
INTERNATIONAL SERVICE OF GEOMAGNETIC INDICES

MONTHLY BULLETIN DECEMBER 2015

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1 IAGA Endorsed Geomagnetic Indices (non-definitive values)

1.1 *aa*

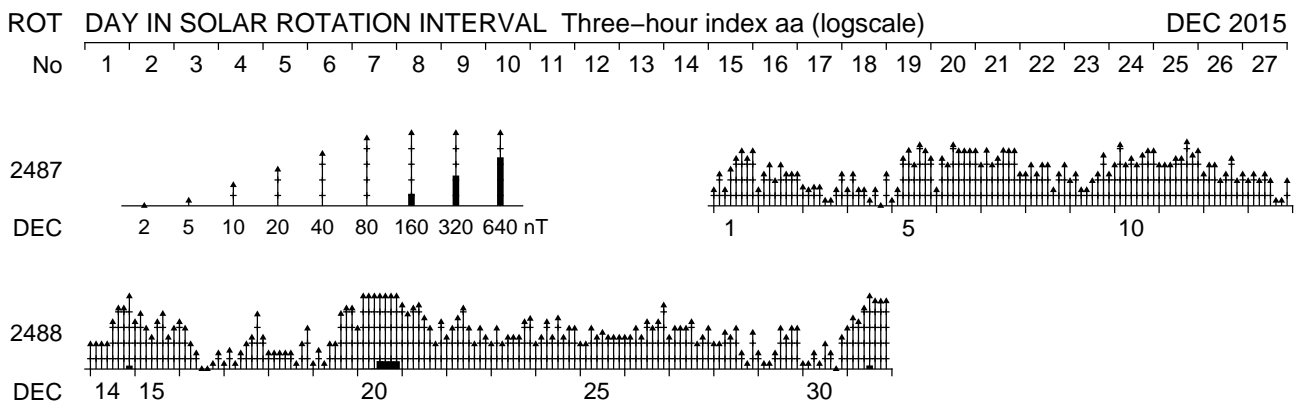
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Contact: A. Chambodut <isgi@unistra.fr>



1.2 *am*

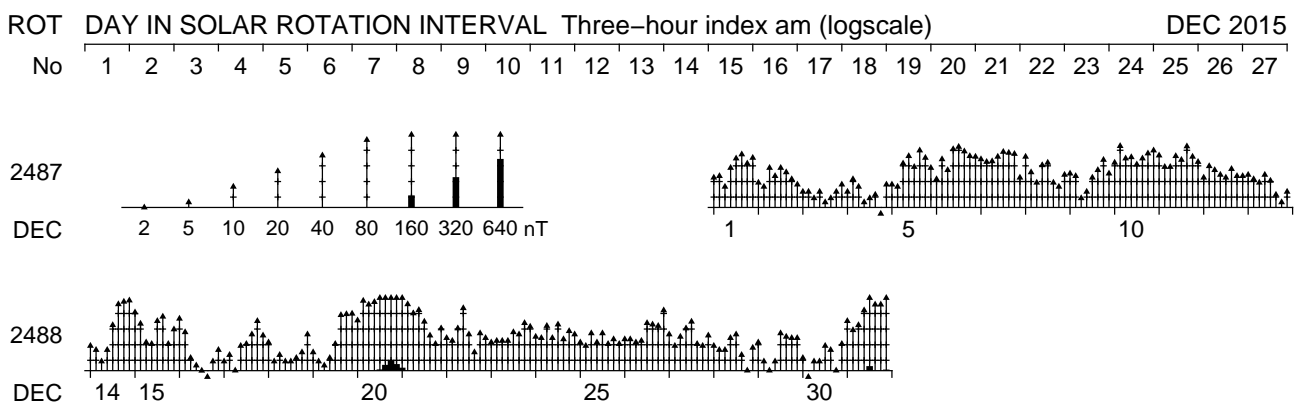
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1.3 K_p

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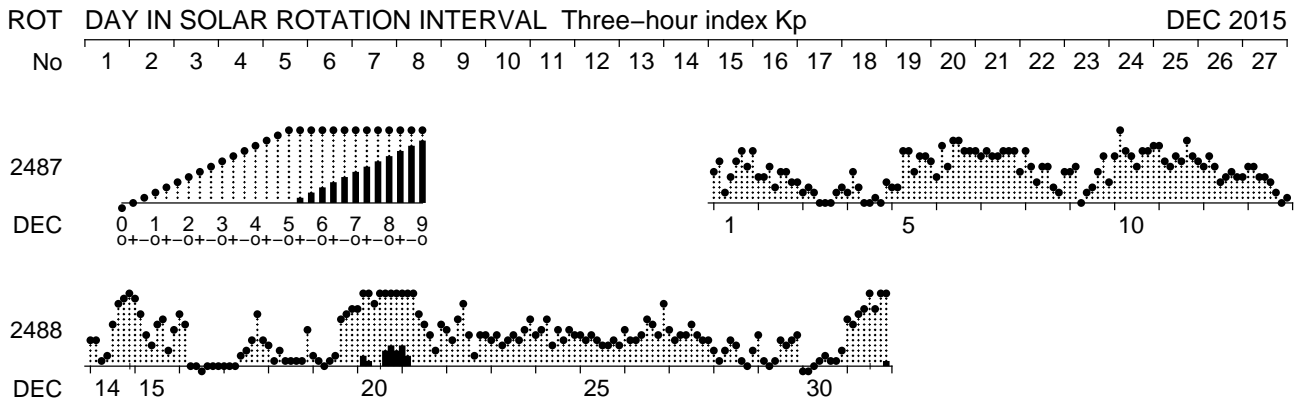
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1.4 *Dst*

ISGI Collaborating Institute:

World Data Center for Geomagnetism, Kyoto

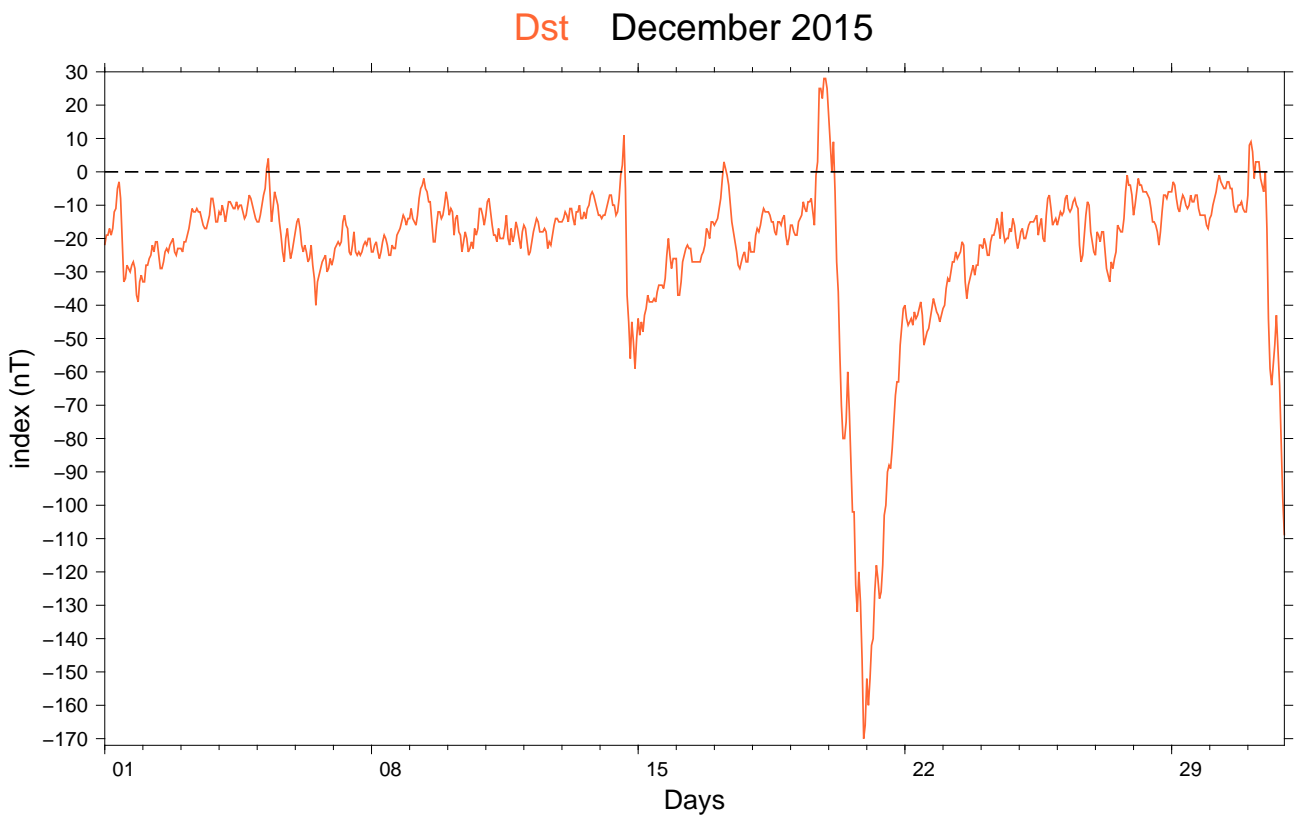
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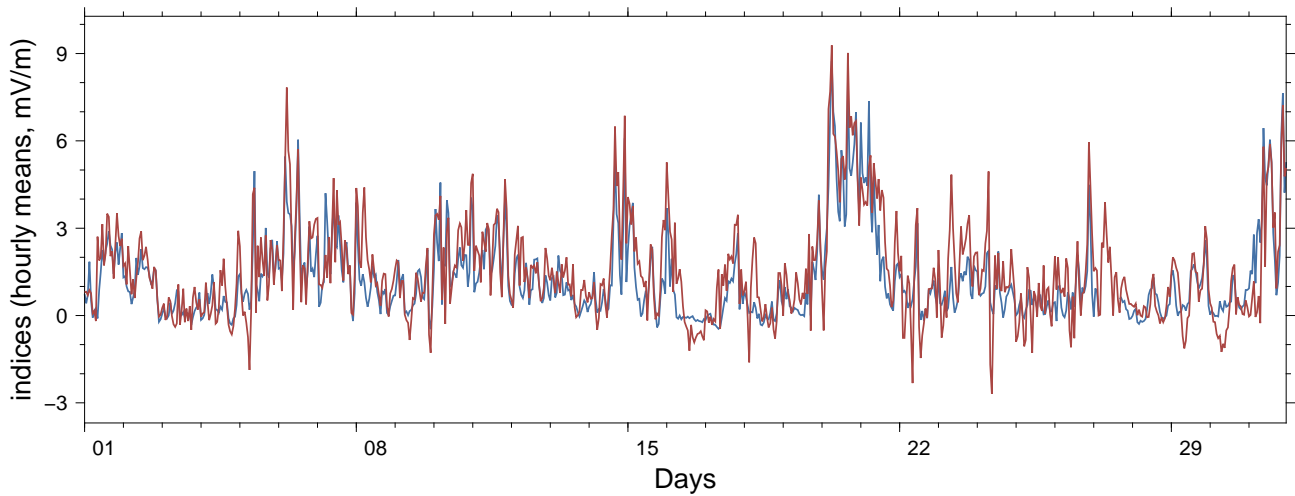
1.5 PC

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PCN and PCS December 2015



1.6 *AE*

ISGI Collaborating Institute:

World Data Center for Geomagnetism, Kyoto

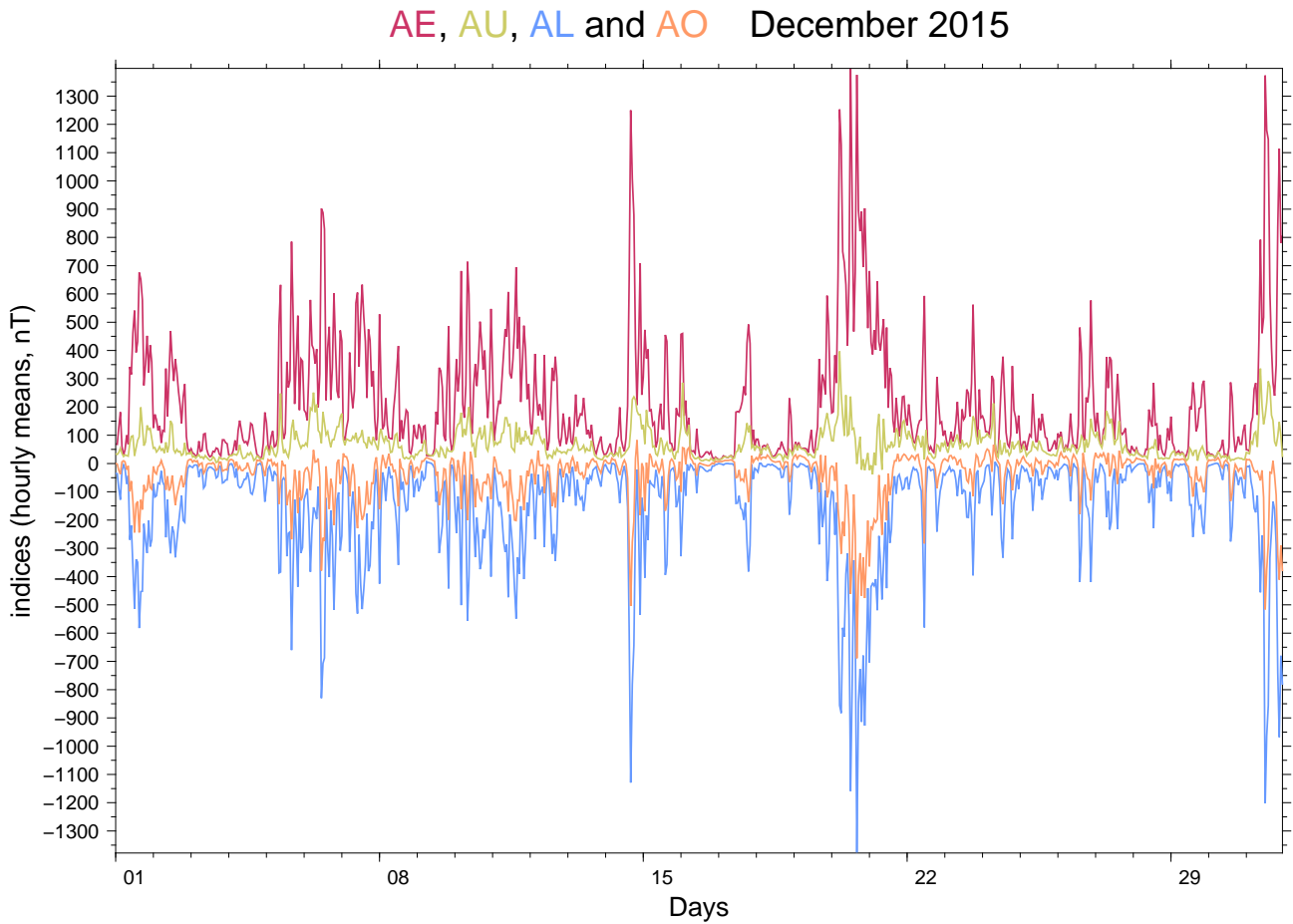
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2 IAGA Endorsed Geomagnetic Events (non-definitive values)

2.1 *SSC* and *SFE*

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SSC:

2015 12 14 13 21 C: LER* ESK HAD* GCK MMB EBR SPT KAK KNY GUI HYB GNG CNB

2015 12 19 16 16 A: SOD NUR LER* ESK* HAD* DOU HRB NAG* GUI HYB GNG CNB*
 B: WNG* NGK* BDV* GCK MMB EBR SPT* KAK KNY
 C: VAL

2015 12 31 00 50 A: SOD WNG NGK NAG
 B: NUR LER ESK HAD BDV HRB MMB* EBR SPT* GUI HYB
 C: VAL DOU GCK KAK* KNY* GNG CNB

SFE:

NONE

2.2 Classification of days

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Date	Aa	CK24	CK48	Ap	Q/D
2015-12-01	26	-	-	13	
2015-12-02	17	-	-	8	
2015-12-03	9	C	C	4	Q2
2015-12-04	9	C	K	4	Q3
2015-12-05	31	-	-	14	
2015-12-06	38	-	-	22	D5
2015-12-07	35	-	-	19	
2015-12-08	19	-	-	10	
2015-12-09	16	-	-	8	
2015-12-10	36	-	-	24	D4
2015-12-11	36	-	-	19	
2015-12-12	19	-	-	10	
2015-12-13	11	C	-	7	Q8A
2015-12-14	39	-	-	20	
2015-12-15	30	-	-	16	
2015-12-16	12	K	-	6	Q7K
2015-12-17	15	-	K	6	Q9K
2015-12-18	10	C	-	5	Q5
2015-12-19	26	-	-	10	
2015-12-20	110	-	-	70	D1
2015-12-21	43	-	-	38	D3
2015-12-22	27	-	-	12	
2015-12-23	21	-	-	9	
2015-12-24	22	-	-	11	
2015-12-25	17	-	-	7	Q10A
2015-12-26	28	-	-	14	
2015-12-27	22	-	-	9	
2015-12-28	15	-	-	4	Q4
2015-12-29	14	-	K	6	Q6
2015-12-30	8	C	-	2	Q1
2015-12-31	64	-	-	35	D2

2.2.1 Truly magnetically very quiet (C) and quiet (K) periods (from *aa*)

The values for the CK24 define quietest days over 24-hours with:

$$\overline{(aa)} = Aa < 13 \text{ nT} \begin{cases} \text{“K” indicates a quiet K-day with } \sum(p) \geq 4 \\ \text{“C” indicates a really quiet C-day with } \sum(p) < 4 \end{cases}$$

The values for the CK48 define quietest days over 48-hours with:

$$\overline{(aa)} < 13 \text{ nT} \begin{cases} \text{“K” indicates a quiet K-day with } \sum(p) \geq 6 \\ \text{“C” indicates a really quiet C-day with } \sum(p) < 6 \end{cases}$$

where *p* is a weight assigned at each *aa* value.

2.2.2 10 international quietest days (Q1-10) and 5 most disturbed days (D1-5)

The values for *Q*-Days, *Q1* – *Q10*, are the order number of the ten quietest days of the month.

A selected quiet day is considered not really quiet and is:

- marked by the letter “A” if ($Ap > 6 \text{ nT}$);
- marked by the letter “K” if ($Ap \leq 6 \text{ nT}$), or if one ($Kp > 3$), or two ($Kp > 2+$).

The values for *D*-Days, *D1* – *D5*, are the order number of the five most disturbed days of the month. A selected disturbed day is considered not really disturbed and marked by “*” if ($Ap < 20 \text{ nT}$).