

PROVISIONAL GEOMAGNETIC
DATA PLOTS
No.17

(January - June, 1998)

August 1998

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

PROVISIONAL GEOMAGNETIC
DATA PLOTS
No.17

(January - June, 1998)

August 1998

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

PREFACE

This booklet contains provisional plots of the geomagnetic data for January - June, 1998 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 final 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

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://swdcdb.kugi.kyoto-u.ac.jp/>

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.Z (for example, 980301-02.ps.Z). 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:

WDC-C2 for Geomagnetism,
Graduate School of Science,
Kyoto University,
Kyoto 606-8501, Japan.

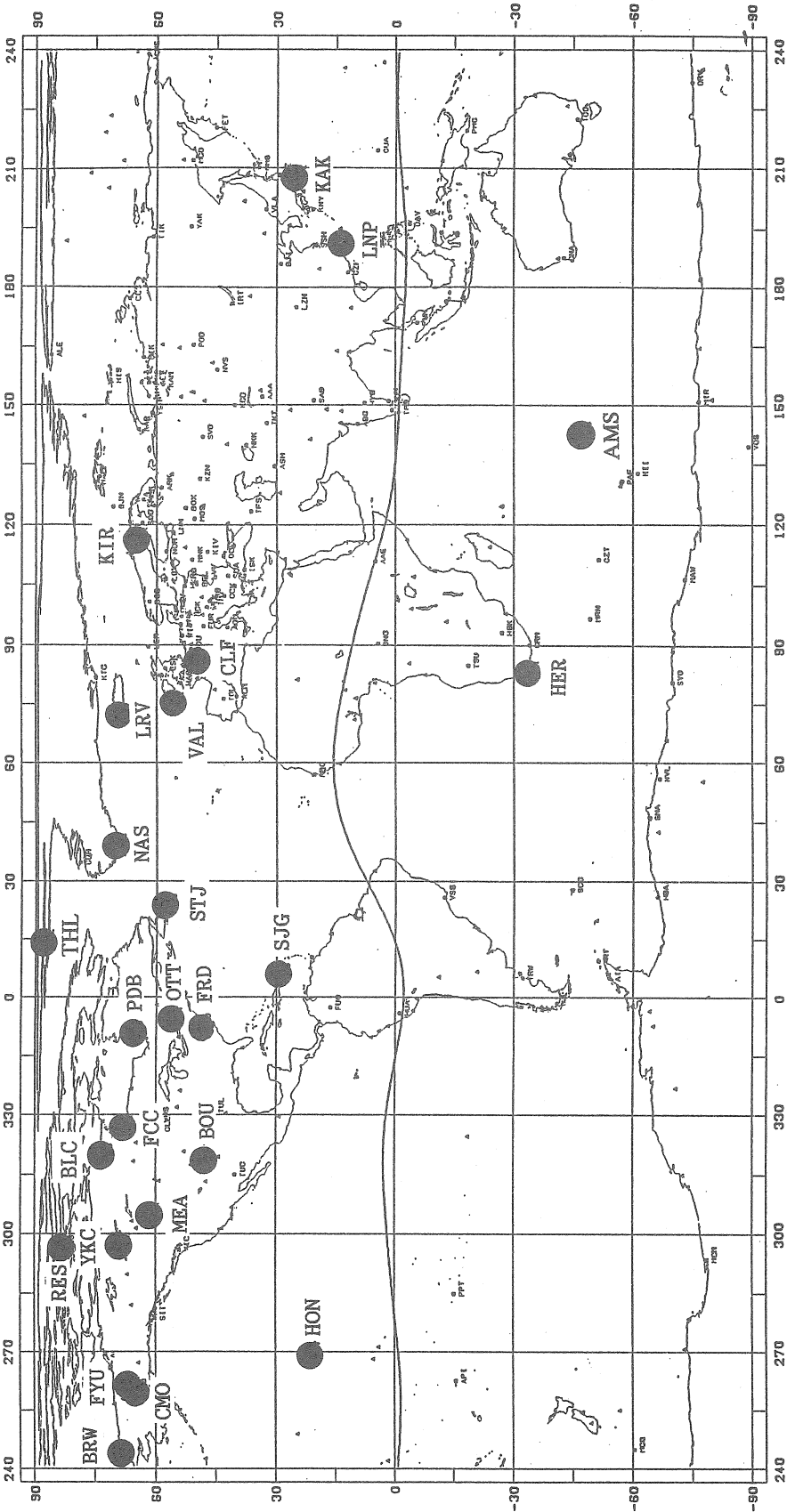
Telephone: 81-75-753-3929
Facsimile: 81-75-722-7884
E-mail: iyemori@kugi.kyoto-u.ac.jp
WWW: <http://swdcd.kugi.kyoto-u.ac.jp/>

Table 1. List of stations used in this booklet. The 15 stations among them are used in the plots.

STATION NAME	ABB CODE	ORG No.	GEOGRAPHIC		GEOMAGNETIC INVARIANT		PLOT SCALE	
			LAT.	LONG.	LAT.	LONG.		
*Thule	THL	9	76.6	291.17	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	NAS	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	-33.7	82.7	43.6	"

*: Provisional data

DISTRIBUTION OF GEOMAGNETIC OBSERVATORIES



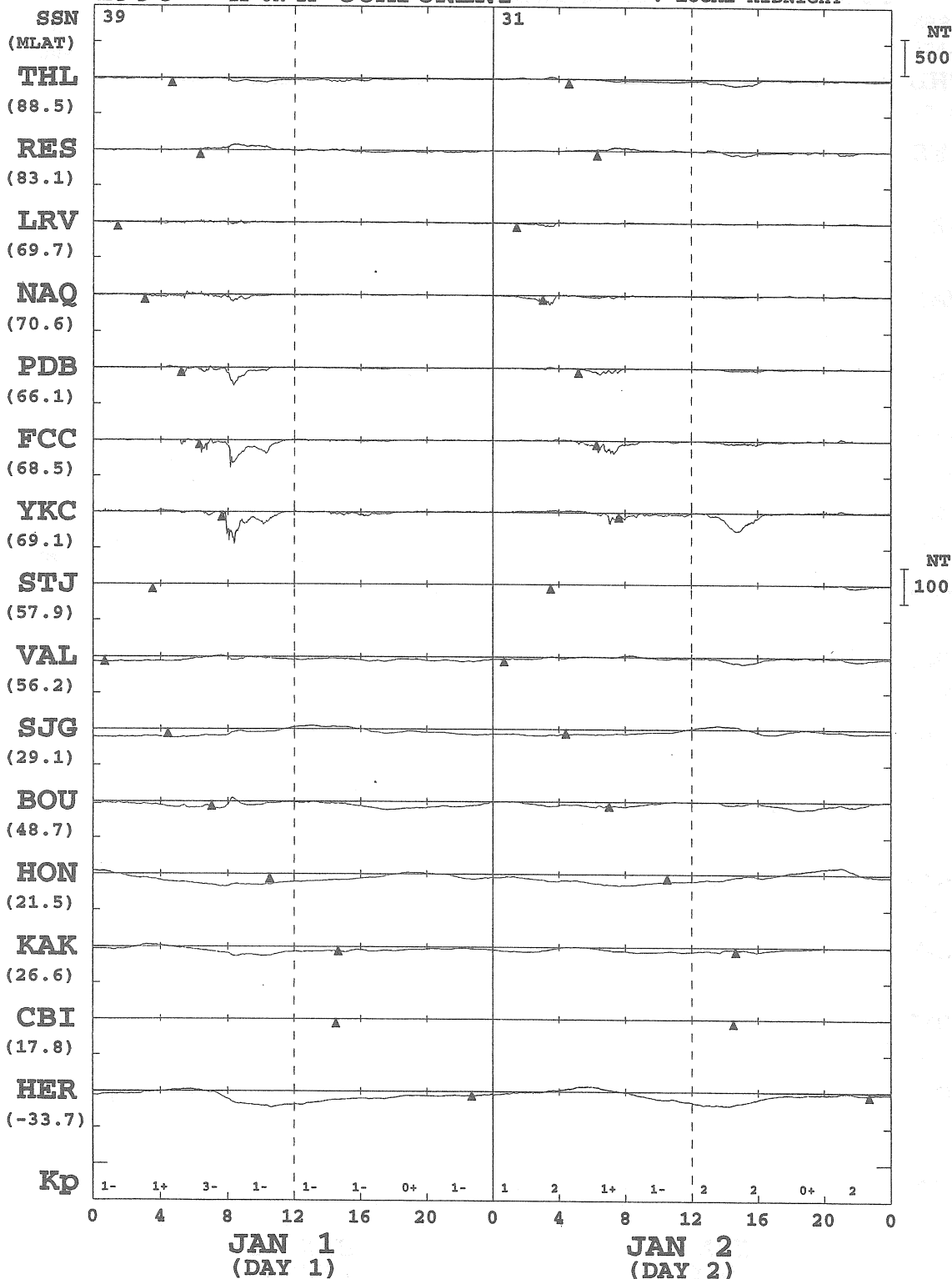
GEOMAGNETIC COORDINATE (1985. 0)

----- 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, 1998

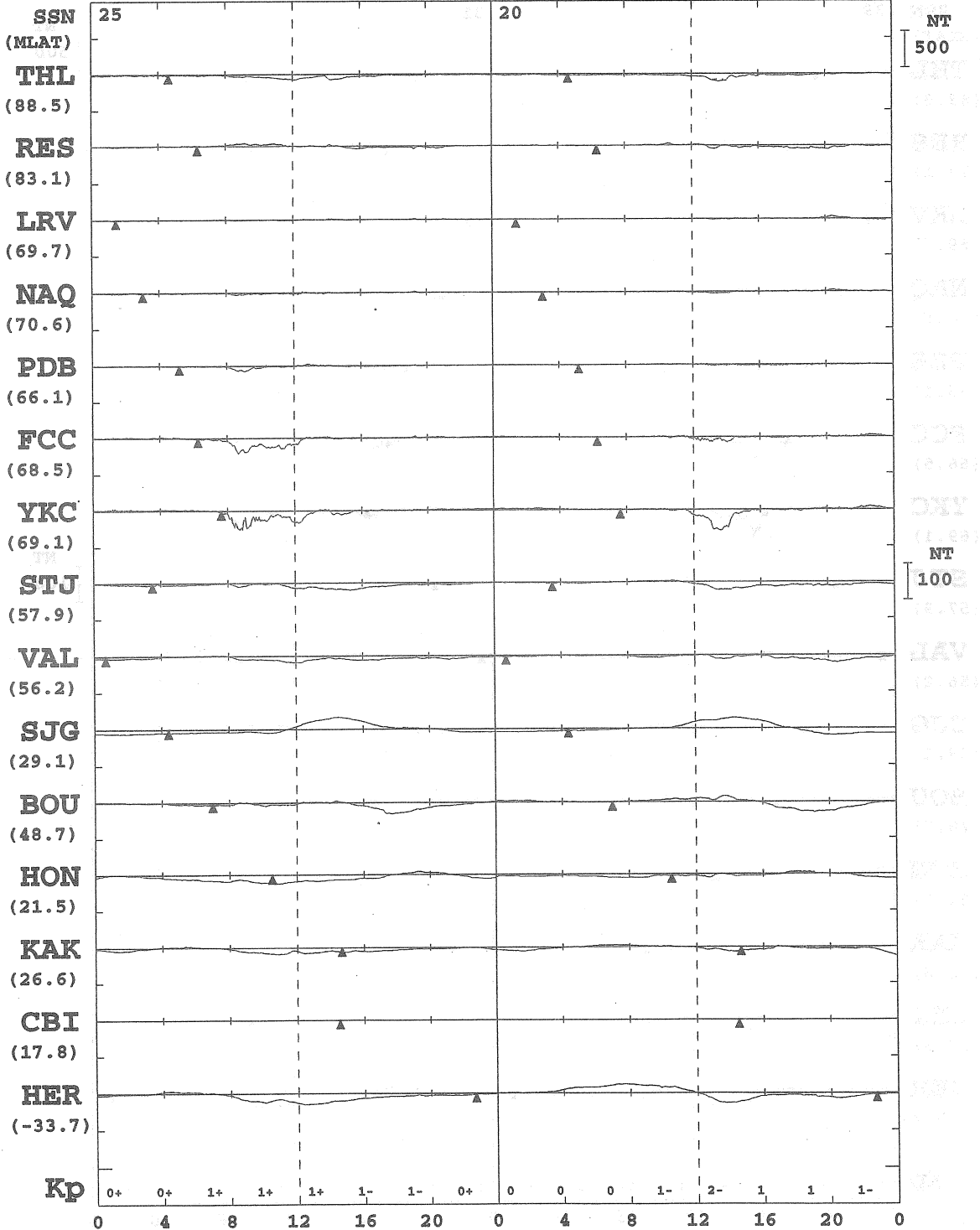
1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

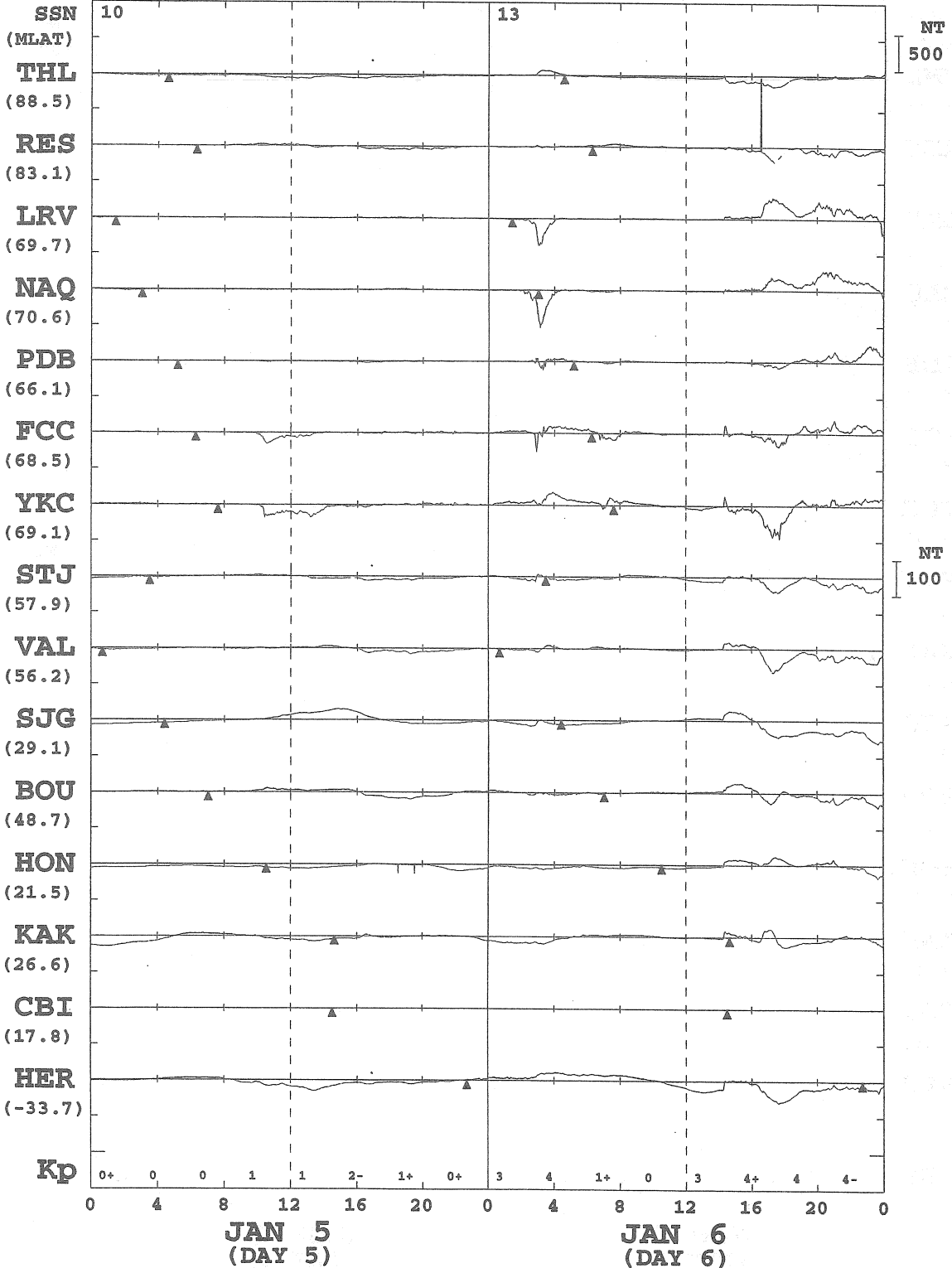
1998 H OR X-COMPONENT LOCAL MIDNIGHT



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

KYOTO UNIV.

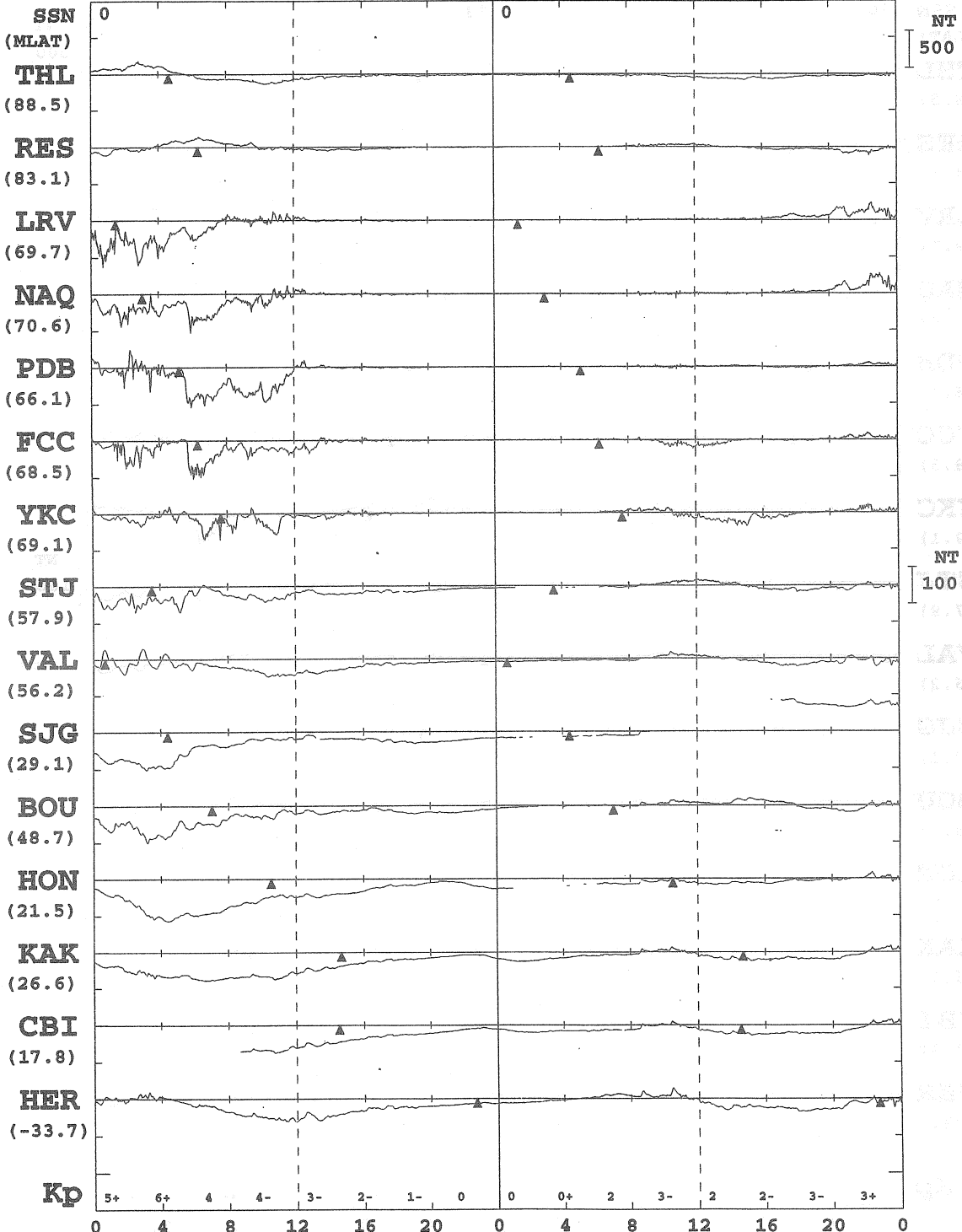
1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

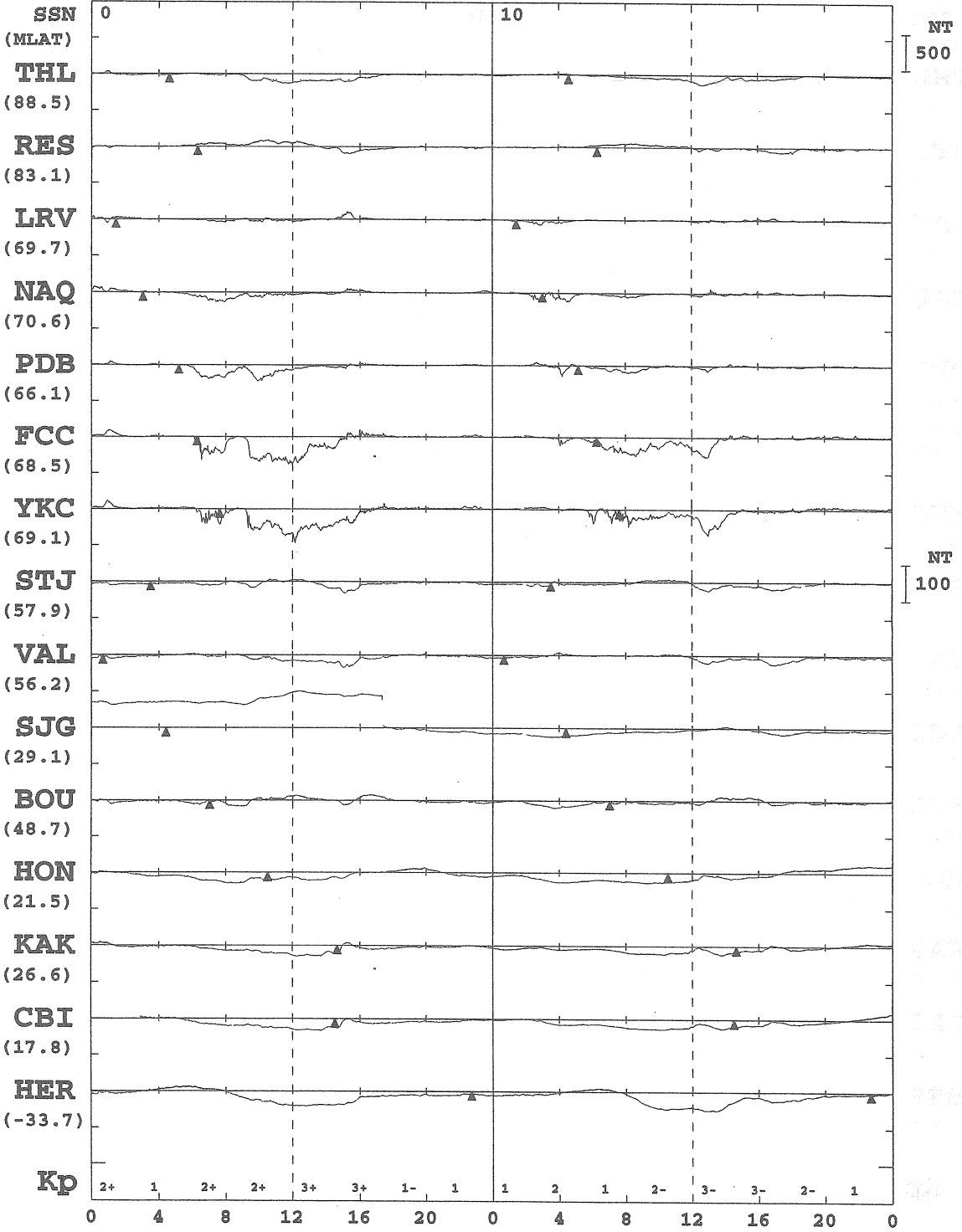
1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



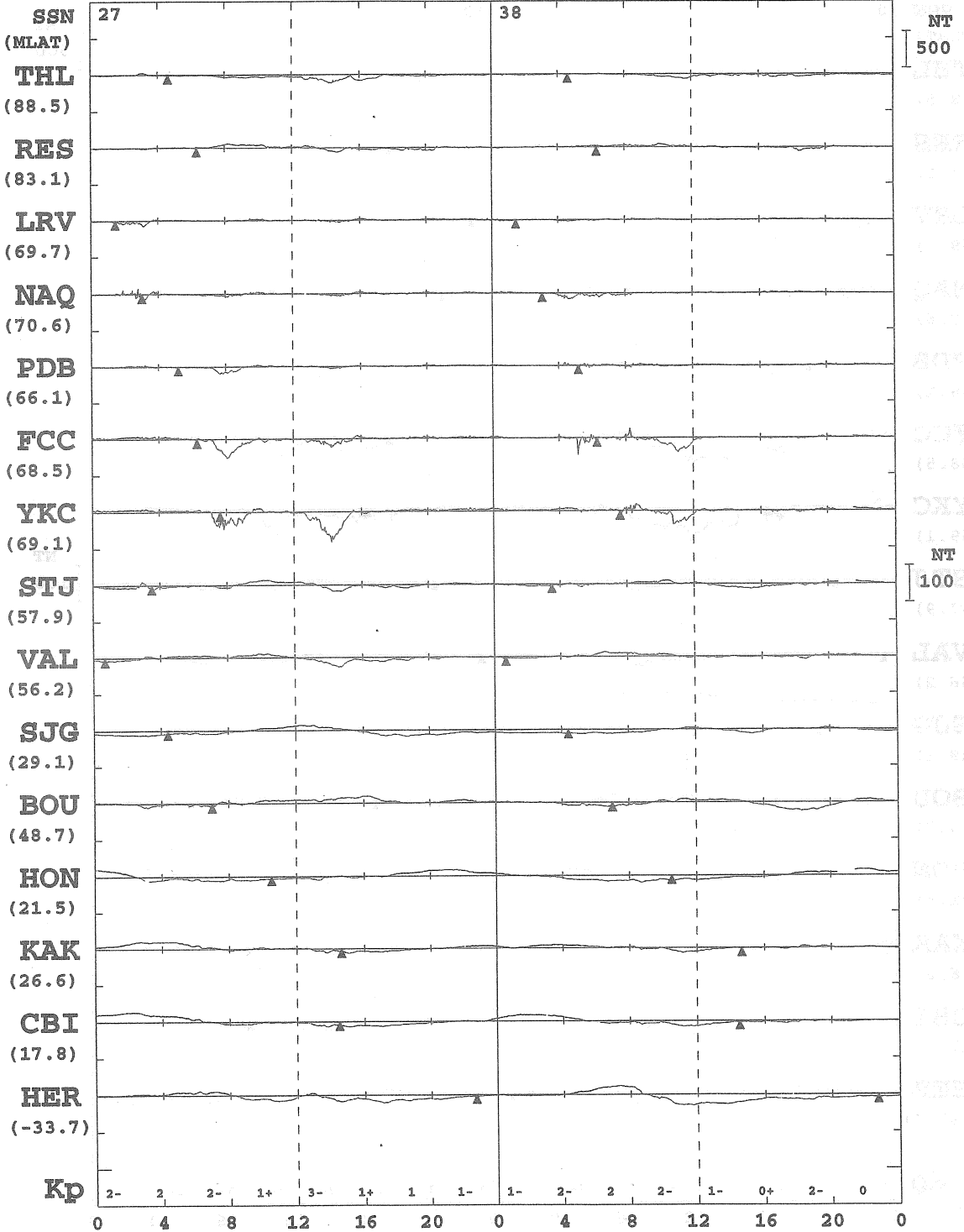
JAN 9
(DAY 9)

JAN 10
(DAY 10)

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

KYOTO UNIV.

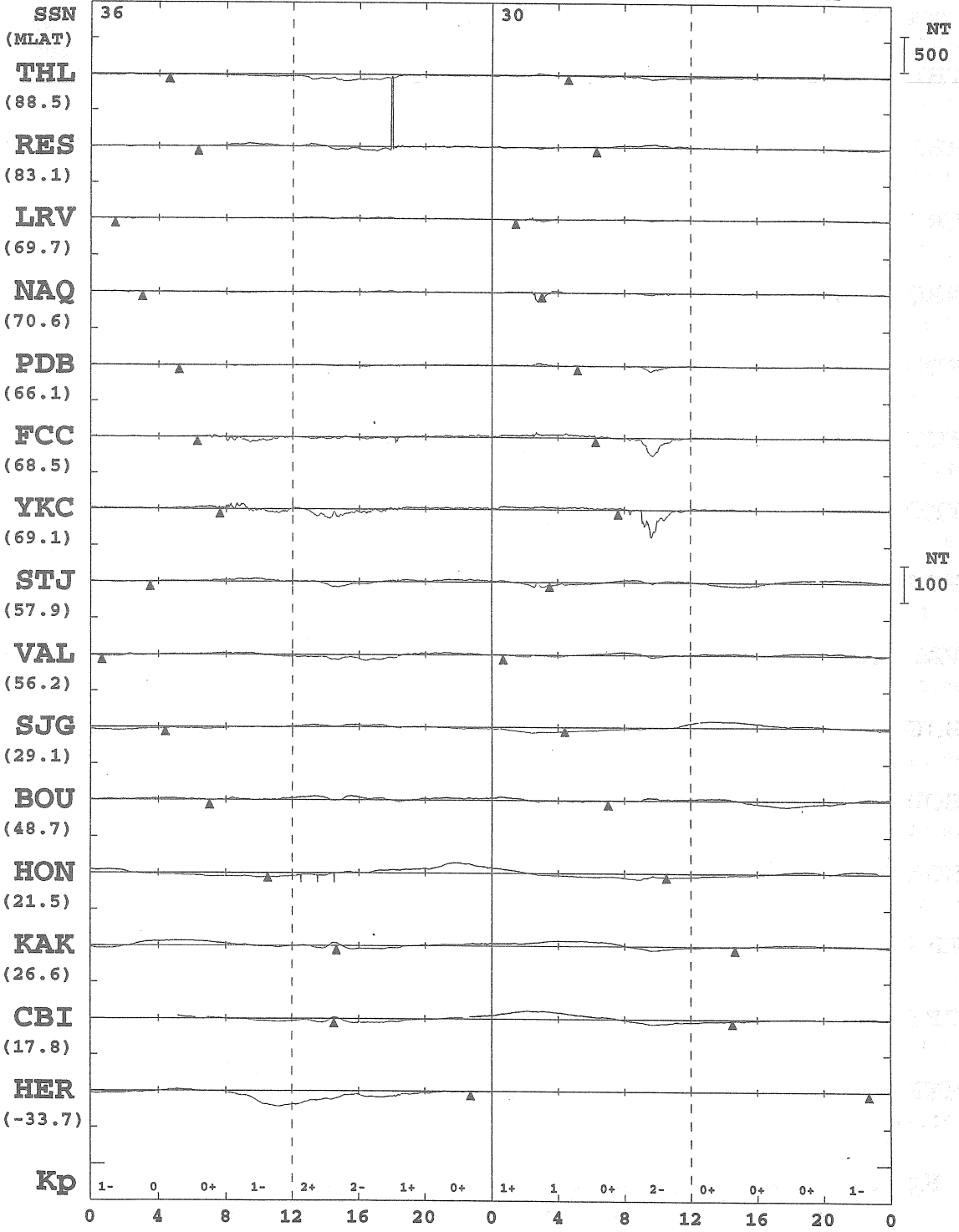
1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

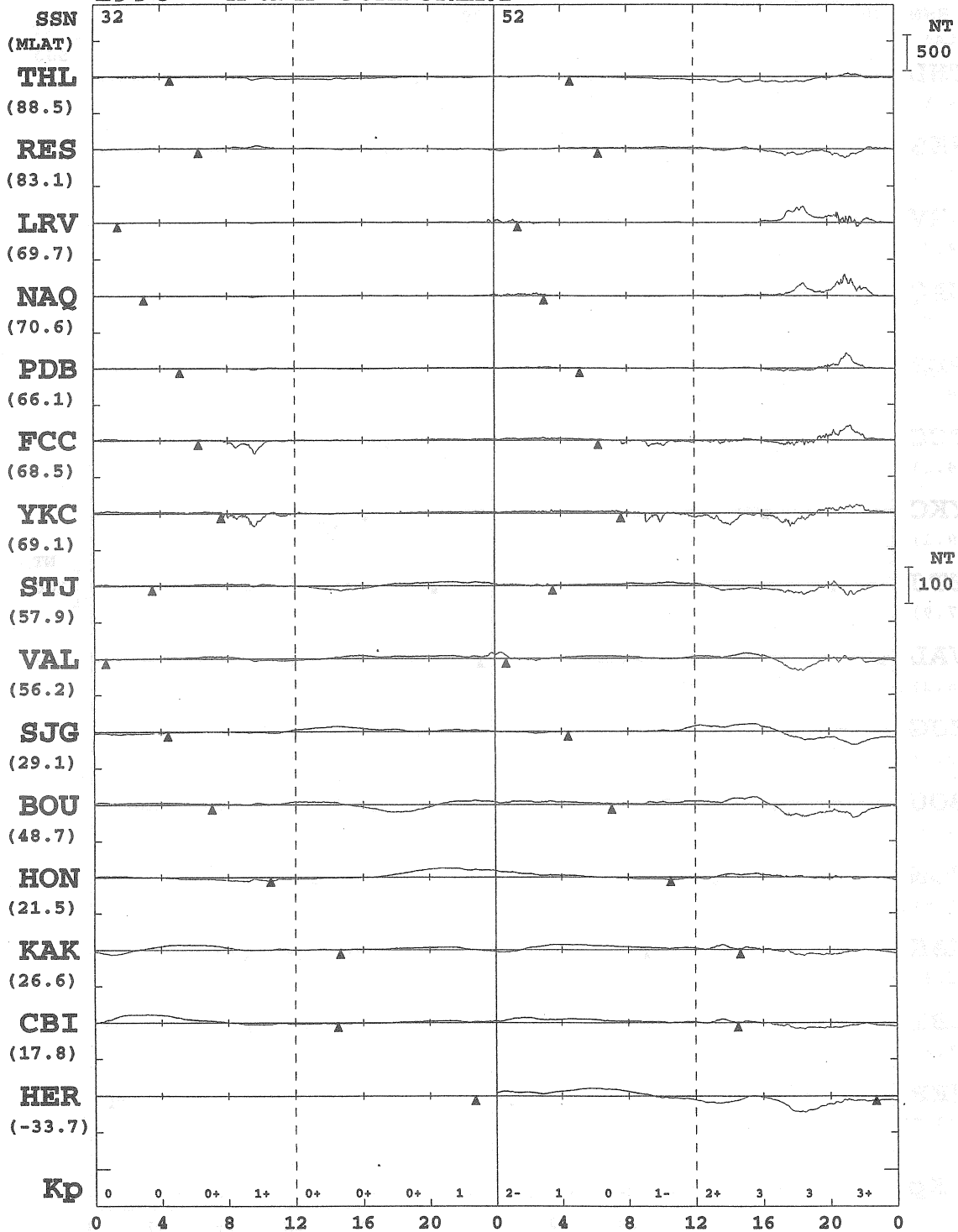


JAN 13
 (DAY 13)

JAN 14
 (DAY 14)

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

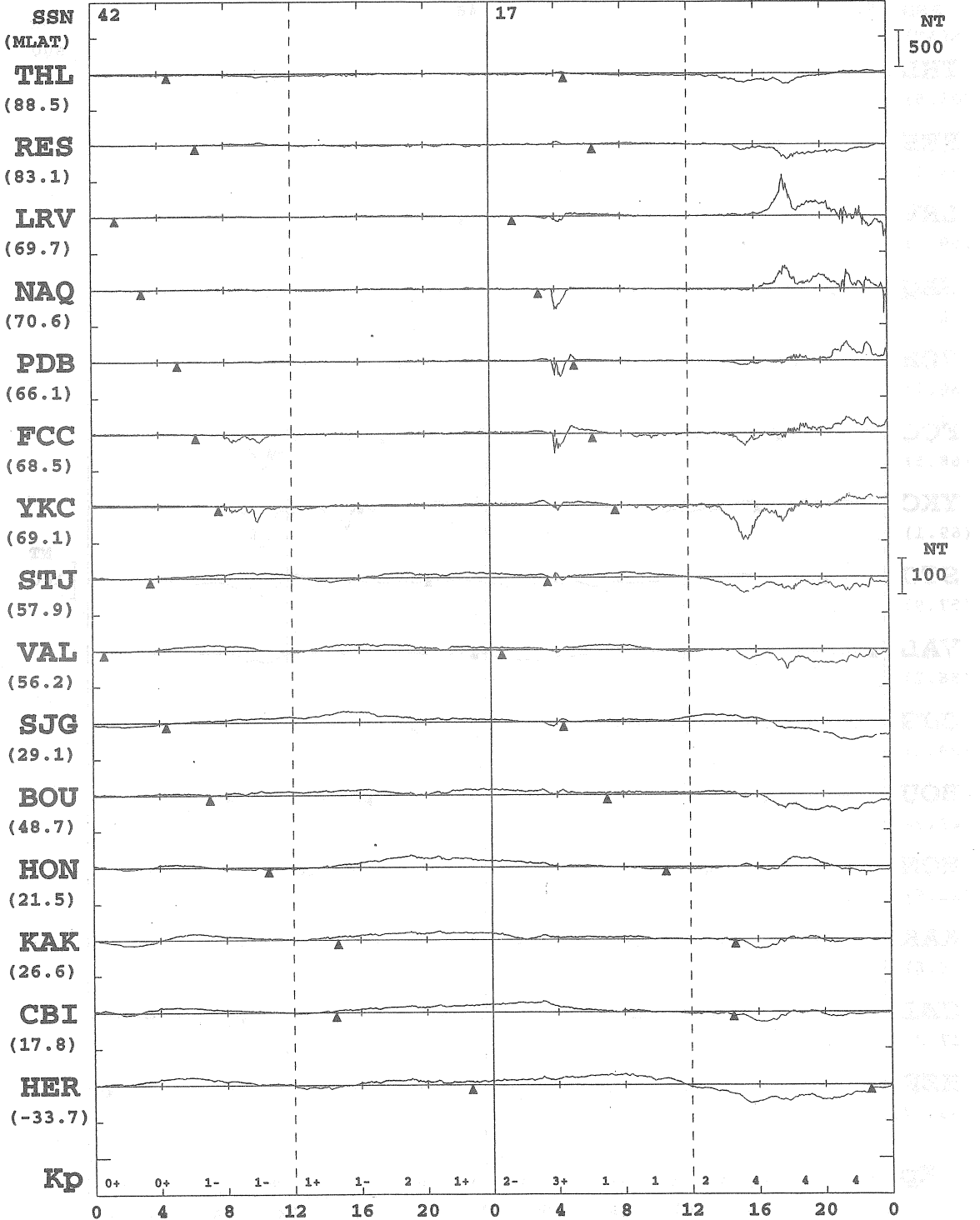
1998 H OR X-COMPONENT LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



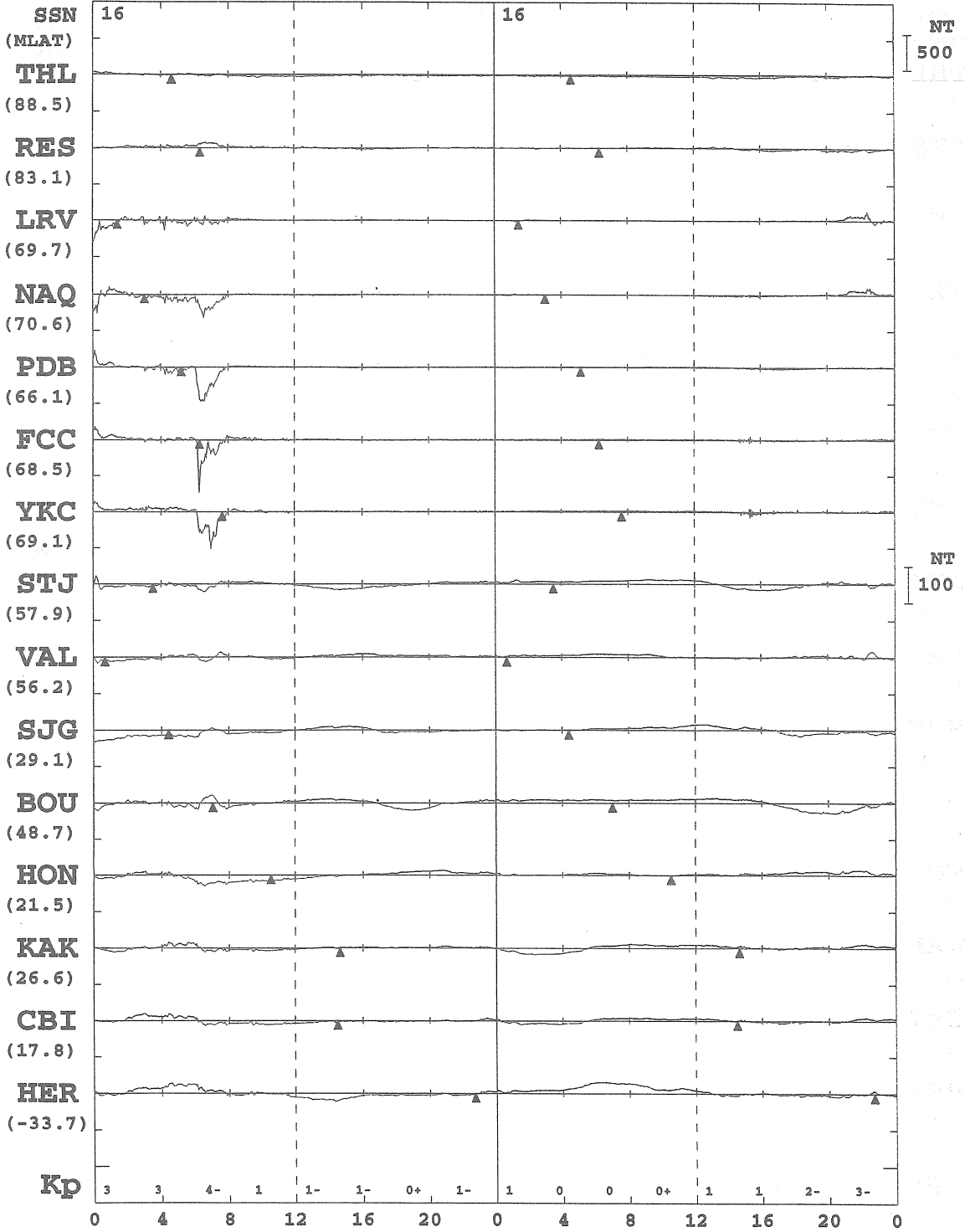
JAN 19
(DAY 19)

JAN 20
(DAY 20)

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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



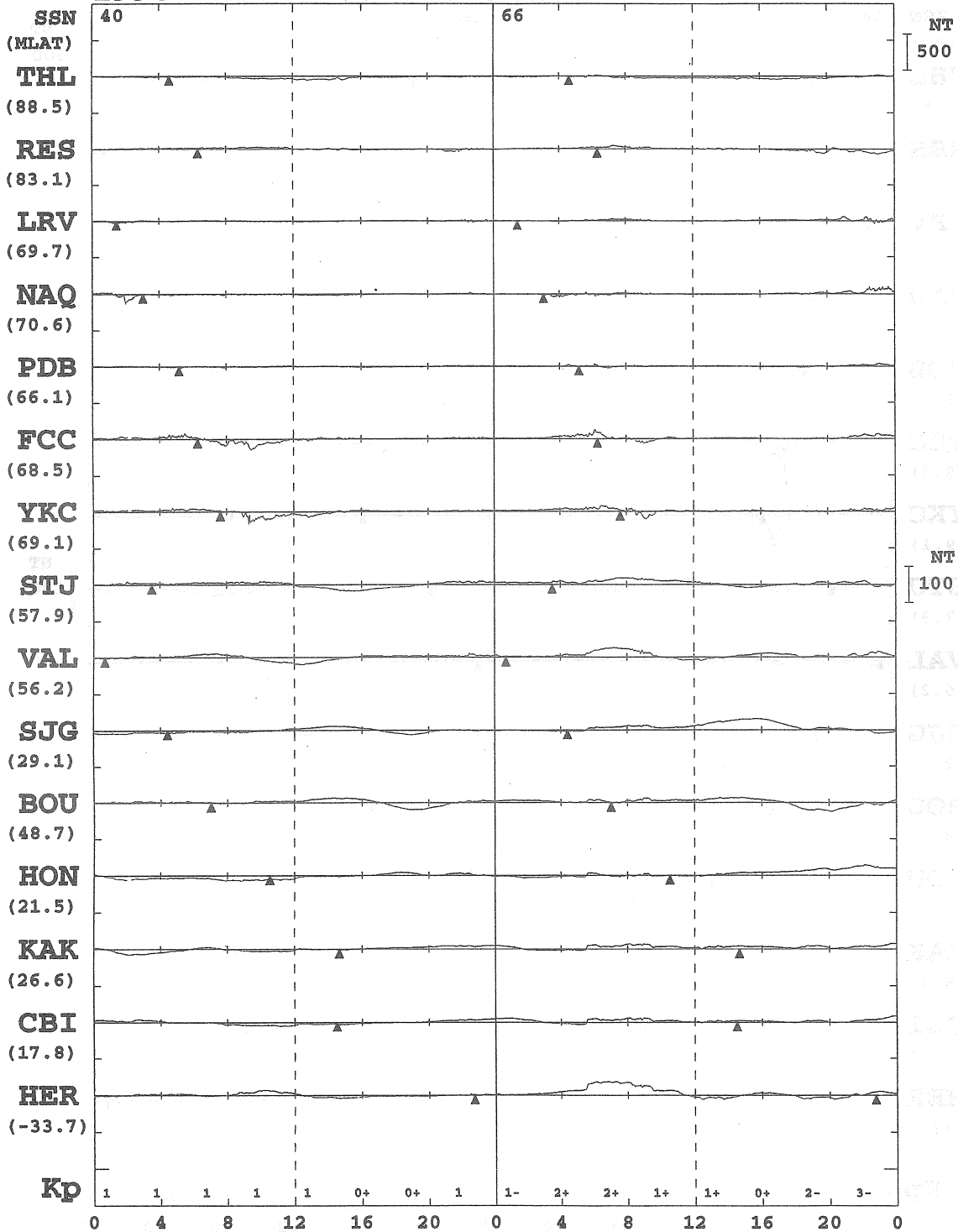
JAN 21
(DAY 21)

JAN 22
(DAY 22)

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT

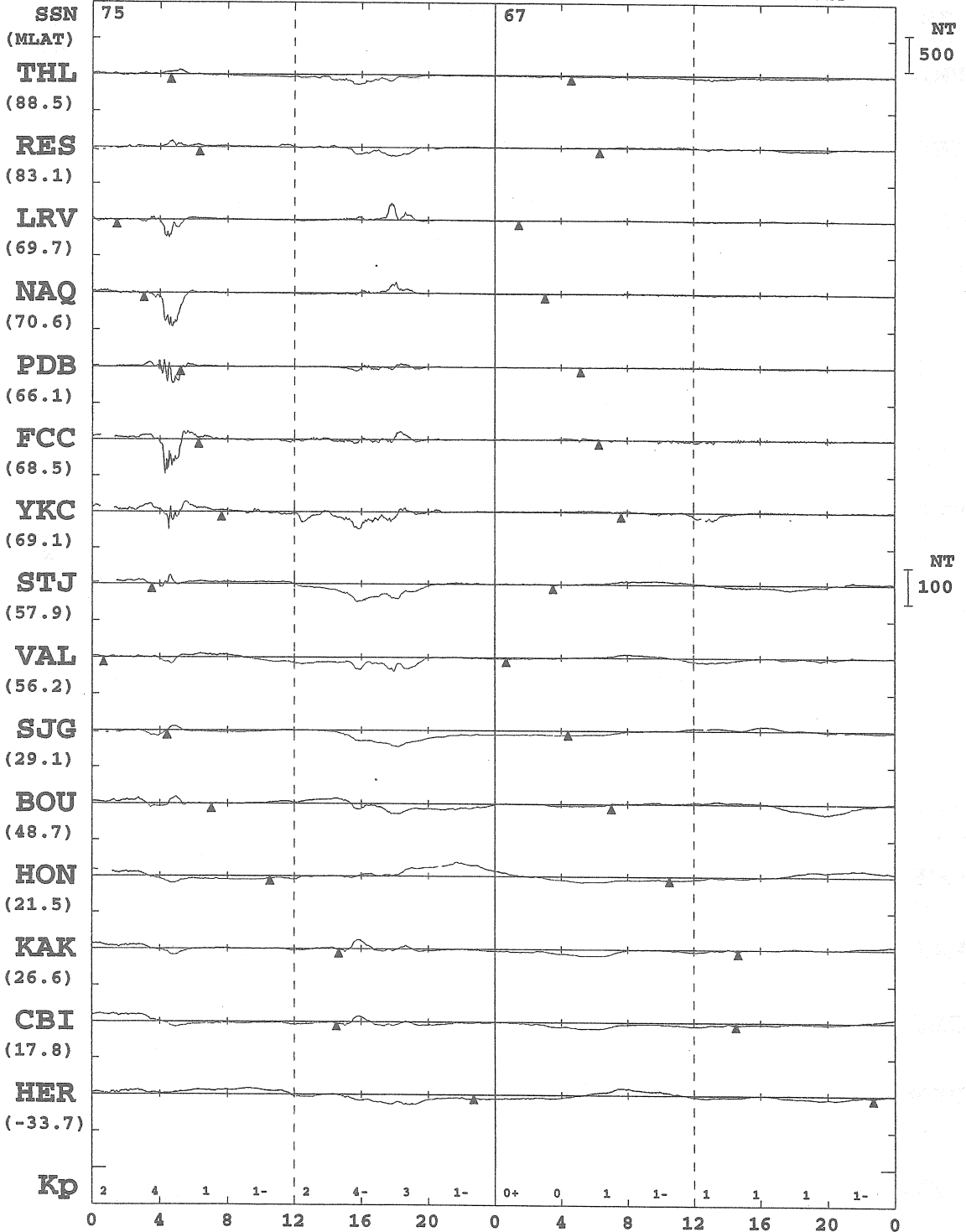


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

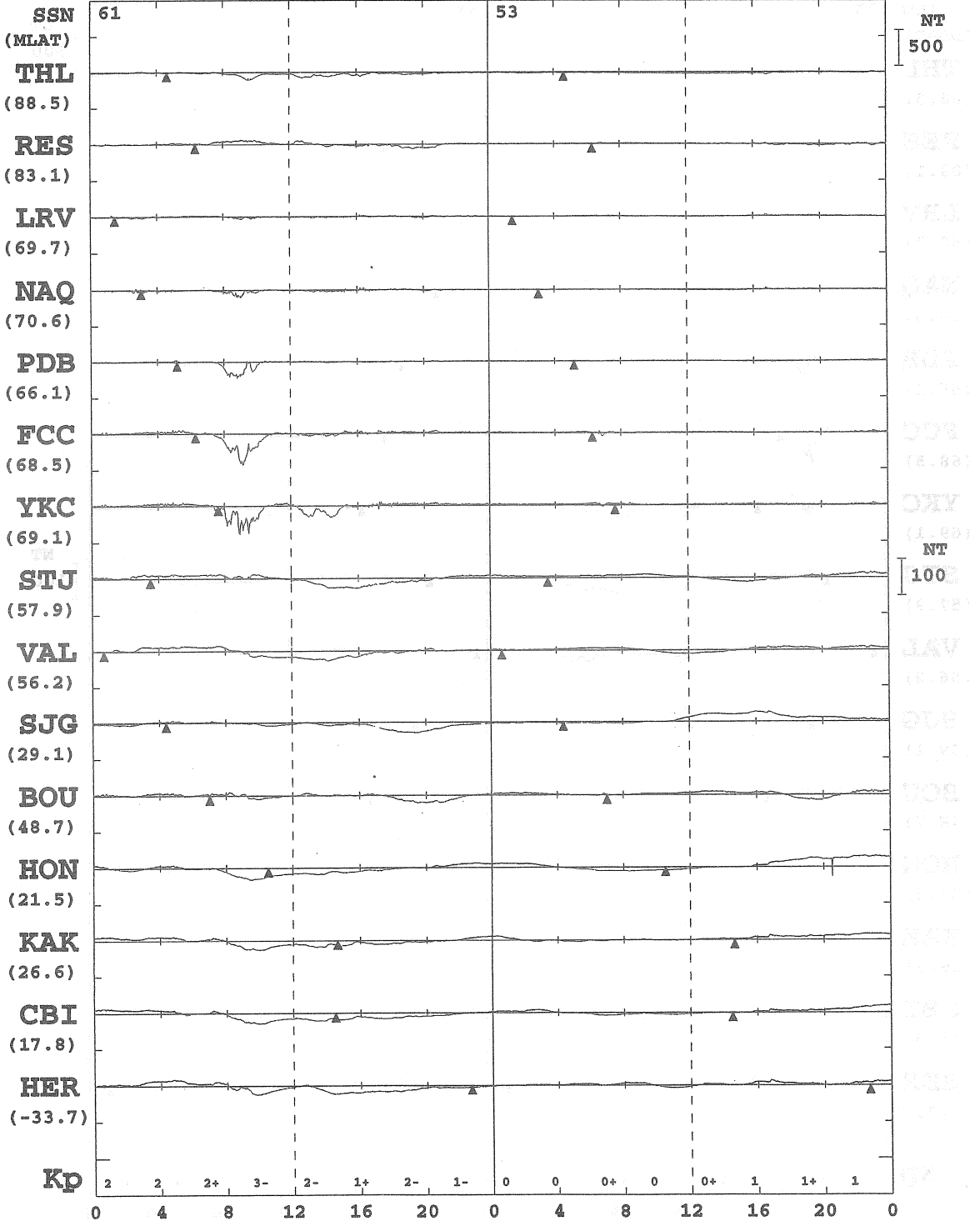
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT

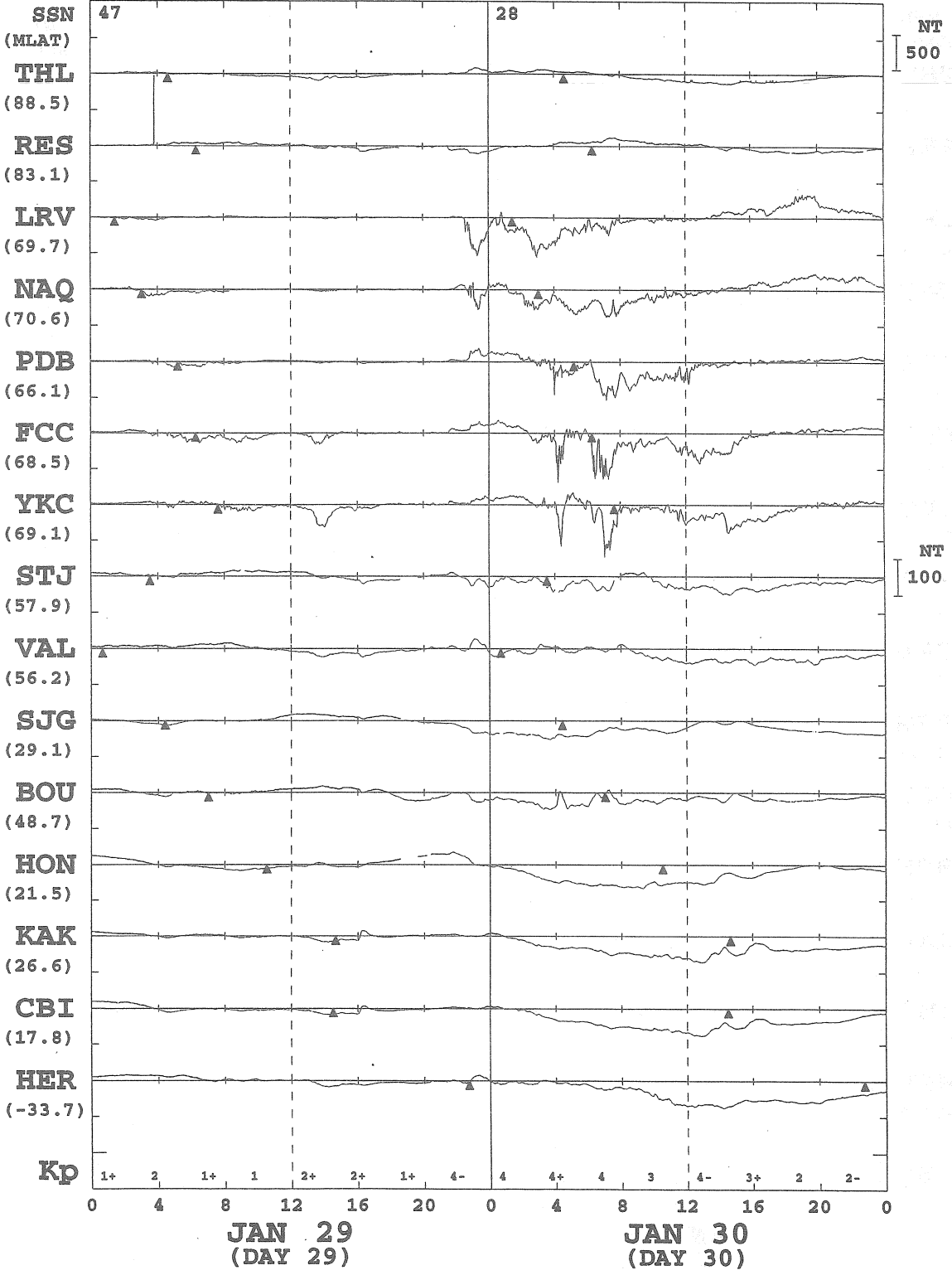


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

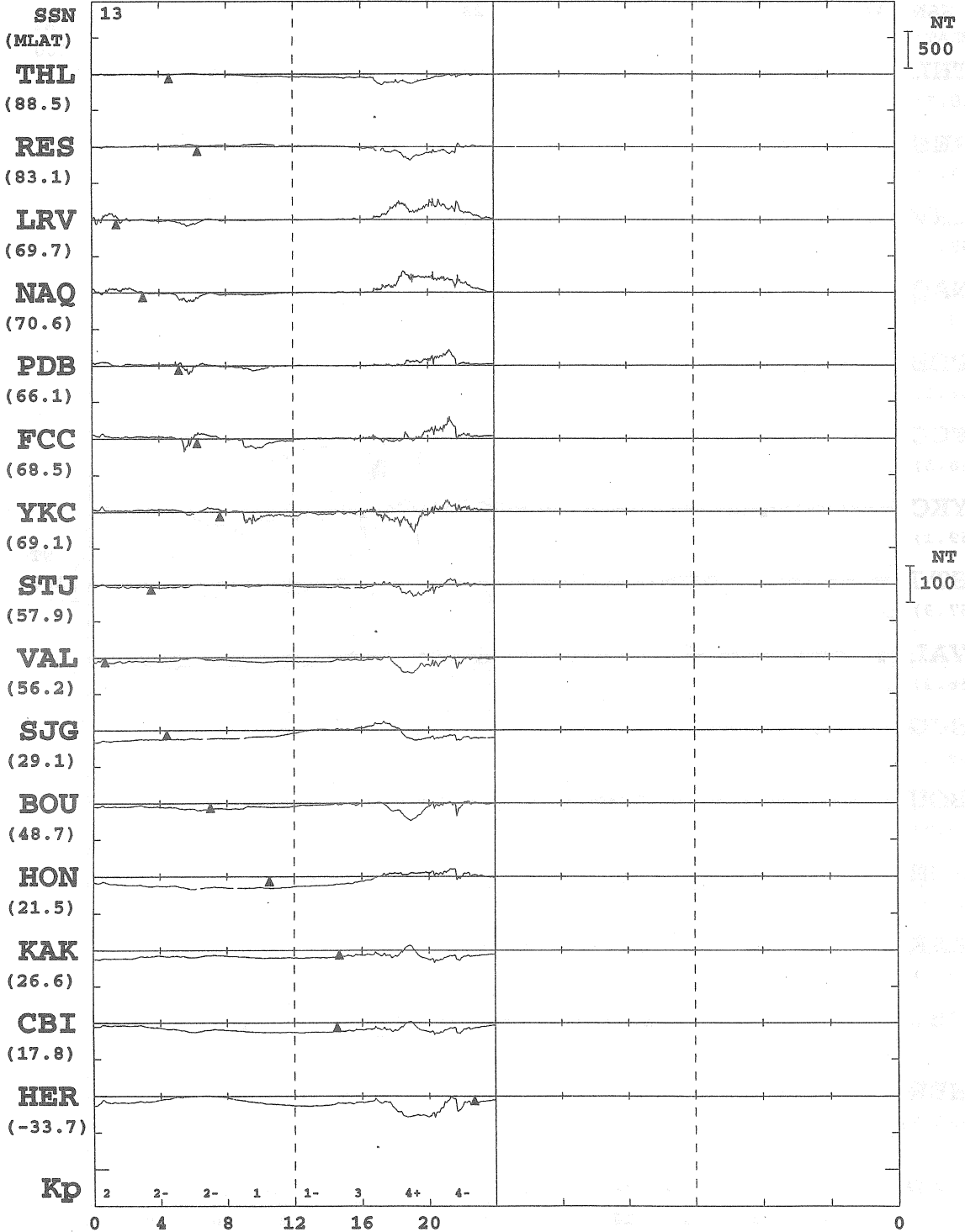
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT A : LOCAL MIDNIGHT



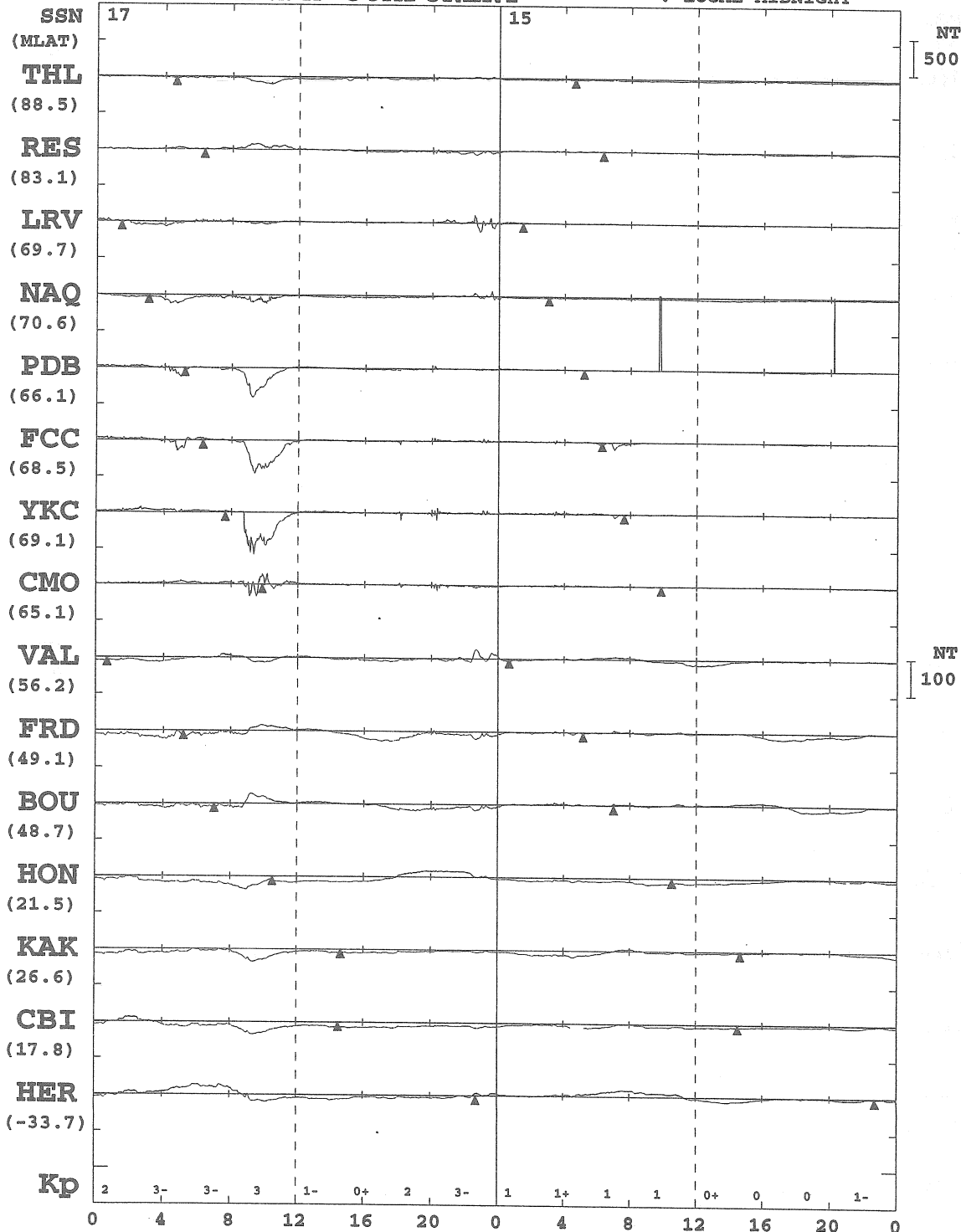
JAN 31
(DAY 31)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

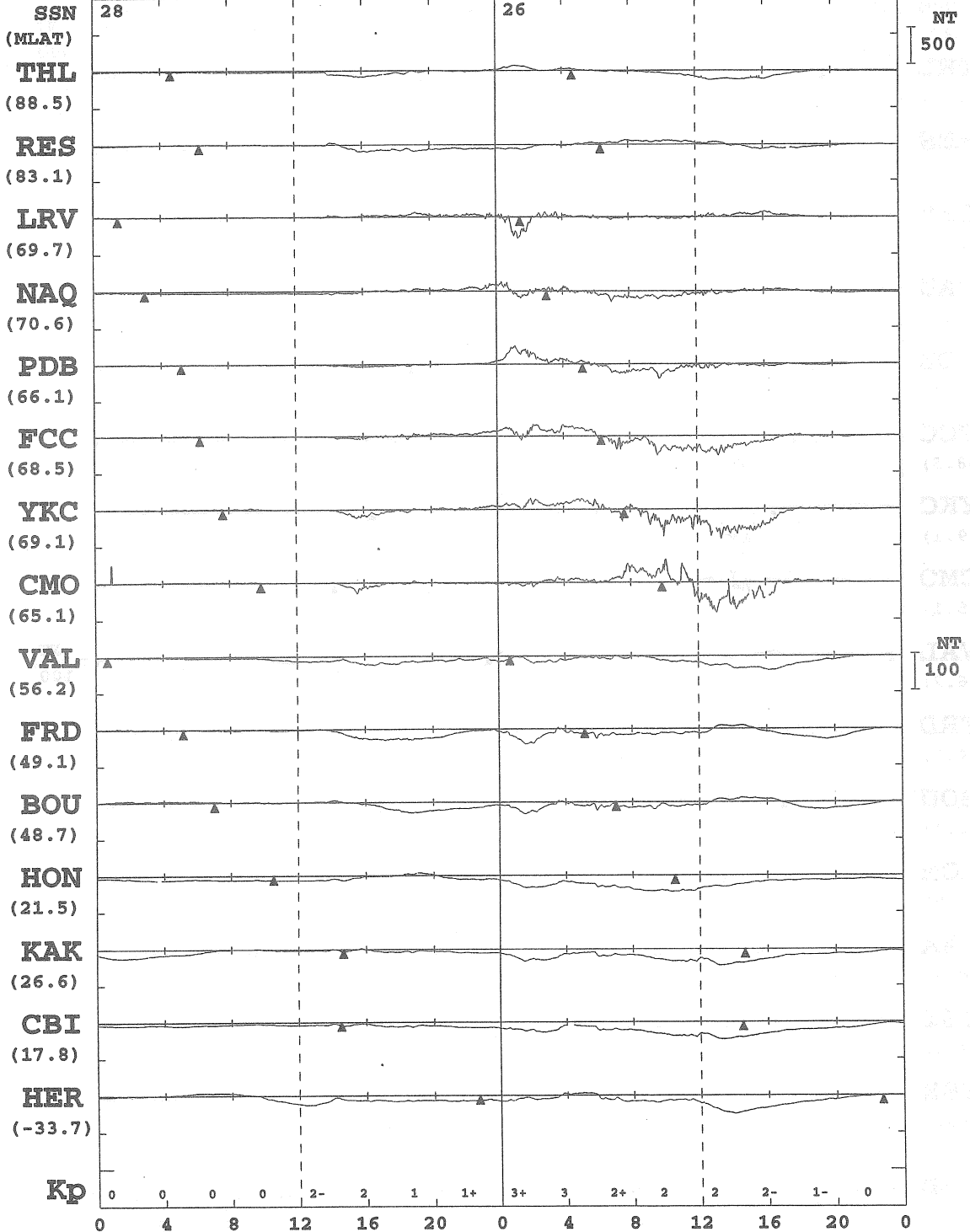
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT A : LOCAL MIDNIGHT

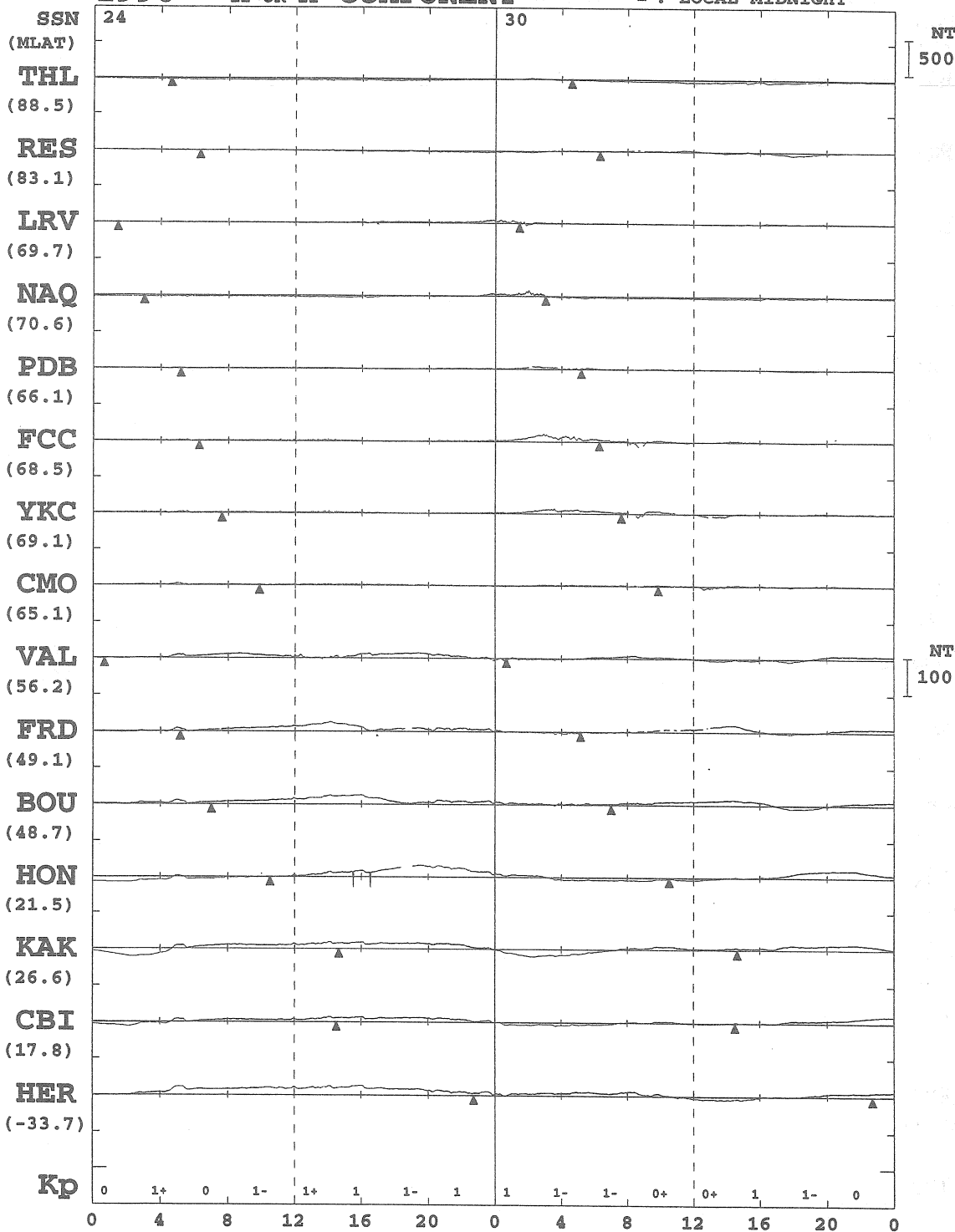


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

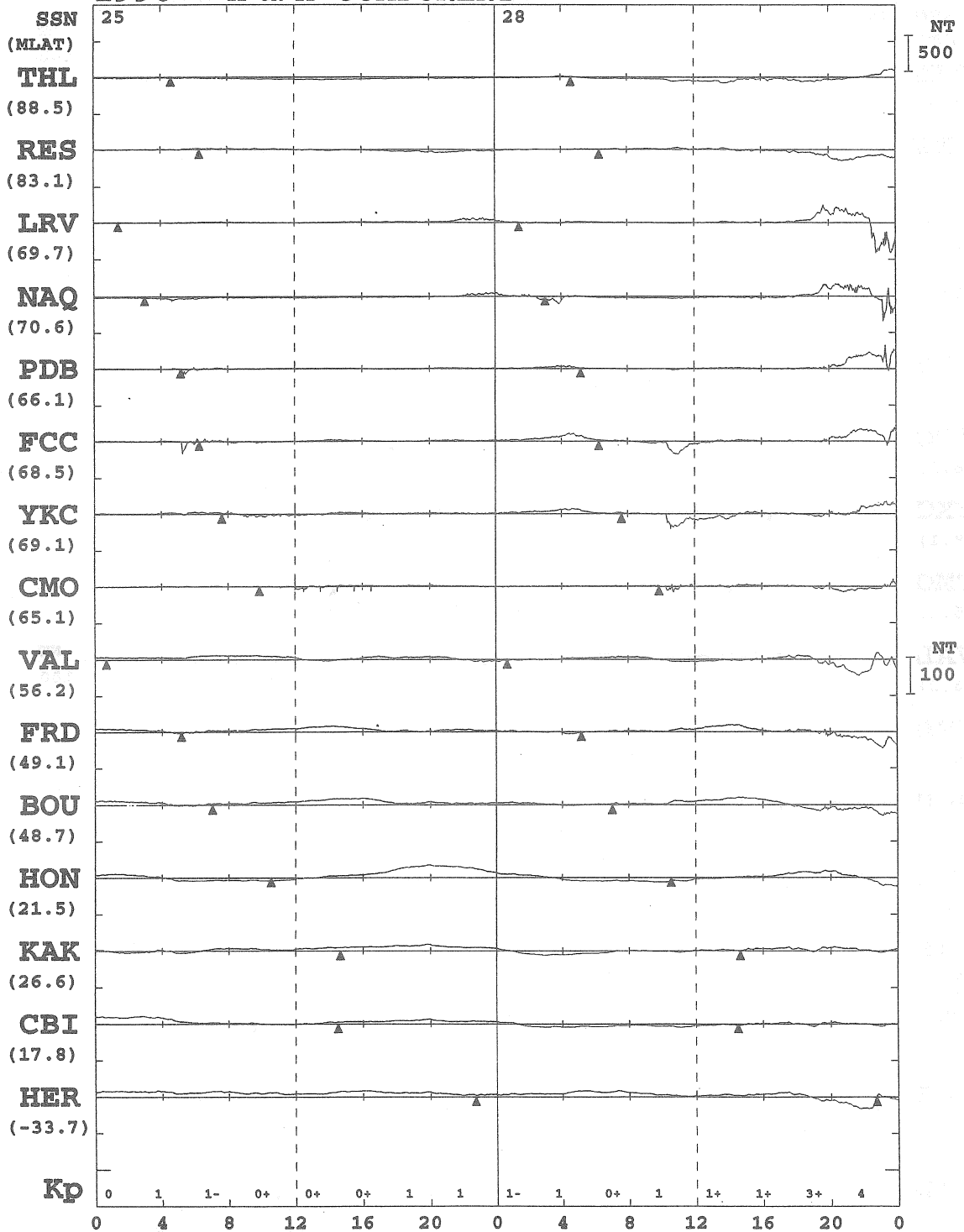
△ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

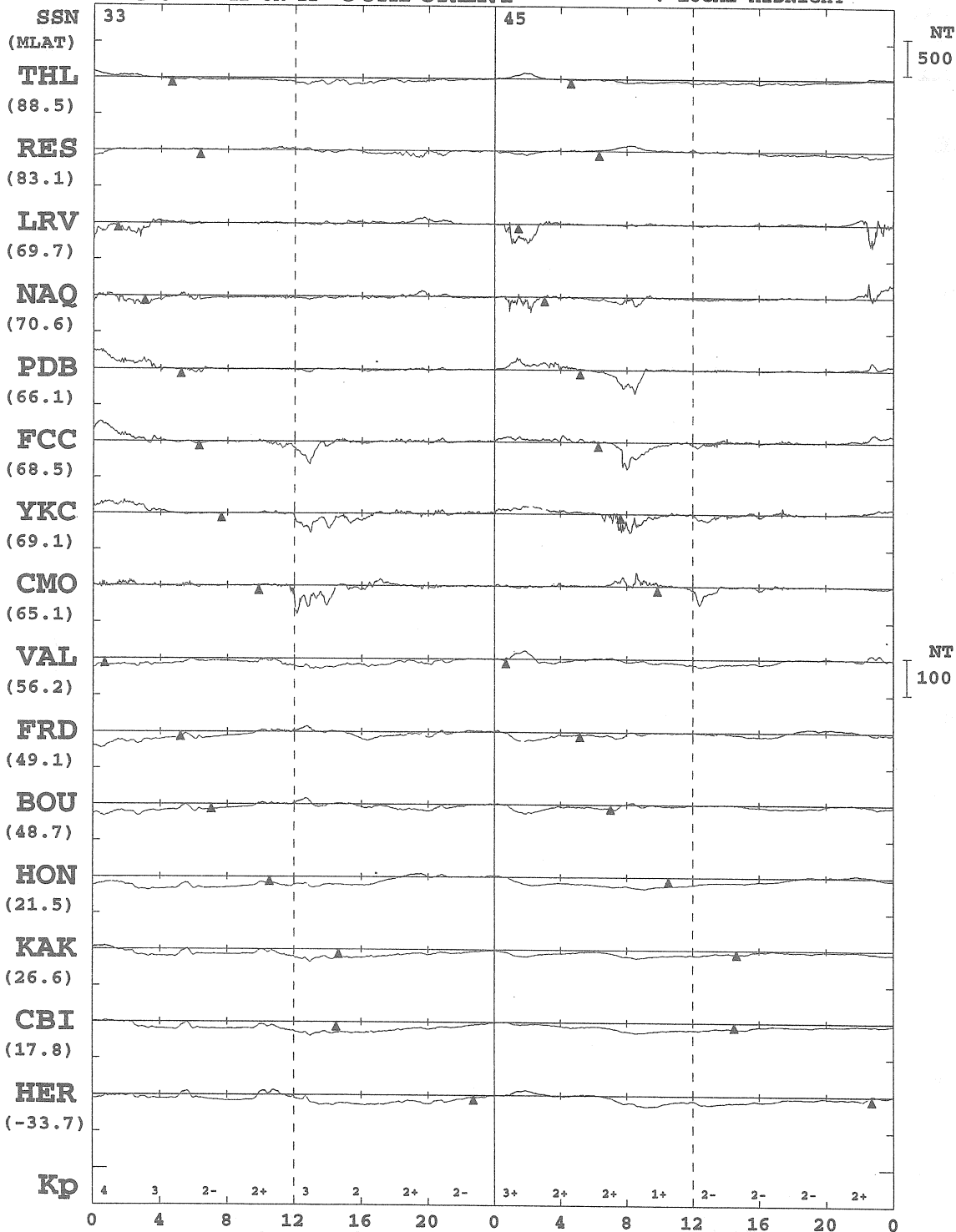


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



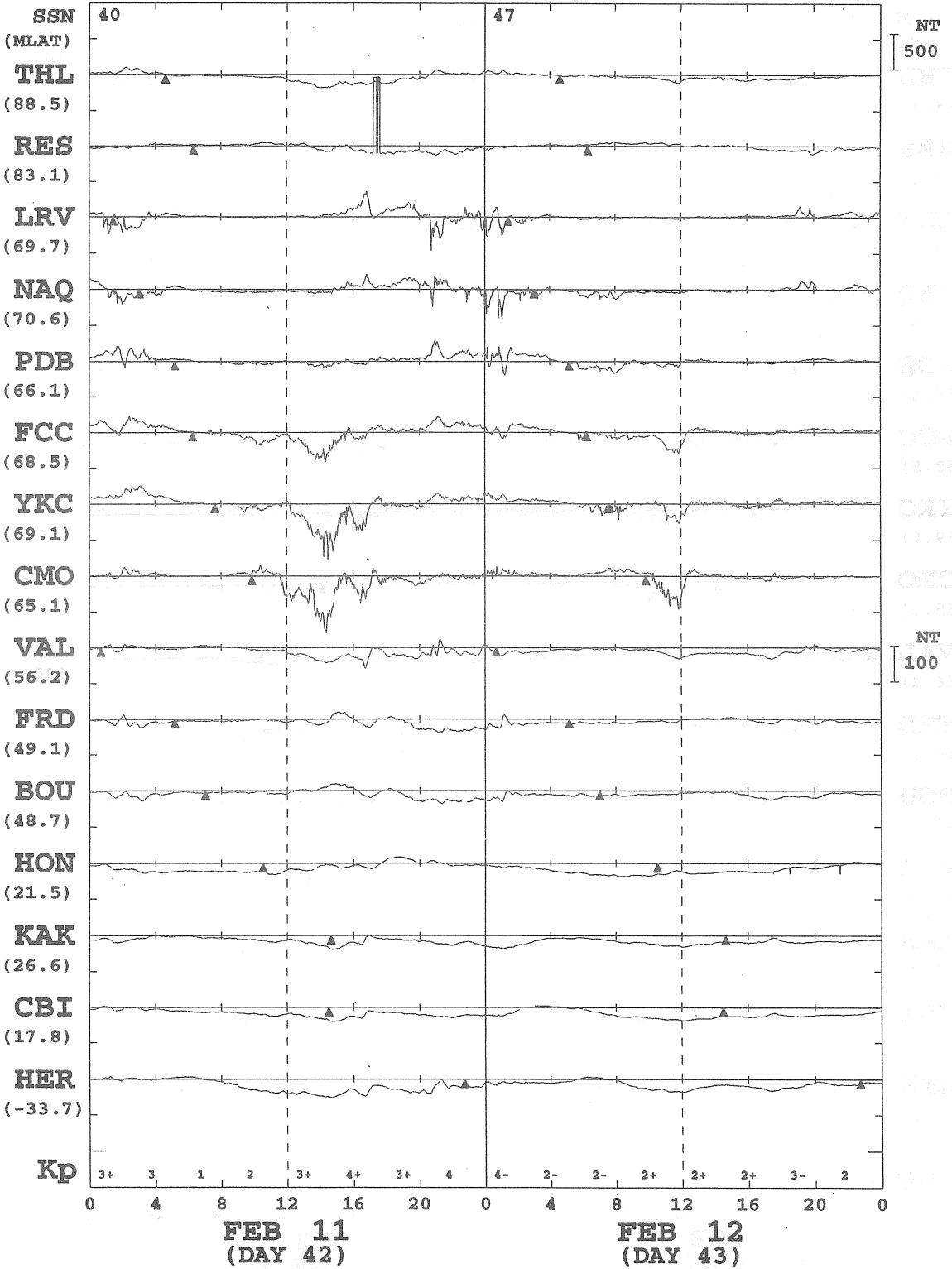
FEB 9 (DAY 40) FEB 10 (DAY 41)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

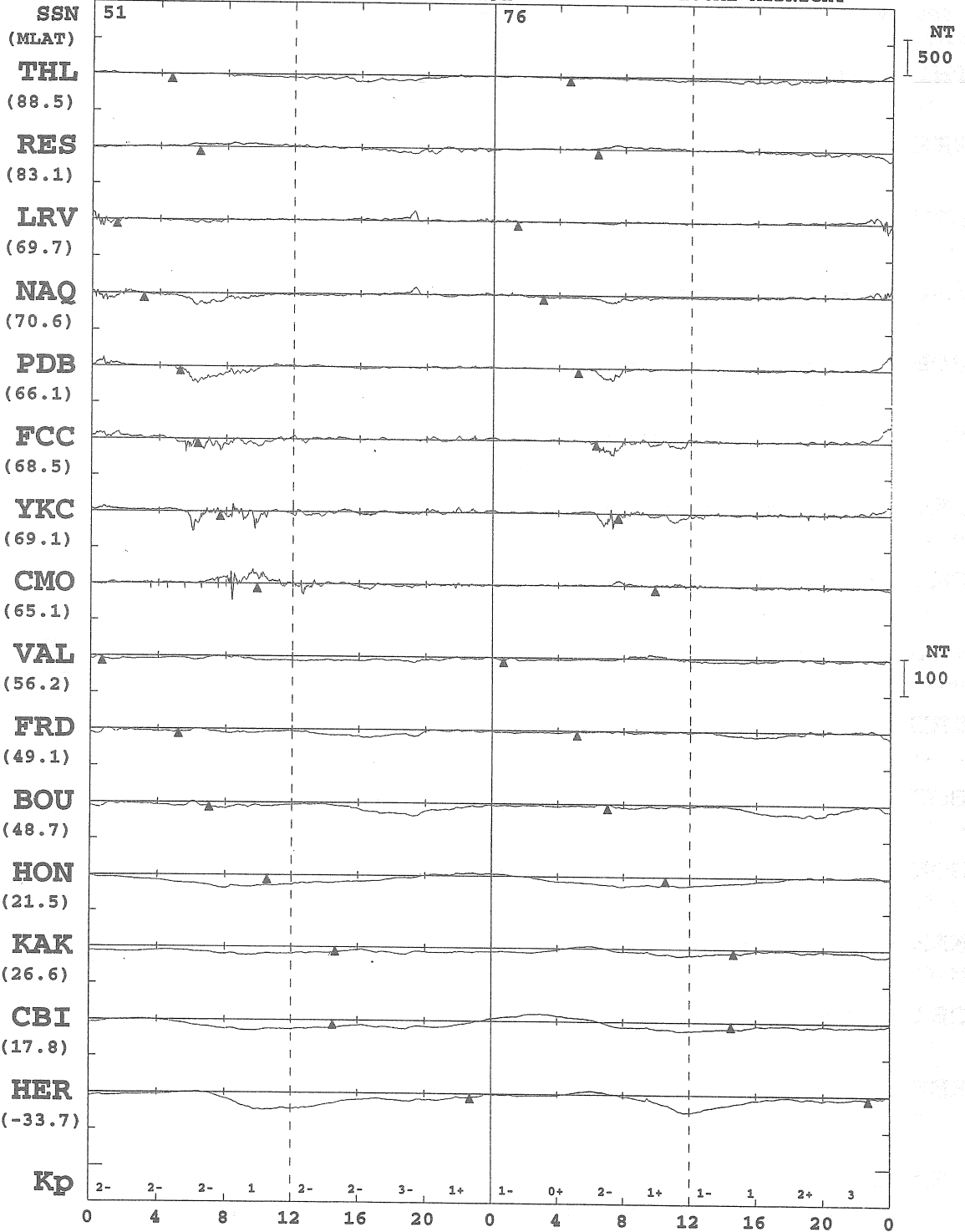
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

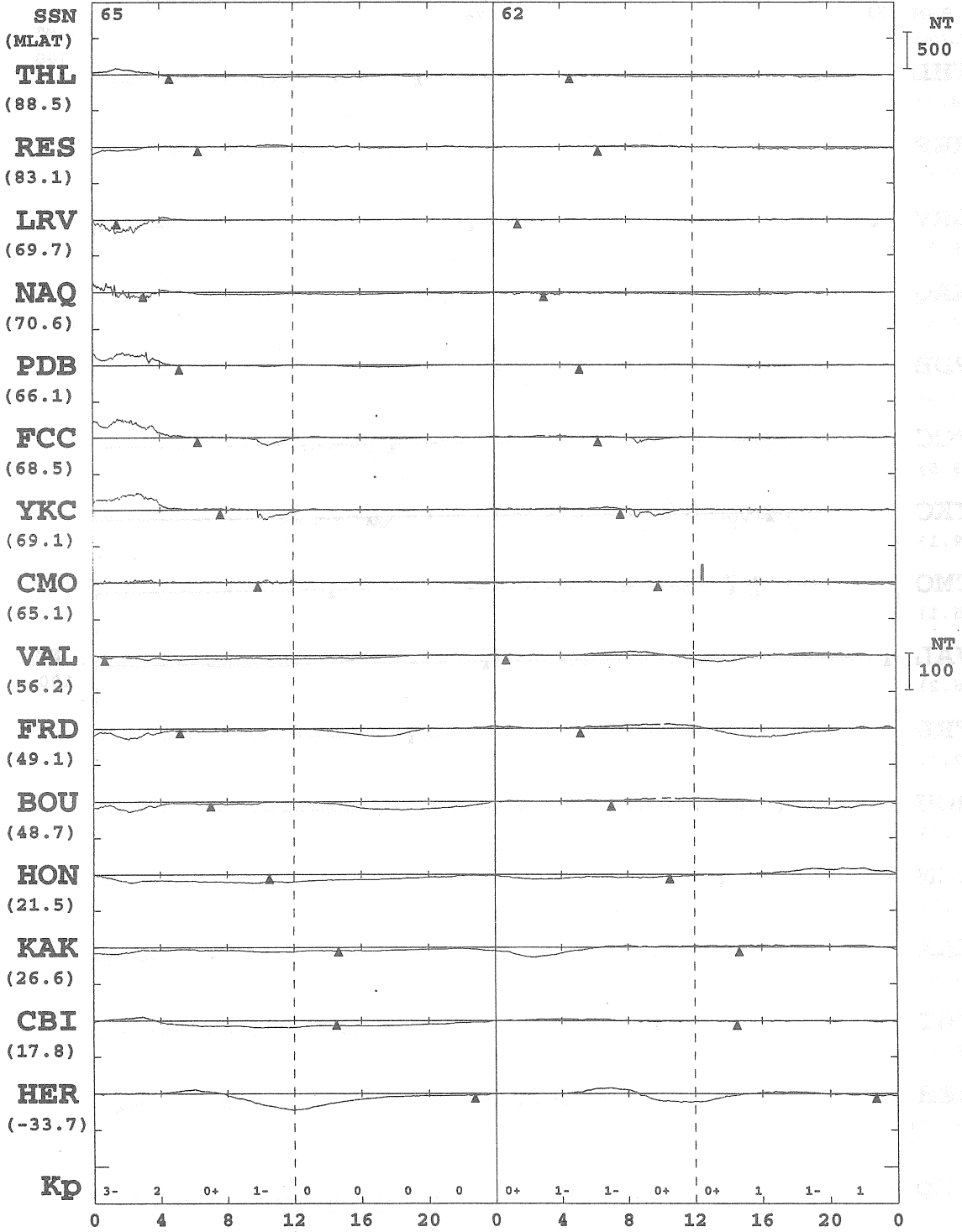
1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT



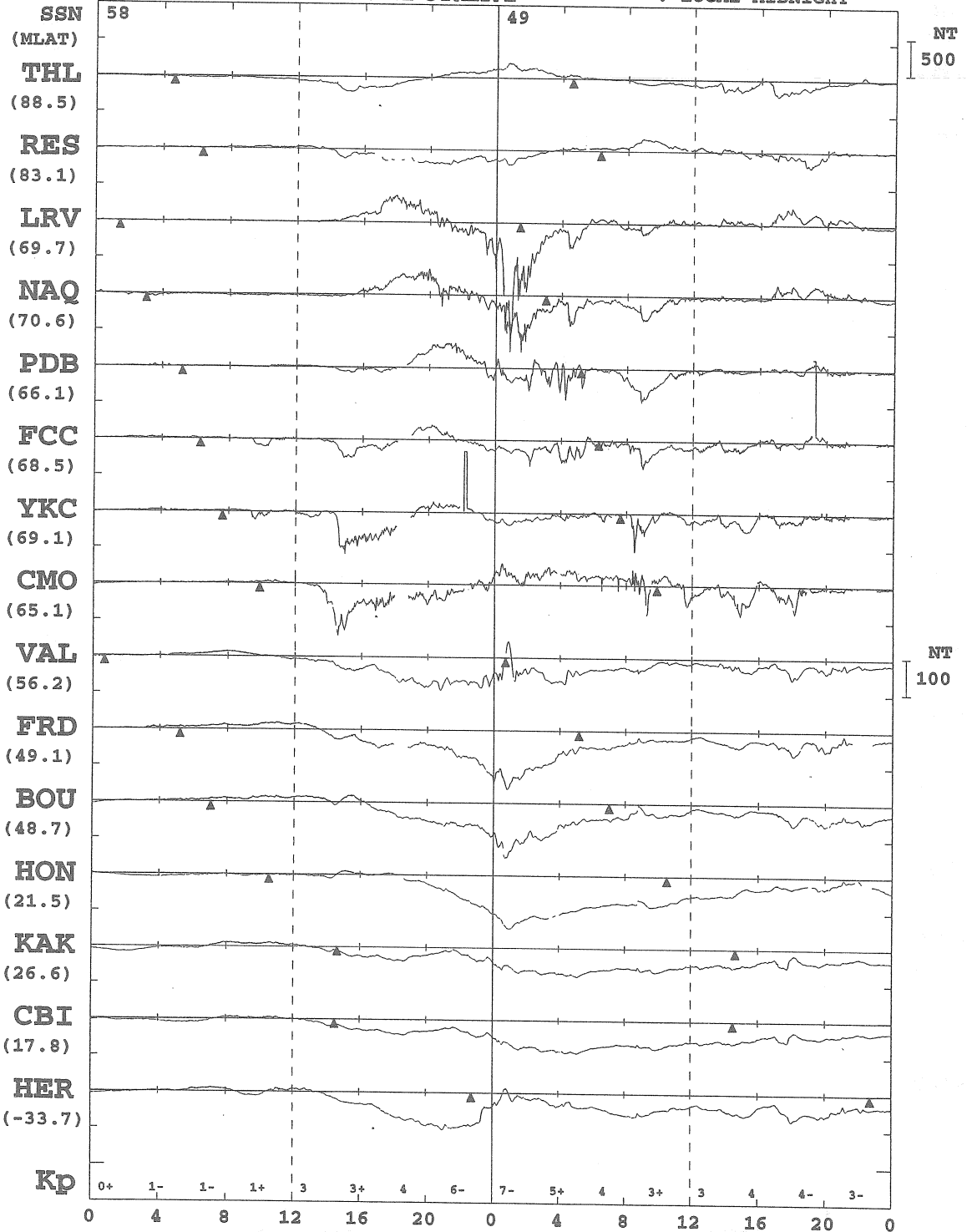
FEB 15 (DAY 46) FEB 16 (DAY 47)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

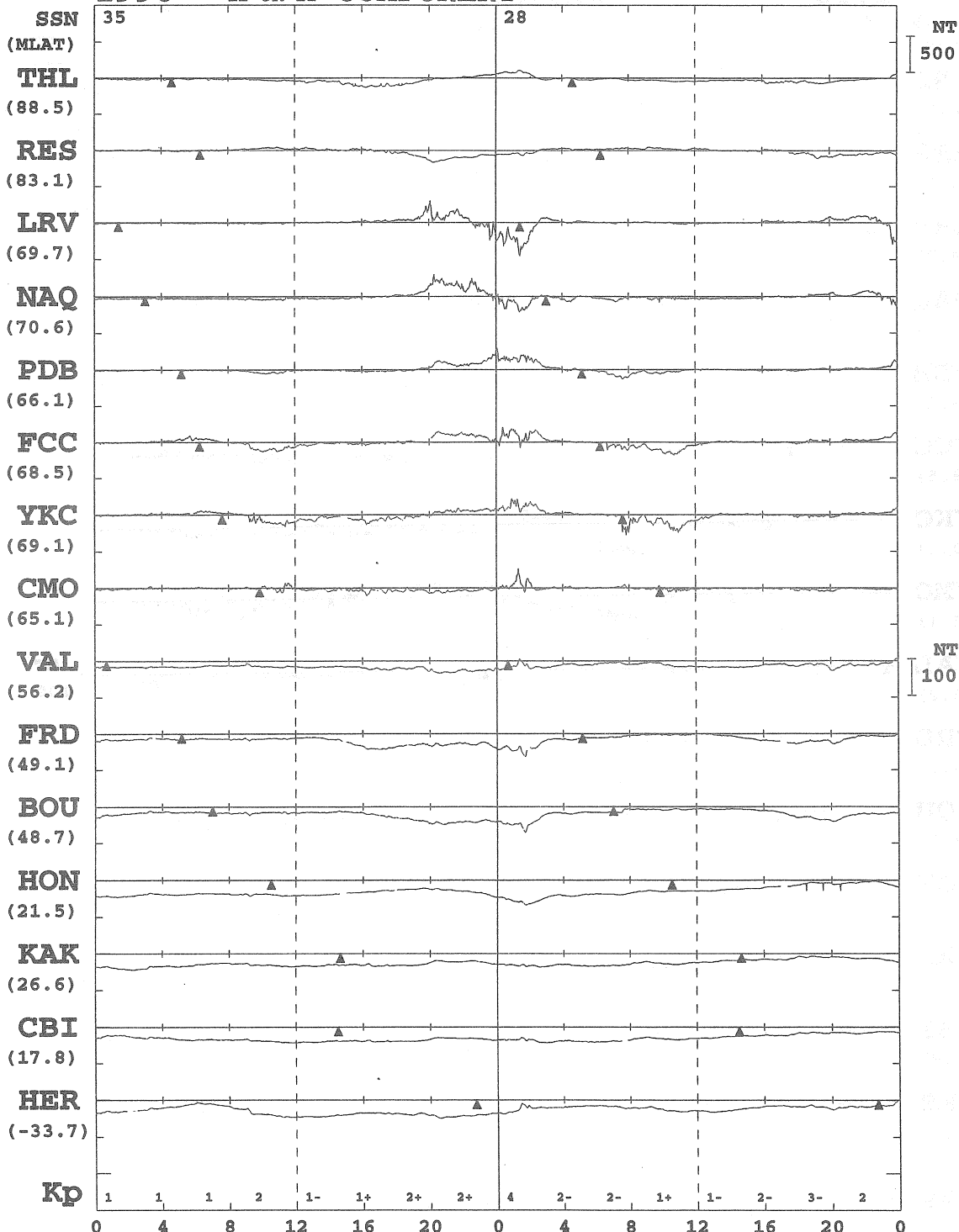


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



FEB 19
(DAY 50)

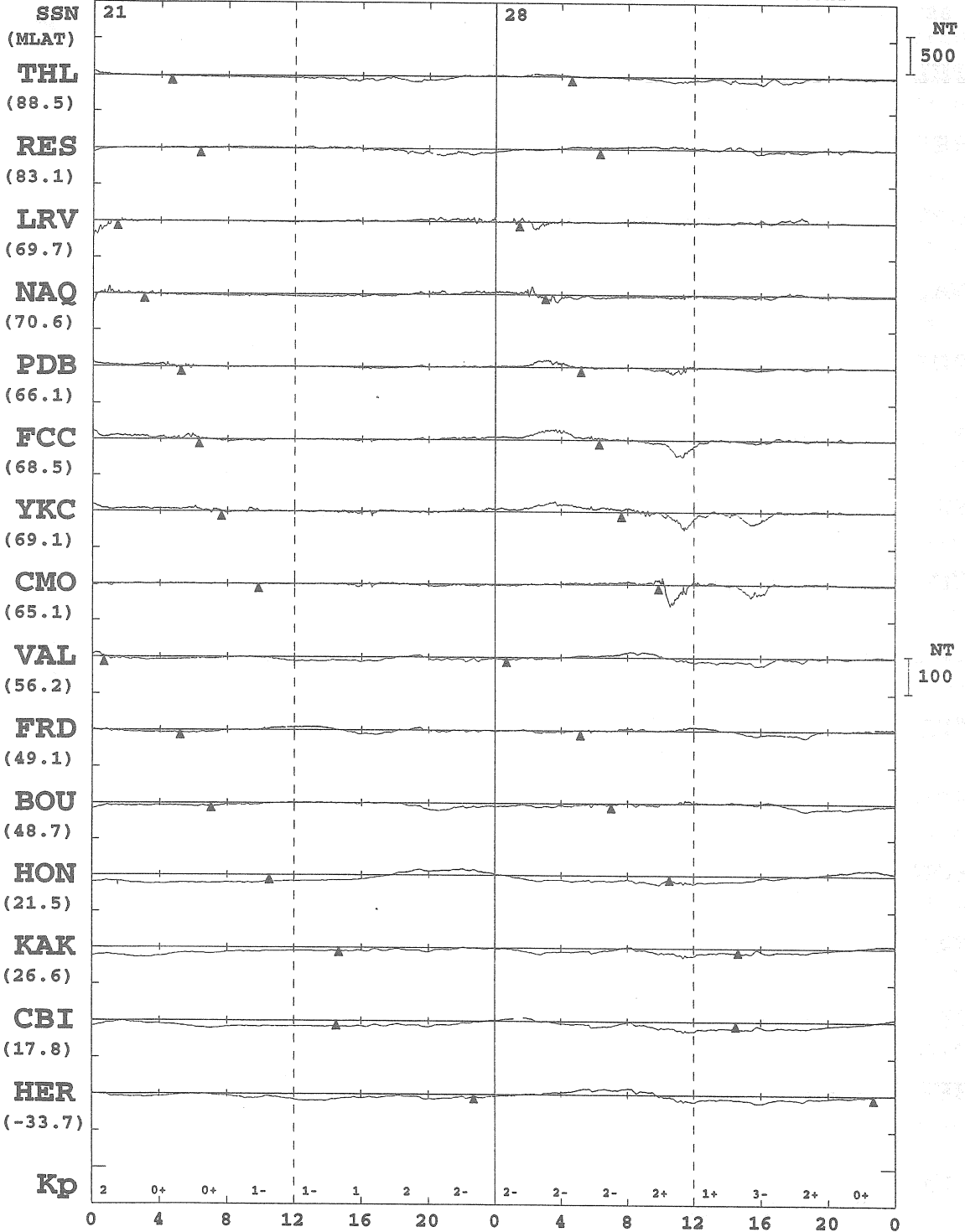
FEB 20
(DAY 51)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



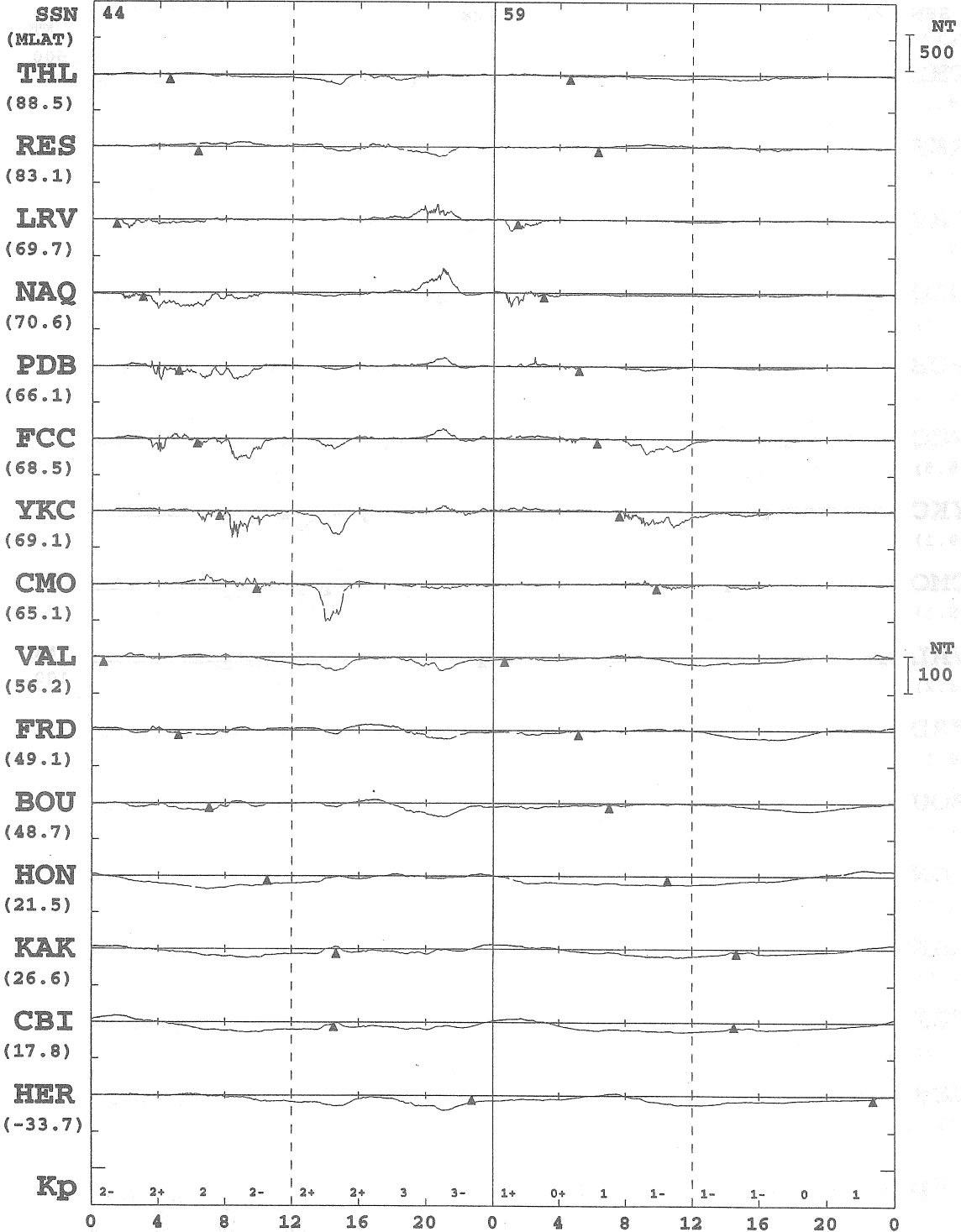
FEB 21
(DAY 52)

FEB 22
(DAY 53)

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

KYOTO UNIV.

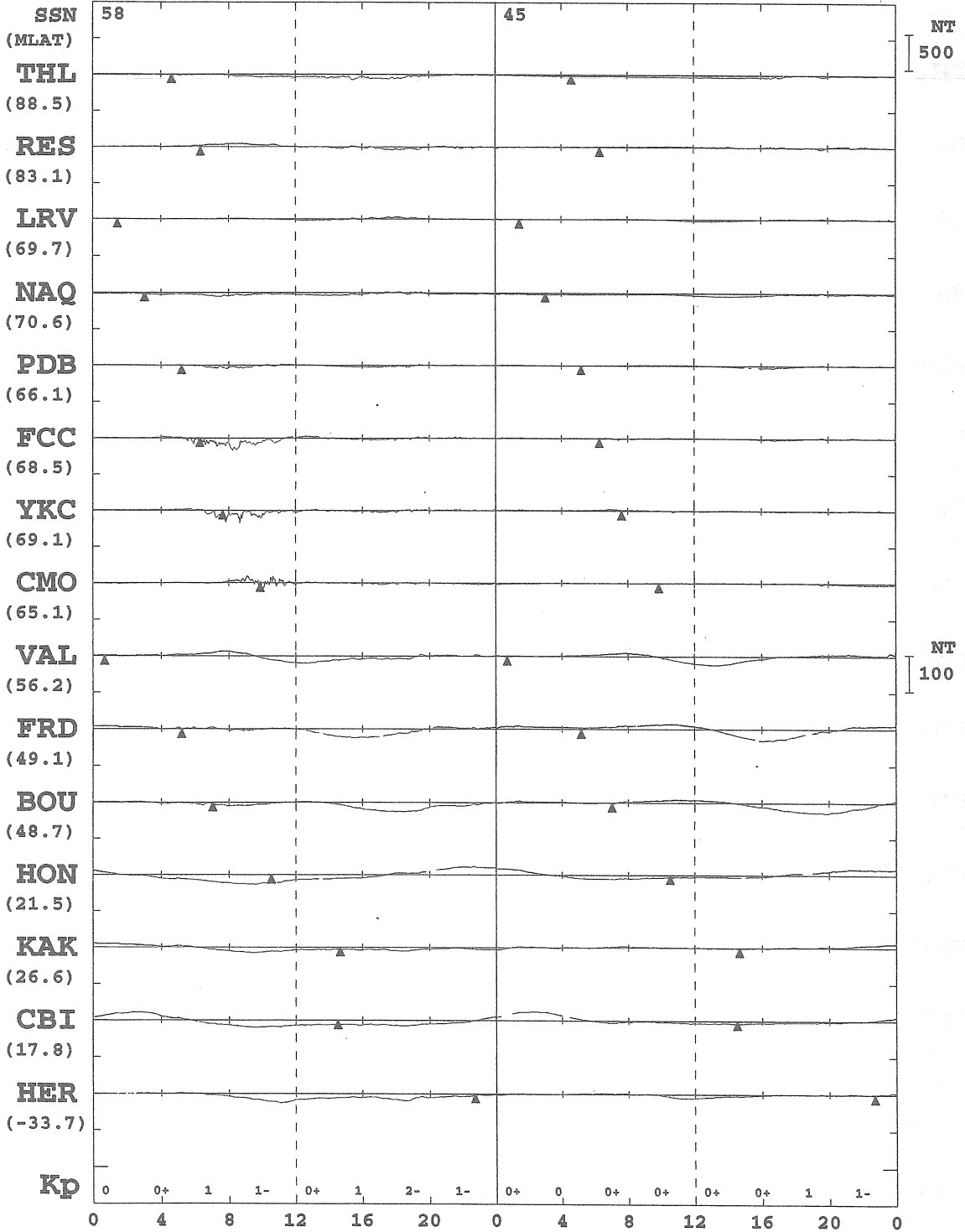
1998 H OR X-COMPONENT LOCAL MIDNIGHT



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

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



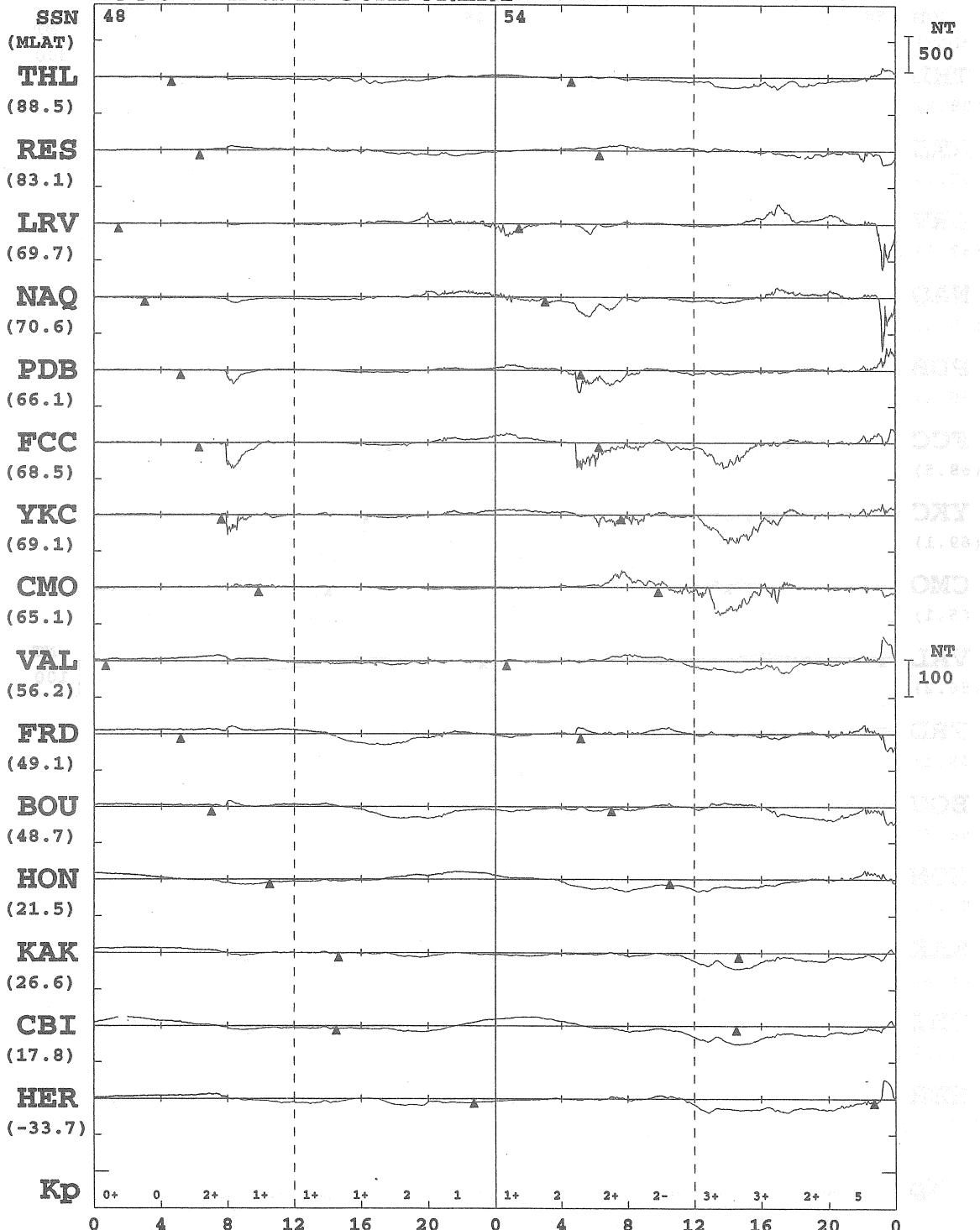
FEB 25
(DAY 56)

FEB 26
(DAY 57)

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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



FEB 27
(DAY 58)

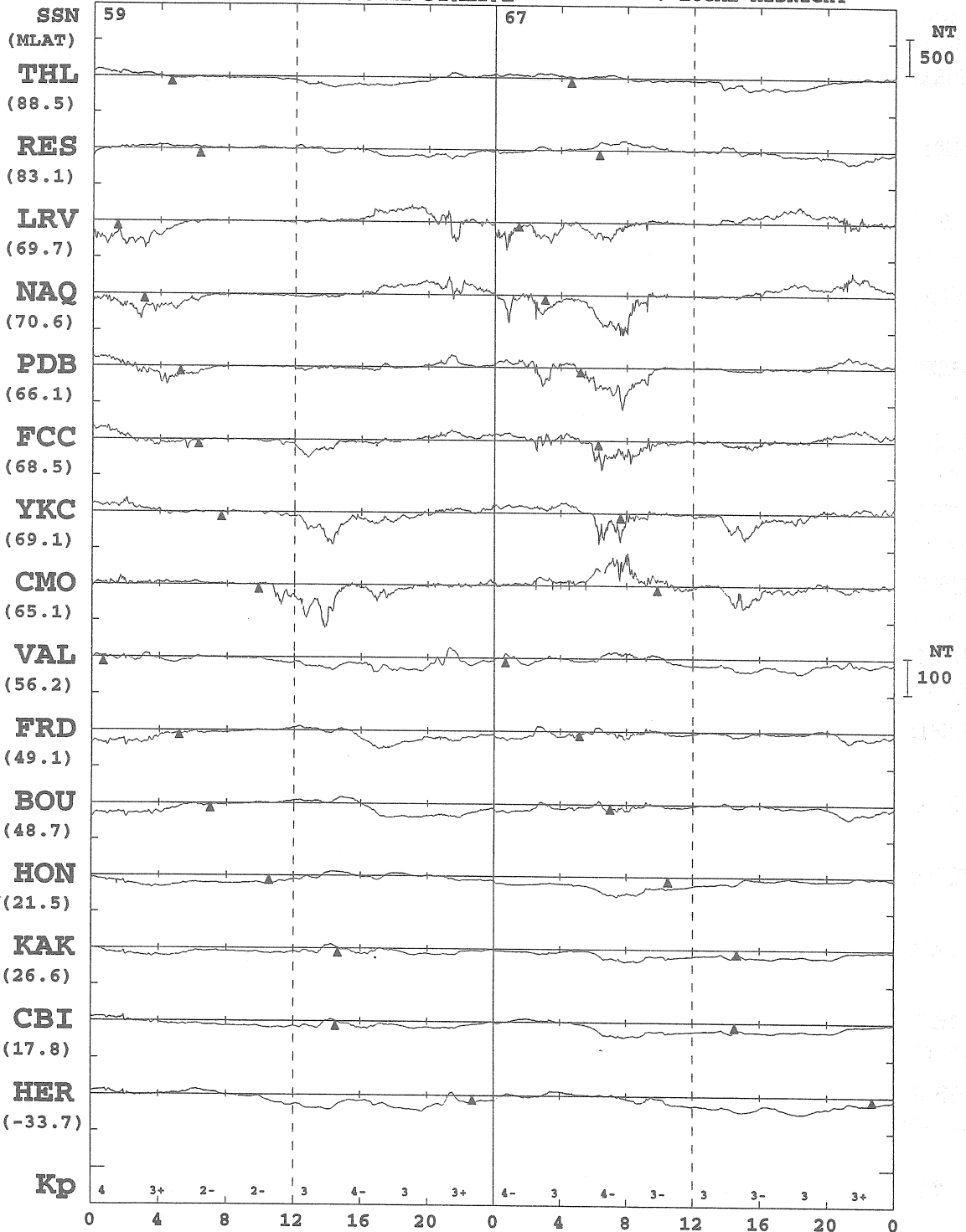
FEB 28
(DAY 59)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

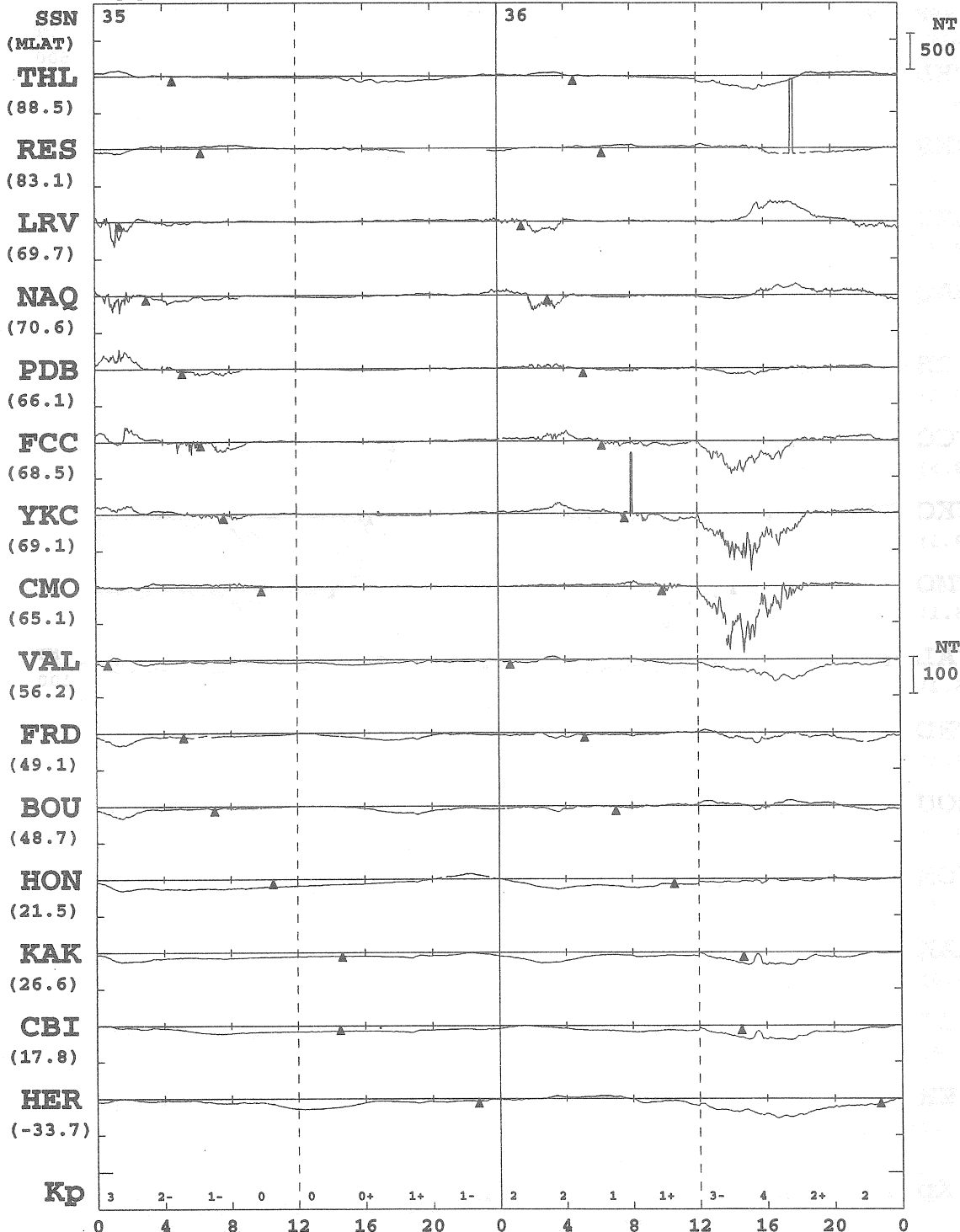
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

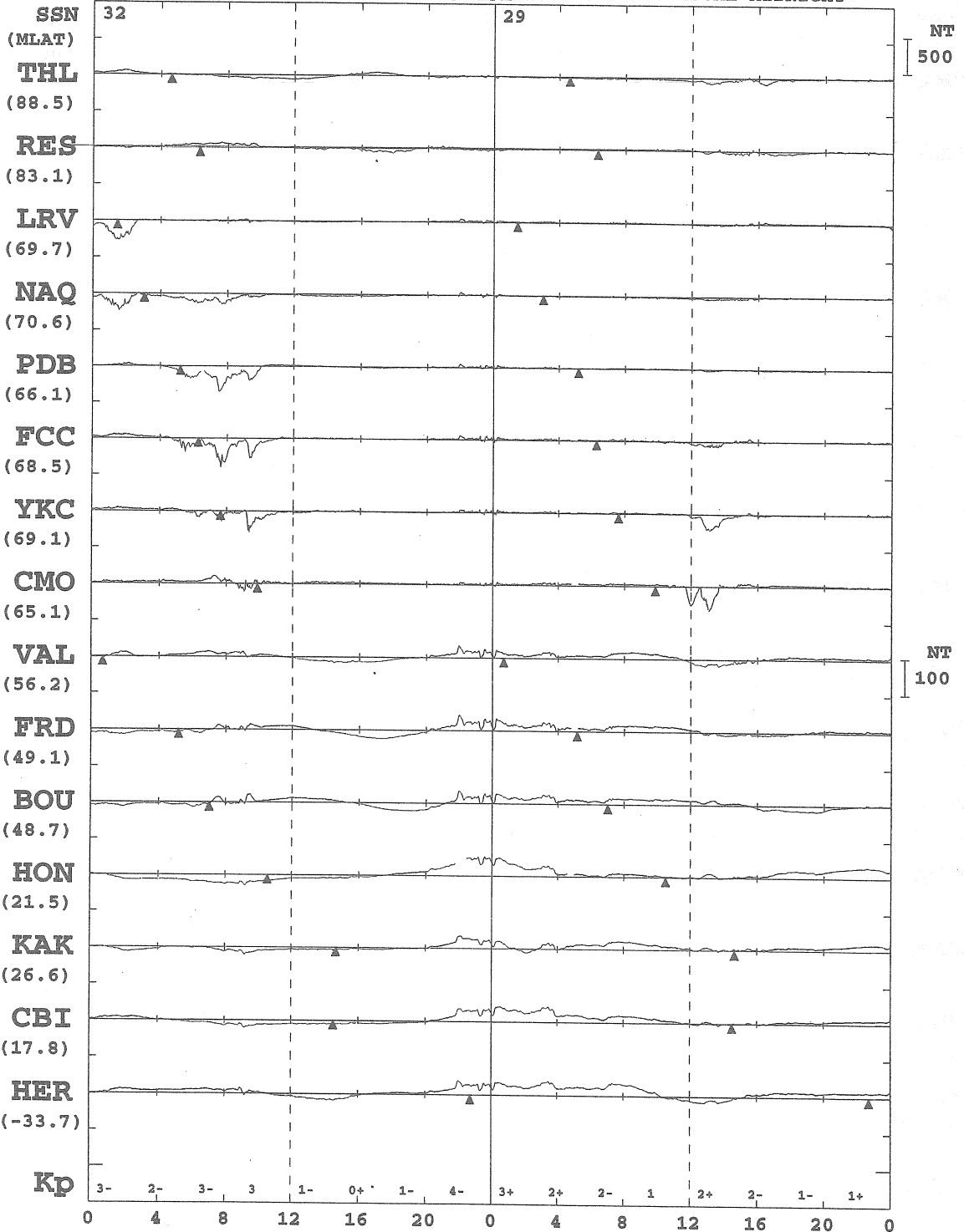


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

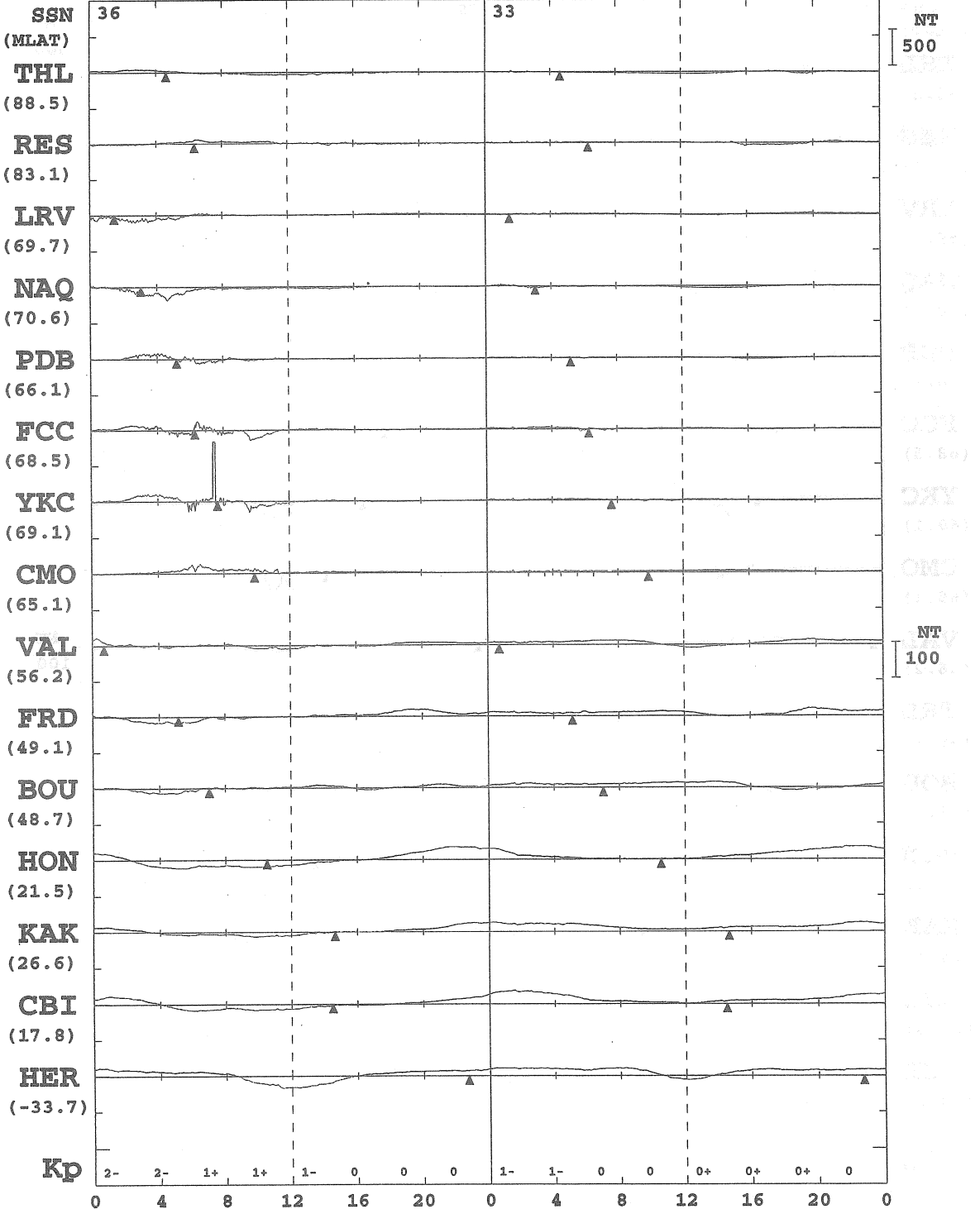


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

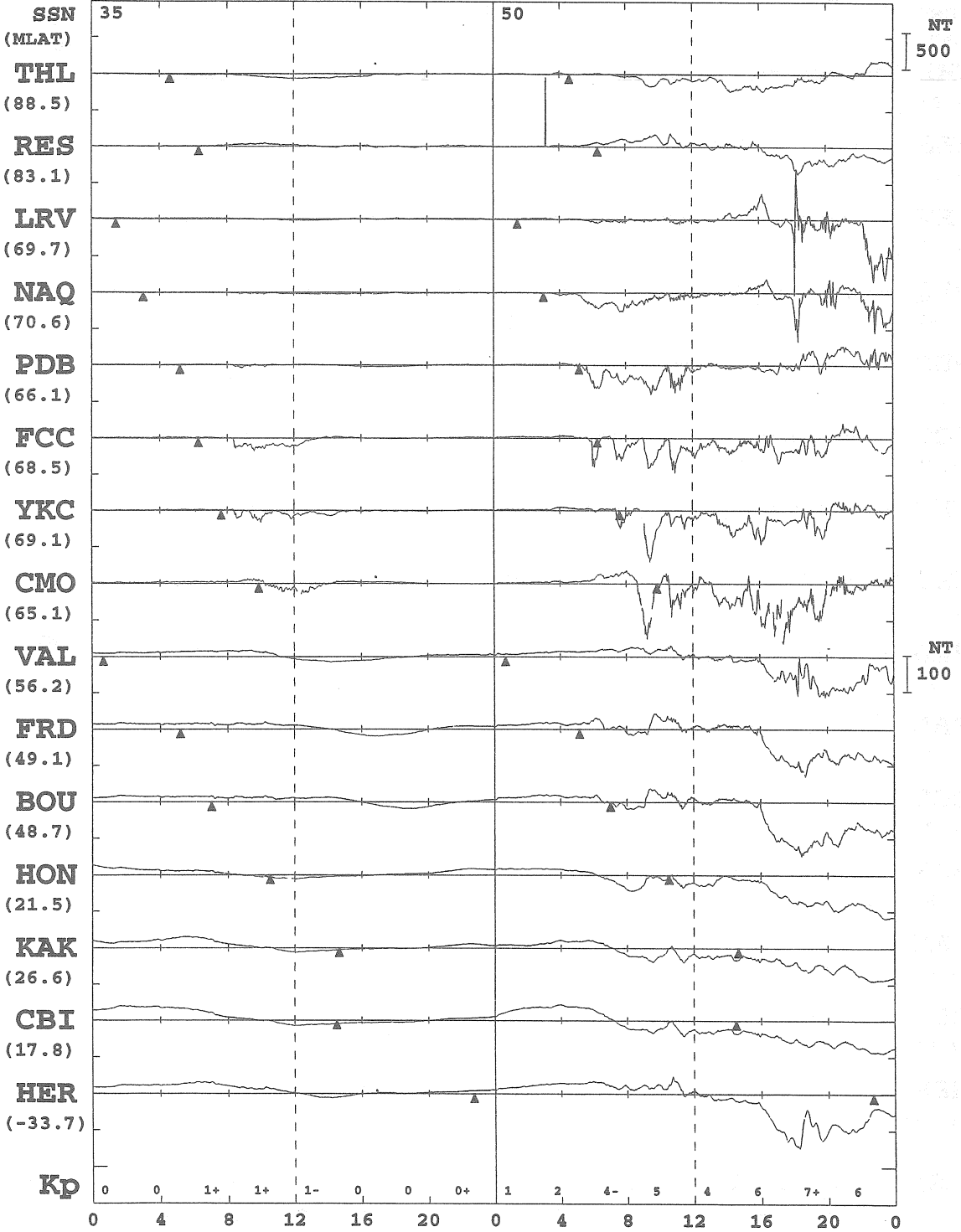


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

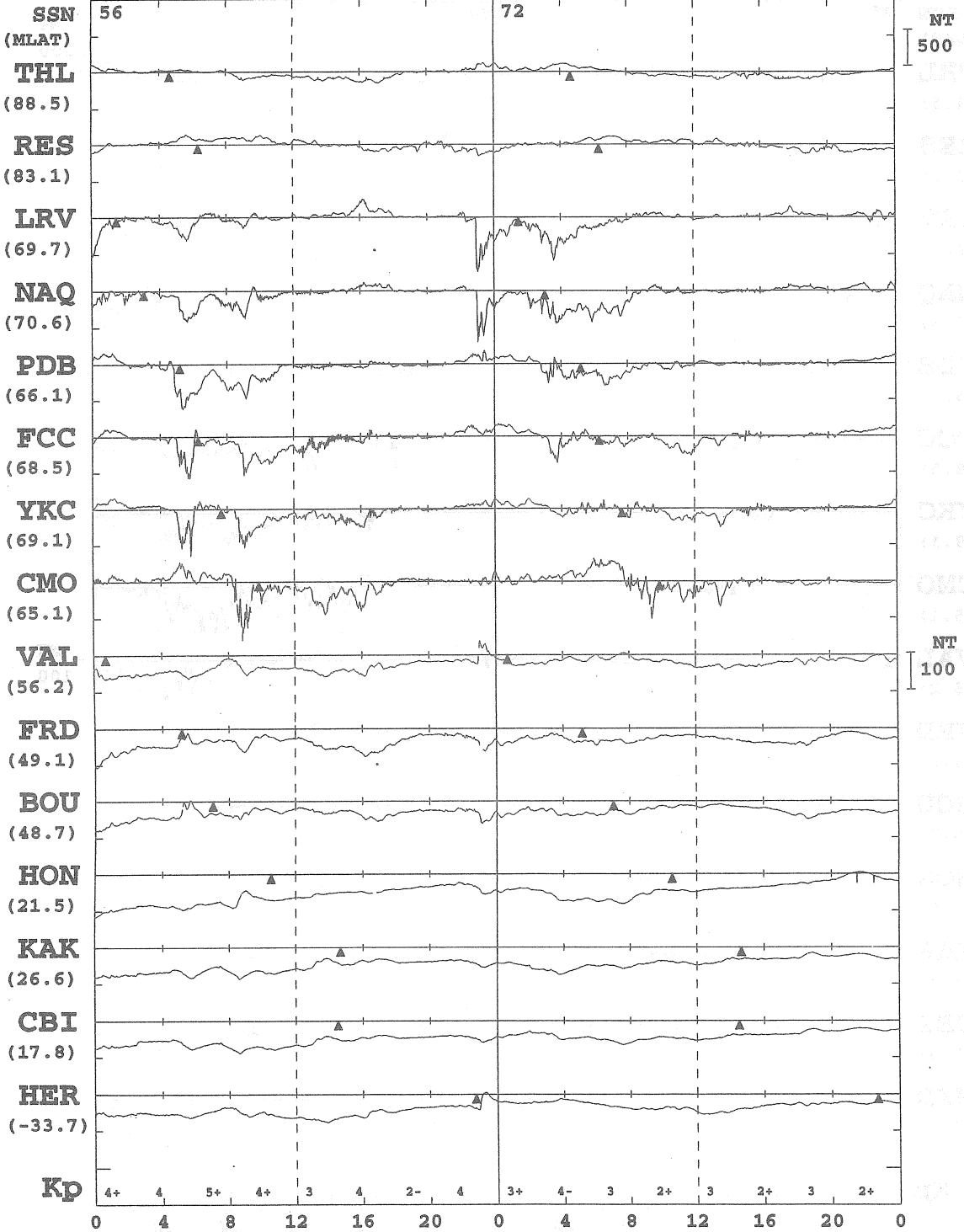
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

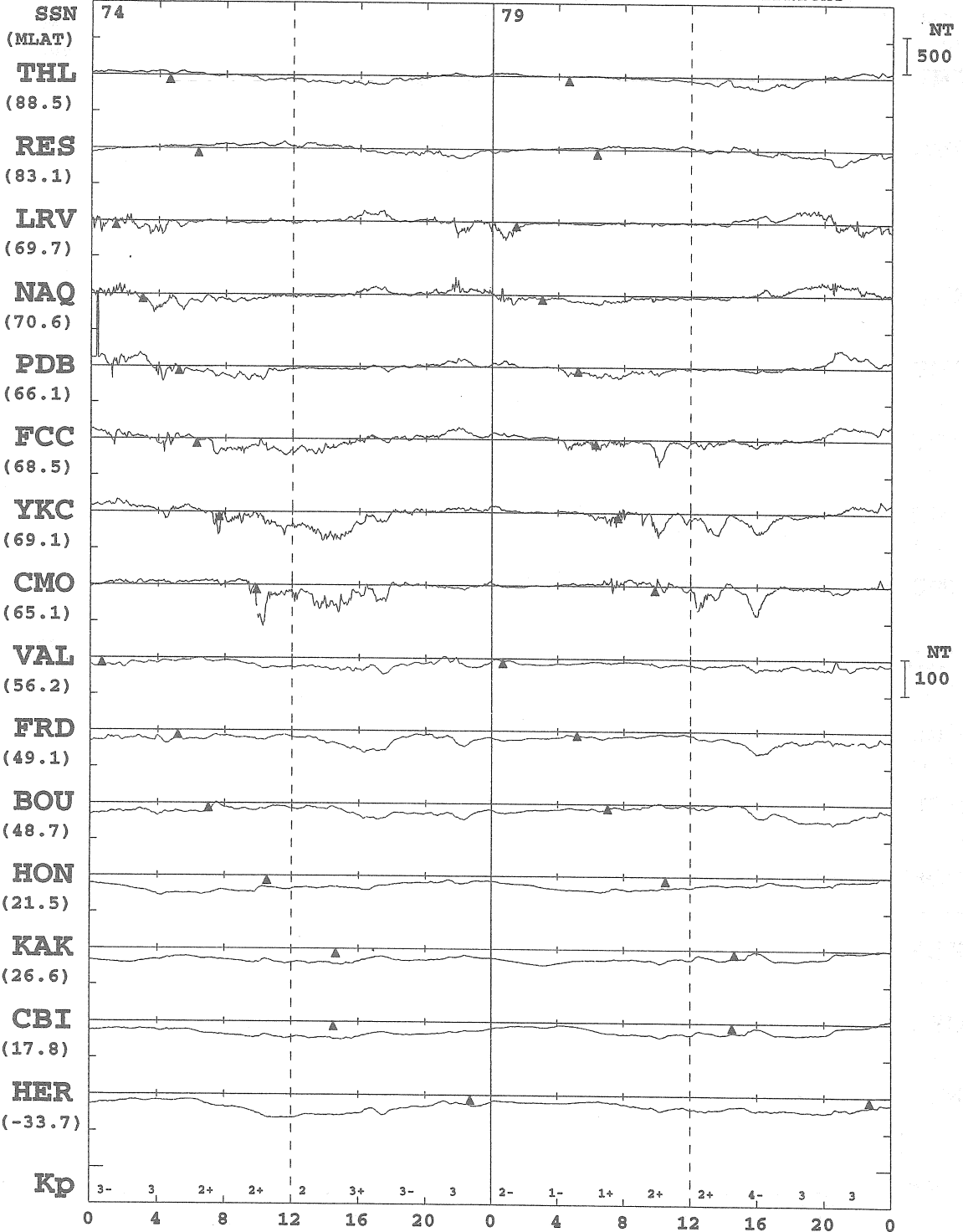
1998 H OR X-COMPONENT STATION ▲ : LOCAL MIDNIGHT



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

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



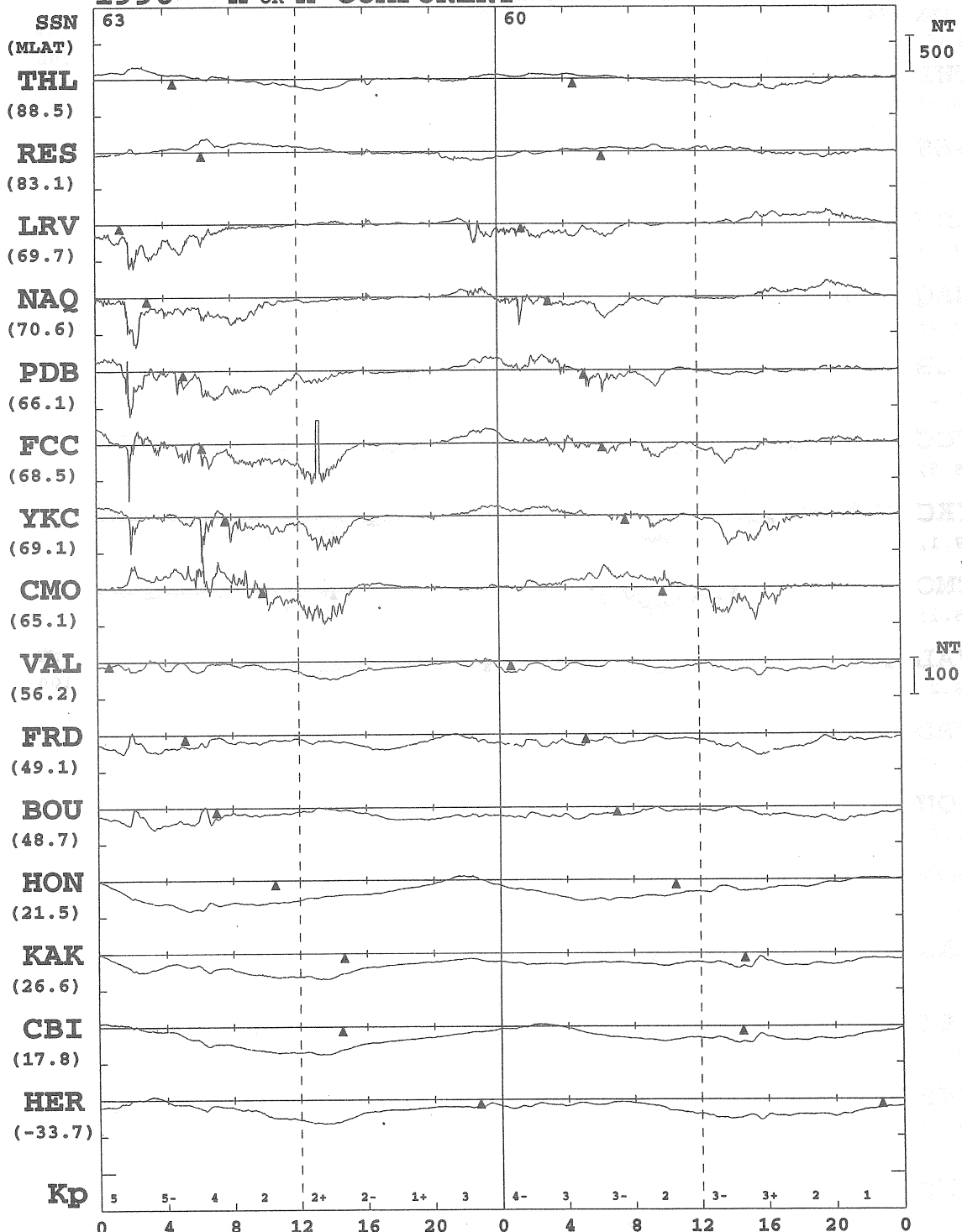
MAR 13
(DAY 72)

MAR 14
(DAY 73)

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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

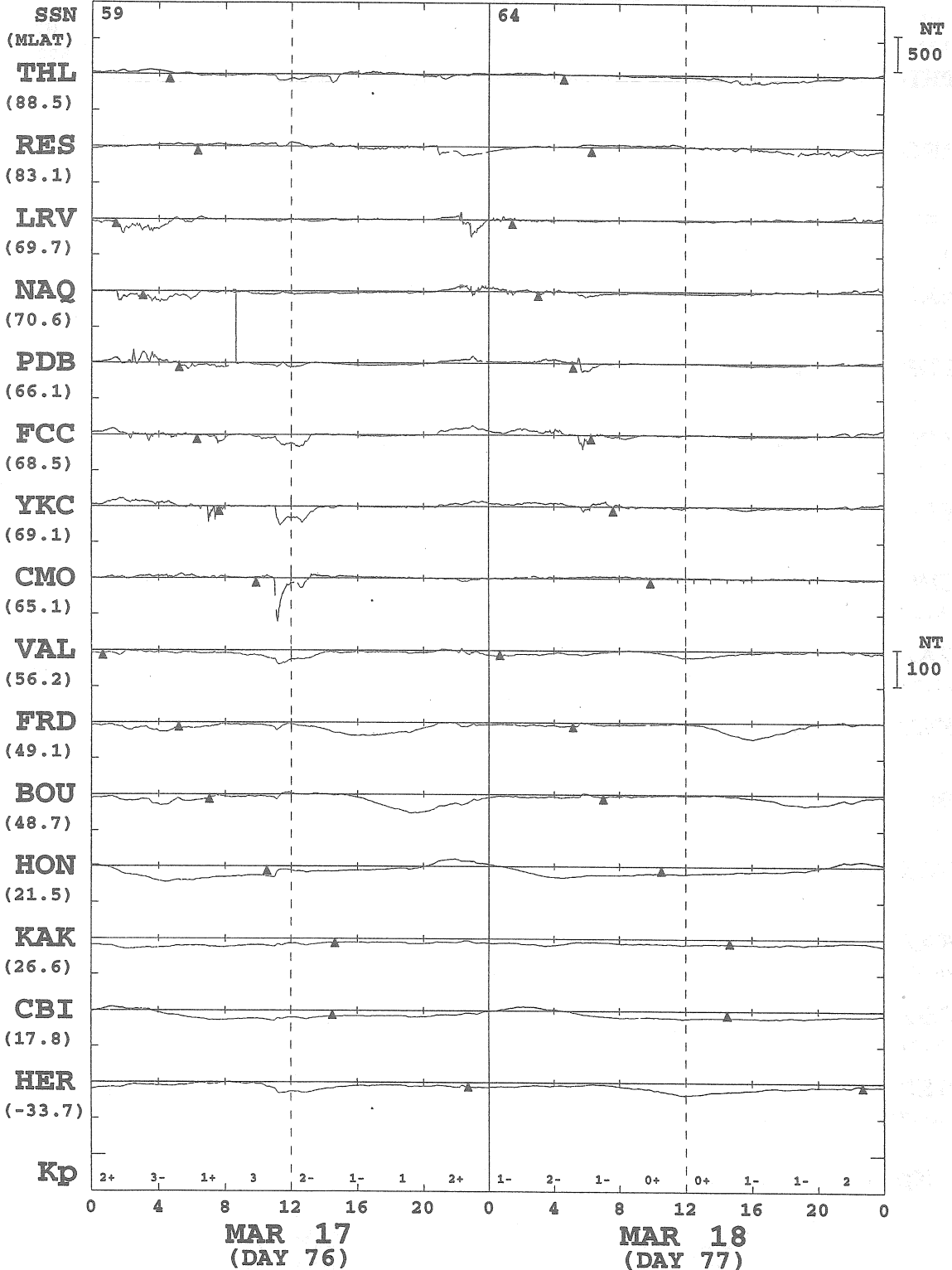


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

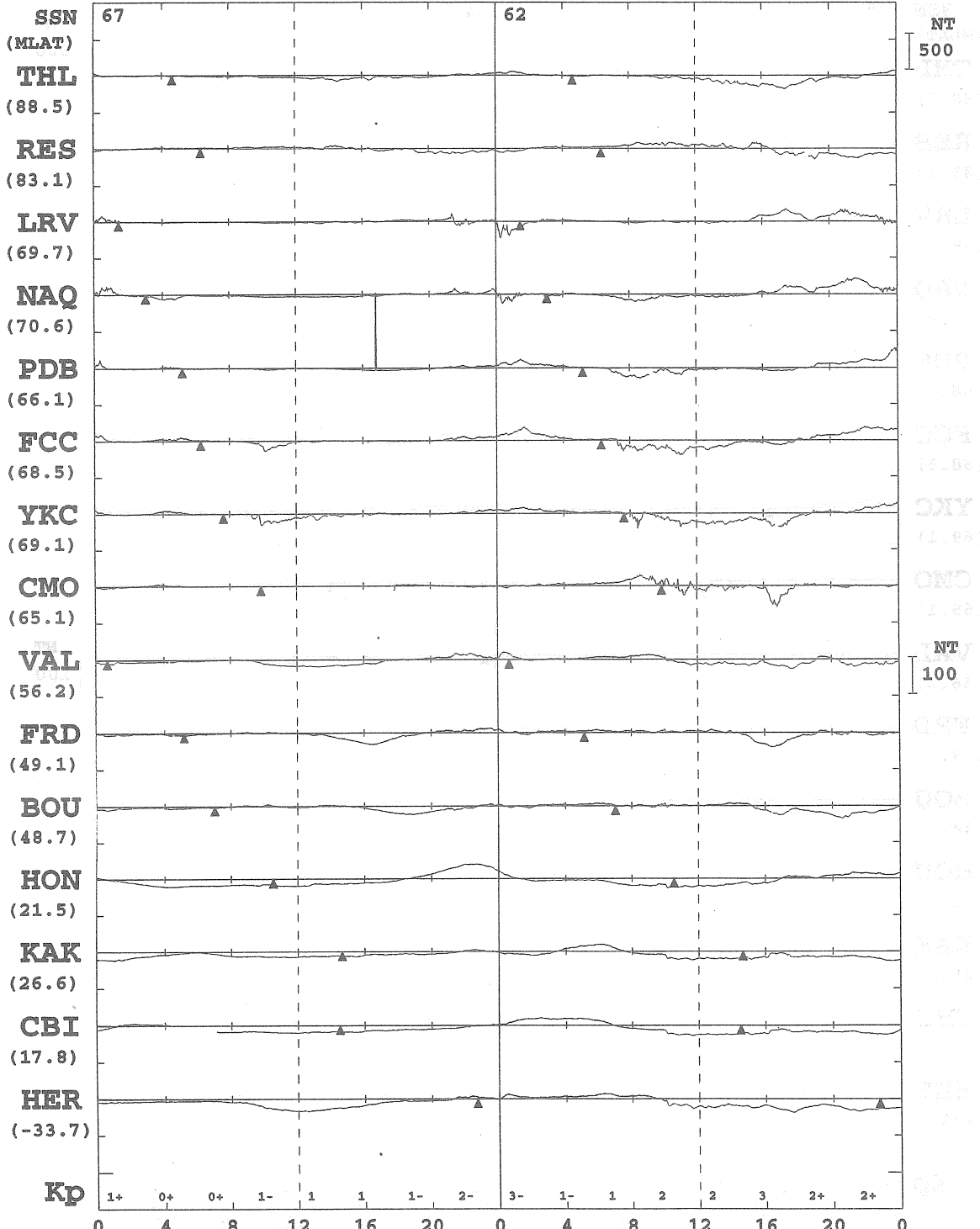
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

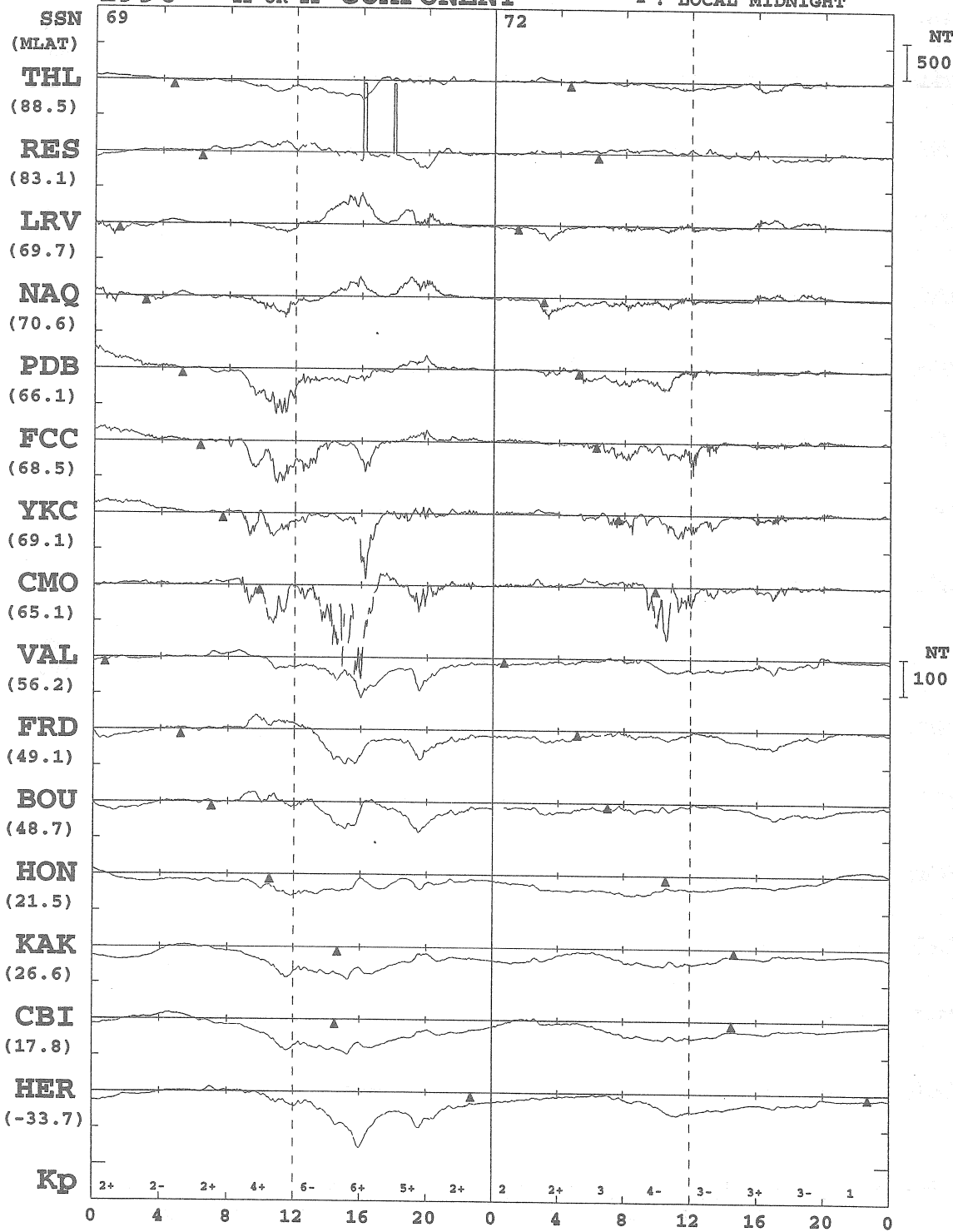


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



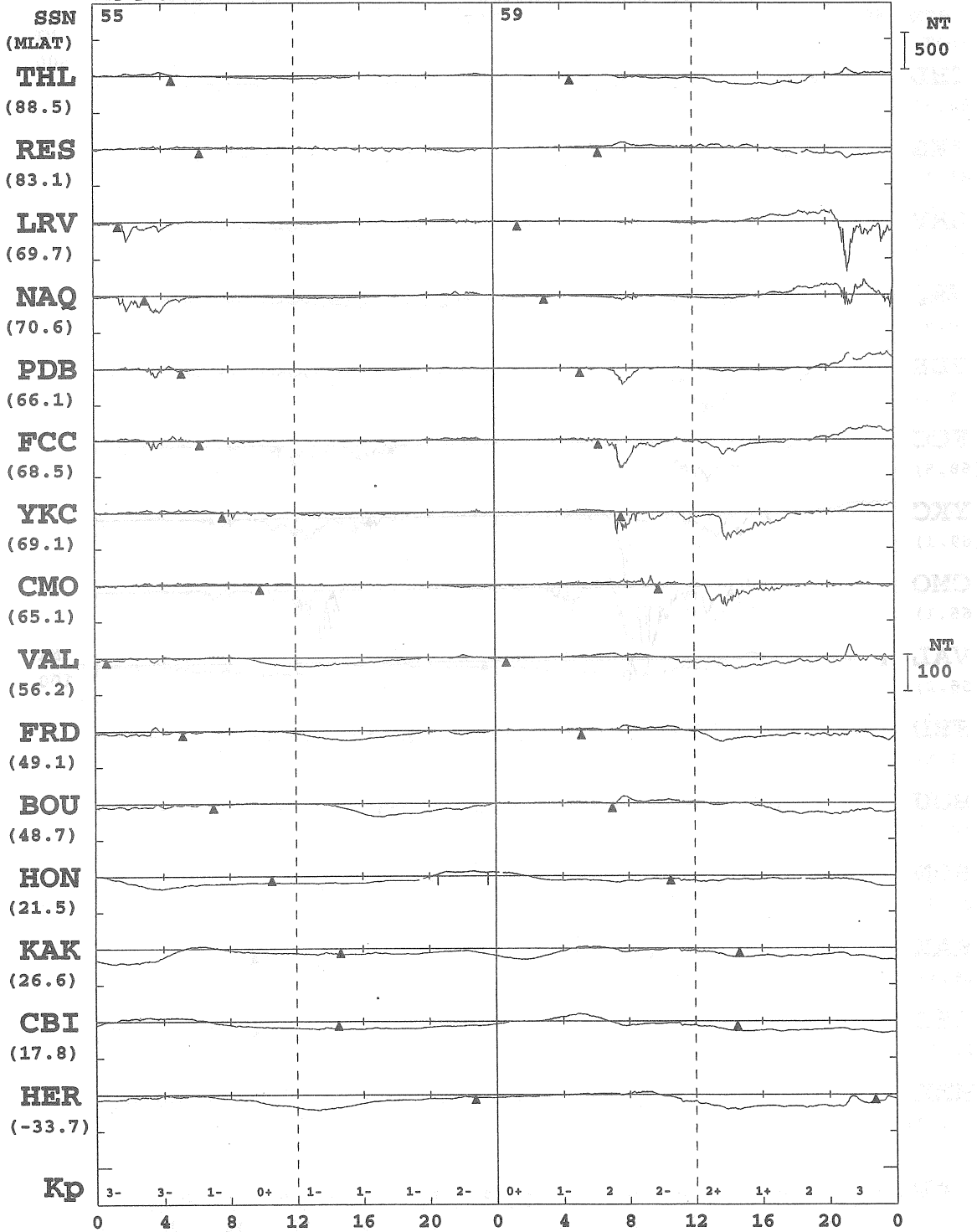
MAR 21
(DAY 80)

MAR 22
(DAY 81)

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

KYOTO UNIV.

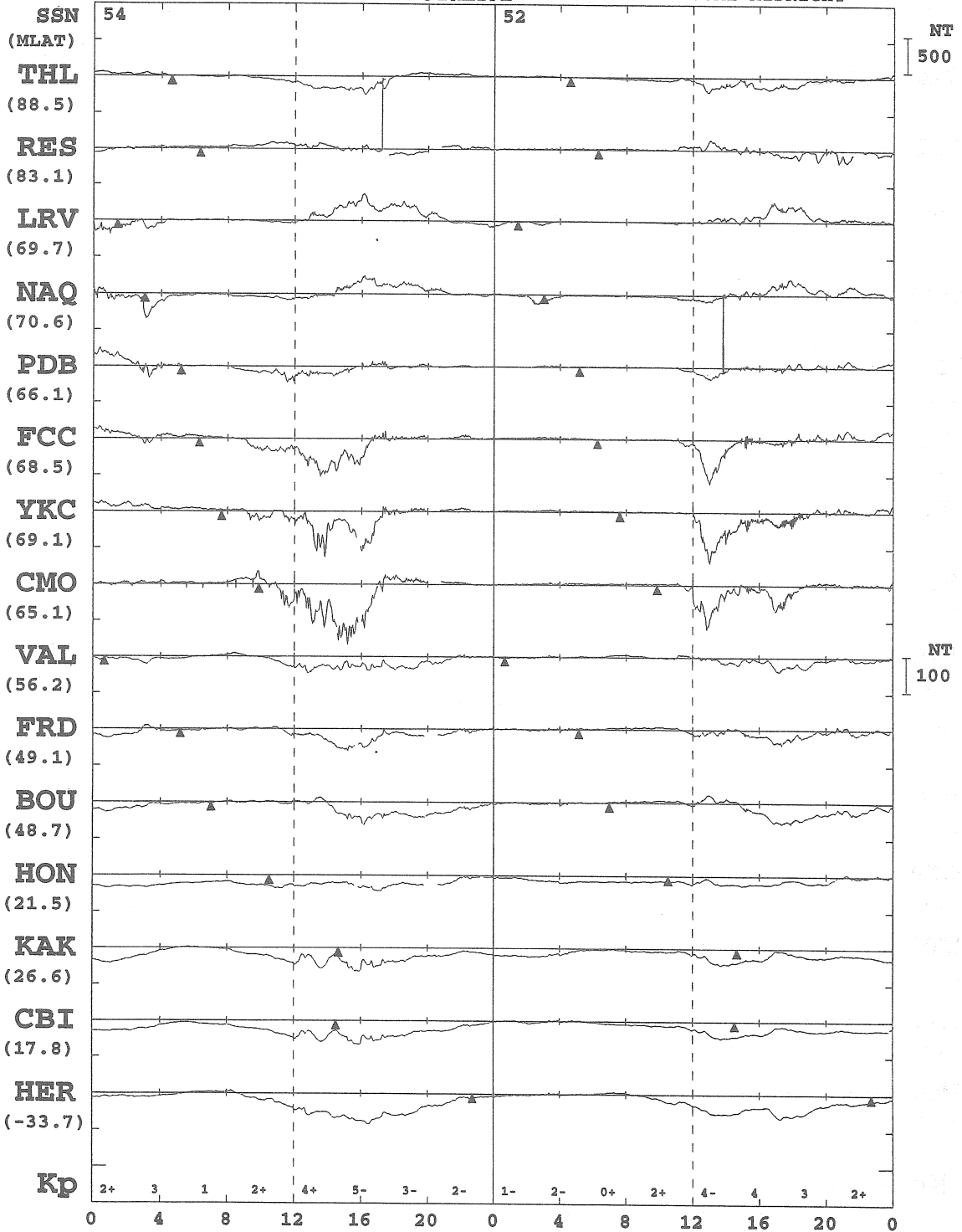
1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



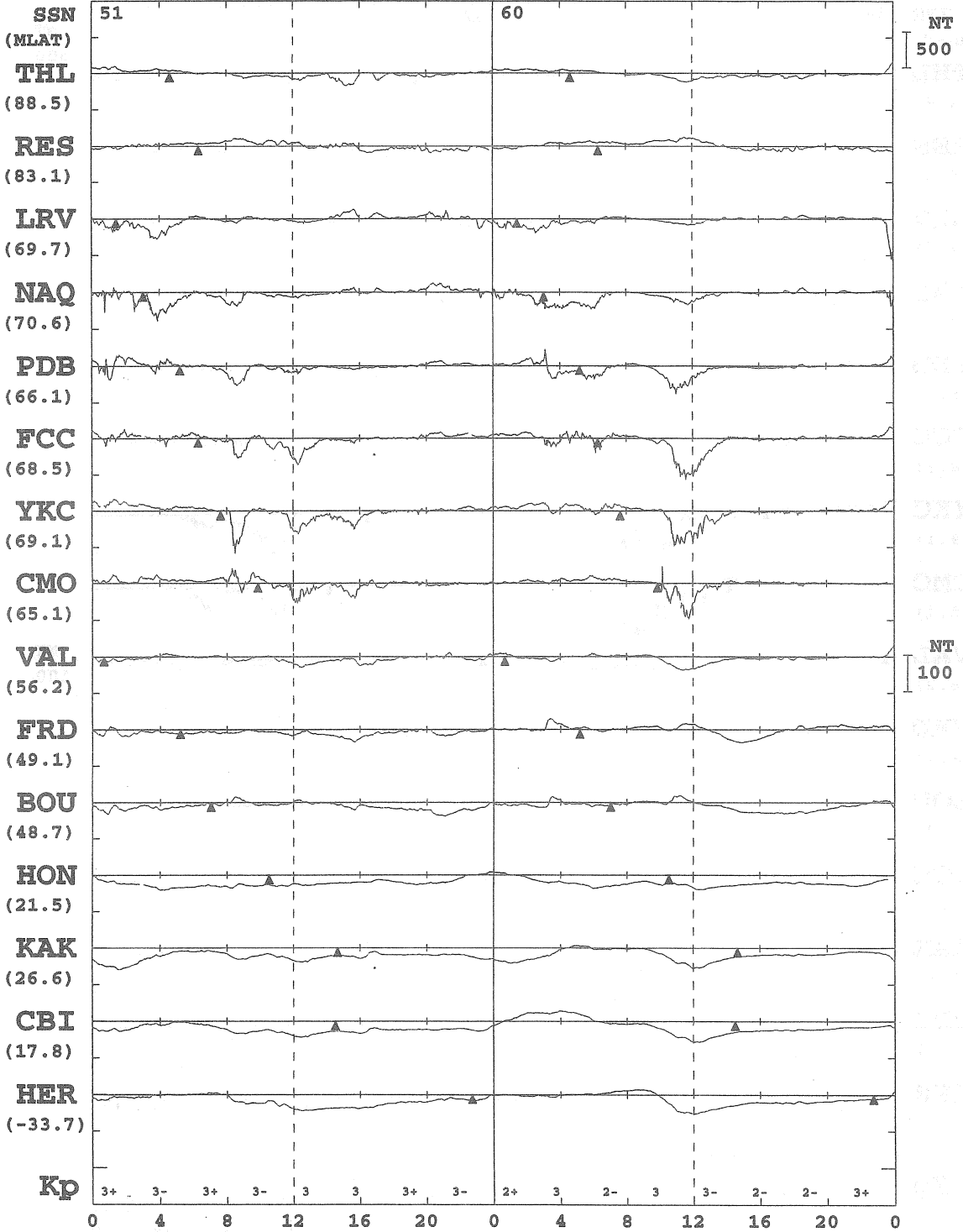
MAR 25
(DAY 84)

MAR 26
(DAY 85)

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT



MAR 27
(DAY 86)

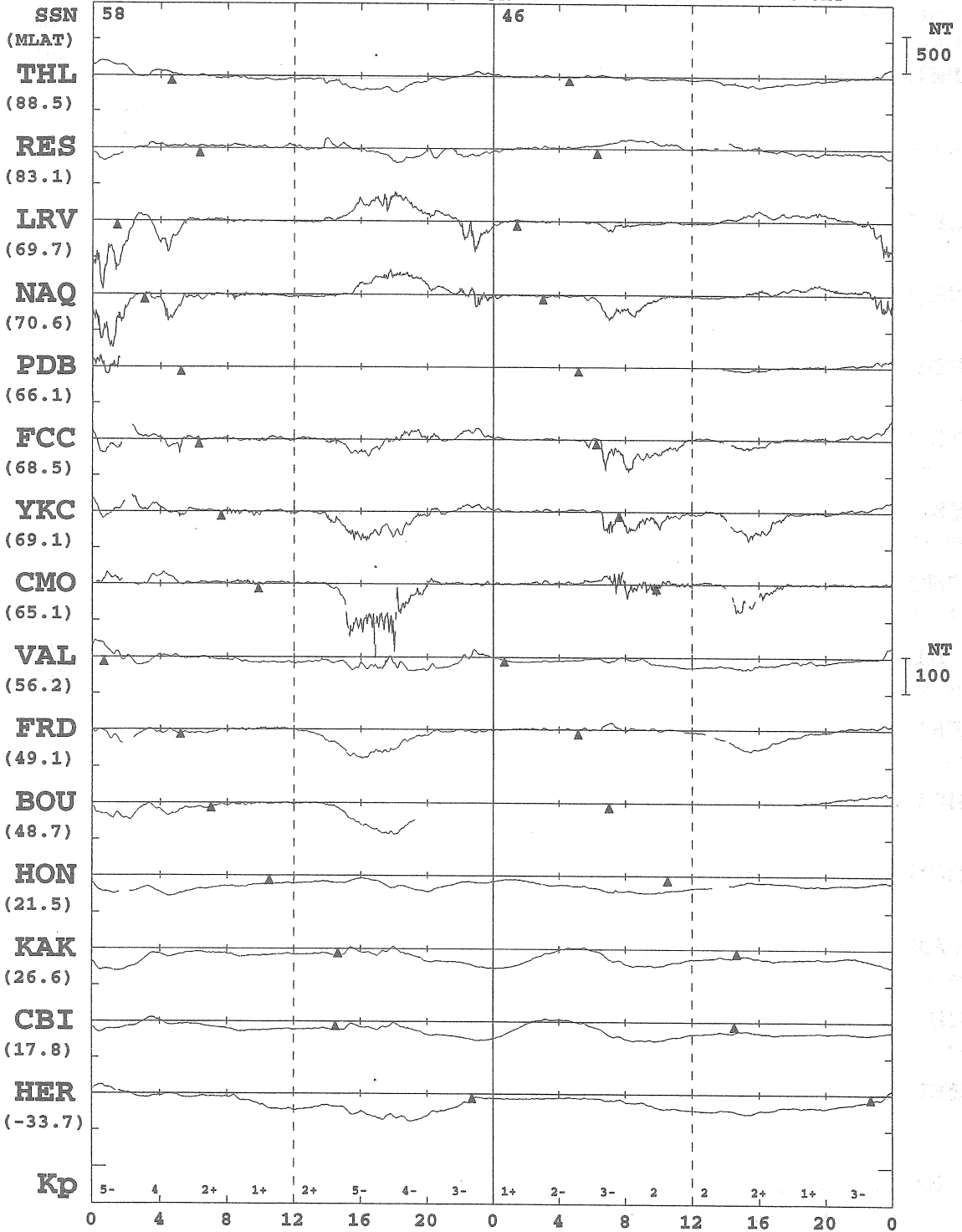
MAR 28
(DAY 87)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

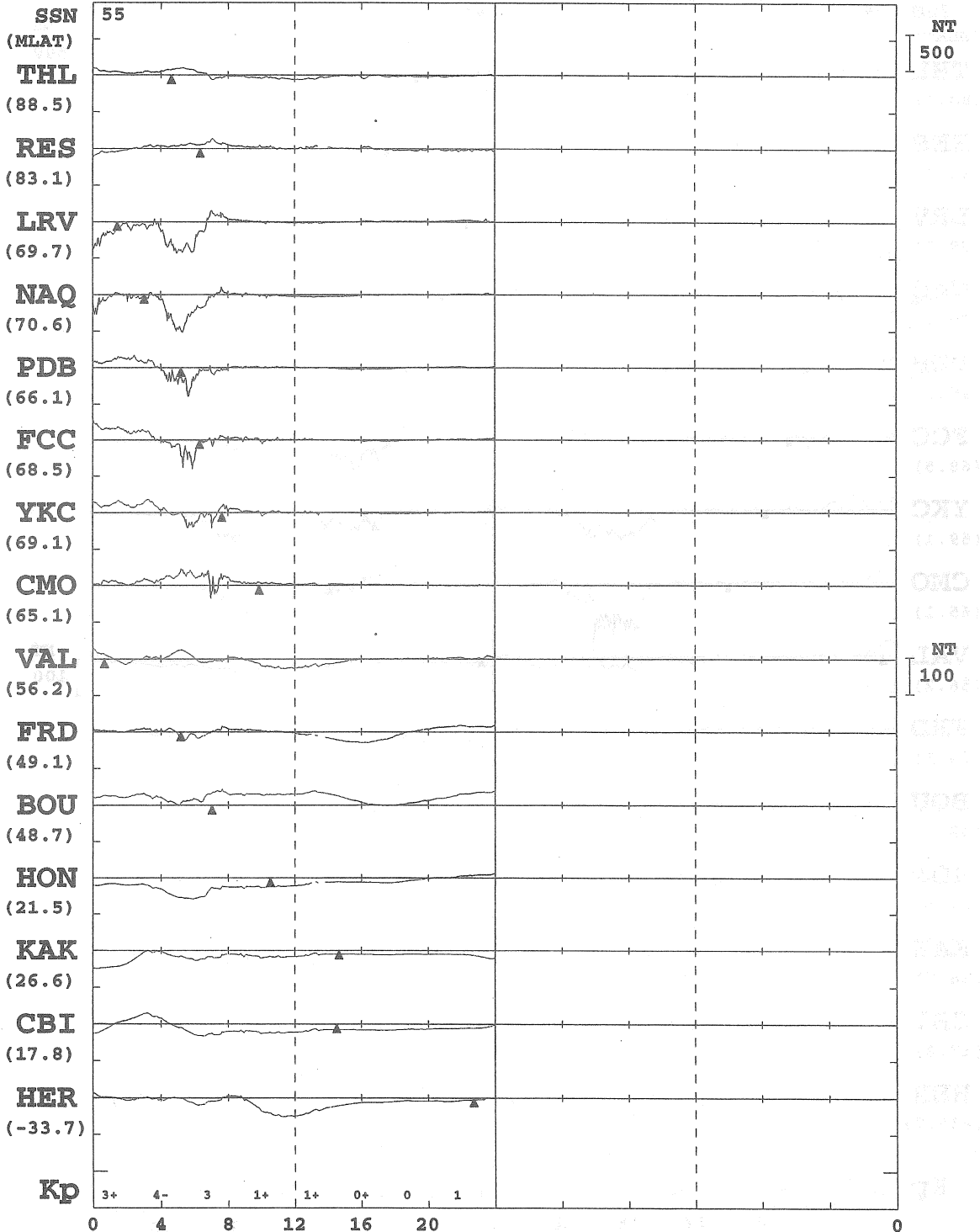


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



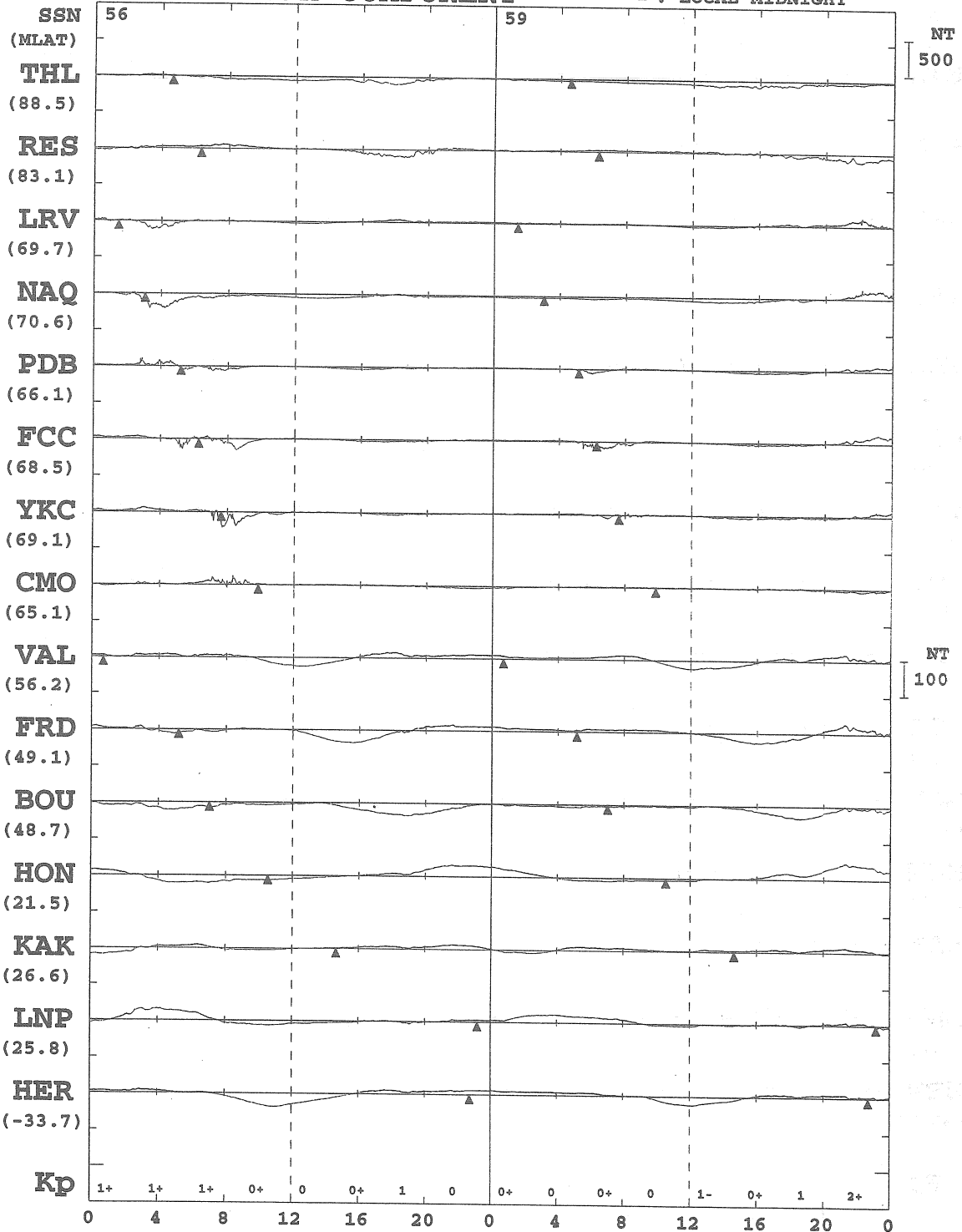
MAR 31
(DAY 90)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

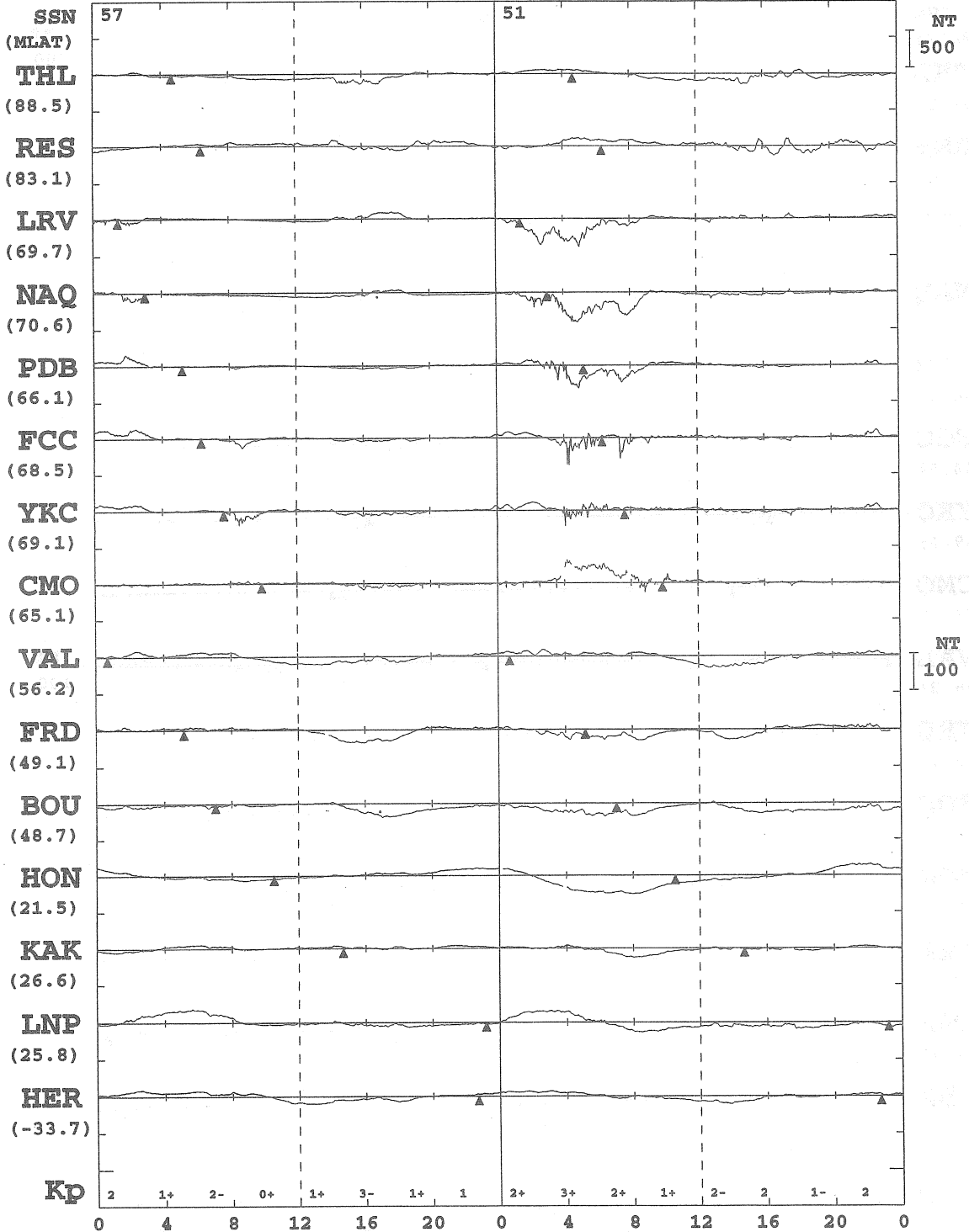


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



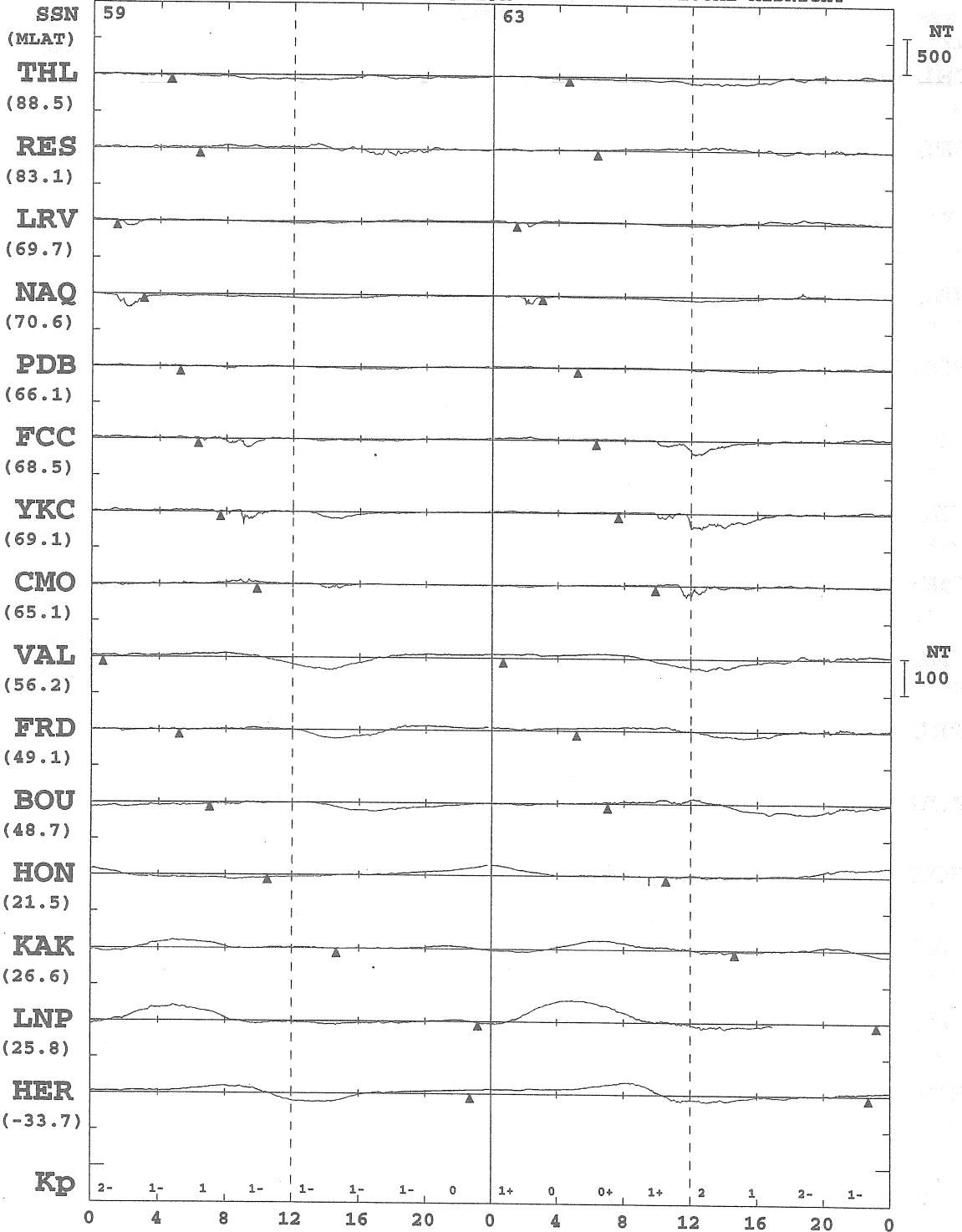
APR 3
(DAY 93)

APR 4
(DAY 94)

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

KYOTO UNIV.

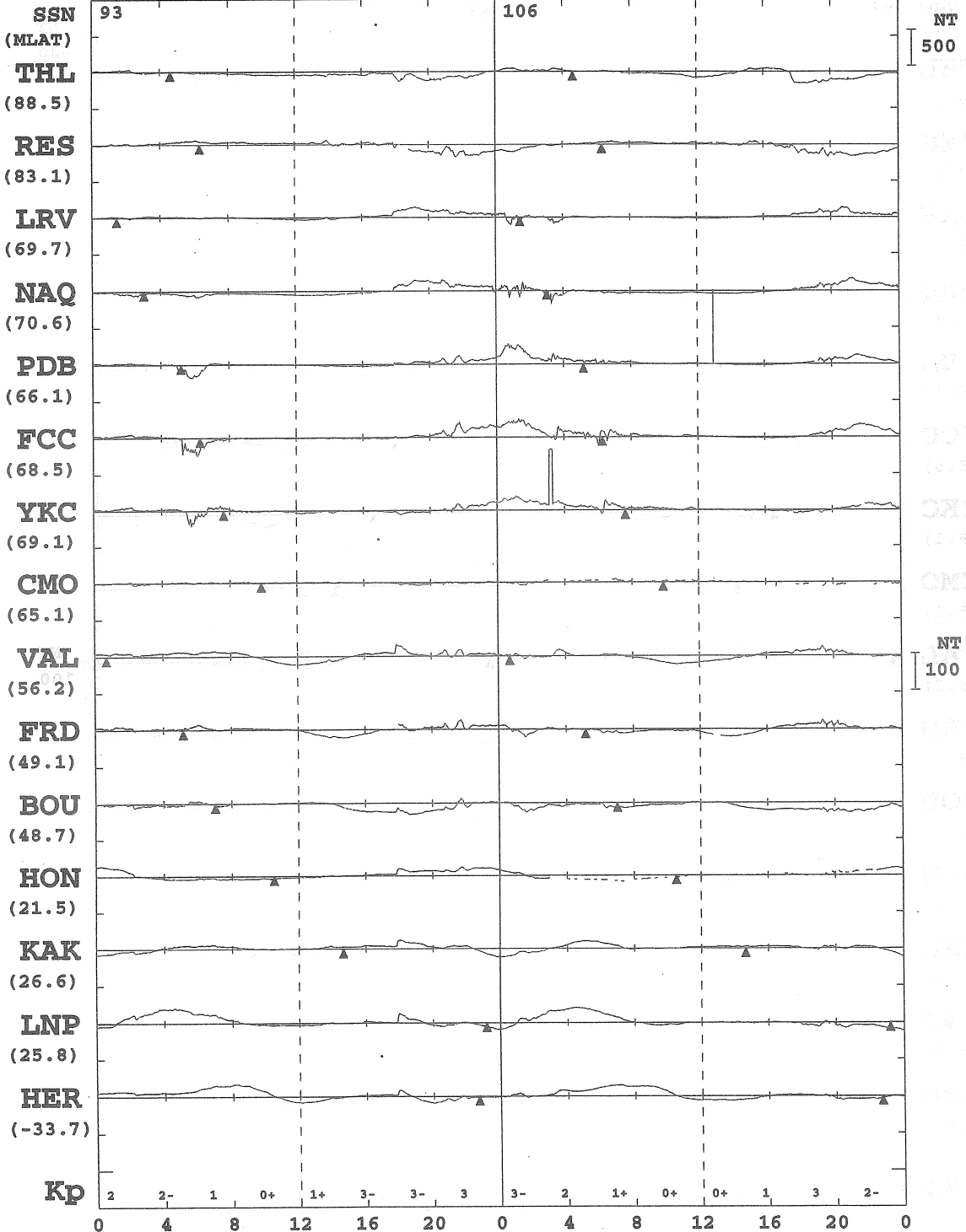
1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT

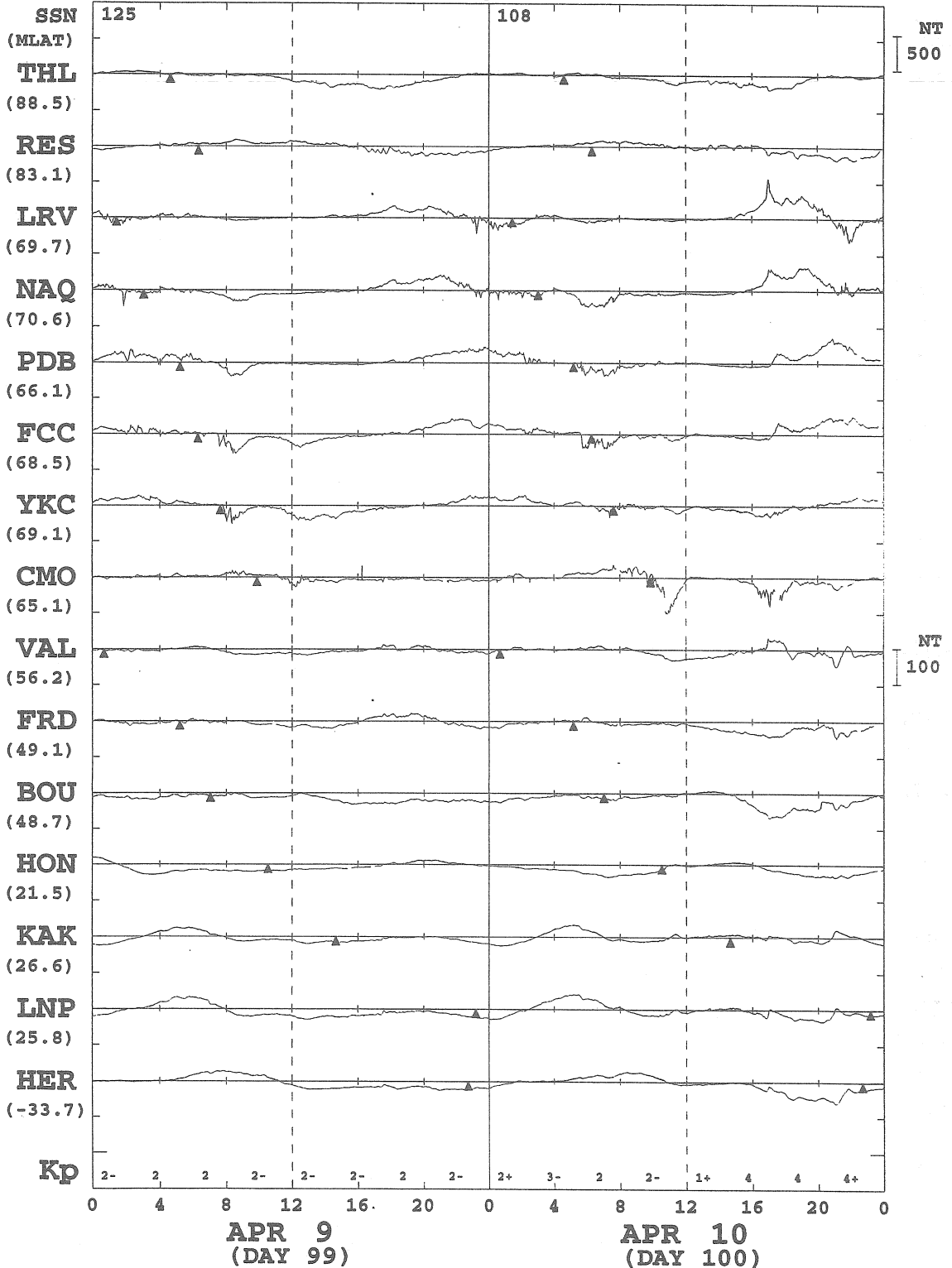


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

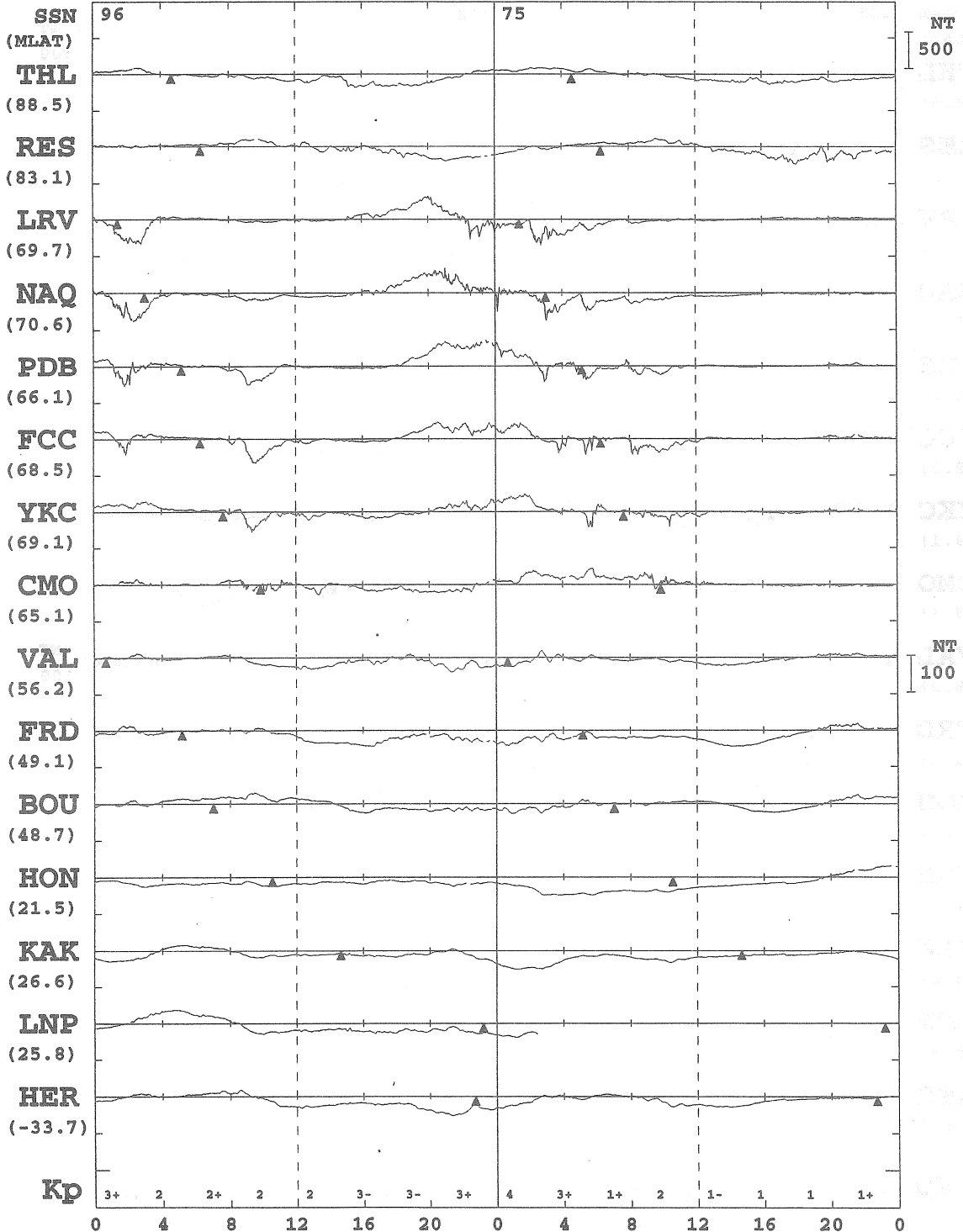
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

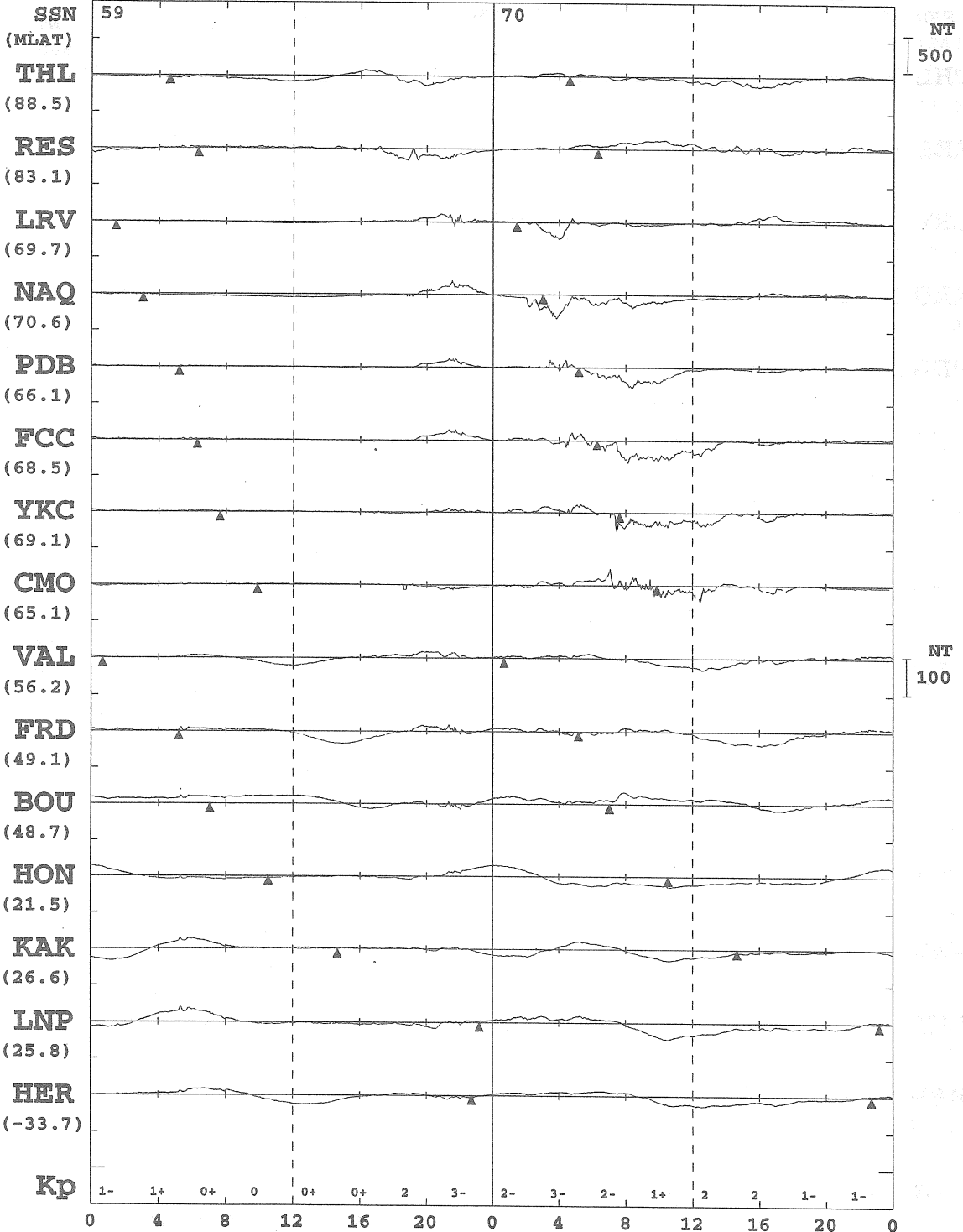
1998 H OR X-COMPONENT LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



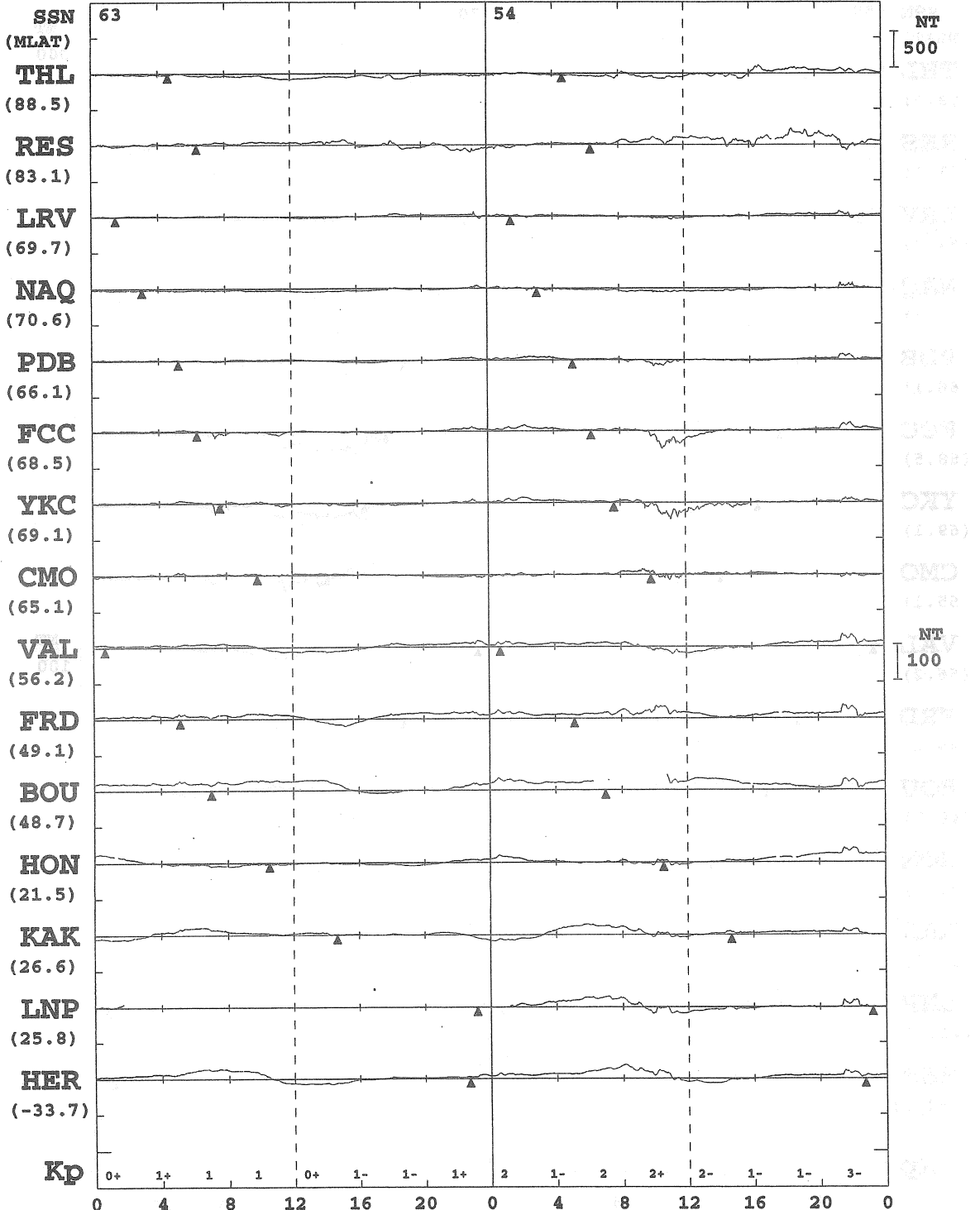
APR 13
(DAY 103)

APR 14
(DAY 104)

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT

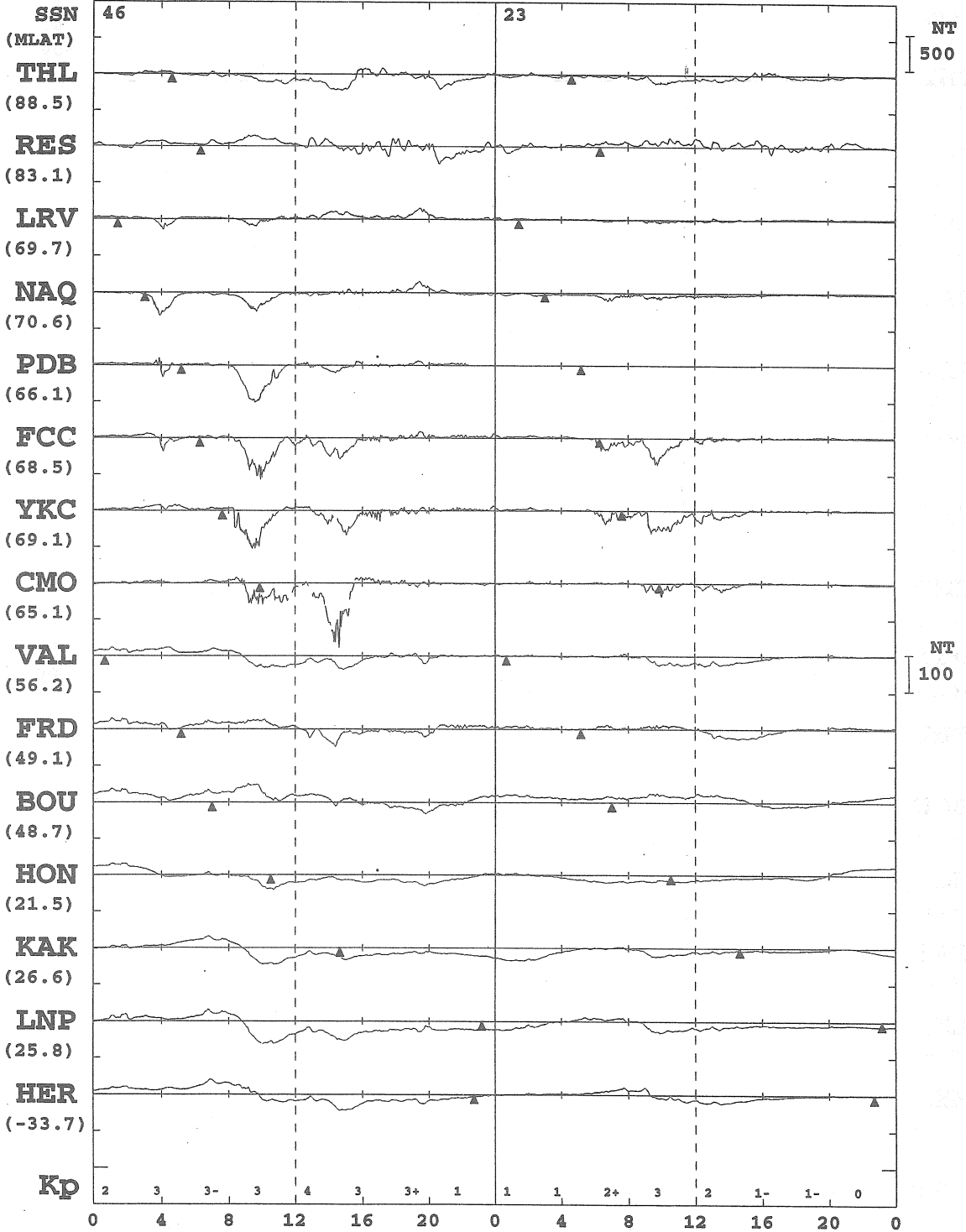


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



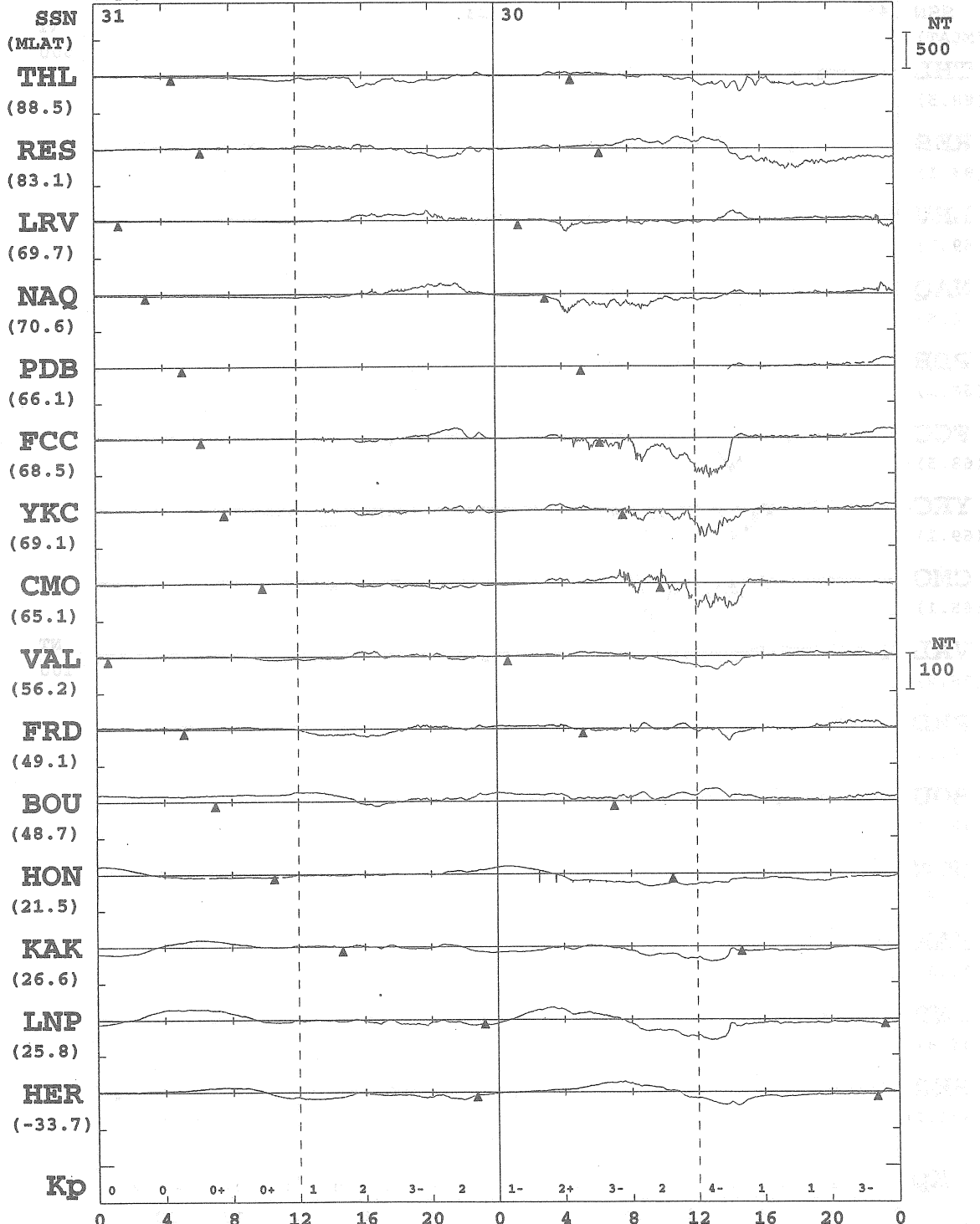
APR 17
(DAY 107)

APR 18
(DAY 108)

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT



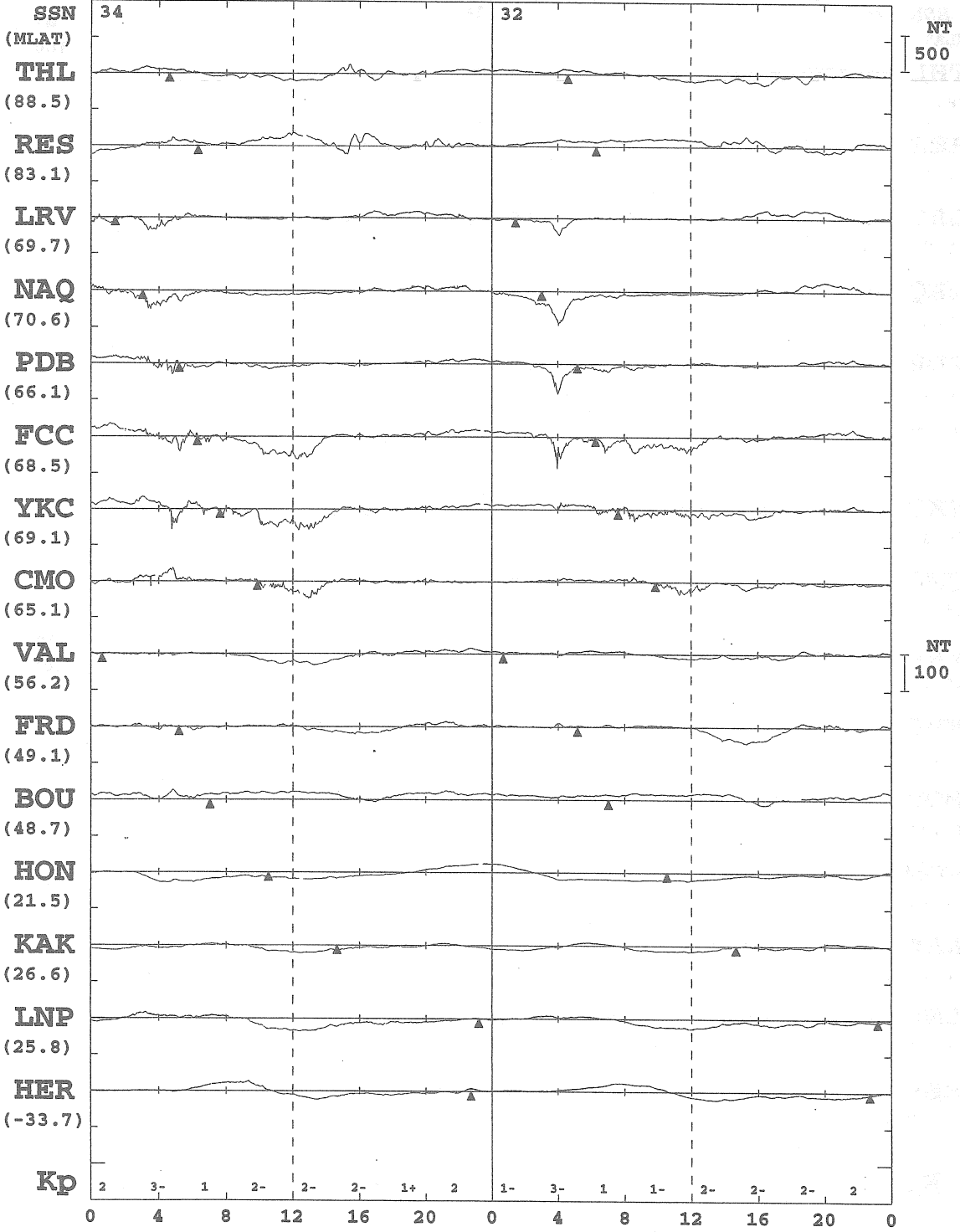
APR 19
(DAY 109)

APR 20
(DAY 110)

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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



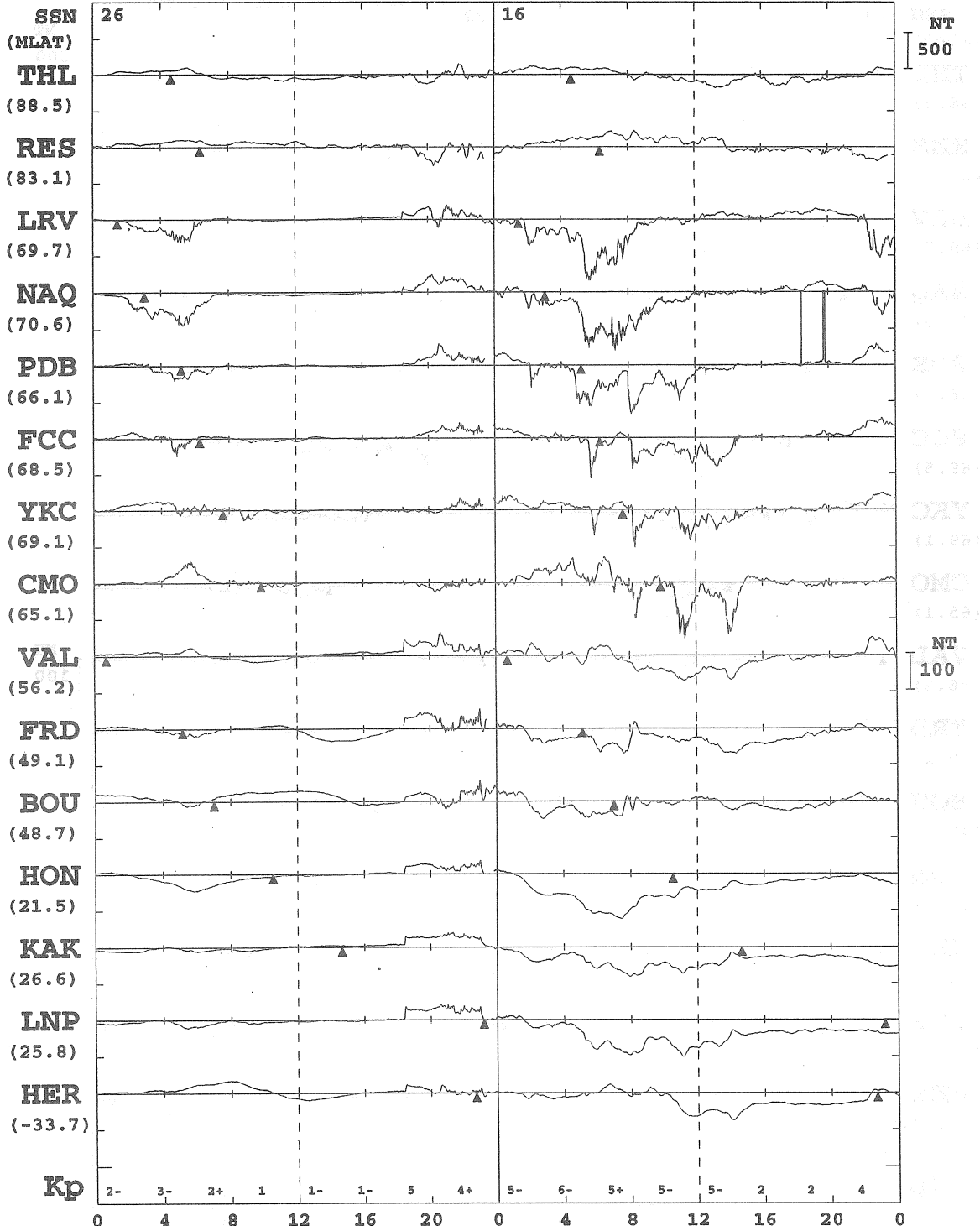
APR 21
(DAY 111)

APR 22
(DAY 112)

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT

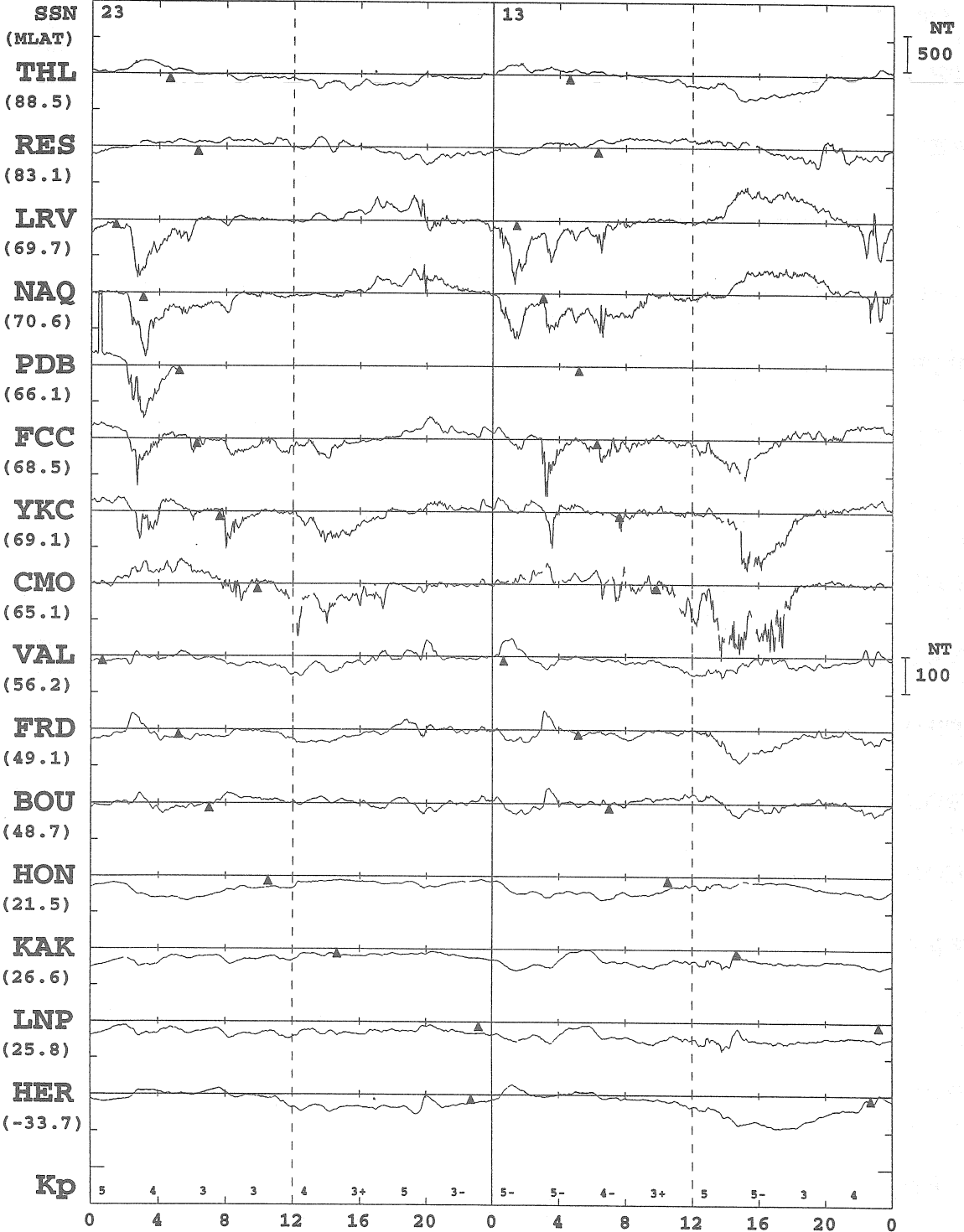


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



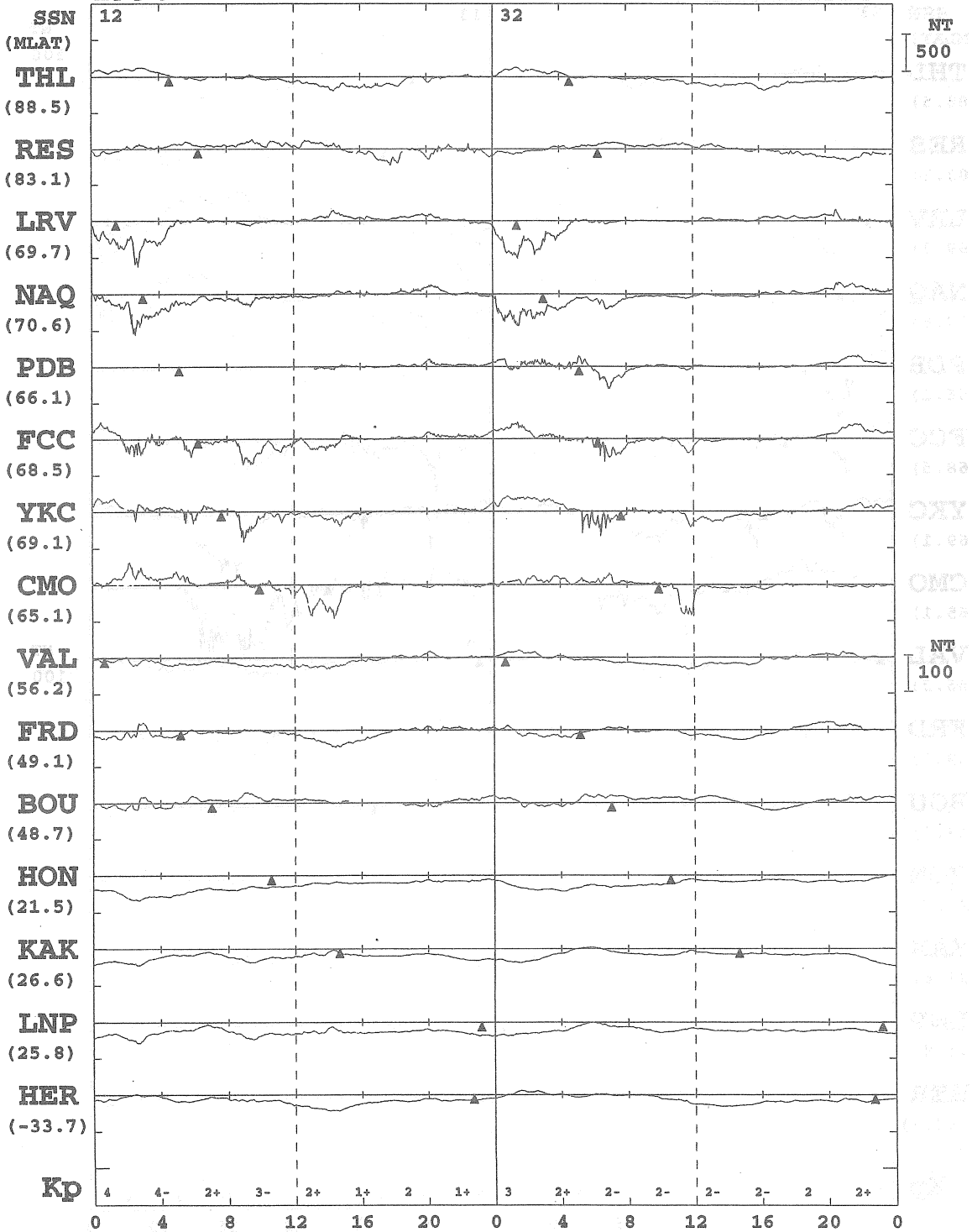
APR 25
(DAY 115)

APR 26
(DAY 116)

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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



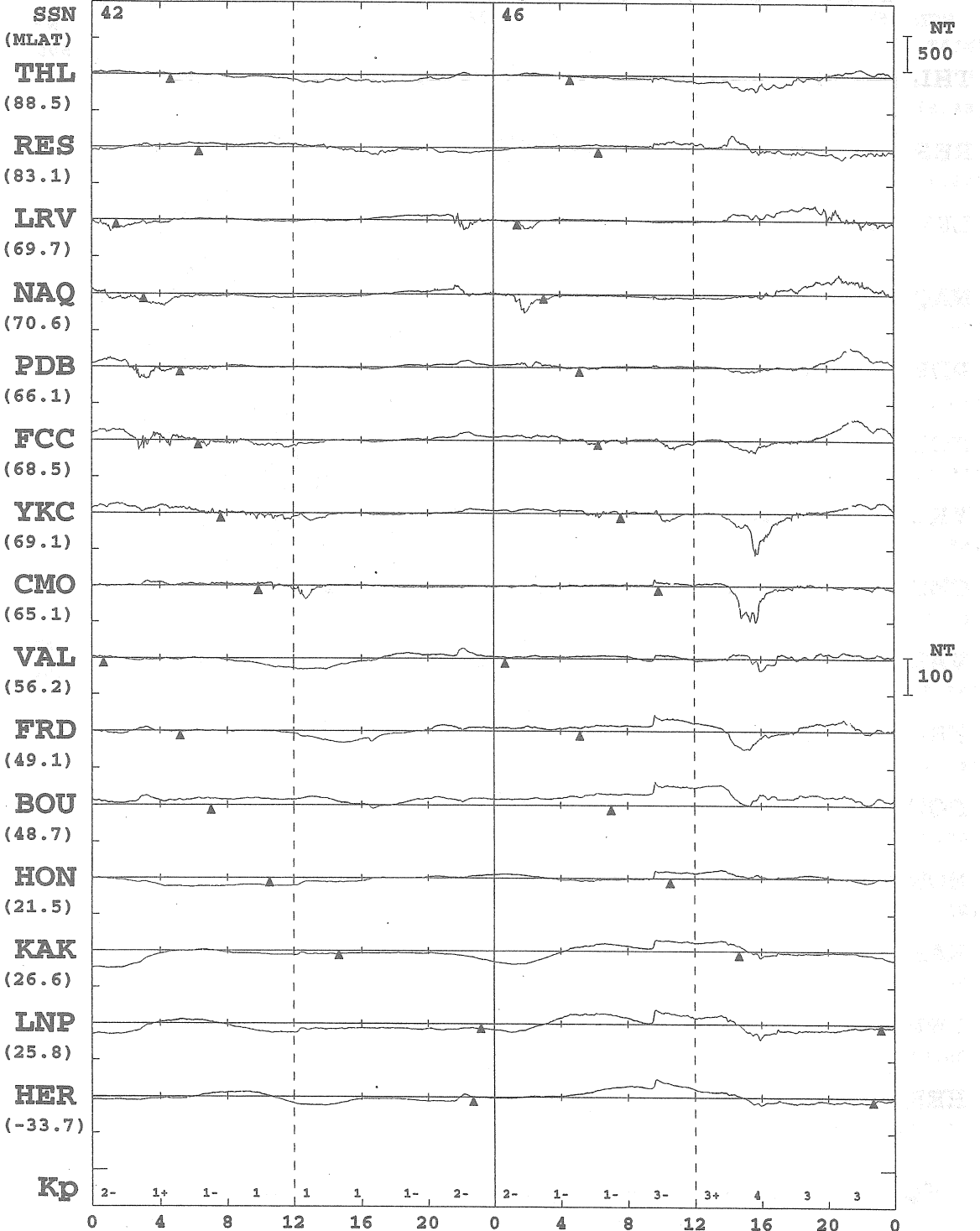
APR 27 (DAY 117) APR 28 (DAY 118)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



APR 29
(DAY 119)

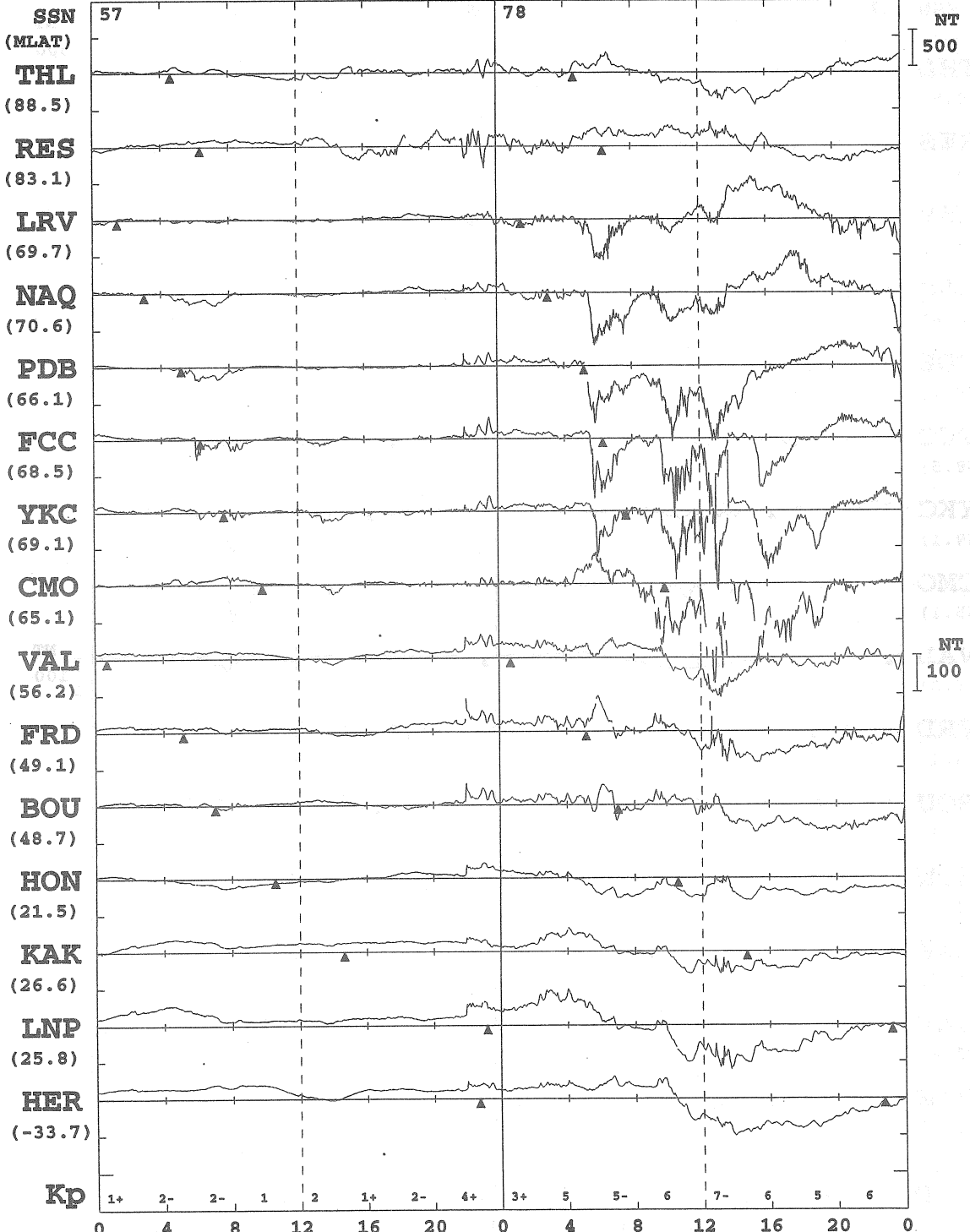
APR 30
(DAY 120)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



MAY 1
(DAY 121)

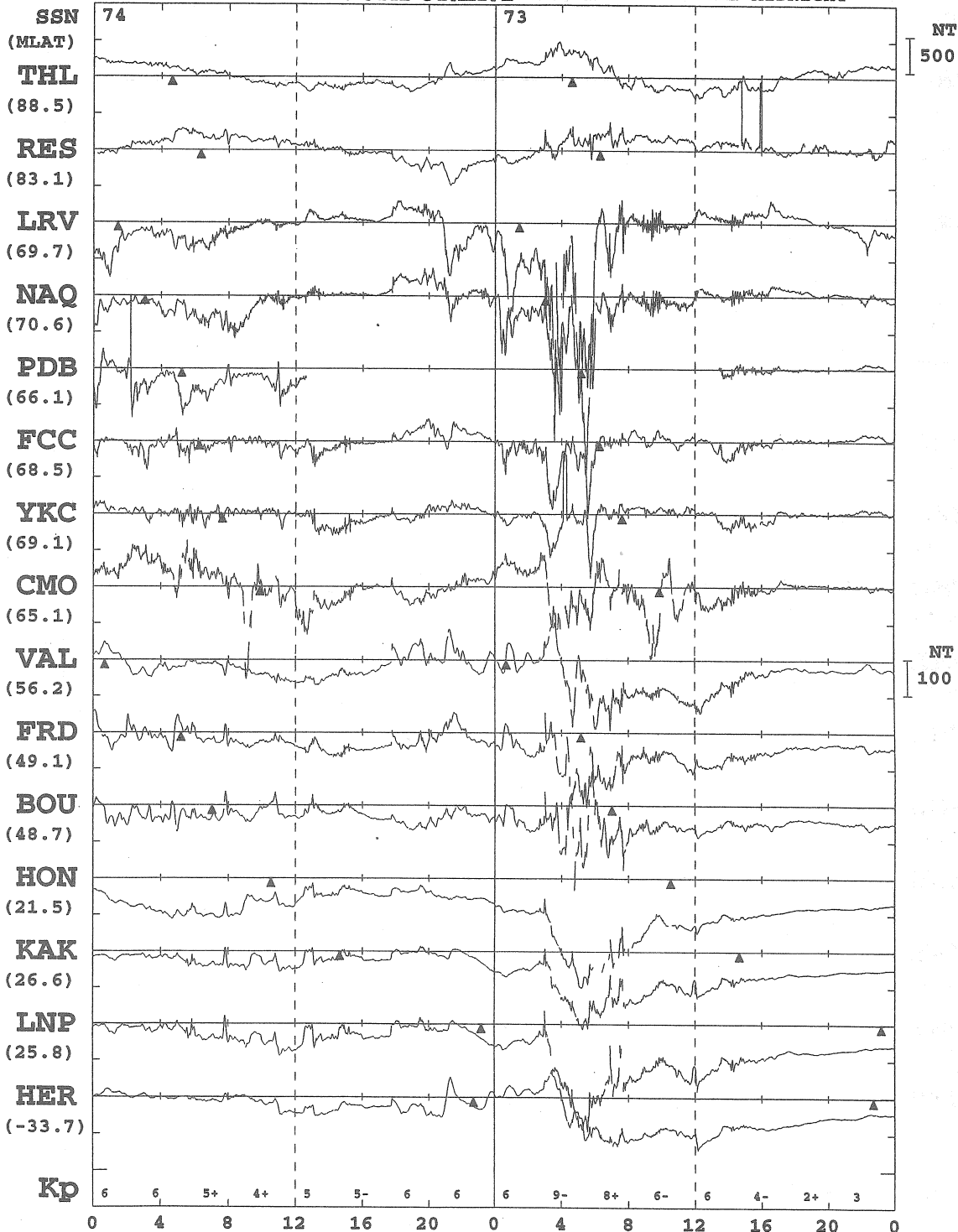
MAY 2
(DAY 122)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



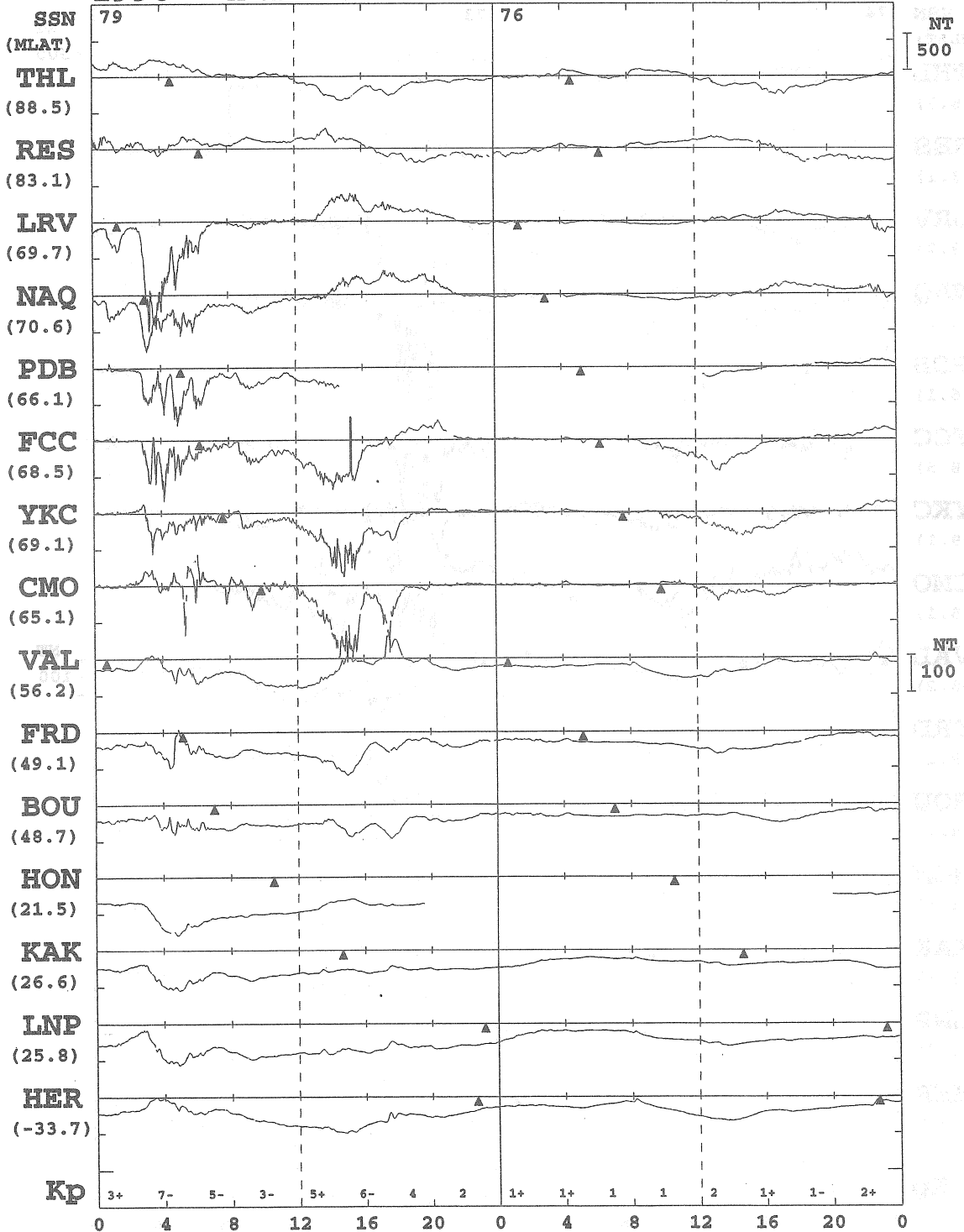
MAY 3
(DAY 123)

MAY 4
(DAY 124)

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

KYOTO UNIV.

1998 H OR X-COMPONENT Δ : LOCAL MIDNIGHT



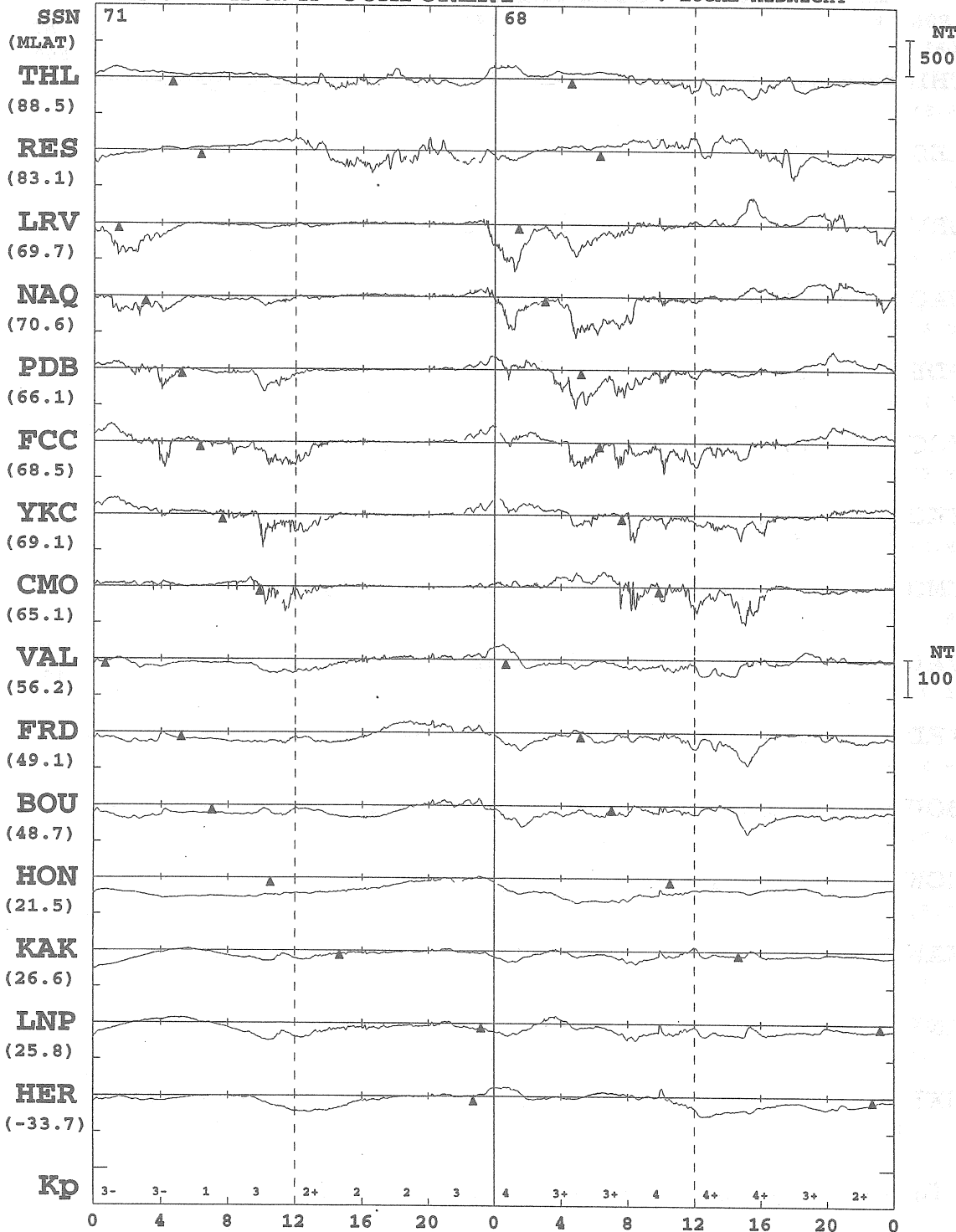
MAY 5
(DAY 125)

MAY 6
(DAY 126)

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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



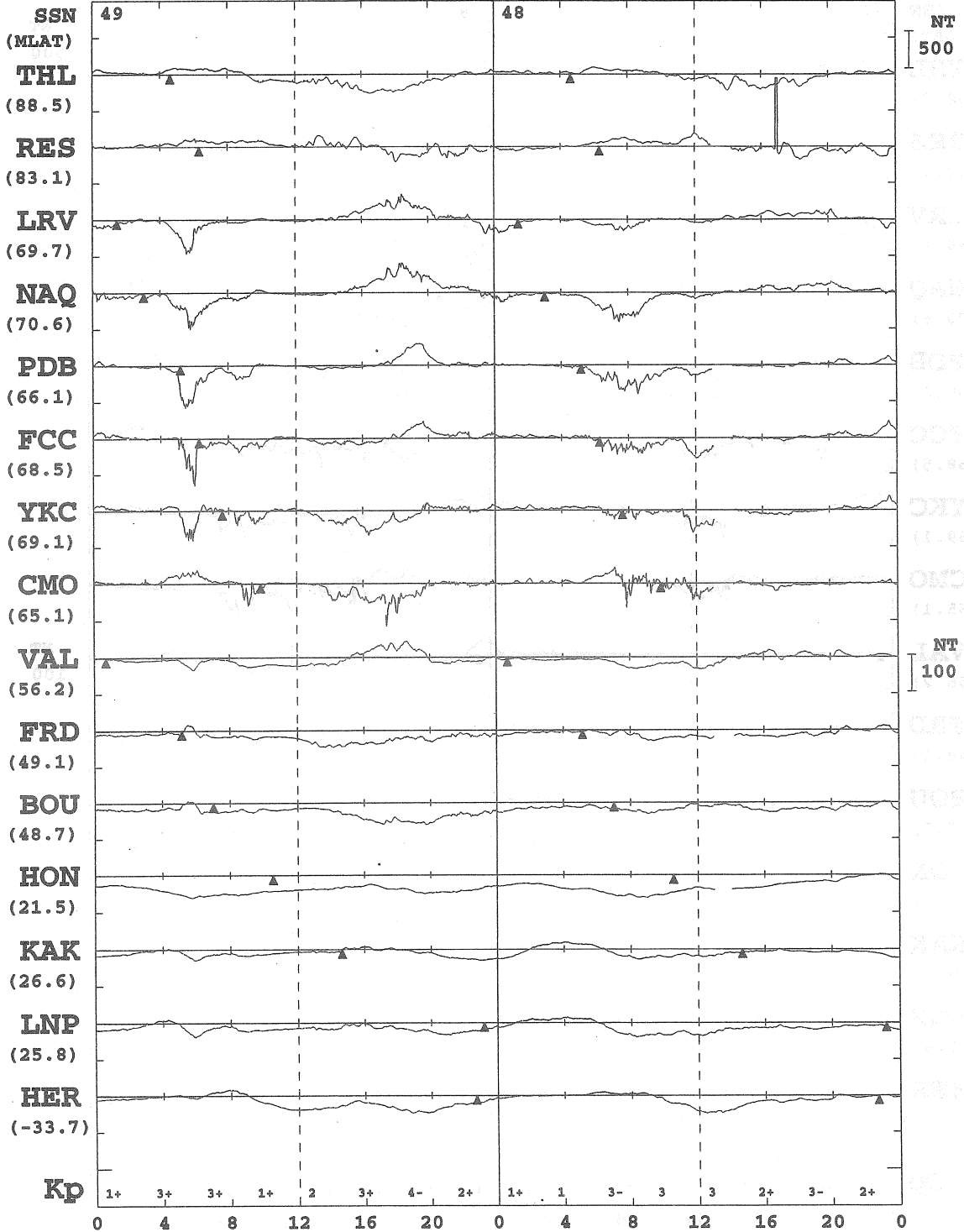
**MAY 7
(DAY 127)**

**MAY 8
(DAY 128)**

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT



MAY 9
(DAY 129)

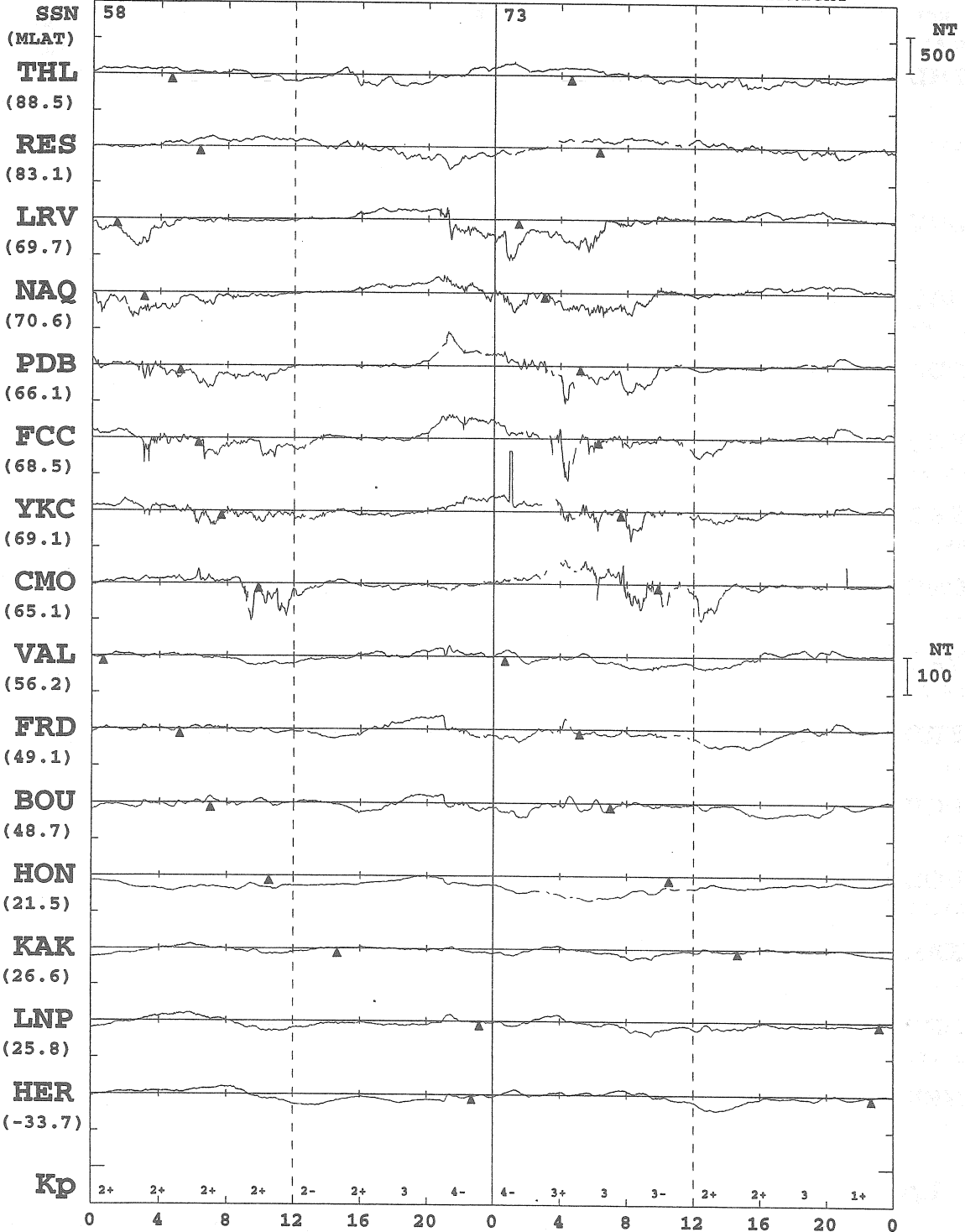
MAY 10
(DAY 130)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



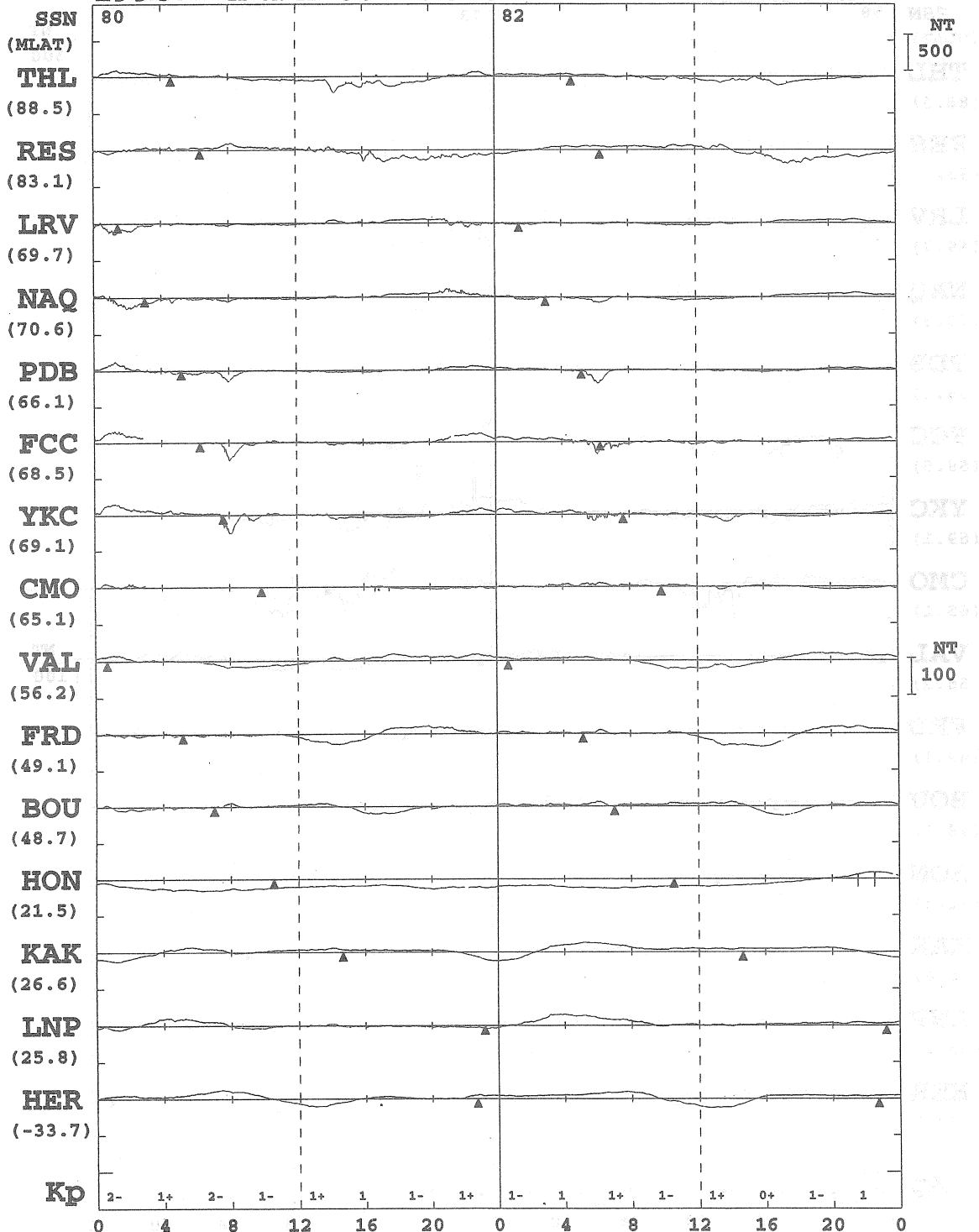
MAY 11
(DAY 131)

MAY 12
(DAY 132)

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

KYOTO UNIV.

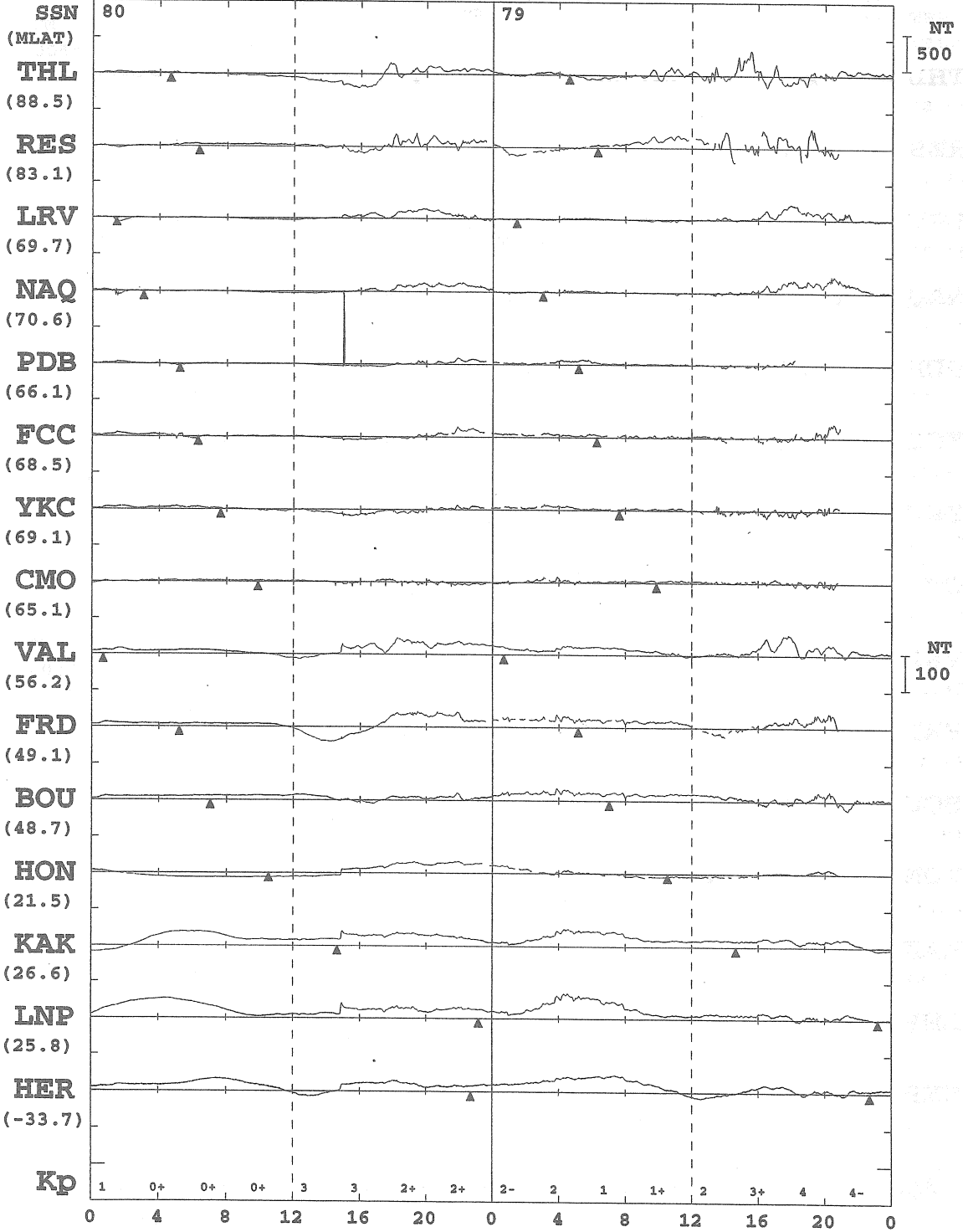
1998 H OR X-COMPONENT LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



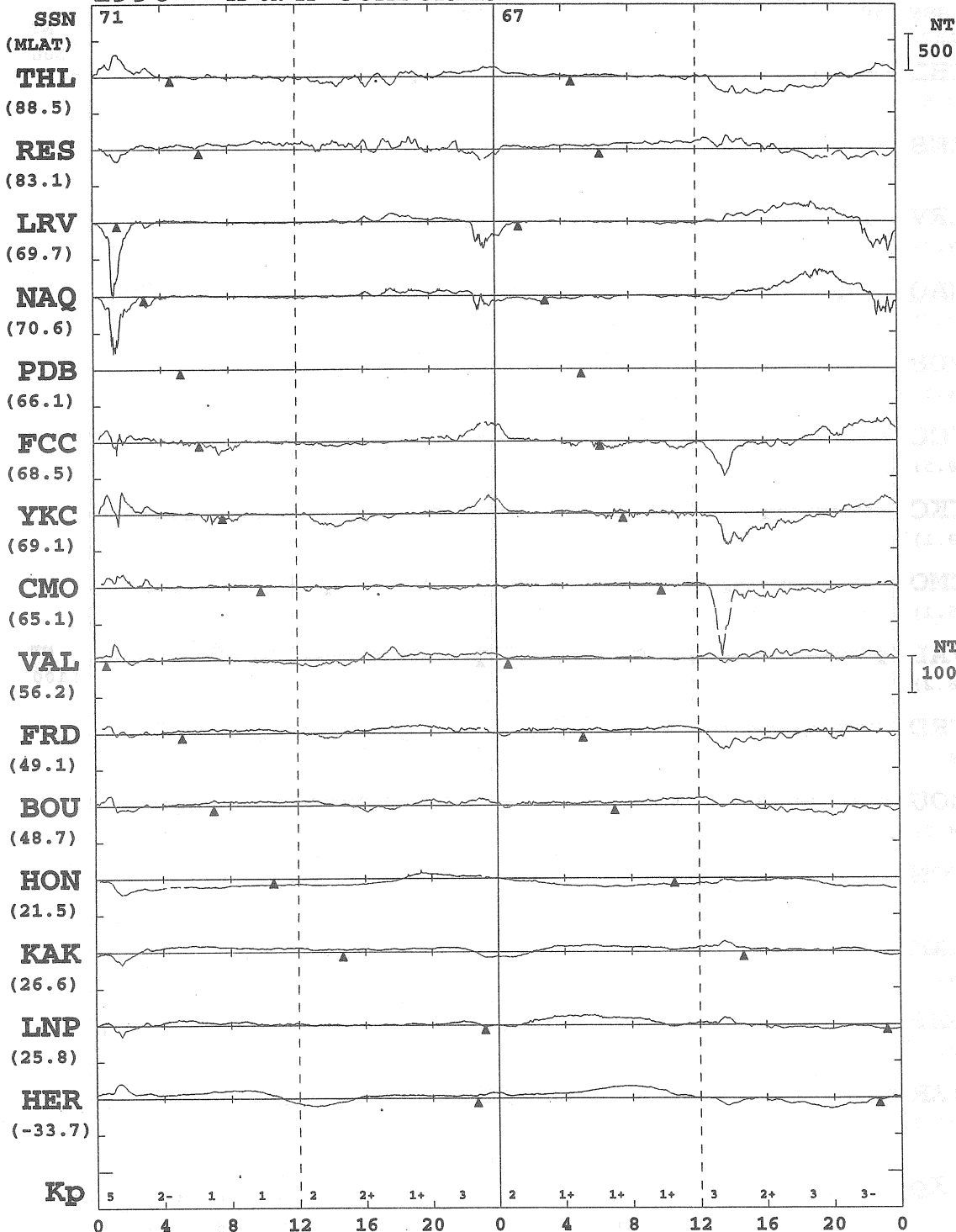
MAY 15
(DAY 135)

MAY 16
(DAY 136)

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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



MAY 17
(DAY 137)

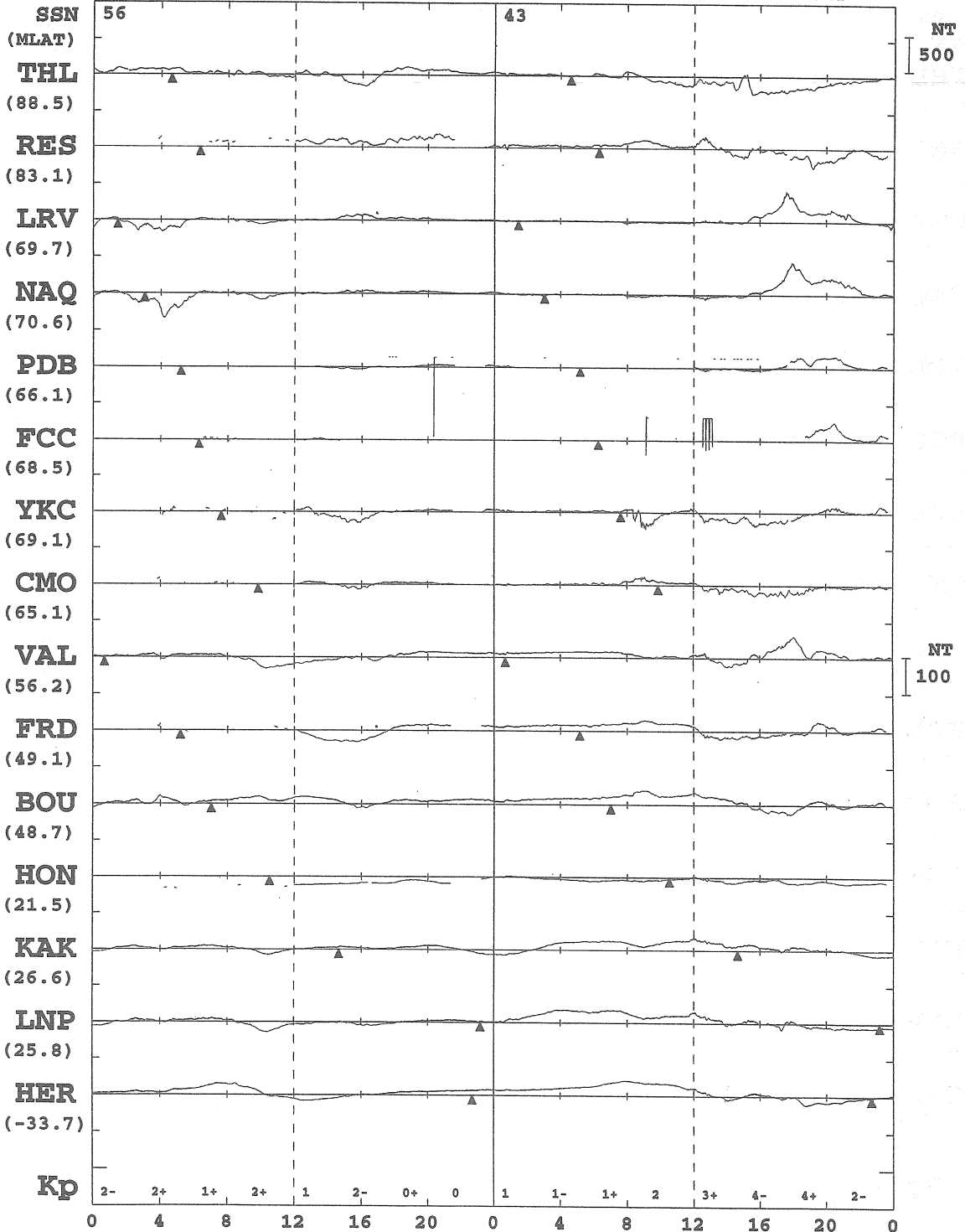
MAY 18
(DAY 138)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



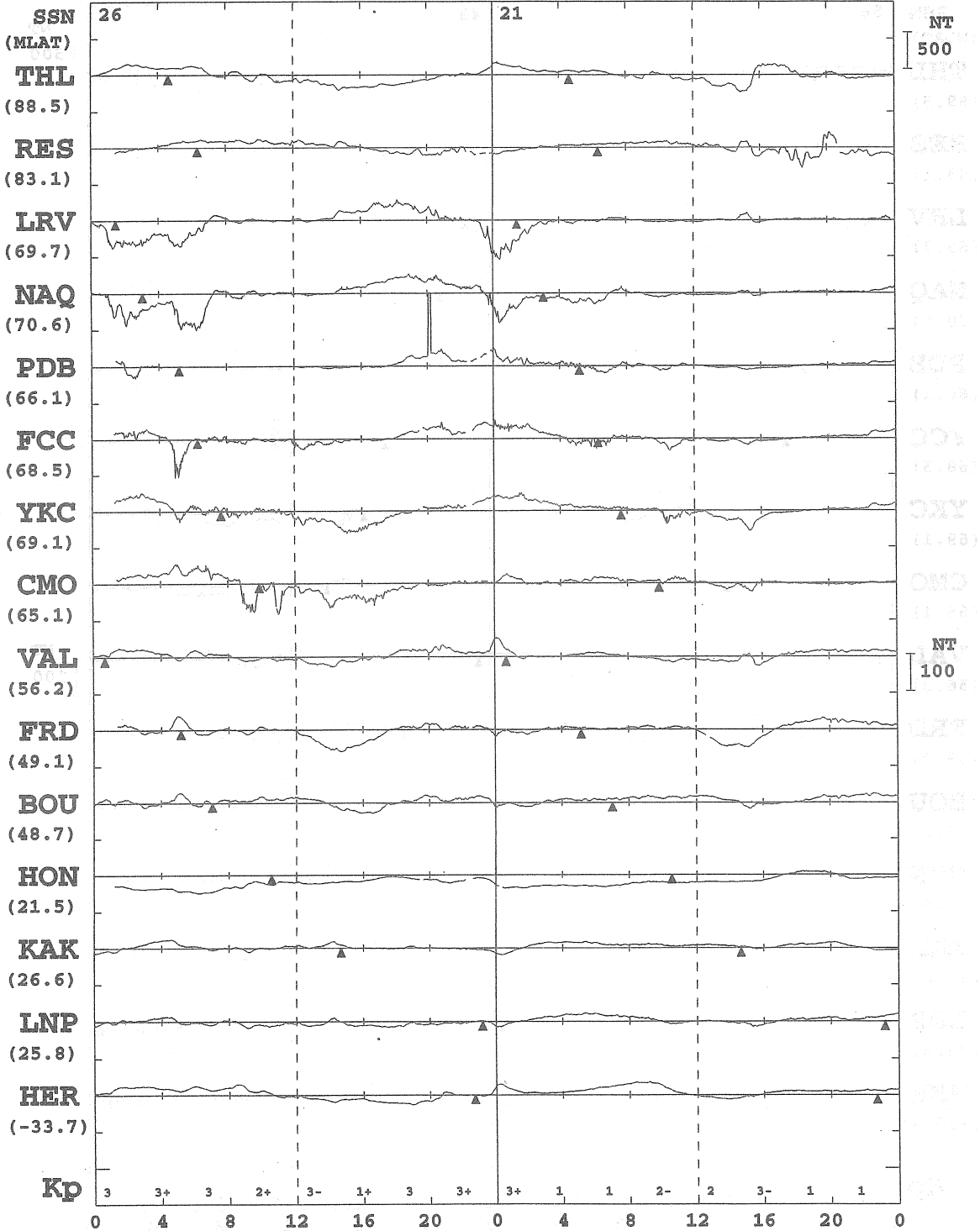
MAY 19
(DAY 139)

MAY 20
(DAY 140)

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT



MAY 21
(DAY 141)

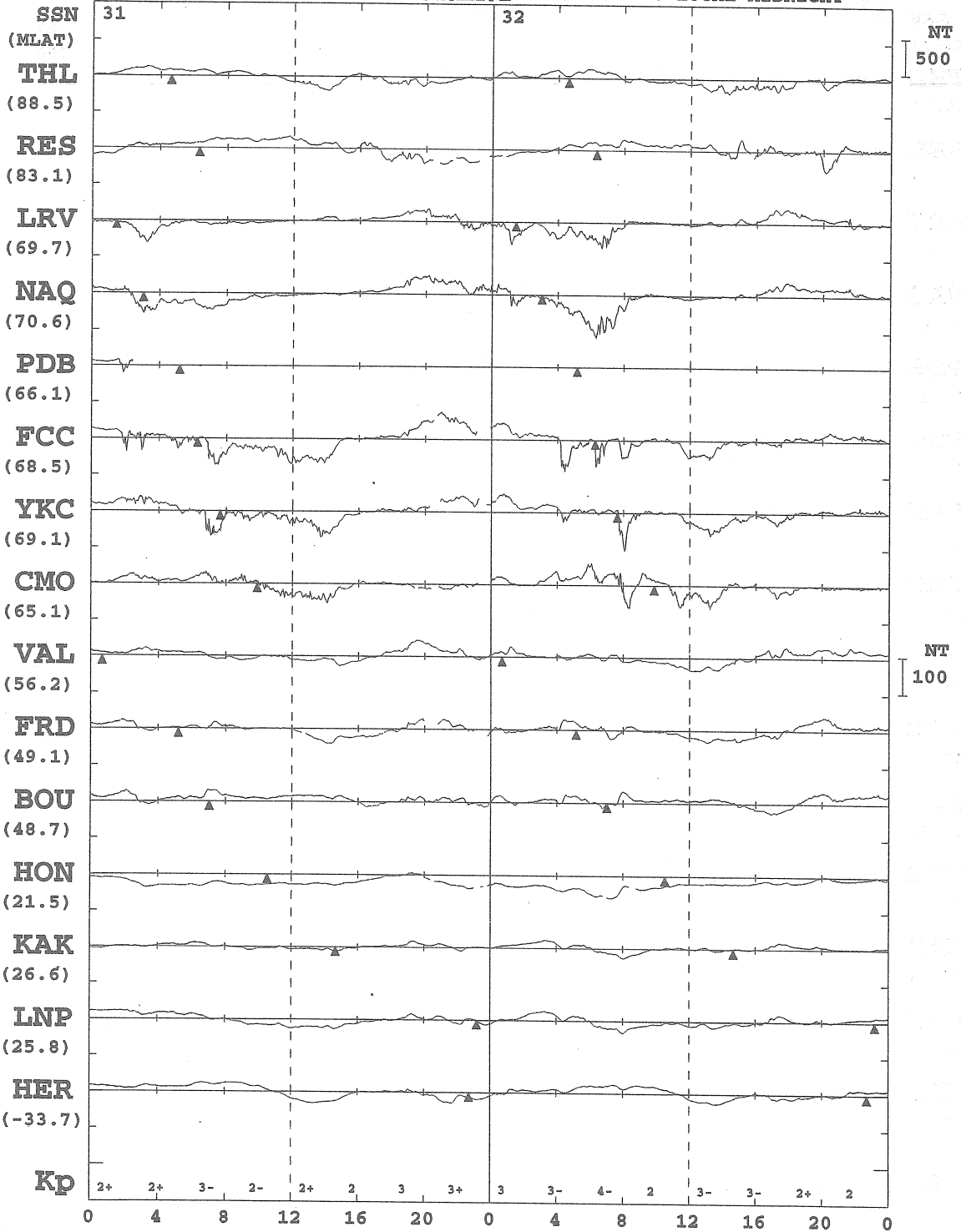
MAY 22
(DAY 142)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



MAY 23
(DAY 143)

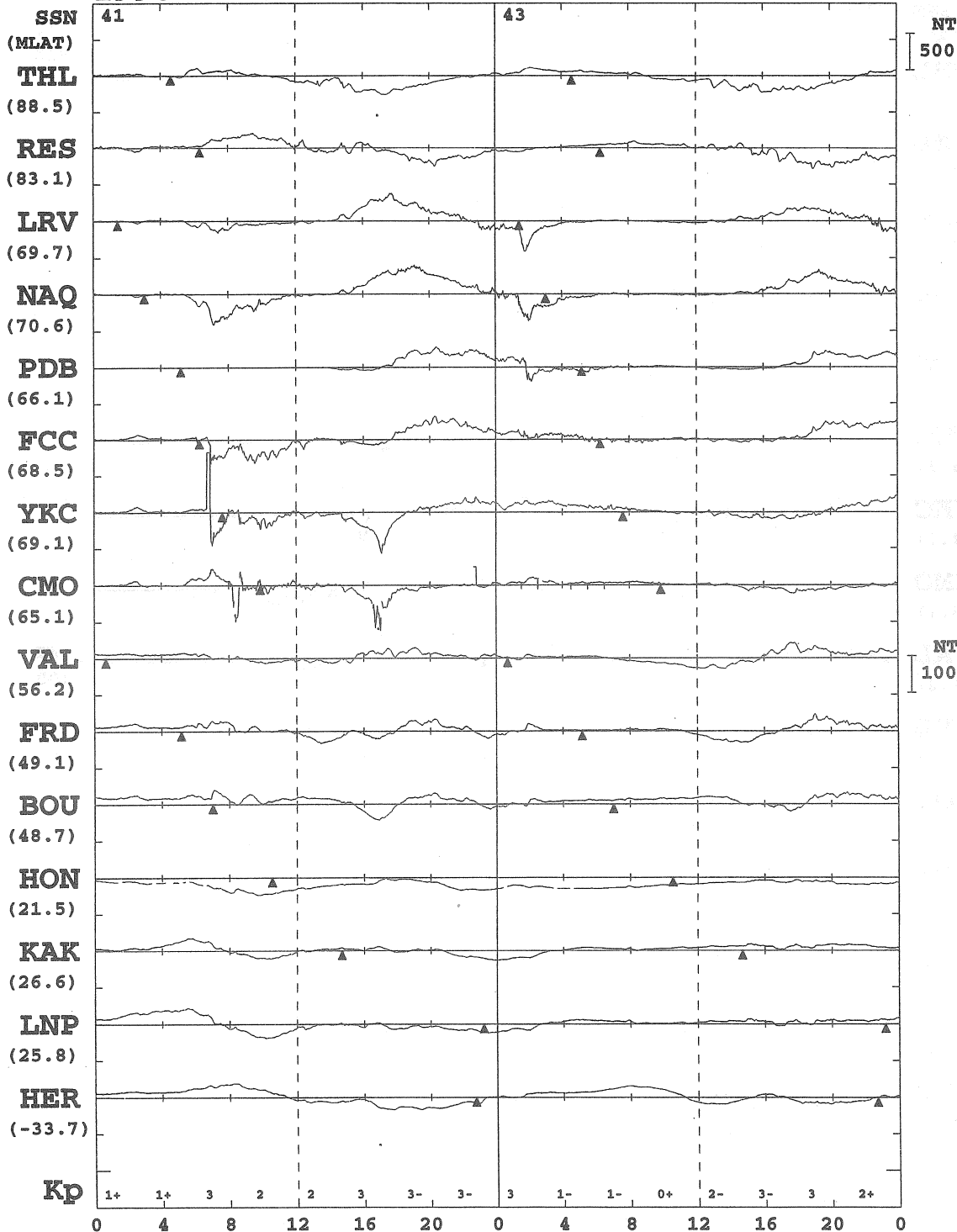
MAY 24
(DAY 144)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



MAY 25
(DAY 145)

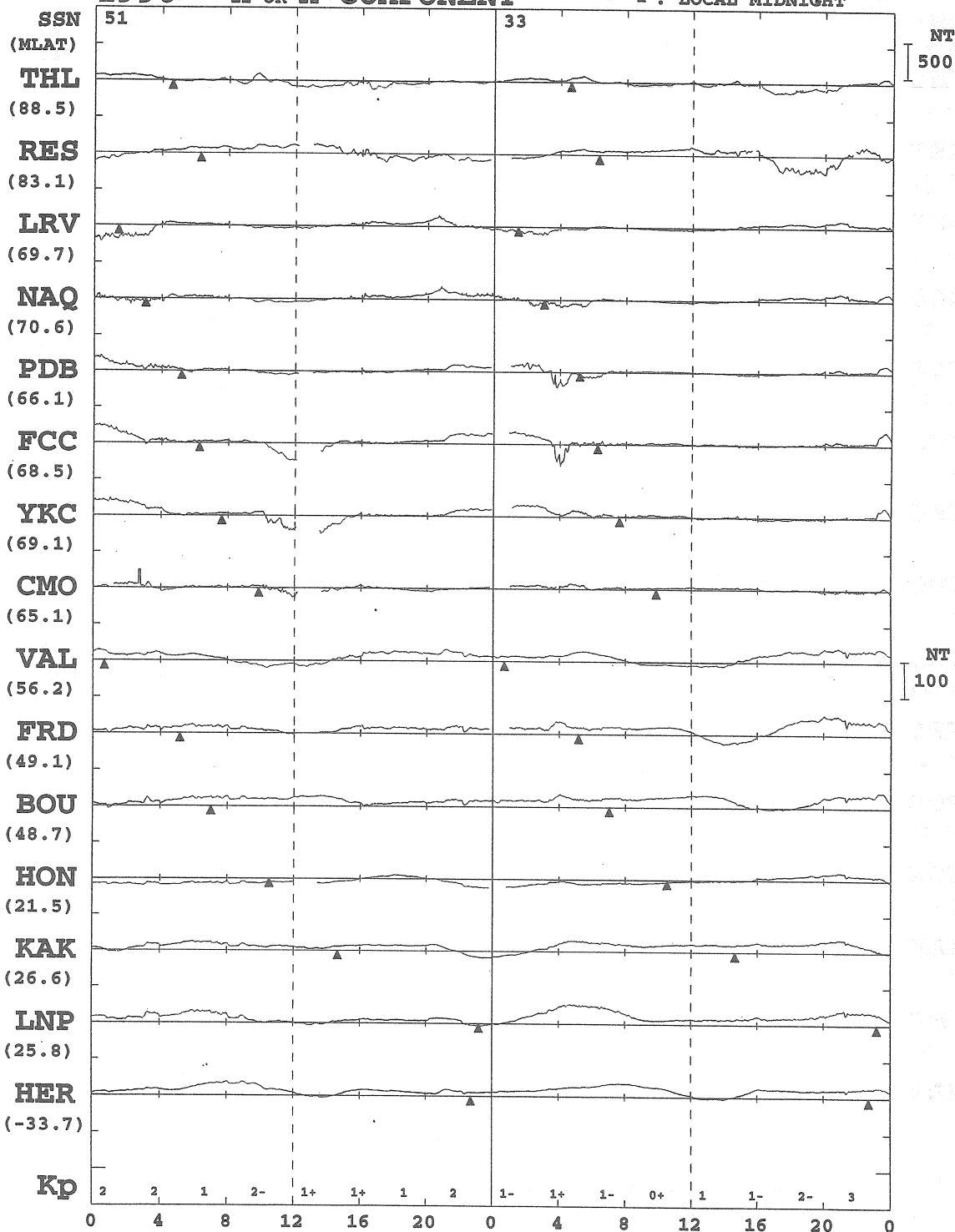
MAY 26
(DAY 146)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



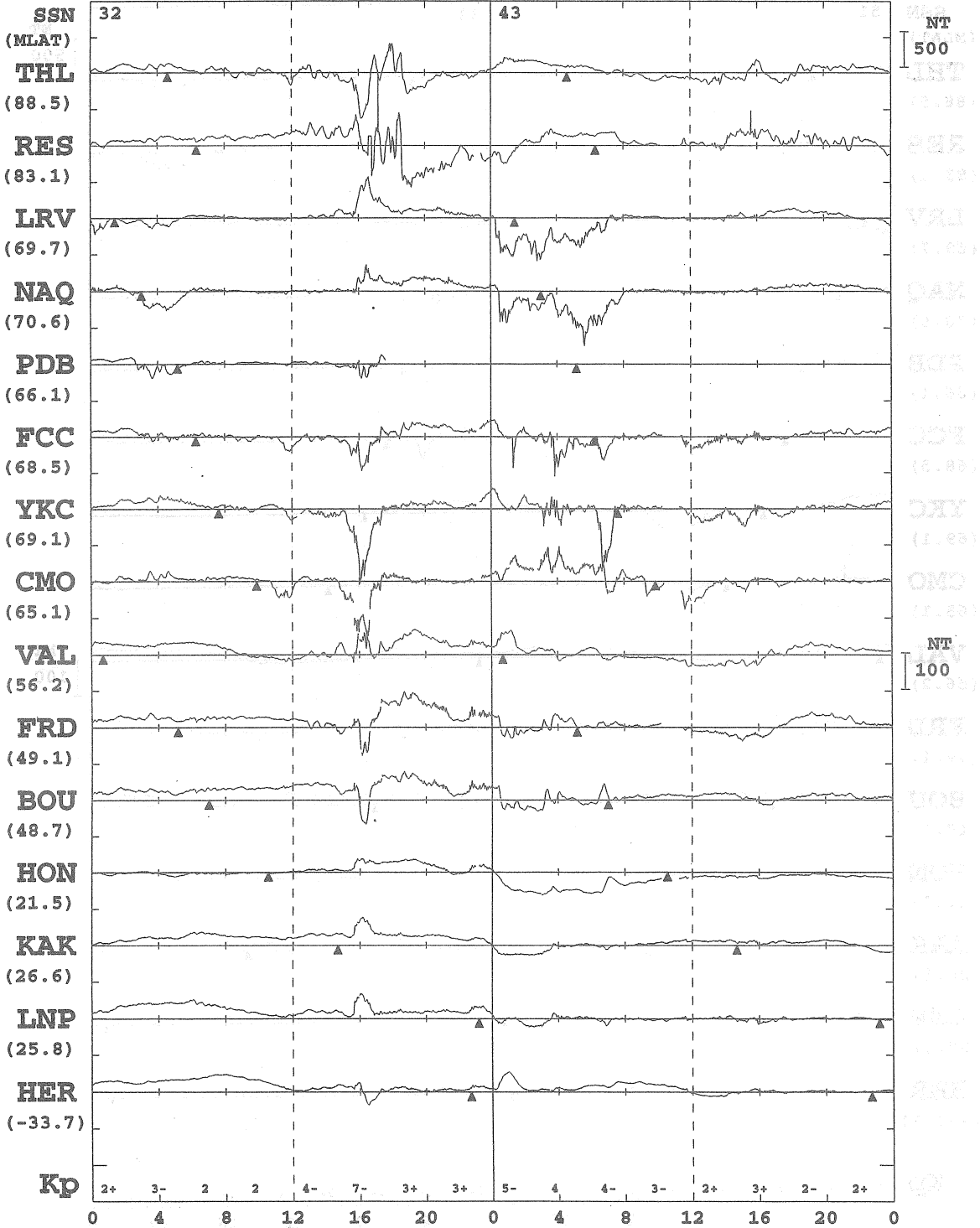
MAY 27
(DAY 147)

MAY 28
(DAY 148)

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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT



MAY 29 (DAY 149)

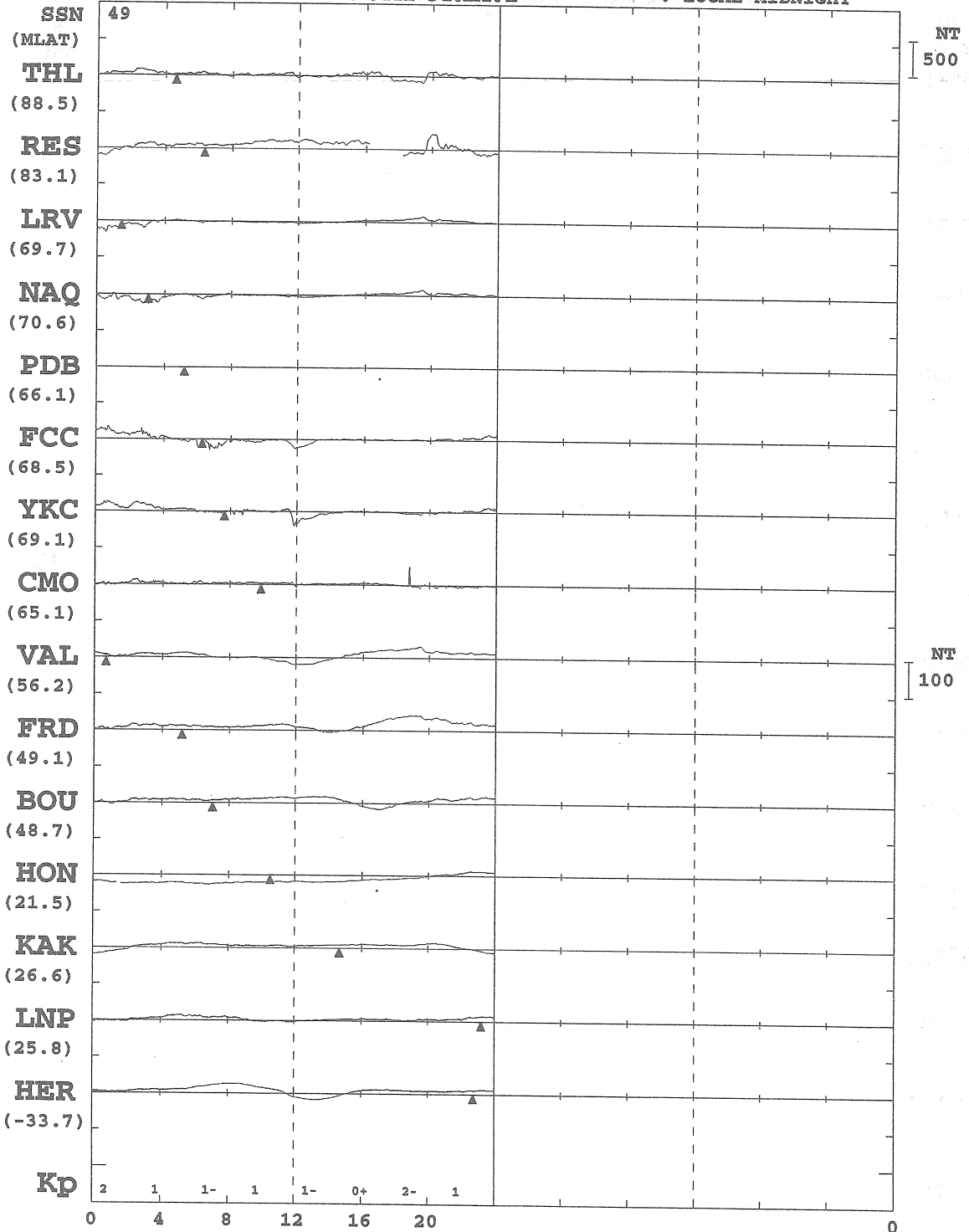
MAY 30 (DAY 150)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

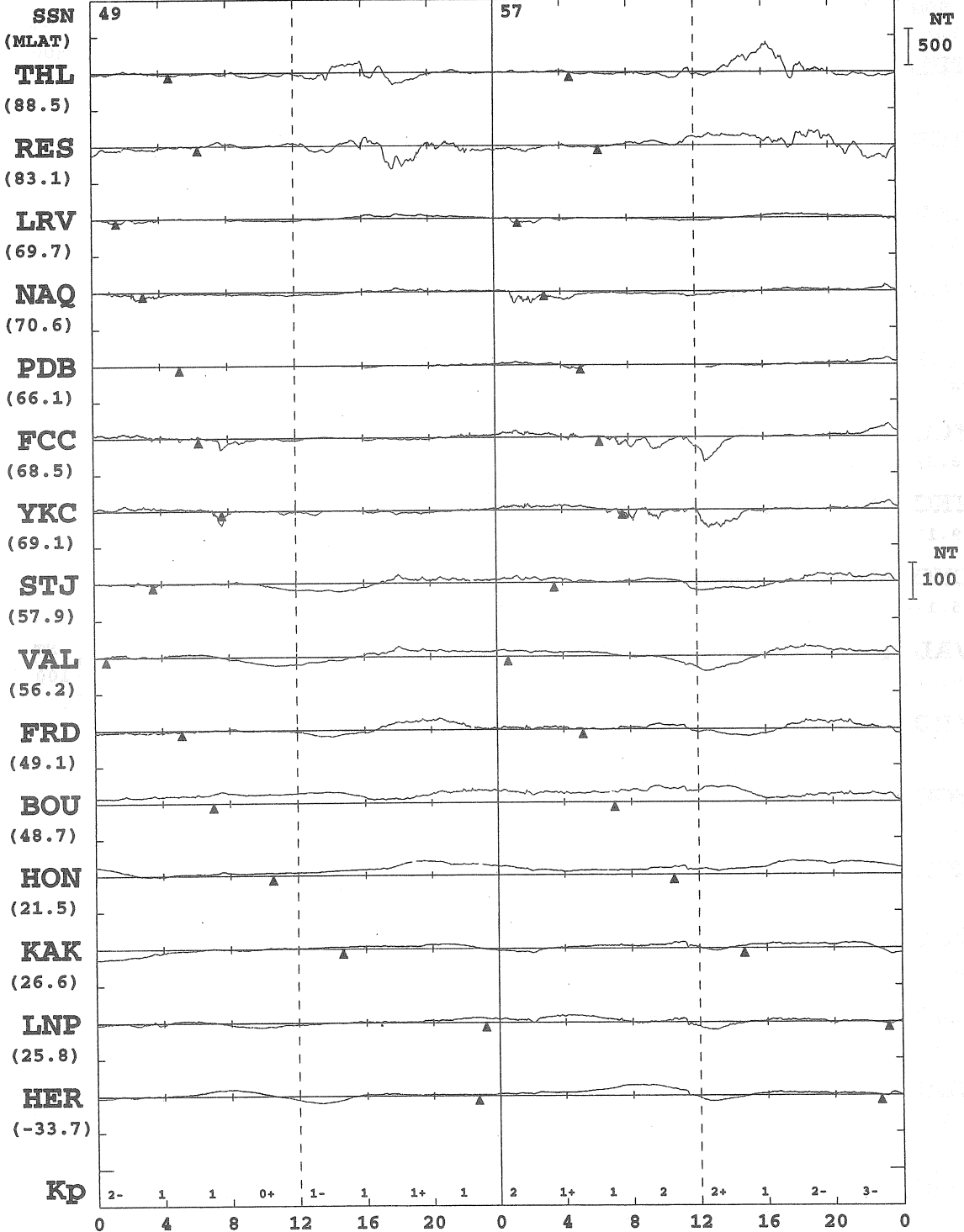


MAY 31
(DAY 151)

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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



JUN 1
(DAY 152)

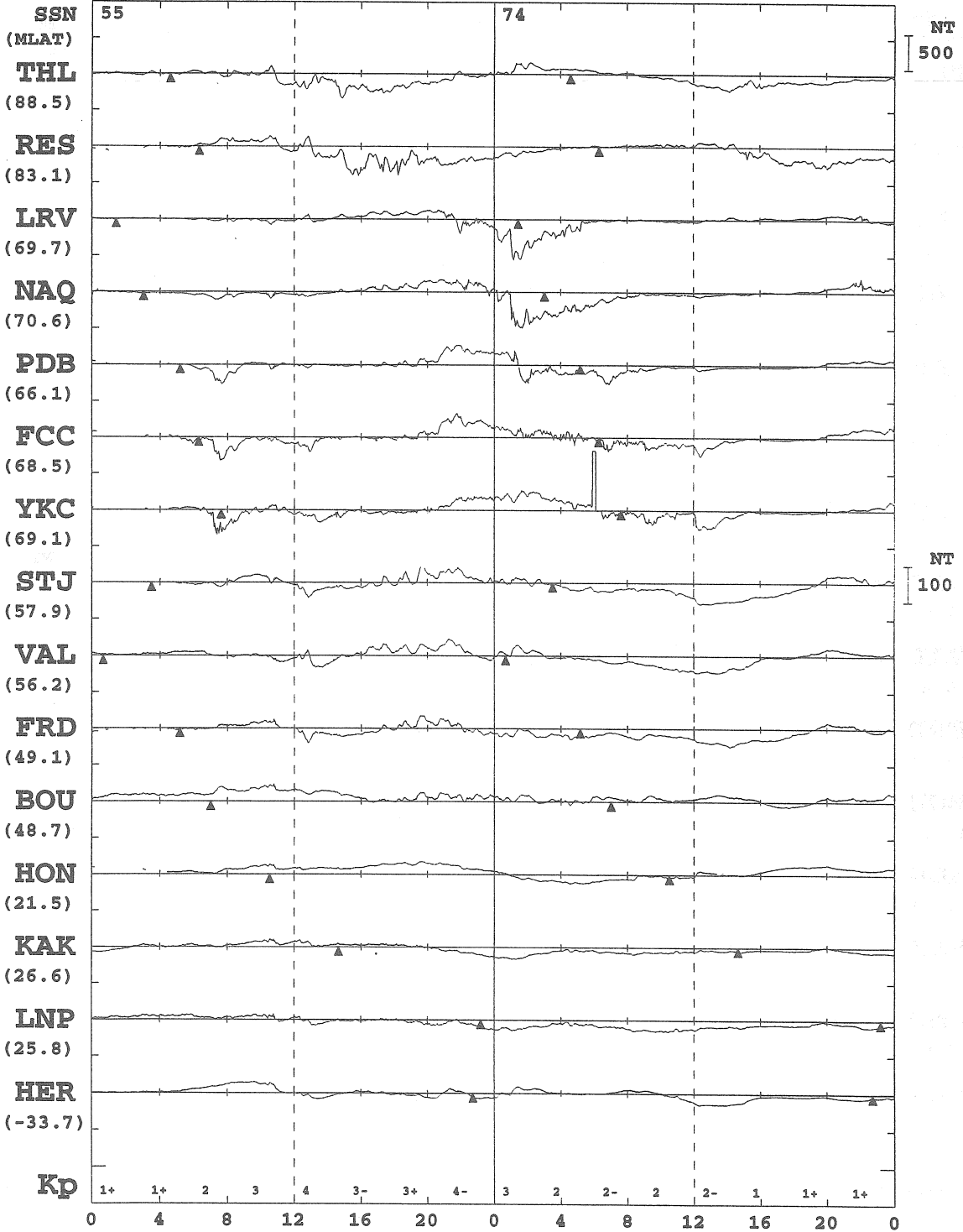
JUN 2
(DAY 153)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

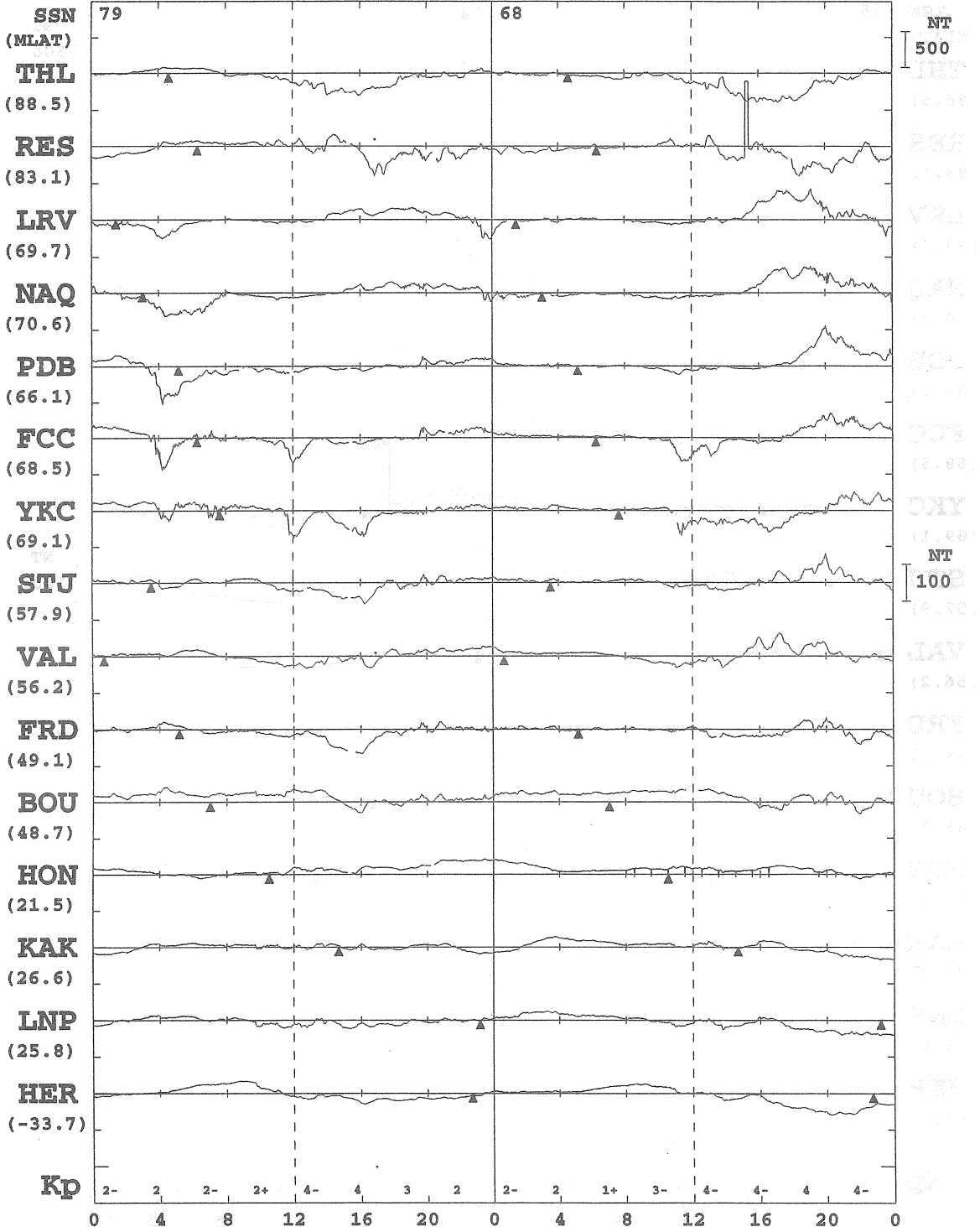
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT LOCAL MIDNIGHT



JUN 5
(DAY 156)

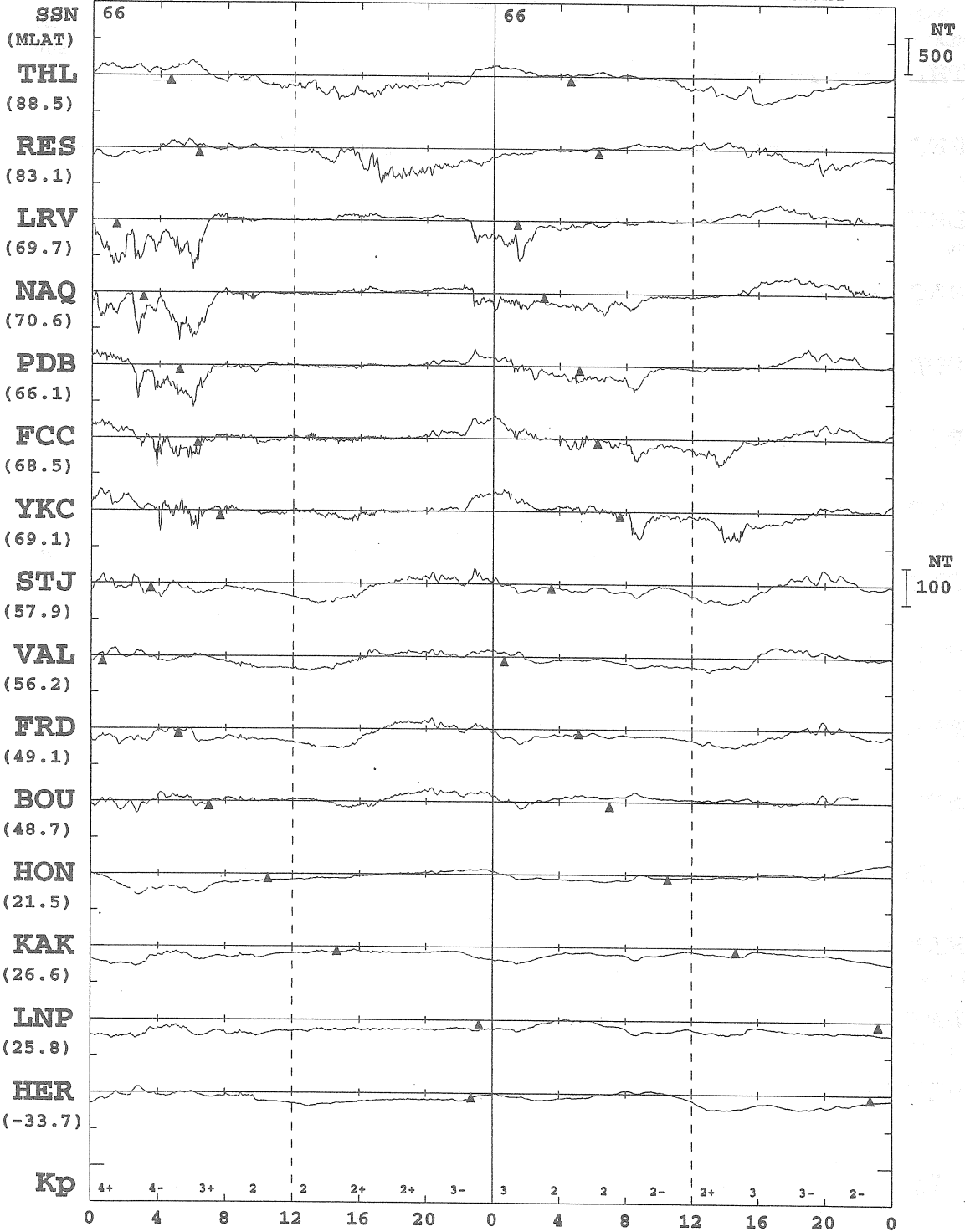
JUN 6
(DAY 157)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

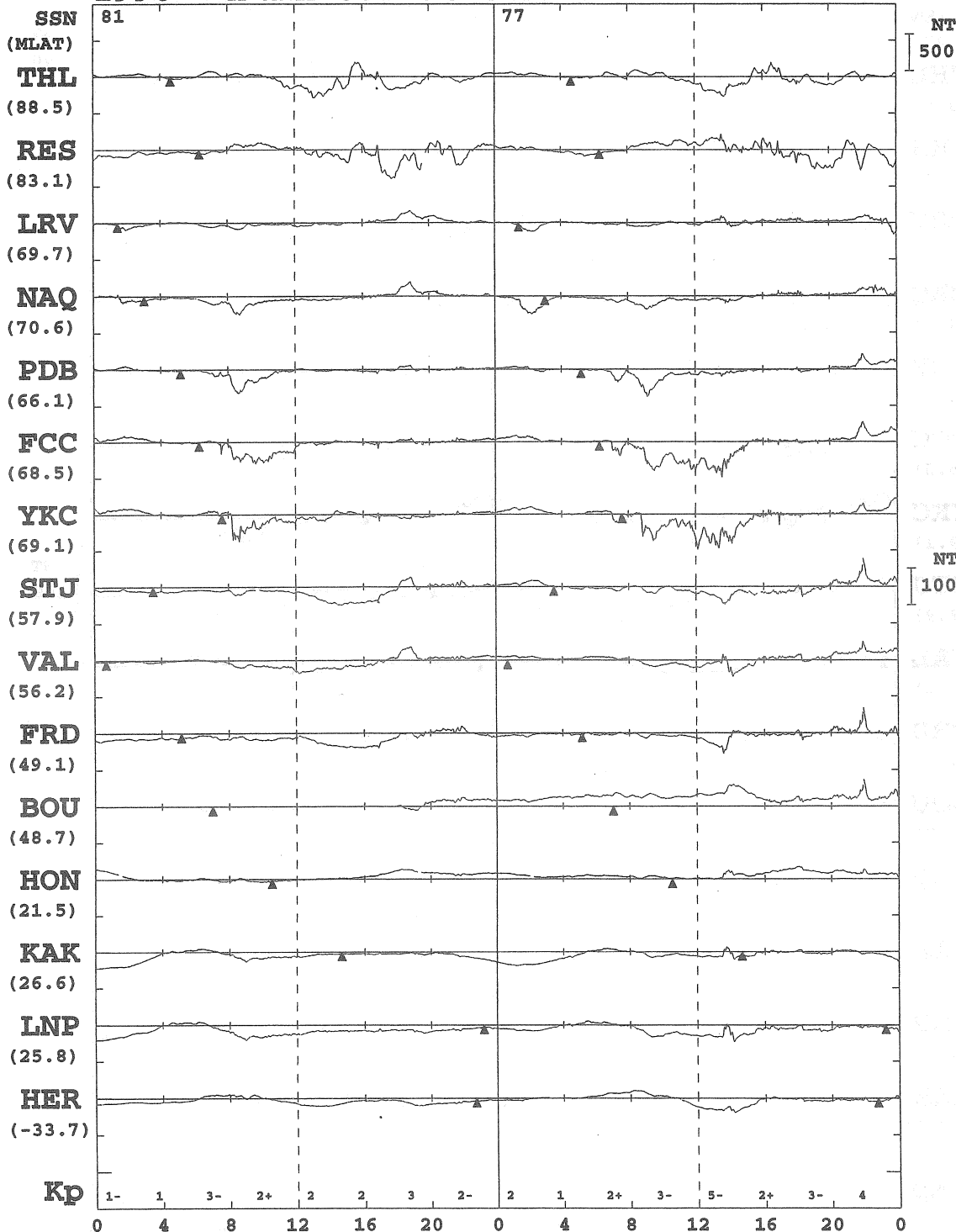


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JUN 9
(DAY 160)

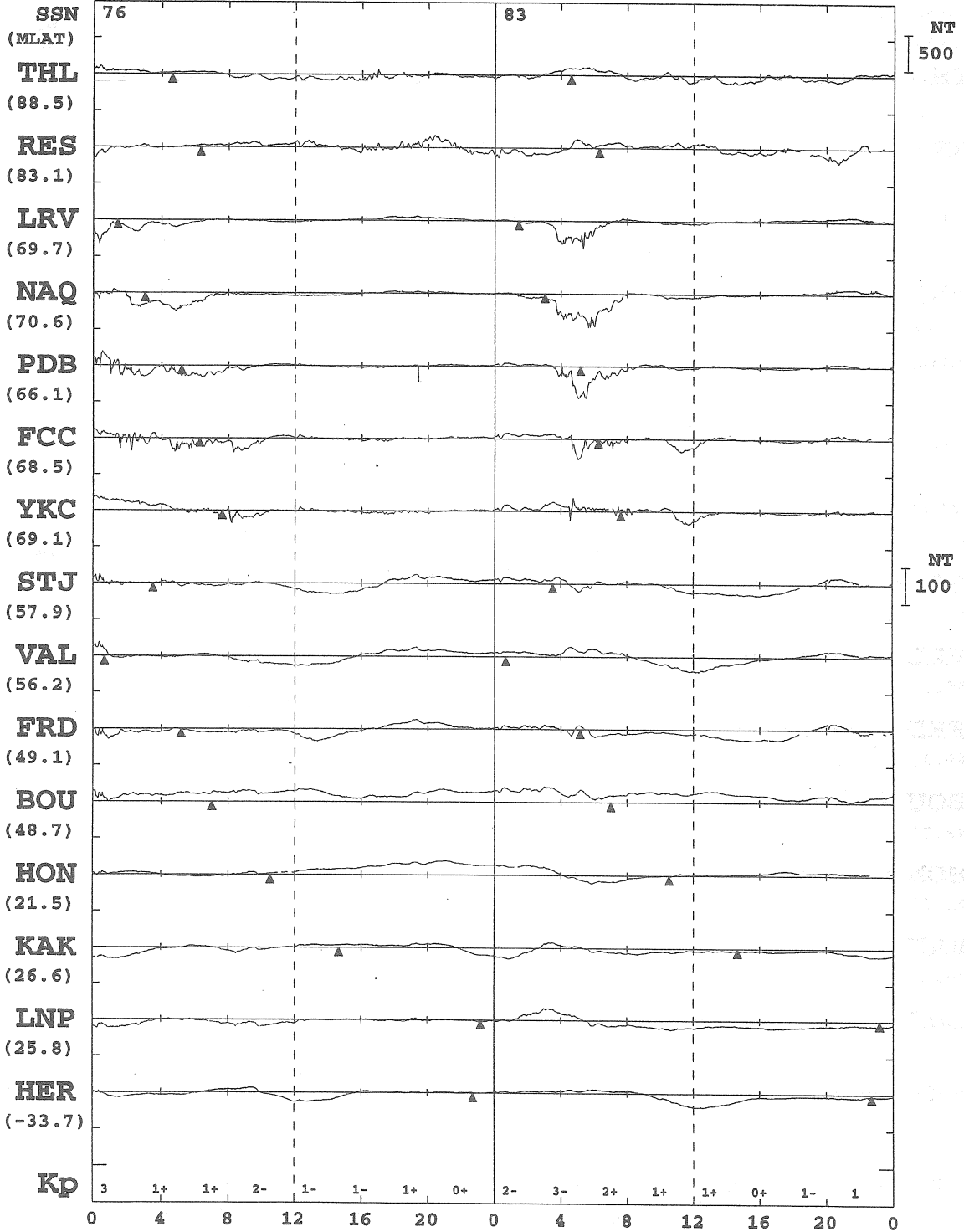
JUN 10
(DAY 161)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

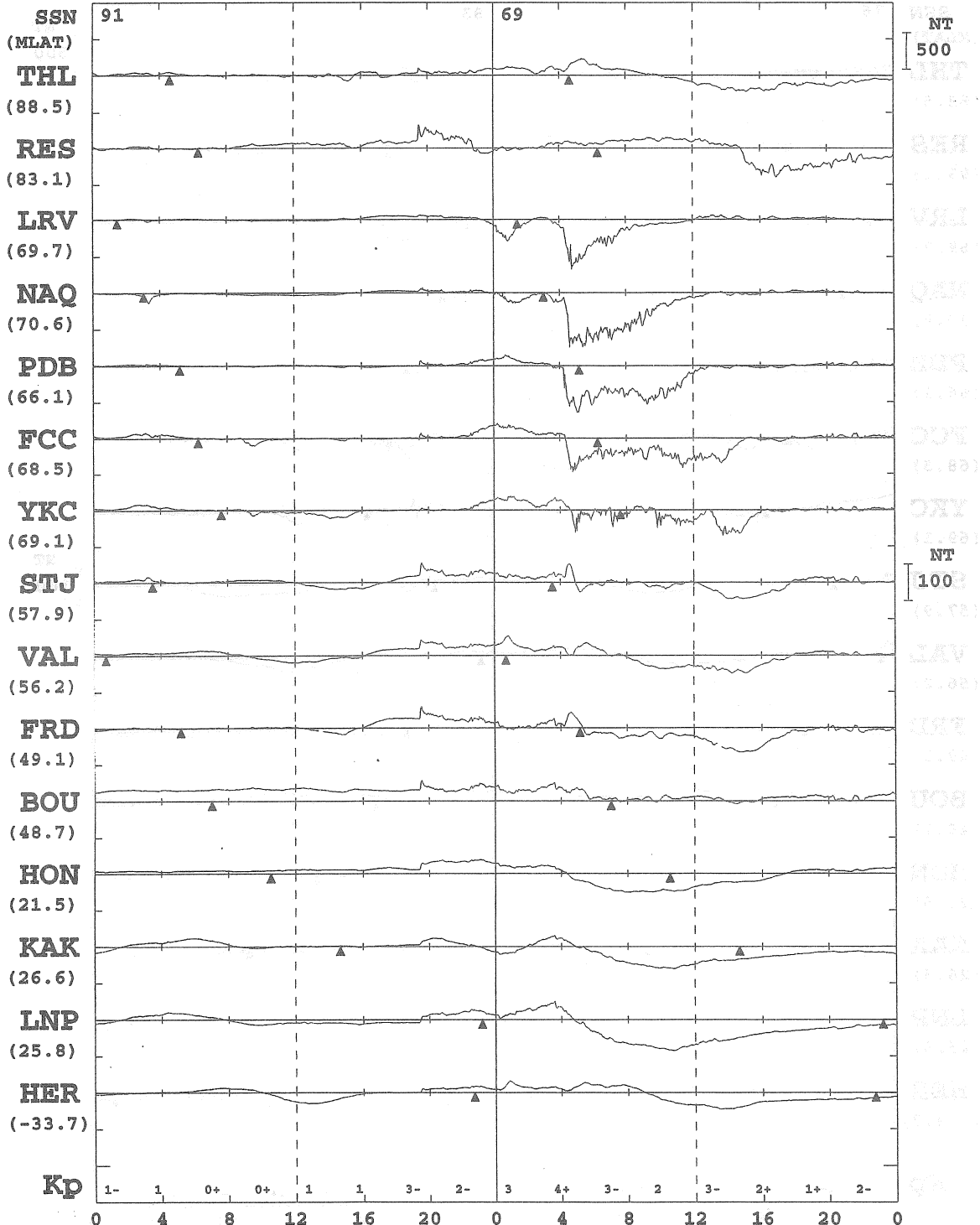
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

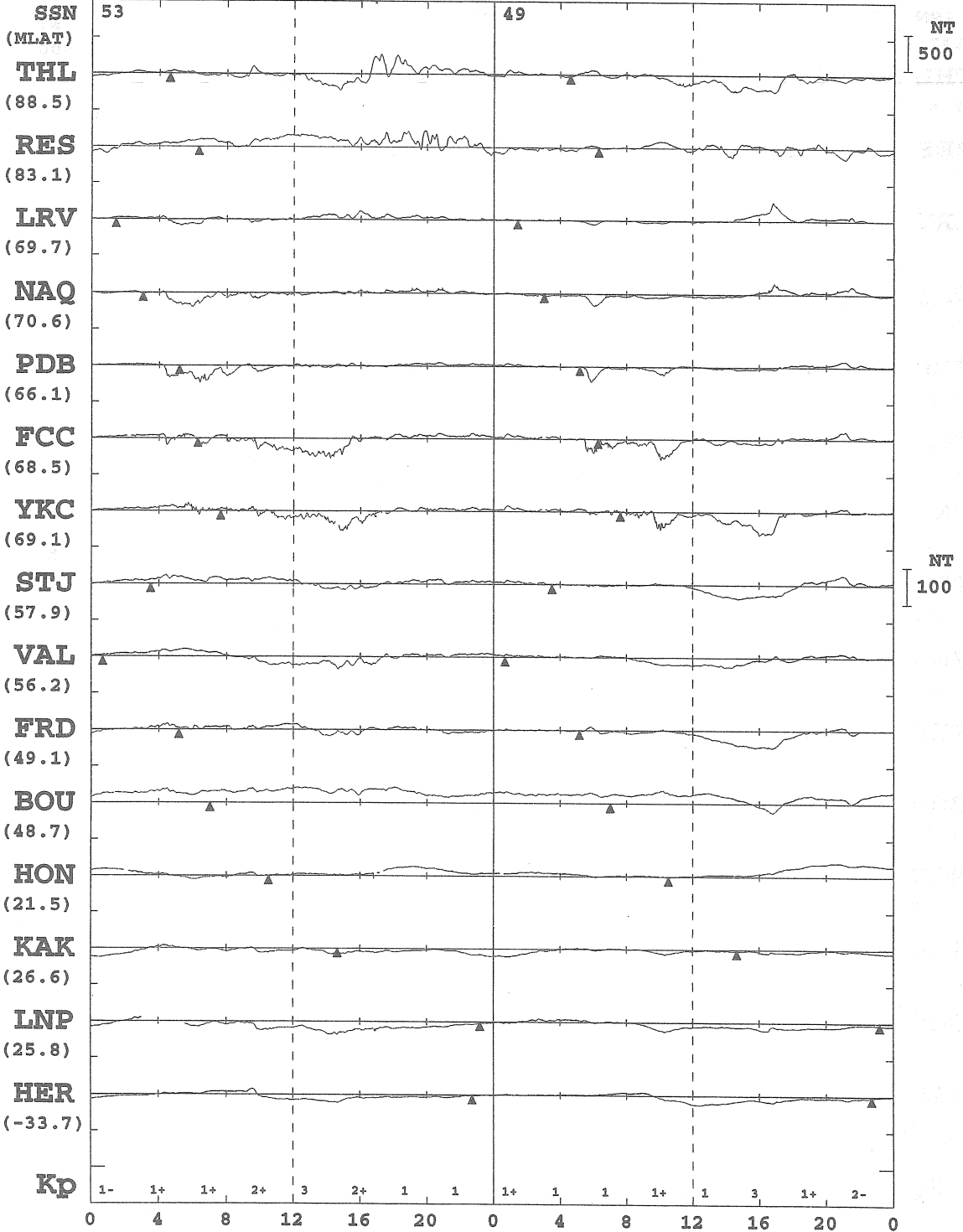
1998 H OR X-COMPONENT LOCAL MIDNIGHT



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

KYOTO UNIV.

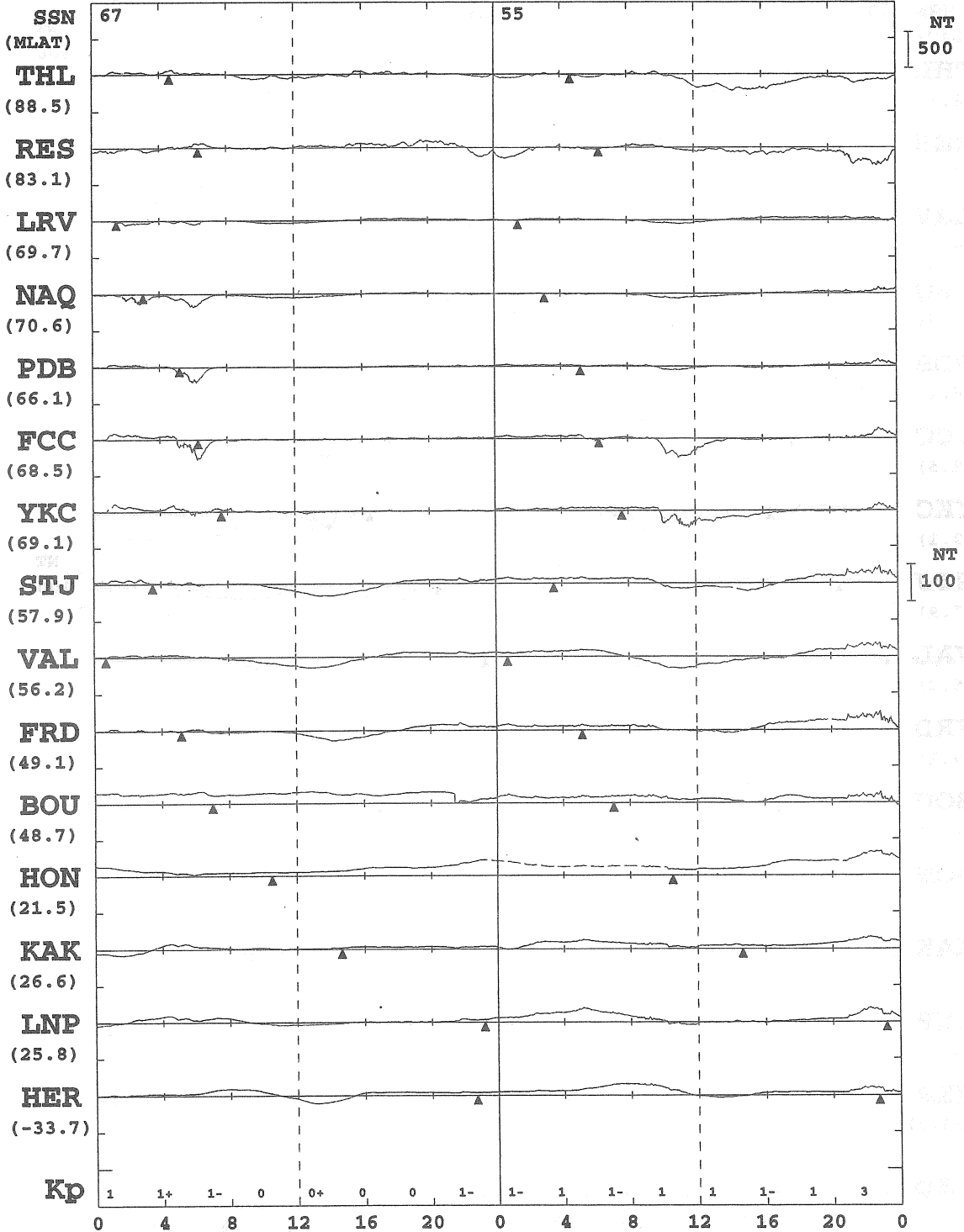
1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



JUN 17
(DAY 168)

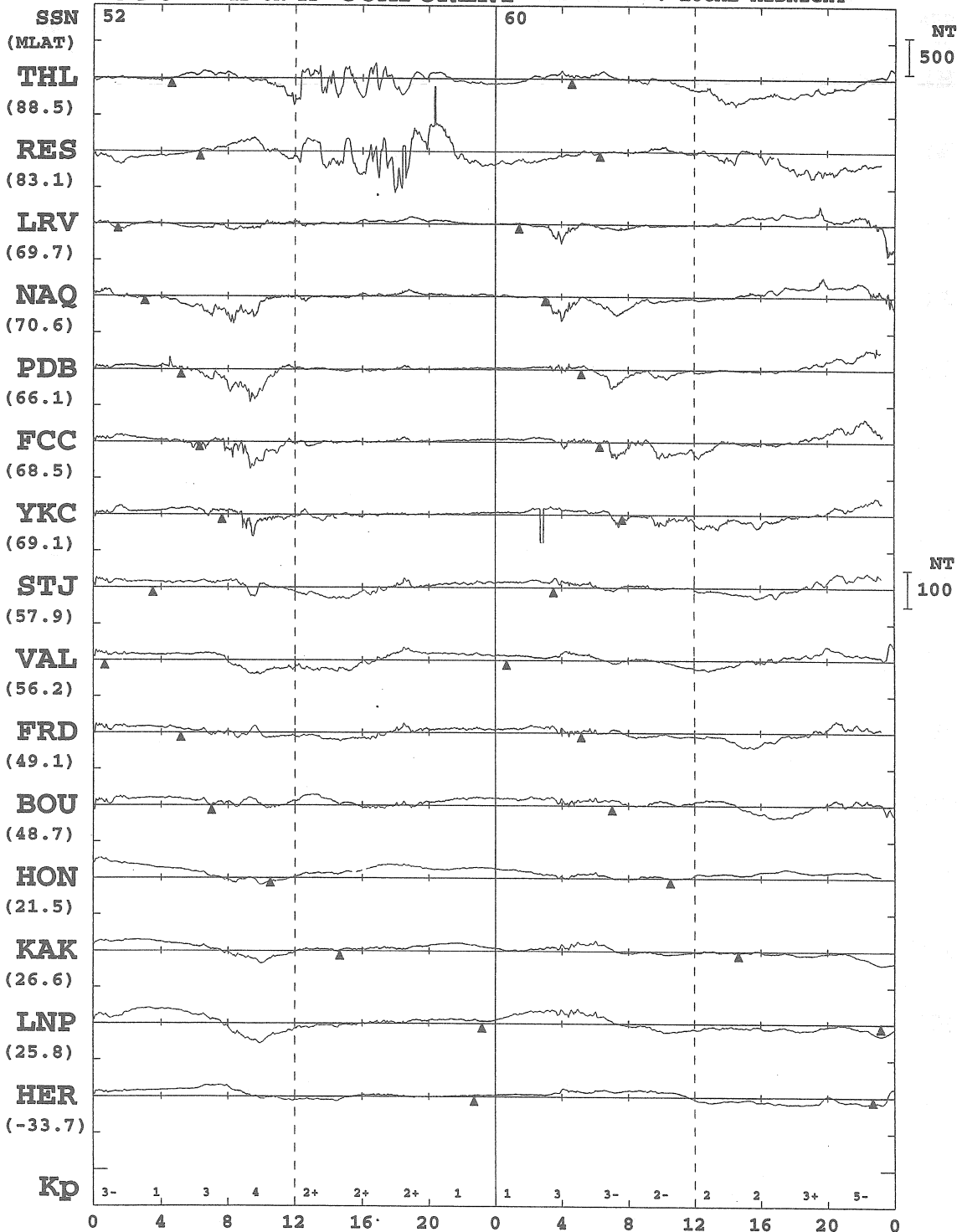
JUN 18
(DAY 169)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

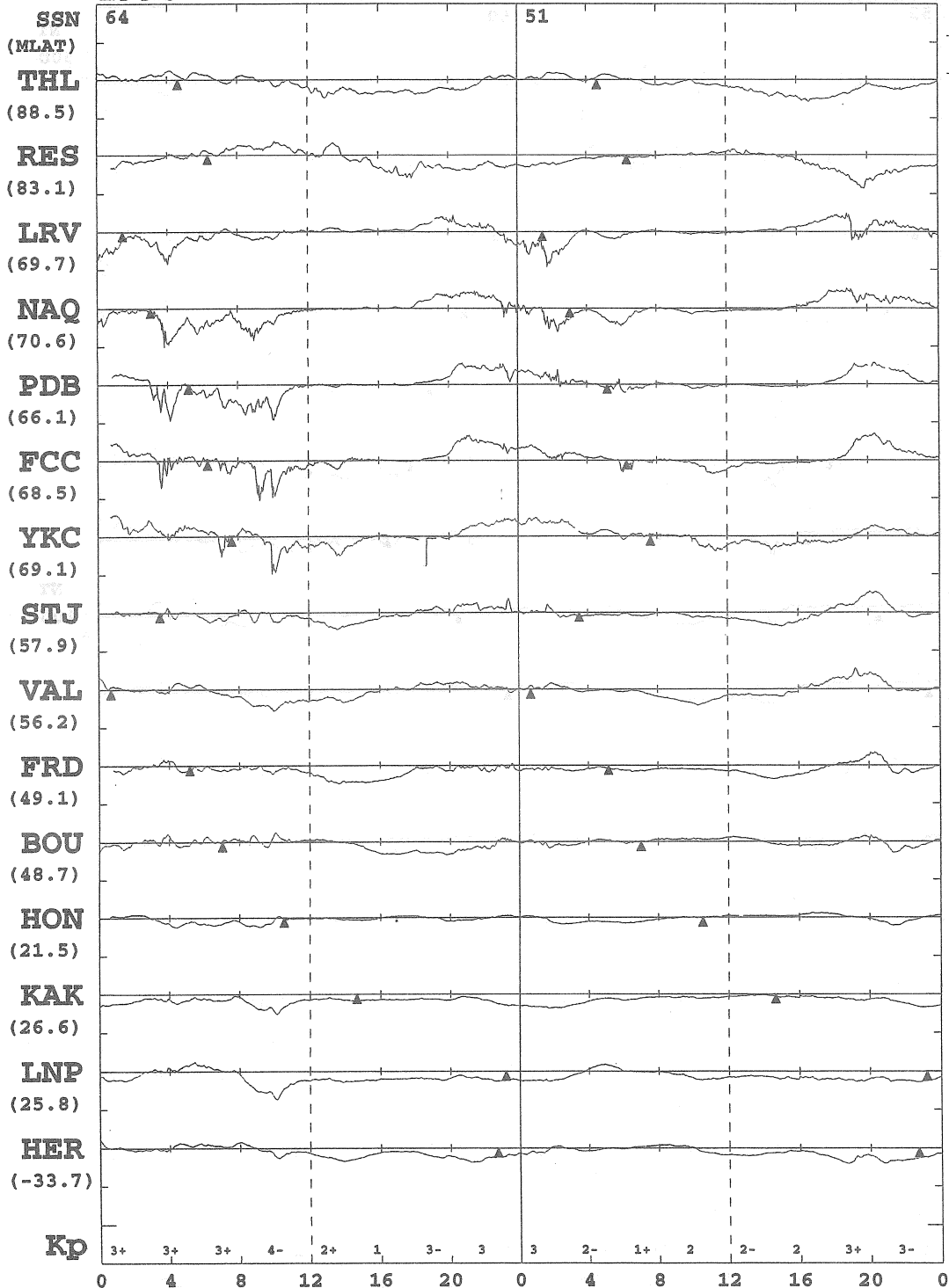
▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

1998 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



JUN 21
(DAY 172)

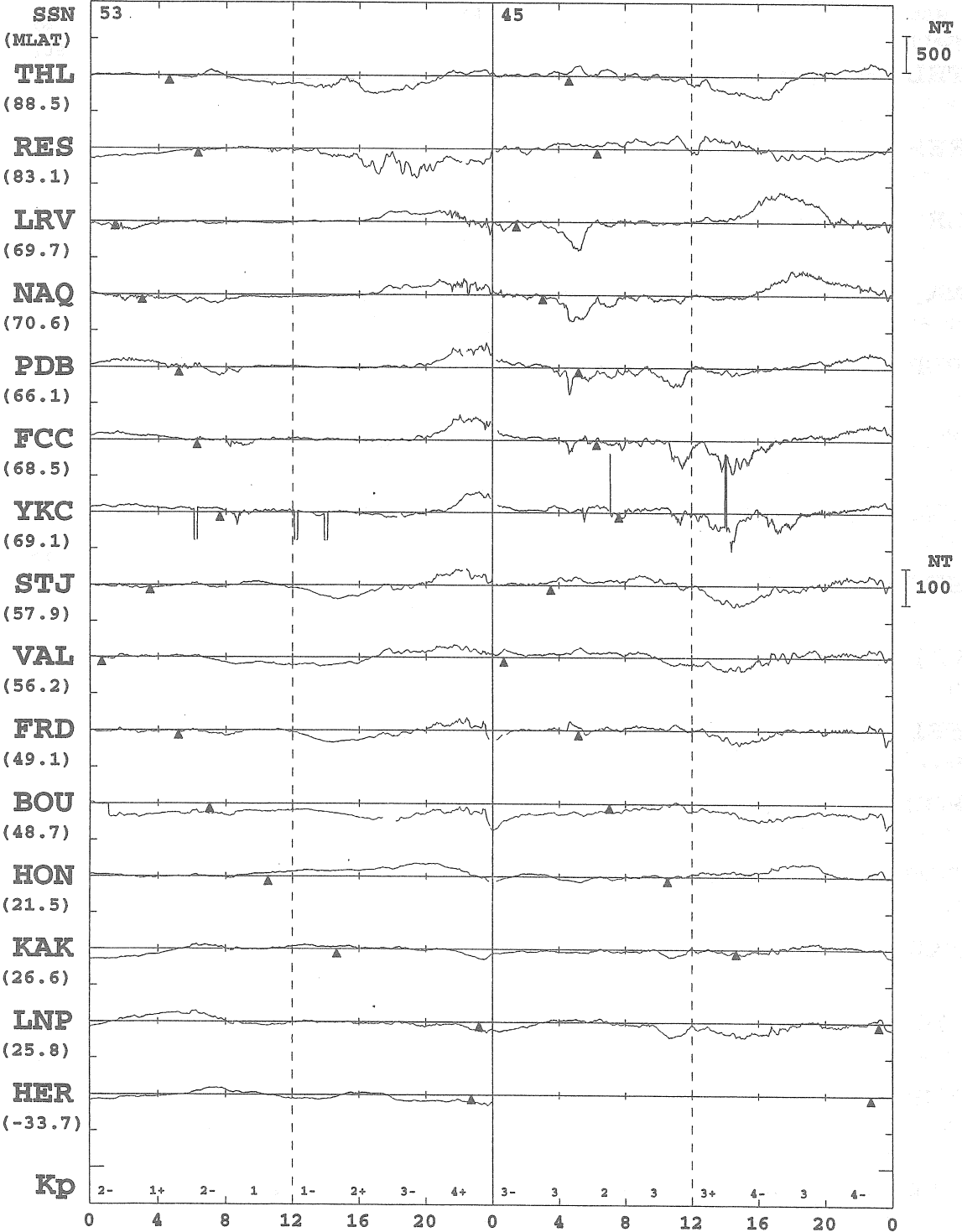
JUN 22
(DAY 173)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



JUN 23
(DAY 174)

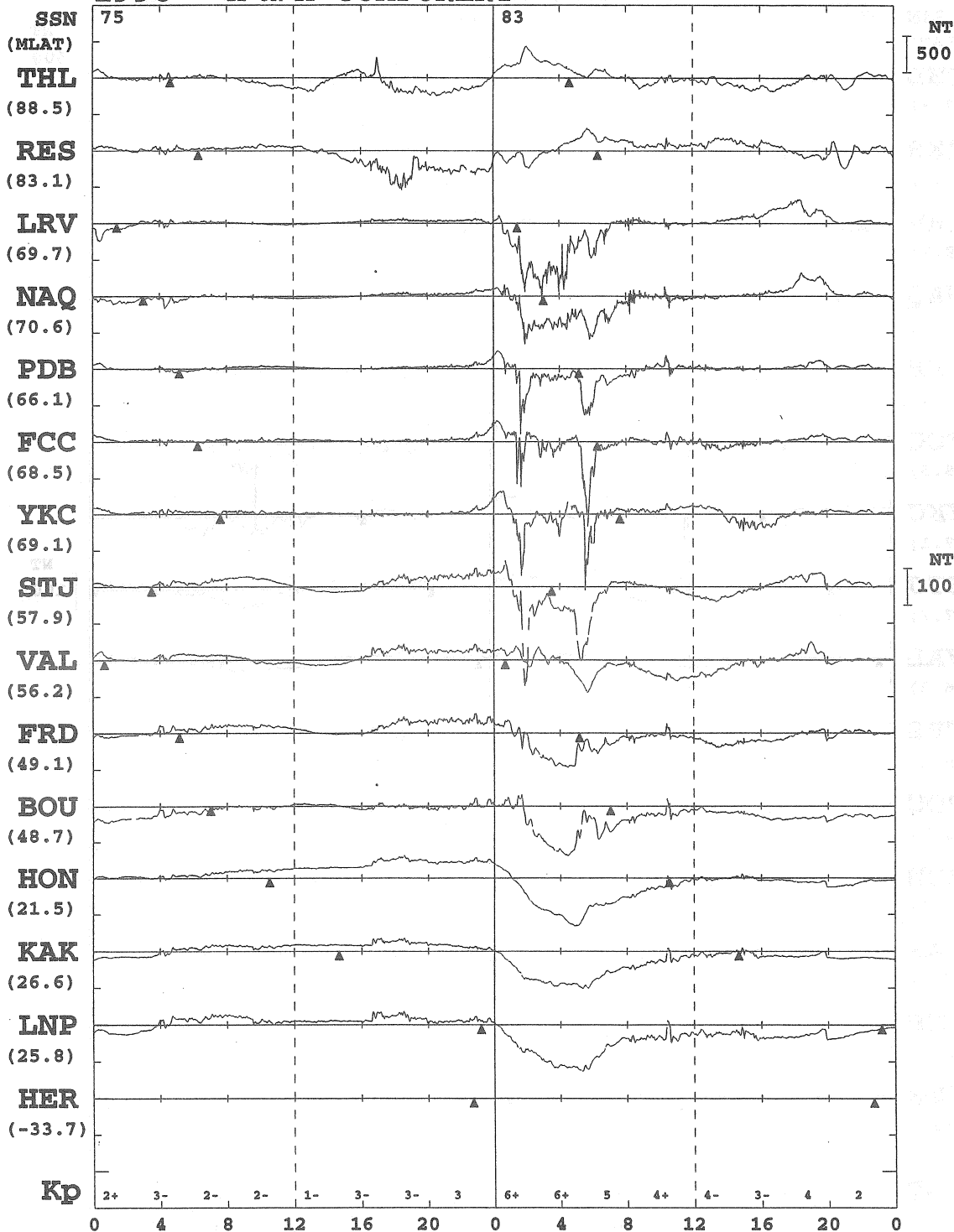
JUN 24
(DAY 175)

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

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT

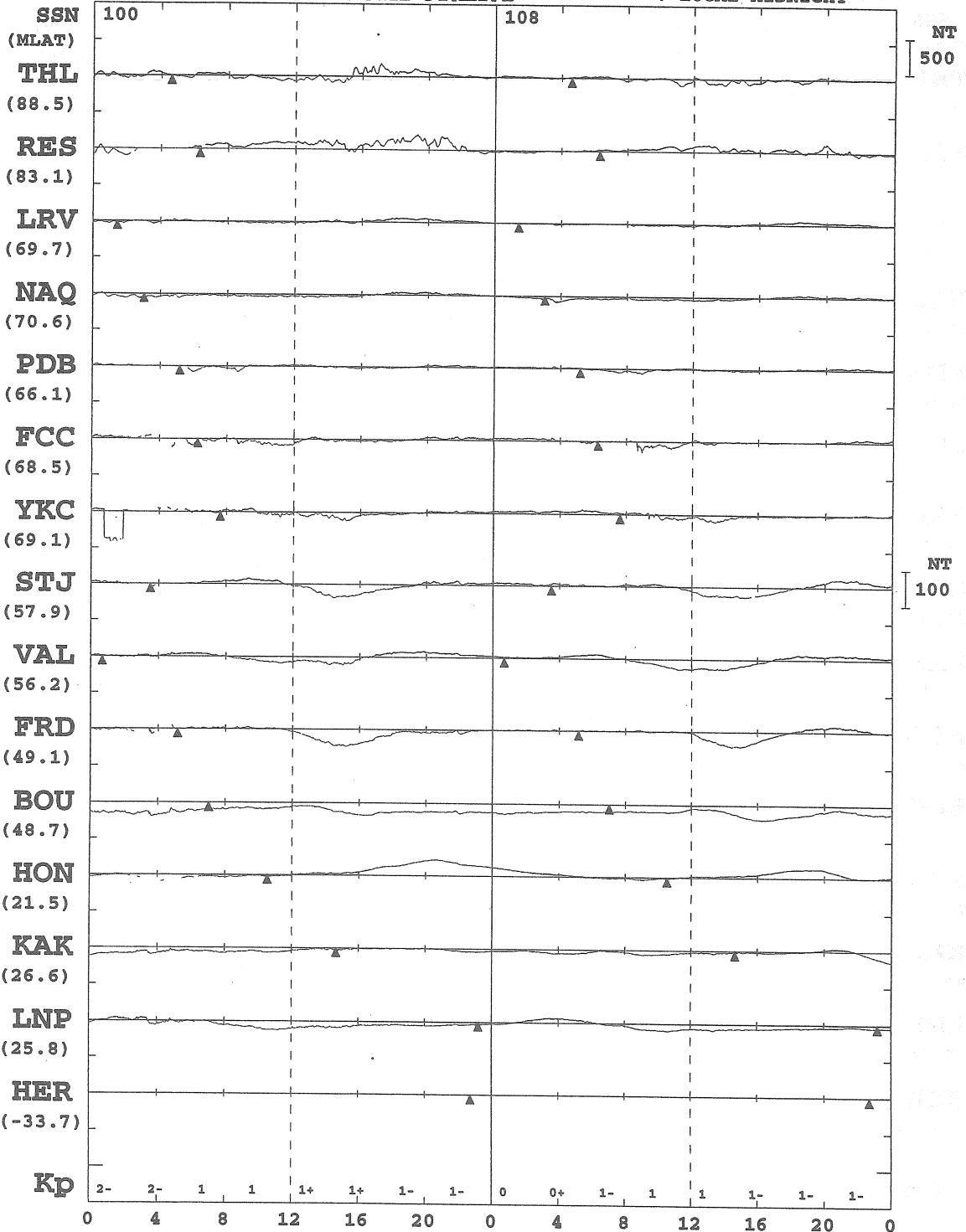


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

1998 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



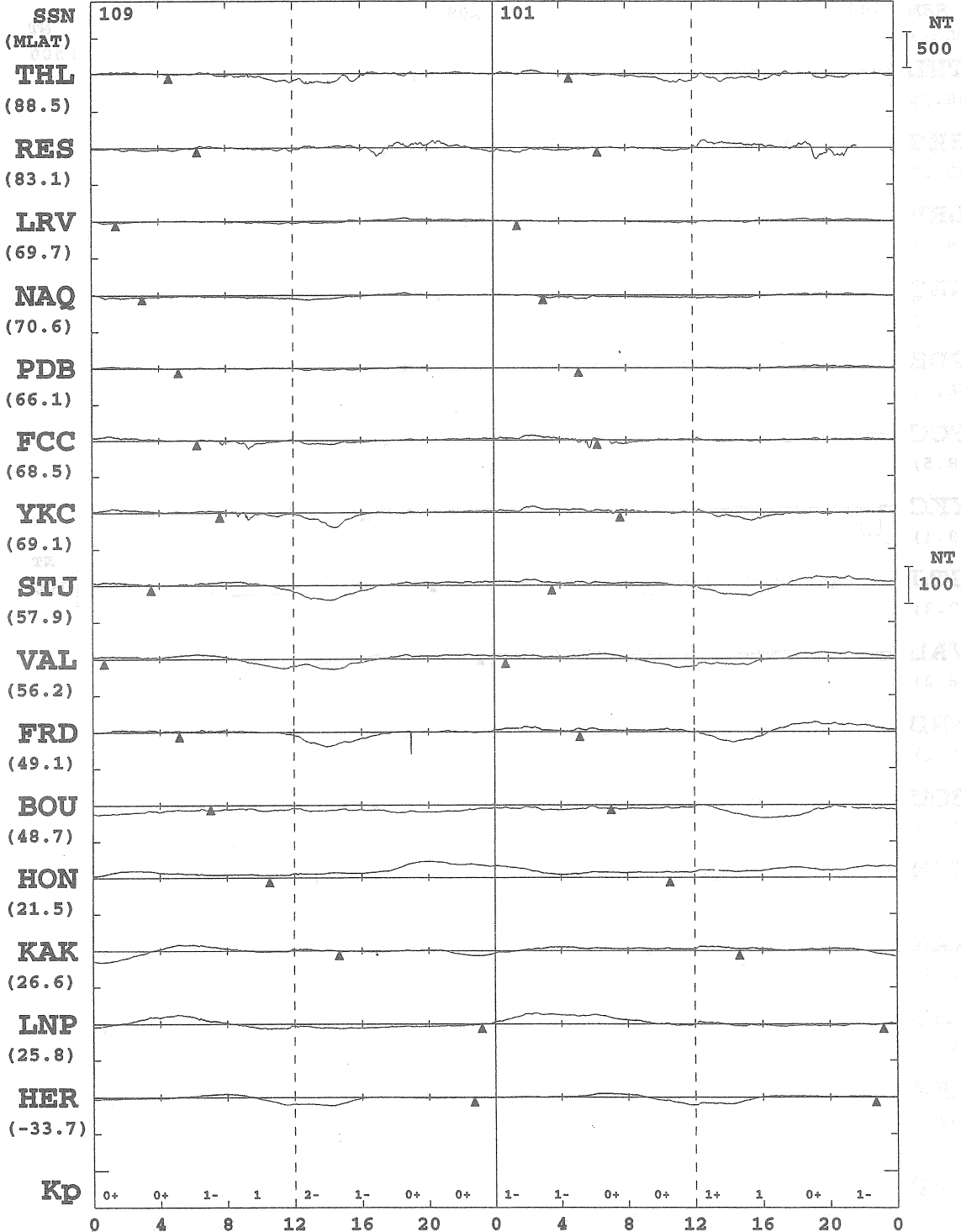
JUN 27
(DAY 178)

JUN 28
(DAY 179)

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

KYOTO UNIV.

1998 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.

