

PROVISIONAL GEOMAGNETIC
DATA PLOTS
NO.32

(July - December, 2005)

January 2006

DATA ANALYSIS CENTER FOR GEOMAGNETISM
AND SPACE MAGNETISM
GRADUATE SCHOOL OF SCIENCE,
KYOTO UNIVERSITY

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PREFACE

This booklet contains provisional plots of the geomagnetic data for July - December, 2005 with the Kp index and the international sunspot number. One minute values of the horizontal (or the northward) component are plotted after subtracting the monthly mean of the five-quiet days. The purpose of this booklet is to give the information of world-wide geomagnetic disturbances with high-time resolution as early as possible. Hence the provisional data without base-line adjustment or noise reduction (marked with * in Table 1) are included. There still remain artificial noises on the plots though we tried to eliminate them. Users should be careful on these points, and the plots in this booklet should not be used in other publications.

These data were kindly provided through the following organizations.

- (1) World Data Center-A for STP and The U.S. Geological Survey.
- (2) Leirvogur Magnetic Observatory, University of Iceland.
- (3) Valentia Observatory of Meteorological Service.
- (4) Kakioka Magnetic Observatory.
- (5) Telecommunication Training Institute.
- (6) Hermanus Magnetic Observatory.
- (7) Swedish Institute of Space Physics in Kiruna.
- (8) Chambon-la-Foret Magnetic Observatory.
- (9) Danish Meteorological Institute.
- (10) Institute de Physique du Globe de Strasbourg.
- (11) Indian Institute of Geomagnetism.
- (12) Instituto Geofisico del Peru.
- (13) Institute of Geophysics, China Earthquake Administration and Xinjiang Province Seismological Bureau
- (14) Institute of Geophysics, China Earthquake Administration, and Yinchuan Geomagnetic Observatory

The distribution and the information of the stations are shown in Figure 1 and Table 1, respectively. The Kp index was provided by GeoForschungsZentrum Potsdam. The international sunspot number is provided by the Sunspot Index Data Center, Brussels.

The Post-Script files of these plots for the latest issue are available from WWW home page

<http://swdcwww.kugi.kyoto-u.ac.jp/wdc/Sec3.html#ARCH>

or from anonymous FTP directory at our data center. The IP address and the directory are as follows:

IP address: 130.54.59.253 (swdcdb)

Directory: anonymous (Change directory to './data/pplot' after logging in.)

Each file is compressed and has a name YYMMD1-D2.ps.gz (for example, 050823-24.ps.gz for August 23-24, 2005). Each file contains the plot of the each page of this booklet. Files should be transferred in binary mode and uncompressed.

For further information or the digital data, please contact

World Data Center for Geomagnetism, Kyoto
 Graduate school of Science,
 Kyoto University
 Kyoto 606-8502, Japan.

Telephone: 81-75-753-3929
 Facsimile: 81-75-722-7884
 E-mail: iyemori@kugi.kyoto-u.ac.jp
 WWW: <http://swdcwww.kugi.kyoto-u.ac.jp/>

Table 1. List of stations used in this booklet. The 17 stations among them are used in the plots.

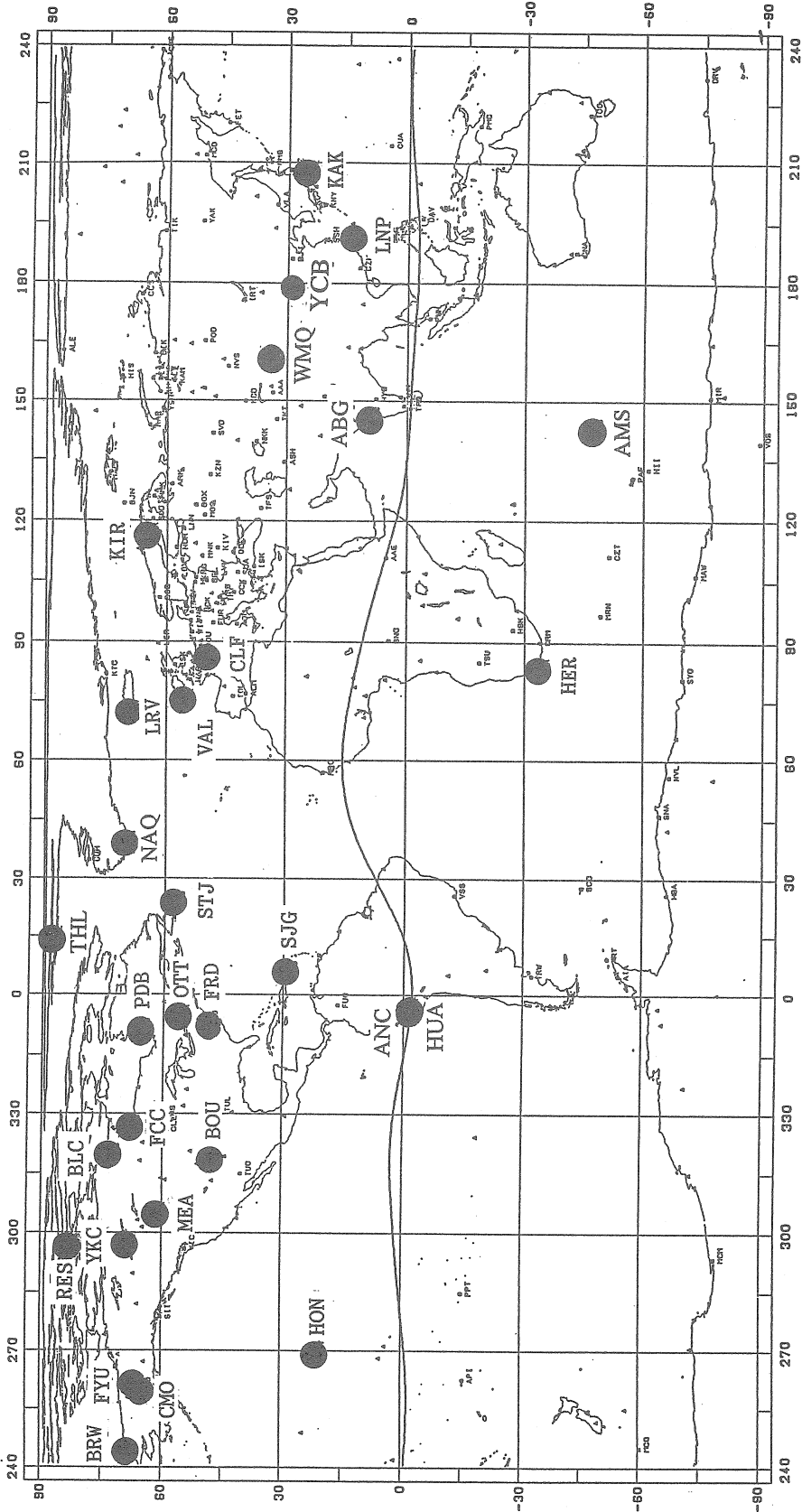
STATION NAME	ABB CODE	ORG No.	GEOGRAPHIC		GEOMAGNETIC		INVARIANT PLOT	
			LAT.	LONG.	LAT.	LONG.	LAT.	SCALE
*Tule	THL	9	76.6	291.2	87.2	12.4	85.9	500nT/div
*Resolute Bay	RES	1	74.7	265.1	83.1	296.0	83.9	"
*Baker Lake	BLC	1	64.3	264.0	73.7	319.2	74.6	"
*Narssarsuaq	NAQ	9	61.2	314.6	70.6	38.7	67.5	"
Leirvogur	LRV	2	64.2	338.3	69.7	72.0	65.7	"
*Yellowknife	YKC	1	62.5	245.5	69.1	296.6	69.8	"
*Barrow	BRW	1	71.3	203.3	69.1	243.7	69.6	"
*Fort Churchill	FCC	1	58.8	265.9	68.5	326.1	69.6	"
*Pos. de la Baleine	PDB	1	55.3	282.3	66.2	350.3	66.8	"
Kiruna	KIR	7	67.8	20.4	65.1	116.2	64.5	"
*College	CMO	1	64.9	212.2	65.1	259.2	64.8	"
*St. Johns	STJ	1	47.6	307.3	57.9	23.4	55.6	100nT/div
Valentia	VAL	3	51.9	349.8	56.2	74.8	51.0	"
*San Juan	SJG	1	18.4	293.9	29.1	5.2	32.5	"
*Fredericksburg	FRD	1	38.2	282.6	49.1	352.2	50.7	"
*Boulder	BOU	1	40.1	254.8	48.7	319.0	49.1	"
*Honolulu	HON	1	21.3	202.0	21.5	268.6	20.2	"
Kakioka	KAK	4	36.2	140.2	26.6	207.8	25.9	"
Lunping	LNP	5	25.0	121.2	14.2	191.3	7.6	"
Martin de Vivies	AMS	10	-37.8	77.6	-46.9	142.8	48.6	"
Chambon-la-Foret	CLF	8	48.0	2.3	50.1	85.7	45.7	"
*Hermanus	HER	6	-34.4	19.2	-33.9	83.4	43.6	"
*Urumqi	WMQ	13	43.8	87.7	33.7	162.0	36.5	"
*Yinchuan	YCB	14	38.5	106.3	28.5	178.1	29.0	"
*Alibag	ABG	11	18.6	72.9	9.9	145.8	----	"
*Ancon	ANC	12	-11.8	282.9	-1.1	354.4	Near Mag. Eq.	"
*Huancayo	HUA	12	-12.1	284.7	-1.4	356.2	Mag. Equator	"

*: Provisional data

Acknowledgments:

The compilation of the geomagnetic data and publication of this booklet have been supported in part by grant 127008 and 178061 under the Japan Society for Promotion of science (JSPS).

DISTRIBUTION OF GEOMAGNETIC OBSERVATORIES



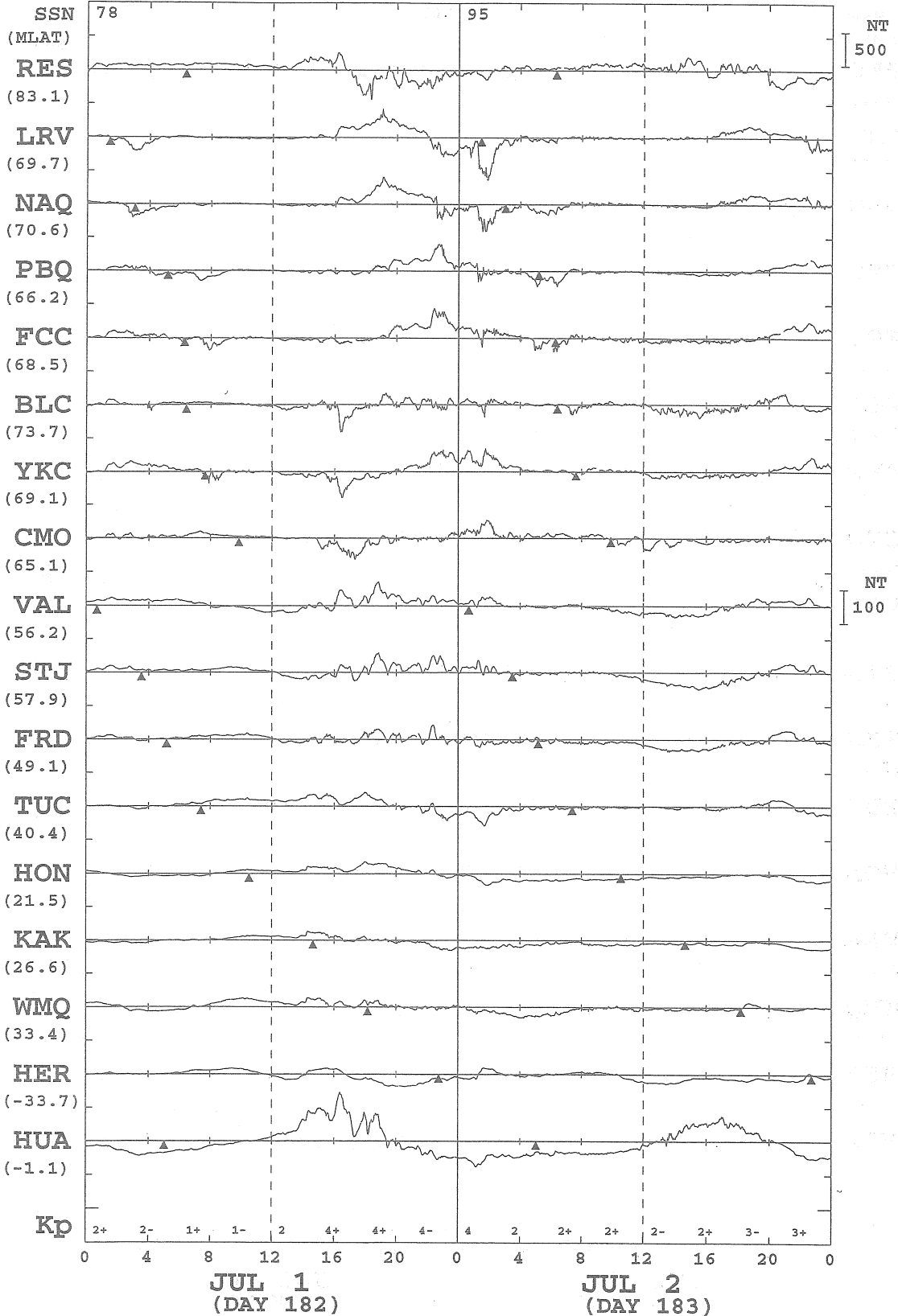
GEOMAGNETIC COORDINATE (1985.0)

— DIP EQUATOR AT 100 KM ALTITUDE

Fig.1 Data are obtained at the observatories shown by the solid circles.
15 stations among those shown in this figure are used for the plots.

July - December, 2005

2005 H OR X-COMPONENT Δ : LOCAL MIDNIGHT

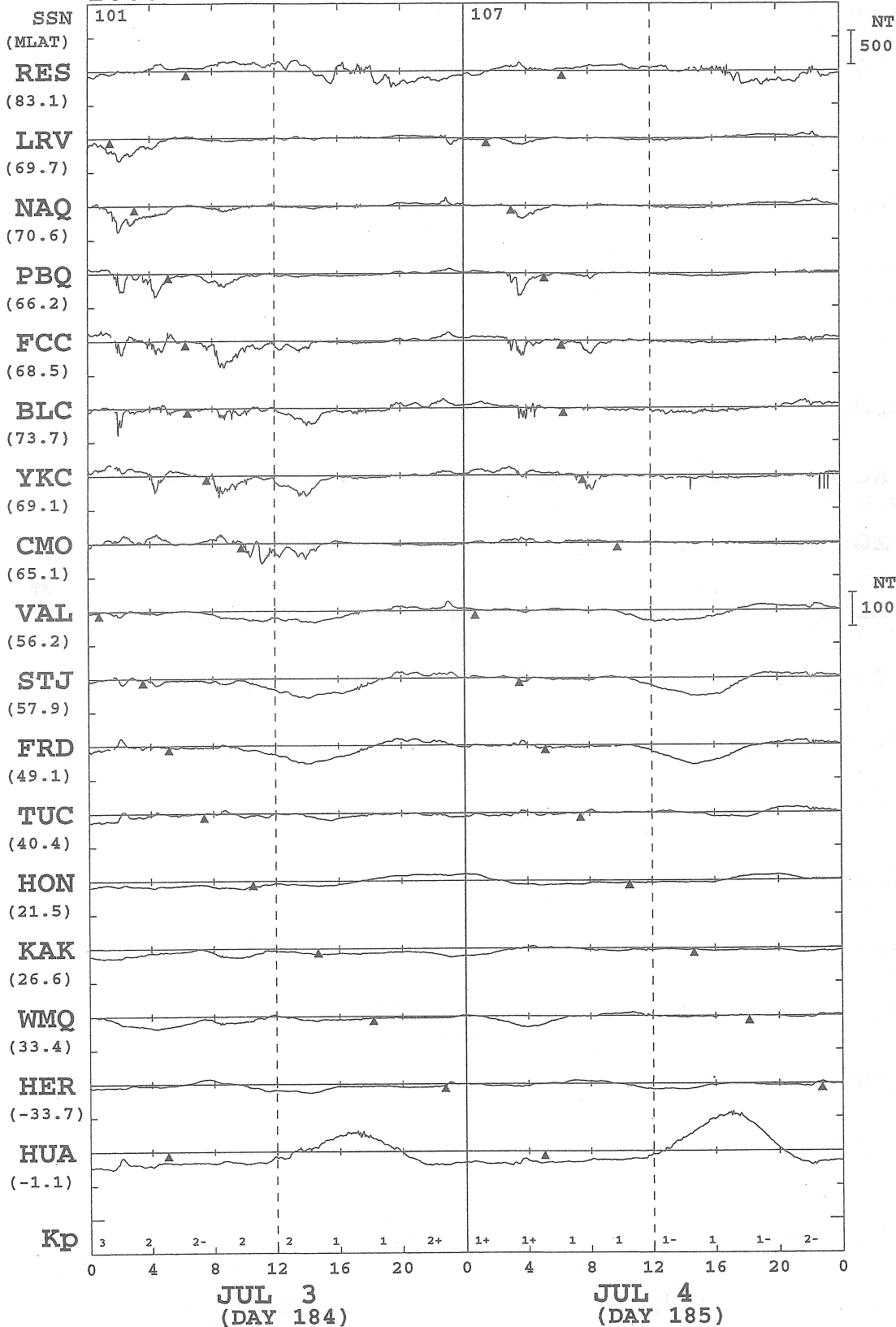


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

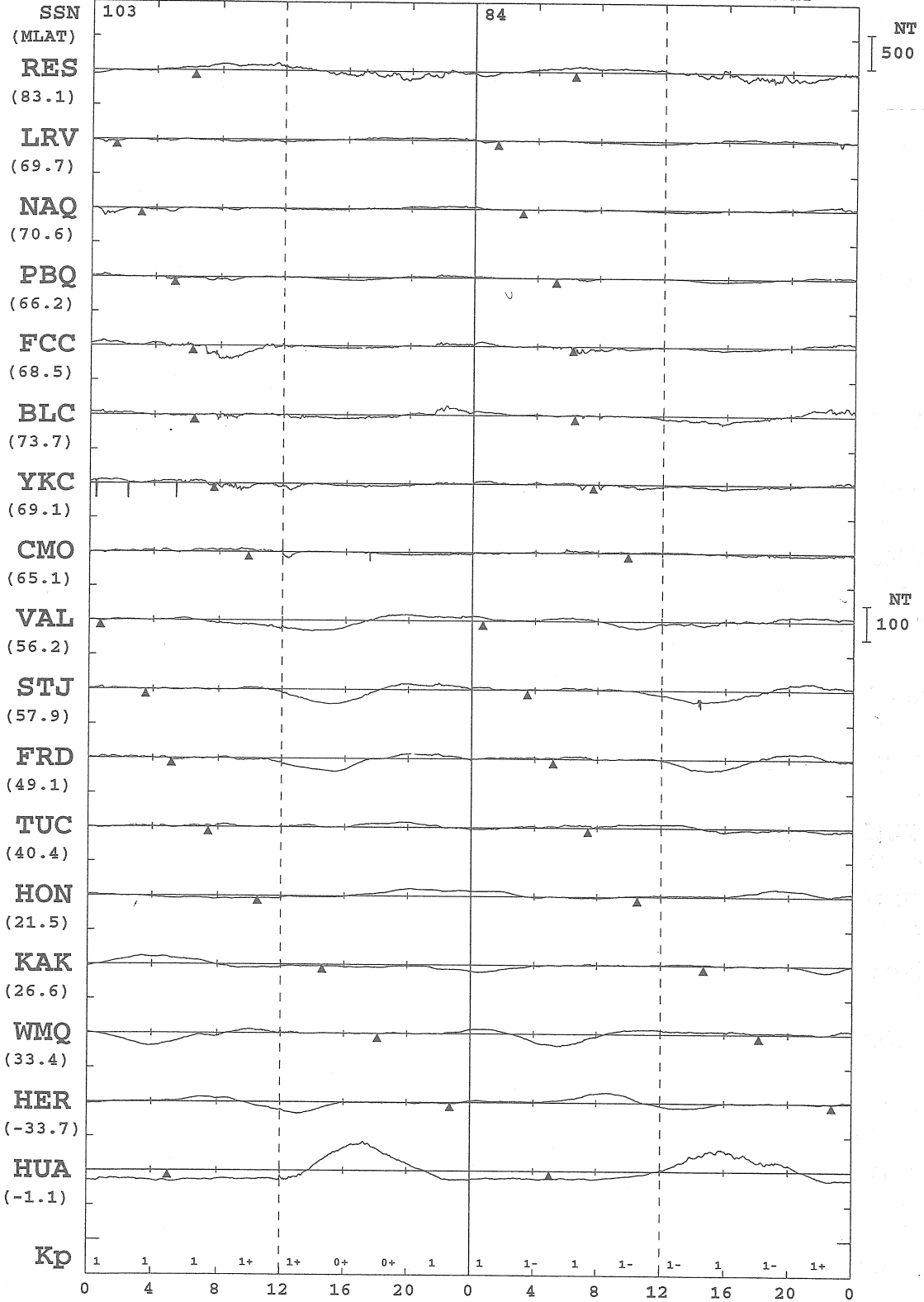


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

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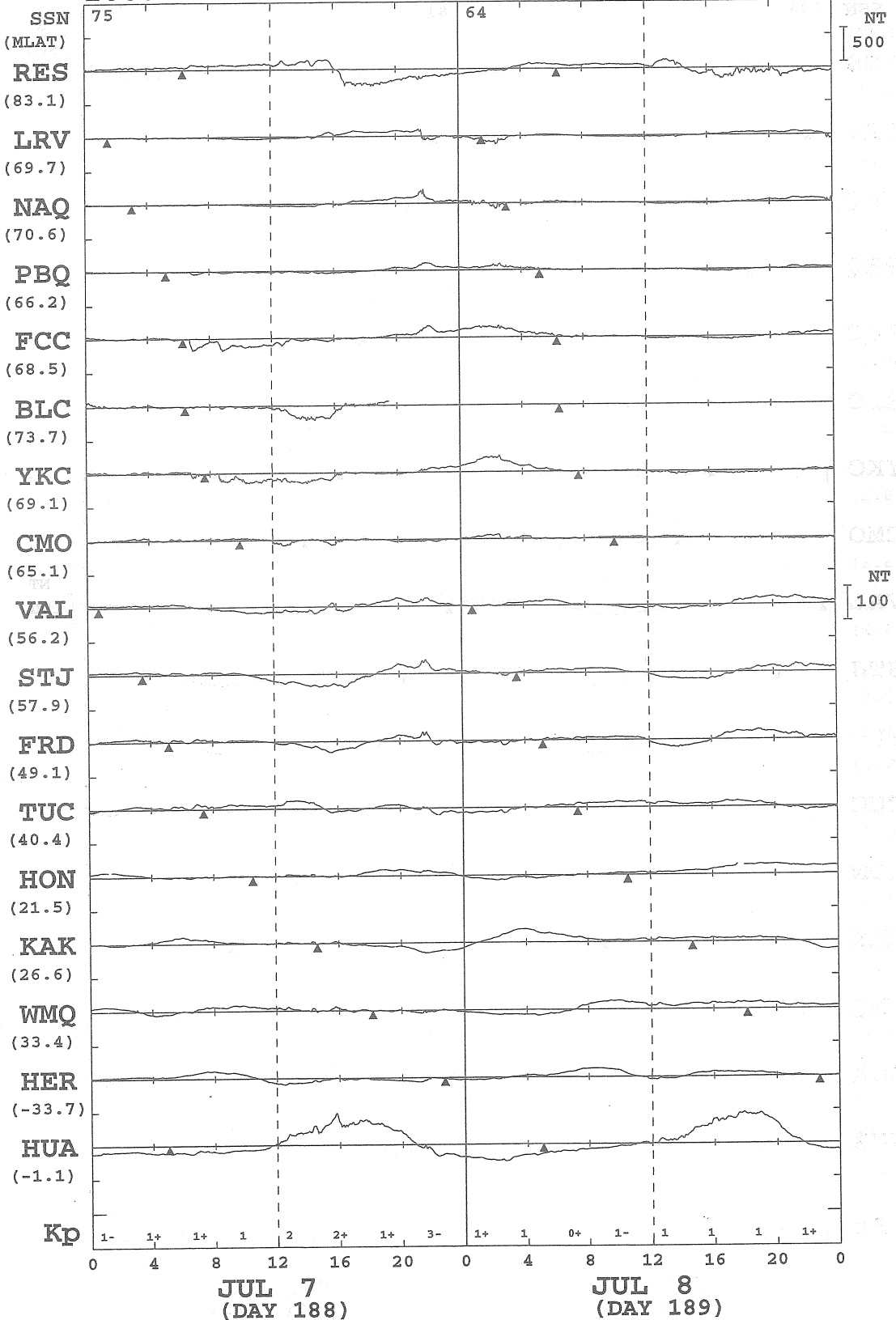
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

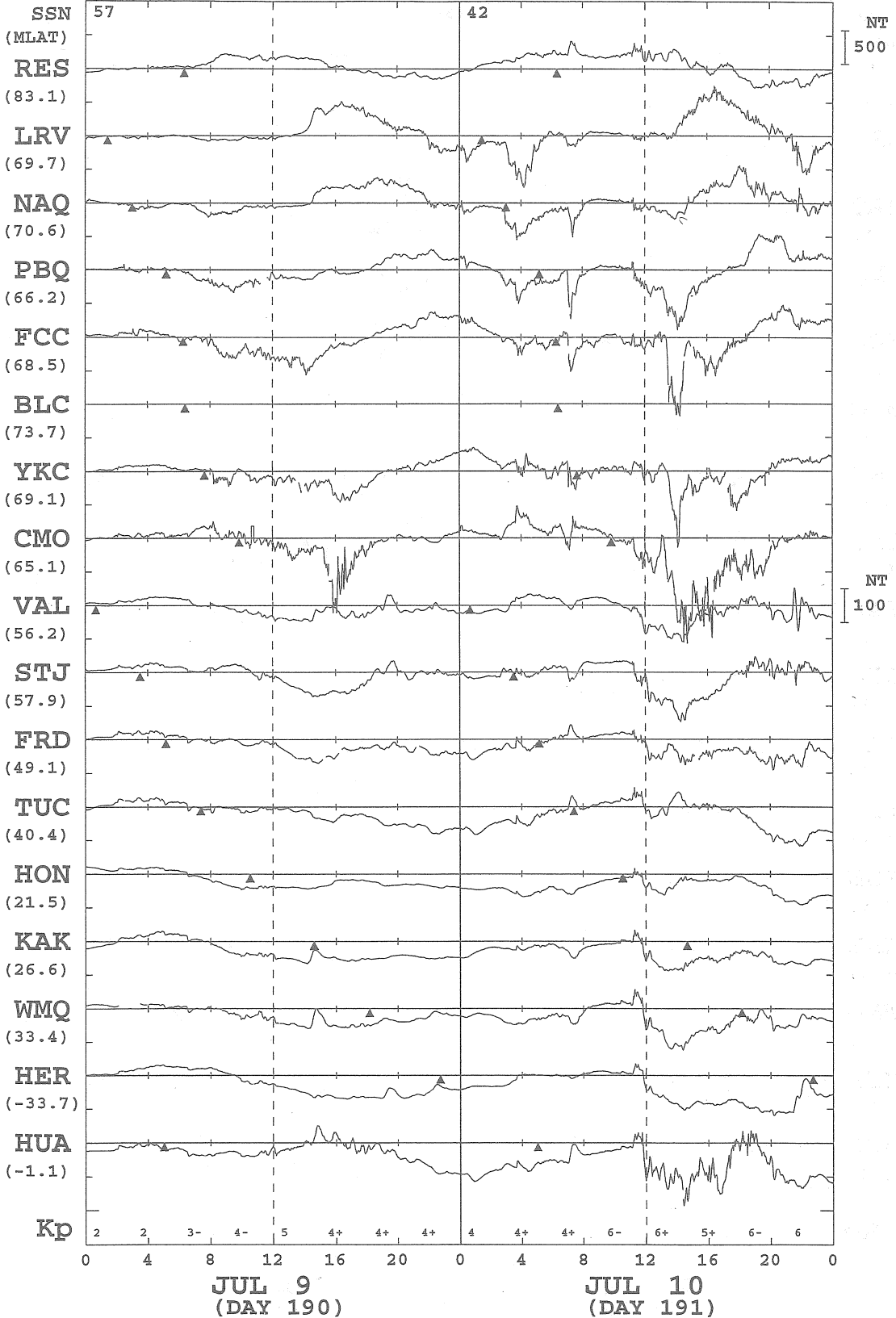


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

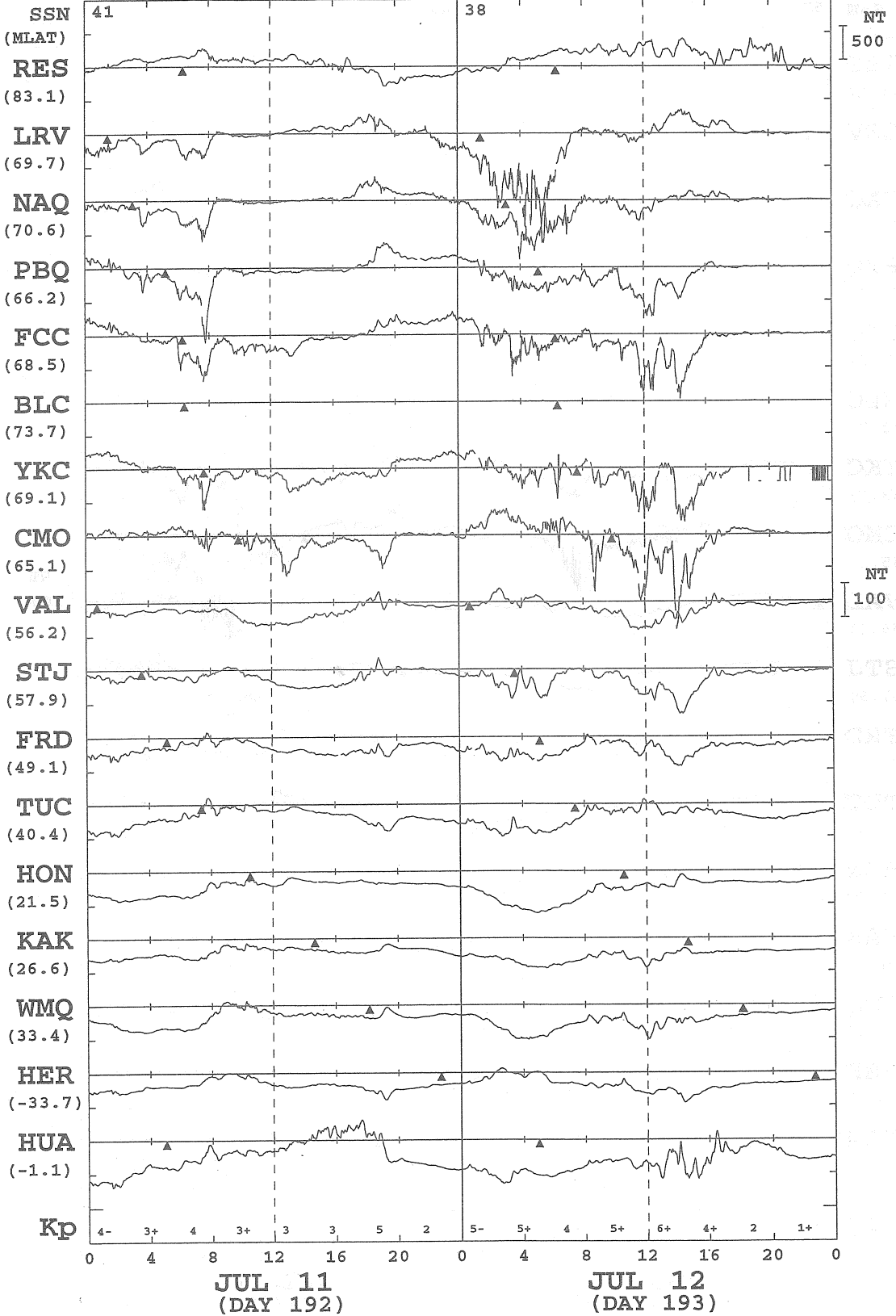
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT Δ : LOCAL MIDNIGHT

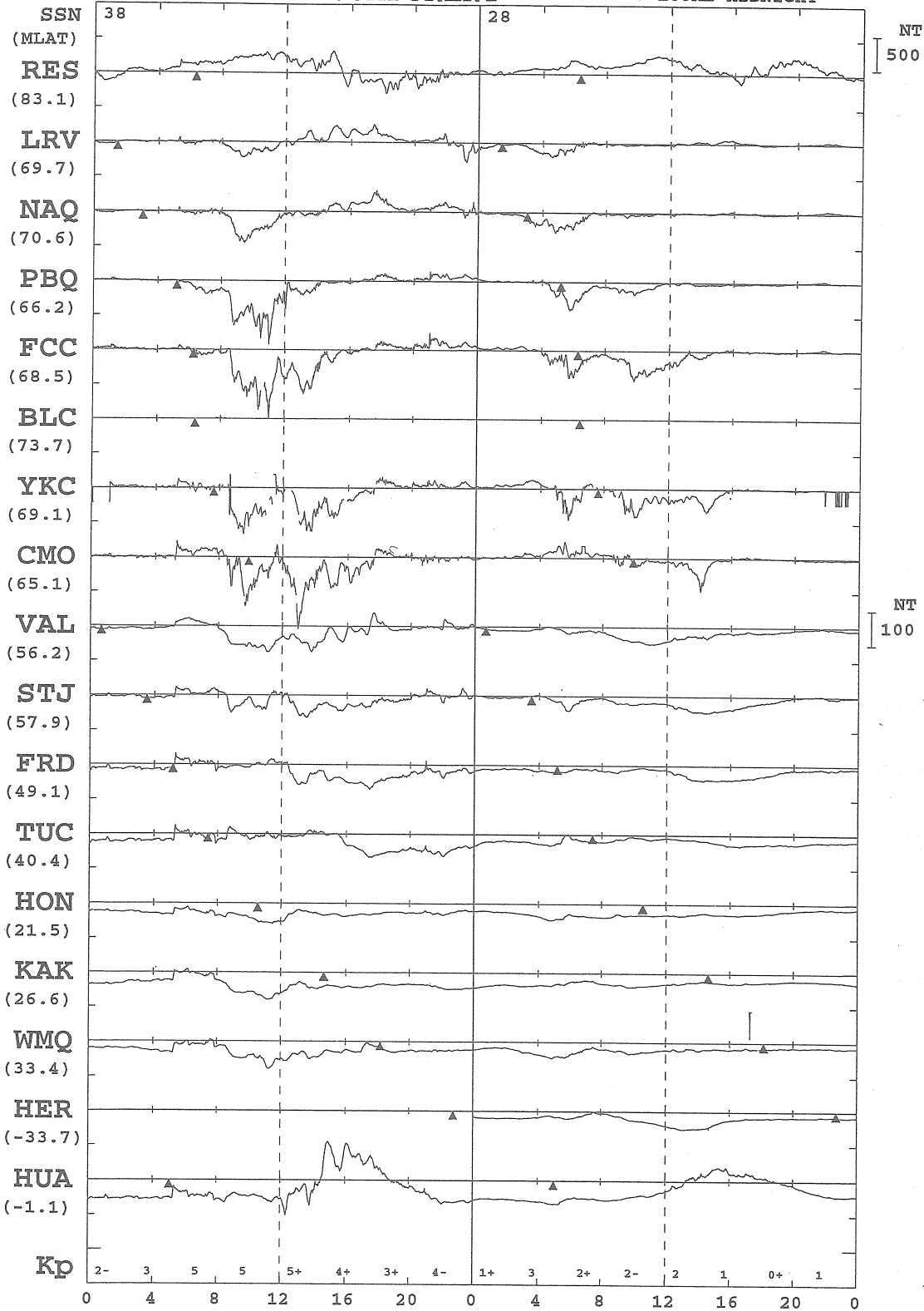


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

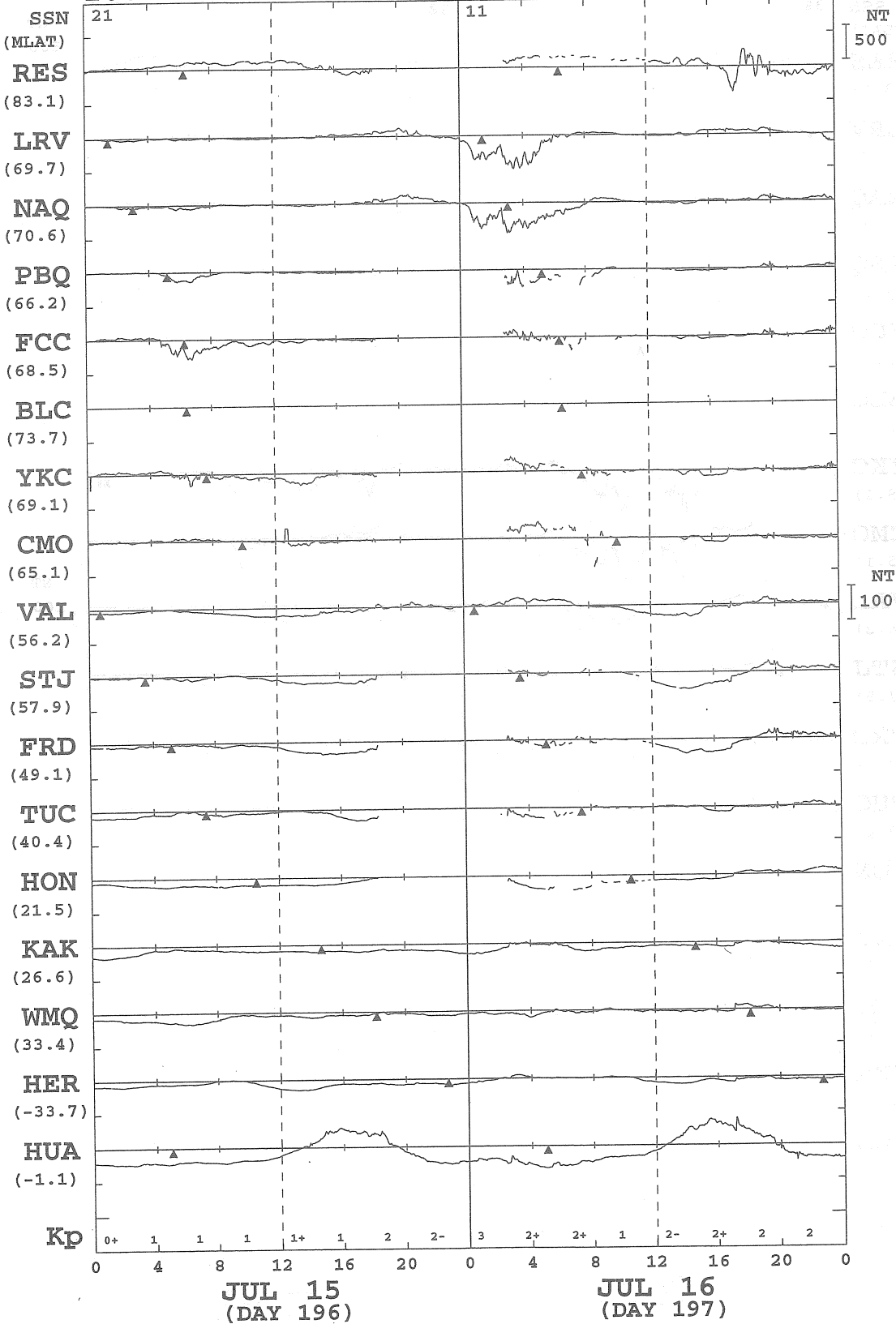
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

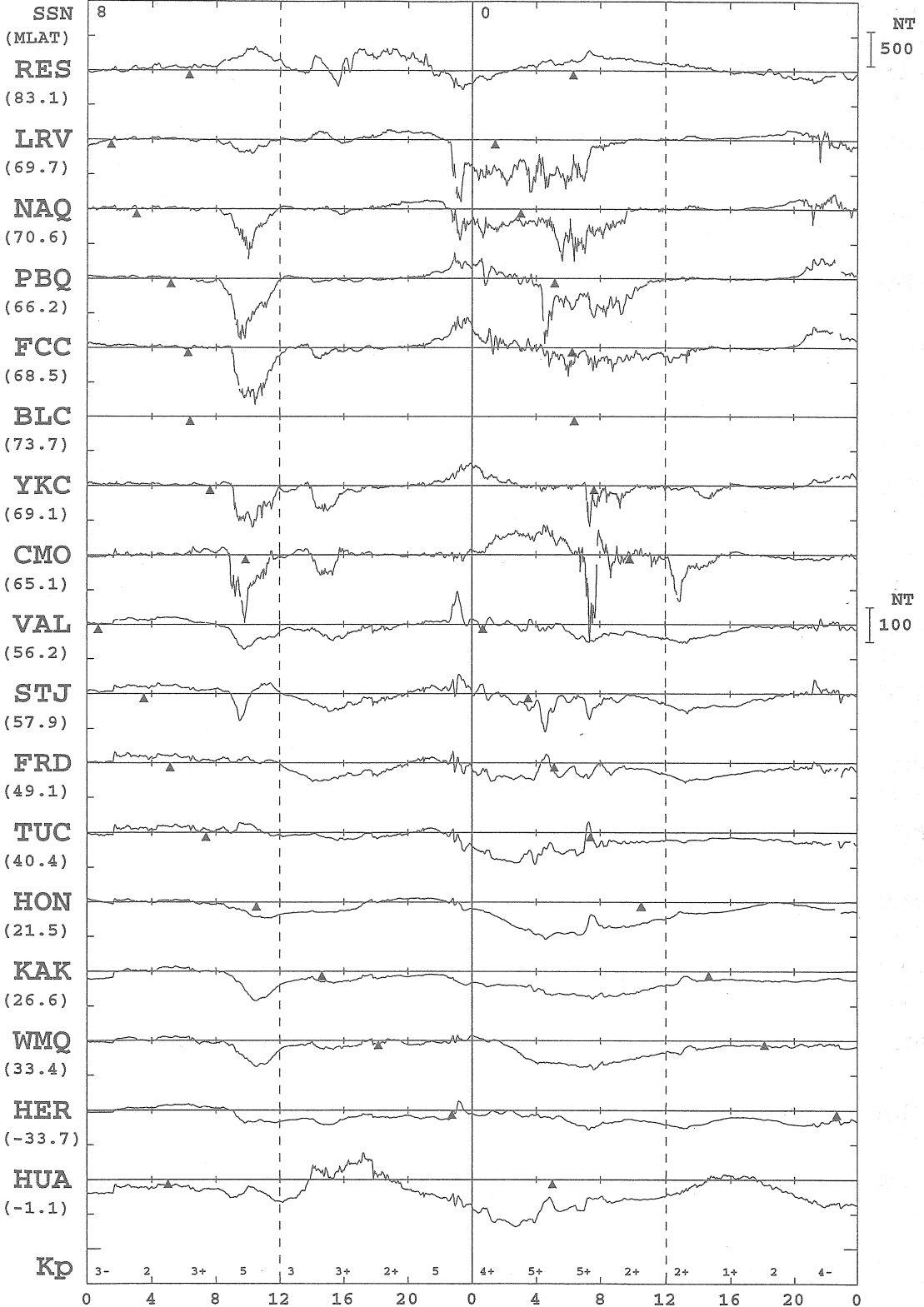


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

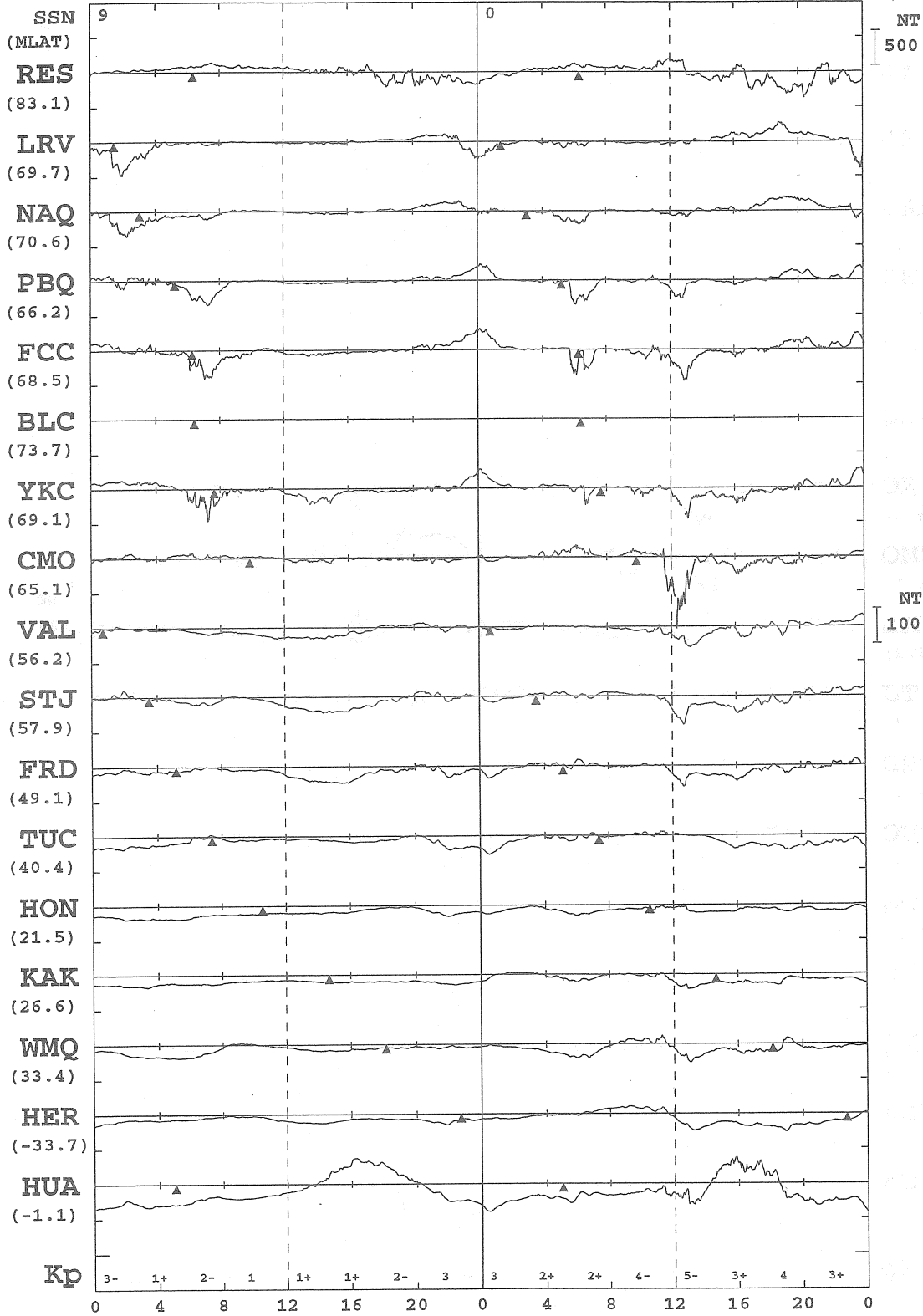


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JUL 19
(DAY 200)

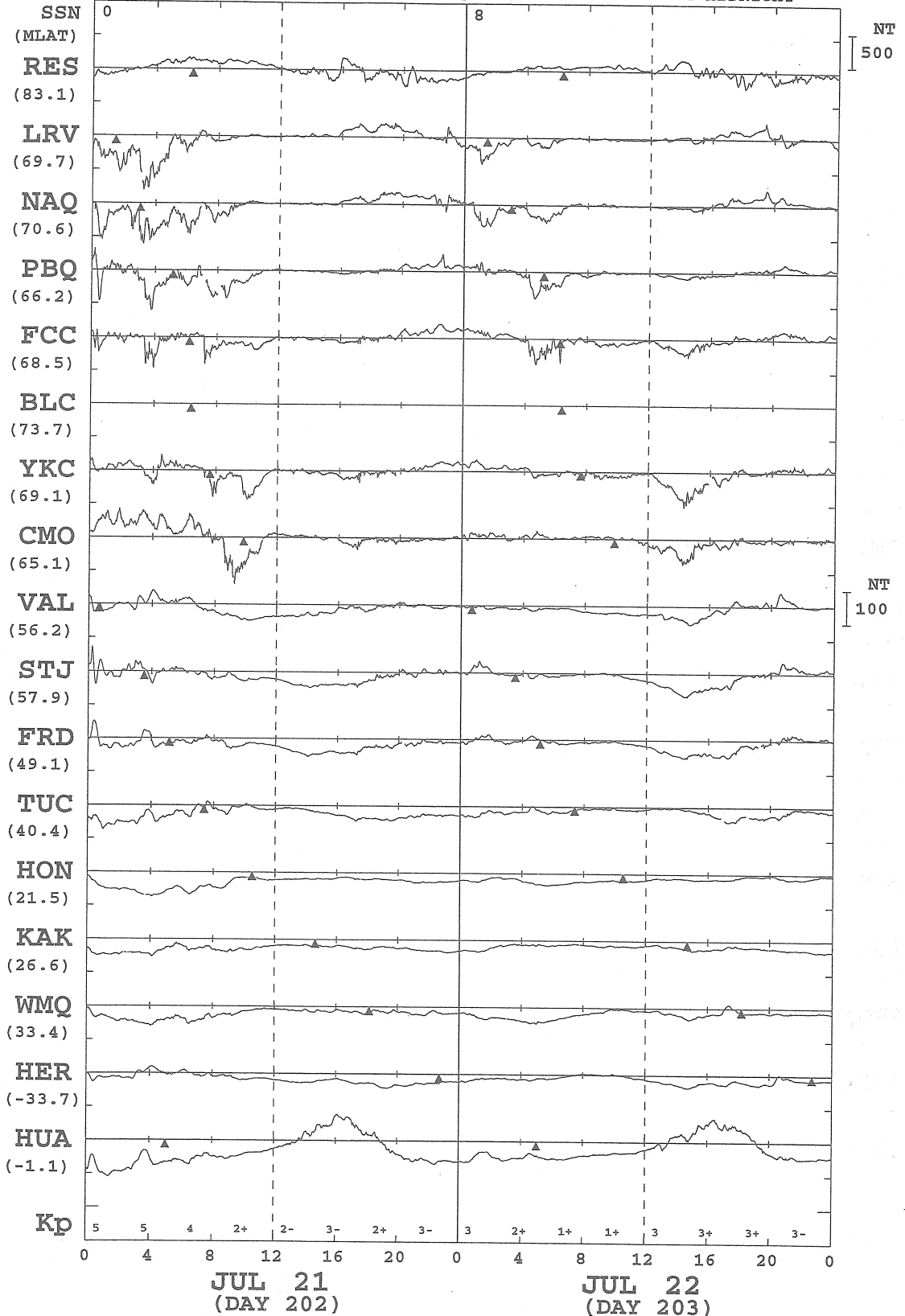
JUL 20
(DAY 201)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

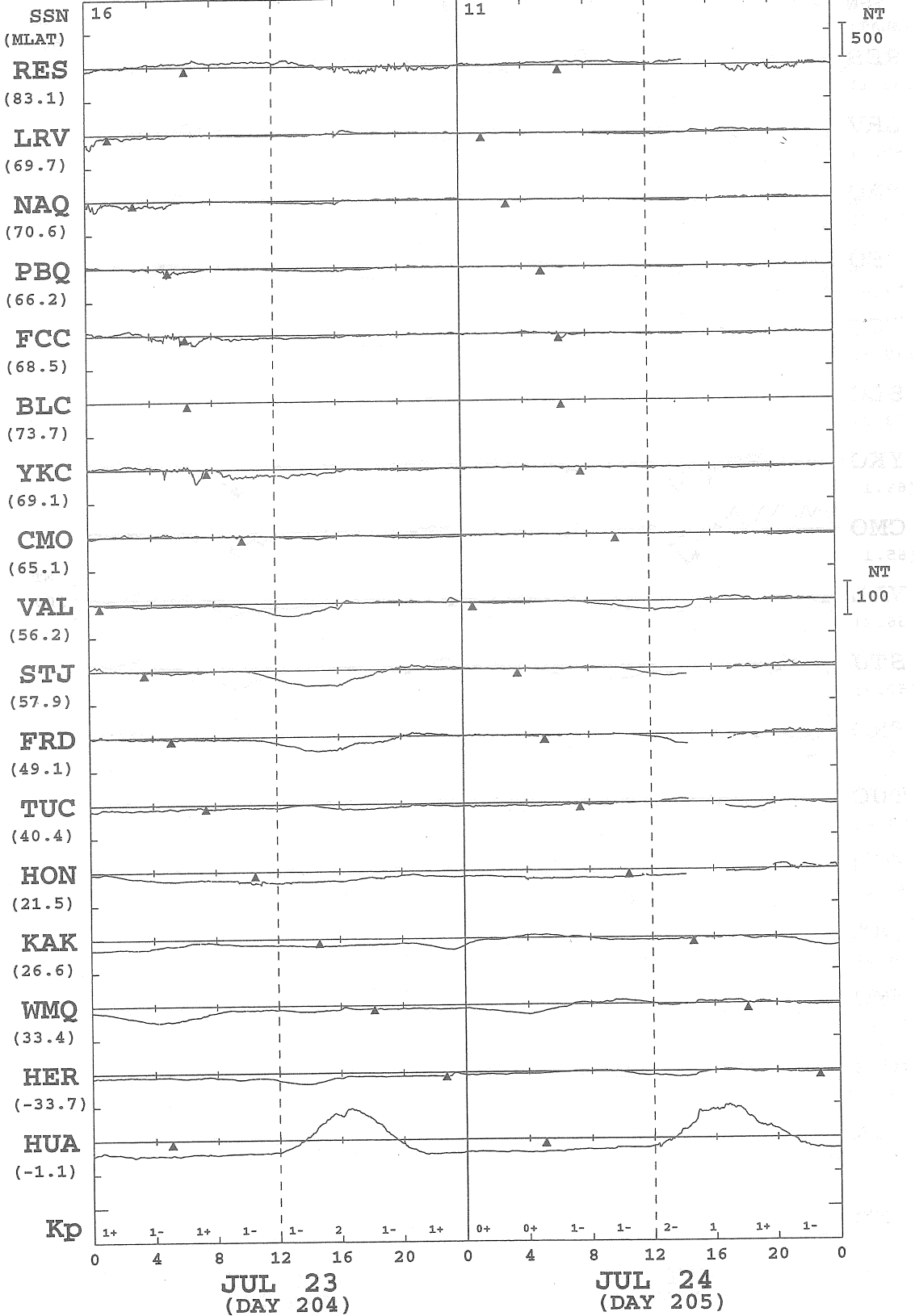
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
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KYOTO UNIV.

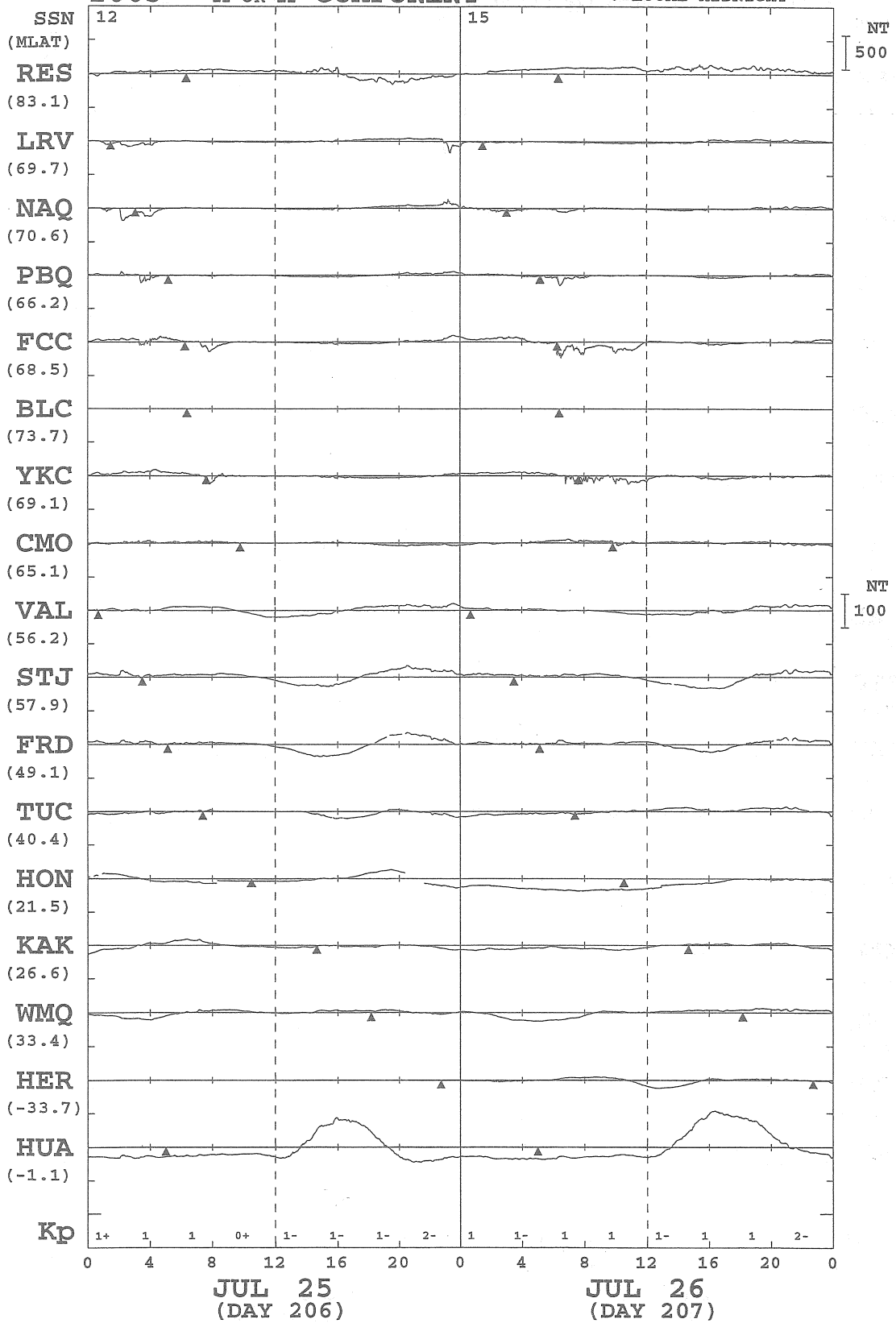
2005 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

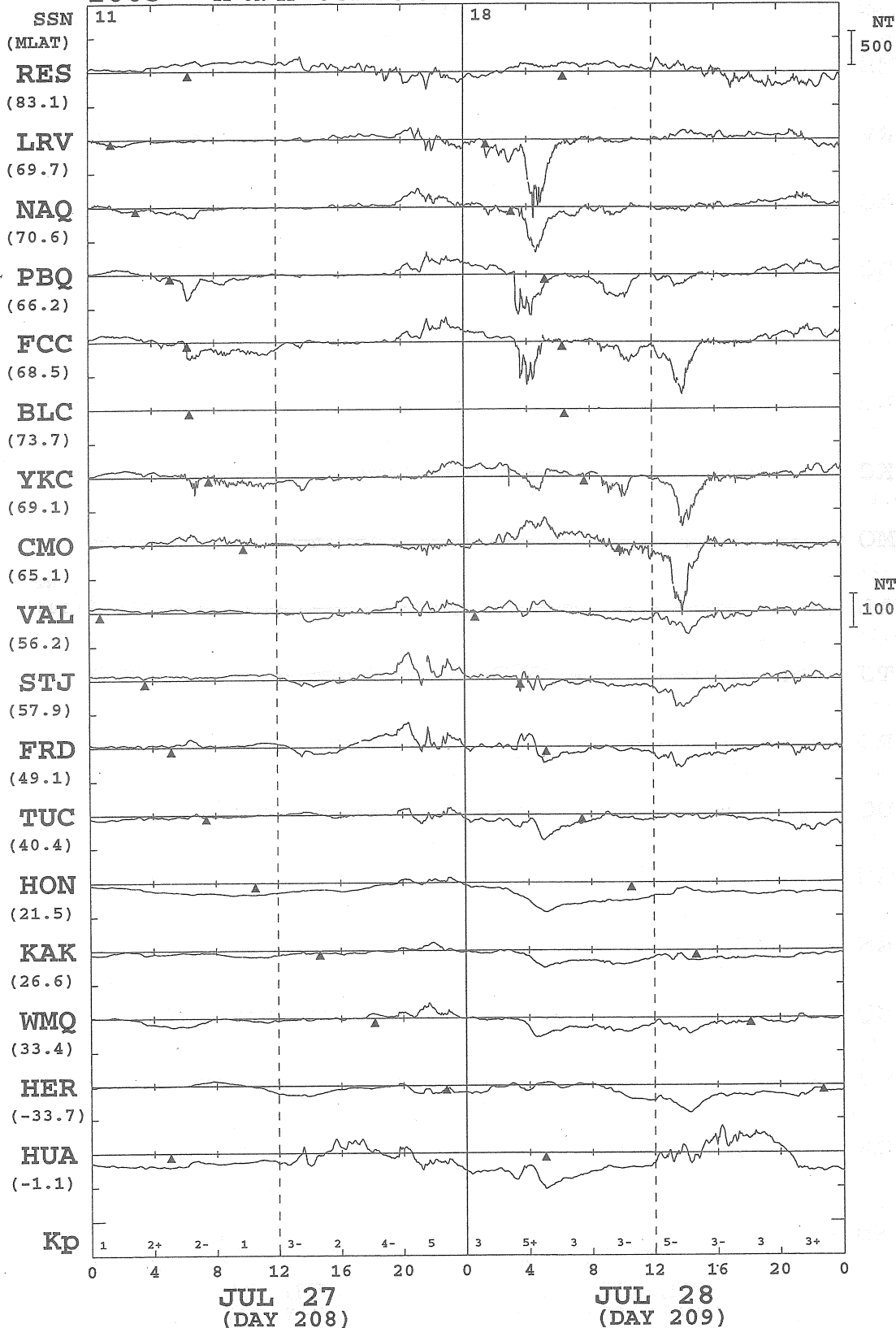


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

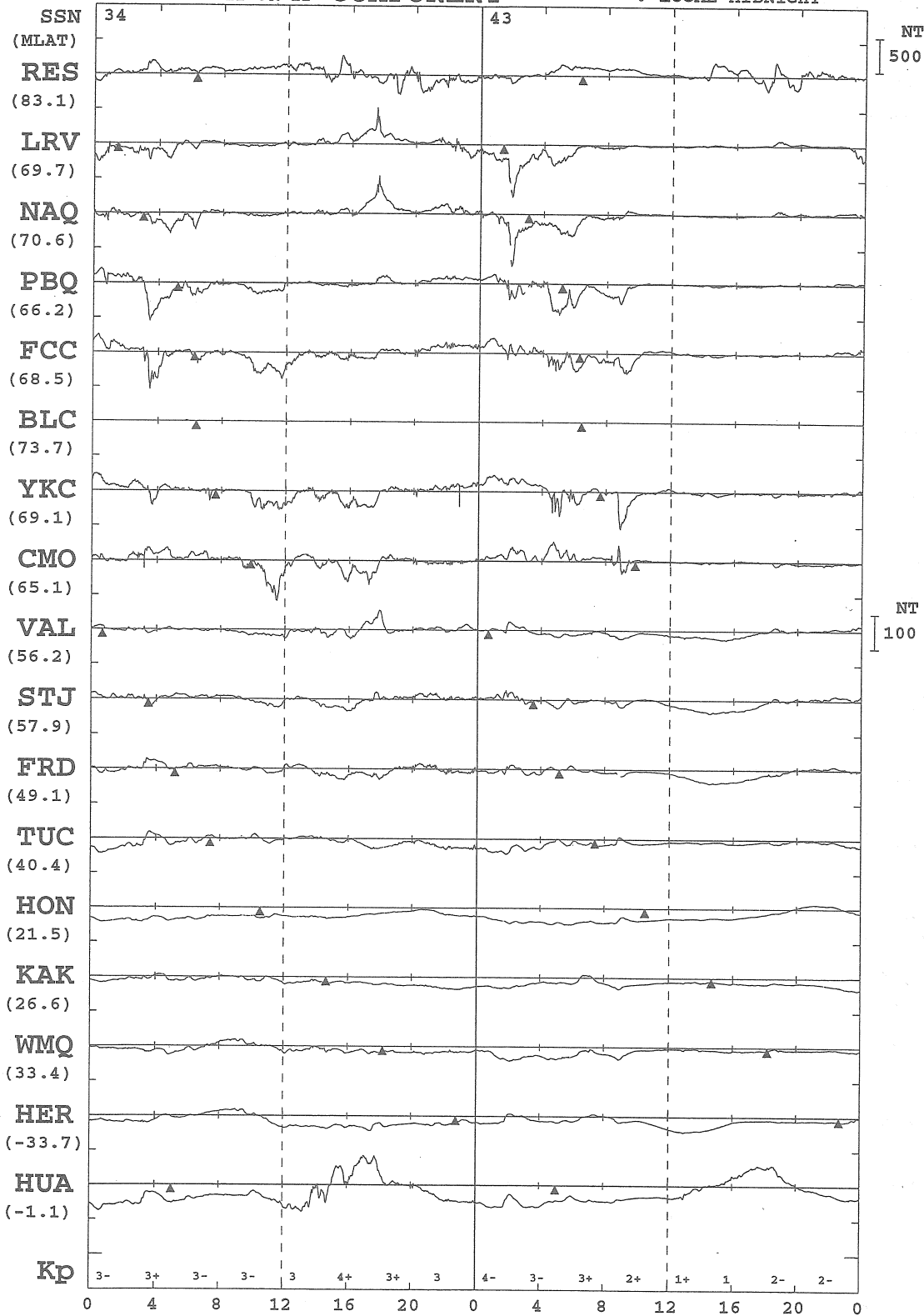


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



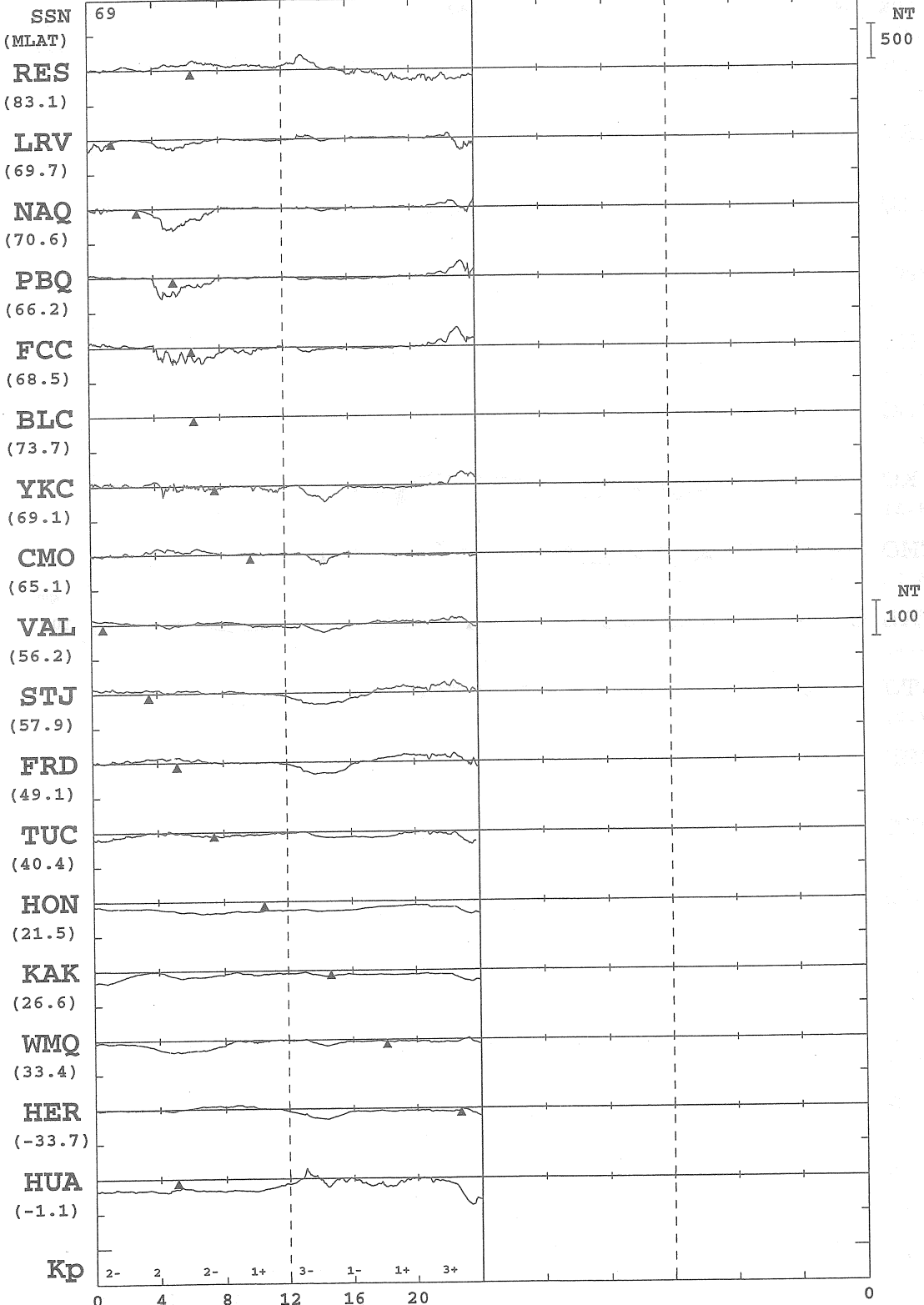
JUL 29
(DAY 210)

JUL 30
(DAY 211)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

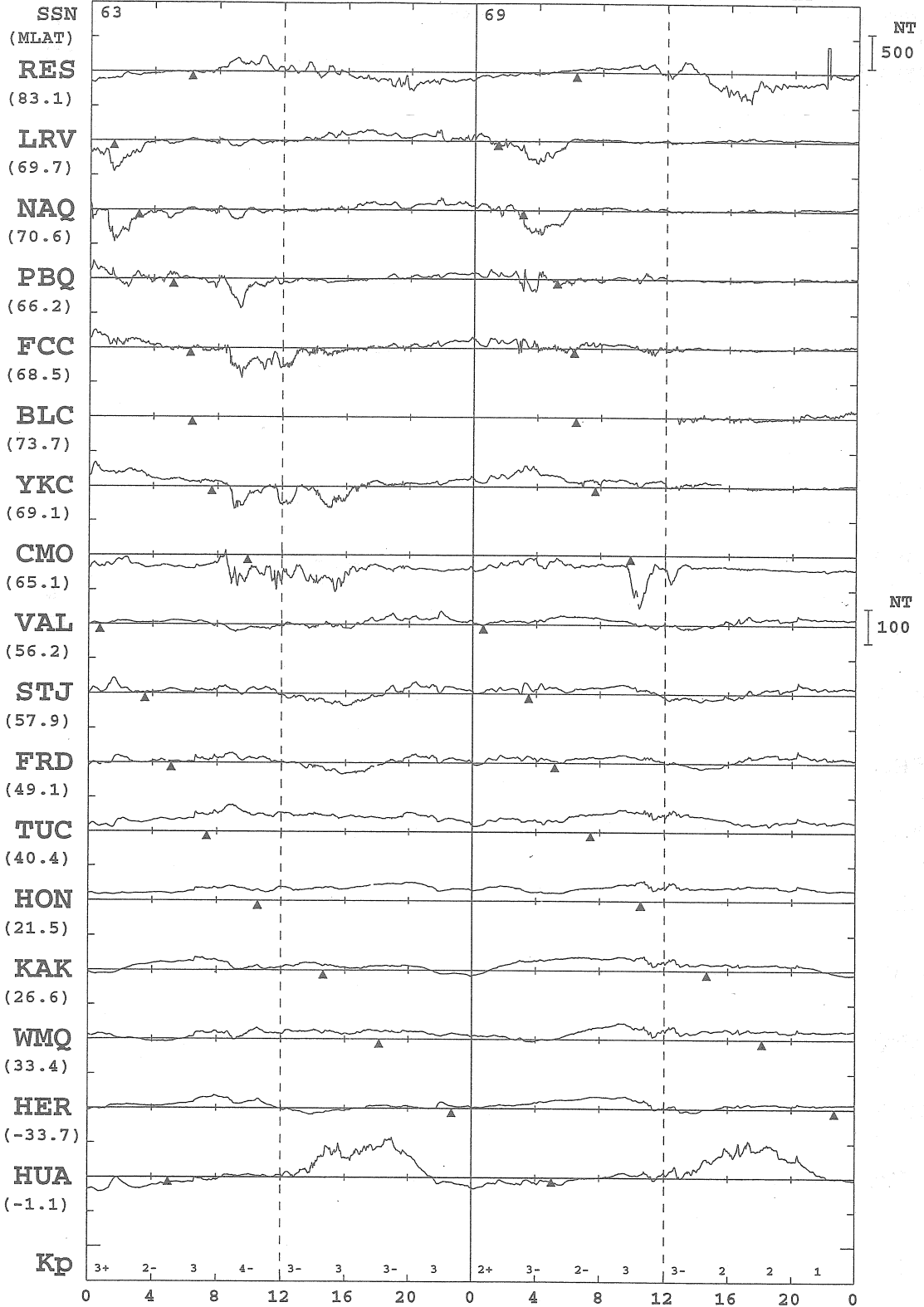


JUL 31
(DAY 212)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

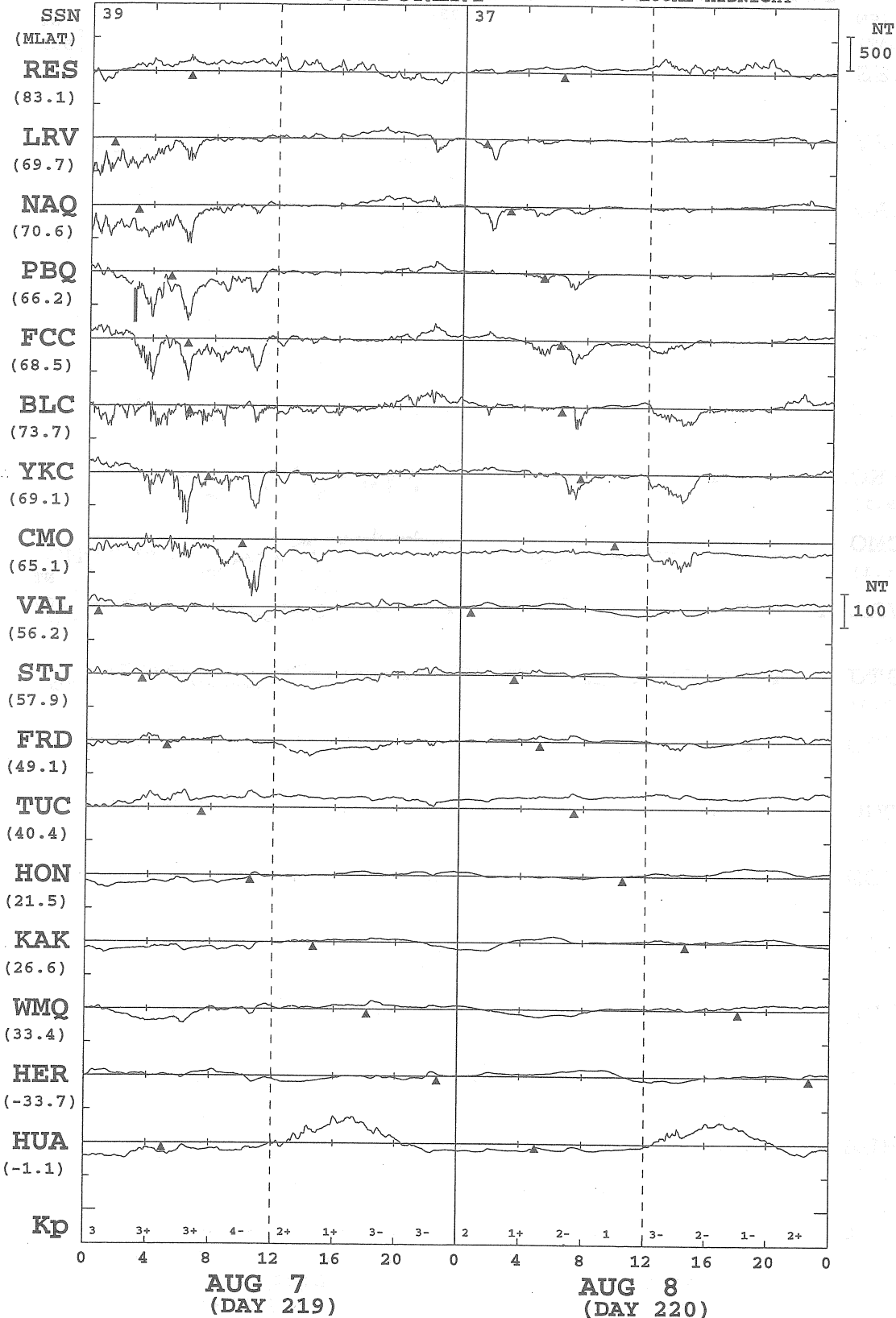


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2005 H OR X-COMPONENT

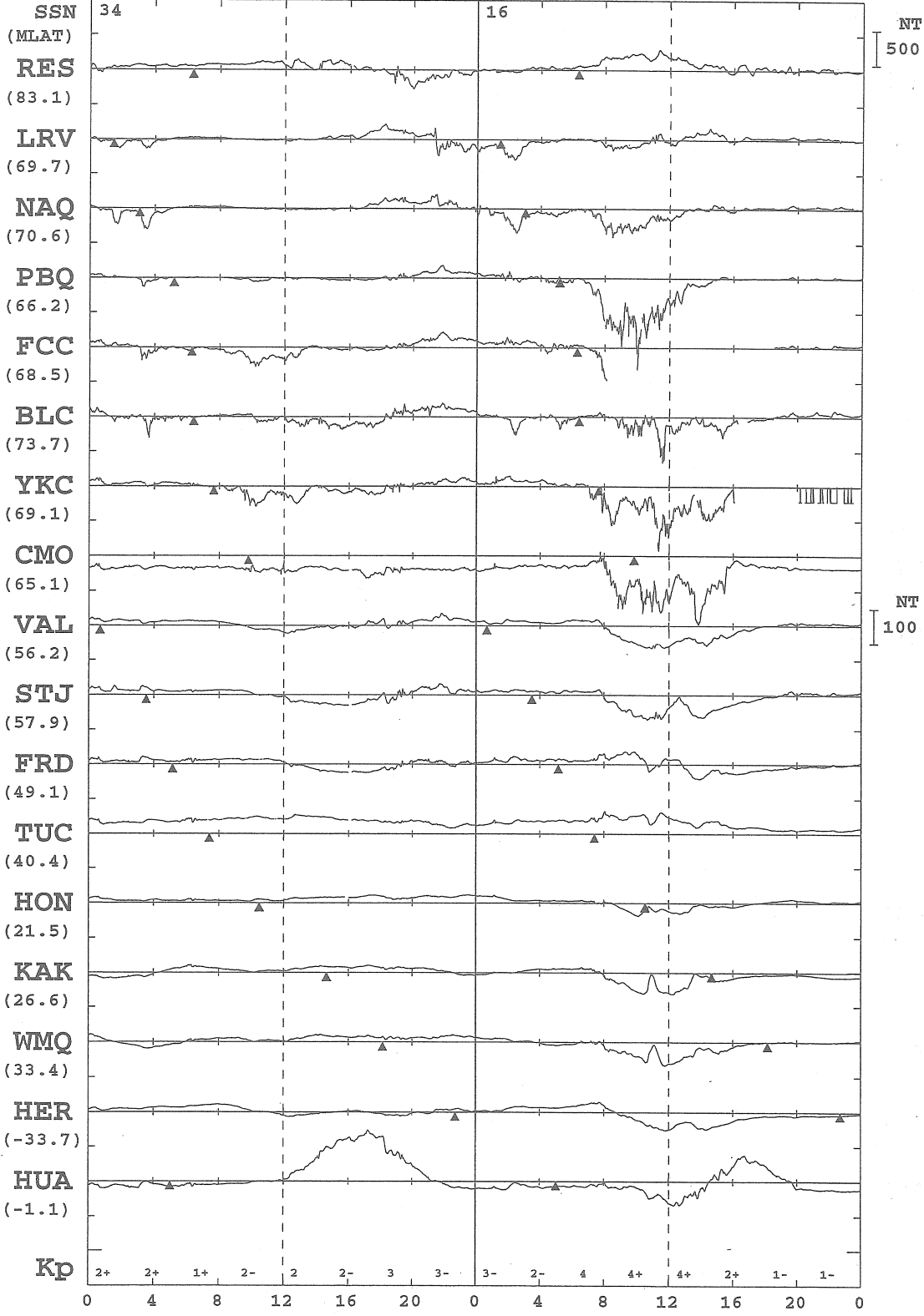
▲: LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

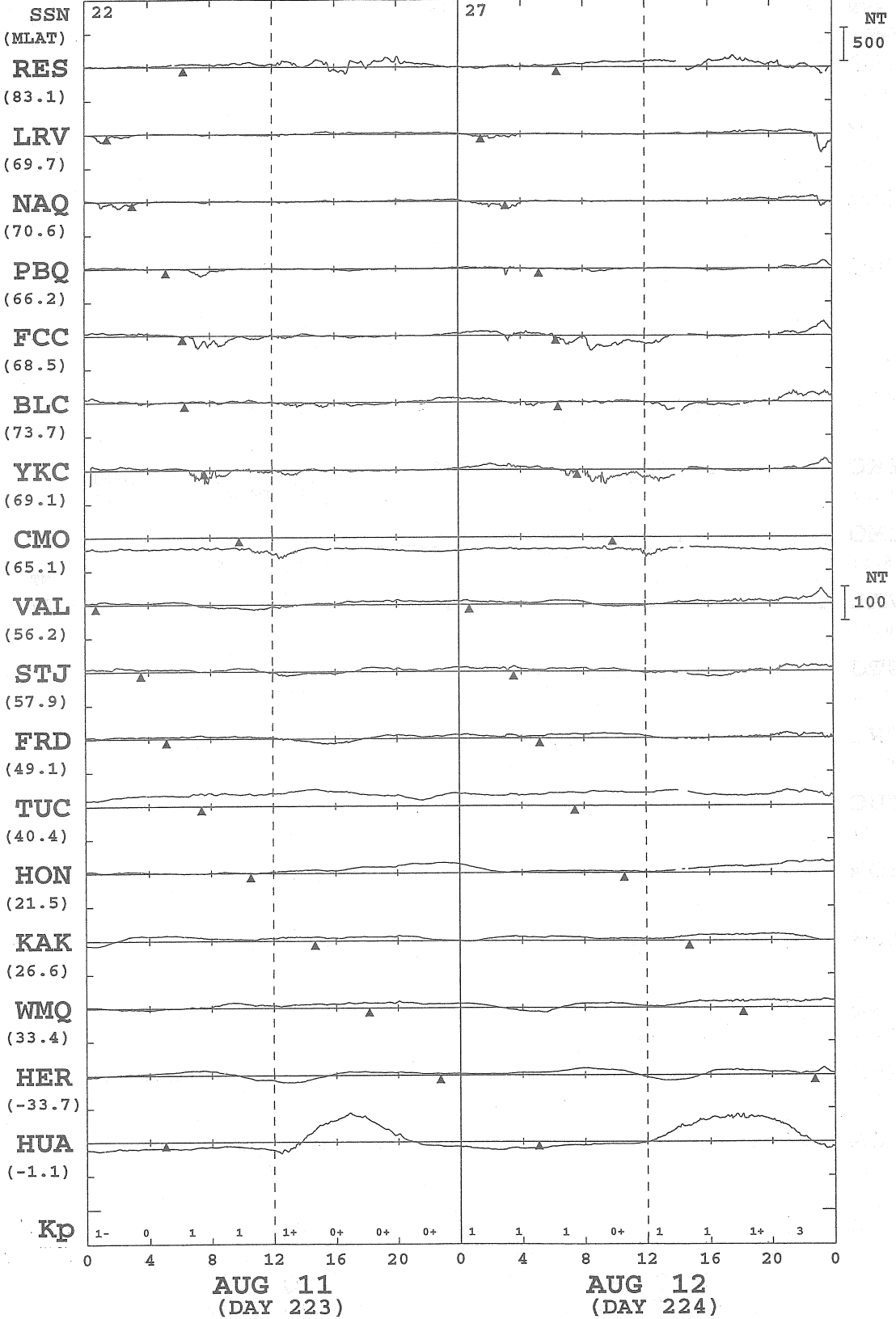


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

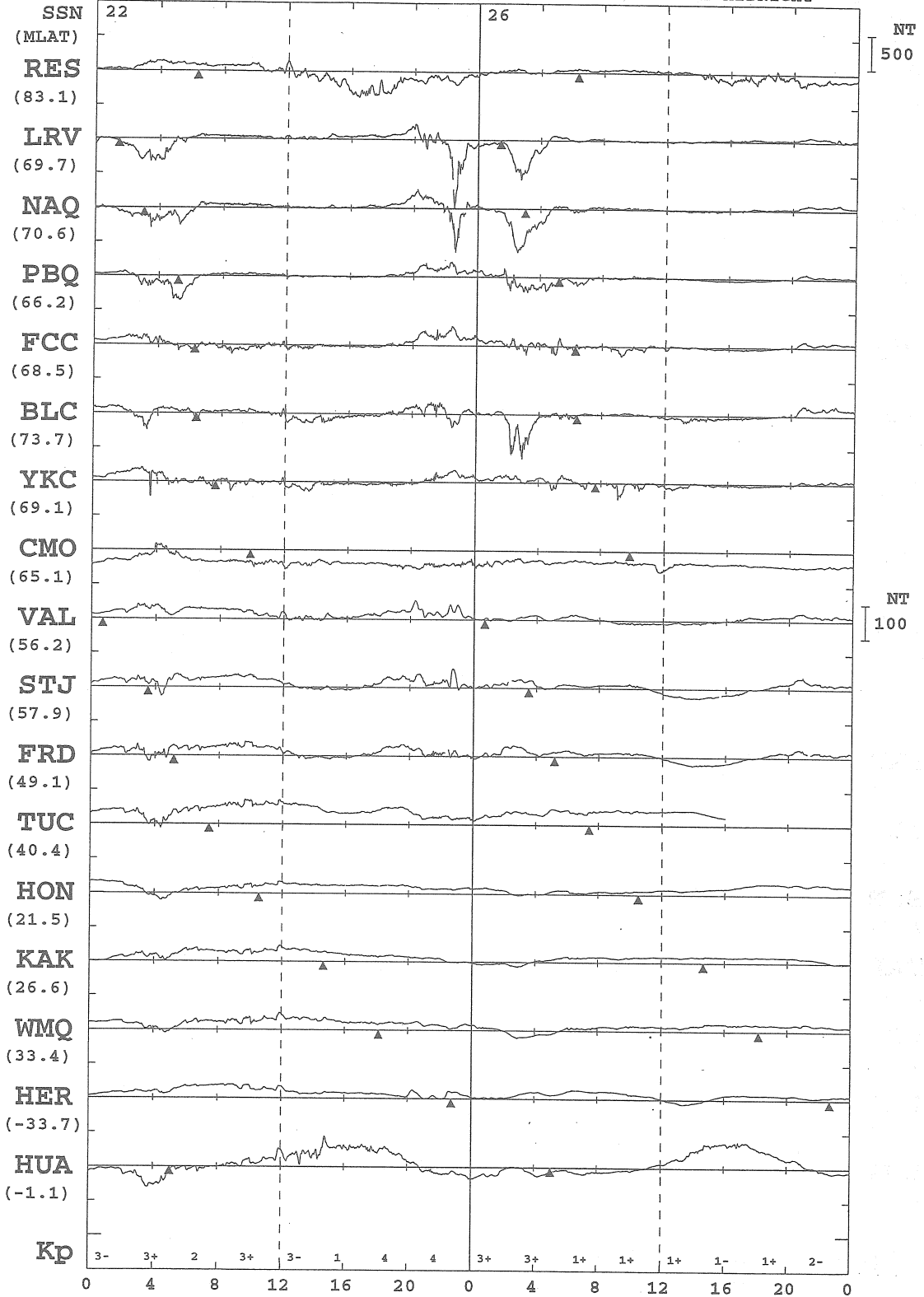


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2005 H OR X-COMPONENT

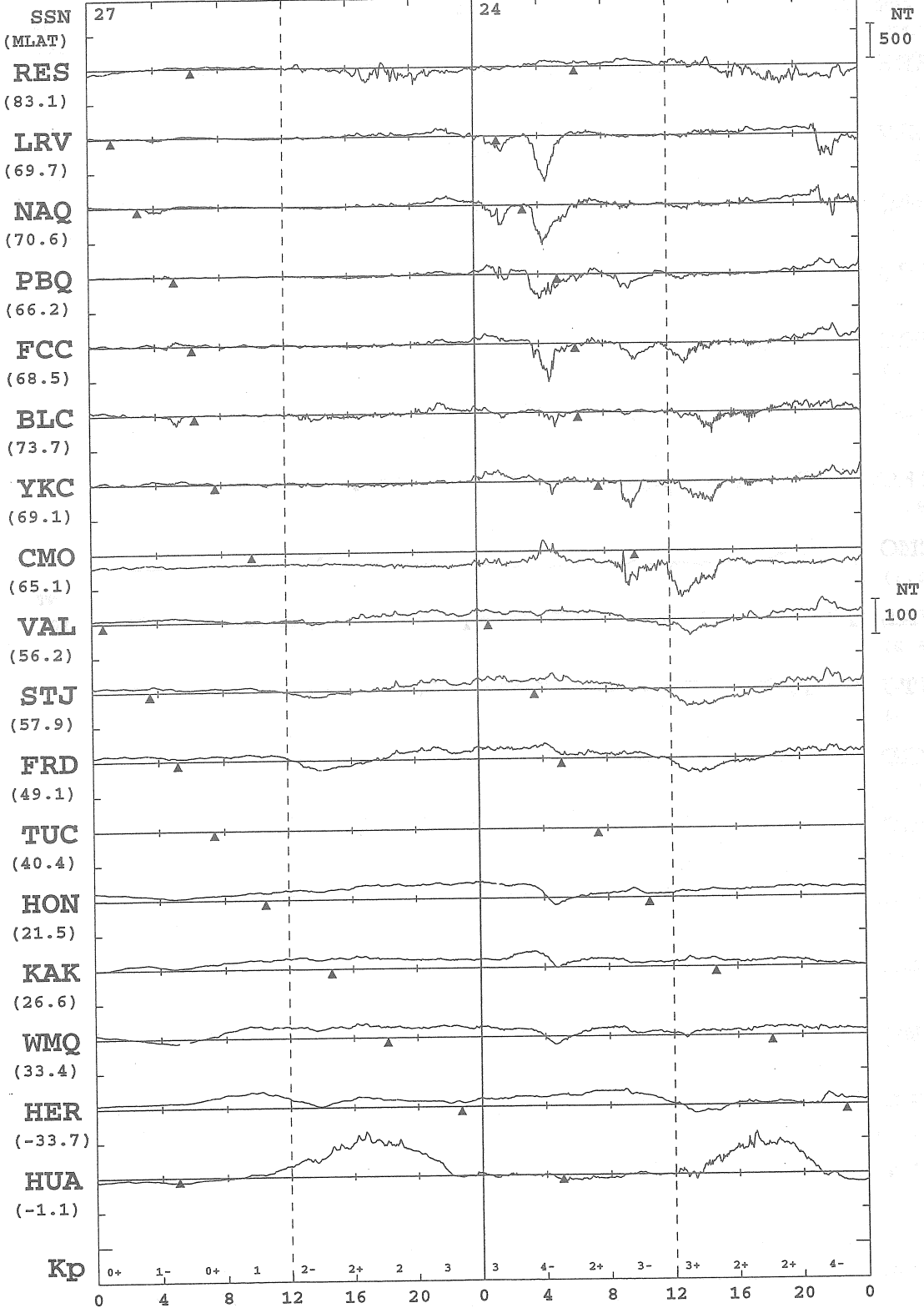
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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... KYOTO UNIV.

2005 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



AUG 15
(DAY 227)

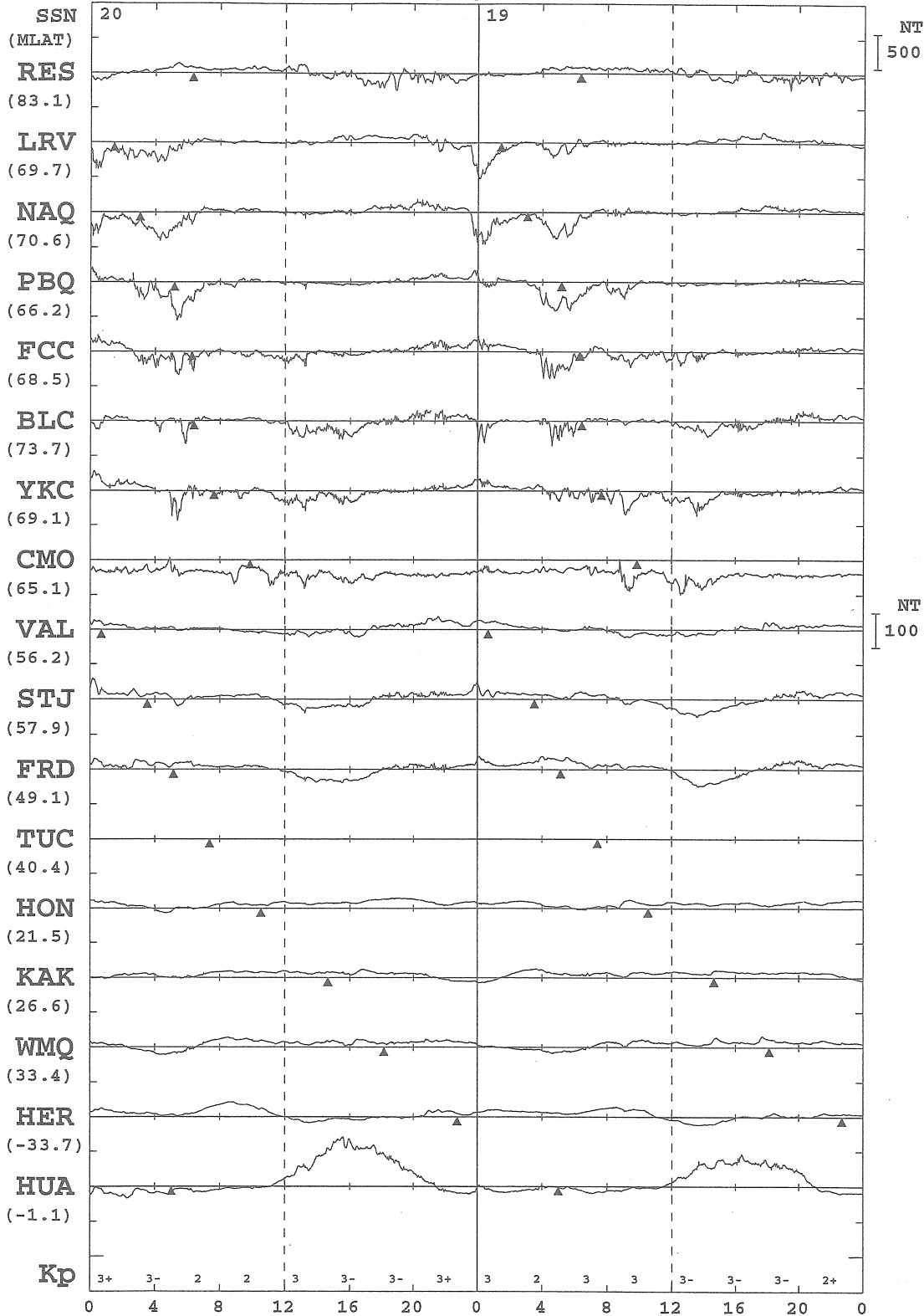
AUG 16
(DAY 228)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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2005 H OR X-COMPONENT

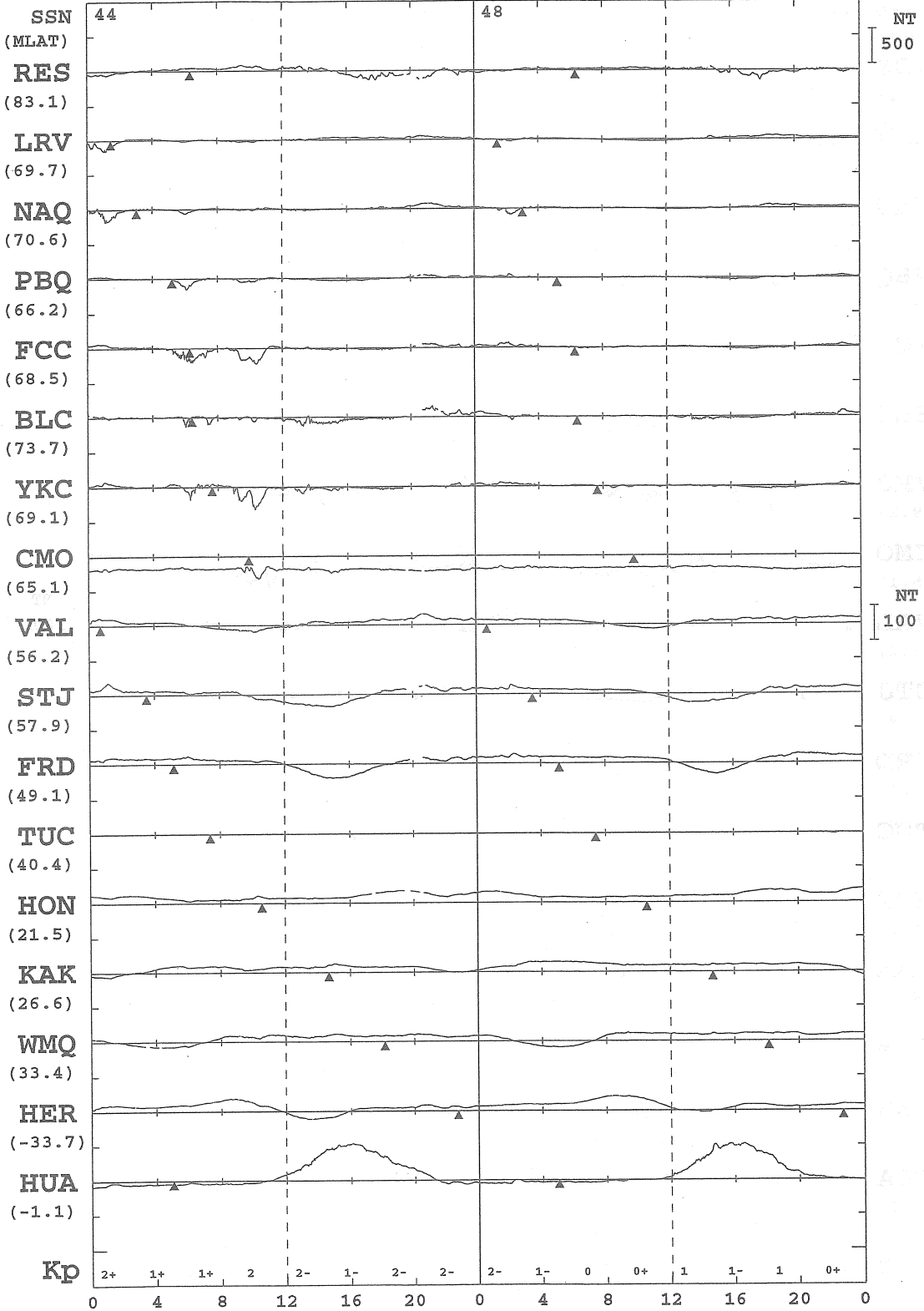
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2005 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

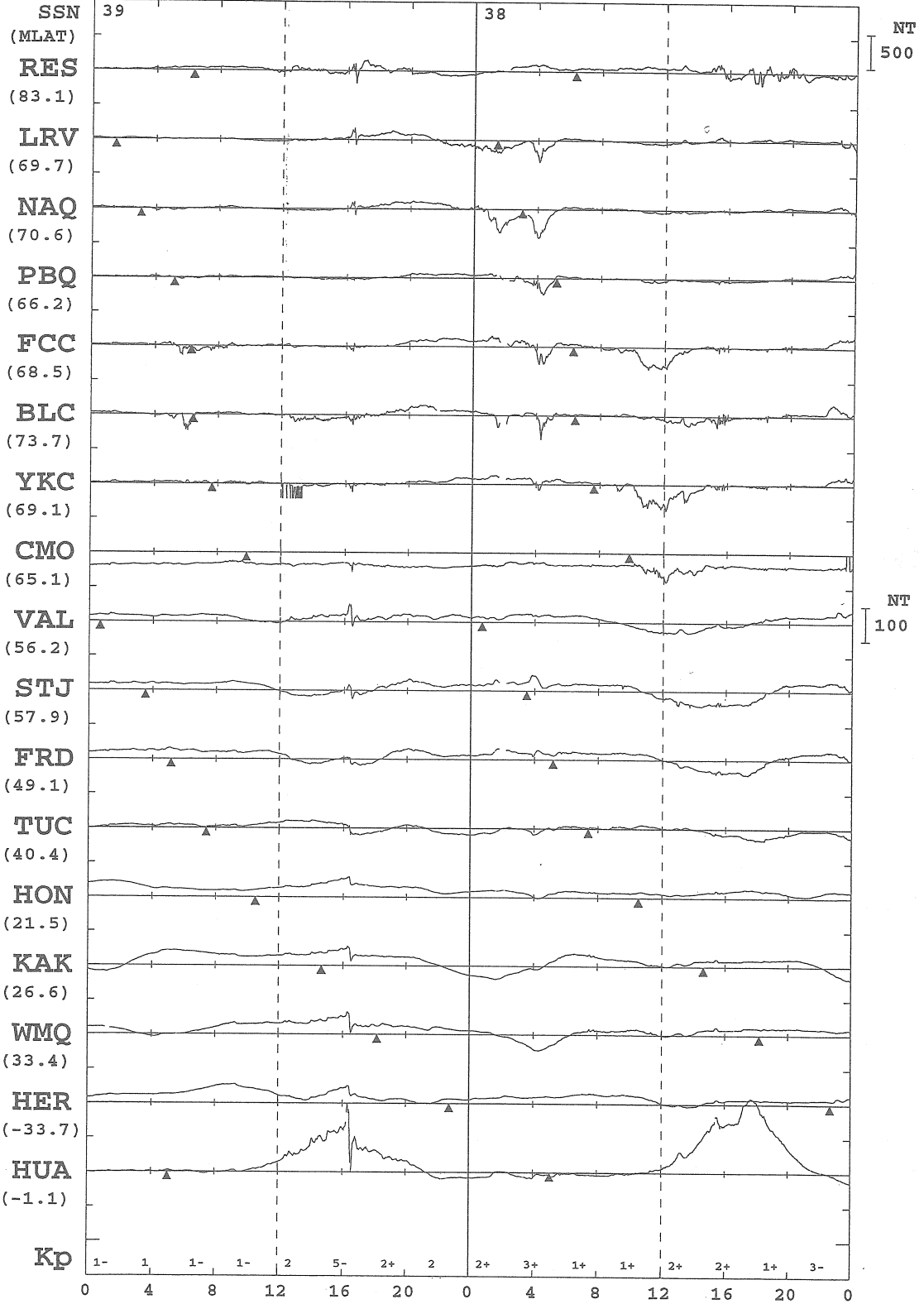


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

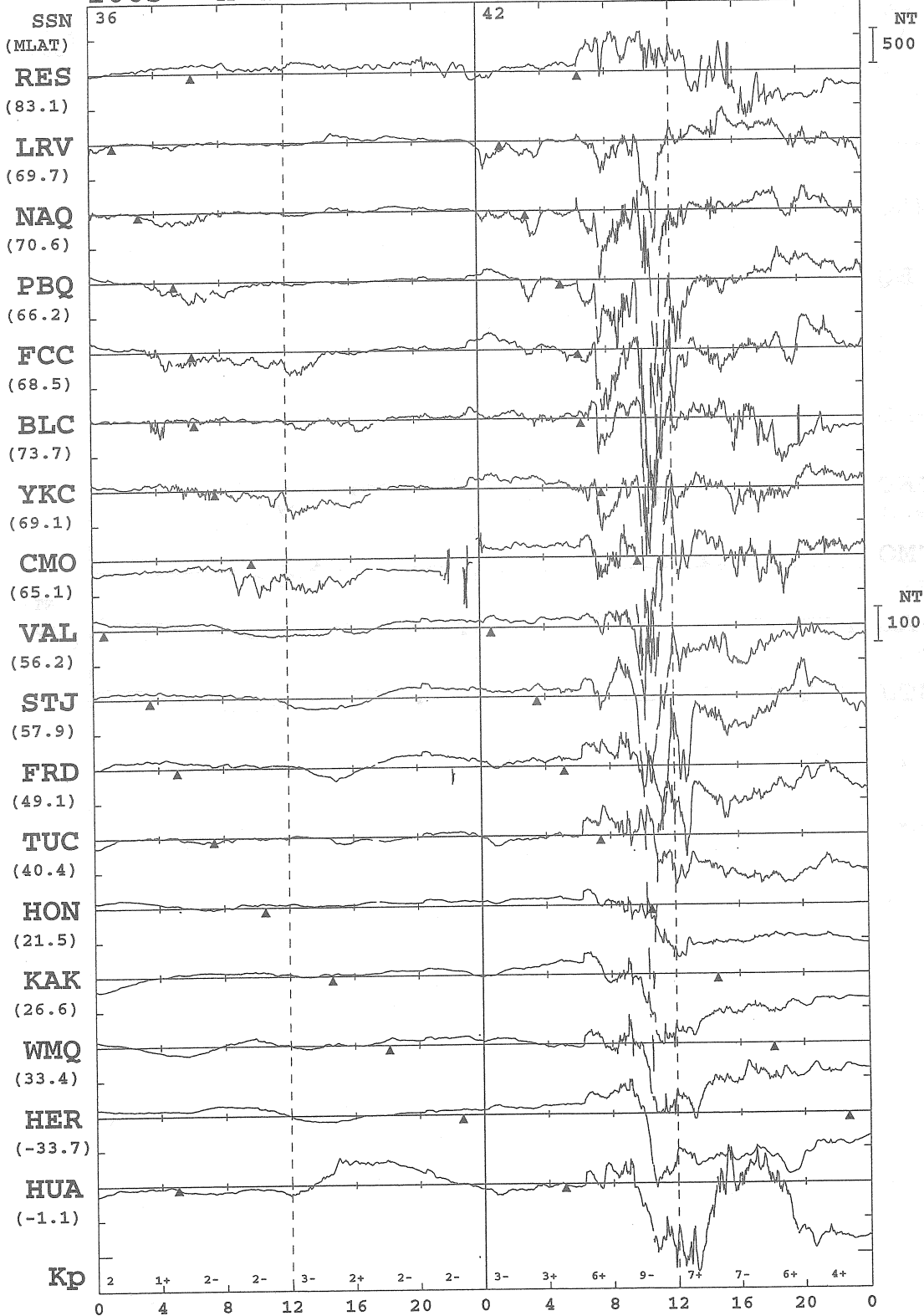


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

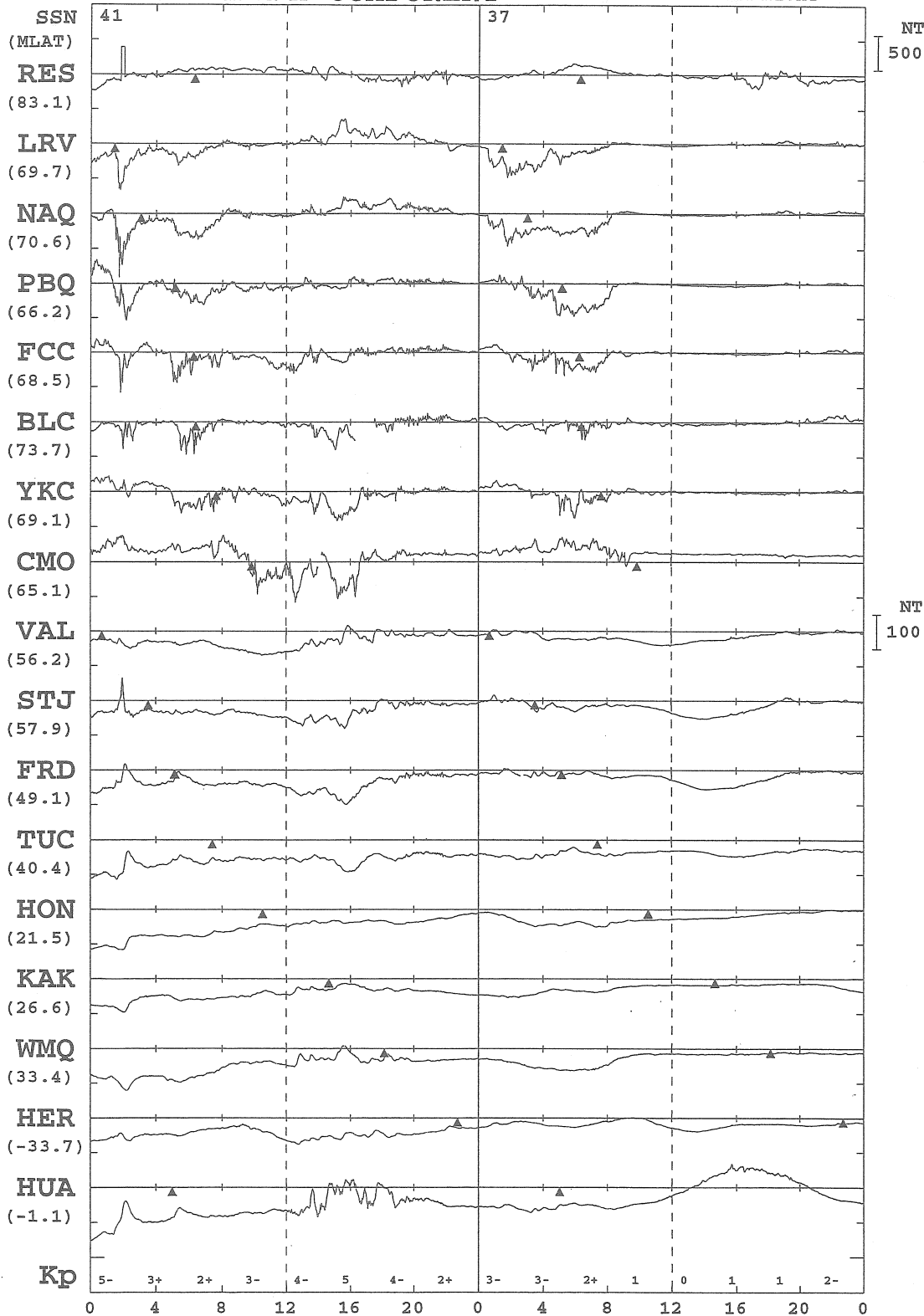


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲.: LOCAL MIDNIGHT

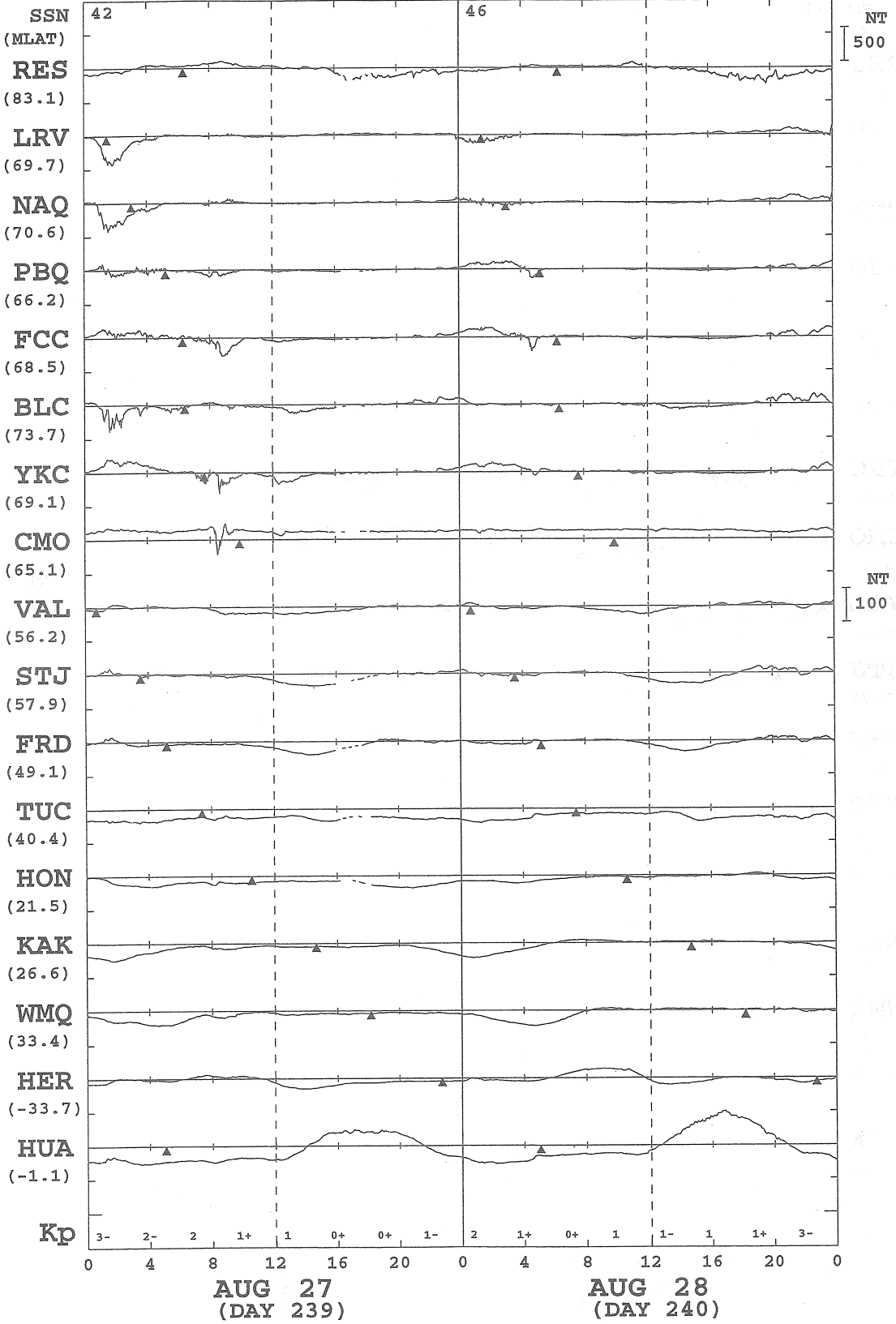


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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

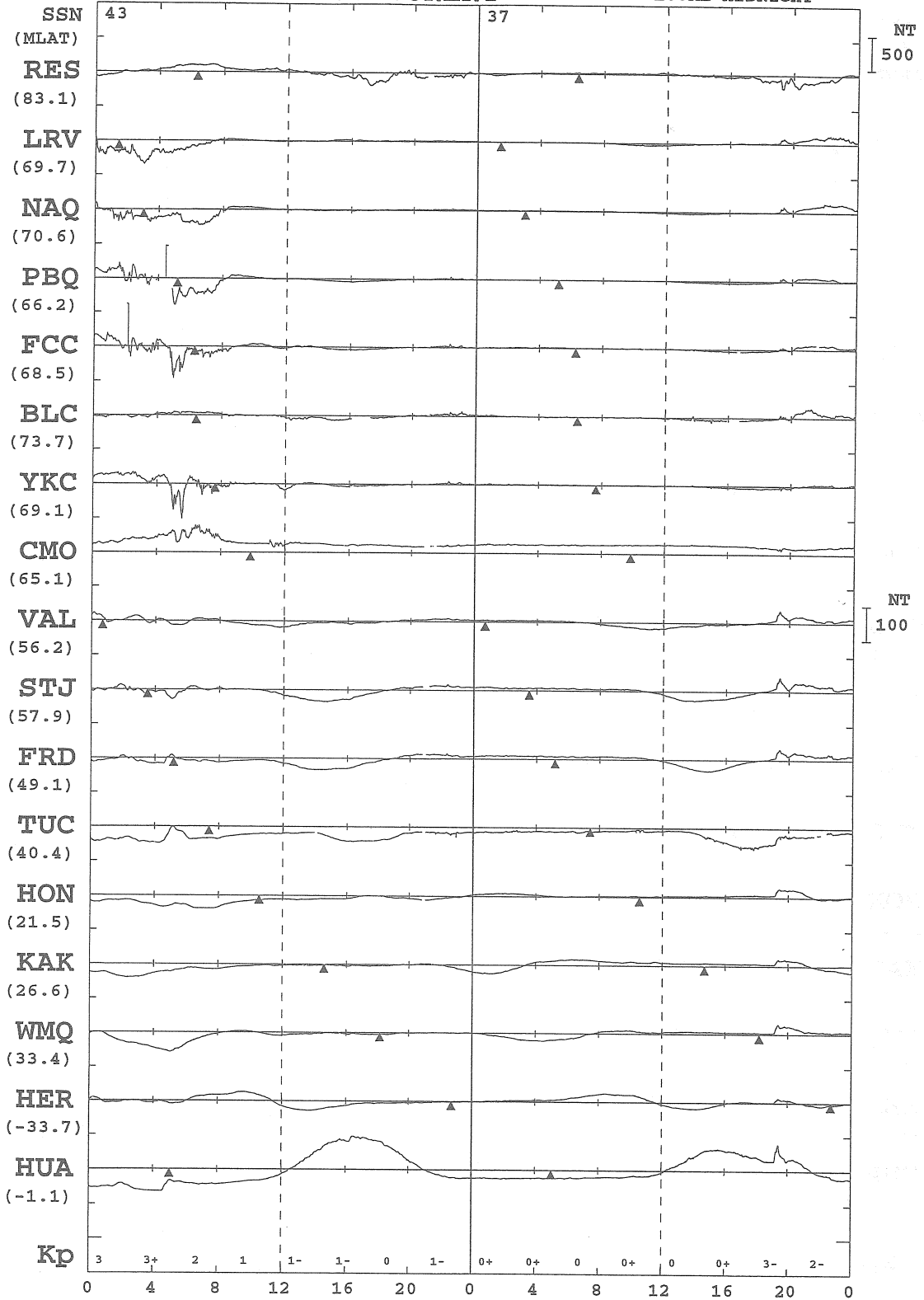


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

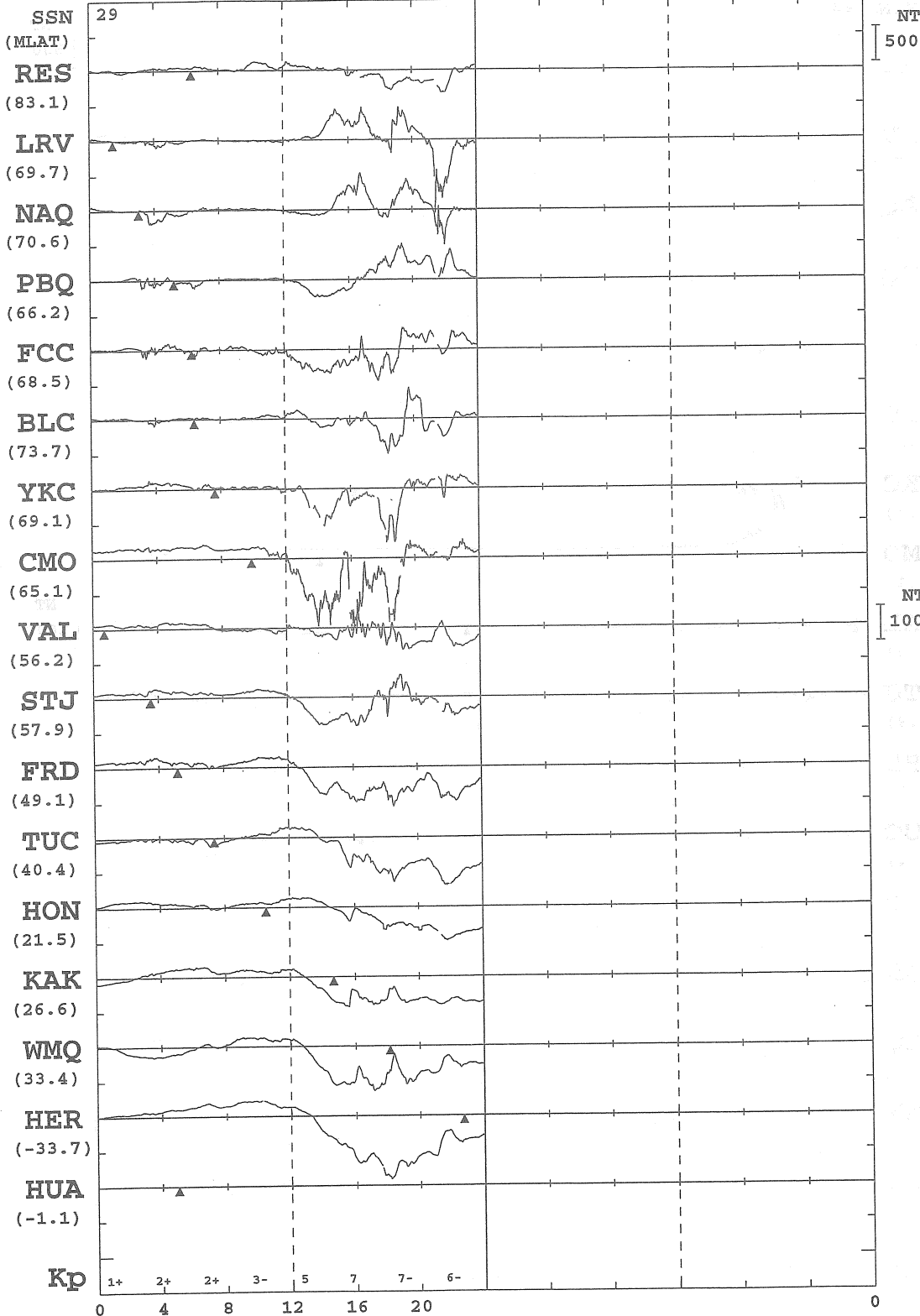
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



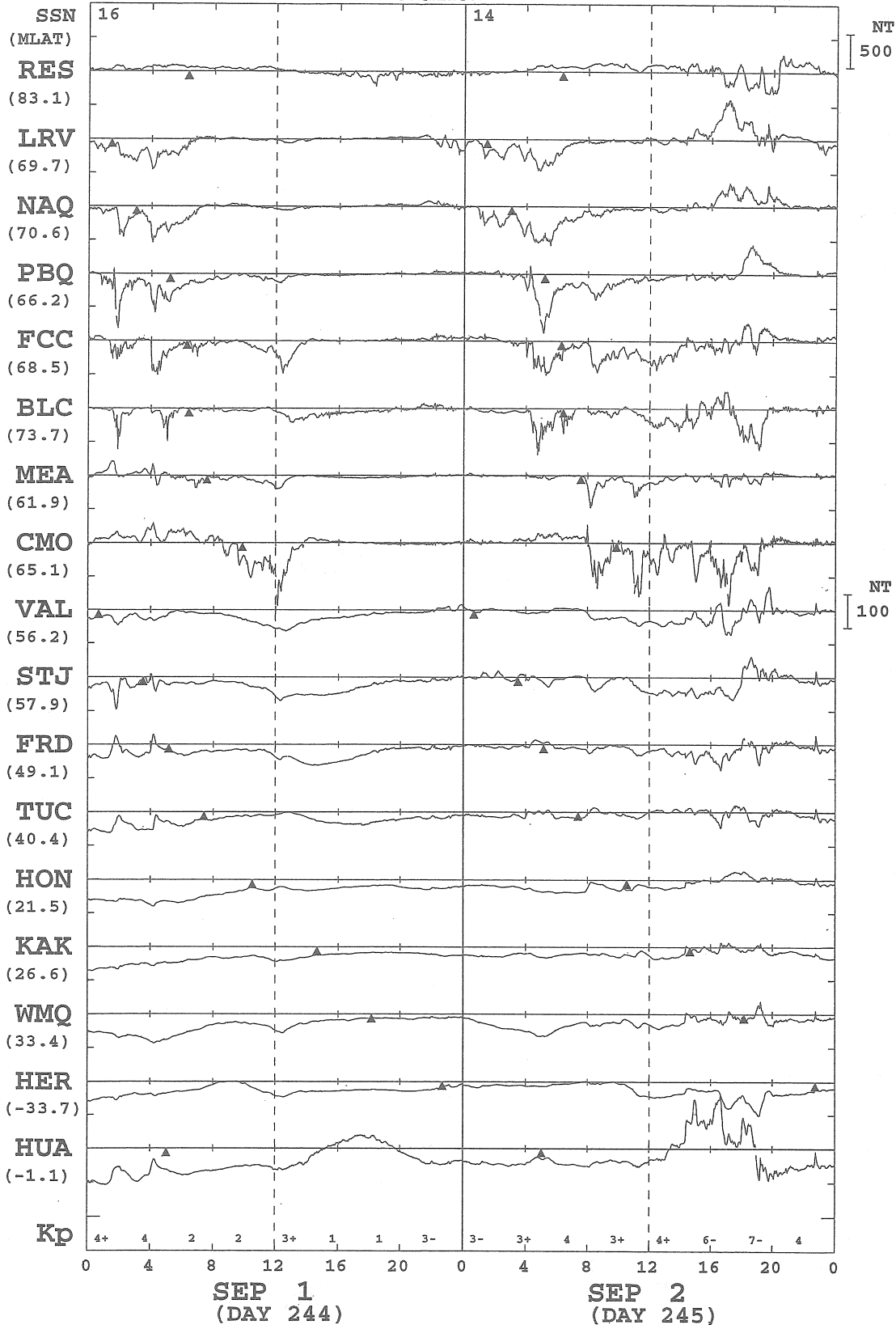
AUG 31
(DAY 243)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

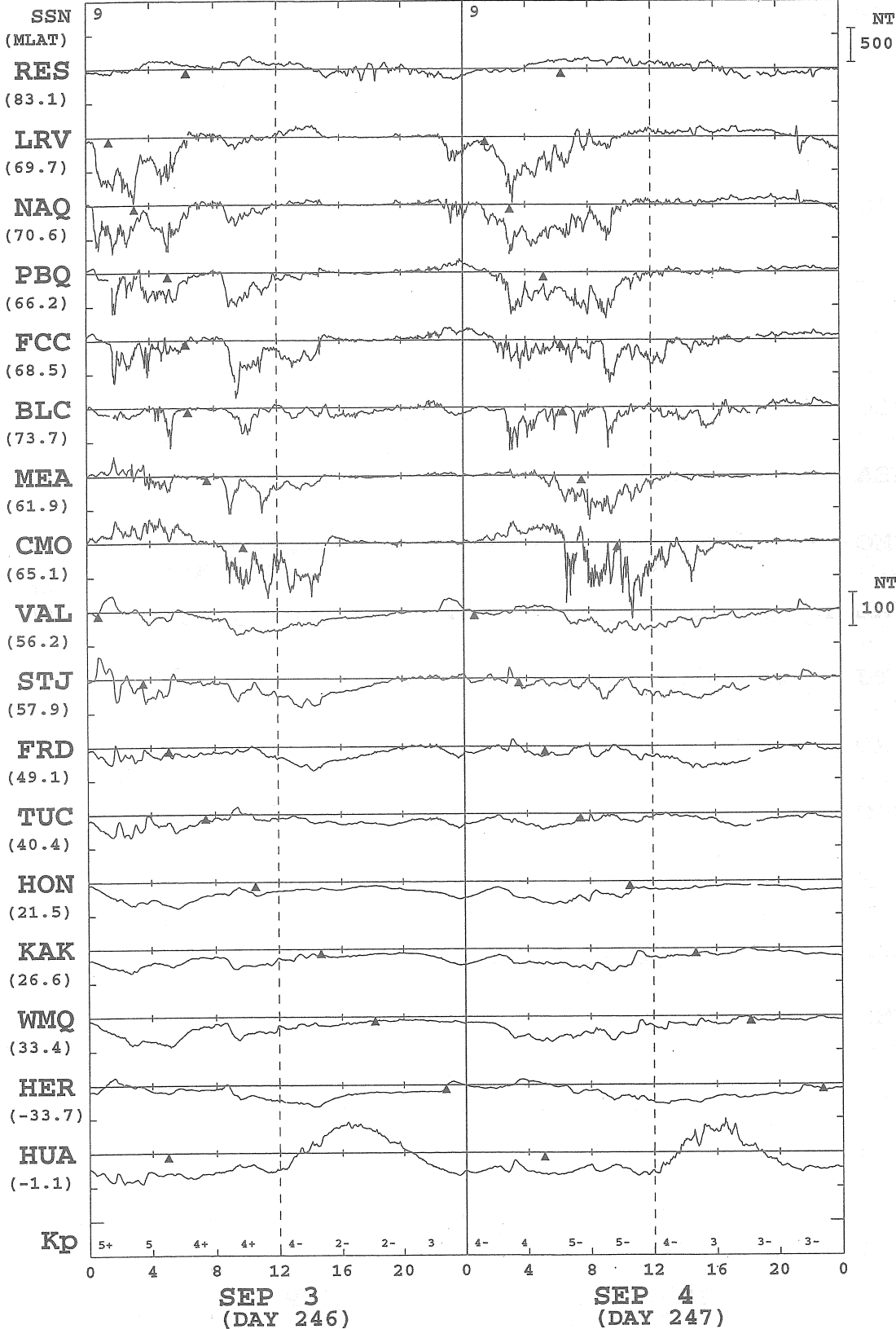


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

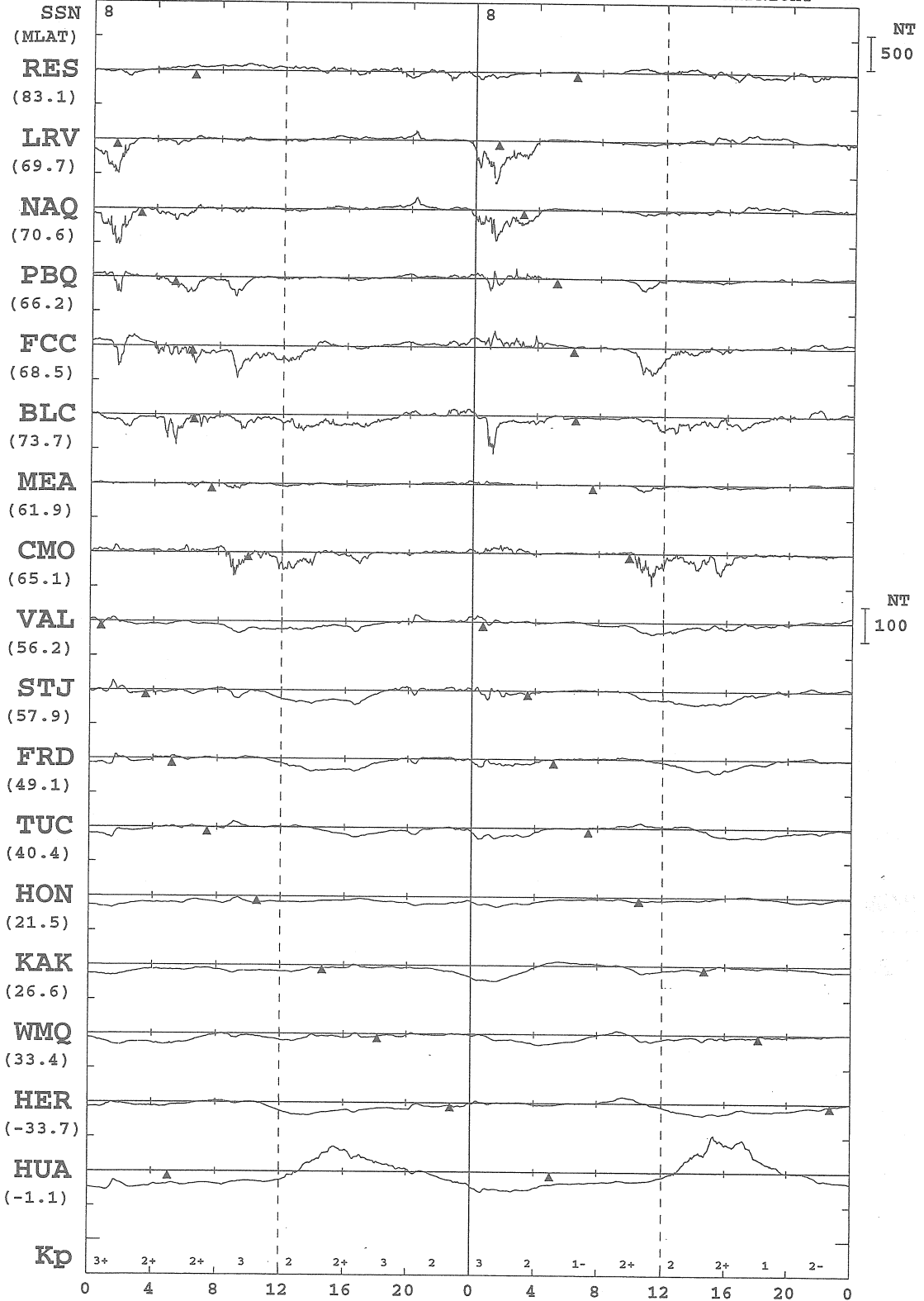


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
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2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



SEP 5
(DAY 248)

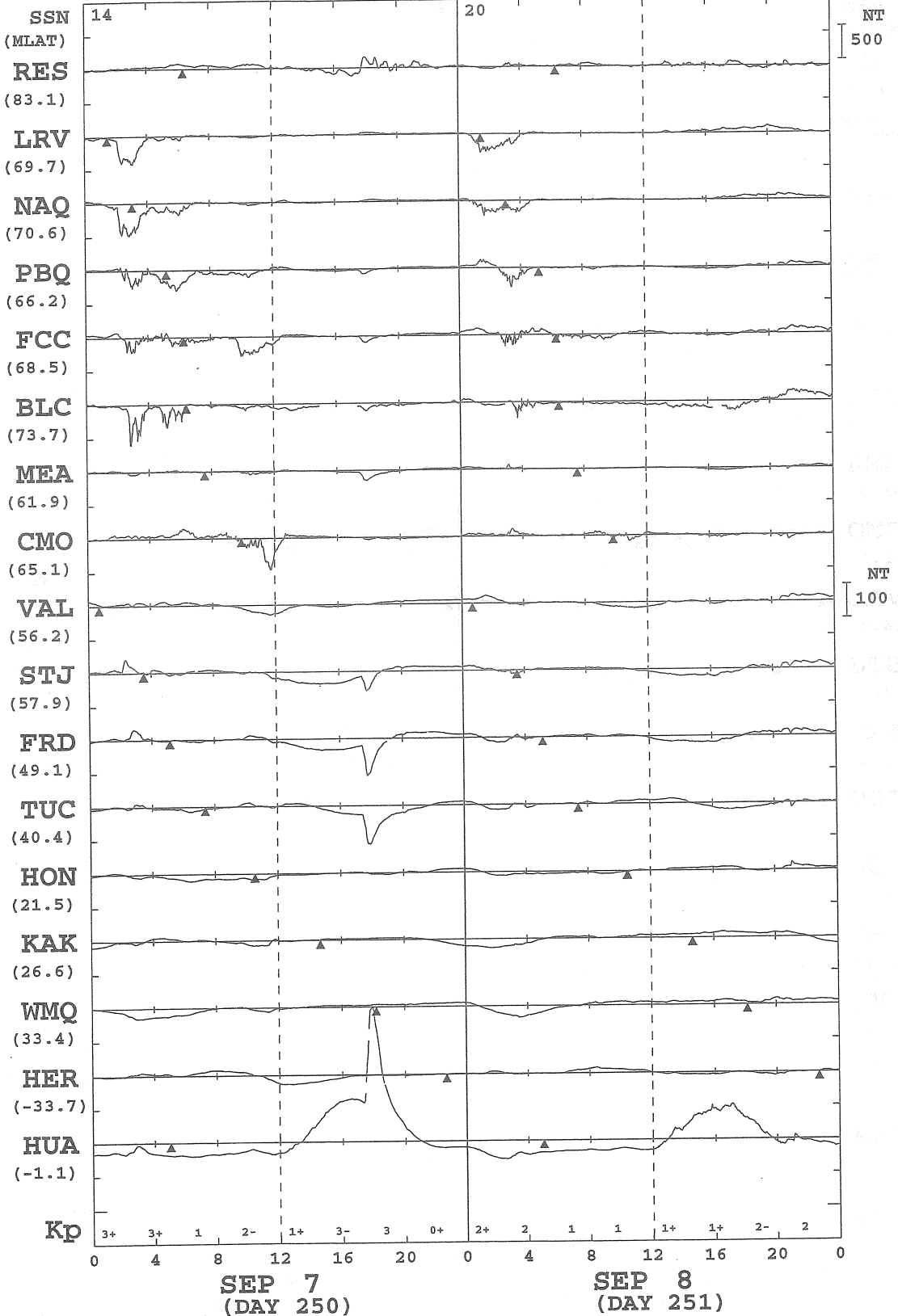
SEP 6
(DAY 249)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

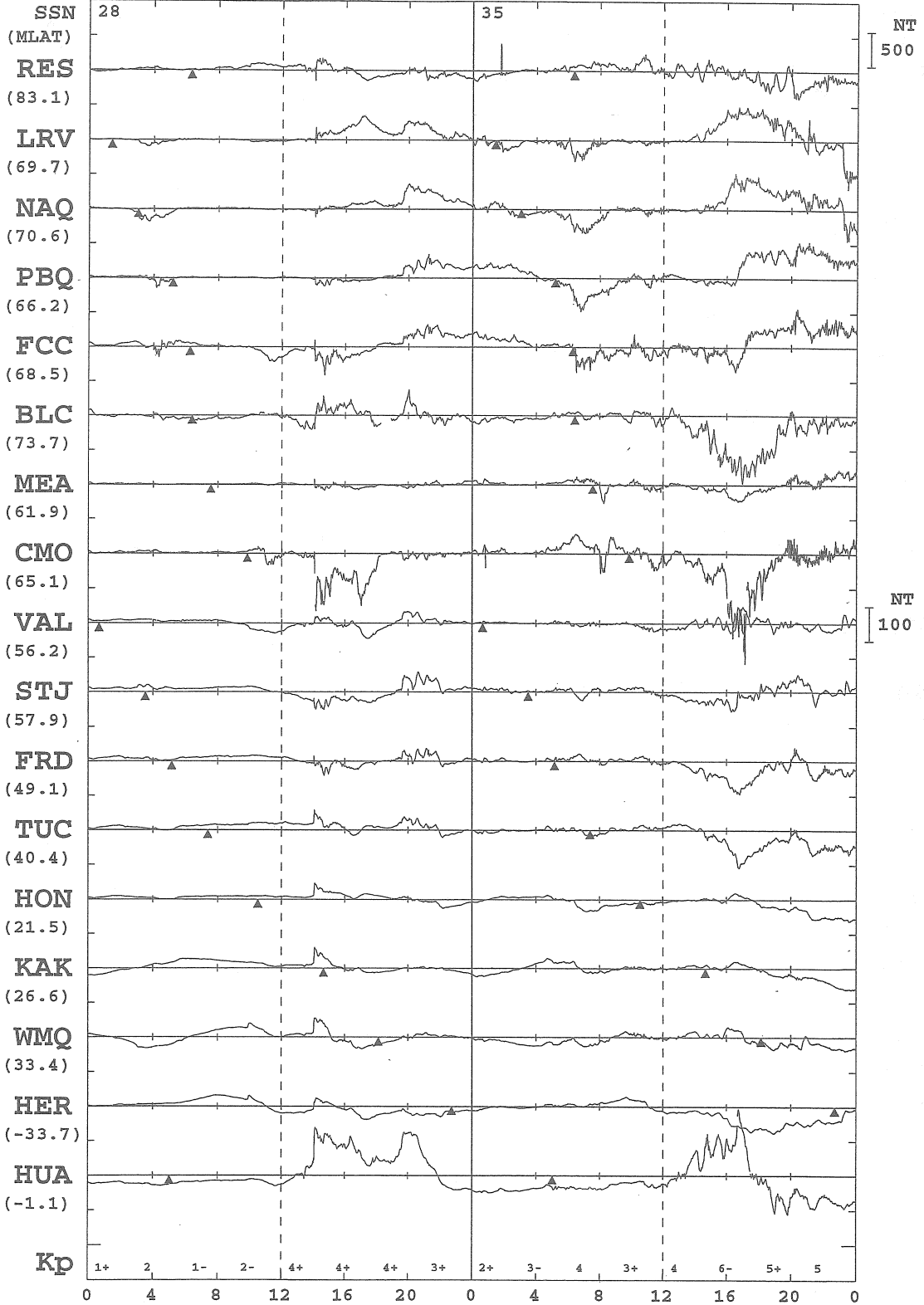


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

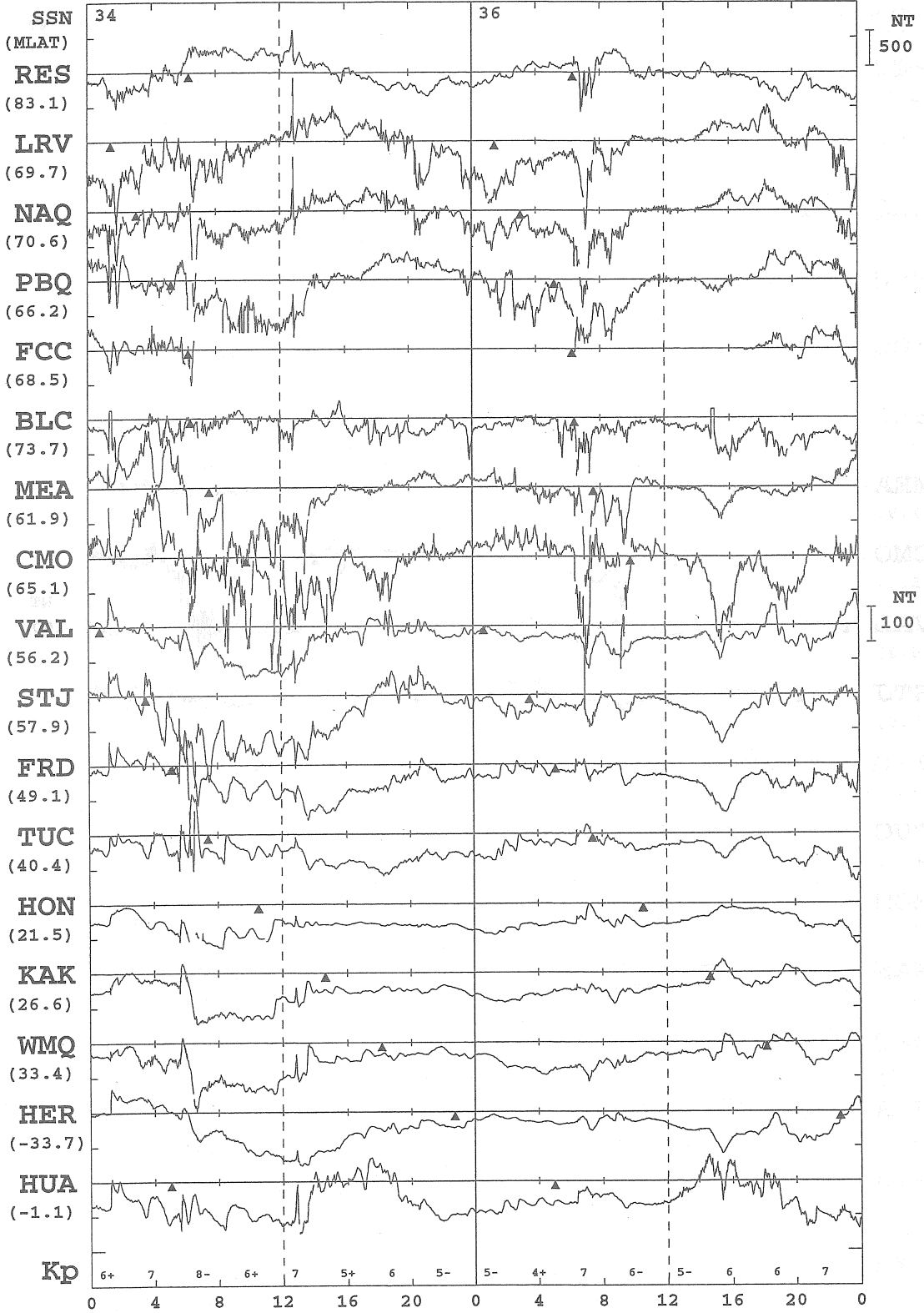


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



SEP 11
(DAY 254)

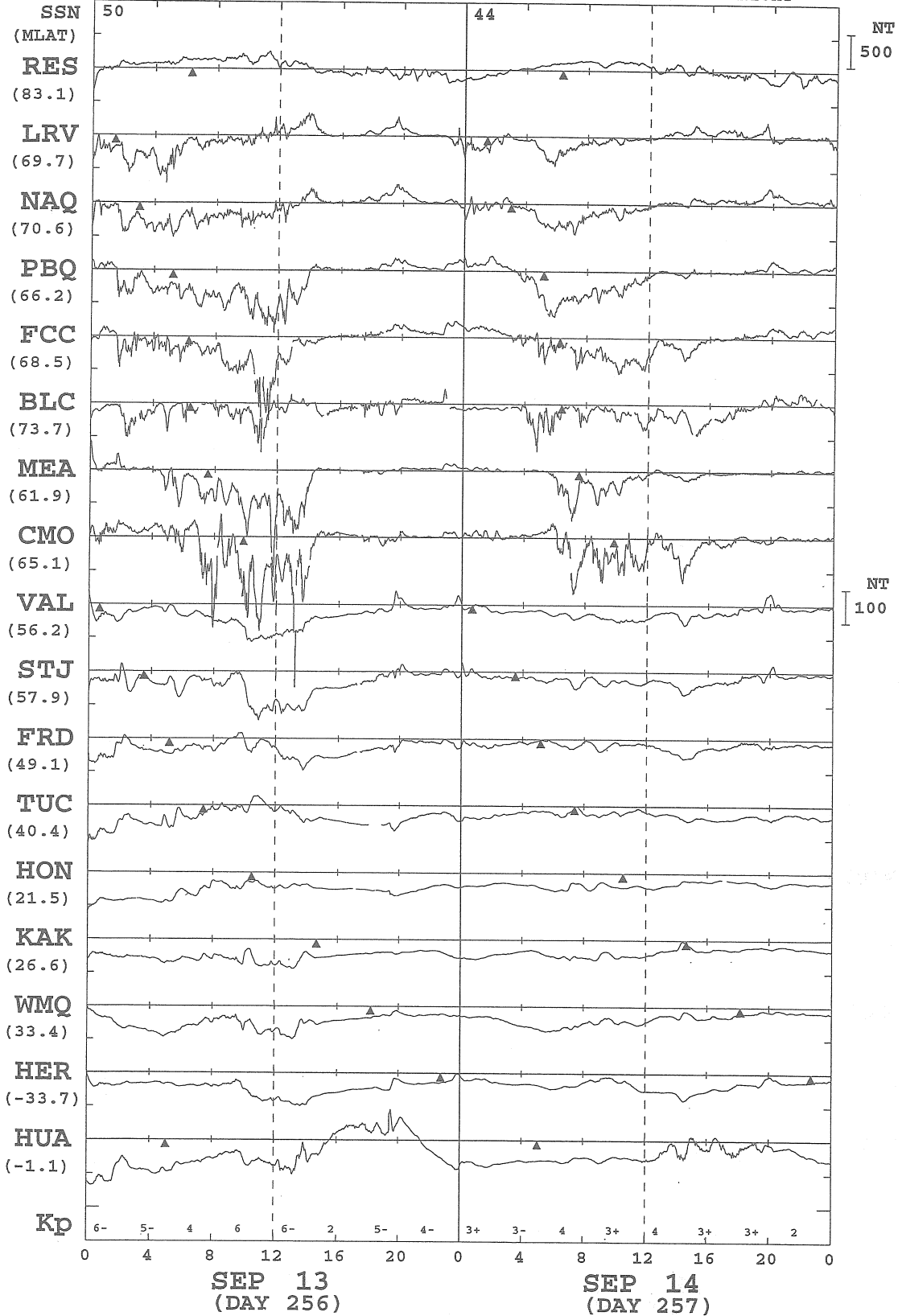
SEP 12
(DAY 255)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2005 H OR X-COMPONENT

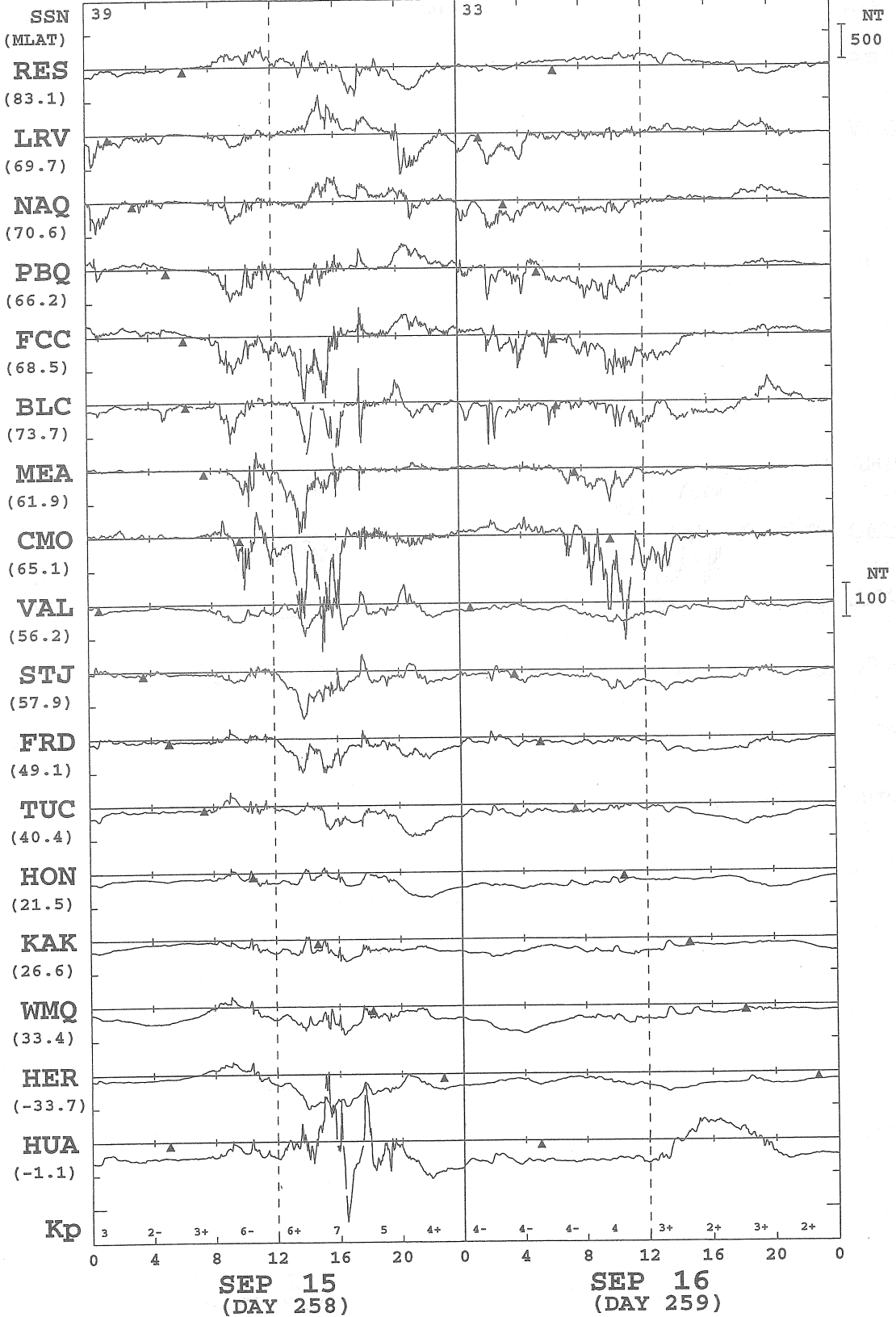
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

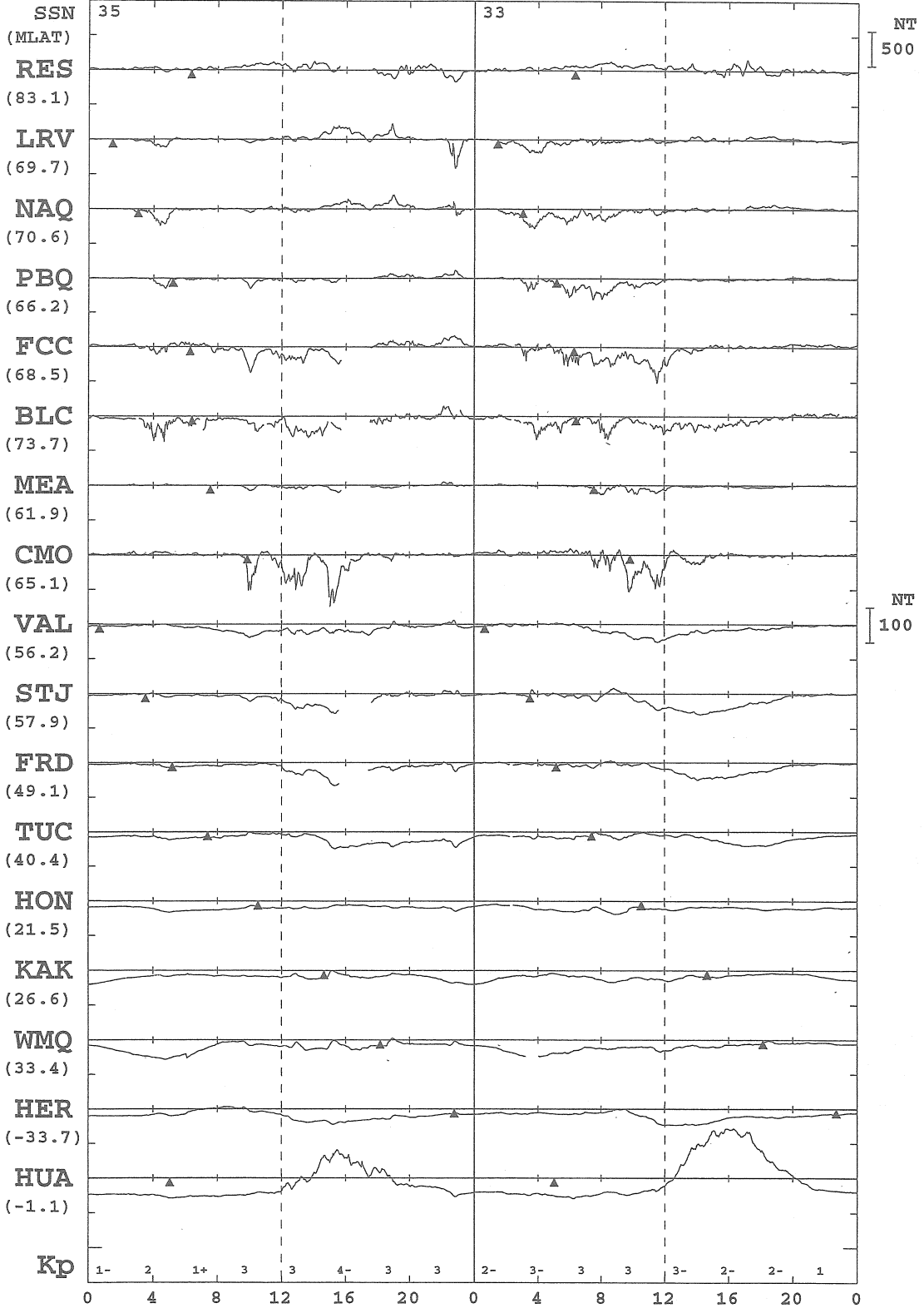
2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

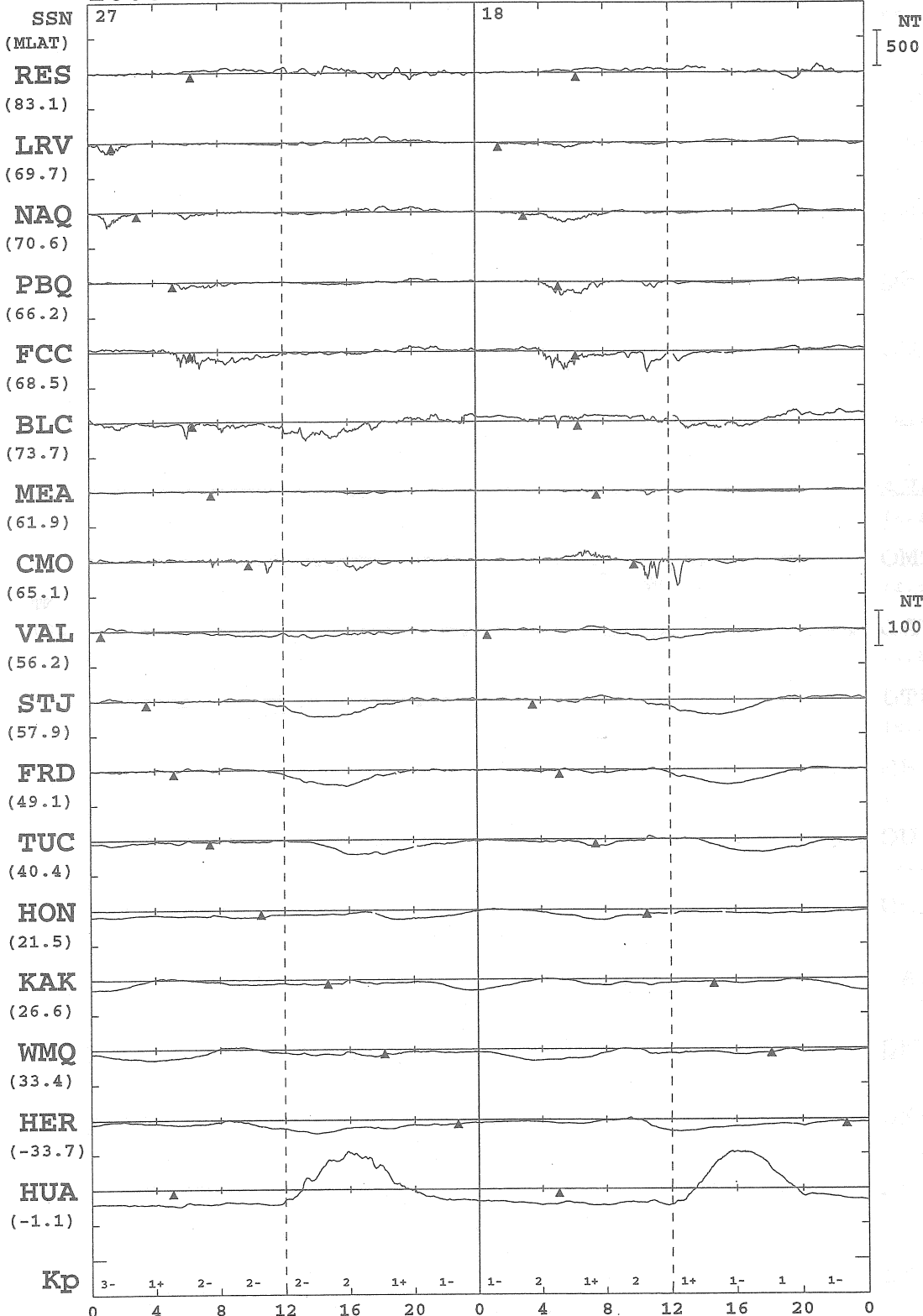


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



Kp

0 4 8 12 16 20 0 4 8 12 16 20 0

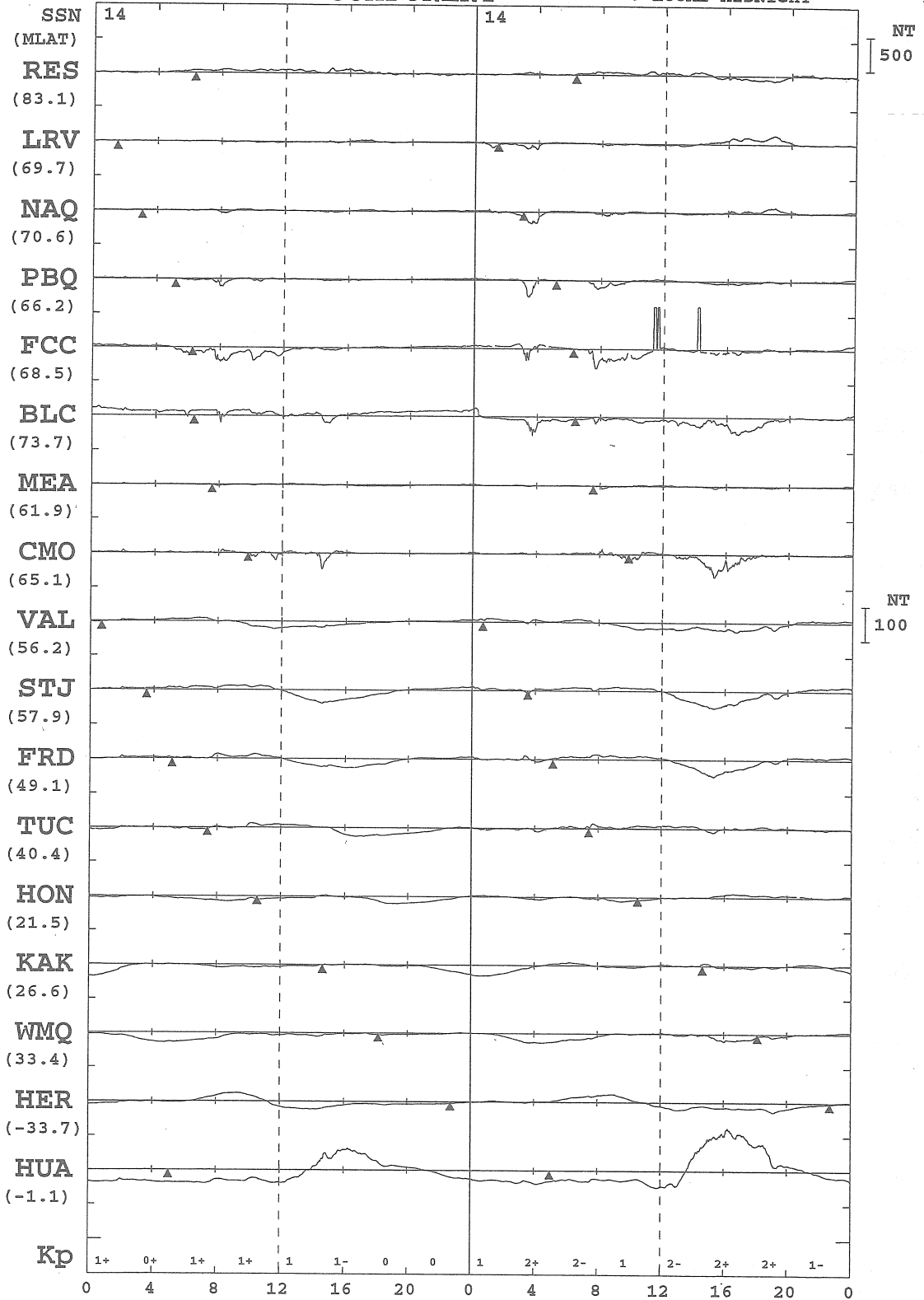
SEP 19 (DAY 262) SEP 20 (DAY 263)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



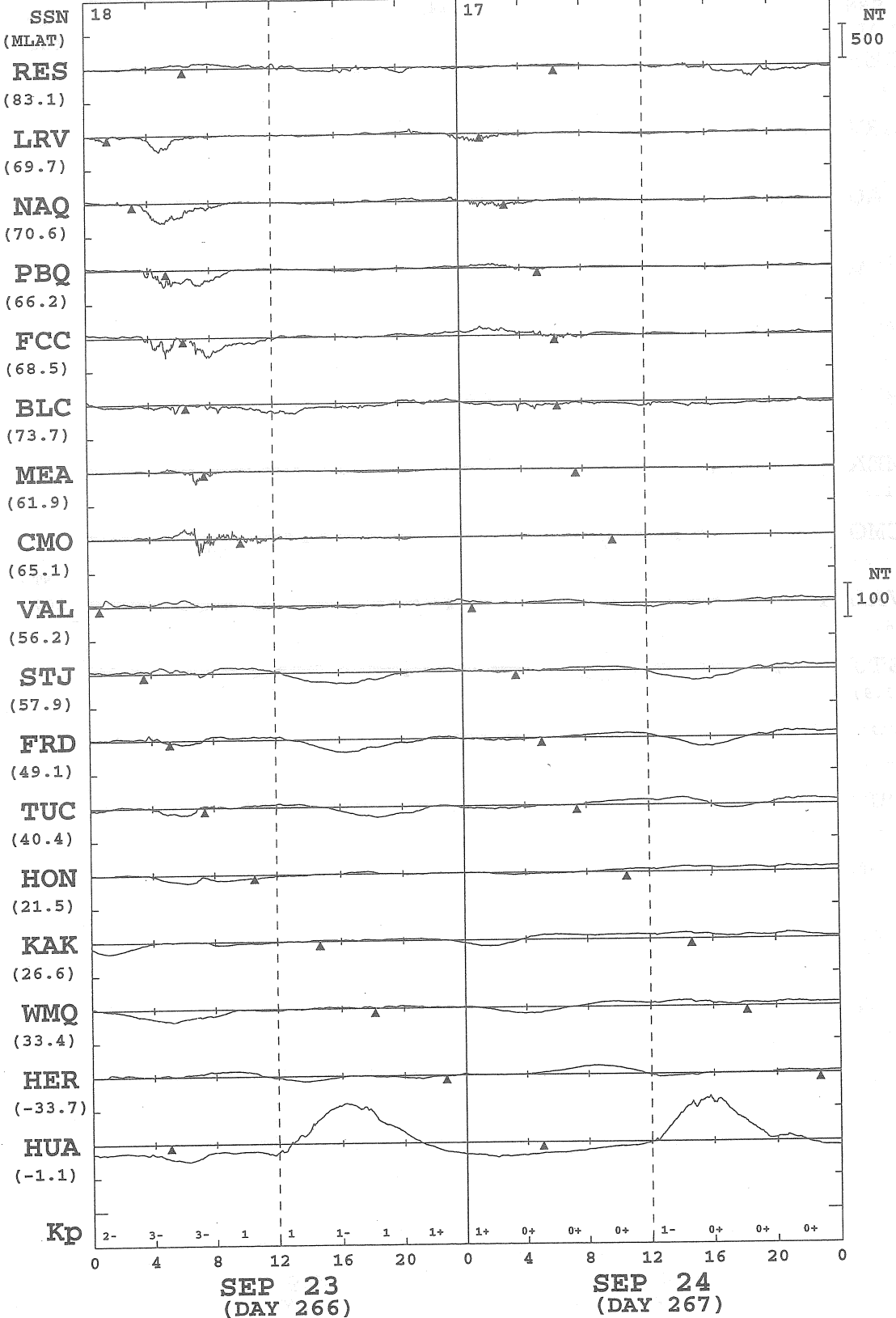
SEP 21
(DAY 264)

SEP 22
(DAY 265)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT Δ : LOCAL MIDNIGHT

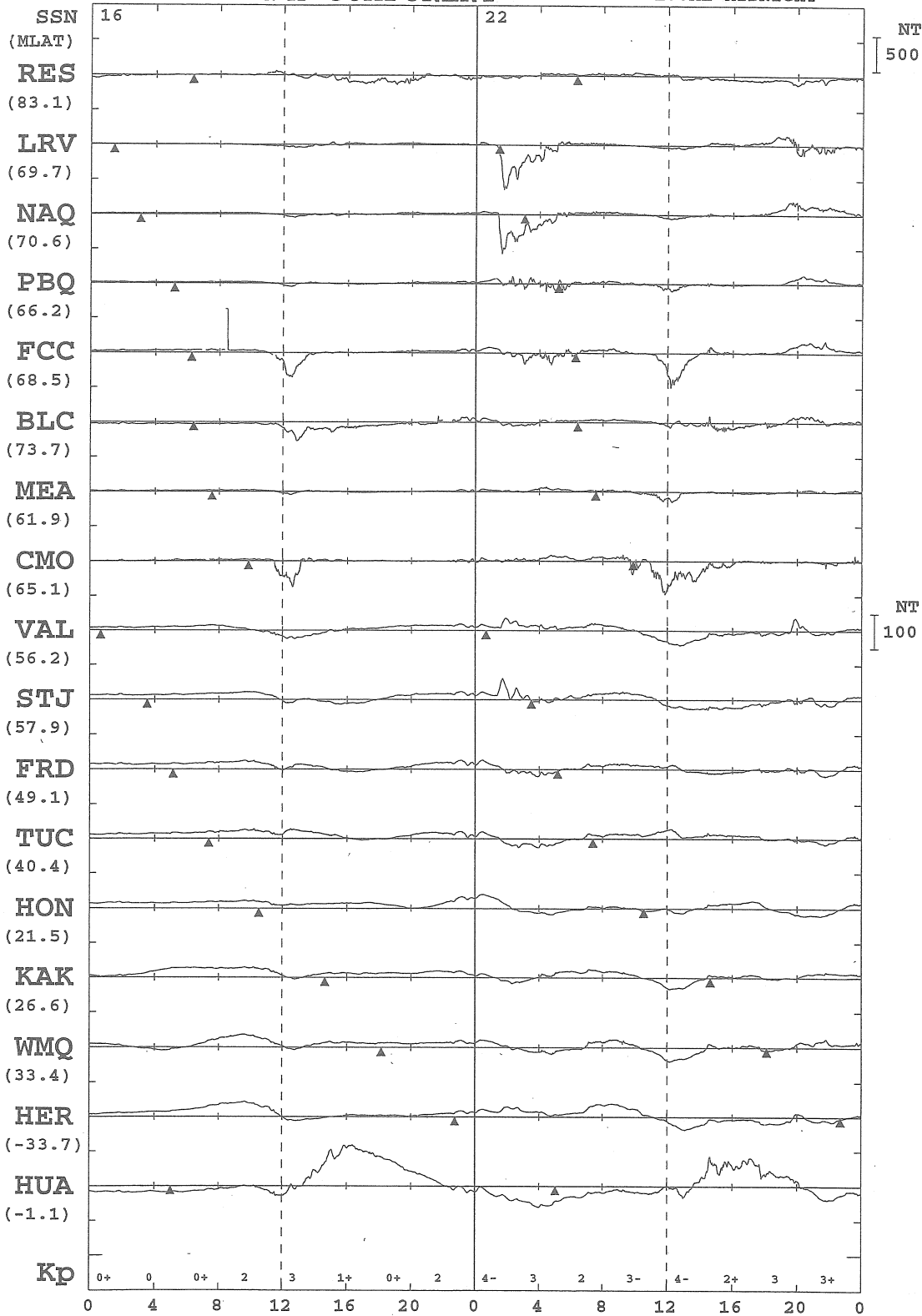


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



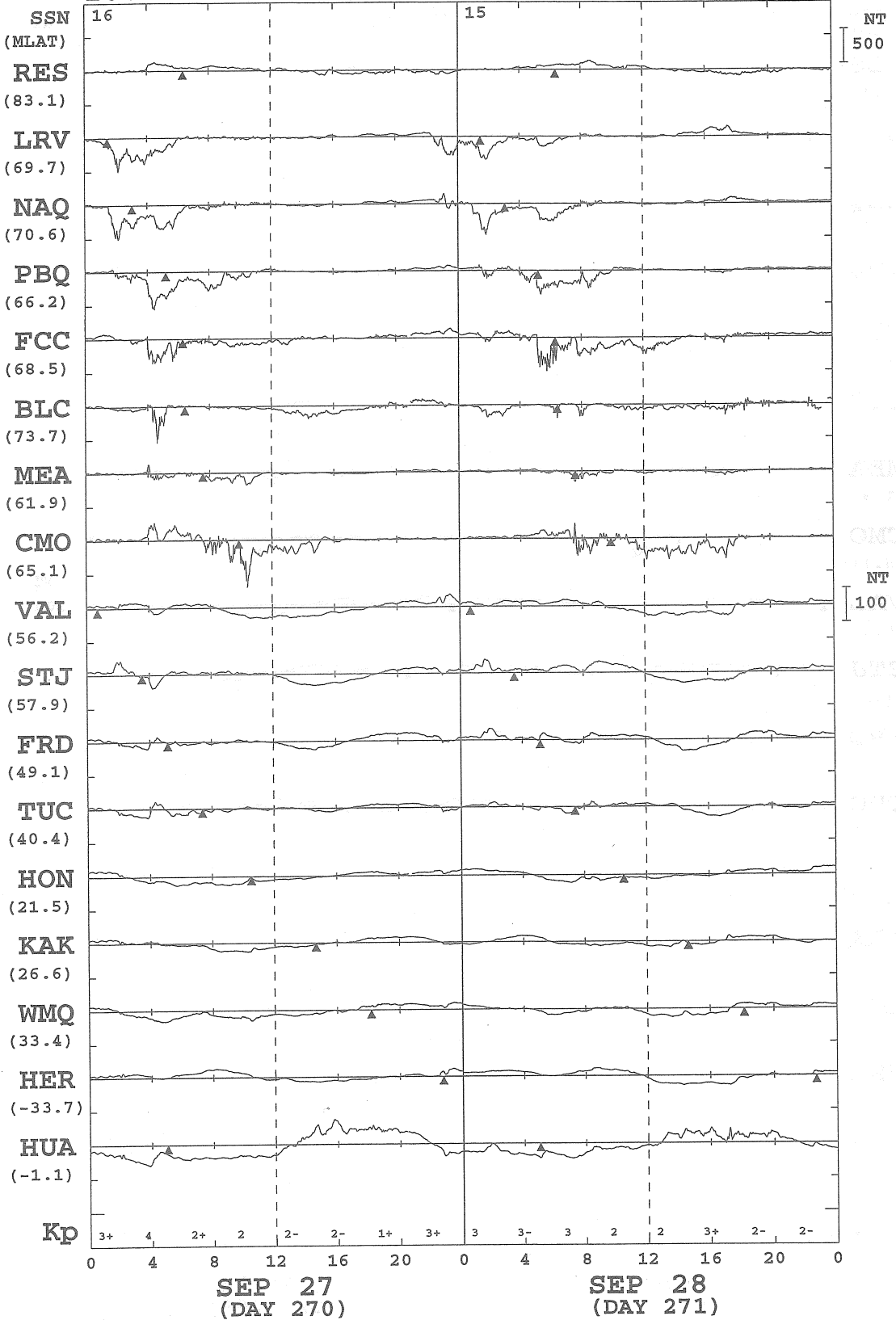
SEP 25
(DAY 268)

SEP 26
(DAY 269)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT **RAW** Δ : LOCAL MIDNIGHT

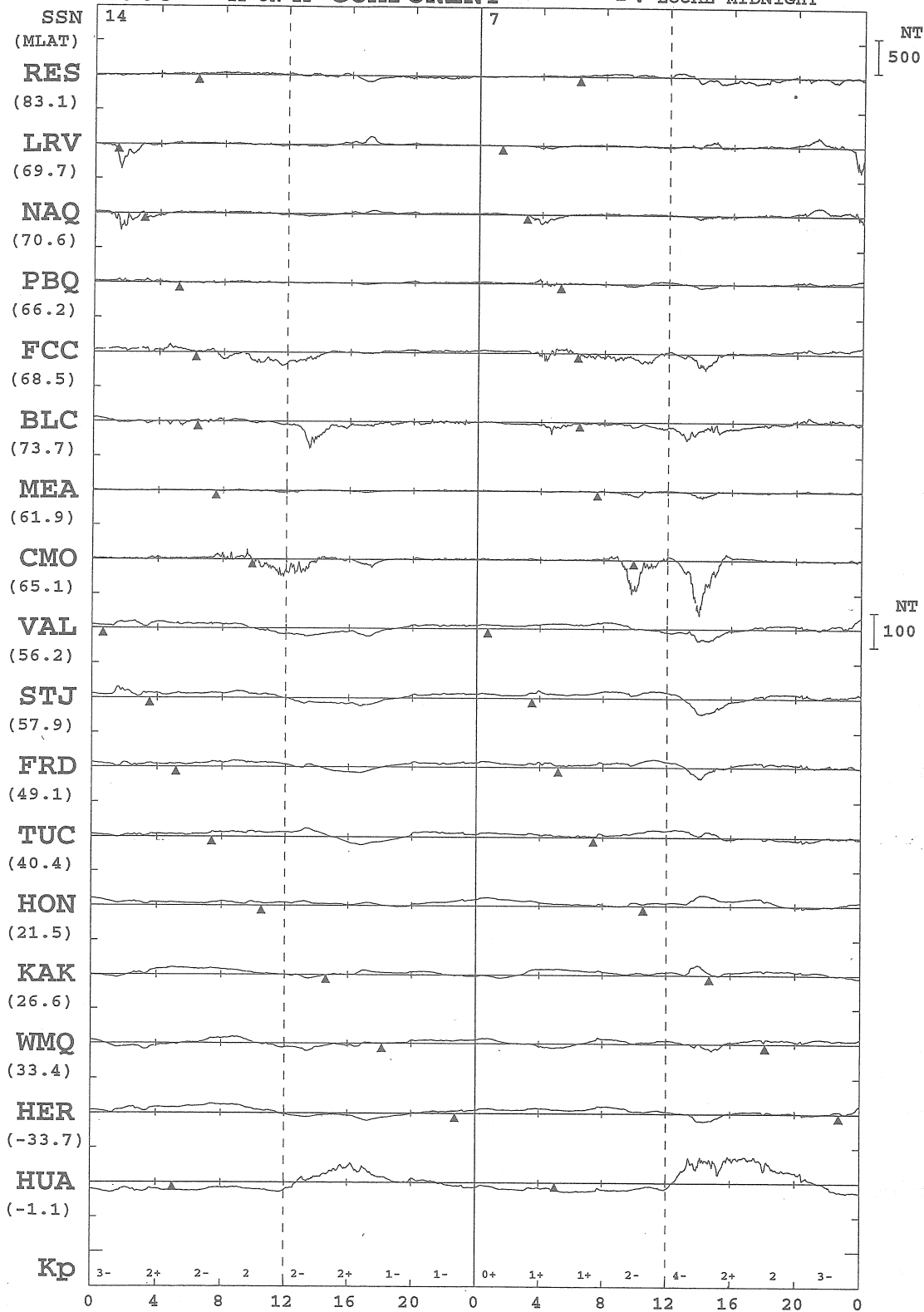


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

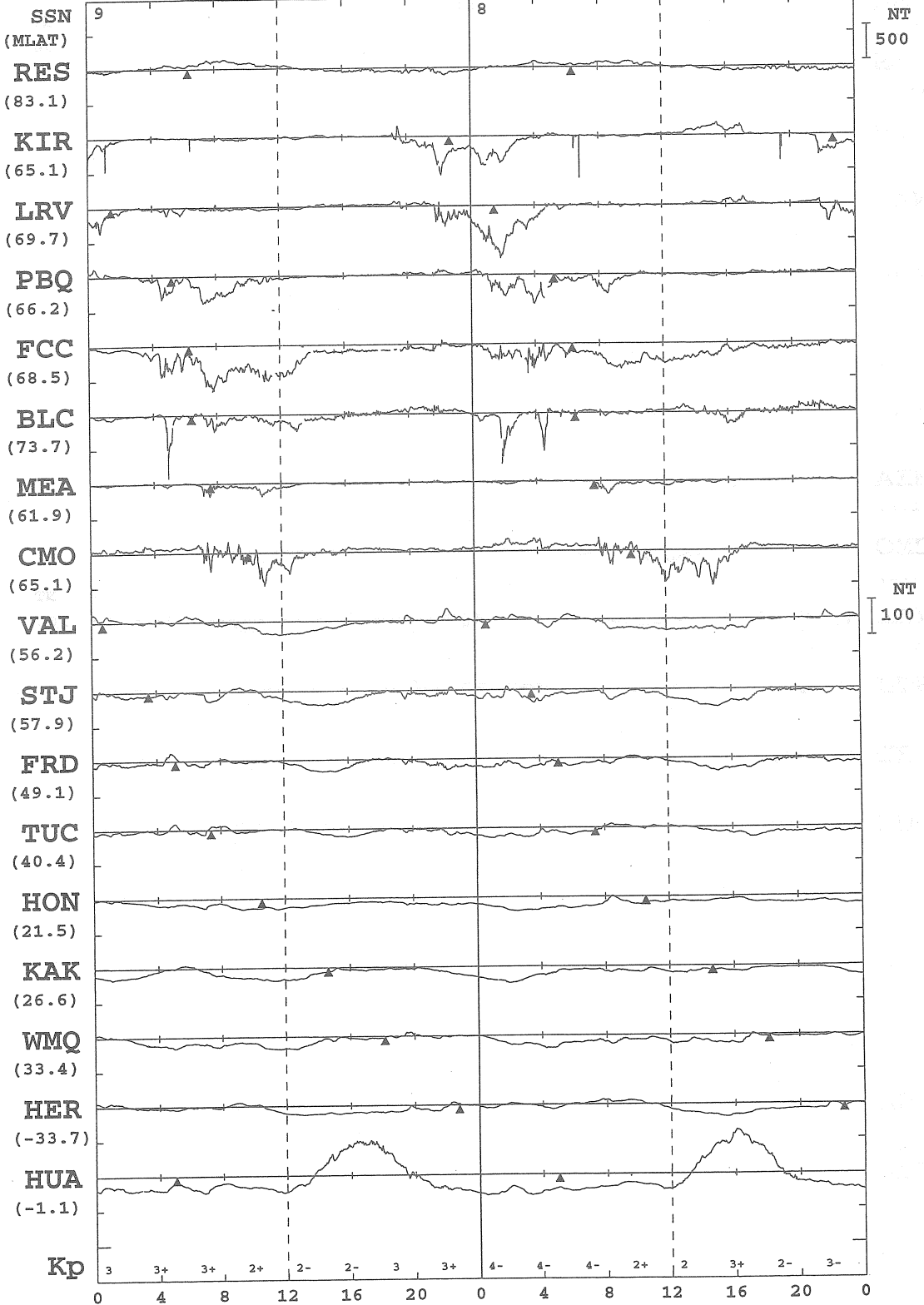


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

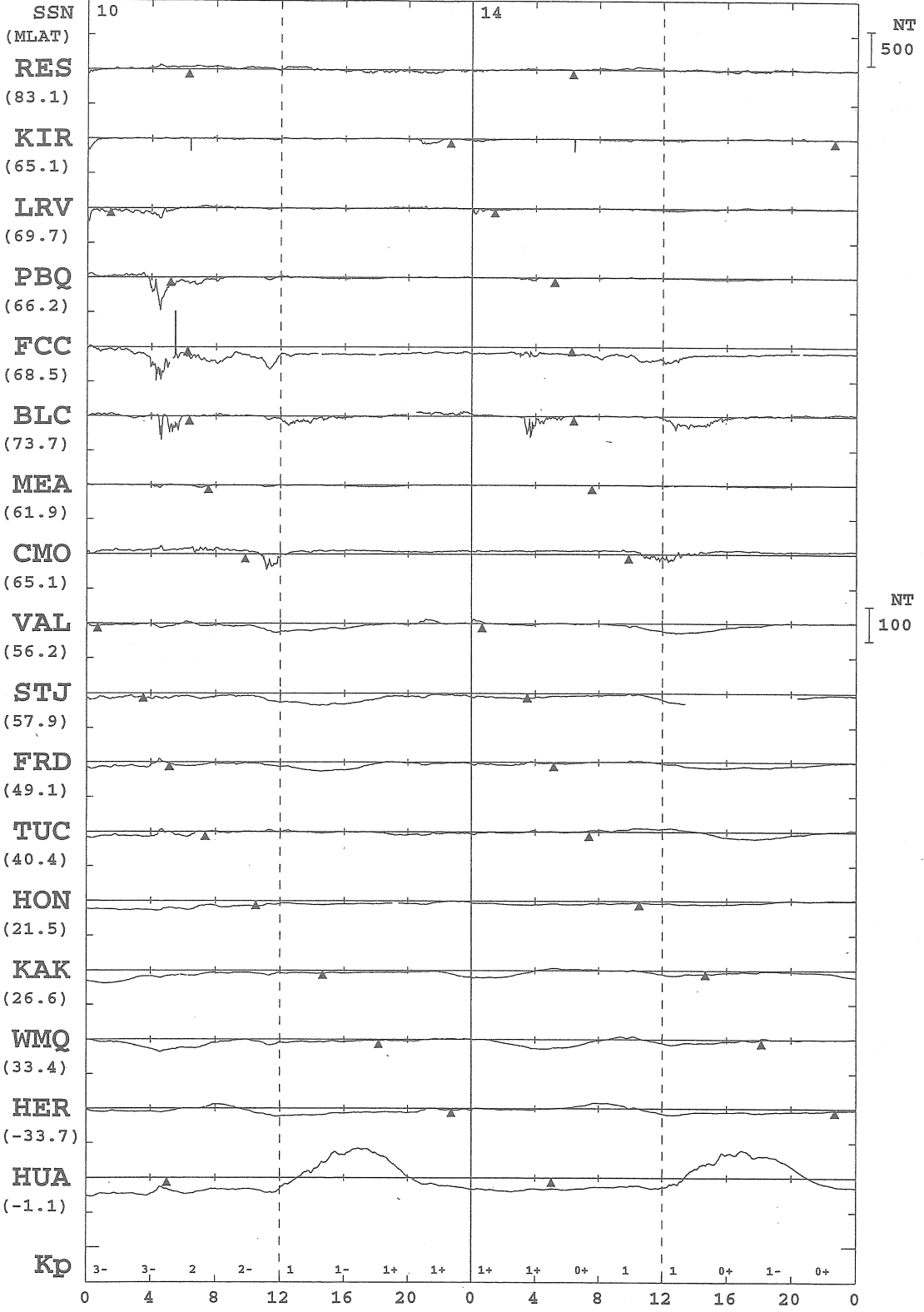


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

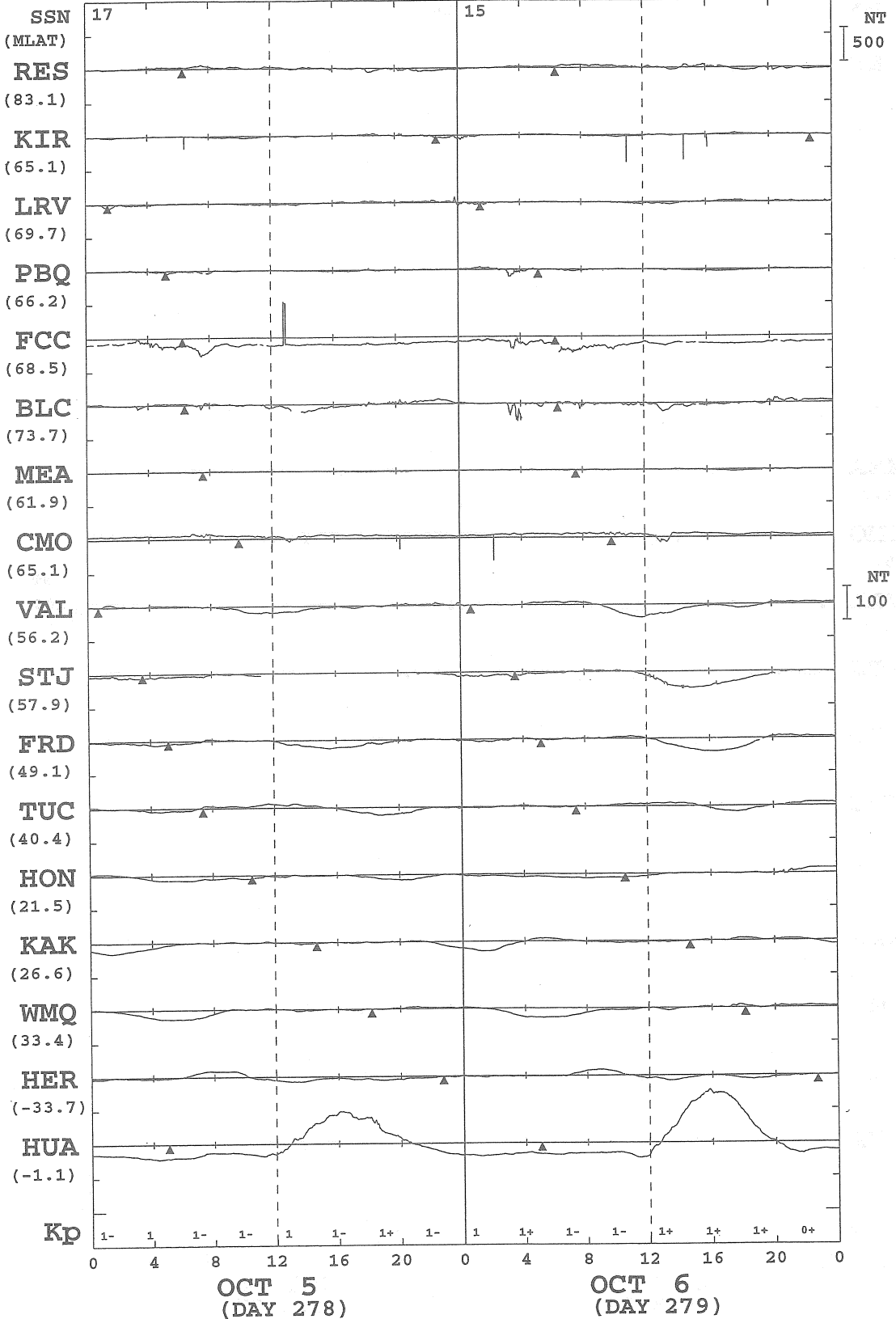
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

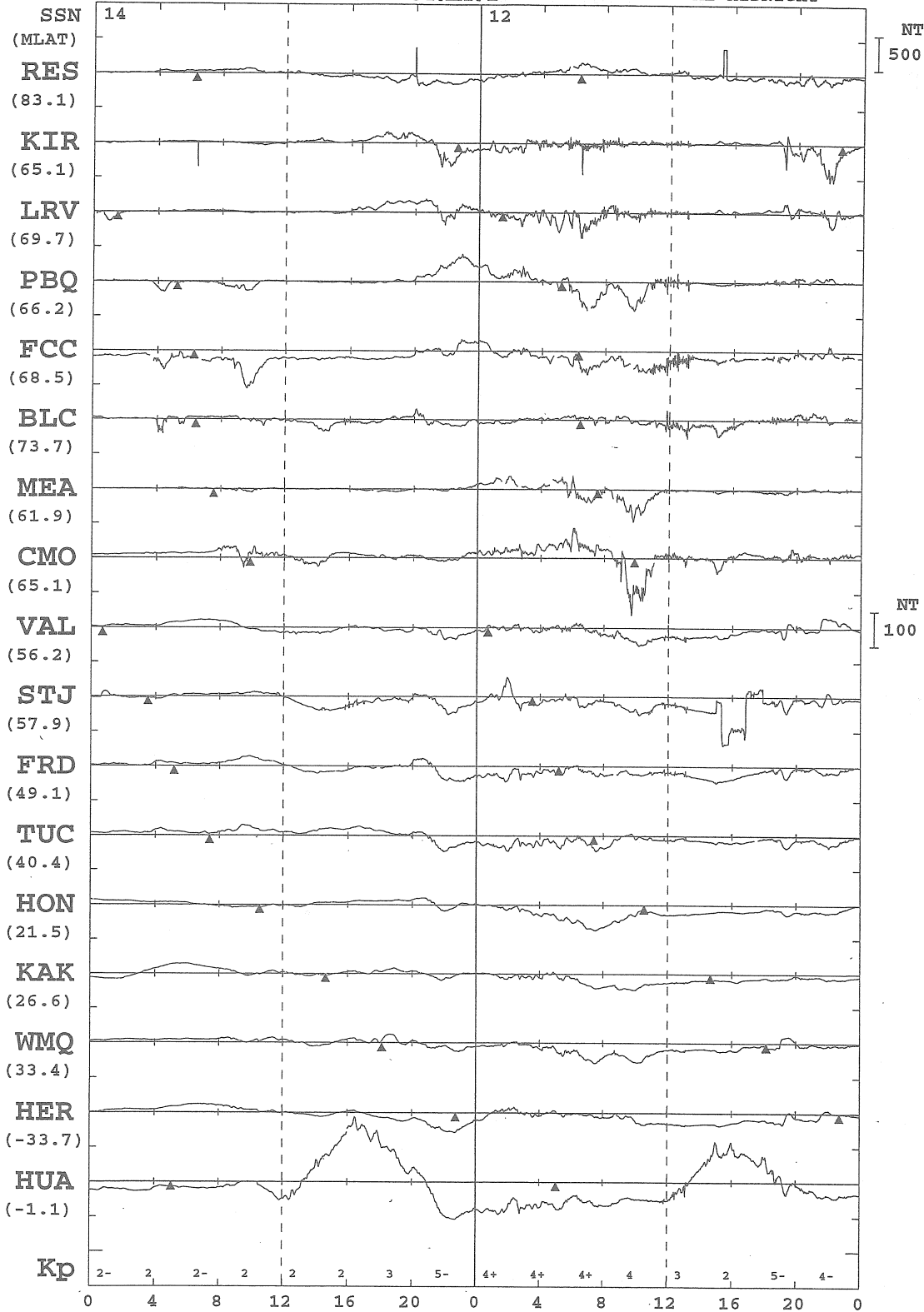


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



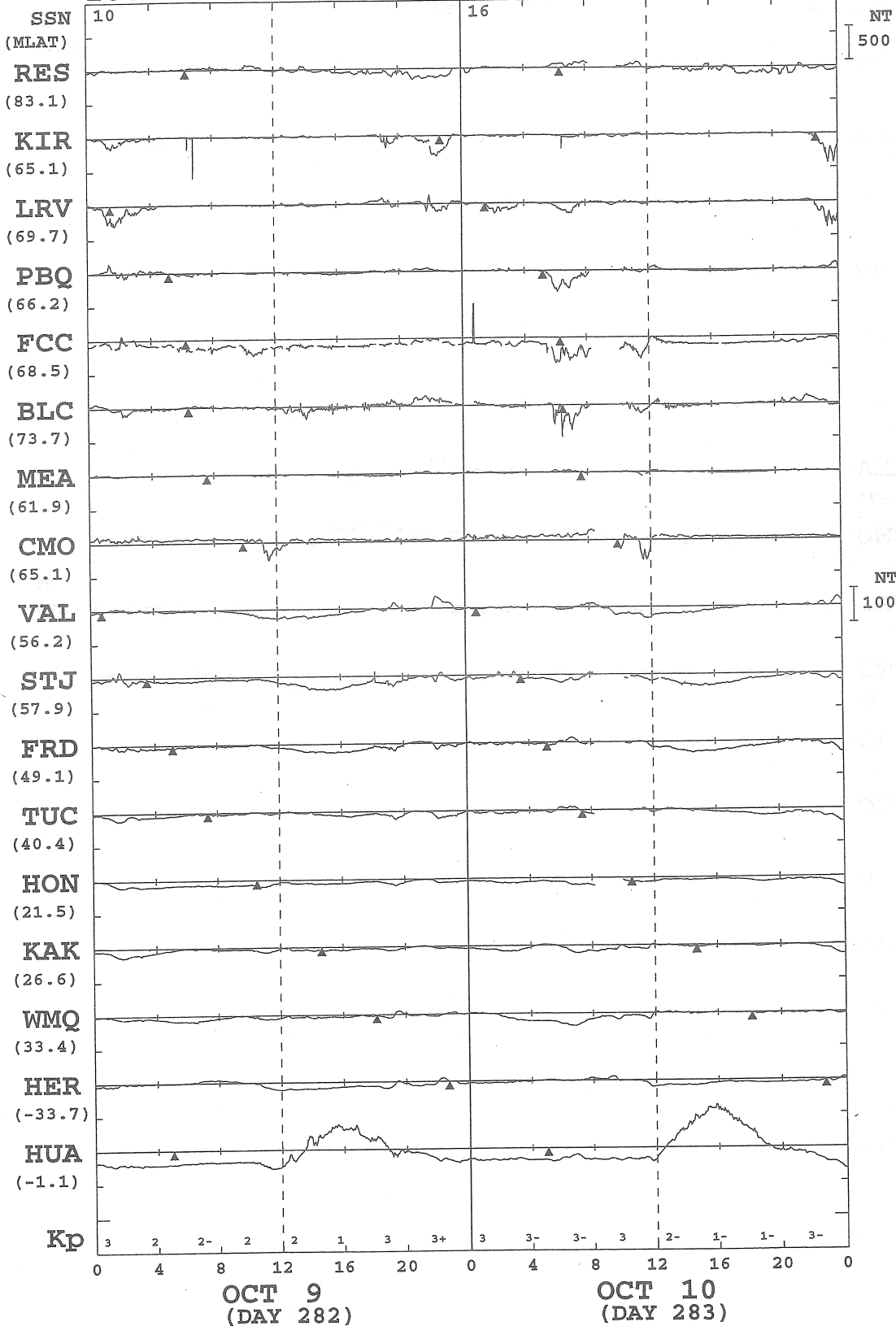
OCT 7
(DAY 280)

OCT 8
(DAY 281)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

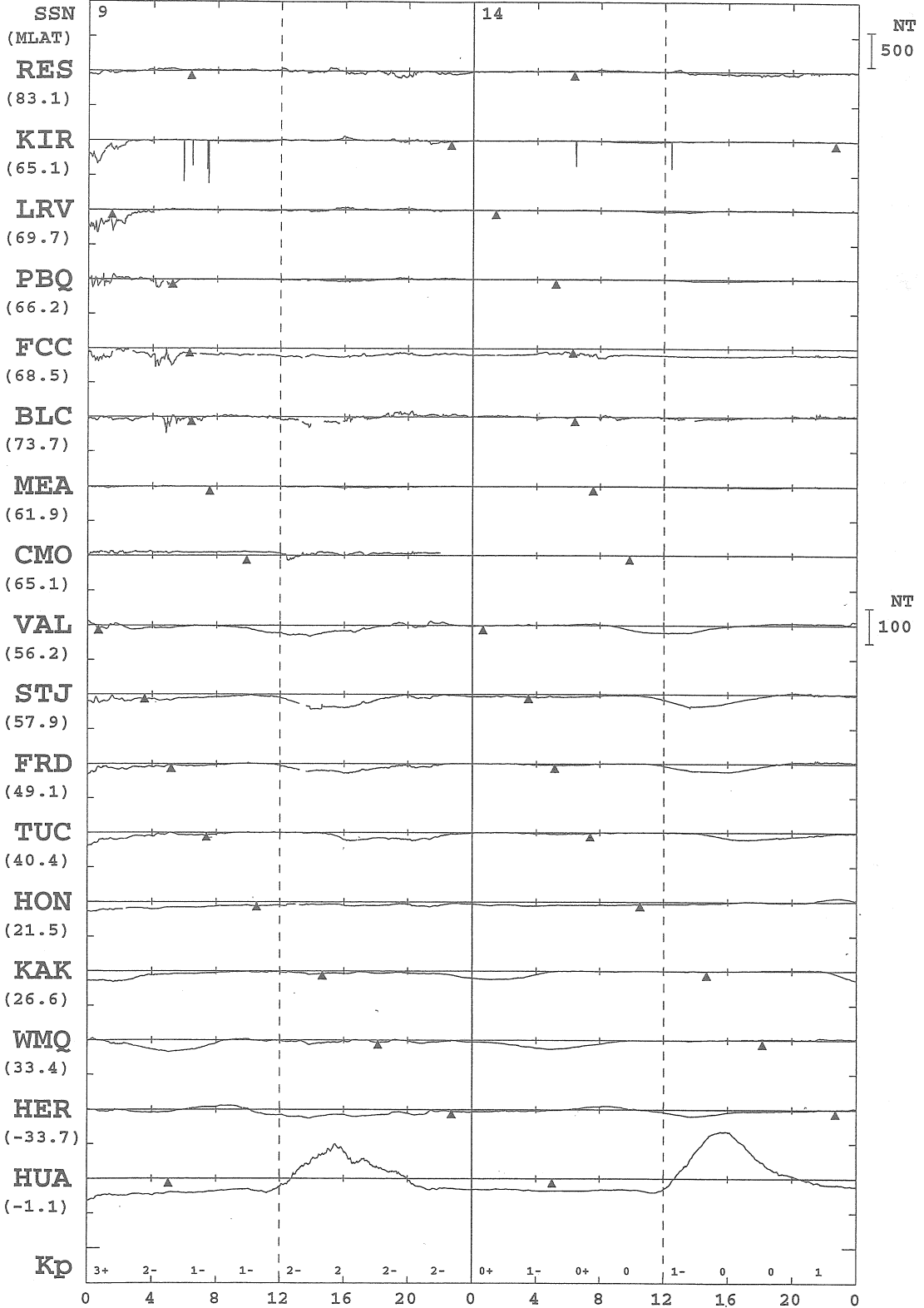


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

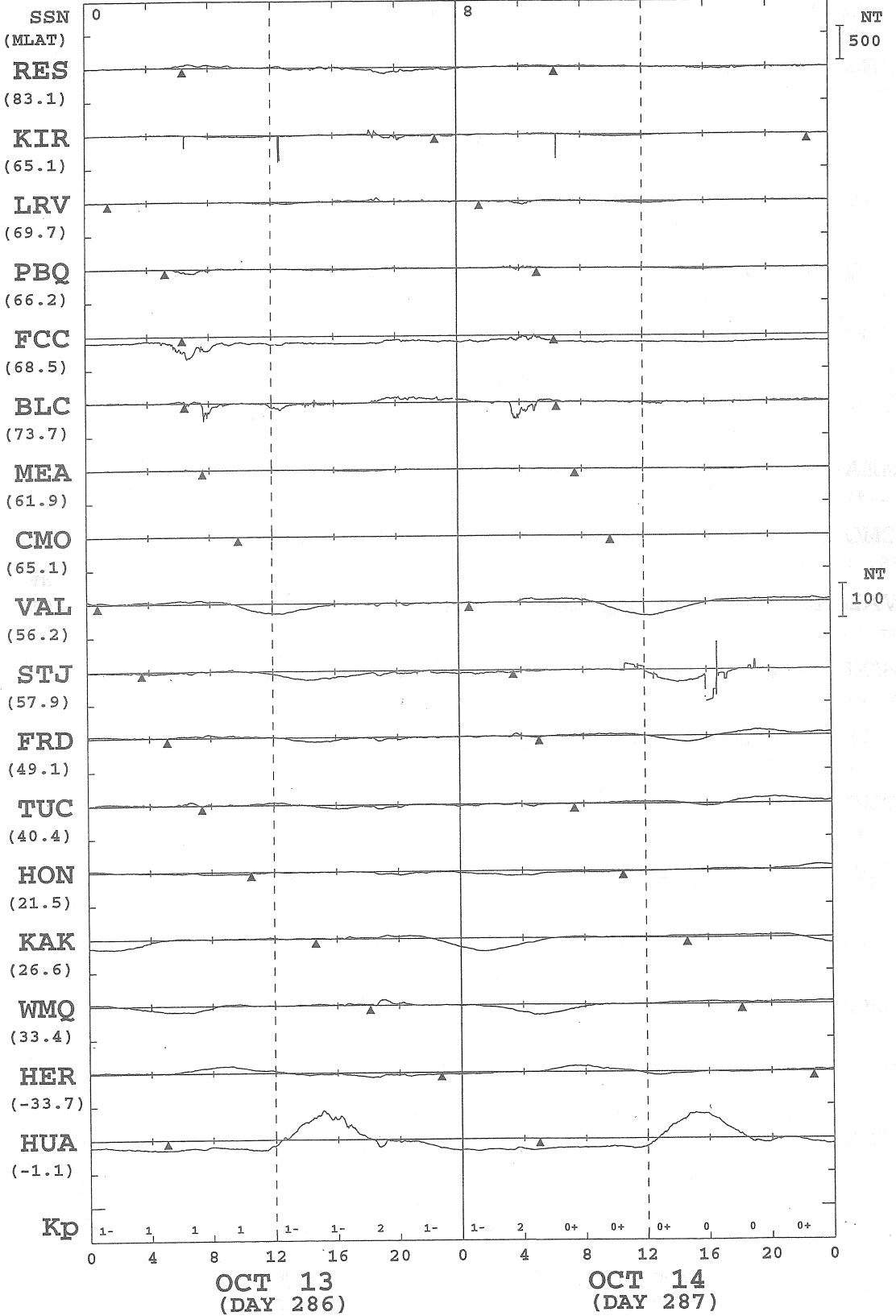


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

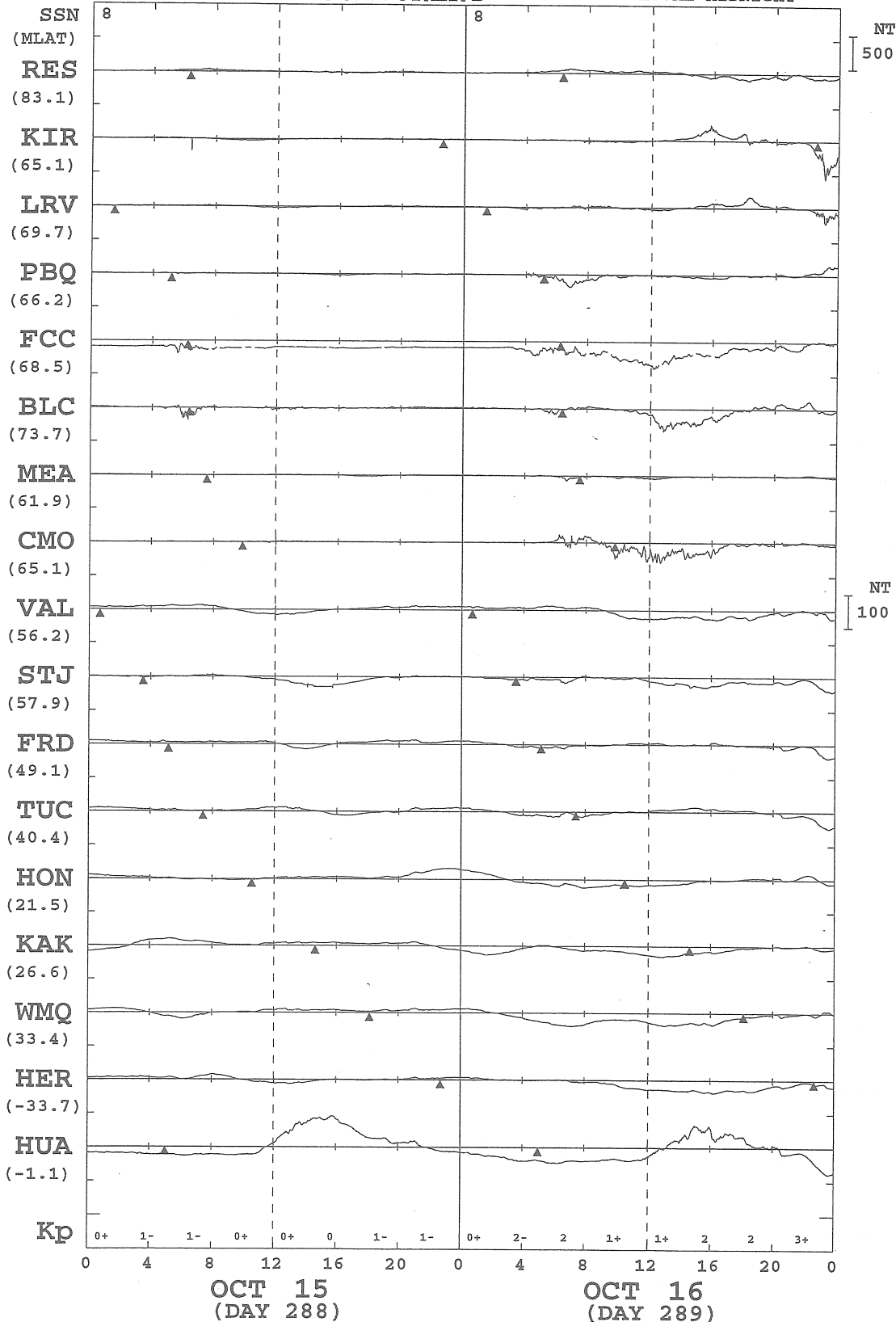


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

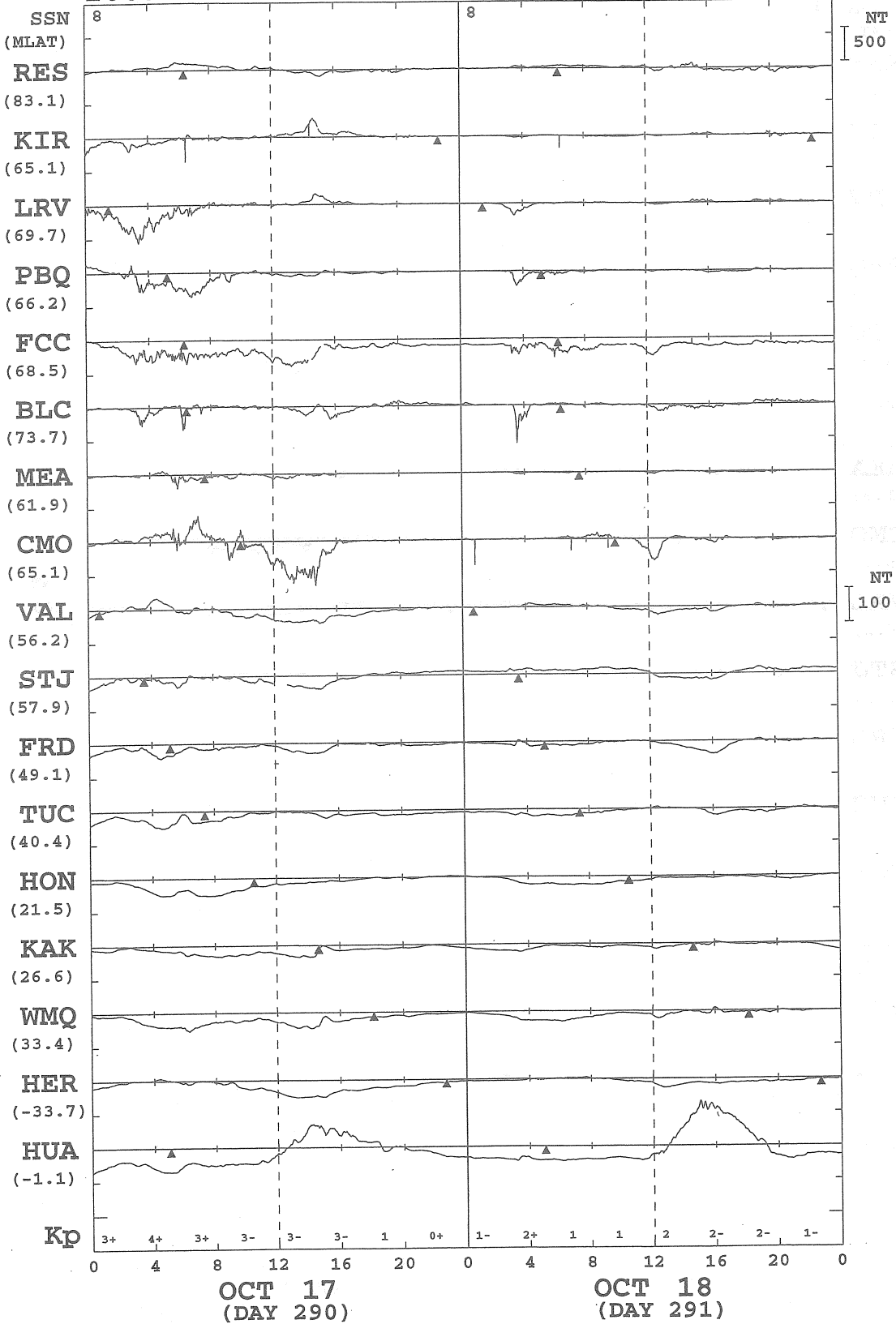


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

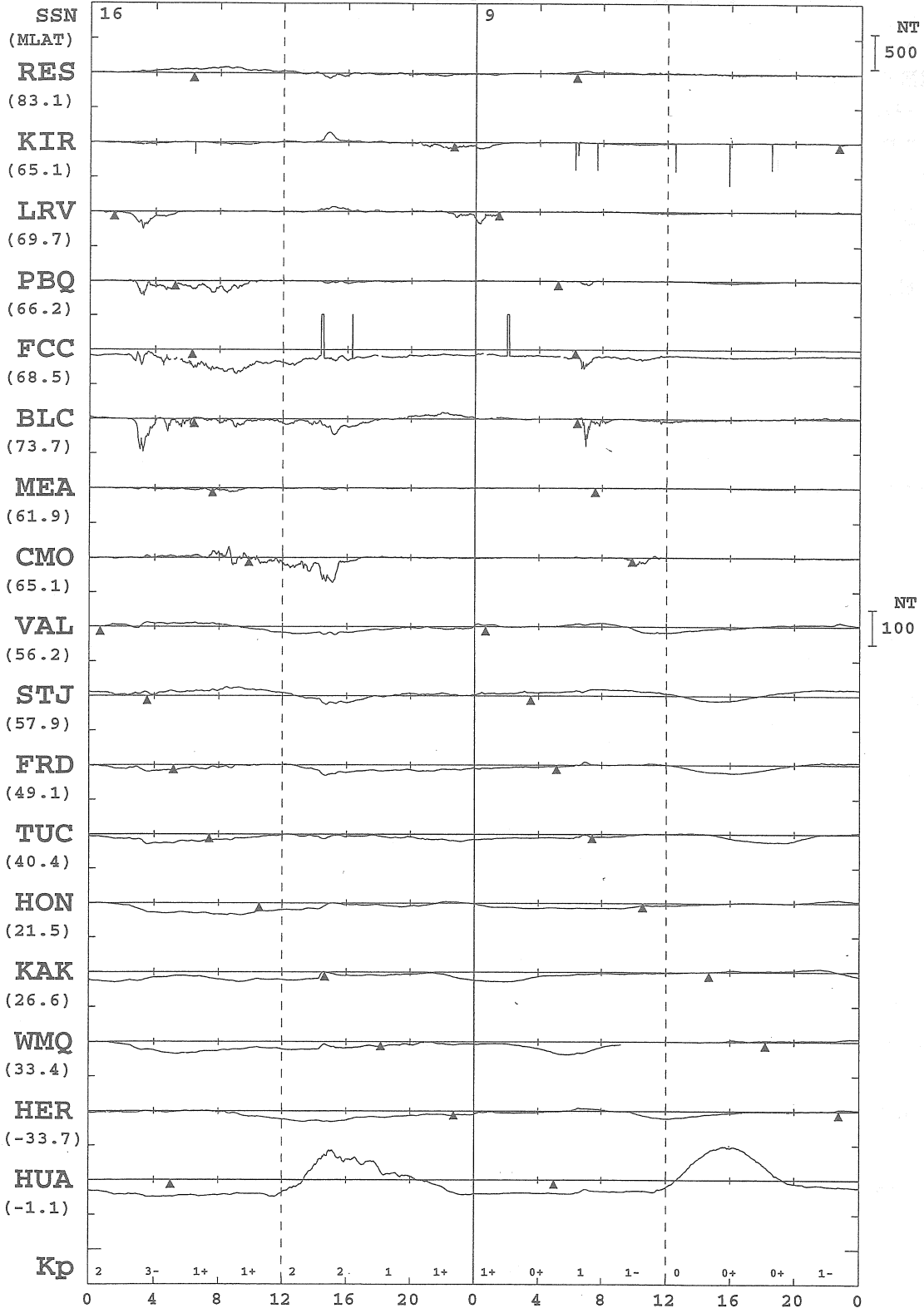


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

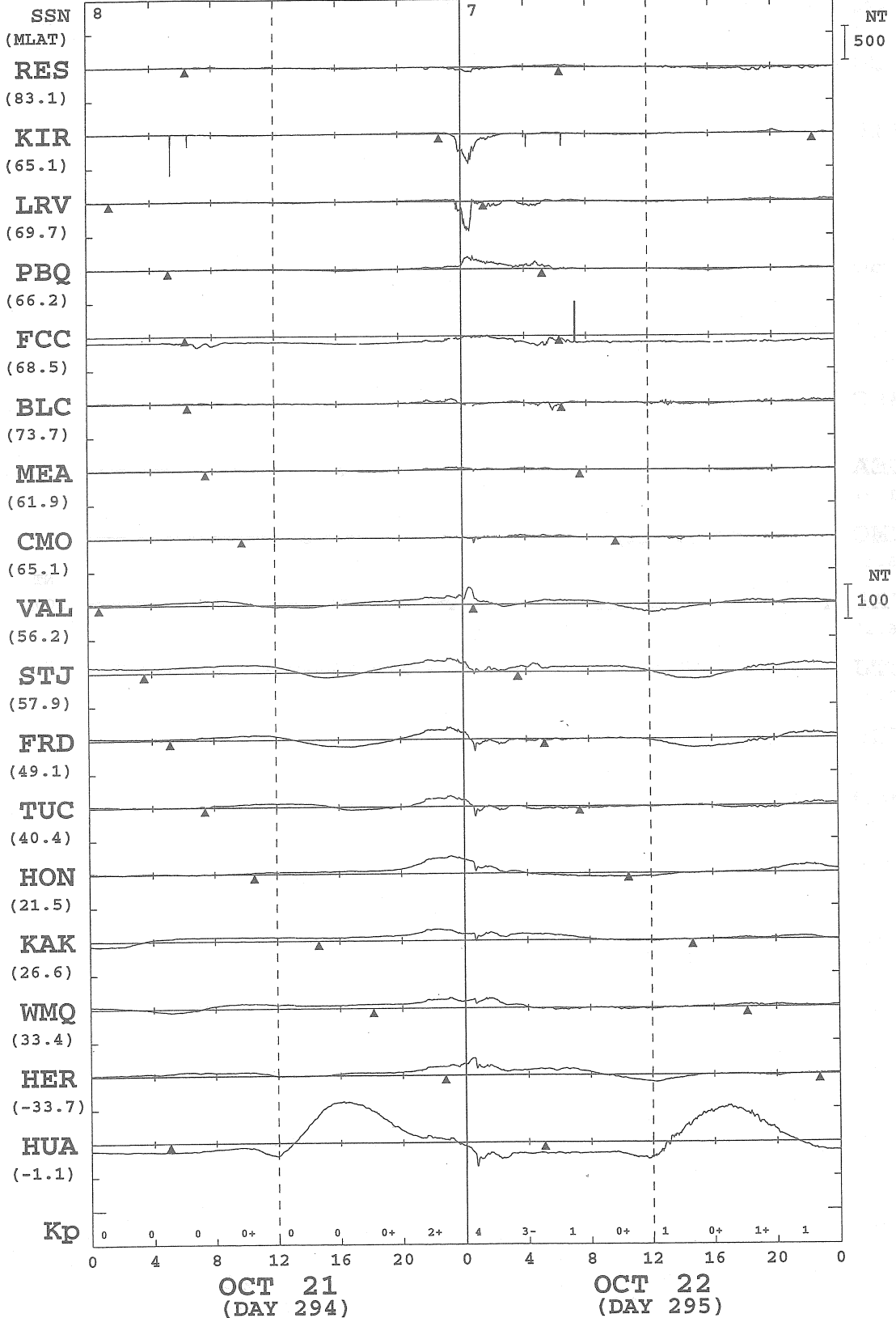


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

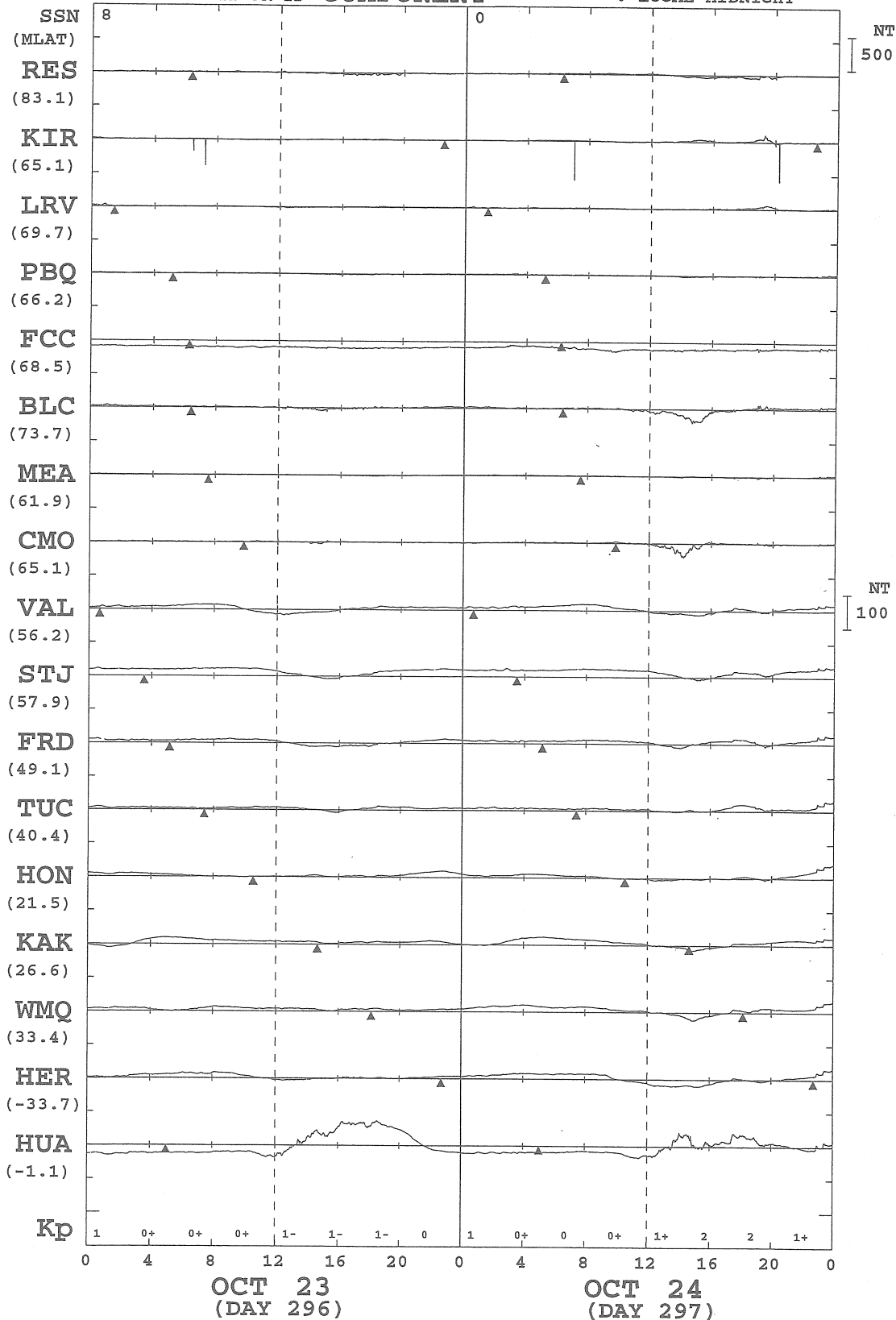


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

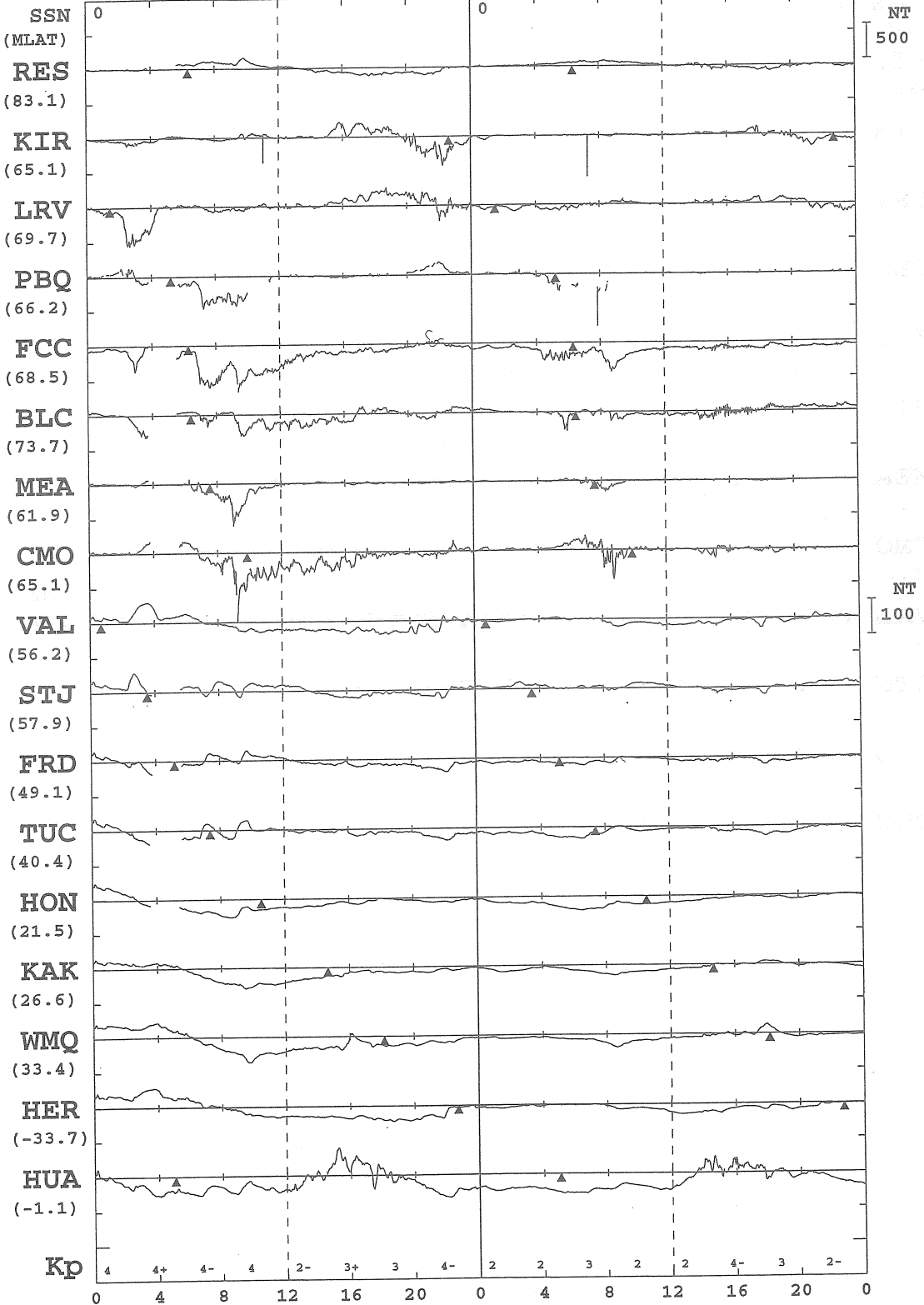
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

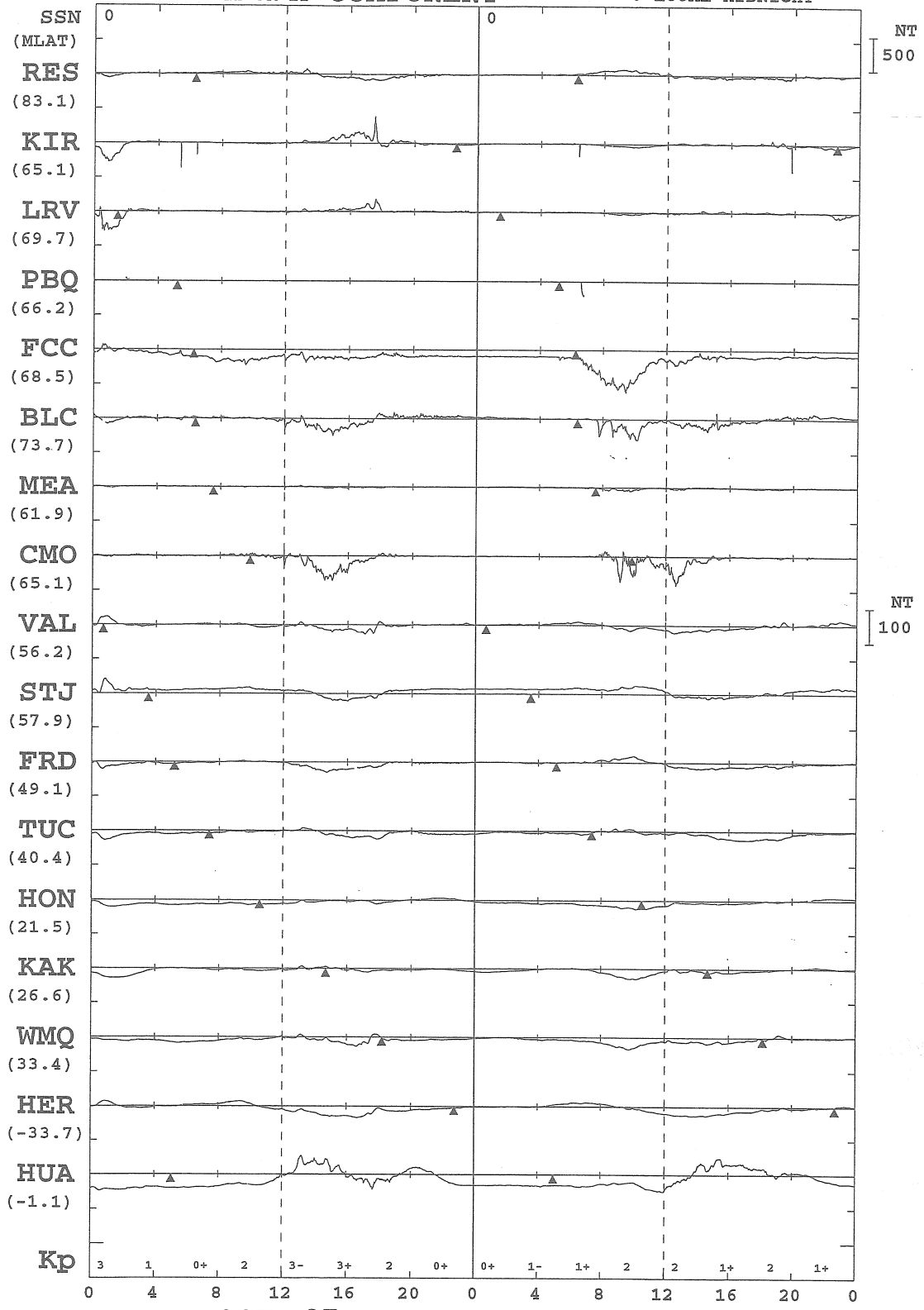


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

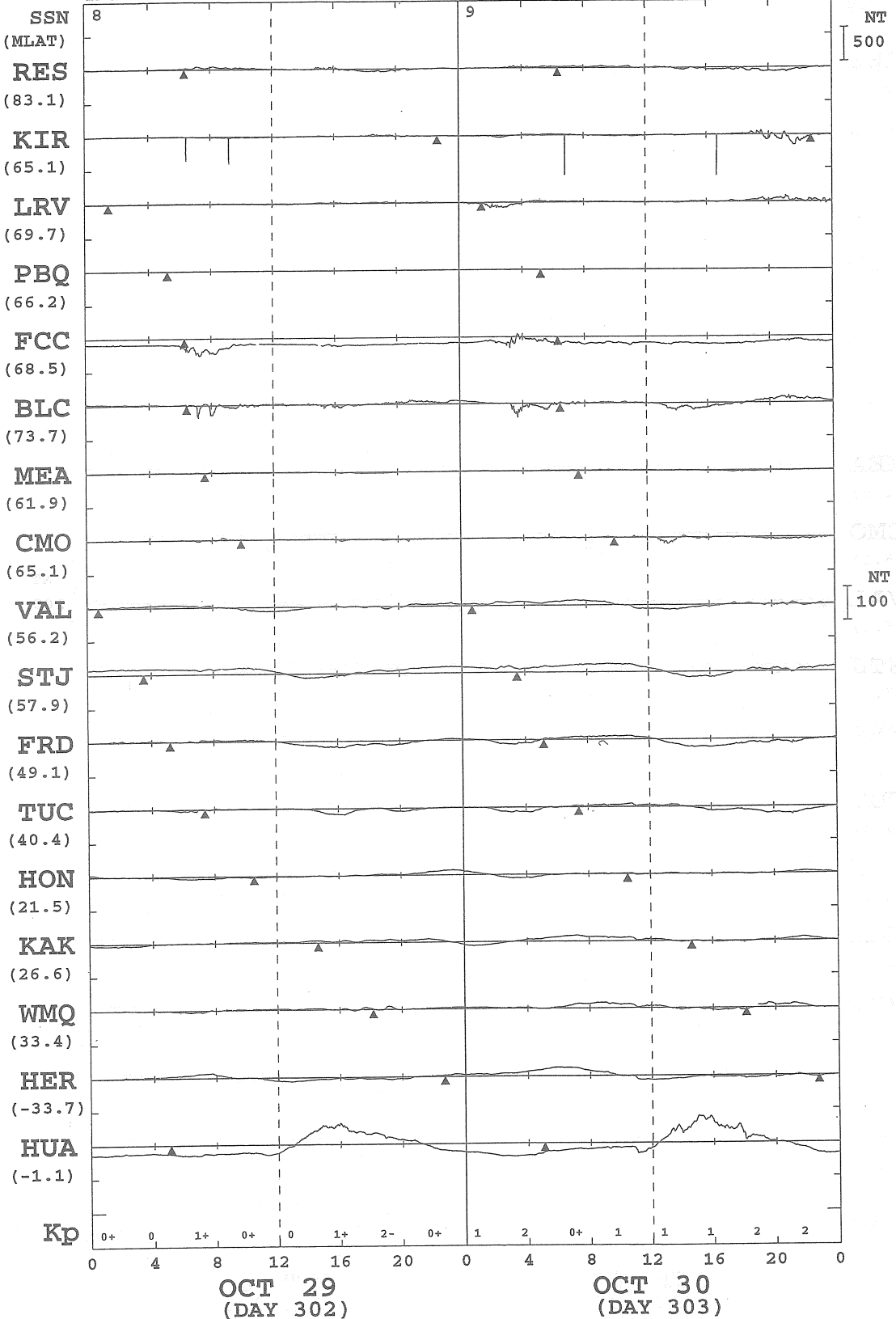


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

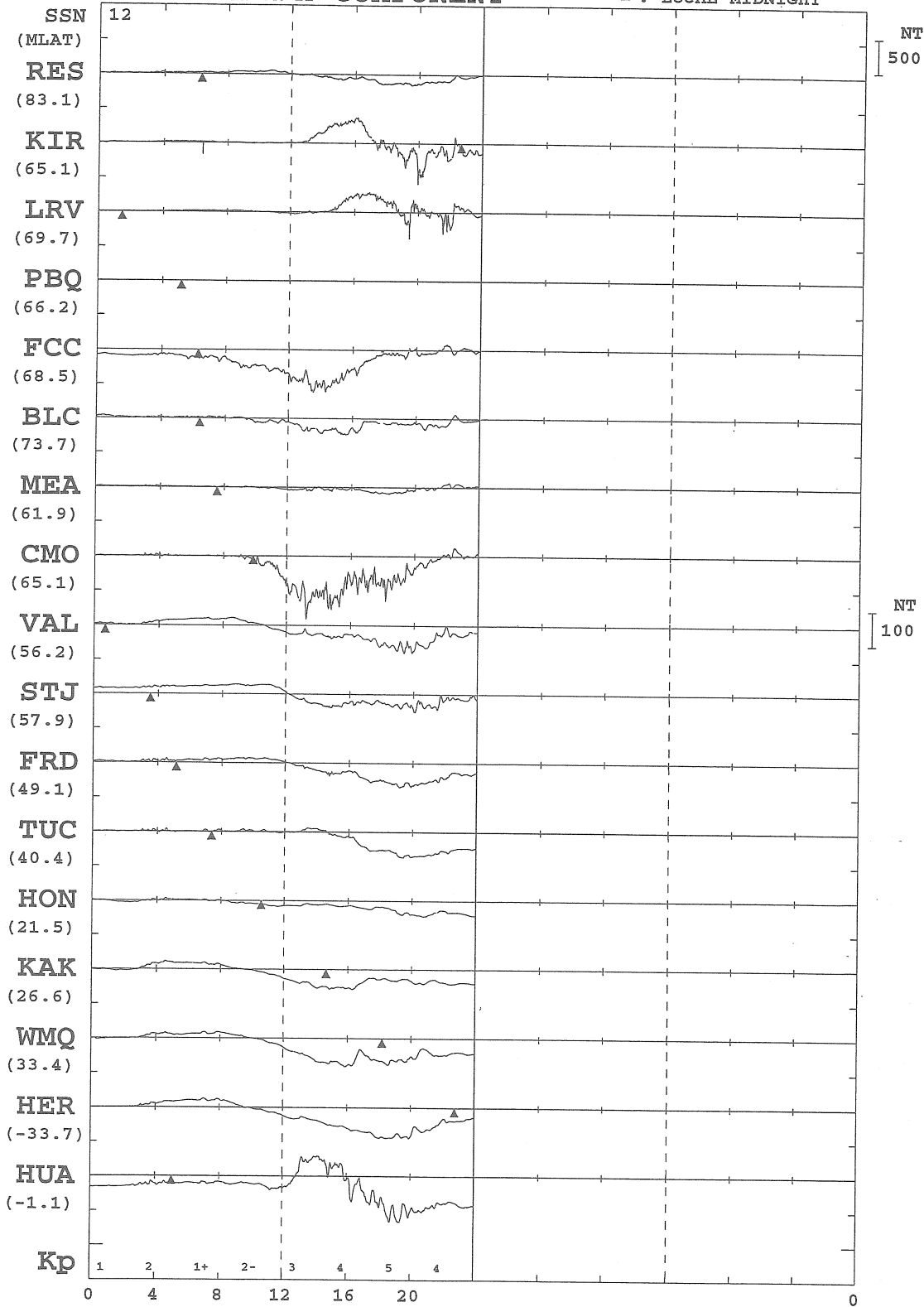


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

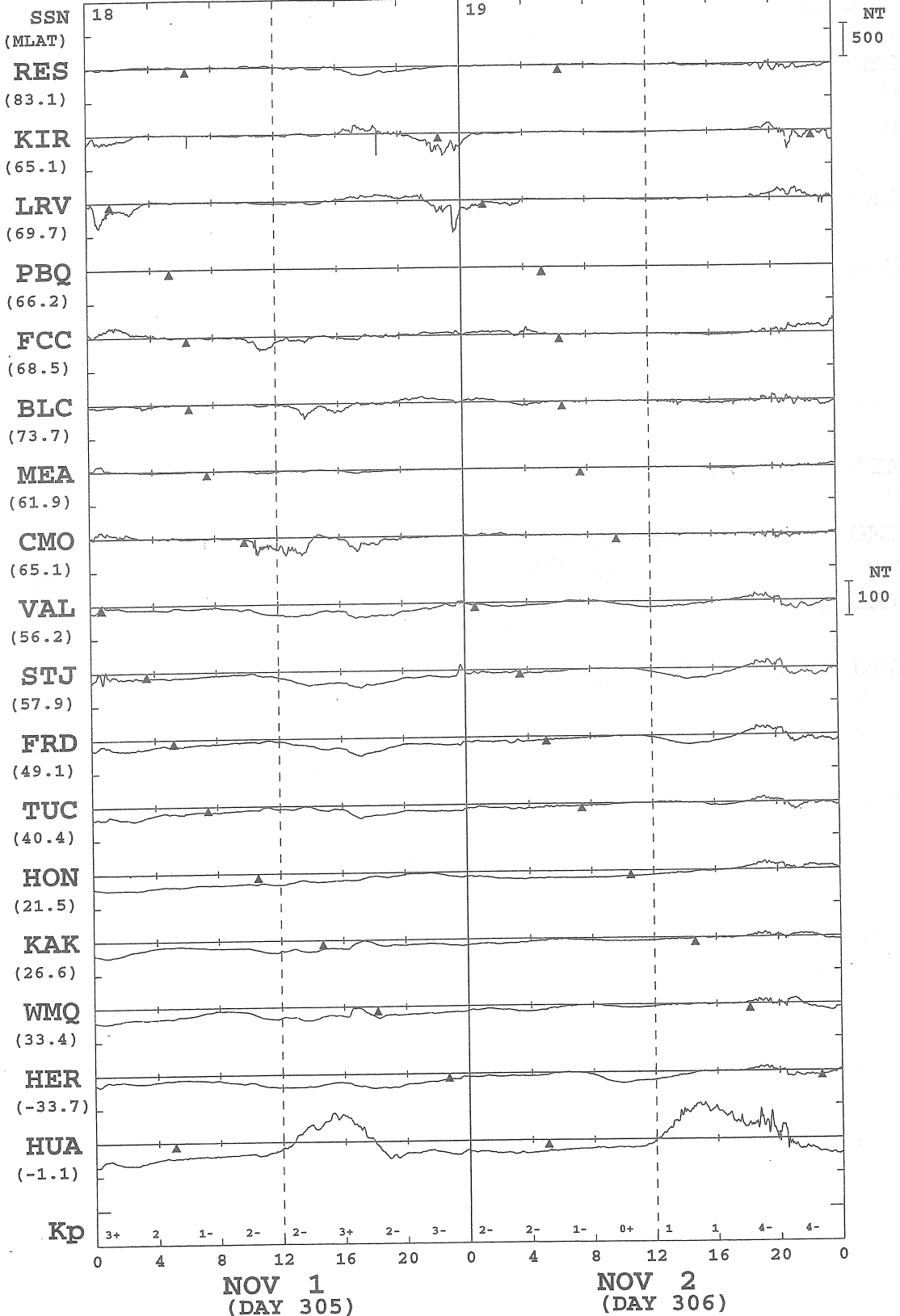


OCT 31
(DAY 304)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

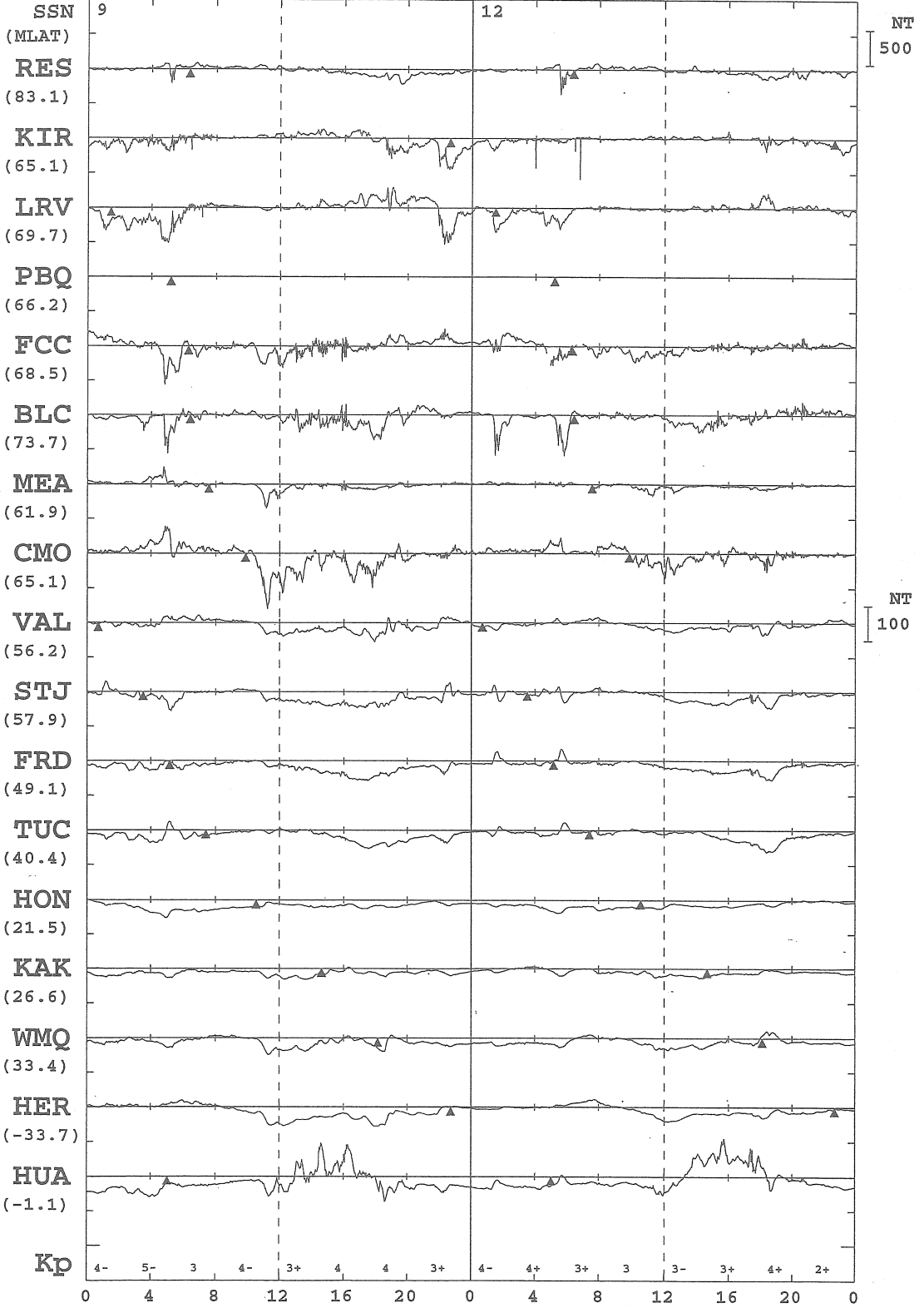


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

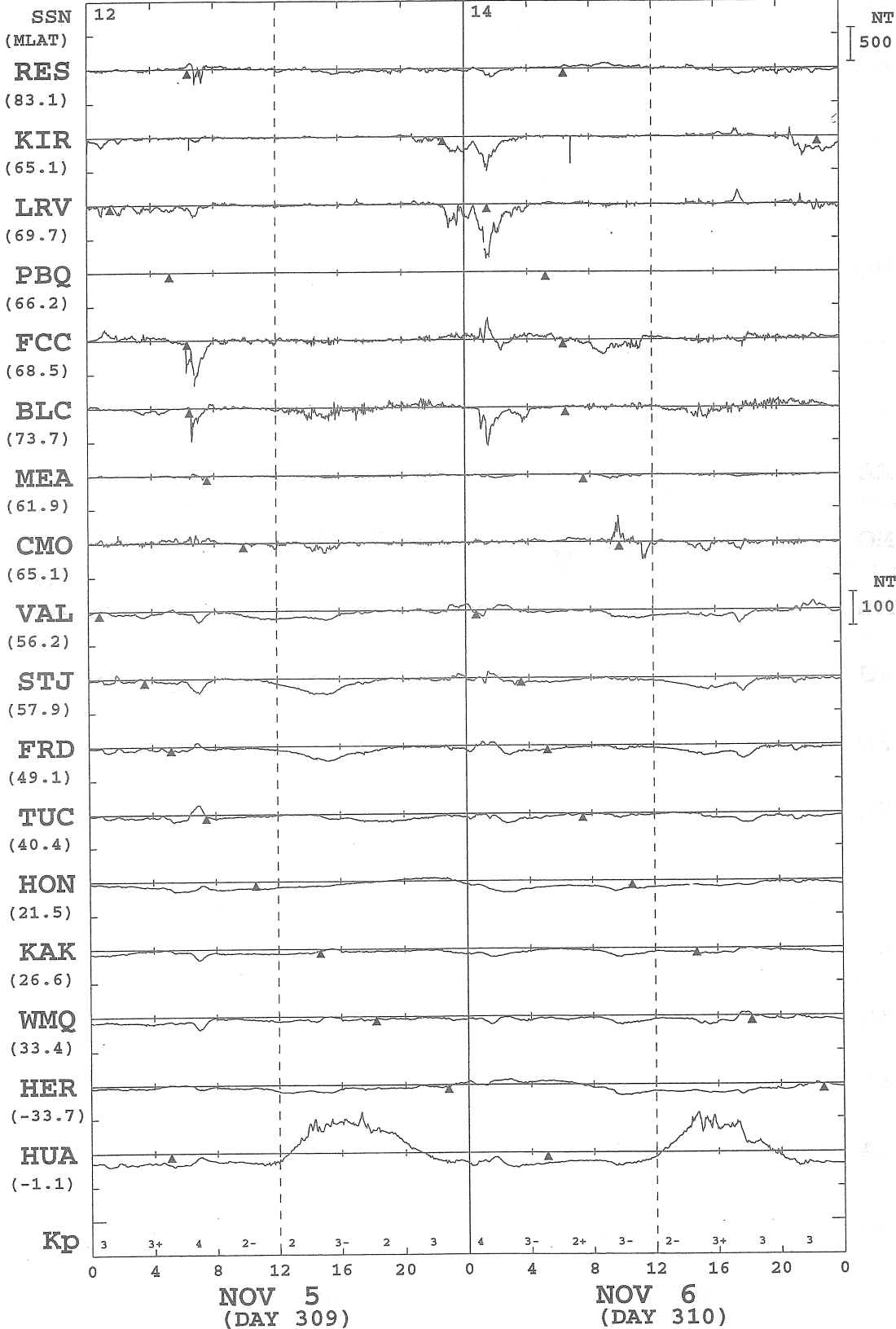


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

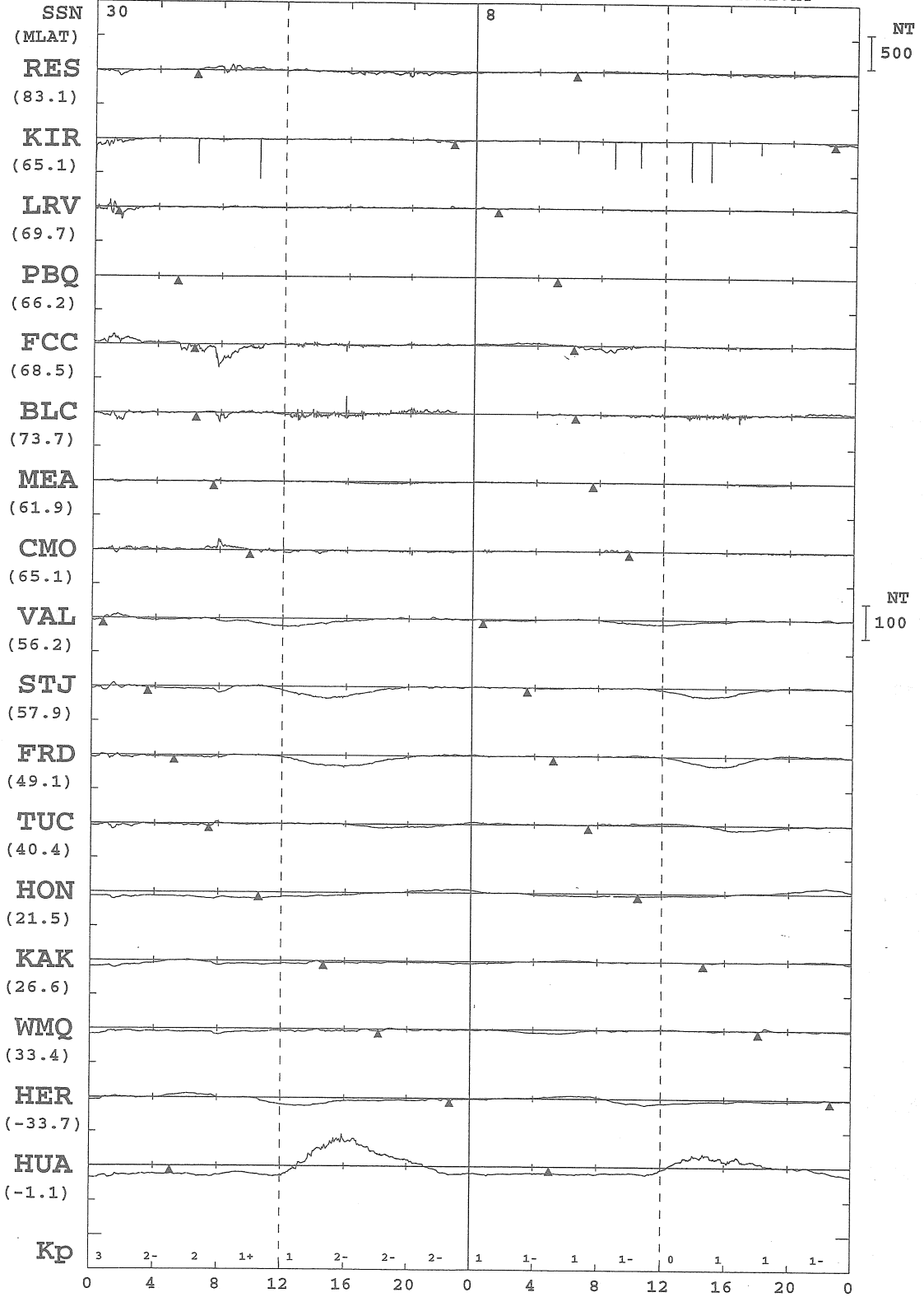


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

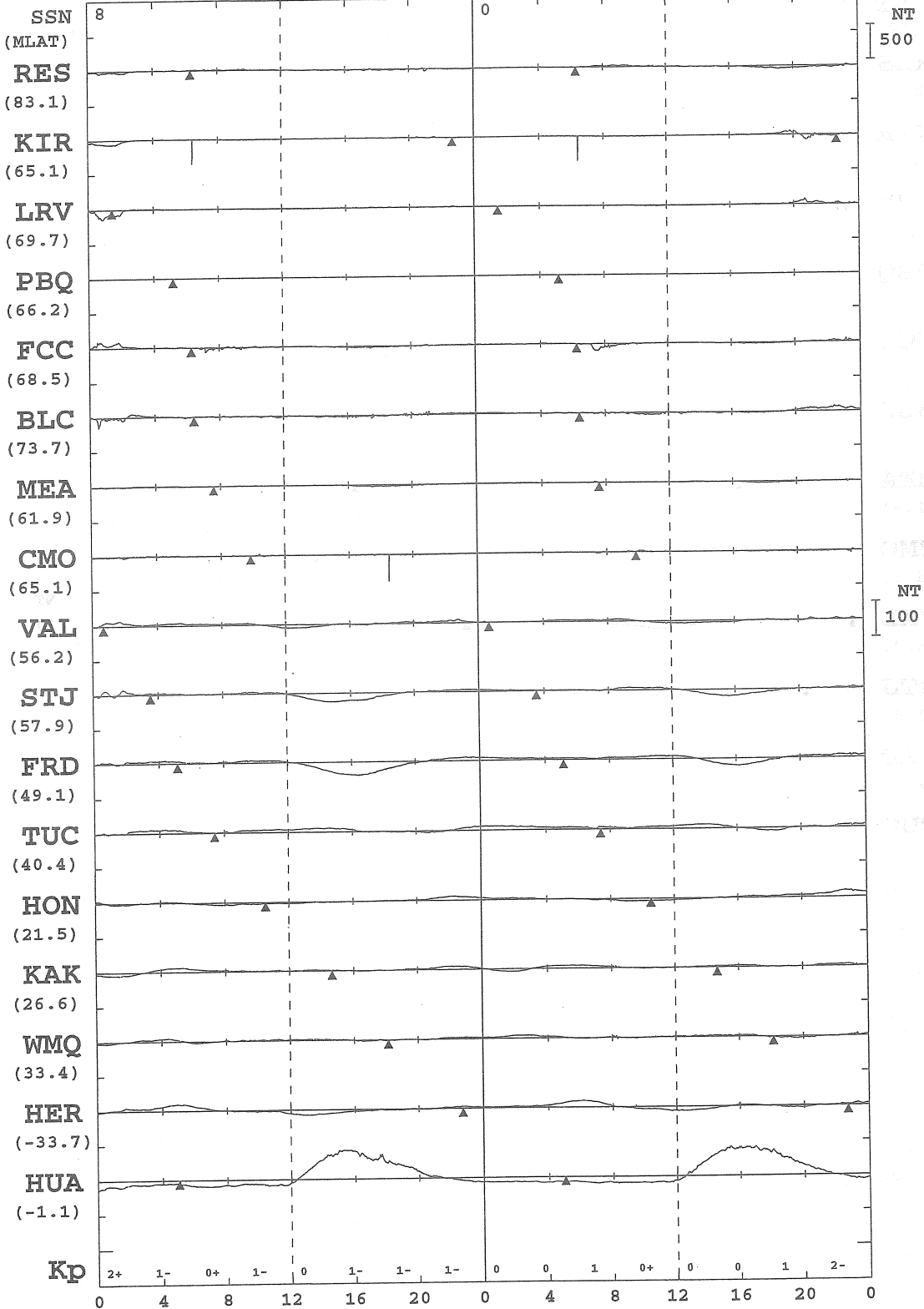
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



NOV 9
(DAY 313)

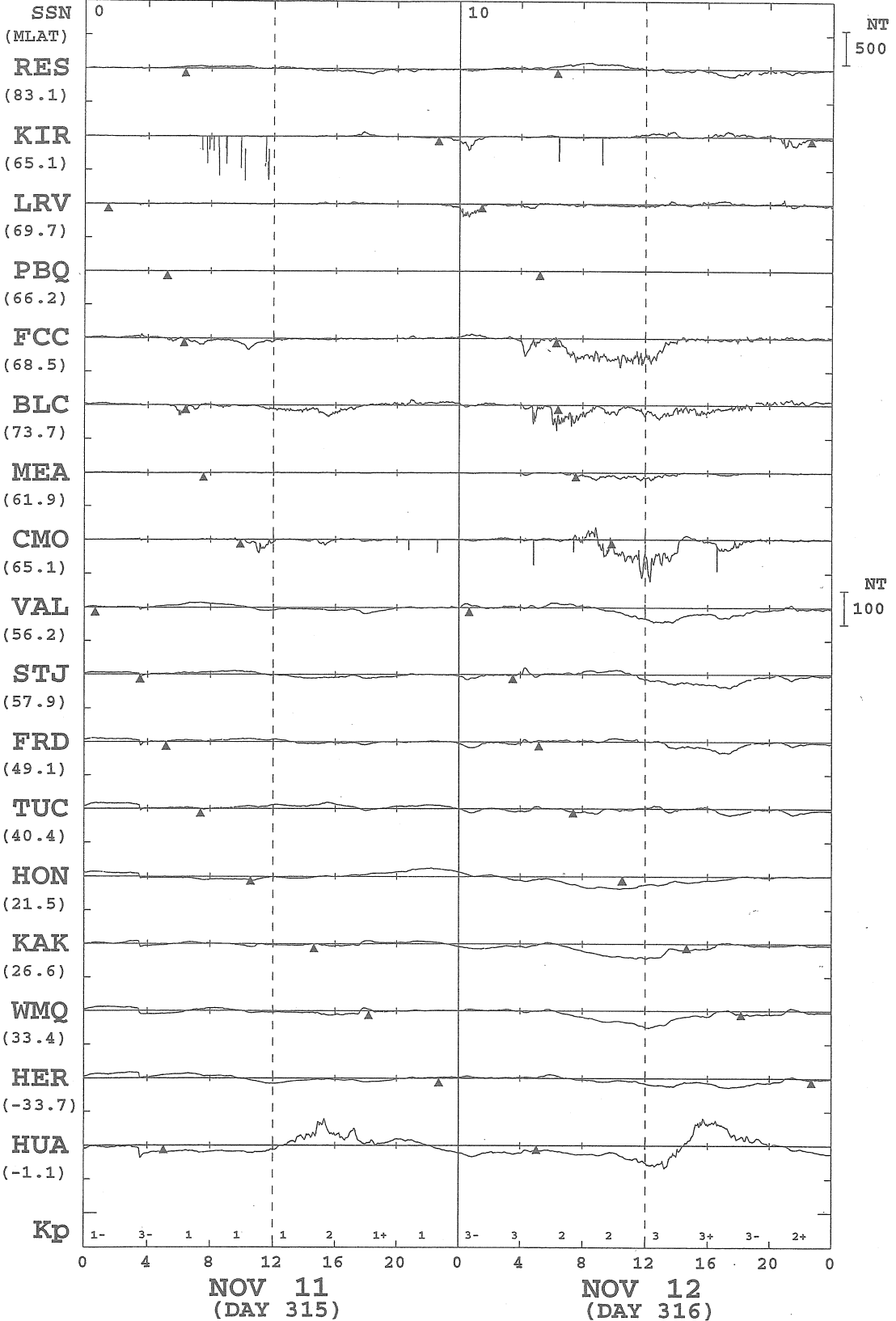
NOV 10
(DAY 314)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED.
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED.

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

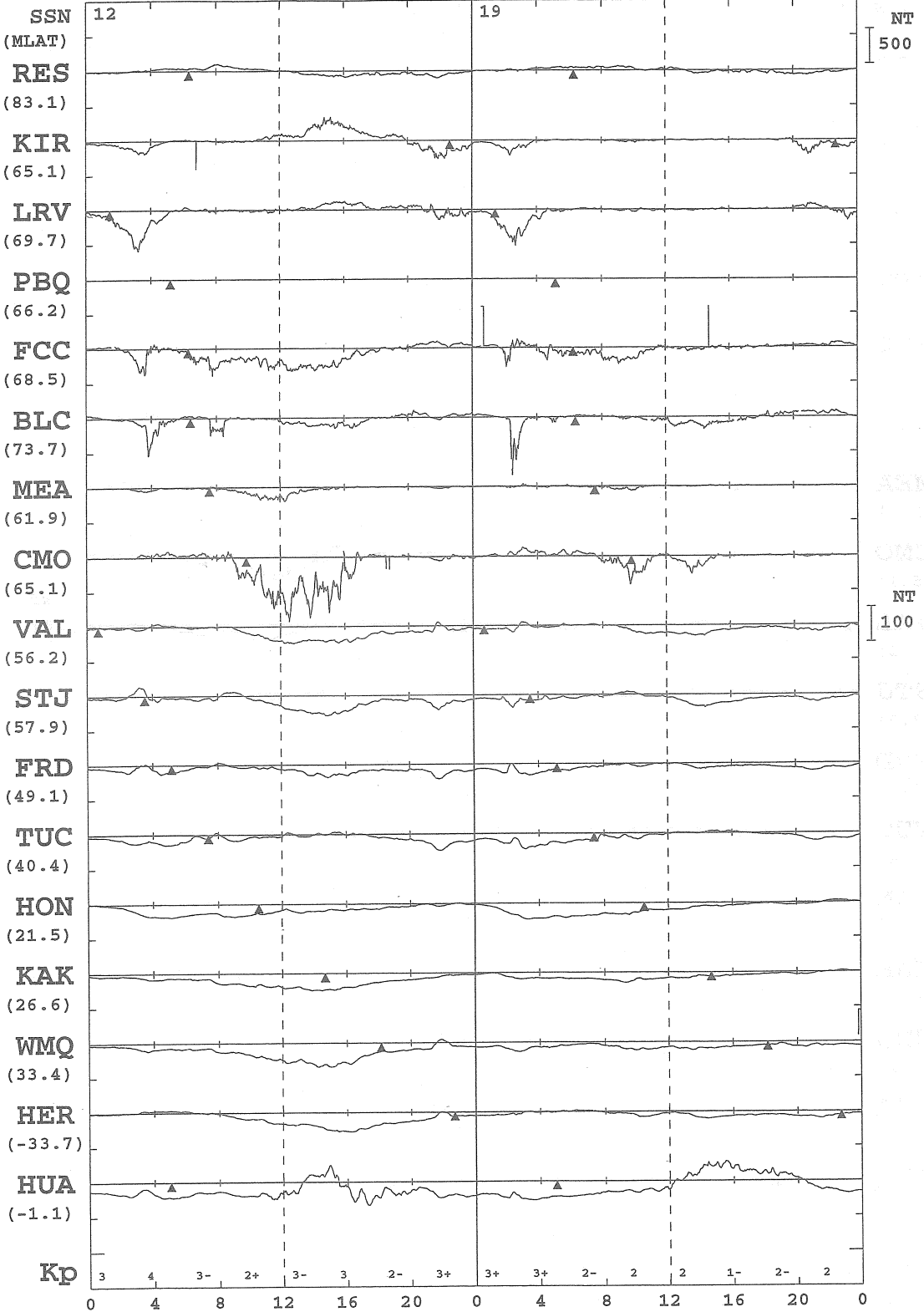


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

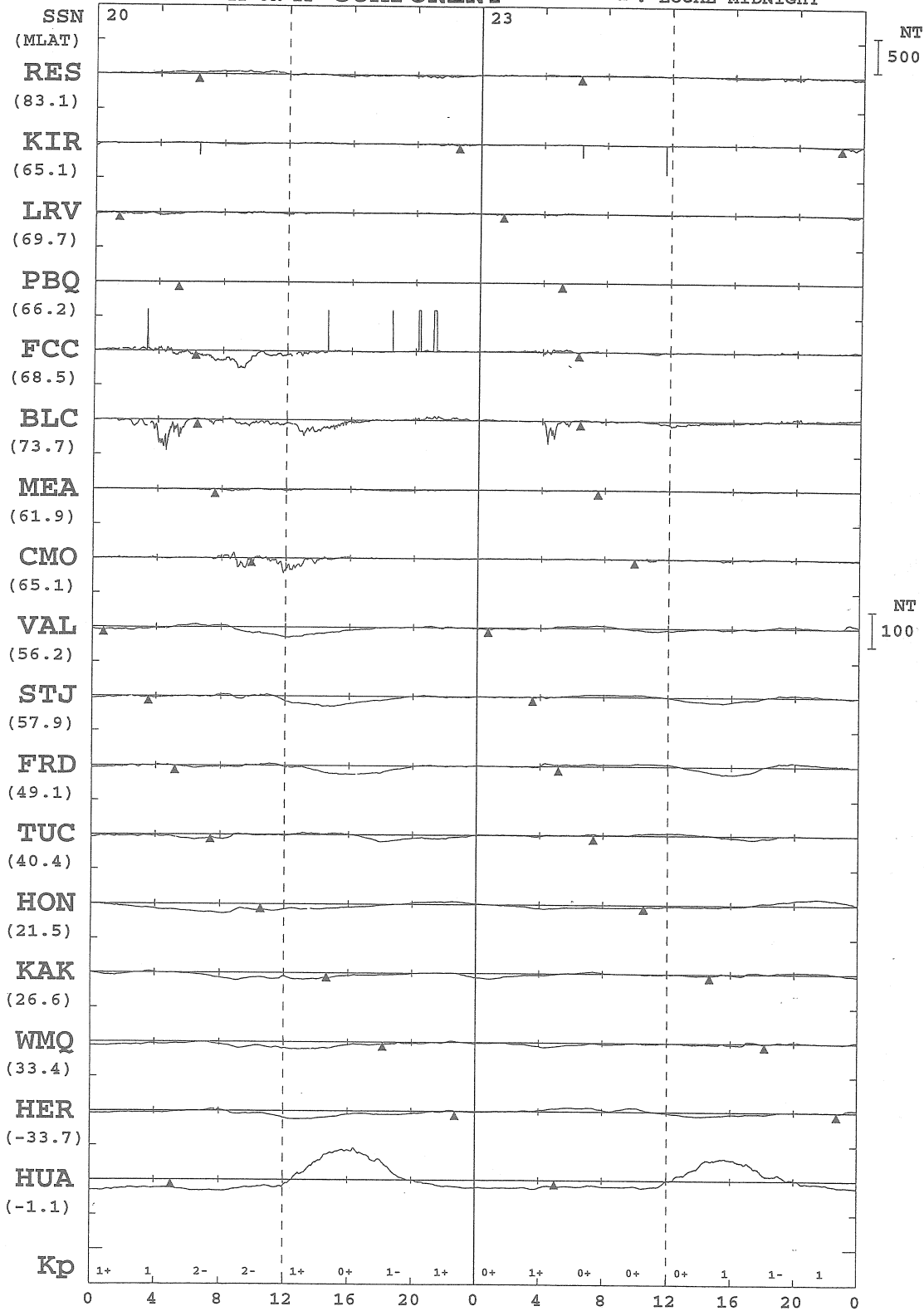


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



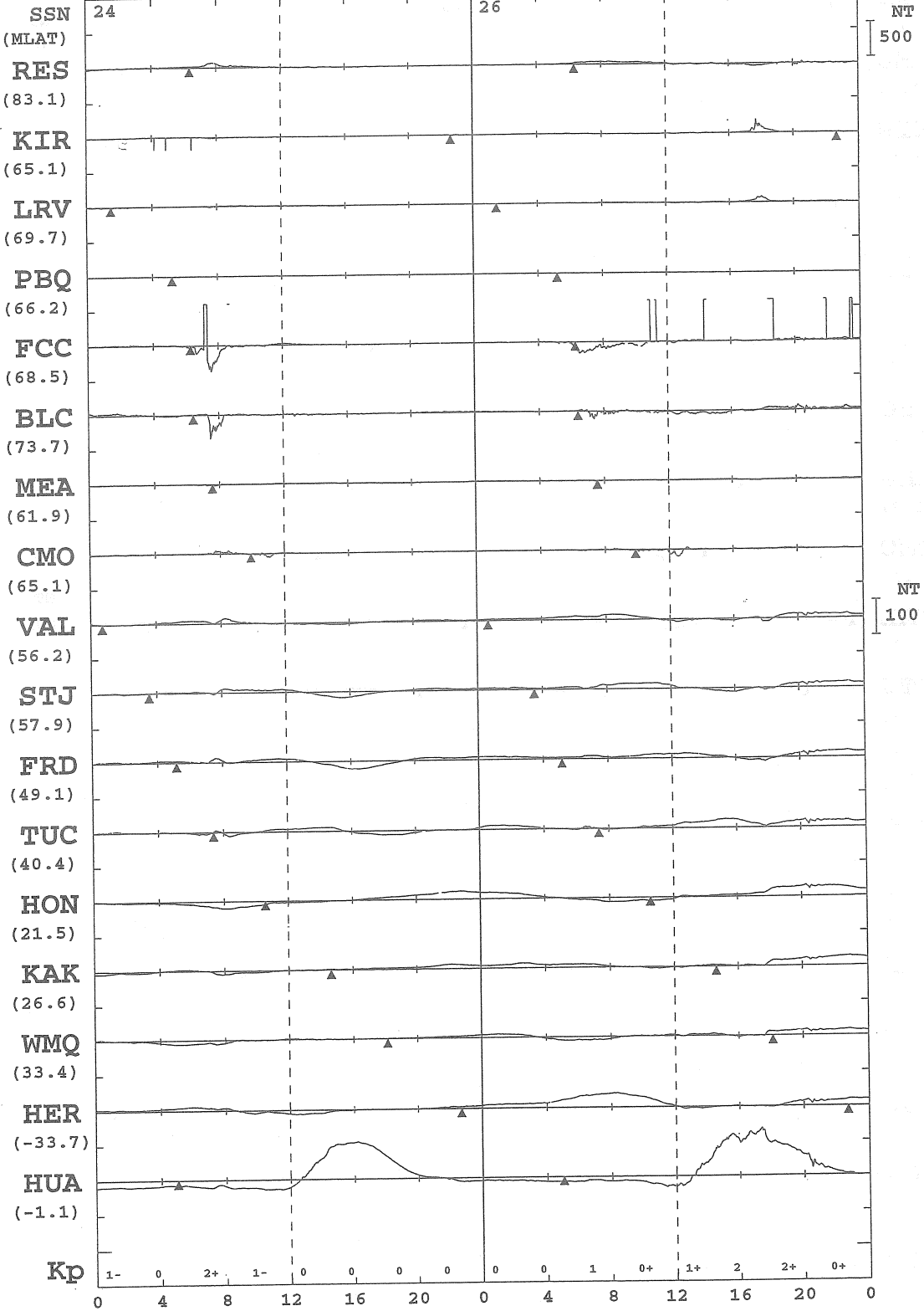
NOV 15
(DAY 319)

NOV 16
(DAY 320)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



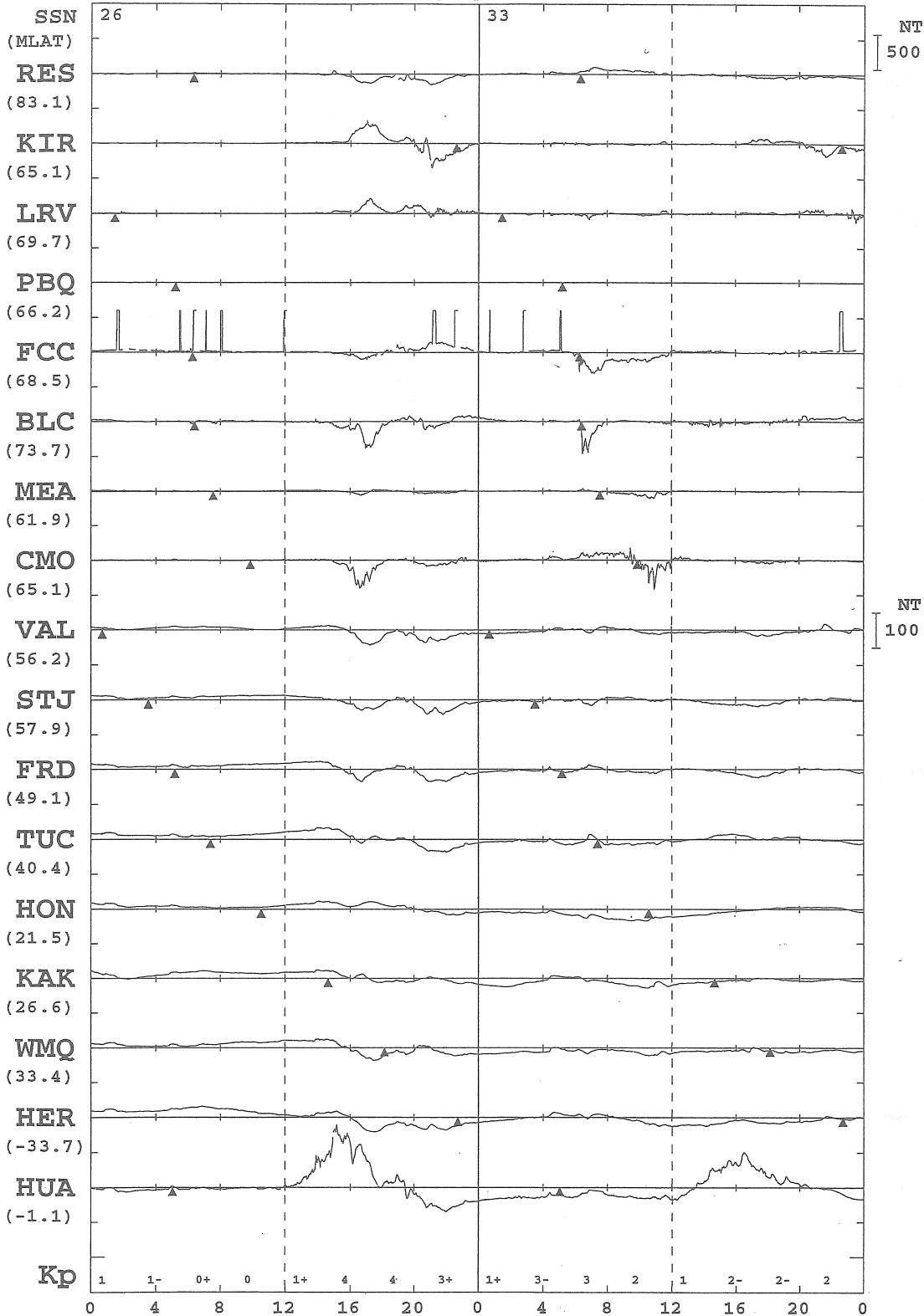
NOV 17 (DAY 321) NOV 18 (DAY 322)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



Kp

1 1- 0+ 0 1+ 4 4 3+ 1+ 3- 3 2 1 2- 2- 2

NOV 19
(DAY 323)

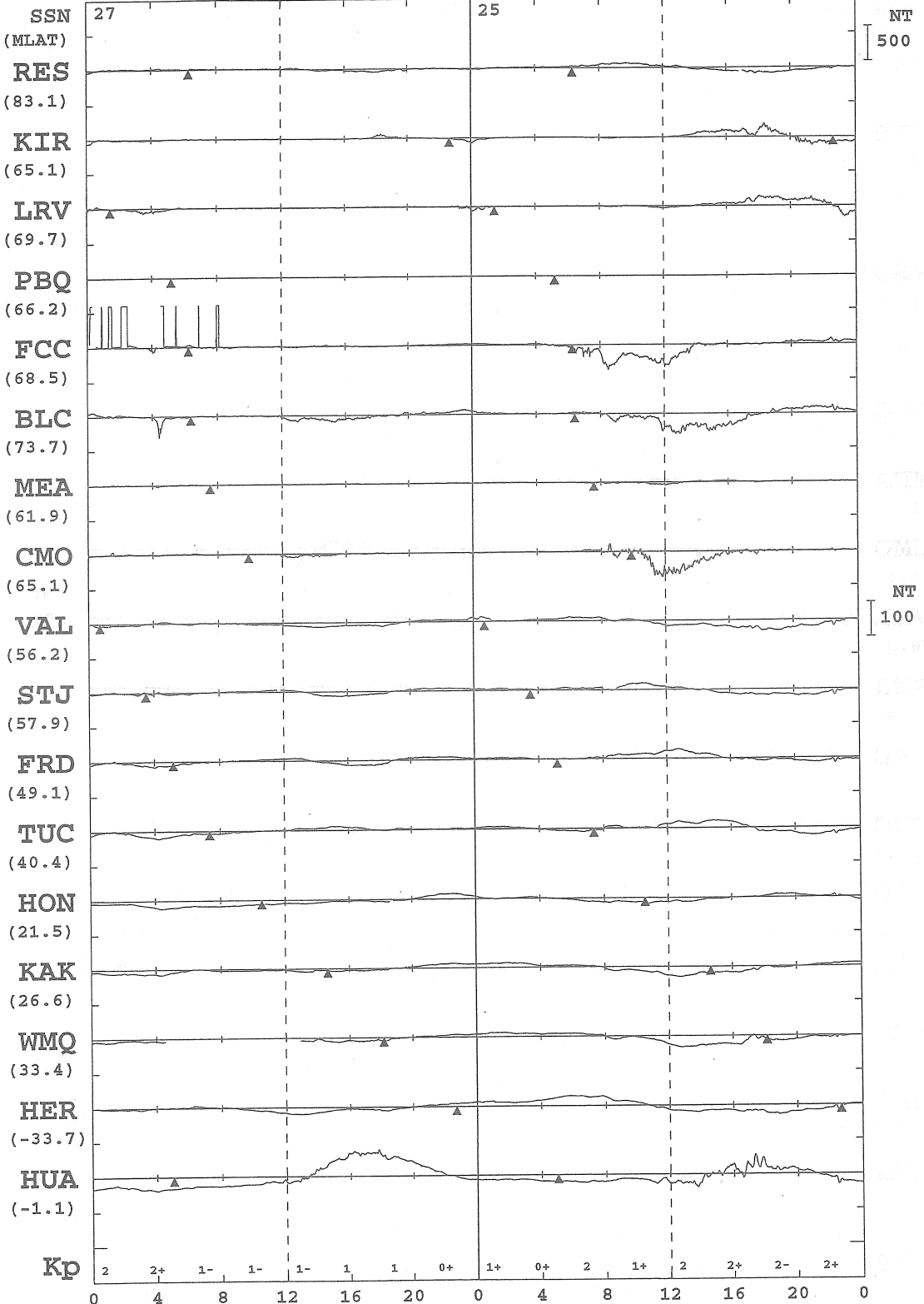
NOV 20
(DAY 324)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

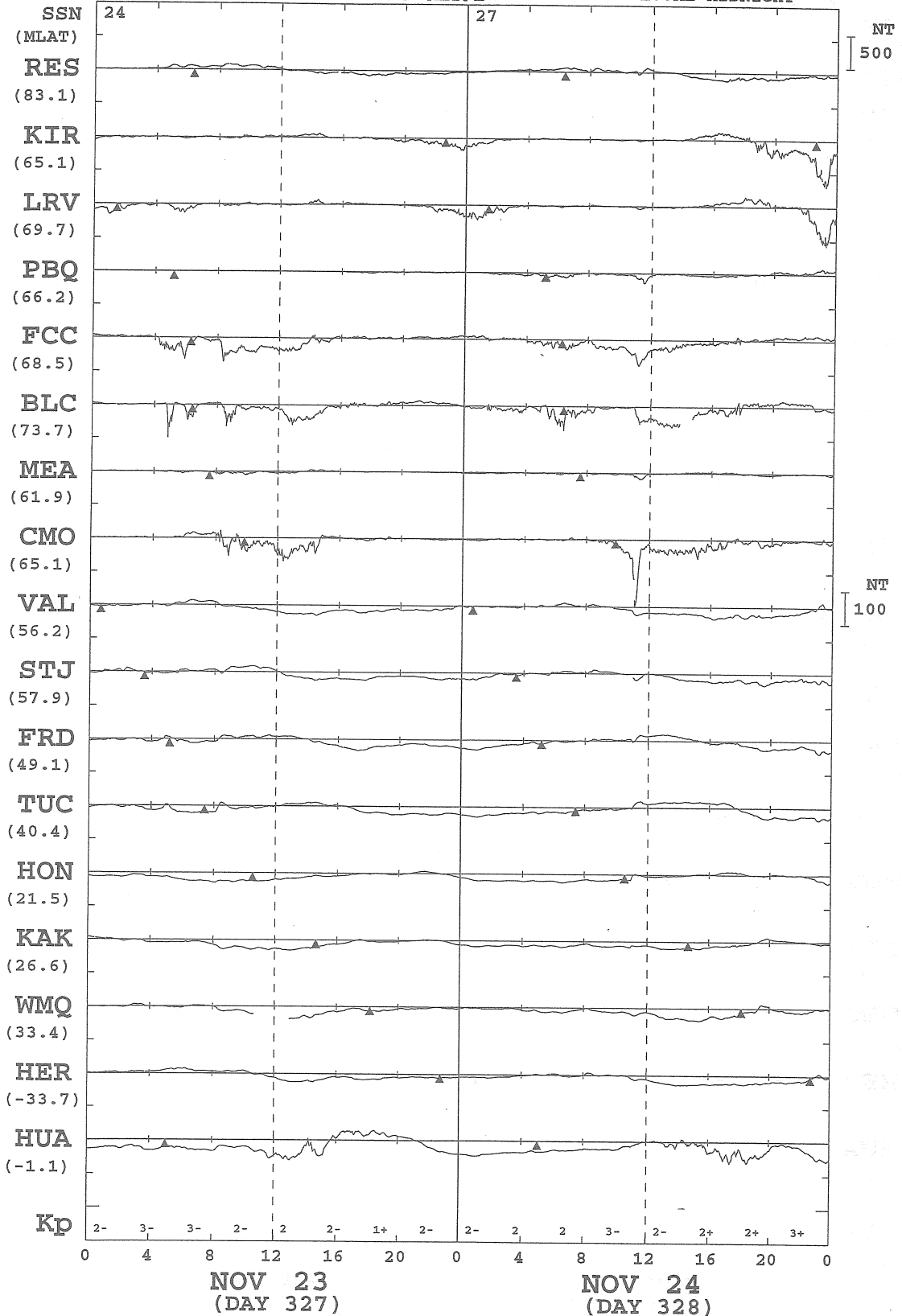


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

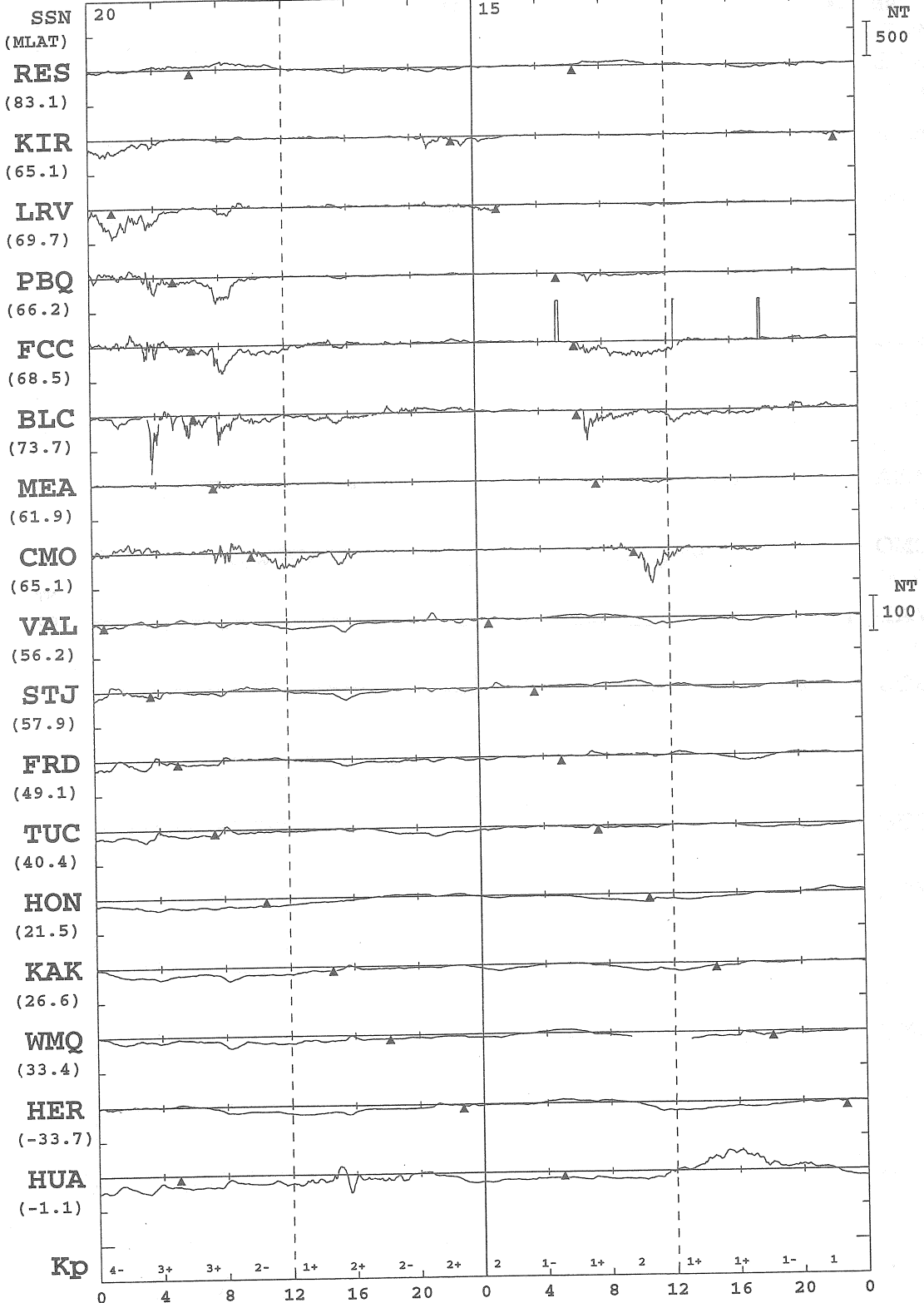


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



NOV 25
(DAY 329)

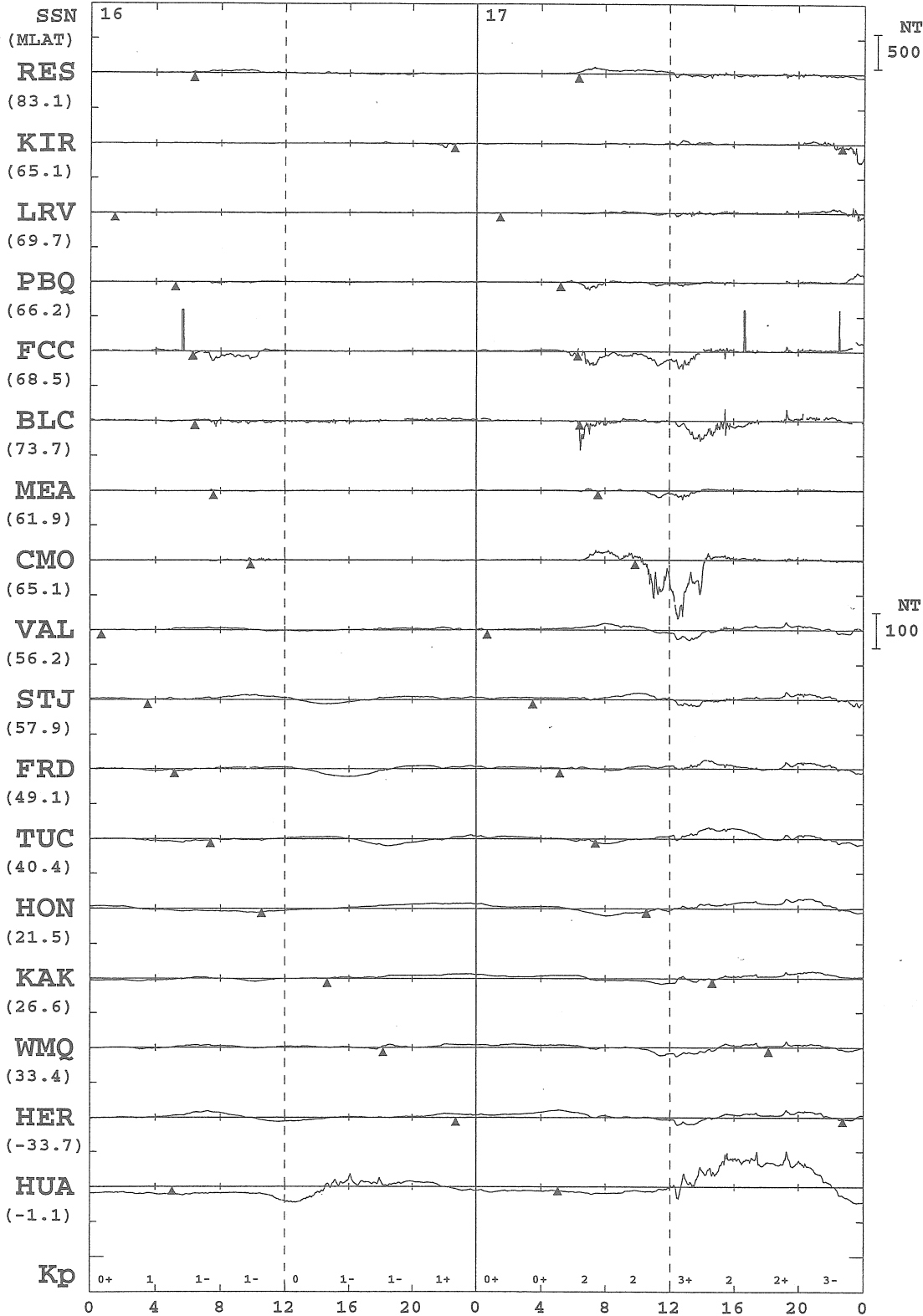
NOV 26
(DAY 330)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

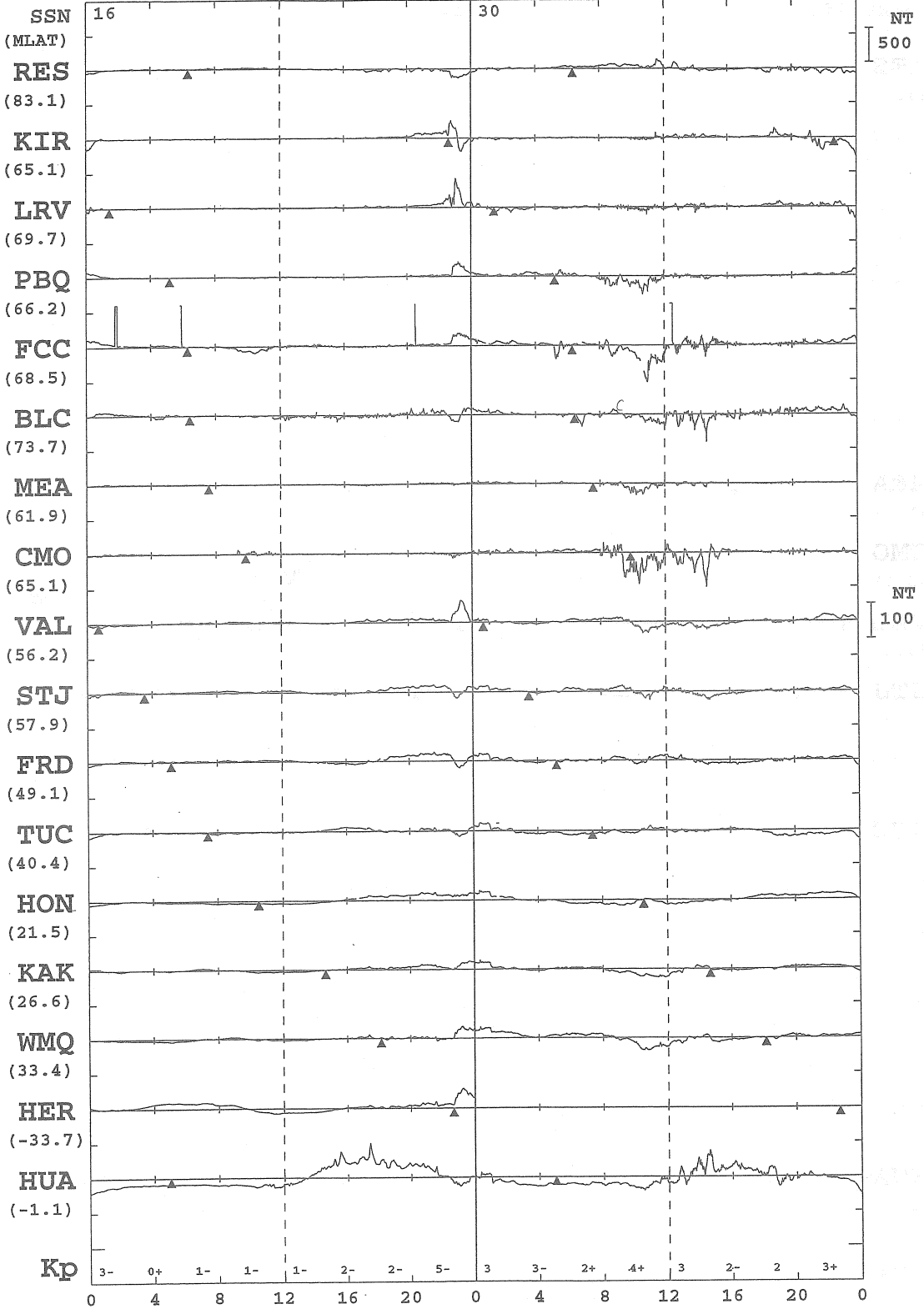


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

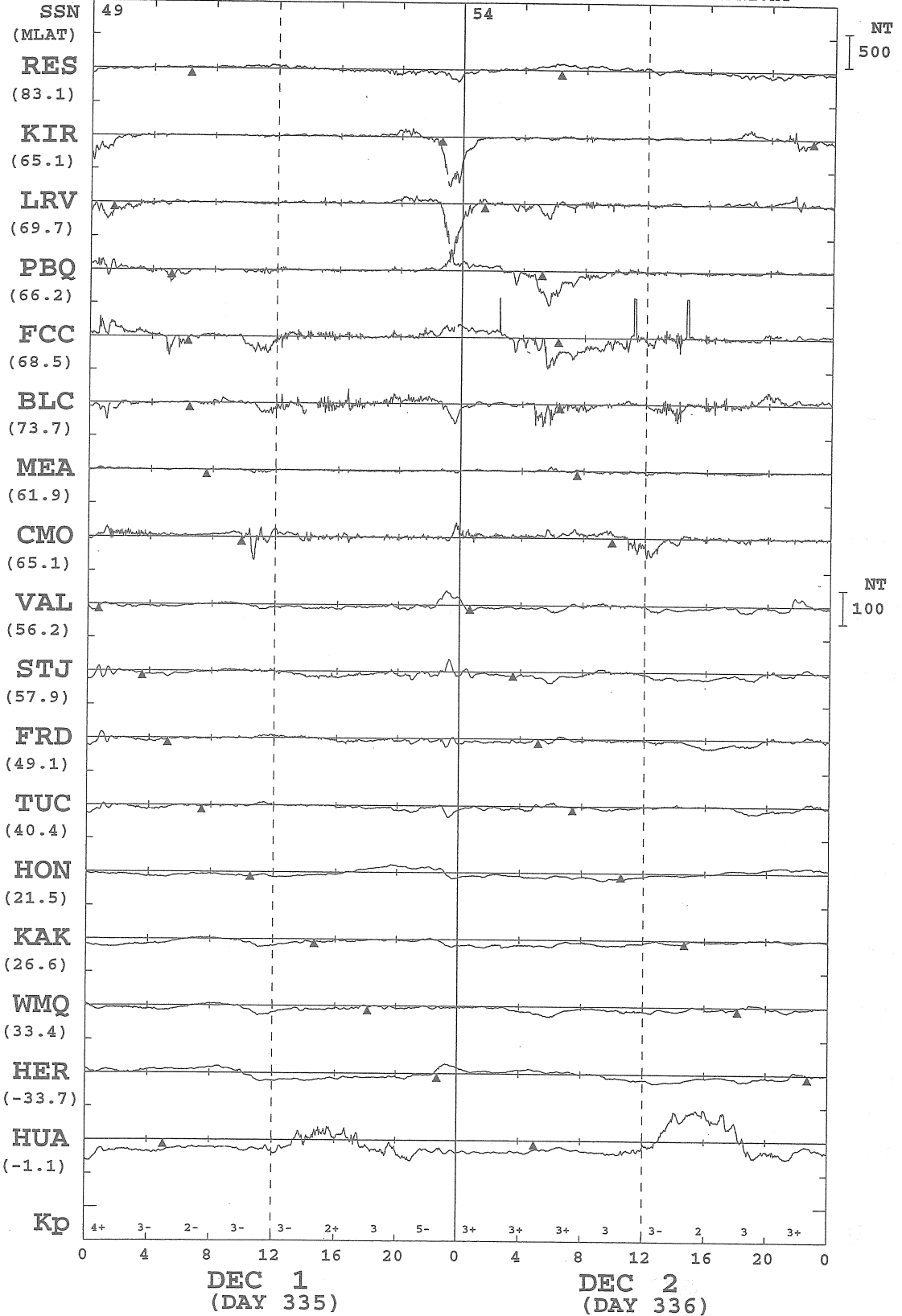


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

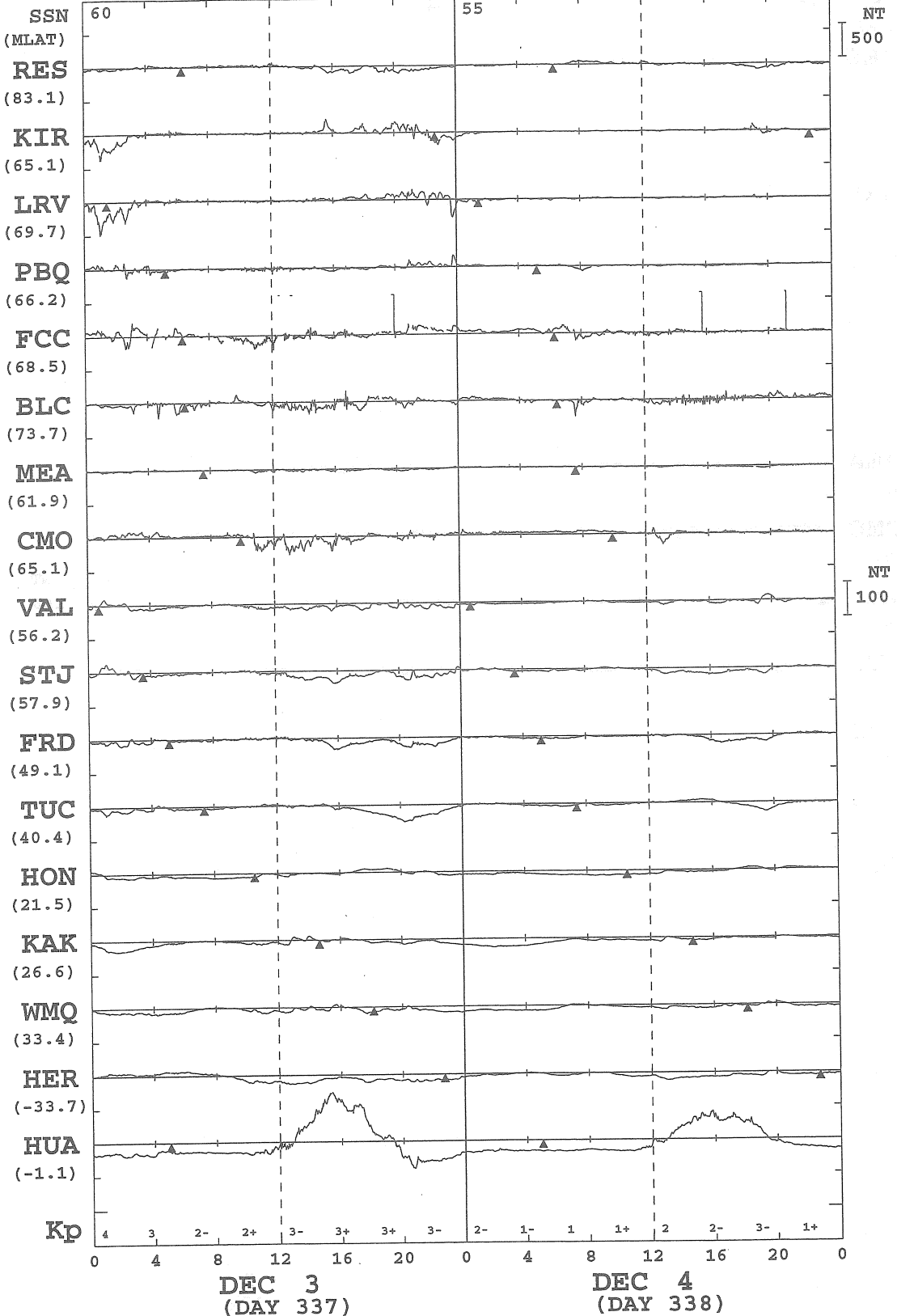


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

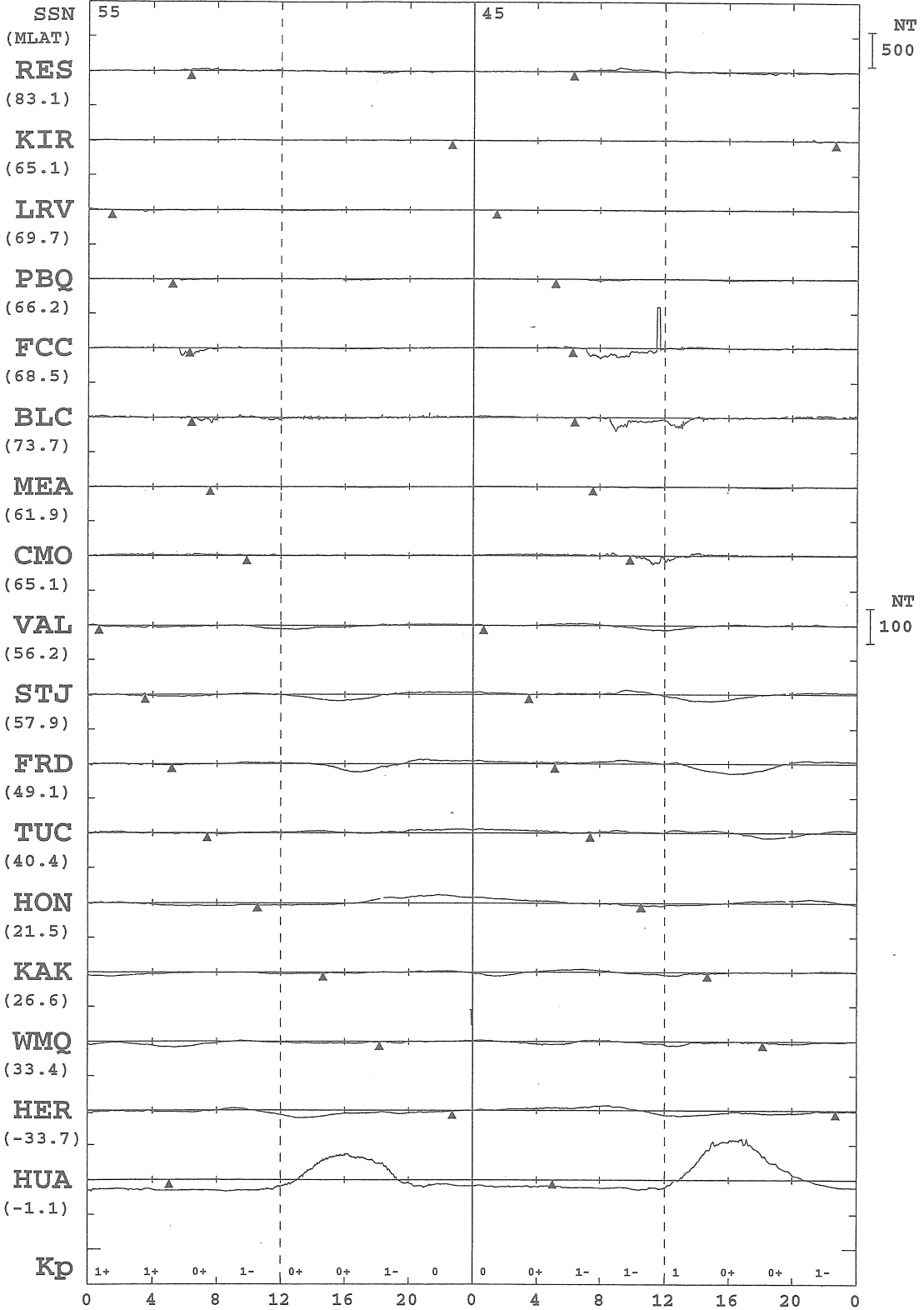
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲: LOCAL MIDNIGHT

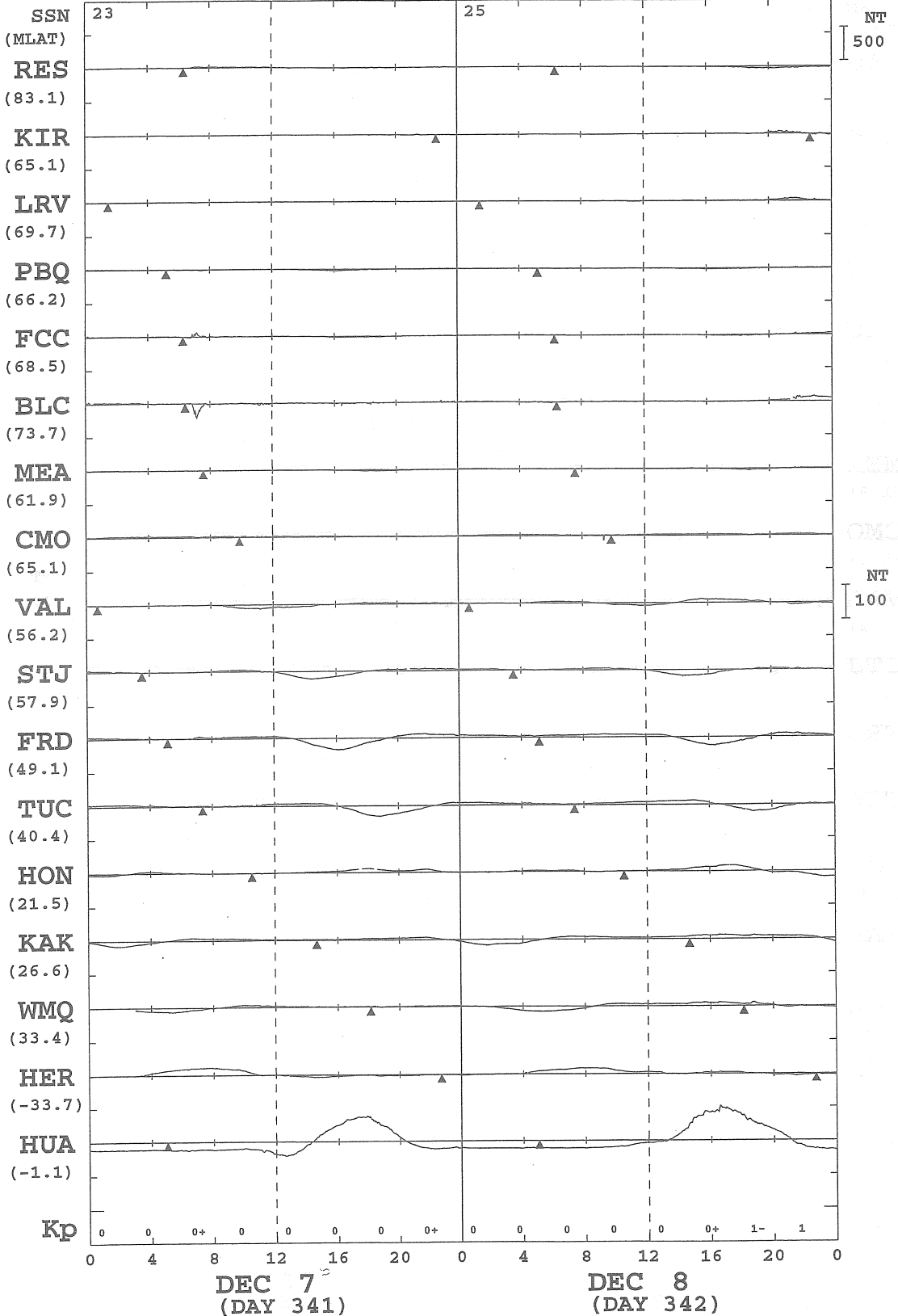


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

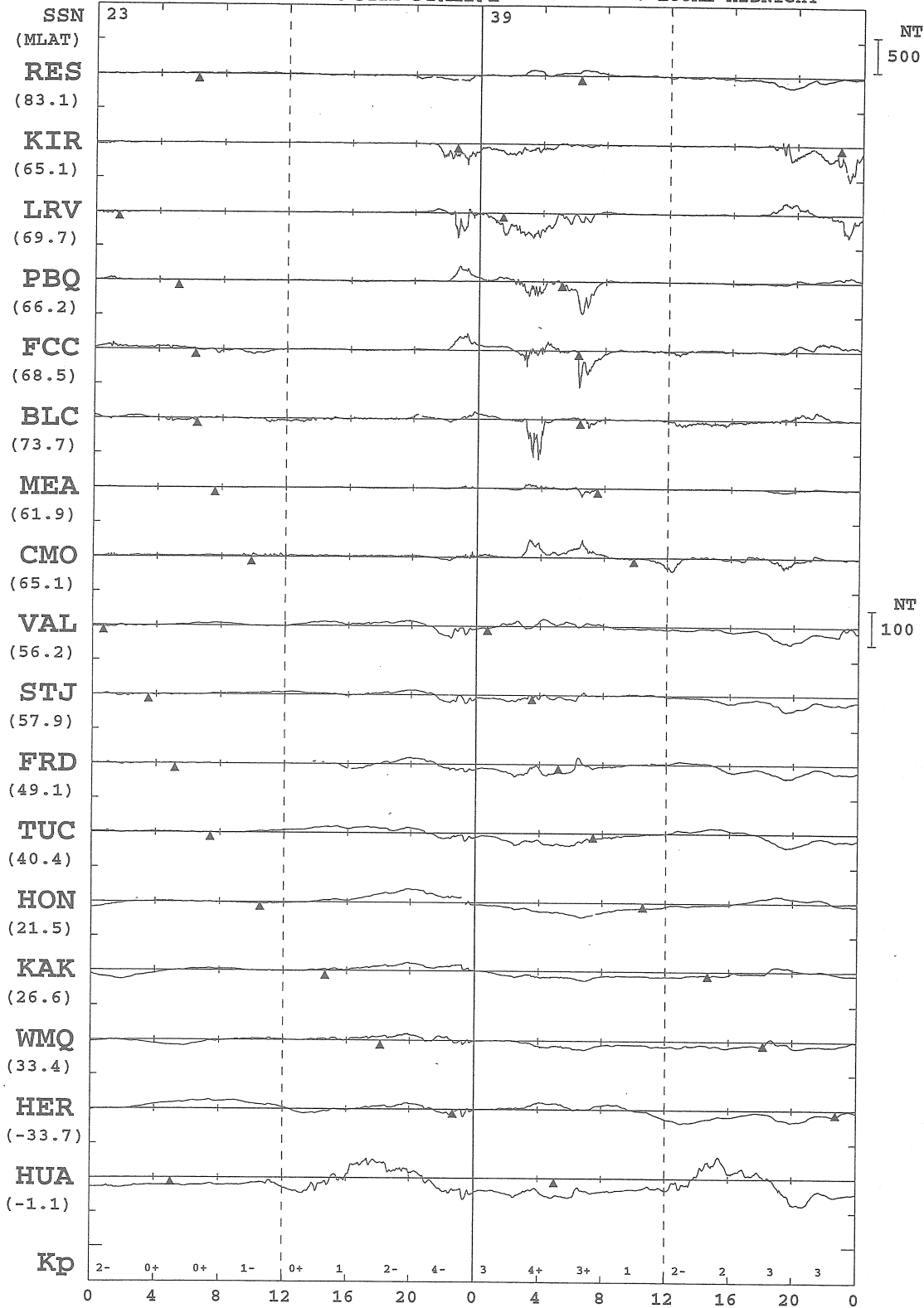


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



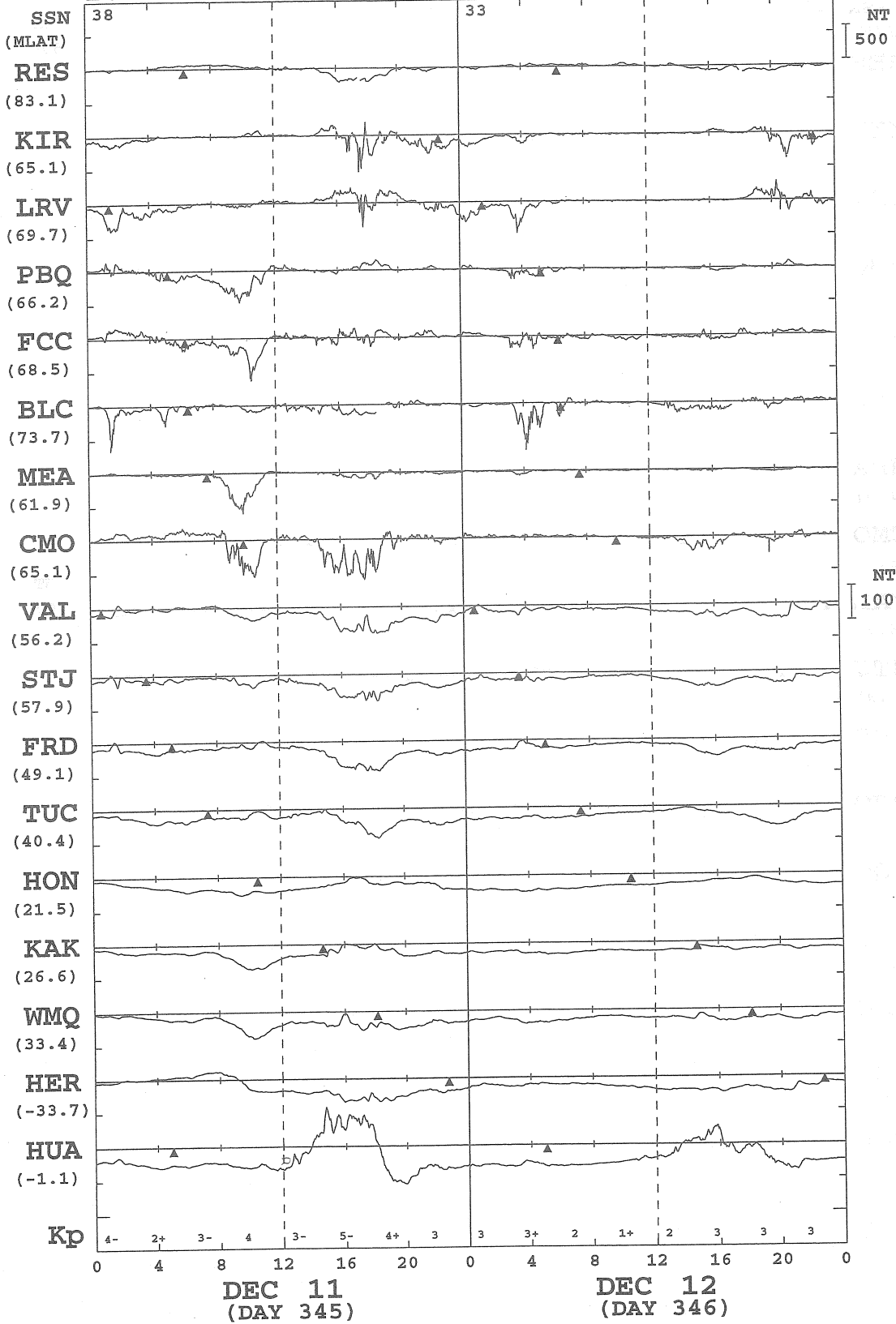
DEC 9
(DAY 343)

DEC 10
(DAY 344)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

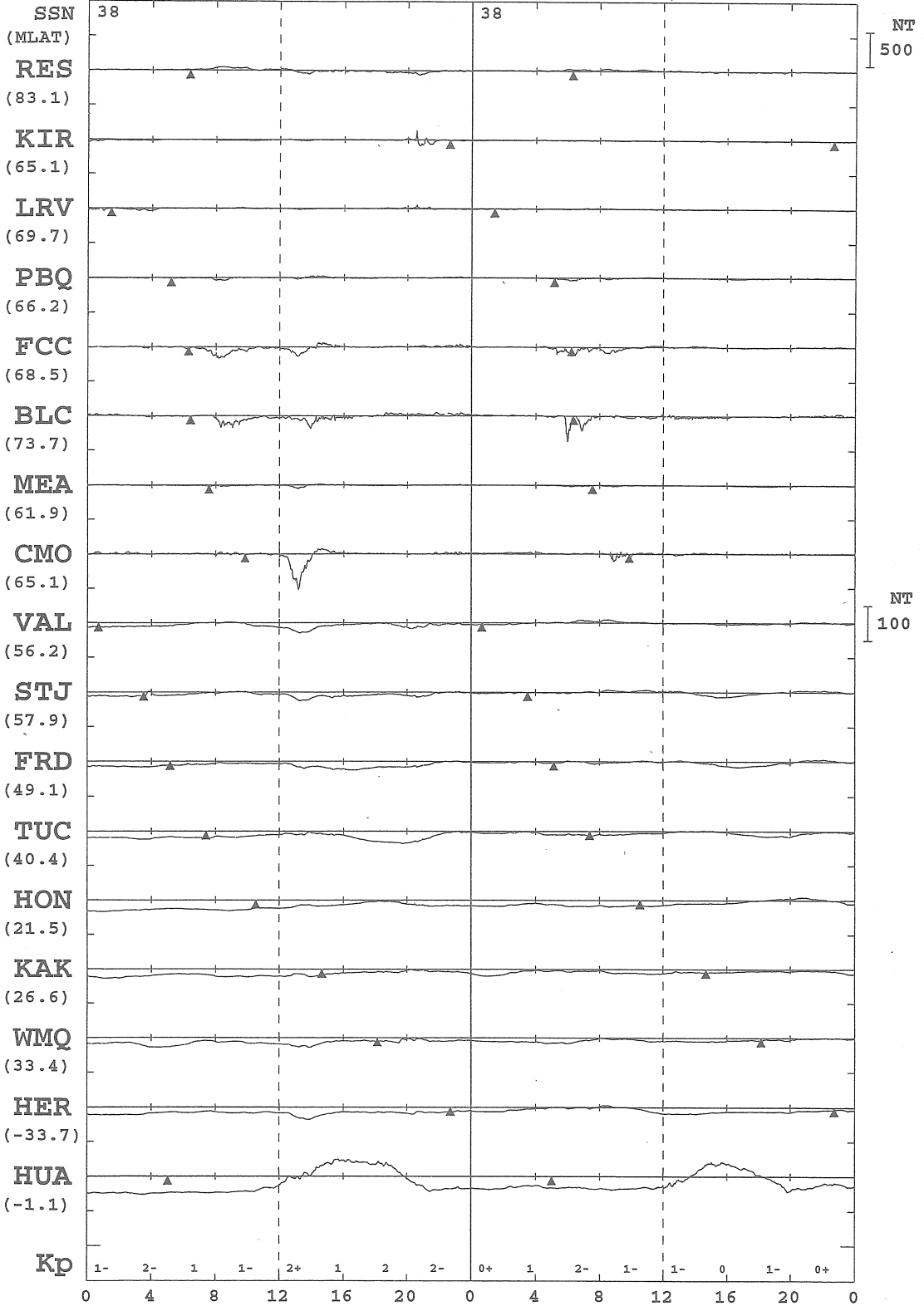


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

— KYOTO UNIV. —

2005 H OR X-COMPONENT

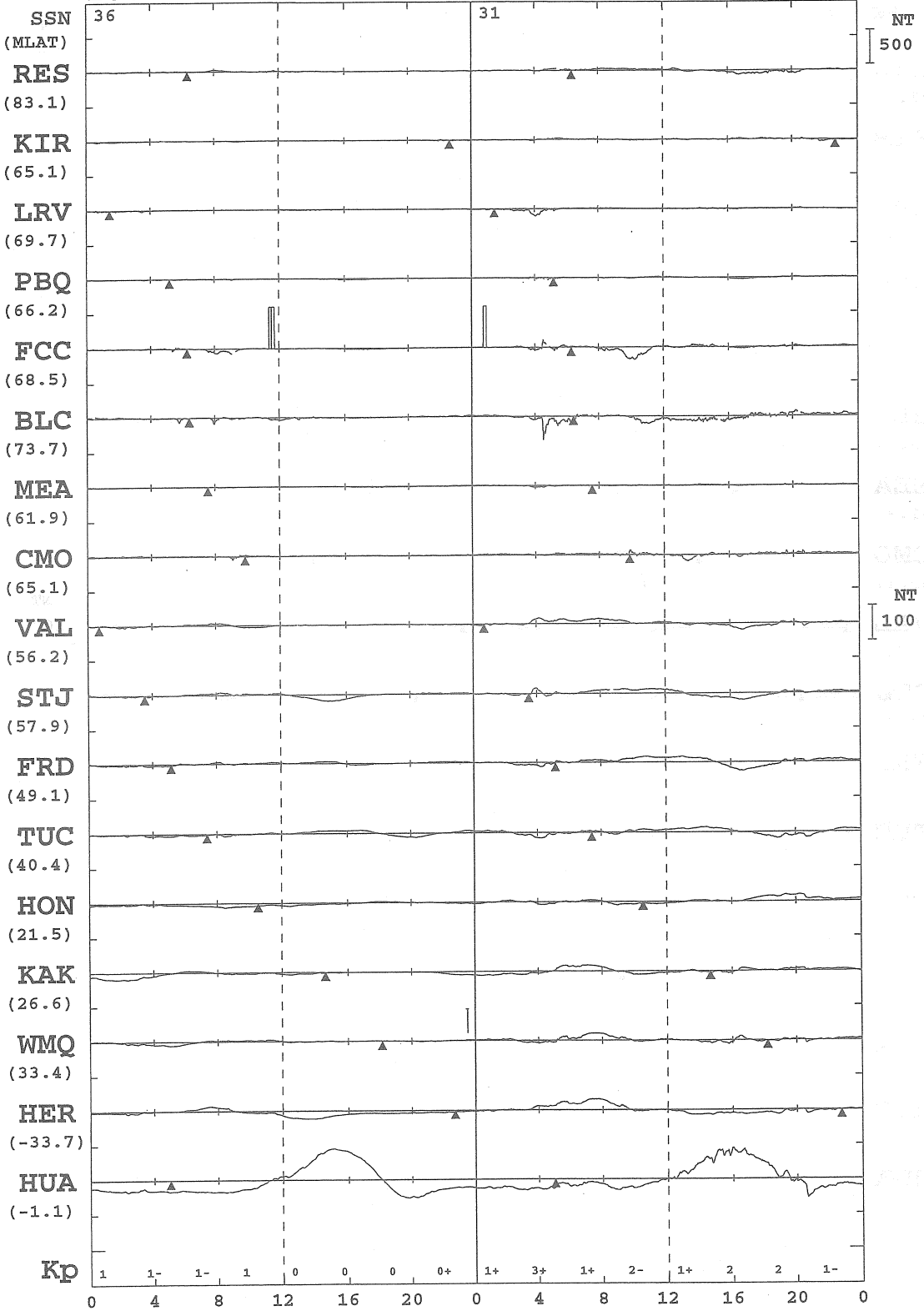
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT (MOS) ▲ : LOCAL MIDNIGHT



DEC 15
(DAY 349)

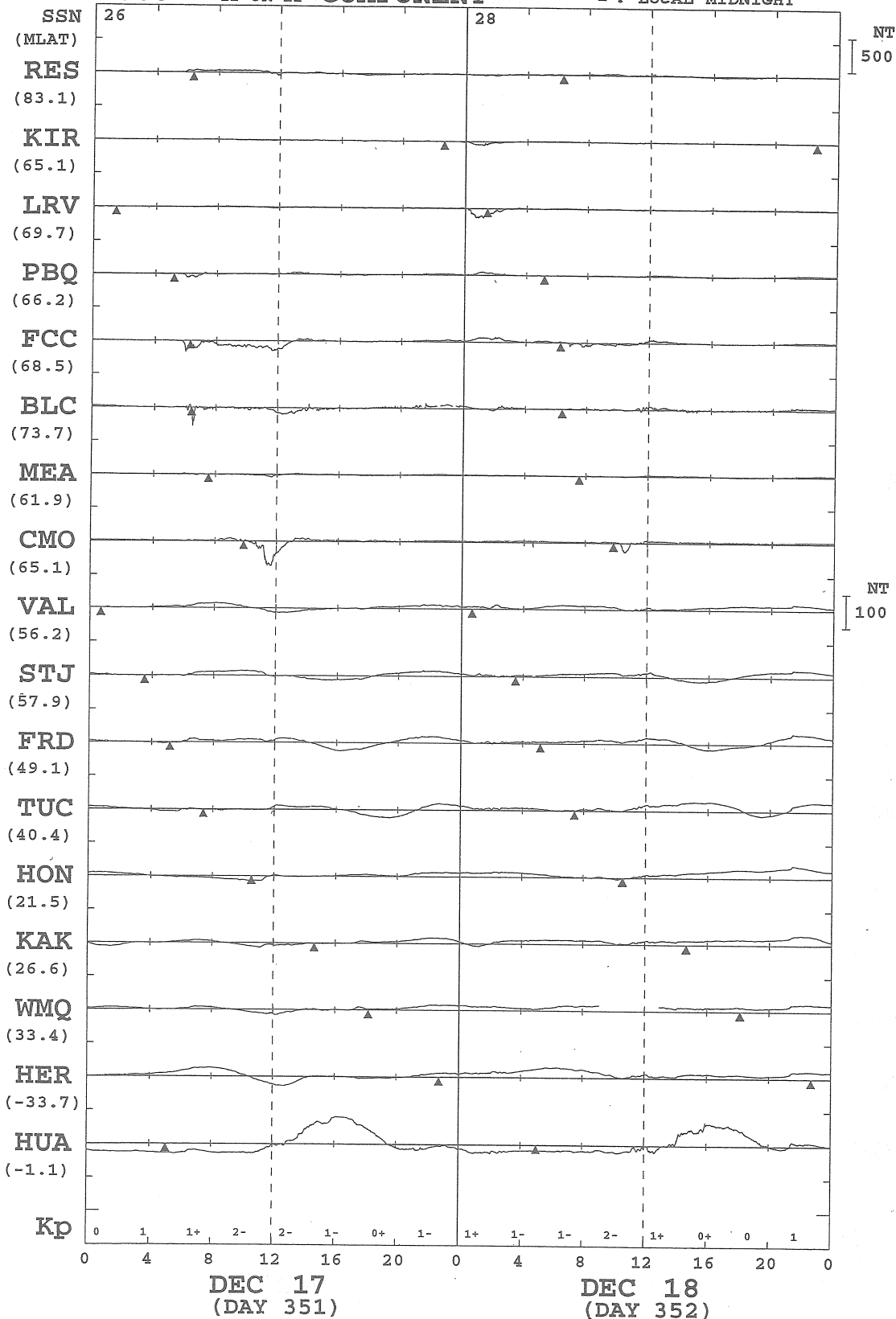
DEC 16
(DAY 350)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

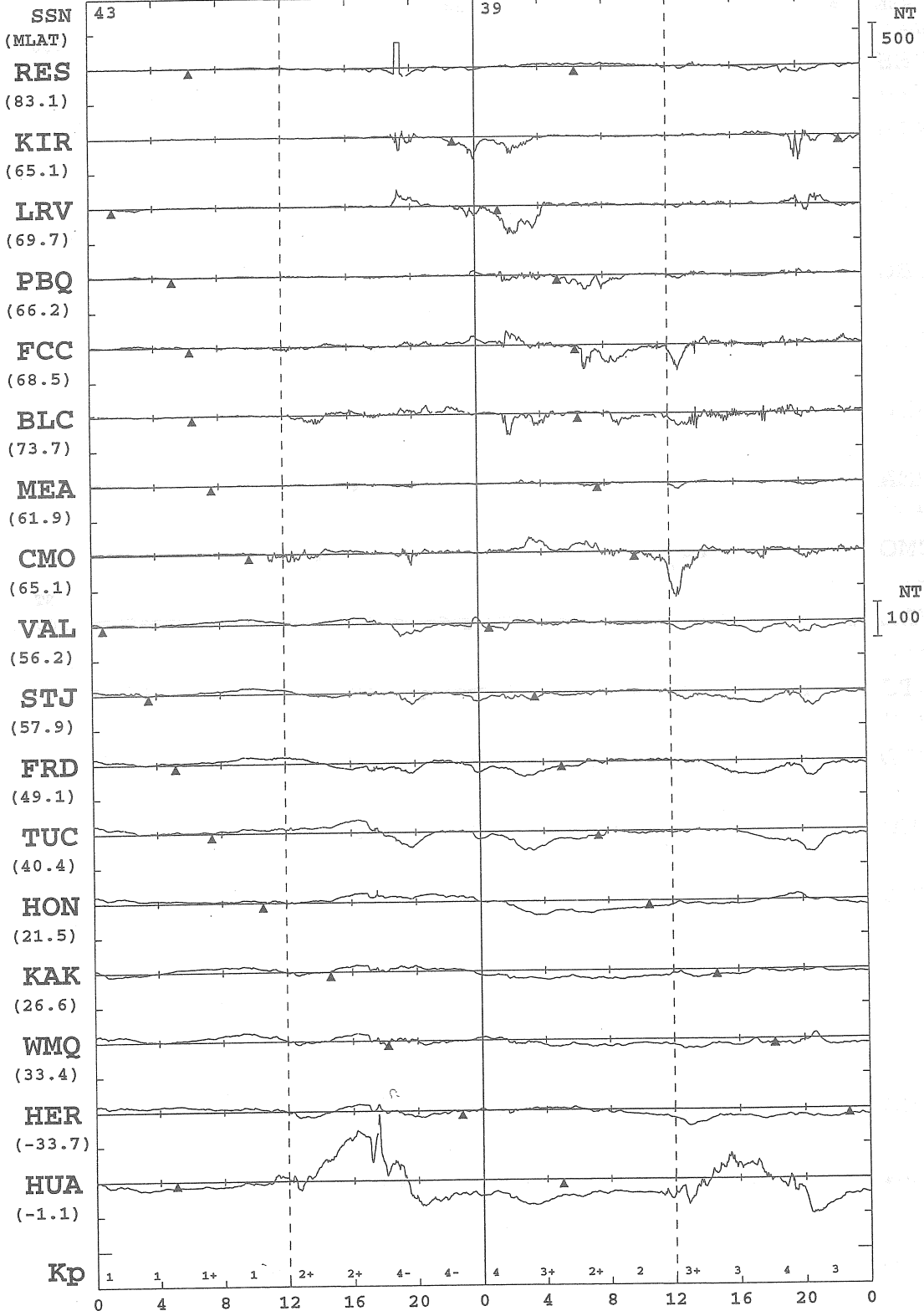
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT LOCAL MIDNIGHT



DEC 19 (DAY 353)

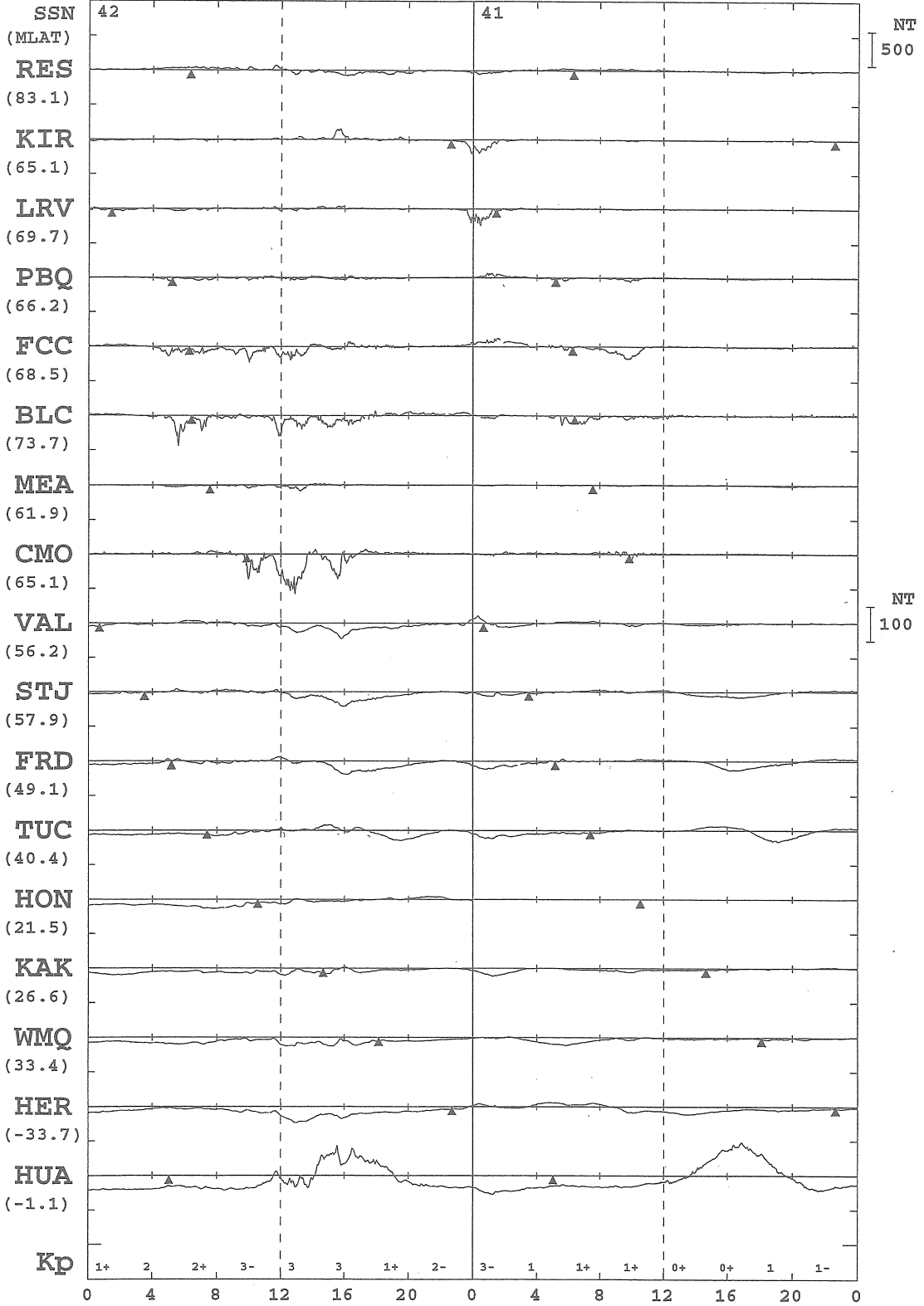
DEC 20 (DAY 354)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

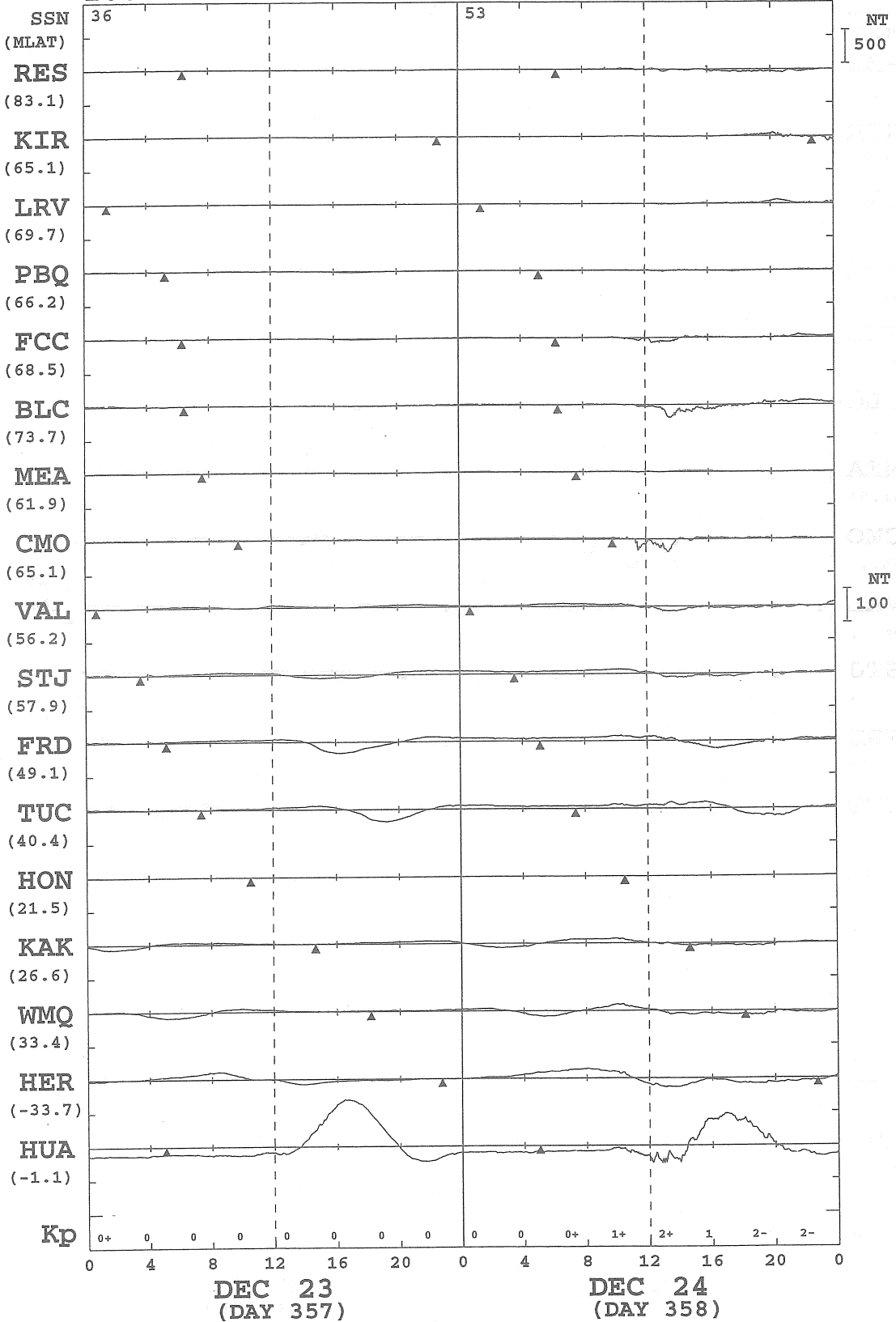


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

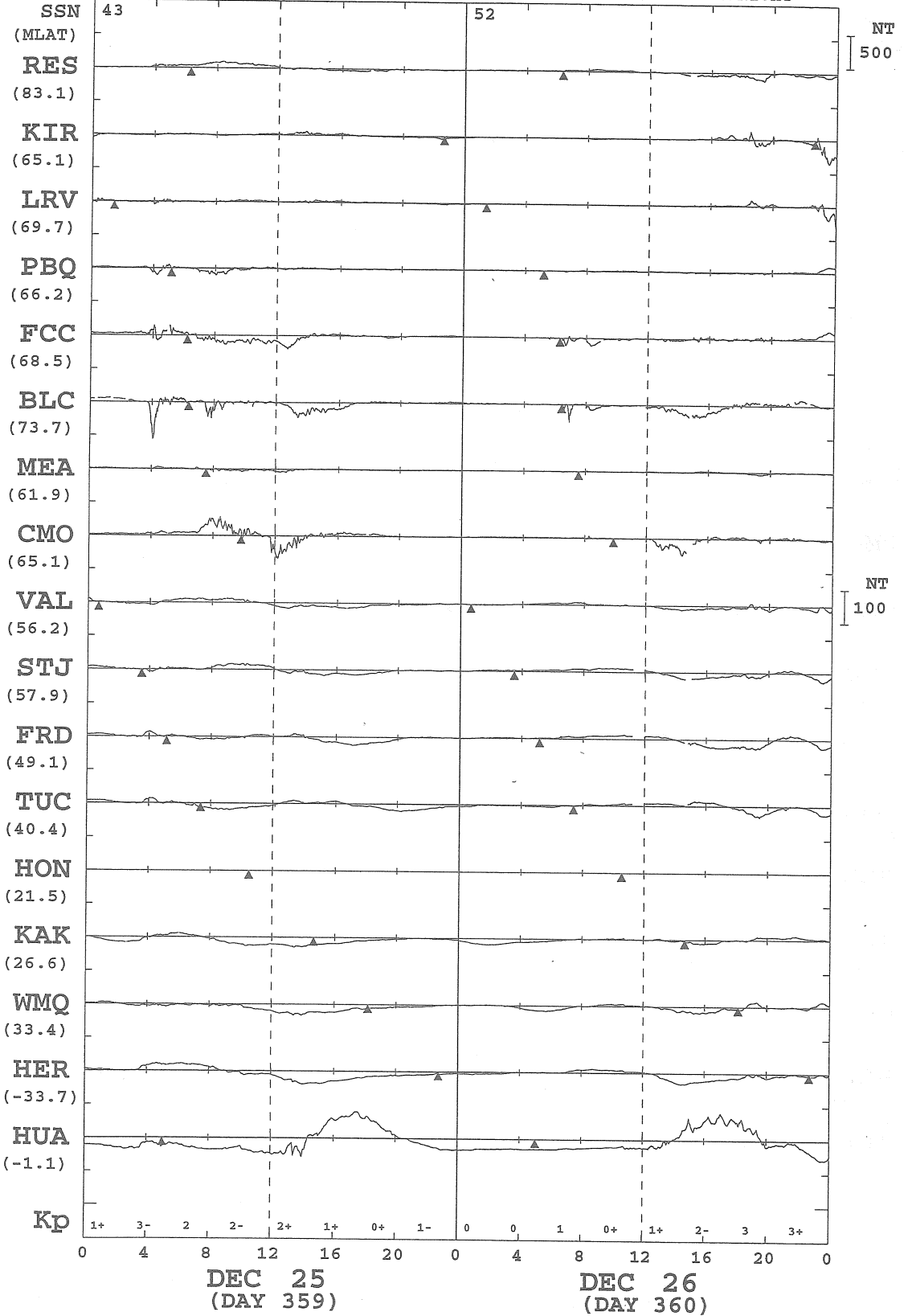


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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2005 H OR X-COMPONENT

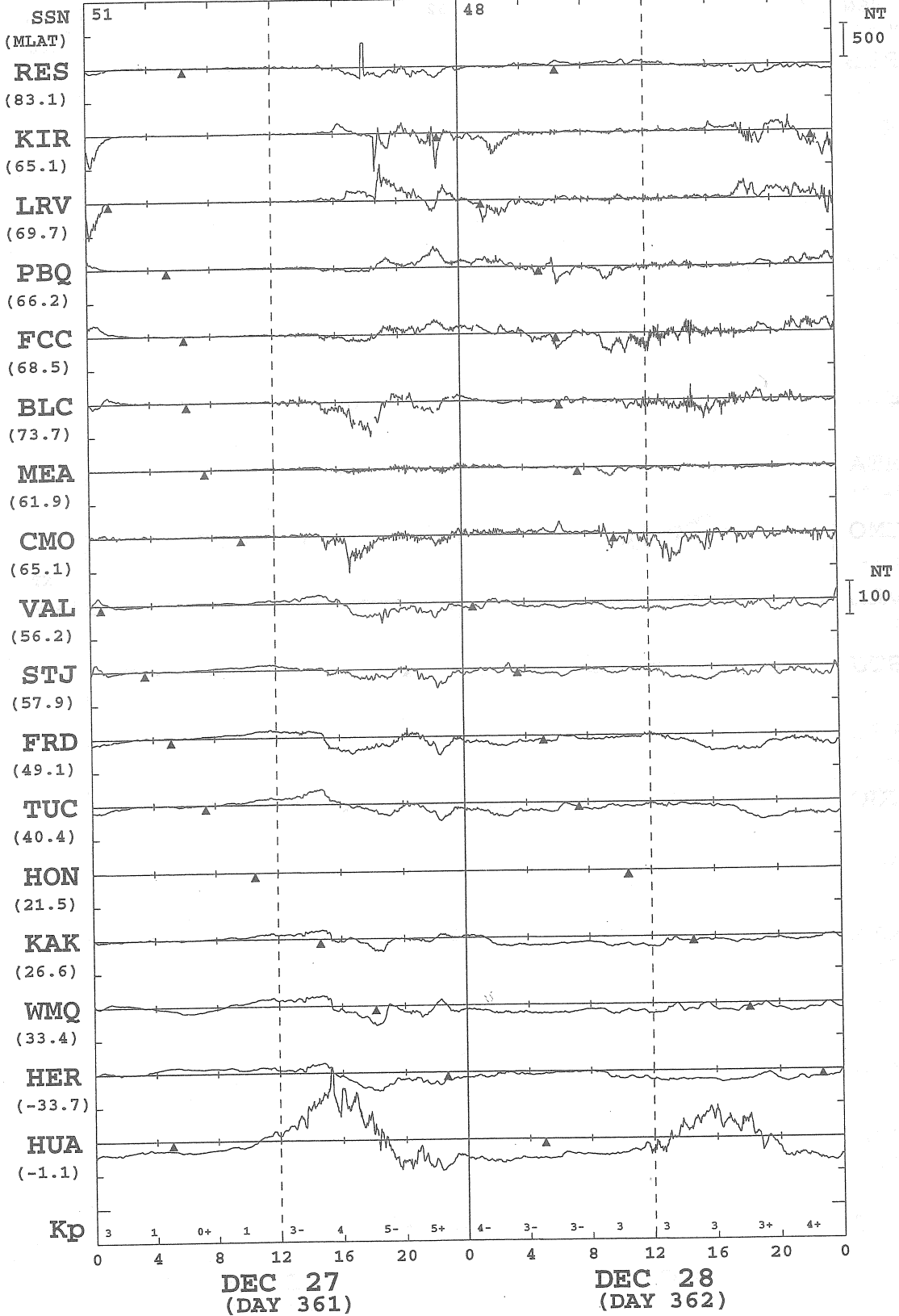
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

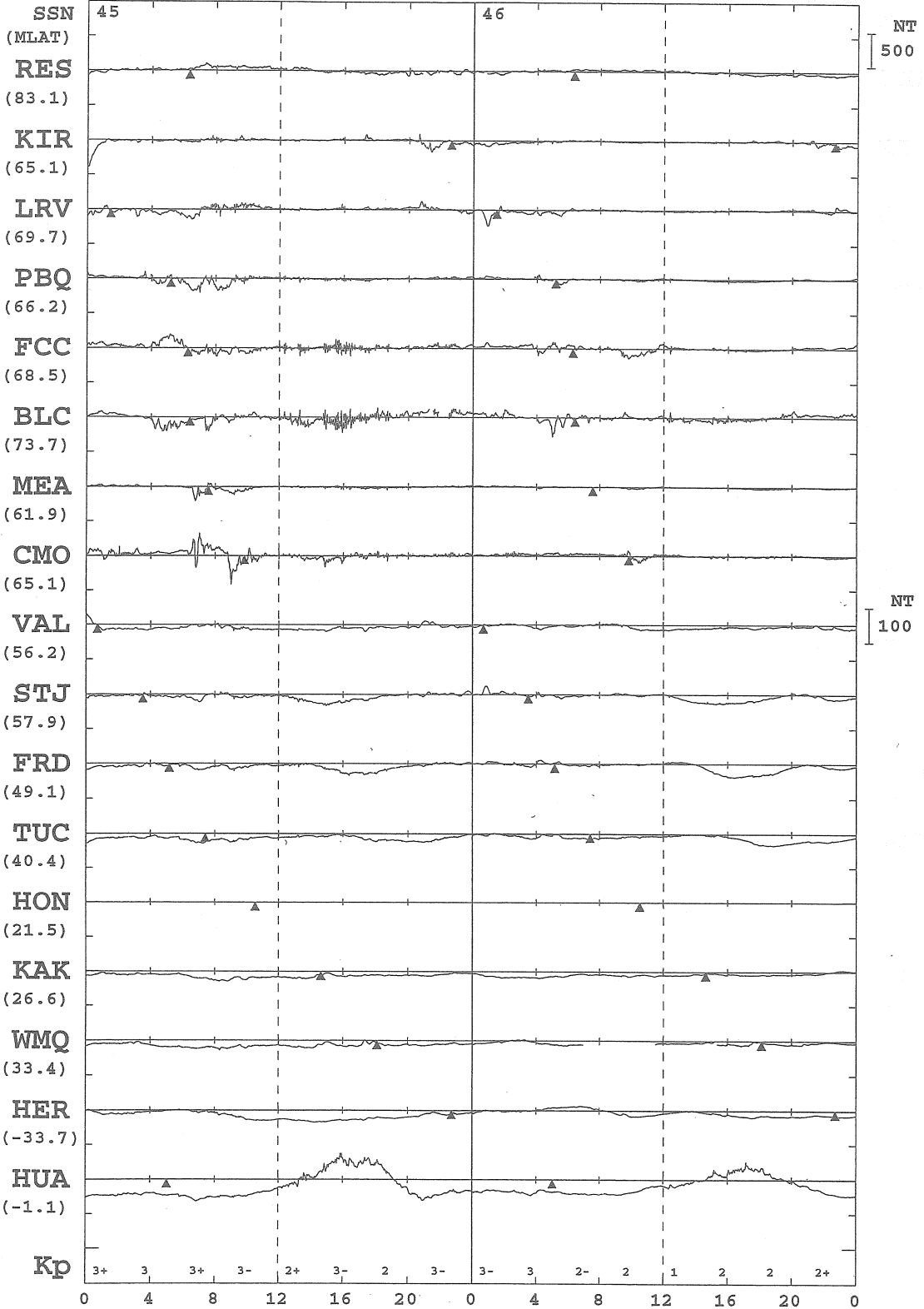
KYOTO UNIV.

2005 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

2005 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

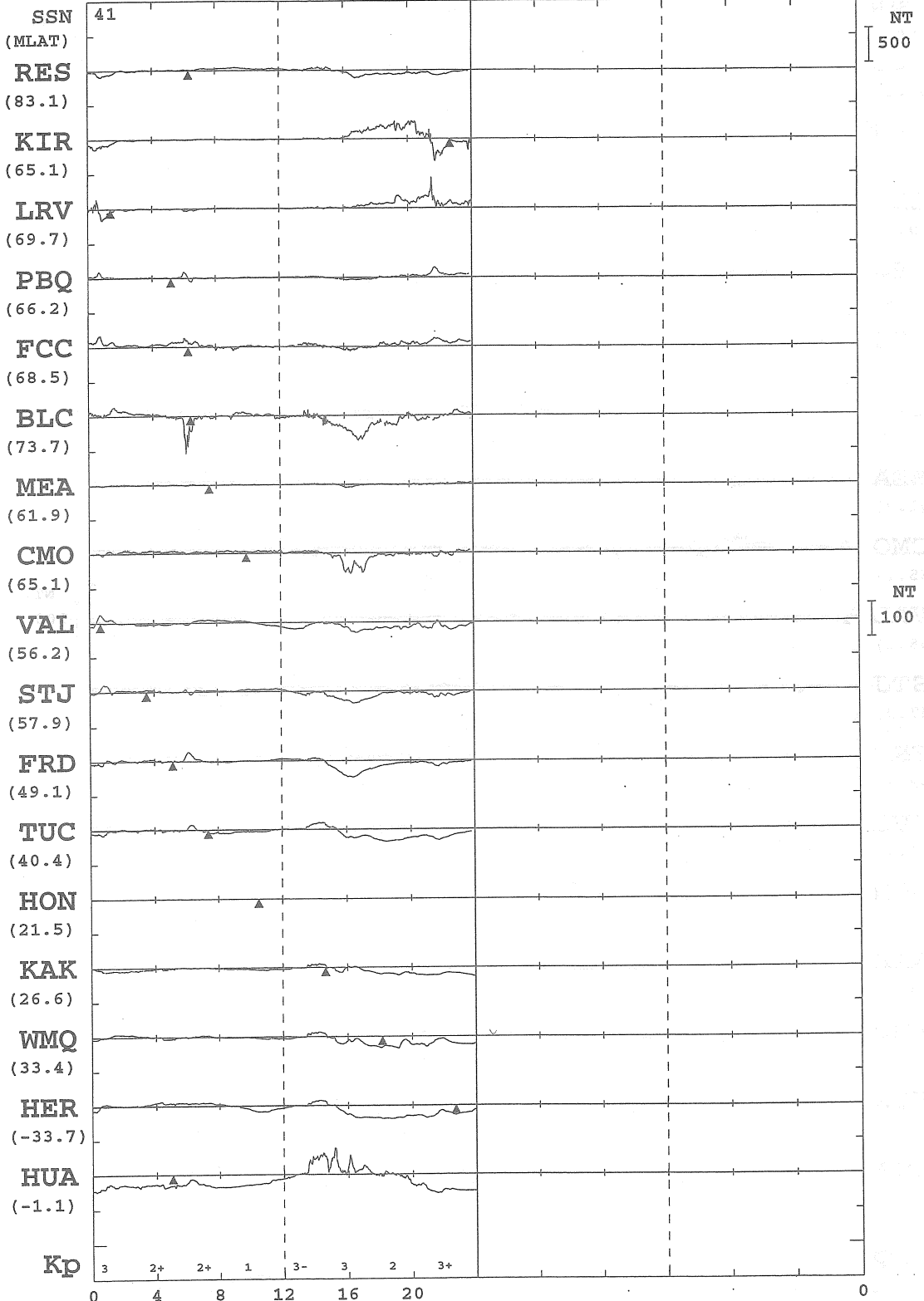


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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2005 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



DEC 31
(DAY 365)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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