

PROVISIONAL GEOMAGNETIC
DATA PLOTS
NO.30

(July - December, 2004)

January 2005

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, 2004 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-Forêt Magnetic Observatory.
- (9) Danish Meteorological Institute.
- (10) Institute de Physique du Globe de Strasbourg.
- (11) Indian Institute of Geomagnetism.
- (12) Instituto Geofísico del Perú.
- (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, 041225-26.ps.gz for December 25-26, 2004). 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.

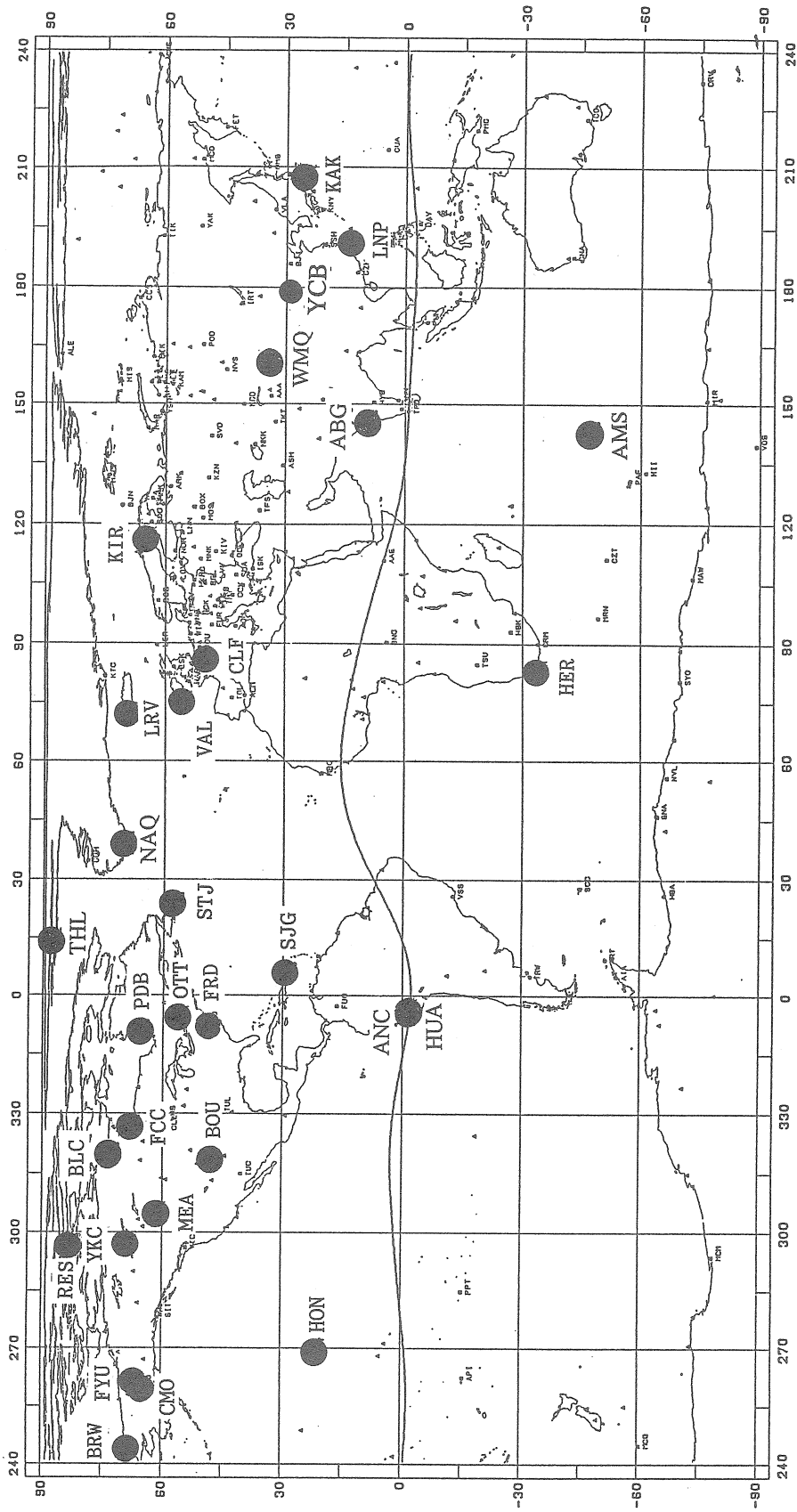
STATION NAME	ABB CODE	ORG No.	GEOGRAPHIC		GEOMAGNETIC		INVARIANT PLOT	
			LAT.	LONG.	LAT.	LONG.	LAT.	SCALE
*Tule	THL	9	76.6	291.2	87.2	12.4	85.9	500nT/div
*Resolute Bay	RES	1	74.7	265.1	83.1	296.0	83.9	"
*Baker Lake	BLC	1	64.3	264.0	73.7	319.2	74.6	"
*Narsarsuaq	NAQ	9	61.2	314.6	70.6	38.7	67.5	"
Leirvogur	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 168069 under the Japan Society for Promotion of science (JSPS).

DISTRIBUTION OF GEOMAGNETIC OBSERVATORIES



GEOMAGNETIC COORDINATE (1985. 0)

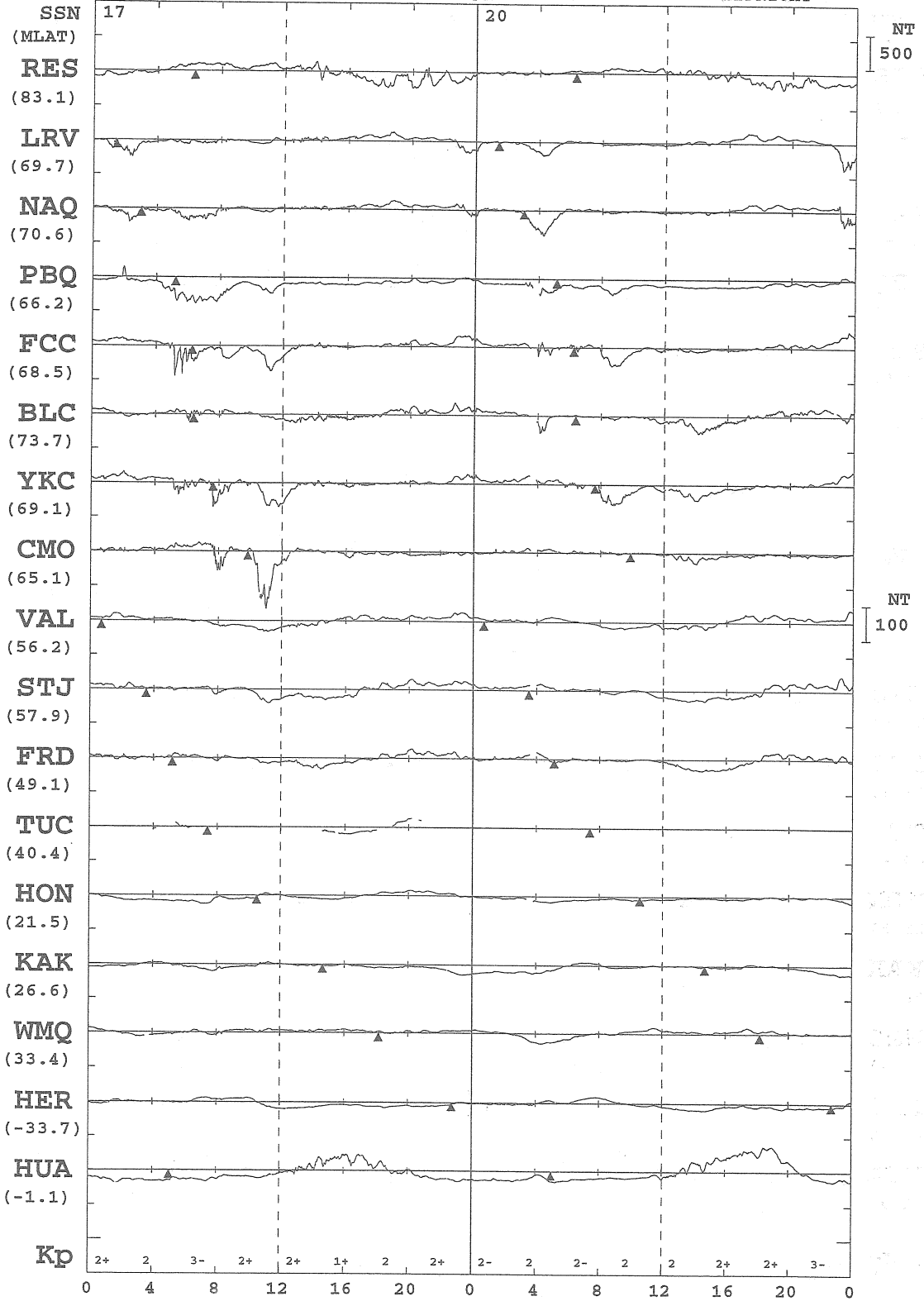
—— DIP EQUATOR AT 100 KM ALTITUDE

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, 2004

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

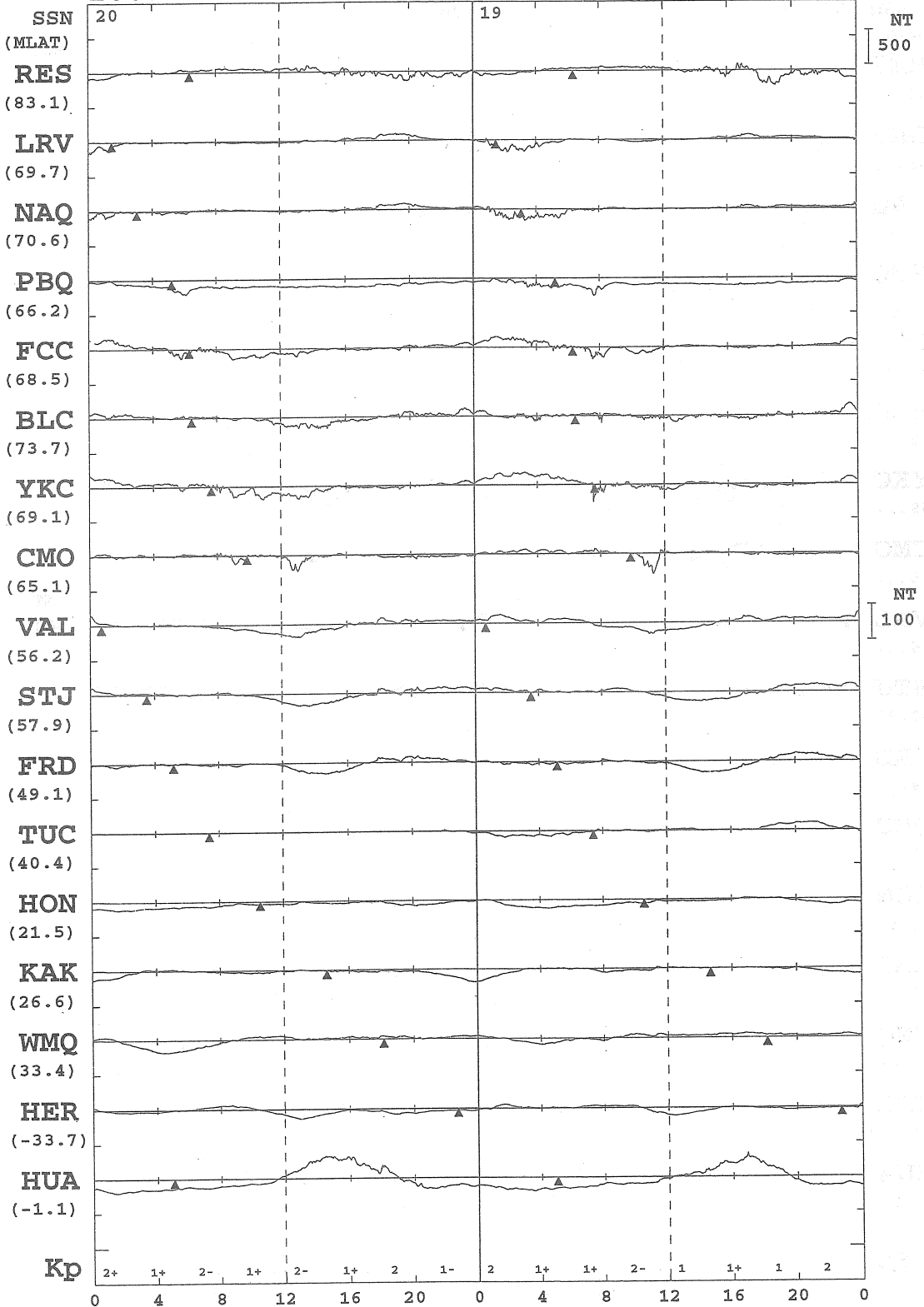


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

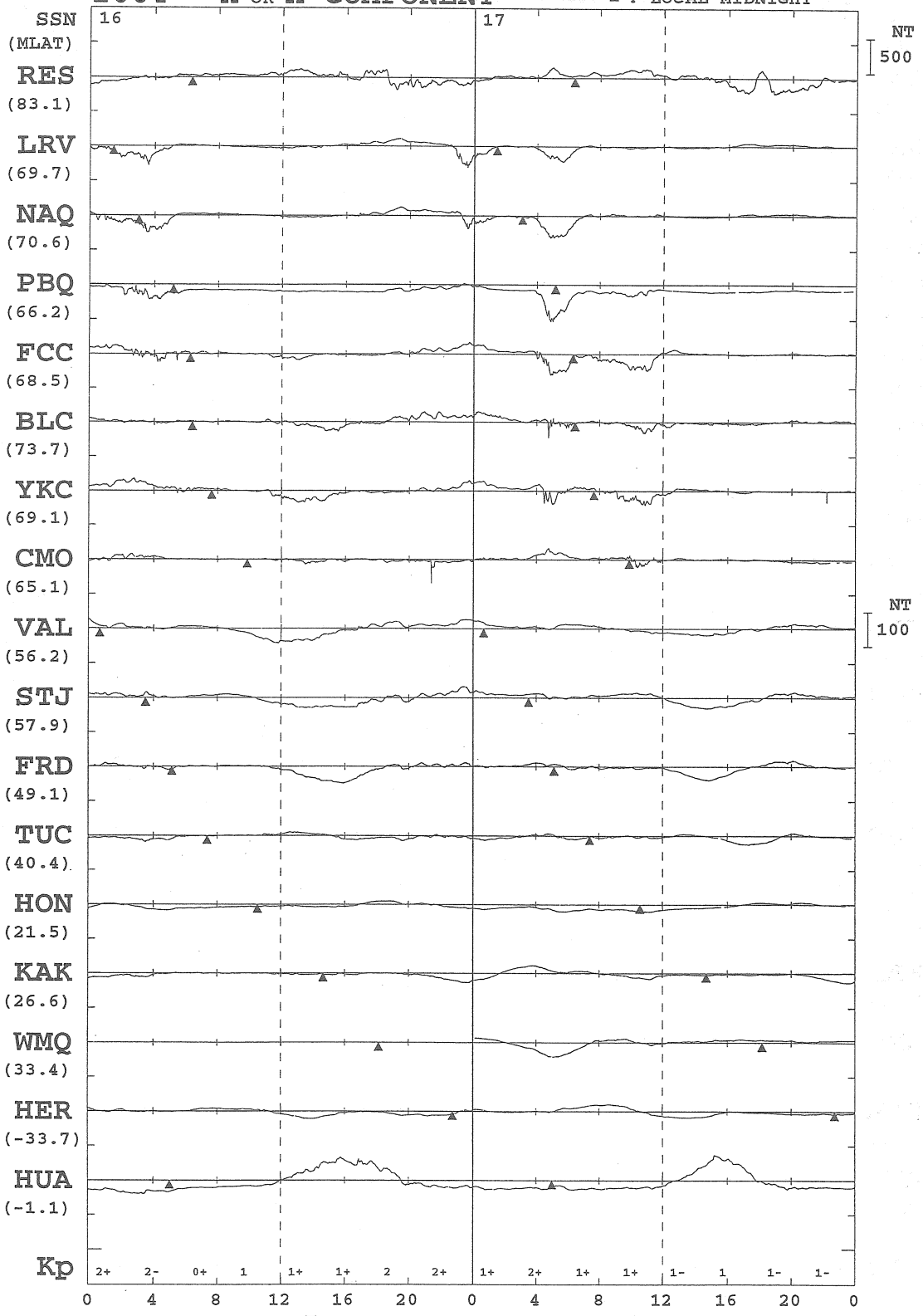
▲ : LOCAL MIDNIGHT



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

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

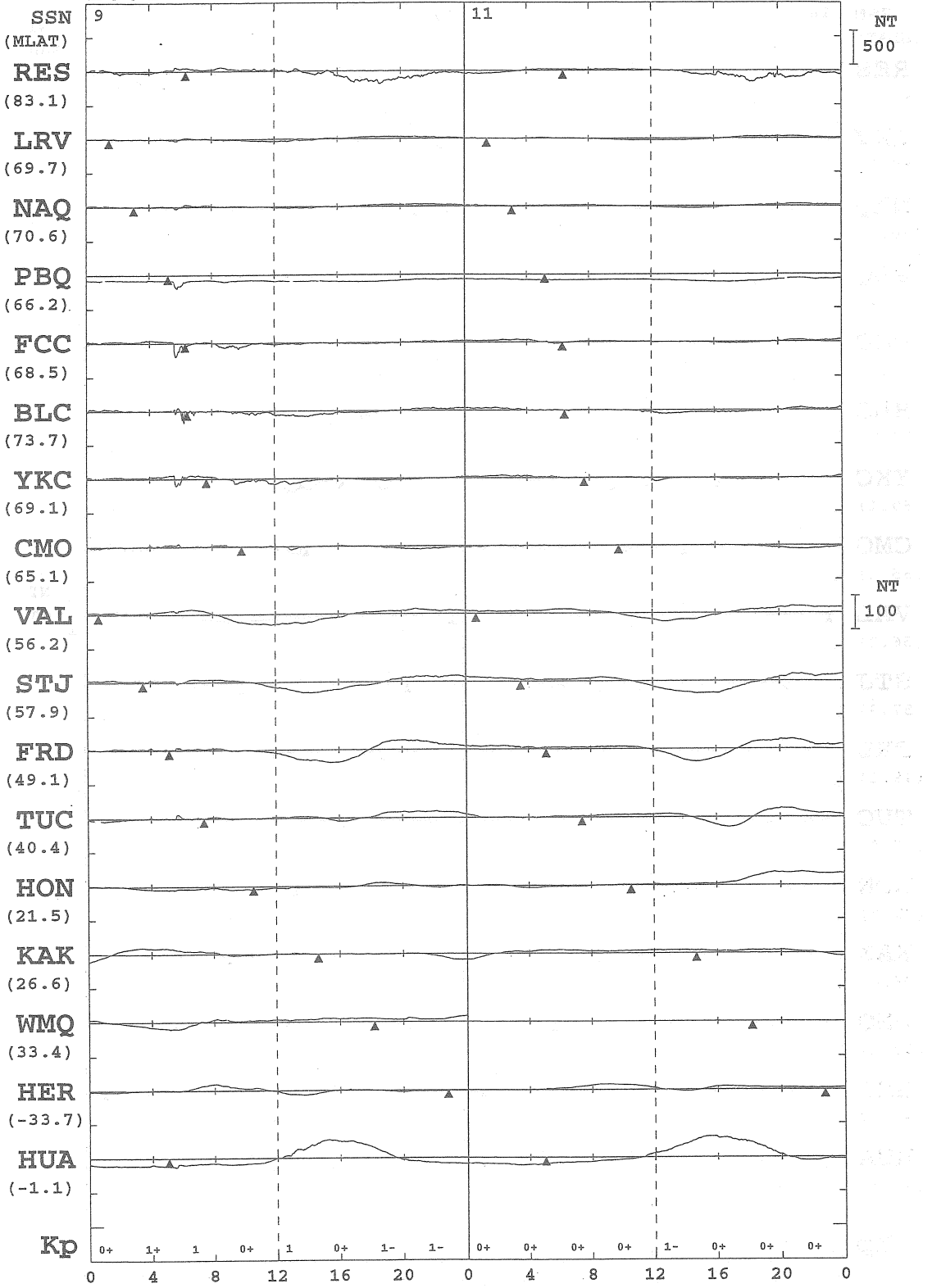


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JUL 7
(DAY 189)

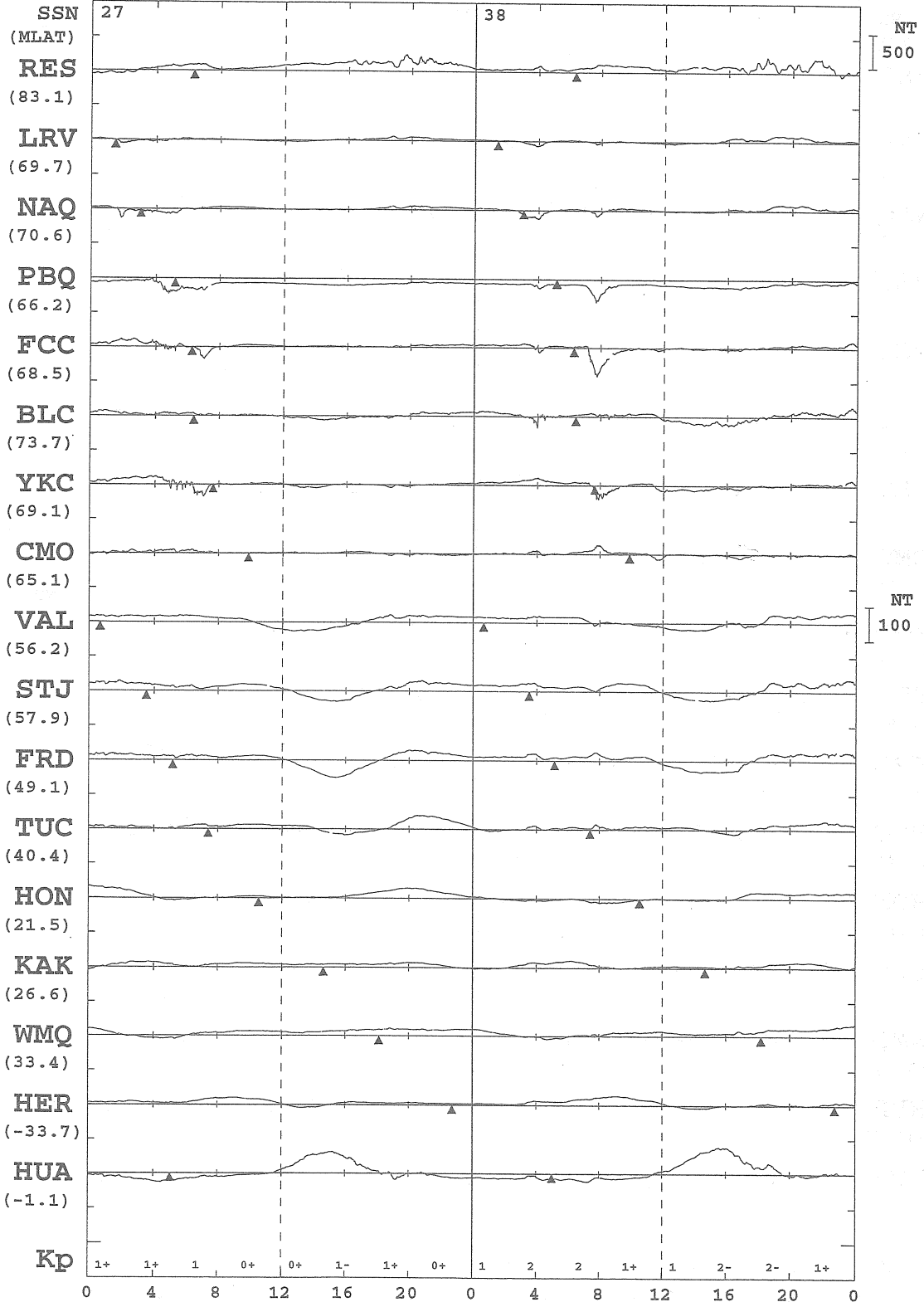
JUL 8
(DAY 190)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



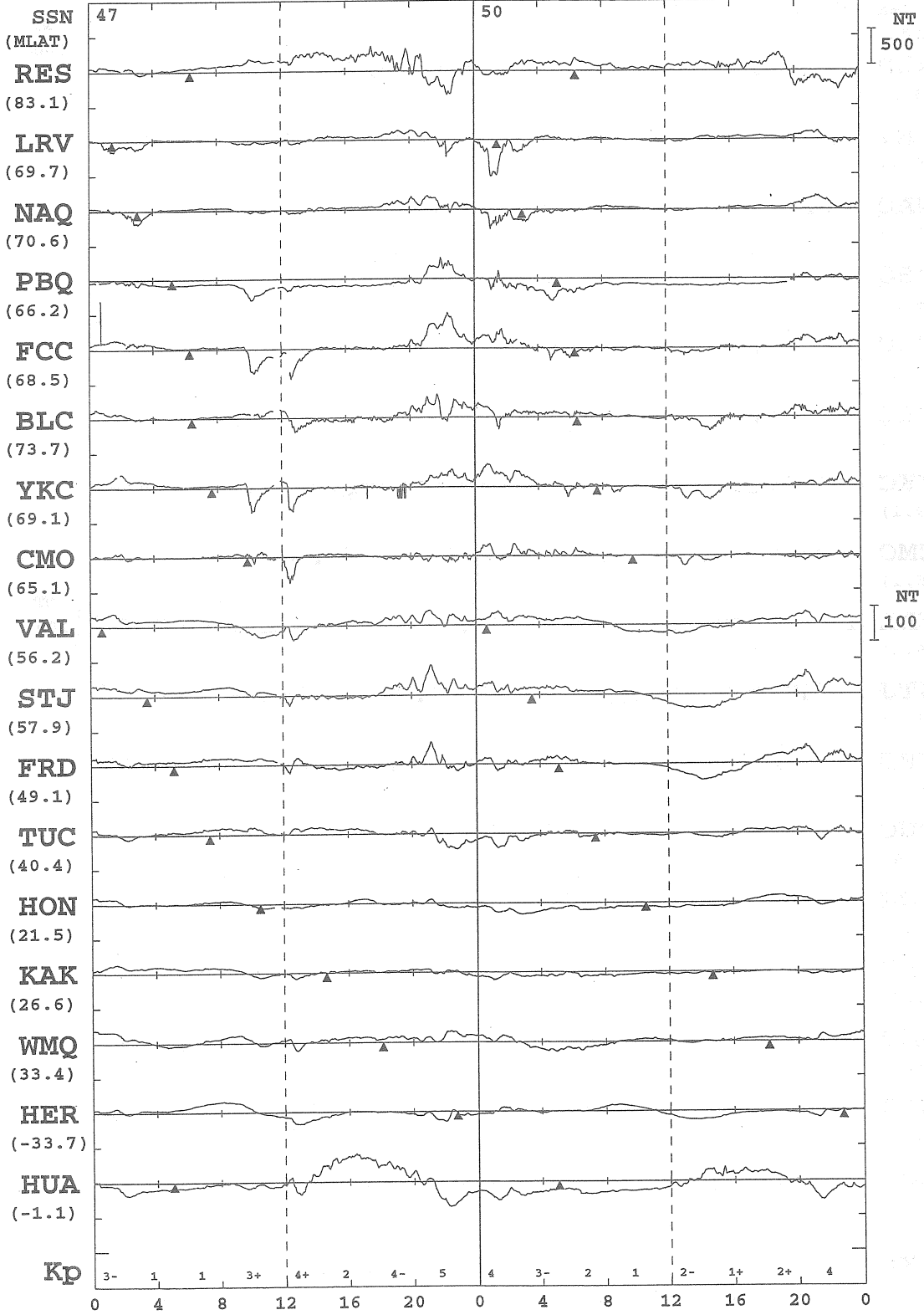
JUL 9
(DAY 191)

JUL 10
(DAY 192)

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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



JUL 11
(DAY 193)

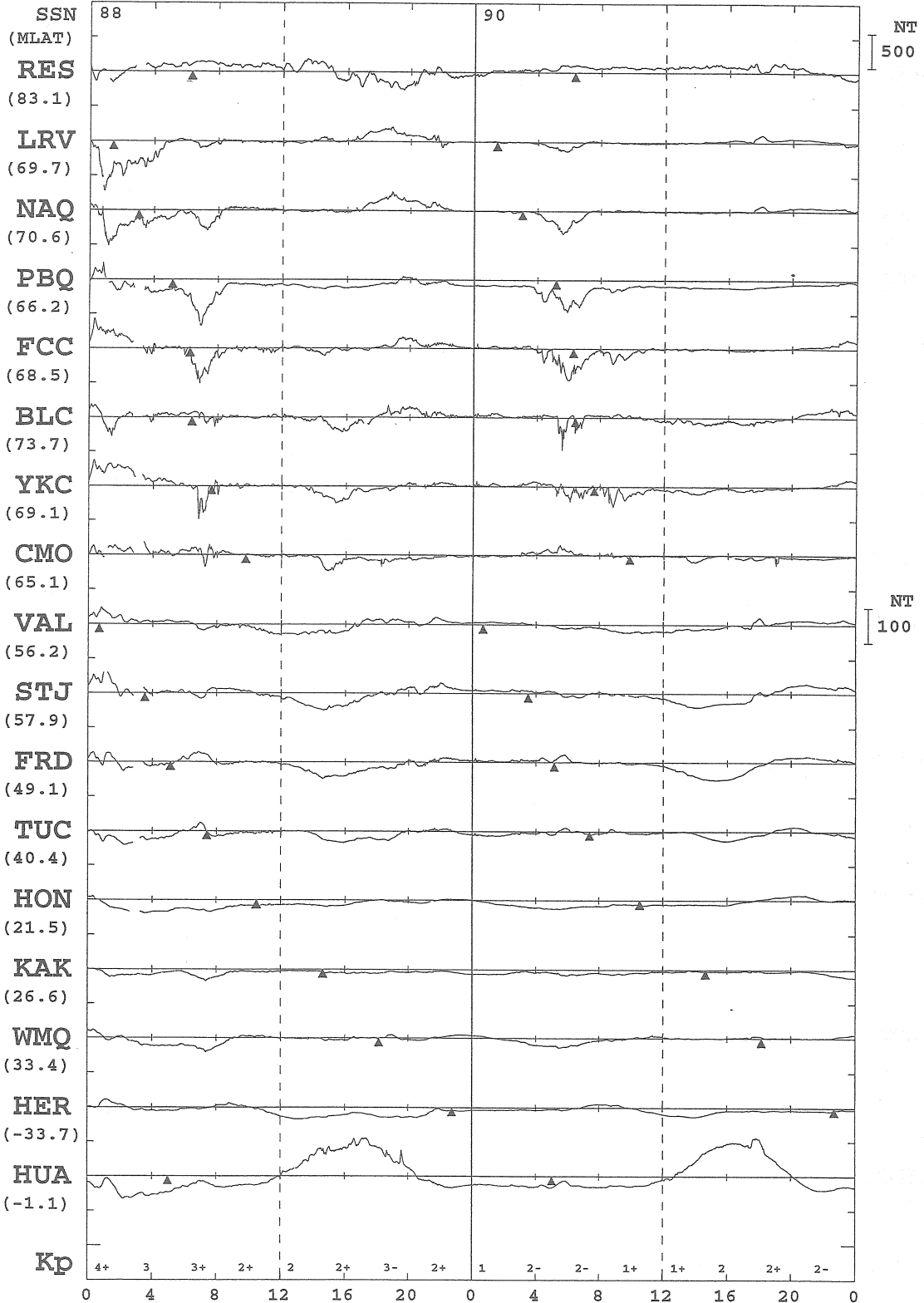
JUL 12
(DAY 194)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

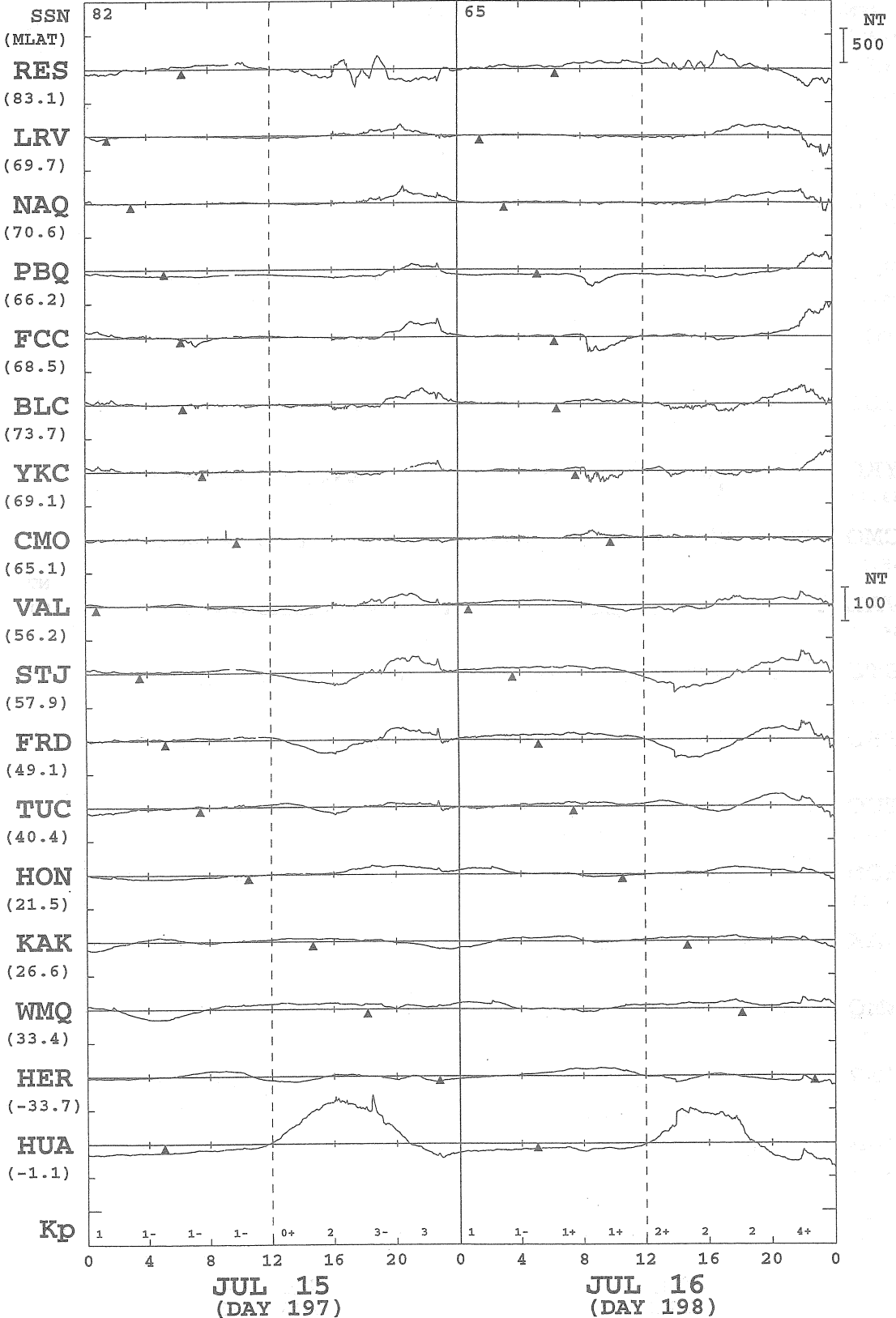


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

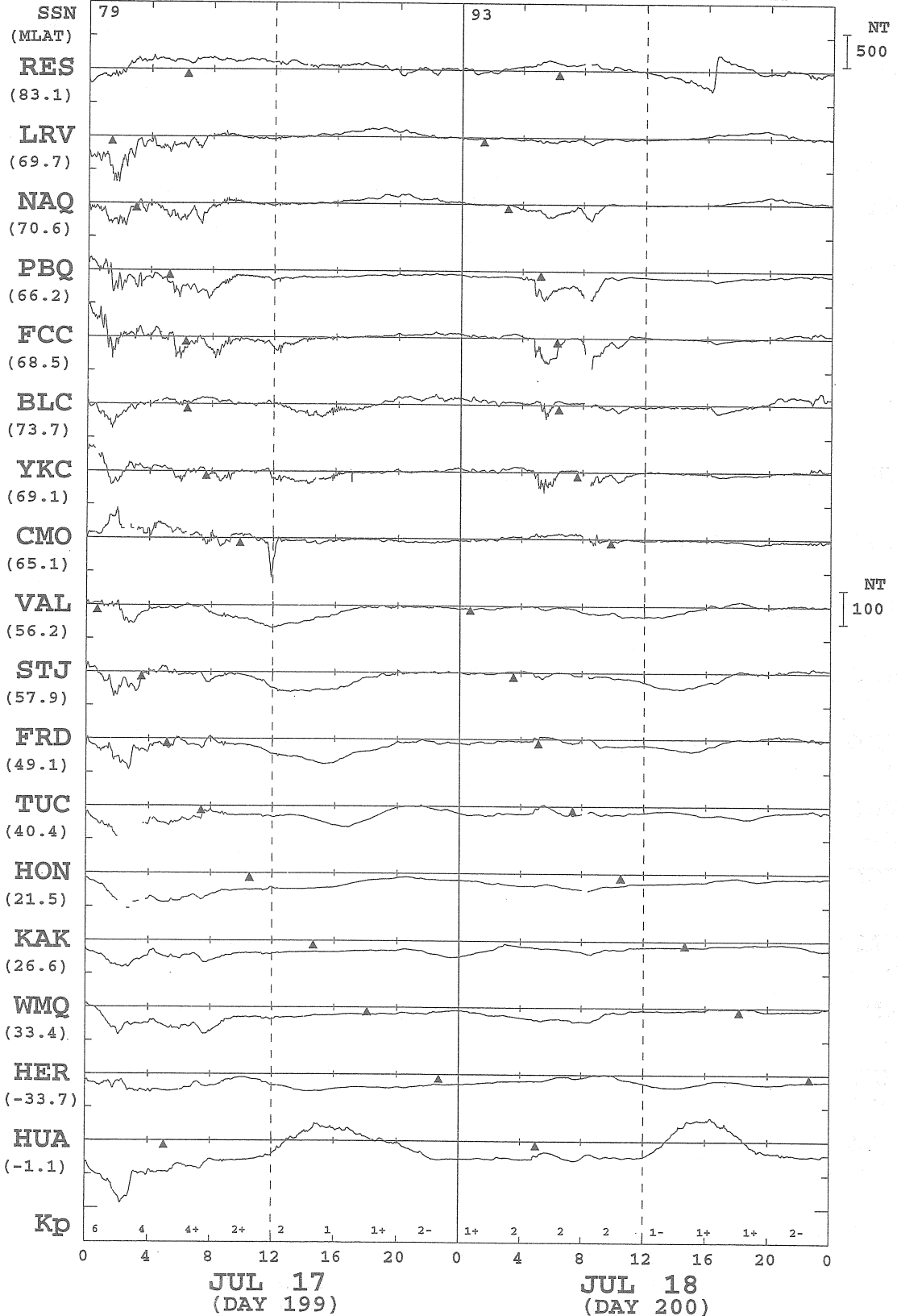


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

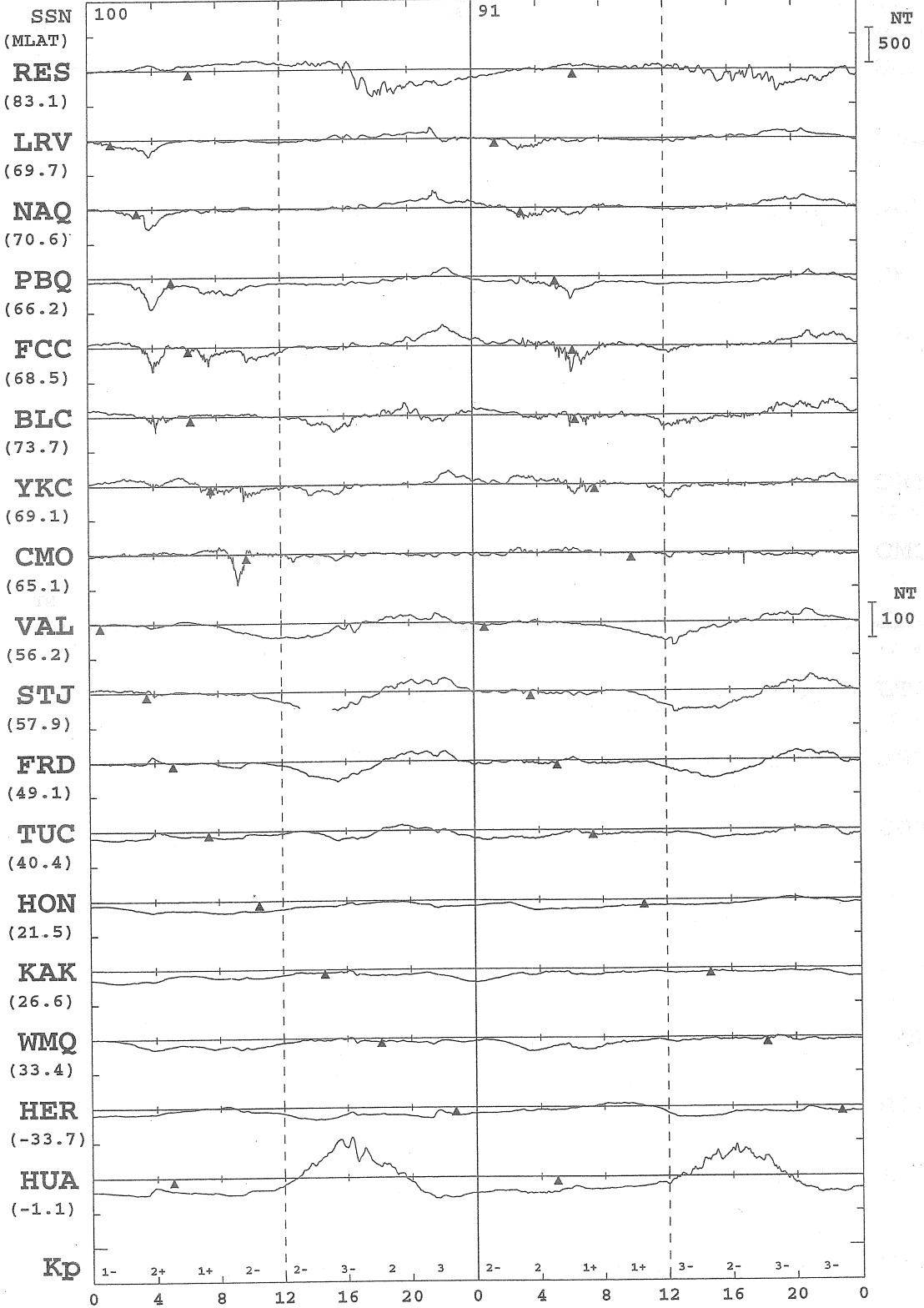


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

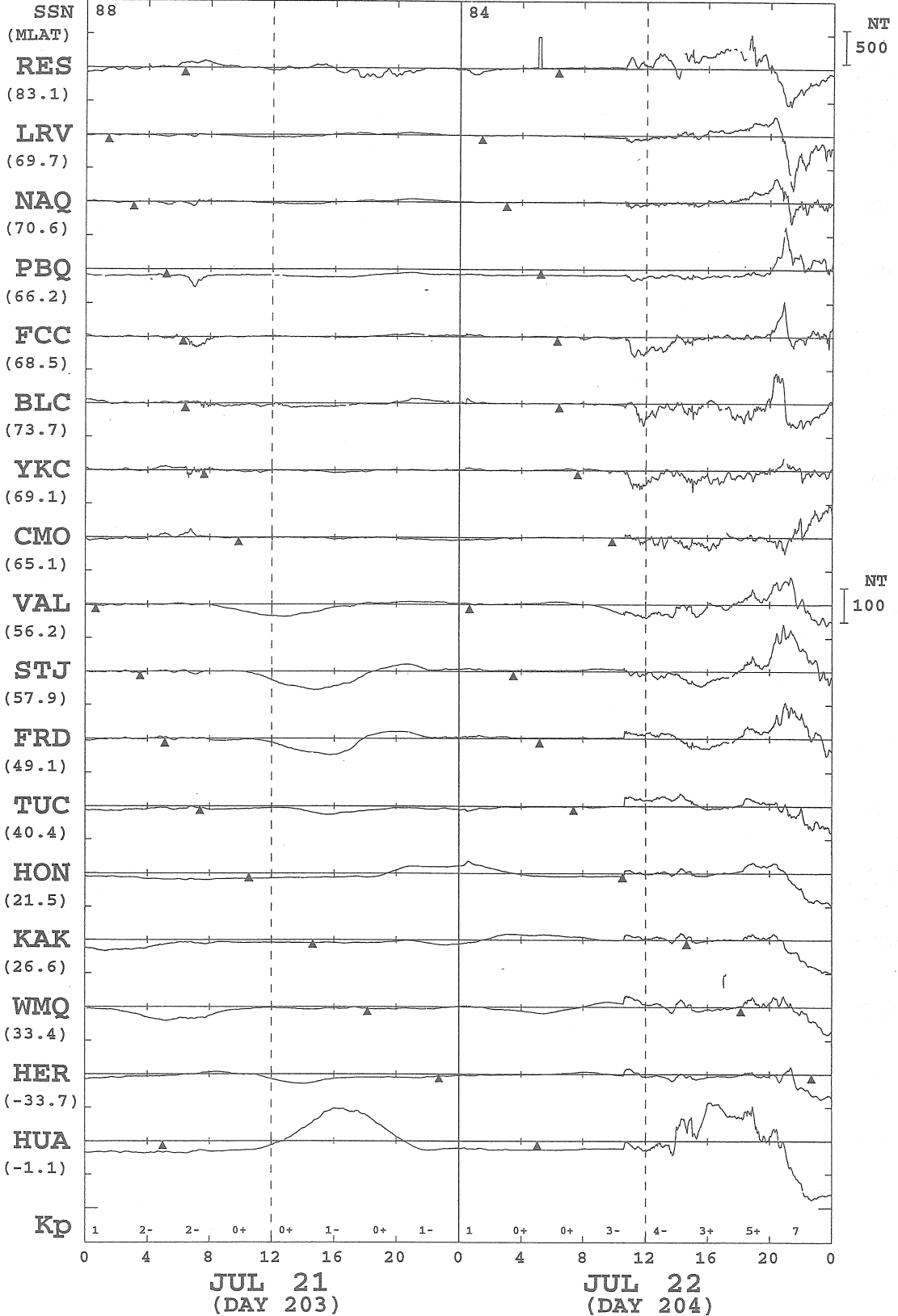


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

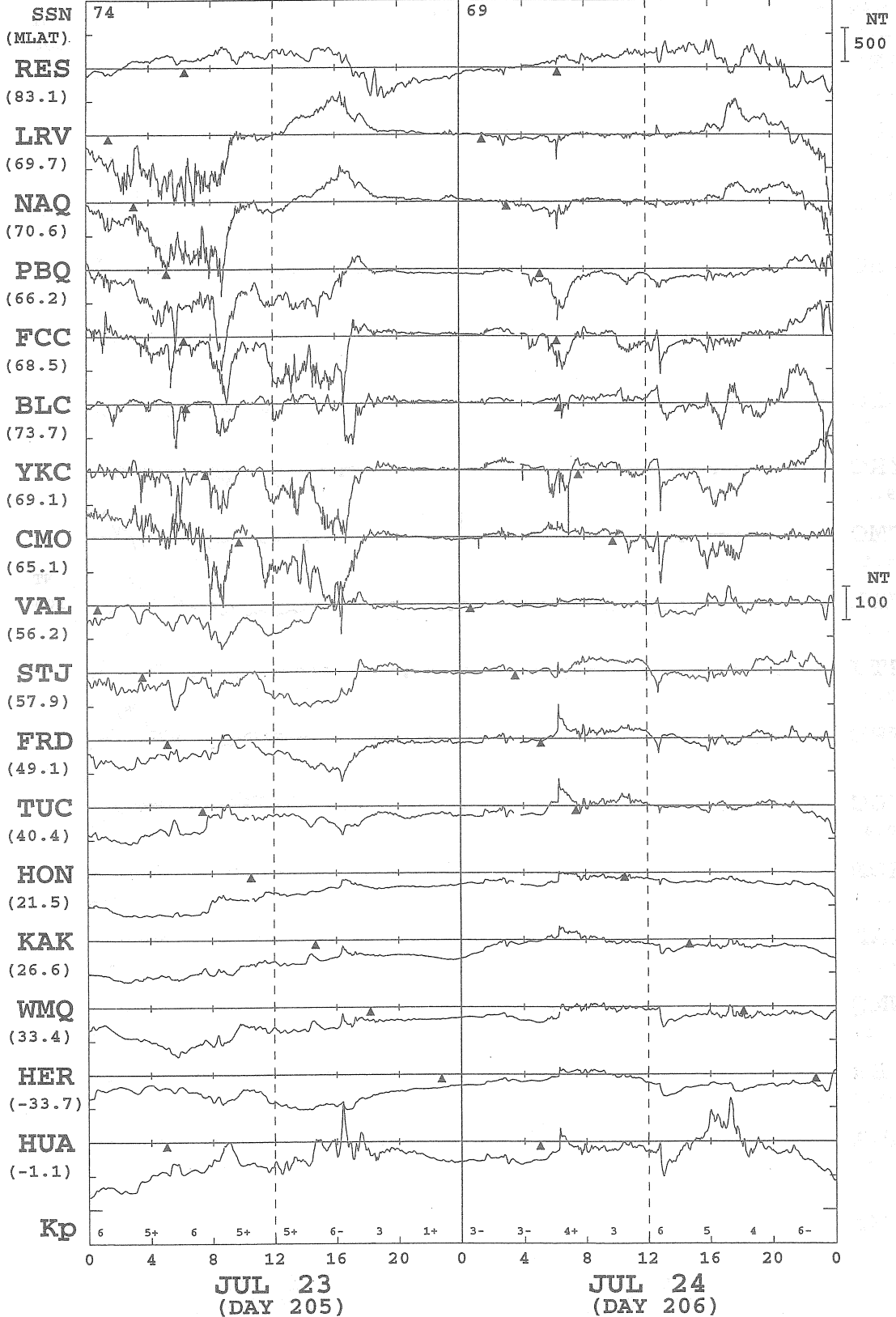


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

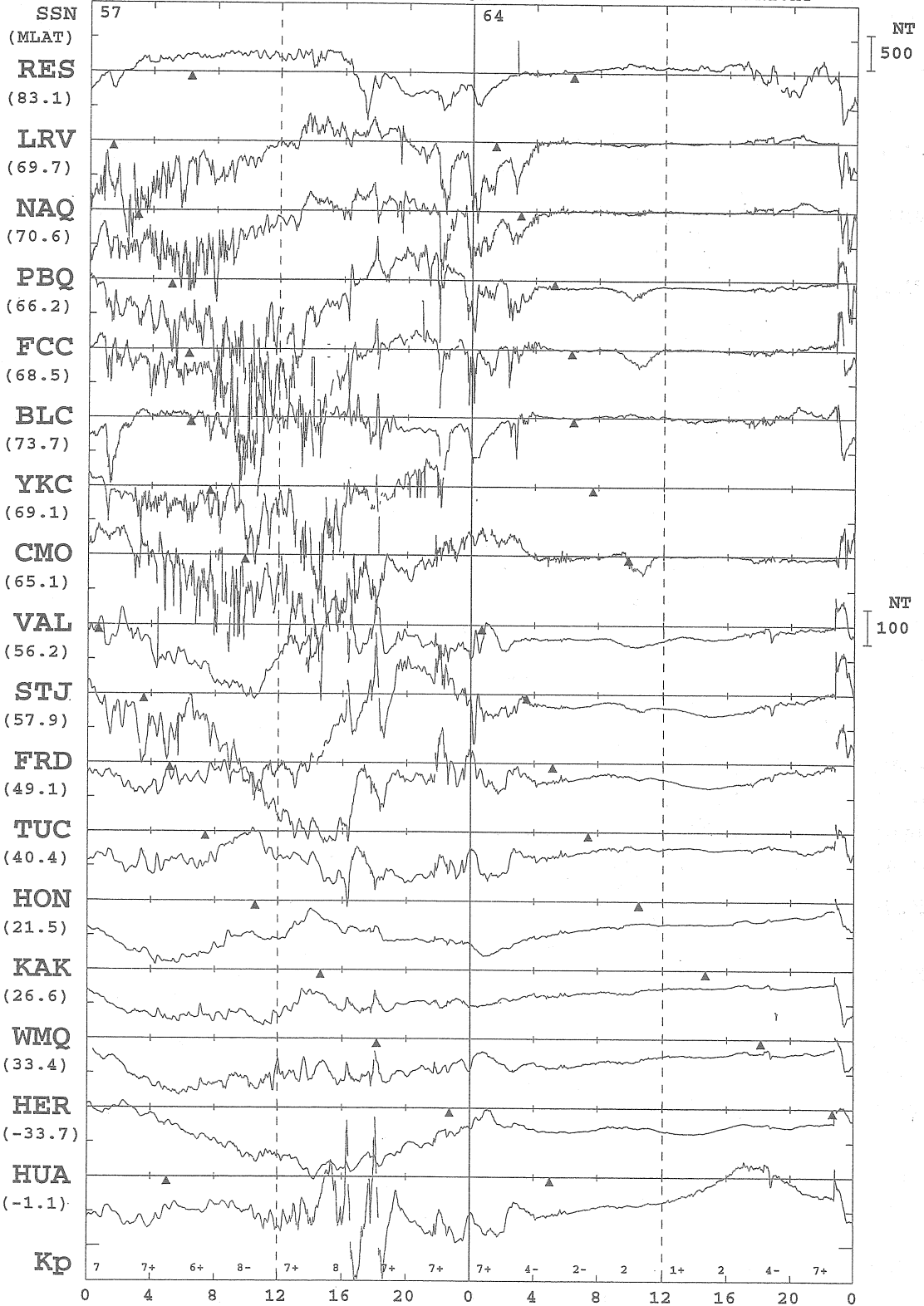


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

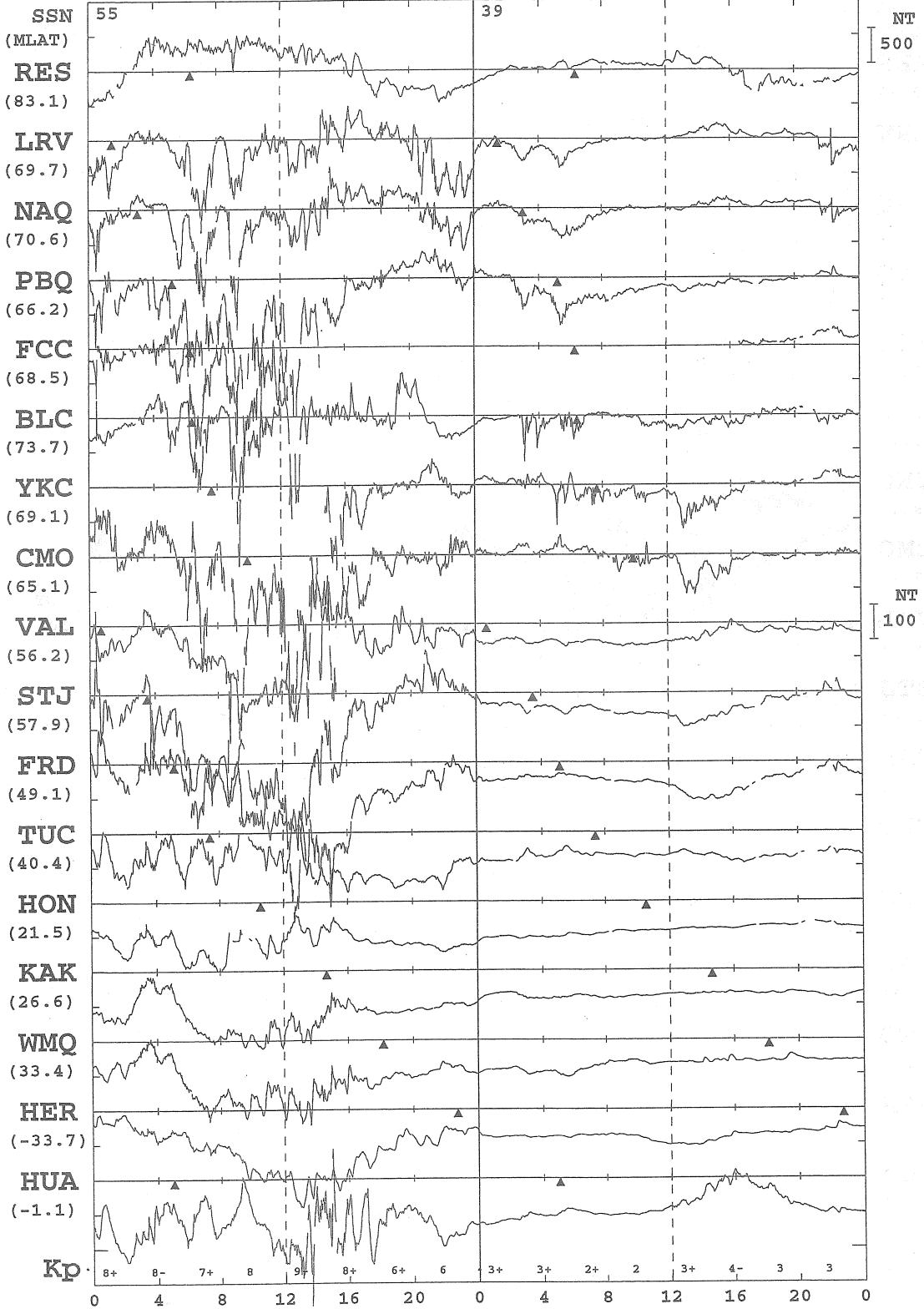


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



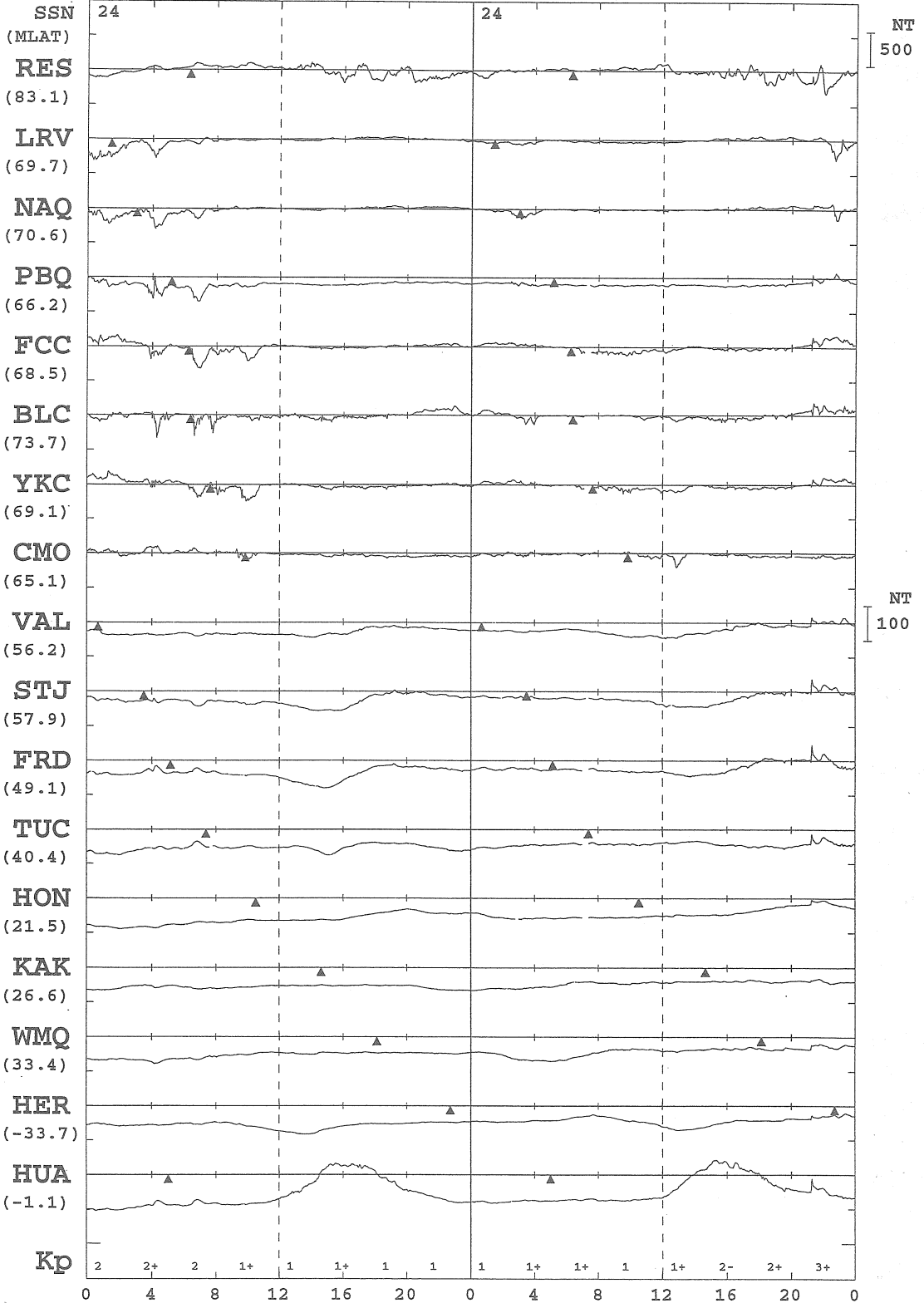
JUL 27
(DAY 209)

JUL 28
(DAY 210)

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

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2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



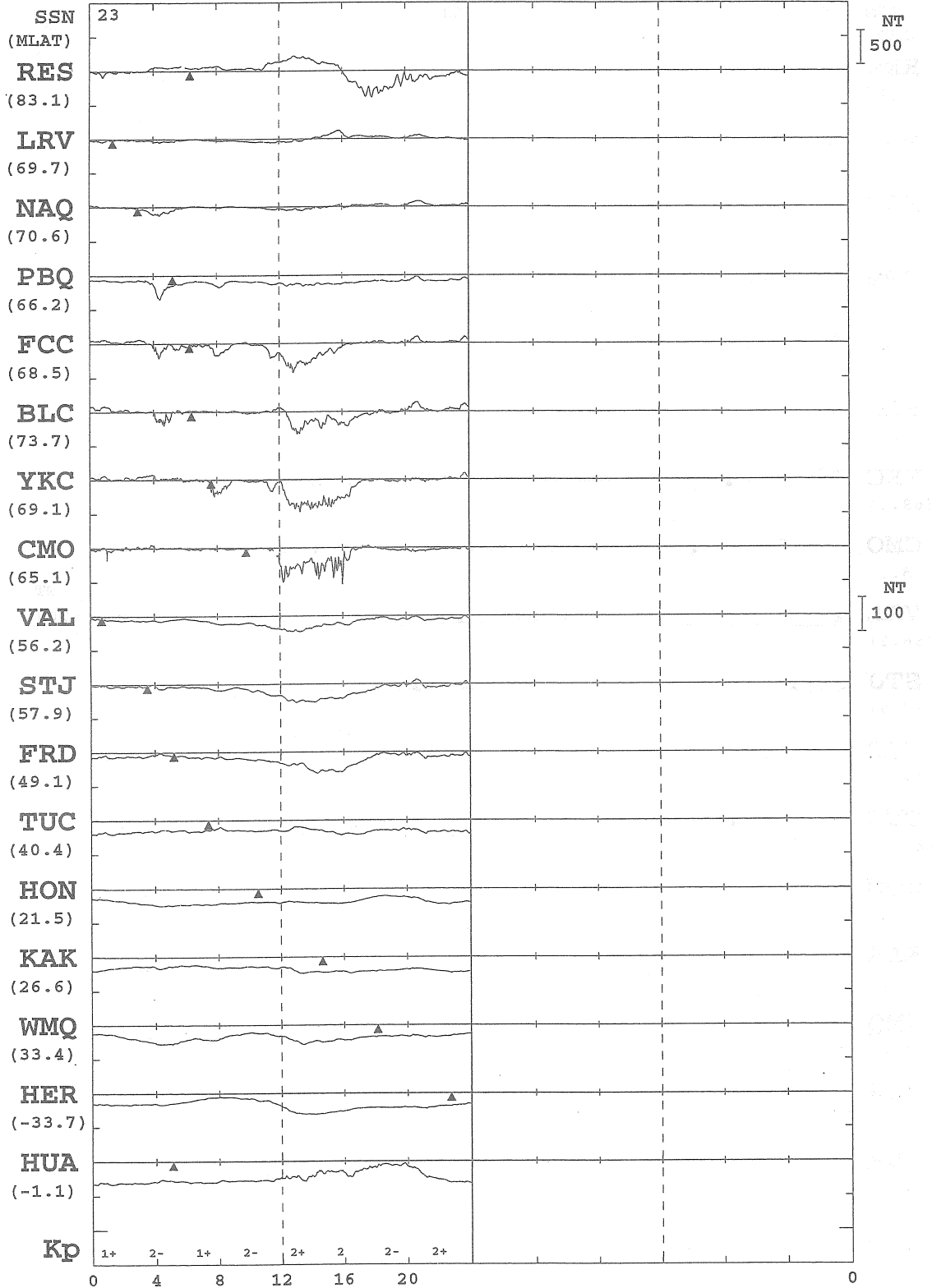
JUL 29
(DAY 211)

JUL 30
(DAY 212)

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

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2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

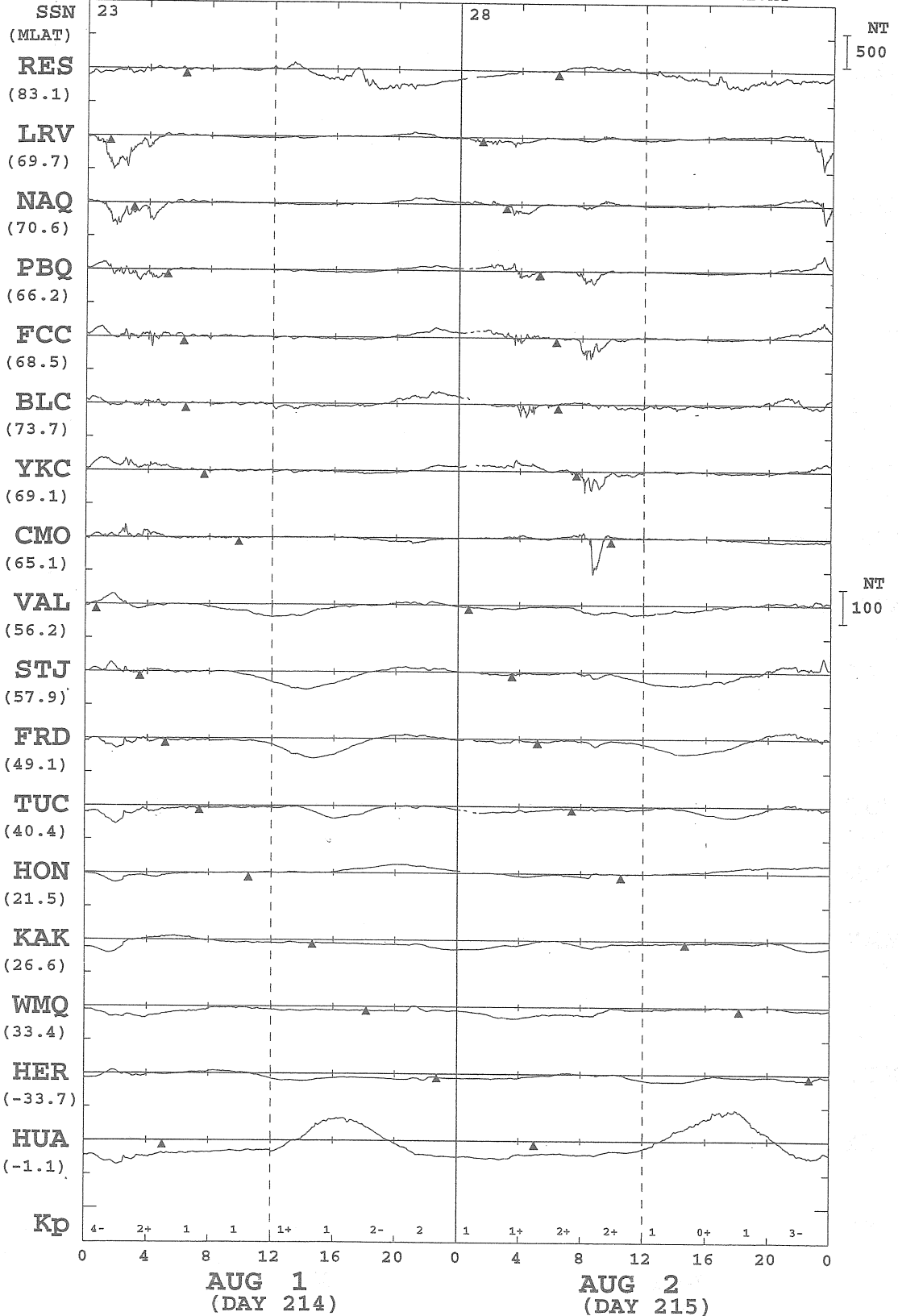


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

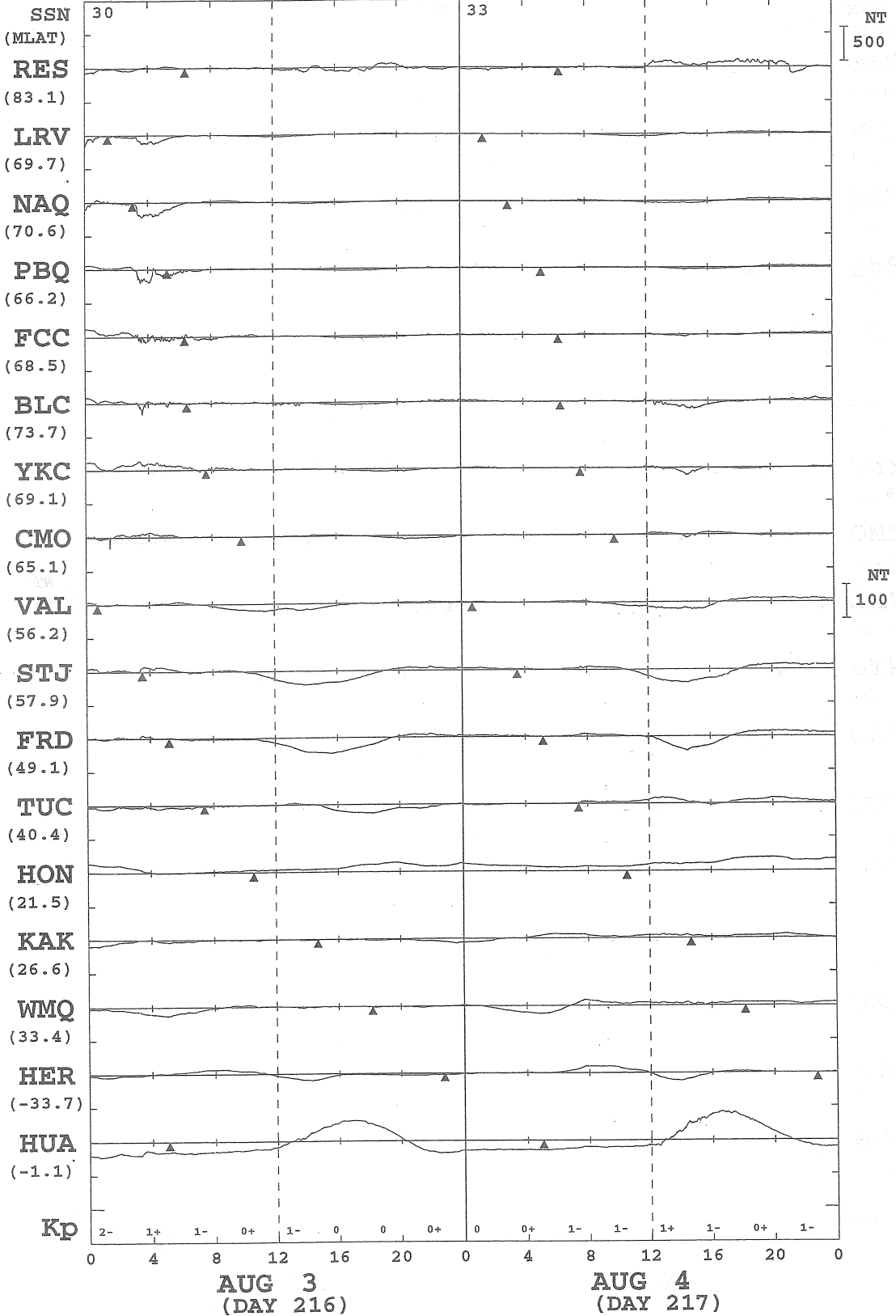


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

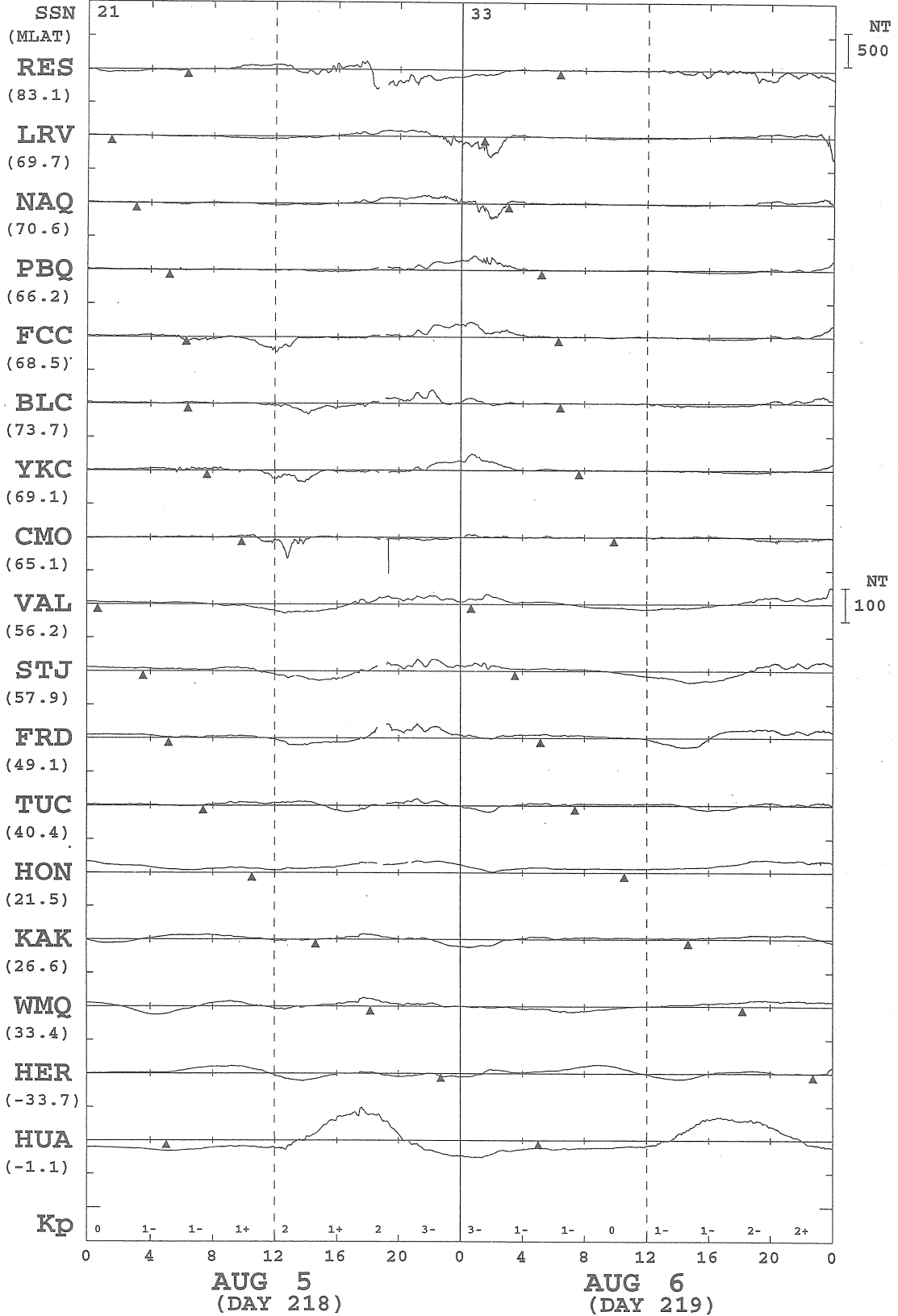


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

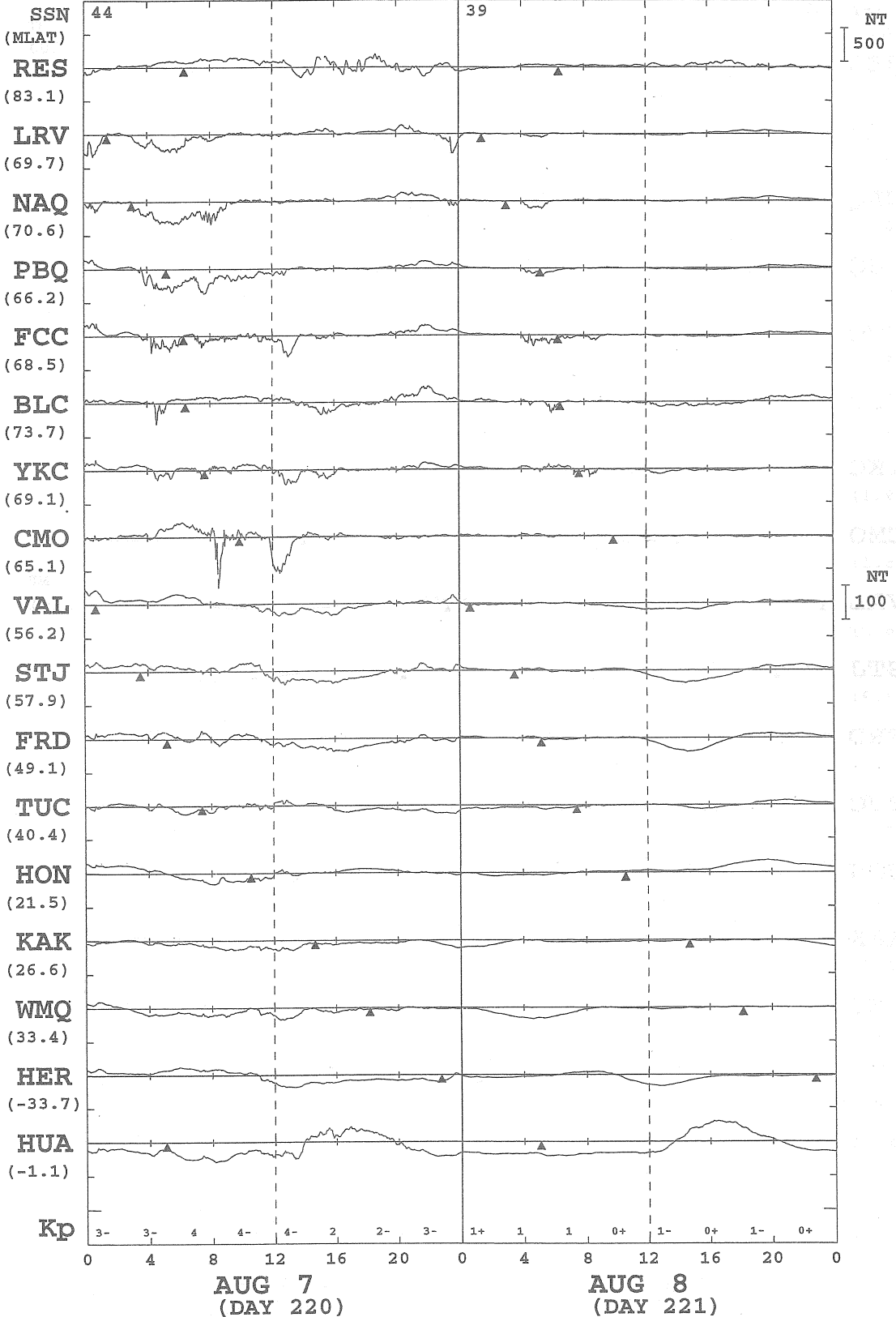


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

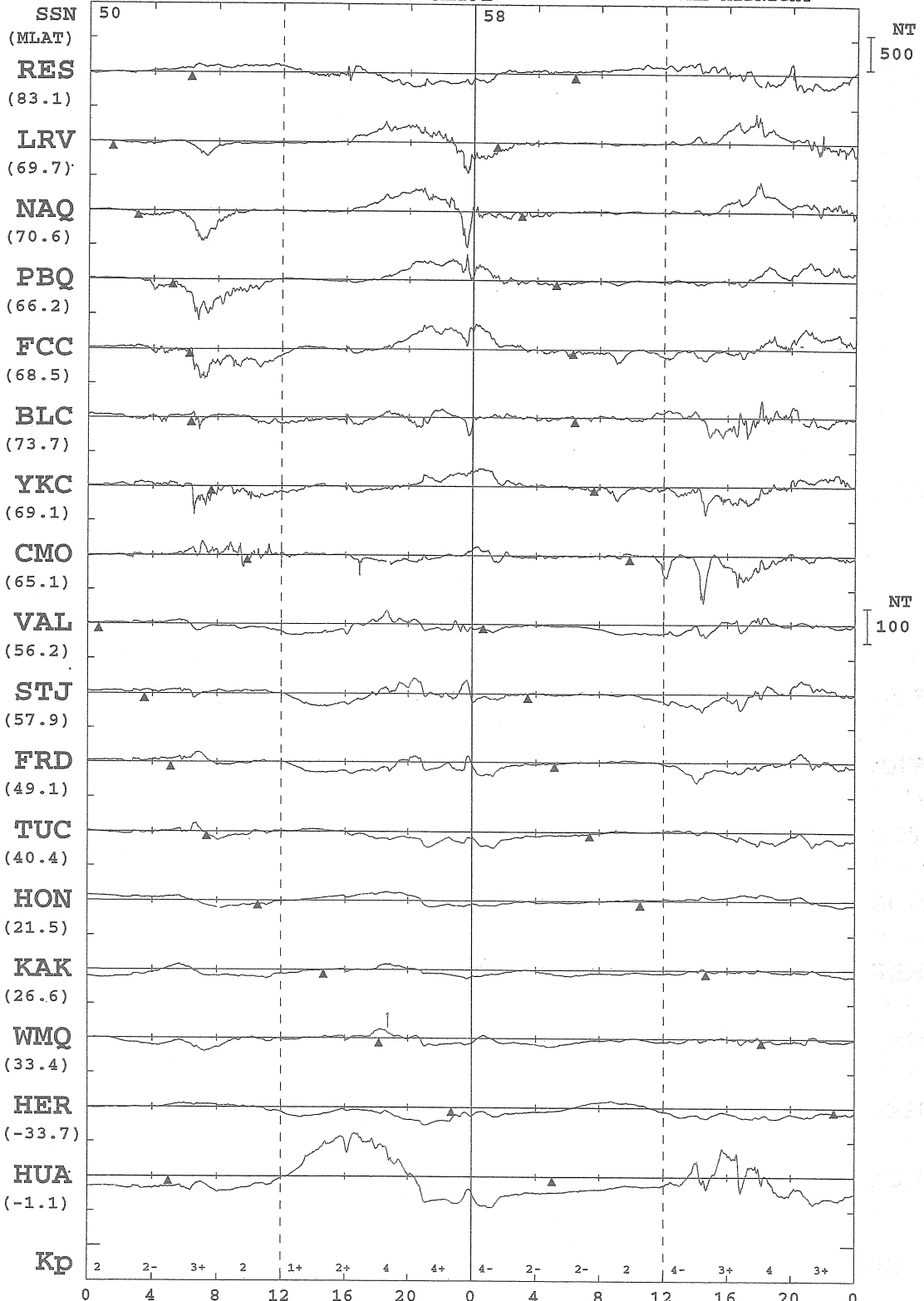


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



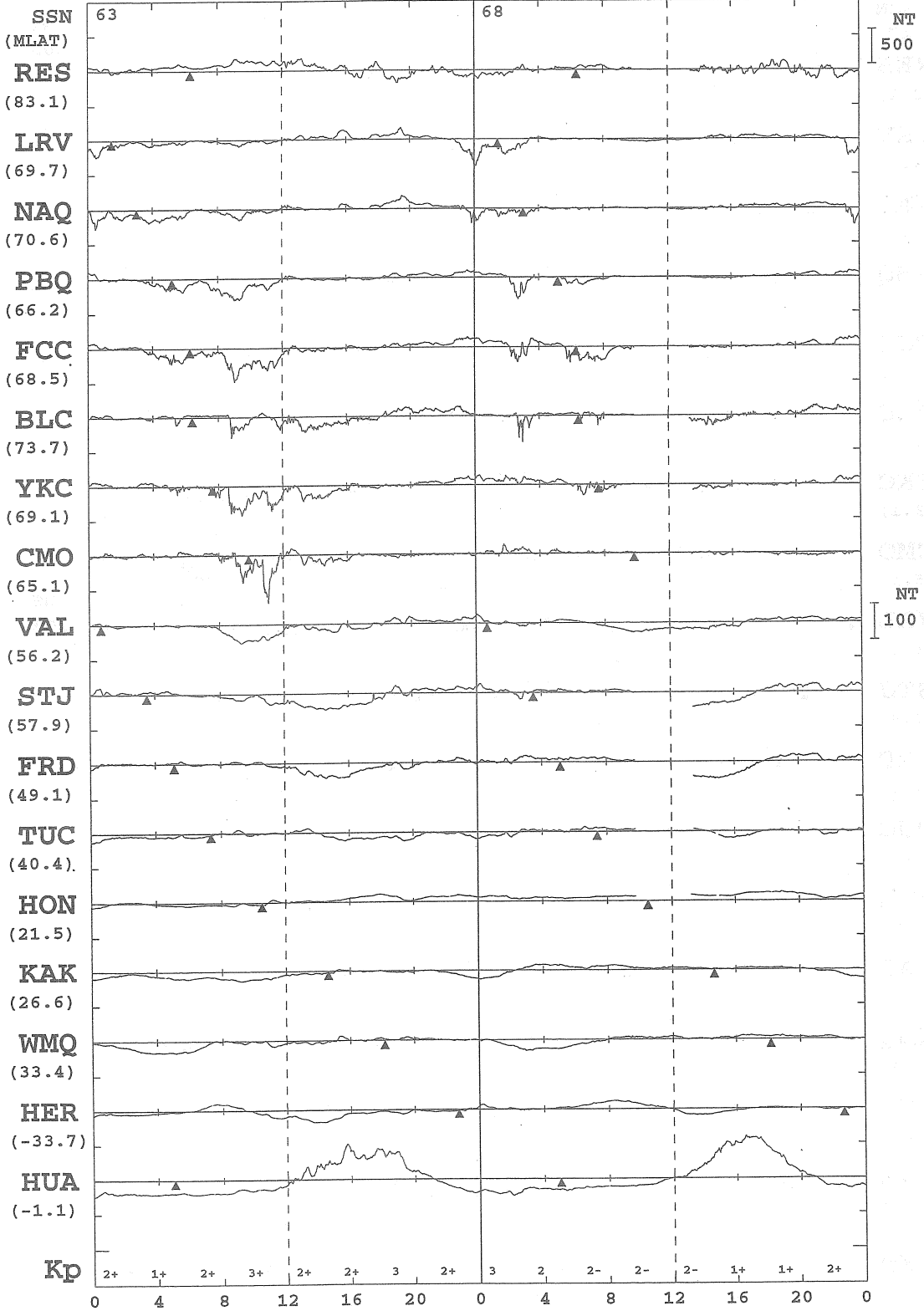
AUG 9 (DAY 222)
AUG 10 (DAY 223)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

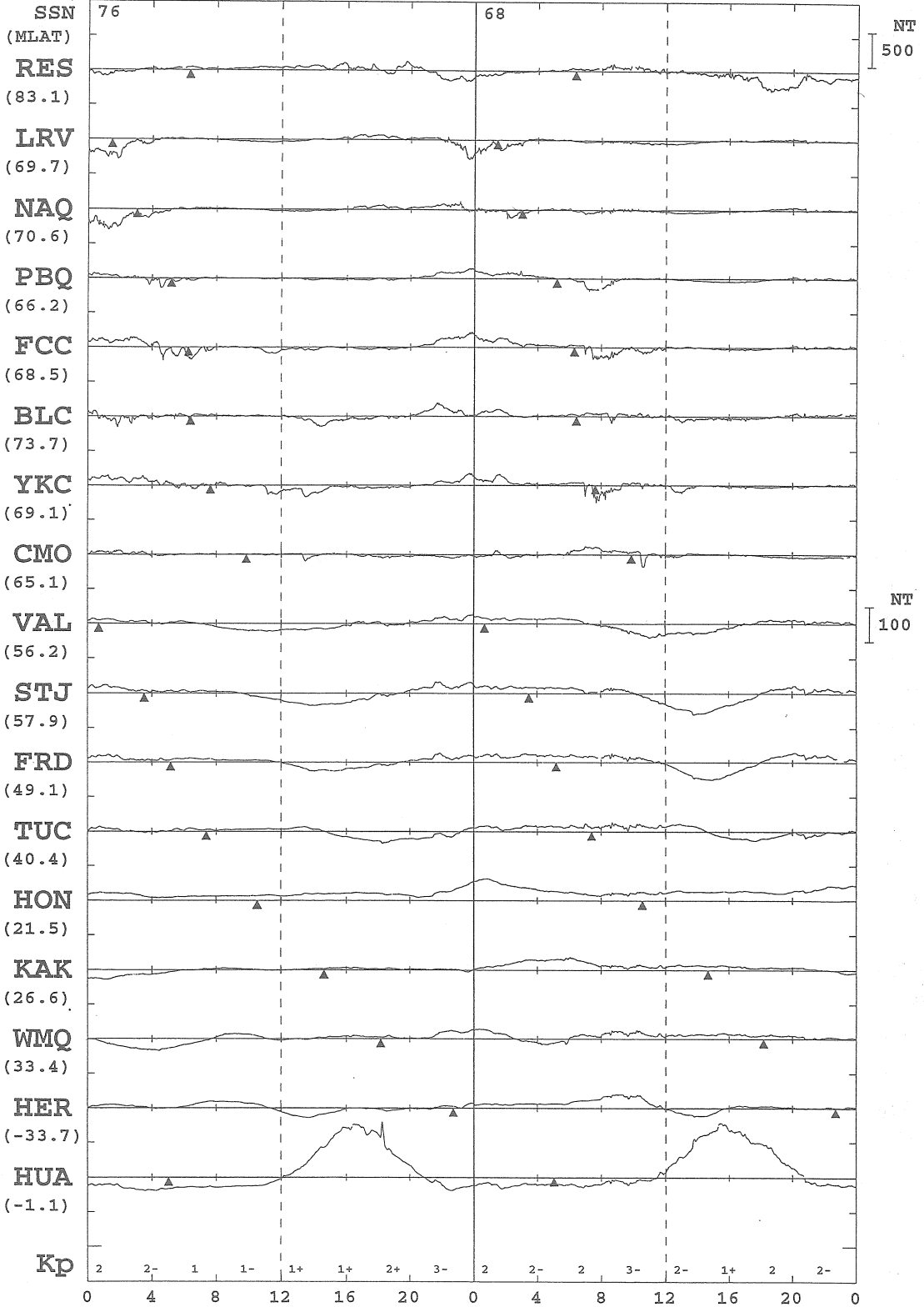


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



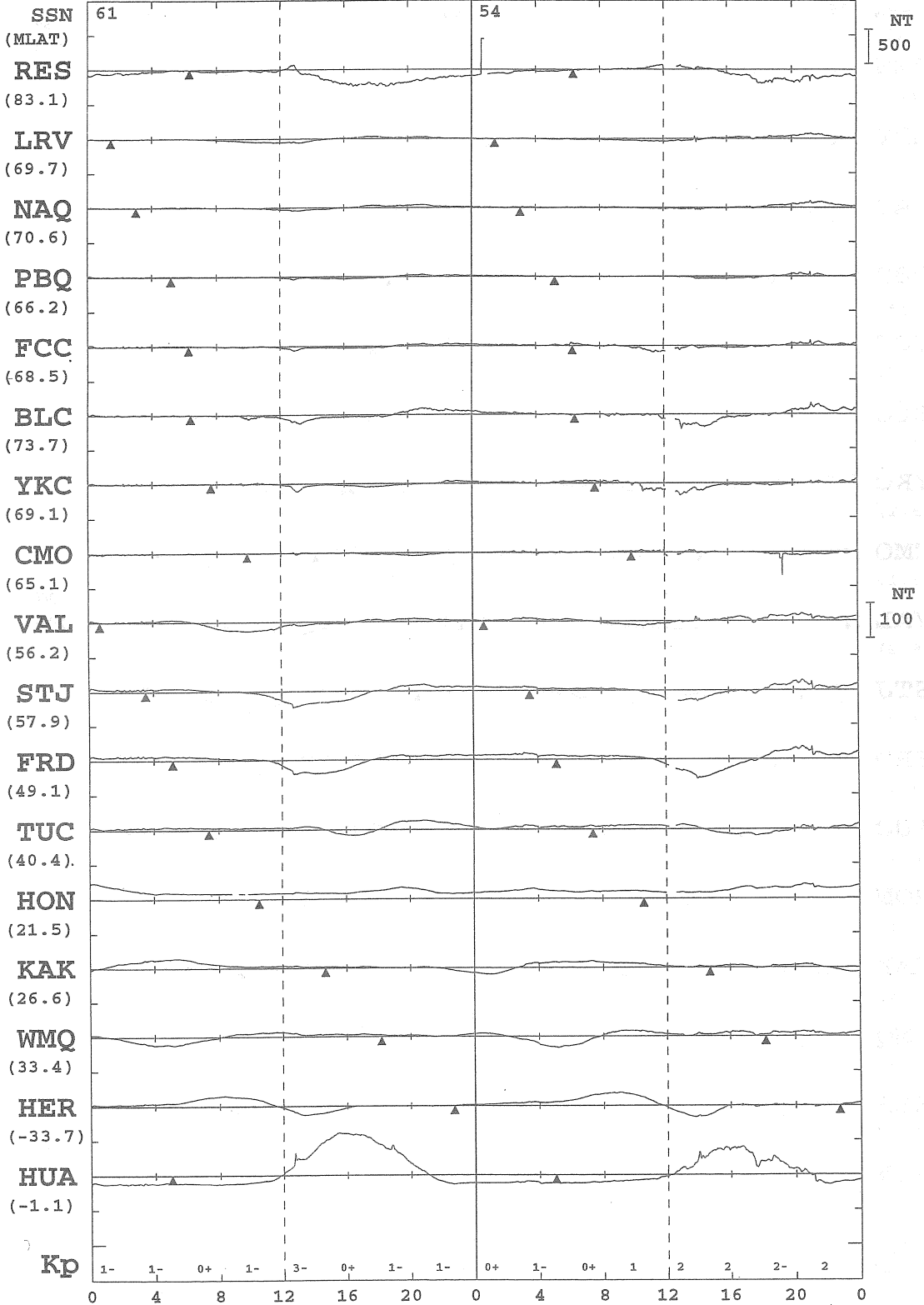
AUG 13
(DAY 226)

AUG 14
(DAY 227)

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

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2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

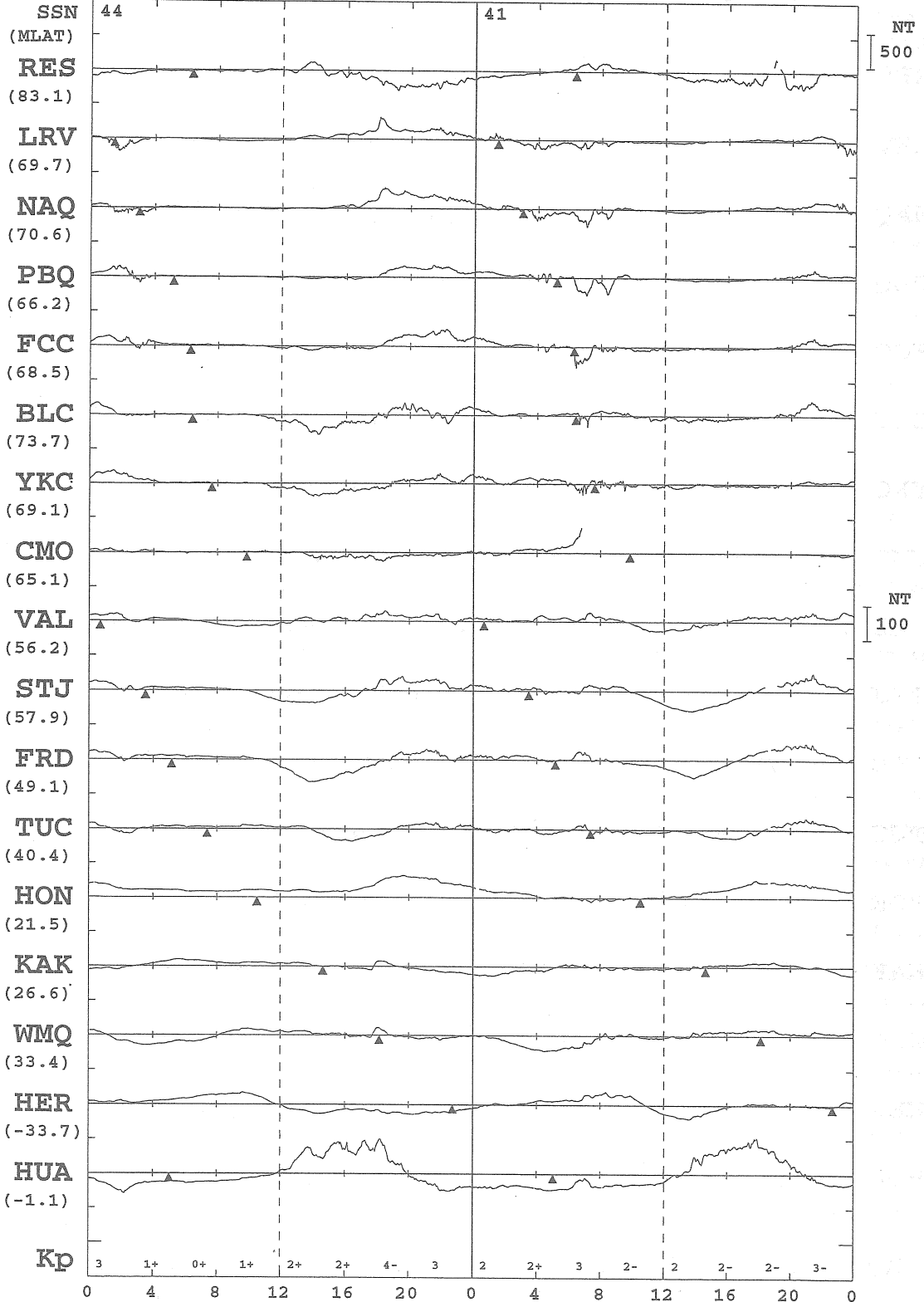


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



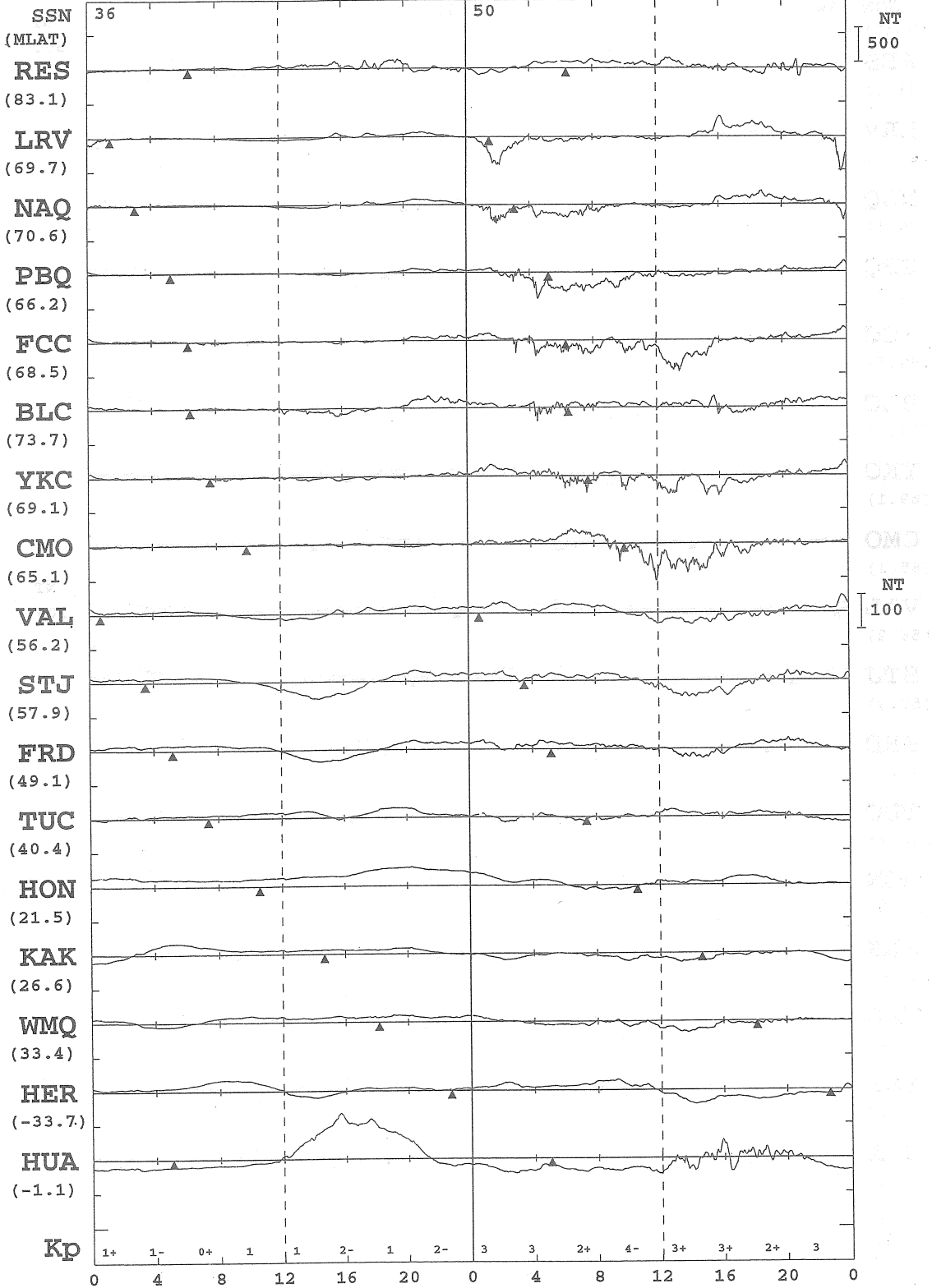
AUG 17
(DAY 230)

AUG 18
(DAY 231)

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

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2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

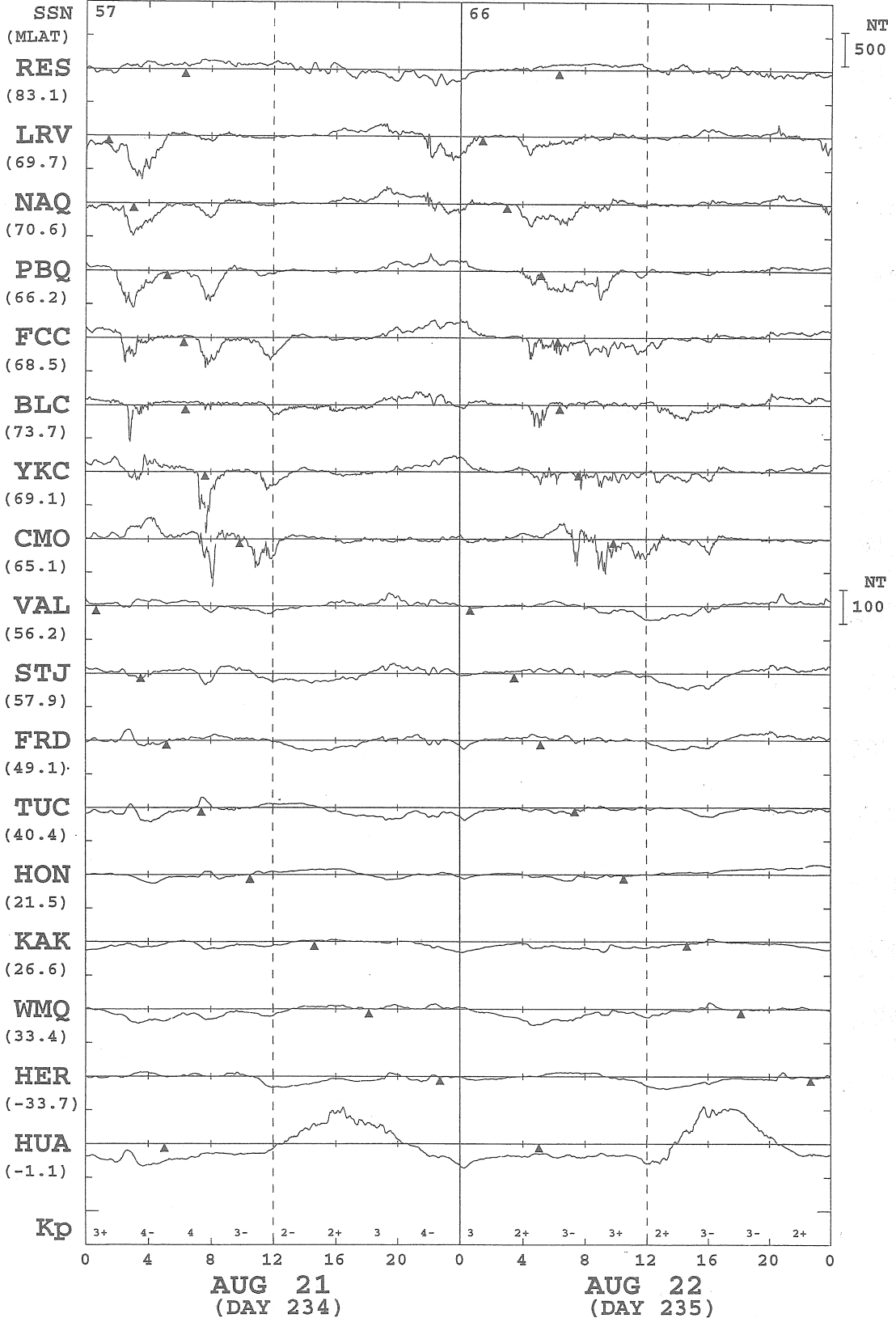


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2004 H OR X-COMPONENT

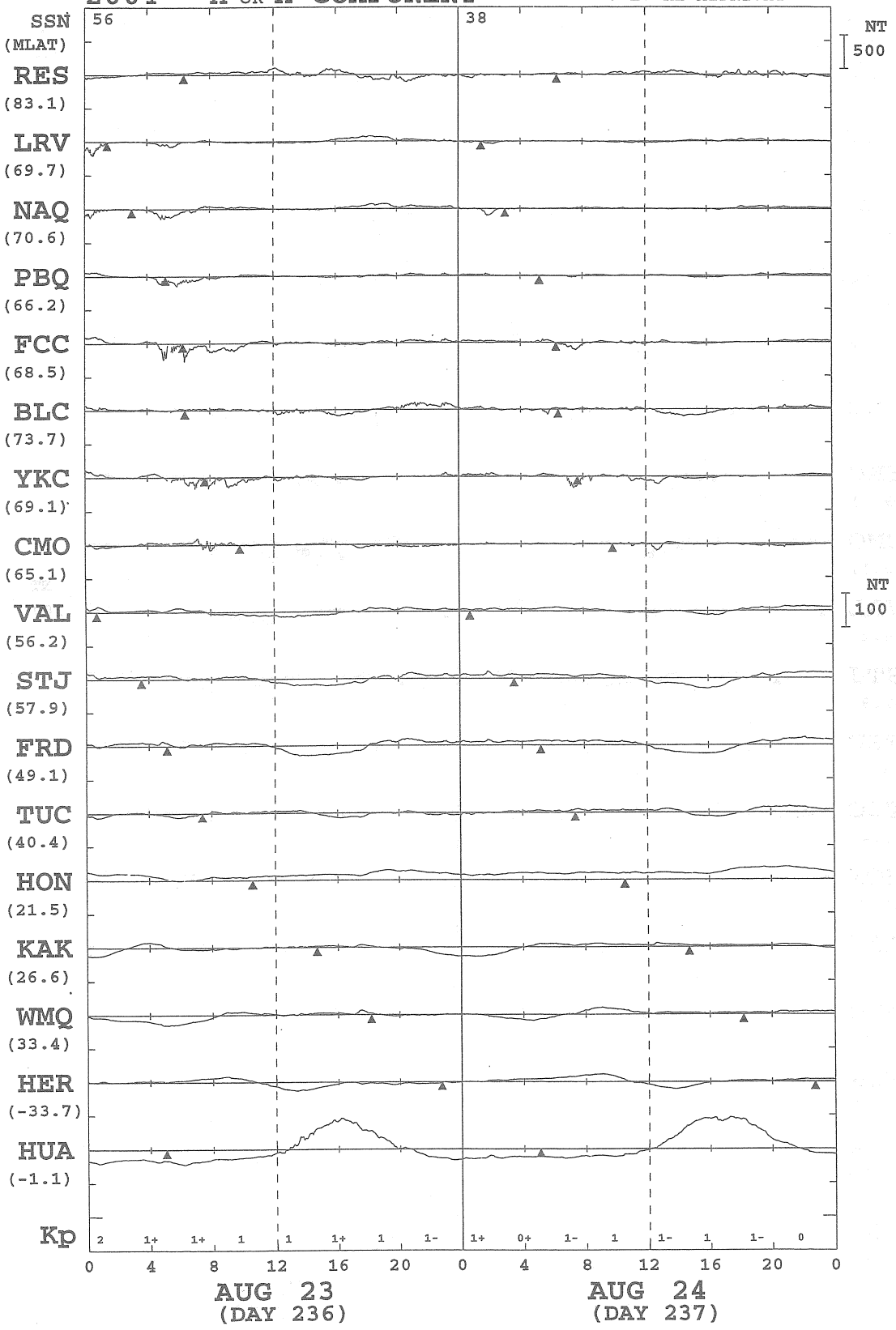
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

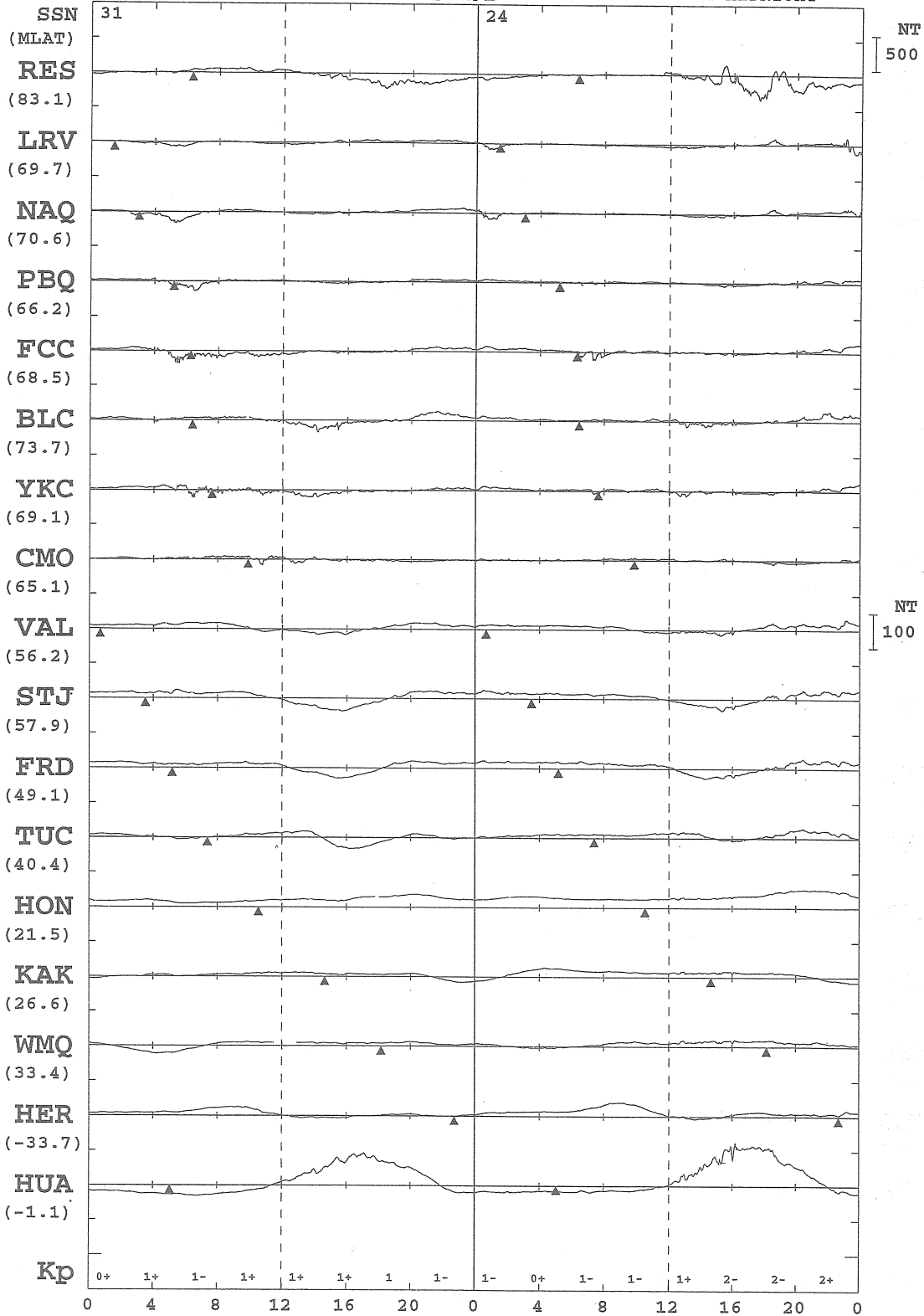


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



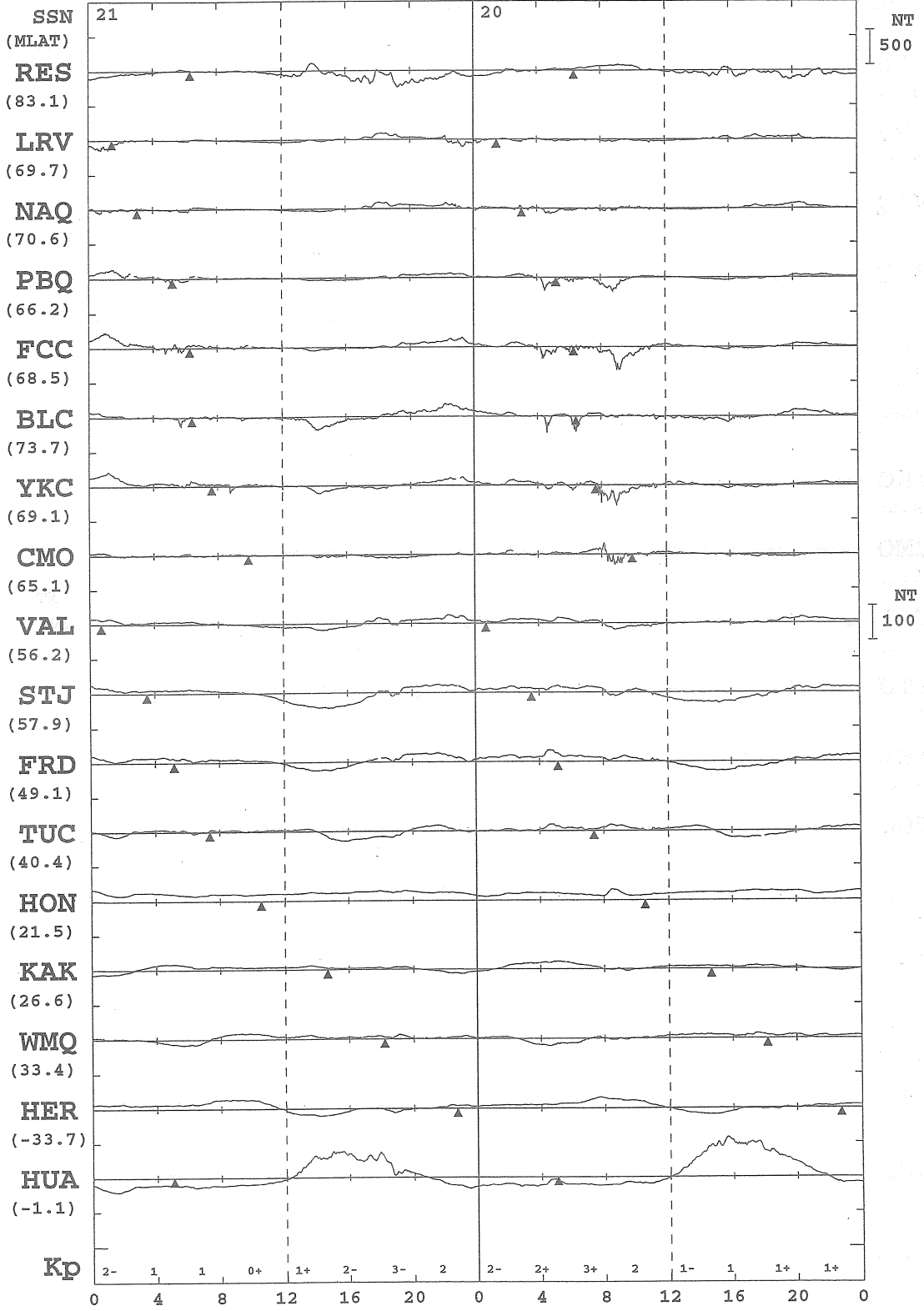
AUG 25
(DAY 238)

AUG 26
(DAY 239)

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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



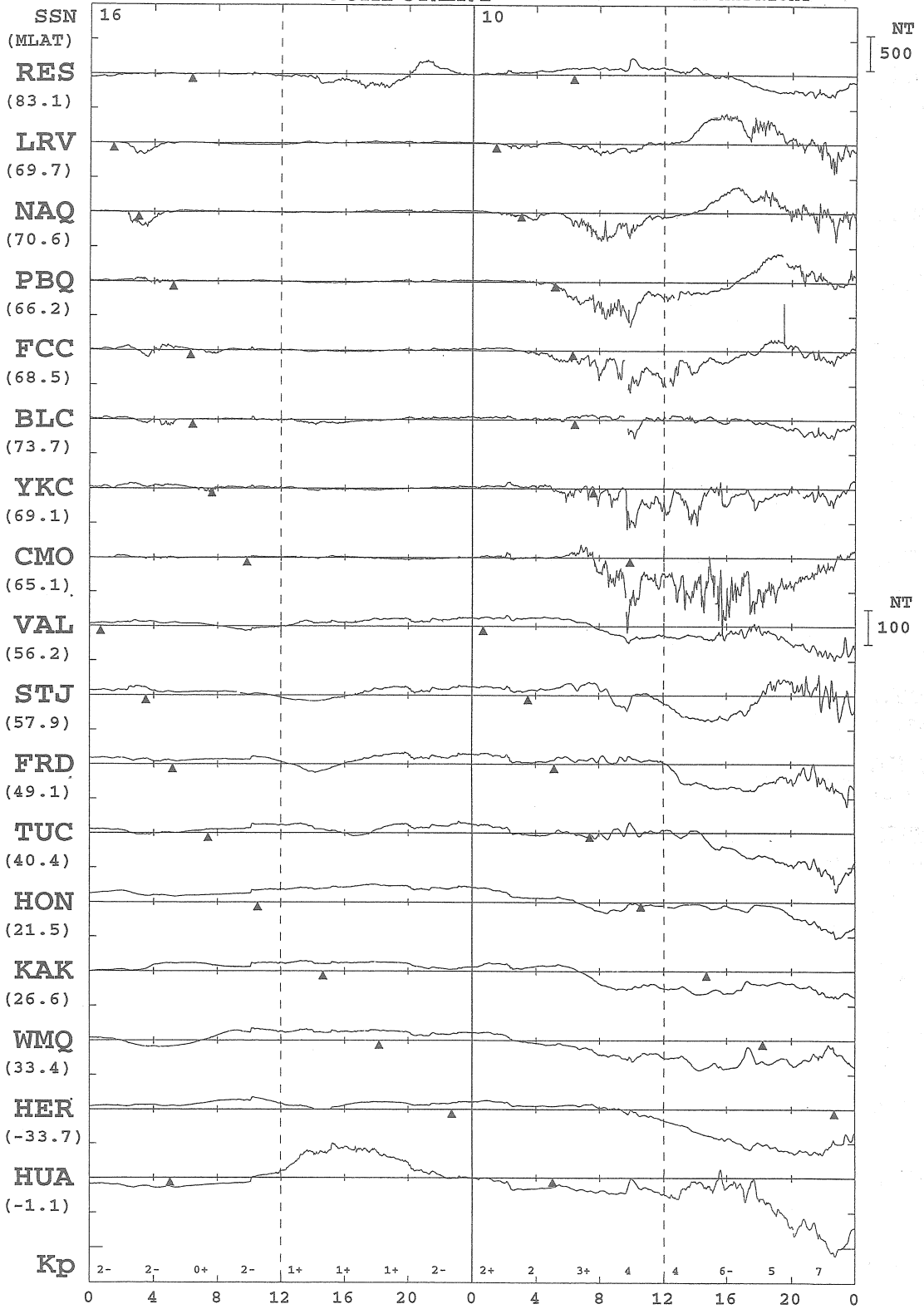
AUG 27
(DAY 240)

AUG 28
(DAY 241)

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

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2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

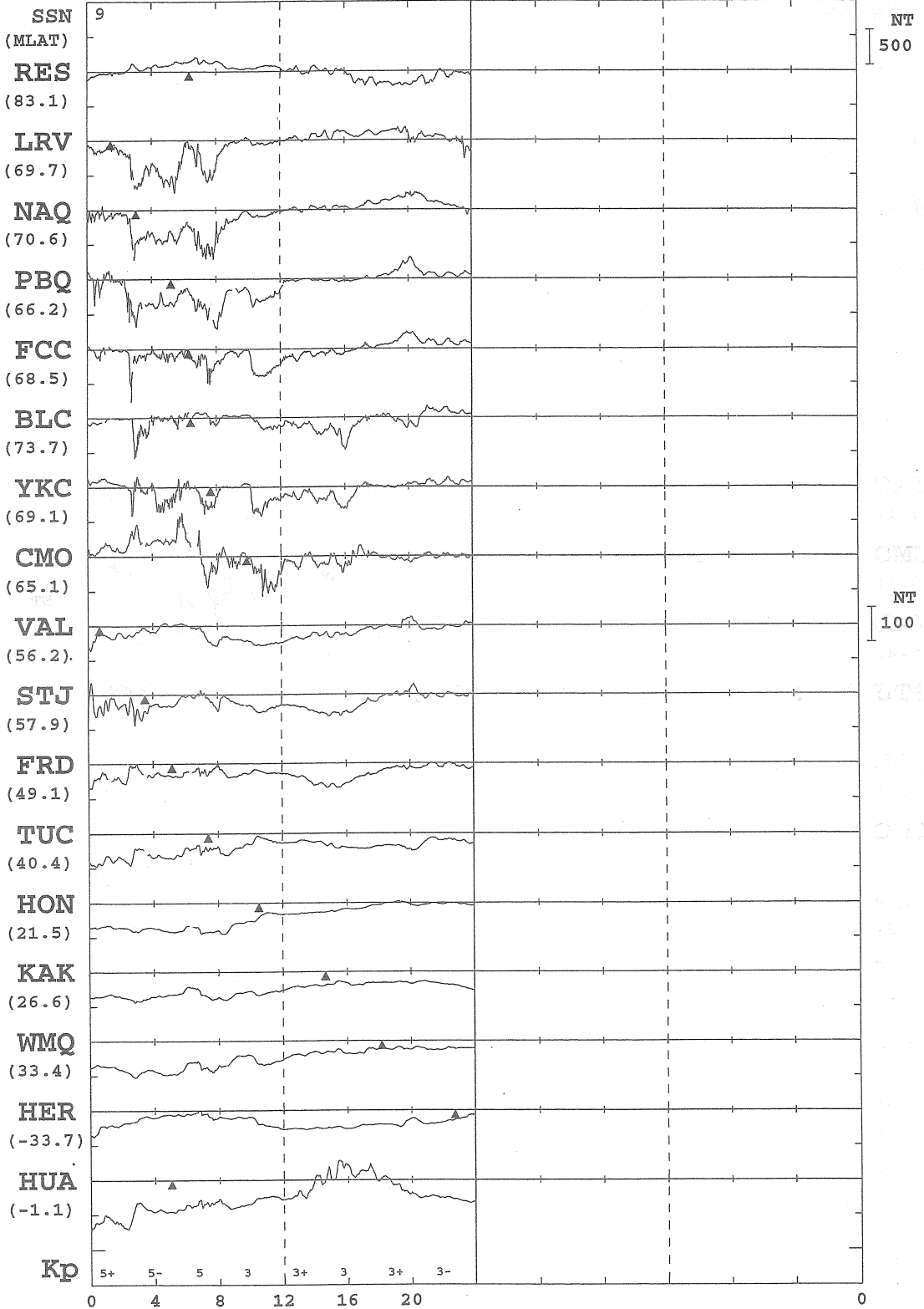


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



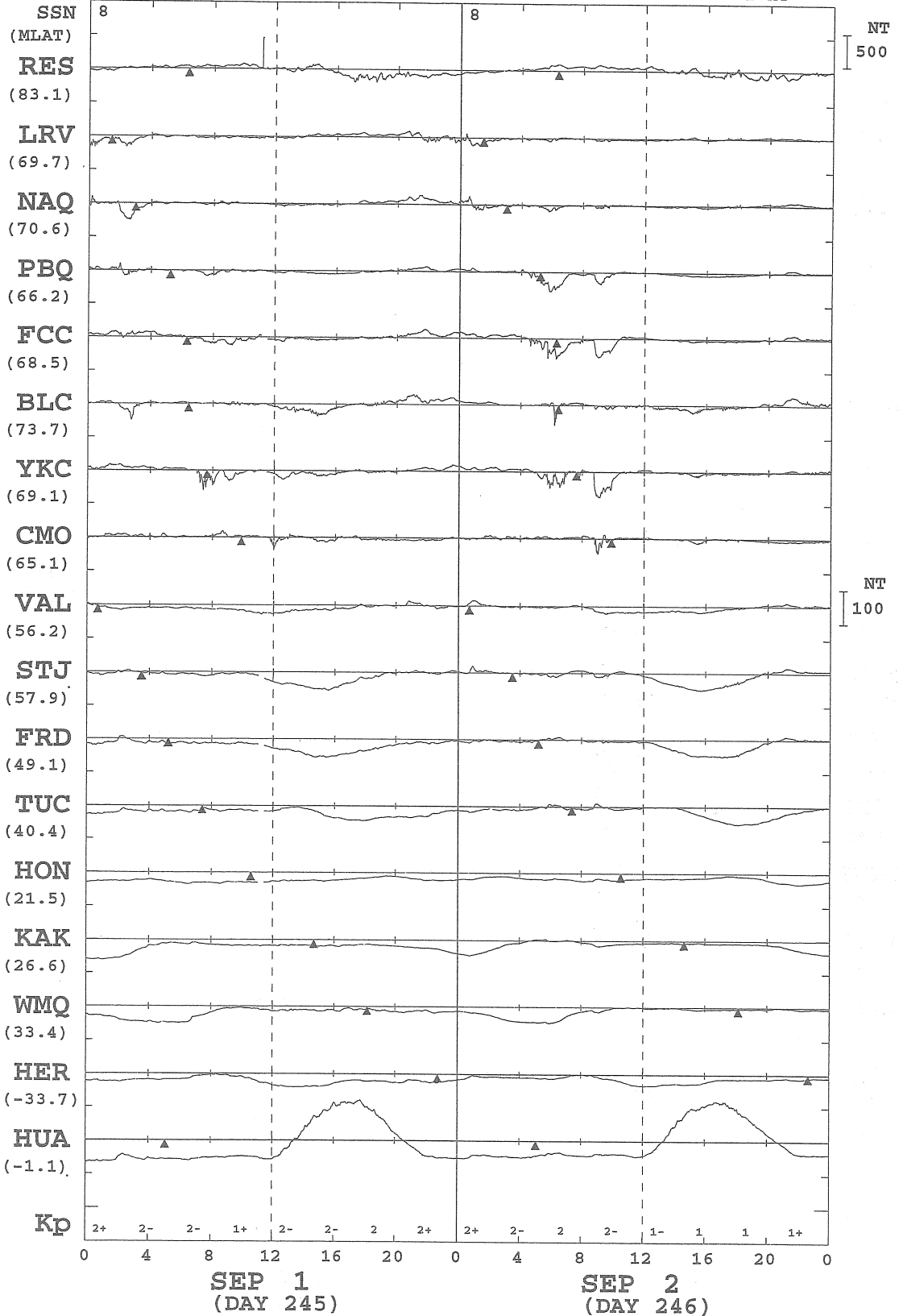
AUG 31
(DAY 244)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

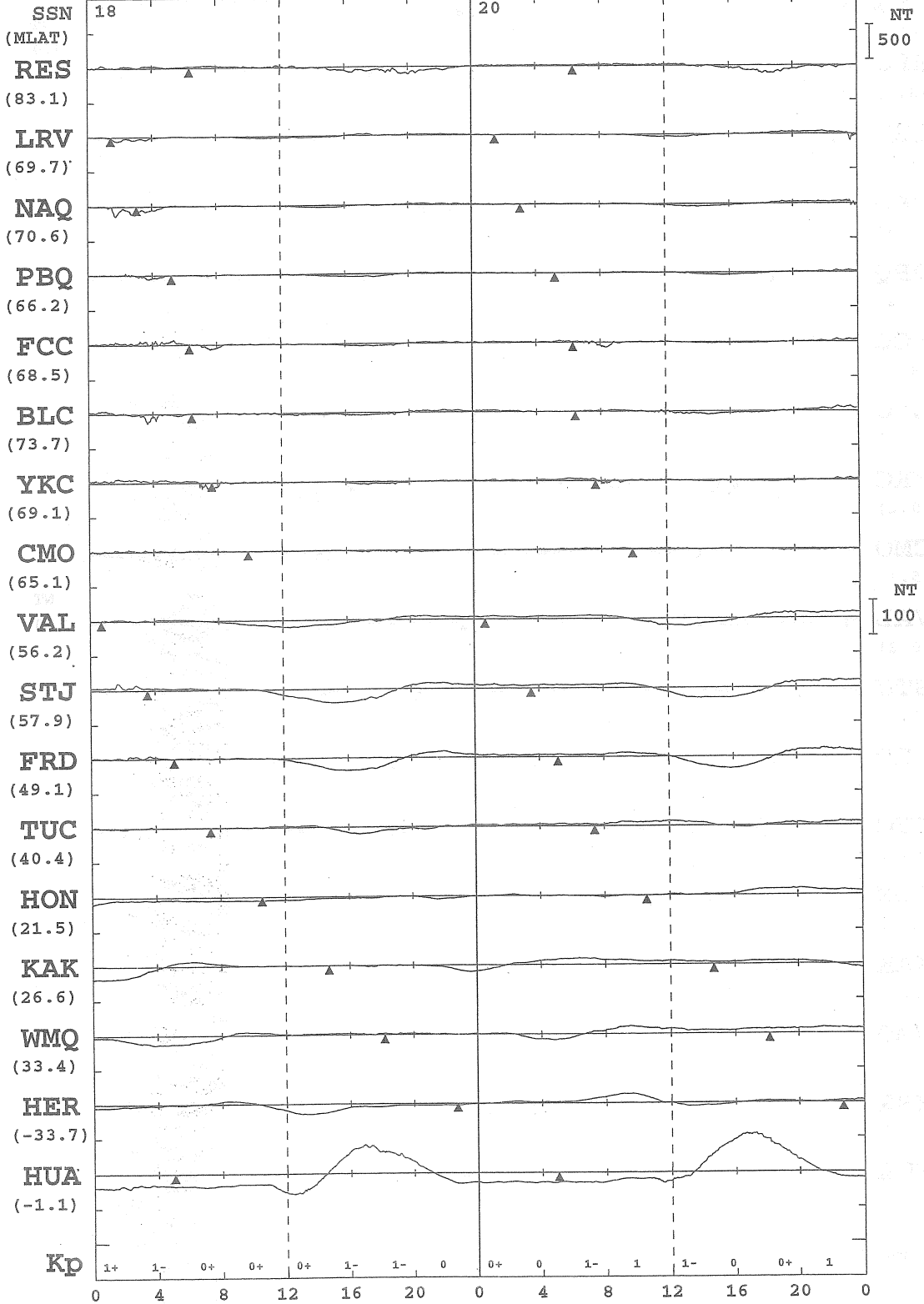
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

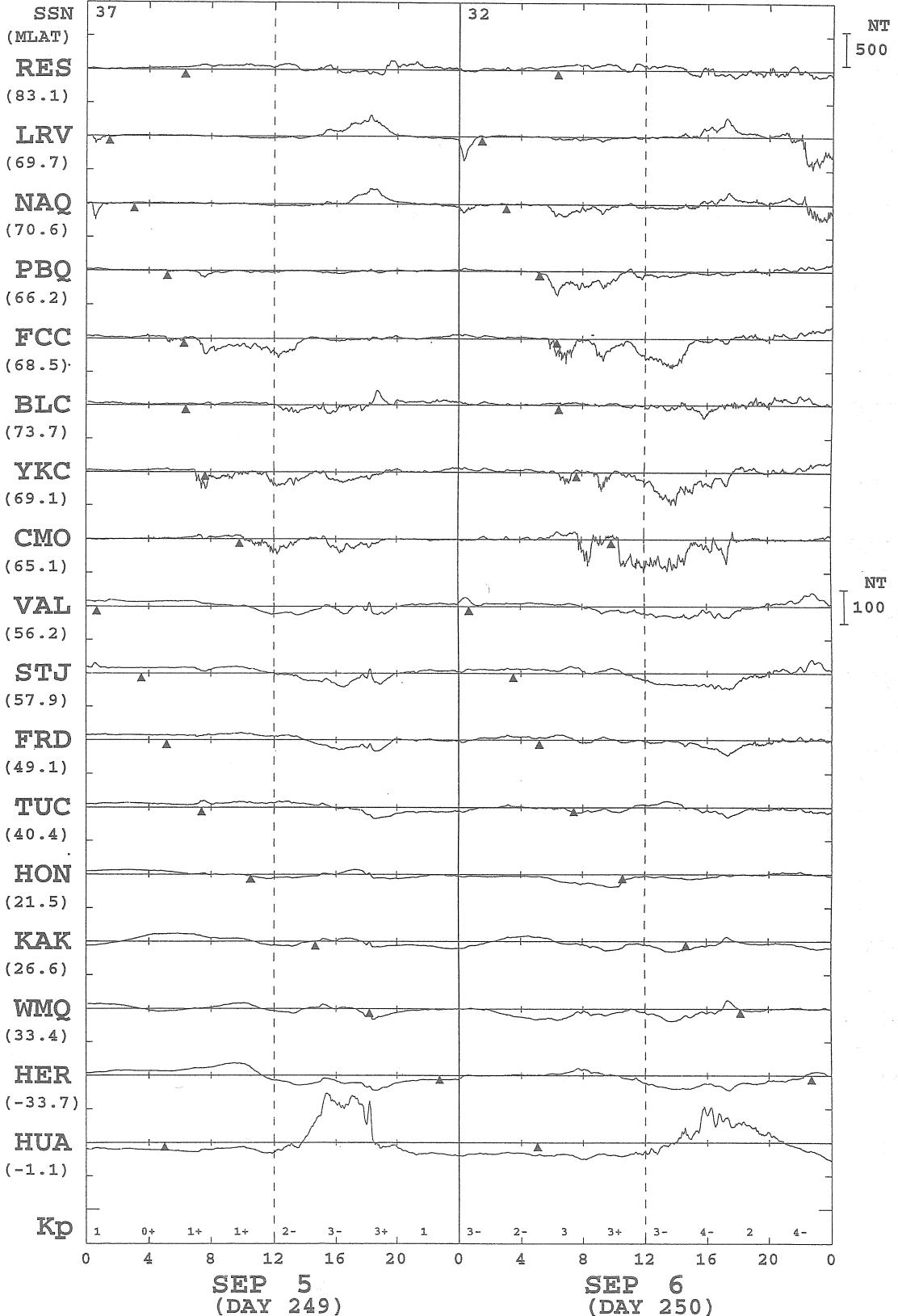


SEP 3 (DAY 247) SEP 4 (DAY 248)

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

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

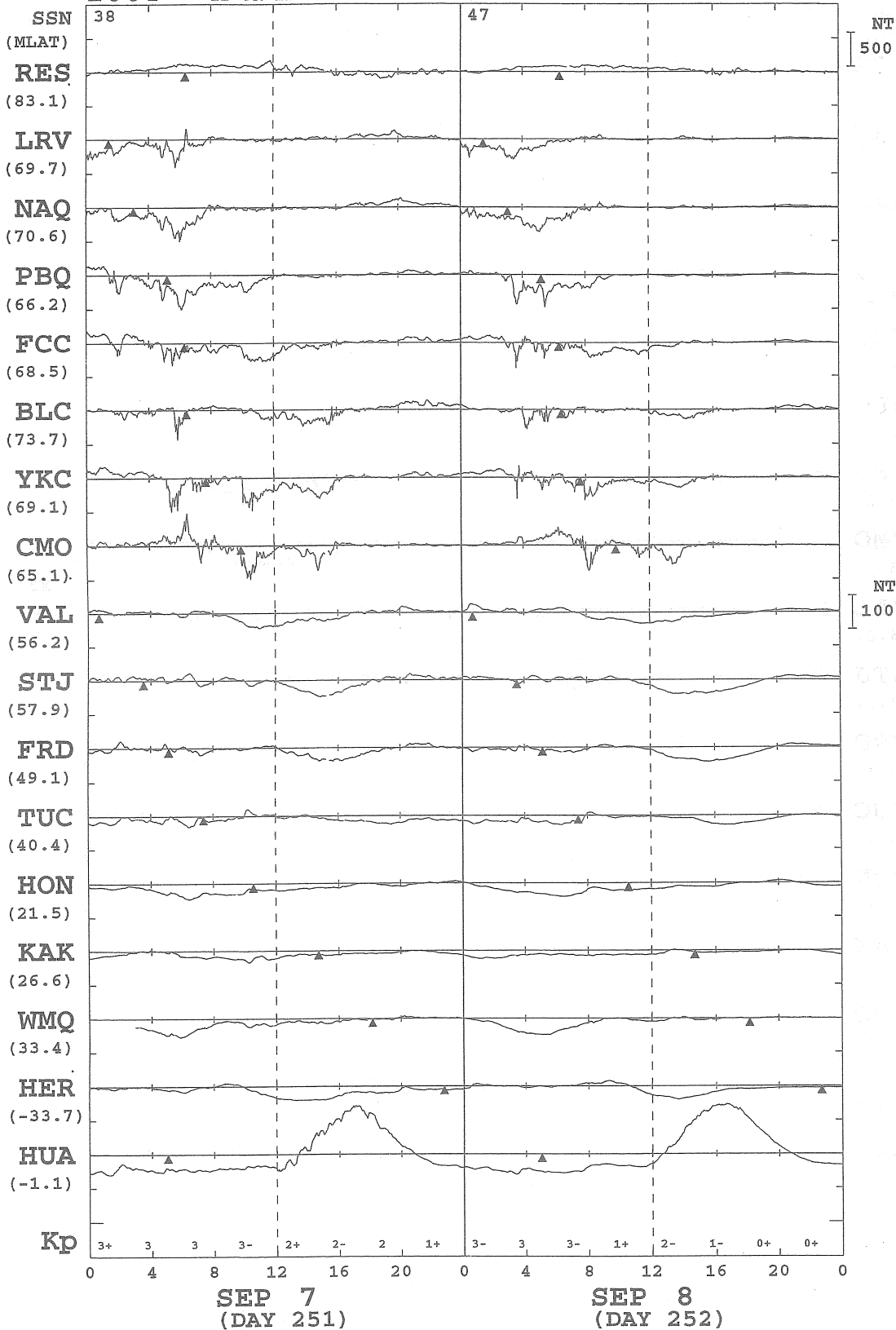


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KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

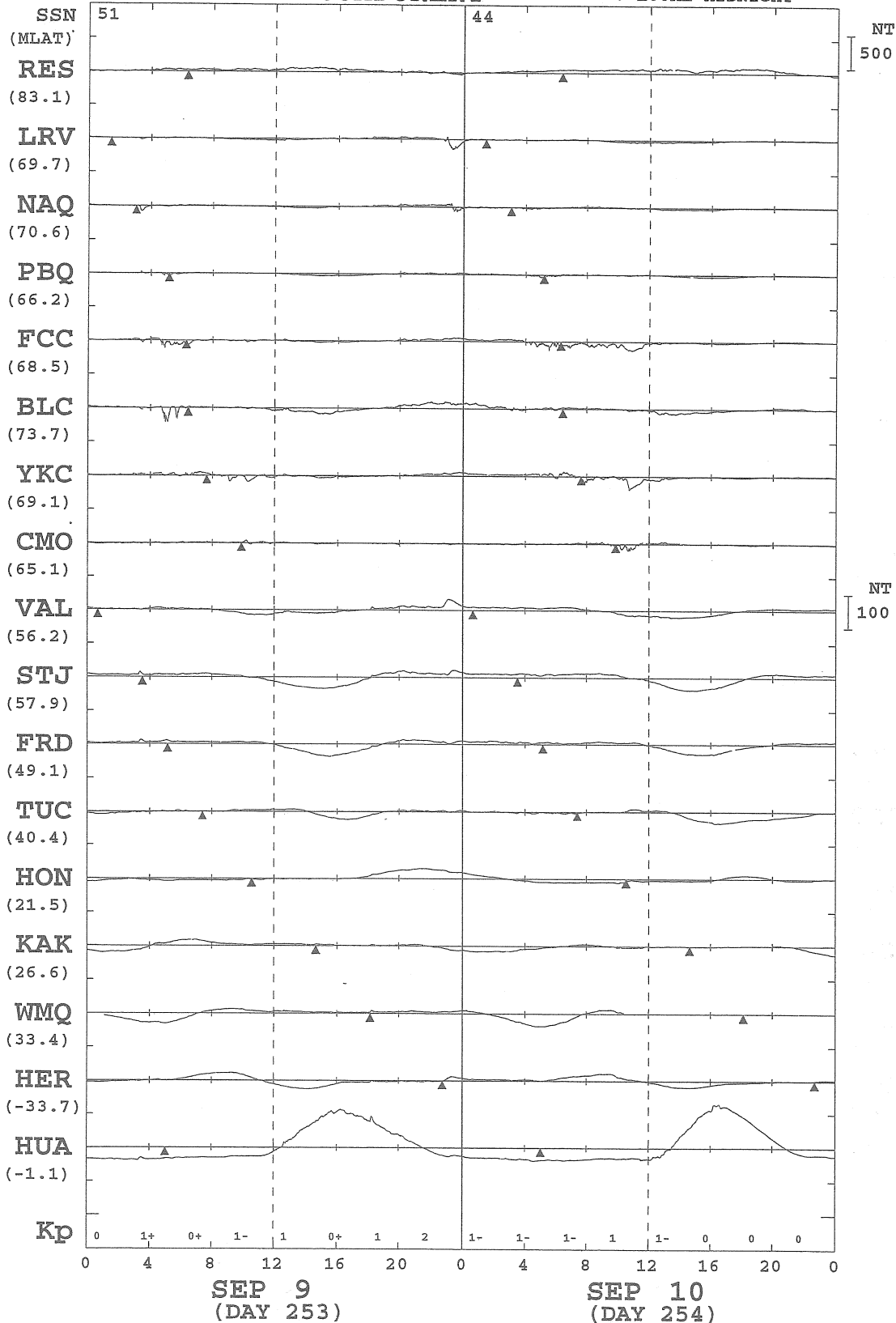


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

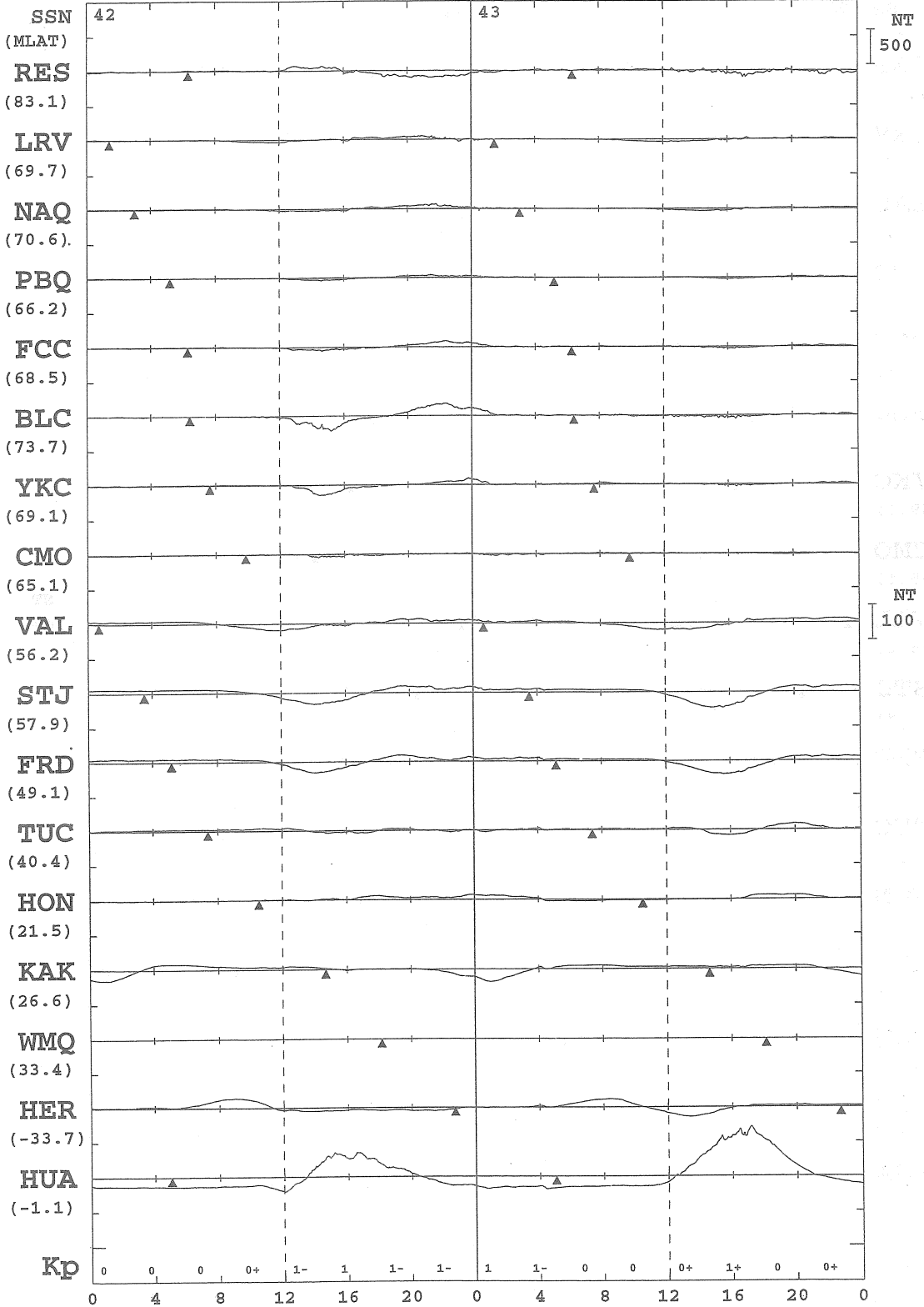
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



SEP 11
(DAY 255)

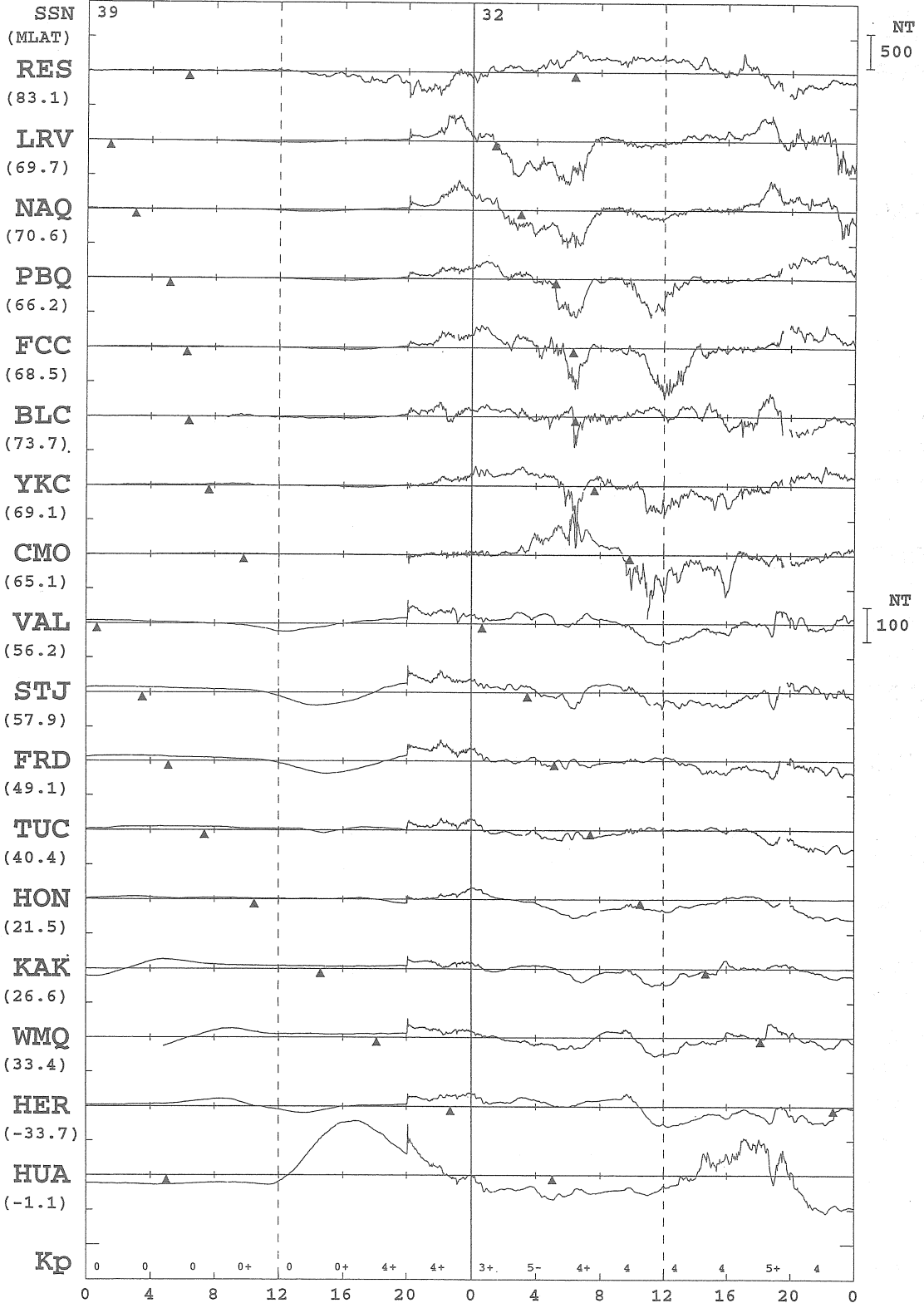
SEP 12
(DAY 256)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

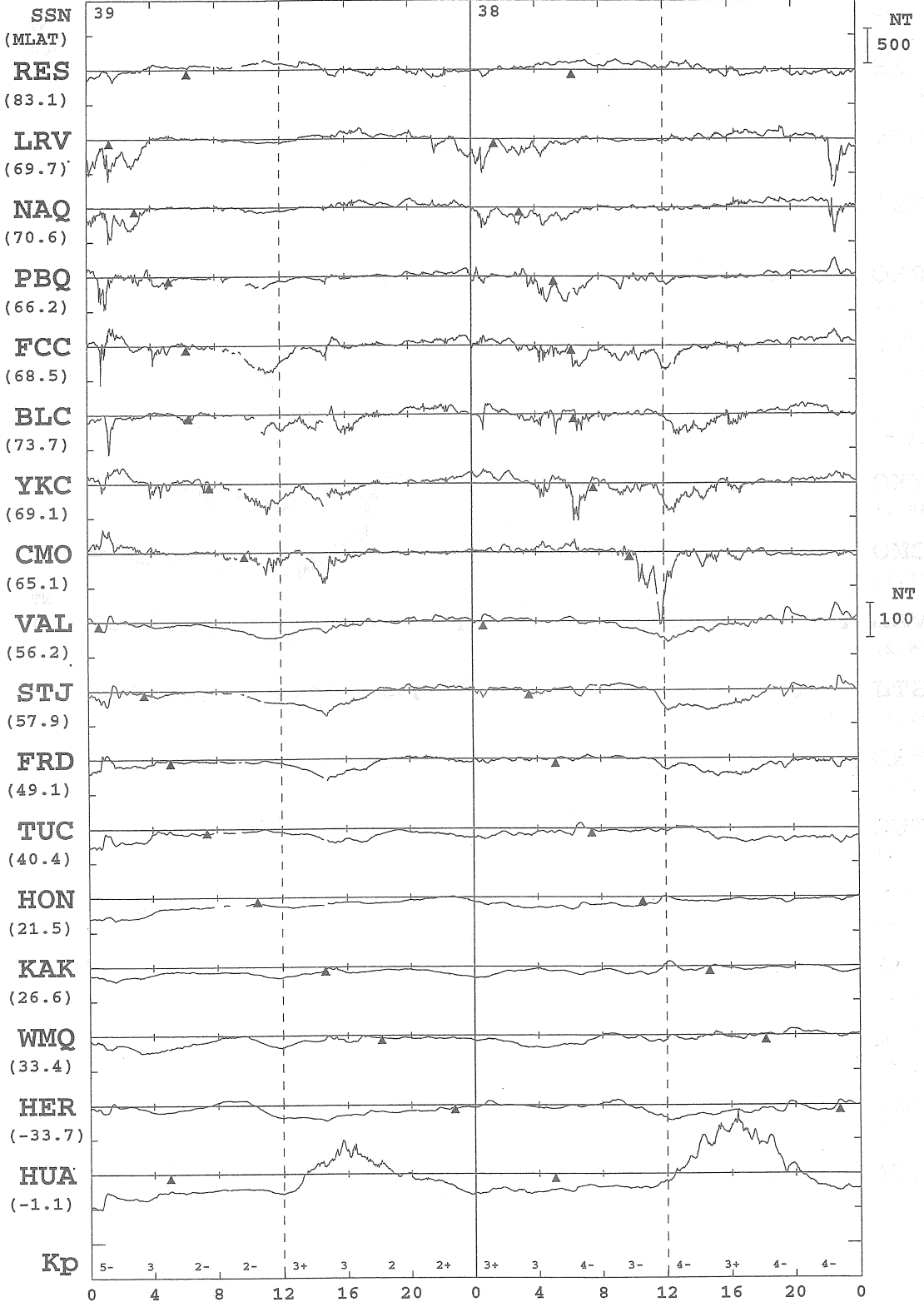


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

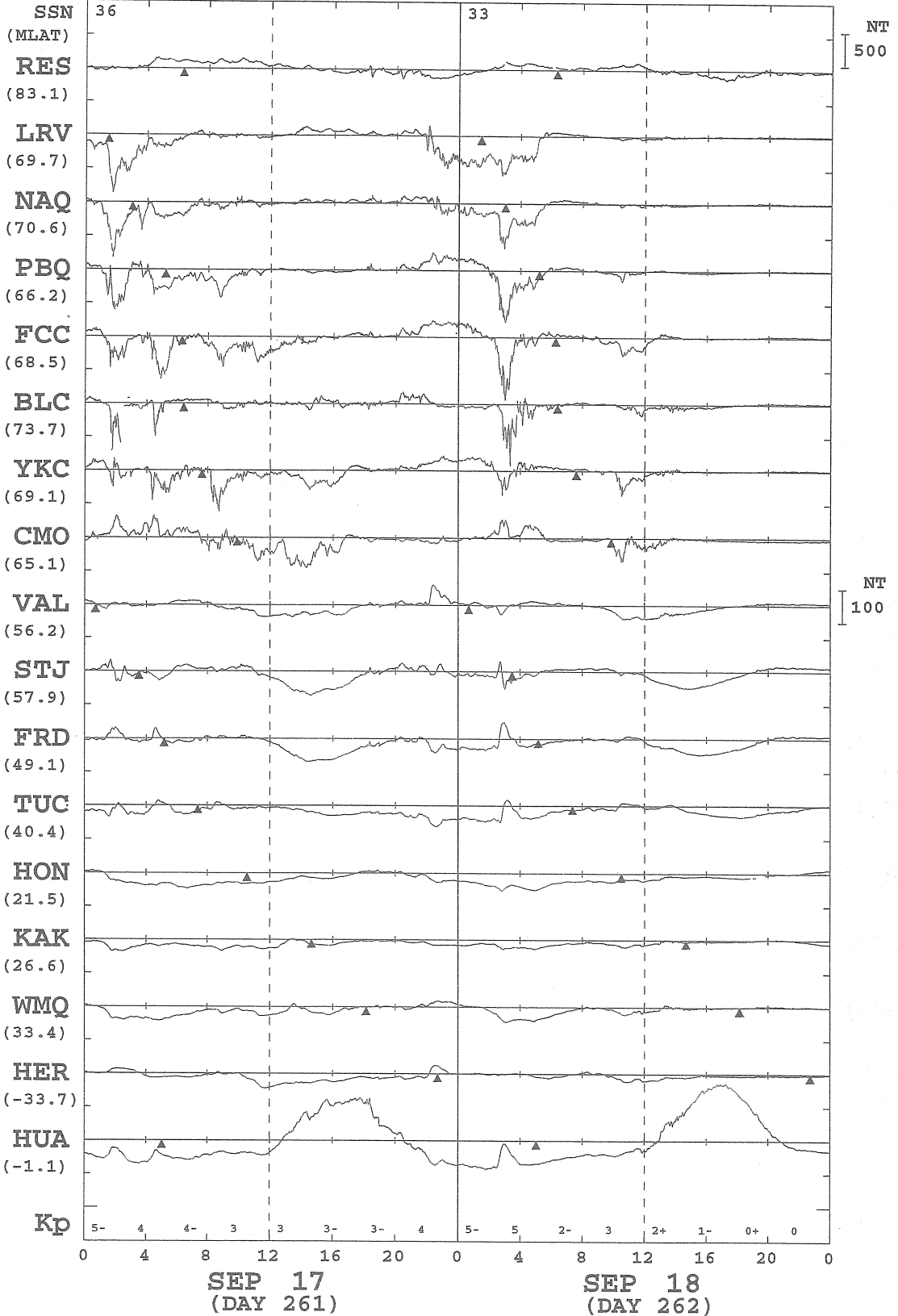


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

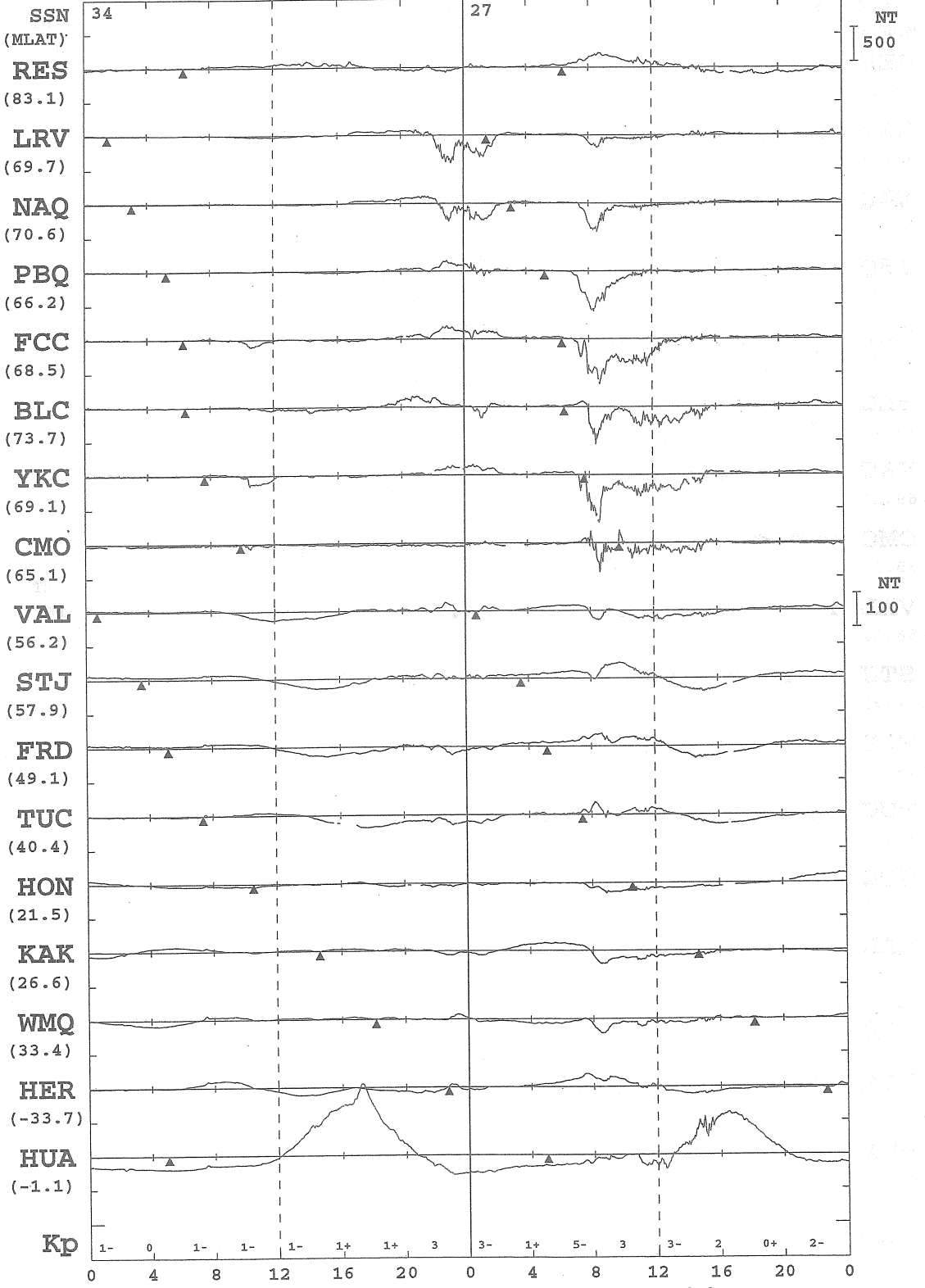
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

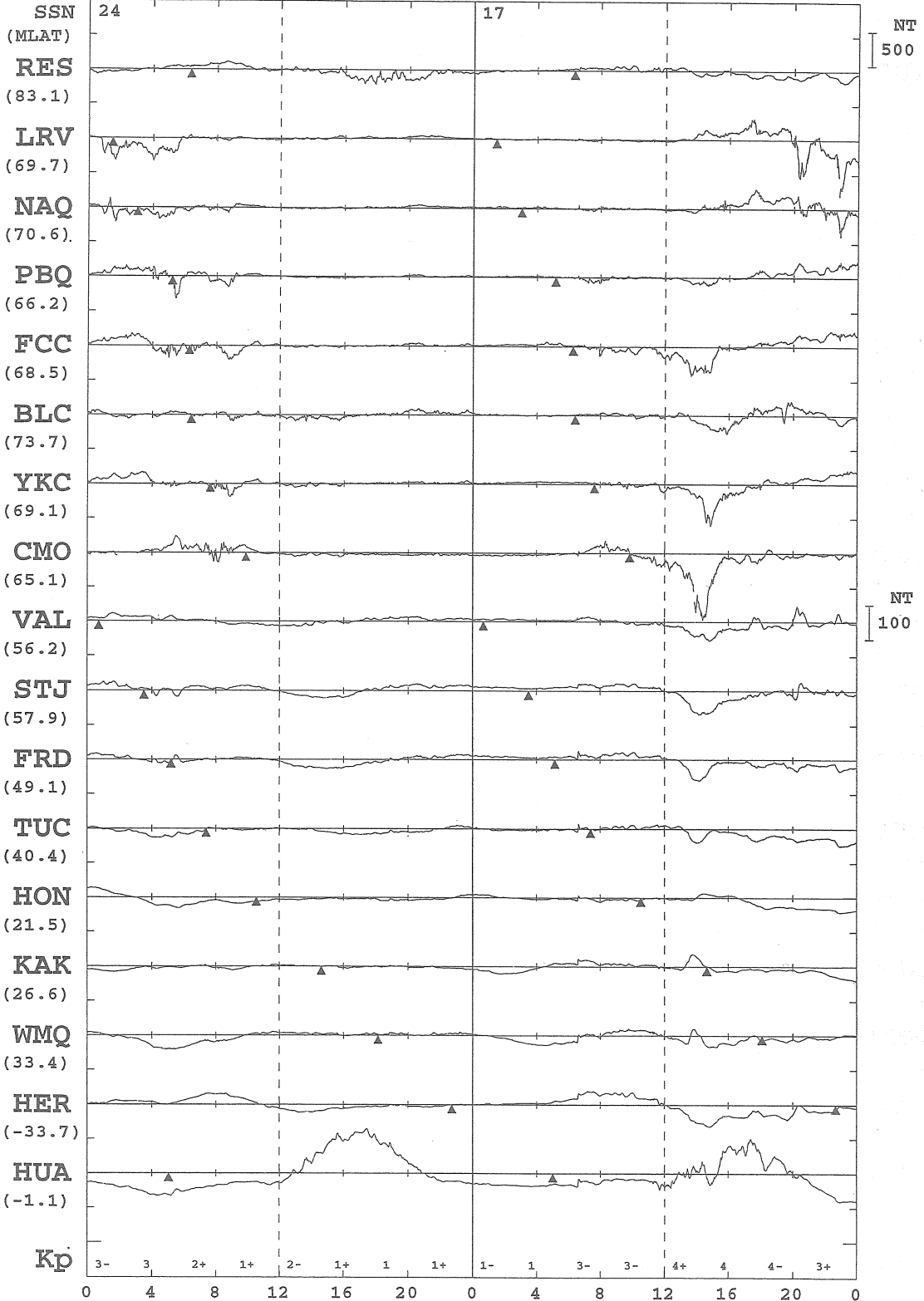


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



SEP 21 (DAY 265)

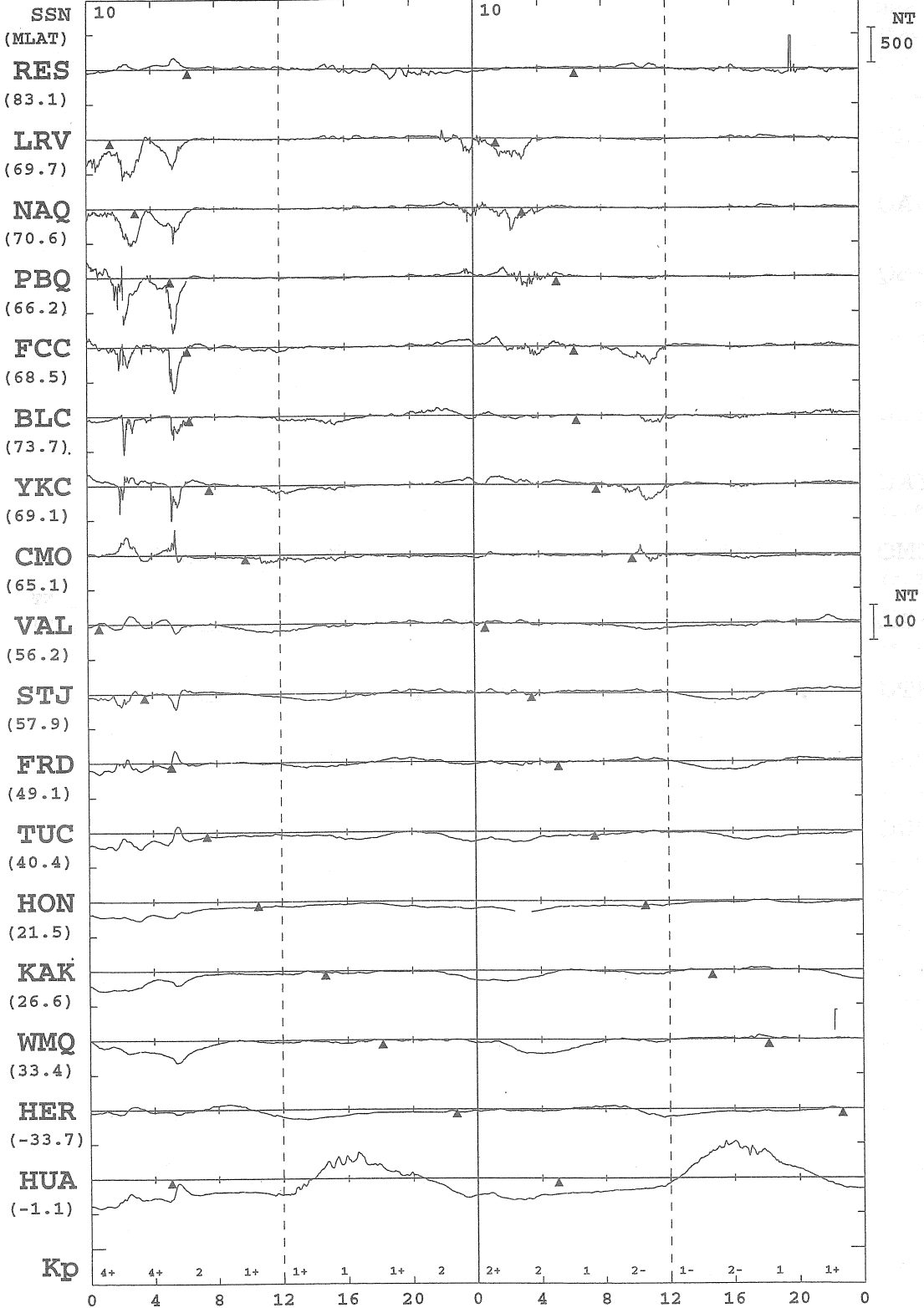
SEP 22 (DAY 266)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



SEP 23
(DAY 267)

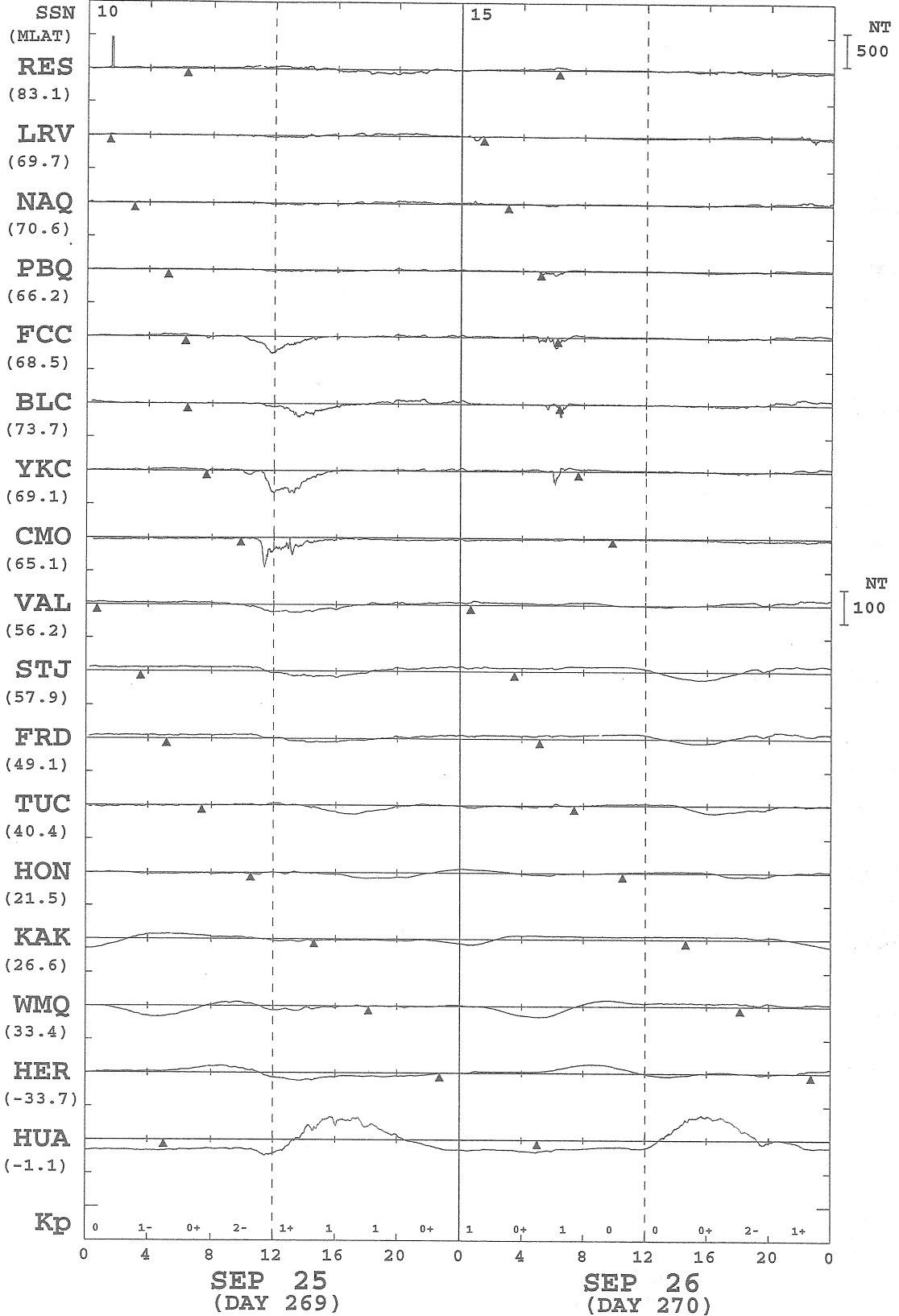
SEP 24
(DAY 268)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

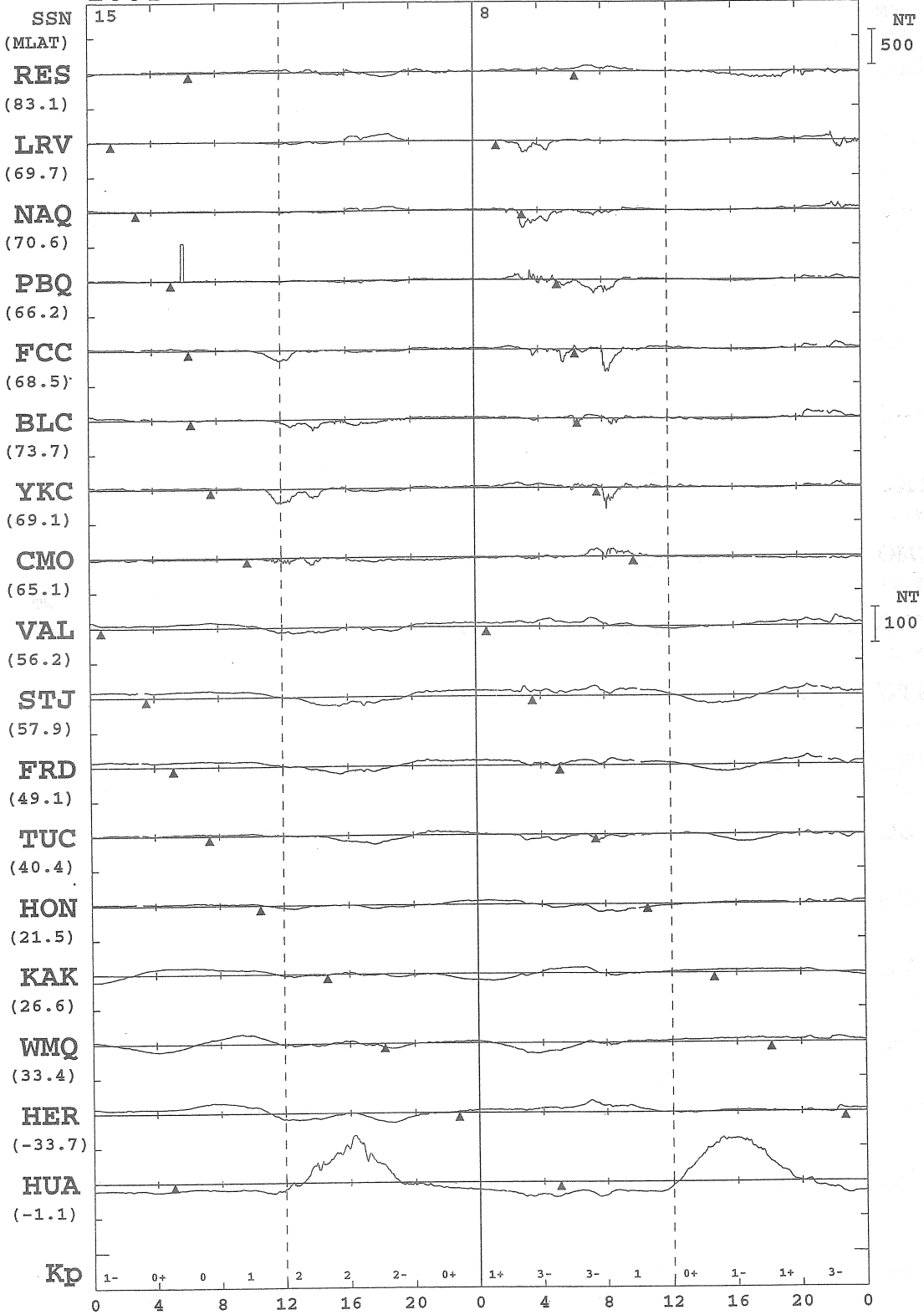


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



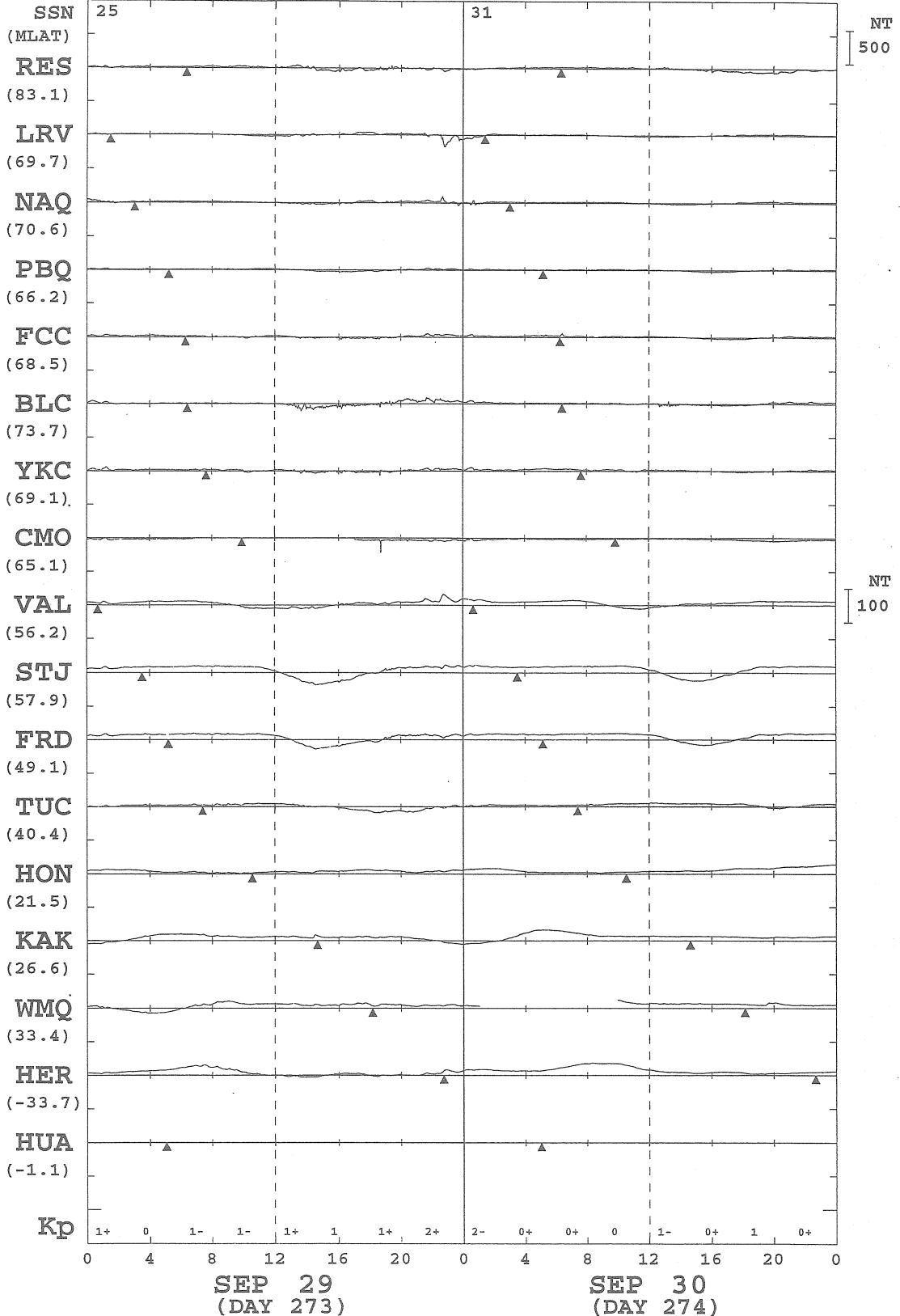
SEP 27
(DAY 271)

SEP 28
(DAY 272)

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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

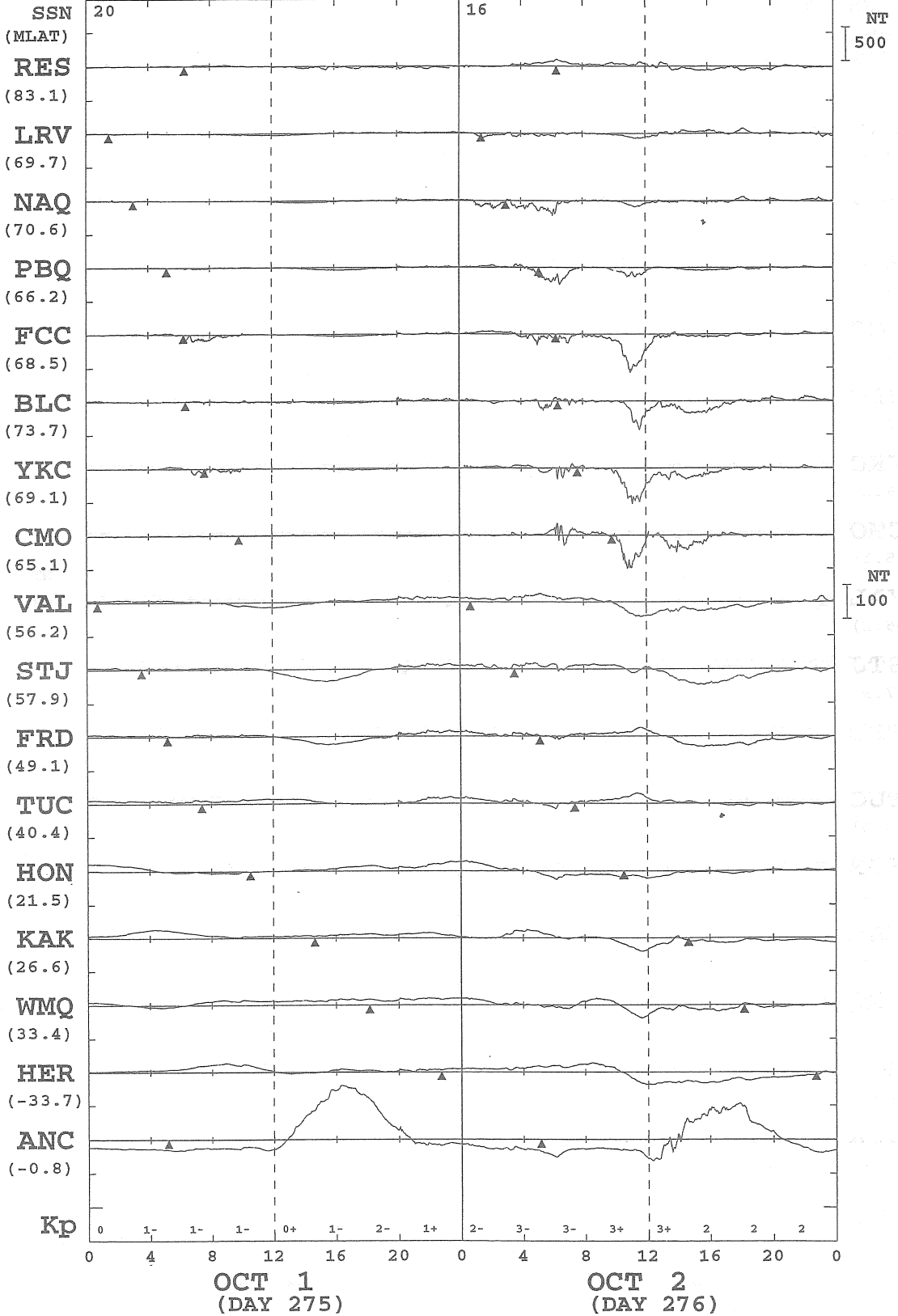


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

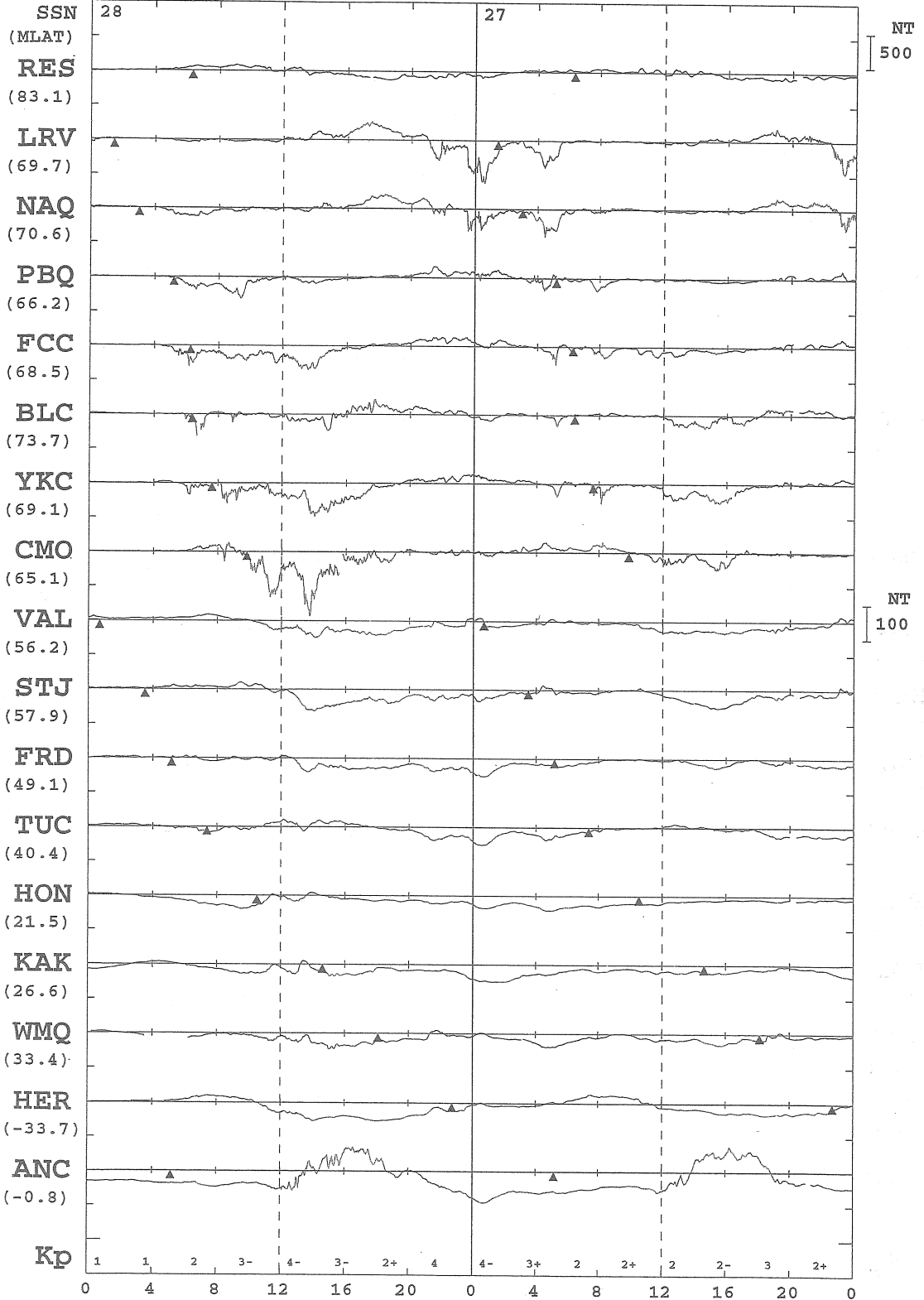


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

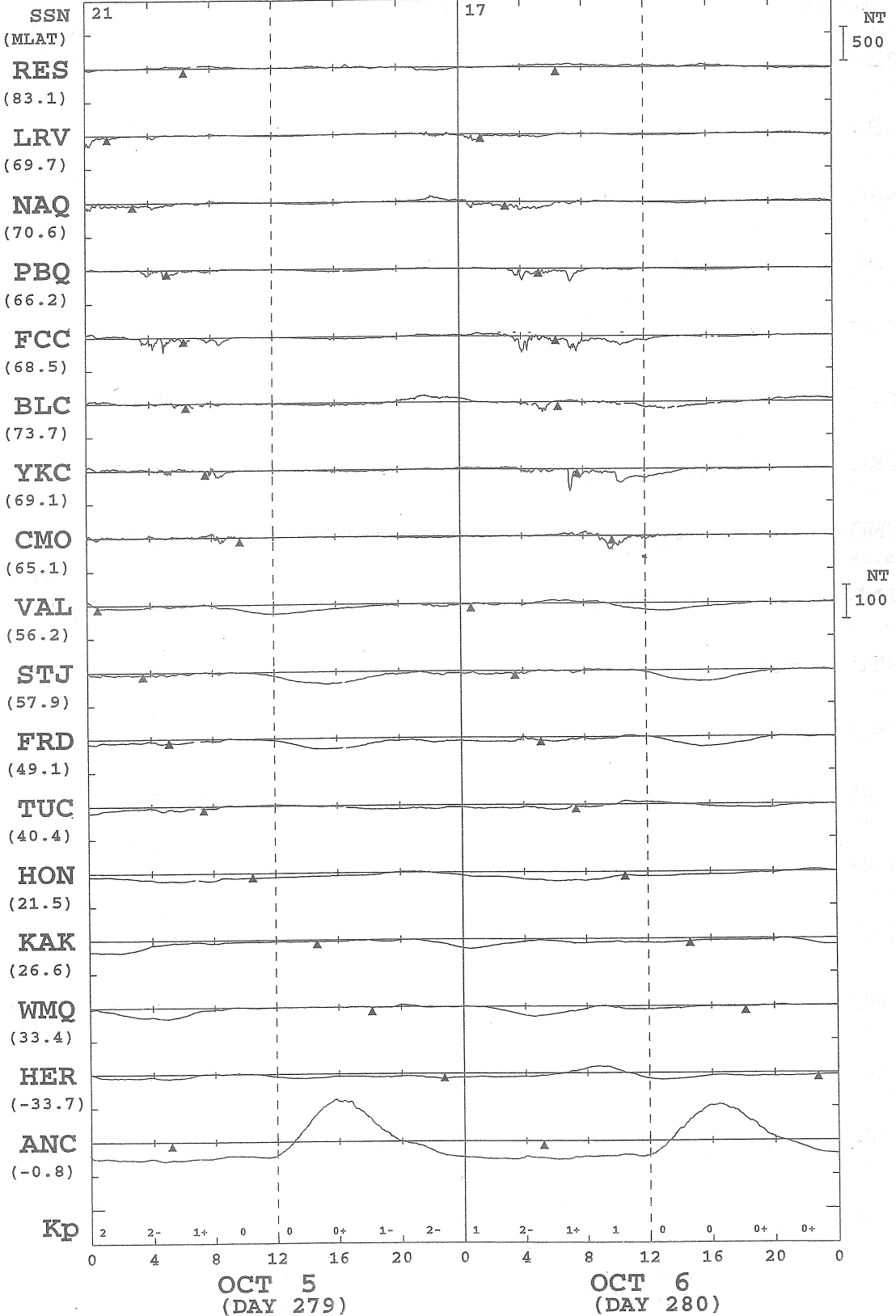


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

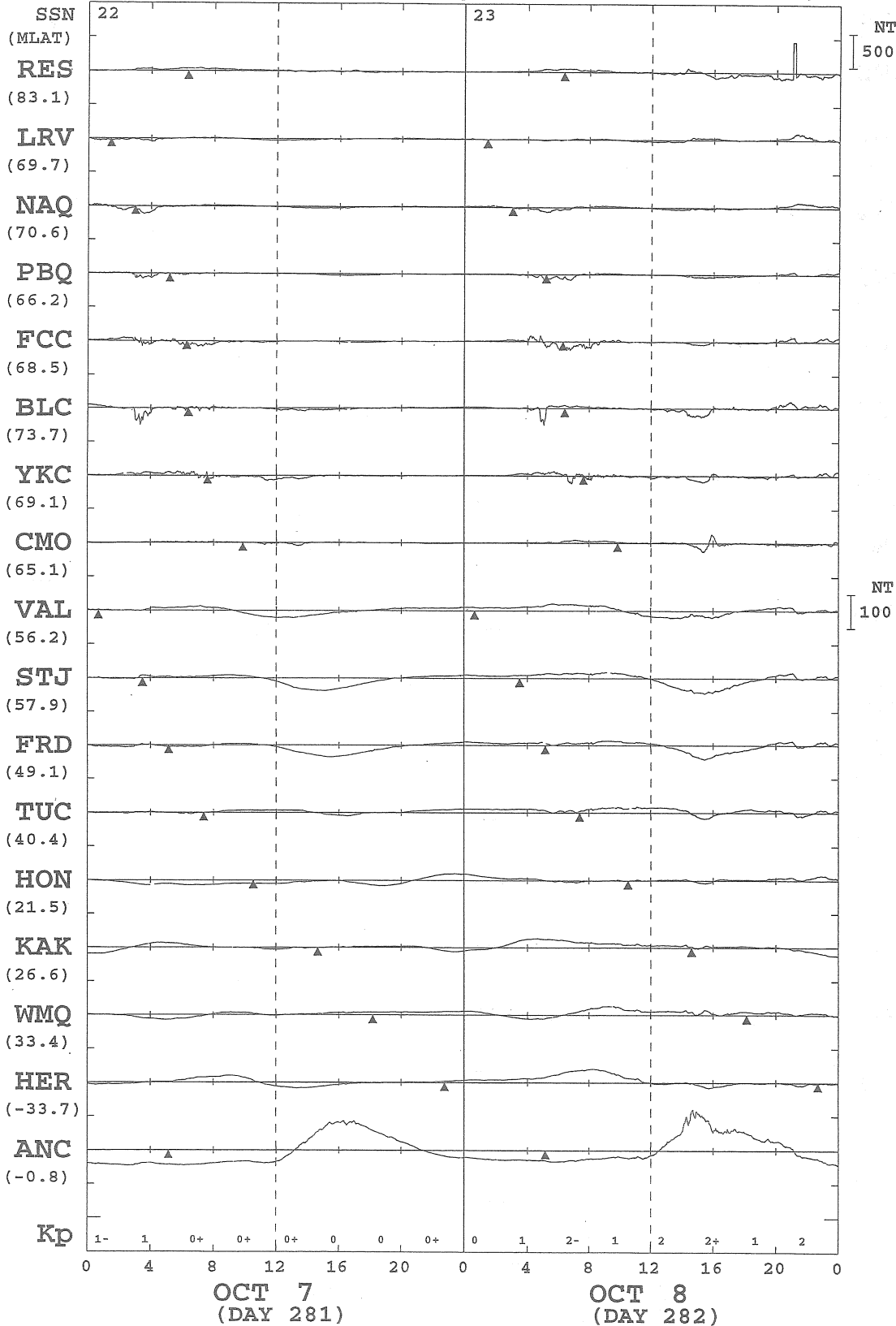


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

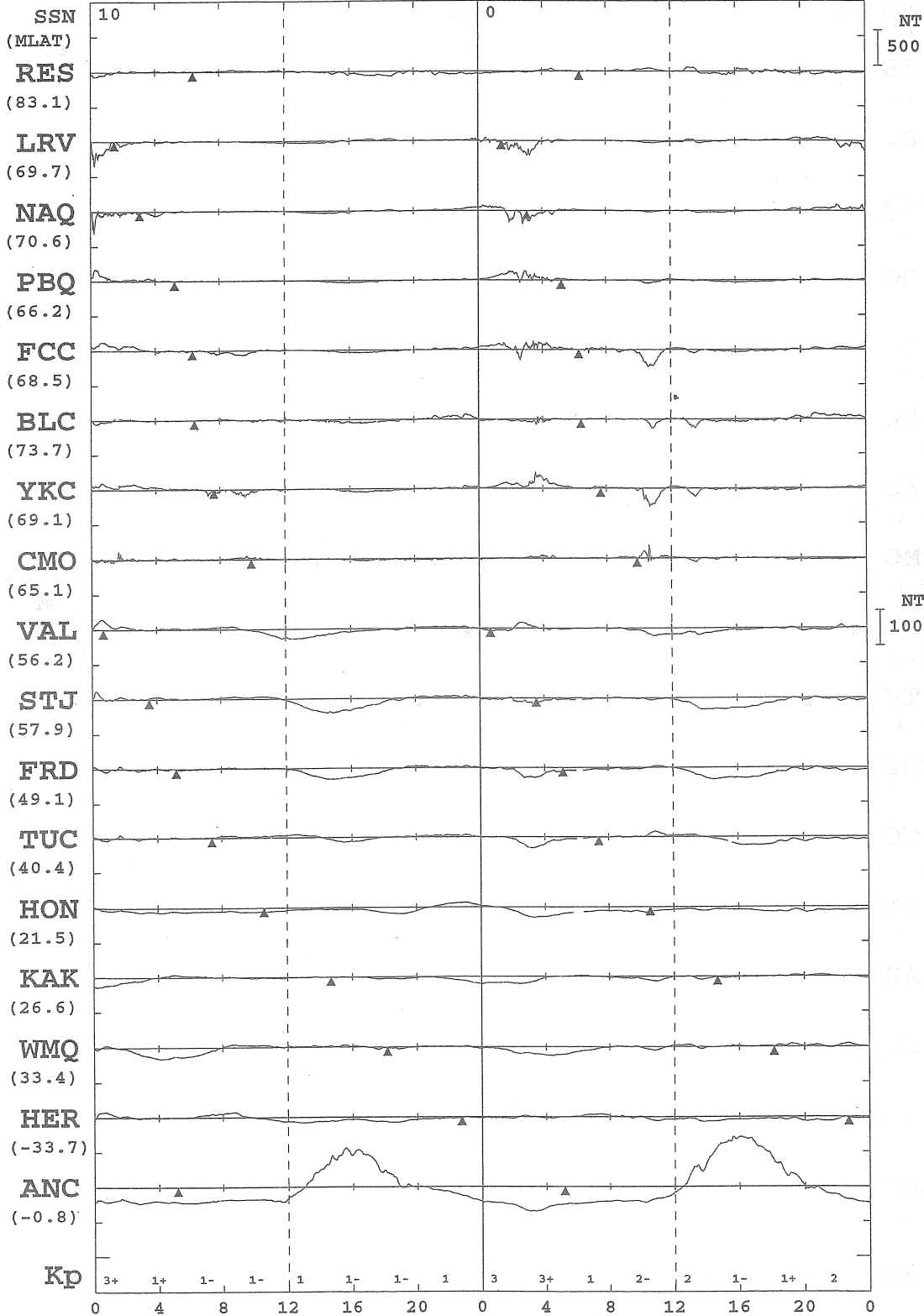


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



OCT 9
(DAY 283)

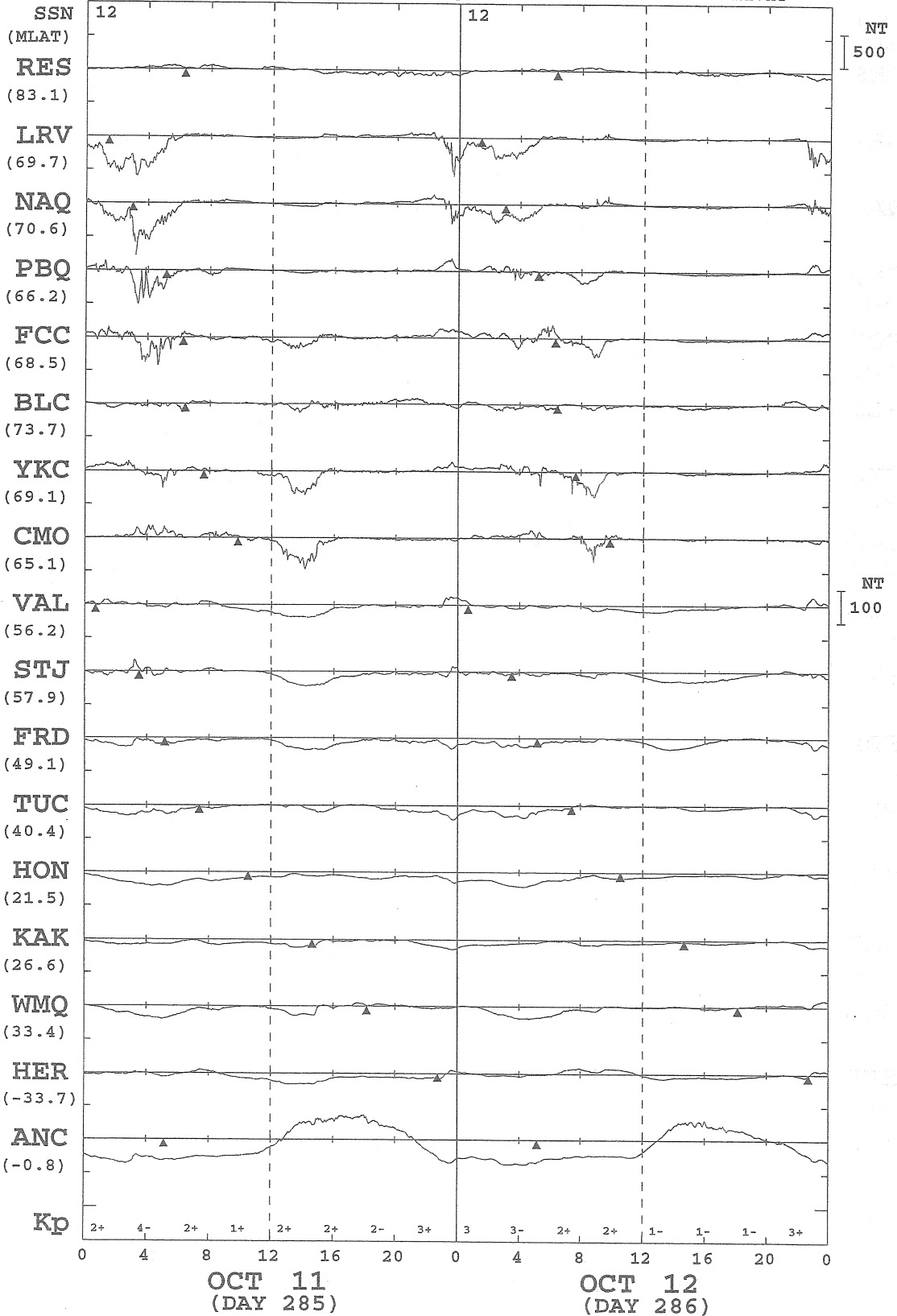
OCT 10
(DAY 284)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

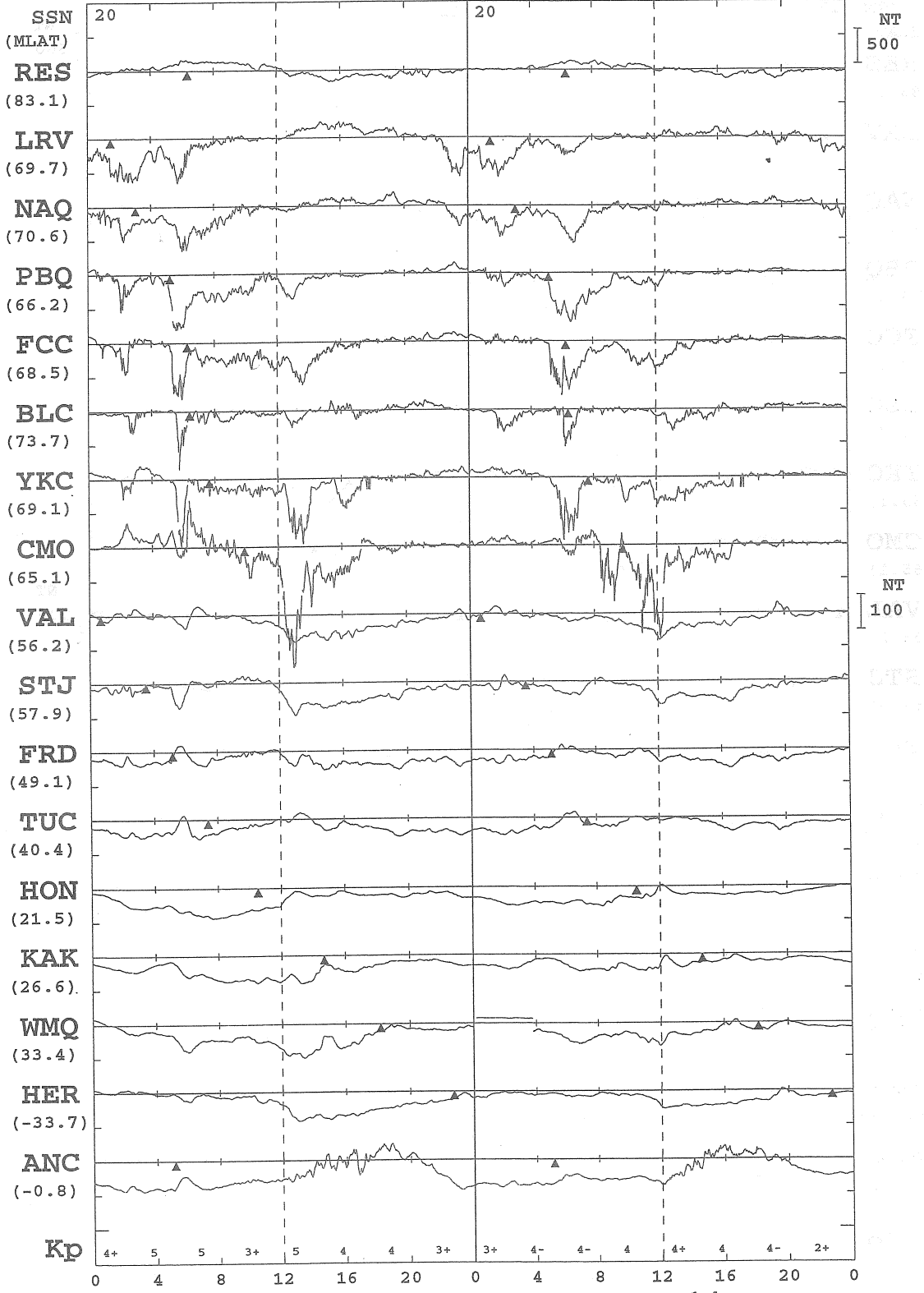
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

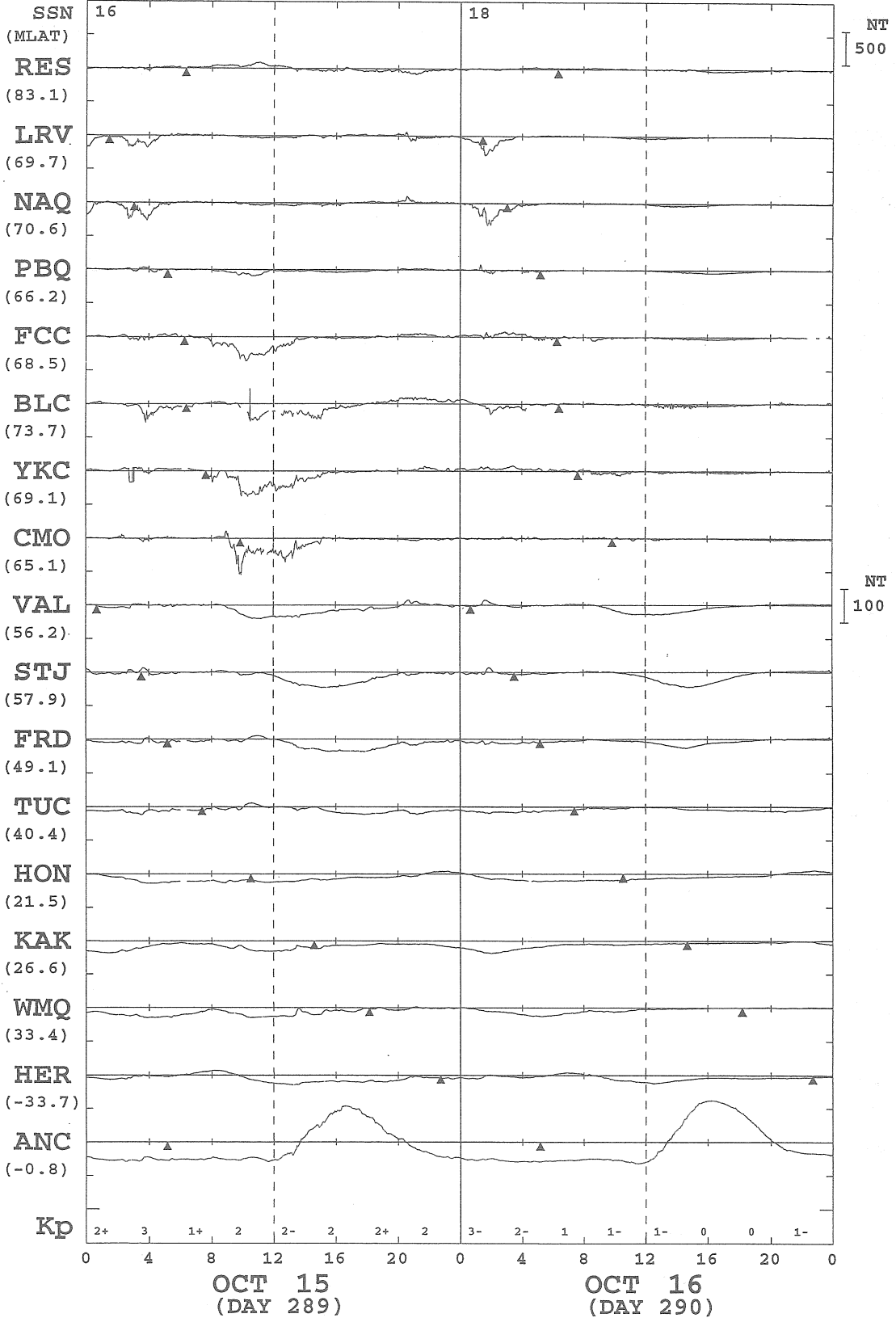


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

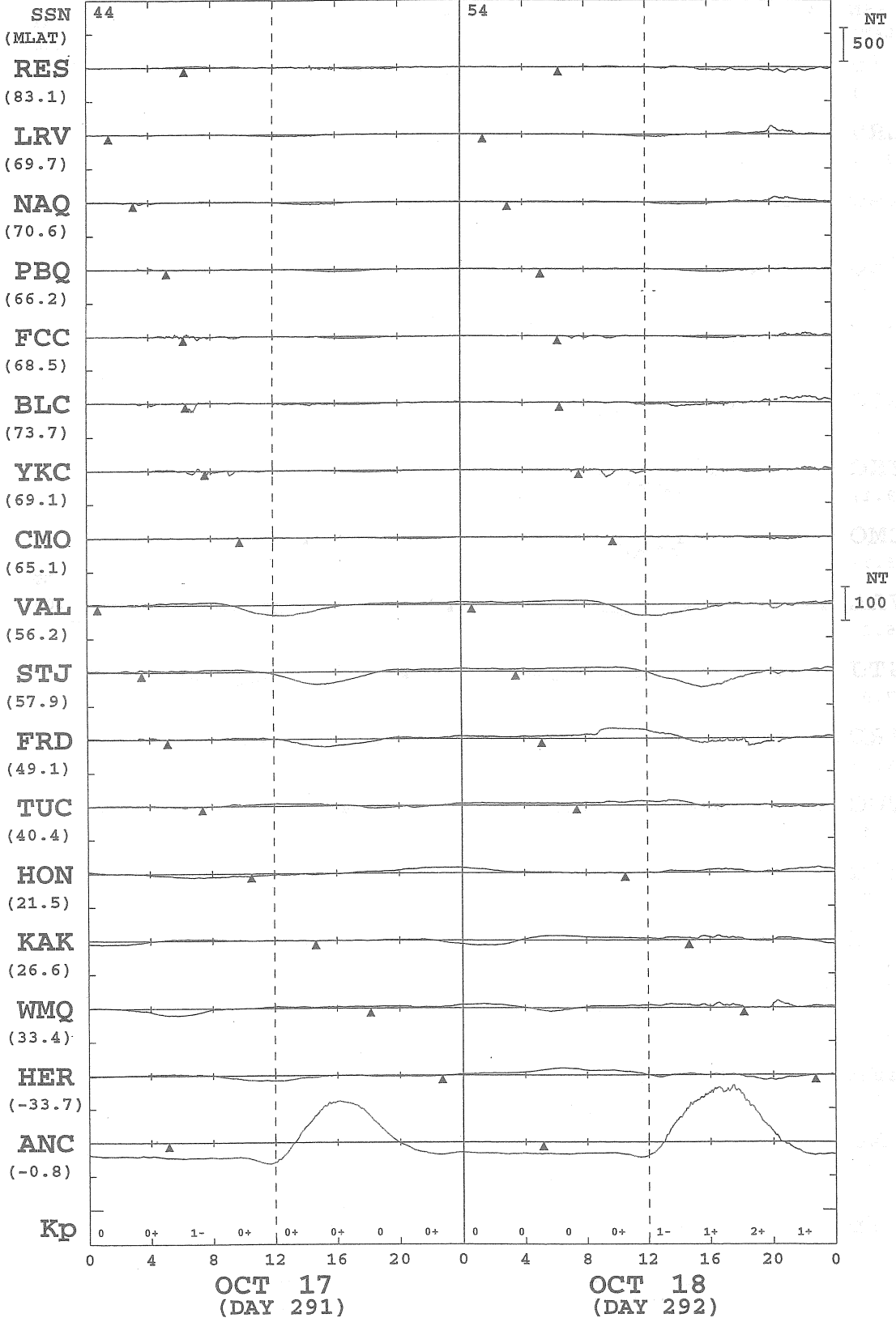
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

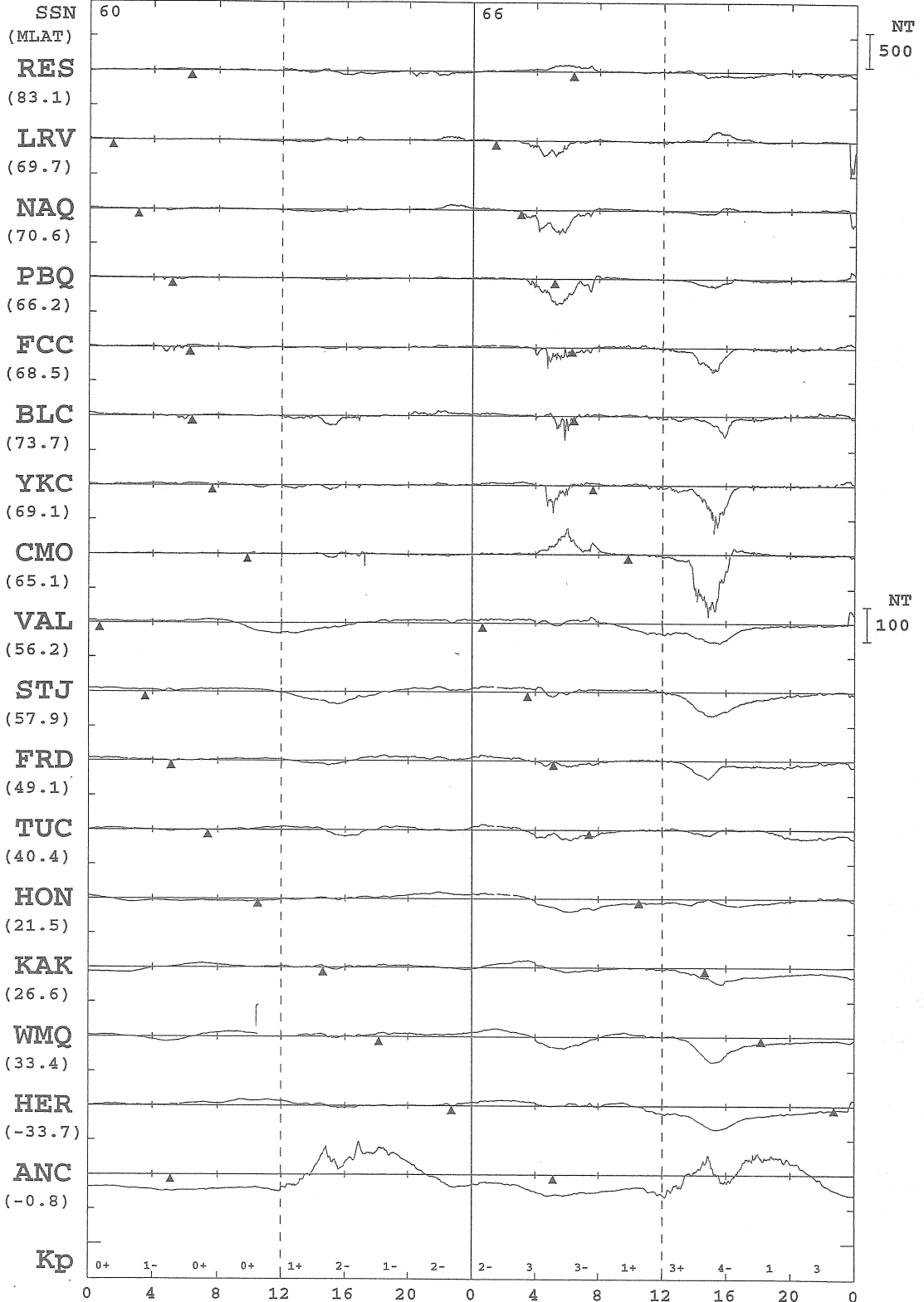


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



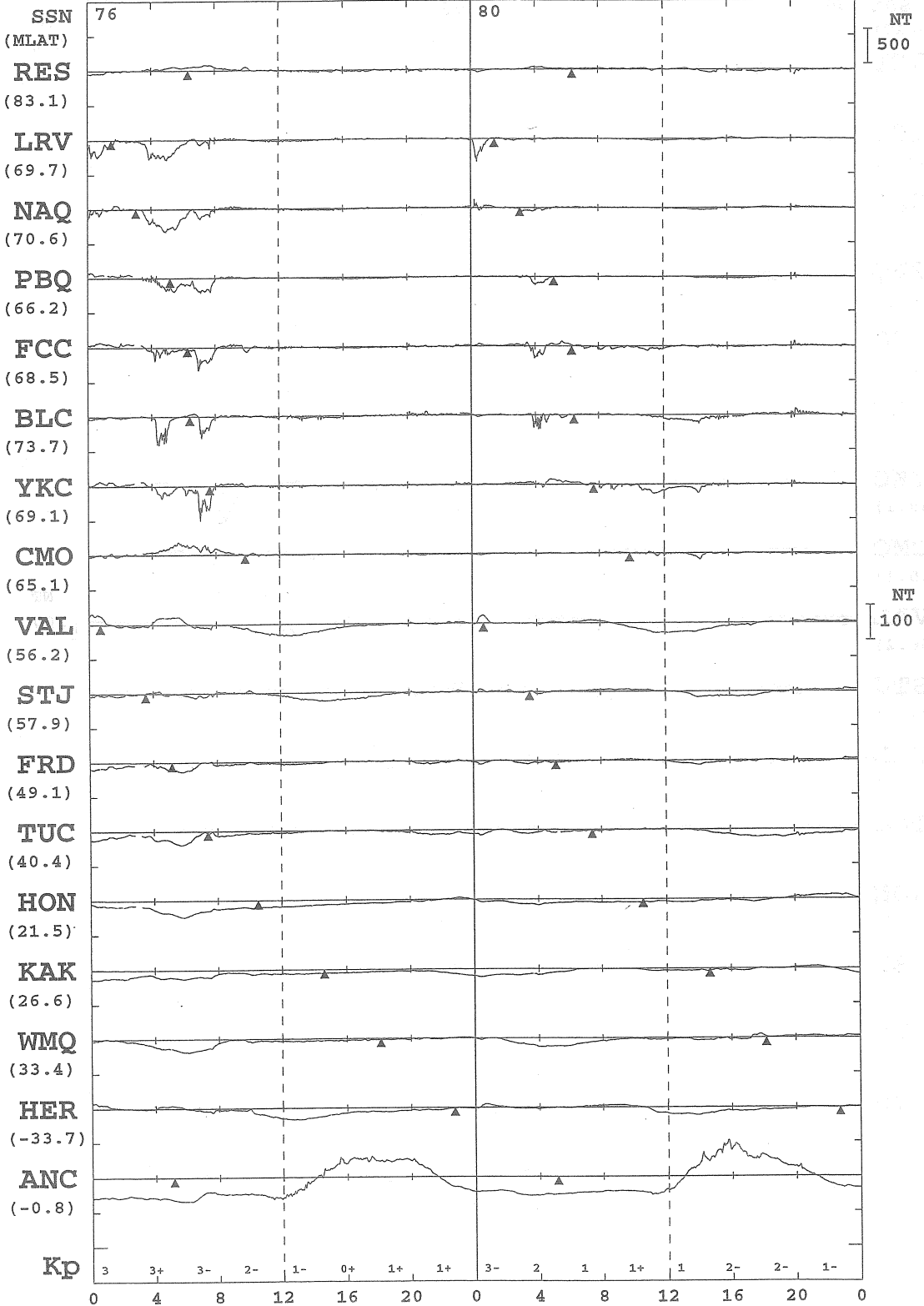
OCT 19
(DAY 293)

OCT 20
(DAY 294)

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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

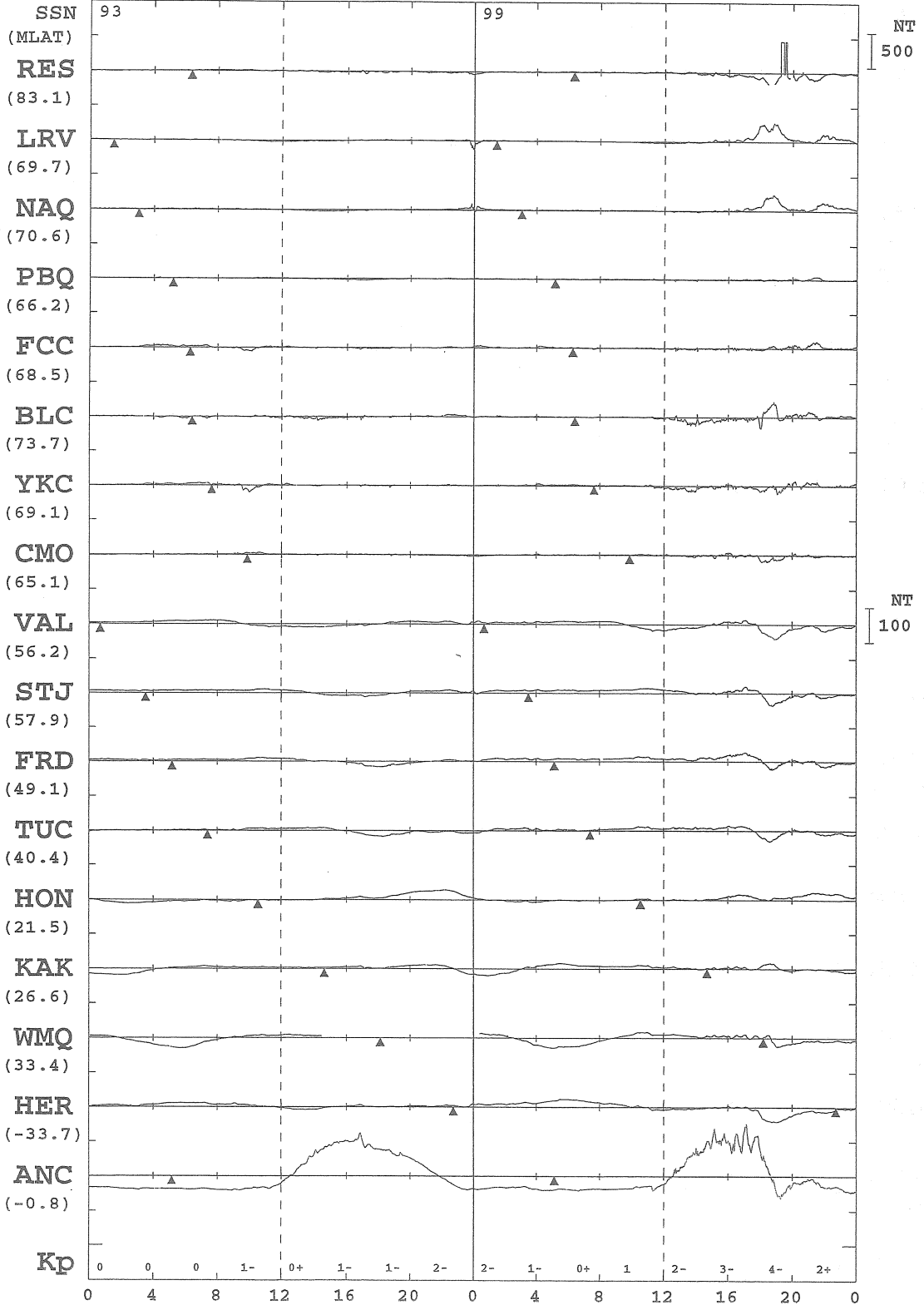


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

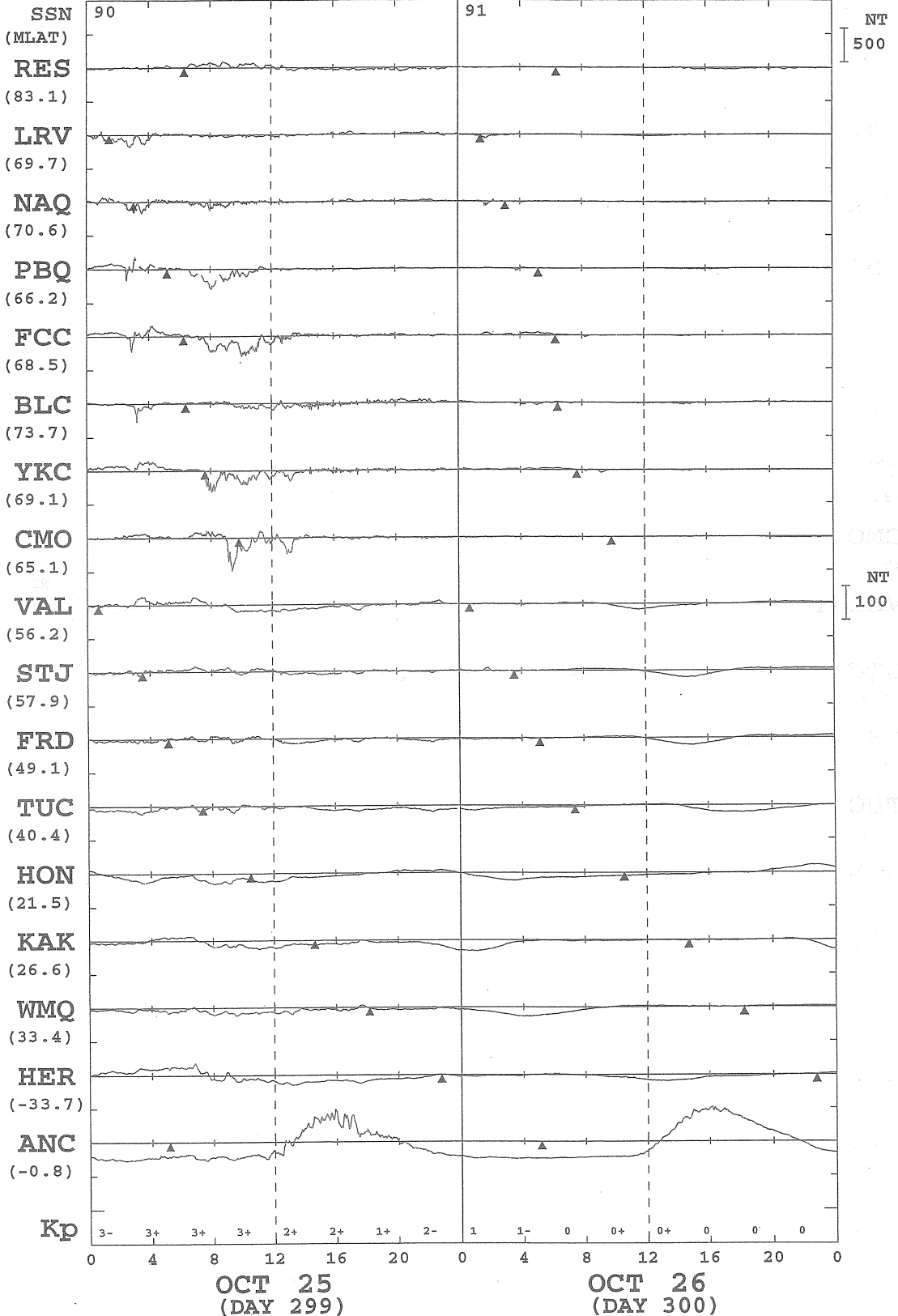


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

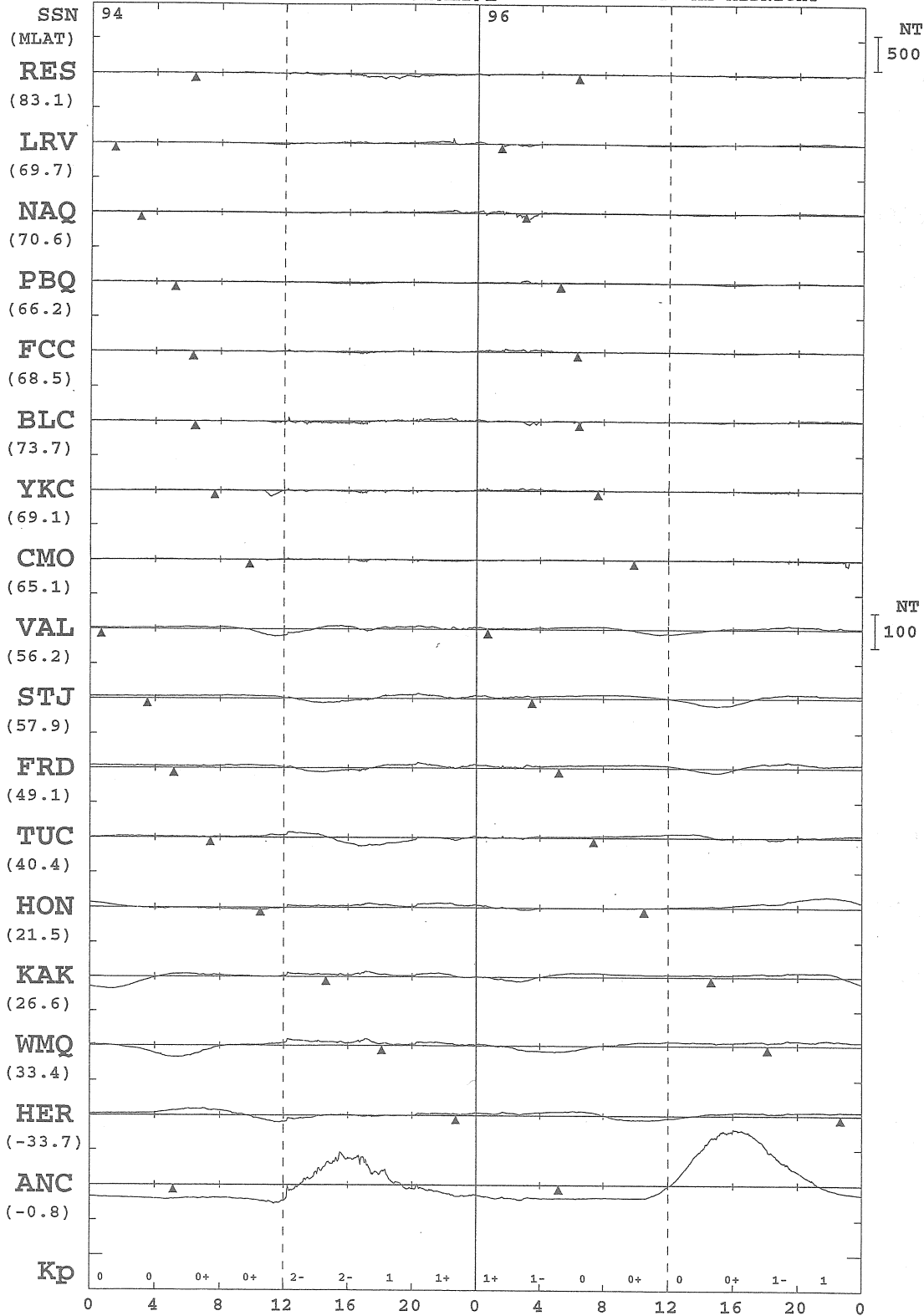


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



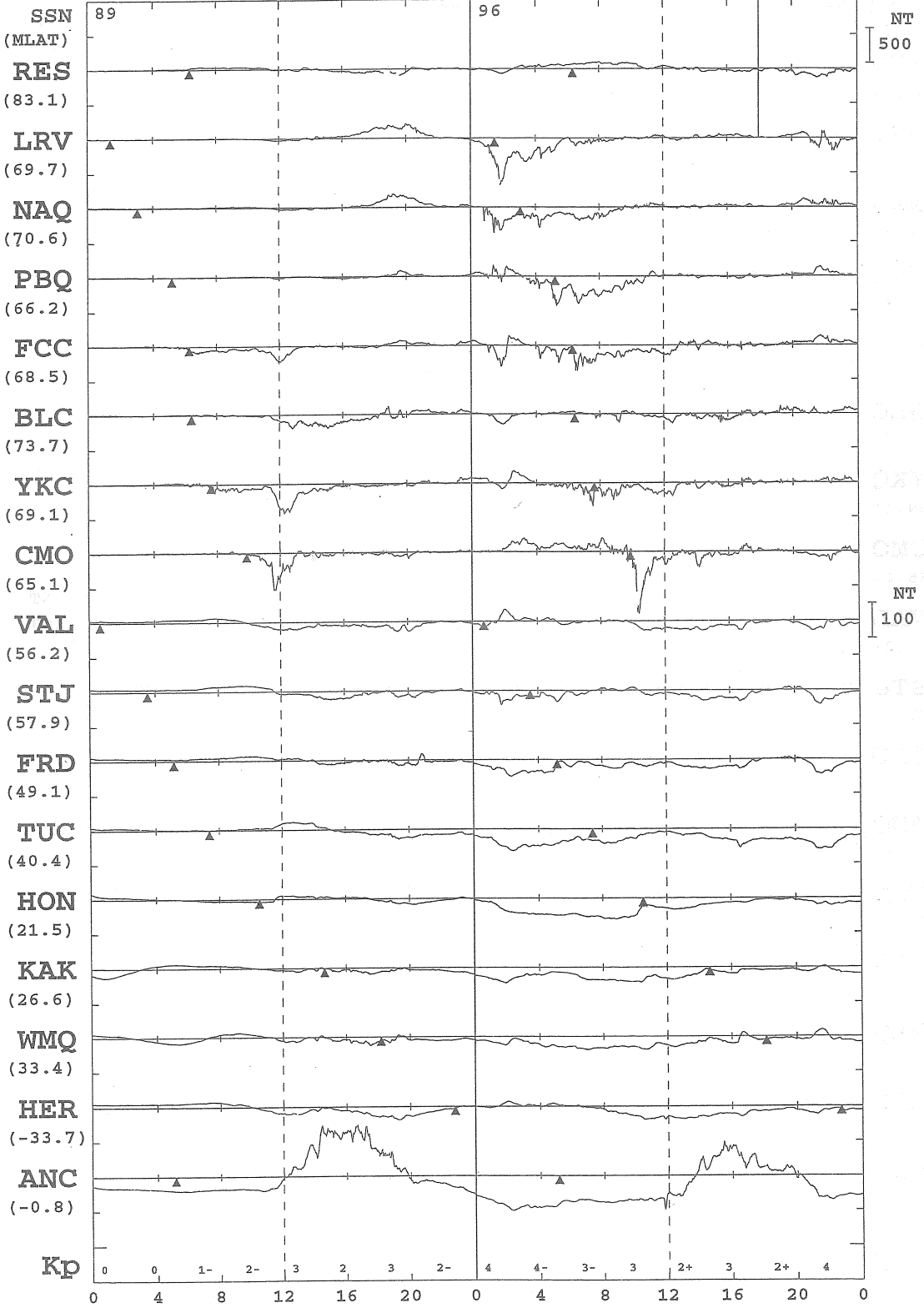
OCT 27
(DAY 301)

OCT 28
(DAY 302)

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

KYOTO UNIV.

2004 H OR X-COMPONENT VARIATION: LOCAL MIDNIGHT

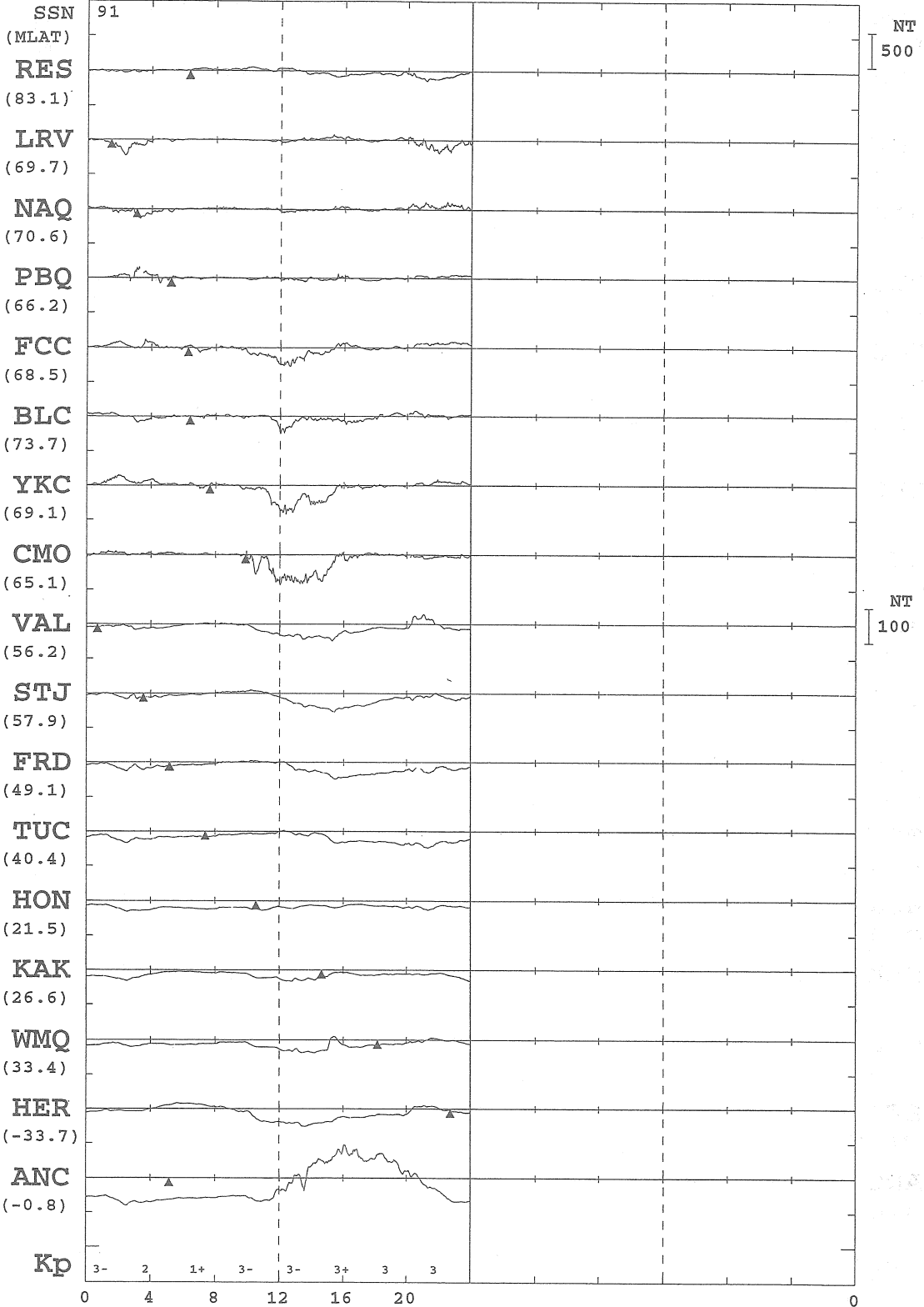


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



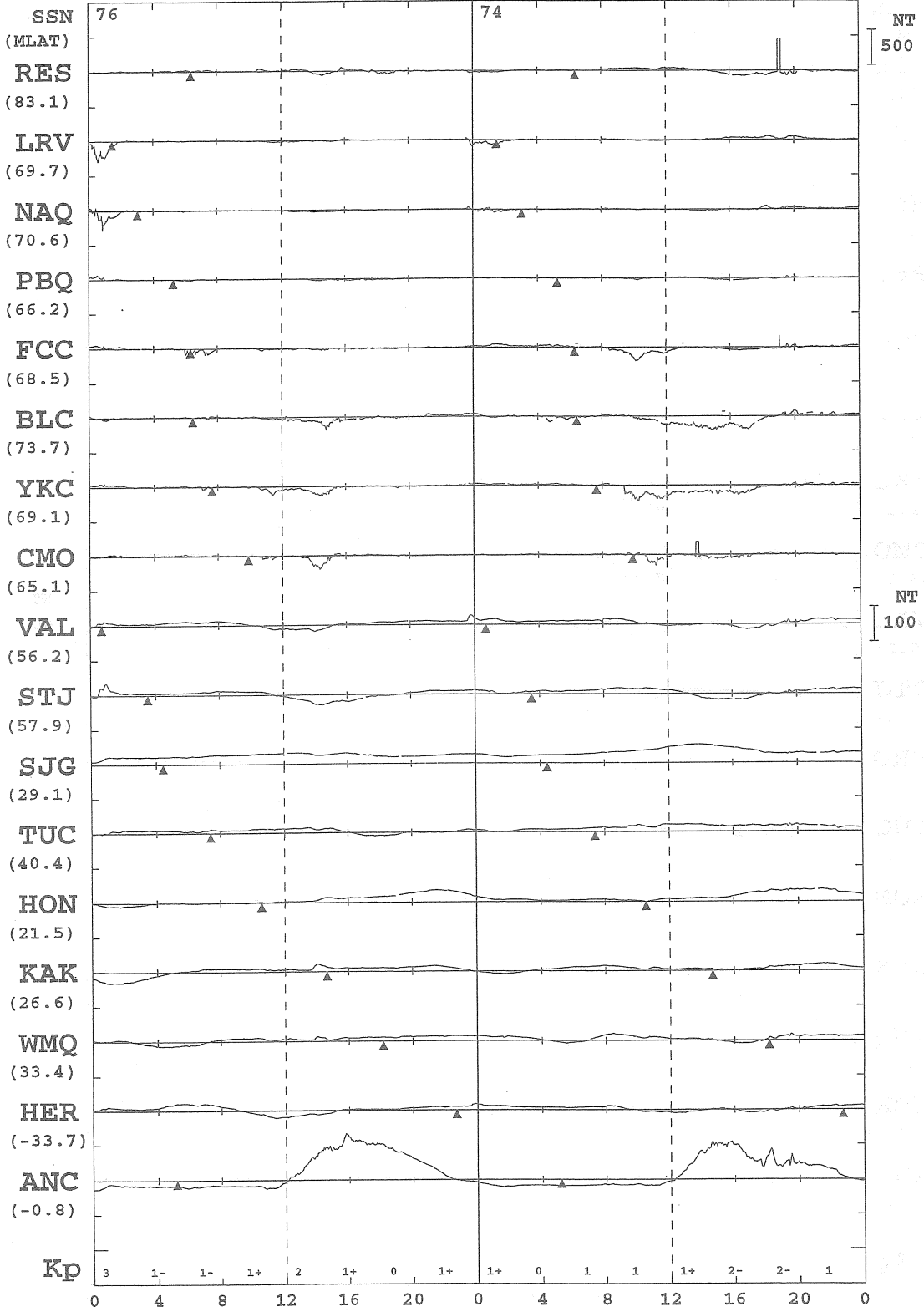
OCT 31
(DAY 305)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



NOV 1
(DAY 306)

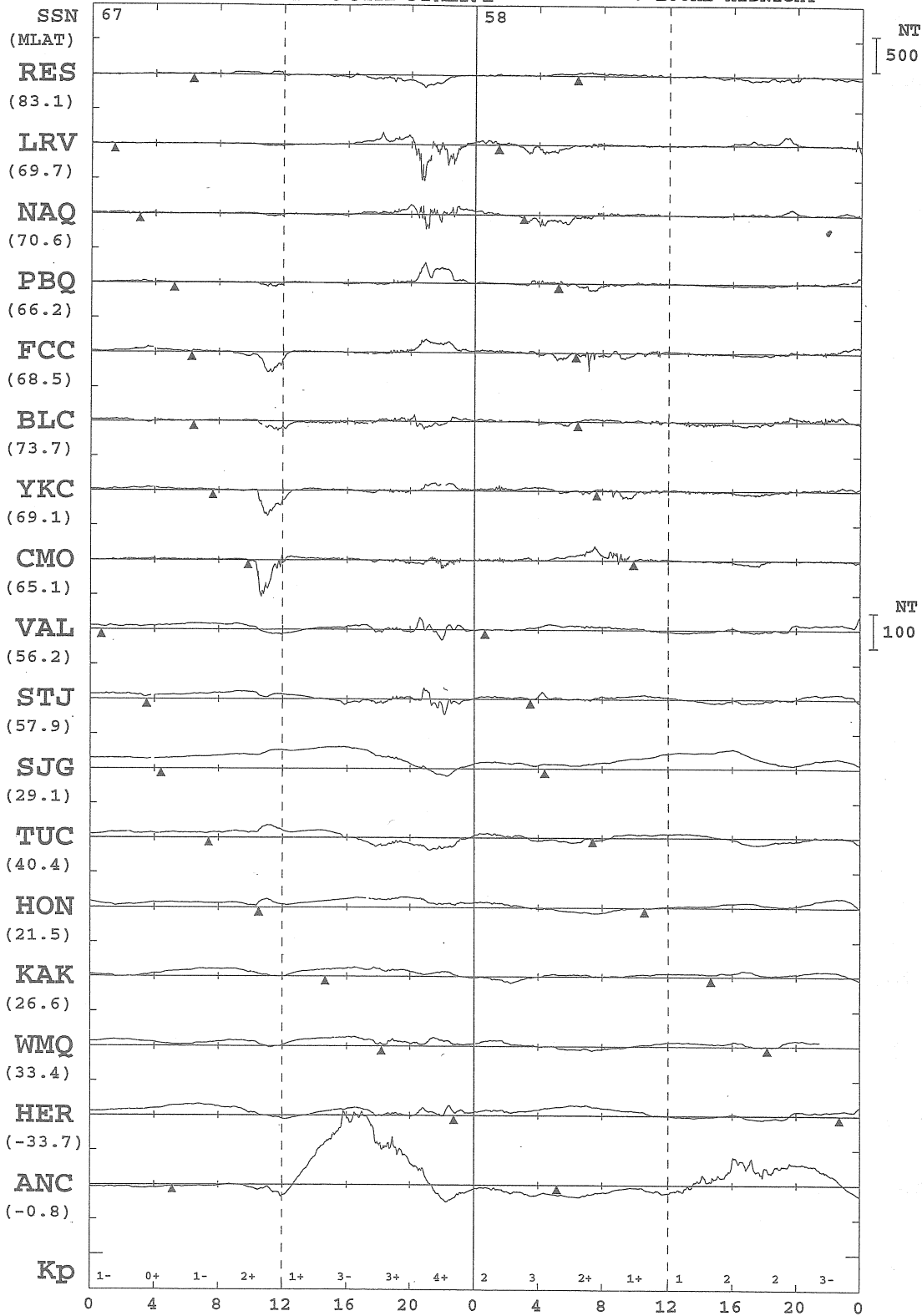
NOV 2
(DAY 307)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



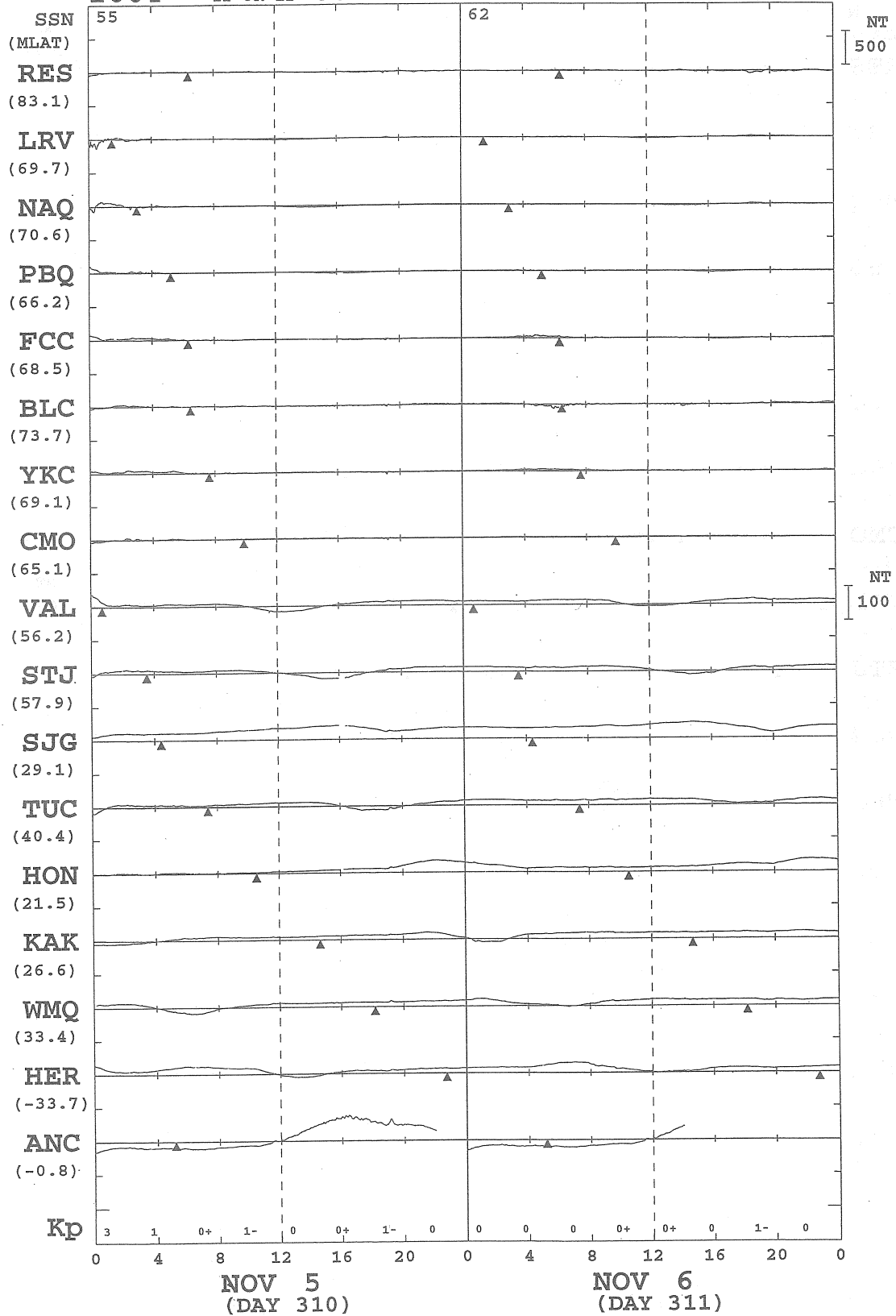
NOV 3
(DAY 308)

NOV 4
(DAY 309)

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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

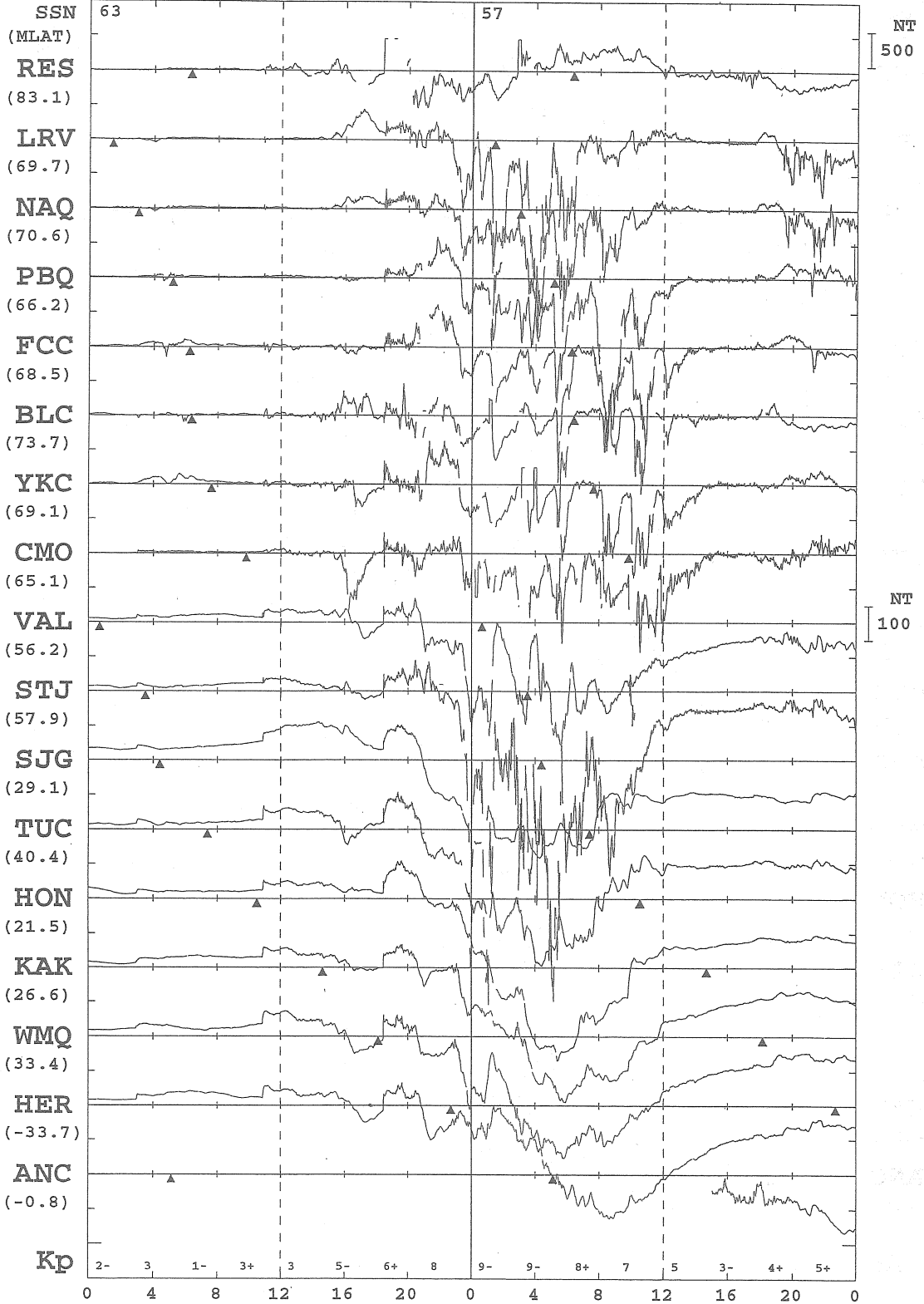


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



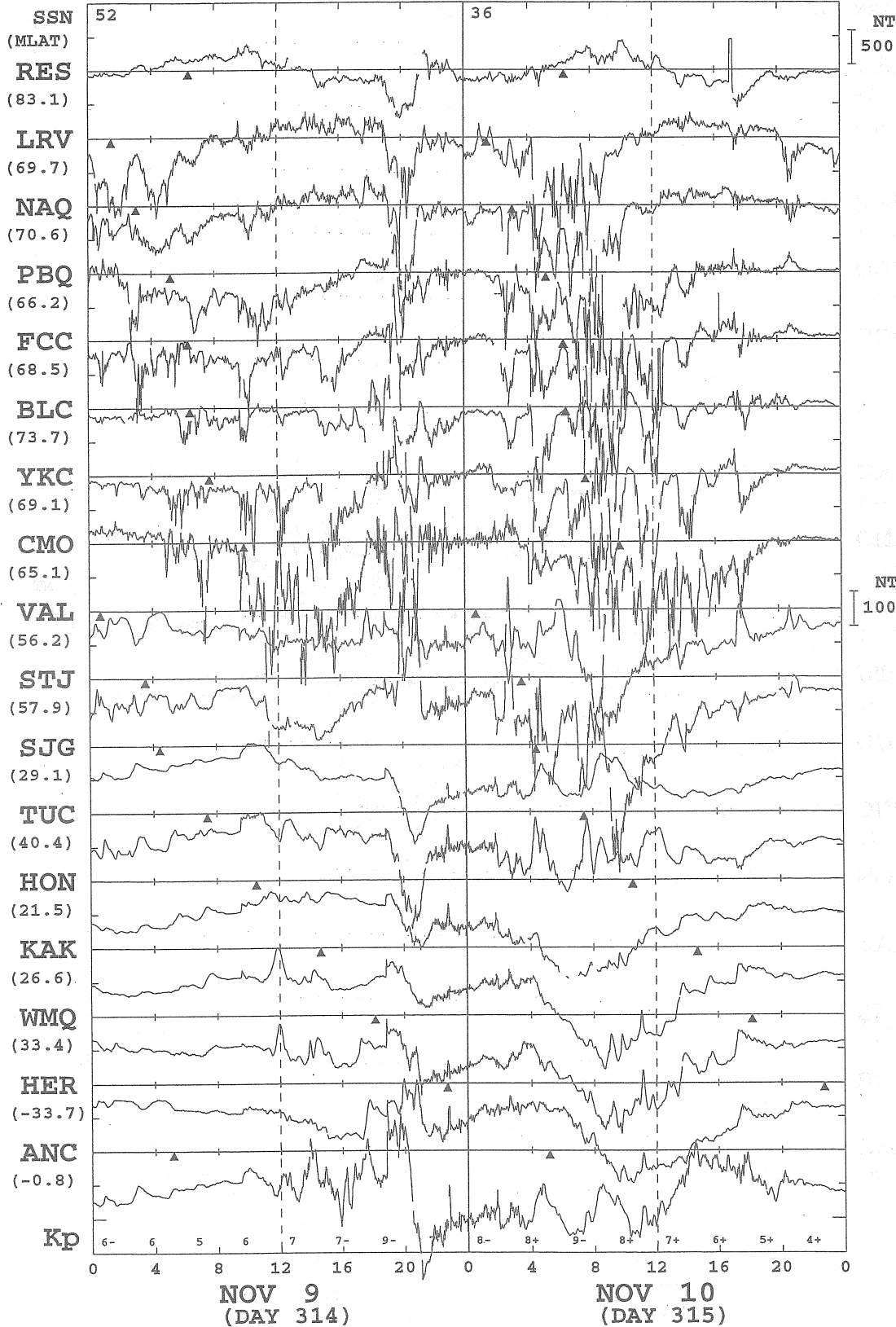
NOV 7 (DAY 312) NOV 8 (DAY 313)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

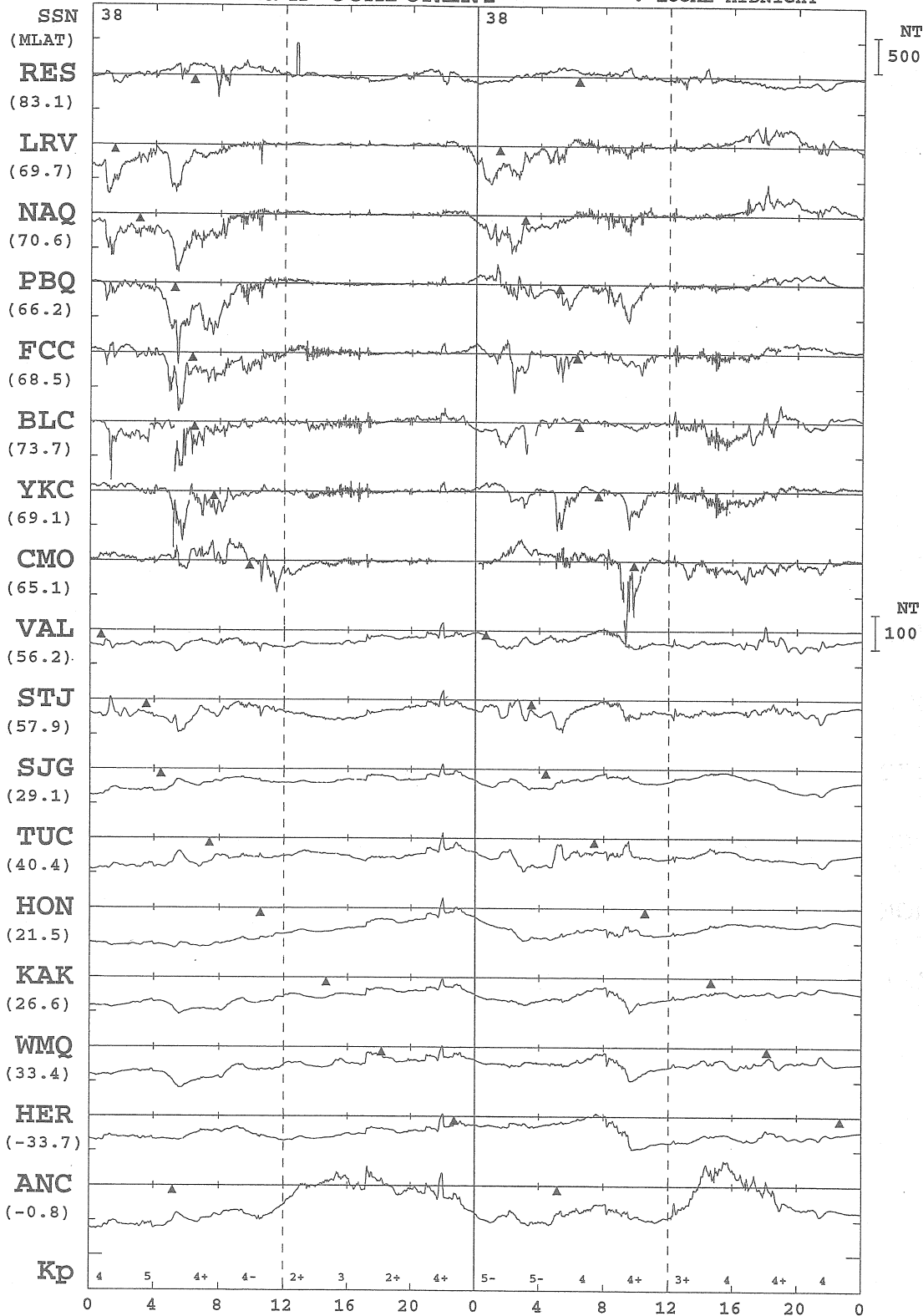


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

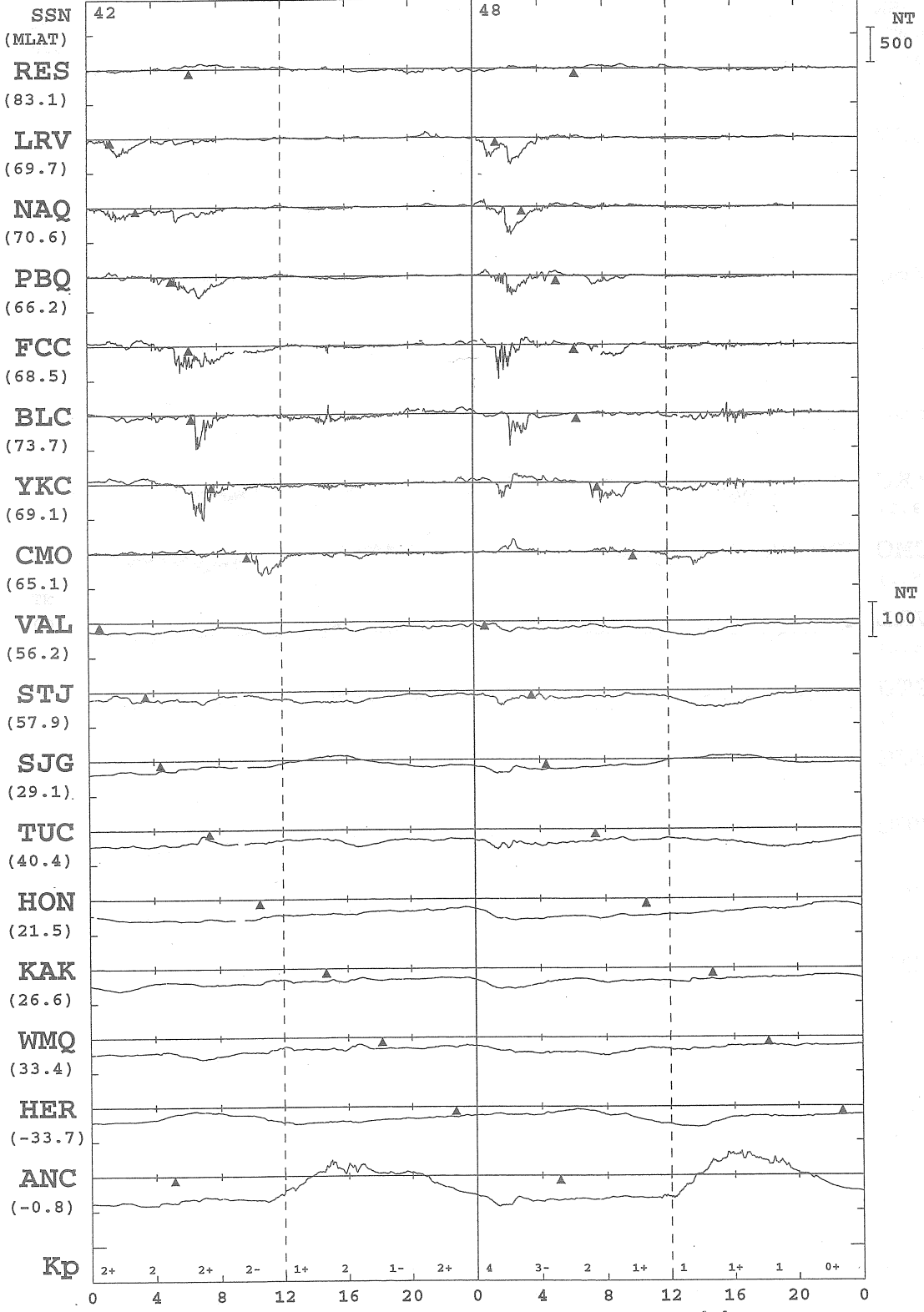


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

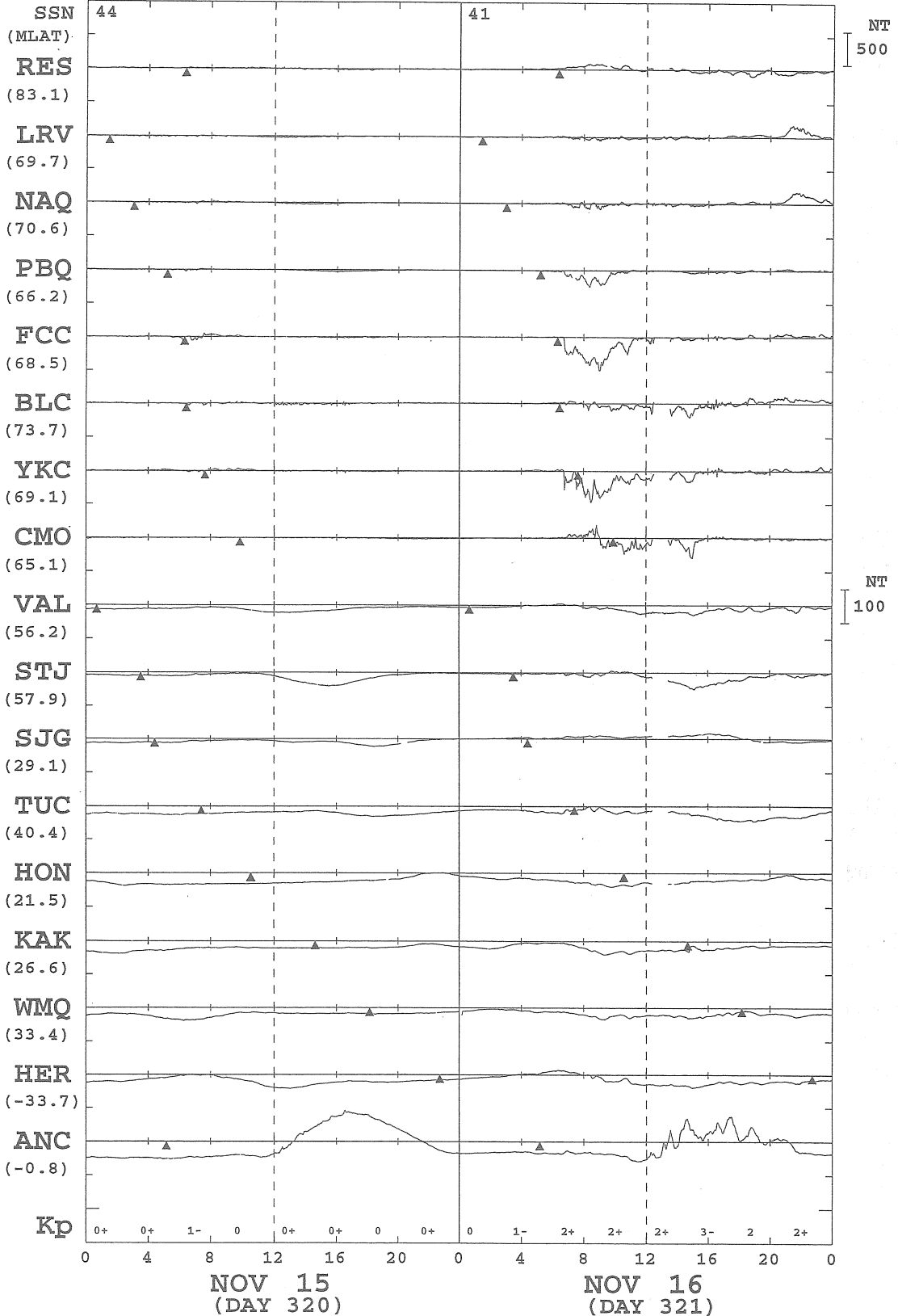


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

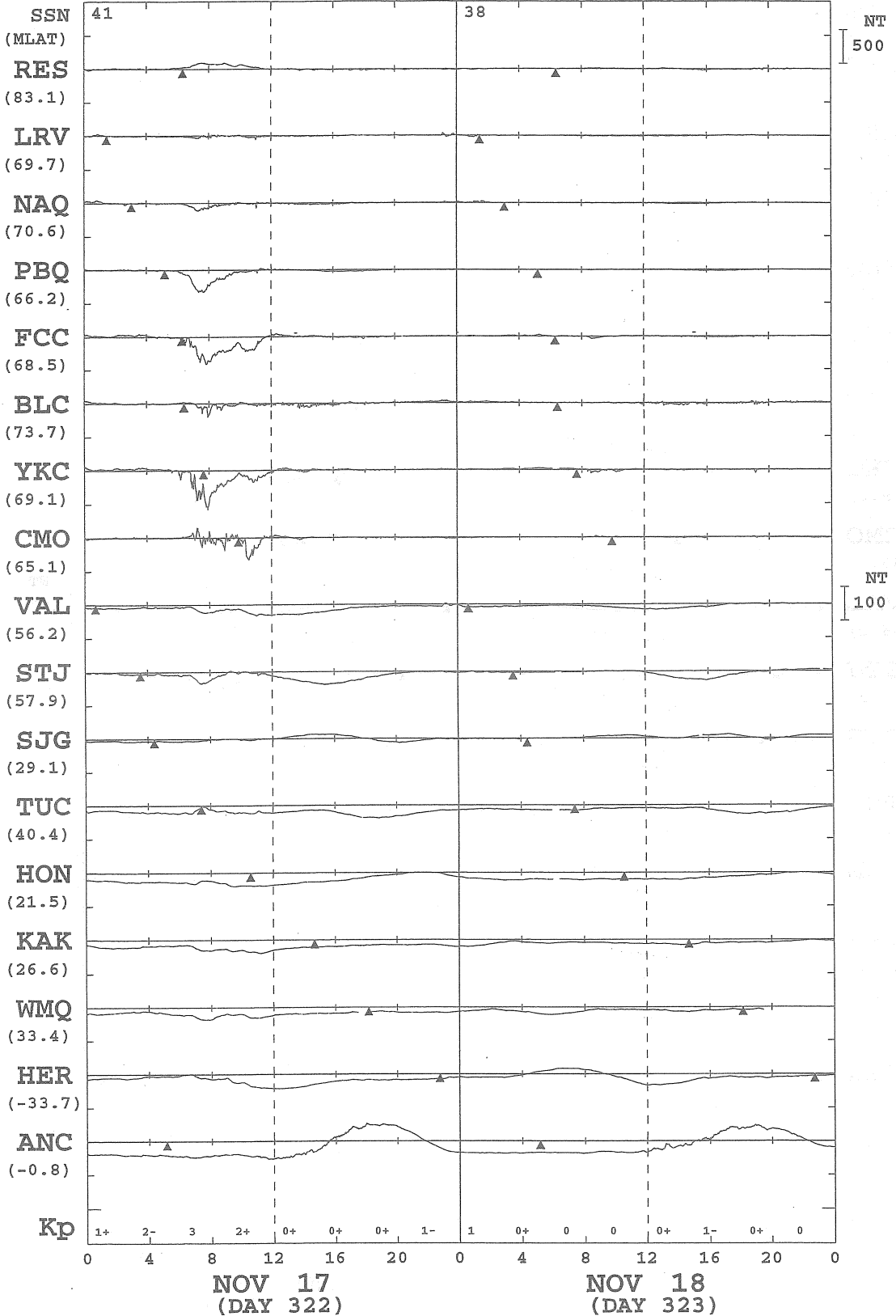


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

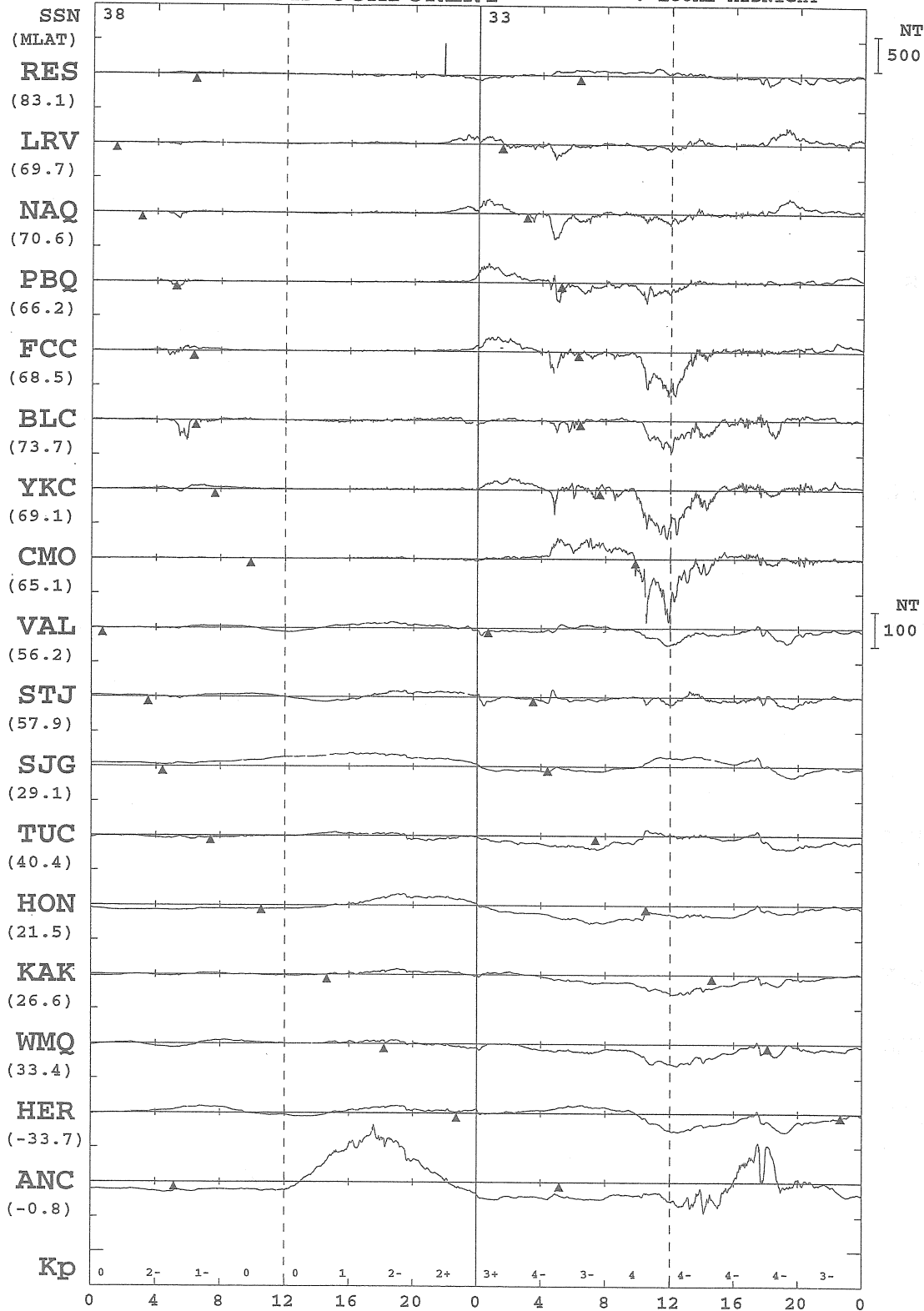


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



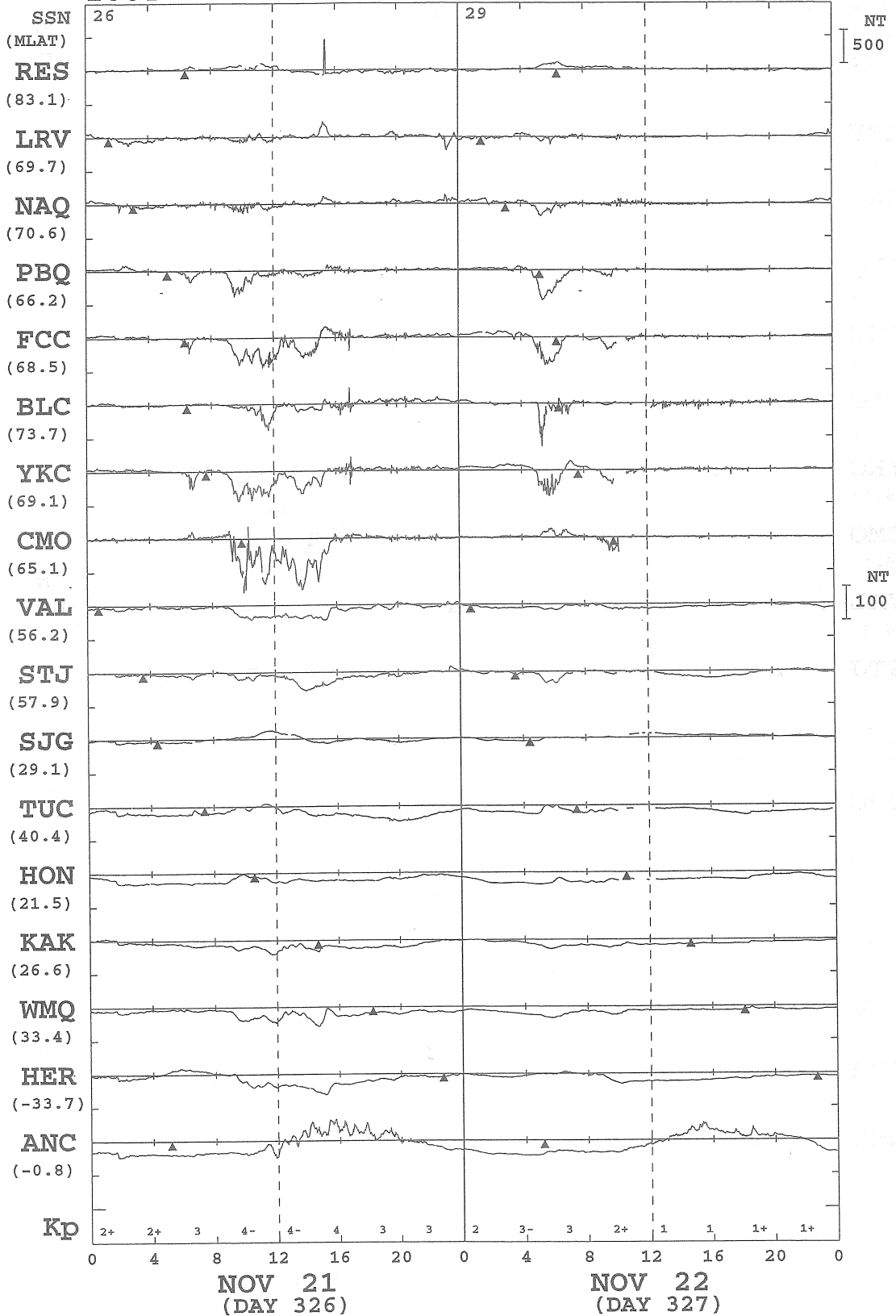
NOV 19
(DAY 324)

NOV 20
(DAY 325)

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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

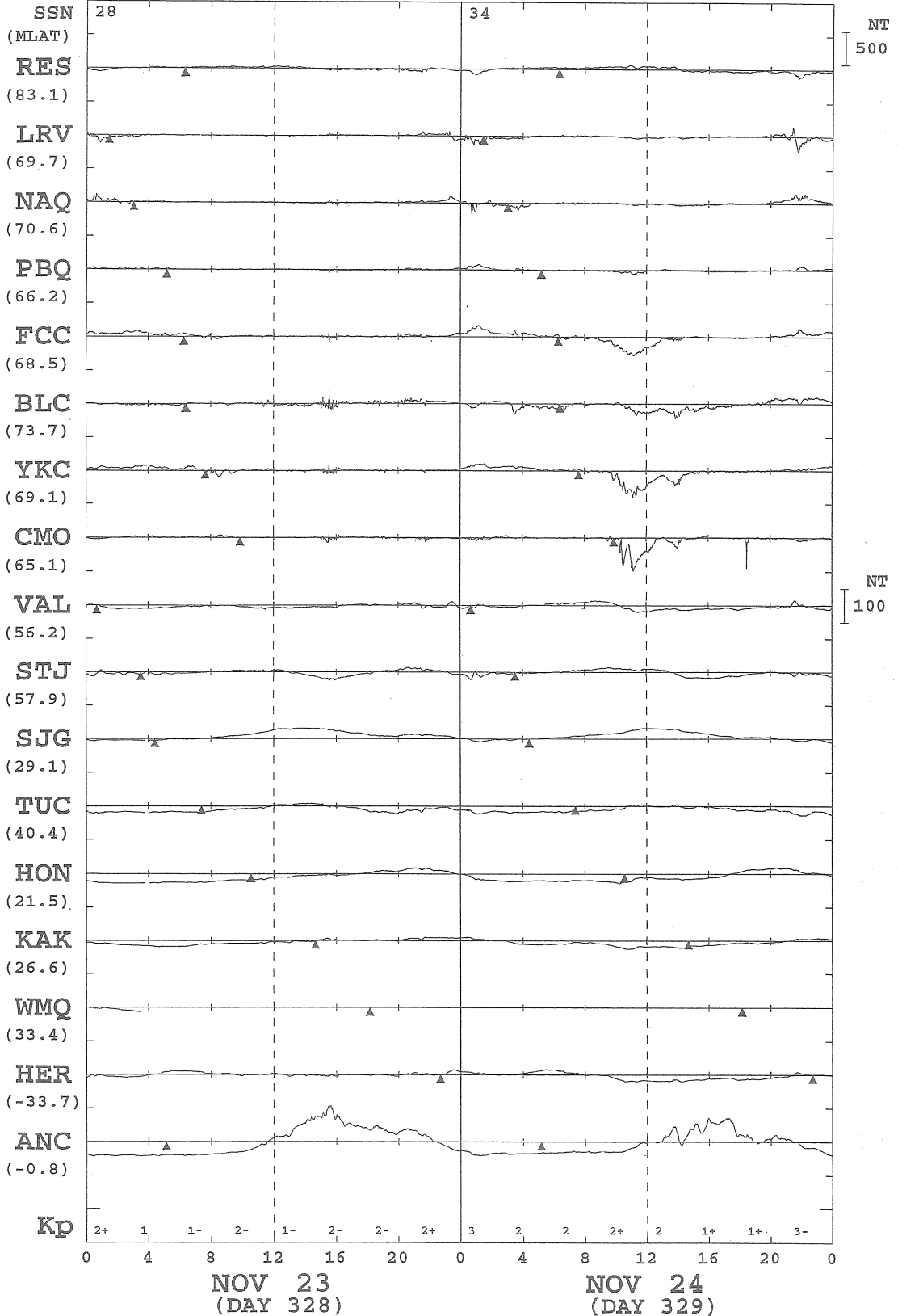


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

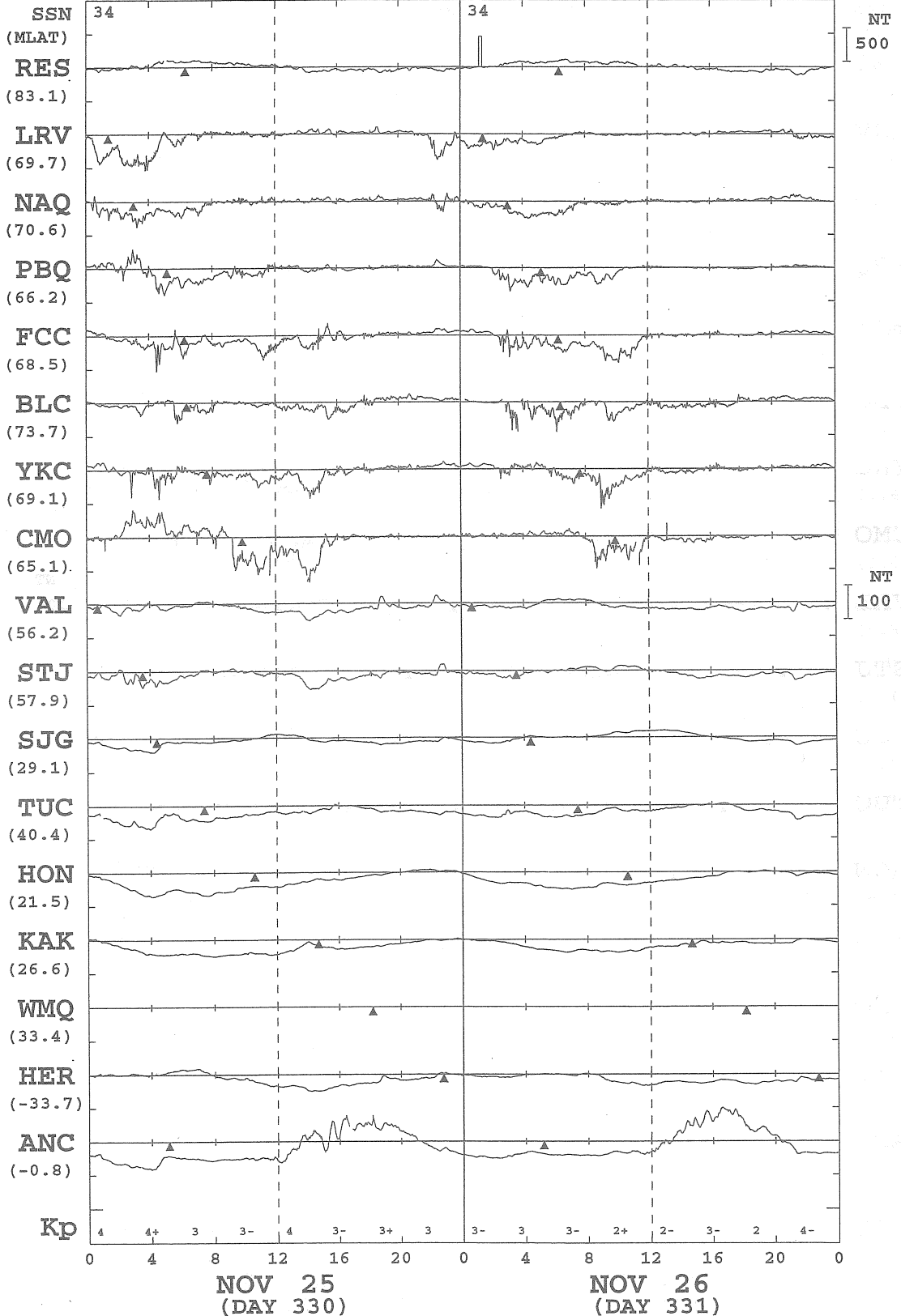


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

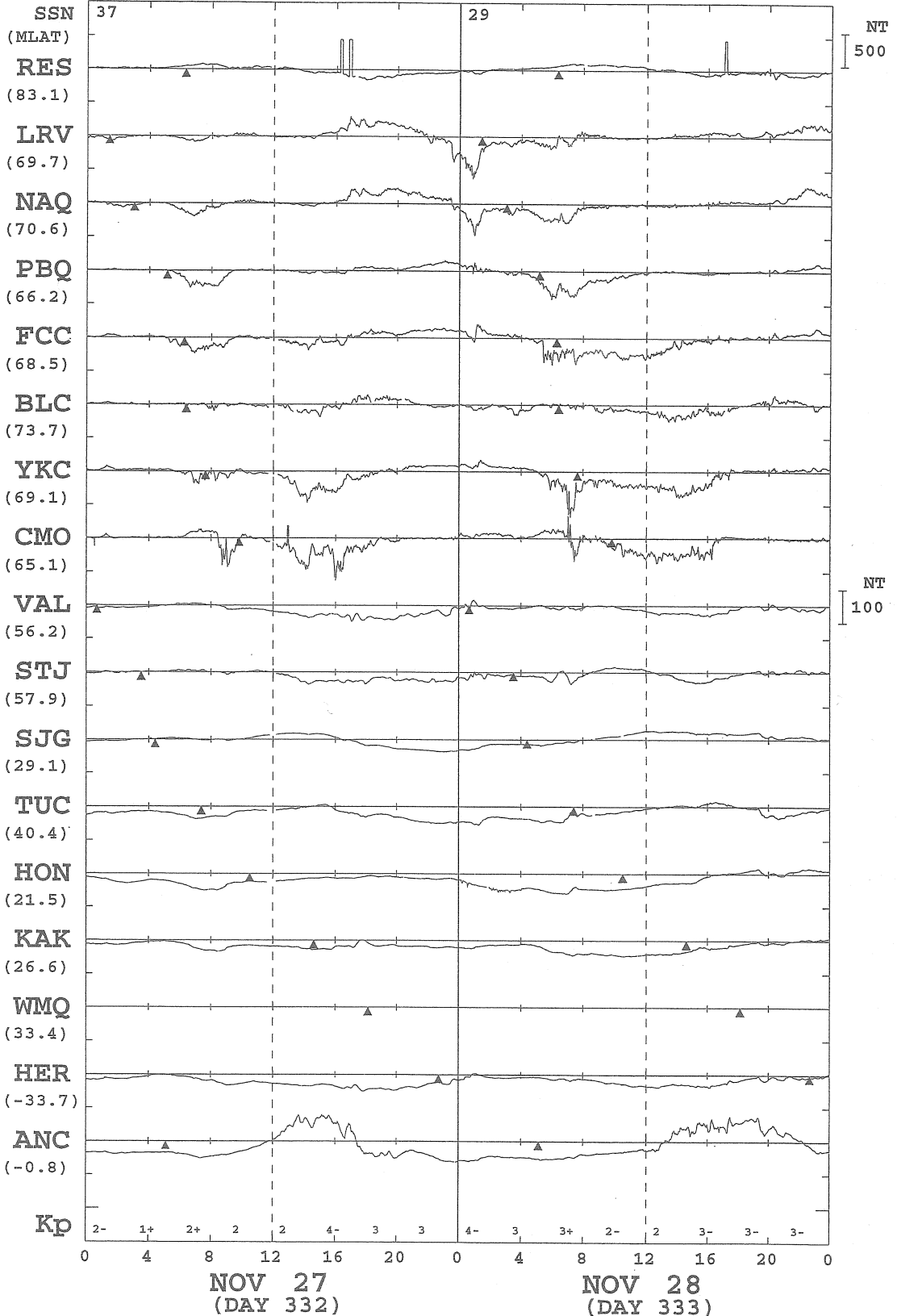


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

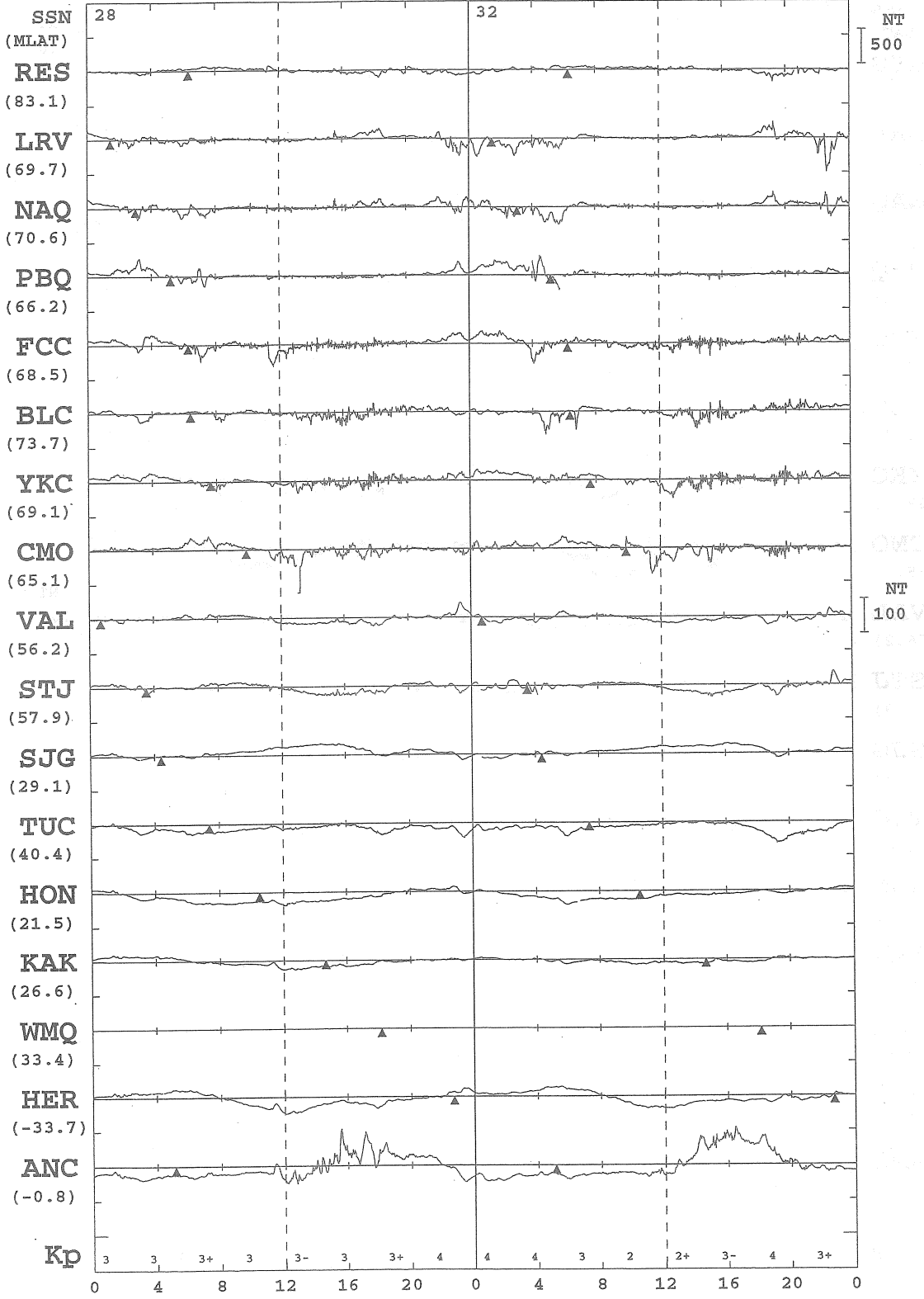
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

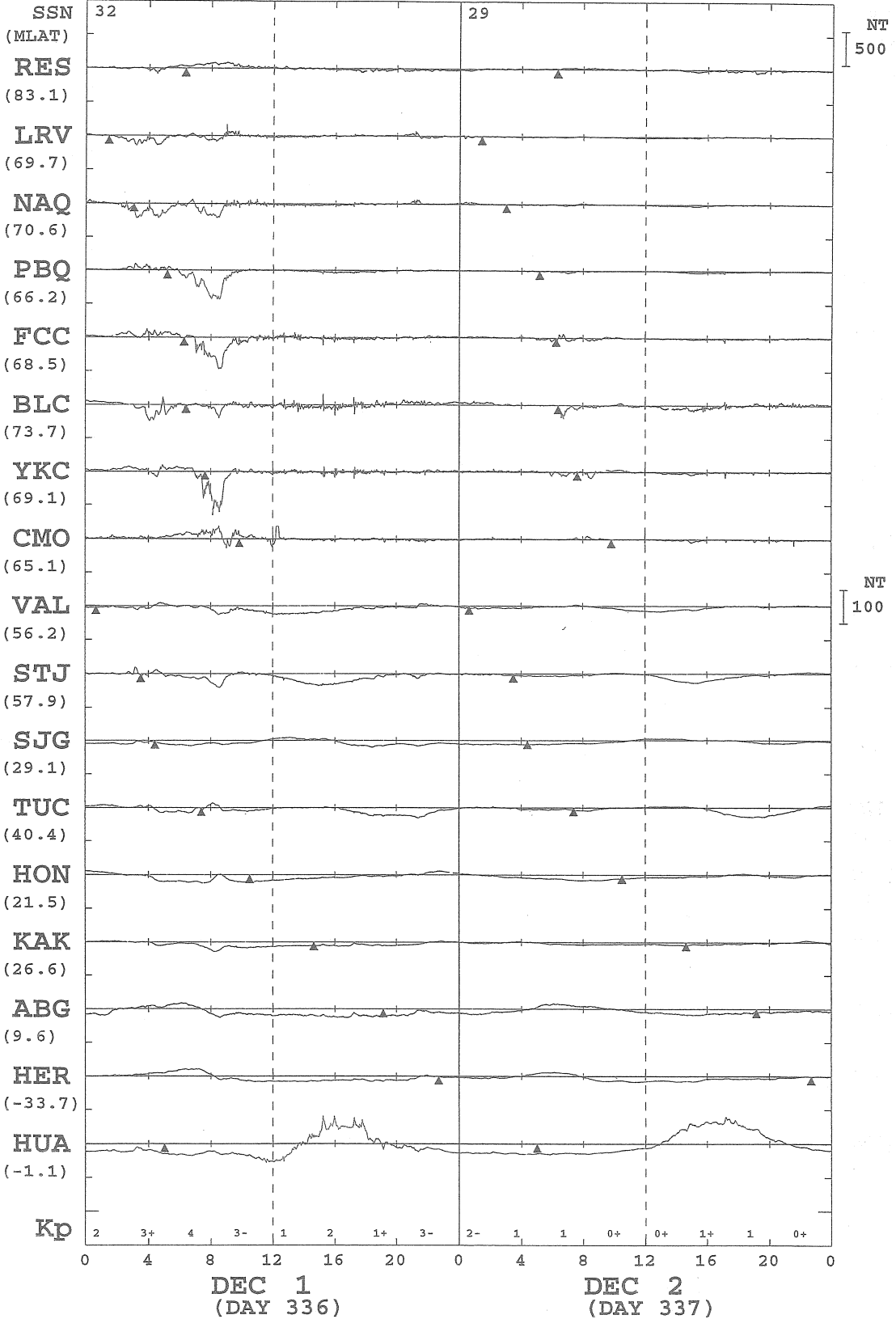


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

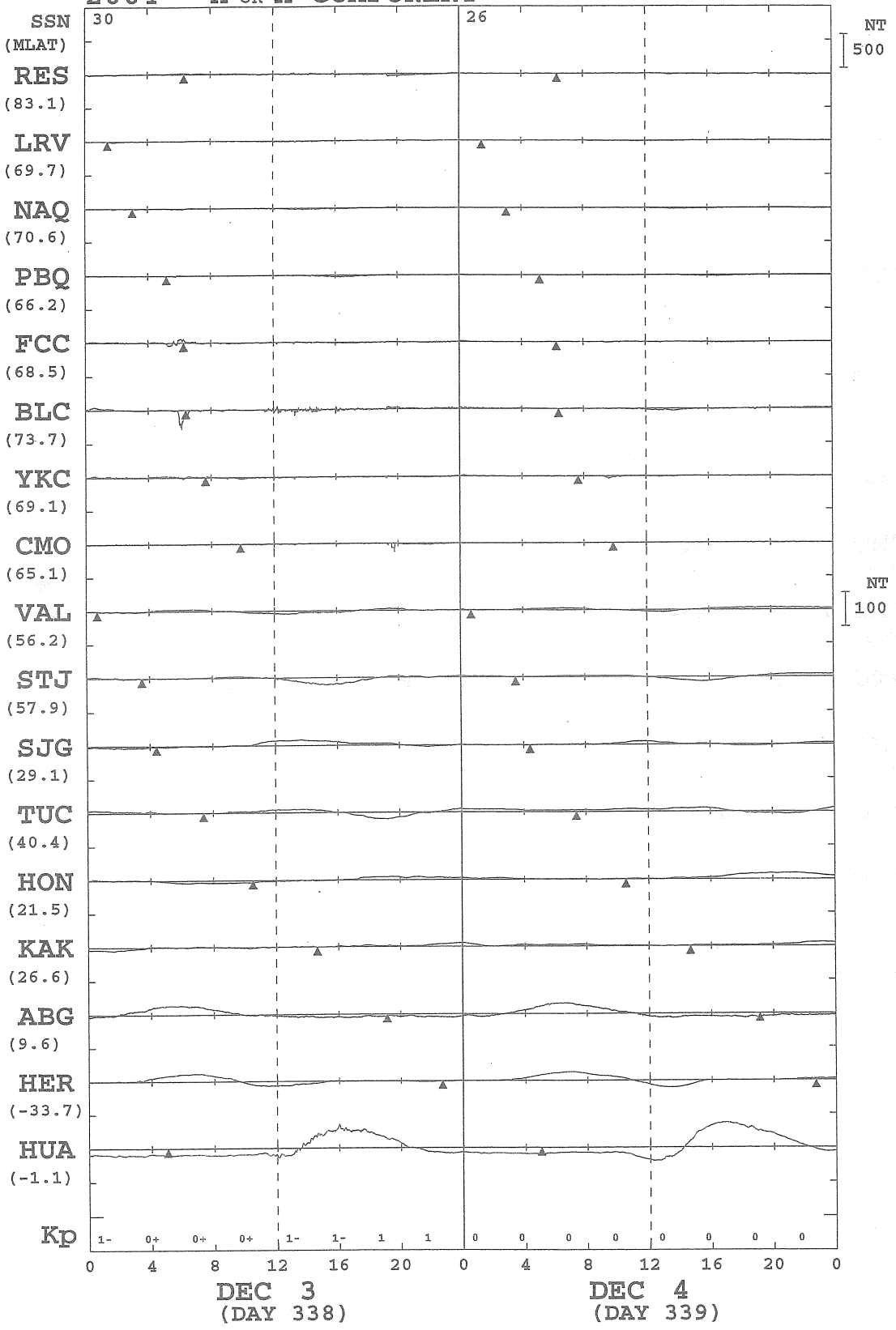
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

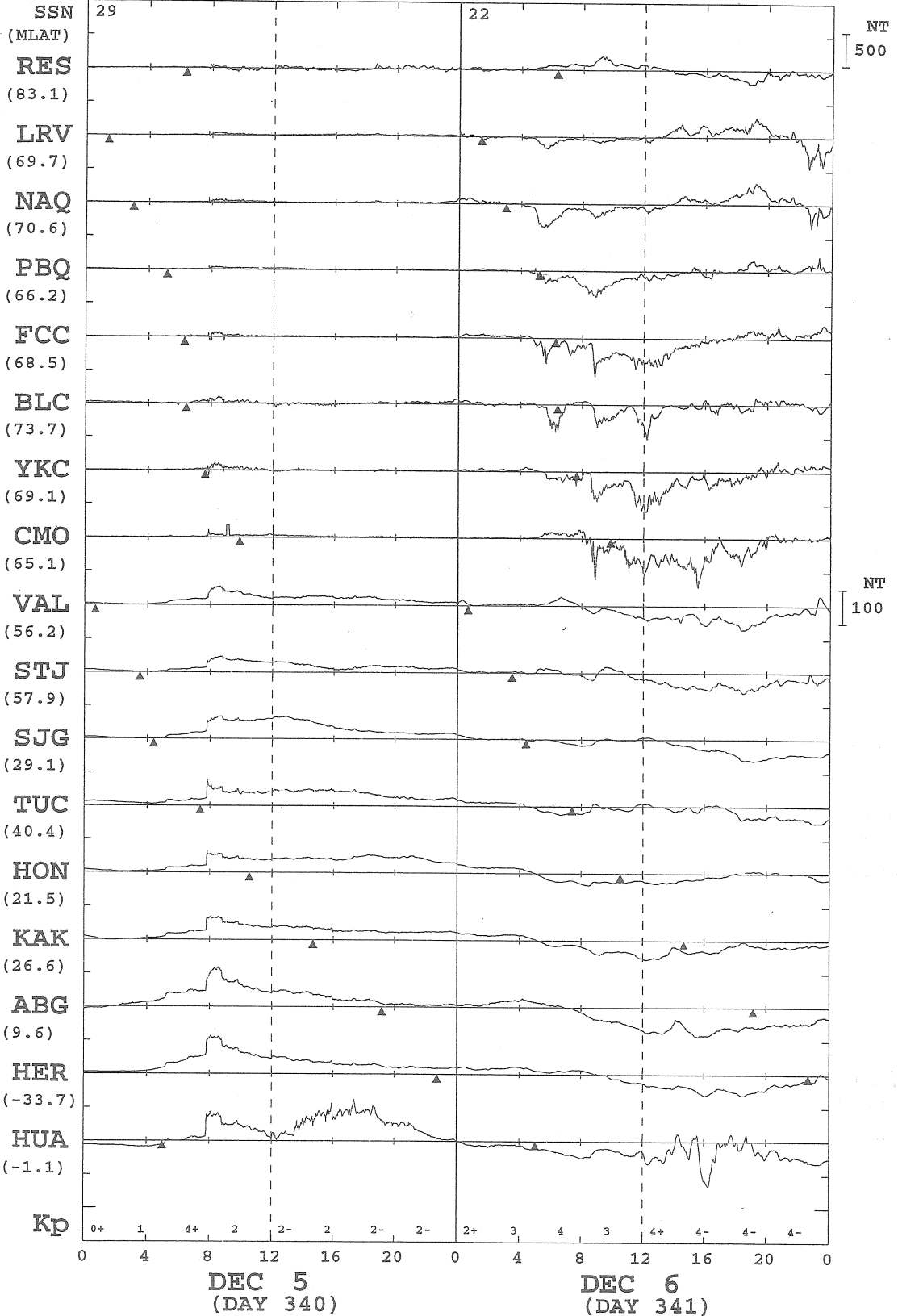
2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

2004 H OR X-COMPONENT

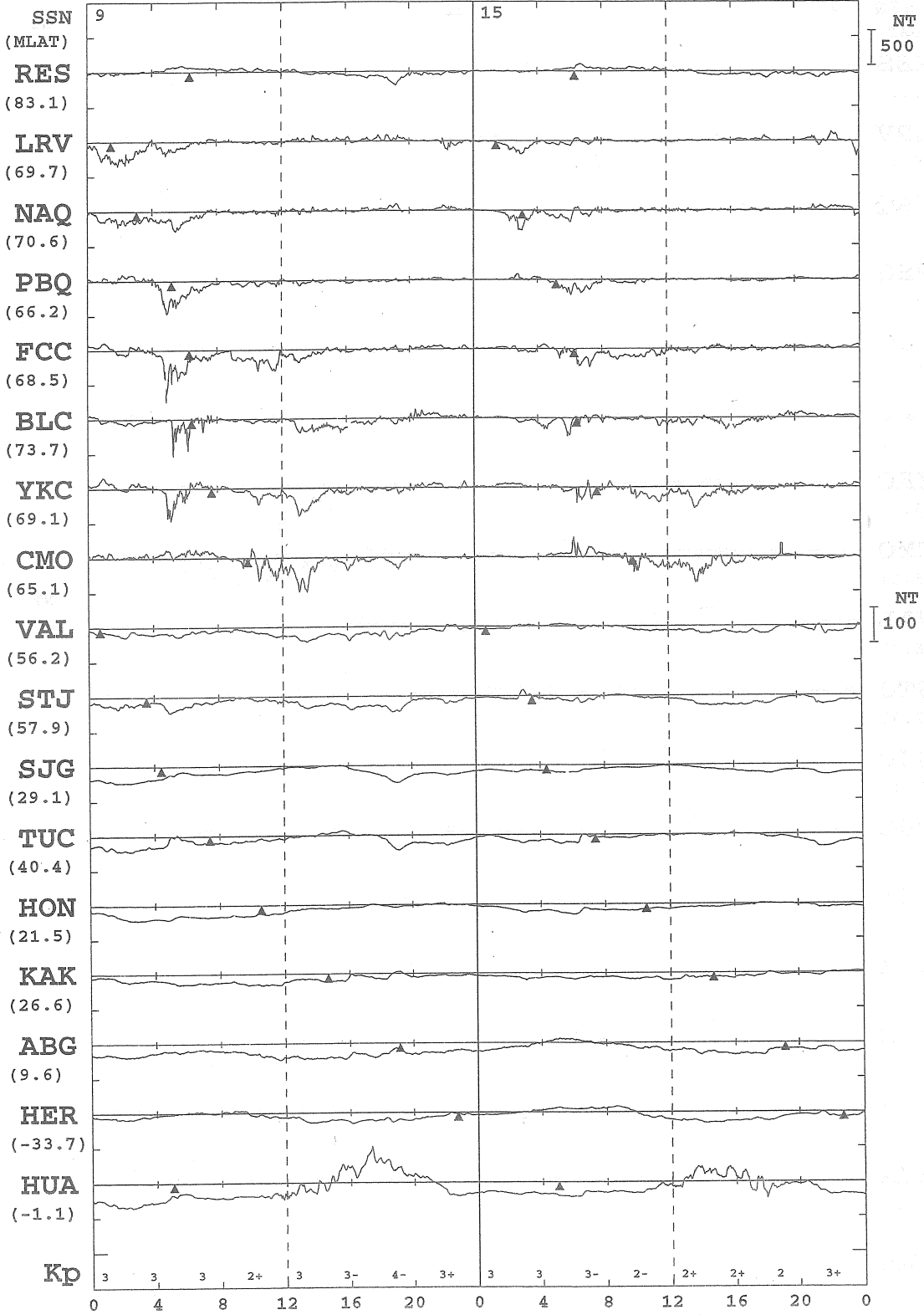
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



DEC 7
(DAY 342)

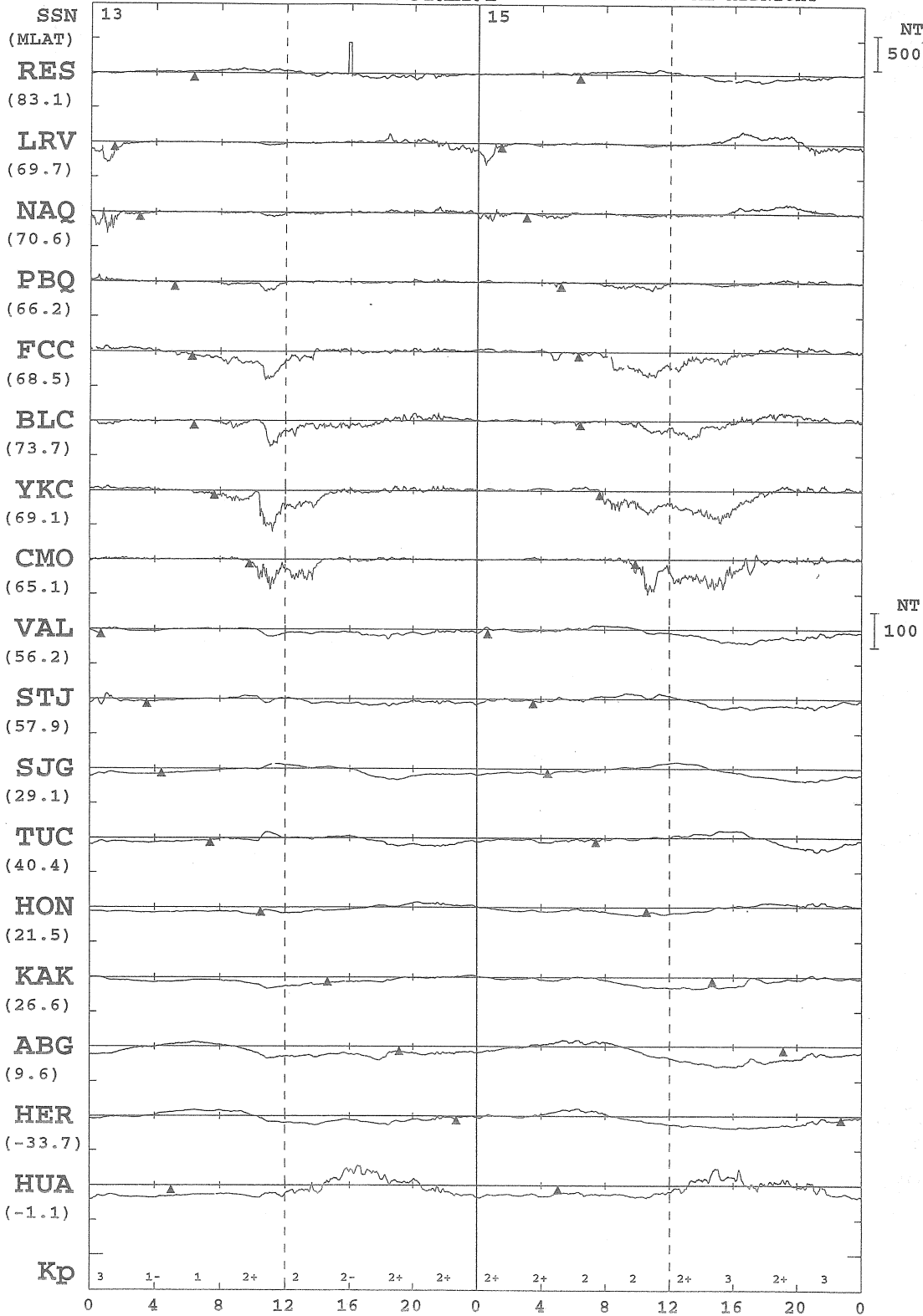
DEC 8
(DAY 343)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

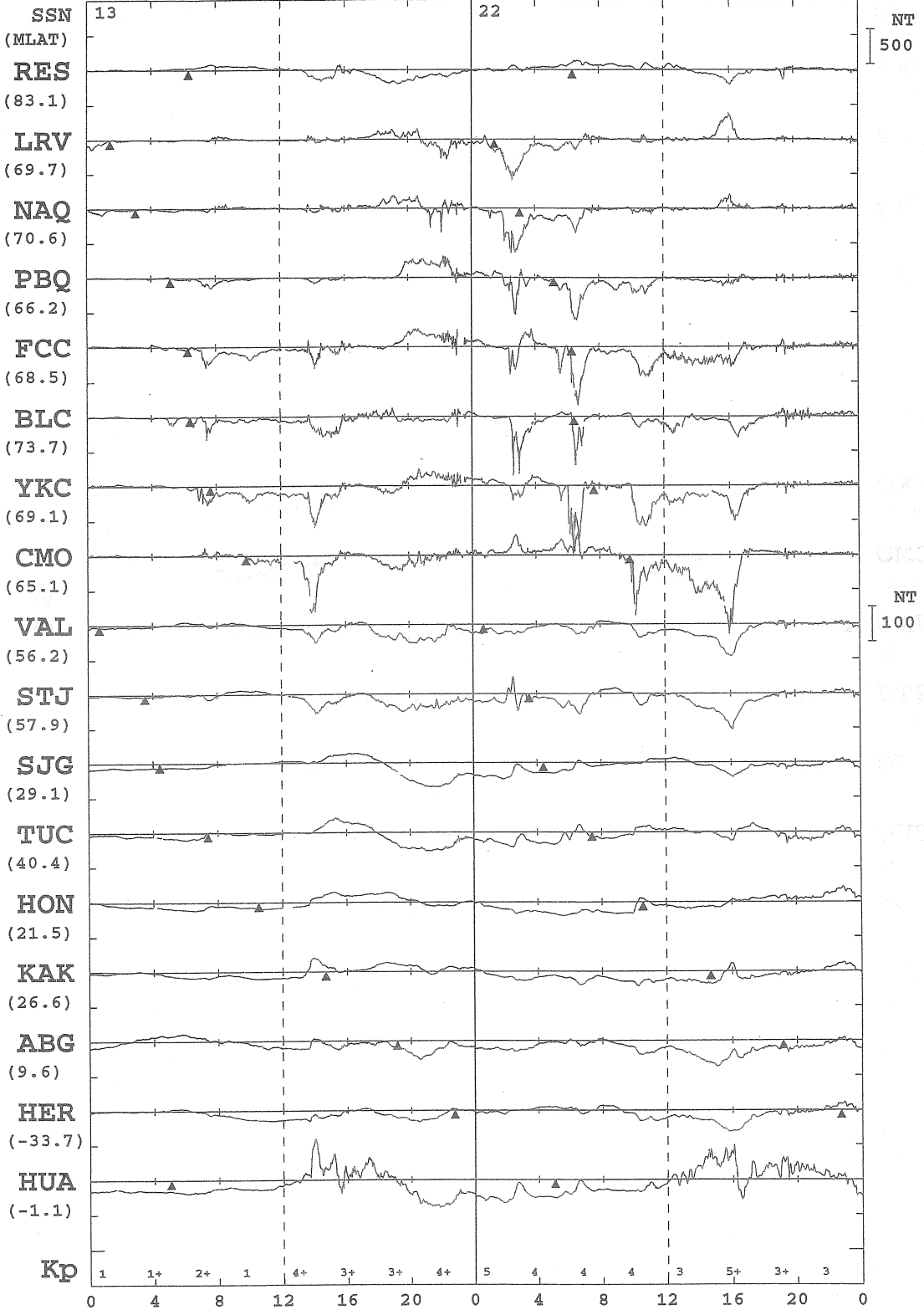


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

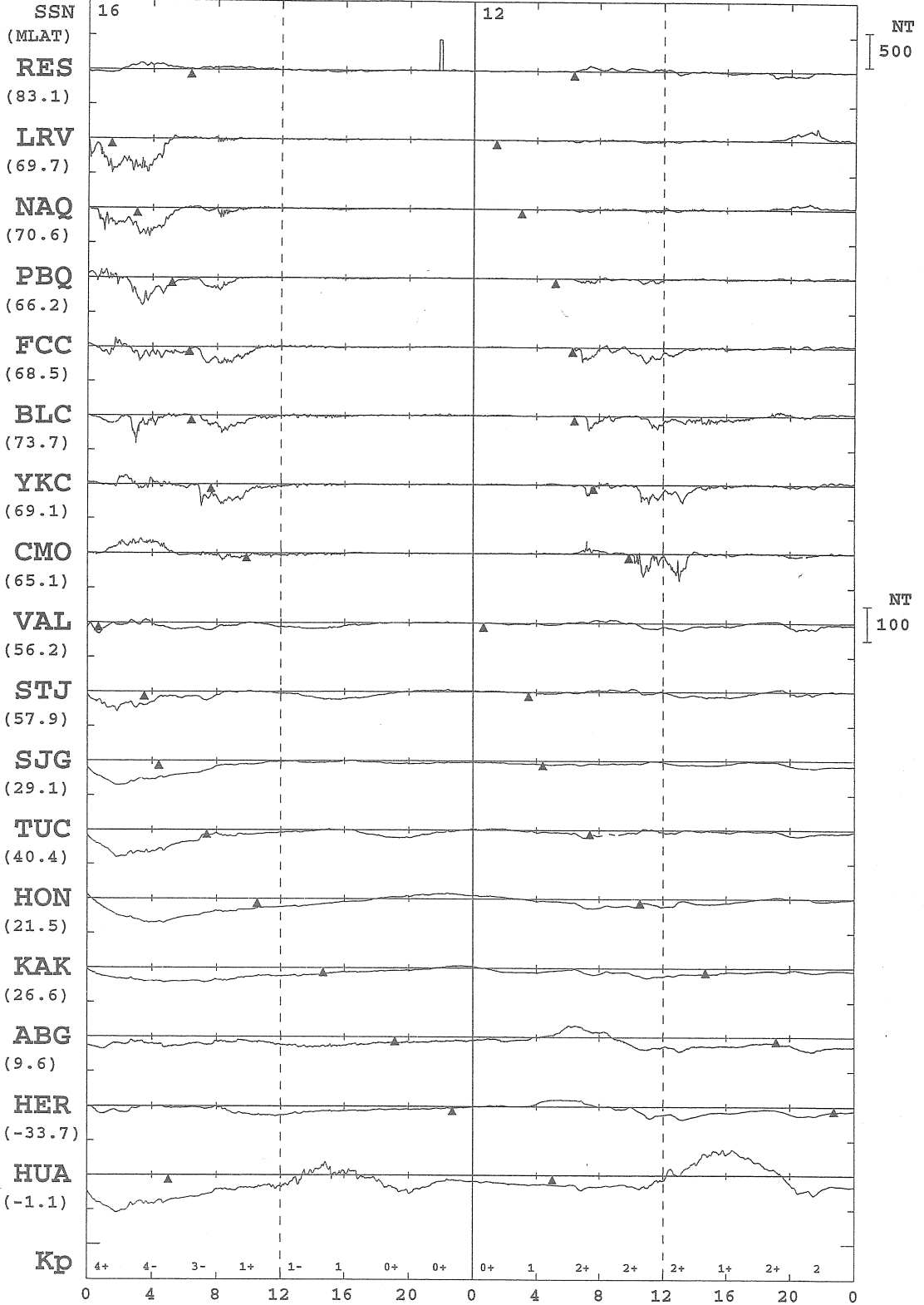
▲ : LOCAL MIDNIGHT



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

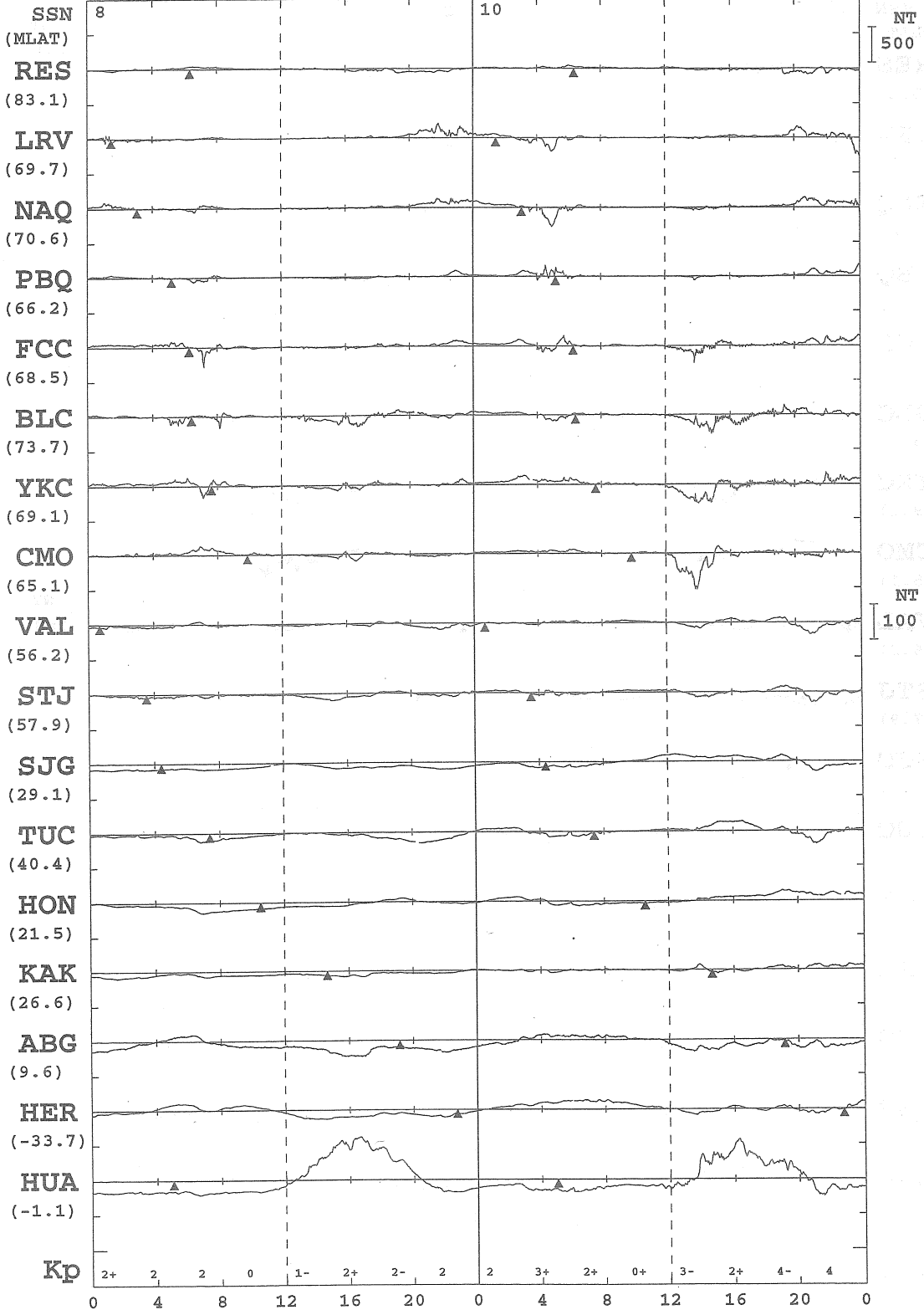
KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

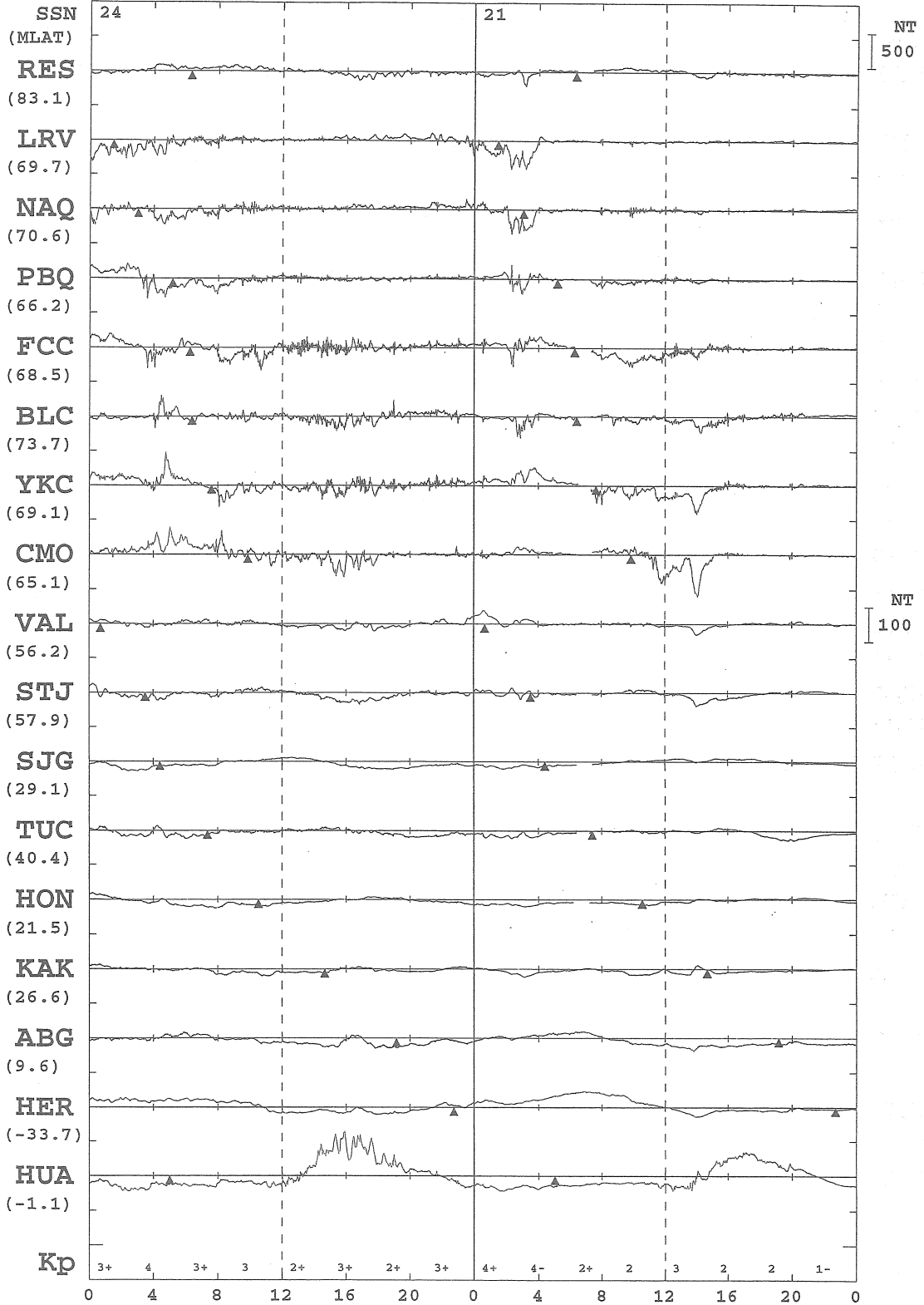


DEC 15 (DAY 350) DEC 16 (DAY 351)

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

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



DEC 17
(DAY 352)

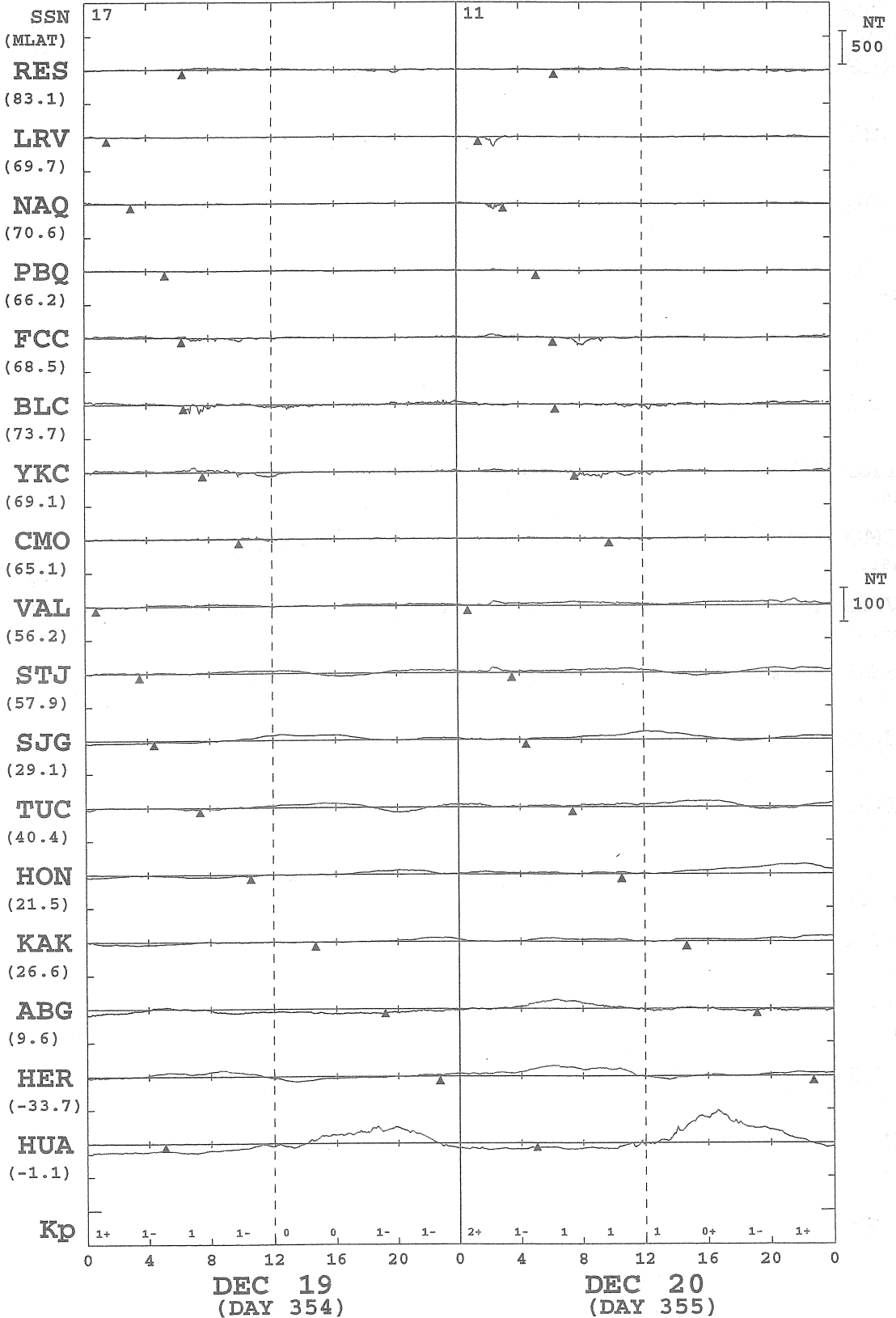
DEC 18
(DAY 353)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

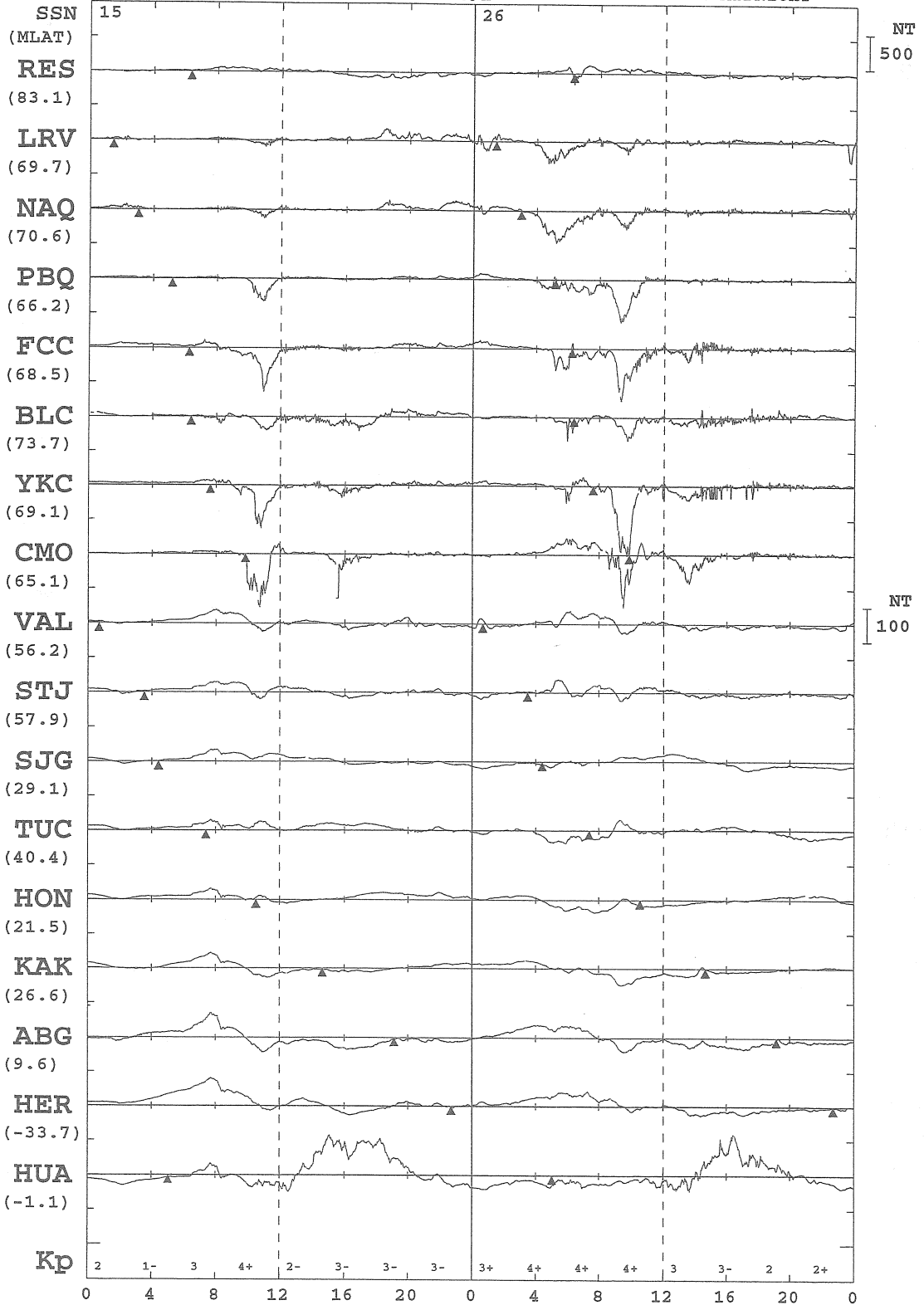


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



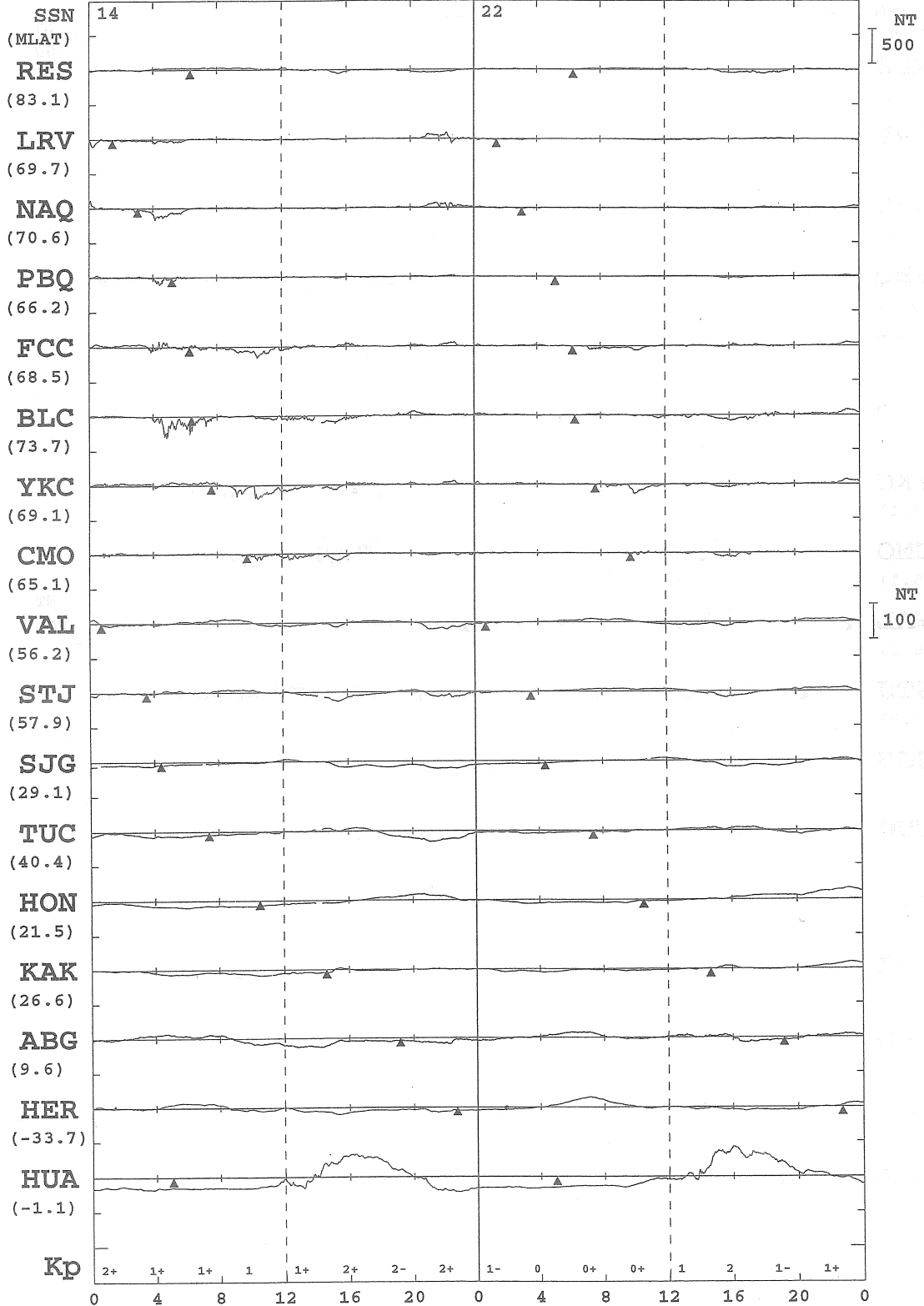
DEC 21
(DAY 356)

DEC 22
(DAY 357)

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

KYOTO UNIV.

2004 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



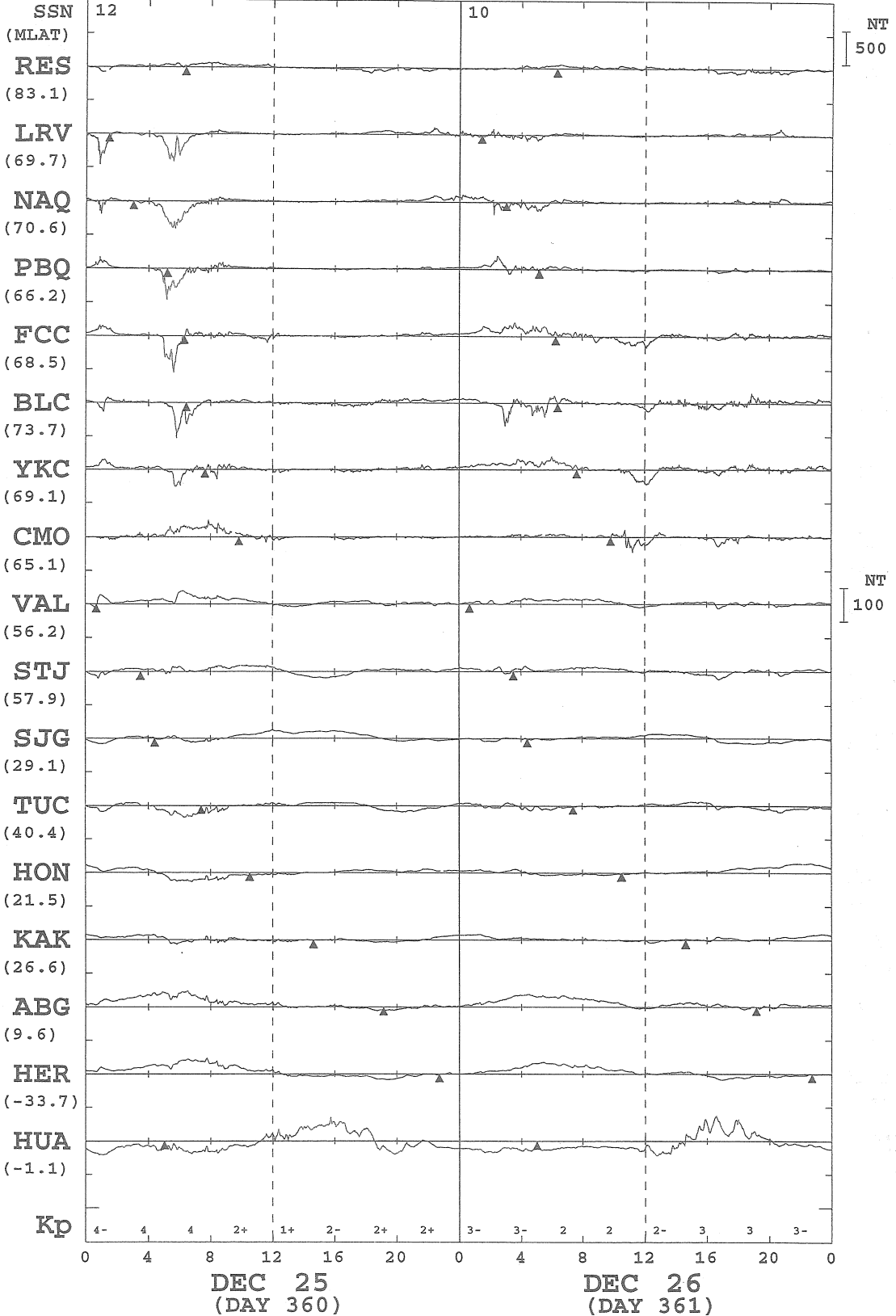
DEC 23 (DAY 358) DEC 24 (DAY 359)

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

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

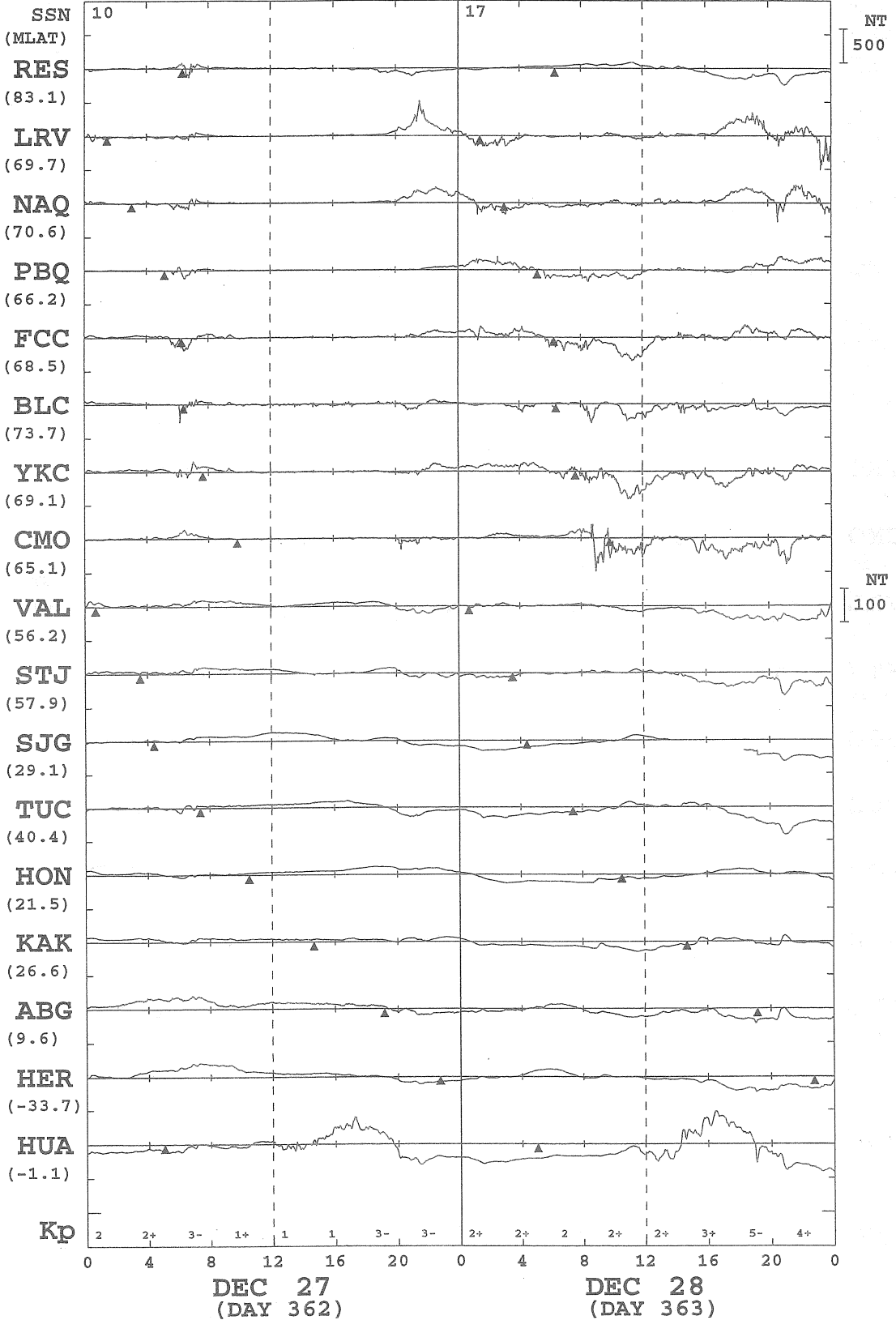


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

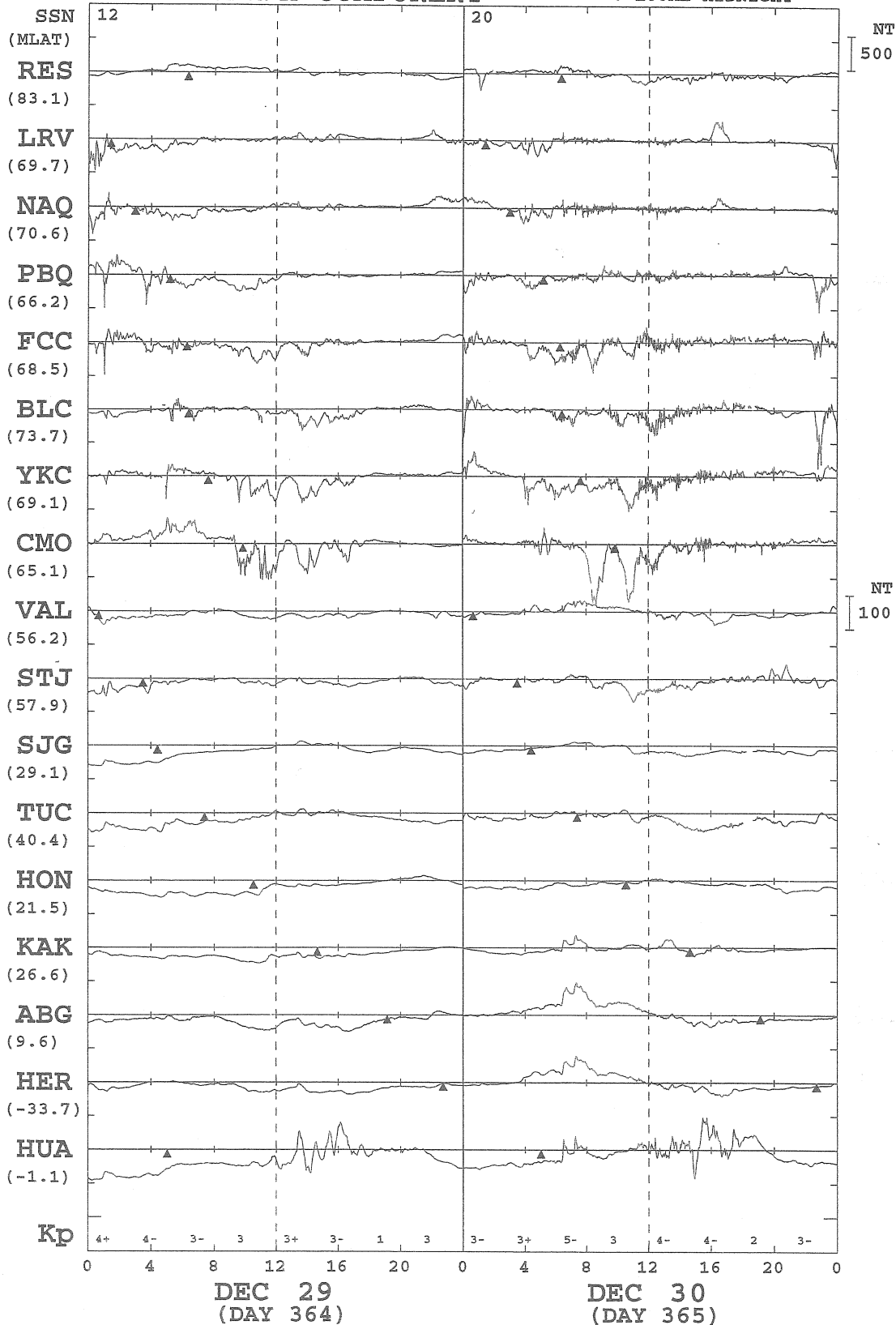


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

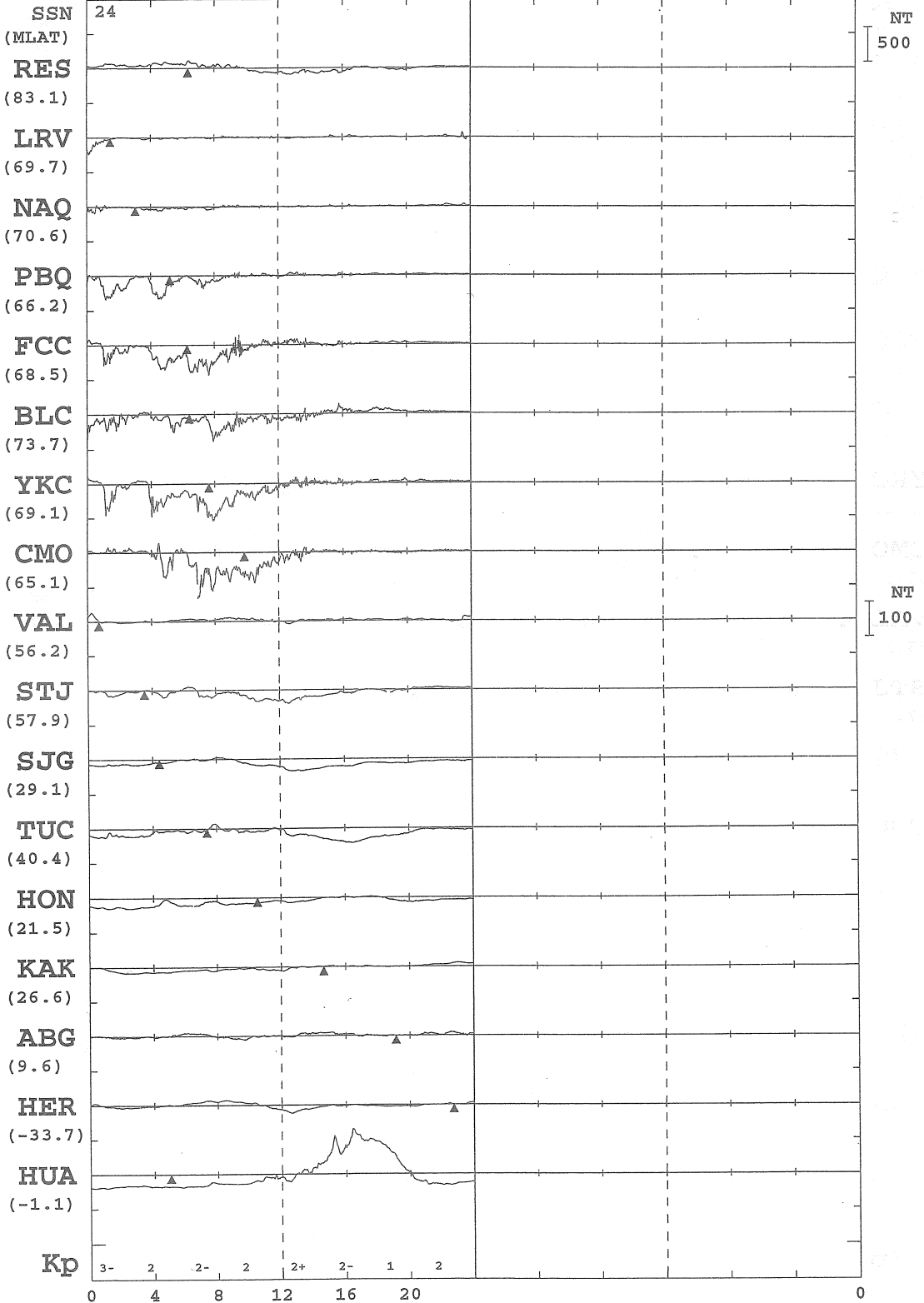


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISE HAS NOT BEEN ELIMINATED

KYOTO UNIV.

2004 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



DEC 31
(DAY 366)

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

KYOTO UNIV.

