

*Warsaw* / *bottom shelf*

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INSTYTUT GEOLOGICZNY

SERVICE GÉOLOGIQUE DE POLOGNE  
INSTITUT  
GÉOLOGIQUE DE POLOGNE

KEW OBSERVATORY  
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BIULETYN 1

OBSERVATORIUM SEISMOLOGICZNEGO W WARSZAWIE

ROK 1940

BULLETIN 1

DE L'OBSERVATOIRE SÉISMOLOGIQUE A VARSOVIE

ANNÉE 1940



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WARSZAWA

Skład Główny: Państwowy Instytut Geologiczny, Rakowiecka 4

1947

## W S T Ę P

Obserwatorium Sejsmologiczne w Warszawie zostało zorganizowane z inicjatywy Prezesa Polskiego Towarzystwa Geofizyków prof. A. B. Dobrowolskiego w latach 1936—1938 r. Dzięki staraniom tego profesora uzyskano pomoc Zarządu Funduszu Kultury, który udzielił środków na zakup przyrządów i Wydziału Nauki Ministerstwa W. R. i O. P., który podjął się stałego subsydiowania Obserwatorium.

Obserwatorium powstało jako Zakład Badawczy przy Towarzystwie Geofizyków. Naczelną władzą Obserwatorium została Rada Naukowa złożona z prezesa, wiceprezesa i sekretarza Tow. Geofizyków oraz delegatów Ministerstwa W. R. i O. P., Polskiego Towarzystwa Fizycznego, Towarzystwa Geofizyków i Państwowego Instytutu Geologicznego.

Władze Obserwatorium postanowiły stworzyć stację I-go rzędu, która mogłaby wejść do ogólnoeuropejskiej sieci stacji i współpracować z międzynarodową służbą sejsmiczną.

Organizację, a następnie kierownictwo Obserwatorium powierzono inż. Irenie Bóbr.

Licząc się z warunkami lokalnymi — małą aktywnością sejsmiczną tej części kraju, w której leży Warszawa, zaopatrzone Obserwatorium w nowoczesne i bardzo czułe sejsmografy typu Golicyna-Wilipa z galvanometryczną rejestracją, o okresie własnym  $12^s$ , reagujące przede wszystkim na dalsze trzęsienia ziemi. Przyrządy te zostały wykonane przez Firmę H. Masing w Tartu (Estonia).

Państwowy Instytut Geologiczny wypożyczył Stacji swoje sejsmografy krótkookresowe (5 sek.) tego samego typu i tej samej Firmy, szczególnie czułe na bliskie wstrząsy o krótkim okresie. Każdy z tych kompletów składa się z 3-ch sejsmografów: 2 poziomych i jednego pionowego. Ze względu jednak na wysoki koszt papieru fotograficznego postanowiono uruchomić tylko 3 sejsmografy długookresowe pionowy krótkookresowy.

Rękopis złożono w P. I. G. 10/II 1947

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Lokalu dla obserwatorium użyczył Uniwersytet Warszawski w ziemiach Gmachu Głównego (dawnego Pałacu Kazimierzowski Krakowskie Przedmieście 26/28. Lokal ten znajduje się na głębokości 9 metrów poniżej poziomu, ze wszystkich stron oddalony od sąsiednich ulic o paręset metrów.

Sejsmografy są ustawione na monolicie betonowym, sięgającej 2 metry poniżej poziomu podłogi i oddzielonym od niej szeroką szparą. W tych warunkach, pomimo, iż lokal ten leży w środku miasta, ruch uliczny nie dawał się we znaki; stwierdzono to na zapisach przyrządów w ciągu kilkuletniej pracy Stacji.

Wilgotność w lokalu Obserwatorium waha się od 90% latem do 45% w mroźne i suche dni zimowe, temperatura od 16° do 12°. Różnice temperatury z dnia na dzień nie przewyższają zwykle 0°1, czasami tylko dochodzą do 0°2.

Dzięki dobrej kompensacji temperatury w wahadłach pionowych wahania te nie przeszkadzają w pracy sejsmografów. Dla mierzenia czasu zakupiono zegar astronomiczny Firmy Strasser i Rohde z wahadłem Rieflerowskim, regulowany za pomocą sygnałów radiowych.

Obserwatorium rozpoczęło normalną pracę od 1.I.1939 r.

Zaczęto opracowywanie zapisów i przygotowanie biuletynów do druku, lecz wybuch wojny przerwał tę pracę. Po ukończeniu działań wojennych okazało się, że wszystkie drobniejsze przyrządy zginęły, jednakże sejsmografy i przyrządy rejestracyjne pozostały nieuszkodzone.

W listopadzie 1939 r. władze okupacyjne dołączyły Obserwatorium do Państwowego Instytutu Geologicznego, wówczas „Amt für Bodenforschung“ i dały środki na zakup zaginionych przyrządów i na remontowanie pozostałych.

Od 1.I.1940 r. Stacja zaczęła pracować regularnie, praca ta trwała bez przerwy do 1.VIII.1944 r., czyli do chwili wybuchu Powstania Warszawskiego.

W marcu 1945 r. po powrocie do Warszawy kierowniczki Obserwatorium przystąpiono do naprawienia szkód i braków wywołanych przez działania wojenne. Środków na to udzieliło Ministerstwo Przemysłu, pozostawiając Obserwatorium jako Zakład, wchodzący w skład Państwowego Instytutu Geologicznego.

Na szczęście podobnie jak w 1939 r. dzięki głębokości, na której znajduje się lokal Obserwatorium i trudnemu dostępowi do niego sejsmografy i przyrządy rejestracyjne ocalały. Tym razem szkody były jednak większe, gdyż poza drobniejszymi przyrządami został zabity zegar astronomiczny. Uruchomienie Obserwatorium bez zegara było

niemożliwym — gdyby nie pomoc p. Rektora U. W. prof. Pieńkowskiego, który wypożyczył czasowo zegar firmy Siemens i Halske, należący do spalonego Obserwatorium Astronomicznego.

Warunki pracy w 1945 r. były jednak tak trudne, że oczyszczenie i wyregulowanie przyrządów, wyremontowanie lokalu itp. zajęło bardzo dużo czasu i Obserwatorium zostało uruchomione dopiero w czerwcu 1946 r. Od tego czasu pracuje już normalnie.

Podczas powstania 1944 r. prawie wszystkie książki, materiały naukowe, oraz materiały, dotyczące zapisów sejsmograficznych i ich opracowania zostały zniszczone — przez okupantów. Z pozostałych rękopisów udało się zrekonstruować biuletyny za rok 1940, 1941 i część 1942. Zanim przystąpimy do druku obserwacji bieżących, drukujemy tę część obserwacji z okresu okupacji w nadziei, że będą one przydatne dla pokrewnych instytucji.

## INTRODUCTION

Observatoire Séismologique à Varsovie fut fondé sur l'initiative du Président de la Société Géophysique Polonaise prof. A. B. Dobrowski en 1936—1938.

Grâce aux ses efforts on a obtenu l'appui du Fond National Culture et du Ministère de l'Enseignement Public.

L'Observatoire fut organisé comme un Institut de recherches de la Société Géophysique. L'organisation et la direction de l'Observatoire furent confiées à dr. Irène Bóbr.

Les initiateurs ont décidé de créer à Varsovie une station séismologique du premier ordre, entrant dans l'organisation générale de l'Europe pouvant collaborer avec service international.

Prenant en considération les conditions locales, c'est à dire la faible activité séismique de cette partie de Pologne où se trouve Varsovie, on a muni l'Observatoire de modernes et très sensibles séismographes du type Galitzine-Wilip avec enregistrement galvanométrique et amortissement magnétique. Ces pendules avec la période de 12 secondes réagissent avant tout aux tremblements de terre éloignés.

Les appareils en nombre de trois (deux horizontaux et un vertical) furent construits dans l'atelier mécanique de H. Masing à Tallinn (Estonie).

L'Université de Varsovie a accordé à l'Observatoire un local souterrain d'un de ses édifices à une profondeur de 9 mètres sous le niveau du sol et éloigné de tous les côtés de quelques centaines de mètres des rues voisines. Le socle sur lequel les appareils sont placés est isolé entièrement du plancher de bâtiment. Dans ces conditions les secousses de la rue ne se font pas sentir. L'humidité dans le local de l'Observatoire varie entre 90% pendant l'été jusqu'à 45% pendant l'hiver et la température de 16° jusqu'au 12°.

Les différences de la température d'un jour à l'autre ne dépassent pas ordinairement 0°1, quelques fois seulement elles atteignent 0°2. Ces oscillations de la température ne dérangent pas le travail des séismographes.

Pour mesurer le temps la station fut munie d'une horloge astronomique à contact de la maison Strasser et Rohde avec le pendule de Riefler. L'Observatoire a commencé son travail quotidien depuis 1.I.1939, mais dès le 1.IX.1939 c'est-à-dire dès le commencement de la guerre le travail fut interrompu. Après la fin des actions de la guerre à Varsovie on a constaté des avaries considérables à l'Observatoire, mais les séismographes, les appareils enregistreurs et l'horloge sont restés dans un état assez satisfaisant.

En novembre de 1939 les occupants ont adjoint l'Observatoire à l'Institut Géologique et alors on a pu réparer les dégâts.

Depuis 1.I.1940 la station commença son travail régulier qui durait sans interruption jusqu'au commencement de l'insurrection de Varsovie, c'est-à-dire jusqu'au 1.VIII.1944.

Varsovie fut délivrée le 17 janvier 1945, mais ce n'est qu'au mois de mars qu'il était passible de se mettre à la réparation de pertes, causées par la guerre. Les moyens furent fournis par le Ministère de l'Industrie qui a laissé l'Observatoire dans le Service Géologique de Pologne. Cette fois les pertes de l'Observatoire étaient plus sensibles qu'à 1939 parce que l'horloge a disparu. Les séismographes et les appareils enregistreurs sont restés et il était possible de le mettre en ordre.

La mise en marche de l'Observatoire fut possible seulement grâce à l'aide du Recteur de l'Université de Varsovie le prof. S. Pieńkowski qui a prêté à l'Observatoire l'horloge à contact de la maison Siemens et Halske appartenant à l'Observatoire Astronomique.

L'Observatoire Séismologique a commencé à travailler normalement depuis 1.IV.1946.

Pendant l'insurrection de Varsovie tous les matériaux scientifiques et d'observation (séismogrammes), les livres, les travaux de dépouillement des séismogrammes etc. furent détruits par les occupants. On fut en état de reconstruire, d'après les manuscrits restés, les bulletins pour les années 1940, 1941 et une partie de 1942.

Avant de commencer la publication des Bulletins courants nous publions cette partie des observations de la période d'occupation, en espérant quelles peuvent être utiles pour les autres institutions séismologiques.

OBSERWATORIUM SEISMOLOGICZNE W WARSZAWIE

OBSERVATOIRE SÉISMOLOGIQUE À VARSOVIE

Wysokość: 110 m.

Podłoże: piaski, utwory lodowcowe.

Długość geograficzna: 21° 02' E.

Szerokość geograficzna: 52° 14' N.

Przyrządy: Trzy sejsmografy Golicyna-Wilipa z galwanometryczną rejestracją i tłumieniem magnetycznym.

Zegar kontaktowy: Strasser i Rohde, sprawdzany za pomocą sygnałów radiowych.

Altitude: 110 m.

Sous-sol: sables, dépôts glaciaires.

Longitude: 21° 02' E.

Latitude: 52° 14' N.

Appareils: Trois séismographes Galitzine-Wilip à enregistrement galvanométrique et amortissement magnétique.

Horloge à contact: Strasser et Rohde contrôlée régulièrement à l'aide de signaux horaires.

STALE SEISMOGRAFÓW  
CONSTANTES DES SÉISMOGRAPHES

| Composante | $T_1$<br>sec | $l$<br>cm | $A$<br>mm | $R$<br>mm/min |
|------------|--------------|-----------|-----------|---------------|
| E — W      | 11,30        | 11,357    | 994       | 30            |
| N — S      | 11,69        | 11,527    | 993       | 30            |
| Z          | 11,26        | 14,900    | 1001      | 30            |

Les autres constantes ont varié pendant l'année de rapport, de la manière suivante:

| Date   | Compos. | $T$<br>sec | $\mu$   | $K$ |
|--------|---------|------------|---------|-----|
| 1.I.   | E — W   | 12,03      | + 0,075 | 242 |
|        | N — S   | 12,63      | — 0,005 | 241 |
|        | Z       | 9,87       | + 0,096 | 210 |
| 2.VII. | E — W   | 12,06      | + 0,061 | 188 |
|        | N — S   | 12,59      | — 0,032 | 192 |
|        | Z       | 10,50      | — 0,001 | 211 |
| 13.X.  | E — W   | 11,64      | + 0,030 | 72  |
|        | N — S   | 10,95      | — 0,006 | 83  |
|        | Z       | 9,83       | + 0,100 | 215 |

Constantes:

- $T_1$  — période du galvanomètre
- $T$  — période du pendule
- $\mu$  — constante d'amortissement
- $K$  — coefficient d'amplification
- $A$  — distance entre le miroir du galvanomètre et le tambour enregistreur
- $l$  — longueur réduite du pendule
- $R$  — vitesse d'enregistrement

A cause d'une forte agitation microséismique pendant les mois d'hiver, il fallait diminuer la sensibilité des séismographes horizontaux.

1940

JANVIER

Nr. 1

| Nr. | Dates  | Phases          | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques   |
|-----|--------|-----------------|-----------------------|----------------|----------------|----------------|----------------|---|
|     |        |                 |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |   |
| 1   | 4. I.  | e <sub>N</sub>  | h m s<br>19 34 20     | s<br>4         | μ              | μ              | μ              | Faibles ondes longues   |
|     |        | e <sub>Z</sub>  | 35 29                 | 6              |                |                |                |   |
|     |        | L <sub>Z</sub>  | 36 00                 | 10; 9          |                |                |                |   |
|     |        | L <sub>N</sub>  | 36 05                 | 10; 8          |                |                |                |   |
|     |        | F               | 41                    |                |                |                |                |   |
| 2   | 6. I.  | eP <sub>Z</sub> | 8 27 02               | 4              |                |                | +              | Compression<br>Δ = 7800 km<br>Enregistrement indistinct   |
|     |        | eS <sub>N</sub> | 36 13                 |                |                |                |                |   |
|     |        | L               | 44                    |                |                |                |                |   |
|     |        | M <sub>Z</sub>  | 9 04 18               | 15             |                |                | 3              |   |
|     |        | M <sub>N</sub>  | 29                    | 14             | 4              |                |                |   |
|     |        | M <sub>N</sub>  | 03 28                 | 14             | 3              |                |                |   |
|     |        | M <sub>Z</sub>  | 42                    | 16             |                |                | 4              |   |
| 3   | 6. I.  | eL              | 15 07                 |                |                |                |                | Phases préliminaires<br>pendant le change-<br>ment des feuilles<br>Ondes W <sub>2</sub> à 16 <sup>b</sup> 15 <sup>m</sup> |
|     |        | M <sub>Z</sub>  | 19 28                 | 27             |                |                | 36             |   |
|     |        | M <sub>Z</sub>  | 26 06                 | 23             |                |                | 27             |   |
|     |        | F               | 16 38                 |                |                |                |                |   |
| 4   | 6. I.  | P <sub>Z</sub>  | 19 08 30              | 6              |                |                | +              | Compression<br>Δ = 2000 km<br>Enregistrement faible<br>Ressenai à Crète   |
|     |        | P <sub>N</sub>  | 55                    | 4              |                |                |                |   |
|     |        | S <sub>Z</sub>  | 11 51                 | 9; 10          |                |                |                |   |
|     |        | S <sub>N</sub>  | 12 08                 |                |                |                |                |   |
|     |        | L               | 13                    | 7; 6           |                |                | 10             |   |
|     |        | M <sub>Z</sub>  | 16 40                 | 10             |                |                |                |   |
|     |        | F               | 48                    |                |                |                |                |   |
| 5   | 7. I.  | e <sub>NZ</sub> | 0 35 50               | 5              |                |                |                | Traces  |
|     |        | F               | 39                    |                |                |                |                |   |
| 6   | 7. I.  | e <sub>N</sub>  | 3 44 29               | 6              |                |                |                |   |
|     |        | L <sub>N</sub>  | 4 05 56               |                |                |                |                |   |
|     |        | M <sub>N</sub>  | 14 48                 | 26             | 14             |                |                |   |
|     |        | M <sub>Z</sub>  | 16 48                 | 14             |                |                | 3              |   |
|     |        | F               | 5 03                  |                |                |                |                |   |
| 7   | 7. I.  | eL <sub>N</sub> | 9 27 43               | 12; 14         |                |                |                | Très faibles ondes<br>longues   |
|     |        | eL <sub>Z</sub> | 30 00                 | 14             |                |                |                |   |
|     |        | F               | 40                    |                |                |                |                |   |
| 8   | 7. I.  | e <sub>N</sub>  | 20 16 37              | 2; 1,5         |                |                |                | Petites oscillations de<br>courte période   |
|     |        | F               | 20                    |                |                |                |                |   |
| 9   | 10. I. | e <sub>Z</sub>  | 11 38 50              |                |                |                |                | Forte agitation micro-<br>séismique surtout<br>dans la composante N   |
|     |        | L <sub>Z</sub>  | 45                    |                |                |                |                |   |
|     |        | M <sub>Z</sub>  | 47 44                 | 7              |                |                | 2              |   |
|     |        | F               | 12 13                 |                |                |                |                |   |

## U W A G I

1. Czas podajemy według Greenwich, licząc od północy do północy.
  2. Azymuty oraz współrzędne geograficzne epicentrow zostały oznaczone metodą Golicyna według danych jednej stacji.
  3. Przy wyznaczaniu momentów poszczególnych maximów w głównej nie wprowadzono poprawki na opóźnienie przyrządu.
  4. Przy opracowywaniu zapisów stosowano tablice Macelwane.
- Układ biuletynu — według nomenklatury międzynarodowej.

## R E M A R Q U E S

1. Nous déterminons les moments de temps dans le temps moyen de Greenwich compté de minuit à minuit.
2. Les azimuts et les coordonnées géographiques des épicentres sont déterminés d'après la méthode du Galitzine pour une seule station.
3. Les moments de différents maxima dans la phase principale sont donnés sans introduire la correction pour le retard des instruments.
4. Pour le dépouillement des séismogrammes nous avons utilisé les tables de Macelwane. La disposition des bulletins est faite d'après la nomenclature internationale.

| Nr. | Dates  | Phases                                       | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |  | Remarques   |
|-----|--------|--|-----------------------|----------------|----------------|----------------|--|---|
|     |        |  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>   |   |
|     |        |  | h m s                 | s              | μ              | μ              | μ  |   |
| 10  | 15. I. | e <sub>Z</sub>                               | 13 23 04              |                |                |                |  | Traces  |
| 11  | 17. I. | iP <sub>Z</sub>                              | 1 28 27               | 5              |                |                |  | Dilatation<br>Δ = ca 11000 km<br>Forte agitation<br>séismique |
|     |        | PP <sub>Z</sub>                              | 32 24                 | 6              |                |                |  |   |
|     |        | PPP <sub>Z</sub>                             | 34 37                 | 6              |                |                |  |   |
|     |        | S <sub>C</sub> P <sub>C</sub> S <sub>N</sub> | 38 59                 | 4; 6           |                |                |  |   |
|     |        | S <sub>N</sub>                               | 39 47                 | 6; 5           |                |                |  |   |
|     |        | SS <sub>N</sub>                              | 46 35                 | 6              |                |                |  |   |
|     |        | L  | 2 04                  |                |                |                |  |   |
|     |        | M <sub>N</sub>                               | 14 15                 | 26             | 96             |                |  |   |
|     |        | M <sub>Z</sub>                               | 17 10                 | 21             |                | 21             |  |   |
|     |        | W <sub>3</sub>                               | 3 27                  |                |                |                |  |   |
| 12  | 19. I. | M <sub>Z</sub>                               | 35 07                 | 18             |                |                |  |   |
|     |        | F  | 4 07                  |                |                |                |  |   |
|     |        | eL <sub>N</sub>                              | 5 55 33               |                |                |                |  |   |
|     |        | e <sub>Z</sub>                               | 58 11                 |                |                |                |  |   |
|     |        | M <sub>N</sub>                               | 6 00 58               | 11             | 7              |                |  |   |
|     |        | M <sub>Z</sub>                               | 4 11                  | 13             |                | 8              |  |   |
| 13  | 20. I. | F <sub>N</sub>                               | 20                    |                |                |                |  |   |
|     |        | eL <sub>Z</sub>                              | 11 26                 | 16; 19         |                |                | Forte agitation<br>séismique surtout<br>dans la composante<br>Δ = 1100 km<br>Tremblement en<br>Emilie et Toscane |   |
| 14  | 24. I. | F  | 57                    |                |                |                |  |   |
|     |        | eP <sub>Z</sub>                              | 23 36 48              | 2              |                |                |  |   |
|     |        | eS <sub>N</sub>                              | 38 37                 | 3              |                |                |  |   |
| 15  | 26. I. | eL   | 39 29                 |                |                |                |  |   |
|     |        | F  | 43                    |                |                |                |  |   |
|     |        | eL <sub>Z</sub>                              | 7 54 56               |                |                |                |  |   |
|     |        | M <sub>N</sub>                               | 59 08                 | 21             |                |                |  |   |
| 16  | 26. I. | M <sub>Z</sub>                               | 46                    | 23             |                |                |  |   |
|     |        | F  | 8 10                  |                |                |                |  |   |
|     |        | P <sub>Z</sub>                               | 17 16 35              | 4; 3           |                | +              | Compression<br>Δ = 8900 km   |   |
|     |        | i <sub>Z</sub>                               | 18 15                 | 5              |                |                |  |   |
|     |        | PP <sub>Z</sub>                              | 19 58                 | 5              |                |                |  |   |
|     |        | iS <sub>N</sub>                              | 26 40                 | 9              |                |                |  |   |
|     |        | PS <sub>N</sub>                              | 27 20                 | 7; 9           |                |                |  |   |
|     |        | eL <sub>NZ</sub>                             | 41                    |                |                |                |  |   |
|     |        | M <sub>Z</sub>                               | 58 21                 | 14             |                | 16             |  |   |
|     |        | M <sub>N</sub>                               | 18 00 05              | 13             | 14             |                |  |   |
| F   | 06     |  |                       |                |                |                |  |   |
| 17  | 26. I. | e <sub>N</sub>                               | 23 31 12              | 2; 1,5         |                |                |  |   |
|     |        | e <sub>Z</sub>                               | 32 07                 | 2; 1,5         |                |                |  |   |
|     |        | eL <sub>N</sub>                              | 33                    |                |                |                |  |   |
|     |        | eL <sub>Z</sub>                              | 35                    |                |                |                |  |   |
|     |        | M <sub>Z</sub>                               | 38 02                 | 13             |                | +              |  |   |
|     |        |  |                       |                |                |                |  |   |

| Nr. | Dates   | Phases             | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |   | Remarques             |
|-----|---------|--------------------|-----------------------|----------------|----------------|----------------|---|-----------------------|
|     |         |                    |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>  |                       |
|     |         |                    | h m s                 | s              | μ              | μ              | μ   |                       |
| 17  | 26. I.  | M <sub>N</sub>     | 23 38 22              | 11             | +              |                |   |                       |
|     | (suite) | F                  | 42                    |                |                |                |   |                       |
| 18  | 27. I.  | eL <sub>N</sub>    | 15 33 51              |                |                |                |   |                       |
|     |         | M <sub>N</sub>     | 34 42                 | 14             | 2              |                |   |                       |
|     |         | eL <sub>Z</sub>    | 36 18                 |                |                |                |   |                       |
|     |         | M <sub>E</sub>     | 39 31                 | 12             |                | 1              |   |                       |
|     |         | M <sub>Z</sub>     | 40 09                 | 13             |                |                | 2   |                       |
|     |         | F                  | 51                    |                |                |                |   |                       |
|     |         |                    | <b>1940</b>           |                |                |                |   |                       |
|     |         |                    | <b>FEVRIER</b>        |                |                |                |   | <b>Nr. 2</b>          |
| 19  | 1. II.  | eP                 | 5 16 11               | 1; 1,5         |                |                |   | Δ = 1400 km<br>Grèce? |
|     |         | S <sub>E, N</sub>  | 18 41                 | 2; 3           |                |                |   |                       |
|     |         | eL                 | 19 42                 |                |                |                |   |                       |
| 20  | 1. II.  | F                  | 30                    |                |                |                |   |                       |
|     |         | eL <sub>E</sub>    | 6 26 13               |                |                |                |   |                       |
|     |         | eL <sub>Z</sub>    | 27 11                 |                |                |                |   |                       |
|     |         | M <sub>E</sub>     | 27 32                 | 11             |                | 10             |   |                       |
|     |         | M <sub>Z</sub>     | 28 17                 | 8              |                |                | 4   |                       |
| 21  | 2. II.  | F <sub>E</sub>     | 41                    |                |                |                |   |                       |
|     |         | eL <sub>E</sub>    | 6 31 31               |                |                |                |   |                       |
|     |         | M <sub>Z</sub>     | 38 07                 | 14             |                |                |   |                       |
|     |         | M <sub>E</sub>     | 39 17                 | 11             |                |                |   |                       |
|     |         | F                  | 47                    |                |                |                |   |                       |
| 22  | 4. II.  | eP <sub>E</sub>    | 18 21 02              |                |                |                |   |                       |
|     |         | eP <sub>Z</sub>    | 21 03                 | 1; 1,5         |                |                | Δ = 1365 km<br>Grèce?   |                       |
|     |         | eS <sub>E</sub>    | 23 30                 | 2; 3           |                |                |   |                       |
|     |         | L                  | 24 23                 |                |                |                |   |                       |
|     |         | M <sub>E</sub>     | 29 44                 | 13             |                |                |   |                       |
| F   | 40      |                    |                       |                |                |                |   |                       |
| 23  | 5. II.  | eP <sub>Z</sub>    | 8 16 57               | 1; 1,5         |                |                |   |                       |
|     |         | S <sub>E</sub>     | 20 12                 | 4              |                |                | Δ = 1900 km<br>Anatolie?  |                       |
|     |         | L                  | 21 20                 |                |                |                |   |                       |
|     |         | M <sub>E</sub>     | 23 51                 | 9              |                | 4              |   |                       |
|     |         | M <sub>Z</sub>     | 23 53                 | 10             |                |                |   |                       |
|     |         | F                  | 33                    |                |                |                |   |                       |
| F   | 33      |                    |                       |                |                |                |   |                       |
| 24  | 7. II.  | iP                 | 17 27 36              | 4              |                |                |   |                       |
|     |         | PP <sub>Z</sub>    | 30 22                 | 5,5            |                |                | Dilatation<br>Δ = 8100 km<br>α = 14° NE<br>φ = 53° N<br>λ = 179° E<br>Région des îles<br>d'Aleoutes |                       |
|     |         | PPP <sub>Z</sub>   | 31 59                 | 6              |                |                |   |                       |
|     |         | S <sub>N, E</sub>  | 37 08                 | 6              |                |                |   |                       |
|     |         | PS                 | 44                    | 9              |                |                |   |                       |
|     |         | SS <sub>E, Z</sub> | 41 48                 | 7              |                |                |   |                       |
|     |         | eL                 | 51                    | 16; 15         |                |                |   |                       |
|     |         | iL                 | 56                    | 28; 25         |                |                |   |                       |
|     |         |                    |                       |                |                |                |   |                       |
|     |         |                    |                       |                |                |                |   |                       |
|     |         |                    |                       |                |                |                |   |                       |

| Nr. | Dates             | Phases            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                   | Remarques         |
|-----|-------------------|-------------------|-----------------------|----------------|----------------|----------------|-------------------|-------------------|
|     |                   |                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>    |                   |
|     |                   |                   | h m s                 | s              | μ              | μ              | μ                 |                   |
| 24  | 7. II.<br>(suite) | M <sub>E</sub>    | 18 06 26              | 15             |                | 13             |                   |                   |
|     |                   | M <sub>N</sub>    | 07 01                 | 15             |                |                |                   |                   |
|     |                   | M <sub>Z</sub>    | 07                    | 15             |                |                | 12                |                   |
| 25  | 9. II.            | F                 | 19 40                 |                |                |                |                   |                   |
|     |                   | i <sub>Z</sub>    | 14 05 22              |                |                |                |                   |                   |
|     |                   | e <sub>Z</sub>    | 35                    |                |                |                |                   |                   |
|     |                   | eL <sub>E</sub>   | 36                    |                |                |                |                   |                   |
|     |                   | eL <sub>Z</sub>   | 37                    |                |                |                |                   |                   |
|     |                   | M <sub>N</sub>    | 40 25                 | 16             | +              |                |                   |                   |
|     |                   | M <sub>Z</sub>    | 29                    | 20             |                |                | +                 |                   |
| 26  | 12. II.           | M <sub>E</sub>    | 41 02                 | 15             |                | +              |                   |                   |
|     |                   | F                 | 49                    |                |                |                |                   |                   |
|     |                   | eL <sub>N</sub>   | 0 55                  |                |                |                |                   | Faibles ondes lon |
|     |                   | eL <sub>E</sub>   | 58                    |                |                |                |                   |                   |
|     |                   | eL <sub>Z</sub>   | 59                    |                |                |                |                   |                   |
|     |                   | M <sub>Z</sub>    | 1 03 58               | 24             |                |                | +                 |                   |
|     |                   | M <sub>N</sub>    | 16 38                 | 19             | +              |                |                   |                   |
| 27  | 12. II.           | M <sub>E, Z</sub> | 44                    | 16             |                | +              | +                 |                   |
|     |                   | F                 | 24                    |                |                |                |                   |                   |
|     |                   | i <sub>Z</sub>    | 8 40 19               | 3              |                |                |                   | Dilatation        |
|     |                   | i <sub>E</sub>    | 22                    | 3              |                |                |                   | Début de forts p  |
|     |                   | i <sub>N</sub>    | 23                    | 3              |                |                |                   | miers avant-cours |
| 28  | 12. II.           | i <sub>Z</sub>    | 41 19                 | 4              |                |                |                   | Phases suivantes  |
|     |                   | i <sub>Z</sub>    | 48 48                 | 5,5            |                |                |                   | indistinctes      |
|     |                   | F                 | 9 03                  |                |                |                |                   |                   |
|     |                   | e <sub>E</sub>    | 9 29 08               | 1,5; 2         |                |                | +                 | Compression       |
|     |                   | i <sub>Z</sub>    | 29 14                 | 6              |                |                |                   |                   |
|     |                   | i <sub>Z</sub>    | 30                    | 6              |                |                |                   |                   |
|     |                   | e <sub>N</sub>    | 32                    | 2; 3           |                |                |                   |                   |
|     |                   | eL <sub>Z</sub>   | 54                    |                |                |                |                   |                   |
|     |                   | eL <sub>E</sub>   | 55                    |                |                |                |                   |                   |
|     |                   | eL <sub>N</sub>   | 56                    |                |                |                |                   |                   |
| 29  | 14. II.           | M <sub>N</sub>    | 10 06 01              | 18             | +              |                |                   |                   |
|     |                   | M <sub>Z</sub>    | 09                    | 17             |                |                | +                 |                   |
|     |                   | M <sub>E</sub>    | 07 24                 | 14             |                |                |                   |                   |
|     |                   | F <sub>Z</sub>    | 20                    |                |                |                | +                 |                   |
|     |                   | eL <sub>Z</sub>   | 3 14                  |                |                |                |                   |                   |
|     |                   | F                 | 32                    |                |                |                |                   |                   |
|     |                   | eL                | 11 46                 | 16; 19; 21     |                |                |                   | Traces d'ondes    |
| 30  | 14. II.           | F                 | 12 26                 |                |                |                | longues           |                   |
|     |                   | eL <sub>N</sub>   | 1 32                  | 9; 13; 10      |                |                |                   |                   |
|     |                   | eL <sub>E</sub>   | 33                    | 10; 14; 9      |                |                |                   |                   |
| 31  | 16. II.           | eL <sub>Z</sub>   | 37                    | 9; 13; 14      |                |                | Faibles ondes lon |                   |
|     |                   | F                 | 45                    |                |                |                |                   |                   |

| Nr. | Dates   | Phases                | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques            |
|-----|---------|-----------------------|-----------------------|----------------|----------------|----------------|----------------|----------------------|
|     |         |                       |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                      |
|     |         |                       | h m s                 | s              | μ              | μ              | μ              |                      |
| 32  | 20. II. | i <sub>P</sub>        | 2 37 17               |                |                |                | +              | Compression          |
|     |         | i <sub>Z</sub>        | 57                    | 9              |                |                |                | Très forte agitation |
|     |         | i <sub>Z</sub>        | 39 45                 | 6              |                |                |                | microsismique sur-   |
|     |         | i <sub>Z</sub>        | 40 27                 | 8              |                |                |                | tout dans les compo- |
|     |         | i <sub>Z</sub>        | 42 36                 | 6              |                |                |                | santes horizontales  |
|     |         | L                     | 49                    |                |                |                |                |                      |
|     |         | M <sub>E</sub>        | 3 31 31               | 18             |                | 9              |                |                      |
| 33  | 23. II. | M <sub>Z</sub>        | 34 05                 | 23             |                |                | 14             |                      |
|     |         | F                     | 4 24                  |                |                |                |                |                      |
|     |         | eP <sub>Z</sub>       | 0 42 56               | 2              |                |                |                | Δ = 1480 km          |
|     |         | eS <sub>Z</sub>       | 45 34                 | 8              |                |                |                | D'après Hambourg     |
|     |         | eSS <sub>Z</sub>      | 54                    | 6              |                |                |                | tremblement en       |
|     |         | eL                    | 46 20                 |                |                |                |                | Albanie              |
|     |         | M <sub>Z</sub>        | 50 45                 | 8              |                |                | 10             | Très forte agitation |
| 34  | 23. II. | F                     | 1 03                  |                |                |                |                | microsismique        |
|     |         | eP <sub>E</sub>       | 9 32 34               | 2; 3           |                |                |                | Réplique?            |
|     |         | eP <sub>Z</sub>       | 56                    |                |                |                |                |                      |
|     |         | i <sub>E</sub>        | 33 54                 | 8              |                |                |                |                      |
|     |         | e <sub>Z</sub>        | 34 40                 | 6              |                |                |                |                      |
|     |         | i <sub>Z</sub>        | 52                    | 6              |                |                |                |                      |
|     |         | eL                    | 35 20                 |                |                |                |                |                      |
|     |         | M <sub>Z</sub>        | 44                    | 8              |                |                | 2              |                      |
|     |         | M <sub>E</sub>        | 47                    | 8              |                |                | 4              |                      |
|     |         | F                     | 42                    |                |                |                |                |                      |
| 35  | 24. II. | eL <sub>E</sub>       | 12 24                 |                |                |                |                |                      |
|     |         | eL <sub>N</sub>       | 26                    |                |                |                |                |                      |
|     |         | M <sub>E</sub>        | 59 29                 | 14             |                | 2              |                |                      |
|     |         | M <sub>N</sub>        | 13 0 37               | 16             | 6              |                |                |                      |
|     |         | M <sub>Z</sub>        | 18 21                 | 16             |                |                | 3              |                      |
|     |         | F                     | 50                    |                |                |                |                |                      |
|     |         | iP <sub>N, E, Z</sub> | 16 11 48              | 5              |                |                | +              | Compression          |
| 36  | 29. II. | S <sub>E</sub>        | 14 51                 | 6              |                |                |                | Δ = 1745 km          |
|     |         | SS <sub>E</sub>       | 15 18                 |                |                |                |                | Ep. φ = 37° N        |
|     |         | L <sub>Z</sub>        | 26                    | 9; 12          |                |                |                | λ = 26° E            |
|     |         | M <sub>Z</sub>        | 20 15                 | 12             |                |                | 40             |                      |
|     |         | M <sub>N</sub>        | 21 56                 | 11             | 17             |                |                |                      |
|     |         | M <sub>E</sub>        | 24 04                 | 7              |                | 11             |                |                      |
|     |         | F                     | 17 10                 |                |                |                |                |                      |



MARS

| Nr. | Dates    | Phases   | Heures<br>(Greenwich)  | Périodes<br>T.                             | Amplitudes     |                |                | Remarques  |
|-----|----------|--|--|--|----------------|----------------|----------------|--|
|     |          |  |  |  | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 37  | 3. III.  | eL <sub>Z</sub><br>F <sub>Z</sub>  | h m s<br>1 25<br>31  | s  | μ              | μ              | μ              | Traces<br>Très forte agitation<br>microsismique<br>tout dans les con-<br>santes horizontales |
| 38  | 7. III.  | eP <sub>E</sub><br>eP <sub>Z</sub><br>eP <sub>N</sub><br>eS <sub>N</sub><br>eS <sub>E</sub><br>i <sub>E</sub><br>i <sub>N</sub><br>eL<br>M <sub>E</sub><br>M <sub>N</sub><br>F | 5 07 49<br>50<br>58<br>10 47<br>50<br>11 05<br>06<br>12 07<br>16 27<br>18 03<br>31 | 1<br>1<br>1<br>4<br>3<br>4<br>5<br>13<br>8 |                |                | 1              | Δ = ca 1700 km   |
| 39  | 7. III.  | eL<br>M <sub>Z</sub><br>M <sub>E</sub><br>M <sub>N</sub><br>F  | 8 19<br>25 23<br>39<br>27 22<br>38   |  |                |                | +              |  |
| 40  | 7. III.  | eP <sub>NE</sub><br>S <sub>N</sub><br>SS <sub>N</sub><br>L<br>M <sub>E</sub><br>M <sub>N</sub><br>F  | 10 29 31<br>32 39<br>33 10<br>33 59<br>34 40<br>35 40<br>40                        | 1; 1,5<br>3<br>3                           |                | +              |                | Δ = ca 1800 km<br>Réplique?  |
| 41  | 12. III. | eL <sub>N</sub><br>eL <sub>EZ</sub><br>F   | 23 05<br>10<br>16  |  |                |                | 1              | Traces   |
| 42  | 14. III. | e <sub>Z</sub><br>i <sub>Z</sub><br>i <sub>Z</sub><br>i <sub>Z</sub><br>i <sub>Z</sub><br>i <sub>Z</sub><br>i <sub>Z</sub><br>eL <sub>N</sub><br>eL <sub>EZ</sub>              | 18 42 31<br>43 00<br>48<br>44 15<br>45 19<br>46 04<br>51 54<br>19 29<br>36         | 2<br>5<br>5<br>7<br>9<br>8<br>8            |                | +              |                | Compression<br>Tremblement<br>éloigné<br>Agitation micros-<br>mique                          |

| Nr. | Dates               | Phases  | Heures<br>(Greenwich)  | Périodes<br>T.                                  | Amplitudes     |                |                | Remarques  |
|-----|---------------------|---|--|---|----------------|----------------|----------------|--|
|     |                     |   |  |   | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 42  | 14. III.<br>(suite) | M <sub>N</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>(W <sub>2</sub> ) <sub>Z</sub><br>M <sub>Z</sub><br>(W <sub>2</sub> ) <sub>N</sub><br>(W <sub>2</sub> ) <sub>E</sub><br>M <sub>N</sub><br>M <sub>E</sub><br>F | h m s<br>19 39 49<br>44 01<br>20<br>20 18<br>19 32<br>21<br>24<br>25 08<br>29 13<br>53 | s<br>26<br>22<br>24<br>19; 20<br>19<br>18<br>14 | μ              | μ              | μ              |  |
| 43  | 15. III.            | eL <sub>NE</sub><br>eL <sub>Z</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>M <sub>N</sub><br>F  | 6 15<br>19<br>26 26<br>37<br>40<br>53  |   |                |                | 2              |  |
| 44  | 16. III.            | eL <sub>NZ</sub><br>F   | 21 23<br>43  |   |                |                |                | Très faibles ondes<br>longues  |
| 45  | 17. III.            | eP <sub>Z</sub><br>eP <sub>N</sub><br>eP <sub>E</sub><br>e <sub>N</sub><br>e <sub>Z</sub><br>eL <sub>Z</sub><br>eL <sub>E</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>F  | 15 31 01<br>04<br>11<br>33 01<br>30<br>58<br>34 02<br>35 03<br>13<br>40                | 15; 2<br>8<br>7<br>9<br>7<br>7                  |                |                | 3              | Forte agitation micro-<br>sismique   |
| 46  | 18. III.            | eL <sub>Z</sub><br>M <sub>NEZ</sub><br>M <sub>NEZ</sub><br>F  | 7 08<br>08 jusqu'à<br>12<br>20 jusqu'à<br>31<br>41                                     | 13-20<br>13-20                                  |                |                |                | Faibles ondes longues<br>Forte agitation micro-<br>sismique  |
| 47  | 18. III.            | e <sub>NE</sub><br>e <sub>NE</sub><br>e <sub>NE</sub>   | 17 31 jusqu'à<br>40<br>56 jusqu'à<br>18 19<br>19 22 jusqu'à<br>21 36                   | 1,5; 1; 2<br>1,5; 1; 2<br>1,5; 1; 2             |                |                |                | Sur les mouvements<br>microsismiques du<br>premier ordre se su-<br>perposent les oscilla-<br>tions de très courte<br>période |
| 48  | 19. III.            | eP <sub>Z</sub><br>eP <sub>E</sub><br>i <sub>E</sub>  | 4 43 06<br>08<br>37  | 2<br>1<br>6                                     |                |                |                | Δ = ca 3200 km?  |

| Nr. | Dates               | Phases               | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |  | Remarques |
|-----|---------------------|----------------------|-----------------------|----------------|----------------|----------------|--|-----------|
|     |                     |                      |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>   |           |
| 48  | 19. III.<br>(suite) | i <sub>E</sub> (S?)  | 4 48 10               | 6              |                |                |  |           |
|     |                     | i <sub>E</sub> (SS?) | 49 29                 | 6              |                |                |  |           |
|     |                     | i <sub>Z</sub>       | 52 05                 | 5              |                |                |  |           |
|     |                     | i <sub>Z</sub>       | 26                    | 5              |                |                |  |           |
|     |                     | L <sub>EN</sub>      | 52                    | 10, 9, 11      |                |                |  |           |
|     |                     | eL <sub>Z</sub>      | 56                    |                |                |                |  |           |
|     |                     | M <sub>E</sub>       | 58 15                 | 7              |                | 4              |  |           |
|     |                     | M <sub>N</sub>       | 36                    | 8              | 11             |                |  |           |
|     |                     | M <sub>Z</sub>       | 5 00 31               | 8              |                |                | 3  |           |
|     |                     | F                    | 20                    |                |                |                |  |           |
| 49  | 21. III.            | eP <sub>Z</sub>      | 14 06 (38)            |                |                |                | Dilatation   |           |
|     |                     | L <sub>N</sub>       | 16                    | 11, 10, 15     |                |                |  |           |
|     |                     | M <sub>N</sub>       | 24 03                 | 9              | 3              |                |  |           |
|     |                     | M <sub>E</sub>       | 28 30                 | 8              |                | 1              |  |           |
| 50  | 22. III.            | F                    | 15 32                 |                |                |                |  |           |
|     |                     | e <sub>Z</sub>       | 20 39 48              |                |                |                |  |           |
|     |                     | eL <sub>E</sub>      | 21 42                 |                |                |                |  |           |
|     |                     | eL <sub>N</sub>      | 43                    |                |                |                |  |           |
| 51  | 27. III.            | M <sub>N</sub>       | 52 34                 | 18             | 2              |                |  |           |
|     |                     | M <sub>E</sub>       | 22 03 02              | 18             |                | 2              |  |           |
|     |                     | F                    | 39                    |                |                |                |  |           |
|     |                     | iP <sub>Z</sub>      | 12 42 59              | 8              |                |                | +  |           |
| 52  | 27. III.            | eP <sub>N</sub>      | 43 02                 |                |                |                | Compression<br>Δ = 9440 km<br>A 14 <sup>h</sup> 40 <sup>m</sup> dans<br>composantes N<br>et à 14 <sup>h</sup> 45 <sup>m</sup> dans<br>composante E de<br>faibles ondes W |           |
|     |                     | iS <sub>N</sub>      | 53 17                 | 11             |                |                |  |           |
|     |                     | iS <sub>EZ</sub>     | 53 30                 | 8, 11          |                |                |  |           |
|     |                     | e <sub>E</sub>       | 57 58                 | 15             |                |                |  |           |
|     |                     | i <sub>N</sub>       | 58 07                 | 23             |                |                |  |           |
|     |                     | i <sub>NE</sub>      | 13 01 29              | 17             |                |                |  |           |
|     |                     | M <sub>N</sub>       | 20 18                 | 20             | 21             |                |  |           |
|     |                     | M <sub>Z</sub>       | 32                    | 18             |                | 19             |  |           |
|     |                     | M <sub>N</sub>       | 23 33                 | 15             | 14             |                |  |           |
|     |                     | M <sub>Z</sub>       | 37                    | 16             |                | 18             |  |           |
|     |                     | M <sub>E</sub>       | 42                    | 15             |                | 6              |  |           |
|     |                     | M <sub>E</sub>       | 27 34                 | 16             |                | 10             |  |           |
|     |                     | F                    | 15 21                 |                |                |                |  |           |
|     |                     | eL <sub>Z</sub>      | 19 24                 |                |                |                |  |           |
| 53  | 27. III.            | eL <sub>N</sub>      | 25                    |                |                |                | Très faibles ondes<br>longues  |           |
|     |                     | eL <sub>E</sub>      | 26                    |                |                |                |  |           |
|     |                     | F                    | 43                    |                |                |                |  |           |
|     |                     | eL <sub>Z</sub>      | 21 41                 |                |                |                |  |           |
| 55  | 27. III.            | eL <sub>NE</sub>     | 43                    |                |                |                | Faibles ondes lon  |           |
|     |                     | M <sub>NEZ</sub>     | 47 jusqu'a            | 18             |                |                |  |           |
|     |                     | F                    | 48                    |                |                |                |  |           |
|     |                     | F                    | 55                    |                |                |                |  |           |

| Nr. | Dates    | Phases           | Heures<br>(Greenwich) | Périodes<br>T.    | Amplitudes     |                |  | Remarques                     |
|-----|----------|------------------|-----------------------|-------------------|----------------|----------------|--|-------------------------------|
|     |          |                  |                       |                   | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>   |                               |
| 54  | 28. III. | iP <sub>Z</sub>  | 16 01 05              | 7                 |                |                |  | Compression<br>Δ = ca 9000 km |
|     |          | P <sub>NE</sub>  | 08                    | 6                 |                |                |  |                               |
|     |          | iS <sub>NE</sub> | 11 12                 | 11; 14            |                |                |  |                               |
|     |          | S <sub>Z</sub>   | 16                    | 10                |                |                |  |                               |
|     |          | PS <sub>E</sub>  | 53                    | 6                 |                |                |  |                               |
|     |          | PS <sub>Z</sub>  | 12 03                 | 9                 |                |                |  |                               |
|     |          | SS <sub>E</sub>  | 16 33                 | 10                |                |                |  |                               |
|     |          | e <sub>Z</sub>   | 17 02                 | 10                |                |                |  |                               |
|     |          | eL               | 26                    |                   |                |                |  |                               |
|     |          | M <sub>Z</sub>   | 36 29                 | 15                |                |                | 6  |                               |
|     |          | M <sub>N</sub>   | 37 51                 | 14                | 19             |                |  |                               |
|     |          | M <sub>E</sub>   | 43 15                 | 12                |                | 7              |  |                               |
| 55  | 29. III. | F                | 17 26                 |                   |                |                |  |                               |
|     |          | e <sub>Z</sub>   | 23 40 10              | 6; 8 et<br>1,5; 2 |                |                |  |                               |
|     |          | 1940             |                       | AVRIL             |                | Nr. 4          |  |                               |
| 56  | 1. IV.   | e <sub>NE</sub>  | 11 50                 |                   |                |                | Commencement pen-<br>dant le changement<br>des feuilles Forte<br>agitation microséis-<br>mique surtout dans<br>les composantes hori-<br>zontales |                               |
|     |          | eL <sub>Z</sub>  | 12 16                 |                   |                |                |  |                               |
|     |          | M <sub>Z</sub>   | 25 jusqu'a<br>30      | 18—22             |                |                |  |                               |
| 57  | 5. IV.   | F                | 50                    |                   |                |                |  |                               |
|     |          | e <sub>NE</sub>  | 18 04 13              |                   |                |                |  |                               |
| 58  | 6. IV.   | F                | 07                    |                   |                |                |  |                               |
|     |          | eL <sub>N</sub>  | 14 18                 |                   |                |                |  |                               |
| 59  | 10. IV.  | eL <sub>Z</sub>  | 18                    |                   |                |                |  |                               |
|     |          | F                | 46                    |                   |                |                |  |                               |
|     |          | e <sub>E</sub>   | 21 08 16              | 16—20             |                |                |  |                               |
| 60  | 11. IV.  | e <sub>Z</sub>   | 09 22                 | 16—20             |                |                |  |                               |
|     |          | e <sub>N</sub>   | 11                    | 16—19             |                |                |  |                               |
|     |          | F                | 21                    |                   |                |                |  |                               |
|     |          | eL <sub>NE</sub> | 9 42                  | 13—16             |                |                |  |                               |
| 60  | 11. IV.  | eL <sub>Z</sub>  | 49                    | 14—16             |                |                |  |                               |
|     |          | M <sub>N</sub>   | 52 59                 | 15                | 4              |                |  |                               |
|     |          | M <sub>Z</sub>   | 53 03                 | 15                |                |                | 3  |                               |
|     |          | M <sub>E</sub>   | 54 29                 | 13                |                | 2              |  |                               |
|     |          | F                | 10 20                 |                   |                |                |  |                               |
|     |          | F                |                       |                   |                |                |  |                               |

| Nr. | Dates   | Phases             | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques  |
|-----|---------|--------------------|-----------------------|----------------|----------------|----------------|----------------|--|
|     |         |                    |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 61  | 12. IV. | eL <sub>NE</sub>   | h m s                 | s              | μ              | μ              | μ              |  |
|     |         | e <sub>Z</sub>     | 6 42                  |                |                |                |                |  |
|     |         | F                  | 45                    |                |                |                |                |  |
| 62  | 13. IV. | e <sub>E</sub>     | 6 27 47               | 0,5; 1         |                |                |                |  |
|     |         | F                  | 30 34                 |                |                |                |                |  |
| 63  | 13. IV. | P <sub>EZ</sub>    | 6 32 54               | 1; 2           |                |                |                | Δ = 1845 km  |
|     |         | iS <sub>E</sub>    | 36 06                 | 3              |                |                |                |  |
|     |         | M <sub>Z</sub>     | 46 09                 | 8              |                |                | 7              |  |
|     |         | M <sub>E</sub>     | 21                    | 10             |                | 10             |                |  |
|     |         | M <sub>N</sub>     | 47                    | 11             | 11             |                |                |  |
|     |         | F                  | 7 10                  |                |                |                |                |  |
| 64  | 14. IV. | eL <sub>NE</sub>   | 15 26                 |                |                |                |                |  |
|     |         | eL <sub>Z</sub>    | 31                    |                |                |                |                |  |
|     |         | M <sub>EZ</sub>    | 38 jusqu'à            | 12—17          |                |                |                |  |
|     |         |                    | 46                    |                |                |                |                |  |
|     |         | M <sub>N</sub>     | 39 jusqu'à            | 12—16          |                |                |                |  |
|     |         |                    | 43                    |                |                |                |                |  |
| 65  | 16. IV. | F                  | 16 02                 |                |                |                |                |  |
|     |         | iP <sub>Z</sub>    | 6 19 16               | 4              |                |                |                |  |
|     |         | S <sub>E</sub>     | 28 44                 | 8              |                |                | +              | Compression  |
|     |         | eSS <sub>E</sub>   | 33 44                 | 10             |                |                |                | Δ = 8045 km  |
|     |         |                    | 52 jusqu'à            | 16             |                |                | 62             | Ep. φ = 55° N  |
|     |         | M                  | 58                    | 15             |                | 24             |                | λ = 184° E   |
|     |         |                    |                       | 22             | 71             |                |                | Sur la phase principale se superposent les avant-coureurs du tremblement suivant |
| 66  | 16. IV. | eP <sub>Z</sub>    | 54 15                 | 1,5 2;         |                |                |                |  |
|     |         | M <sub>1</sub>     | 7 26 jusqu'à          | 17             | 49             |                |                |  |
|     |         |                    | 29                    | 18             |                | 36             |                |  |
|     |         |                    |                       | 20             |                |                | 130            |  |
|     |         | M <sub>2</sub>     | 31 jusqu'à            | 17—18          | 45             | 37             | 145            |  |
|     |         |                    | 37                    | 12             | 32             |                |                |  |
|     |         |                    |                       | 16             |                | 37             |                |  |
|     |         |                    |                       | 17             |                |                | 99             |  |
|     |         | F                  | 9 52                  |                |                |                |                |  |
| 67  | 16. IV. | e <sub>NE</sub>    | 14 28                 |                |                |                |                | Très faibles ondes   |
|     |         | e <sub>Z</sub>     | 30                    |                |                |                |                |  |
|     |         | F                  | 37                    |                |                |                |                |  |
| 68  | 19. IV. | (eP?) <sub>Z</sub> | 0 18 22               | 3              |                |                |                | +  |
|     |         | e <sub>N</sub>     | 24                    |                |                |                |                | Compression  |

| Nr. | Dates   | Phases                             | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques  |
|-----|---------|------------------------------------|-----------------------|----------------|----------------|----------------|----------------|--|
|     |         |                                    |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 68  | 19. IV. | eL                                 | h m s                 | s              | μ              | μ              | μ              |  |
|     |         | M <sub>N</sub>                     | 0 50                  | 18             |                |                |                |  |
|     | (suite) | M <sub>E</sub>                     | 52 40                 | 16             | 3              |                |                |  |
|     |         |                                    | 53 jusqu'à            | 14—16          |                |                |                |  |
|     |         |                                    | 56                    |                |                |                |                |  |
|     |         | M <sub>Z</sub>                     | 54 jusqu'à            | 16—18          |                |                |                |  |
|     |         |                                    | 56                    |                |                |                |                |  |
|     |         | F                                  | 1 18                  |                |                |                |                |  |
| 69  | 19. IV. | eL <sub>NE</sub>                   | 11 29                 | 14—16          |                |                |                |  |
|     |         | M <sub>E</sub>                     | 34 30                 | 16             |                | 1              |                |  |
|     |         | eL <sub>Z</sub>                    | 35                    | 14—18          |                |                |                |  |
|     |         | M <sub>Z</sub>                     | 38 12                 | 16             |                |                | 2              |  |
|     |         | M <sub>N</sub>                     | 18                    | 16             | 3              |                |                |  |
|     |         | F                                  | 53                    |                |                |                |                |  |
| 70  | 19. IV. | e <sub>Z</sub> (eP <sub>Z</sub> ?) | 14 51 13              | 5              |                |                | +              | Compression  |
|     |         | eL <sub>NE</sub>                   | 15 09                 | 12—18          |                |                |                |  |
|     |         | eL <sub>Z</sub>                    | 20                    | 18—20          |                |                |                |  |
|     |         | M <sub>E</sub>                     | 22 33                 | 16             |                | 3              |                |  |
|     |         | M <sub>Z</sub>                     | 25 58                 | 18             |                |                | 5              |  |
|     |         | M <sub>N</sub>                     | 26 22                 | 16             | 5              |                |                |  |
|     |         | F                                  | 55                    |                |                |                |                |  |
| 71  | 20. IV. | e <sub>E</sub>                     | 10 03                 | 0,5; 1         |                |                |                | Oscillations à très courte période dans les composantes horizontales |
|     |         | e <sub>N</sub>                     | 5                     |                |                |                |                |  |
|     |         | F                                  | 8,5                   |                |                |                |                |  |
| 72  | 20. IV. | eL <sub>NE</sub>                   | 11 03                 |                |                |                |                |  |
|     |         | eL <sub>Z</sub>                    | 7                     | 15—18          |                |                |                |  |
|     |         | M <sub>NE</sub>                    | 7 jusqu'à             | 12—16          |                |                |                |  |
|     |         |                                    | 9                     |                |                |                |                |  |
|     |         | F                                  | 22                    |                |                |                |                | Traces   |
| 73  | 20. IV. | e <sub>NE</sub>                    | 16 10 14              |                |                |                |                |  |
|     |         | F                                  | 21                    |                |                |                |                |  |
| 74  | 20. IV. | eL <sub>NE</sub>                   | 20 27                 |                |                |                |                |  |
|     |         | eL <sub>Z</sub>                    | 31                    |                |                |                |                |  |
|     |         | M <sub>E</sub>                     | 31 jusqu'à            | 14—18          |                |                |                |  |
|     |         |                                    | 33                    |                |                |                |                |  |
|     |         | M <sub>NZ</sub>                    | 35 jusqu'à            | 12—19          |                |                |                |  |
|     |         |                                    | 38                    |                |                |                |                |  |
|     |         | F                                  | 21 0                  |                |                |                |                |  |

| Nr.             | Dates   | Phases           | Heures<br>(Greenwich) | Périodes<br>T.   | Amplitudes     |                |                | Remarques  |
|-----------------|---------|------------------|-----------------------|------------------|----------------|----------------|----------------|------------|
|                 |         |                  |                       |                  | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |            |
| 75              | 22. IV. | eP <sub>Z</sub>  | h m s<br>12 24 55     | s<br>4; 1,5      | μ              | μ              | μ              | Dilatation |
|                 |         | i <sub>N</sub>   | 28 27                 | 4                |                |                |                |            |
|                 |         | e <sub>E</sub>   | 27                    | 4                |                |                |                |            |
|                 |         | e <sub>N</sub>   | 29 50                 | 4                |                |                |                |            |
|                 |         | e <sub>N</sub>   | 31 01                 | 3                |                |                |                |            |
|                 |         | M <sub>Z</sub>   | 35 39                 | 8                |                |                | 2              |            |
|                 |         | M <sub>N</sub>   | 55                    | 10               | 5              |                |                |            |
|                 |         | M <sub>E</sub>   | 39 20                 | 9                |                | 3              |                |            |
|                 |         | F                | 56                    |                  |                |                |                |            |
|                 |         | 76               | 24. IV.               | eL <sub>NE</sub> | 11 20          | 10, 14—20      |                |            |
| eL <sub>Z</sub> | 27      |                  |                       | 14, 18—22        |                |                |                |            |
| 77              | 25. IV. | F                | 40                    |                  |                |                |                |            |
|                 |         | e <sub>Z</sub>   | 18 36 45              | 2                |                |                |                |            |
| 78              | 26. IV. | eL <sub>Z</sub>  | 7 54 30               | 9—10             |                |                |                |            |
|                 |         | eL <sub>NE</sub> | 55                    | 8—14             |                |                |                |            |
|                 |         | F                | 8 07                  |                  |                |                |                |            |
| 79              | 26. IV. | e <sub>E</sub>   | 21 11 29              |                  |                |                |                |            |
|                 |         | e <sub>N</sub>   | 12                    |                  |                |                |                |            |
|                 |         | e <sub>Z</sub>   | 13                    |                  |                |                |                |            |
|                 |         | eL <sub>NE</sub> | 14                    | 8—12             |                |                |                |            |
|                 |         | eL <sub>Z</sub>  | 30                    | 8—10             |                |                |                |            |
|                 |         | M <sub>E</sub>   | 16 55                 | 7                |                | 2              |                |            |
|                 |         | M <sub>N</sub>   | 17 30                 | 8                | 2              |                |                |            |
|                 |         | F                | 22                    |                  |                |                |                |            |
|                 |         | F                | 27                    |                  |                |                |                |            |
|                 |         | 80               | 26. IV.               | eL <sub>E</sub>  | 22 21 30       | 8—10           |                |            |
| eL <sub>N</sub> | 22 30   |                  |                       |                  |                |                |                |            |
| eL <sub>Z</sub> | 23      |                  |                       |                  |                |                |                |            |
| F               | 30      |                  |                       |                  |                |                |                |            |
| 81              | 27. IV. | e <sub>Z</sub>   | 9 57                  | 1,5; 2           |                |                |                |            |
|                 |         | e <sub>NE</sub>  | 58                    |                  |                |                |                |            |
|                 |         | F                | 10 29                 |                  |                |                |                |            |
| 82              | 27. IV. | e <sub>Z</sub>   | 10 43 43              | 6                |                |                |                |            |
|                 |         | e <sub>E</sub>   | 52 35                 |                  |                |                |                |            |
|                 |         | M <sub>E</sub>   | 11 16 55              | 13               |                | 3              |                |            |
|                 |         | M <sub>Z</sub>   | 17 01                 | 14               |                |                | 5              |            |

| Nr.            | Dates              | Phases              | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques                    |  |  |  |
|----------------|--------------------|---------------------|-----------------------|----------------|----------------|----------------|----------------|------------------------------|--|--|--|
|                |                    |                     |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                              |  |  |  |
| 82             | 27. IV.<br>(suite) | M <sub>N</sub>      | h m s<br>11 18 31     | s<br>12        | μ              | μ              | μ              |                              |  |  |  |
|                |                    | M <sub>E</sub>      | 29 29                 | 11             |                | 3              |                |                              |  |  |  |
|                |                    | M <sub>N</sub>      | 30 28                 | 13             | 4              |                |                |                              |  |  |  |
|                |                    | M <sub>Z</sub>      | 31 48                 | 13             |                |                | 5              |                              |  |  |  |
| 83             | 27. IV.            | F                   | 12 44                 |                |                |                |                |                              |  |  |  |
|                |                    | e <sub>Z</sub>      | 18 26 30              | 7              |                |                |                |                              |  |  |  |
|                |                    | e <sub>N</sub>      | 27 29                 | 3              |                |                |                |                              |  |  |  |
|                |                    | e <sub>E</sub>      | 39                    | 5              |                |                |                |                              |  |  |  |
|                |                    | eL <sub>NE</sub>    | 19 13                 | 16—19          |                |                |                |                              |  |  |  |
|                |                    | eL <sub>Z</sub>     | 14                    | 16—18          |                |                |                |                              |  |  |  |
| 84             | 29. IV.            | F                   | 16                    |                |                |                |                | + Compression                |  |  |  |
|                |                    | e <sub>Z</sub>      | 15 23 26              | 2              |                |                |                |                              |  |  |  |
|                |                    | eL <sub>NZ</sub>    | 55                    | 14—18          |                |                |                |                              |  |  |  |
| 85             | 30. IV.            | F                   | 15                    |                |                |                |                |                              |  |  |  |
|                |                    | e <sub>Z</sub>      | 5 50                  |                |                |                |                |                              |  |  |  |
|                |                    | eL <sub>NE</sub>    | 37                    | 12—18          |                |                |                |                              |  |  |  |
|                |                    | eL <sub>Z</sub>     | 41                    | 14—18          |                |                |                |                              |  |  |  |
|                |                    | M <sub>N</sub>      | 42 11                 | 13             |                | 2              |                |                              |  |  |  |
|                |                    | M <sub>E</sub>      | 52                    | 13             |                |                | 1              |                              |  |  |  |
| 86             | 1. V.              | F                   | 6 04                  |                |                |                |                |                              |  |  |  |
|                |                    | 1940 M A I          |                       |                |                |                |                |                              |  |  |  |
|                |                    | e <sub>EZ</sub>     | 9 41 23               |                |                |                |                |                              |  |  |  |
|                |                    | i <sub>N</sub>      | 49                    | 5              |                |                |                |                              |  |  |  |
|                |                    | i <sub>E</sub>      | 42 04                 | 5              |                |                | 1              |                              |  |  |  |
|                |                    | M <sub>E</sub>      | 43 47                 | 5              |                |                |                |                              |  |  |  |
|                |                    | F                   | 47                    |                |                |                |                |                              |  |  |  |
|                |                    | 87                  | 3. V.                 | e <sub>E</sub> | 0 39 01        | 2              |                |                              |  |  |  |
|                |                    |                     |                       | e <sub>N</sub> | 06             |                |                |                              |  |  |  |
|                |                    |                     |                       | e <sub>Z</sub> | 29             |                |                |                              |  |  |  |
| 88             | 4. V.              | F                   | 44                    |                |                |                |                | + Compression<br>Δ = 8045 km |  |  |  |
|                |                    | iP <sub>Z</sub>     | 7 35 39               | 7              |                |                |                |                              |  |  |  |
|                |                    | ePP <sub>Z</sub>    | 38 22                 | 7              |                |                |                |                              |  |  |  |
|                |                    | PPP <sub>Z</sub>    | 40 04                 | 9              |                |                |                |                              |  |  |  |
|                |                    | iS <sub>N</sub>     | 45 07                 | 12             |                |                |                |                              |  |  |  |
|                |                    | iPS <sub>N</sub>    | 42                    | 12             |                |                |                |                              |  |  |  |
|                |                    | (eSS <sub>E</sub> ) | 50 13                 | 10             |                |                |                |                              |  |  |  |
|                |                    | eL                  | 8 03                  | 16 18—20       |                |                |                |                              |  |  |  |
|                |                    | M <sub>N</sub>      | 09 12                 | 18             |                | 12             |                |                              |  |  |  |
|                |                    | M <sub>Z</sub>      | 11 19                 | 18             |                |                | 11             |                              |  |  |  |
| M <sub>E</sub> | 15 26              | 12                  |                       |                | 4              |                |                |                              |  |  |  |
| F              | 9 36               |                     |                       |                |                |                |                |                              |  |  |  |

Nr. 5

| Nr. | Dates | Phases           | Heures<br>(Greenwich) | Périodes<br>T.  | Amplitudes     |                |                | Remarques                  |
|-----|-------|------------------|-----------------------|-----------------|----------------|----------------|----------------|----------------------------|
|     |       |                  |                       |                 | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                            |
| 89  | 4. V. | e <sub>N</sub>   | h m s<br>17 08        | s               | μ              | μ              | μ              |                            |
|     |       | e <sub>EZ</sub>  | 14                    |                 |                |                |                |                            |
|     |       | M <sub>N</sub>   | 28 jusqu'à<br>32      | 8—12            |                |                |                |                            |
|     |       | M <sub>N</sub>   | 41 jusqu'à<br>51      | 12—18, 22       |                |                |                |                            |
|     |       | M <sub>EZ</sub>  | 46 jusqu'à<br>51      | 12—18, 20       |                |                |                |                            |
|     |       | F                | 18 10                 |                 |                |                |                |                            |
| 90  | 4. V. | e <sub>E</sub>   | 18 51                 | 10—16           |                |                |                | Traces                     |
|     |       | e <sub>NZ</sub>  | 52                    | 8—14, 20        |                |                |                |                            |
|     |       | F                | 58                    |                 |                |                |                |                            |
| 91  | 4. V. | P <sub>Z</sub>   | 21 08 19              | 4               |                |                | +              | Compression<br>Δ = 3800 km |
|     |       | PP <sub>Z</sub>  | 9 29                  | 4               |                |                |                |                            |
|     |       | iS <sub>N</sub>  | 13 54                 | 8               |                |                |                |                            |
|     |       | iSS <sub>N</sub> | 15 39                 | 8               |                |                |                |                            |
|     |       | L <sub>Z</sub>   | 20                    | 8, 12           |                |                |                |                            |
|     |       | M <sub>Z</sub>   | 22 23                 | 15              |                |                | 36             |                            |
|     |       | M <sub>E</sub>   | 26 06                 | 11              |                | 18             |                |                            |
|     |       | M <sub>N</sub>   | 13                    | 14              | 50             |                |                |                            |
|     |       | F                | 23 10                 |                 |                |                |                |                            |
|     |       | e <sub>Z</sub>   | 2 17 43               |                 |                |                |                |                            |
| 92  | 5. V. | e <sub>Z</sub>   | 21 53                 | 7               |                |                |                |                            |
|     |       | i <sub>E</sub>   | 28 19                 | 7               |                |                |                |                            |
|     |       | e <sub>N</sub>   | 21                    |                 |                |                |                |                            |
|     |       | e <sub>E</sub>   | 29 26                 |                 |                |                |                |                            |
|     |       | i <sub>N</sub>   | 27                    | 7               |                |                |                |                            |
|     |       | e <sub>Z</sub>   | 29                    | 7               |                |                |                |                            |
|     |       | eL <sub>EZ</sub> | 56                    | 20—26,<br>16—21 |                |                |                |                            |
|     |       | eL <sub>N</sub>  | 58                    | 19—22           |                |                |                |                            |
|     |       | M <sub>E</sub>   | 3 06 23               | 19              |                | 5              |                |                            |
|     |       | M <sub>N</sub>   | 07 36                 | 18              | 5              |                |                |                            |
|     |       | M <sub>Z</sub>   | 08 18                 | 19              |                |                | 7              |                            |
|     |       | F                | 48                    |                 |                |                |                |                            |
|     |       | e <sub>NE</sub>  | 6 02                  |                 |                |                |                |                            |
|     |       | e <sub>Z</sub>   | 04                    |                 |                |                |                |                            |
| 93  | 5. V. | e <sub>Z</sub>   | 07 55                 |                 |                |                |                |                            |
|     |       | e <sub>Z</sub>   | 11 15                 |                 |                |                |                |                            |
|     |       | M <sub>N</sub>   | 22 33                 | 14              | 2              |                |                |                            |
|     |       | M <sub>Z</sub>   | 48                    | 15              |                |                | 3              |                            |
|     |       | M <sub>E</sub>   | 6 22 50               | 14              |                | 2              |                |                            |
|     |       | F                | 38                    |                 |                |                |                |                            |

| Nr.            | Dates           | Phases            | Heures<br>(Greenwich) | Périodes<br>T.  | Amplitudes     |                |                | Remarques   |
|----------------|-----------------|-------------------|-----------------------|-----------------|----------------|----------------|----------------|---|
|                |                 |                   |                       |                 | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |   |
| 94             | 7. V.           | e <sub>E</sub>    | h m s<br>7 19 17      | s               | μ              | μ              | μ              |   |
|                |                 | e <sub>N</sub>    | 31                    |                 |                |                |                |   |
|                |                 | eL <sub>E</sub>   | 20                    | 10, 11          |                |                |                |   |
|                |                 | eL <sub>NZ</sub>  | 21                    | 11              |                |                |                |   |
|                |                 | M <sub>N</sub>    | 26                    | 8               | 1              |                |                |   |
|                |                 | M <sub>E</sub>    | 22 12                 | 6               |                | 1              |                |   |
| 95             | 7. V.           | F                 | 26                    |                 |                |                |                |   |
|                |                 | P <sub>Z</sub>    | 22 27 57              | 3               |                |                | +              | Compression<br>Δ = 2100 km<br>Azimut SE<br>Ep. φ = 39° N<br>λ = 40° E |
|                |                 | PP <sub>Z</sub>   | 29 15                 | 3               |                |                |                |   |
|                |                 | iS <sub>N</sub>   | 31 31                 | 6, 7            |                |                |                |   |
|                |                 | iSS <sub>N</sub>  | 32 09                 | 8               |                |                |                |   |
|                |                 | eL                | 33                    | 4—5, 11         |                |                |                |   |
|                |                 | M <sub>E</sub>    | 35 13                 | 9               |                | 26             |                |   |
|                |                 | M <sub>Z</sub>    | 36                    | 13              |                |                | 40             |   |
|                |                 | M <sub>N</sub>    | 42                    | 14              | 70             |                |                |   |
|                |                 | M <sub>E</sub>    | 37 44                 | 8               |                | 17             |                |   |
| M <sub>Z</sub> | 38 15           | 8                 |                       |                 | 18             |                |                |   |
| 96             | 8. V.<br>11. V. | M <sub>N</sub>    | 41 32                 | 9               | 21             |                |                |   |
|                |                 | F                 | 0 05                  |                 |                |                |                |   |
| 96             | 8. V.<br>11. V. | eP <sub>Z</sub>   | 14 06 12              | 6; 2            |                |                | +              | Compression<br>Δ = 8000 km  |
|                |                 | eP <sub>E</sub>   | 12                    | 4; 2            |                |                |                |   |
|                |                 | PP <sub>Z</sub>   | 08 56                 | 4               |                |                |                |   |
|                |                 | PPP <sub>Z</sub>  | 10 42                 | 6               |                |                |                |   |
|                |                 | iS <sub>E</sub>   | 15 37                 | 9               |                |                |                |   |
|                |                 | iS <sub>N</sub>   | 40                    | 10              |                |                |                |   |
|                |                 | i <sub>Z</sub>    | 16 22                 | 6               |                |                |                |   |
|                |                 | SS <sub>E</sub>   | 20 14                 | 12              |                |                |                |   |
|                |                 | SS <sub>N</sub>   | 31                    | 12              |                |                |                |   |
|                |                 | eSSS <sub>E</sub> | 22 34                 | 10              |                |                |                |   |
|                |                 | i <sub>N</sub>    | 23 56                 | 10              |                |                |                |   |
|                |                 | i <sub>Z</sub>    | 24 12                 | 16              |                |                |                |   |
|                |                 | eL <sub>E</sub>   | 29                    | 12—18,<br>24—26 |                |                |                |   |
|                |                 | eL <sub>Z</sub>   | 31                    | 12—20, 32       |                |                |                |   |
|                |                 | eL <sub>N</sub>   | 32                    | 12—18, 22       |                |                |                |   |
|                |                 | M <sub>N</sub>    | 42 21                 | 16              | 16             |                |                |   |
|                |                 | M <sub>Z</sub>    | 43 38                 | 16              |                |                | 12             |   |
| M <sub>E</sub> | 45 50           | 13                |                       | 5               |                |                |                |   |
| F              | 50              |                   |                       |                 |                |                |                |   |

| Nr. | Dates  | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes         |                |                | Remarques |
|-----|--------|------------------|-----------------------|----------------|--------------------|----------------|----------------|-----------|
|     |        |                  |                       |                | A <sub>N</sub>     | A <sub>E</sub> | A <sub>Z</sub> |           |
| 97  | 11. V. | e <sub>NE</sub>  | h m s<br>21 32        | s              | μ                  | μ              | μ              |           |
|     |        | eL <sub>N</sub>  | 34                    |                | 12, 18—26          |                |                |           |
|     |        | e <sub>Z</sub>   | 35                    |                |                    |                |                |           |
|     |        | eL <sub>E</sub>  | 39                    |                | 12, 16—20          |                |                |           |
|     |        | eL <sub>Z</sub>  | 39                    |                | 12, 20—26          |                |                |           |
|     |        | F                | 47                    |                |                    |                |                |           |
| 98  | 14. V. | e <sub>NEZ</sub> | 0 51                  |                |                    |                |                |           |
|     |        | F                | 56                    |                |                    |                |                |           |
| 99  | 14. V. | e <sub>EZ</sub>  | 3 33                  |                |                    |                |                |           |
|     |        | F                | 35                    |                |                    |                |                |           |
| 100 | 14. V. | e <sub>NEZ</sub> | 5 51                  |                |                    |                |                |           |
|     |        | F                | 57                    |                |                    |                |                |           |
| 101 | 14. V. | eL <sub>N</sub>  | 11 18                 |                | Très faibles ondes |                |                |           |
|     |        | eL <sub>EZ</sub> | 24                    |                |                    |                |                |           |
|     |        | F                | 57                    |                |                    |                |                |           |
| 102 | 15. V. | eL <sub>E</sub>  | 14 00                 |                |                    |                |                |           |
|     |        | eL <sub>N</sub>  | 03                    |                |                    |                |                |           |
|     |        | F                | 25                    |                |                    |                |                |           |
| 103 | 15. V. | e <sub>E</sub>   | 20 19 37              |                |                    |                |                |           |
|     |        | e <sub>N</sub>   | 44                    |                |                    |                |                |           |
|     |        | eL <sub>NE</sub> | 27                    |                |                    |                |                |           |
|     |        | eL <sub>Z</sub>  | 28 jusqu'à            |                | 10—12              |                |                |           |
|     |        |                  | 33                    |                |                    |                |                |           |
|     |        | M <sub>E</sub>   | 29 jusqu'à            |                | 10—12              |                |                |           |
|     |        |                  | 32                    |                |                    |                |                |           |
|     |        | M <sub>N</sub>   | 29 jusqu'à            |                | 10—16              |                |                |           |
|     |        |                  | 34                    |                |                    |                |                |           |
|     |        | F                | 47                    |                |                    |                |                |           |
| 104 | 17. V. | e <sub>Z</sub>   | 2 12 53               |                |                    |                |                |           |
|     |        | e <sub>NE</sub>  | 23 35                 |                | 6, 8               |                |                |           |
|     |        | eL <sub>NE</sub> | 44                    |                | 12—16,<br>20, 24   |                |                |           |
|     |        | M <sub>N</sub>   | 52 22                 |                | 20                 | 2              |                |           |
|     |        | M <sub>E</sub>   | 59 45                 |                | 17                 | 2              |                |           |
|     |        | F                | 3 39                  |                |                    |                |                |           |
| 105 | 18. V. | e <sub>N</sub>   | 5 21 33               |                |                    |                |                |           |
|     |        | eL <sub>N</sub>  | 6 11 jusqu'à          |                | 12—16,<br>20, 32   |                |                |           |
|     |        |                  | 23                    |                |                    |                |                |           |

| Nr.              | Dates             | Phases                         | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes       |                |                | Remarques                     |
|------------------|-------------------|--------------------------------|-----------------------|----------------|------------------|----------------|----------------|-------------------------------|
|                  |                   |                                |                       |                | A <sub>N</sub>   | A <sub>E</sub> | A <sub>Z</sub> |                               |
| 105              | 18. V.<br>(suite) | eL <sub>E</sub>                | h m s<br>6 13 jusqu'à | 12—16 20       | μ                | μ              | μ              |                               |
|                  |                   |                                | 25                    |                |                  |                |                |                               |
| 106              | 19. V.            | F                              | 42                    |                |                  |                |                | Dilatation<br>Δ = ca 9500 km? |
|                  |                   | eP <sub>Z</sub>                | 4 49 36               |                | 3                |                |                |                               |
|                  |                   | PP <sub>Z</sub>                | 52 51                 |                | 6                |                |                |                               |
|                  |                   | PPP <sub>Z</sub>               | 54 55                 |                | 6                |                |                |                               |
|                  |                   | S <sub>E</sub>                 | 5 00 09               |                | 10               |                |                |                               |
|                  |                   | i <sub>Z</sub>                 | 04 30                 |                | 12               |                |                |                               |
|                  |                   | SS <sub>E</sub>                | 05 43                 |                | 13               |                |                |                               |
|                  |                   | eL <sub>E</sub>                | 16                    |                | 12—20,<br>28, 30 |                |                |                               |
|                  |                   |                                |                       |                | 14—22            |                |                |                               |
|                  |                   |                                | eL <sub>Z</sub>       |                | 16               |                |                |                               |
| 107              | 19. V.            | M <sub>E</sub>                 | 35 35                 |                |                  | 39             |                | Dilatation<br>Δ = 6680 km     |
|                  |                   | M <sub>Z</sub>                 | 36 41                 |                | 135              |                |                |                               |
|                  |                   | M <sub>E</sub>                 | 37 47                 |                | 16               | 43             |                |                               |
|                  |                   | (W <sub>2</sub> ) <sub>E</sub> | 7 04                  |                |                  |                |                |                               |
|                  |                   | (W <sub>2</sub> ) <sub>Z</sub> | 09                    |                |                  |                |                |                               |
|                  |                   | F                              | 8 58                  |                |                  |                |                |                               |
|                  |                   | iP <sub>E</sub>                | 15 28 01              |                | 6                | +              |                |                               |
|                  |                   | iP <sub>Z</sub>                | 03                    |                | 4                |                |                |                               |
|                  |                   | PP <sub>Z</sub>                | 30 01                 |                | 7                |                |                |                               |
|                  |                   | PPP <sub>Z</sub>               | 31 03                 |                | 8                |                |                |                               |
| i <sub>Z</sub>   | 33 31             | 10                             |                       |                |                  |                |                |                               |
| i <sub>Z</sub>   | 34 53             | 9                              |                       |                |                  |                |                |                               |
| iS <sub>E</sub>  | 36 20             | 8                              |                       |                |                  |                |                |                               |
| iS <sub>Z</sub>  | 27                | 10                             |                       |                |                  |                |                |                               |
| e <sub>Z</sub>   | 39 27             | 10                             |                       |                |                  |                |                |                               |
| iSS <sub>E</sub> | 47                | 10                             |                       |                |                  |                |                |                               |
| e <sub>E</sub>   | 43 20             | 8                              |                       |                |                  |                |                |                               |
| i <sub>E</sub>   | 44 49             | 14                             |                       |                |                  |                |                |                               |
| i <sub>Z</sub>   | 51                | 17                             |                       |                |                  |                |                |                               |
| eL <sub>E</sub>  | 45                | 12—14, 20                      |                       |                |                  |                |                |                               |
| eL <sub>Z</sub>  | 45                | 12, 16, 24                     |                       |                |                  |                |                |                               |
| M <sub>E</sub>   | 54 14             | 11                             | 5                     |                |                  |                |                |                               |
| M <sub>Z</sub>   | 16 09 53          | 14                             |                       |                |                  |                |                |                               |
| F                | 17 10             |                                |                       |                |                  |                |                |                               |
| 108              | 19. V.            | P <sub>Z</sub>                 | 18 28 13              |                |                  |                |                | Dilatation<br>Δ = 8650 km     |
|                  |                   | P <sub>E</sub>                 | 15                    |                | 4                |                |                |                               |
|                  |                   | S <sub>E</sub>                 | 38 09                 |                | 8                |                |                |                               |
|                  |                   | S <sub>Z</sub>                 | 13                    |                | 6                |                |                |                               |
|                  |                   | eL <sub>E</sub>                | 53                    |                | 12—20, 24        |                |                |                               |
|                  |                   | eL <sub>Z</sub>                | 56                    |                | 12—20, 24        |                |                |                               |

| Nr.             | Dates             | Phases              | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques      |
|-----------------|-------------------|---------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|
|                 |                   |                     |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                |
|                 |                   |                     | h m s                 | s              | μ              | μ              | μ              |                |
| 108             | 19. V.<br>(suite) | M <sub>E</sub>      | 19 09 53              | 14             |                | 3              |                |                |
|                 |                   | M <sub>Z</sub>      |                       | 18             |                |                |                |                |
| 109             | 21. V.            | F                   | 20 15                 |                |                |                |                | 4              |
|                 |                   | (eP <sub>Z</sub> ?) | 1 38 45               |                |                |                |                |                |
|                 |                   | eP <sub>E</sub>     | 51                    |                |                |                |                |                |
|                 |                   | (eS <sub>E</sub> ?) | 39 59                 | 4              |                |                |                |                |
|                 |                   | eL <sub>E</sub>     | 40 26                 | 6-10           |                |                |                |                |
|                 |                   | M <sub>E</sub>      | 41 03                 | 7              |                | 1              |                |                |
| 110             | 21. V.            | M <sub>Z</sub>      | 41                    | 6              |                |                |                | 1              |
|                 |                   | F                   | 48                    |                |                |                |                |                |
|                 |                   | e <sub>E</sub>      | 2 51 43               |                |                |                |                |                |
|                 |                   | F                   | 57                    |                |                |                |                |                |
| 111             | 21. V.            | eP <sub>Z</sub>     | 19 07 57              |                |                |                |                | Dilatation     |
|                 |                   | eP <sub>E</sub>     |                       | 4              |                |                |                |                |
|                 |                   | eP <sub>N</sub>     | 59                    | 2; 3           | +              | +              |                |                |
|                 |                   | e <sub>Z</sub>      | 09 29                 | 4              |                |                |                |                |
|                 |                   | e <sub>Z</sub>      | 10 07                 | 5              |                |                |                |                |
|                 |                   | e <sub>E</sub>      | 11 13                 | 6              |                |                |                |                |
|                 |                   | e <sub>Z</sub>      | 21                    | 6              |                |                |                |                |
|                 |                   | e <sub>N</sub>      | 13 33                 | 8              |                |                |                |                |
|                 |                   | e <sub>N</sub>      | 14 29                 | 6              |                |                |                |                |
|                 |                   | e <sub>E</sub>      | 37                    | 6              |                |                |                |                |
|                 |                   | e <sub>N</sub>      | 20 25                 | 5              |                |                |                |                |
|                 |                   | e <sub>N</sub>      | 21 39                 | 14             |                |                |                |                |
|                 |                   | eL <sub>N</sub>     | 27                    | 10-16          |                |                |                |                |
|                 |                   | eL <sub>E</sub>     |                       | 12-18          |                |                |                |                |
|                 |                   | M <sub>E</sub>      | 30 07                 | 10             |                |                | 1              |                |
| M <sub>N</sub>  | 32 18             | 13                  | 1                     |                |                |                |                |                |
| F               | 20 30             |                     |                       |                |                |                |                |                |
| 112             | 22. V.            | e <sub>E</sub>      | 6 44 43               |                |                |                |                |                |
|                 |                   | e <sub>N</sub>      | 57                    |                |                |                |                |                |
|                 |                   | M <sub>E</sub>      | 47 25                 | 10             |                |                | 1              |                |
|                 |                   | M <sub>N</sub>      | 49 19                 | 10             | 1              |                |                |                |
| 113             | 23. V.            | F                   | 56                    |                |                |                |                |                |
|                 |                   | eP <sub>NZ</sub>    | 6 13 13               | 2              |                |                |                | Δ = ca 8000 km |
|                 |                   | ePP <sub>Z</sub>    | 15 19                 | 8              |                |                |                |                |
|                 |                   | ePPP <sub>Z</sub>   | 17 31                 | 6              |                |                |                |                |
|                 |                   | eS <sub>E</sub>     | 22 35                 | 7              |                |                |                |                |
|                 |                   | eS <sub>N</sub>     | 37                    | 10             |                |                |                |                |
| SS <sub>E</sub> | 26 33             | 8                   |                       |                |                |                |                |                |

| Nr.               | Dates             | Phases   | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques |  |
|-------------------|-------------------|--|-----------------------|----------------|----------------|----------------|----------------|-----------|--|
|                   |                   |  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |  |
|                   |                   |  | h m s                 | s              | μ              | μ              | μ              |           |  |
| 113               | 23. V.<br>(suite) | SS <sub>N</sub>  | 6 27 13               | 14             |                |                |                |           |  |
|                   |                   | e <sub>E</sub>   | 29 11                 | 8              |                |                |                |           |  |
|                   |                   | eL   | 41                    | 12-16, 20      |                |                |                |           |  |
|                   |                   | M <sub>Z</sub>   | 54 56                 | 15             |                |                |                | 2         |  |
|                   |                   | M <sub>N</sub>   | 55 01                 | 14             | 2              |                |                |           |  |
| 114               | 23. V.            | M <sub>E</sub>   | 7 00 51               | 11             |                | 1              |                |           |  |
|                   |                   | F  | 53                    |                |                |                |                |           |  |
|                   |                   | eP <sub>N</sub>  | 19 17 47              |                |                |                |                |           |  |
|                   |                   | eP <sub>E</sub>  | 49                    | 4              |                |                |                |           |  |
|                   |                   | e <sub>Z</sub>   | 18 19                 | 4              |                |                |                |           |  |
|                   |                   | (eS <sub>N</sub> ?)  | 19 59                 | 8              |                |                |                |           |  |
|                   |                   | (eS <sub>E</sub> ?)  | 20 01                 | 4              |                |                |                |           |  |
|                   |                   | M <sub>N</sub>   | 21 37                 | 12             | 2              |                |                |           |  |
| 115               | 24. V.            | M <sub>E</sub>   | 22 17                 | 8              |                | 1              |                |           |  |
|                   |                   | F  | 42                    |                |                |                |                |           |  |
|                   |                   | e <sub>EN</sub>  | 1 50                  |                |                |                |                |           |  |
| 116               | 24. V.            | F  | 56                    |                |                |                |                |           |  |
|                   |                   | iP <sub>EZ</sub>   | 16 47 57              | 4              |                |                | +              | +         | Compression<br>Δ = 11900 km<br>Tremblement à Pérou |
|                   |                   | PP <sub>Z</sub>  | 52 11                 | 12             |                |                |                |           |  |
|                   |                   | PP <sub>E</sub>  | 13                    | 14             |                |                |                |           |  |
|                   |                   | PPP <sub>Z</sub>   | 54 35                 |                |                |                |                |           |  |
|                   |                   | S <sub>C</sub> P <sub>C</sub> S <sub>N</sub>                 | 58 56                 | 20             |                |                |                |           |  |
|                   |                   | iS <sub>C</sub> P <sub>C</sub> S <sub>E</sub>                | 59 01                 | 18             |                |                |                |           |  |
|                   |                   | eS <sub>C</sub> P <sub>C</sub> S <sub>Z</sub>                | 11                    | 10-14          |                |                |                |           |  |
|                   |                   | iS <sub>C</sub> P <sub>C</sub> P <sub>C</sub> S <sub>N</sub> | 29                    | 22             |                |                |                |           |  |
|                   |                   | S <sub>C</sub> P <sub>C</sub> P <sub>C</sub> S <sub>E</sub>  | 49                    | 8              |                |                |                |           |  |
|                   |                   | iP <sub>S<sub>E</sub></sub>                                  | 17 01 33              |                |                |                |                |           |  |
|                   |                   | PS <sub>Z</sub>  | 35                    | 18             |                |                |                |           |  |
| e <sub>Z</sub>    | 03 53             | 14   |                       |                |                |                |                |           |  |
| iSS <sub>E</sub>  | 07 11             | 22   |                       |                |                |                |                |           |  |
| iSS <sub>Z</sub>  | 15                | 32   |                       |                |                |                |                |           |  |
| SS <sub>N</sub>   | 25                | 20   |                       |                |                |                |                |           |  |
| iSSS <sub>E</sub> | 12 09             | 30   |                       |                |                |                |                |           |  |
| eL <sub>N</sub>   | 19                |  |                       |                |                | 99             |                |           |  |
| M <sub>N</sub>    | 21 31             | 24   |                       |                |                |                |                |           |  |
| eL <sub>EZ</sub>  | 24                | 20-26  |                       |                |                |                |                |           |  |
| M <sub>N</sub>    | 31 13             | 27   |                       |                | 110            |                |                |           |  |
| M <sub>E</sub>    | 32 55             | 24   |                       |                |                | 111            |                |           |  |
| M <sub>Z</sub>    | 33 59             | 23   |                       |                |                | 161            |                |           |  |
| M <sub>N</sub>    | 37 16             | 18   |                       |                | 55             |                |                |           |  |

| Nr.   | Dates             | Phases                          | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques  |
|---|-------------------|---------------------------------|-----------------------|----------------|----------------|----------------|----------------|--|
|   |                   |                                 |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 116   | 24. V.<br>(suite) | M <sub>Z</sub>                  | 17 29 29              | 18             | μ              | μ              | μ              | Sur l'arrière-train des ondes du tremblement se superposent depuis 19 <sup>h</sup> 10 <sup>m</sup> jusqu'à 19 <sup>h</sup> 21 <sup>m</sup> des oscillations à période courte de 1-2 secondes pour la plupart |
|   |                   | (W <sub>2</sub> ) <sub>Z</sub>  | 18 43                 |                |                |                | 89             |  |
|   |                   | M <sub>Z</sub>                  | 53                    | 20             |                |                | 48             |  |
|   |                   | (W <sub>2</sub> ) <sub>NE</sub> | 45                    |                |                |                |                |  |
|   |                   | M <sub>E</sub>                  | 47 25                 | 16             |                | 16             |                |  |
|   |                   | M <sub>N</sub>                  | 47                    | 20             | 32             |                |                |  |
|   |                   | (W <sub>3</sub> ) <sub>E</sub>  | 20 12                 |                |                |                |                |  |
|   |                   | (W <sub>3</sub> ) <sub>NE</sub> | 15                    |                |                |                |                |  |
|   |                   | F                               | 21 58                 |                |                |                |                |  |
|   |                   | 117                             | 24. V.                | P <sub>Z</sub> | 22 11 53       | 8              |                |  |
| PP <sub>Z</sub>   | 16 11             |                                 |                       | 6              |                |                |                |  |
| PP <sub>E</sub>   | 13                |                                 |                       | 6              |                |                |                |  |
| PPP <sub>Z</sub>  | 18 33             |                                 |                       | 6              |                |                |                |  |
| S <sub>C</sub> P <sub>C</sub> S <sub>E</sub>                | 22 29             |                                 |                       | 7              |                |                |                |  |
| S <sub>C</sub> P <sub>C</sub> P <sub>C</sub> S <sub>E</sub> | 23 35             |                                 |                       | 7              |                |                |                |  |
| PS <sub>E</sub>   | 25 25             |                                 |                       | 13             |                |                |                |  |
| PS <sub>Z</sub>   | 31                |                                 |                       | 14             |                |                |                |  |
| SS <sub>N</sub>   | 31 13             |                                 |                       | 14             |                |                |                |  |
| SS <sub>E</sub>   | 33                |                                 |                       | 12             |                |                |                |  |
| SSS <sub>N</sub>  | 35 57             |                                 |                       | 15             |                |                |                |  |
| L <sub>N</sub>  | 44                |                                 |                       | 16-28,         |                |                |                |  |
| L <sub>E</sub>  | 47                |                                 |                       | 36             |                |                |                |  |
| L <sub>Z</sub>  | 51                |                                 |                       | 24-48          |                |                |                |  |
| M <sub>Z</sub>  | 59 35             |                                 |                       | 20             |                |                | 21             |  |
| M <sub>E</sub>  | 51                |                                 |                       | 19             |                | 16             |                |  |
| 118   | 25. V.            |                                 |                       | M <sub>N</sub> | 23 01 29       | 13             | 14             |  |
|   |                   | (W <sub>2</sub> ) <sub>Z</sub>  | 0 12                  |                |                |                |                |  |
|   |                   | (W <sub>2</sub> ) <sub>N</sub>  | 18                    |                |                |                |                |  |
|   |                   | (W <sub>2</sub> ) <sub>E</sub>  | 22                    |                |                |                |                |  |
|   |                   | F                               | 1 34                  |                |                |                |                |  |
| 118   | 26. V.            | e <sub>E</sub>                  | 15 47 00              | 14             |                |                |                |  |
|   |                   | e <sub>N</sub>                  | 04                    | 18             |                |                |                |  |
|   |                   | e <sub>Z</sub>                  | 15                    | 10             |                |                |                |  |
|   |                   | e <sub>E</sub>                  | 32                    | 2              |                |                |                |  |
|   |                   | e <sub>NZ</sub>                 | 34                    | 2              |                |                |                |  |
|   |                   | eL <sub>N</sub>                 | 53                    | 10-20          |                |                |                |  |
|   |                   | eL <sub>E</sub>                 | 54                    | 12-20          |                |                |                |  |
|   |                   | eL <sub>Z</sub>                 |                       | 8-12           |                |                |                |  |
|   |                   | F                               | 16 22                 |                |                |                |                |  |

| Nr.              | Dates  | Phases                | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                          | Remarques   |
|------------------|--------|-----------------------|-----------------------|----------------|----------------|----------------|--------------------------|---|
|                  |        |                       |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>           |   |
| 119              | 27. V. | eP <sub>Z</sub>       | 4 17 37               | 4              | μ              | μ              | μ                        | Compression<br>Δ = 4200 km?<br>Ep. φ = 27° N<br>λ = 59° E |
|                  |        | eP <sub>E</sub>       | 38                    | 4              |                | -              | +                        |   |
|                  |        | eP <sub>N</sub>       | 40                    | 4              | +              |                |                          |   |
|                  |        | e <sub>Z</sub>        | 18 24                 | 4              |                |                |                          |   |
|                  |        | e <sub>Z</sub>        | 25                    | 4              |                |                |                          |   |
|                  |        | (ePP <sub>NE</sub> ?) | 50                    | 4              |                |                |                          |   |
|                  |        | (ePP <sub>Z</sub> ?)  |                       | 6              |                |                |                          |   |
|                  |        | e <sub>N</sub>        | 19 30                 | 4              |                |                |                          |   |
|                  |        | e <sub>Z</sub>        | 53                    | 4              |                |                |                          |   |
|                  |        | e <sub>E</sub>        | 20 10                 | 4              |                |                |                          |   |
|                  |        | i <sub>Z</sub>        | 15                    | 5              |                |                |                          |   |
|                  |        | e <sub>E</sub>        | 23 12                 | 4              |                |                |                          |   |
|                  |        | e <sub>N</sub>        | 14                    | 6              |                |                |                          |   |
|                  |        | e <sub>Z</sub>        | 21                    | 6              |                |                |                          |   |
|                  |        | (eS <sub>E</sub> ?)   | 38                    | 6              |                |                |                          |   |
|                  |        | (eSS <sub>E</sub> ?)  | 25 50                 | 6              |                |                |                          |   |
|                  |        | (eSS <sub>N</sub> ?)  | 54                    | 14             |                |                |                          |   |
|                  |        | e <sub>Z</sub>        |                       | 8              |                |                |                          |   |
|                  |        | (eSSS <sub>E</sub> ?) | 26 22                 | 8              |                |                |                          |   |
|                  |        | (eSSS <sub>N</sub> ?) |                       | 10             |                |                |                          |   |
| e <sub>Z</sub>   | 25     | 10                    |                       |                |                |                |                          |   |
| eL <sub>E</sub>  | 29     | 8, 10,                |                       |                |                |                |                          |   |
| eL <sub>NZ</sub> | 30     | 12                    |                       |                |                |                |                          |   |
| M <sub>Z</sub>   | 34 42  | 7                     |                       |                |                |                |                          |   |
| M <sub>N</sub>   | 35 48  | 10                    | 1                     |                |                |                |                          |   |
| M <sub>E</sub>   | 36 24  | 8                     |                       | 1              |                |                |                          |   |
| F                | 5 08   |                       |                       |                |                |                |                          |   |
| 120              | 27. V. | e <sub>Z</sub>        | 8 12 38               | 6              |                |                | Tremblement très éloigné |   |
|                  |        | e <sub>N</sub>        | 44                    | 4              |                |                |                          |   |
|                  |        | e <sub>N</sub>        | 39 38                 | 11             |                |                |                          |   |
|                  |        | eL <sub>N</sub>       | 9 02                  | 20             |                |                |                          |   |
|                  |        | eL <sub>E</sub>       | 05                    | 20-24          |                |                |                          |   |
|                  |        | eL <sub>Z</sub>       | 08                    |                |                |                |                          |   |
|                  |        | M <sub>N</sub>        | 27 30                 | 16             | 1              |                |                          |   |
|                  |        | F                     | 10 13                 |                |                |                |                          |   |
|                  |        | e <sub>Z</sub>        | 11 59                 |                |                |                |                          |   |
|                  |        | e <sub>NE</sub>       | 12 03                 |                |                |                |                          |   |
| 121              | 27. V. | F                     | 24                    |                |                |                | Très faibles ondes       |   |
|                  |        | eP <sub>Z</sub>       | 9 55 07               | 4              |                |                |                          |   |
| 122              | 28. V. | eP <sub>E</sub>       | 08                    |                |                |                | Δ = 12300 km             |   |



| Nr.             | Dates             | Phases   | Heures<br>(Greenwich) | Périodes<br>T.  | Amplitudes     |                |                | Remarques          |
|-----------------|-------------------|--|-----------------------|-----------------|----------------|----------------|----------------|--------------------|
|                 |                   |  |                       |                 | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                    |
| 122             | 28. V.<br>(suite) | ePP <sub>NE</sub>  | 9 59 34               | 6               | μ              | μ              | μ              |                    |
|                 |                   | ePP <sub>Z</sub>   | 36                    | 7               |                |                |                |                    |
|                 |                   | e <sub>E</sub>   | 10 00 10              | 6               |                |                |                |                    |
|                 |                   | e <sub>Z</sub>   |                       | 7               |                |                |                |                    |
|                 |                   | e <sub>E</sub>   | 50                    | 6               |                |                |                |                    |
|                 |                   | e <sub>E</sub>   | 02 02                 | 8               |                |                |                |                    |
|                 |                   | e <sub>Z</sub>   |                       | 7               |                |                |                |                    |
|                 |                   | S <sub>C</sub> P <sub>C</sub> S <sub>E</sub>                 | 06 00                 | 8               |                |                |                |                    |
|                 |                   | S <sub>C</sub> P <sub>C</sub> S <sub>N</sub>                 | 02                    | 9               |                |                |                |                    |
|                 |                   | eS <sub>C</sub> P <sub>C</sub> P <sub>C</sub> S <sub>N</sub> | 58                    | 10              |                |                |                |                    |
|                 |                   | S <sub>N</sub>   | 07 22                 | 12              |                |                |                |                    |
|                 |                   | PS <sub>Z</sub>  | 09 02                 | 9               |                |                |                |                    |
|                 |                   | PPS <sub>Z</sub>   | 10 03                 | 8               |                |                |                |                    |
|                 |                   | SS <sub>E</sub>  | 14 26                 | 11              |                |                |                |                    |
|                 |                   | SS <sub>N</sub>  | 52                    | 12              |                |                |                |                    |
|                 |                   | SSS <sub>E</sub>   | 19 40                 | 12              |                |                |                |                    |
|                 |                   | SSS <sub>N</sub>   | 46                    | 12              |                |                |                |                    |
|                 |                   | L <sub>E</sub>   | 31                    | 12-24           |                |                |                |                    |
|                 |                   | L <sub>N</sub>   |                       |                 |                |                |                |                    |
|                 |                   | L <sub>Z</sub>   | 36                    | 20-28, 32       |                |                |                |                    |
|                 |                   | M <sub>Z</sub>   | 48 26                 | 18              |                | 14             |                |                    |
|                 |                   | M <sub>N</sub>   | 32                    | 18              | 15             |                |                |                    |
|                 |                   | M <sub>E</sub>   | 33                    | 16              |                | 6              |                |                    |
|                 |                   | (W <sub>2</sub> ) <sub>Z</sub>                               | 11 47                 |                 |                |                |                |                    |
|                 |                   | (W <sub>2</sub> ) <sub>N</sub>                               | 50                    |                 |                |                |                |                    |
|                 |                   | (W <sub>2</sub> ) <sub>E</sub>                               | 53                    |                 |                |                |                |                    |
|                 |                   | M <sub>Z</sub>   | 56 16                 | 17              |                | 3              |                |                    |
| M <sub>N</sub>  | 12 02 54          | 18   | 2                     |                 |                |                |                |                    |
| M <sub>E</sub>  | 03 33             | 18   |                       | 2               |                |                |                |                    |
| F               | 50                |  |                       |                 |                |                |                |                    |
| 123             | 28. V.            | eL <sub>N</sub>  | 15 02                 | 20-24           |                |                |                |                    |
|                 |                   | eL <sub>E</sub>  | 03                    | 12-20           |                |                |                |                    |
|                 |                   | eL <sub>Z</sub>  | 06                    | 10-12           |                |                |                |                    |
|                 |                   | M <sub>N</sub>   | 30                    | 16              | 2              |                |                |                    |
|                 |                   | e <sub>NEZ</sub>   | 12 10                 | 4, 6            |                |                |                |                    |
|                 |                   | eL <sub>NE</sub>   | 14                    | 10-16           |                |                |                |                    |
|                 |                   | eL <sub>Z</sub>  |                       | 10-12           |                |                |                |                    |
|                 |                   | M <sub>N</sub>   | 15 34                 | 9               | 1              |                |                |                    |
|                 |                   | F  | 25                    |                 |                |                |                |                    |
|                 |                   | 124  | 28. V.                | eL <sub>N</sub> | 22 25          | 18-20          |                |                    |
| eL <sub>E</sub> | 27                |  |                       | 16-18           |                |                |                |                    |
| F               | 52                |  |                       |                 |                |                |                | Très faibles ondes |

| Nr.             | Dates  | Phases            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques  |
|-----------------|--------|-------------------|-----------------------|----------------|----------------|----------------|----------------|--|
|                 |        |                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 125             | 28. V. | eL <sub>NE</sub>  | 23 40                 | 10-12          | μ              | μ              | μ              |  |
|                 |        | eL <sub>Z</sub>   | 46                    |                |                |                |                |  |
| 126             | 29. V. | F                 | 51                    | 12-16          |                |                |                | Très faibles ondes   |
|                 |        | eL <sub>NE</sub>  | 0 36                  |                | 14-16          |                |                |  |
|                 |        | eL <sub>Z</sub>   | 41                    |                |                |                |                |  |
| 127             | 29. V. | F                 | 54                    | 16-20          |                |                |                | Sur les ondes longues<br>se superposent les<br>premières impulsions<br>du tremblement<br>suivant |
|                 |        | eL <sub>N</sub>   | 1 55                  |                |                |                |                |  |
| 128             | 29. V. | eL <sub>E</sub>   | 59                    | 16-20          |                |                |                | Dilatation<br>Δ = 6500 km  |
|                 |        | eL <sub>Z</sub>   | 2 01                  |                |                |                |                |  |
|                 |        | eP <sub>Z</sub>   | 2 07 53               |                | 4, 5           |                |                |  |
| 129             | 29. V. | eP <sub>N</sub>   | 54                    |                |                |                |                | Très faibles ondes   |
|                 |        | iS <sub>NE</sub>  | 16 02                 | 8              |                |                |                |  |
|                 |        | SS <sub>N</sub>   | 20 08                 | 10             |                |                |                |  |
|                 |        | eSSS <sub>E</sub> | 22 26                 | 9              |                |                |                |  |
|                 |        | eSSS <sub>N</sub> | 34                    | 16             |                |                |                |  |
|                 |        | eL <sub>E</sub>   | 24                    | 12-16,         |                |                |                |  |
|                 |        | eL <sub>N</sub>   | 25                    | 28-33          |                |                |                |  |
|                 |        | eL <sub>Z</sub>   | 27                    | 28-36          |                |                |                |  |
|                 |        | M <sub>Z</sub>    | 34 56                 | 24             |                | 9              |                |  |
|                 |        | M <sub>N</sub>    | 38 44                 | 14             | 5              |                |                |  |
|                 |        | M <sub>E</sub>    | 43 36                 | 16             |                | 2              |                |  |
|                 |        | F                 | 4 08                  |                |                |                |                |  |
| 130             | 29. V. | eL <sub>N</sub>   | 4 36                  | 16-20          |                |                |                | Très faibles ondes   |
|                 |        | eL <sub>E</sub>   | 40                    |                |                |                |                |  |
| 131             | 29. V. | F                 | 5 01                  |                |                |                |                | Δ = 2050 km  |
|                 |        | eP <sub>NZ</sub>  | 15 29 02              | 2, 7           |                |                |                |  |
|                 |        | eP <sub>E</sub>   | 08                    | 2              |                |                |                |  |
|                 |        | iS <sub>N</sub>   | 32 32                 | 6              |                |                |                |  |
|                 |        | iS <sub>E</sub>   | 34                    | 6              |                |                |                |  |
|                 |        | eL <sub>N</sub>   | 36                    | 8-14, 20       |                |                |                |  |
|                 |        | eL <sub>E</sub>   |                       | 10-16, 20      |                |                |                |  |
|                 |        | eL <sub>Z</sub>   |                       | 8-10           |                |                |                |  |
|                 |        | M <sub>Z</sub>    | 38 30                 | 10             |                |                |                |  |
|                 |        | M <sub>N</sub>    | 39 22                 | 10             | 3              |                |                |  |
|                 |        | M <sub>E</sub>    | 54                    | 10             |                | 2              |                |  |
| F               | 16 08  |                   |                       |                |                |                |                |  |
| eL <sub>E</sub> | 17 08  | 14-20             |                       |                |                |                |                |  |
| eL <sub>N</sub> | 12     | 16-20             |                       |                |                |                |                |  |
| eL <sub>Z</sub> | 14     |                   |                       |                |                |                |                |  |
| F               | 22     |                   |                       |                |                |                |                |  |

| Nr. | Dates  | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques                |
|-----|--------|------------------|-----------------------|----------------|----------------|----------------|----------------|--------------------------|
|     |        |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                          |
| 132 | 30. V. | e <sub>NE</sub>  | h m s                 | s              | μ              | μ              | μ              | Très faibles ondes       |
|     |        | e <sub>Z</sub>   | 15 18                 |                |                |                |                |                          |
|     |        | F                | 19                    |                |                |                |                |                          |
| 133 | 31. V. | eP <sub>Z</sub>  | 1 00 42               | 6              |                |                |                | Tremblement très éloigné |
|     |        | e <sub>Z</sub>   | 03 34                 | 6              |                |                |                |                          |
|     |        | e <sub>N</sub>   | 04 20                 | 6              |                |                |                |                          |
|     |        | e <sub>N</sub>   | 13 58                 | 9              |                |                |                |                          |
|     |        | i <sub>E</sub>   | 22 24                 | 13             |                |                |                |                          |
|     |        | e <sub>N</sub>   | 34                    | 12             |                |                |                |                          |
|     |        | eL <sub>Z</sub>  | 44                    | 16-20          |                |                |                |                          |
|     |        | eL <sub>E</sub>  | 51                    | 12-16, 20      |                |                |                |                          |
|     |        | eL <sub>N</sub>  | 51                    | 12-20, 24      |                |                |                |                          |
| 134 | 31. V. | eP <sub>Z</sub>  | 2 51 48               | 6              |                |                |                |                          |
|     |        | e <sub>Z</sub>   | 55 02                 | 6              |                |                |                |                          |
|     |        | e <sub>E</sub>   | 57 10                 | 6              |                |                |                |                          |
|     |        | e <sub>N</sub>   | 3 05 00               | 9              |                |                |                |                          |
|     |        | eL <sub>N</sub>  | 47                    | 16-20          |                |                |                |                          |
|     |        | eL <sub>EZ</sub> | 51                    |                |                |                |                |                          |
| 135 | 31. V. | eL <sub>NZ</sub> | 5 56                  | 12-16, 20      |                |                |                | Très faibles ondes       |
|     |        | eL <sub>E</sub>  | 6 26                  |                |                |                |                |                          |
|     |        |                  | <b>J U I N</b>        |                |                |                |                | <b>Nr. 6</b>             |
| 136 | 2. VI. | e <sub>Z</sub>   | 11 49 26              | 2, 7           |                |                |                |                          |
|     |        | e <sub>N</sub>   | 27                    | 2, 9           |                |                |                |                          |
|     |        | e <sub>N</sub>   | 54 06                 | 6              |                |                |                |                          |
|     |        | e <sub>Z</sub>   | 15                    | 8              |                |                |                |                          |
|     |        | e <sub>N</sub>   | 58 48                 | 8              |                |                |                |                          |
|     |        | i <sub>N</sub>   | 59 38                 | 12             |                |                |                |                          |
|     |        | eL <sub>N</sub>  | 12 18                 | 20-24          |                |                |                |                          |
|     |        | eL <sub>Z</sub>  |                       | 20             |                |                |                |                          |
|     |        | eL <sub>E</sub>  | 19                    | 18-20          |                |                |                |                          |
|     |        | M <sub>N</sub>   | 22 47                 | 21             | 3              |                |                |                          |
|     |        | M <sub>E</sub>   | 25 08                 | 18             |                | 2              |                |                          |
|     |        | M <sub>Z</sub>   | 29 54                 | 16             |                |                | 2              |                          |
| 137 | 2. VI. | eL <sub>N</sub>  | 13 00                 | 16-20          |                |                |                |                          |
|     |        | eL <sub>EZ</sub> | 07                    |                |                |                |                |                          |
|     |        | M <sub>N</sub>   | 09 48                 | 16             | 1              |                |                |                          |

| Nr. | Dates   | Phases            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques                         |                    |
|-----|---------|-------------------|-----------------------|----------------|----------------|----------------|----------------|-----------------------------------|--------------------|
|     |         |                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                                   |                    |
| 137 | 2. VI.  | M <sub>E</sub>    | h m s                 | s              | μ              | μ              | μ              |                                   |                    |
|     | (suite) | M <sub>Z</sub>    | 13 12 04              | 17             |                | 1              |                |                                   |                    |
|     |         | F                 | 18                    | 17             |                |                | 2              |                                   |                    |
| 138 | 2. VI.  | e <sub>Z</sub>    | 19 36 31              | 7              |                |                |                |                                   |                    |
|     |         | eL <sub>NE</sub>  | 59                    | 8-16           |                |                |                |                                   |                    |
| 139 | 2. VI.  | e <sub>Z</sub>    | 20 40                 | 7              |                |                |                | Enregistrement faible, indistinct |                    |
|     |         | e <sub>E</sub>    | 23 04 24              | 6              |                |                |                |                                   |                    |
|     |         | e <sub>V</sub>    | 26                    | 6              |                |                |                |                                   |                    |
|     |         | eL <sub>NEZ</sub> | 28                    | 6              |                |                |                |                                   |                    |
|     |         | F                 | 12                    | 10-16          |                |                |                |                                   |                    |
|     |         | F                 | 24                    |                |                |                |                |                                   |                    |
| 140 | 2. VI.  | eP <sub>Z</sub>   | 23 28 53              | 4              |                |                |                | D latation<br>Δ = 2745 km         |                    |
|     |         | iS <sub>N</sub>   | 33 18                 | 5              |                |                |                |                                   |                    |
|     |         | S <sub>E</sub>    | 23                    | 9              |                |                |                |                                   |                    |
|     |         | eL <sub>NEZ</sub> | 36                    | 16-24, 12      |                |                |                |                                   |                    |
|     |         | M <sub>E</sub>    | 38 53                 | 12             |                | 1              |                |                                   |                    |
|     |         | M <sub>N</sub>    | 40 38                 | 12             | 1              |                |                |                                   |                    |
|     |         | M <sub>Z</sub>    | 46                    | 12             |                |                | 1              |                                   |                    |
|     |         | F                 | 0 12                  |                |                |                |                |                                   |                    |
| 141 | 3. VI.  | e <sub>Z</sub>    | 0 53 12               | 4, 6           |                |                |                |                                   | Très faibles ondes |
|     |         | e <sub>N</sub>    | 19                    | 6              |                |                |                |                                   |                    |
| 142 | 3. VI.  | eL <sub>N</sub>   | 1 03                  | 12-14          |                |                |                |                                   |                    |
|     |         | F                 | 13                    |                |                |                |                |                                   |                    |
|     |         | e <sub>Z</sub>    | 18 18 34              |                |                |                |                |                                   |                    |
|     |         | e <sub>E</sub>    | 29 07                 | 8              |                |                |                |                                   |                    |
|     |         | e <sub>N</sub>    |                       |                |                |                |                |                                   |                    |
|     |         | eL <sub>N</sub>   | 46                    | 12, 16-24, 28  |                |                |                |                                   |                    |
|     |         | eL <sub>E</sub>   | 48                    | 12-16, 20, 24  |                |                |                |                                   |                    |
|     |         | M <sub>Z</sub>    | 19 03 48              | 14             |                |                | 6              |                                   |                    |
|     |         | M <sub>N</sub>    | 50                    | 14             | 6              |                |                |                                   |                    |
|     |         | M <sub>E</sub>    | 58                    |                |                | 5              |                |                                   |                    |
|     |         | F                 | 20 20                 |                |                |                |                |                                   |                    |
| 143 | 5. VI.  | eP <sub>Z</sub>   | 11 11 18              | 2, 3           |                |                |                |                                   | Δ = 6535 km        |
|     |         | eP <sub>N</sub>   |                       | 6              |                |                |                |                                   |                    |
|     |         | i <sub>Z</sub>    | 21                    | 5              |                |                | +              |                                   |                    |
|     |         | S <sub>N</sub>    | 19 26                 |                |                |                |                |                                   |                    |
|     |         | iS <sub>E</sub>   | 19                    | 5              |                |                |                |                                   |                    |

| Nr. | Dates             | Phases           | Heures<br>(Greenwich) | Périodes<br>T.  | Amplitudes     |                |                | Remarques |
|-----|-------------------|------------------|-----------------------|-----------------|----------------|----------------|----------------|-----------|
|     |                   |                  |                       |                 | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |
| 143 | 5. VI.<br>(suite) | i <sub>Z</sub>   | h m s<br>11 19 32     | s<br>12         | μ              | μ              | μ              |           |
|     |                   | SS <sub>E</sub>  | 23 21                 | 6               |                |                |                |           |
|     |                   | e <sub>E</sub>   | 24 38                 | 8               |                |                |                |           |
|     |                   | eL <sub>Z</sub>  | 26                    | 12-16,<br>20-32 |                |                |                |           |
|     |                   | eL <sub>E</sub>  | 28                    | 20-24           |                |                |                |           |
|     |                   | eL <sub>N</sub>  | 30                    | 12-24           |                |                |                |           |
|     |                   | M <sub>N</sub>   | 37 55                 | 19              | 11             |                |                |           |
|     |                   | M <sub>Z</sub>   | 38 36                 | 19              |                |                | 11             |           |
|     |                   | M <sub>E</sub>   | 40 47                 | 14              |                | 6              |                |           |
|     |                   | M <sub>Z</sub>   | 56 26                 | 16              |                |                | 12             |           |
|     |                   | M <sub>N</sub>   | 45                    | 14              | 11             |                |                |           |
|     |                   | M <sub>E</sub>   | 57 19                 | 16              |                | 9              |                |           |
|     |                   | F                | 14 24                 |                 |                |                |                |           |
| 144 | 5. VI.            | e <sub>NE</sub>  | 15 10                 | 6, 8            |                |                |                |           |
|     |                   | eL <sub>E</sub>  | 29                    | 12-14 20        |                |                |                |           |
|     |                   | eL <sub>N</sub>  | 30                    | 14-16           |                |                |                |           |
|     |                   | eL <sub>Z</sub>  | 32                    | 16              |                |                |                |           |
|     |                   | M <sub>Z</sub>   | 37 55                 | 14              |                |                | 1              |           |
|     |                   | M <sub>E</sub>   | 38 13                 | 12              |                | 1              |                |           |
|     |                   | M <sub>N</sub>   | 39 03                 | 14              | 1              |                |                |           |
|     |                   | F                | 16 20                 |                 |                |                |                |           |
| 145 | 7. VI.            | e <sub>Z</sub>   | 7 37 45               | 4               |                |                |                |           |
|     |                   | e <sub>N</sub>   | 45 23                 | 5               |                |                |                |           |
|     |                   | e <sub>N</sub>   | 54 23                 | 6               |                |                |                |           |
|     |                   | e <sub>E</sub>   | 27                    | 9               |                |                |                |           |
|     |                   | eL <sub>N</sub>  | 8 16                  | 16-20 24        |                |                |                |           |
|     |                   | eL <sub>EZ</sub> | 22                    | 20-24           |                |                |                |           |
|     |                   | M <sub>N</sub>   | 29 09                 | 23              | 2              |                |                |           |
|     |                   | M <sub>Z</sub>   | 30 43                 | 20              |                |                | 2              |           |
|     |                   | M <sub>E</sub>   | 31 49                 | 18              |                | 1              |                |           |
|     |                   | F                | 55                    |                 |                |                |                |           |
| 146 | 7. VI.            | e <sub>N</sub>   | 19 56 17              | 6               |                |                |                |           |
|     |                   | e <sub>E</sub>   | 23                    | 6               |                |                |                |           |
|     |                   | e <sub>Z</sub>   | 39                    | 6               |                |                |                |           |
|     |                   | eL <sub>NE</sub> | 20 01                 | 12-13           |                |                |                |           |
|     |                   | eL <sub>Z</sub>  | 02                    |                 |                |                |                |           |
|     |                   | M <sub>N</sub>   | 03 27                 | 12              | 1              |                |                |           |
|     |                   | M <sub>E</sub>   | 47                    | 11              |                | 1              |                |           |
|     |                   | M <sub>Z</sub>   | 59                    | 10              |                |                | 1              |           |
|     |                   | F                | 18                    |                 |                |                |                |           |

| Nr.            | Dates      | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques |
|----------------|------------|------------------|-----------------------|----------------|----------------|----------------|----------------|-----------|
|                |            |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |
| 147            | 7. VI.     | e <sub>N</sub>   | h m s<br>23 13 21     | s<br>5         | μ              | μ              | μ              |           |
|                |            | e <sub>E</sub>   |                       | 7              |                |                |                |           |
|                |            | e <sub>Z</sub>   |                       | 6              |                |                |                |           |
|                |            | e <sub>E</sub>   |                       | 17 19          | 9              |                |                |           |
|                |            | e <sub>N</sub>   |                       | 27             | 8              |                |                |           |
|                |            | eL <sub>N</sub>  |                       | 21             | 8-12           |                |                |           |
|                |            | eL <sub>EZ</sub> |                       | 22             |                |                |                |           |
|                |            | M <sub>NE</sub>  |                       | 27 37          | 9              | 1              | 0              |           |
|                |            | F                |                       | 40             |                |                |                |           |
|                |            | 148              |                       | 8. VI.         | e <sub>Z</sub> | 4 19 36        | 5              |           |
| e <sub>N</sub> | 41         |                  | 4, 6                  |                |                |                |                |           |
| e <sub>N</sub> | 40 53      |                  | 10                    |                |                |                |                |           |
| e <sub>E</sub> | 41 13      |                  | 12                    |                |                |                |                |           |
| eL             | 5 19       |                  |                       |                |                |                |                |           |
| M <sub>Z</sub> | 23 jusqu'à |                  | 16-20                 |                |                |                |                |           |
| M <sub>N</sub> | 31         |                  |                       |                |                |                |                |           |
| M <sub>E</sub> | 33 jusqu'à |                  |                       |                |                |                |                |           |
| M <sub>N</sub> | 40         |                  |                       |                |                |                |                |           |
| F              | 6 35       |                  |                       |                |                |                |                |           |
| 149            | 9. VI.     | e <sub>E</sub>   | 19 46 44              |                |                |                |                |           |
|                |            | e <sub>Z</sub>   | 47                    |                |                |                |                | Traces    |
|                |            | F                | 52                    |                |                |                |                |           |
| 150            | 10. VI.    | e <sub>N</sub>   | 5 44 18               |                |                |                |                |           |
|                |            | F                | 50                    |                |                |                |                |           |
| 151            | 11. VI.    | e <sub>Z</sub>   | 8 56 14               |                |                |                |                |           |
|                |            | e <sub>E</sub>   | 58 24                 |                |                |                |                |           |
|                |            | e <sub>Z</sub>   | 9 00 44               | 5              |                |                |                |           |
|                |            | e <sub>E</sub>   |                       | 8              |                |                |                |           |
|                |            | e <sub>E</sub>   | 03 10                 | 10             |                |                |                |           |
|                |            | e <sub>E</sub>   | 04 46                 |                |                |                |                |           |
|                |            | e <sub>Z</sub>   | 47                    | 10             |                |                |                |           |
|                |            | e <sub>Z</sub>   | 09 50                 | 10, 12         |                |                |                |           |
|                |            | i <sub>E</sub>   | 10 02                 | 10             |                |                |                |           |
|                |            | eL <sub>N</sub>  | 37                    | 12-20          |                |                |                |           |
|                |            | eL <sub>EZ</sub> | 42                    | 16-24          |                |                |                |           |
|                |            | M <sub>N</sub>   | 39 jusqu'à            | 16-20          |                |                |                |           |
|                | 47         |                  |                       |                |                |                |                |           |
| M <sub>E</sub> | 46 jusqu'à | 16-20            |                       |                |                |                |                |           |
| M <sub>Z</sub> | 55         | 16-24, 28        |                       |                |                |                |                |           |

| Nr. | Dates              | Phases                 | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques        |
|-----|--------------------|------------------------|-----------------------|----------------|----------------|----------------|----------------|------------------|
|     |                    |                        |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                  |
|     |                    |                        | h m s                 | s              | μ              | μ              | μ              |                  |
| 151 | 11. VI.<br>(suite) | M <sub>NE</sub>        | 9 58 jusqu'à<br>10 01 | 16 18          |                |                |                |                  |
|     |                    | F                      | 32                    |                |                |                |                |                  |
| 152 | 11. VI.            | e <sub>NEZ</sub>       | 20 28                 |                |                |                |                | Traces           |
|     |                    | F                      | 55                    |                |                |                |                |                  |
| 153 | 12. VI.            | e <sub>Z</sub>         | 6 48 54               | 4              |                |                |                |                  |
|     |                    | eL <sub>NE</sub>       | 7 17                  | 12-20          |                |                |                |                  |
|     |                    | eL <sub>Z</sub>        | 23                    |                |                |                |                |                  |
|     |                    | M <sub>N</sub>         | 24 48                 | 16             | 1              |                |                |                  |
|     |                    | M <sub>E</sub>         | 25 04                 | 16             |                | 1              |                |                  |
|     |                    | F                      | 59                    |                |                |                |                |                  |
| 154 | 12. VI.            | e <sub>Z</sub>         | 10 09 12              | 8              |                |                |                |                  |
|     |                    | e <sub>N</sub>         | 20                    | 8              |                |                |                |                  |
|     |                    | e <sub>E</sub>         | 32                    | 6              |                |                |                |                  |
|     |                    | eL <sub>NEZ</sub>      | 55                    | 16-20          |                |                |                |                  |
|     |                    | F                      | 11 28                 |                |                |                |                |                  |
| 155 | 12. VI.            | e <sub>E</sub>         | 12 30 06              | 12             |                |                |                |                  |
|     |                    | e <sub>N</sub>         | 10                    |                |                |                |                |                  |
|     |                    | eL <sub>NEZ</sub>      | 13 03                 | 12-20          |                |                |                |                  |
|     |                    | F                      | 14 00                 |                |                |                |                |                  |
| 156 | 12. VI.            | e <sub>Z</sub> (eP?)   | 14 10 24              | 4              |                |                |                | (Δ = ca 9500 km) |
|     |                    | e <sub>Z</sub> (ePP?)  | 13 34                 | 4              |                |                |                |                  |
|     |                    | e <sub>Z</sub> (ePPP?) | 15 38                 | 6              |                |                |                |                  |
|     |                    | e <sub>E</sub> (PS?)   | 21 40                 | 9              |                |                |                |                  |
|     |                    | e <sub>N</sub> (PS?)   | 42                    | 10             |                |                |                |                  |
|     |                    | e <sub>E</sub> (SS?)   | 27 42                 | 9              |                |                |                |                  |
|     |                    | eL <sub>NE</sub>       | 42                    | 12-20          |                |                |                |                  |
|     |                    | eL <sub>Z</sub>        | 45                    | 20-24          |                |                |                |                  |
|     |                    | M <sub>N</sub>         | 46 04                 | 14             | 6              |                |                |                  |
|     |                    | M <sub>E</sub>         | 48 52                 | 14             |                | 5              |                |                  |
|     |                    | M <sub>N</sub>         | 50 42                 | 15             | 6              |                |                |                  |
|     |                    | M <sub>E</sub>         | 44                    | 14             |                | 4              |                |                  |
|     |                    | M <sub>Z</sub>         | 46                    | 15             |                |                | 7              |                  |
|     |                    | W <sub>2</sub>         | 16 45                 |                |                |                |                |                  |
|     |                    | M <sub>E</sub>         | 53 12                 | 14             |                | 1              |                |                  |
|     |                    | M <sub>N</sub>         | 41                    | 16             | 1              |                |                |                  |
|     |                    | F                      | 17 33                 |                |                |                |                |                  |

| Nr. | Dates   | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques |
|-----|---------|------------------|-----------------------|----------------|----------------|----------------|----------------|-----------|
|     |         |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |
|     |         |                  | h m s                 | s              | μ              | μ              | μ              |           |
| 157 | 12. VI. | e <sub>Z</sub>   | 18 49 13              | 4, 6           |                |                |                |           |
|     |         | e <sub>N</sub>   | 59 32                 | 6              |                |                |                |           |
|     |         | e <sub>E</sub>   | 34                    | 6              |                |                |                |           |
|     |         | eL <sub>NE</sub> | 19 23                 | 16-20          |                |                |                |           |
|     |         | eL <sub>Z</sub>  | 27                    |                |                |                |                |           |
|     |         | M <sub>E</sub>   | 30 57                 | 13             |                | 1              |                |           |
|     |         | M <sub>Z</sub>   |                       | 15             |                |                | 1              |           |
|     |         | M <sub>N</sub>   | 31 13                 | 14             | 1              |                |                |           |
|     |         | F                | 59                    |                |                |                |                |           |
| 158 | 13. VI. | e <sub>N</sub>   | 11 05 13              | 2, 3           |                |                |                |           |
|     |         | e <sub>E</sub>   | 25                    | 2, 3           |                |                |                |           |
|     |         | e <sub>Z</sub>   | 07 36                 | 3, 4           |                |                |                |           |
|     |         | e <sub>E</sub>   | 08 48                 | 4              |                |                |                |           |
|     |         | e <sub>E</sub>   | 56                    | 8              |                |                |                |           |
|     |         | e <sub>Z</sub>   | 09 00                 | 5              |                |                |                |           |
|     |         | e <sub>N</sub>   | 11                    | 4              |                |                |                |           |
|     |         | e <sub>Z</sub>   | 30                    | 4              |                |                |                |           |
|     |         | e <sub>N</sub>   | 58                    | 16             |                |                |                |           |
|     |         | eL <sub>E</sub>  | 10                    | 10-16          |                |                |                |           |
|     |         | eL <sub>NZ</sub> | 11                    |                |                |                |                |           |
|     |         | M <sub>E</sub>   | 12 36                 | 9              |                |                | 2              |           |
|     |         | M <sub>N</sub>   | 15 22                 | 10             | 1              |                |                |           |
|     |         | F                | 36                    |                |                |                |                |           |
| 159 | 13. VI. | e <sub>Z</sub>   | 11 58 32              | 4              |                |                |                |           |
|     |         | e <sub>N</sub>   | 12 01 48              | 6              |                |                |                |           |
|     |         | e <sub>E</sub>   | 02 00                 | 9              |                |                |                |           |
|     |         | e <sub>N</sub>   | 03 58                 | 6              |                |                |                |           |
|     |         | eL <sub>E</sub>  | 04                    | 12-16          |                |                |                |           |
|     |         | e <sub>Z</sub>   | 10                    | 8              |                |                |                |           |
|     |         | eL <sub>NZ</sub> | 05                    | 10-16          |                |                |                |           |
|     |         | M <sub>E</sub>   | 30                    | 10             |                |                | 2              |           |
|     |         | M <sub>Z</sub>   | 06 12                 | 11             |                |                |                | 1         |
|     |         | M <sub>N</sub>   | 18                    | 10             | 3              |                |                |           |
|     |         | F                | 30                    |                |                |                |                |           |
| 160 | 13. VI. | e <sub>E</sub>   | 14 49 12              | 6              |                |                |                |           |
|     |         | e <sub>Z</sub>   |                       | 4              |                |                |                |           |
|     |         | e <sub>N</sub>   | 54 14                 | 11             |                |                |                |           |
|     |         | e <sub>E</sub>   | 18                    |                |                |                |                |           |

| Nr. | Dates              | Phases            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques          |
|-----|--------------------|-------------------|-----------------------|----------------|----------------|----------------|----------------|--------------------|
|     |                    |                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                    |
| 160 | 13. VI.<br>(suite) | eL <sub>NEZ</sub> | h m s<br>14 55        | s<br>10—16     | μ              | μ              | μ              |                    |
|     |                    | M <sub>E</sub>    | 56 10                 | 10             |                | 1              |                |                    |
|     |                    | M <sub>Z</sub>    | 50                    | 12             |                |                | 1              |                    |
|     |                    | M <sub>N</sub>    | 56                    | 11             | 2              |                |                |                    |
| 161 | 13. VI.            | F                 | 15 17                 |                |                |                |                | Traces             |
|     |                    | eL <sub>E</sub>   | 23 12                 |                |                |                |                |                    |
| 162 | 14. VI.            | eL <sub>NZ</sub>  | 15                    | 12—16, 20      |                |                |                | Traces             |
|     |                    | F                 | 30                    |                |                |                |                |                    |
| 163 | 14. VI.            | e <sub>E</sub>    | 1 42                  |                |                |                |                | Traces             |
|     |                    | e <sub>N</sub>    | 43                    |                |                |                |                |                    |
|     |                    | F                 | 48                    |                |                |                |                |                    |
| 164 | 14. VI.            | e <sub>E</sub>    | 3 02                  |                |                |                |                |                    |
|     |                    | e <sub>NZ</sub>   | 03                    |                |                |                |                |                    |
|     |                    | M <sub>E</sub>    | 04 21                 | 12             |                | 1              |                |                    |
|     |                    | M <sub>N</sub>    | 05 46                 | 12             | 1              |                |                |                    |
|     |                    | F                 | 14                    |                |                |                |                |                    |
| 165 | 15. VI.            | e <sub>NE</sub>   | 17 52                 |                |                |                |                | Très faibles ondes |
|     |                    | e <sub>Z</sub>    | 56                    |                |                |                |                |                    |
|     |                    | F                 | 18 20                 |                |                |                |                |                    |
| 166 | 15. VI.            | eL <sub>NE</sub>  | 9 52                  | 12—16          |                |                |                | Traces             |
|     |                    | eL <sub>Z</sub>   | 58                    | 10—16          |                |                |                |                    |
|     |                    | F                 | 10 11                 |                |                |                |                |                    |
| 167 | 15. VI.            | e <sub>E</sub>    | 13 01                 |                |                |                |                | Traces             |
|     |                    | e <sub>N</sub>    | 03                    |                |                |                |                |                    |
|     |                    | F                 | 06                    |                |                |                |                |                    |
| 168 | 17. VI.            | e <sub>NE</sub>   | 22 43                 |                |                |                |                |                    |
|     |                    | F                 | 51                    |                |                |                |                |                    |
| 168 | 17. VI.            | e <sub>Z</sub>    | 10 45 44              | 4, 8           |                |                |                |                    |
|     |                    | e <sub>N</sub>    | 52                    |                |                |                |                |                    |
|     |                    | e <sub>Z</sub>    | 49 30                 | 7              |                |                |                |                    |
|     |                    | i <sub>N</sub>    | 51 52                 | 10             |                |                |                |                    |
|     |                    | e <sub>E</sub>    | 53                    | 10             |                |                |                |                    |
|     |                    | e <sub>E</sub>    | 53 06                 | 8              |                |                |                |                    |
|     |                    | i <sub>N</sub>    | 55 28                 | 10             |                |                |                |                    |
|     |                    | i <sub>E</sub>    | 58 50                 | 8              |                |                |                |                    |
|     |                    | i <sub>E</sub>    | 11 02 52              | 10             |                |                |                |                    |
|     |                    | M <sub>E</sub>    | 44 52                 | 14             |                | 1              |                |                    |
|     |                    | M <sub>Z</sub>    | 45 40                 | 16             |                |                | 2              |                    |
|     |                    | M <sub>N</sub>    | 49 06                 | 15             | 2              |                |                |                    |
| F   | 13 16              |                   |                       |                |                |                |                |                    |

| Nr.              | Dates   | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                    | Remarques   |
|------------------|---------|------------------|-----------------------|----------------|----------------|----------------|--------------------|---|
|                  |         |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>     |   |
| 169              | 17. VI. | eL <sub>N</sub>  | h m s<br>20 48        | s<br>12—20     | μ              | μ              | μ                  | Faibles ondes   |
|                  |         | eL <sub>EZ</sub> | 50                    | 10—20          |                |                |                    |   |
| 170              | 18. VI. | F                | 21 36                 |                |                |                |                    | Dilatation<br>Ondes superficielles<br>pendant le change-<br>ment des feuilles |
|                  |         | eP <sub>Z</sub>  | 14 04 47              | 3, 8           |                |                |                    |   |
|                  |         | e <sub>E</sub>   | 11 25                 | 10             |                |                |                    |   |
|                  |         | i <sub>Z</sub>   | 26                    | 10             |                |                |                    |   |
|                  |         | i <sub>E</sub>   | 14 30                 | 10             |                |                |                    |   |
|                  |         | i <sub>N</sub>   | 32                    | 4, 10          |                |                |                    |   |
|                  |         | i <sub>N</sub>   | 15 06                 | 8              |                |                |                    |   |
|                  |         | e <sub>E</sub>   | 17 42                 | 11             |                |                |                    |   |
|                  |         | i <sub>E</sub>   | 18 46                 | 12             |                |                |                    |   |
|                  |         | i <sub>N</sub>   | 47                    | 10             |                |                |                    |   |
|                  |         | i <sub>E</sub>   | 20 02                 | 11             |                |                |                    |   |
|                  |         | e <sub>N</sub>   | 21 52                 | 13             |                |                |                    |   |
| 171              | 18. VI. | F                | 15 44                 |                |                |                |                    | + Compression<br>Δ = 8000 km  |
|                  |         | P <sub>Z</sub>   | 18 50 34              | 2, 3           |                |                |                    |   |
|                  |         | P <sub>N</sub>   | 34                    | 3, 4           |                |                |                    |   |
|                  |         | PP <sub>Z</sub>  | 53 16                 | 3, 9           |                |                |                    |   |
|                  |         | S <sub>E</sub>   | 59 57                 | 7              |                |                |                    |   |
|                  |         | S <sub>N</sub>   | 19 00 00              | 8              |                |                |                    |   |
|                  |         | PS <sub>N</sub>  | 40                    | 10             |                |                |                    |   |
|                  |         | SS <sub>E</sub>  | 04 44                 | 9              |                |                |                    |   |
|                  |         | SS <sub>N</sub>  | 48                    | 9              |                |                |                    |   |
|                  |         | SSS <sub>N</sub> | 07 36                 | 10             |                |                |                    |   |
|                  |         | i <sub>N</sub>   | 08 34                 | 12             |                |                |                    |   |
|                  |         | i <sub>N</sub>   |                       | 12—24          |                |                |                    |   |
| eL <sub>NE</sub> | 17      | 16—28            |                       |                |                |                |                    |   |
| eL <sub>Z</sub>  |         | 20               |                       |                | 9              |                |                    |   |
| M <sub>Z</sub>   | 24 02   | 19               |                       | 4              |                |                |                    |   |
| M <sub>E</sub>   | 25 42   | 18               |                       | 11             |                |                |                    |   |
| M <sub>N</sub>   | 26 24   | 16               |                       |                | 8              |                |                    |   |
| M <sub>Z</sub>   | 27 58   | 16               |                       | 10             |                |                |                    |   |
| M <sub>N</sub>   | 28 00   | 16               |                       |                | 3              |                |                    |   |
| M <sub>E</sub>   | 30 16   | 15               |                       |                |                |                |                    |   |
| F                | 20 48   |                  |                       |                |                |                |                    |   |
| 172              | 19. VI. | eL <sub>NE</sub> | 8 51                  |                |                |                | Très faibles ondes |   |
|                  |         | eL <sub>Z</sub>  | 55                    |                |                |                |                    |   |
|                  |         | M                | 56 jusqu'à            | 8—12           |                |                |                    |   |
| 173              | 19. VI. | F                | 57                    |                |                |                |                    |   |
|                  |         | e <sub>NE</sub>  | 9 04                  | 5, 6           |                |                |                    |   |
|                  |         | e <sub>Z</sub>   | 14 16                 | 3, 4           |                |                |                    |   |
| F                | 17      |                  |                       |                |                |                |                    |   |
| F                | 28      |                  |                       |                |                |                |                    |   |



| Nr.            | Dates   | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                    | Remarques   |
|----------------|---------|------------------|-----------------------|----------------|----------------|----------------|--------------------|-------------|
|                |         |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>     |             |
| 188            | 26. VI. | eP <sub>Z</sub>  | h m s<br>8 12 53      | s<br>5         | μ              | μ              | μ                  | Compression |
|                |         | e <sub>Z</sub>   | 16 35                 | 6              |                |                | +                  |             |
|                |         | e <sub>N</sub>   | 19 36                 | 12             |                |                |                    |             |
|                |         | e <sub>E</sub>   | 23 20                 | 7              |                |                |                    |             |
|                |         | e <sub>N</sub>   | 32                    | 8              |                |                |                    |             |
|                |         | e <sub>E</sub>   | 44                    | 9              |                |                |                    |             |
|                |         | e <sub>Z</sub>   | 24 32                 | 9              |                |                |                    |             |
|                |         | e <sub>Z</sub>   | 33 52                 | 7              |                |                |                    |             |
|                |         | eL <sub>NE</sub> | 49                    | 12-24          |                |                |                    |             |
|                |         | eL <sub>Z</sub>  | 54                    | 12-20          |                |                |                    |             |
| 189            | 27. VI. | F                | 9 30                  |                |                |                |                    |             |
|                |         | e <sub>N</sub>   | 8 16                  | 9              |                |                |                    |             |
|                |         | e <sub>E</sub>   | 17                    |                |                |                |                    |             |
|                |         | e <sub>Z</sub>   |                       |                |                |                |                    |             |
|                |         | M <sub>Z</sub>   | 20 32                 | 9              |                | 1              |                    |             |
| M <sub>N</sub> | 22 01   | 8                | 2                     |                |                |                |                    |             |
| 190            | 28. VI. | F                | 32                    |                |                |                |                    |             |
|                |         | e <sub>NZ</sub>  | 4 00 08               |                |                |                |                    |             |
|                |         | M <sub>E</sub>   | 04 10                 | 10             |                | 1              |                    |             |
| 191            | 28. VI. | M <sub>N</sub>   | 06 01                 | 8              | 1              |                |                    |             |
|                |         | F                | 10                    |                |                |                |                    |             |
|                |         | e <sub>N</sub>   | 19 07                 |                |                |                |                    |             |
| 192            | 28. VI. | e <sub>Z</sub>   | 10                    |                |                |                |                    |             |
|                |         | eL <sub>NE</sub> | 11                    | 14-20          |                |                |                    |             |
|                |         | F                | 22                    |                |                |                |                    |             |
|                |         | e <sub>E</sub>   | 20 57                 |                |                |                |                    |             |
| 193            | 29. VI. | e <sub>N</sub>   | 58                    |                |                |                |                    |             |
|                |         | e <sub>Z</sub>   | 21 00                 |                |                |                |                    |             |
|                |         | M <sub>E</sub>   | 03 44                 | 7              |                | 1              |                    |             |
|                |         | M <sub>Z</sub>   | 04 20                 | 10             |                |                |                    |             |
|                |         | M <sub>N</sub>   | 54                    | 9              | 1              |                | 1                  |             |
|                |         | F                | 12                    |                |                |                |                    |             |
|                |         | e <sub>NEZ</sub> | 14 13                 |                |                |                | Traces             |             |
| 194            | 30. VI. | F                | 25                    |                |                |                |                    |             |
|                |         | e <sub>E</sub>   | 14 48                 |                |                |                | Très faibles ondes |             |
|                |         | e <sub>N</sub>   | 49                    |                |                |                |                    |             |
| 195            | 30. VI. | e <sub>Z</sub>   | 51                    |                |                |                |                    |             |
|                |         | F                | 15 01                 |                |                |                |                    |             |
|                |         | e <sub>NE</sub>  | 15 49                 |                |                |                | Traces             |             |
|                |         | F                | 16 12                 |                |                |                |                    |             |



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| Nr. | Dates   | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                    | Remarques |
|-----|---------|------------------|-----------------------|----------------|----------------|----------------|--------------------|-----------|
|     |         |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>     |           |
| 196 | 1. VII. | e <sub>N</sub>   | h m s<br>21 31 35     | s<br>6         | μ              | μ              | μ                  |           |
|     |         | e <sub>E</sub>   | 57                    | 6              |                |                |                    |           |
|     |         | e <sub>N</sub>   | 32 17                 | 8              |                |                |                    |           |
|     |         | i <sub>Z</sub>   | 36 29                 | 5              |                |                |                    |           |
|     |         | i <sub>Z</sub>   | 37 47                 | 6              |                |                |                    |           |
|     |         | e <sub>E</sub>   | 38 17                 | 6              |                |                |                    |           |
|     |         | e <sub>N</sub>   | 41 48                 | 8              |                |                |                    |           |
|     |         | e <sub>E</sub>   | 53                    | 10             |                |                |                    |           |
|     |         | eL <sub>N</sub>  | 44                    | 8 12           |                |                |                    |           |
|     |         | e <sub>E</sub>   | 43                    | 8              |                |                |                    |           |
|     |         | eL <sub>E</sub>  | 47                    | 8-14           |                |                |                    |           |
|     |         | eL <sub>Z</sub>  | 48                    | 8-16           |                |                |                    |           |
|     |         | M <sub>N</sub>   | 49 11                 | 11             | 5              |                |                    |           |
|     |         | M <sub>E</sub>   | 50 51                 | 10             |                | 3              |                    |           |
|     |         | M <sub>Z</sub>   | 51 57                 | 14             |                |                | 3                  |           |
| 197 | 2. VII. | F                | 22 40                 |                |                |                |                    |           |
|     |         | e <sub>N</sub>   | 2 19                  |                |                |                |                    |           |
|     |         | e <sub>E</sub>   | 20                    |                |                |                |                    |           |
|     |         | eL <sub>NE</sub> | 21                    | 12-18          |                |                |                    |           |
|     |         | i <sub>Z</sub>   | 24                    |                |                |                |                    |           |
|     |         | M <sub>E</sub>   | 23                    | 13             |                | 1              |                    |           |
|     |         | M <sub>N</sub>   | 43                    | 12             | 1              |                |                    |           |
|     |         | eL <sub>Z</sub>  | 27                    | 12-16          |                |                |                    |           |
|     |         | M <sub>Z</sub>   | 29 32                 | 13             |                |                | 1                  |           |
|     |         | F                | 32 00                 | 11             |                |                | 1                  |           |
| 198 | 2. VII. | F                | 3 00                  |                |                |                |                    |           |
|     |         | e <sub>Z</sub>   | 19 28                 |                |                |                |                    |           |
|     |         | e <sub>E</sub>   | 30                    | 4              |                |                |                    |           |
|     |         | e <sub>N</sub>   | 31                    |                |                |                |                    |           |
|     |         | eL <sub>N</sub>  | 20 17                 | 20             |                |                |                    |           |
|     |         | eL <sub>Z</sub>  | 22                    | 20             |                |                |                    |           |
|     |         | M <sub>N</sub>   | 25 29                 | 24             | 7              |                |                    |           |
|     |         | M <sub>E</sub>   | 30 36                 | 19             |                | 5              |                    |           |
|     |         | eL <sub>NE</sub> | 21 40                 | 16-20          |                |                |                    |           |
|     |         | F                | 22 04                 |                |                |                | Traces             |           |
| 199 | 3. VII. | eL <sub>N</sub>  | 4 42                  | 20             |                |                |                    |           |
|     |         | e <sub>E</sub>   | 43                    |                |                |                |                    |           |
|     |         | F                | 50                    |                |                |                |                    |           |
| 200 | 4. VII. | eL <sub>N</sub>  | 6 58                  | 16-20          |                |                |                    |           |
|     |         | eL <sub>E</sub>  | 7 01                  |                |                |                |                    |           |
|     |         | F                | 20                    |                |                |                | Très faibles ondes |           |

| Nr. | Dates   | Phases                            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques                  |
|-----|---------|-----------------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------------------|
|     |         |                                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                            |
| 201 | 4. VII. | i <sub>N</sub>                    | h m s                 | s              | μ              | μ              | μ              |                            |
|     |         | i <sub>E</sub>                    | 9 20 23               | 7              |                |                |                |                            |
|     |         | eL <sub>N</sub>                   |                       | 6              |                |                |                |                            |
|     |         | eL <sub>E</sub>                   | 36                    | 10-14          |                |                |                |                            |
| 202 | 4. VII. | F                                 | 58                    | 8-12           |                |                |                |                            |
|     |         | e <sub>NE</sub>                   | 13 55                 |                |                |                |                | Impulsions d'ondes faibles |
| 203 | 5. VII. | eL <sub>E</sub>                   | 21 41                 | 8-16           |                |                |                |                            |
|     |         | eL <sub>N</sub>                   | 42                    | 12-16          |                |                |                |                            |
|     |         | eL <sub>Z</sub>                   | 44                    | 8-14           |                |                |                |                            |
|     |         | M <sub>N</sub>                    | 47 49                 | 16             | 1              |                |                |                            |
|     |         | M <sub>Z</sub>                    | 59                    | 11             |                |                | 1              |                            |
|     |         | M <sub>E</sub>                    | 49 47                 | 13             |                | 1              |                |                            |
| 204 | 6. VII. | F                                 | 22 08                 |                |                |                |                |                            |
|     |         | iP <sub>Z</sub>                   | 3 51 47               | 5              |                |                |                | Dilatation                 |
|     |         | i <sub>Z</sub>                    | 52 23                 | 5              |                |                |                | Δ = 7980 km                |
|     |         | i <sub>Z</sub>                    | 39                    | 7              |                |                |                |                            |
|     |         | iS <sub>E</sub>                   | 4 01 11               | 10             |                |                |                |                            |
|     |         | PS <sub>N</sub>                   | 42                    | 5              |                |                |                |                            |
|     |         | PS <sub>E</sub>                   | 43                    | 4              |                |                |                |                            |
|     |         | SS <sub>E</sub>                   | 05 49                 | 10             |                |                |                |                            |
|     |         | i <sub>E</sub>                    | 07 31                 | 11             |                |                |                |                            |
|     |         | i <sub>N</sub>                    | 33                    | 9              |                |                |                |                            |
|     |         | eL <sub>N</sub>                   | 14                    | 12-20; 24      |                |                |                |                            |
|     |         | eL <sub>Z</sub>                   | 16                    | 10-16          |                |                |                |                            |
|     |         | eL <sub>E</sub>                   | 17                    | 8-16           |                |                |                |                            |
|     |         | M <sub>Z</sub>                    | 24 39                 | 17             |                |                | 3              |                            |
|     |         | M <sub>E</sub>                    | 25 05                 | 16             |                |                | 3              |                            |
| 205 | 6. VII. | M <sub>N</sub>                    | 16                    | 14             | 4              |                |                |                            |
|     |         | F                                 | 5,4                   |                |                |                |                |                            |
|     |         | e <sub>N</sub> (eP <sub>N</sub> ) | 7 25 51               | 8              |                |                |                | Dilatation                 |
|     |         | e <sub>Z</sub> (eP <sub>Z</sub> ) | 52                    | 8              |                |                |                | Δ = 3080 km                |
|     |         | S <sub>E</sub> ?                  | 30 39                 | 8              |                |                |                |                            |
|     |         | S <sub>N</sub> ?                  | 40                    | 8              |                |                |                |                            |
|     |         | eL <sub>N</sub>                   | 36                    |                |                |                |                |                            |
|     |         | eL <sub>EZ</sub>                  | 37                    | 8-16           |                |                |                |                            |
|     |         | M <sub>N</sub>                    | 43 17                 | 12             | 1              |                |                |                            |
|     |         | F                                 | 8 00                  |                |                |                |                |                            |
| 206 | 6. VII. | e <sub>NE</sub>                   | 10 59                 |                |                |                |                | Traces                     |
|     |         | F                                 | 11 10                 |                |                |                |                |                            |
| 207 | 6. VII. | e <sub>E</sub>                    | 17 50 48              | 2              |                |                |                |                            |
|     |         | e <sub>Z</sub>                    | 52                    | 2              |                |                |                |                            |
|     |         | e <sub>N</sub>                    | 55                    | 5              |                |                |                |                            |
|     |         | e <sub>Z</sub>                    | 55 29                 | 8              |                |                |                |                            |

| Nr.              | Dates              | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques                              |
|------------------|--------------------|------------------|-----------------------|----------------|----------------|----------------|----------------|--|
|                  |                    |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 207              | 6. VII.<br>(suite) | i <sub>N</sub>   | h m s                 | s              | μ              | μ              | μ              |  |
|                  |                    | i <sub>E</sub>   | 17 55 35              | 6              |                |                |                |  |
|                  |                    | eL <sub>N</sub>  | 37                    | 7              |                |                |                |  |
|                  |                    | eL <sub>EZ</sub> | 18 00                 | 8-16           |                |                |                |  |
| 208              | 8. VII.            | F                | 02                    | 8-14           |                |                |                |  |
|                  |                    | eL <sub>N</sub>  | 26                    |                |                |                |                | Traces                                 |
|                  |                    | eL <sub>EZ</sub> | 20 08                 |                |                |                |                |  |
| 209              | 10. VII.           | F                | 12                    | 8-12           |                |                |                |  |
|                  |                    | eL <sub>EZ</sub> | 27                    |                |                |                |                | Très faibles ondes                     |
|                  |                    | eL <sub>N</sub>  | 2 00                  |                |                |                |                |  |
| 210              | 10. VII.           | eL <sub>E</sub>  | 03                    | 8-12           |                |                |                |  |
|                  |                    | eL <sub>Z</sub>  | 04                    |                |                |                |                |  |
|                  |                    | F                | 20                    |                |                |                |                |  |
|                  |                    | P <sub>Z</sub>   | 5 59 50               |                |                |                |                | Dilatation                             |
|                  |                    | P <sub>E</sub>   | 53                    | 3              |                |                |                | Δ = 6400 km                            |
|                  |                    | P <sub>N</sub>   | 54                    |                |                |                |                | Phase principale faiblement développée |
|                  |                    | i <sub>Z</sub>   | 6 01 45               | 6              |                |                |                | (φ = 58° 49' N)                        |
|                  |                    | i <sub>Z</sub>   | 02 31                 | 6              |                |                |                | (λ = 137° 12' E)?                      |
|                  |                    | i <sub>Z</sub>   | 03 25                 | 4              |                |                |                |  |
|                  |                    | i <sub>Z</sub>   | 04 16                 | 6              |                |                |                |  |
|                  |                    | iS <sub>E</sub>  | 07 54                 | 5              |                |                |                |  |
|                  |                    | iS <sub>Z</sub>  | 57                    | 6              |                |                |                |  |
|                  |                    | iS <sub>N</sub>  | 58                    | 9              |                |                |                |  |
|                  |                    | i <sub>N</sub>   | 08 59                 | 7              |                |                |                |  |
|                  |                    | iSS <sub>N</sub> | 11 26                 | 10             |                |                |                |  |
| SS <sub>E</sub>  | 28                 | 6; 8             |                       |                |                |                |                |  |
| eSS <sub>Z</sub> | 31                 | 6                |                       |                |                |                |                |  |
| 211              | 10. VII.           | eL <sub>E</sub>  | 16                    | 7-14           |                |                |                |  |
|                  |                    | eL <sub>Z</sub>  | 17                    | 10-20          |                |                |                |  |
|                  |                    | eL <sub>N</sub>  | 19                    | 10-16          |                |                |                |  |
|                  |                    | M <sub>E</sub>   | 24 50                 | 9              |                | 9              |                |  |
|                  |                    | M <sub>Z</sub>   | 28 38                 | 15             |                |                | 11             |  |
|                  |                    | M <sub>N</sub>   | 58                    | 11             | 13             |                |                |  |
|                  |                    | F                | 8,2                   |                |                |                |                | Δ = ca 2200 km                         |
|                  |                    | eP <sub>E</sub>  | 13 15 15              |                |                |                |                |  |
|                  |                    | eP <sub>Z</sub>  | 20                    | 2              |                |                |                |  |
|                  |                    | eP <sub>N</sub>  | 22                    |                |                |                |                |  |
|                  |                    | iP <sub>Z</sub>  | 23                    |                |                |                |                |  |
|                  |                    | iP <sub>E</sub>  | 25                    | 5              |                |                |                |  |
|                  |                    | iP <sub>N</sub>  | 29                    |                |                |                |                |  |
|                  |                    | S <sub>E</sub>   | 18 57                 | 6              |                |                |                |  |
|                  |                    | S <sub>Z</sub>   | 59                    | 7              |                |                |                |  |
|                  |                    | iS <sub>N</sub>  | 19 02                 | 8              |                |                |                |  |
|                  |                    | eL <sub>N</sub>  | 21                    | 8-12           |                |                |                |  |
|                  |                    | eL <sub>EZ</sub> | 23                    |                |                |                |                |  |



| Nr.            | Dates               | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques          |
|----------------|---------------------|------------------|-----------------------|----------------|----------------|----------------|----------------|--------------------|
|                |                     |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                    |
| 211            | 10. VII.<br>(suite) | M <sub>N</sub>   | h m s<br>13 24 00     | s<br>10        | μ<br>5         | μ              | μ              |                    |
|                |                     | M <sub>Z</sub>   | 51                    | 10             |                |                |                |                    |
|                |                     | F                | 50                    |                |                |                | 2              |                    |
| 212            | 10. VII.            | eL <sub>NE</sub> | 14 54                 | 10-18; 24      |                |                |                | Très faibles ondes |
|                |                     | F                | 15 10                 |                |                |                |                |                    |
| 213            | 11. VII.            | eL <sub>NE</sub> | 1 33                  | 8-12           |                |                |                |                    |
|                |                     | F                | 51                    |                |                |                |                |                    |
| 214            | 11. VII.            | eL <sub>N</sub>  | 4 14                  | 10-16          |                |                |                |                    |
|                |                     | F                | 24                    |                |                |                |                |                    |
| 215            | 12. VII.            | eL <sub>NE</sub> | 16 00 jusqu'à<br>28   | 8-16           |                |                |                | Traces             |
|                |                     | eL <sub>NE</sub> | 40 jusqu'à<br>17 26   |                | 10-14          |                |                |                    |
| 216            | 13. VII.            | e <sub>Z</sub>   | 17 00 36              | 7              |                |                |                | (Δ = ca 9500 km?)  |
|                |                     | e <sub>Z</sub>   | 03 40                 | 7              |                |                |                |                    |
|                |                     | i <sub>E</sub>   | 11 08                 | 8              |                |                |                |                    |
|                |                     | i <sub>N</sub>   | 10                    |                |                |                |                |                    |
|                |                     | e <sub>E</sub>   | 46                    | 12             |                |                |                |                    |
|                |                     | e <sub>N</sub>   | 49                    |                |                |                |                |                    |
|                |                     | e <sub>Z</sub>   | 12 50                 | 12             |                |                |                |                    |
|                |                     | e <sub>E</sub>   | 14 16                 | 11             |                |                |                |                    |
|                |                     | e <sub>N</sub>   | 31                    | 11             |                |                |                |                    |
|                |                     | eL <sub>N</sub>  | 27                    | 20-25          |                |                |                |                    |
|                |                     | eL <sub>E</sub>  | 29                    |                |                |                |                |                    |
|                |                     | eL <sub>Z</sub>  | 31                    |                |                |                |                |                    |
|                |                     | M <sub>Z</sub>   | 39 20                 | 20             |                |                | 8              |                    |
|                |                     | M <sub>N</sub>   | 26                    | 21             | 9              |                |                |                    |
|                |                     | M <sub>E</sub>   | 34                    | 19             |                | 9              |                |                    |
| M <sub>E</sub> | 46 52               | 19               |                       | 10             |                |                |                |                    |
| M <sub>Z</sub> | 57                  | 20               |                       |                | 7              |                |                |                    |
| F              | 18                  |                  |                       |                |                |                |                |                    |
| 217            | 13. VII.            | e <sub>Z</sub>   | 20 20 20              | 3              |                |                |                |                    |
|                |                     | e <sub>N</sub>   | 26                    | 5              |                |                |                |                    |
|                |                     | e <sub>E</sub>   | 33                    | 6              |                |                |                |                    |
|                |                     | e <sub>N</sub>   | 23 48                 | 8              |                |                |                |                    |
|                |                     | e <sub>E</sub>   | 24 56                 | 12             |                |                |                |                    |
|                |                     | e <sub>N</sub>   | 25 28                 | 6              |                |                |                |                    |
|                |                     | e <sub>Z</sub>   | 41                    | 7              |                |                |                |                    |
|                |                     | eL <sub>NZ</sub> | 26                    | 10-16          |                |                |                |                    |
|                |                     | eL <sub>Z</sub>  | 27                    | 8-14           |                |                |                |                    |
|                |                     | M <sub>N</sub>   | 28 12                 | 8              | 2              |                |                |                    |
|                |                     | M <sub>E</sub>   | 29 25                 | 9              |                | 2              |                |                    |
| F              | 44                  |                  |                       |                |                |                |                |                    |

| Nr.            | Dates    | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques   |
|----------------|----------|------------------|-----------------------|----------------|----------------|----------------|----------------|---|
|                |          |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |   |
| 218            | 14. VII. | iP               | h m s<br>6 04 28      | s<br>4; 8      | μ<br>+         | μ<br>+         | μ<br>-         | D latitude<br>Δ = 8010 km<br>φ = 53° 37' N<br>λ = 177° 20' E<br>Région des îles<br>d'Aléoutes |
|                |          | PP <sub>Z</sub>  | 07 43                 | 7              |                |                |                |   |
|                |          | PPP <sub>Z</sub> | 09 04                 | 10             |                |                |                |   |
|                |          | i <sub>Z</sub>   | 28                    | 8              |                |                |                |   |
|                |          | i <sub>N</sub>   | 30                    | 9              |                |                |                |   |
|                |          | i <sub>Z</sub>   | 10 43                 | 7; 8           |                |                |                |   |
|                |          | iS <sub>N</sub>  | 13 54                 | 13             |                |                |                |   |
|                |          | iS <sub>E</sub>  | 57                    | 8              |                |                |                |   |
|                |          | PS <sub>N</sub>  | 14 31                 | 15             |                |                |                |   |
|                |          | PS <sub>E</sub>  | 32                    | 9              |                |                |                |   |
|                |          | PS <sub>Z</sub>  | 36                    | 7              |                |                |                |   |
|                |          | SS <sub>E</sub>  | 19 16                 | 8              |                |                |                |   |
|                |          | SSS <sub>E</sub> | 21 53                 | 10             |                |                |                |   |
|                |          | L                | 30                    | 20-32          |                |                |                |   |
|                |          | M <sub>N</sub>   | 36 34                 | 20             | 17             |                |                |   |
| M <sub>E</sub> | 39 54    | 16               |                       | 53             |                |                |                |   |
| M <sub>N</sub> | 40 36    | 18               | 94                    |                | 55             |                |                |   |
| M <sub>Z</sub> | 41       | 18               |                       |                |                |                |                |   |
| M <sub>E</sub> | 42 02    | 15               |                       | 61             |                |                |                |   |
| F              | 10 06    |                  |                       |                |                |                |                |   |
| 219            | 14. VII. | e <sub>E</sub>   | 15 43                 |                |                |                |                | Très faibles ondes  |
|                |          | e <sub>Z</sub>   | 43 18                 | 5              |                |                |                |   |
|                |          | eL <sub>NE</sub> | 16 11                 | 10-16          |                |                |                |   |
|                |          | eL <sub>Z</sub>  | 12                    | 19-20          |                |                |                |   |
|                |          | M <sub>NE</sub>  | 17 jusqu'à<br>23      | 10-16          |                |                |                |   |
|                |          | M <sub>Z</sub>   | 20 jusqu'à<br>23      | 16             |                |                |                |   |
|                |          | F                | 16 40                 |                |                |                |                |   |
| 220            | 16. VII. | e <sub>NE</sub>  | 0 17                  | 7              |                |                | Traces         |   |
|                |          | F                | 29                    |                |                |                |                |   |
| 221            | 16. VII. | e <sub>Z</sub>   | 5 10                  |                |                |                | Faibles ondes  |   |
|                |          | e <sub>E</sub>   | 11 41                 | 7              |                |                |                |   |
|                |          | e <sub>N</sub>   | 47                    | 4              |                |                |                |   |
|                |          | eL <sub>N</sub>  | 36                    | 16-24          |                |                |                |   |
|                |          | eL <sub>E</sub>  | 42                    |                |                |                |                |   |
|                |          | M <sub>N</sub>   | 47 37                 | 20             | 3              |                |                |   |
|                |          | M <sub>E</sub>   | 48 30                 | 18             |                | 2              |                |   |
|                |          | eL <sub>Z</sub>  | 54                    | 14-20          |                |                |                |   |
|                |          | F                | 6 12                  |                |                |                |                |   |
|                |          | e <sub>NE</sub>  | 19 40                 |                |                |                |                |   |
| e <sub>Z</sub> | 42       |                  |                       |                |                |                |                |   |
| 222            | 16. VII. | eL <sub>N</sub>  | 20 11                 | 16-22          |                |                | 16-24; 30      |   |
|                |          | eL <sub>E</sub>  |                       |                |                |                |                |   |

| Nr. | Dates               | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques |
|-----|---------------------|------------------|-----------------------|----------------|----------------|----------------|----------------|-----------|
|     |                     |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |
| 222 | 16. VII.<br>(suite) | eL <sub>Z</sub>  | h m s<br>20 14        | s<br>20-22     | μ              | μ              | μ              |           |
|     |                     | M                | 17 jusqu'à<br>24      | 20-24          |                |                |                |           |
| 223 | 16. VII.            | F                | 40                    |                |                |                |                |           |
|     |                     | e <sub>N</sub>   | 23 42                 |                |                |                |                |           |
| 223 | 16. VII.            | e <sub>E</sub>   | 45                    |                |                |                |                |           |
|     |                     | e <sub>Z</sub>   | 49                    |                |                |                |                |           |
| 223 | 17. VII.            | eL <sub>N</sub>  | 0 14                  | 18-28          |                |                |                |           |
|     |                     | eL <sub>E</sub>  | 17                    | 18-24          |                |                |                |           |
| 223 | 17. VII.            | eL <sub>Z</sub>  | 20                    | 18-22          |                |                |                |           |
|     |                     | M <sub>N</sub>   | 23 jusqu'à<br>27      | 16-24          |                |                |                |           |
| 223 | 17. VII.            | M <sub>EZ</sub>  | 24 jusqu'à<br>29      |                | 18-24          |                |                |           |
|     |                     | F                | 48                    |                |                |                |                |           |
| 224 | 17. VII.            | e <sub>NE</sub>  | 6 44,5                |                |                |                |                |           |
|     |                     | e <sub>Z</sub>   | 45                    |                |                |                |                |           |
| 224 | 17. VII.            | e <sub>N</sub>   | 52 07                 | 7              |                |                |                |           |
|     |                     | e <sub>Z</sub>   | 14                    | 6              |                |                |                |           |
| 224 | 17. VII.            | e <sub>NE</sub>  | 23                    | 7; 5           |                |                |                |           |
|     |                     | e <sub>E</sub>   | 45                    | 6              |                |                |                |           |
| 224 | 17. VII.            | e <sub>E</sub>   | 53 36                 | 5              |                |                |                |           |
|     |                     | e <sub>N</sub>   | 53                    | 7              |                |                |                |           |
| 224 | 17. VII.            | e <sub>NE</sub>  | 54 24                 | 7; 5           |                |                |                |           |
|     |                     | eL <sub>N</sub>  | 56                    | 8-16           |                |                |                |           |
| 224 | 17. VII.            | eL <sub>EZ</sub> | 59                    |                | 8-16           |                |                |           |
|     |                     | M <sub>N</sub>   | 59 48                 | 11             |                | 8.             |                |           |
| 224 | 17. VII.            | M <sub>E</sub>   | 7 01 19               | 8              |                | 3              |                |           |
|     |                     | M <sub>Z</sub>   | 39                    | 8              |                |                | 2              |           |
| 224 | 17. VII.            | F                | 48                    |                |                |                |                |           |
|     |                     | e <sub>E</sub>   | 11 53                 |                |                |                |                |           |
| 225 | 17. VII.            | e <sub>NZ</sub>  | 54                    |                |                |                |                |           |
|     |                     | e <sub>N</sub>   | 12 00 23              | 8              |                |                |                |           |
| 225 | 17. VII.            | e <sub>E</sub>   | 40                    | 4              |                |                |                |           |
|     |                     | e <sub>N</sub>   | 44                    | 7              |                |                |                |           |
| 225 | 17. VII.            | e <sub>E</sub>   | 01 10                 | 4              |                |                |                |           |
|     |                     | e <sub>E</sub>   | 59                    | 3              |                |                |                |           |
| 225 | 17. VII.            | e <sub>N</sub>   | 02 15                 | 10             |                |                |                |           |
|     |                     | e <sub>NE</sub>  | 47                    | 4; 8           |                |                |                |           |
| 225 | 17. VII.            | e <sub>N</sub>   | 03 31                 | 7              |                |                |                |           |
|     |                     | e <sub>N</sub>   | 59                    | 11             |                |                |                |           |
| 225 | 17. VII.            | eL <sub>N</sub>  | 05                    | 8-14           |                |                |                |           |
|     |                     | eL <sub>E</sub>  | 07                    |                |                |                |                |           |
| 225 | 17. VII.            | eL <sub>Z</sub>  | 08                    |                |                |                |                |           |

| Nr. | Dates               | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques                          |
|-----|---------------------|------------------|-----------------------|----------------|----------------|----------------|----------------|------------------------------------|
|     |                     |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                                    |
| 225 | 17. VII.<br>(suite) | M <sub>N</sub>   | h m s<br>12 08 09     | s<br>12        | μ              | μ              | μ              |                                    |
|     |                     | M <sub>E</sub>   | 53                    | 8              |                | 2              |                |                                    |
| 225 | 17. VII.<br>(suite) | M <sub>Z</sub>   | 10 33                 | 7              |                |                | 2              |                                    |
|     |                     | F                | 12 45                 |                |                |                |                |                                    |
| 226 | 17. VII.            | e <sub>Z</sub>   | 21 30 54              | 15; 2          |                |                |                |                                    |
|     |                     | e <sub>E</sub>   | 33 23                 | 2              |                |                |                |                                    |
| 226 | 17. VII.            | e <sub>N</sub>   | 35 00                 | 8              |                |                |                |                                    |
|     |                     | e <sub>Z</sub>   | 11                    | 8              |                |                |                |                                    |
| 226 | 17. VII.            | eL <sub>NE</sub> | 42                    | 8-12           |                |                |                |                                    |
|     |                     | eL <sub>Z</sub>  | 44                    | 10             |                |                |                |                                    |
| 226 | 17. VII.            | F                | 53                    |                |                |                |                |                                    |
|     |                     | e <sub>NZ</sub>  | 4 59                  |                |                |                |                | + Compression                      |
| 227 | 19. VII.            | e <sub>N</sub>   | 5 08 24               | 10             |                |                |                | e <sub>Z</sub> dans l'interruption |
|     |                     | e <sub>E</sub>   | 28                    | 6              |                |                |                | de la minute                       |
| 227 | 19. VII.            | i <sub>N</sub>   | 09 08                 | 9              |                |                |                |                                    |
|     |                     | eL <sub>N</sub>  | 25                    | 16-26          |                |                |                |                                    |
| 227 | 19. VII.            | eL <sub>E</sub>  |                       |                | 25             | 16-26          |                |                                    |
|     |                     | eL <sub>Z</sub>  | 25                    | 20-25; 36      |                |                |                |                                    |
| 227 | 19. VII.            | M <sub>Z</sub>   |                       |                | 33 14          | 20             |                |                                    |
|     |                     | M <sub>N</sub>   | 22                    | 20             | 9              |                | 10             |                                    |
| 227 | 19. VII.            | M <sub>E</sub>   | 34 38                 | 16             |                |                |                |                                    |
|     |                     | F                | 6 06                  |                |                |                |                | Traces                             |
| 228 | 19. VII.            | e <sub>NE</sub>  | 10 18                 | 7; 8           |                |                |                |                                    |
|     |                     | e <sub>Z</sub>   |                       |                | 25             |                |                |                                    |
| 228 | 19. VII.            | F                | 25                    |                |                |                |                |                                    |
|     |                     | e <sub>Z</sub>   | 2 13 21               | 8              |                |                |                | - Dilatation                       |
| 229 | 20. VII.            | e <sub>Z</sub>   | 16 27                 | 8              |                |                |                |                                    |
|     |                     | e <sub>N</sub>   | 51                    | 6              |                |                |                |                                    |
| 229 | 20. VII.            | e <sub>N</sub>   | 17 04                 | 8              |                |                |                |                                    |
|     |                     | e <sub>N</sub>   | 26 45                 | 8              |                |                |                |                                    |
| 229 | 20. VII.            | e <sub>N</sub>   | 32 09                 | 9              |                |                |                |                                    |
|     |                     | e <sub>E</sub>   | 35 03                 | 15             |                |                |                |                                    |
| 229 | 20. VII.            | e <sub>N</sub>   | 04                    | 16             |                |                |                |                                    |
|     |                     | eL <sub>N</sub>  | 3 06                  | 16-22          |                |                |                |                                    |
| 229 | 20. VII.            | eL <sub>E</sub>  | 08                    | 19-20          |                |                |                |                                    |
|     |                     | eL <sub>Z</sub>  |                       |                | 08             | 20-24          |                |                                    |
| 229 | 20. VII.            | M <sub>N</sub>   | 11 31                 | 23             |                |                | 6              |                                    |
|     |                     | M <sub>Z</sub>   | 12 33                 | 22             |                |                | 5              |                                    |
| 229 | 20. VII.            | M <sub>E</sub>   | 14 49                 | 19             |                |                |                |                                    |
|     |                     | M <sub>N</sub>   | 32 08                 | 17             | 4              |                |                |                                    |
| 230 | 21. VII.            | F                | 4 20                  |                |                |                |                |                                    |
|     |                     | e <sub>Z</sub>   | 5 38 17               | 8              |                |                |                |                                    |
| 230 | 21. VII.            | e <sub>NE</sub>  | 38 32                 | 6              |                |                |                |                                    |

| Nr.            | Dates               | Phases                            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques  |
|----------------|---------------------|-----------------------------------|-----------------------|----------------|----------------|----------------|----------------|--|
|                |                     |                                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 230            | 21. VII.<br>(suite) | e <sub>E</sub>                    | h m s<br>5 39 16      | s              | μ              | μ              | μ              |  |
|                |                     | e <sub>N</sub>                    | 17                    | 8              |                |                |                |  |
|                |                     | e <sub>Z</sub>                    | 37                    | 6              |                |                |                |  |
| 231            | 21. VII.            | F                                 | 48                    |                |                |                |                |  |
|                |                     | P <sub>E</sub>                    | 15 51 48              | 10; 2          |                |                | +              | Compression  |
|                |                     | P <sub>Z</sub>                    | 49                    | 8              |                |                |                |  |
|                |                     | e <sub>Z</sub>                    | 55 35                 | 6              |                |                |                |  |
|                |                     | e <sub>E</sub> (S <sup>?</sup> )  | 16 02 21              | 7              |                |                |                |  |
|                |                     | i <sub>N</sub>                    | 59                    | 14             |                |                |                |  |
|                |                     | i <sub>E</sub>                    | 04 10                 | 14             |                |                |                |  |
|                |                     | i <sub>Z</sub>                    | 19                    | 9              |                |                |                |  |
|                |                     | L <sub>N</sub>                    | 26                    | 14-26; 28      |                |                |                |  |
|                |                     | L <sub>EZ</sub>                   | 28                    | 12-22; 26      |                |                |                |  |
|                |                     | M <sub>N</sub>                    | 38 45                 | 18             | 12             |                |                |  |
|                |                     | M <sub>Z</sub>                    | 39 44                 | 18             |                |                | 7              |  |
|                |                     | M <sub>E</sub>                    | 49                    | 18             |                | 9              |                |  |
|                |                     | M <sub>N</sub>                    | 41 30                 | 18             | 13             |                |                |  |
| M <sub>Z</sub> | 33                  | 18                                |                       |                | 7              |                |                |  |
| F              | 17 25               |                                   |                       |                |                |                |                |  |
| 232            | 22. VII.            | e <sub>NE</sub>                   | 12 35                 |                |                |                |                | Traces   |
|                |                     | F                                 | 39                    |                |                |                |                |  |
| 233            | 24. VII.            | eL <sub>N</sub>                   | 13 53                 | 10-16          |                |                |                |  |
|                |                     | eL <sub>E</sub>                   | 57                    |                |                |                |                |  |
| 234            | 24. VII.            | F                                 | 14 09                 |                |                |                |                |  |
|                |                     | eP <sub>Z</sub>                   | 22 19 56              | 2; 1,5         |                |                | +              | Compression<br>Δ = 2345 km   |
|                |                     | eP <sub>NE</sub>                  | 20                    |                |                |                |                |  |
|                |                     | S <sub>E</sub>                    | 23 46                 | 6              |                |                |                |  |
|                |                     | S <sub>N</sub>                    |                       | 5              |                |                |                |  |
|                |                     | S <sub>Z</sub>                    | 49                    | 6              |                |                |                |  |
|                |                     | eL <sub>E</sub>                   | 27                    | 8-10           |                |                |                |  |
|                |                     | eL <sub>NZ</sub>                  | 28                    | 8-12           |                |                |                |  |
| 235            | 27. VII.            | F                                 | 37                    |                |                |                |                |  |
|                |                     | P <sub>Z</sub>                    | 13 45 34              | 10             |                |                | +              | Compression<br>Δ = ca 9500 km  |
|                |                     | i <sub>Z</sub> (PP <sub>Z</sub> ) | 49 13                 | 8              |                |                |                | A 15 <sup>h</sup> 44 <sup>m</sup> dans toutes<br>composantes émer-<br>gence des ondes W <sub>2</sub> |
|                |                     | iS <sub>E</sub>                   | 56 01                 | 10             |                |                |                |  |
|                |                     | iS <sub>N</sub>                   | 03                    | 10             |                |                |                |  |
|                |                     | e <sub>Z</sub>                    | 06                    | 10             |                |                |                |  |
|                |                     | i <sub>NE</sub>                   | 29                    | 11             |                |                |                |  |
|                |                     | i <sub>Z</sub>                    | 33                    | 11             |                |                |                |  |
|                |                     | e <sub>N</sub>                    | 14 00 27              | 10             |                |                |                |  |
|                |                     | e <sub>N</sub>                    | 02 36                 | 13             |                |                |                |  |
|                |                     | i <sub>E</sub>                    | 03 17                 | 9              |                |                |                |  |
|                |                     | e <sub>N</sub>                    | 05 02                 | 9              |                |                |                |  |

| Nr.              | Dates               | Phases            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques  |  |  |
|------------------|---------------------|-------------------|-----------------------|----------------|----------------|----------------|----------------|--|--|--|
|                  |                     |                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |  |  |
| 235              | 27. VII.<br>(suite) | L                 | h m s<br>14 13        | s<br>20-28; 36 | μ              | μ              | μ              |  |  |  |
|                  |                     | M <sub>Z</sub>    | 20 40                 | 28             |                |                |                | 40   |  |  |
|                  |                     | M <sub>N</sub>    | 49                    | 25             | 44             |                |                |  |  |  |
|                  |                     | M <sub>Z</sub>    | 23 02                 | 25             |                |                |                | 32   |  |  |
|                  |                     | M <sub>N</sub>    | 11                    | 24             | 30             |                |                |  |  |  |
|                  |                     | M <sub>E</sub>    | 27 46                 | 20             |                | 25             |                |  |  |  |
|                  |                     | M <sub>Z</sub>    | 55                    | 22             |                |                |                | 27   |  |  |
|                  |                     | M <sub>E</sub>    | 29 56                 | 17             |                | 17             |                |  |  |  |
|                  |                     | F                 | 16 25                 |                |                |                |                |  |  |  |
|                  |                     | P <sub>Z</sub>    | 0 15 50               | 3              |                |                |                |  |  |  |
|                  |                     | P <sub>E</sub>    | 53                    | 8; 1,5; 1      |                |                |                |  |  |  |
| 236              | 30. VII.            | P <sub>N</sub>    | 54                    | 8              |                |                |                | Dilatation<br>Δ = ca 1800 km<br>φ = 38° 34' N<br>λ = 34° 15' E |  |  |
|                  |                     | S <sub>N</sub>    | 18 54                 | 5              |                |                |                |  |  |  |
|                  |                     | S <sub>E</sub>    | 58                    | 4              |                |                |                |  |  |  |
|                  |                     | S <sub>Z</sub>    | 19 04                 | 4; 5           |                |                |                |  |  |  |
|                  |                     | SS <sub>EZ</sub>  | 34                    | 3; 5           |                |                |                |  |  |  |
|                  |                     | eL <sub>Z</sub>   | 22                    | 7-16           |                |                |                |  |  |  |
|                  |                     | eL <sub>E</sub>   | 23                    | 7-14           |                |                |                |  |  |  |
|                  |                     | M <sub>Z</sub>    | 25 30                 | 12             |                |                |                | 46   |  |  |
|                  |                     | M <sub>Z</sub>    | 26 31                 | 11             |                |                |                | 24   |  |  |
|                  |                     | M <sub>E</sub>    | 47                    | 10             |                | 40             |                |  |  |  |
|                  |                     | M <sub>N</sub>    | 27 25                 | 8              | 29             |                |                |  |  |  |
|                  |                     | F                 | 2 11                  |                |                |                |                |  |  |  |
|                  |                     | 237               | 30. VII.              | e <sub>N</sub> | 22 12 22       | 3; 4           |                |  |  |  |
|                  |                     |                   |                       | e <sub>E</sub> | 39             | 2; 3           |                |  |  |  |
| eL <sub>EZ</sub> | 16                  |                   |                       | 8-13           |                |                |                |  |  |  |
| eL <sub>N</sub>  | 17                  |                   |                       | 8-14           |                |                |                |  |  |  |
| 238              | 31. VII.            | F                 | 30                    |                |                |                |                | Δ = 1880 km?   |  |  |
|                  |                     | eP <sub>E</sub>   | 10 40 15              | 1; 1,5; 2      |                |                |                |  |  |  |
|                  |                     | eP <sub>Z</sub>   |                       | 2; 4           |                |                |                |  |  |  |
|                  |                     | eP <sub>N</sub>   | 19                    | 2              |                |                |                |  |  |  |
|                  |                     | S <sub>NE</sub> ? | 43 30                 | 4; 3           |                |                |                |  |  |  |
|                  |                     | SS <sub>E</sub> ? | 44 04                 | 4              |                |                |                |  |  |  |
|                  |                     | SS <sub>N</sub> ? | 11                    | 3              |                |                |                |  |  |  |
|                  |                     | eL <sub>NE</sub>  | 45                    | 7-12           |                |                |                |  |  |  |
|                  |                     | eL <sub>Z</sub>   | 46                    | 7-14           |                |                |                |  |  |  |
|                  |                     | M <sub>N</sub>    | 49 07                 | 11             | 6              |                |                |  |  |  |
|                  |                     | M <sub>E</sub>    | 35                    | 10             |                | 7              |                |  |  |  |
| M <sub>Z</sub>   | 50 54               | 8                 |                       |                |                | 1              |                |  |  |  |
| F                | 11 20               |                   |                       |                |                |                |                |  |  |  |

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Nr. 8

| Nr. | Dates    | Phases               | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |  |                    | Remarques                                    |     |
|-----|----------|----------------------|-----------------------|----------------|----------------|--|--------------------|--|-----|
|     |          |                      |                       |                | A <sub>N</sub> | A <sub>E</sub>   | A <sub>Z</sub>     |  |     |
| 239 | 1. VIII. | P <sub>Z</sub>       | h m s<br>12 58 25     | s<br>5         | μ              | μ  | μ                  | Dilatation<br>Enregistrement indi-<br>stinct |     |
|     |          | e <sub>E</sub>       | 30                    | 3; 4           |                |  |                    |  |     |
|     |          | e <sub>N</sub>       | 31                    | 4              |                |  |                    |  |     |
|     |          | e <sub>Z</sub>       | 13 00 28              | 7              |                |  |                    |  |     |
|     |          | e <sub>Z</sub>       | 01 17                 | 7              |                |  |                    |  |     |
|     |          | e <sub>Z</sub>       | 02 03                 | 8              |                |  |                    |  |     |
|     |          | e <sub>E</sub>       | 14 59                 | 7              |                |  |                    |  |     |
|     |          | e <sub>N</sub>       | 15 00                 | 9              |                |  |                    |  |     |
|     |          | e <sub>N</sub>       | 17 14                 | 10             |                |  |                    |  |     |
|     |          | e <sub>N</sub>       | 20 36                 | 11             |                |  |                    |  |     |
|     |          | i <sub>E</sub>       | 39                    | 13             |                |  |                    |  |     |
|     |          | eL <sub>E</sub>      | 28                    | 12-18          |                |  |                    |  |     |
|     |          | eL <sub>N</sub>      | 30                    | 14-18          |                |  |                    |  |     |
|     |          | F                    | 14 41                 |                |                |  |                    |  |     |
| 240 | 1. VIII. | P <sub>Z</sub>       | 15 19 35              | 10             | +              | Compression<br>Δ = 7580 km<br>φ = 53° 12' N<br>λ = 156° 47' E<br><br>A cause de l'enregi-<br>strement tout au bord<br>de la feuille la déter-<br>mination des maxima<br>est très difficile |                    |  |     |
|     |          | P <sub>E</sub>       |                       | 8              |                |  |                    |  |     |
|     |          | P <sub>N</sub>       |                       | 9              |                |  |                    |  |     |
|     |          | PP <sub>Z</sub>      | 22 21                 | 10             |                |  |                    |  |     |
|     |          | PPP <sub>Z</sub>     | 24 04                 | 10             |                |  |                    |  |     |
|     |          | e <sub>Z</sub>       | 26 11                 | 8              |                |  |                    |  |     |
|     |          | iS <sub>N</sub>      | 28 41                 | 12             |                |  |                    |  |     |
|     |          | iS <sub>E</sub>      |                       | 14             |                |  |                    |  |     |
|     |          | PS <sub>Z</sub>      | 29 05                 | 8; 13          |                |  |                    |  |     |
|     |          | SS <sub>Z</sub> (?)  | 33 46                 | 11             |                |  |                    |  |     |
|     |          | SSS <sub>Z</sub> (?) | 36 58                 | 9              |                |  |                    |  |     |
|     |          | eL <sub>Z</sub>      | 43                    | 10-14          |                |  |                    |  |     |
|     |          | M <sub>Z</sub>       | 54 40                 | 12             |                |  |                    |  | 730 |
|     |          | M <sub>Z</sub>       | 57 24                 | 10             |                |  |                    |  | 190 |
| F   | 19 36    |                      |                       |                |                |  |                    |  |     |
| 241 | 1. VIII. | e <sub>N</sub>       | 20 00 07              | 8              |                |  |                    |  |     |
|     |          | e <sub>E</sub>       | 46                    | 5              |                |  |                    |  |     |
|     |          | e <sub>Z</sub>       | 01 05                 | 5              |                |  |                    |  |     |
|     |          | eL <sub>N</sub>      | 05                    | 9-14           |                |  |                    |  |     |
|     |          | eL <sub>E</sub>      | 07                    |                |                |  |                    |  |     |
|     |          | eL <sub>Z</sub>      | 08                    |                |                |  |                    |  |     |
|     |          | M <sub>E</sub>       | 09 11                 | 11             | 2              |  |                    |  |     |
|     |          | M <sub>N</sub>       | 27                    | 11             | 7              |  |                    |  |     |
|     |          | M <sub>Z</sub>       | 13 52                 | 10             |                | 2  |                    |  |     |
|     |          | F                    | 40                    |                |                |  |                    |  |     |
| 242 | 2. VIII. | eL <sub>NZ</sub>     | 3 33                  | 9-18           |                |  | Très faibles ondes |  |     |
|     |          | eL <sub>E</sub>      | 35                    |                |                |  |                    |  |     |
|     |          | F                    | 51                    |                |                |  |                    |  |     |

| Nr.             | Dates            | Phases           | Heures<br>(Greenwich) | Périodes<br>T.   | Amplitudes     |                |                | Remarques  |       |       |   |  |   |
|-----------------|------------------|------------------|-----------------------|------------------|----------------|----------------|----------------|--|-------|-------|---|--|---|
|                 |                  |                  |                       |                  | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |       |       |   |  |   |
| 243             | 2. VIII.         | eL <sub>N</sub>  | h m s<br>4 34         | 10-14            | μ              | μ              | μ              | Traces   |       |       |   |  |   |
|                 |                  | eL <sub>E</sub>  | 36                    |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | F                | 44                    |                  |                |                |                |  |       |       |   |  |   |
| 244             | 2. VIII.         | eL <sub>NE</sub> | 6 29                  | 9-14             |                |                |                | Très faibles ondes   |       |       |   |  |   |
|                 |                  | eL <sub>Z</sub>  | 31                    |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | F                | 53                    |                  |                |                |                |  |       |       |   |  |   |
| 245             | 2. VIII.         | eL <sub>N</sub>  | 14 33                 | 9-14             |                |                |                | Faibles ondes<br>Fin pendant le chan-<br>gement des feuilles |       |       |   |  |   |
|                 |                  | eL <sub>EZ</sub> | 37                    |                  |                |                |                |  |       |       |   |  |   |
| 246             | 5. VIII.         | eL <sub>E</sub>  | 9 00                  | 14-22            |                |                |                |  |       |       |   |  |   |
|                 |                  | eL <sub>NZ</sub> | 03                    |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | M <sub>E</sub>   | 04 jusqu'à<br>07      | 16-18            |                |                |                |  |       |       |   |  |   |
|                 |                  | M <sub>NZ</sub>  | 08 jusqu'à<br>12      | 16-20            |                |                |                |  |       |       |   |  |   |
|                 |                  | M <sub>E</sub>   | 09 jusqu'à<br>13      | 14-20            |                |                |                |  |       |       |   |  |   |
|                 |                  | M <sub>N</sub>   | 11 jusqu'à<br>15      | 14-20            |                |                |                |  |       |       |   |  |   |
|                 |                  | F                | 9 28                  |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | 247              | 5. VIII.              | eL <sub>NE</sub> |                |                |                |  | 10 29 | 14-18 | 5 |  | 4 |
|                 |                  |                  |                       | eL <sub>Z</sub>  |                |                |                |  | 30    | 10-16 |   |  |   |
|                 |                  |                  |                       | M <sub>N</sub>   |                |                |                |  | 33 16 | 11    |   |  |   |
| M <sub>Z</sub>  | 36 10            |                  |                       | 11               |                |                |                |  |       |       |   |  |   |
| M <sub>E</sub>  | 38 23            |                  |                       | 12               |                |                |                |  |       |       |   |  |   |
| 248             | 5. VIII.         | F                | 50                    |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | eL <sub>N</sub>  | 22 11                 | 12-16            |                |                |                |  |       |       |   |  |   |
|                 |                  | eL <sub>E</sub>  | 12                    | 12-16; 20        |                |                |                |  |       |       |   |  |   |
|                 |                  | eL <sub>Z</sub>  | 15                    |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | M <sub>E</sub>   | 18 jusqu'à<br>25      | 12-16            |                |                |                |  |       |       |   |  |   |
| M <sub>NZ</sub> | 19 jusqu'à<br>22 |                  |                       |                  |                |                |                |  |       |       |   |  |   |
| 249             | 7. VIII.         | F                | 34                    |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | e <sub>NE</sub>  | 3 20                  | 8-12             |                |                |                |  |       |       |   |  |   |
|                 |                  | eL <sub>NE</sub> | 29                    |                  |                |                |                |  |       |       |   |  |   |
| 250             | 7. VIII.         | F                | 37                    |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | e <sub>E</sub>   | 3 54                  |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | e <sub>N</sub>   | 56                    |                  |                |                |                |  |       |       |   |  |   |
| 251             | 7. VIII.         | F                | 4 06                  |                  |                |                |                |  |       |       |   |  |   |
|                 |                  | e <sub>NEZ</sub> | 07 jusqu'à<br>14      | 1, 2             |                |                |                |  |       |       |   |  |   |

Très faibles ondes

Oscillations à période  
courte dans toutes  
les trois composantes

| Nr.             | Dates     | Phases          | Heures<br>(Greenwich) | Périodes<br>T.   | Amplitudes                                  |                |                    | Remarques |               |
|-----------------|-----------|-----------------|-----------------------|------------------|---|----------------|--------------------|-----------|---------------|
|                 |           |                 |                       |                  | A <sub>N</sub>                              | A <sub>E</sub> | A <sub>Z</sub>     |           |               |
| 252             | 7. VIII.  | e <sub>NE</sub> | h m s<br>14 01        | s                | μ   | μ              | μ                  |           |               |
|                 |           | e <sub>Z</sub>  | 04                    |                  |   |                |                    |           |               |
|                 |           | eL <sub>E</sub> | 06                    | } 10-14          |   |                |                    |           |               |
|                 |           | eL <sub>N</sub> | 07                    |                  |   |                |                    |           |               |
|                 |           | eL <sub>Z</sub> | 08                    | 10               |   |                |                    |           |               |
|                 |           | eL <sub>E</sub> | 16                    | 10-12            |   |                |                    |           |               |
|                 |           | eL <sub>N</sub> | } 17                  | 10-12            |   |                |                    |           |               |
|                 |           | eL <sub>Z</sub> |                       | 8-12             |   |                |                    |           |               |
|                 |           | F               | 28                    |                  |   |                |                    |           |               |
|                 |           | 253             | 7. VIII.              | eL <sub>NE</sub> | 17 37                                       | 10-16          |                    |           |               |
| eL <sub>Z</sub> | 42        |                 |                       | 10-14            |   |                |                    |           |               |
| F               | 55        |                 |                       |                  |   |                |                    |           |               |
| 254             | 8. VIII.  | eL <sub>Z</sub> | 14 16                 |                  |   |                |                    |           |               |
|                 |           | eL <sub>E</sub> | } 19                  | 10-12            |   |                |                    |           |               |
|                 |           | eL <sub>N</sub> |                       |                  |   |                |                    |           |               |
| 255             | 8. VIII.  | e <sub>Z</sub>  | 28 50                 | 4                |   |                |                    |           |               |
|                 |           | e <sub>Z</sub>  | 31                    | 3                |   |                |                    |           |               |
|                 |           | e <sub>Z</sub>  | 14 57                 | 4                | } Deux séismes passant<br>l'un dans l'autre |                |                    |           |               |
|                 |           | e <sub>Z</sub>  | } 15 04               | 8                |   |                |                    |           |               |
|                 |           | e <sub>NE</sub> |                       |                  | 1-2   |                |                    |           |               |
|                 |           | eL              | 40                    | 12-18            |   |                |                    |           |               |
|                 |           | F               | 16 07                 |                  |   |                |                    |           |               |
|                 |           | 256             | 11. VIII.             | eL               | 4 22  | 10-14          |                    |           | Faibles ondes |
|                 |           |                 |                       | F                | 38  |                |                    |           |               |
|                 |           | 257             | 11. VIII.             | e <sub>Z</sub>   | 17 06 13                                    | 1-2            |                    |           |               |
| e <sub>Z</sub>  | 09 34     |                 |                       | 9                |   |                |                    |           |               |
| e <sub>E</sub>  | 43        |                 |                       | 2                |   |                |                    |           |               |
| e <sub>N</sub>  | 57        |                 |                       | 8; 9             |   |                |                    |           |               |
| e <sub>Z</sub>  | 21 08     |                 |                       | 11               |   |                |                    |           |               |
| e <sub>E</sub>  | 41        |                 |                       | 8                |   |                |                    |           |               |
| e <sub>N</sub>  | 27 43     |                 |                       | 9                |   |                |                    |           |               |
| eL <sub>N</sub> | } 55      |                 |                       | 20-30            |   |                |                    |           |               |
| eL <sub>Z</sub> |           |                 |                       | 24-36            |   |                |                    |           |               |
| eL <sub>E</sub> | 56        |                 |                       | 20-30            |   |                |                    |           |               |
| M <sub>N</sub>  | 18 05 12  |                 |                       | 24               | 22  |                |                    |           |               |
| M <sub>Z</sub>  | 06 34     |                 |                       | 11               |   | 3              |                    |           |               |
| M <sub>E</sub>  | 09 02     |                 |                       | 22               |   | 3              |                    |           |               |
| F               | 45        |                 |                       |                  |   |                |                    |           |               |
| 258             | 12. VIII. | eL              | 16 15                 | 10-14            |   |                | Très faibles ondes |           |               |
|                 |           | F               | 36                    |                  |   |                |                    |           |               |
| 259             | 12. VIII. | eL <sub>E</sub> | 16 56                 | 10-12            |   |                |                    |           |               |

| Nr.                             | Dates                | Phases            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |  | Remarques |
|---------------------------------|----------------------|-------------------|-----------------------|----------------|----------------|----------------|--|-----------|
|                                 |                      |                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>   |           |
| 259                             | 12. VIII.<br>(suite) | eL <sub>N</sub>   | } 17 00               | 12-16          |                |                |  |           |
|                                 |                      | eL <sub>Z</sub>   |                       | 10-12          |                |                |  |           |
|                                 |                      | F                 | 14                    |                |                |                |  |           |
| 260                             | 13. VIII.            | e <sub>Z</sub>    | 5 28 33               | 1              |                |                |  |           |
|                                 |                      | e <sub>E</sub>    | 35 13                 | 10             |                |                |  |           |
|                                 |                      | e <sub>Z</sub>    | 15                    | 10             |                |                |  |           |
|                                 |                      | e <sub>N</sub>    | 21                    | 8              |                |                |  |           |
|                                 |                      | e <sub>Z</sub>    | 38 46                 | 9              |                |                |  |           |
|                                 |                      | e <sub>E</sub>    | 51                    | 10             |                |                |  |           |
|                                 |                      | e <sub>N</sub>    | 57                    | 10             |                |                |  |           |
|                                 |                      | M <sub>N</sub>    | 50 52                 | 14             | 2              |                |  |           |
|                                 |                      | M <sub>E</sub>    | 51 46                 | 14             |                | 3              |  |           |
|                                 |                      | F                 | 6 09                  |                |                |                |  |           |
| 261                             | 13. VIII.            | e <sub>E</sub>    | 15 23 29              | } 1            |                |                |  |           |
|                                 |                      | e <sub>N</sub>    | 24 31                 |                |                |                |  |           |
|                                 |                      | e <sub>Z</sub>    | 34                    |                |                |                |  |           |
| 262                             | 13. VIII.            | P <sub>Z</sub>    | } 15 48 20            | 8              |                |                | +<br>Brève série d'oscilla-<br>tions à périodes très<br>courtes<br><br>Compression<br>Δ = 8100 km<br>φ = 34° 52' N<br>λ = 129° 12' E |           |
|                                 |                      | P <sub>N</sub>    |                       | 10             |                |                |  |           |
|                                 |                      | P <sub>E</sub>    | 21                    | 8              |                |                |  |           |
|                                 |                      | PP <sub>Z</sub>   | 51 03                 | 10; 1,5-2      |                |                |  |           |
|                                 |                      | iS <sub>E</sub>   | 57 49                 | 8              |                |                |  |           |
|                                 |                      | S <sub>N</sub>    | 51                    | 10             |                |                |  |           |
|                                 |                      | S <sub>Z</sub>    | 52                    | 9              |                |                |  |           |
|                                 |                      | PS <sub>Z</sub>   | 58 15                 | 14             |                |                |  |           |
|                                 |                      | PS <sub>E</sub>   | 21                    | 9              |                |                |  |           |
|                                 |                      | PS <sub>N</sub>   | 22                    | 11             |                |                |  |           |
|                                 |                      | iSS <sub>N</sub>  | 16 02 39              | 12             |                |                |  |           |
|                                 |                      | SS <sub>E</sub>   | 44                    | 11             |                |                |  |           |
|                                 |                      | iSSS <sub>N</sub> | 06 12                 | 12             |                |                |  |           |
|                                 |                      | SSS <sub>E</sub>  | 19                    | 14             |                |                |  |           |
|                                 |                      | L <sub>N</sub>    | 12                    | 12-16          |                |                |  |           |
|                                 |                      | eL <sub>E</sub>   | 14                    | 11-22          |                |                |  |           |
|                                 |                      | L <sub>Z</sub>    | 15                    | 12-20          |                |                |  |           |
|                                 |                      | M <sub>E</sub>    | 17 17                 | 22             |                | 62             |  |           |
|                                 |                      | M <sub>Z</sub>    | 18 44                 | 15             |                | 21             |  |           |
| M <sub>N</sub>                  | 21 14                | 11                | 19                    | 159            |                |                |  |           |
| M <sub>Z</sub>                  | 23 41                | 20                | 18                    |                |                |                |  |           |
| M <sub>N</sub>                  | 24 43                | 10                |                       |                |                |                |  |           |
| (W <sub>2</sub> ) <sub>NE</sub> | 17 58                |                   |                       |                |                |                |  |           |
| (W <sub>2</sub> ) <sub>Z</sub>  | 18 00                |                   |                       |                |                |                |  |           |
| F                               | 36                   |                   |                       |                |                |                |  |           |
| 263                             | 14. VIII.            | e <sub>Z</sub>    | 8 57 48               | 1; 1,5         |                |                |  |           |
|                                 |                      | e <sub>NE</sub>   | 58                    |                |                |                |  |           |

| Nr.              | Dates                | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |  | Remarques   |
|------------------|----------------------|------------------|-----------------------|----------------|----------------|----------------|--|---|
|                  |                      |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>   |   |
| 263              | 14. VIII.<br>(suite) | e <sub>E</sub>   | h m s<br>9 04 10      | s<br>5         | μ              | μ              | μ  |   |
|                  |                      | e <sub>Z</sub>   | 36                    | 6              |                |                |  |   |
|                  |                      | eL <sub>NE</sub> | 15                    | 12-18; 20      |                |                |  |   |
|                  |                      | eL <sub>Z</sub>  | 17                    | 10-14          |                |                |  |   |
| 264              | 14. VIII.            | F                | 34                    |                |                |                |  |   |
|                  |                      | e <sub>Z</sub>   | 9 51 50               |                |                |                |  |   |
| 265              | 14. VIII.            | e <sub>N</sub>   | 52                    | 1              |                |                | } Brève série d'oscilla-<br>tions à périodes très<br>courtes                                 |   |
|                  |                      | e <sub>NE</sub>  | 14 33 16              |                |                |                |  |   |
| 266              | 15. VIII.            | e <sub>Z</sub>   | 24                    | 1              |                |                |  |   |
|                  |                      | e <sub>NEZ</sub> | 21 43                 |                |                |                |  |   |
| 267              | 16. VIII.            | e <sub>N</sub>   | 47 29                 | 8              |                |                |  |   |
|                  |                      | eL <sub>N</sub>  | 22 09                 | 12-18          |                |                |  |   |
|                  |                      | eL <sub>E</sub>  | 13                    | 10-16          |                |                |  |   |
|                  |                      | eL <sub>Z</sub>  | 17                    | 8-16           |                |                |  |   |
|                  |                      | M <sub>N</sub>   | 14 jusqu'à<br>17      | 14-18; 20      |                |                |  |   |
|                  |                      | F                | 35                    |                |                |                |  |   |
|                  |                      | eP <sub>E</sub>  | 16 06 33              | 8              | +              | -              | +  | } Compression<br>Δ = ca 2000 km<br>φ = 36° 10' N<br>λ = 32° 27' E |
|                  |                      | eP <sub>Z</sub>  |                       |                |                |                |  |   |
|                  |                      | eP <sub>N</sub>  | 35                    |                |                |                |  |   |
|                  |                      | S <sub>N</sub>   | 09 55                 | 8              |                |                |  |   |
|                  |                      | S <sub>E</sub>   | 59                    | 9              |                |                |  |   |
|                  |                      | e <sub>Z</sub>   | 10 08                 | 9              |                |                |  |   |
| SS <sub>N</sub>  | 26                   | 8                |                       |                |                |                |  |   |
| iSS <sub>E</sub> | 31                   | 8                |                       |                |                |                |  |   |
| eL <sub>N</sub>  | 12                   | 8-16; 20         |                       |                |                |                |  |   |
| eL <sub>E</sub>  |                      | 16-22            |                       |                |                |                |  |   |
| eL <sub>Z</sub>  | 13                   | 12-17; 20        |                       |                |                |                |  |   |
| M <sub>Z</sub>   | 15 31                | 12               |                       |                | 9              |                |  |   |
| M <sub>N</sub>   | 34                   | 8                | 13                    |                |                |                |  |   |
| M <sub>E</sub>   | 35                   | 13               |                       | 14             |                |                |  |   |
| F                | 55                   |                  |                       |                |                |                |  |   |
| 268              | 16. VIII.            | eP <sub>N</sub>  | 18 27 21              | 8              | +              |                | } Compression<br>Δ = 1865 km<br>φ = 36° 49' N<br>λ = 30° 22' E<br>Réplique du précé-<br>dent |   |
|                  |                      | eP <sub>E</sub>  |                       | 6              |                | -              |  |   |
|                  |                      | eP <sub>Z</sub>  | 8                     |                |                | +              |  |   |
|                  |                      | i <sub>Z</sub>   | 34                    | 7              |                |                |  |   |
|                  |                      | S <sub>N</sub>   | 20 47                 | 7              |                |                |  |   |
|                  |                      | S <sub>E</sub>   |                       | 9              |                |                |  |   |
|                  |                      | e <sub>Z</sub>   | 31 07                 | 6              |                |                |  |   |
|                  |                      | SS <sub>N</sub>  | 15                    | 9              |                |                |  |   |
|                  |                      | SS <sub>E</sub>  | 20                    | 8              |                |                |  |   |
|                  |                      | eL <sub>N</sub>  | 33                    | 10-16; 20      |                |                |  |   |
|                  |                      | eL <sub>E</sub>  |                       | 11-19          |                |                |  |   |

| Nr.                            | Dates                | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques |
|--------------------------------|----------------------|------------------|-----------------------|----------------|----------------|----------------|----------------|-----------|
|                                |                      |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |
| 268                            | 16. VIII.<br>(suite) | M <sub>E</sub>   | h m s<br>18 34 51     | s<br>7         | μ              | μ              | μ              |           |
|                                |                      | M <sub>N</sub>   | 35 05                 | 7              | 8              | 5              |                |           |
|                                |                      | M <sub>Z</sub>   | 47                    | 12             |                |                | 3              |           |
|                                |                      | F                | 57                    |                |                |                |                |           |
| 269                            | 19. VIII.            | eL <sub>NZ</sub> | 20 51                 | 9-14           |                |                |                |           |
|                                |                      | eL <sub>E</sub>  |                       | 8-16           |                |                |                |           |
|                                |                      | M <sub>N</sub>   | 55 25                 | 12             | 2              |                |                |           |
|                                |                      | M <sub>E</sub>   | 56 25                 | 10             |                | 2              |                |           |
| 270                            | 20. VIII.            | F                | 21 09                 |                |                |                |                |           |
|                                |                      | eP <sub>Z</sub>  | 17 49 45              | 9              |                |                |                |           |
|                                |                      | eP <sub>E</sub>  |                       | 8              |                |                |                |           |
|                                |                      | e <sub>E</sub>   | 59 27                 | 10             |                |                |                |           |
|                                |                      | e <sub>N</sub>   | 30                    | 11             |                |                |                |           |
|                                |                      | eL <sub>N</sub>  | 18 22                 | 20-22          |                |                |                |           |
|                                |                      | eL <sub>E</sub>  | 26                    | 30-34          |                |                |                |           |
|                                |                      | eL <sub>Z</sub>  | 27                    | 40             |                |                |                |           |
|                                |                      | M <sub>Z</sub>   | 38 10                 | 24             |                |                | 17             |           |
|                                |                      | M <sub>E</sub>   | 15                    | 22             |                | 14             |                |           |
|                                |                      | M <sub>N</sub>   | 17                    | 24             | 12             |                |                |           |
|                                |                      | 271              | 22. VIII.             | M <sub>N</sub> | 40 25          | 20             | 9              |           |
| M <sub>Z</sub>                 | 41                   |                  |                       | 20             |                |                | 11             |           |
| M <sub>E</sub>                 | 44                   |                  |                       | 20             |                | 11             |                |           |
| (W <sub>2</sub> ) <sub>N</sub> | 20 09 09             |                  |                       | 12-16          |                |                |                |           |
| (W <sub>2</sub> ) <sub>E</sub> | 11                   |                  |                       | 14-16          |                |                |                |           |
| F                              | 20                   |                  |                       |                |                |                |                |           |
| eP <sub>Z</sub>                | 3 39 00              |                  |                       | 2              |                |                |                |           |
| iP <sub>N</sub>                | 04                   |                  |                       | 7              |                |                | +              |           |
| iP <sub>Z</sub>                |                      |                  |                       | 5              |                |                |                |           |
| PP <sub>Z</sub>                | 41 58                |                  |                       | 8              |                |                |                |           |
| iS <sub>N</sub>                | 43 50                |                  |                       | 10             |                |                |                |           |
| iS <sub>E</sub>                |                      |                  |                       | 9              |                |                |                |           |
| iS <sub>Z</sub>                | 5                    |                  |                       |                |                |                |                |           |
| SS <sub>Z</sub>                | 53 56                | 12               |                       |                |                |                |                |           |
| SSS <sub>Z</sub> (?)           | 57 20                | 11               |                       |                |                |                |                |           |
| eL <sub>N</sub>                | 59                   | 20; 26           |                       |                |                |                |                |           |
| eL <sub>E</sub>                | 4 02                 | 18; 28-30        |                       |                |                |                |                |           |
| eL <sub>Z</sub>                | 03                   | 18-30            |                       |                |                |                |                |           |
| M <sub>N</sub>                 | 07 55                | 27               | 125                   |                |                |                |                |           |
| M <sub>E</sub>                 | 08 24                | 28               |                       | 92             |                |                |                |           |
| M <sub>Z</sub>                 | 43                   | 23               |                       |                | 70             |                |                |           |
| N <sub>Z</sub>                 | 11 26                | 20               |                       |                | 49             |                |                |           |
| M <sub>N</sub>                 | 15 22                | 19               | 73                    |                |                |                |                |           |
| M <sub>E</sub>                 | 31                   | 17               |                       | 51             |                |                |                |           |

| Nr.            | Dates                | Phases           | Heures<br>(Greenwich) | Périodes<br>T.   | Amplitudes     |                |                | Remarques   |    |
|----------------|----------------------|------------------|-----------------------|--|----------------|----------------|----------------|---|----|
|                |                      |                  |                       |  | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |   |    |
| 271            | 22. VIII.<br>(suite) | M <sub>Z</sub>   | h m s<br>4 15 40      | 23   | μ              | μ              | μ              |   |    |
|                |                      | W <sub>2</sub>   | 6 00                  |  |                |                |                |   | 70 |
| 272            | 24. VIII.            | F                | 33                    | 14-22<br>10-16<br>14-24  |                |                |                | Forte agitation micro-<br>séismique dans les<br>composantes hori-<br>zontales |    |
|                |                      | eL <sub>N</sub>  | 14 45 30              |  |                |                |                |   |    |
|                |                      | eL <sub>E</sub>  | 46                    |  |                |                |                |   |    |
|                |                      | eL <sub>Z</sub>  | 46                    |  |                |                |                |   |    |
| 273            | 26. VIII.            | F                | 15 03                 | 16-20<br>18-24<br>16-20<br>14-22<br>14-19                      |                |                |                |   |    |
|                |                      | eL <sub>Z</sub>  | 5 49                  |  |                |                |                |   |    |
|                |                      | eL <sub>N</sub>  | 50                    |  |                |                |                |   |    |
|                |                      | eL <sub>E</sub>  | 51                    |  |                |                |                |   |    |
|                |                      | M <sub>1</sub>   | 57 jusqu'à<br>6 03    |  |                |                |                |   |    |
|                |                      | M <sub>2</sub>   | 04 jusqu'à<br>07      |  |                |                |                |   |    |
| 274            | 27. VIII.            | F                | 14                    | 8-14   |                |                |                | Traces  |    |
|                |                      | eL <sub>NE</sub> | 0 08                  |  |                |                |                |   |    |
| 275            | 29. VIII.            | F                | 18                    | 8-14<br>9-16<br>8-10   |                |                |                | Très faibles ondes  |    |
|                |                      | eL <sub>N</sub>  | 2 40                  |  |                |                |                |   |    |
|                |                      | eL <sub>E</sub>  | 2 40                  |  |                |                |                |   |    |
| 276            | 29. VIII.            | eL <sub>Z</sub>  | 42                    | 8-10   |                |                |                |   |    |
|                |                      | F                | 50                    |  |                |                |                |   |    |
|                |                      | e <sub>Z</sub>   | 7 43 16               |  |                |                |                |   |    |
| 277            | 29. VIII.            | e <sub>E</sub>   | 17                    | 1  |                |                |                | Brève série d'oscilla-<br>tions à périodes très<br>courtes                    |    |
|                |                      | e <sub>N</sub>   | 17                    |  |                |                |                |   |    |
| 278            | 30. VIII.            | e <sub>Z</sub>   | 8 12 18               | 5<br>8<br>12<br>9<br>9-14<br>8-14<br>9<br>10<br>10<br>12<br>11 |                |                |                |   |    |
|                |                      | e <sub>N</sub>   | 19 43                 |  |                |                |                |   |    |
|                |                      | e <sub>Z</sub>   | 23 40                 |  |                |                |                |   |    |
|                |                      | e <sub>E</sub>   | 45                    |  |                |                |                |   |    |
|                |                      | eL <sub>N</sub>  | 29                    |  |                |                |                |   |    |
|                |                      | eL <sub>E</sub>  | 31                    |  |                |                |                |   |    |
|                |                      | eL <sub>Z</sub>  | 32                    |  |                |                |                |   |    |
|                |                      | M <sub>N</sub>   | 33 10                 |  |                |                |                |   |    |
|                |                      | M <sub>E</sub>   | 13                    |  |                |                |                |   |    |
|                |                      | M <sub>N</sub>   | 37 13                 |  |                |                |                |   |    |
|                |                      | M <sub>Z</sub>   | 39 27                 |  |                |                |                |   |    |
| M <sub>E</sub> | 30                   |                  |                       |  |                |                |                |   |    |
| F              | 9 10                 |                  |                       |  |                |                |                |   |    |
| e <sub>Z</sub> | 12 46                |                  |                       |  |                |                |                |   |    |
| e <sub>N</sub> | 47                   |                  |                       |  |                |                |                |   |    |
| e <sub>E</sub> | 47                   |                  |                       |  |                |                |                |   |    |
| e <sub>Z</sub> | 51 08                |                  |                       |  |                |                |                |   |    |
| e <sub>N</sub> | 11                   |                  |                       |  |                |                |                |   |    |
| e <sub>E</sub> | 20                   |                  |                       |  |                |                |                |   |    |

| Nr. | Dates                | Phases           | Heures<br>(Greenwich) | Périodes<br>T.                            | Amplitudes     |                |                | Remarques          |
|-----|----------------------|------------------|-----------------------|---|----------------|----------------|----------------|--------------------|
|     |                      |                  |                       |   | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                    |
| 278 | 30. VIII.<br>(suite) | e <sub>Z</sub>   | h m s<br>12 51 52     | 4<br>3<br>3<br>8<br>7<br>6                | μ              | μ              | μ              |                    |
|     |                      | e <sub>N</sub>   | 56                    |   |                |                |                |                    |
|     |                      | e <sub>E</sub>   | 56                    |   |                |                |                |                    |
|     |                      | M <sub>N</sub>   | 54 18                 |   |                |                |                |                    |
|     |                      | M <sub>Z</sub>   | 47                    |   |                |                |                |                    |
|     |                      | M <sub>E</sub>   | 48                    |   |                |                |                |                    |
|     |                      | F                | 13 12                 |   |                |                |                |                    |
| 279 | 30. VIII.            | e <sub>EZ</sub>  | 15 15                 | 4<br>5<br>5<br>4<br>4<br>9<br>9<br>9<br>7 |                |                |                |                    |
|     |                      | e <sub>E</sub>   | 18 09                 |   |                |                |                |                    |
|     |                      | e <sub>Z</sub>   | 11                    |   |                |                |                |                    |
|     |                      | e <sub>E</sub>   | 22 25                 |   |                |                |                |                    |
|     |                      | e <sub>Z</sub>   | 29                    |   |                |                |                |                    |
|     |                      | e <sub>N</sub>   | 53                    |   |                |                |                |                    |
|     |                      | M <sub>Z</sub>   | 25 39                 |   |                |                |                |                    |
|     |                      | M <sub>N</sub>   | 43                    |   |                |                |                |                    |
|     |                      | M <sub>E</sub>   | 26 13                 |   |                |                |                |                    |
|     |                      | F                | 16 00                 |   |                |                |                |                    |
|     |                      | e <sub>EZ</sub>  | 17 10                 |   |                |                |                |                    |
| 280 | 30. VIII.            | e <sub>Z</sub>   | 14 03                 | 8   |                |                |                | Faibles ondes      |
|     |                      | F                | 23                    |   |                |                |                |                    |
|     |                      | e <sub>N</sub>   | 21 36 27              |   |                |                |                |                    |
| 281 | 30. VIII.            | e <sub>Z</sub>   | 34                    | 2<br>10<br>6<br>8-16                      |                |                |                |                    |
|     |                      | e <sub>N</sub>   | 40 55                 |   |                |                |                |                    |
|     |                      | e <sub>E</sub>   | 41                    |   |                |                |                |                    |
|     |                      | e <sub>Z</sub>   | 01                    |   |                |                |                |                    |
|     |                      | eL <sub>Z</sub>  | 43                    |   |                |                |                |                    |
|     |                      | eL <sub>NE</sub> | 44                    |   |                |                |                |                    |
| 282 | 31. VIII.            | F                | 56                    | 1 12<br>14<br>25                          |                |                |                | Très faibles ondes |
|     |                      | e <sub>NE</sub>  | 1 12                  |   |                |                |                |                    |
|     |                      | e <sub>Z</sub>   | 14                    |   |                |                |                |                    |
| 283 | 31. VIII.            | F                | 25                    | 1 36 27<br>37<br>42                       |                |                |                |                    |
|     |                      | e <sub>NE</sub>  | 1 36 27               |   |                |                |                |                    |
|     |                      | e <sub>Z</sub>   | 37                    |   |                |                |                |                    |
|     |                      | F                | 42                    |   |                |                |                |                    |
|     |                      |                  | 1940                  |   | SEPTEMBRE      |                |                | Nr. 9              |
| 284 | 1. IX.               | e <sub>NE</sub>  | 19 04                 | 8-14                                      |                |                |                | Faibles ondes      |
|     |                      | e <sub>Z</sub>   | 05                    |   |                |                |                |                    |
| 285 | 3. IX.               | M                | 11 jusqu'à<br>18      | 4   |                |                |                |                    |
|     |                      | F                | 28                    |   |                |                |                |                    |
|     |                      | e <sub>N</sub>   | 14 50 01              |   |                |                |                |                    |

| Nr.            | Dates             | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                    | Remarques |
|----------------|-------------------|------------------|-----------------------|----------------|----------------|----------------|--------------------|-----------|
|                |                   |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>     |           |
| 285            | 3. IX.<br>(suite) | i <sub>N</sub>   | h m s<br>14 50 36     | s<br>8         | μ              | μ              | μ                  |           |
|                |                   | i <sub>E</sub>   | 57 46                 | 7              |                |                |                    |           |
|                |                   | i <sub>N</sub>   | 49                    | 8              |                |                |                    |           |
|                |                   | i <sub>E</sub>   | 15 02 10              | 10             |                |                |                    |           |
|                |                   | eL               | 11                    | 8-14; 18       |                |                |                    |           |
|                |                   | M <sub>N</sub>   | 13 26                 | 16             | 11             |                |                    |           |
|                |                   | M <sub>Z</sub>   | 15 33                 | 15             |                | 5              |                    |           |
|                |                   | M <sub>E</sub>   | 18 31                 | 9              |                | 4              |                    |           |
|                |                   | F                | 16 05                 |                |                |                |                    |           |
|                |                   | e <sub>E</sub>   | 20 18 45              |                |                |                |                    |           |
| 286            | 3. IX.            | e <sub>NZ</sub>  | 19                    |                |                |                |                    |           |
|                |                   | eL <sub>N</sub>  | 27                    | 8-18           |                |                |                    |           |
|                |                   | eL <sub>E</sub>  | 28                    |                |                |                |                    |           |
|                |                   | eL <sub>Z</sub>  | 30                    |                |                |                |                    |           |
|                |                   | M <sub>N</sub>   | 49                    | 12             | 2              |                |                    |           |
|                |                   | F                | 55                    |                |                |                |                    |           |
|                |                   | e <sub>N</sub>   | 19 32                 |                |                |                |                    |           |
| 287            | 4. IX.            | e <sub>E</sub>   | 11                    | 11             |                |                |                    |           |
|                |                   | e <sub>Z</sub>   | 15                    | 10             |                |                |                    |           |
|                |                   | eL <sub>NE</sub> | 40                    | 8-18           |                |                |                    |           |
|                |                   | eL <sub>Z</sub>  | 41                    |                |                |                |                    |           |
|                |                   | M <sub>E</sub>   | 42 13                 | 10             |                | 2              |                    |           |
|                |                   | M <sub>N</sub>   | 20                    | 13             | 5              |                |                    |           |
|                |                   | F                | 20 13                 |                |                |                |                    |           |
|                |                   | e <sub>Z</sub>   | 3 02 14               | 3; 1,5         |                |                |                    |           |
|                |                   | e <sub>N</sub>   | 09                    |                |                |                |                    |           |
|                |                   | e <sub>E</sub>   | 11                    |                |                |                |                    |           |
| e <sub>N</sub> | 31                |                  |                       |                |                |                |                    |           |
| 288            | 6. IX.            | e <sub>N</sub>   | 32                    |                |                |                |                    |           |
|                |                   | eL <sub>NE</sub> | 30                    | 10-20          |                |                |                    |           |
|                |                   | eL <sub>Z</sub>  | 31                    | 14-28          |                |                |                    |           |
|                |                   | F                | 3,7                   |                |                |                |                    |           |
|                |                   | eL <sub>N</sub>  | 7 08                  | 12-16          |                |                | Très faibles ondes |           |
|                |                   | eL <sub>E</sub>  | 10                    | 10-14          |                |                |                    |           |
|                |                   | eL <sub>Z</sub>  | 11                    |                |                |                |                    |           |
|                |                   | F                | 21                    |                |                |                |                    |           |
|                |                   | e <sub>E</sub>   | 19 19                 |                |                |                | Traces             |           |
|                |                   | e <sub>N</sub>   | 20                    |                |                |                |                    |           |
| F              | 27                |                  |                       |                |                |                |                    |           |
| 290            | 6. IX.            | e <sub>E</sub>   | 19 19                 |                |                |                |                    |           |
|                |                   | e <sub>N</sub>   | 20                    |                |                |                |                    |           |
|                |                   | F                | 27                    |                |                |                |                    |           |
|                |                   | e <sub>E</sub>   | 19 19                 |                |                |                |                    |           |
| 291            | 7. IX.            | eL <sub>N</sub>  | 20 13                 | 10-18          |                |                |                    |           |
|                |                   | eL <sub>E</sub>  | 17                    |                |                |                |                    |           |
|                |                   | eL <sub>Z</sub>  | 19                    |                |                |                |                    |           |
|                |                   | F                | 34                    |                |                |                |                    |           |

| Nr. | Dates   | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques   |
|-----|---------|------------------|-----------------------|----------------|----------------|----------------|----------------|---|
|     |         |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |   |
| 292 | 8. IX.  | eL <sub>E</sub>  | h m s<br>10 58        | s<br>10-16     | μ              | μ              | μ              | Faibles ondes   |
|     |         | eL <sub>Z</sub>  | 59                    | 10-18          |                |                |                |   |
|     |         | eL <sub>N</sub>  | 11 00                 |                |                |                |                |   |
| 293 | 9. IX.  | F                | 14                    | 10-16;         |                |                |                |   |
|     |         | eL <sub>N</sub>  | 21 13                 |                | 20             |                |                |   |
|     |         | eL <sub>E</sub>  | 18                    |                |                |                |                |   |
| 294 | 12. IX. | F                | 32                    |                |                |                |                |   |
|     |         | e <sub>Z</sub>   | 13 36 58              | 1,5            |                |                |                |   |
|     |         | e <sub>N</sub>   | 37 06                 | 6, 2           |                |                |                |   |
|     |         | e <sub>E</sub>   | 12                    | 1,5; 2         |                |                |                |   |
|     |         | e <sub>Z</sub>   | 18                    | 14; 12         |                |                |                |   |
|     |         | i <sub>E</sub>   | 46 48                 | 12             |                |                |                |   |
|     |         | e <sub>Z</sub>   | 47 02                 | 10             |                |                |                |   |
|     |         | i <sub>N</sub>   | 22                    | 10             |                |                |                |   |
|     |         | i <sub>N</sub>   | 48 51                 | 11             |                |                |                |   |
|     |         | i <sub>Z</sub>   | 53 40                 | 10             |                |                |                |   |
|     |         | i <sub>E</sub>   | 54 02                 | 8              |                |                |                |   |
|     |         | i <sub>Z</sub>   | 05                    | 9              |                |                |                |   |
|     |         | i <sub>Z</sub>   | 55 08                 | 10             |                |                |                |   |
|     |         | e <sub>E</sub>   | 12                    |                |                |                |                |   |
| 295 | 13. IX. | eL <sub>Z</sub>  | 14 05                 | 14-20; 30      |                |                |                | A 15 <sup>h</sup> 49 <sup>m</sup> émergence<br>des ondes W <sub>2</sub> |
|     |         | eL <sub>N</sub>  | 07                    | 20-26; 38      |                |                |                |   |
|     |         | eL <sub>E</sub>  | 12                    | 20, 40         |                |                |                |   |
|     |         | M <sub>E</sub>   | 26 34                 | 18             |                | 10             |                |   |
|     |         | M <sub>Z</sub>   | 50                    | 23             |                |                | 22             |   |
|     |         | M <sub>N</sub>   | 27 41                 | 18             | 15             |                | 16             |   |
|     |         | M <sub>Z</sub>   | 30 25                 | 20             |                |                |                |   |
|     |         | M <sub>E</sub>   | 32 27                 | 18             |                | 12             |                |   |
|     |         | F                | 16 05                 |                |                |                |                |   |
|     |         | eL <sub>E</sub>  | 15 46                 | 10-14          |                |                |                |   |
| 296 | 15. IX. | eL <sub>NZ</sub> | 47                    | 9              |                | 3              |                | Très faibles ondes  |
|     |         | M <sub>E</sub>   | 48 30                 |                |                |                |                |   |
|     |         | M <sub>N</sub>   | 49 19                 | 9              | 4              |                |                |   |
| 296 | 15. IX. | F                | 56                    |                |                |                | Faibles ondes  |   |
|     |         | eL <sub>N</sub>  | 12 38                 |                |                |                |                |   |
|     |         | eL <sub>EZ</sub> | 40                    |                |                |                |                |   |
|     |         | M <sub>1</sub>   | 12 42 jusqu'à<br>46   | 14-20          |                |                |                |   |
|     |         | M <sub>2</sub>   | 55 jusqu'à<br>59      | 10-16          |                |                |                |   |
|     |         | M <sub>3</sub>   | 13 01 jusqu'à<br>04   | 9-16           |                |                |                |   |
|     |         | F                | 15                    |                |                |                |                |   |



| Nr. | Dates   | Phases                            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                                   | Remarques          |
|-----|---------|-----------------------------------|-----------------------|----------------|----------------|----------------|-----------------------------------|--------------------|
|     |         |                                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>                    |                    |
| 297 | 18. IX. | eL <sub>N</sub>                   | h m s                 | s              | μ              | μ              | μ                                 | Très faibles ondes |
|     |         | eL <sub>E</sub>                   | 7 21                  | 8-14           |                |                |                                   |                    |
|     |         | eL <sub>Z</sub>                   | 22                    |                |                |                |                                   |                    |
|     |         | M <sub>N</sub>                    | 25                    | 8-12           |                |                |                                   |                    |
|     |         | F                                 | 27 jusqu'à 29         |                |                |                |                                   |                    |
| 298 | 19. IX. | e <sub>N</sub>                    | 18 39                 |                |                |                | + Compression                     |                    |
|     |         | iP <sub>Z</sub>                   | 11                    | 4              |                |                |                                   |                    |
|     |         | e <sub>E</sub>                    | 19                    | 6              |                |                |                                   |                    |
|     |         | i <sub>Z</sub>                    | 42 19                 | 10             |                |                |                                   |                    |
|     |         | e <sub>N</sub>                    | 35                    | 11             |                |                |                                   |                    |
|     |         | i <sub>Z</sub>                    | 53                    | 10             |                |                |                                   |                    |
|     |         | i <sub>E</sub>                    | 55                    | 5              |                |                |                                   |                    |
|     |         | e <sub>E</sub>                    | 49 22                 | 9              |                |                |                                   |                    |
|     |         | i <sub>N</sub>                    | 24                    | 9              |                |                |                                   |                    |
|     |         | e <sub>N</sub>                    | 52 21                 | 8              |                |                |                                   |                    |
|     |         | e <sub>Z</sub>                    | 42                    | 10             |                |                |                                   |                    |
|     |         | i <sub>E</sub>                    | 53 02                 | 9              |                |                |                                   |                    |
|     |         | e <sub>Z</sub>                    | 59                    | 8              |                |                |                                   |                    |
|     |         | e <sub>Z</sub>                    | 55 07                 | 13             |                |                |                                   |                    |
|     |         | e <sub>Z</sub>                    | 19 01 04              | 9              |                |                |                                   |                    |
|     |         | i <sub>E</sub>                    | 06                    | 10             |                |                |                                   |                    |
|     |         | i <sub>N</sub>                    | 16                    | 12             |                |                |                                   |                    |
|     |         | eL <sub>NE</sub>                  | 19                    | 24-30          |                |                |                                   |                    |
|     |         | eL <sub>E</sub>                   | 24                    | 18-24; 30      |                |                |                                   |                    |
|     |         | eL <sub>Z</sub>                   | 30                    | 26-30          |                |                |                                   |                    |
|     |         | M <sub>N</sub>                    | 45 37                 | 21             | 18             |                |                                   |                    |
|     |         | M <sub>Z</sub>                    | 46 28                 | 16             |                | 10             |                                   |                    |
|     |         | M <sub>E</sub>                    | 49 57                 | 19             |                | 9              |                                   |                    |
| F   | 21 22   |                                   |                       |                |                |                |                                   |                    |
| 299 | 20. IX. | e <sub>NE</sub>                   | 0 30                  |                |                |                | Faibles ondes                     |                    |
|     |         | eL <sub>N</sub>                   | 55                    | 14-22          |                |                |                                   |                    |
|     |         | eL <sub>E</sub>                   | 56                    |                |                |                |                                   |                    |
|     |         | eL <sub>Z</sub>                   | 58                    | 12-16          |                |                |                                   |                    |
| 300 | 21. IX. | F                                 | 1 36                  |                |                |                | + Compression<br>(Δ = ca 3850 km) |                    |
|     |         | eP <sub>Z</sub>                   | 13 55 57              | 6; 1           |                |                |                                   |                    |
|     |         | i <sub>Z</sub>                    | 56 00                 |                |                |                |                                   |                    |
|     |         | eP <sub>E</sub>                   | 01                    | 6              |                |                |                                   |                    |
|     |         | eP <sub>N</sub>                   | 02                    | 4              |                |                |                                   |                    |
|     |         | i <sub>Z</sub> (PP <sub>Z</sub> ) | 57 10                 | 6              |                |                |                                   |                    |
|     |         | e <sub>E</sub>                    | 12                    | 6; 2           |                |                |                                   |                    |
|     |         | i <sub>E</sub>                    | 58 31                 | 5              |                |                |                                   |                    |
|     |         | i <sub>Z</sub>                    | 33                    | 5              |                |                |                                   |                    |
|     |         | e <sub>N</sub>                    | 36                    | 4              |                |                |                                   |                    |

| Nr.                         | Dates              | Phases                            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |  | Remarques |
|-----------------------------|--------------------|-----------------------------------|-----------------------|----------------|----------------|----------------|--|-----------|
|                             |                    |                                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>   |           |
| 300                         | 21. IX.<br>(suite) | i <sub>N</sub> (S <sub>N</sub> )  | h m s                 | s              | μ              | μ              | μ  |           |
|                             |                    | i <sub>E</sub> (S <sub>E</sub> )  | 14 01 34              | 7              |                |                |  |           |
|                             |                    | i <sub>N</sub>                    | 36                    | 8              |                |                |  |           |
|                             |                    | i <sub>E</sub>                    | 14 02 54              | 10             |                |                |  |           |
|                             |                    | i <sub>N</sub> (SS <sub>N</sub> ) | 57                    | 9; 4           |                |                |  |           |
|                             |                    | i <sub>Z</sub> (SS <sub>Z</sub> ) | 04 14                 | 12             |                |                |  |           |
|                             |                    | i <sub>E</sub> (SS <sub>E</sub> ) | 16                    | 9              |                |                |  |           |
|                             |                    | eL <sub>Z</sub>                   | 22                    | 9              |                |                |  |           |
|                             |                    | eL <sub>NE</sub>                  | 07                    | 10-14          |                |                |  |           |
|                             |                    | M <sub>Z</sub>                    | 08                    | 8-14; 16       |                |                |  |           |
|                             |                    | M <sub>E</sub>                    | 11 52                 | 9              |                | 3              |  |           |
|                             |                    | M <sub>N</sub>                    | 16 14                 | 8              |                | 3              |  |           |
|                             |                    | F                                 | 39                    | 9              | 4              |                |  |           |
|                             |                    | 301                               | 22. IX.               | e <sub>Z</sub> | 15 00          |                |  |           |
| e <sub>NE</sub>             | 3 54 24            |                                   |                       | 7              |                |                |  |           |
| eL <sub>N</sub>             | 59                 |                                   |                       | 8; 10          |                |                |  |           |
| eL <sub>EZ</sub>            | 4 23               |                                   |                       | 12-16          |                |                |  |           |
| 302                         | 22. IX.            | F                                 | 24                    | 12-18          |                |                | - Dilatation<br>Δ = 8000 km<br>φ = 15° N<br>λ = 100,5° E |           |
|                             |                    | iP <sub>Z</sub>                   | 5 00                  |                |                |                |  |           |
|                             |                    | e <sub>Z</sub>                    | 23 03 55              | 6              |                |                |  |           |
|                             |                    | e <sub>Z</sub>                    | 06 14                 | 4              |                |                |  |           |
|                             |                    | e <sub>Z</sub>                    | 59                    | 6              |                |                |  |           |
|                             |                    | iS <sub>E</sub>                   | 13 23                 | 7              |                |                |  |           |
|                             |                    | iS <sub>N</sub>                   | 24                    | 8              |                |                |  |           |
|                             |                    | iP <sub>S<sub>E</sub></sub>       | 55                    | 8              |                |                |  |           |
|                             |                    | PS <sub>N</sub>                   |                       | 4              |                |                |  |           |
|                             |                    | e <sub>N</sub>                    | 15 09                 | 8              |                |                |  |           |
|                             |                    | i <sub>Z</sub>                    | 13                    | 5              |                |                |  |           |
|                             |                    | e <sub>E</sub>                    | 16                    | 6              |                |                |  |           |
|                             |                    | e <sub>N</sub>                    | 16 59                 | 5              |                |                |  |           |
|                             |                    | SS <sub>N</sub>                   | 18 11                 | 7              |                |                |  |           |
|                             |                    | SS <sub>E</sub>                   |                       | 8              |                |                |  |           |
|                             |                    | i <sub>N</sub>                    | 19 00                 | 7              |                |                |  |           |
| i <sub>E</sub>              | 07                 | 10                                |                       |                |                |                |  |           |
| i <sub>Z</sub>              | 14                 | 9                                 |                       |                |                |                |  |           |
| e <sub>Z</sub>              | 20 43              | 8                                 |                       |                |                |                |  |           |
| SS <sub>S<sub>E</sub></sub> | 21 12              | 5                                 |                       |                |                |                |  |           |
| SS <sub>S<sub>N</sub></sub> | 20                 | 11                                |                       |                |                |                |  |           |
| eL <sub>Z</sub>             | 27                 | 10-14; 18                         |                       |                |                |                |  |           |
| eL <sub>E</sub>             | 28                 | 10-17                             |                       |                |                |                |  |           |
| eL <sub>N</sub>             |                    | 8-15; 20                          |                       |                |                |                |  |           |
| M <sub>N</sub>              | 31 23              | 10                                | 5                     |                |                |                |  |           |
| M <sub>Z</sub>              | 33 33              | 10                                |                       | 1              |                |                |  |           |
| M <sub>E</sub>              | 34 15              | 9                                 |                       | 3              |                |                |  |           |
| F                           | 1 03               |                                   |                       |                |                |                |  |           |
|                             | 23. IX.            |                                   |                       |                |                |                |  |           |

| Nr.             | Dates   | Phases                      | Heures<br>(Greenwich) | Périodes<br>T.  | Amplitudes     |                |                | Remarques |                              |
|-----------------|---------|-----------------------------|-----------------------|-----------------|----------------|----------------|----------------|-----------|------------------------------|
|                 |         |                             |                       |                 | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |                              |
| 303             | 23. IX. | e <sub>NEZ</sub>            | h m s<br>10 42        | s               | μ              | μ              | μ              |           |                              |
|                 |         | e <sub>Z</sub>              | 47 21                 | 8               |                |                |                |           |                              |
|                 |         | e <sub>Z</sub>              | 49 26                 | 8               |                |                |                |           |                              |
|                 |         | e <sub>N</sub>              | 41                    | 9               |                |                |                |           |                              |
|                 |         | e <sub>N</sub>              | 50 51                 | 11              |                |                |                |           |                              |
|                 |         | e <sub>Z</sub>              | 51 06                 | 9               |                |                |                |           |                              |
|                 |         | e <sub>NE</sub>             | 53 13                 | 7; 8            |                |                |                |           |                              |
|                 |         | e <sub>LN</sub>             | 55                    | 12-18           |                |                |                |           |                              |
|                 |         | e <sub>LE</sub>             | 56                    |                 |                |                |                |           |                              |
|                 |         | e <sub>LZ</sub>             | 57                    |                 |                |                |                |           |                              |
|                 |         | M <sub>Z</sub>              | 59 52                 | 9               |                |                | 4              |           |                              |
|                 |         | M <sub>E</sub>              | 11 00 04              | 10              |                | 5              |                |           |                              |
|                 |         | M <sub>N</sub>              | 12                    | 10              | 4              |                |                |           |                              |
|                 |         | F                           | 30                    |                 |                |                |                |           |                              |
| 304             | 23. IX. | e <sub>PE</sub>             | 19 34 29              | 1,5; 2          |                |                | Δ = 2100 km    |           |                              |
|                 |         | e <sub>PZ</sub>             | 32                    |                 |                |                |                |           |                              |
|                 |         | e <sub>PN</sub>             | 33                    |                 |                |                |                |           |                              |
|                 |         | S <sub>N</sub>              | 38 04                 | 7               |                |                |                |           |                              |
|                 |         | S <sub>EZ</sub>             | 07                    | 7; 5            |                |                |                |           |                              |
|                 |         | e <sub>LN</sub>             | 41                    | 8-14            |                |                |                |           |                              |
|                 |         | e <sub>LE</sub>             | 42                    |                 |                |                |                |           |                              |
|                 |         | e <sub>LZ</sub>             | 43                    |                 |                |                |                |           |                              |
|                 |         | M <sub>Z</sub>              | 44 35                 | 12              |                | 1              |                |           |                              |
|                 |         | M <sub>N</sub>              | 41                    | 11              | 2              |                |                |           |                              |
|                 |         | M <sub>E</sub>              | 46 19                 | 10              |                | 2              |                |           |                              |
|                 |         | F                           | 20 24                 |                 |                |                |                |           |                              |
|                 |         | 305                         | 24. IX.               | e <sub>Z</sub>  | 1 05           | 8              |                |           |                              |
|                 |         |                             |                       | e <sub>N</sub>  | 12 30          |                |                |           |                              |
| e <sub>E</sub>  | 31      |                             |                       |                 |                |                |                |           |                              |
| e <sub>Z</sub>  | 15 36   |                             |                       | 4               |                |                |                |           |                              |
| e <sub>N</sub>  | 40      |                             |                       | 10              |                |                |                |           |                              |
| e <sub>LE</sub> | 39      |                             |                       | 14-20;          |                |                |                |           |                              |
| e <sub>LZ</sub> | 45      |                             |                       | 24              |                |                |                |           |                              |
| F               | 2 16    |                             |                       |                 |                |                |                |           |                              |
| 306             | 25. IX. |                             |                       | P <sub>Z</sub>  | 19 37 05       | 1; 2; 3        |                |           | + Compression<br>Δ = 3120 km |
|                 |         |                             |                       | e <sub>PE</sub> | 08             | 1; 2           |                |           |                              |
|                 |         | e <sub>PN</sub>             | 11                    |                 |                |                |                |           |                              |
|                 |         | e <sub>SN</sub>             | 41 44                 | 6               |                |                |                |           |                              |
|                 |         | i <sub>SN</sub>             | 56                    | 8               |                |                |                |           |                              |
|                 |         | S <sub>Z</sub>              | 57                    | 5               |                |                |                |           |                              |
|                 |         | i <sub>SE</sub>             |                       | 8               |                |                |                |           |                              |
|                 |         | e <sub>SS<sub>N</sub></sub> | 43 02                 | 6               |                |                |                |           |                              |

| Nr.             | Dates              | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                                     | Remarques |
|-----------------|--------------------|------------------|-----------------------|----------------|----------------|----------------|-------------------------------------|-----------|
|                 |                    |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>                      |           |
| 306             | 25. IX.<br>(suite) | e <sub>L</sub>   | h m s<br>19 50        | 12-18; 20      | μ              | μ              |                                     |           |
|                 |                    | M <sub>N</sub>   | 54 26                 | 13             | 5              |                |                                     |           |
|                 |                    | M <sub>E</sub>   | 55 37                 | 13             |                | 3              |                                     |           |
| 307             | 26. IX.            | F                | 20 40                 |                |                |                |                                     |           |
|                 |                    | e <sub>E</sub>   | 4 15 22               | 1,5; 2         |                |                |                                     |           |
|                 |                    | e <sub>Z</sub>   | 30                    |                |                |                |                                     |           |
|                 |                    | e <sub>Z</sub>   | 16 08                 | 4              |                |                |                                     |           |
|                 |                    | e <sub>Z</sub>   | 18 25                 | 8              |                |                |                                     |           |
|                 |                    | e <sub>Z</sub>   | 46                    | 6              |                |                |                                     |           |
|                 |                    | i <sub>N</sub>   | 59                    | 7              |                |                |                                     |           |
|                 |                    | i <sub>E</sub>   | 19 03                 | 8              |                |                |                                     |           |
|                 |                    | i <sub>N</sub>   | 35                    | 8              |                |                |                                     |           |
|                 |                    | i <sub>E</sub>   | 37                    | 7              |                |                |                                     |           |
|                 |                    | e <sub>Z</sub>   | 31 42                 | 8              |                |                |                                     |           |
|                 |                    | e <sub>E</sub>   | 36 09                 | 8              |                |                |                                     |           |
|                 |                    | e <sub>N</sub>   | 16                    | 10             |                |                |                                     |           |
|                 |                    | e <sub>LN</sub>  | 51                    | 16-20;<br>27   |                |                |                                     |           |
| e <sub>LE</sub> | 54                 |                  |                       |                |                |                |                                     |           |
| e <sub>LZ</sub> | 57                 |                  |                       |                |                |                |                                     |           |
| F               | 5 50               |                  |                       |                |                |                |                                     |           |
| 308             | 29. IX.            | e <sub>LE</sub>  | 14 22                 | 8-12           |                |                | Traces                              |           |
|                 |                    | e <sub>N</sub>   | 24                    |                |                |                |                                     |           |
|                 |                    | e <sub>Z</sub>   | 26                    |                |                |                |                                     |           |
| 309             | 30. IX.            | F                | 36                    |                |                |                |                                     |           |
|                 |                    | e <sub>L</sub>   | 12 36                 | 8-16; 20       |                |                |                                     |           |
|                 |                    | F                | 13 30                 |                |                |                |                                     |           |
|                 |                    | 1940             |                       | OCTOBRE        |                | Nr. 10         |                                     |           |
| 310             | 1. X.              | e <sub>LZ</sub>  | 11 44                 | 14-18          |                |                | Forte agitation micro-<br>séismique |           |
|                 |                    | e <sub>LE</sub>  | 45                    | 12-16          |                |                |                                     |           |
|                 |                    | e <sub>LN</sub>  | 46                    |                |                |                |                                     |           |
| 311             | 1. X.              | F                | 12 05                 |                |                |                |                                     |           |
|                 |                    | e <sub>Z</sub>   | 21 59                 |                |                |                |                                     |           |
|                 |                    | e <sub>LEZ</sub> | 23 00                 | 12; 18 20      |                |                |                                     |           |
| 312             | 2. X.              | M                | 14 jusqu'à            | 14;            |                |                | 9                                   |           |
|                 |                    | M                | 35                    | 18-20          |                |                |                                     |           |
|                 |                    | M <sub>Z</sub>   | 22 47                 | 18             |                |                |                                     |           |
|                 |                    | F                | 59                    |                |                |                |                                     |           |
|                 |                    | e <sub>LE</sub>  | 4 03                  | 18-20          |                |                |                                     |           |
| e <sub>LZ</sub> | 04                 | 12-14            |                       |                |                |                |                                     |           |
| F               | 24                 |                  |                       |                |                |                |                                     |           |

| Nr.            | Dates | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |                | Remarques  |
|----------------|-------|------------------|-----------------------|----------------|----------------|----------------|----------------|--|
|                |       |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |
| 313            | 4. X. | e <sub>N</sub>   | h m s<br>4 53         | s              | μ              | μ              | μ              |  |
|                |       | e <sub>E</sub>   | 54                    |                |                |                |                |  |
|                |       | e <sub>Z</sub>   | 57                    |                |                |                |                |  |
|                |       | e <sub>N</sub>   | 5 05 30               | 8              |                |                |                |  |
|                |       | e <sub>E</sub>   | 07 03                 |                |                |                |                |  |
|                |       | e <sub>L</sub>   | 08                    | 10-18          |                |                |                |  |
|                |       | M <sub>N</sub>   | 10 08                 | 13             | 10             |                |                |  |
|                |       | M <sub>E</sub>   | 12 12                 | 11             |                | 4              |                |  |
|                |       | M <sub>Z</sub>   | 13 55                 | 10             |                |                | 3              |  |
|                |       | F                | 54                    |                |                |                |                |  |
| 314            | 4. X. | P <sub>Z</sub>   | 8 09 17               | 8              |                |                | +              | Compression<br>Très forte agitation<br>microsismique |
|                |       | PP <sub>Z</sub>  | 13 23                 | 8              |                |                |                |  |
|                |       | ePP <sub>E</sub> | 39                    | 9              |                |                |                |  |
|                |       | e <sub>E</sub>   | 19 59                 | 9              |                |                |                |  |
|                |       | i <sub>E</sub>   | 23 12                 | 8              |                |                |                |  |
|                |       | i <sub>Z</sub>   | 24 36                 | 11             |                |                |                |  |
|                |       | eL <sub>E</sub>  | 34                    | 20; 34; 38     |                |                |                |  |
|                |       | eL <sub>Z</sub>  | 41                    | 18; 20; 30     |                |                |                |  |
|                |       | M <sub>Z</sub>   | 52 59                 | 24             |                |                | 65             |  |
|                |       | M <sub>E</sub>   | 53 29                 | 22             |                | 99             |                |  |
|                |       | M <sub>E</sub>   | 54 43                 | 21             |                | 56             |                |  |
|                |       | M <sub>Z</sub>   | 48                    | 22             |                |                | 52             |  |
|                |       | M <sub>N</sub>   | 57 41                 | 19             | 32             |                |                |  |
|                |       | M <sub>N</sub>   | 9 01 12               | 19             | 37             |                |                |  |
|                |       | F                | 11 05                 |                |                |                |                |  |
| 315            | 5. X. | eP <sub>Z</sub>  | 14 51 53              | 5              |                |                | +              | Compression  |
|                |       | e <sub>E</sub>   | 15 02 23              | 7              |                |                |                |  |
|                |       | e <sub>N</sub>   | 25                    | 7              |                |                |                |  |
|                |       | i <sub>N</sub>   | 15 04 06              | 13             |                |                |                |  |
|                |       | e <sub>E</sub>   |                       |                |                |                |                |  |
|                |       | e <sub>N</sub>   | 07 10                 | 10             |                |                |                |  |
|                |       | e <sub>E</sub>   | 09 24                 | 8              |                |                |                |  |
|                |       | e <sub>E</sub>   | 11 42                 | 9              |                |                |                |  |
|                |       | eL <sub>NE</sub> | 21                    | 18-22          |                |                |                |  |
|                |       | eL <sub>Z</sub>  | 22                    |                |                |                |                |  |
|                |       | M <sub>E</sub>   | 40 28                 | 17             |                | 4              |                |  |
|                |       | M <sub>Z</sub>   | 34                    | 16             |                |                | 3              |  |
|                |       | M <sub>N</sub>   | 39                    | 17             | 4              |                |                |  |
|                |       | F                | 16 20                 |                |                |                |                |  |
|                |       | 316              | 6. X.                 | i <sub>E</sub> | 16 03 16       | 8              |                |  |
| e <sub>N</sub> | 04 42 |                  |                       | 11             |                |                |                |  |
| e <sub>L</sub> | 35    |                  |                       | 14-20; 24      |                |                |                |  |
| M <sub>E</sub> | 40 12 |                  |                       | 18             |                |                | 4              |  |
|                |       |                  |                       |                |                |                |                |  |

| Nr.             | Dates           | Phases            | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |   | Remarques                 |
|-----------------|-----------------|-------------------|-----------------------|----------------|----------------|----------------|---|---------------------------|
|                 |                 |                   |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>  |                           |
| 316             | 6. X<br>(suite) | M <sub>Z</sub>    | h m s<br>44 29        | s<br>16        | μ              | μ              | μ   |                           |
|                 |                 | F                 | 17 24                 |                |                |                |   |                           |
| 317             | 7. X.           | e <sub>Z</sub>    | 6 56 12               | 2              |                |                |   | Enregistrement indistinct |
|                 |                 | e <sub>E</sub>    | 7 00 49               | 2              |                |                |   |                           |
|                 |                 | i <sub>E</sub>    | 06 39                 | 2,5; 3         |                |                |   |                           |
|                 |                 | e <sub>Z</sub>    | 45                    | 2; 3           |                |                |   |                           |
|                 |                 | i <sub>N</sub>    | 07 17                 | 2,5; 10        |                |                |   |                           |
|                 |                 | i <sub>E</sub>    |                       | 4              |                |                |   |                           |
|                 |                 | i <sub>N</sub>    | 08 17                 | 3; 10          |                |                |   |                           |
|                 |                 | i <sub>E</sub>    |                       | 5              |                |                |   |                           |
|                 |                 | eL <sub>N</sub> ? | 19 jusqu'à            | 10-13          |                |                |   |                           |
|                 |                 |                   | 24                    |                |                |                |   |                           |
| eL <sub>N</sub> | 32              | 15-20             |                       |                |                |                |   |                           |
| eL <sub>E</sub> | 33              |                   |                       |                |                |                |   |                           |
| eL <sub>Z</sub> | 36              | 12-18             |                       |                |                |                |   |                           |
| F               | 8 20            |                   |                       |                |                |                |   |                           |
| 318             | 11. X.          | e <sub>Z</sub>    | 19 01 49              | 14             |                |                |   |                           |
|                 |                 | e <sub>E</sub>    | 02 13                 | 12             |                |                |   |                           |
|                 |                 | e <sub>N</sub>    | 14                    | 14             |                |                |   |                           |
|                 |                 | eL <sub>E</sub>   | 12                    | 12-18;         |                |                |   |                           |
| eL <sub>Z</sub> | 13              | 20                |                       |                |                |                |   |                           |
| eL <sub>N</sub> | 15              |                   |                       |                |                |                |   |                           |
| 319             | 11. X.          | eL <sub>N</sub>   | 19 40                 | 18-22;         |                |                |   |                           |
|                 |                 | eL <sub>E</sub>   | 41                    | 24             |                |                |   |                           |
|                 |                 | eL <sub>Z</sub>   | 47                    |                |                |                |   |                           |
|                 |                 | M <sub>N</sub>    | 55 07                 | 18             | 38             |                |   |                           |
|                 |                 | M <sub>E</sub>    | 11                    | 18             |                | 28             |   |                           |
|                 |                 | M <sub>Z</sub>    | 14                    | 19             |                |                | 27  |                           |
|                 |                 | M <sub>E</sub>    | 19 56 53              | 18             |                | 34             |   |                           |
|                 |                 | M <sub>Z</sub>    | 59                    | 19             |                |                | 29  |                           |
|                 |                 | F                 | 21 40                 |                |                |                |   |                           |
|                 |                 | eL <sub>NE</sub>  | 7 13                  | 12-16          |                |                |   |                           |
| eL <sub>Z</sub> | 14              |                   |                       |                |                |                |   |                           |
| F               | 43              |                   |                       |                |                |                |   |                           |
| F               | 13 50           |                   |                       |                |                |                |   |                           |
| 320             | 15. X.          |                   |                       |                |                |                |   |                           |
|                 |                 |                   |                       |                |                |                |   |                           |
|                 |                 |                   |                       |                |                |                |   |                           |
|                 |                 |                   |                       |                |                |                |   |                           |
|                 |                 |                   |                       |                |                |                |   |                           |
| 321             | 16. X.          | F                 |                       |                |                |                | Commencement et la phase principale du tremblement pendant le changement des feuilles |                           |
|                 |                 | F                 |                       |                |                |                |   |                           |
| 322             | 18. X.          | P <sub>Z</sub>    |                       | 3; 4           |                |                | + Compression<br>Δ = 2410 km  |                           |
|                 |                 | P <sub>N</sub>    | 12 30 35              | 4              |                |                |   |                           |
|                 |                 | P <sub>E</sub>    |                       |                |                |                |   |                           |
|                 |                 | S <sub>N</sub>    | 34 33                 | 8              |                |                |   |                           |
|                 |                 | S <sub>E</sub>    |                       | 6              |                |                |   |                           |

| Nr.             | Dates             | Phases                              | Heures<br>(Greenwich) | Périodes<br>T.  | Amplitudes     |                |                | Remarques  |  |  |       |
|-----------------|-------------------|-------------------------------------|-----------------------|-----------------|----------------|----------------|----------------|--|--|--|-------|
|                 |                   |                                     |                       |                 | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |  |  |  |       |
| 322             | 18. X.<br>(suite) | S <sub>Z</sub>                      | h m s<br>37           | s<br>7          | μ              | μ              | μ              |  |  |  |       |
|                 |                   | eL <sub>NE</sub>                    | } 38                  | 12; 16-20       | 8              | 14             | 6              |  |  |  |       |
|                 |                   | eL <sub>Z</sub>                     |                       |                 |                |                |                |  |  |  |       |
|                 |                   | M <sub>N</sub>                      | 40 40                 | 10              |                |                |                |  |  |  |       |
|                 |                   | M <sub>Z</sub>                      | 41 32                 | 11              |                |                |                |  |  |  |       |
|                 |                   | M <sub>E</sub>                      | 43 30                 | 12              |                |                |                |  |  |  |       |
| 323             | 22. X.            | F                                   | 13 26                 |                 |                |                |                | Dilatation<br>Δ = ca 750 km<br>Azimut 35° SE<br>φ = 46° 34' N<br>λ = 26° 39' E<br>Roumanie |  |  |       |
|                 |                   | iP <sub>Z</sub>                     | 6 38 48               | 7               |                |                |                |  |  |  |       |
|                 |                   | iP <sub>N</sub>                     | } 49                  | 7               |                |                |                |  |  |  |       |
|                 |                   | iP <sub>E</sub>                     |                       | 6               |                | +              |                |  |  |  |       |
|                 |                   | iS <sub>E</sub>                     | } 40 13               | 3               |                |                |                |  |  |  |       |
|                 |                   | iS <sub>Z</sub>                     |                       | 5               |                |                |                |  |  |  |       |
|                 |                   | iS <sub>N</sub>                     | 15                    | 6               |                |                |                |  |  |  |       |
|                 |                   | M <sub>Z</sub>                      | 42 36                 | 6               |                |                | 52             |  |  |  |       |
|                 |                   | M <sub>E</sub>                      | 43 44                 | 6               |                |                | 100            |  |  |  |       |
|                 |                   | M <sub>N</sub>                      | 59                    | 5               | 101            |                |                |  |  |  |       |
|                 |                   | F                                   | 8 00                  |                 |                |                |                |  |  |  |       |
|                 |                   | 324                                 | 23. X.                | eL <sub>Z</sub> | 14 15          | 8-14           |                |  |  |  | Trace |
|                 |                   |                                     |                       | F               | 38             |                |                |  |  |  |       |
|                 |                   | 325                                 | 24. X.                | e <sub>Z</sub>  | 20 26 54       | 3              |                |  |  |  |       |
| i <sub>Z</sub>  | 36 19             |                                     |                       | 10              |                |                |                |  |  |  |       |
| e <sub>E</sub>  | 23                |                                     |                       | 9               |                |                |                |  |  |  |       |
| e <sub>N</sub>  | 42 44             |                                     |                       | 9               |                |                |                |  |  |  |       |
| eL <sub>Z</sub> | 21 08             |                                     |                       | 16; 20-22       |                |                |                |  |  |  |       |
| eL <sub>E</sub> | 09                |                                     |                       | } 16-20         |                |                |                |  |  |  |       |
| eL <sub>N</sub> | 15                |                                     |                       |                 |                |                |                |  |  |  |       |
| F               | 38                |                                     |                       |                 |                |                |                |  |  |  |       |
| 326             | 27. X.            | iP <sub>Z</sub>                     | 5 48 43               | 5; 7            |                |                |                | + Compression<br>Δ = ca 9800 km  |  |  |       |
|                 |                   | eP <sub>E</sub>                     | 46                    | 6               |                |                |                |  |  |  |       |
|                 |                   | PP <sub>Z</sub>                     | 5 52 26               |                 |                |                |                |  |  |  |       |
|                 |                   | S <sub>NE</sub>                     | 59 30                 | 8               |                |                |                |  |  |  |       |
|                 |                   | i <sub>E</sub> (PPS <sub>E</sub> ?) | 6 00 54               | 12              |                |                |                |  |  |  |       |
|                 |                   | i <sub>N</sub> (PPS <sub>N</sub> ?) | 59                    | 12              |                |                |                |  |  |  |       |
|                 |                   | i <sub>Z</sub>                      | 01 05                 |                 |                |                |                |  |  |  |       |
|                 |                   | eL <sub>N</sub>                     | 17                    | 18-20;<br>28-30 |                |                |                |  |  |  |       |
|                 |                   | eL <sub>EZ</sub>                    | 19                    | 20-28           |                |                |                |  |  |  |       |
|                 |                   | M <sub>E</sub>                      | 28 50                 | 18              |                | 26             |                |  |  |  |       |
|                 |                   | M <sub>Z</sub>                      | 55                    | 19              |                |                | 39             |  |  |  |       |
|                 |                   | M <sub>N</sub>                      | 29 59                 | 19              | 27             |                |                |  |  |  |       |
|                 |                   | M <sub>E</sub>                      | 34 21                 | 17              |                | 38             |                |  |  |  |       |
|                 |                   | M <sub>Z</sub>                      | 43                    | 17              |                |                | 28             |  |  |  |       |
| M <sub>N</sub>  | 37 53             | 16                                  | 16                    |                 |                |                |                |  |  |  |       |
| F               | 8 33              |                                     |                       |                 |                |                |                |  |  |  |       |

| Nr.            | Dates             | Phases           | Heures<br>(Greenwich) | Périodes<br>T. | Amplitudes     |                |   | Remarques     |
|----------------|-------------------|------------------|-----------------------|----------------|----------------|----------------|---|---------------|
|                |                   |                  |                       |                | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub>  |               |
| 327            | 27. X.<br>(suite) | eL <sub>EZ</sub> | h m s<br>11 34        | s<br>16-20     | μ              | μ              | μ   | Traces        |
|                |                   | F                | 44                    |                |                |                |   |               |
| 328            | 30. X.            | e <sub>Z</sub>   | 3 22                  |                |                |                |   |               |
|                |                   | eL <sub>E</sub>  | } 43                  | } 14-18;<br>20 | 8              | 15             | 9   |               |
|                |                   | eL <sub>Z</sub>  |                       |                |                |                |   |               |
|                |                   | eL <sub>N</sub>  | 44                    |                |                |                |   |               |
|                |                   | M <sub>EZ</sub>  | 51 51                 | 15             |                |                |   |               |
|                |                   | M <sub>N</sub>   | 52 29                 | 13             |                |                |   |               |
| 329            | 31. X.            | F                | 4 34                  |                |                |                |   | + Compression |
|                |                   | P <sub>Z</sub>   | 10 52 24              | 4              |                |                |   |               |
|                |                   | eL               | 11 16                 | 12-18          |                |                |   |               |
|                |                   | M <sub>Z</sub>   | 19 45                 | 12             |                |                | 5   |               |
|                |                   | M <sub>E</sub>   | 48                    | 15             |                |                | 9   |               |
|                |                   | F                | 36                    |                |                |                |   |               |
|                |                   |                  |                       |                |                |                |   |               |
| 1940           |                   | NOVEMBRE         |                       |                |                |                |   | Nr. 11        |
| 330            | 6. XI.            | e <sub>Z</sub>   | 16 21 40              | 4              |                |                |   |               |
|                |                   | e <sub>E</sub>   | 30 17                 | 6              |                |                |   |               |
|                |                   | eL <sub>N</sub>  | 45                    | } 10-16        |                |                |   |               |
|                |                   | eL <sub>Z</sub>  | 47                    |                |                |                |   |               |
|                |                   | eL <sub>E</sub>  | 49                    |                |                |                |   |               |
| M <sub>E</sub> | 50 30             | 12               |                       | 4              |                |                |   |               |
| 331            | 7. XI.            | F                | 17 07                 |                |                |                | + Compression   |               |
|                |                   | P <sub>Z</sub>   | 14 09 25              | 5              |                |                |   |               |
|                |                   | i <sub>N</sub>   | 18 54                 | 8              |                |                |   |               |
|                |                   | i <sub>E</sub>   | 56                    |                |                |                |   |               |
|                |                   | e <sub>E</sub>   | 22 08                 | 6              |                |                |   |               |
|                |                   | eL <sub>Z</sub>  | 14 42                 | 10-14;<br>18   |                |                |   |               |
| 332            | 8. XI.            | eL <sub>E</sub>  | 44                    |                |                |                |   |               |
|                |                   | eL <sub>N</sub>  | 45                    |                |                |                |   |               |
|                |                   | F                | 15 06                 |                |                |                |   |               |
|                |                   | eL <sub>EZ</sub> | 11 51                 | 13-18          |                |                |   |               |
| 333            | 8 XI              | eL <sub>N</sub>  | 52                    |                |                |                | Très faibles ondes<br><br>Forte agitation micro-séismique |               |
|                |                   | e <sub>Z</sub>   | 12 02 30              | 1; 1,5         |                |                |   |               |
|                |                   | e <sub>E</sub>   | 34                    |                |                |                |   |               |
|                |                   | e <sub>N</sub>   | 40                    | 1; 2           |                |                |   |               |
|                |                   | e <sub>Z</sub>   | 04 04                 | 6              |                |                |   |               |
|                |                   | e <sub>E</sub>   | 14                    | 4              |                |                |   |               |
|                |                   | e <sub>N</sub>   | 39                    | 6              |                |                |   |               |
|                |                   | e <sub>Z</sub>   | 40                    | 5              |                |                |   |               |
|                |                   | e <sub>N</sub>   | 05 13                 | 5              |                |                |   |               |
|                |                   | e <sub>Z</sub>   | 14                    | 5              |                |                |   |               |
|                |                   | e <sub>E</sub>   | 40                    |                |                |                |   |               |

| Nr. | Dates             | Phases   | Heures<br>(Greenwich)  | Périodes<br>T.         | Amplitudes                                |                |                | Remarques  |   |
|-----|-------------------|--|--|------------------------|---|----------------|----------------|--|---|
|     |                   |  |  |                        | A <sub>N</sub>                            | A <sub>E</sub> | A <sub>Z</sub> |  |   |
| 333 | 8. XI.<br>(suite) | e <sub>Z</sub><br>F  | h m s<br>06 37<br>18   | s<br>6                 | μ   | μ              | μ              |  |   |
| 334 | 10. XI.           | iP <sub>NEZ</sub><br>iS<br>M <sub>Z</sub><br>M <sub>NE</sub><br>F  | 1 40 55<br>42 13<br>49<br>2 01<br>4 05                           | 4; 6<br>8<br>5<br>6; 7 | —   | +              | —              | Dilatation<br>Δ = ca 700 km<br>Azimut 31° SE<br>φ = 46° 43' N<br>λ = 25° 43' E<br>Roumanie<br>Les déviations dans<br>toutes les trois compo-<br>santes sont si fortes<br>que le point lumineux<br>sort des limites du<br>tambour déjà deux<br>minutes après le com-<br>mencement et n'y re-<br>vient qu'après 7-8<br>minutes<br>Très faibles ondes |   |
| 335 | 10. XI.           | eL <sub>Z</sub><br>eL <sub>E</sub><br>eL <sub>N</sub><br>F   | 21 31<br>32<br>33<br>48  | 14-17                  |   |                |                |  |   |
| 336 | 11. XI.           | eP <sub>Z</sub><br>e <sub>E</sub><br>i <sub>N</sub><br>i <sub>Z</sub><br>e <sub>E</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>M <sub>N</sub><br>F | 6 36 19<br>37 10<br>48<br>38 00<br>02<br>55<br>57<br>39 51<br>52 |                        | 1; 1,5<br>5<br>4<br>5<br>5<br>4<br>5<br>5 |                | 15             | 5  | Roumanie<br>Choc secondaire<br>du précédent |
| 337 | 14. XI.           | eL <sub>NE</sub><br>eL <sub>Z</sub><br>M <sub>N</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>F   | 11 16<br>20<br>11 23 46<br>24 28<br>39<br>40                     |                        | 12-16<br>16-18<br>13<br>15<br>15          | 6              | 7              | 6  |   |
| 338 | 16. XI.           | P <sub>Z</sub><br>eL <sub>NZ</sub><br>eL <sub>E</sub><br>F   | 2 38 35<br>3 10<br>11<br>38                                      |                        | 12-18                                     |                |                |  | +   |
| 339 | 18. XI.           | eL <sub>N</sub><br>eL <sub>E</sub><br>eL <sub>Z</sub><br>F   | 13 24<br>25<br>32<br>46  | 10-16                  |   |                |                |  |   |

| Nr. | Dates   | Phases   | Heures<br>(Greenwich)  | Périodes<br>T.  | Amplitudes     |                |                | Remarques |                               |
|-----|---------|--|--|---|----------------|----------------|----------------|-----------|-------------------------------|
|     |         |  |  |   | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |                               |
| 340 | 19. XI. | P <sub>Z</sub><br>PP <sub>Z</sub><br>e <sub>N</sub><br>S <sub>N</sub><br>S <sub>E</sub><br>PS <sub>N</sub><br>PS <sub>E</sub><br>i <sub>EN</sub><br>eL <sub>N</sub><br>eL <sub>E</sub><br>eL <sub>Z</sub><br>M <sub>Z</sub><br>M <sub>N</sub><br>M <sub>Z</sub><br>M <sub>N</sub><br>M <sub>E</sub><br>F | h m s<br>15 13 24<br>16 24<br>23 04<br>20<br>26<br>58<br>26 10<br>40<br>49 34<br>38<br>50 41<br>44<br>17 17<br>20 29 | s<br>6<br>6<br>8<br>12<br>9<br>(8)<br>26-28; 20<br>16; 22-26<br>24-28<br>16<br>16<br>14<br>14<br>16 | μ              | μ              | μ              | +         | Compression<br>Δ = ca 8700 km |
| 341 | 19. XI. | e <sub>NE</sub><br>P <sub>Z</sub><br>e <sub>NE</sub><br>eL<br>M <sub>N</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>F  | 01<br>30 24<br>30,5<br>31 18<br>21<br>37<br>40   | 1,5; 2<br>1,5; 4<br>8-9<br>5<br>5<br>5  |                | 4              | 5              | 2         |                               |
| 342 | 20. XI. | e <sub>Z</sub><br>e <sub>Z</sub><br>e <sub>E</sub><br>e <sub>N</sub><br>e <sub>E</sub><br>e <sub>E</sub><br>e <sub>Z</sub><br>F  | 18 07 47<br>15 18<br>22<br>28<br>56<br>16 09<br>18 17 29<br>33   | 2<br>2; 6<br>2; 7<br>7<br>5<br>5<br>4   |                |                |                |           |                               |
| 343 | 23. XI. | e <sub>E</sub><br>e <sub>N</sub><br>e <sub>Z</sub><br>eL <sub>EZ</sub><br>eL <sub>N</sub><br>F   | 4 12<br>13<br>14<br>39<br>42<br>5 00   | 12-18   |                |                |                |           | Très faibles ondes            |
| 344 | 27. XI. | e <sub>E</sub><br>e <sub>N</sub>   | 15 16<br>17  |   |                |                |                |           |                               |

| Nr.           | Dates              | Phases   | Heures<br>(Greenwich)  | Périodes<br>T.                                  | Amplitudes     |                |                | Remarques                             |
|---------------|--------------------|--|--|---|----------------|----------------|----------------|---------------------------------------|
|               |                    |  |  |   | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |                                       |
| 344           | 27. XI.<br>(suite) | eL <sub>Z</sub><br>eL <sub>NE</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>F   | h m s<br>38<br>39<br>51 13<br>52 05<br>16 29                         | s<br>20-24<br>16-24<br>20<br>18                 | μ              | μ              | μ              |                                       |
| 1940 DECEMBRE |                    |  |  |   |                |                |                |                                       |
| 345           | 4. XII.            | e <sub>E</sub><br>eL <sub>N</sub><br>eL <sub>E</sub><br>eL <sub>Z</sub><br>F   | 13 39<br>58<br>14 00<br>02<br>36                                     | 18-20;<br>26<br>14-20                           |                |                |                |                                       |
| 346           | 17. XII.           | eL <sub>N</sub><br>eL <sub>E</sub><br>eL <sub>Z</sub><br>F   | 15 42<br>44<br>45<br>16 04   | 16-20<br>18-22                                  |                |                |                | Très forte agitation<br>microsismique |
| 347           | 19. XII.           | eL <sub>E</sub><br>eL <sub>N</sub><br>F  | 16 40<br>50  | 12-20   |                |                |                | Traces                                |
| 348           | 21. XII.           | eL <sub>NE</sub><br>F  | 0 30<br>47   | 12-18   |                |                |                |                                       |
| 349           | 22. XII.           | e <sub>E</sub><br>e <sub>N</sub><br>M <sub>NE</sub><br>M <sub>N</sub><br>F   | 13 43<br>46<br>51 jusqu'à<br>55,5<br>56 jusqu'à<br>58<br>14 30       | 12-14;<br>18-20<br>12-16;<br>20                 |                |                |                | Traces                                |
| 350           | 25. XII.           | e <sub>Z</sub><br>e <sub>NE</sub><br>F   | 23 22,5<br>23<br>33  |   |                |                |                |                                       |
| 351           | 28. XII.           | e <sub>Z</sub><br>e <sub>E</sub><br>e <sub>Z</sub><br>e <sub>N</sub><br>e <sub>Z</sub><br>e <sub>E</sub><br>e <sub>N</sub><br>e <sub>E</sub><br>e <sub>Z</sub><br>e <sub>N</sub><br>e <sub>E</sub> | 16 51 09<br>55 19<br>20<br>57 16<br>17 00 32<br>01 51<br>02 23<br>27 | 3; 7<br>5<br>7<br>5<br>7<br>8<br>6<br>4<br>3; 6 |                |                |                |                                       |

Nr. 12



| Nr. | Dates               | Phases   | Heures<br>(Greenwich)   | Périodes<br>T.   | Amplitudes     |                |                | Remarques |
|-----|---------------------|--|---|--|----------------|----------------|----------------|-----------|
|     |                     |  |   |  | A <sub>N</sub> | A <sub>E</sub> | A <sub>Z</sub> |           |
| 351 | 28. XII.<br>(suite) | e <sub>Z</sub><br>eL <sub>NE</sub><br>eL <sub>Z</sub><br>M <sub>N</sub><br>M <sub>Z</sub><br>M <sub>E</sub><br>M <sub>E</sub><br>M <sub>Z</sub><br>F | h m s<br>05 22<br>29<br>30<br>38 39<br>59<br>39 04<br>17<br>29<br>19 32 | s<br>7<br>16-20<br>16; 20-26<br>16<br>18<br>15<br>18<br>16 | μ              | μ              | μ              |           |
| 352 | 29. XII.            | eL <sub>Z</sub><br>eL <sub>E</sub><br>F  | 18 59<br>19 00<br>14  | 12;<br>16-20   |                |                |                | Traces    |
| 353 | 30. XII.            | e <sub>E</sub><br>e <sub>N</sub><br>e <sub>Z</sub><br>eL <sub>E</sub><br>eL <sub>NZ</sub><br>M <sub>Z</sub><br>M <sub>E</sub><br>F                   | 17 05<br>17<br>20<br>06<br>07<br>08 05<br>17<br>13                      | 2<br>8-12<br>9<br>6  |                |                |                |           |

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