
INTERNATIONAL SERVICE OF GEOMAGNETIC INDICES

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1 IAGA Endorsed Geomagnetic Indices (non-definitive values)

1.1 *aa*

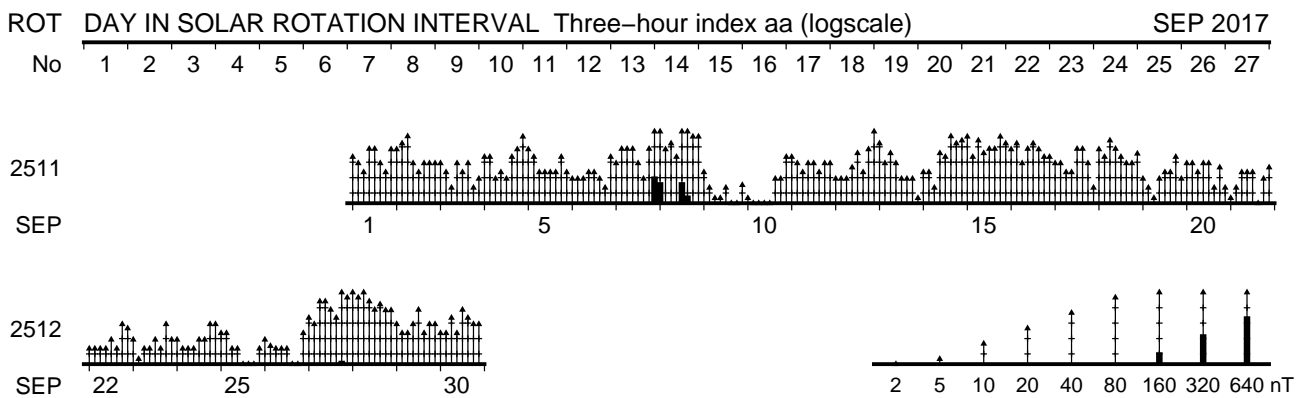
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Contact: A. Chambodut <isgi@unistra.fr>



1.2 *am*

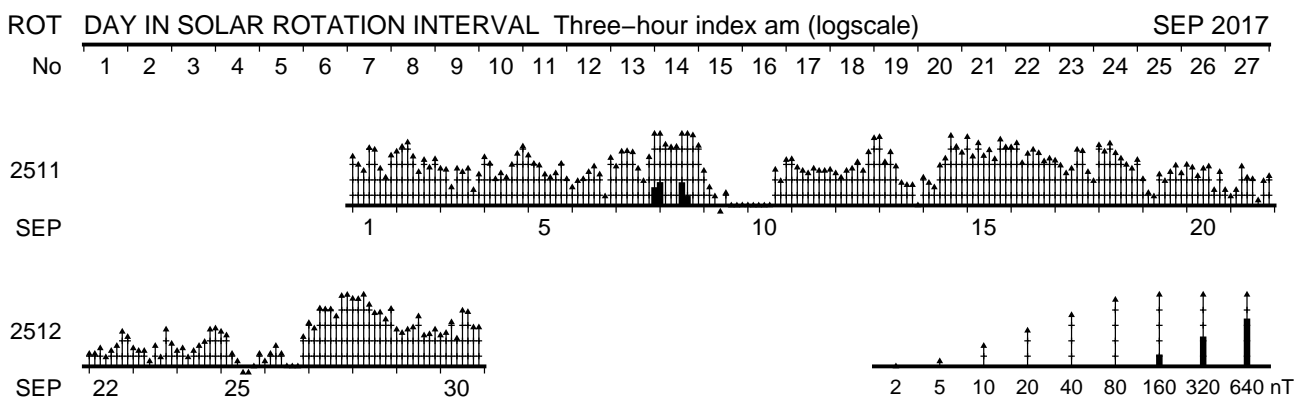
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1.3 K_p

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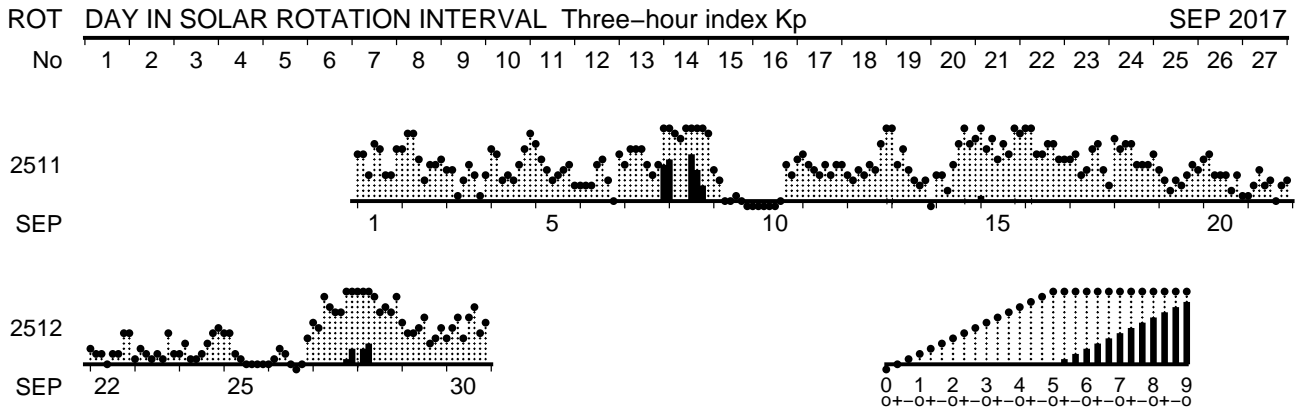
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1.4 *Dst*

ISGI Collaborating Institute:

World Data Center for Geomagnetism, Kyoto

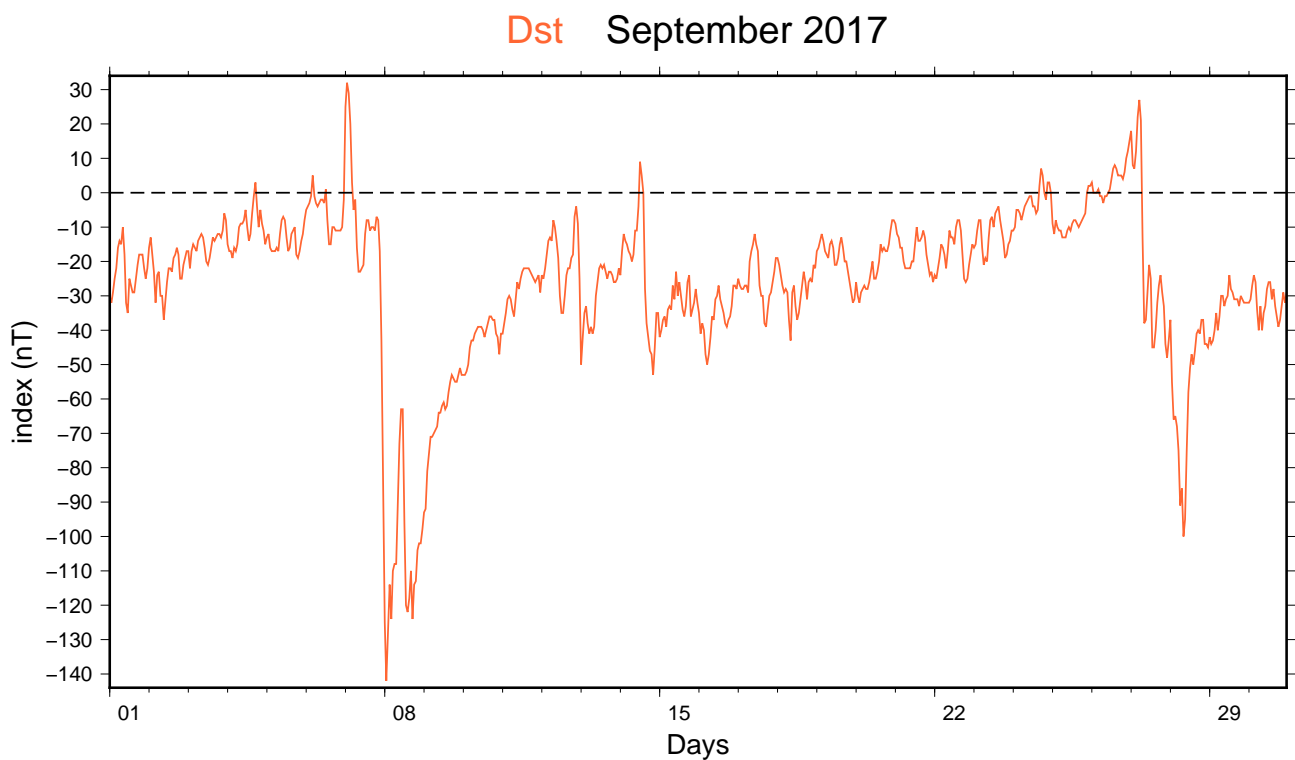
Data Analysis Center for Geomagnetism and Space Magnetism

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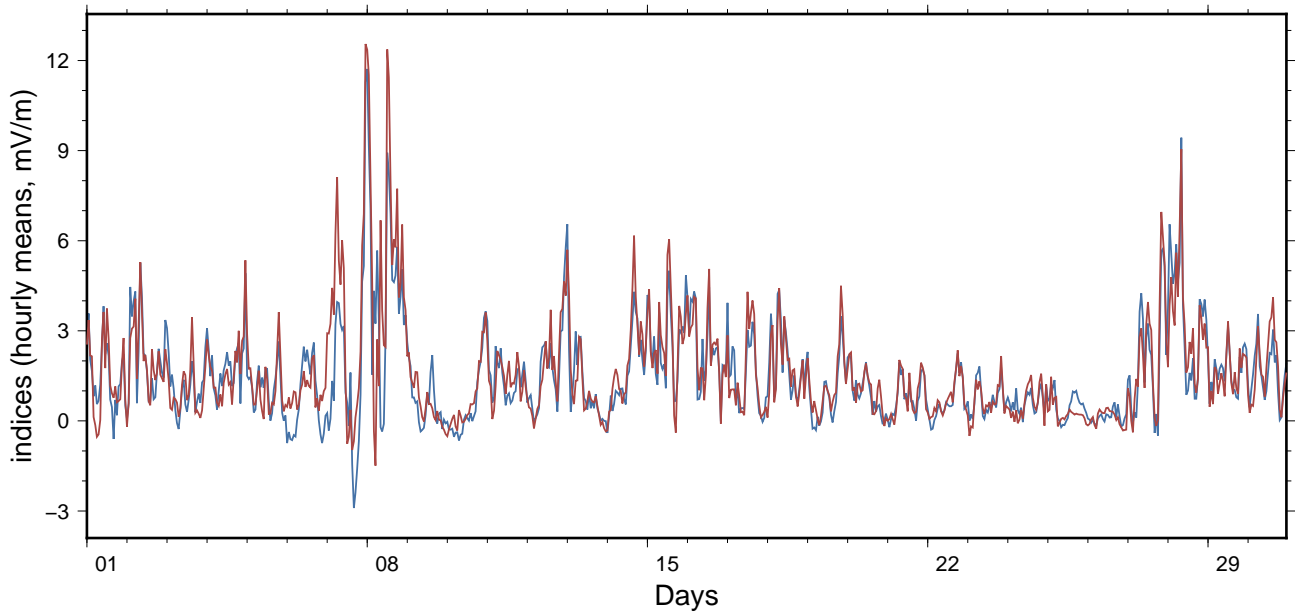
1.5 PC

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PCN and PCS September 2017



1.6 *AE*

ISGI Collaborating Institute:

World Data Center for Geomagnetism, Kyoto

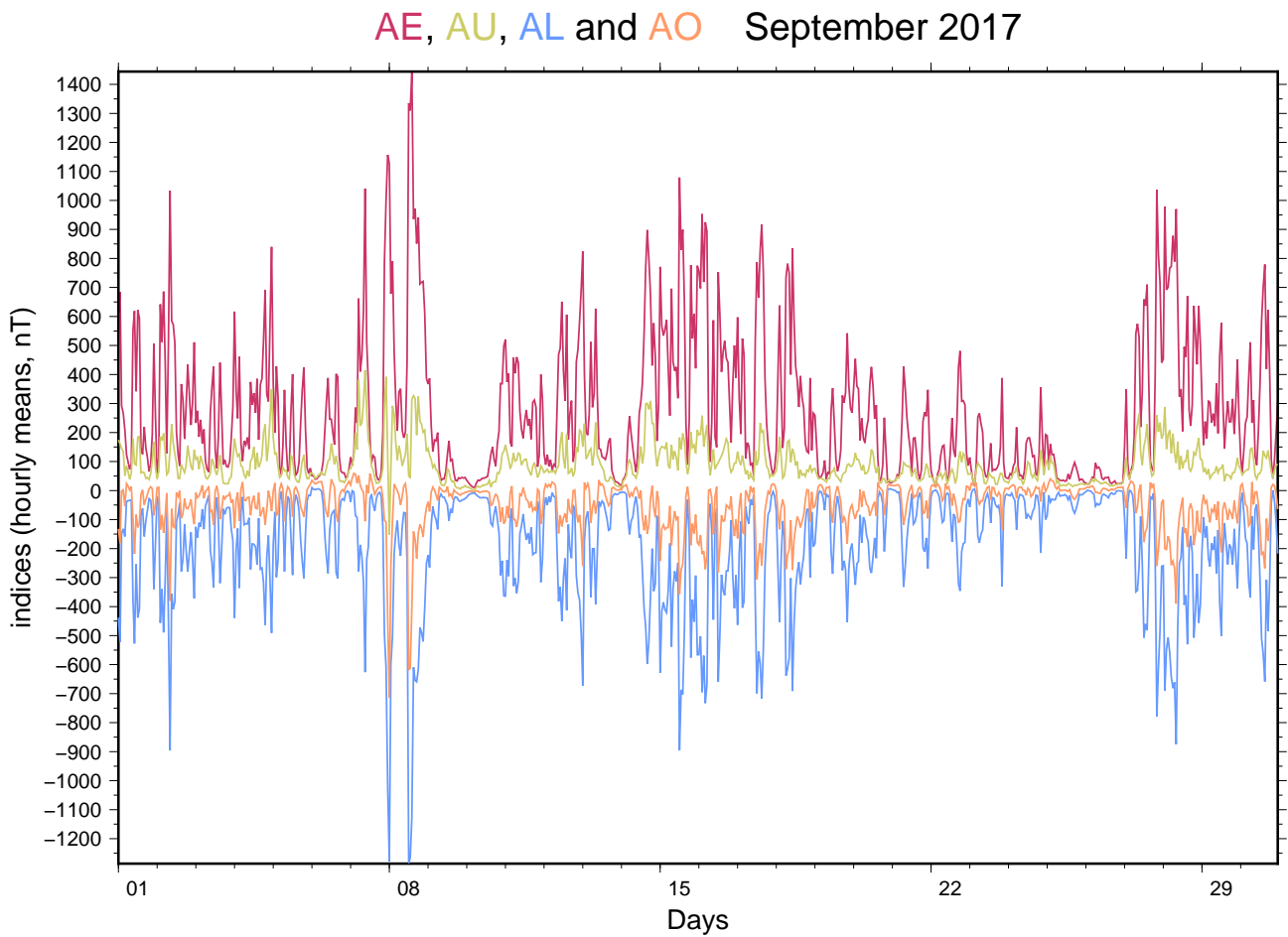
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2 IAGA Endorsed Geomagnetic Events (non-definitive values)

2.1 SC (SSC/SI) and SFE

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SC:

YYYY MM dd hh min	Rise-time	Amplitude (nT)				Qualification	Observatories	Type
2017 09 06 23 43	7 4 4 3 3	21.0	19.3	28.6	18.8	13.6 3 3 3 3 2	HON SJG MBO ABG KNY	SSC
2017 09 07 23 00	2 3 3 3 2	27.0	32.9	59.9	35.0	4.8 3 3 3 3 0	HON SJG MBO ABG KNY	SSC
2017 09 12 20 02	7 7 7 7 7	12.6	13.6	23.9	22.3	21.5 2 2 2 3 2	HON SJG MBO ABG KNY	SSC
2017 09 14 11 16	6 6 7 5 5	13.7	8.3	24.7	15.4	16.7 1 1 1 1 1	HON SJG MBO ABG KNY	SSC

SFE:

Month	DD HH MM	Observatories reporting sfe	Qualification
September	05 06 38	GNG	1
	06 11 56	WNG NGK EBR	3
	07 14 32	WNG NGK	2
	09 10 55	WNG NGK	1
	10 15 51	WNG NGK EBR	3

2.2 Classification of days

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Date	Aa	CK24	CK48	Ap	Q/D
2017-09-01	31	-	-	16	
2017-09-02	37	-	-	20	
2017-09-03	17	-	-	7	Q9A
2017-09-04	33	-	-	16	
2017-09-05	24	-	-	11	
2017-09-06	15	-	-	8	
2017-09-07	66	-	-	36	D5
2017-09-08	111	-	-	106	D1
2017-09-09	7	C	C	3	Q2
2017-09-10	9	K	-	4	Q7K
2017-09-11	23	-	-	11	
2017-09-12	32	-	-	17	
2017-09-13	23	-	-	14	
2017-09-14	40	-	-	22	
2017-09-15	56	-	-	34	D4
2017-09-16	43	-	-	28	
2017-09-17	26	-	-	14	
2017-09-18	38	-	-	20	
2017-09-19	14	-	-	7	Q10A
2017-09-20	19	-	-	8	
2017-09-21	12	C	C	5	Q6
2017-09-22	12	C	K	5	Q5
2017-09-23	11	C	C	4	Q4
2017-09-24	14	-	-	6	Q8
2017-09-25	8	C	C	4	Q3
2017-09-26	8	C	-	3	Q1
2017-09-27	58	-	-	37	D3
2017-09-28	68	-	-	51	D2
2017-09-29	24	-	-	11	
2017-09-30	26	-	-	14	

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 ($Ap < 20 \text{ nT}$).