

# Monthly Preliminary Geomagnetic Bulletin - APRIL 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)
25644	-2.678	36242	25616	-1199	54.717	44397

## Monthly daily amplitudes\*

	H (nT)	D (°)	Z (nT)	X (nT)	Y (nT)	I (°)	F (nT)
mean	32	9.9	55	32	74	3.8	43
min	14	7.2	40	17	55	2.0	18
max	65	13.0	78	64	97	6.9	58

## Monthly maximum amplitudes\*

H (nT)	D (°)	Z (nT)	X (nT)	Y (nT)	I (°)	F (nT)
99	13.4	99	96	101	8.9	74

(\*) - Based on hourly values

## Geomagnetic Activity - K indices

Day	K indices								ak indices (nT)								Ak
	0	3	6	9	12	15	18	21	0	3	6	9	12	15	18	21	
1	1	1	2	2	2	3	2	3	4	4	10	10	10	21	10	21	11.0
2	1	2	2	2	2	2	3	4	4	10	10	10	10	10	21	38	14.0
3	3	2	2	2	3	2	2	3	21	10	10	10	21	10	10	21	14.0
4	3	2	2	2	3	3	2	2	21	10	10	10	21	21	10	10	14.0
5	2	1	2	3	1	2	2	3	10	4	10	21	4	10	10	21	11.2
6	2	2	2	2	2	2	1	1	10	10	10	10	10	10	4	4	8.4
7	2	1	2	2	2	2	2	1	10	4	10	10	10	10	10	4	8.4
8	1	0	1	1	2	2	2	1	4	0	4	4	10	10	10	4	5.8
9	2	3	3	3	2	3	3	3	10	21	21	21	10	21	21	21	18.2
10	4	5	4	3	4	3	3	2	38	63	38	21	38	21	21	10	31.2
11	3	3	3	2	2	3	2	1	21	21	21	10	10	21	10	4	14.7
12	1	1	1	1	2	1	1	1	4	4	4	4	10	4	4	4	4.9
13	2	2	2	1	2	2	1	1	10	10	10	4	10	10	4	4	7.7
14	1	0	1	1	3	4	4	4	4	0	4	4	21	38	38	38	18.4
15	3	3	3	4	4	4	5	4	21	21	21	38	38	38	63	38	34.7
16	4	3	3	3	3	3	5	5	38	21	21	21	21	21	63	63	33.6
17	4	3	3	3	3	2	3	2	38	21	21	21	21	10	21	10	20.3
18	2	1	2	2	2	3	4	3	10	4	10	10	10	21	38	21	15.4
19	3	2	3	2	2	2	2	3	21	10	21	10	10	10	10	21	14.0
20	3	3	2	2	2	2	3	4	21	21	10	10	10	10	21	38	17.5
21	3	3	3	4	4	3	3	3	21	21	21	38	38	21	21	21	25.2
22	2	2	2	2	3	3	2	3	10	10	10	10	21	21	10	21	14.0
23	2	2	1	1	1	2	2	2	10	10	4	4	4	10	10	10	7.7
24	2	2	2	2	2	2	2	0	10	10	10	10	10	10	10	0	8.6
25	0	0	1	1	1	2	2	0	0	0	4	4	4	10	10	0	4.0
26	1	0	2	3	1	2	2	1	4	0	10	21	4	10	10	4	7.9
27	0	0	2	2	2	2	2	2	0	0	10	10	10	10	10	10	7.4
28	2	1	2	2	2	2	2	1	10	4	10	10	10	10	10	4	8.4
29	1	0	1	1	2	2	1	1	4	0	4	4	10	10	4	4	5.1
30	3	1	1	1	1	1	2	2	21	4	4	4	4	4	10	10	7.7

Monthly mean of the daily equivalent amplitude Ak: 13.8

K values:	0	1	2	3	4	5	6	7	8	9
Freq. (N):	10	49	103	57	17	4	0	0	0	0
Freq. (%):	4.17	20.42	42.92	23.75	7.08	1.67	0.00	0.00	0.00	0.00

Classification of days	Quiet					Disturbed				
	Q1	Q2	Q3	Q4	Q5	D1	D2	D3	D4	D5
Coimbra (local K):	25	12	29	8	27A	15	16	10	21	17
International (Kp):	25	26	12	8	29	16	10	15	17	21

## Principal Magnetic Storms in April 2015

Storminess period					Sudden commencement			Maximum activity			Range			
Day	Begin		End		Type	Amplitude			Day	3hp	K	H (nT)	D (°)	Z (nT)
	hour	min	day	hour		H (nT)	D (°)	Z (nT)						
9	2	14	11	16	SSC	10	0.7	2	10	2	5	89	14	63
14	14	45	17	10	SSC*	10	1.3	-	16	8	5	83	17	104

The "Storminess period" includes the "initial" and "main" storm phases.

SSS\*: the chief movement is preceded by small oscillations.

3hp: Daily 3-hour period; K: maximum local index

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