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May-June '41
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May, 1941.
International
Seismological
Centre

M A N I L A , P . I .

SEISMOLOGICAL BULLETIN OF THE OBSERVATORY.

$\phi=14^{\circ} 34' 42''$ N.

$\lambda=120^{\circ} 58' 41''$ E

h=3 m.

Alluvium.

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INSTRUMENTS

Galitzin-Wilip, three components.

Wiechert Inverted Pendulum, 955 Kg.

Horizontal Pendulums, two components, 118 Kg. each.

Data taken from the Galitzin-Wilip, unless otherwise stated.

No.	Date	Phase.	Greenwich Time			Dist. Km.	Remarks.
			h.	m.	s.		
	May 1941						
301	1	iPZ ePN iSNE F	19	43	37 37 47 52 20 35	2740	Dilatation. Deep focus.
302	2	iPZ ePNE SNE LN MN F	10	02	21 21 08 17 12 35ca 15 25ca 11 32	4140	Compression. Probable epicenter in region of New Britain by River-view and Manila.
307	4	ePNEZ iS?NE F	11	29	10 34 29 12 20	3730?	Deep focus?
308	4	iPZ ePE iSNEZ F	22	15	38 38 21 58 23 26	4550	Deep focus. Central Australia according to Riverview.
309	4	ePZ SNEZ F	23	31	40 38 26 0 04	5160	
310	5	iPZ ePNE iSN LNE MN F	15	24	57 59 30 15 34 25ca 37 40ca 17 05	3710	Dilatation.
311	5	ePEZ SEZ F	17	09	09 10 04 24	450	
312	6	ePNEZ SNE F	9	11	09 13 49 40	1540	

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No.	Date	Phase.	Greenwich Time			Dist. Km.	Remarks.
			h.	m.	s.		
	May 1941						
313	6	ePZ ePNE S?N F	17	04	29 35 45 15	5660?	
315	7	ePNEZ SNE F	2	56	20 55 11	260	
316	7	iPZ ePE ePN SNE F	12	29	58 59 00 22 55	5700	Dilatation.
318	8	iPNEZ iE iN SNE F	10	31	54 26 03 02 35	6480	Dilatation. 16°S: 170°E by River-view and Manila.
319	9	iPNEZ SNE F	5	33	11 39 15	225	Compression. S from the Wiechert and Horizontals. Felt in SE Luzon. 14° 25'N: 123° 05'E by Manila and Baguio.
320	9	PE SE	6	10	26 54	225	Aftershock of #319.
321	9	PNE SNE	9	05	56 24	225	Aftershock of #319.
322	9	ePNEZ SNE MN F	9	37	56 17 08 50	4720	
323	9	iPZ ePNE iSNEZ F	11	05	26 26 54 33	225	Aftershock of #319.
325	9	ePNE SNEZ F	18	40	20 51 03	270	Felt in NW Luzon. In the vicinity of 16° 30'N: 119°20'E; h=100 Km? by Baguio and Manila.
331	13	PPZ PSNEZ LNE F	16	19	16 10 20ca 22	10880	40.3°N: 125°W by USCGS.
332	13	ePNE SNE F	22	12	58 17 23	150	

SEISMOLOGICAL BULLETIN OF THE OBSERVATORY.--Continued.

No.	Date	Phase.	Greenwich Time h. m. s.	Dist. Km.	Remarks.
	May 1941				
334	14	ePZ SZ F	3 59 04 4 00 57 21	1060	
335	14	PZ SZ F	5 30 24 31 47 43	750	
337	14	iPZ iSZ LZ MZ F	7 13 25 18 24 22 08 24 45 8 03	3410	Dilatation (?)
338	14	ePZ SZ F	8 23 10 24 59 55	1030	
342	16	iPZ iZ iSZ iLZ F	7 19 30 20 04 23 50 26 33 9 20	2820	Compression.
343	17	iPZ SNE LNE MNE F	2 33 58 41 26 49 30 54 20 6 20	5780	Compression. Data after P from the Wiechert. 12.9°S: 166.7°E by USCGS. 10°S: 166°E by Riverview and Manila.
345	17	ePZ SZ F	20 01 20 36 05	125	
346	18	ePZ S?Z F	11 22 17 26 32 12 16	2740?	
351	21	ePZ SZ F	1 50 23 55 33 2 35	3580	
352	21	ePZ iSZ F	6 07 33 08 02 18	230	Felt in Camarines Norte.

No.	Date	Phase.	Greenwich Time			Dist. Km.	Remarks.
			h.	m.	s.		
	May 1941						
353	21	ePZ iSZ F	12	32	53 35 13 45	1340	
354	22	ePZ SZ LZ F	1	07	24 11 43 14 24 42	2810	
356	22	iPZ SZ F	7	43	56 44 14 52	145	
357	22	PZ SZ F	14	17	09 32 21	185	
358	23	ePZ SZ F	2	45	18 46 46 54	560	Felt at Cebu.
359	23	ePZ iSZ F	4	45	11 46 08 52	490	
360	23	ePZ SZ F	8	16	23 18 24 29	1160	
361	23	ePZ SZ F	14	47	46 49 04 55	500	
362	23	ePZ SZ F	15	58	28 59 48 16 07	510	
365	24	iPZ iZ iSZ F	5	17	48 53 22 18 6 20	2970	Dilatation. Deep focus.
367	24	iPZ iSZ F	12	19	13 20 46 28	590	Dilatation.
369	24	ePZ S?Z F	13	00	52 05 03 27	2700?	
370	24	iPZ SZ F	19	55	54 20 02 36 35	5100	

No.	Date	Phase.	Greenwich Time h. m. s.	Dist. Km.	Remarks.
371	May 1941 24	iPZ SZ F	23 21 54 22 28 26	590	
372	25	ePZ SZ F	4 02 30 05 17 20	1600	
373	25	PZ SZ F	11 03 24 08 08 19	3170	
374	25	PZ SZ F	21 11 04 35 15	570	
375	26	ePZ SZ F	7 32 50 34 20 55	570	
376	26	ePZ SZ F	14 41 29 43 11 58	630	
377	26	ePZ SZ F	16 27 27 40 30	100	
379	27	ePZ SZ F	12 47 11 48 10 56	490	
380	27	ePZ SZ F	13 33 15 36 07 14 00	1650	
381	29	iPZ SZ L?Z F	11 28 46 33 05 38 41 12 46	2810	
382	29	iPZ iSZ F	14 24 17 47 34	220	Felt in Manila, II.
383	30	ePZ iZ iSZ LZ F	17 41 05 17 51 33 18 09 05ca 42	9290	

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No.	Date	Phase.	Greenwich Time h. m. s.	Dist. Km.	Remarks.
	May 1941				
384	30	iPZ SZ F	21 38 57 47 37 22 10	7130	Dilatation (?)
385	30	ePNE SNE F	23 48 13 29 51	125	From the Wiechert.
386	31	ePZ SZ F	5 06 26 07 20 20	440	

Twenty-nine insignificant or undecipherable disturbances on the following days of May: 1st, 3rd(2), 4th(2), 6th, 7th, 9th, 10th, 11th(3), 12th, 14th(2), 15th(3), 17th, 18th, 19th(3), 22nd, 23rd(2), 24th(2), and 26th.

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No.	Date	Phase.	Greenwich Time			Dist. Km.	Remarks.
			h.	m.	s.		
	June 1941						
387	1	ePZ SZ F	2	12	22 15 30 25	1830	
388	2	e \bar{P} Z \bar{S} Z F	1	45	53 46 14 50	165	
389	2	i \bar{P} Z \bar{S} Z F	2	13	36 14 00 27	190	Felt at Naujan, Mindoro.
390	2	ePZ SZ F	18	21	24 24 50 32	2060	
391	4	ePZ iSZ iZ iZ L?Z F	16	36	00 40 03 20 41 43 52 17 20	2620	Felt in Guam, 1.8° . Probable focal depth, 75 KM. Disturbed by microseisms.
392	5	i \bar{P} Z i \bar{S} Z F	8	42	17 53 9 14	285	Compression. Felt at Lobo, Batangas, at Naujan, Mindoro, and at Culion Island.
394	5	e \bar{P} NE i \bar{S} NE F	17	10	02 22 27	160	Felt in Manila, III. From the Horizontals and the Wiechert. Deeper than normal.
397	7	i \bar{P} Z i \bar{S} Z F	18	21	21 41 30	160	
398	7	i \bar{P} Z i \bar{S} Z	18	54	21 41	160	Dilatation.

No.	Date	Phase.	Greenwich Time h. m. s.	Dist. Km.	Remarks.
	June 1941				
399	7	$\overline{\text{PNE}}$ $\overline{\text{SNE}}$ F	18 55 48 56 08 19 16	160	From the Wiechert.
401	7	$\overline{\text{PZ}}$ $\overline{\text{SZ}}$ F	19 31 22 42 35	160	
406	11	iPZ iSZ F	6 54 38 53 7 02	115	Dilatation. Felt at Iba.
408	11	ePZ SZ F	10 21 35 24 51 57	1930	
409	11	iPZ iSZ iMZ	23 18 37 23 03 29 17	2910	Compression.
	12	F	0 15		
410	12	$\overline{\text{ePZ}}$ $\overline{\text{SZ}}$ F	19 35 48 36 13 40	195	
413	13	iPZ iSZ F	22 19 41 24 15 48	3030	Dilatation (?).
414	15	ePZ SZ F	20 13 50 14 18 23	215	
415	16	iPZ iSZ iZ iZ F	11 29 34 31 36 34 15 34 12 50	1100	Compression. Probably deeper than normal. Felt in the northeastern part of Mindanao. Butuan, 275 Km.
418	18	iPZ iZ iSZ iMZ F	10 18 44 19 00 21 43 25 13 11 16	1700	Compression. In the region of Molucca by Manila and Riverview.
419	18	iPZ F	11 28 15 12 50		Long distance.
421	18	iPZ SZ F	20 02 38 05 26 56	1590	Compression. Probably in Malucco by Manila and Riverview.
424	21	eP?Z SZ F	0 41 22 45 42 1 09	2680?	Felt in Guam with intensity V. Probably near 12° 50'N: 144°E by Guam and Manila.

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	June 1941				
425	21	iPZ iSNE F	8 14 57 16 57 9 25	1070	Dilatation. S from the Wiechert.
427	21	iPZ F	17 51 47 18 17	?	Dilatation.
429	23	iPZ iZ iSZ iZ F	9 32 30 33 38 35 55 36 54 10 51	2040	Compression.
434	26	iPZ iSZ F	11 57 52 12 03 00 15 20	3365	Compression. Near 8°N: 91°E by Manila and Riverview.
436	27	iPZ SNE F	8 03 55 10 37 50	5100	Epicenter in Central Australia according to Riverview. Data after P from the Horizontals.

Twenty-six insignificant or undecipherable disturbances on the following days of June: 5th, 6th(2), 7th(4), 10th, 11th, 13th(2), 17th(2), 18th, 19th(2), 21st, 23rd(2), 24th(3), 27th, and 30th(3).