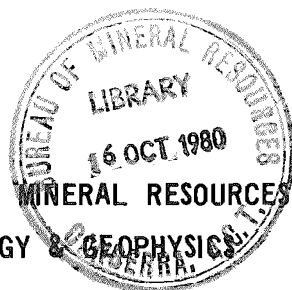


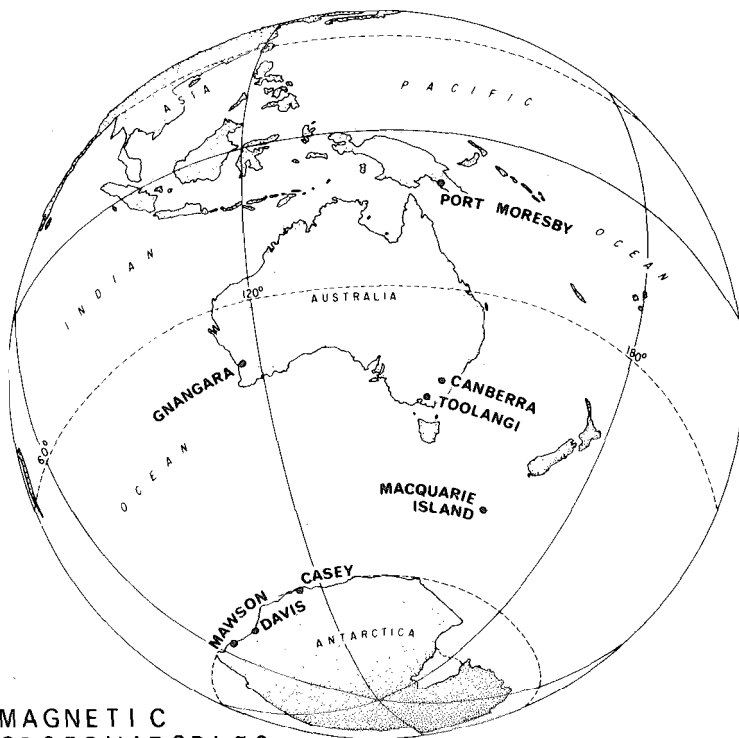


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BUREAU OF MINERAL RESOURCES,
GEOLOGY & GEOPHYSICS



GEOPHYSICAL OBSERVATORY REPORT



MAGNETIC
OBSERVATIONS

BMR
S550
.389.5
AUS.8
copy 2

Volume 28, No. 7
July 1980

DEPARTMENT OF NATIONAL DEVELOPMENT AND ENERGY

MINISTER: Senator The Hon. J.L. Carrick

SECRETARY: A. Woods

BUREAU OF MINERAL RESOURCES, GEOLOGY & GEOPHYSICS

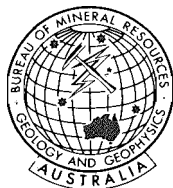
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ISSN 0433-5015



Commonwealth of Australia 1980

Printed by Canberra Publishing and Printing Co.

	Page
Contributing Observatories.....	2
K-Indices.....	3
Principal Magnetic Storms.....	8
Monthly Mean Values, Sudden Commencements and Other Rapid Variations.....	9

The observers at Casey and Davis are officers of the Antarctic Division (Department of Science and the Environment) and their contributions are gratefully acknowledged: they and the BMR geophysicists at Macquarie Island and Mawson are members of the Australian National Antarctic Research Expeditions (ANARE).

The data from the Port Moresby geophysical observatory are contributed by the Geological Survey of Papua New Guinea.

The terminology used in this report is that accepted by International convention. The units of field intensity, nanotesla (nT), are those of the SI system. All times are in Universal Time. Should further information be required, apply to:

GEOMAGNETISM & SEISMOLOGY SUBSECTION
BUREAU OF MINERAL RESOURCES
P.O. BOX 378
CANBERRA CITY, A.C.T. 2601

GNANGARAMAGNETIC K-INDICES - JULY 1980Range for lower limit of K = 9 is 450 nT

<u>Day</u>	<u>K-Indices</u>								<u>K-Sum</u>
01	1	1	1	0	0	0	0	1	04
02	0	0	1	0	0	0	1	1	03
03	0	1	0	1	1	0	0	0	03
04	0	0	2	2	2	2	1	2	11
05	1	2	3	3	3	3	4	1	20
06	2	2	1	2	2	2	2	3	16
07	3	2	3	3	2	2	2	3	20
08	3	2	2	2	2	2	4	3	20
09	3	2	2	3	2	1	2	1	16
10	1	1	0	0	1	1	2	1	07
11	1	1	1	0	2	1	2	2	10
12	2	0	1	0	0	2	0	2	07
13	3	3	2	1	2	2	1	1	15
14	1	1	2	2	2	1	1	2	12
15	3	0	1	1	0	1	1	1	08
16	1	1	0	1	0	1	1	2	07
17	1	1	1	0	1	0	2	2	08
18	2	2	0	1	2	1	5	5	18
19	4	3	3	1	0	1	0	2	14
20	1	0	1	0	1	1	1	1	06
21	2	2	1	2	4	3	3	2	19
22	1	1	0	0	0	1	1	2	06
23	2	0	0	0	1	1	0	1	05
24	1	1	0	0	1	0	2	2	07
25	1	2	1	3	3	4	4	5	23
26	5	3	2	2	3	2	2	2	21
27	3	4	3	3	1	2	2	2	20
28	3	3	3	2	3	2	2	1	19
29	1	2	3	1	1	2	2	1	13
30	1	2	2	1	1	1	2	2	12
31	2	1	2	1	2	1	1	1	11

TOOLANGIMAGNETIC K-INDICES - JULY 1980Range for lower limit of K = 9 is 500 nT

<u>Day</u>	<u>K-Indices</u>								<u>K-Sum</u>
01	1	0	0	0	0	0	0	0	01
02	0	0	0	0	0	0	0	0	00
03	0	0	0	2	1	0	0	0	03
04	0	0	1	2	3	3	0	1	10
05	1	2	2	2	3	3	3	1	17
06	1	1	1	2	2	2	1	2	12
07	1	2	4	3	3	2	1	2	18
08	4	2	1	2	3	3	4	2	21
09	2	1	2	3	1	1	2	0	12
10	0	0	0	0	0	1	1	0	02
11	1	1	0	1	3	1	1	1	09
12	1	0	0	0	-	-	-	-	--
13	-	-	-	-	-	-	-	-	--
14	-	-	-	-	-	-	-	-	--
15	1	0	0	1	0	0	0	1	03
16	1	1	1	1	1	1	0	1	07
17	1	1	1	1	0	0	2	1	07
18	2	2	0	2	1	2	4	5	18
19	3	2	1	0	0	0	0	1	07
20	0	0	0	0	2	2	1	0	05
21	1	0	0	1	4	4	2	2	14
22	1	0	0	0	0	1	0	1	03
23	2	0	0	0	1	1	0	0	04
24	0	1	0	0	1	0	2	1	05
25	0	0	1	3	3	3	5	5	20
26	4	2	1	3	3	2	1	1	17
27	3	3	3	3	2	2	2	1	19
28	3	2	2	2	3	2	2	0	16
29	0	1	0	1	1	1	1	1	06
30	0	0	0	2	2	1	1	1	07
31	1	0	3	2	2	1	1	0	10

MACQUARIE ISLAND

MAGNETIC K-INDICES - JULY 1980

Range for lower limit of K = 9 is 1500 nT

<u>Day</u>	<u>K-Indices</u>								<u>K-Sum</u>
01	1	0	0	0	0	0	0	0	01
02	0	0	0	0	0	0	0	0	00
03	1	0	0	2	0	0	0	0	03
04	0	0	1	2	3	2	0	0	08
05	1	2	3	2	4	4	4	1	21
06	1	1	1	1	3	3	0	1	11
07	1	1	4	3	3	3	1	1	17
08	2	2	1	1	4	3	5	2	20
09	1	1	2	5	2	-	-	0	--
10	0	0	0	0	0	0	0	0	00
11	1	1	0	0	4	0	1	1	08
12	1	0	0	0	0	1	0	0	02
13	1	2	1	0	2	3	0	-	--
14	1	1	0	3	1	0	0	0	06
15	1	1	0	0	0	0	0	0	02
16	1	0	0	0	0	0	0	0	01
17	0	0	0	1	0	0	1	0	02
18	1	1	0	1	2	1	6	6	18
19	3	4	3	1	1	2	1	0	15
20	0	1	1	0	3	2	1	0	08
21	2	1	2	0	6	5	4	2	22
22	1	1	0	0	0	0	0	1	03
23	1	0	0	0	1	0	0	0	02
24	0	1	0	0	0	0	1	1	03
25	0	0	0	3	2	6	5	5	21
26	3	1	1	3	5	3	2	1	19
27	3	3	2	4	3	1	2	2	20
28	3	2	3	2	5	3	2	1	21
29	1	1	1	0	0	1	1	0	05
30	1	1	1	1	2	0	1	1	08
31	1	1	3	2	1	0	0	0	08

MAWSONMAGNETIC K-INDICES - JULY 1980Range for lower limit of K = 9 is 1500 nT

<u>Day</u>	<u>K-Indices</u>								<u>K-Sum</u>
01	4	2	2	0	0	0	0	5	13
02	3	0	0	0	0	0	4	4	11
03	3	3	2	1	2	0	0	0	11
04	0	0	2	1	2	2	2	4	13
05	4	4	4	3	2	4	5	1	27
06	3	2	2	3	2	1	4	4	21
07	5	5	3	4	2	1	5	5	30
08	6	5	4	2	2	5	5	6	35
09	3	5	3	3	2	1	3	3	23
10	0	1	0	0	2	1	3	3	10
11	4	5	1	1	2	2	5	4	24
12	3	1	1	0	0	2	0	5	12
13	3	4	3	1	1	4	2	2	20
14	4	5	2	3	3	0	2	4	24
15	2	4	2	2	1	1	2	3	17
16	4	3	2	1	1	0	0	5	16
17	3	3	2	2	1	0	3	3	17
18	5	3	2	1	2	3	5	6	27
19	6	6	5	1	3	2	3	5	31
20	4	3	2	1	2	3	3	4	22
21	6	6	2	2	3	4	4	4	31
22	4	4	3	1	1	1	3	4	21
23	2	0	0	1	0	0	0	5	08
24	2	4	1	0	1	0	3	5	16
25	3	2	1	3	3	5	6	7	30
26	7	3	3	2	3	3	5	4	30
27	4	5	4	4	1	1	1	6	26
28	6	4	3	2	3	3	2	2	25
29	2	3	3	1	1	3	4	3	20
30	5	4	3	2	2	1	3	5	25
31	4	4	3	3	1	2	1	5	23

JULY 1980

PRINCIPAL MAGNETIC STORMS

OBSERVATORY	COMMENCEMENT				SSC AMPLITUDES			MAX 3h INDEX K		RANGES			UT	END	
	d	h	min	TYPE	D(')	H(nT)	Z(nT)	d	(3h-PERIOD)	K	D(')	H(nT)	Z(nT)	d	h
PORT MORESBY	18 25	19 11	25 11	ssc ssc	+1.5 -0.2	+37 +24	+36 +22	18 (7,8) 25 (6,8)	5 5	9 8	90 100	70 50	19 27	09 12	
GNANGARA	NIL														
TOOLANGI	25	11	11	ssc*	-1.4	+24*	+5	25 (7,8)	5	19	100	30	26	18	

JULY 1980

PRELIMINARY MONTHLY MEAN VALUES

OBSERVATORY	H	D		Z	F
	nT	o	'	nT	nT
PORT MORESBY	35966	06	28.6E	-23644	43042
GNANGARA	23404	03	17.8W	-53652	58534
CANBERRA	23813	12	08.9E	-53767	58804
TOOLANGI		no absolute control			
MACQUARIE I	12722	28	30.0E	-63765	65022
MAWSON	68415	63	07.9W	-46780	50274
DAVIS	16840	76	34.3W	-52750	55373
CASEY		not available			

The values are derived from magnetograms for selected quiet days except at Davis and Casey where they are derived from semi-weekly absolute measurements.

SUDDEN COMMENCEMENTS AND OTHER RAPID VARIATIONS

OBSERVATORY	DAY	TYPE AND QUALITY		TIME	SENSE AND AMPLITUDE OF CHIEF MOVEMENT		
					H(nT)	D(nT)	Z(nT)
PORT MORESBY	18	ssc	B	1925	+37	+15	+36
	25	ssc	B	1111	+24	- 2	+22
GNANGARA	18	ssc	B	1925	+10	+ 7	+ 5
	25	ssc	B	1111	+ 7	+ 7	+ 5
TOOLANGI	25	ssc*	B	1111	+24*	- 9	+ 5