

Monthly Preliminary Geomagnetic Bulletin - February 2015

Coimbra Magnetic Observatory (COI, IAGA code)

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

Observatório Geofísico e Astronómico da Universidade de Coimbra (OGAUC)

Coimbra (COI)			FEBRUARY monthly means																				Year 2015			
Daily Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN	
H = 25000 + Table value (nT)																										
Means	637	637	639	639	639	640	644	648	650	650	648	646	642	639	635	631	627	626	629	634	634	632	632	635	638	
5Q Means	643	644	644	644	645	648	651	653	656	657	656	653	650	648	647	643	641	639	640	644	643	643	645	647	647	
5D Means	622	620	634	632	628	629	635	641	644	644	641	636	632	630	627	618	612	613	614	621	627	620	612	620	627	
D = -2° + Table value (in decimal minutes)																										
Means	41.7	42.1	42.4	42.6	42.8	43.1	42.9	42.7	42.3	41.5	41.7	43.1	44.8	45.7	46.0	45.8	45.2	44.6	44.4	43.7	42.7	42.2	41.9	41.5	43.2	
5Q Means	40.9	41.4	42.0	42.2	42.5	42.9	42.8	42.8	42.3	41.3	41.1	42.9	44.8	45.7	45.9	45.5	45.0	44.3	44.6	43.3	41.8	42.0	41.6	41.5	43.0	
5D Means	41.9	41.9	42.3	42.8	42.7	42.9	42.8	42.8	42.5	41.7	41.6	43.0	44.4	45.3	45.7	45.6	45.5	44.7	45.2	43.7	43.3	42.7	41.9	41.7	43.3	
Z = 36000 + Table value (nT)																										
Means	248	246	245	244	244	244	244	243	244	245	240	233	229	230	235	241	246	249	249	250	252	251	251	250	244	
5Q Means	250	247	245	246	245	244	246	245	247	250	244	236	231	231	236	243	248	252	251	255	258	254	253	250	246	
5D Means	249	247	245	243	244	244	244	243	243	247	242	234	231	233	235	240	244	248	246	249	249	250	251	250	244	
X = 25000 + Table value (nT)																										
Means	596	596	597	598	600	602	605	608	607	604	596	590	588	585	584	587	589	591	594	593	592	592	592	595	595	
5Q Means	592	590	591	594	600	601	604	603	601	596	590	585	581	577	575	579	583	588	587	582	585	590	592	595	590	
5D Means	593	598	595	596	599	602	604	607	608	605	598	593	591	591	586	587	587	590	591	594	598	595	591	593	595	
Y = -1000 + Table value (nT)																										
Means	-205	-207	-210	-212	-213	-215	-214	-213	-210	-204	-205	-215	-227	-234	-236	-235	-231	-226	-225	-219	-212	-209	-206	-203	-216	
5Q Means	-199	-202	-207	-208	-211	-214	-213	-213	-210	-202	-200	-213	-227	-234	-236	-232	-229	-224	-226	-216	-205	-207	-204	-203	-214	
5D Means	-206	-207	-210	-213	-213	-214	-213	-213	-211	-205	-205	-214	-225	-231	-234	-233	-233	-227	-231	-220	-217	-212	-206	-205	-217	
I = 54° + Table value (in decimal minutes)																										
Means	44.6	44.4	44.3	44.2	44.1	44.0	43.8	43.6	43.7	44.0	44.2	44.2	44.2	44.4	44.7	44.7	44.9	44.8	44.7	44.8	44.9	45.0	45.0	44.7	44.4	
5Q Means	44.9	44.9	44.8	44.6	44.2	44.1	43.9	44.0	44.2	44.7	44.8	44.7	44.7	44.9	45.3	45.4	45.3	45.2	45.2	45.8	45.7	45.2	45.0	44.8	44.8	
5D Means	44.8	44.4	44.5	44.4	44.2	44.0	43.8	43.6	43.6	43.9	44.2	44.1	44.0	44.1	44.5	44.7	44.8	44.9	44.8	44.7	44.5	44.7	45.1	44.8	44.4	
F = 44000 + Table value (nT)																										
Means	390	389	389	389	390	390	393	394	394	393	384	375	371	371	374	380	385	389	391	391	392	391	391	392	387	
5Q Means	389	386	385	388	391	391	394	393	393	392	384	374	368	366	370	378	384	390	388	388	392	392	392	392	386	
5D Means	390	391	388	387	389	390	392	393	394	395	387	377	374	376	375	379	383	388	387	391	392	392	390	391	387	

Monthly mean of daily amplitude: H (nT) D (') Z (nT) X (nT) Y (nT) I (') F (nT)

38 5.9 28 41 43 2.8 30

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	4	2	3	2	2	3	5	5	38	10	21	10	10	21	63	63	29.0		
2	4	4	3	3	3	4	4	4	38	38	21	21	21	38	38	38	31.5		
3	4	3	2	2	3	3	3	3	38	21	10	10	21	21	21	21	20.3		
4	2	1	2	2	2	3	1	2	10	4	10	10	10	21	4	10	9.8		
5	2	2	2	2	3	3	2	2	10	10	10	10	21	21	10	10	12.6		
6	0	0	2	2	2	2	1	0	0	0	10	10	10	10	4	0	5.4		
7	1	1	2	3	2	2	2	1	4	4	10	21	10	10	10	4	9.1		
8	2	2	2	2	2	3	3	3	10	10	10	10	10	21	21	21	14.0		
9	3	1	1	1	3	2	2	3	21	4	4	4	21	10	10	21	11.9		
10	1	2	2	2	2	2	2	3	4	10	10	10	10	10	10	21	10.5		
11	1	3	2	2	3	2	1	1	4	21	10	10	21	10	4	4	10.5		
12	1	1	1	1	2	1	2	2	4	4	4	4	10	4	10	10	6.3		
13	0	0	1	1	1	2	1	1	0	0	4	4	4	10	4	4	3.9		
14	0	1	1	1	1	1	1	1	0	4	4	4	4	4	4	4	3.7		
15	1	2	2	2	3	3	2	1	4	10	10	10	21	21	10	4	11.2		
16	1	1	1	1	2	2	3	3	4	4	4	4	10	10	21	21	9.8		
17	3	3	3	3	3	2	4	4	21	21	21	21	21	10	38	38	23.8		
18	4	3	2	3	2	3	3	3	38	21	10	21	10	21	21	21	20.3		
19	3	2	2	1	2	3	3	3	21	10	10	4	10	21	21	21	14.7		
20	0	2	2	2	2	1	1	2	0	10	10	10	10	4	4	10	7.2		
21	2	2	1	1	2	2	1	3	10	10	4	4	10	10	4	21	9.1		
22	2	2	1	1	2	2	2	3	10	10	4	4	10	10	10	21	9.8		
23	3	2	2	3	3	4	4	4	21	10	10	21	21	38	38	38	24.5		
24	5	5	3	3	3	3	2	3	63	63	21	21	21	21	10	21	30.1		
25	0	1	3	2	3	3	3	0	0	4	21	10	21	21	21	0	12.3		
26	2	0	2	2	2	1	1	1	10	0	10	10	10	4	4	4	6.5		
27	0	0	1	1	1	2	2	2	0	0	4	4	4	10	10	10	5.3		
28	1	2	2	2	2	4	4	4	4	10	10	10	10	38	38	38	19.6		

Monthly mean of the daily equivalent amplitude Ak: 13.7

K values:	0	1	2	3	4	5	6	7	8	9
Freq. (N):	12	52	85	55	16	4	0	0	0	0
Freq. (%):	5.36	23.21	37.95	24.55	7.14	1.79	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):	14	13	27	6	12A	2	24	1	23	17
International (Kp):	13	27	14	26	12	2	24	17	1	18

Principal Magnetic Storms in February 2015

Storminess period					Sudden commencement			Maximum activity			Range			
Begin			End		Type	Amplitude			Day	3hp	K	H (nT)	D (')	Z (nT)
Day	hour	min	day	hour		H (nT)	D (')	Z (nT)						
1	6	41	3	6	ssc*	15	2	4	1	3	5	92	9.6	53
16	18	0	18	6	-	-	-	-	17	8	4	96	11.3	36
23	12	0	24	16	-	-	-	-	24	1	5	104	13.4	15
28	15	0	1 mar	12	-	-	-	-	1 mar	1	4	81	11.7	48

Note: the storm of 1st February started probably on 31 January (~21h00) but without any clear sudden impulse.
 3hp: Daily 3-hour period; K: maximum local index

Any questions regarding COI data could be addressed to: Paulo Ribeiro; e-mail: pribeiro@ci.uc.pt
 OGAUC - Av. Dr. Dias da Silva 3800-134 Coimbra - PORTUGAL