

PROVISIONAL GEOMAGNETIC
DATA PLOTS
NO.27

(January - June, 2003)

August 2003

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 January - June, 2003 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 Seismological Bureau and Xinjiang Province Seismological Bureau

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, 030501-02.ps.gz for May 1-2, 2003). Each file contains the plot of the each page of this booklet. Files should be transferred in binary mode and uncompressed.

The users who need further information or the digital data should consult to:

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.

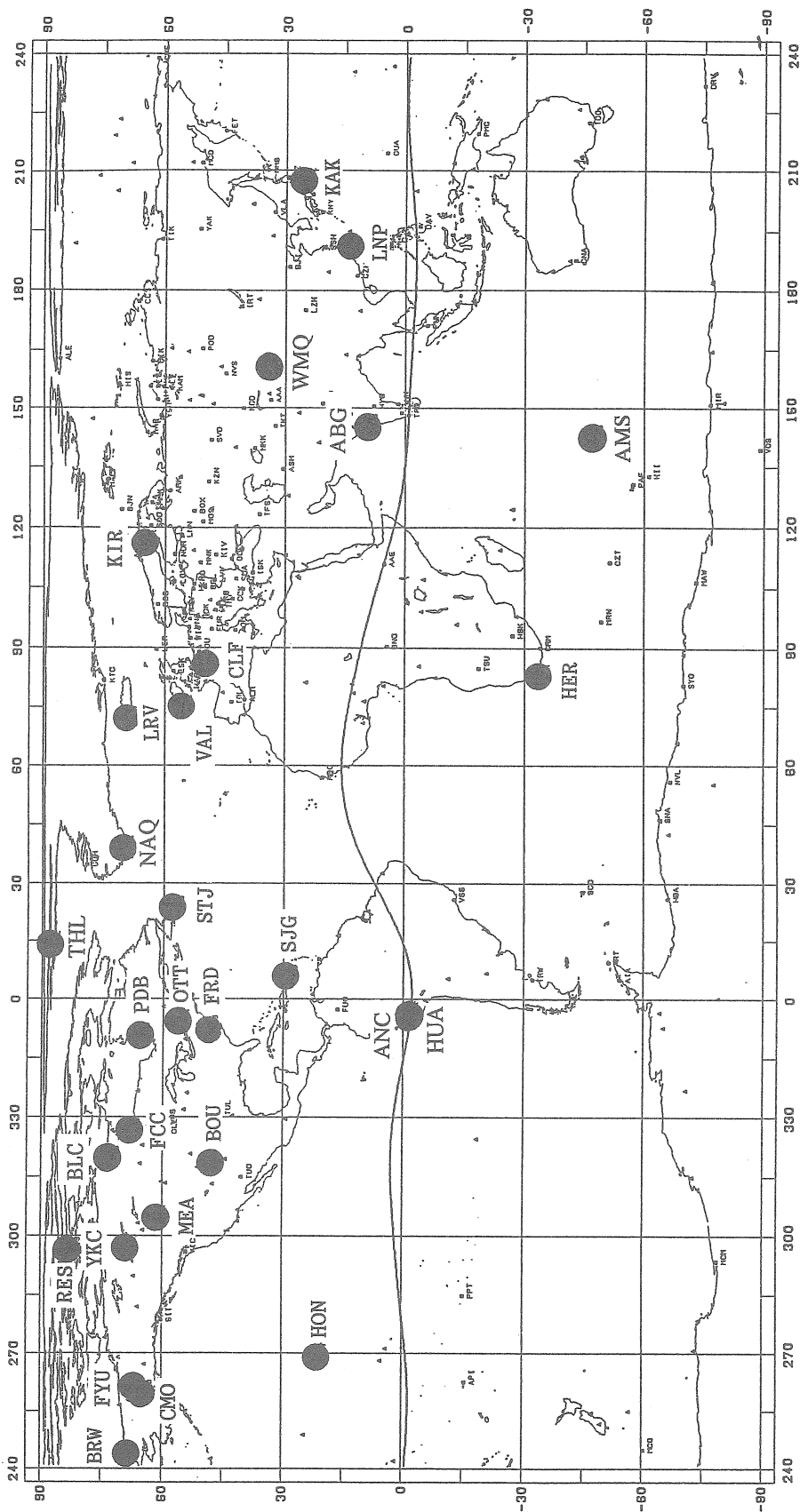
STATION NAME	ABB CODE	ORG No.	GEOGRAPHIC		GEOMAGNETIC		INVARIANT PLOT	
			LAT.	LONG.	LAT.	LONG.	LAT.	SCALE
*Tule	THL	9	76.6	291.2	87.2	12.4	85.9	500nT/div
*Resolute Bay	RES	1	74.7	265.1	83.1	296.0	83.9	"
*Baker Lake	BLC	1	64.3	264.0	73.7	319.2	74.6	"
*Narssarsuaq	NAQ	9	61.2	314.6	70.6	38.7	67.5	"
Leirvogur	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	"
*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 13640451 and 127008 under the Japan Society for Promotion of science (JSPS).

DISTRIBUTION OF GEOMAGNETIC OBSERVATORIES



GEOMAGNETIC COORDINATE (1985.0)

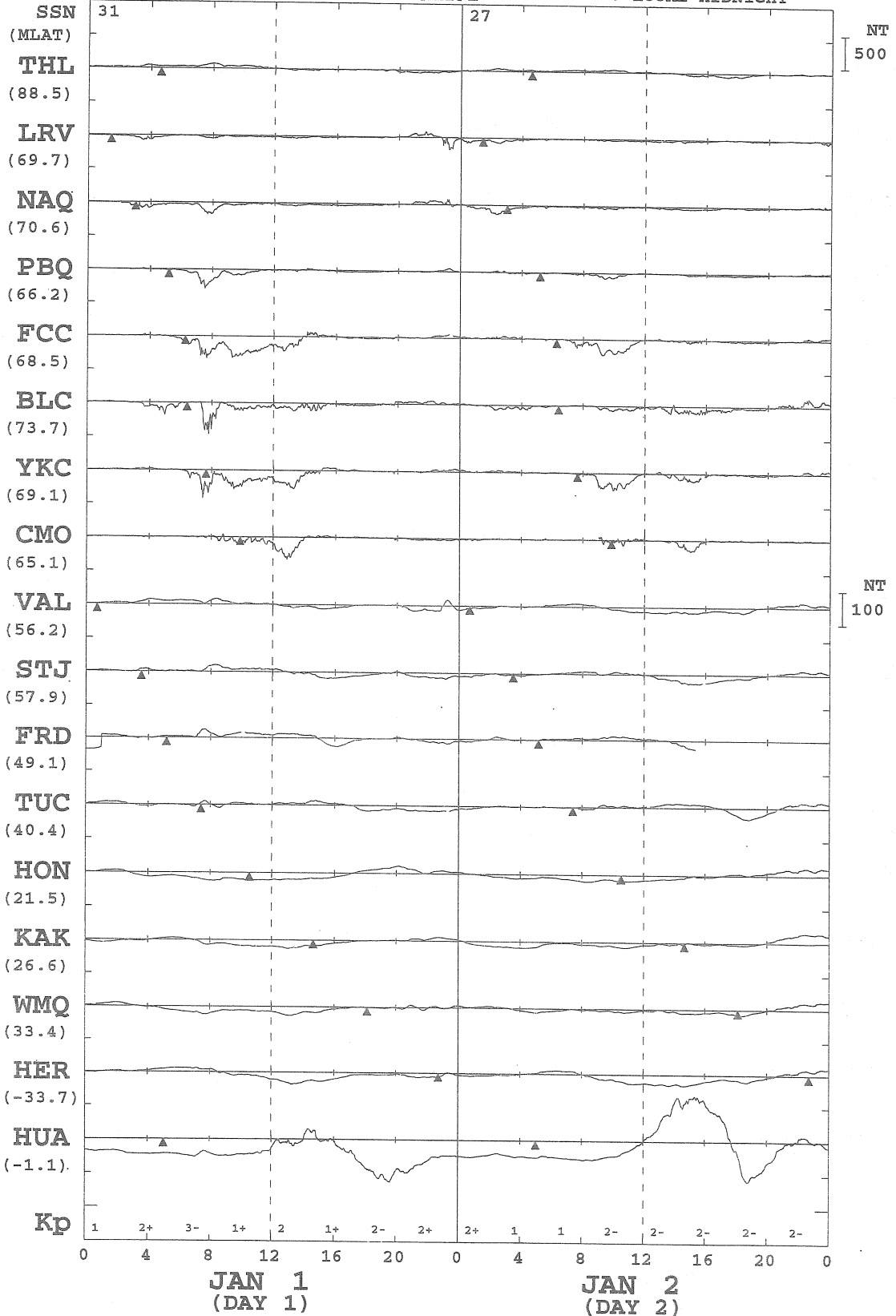
----- DIP EQUATOR AT 100 KM ALTITUDE

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.

January - June, 2003

2003 H OR X-COMPONENT

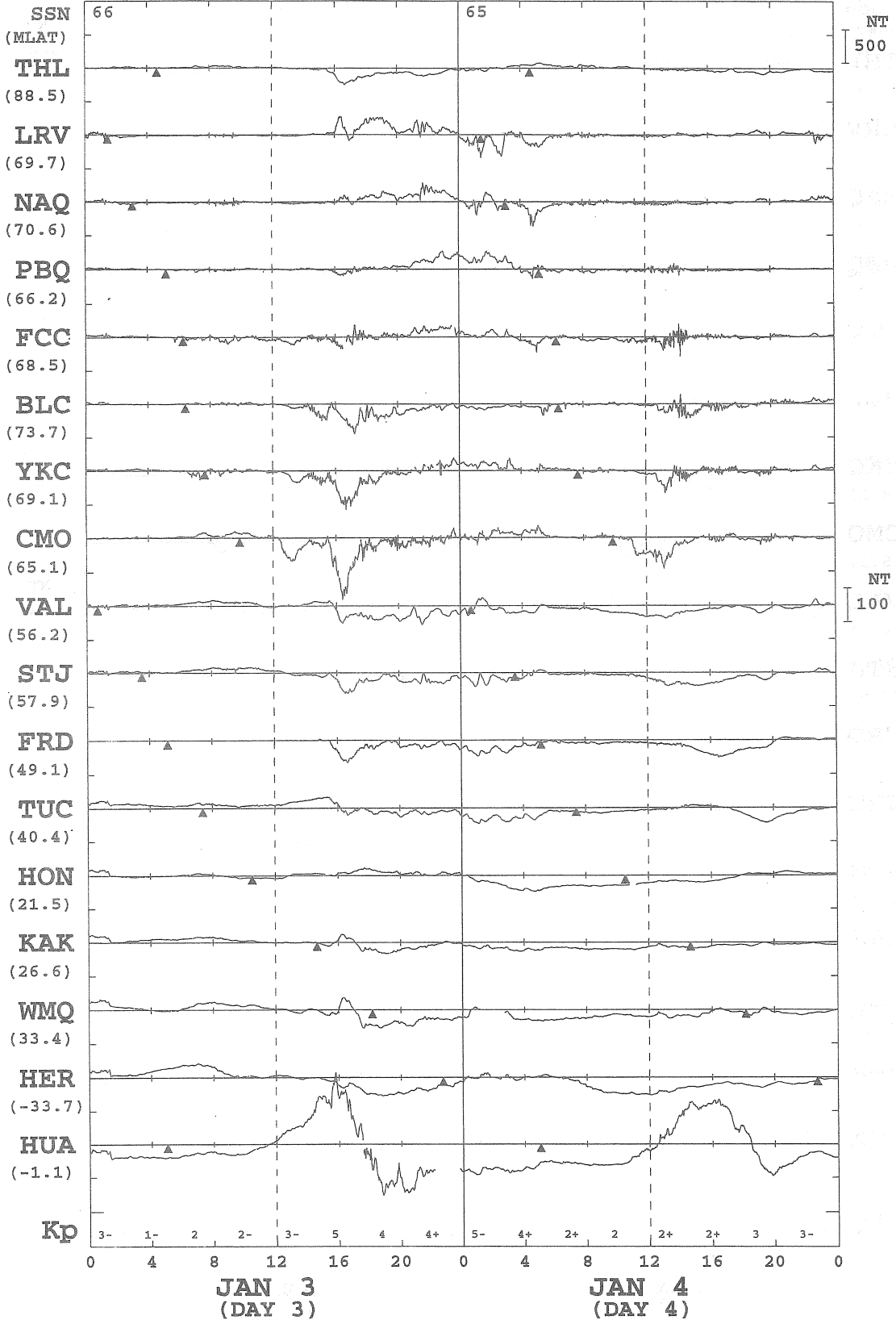
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

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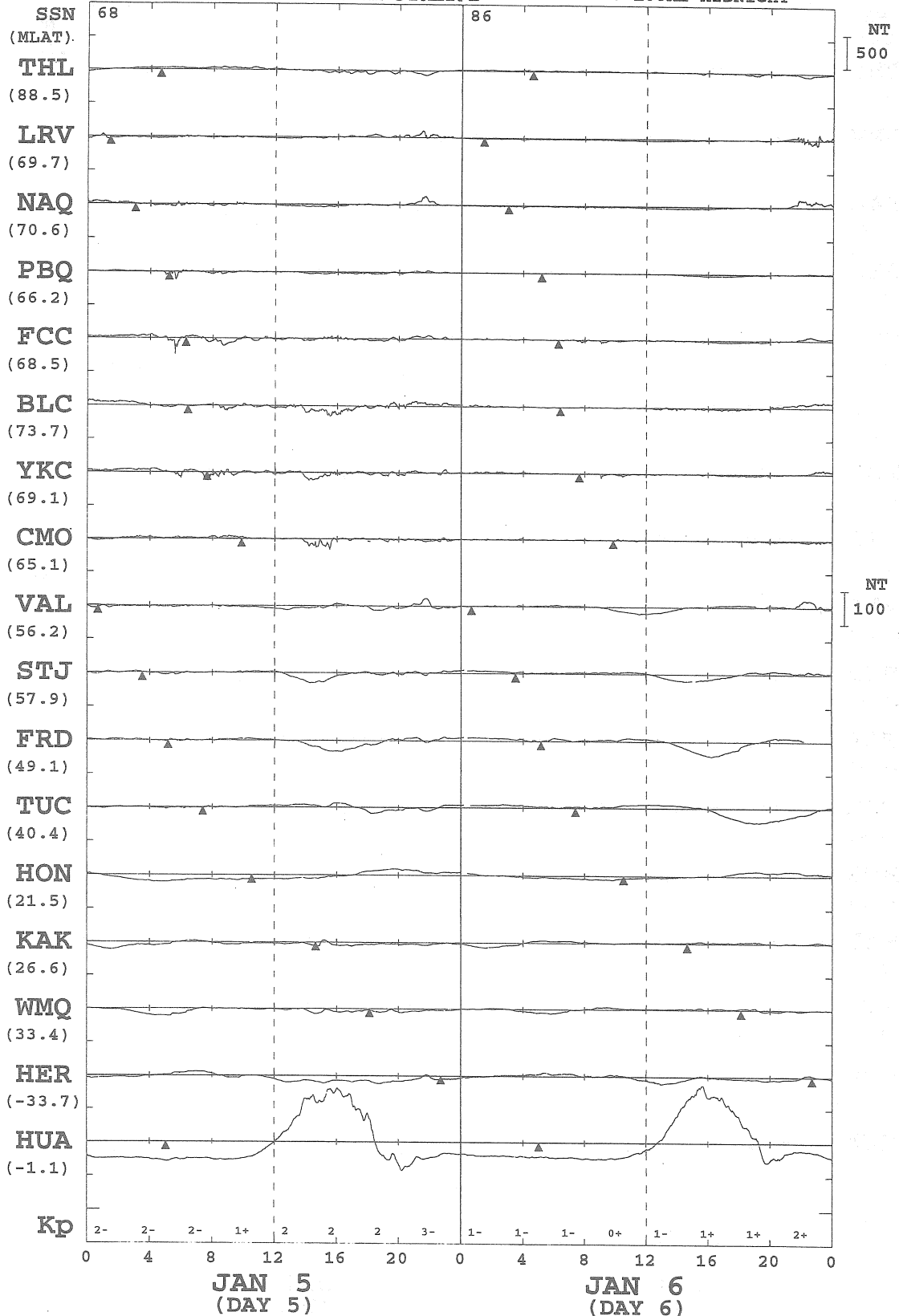


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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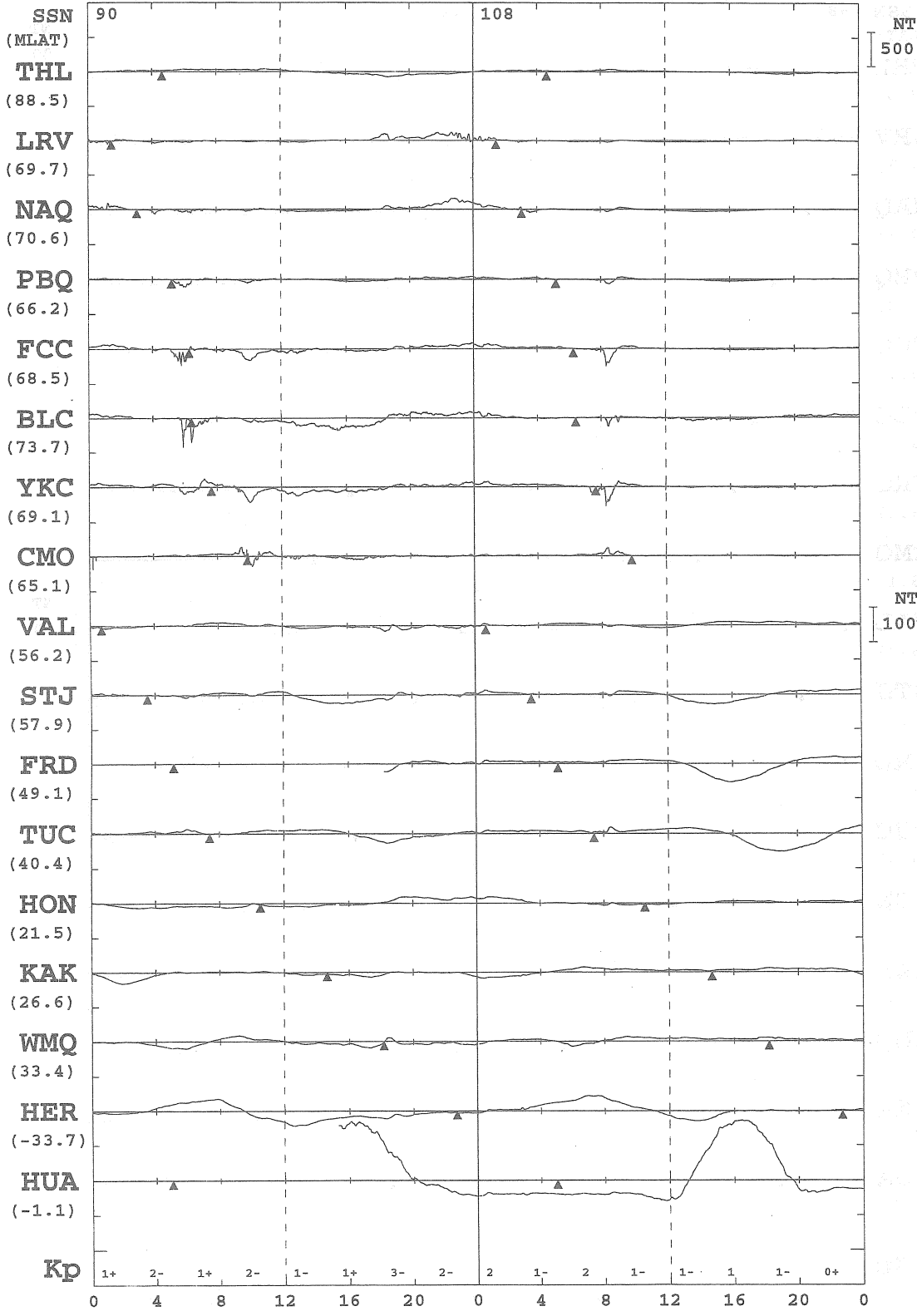
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* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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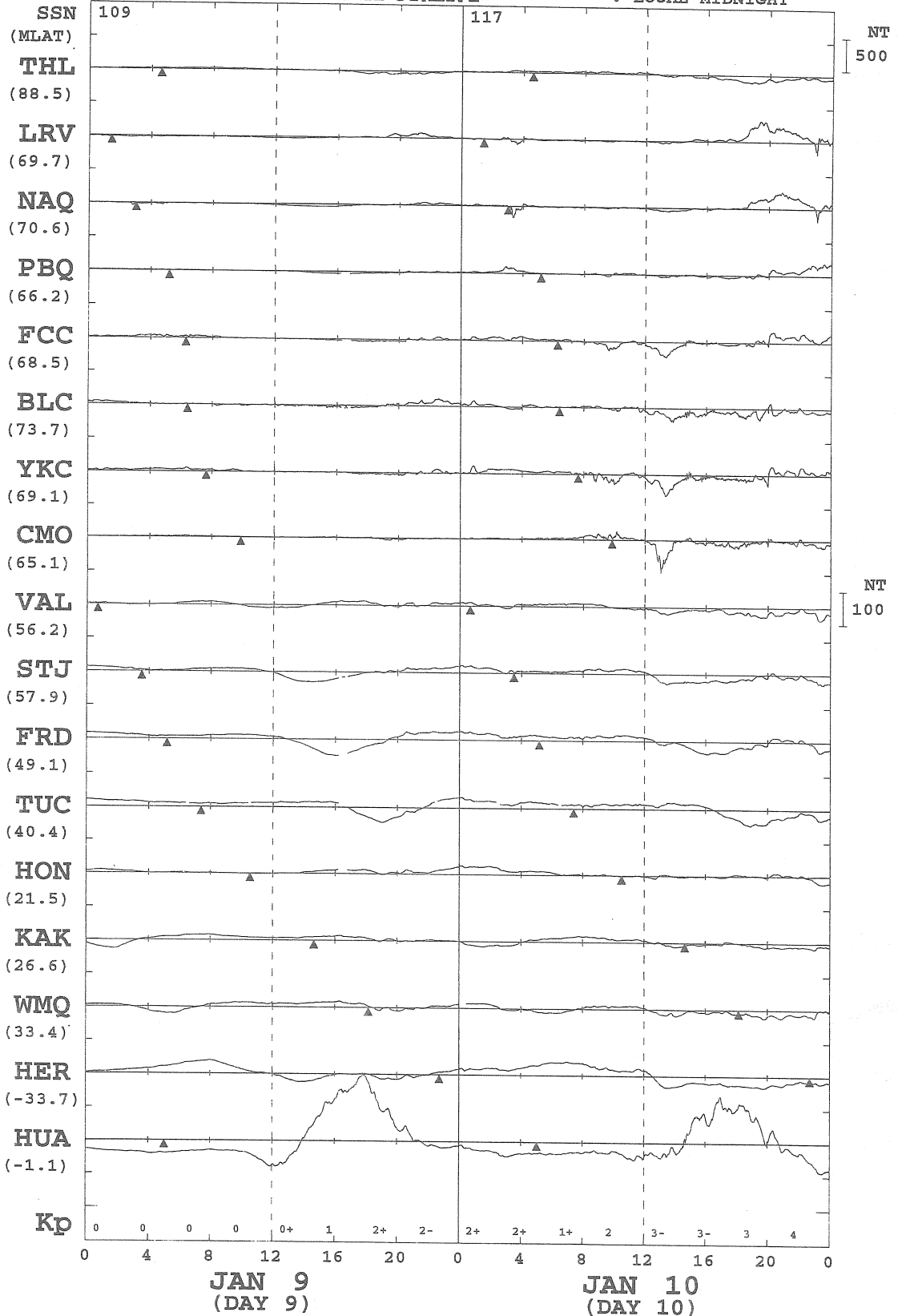
2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

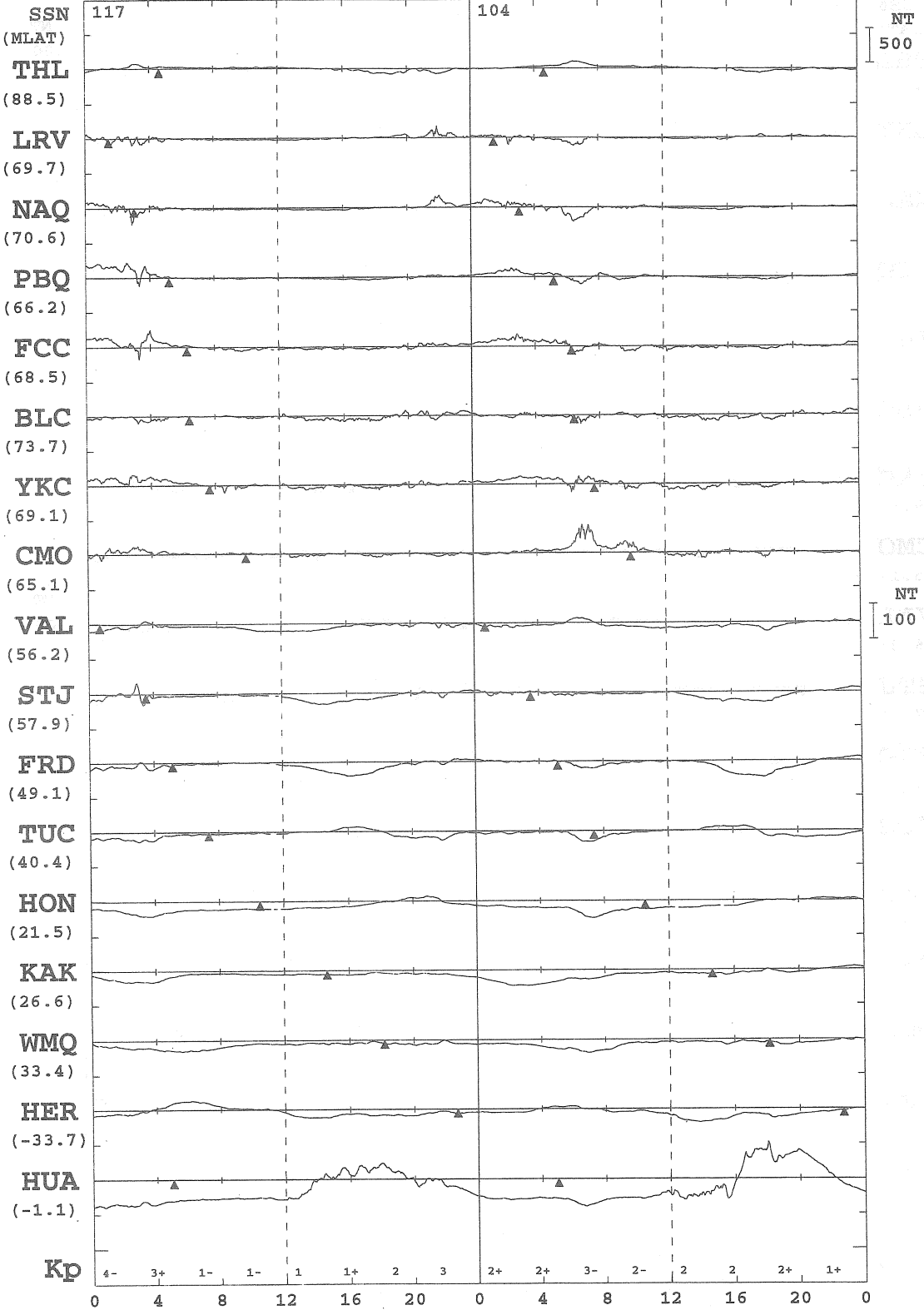


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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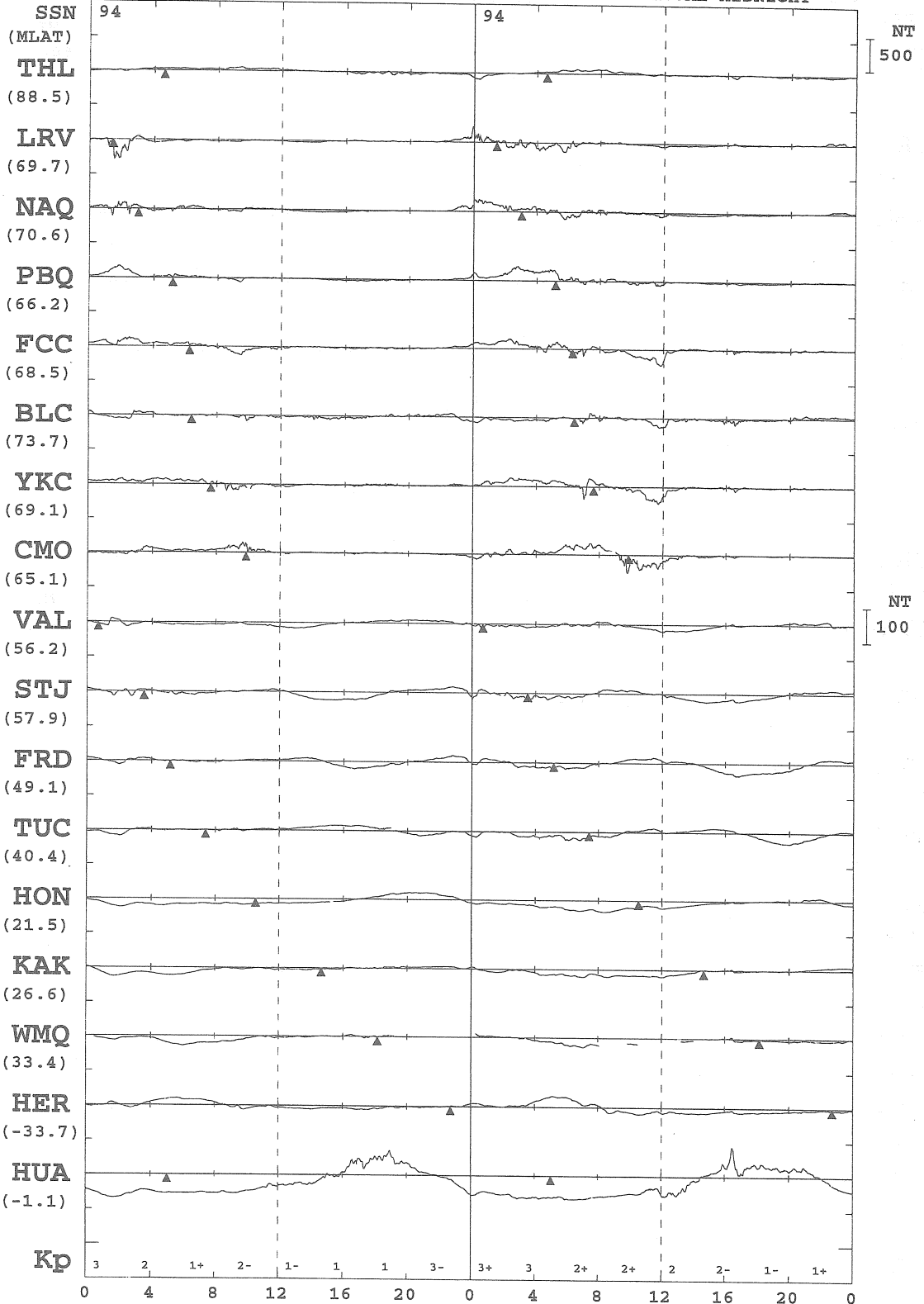


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▲ : LOCAL MIDNIGHT

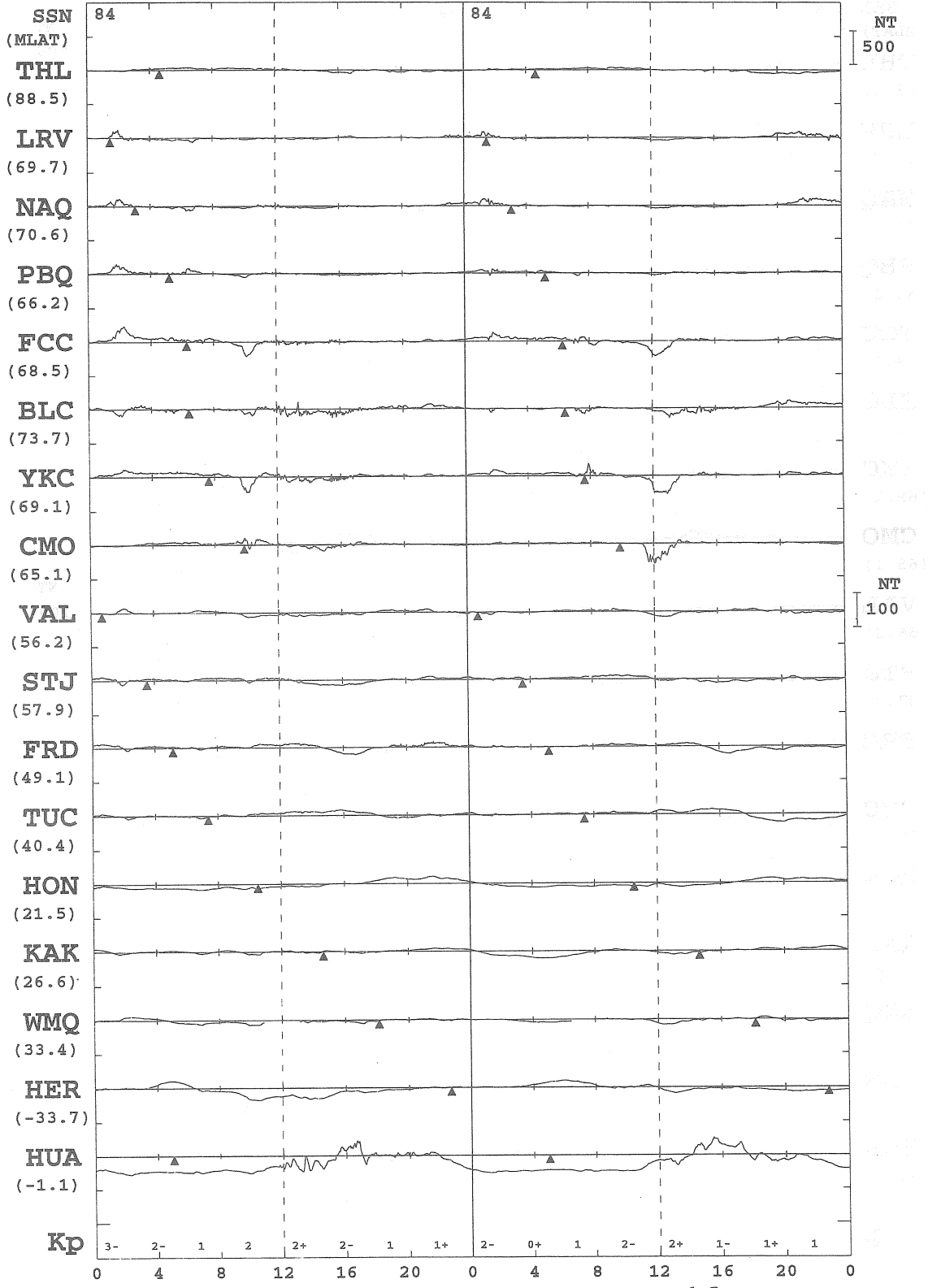


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▲ : LOCAL MIDNIGHT

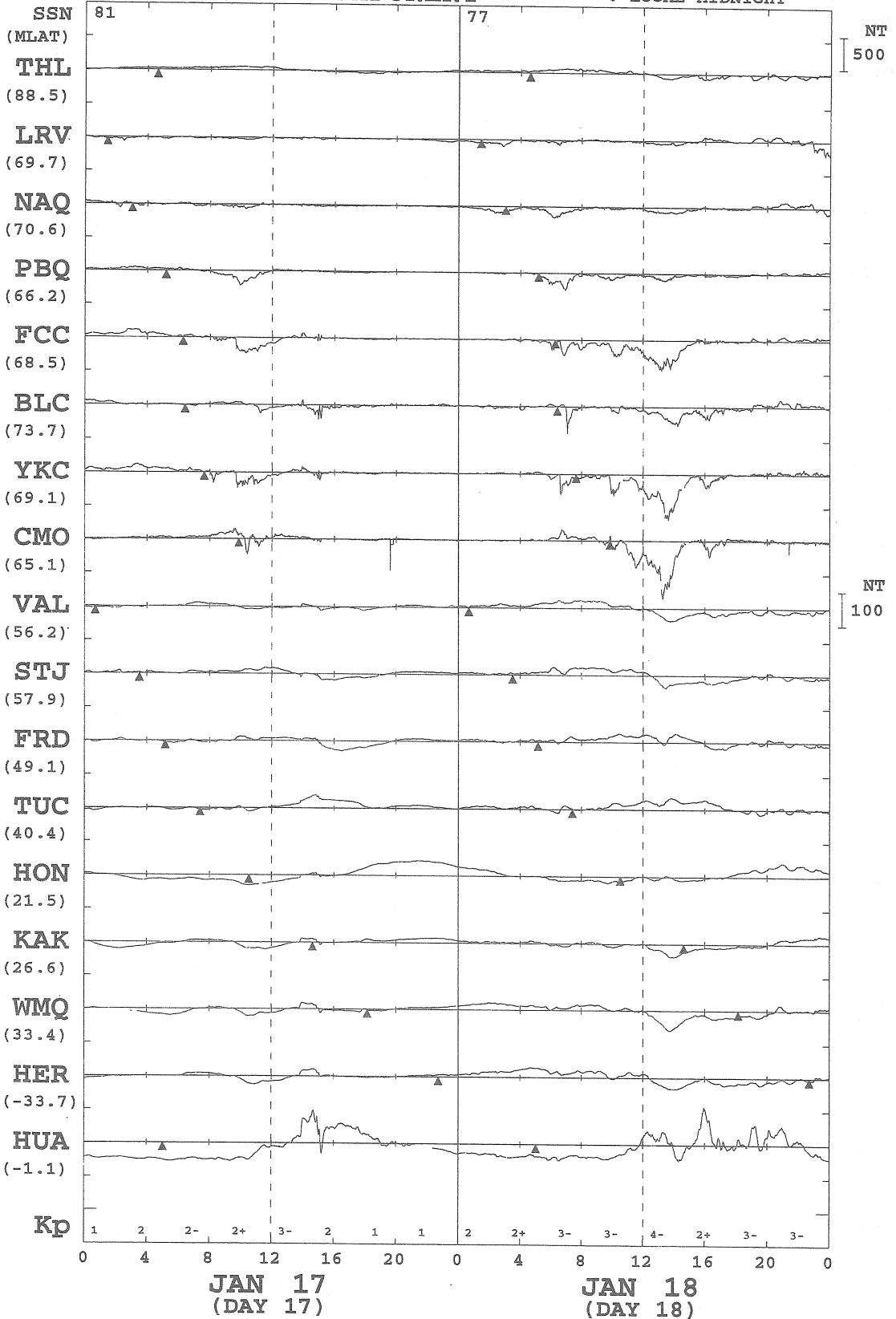


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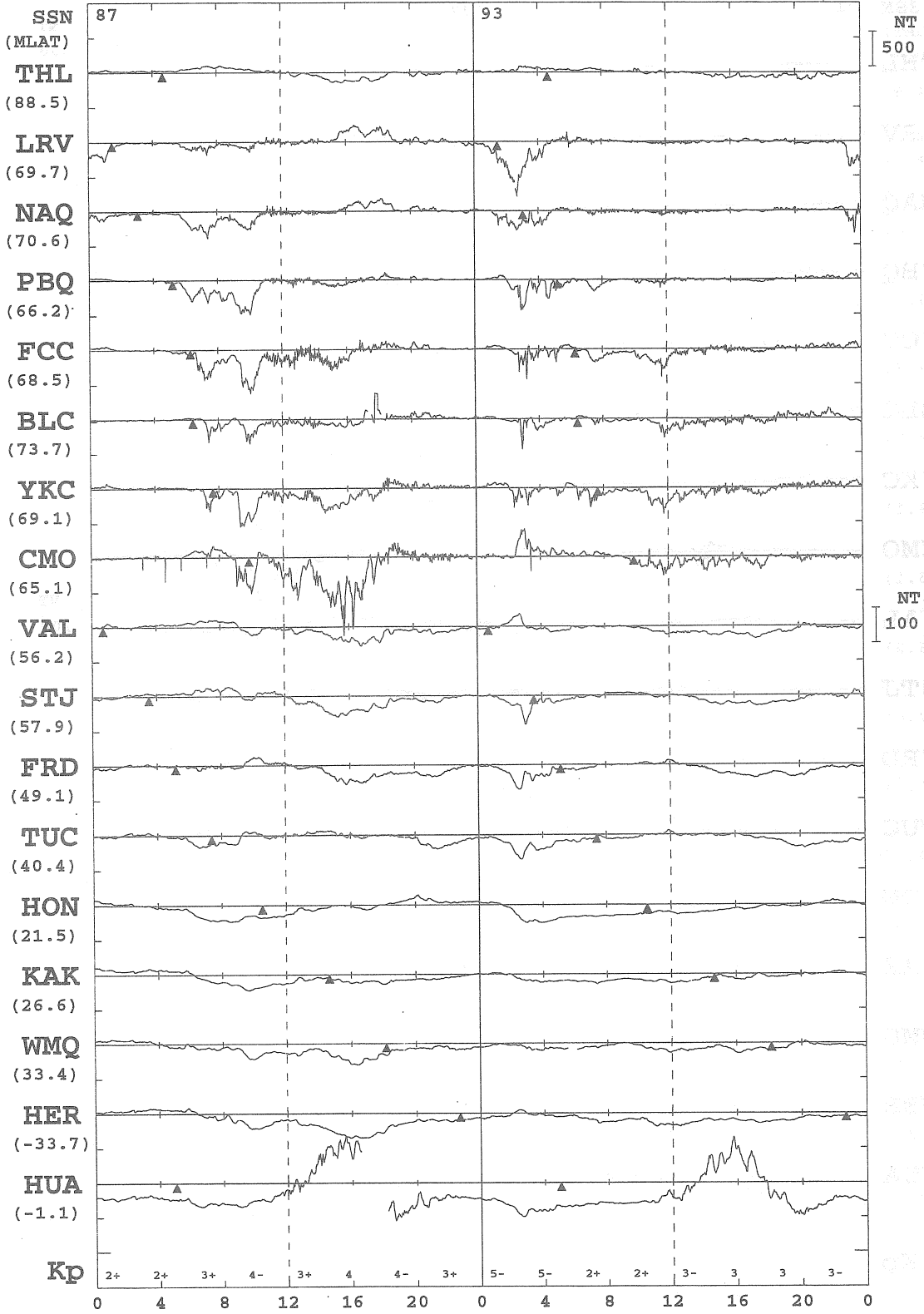
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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



JAN 19
(DAY 19)

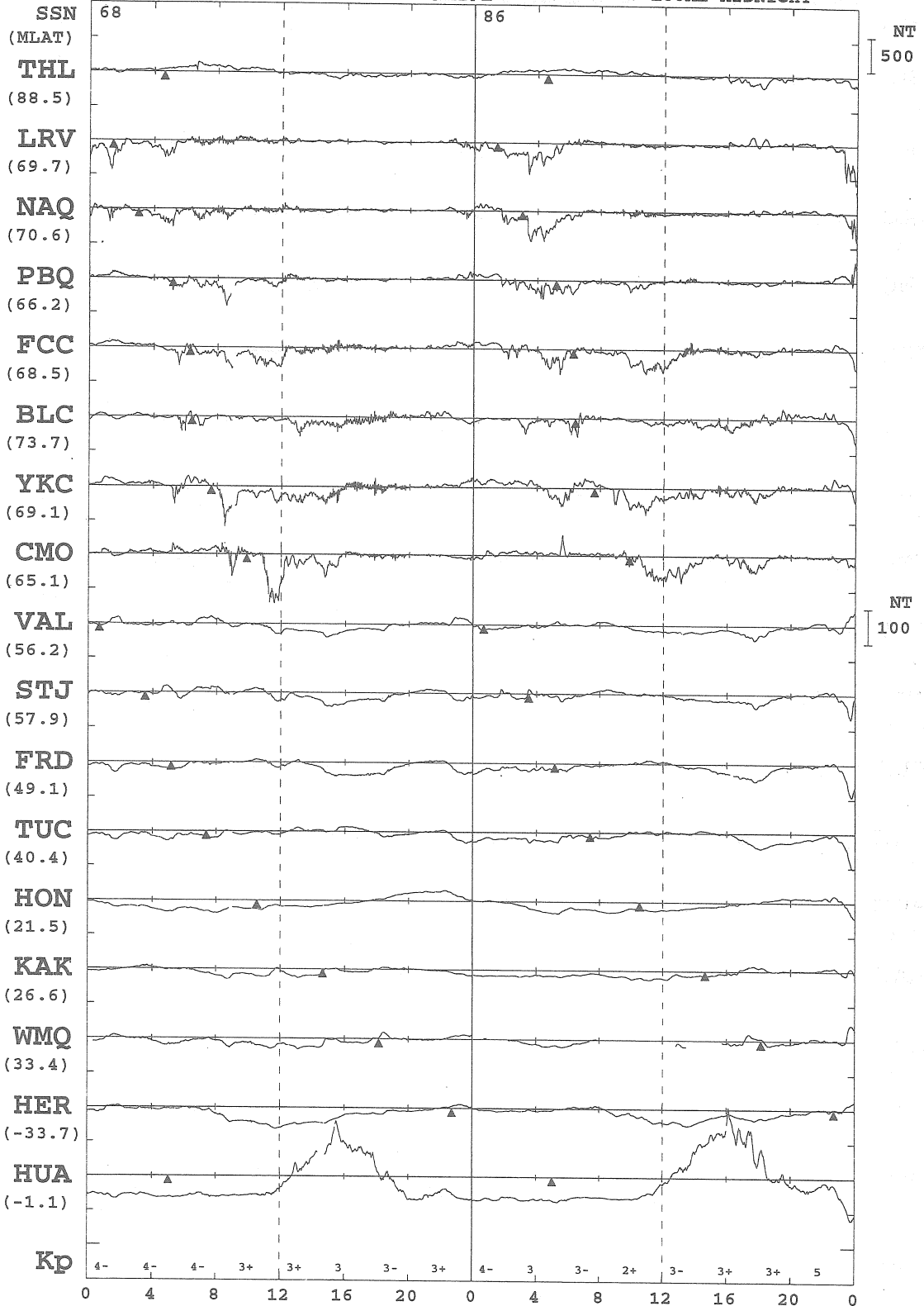
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(DAY 20)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JAN 21
(DAY 21)

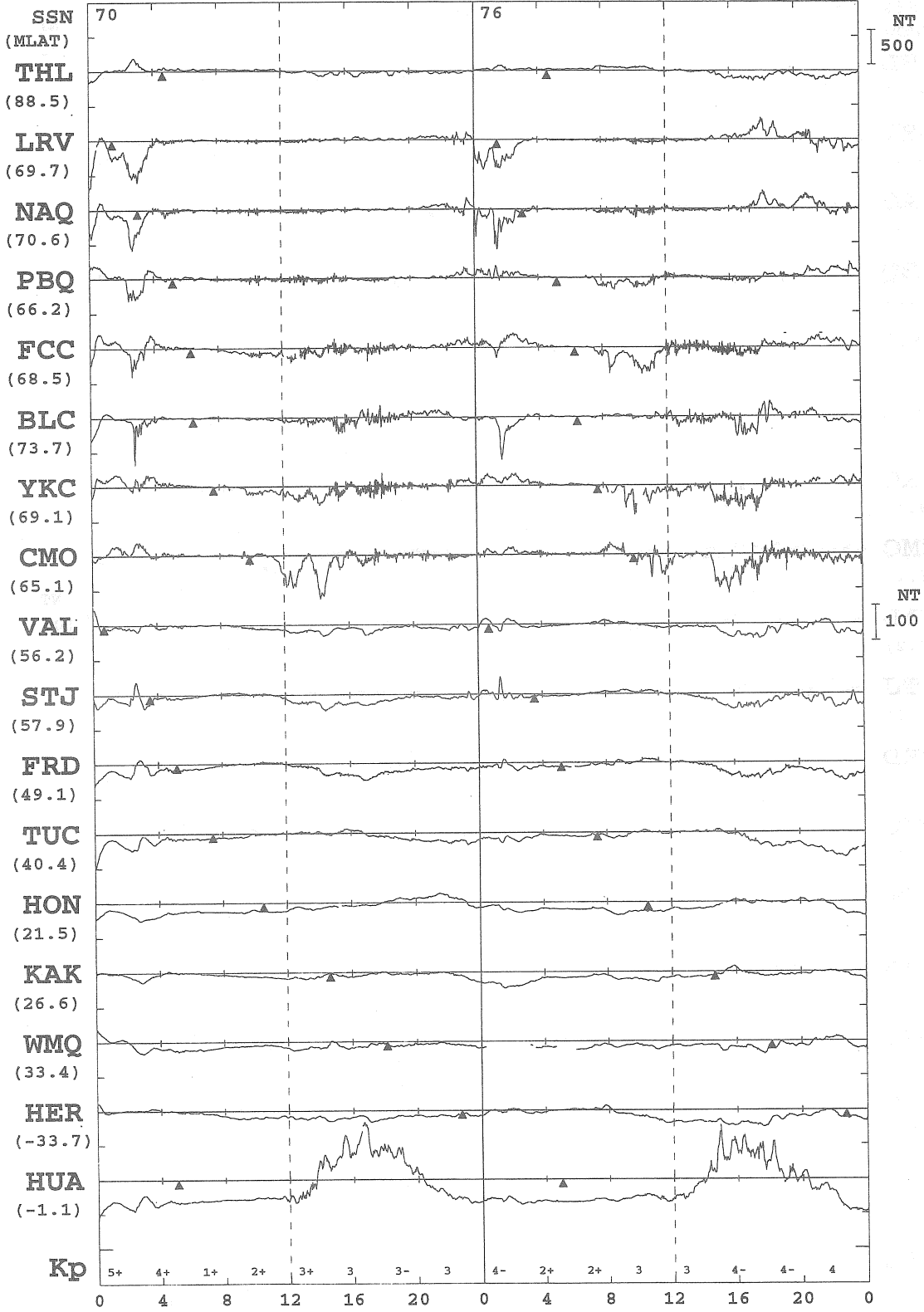
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(DAY 22)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

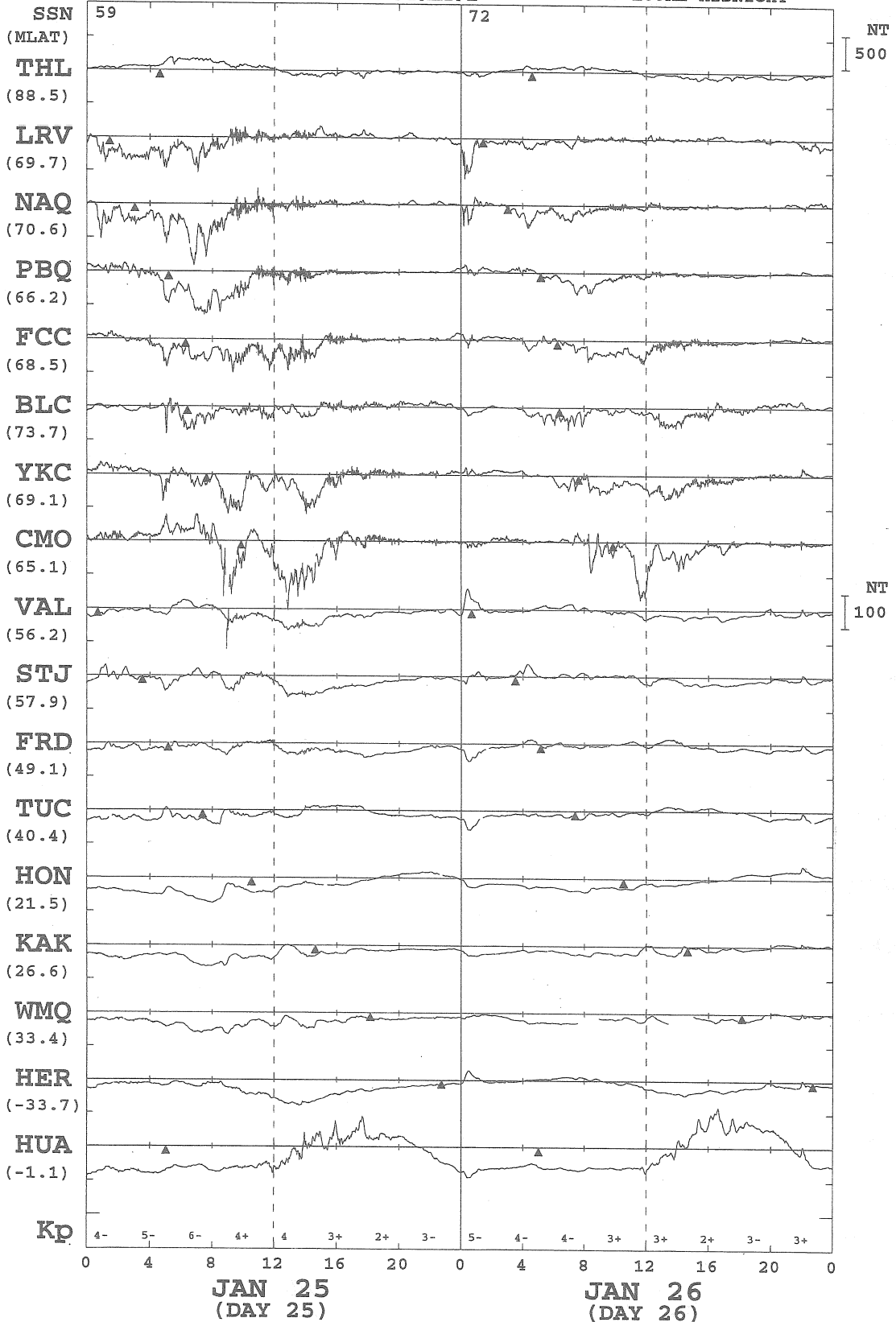


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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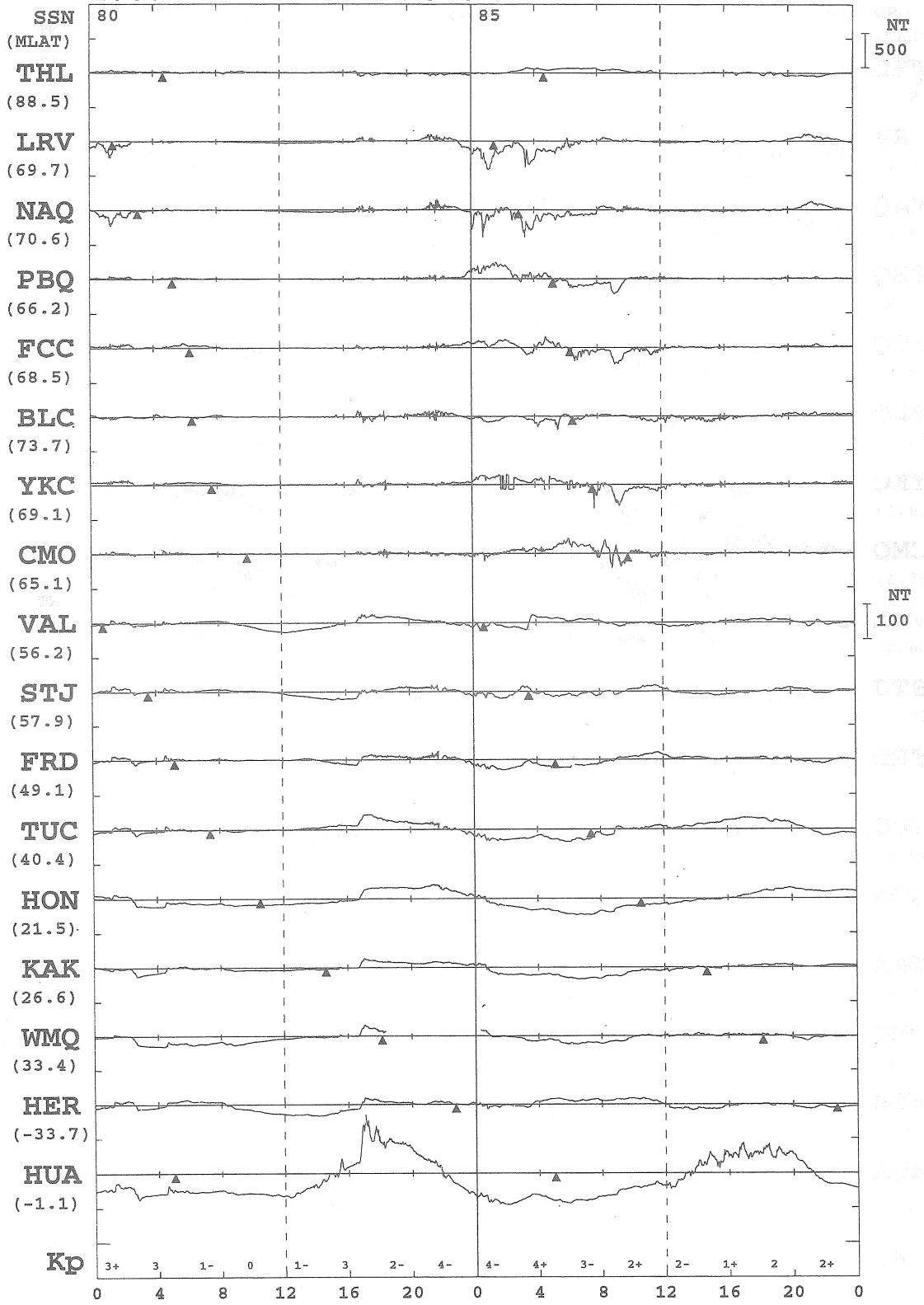
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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

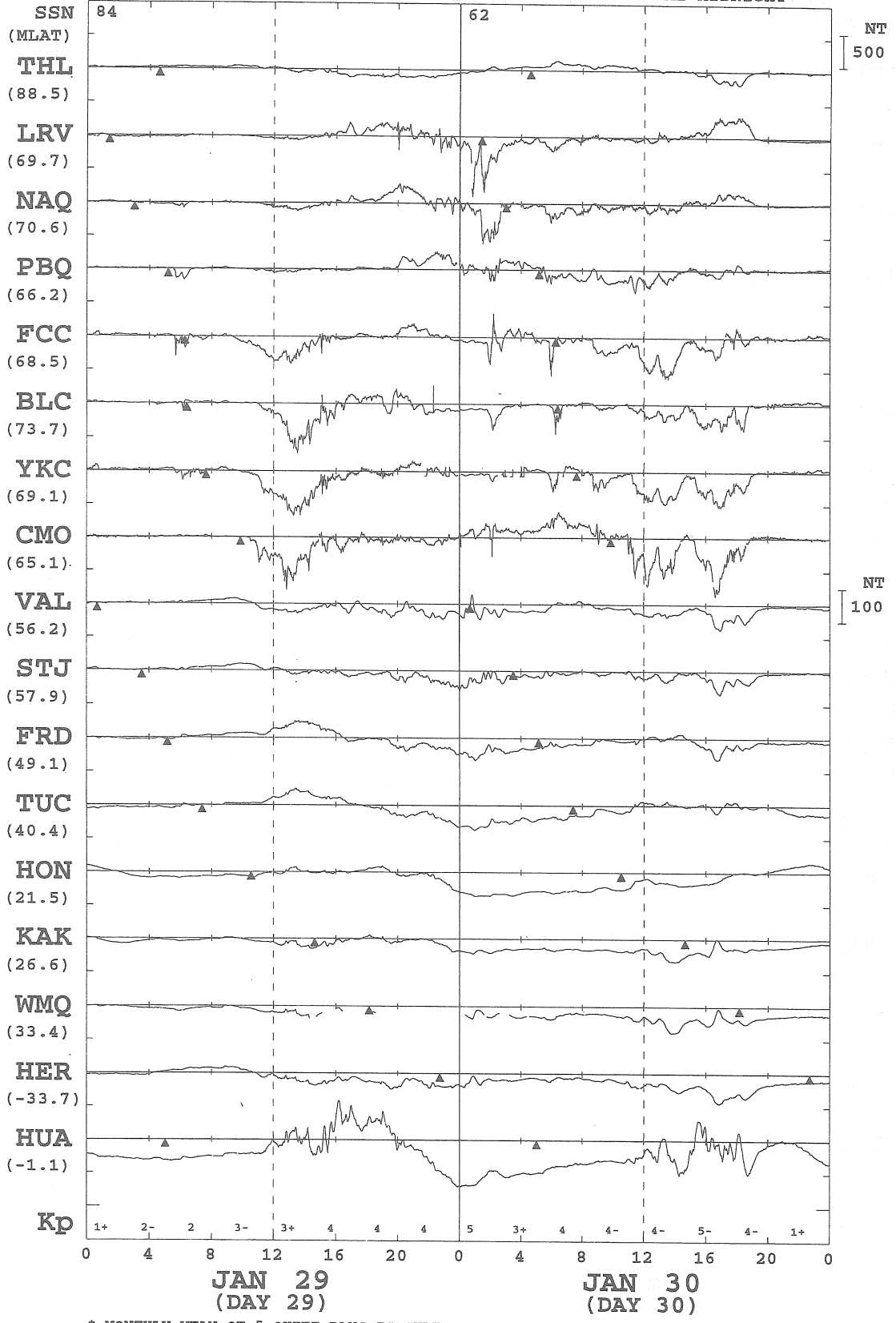


JAN 27 (DAY 27) JAN 28 (DAY 28)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

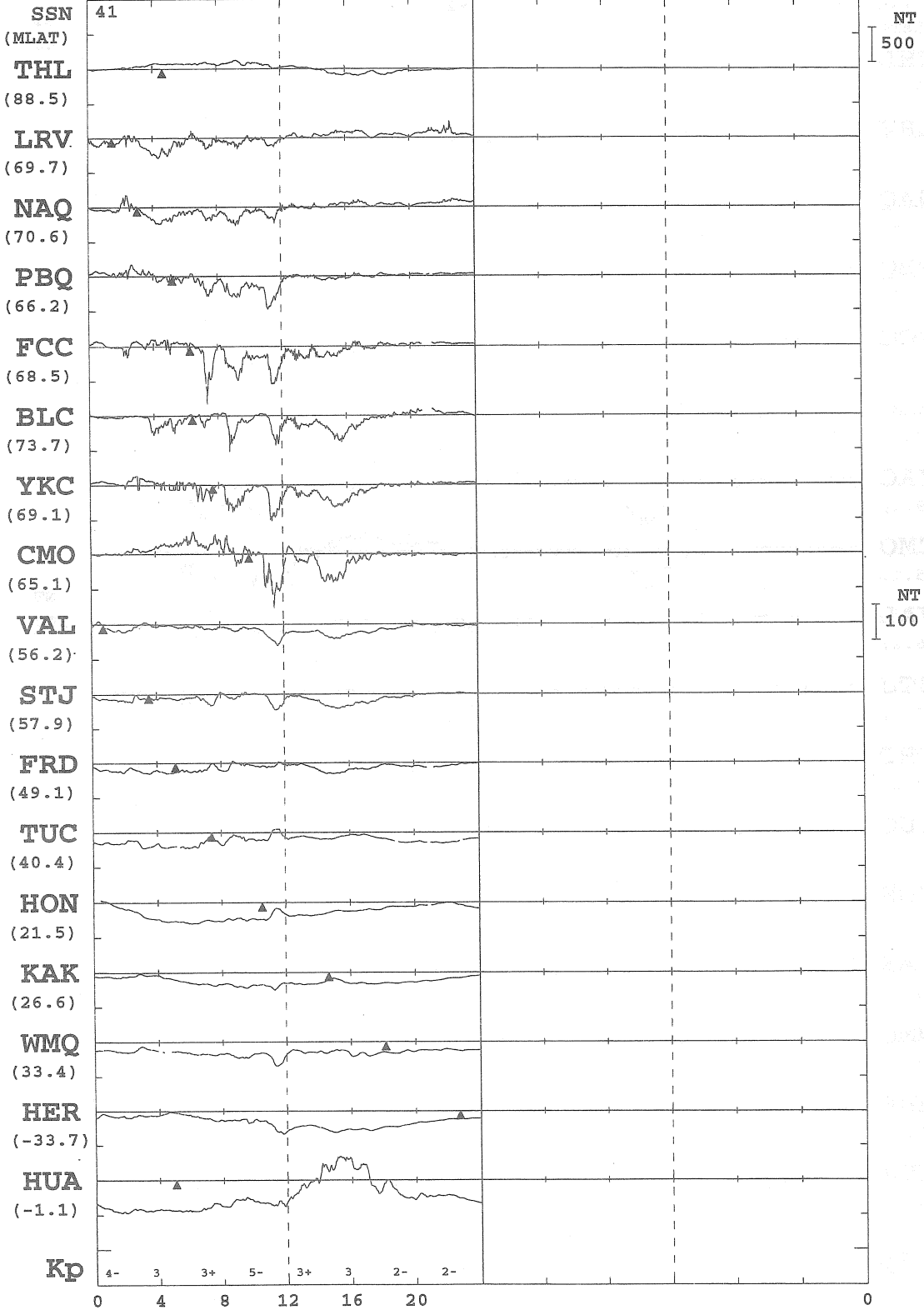


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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



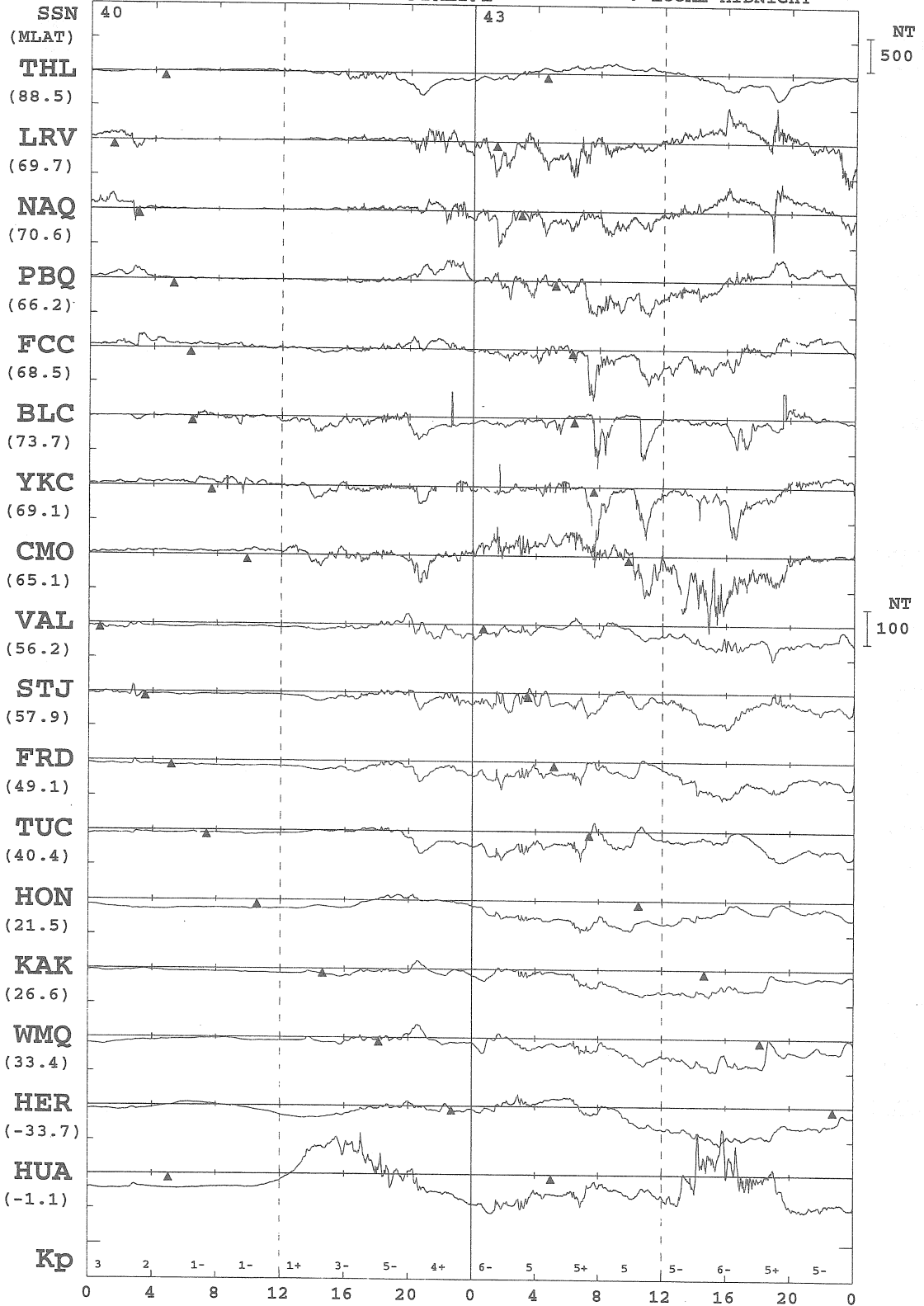
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(DAY 31)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



FEB 1
(DAY 32)

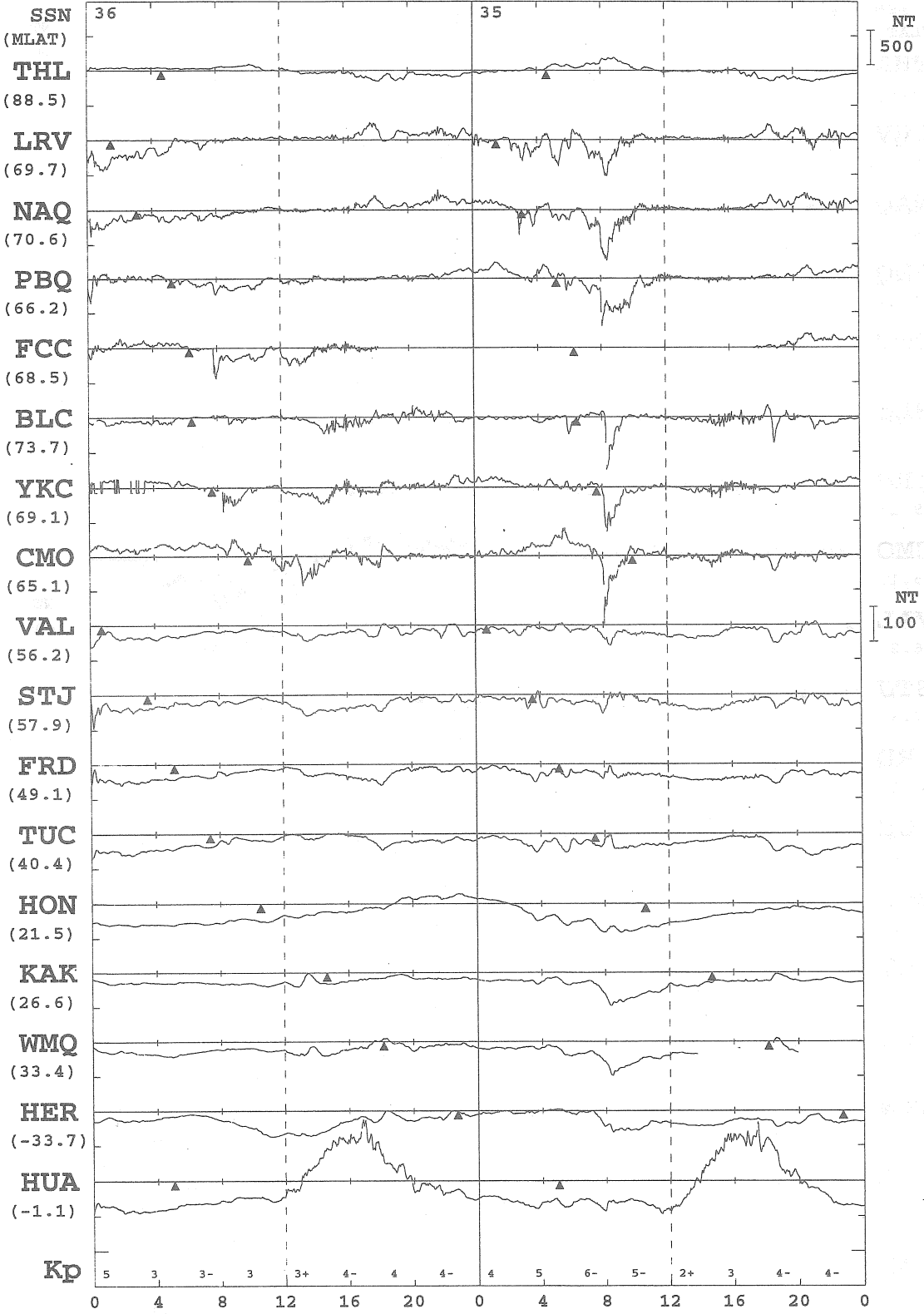
FEB 2
(DAY 33)

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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

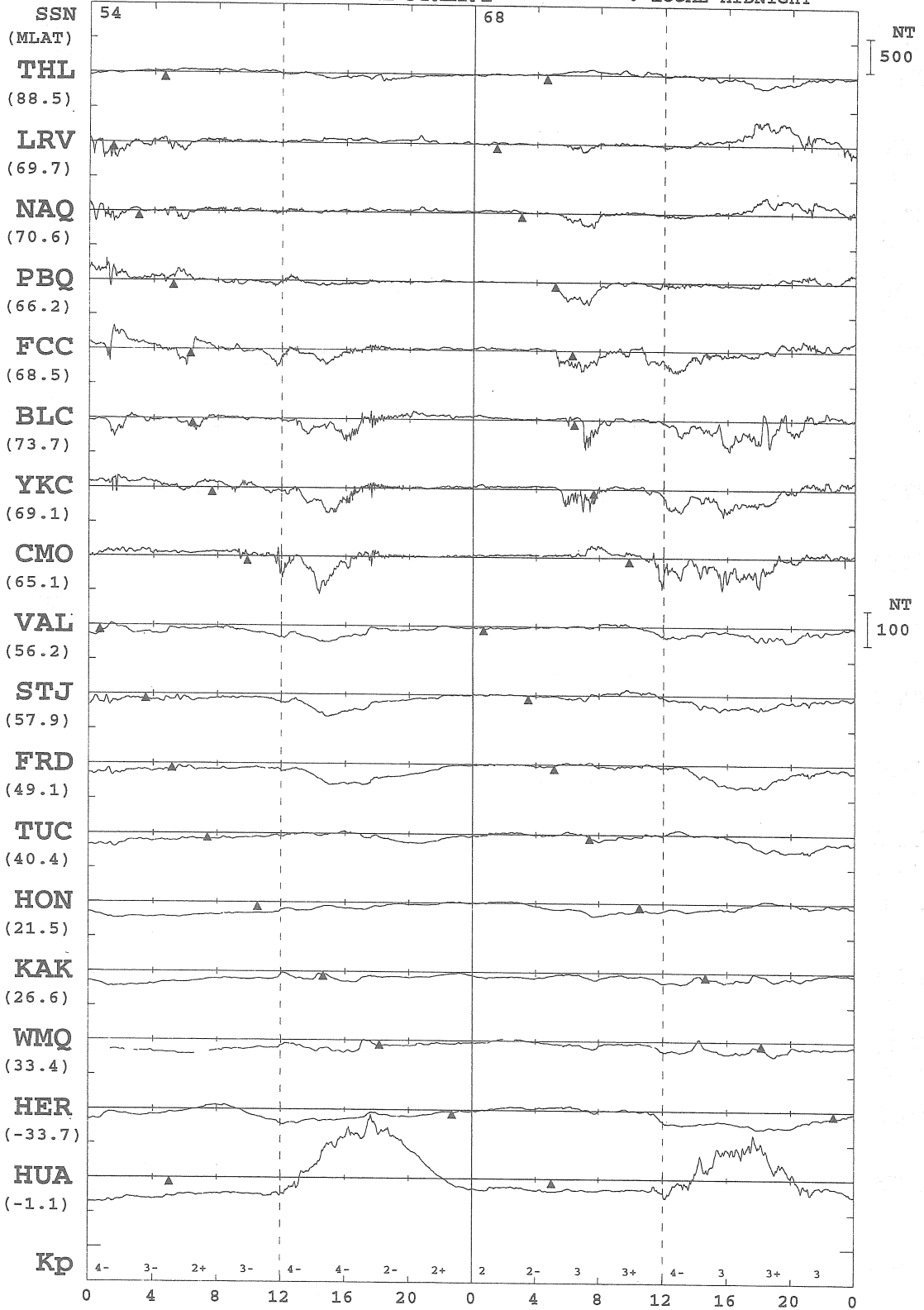


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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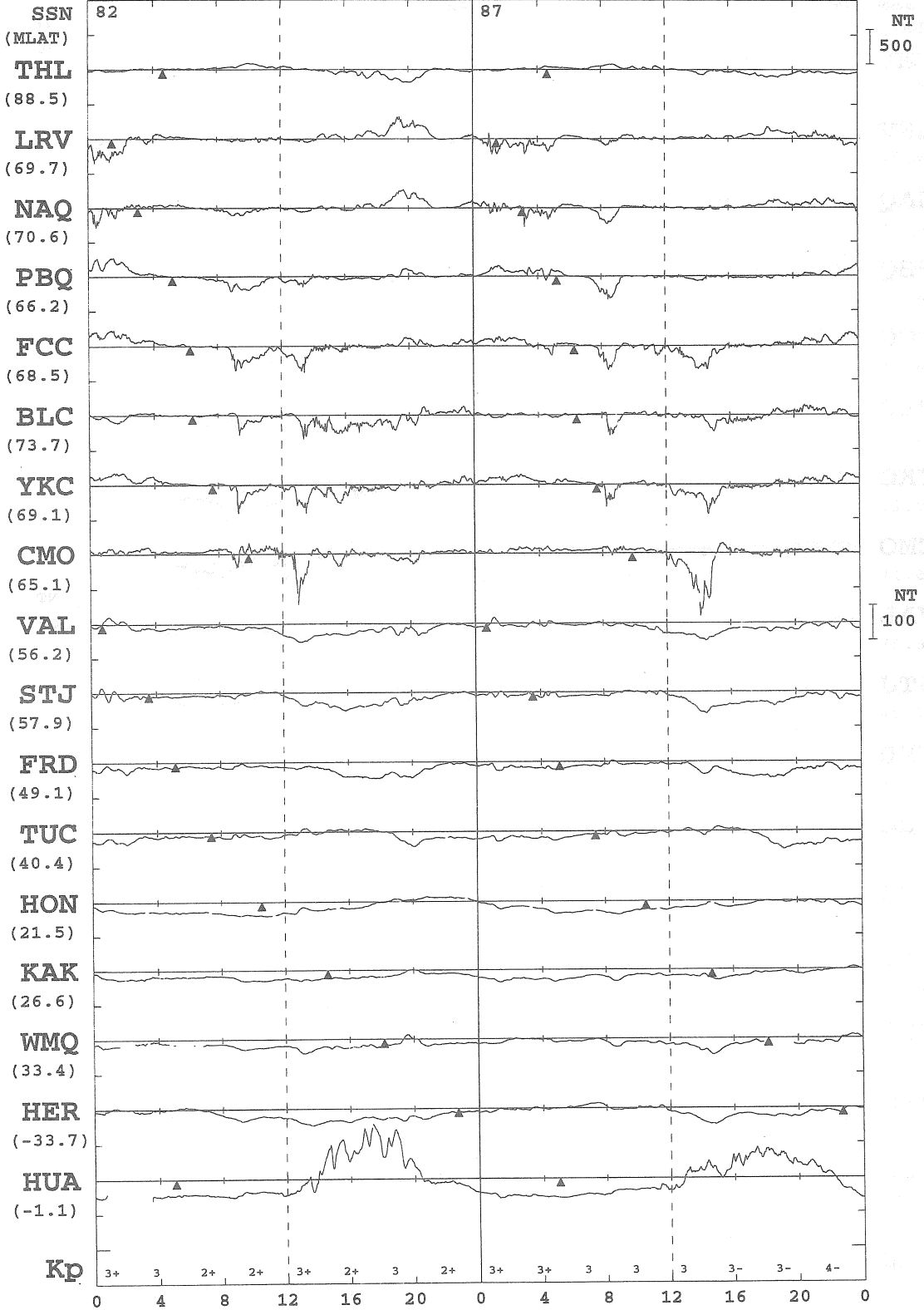
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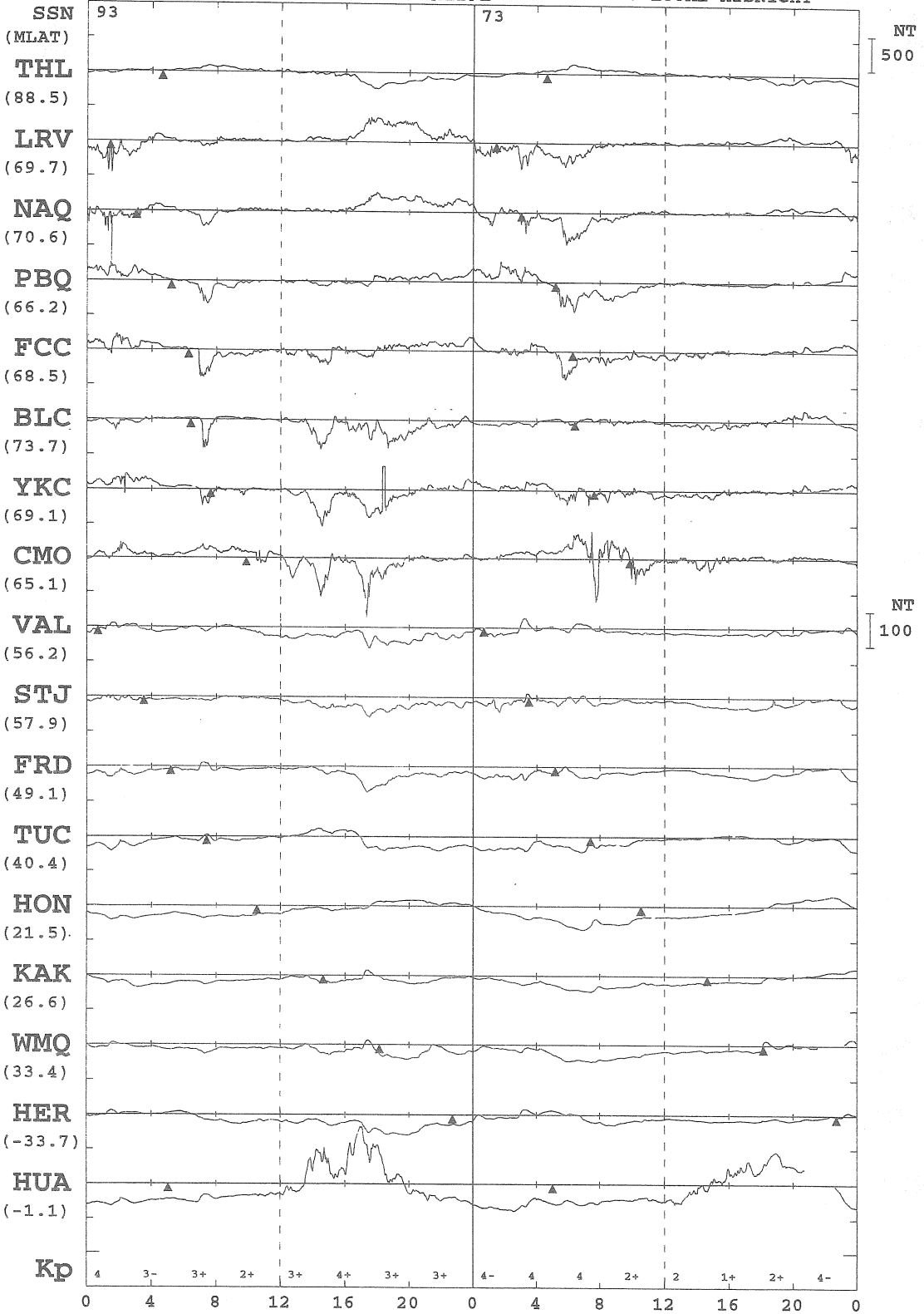


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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



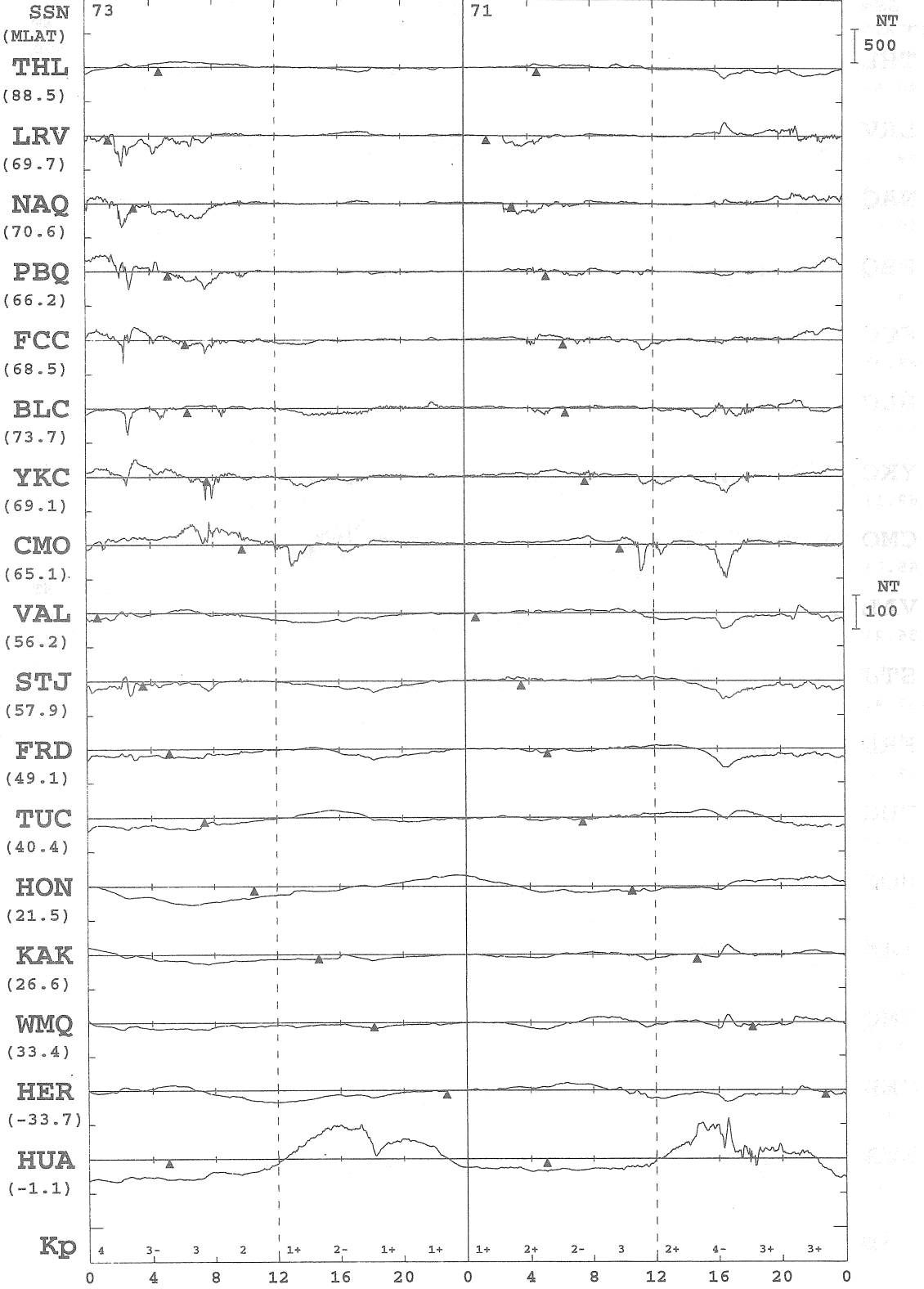
FEB 9
(DAY 40)

FEB 10
(DAY 41)

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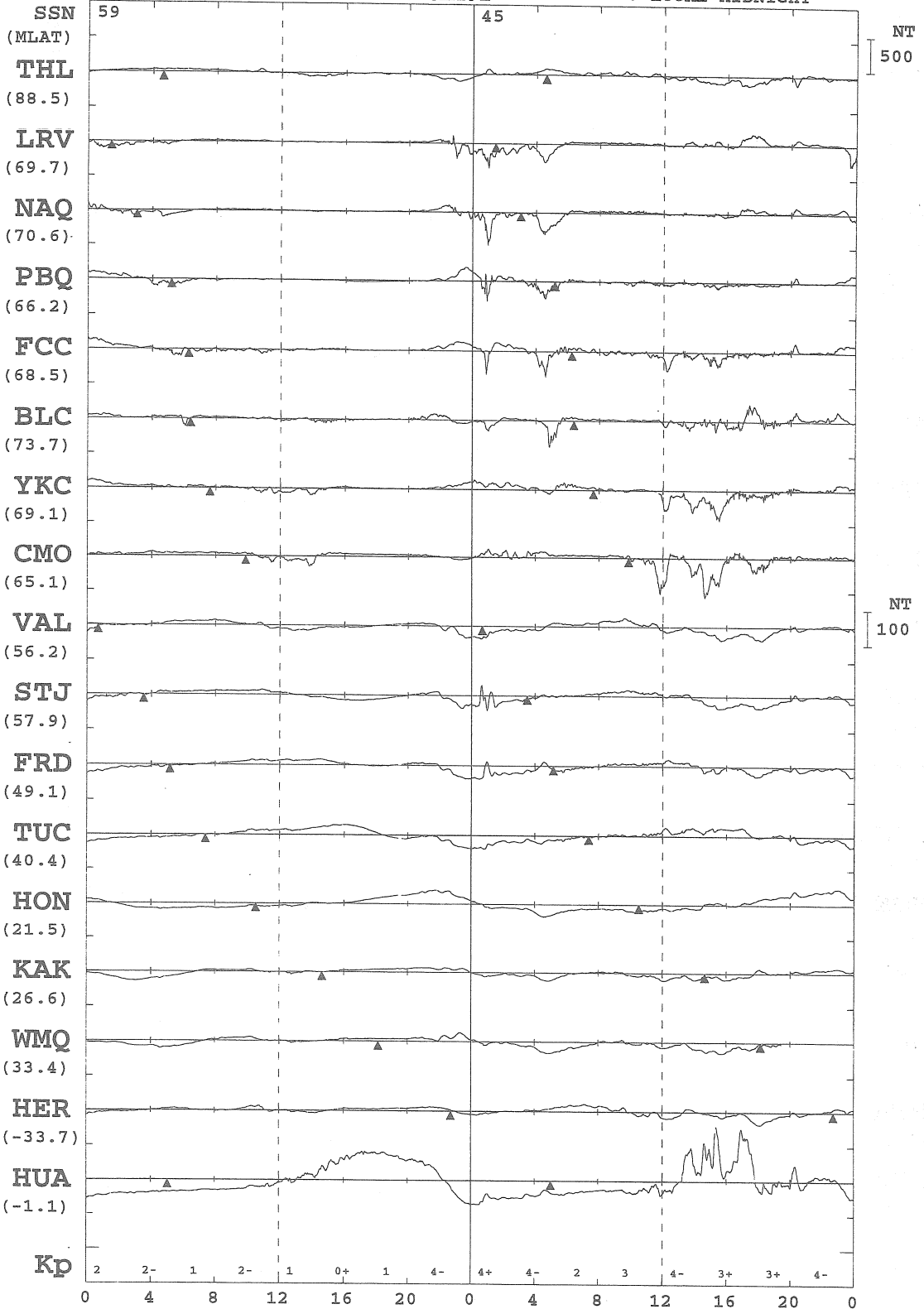
2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



FEB 13
(DAY 44)

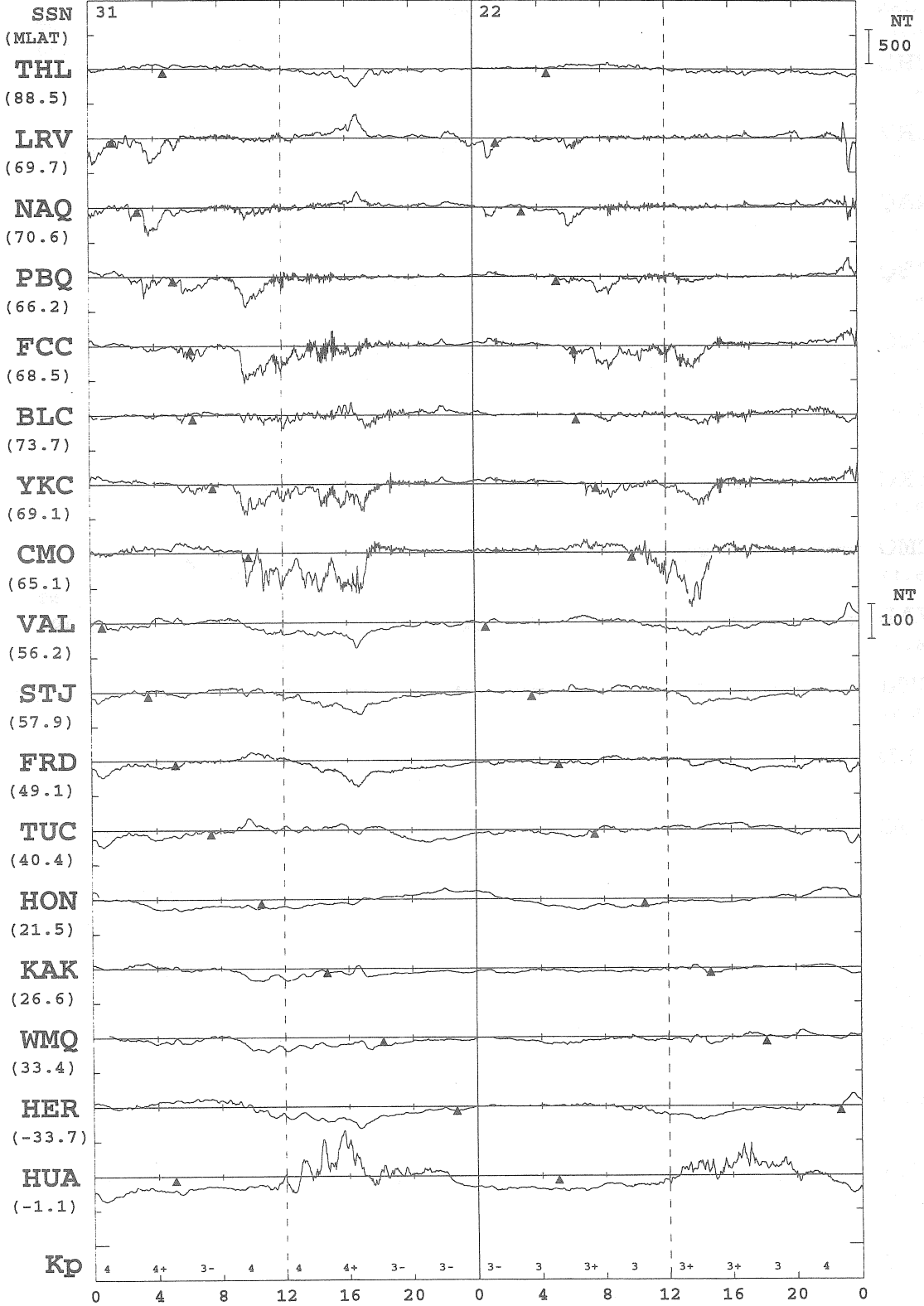
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(DAY 45)

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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



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(DAY 46)

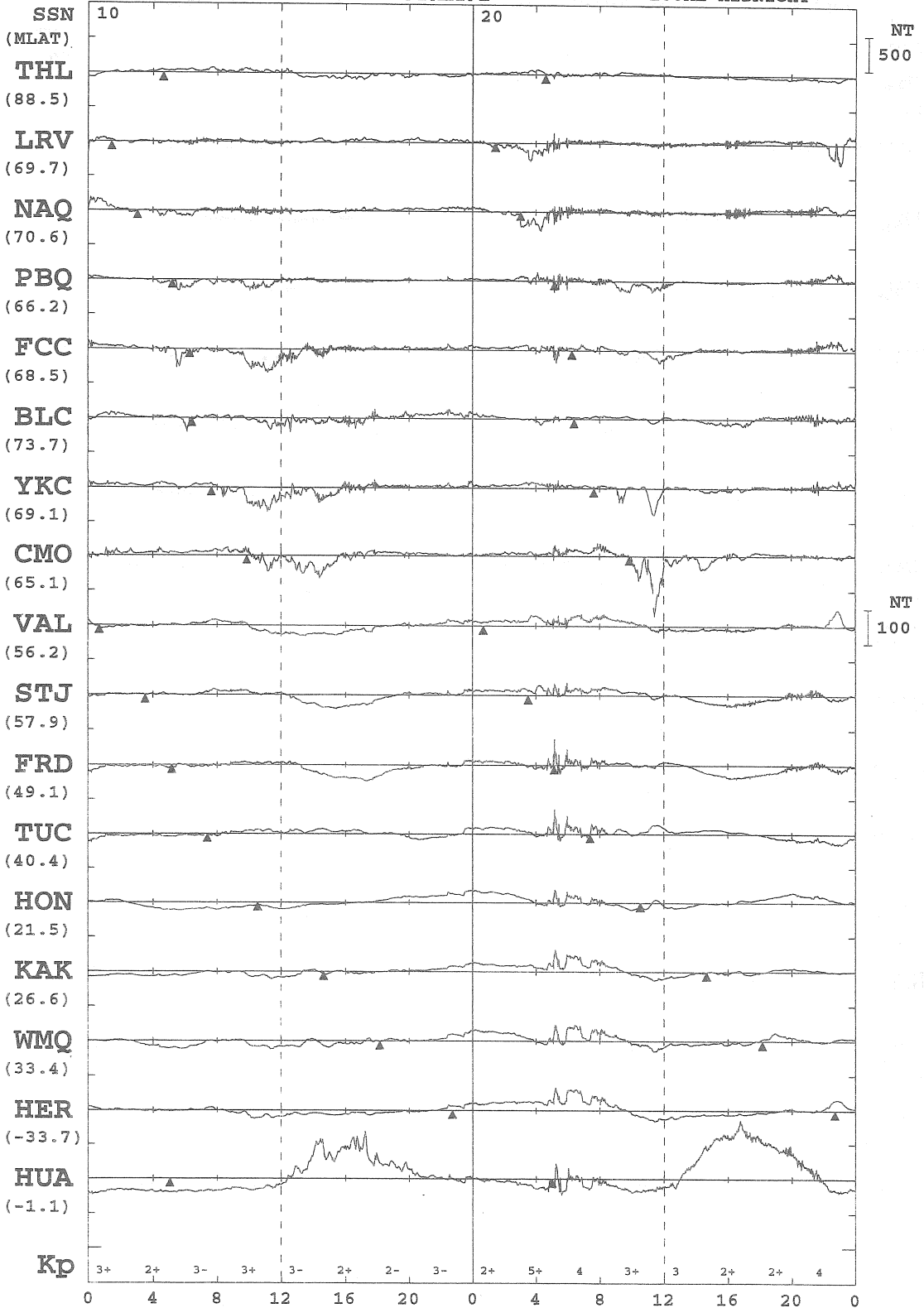
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(DAY 47)

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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



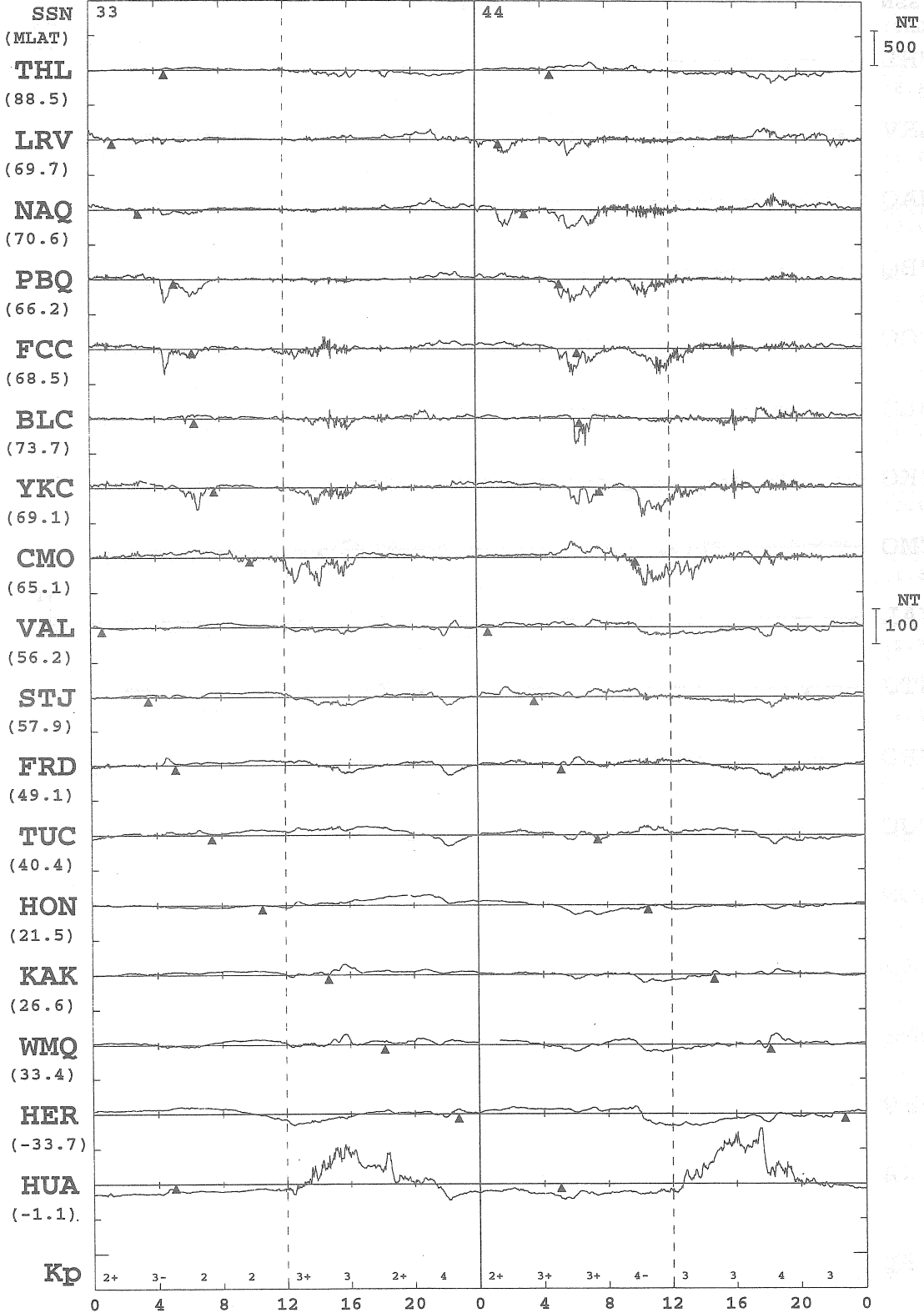
FEB 17
(DAY 48)

FEB 18
(DAY 49)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

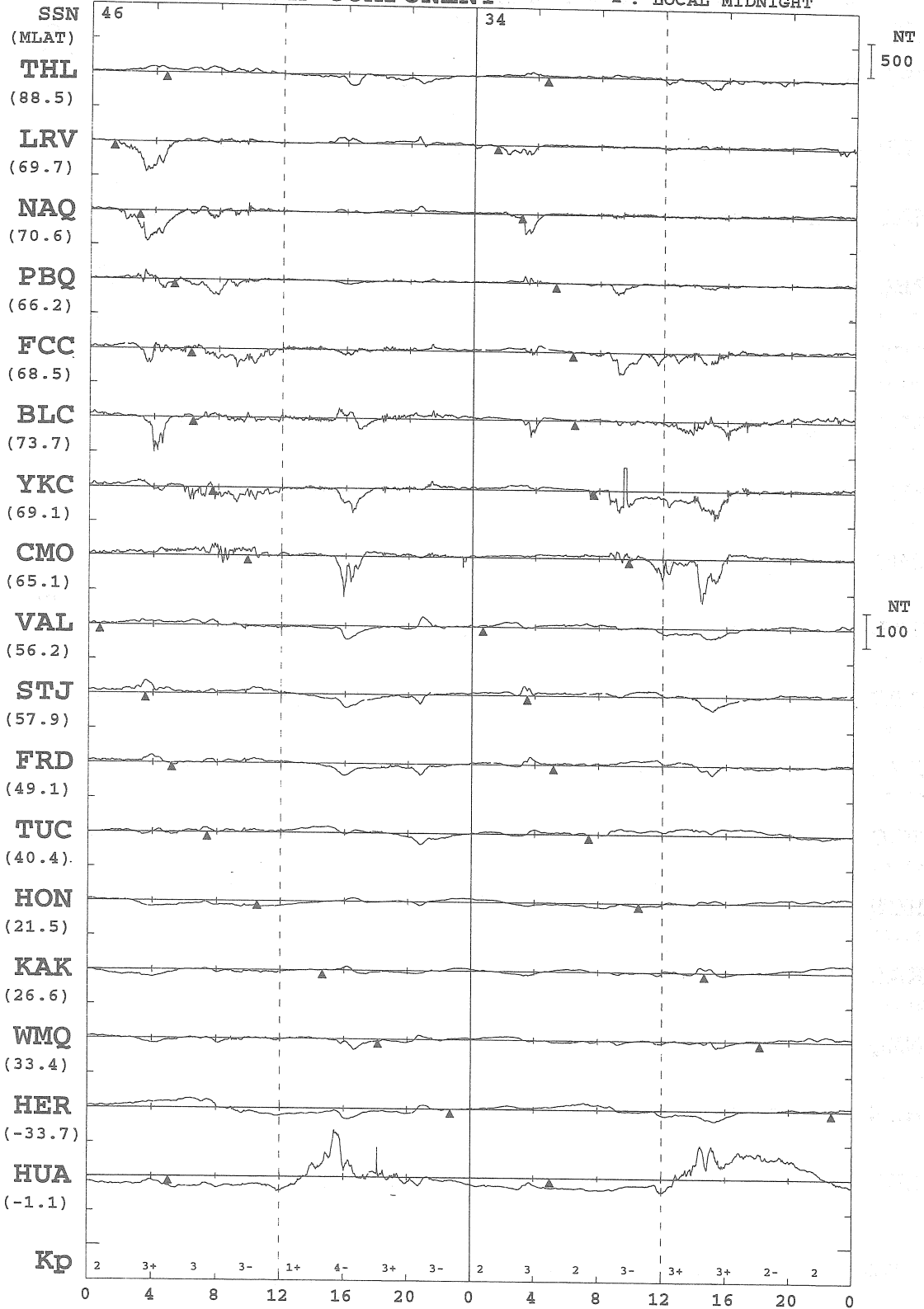


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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



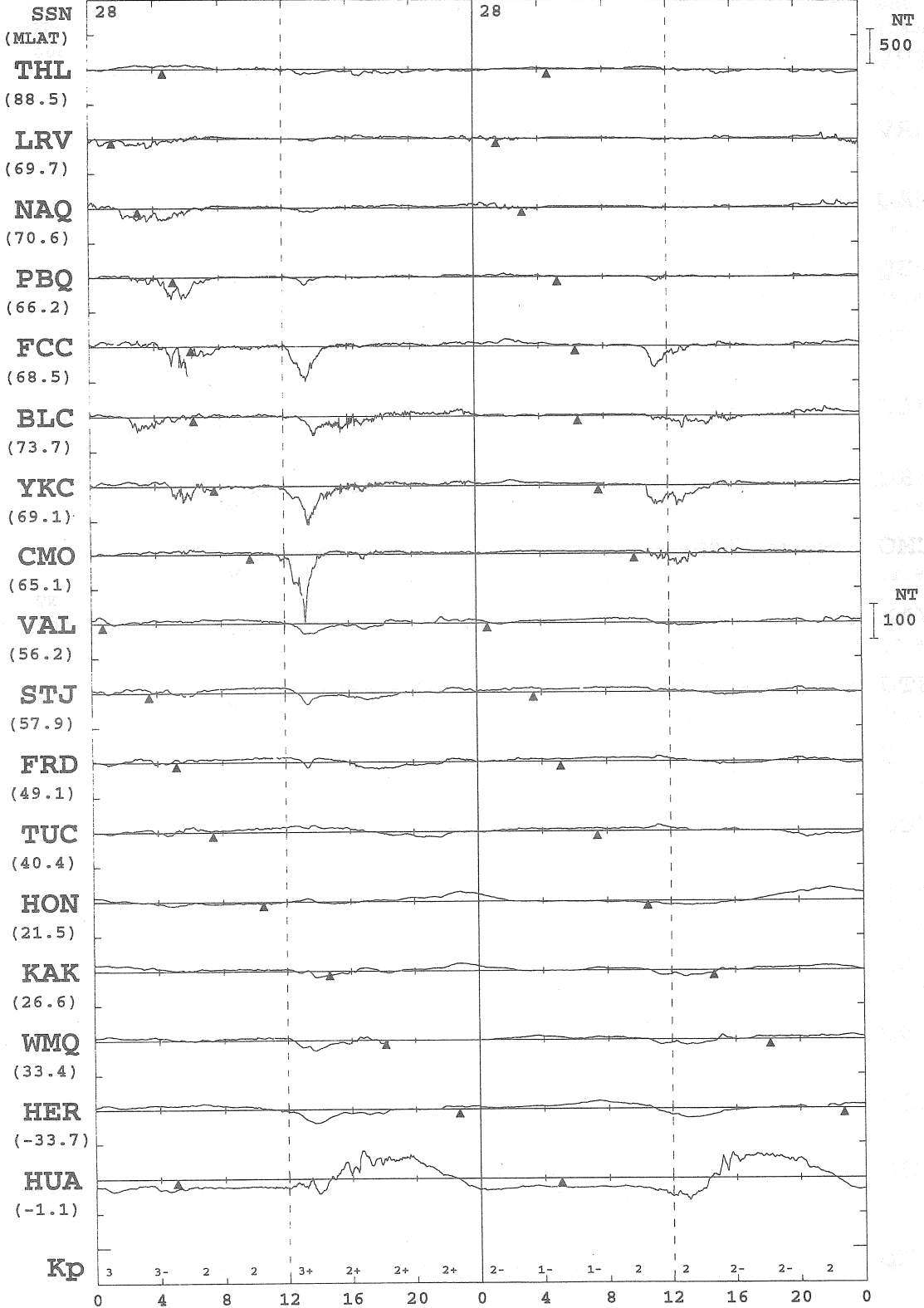
FEB 21
(DAY 52)

FEB 22
(DAY 53)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



FEB 23
(DAY 54)

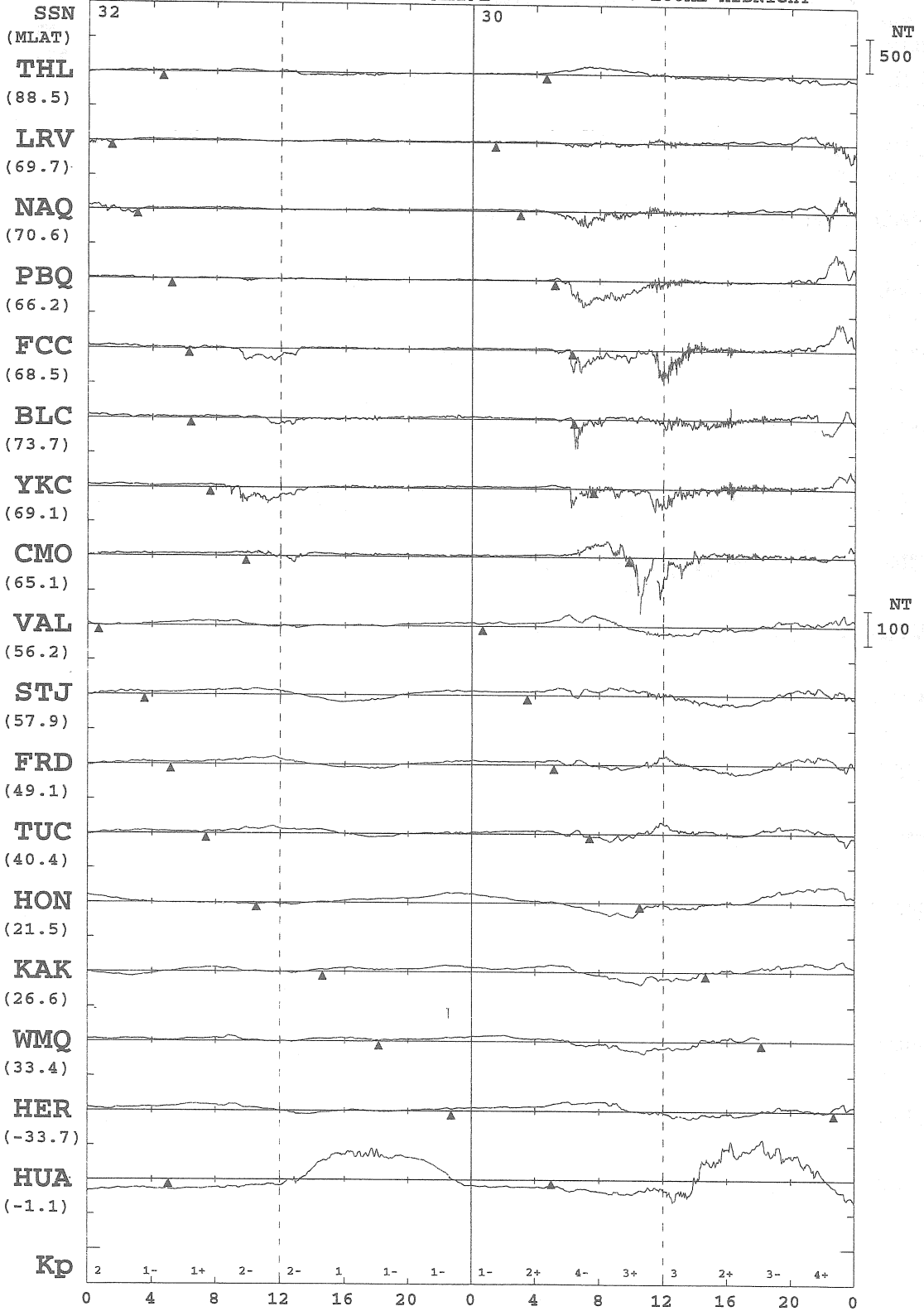
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(DAY 55)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT

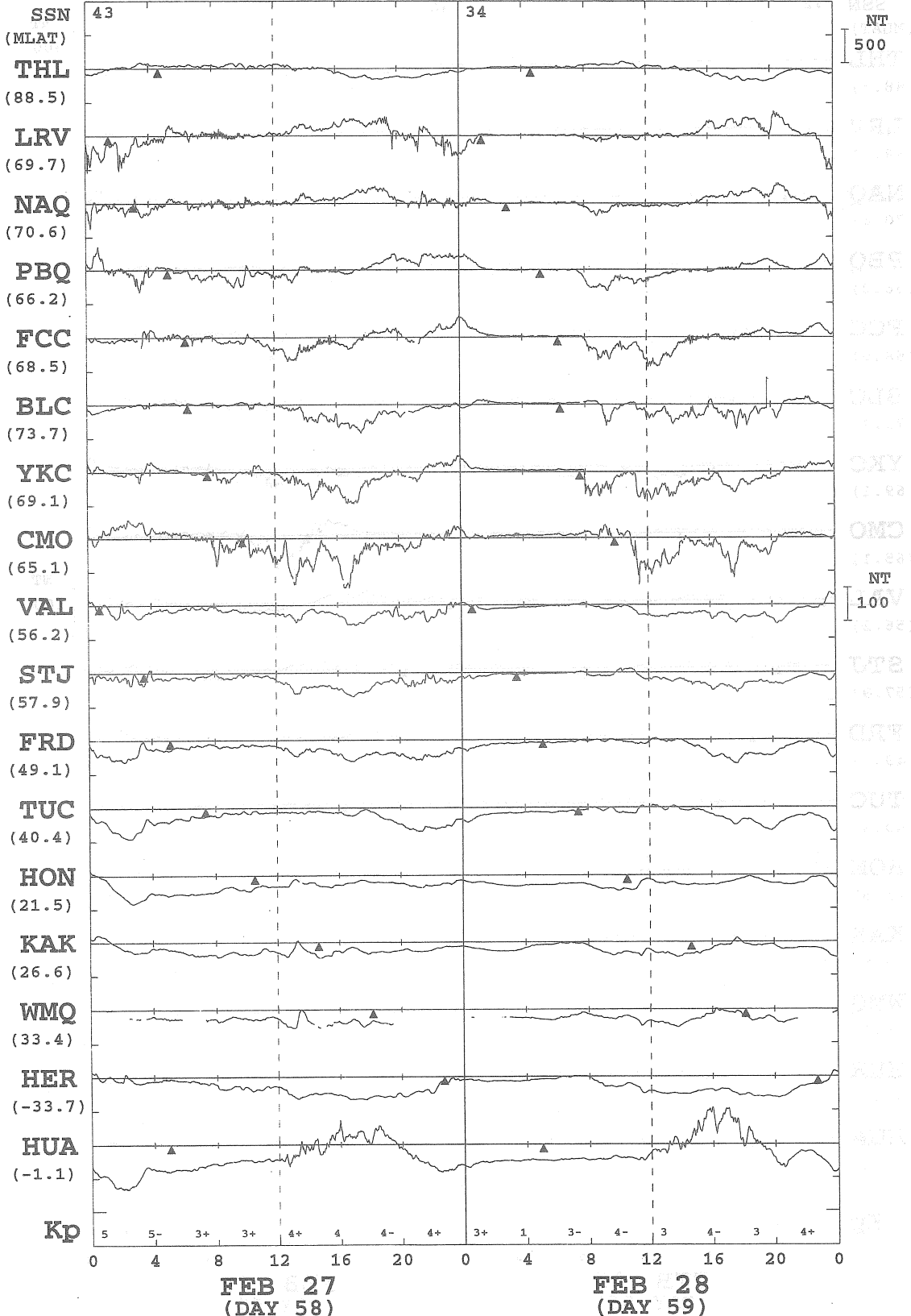
▲ : LOCAL MIDNIGHT



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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

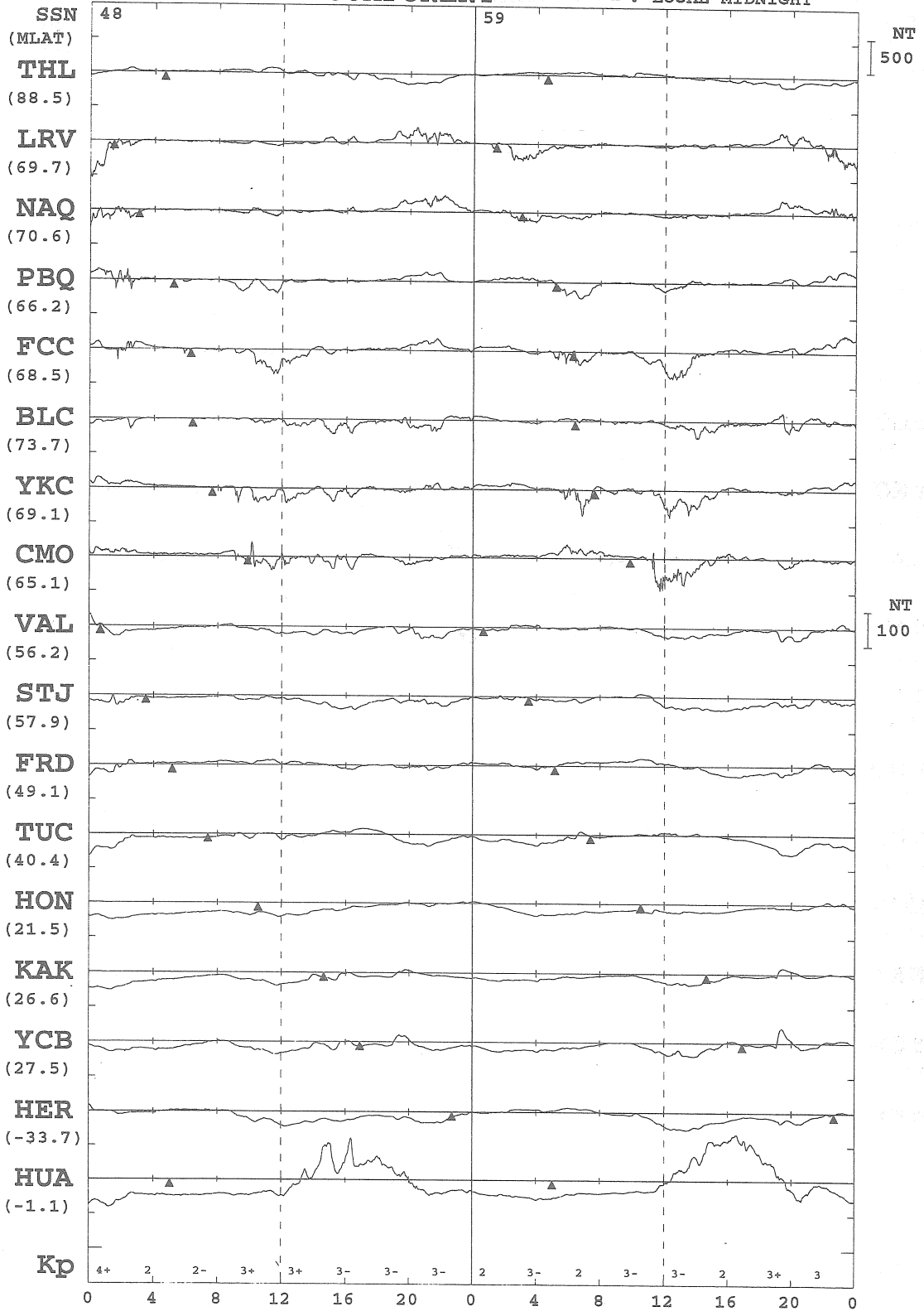


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2003 H OR X-COMPONENT

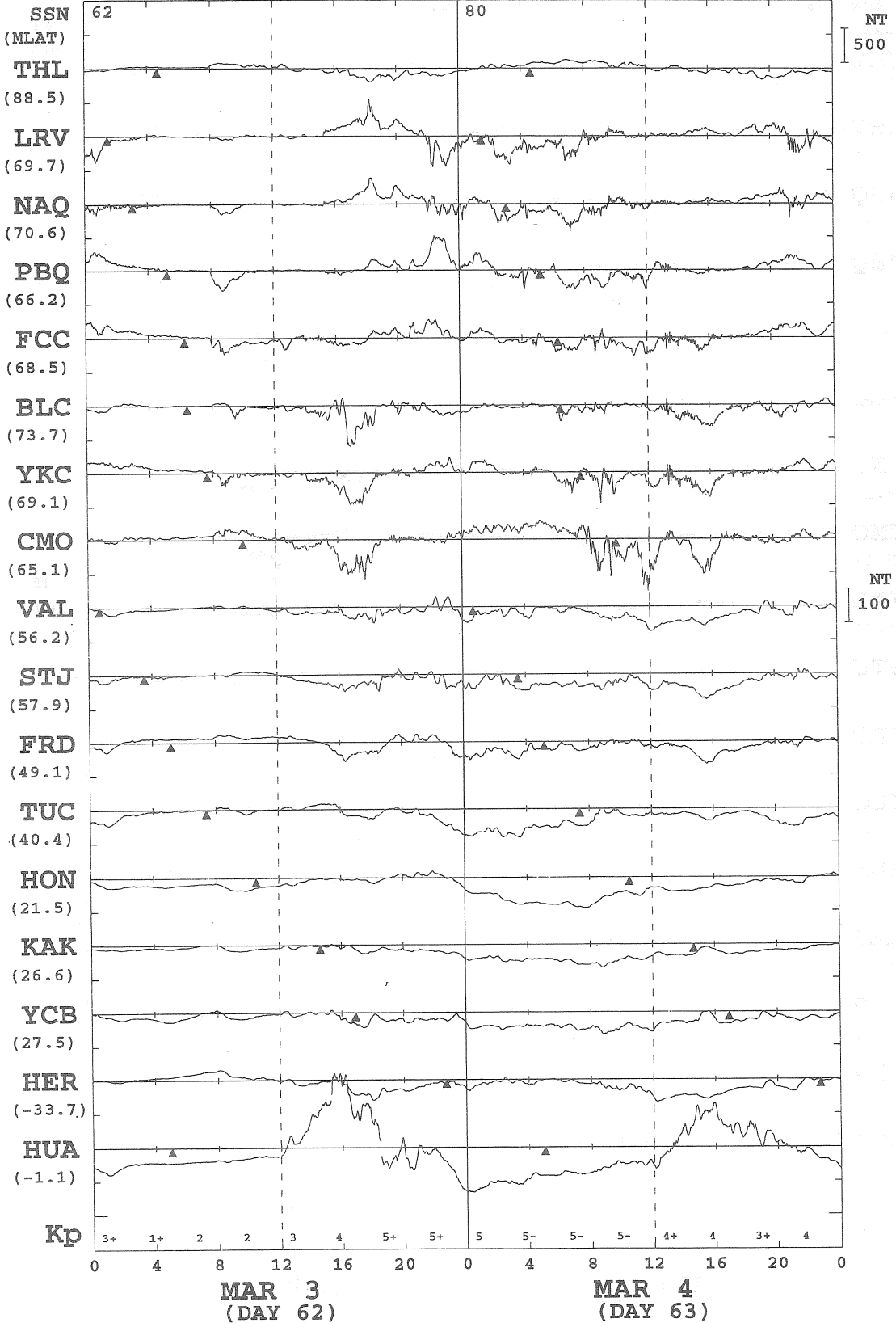
▲ : LOCAL MIDNIGHT



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2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

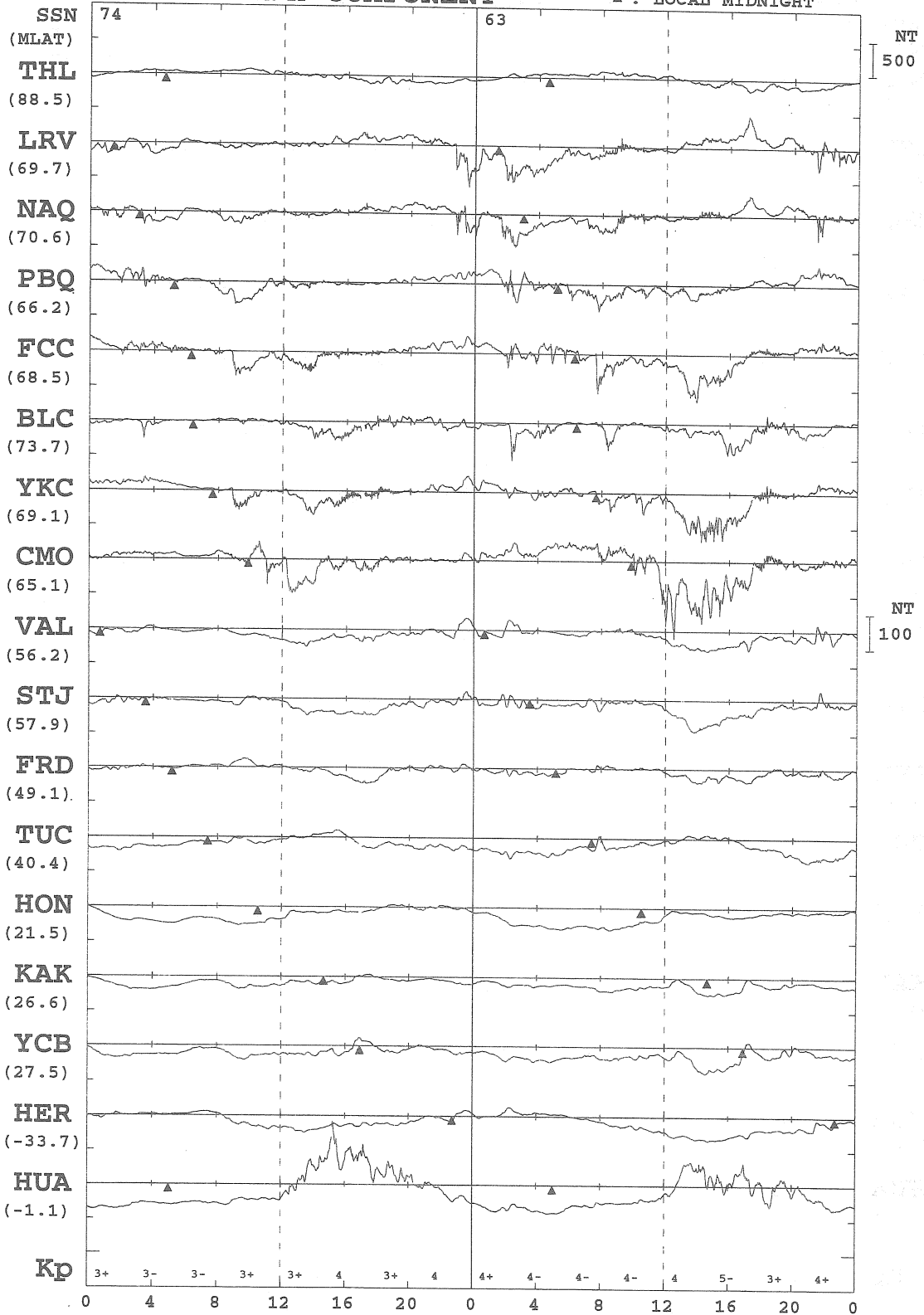


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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



MAR 5
(DAY 64)

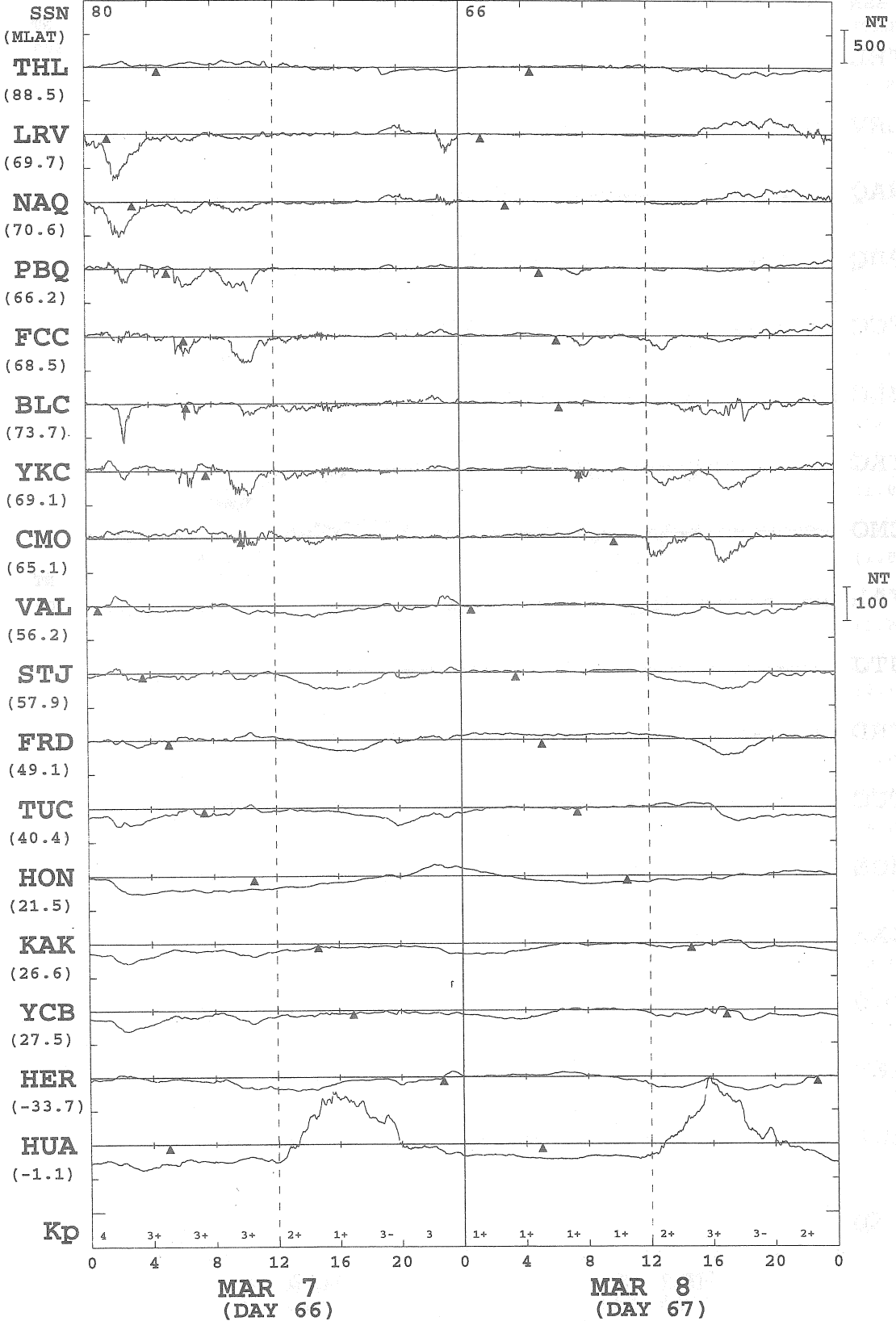
MAR 6
(DAY 65)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

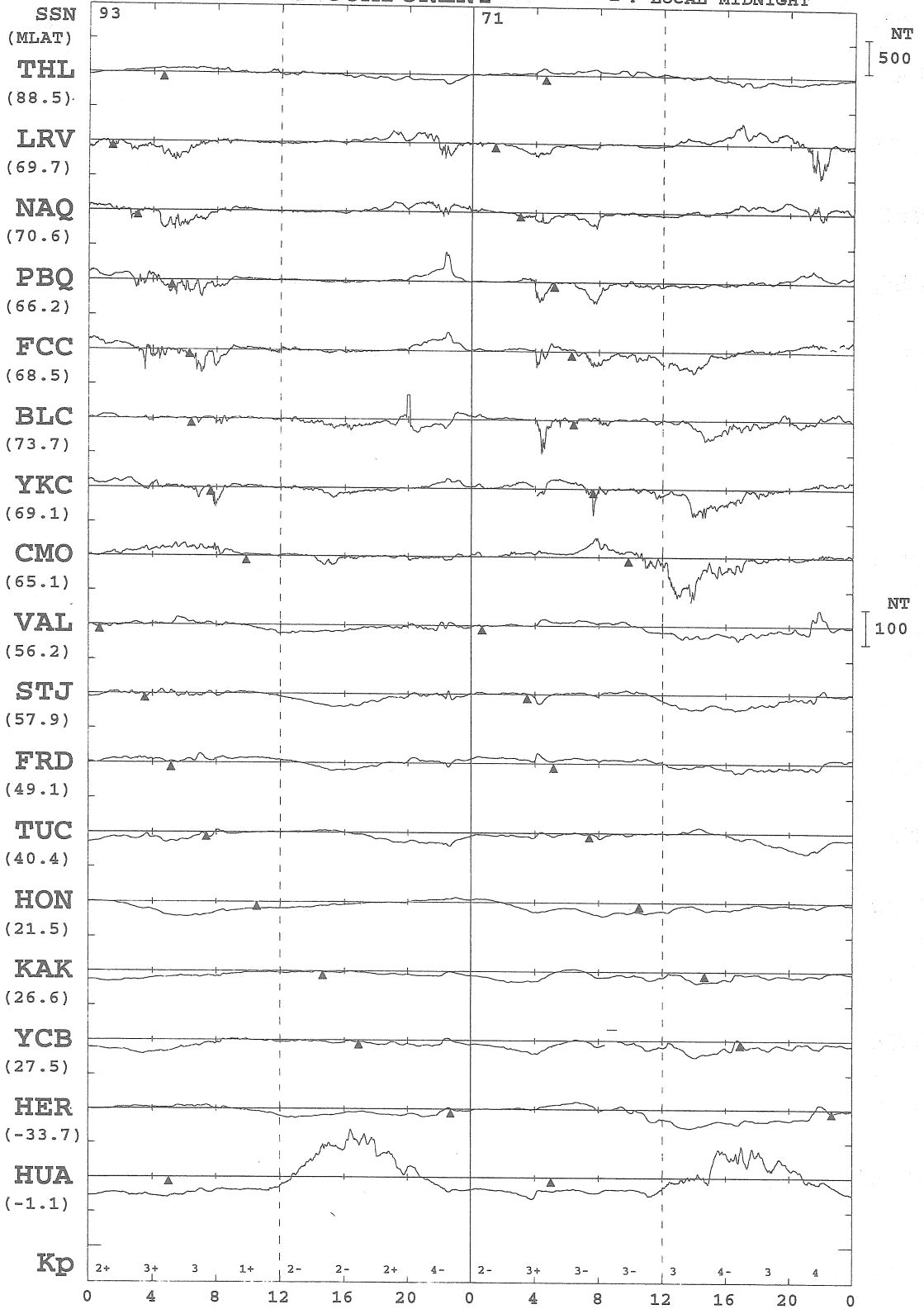


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KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

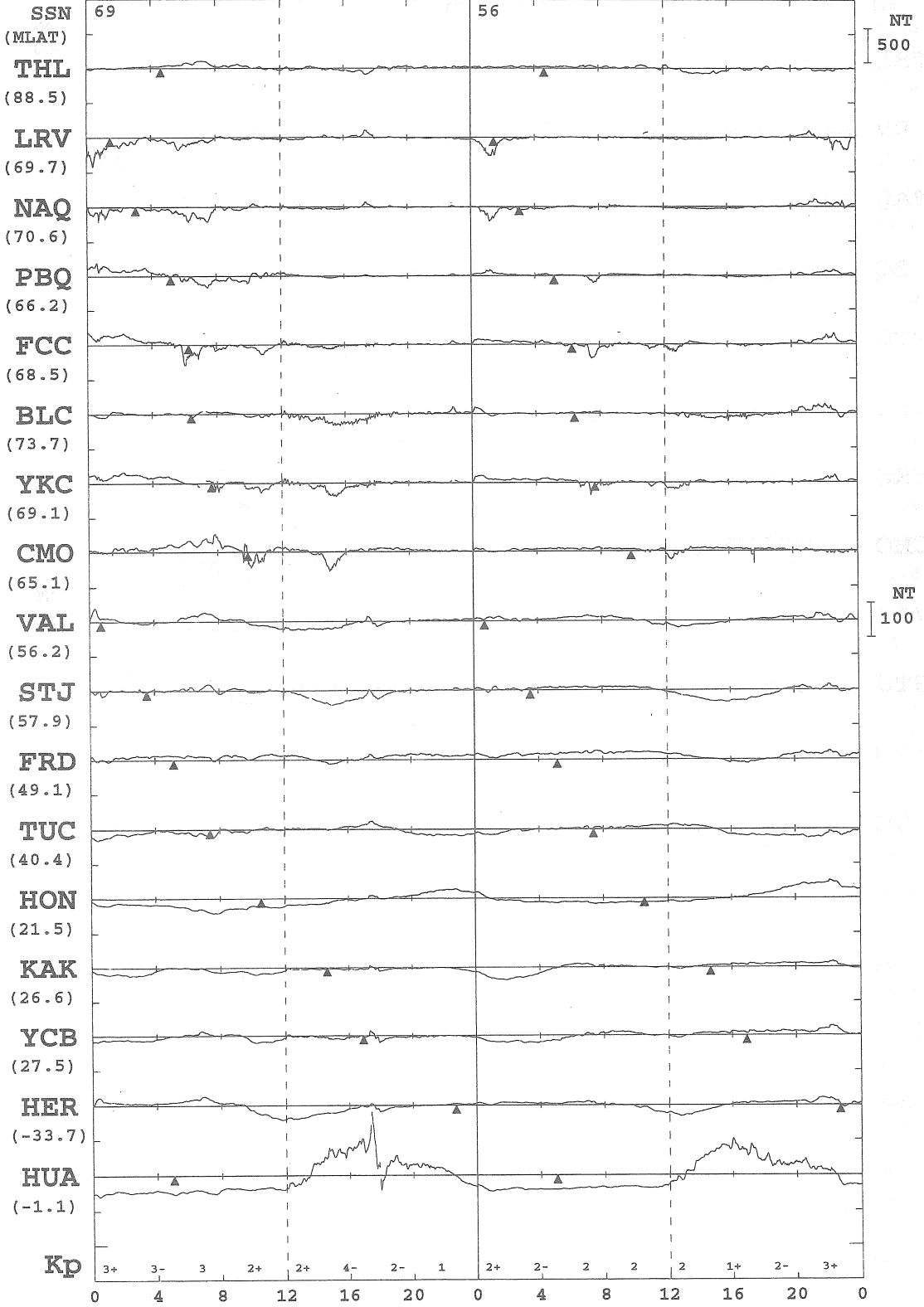


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KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

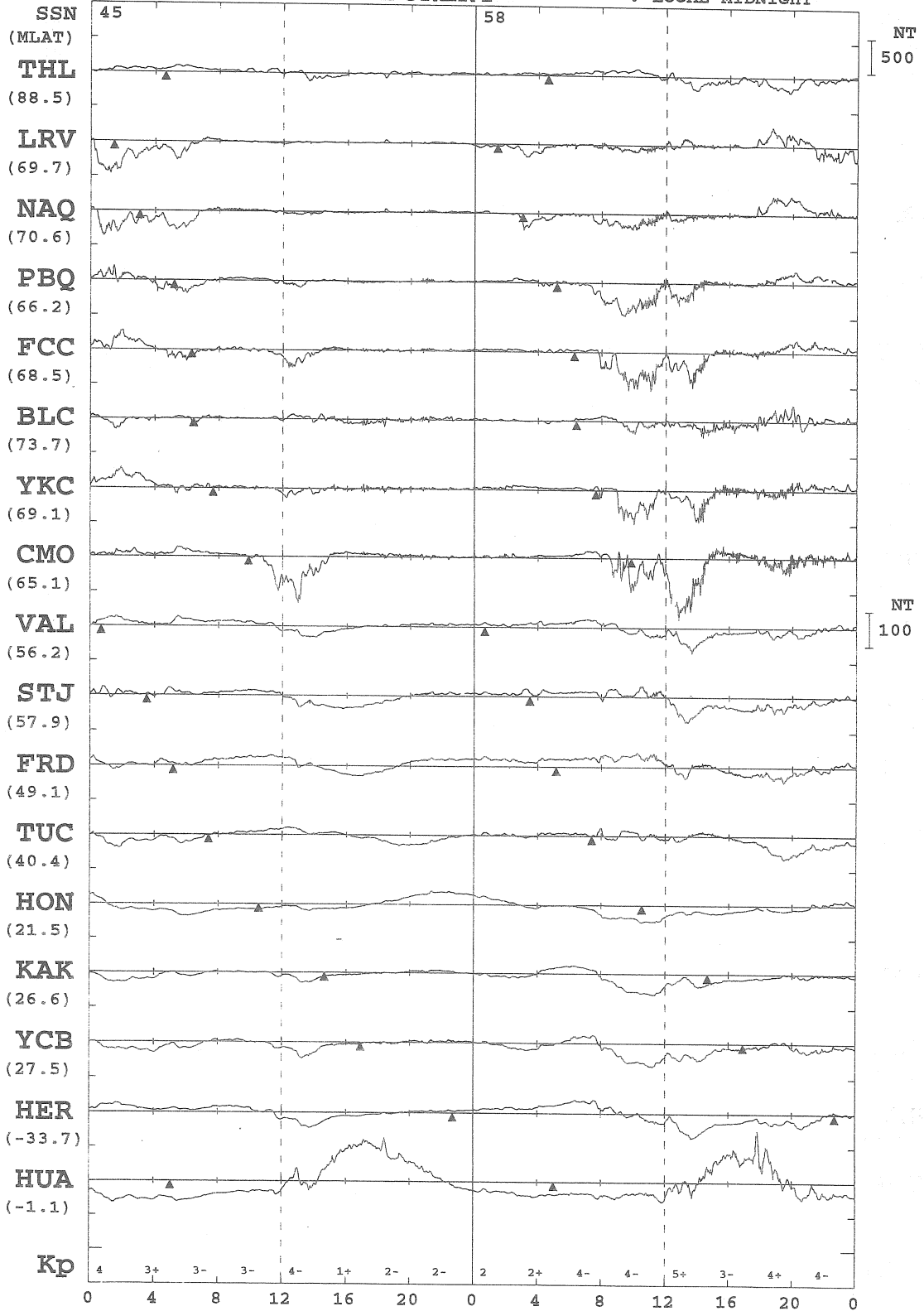


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KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



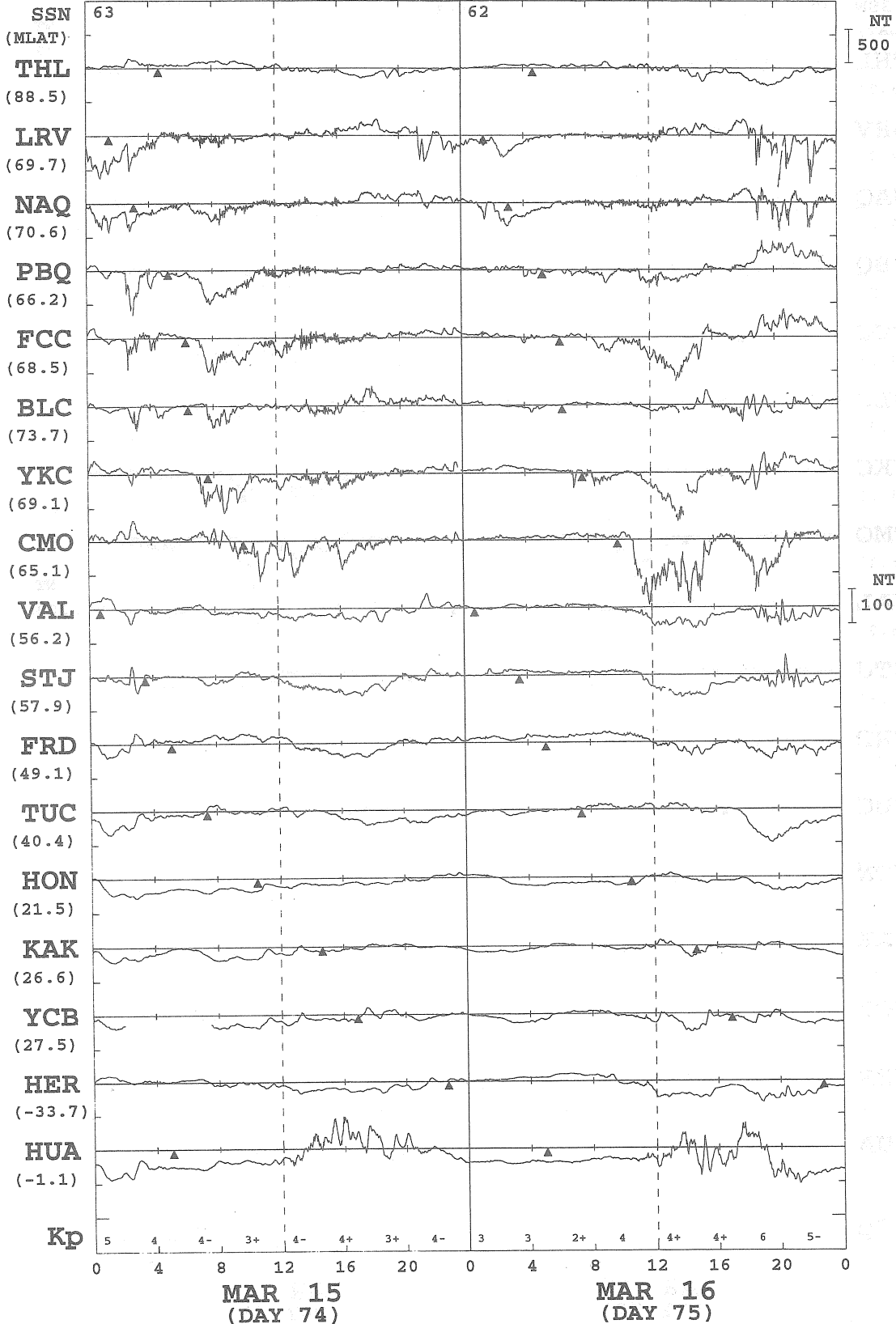
MAR 13
(DAY 72)

MAR 14
(DAY 73)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

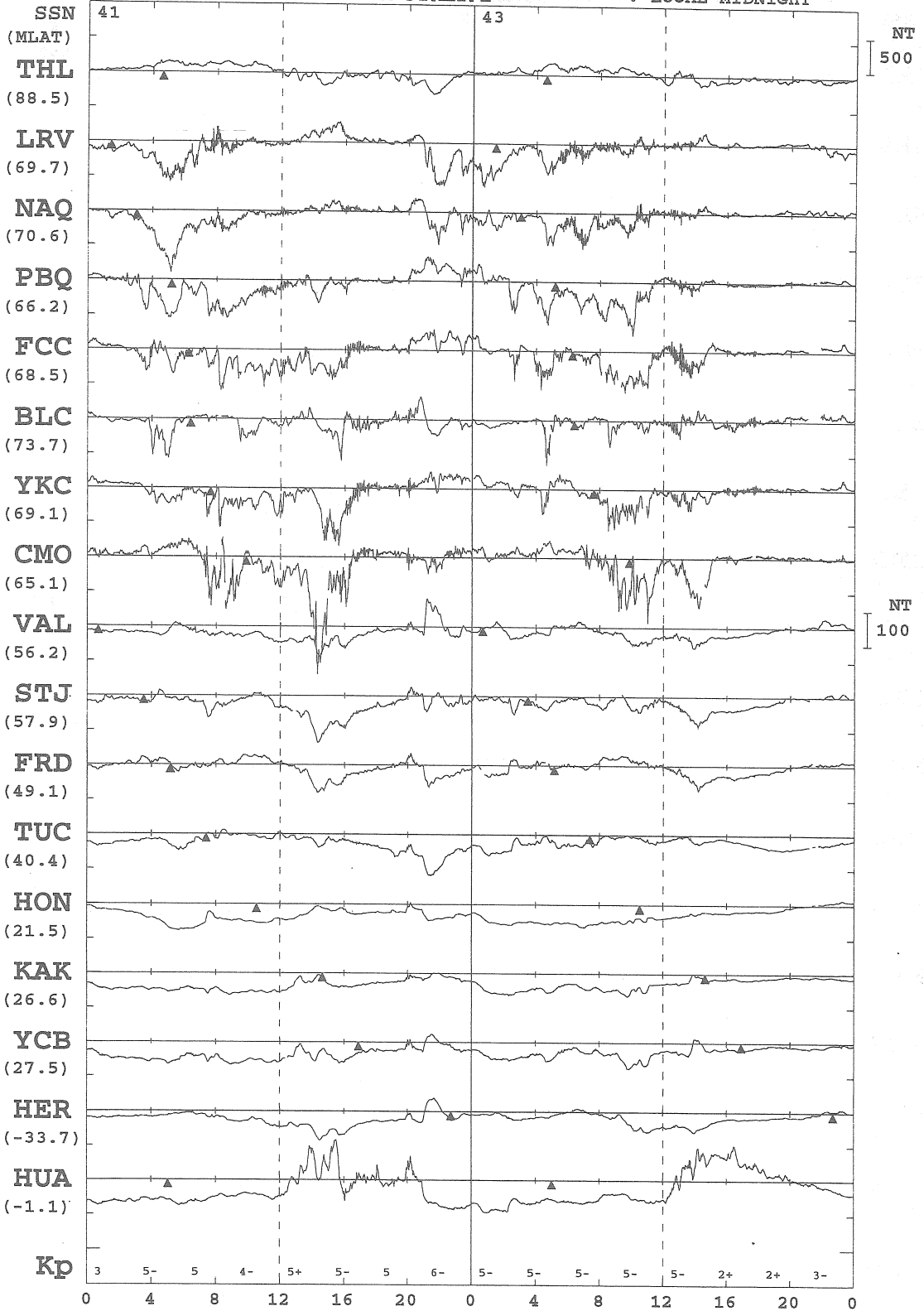


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

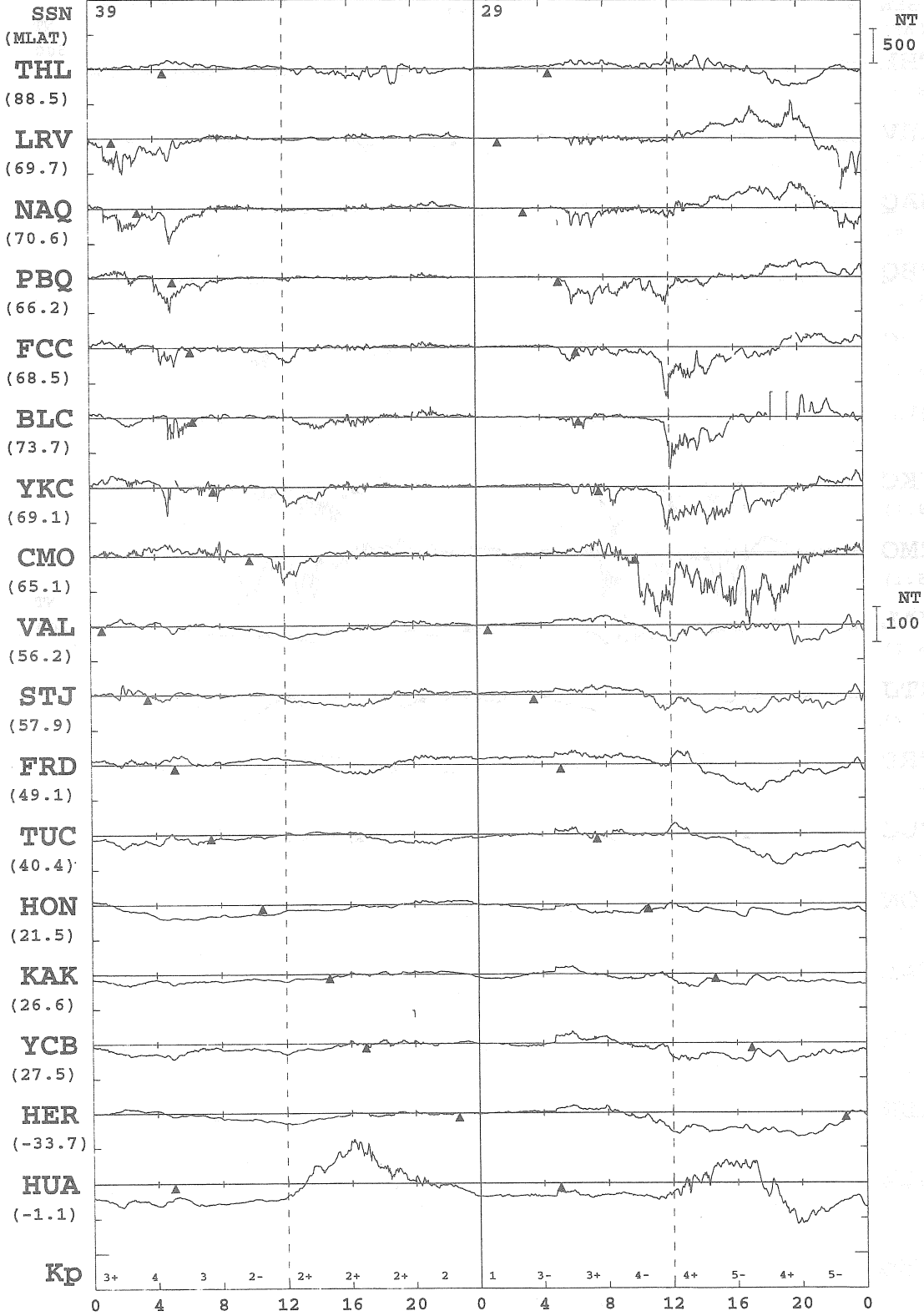
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

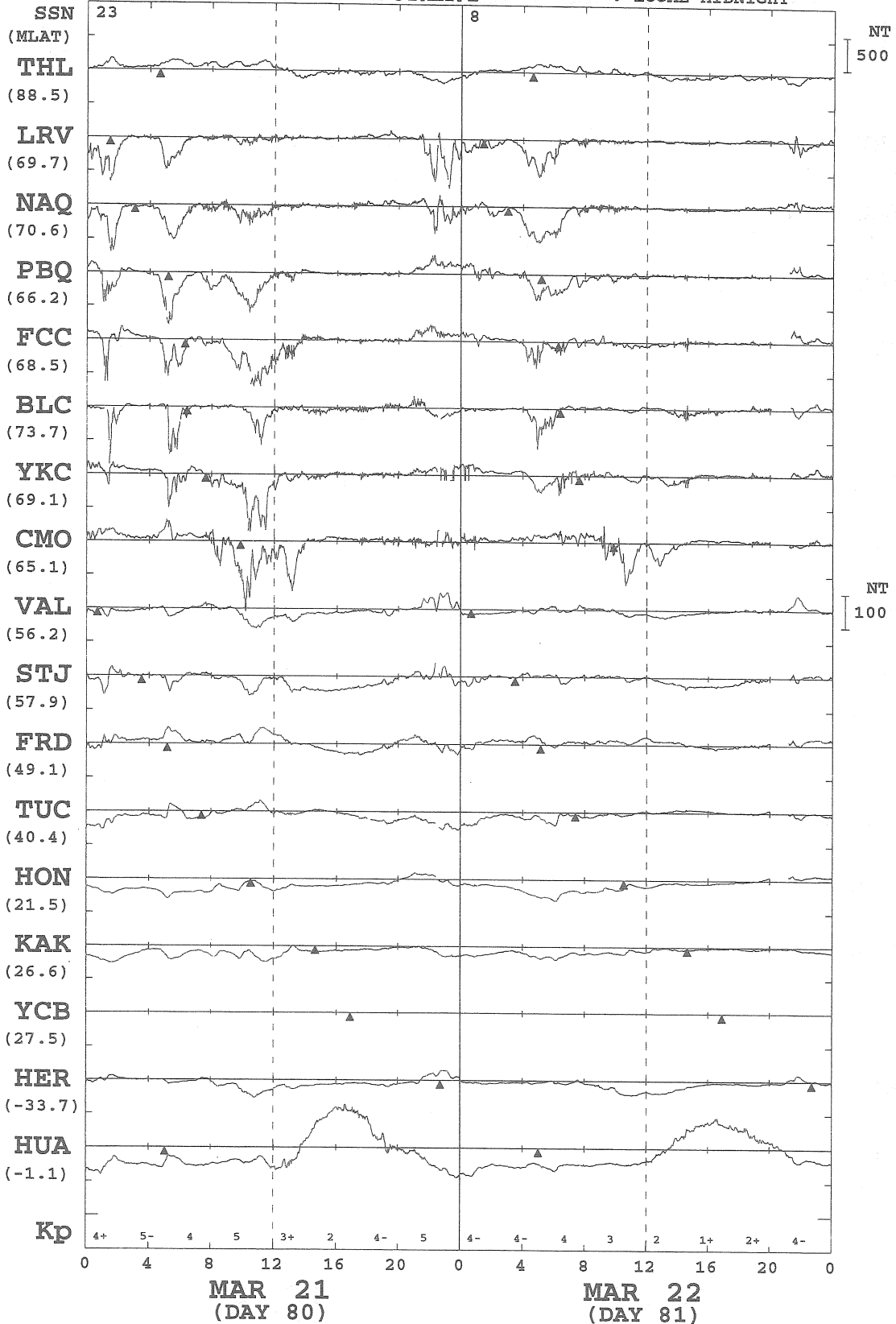
2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

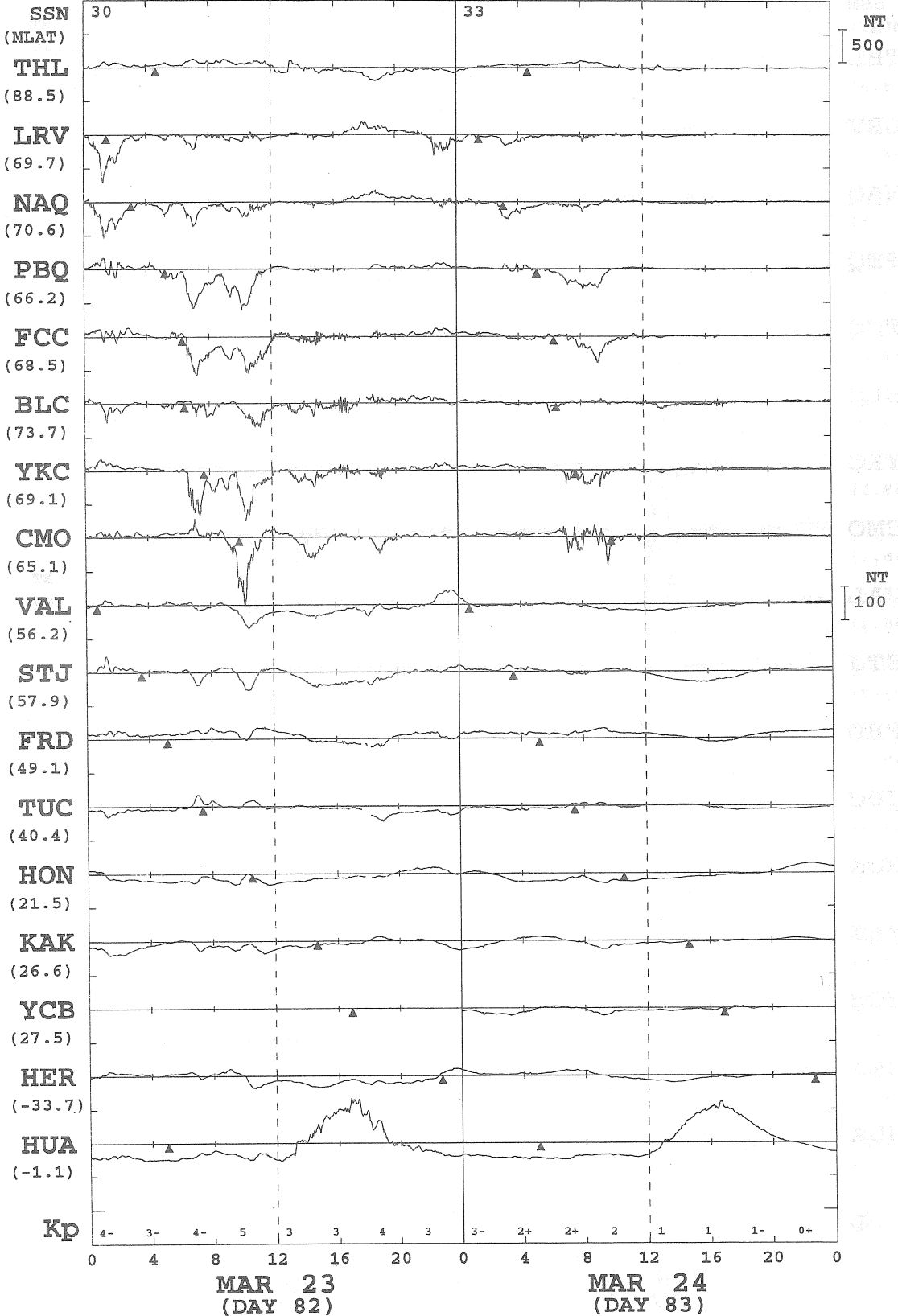
2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

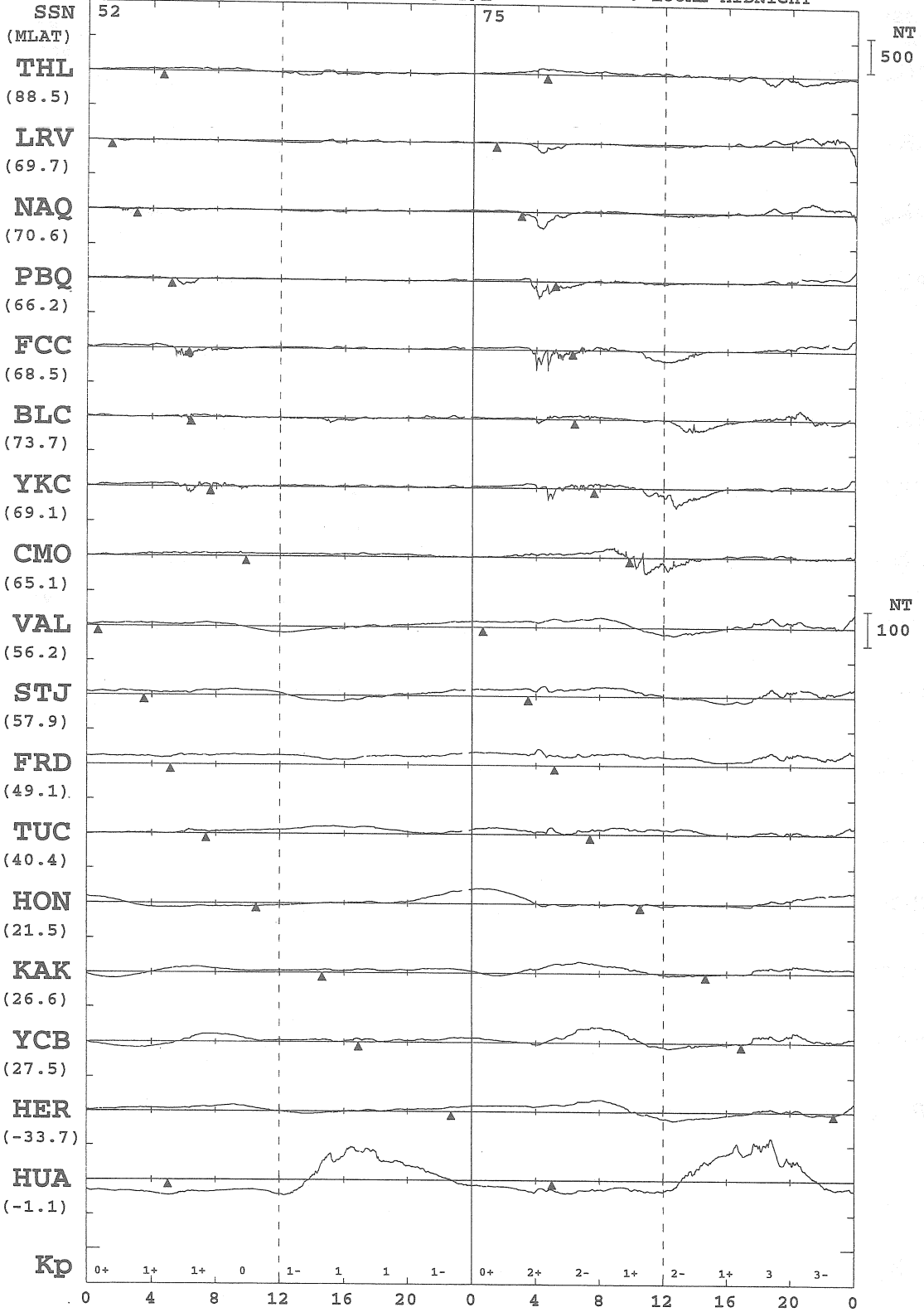


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

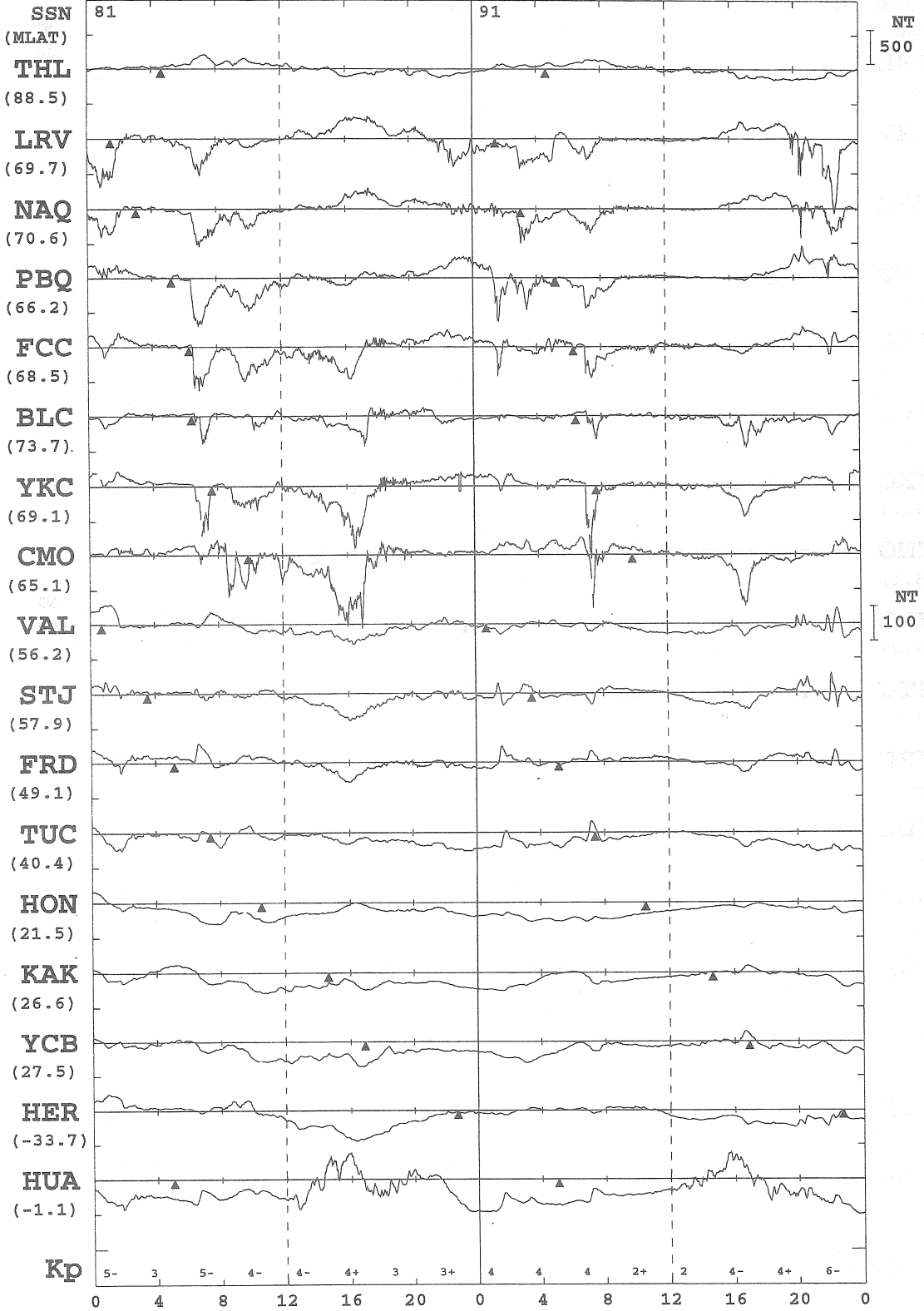
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

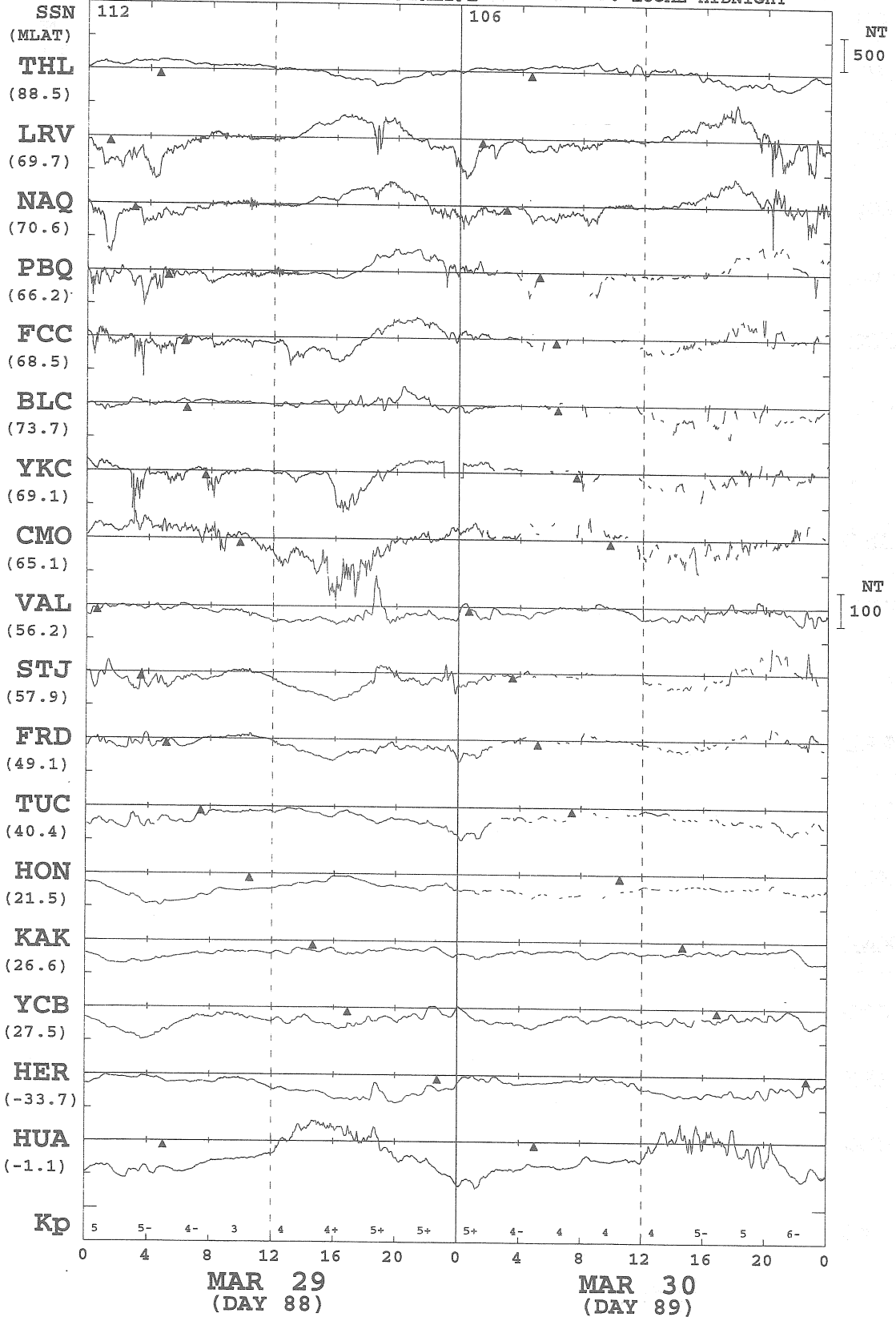


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

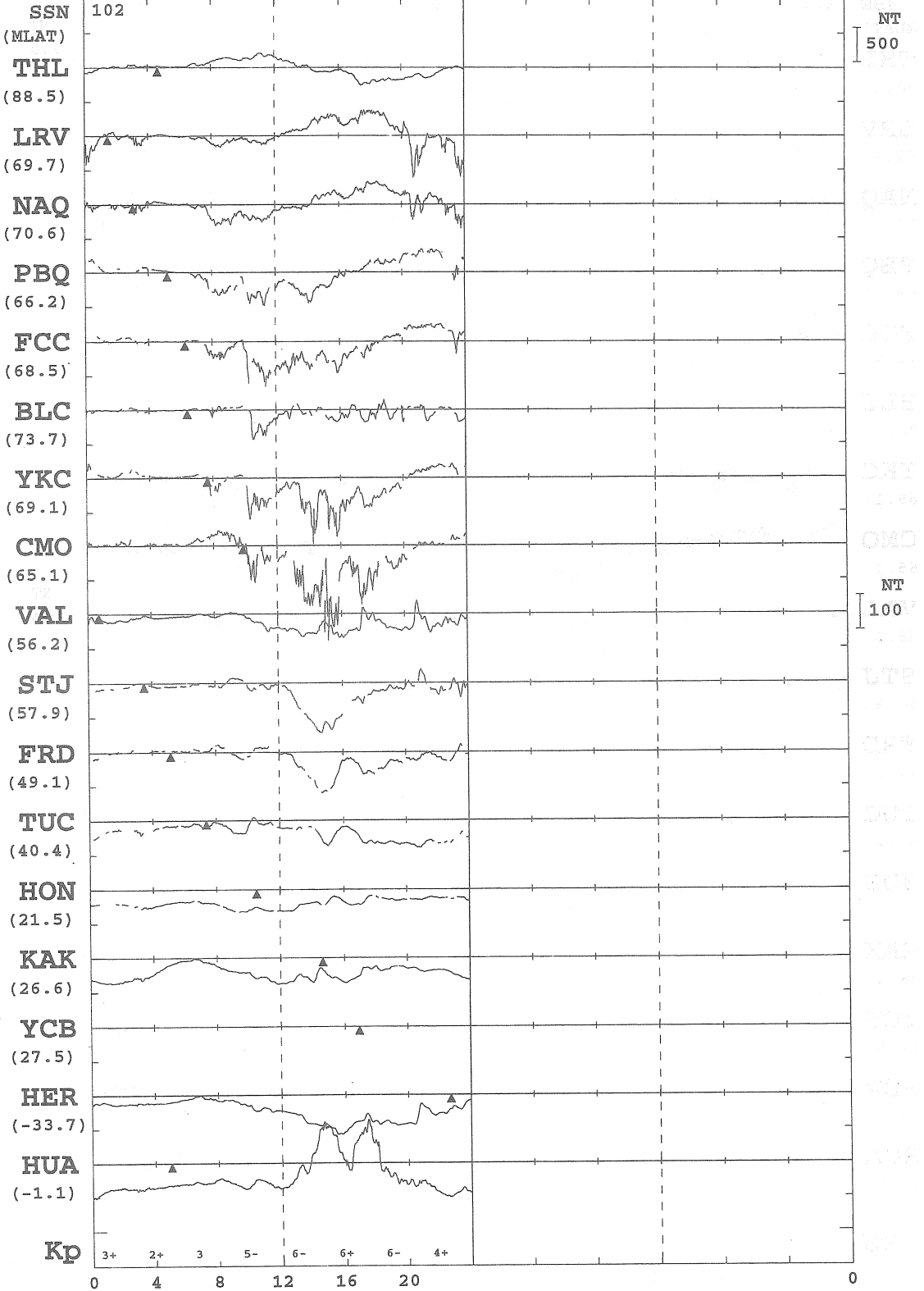


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



Kp

3+ 2+ 3 5- 6- 6+ 6- 4+

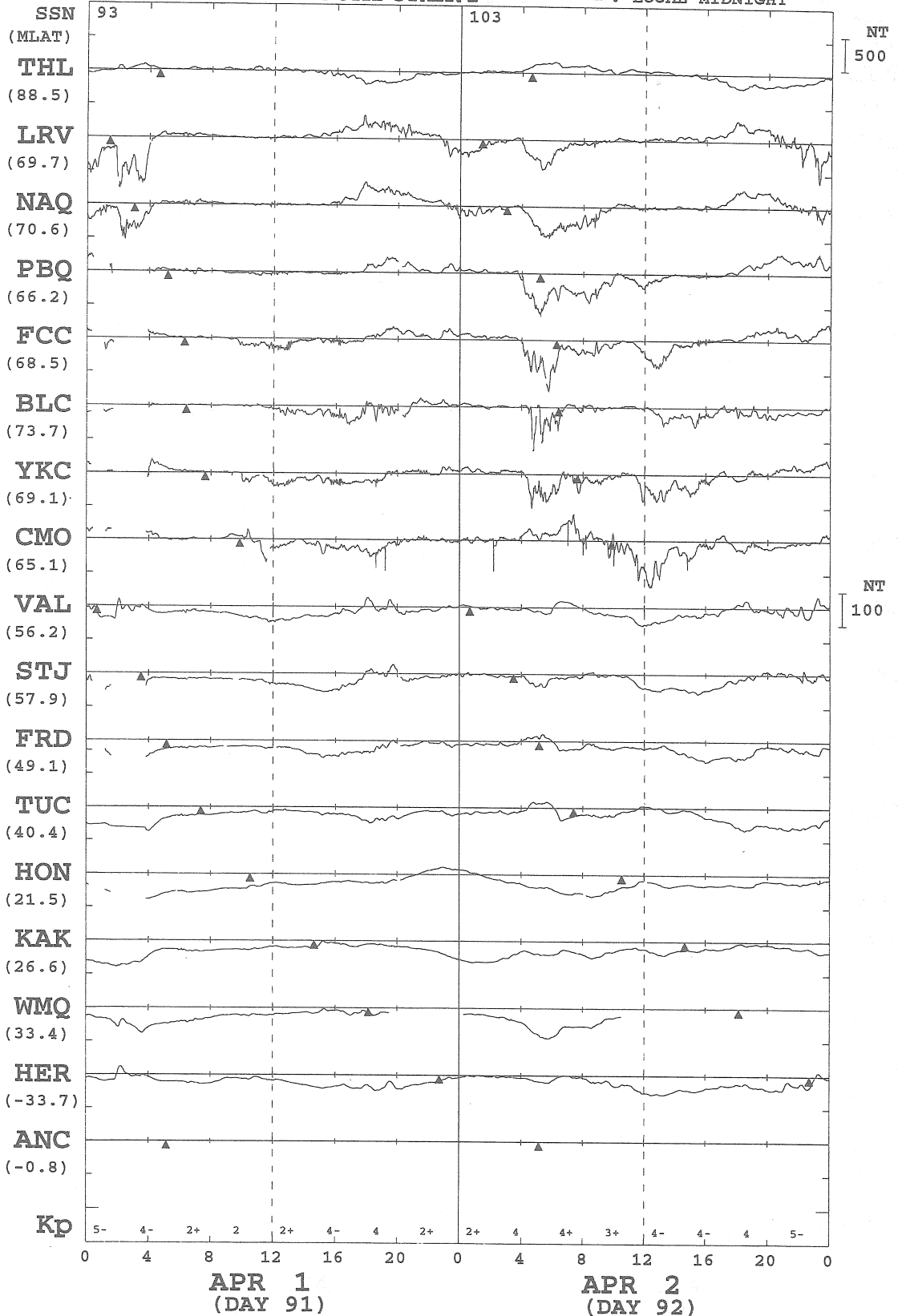
MAR 31
(DAY 90)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

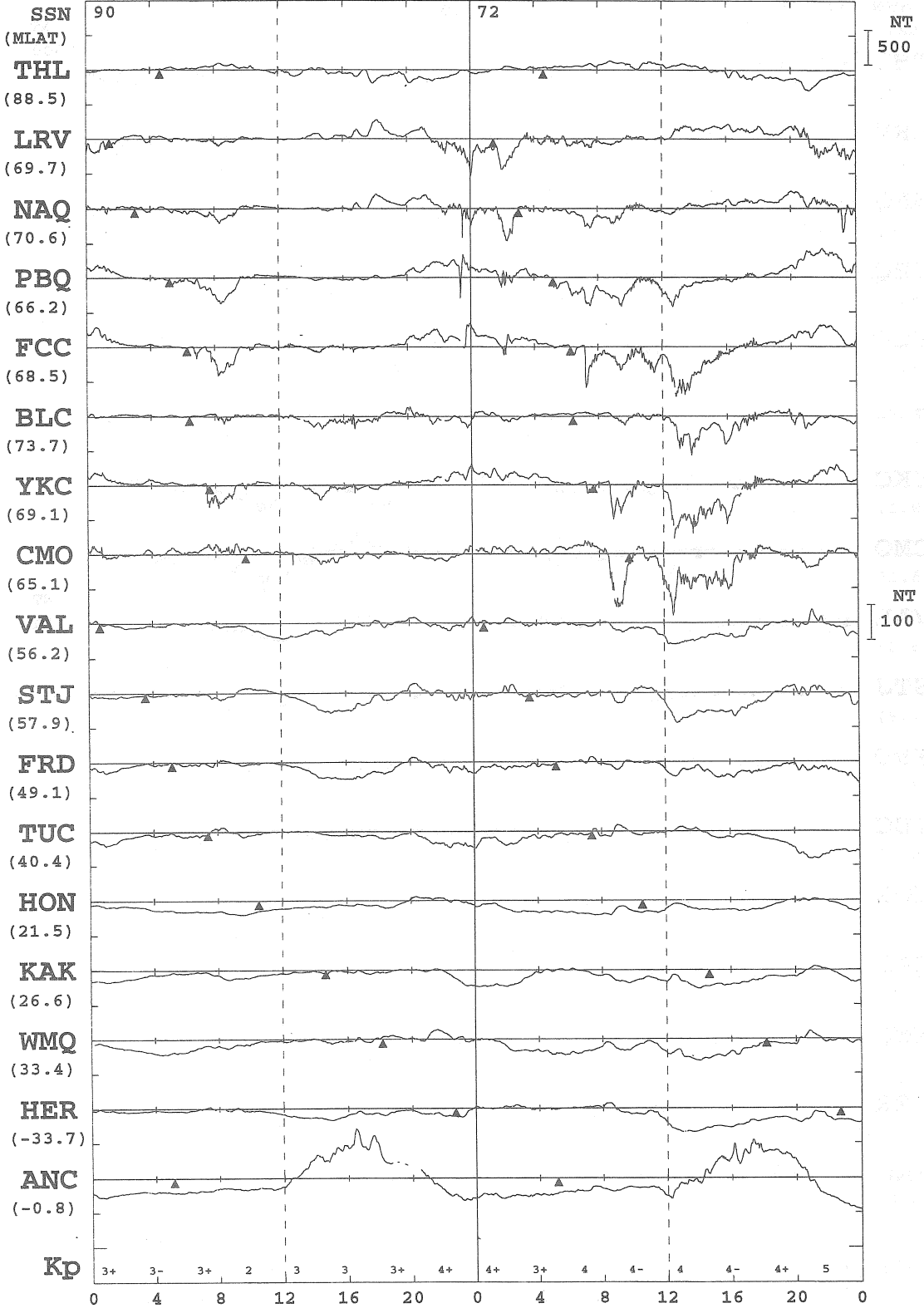


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

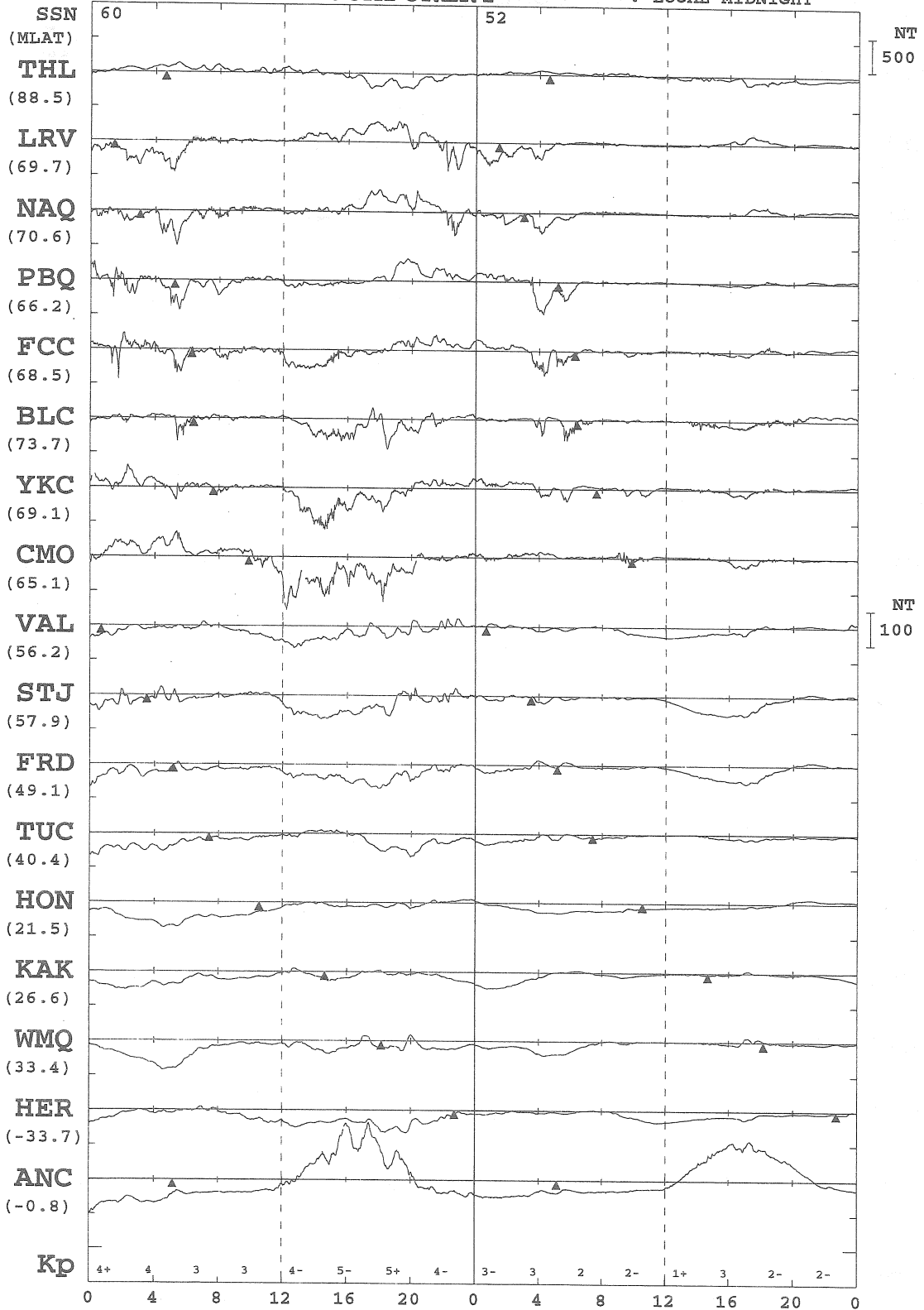
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

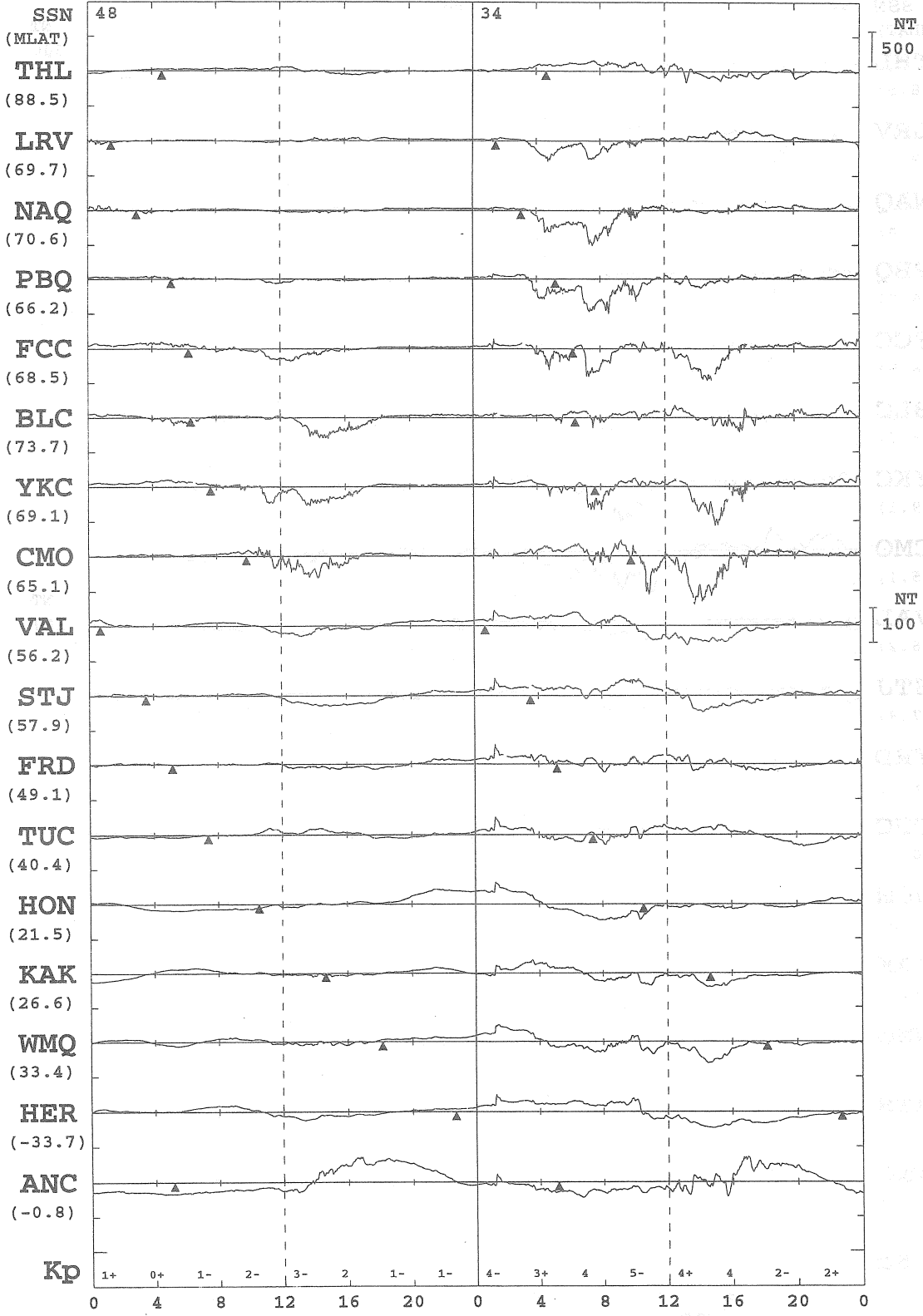
2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

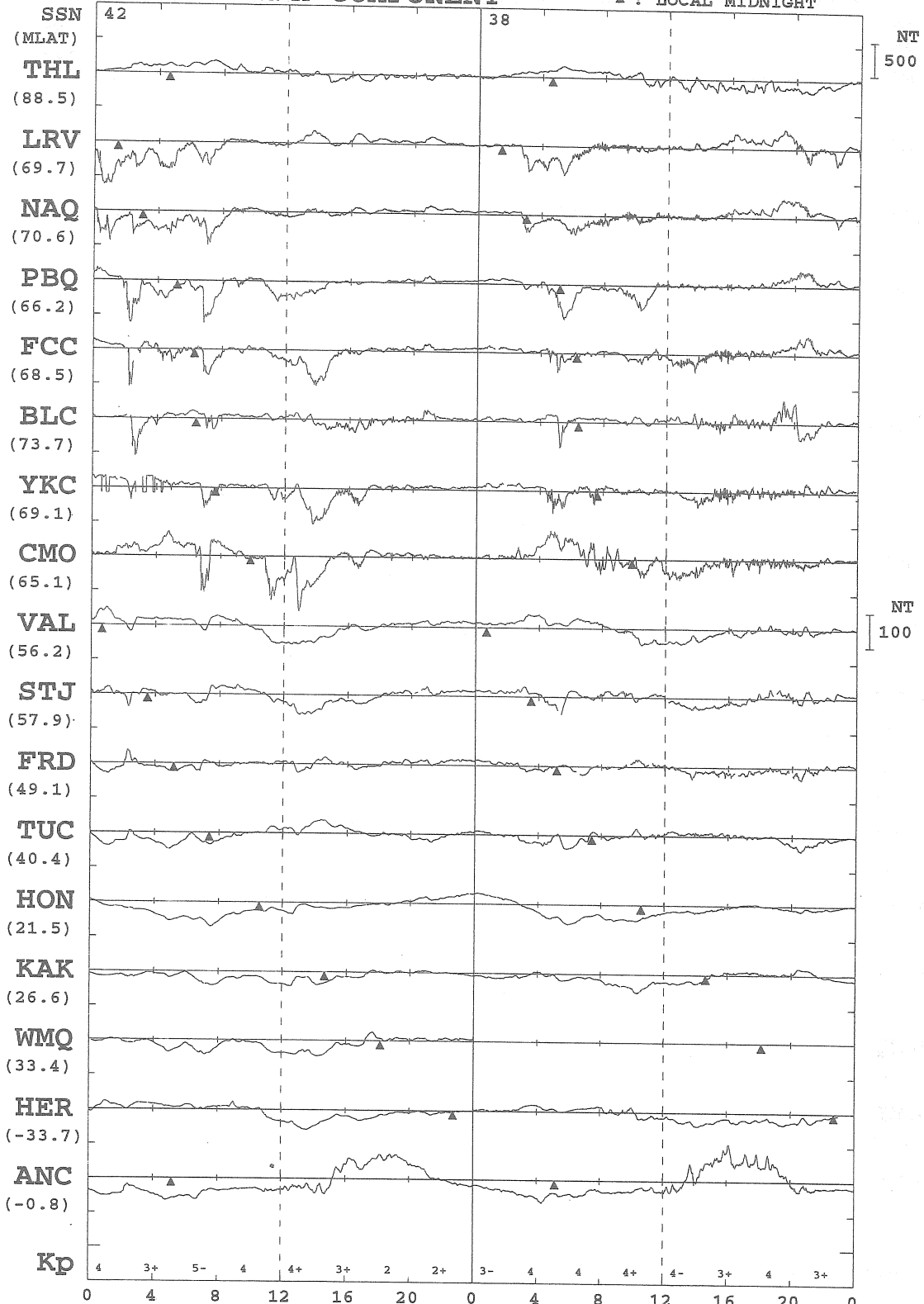
2003 H OR X-COMPONENT LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



APR 9
(DAY 99)

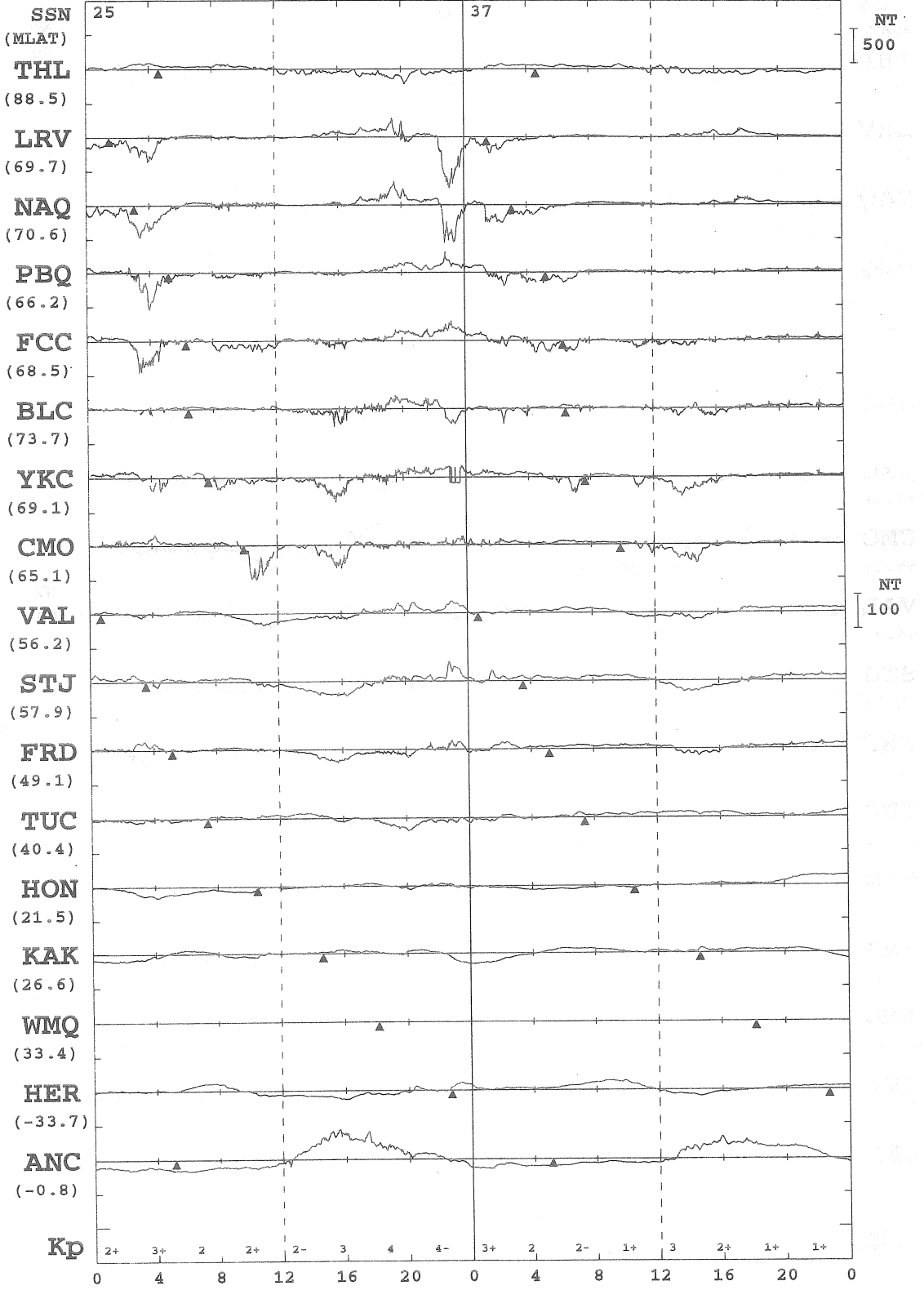
APR 10
(DAY 100)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

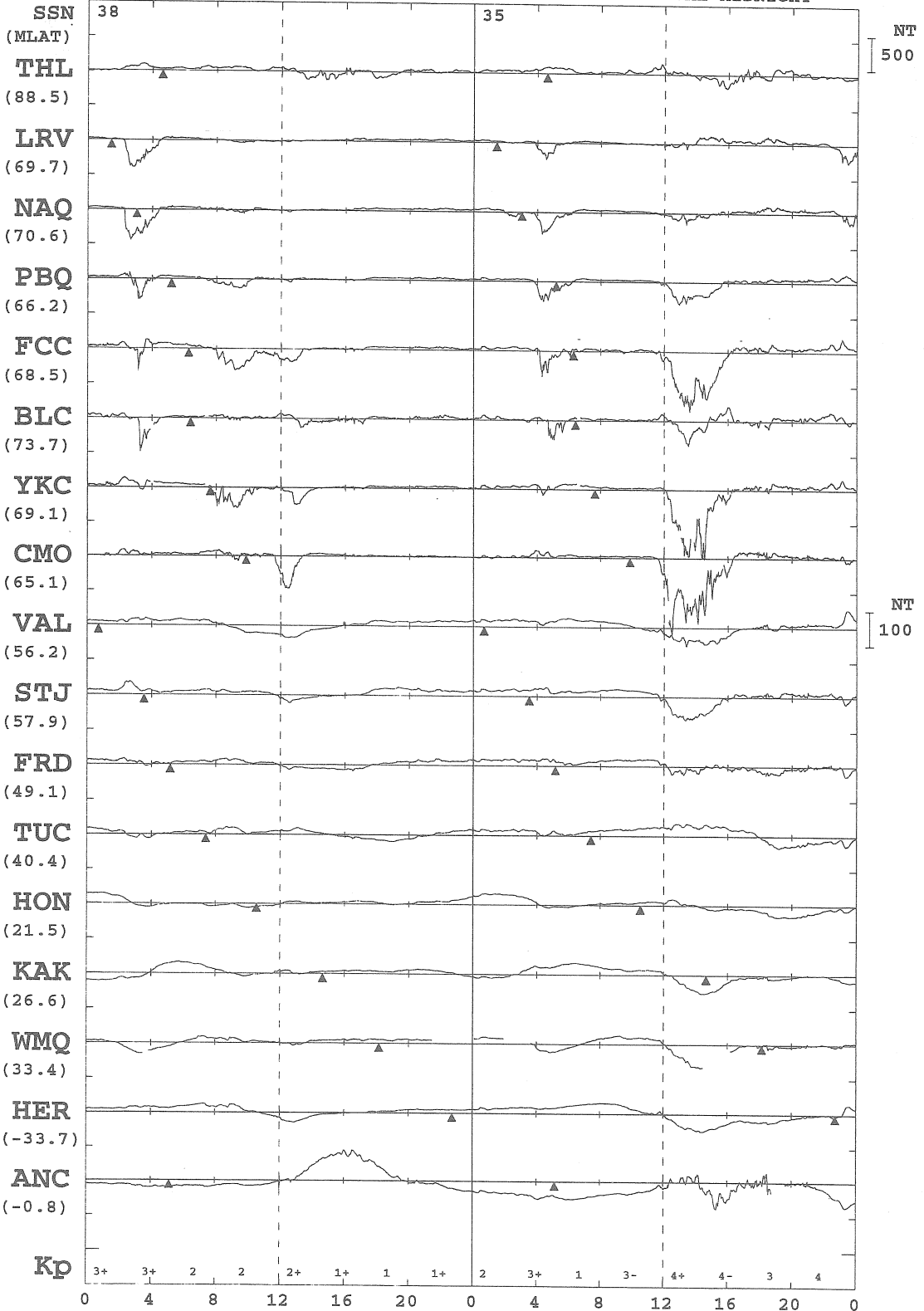


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



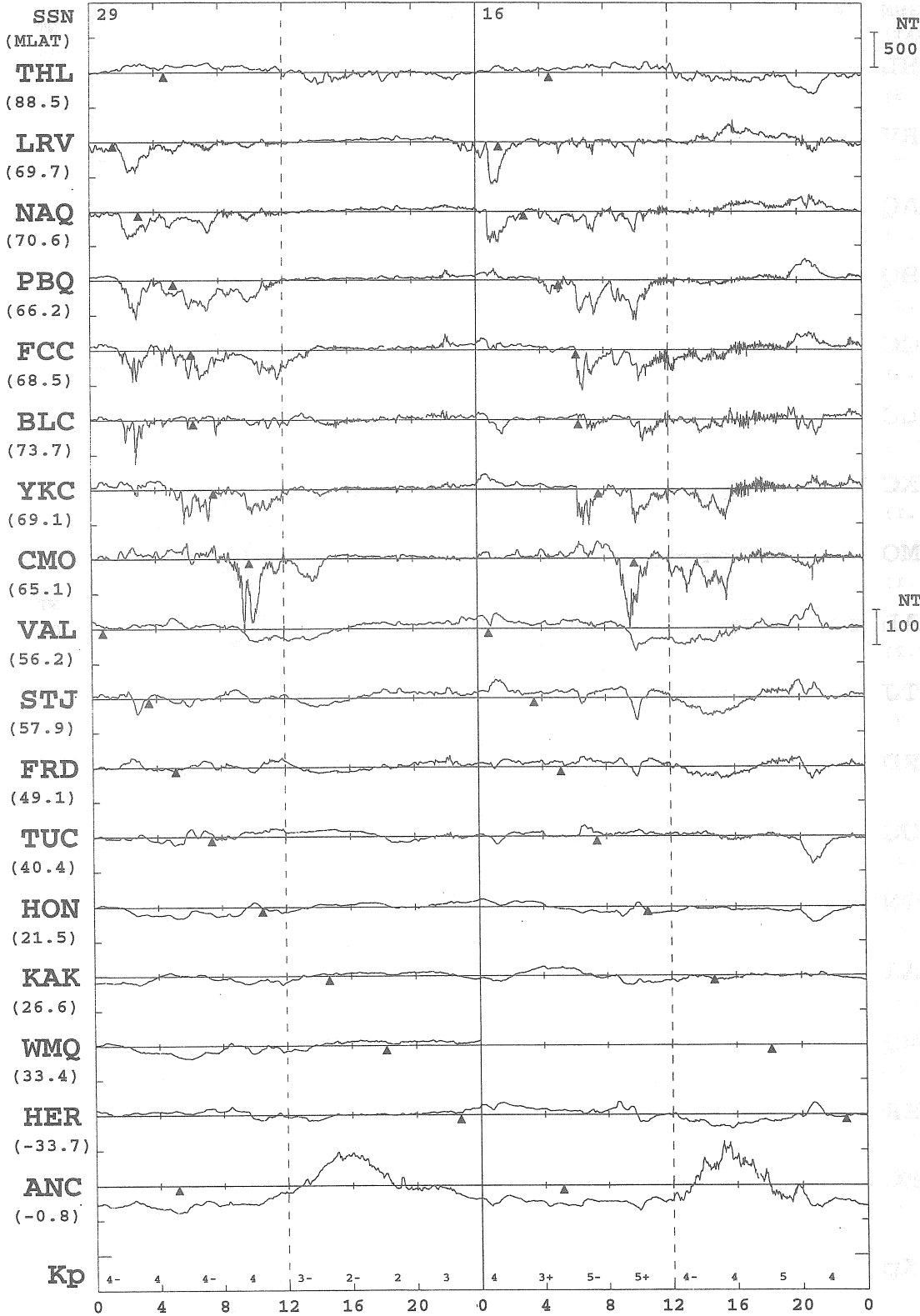
APR 13
(DAY 103)

APR 14
(DAY 104)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

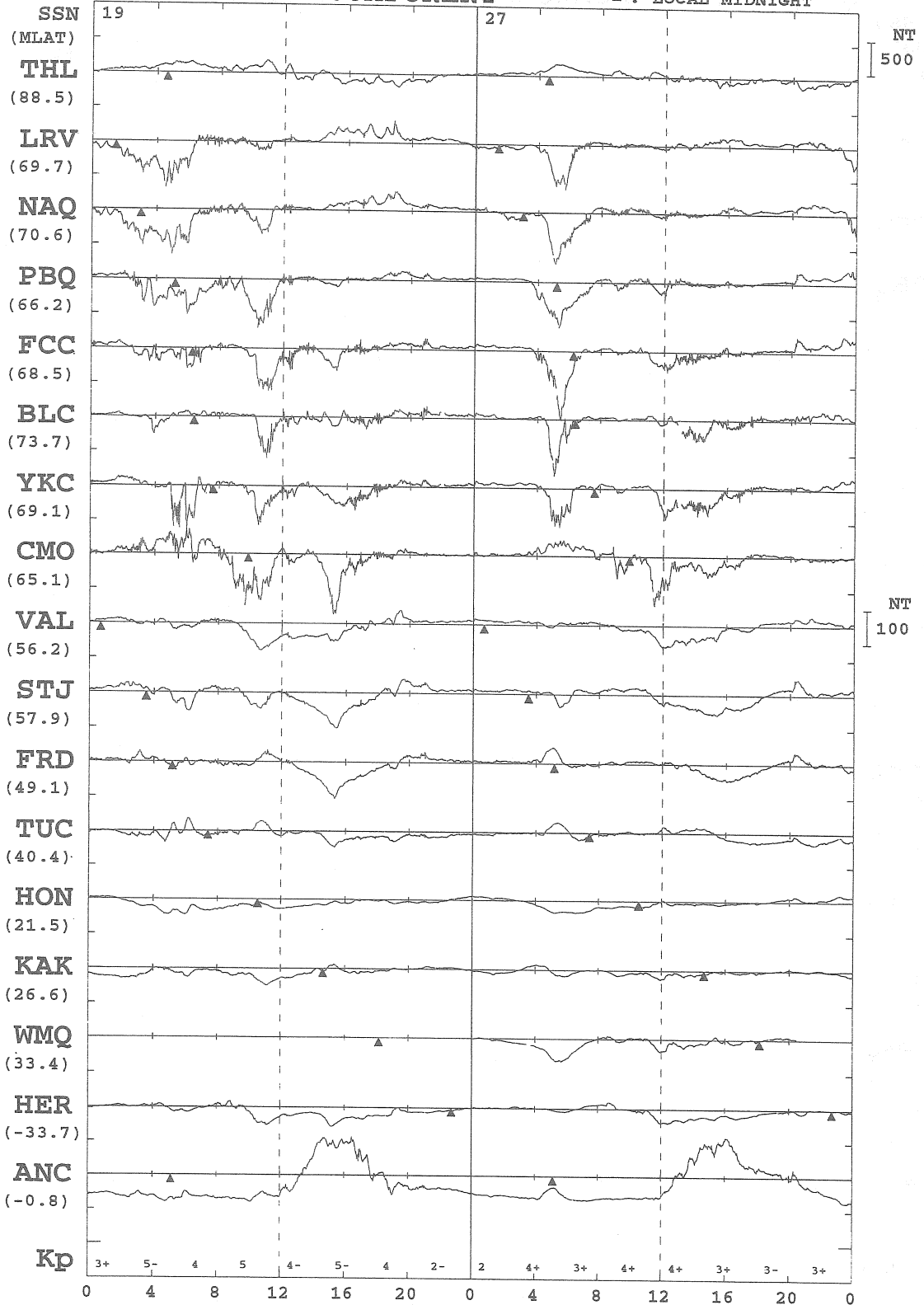
2003 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

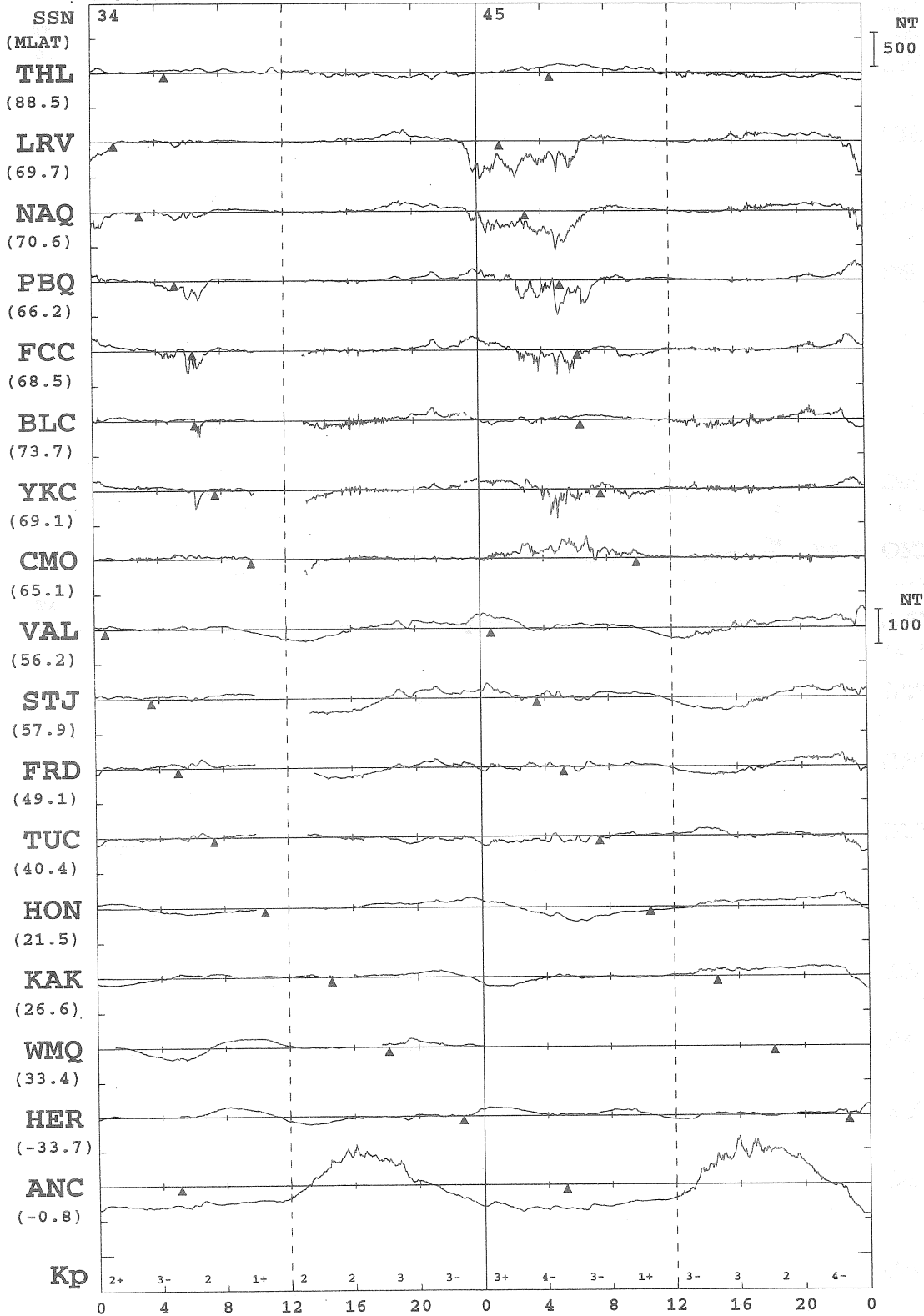
2003 H OR X-COMPONENT LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



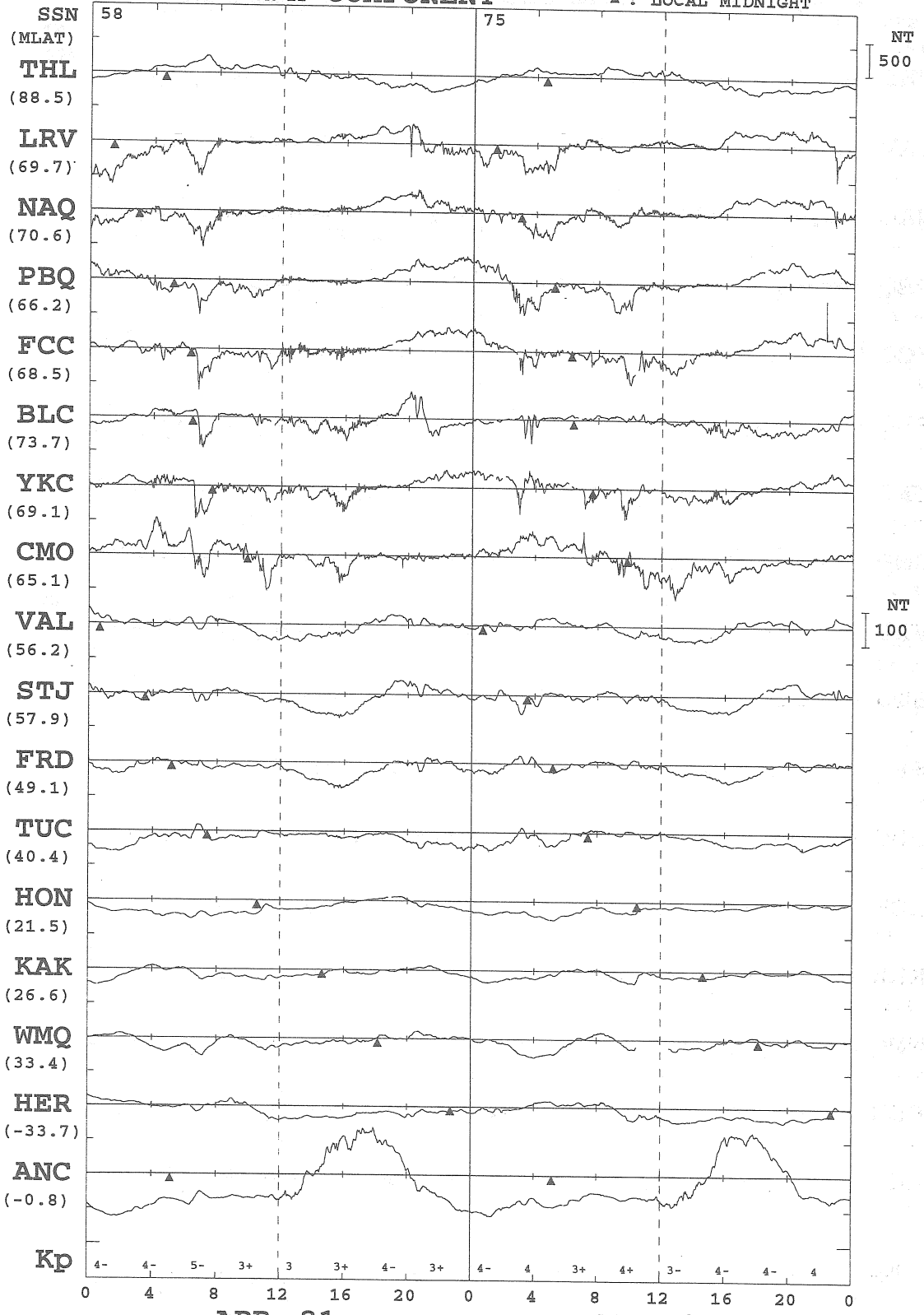
APR 19
(DAY 109)

APR 20
(DAY 110)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



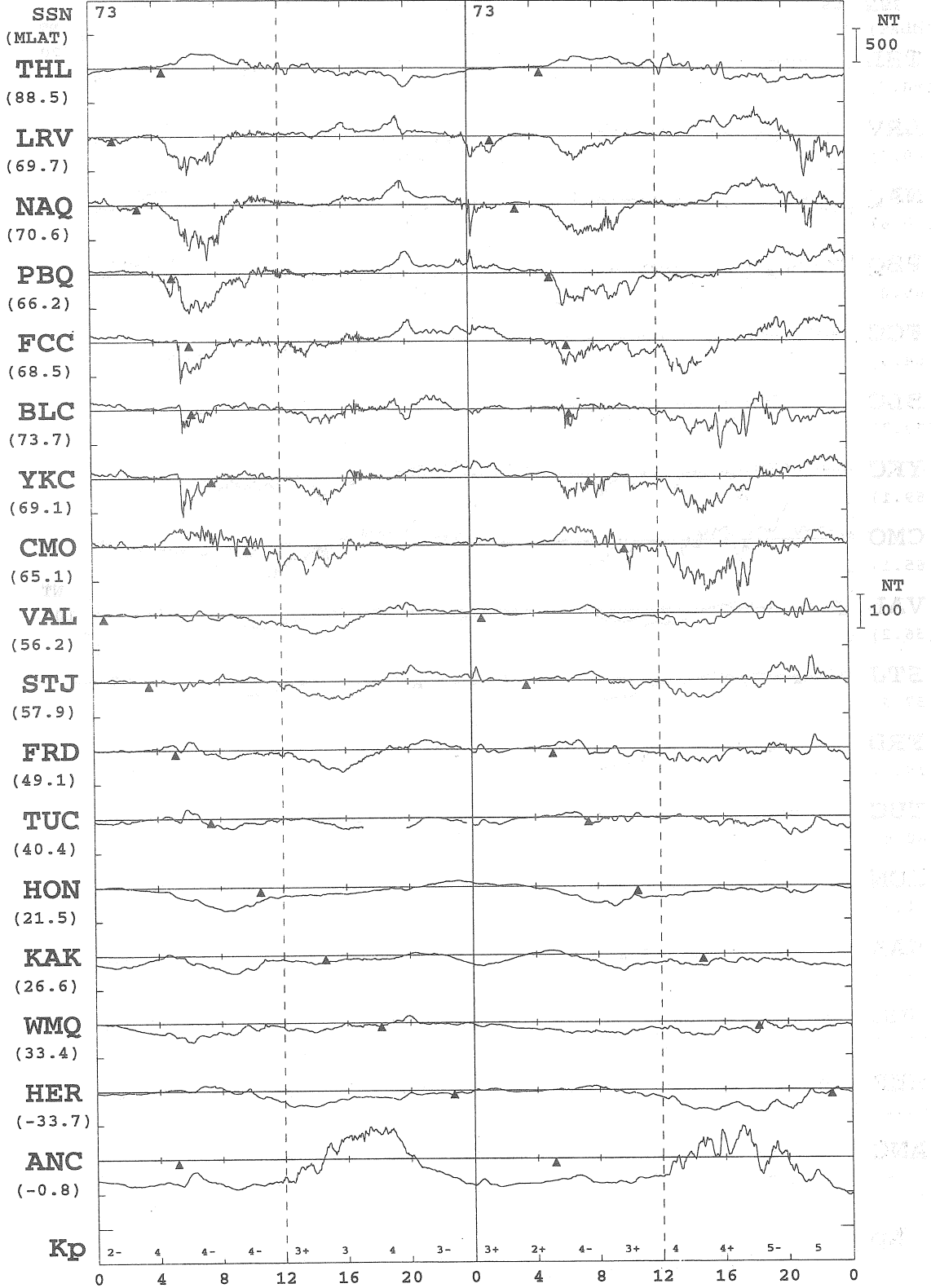
APR 21
(DAY 111)

APR 22
(DAY 112)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

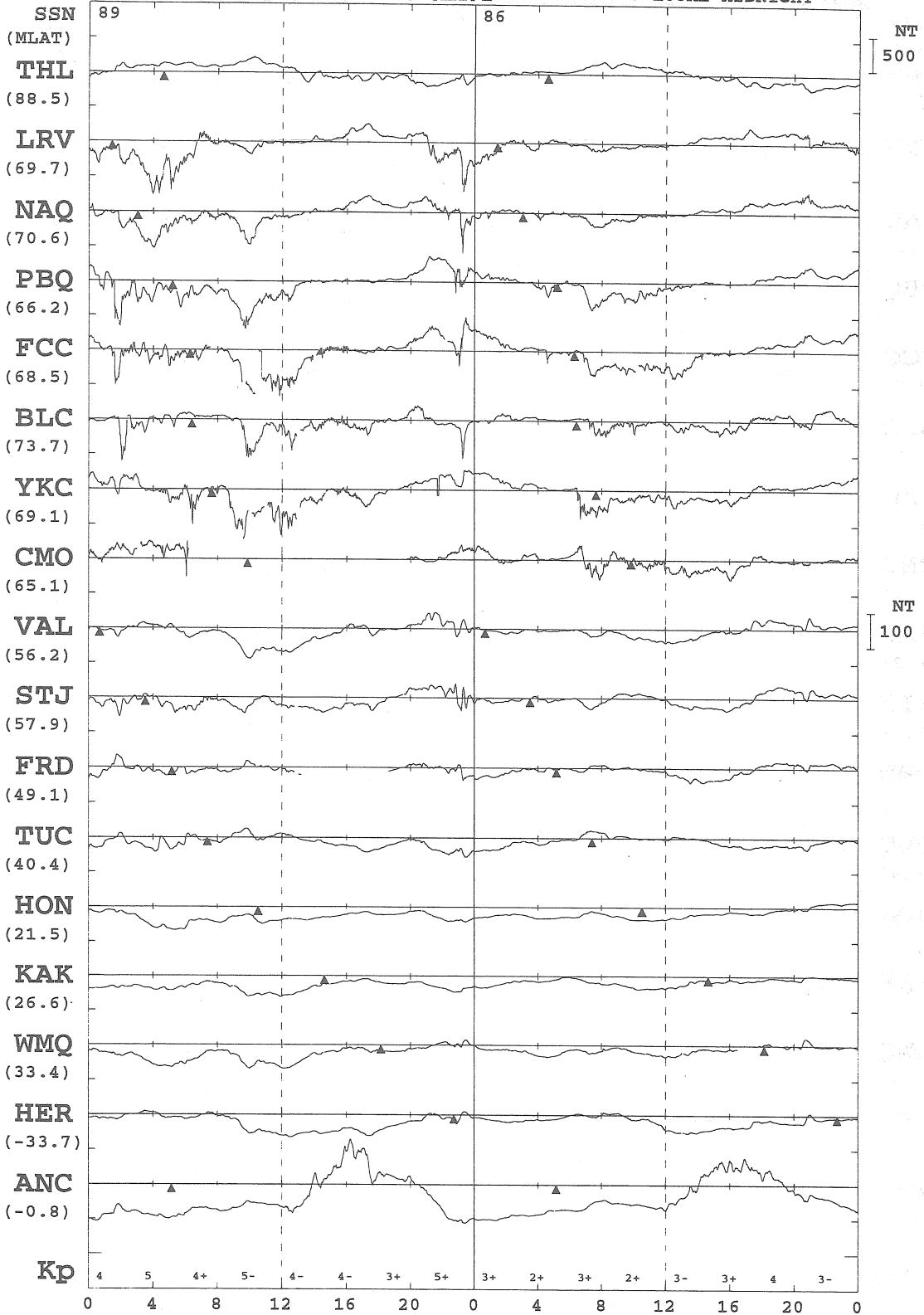


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



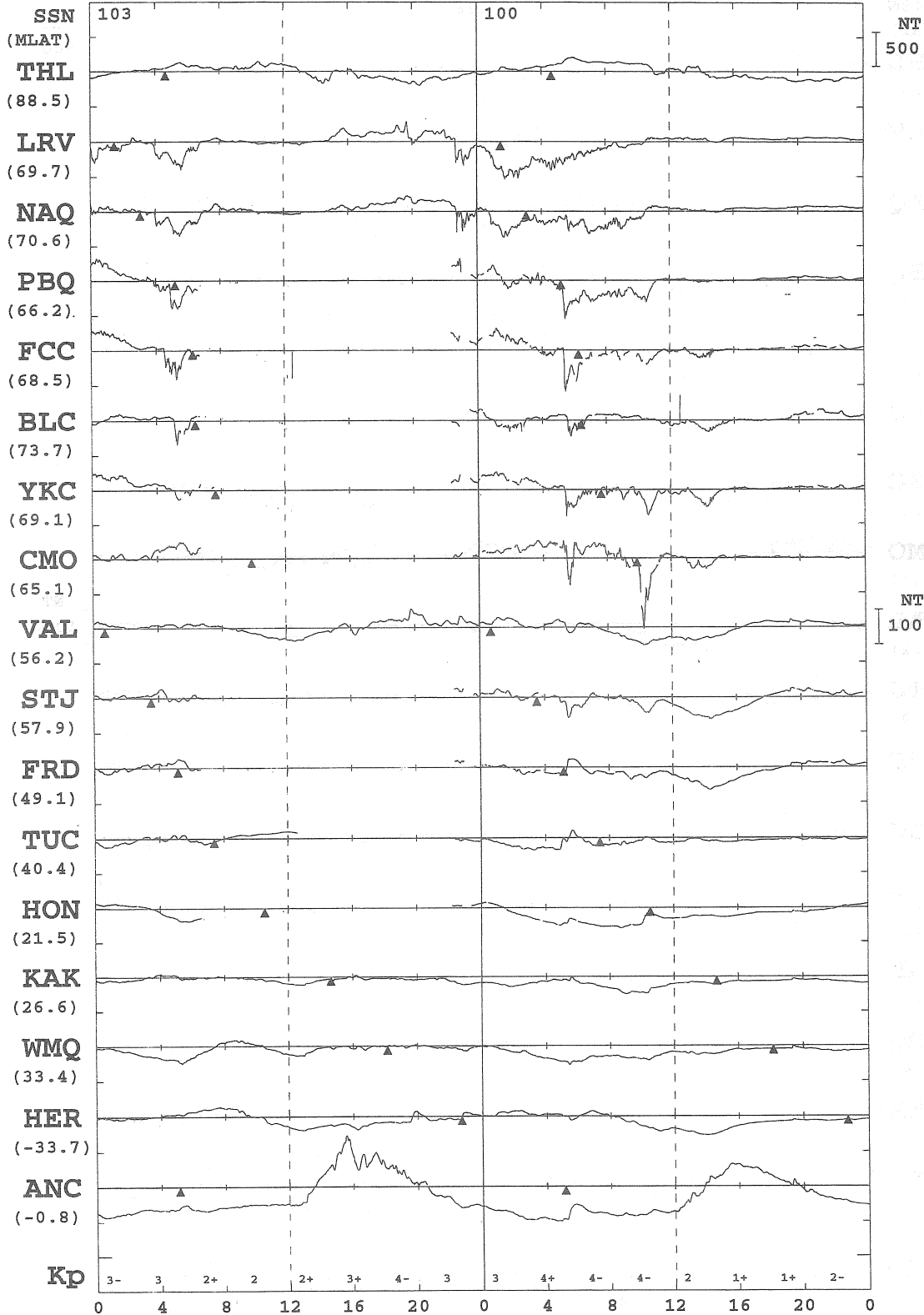
APR 25
(DAY 115)

APR 26
(DAY 116)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

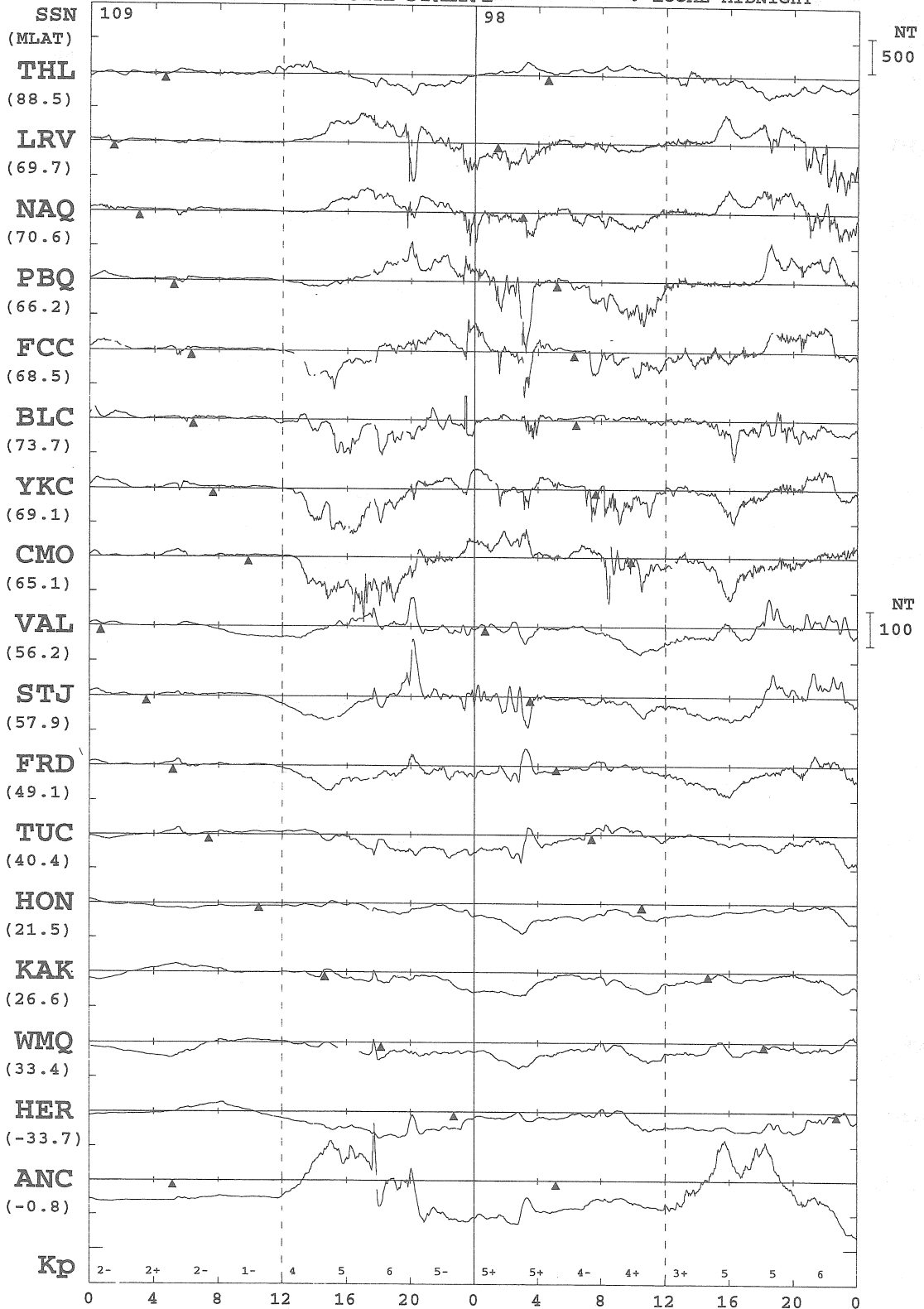


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



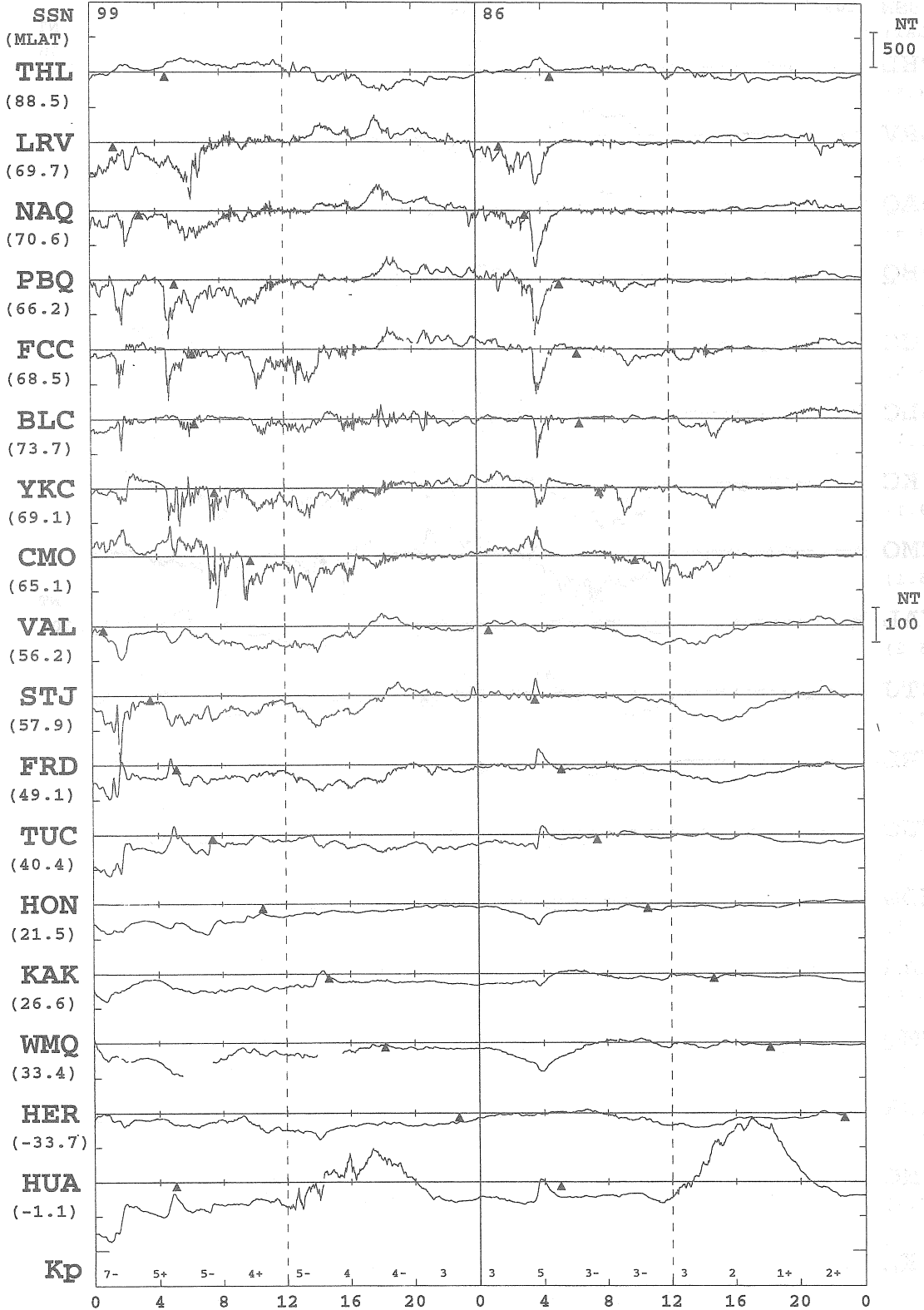
APR 29
(DAY 119)

APR 30
(DAY 120)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

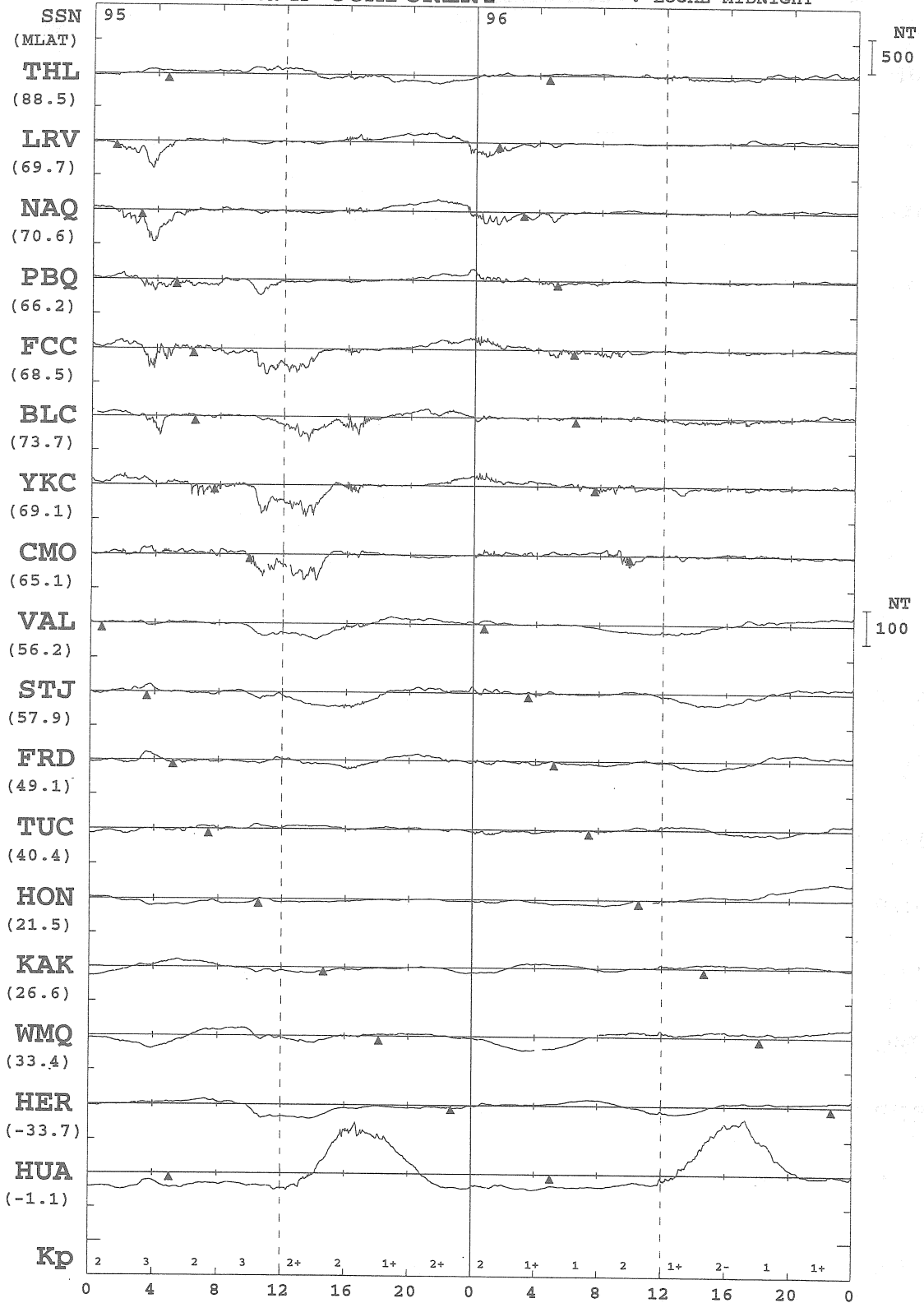
2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



MAY 1 (DAY 121) MAY 2 (DAY 122)

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

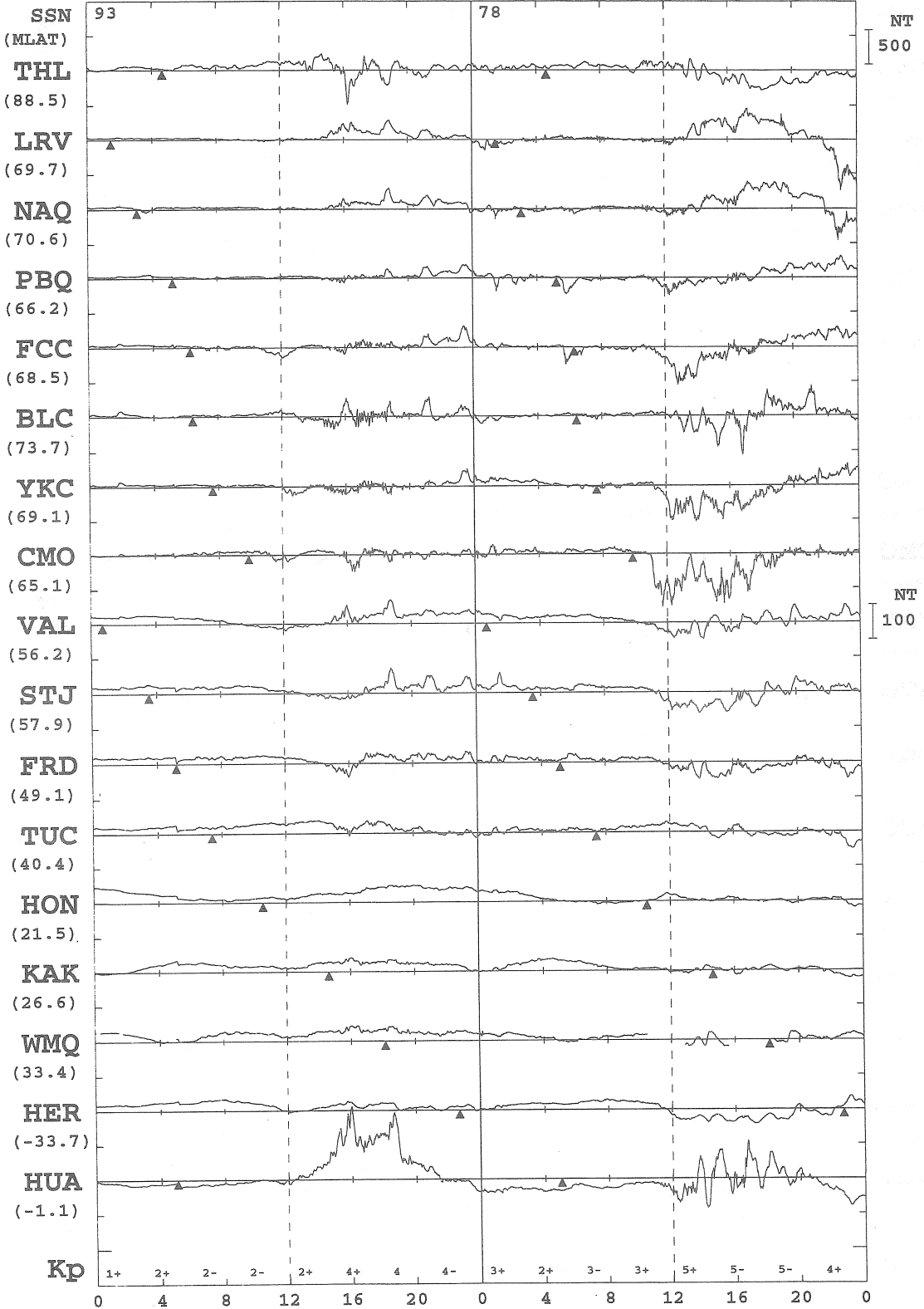
2003 H OR X-COMPONENT ~~DATA~~ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

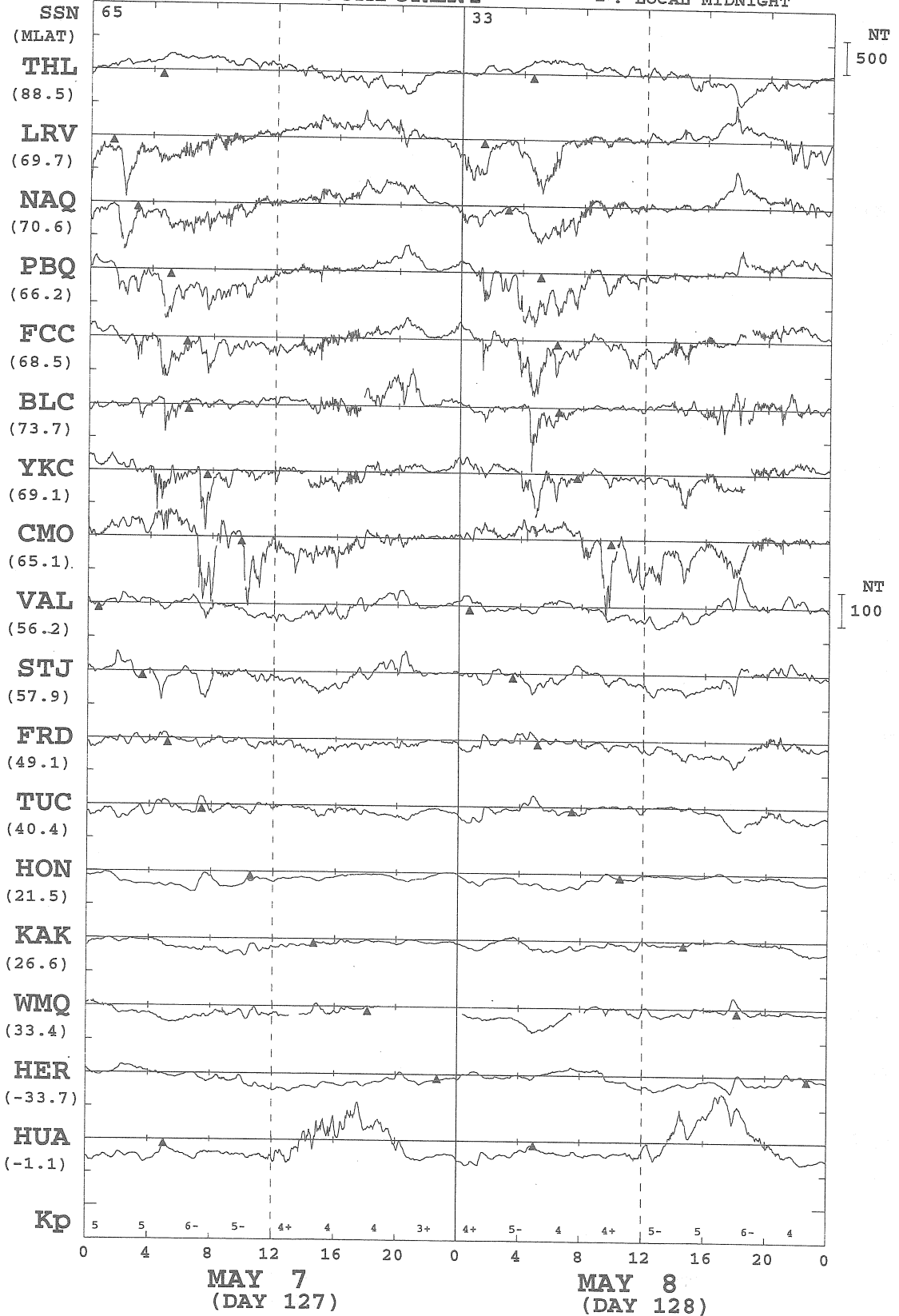


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

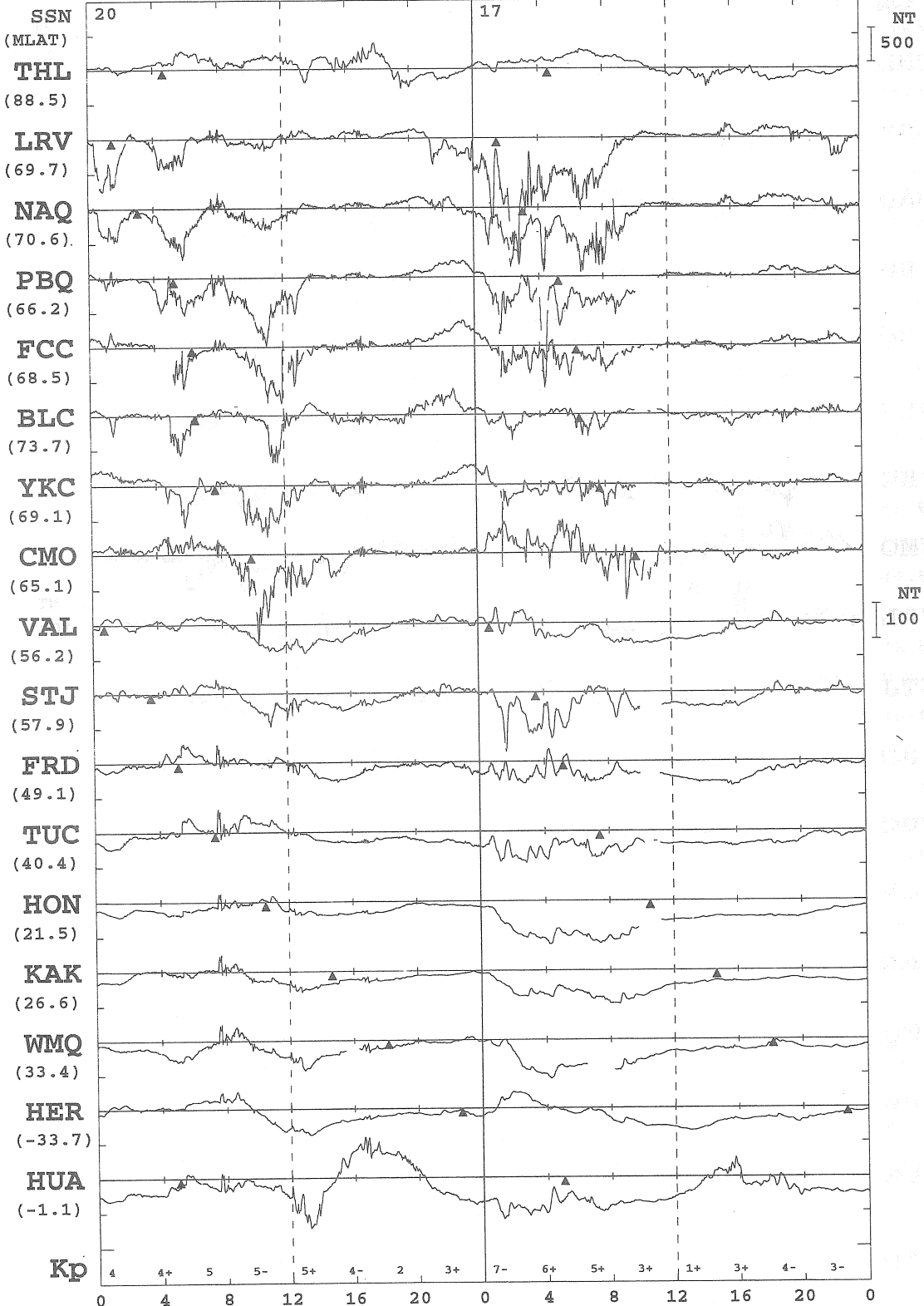
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



MAY 9
(DAY 129)

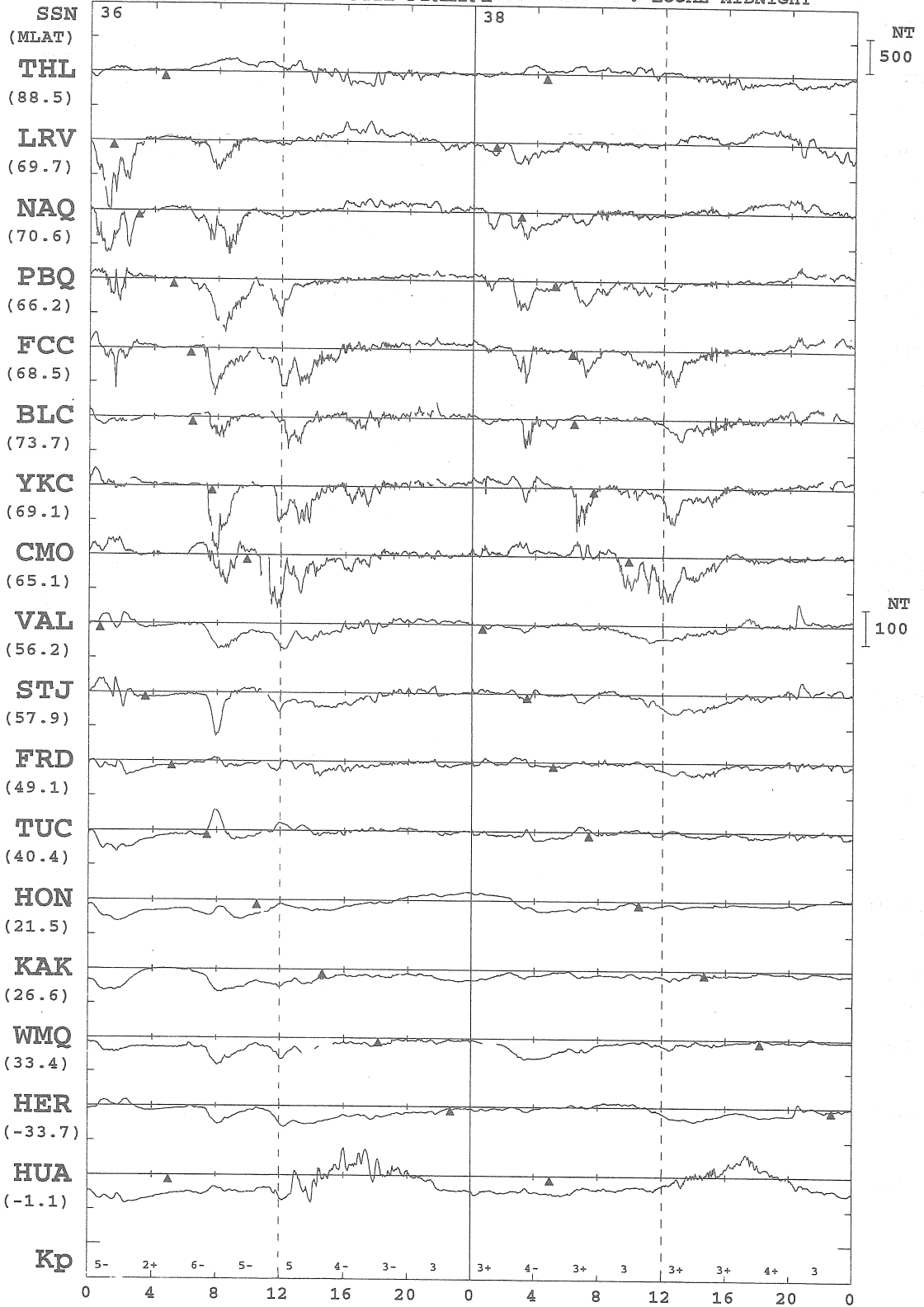
MAY 10
(DAY 130)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

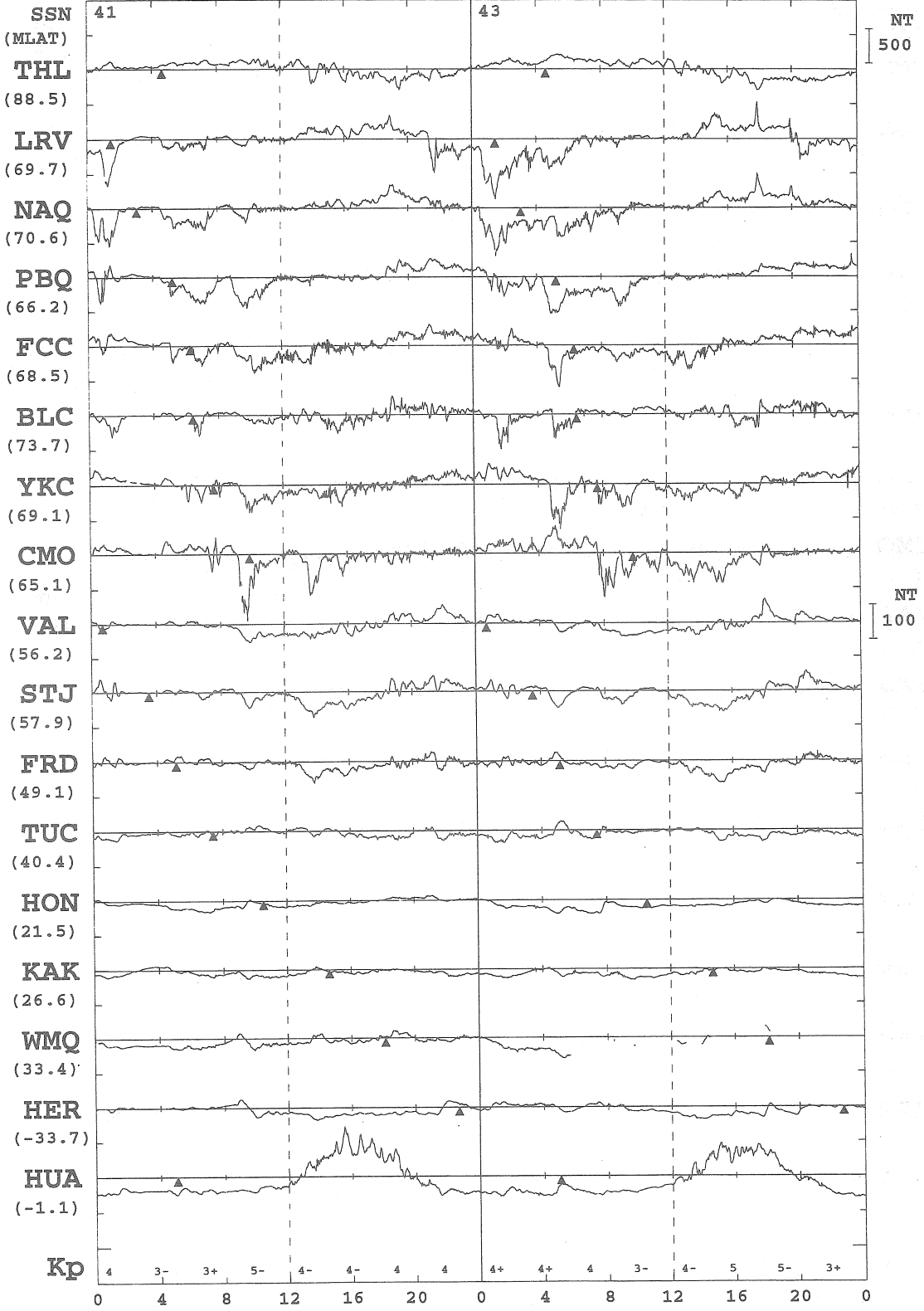


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



Kp

4 3- 3+ 5- 4- 4- 4 4 4+ 4+ 4 3- 4- 5 5- 3+

MAY 13
(DAY 133)

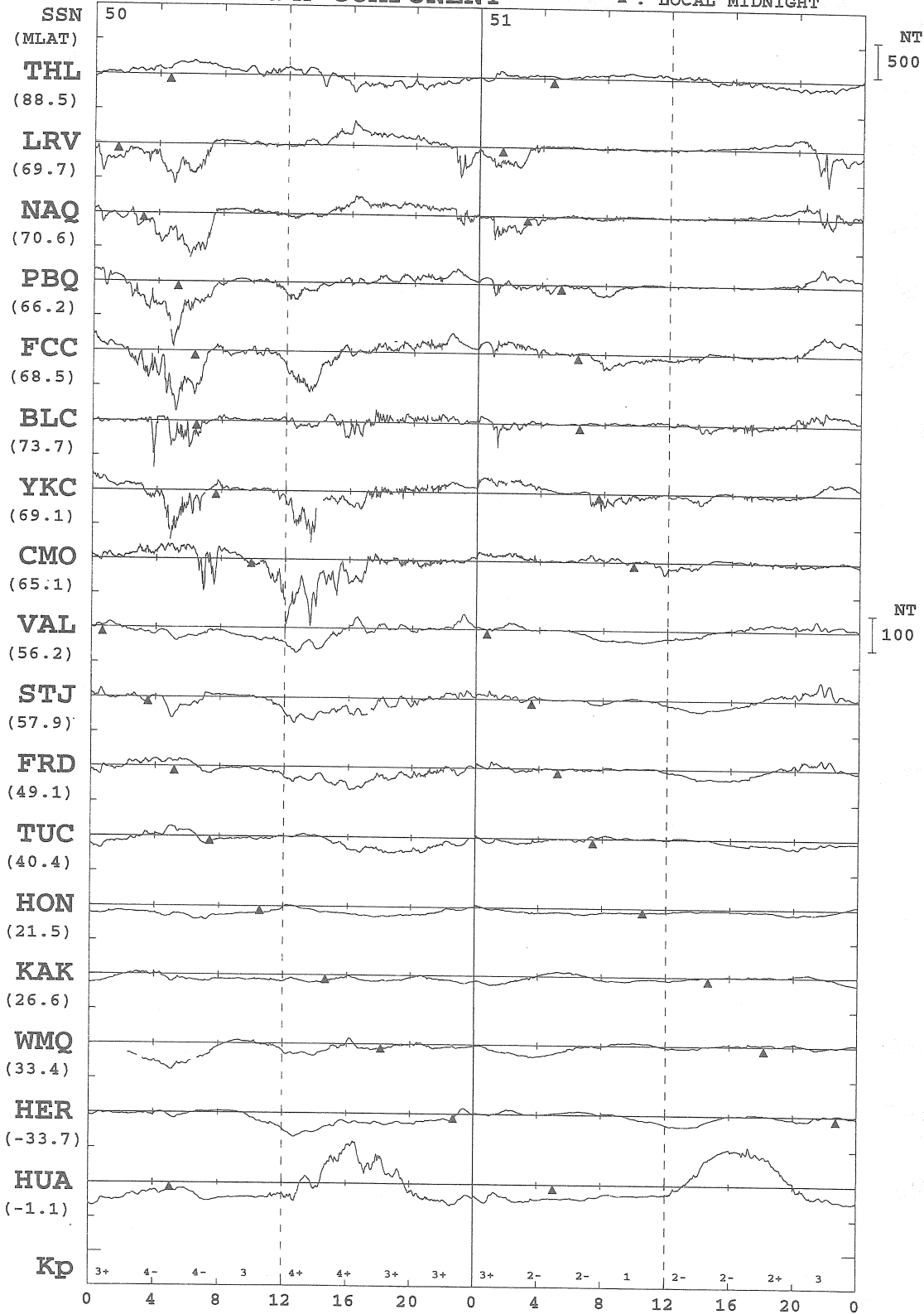
MAY 14
(DAY 134)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

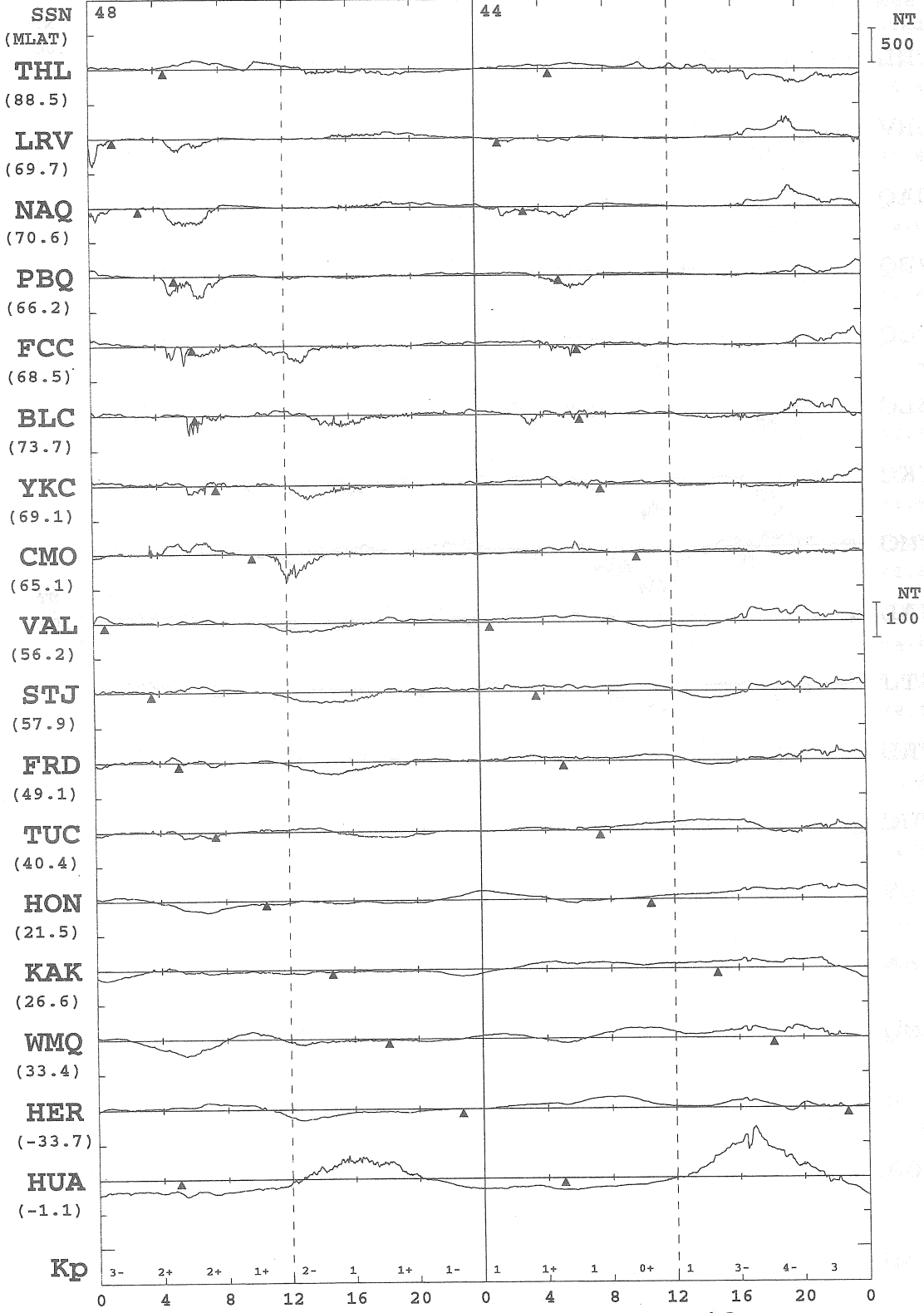
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



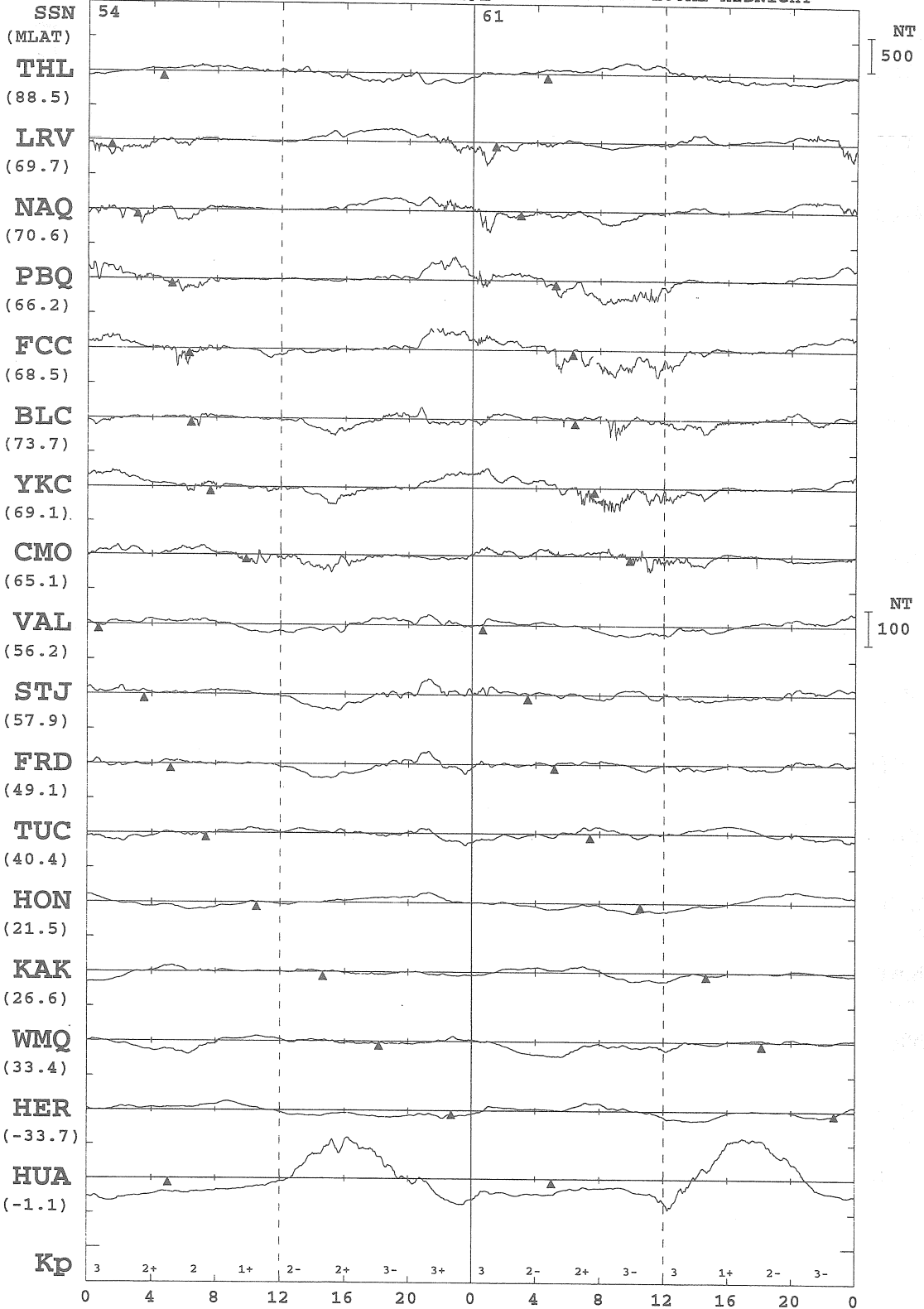
MAY 17
(DAY 137)

MAY 18
(DAY 138)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



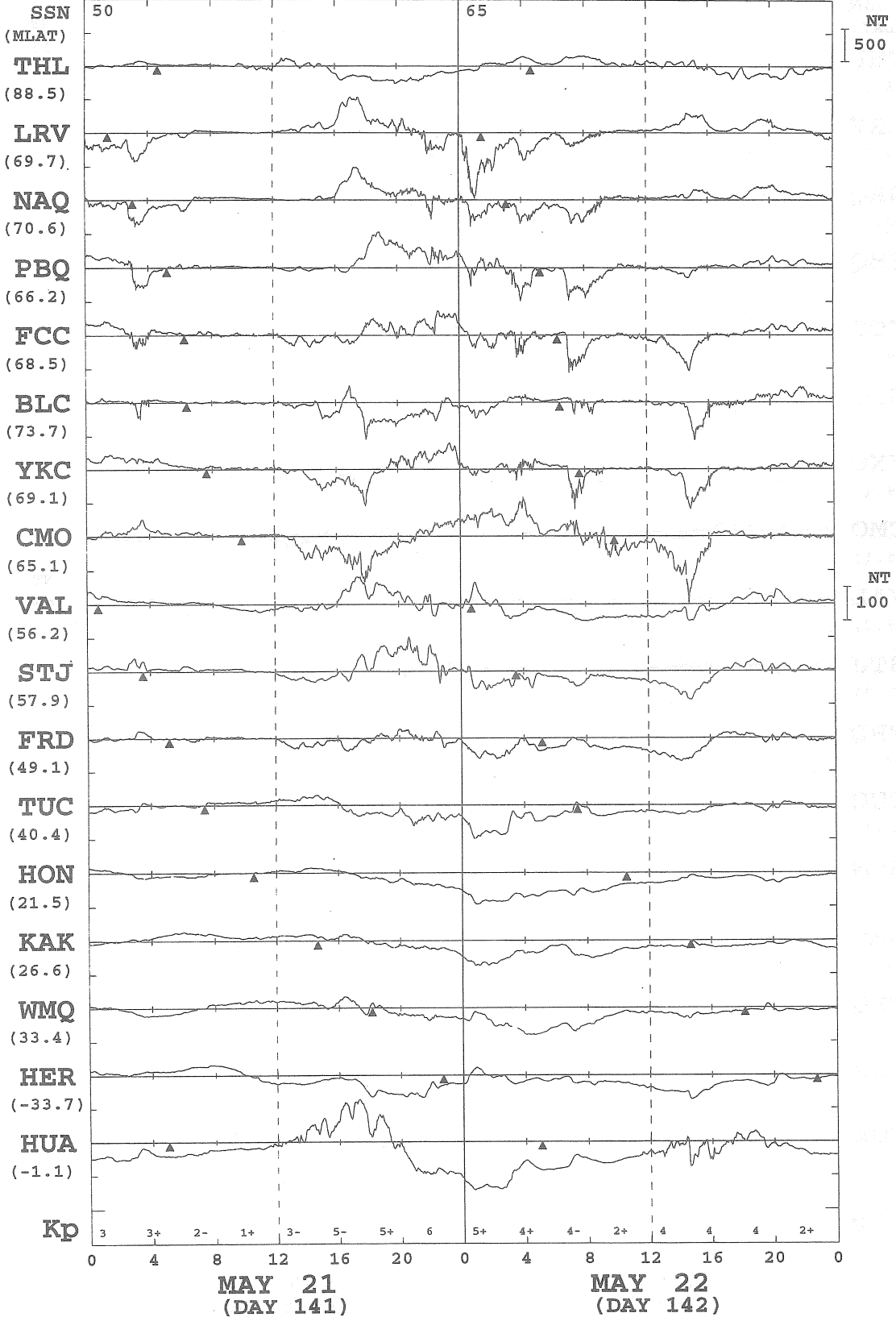
MAY 19
(DAY 139)

MAY 20
(DAY 140)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

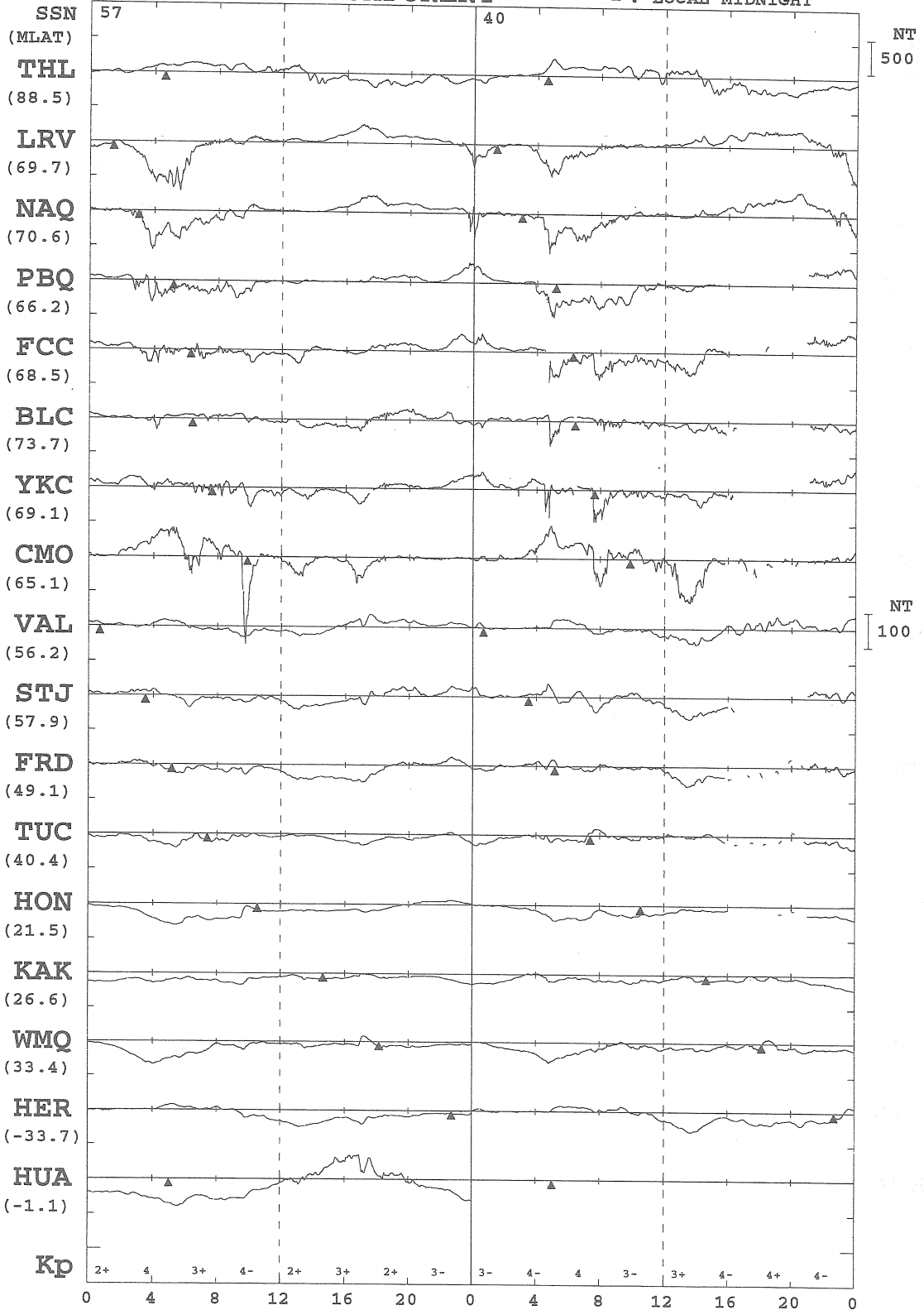


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



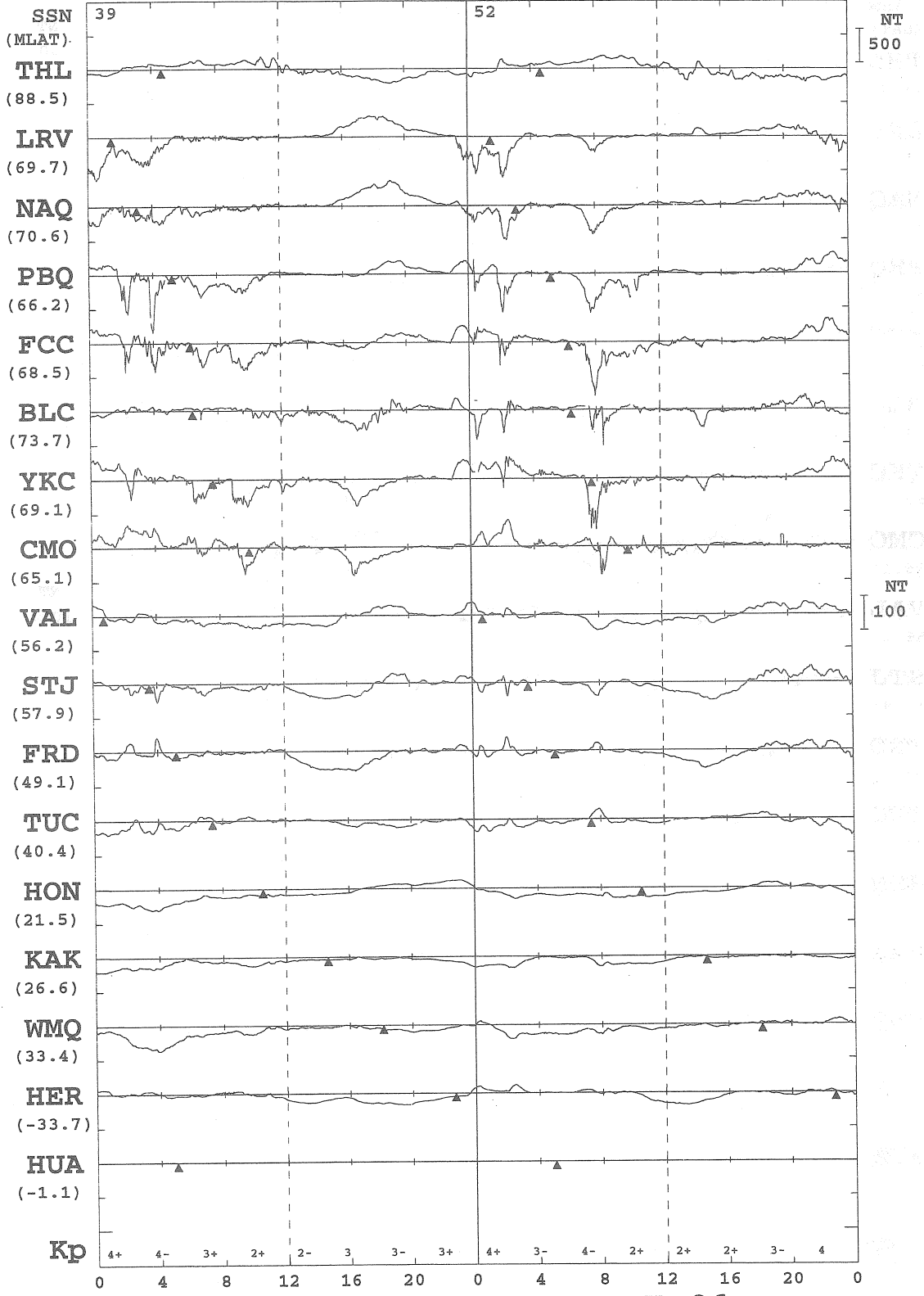
MAY 23
(DAY 143)

MAY 24
(DAY 144)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



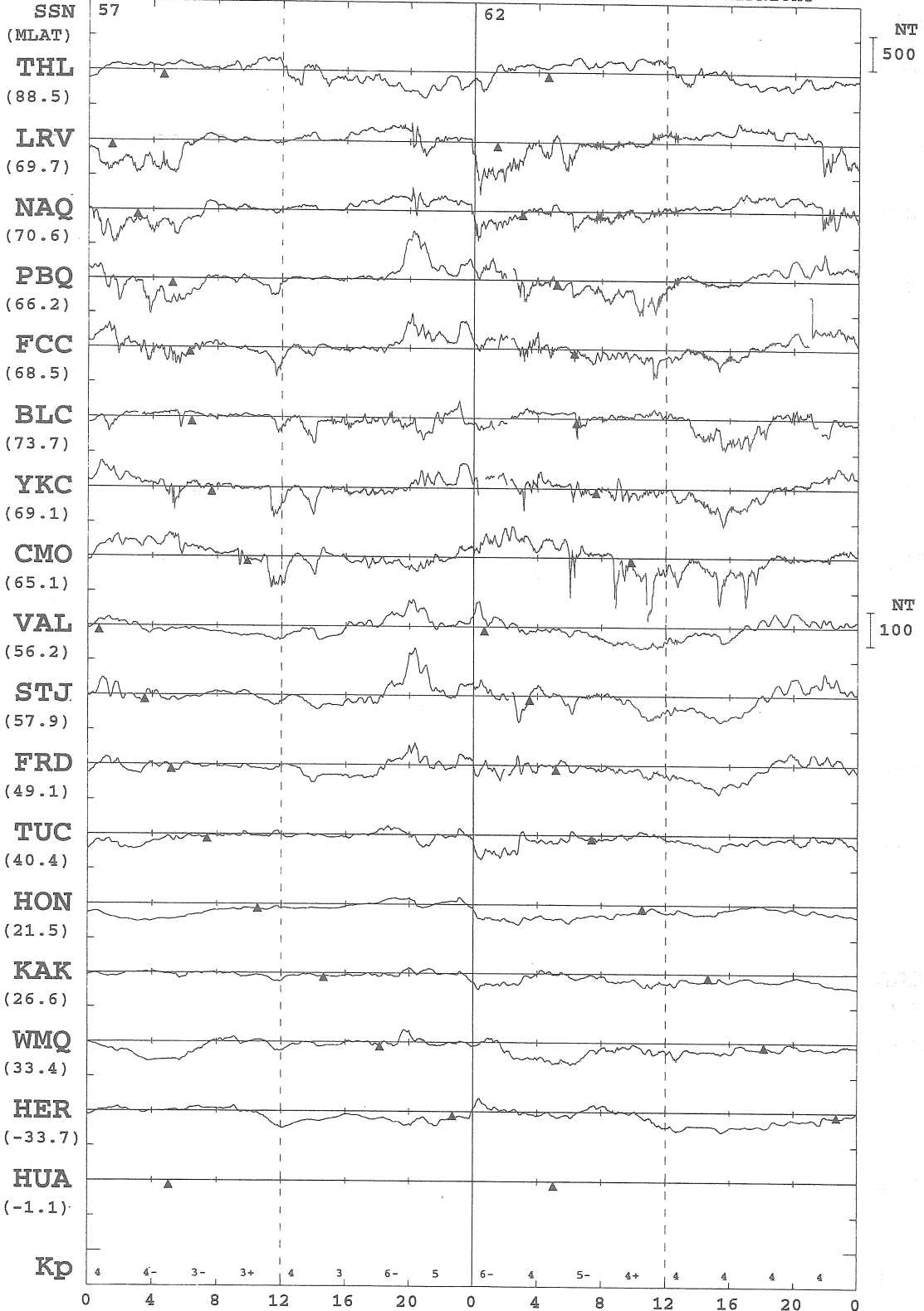
Kp

4+ 4- 3+ 2+ 2- 3 3- 3+ 4+ 3- 4- 2+ 2+ 2+ 3- 4

MAY 25 (DAY 145) MAY 26 (DAY 146)

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

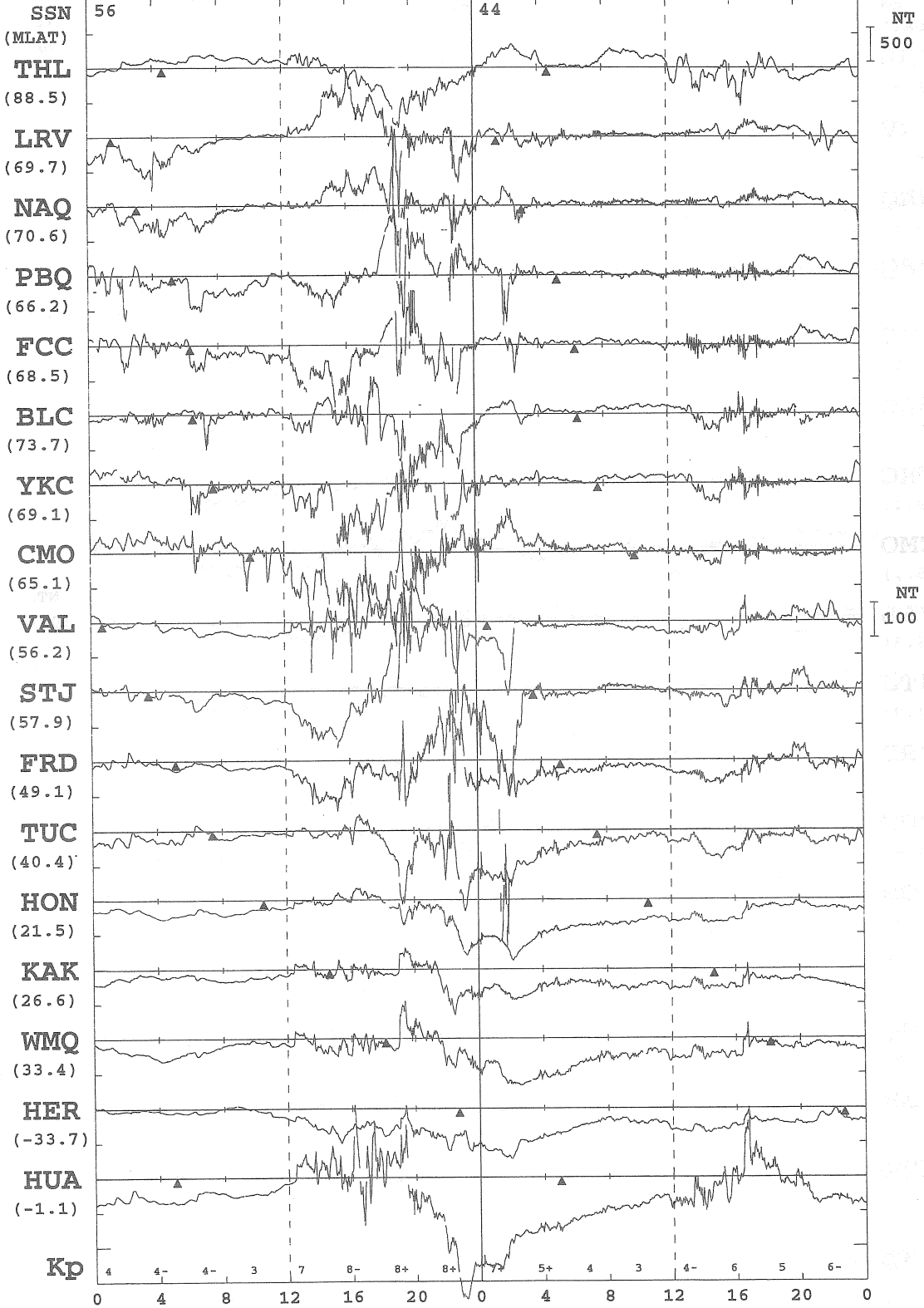
2003 H OR X-COMPONENT LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



MAY 29
(DAY 149)

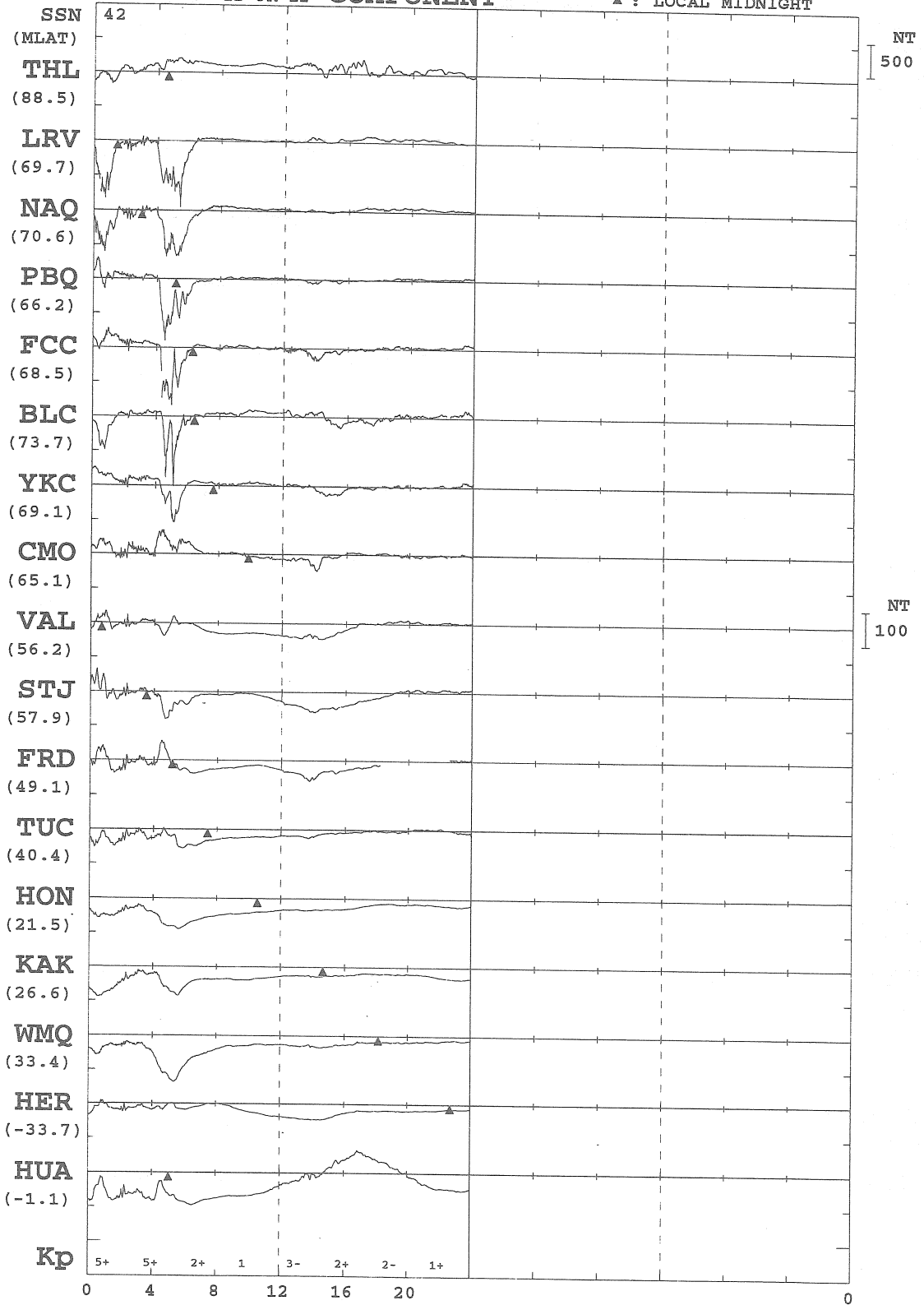
MAY 30
(DAY 150)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



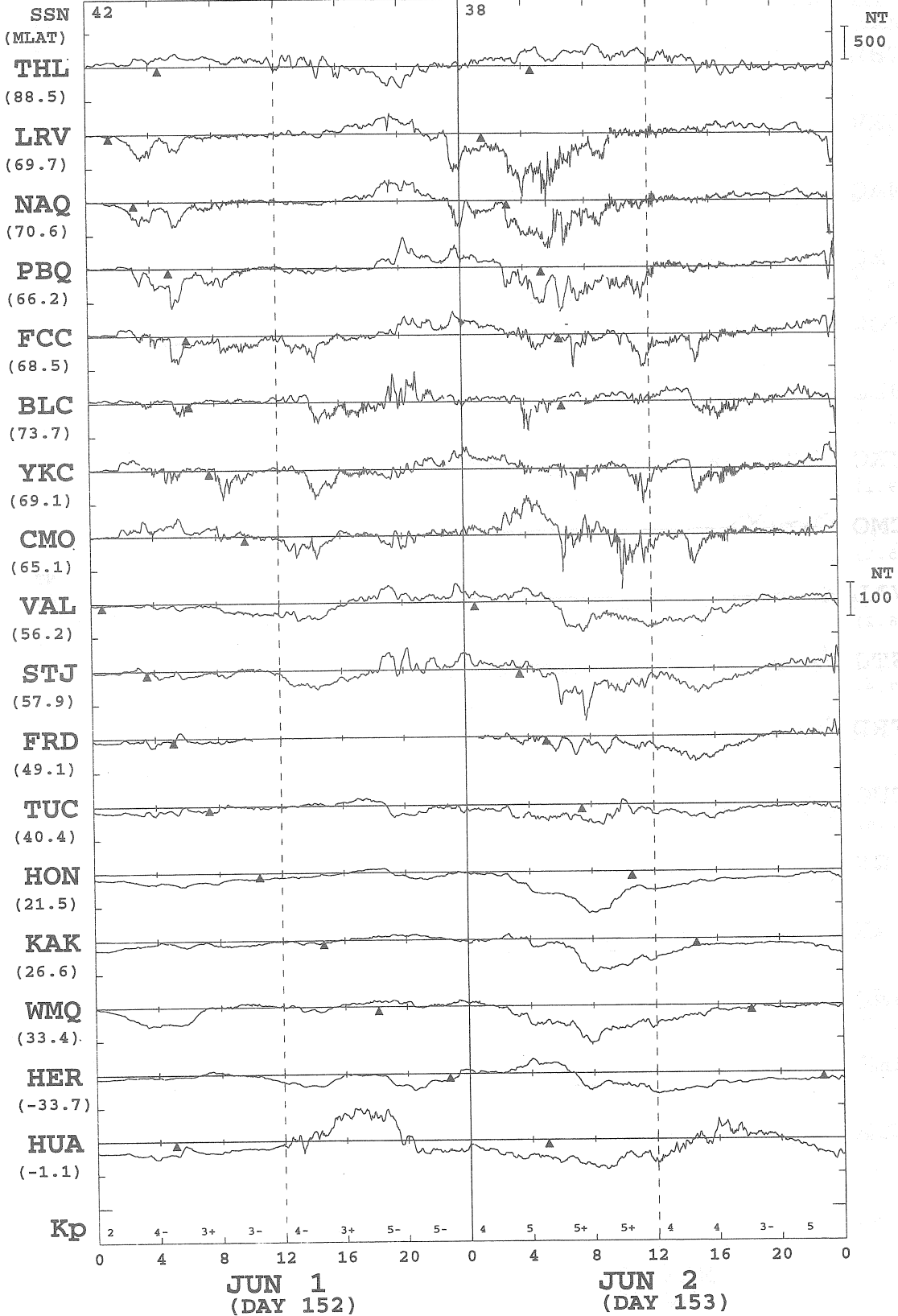
MAY 31
(DAY 151)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
* PROMPT DATA ARE INCLUDED
* ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

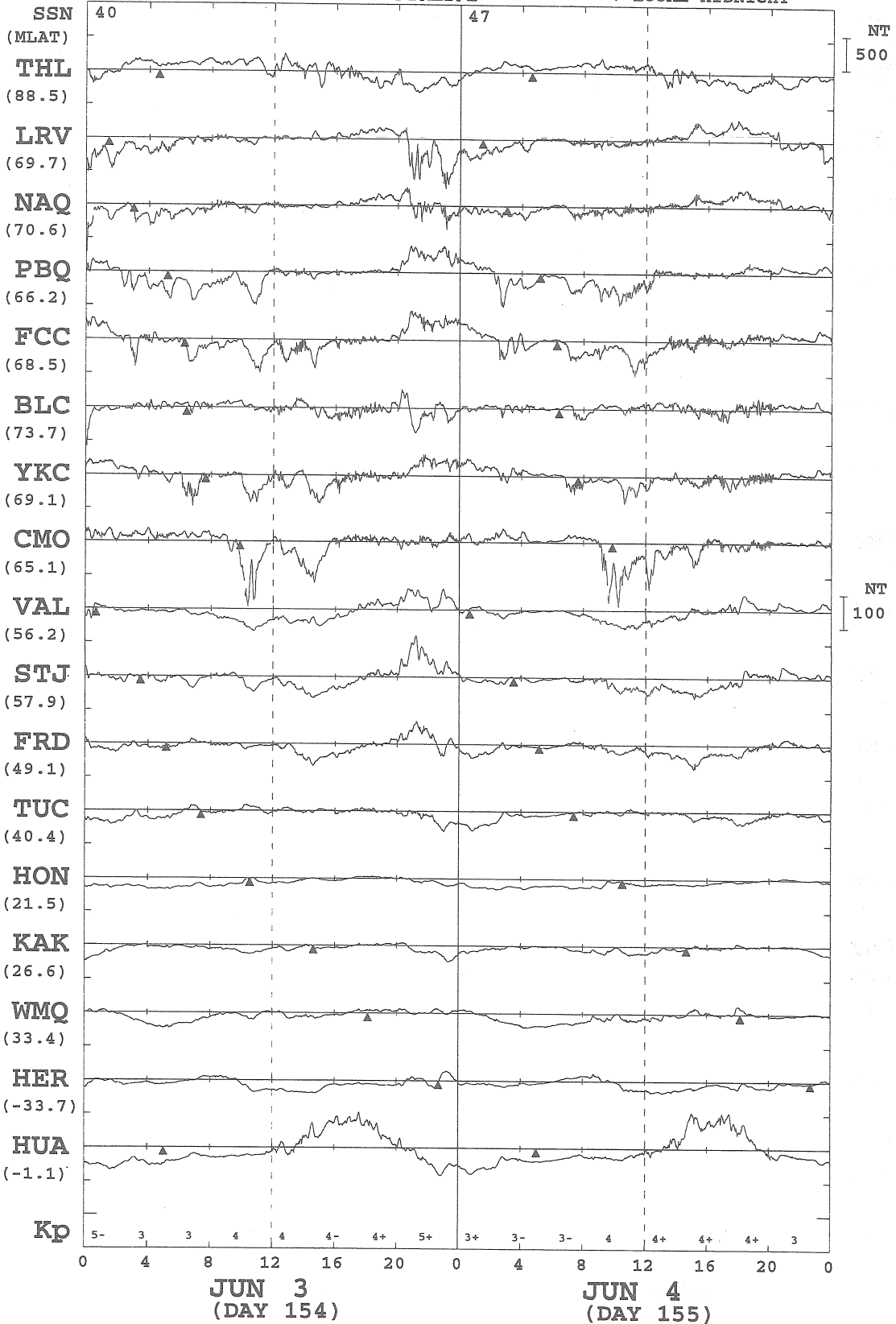


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

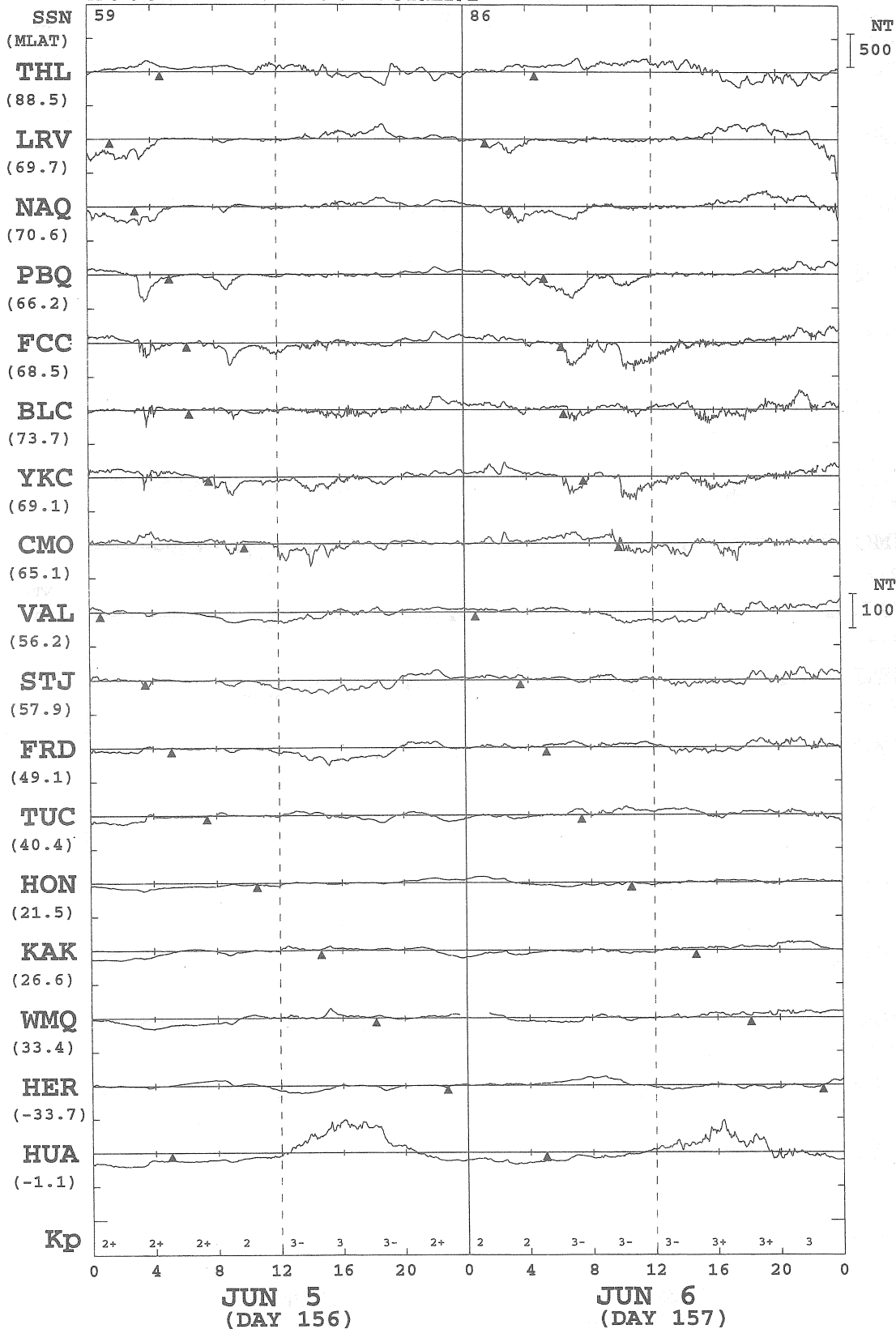


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

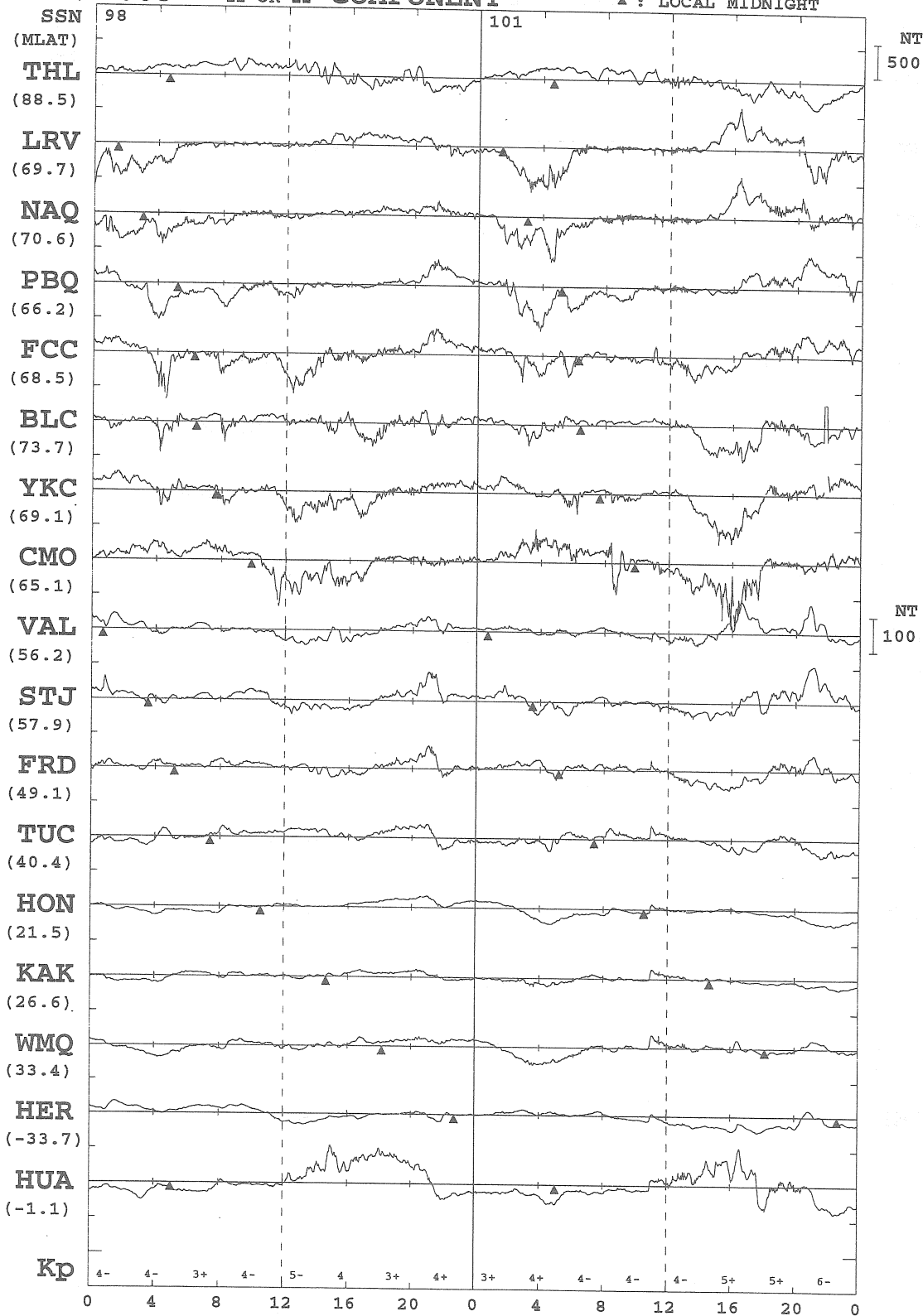


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JUN 7
(DAY 158)

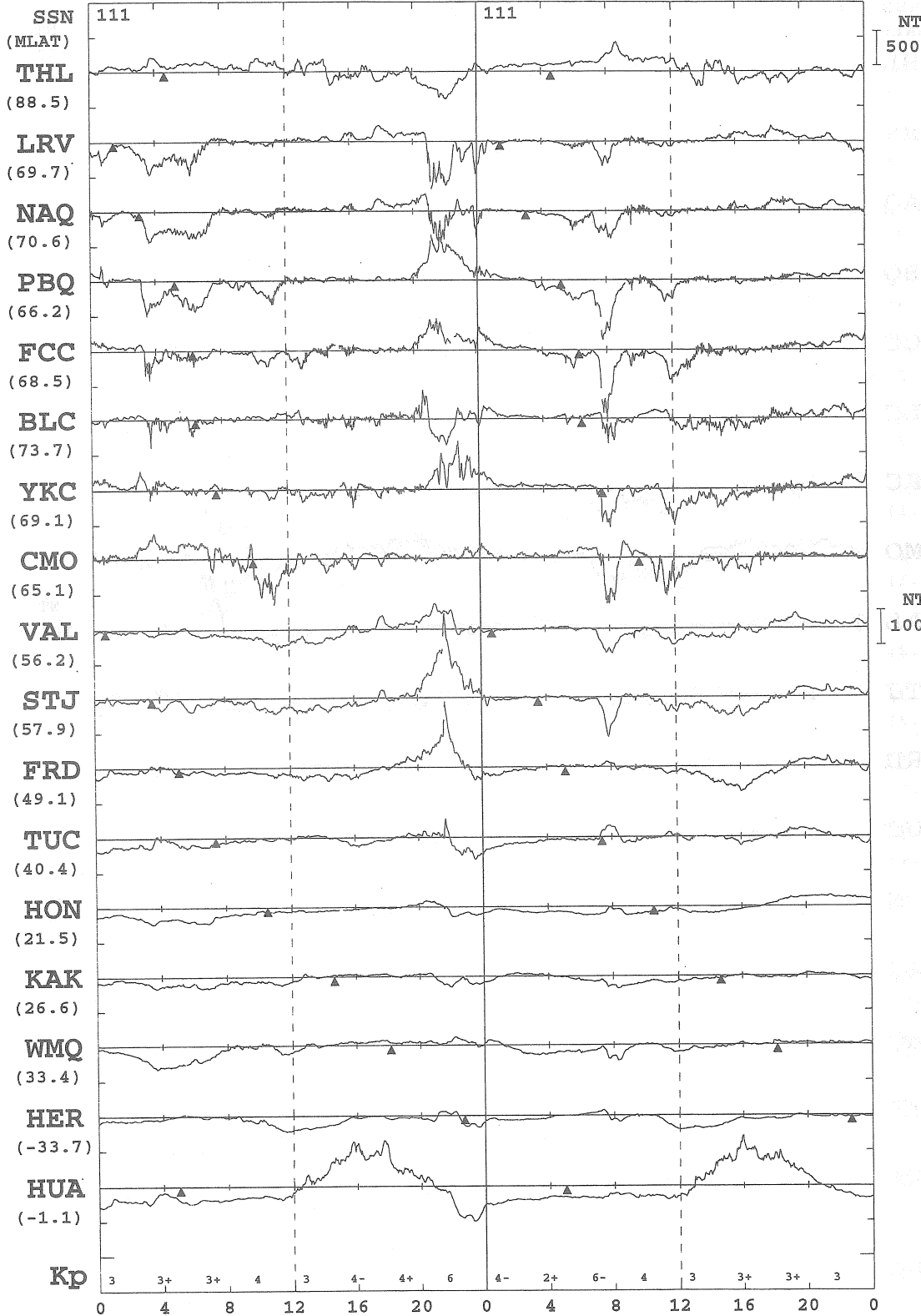
JUN 8
(DAY 159)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



Kp

3 3+ 3+ 4 3 4- 4+ 6 4- 2+ 6- 4 3 3+ 3+ 3
 0 4 8 12 16 20 0 4 8 12 16 20 0

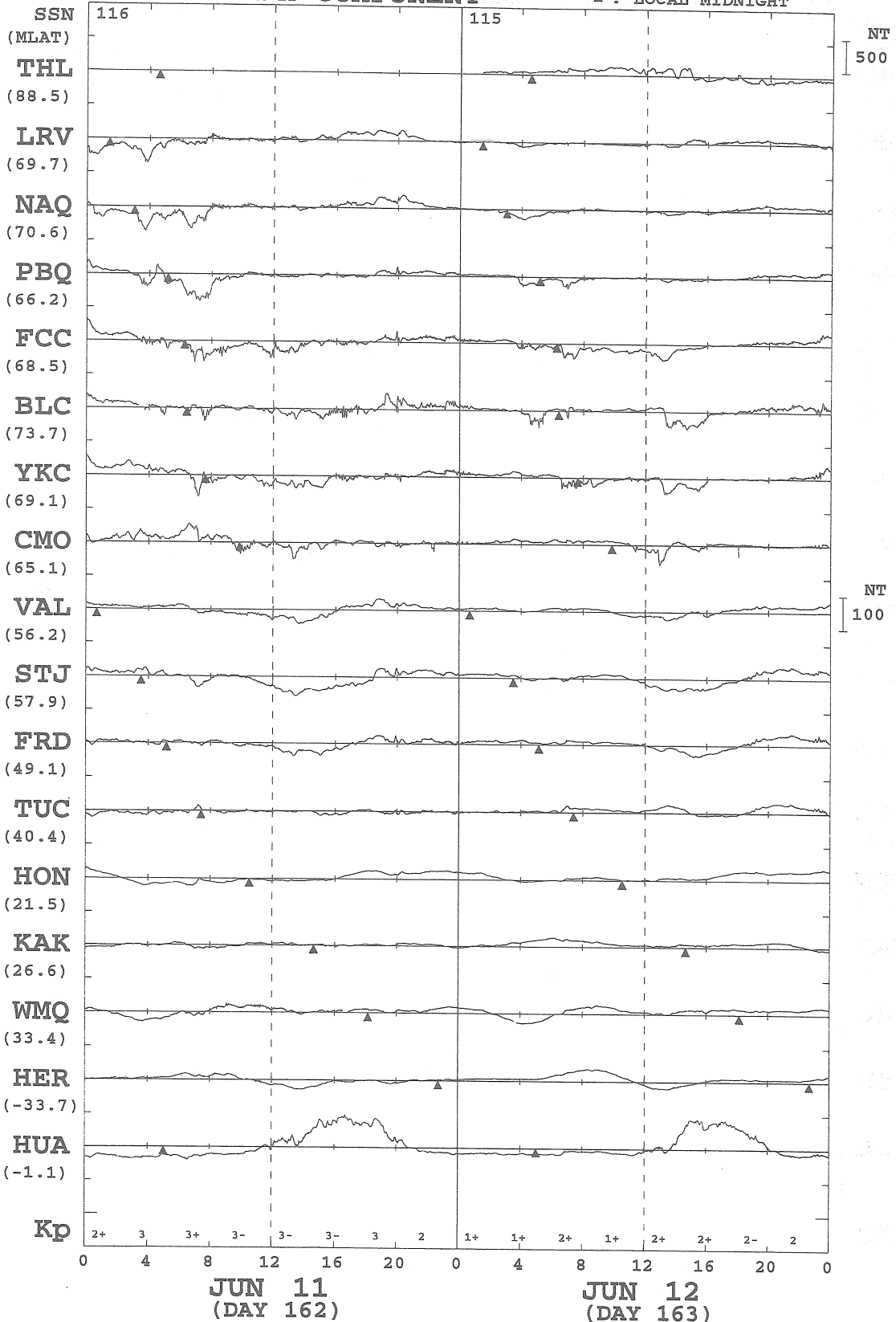
JUN 9 (DAY 160) **JUN 10 (DAY 161)**

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

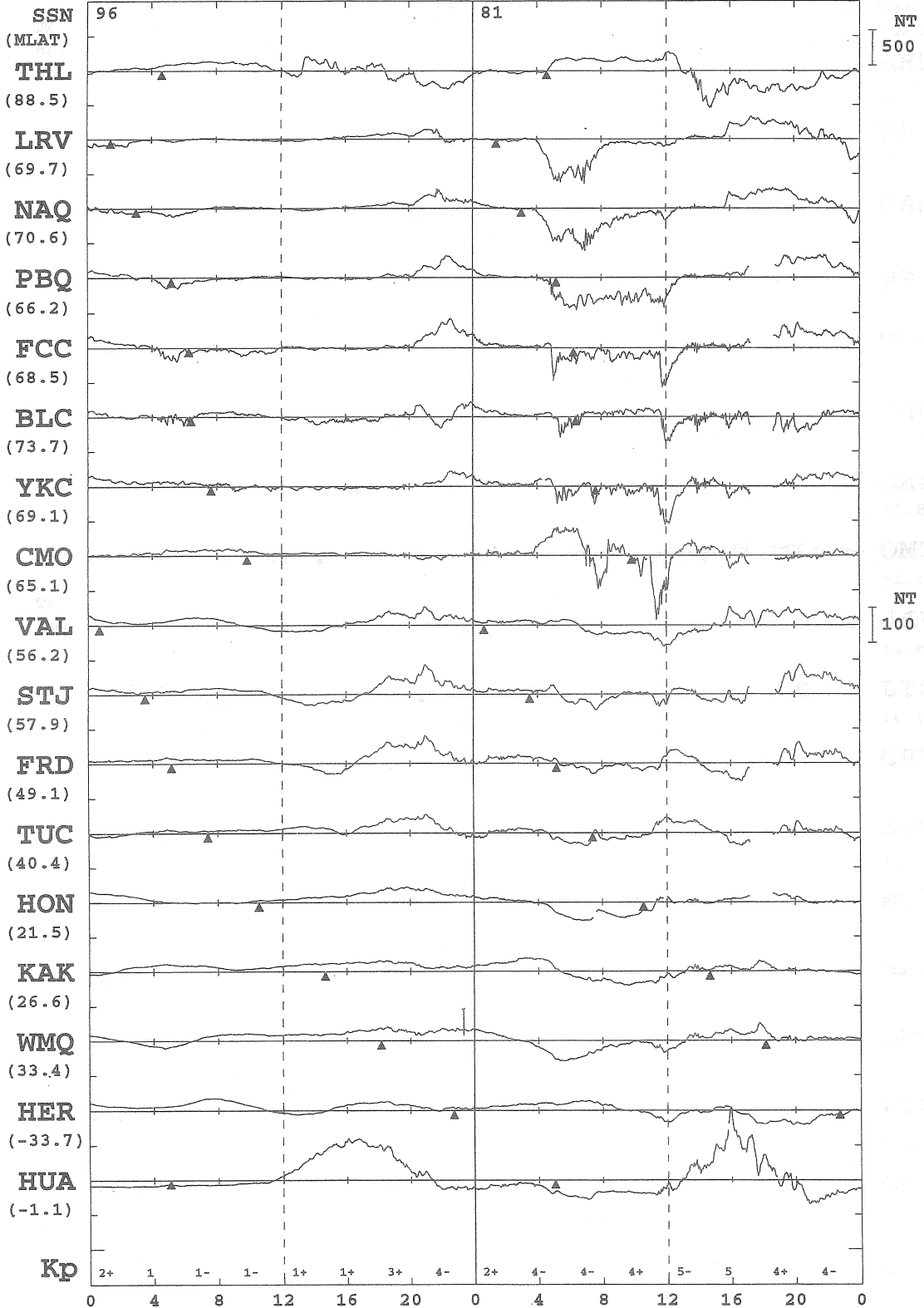
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

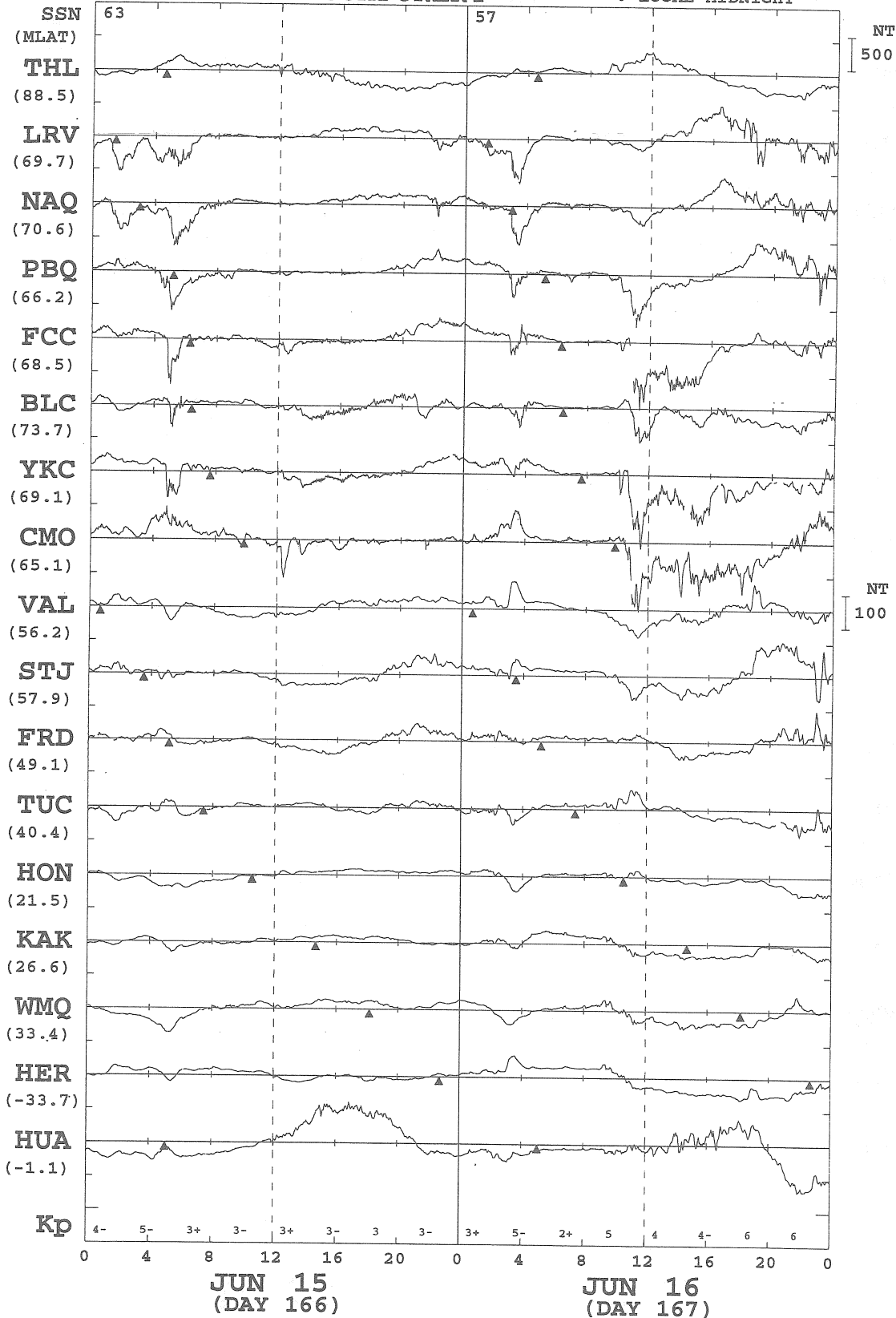


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

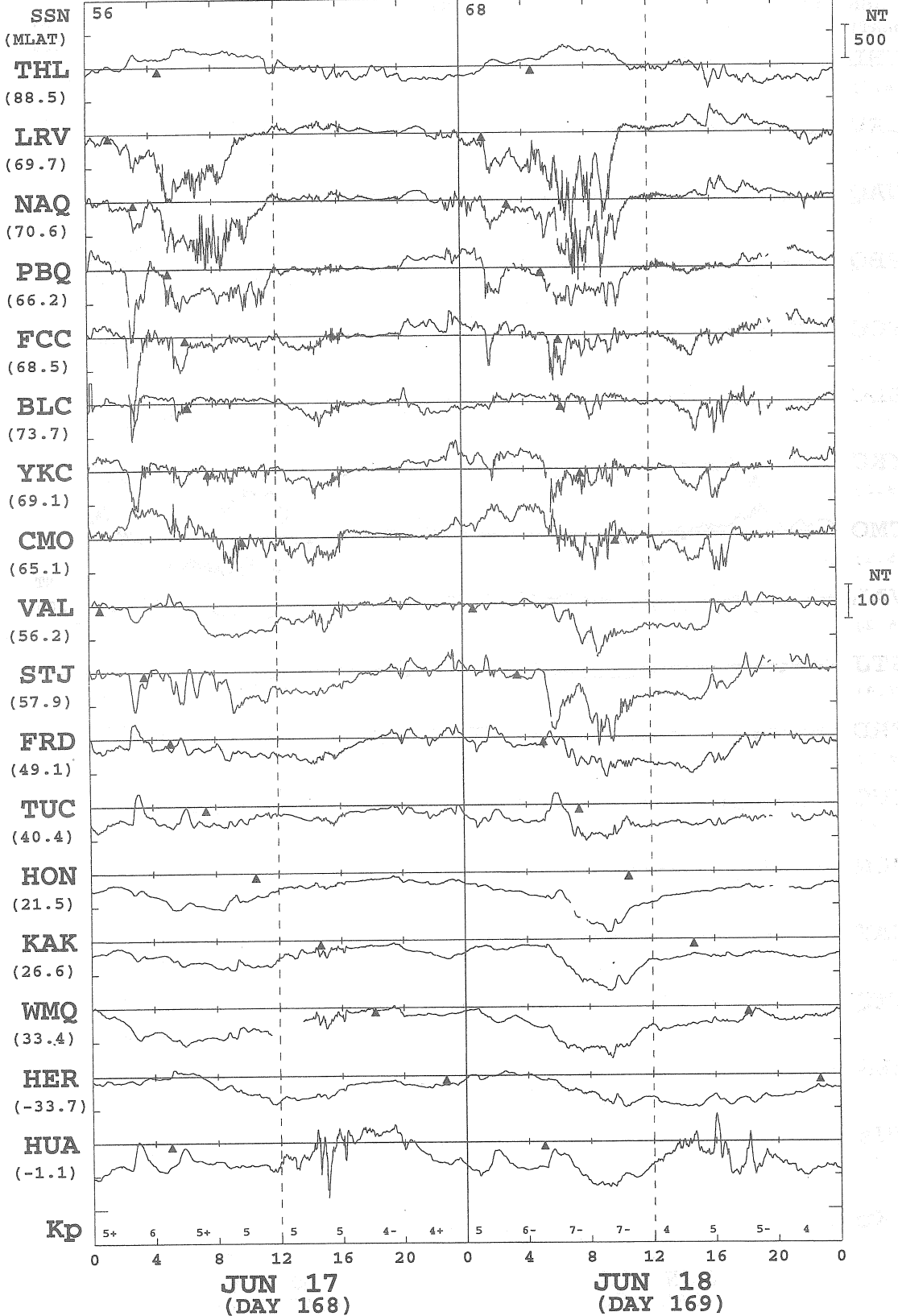
▲ : LOCAL MIDNIGHT



* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

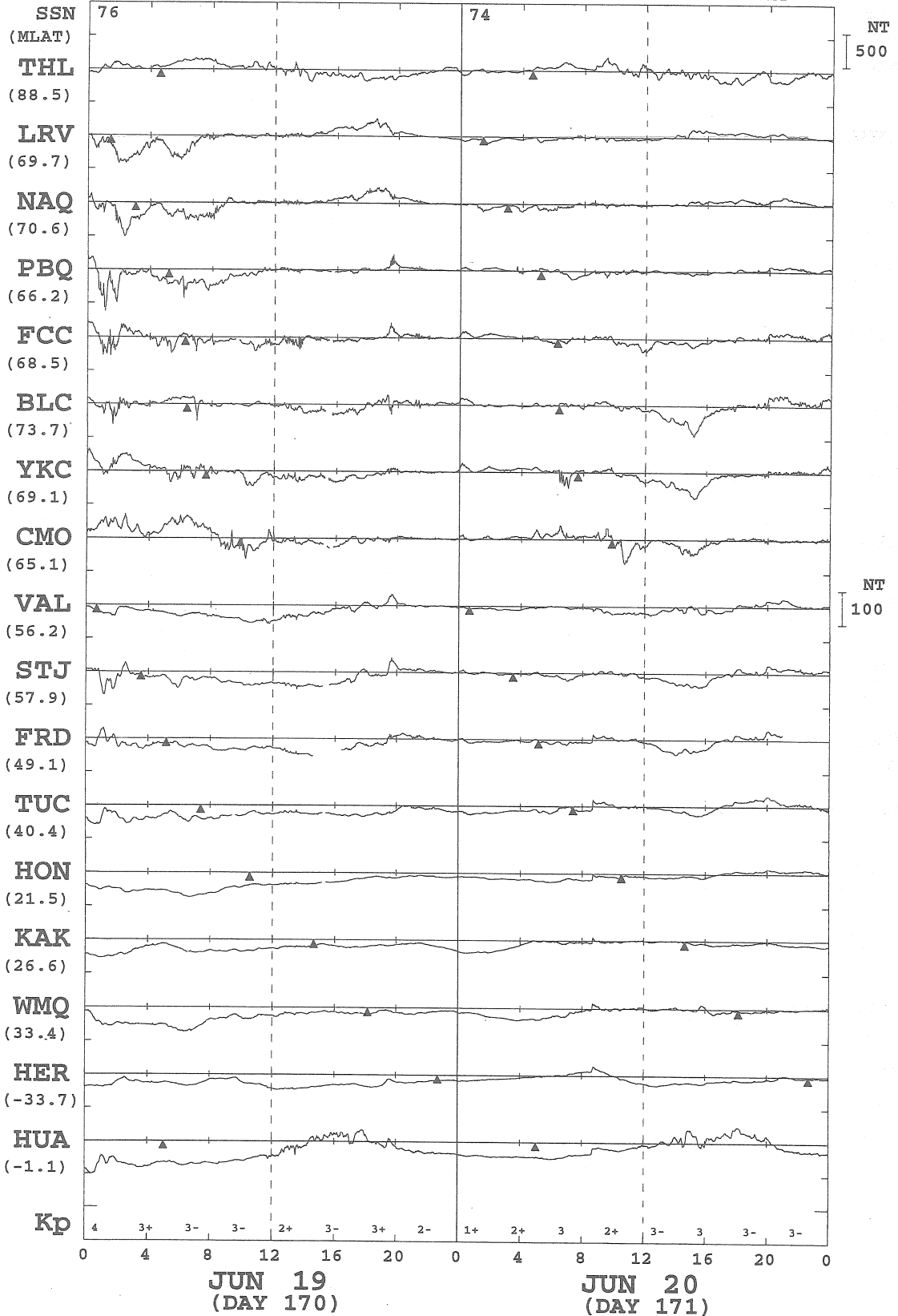


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

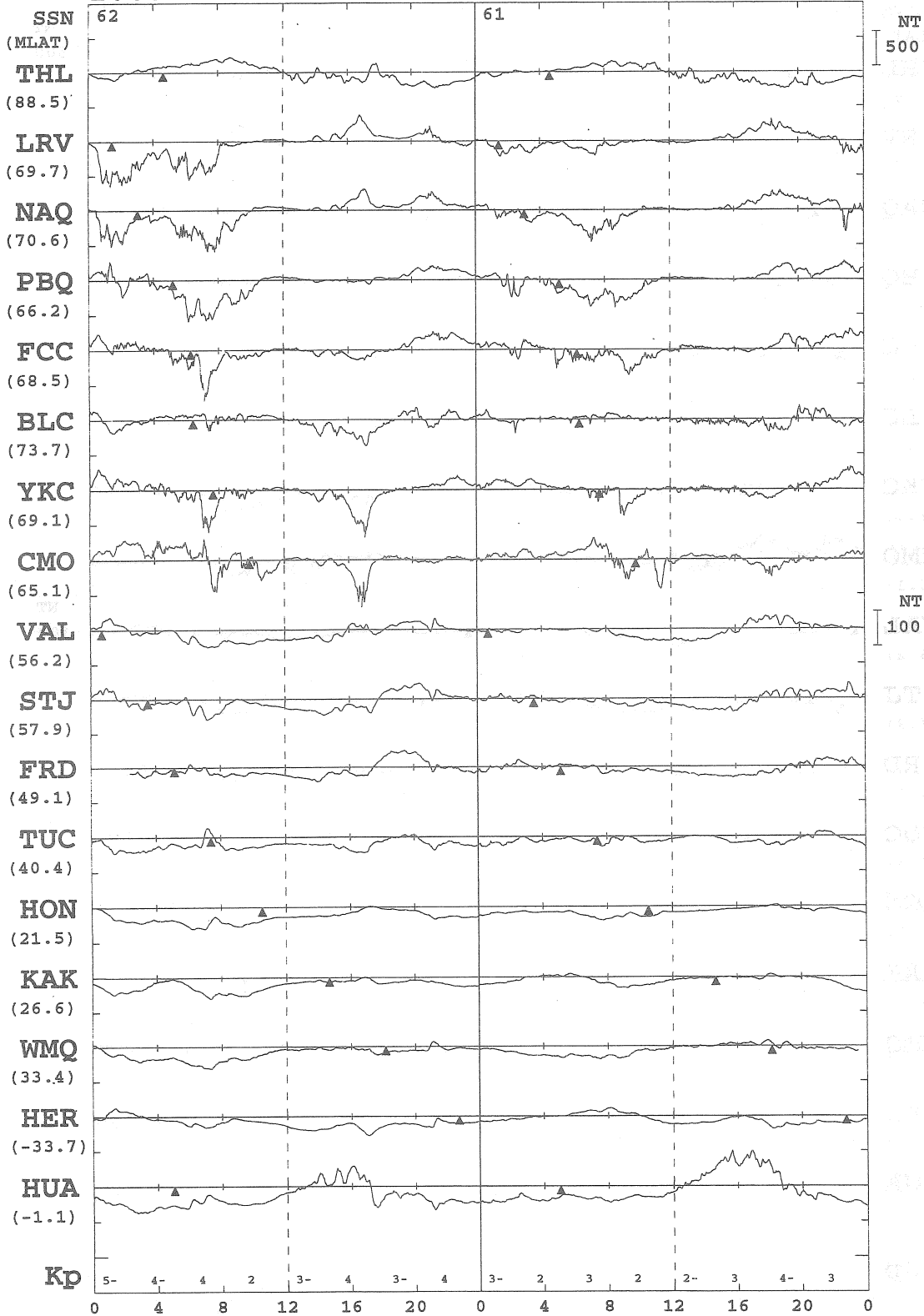


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JUN 21
(DAY 172)

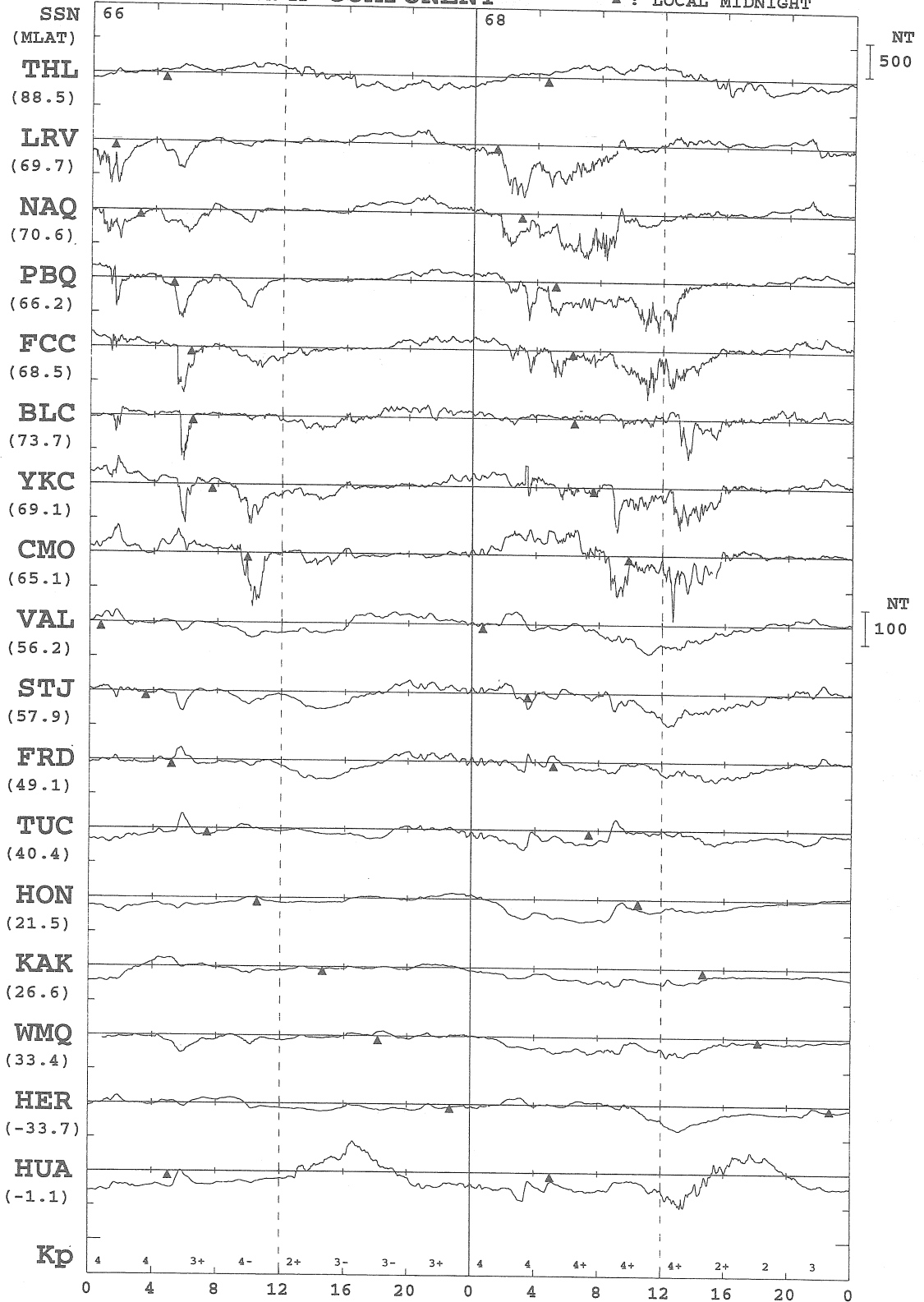
JUN 22
(DAY 173)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JUN 23
(DAY 174)

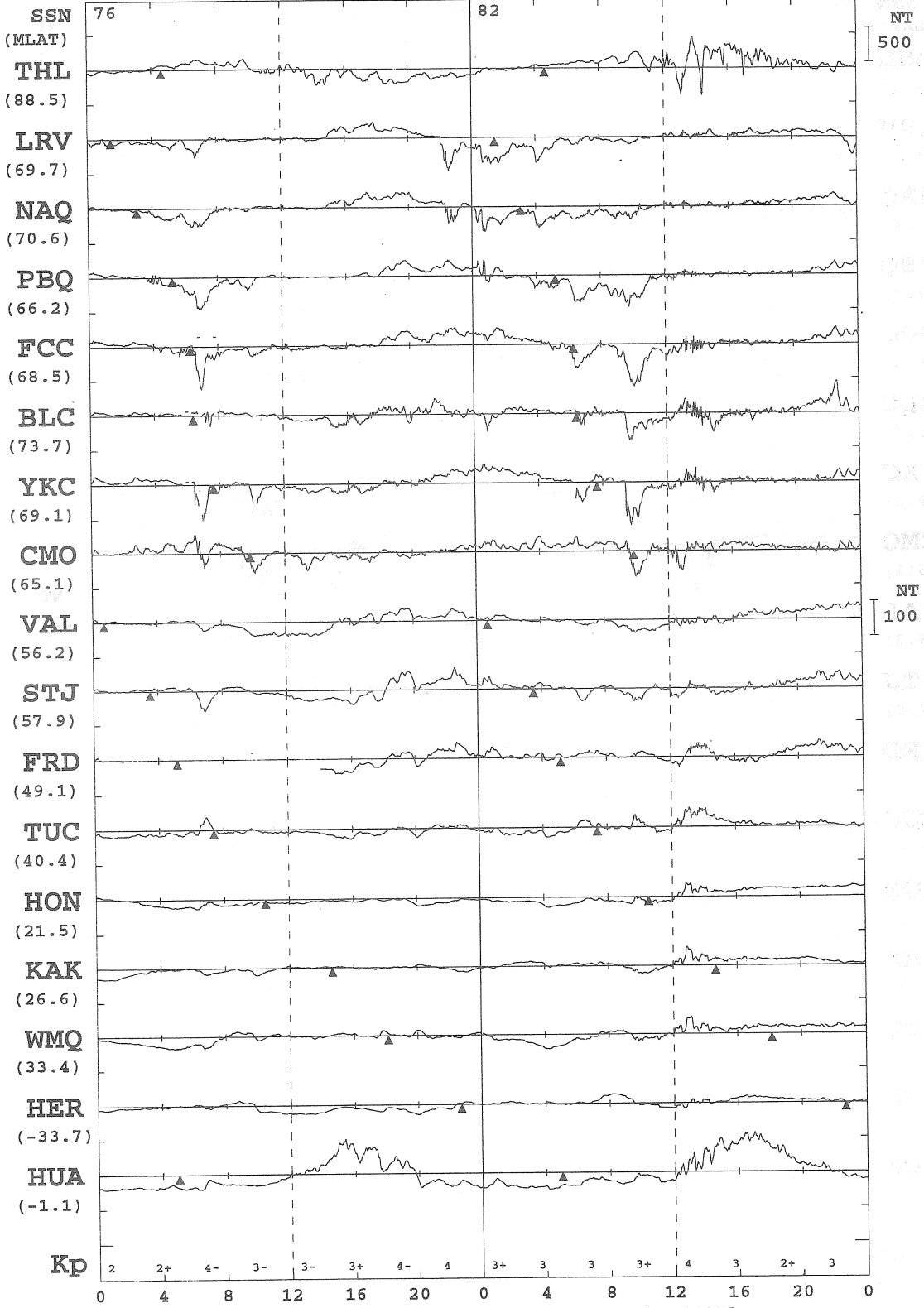
JUN 24
(DAY 175)

* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

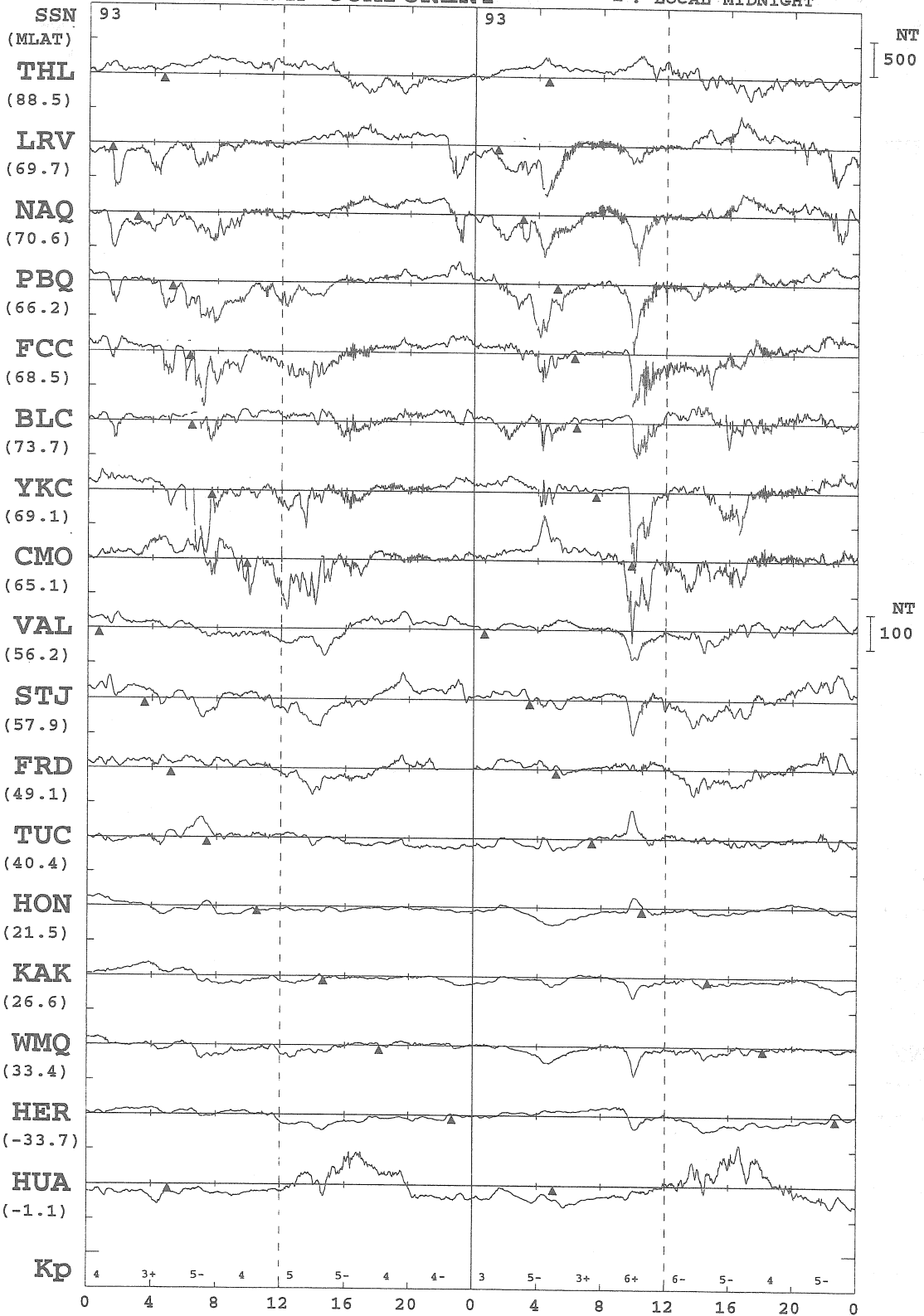


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

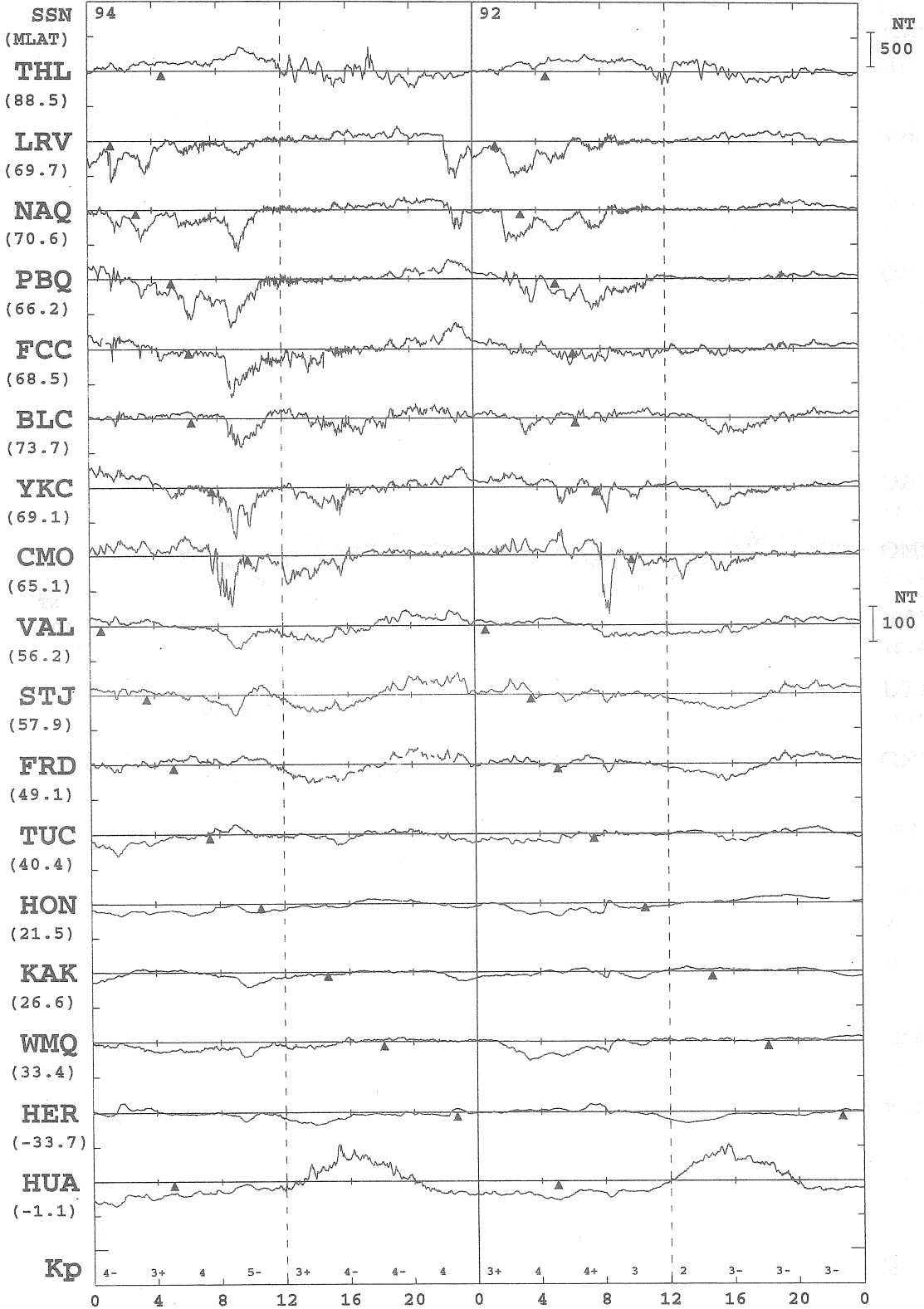


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
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KYOTO UNIV.

2003 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



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