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# INTERNATIONAL SERVICE OF GEOMAGNETIC INDICES

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## MONTHLY BULLETIN JANUARY 2018

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# 1 IAGA Endorsed Geomagnetic Indices (non-definitive values)

## 1.1 *aa*

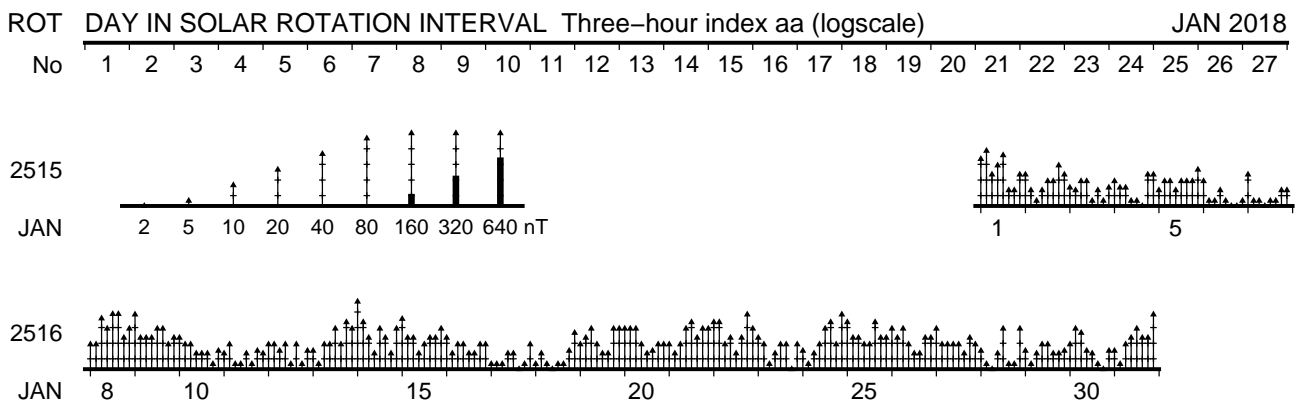
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*Ecole et Observatoire des Sciences de la Terre*

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## 1.2 *am*

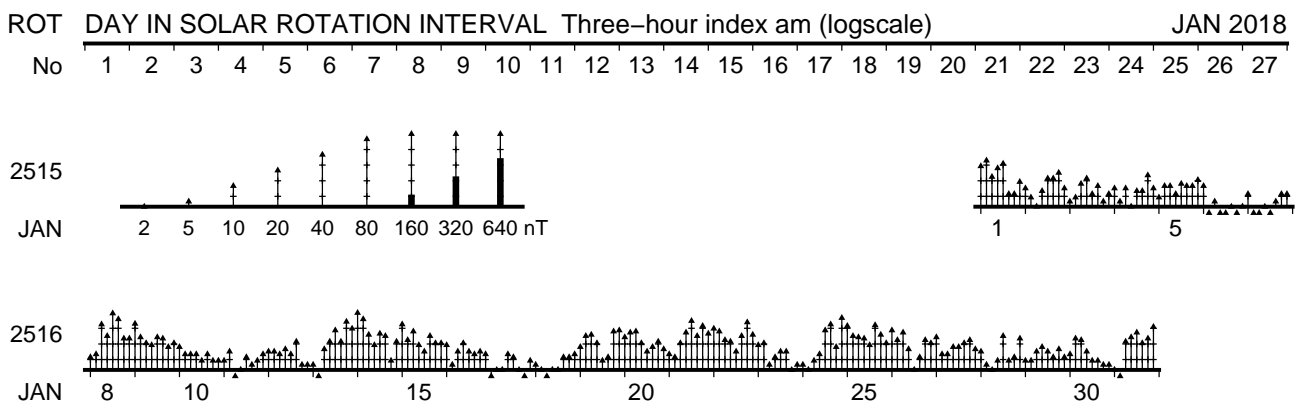
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### 1.3 $K_p$

**ISGI Collaborating Institute:**

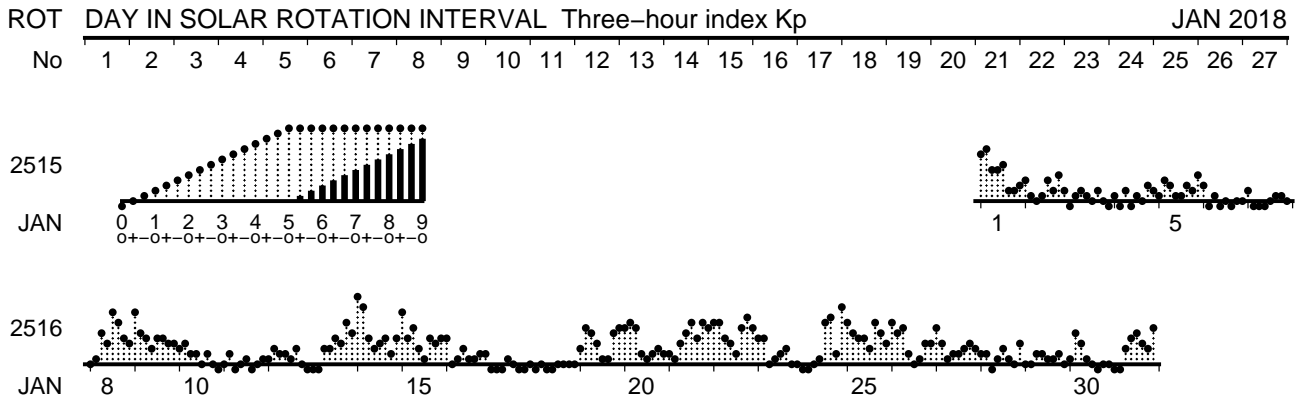
*Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum*

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## 1.4 *Dst*

### ISGI Collaborating Institute:

*World Data Center for Geomagnetism, Kyoto*

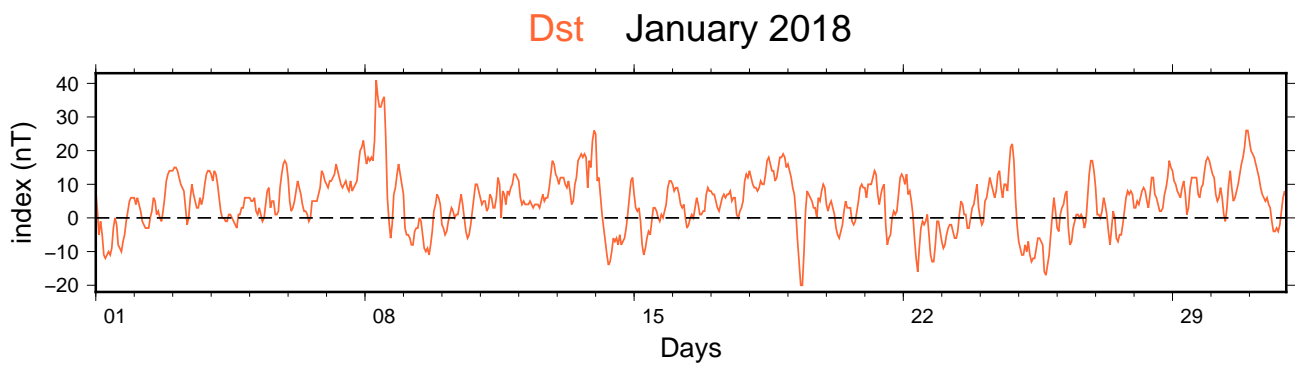
*Data Analysis Center for Geomagnetism and Space Magnetism*

*Graduate School of Science, Kyoto University*

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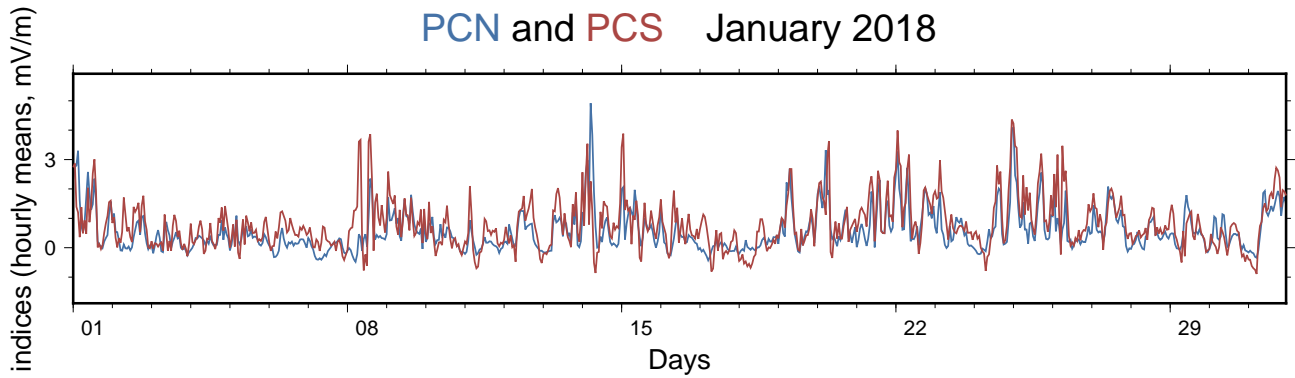


## 1.5 PC

### ISGI Collaborating Institutes:

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## 1.6 *AE*

### ISGI Collaborating Institute:

*World Data Center for Geomagnetism, Kyoto*

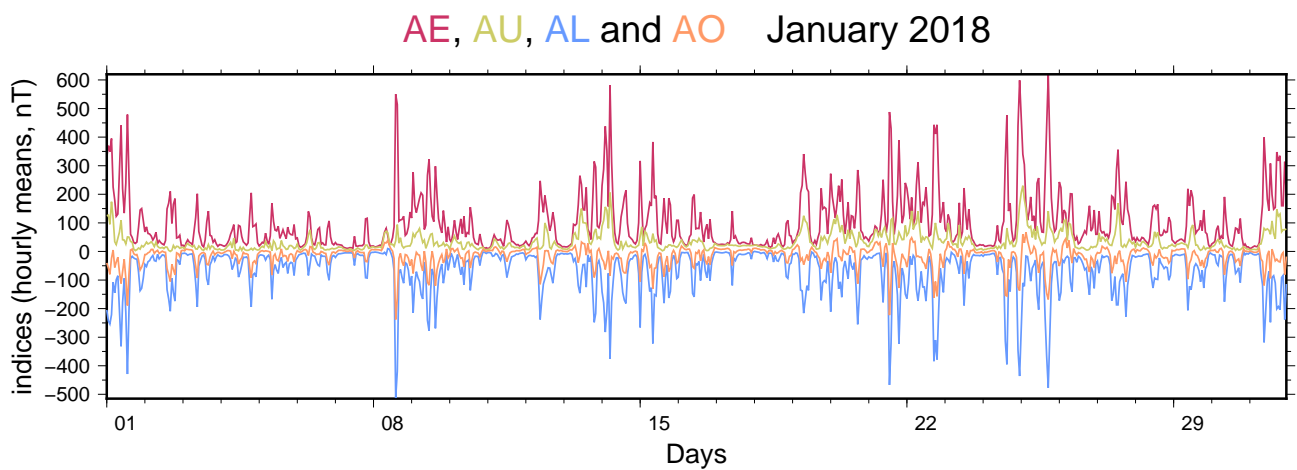
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## 2 IAGA Endorsed Geomagnetic Events (non-definitive values)

### 2.1 SC (SSC/SI) and SFE

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SC:

YYYY MM dd hh min	Rise-time	Amplitude (nT)				Qualification	Observatories	Type
2018 01 08 06 46	4 5 7 6 6	17.4	14.1	20.4	28.5	22.9	3 3 3 3 3 HON SJG MBO ABG KNY	SSC

SFE:

Month	DD HH MM	Observatories reporting sfe	Qualification
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January	NONE		

## 2.2 Classification of days

### ISGI Collaborating Institutes:

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 5, rue René Descartes  
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 Contact : H.-J. Linthe and J. Matzka  
 <kp\_index@gfz-potsdam.de>

Date	Aa	CK24	CK48	Ap	Q/D
2018-01-01	24	-	-	10	D3*
2018-01-02	13	-	-	4	
2018-01-03	9	C	C	2	Q6
2018-01-04	9	C	C	3	Q8
2018-01-05	12	C	C	4	
2018-01-06	6	C	C	2	Q5
2018-01-07	7	C	K	2	Q3
2018-01-08	27	-	-	9	
2018-01-09	21	-	-	9	D5*
2018-01-10	10	C	C	3	
2018-01-11	8	C	C	2	Q4
2018-01-12	10	C	C	3	Q9
2018-01-13	16	-	-	6	
2018-01-14	26	-	-	13	D1*
2018-01-15	18	-	-	9	
2018-01-16	11	C	C	4	
2018-01-17	6	C	C	1	Q2
2018-01-18	7	C	C	1	Q1
2018-01-19	16	-	-	7	
2018-01-20	16	-	-	7	
2018-01-21	19	-	-	9	
2018-01-22	23	-	-	11	D2*
2018-01-23	10	C	C	4	
2018-01-24	18	-	-	9	
2018-01-25	19	-	-	9	D4*
2018-01-26	16	-	-	7	
2018-01-27	14	-	C	6	
2018-01-28	10	K	K	3	Q10
2018-01-29	9	C	C	3	Q7
2018-01-30	11	C	C	3	
2018-01-31	18	-	-	6	



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