

SERVIÇO METEOROLÓGICO DE ANGOLA

CENTRO GEOFÍSICO DE BELAS

LUANDA

$\gamma = 8^{\circ} 55' S$; $\lambda = 13^{\circ} 10' E$; $h = 53$ $\phi = 7^{\circ} 11' S$; $\Lambda = 80^{\circ} 33' E$

JANUARY 1976

GEOMAGNETIC BULLETIN

LUANDA

Scale values of the Askania variometers:

$e_D = 3,6 \gamma/mm$; $e_H = 3,5 \gamma/mm$; $e_Z = 3,4 \gamma/mm$

Time scale of variometers: 20 mm/h

Range for K = 9;350 γ

INDICES OF GEOMAGNETIC ACTIVITY

GR	K - Indices for three-hour interval									Corr. 0.1.2
DAY	h- 00	h- 03	h- 06	h- 09	h- 12	h- 15	h- 18	h- 21		
1976	h- 03	h- 06	h- 09	h- 12	h- 15	h- 18	h- 21	h- 24	SUM	FULL DAY
1	1	1	1	0	2	0	0	0	5	0
2	0	0	1	0	0	0	1	1	3	0
3	1	2	1	2	3	2	2	0	13	1
4	0	1	0	1	2	2	2	1	9	0
5	1	0	1	2	1	0	0	1	6	0
6	2	1	1	0	2	4	3	3	16	1
7	1	0	2	2	2	1	0	0	8	0
8	0	0	0	1	0	1	0	0	2	0
9	1	1	0	1	0	0	0	1	4	0
10	0	0	2	3	4	6	6	6	27	2
11	5	4	-	4	4	4	4	4	-	-
12	3	2	3	3	3	2	2	2	20	1
13	1	0	2	2	2	0	1	1	9	0
14	0	2	2	2	2	2	1	1	12	1
15	0	1	2	2	0	2	2	1	10	0
16	1	1	0	2	2	1	2	3	12	1
17	1	1	2	1	2	1	3	3	14	1
18	0	1	1	2	2	0	1	0	7	0
19	0	1	1	2	2	2	1	1	10	0
20	2	1	2	2	3	1	1	0	12	1
21	1	1	1	1	4	4	3	2	17	1
22	2	2	1	-	3	4	4	2	-	-
23	2	2	2	0	3	2	2	2	15	1
24	3	2	2	2	3	3	1	0	16	1
25	2	1	0	1	2	1	0	1	8	0
26	1	1	0	1	2	0	0	0	5	0
27	0	1	2	2	1	1	1	1	9	0
28	1	1	2	1	1	1	1	1	9	0
29	1	0	0	2	2	1	1	1	8	0
30	0	0	1	2	2	2	2	3	12	1
31	1	1	0	1	5	4	2	1	18	1

APR 2 1 1977



JANUARY 1976

pi, pc							
DAY	TIME (GMT)		TYPE	QUALITY A, B, C	LARGEST OSCILLATIONS		REMARKS
	Begin	End			Period	Range	
01	10h 28m	10h43m	Pc4	B			
01	15 13	16 10	Pc4	A			
03	02 06	02 15	Pc4	B			
04	20 45	21 00	Pi2	B			
09	18 14	18 48	Pc4	B			
14	22 14	22 45	Pc4	B			
15	23 06	23 17	Pi2	B			
16	19 25	19 55	Pc4	A			
17	02 01	02 14	Pi2	B			
20	01 36	01 42	Pi2	A			
20	04 33	04 58	Pc4	A			
22	02 50	03 06	Pi2	B			
30	21 42	22 03	Pi2	B			

SERVICO METEOROLÓGICO DE ANGOLA
CENTRO GEOFÍSICO DE BELAS

LUANDA

$\phi = 8^{\circ} 55' S$; $\lambda = 13^{\circ} 10' E$; $h = 53$ $\phi = 7^{\circ} 11' S$; $\lambda = 80^{\circ} 33' E$
FEBRUARY 1976

Geomagnetic Bulletin

LUANDA

Scale values of the Askania variometers:

$e_D = 3,6 \gamma / \text{mm}$; $e_H = 3,5 \gamma / \text{mm}$; $e_Z = 3,4 \gamma / \text{mm}$:

Time scale of variometers: 20 mm/h.

Range for K = 9; 350 γ

INDICES OF GEOMAGNETIC ACTIVITY

GR DAY 1976	h-: h-: h-: h-: h-: h-: h-: h-:								SUM	Char. 0.1-2	FULL DAY
	00 : 03	03 : 06	06 : 09	09 : 12	12 : 15	15 : 18	18 : 21	21 : 24			
1	1	2	1	2	3	3	3	2	17	1	
2	1	1	1	2	3	1	2	2	13	1	
3	1	1	0	1	2	1	1	2	9	0	
4	1	0	1	0	1	1	2	2	8	0	
5	1	1	0	1	1	2	-	-	-	-	
6	-	-	-	-	-	-	-	-	-	-	
7	-	-	-	-	-	-	-	-	-	-	
8	-	-	-	-	-	-	-	-	-	-	
9	-	-	-	-	-	-	-	-	-	-	
10	-	-	-	-	-	-	-	-	-	-	
11	-	-	-	-	-	-	-	-	-	-	
12	-	-	-	2	2	1	3	1	-	-	
13	3	1	1	1	3	3	1	2	15	1	
14	1	1	0	0	2	3	1	1	9	0	
15	2	2	1	2	2	1	0	0	10	0	
16	0	0	1	1	2	3	2	0	9	0	
17	1	2	1	2	2	1	2	3	14	1	
18	2	2	1	2	3	1	1	1	13	0	
19	2	2	2	2	3	2	4	3	20	1	
20	2	2	0	2	3	3	1	1	14	1	
21	0	1	2	3	2	3	3	1	15	1	
22	1	1	1	1	1	0	1	1	7	0	
23	1	1	0	0	1	0	0	0	3	0	
24	0	1	0	0	2	2	2	0	7	0	
25	0	0	0	1	0	1	1	2	5	0	
26	2	1	0	2	1	1	1	2	10	0	
27	1	1	1	1	4	5	5	4	22	1	
28	1	1	1	1	2	1	2	3	12	1	
29	3	3	3	2	1	1	2	4	19	1	

pi, pc							
DAY	TIME (GMT)		T Y P E	QUALITY A,B,C	LARGEST OSCILLATIONS		REMARKS
	Begin	End			Period	Range	
01	06h 46m	07h26m	Pc2	B			
02	12 31	12 40	pi2	B			
04	00 49	01 02	pc5	B			
12	21 17	21 31	pc4	A			
13	21 13	21 24	pc5	B			
14	15 27	17 19	pc4	A			
17	23 06	23 15	pi2	B			
18	10 00	10 11	pi2	A			
21	12 03	12 26	pc4	B			
22	13 10	14 17	pc4	B			
25	03 02	03 23	pc5	A			
25	07 45	08 06	pc4	A			

SERVICO METEOROLÓGICO DE ANGOLA
CENTRO GEOFÍSICO DE BELAS

LUANDA

$\varphi = 8^{\circ} 55' S$; $\lambda = 13^{\circ} 10' E$; $h = 53$ $\phi = 7^{\circ} 11' S$; $\lambda = 80^{\circ} 33' E$

MARCH 1976

Geomagnetic Bulletin

LUANDA

Scale values of the Askania variometers:

$e_D = 3,6 \gamma / \text{mm}$; $e_H = 3,5 \gamma / \text{mm}$; $e_Z = 3,4 \gamma / \text{mm}$

Time scale of variometers: 20 mm/h.

Range for $k = 9;350 \gamma$

INDICES OF GEOMAGNETIC ACTIVITY

GR	K - Indices for three-hour interval									Char. 0.1.2.	
	h-	h-	h-	h-	h-	h-	h-	h-	SUM		FULL DAY
	00	03	06	09	12	15	18	21			
1976	h-	h-	h-	h-	h-	h-	h-	h-			
	03	06	09	12	15	18	21	24			
1	0	1	-	1	1	1	1	2	-	-	
2	3	1	2	2	3	3	4	3	21	1	
3	3	1	2	2	2	2	3	3	18	1	
4	2	2	1	1	1	1	0	1	9	0	
5	2	1	0	1	1	2	2	3	12	1	
6	2	1	1	2	3	4	3	3	19	1	
7	2	1	2	2	1	2	2	2	14	1	
8	3	0	3	3	2	2	2	4	19	1	
9	3	3	1	0	1	4	3	4	19	1	
10	1	1	0	1	3	3	3	4	16	1	
11	3	3	2	2	2	2	1	3	18	1	
12	4	1	2	2	1	1	1	3	15	1	
13	3	1	2	2	2	1	1	1	13	1	
14	2	2	0	0	1	0	0	1	6	0	
15	1	2	0	0	2	2	3	4	14	1	
16	1	1	0	0	2	1	3	1	9	0	
17	3	1	0	2	2	1	2	3	14	1	
18	2	1	1	0	0	0	1	2	7	0	
19	1	1	1	0	1	0	2	0	6	0	
20	0	0	1	-	2	0	0	1	-	-	
21	1	1	-	1	0	1	0	1	-	-	
22	1	1	1	1	0	0	0	1	5	0	
23	0	0	1	2	1	1	1	2	8	0	
24	1	0	0	0	0	0	0	1	2	0	
25	1	0	0	1	1	0	1	2	6	0	
26	2	4	6	6	7	7	6	5	43	2	
27	4	3	2	3	3	4	3	3	25	2	
28	3	1	1	2	2	2	1	1	13	1	
29	1	1	2	2	1	0	0	1	8	0	
30	0	0	0	1	3	2	2	3	11	1	
31	0	0	1	1	2	2	2	2	10	0	

pi, pc							
DAY	TIME (G T)		TYPE	Quality A.B.C	LARGEST OSCILLATIONS		REMARKS
	Begin	End			Period	Range	
01	20h 00m	20h09m	pi ₂	B			
06	05 26	06 49	pc ₄	B			
16	01 50	05 00	pi ₂	B			
16	14 33	14 46	pi ₂	A			
16	14 50	15 09	pi ₂	A			
22	14 22	15 40	pc ₄	B			
24	00 44	01 08	pc ₅	B			

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CENTRO GEOFÍSICO DE BELAS

LUANDA

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APRIL 1976

Geomagnetic Bulletin

LUANDA

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$e_D = 3,6 \gamma / \text{mm}$; $e_H = 3,5 \gamma / \text{mm}$; $e_Z = 3,4 \gamma / \text{mm}$

Time scale of variometers: 20 mm/h

Range for K = 9; 350 γ

INDICES OF GEOMAGNETIC ACTIVITY

GR	K - Indices for three-hour interval									char. 0.1.2
DAY	h- 00	h- 03	h- 06	h- 09	h- 12	h- 15	h- 18	h- 21		FULL
1976	h	h	h	h	h	h	h	h	SUM	DAY
	03	06	09	12	15	18	21	24		
1	4	5	6	6	6	5	5	4	41	2
2	2	1	2	2	3	3	3	3	19	1
3	2	2	4	3	5	5	4	4	29	2
4	4	2	1	2	3	2	1	3	18	1
5	3	3	2	1	2	2	3	2	18	1
6	2	1	1	2	3	3	2	2	16	1
7	3	2	2	2	3	1	0	1	14	1
8	3	1	1	0	1	1	2	2	11	1
9	2	2	0	0	-	-	-	-	-	-
10	-	-	-	1	0	0	0	1	-	-
11	1	1	1	2	3	2	1	2	13	1
12	1	1	1	1	0	0	1	1	6	0
13	2	0	0	1	2	1	1	2	9	0
14	1	1	1	1	2	1	1	1	9	0
15	1	0	1	1	0	0	0	0	3	0
16	1	1	1	2	0	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	0	0	0	0	0	0
19	0	1	1	1	1	2	1	0	7	0
20	0	0	1	0	0	0	0	0	1	0
21	0	0	1	3	2	1	0	2	9	0
22	2	2	3	3	2	2	2	2	18	1
23	1	0	0	0	1	1	0	1	4	0
24	1	2	2	2	2	0	1	1	11	1
25	0	1	1	1	1	0	0	1	5	0
26	1	1	1	2	2	2	0	0	9	0
27	1	1	2	1	1	1	1	1	9	0
28	1	0	1	1	0	1	1	2	7	0
29	0	0	1	2	2	4	4	4	17	1
30	1	1	2	1	1	0	1	0	7	0

ANNEX 2 TO THE ICGM REPORT ON THE 1962-63 SEISMIC YEAR

ANNEX 2 TO THE ICGM REPORT ON THE 1962-63 SEISMIC YEAR

DAY	DAILY MEAN			SUDDEN COMMENCEMENTS AND BAYS				
	D	H	Z	DAY	TIME (GMT)	TYPE	Quality A.B.C.	Sense of chief Movement D H Z
1	-09° 55,6	23 303	22 594	01	02h 53		B	+ + -
2	56,6	376	587	02	17 44	SSC	B	+ + -
3	56,5	363	587	08	20 29	gp	A	- + -
4	57,0	383	584	09	02 29	bps	A	+ + ±
5	56,3	400	584	21	22 11	SSC	B	+ + -
6	57,1	401	585					
7	56,9	406	589					
8	56,5	413	590					
9								
10	-09° 55,6	430	590					
11	56,4	432	582					
12	56,0	448	588					
13	57,1	434	586					
14	56,2	430	587					
15	56,4	438	585					
16	56,2	451	585					
17								
18								
19	56,3	441	580					
20	56,4	454	581					
21	56,3	444	579					
22	55,8	428	584					
23	56,0	435	584					
24	56,0	425	584					
25	55,8	422	586					
26	56,1	435	586					
27	55,6	440	586					
28	55,2	440	562					
29	55,8	426	588					
30	56,2	420	591					



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APRIL 1976

pi , pc							
DAY	TIME (GMT)		TYPE	Quality A,B,C	LARGEST OSCILLATIONS		REMARKS
	Begin	End			Period	Range	
01	00h 34m	00h 45m	pi ₂	B			
04	00 14	00 19	pi ₂	B			
05	15 35	16 05	pc ₄	D			
06	11 05	11 15	pi ₂	A			
06	23 15	23 30	pi ₂	A			
07	14 37	15 13	pc ₄	B			
08	09 26	12 26	pc ₂	B			
11	00 29	00 54	pi ₂	A			
13	00 47	01 25	pc ₄	A			
15	15 29	17 07	pc ₄	A			
15	23 29	23 48	pi ₂	B			
16	03 09	03 31	pc ₄	B			
22	02 39	03 29	pc ₅	A			
28	21 30	21 45	pi ₂	A			



MAY 1976

pi , pc							
DAY	TIME (GMT)		TYPE	Quality A,B,C	LARGEST OSCILLATIONS		REMARKS
	Begin	End			Period	Range	
06	21h 14m	21h58m	pc ₄	B			
07	23 13	23 21	pi ₂	A			
12	22 47	23 00	pi ₂	A			
14	01 22	01 43	pc ₄	A			
19	20 06	20 25	pc ₄	B			
21	21 36	21 49	pi ₂	A			
25	00 23	00 40	pc ₄	A			
26	02 05	02 30	pc ₄	A			
27	05 06	07 24	pc ₄	A			

SERVIÇO METEOROLÓGICO DE ANGOLA
 =====
 CENTRO GEOFÍSICO DE BELAS



L U A N D A

$\delta = 8^{\circ} 55' S$; $\lambda = 13^{\circ} 10' E$; $h = 53mm$ $\phi = 7^{\circ} 11' S$; $\lambda = 80^{\circ} 33' E$

NOVEMBER 1976

Geomagnetic Bulletin

LUANDA

Scale values of the Askania variometers:

$e_D = 3,6 \gamma/mm$; $e_H = 3,5 \gamma/mm$; $e_Z = 3,4 \gamma/mm$

Time scale of variometers: 20 mm/h.

Range for K = 9;350 γ

INDICES OF GEOMAGNETIC ACTIVITY

GR DAY 1976	K - Indices for three-hour interval									Char. 0.1,2	
	00h-03h	03h-06h	06h-09h	09h-12h	12h-15h	15h-18h	18h-21h	21h-24h	SUM	FULL	
1	1	1	2	2	0	0	0	0	6		0
2	1	1	0	1	1	1	1	1	7		0
3	2	1	1	1	1	1	1	2	10		0
4	1	1	0	1	1	1	1	1	7		0
5	0	0	1	0	1	0	0	1	3		0
6	1	1	0	0	1	1	1	0	5		0
7	1	1	-	-	-	-	-	-	-		-
8	-	-	0	1	1	2	2	2	-		-
9	3	2	0	0	1	1	0	1	8		0
10	1	0	1	3	3	2	3	2	15		1
11	1	1	1	2	4	4	2	2	17		1
12	2	0	1	2	2	2	3	2	14		1
13	1	1	1	2	3	3	3	2	16		1
14	2	1	1	1	3	1	1	1	11		1
15	2	1	1	0	1	0	1	0	6		0
16	1	1	1	1	0	0	0	1	5		0
17	1	0	1	1	1	1	1	0	6		0
18	1	0	1	0	0	0	0	0	3		0
19	1	0	0	0	0	0	2	2	7		0
20	1	0	1	1	1	0	2	0	6		0
21	0	0	1	0	1	0	1	1	4		0
22	0	1	0	1	1	1	0	0	4		0
23	1	1	1	0	0	1	0	0	4		0
24	0	0	0	0	1	1	0	0	2		0
25	1	2	1	-	-	-	-	-	-		-
26	-	-	-	-	-	-	-	-	-		-
27	-	-	-	-	-	-	-	-	-		-
28	-	-	-	1	1	1	0	0	-		-
29	0	0	2	2	1	1	1	1	8		0
30	1	2	1	1	1	2	1	2	11		1

DAY	DAILY MEAN			SUDDEN COMMENCEMENTS AND BAYS					
	D	H	Z	DAY	TIME (GMT)	TYPE	Quality A.B.C	Sense of chief Movement	
								D H Z	
1	-09 ⁰	52,4	23 386	-22	02	02 28	b	B	+ + +
2		526	390		02	23 57	bp	A	+ + -
3		521	406						
4		527	409		15	20 32	bp	A	+ +
5		528	415		18	01 08	bp	B	+ +
6		523	413		20	20 09	bp	B	- + -
7		-	-		21	22 32	bp	B	+ + -
8	-07 ⁰	521	411	-22					
9		527	402						
10		528	402						
11		523	380						
12		524	384						
13		523	381						
14		522	388						
15		516	390						
16		523	392						
17		527	390						
18		520	399						
19		527	410						
20		523	409						
21		528	412						
22		526	418						
23		525	411						
24		519	416						
25		-	-						
26		-	-						
27		-	-						
28	-09 ⁰	515	23 408	-22					
29		521	405						
30		523	412						

NOVEMBER 1976

pi, pc							
DAY	TIME (GMT)		TYPE	Quality A.B.C	LARGEST OSCILLATIONS		REMARKS
	Begin	End			Period	Range	
01	12 ^h 57 ^m	16 ^h 00 ^m	Pc 4	B			
03	21 33	21 44	Pi 2	A			
04	20 24	20 37	Pi 2	B			
08	20 35	20 43	Pi 2	A			
11	22 51	23 08	Pc 4	A			
21	22 33	22 45	Pc 4	B			
30	03 37	04 00	Pc 4	A			
30	21 44	22 00	Pi 2	A			

SERVICO METEOROLÓGICO DE ANGOLA

CENTRO GEOFÍSICO DE BELAS

LUANDA

$\varphi = 8^{\circ} 55' S$; $\lambda = 13^{\circ} 10' E$; $h = 53 \text{ m}$; $\phi = 7^{\circ} 11' S$; $\lambda = 80^{\circ} 33' E$

DECEMBER 1976

Geomagnetic Bulletin

LUANDA

Scale values of the Askania variometers:

$e_D = 3,5 \gamma / \text{mm}$; $e_H = 3,5 \gamma / \text{mm}$; $e_Z = 3,4 \gamma / \text{mm}$

Time scale of variometers: 20 mm/h.

Range for K = 9;350 γ

INDICES OF GEOMAGNETIC ACTIVITY

GR DAY 1976	K - Indices for three-hour interval										Char 0.1.2
	00 ^{h-} 03 ^h	03 ^{h-} 06 ^h	06 ^{h-} 09 ^h	09 ^{h-} 12 ^h	12 ^{h-} 15 ^h	15 ^{h-} 18 ^h	18 ^{h-} 21 ^h	21 ^{h-} 24 ^h	SUM	FULL DAY	
1	0	0	1	2	2	0	0	0	7	0	
2	1	0	1	1	1	1	1	0	6	0	
3	1	0	1	1	1	0	1	2	7	0	
4	1	2	4	3	4	3	0	2	19	1	
5	2	1	1	3	3	1	0	0	11	1	
6	1	1	1	0	0	0	0	1	4	0	
7	1	1	2	1	1	1	1	2	10	0	
8	2	2	3	4	4	2	0	2	20	1	
9	2	1	2	2	3	3	2	1	16	1	
10	0	0	1	2	2	2	0	3	10	0	
11	2	1	1	-	1	1	1	2	-	-	
12	3	2	0	0	3	3	1	1	13	1	
13	1	1	1	1	1	0	0	0	4	0	
14	0	0	0	0	1	1	0	0	2	0	
15	0	2	1	0	0	0	0	0	3	0	
16	0	0	1	2	2	1	2	1	9	0	
17	1	1	2	2	1	2	3	2	14	1	
18	2	3	2	2	2	1	1	2	15	1	
19	1	0	0	1	1	1	1	0	5	0	
20	0	1	0	1	1	1	1	1	6	0	
21	0	0	-	-	-	1	0	0	-	-	
22	1	1	-	2	3	2	2	2	-	-	
23	1	0	0	1	1	0	0	0	3	0	
24	1	0	1	1	1	0	1	1	6	0	
25	1	2	2	0	2	2	1	0	10	0	
26	0	0	1	1	0	0	0	0	2	0	
27	1	1	0	0	0	0	1	1	4	0	
28	1	2	1	1	0	1	3	3	12	1	
29	4	2	3	5	5	5	3	2	29	2	
30	1	1	2	2	1	2	2	3	14	1	
31	3	1	1	3	2	0	2	2	14	1	

DAY	DAILY MEAN			SUDDEN COMMENCEMENTS AND BAYS							
	D	H	Z	DAY	TIME (GMT)	TYPE	Quality A.B.C.	Sense of chier Movement D H Z			
1	-09°	52,0	23	422	-22	619	02	20 26	bp	B	+ -
2		519		418		622	04	05 24	ssc	A	+ + -
3		519		426		623	04	07 43	si	A	- - -
4		523		411		621	08	02 28	si	B	- - -
5		517		412		622	12	01 00	bps	B	+ + +
6		521		412		625	16	11 07	ssc	A	+ + -
7		517		425		624	17	23 53	si	A	- - +
8		512		381		624	28	20 37	ssc	A	+ + -
9		518		377		629	29	08 35	si	A	- - -
10		516		390		629	30	22 36	si	B	+ + -
11		516		392		618	31	00 12	si	B	- - +
12		514		391		612					
13		514		398		611					
14		509		403		610					
15		513		411		613					
16		513		411		614					
17		513		401		616					
18		513		392		621					
19		511		401		615					
20		516		407		611					
21		519		411		616					
22		507		402		617					
23		507		413		613					
24		517		417		619					
25		509		405		612					
26		513		412		617					
27		511		405		619					
28		510		417		617					
29		512		364		624					
30		508		376		623					
31		511		380		621					



pi, pc							
DAY	TIME (GMT)		T Y P E	QUALITY A.B.C	LARGEST OSCILLATIONS		REMARKS
	Begin	End			Period	Range	
02	11 ^h 45 ^m	13 ^h 22 ^m	Pc 4	B			
02	20 26	21 07	Pc 4	B			
03	11 51	12 49	Pc 4	B			
03	22 40	23 08	Pc 4	A			
08	00 24	00 39	Pi 2	B			
09	00 57	01 06	Pc 4	A			