

Monthly Preliminary Geomagnetic Bulletin - JUNE 2015

Coimbra Magnetic Observatory (COI, IAGA code)

$\phi = 40.222^\circ$; $\lambda = 351.578^\circ$

Observatório Geofísico e Astronómico da Universidade de Coimbra (OGAUC)

Absolute monthly means

H (nT)	D (°)	Z (nT)	X (nT)	Y (nT)	I (°)	F (nT)
25649	-2.657	36245	25621	-1189	54.715	44403

Monthly daily amplitudes*

	H (nT)	D (°)	Z (nT)	X (nT)	Y (nT)	I (°)	F (nT)
mean	43	9.8	51	42	73	3.8	47
min	16	6.8	29	14	51	1.9	24
max	222	13.5	115	220	101	13.5	156

Monthly maximum amplitudes*

H (nT)	D (°)	Z (nT)	X (nT)	Y (nT)	I (°)	F (nT)
237	16.5	131	237	128	14.3	200

(*) - Based on hourly values

Geomagnetic Activity - K indices

K indices

ak indices (nT)

Day	Tri-hourly values								Tri-hourly values								Ak
	0	3	6	9	12	15	18	21	0	3	6	9	12	15	18	21	
1	3	2	1	2	1	2	2	1	21	10	4	10	4	10	10	4	9.0
2	0	1	1	1	2	2	1	0	0	4	4	4	10	10	4	0	4.6
3	0	1	2	1	2	1	2	0	0	4	10	4	10	4	10	0	5.3
4	0	1	1	1	2	2	2	0	0	4	4	4	10	10	10	0	5.3
5	0	1	1	2	1	2	1	1	0	4	4	4	10	4	10	4	5.1
6	1	2	2	3	2	2	2	1	4	10	10	10	10	10	10	4	9.8
7	0	1	2	1	2	3	3	3	0	4	10	4	10	21	21	21	11.4
8	3	4	5	4	3	4	3	4	21	38	63	38	21	38	21	38	34.7
9	3	3	3	2	3	3	3	2	21	21	21	10	21	21	21	10	18.2
10	3	2	3	2	2	2	2	2	21	10	21	10	10	10	10	10	12.6
11	2	3	2	3	2	3	2	1	10	21	10	21	10	21	10	4	13.3
12	2	1	1	2	3	3	2	2	10	4	4	10	21	21	10	10	11.2
13	2	3	3	2	2	2	2	2	10	21	21	10	10	10	10	10	12.6
14	4	2	3	4	3	2	3	3	38	10	21	38	21	10	21	21	22.4
15	2	2	2	2	3	3	3	3	10	10	10	10	21	21	21	21	15.4
16	3	2	2	2	2	3	3	2	21	10	10	10	10	21	21	10	14.0
17	3	2	3	2	3	3	1	1	21	10	21	10	21	21	4	4	14.0
18	3	2	2	2	2	2	2	0	21	10	10	10	10	10	10	0	10.0
19	2	1	1	2	1	1	0	0	10	4	4	10	4	4	0	0	4.6
20	0	1	1	1	1	2	1	0	0	4	4	4	4	10	4	0	3.9
21	1	0	1	1	2	4	3	3	4	0	4	4	10	38	21	21	12.8
22	2	3	4	3	5	5	8	6	10	21	38	21	63	63	336	112	83.0
23	5	5	5	4	5	3	4	3	63	63	63	38	63	21	38	21	46.2
24	4	3	3	2	3	3	3	1	38	21	21	10	21	21	21	4	19.6
25	3	3	4	4	5	4	4	3	21	21	38	38	63	38	38	21	34.7
26	2	2	2	3	2	2	1	2	10	10	10	21	10	10	4	10	10.5
27	2	3	3	2	2	2	2	2	10	21	21	10	10	10	10	10	12.6
28	3	3	3	2	3	2	3	2	21	21	21	10	21	10	21	10	16.8
29	2	2	2	2	2	2	2	0	10	10	10	10	10	10	10	0	8.6
30	1	2	1	2	3	1	2	3	4	10	4	10	21	4	10	21	10.5

Monthly mean of the daily equivalent amplitude Ak: 16.4

K values:	0	1	2	3	4	5	6	7	8	9
Freq. (N):	15	44	93	63	15	8	1	0	1	0
Freq. (%):	6.25	18.33	38.75	26.25	6.25	3.33	0.42	0.00	0.42	0.00

Classification of days	Quiet					Disturbed				
	Q1	Q2	Q3	Q4	Q5	D1	D2	D3	D4	D5
Coimbra (local K):	20	19	2	5	4	22	23	25	8	14
International (Kp):	20	5	2	4	3	23	22	8	25	14*

Principal Magnetic Storms in June 2015

Storminess period					Commencement			Maximum activity			Range		
Begin			End		Type	Amplitude		Day	3hp	K	H (nT)	D (°)	Z (nT)
Day	hour	min	day	hour		H (nT)	D (°)						
7	13	30	9	9	Gradual	-	-	8	3	5	109	13	68
22	18	33	24	9	SSC	146	2.6	11	22	7	323	15	98
25	5	30	26	1	SSC	8	-	25	5	5	86	14	58

The main reported sudden impulse on 22 (see table) was preceded by two impulsive movements on 21 (16h44) and 22 (05h45).

SSC: Storm Sudden Commencement;

3hp: daily 3-hour period of maximum activity; K: maximum local index

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