

---

# INTERNATIONAL SERVICE OF GEOMAGNETIC INDICES

---

## MONTHLY BULLETIN FEBRUARY 2017

---

This Bulletin is freely offered to interested Scientists thanks to the support of the hosting laboratory EOST and of French Organisations of Scientific Research (CNRS, INSU, BCMT). Special thanks are due to contributors (ISGI Collaborating Institutes) for providing the here published geomagnetic data within shortly possible delay.

## Contents

<b>1</b>	<b>IAGA Endorsed Geomagnetic Indices</b> (non-definitive values)	<b>2</b>
1.1	<i>aa</i> . . . . .	2
1.2	<i>am</i> . . . . .	2
1.3	<i>Kp</i> . . . . .	3
1.4	<i>Dst</i> . . . . .	4
1.5	<i>PC</i> . . . . .	5
1.6	<i>AE</i> . . . . .	6
<b>2</b>	<b>IAGA Endorsed Geomagnetic Events</b> (non-definitive values)	<b>7</b>
2.1	<i>SSC</i> and <i>SFE</i> . . . . .	7
2.2	Classification of days . . . . .	8
2.2.1	Truly magnetically very quiet (C) and quiet (K) periods (from <i>aa</i> ) . . . . .	8
2.2.2	10 international quietest days (Q1-10) and 5 most disturbed days (D1-5)	9

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

## 1.1 *aa*

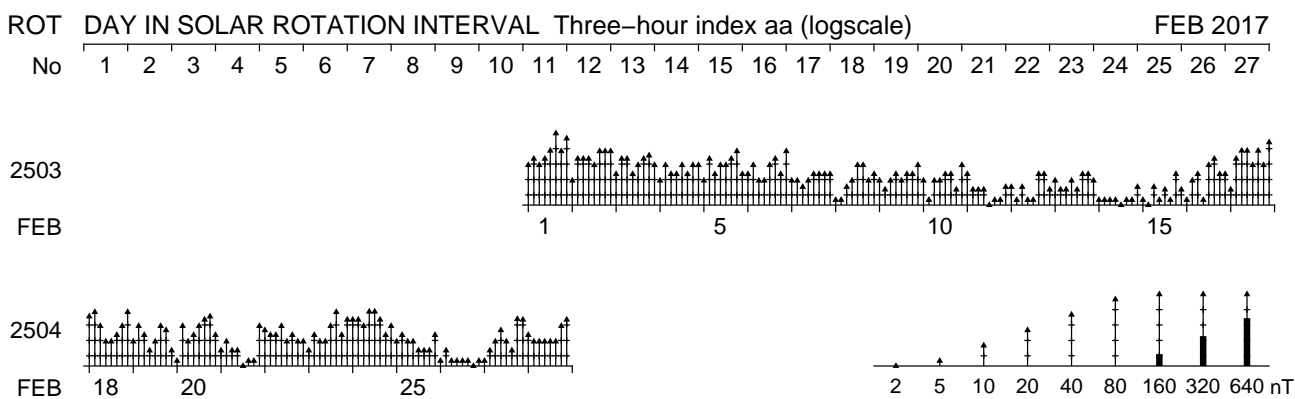
### ISGI Collaborating Institute:

*Ecole et Observatoire des Sciences de la Terre*

*5, rue René Descartes*

*67084 Strasbourg Cedex - FRANCE*

Contact: A. Chambodut <[isgi@unistra.fr](mailto:isgi@unistra.fr)>



## 1.2 *am*

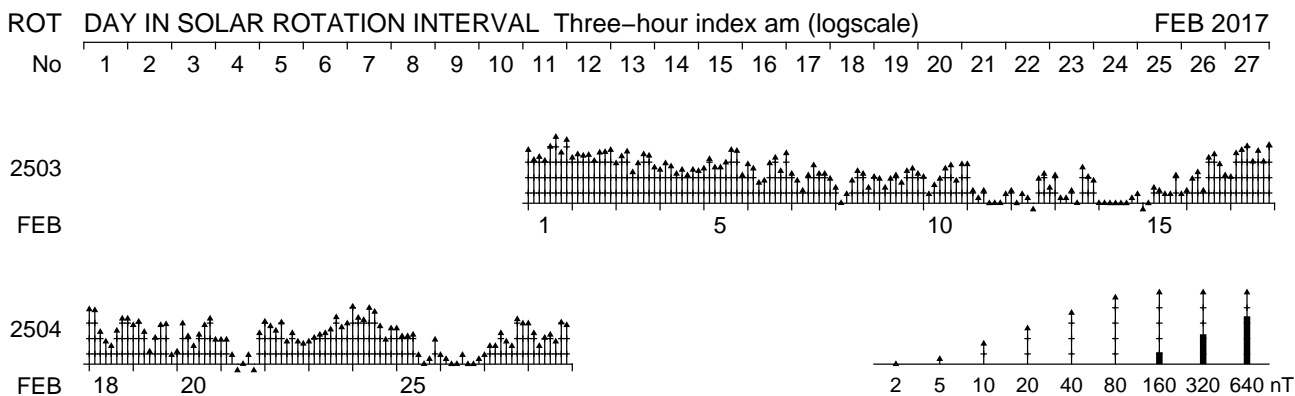
### ISGI Collaborating Institute:

*Ecole et Observatoire des Sciences de la Terre*

*5, rue René Descartes*

*67084 Strasbourg Cedex - FRANCE*

Contact: A. Chambodut <[isgi@unistra.fr](mailto:isgi@unistra.fr)>



### 1.3 $K_p$

#### ISGI Collaborating Institute:

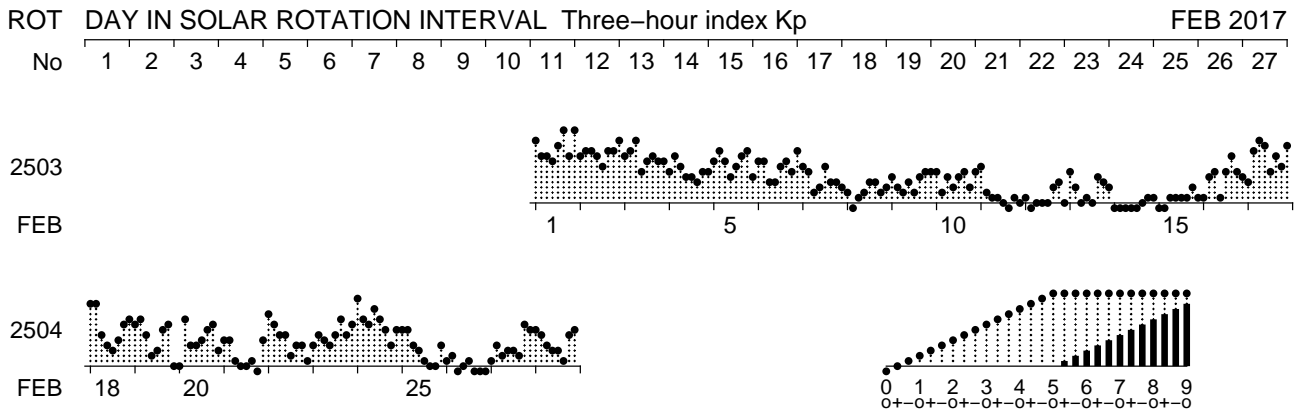
*Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum*

*Adolf-Schmidt-Observatorium*

*Lindenstr. 7*

*14823 Niemegk - GERMANY*

*Contact: J. Matzka <kp\_index@gfz-potsdam.de>*



## 1.4 *Dst*

### ISGI Collaborating Institute:

*World Data Center for Geomagnetism, Kyoto*

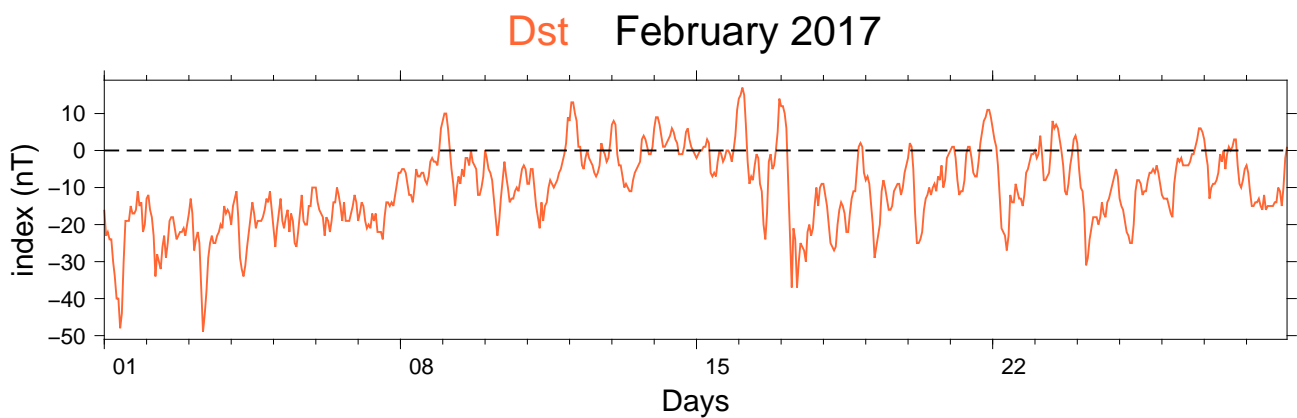
*Data Analysis Center for Geomagnetism and Space Magnetism*

*Graduate School of Science, Kyoto University*

*Kitashirakawa-Oiwake Cho, Sakyo-ku*

*Kyoto 606-8502 - JAPAN*

*Contact: M. Nosé <nose@kugi.kyoto-u.ac.jp>*

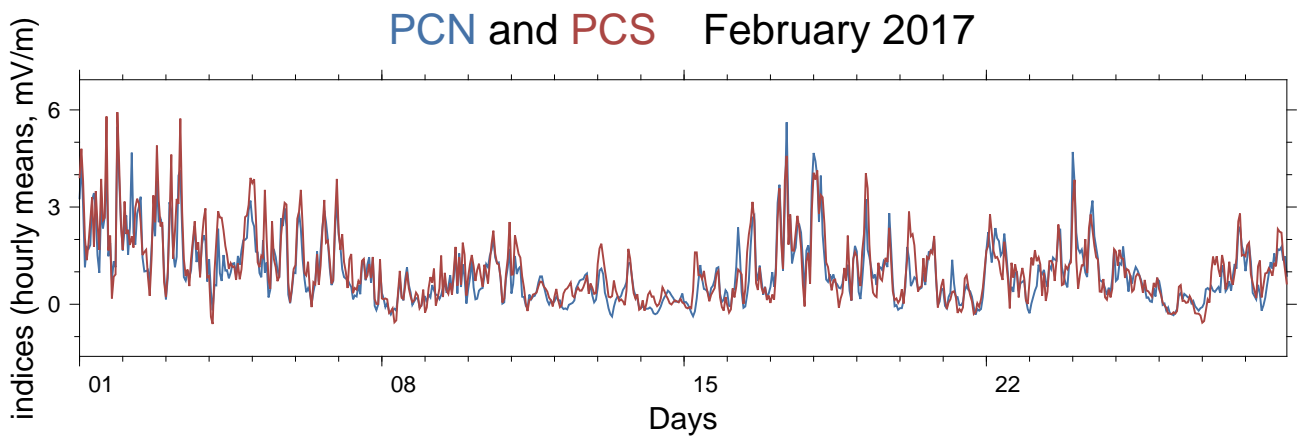


## 1.5 PC

### ISGI Collaborating Institutes:

*Arctic and Antarctic Research Institute  
Department of geophysics, 38 Bering str.  
St.Petersburg, 199397 - RUSSIAN FEDERATION  
Contact: O. Troshichev <olegtr@aari.nw.ru>  
and A. Janzhura <alex.j@aari.nw.ru>*

*World Data Center for Geomagnetism, Copenhagen  
DTU Space, National Space Institute  
Elektrovej, building 327  
DK-2800 Kgs. Lyngby - DENMARK  
N. Olsen <nio@space.dtu.dk>*



## 1.6 *AE*

### ISGI Collaborating Institute:

*World Data Center for Geomagnetism, Kyoto*

*Data Analysis Center for Geomagnetism and Space Magnetism*

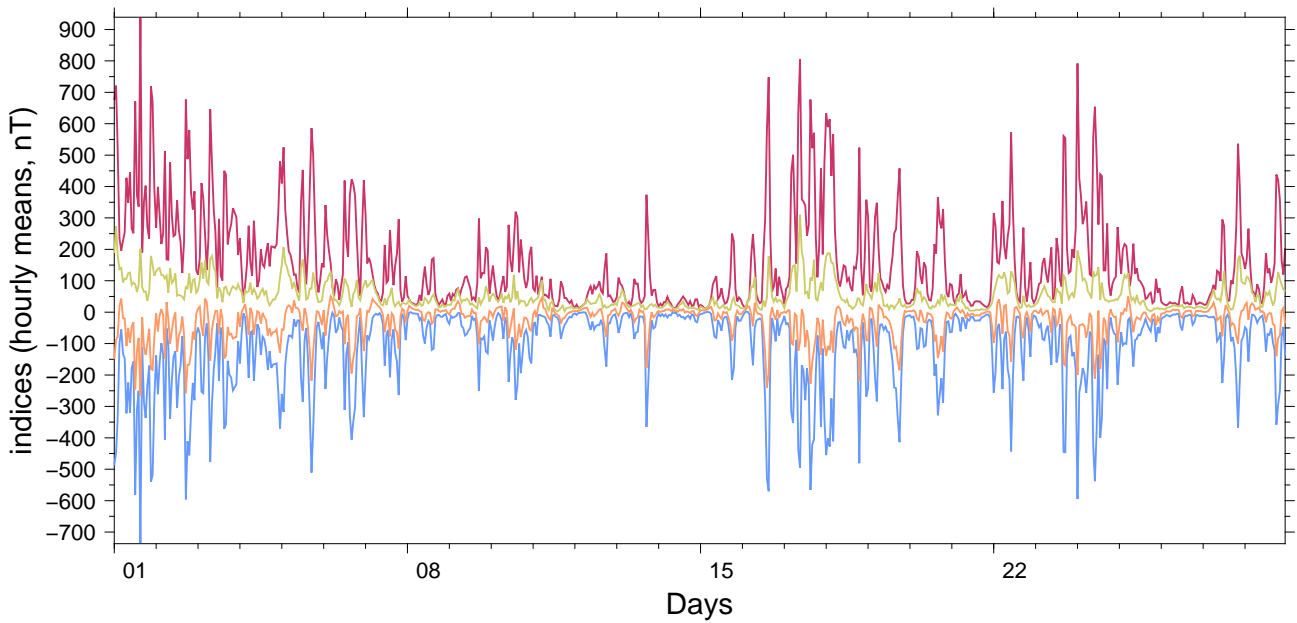
*Graduate School of Science, Kyoto University*

*Kitashirakawa-Oiwake Cho, Sakyo-ku*

*Kyoto 606-8502 - JAPAN*

Contact : M. Nosé <nose@kugi.kyoto-u.ac.jp>

### AE, AU, AL and AO February 2017



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

### 2.1 *SSC* and *SFE*

**ISGI Collaborating Institute:**

*Observatori de l'Ebre*

*Horta Alta, 38*

*43520 Roquetes - SPAIN*

*Contact : J. J. Curto <jjcurto@obsebre.es>*

SSC:

NONE

SFE:

NONE

## 2.2 Classification of days

### ISGI Collaborating Institutes:

*Ecole et Observatoire des Sciences de la Terre*  
 5, rue René Descartes  
 67084 Strasbourg Cedex - FRANCE  
 Contact: A. Chambodut <isgi@unistra.fr>

*Helmholtz-Zentrum Potsdam Deutsches Geo-  
 Forschungszentrum*  
*Adolf-Schmidt-Observatorium*  
 Lindenstr. 7  
 14823 Niemegk - GERMANY  
 Contact : H.-J. Linthe and J. Matzka  
 <kp\_index@gfz-potsdam.de>

Date	Aa	CK24	CK48	Ap	Q/D
2017-02-01	48	-	-	28	D1
2017-02-02	33	-	-	21	D2
2017-02-03	27	-	-	18	D4*
2017-02-04	20	-	-	10	
2017-02-05	25	-	-	15	
2017-02-06	23	-	-	12	
2017-02-07	14	-	-	7	
2017-02-08	13	-	-	4	Q5
2017-02-09	15	-	-	6	Q10
2017-02-10	13	-	-	7	
2017-02-11	8	C	C	4	Q6
2017-02-12	9	C	C	3	Q4
2017-02-13	12	C	C	5	Q8
2017-02-14	5	C	C	1	Q1
2017-02-15	7	C	C	2	Q3
2017-02-16	16	-	-	8	
2017-02-17	37	-	-	19	D3*
2017-02-18	27	-	-	16	
2017-02-19	16	-	-	10	
2017-02-20	21	-	-	9	
2017-02-21	9	C	-	4	Q7
2017-02-22	16	-	-	9	
2017-02-23	21	-	-	10	
2017-02-24	32	-	-	18	D5*
2017-02-25	12	C	-	6	Q9K
2017-02-26	5	C	C	2	Q2
2017-02-27	16	-	K	7	
2017-02-28	17	-	-	8	

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