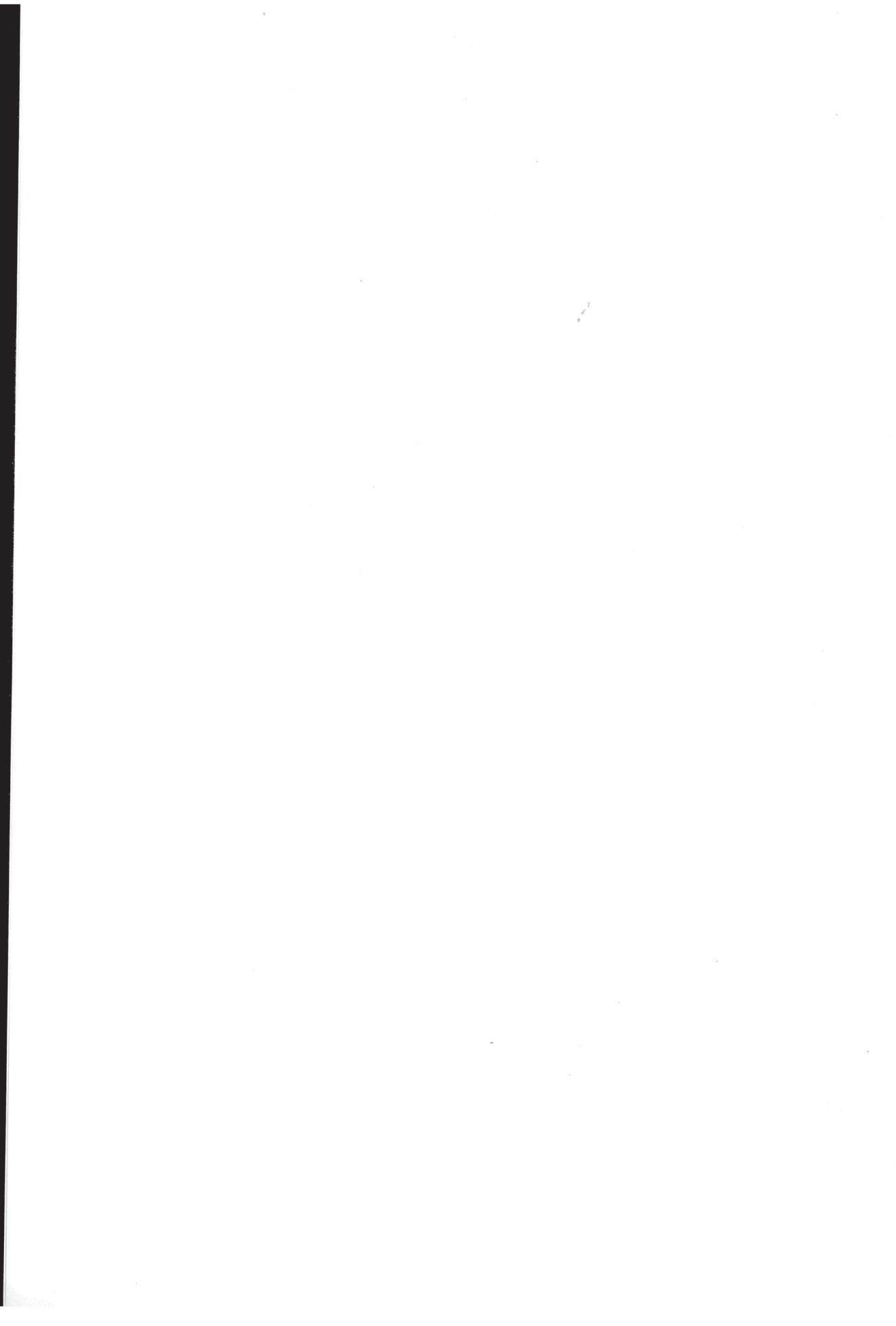


**PROVISIONAL GEOMAGNETIC
DATA PLOTS
No. 8**

(January – June, 1993)

SEPTEMBER 1993

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



**PROVISIONAL GEOMAGNETIC
DATA PLOTS**

No. 8

(January – June, 1993)

SEPTEMBER 1993

**DATA ANALYSIS CENTER FOR GEOMAGNETISM
AND SPACE MAGNETISM
FACULTY OF SCIENCE,
KYOTO UNIVERSITY**

PROVISIONAL GEOMAGNETIC

DATA PLOTS

No. 8

(January - June, 1953)

SEPTEMBER 1953

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

PREFACE

This booklet contains provisional plots of the geomagnetic data for January – June, 1993 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 control (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) The World Data Center-A for STP and The U.S. Geological Survey (RGON data).
- (2) The Leirvogur Magnetic Observatory, University of Iceland.
- (3) The Valentia Observatory of Meteorological Service.
- (4) The Kakioka Magnetic Observatory.
- (5) The Telecommunication Training Institute.
- (6) The Hermanus Magnetic Observatory.
- (7) The Swedish Institute of Space Physics in Kiruna.
- (8) The Chambon-la-Forêt Magnetic Observatory.

The distribution and the information of the stations are shown in Figure 1 and Table 1, respectively. The Kp index was provided by Geophysical Institute, Gottingen University. The international sunspot number is taken from Solar Indices Bulletin published from National Geophysical Data Center, Boulder.

Table 1.

STATION NAME	ABB CODE	ORG No.	GEOGRAPHIC		GEOMAGNETIC		INVARIANT LAT.	PLOT SCALE
			LAT.	LONG.	LAT.	LONG.		
*Resolute Bay	RES	1	74.7	265.1	83.1	296.0	83.9	500nT/div
*Baker Lake	BLC	1	64.3	264.0	73.7	319.2	74.6	"
*Narsarsuaq	NAS	1	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 Balcine	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	"
Valentia	VAL	3	51.9	349.8	56.2	74.8	51.0	100nT/div
*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	"
Chambon-la-Forêt	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	"

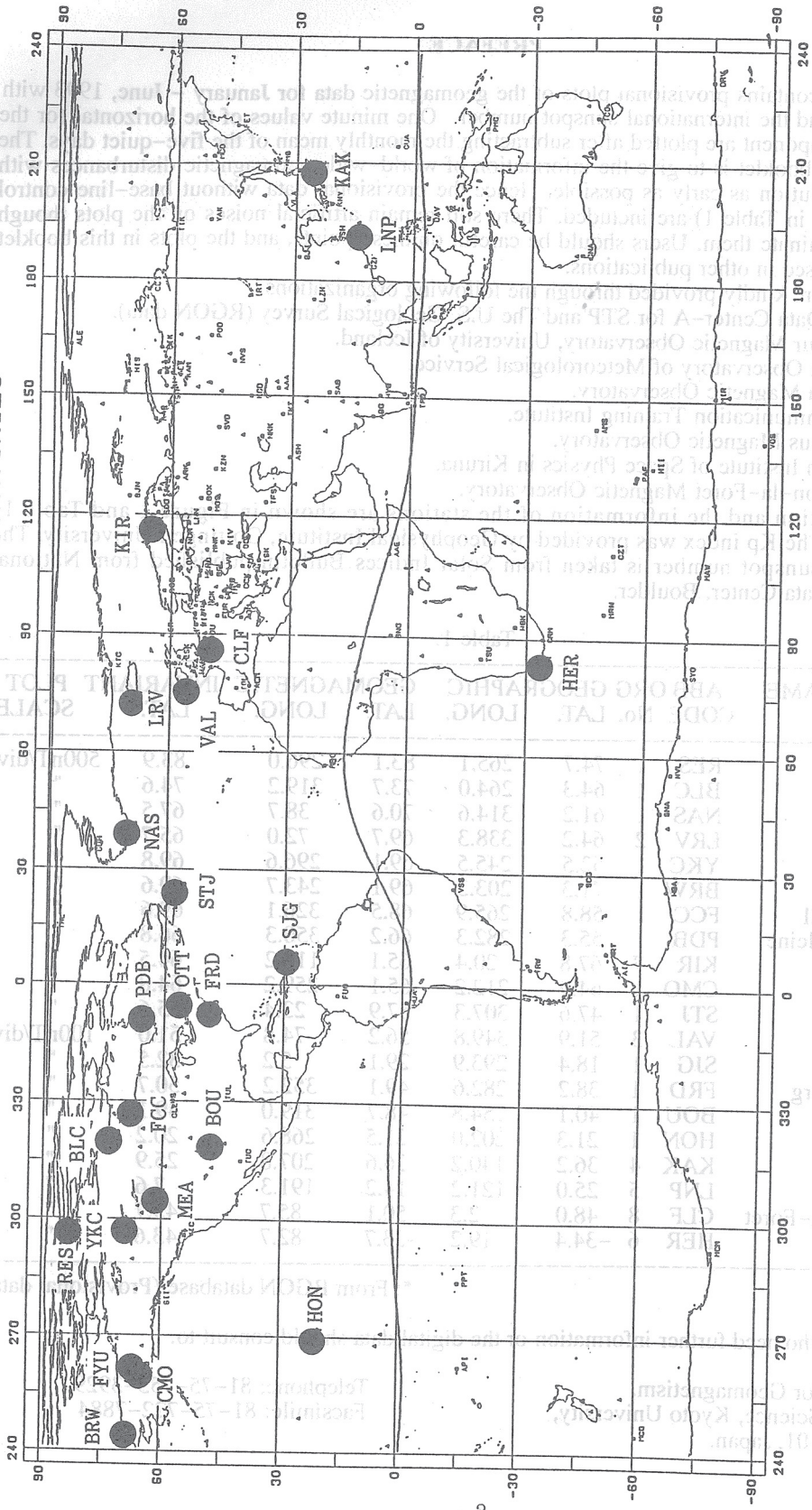
*: From RGON database (Provisional data)

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

WDC-C2 for Geomagnetism,
Faculty of Science, Kyoto University,
Kyoto 606-01, Japan.

Telephone: 81-75-753-3929
Facsimile: 81-75-722-7884

DISTRIBUTION OF GEOMAGNETIC OBSERVATORIES



GEOMAGNETIC COORDINATE (1985.0)

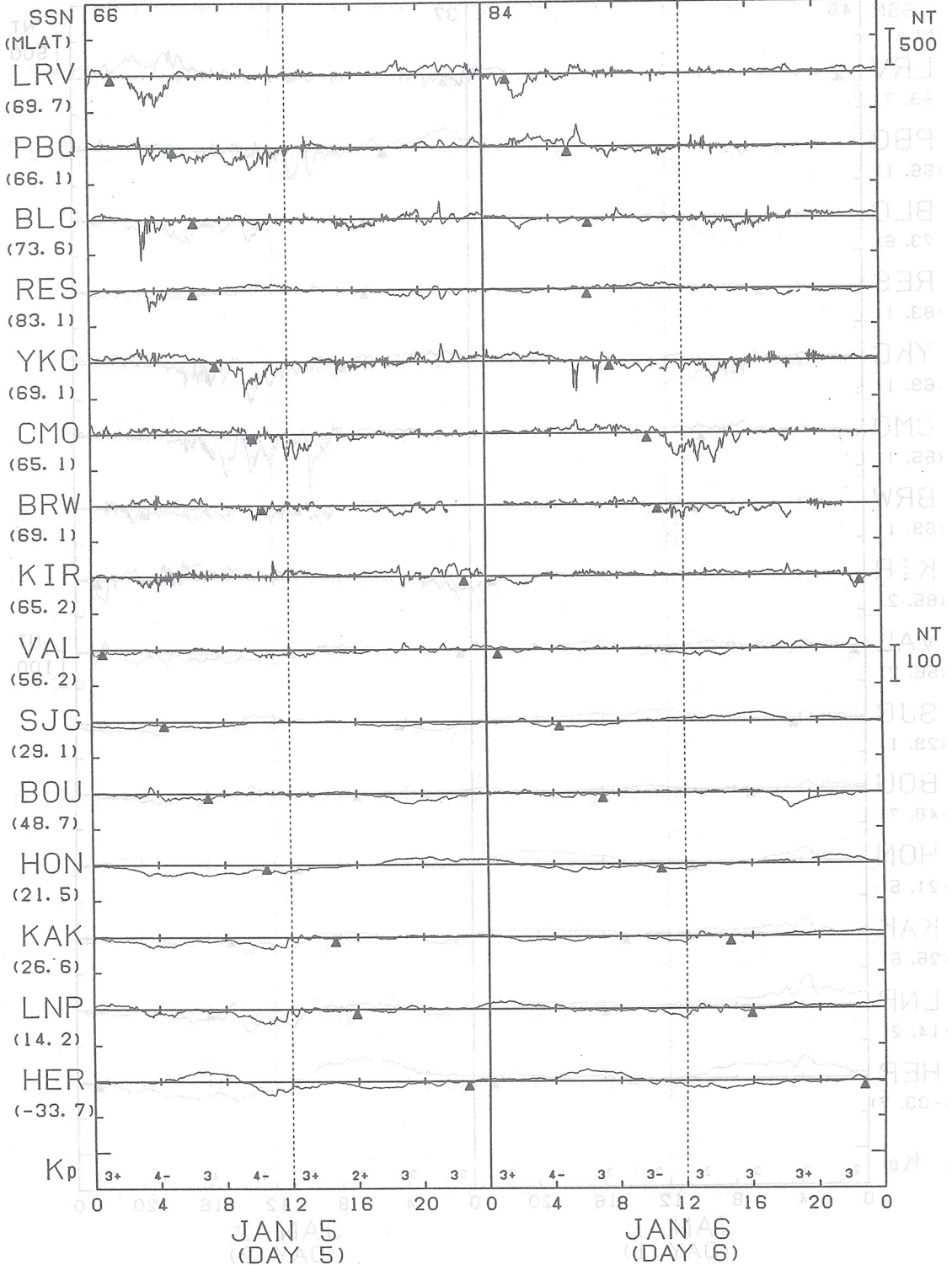
Fig.1 Data are obtained at the observatories shown by the solid circles.

(Data from FYU, CLF, STJ, MEA and OTT are not used in this volume.)

JANUARY - JUNE, 1993

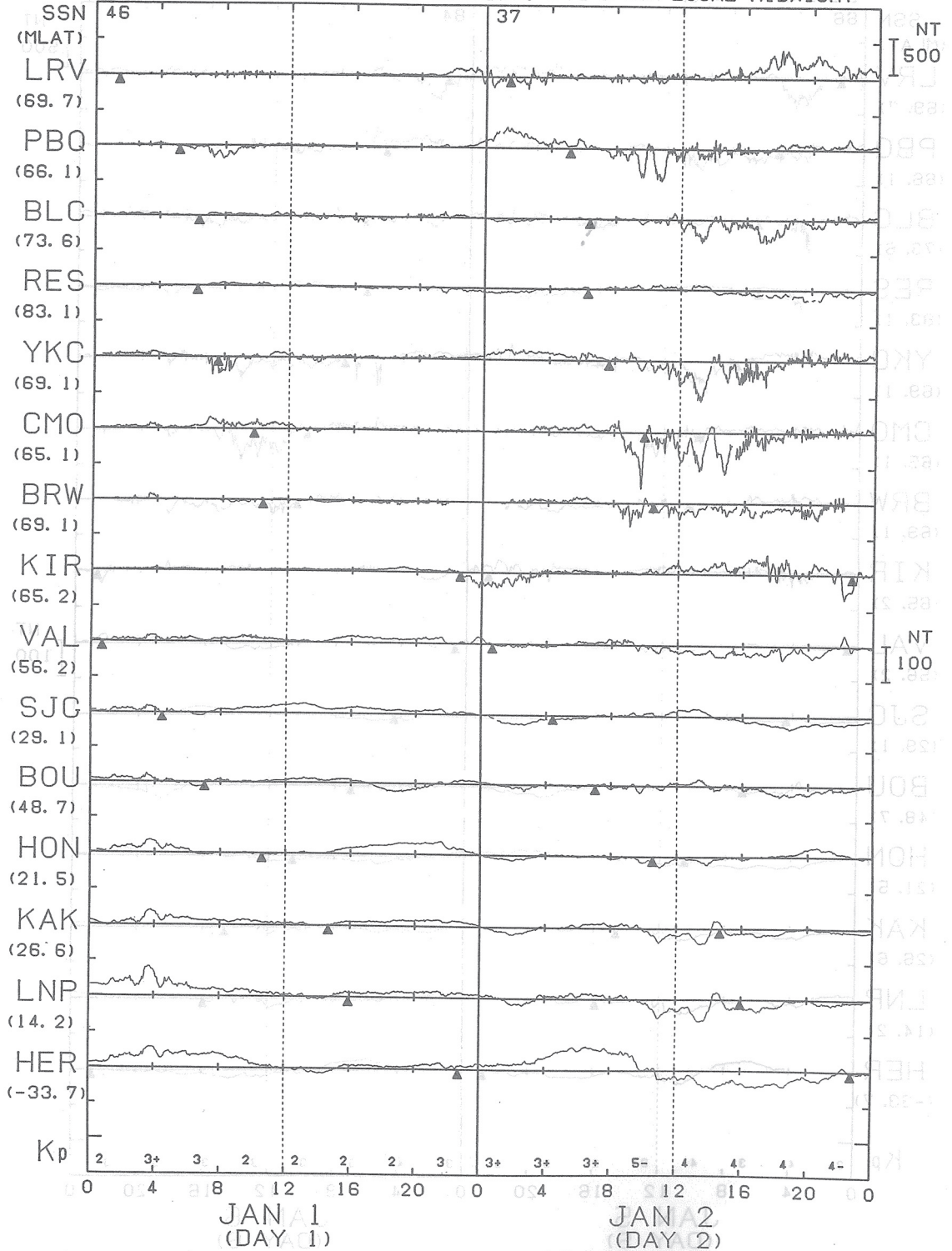
JANUARY - JUNE 1993

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



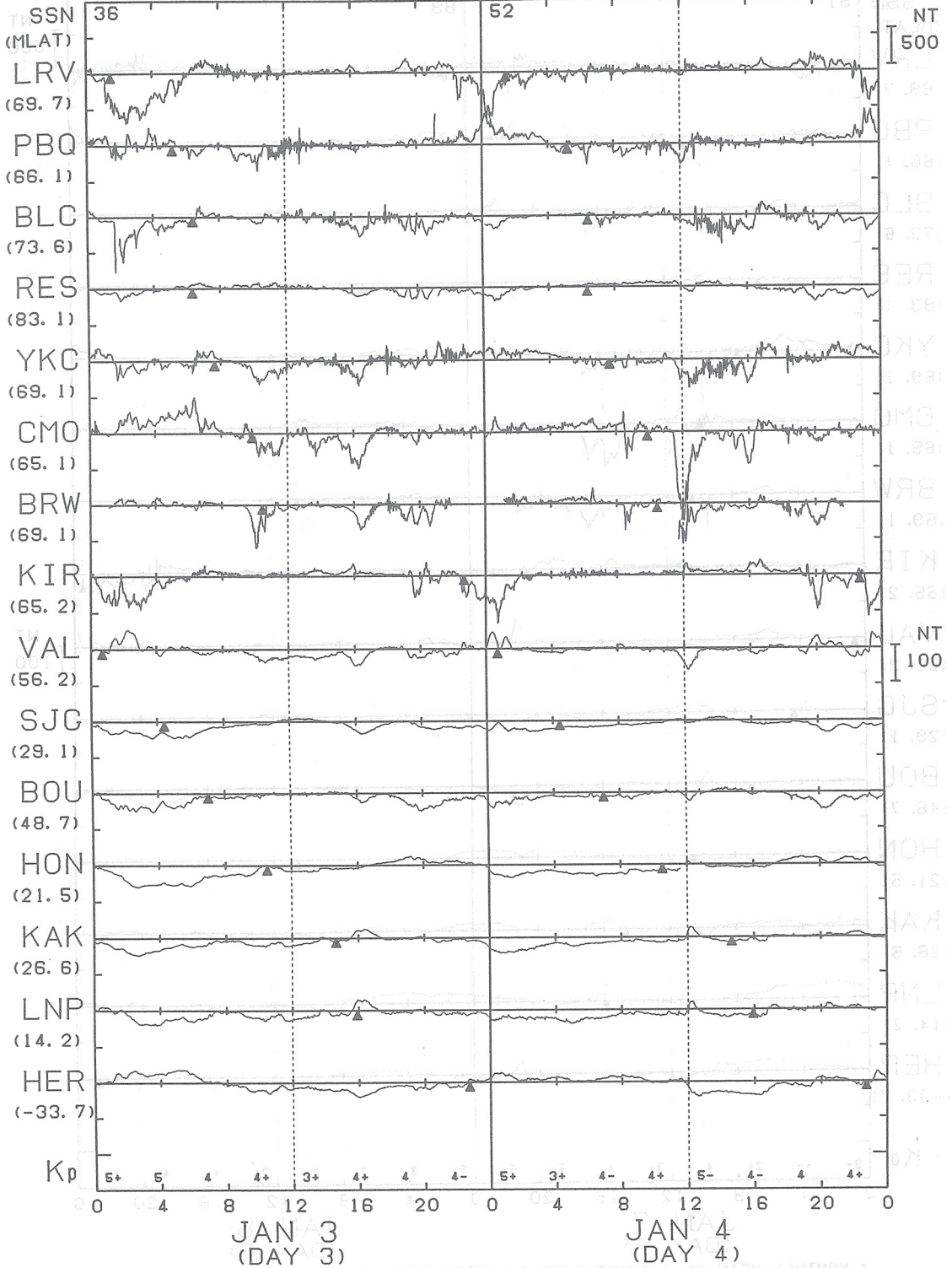
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT IMOS ▲ : LOCAL MIDNIGHT



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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

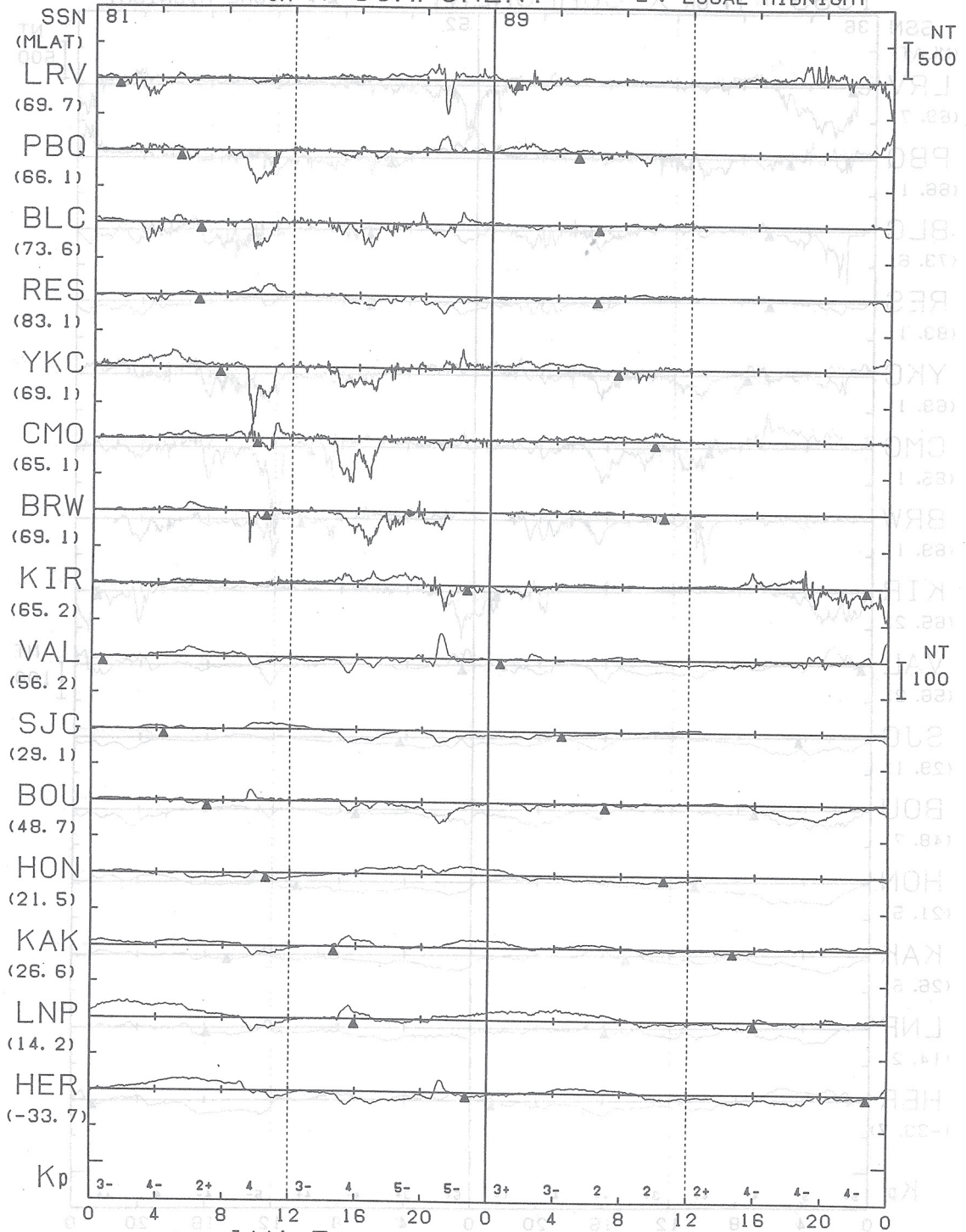


* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

KYOTO UNIV.

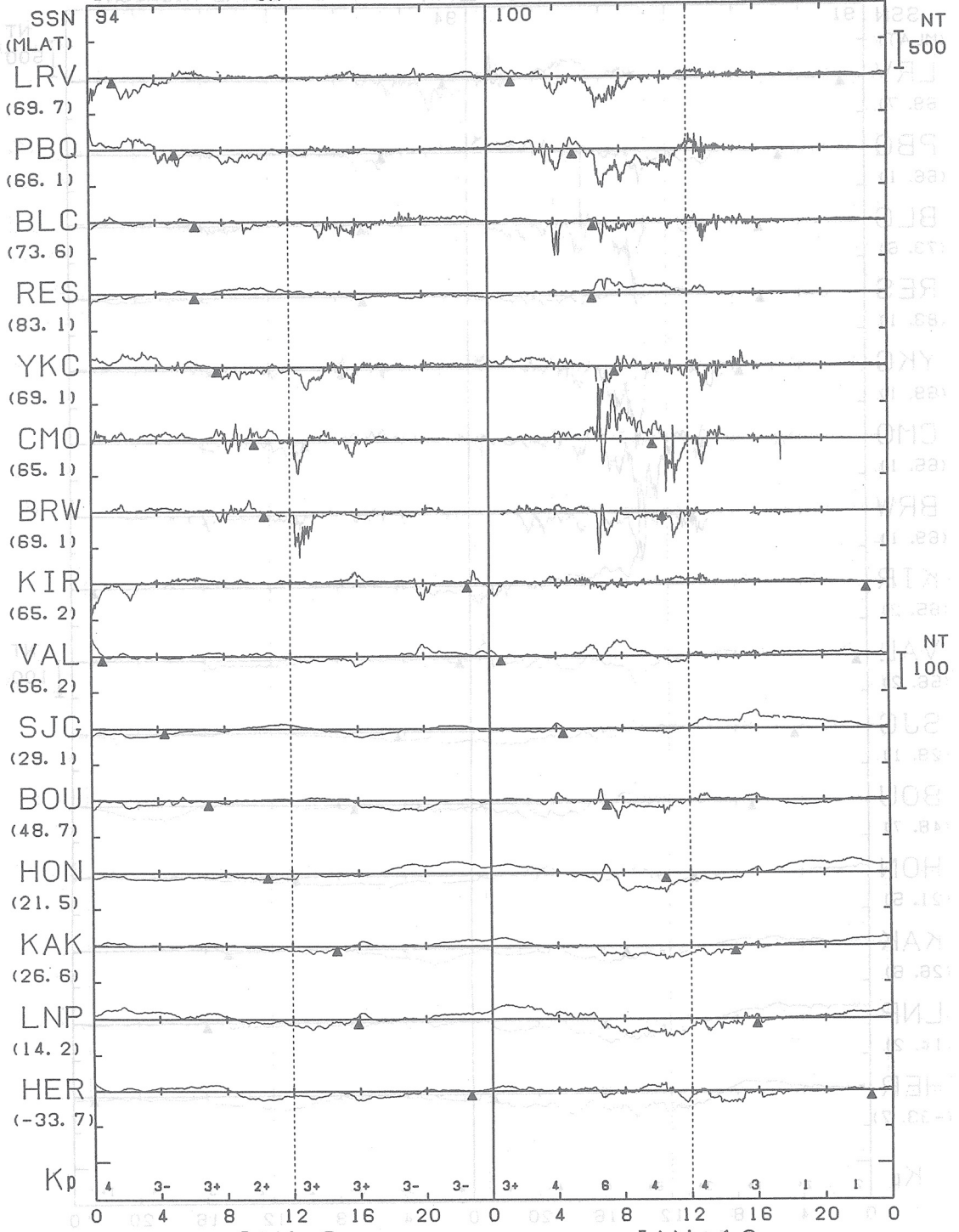
1993 H OR X-COMPONENT

▲ : LOCAL MIDNIGHT



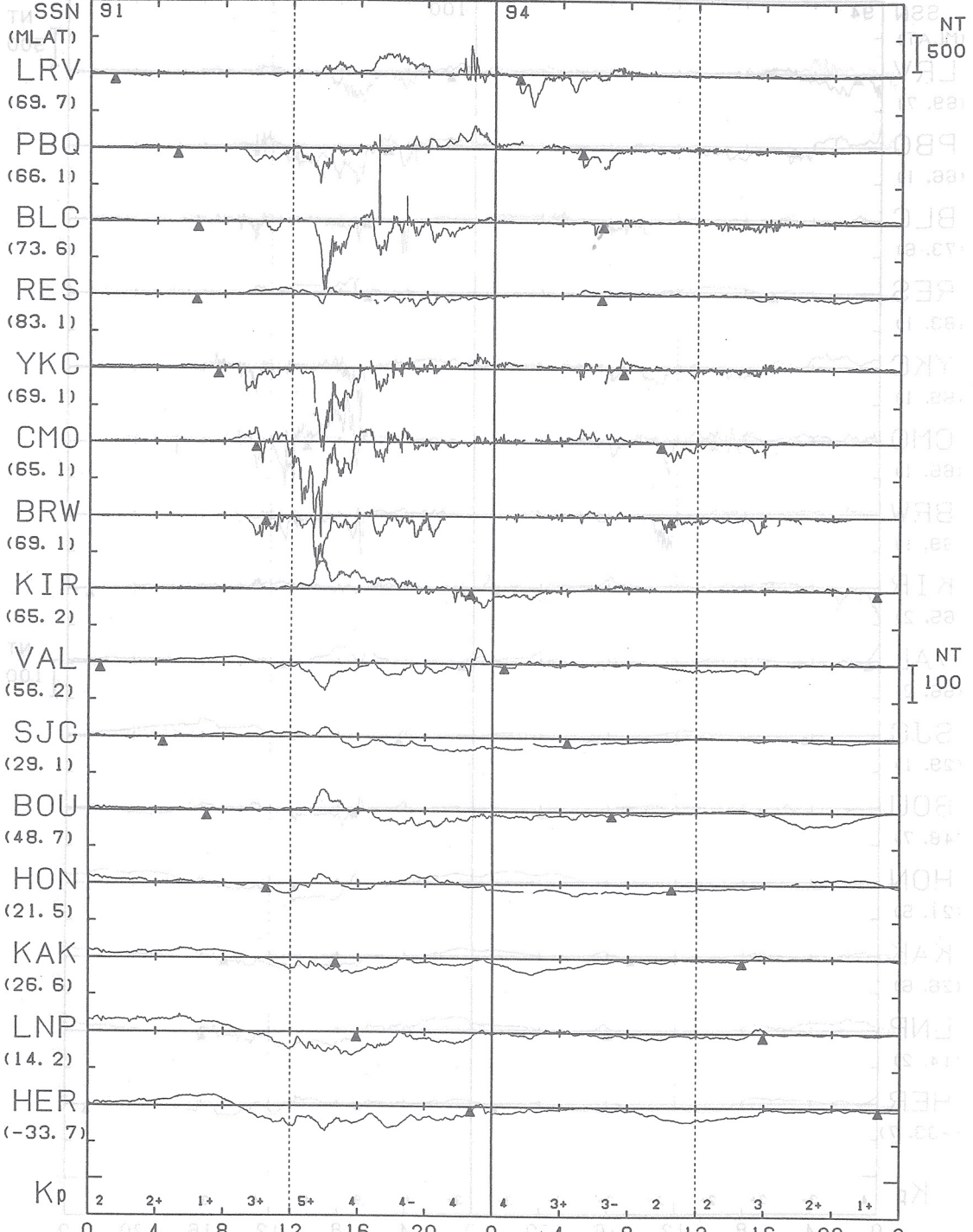
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 ** PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

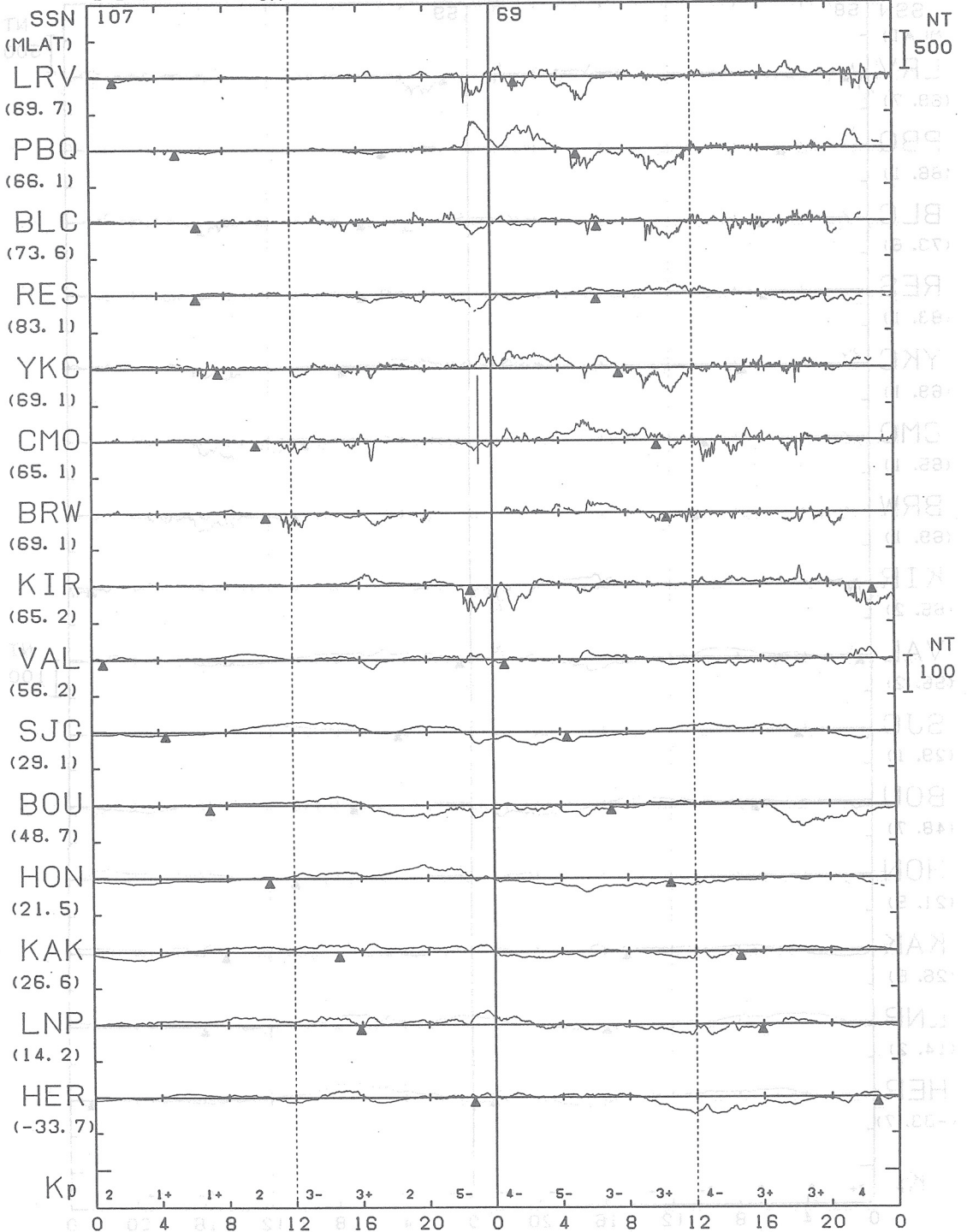


JAN 11
(DAY 11)

JAN 12
(DAY 12)

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

1993 H OR X-COMPONENT Δ : LOCAL MIDNIGHT

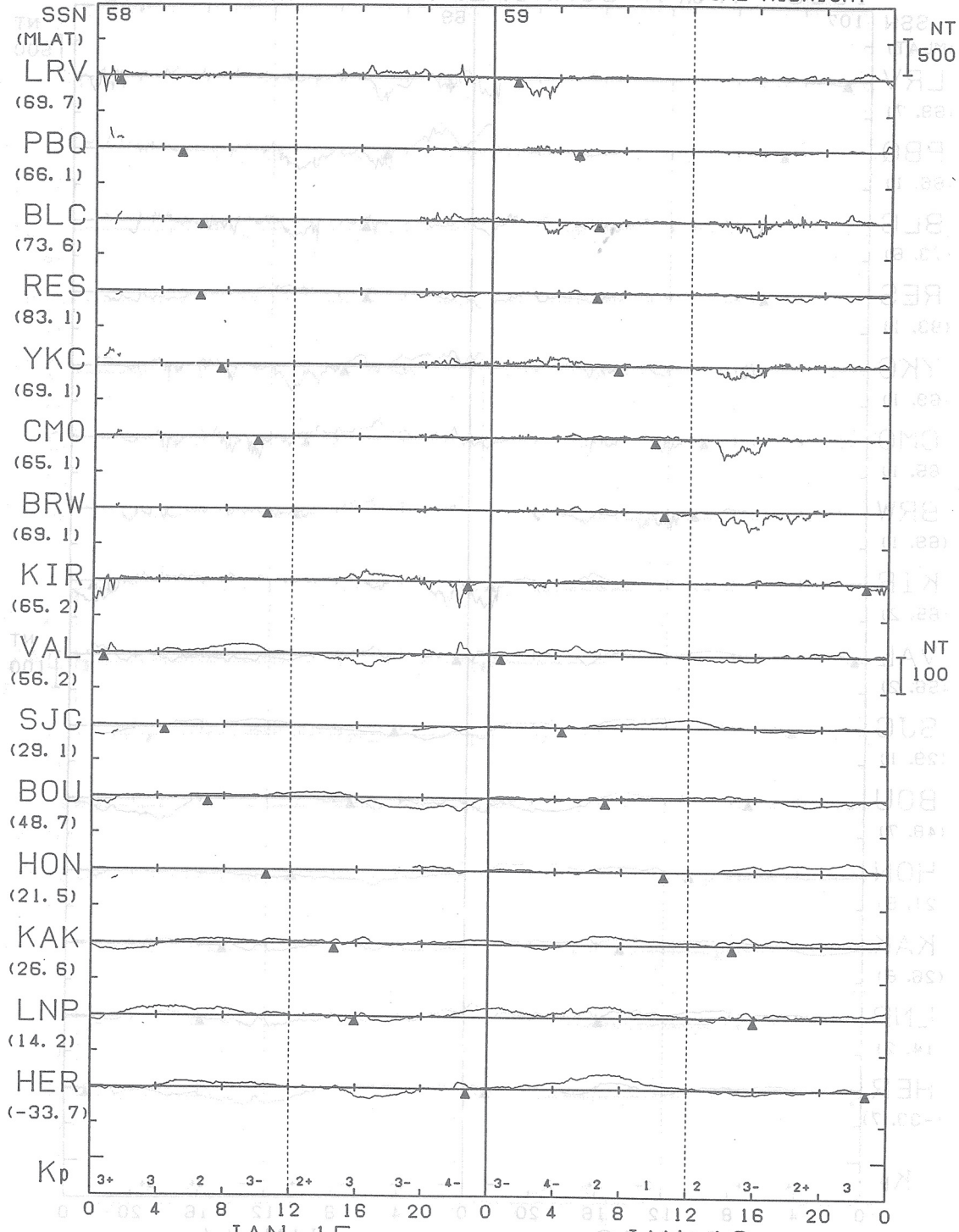


JAN 13
(DAY 13)

JAN 14
(DAY 14)

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

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

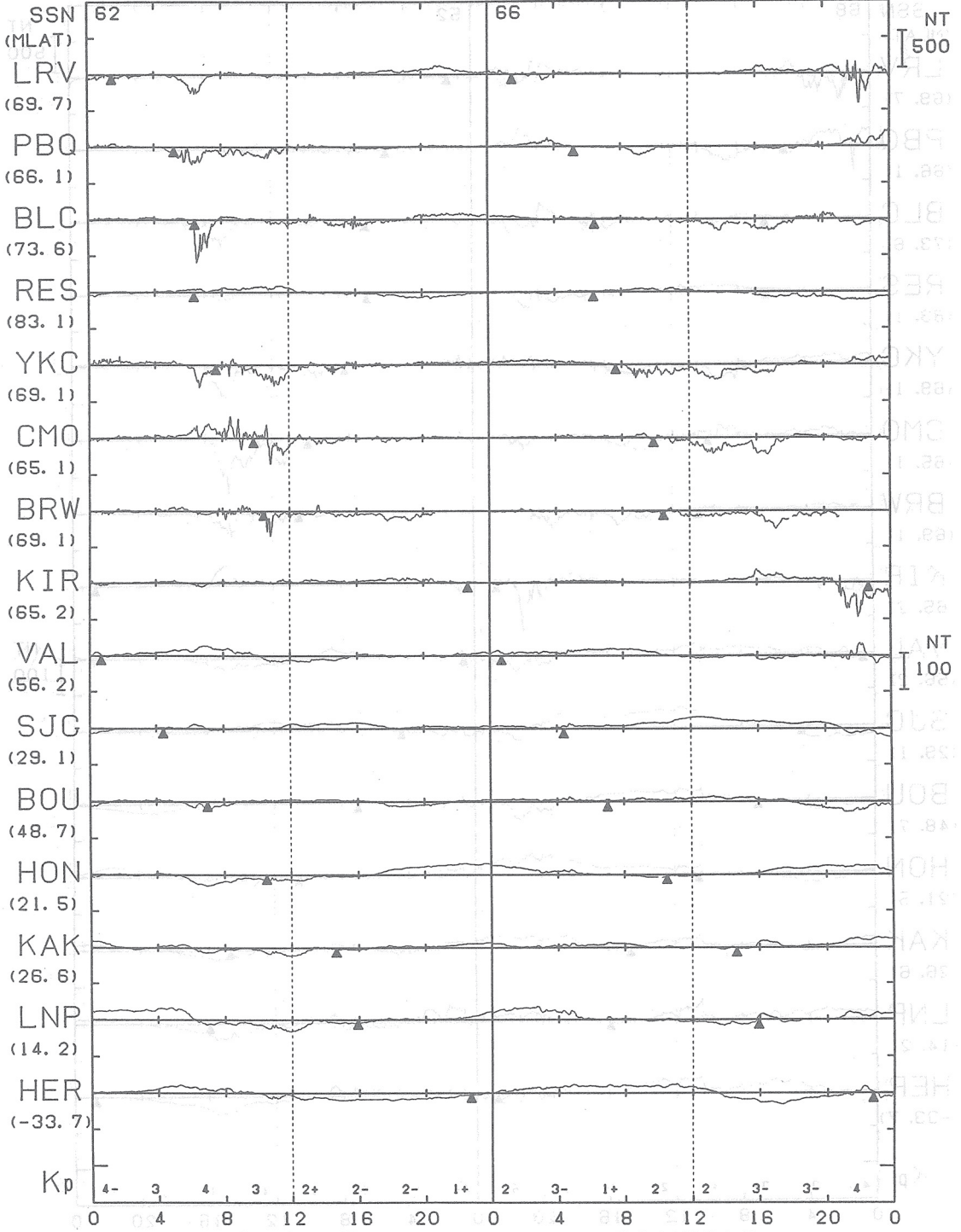


JANA 15
(DAY 15)

JANA 16
(DAY 16)

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

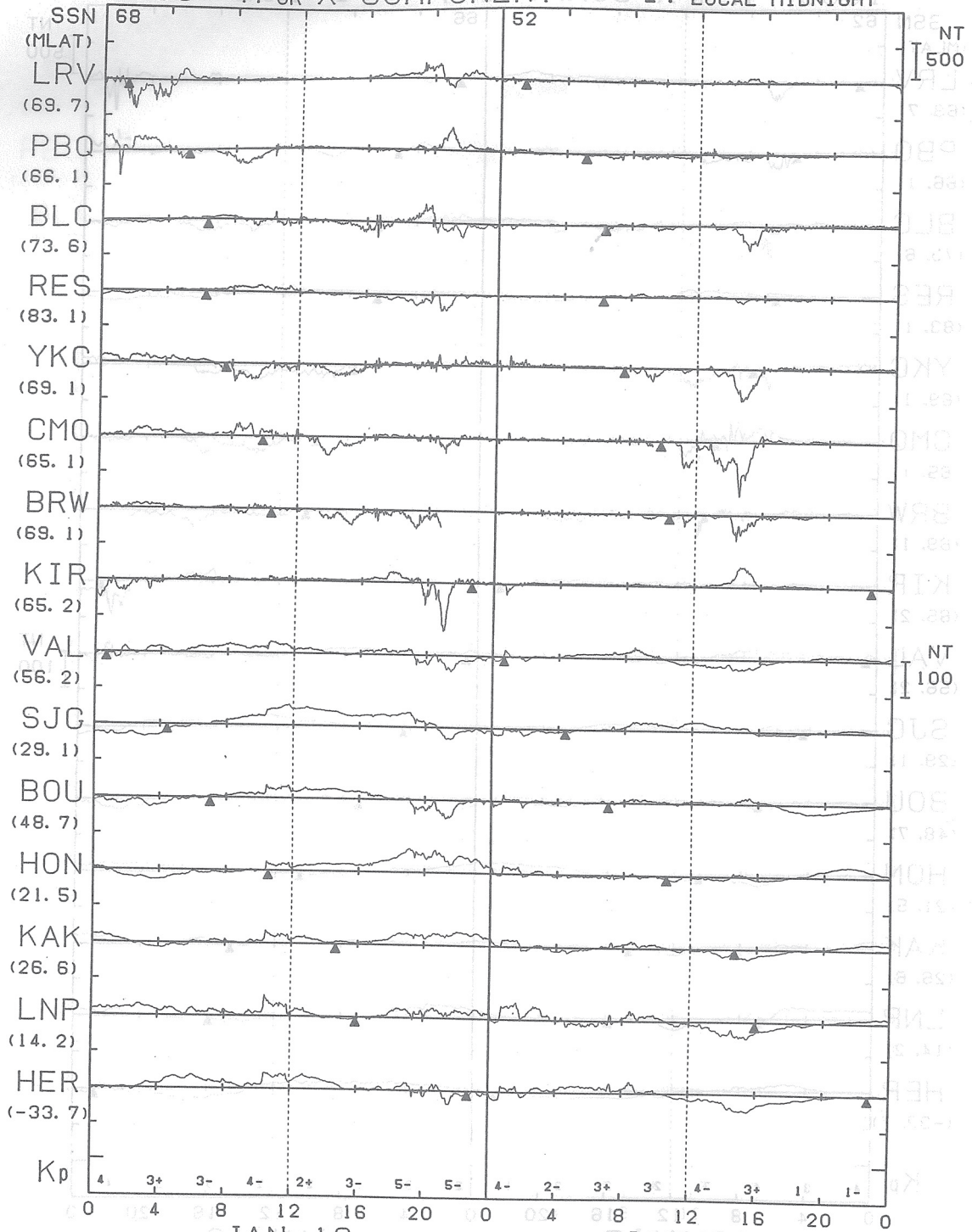
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



JAN 17 (DAY 17) JAN 18 (DAY 18)

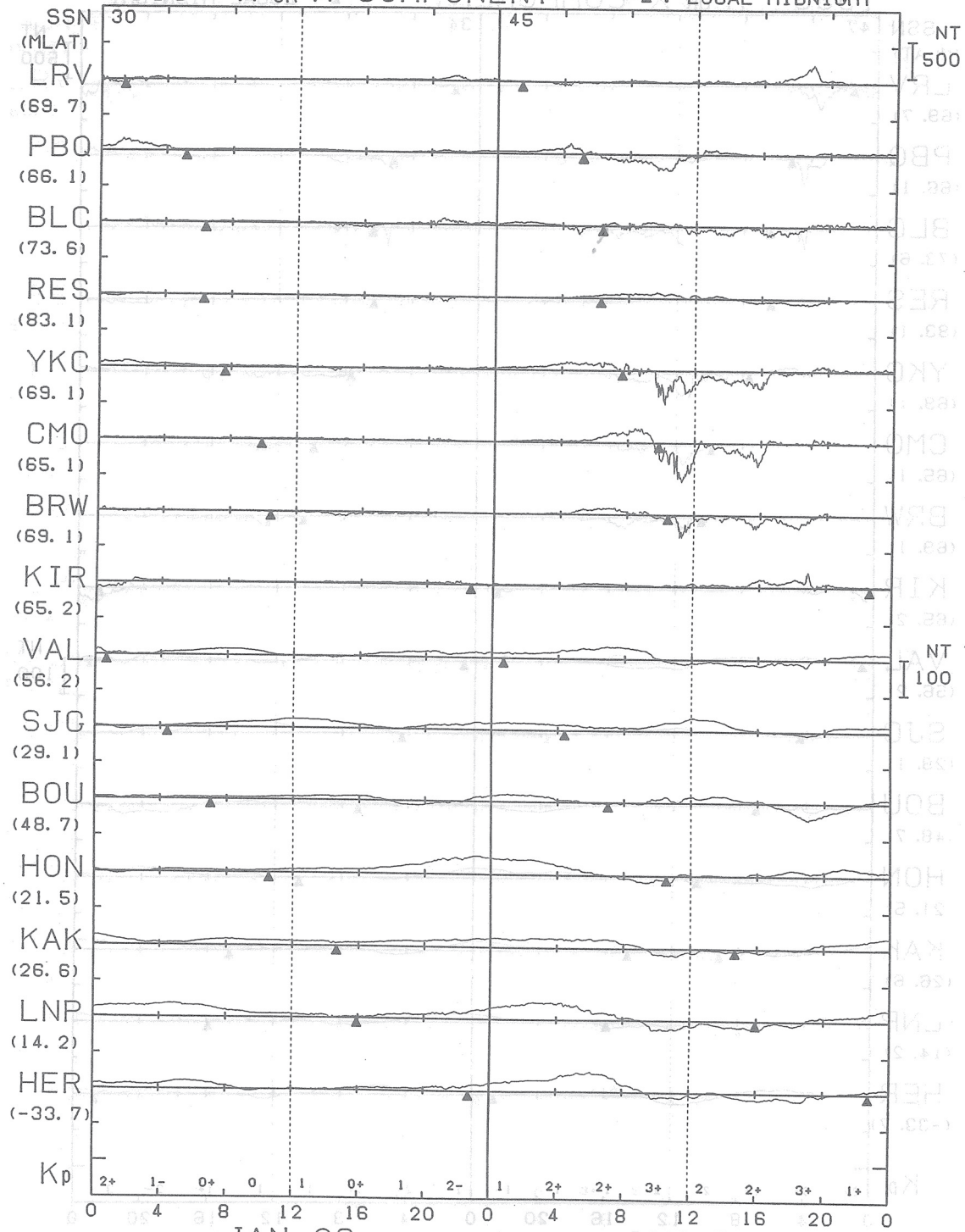
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT LOCAL MIDNIGHT



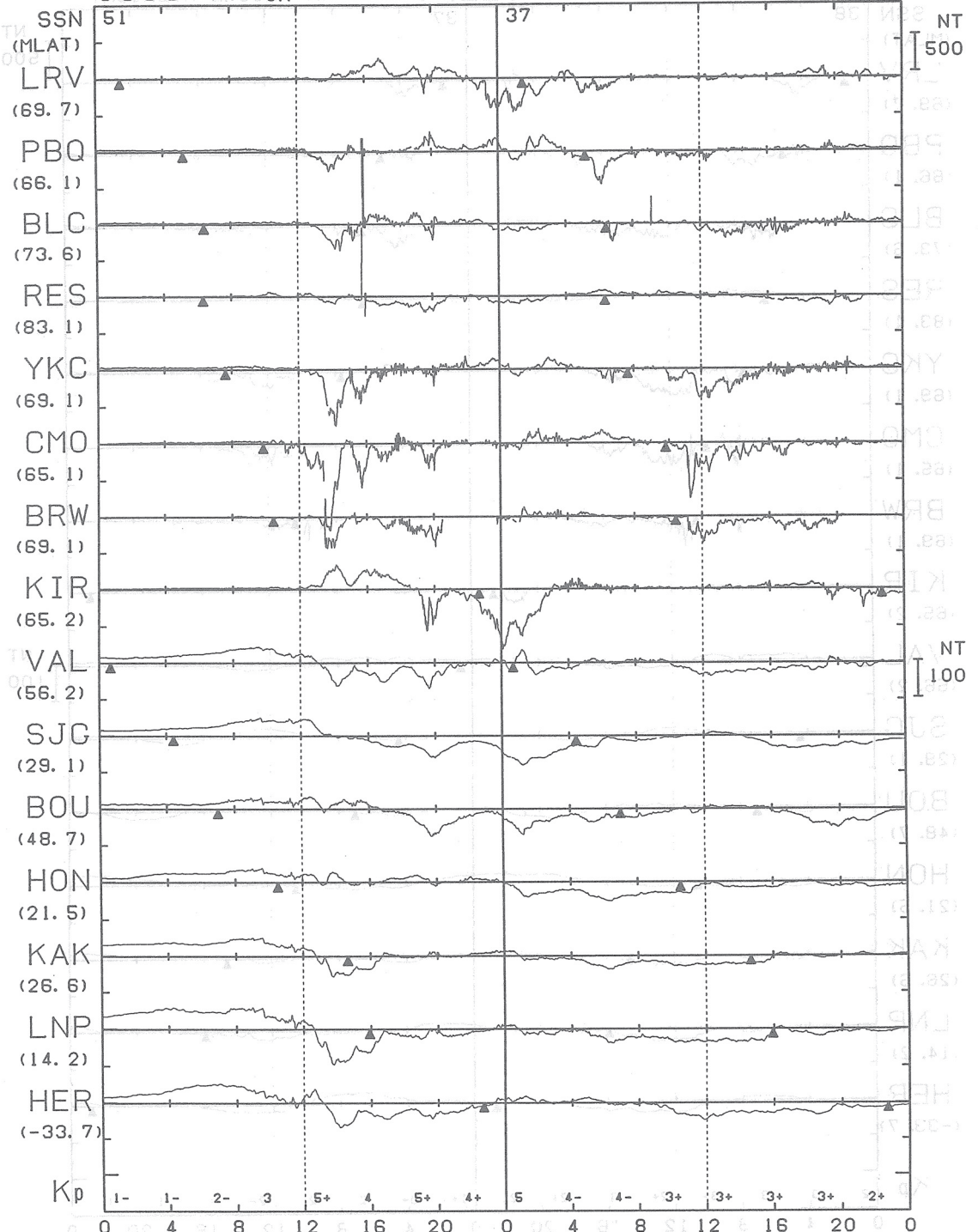
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 * MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

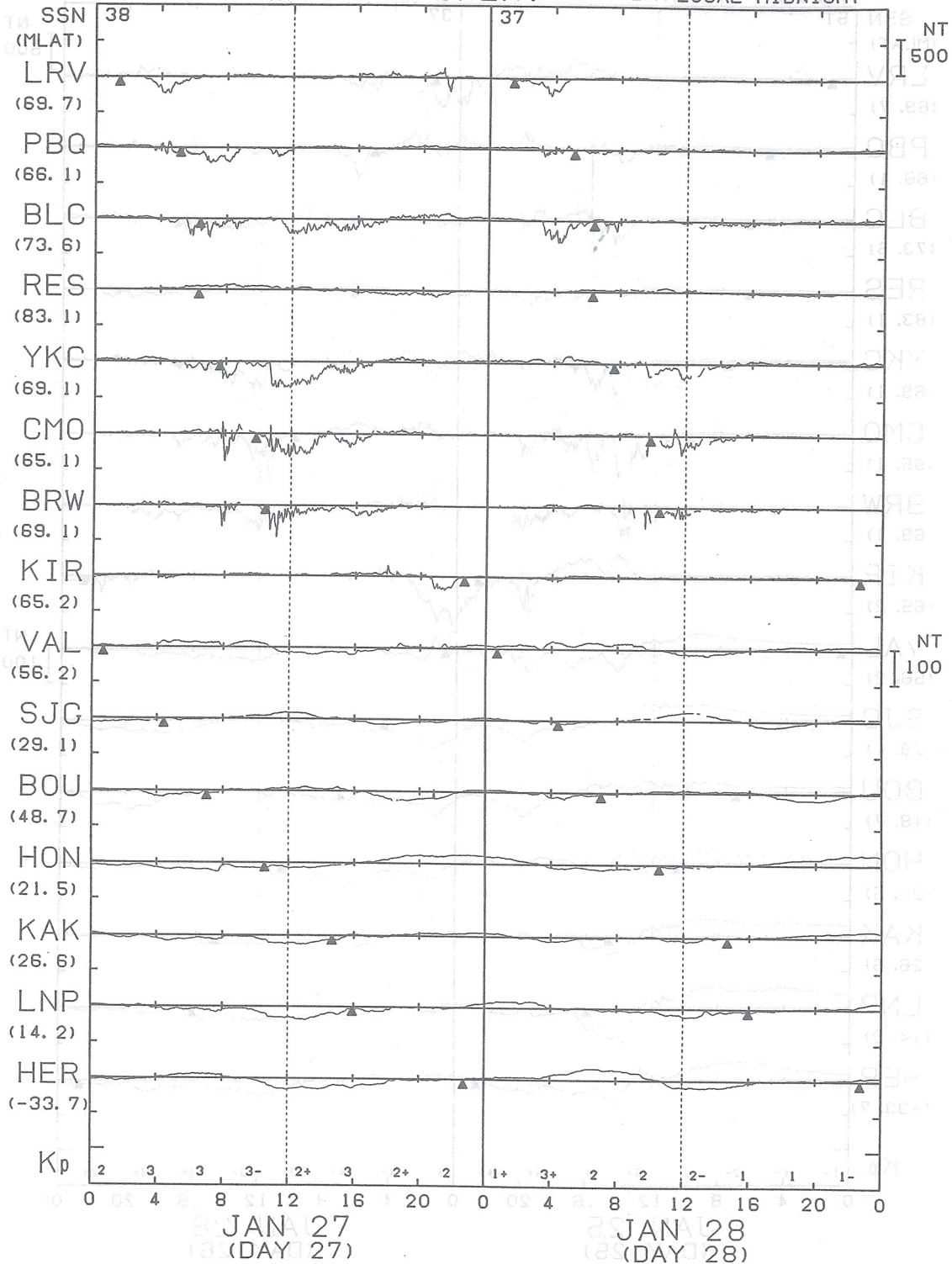
1993 H OR X-COMPONENT LOCAL MIDNIGHT



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

KYOTO UNIV.

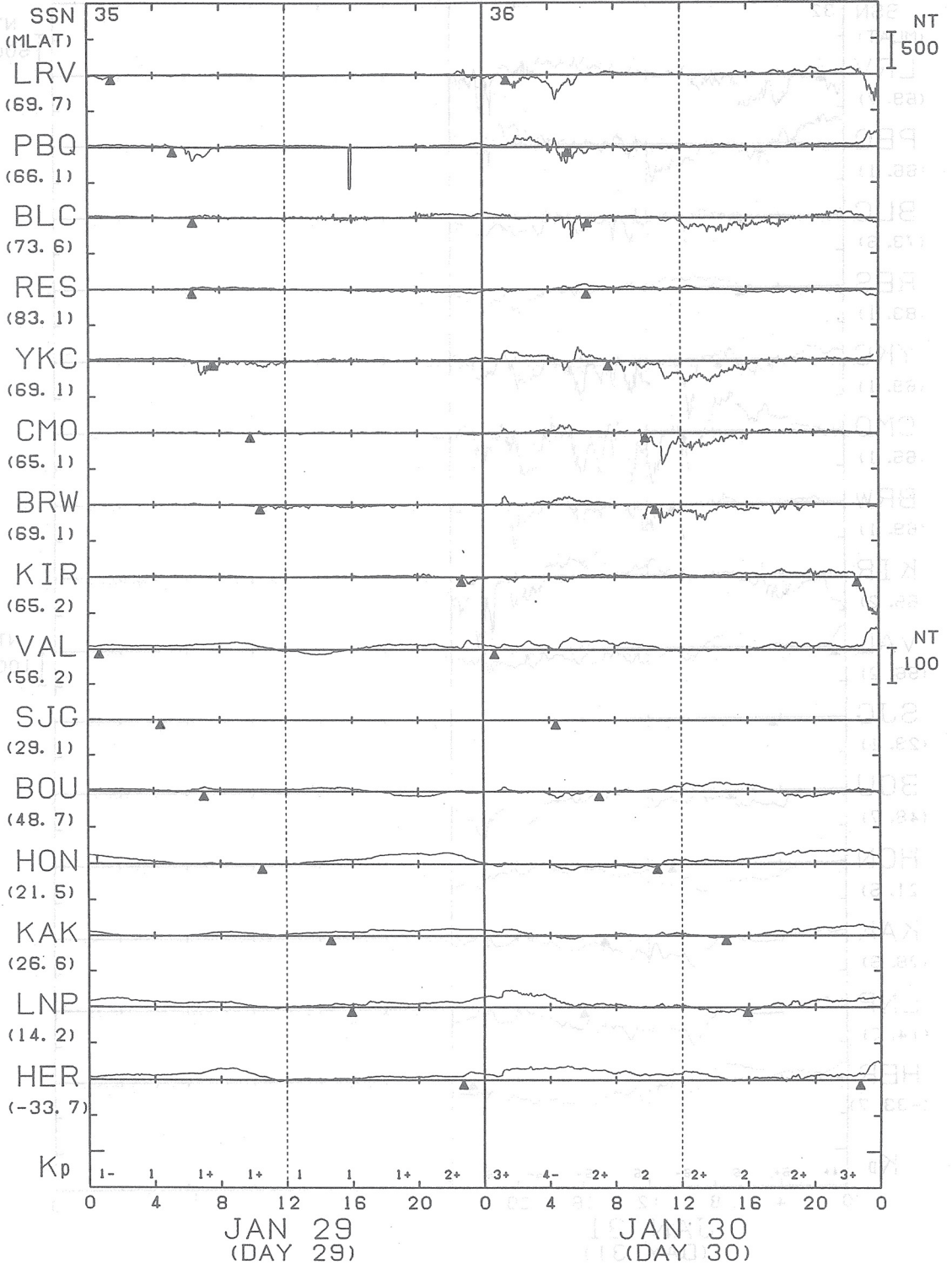
1993 H OR X-COMPONENT LOCAL MIDNIGHT



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

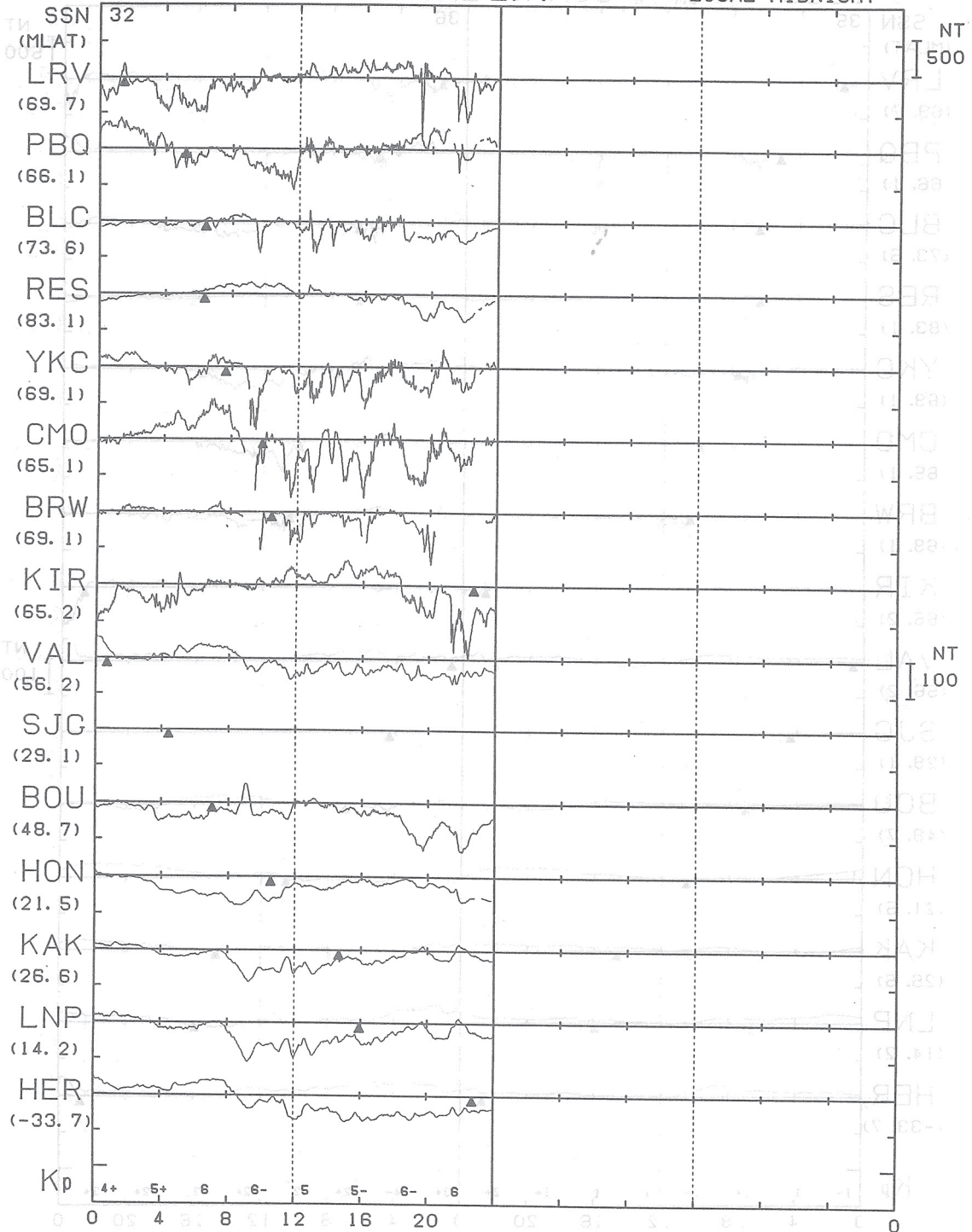
KYOTO UNIV.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



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

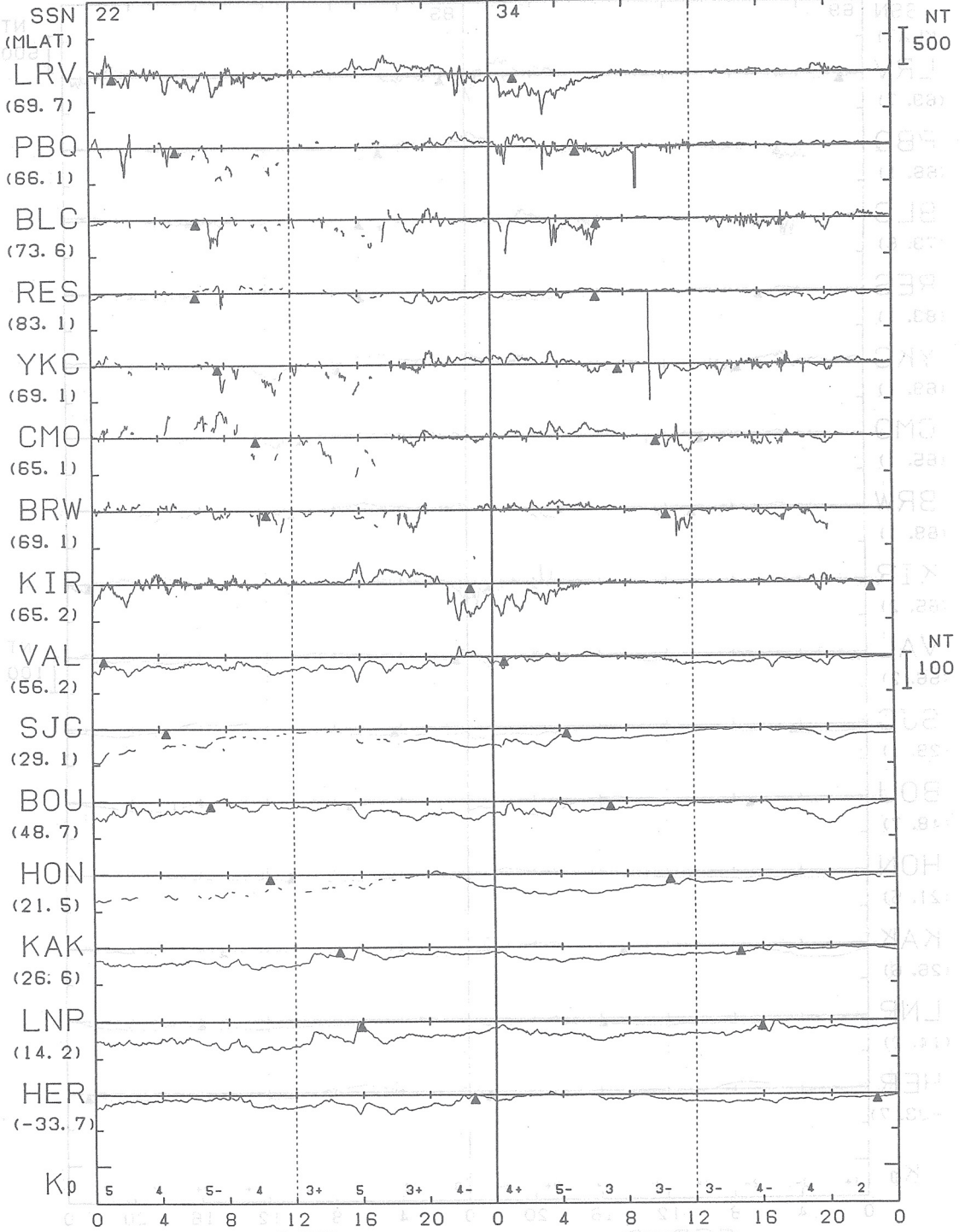
1993 H OR X-COMPONENT M00-▲ : LOCAL MIDNIGHT



JAN 31 (DAY 31) JAN 31 (DAY 31)

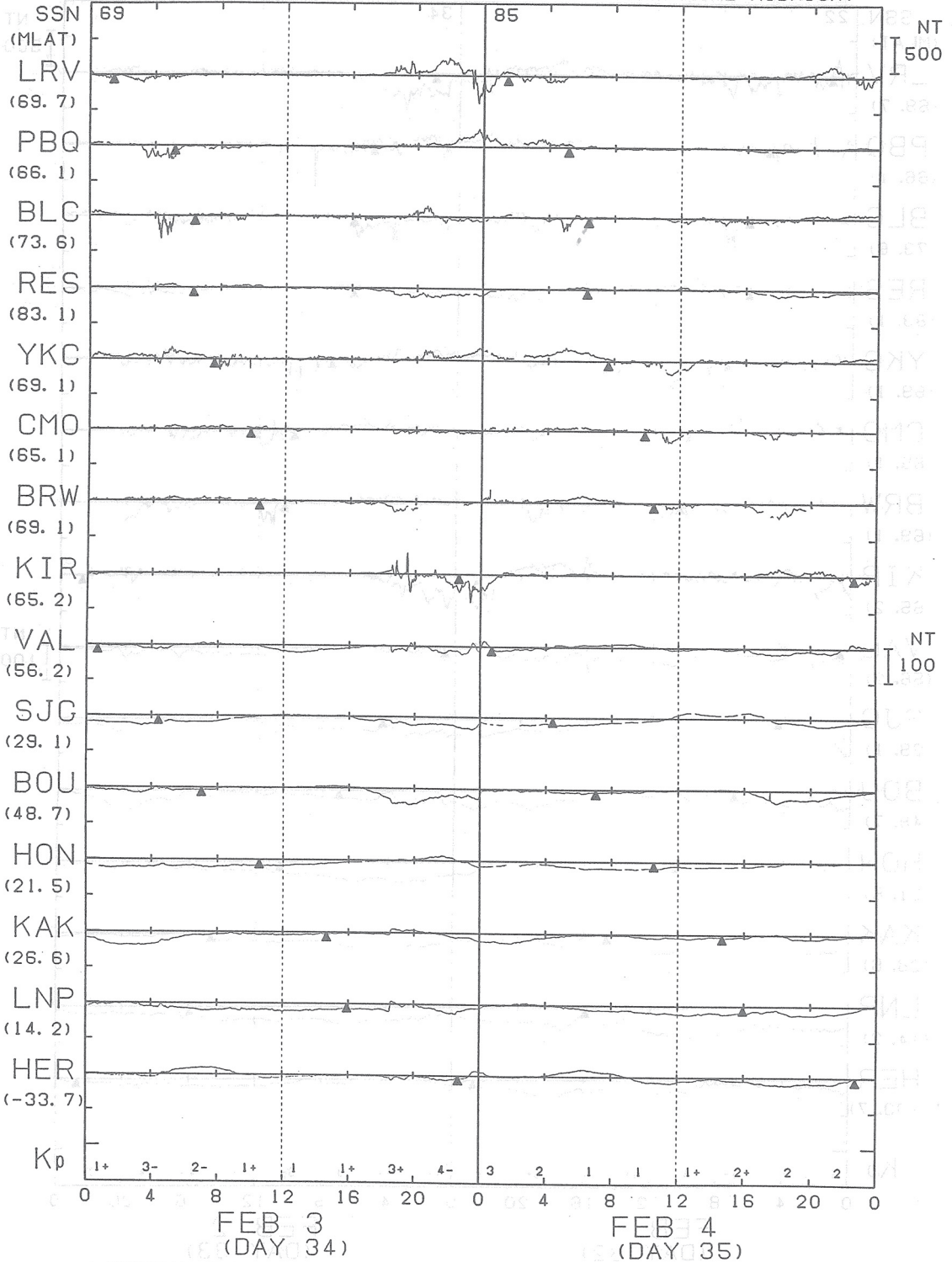
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 ** PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH KYOTO UNIV.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



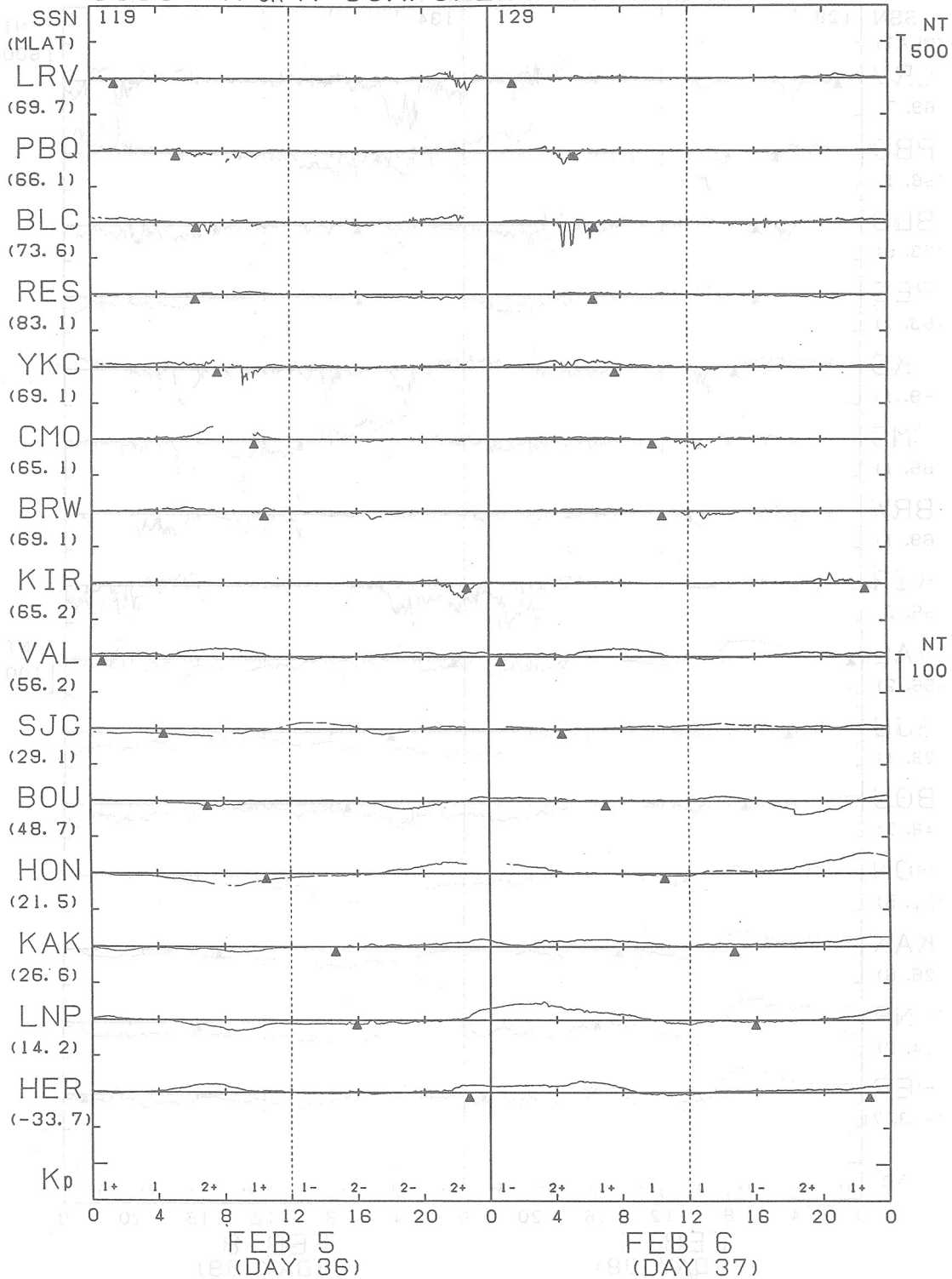
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



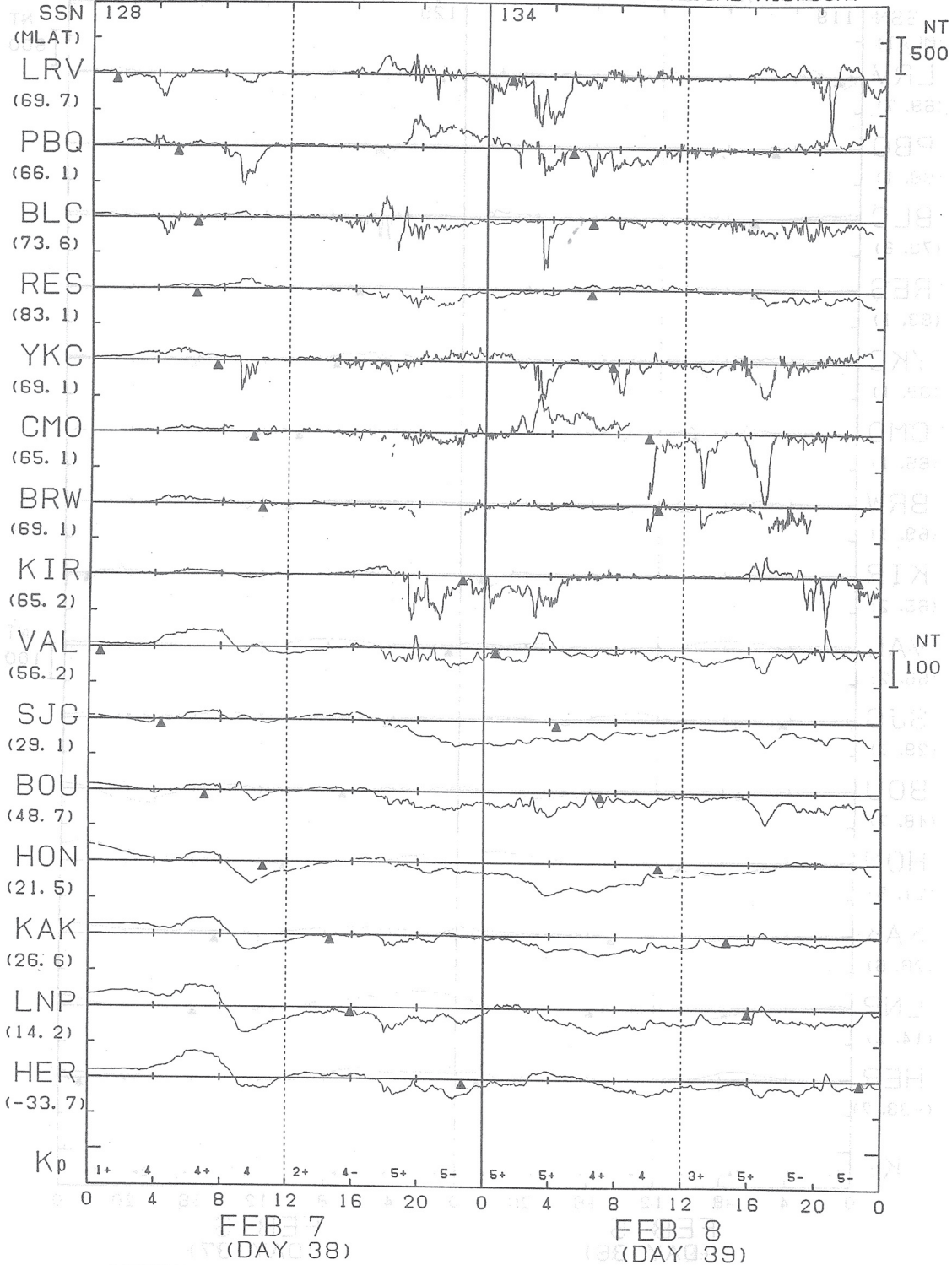
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 ** PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

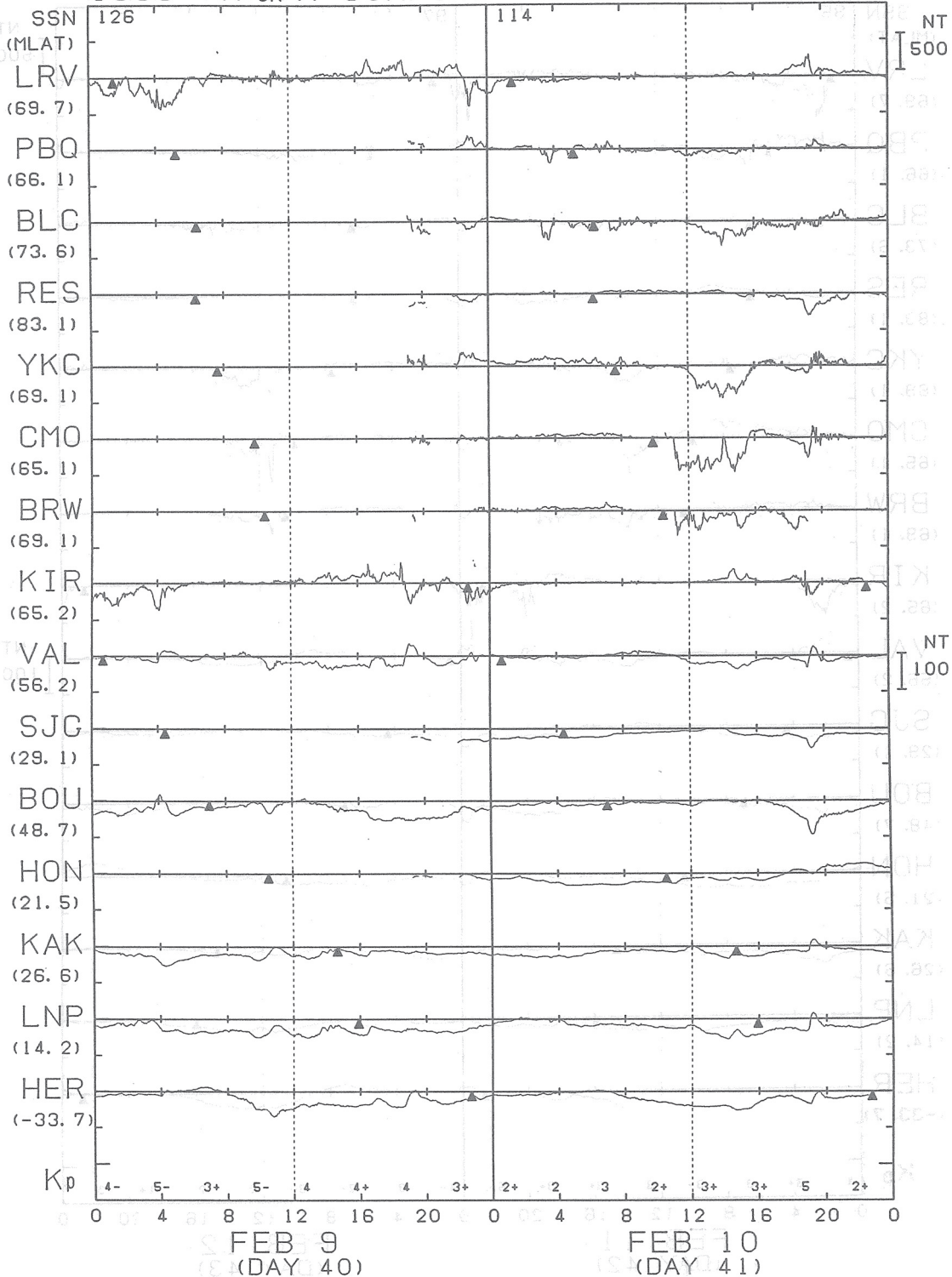
1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT



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

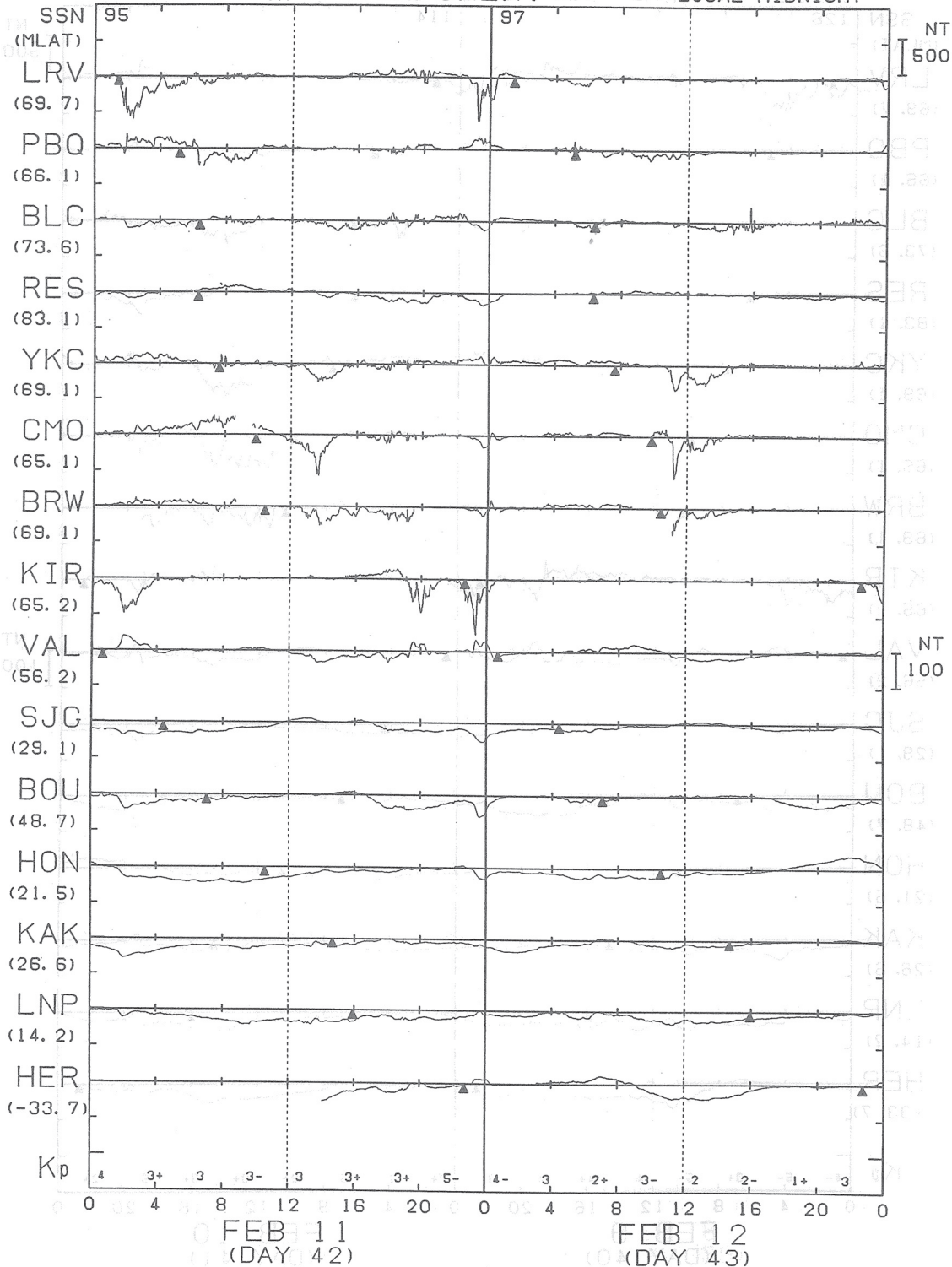
KYOTO UNIV.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



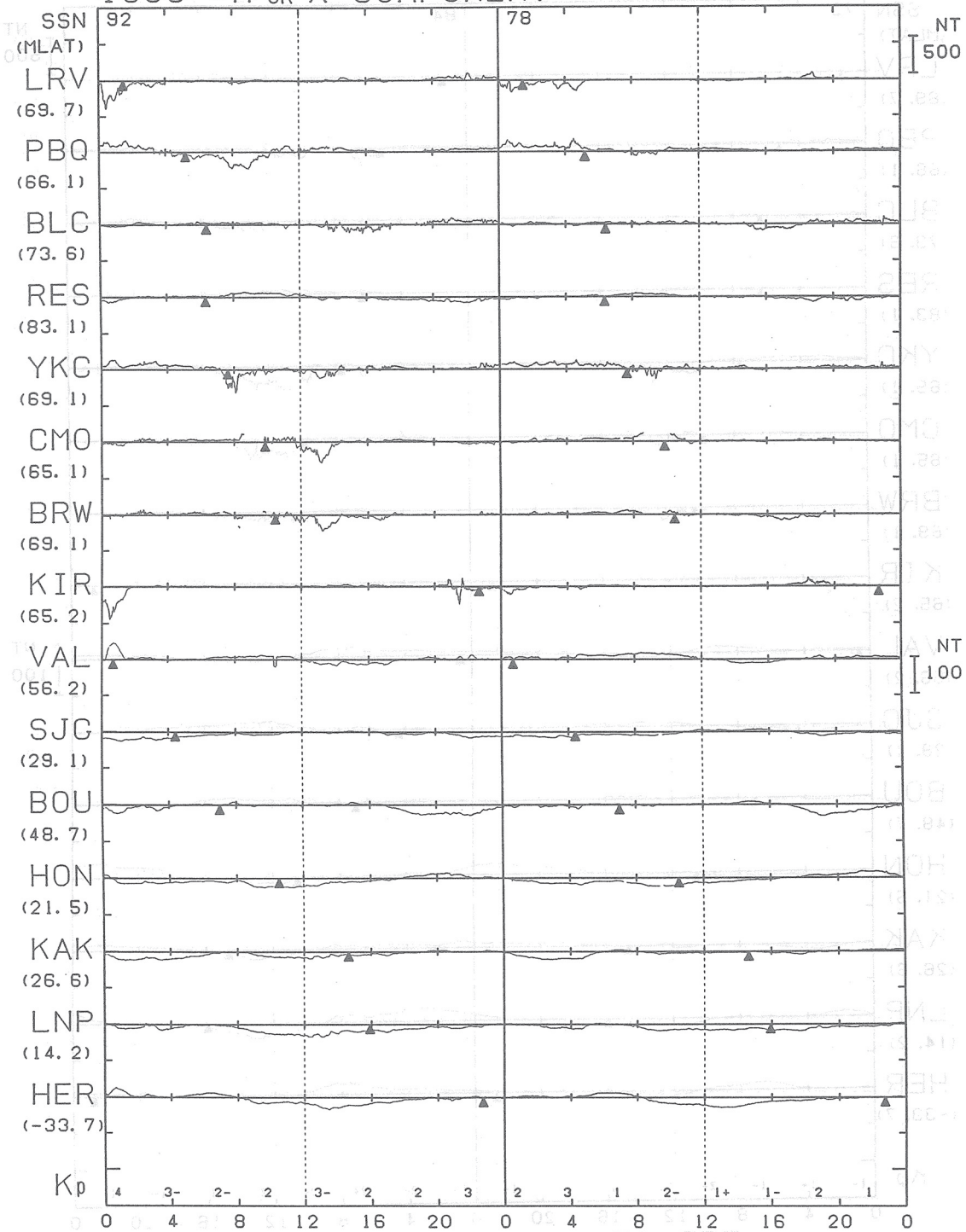
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH KYOTO UNIV.

1993 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.

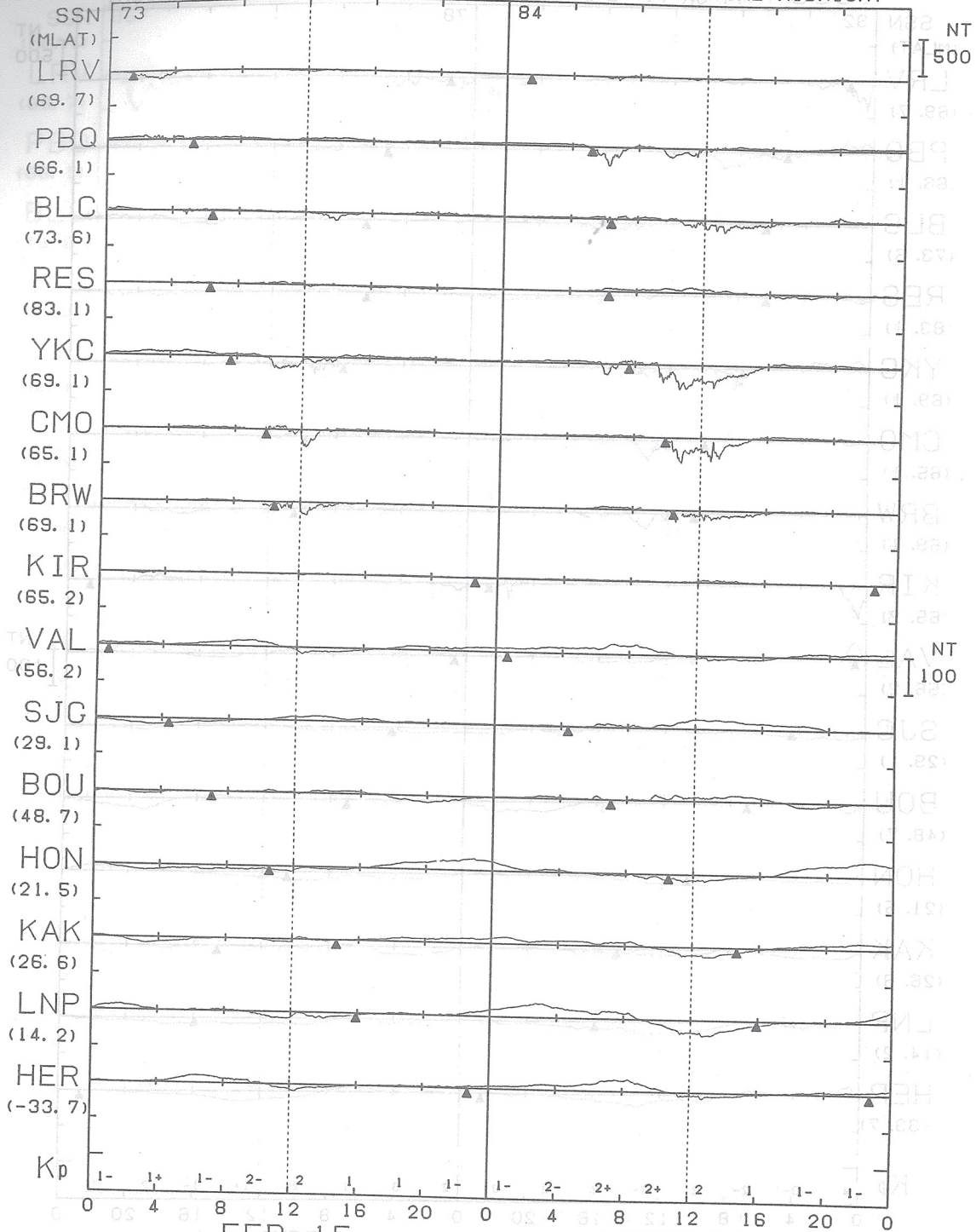
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



FEB 13 (DAY 44) FEB 14 (DAY 45)

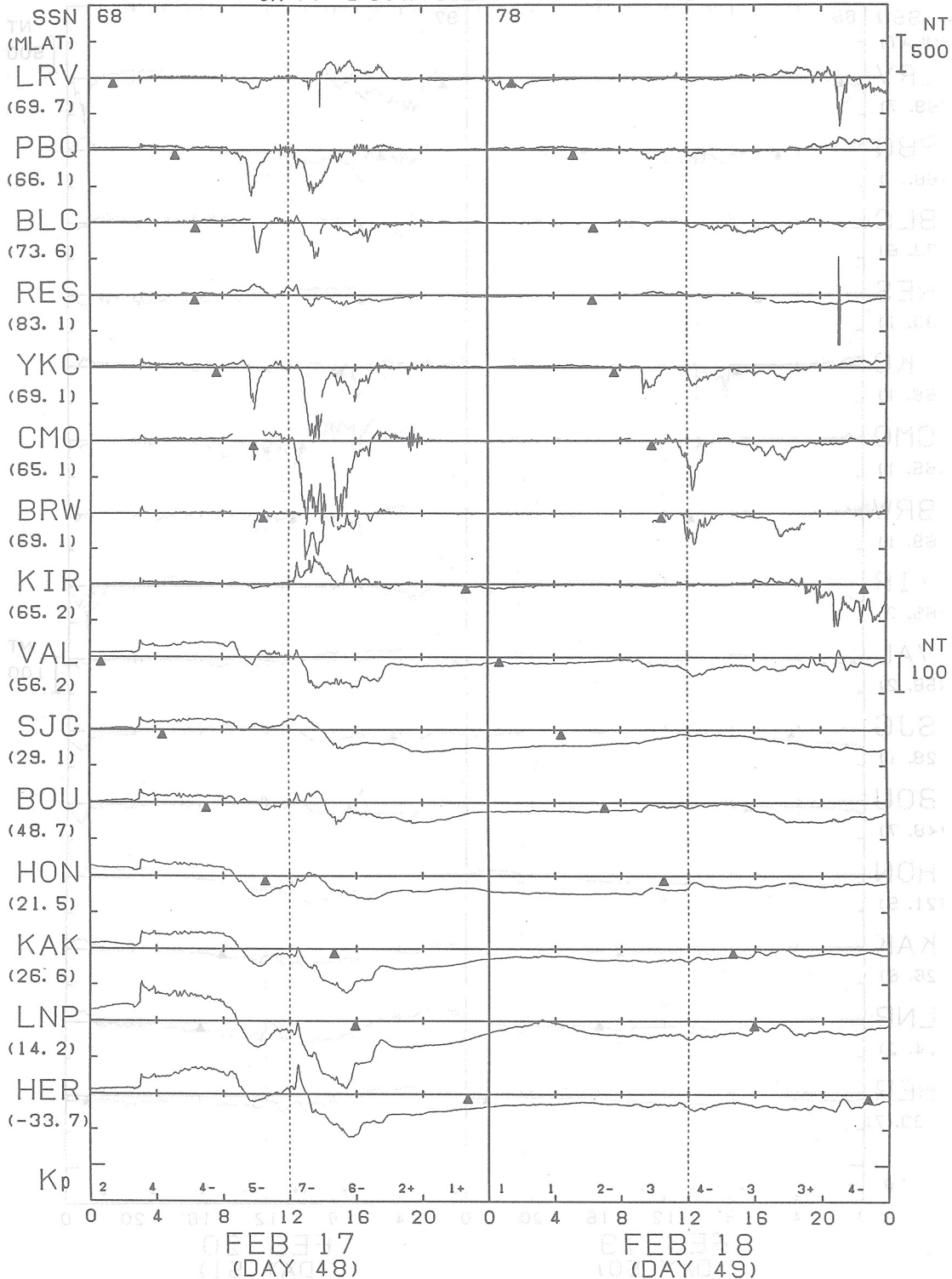
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT —▲ : LOCAL MIDNIGHT



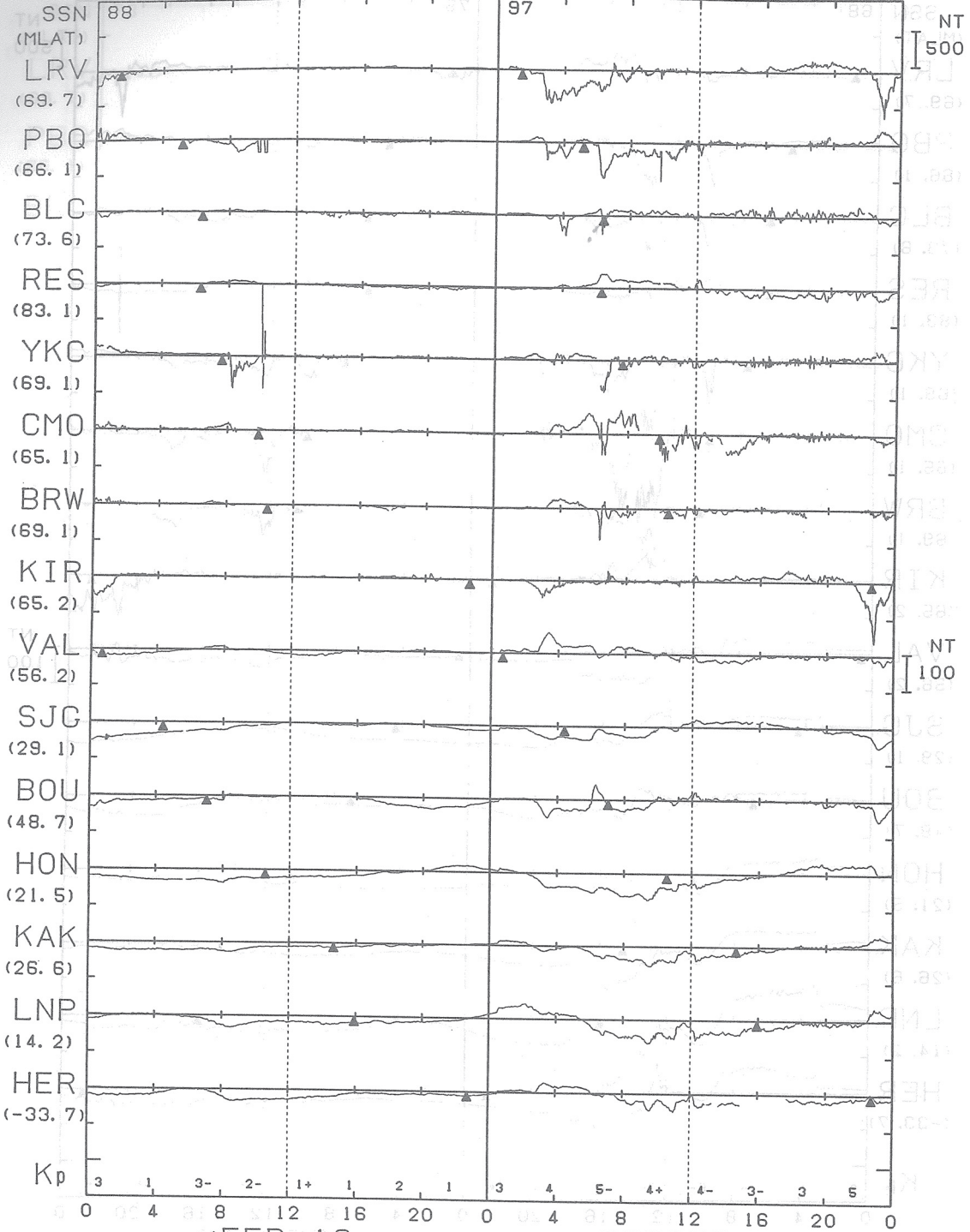
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 ** PROMPT DATA ARE INCLUDED
 ** ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 * MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 ** PROMPT DATA ARE INCLUDED
 ** ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT

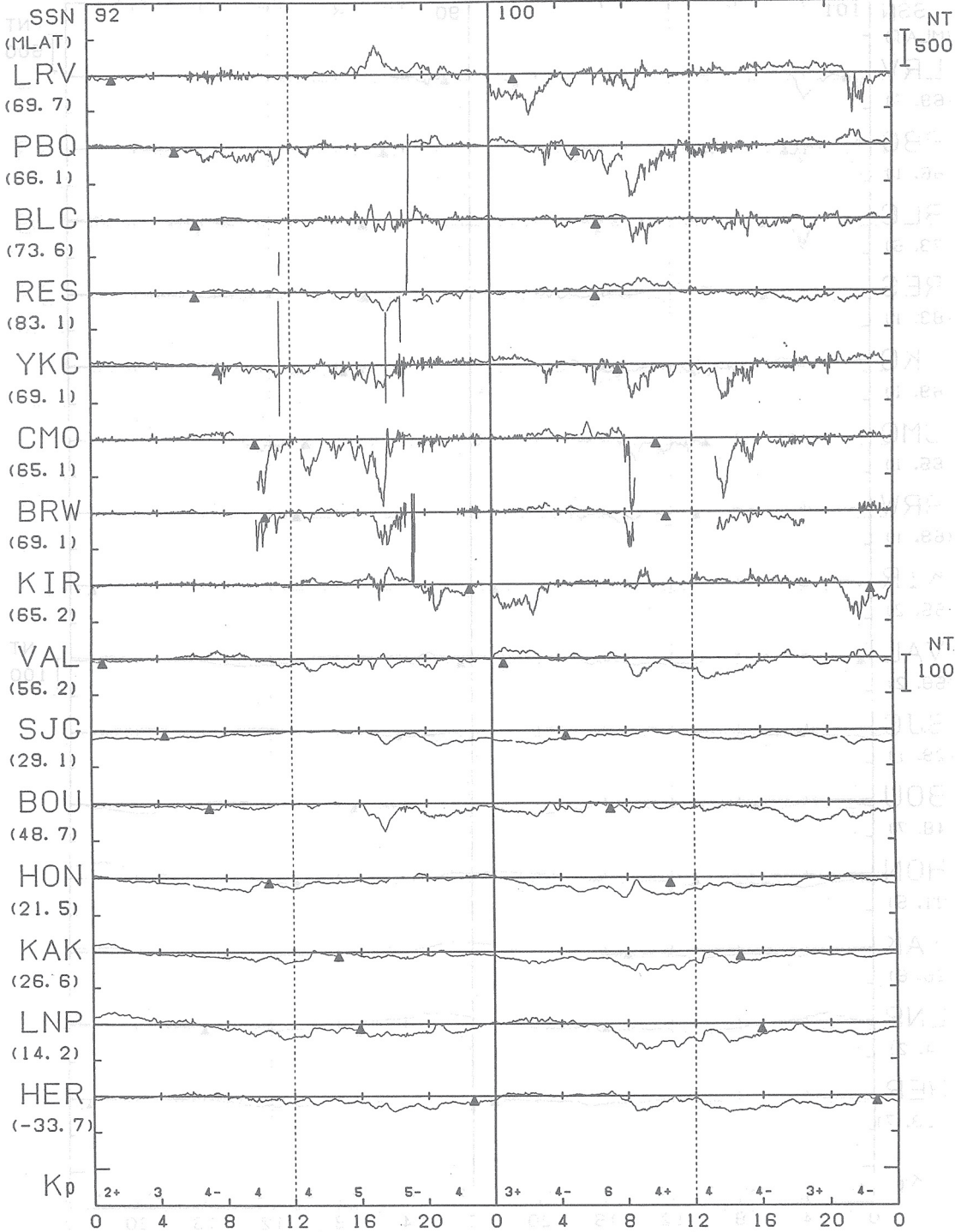


FEB 19 (DAY 50)

FEB 20 (DAY 51)

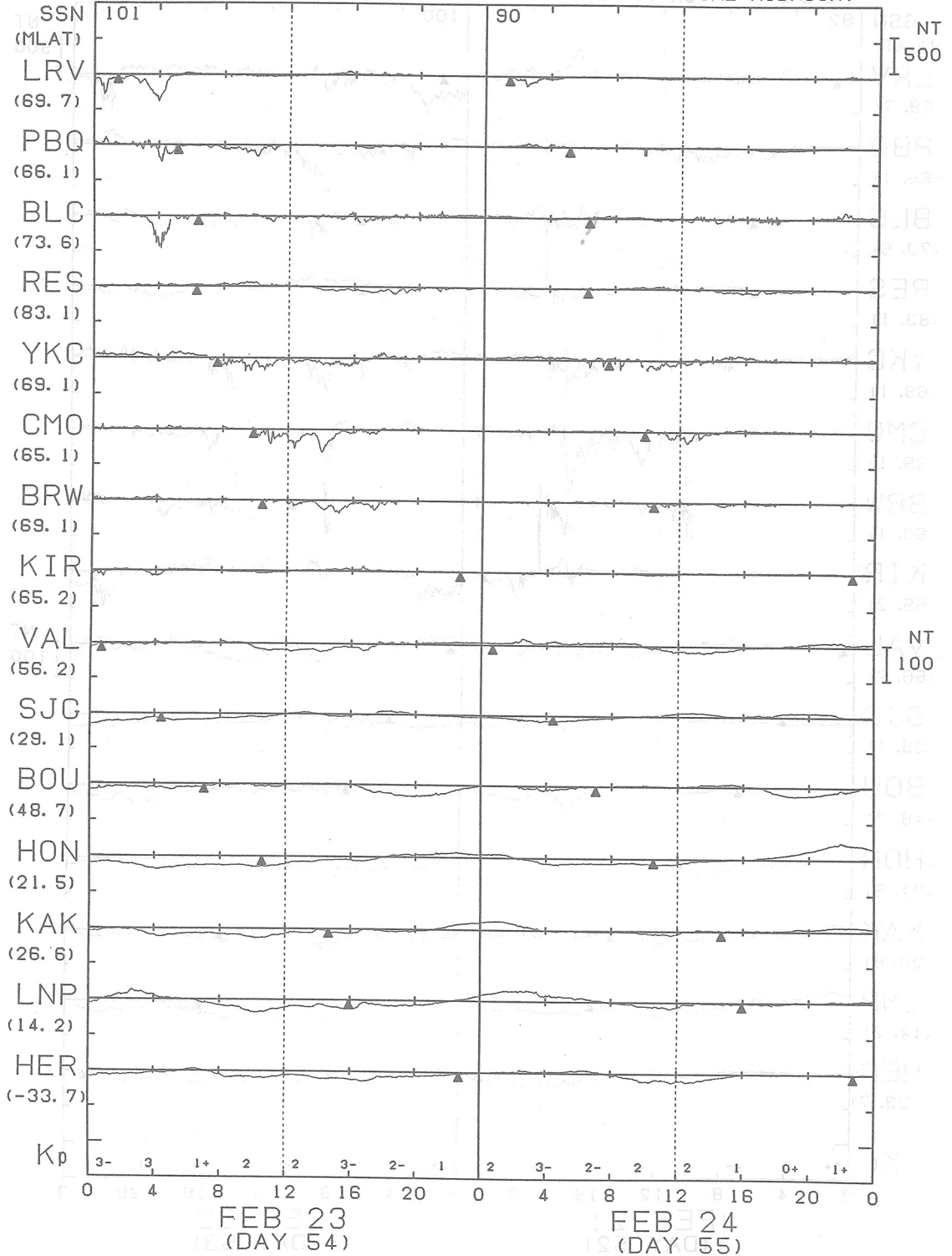
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 ** PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT



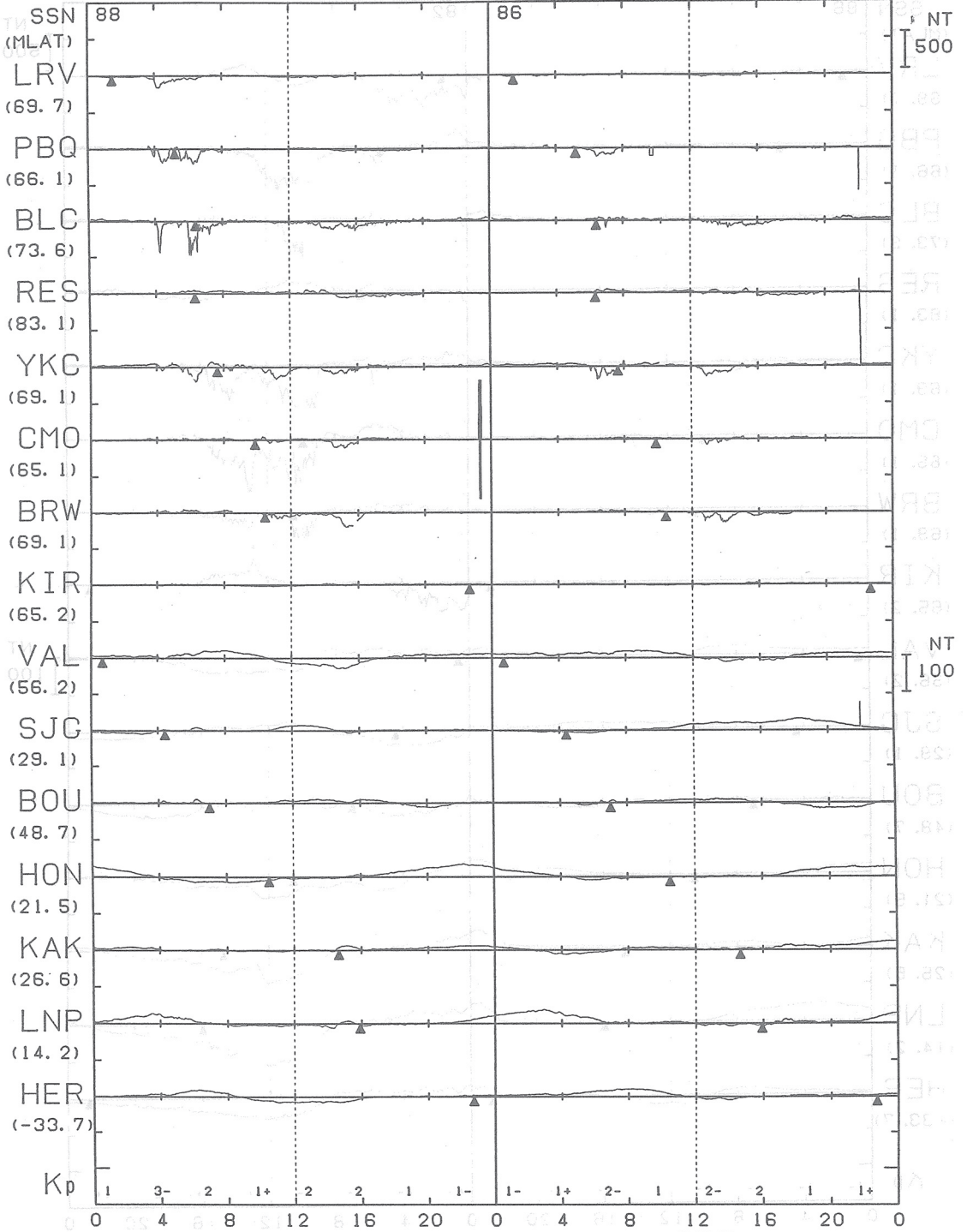
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 ** PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



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

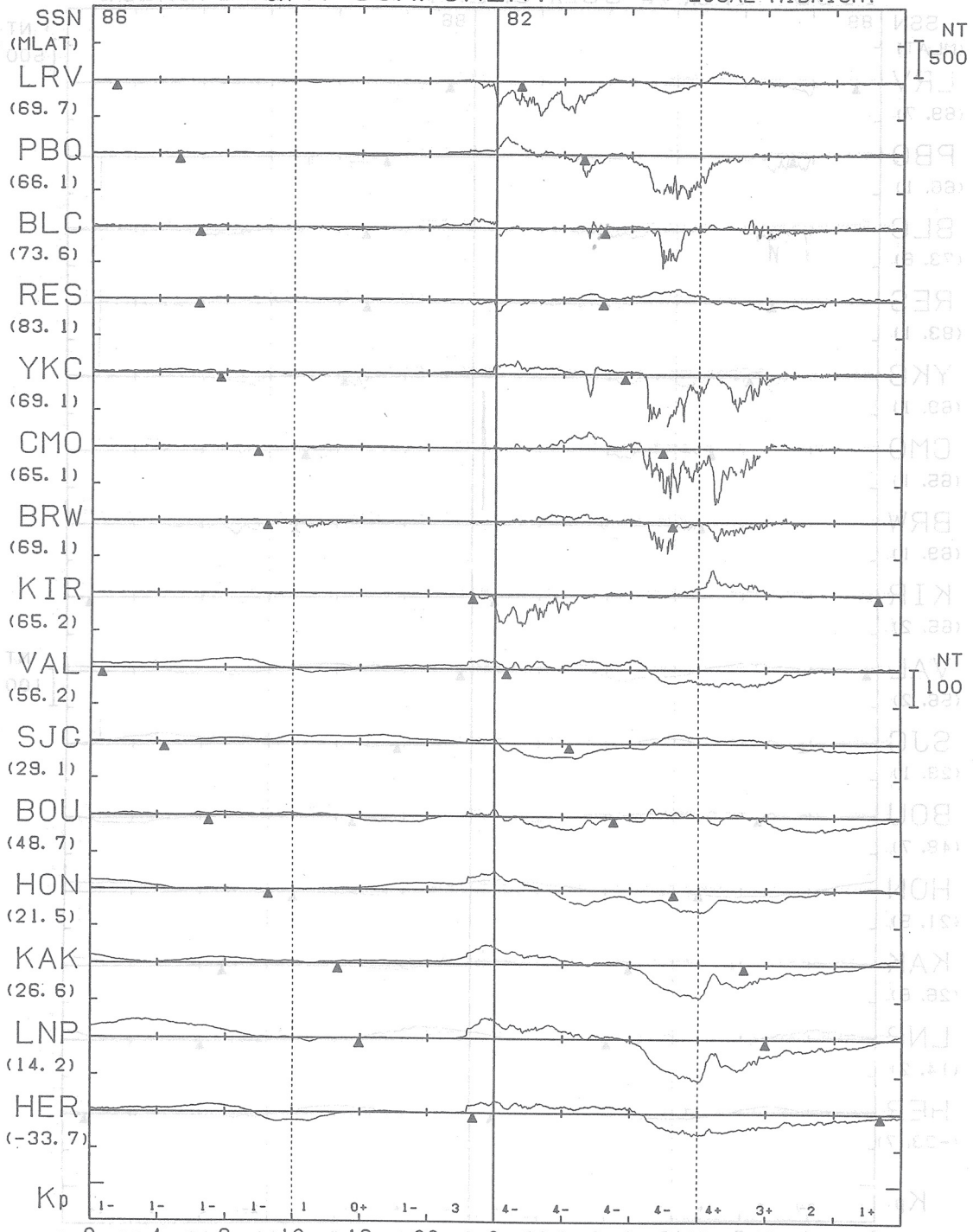
1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



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.

1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT

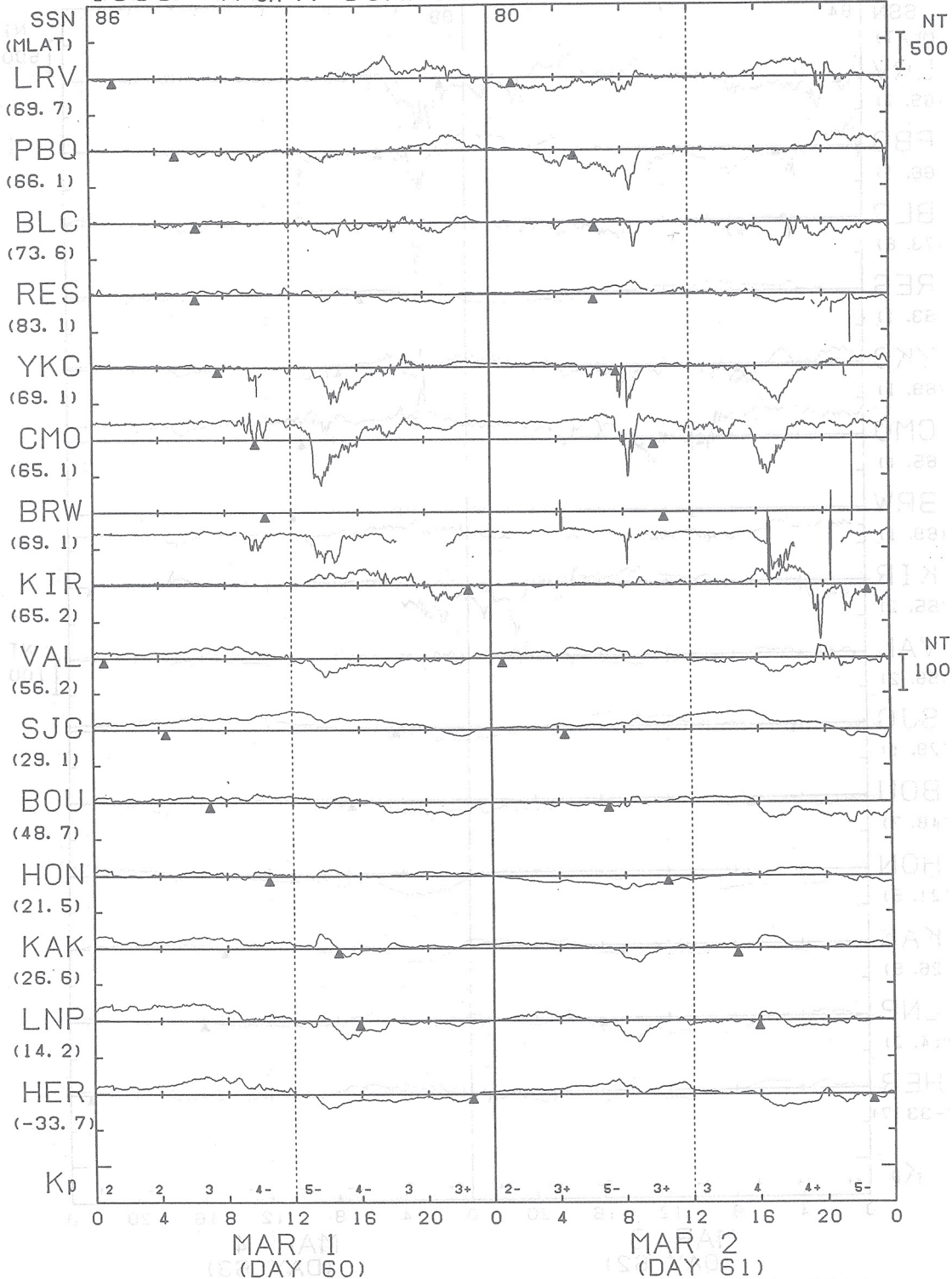


FEB 27 (DAY 58)

FEB 28 (DAY 59)

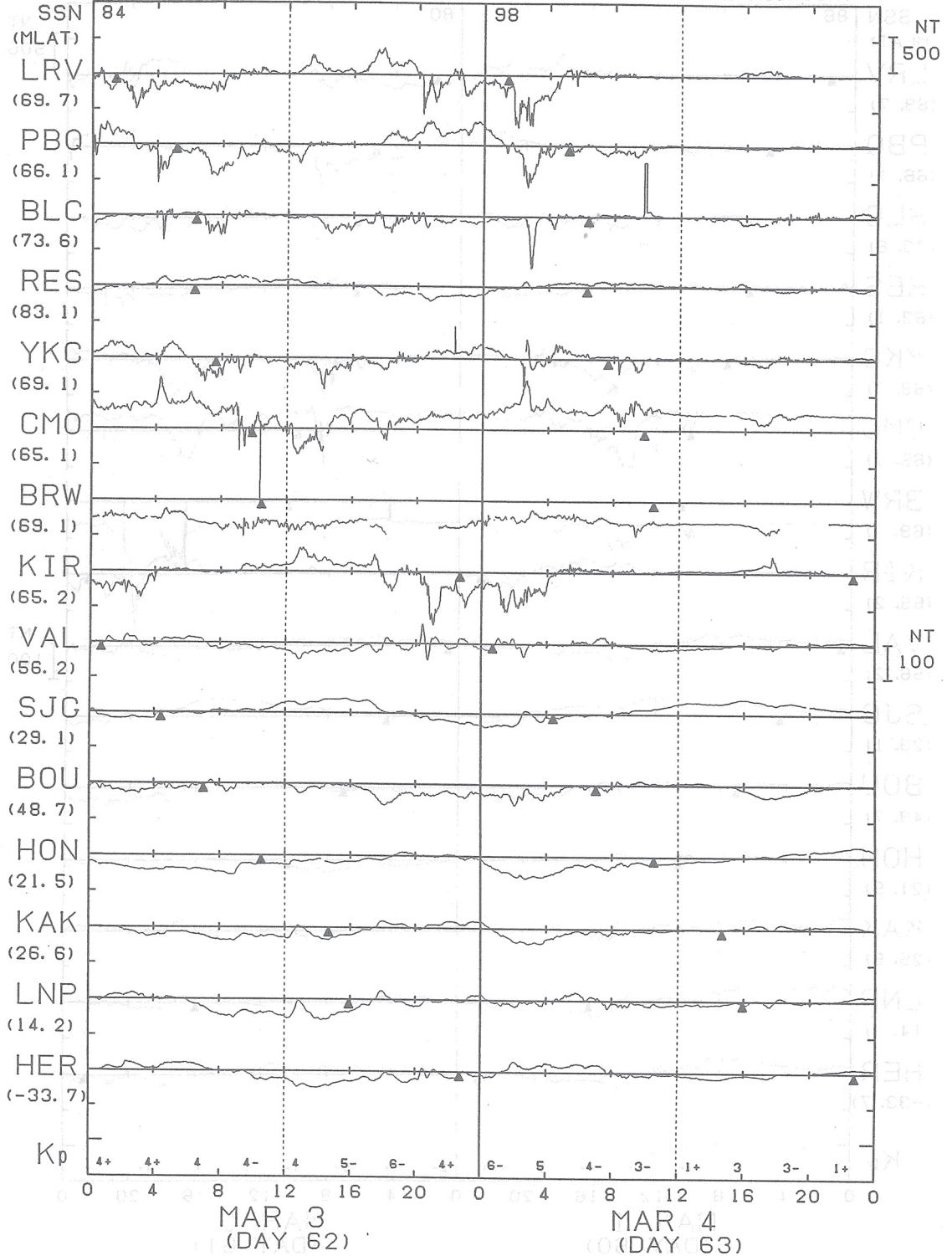
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH

1993 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.

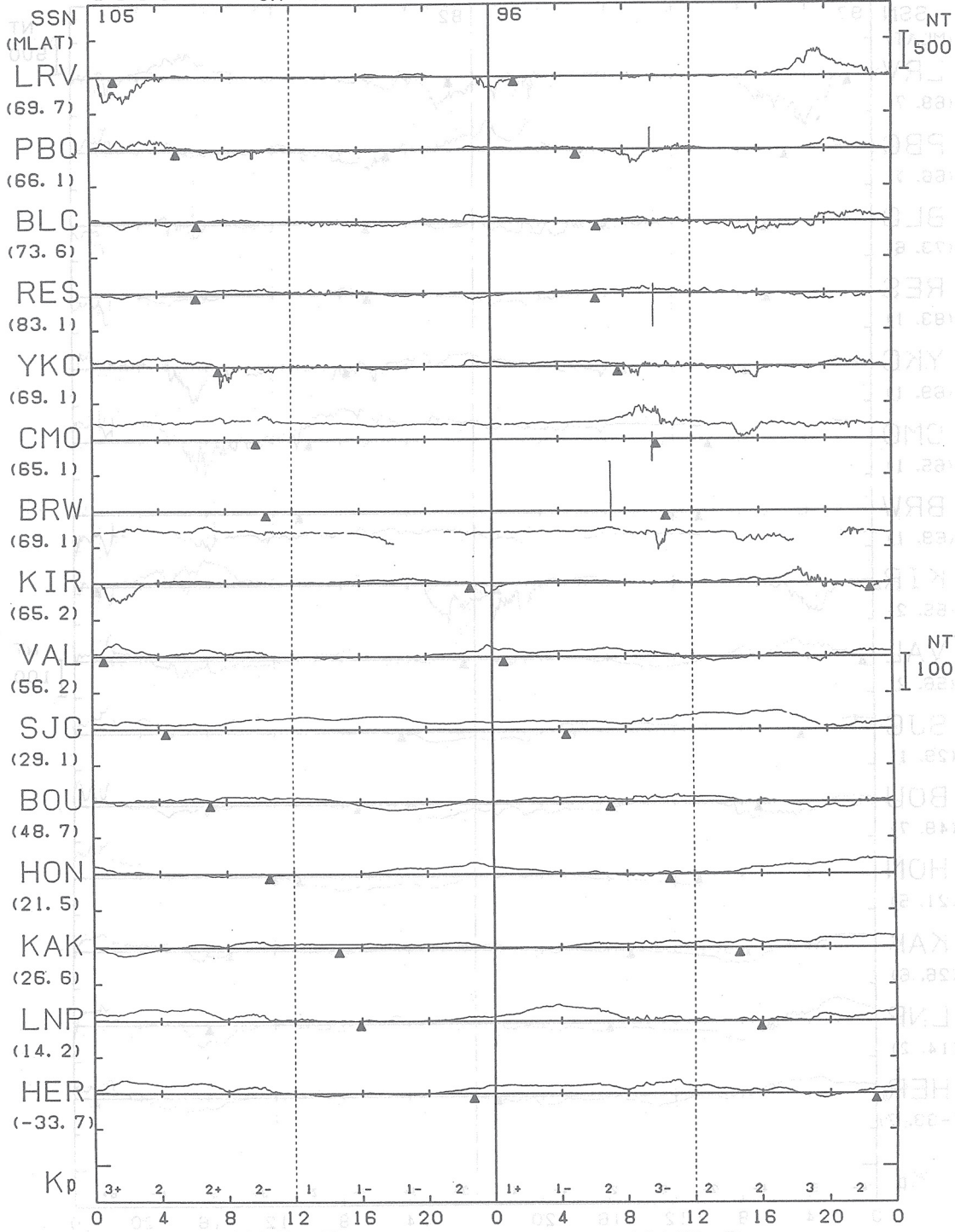
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

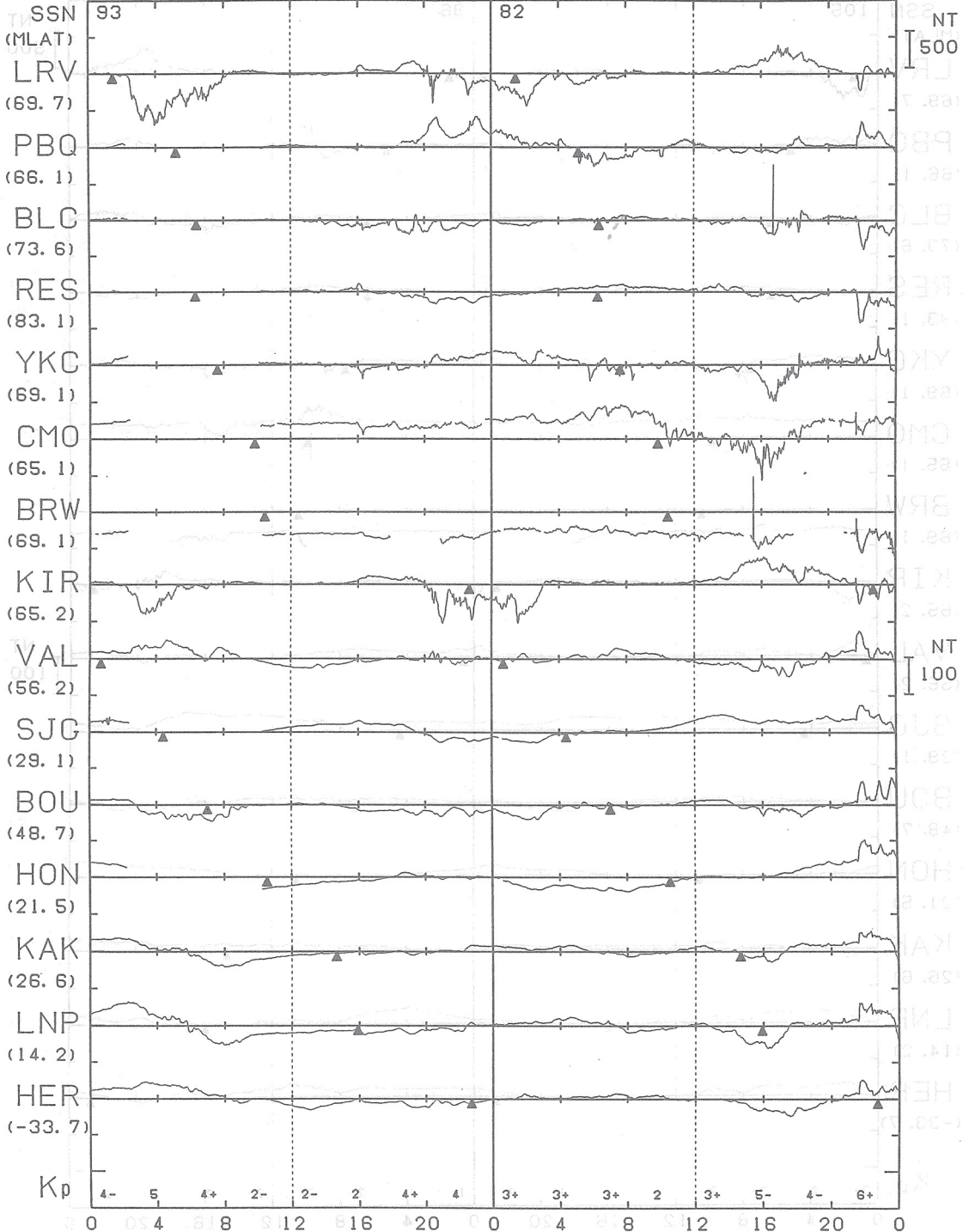
1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



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

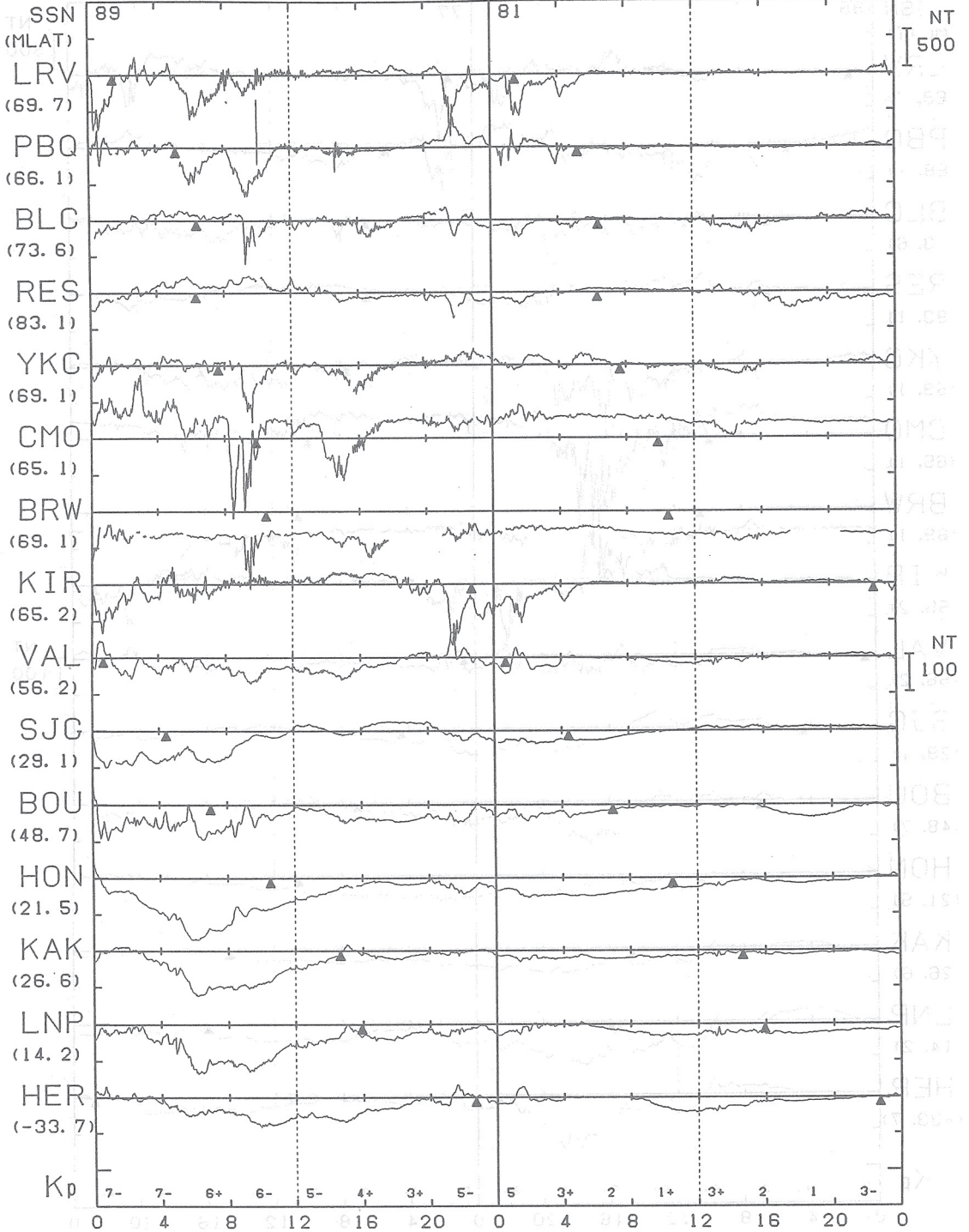
KYOTO UNIV.

1993 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.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

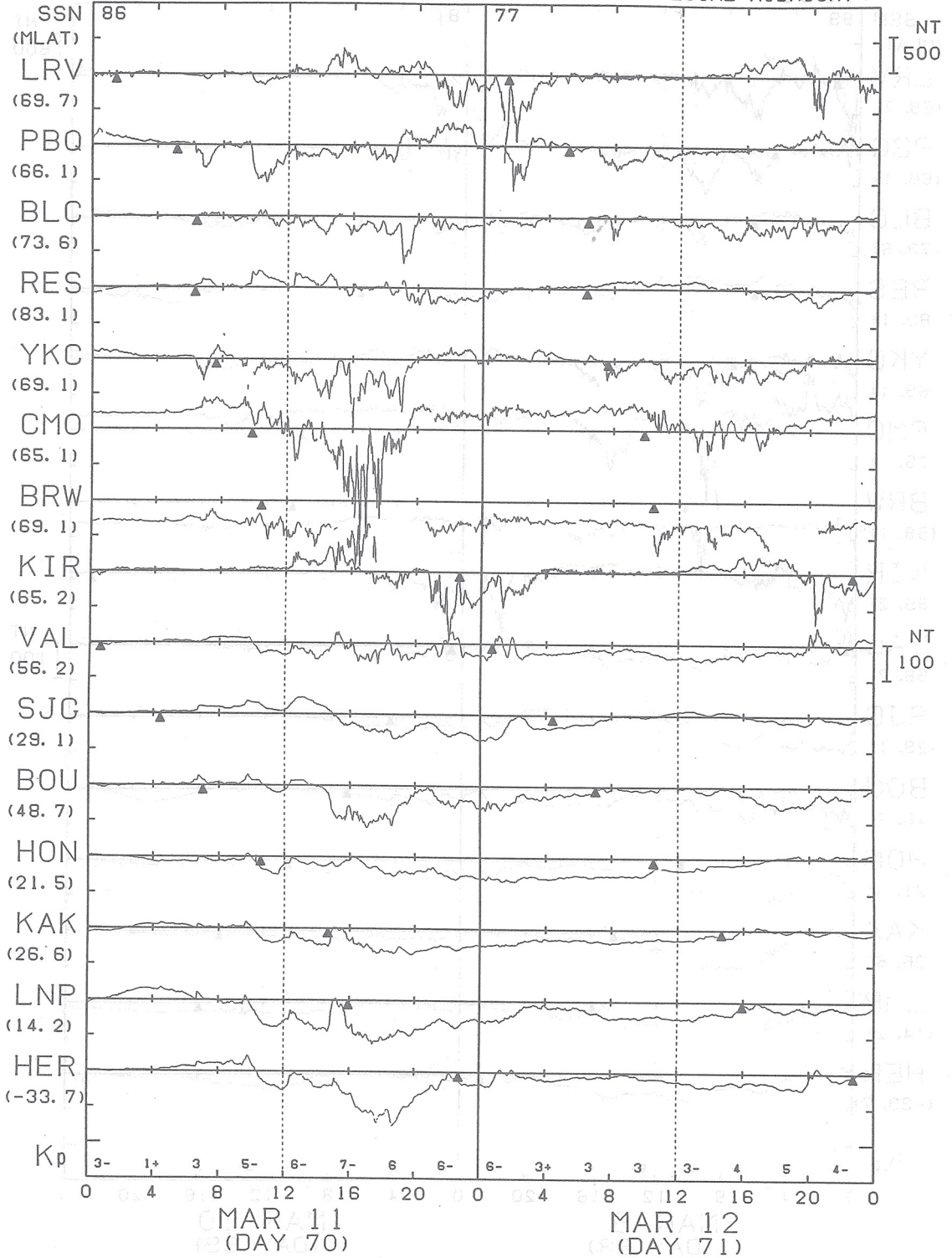


MAR 9
(DAY 68)

MAR 10
(DAY 69)

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

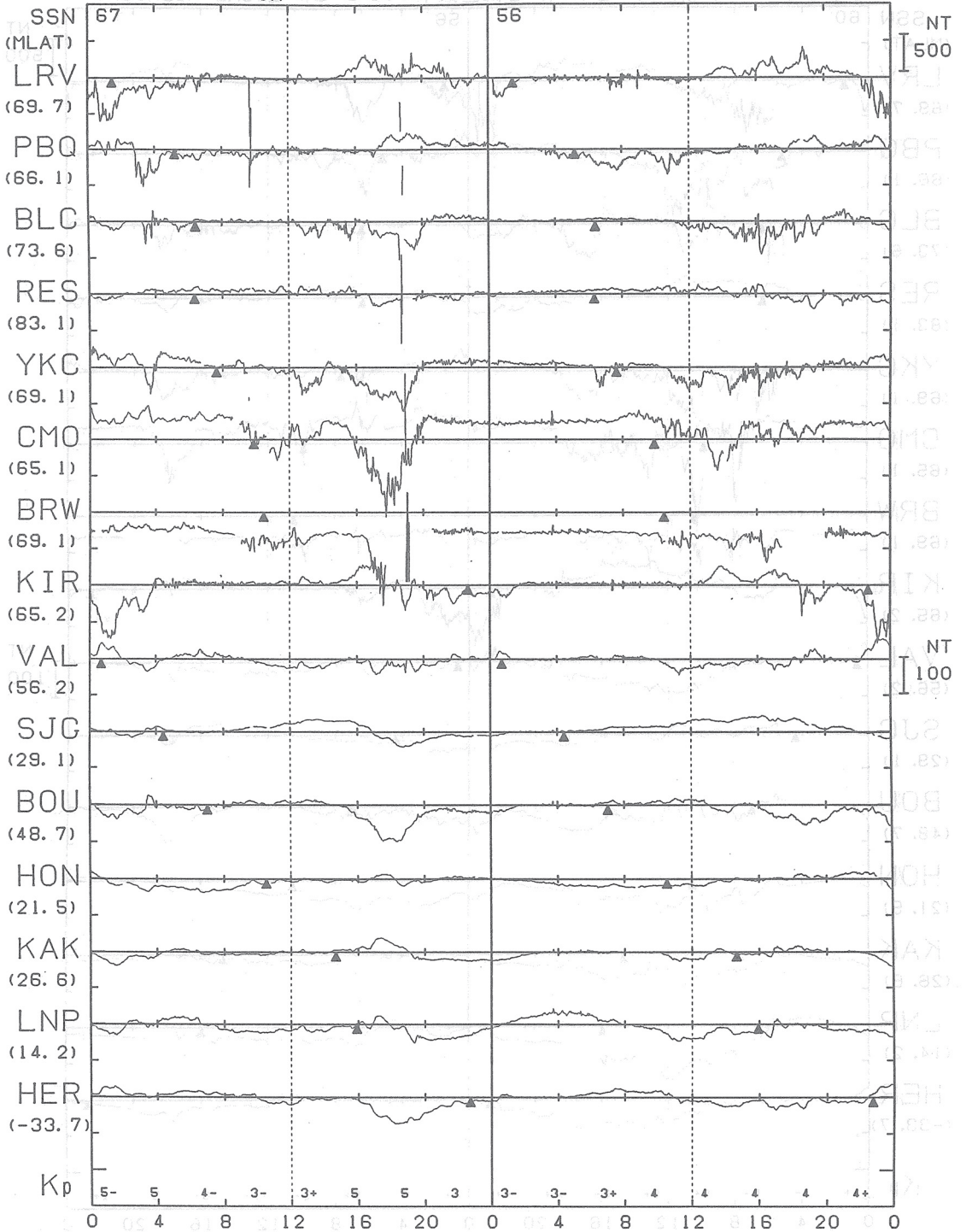
1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT



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

KYOTO UNIV.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

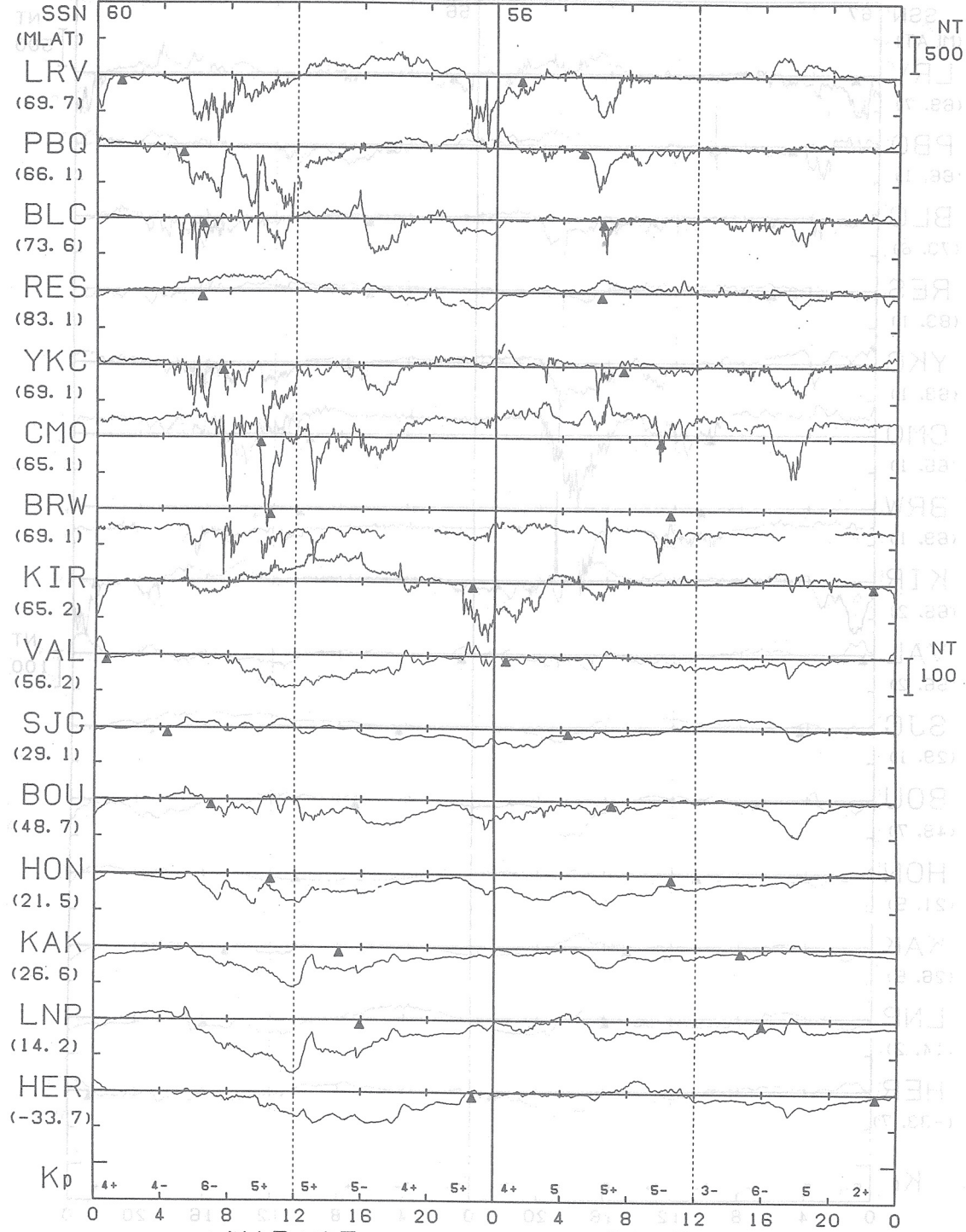


MAR 13
(DAY 72)

MAR 14
(DAY 73)

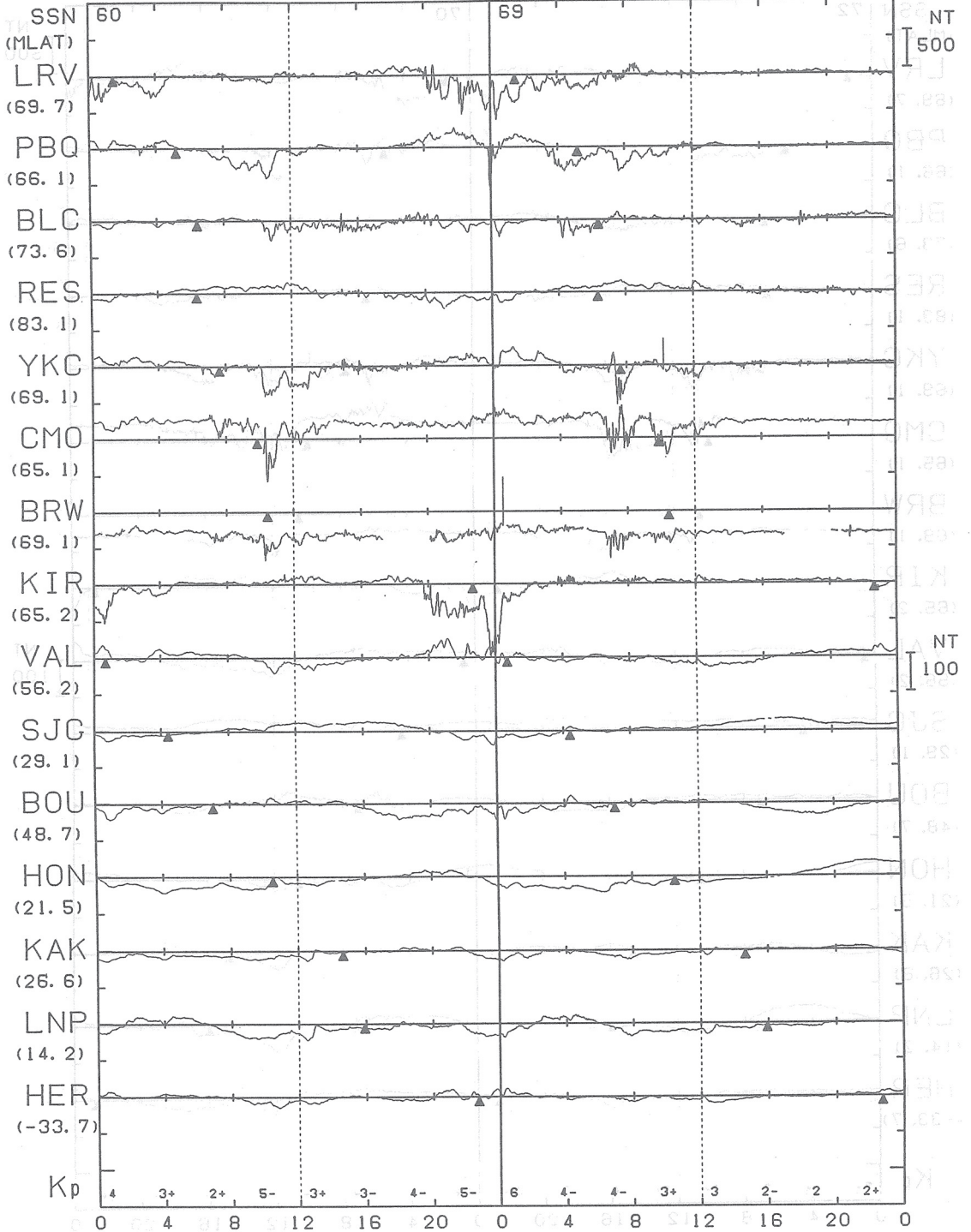
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

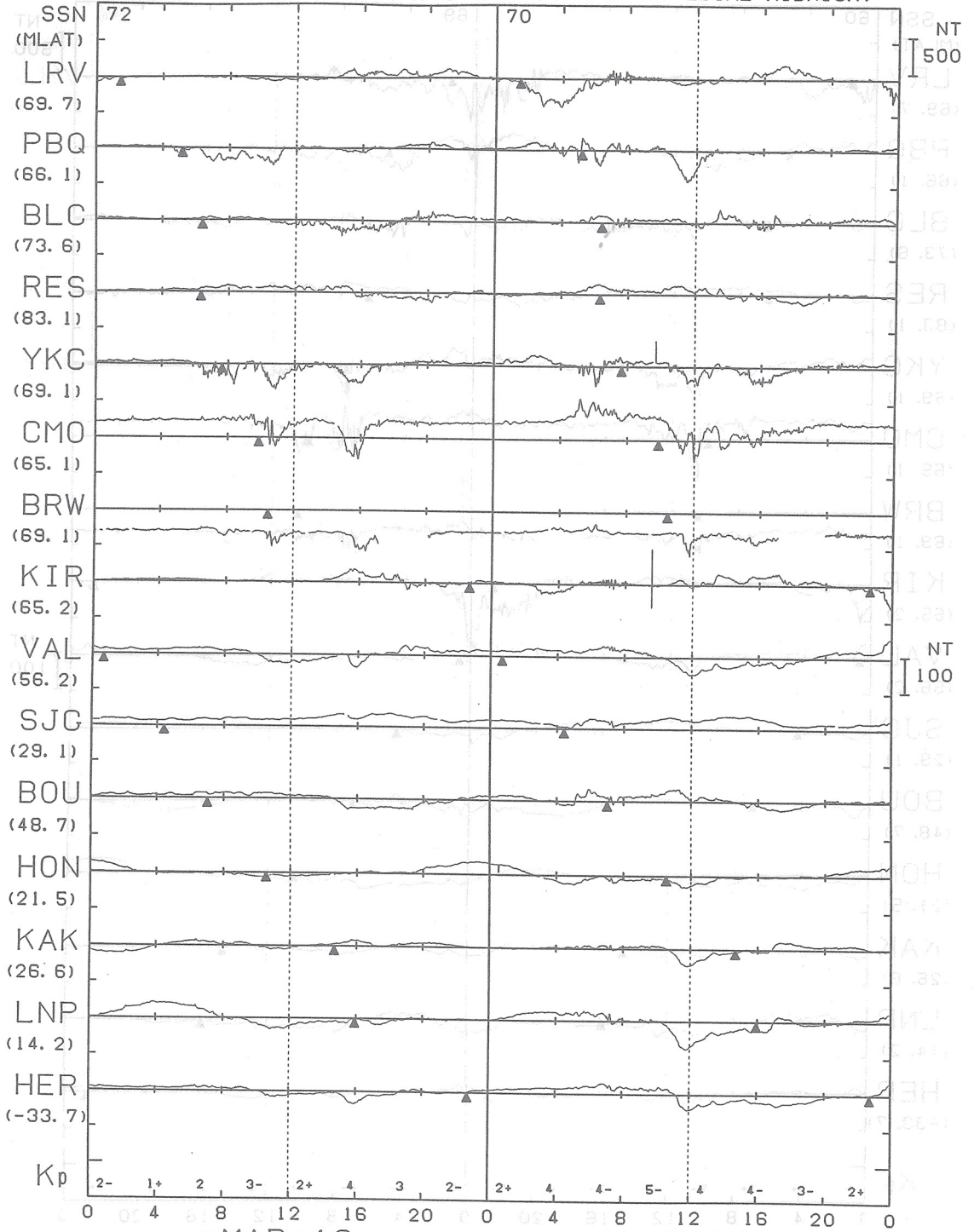


MAR 17
(DAY 76)

MAR 18
(DAY 77)

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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

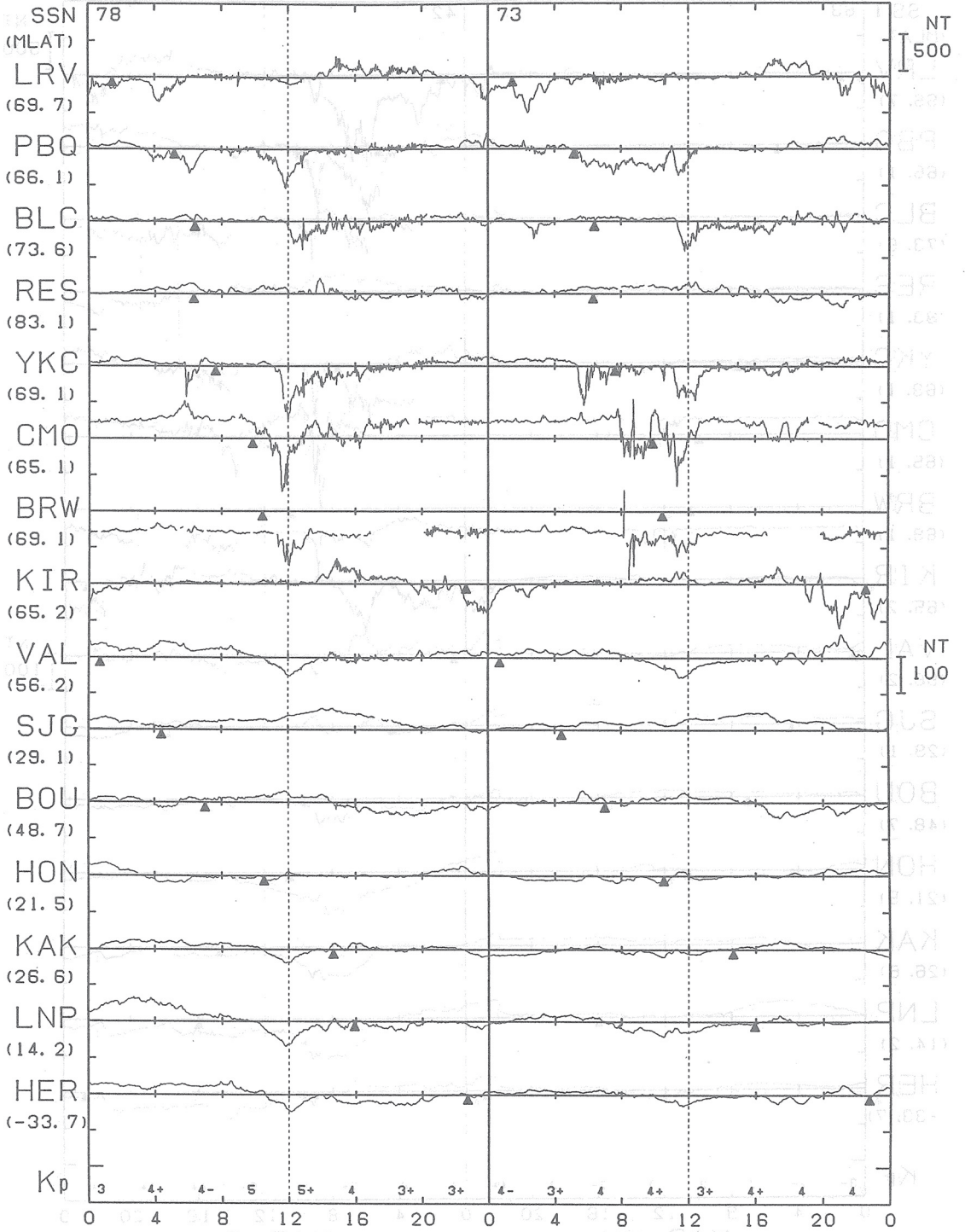


MAR 19
(DAY 78)

MAR 20
(DAY 79)

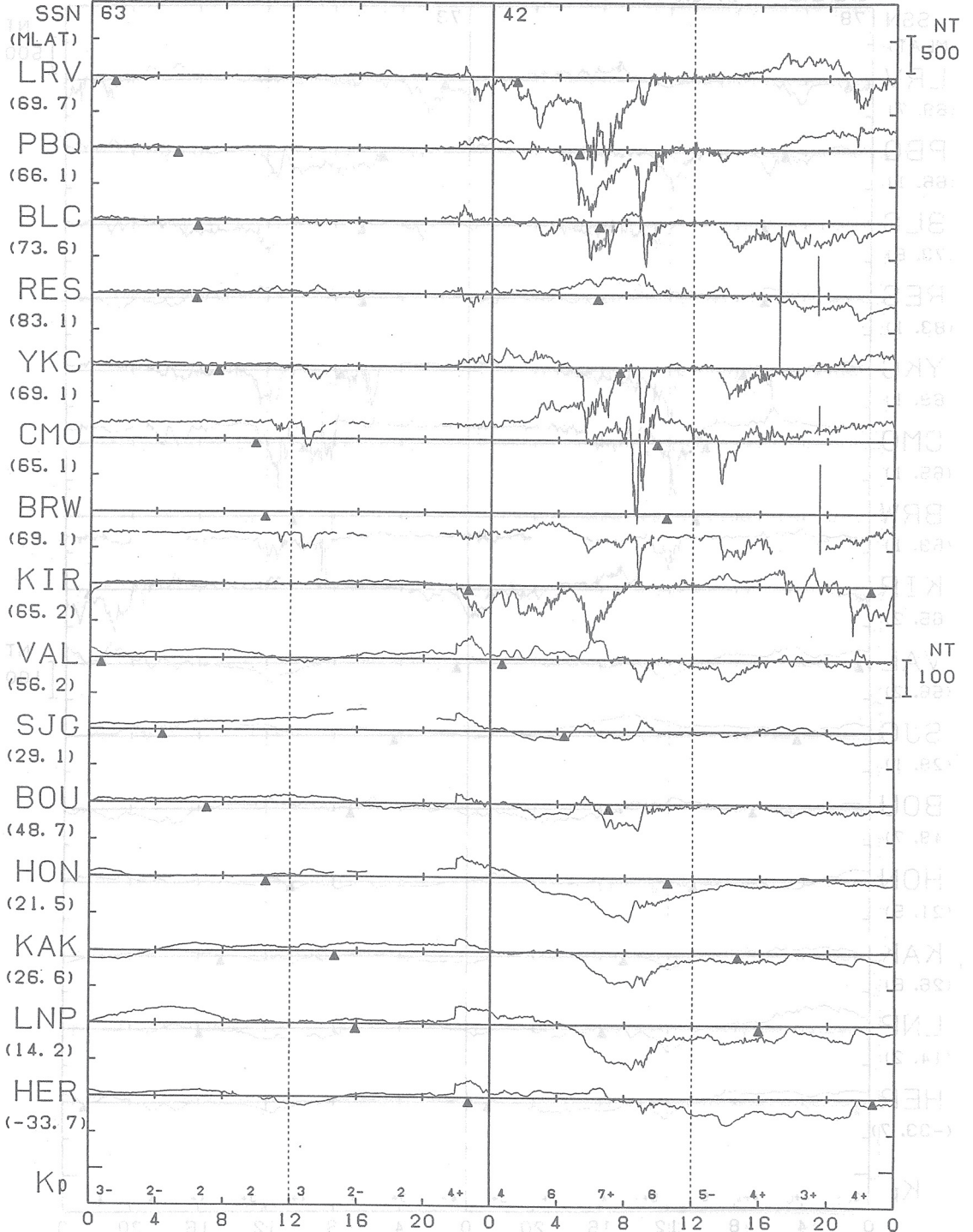
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

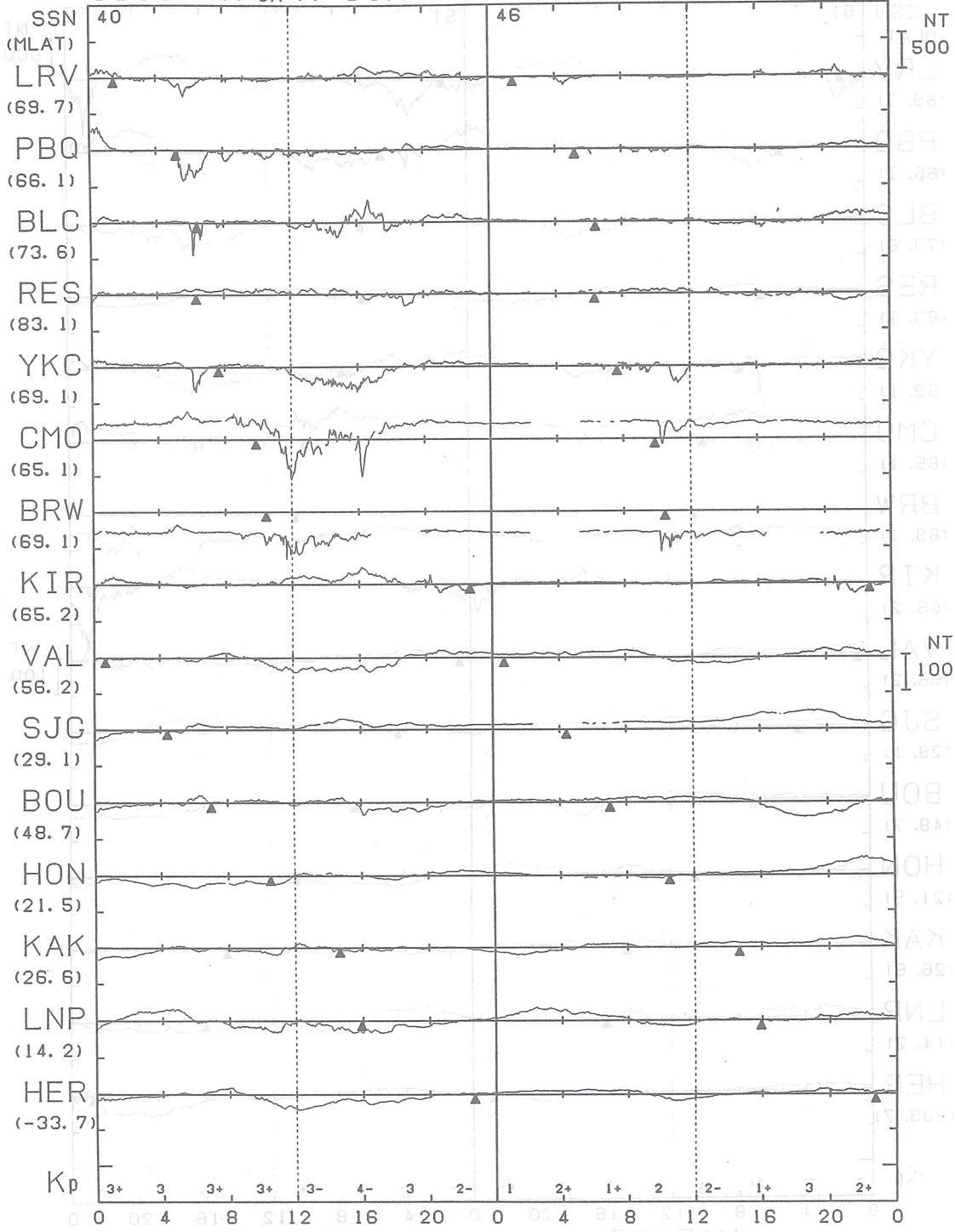


MAR 23
(DAY 82)

MAR 24
(DAY 83)

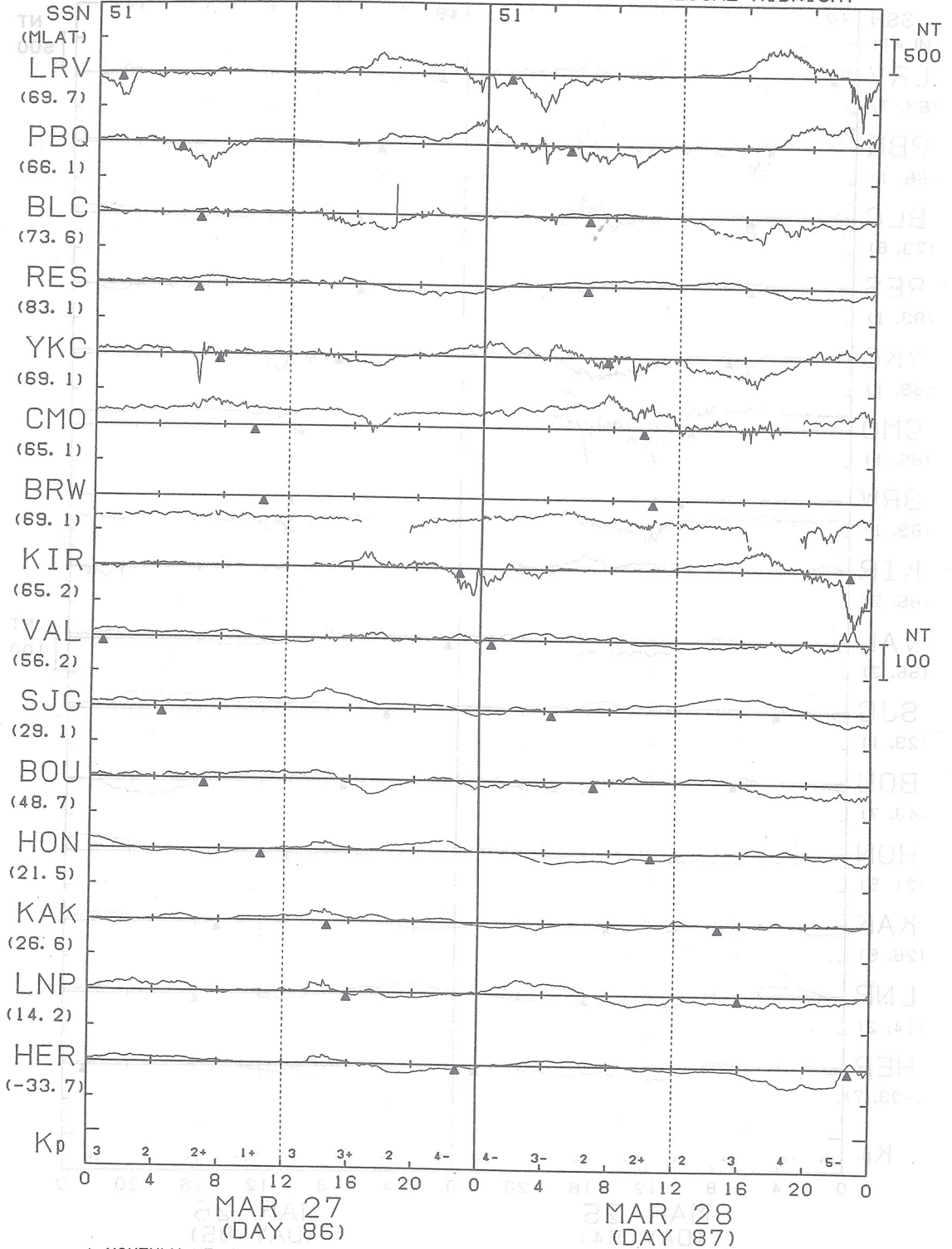
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

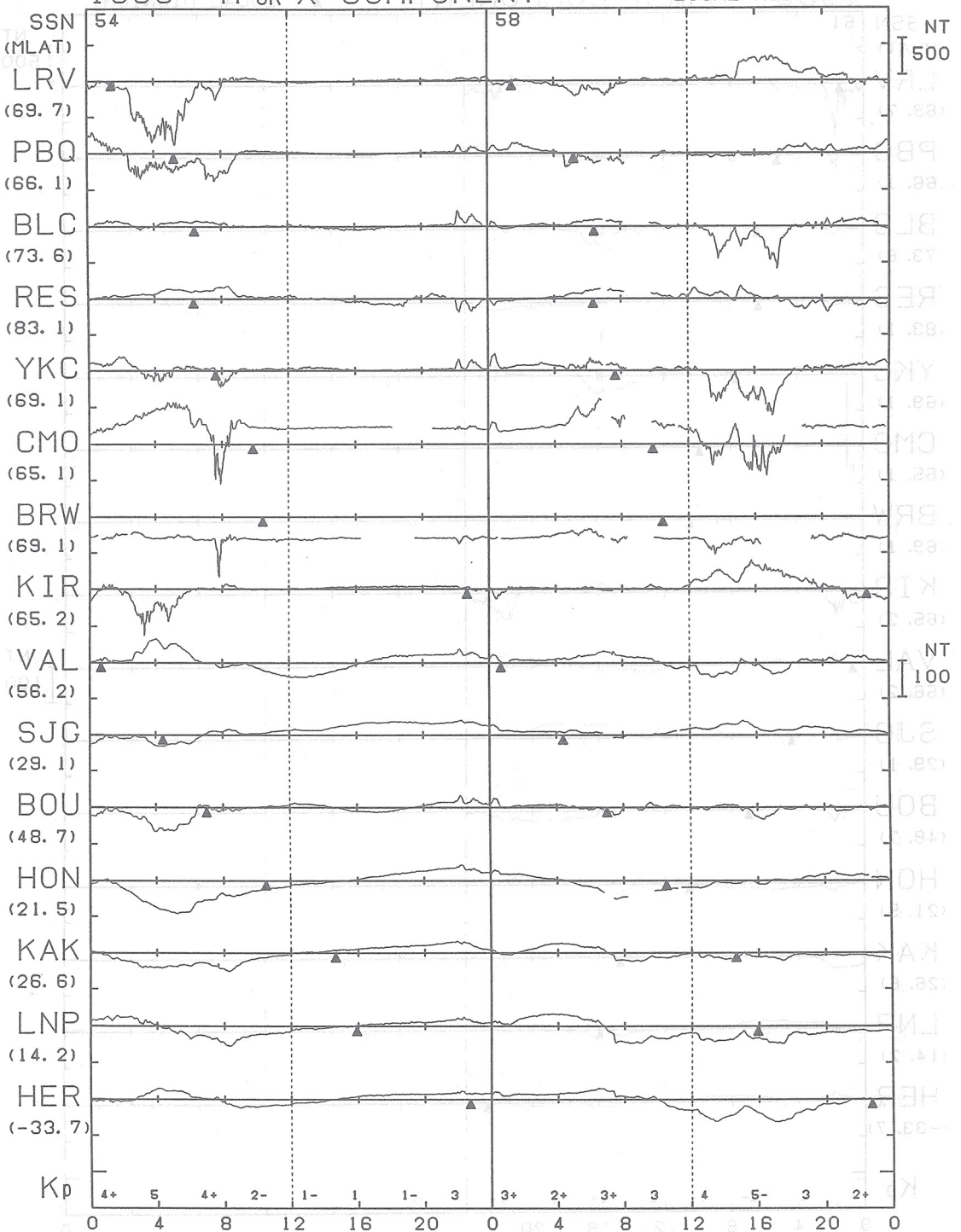
1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT



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

KYOTO UNIV.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

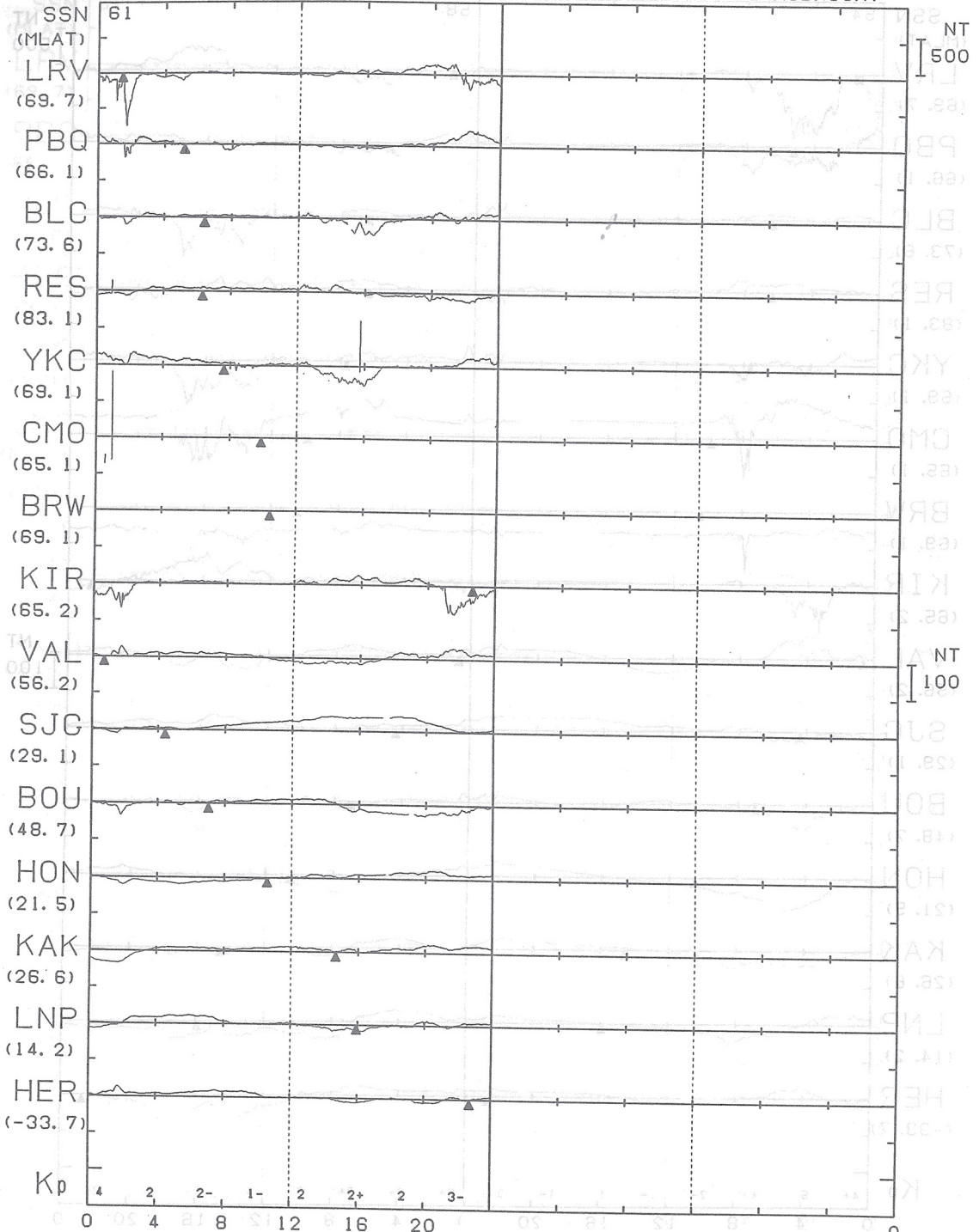


MAR 29
(DAY 88)

MAR 30
(DAY 89)

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

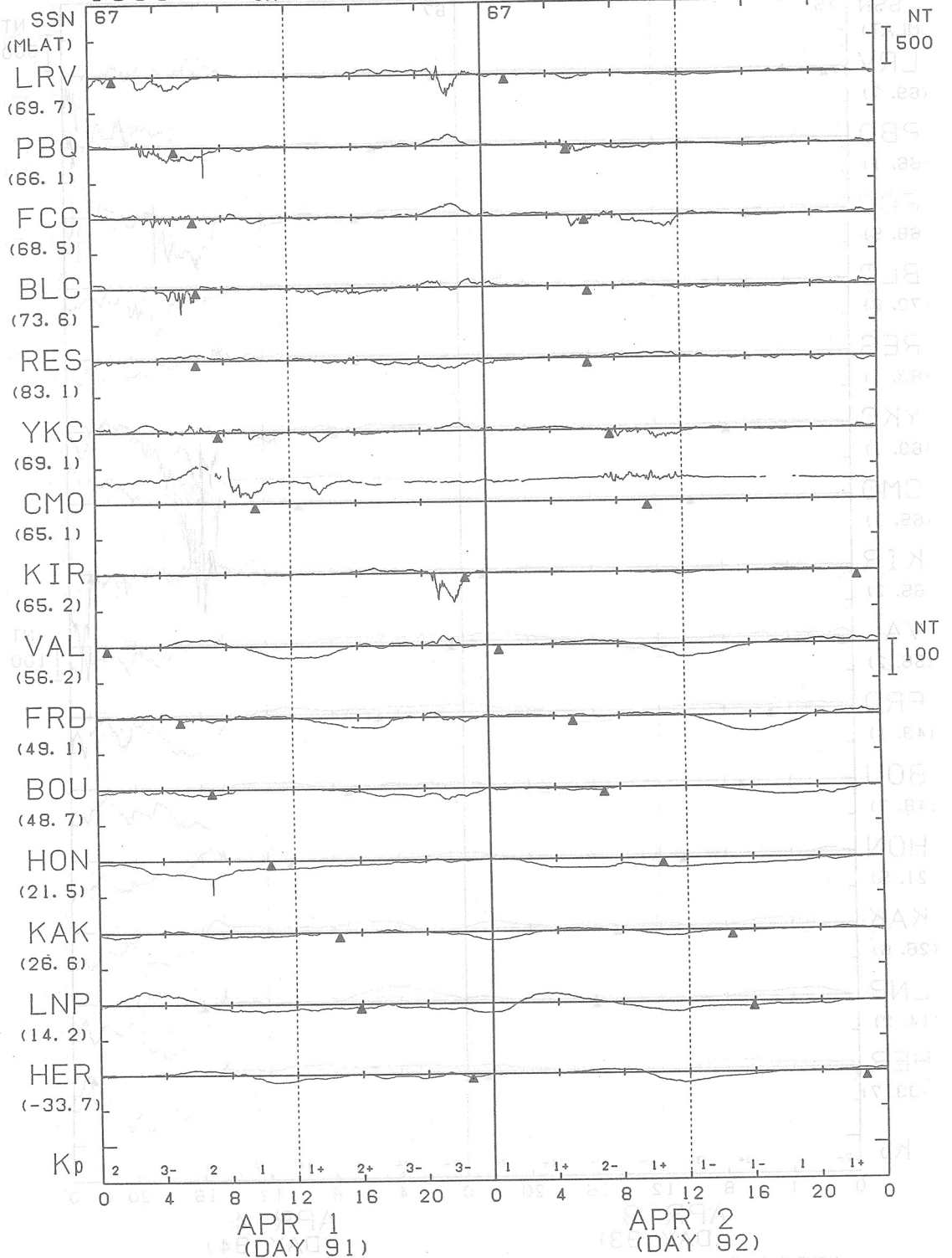
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



MAR 31 (DAY 90) MAR 29 (DAY 88)

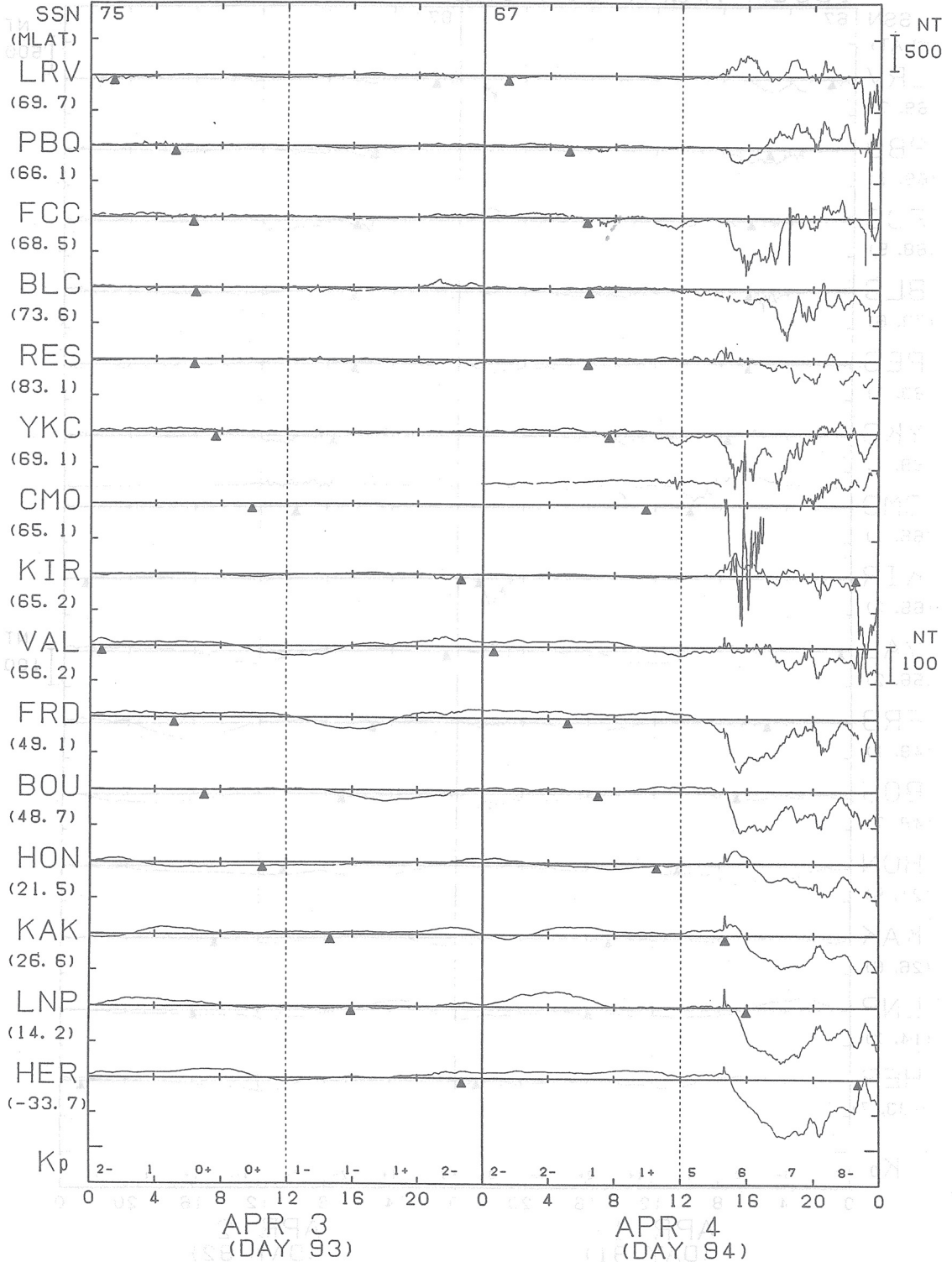
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT 100 ▲ : LOCAL MIDNIGHT



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

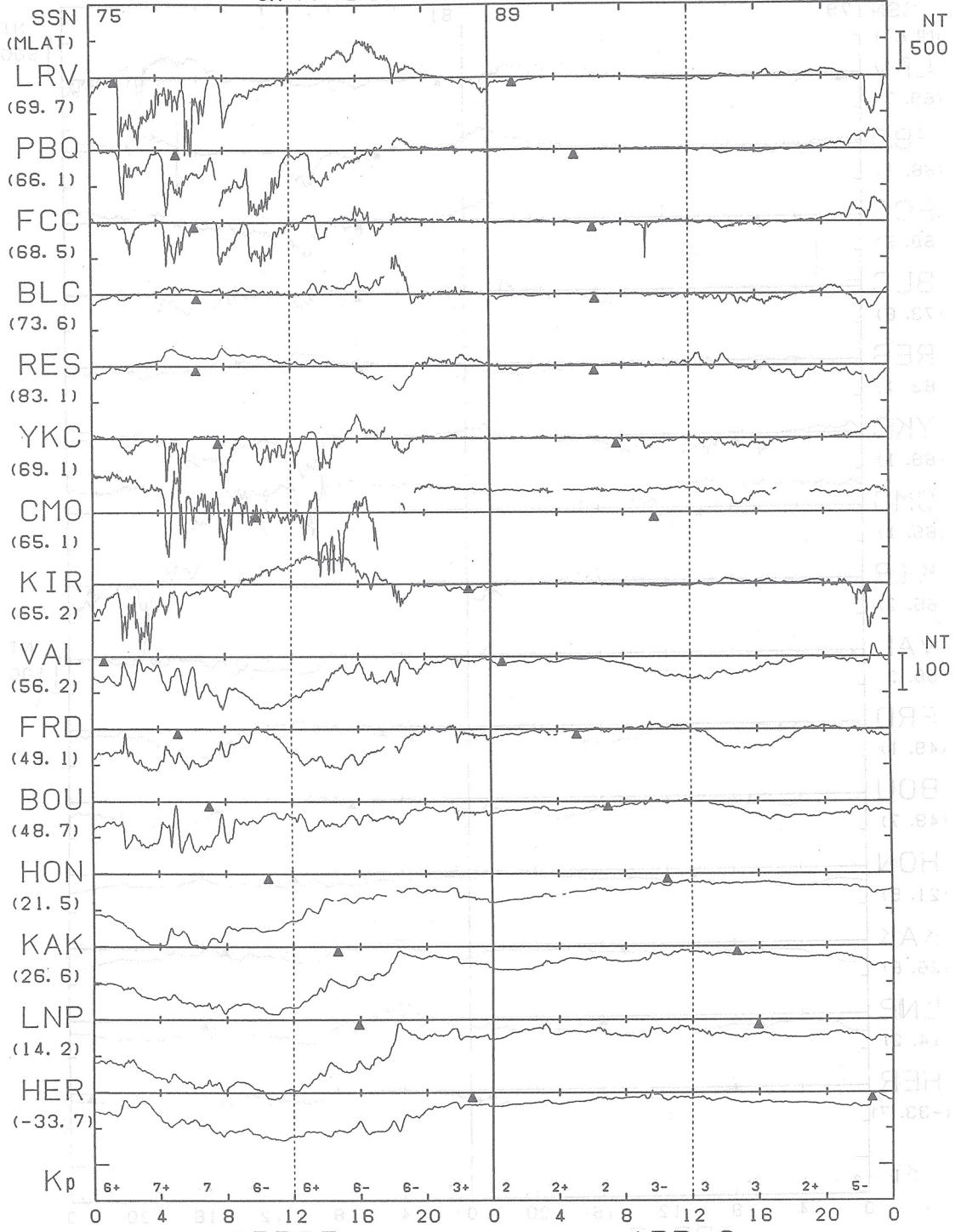
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

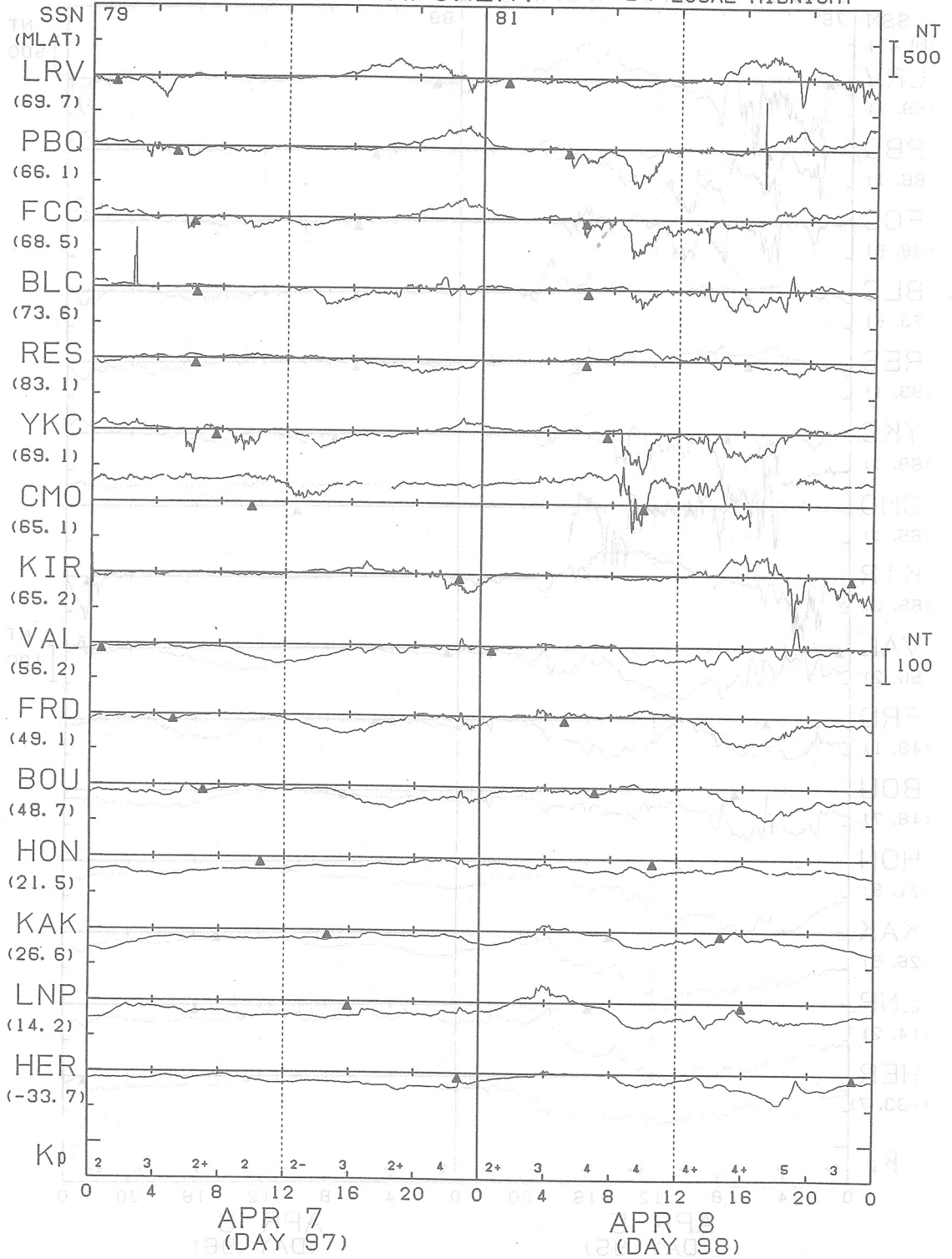
KYOTO UNIV.

1993 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.

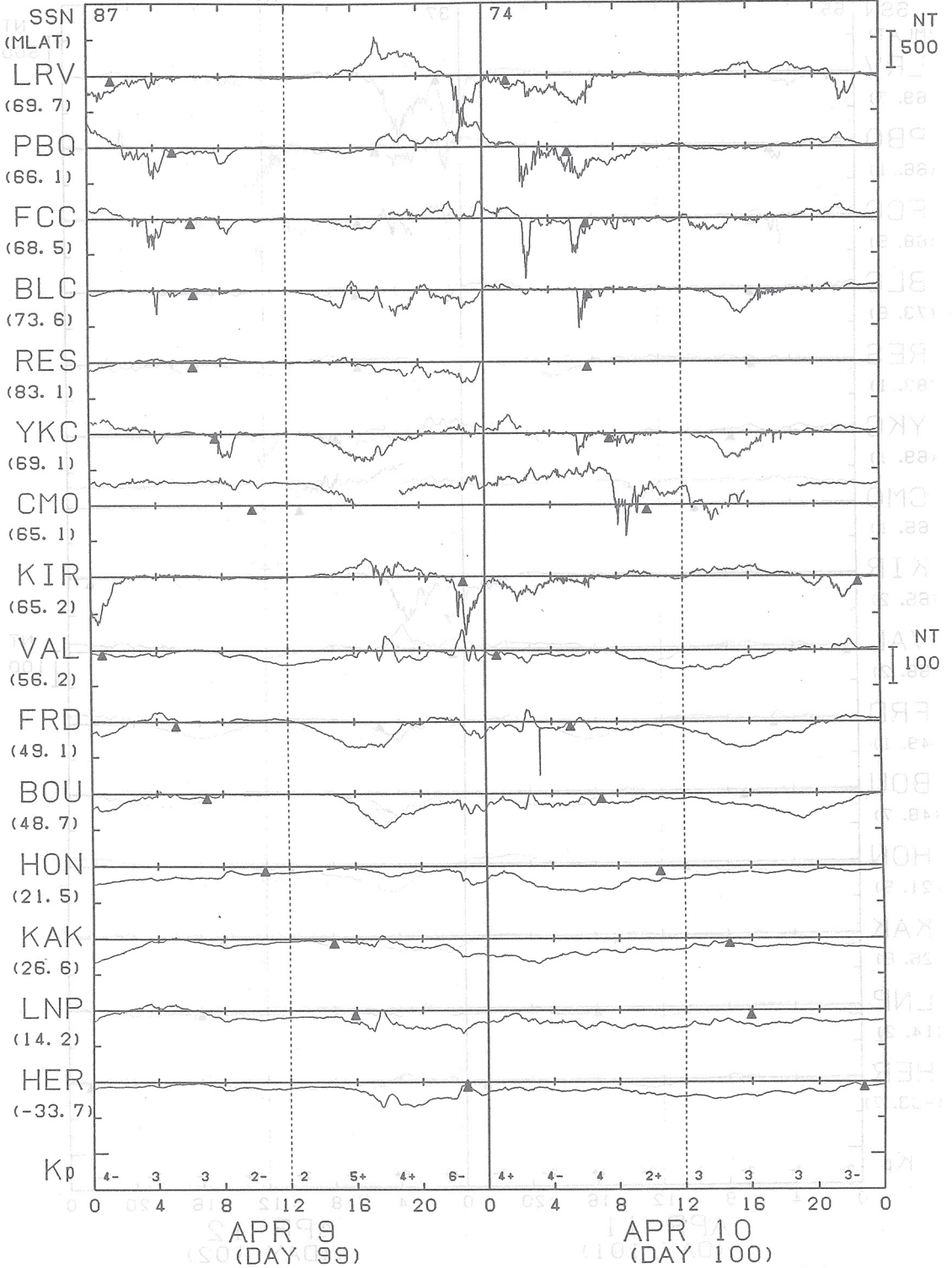
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

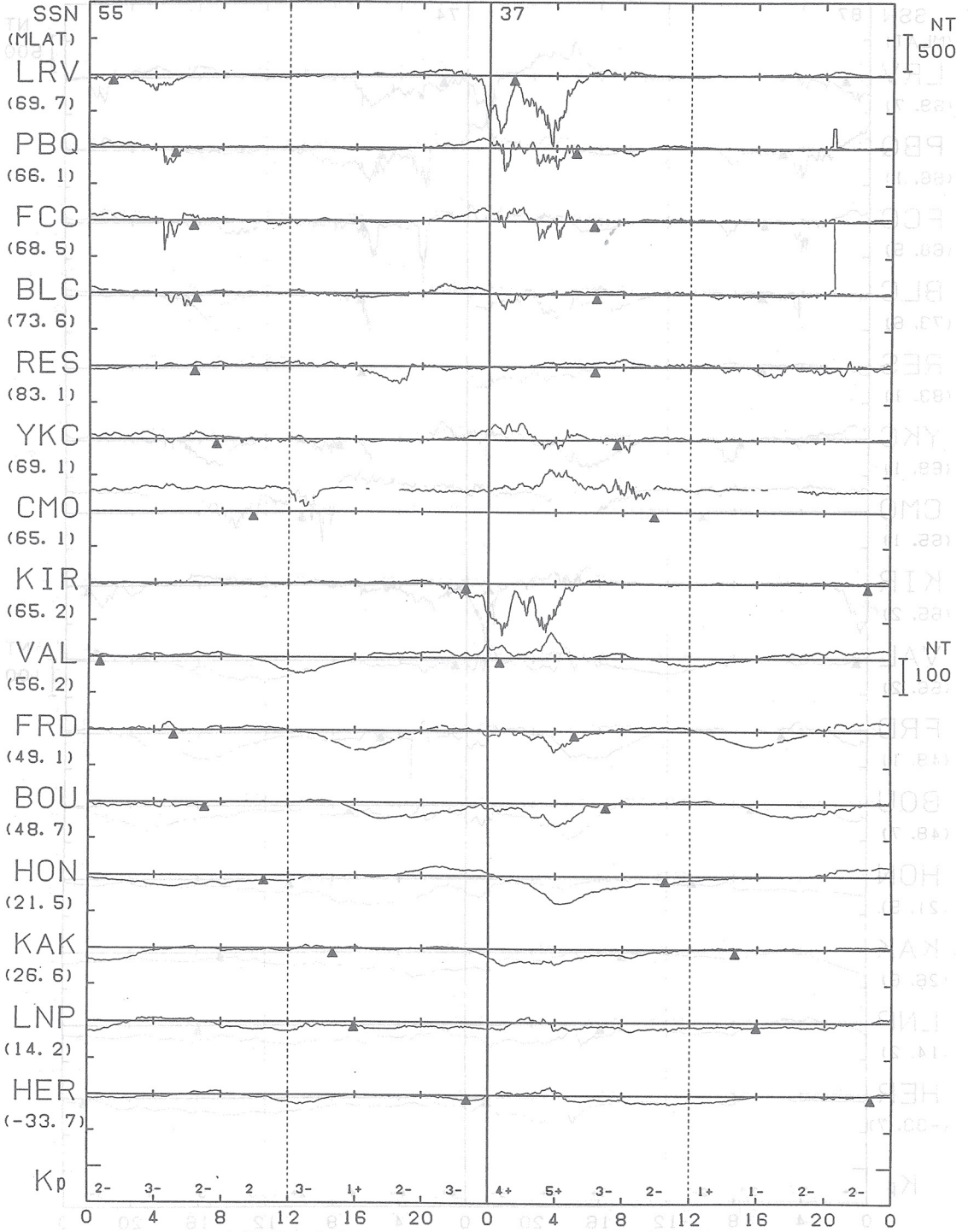
KYOTO UNIV.

1993 H OR X-COMPONENT M00 -▲: LOCAL MIDNIGHT



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

1993 H OR X-COMPONENT —▲: LOCAL MIDNIGHT



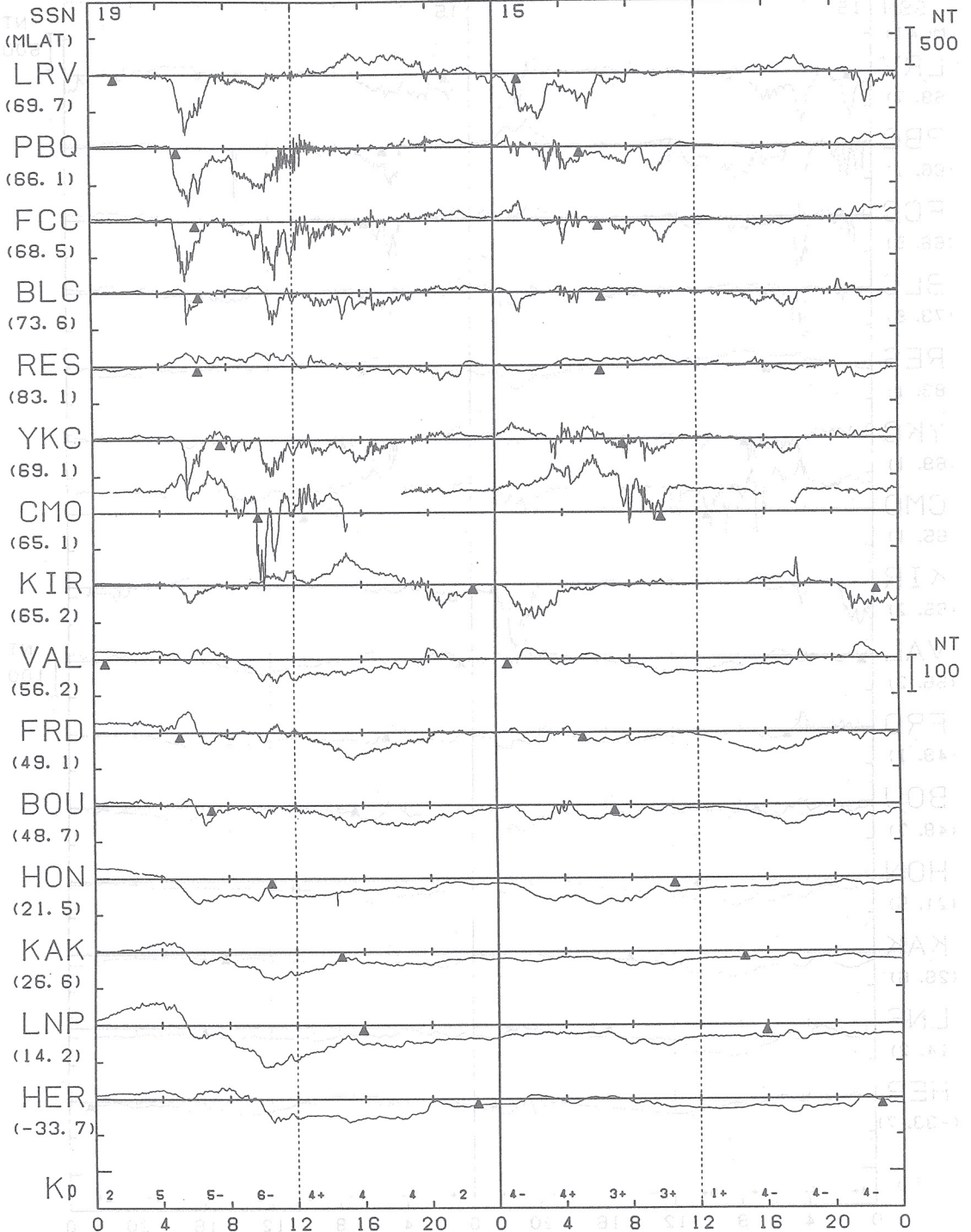
APR 11
(DAY 101)

APR 12
(DAY 102)

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

KYOTO UNIV.

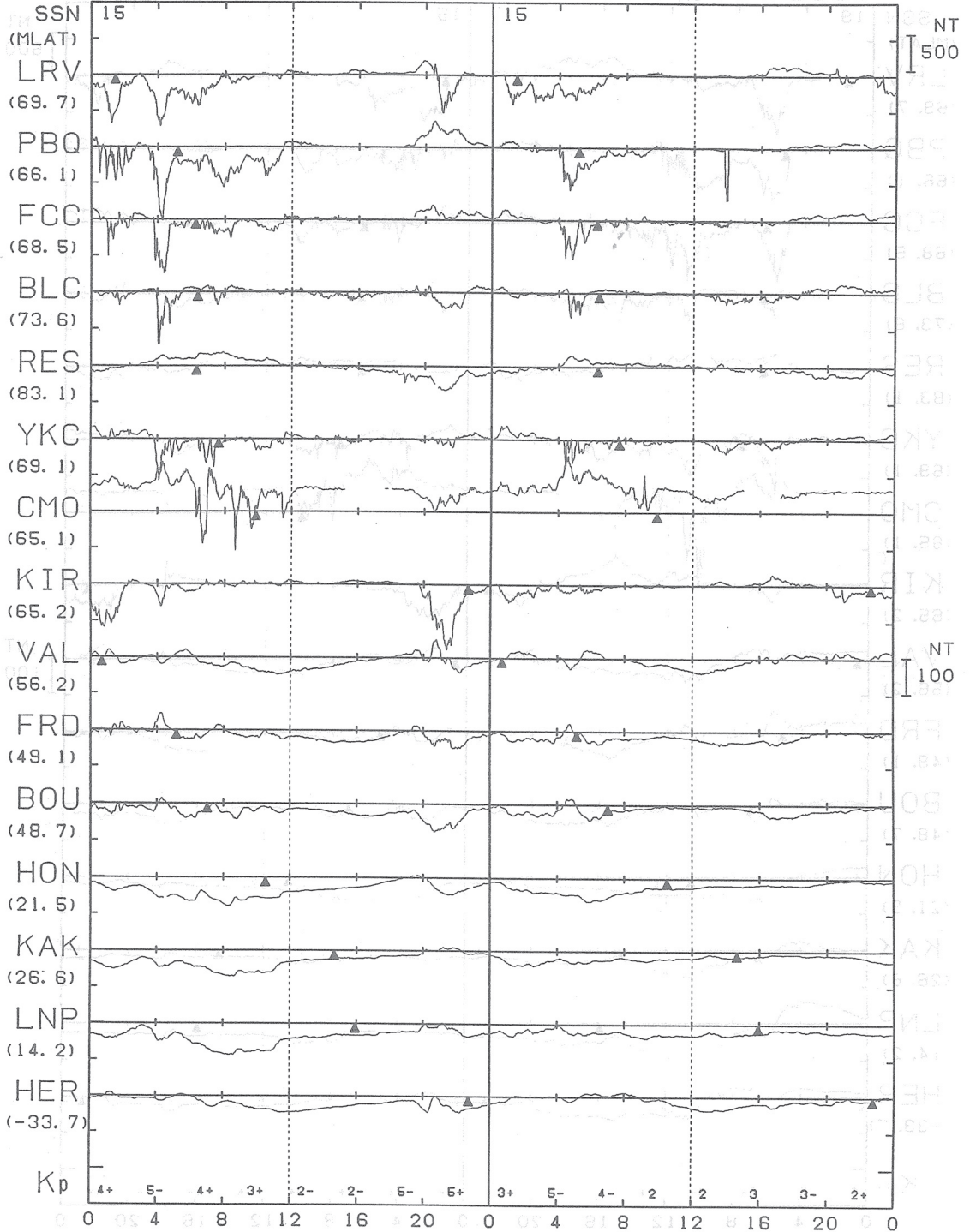
1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



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

KYOTO UNIV.

1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT

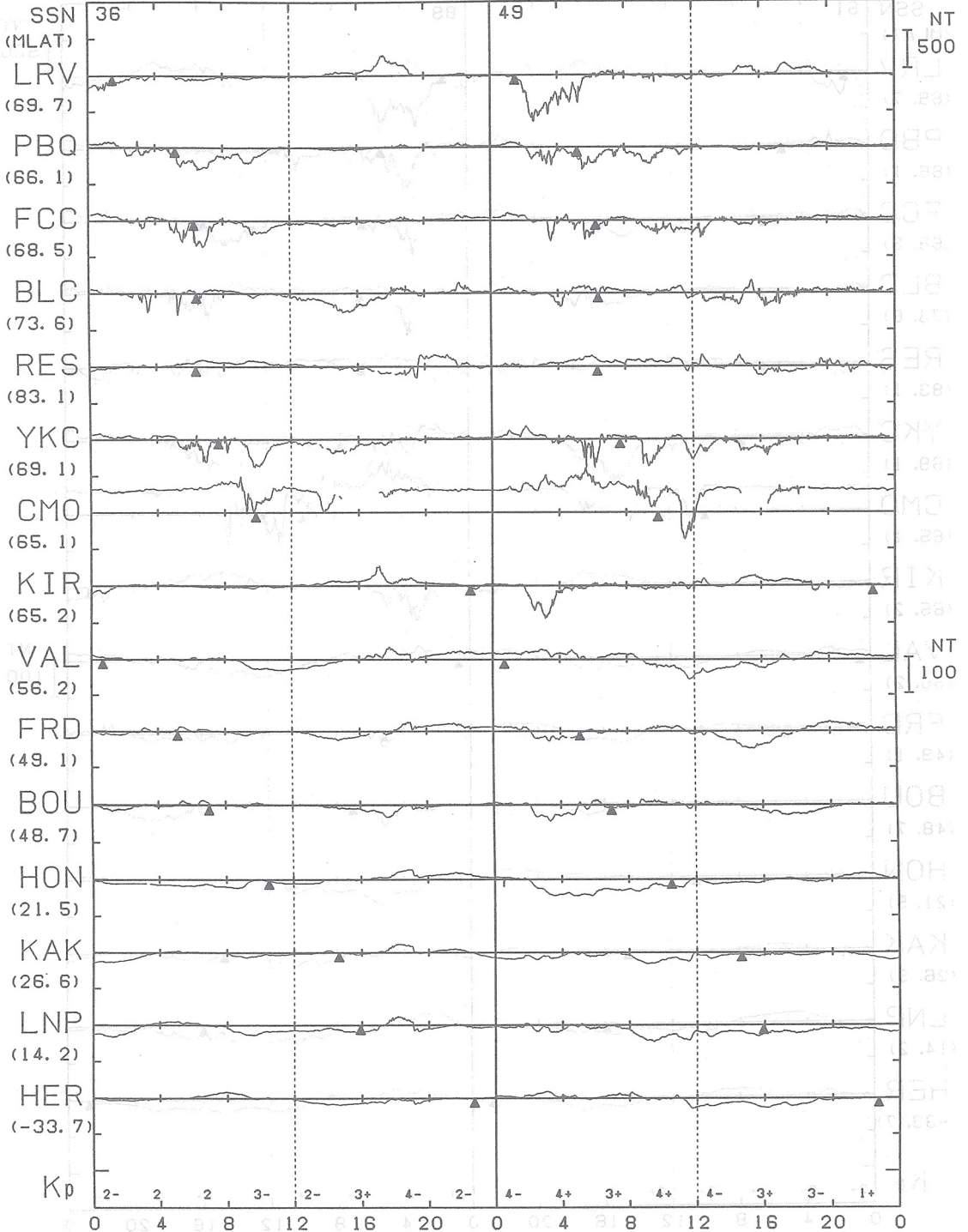


APR 15
(DAY 105)

APR 16
(DAY 106)

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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



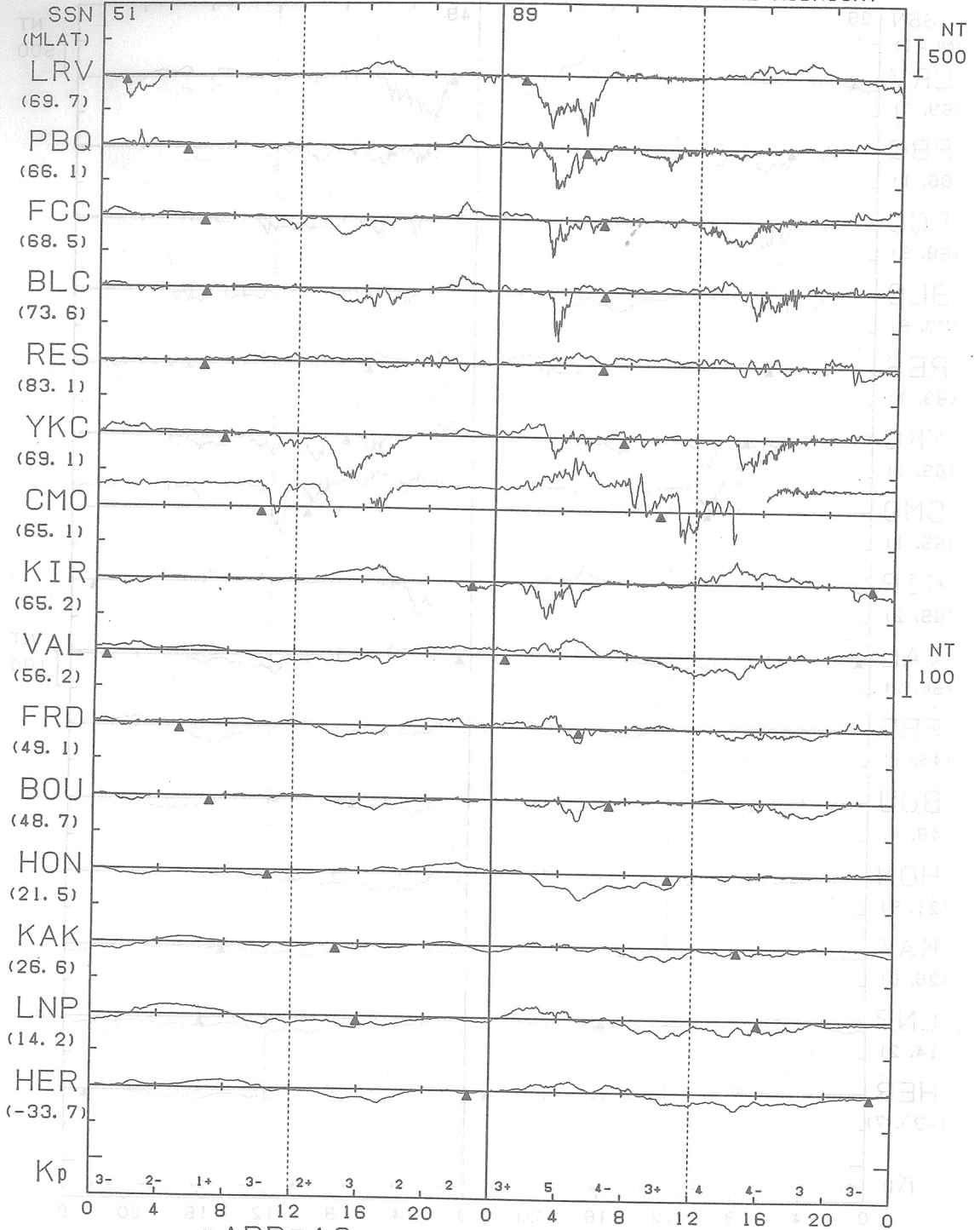
APR 17
(DAY 107)

APR 18
(DAY 108)

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

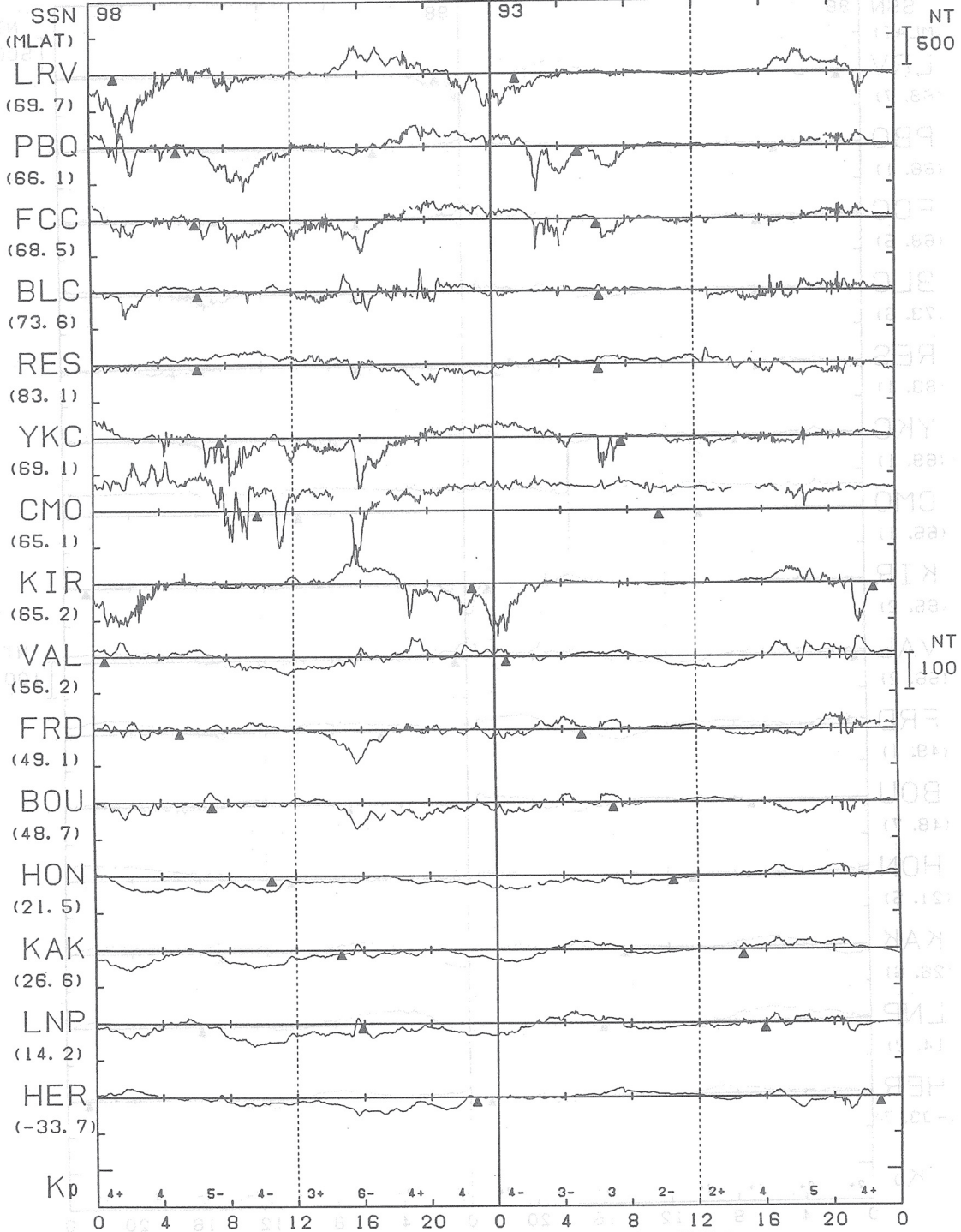
▲ : LOCAL MIDNIGHT
 KYOTO UNIV.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



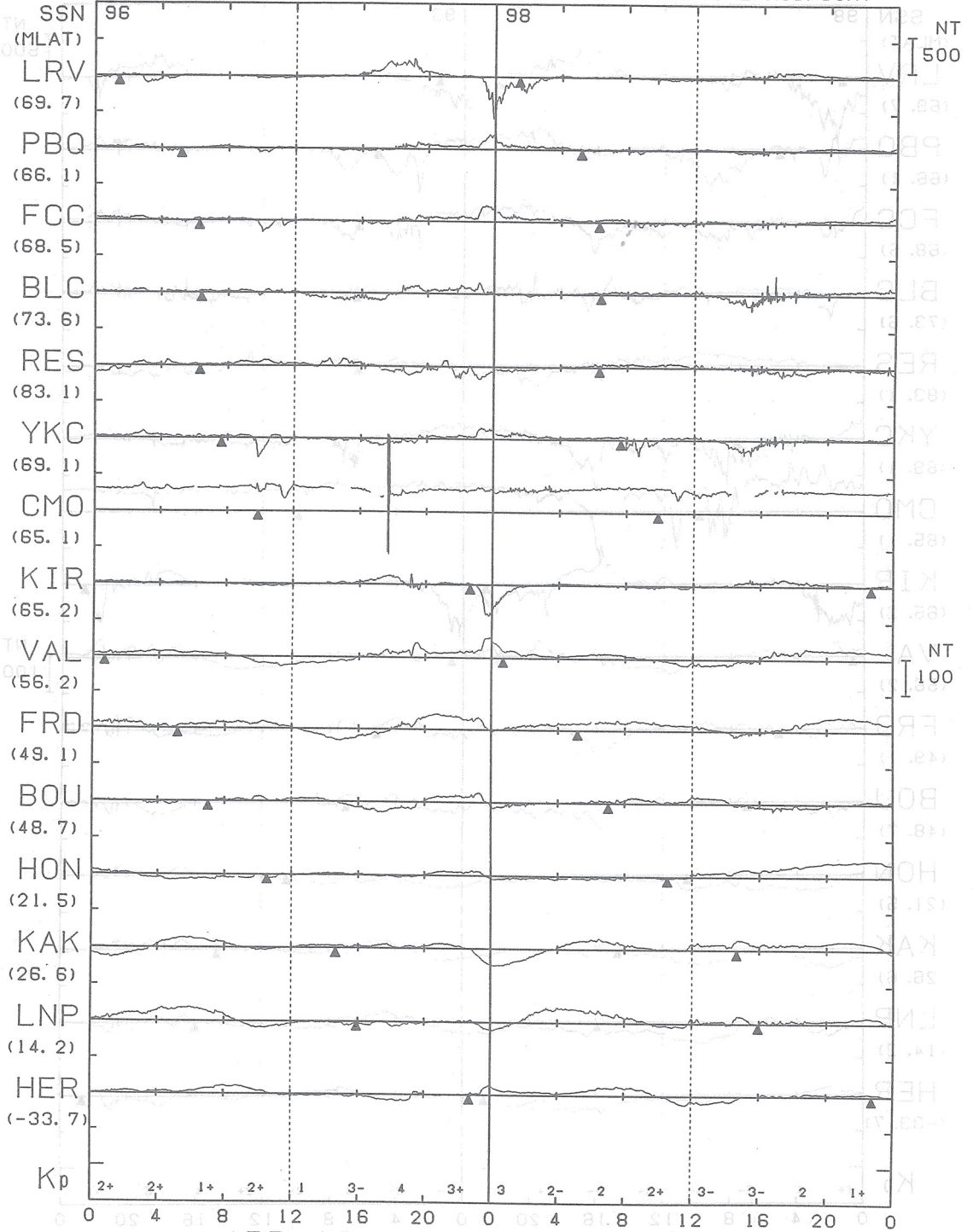
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 HOR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



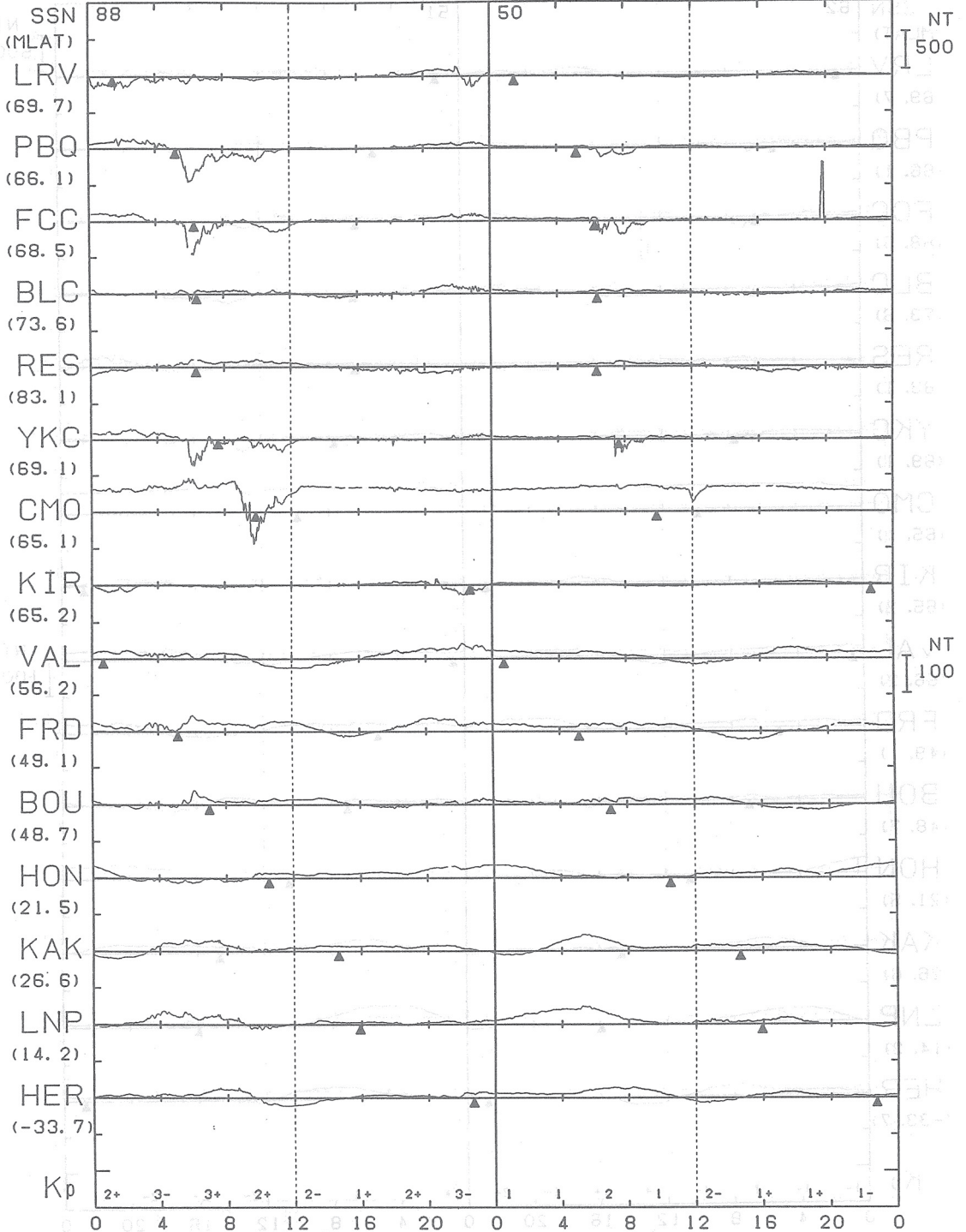
APR 23
(DAY 113)

APR 24
(DAY 114)

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

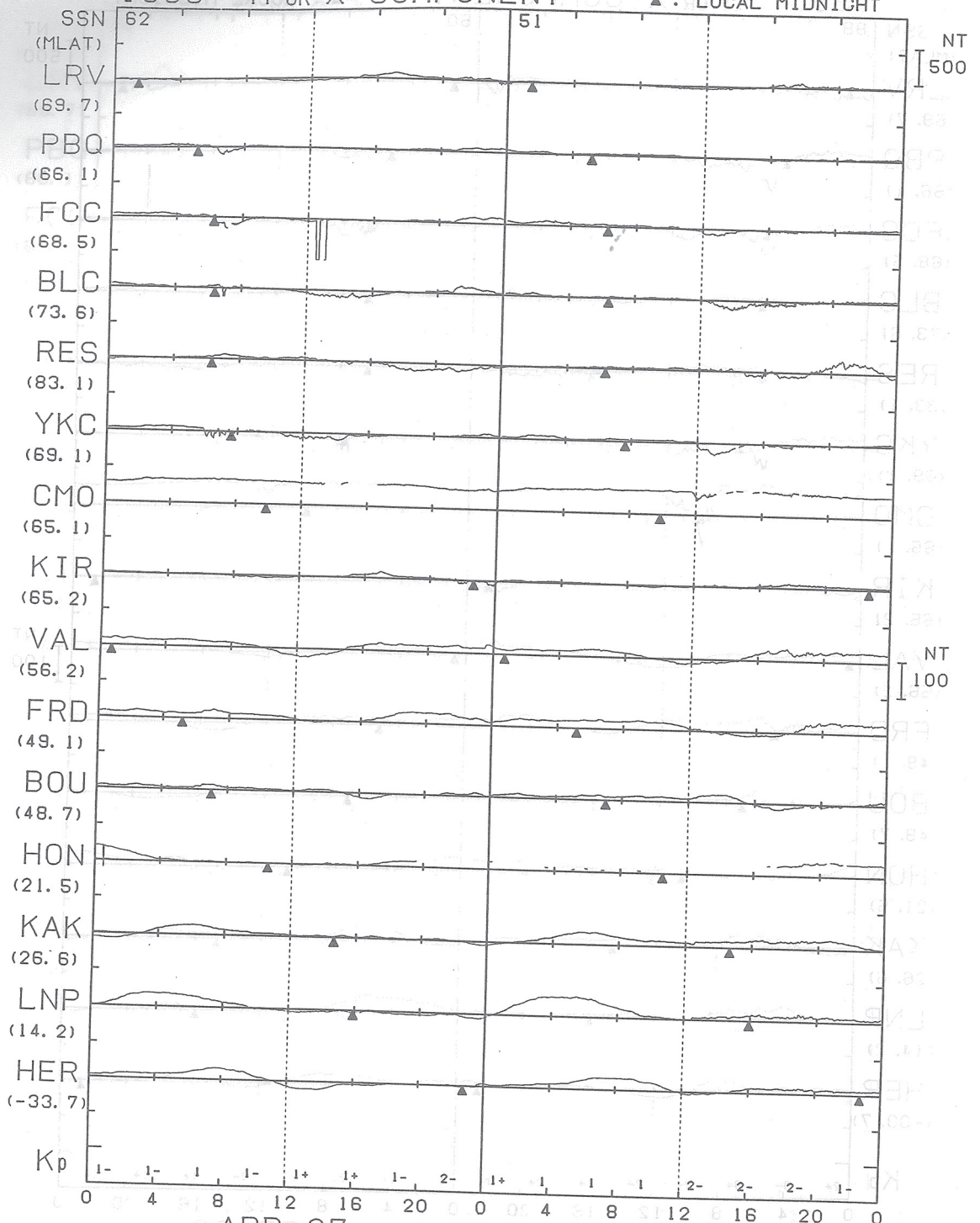
KYOTO UNIV.

1993 H₀ 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.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

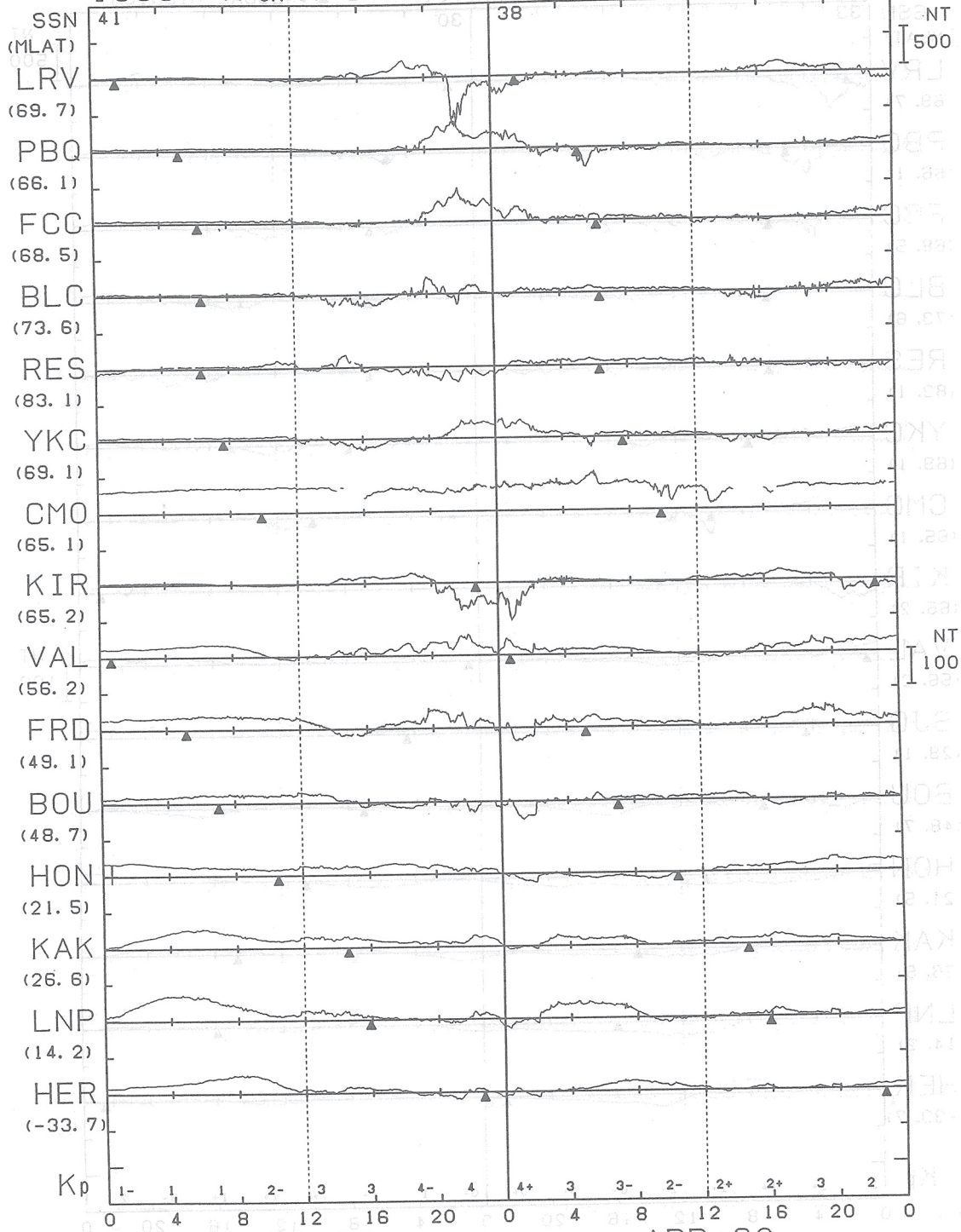


APR 27 (DAY 117)

APR 28 (DAY 118)

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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

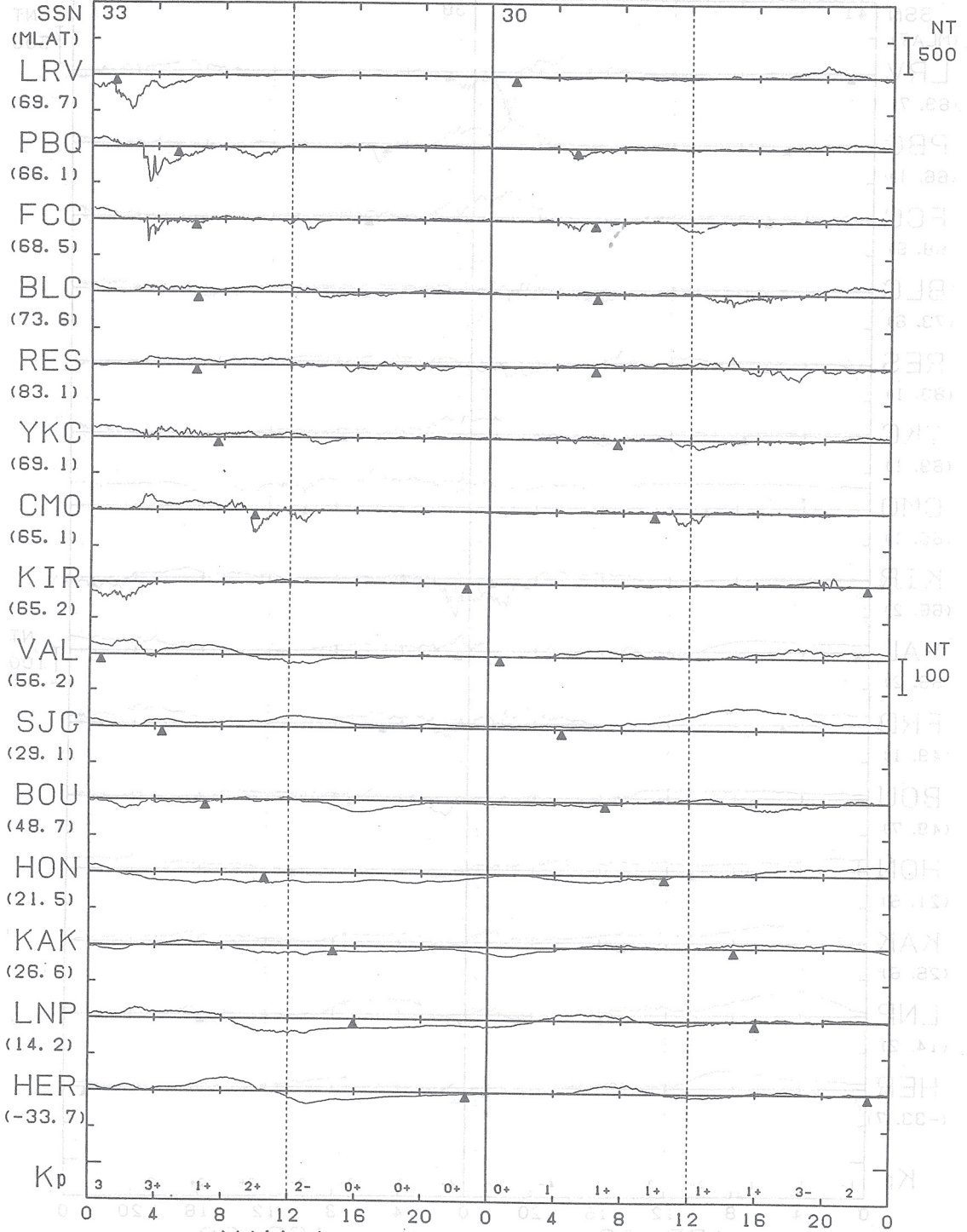


APR 29
(DAY 119)

APR 30
(DAY 120)

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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

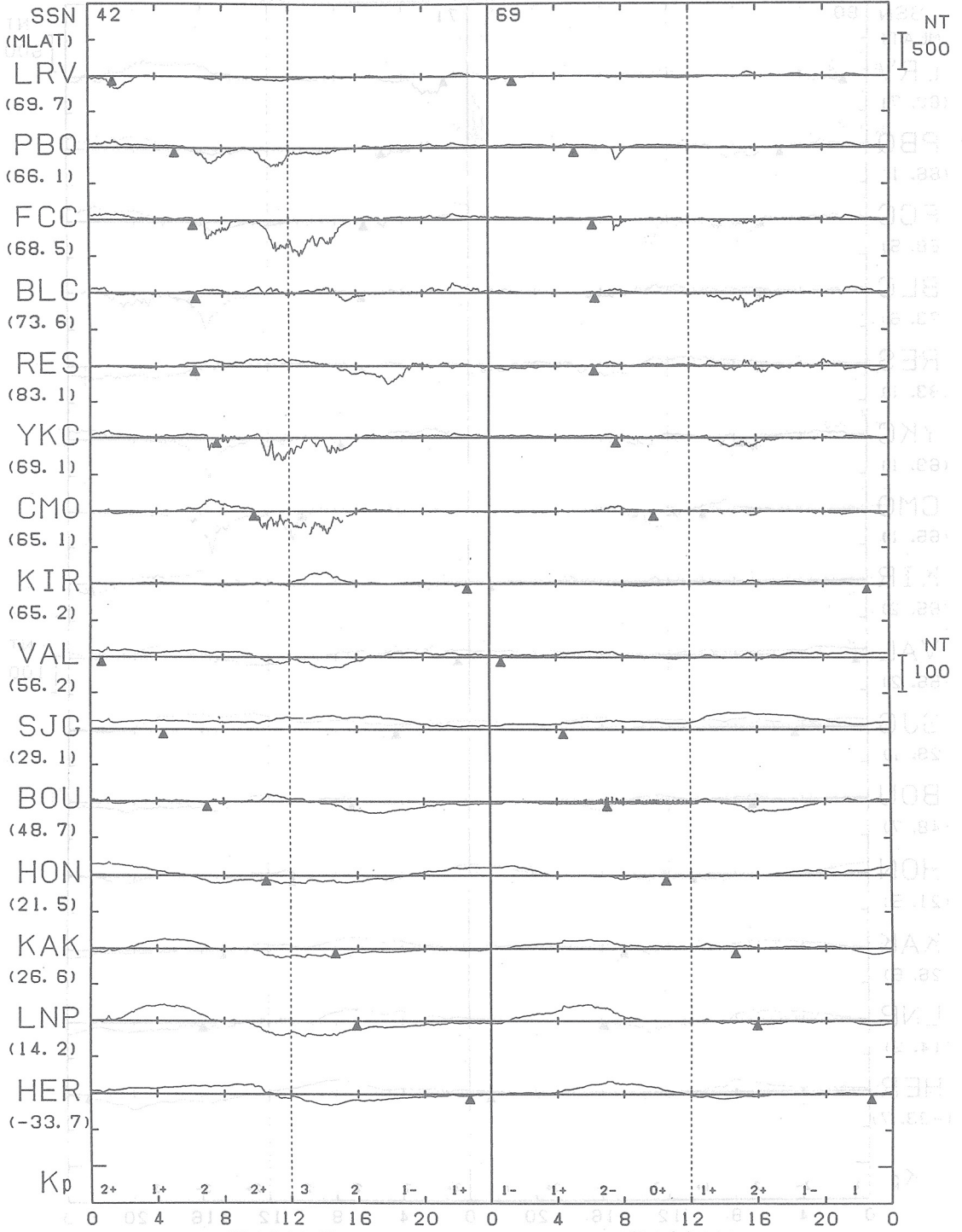


MAY 1
(DAY 121)

MAY 2
(DAY 122)

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

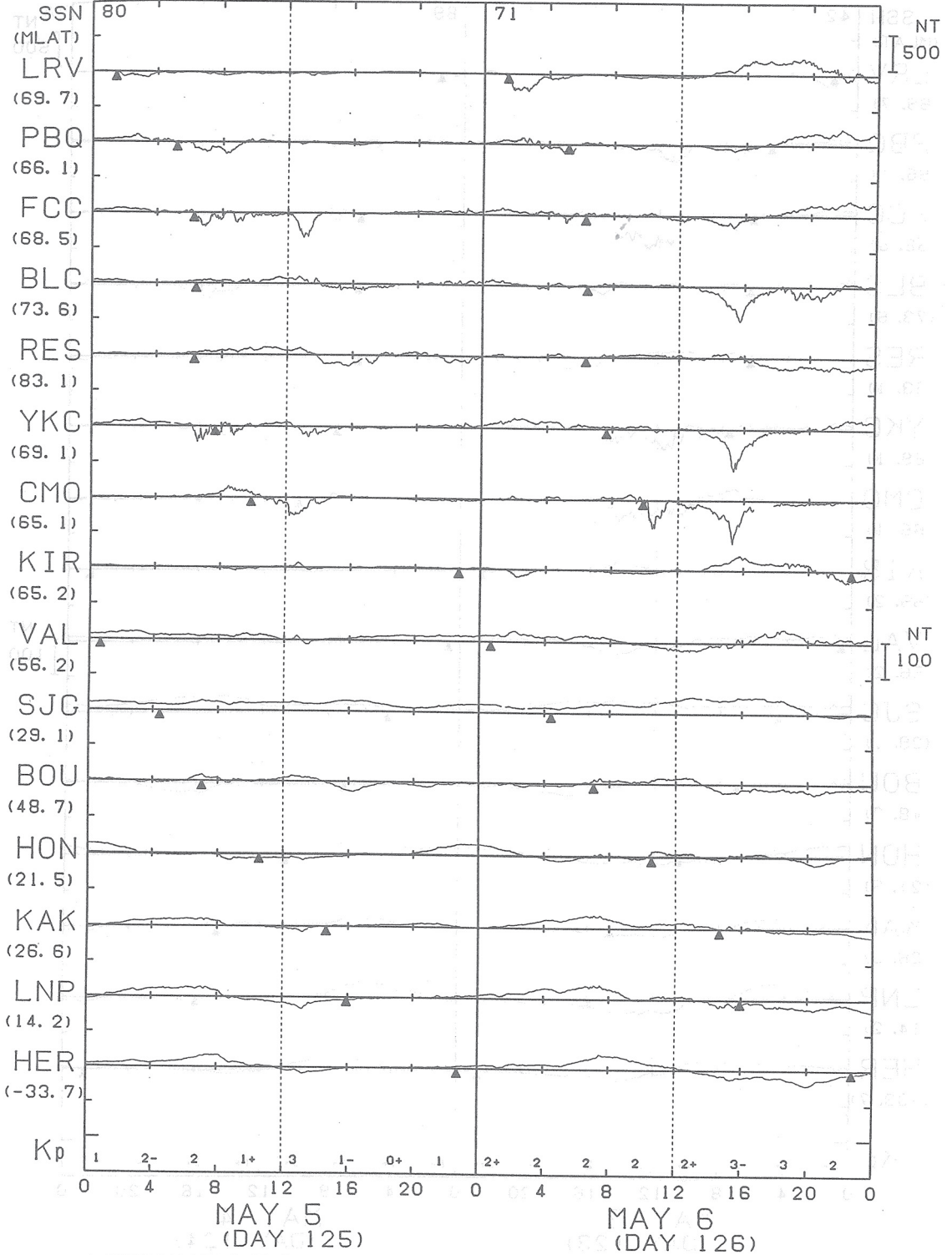
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

KYOTO UNIV.

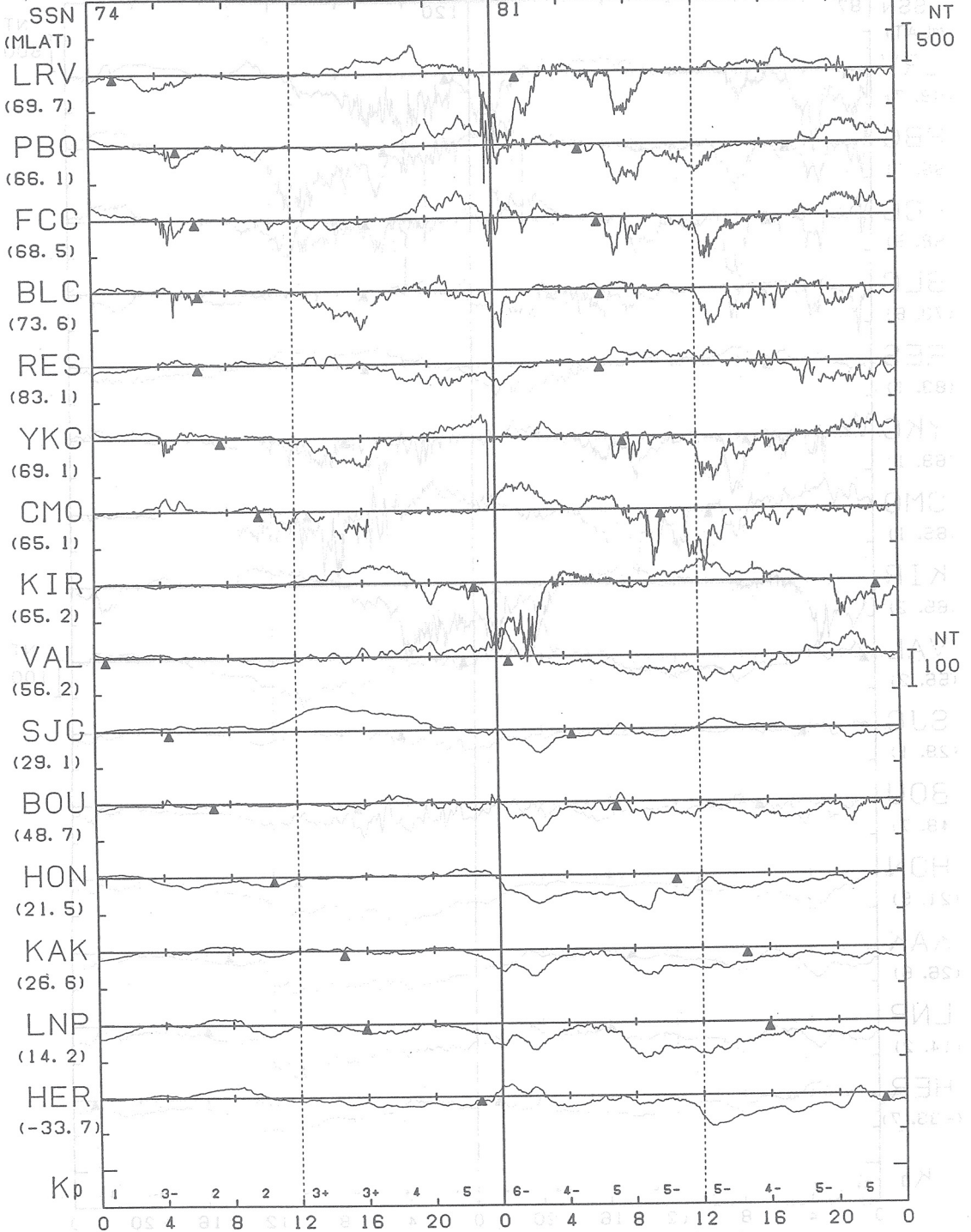
1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



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

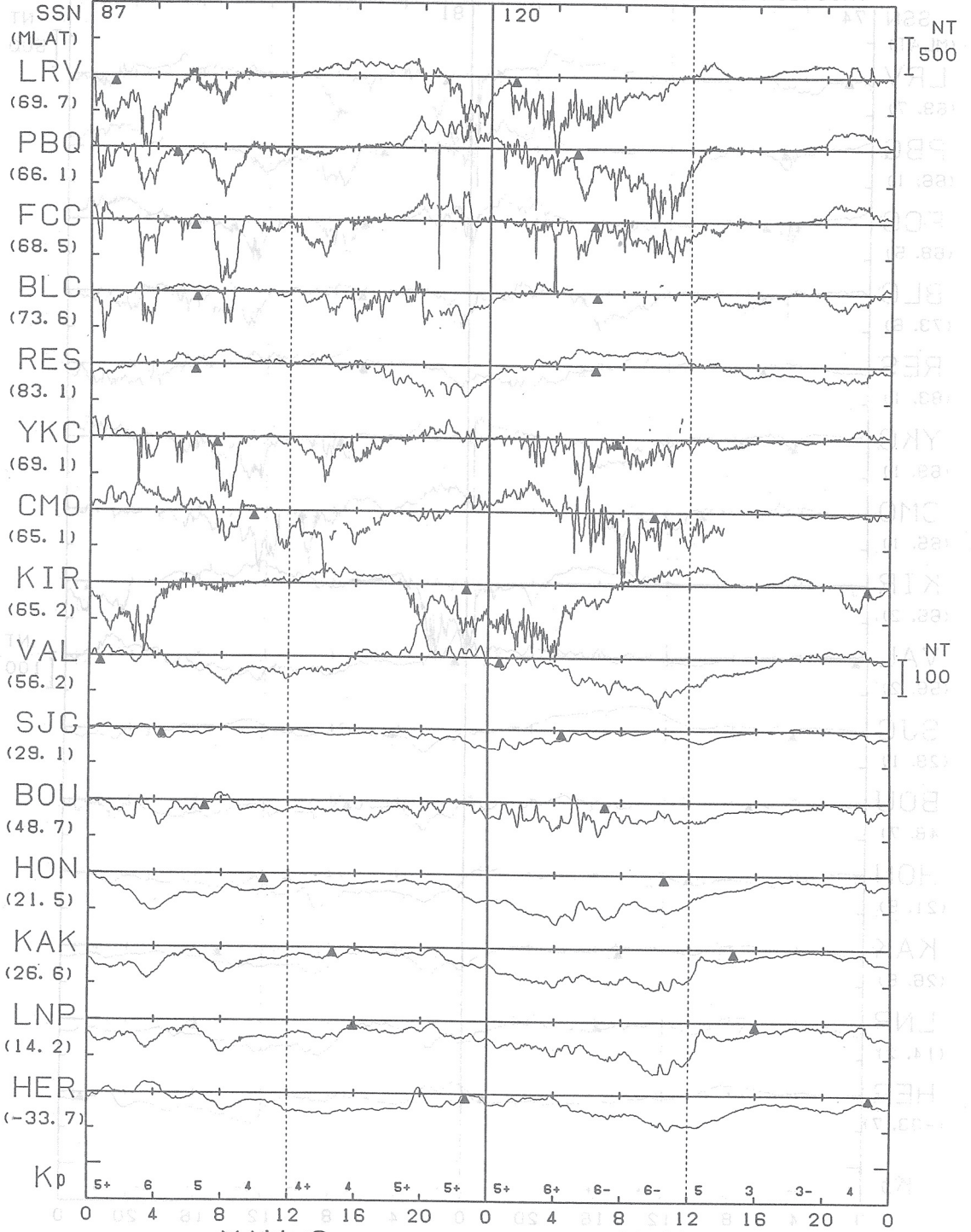
KYOTO UNIV.

1993 H OR X-COMPONENT 1000 ▲ : LOCAL MIDNIGHT



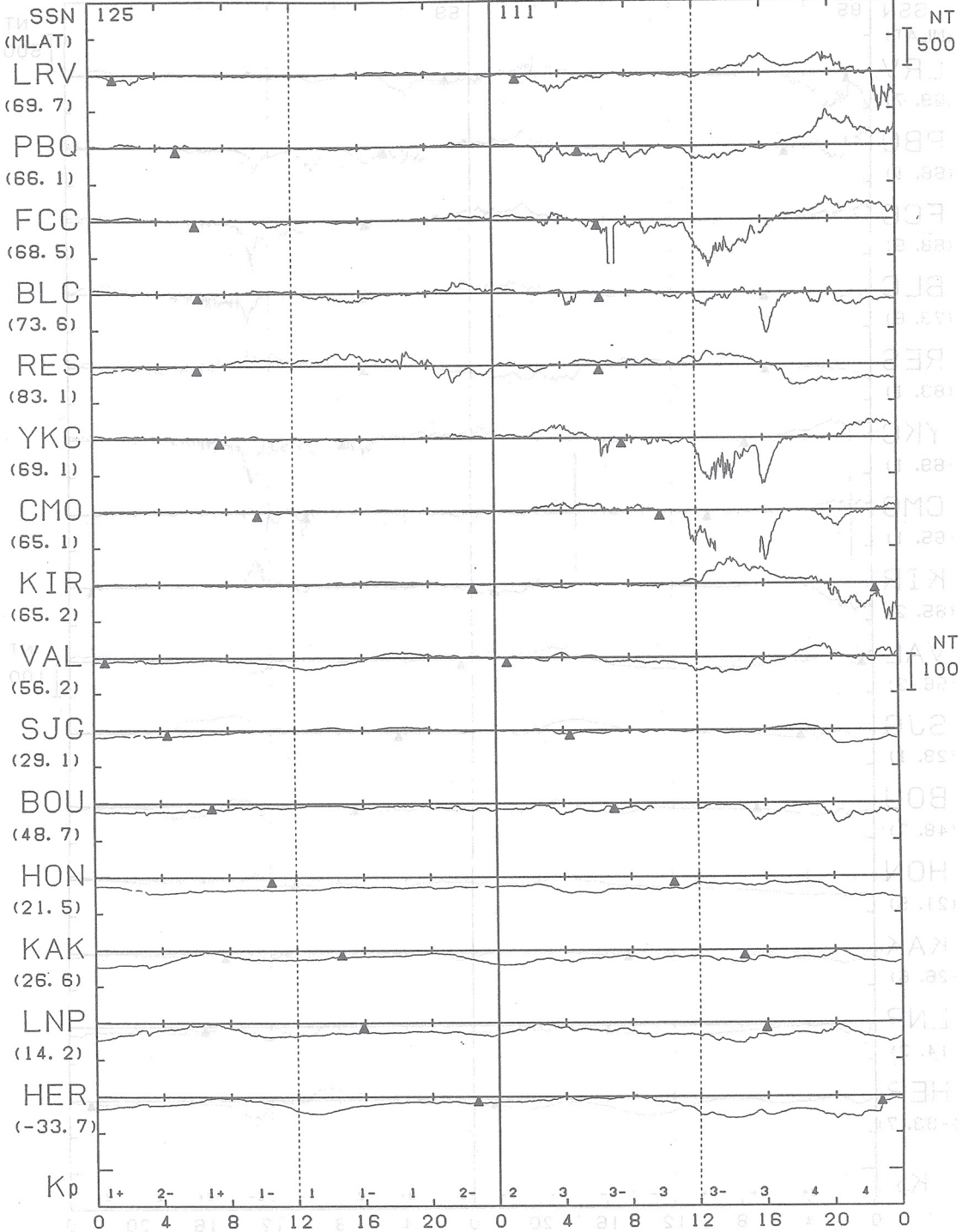
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH KYOTO UNIV.

1993 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.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



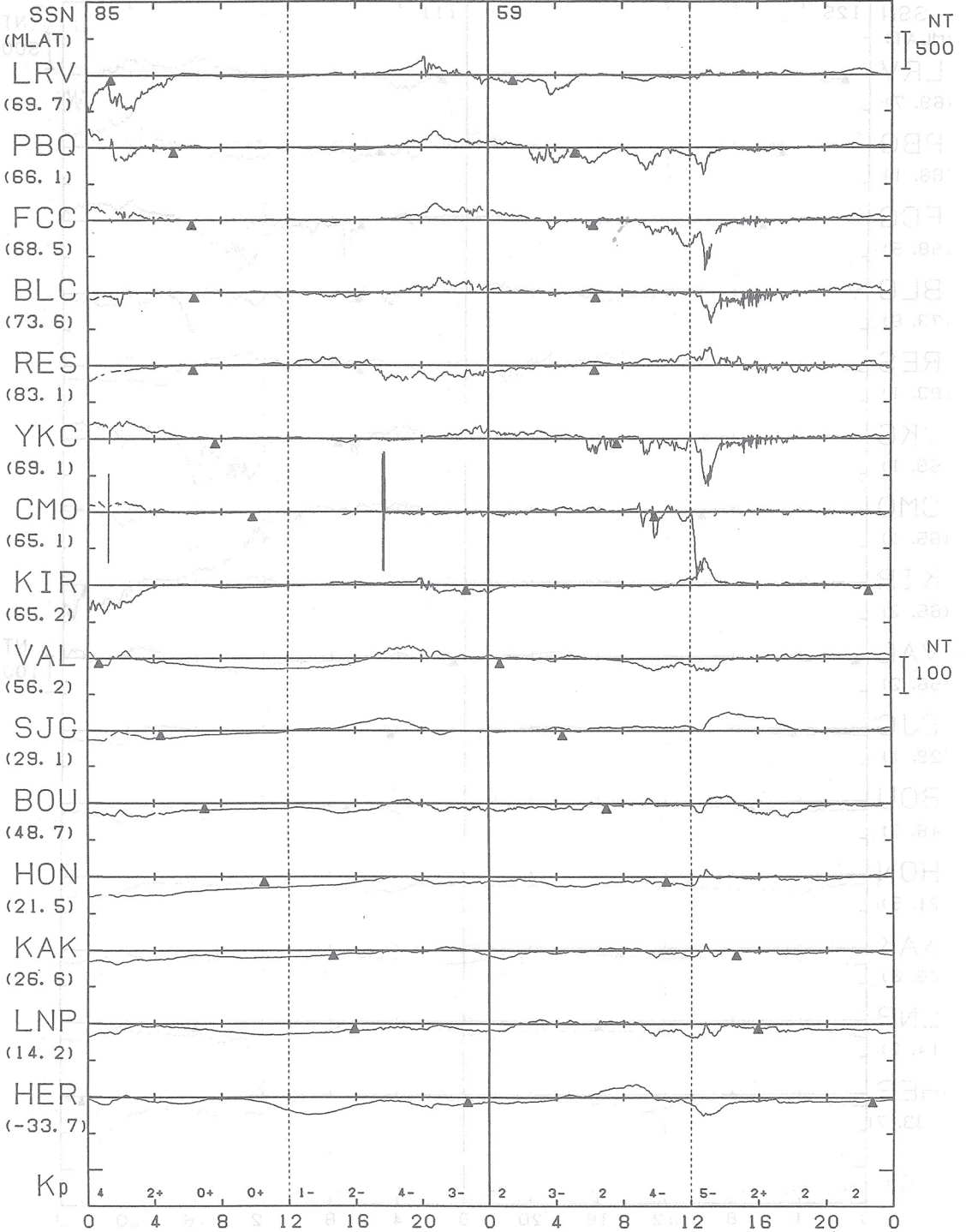
MAY 11
(DAY 131)

MAY 12
(DAY 132)

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

▲ : LOCAL MIDNIGHT
 KYOTO UNIV.

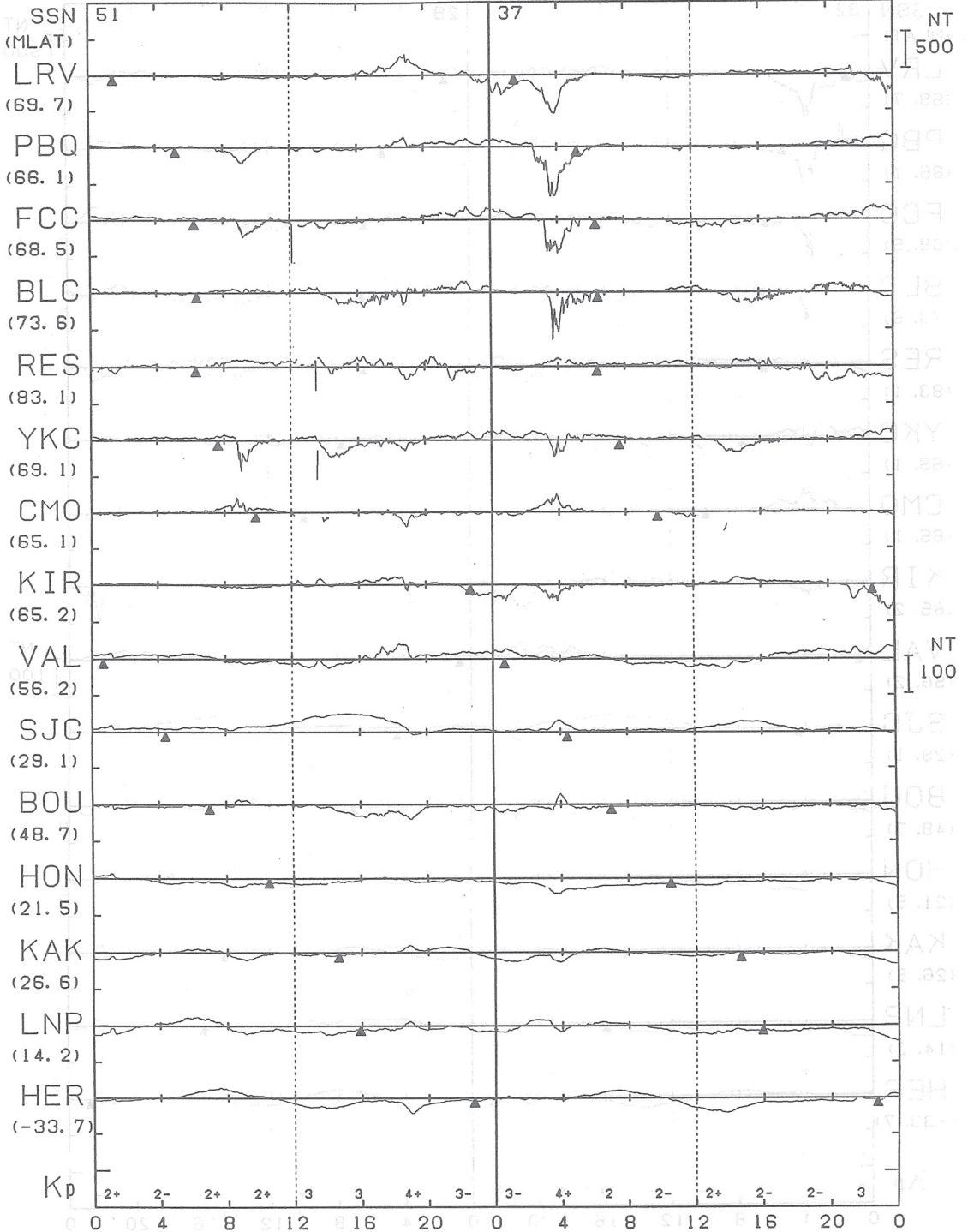
1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT



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.

1993 H_{OR} X-COMPONENT ▲ : LOCAL MIDNIGHT

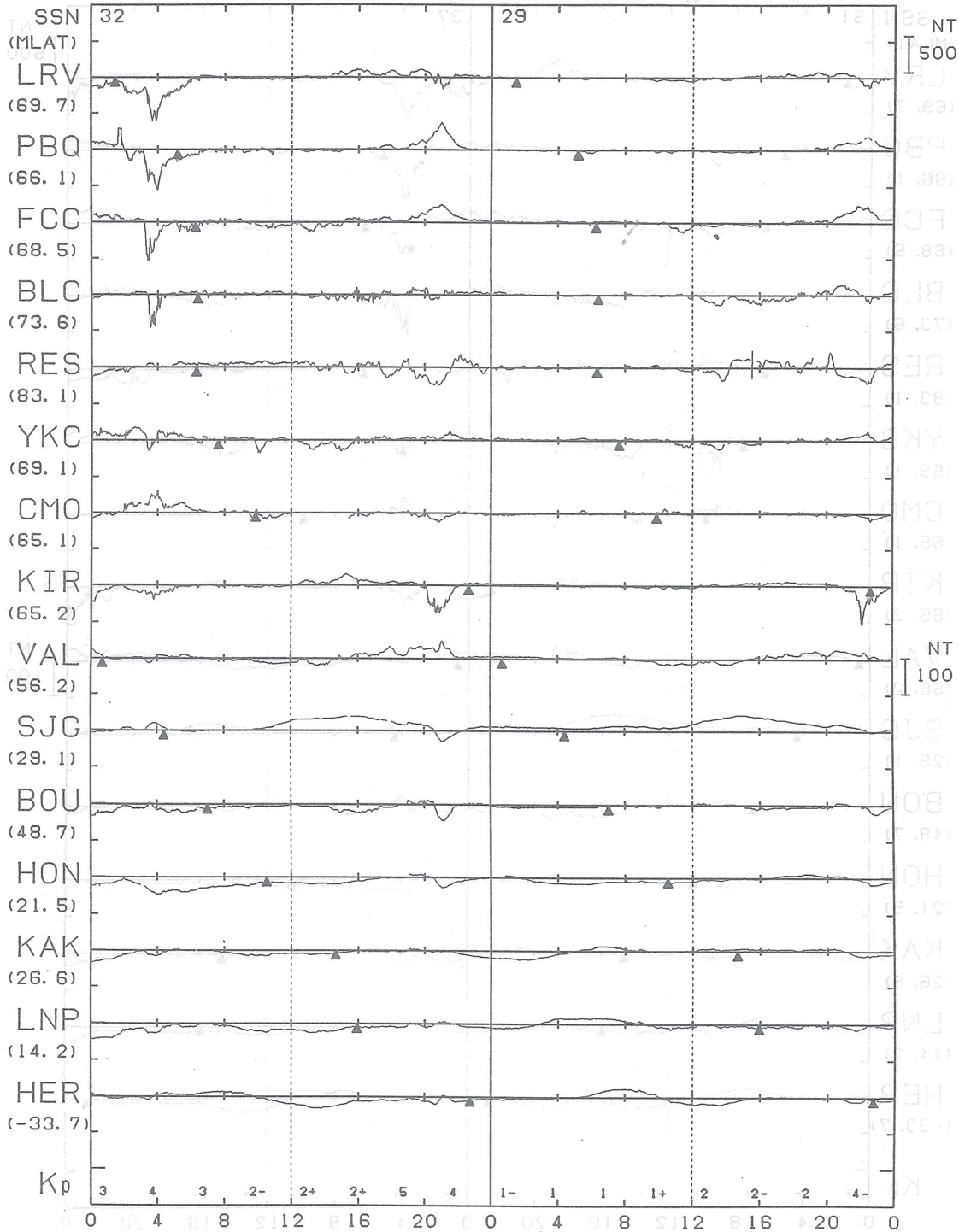


MAY 15
88 (DAY 135)

MAY 16
(DAY 136)

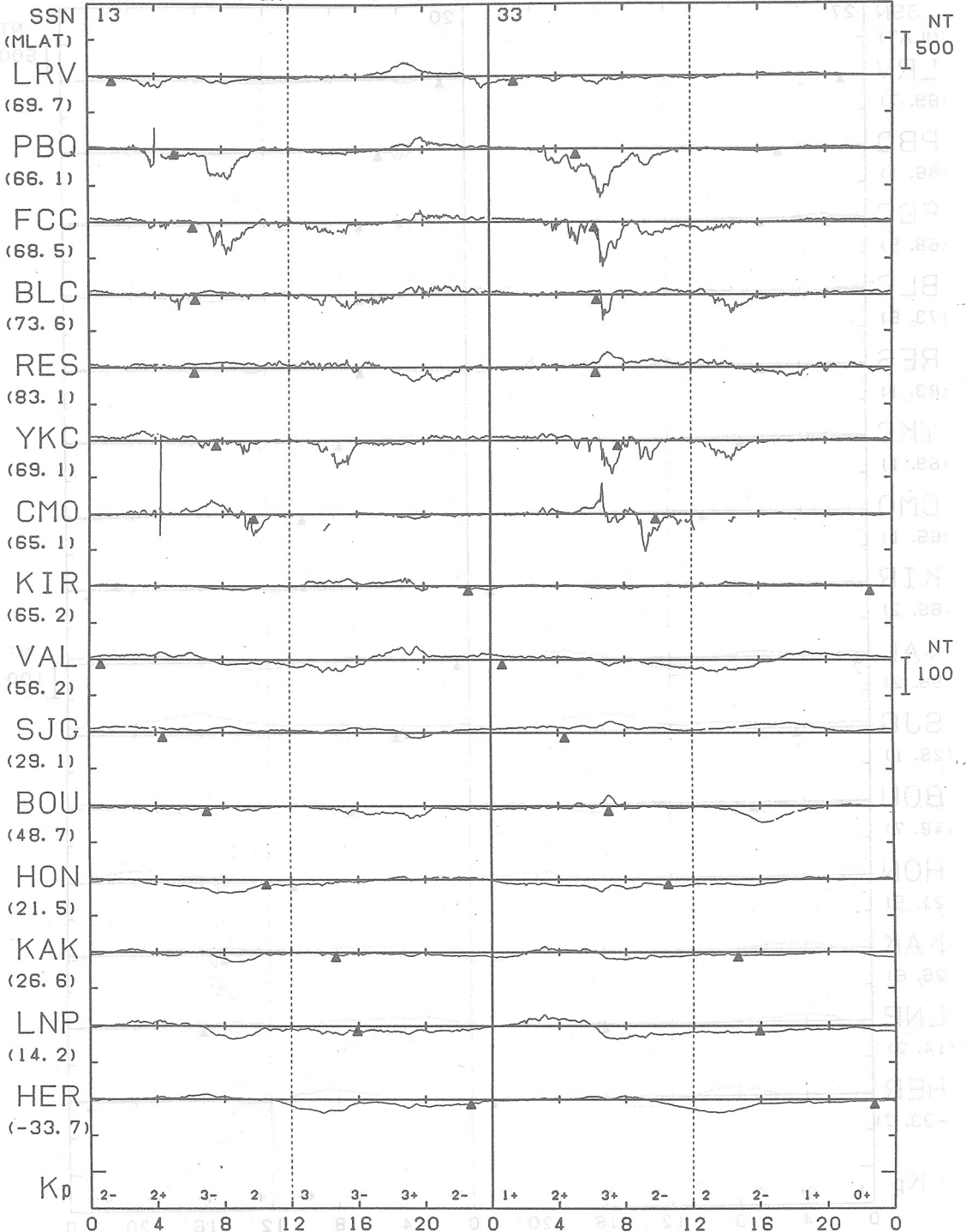
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT ▲: LOCAL MIDNIGHT



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

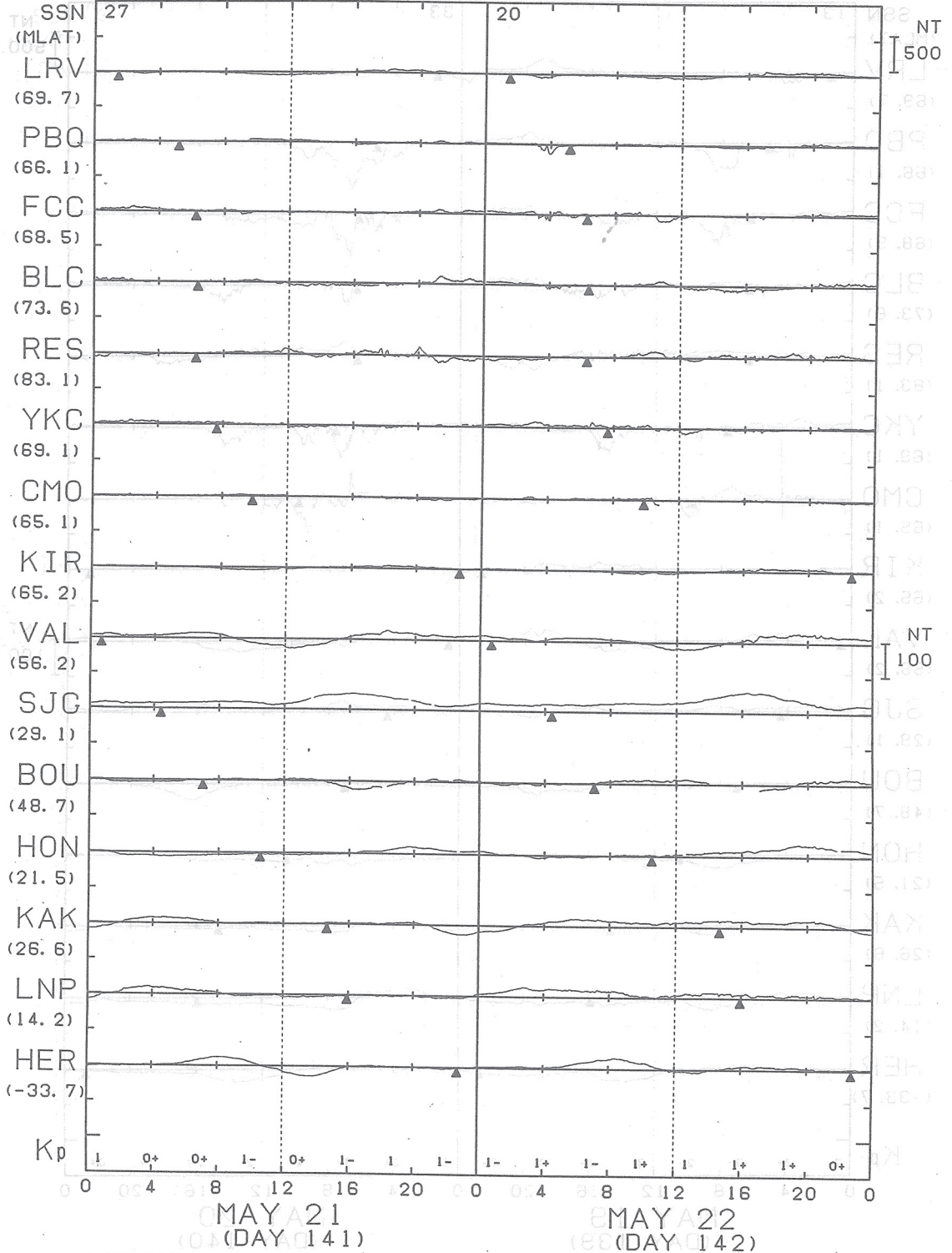
1993 H OR X-COMPONENT MOON -▲ : LOCAL MIDNIGHT



MAY 19 (DAY 139) MAY 20 (DAY 140)

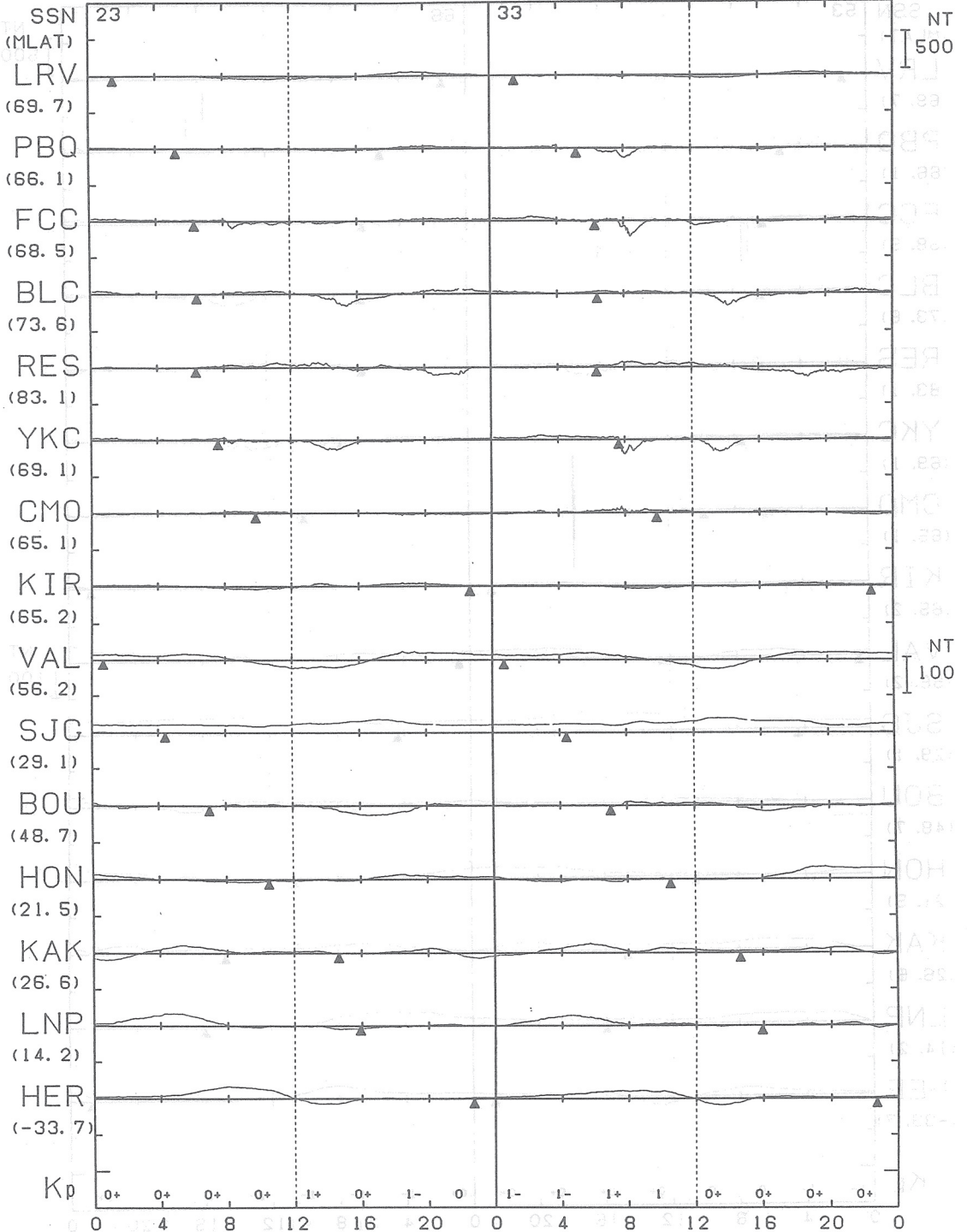
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH KYOTO UNIV.

1993 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.

1993 H OR X-COMPONENT Δ : LOCAL MIDNIGHT

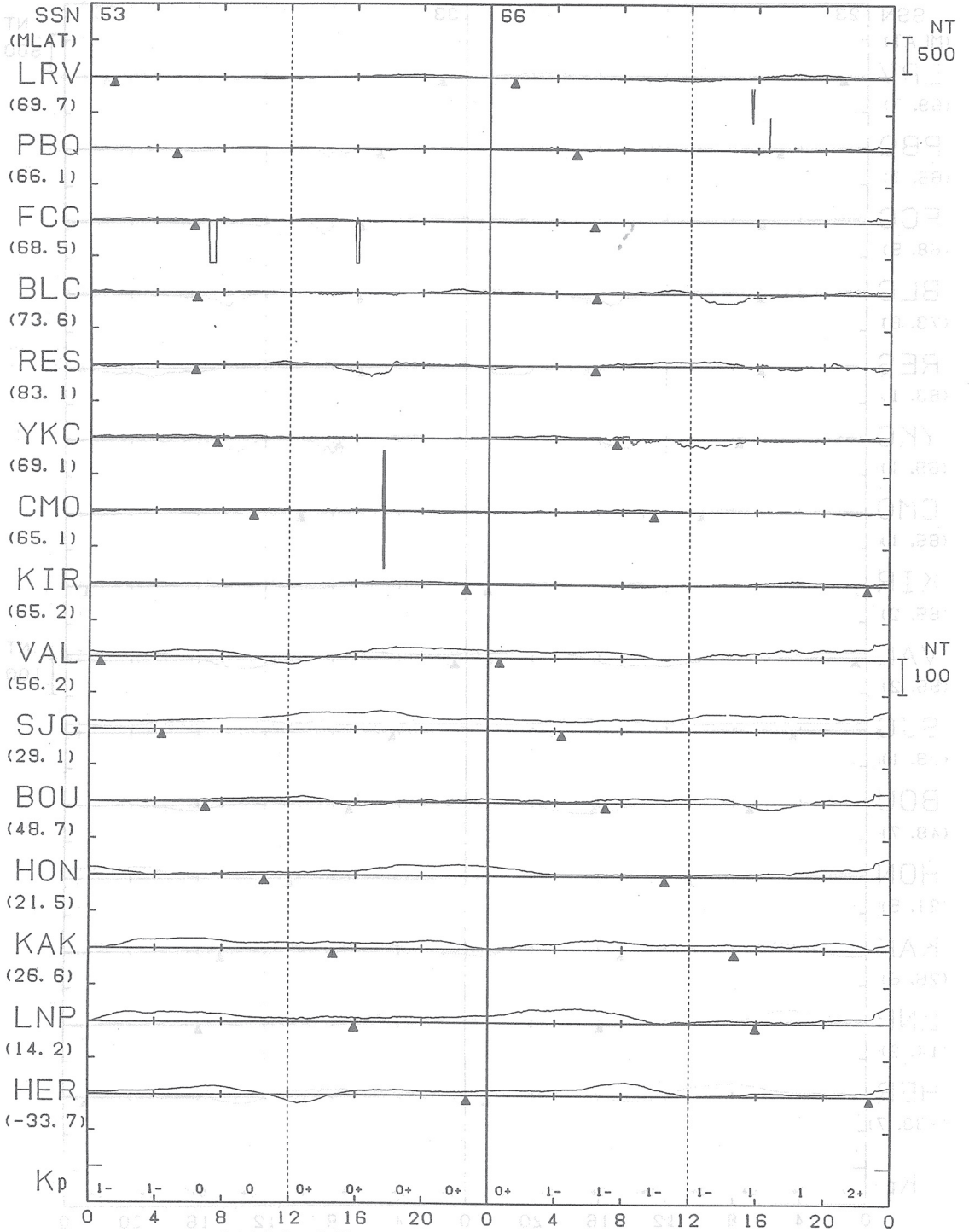


MAY 23
(DAY 143)

MAY 24
(DAY 144)

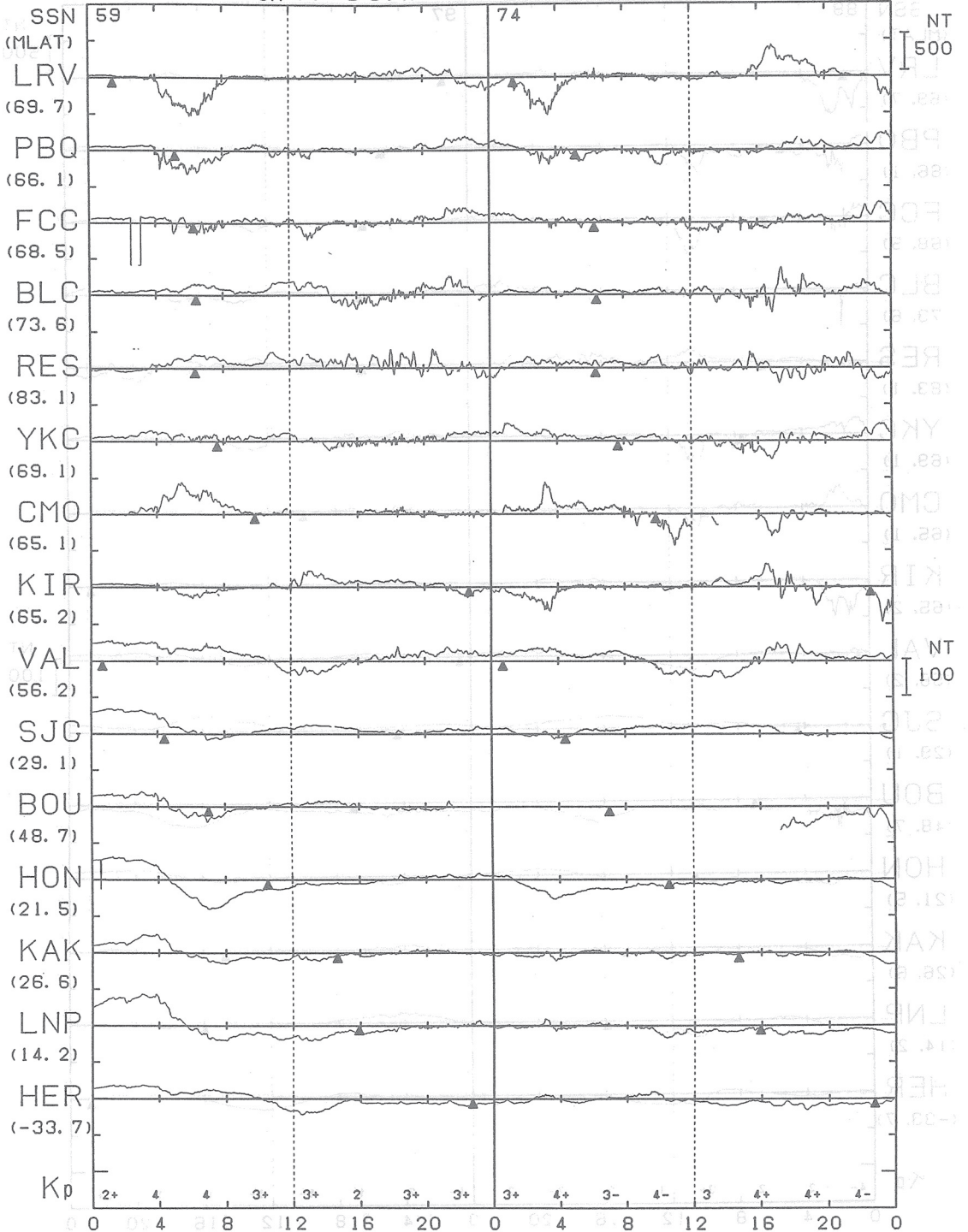
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 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.

1993 M H OR X-COMPONENT MOO-▲: LOCAL MIDNIGHT

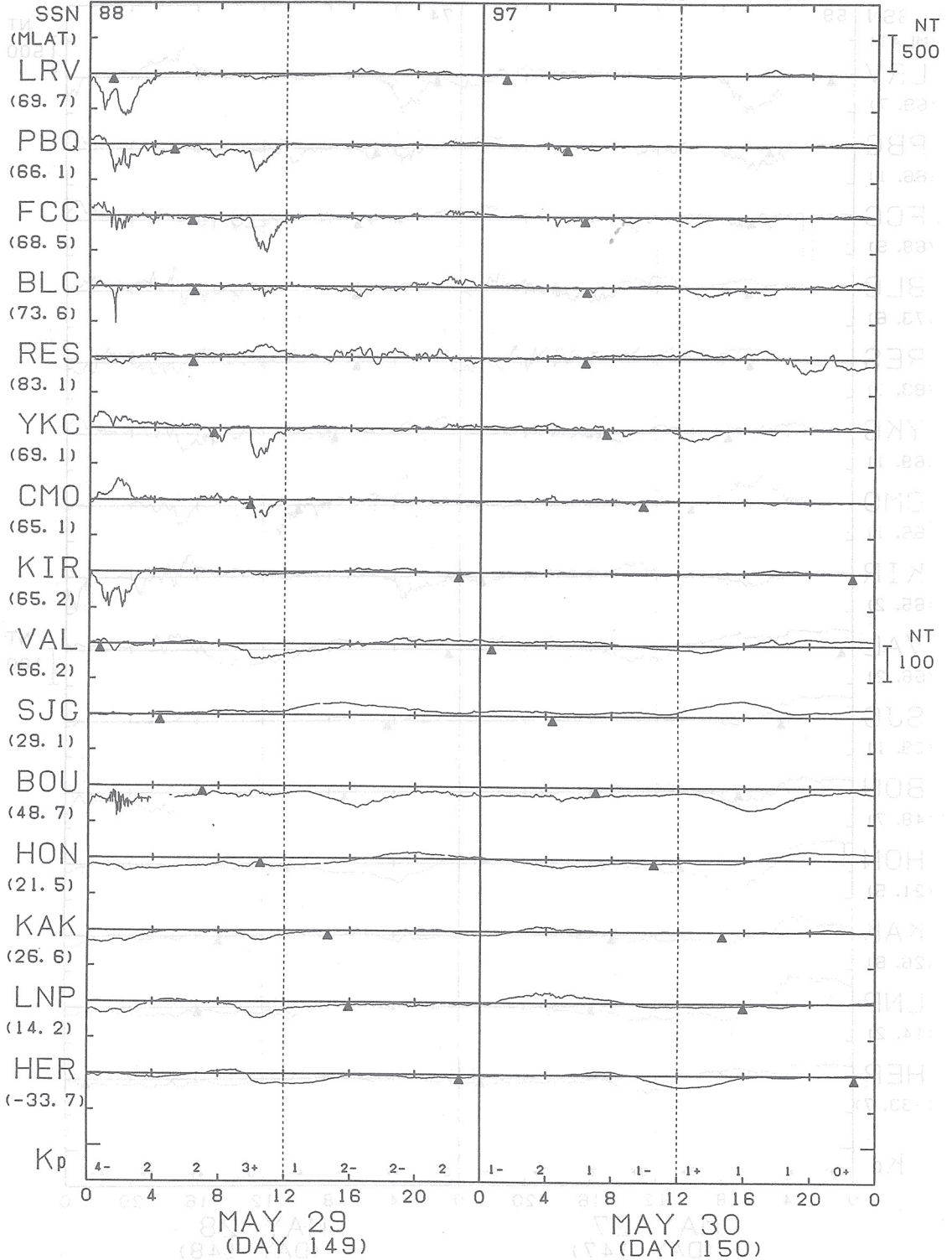


MAY 27
(DAY 147)

MAY 28
(DAY 148)

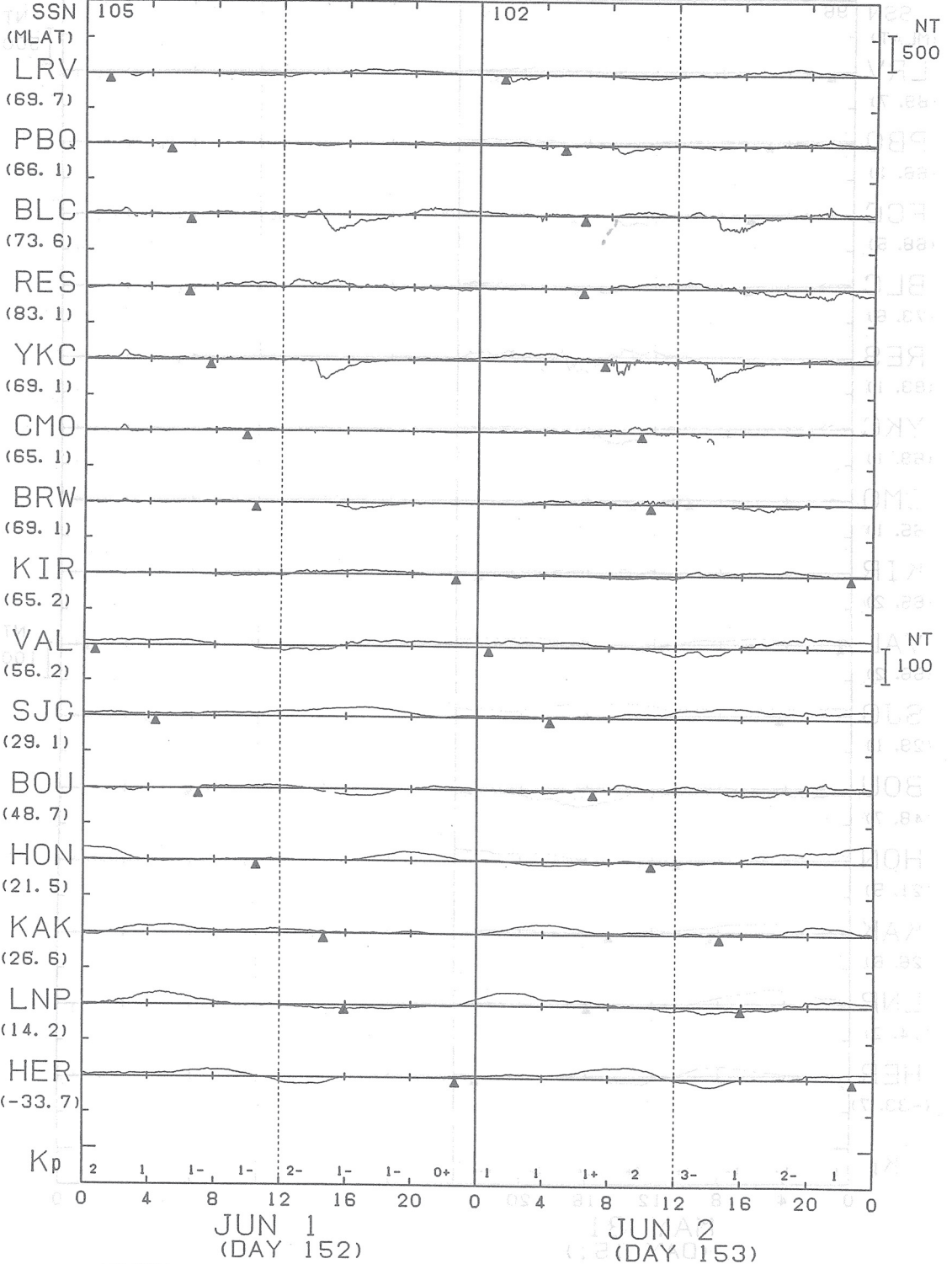
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



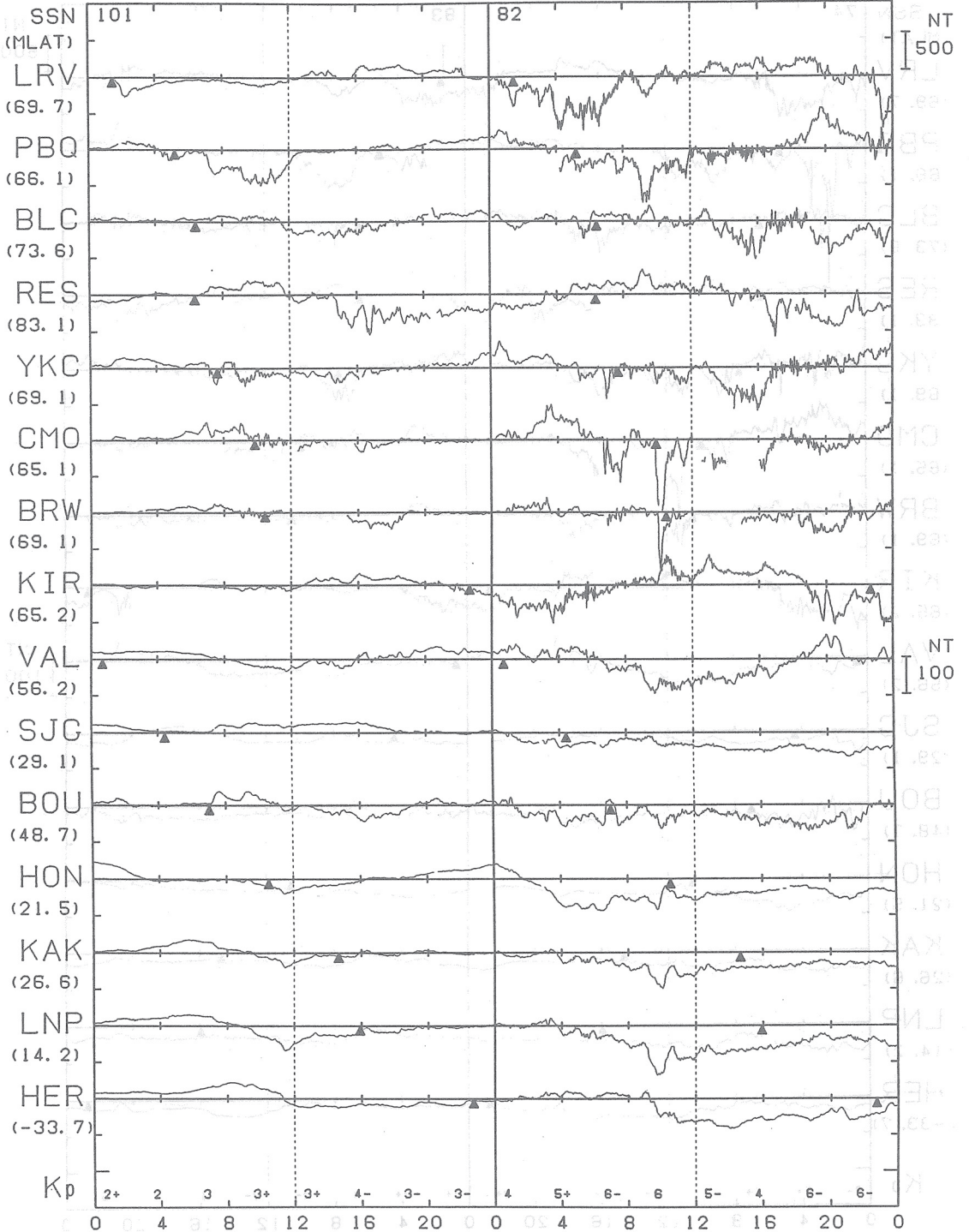
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH KYOTO UNIV.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



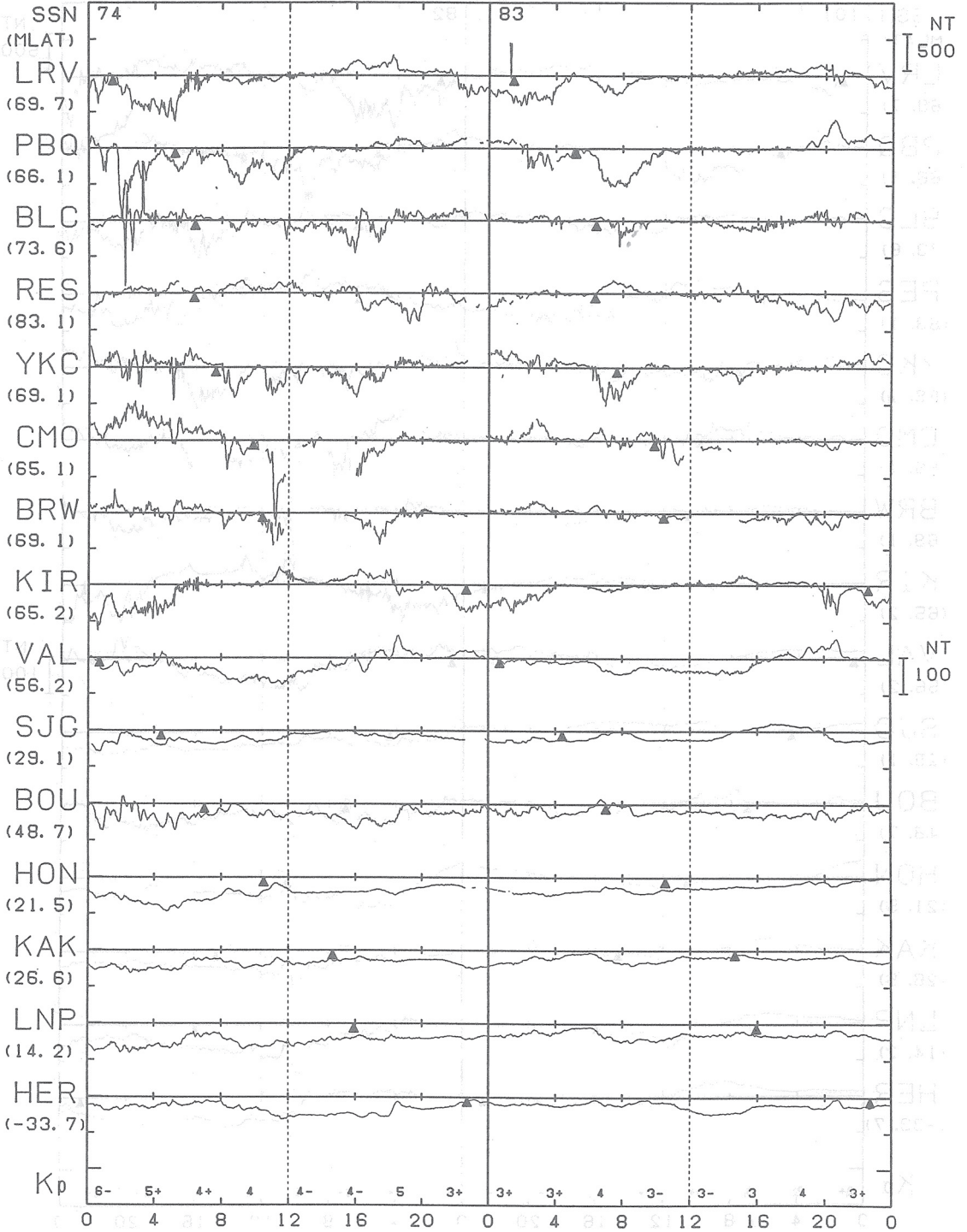
JUN 3 (DAY 154)

JUN 4 (DAY 155)

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

© KYOTO UNIV.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



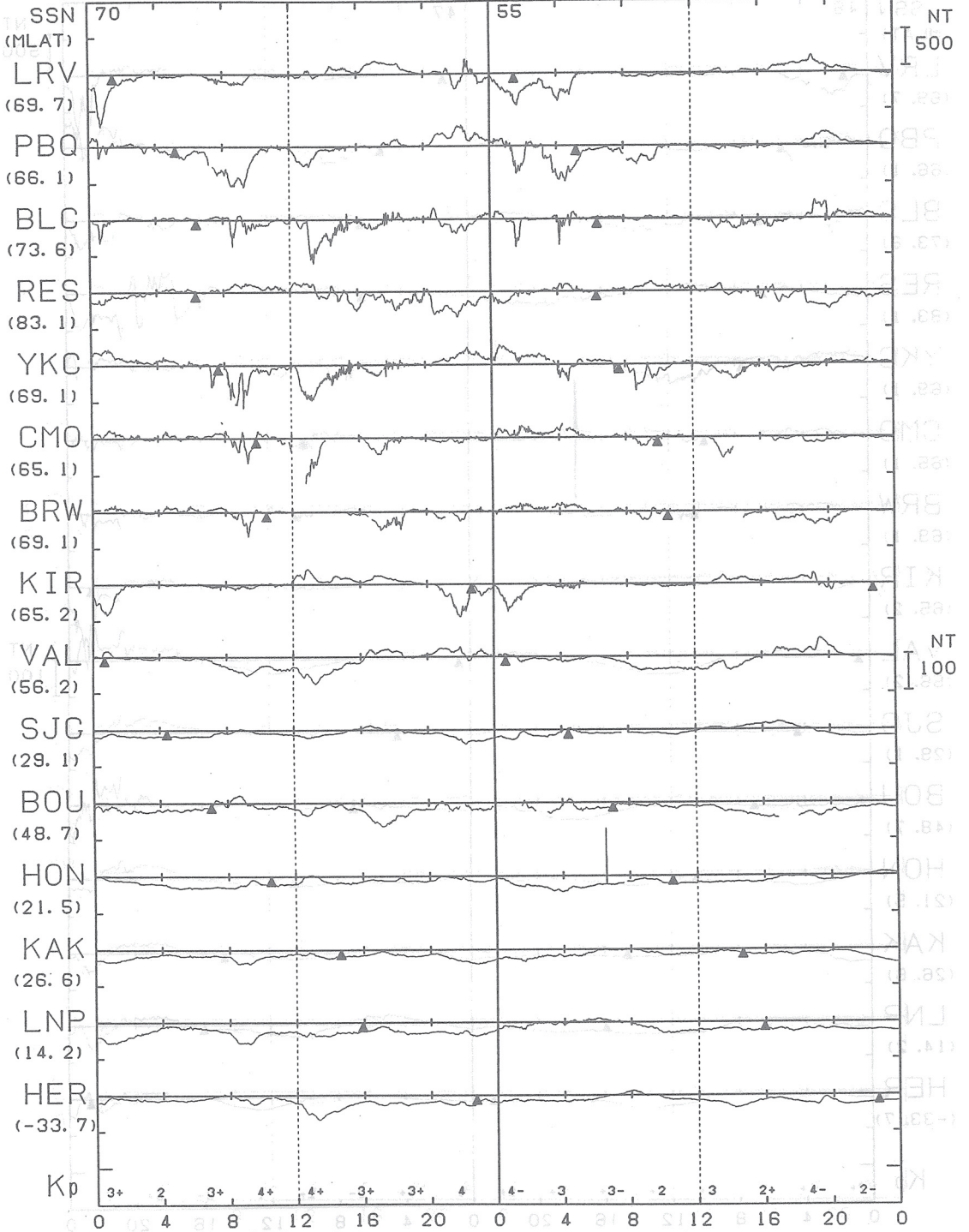
JUN 5
(DAY 156)

JUN 6
(DAY 157)

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

NT 500
 NT 100
 KYOTO UNIV.

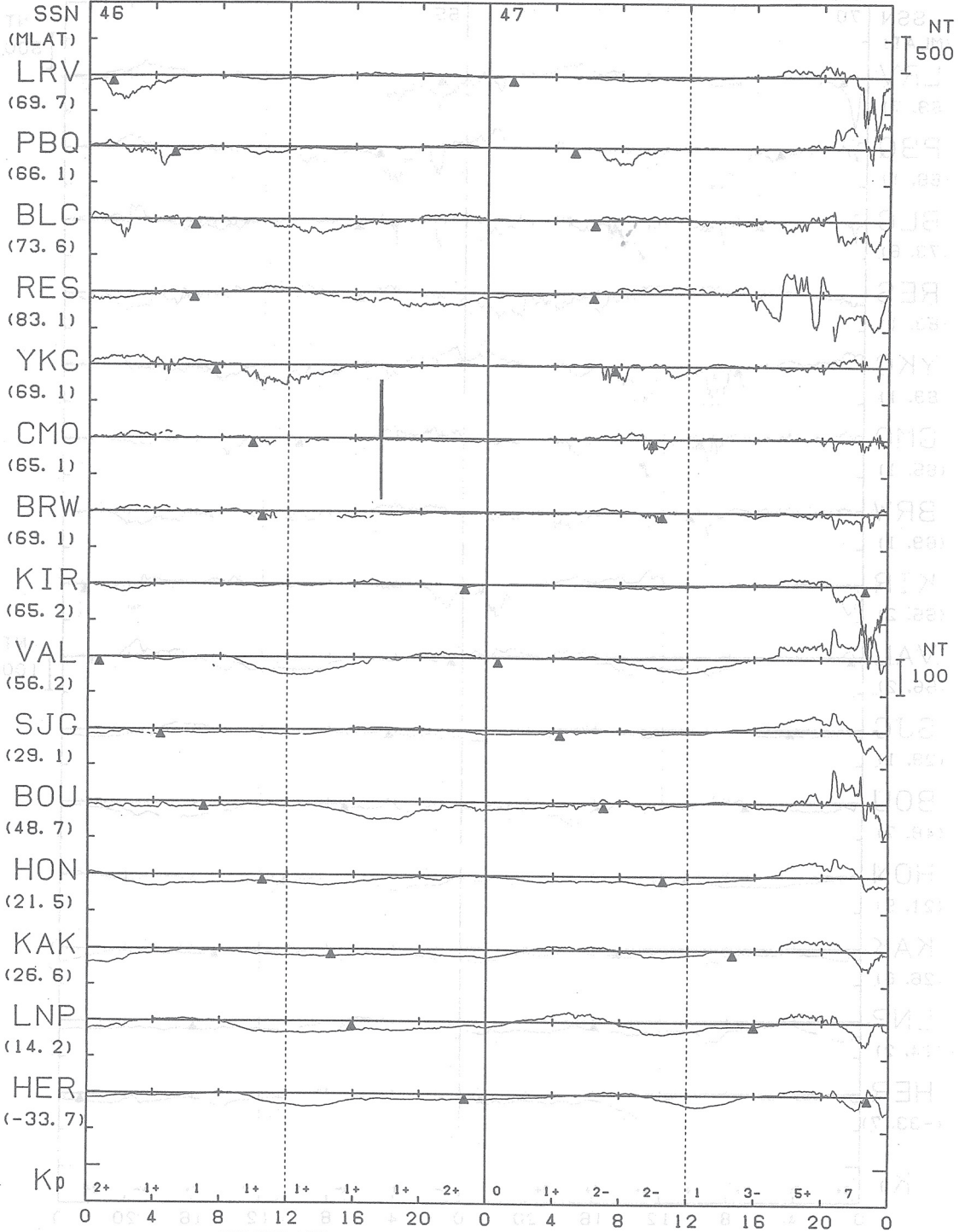
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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.

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

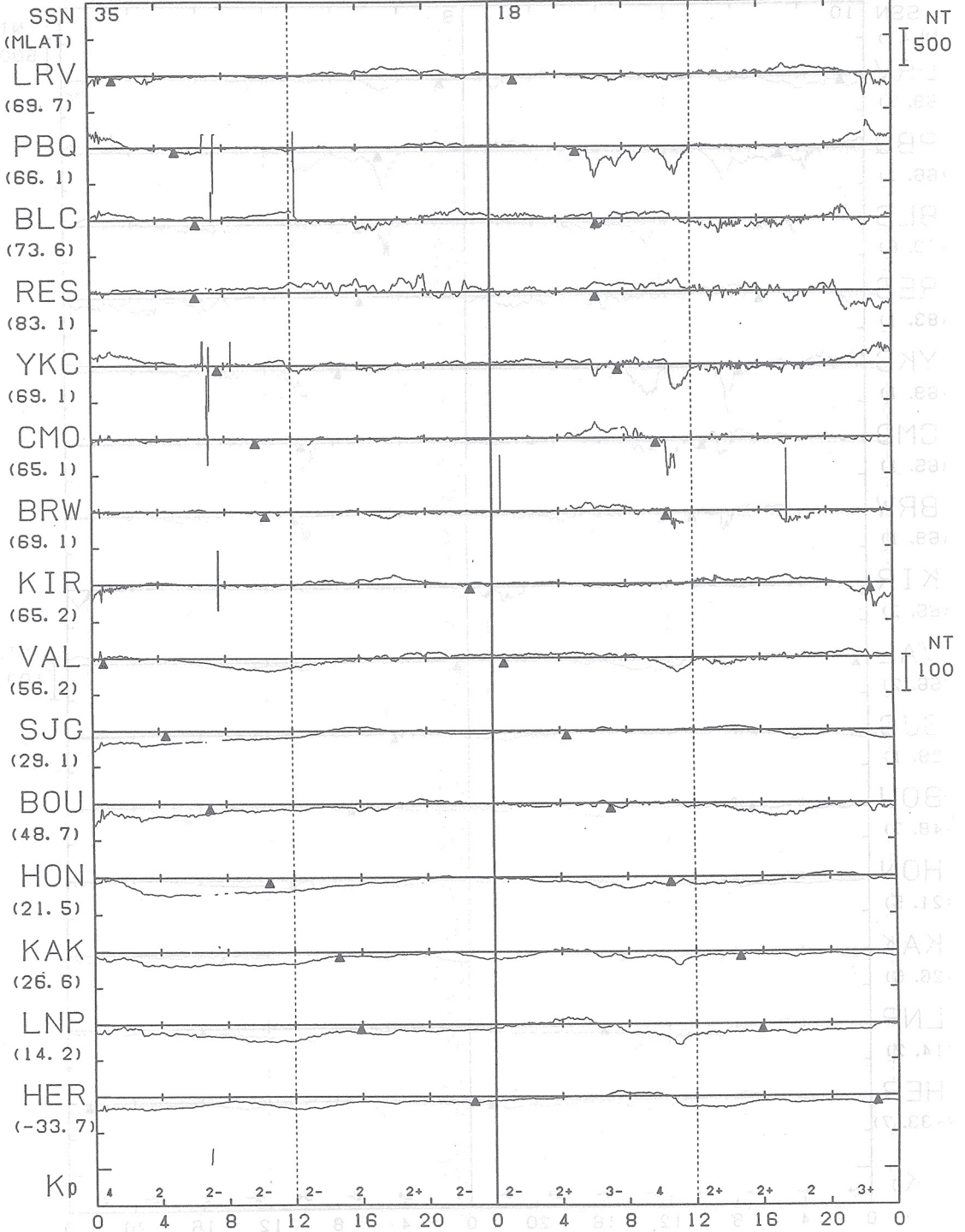


JUN 9
(82 (DAY 160))

JUN 10
(82 (DAY 161))

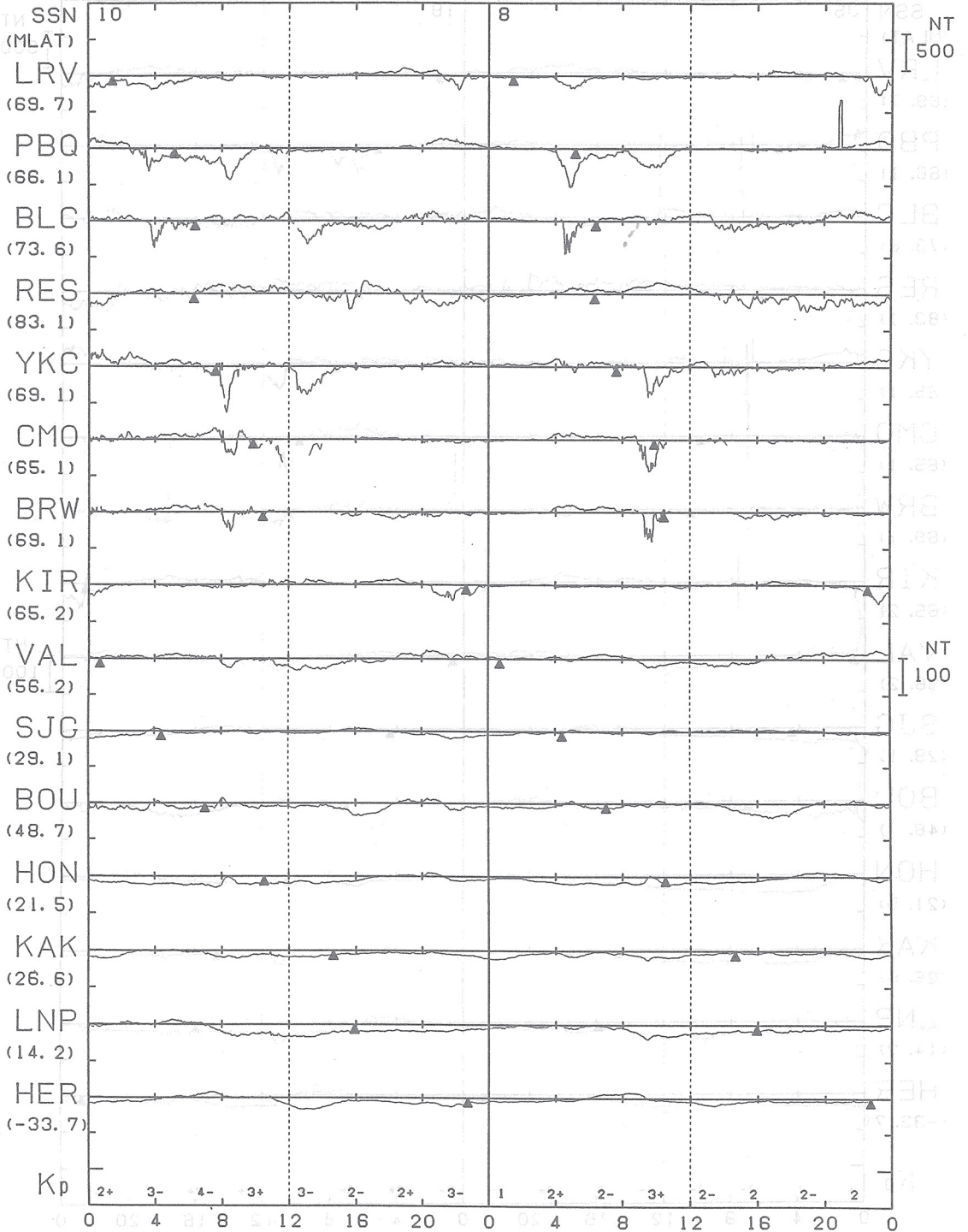
* MONTHLY MEAN OF 5-QUIET DAYS IS SUBTRACTED
 * PROMPT DATA ARE INCLUDED
 * ARTIFICIAL NOISES ARE NOT ELIMINATED ENOUGH
 KYOTO UNIV.

1993 H OR X-COMPONENT MOON ▲ : LOCAL MIDNIGHT



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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

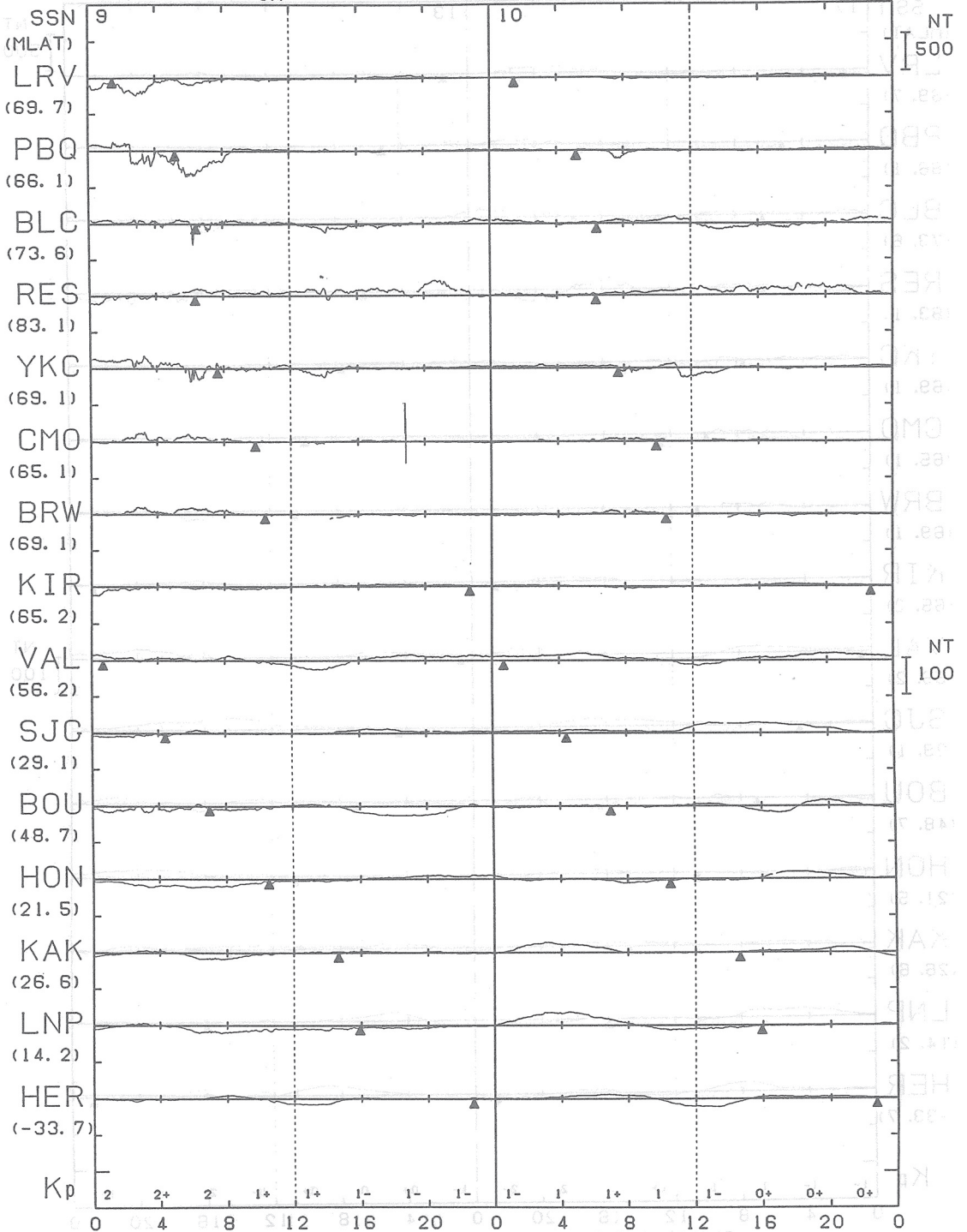


JUN 13
(DAY 164)

JUN 14
(DAY 165)

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

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

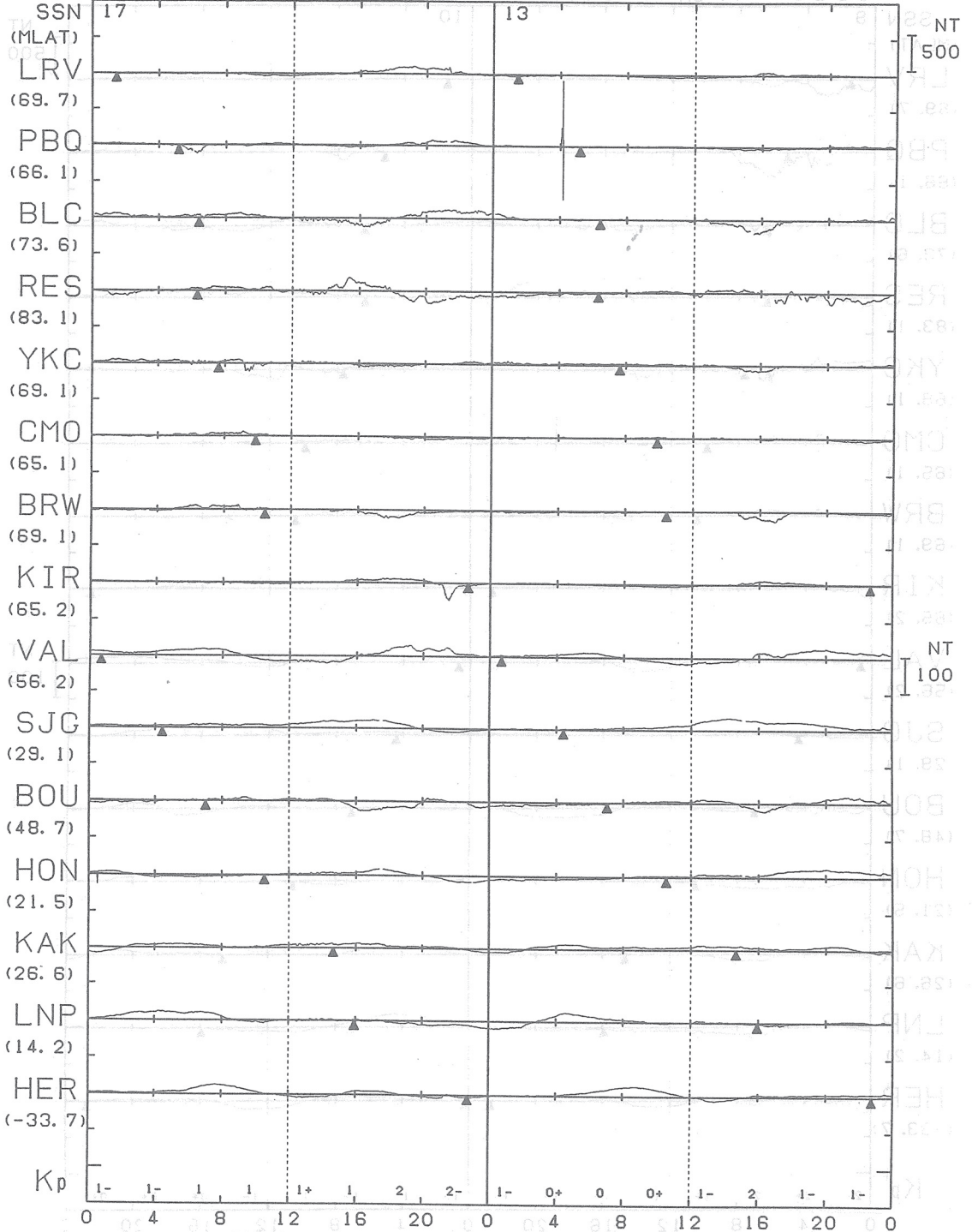


JUN 15 (DAY 166)

JUN 16 (DAY 167)

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

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

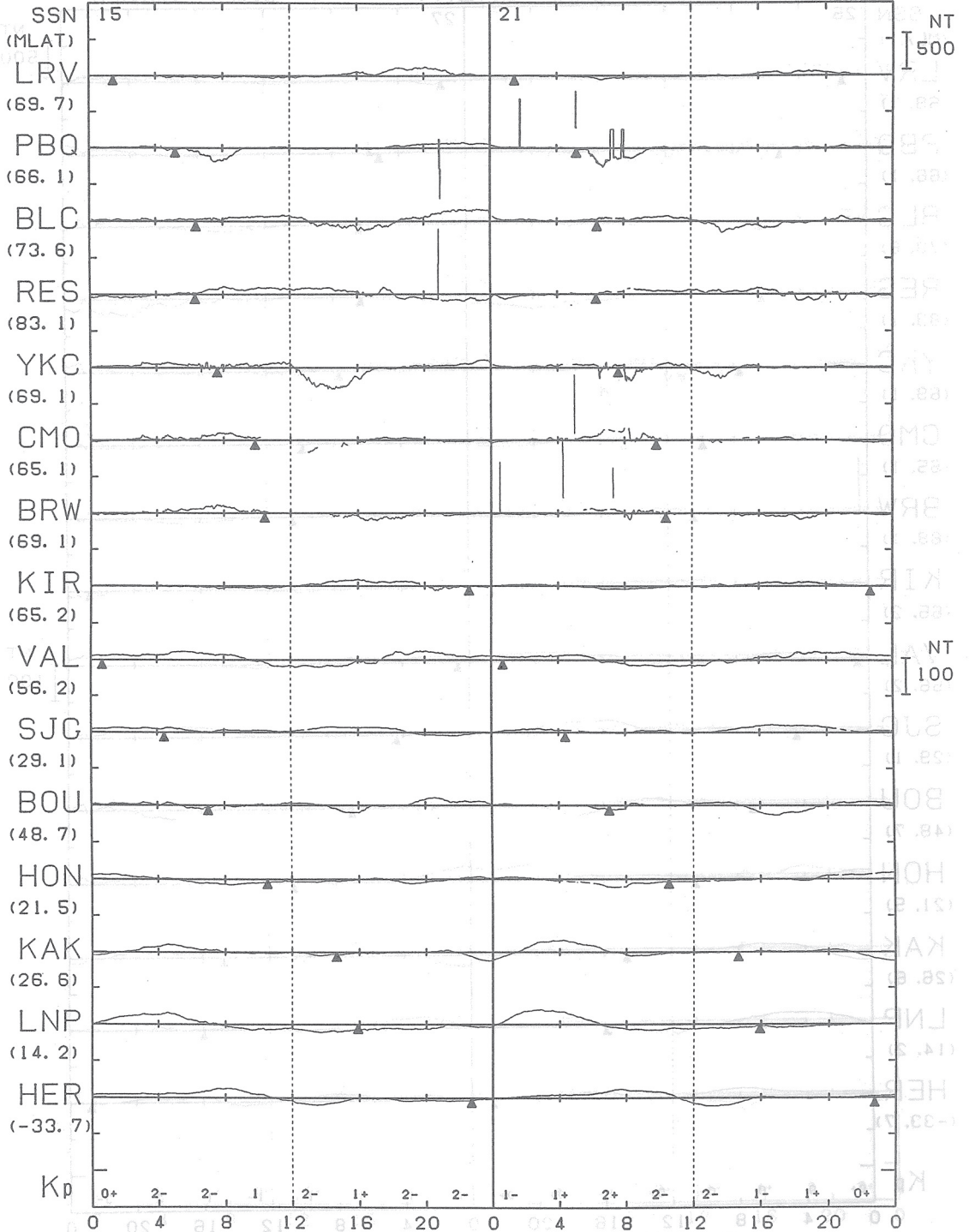


JUN 17
(DAY 168)

JUN 18
(DAY 169)

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

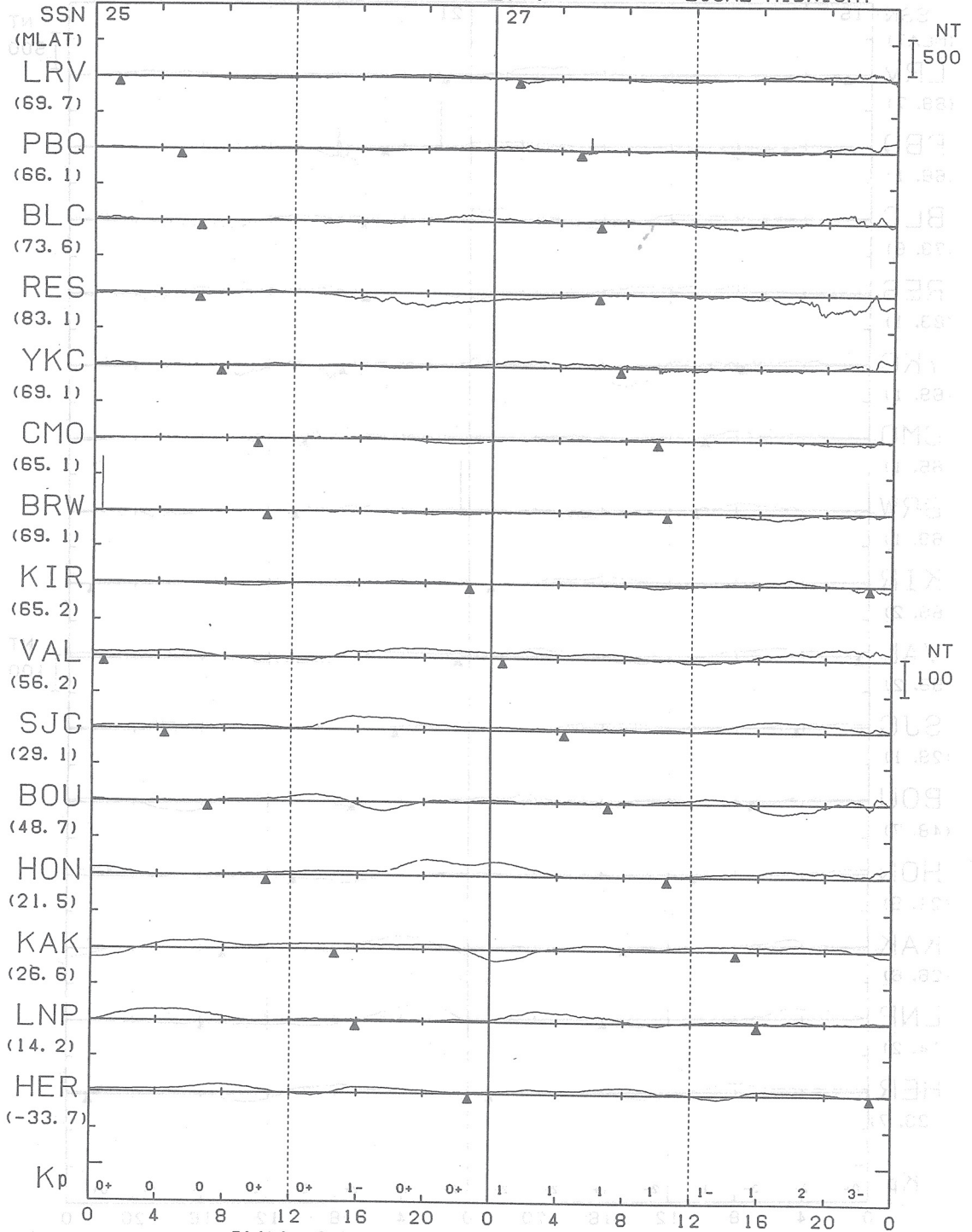
1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT



JUN 19 (DAY 170) JUN 20 (DAY 171)

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

1993 H OR X-COMPONENT \blacktriangle : LOCAL MIDNIGHT

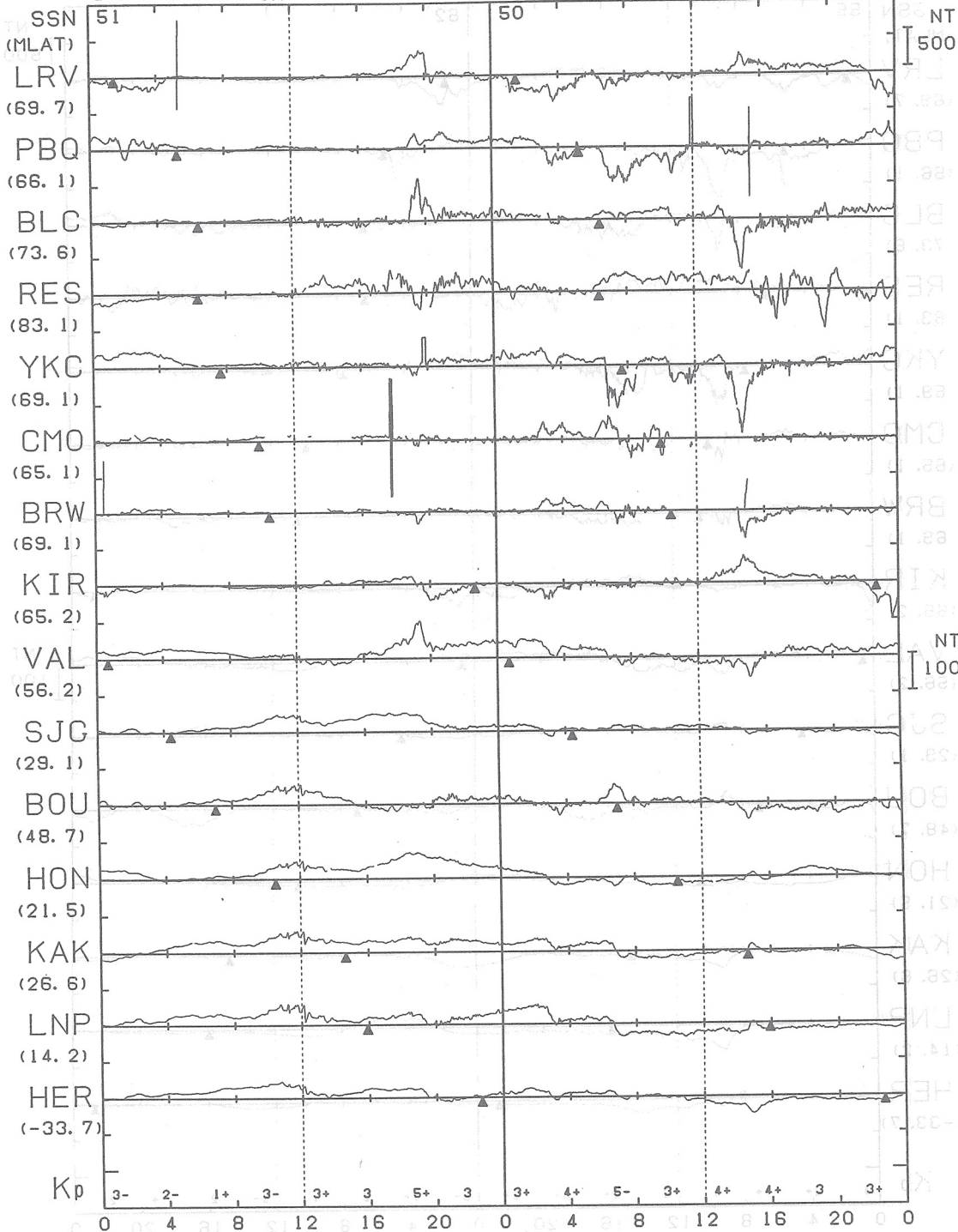


JUN 21 (DAY 172) JUN 22 (DAY 173)

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

KYOTO UNIV.

1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT

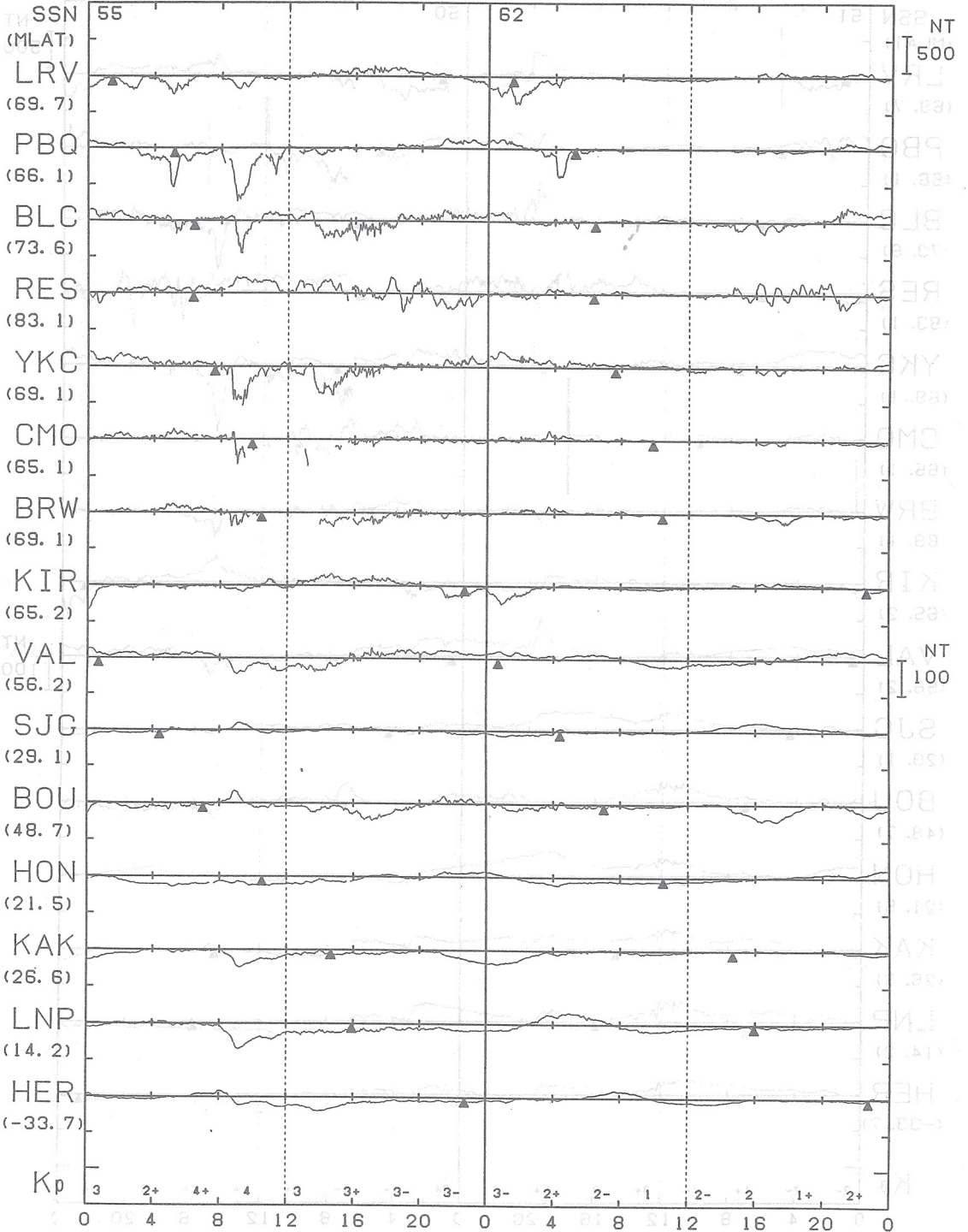


JUN 23 (DAY 174)

JUN 24 (DAY 175)

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

1993 H OR X-COMPONENT MOD -▲ : LOCAL MIDNIGHT

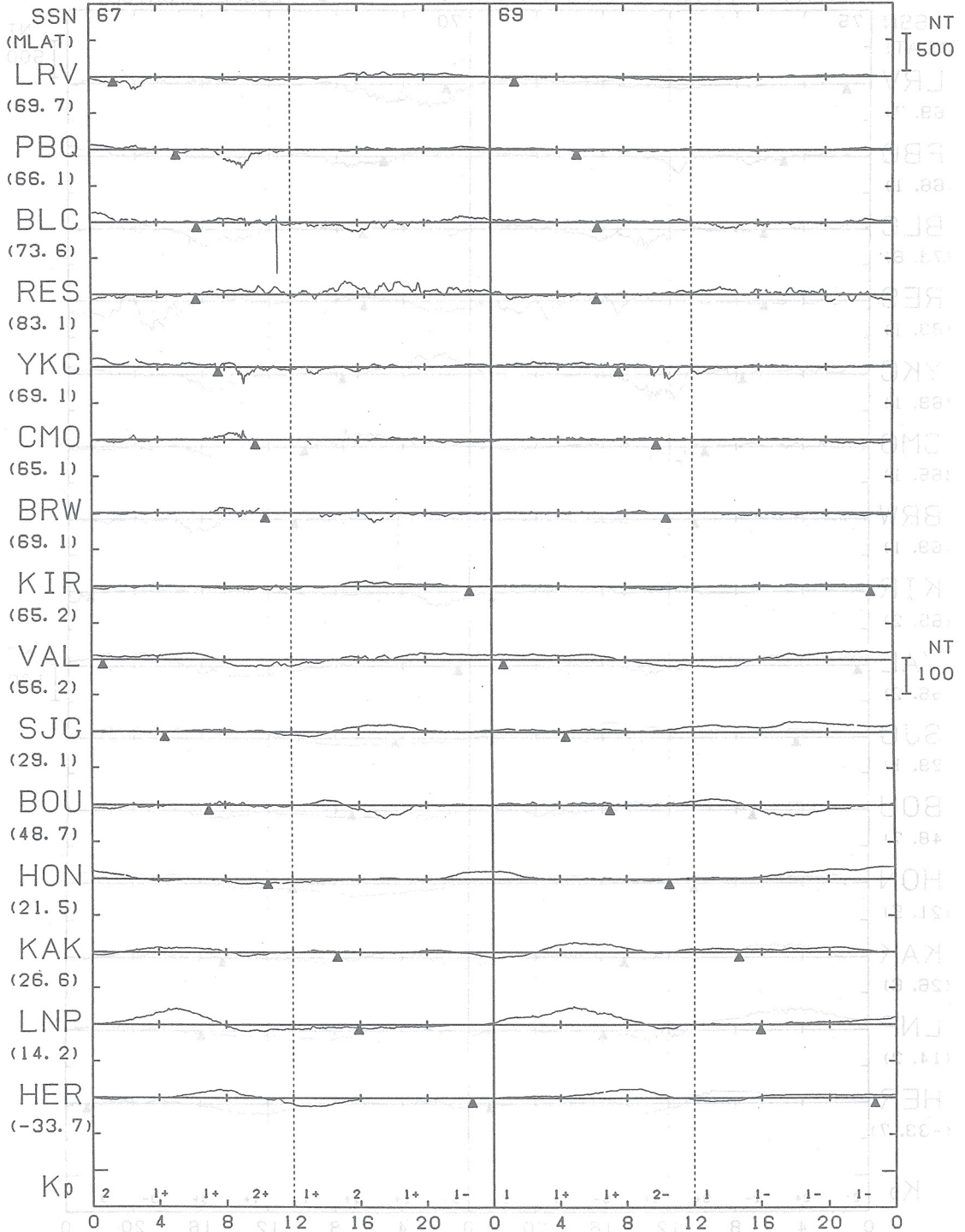


JUN 25
(DAY 176)

JUN 26
(DAY 177)

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

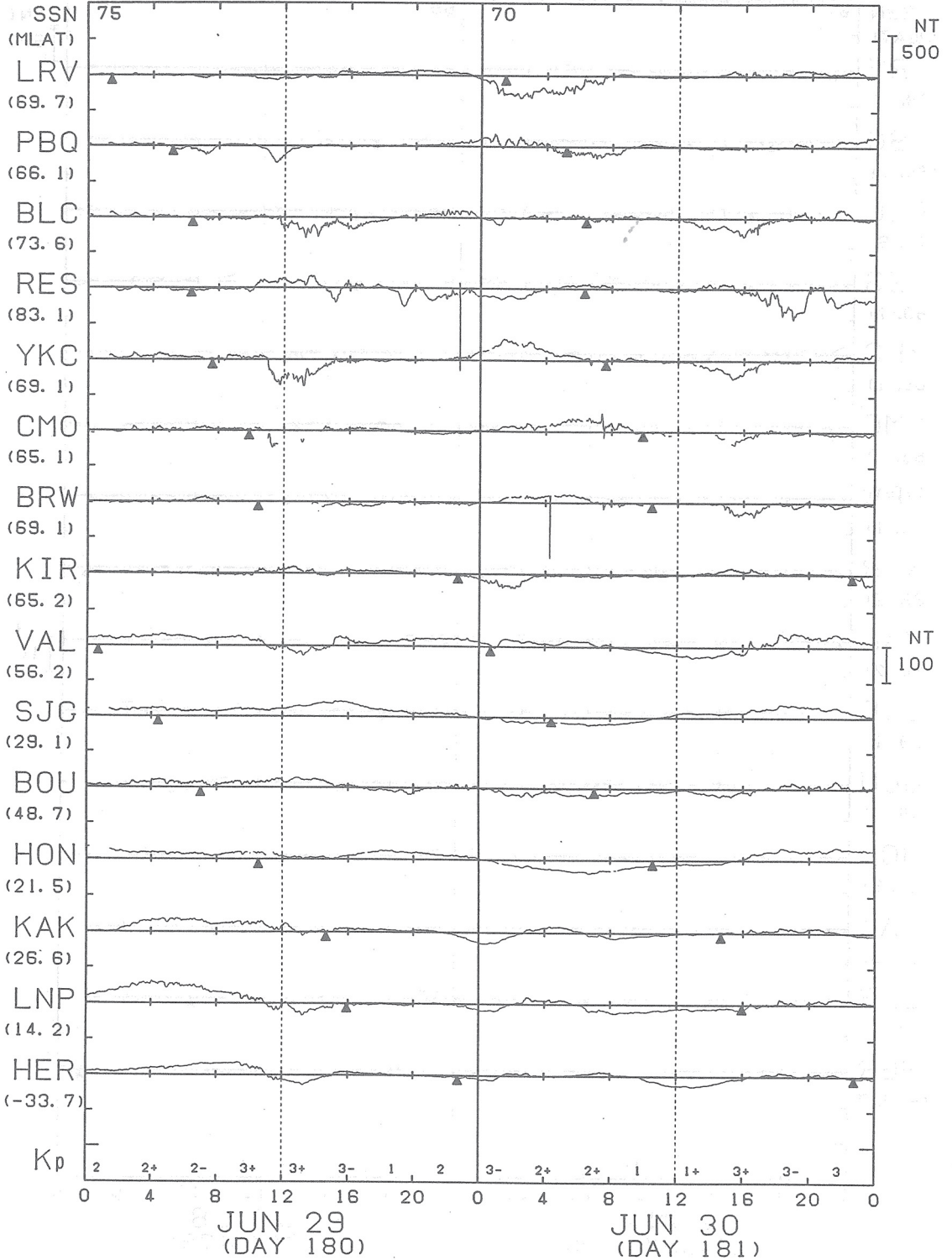
1993 H OR X-COMPONENT ▲ : LOCAL MIDNIGHT



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

1993 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.