

RADIO OBSERVATION DATA  
AT SYOWA STATION, ANTARCTICA DURING 1995

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1. Introduction

CRL has been observing the absorption of cosmic radio noise with a standard riometer (relative ionospheric opacity meter) at 30 MHz at Syowa Station, Antarctica since February 1966. This report presents the data observed in January 1 through December 31, 1995. The combined data plots also contain geomagnetic field, HF, VLF, and radar observations for reference.

Copies of these data in digital form are available on request.

Requests should be addressed to:

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2. Location

Syowa Station			
Geographic		Geomagnetic	
Latitude (Deg.)	Longitude (Deg.)	Latitude (Deg.)	Longitude (Deg.)
69.00 S	39.58 E	-70.0	80.2

3. Observer

Koji INAMORI (Communications Research Laboratory)

4. Instrumentation

The riometer receiver has a center frequency of 30 MHz and a band width of 7.5 kHz; it is connected to a vertically directed five-element Yagi antenna whose elements are oriented in the east-west direction. The antenna is designed to match the 50-ohm coaxial transmission line (8D-2V), which is 80 m long. Noise from a reference noise diode, with power levels of 20000 K, 16000 K, 12000 K, 8000 K, and

4000 K, is inserted each day at 0800 at 45° EMT (Eastern Meridian Time: UT + 3 hours). The data are recorded on magnetic tape in digital form.

### 5. Remarks

The cosmic noise power level shows a remarkable sidereal diurnal variation caused by the passage of the cosmic radio source across the zenith. Due to the earth's revolution, the time of the zenith passage of a particular cosmic radio source shifts about four minutes earlier each day and returns to its initial time after one year. This diurnal variation of the cosmic noise power is deduced from the record on the quiet days.

The ionospheric absorption in dB is obtained as follows:

- 1) The reference sidereal diurnal variation of the cosmic noise power in K,  $T_0$ , is determined from the diurnal variations on several selected quiet days each month.
- 2) Actual received power,  $T_1$ , is read in K.
- 3) Ionospheric absorption in dB,  $A$ , is calculated with the following conversion equation:

$$A = -10 \times \log \left( \frac{T_1}{T_0} \right)$$

The combined data plots also include the variation of H-component of the geomagnetic field, HF field strength, phase variation of VLF waves, and auroral radar echo intensity at Syowa Station. In the panel of geomagnetic variations, the H-component increases upward and the calibration signals are added each hour as a depression of 200 nT.

Because of troubles in the data acquisition system, any plot during period showing in Table 1 do not appear in the combined data plots.

Variations of riometer during period from May 1 to December 31 are not shown because of troubles in the observation system.

Auroral radar echo intensity throughout the year and H-component of the geomagnetic field during period from 0500 on September 9 to 0600 on September 10 are not shown because of a technical trouble.

If there is any unclear point you would raise or if you have any question, do not hesitate to write us at the address in the introduction section.

Table 1

from	to
Jan. 2, 06 20	Jan. 2, 24 00
Jan. 10, 19 50	Jan. 10, 24 00
Jan. 20, 12 30	Jan. 20, 14 50
Jan. 30, 06 10	Feb. 6, 06 10
Feb. 13, 06 10	Feb. 20, 06 10
Jun. 29, 19 40	Jun. 30, 19 50
Dec. 24, 17 10	Dec. 26, 12 00

Bibliography relevant to RADIO OBSERVATION DATA AT SYOWA STATION, ANTARCTICA (1)  
 (RIOMETER RECORDS OF 30 MHz COSMIC NOISE AT SYOWA STATION, ANTARCTICA)

Observing Period	Observers	Literature		
		JARE Data Reports		
		Volume	Pages	Year
Feb 1967 - Feb 1968	Ose, M Nishimuta, I	2 (lonosphere 1)	62	1968
Feb. 1968 - Jan 1969	Ishizawa, K	7 (lonosphere 3)	65	1970
1969	Ota, Y.	8 (lonosphere 4)	74	1970
1970	Shiro, I. Sakamoto, T	14 (lonosphere 5)	62	1971
1971	Ogata, T Ose, M	18 (lonosphere 7)	62	1971
1972	Isozaki, S Miyazaki, S.	20 (lonosphere 8)	76	1973
1973	Nishimuta, I Yabuuma, H	24 (lonosphere 11)	74	1974
1974	Yamazaki, I Shiro, I	29 (lonosphere 13)	84	1975
1975	Sugiuchi, H Komiya, N.	35 (lonosphere 15)	84	1976
1976	Ose M Yamakoshi, A Sasaki, T	41 (lonosphere 17)	87	1977
1977	Ose M Nishiyama, N Sakamoto, J	46 (lonosphere 19)	82	1978
1978	Ose M. Igarashi, K Tsuzurahara, S	51 (lonosphere 20)	86	1979
(cont.)				

Bibliography relevant to RADIO OBSERVATION DATA AT SYOWA STATION, ANTARCTICA (2)  
 (RIOMETER RECORDS OF 30 MHz COSMIC NOISE AT SYOWA STATION, ANTARCTICA)

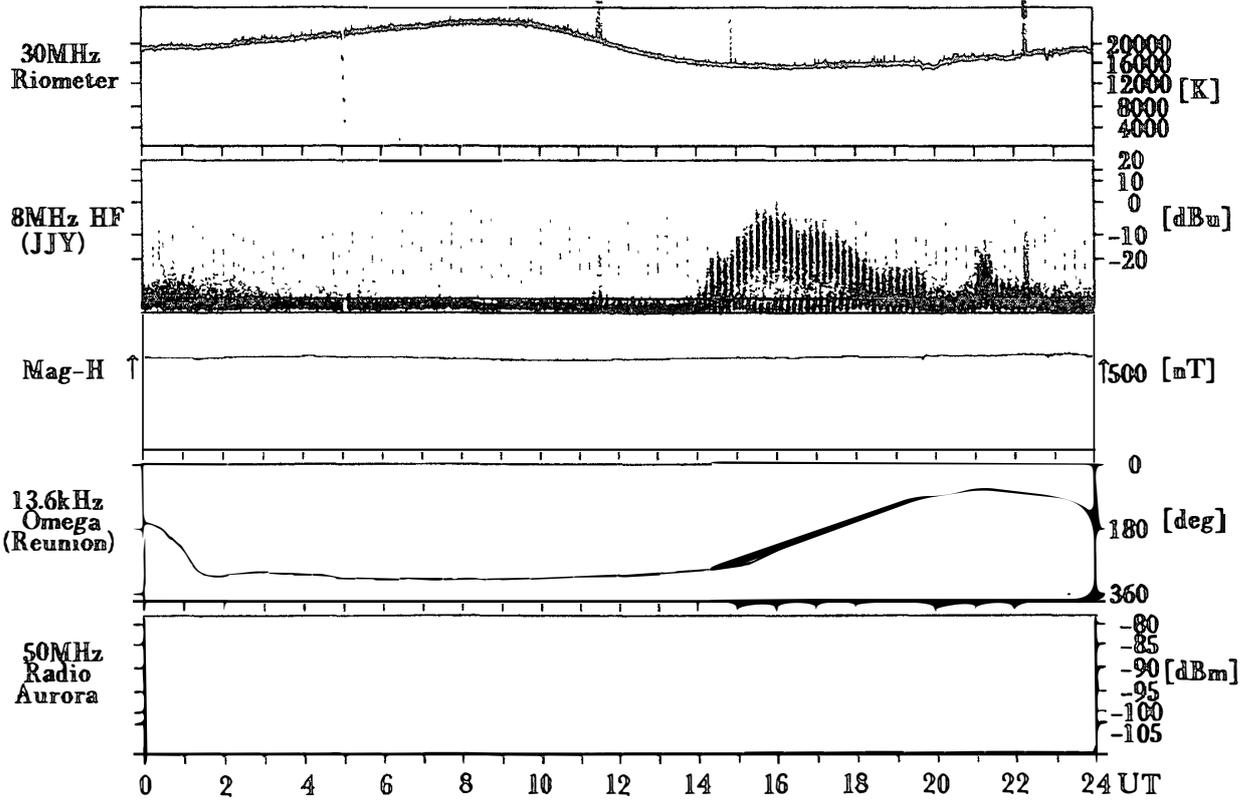
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		JARE Data Reports		
		Volume	Pages	Year
1979	Ose, M Ojima, S Komiya, N	56 (Ionosphere 22)	84	1980
1980	Ose, M Nozaki, K	70 (Ionosphere 26)	97	1982
1981	Ose, M Kurihara, N	80 (Ionosphere 27)	94	1983
1982	Kuratani, Y Igarashi, K	87 (Ionosphere 29)	86	1984
1983	Kuratani, Y Yamazaki, I. Tanaka, T	99 (Ionosphere 31)	93	1985
1984	Kuratani, Y Yamamoto, S	112 (Ionosphere 33)	95	1986
1985	Kuratani, Y Maeno, H	122 (Ionosphere 35)	94	1987
1986	Maeno, H Suzuki, A	133 (Ionosphere 37)	96	1988
1987	Maeno, H Inamori, K	141 (Ionosphere 39)	99	1989
1988	Maeno, H. Ohtsuka, A	155 (Ionosphere 42)	98	1990
1989	Maeno, H Yamamoto, S	168 (Ionosphere 44)	184	1991
1990	Ohtaka, K Kunitake, M	176 (Ionosphere 47)	204	1992
(cont )				

Bibliography relevant to RADIO OBSERVATION DATA AT SYOWA STATION. ANTARCTICA (3)  
 (RIOMETER RECORDS OF 30 MHz COSMIC NOISE AT SYOWA STATION, ANTARCTICA)

Observing Period	Observers	Literature		
		JARE Data Reports		
		Volume	Pages	Year
1991	Nozaki, K. Kunitake, M	189 (Ionosphere 49)	184	1993
1992	Kamata, M. Kunitake, M	196 (Ionosphere 52)	202	1994
1993	Yamaguchi, T. Kunitake, M	206 (Ionosphere 54)	190	1995
1994	Iwasaki, K Ichinose, M	212 (Ionosphere 55)	197	1996

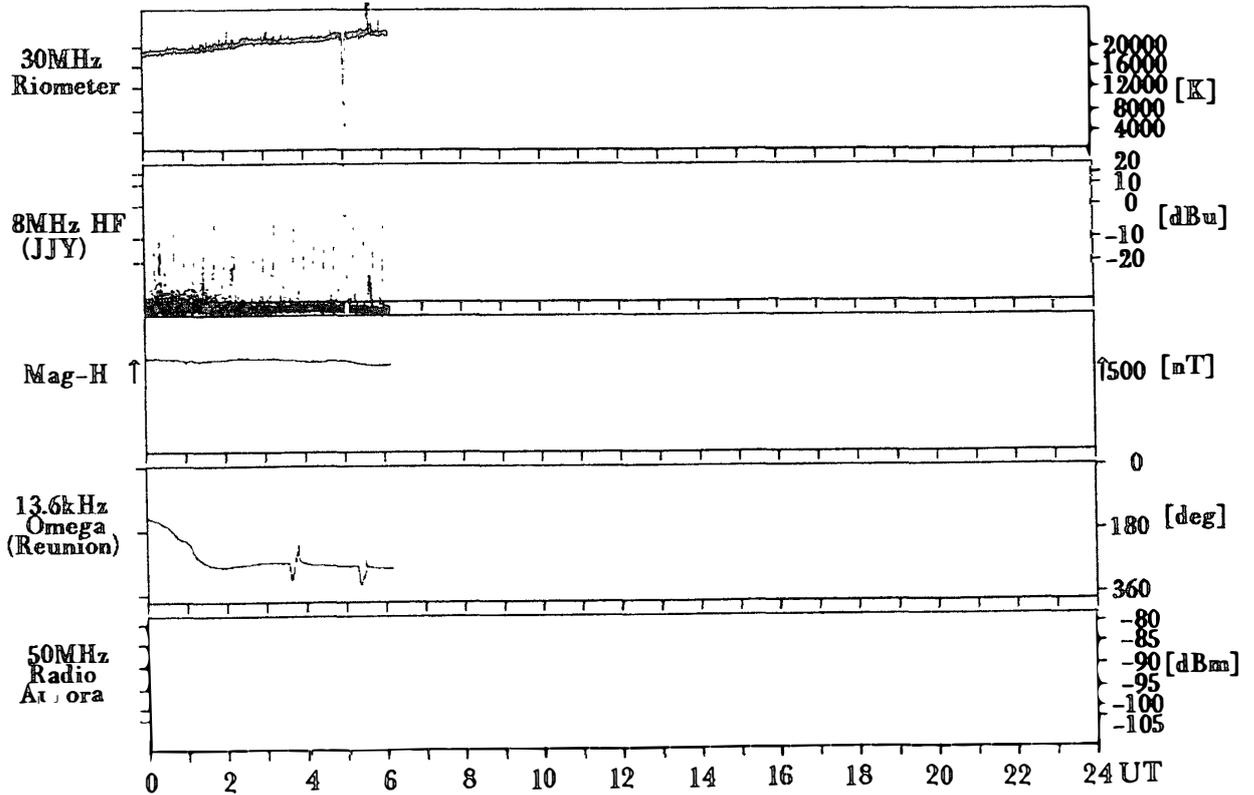
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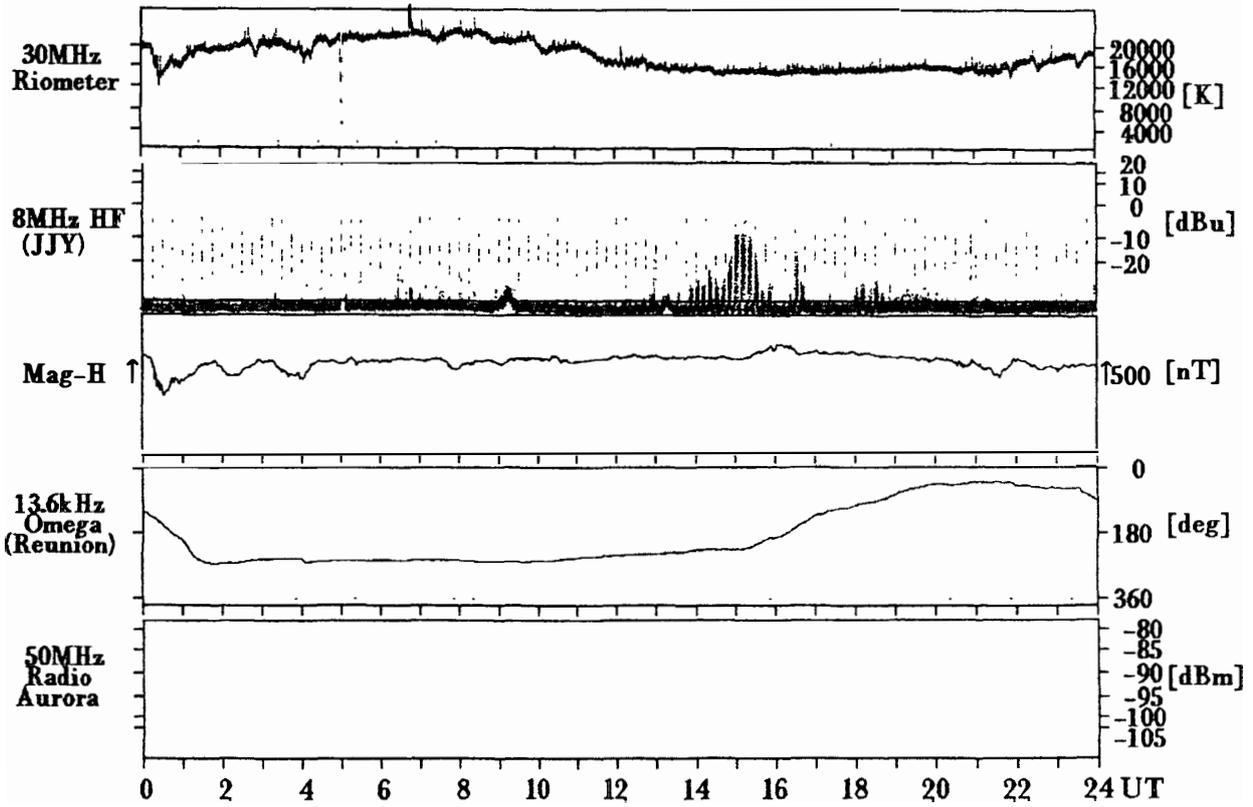
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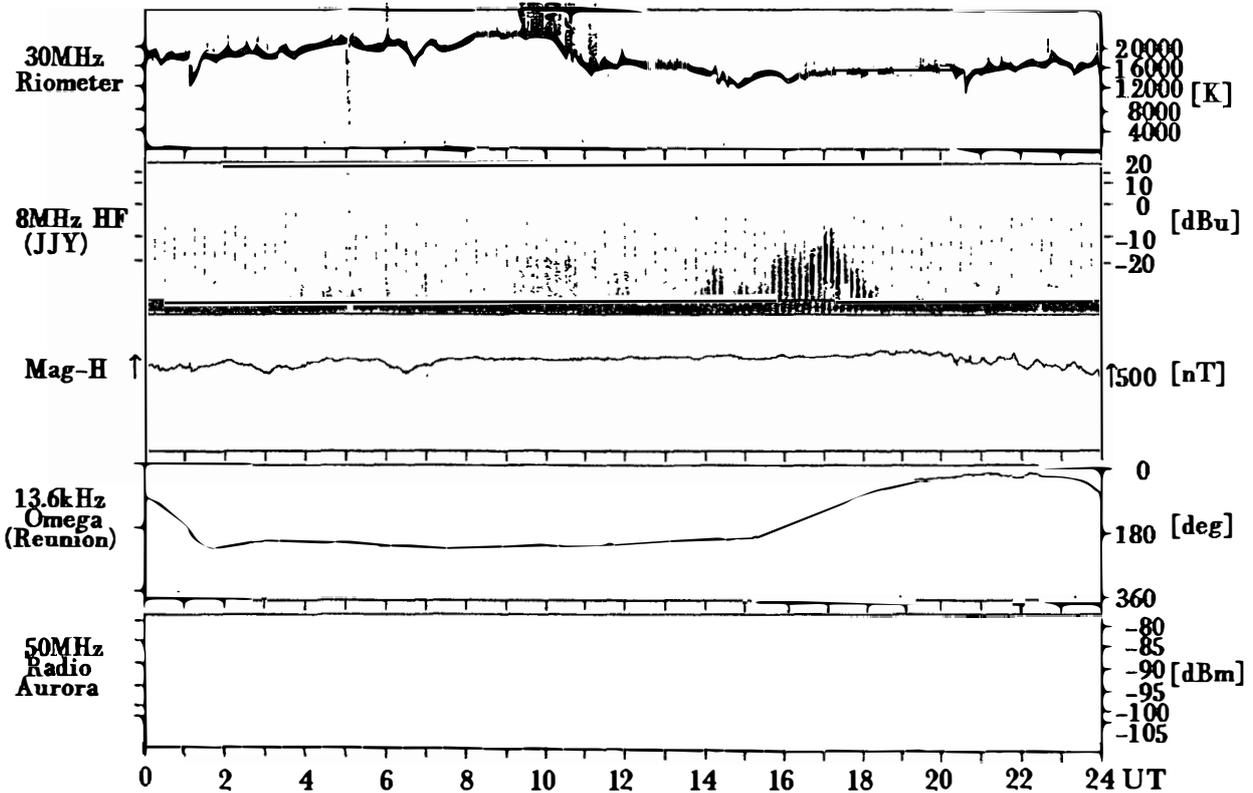
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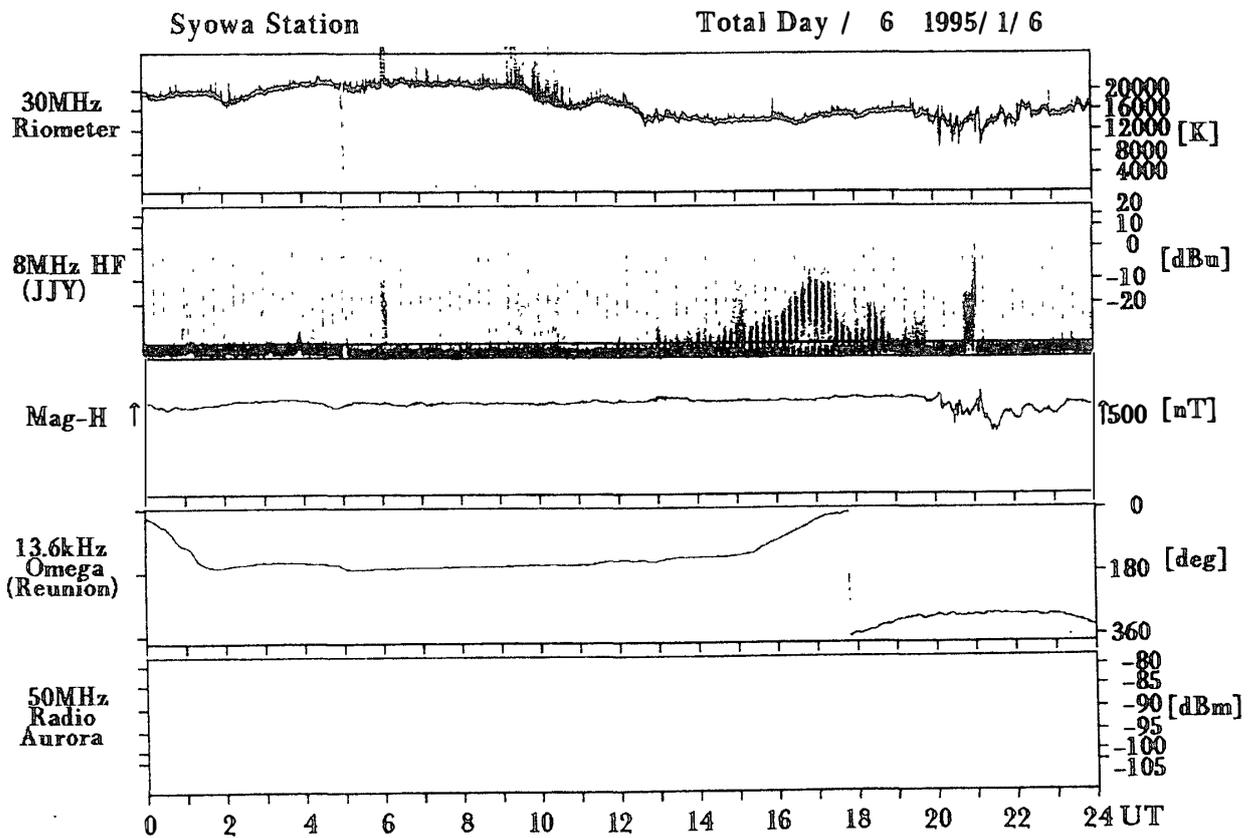
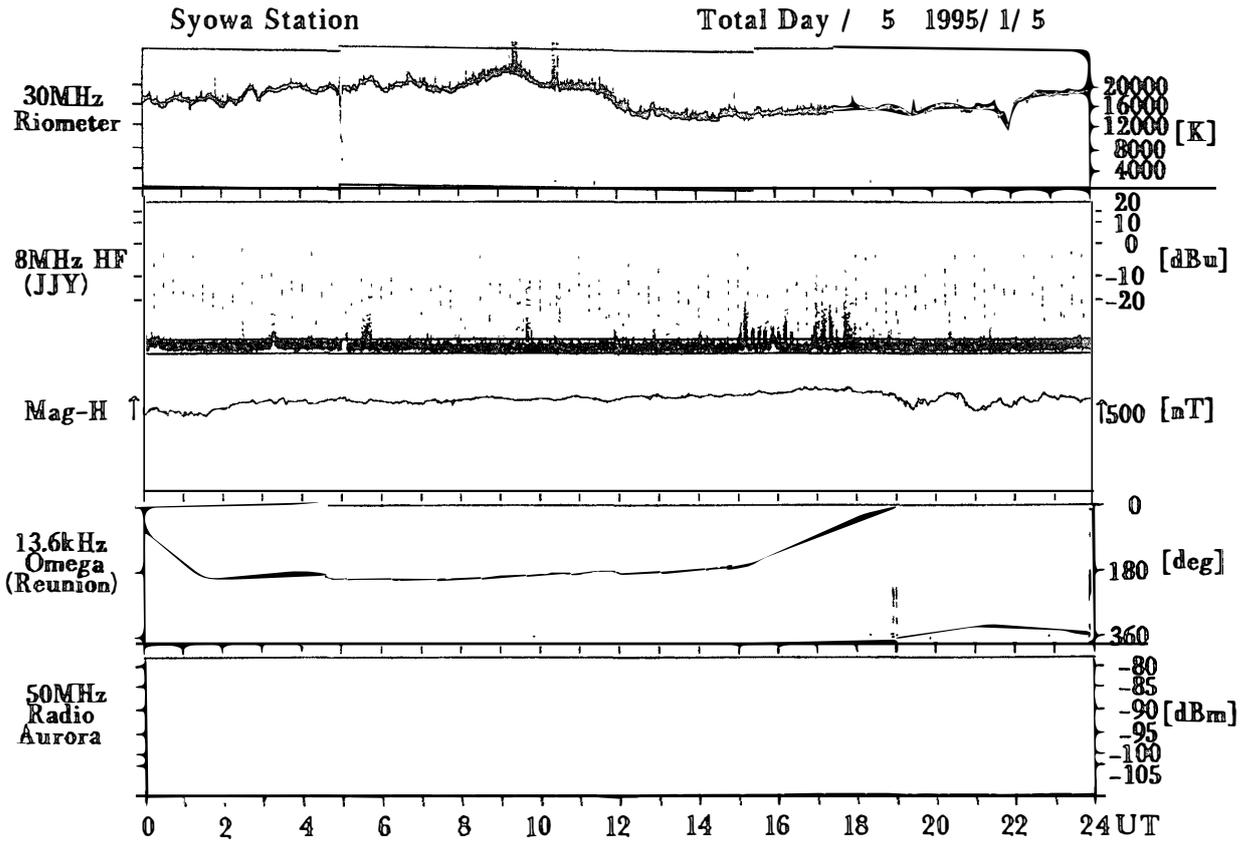
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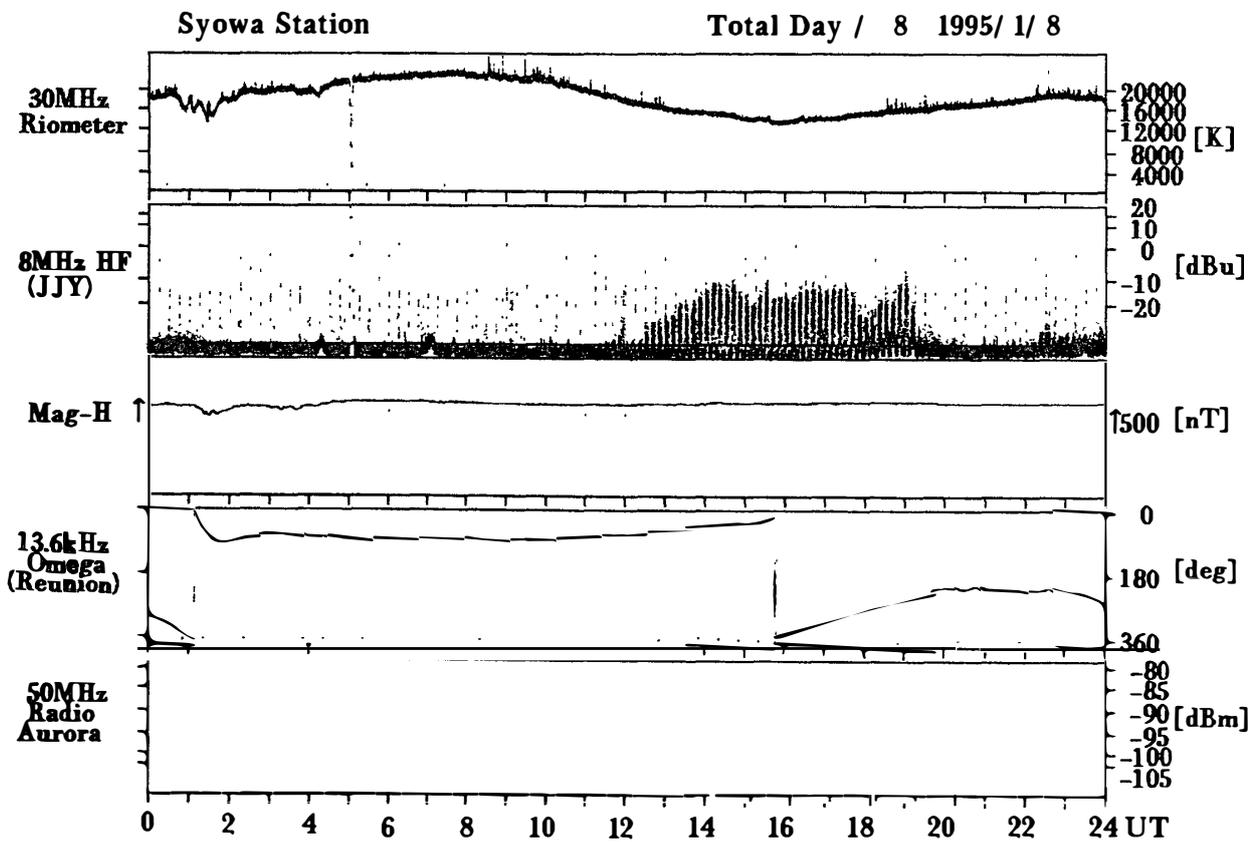
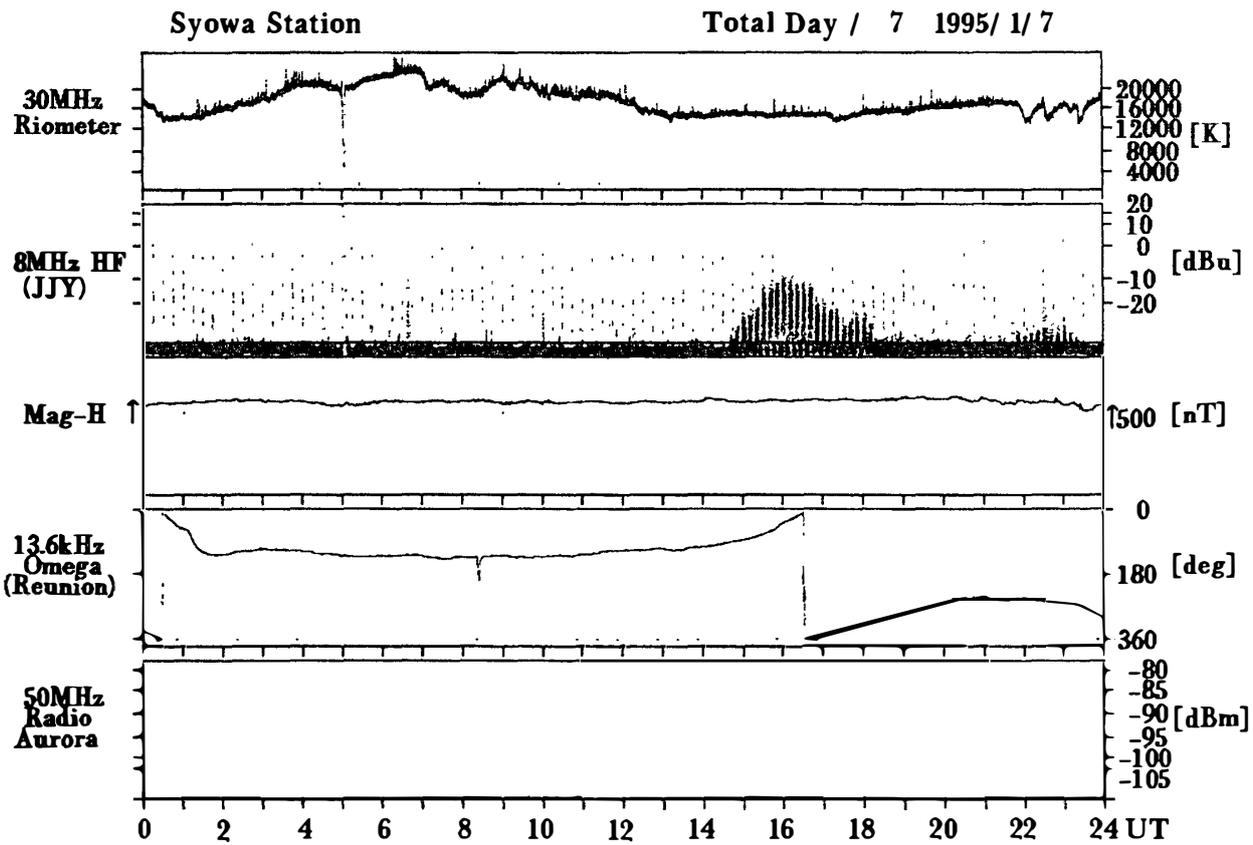


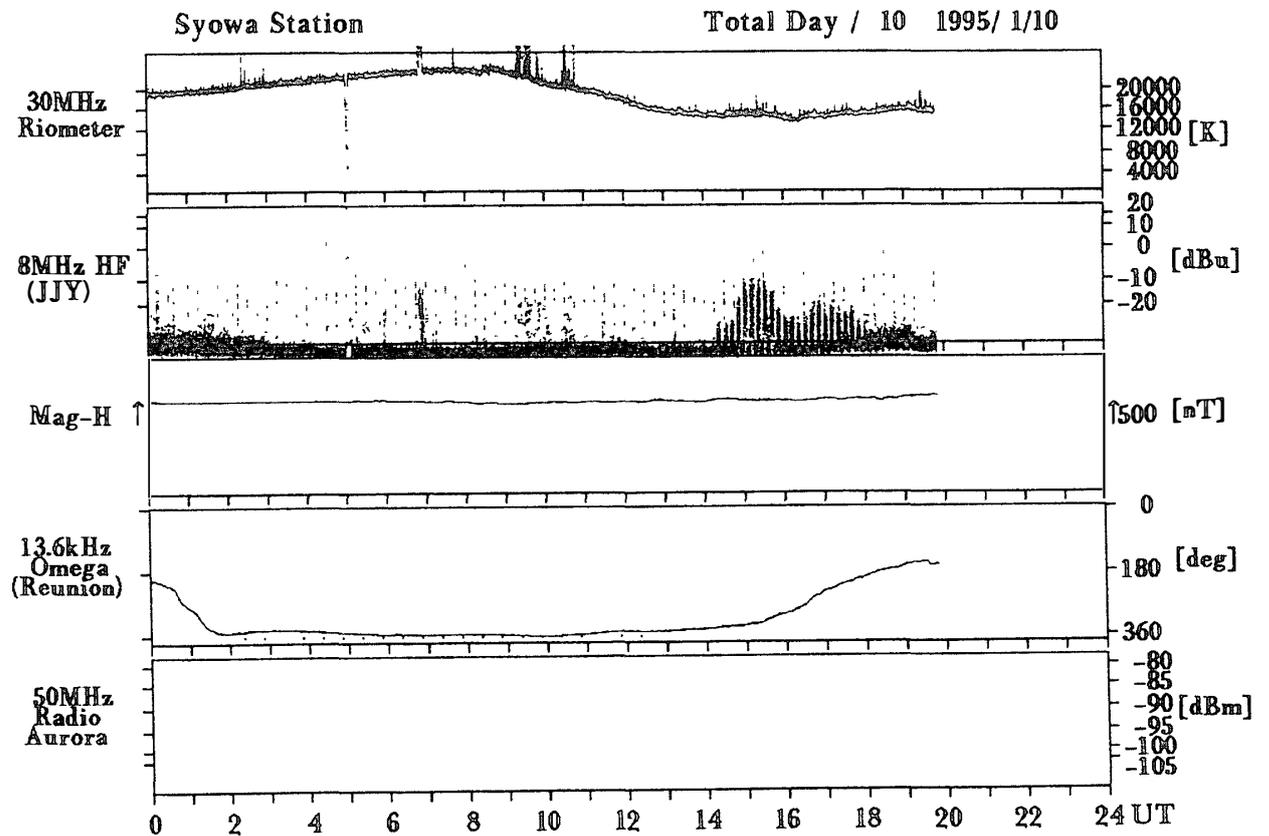
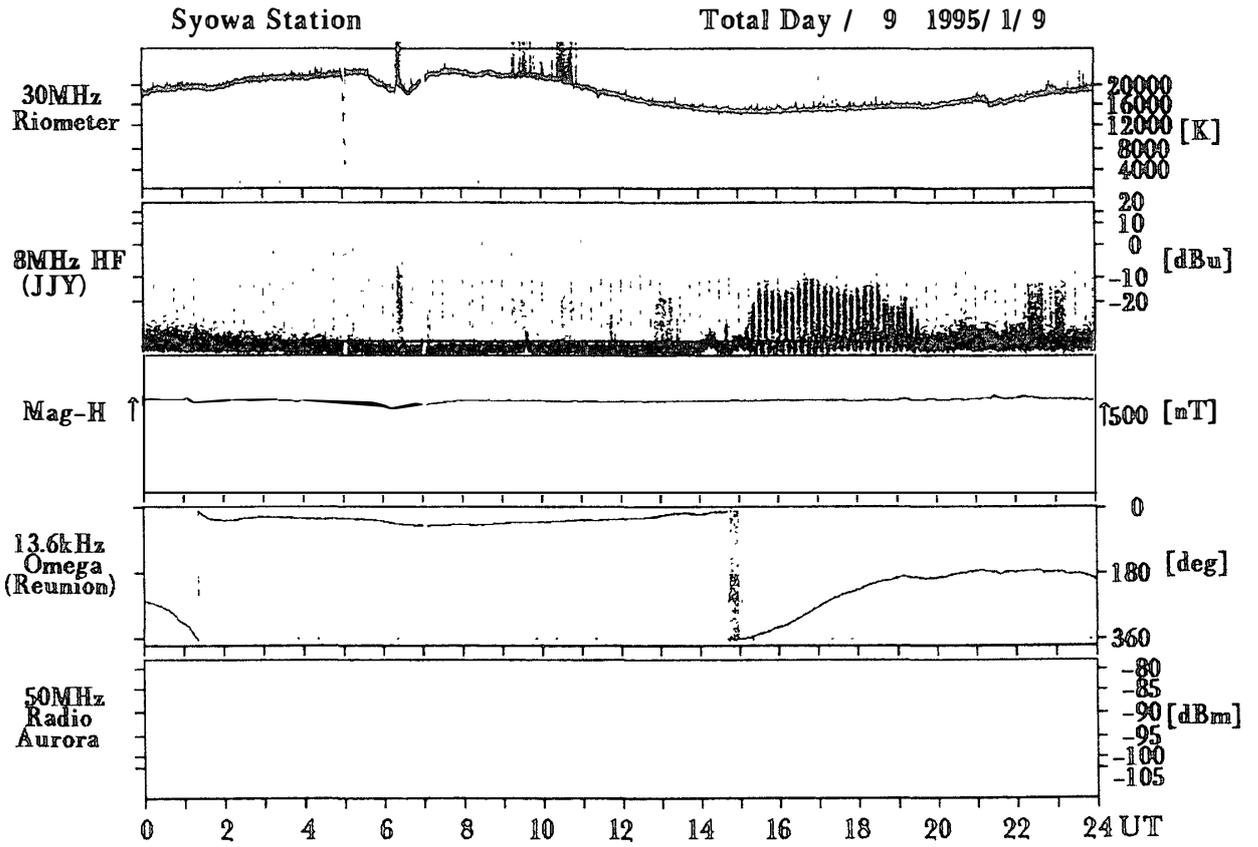
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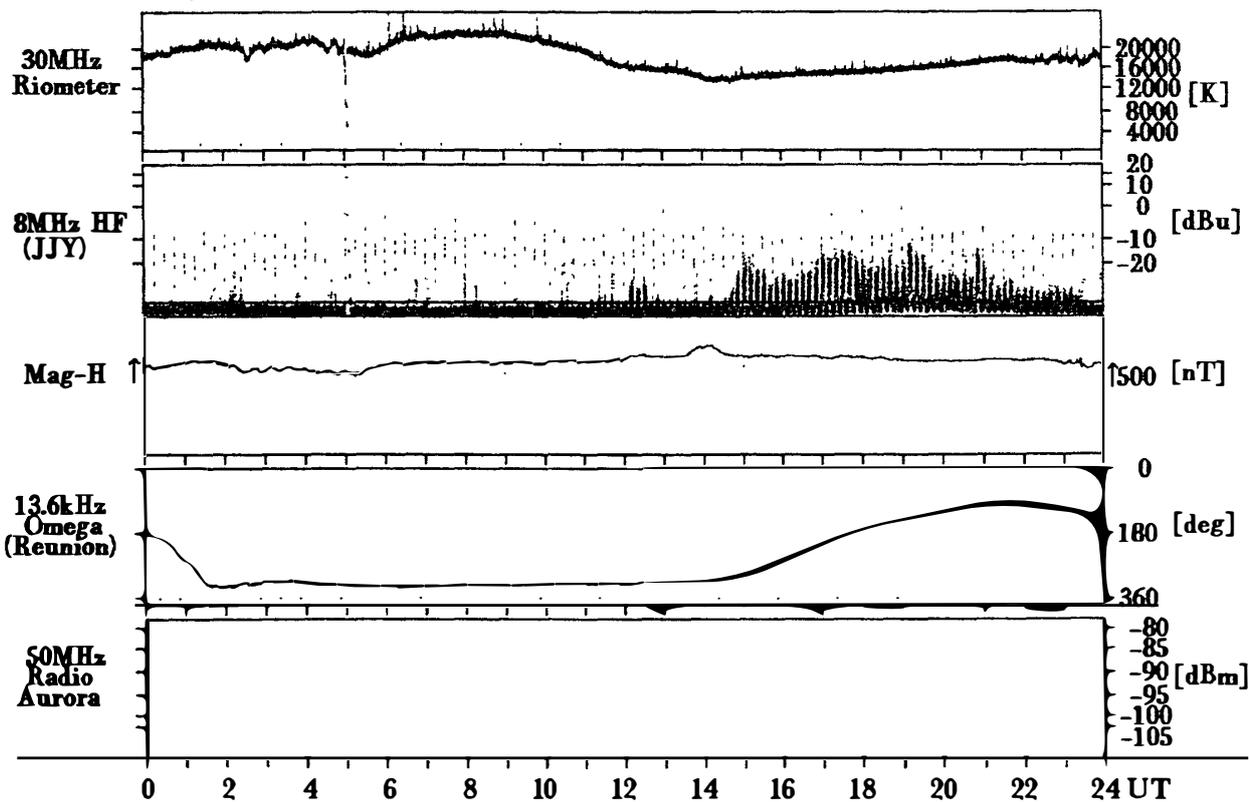






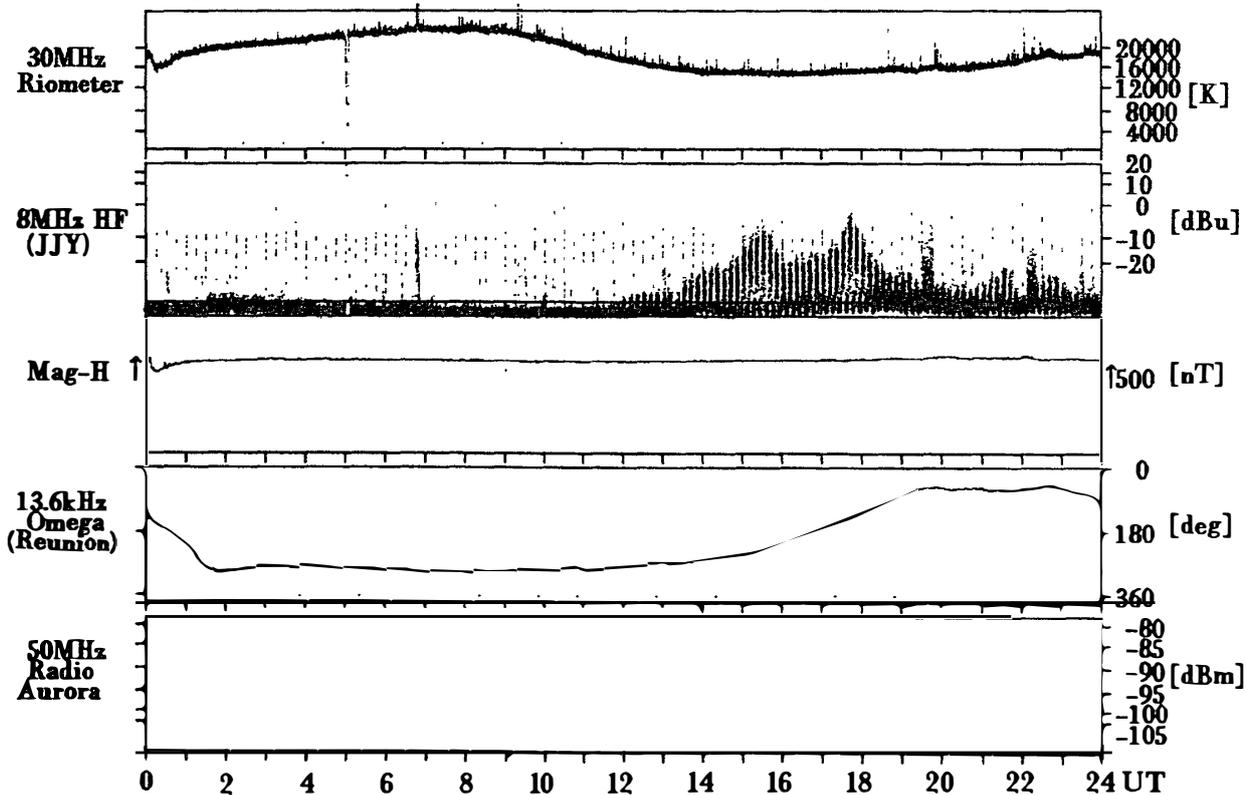
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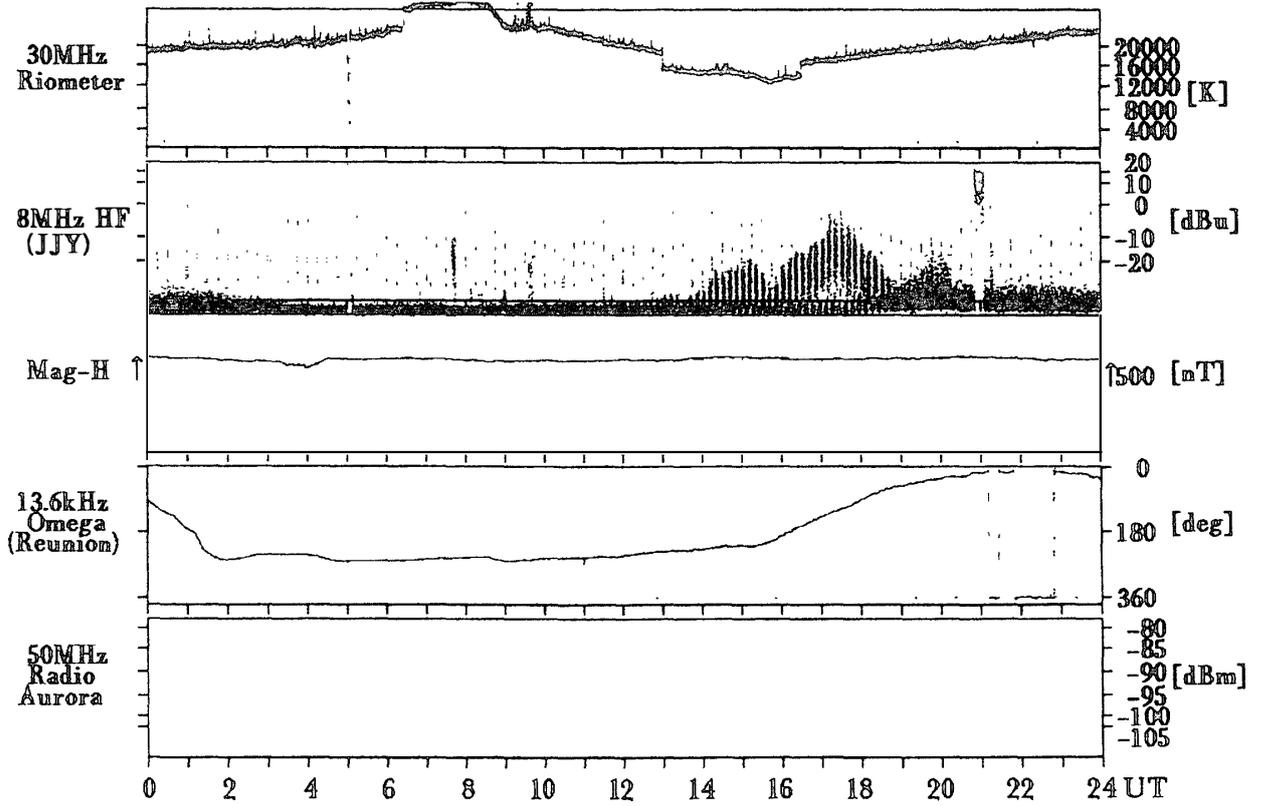
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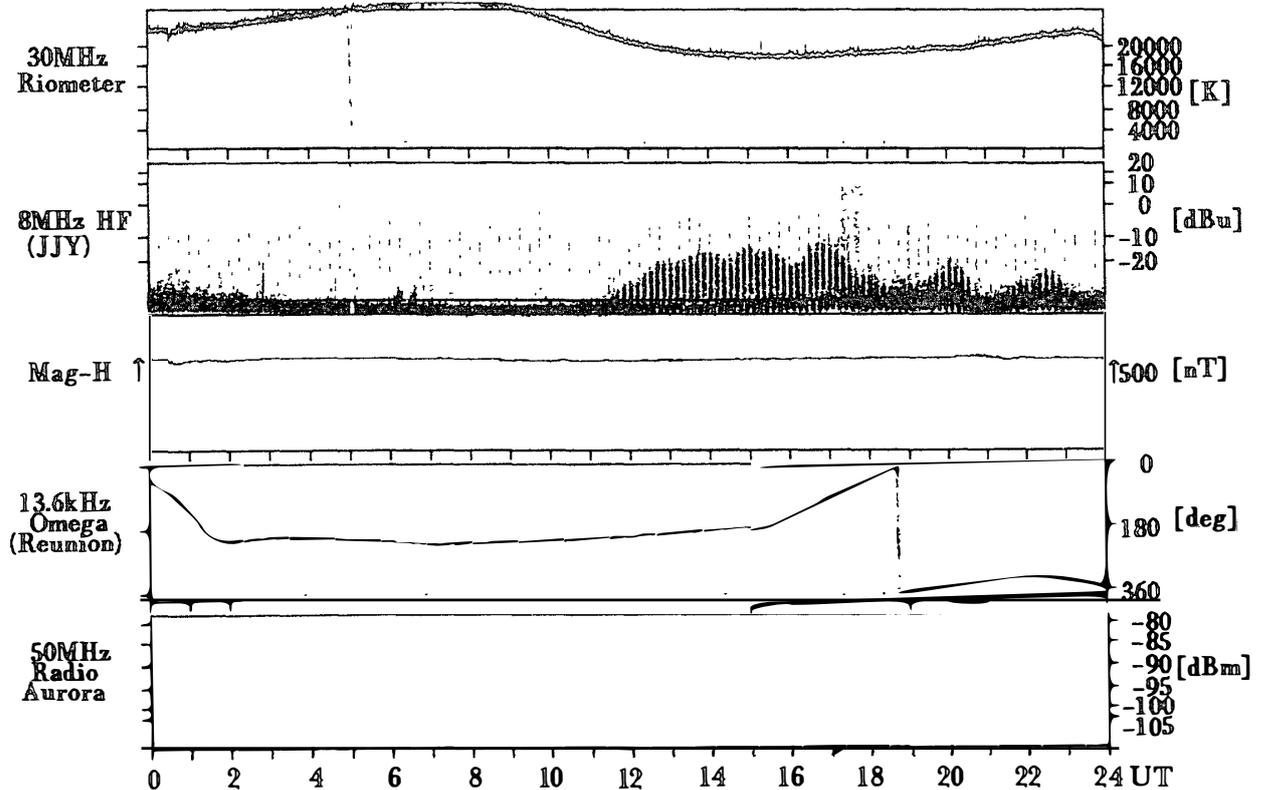
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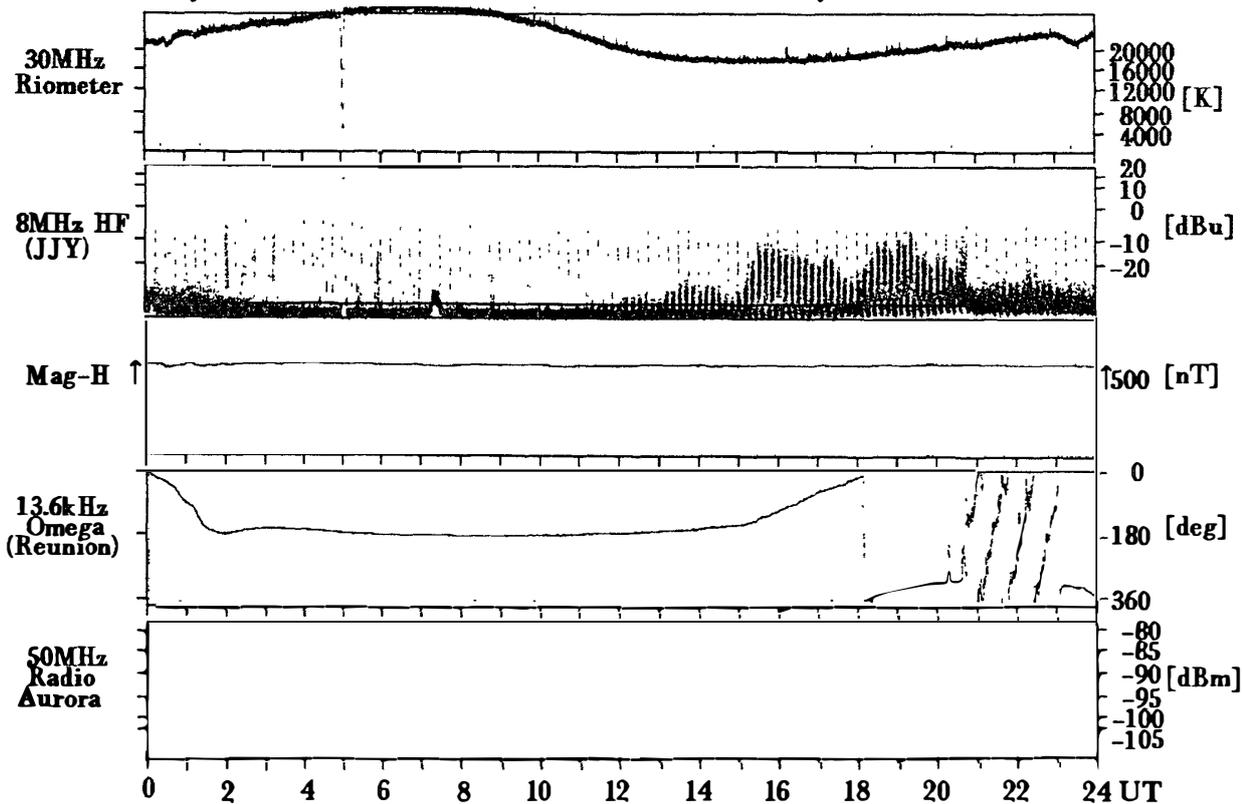
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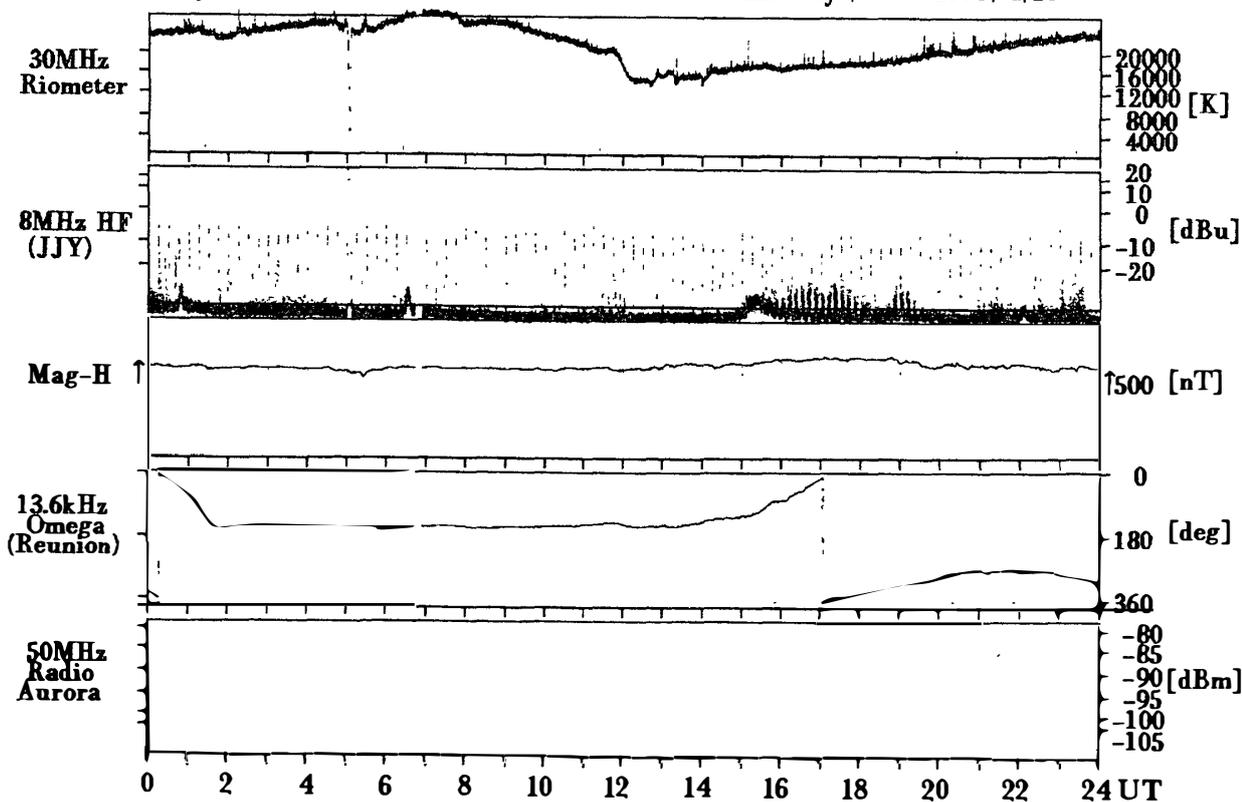
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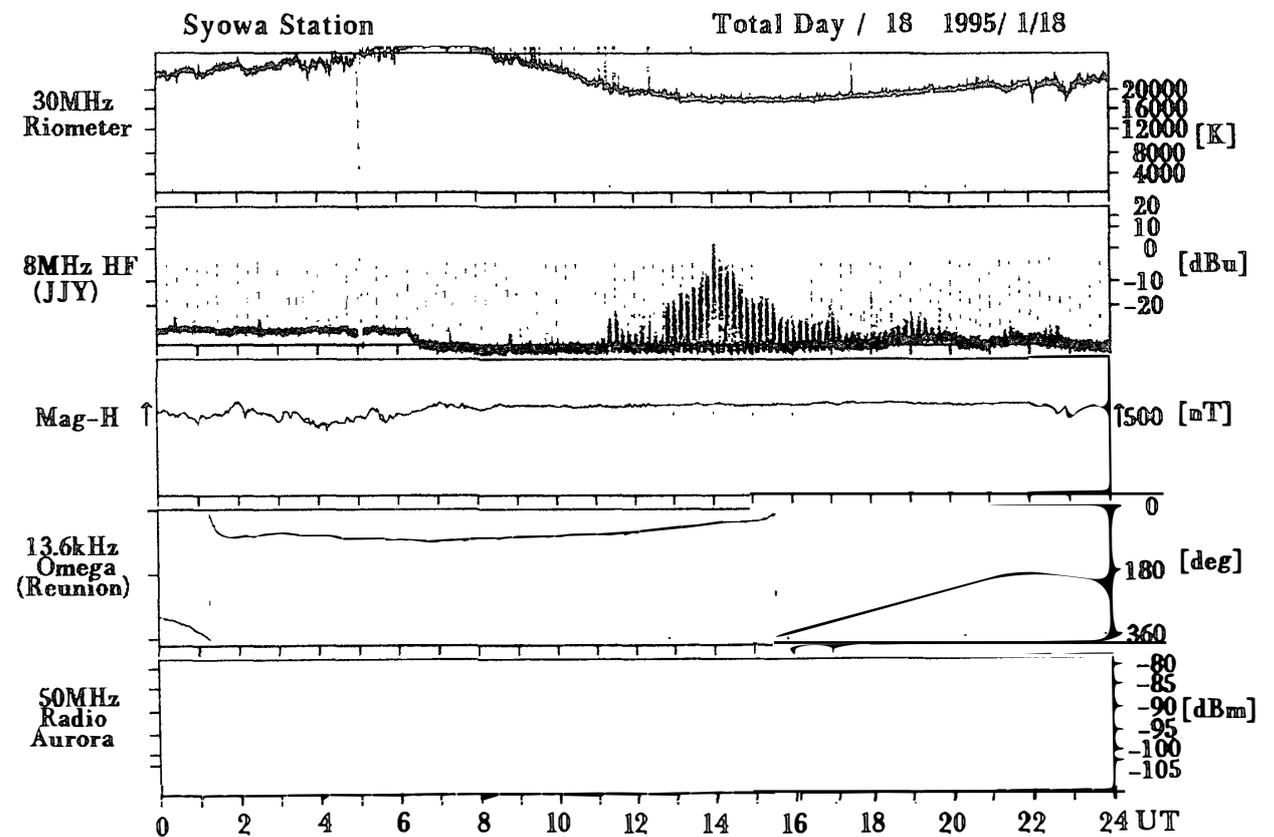
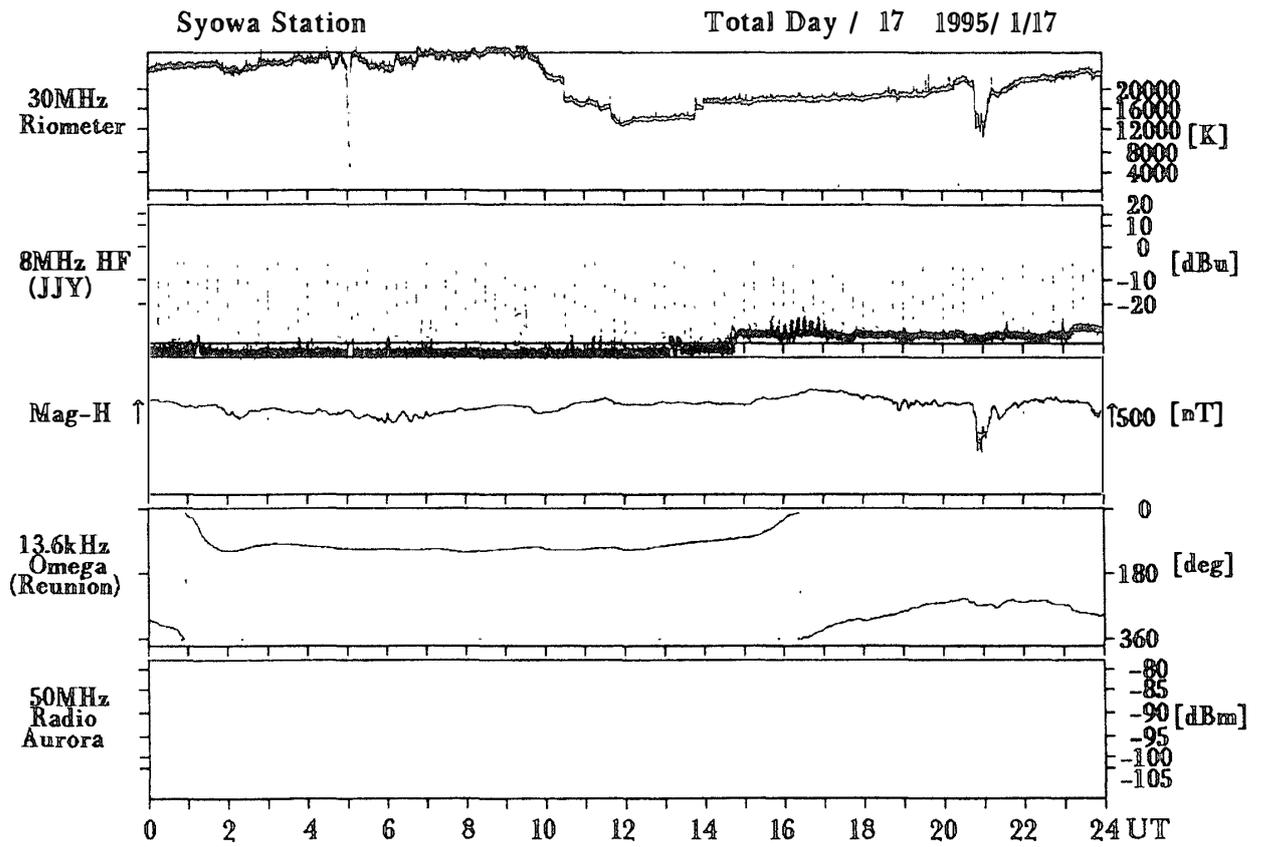
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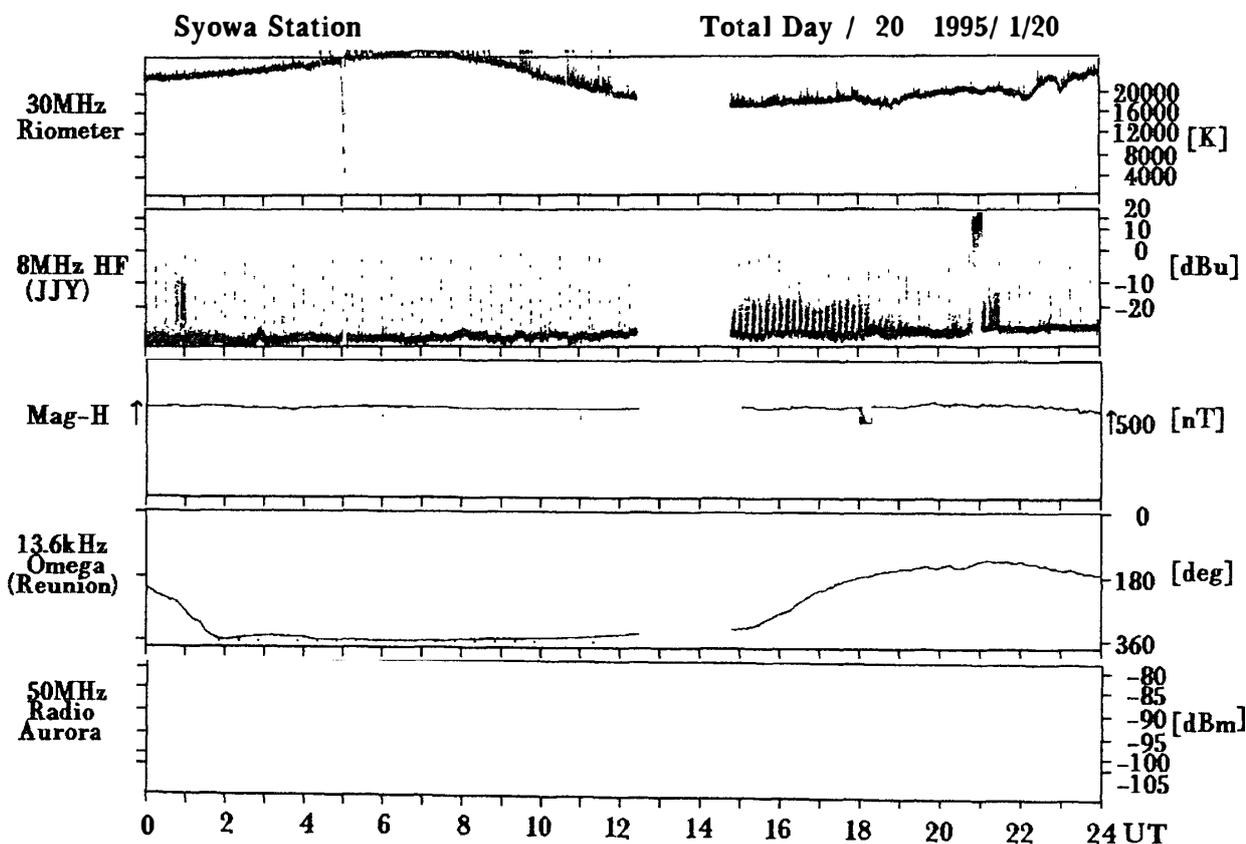
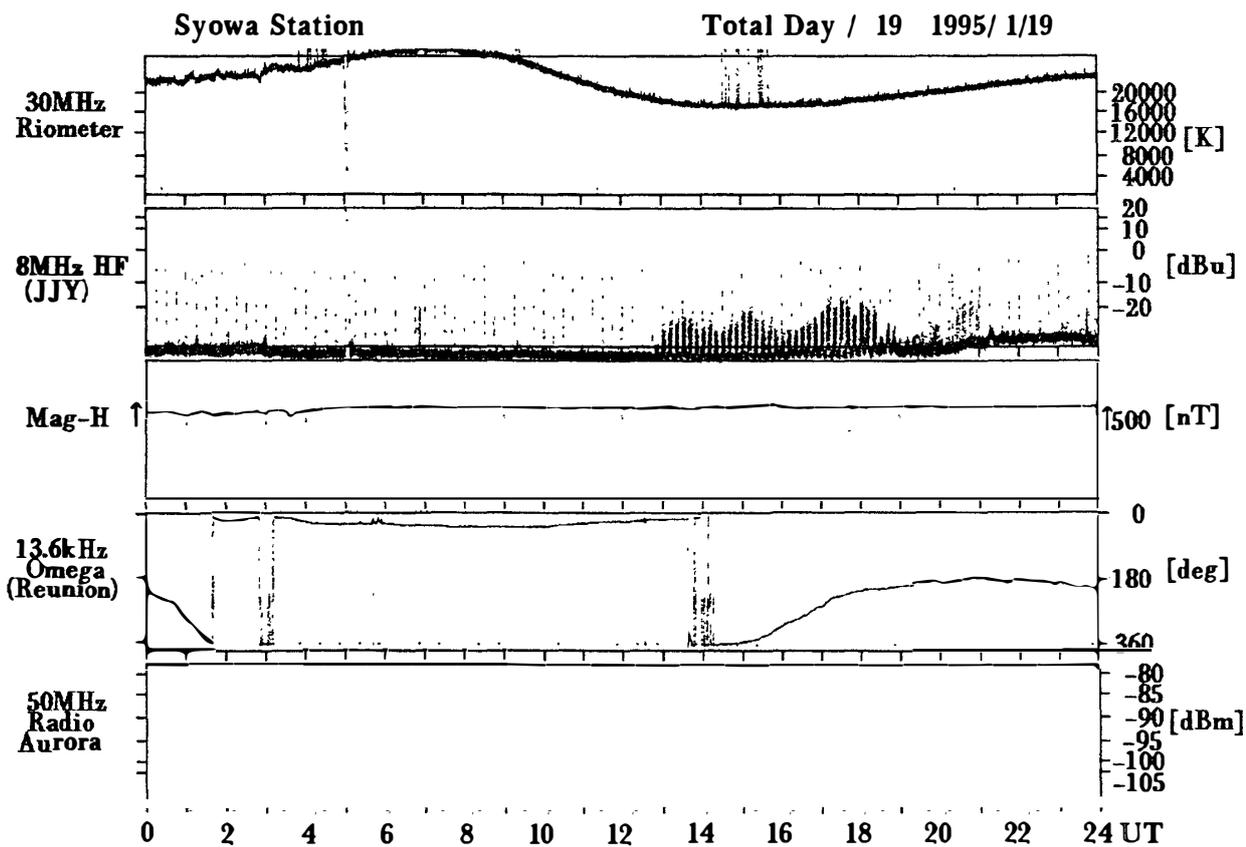


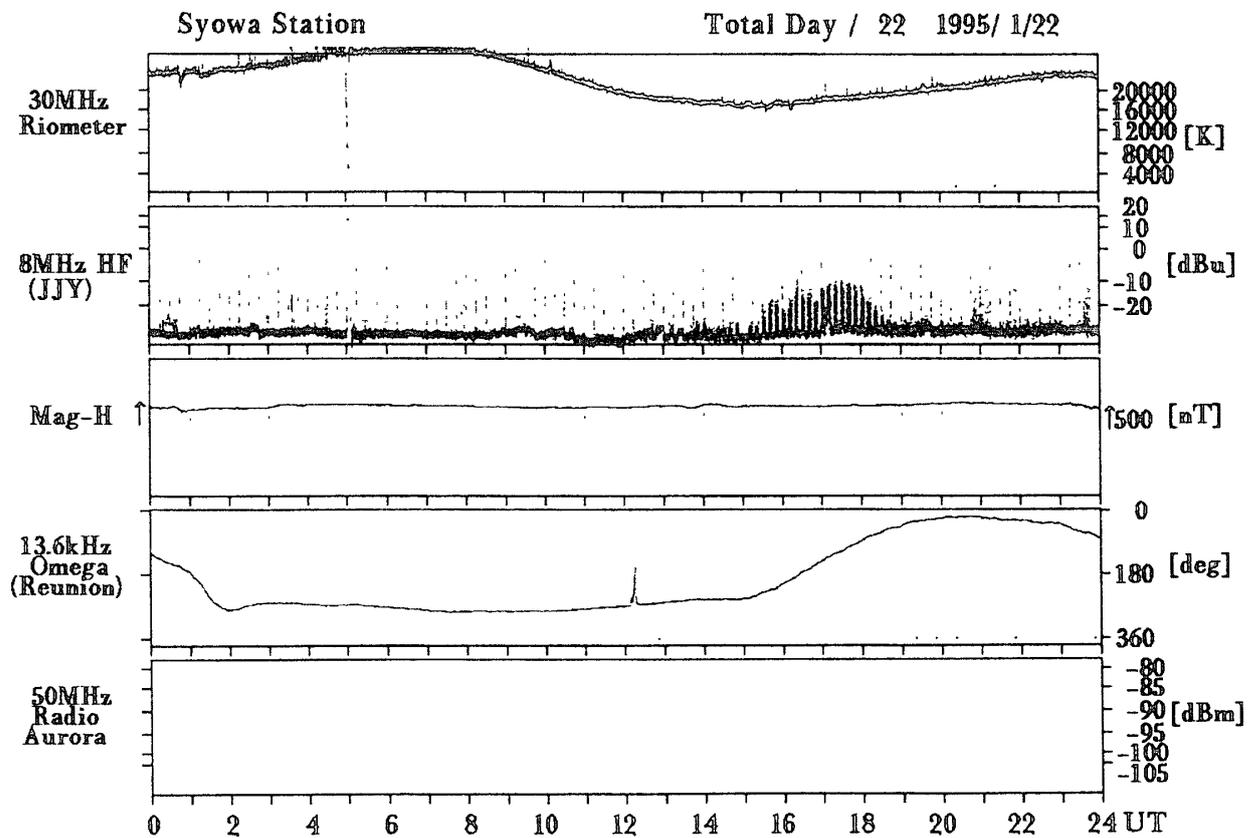
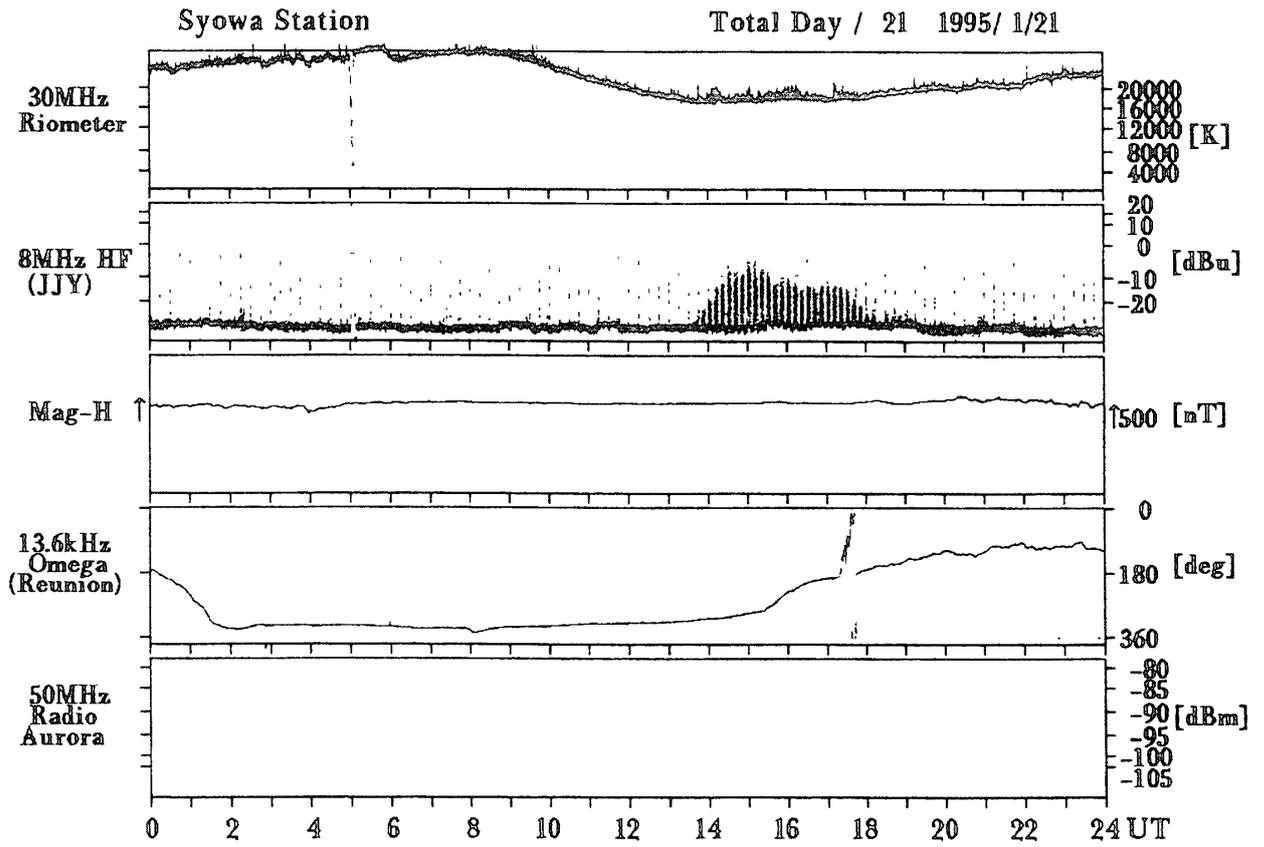
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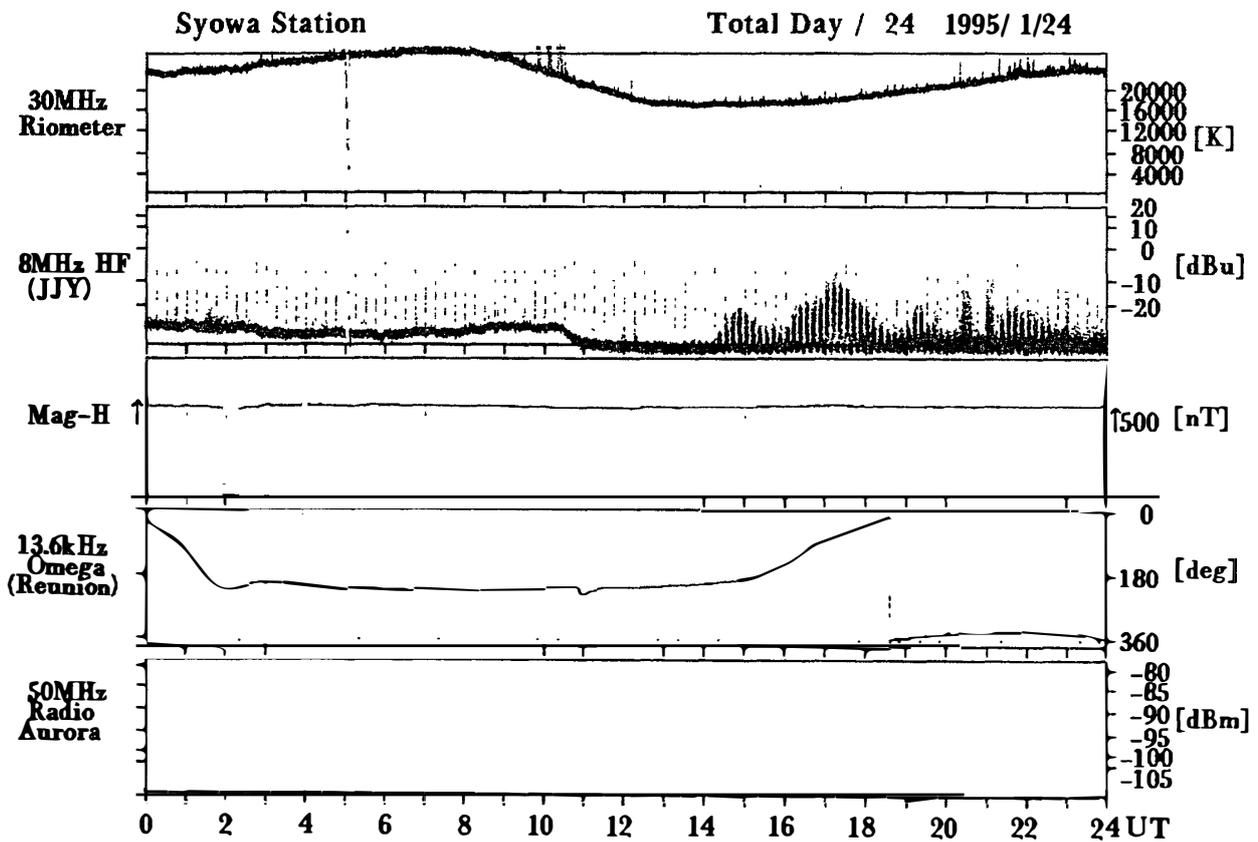
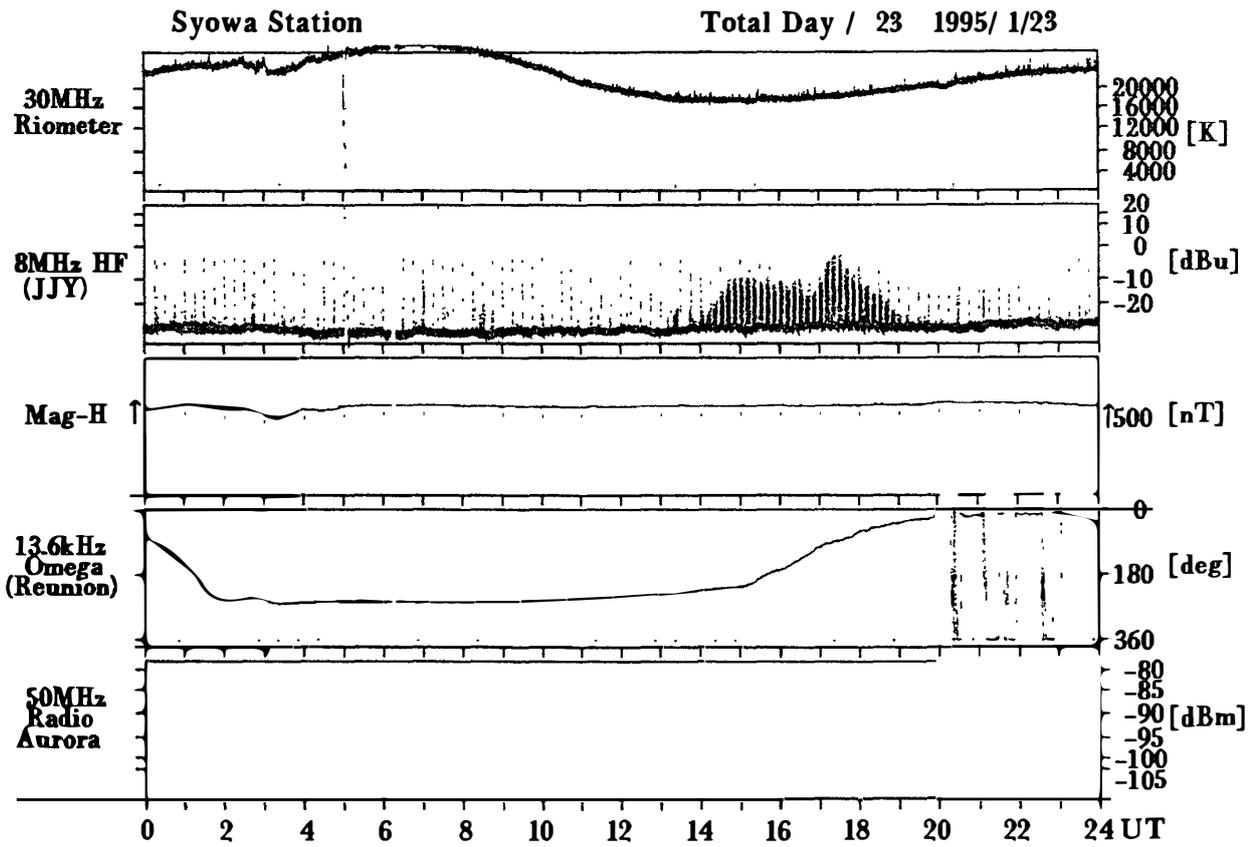
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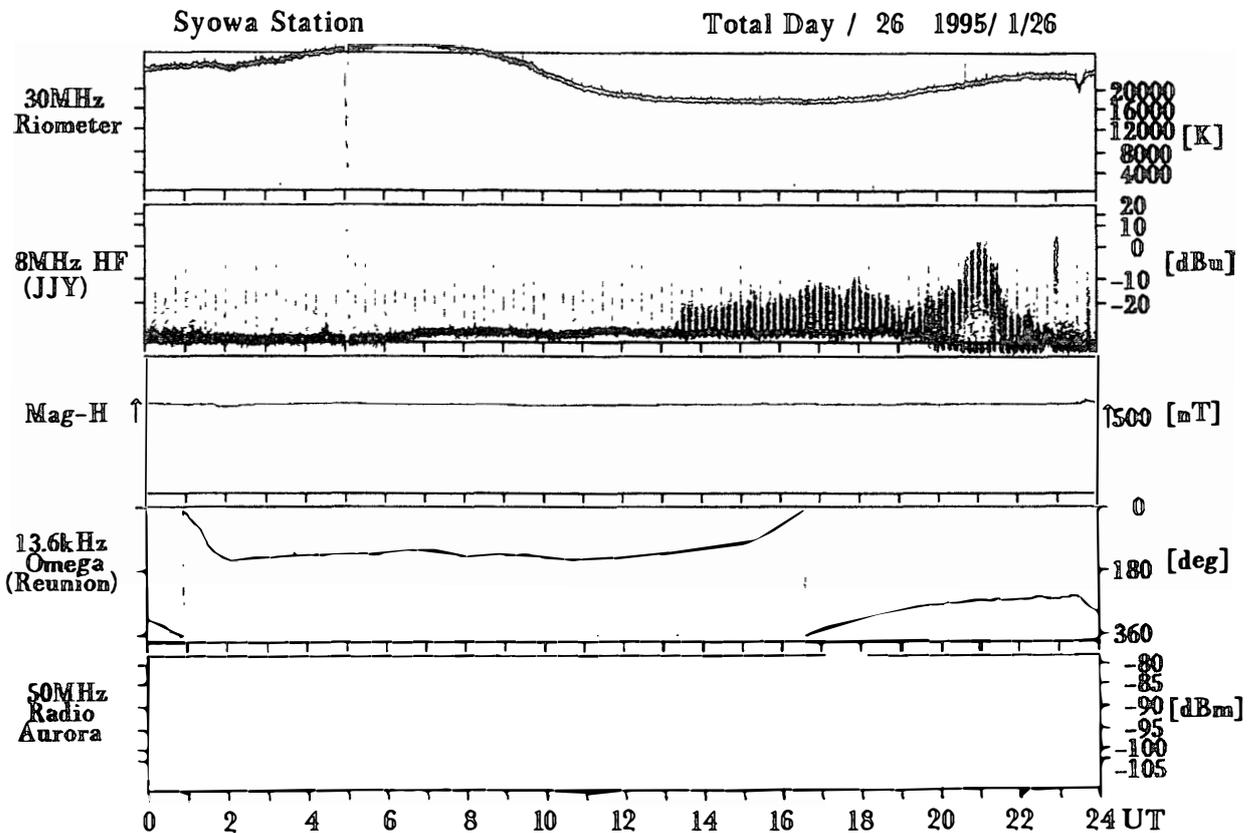
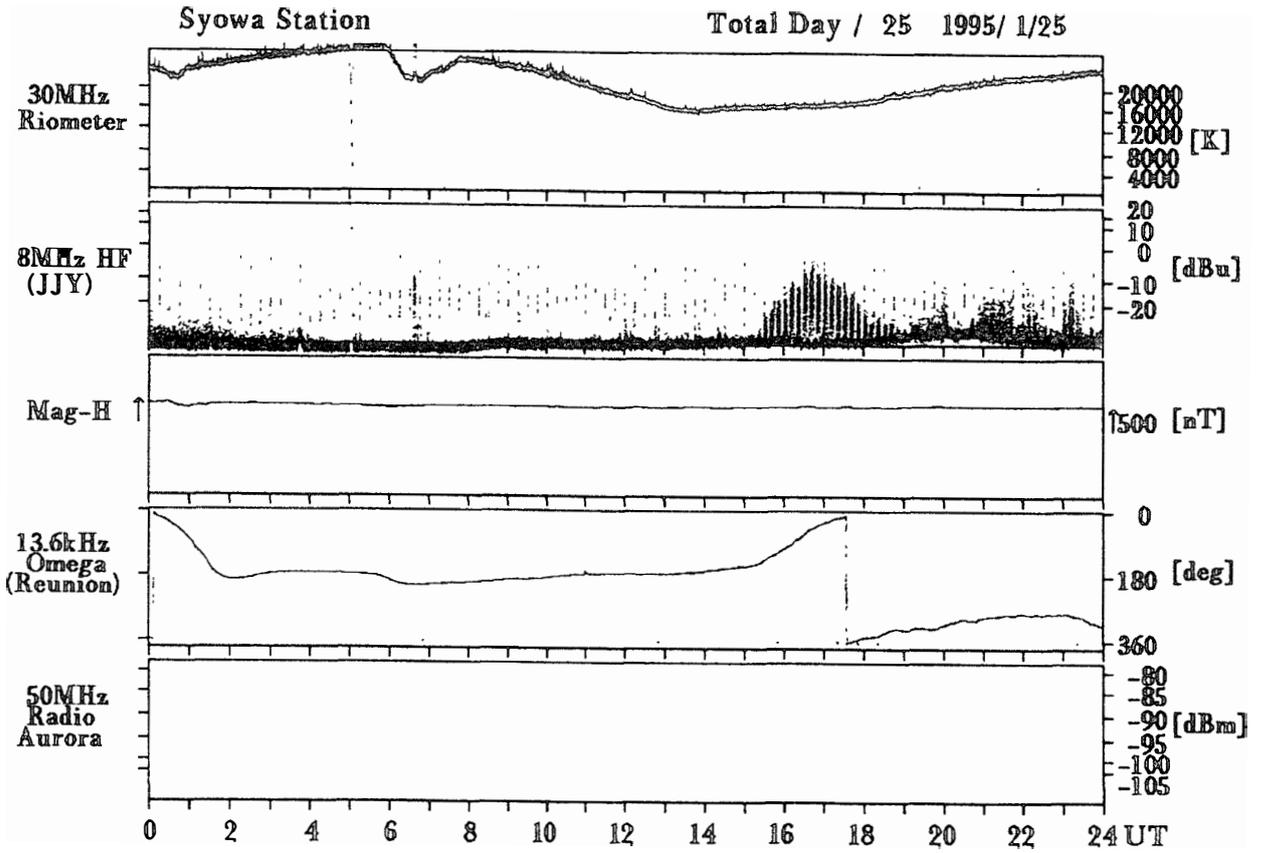


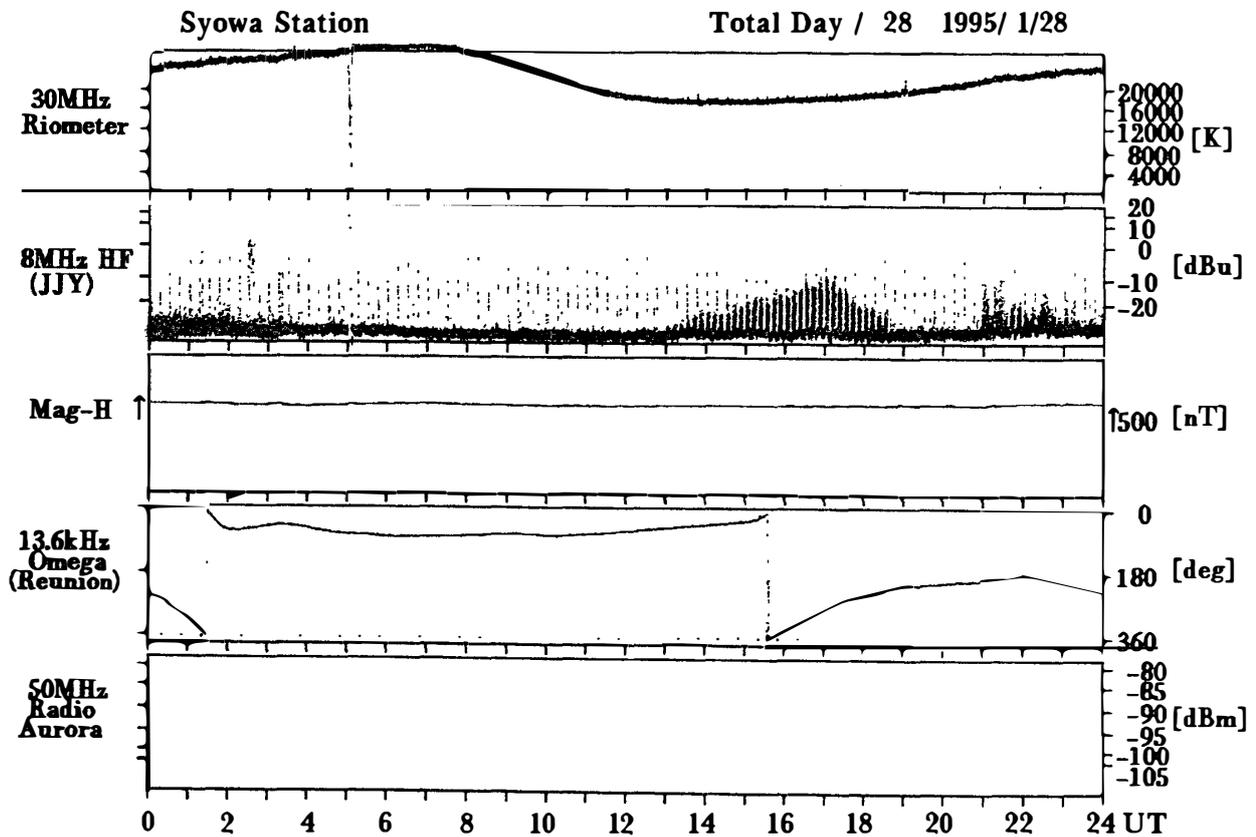
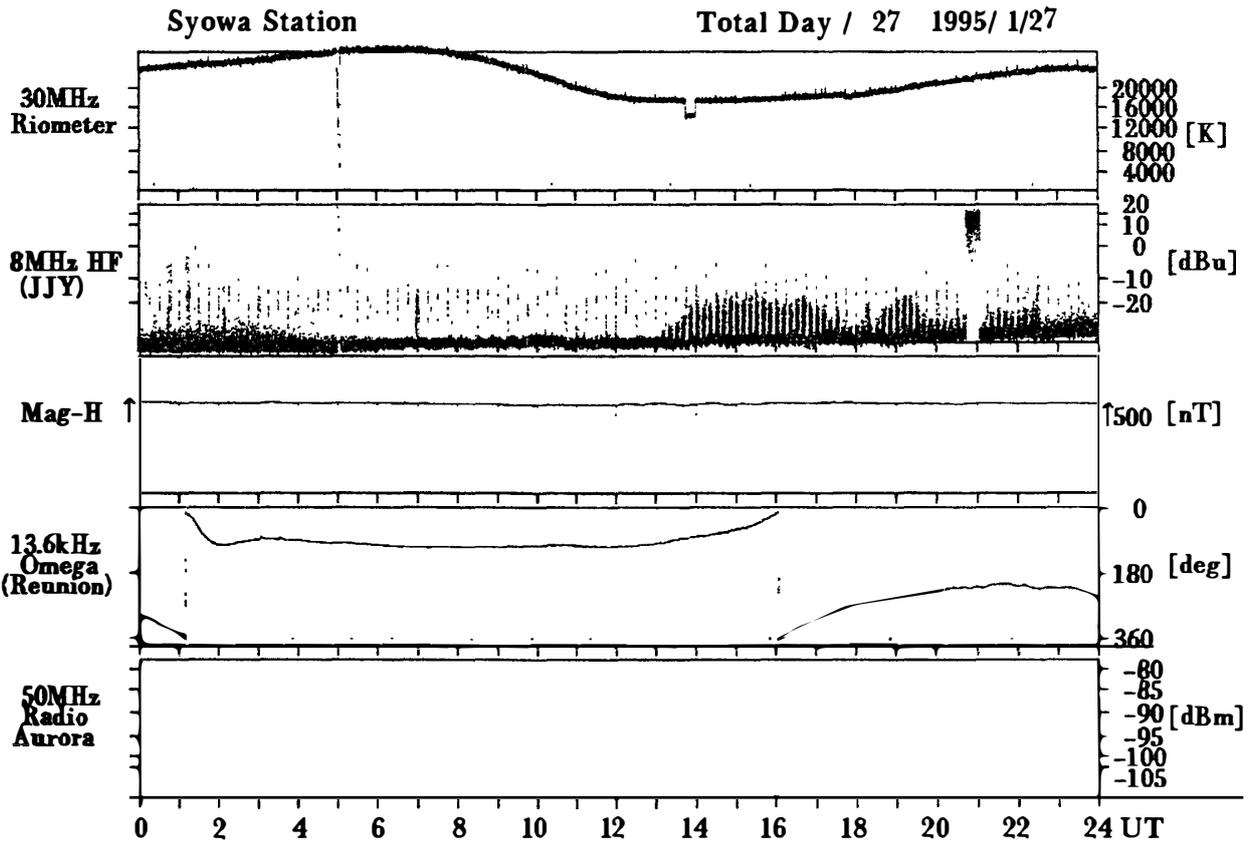






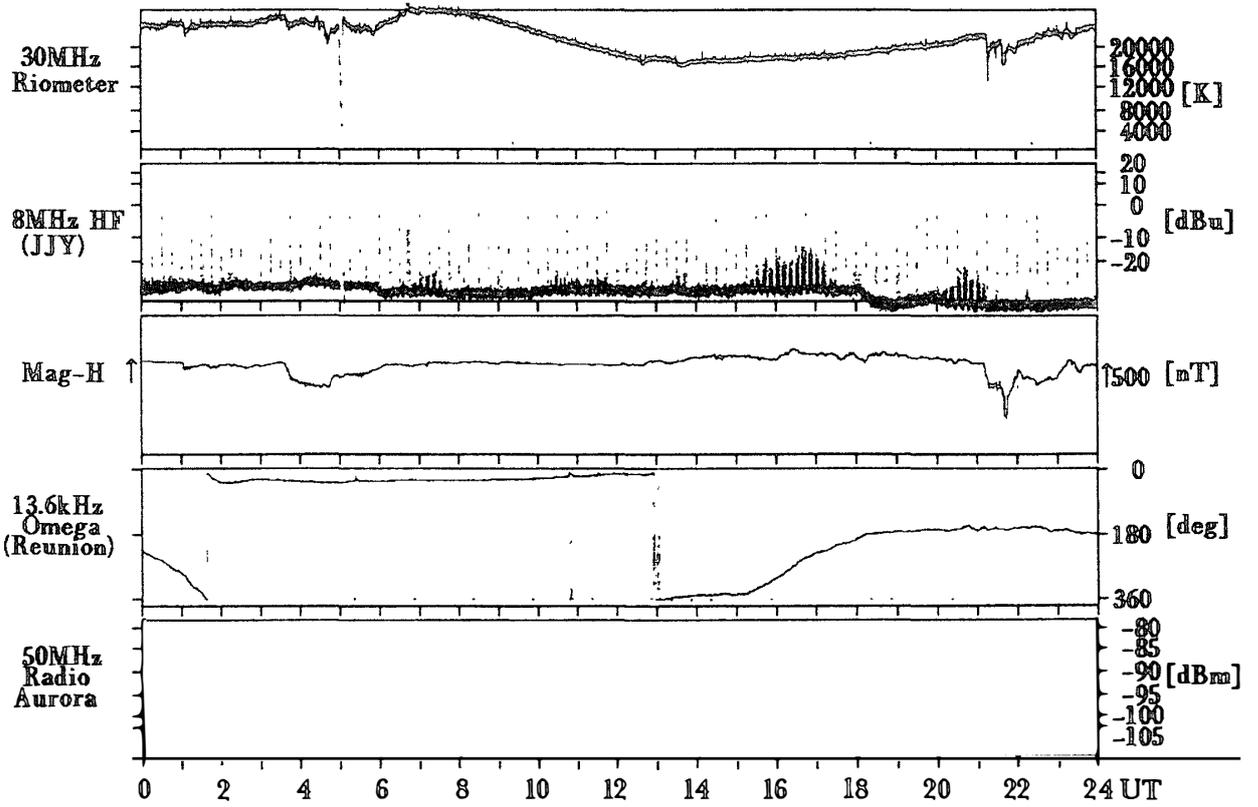






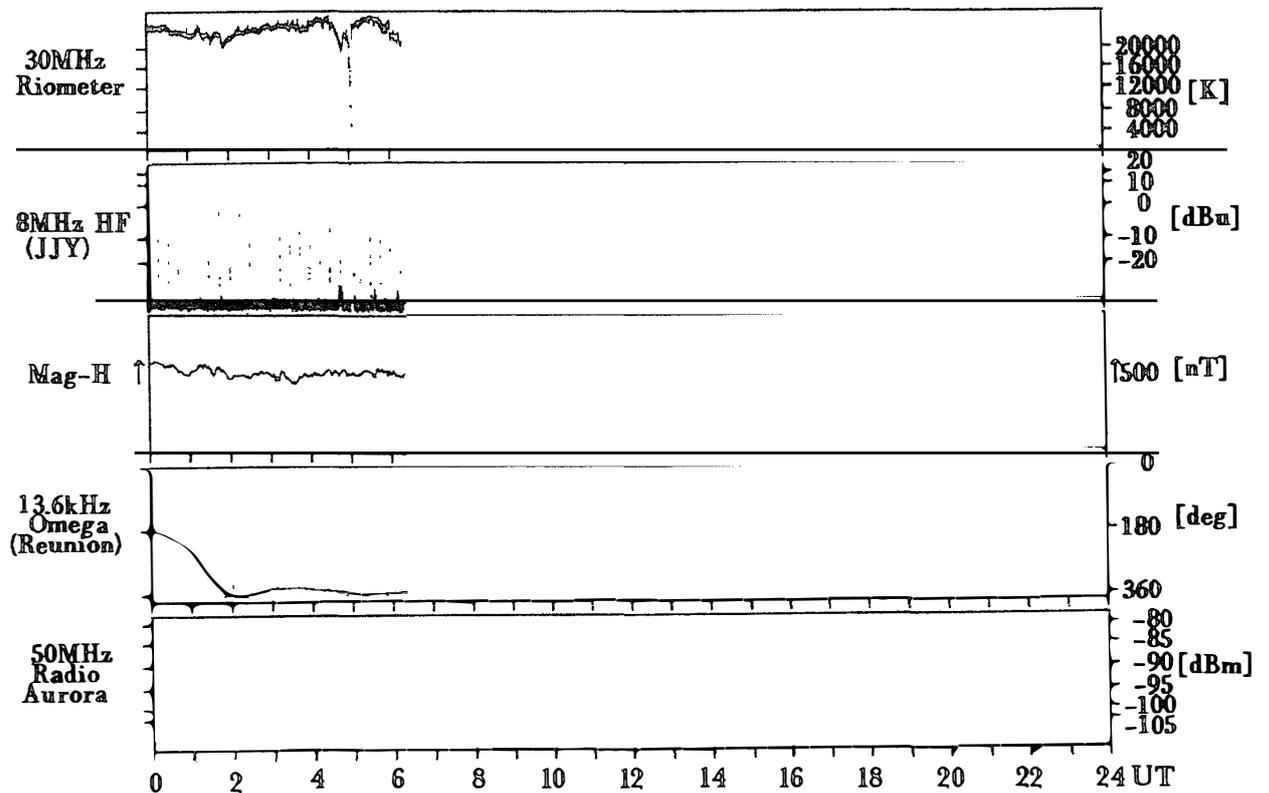
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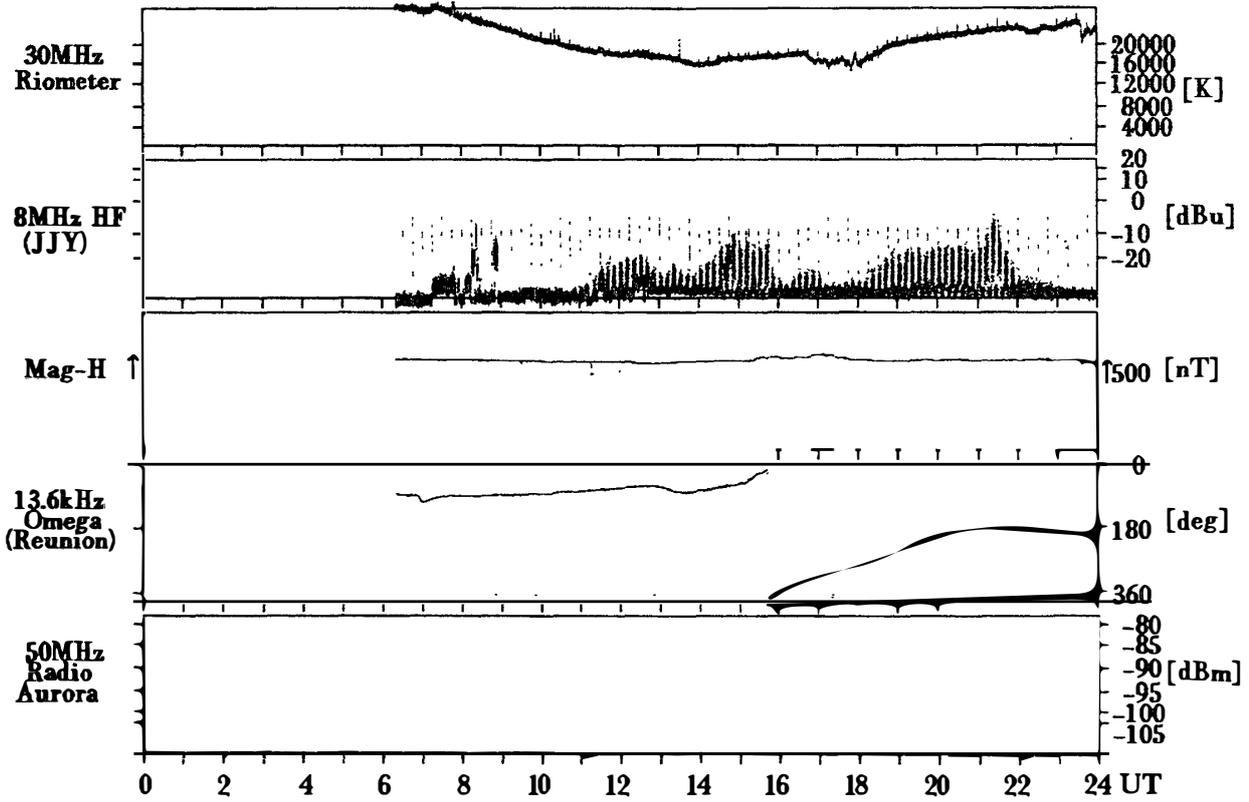
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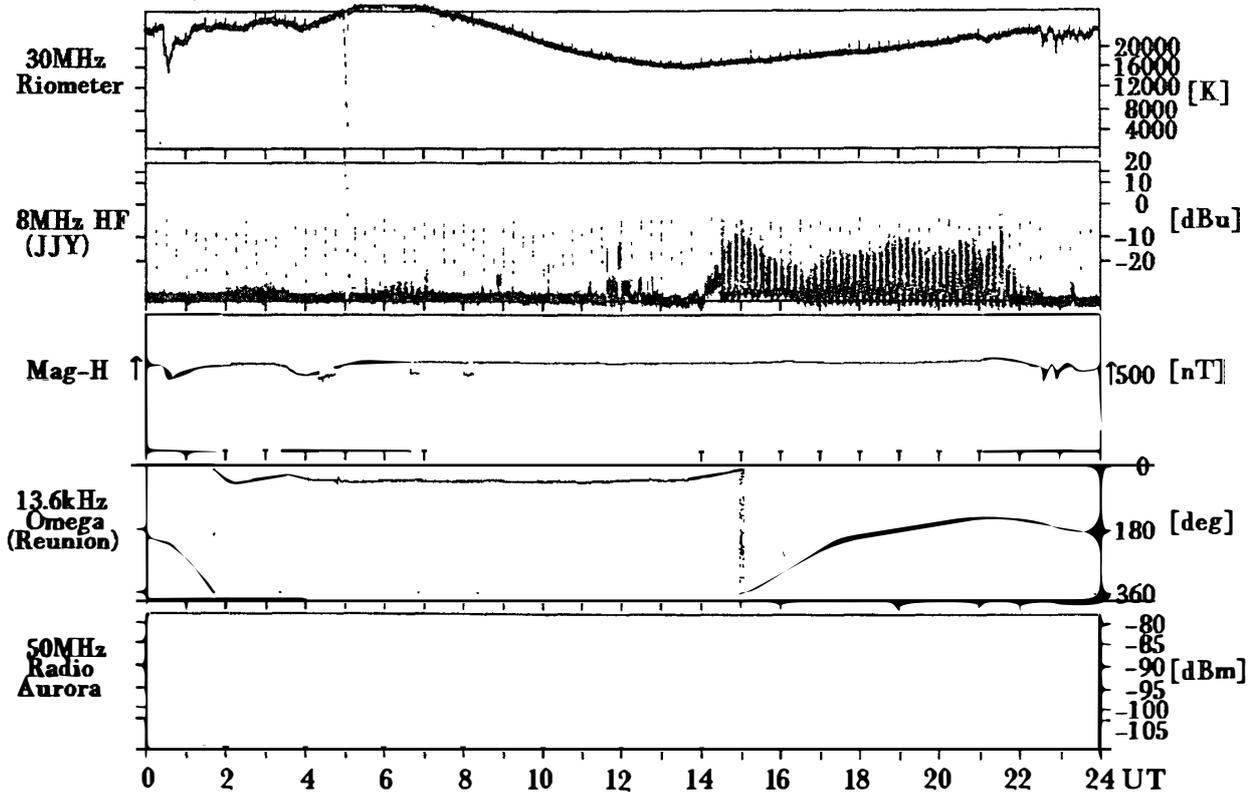
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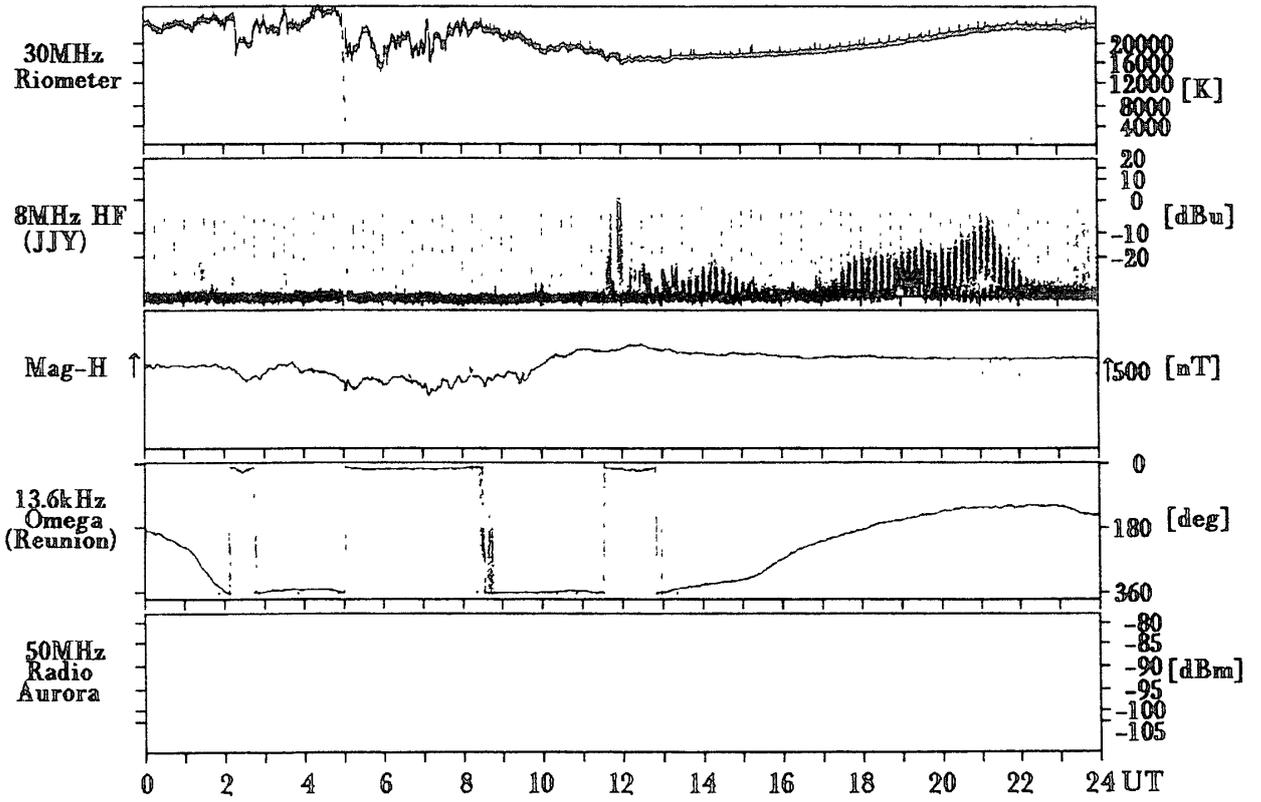
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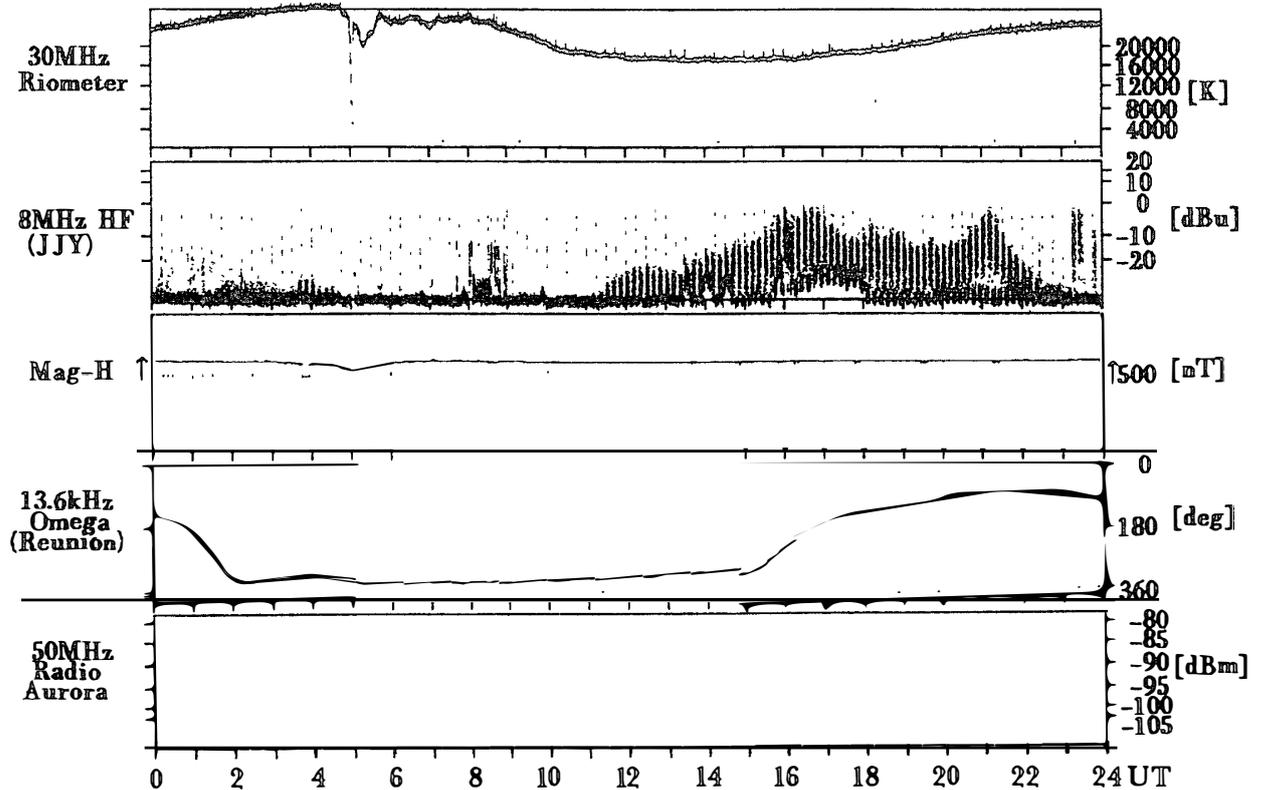
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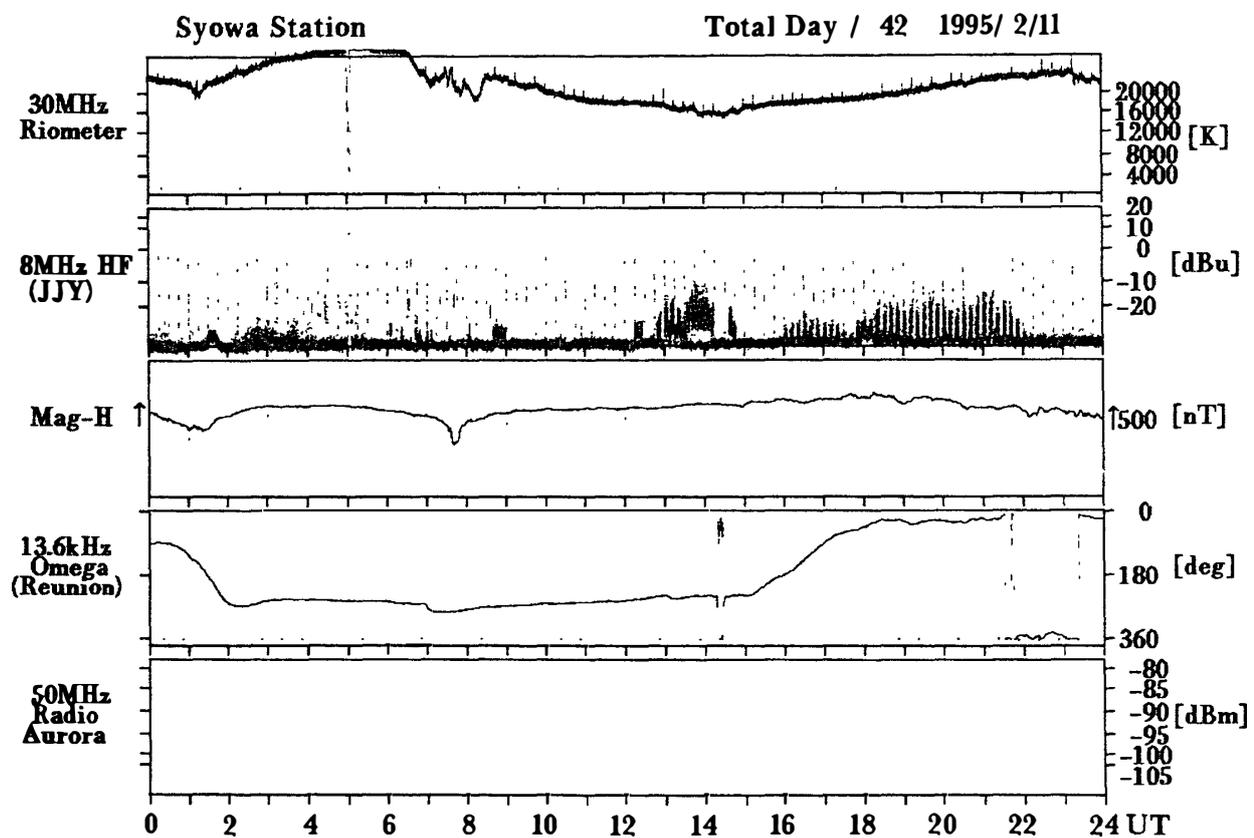
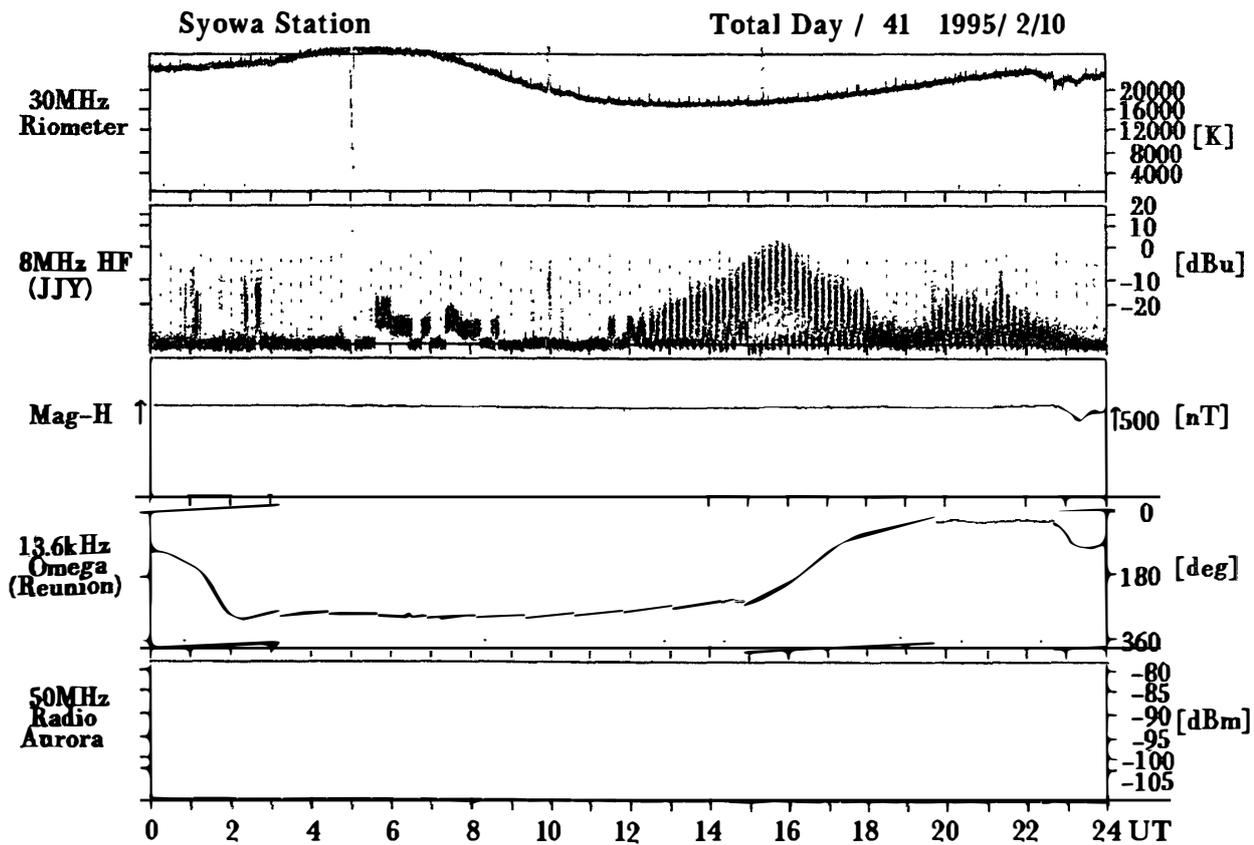
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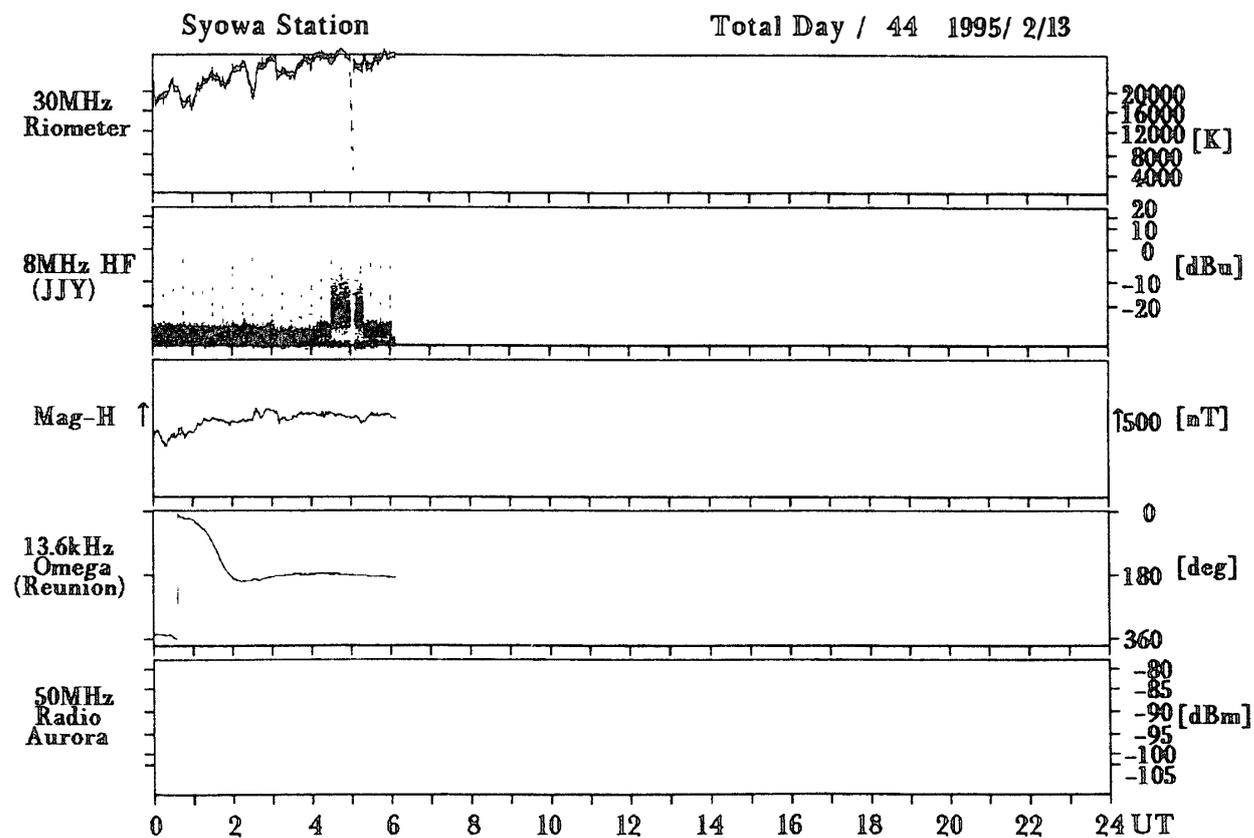
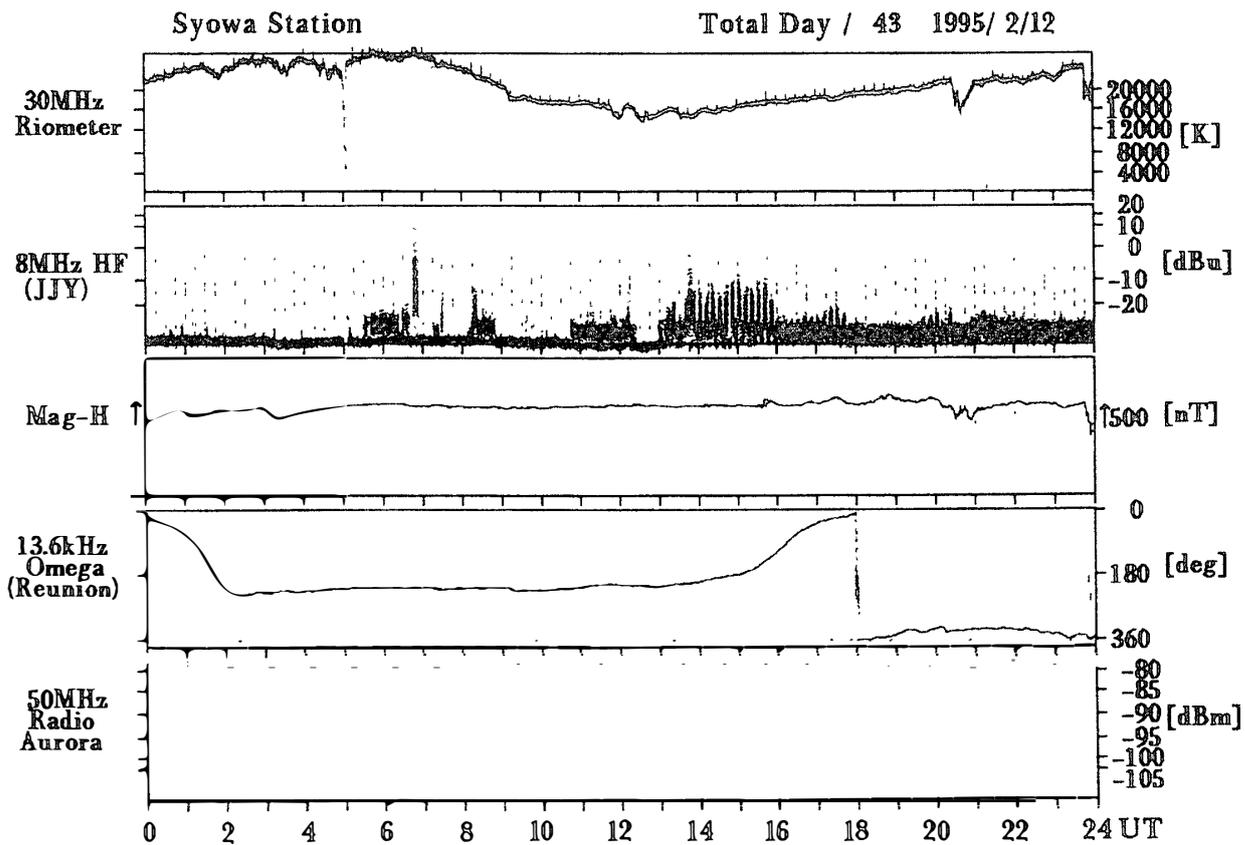


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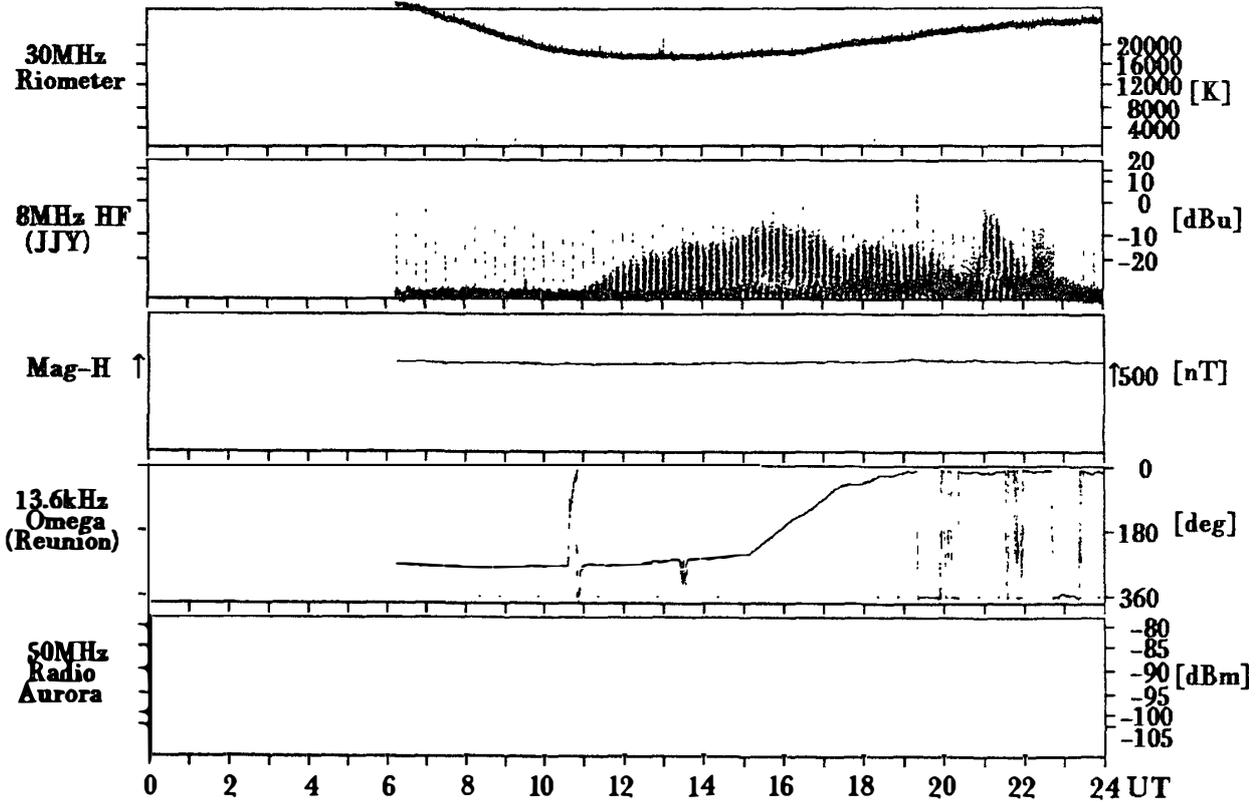






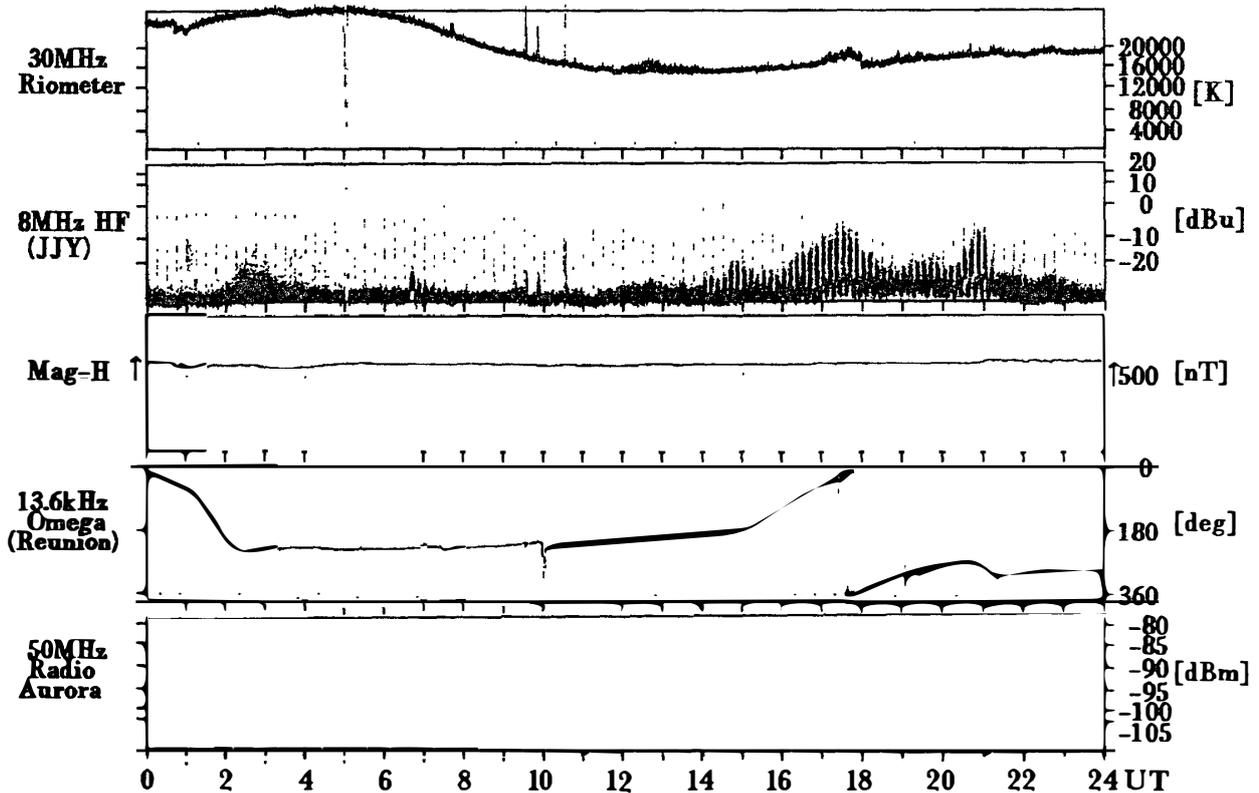
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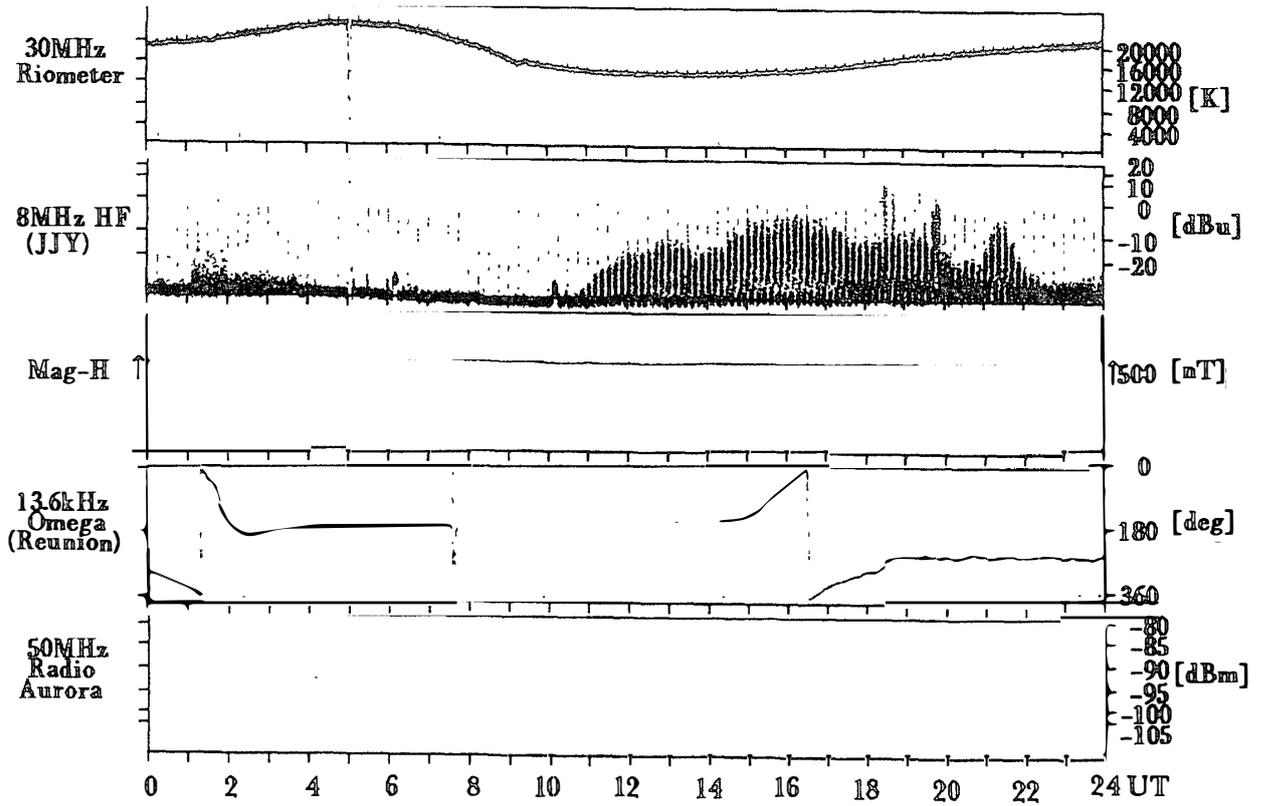
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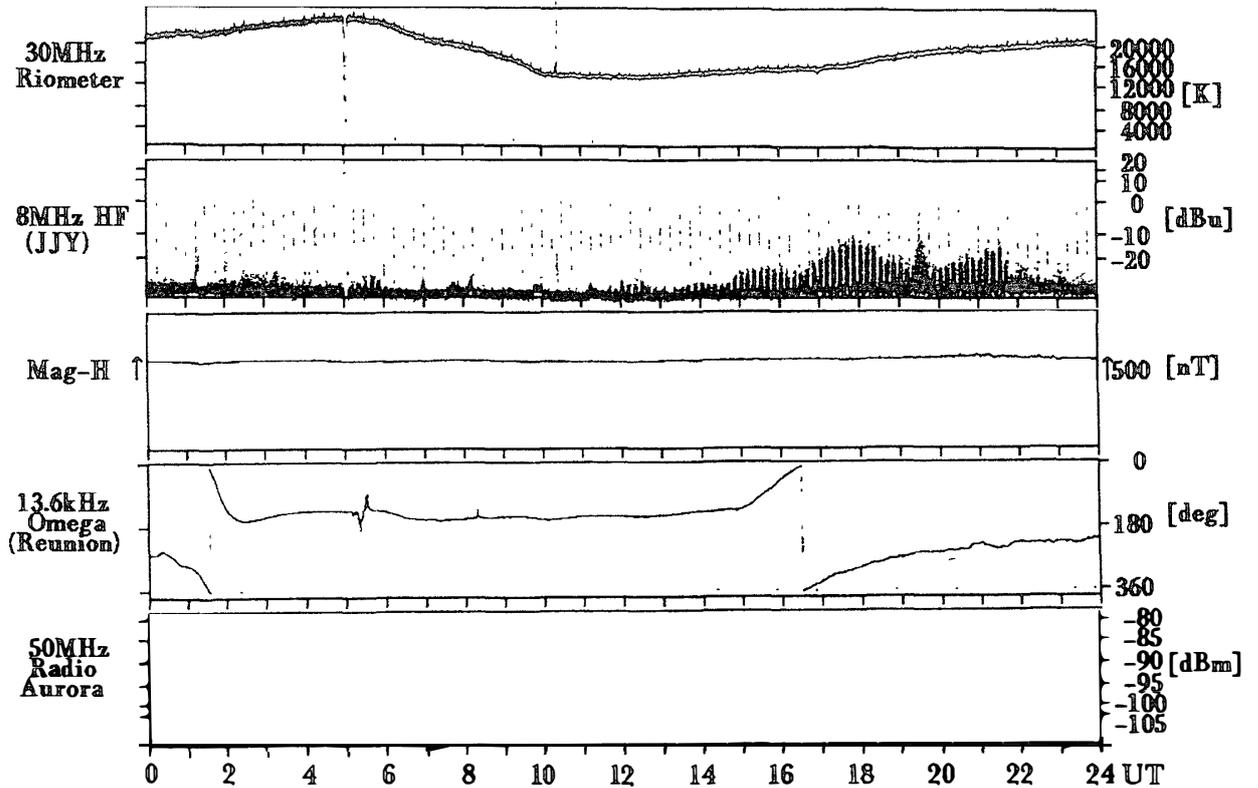
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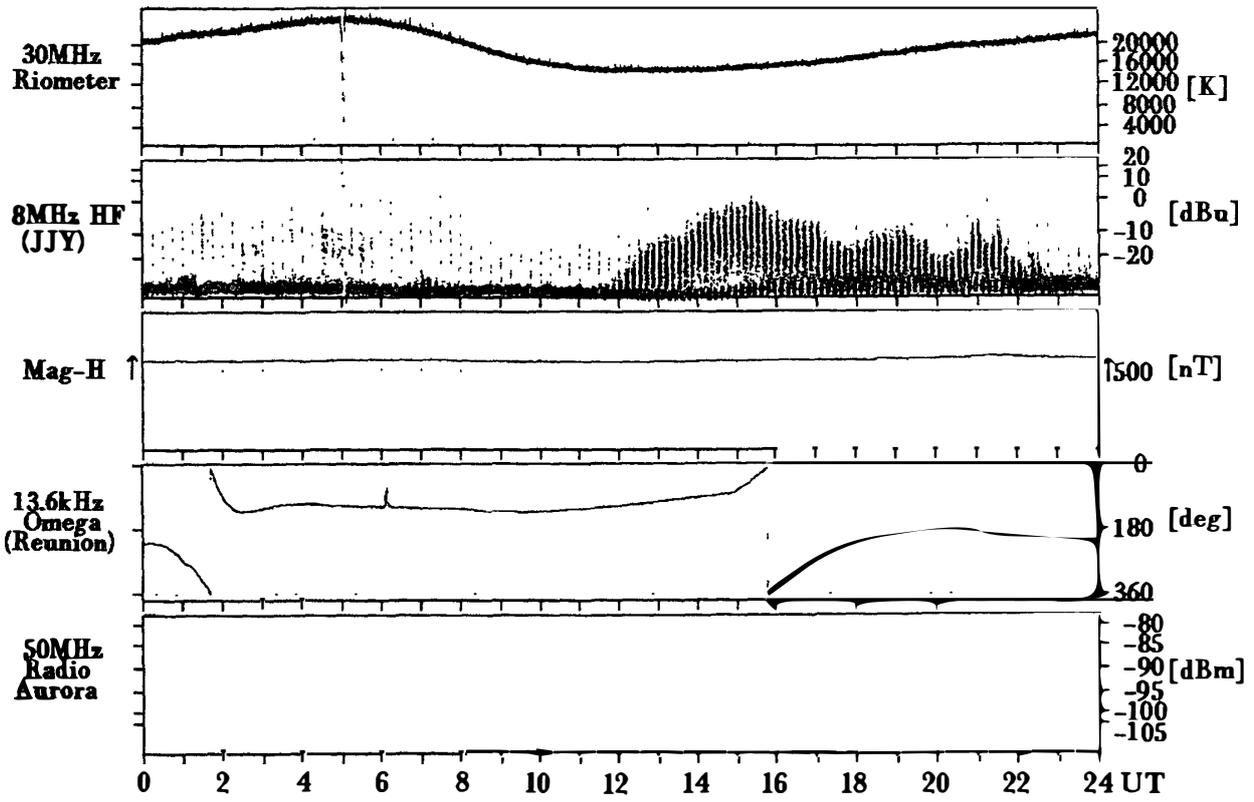
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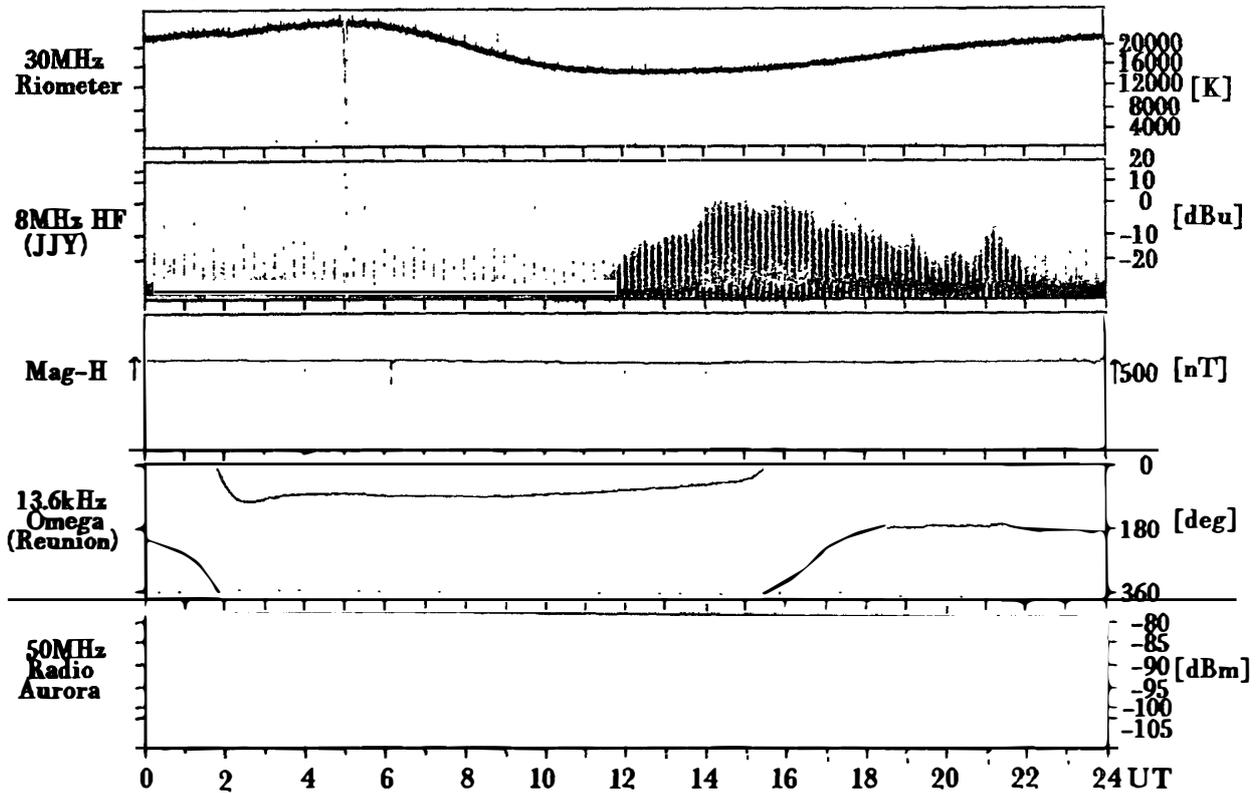
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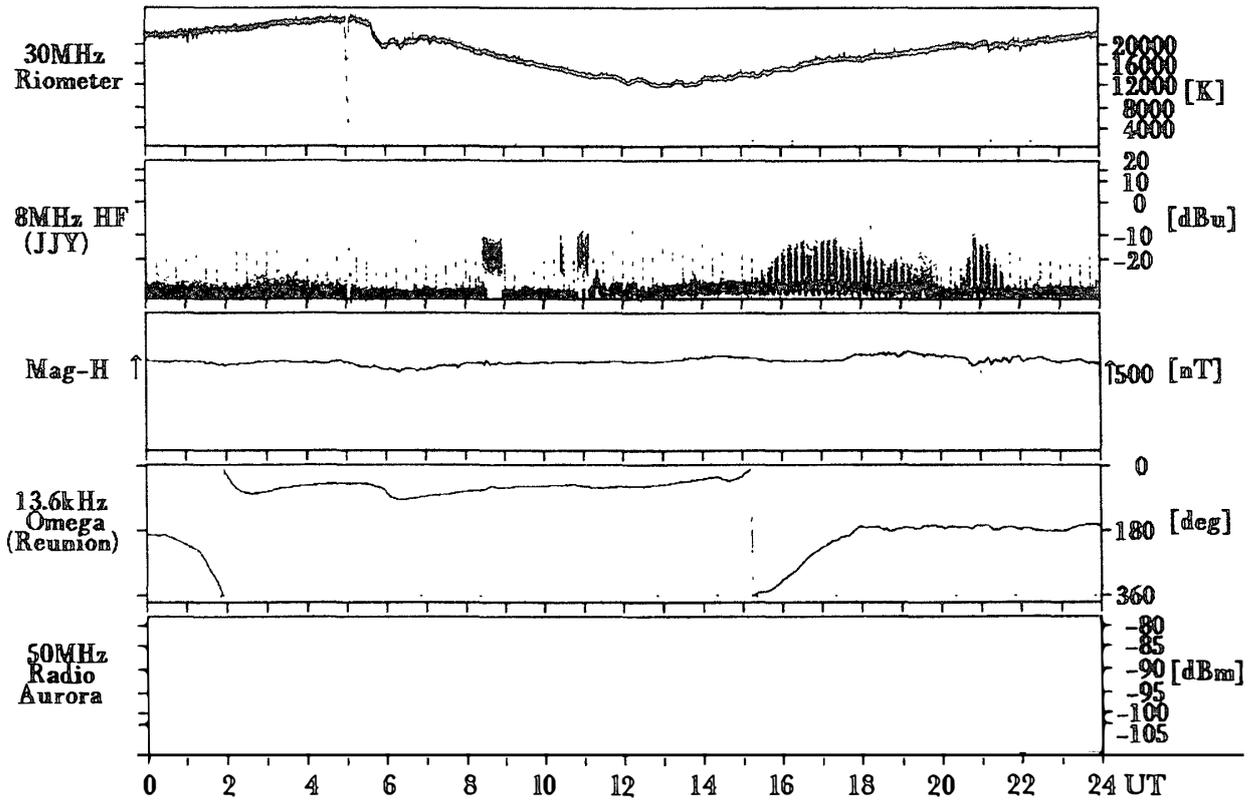
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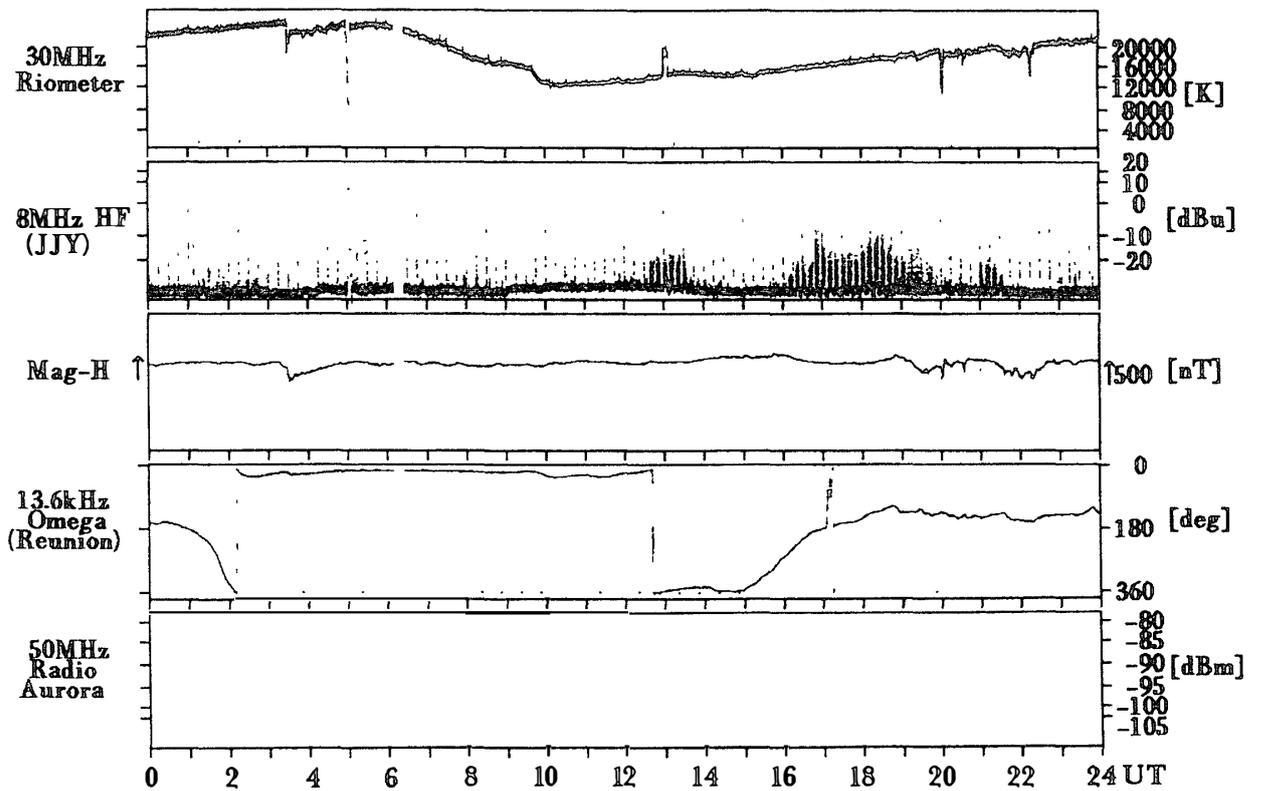
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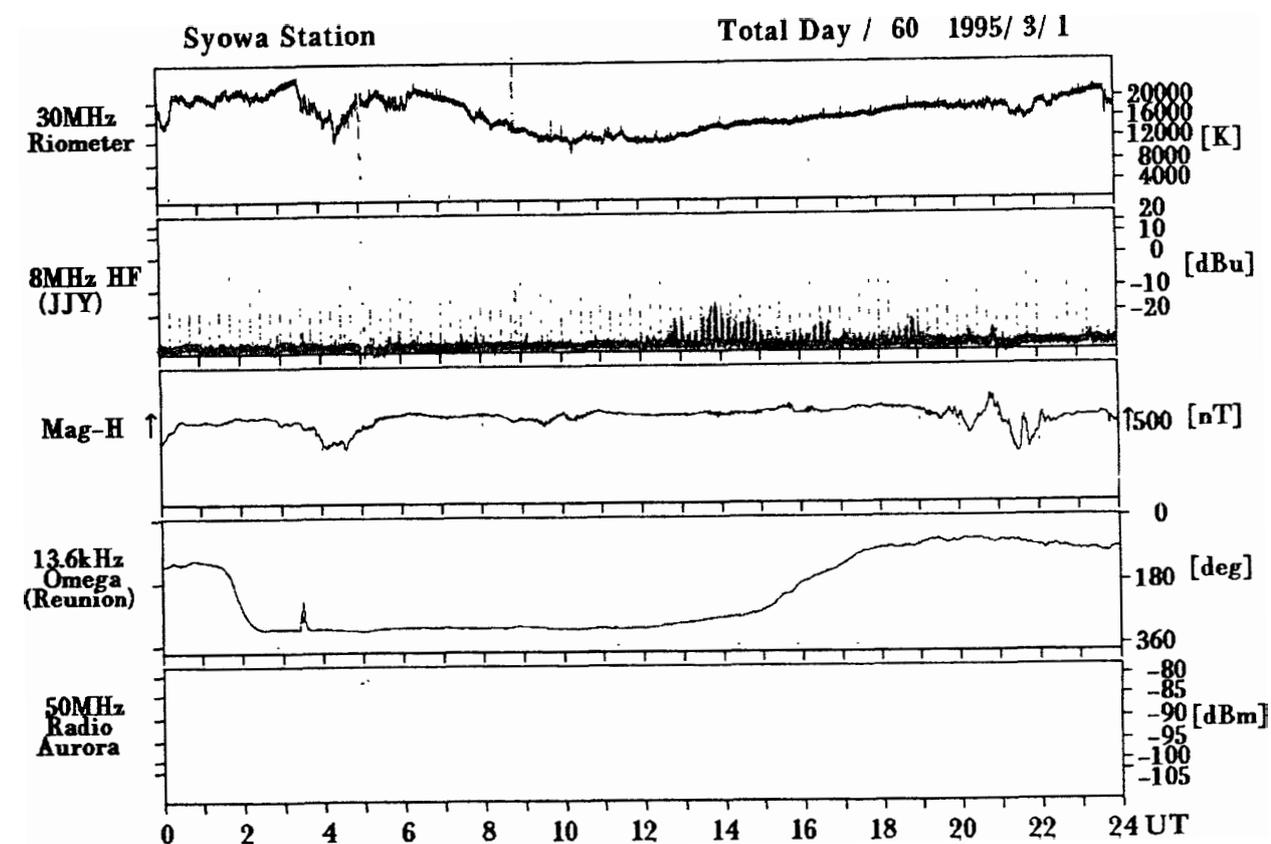
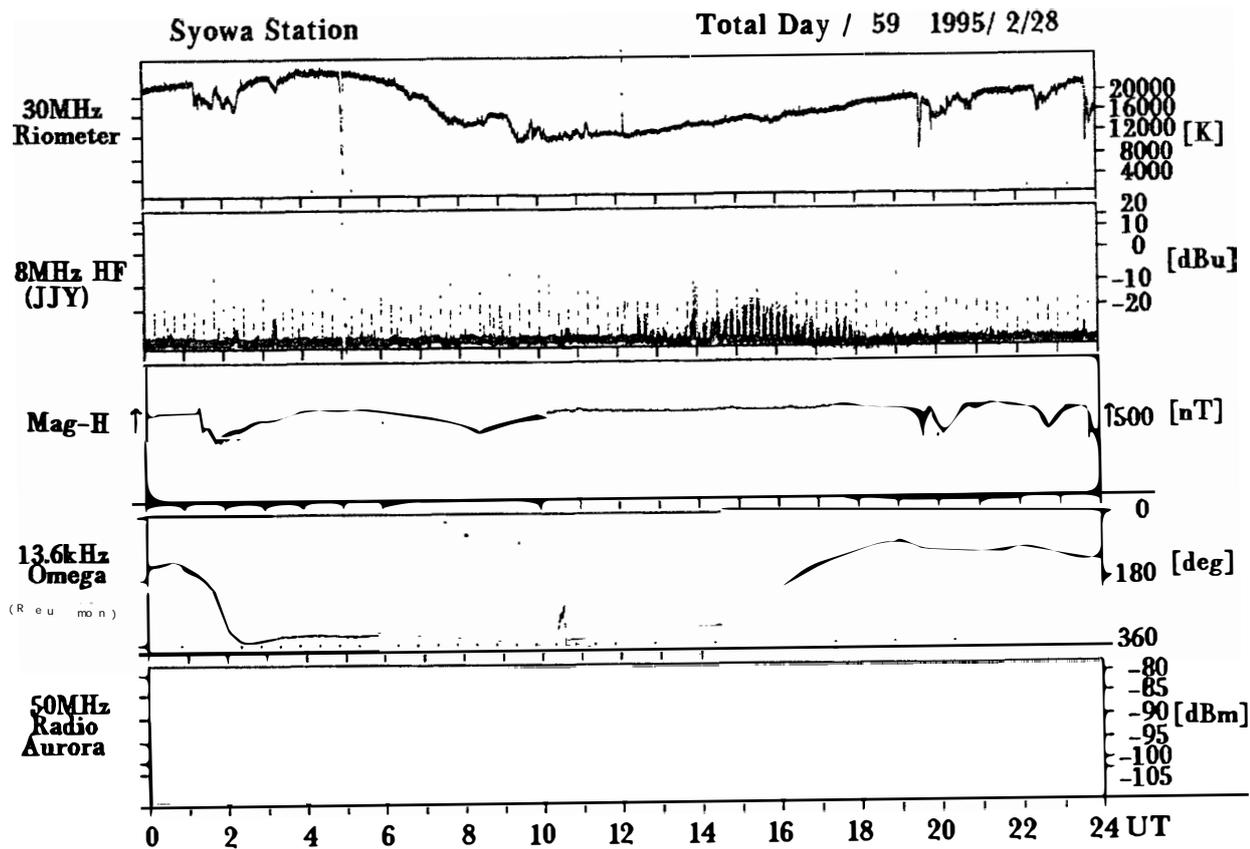
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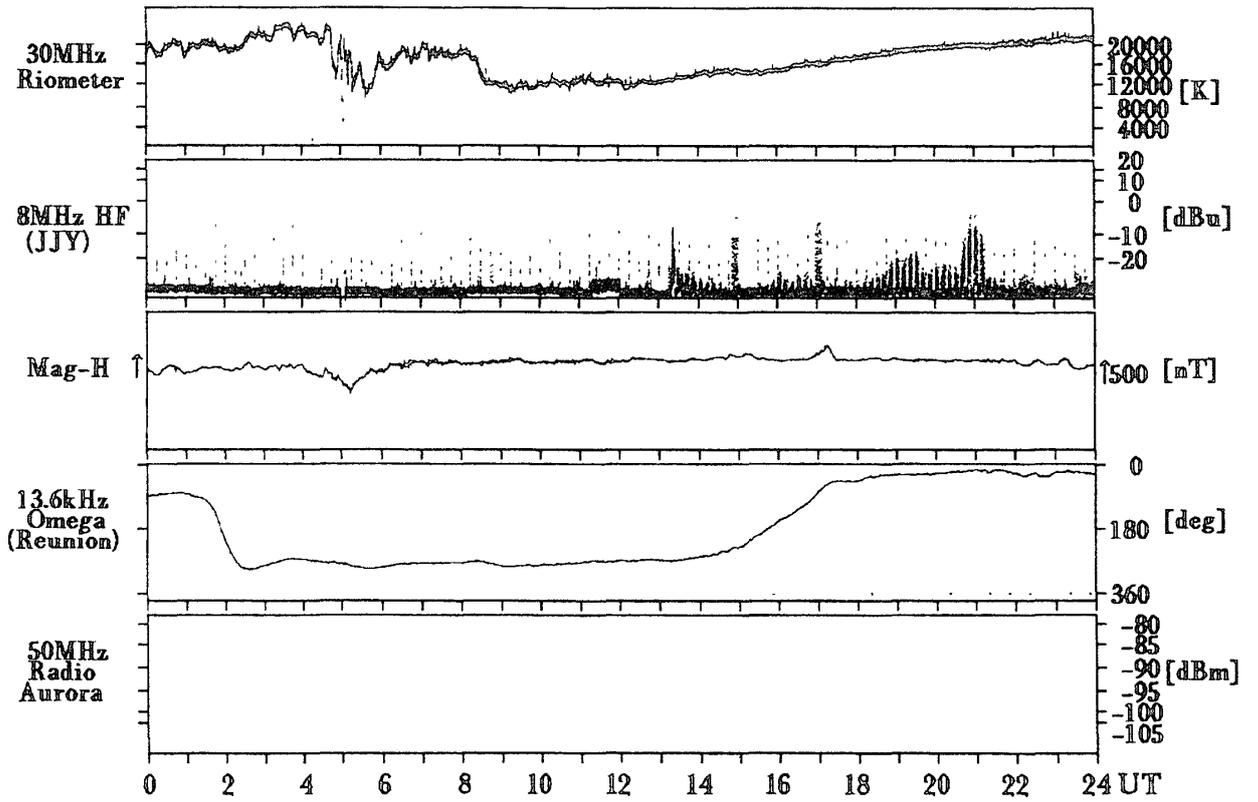
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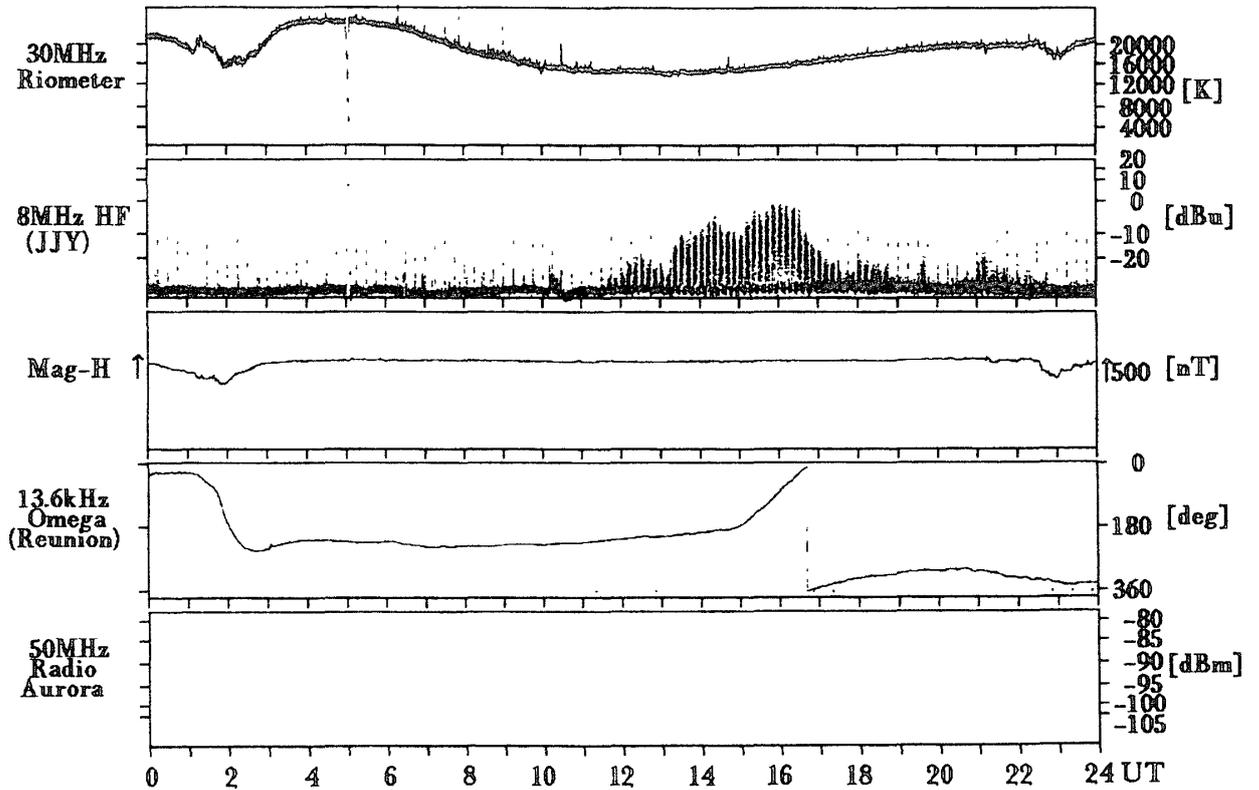
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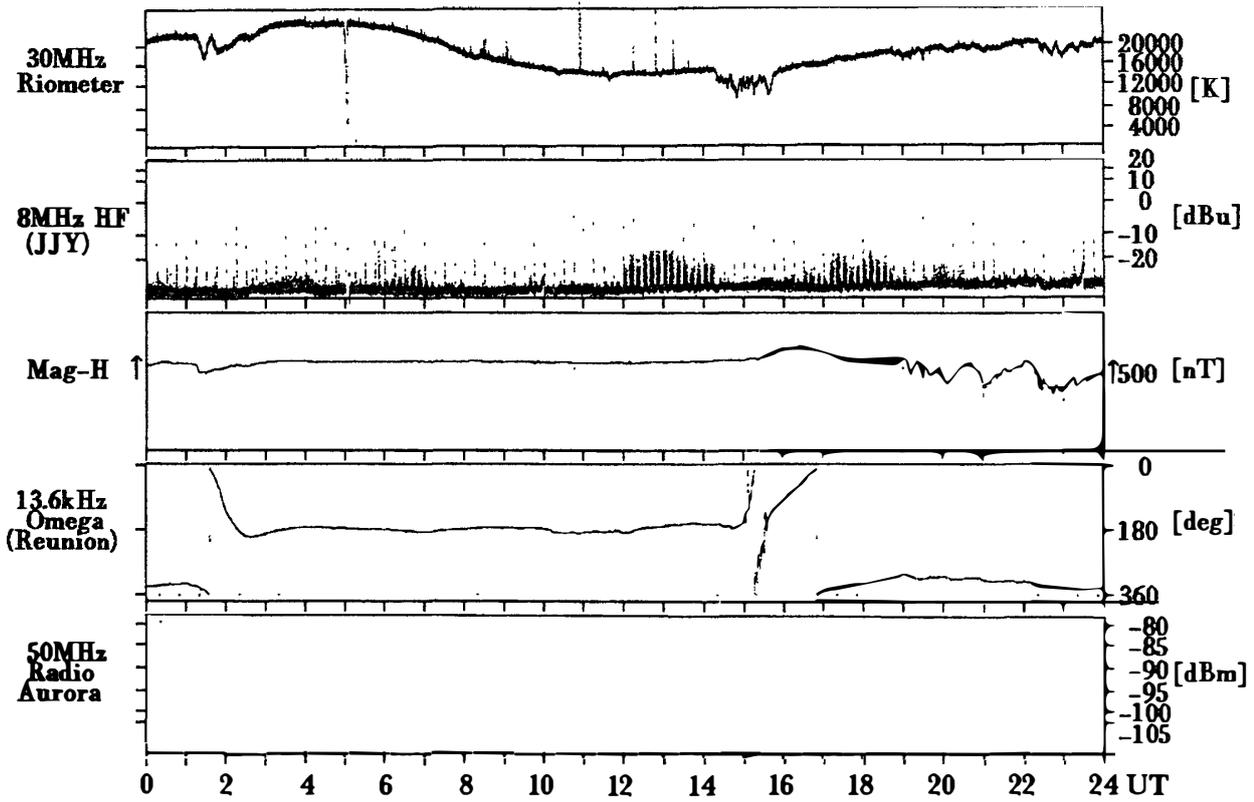
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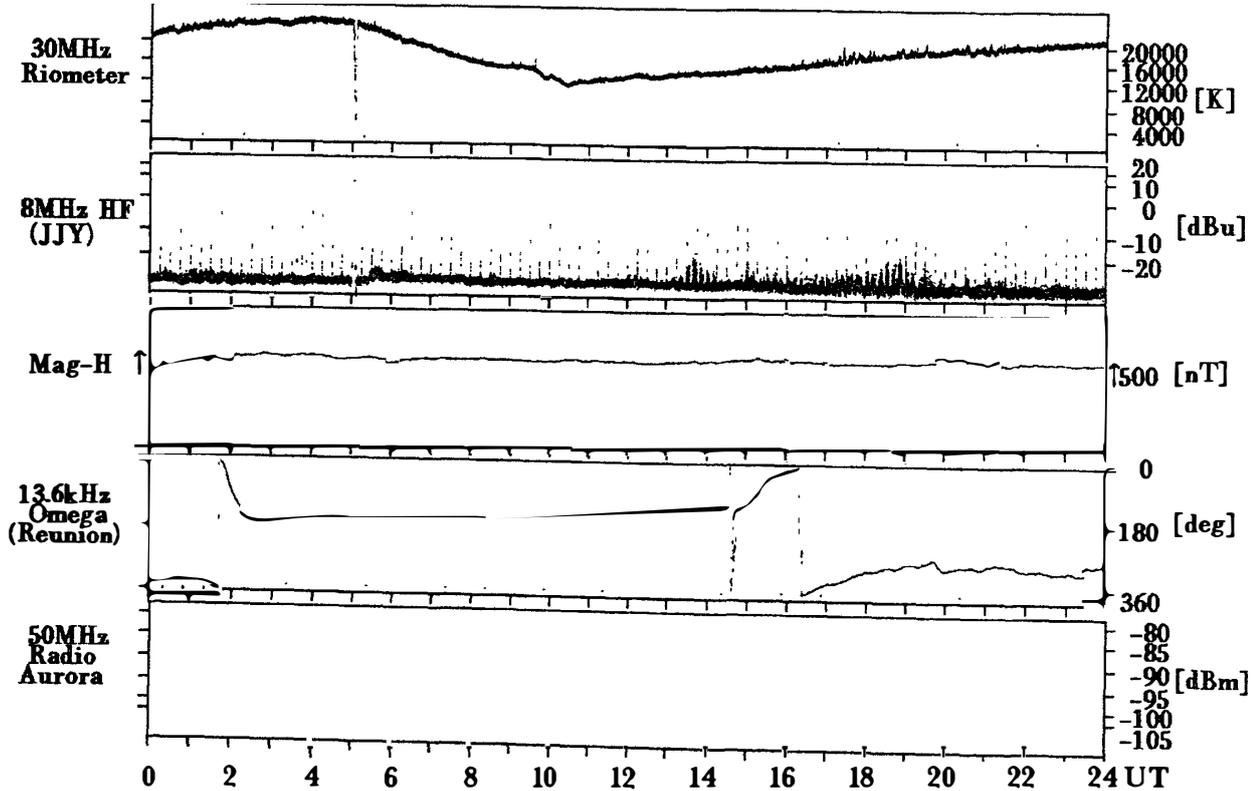
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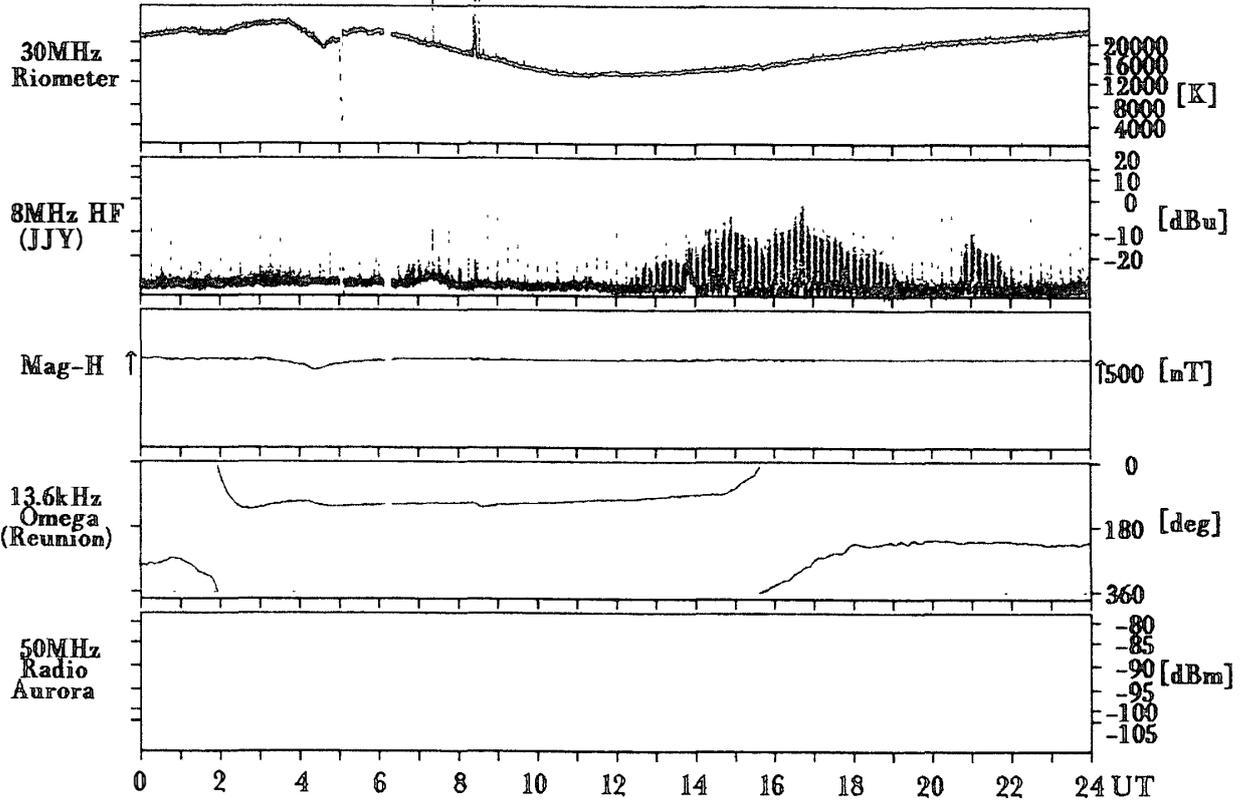
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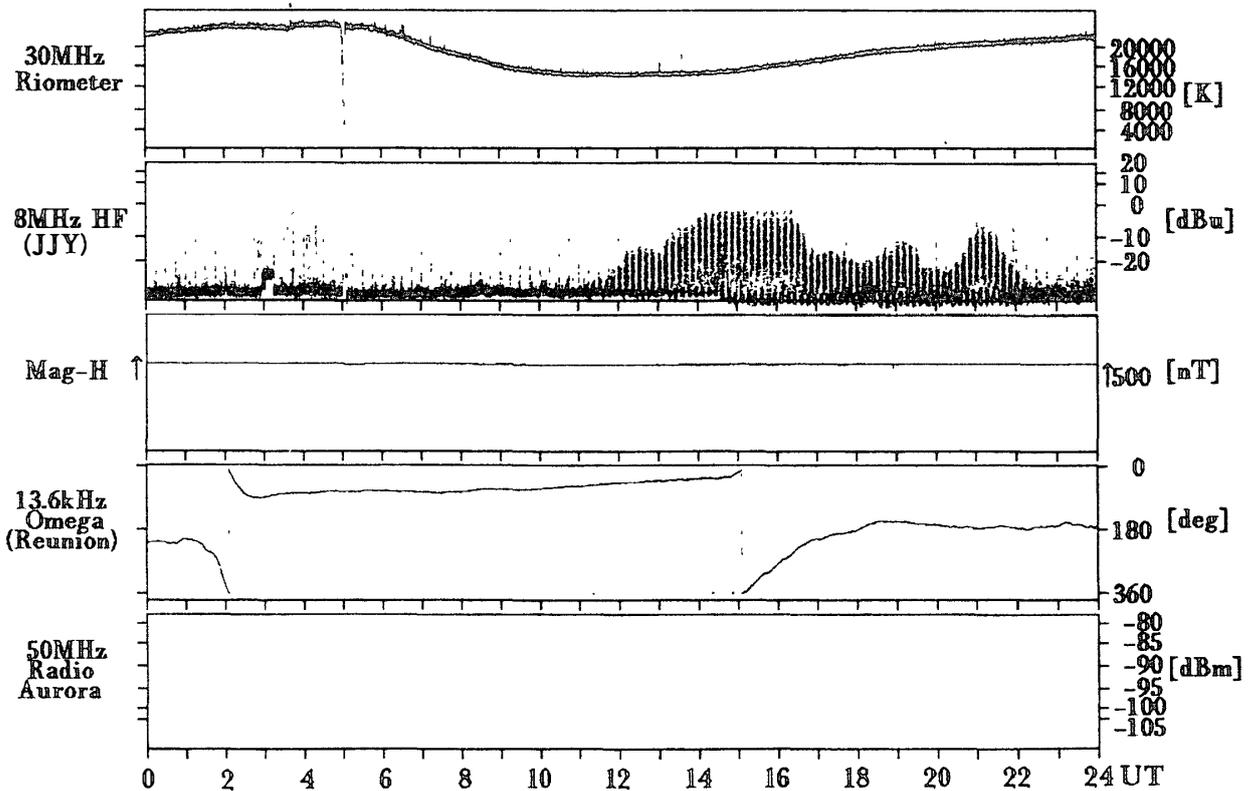
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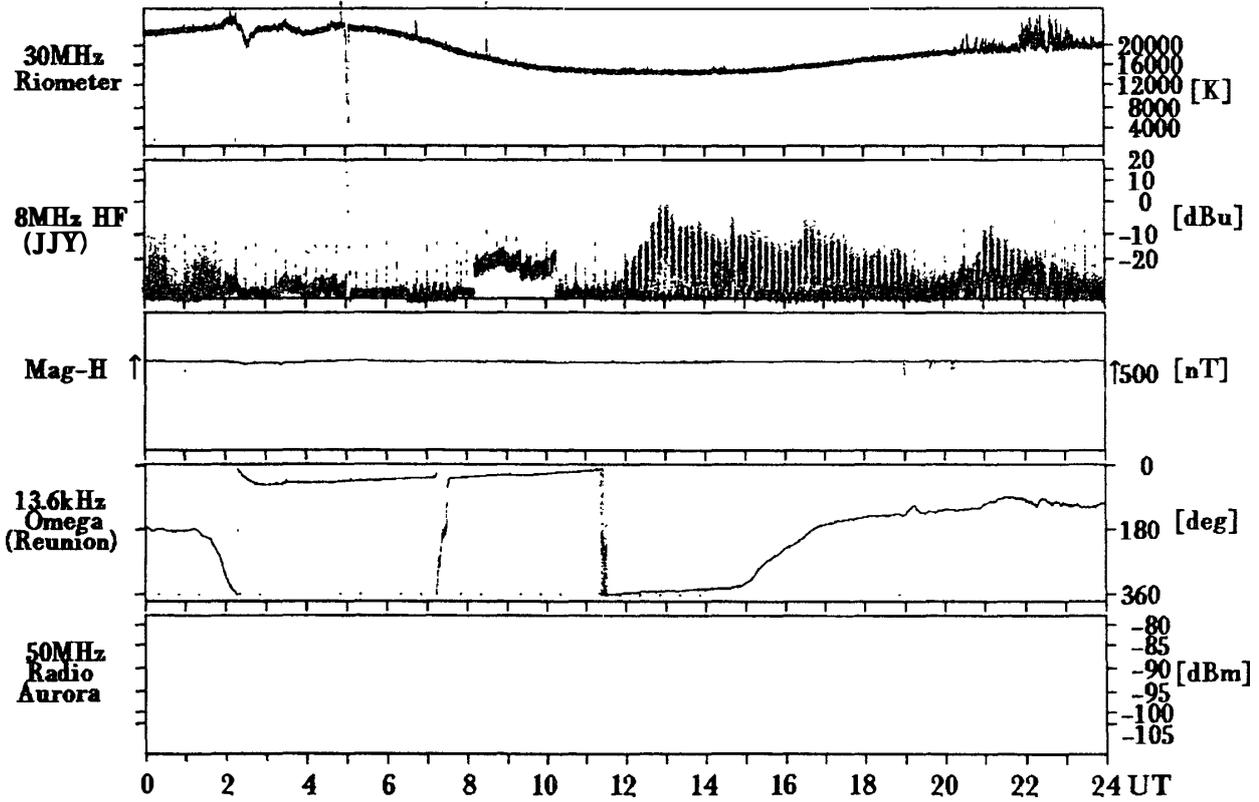
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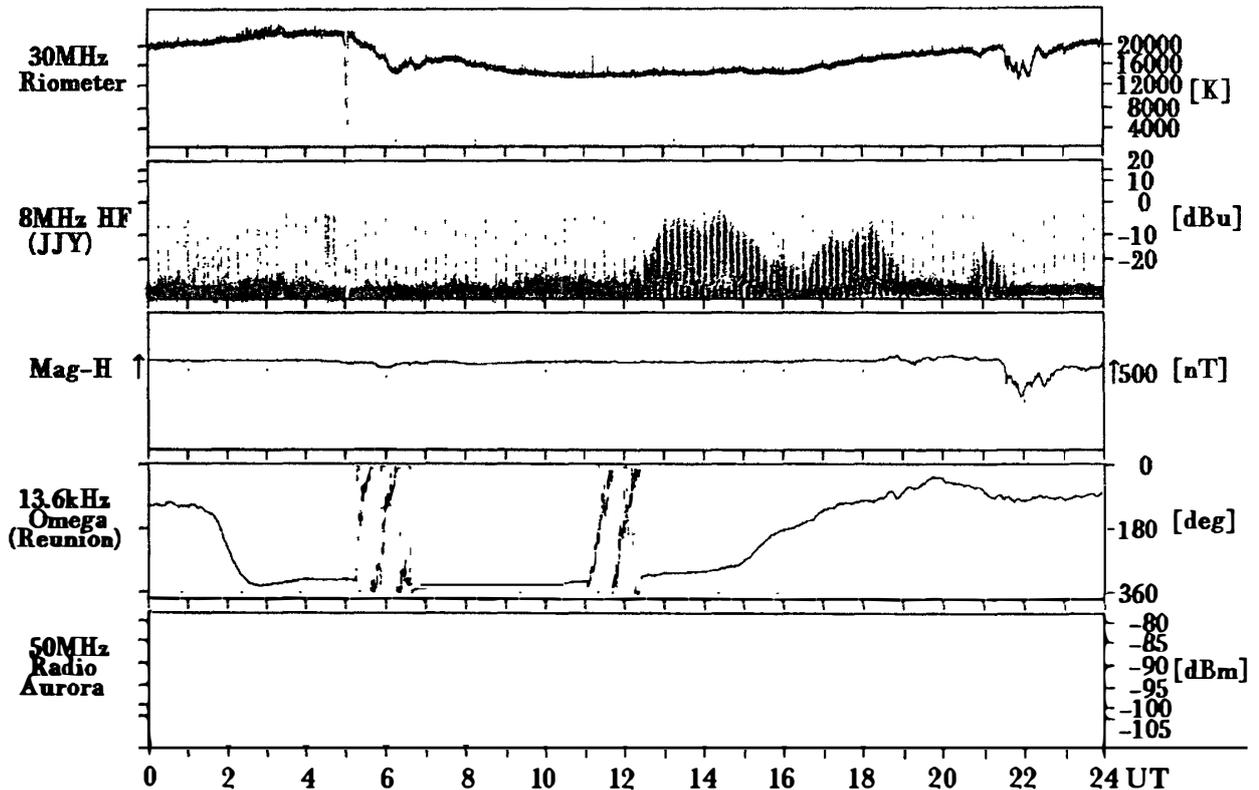
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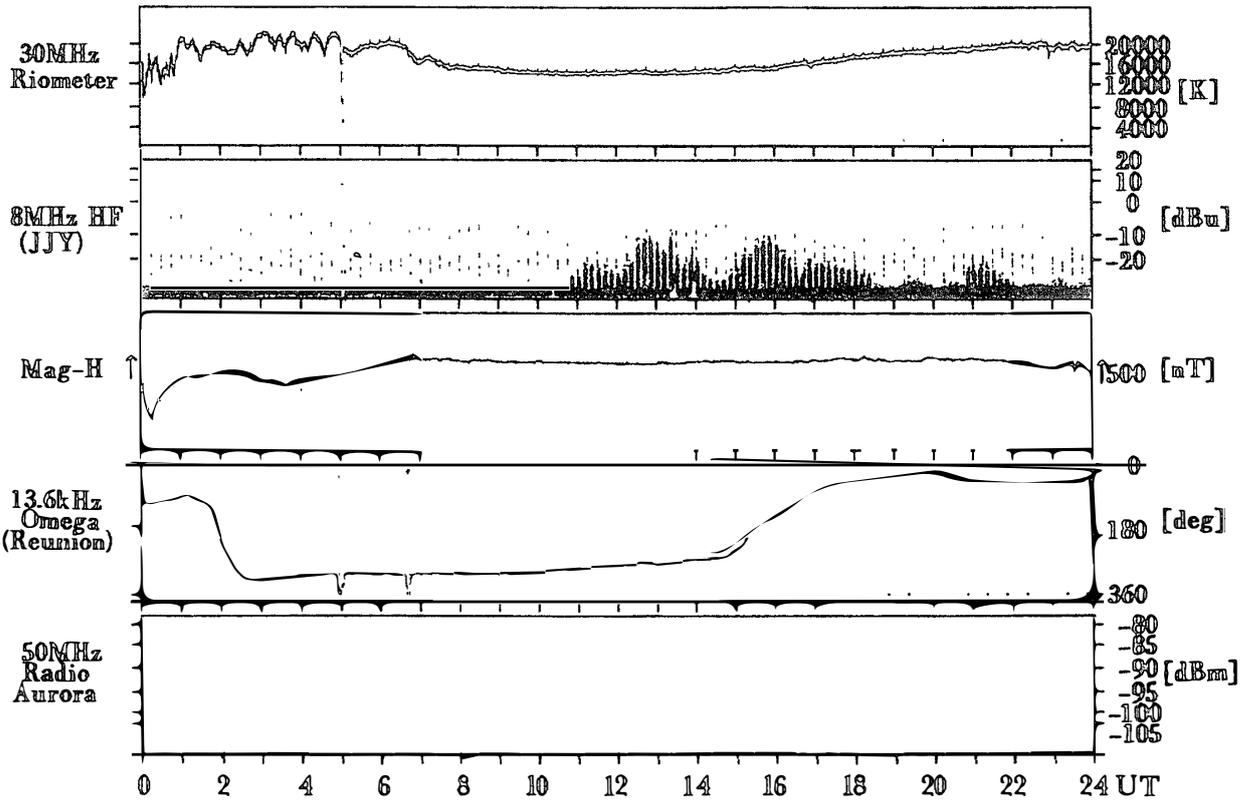
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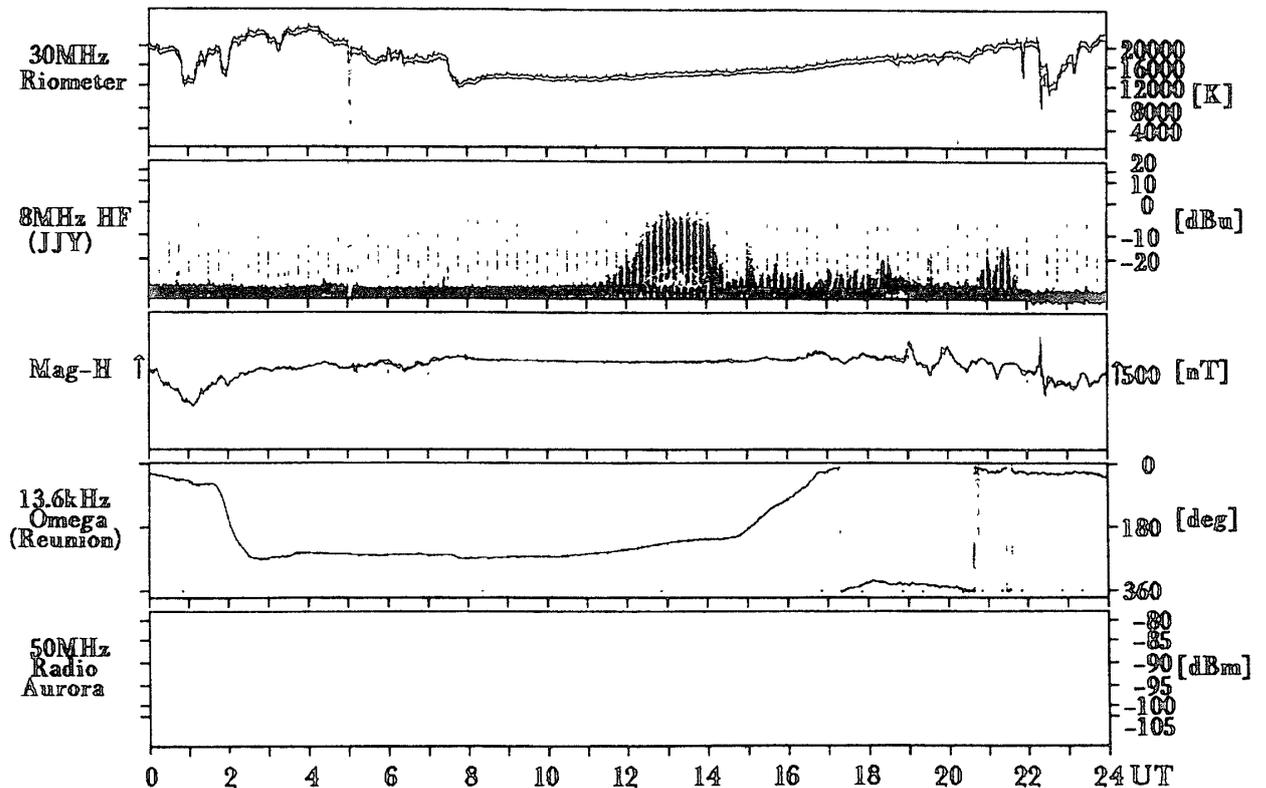
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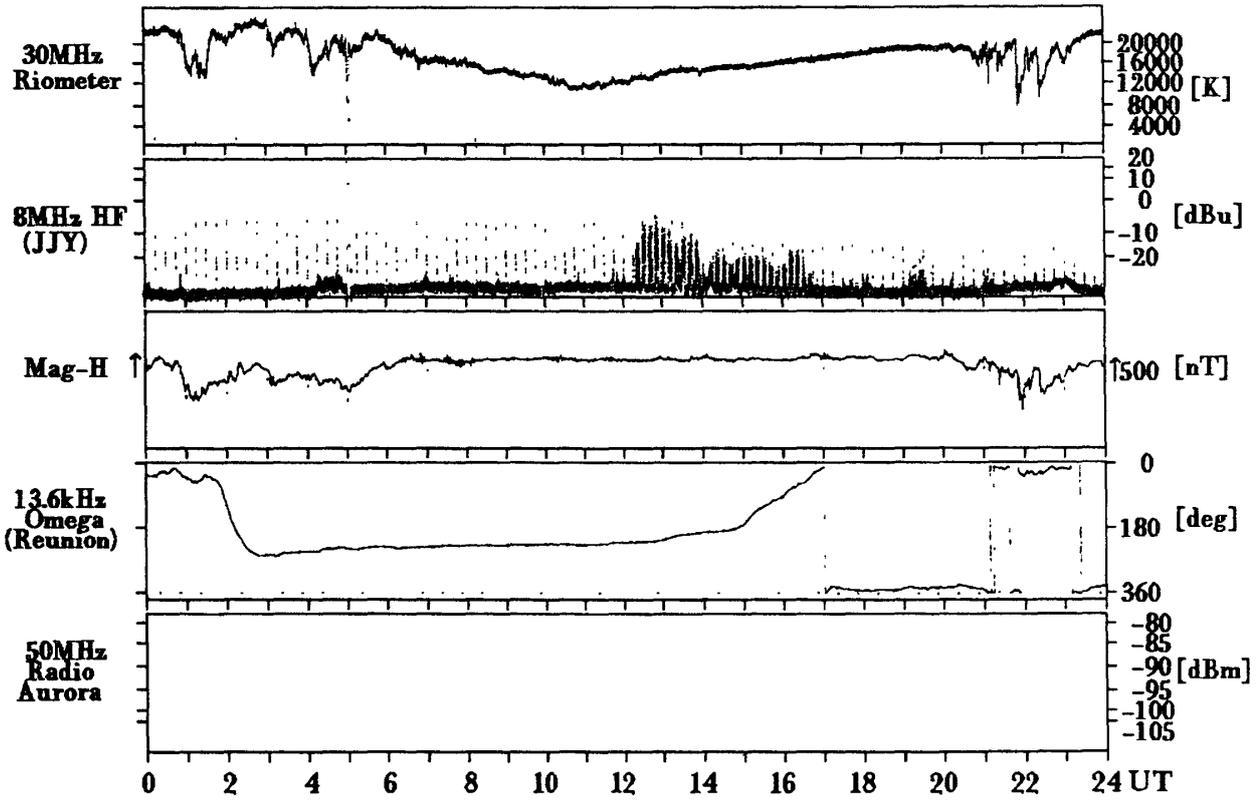
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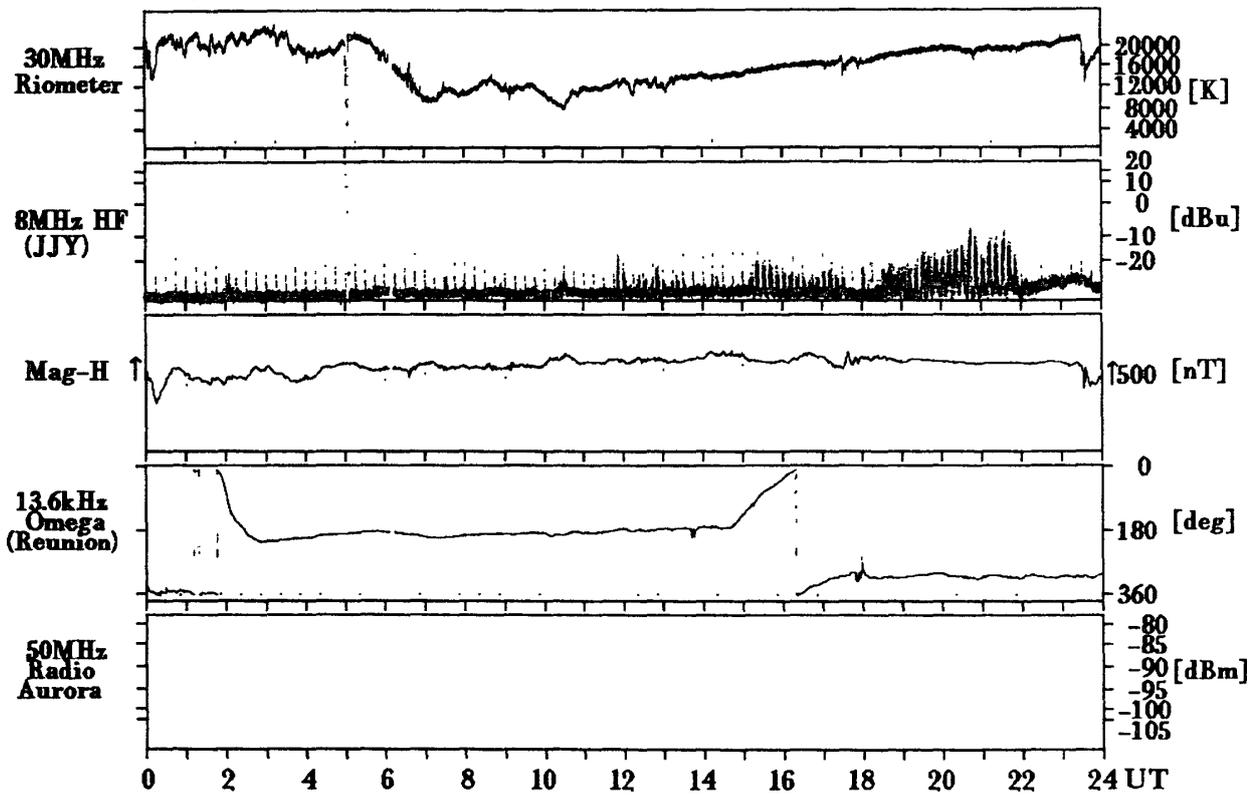
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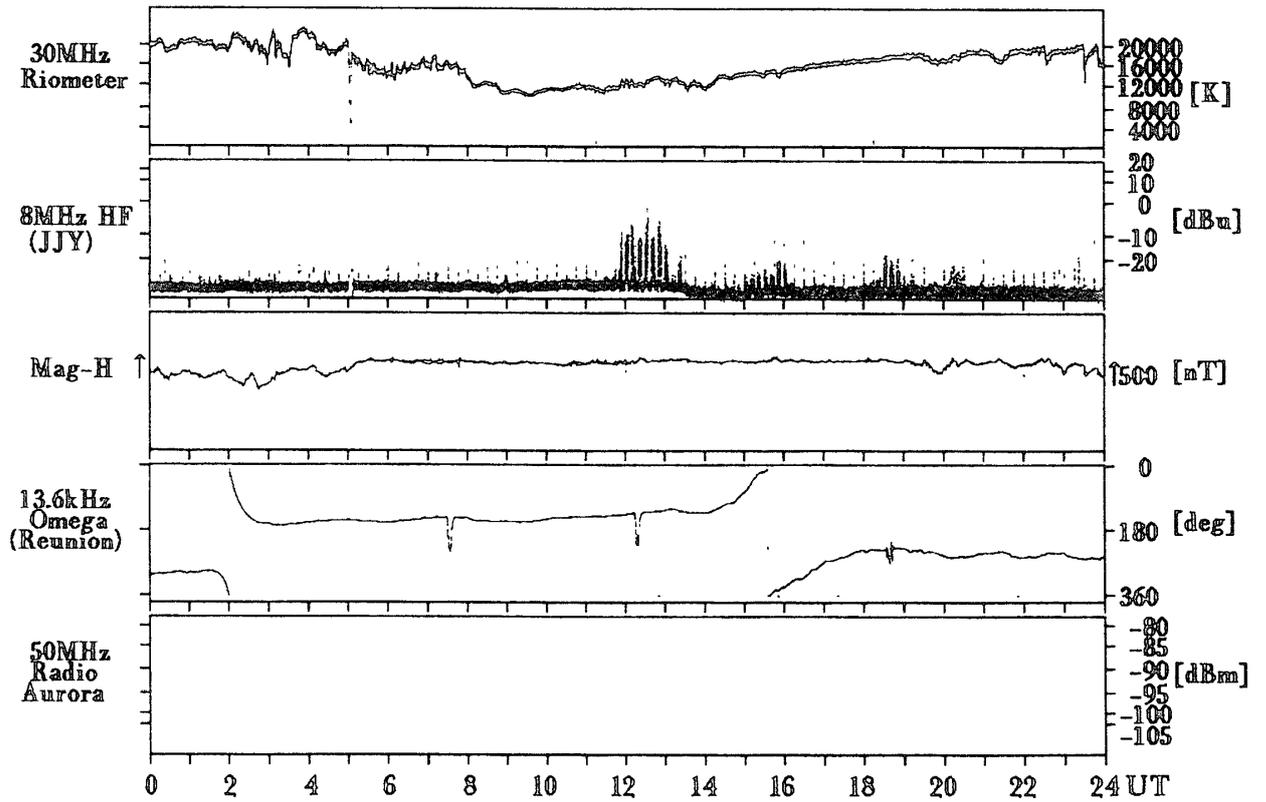
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Total Day / 72 1995/ 3/13



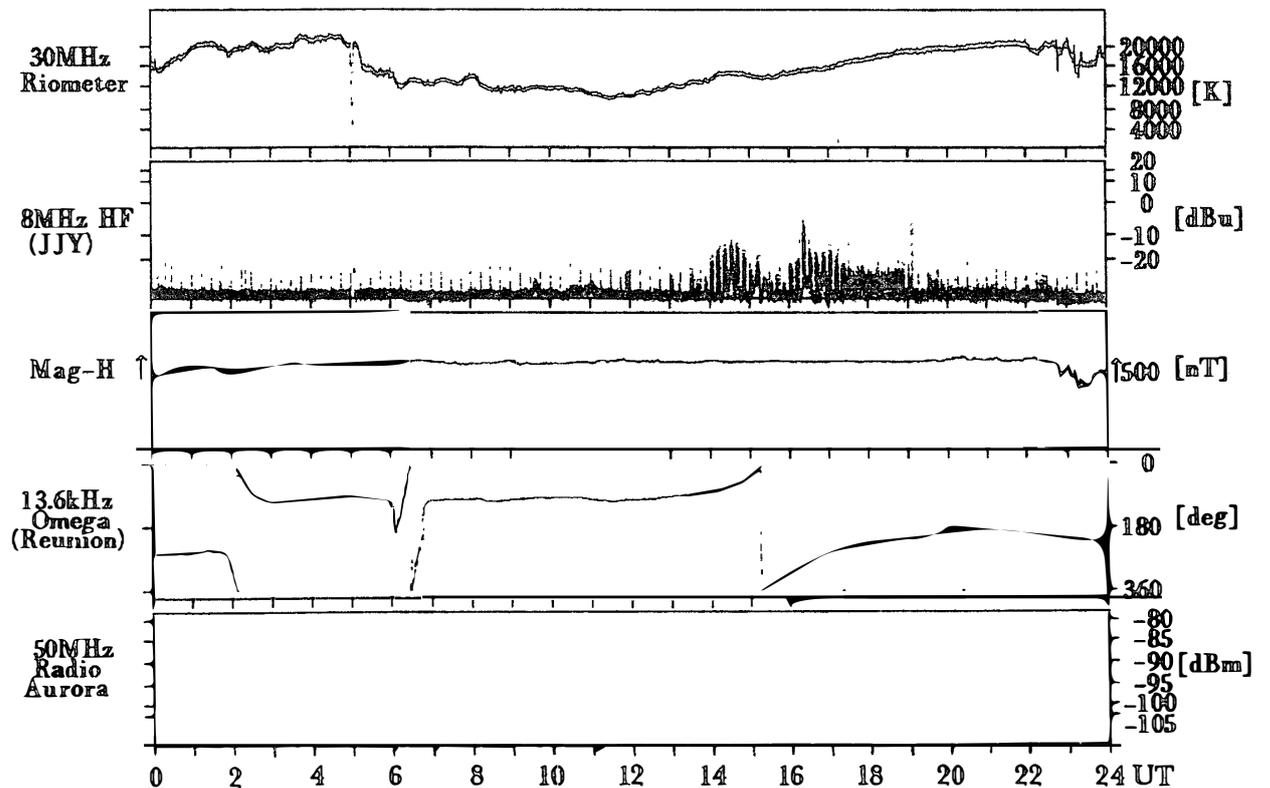
Syowa Station

Total Day / 73 1995/ 3/14



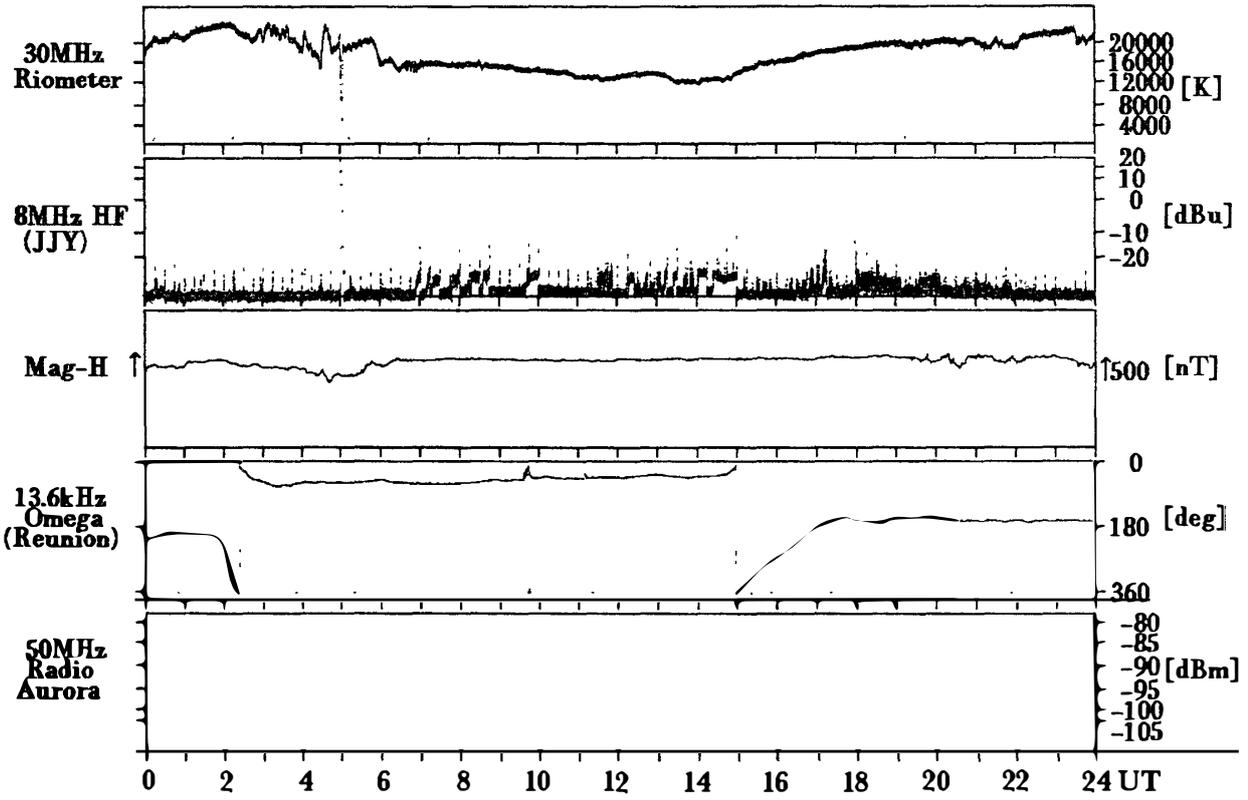
Syowa Station

Total Day / 74 1995/ 3/15



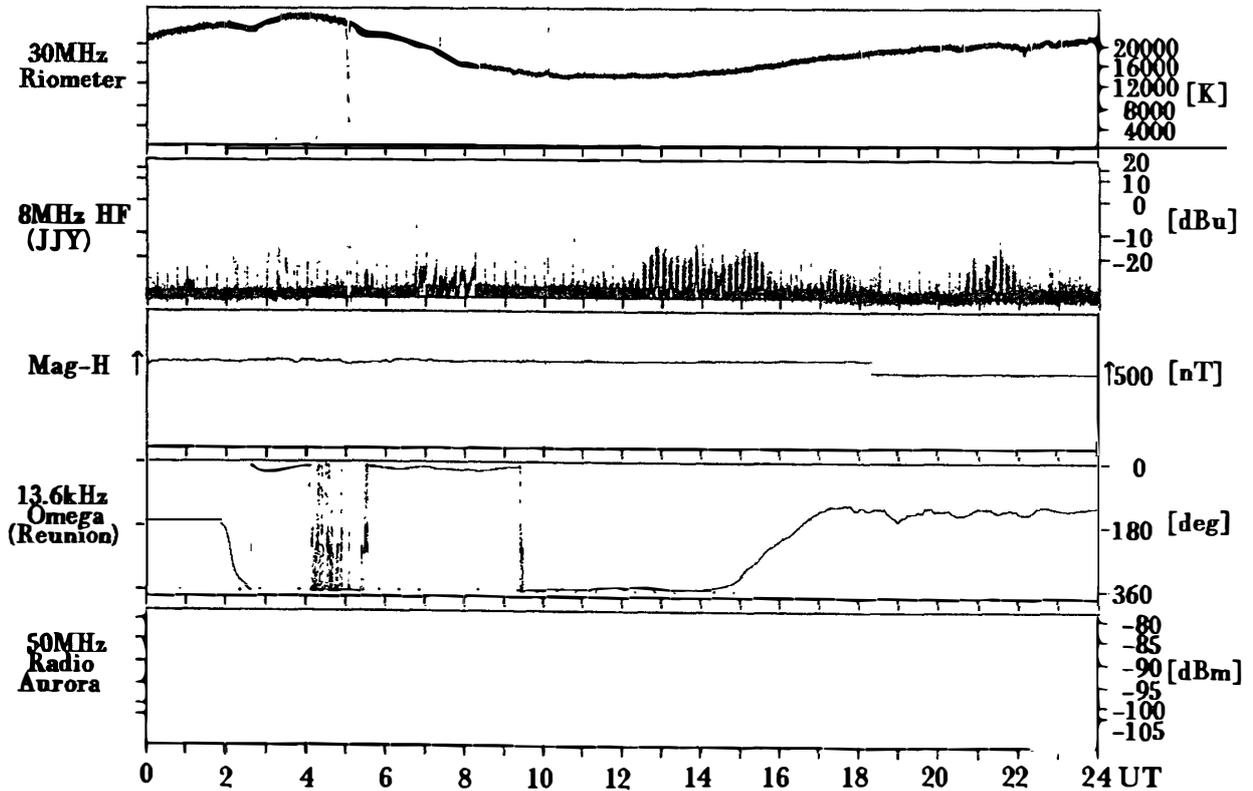
Syowa Station

Total Day / 75 1995/ 3/16



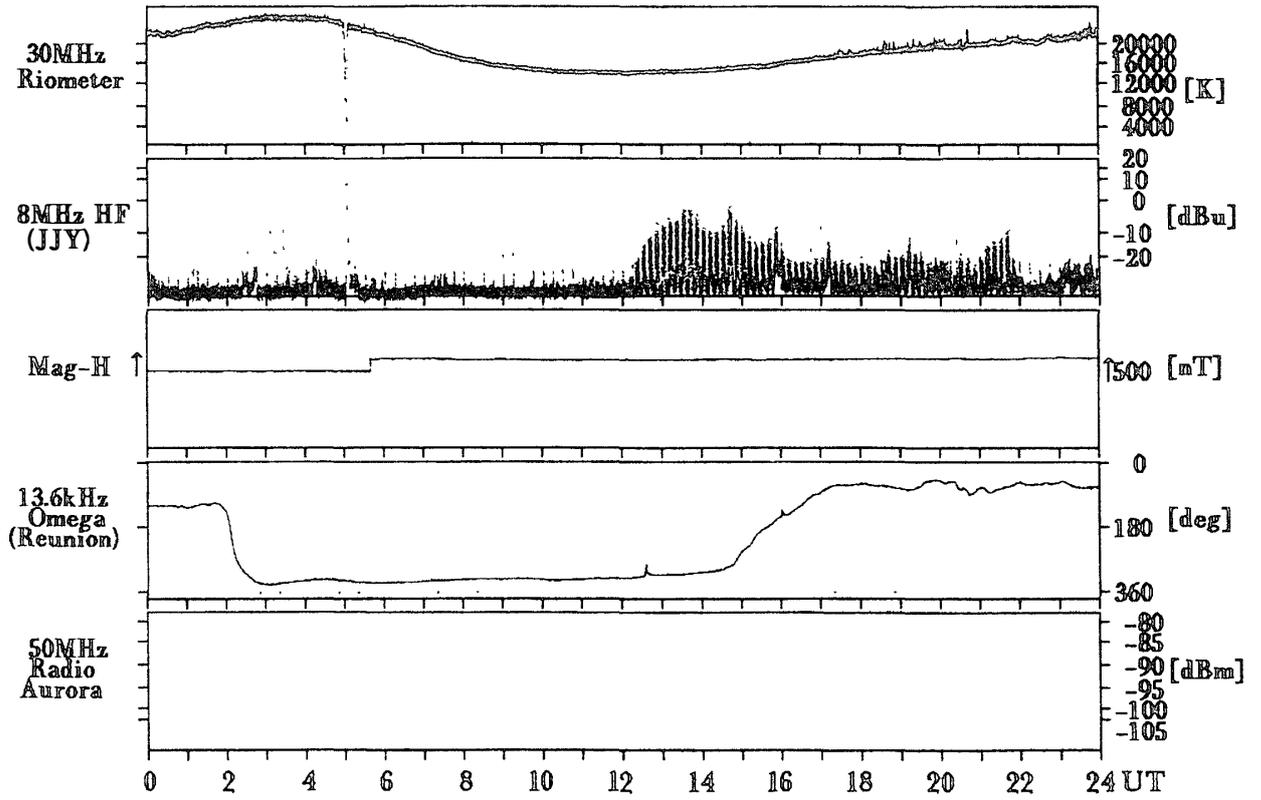
Syowa Station

Total Day / 76 1995/ 3/17



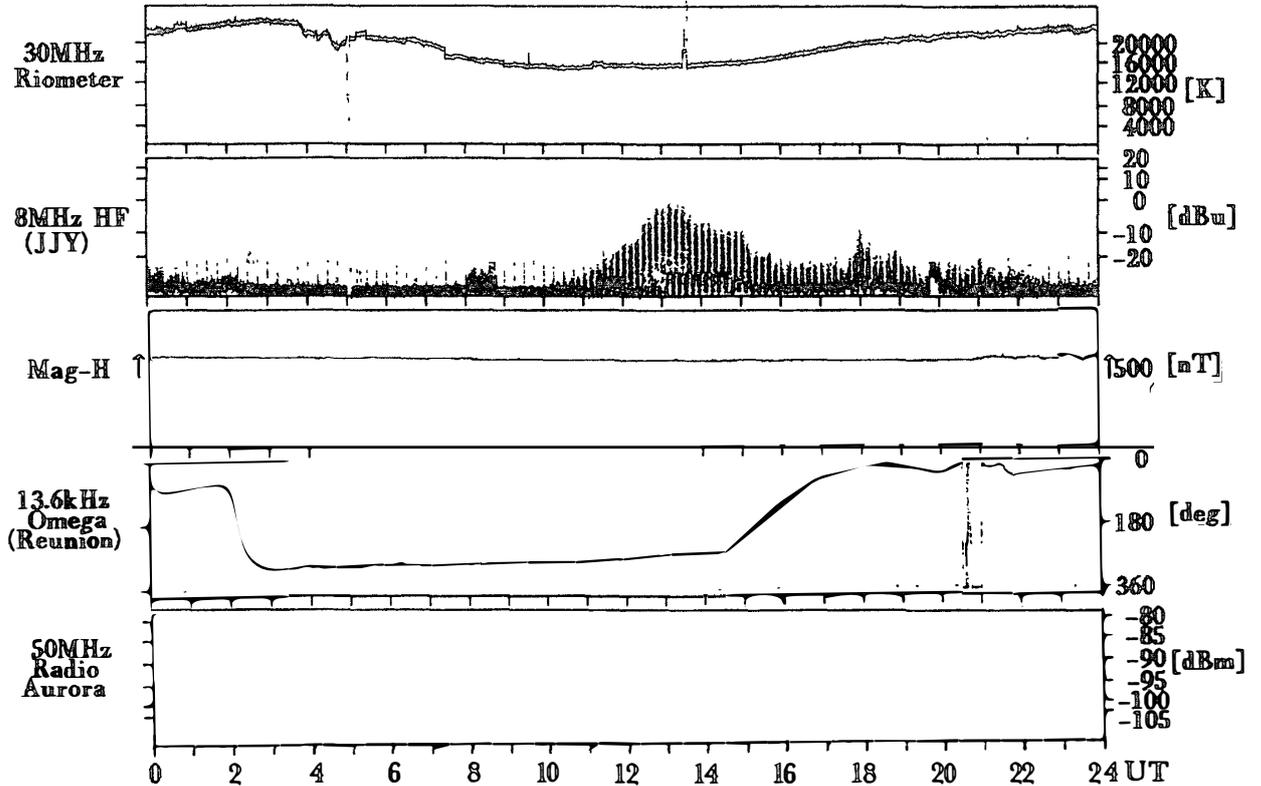
Syowa Station

Total Day / 77 1995/ 3/18



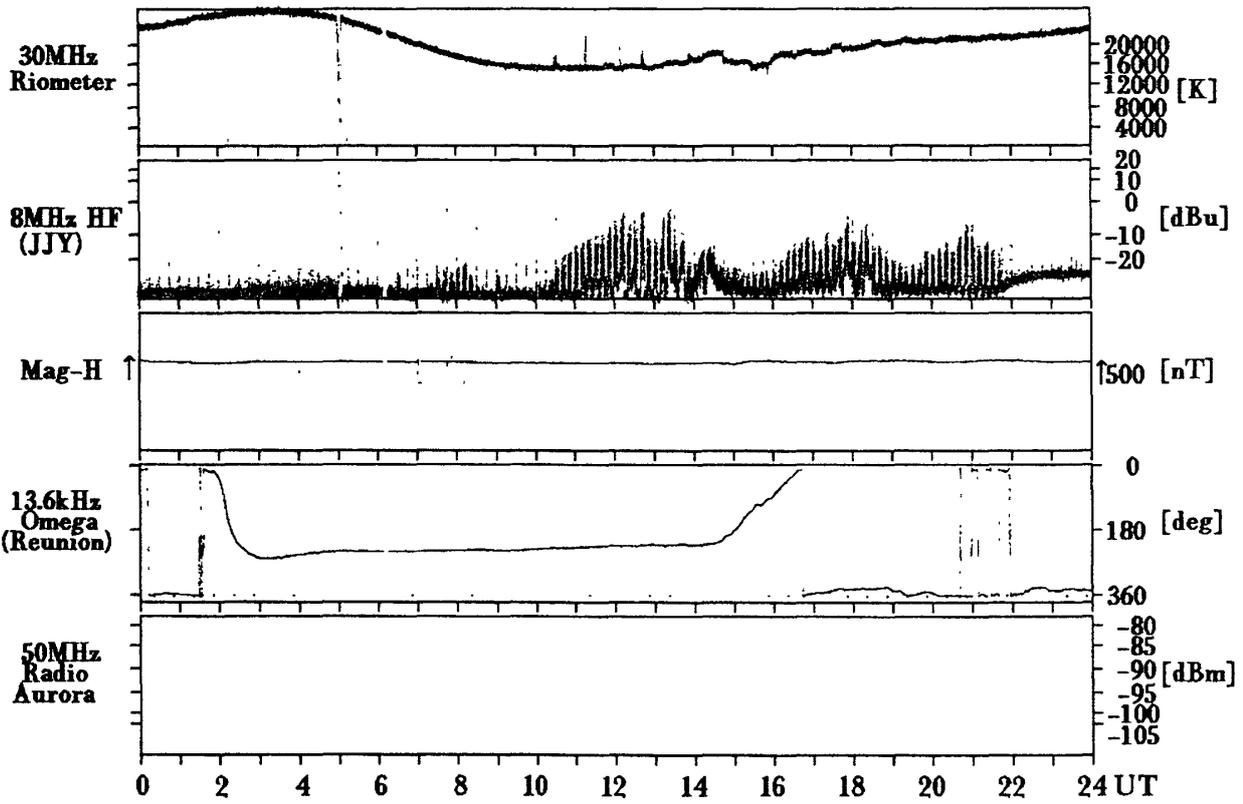
Syowa Station

Total Day / 78 1995/ 3/19



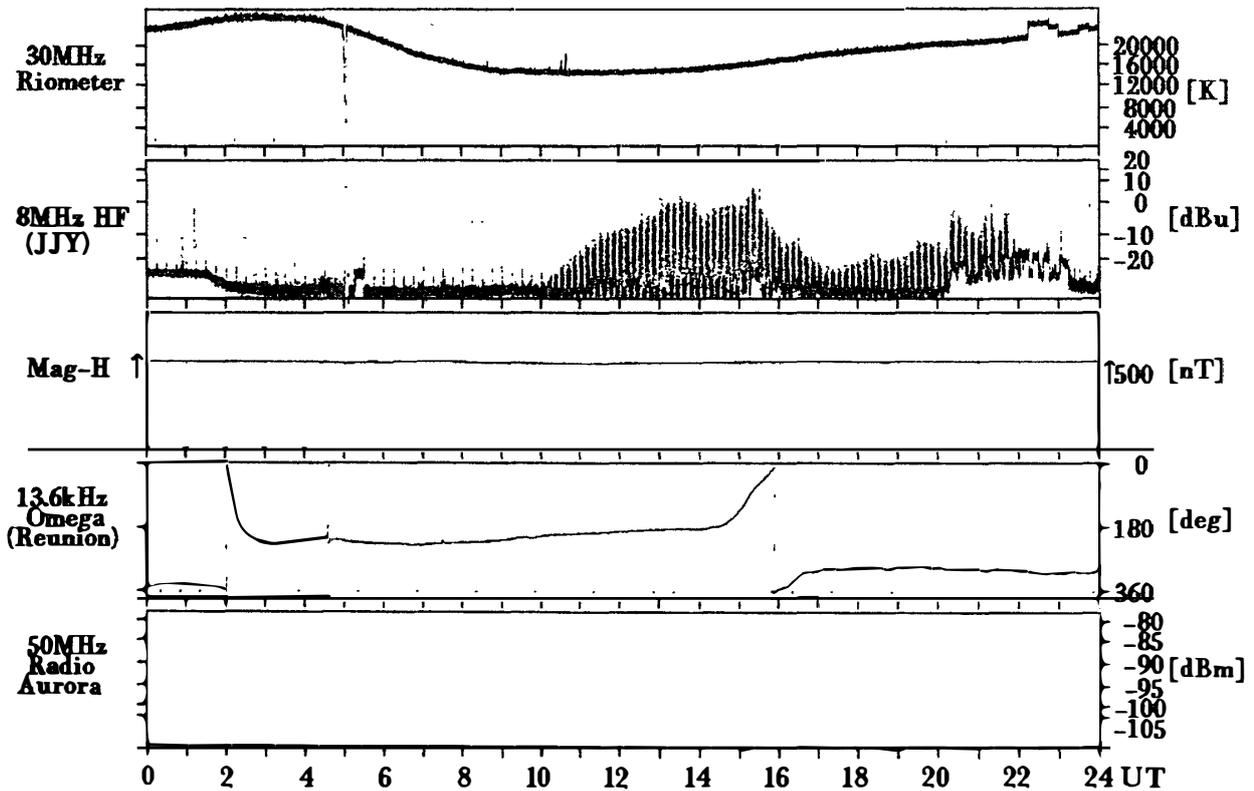
Syowa Station

Total Day / 79 1995/ 3/20



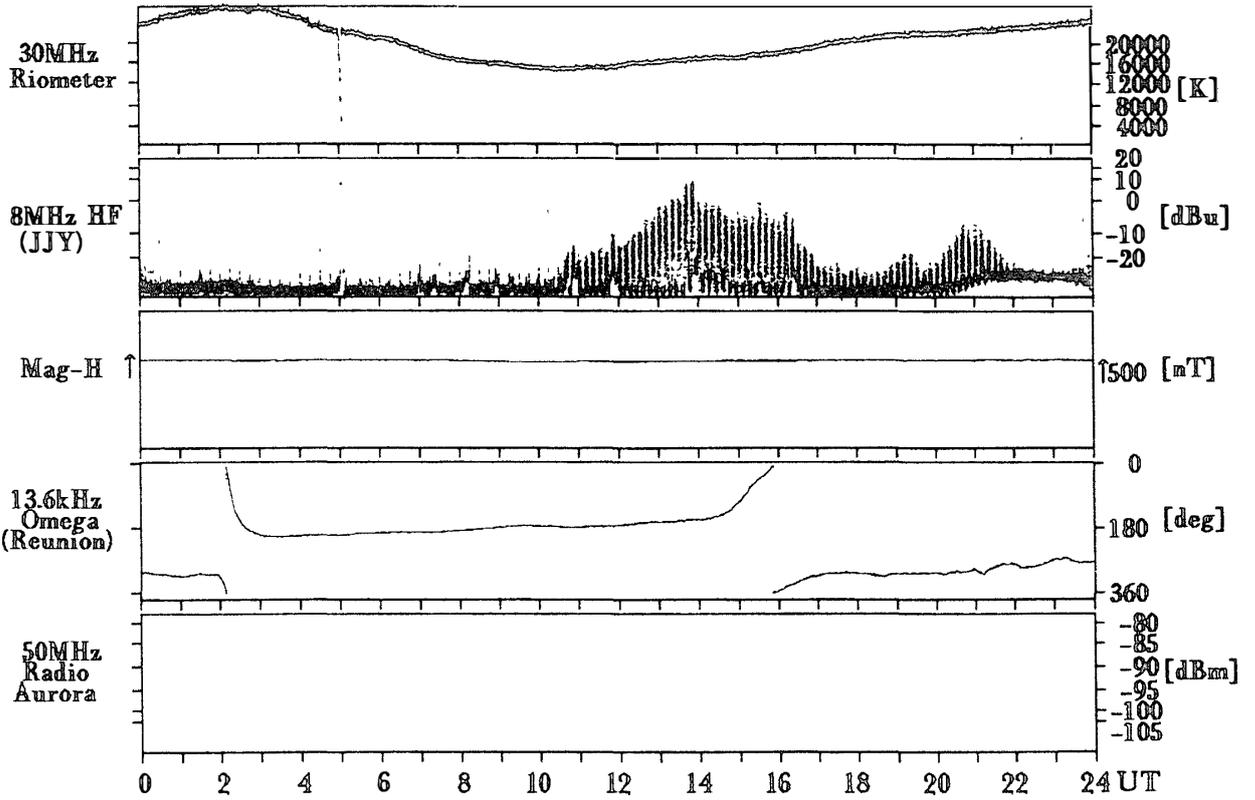
Syowa Station

Total Day / 80 1995/ 3/21



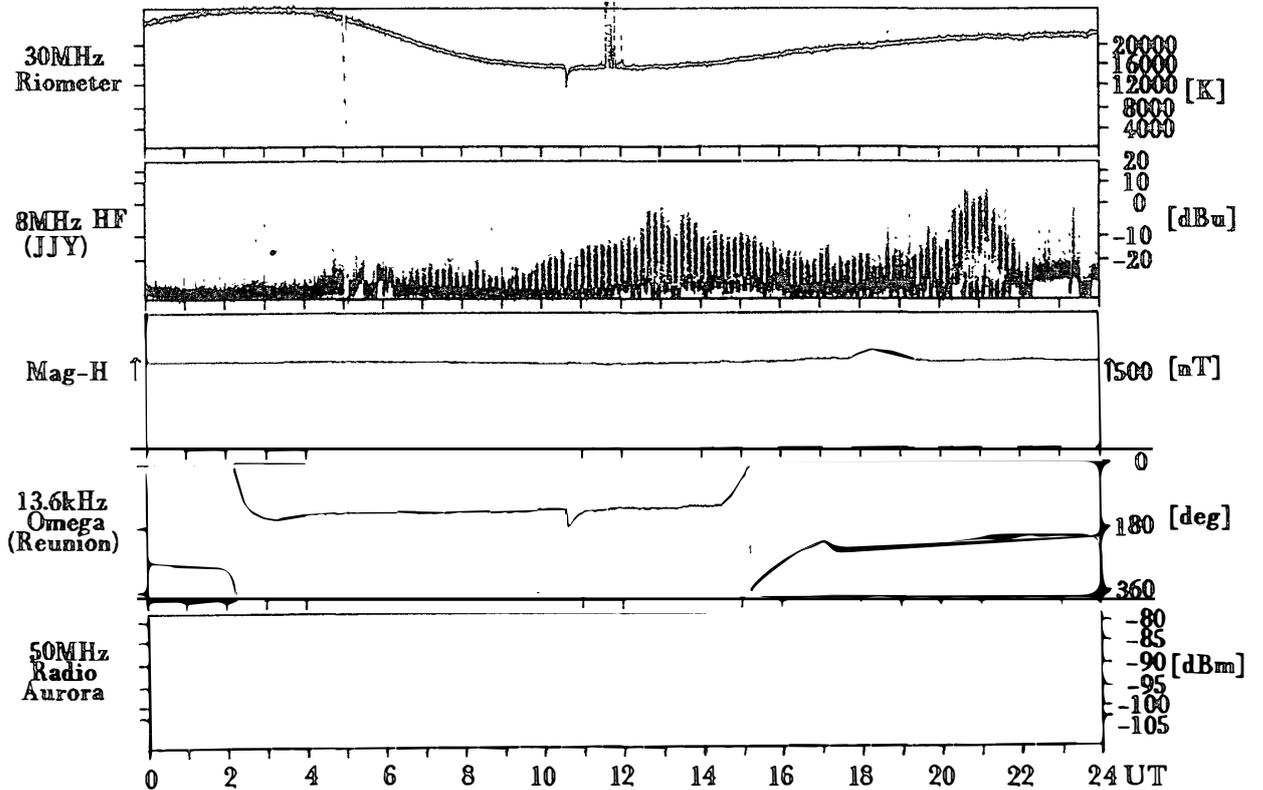
Syowa Station

Total Day / 81 1995/ 3/22



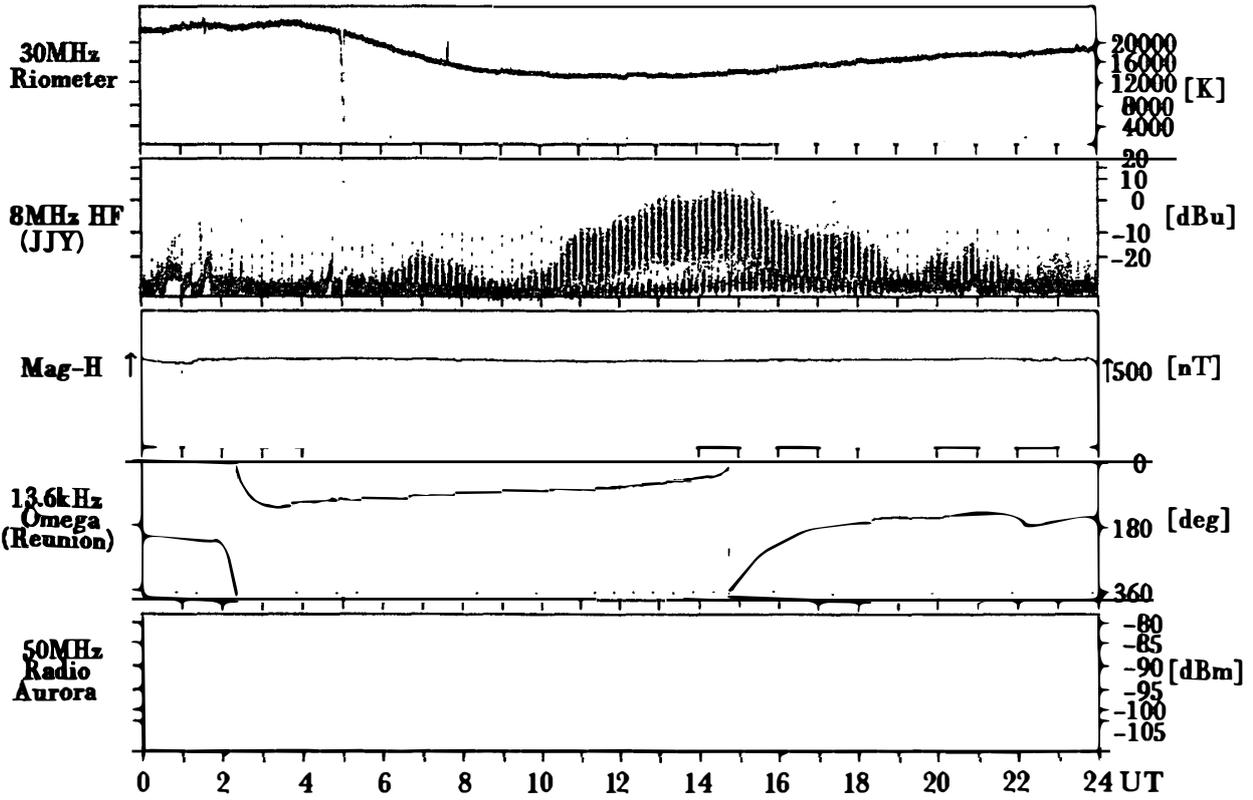
Syowa Station

Total Day / 82 1995/ 3/23



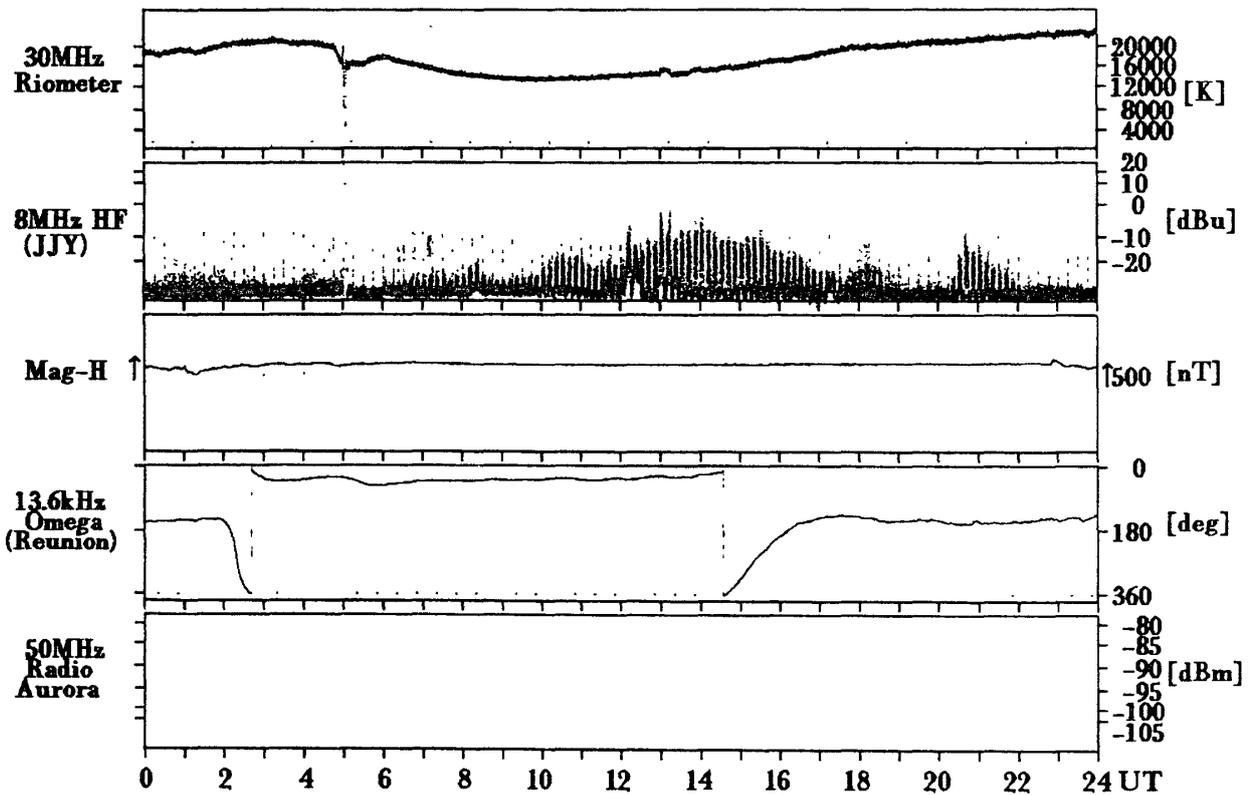
Syowa Station

Total Day / 83 1995/ 3/24



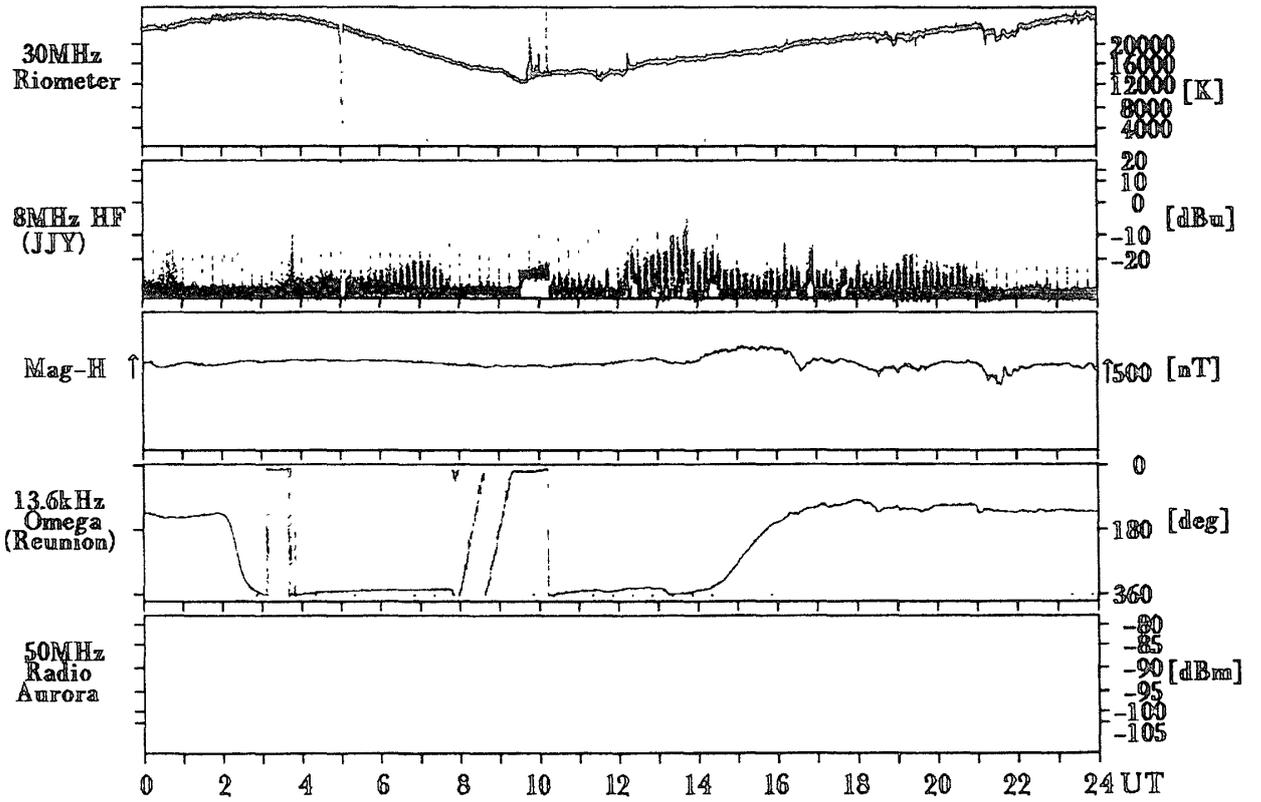
Syowa Station

Total Day / 84 1995/ 3/25



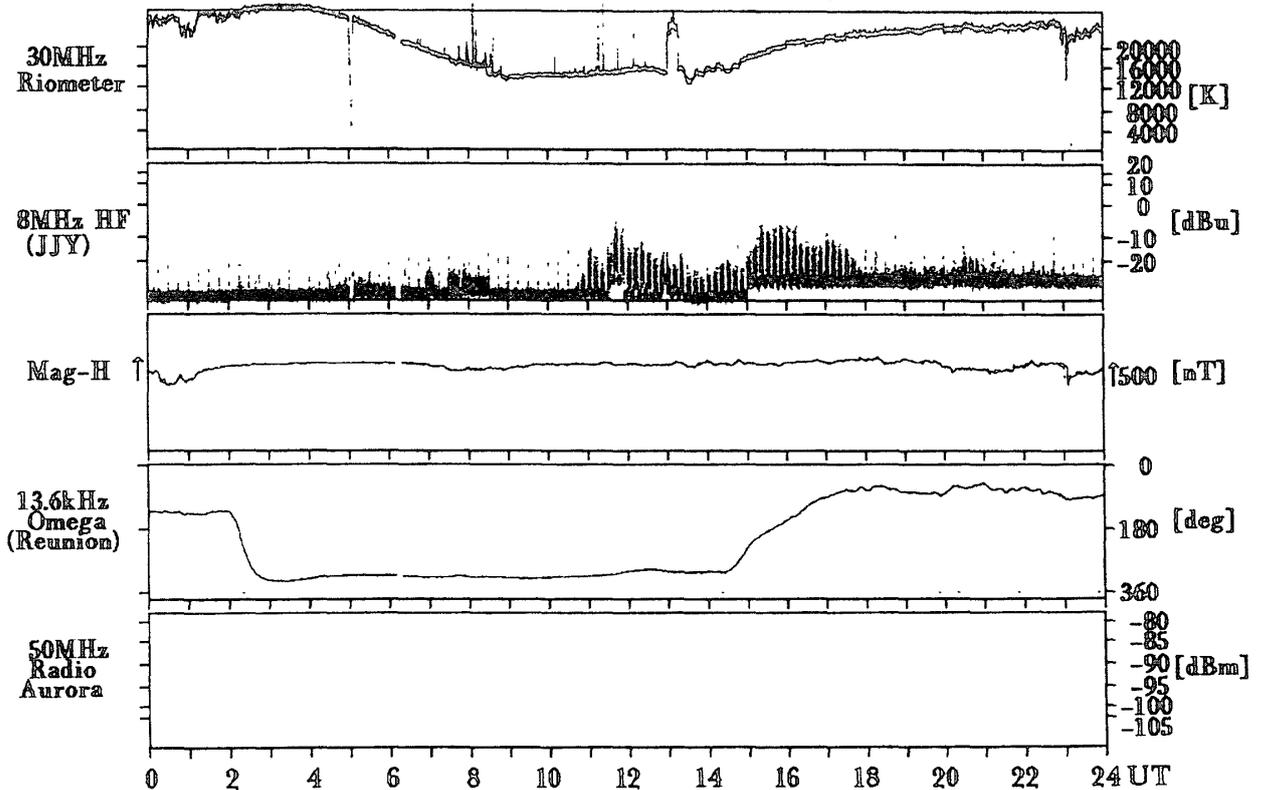
Syowa Station

Total Day / 85 1995/ 3/26



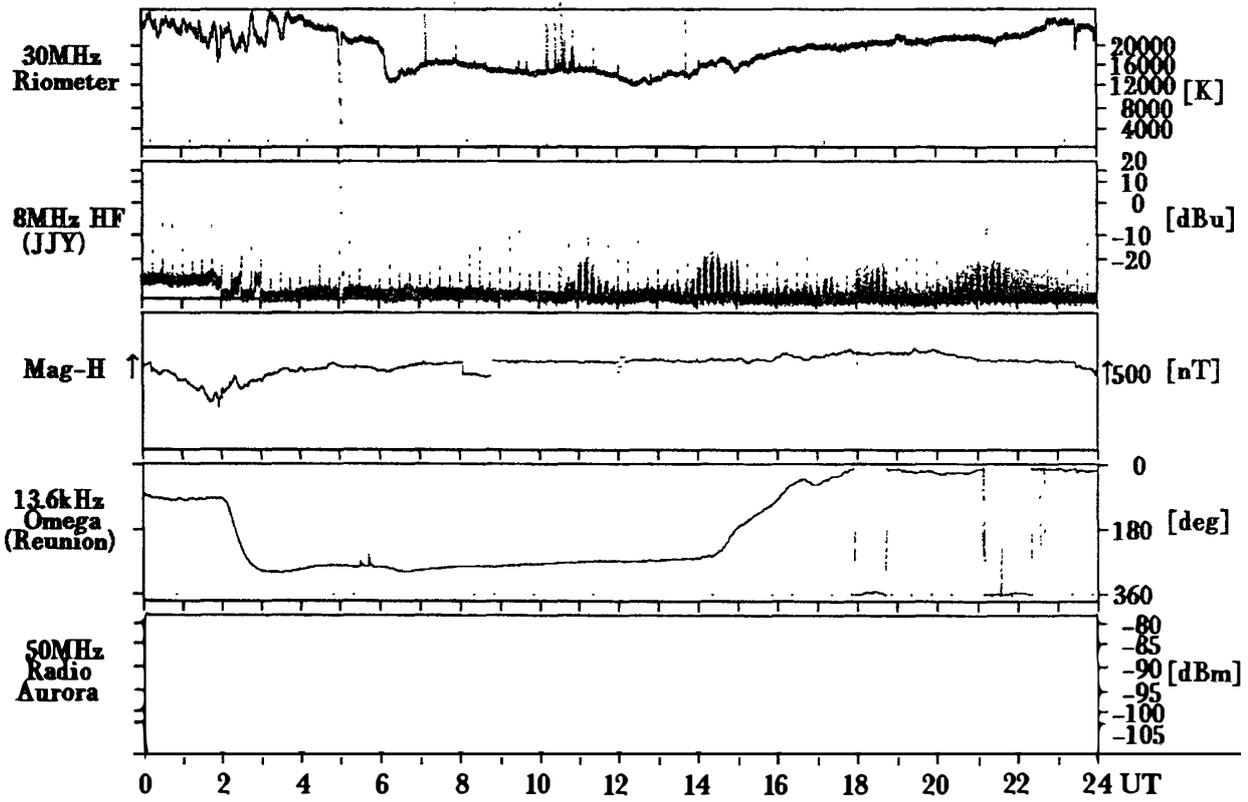
Syowa Station

Total Day / 86 1995/ 3/27



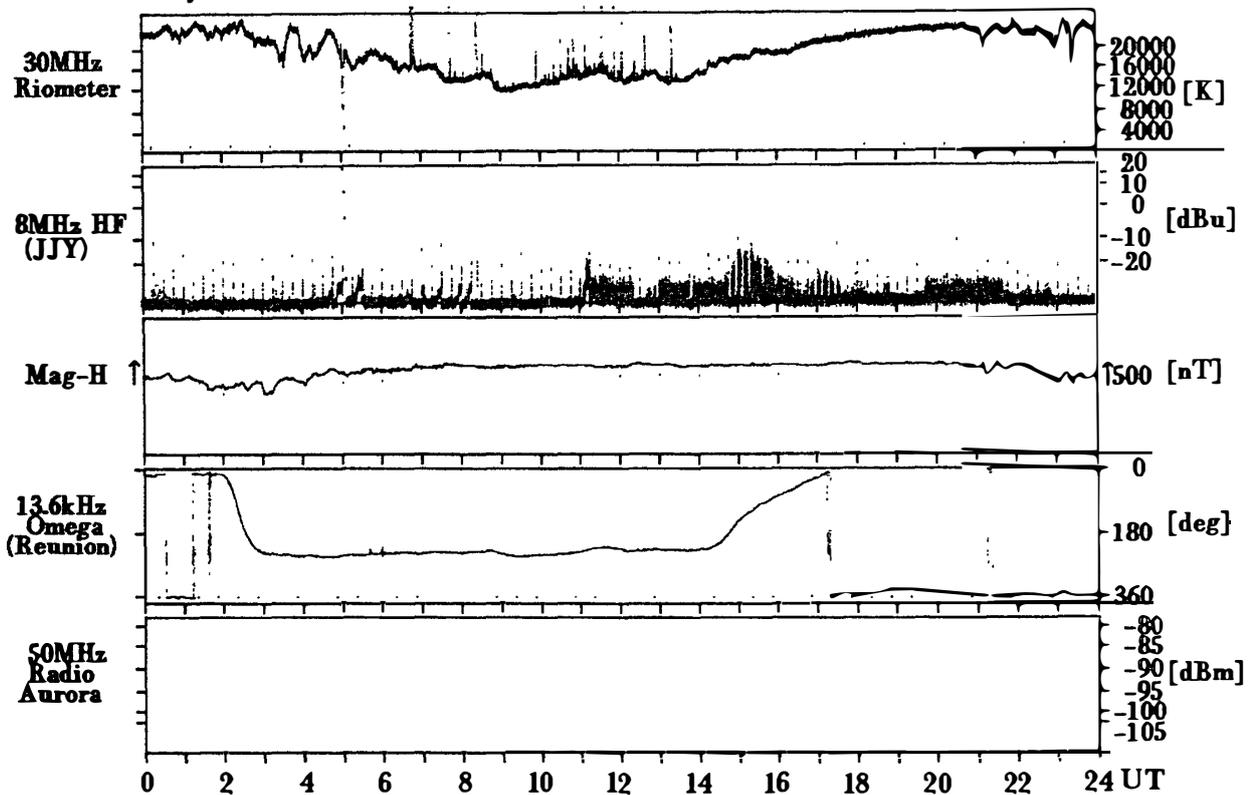
Syowa Station

Total Day / 87 1995/ 3/28



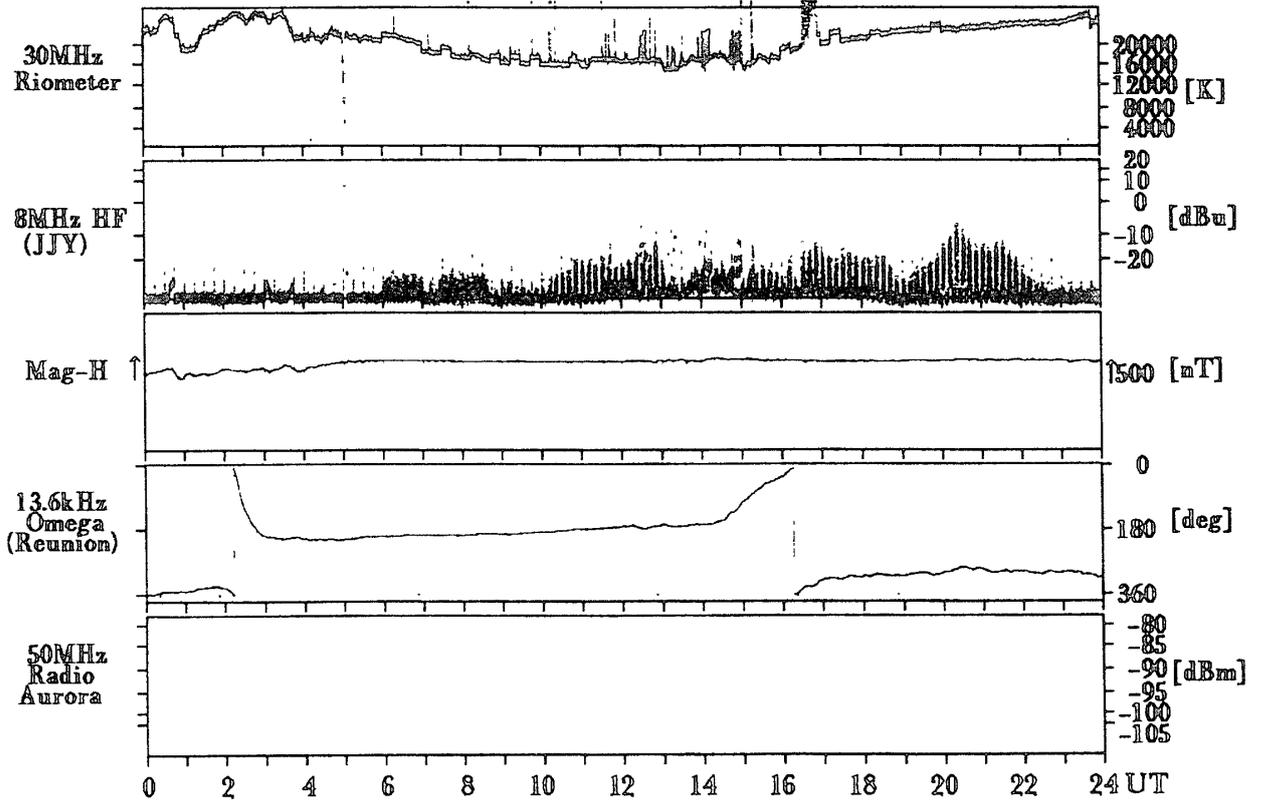
Syowa Station

Total Day / 88 1995/ 3/29



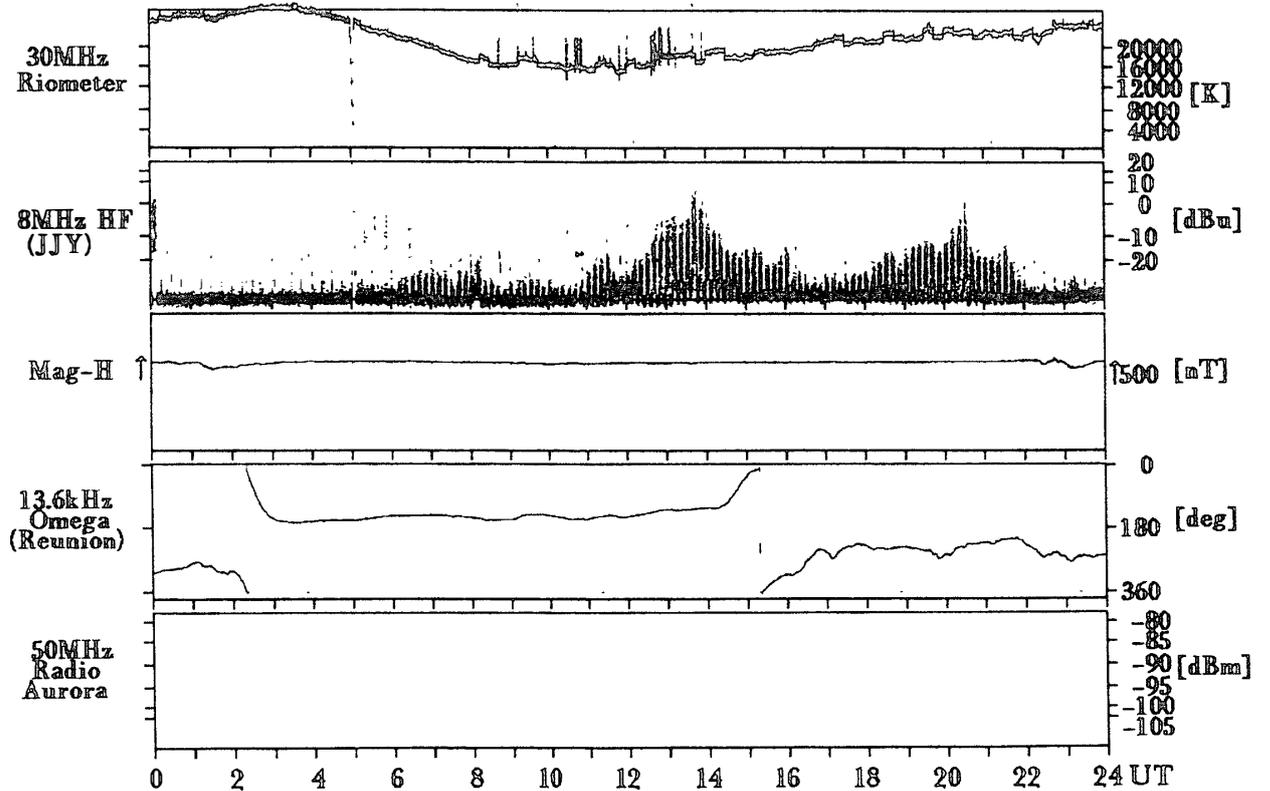
Syowa Station

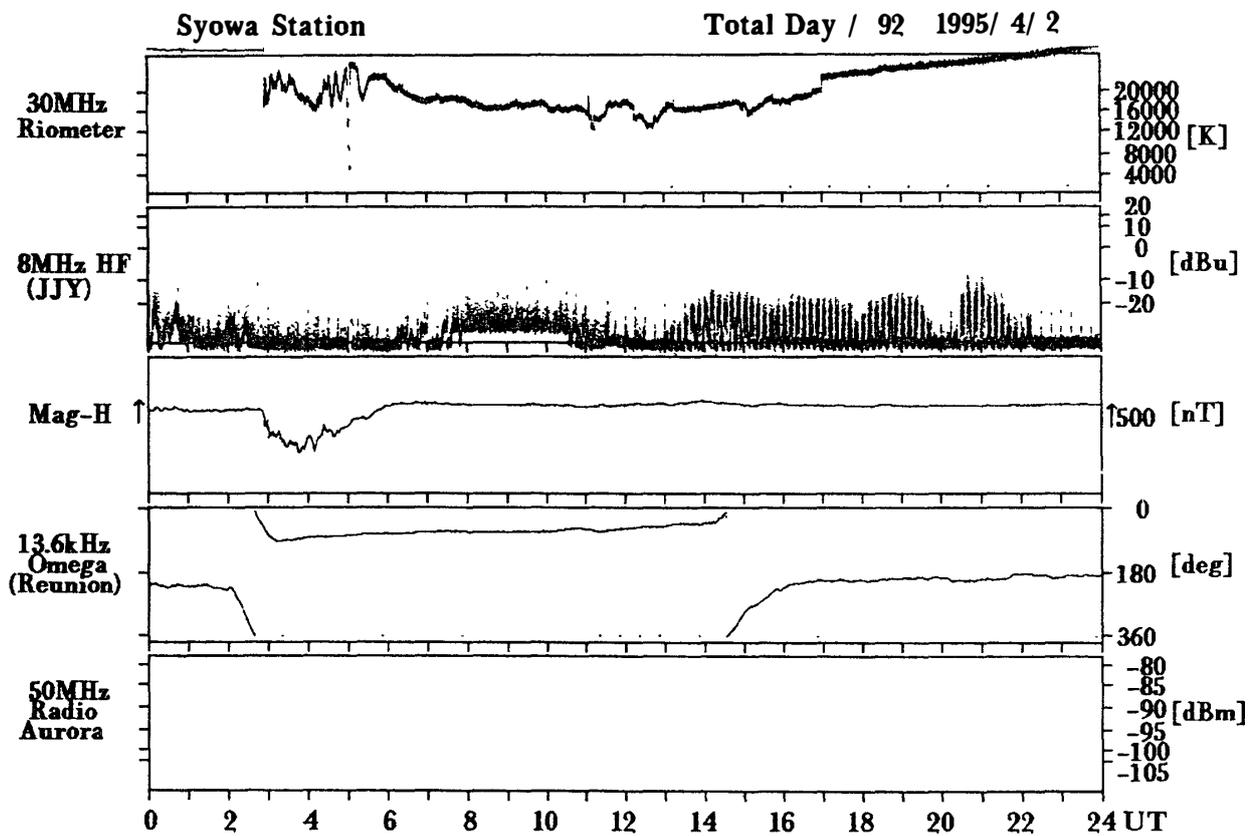
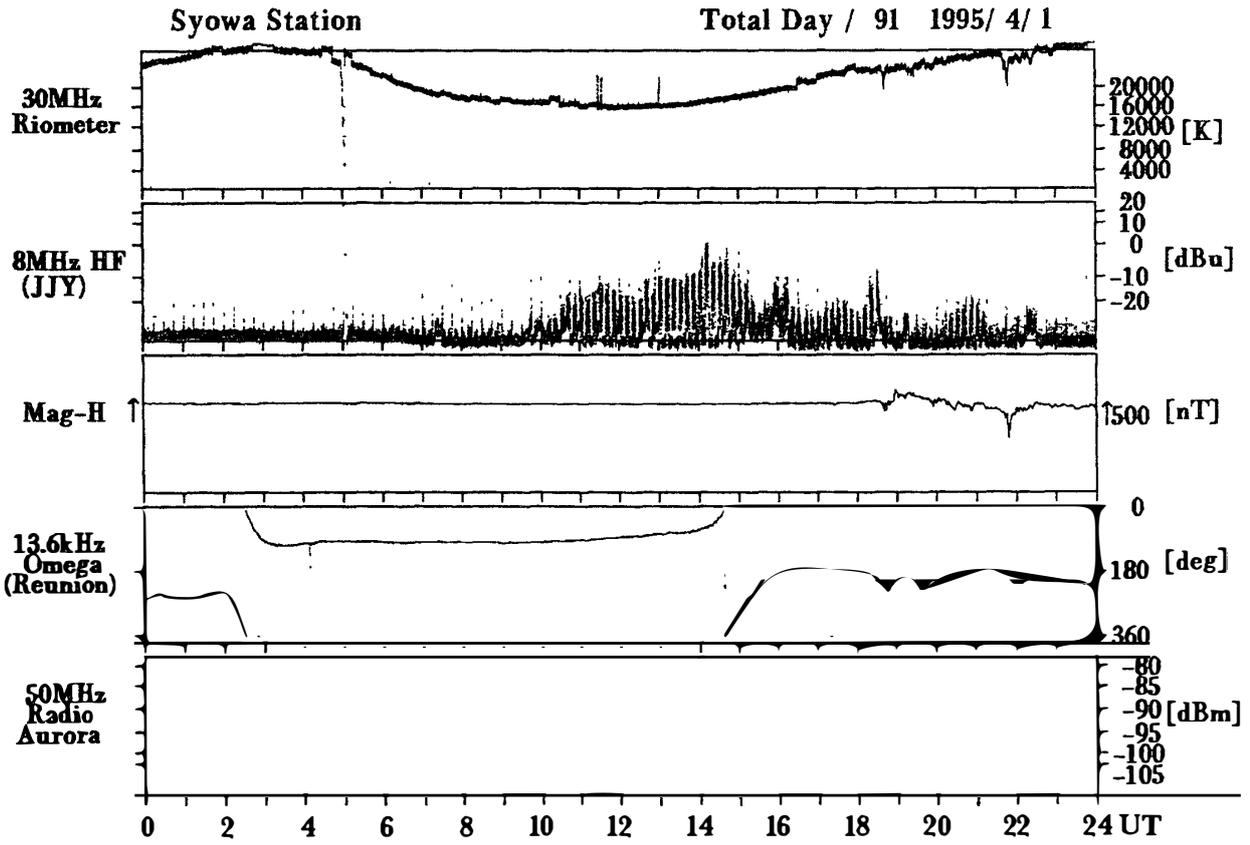
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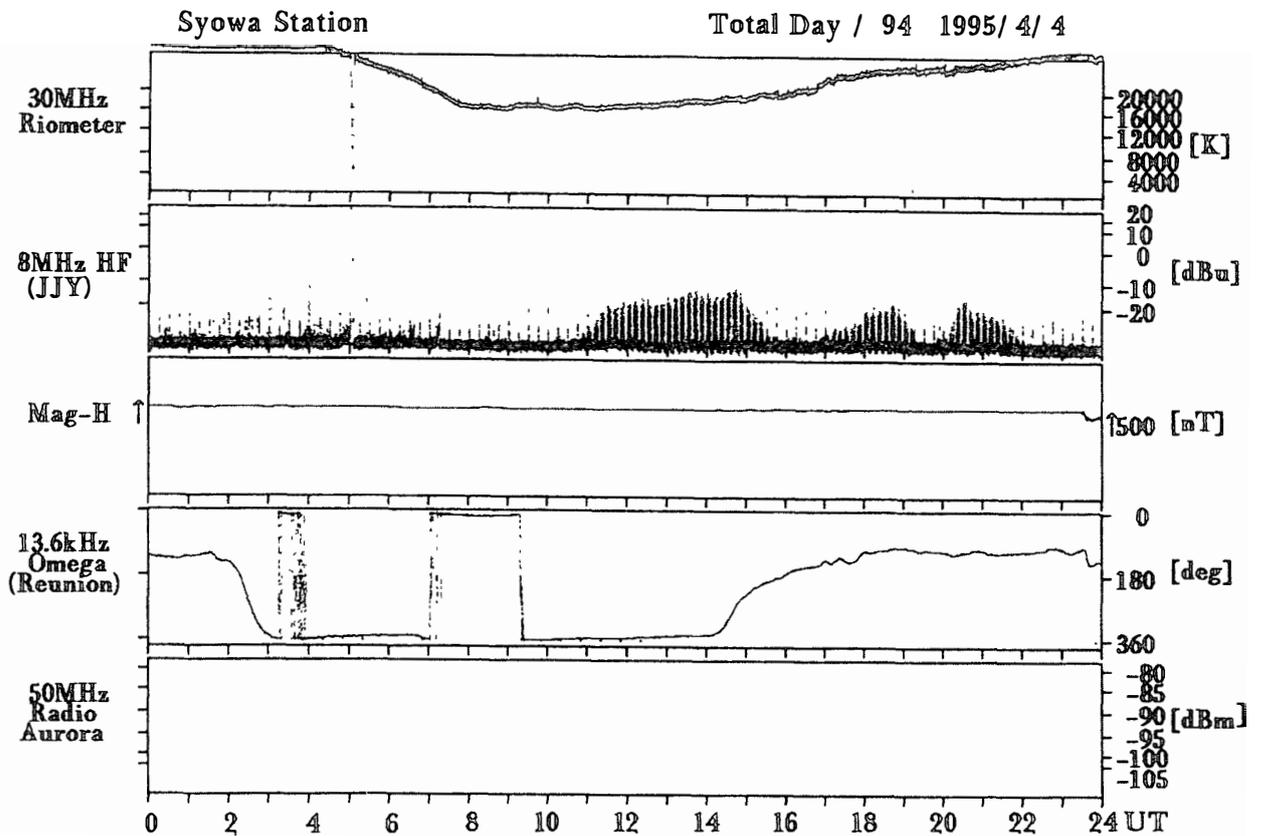
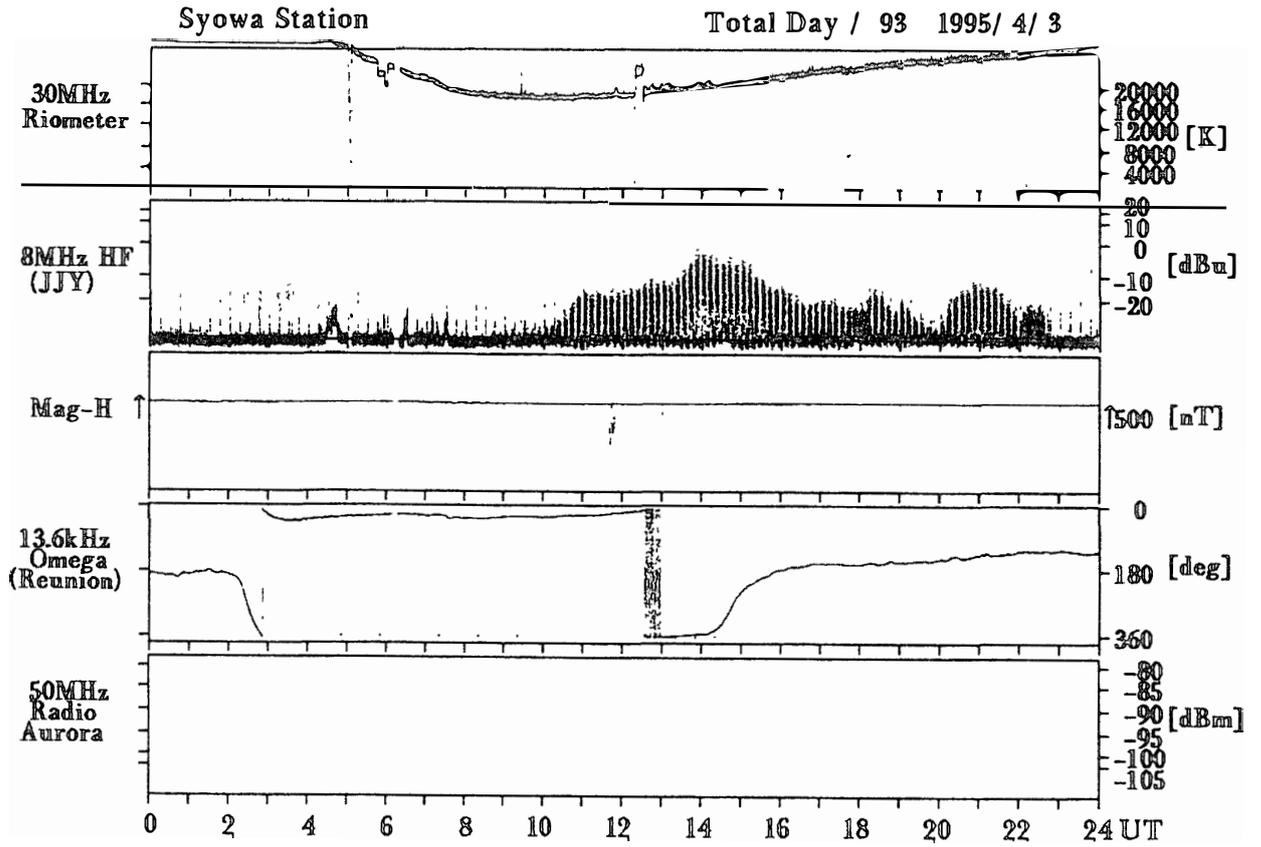


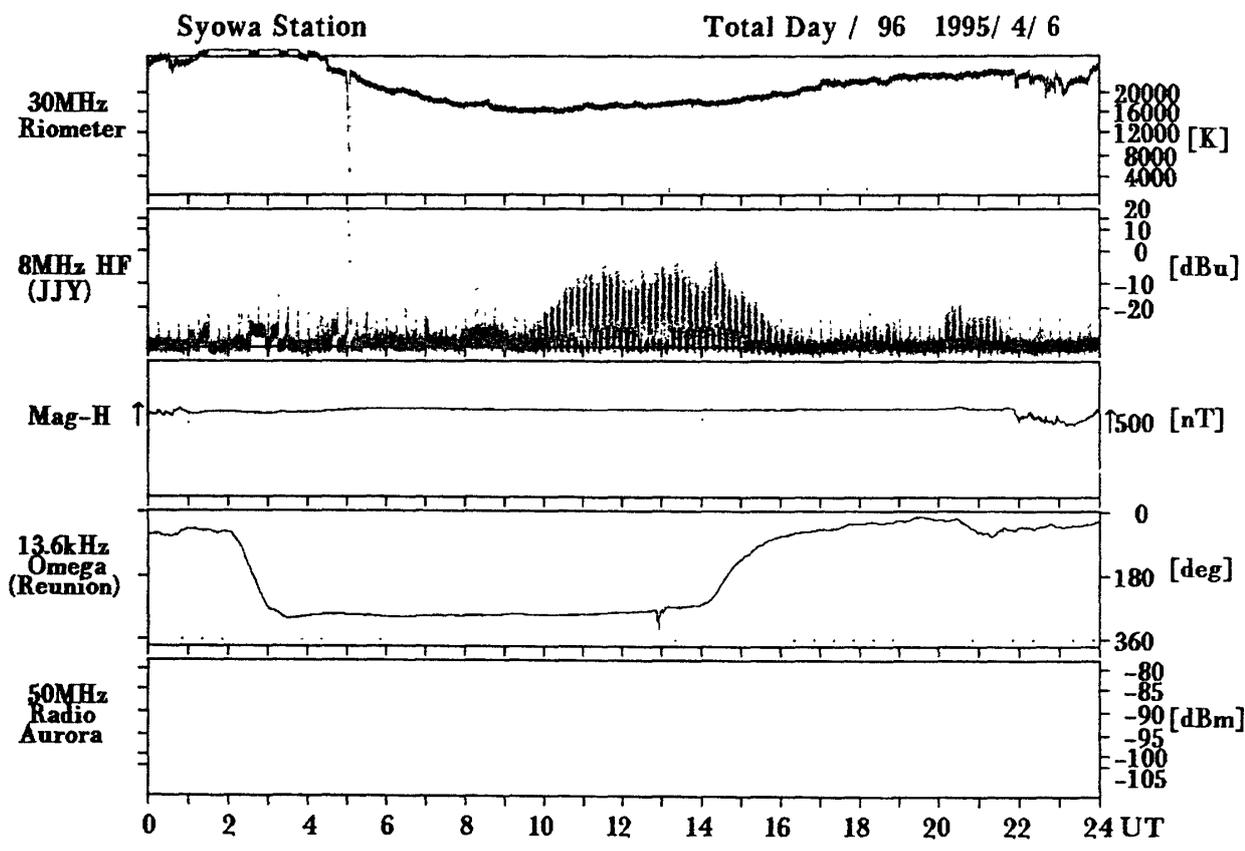
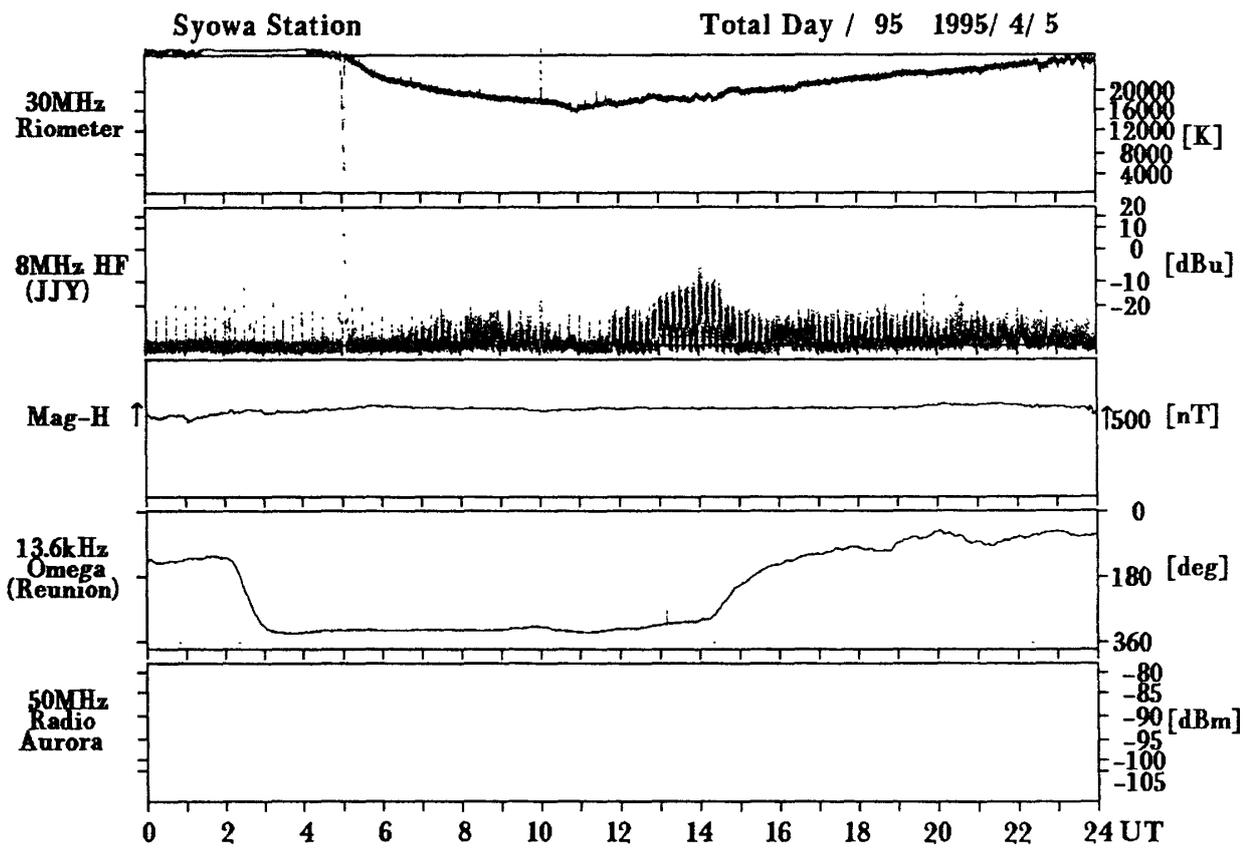
Syowa Station

Total Day / 90 1995/ 3/31



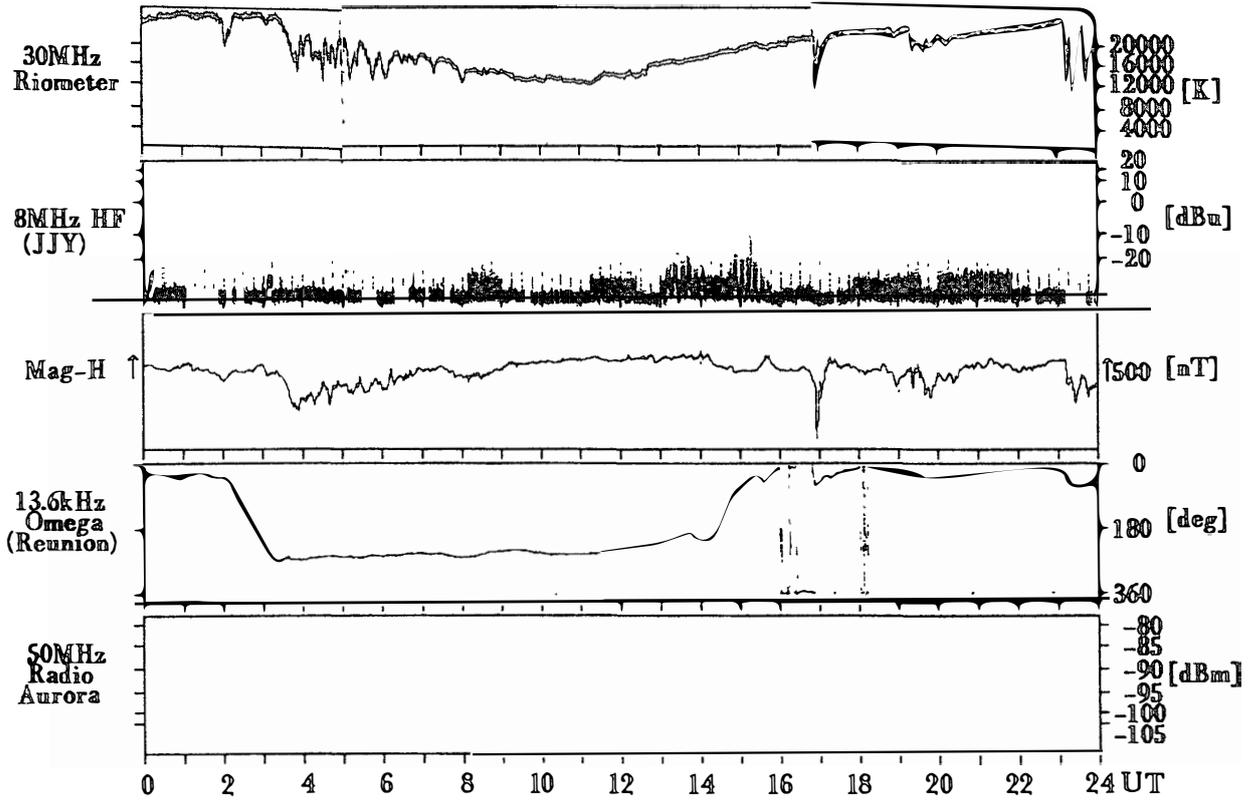






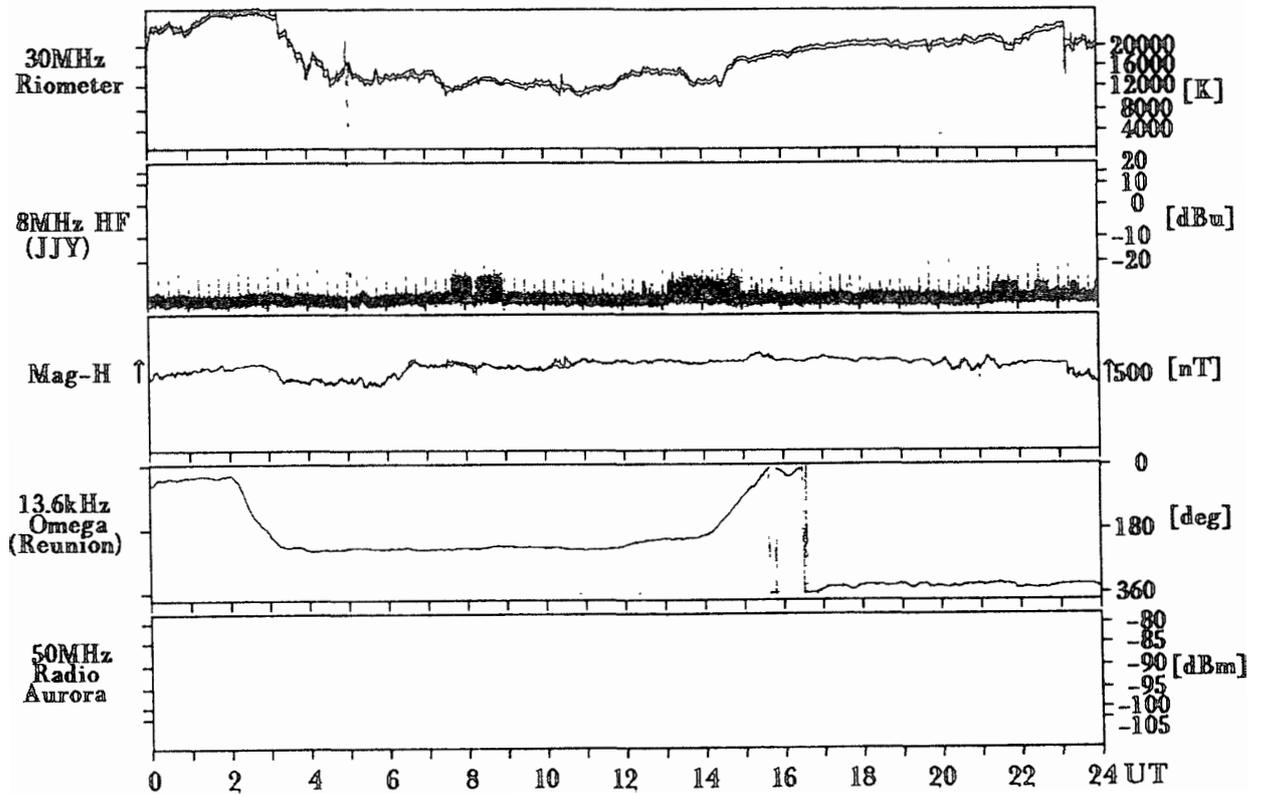
Syowa Station

Total Day / 97 1995/ 4/ 7



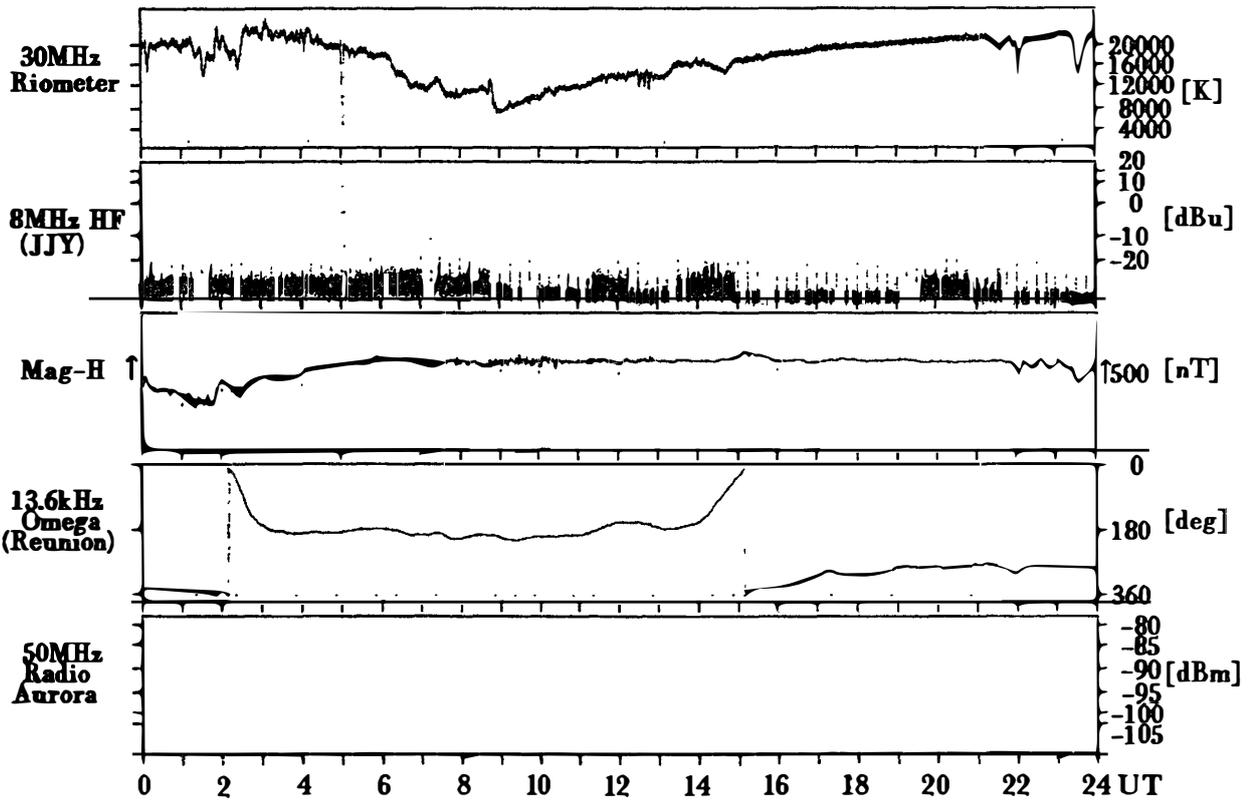
Syowa Station

Total Day / 98 1995/ 4/ 8



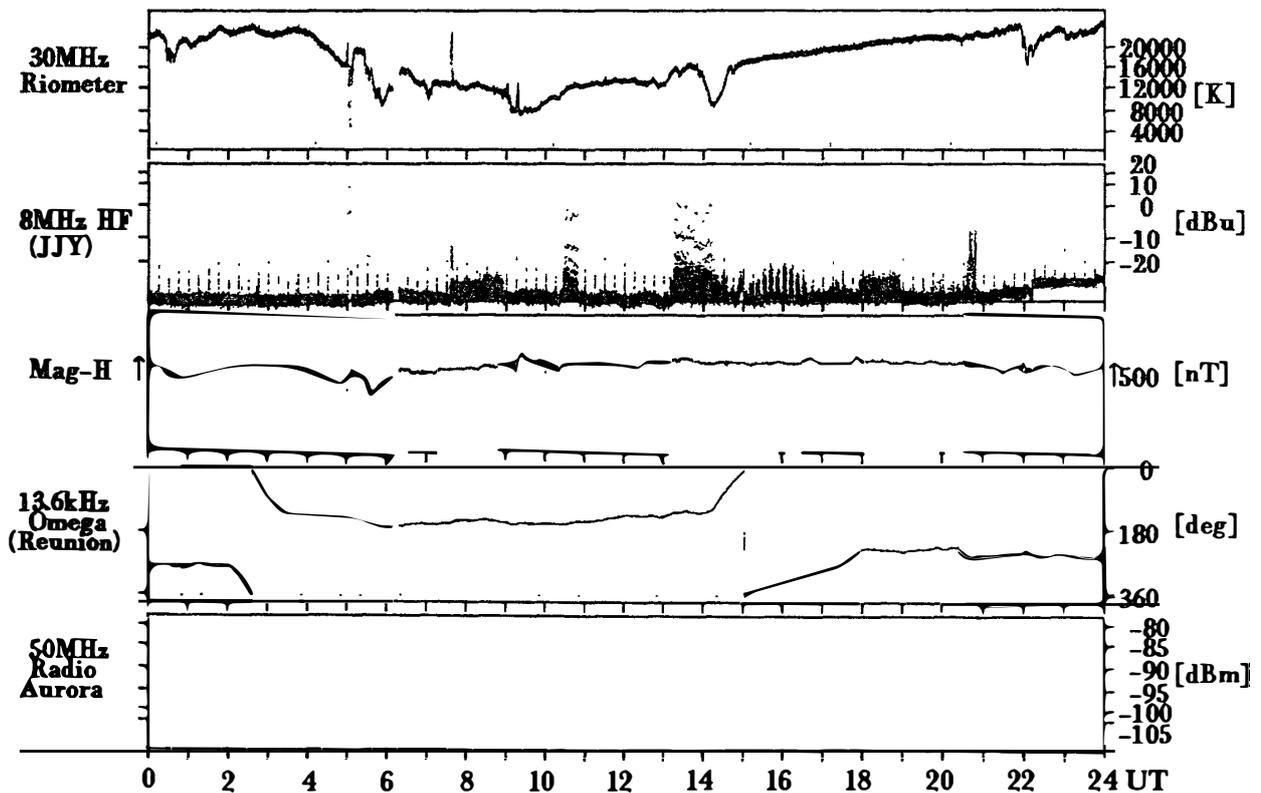
Syowa Station

Total Day / 99 1995/ 4/ 9



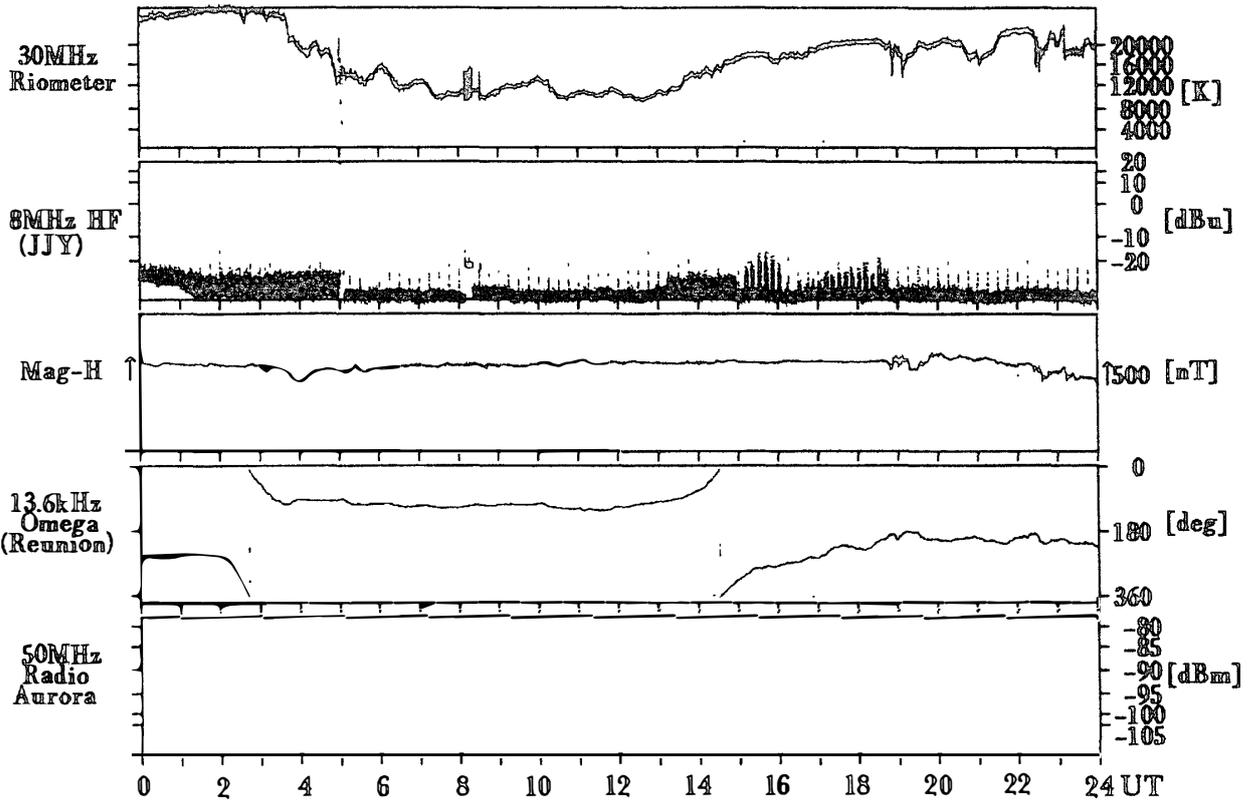
Syowa Station

Total Day / 100 1995/ 4/10



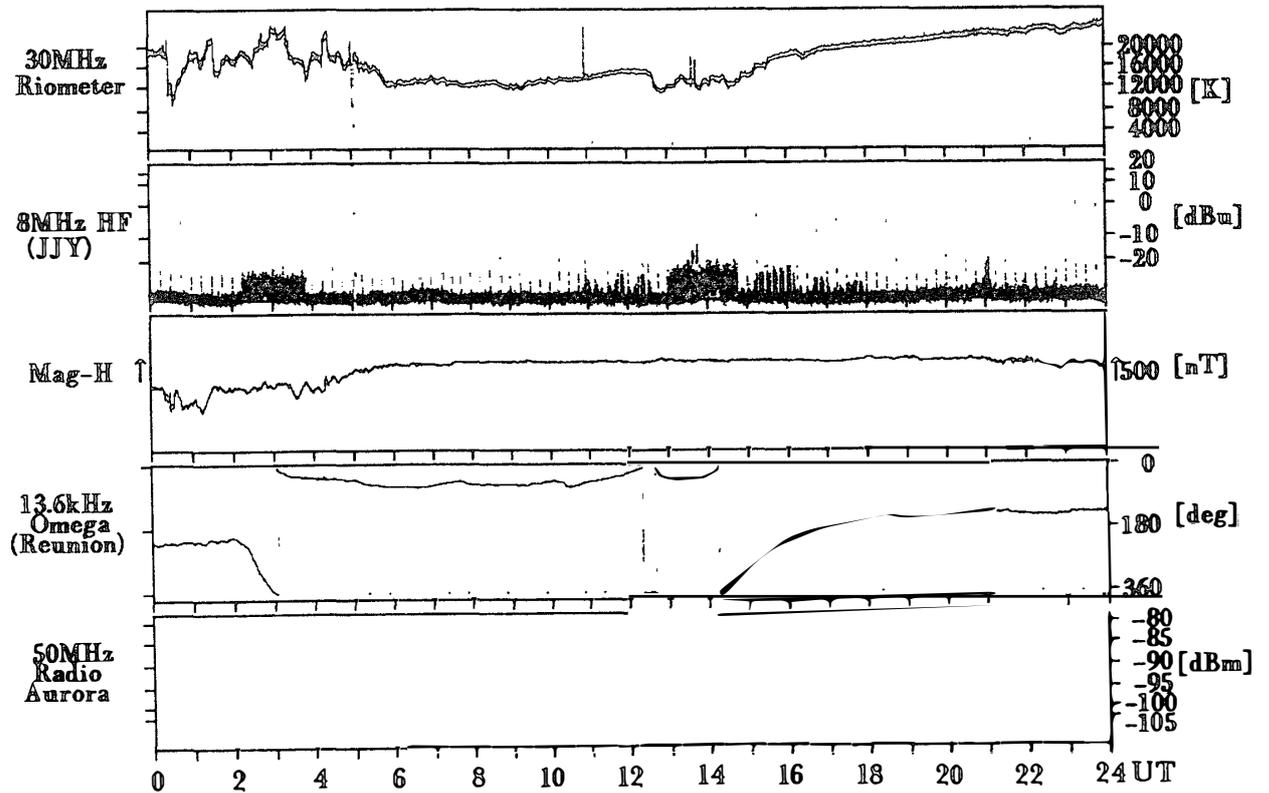
Syowa Station

Total Day / 101 1995/ 4/11



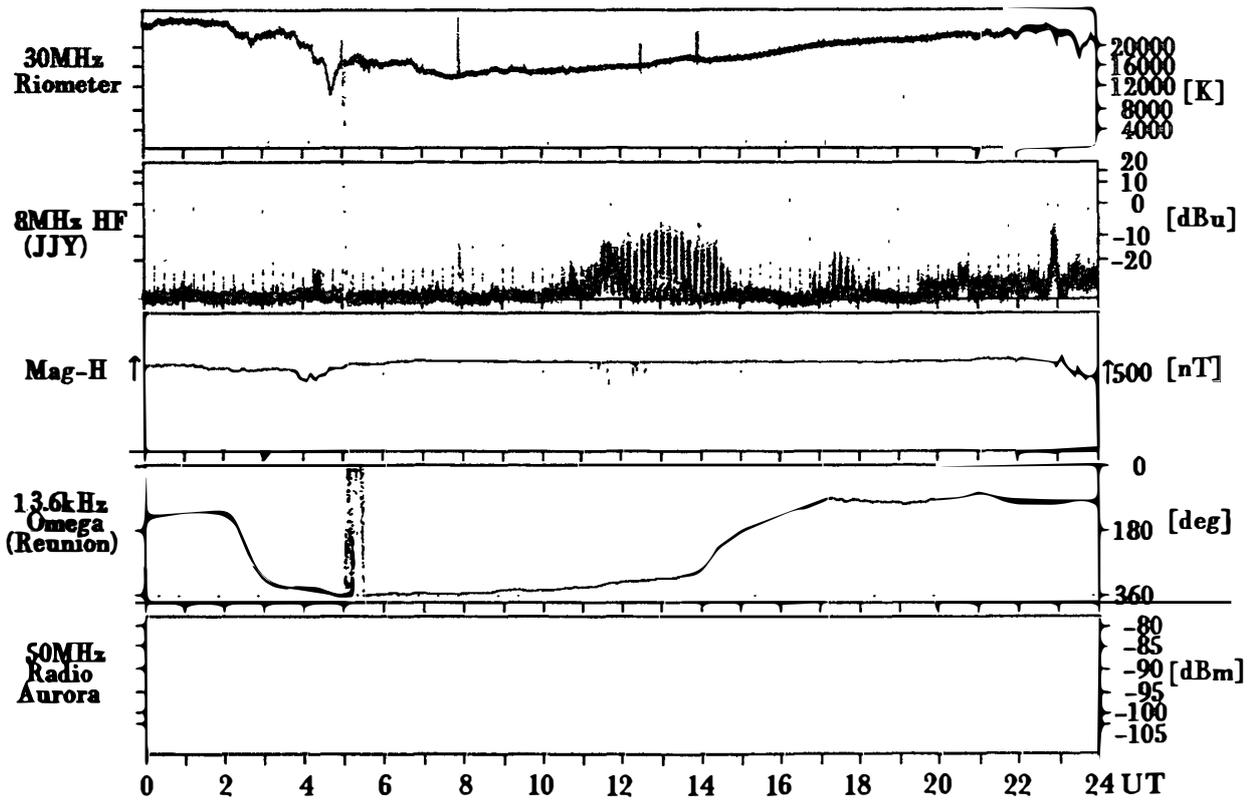
Syowa Station

Total Day / 102 1995/ 4/12



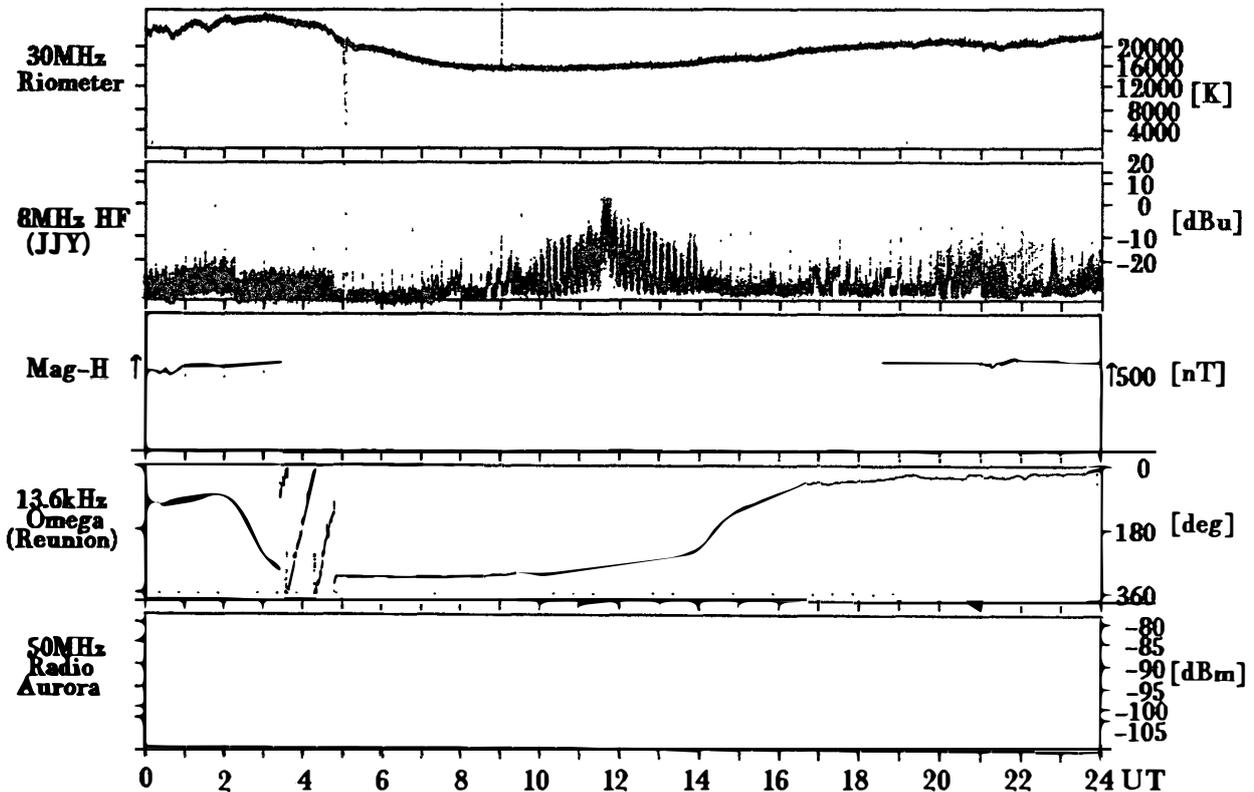
Syowa Station

Total Day / 103 1995/ 4/13



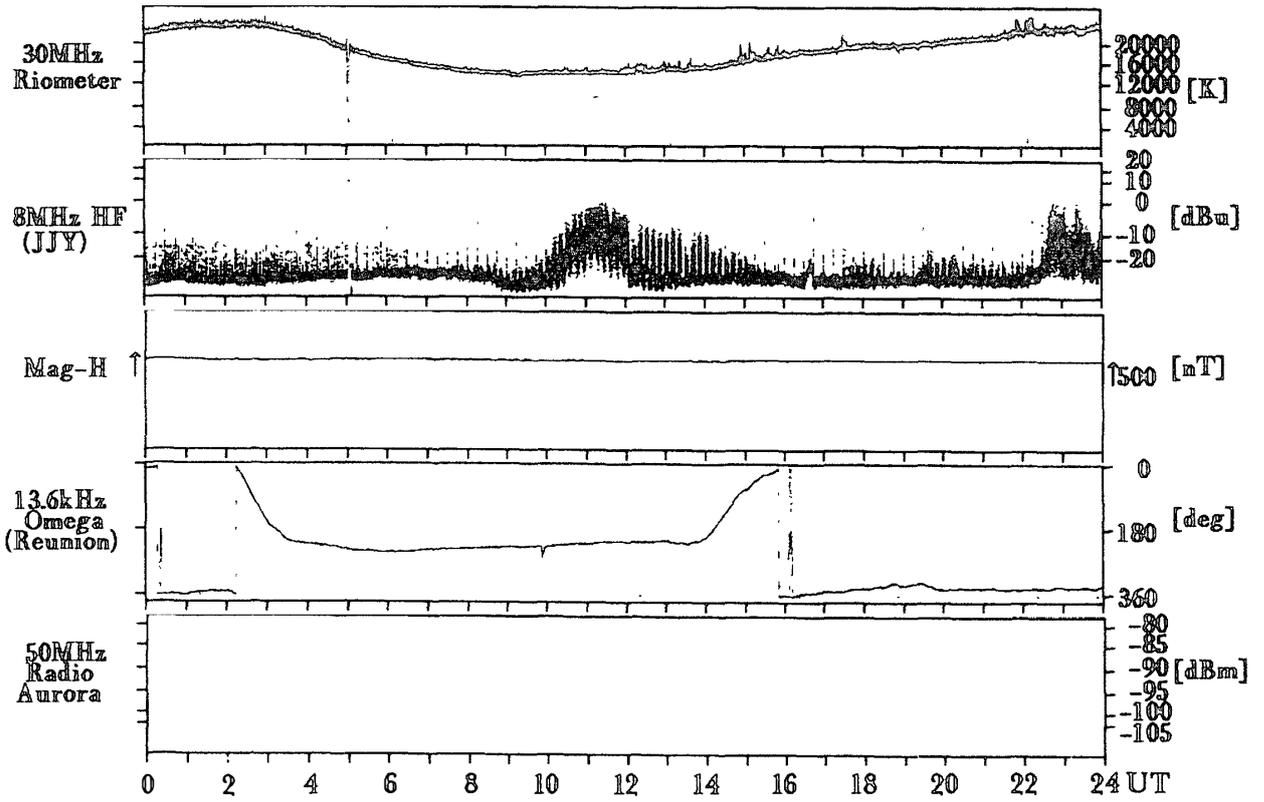
Syowa Station

Total Day / 104 1995/ 4/14



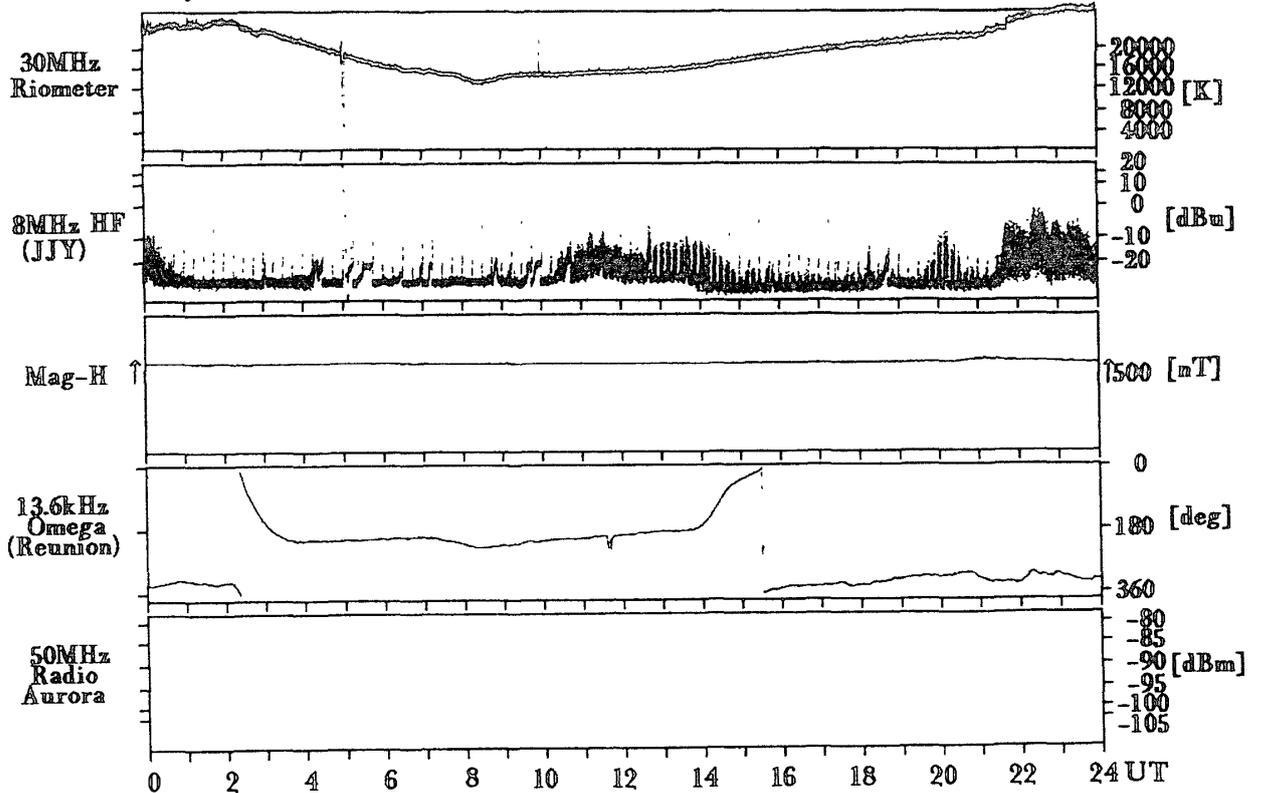
Syowa Station

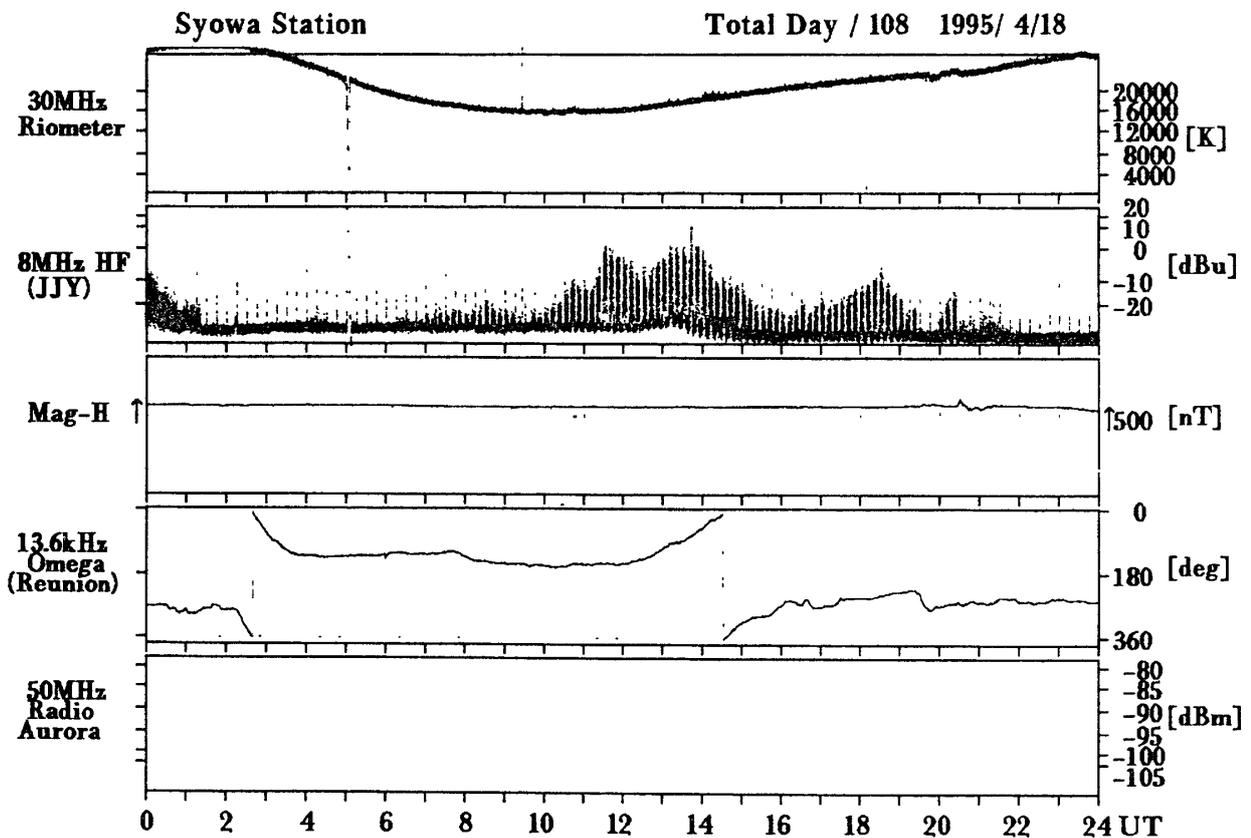
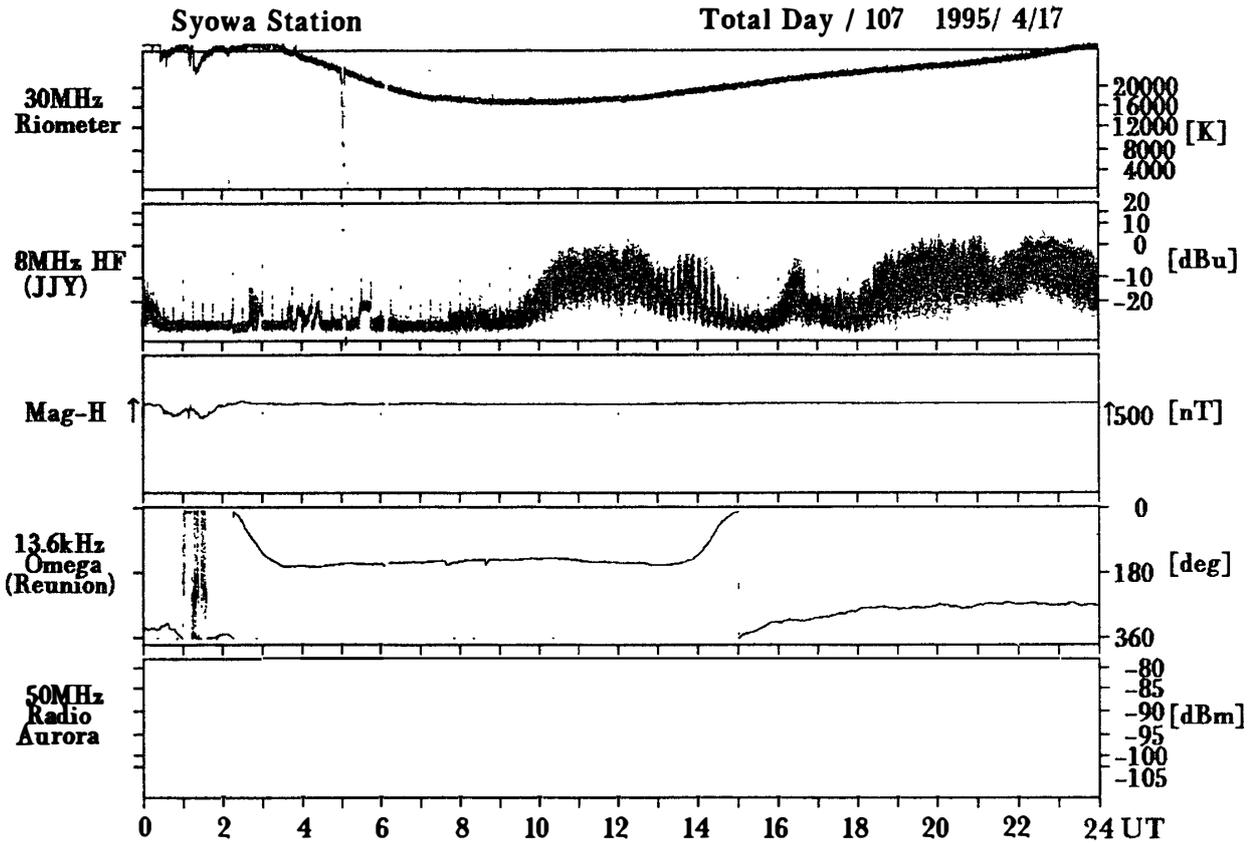
Total Day / 105 1995/ 4/15

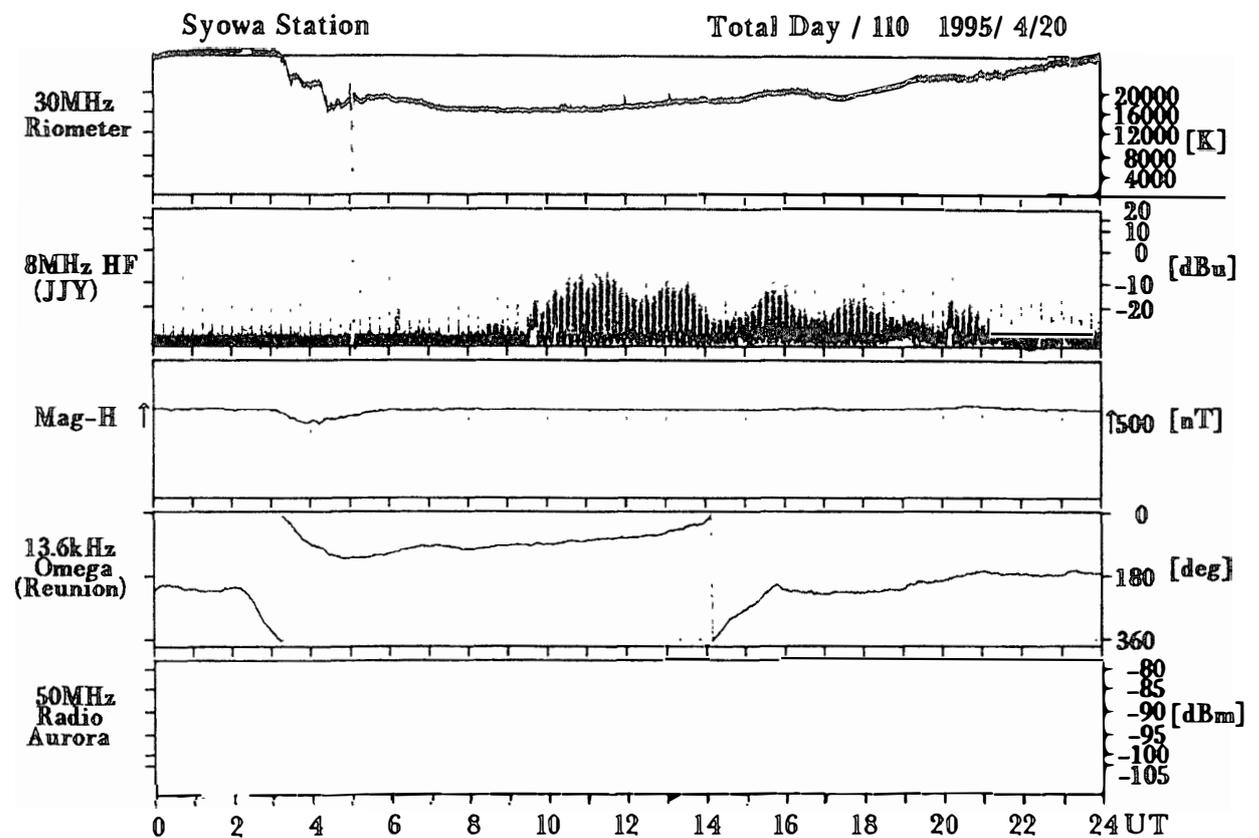
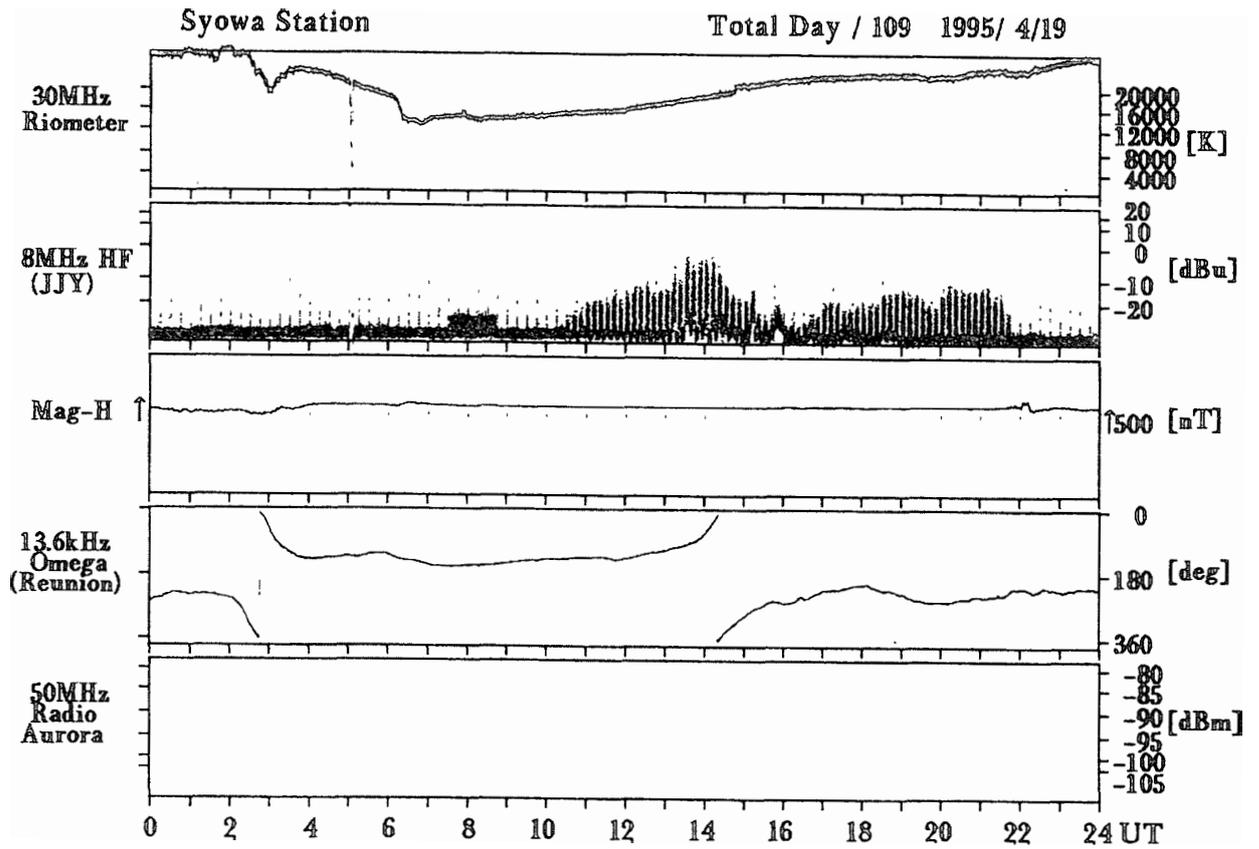


Syowa Station

Total Day / 106 1995/ 4/16

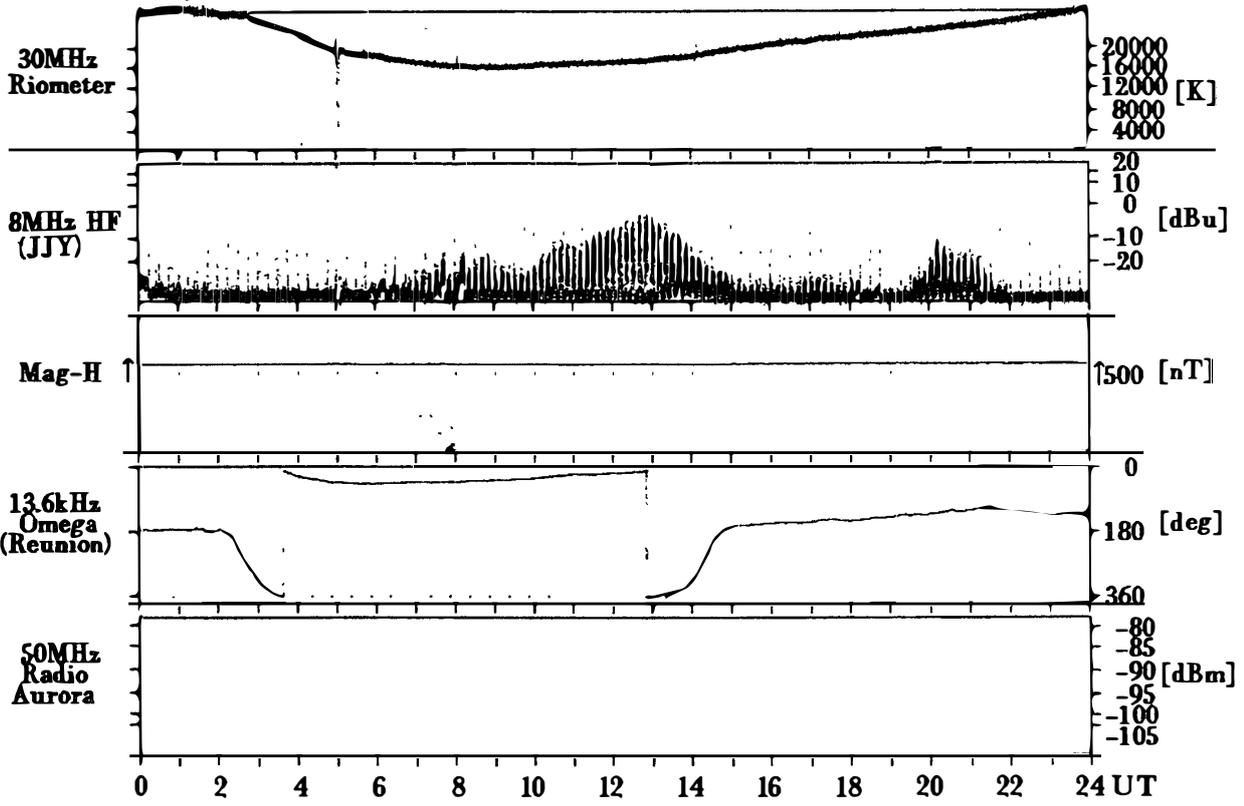






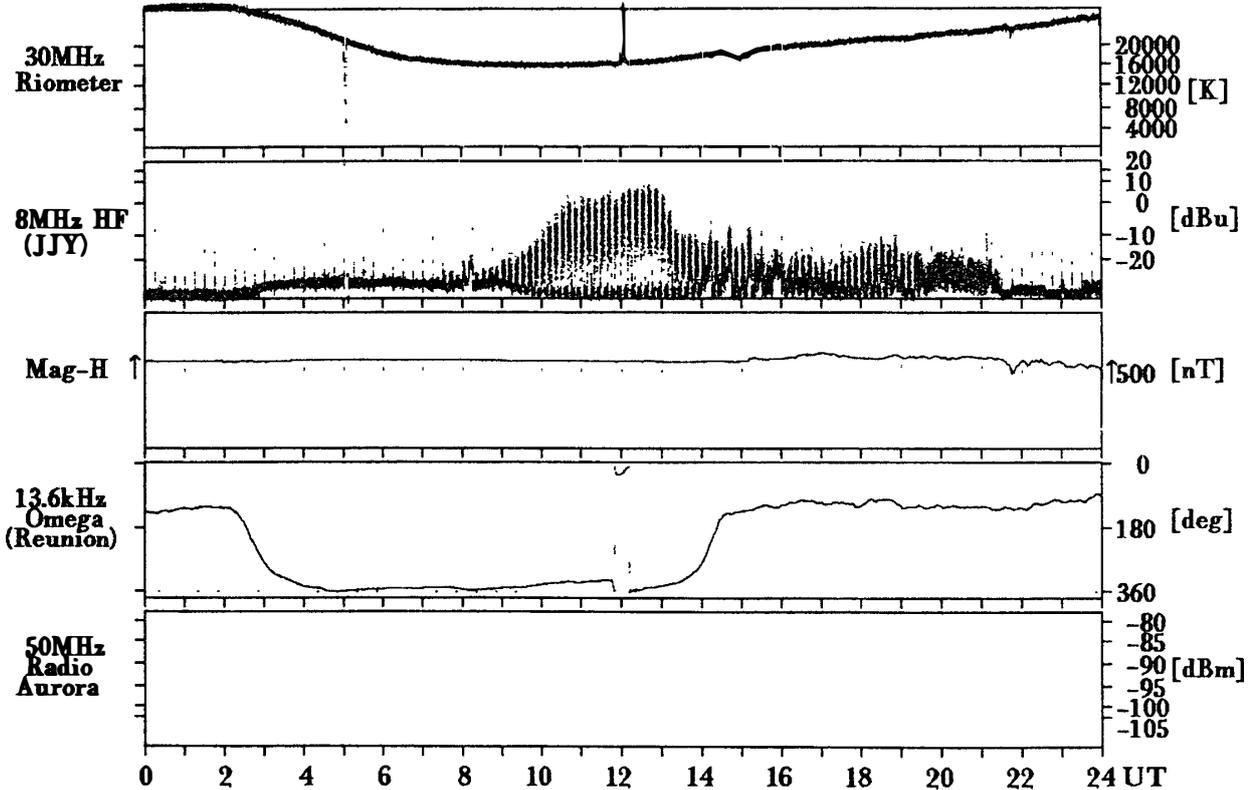
Syowa Station

Total Day / 111 1995/ 4/21



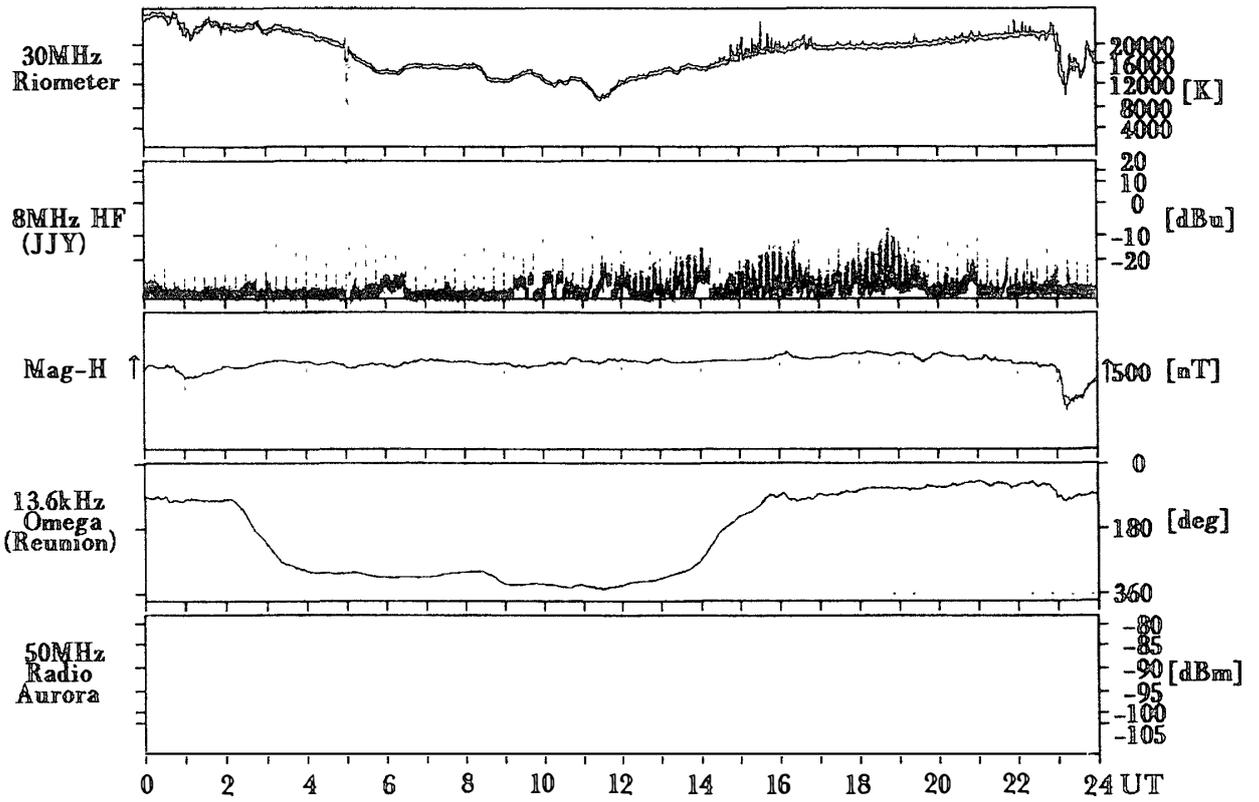
Syowa Station

Total Day / 112 1995/ 4/22



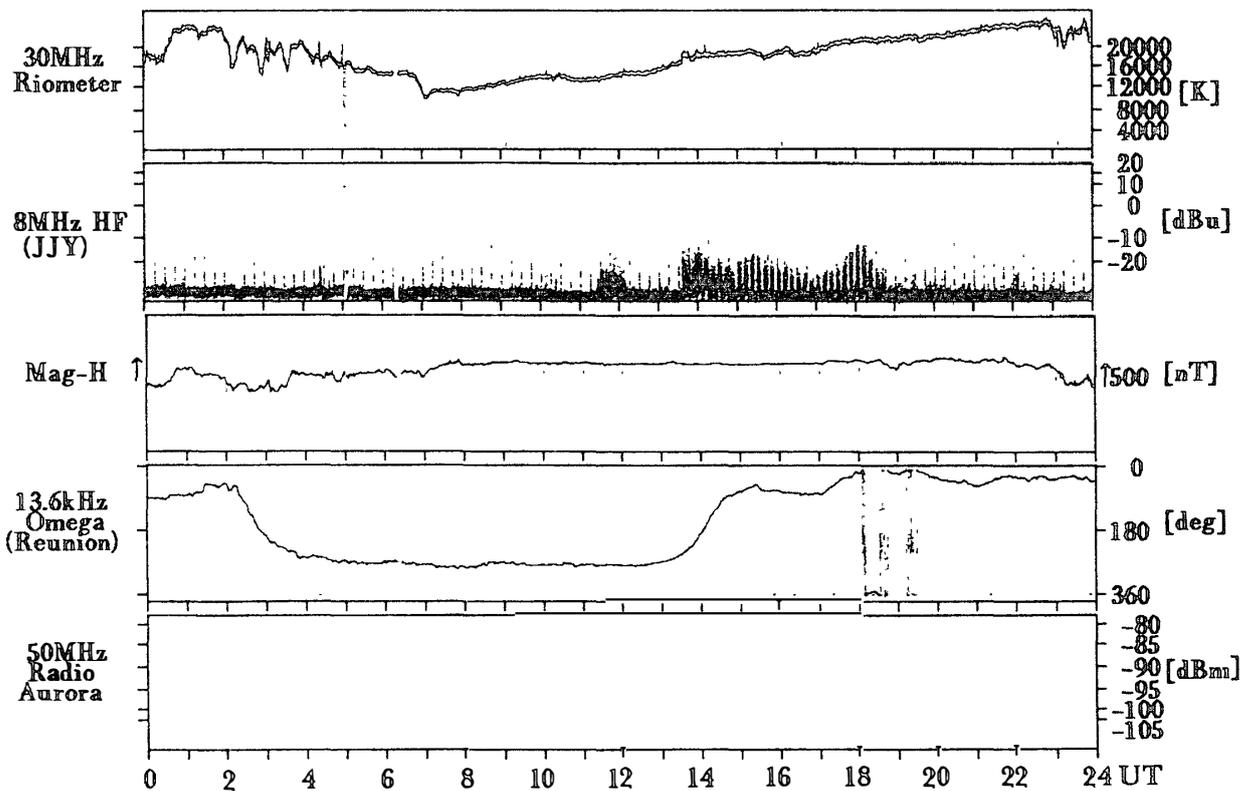
Syowa Station

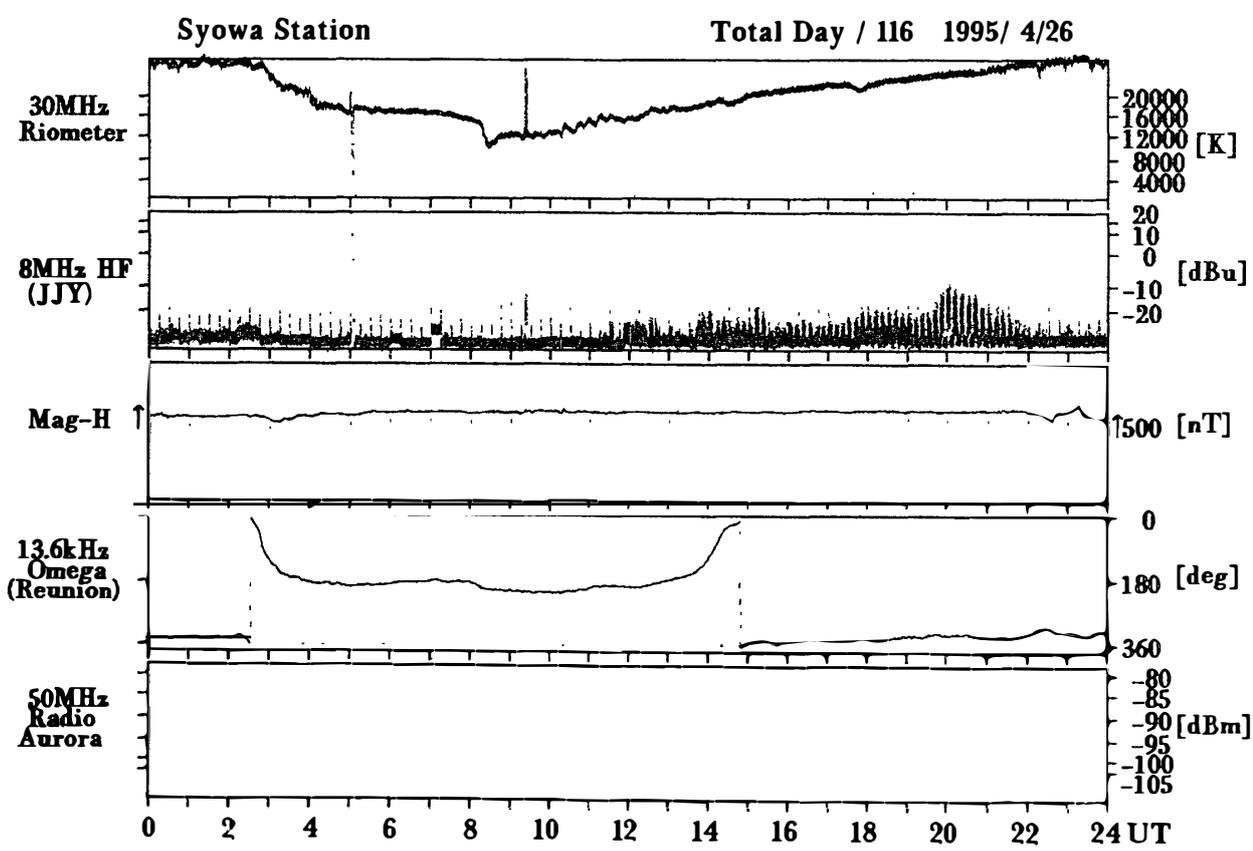
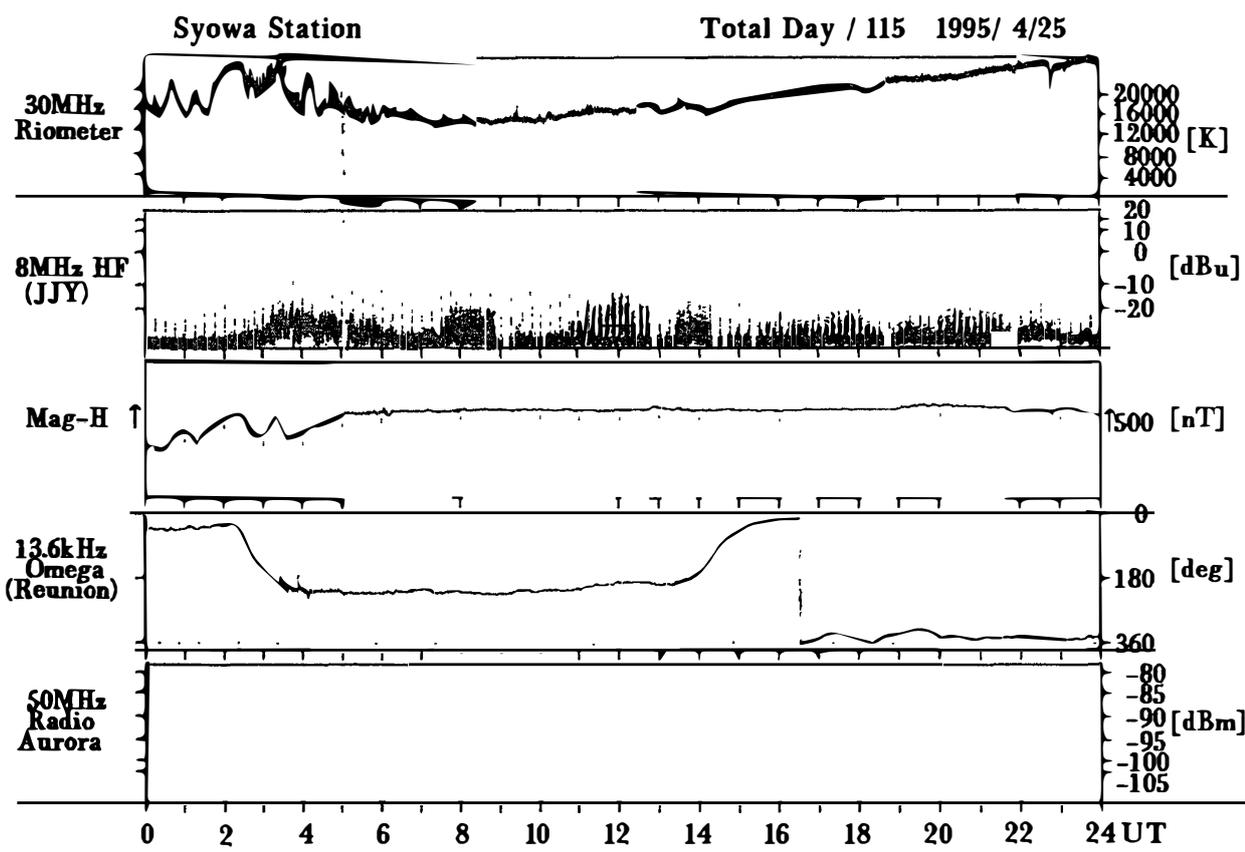
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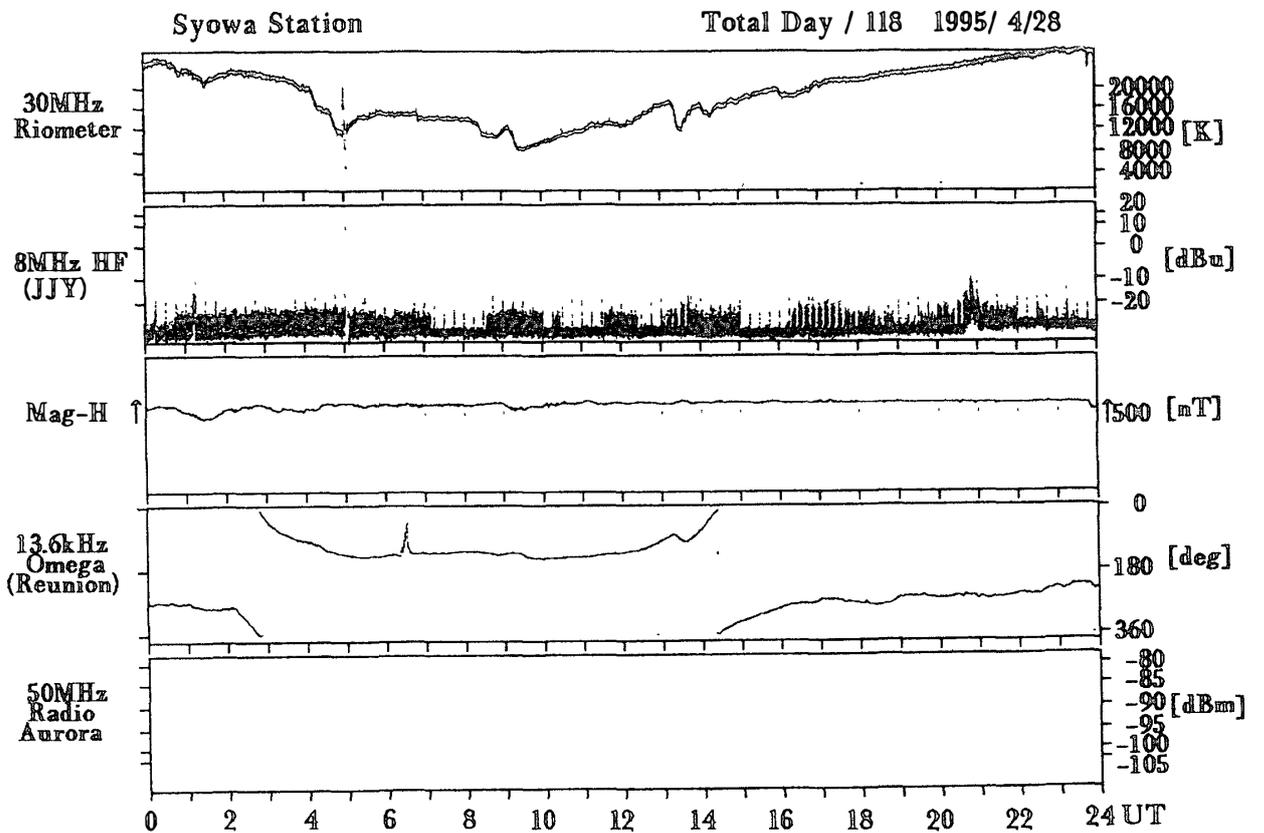
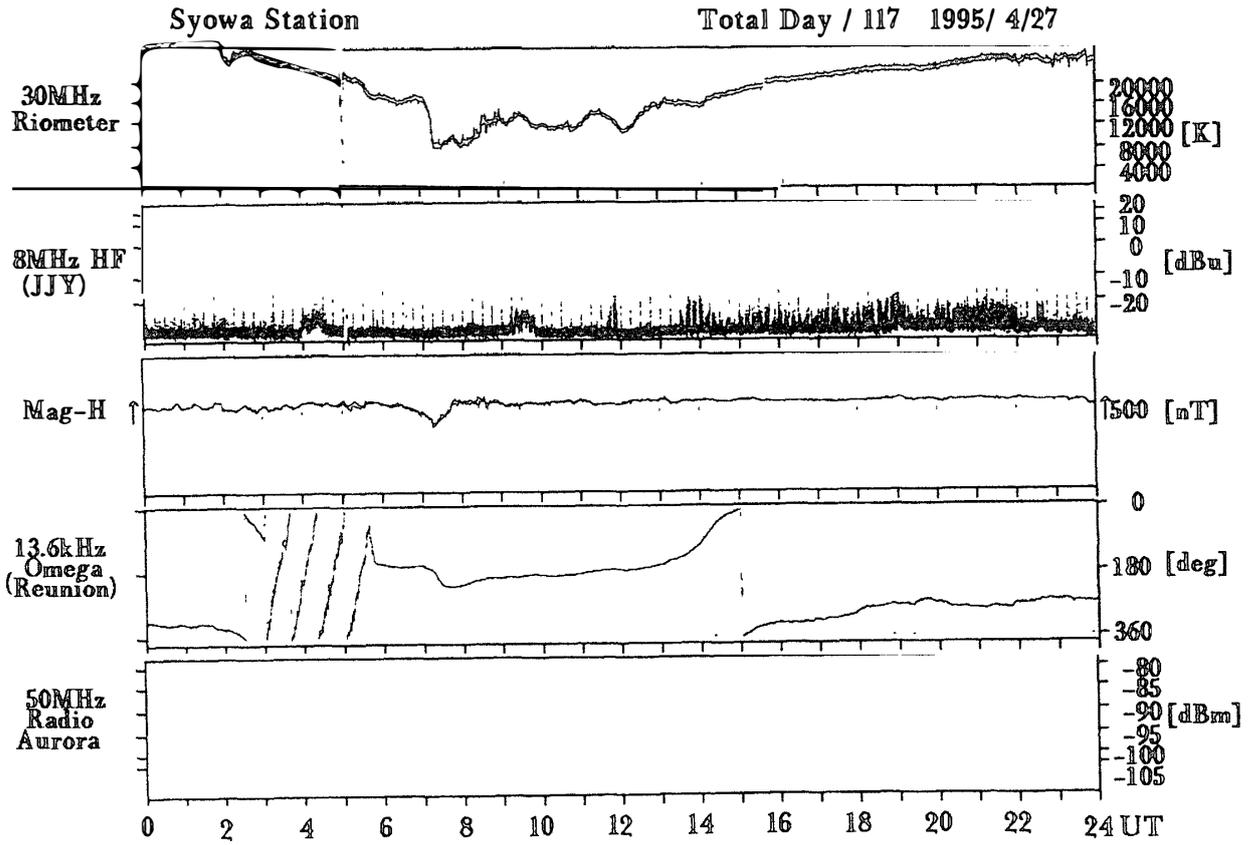


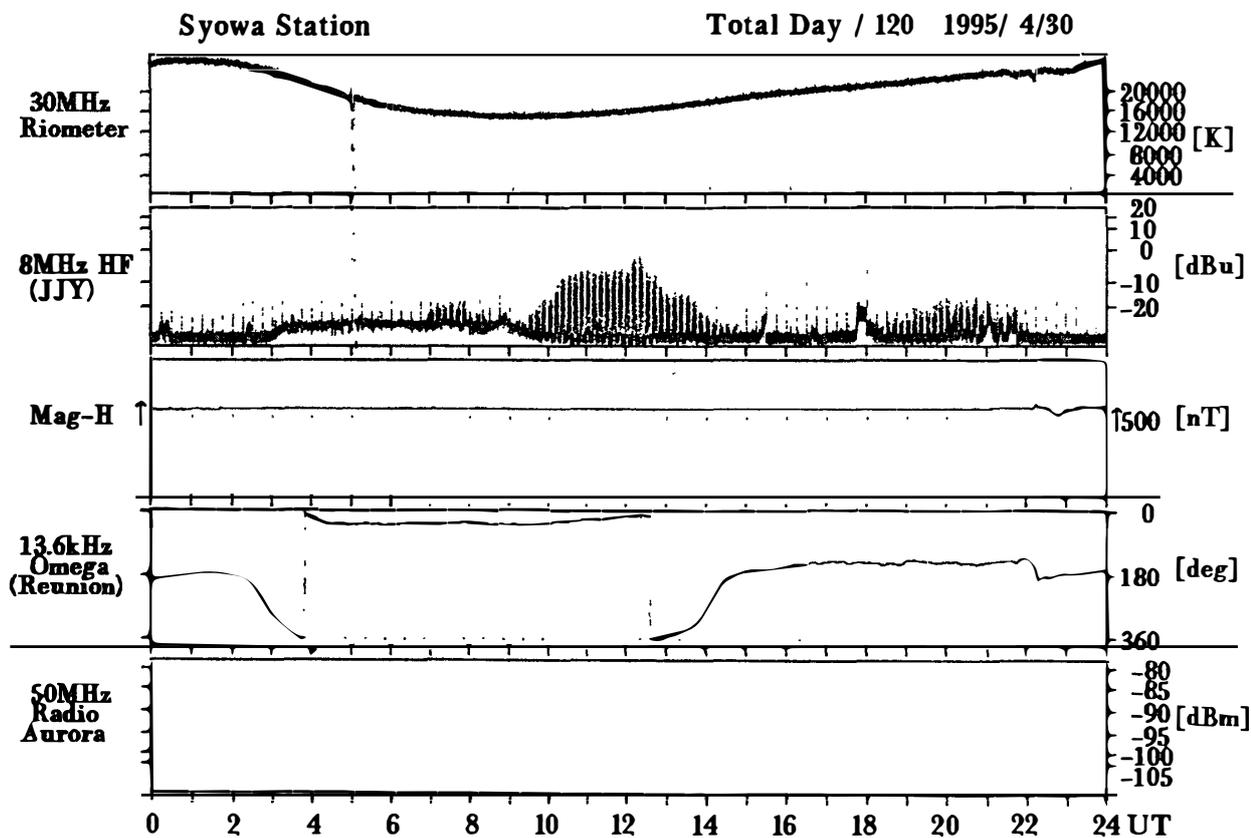
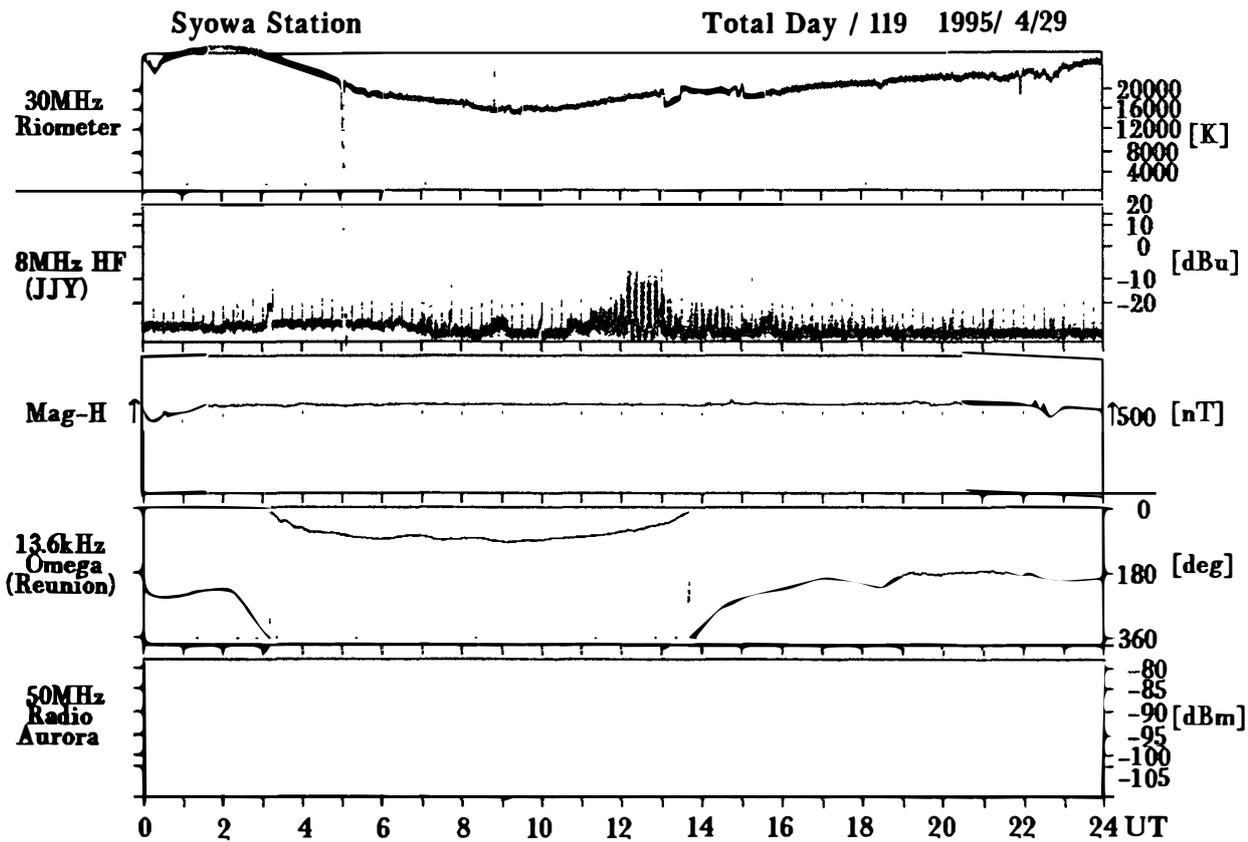
Syowa Station

Total Day / 114 1995/ 4/24



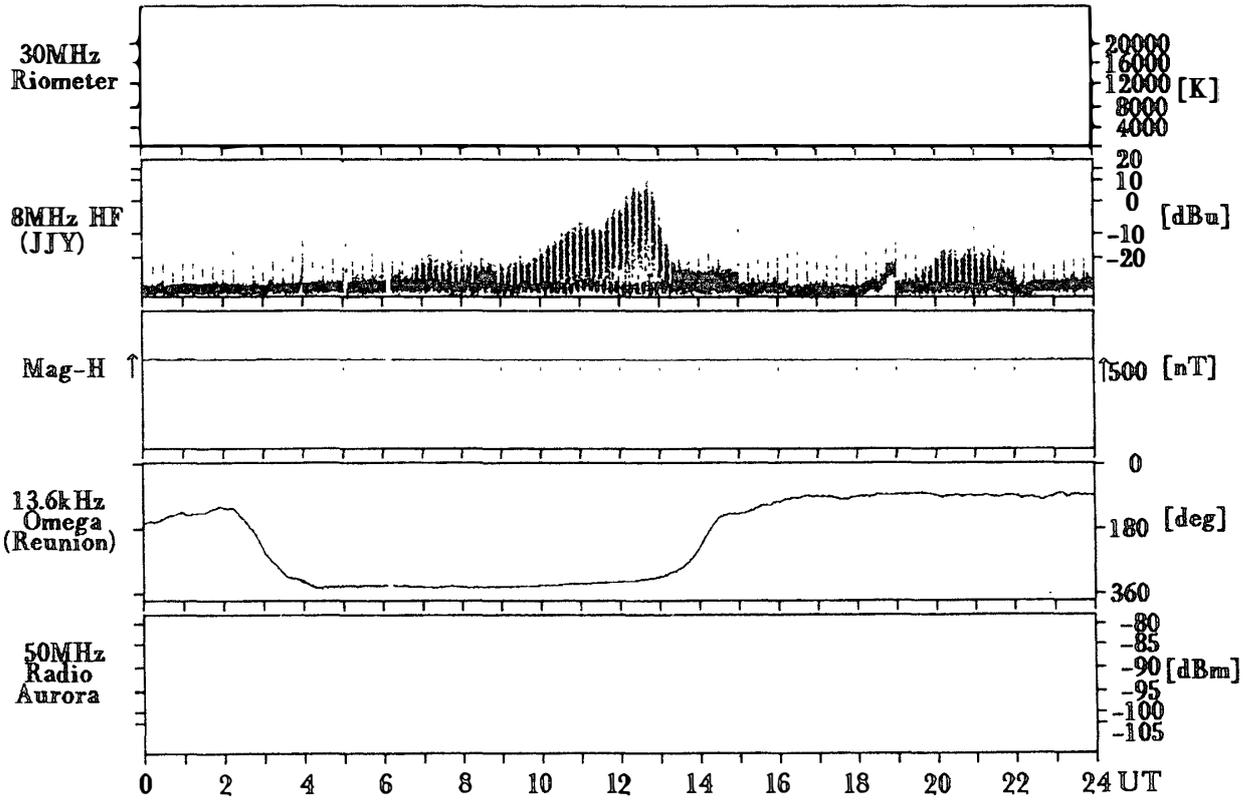






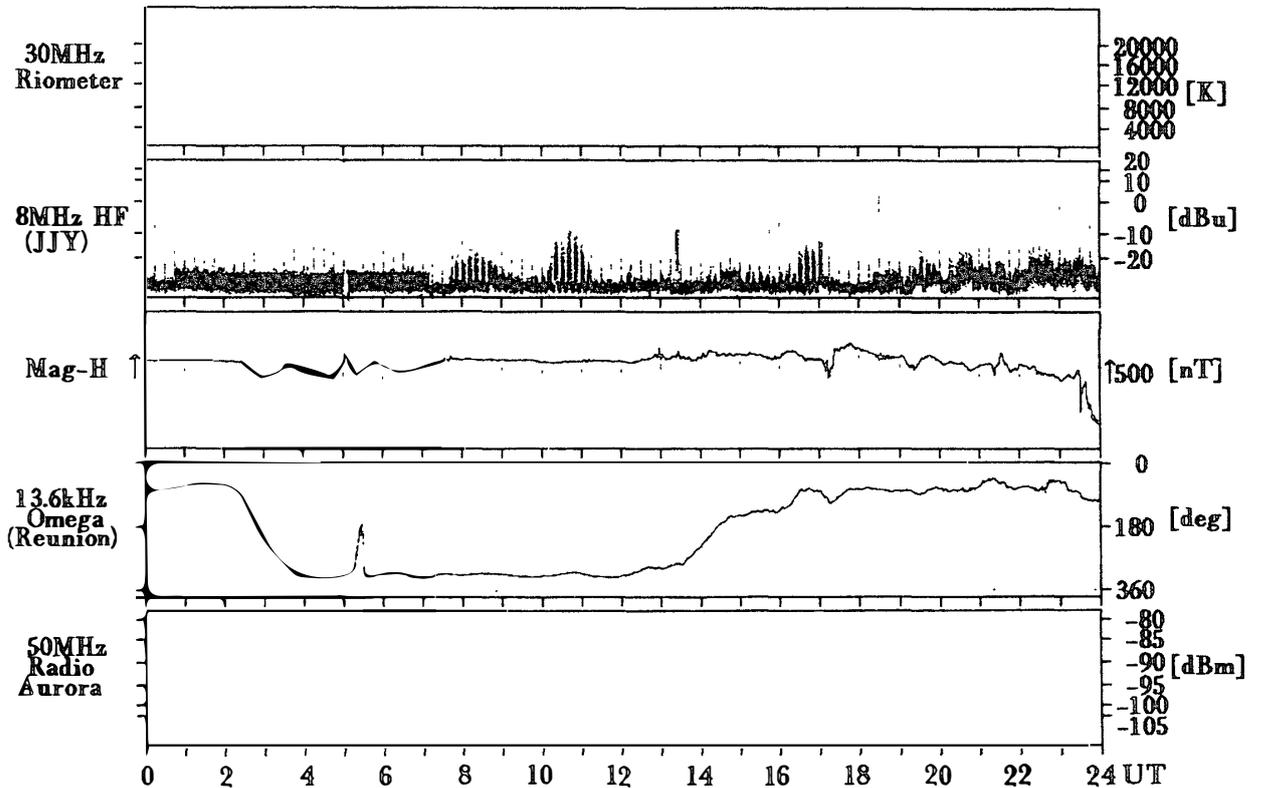
Syowa Station

Total Day / 121 1995/ 5/ 1



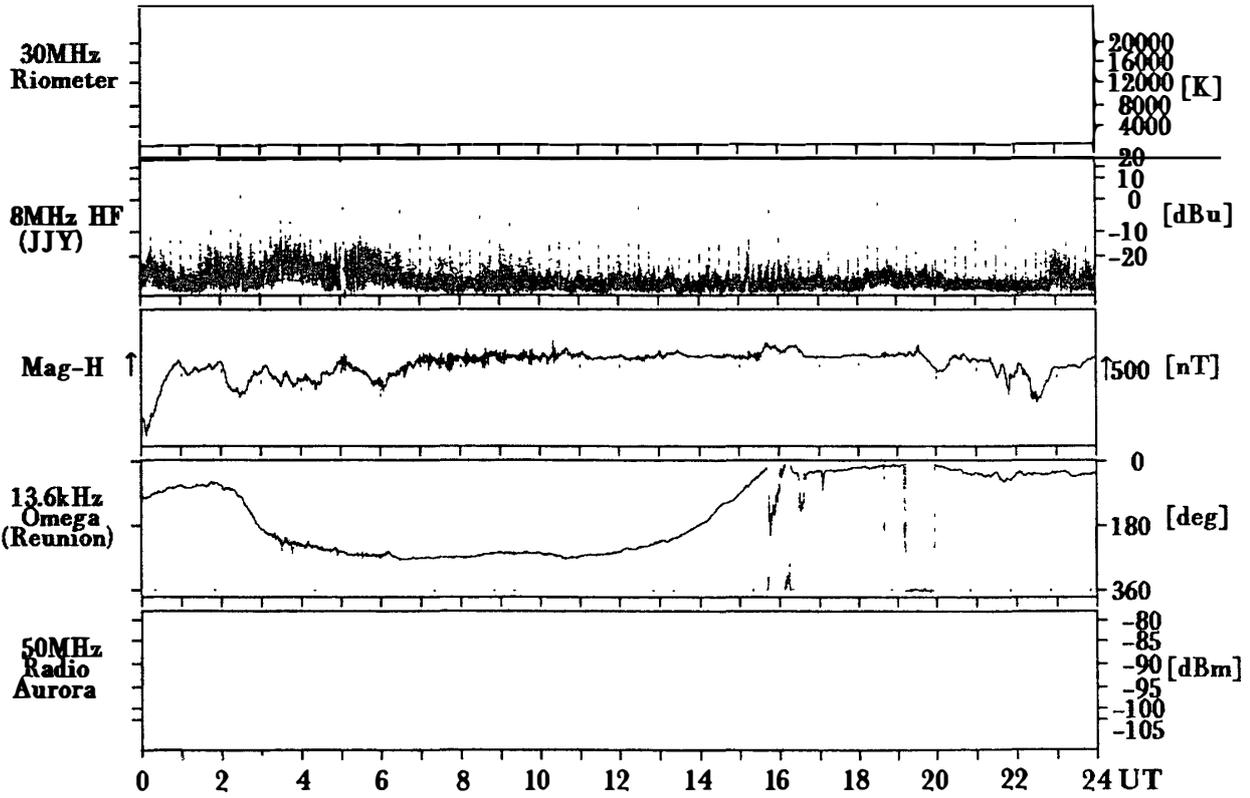
Syowa Station

Total Day / 122 1995/ 5/ 2



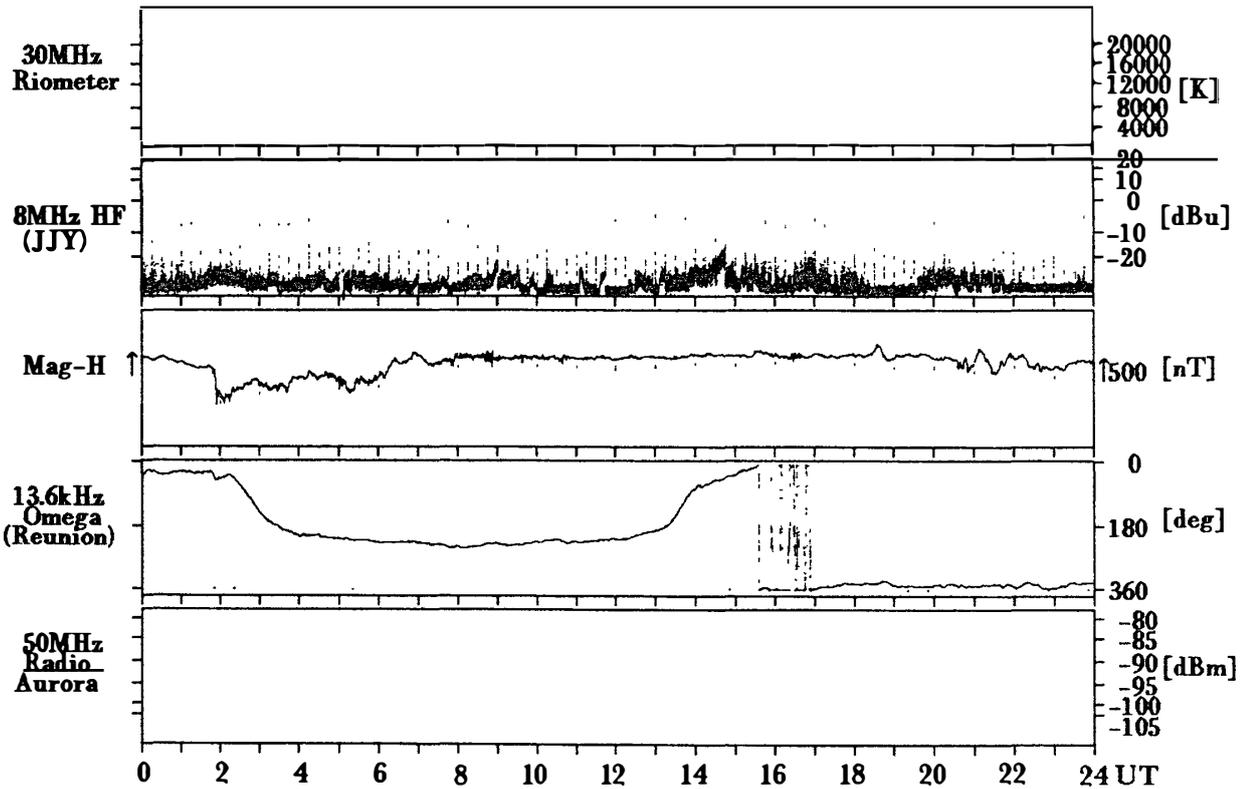
Syowa Station

Total Day / 123 1995/ 5/ 3



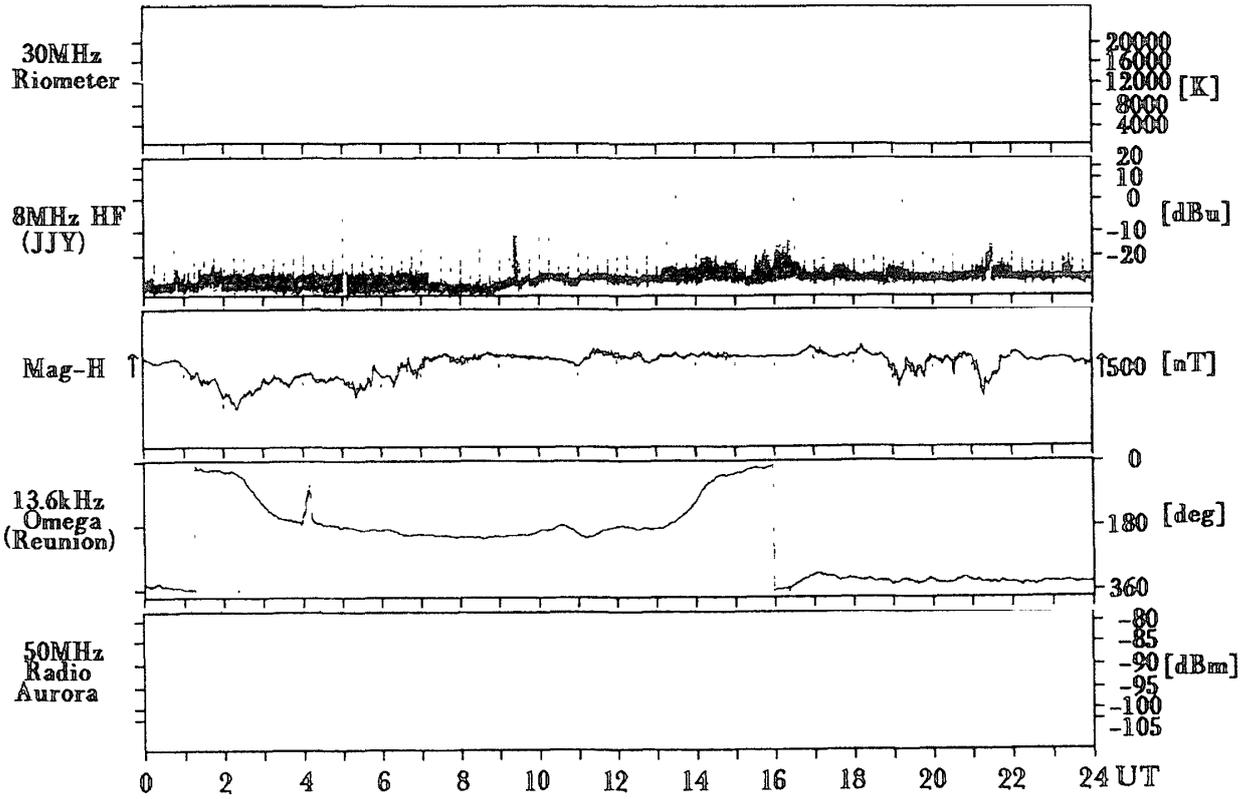
Syowa Station

Total Day / 124 1995/ 5/ 4



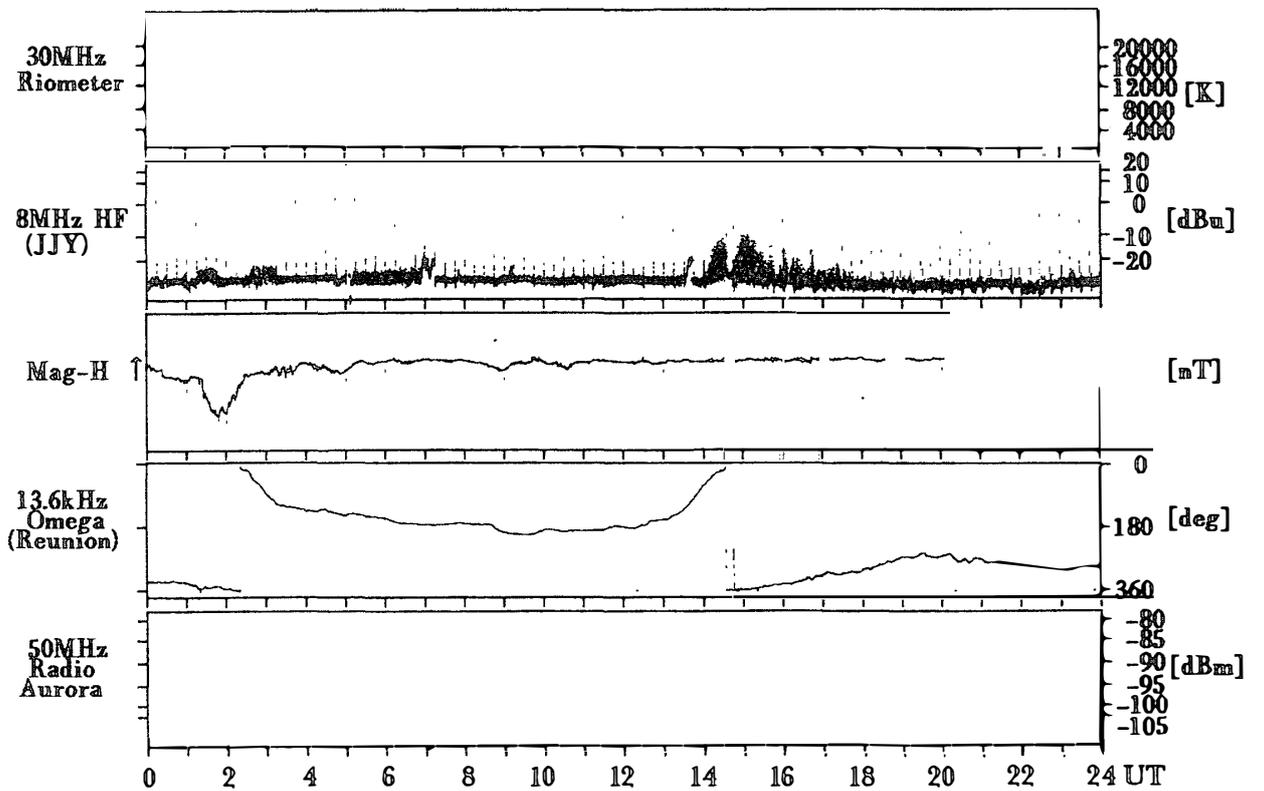
Syowa Station

Total Day / 125 1995/ 5/ 5



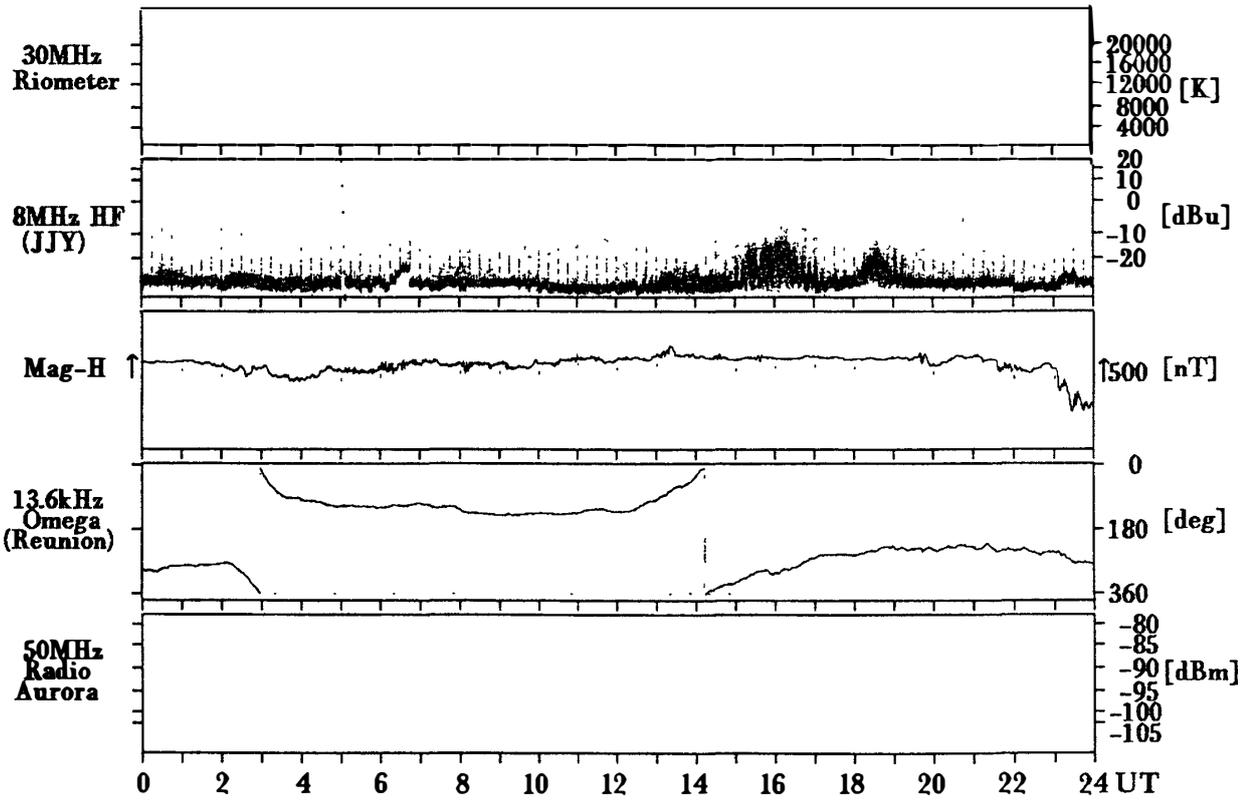
Syowa Station

Total Day / 126 1995/ 5/ 6



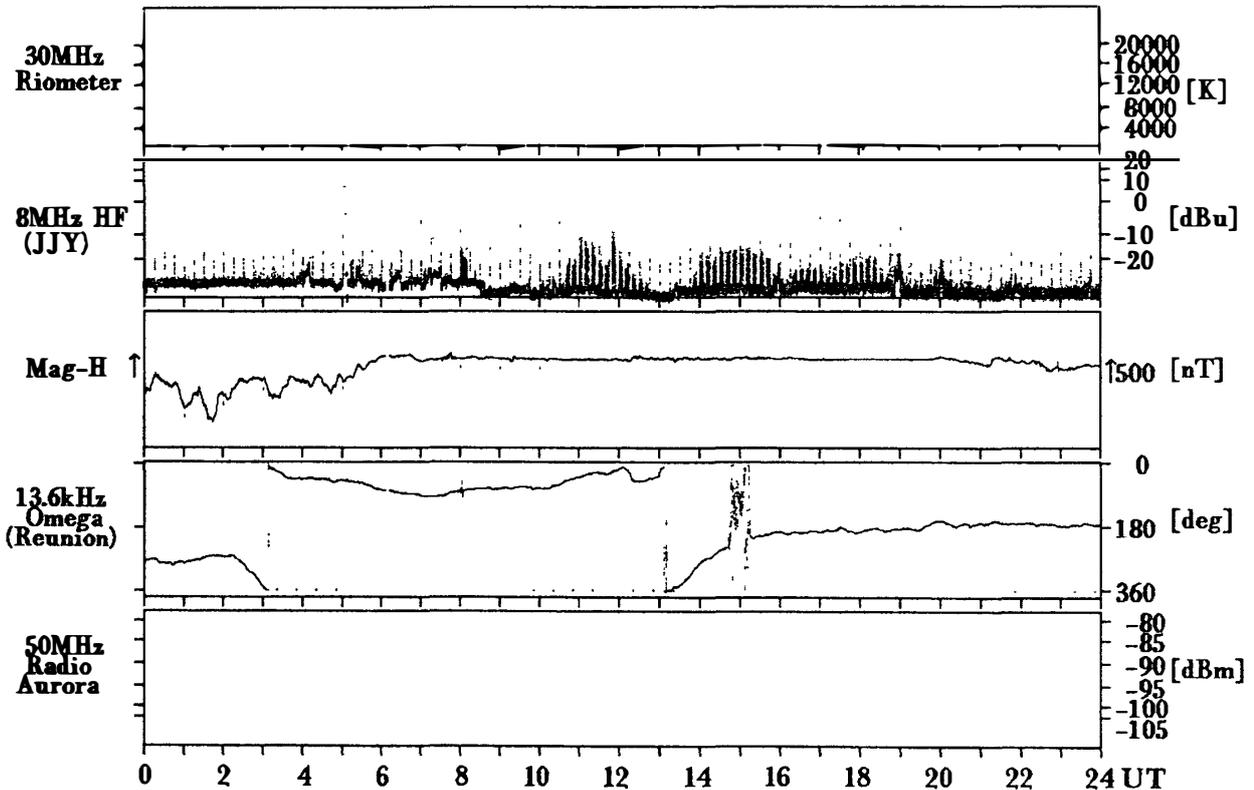
Syowa Station

Total Day / 127 1995/ 5/ 7



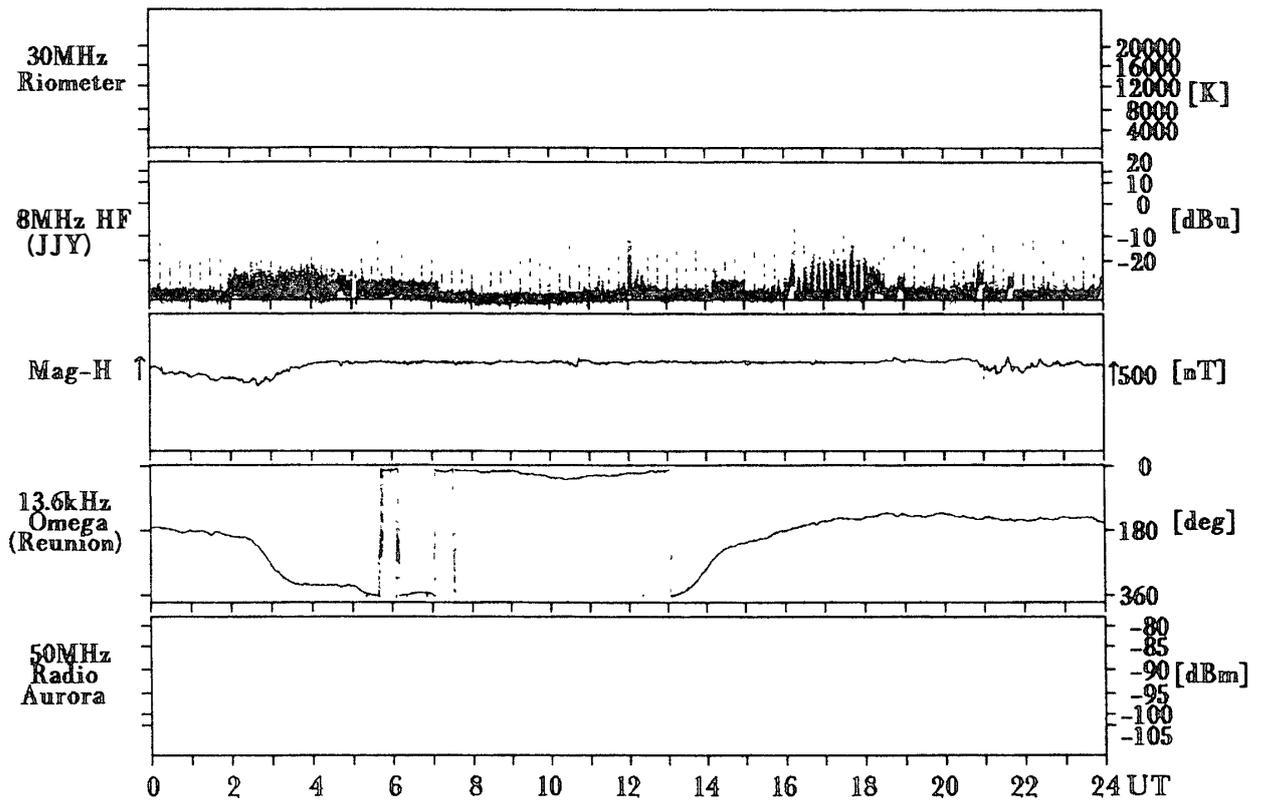
Syowa Station

Total Day / 128 1995/ 5/ 8



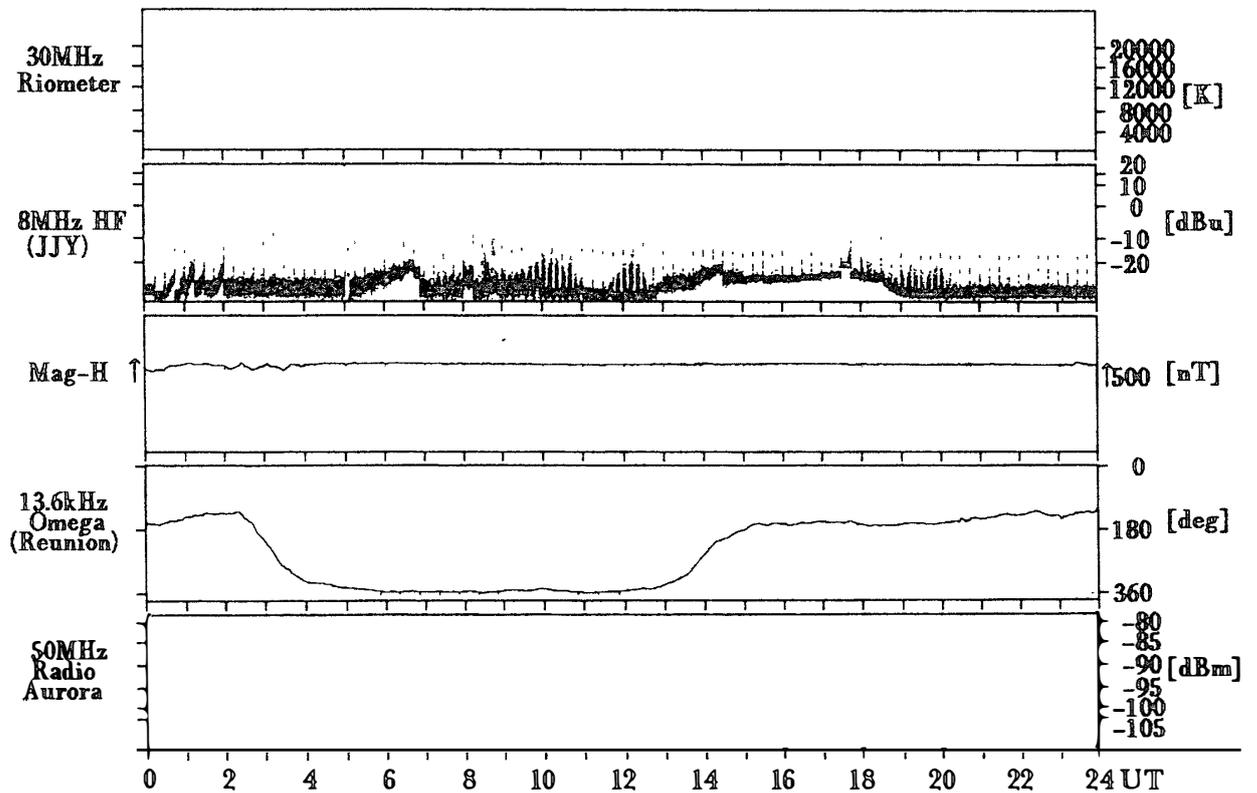
Syowa Station

Total Day / 129 1995/ 5/ 9



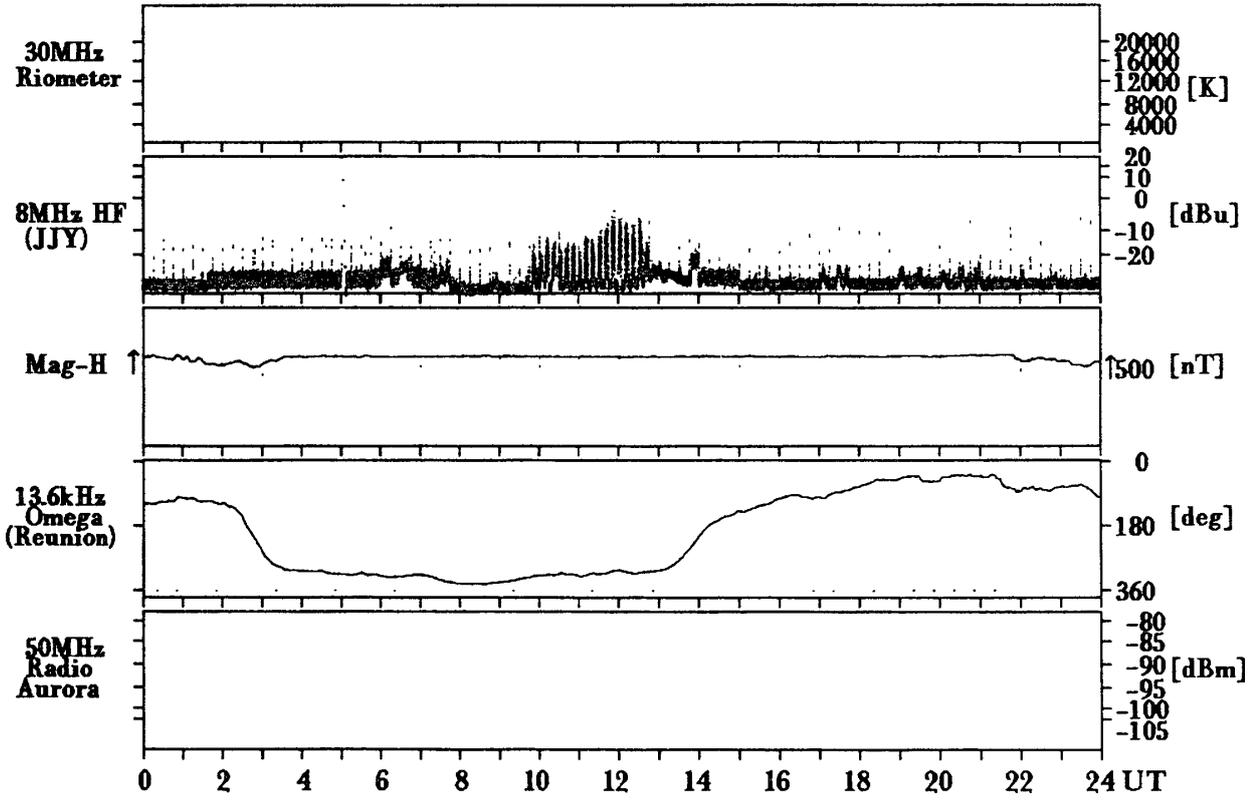
Syowa Station

Total Day / 130 1995/ 5/10



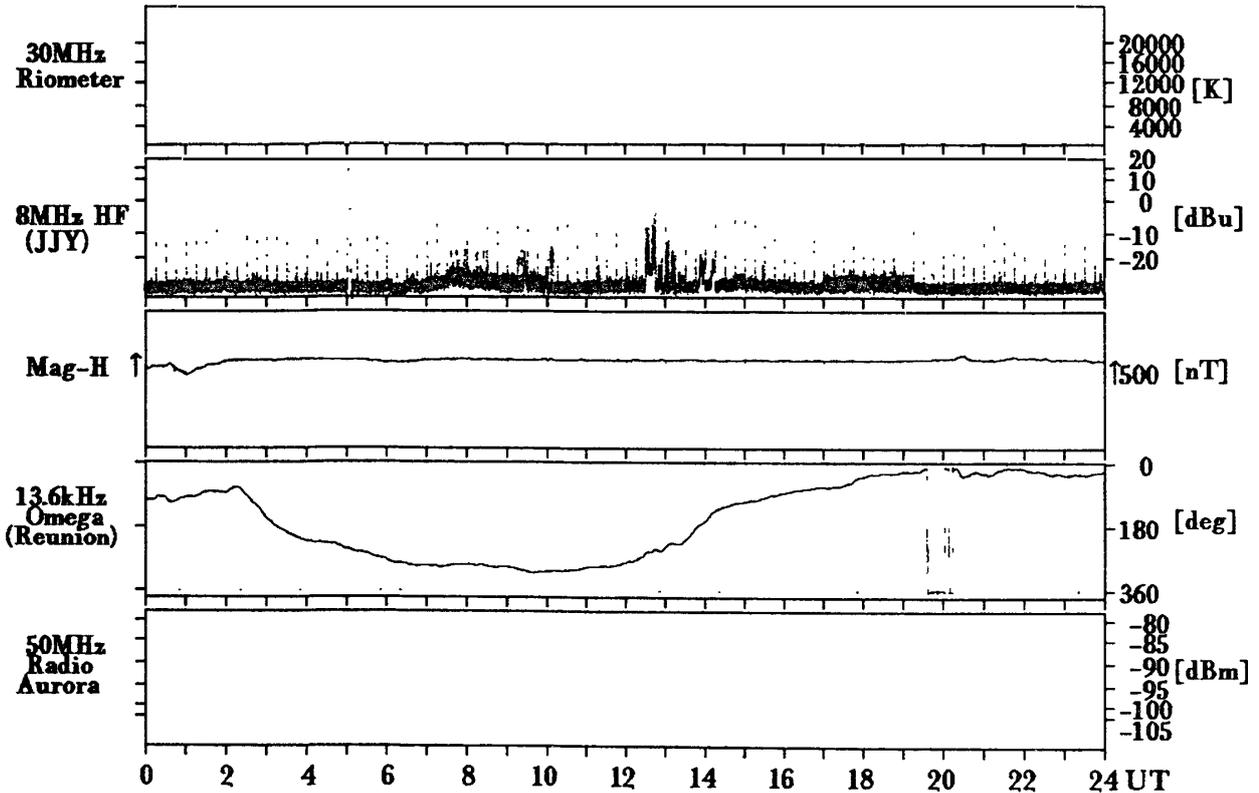
Syowa Station

Total Day / 131 1995/ 5/11



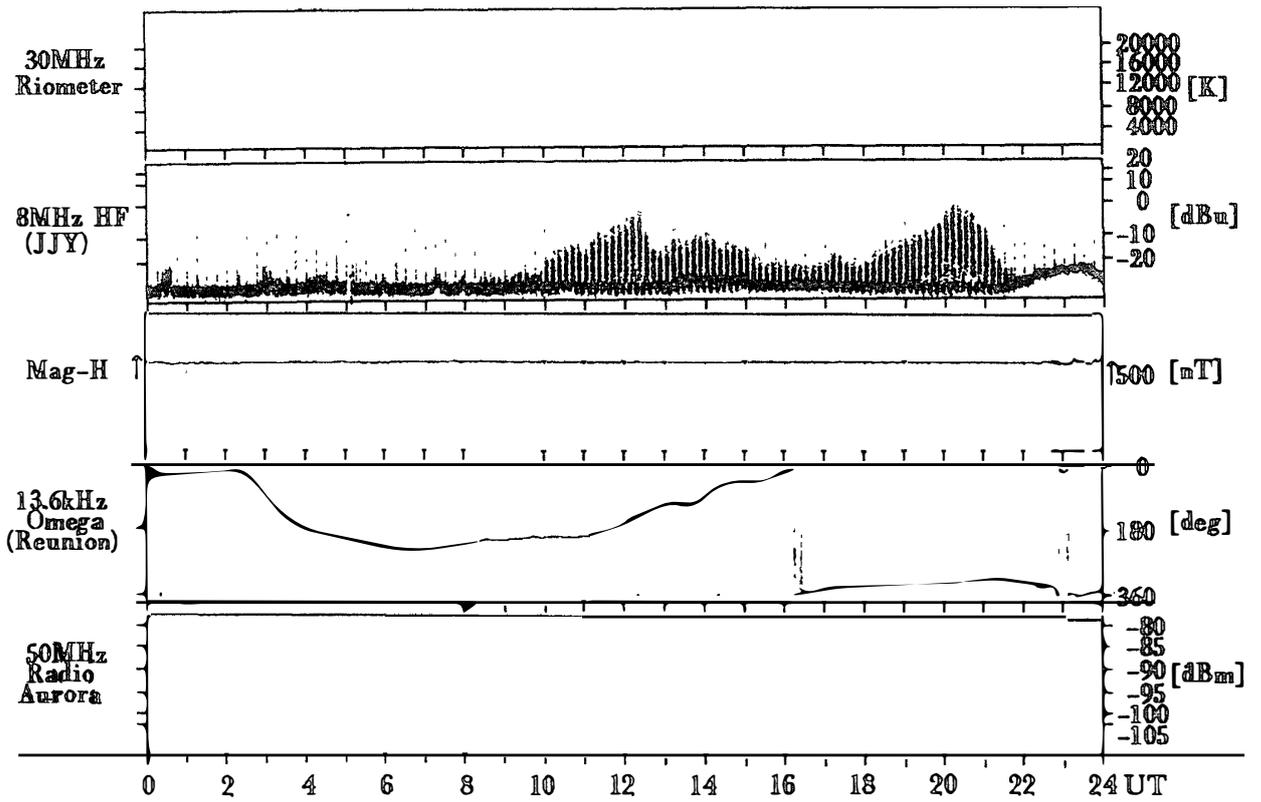
Syowa Station

Total Day / 132 1995/ 5/12



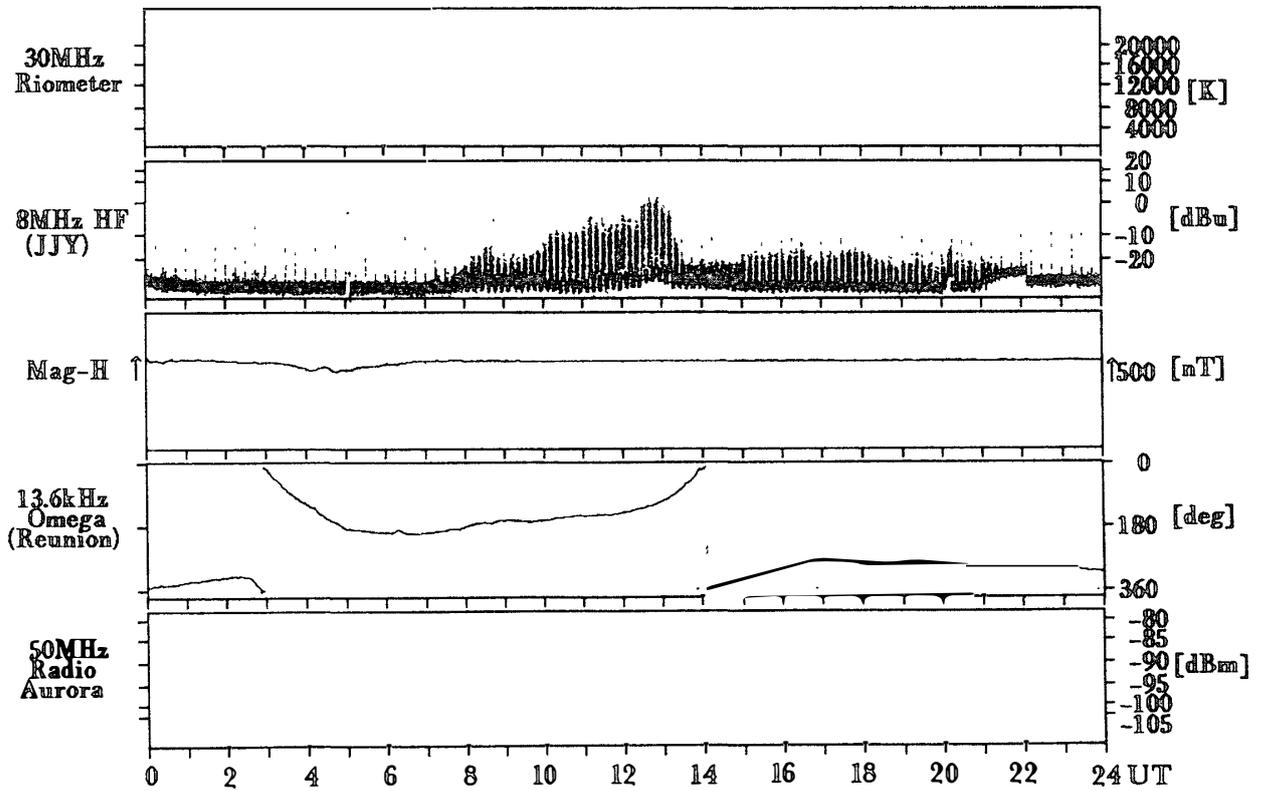
Syowa Station

Total Day / 133 1995/ 5/13



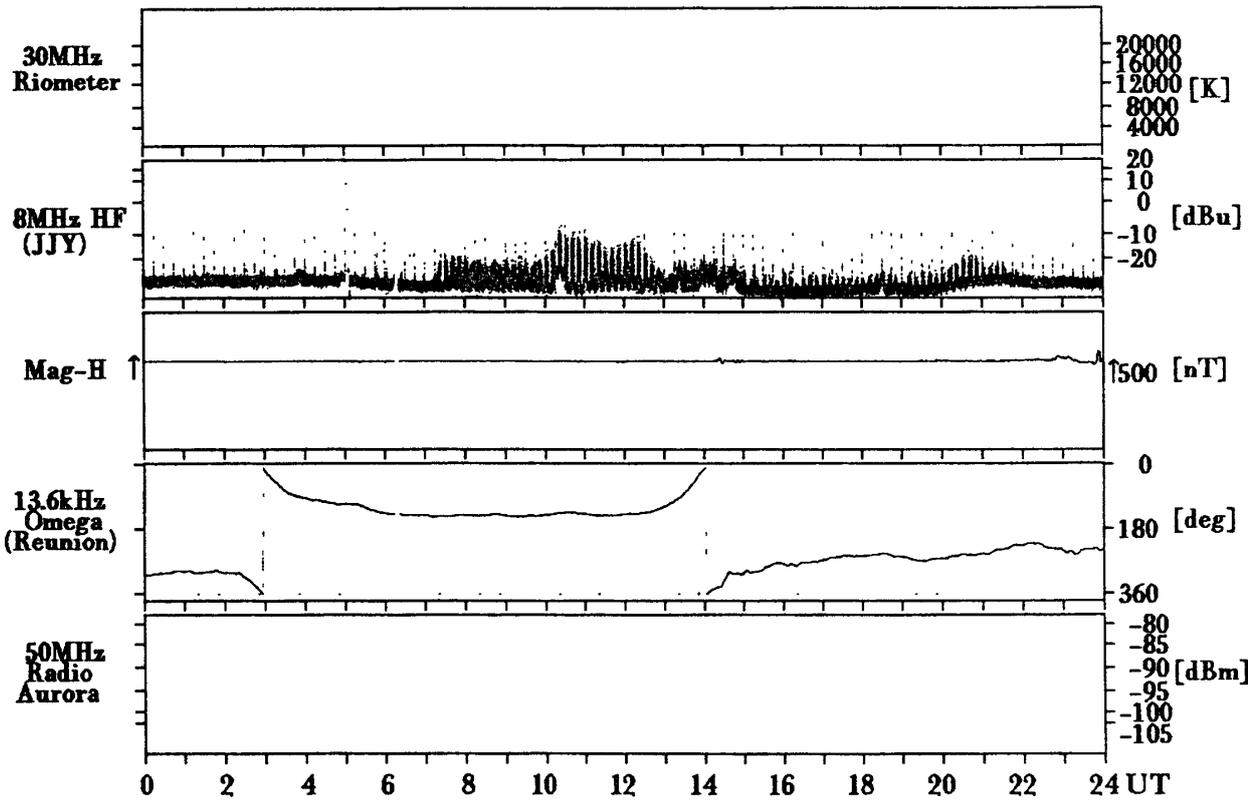
Syowa Station

Total Day / 134 1995/ 5/14



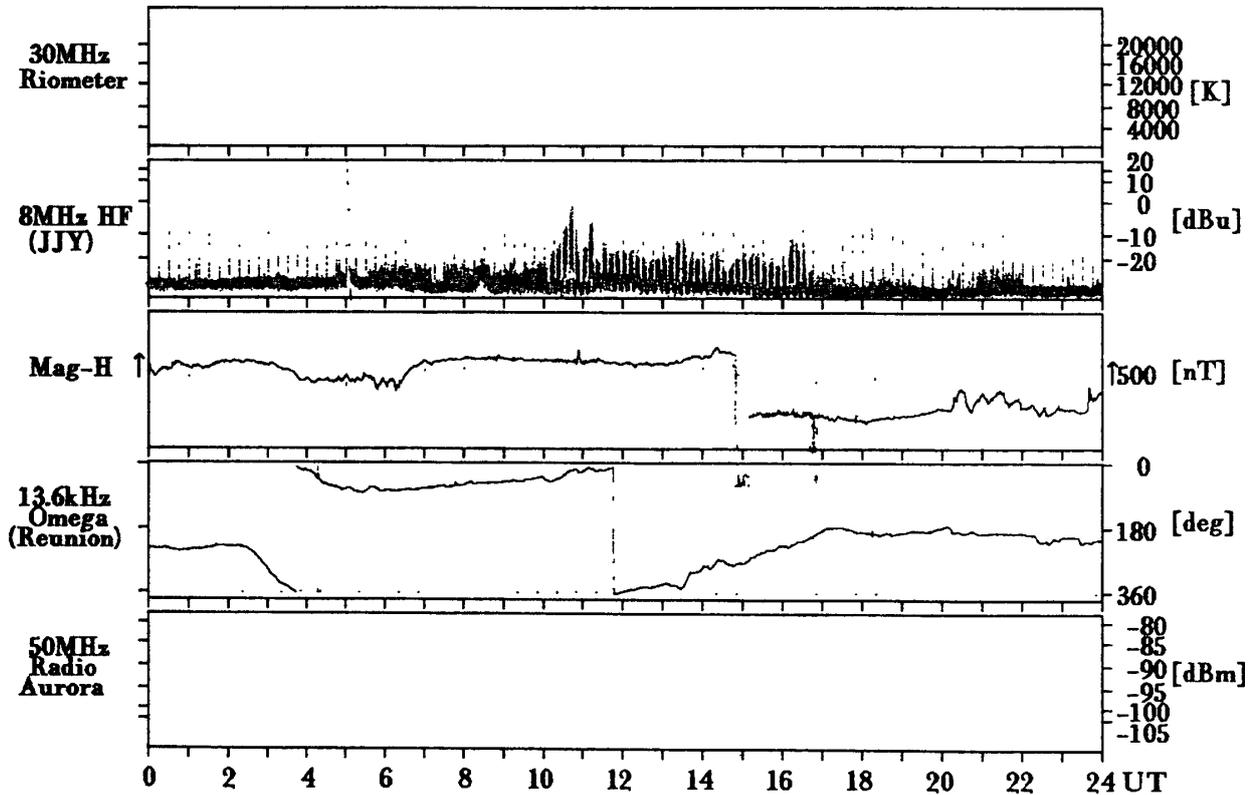
Syowa Station

Total Day / 135 1995/ 5/15



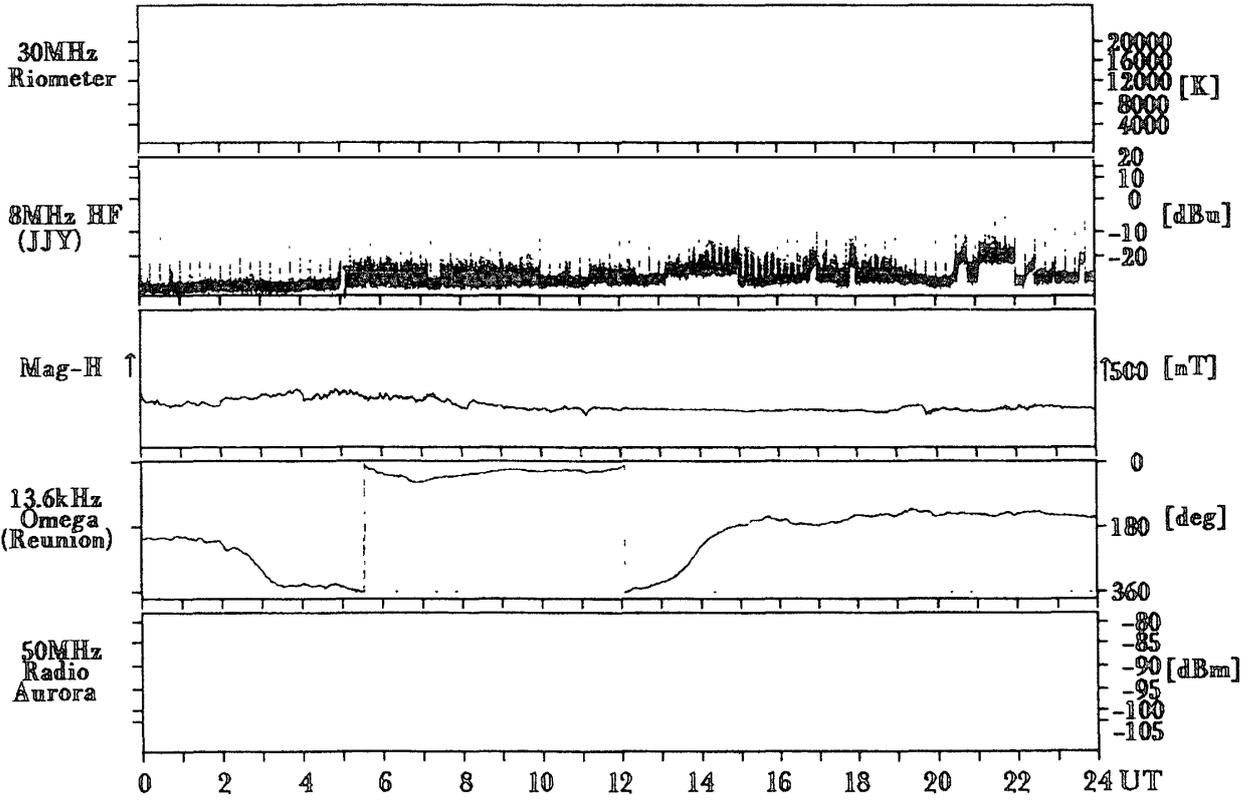
Syowa Station

Total Day / 136 1995/ 5/16



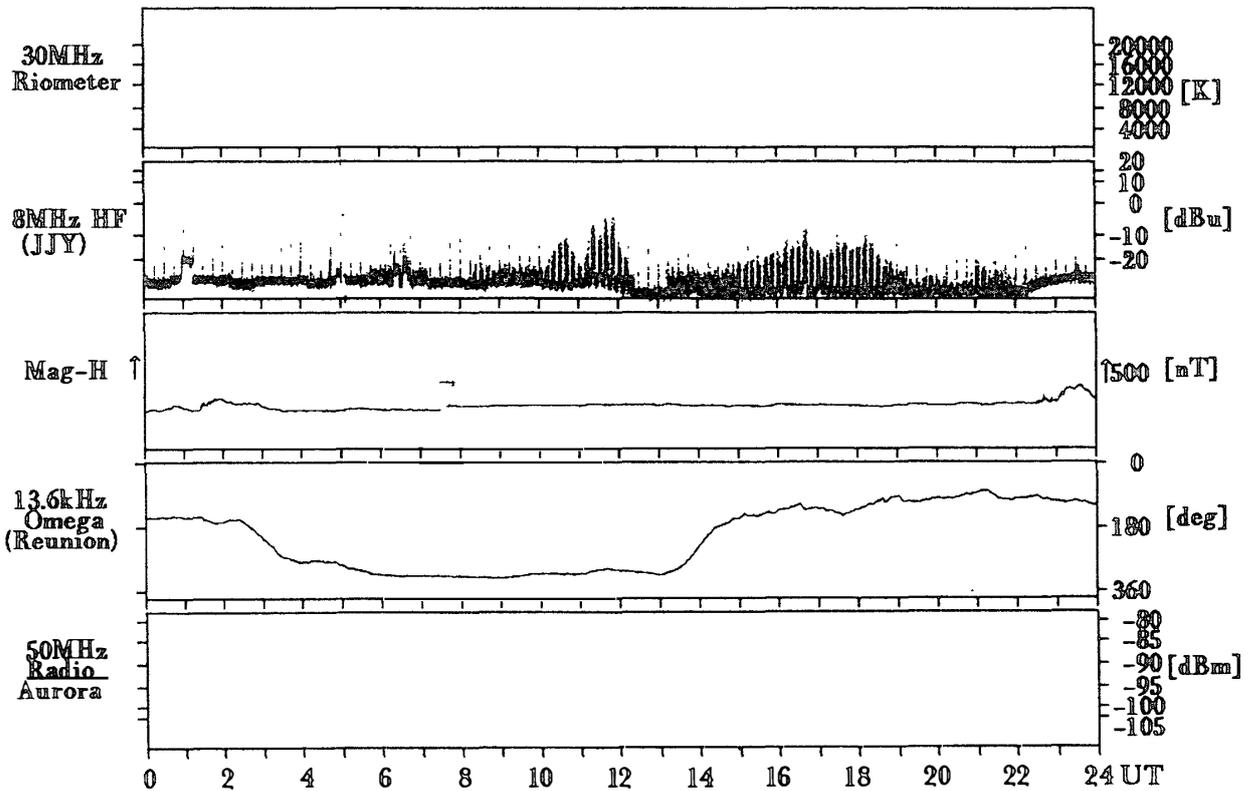
Syowa Station

Total Day / 137 1995/ 5/17



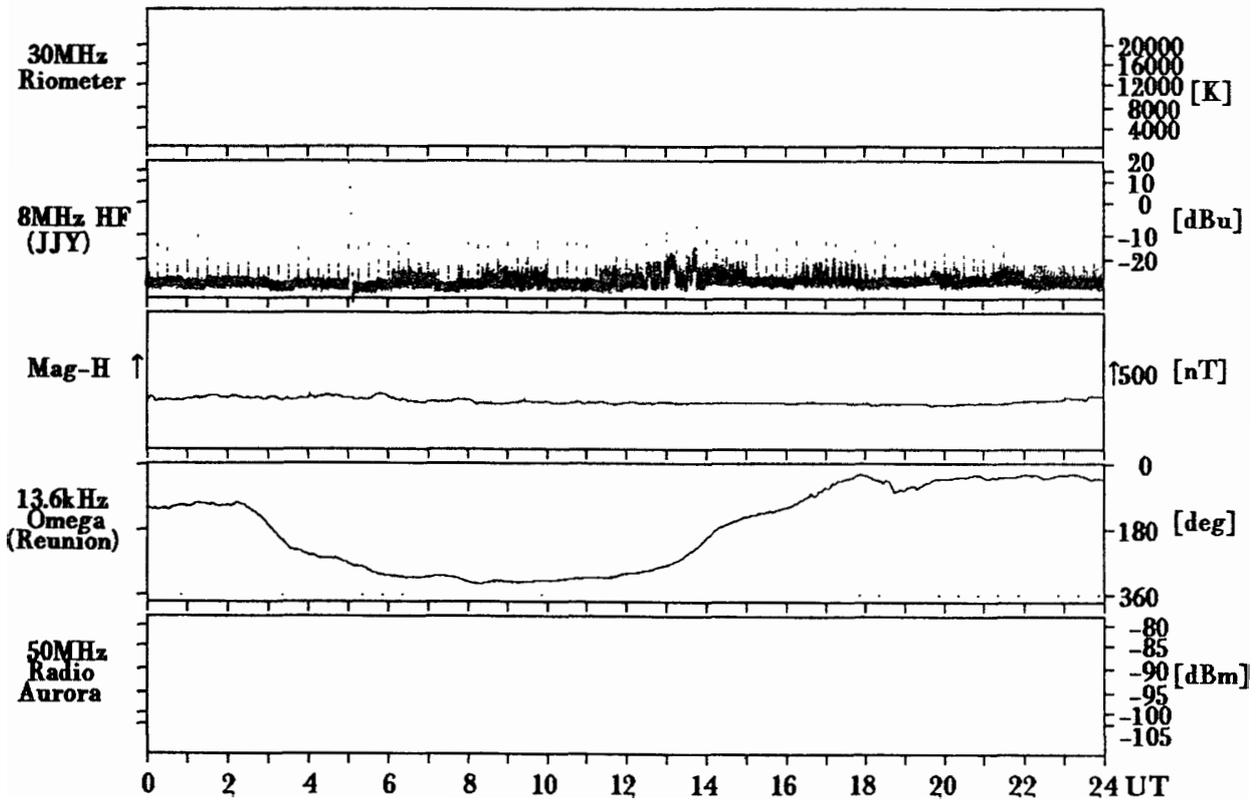
Syowa Station

Total Day / 138 1995/ 5/18



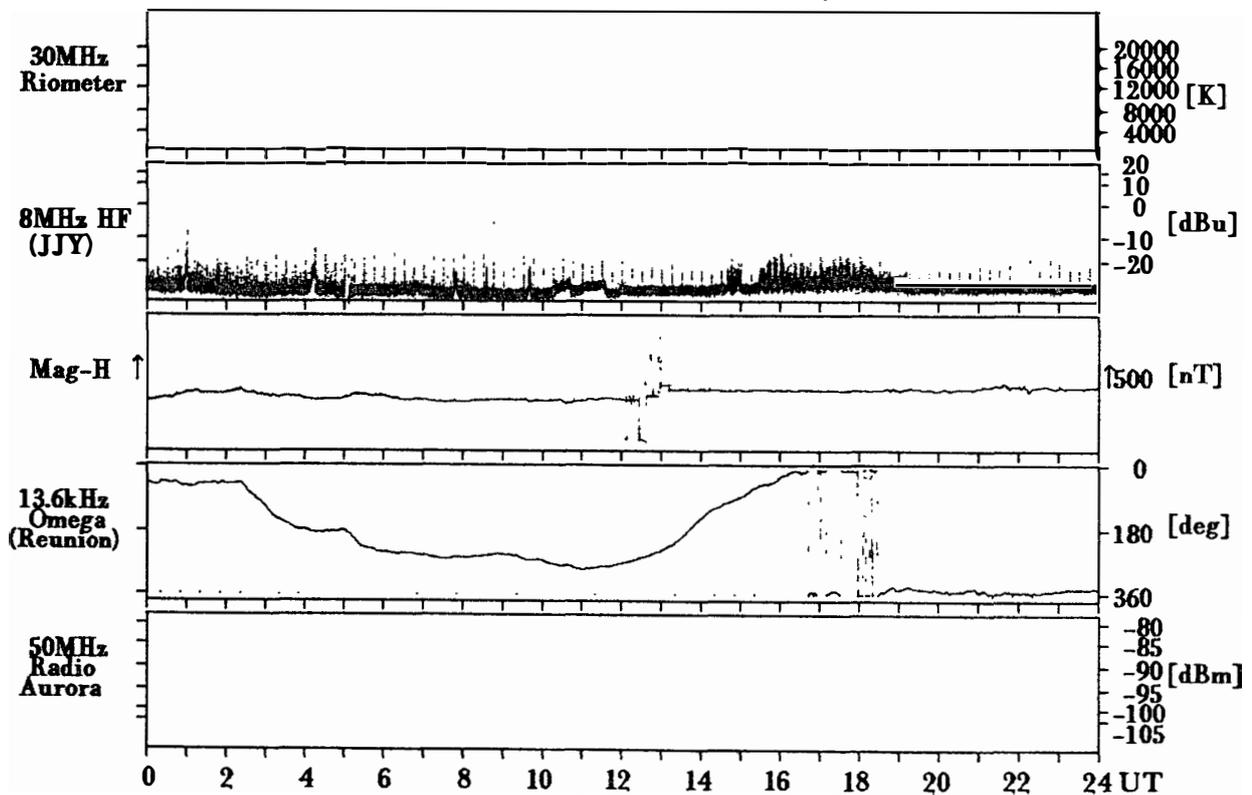
Syowa Station

Total Day / 139 1995/ 5/19



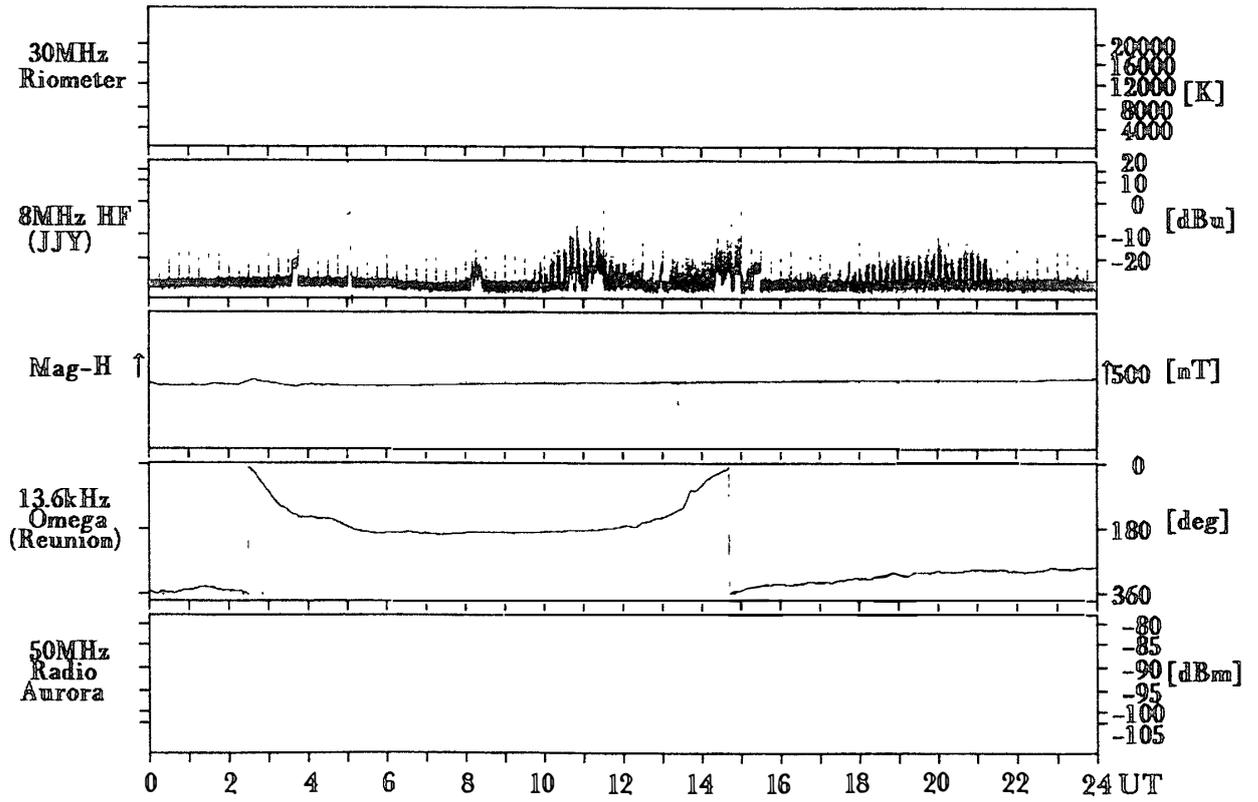
Syowa Station

Total Day / 140 1995/ 5/20



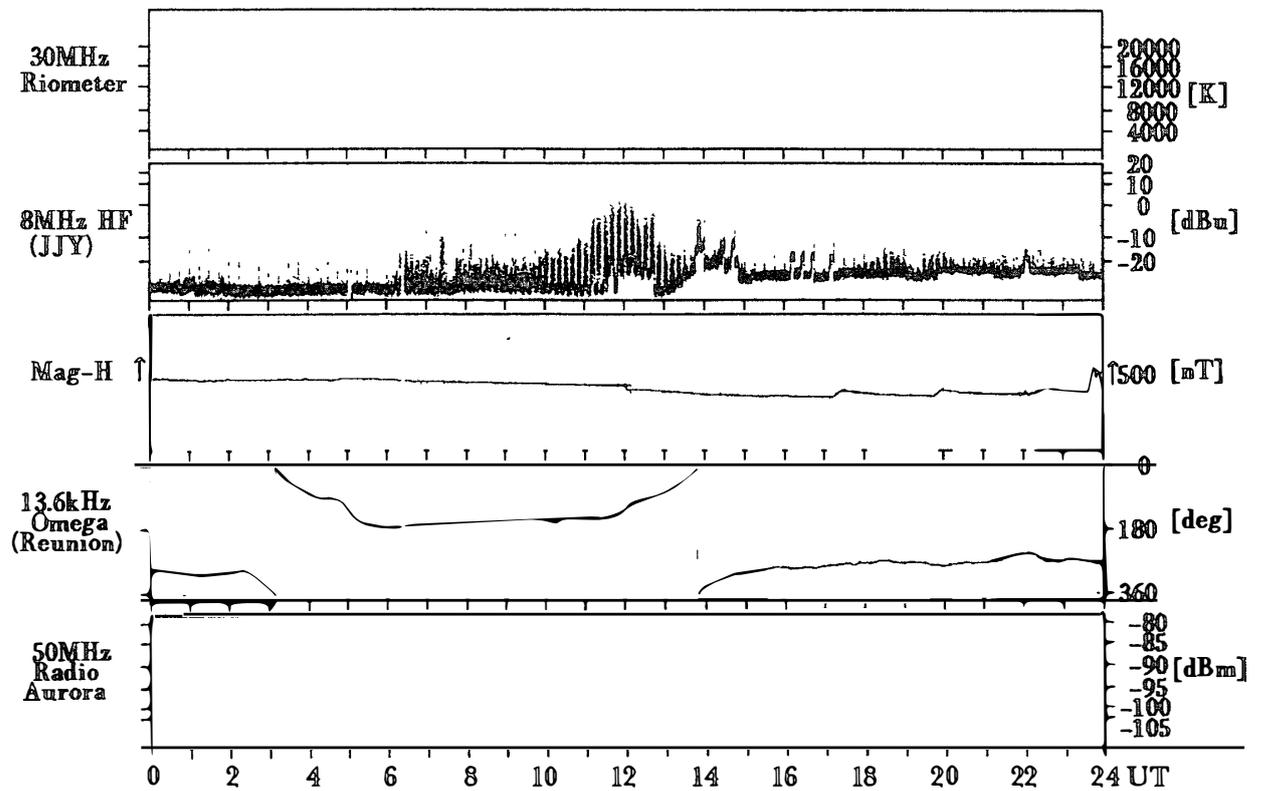
Syowa Station

Total Day / 141 1995/ 5/21



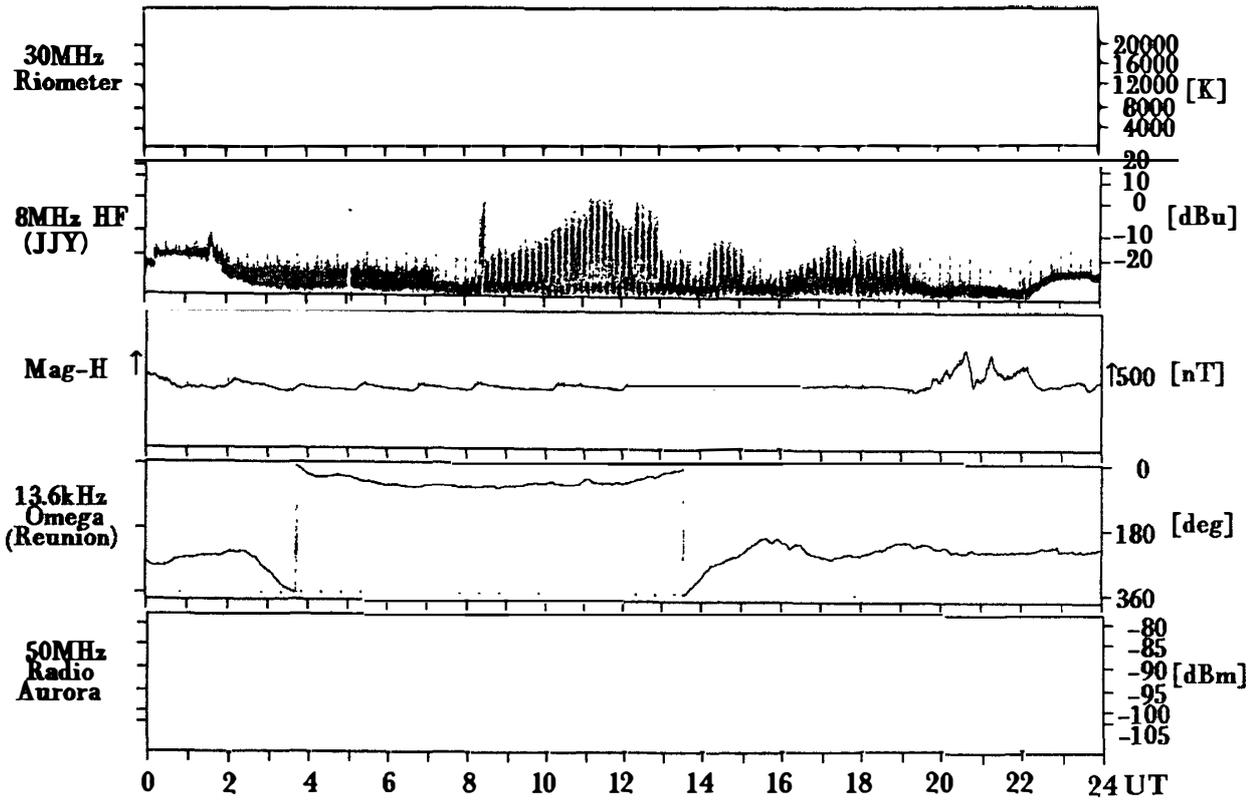
Syowa Station

Total Day / 142 1995/ 5/22



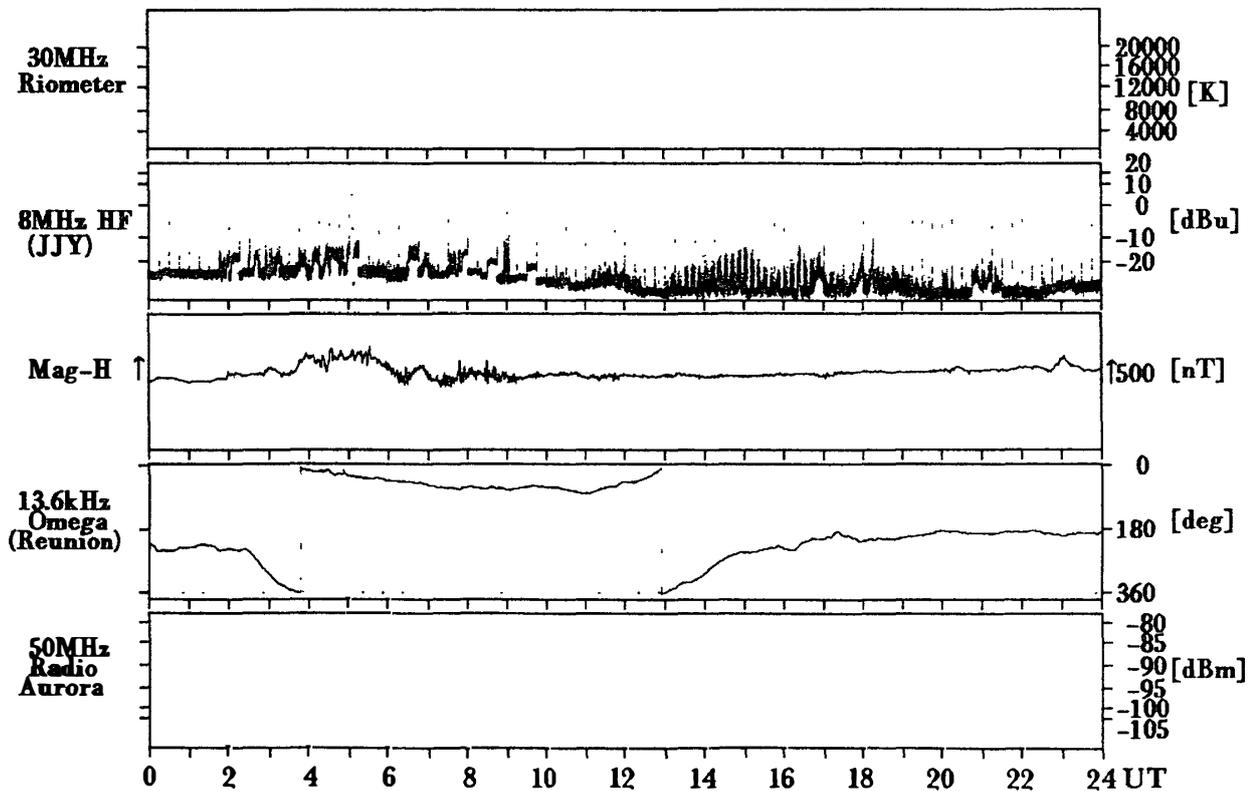
Syowa Station

Total Day / 143 1995/ 5/23



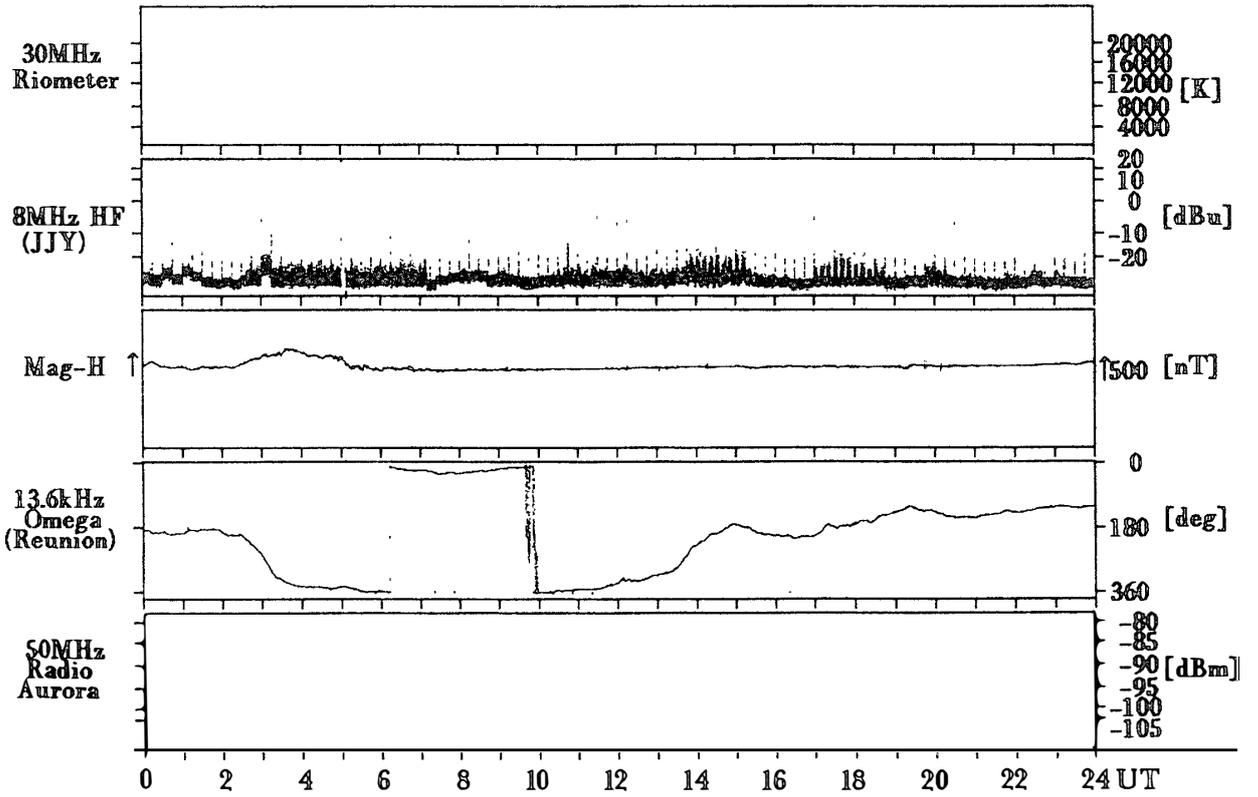
Syowa Station

Total Day / 144 1995/ 5/24



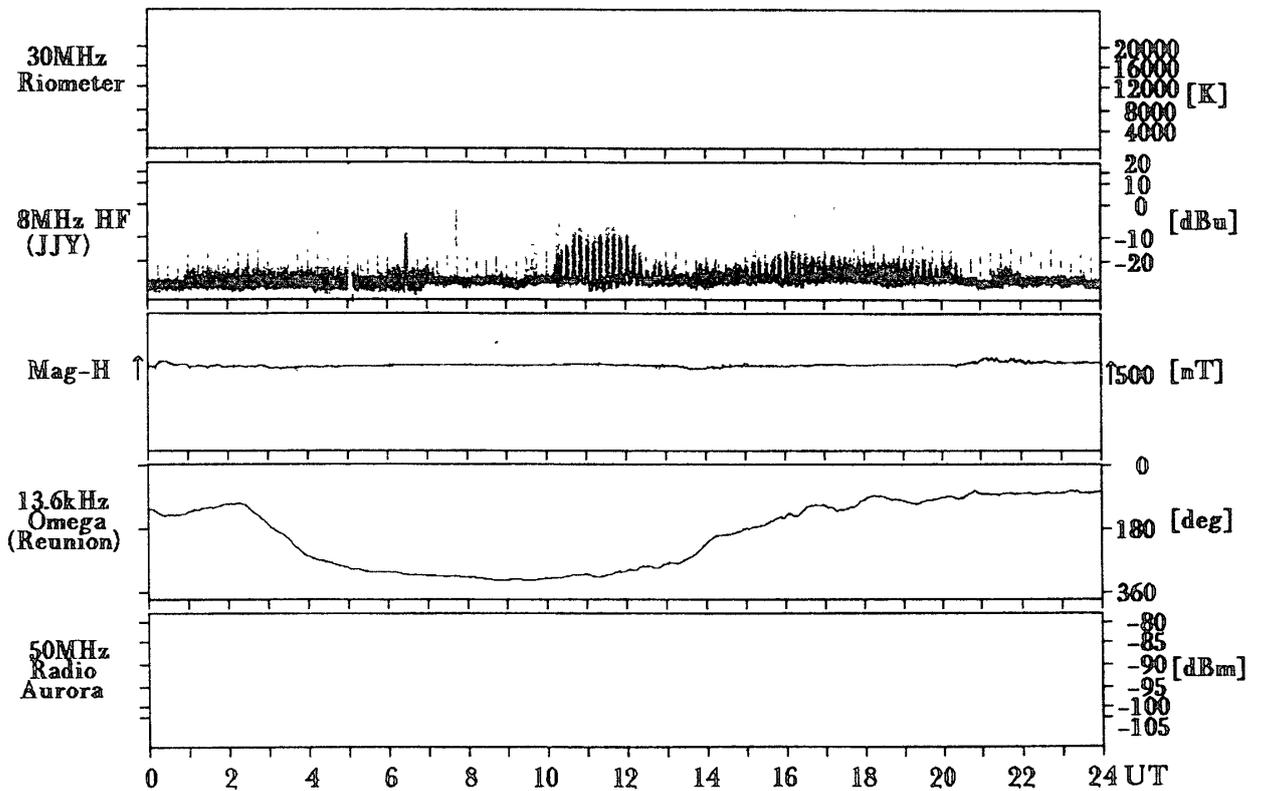
Syowa Station

Total Day / 145 1995/ 5/25



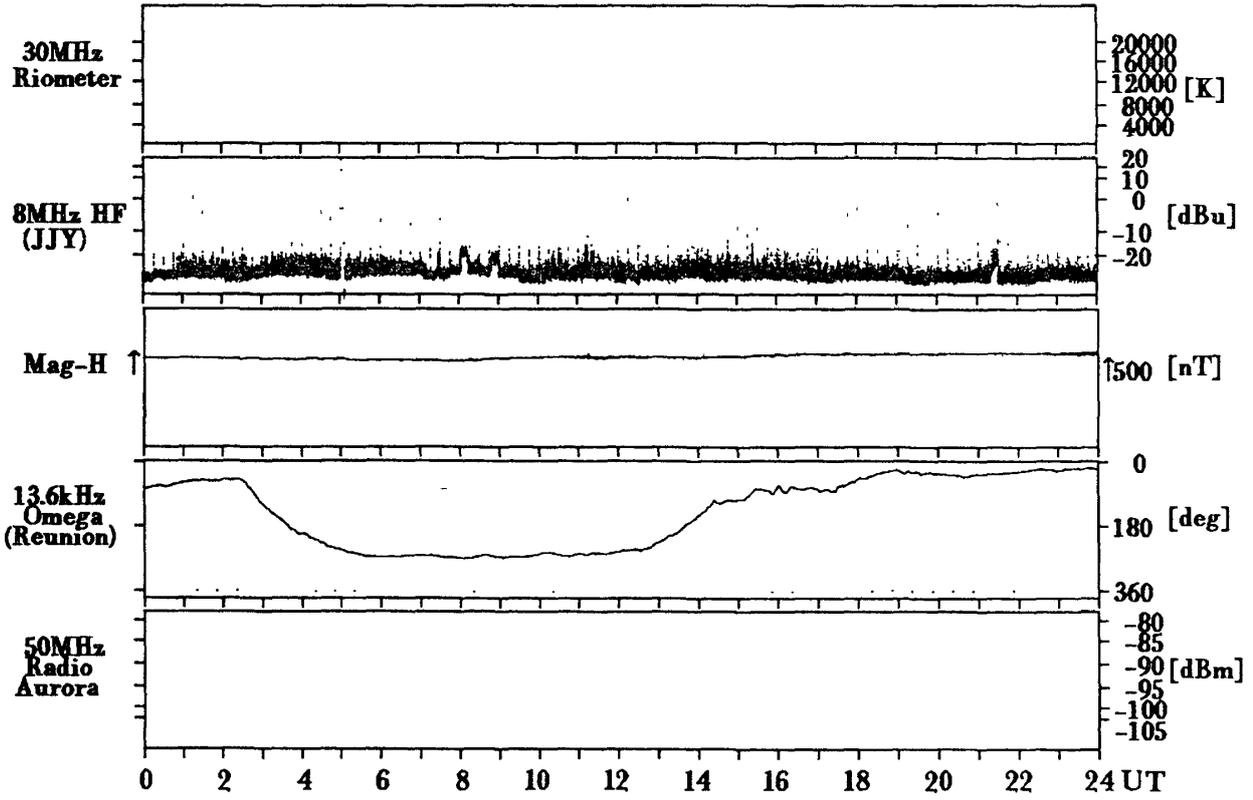
Syowa Station

Total Day / 146 1995/ 5/26



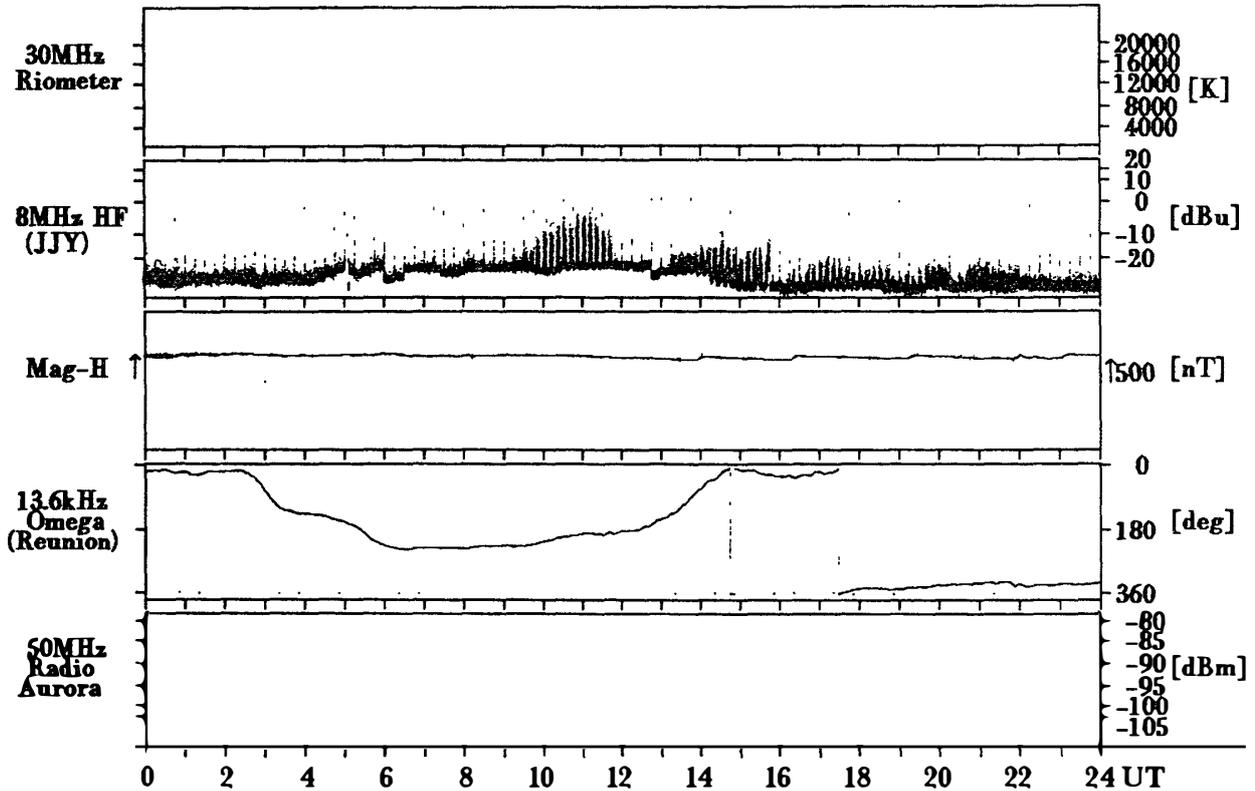
Syowa Station

Total Day / 147 1995/ 5/27



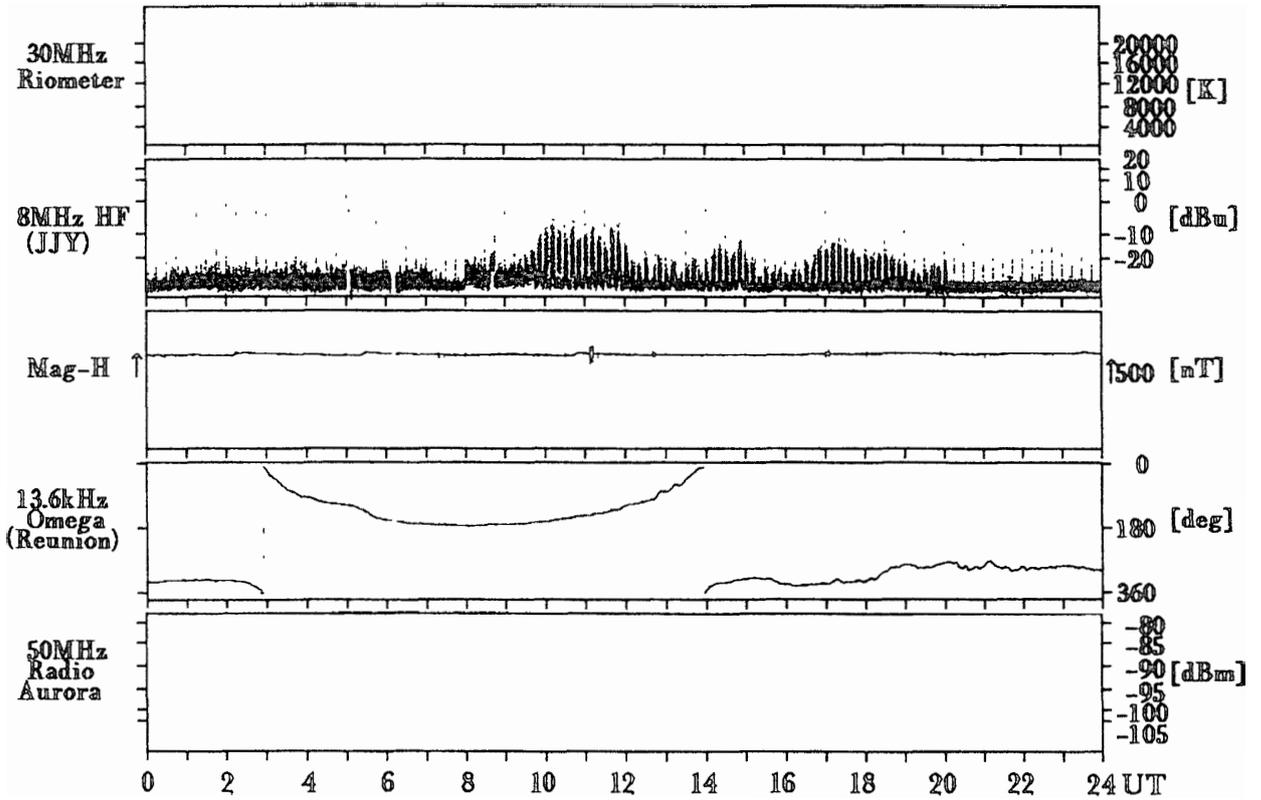
Syowa Station

Total Day / 148 1995/ 5/28



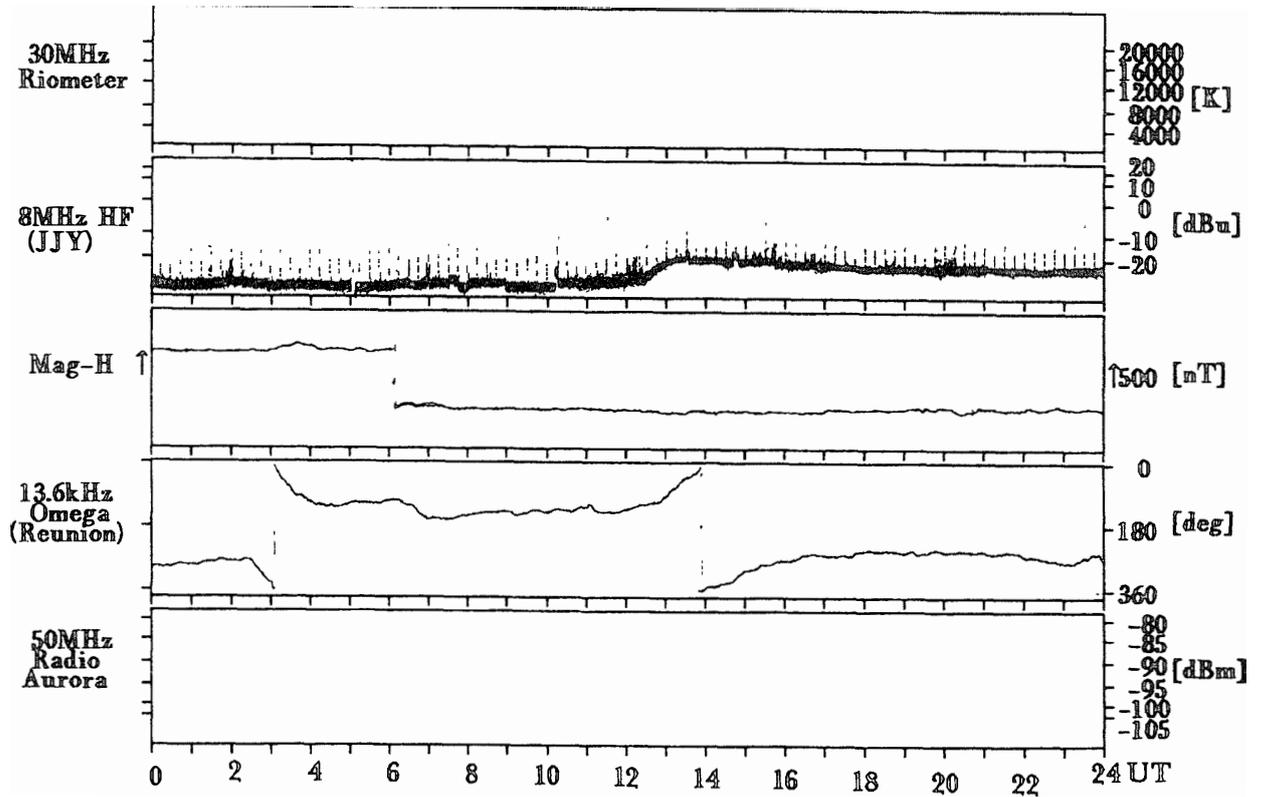
Syowa Station

Total Day / 149 1995/ 5/29



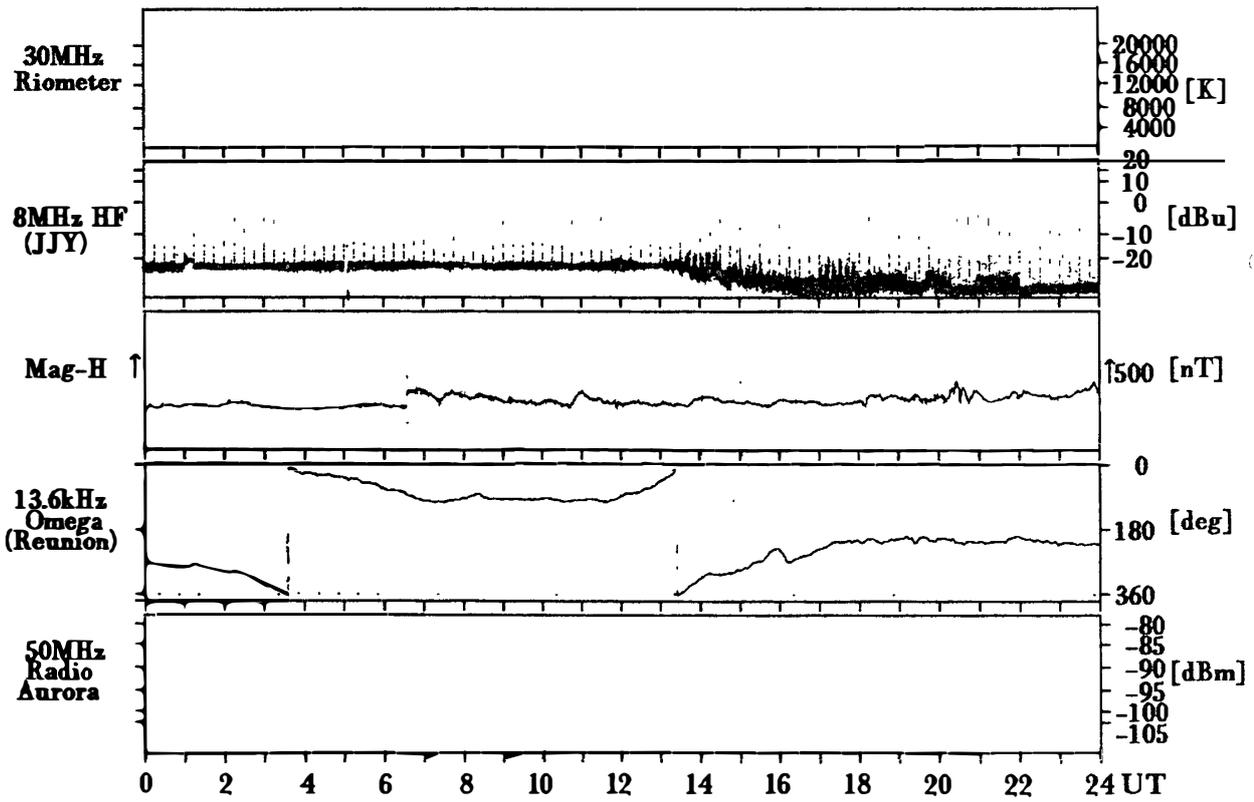
Syowa Station

Total Day / 150 1995/ 5/30



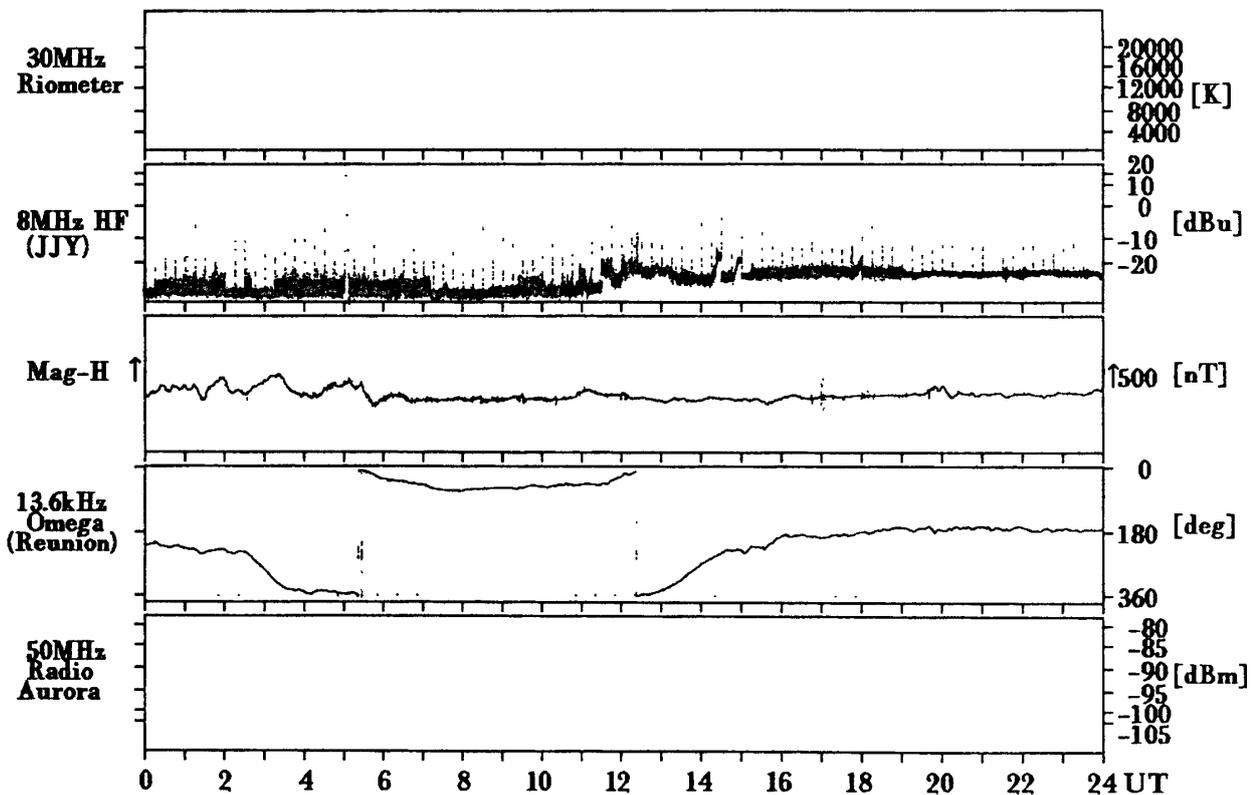
Syowa Station

Total Day / 151 1995/ 5/31



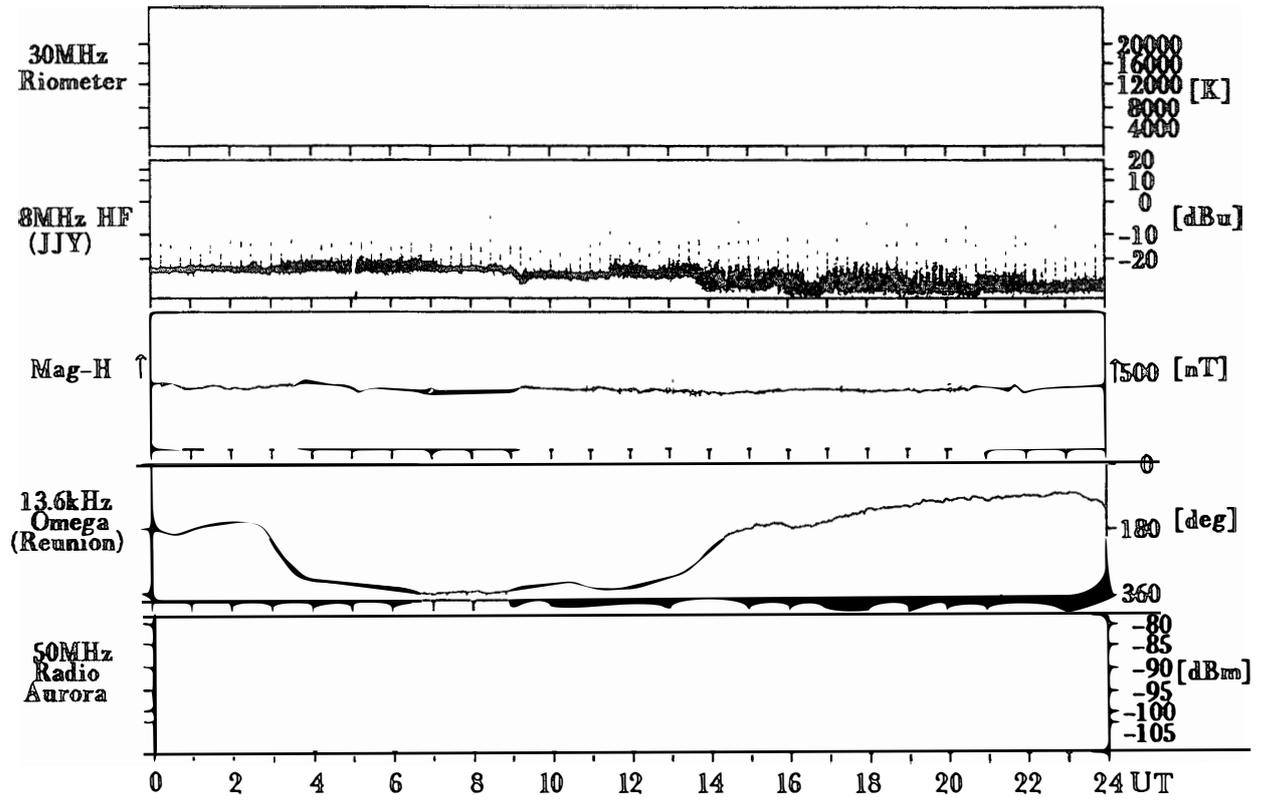
Syowa Station

Total Day / 152 1995/ 6/ 1



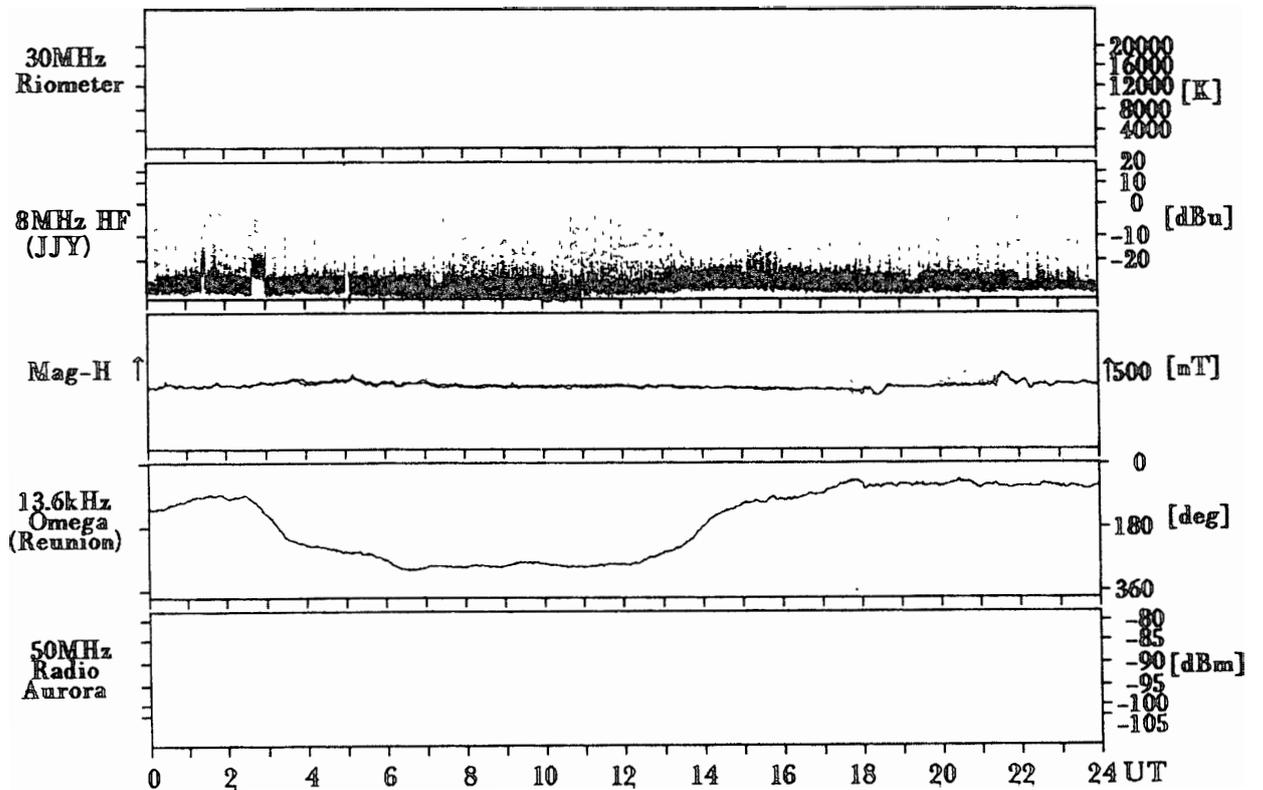
Syowa Station

Total Day / 153 1995/ 6/ 2



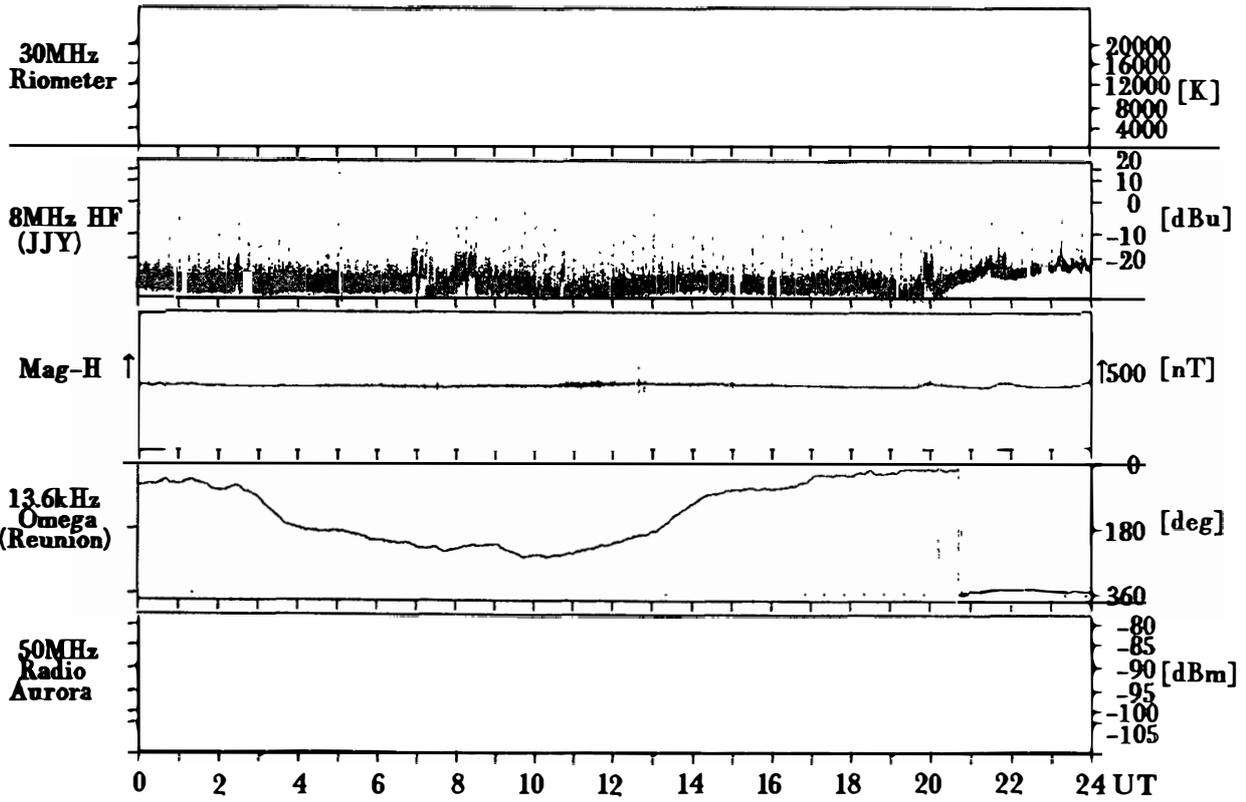
Syowa Station

Total Day / 154 1995/ 6/ 3



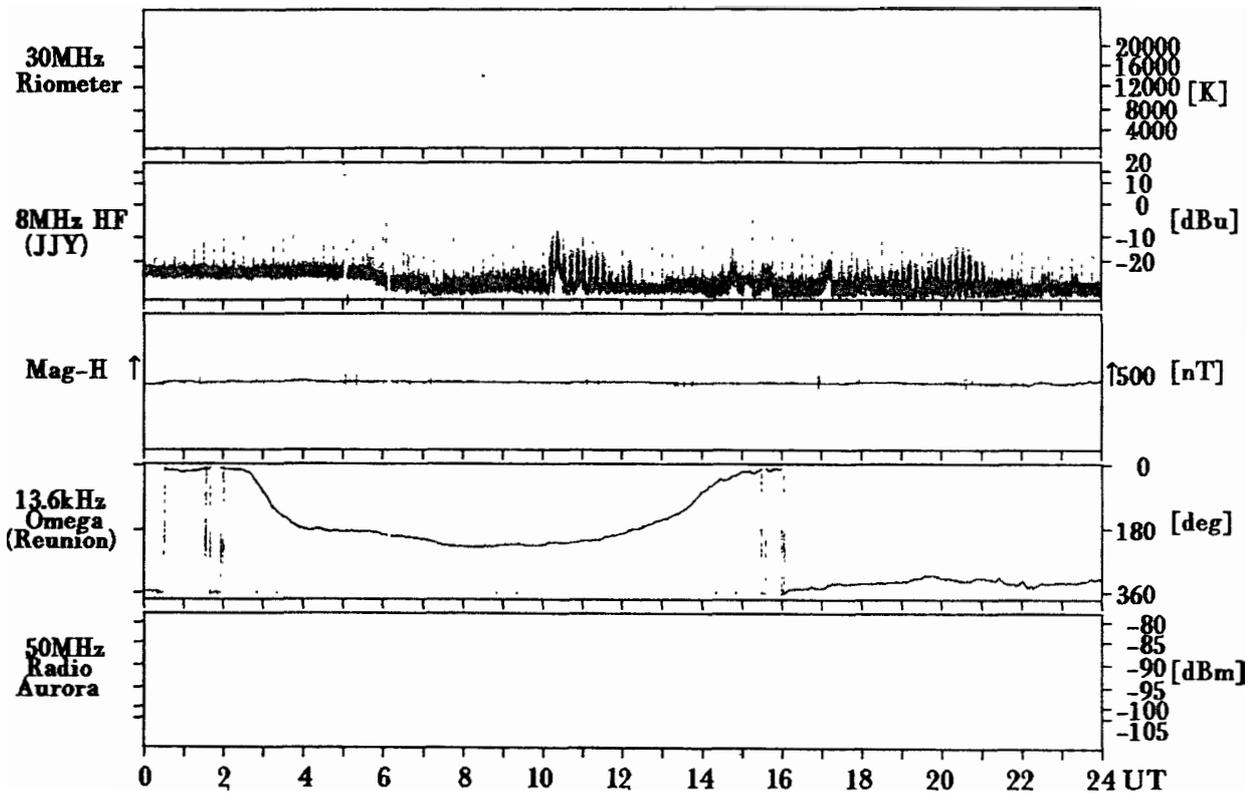
Syowa Station

Total Day / 155 1995/ 6/ 4



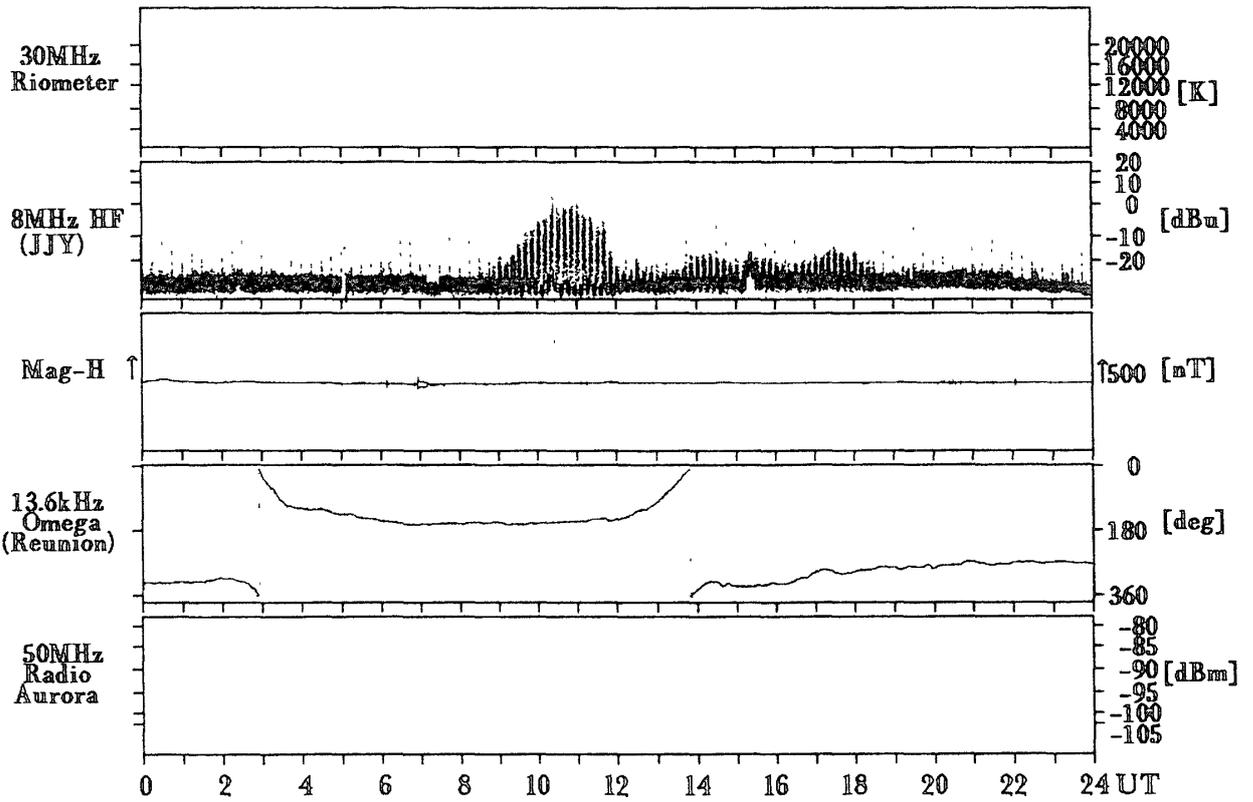
Syowa Station

Total Day / 156 1995/ 6/ 5



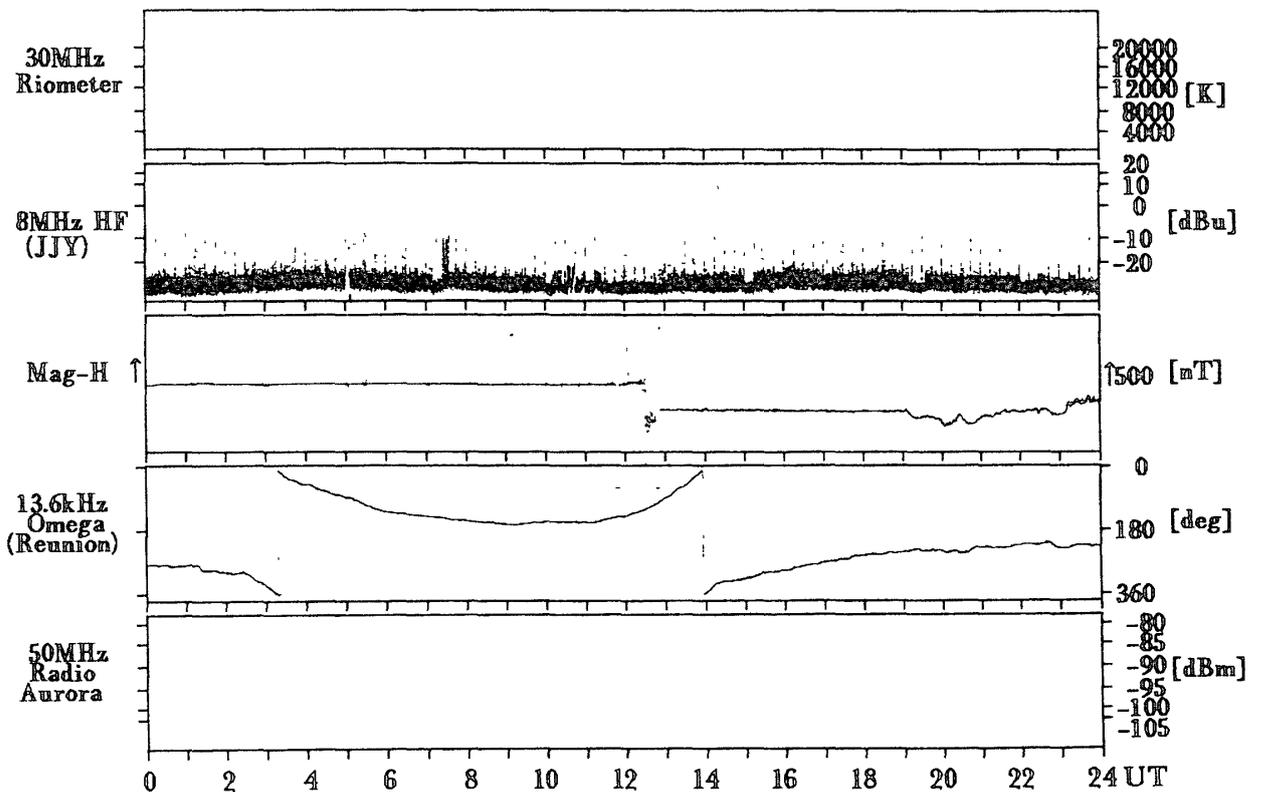
Syowa Station

Total Day / 157 1995/ 6/ 6



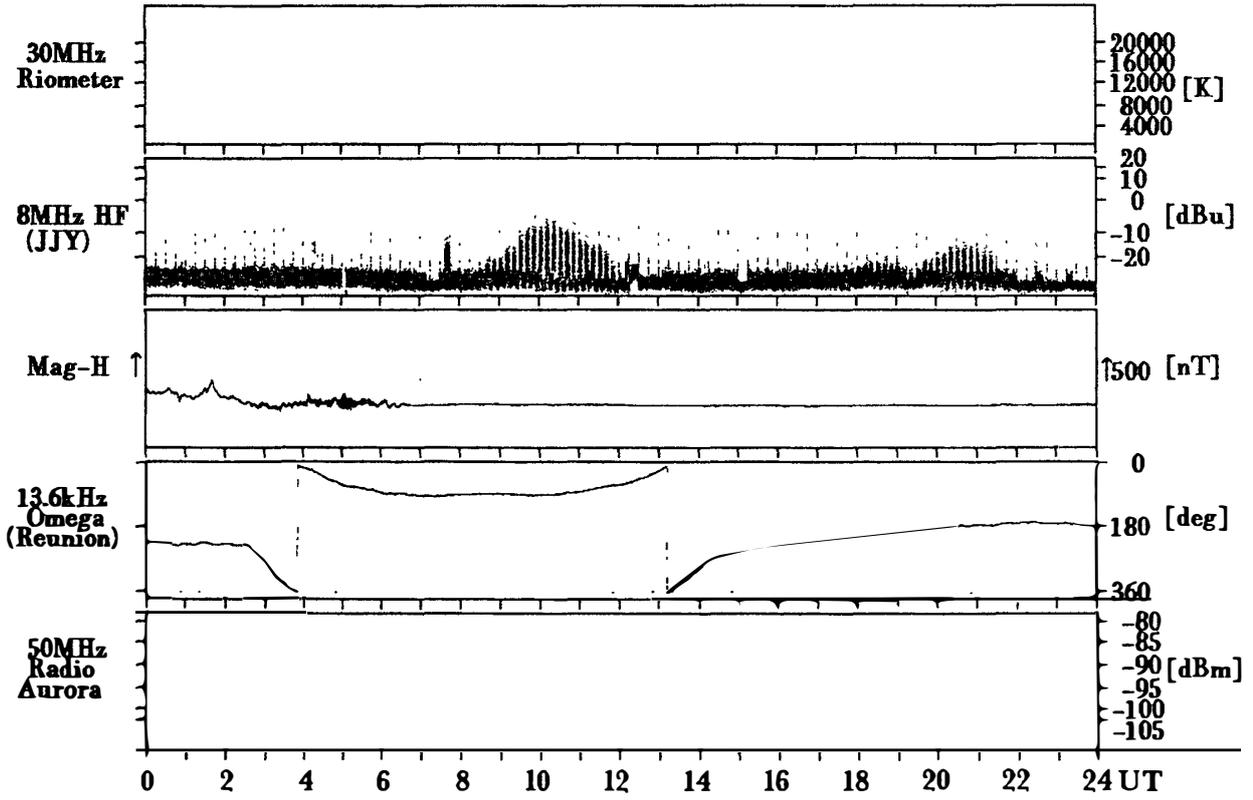
Syowa Station

Total Day / 158 1995/ 6/ 7



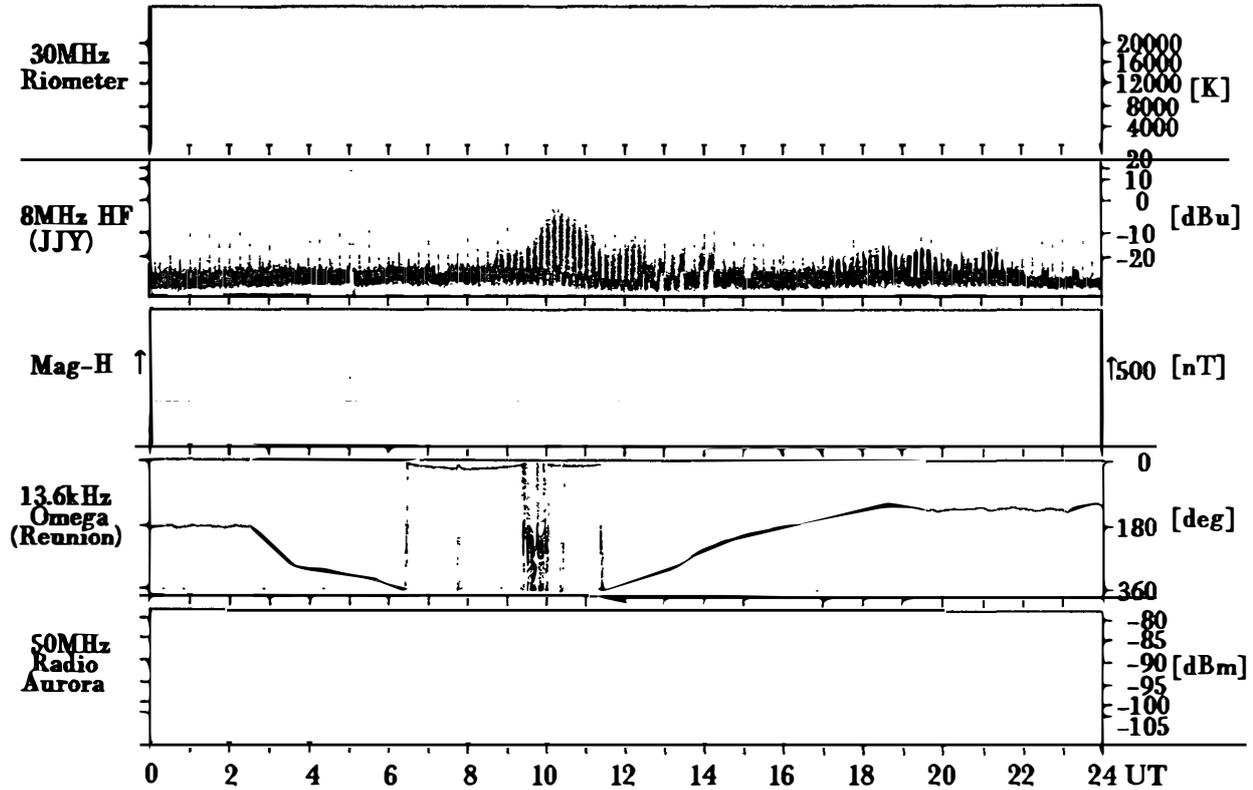
Syowa Station

Total Day / 159 1995/ 6/ 8



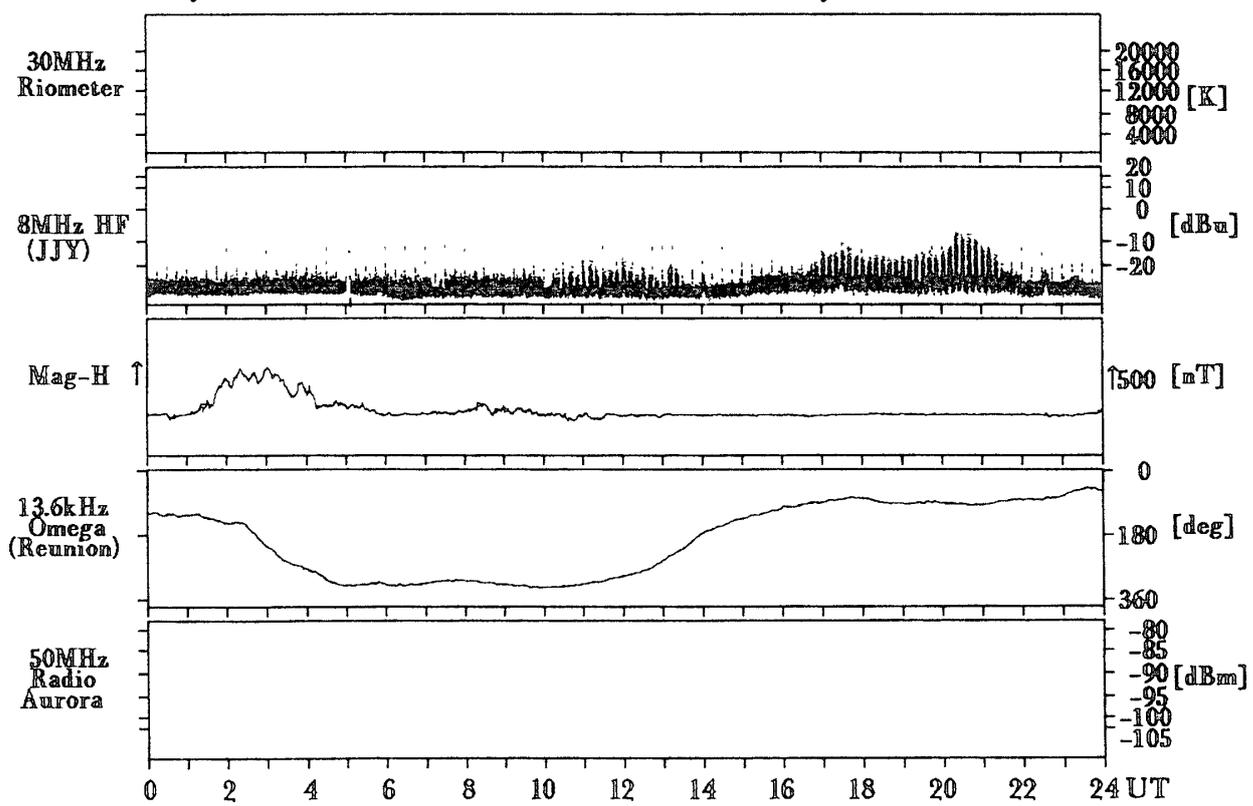
Syowa Station

Total Day / 160 1995/ 6/ 9



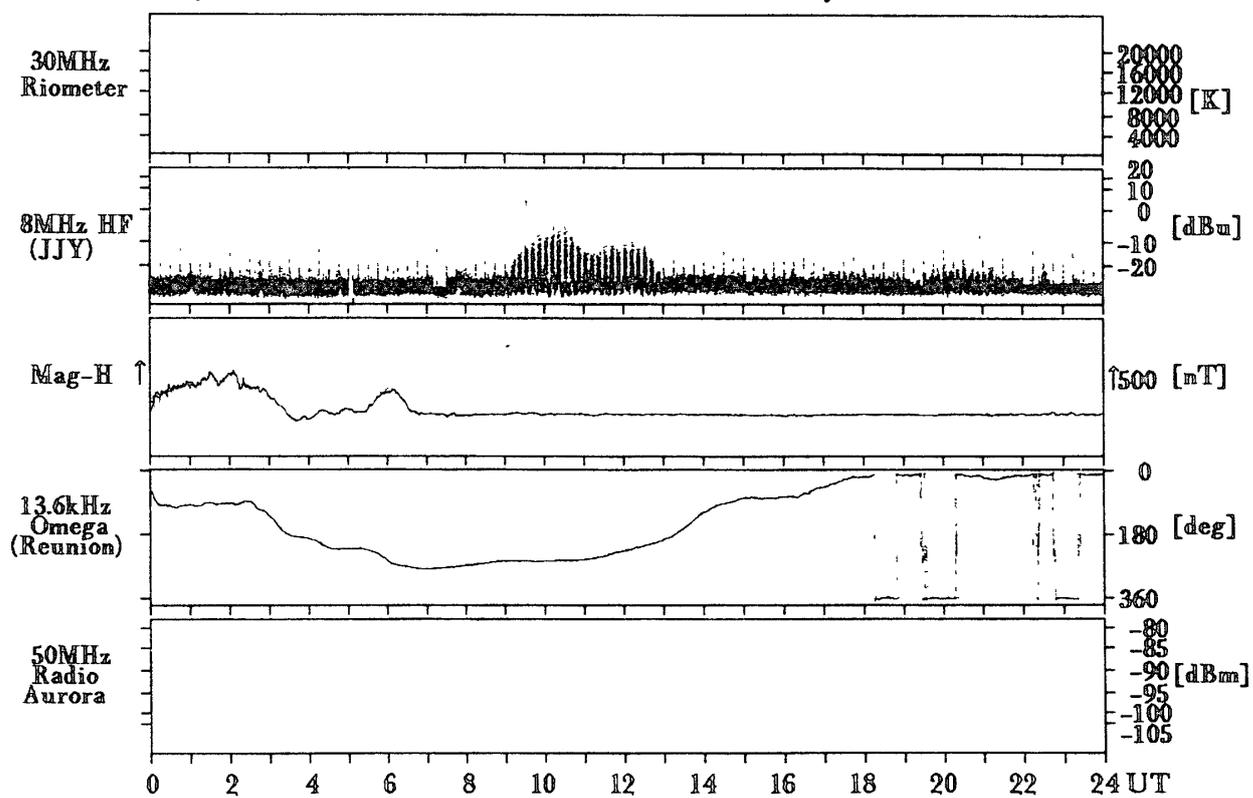
Syowa Station

Total Day / 161 1995/ 6/10



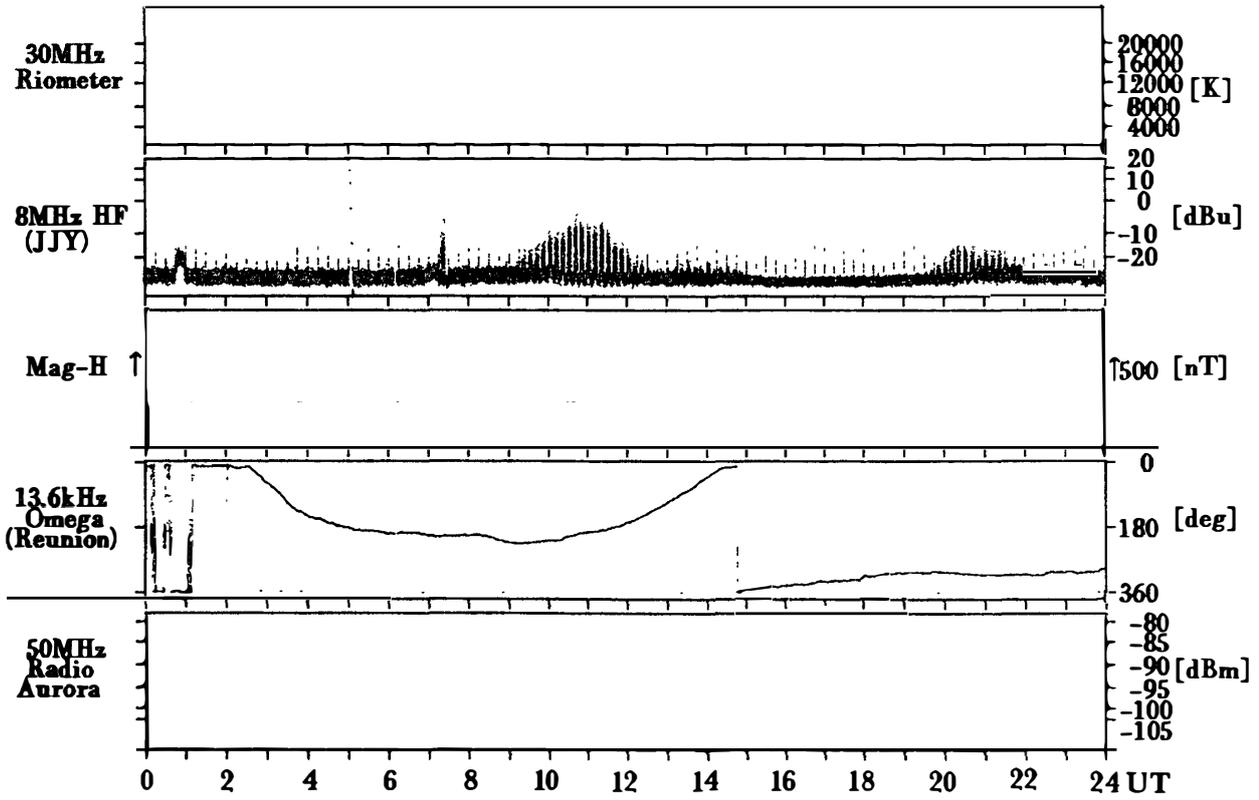
Syowa Station

Total Day / 162 1995/ 6/11



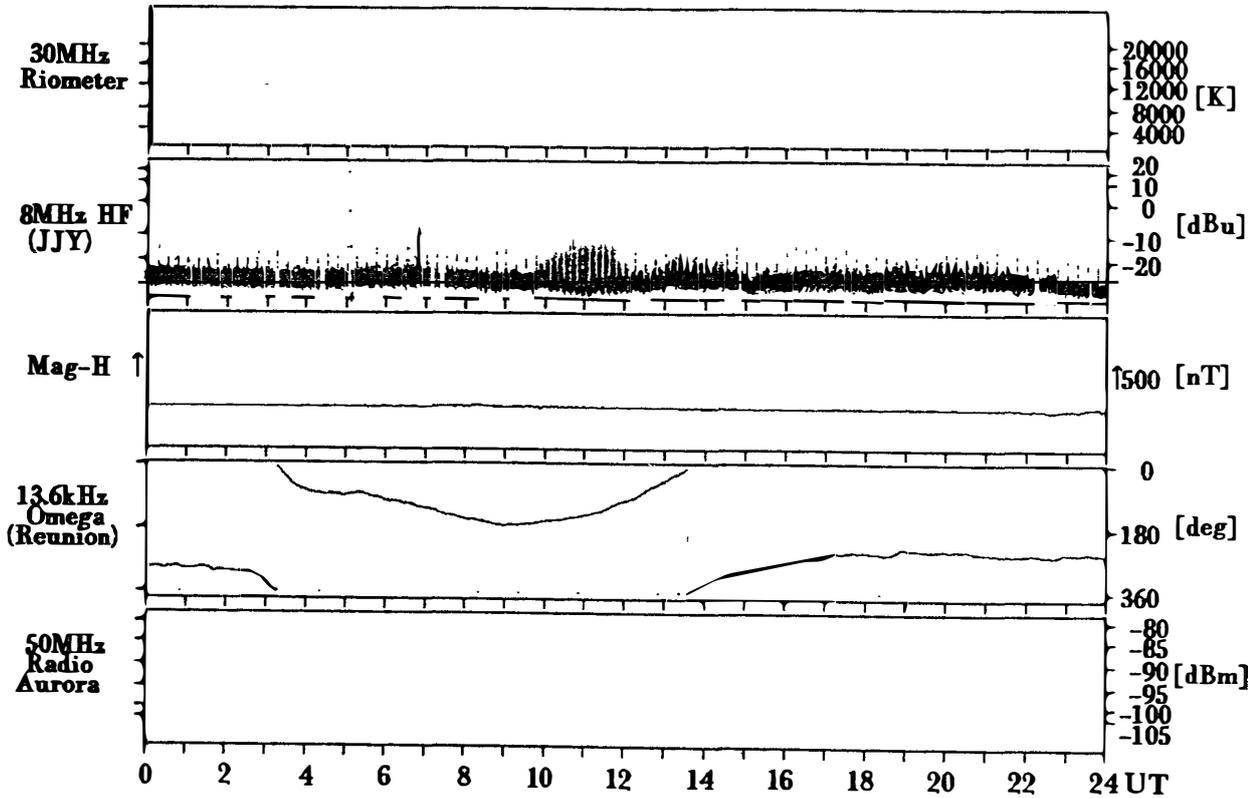
Syowa Station

Total Day / 163 1995/ 6/12



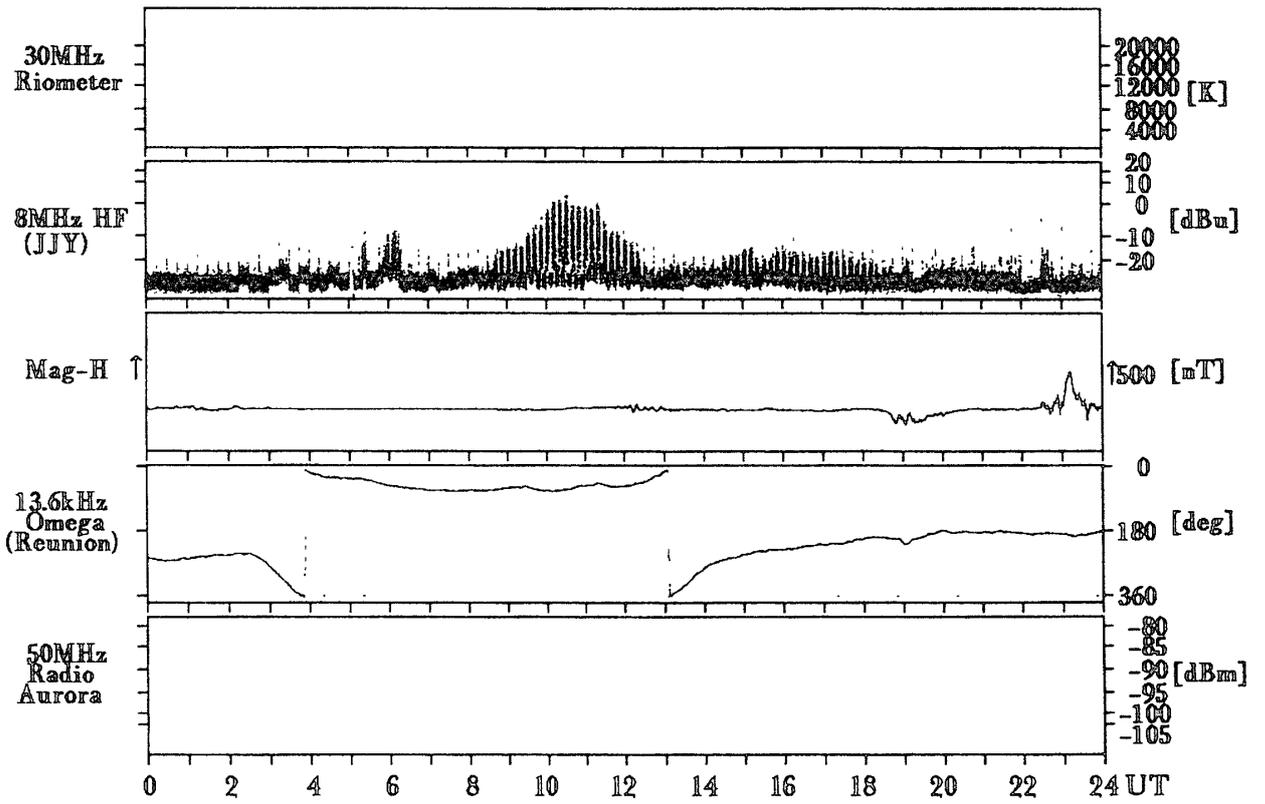
Syowa Station

Total Day / 164 1995/ 6/13



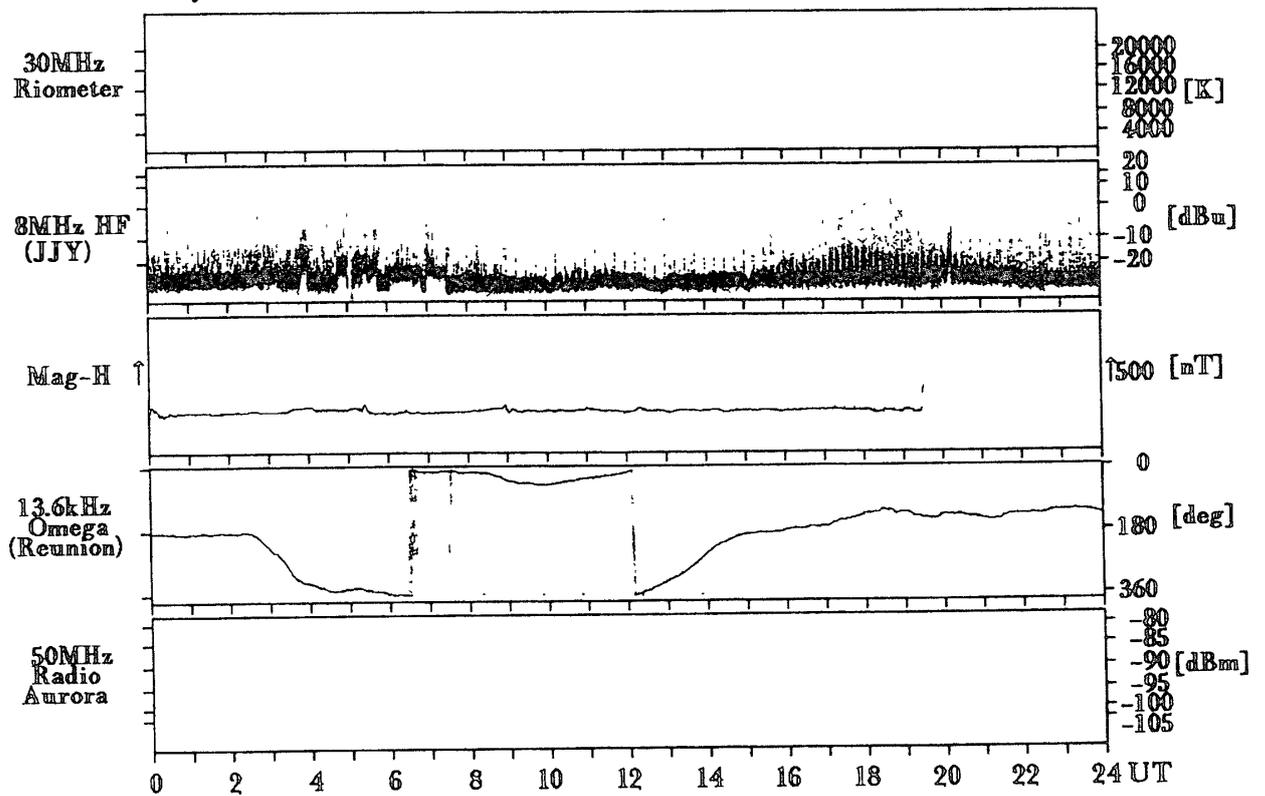
Syowa Station

Total Day / 165 1995/ 6/14



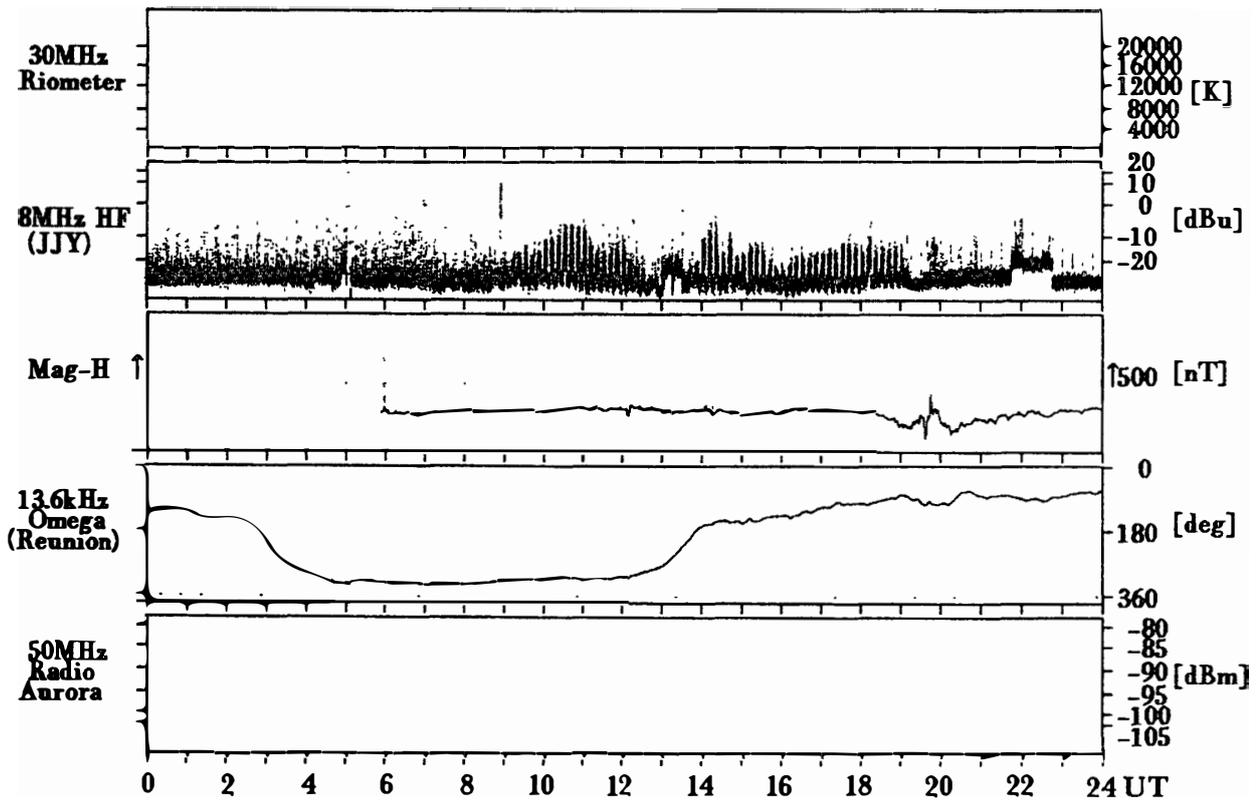
Syowa Station

Total Day / 166 1995/ 6/15



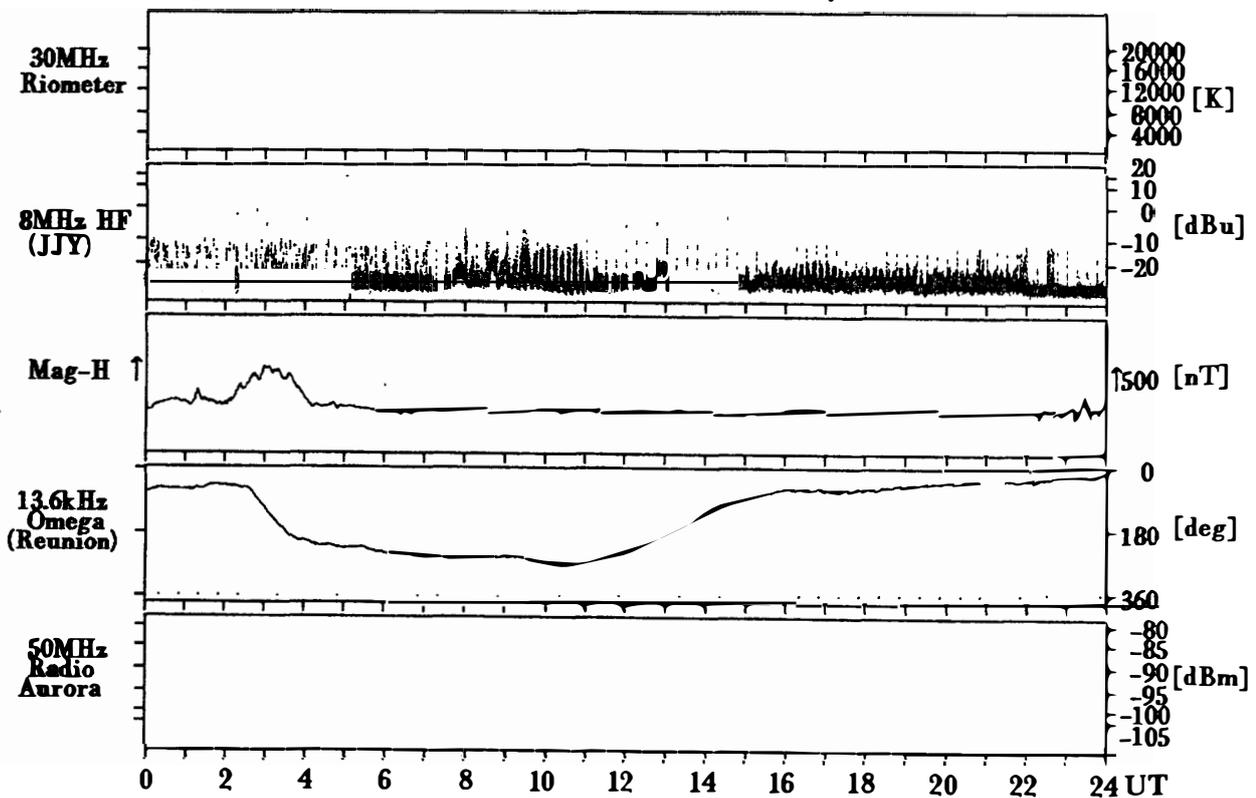
Syowa Station

Total Day / 167 1995/ 6/16



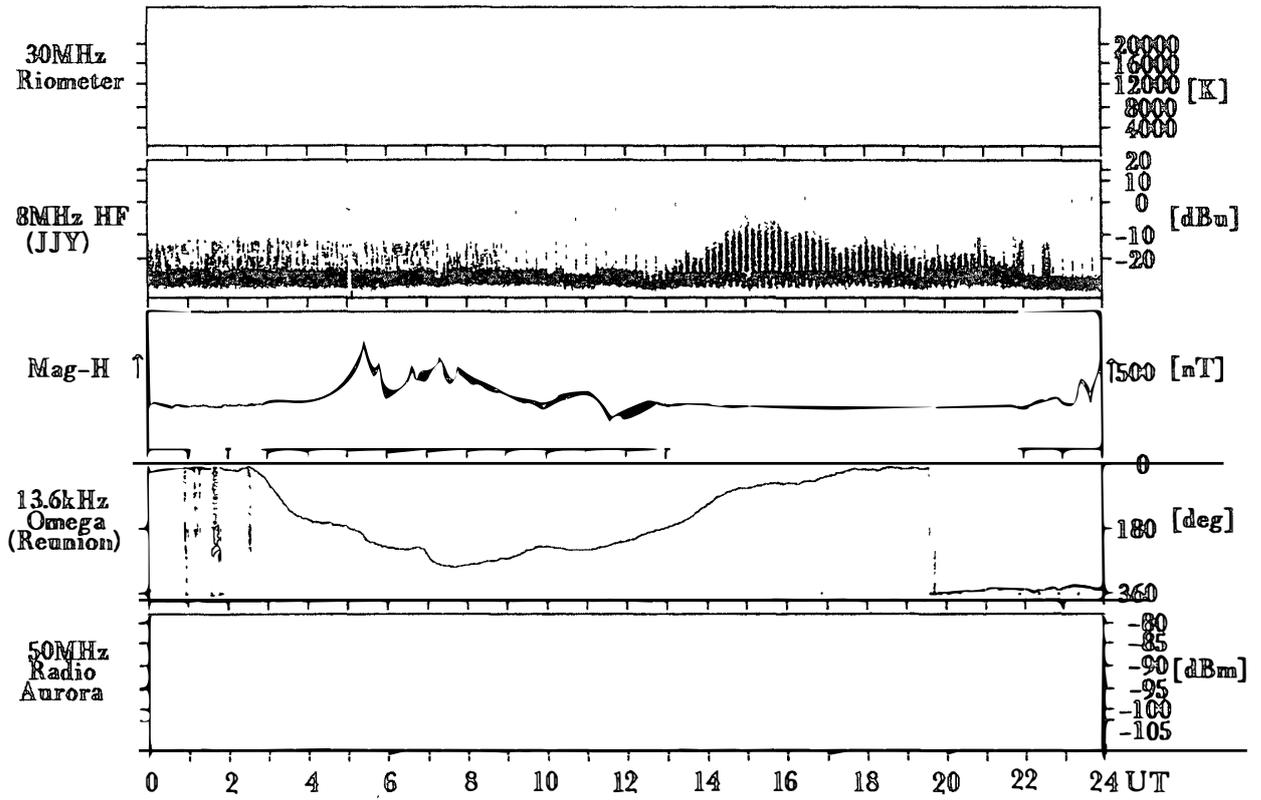
Syowa Station

Total Day / 168 1995/ 6/17



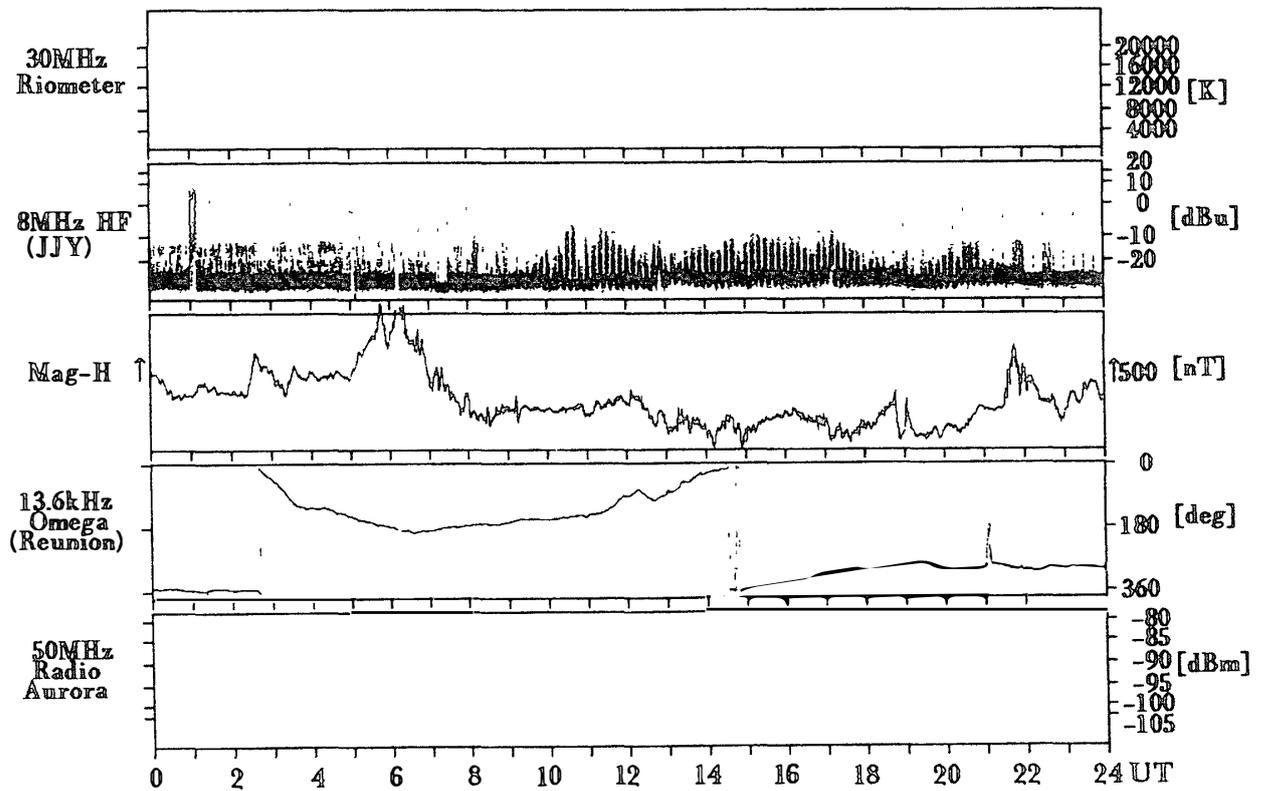
Syowa Station

Total Day / 169 1995/ 6/18



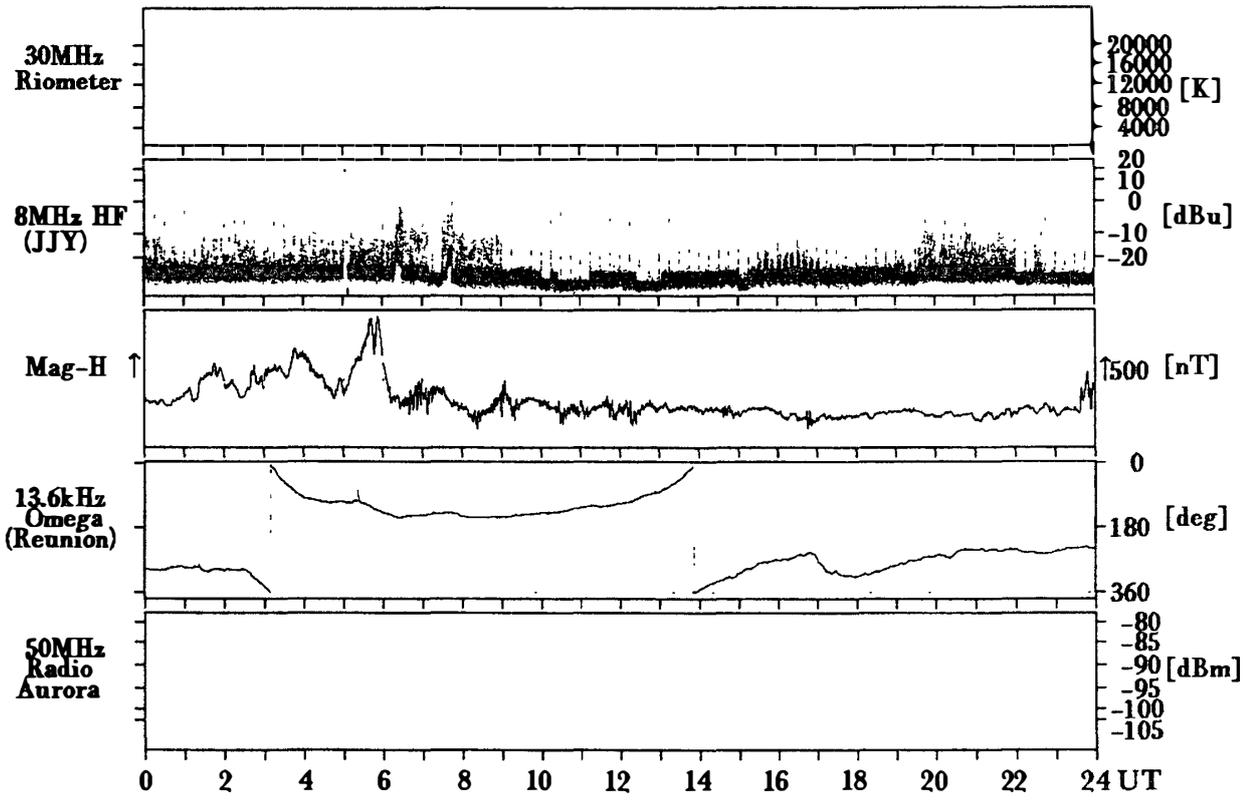
Syowa Station

Total Day / 170 1995/ 6/19



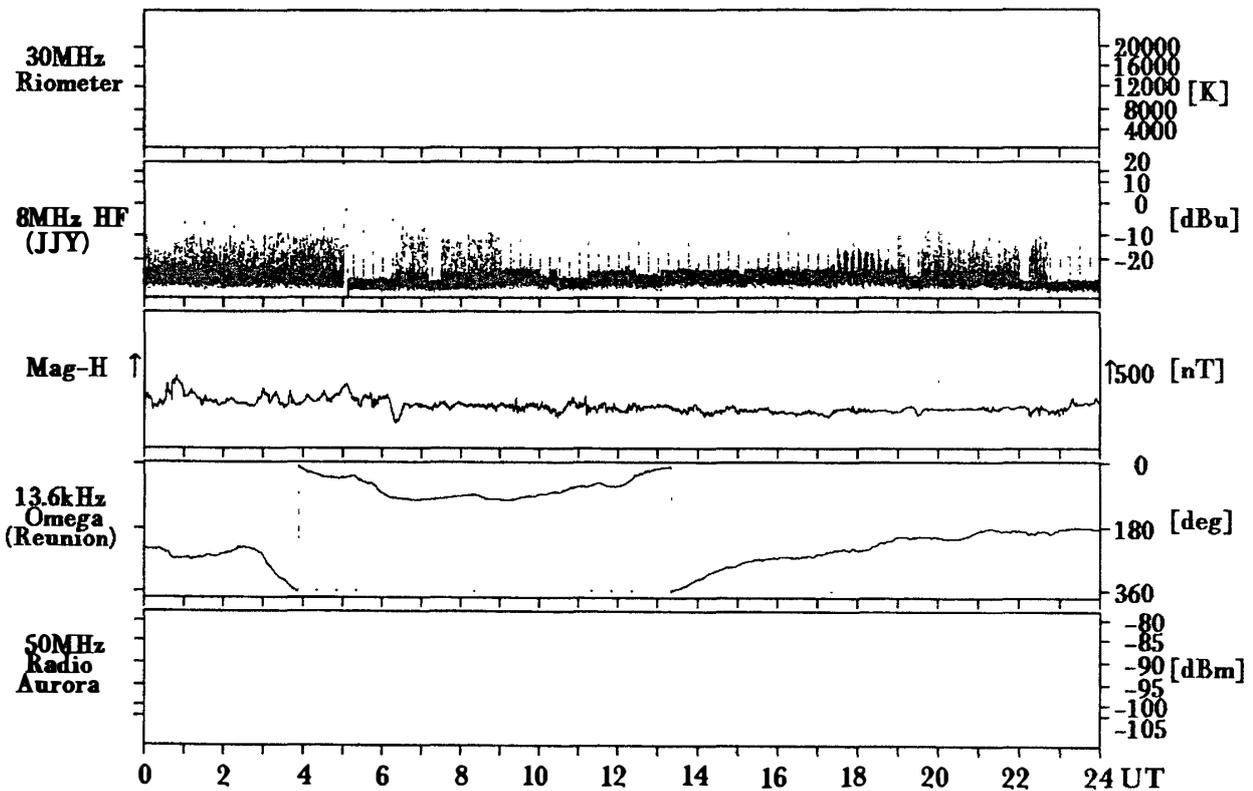
Syowa Station

Total Day / 171 1995/ 6/20



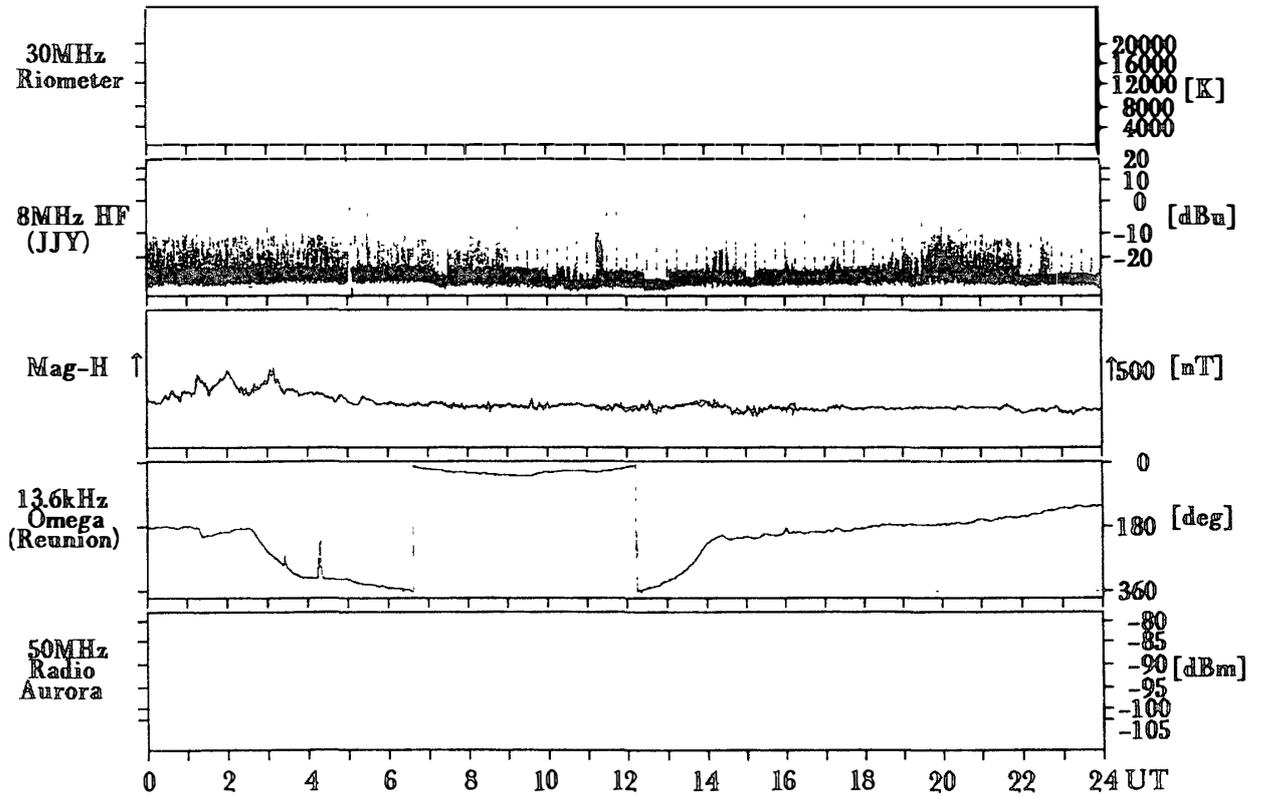
Syowa Station

Total Day / 172 1995/ 6/21



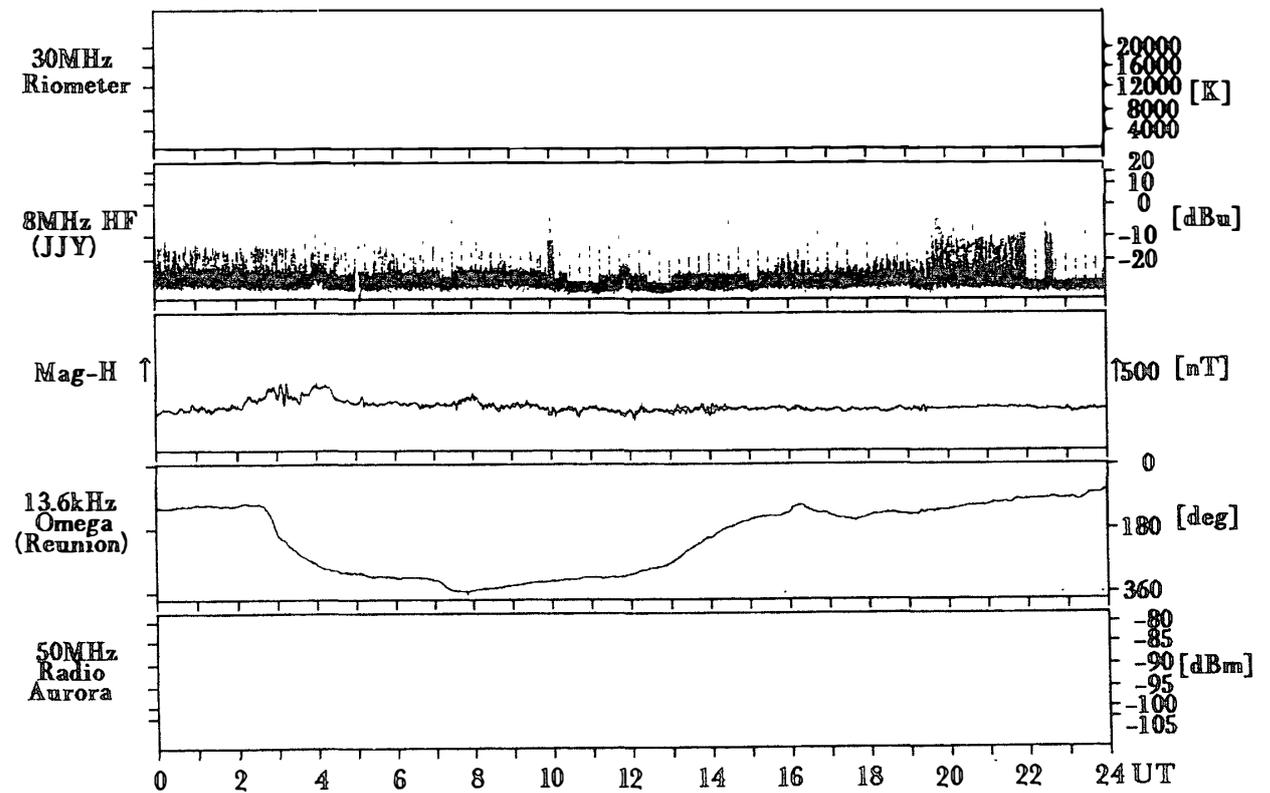
Syowa Station

Total Day / 173 1995/ 6/22



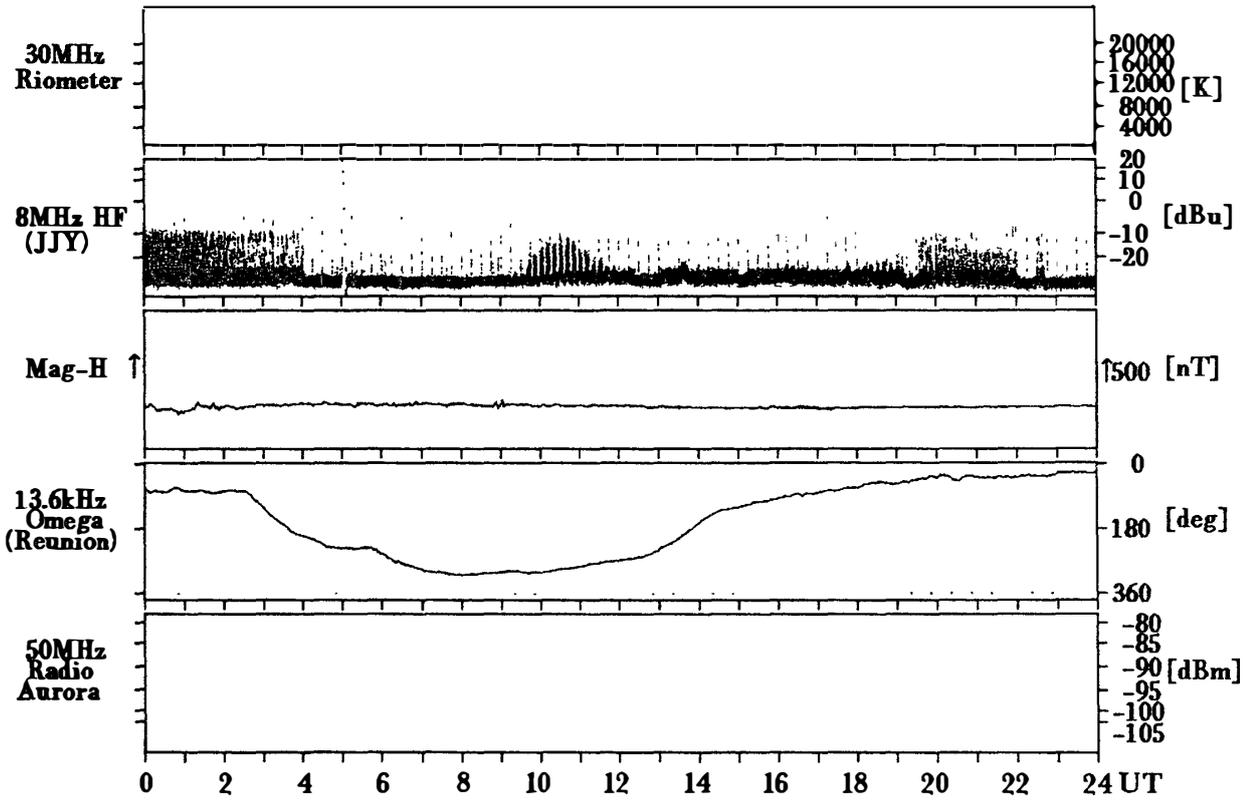
Syowa Station

Total Day / 174 1995/ 6/23



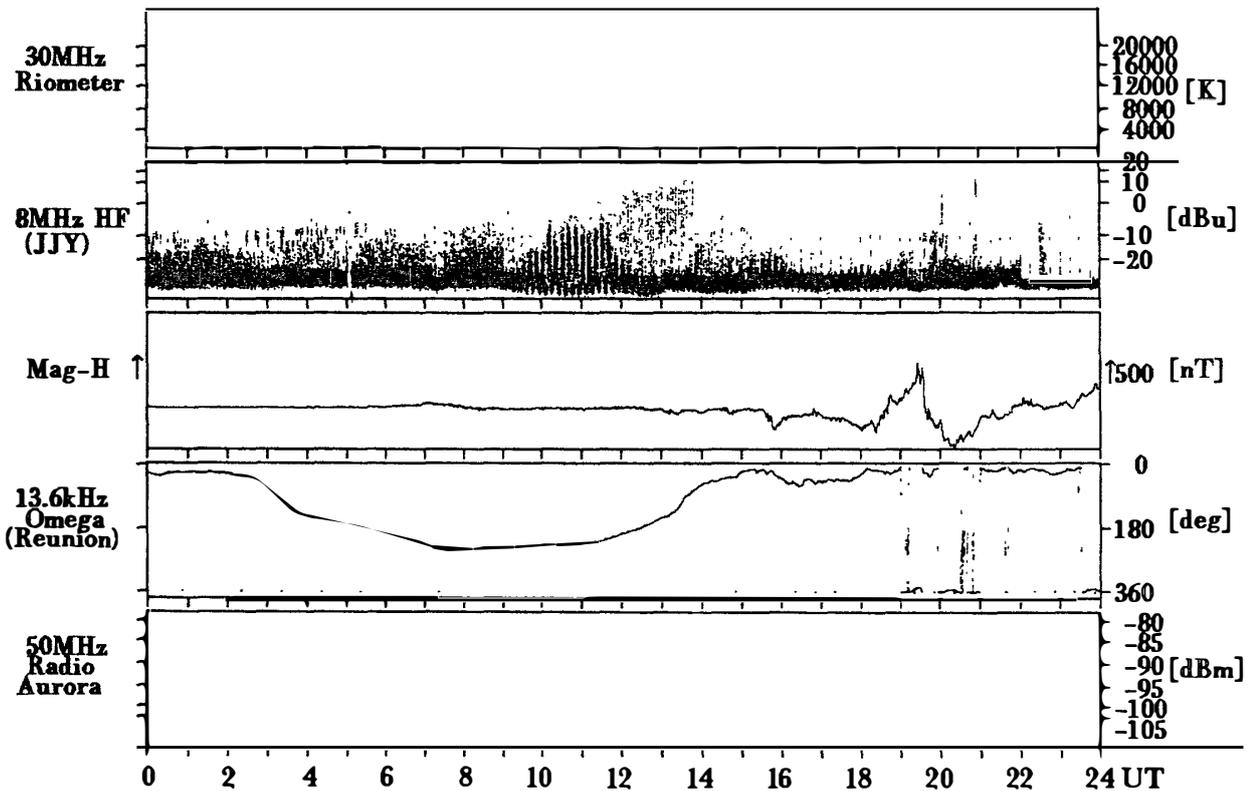
Syowa Station

Total Day / 175 1995/ 6/24



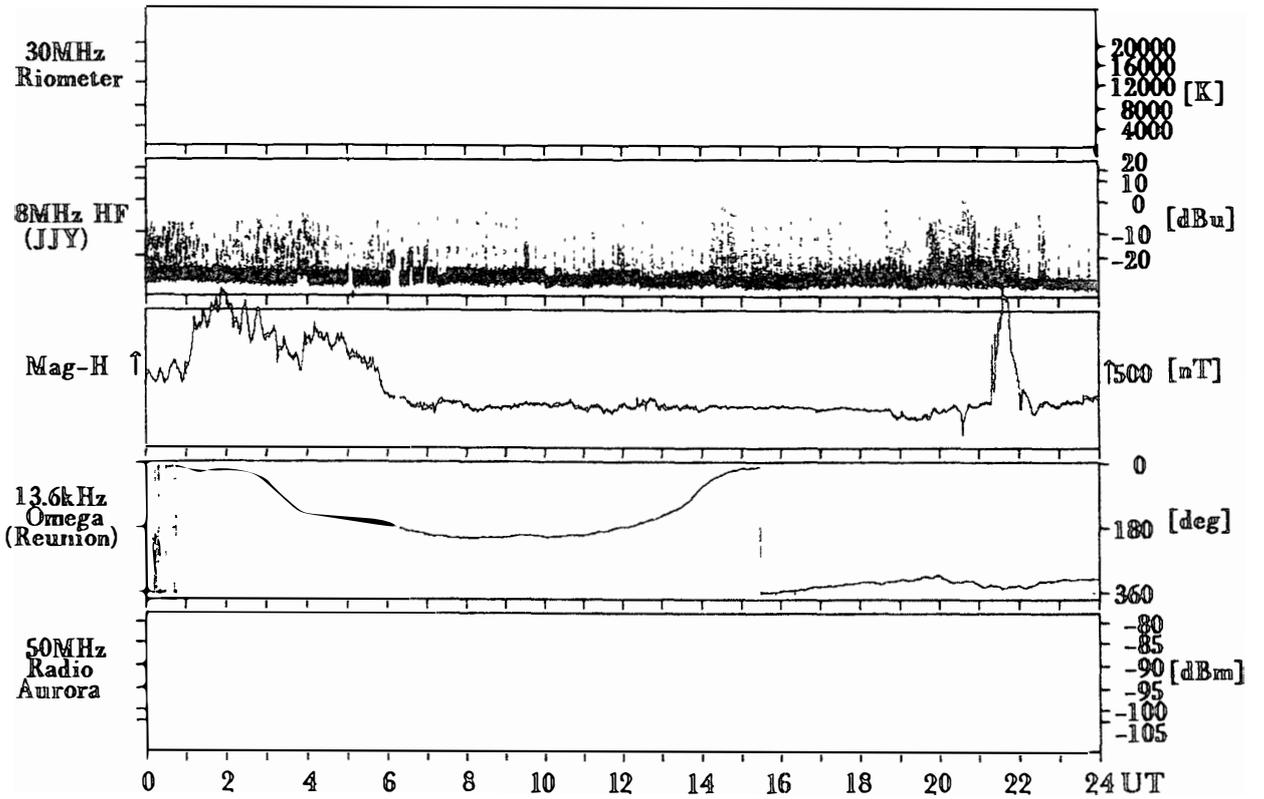
Syowa Station

Total Day / 176 1995/ 6/25



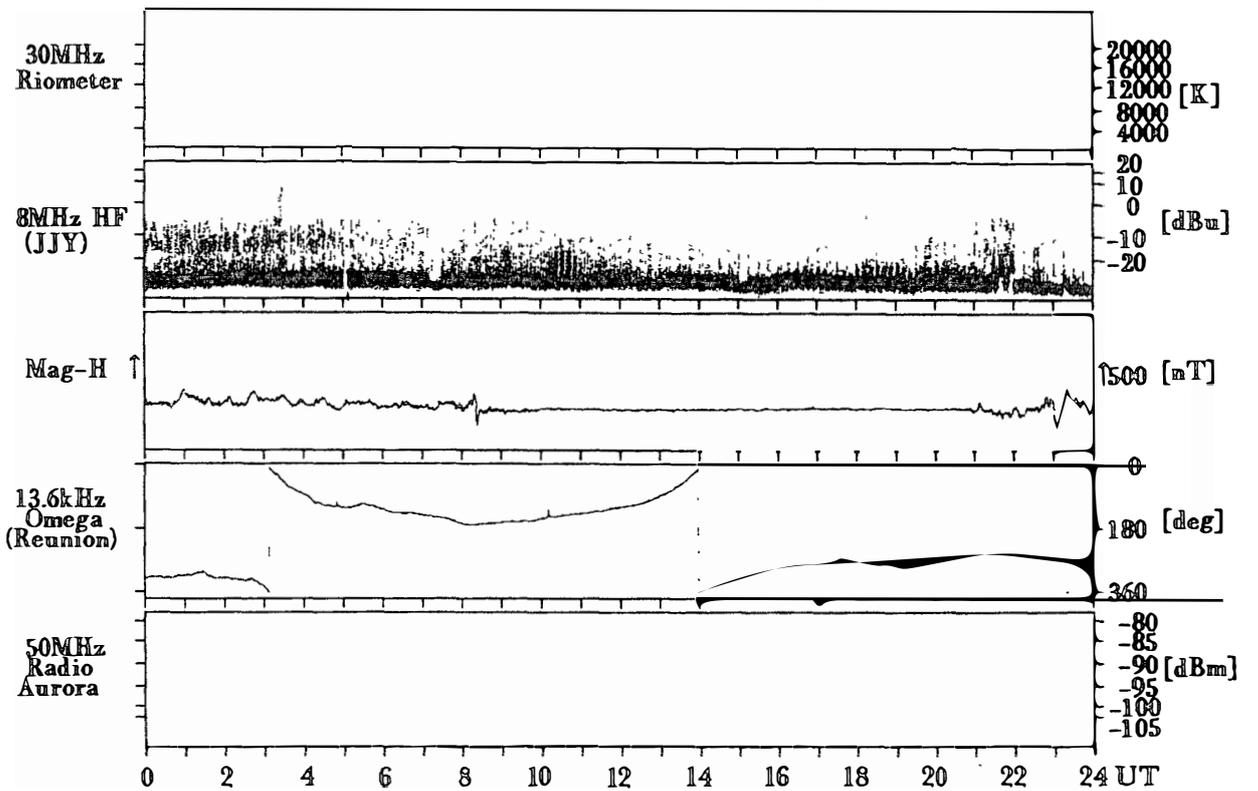
Syowa Station

Total Day / 177 1995/ 6/26



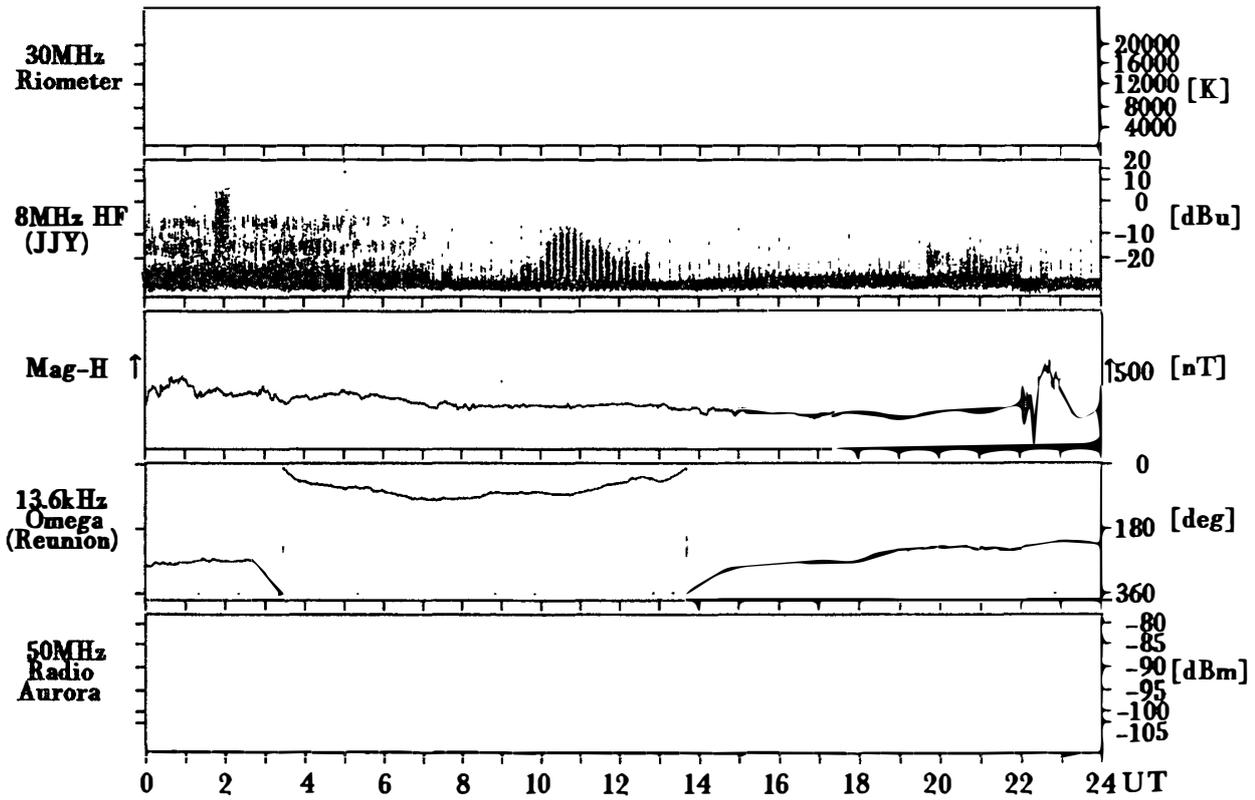
Syowa Station

Total Day / 178 1995/ 6/27



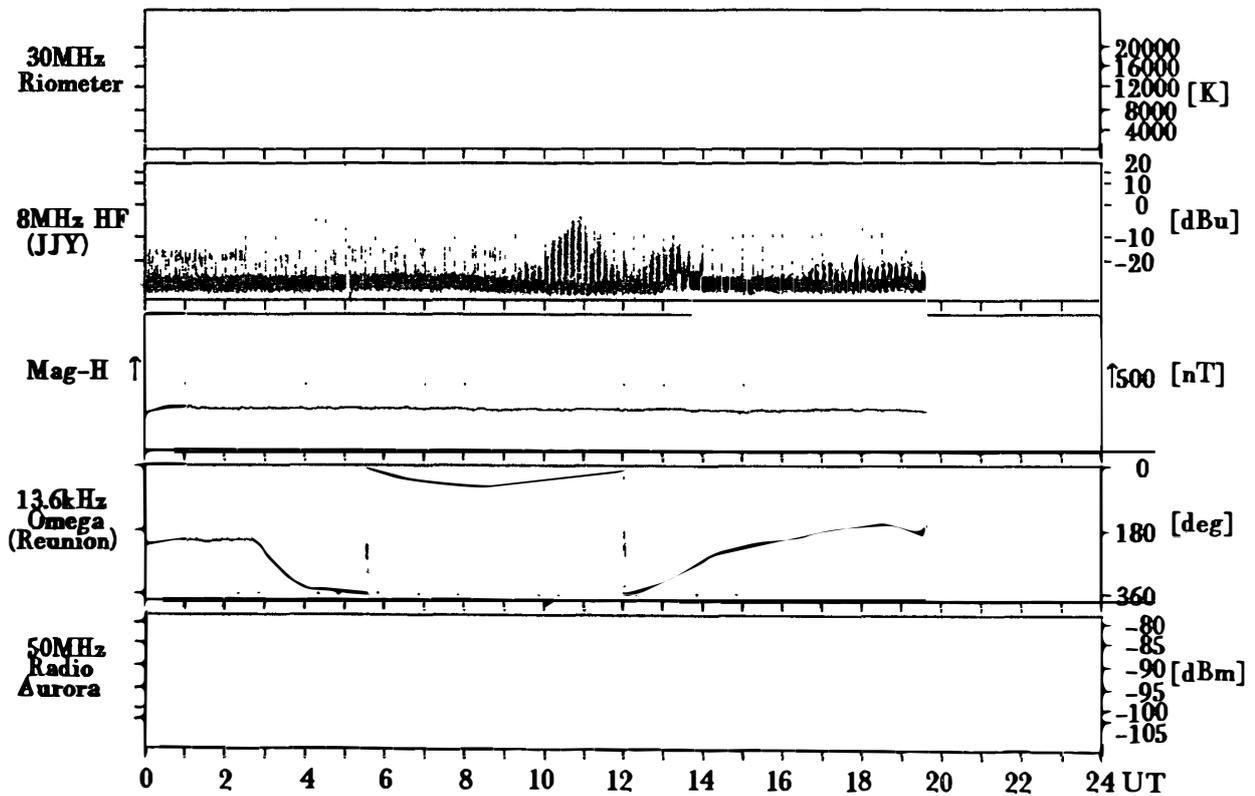
Syowa Station

Total Day / 179 1995/ 6/28



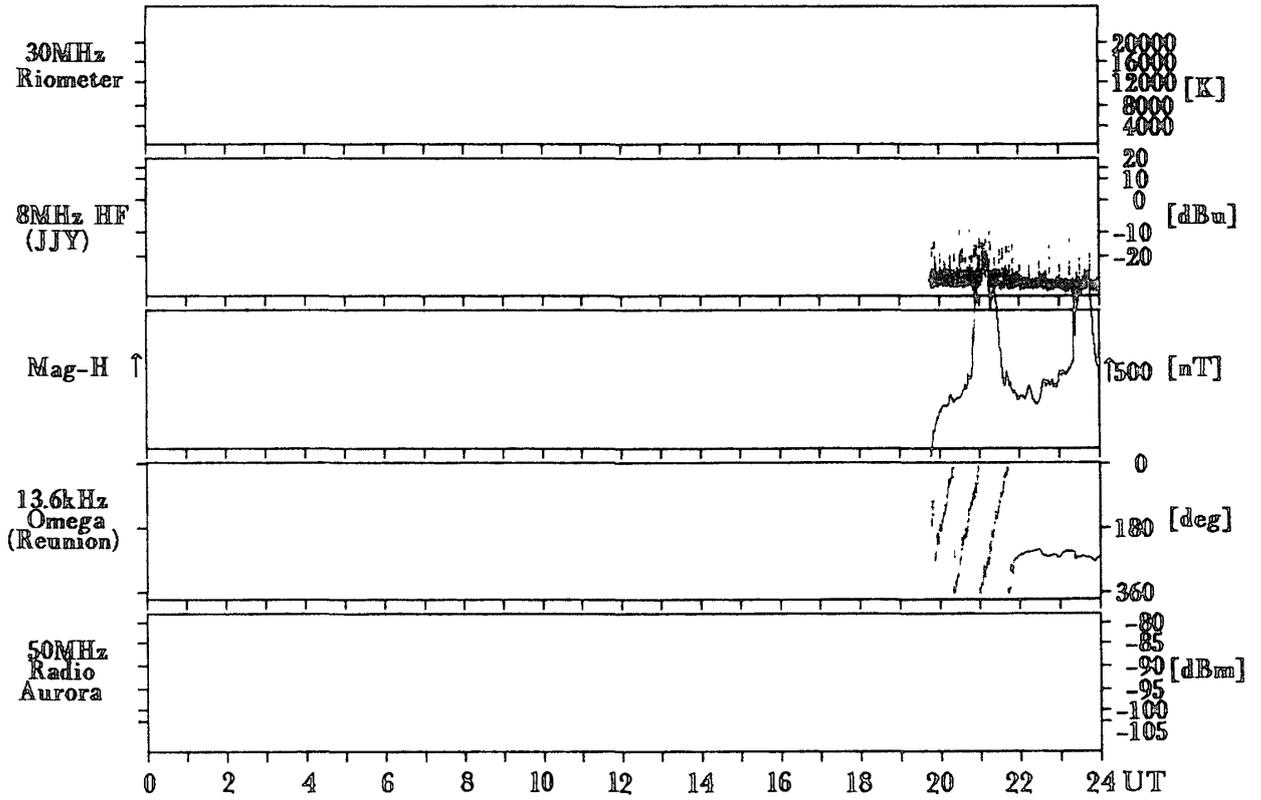
Syowa Station

Total Day / 180 1995/ 6/29



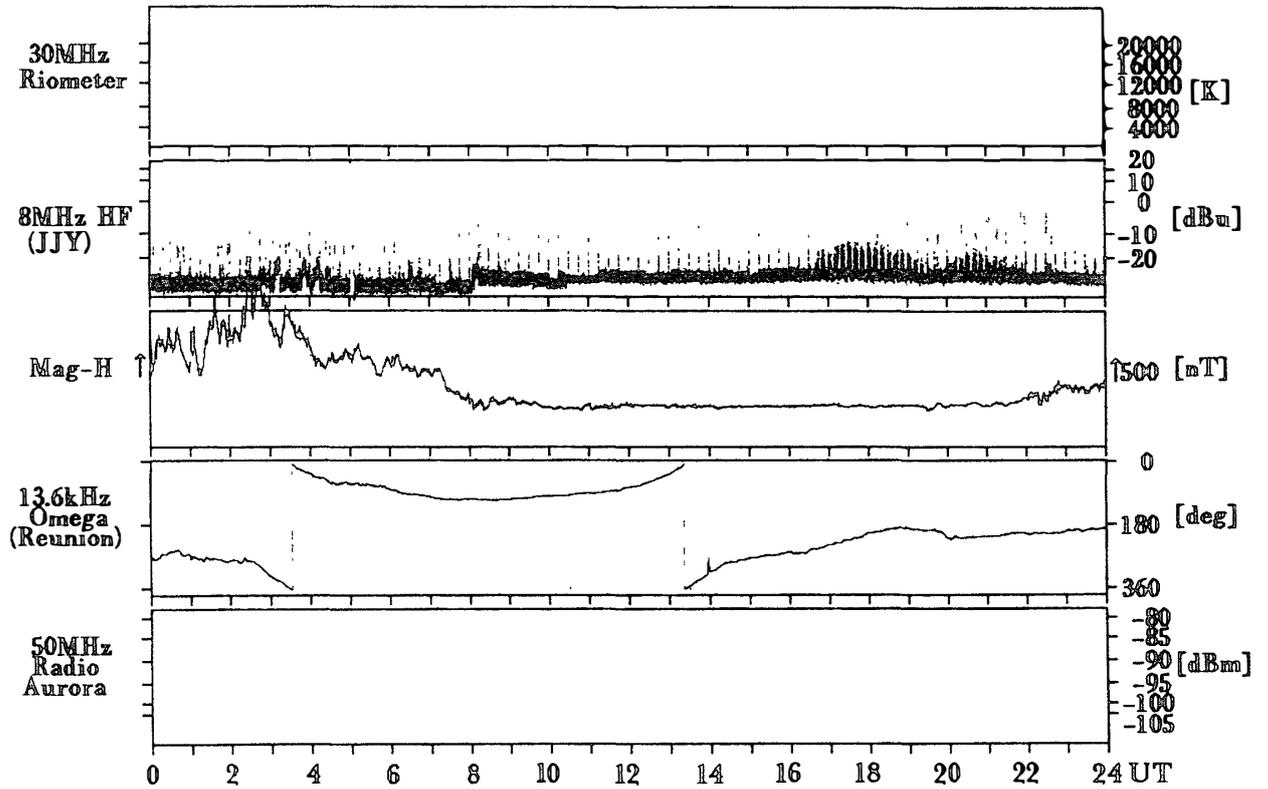
Syowa Station

Total Day / 181 1995/ 6/30



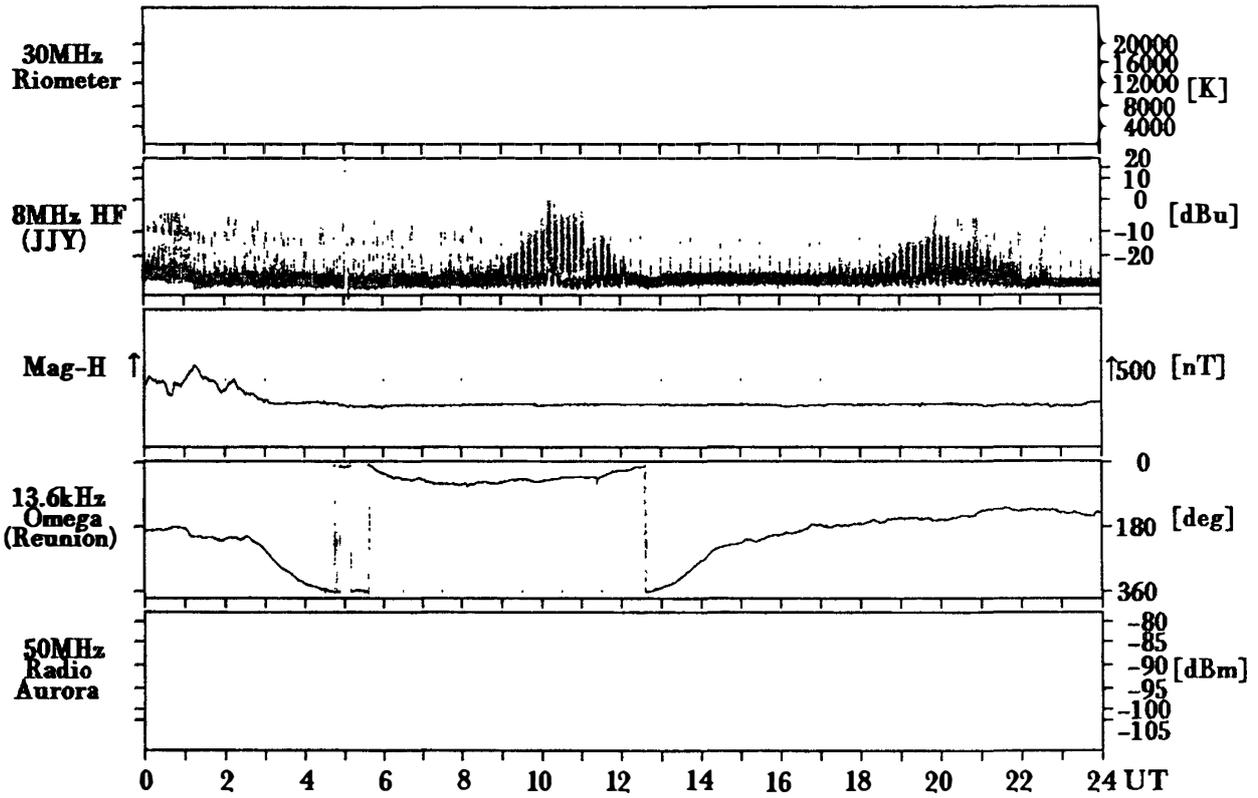
Syowa Station

Total Day / 182 1995/ 7/ 1



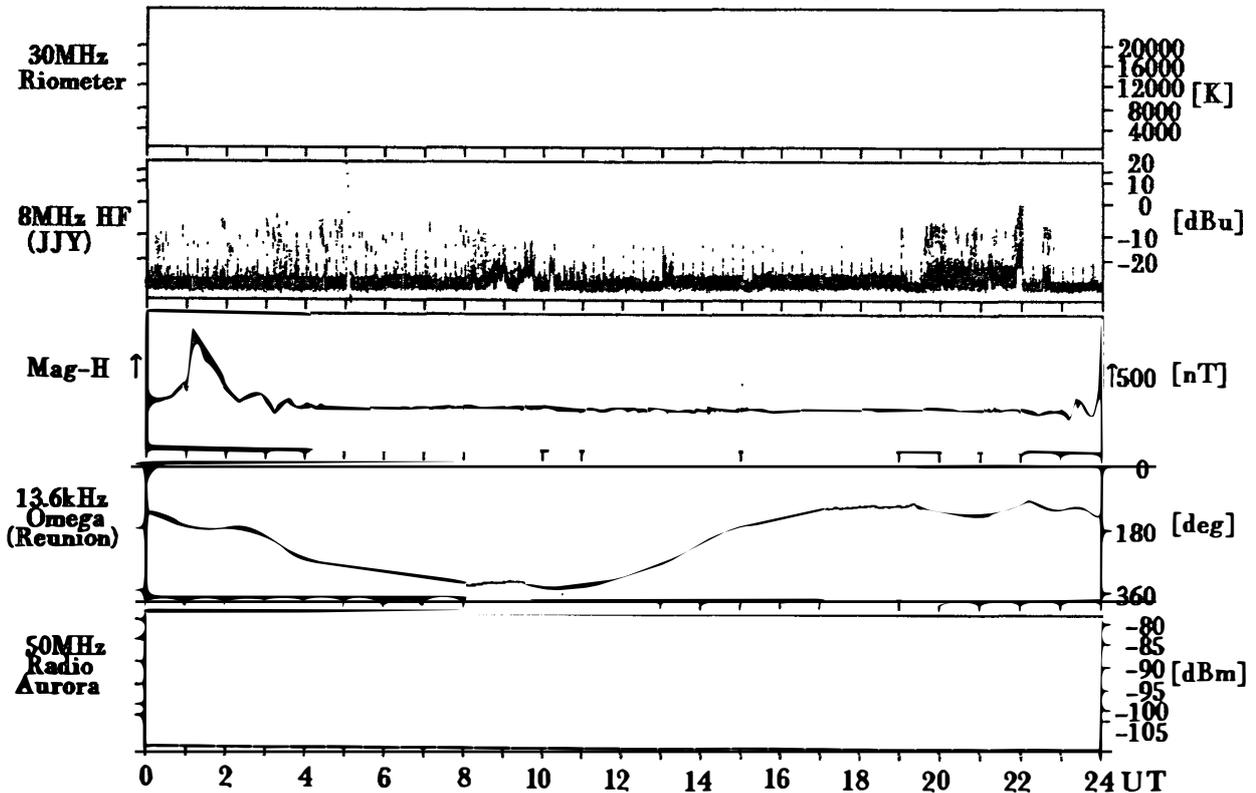
Syowa Station

Total Day / 183 1995/ 7/ 2



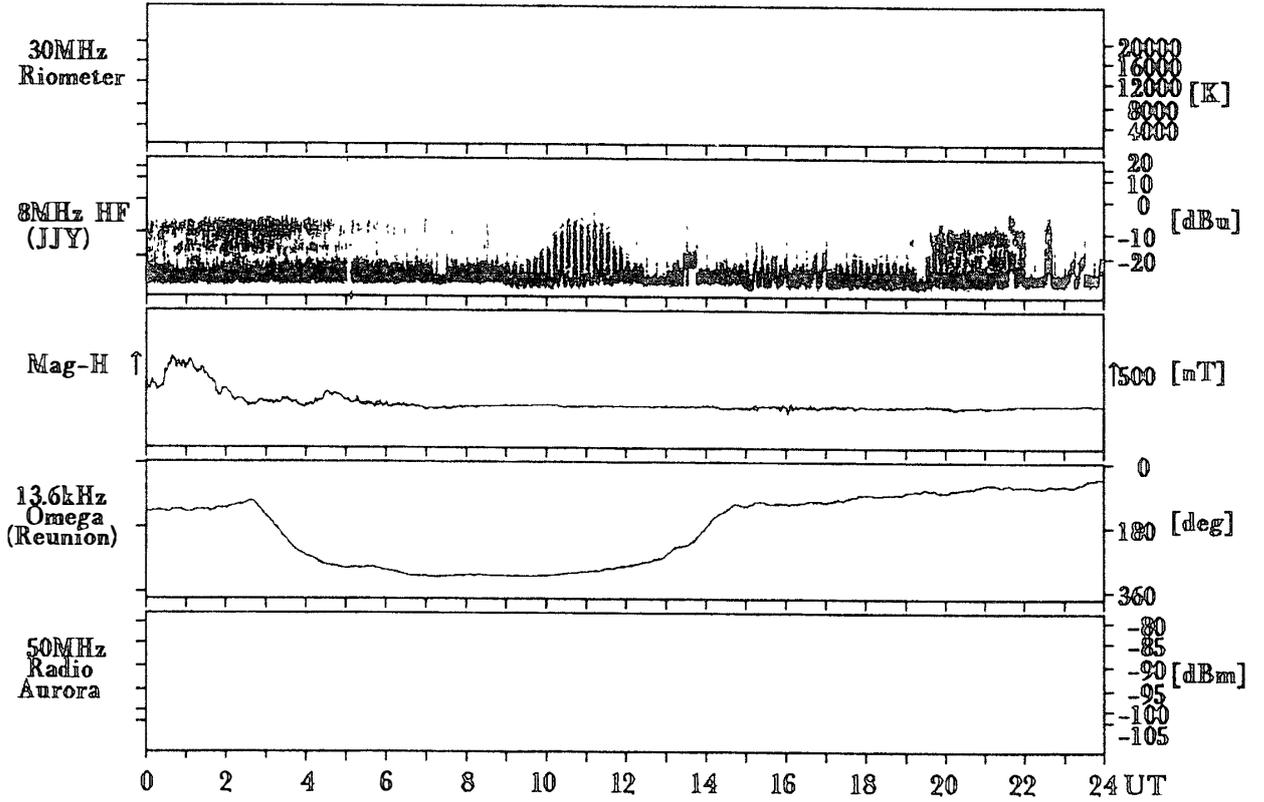
Syowa Station

Total Day / 184 1995/ 7/ 3



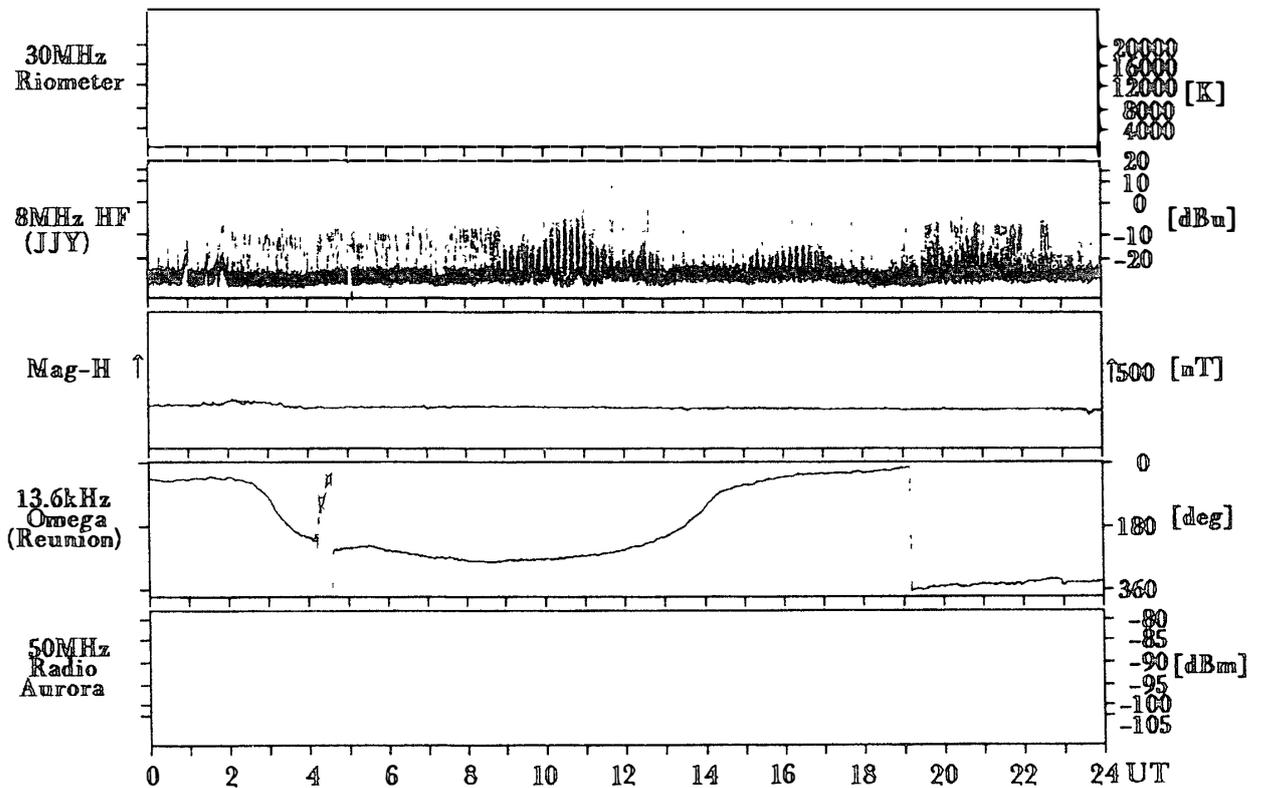
Syowa Station

Total Day / 185 1995/ 7/ 4



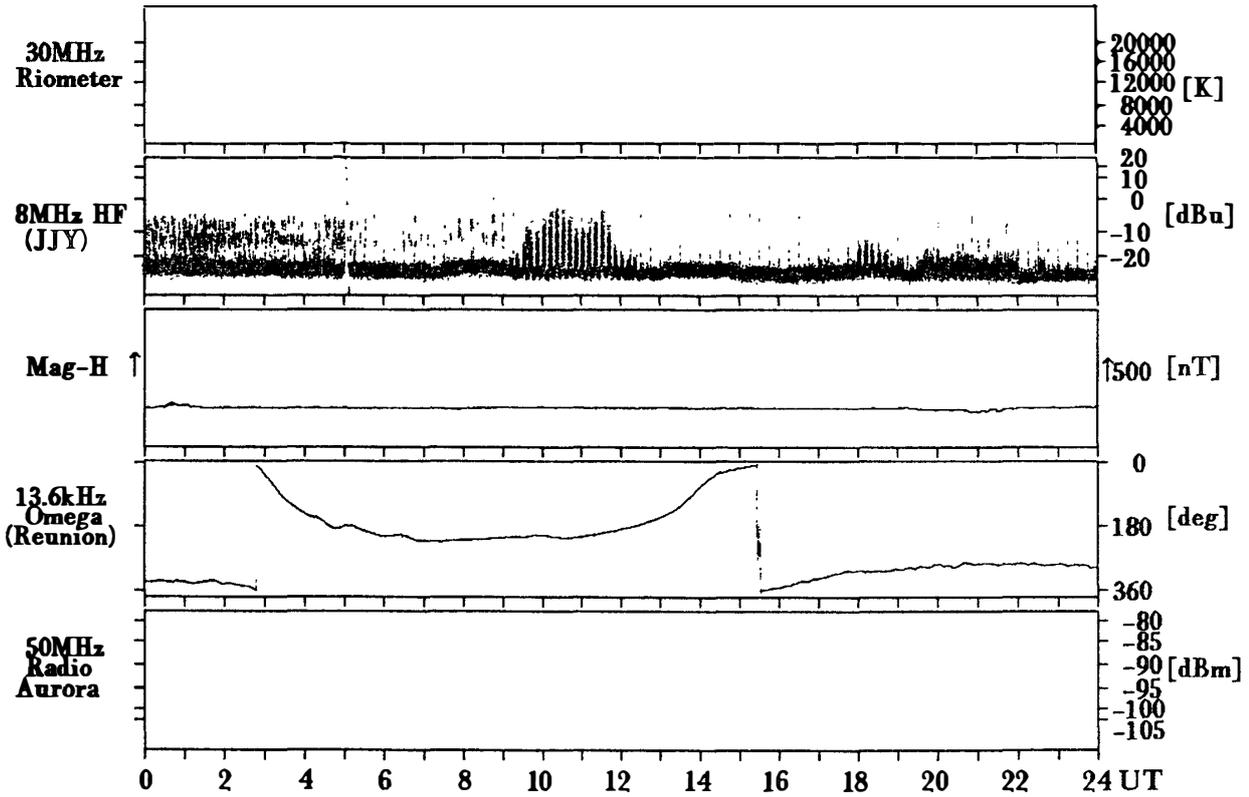
Syowa Station

Total Day / 186 1995/ 7/ 5



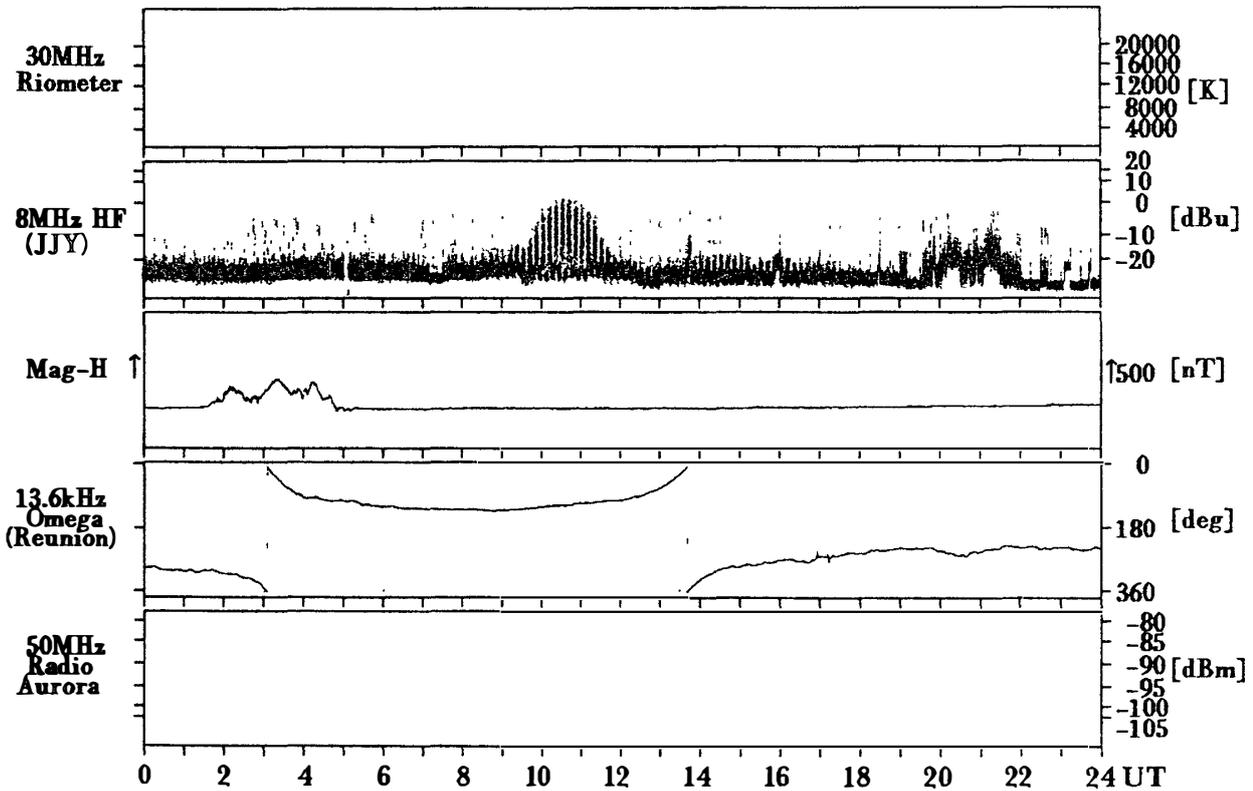
Syowa Station

Total Day / 187 1995/ 7/ 6



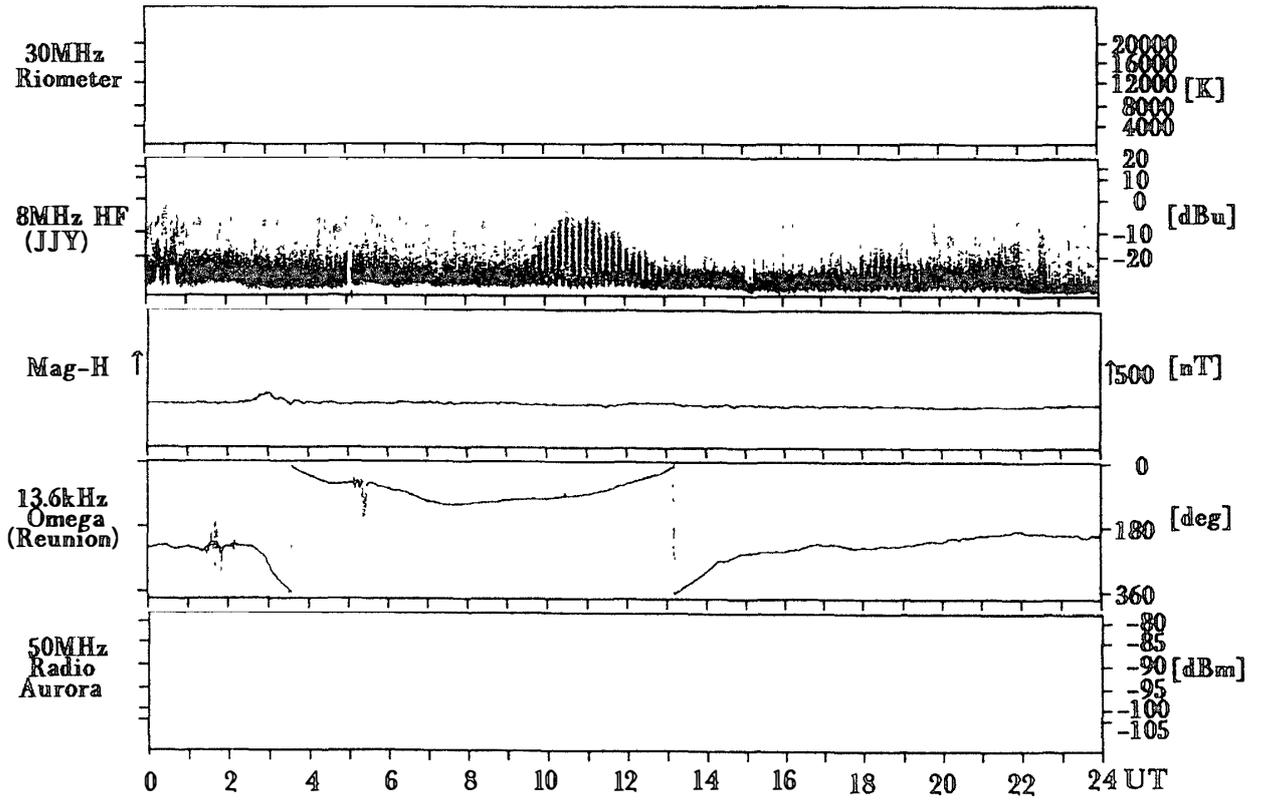
Syowa Station

Total Day / 188 1995/ 7/ 7



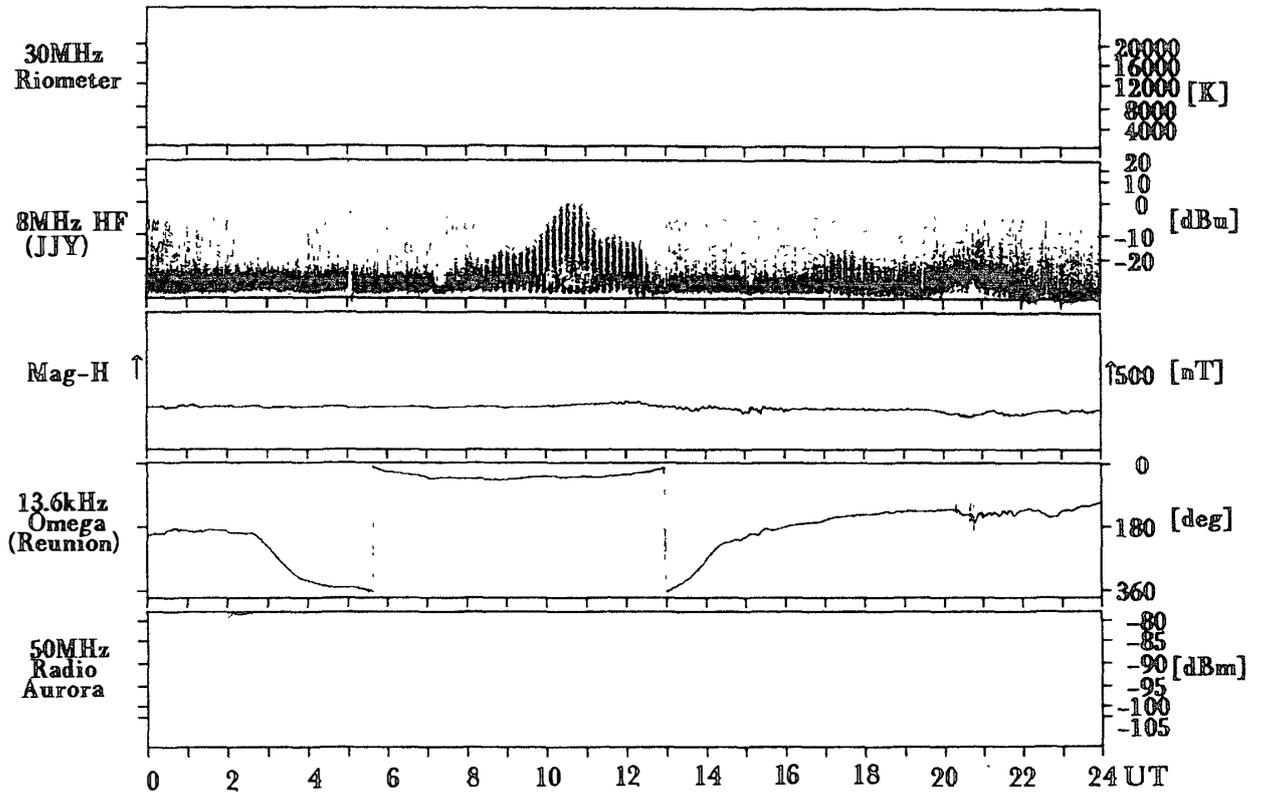
Syowa Station

Total Day / 189 1995/ 7/ 8



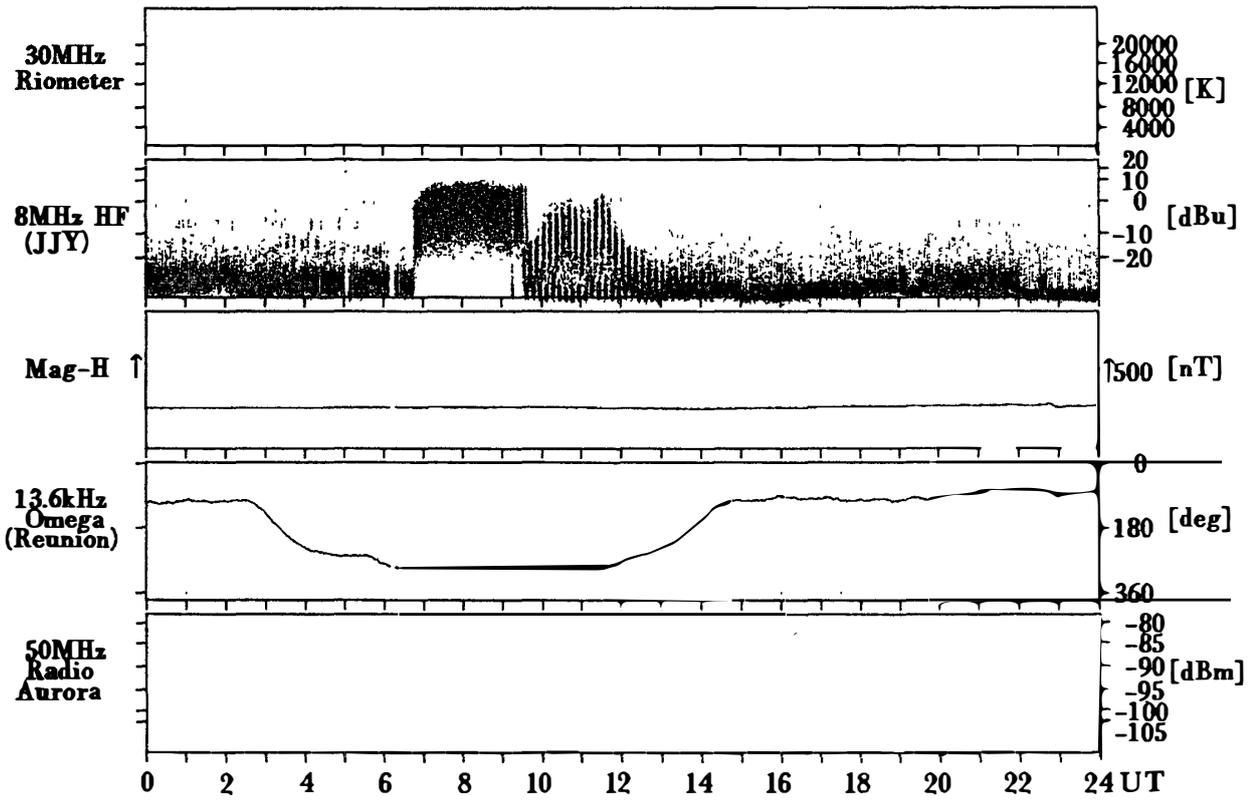
Syowa Station

Total Day / 190 1995/ 7/ 9



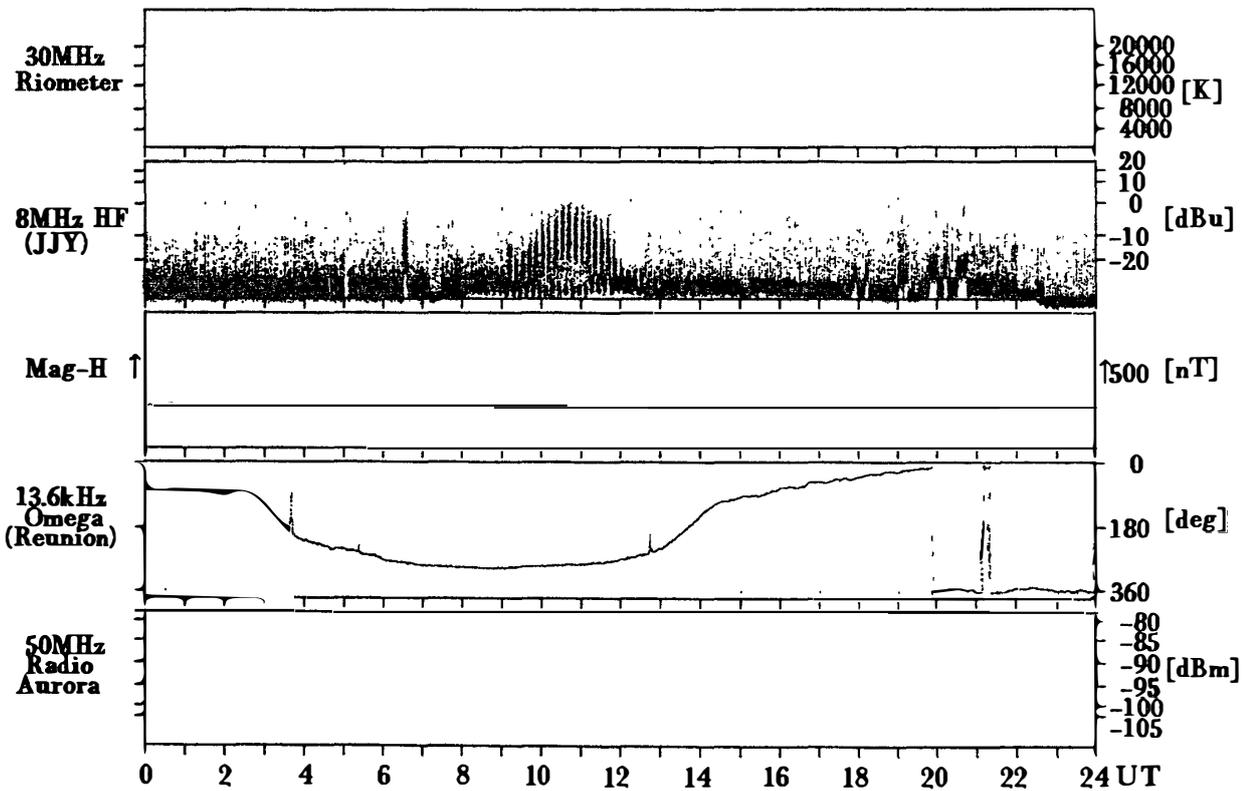
Syowa Station

Total Day / 191 1995/ 7/10



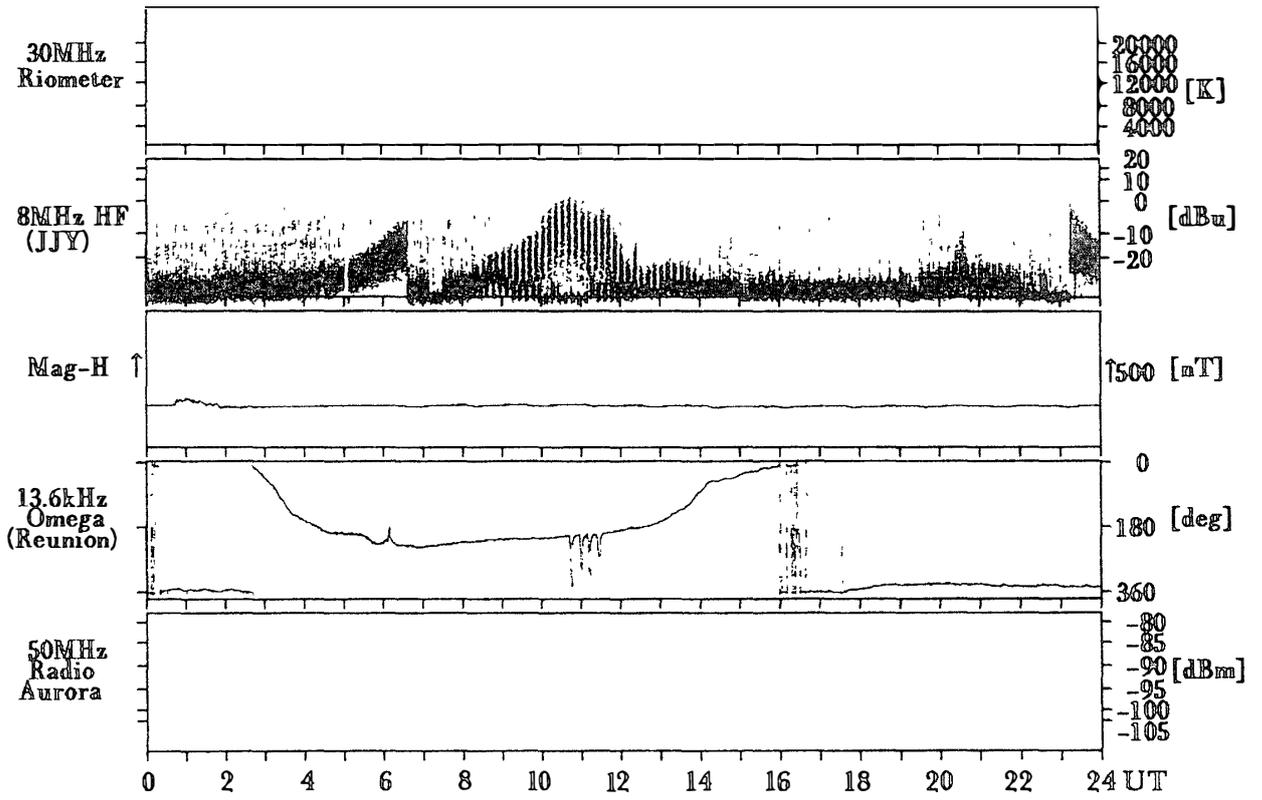
Syowa Station

Total Day / 192 1995/ 7/11



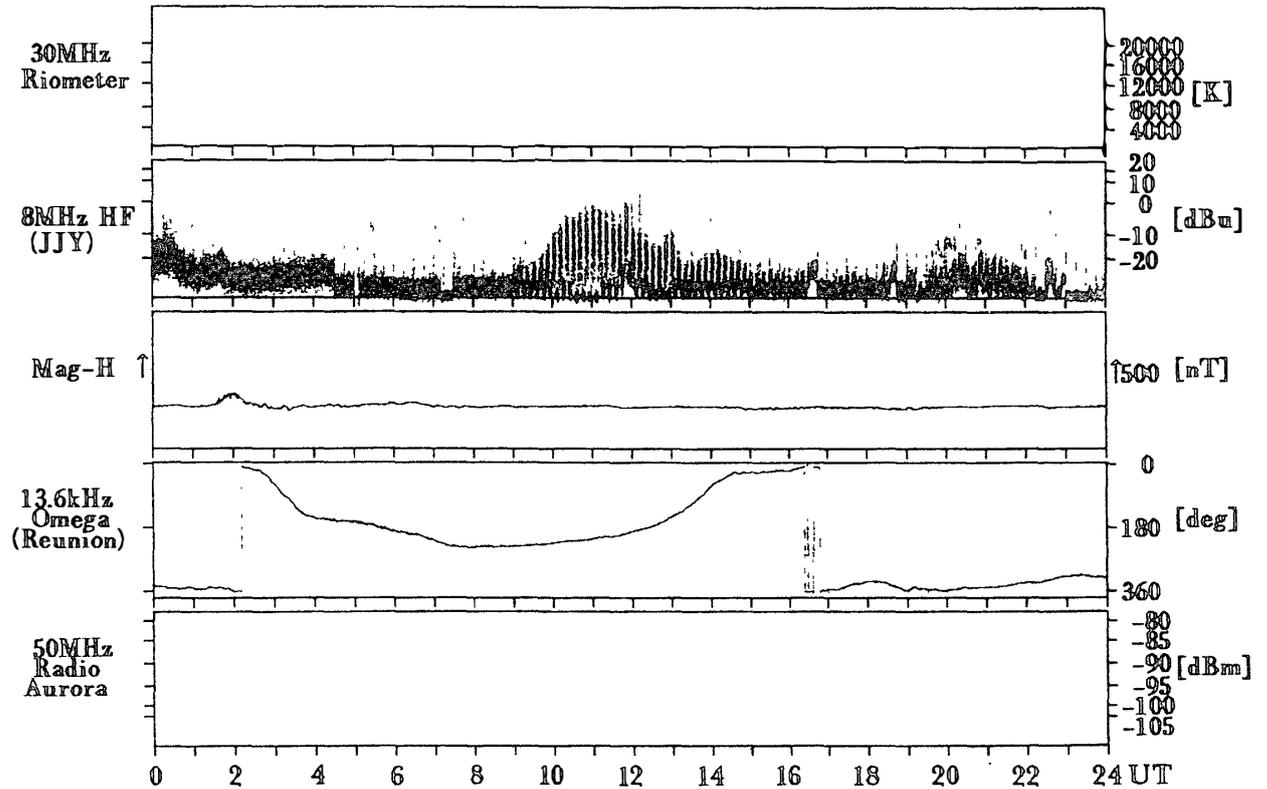
Syowa Station

Total Day / 193 1995/ 7/12



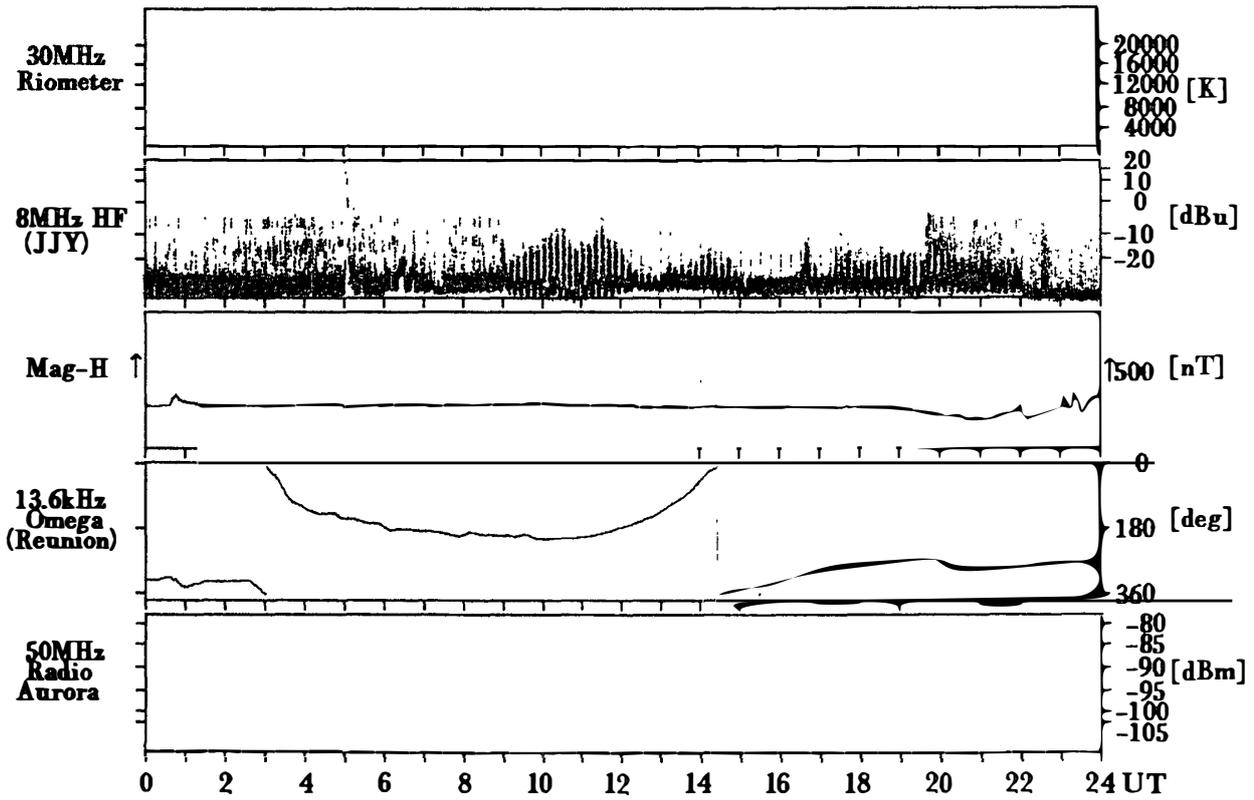
Syowa Station

Total Day / 194 1995/ 7/13



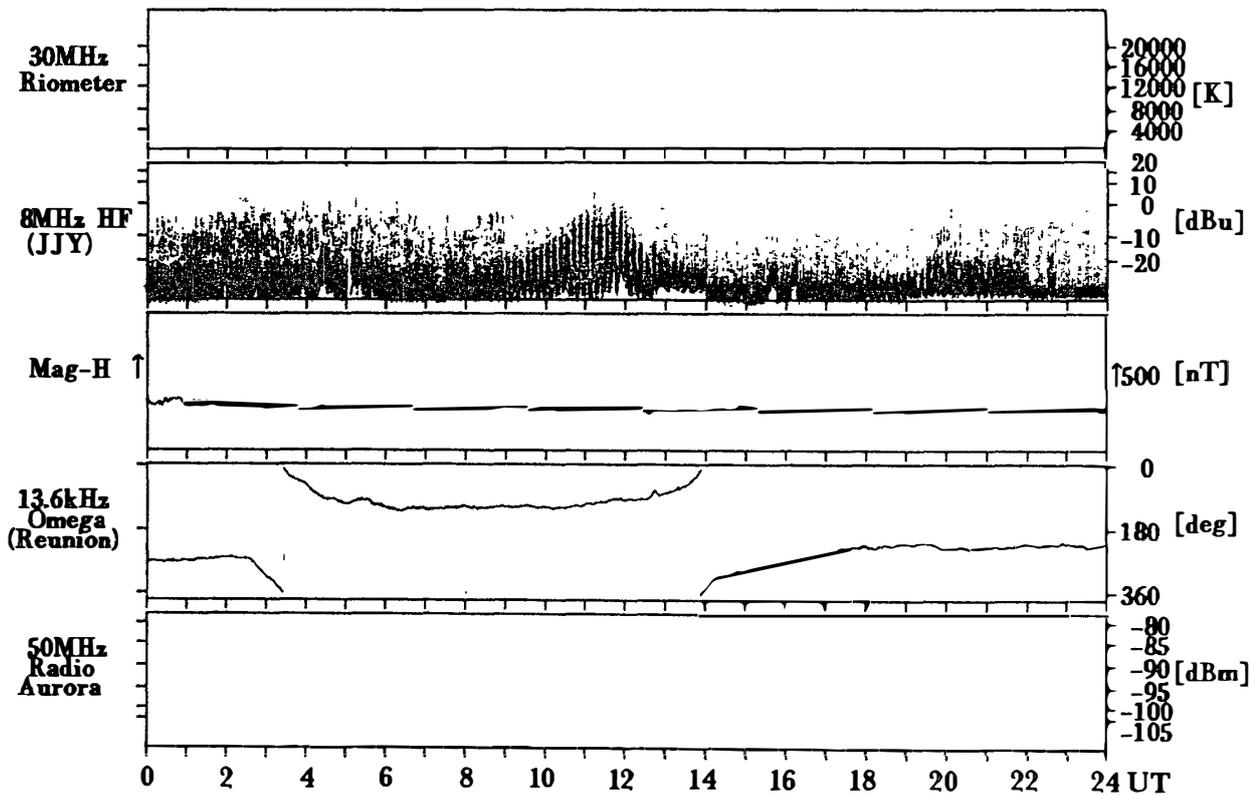
Syowa Station

Total Day / 195 1995/ 7/14



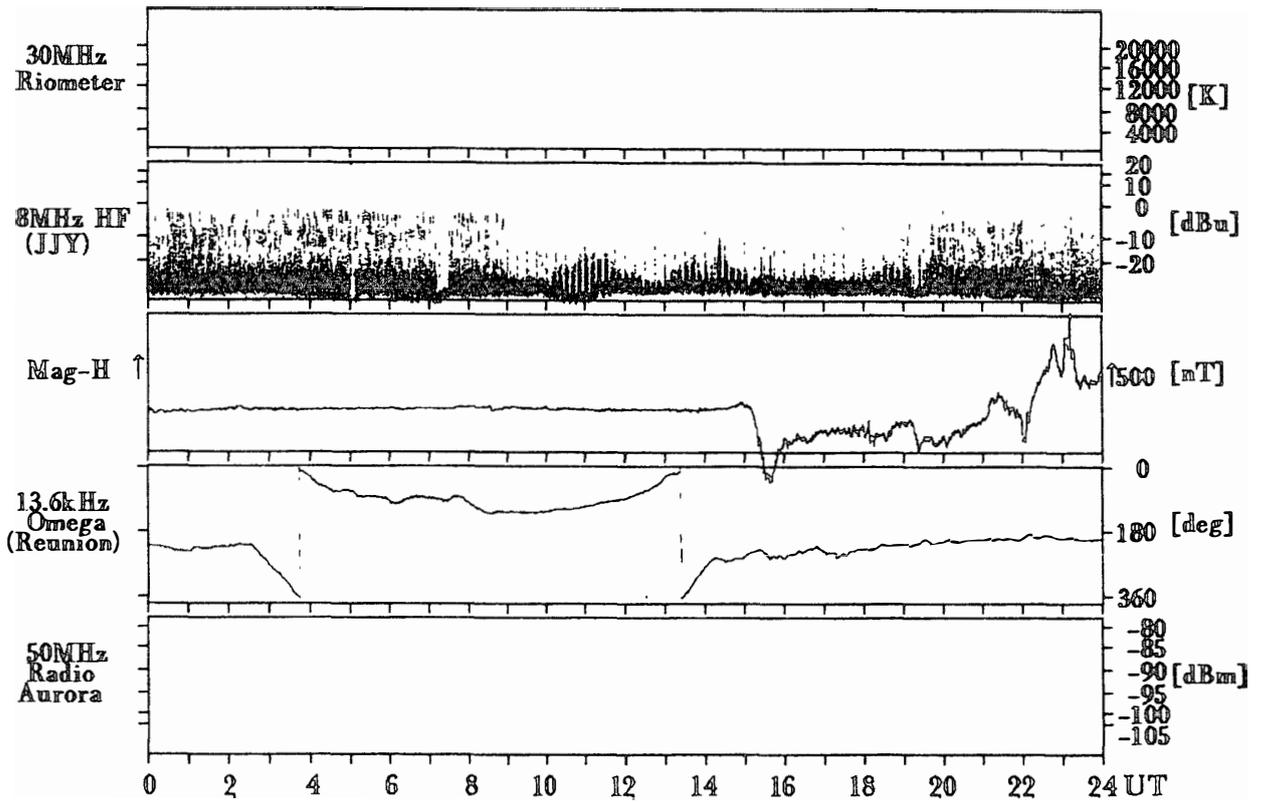
Syowa Station

Total Day / 196 1995/ 7/15



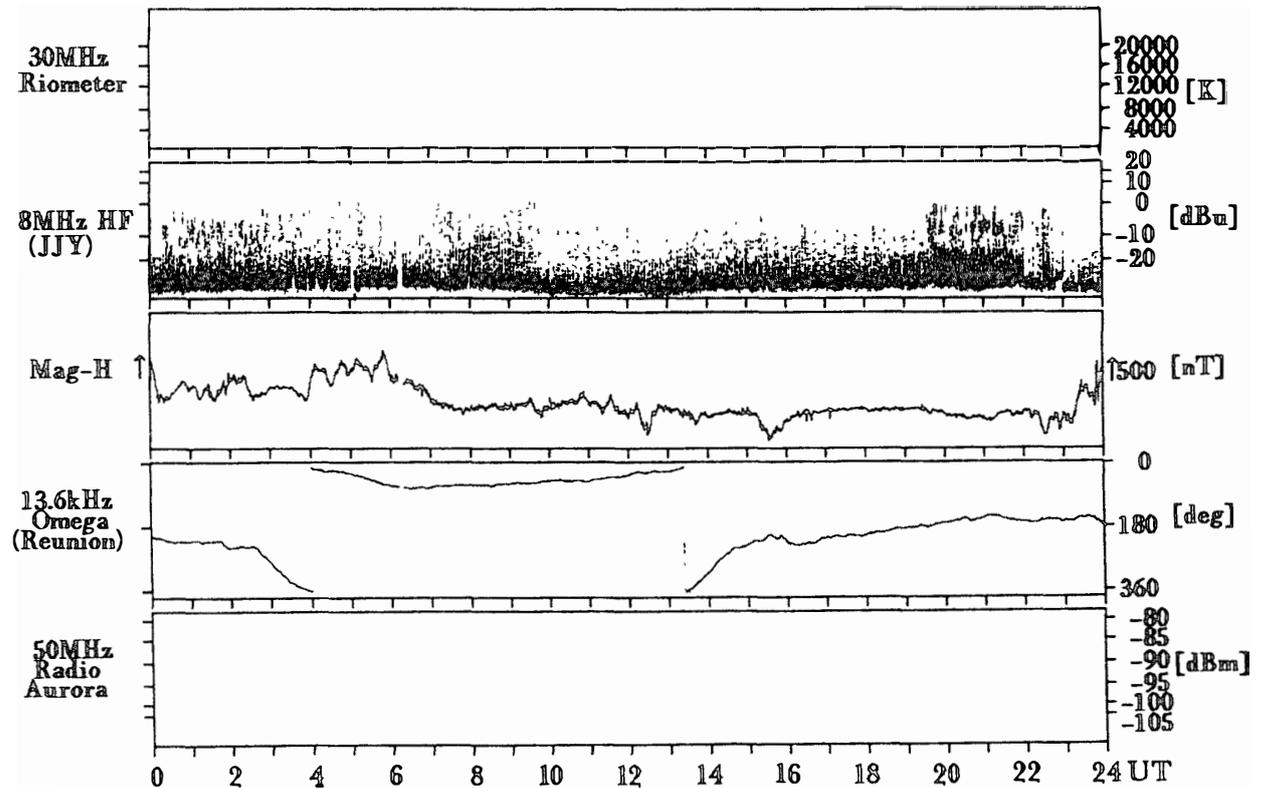
Syowa Station

Total Day / 197 1995/ 7/16



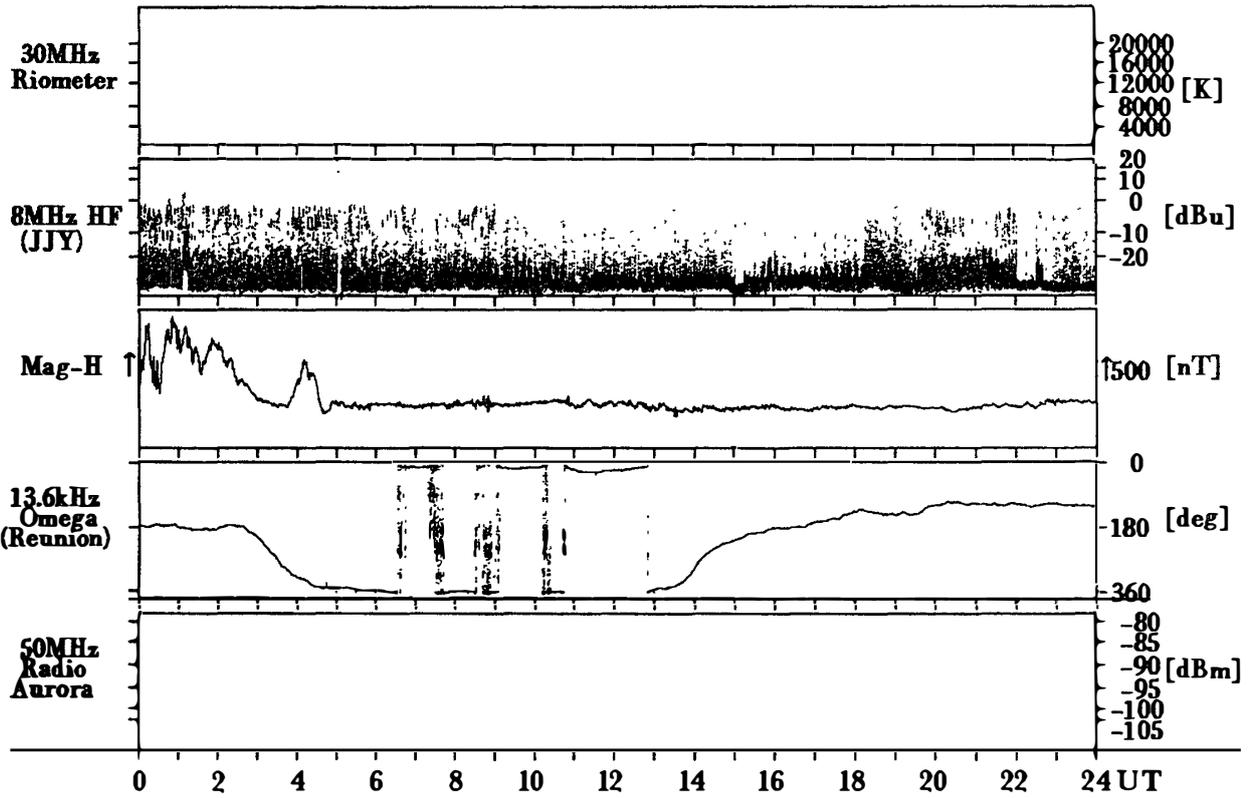
Syowa Station

Total Day / 198 1995/ 7/17



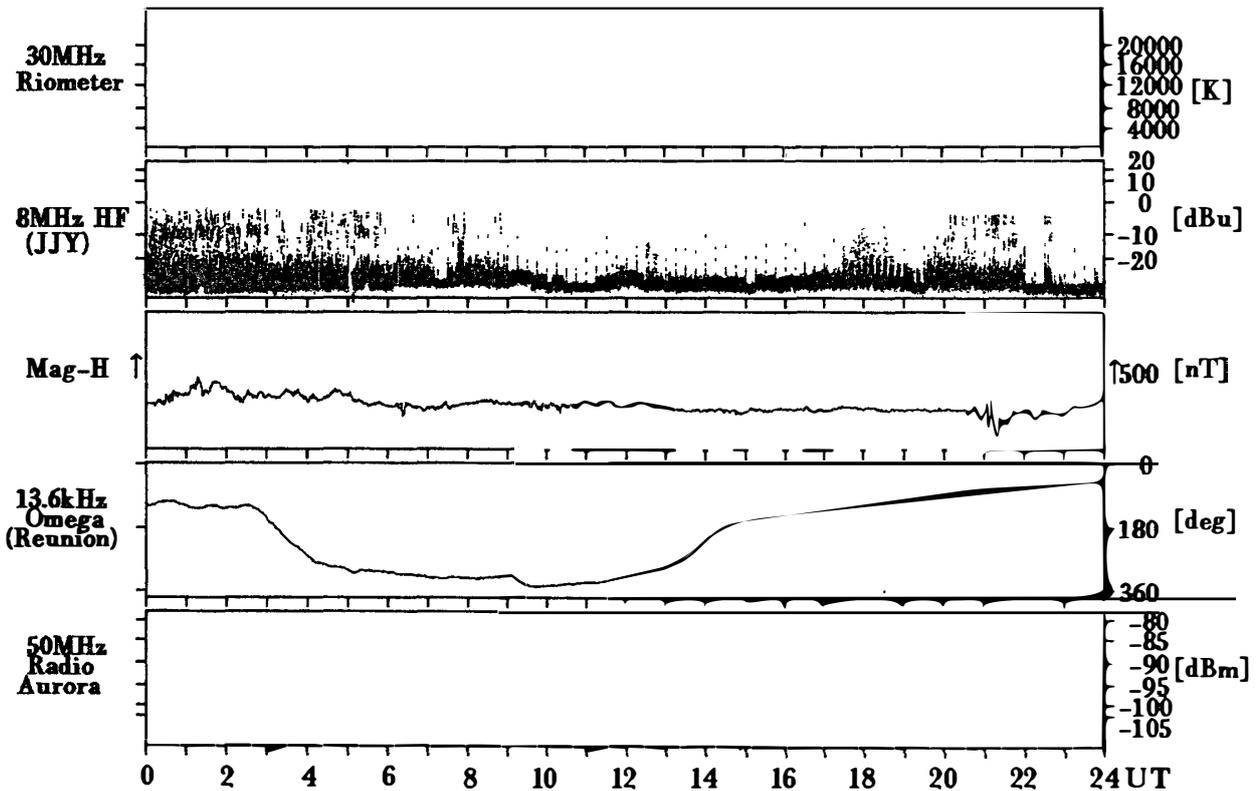
Syowa Station

Total Day / 199 1995/ 7/18



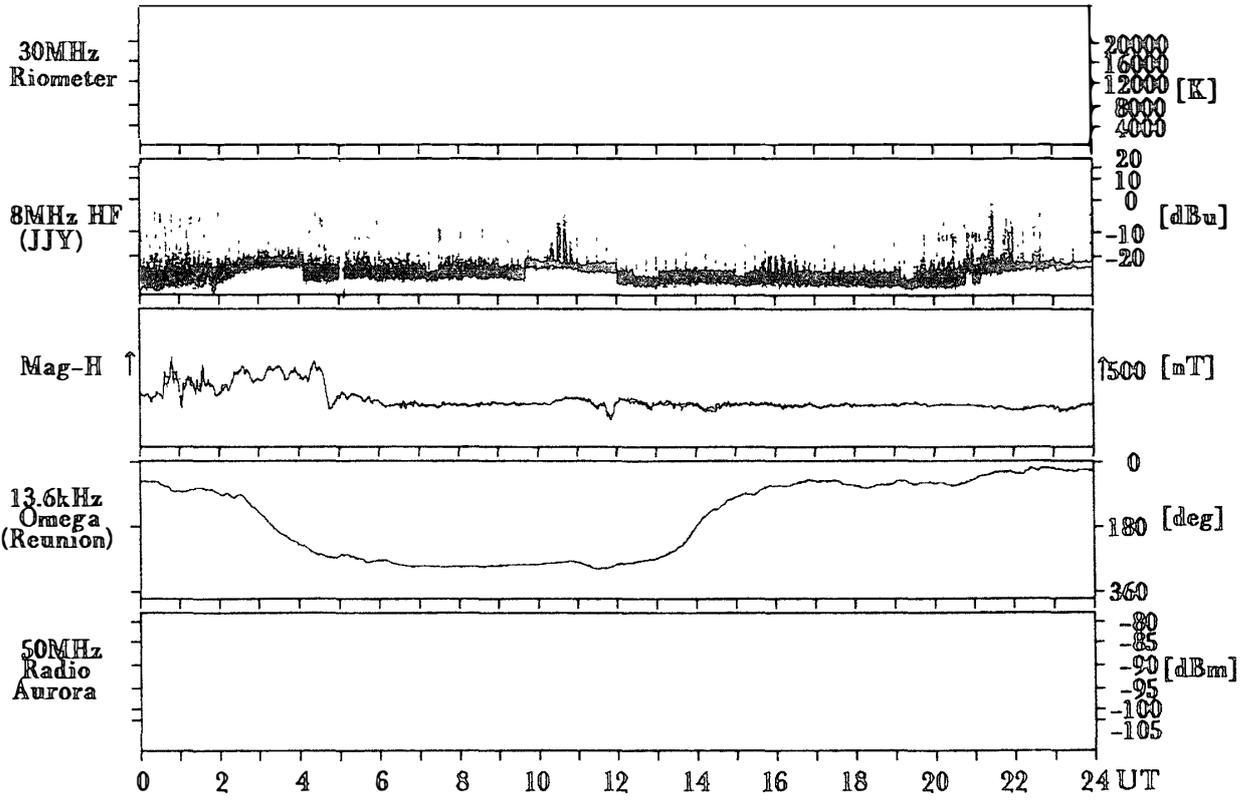
Syowa Station

Total Day / 200 1995/ 7/19



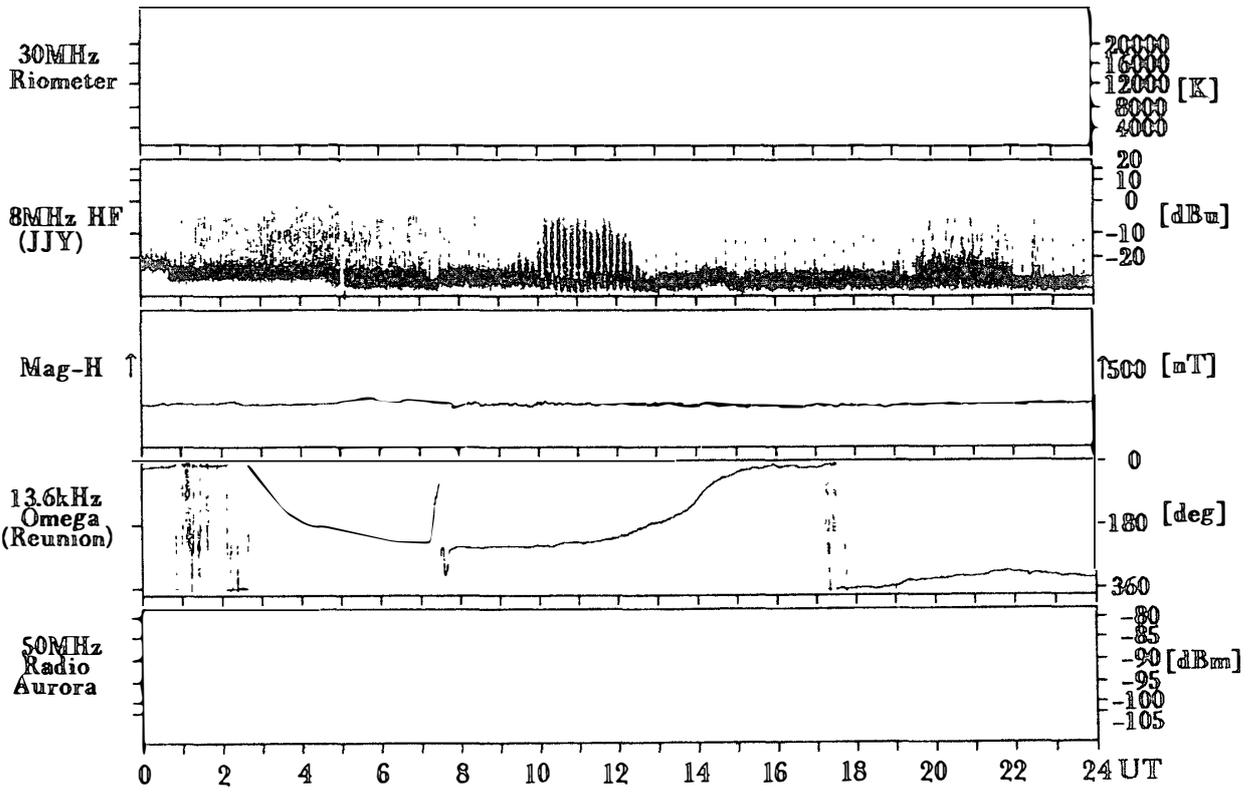
Syowa Station

Total Day / 201 1995/ 7/20



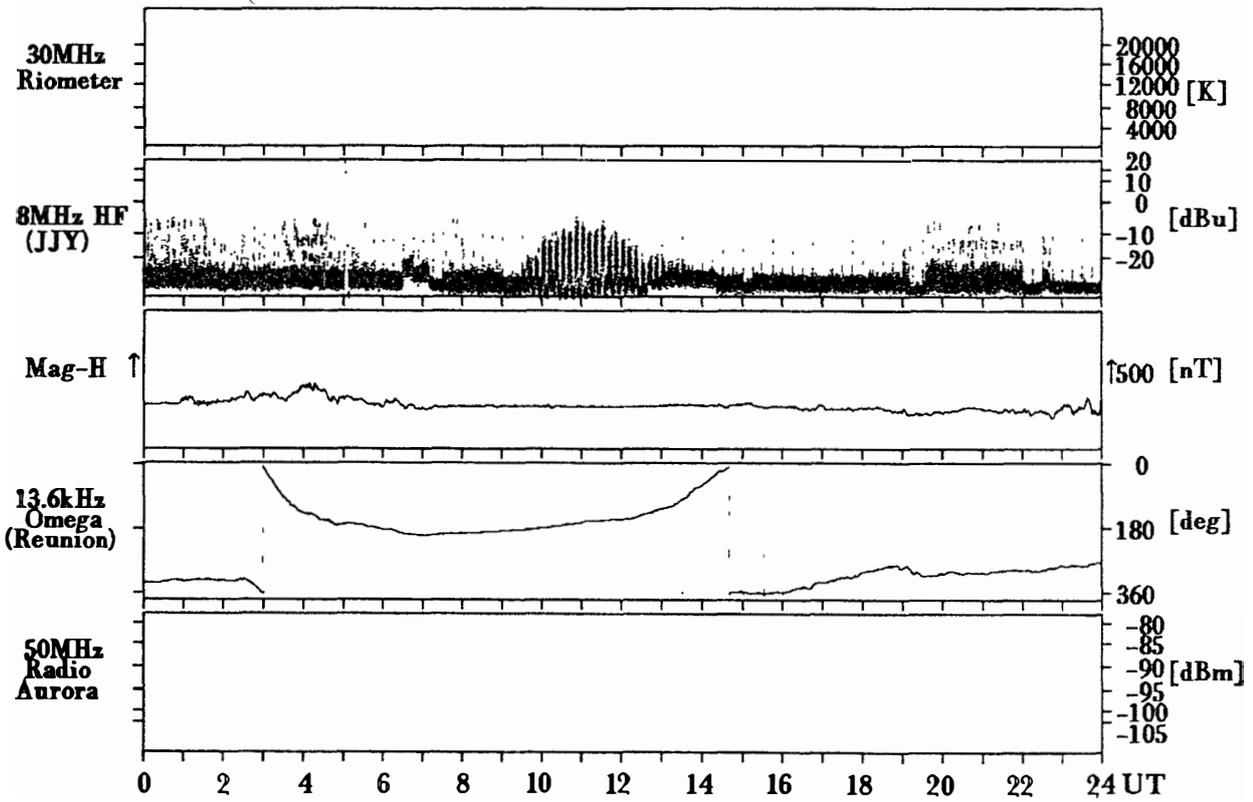
Syowa Station

Total Day / 202 1995/ 7/21



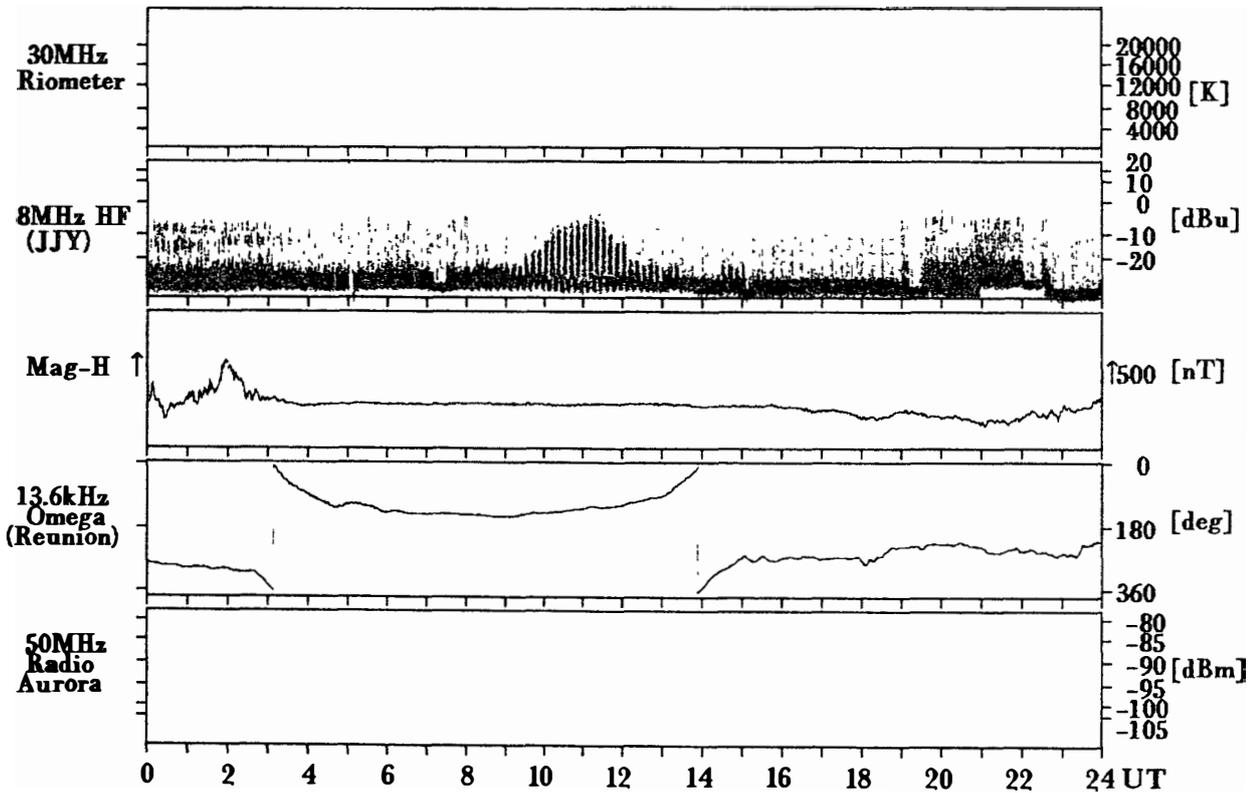
Syowa Station

Total Day / 203 1995/ 7/22



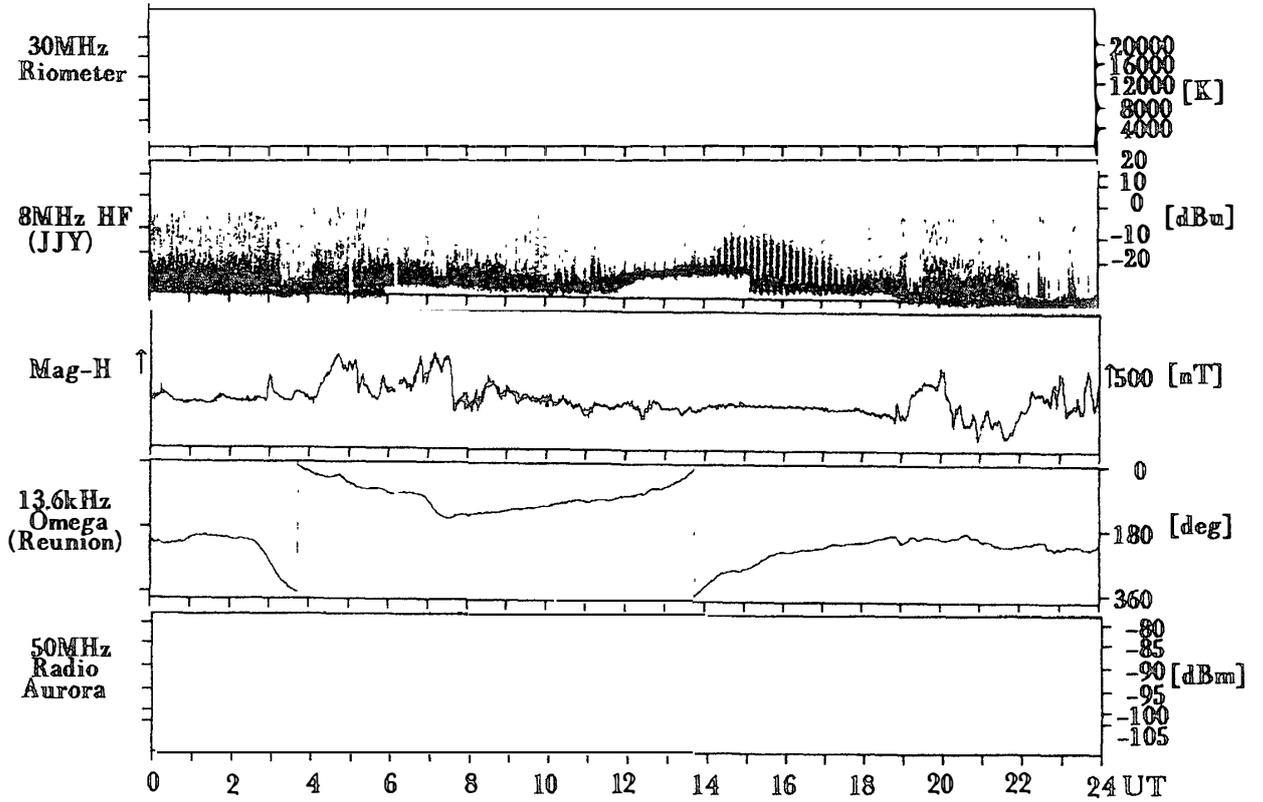
Syowa Station

Total Day / 204 1995/ 7/23



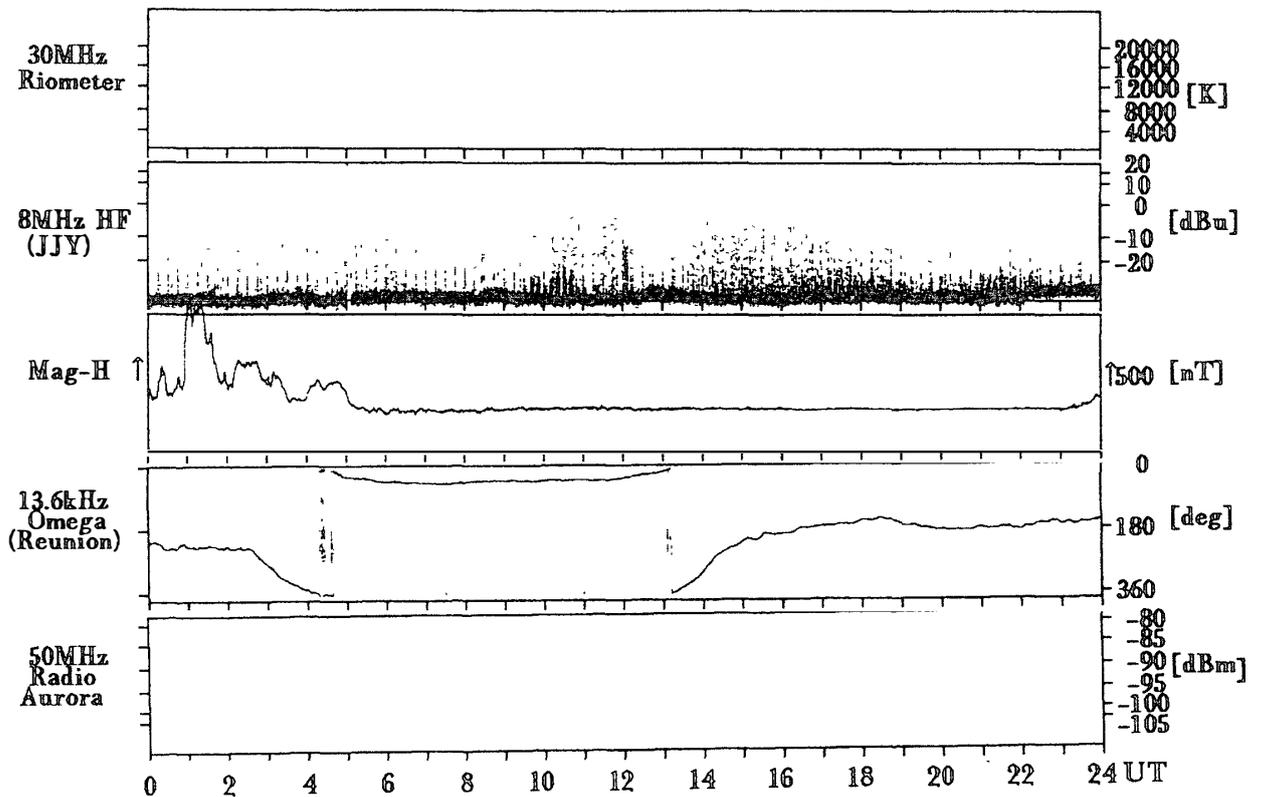
Syowa Station

Total Day / 205 1995/ 7/24



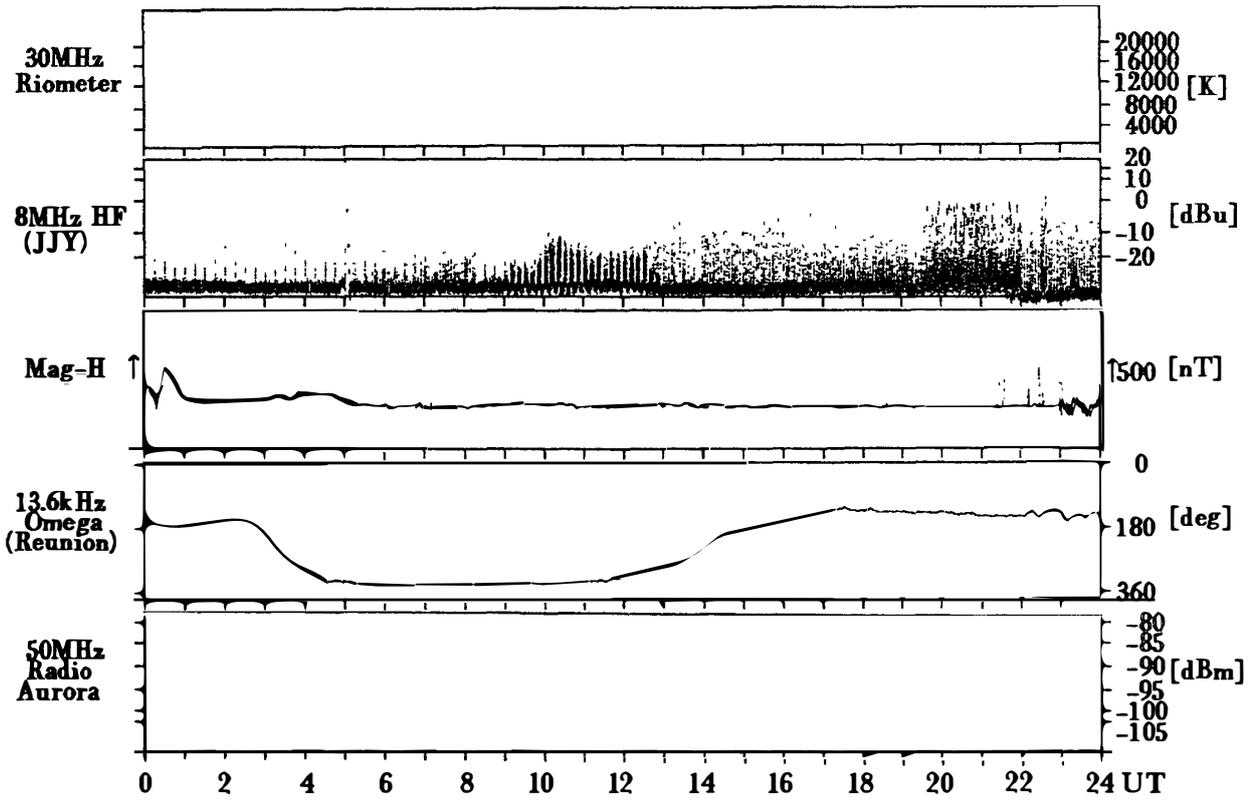
Syowa Station

Total Day / 206 1995/ 7/25



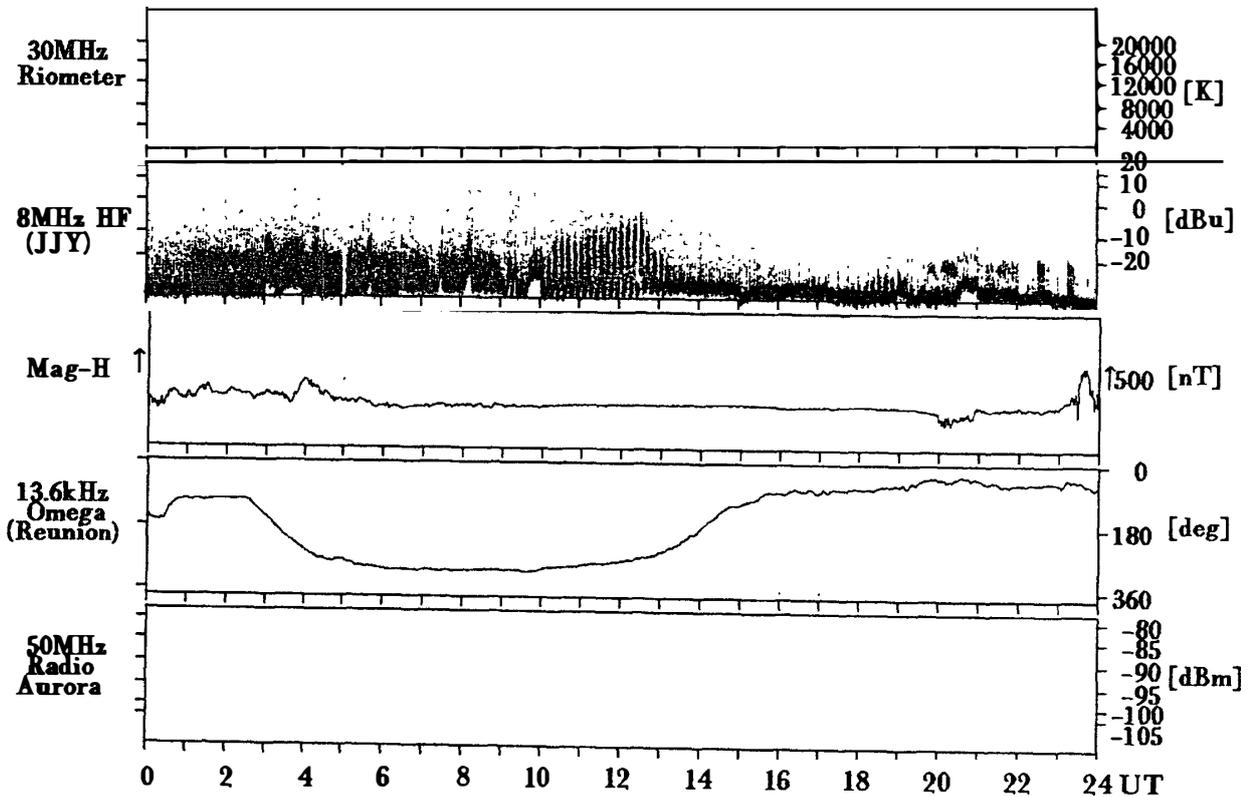
Syowa Station

Total Day / 207 1995/ 7/26



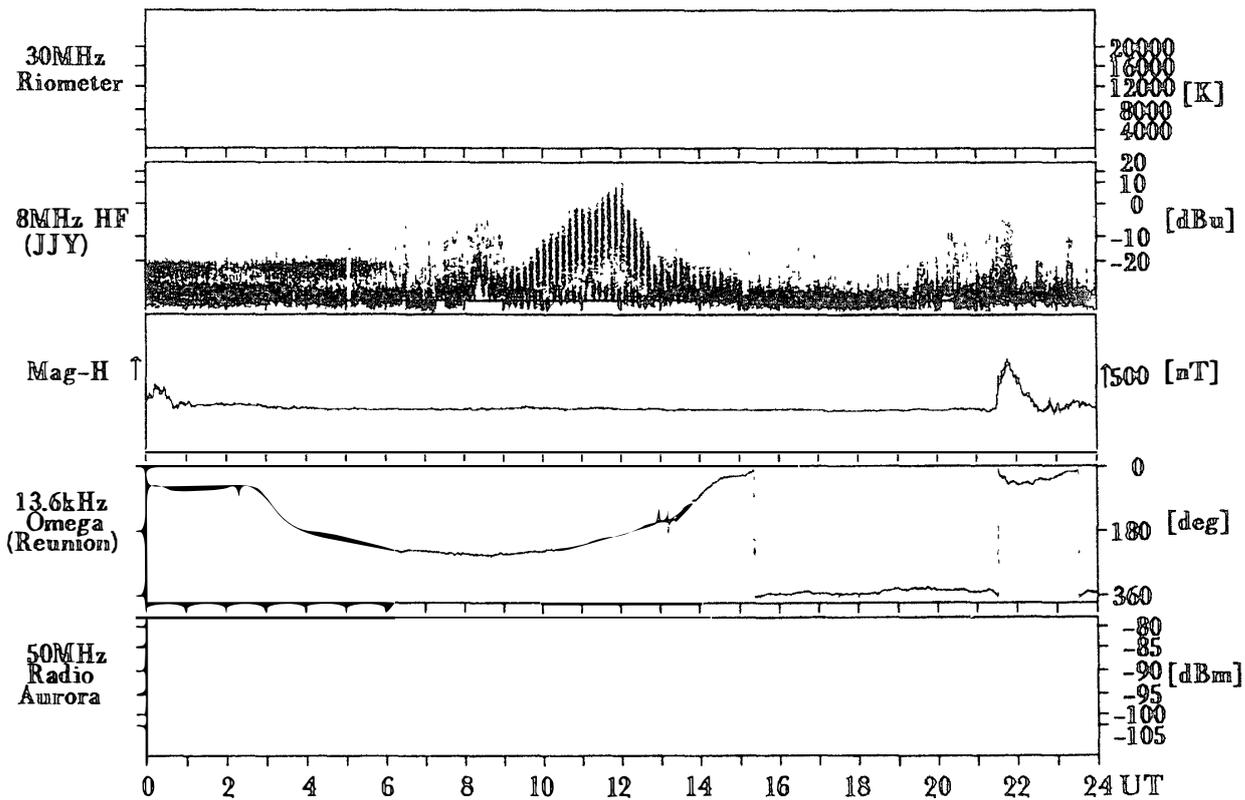
Syowa Station

Total Day / 208 1995/ 7/27



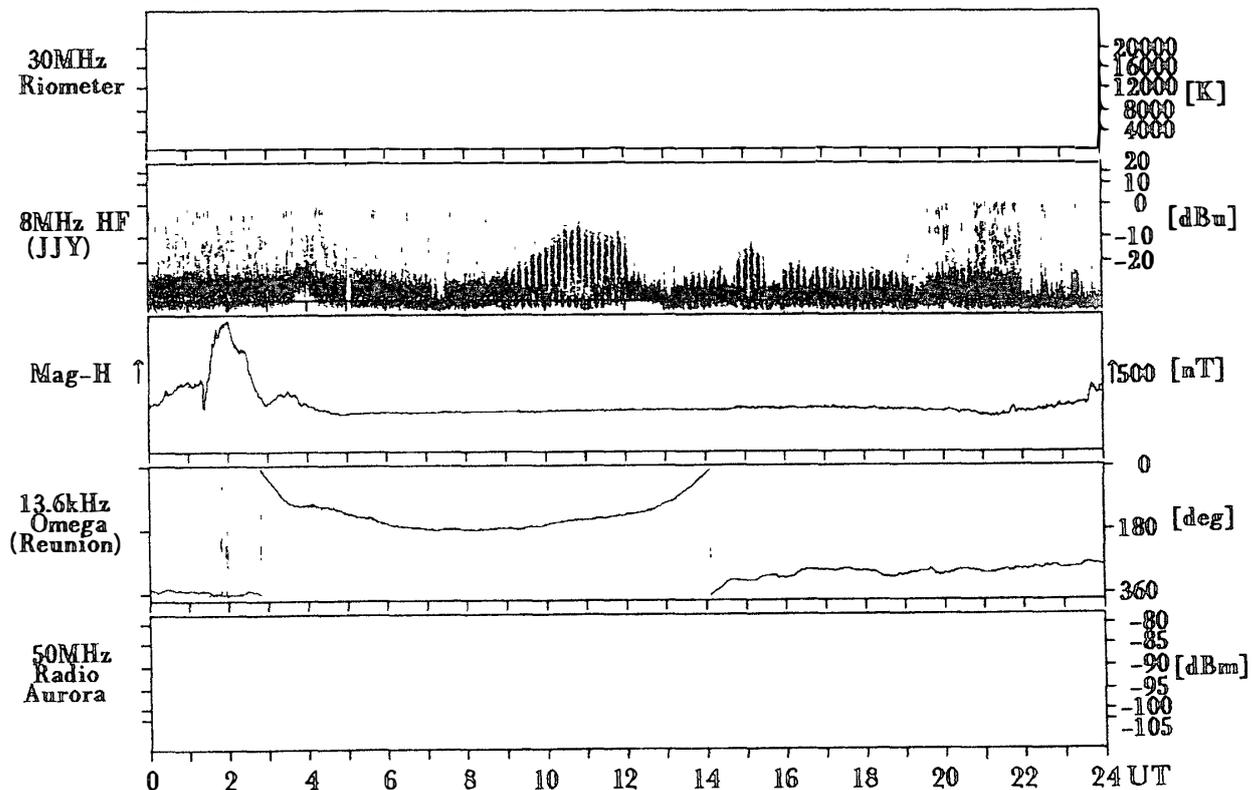
Syowa Station

Total Day / 209 1995/ 7/28



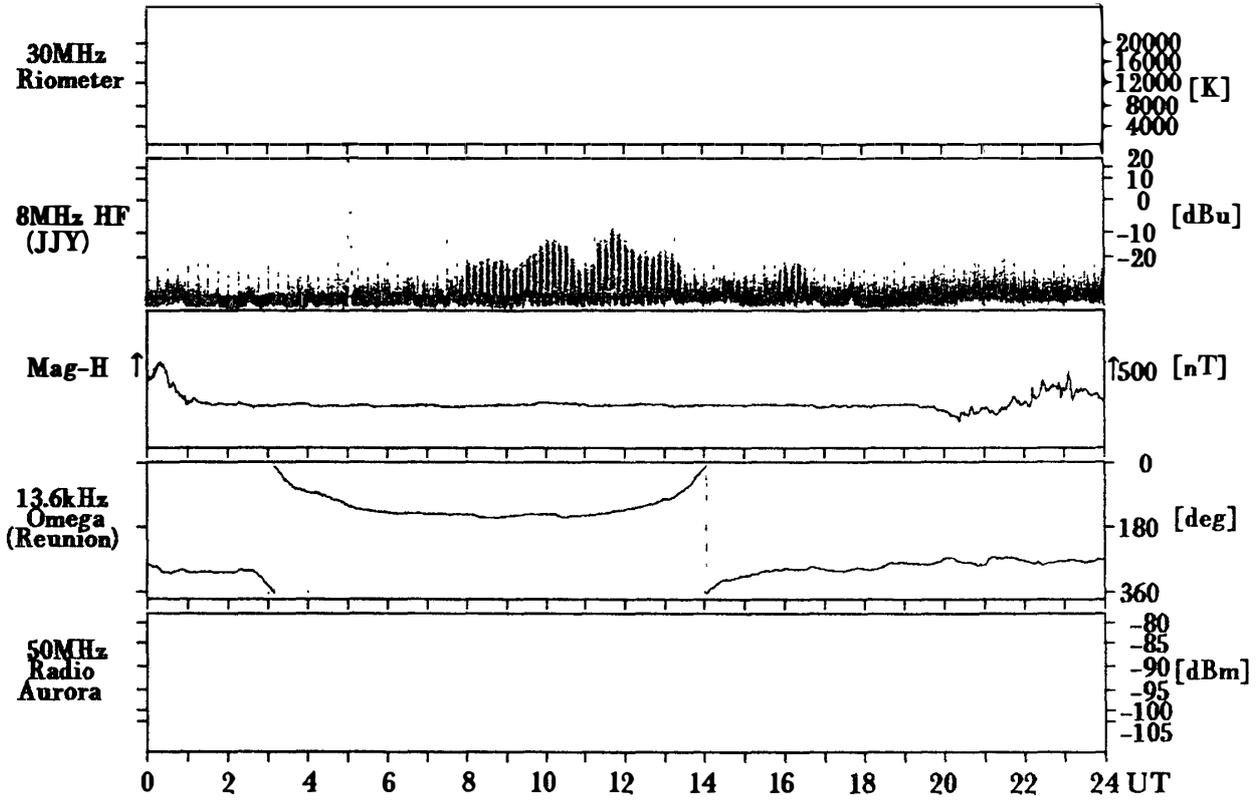
Syowa Station

Total Day / 210 1995/ 7/29



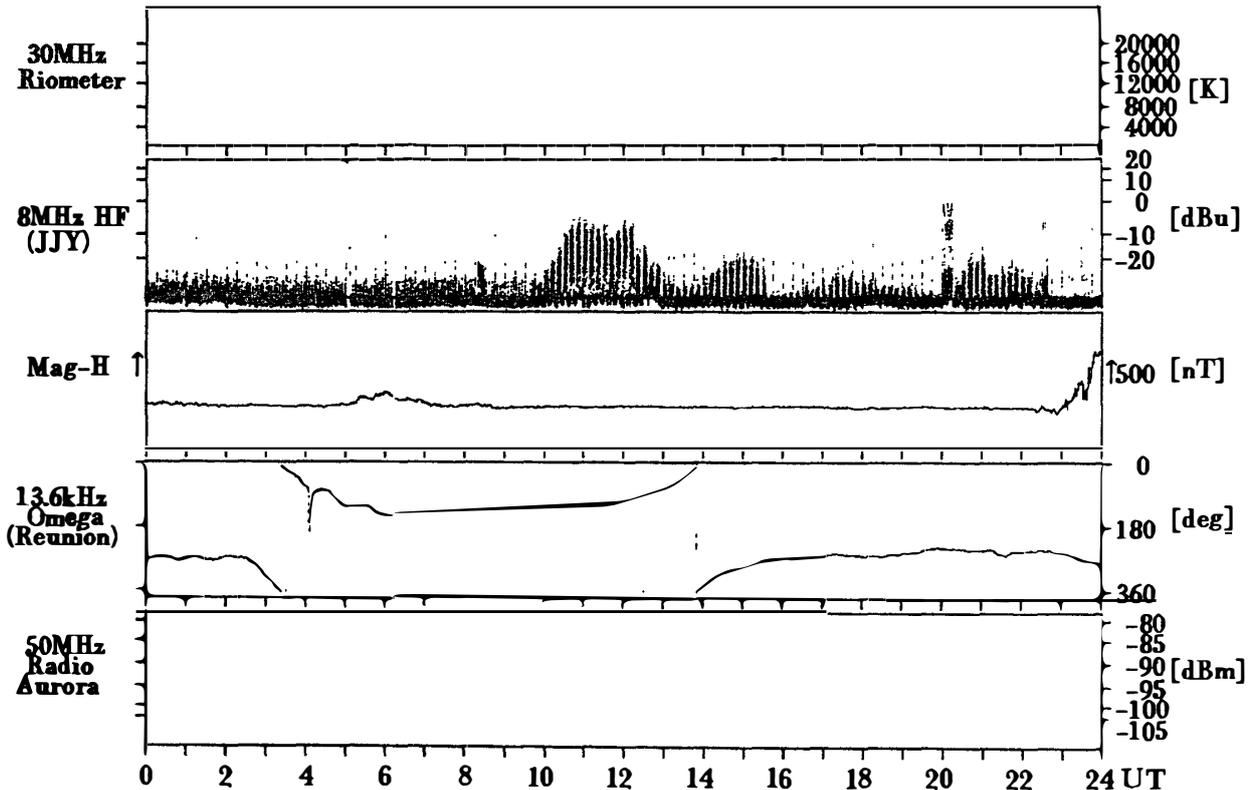
Syowa Station

Total Day / 211 1995/ 7/30



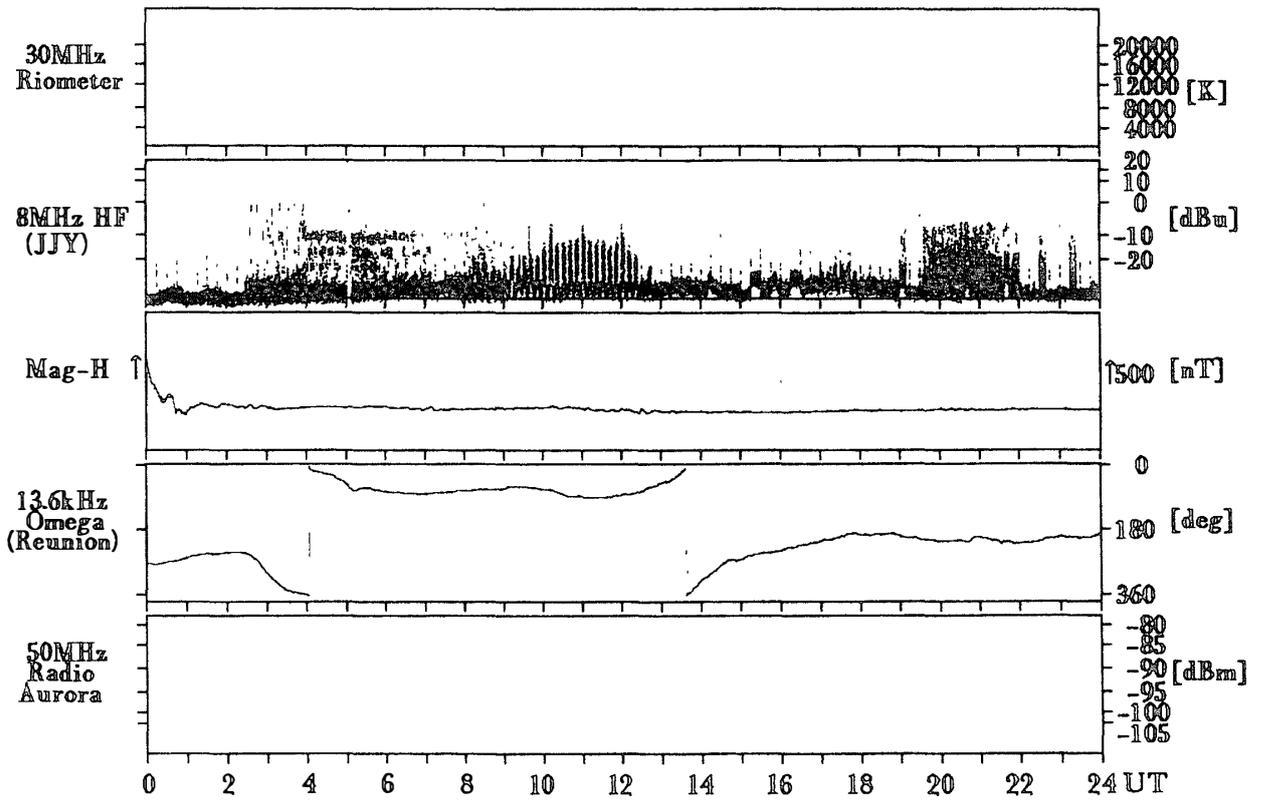
Syowa Station

Total Day / 212 1995/ 7/31



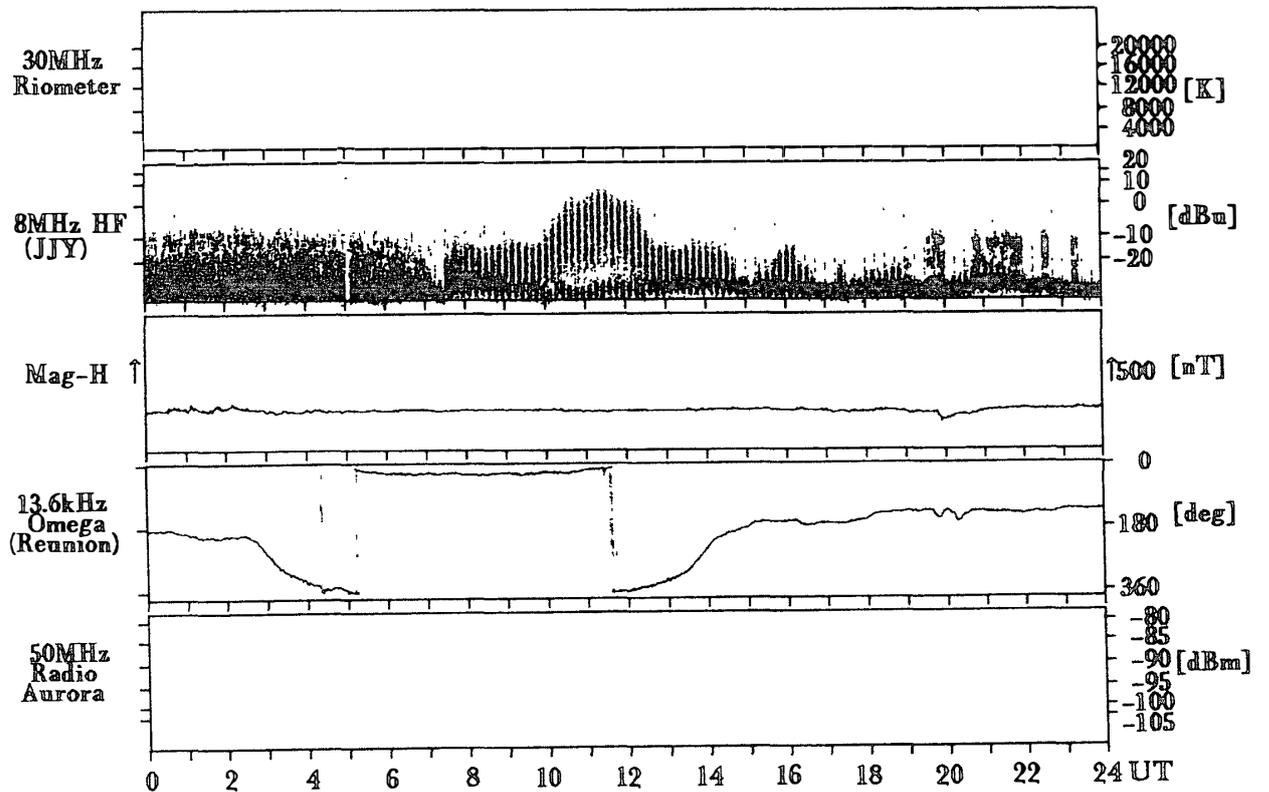
Syowa Station

Total Day / 213 1995/ 8/ 1



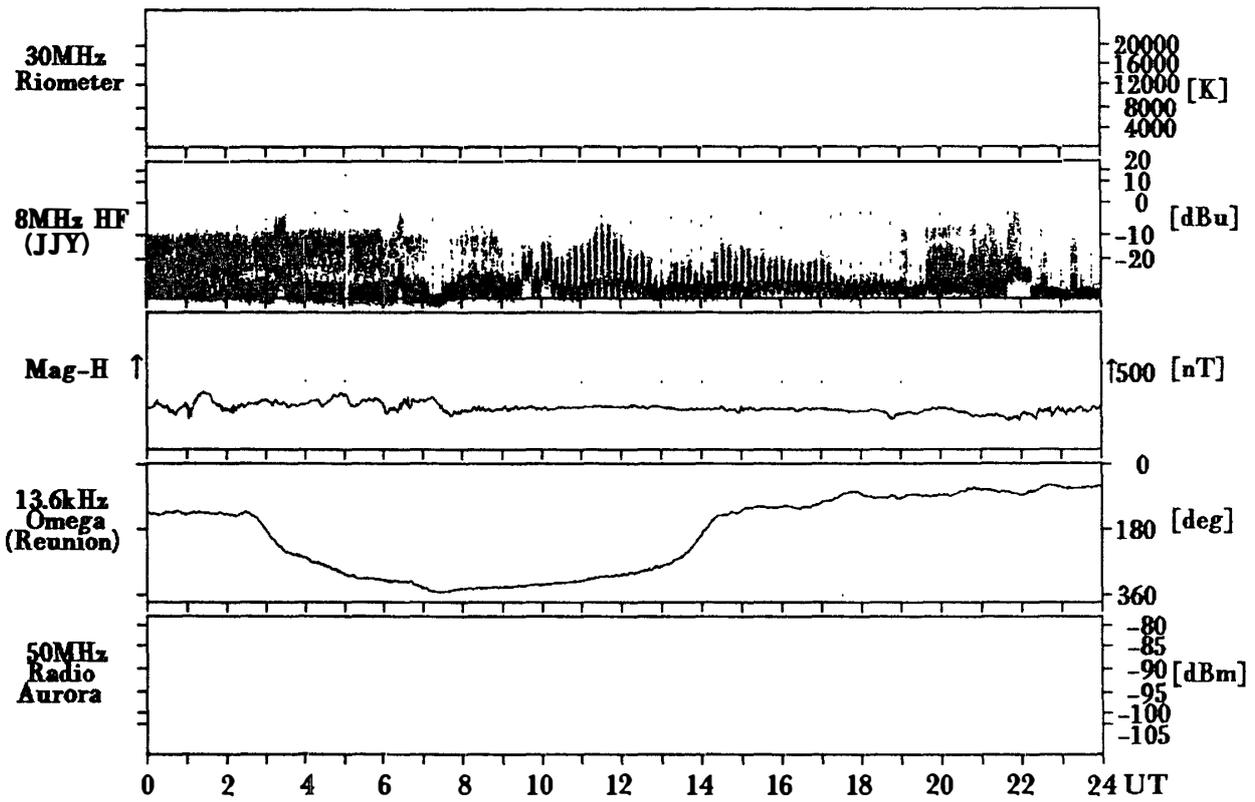
Syowa Station

Total Day / 214 1995/ 8/ 2



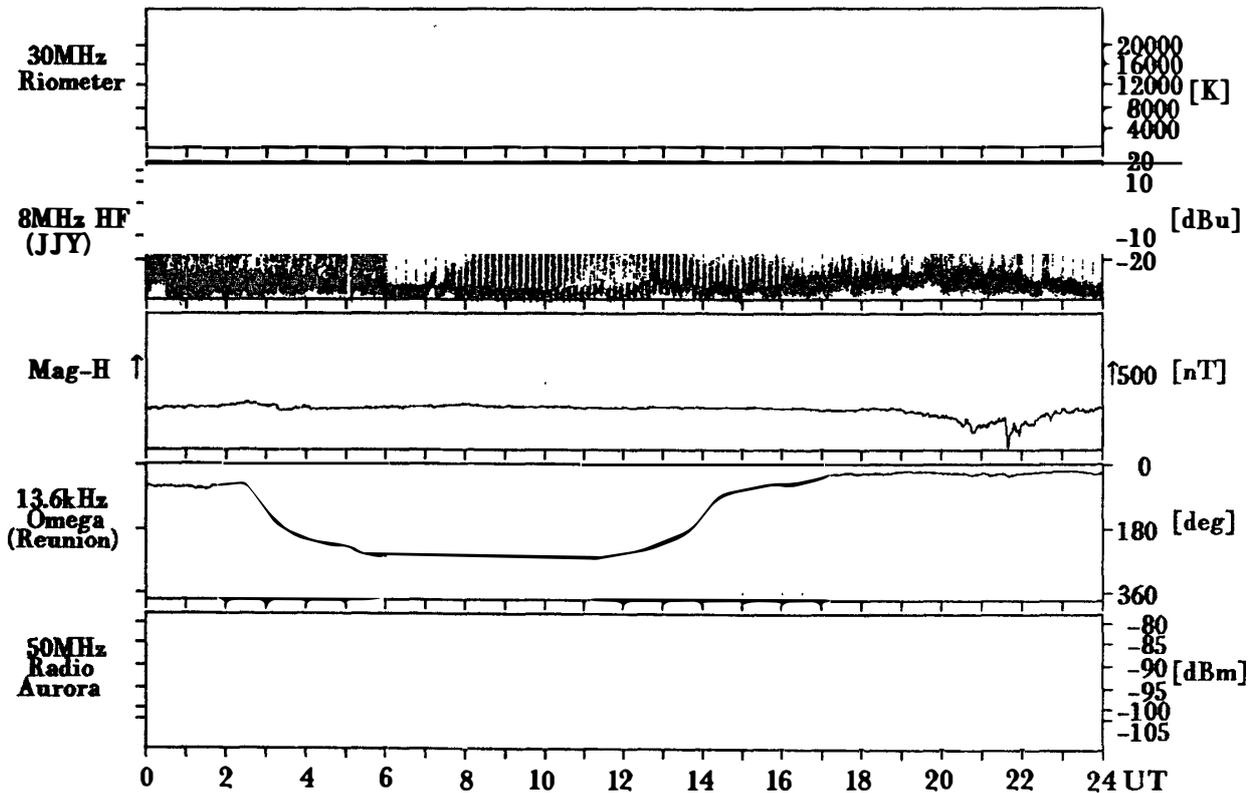
Syowa Station

Total Day / 215 1995/ 8/ 3



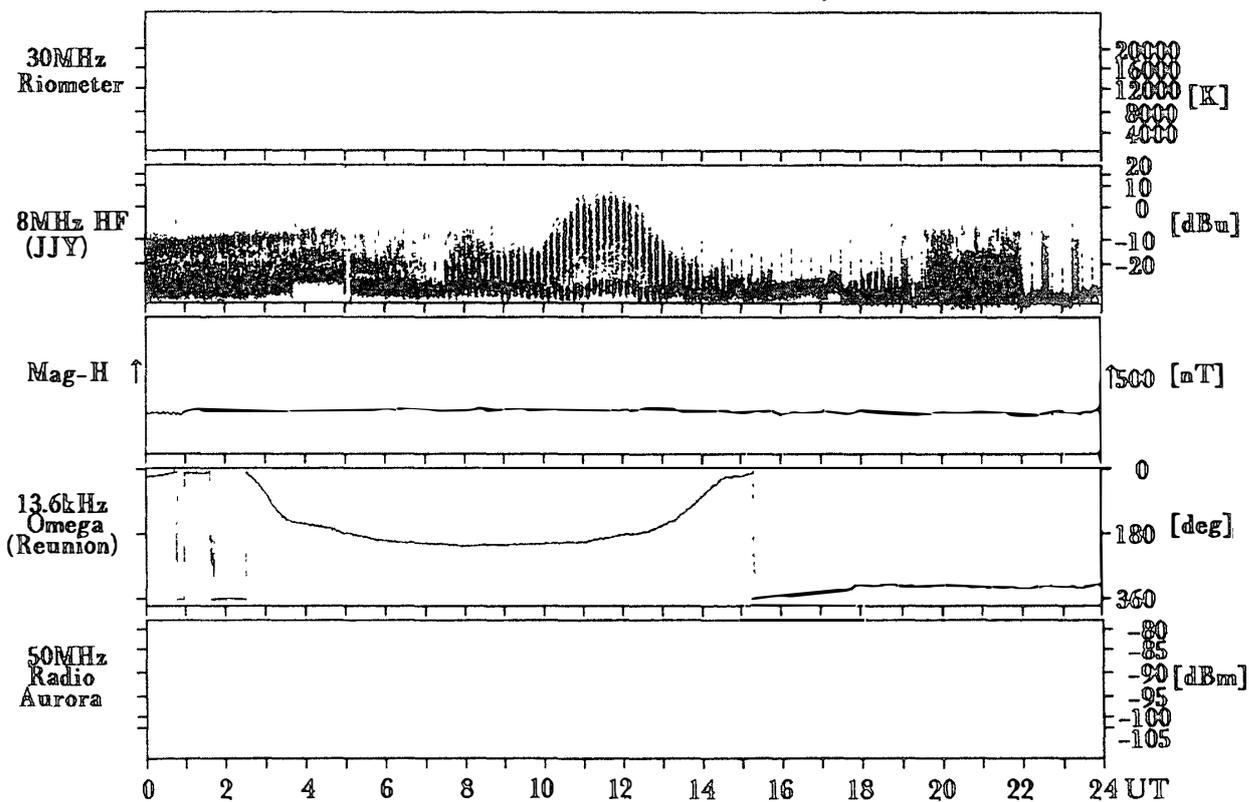
Syowa Station

Total Day / 216 1995/ 8/ 4



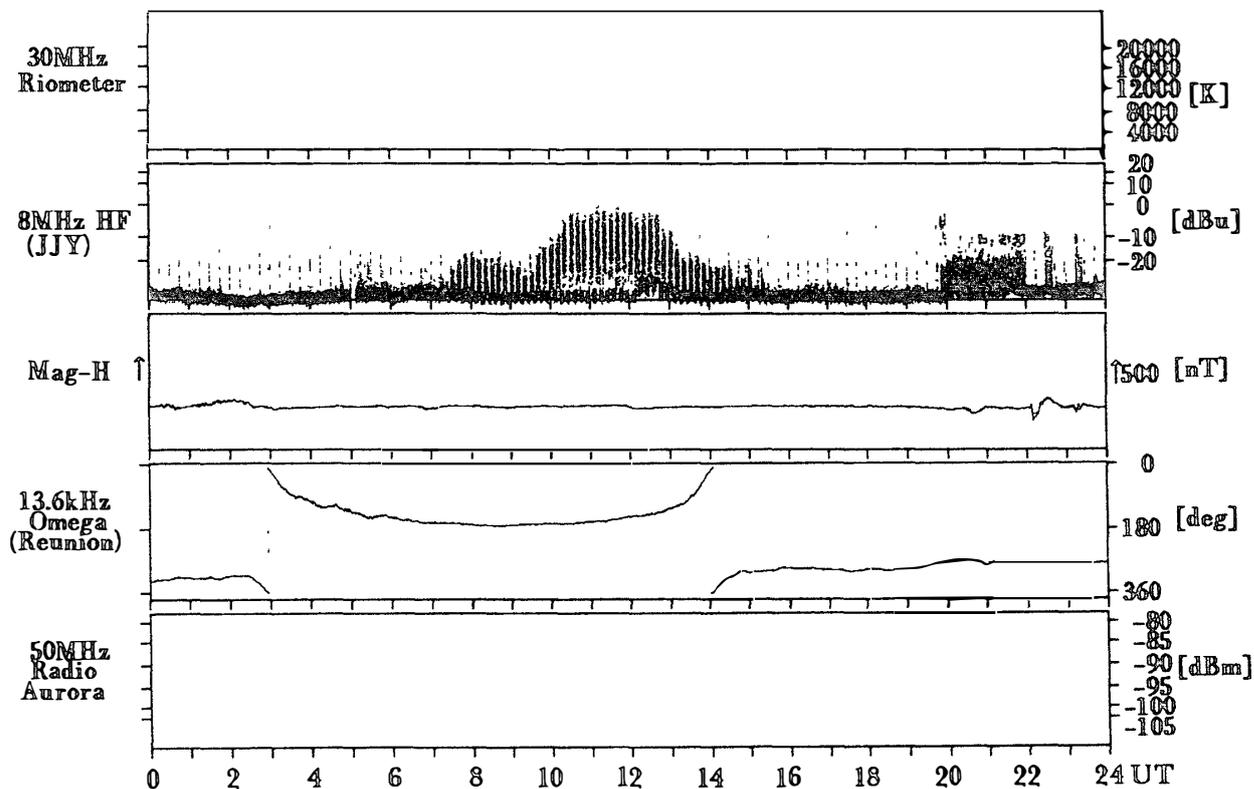
Syowa Station

Total Day / 217 1995/ 8/ 5



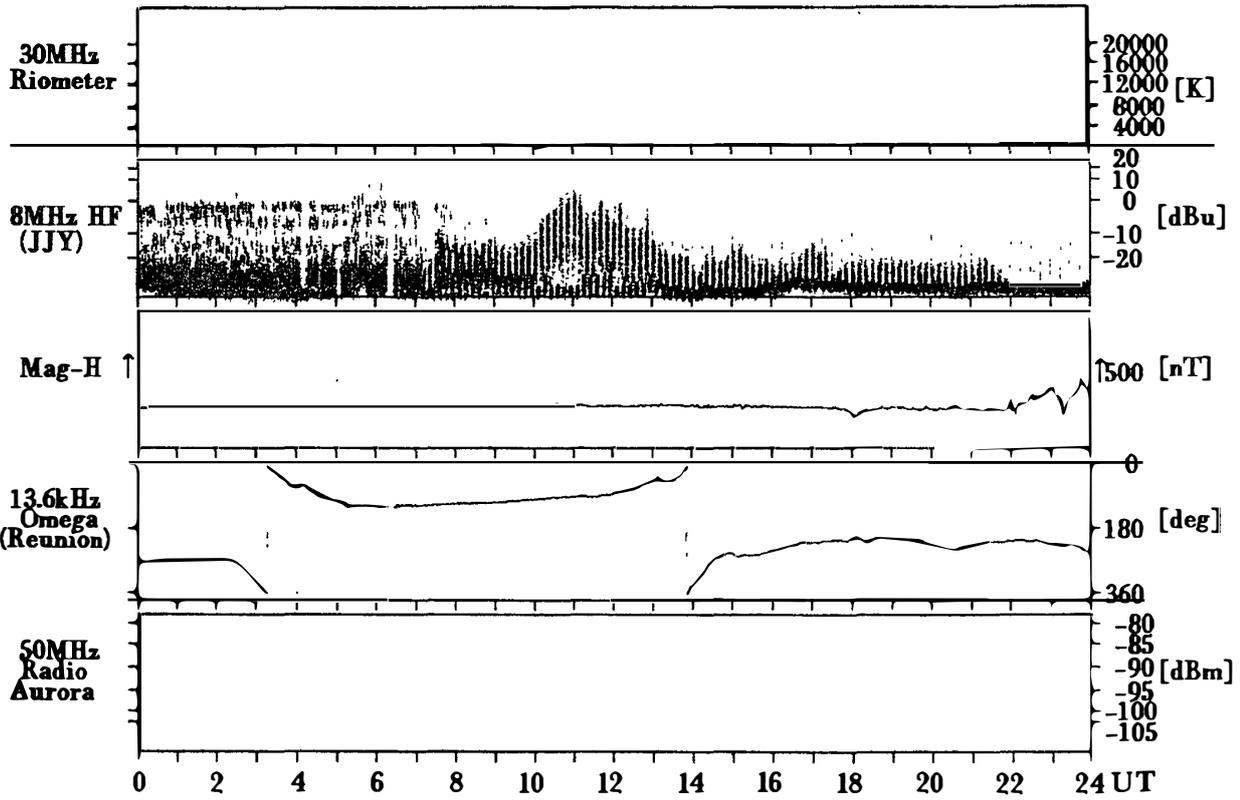
Syowa Station

Total Day / 218 1995/ 8/ 6



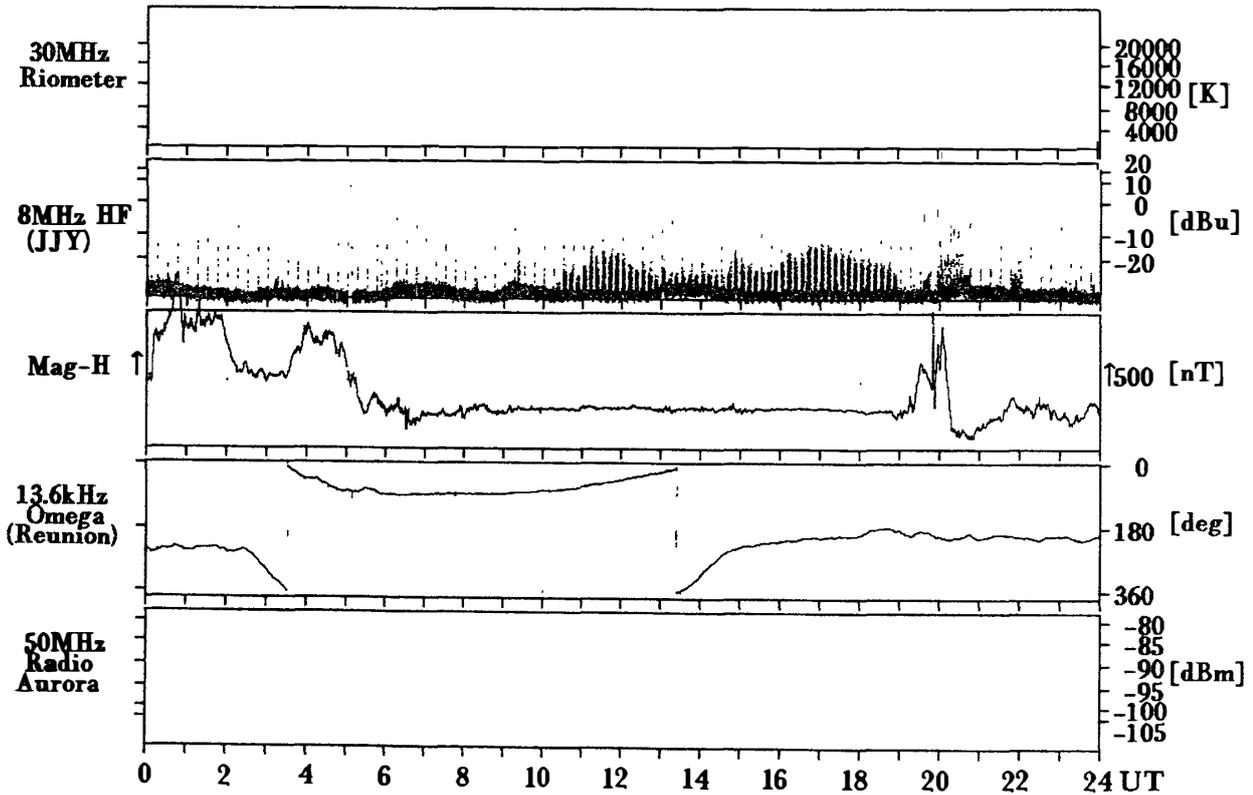
Syowa Station

Total Day / 219 1995/ 8/ 7



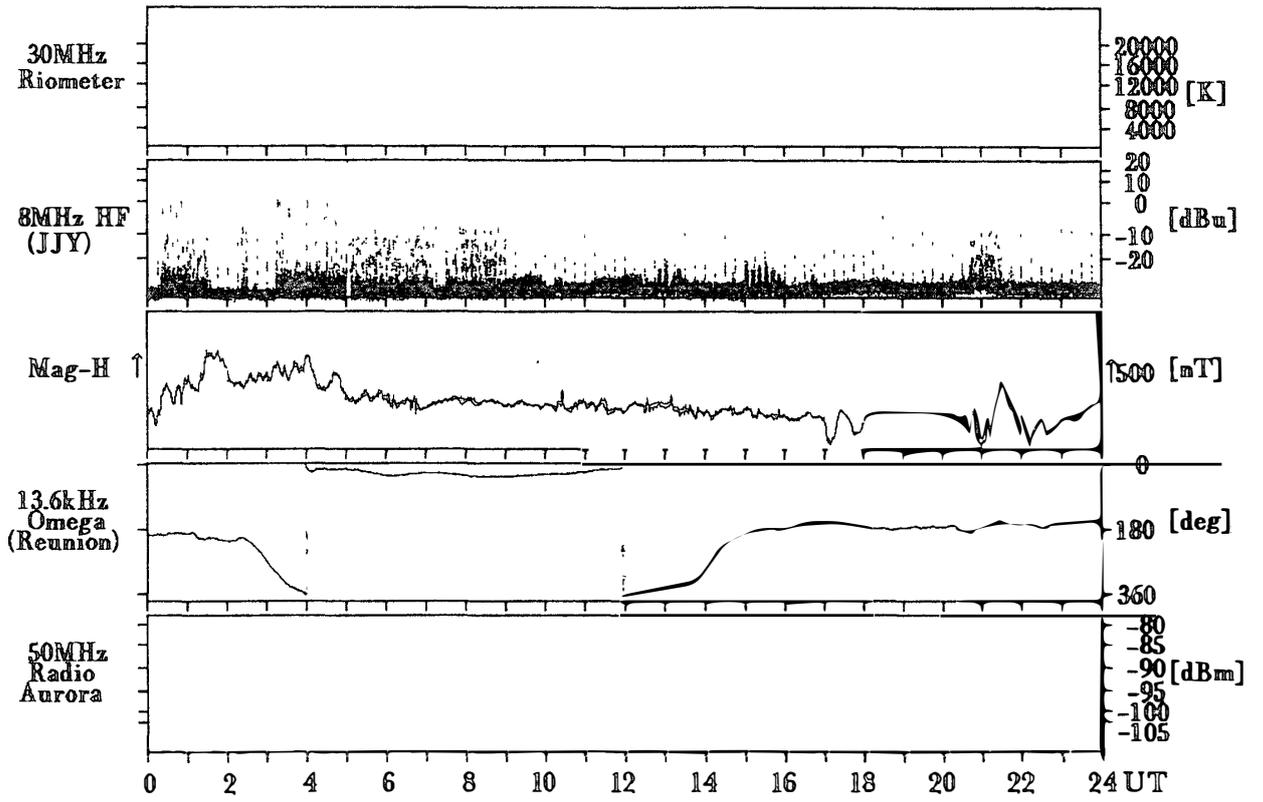
Syowa Station

Total Day / 220 1995/ 8/ 8



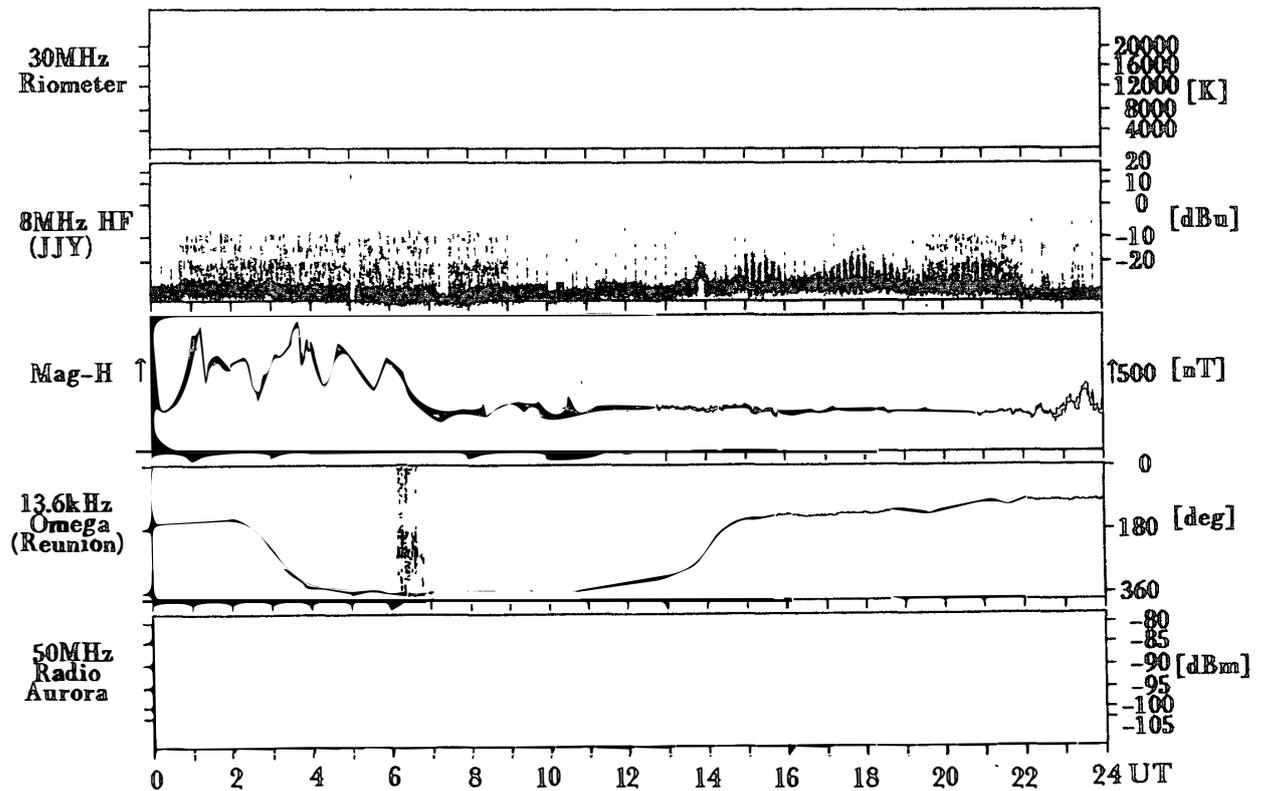
Syowa Station

Total Day / 221 1995/ 8/ 9



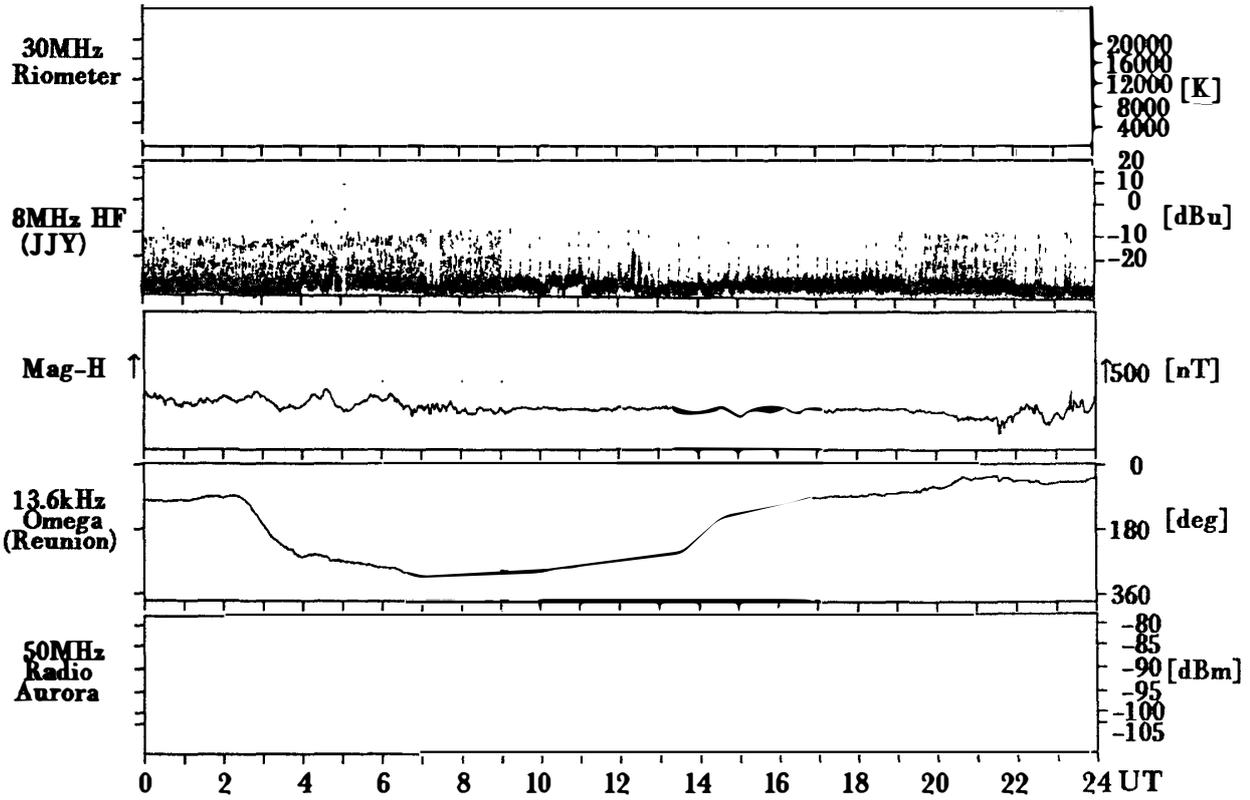
Syowa Station

Total Day / 222 1995/ 8/10



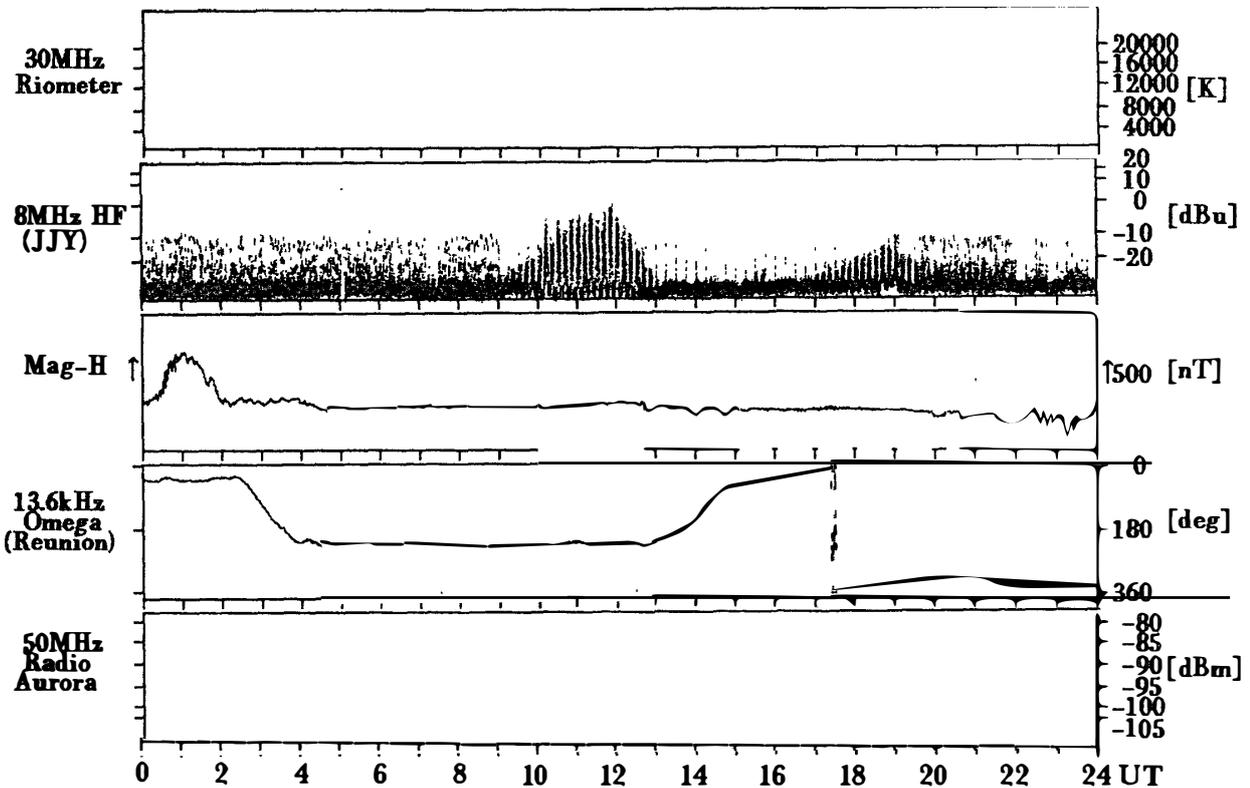
Syowa Station

Total Day / 223 1995/ 8/11



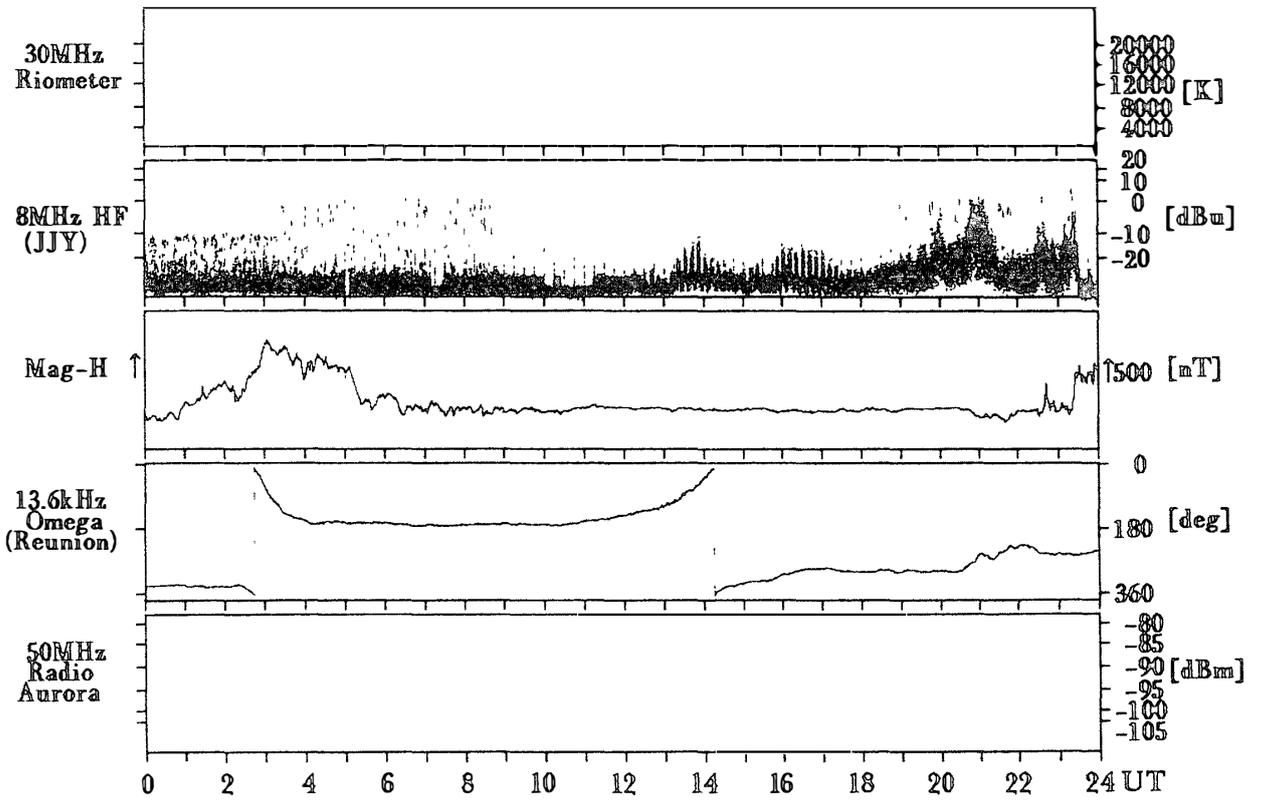
Syowa Station

Total Day / 224 1995/ 8/12



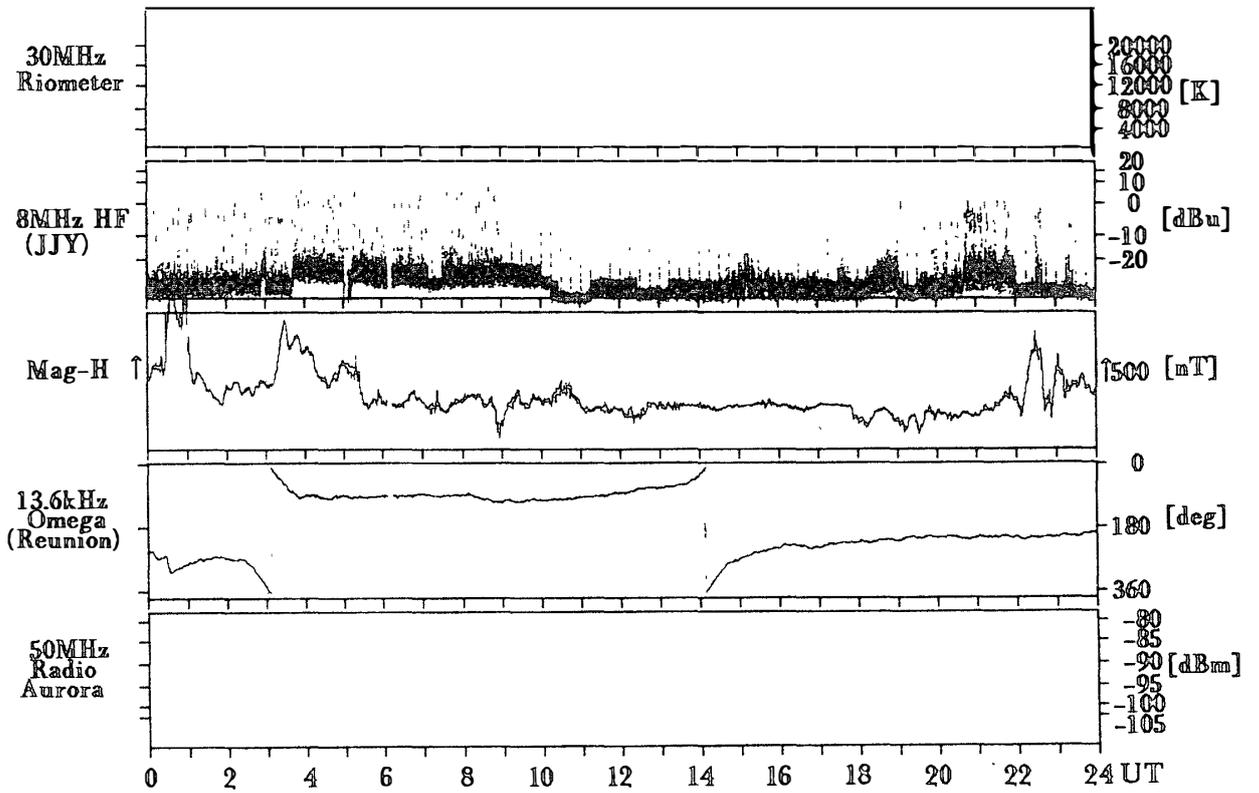
Syowa Station

Total Day / 225 1995/ 8/13



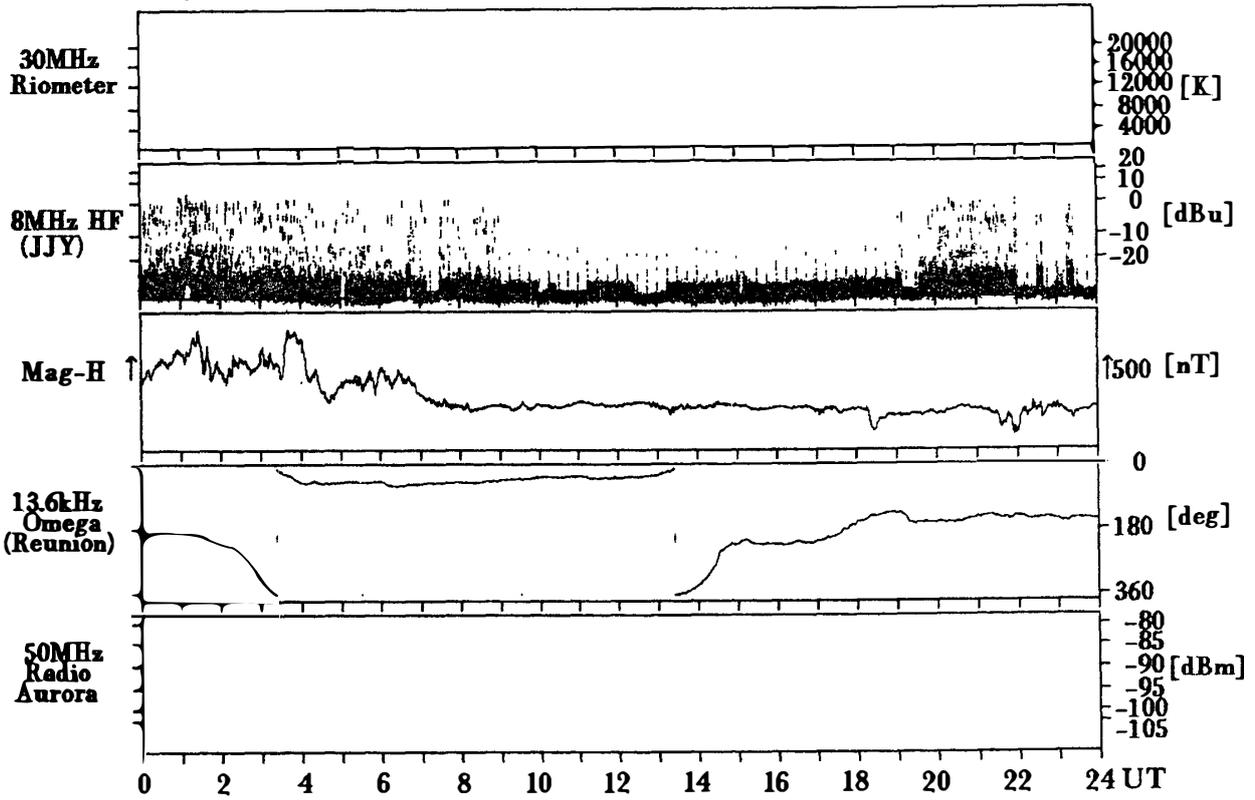
Syowa Station

Total Day / 226 1995/ 8/14



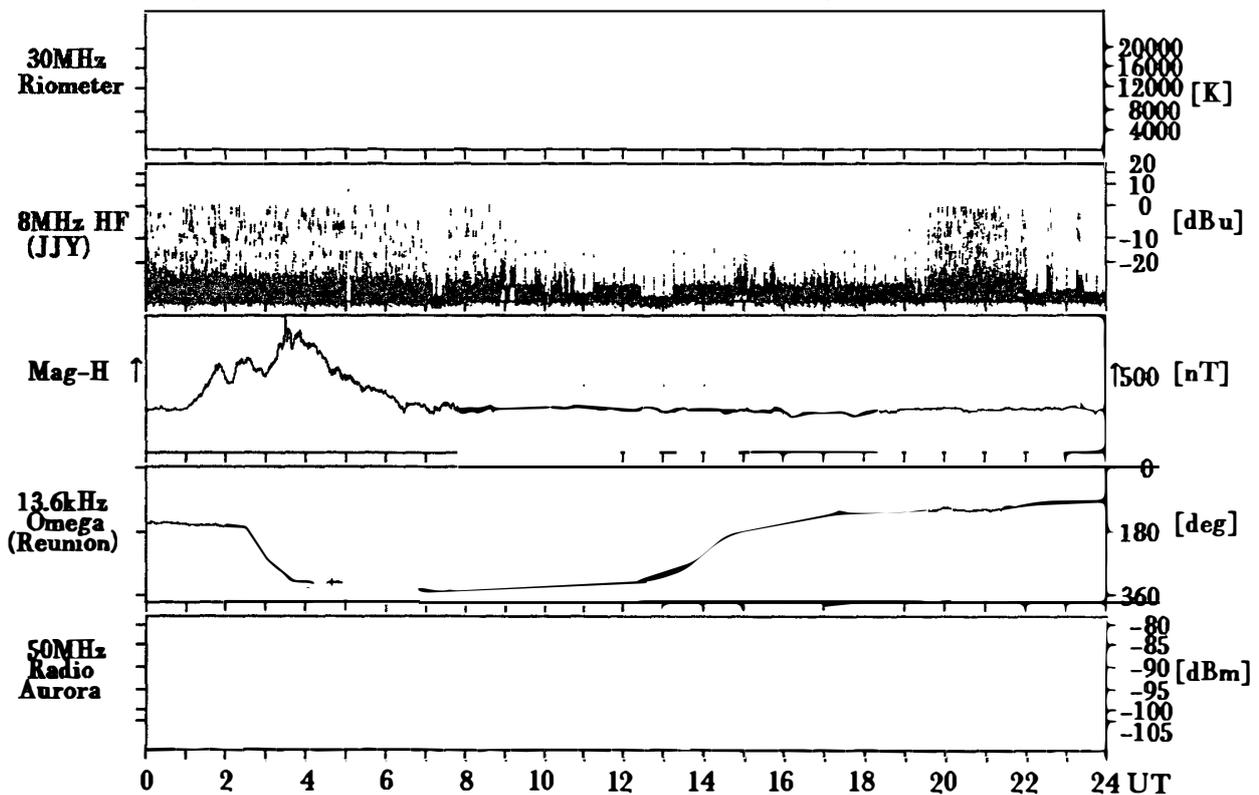
Syowa Station

Total Day / 227 1995/ 8/15



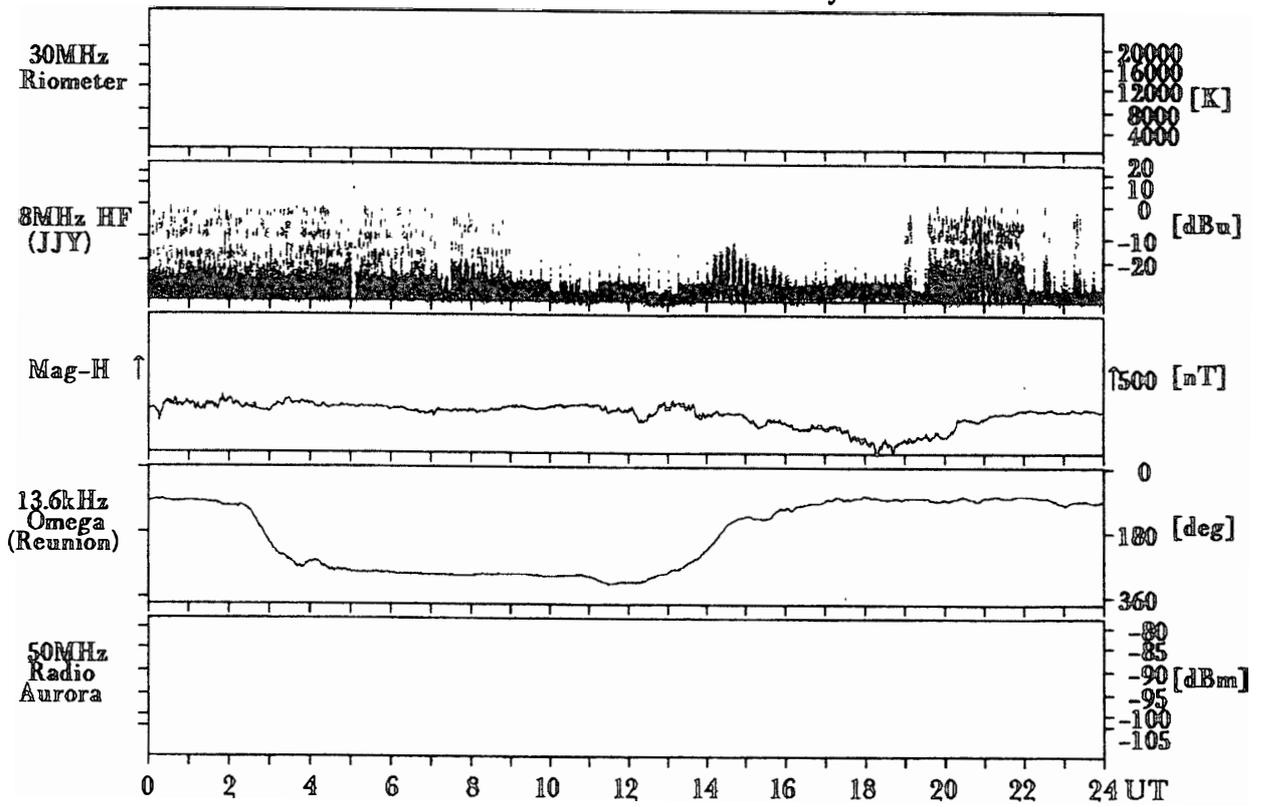
Syowa Station

Total Day / 228 1995/ 8/16



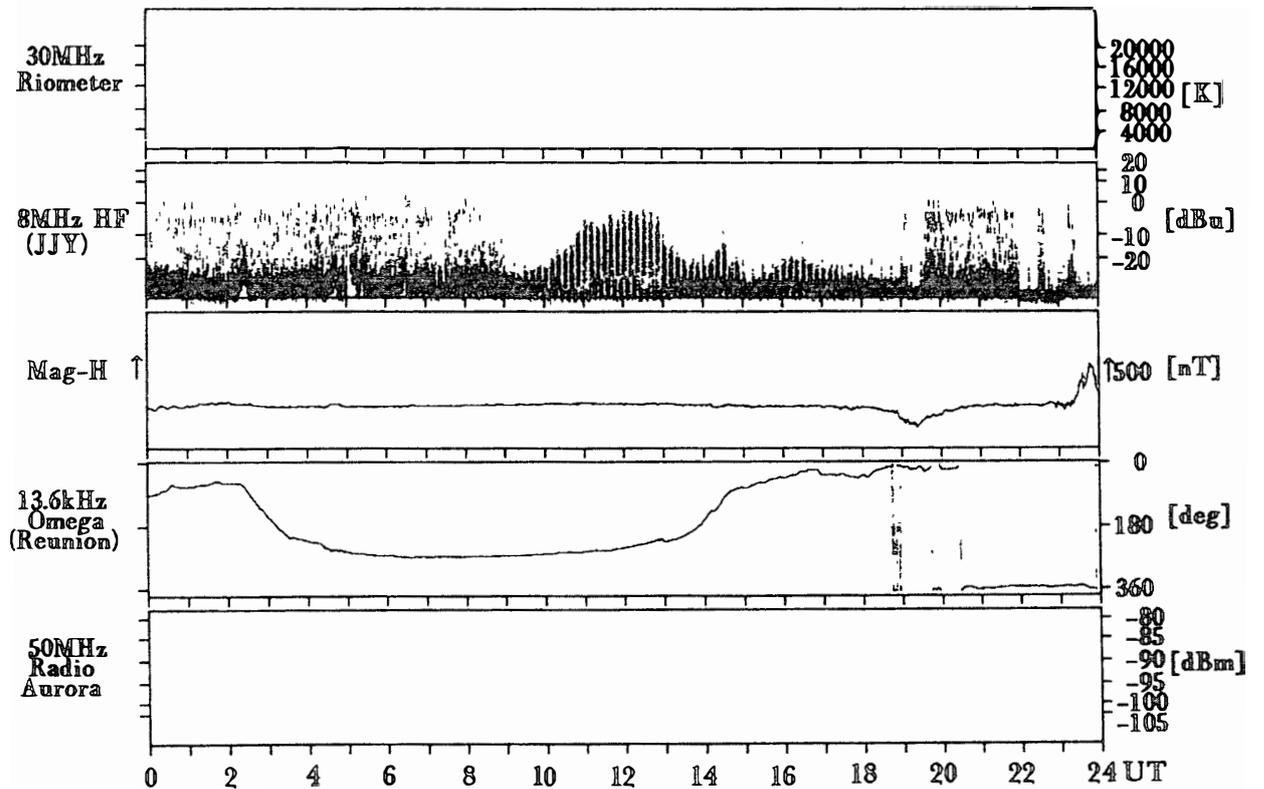
Syowa Station

Total Day / 229 1995/ 8/17



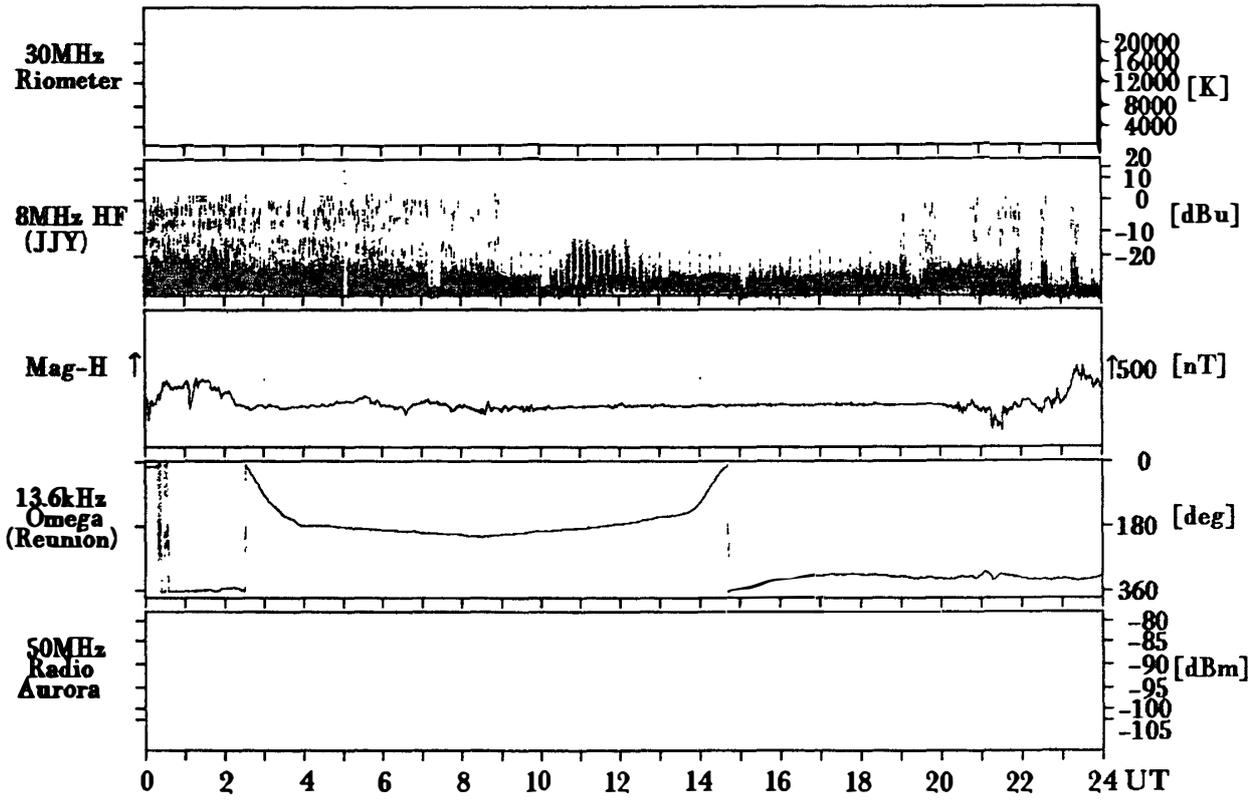
Syowa Station

Total Day / 230 1995/ 8/18



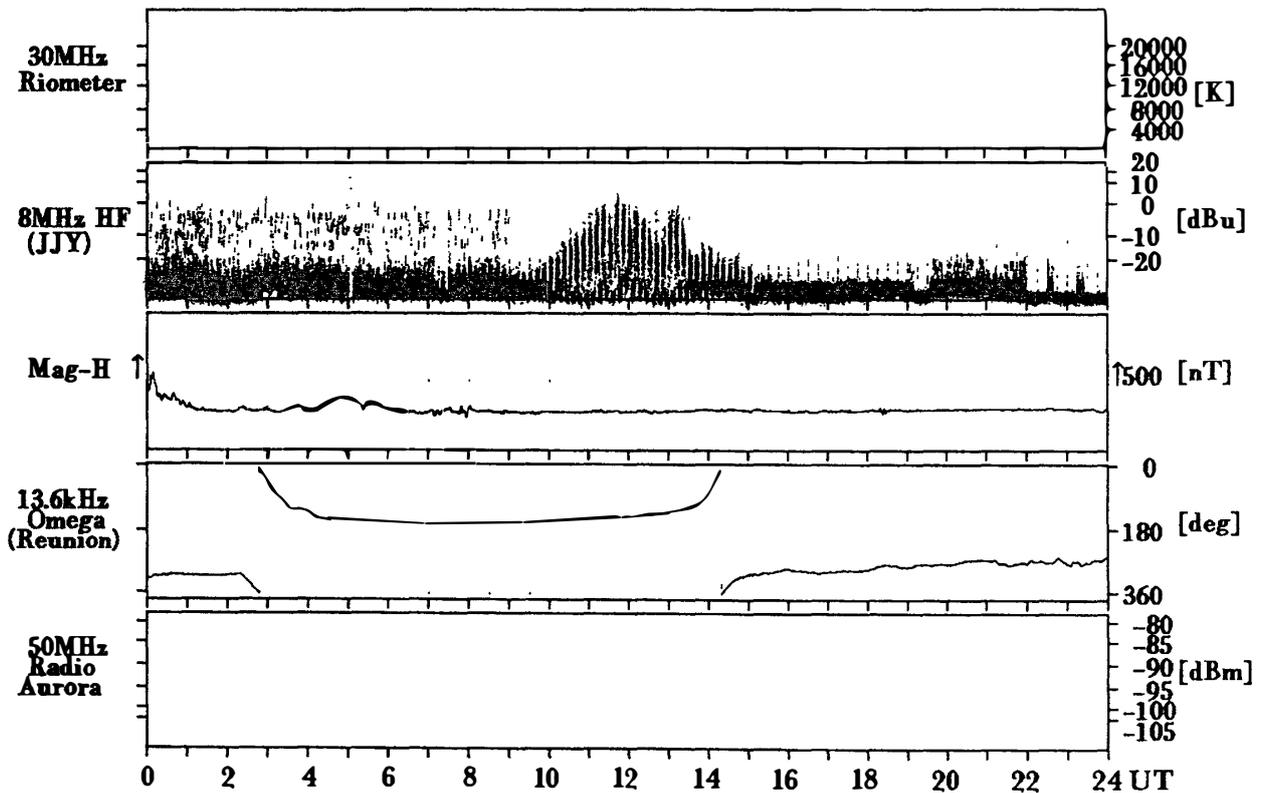
Syowa Station

Total Day / 231 1995/ 8/19



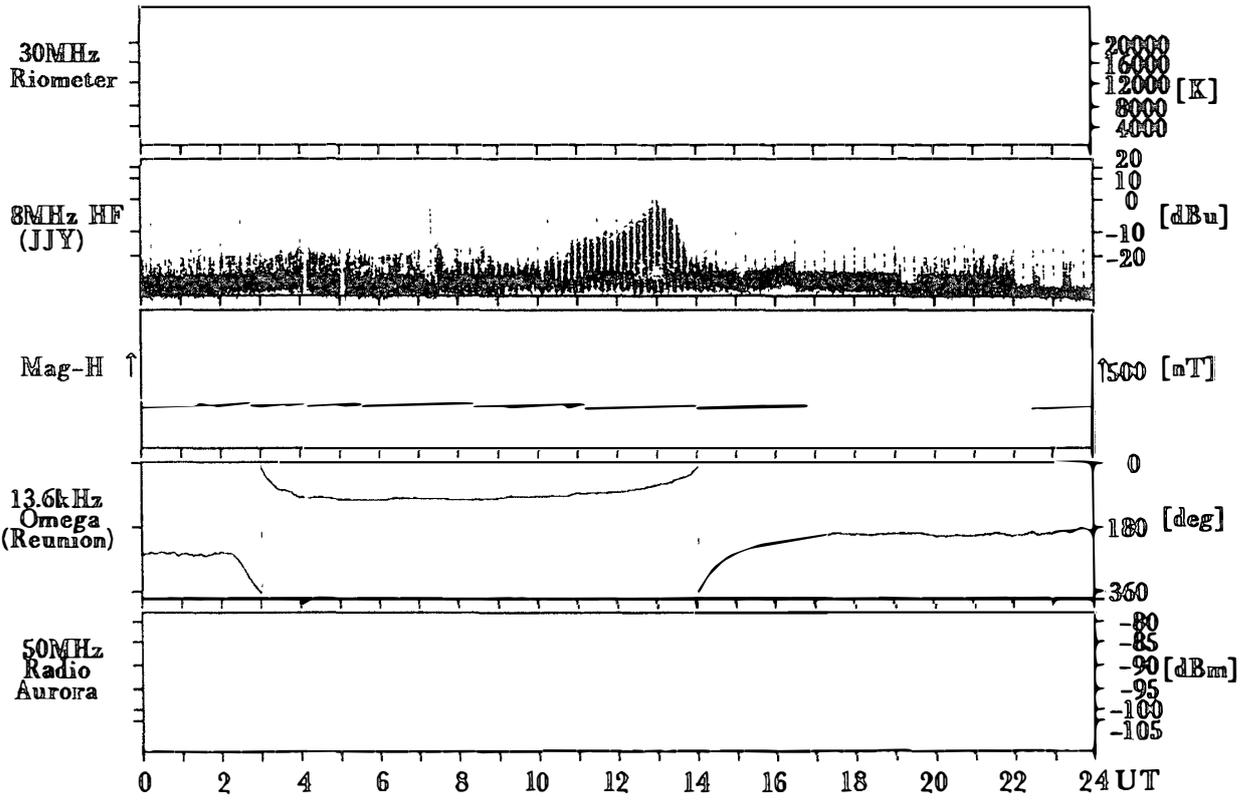
Syowa Station

Total Day / 232 1995/ 8/20



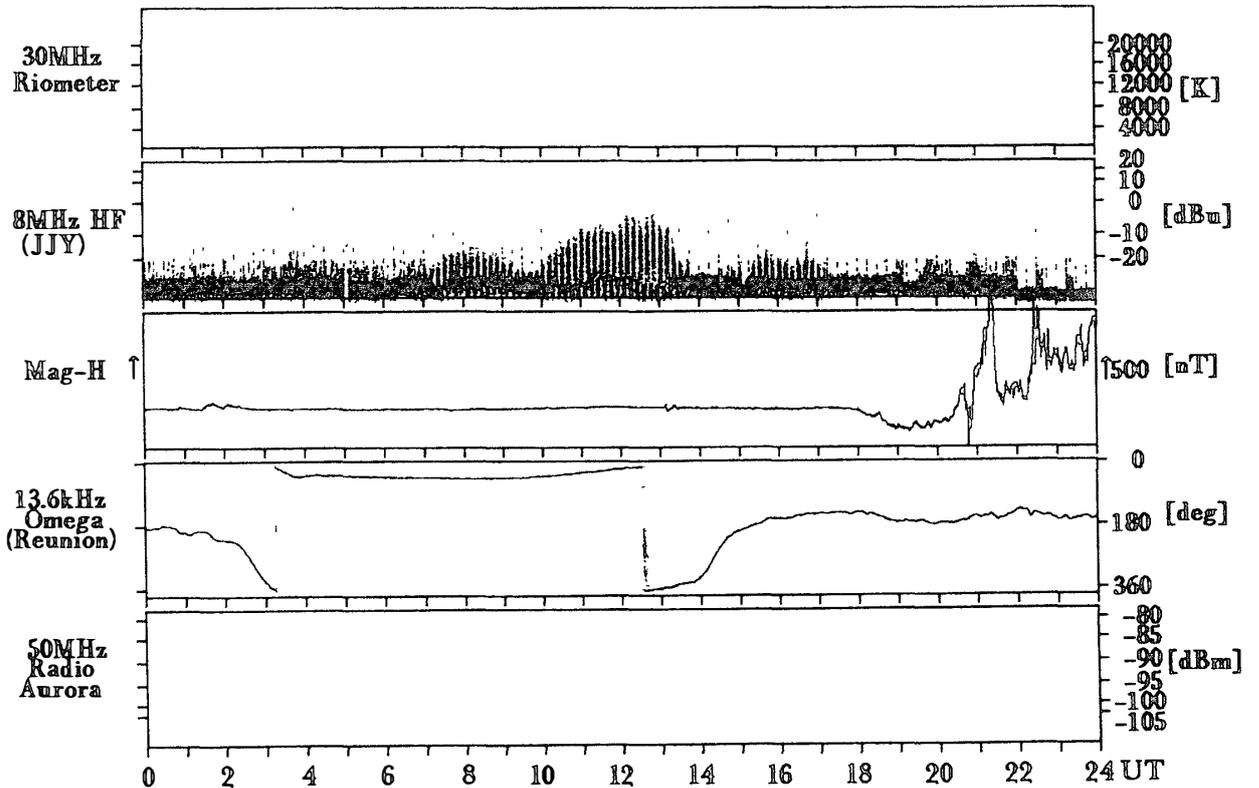
Syowa Station

Total Day / 233 1995/ 8/21



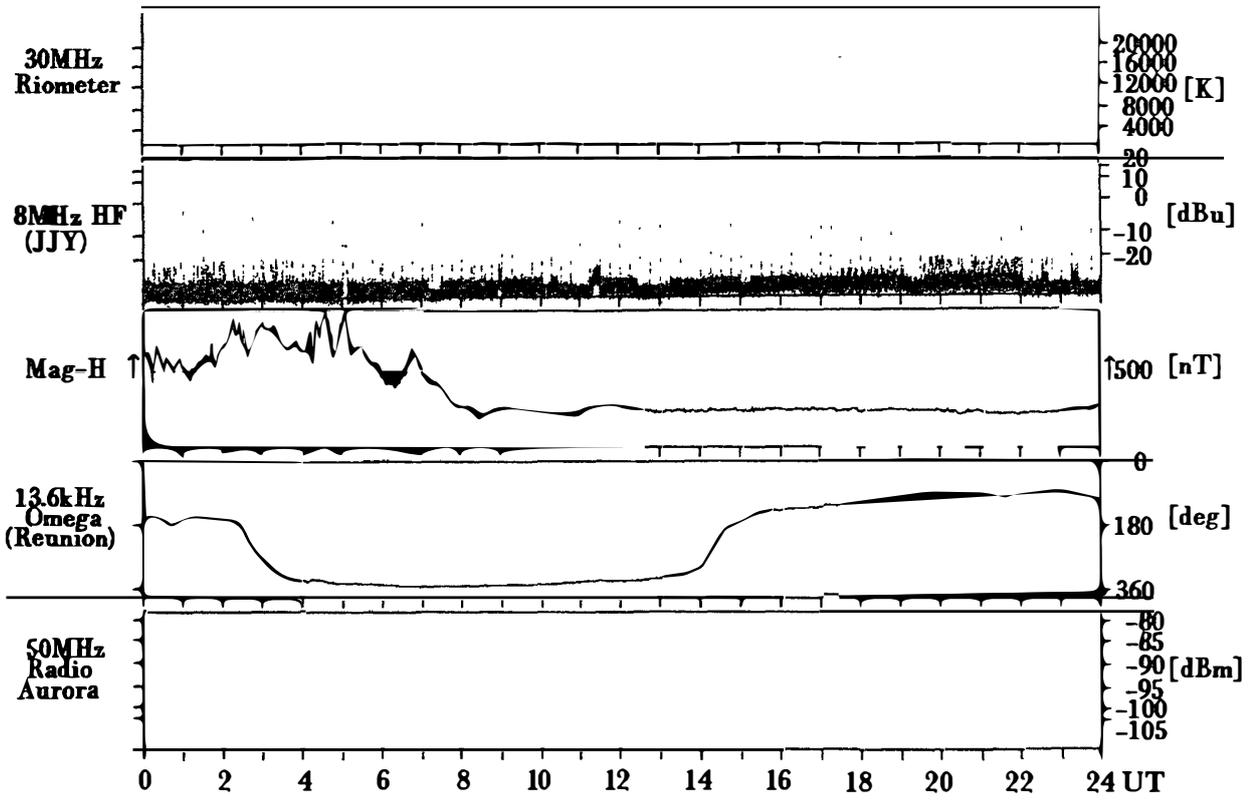
Syowa Station

Total Day / 234 1995/ 8/22



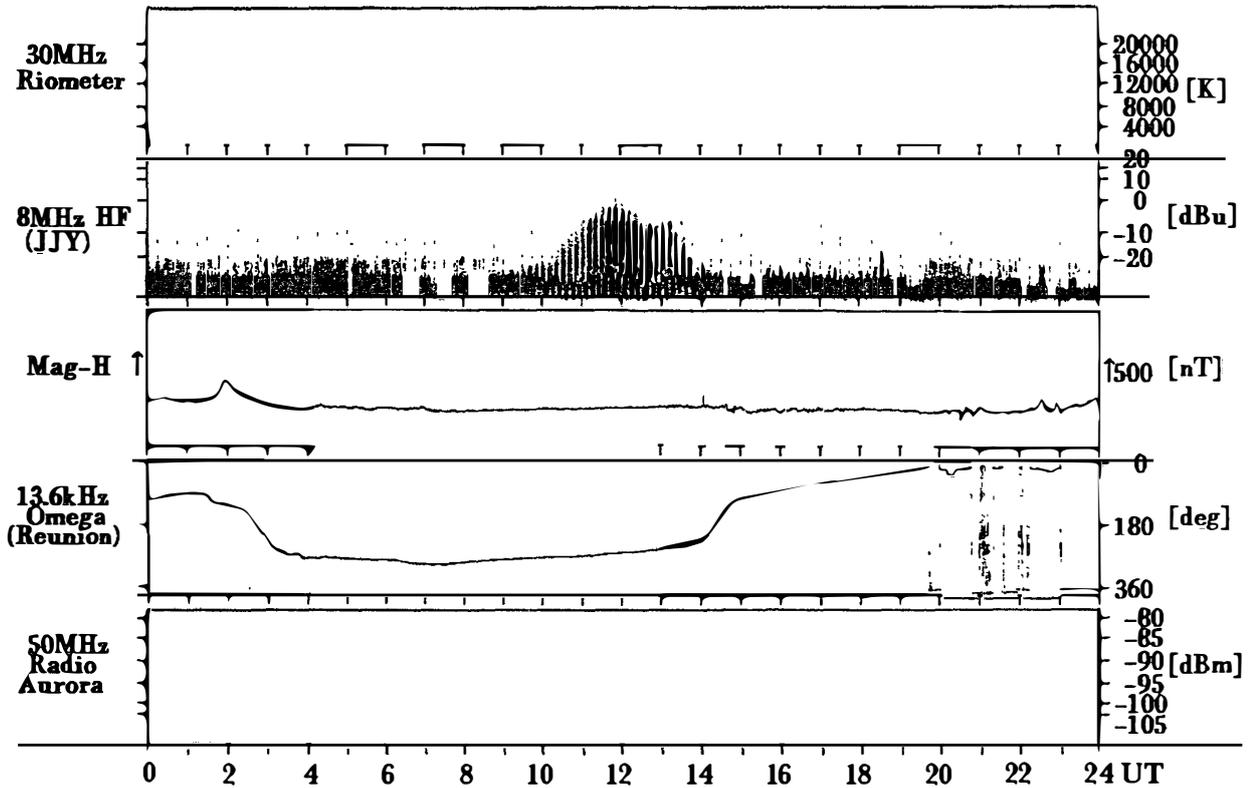
Syowa Station

Total Day / 235 1995/ 8/23



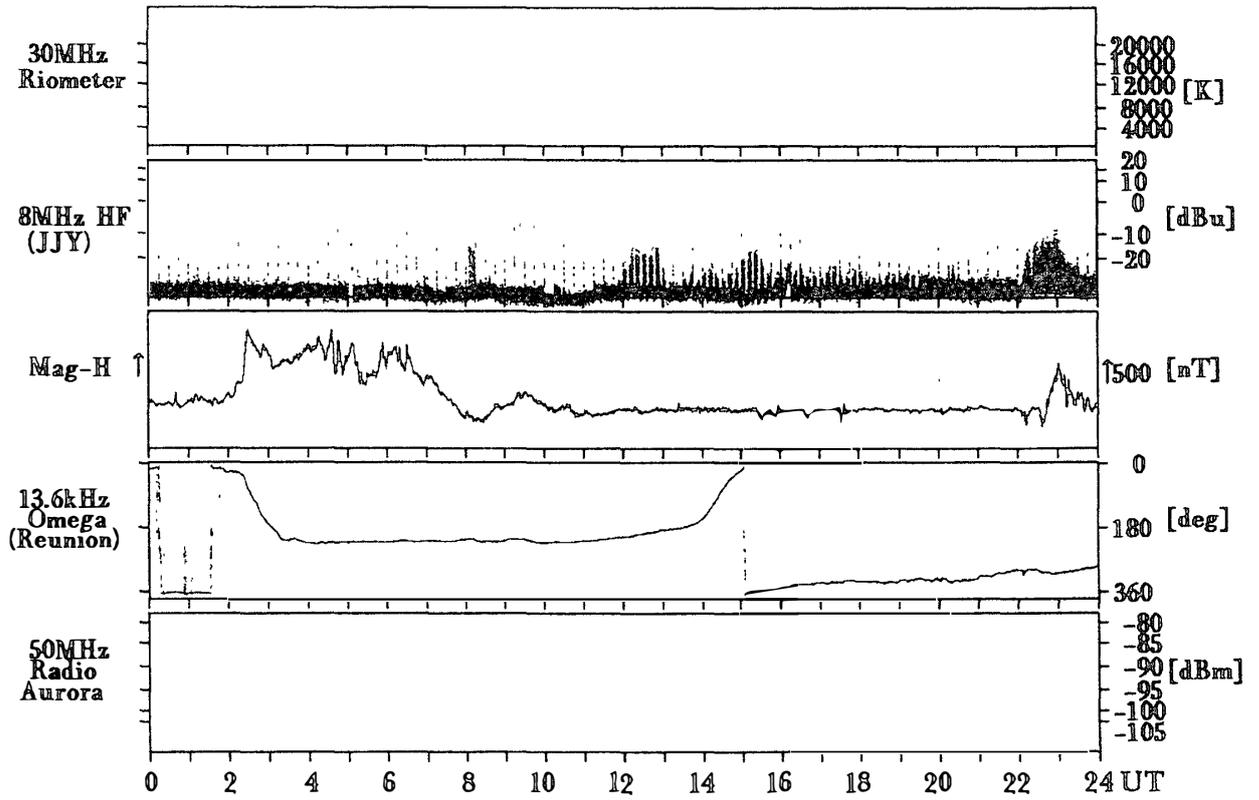
Syowa Station

Total Day / 236 1995/ 8/24



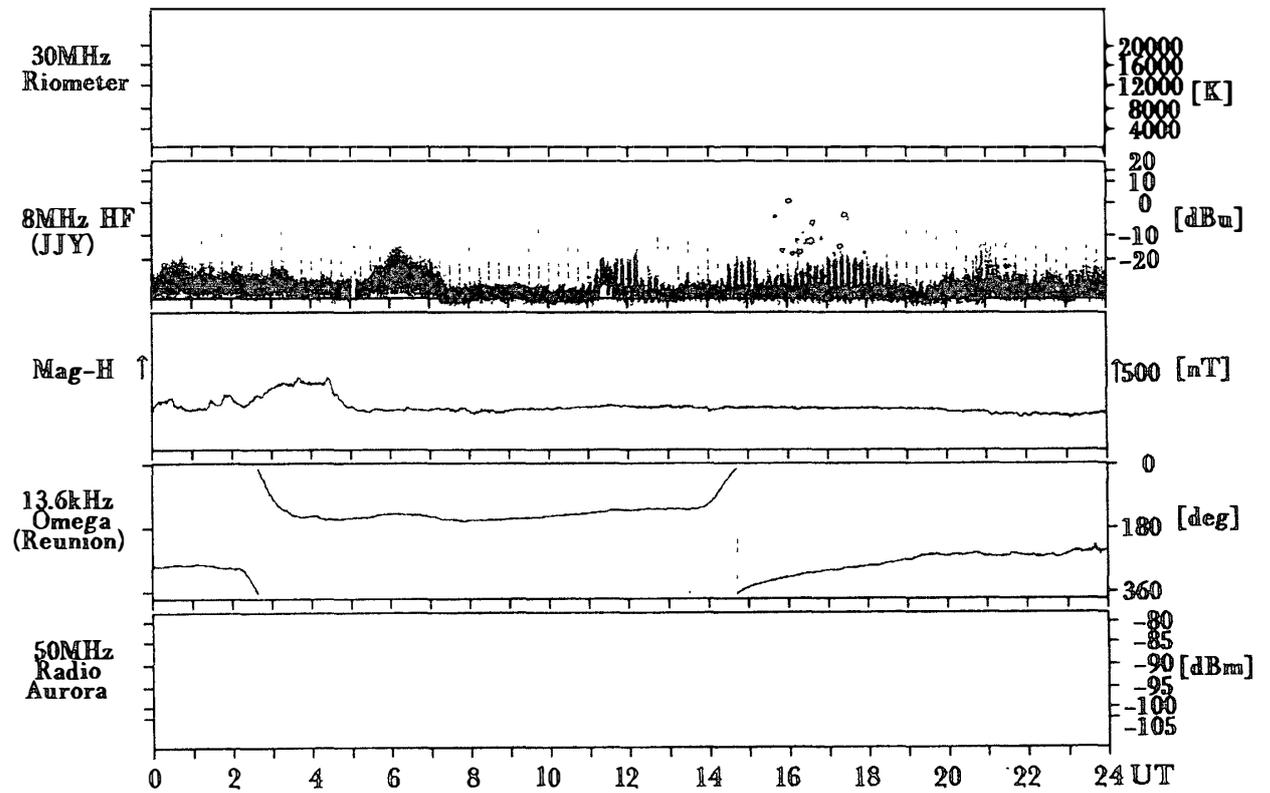
Syowa Station

Total Day / 237 1995/ 8/25



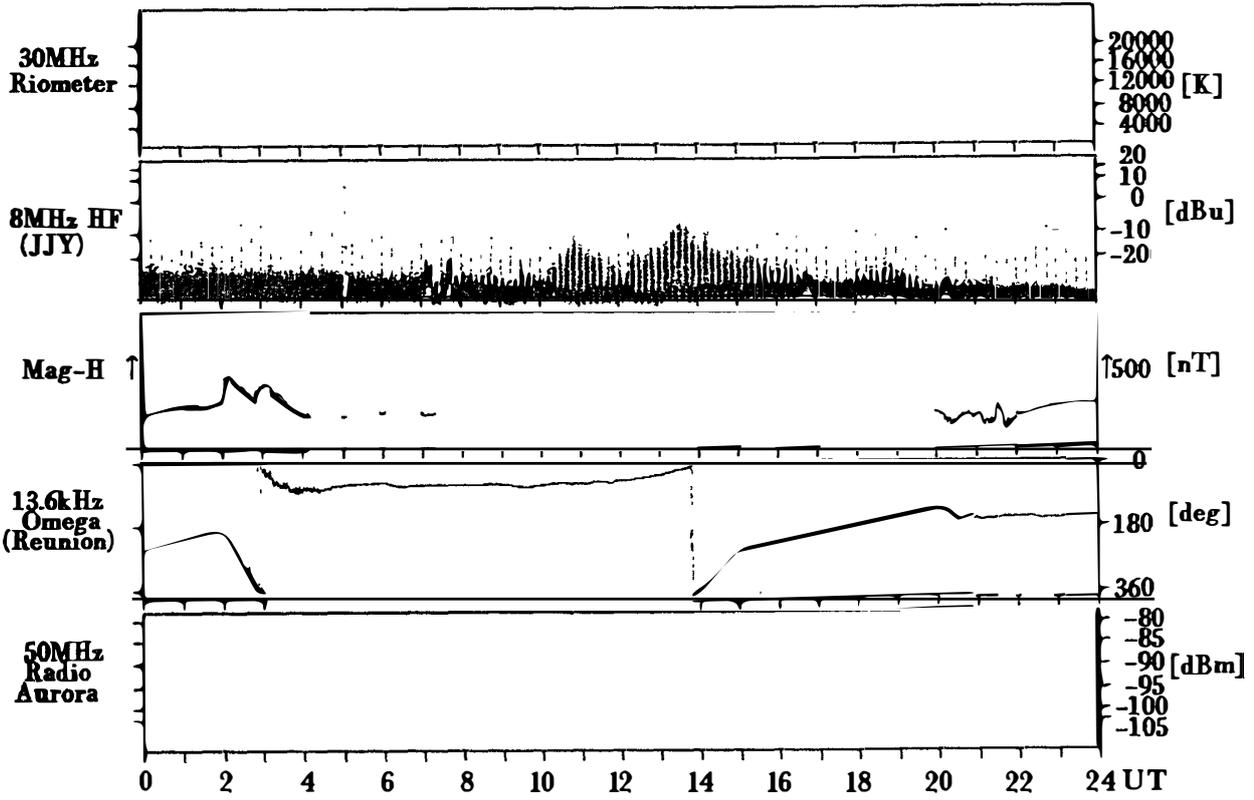
Syowa Station

Total Day / 238 1995/ 8/26



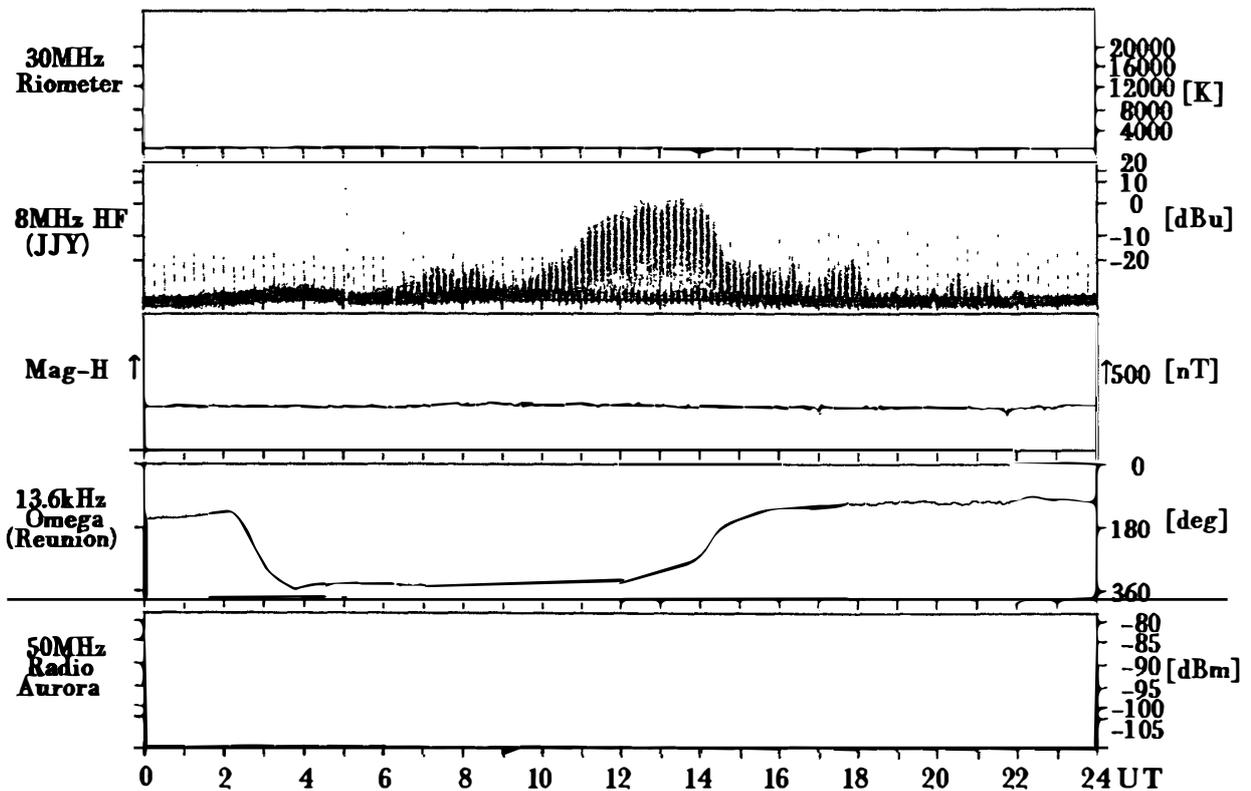
Syowa Station

Total Day / 239 1995/ 8/27



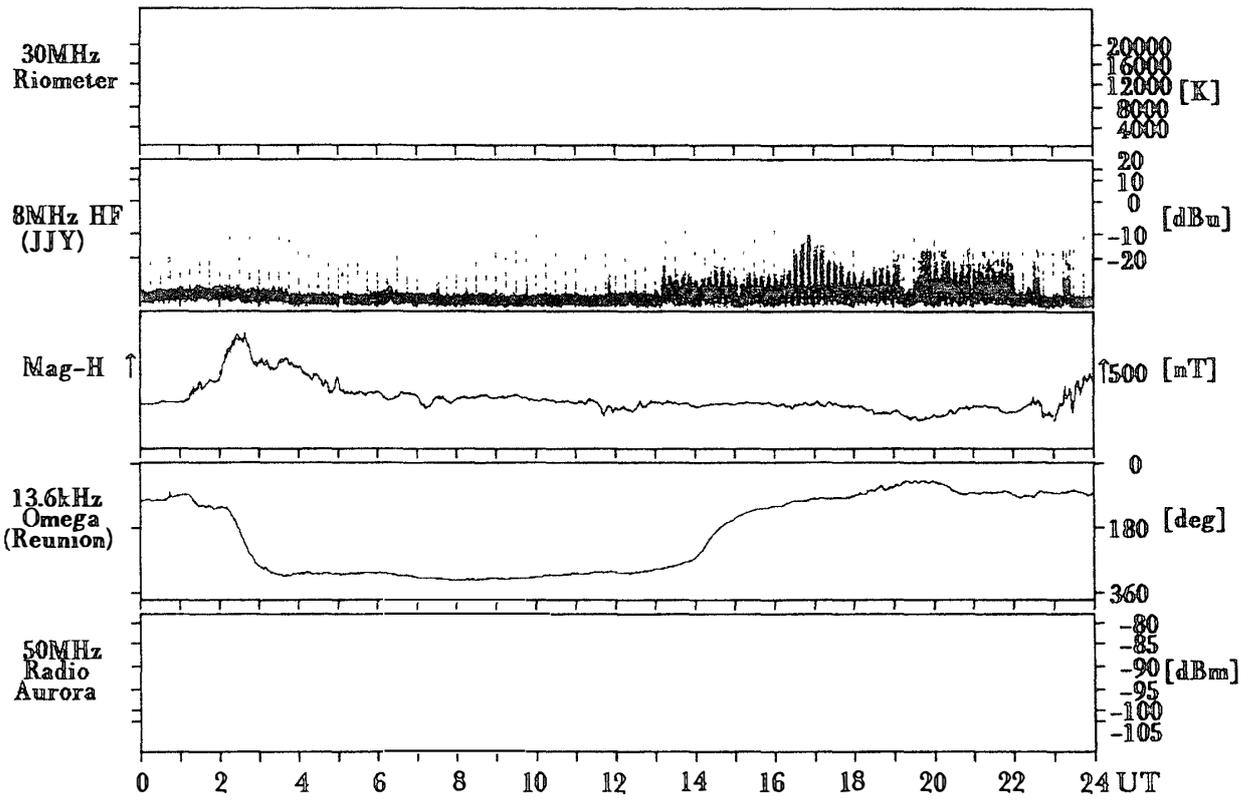
Syowa Station

Total Day / 240 1995/ 8/28



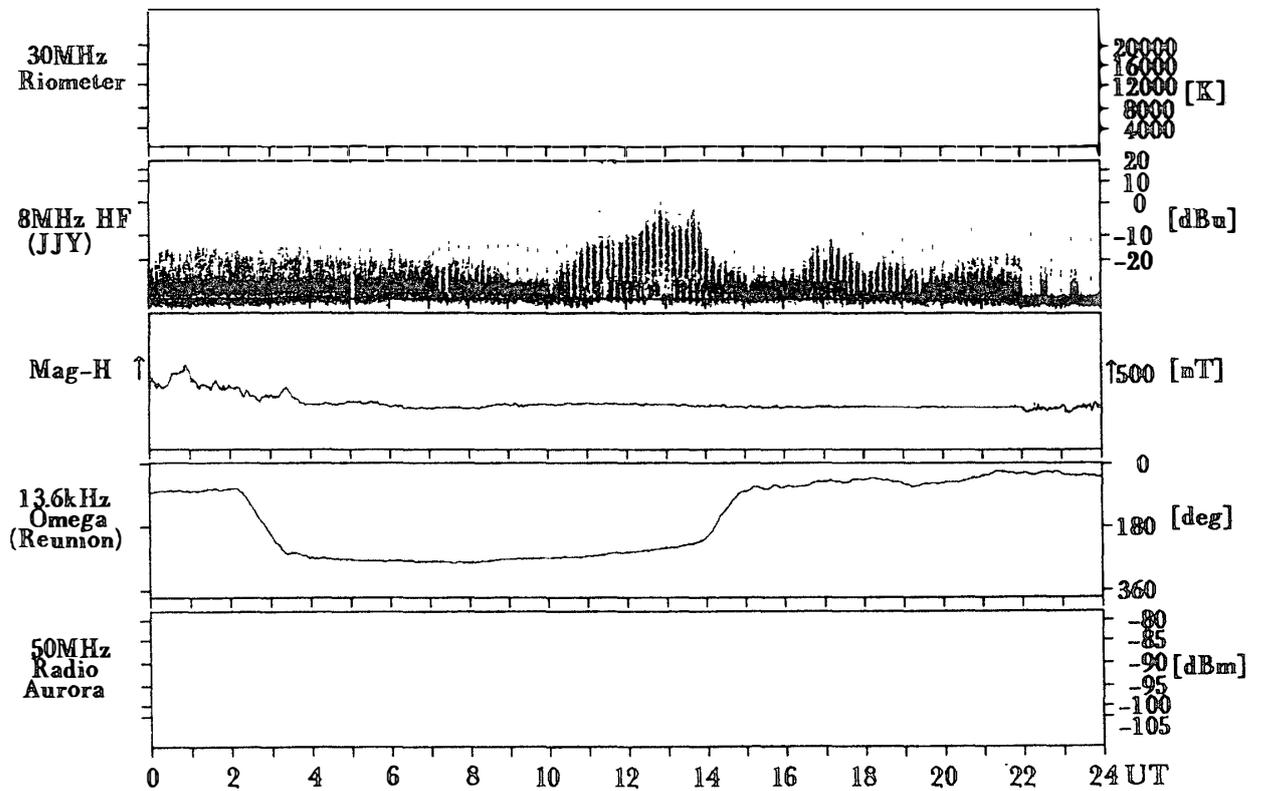
Syowa Station

Total Day / 241 1995/ 8/29



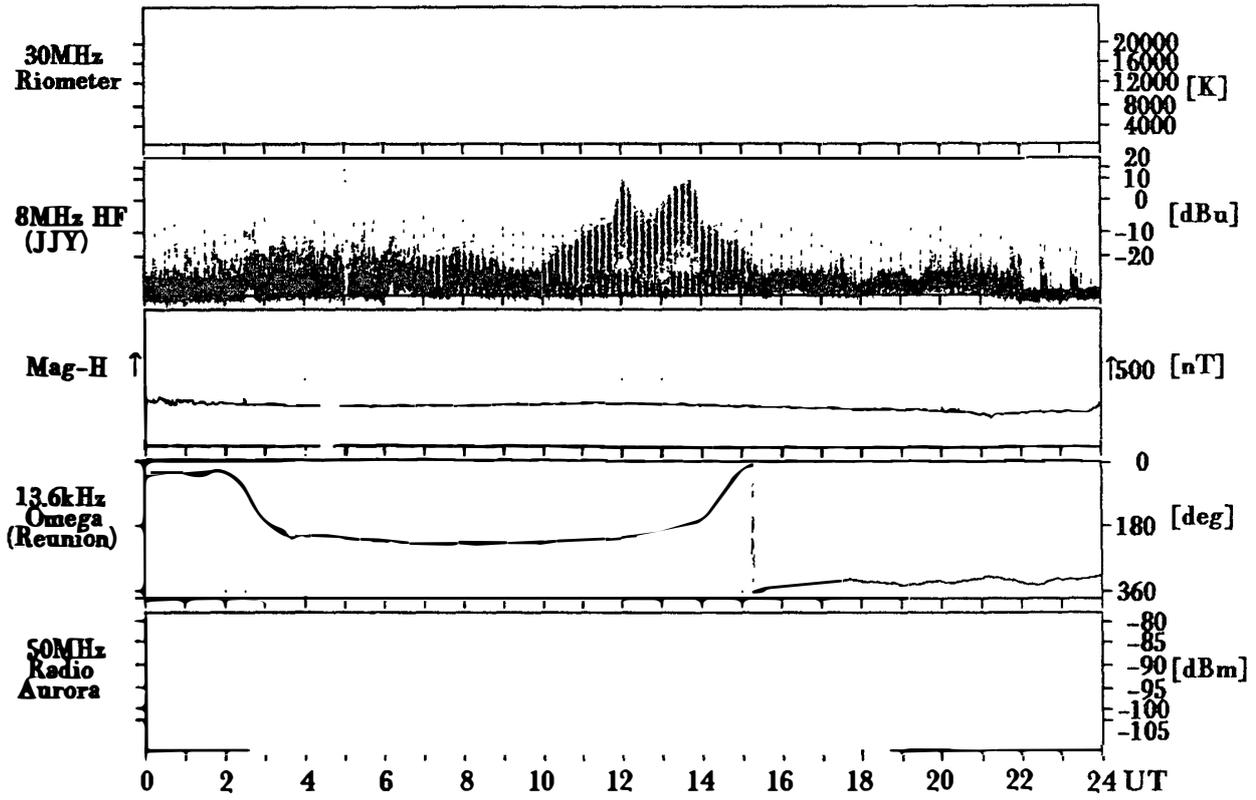
Syowa Station

Total Day / 242 1995/ 8/30



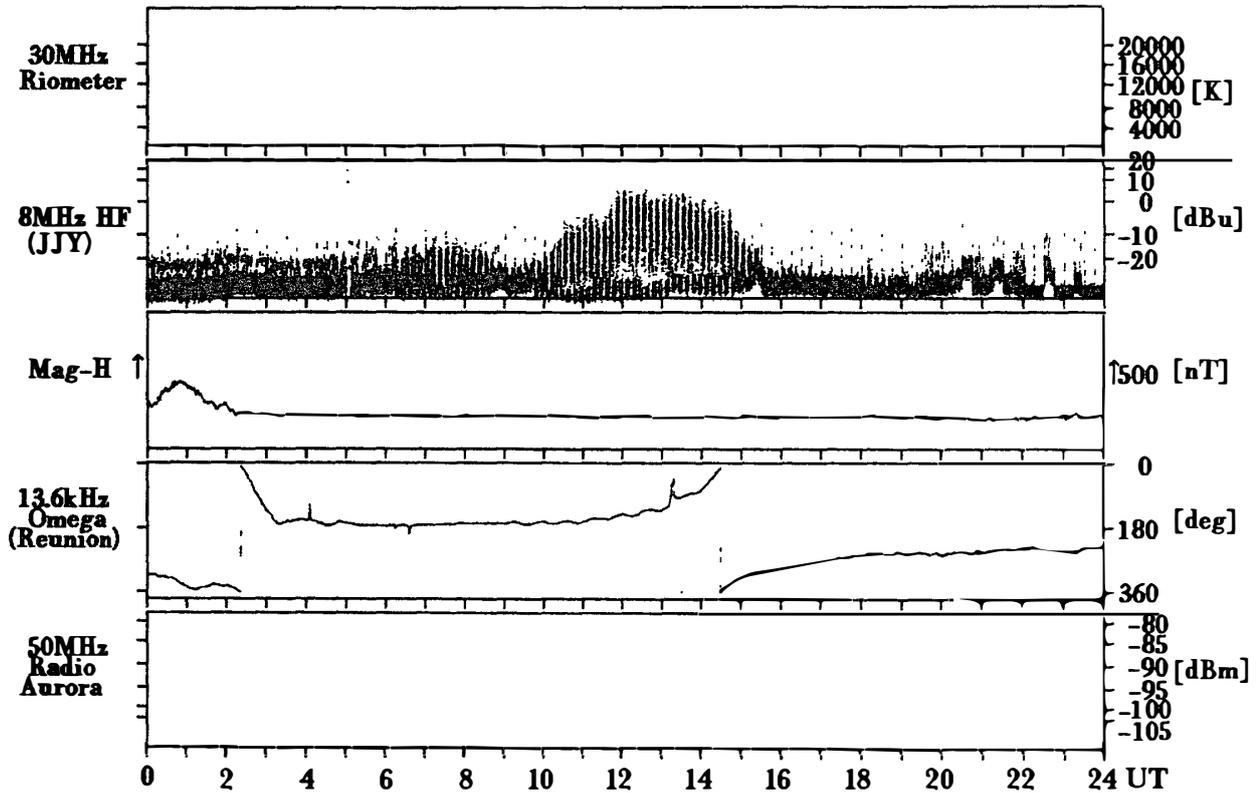
Syowa Station

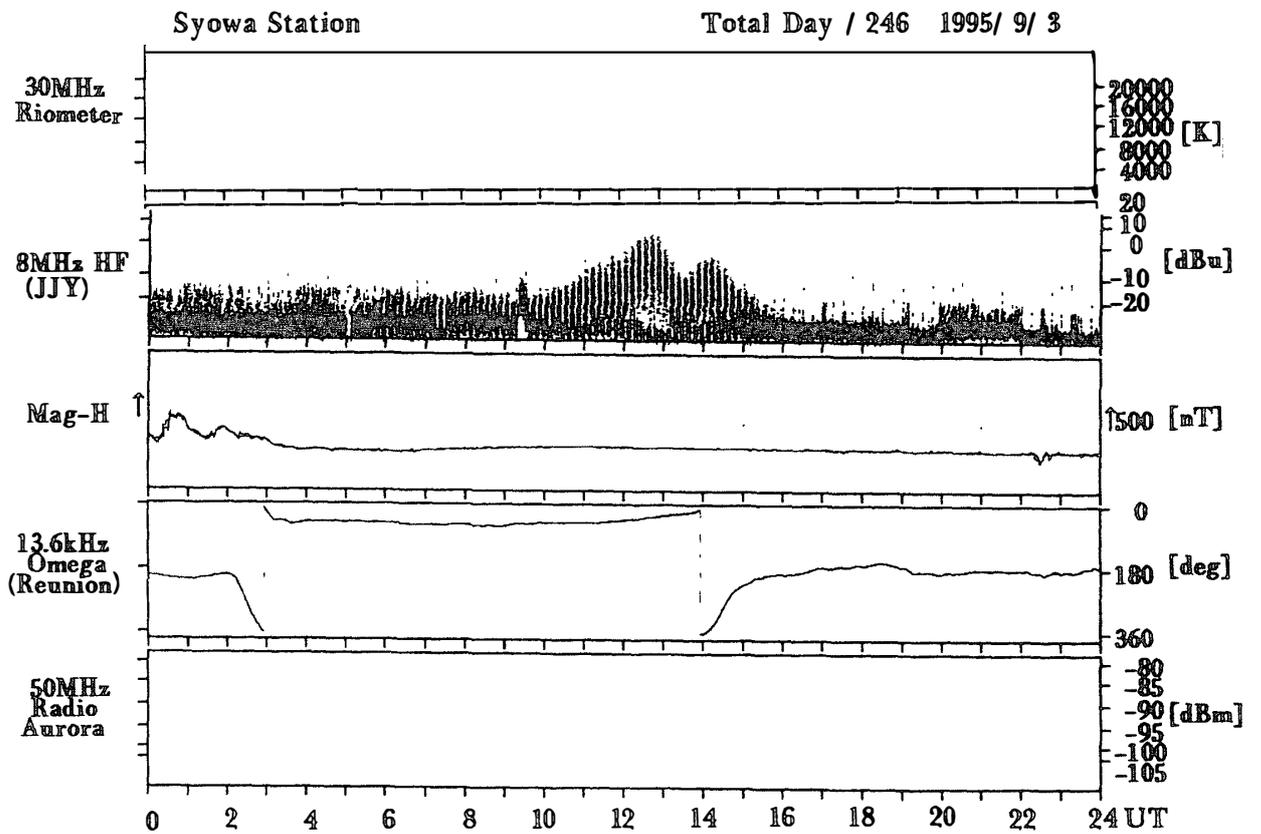
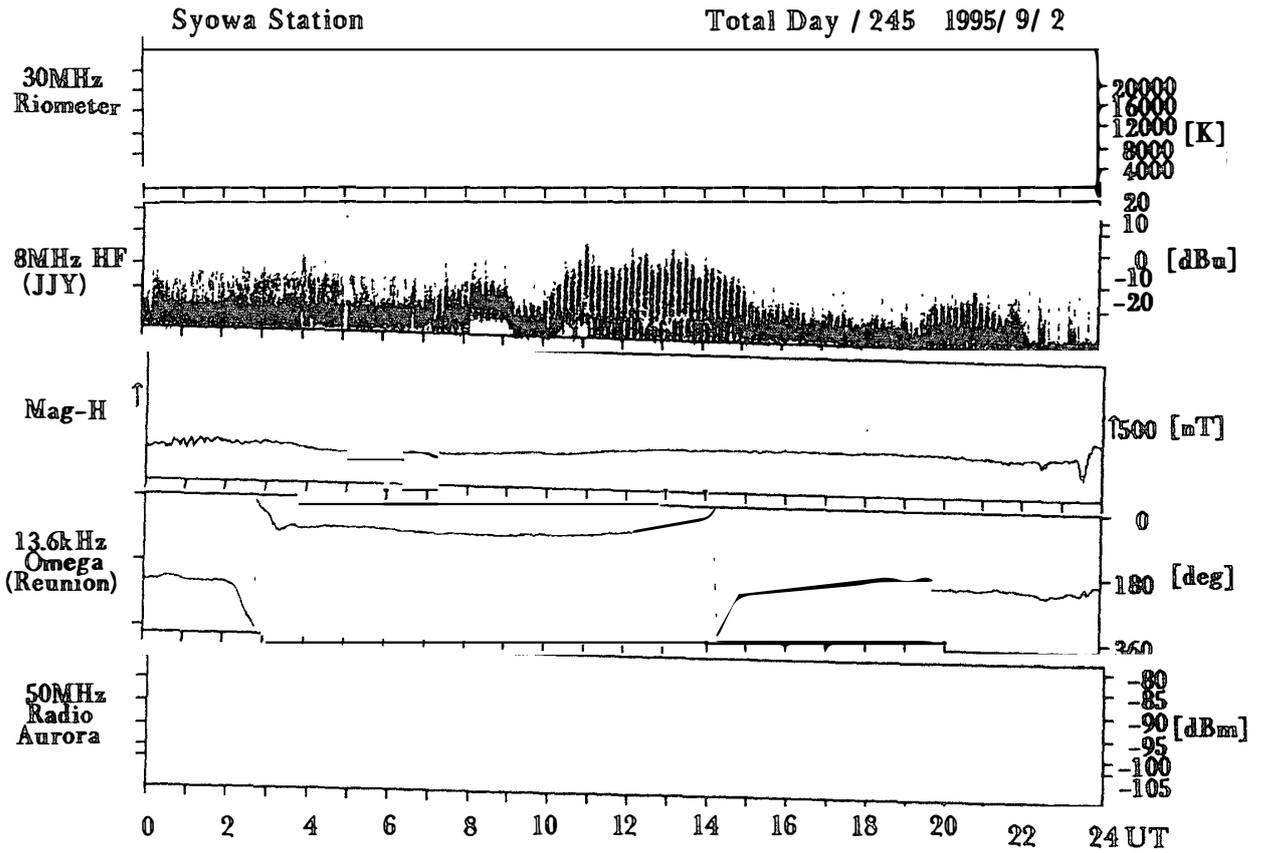
Total Day / 243 1995/ 8/31



Syowa Station

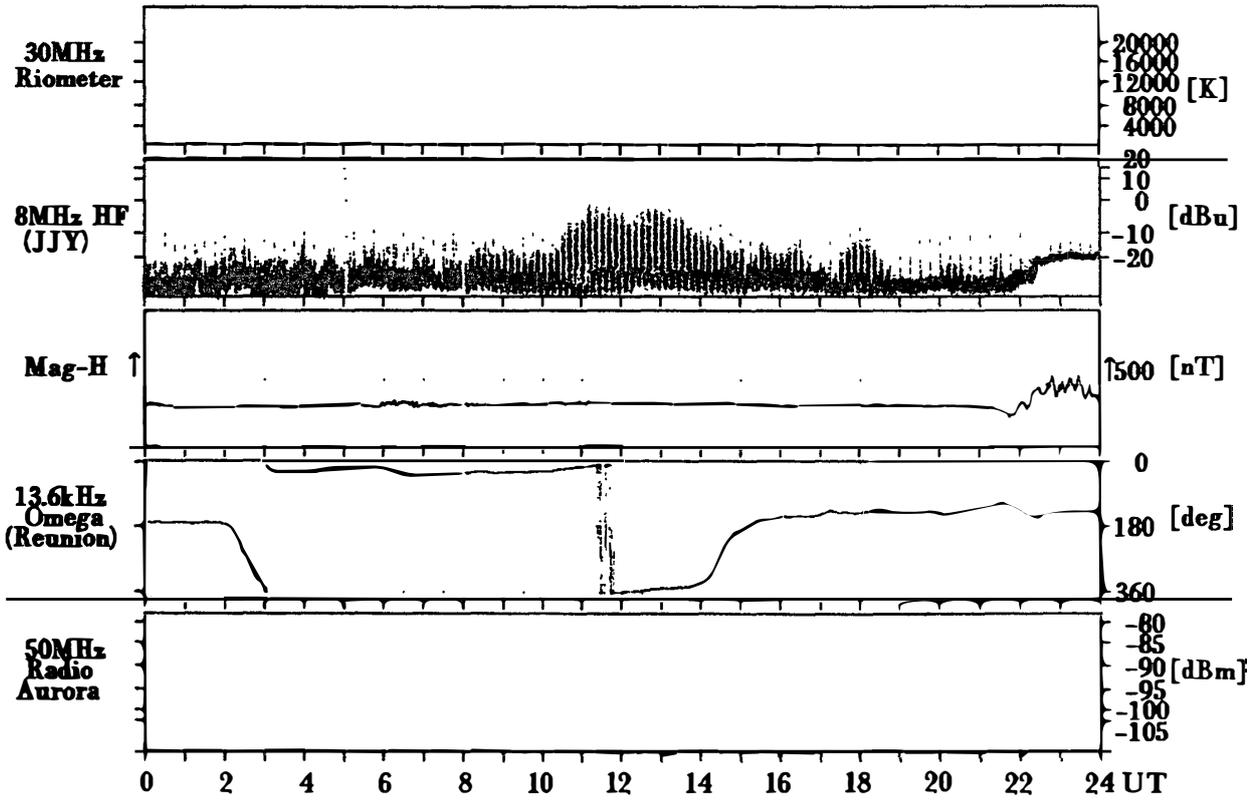
Total Day / 244 1995/ 9/ 1





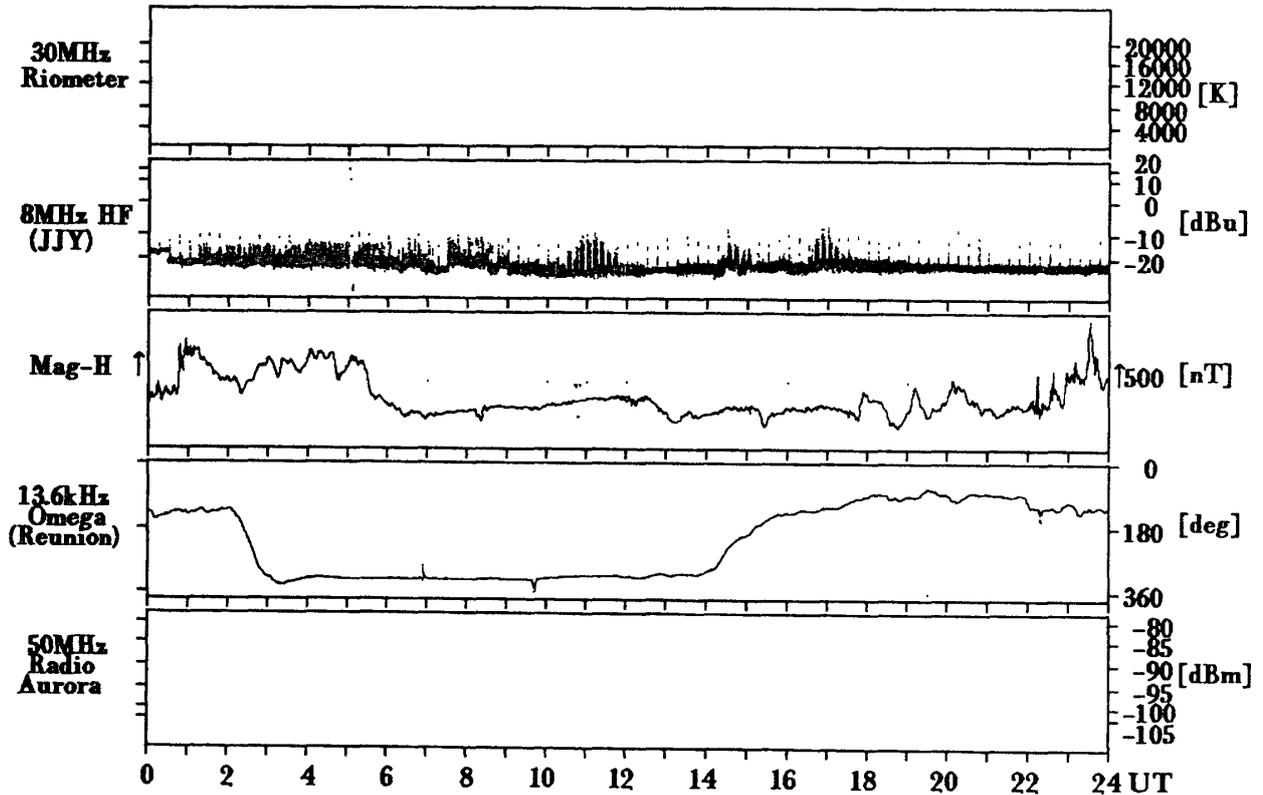
Syowa Station

Total Day / 247 1995/ 9/ 4



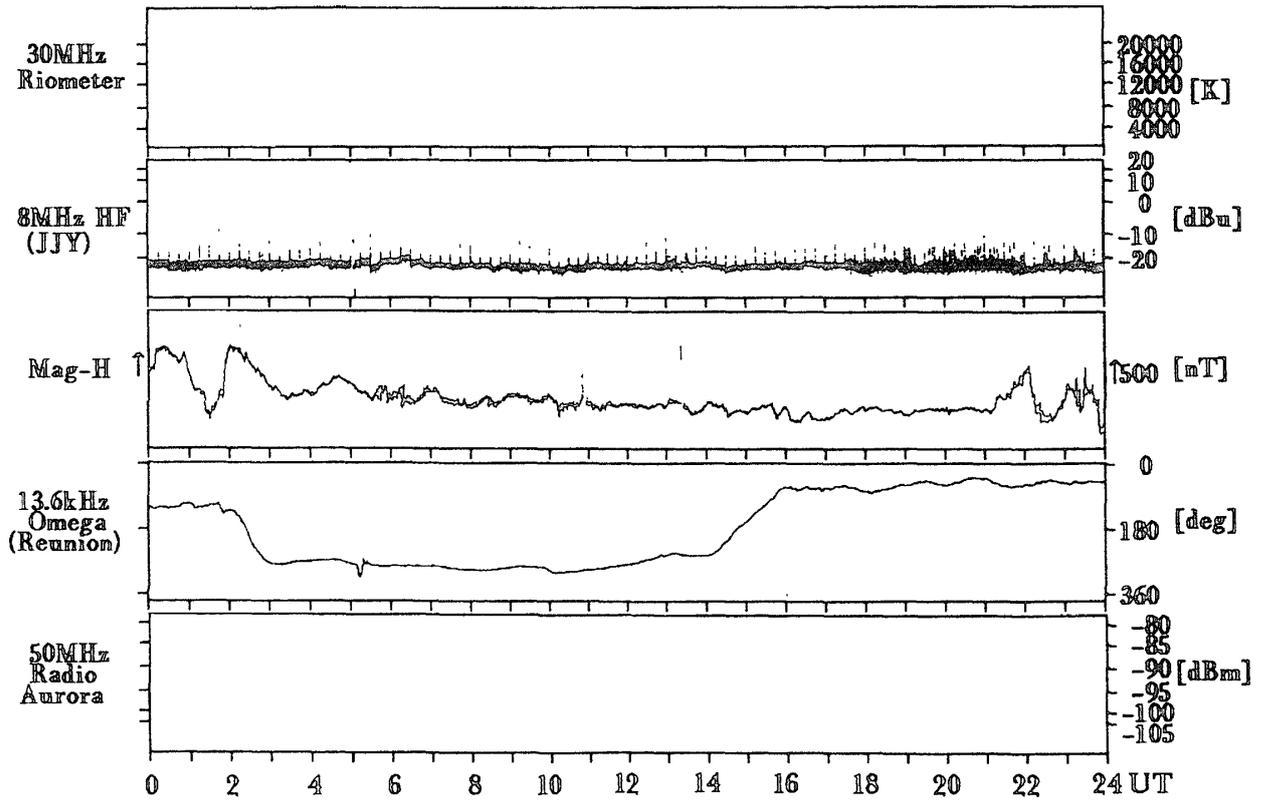
Syowa Station

Total Day / 248 1995/ 9/ 5



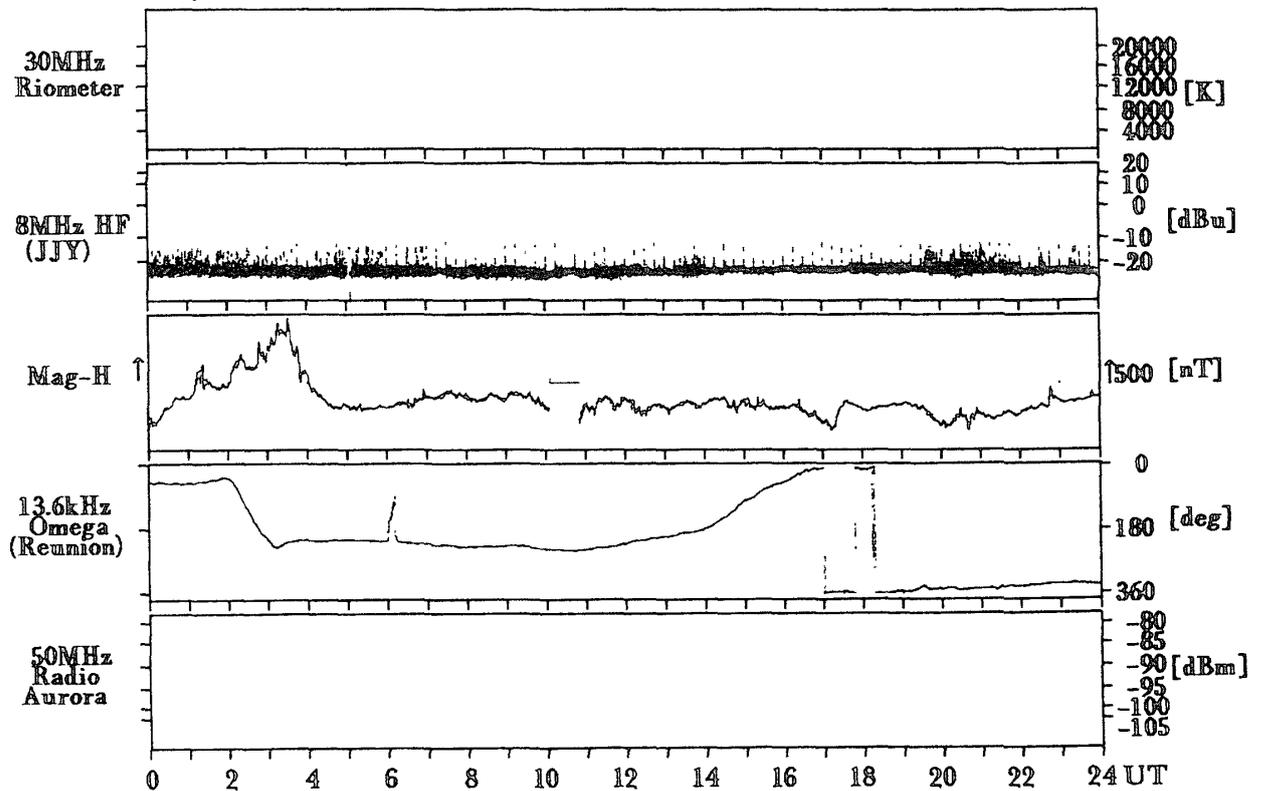
Syowa Station

Total Day / 249 1995/ 9/ 6



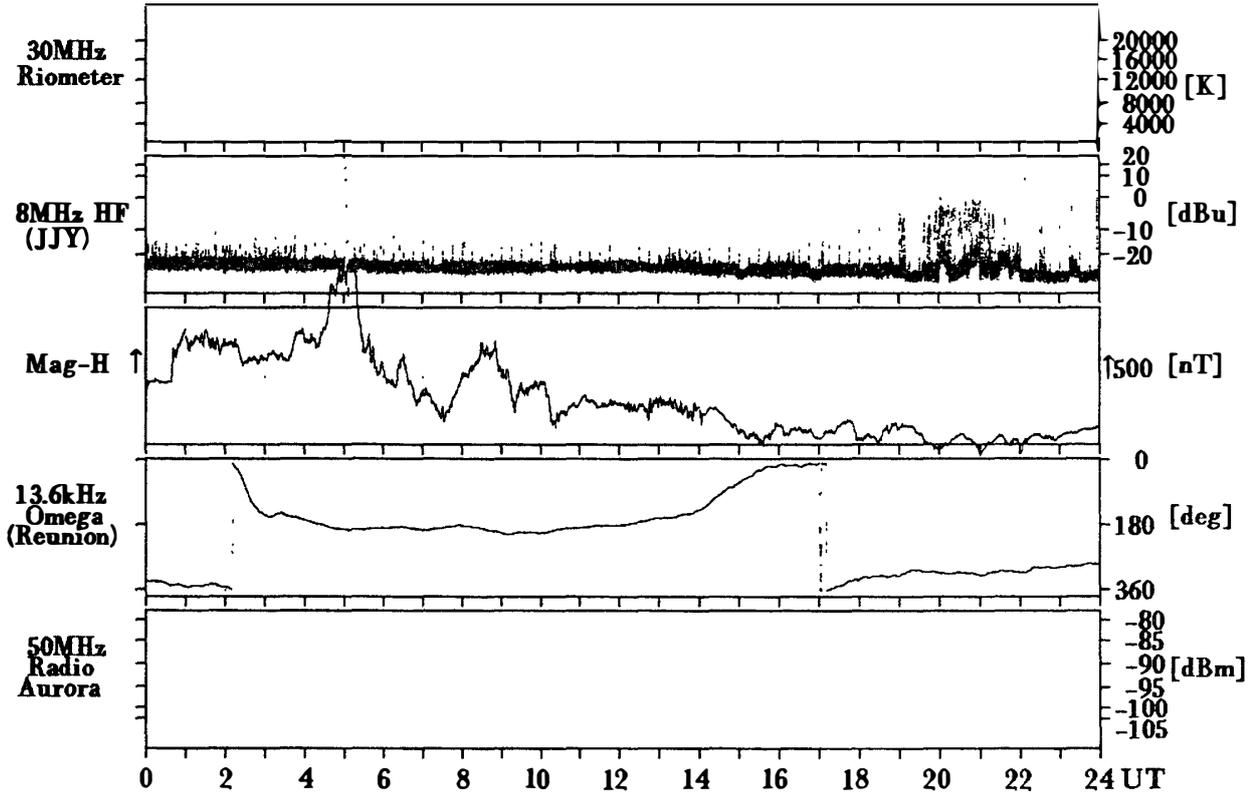
Syowa Station

Total Day / 250 1995/ 9/ 7



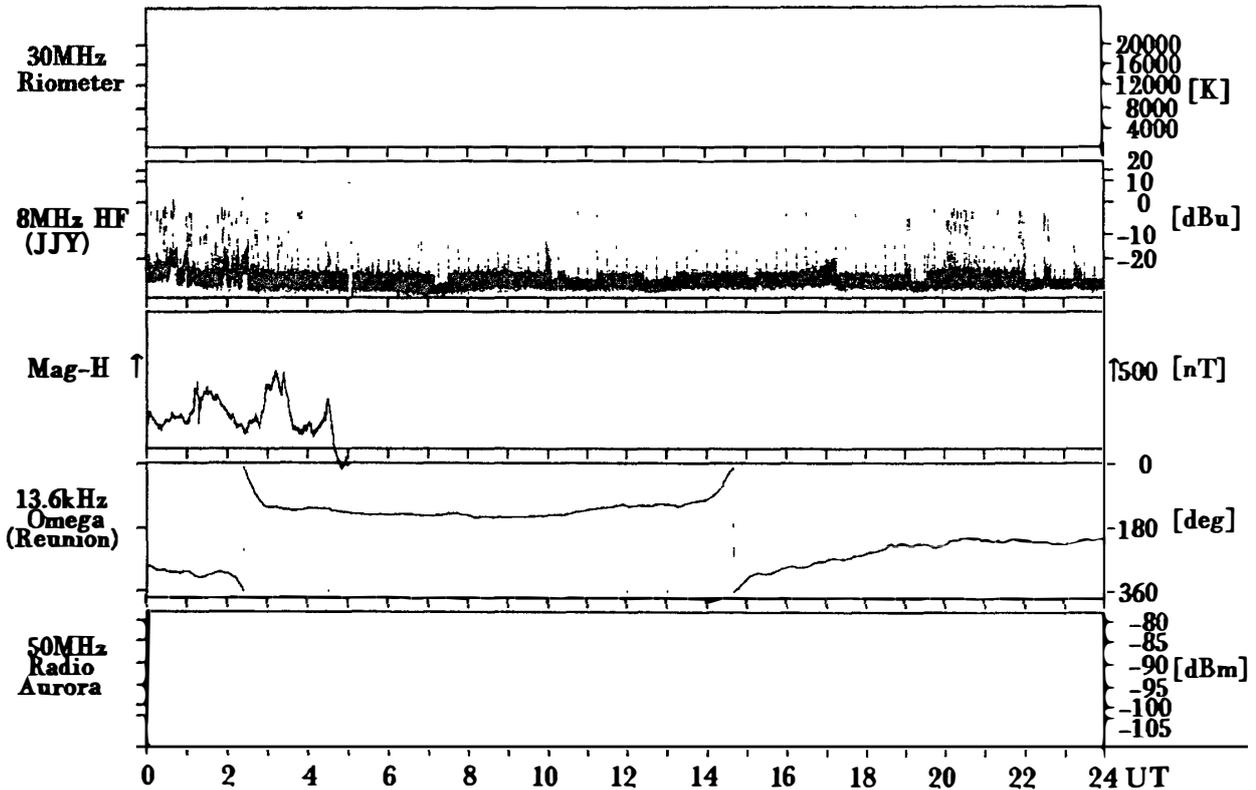
Syowa Station

Total Day / 251 1995/ 9/ 8



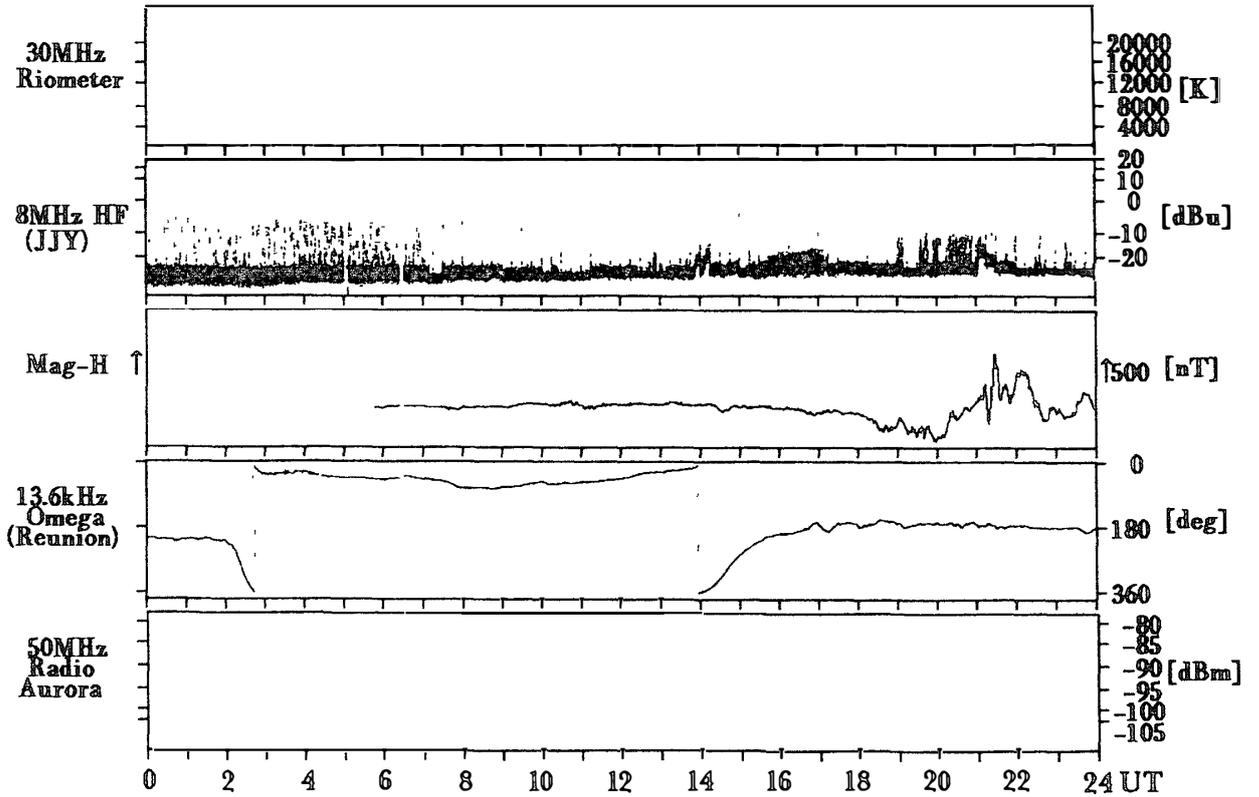
Syowa Station

Total Day / 252 1995/ 9/ 9



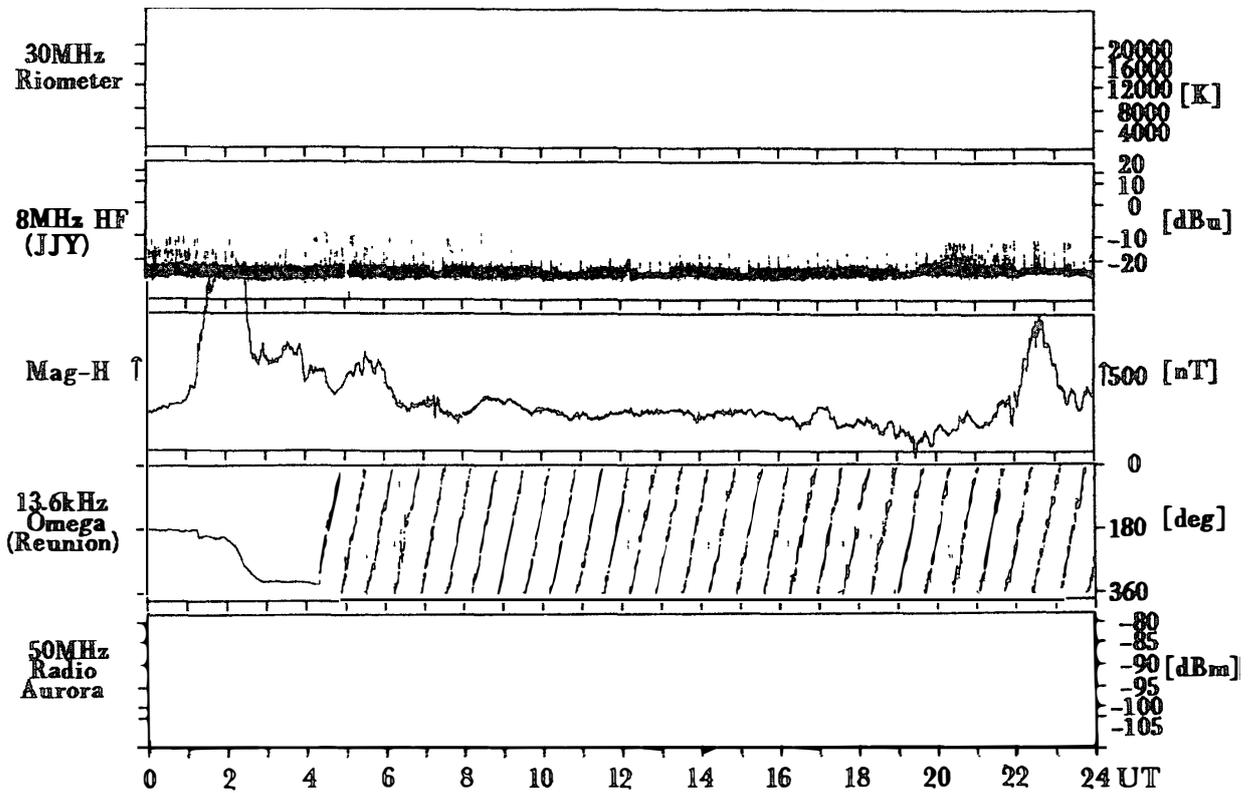
Syowa Station

Total Day / 253 1995/ 9/10



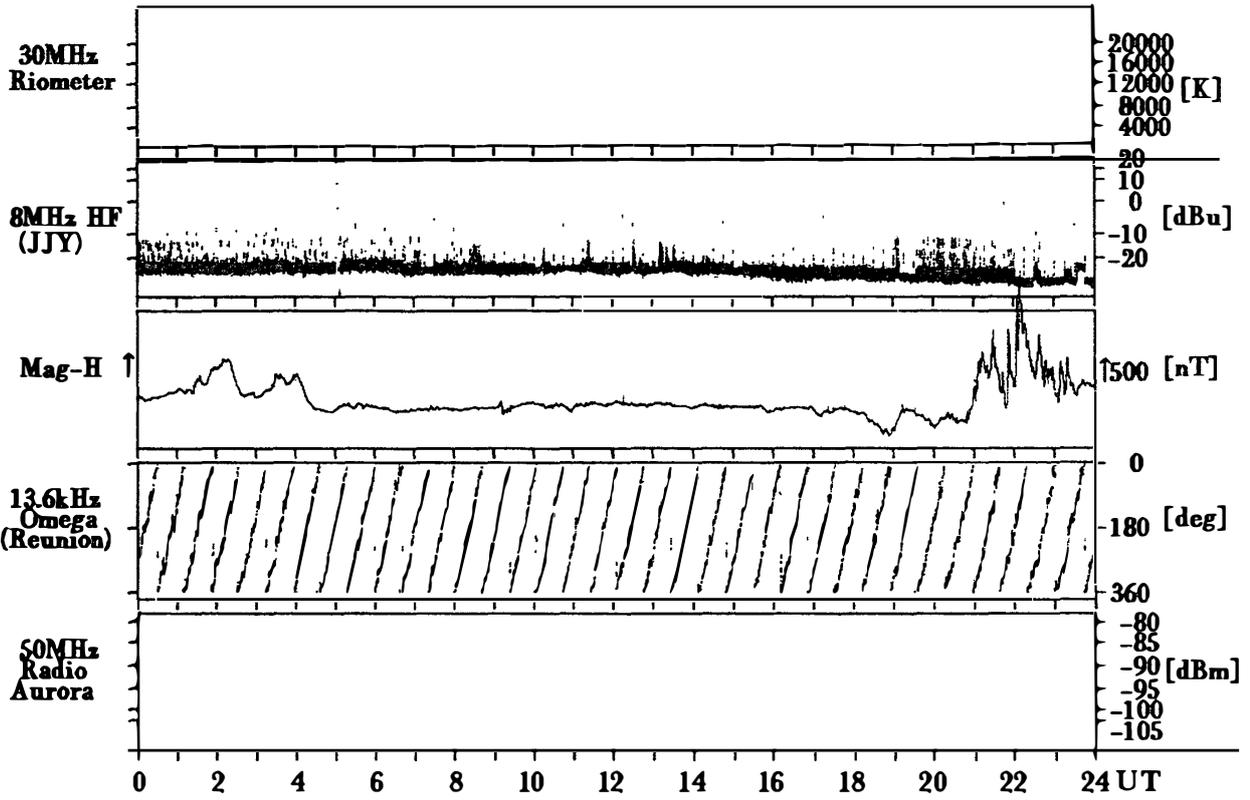
Syowa Station

Total Day / 254 1995/ 9/11



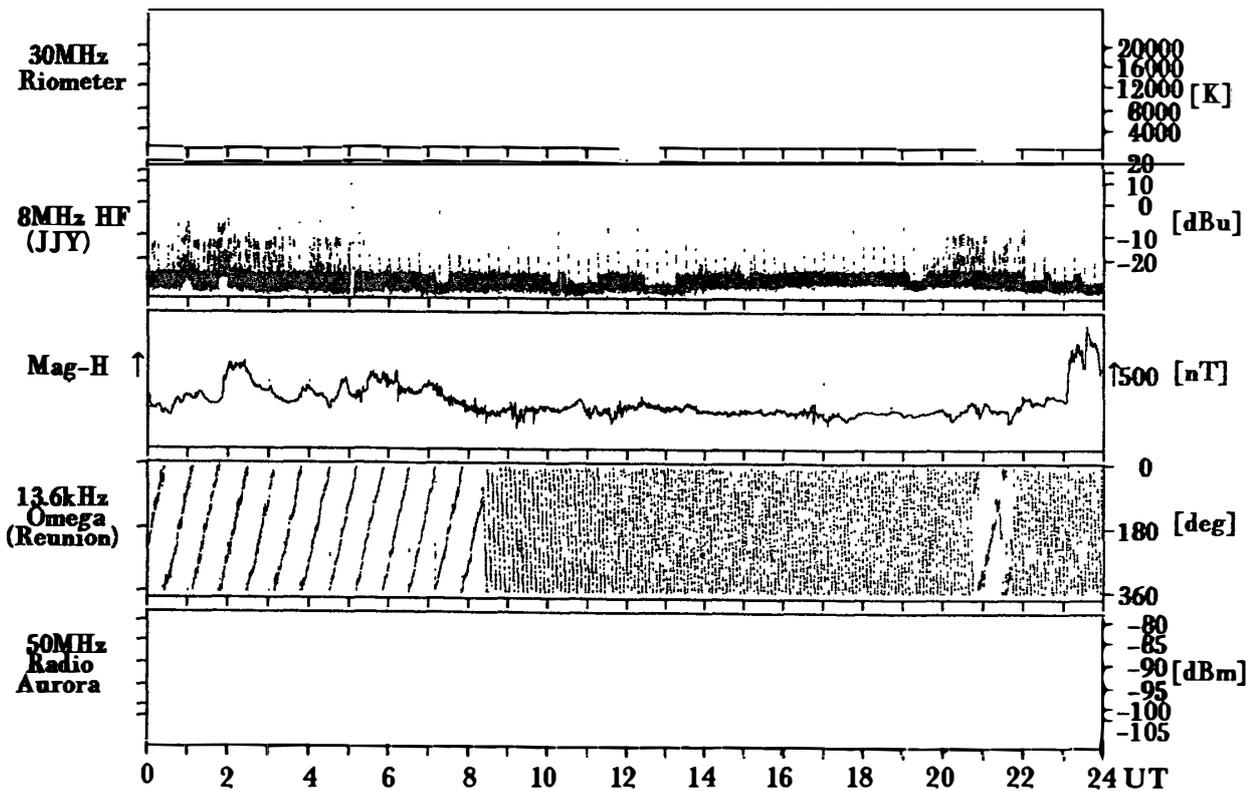
Syowa Station

Total Day / 255 1995/ 9/12



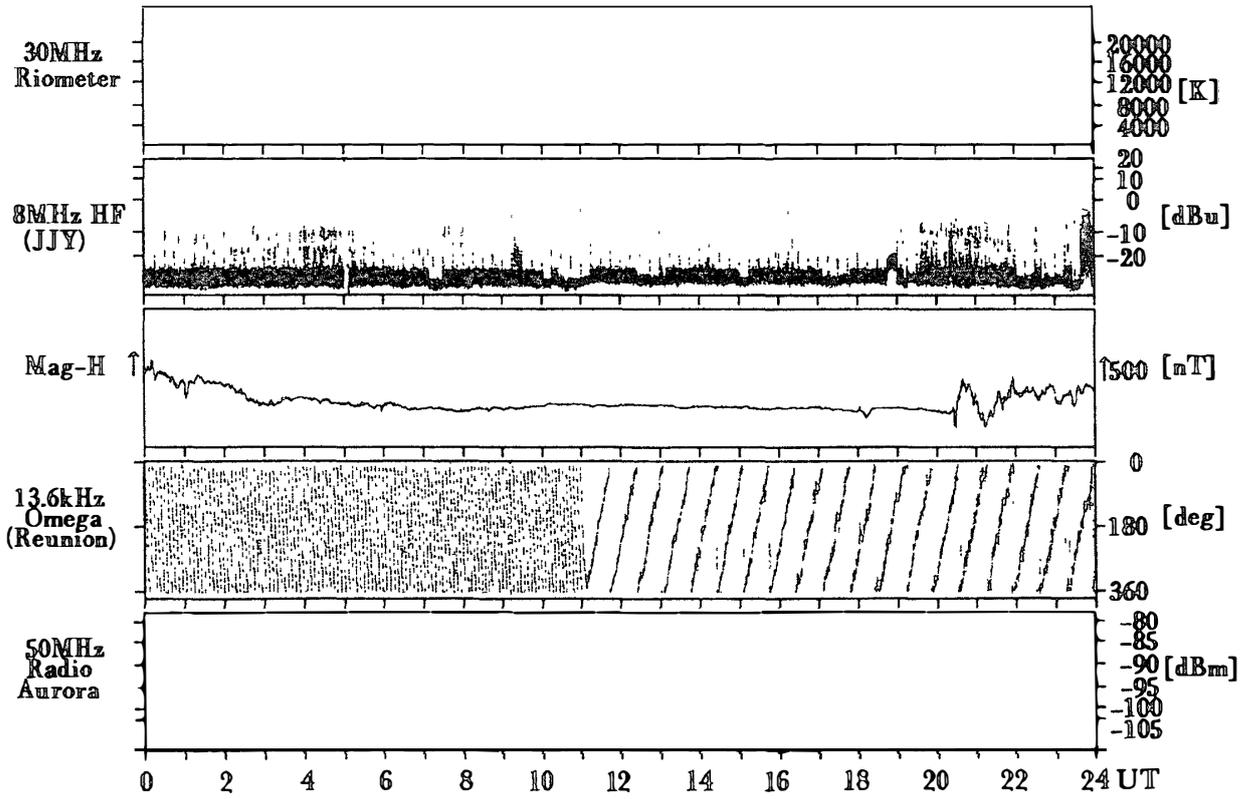
Syowa Station

Total Day / 256 1995/ 9/13



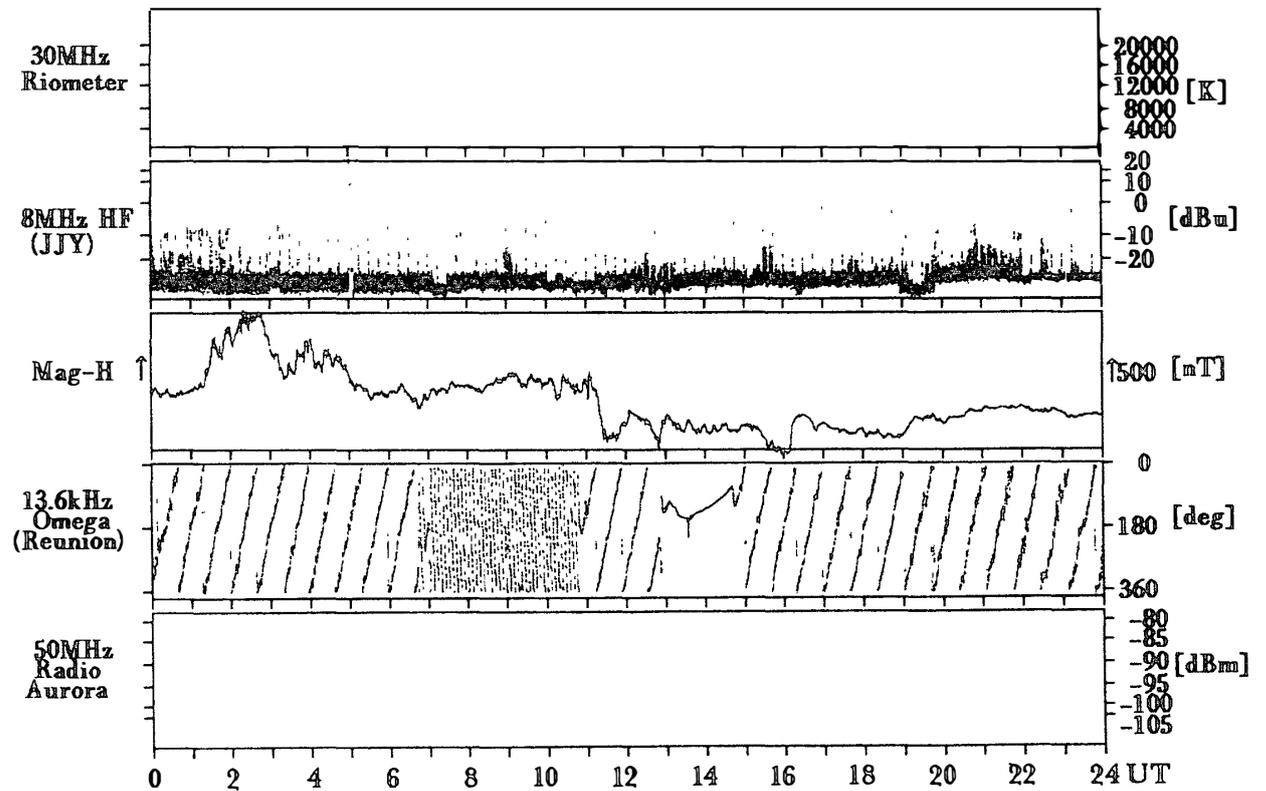
Syowa Station

Total Day / 257 1995/ 9/14



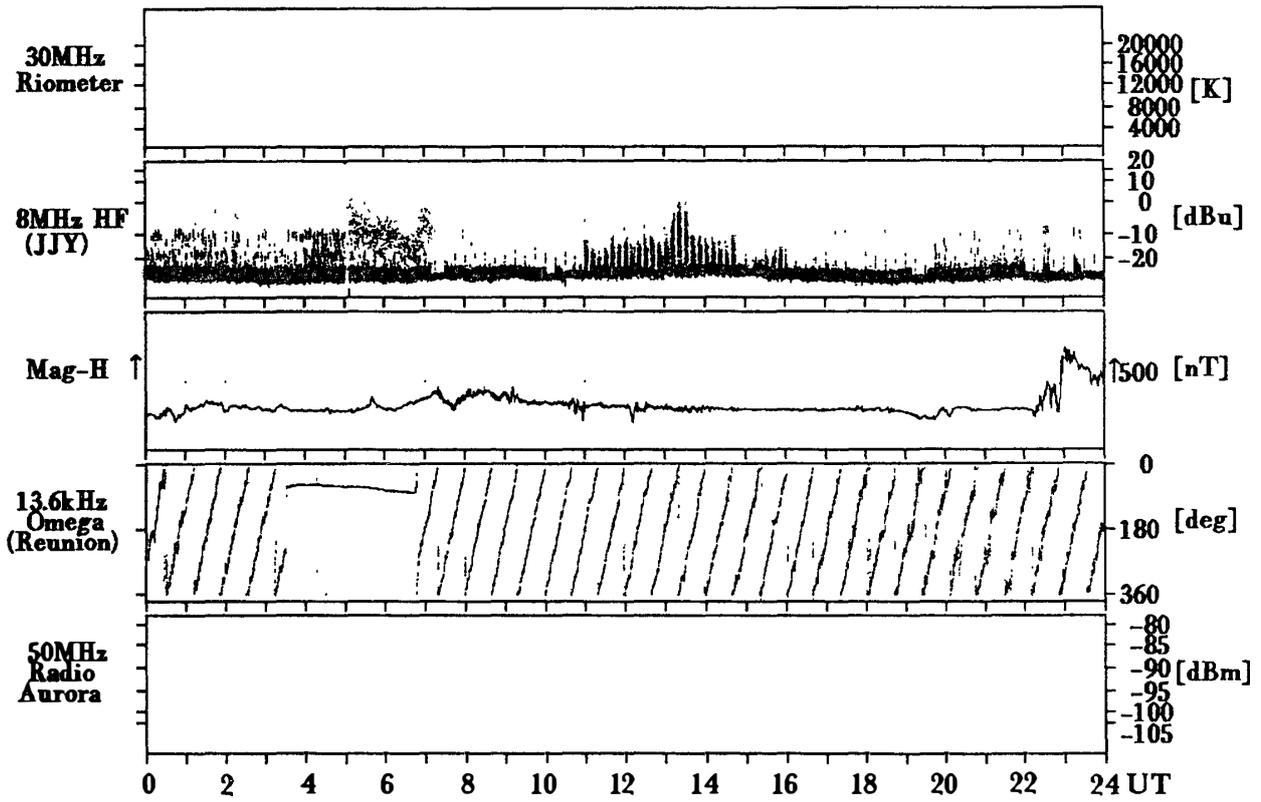
Syowa Station

Total Day / 258 1995/ 9/15



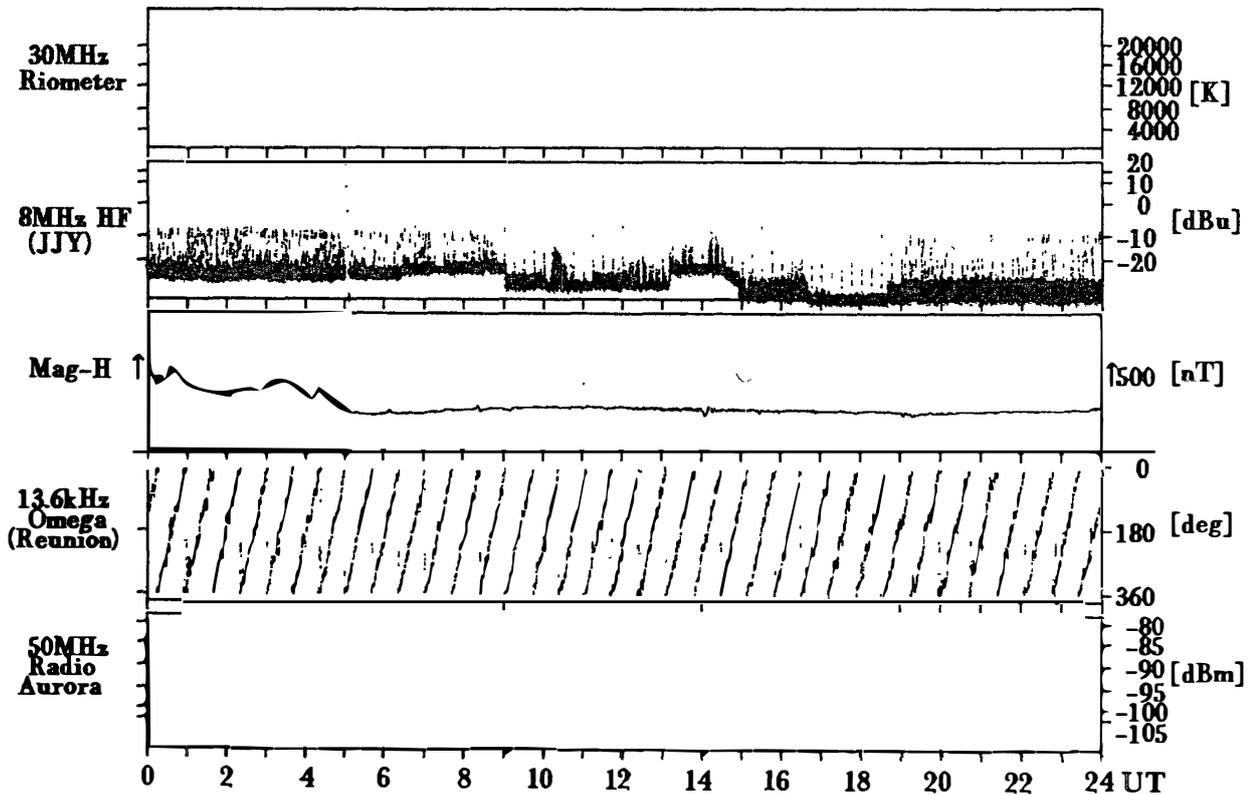
Syowa Station

Total Day / 259 1995/ 9/16



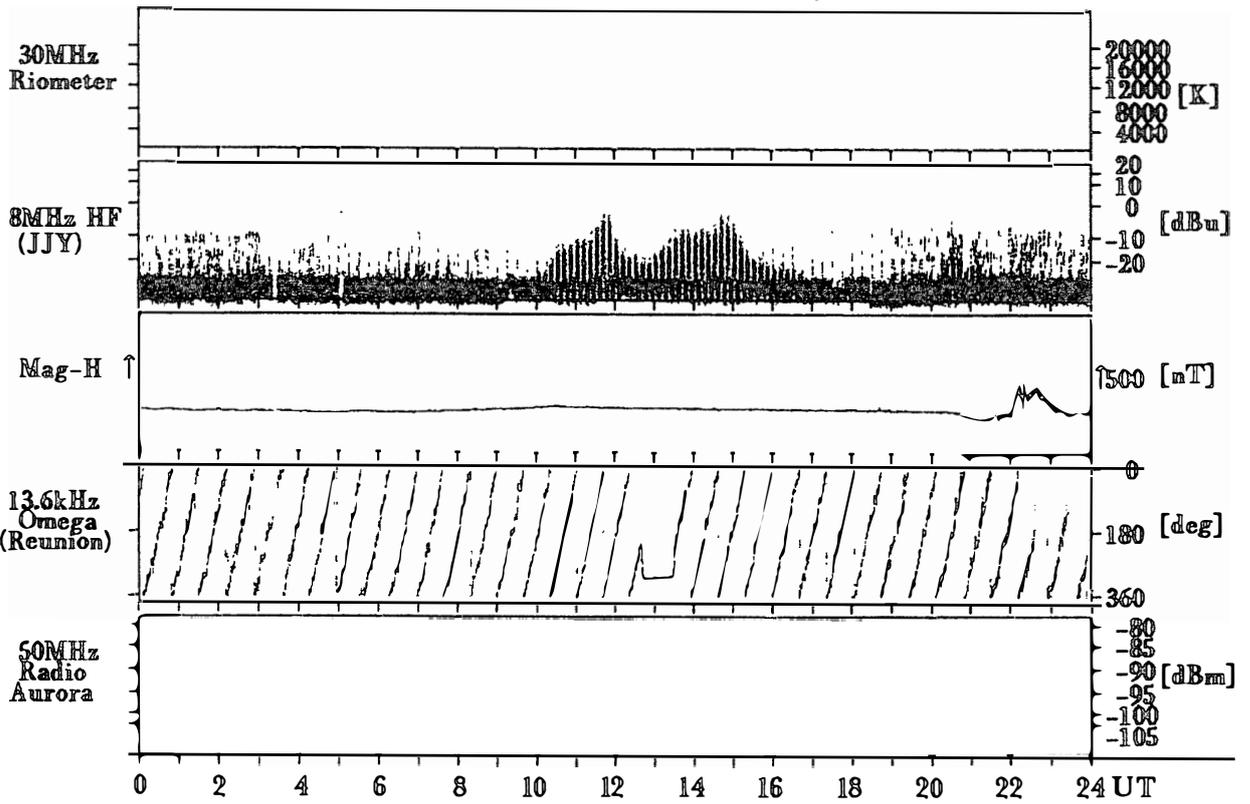
Syowa Station

Total Day / 260 1995/ 9/17



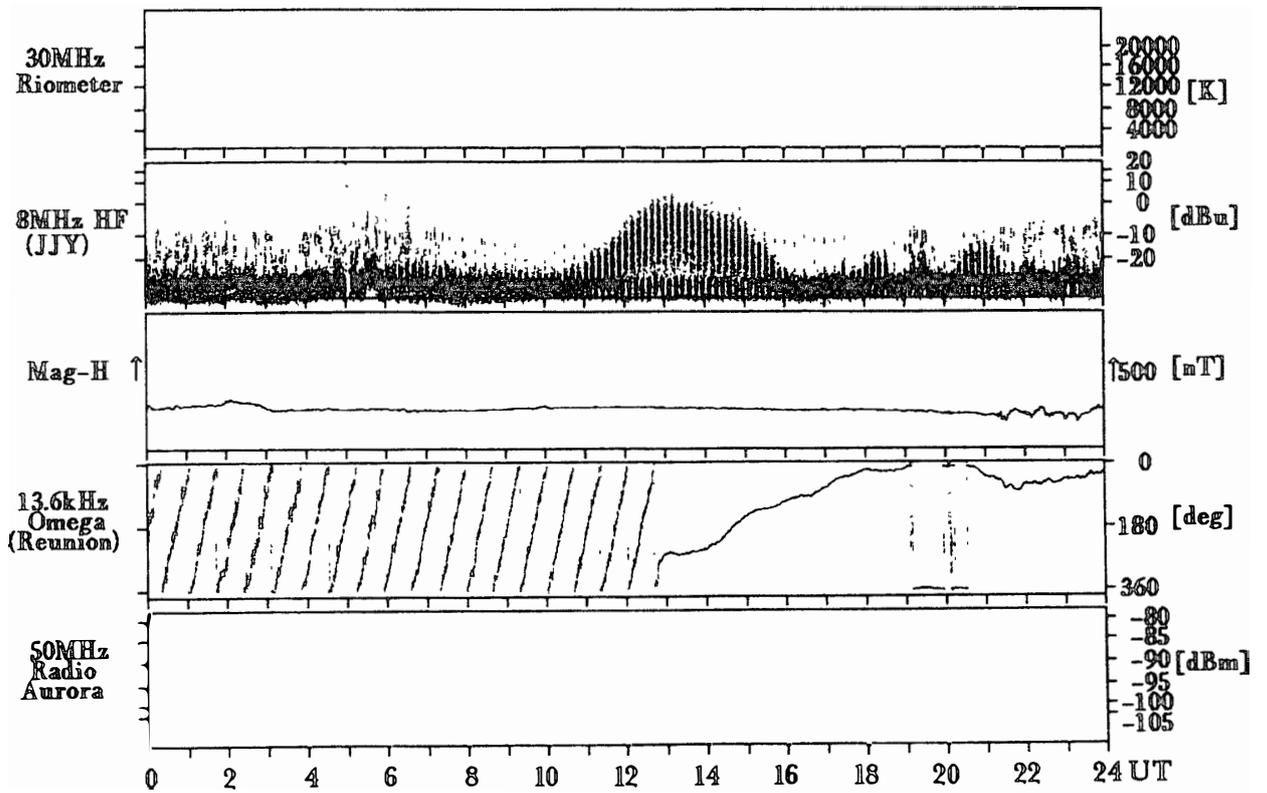
Syowa Station

Total Day / 261 1995/ 9/18



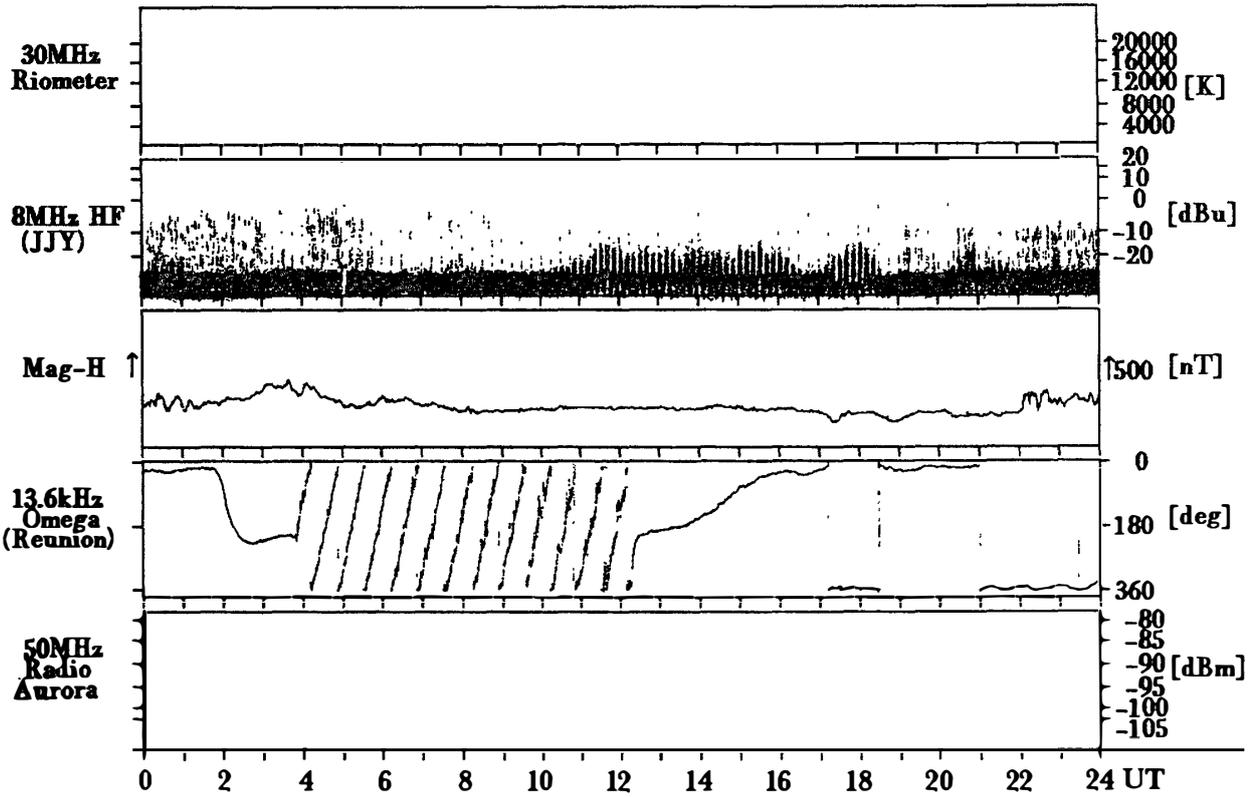
Syowa Station

Total Day / 262 1995/ 9/19



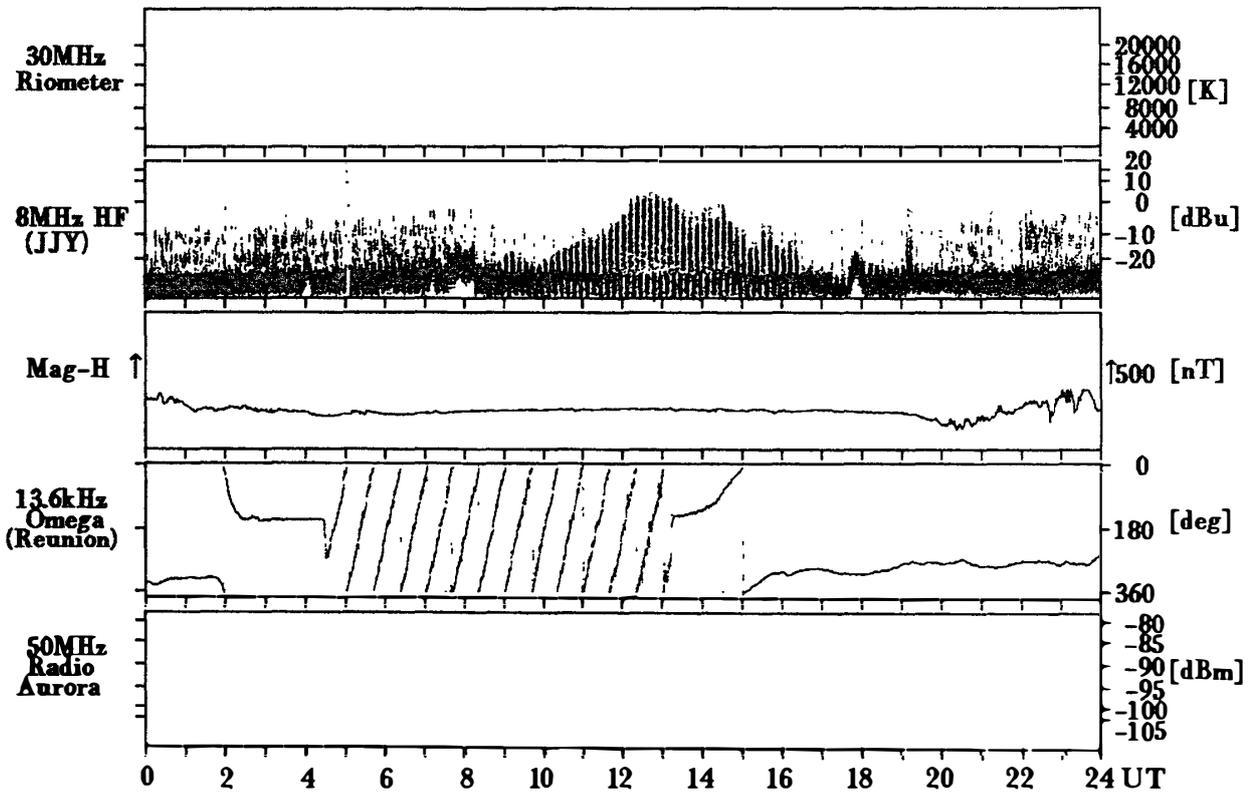
Syowa Station

Total Day / 263 1995/ 9/20



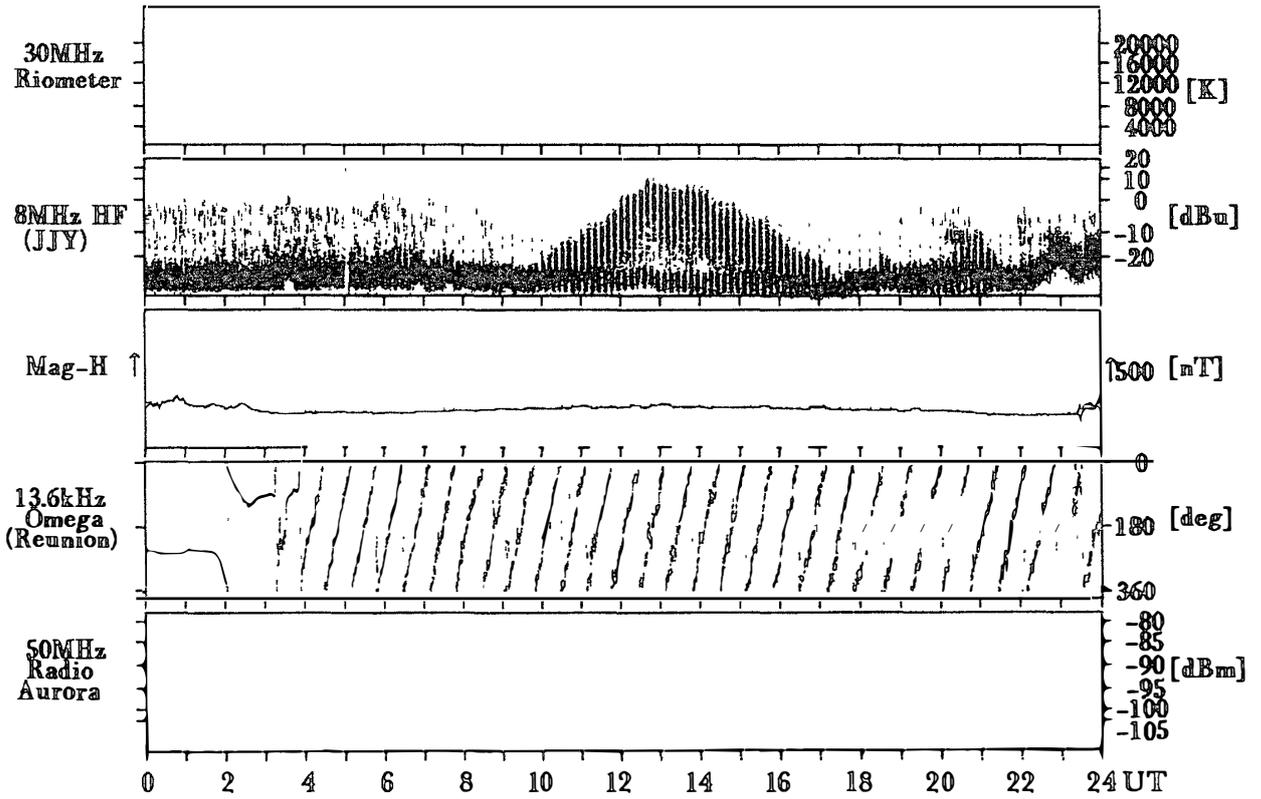
Syowa Station

Total Day / 264 1995/ 9/21



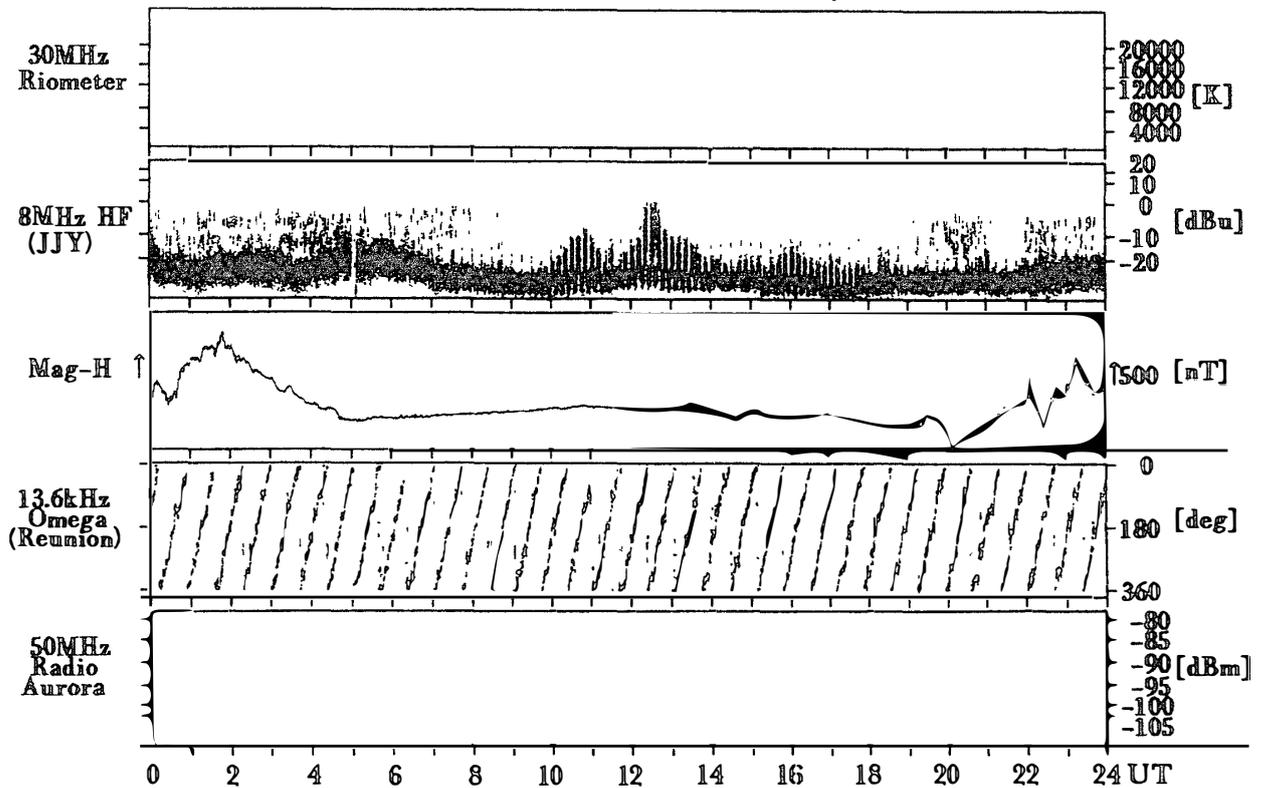
Syowa Station

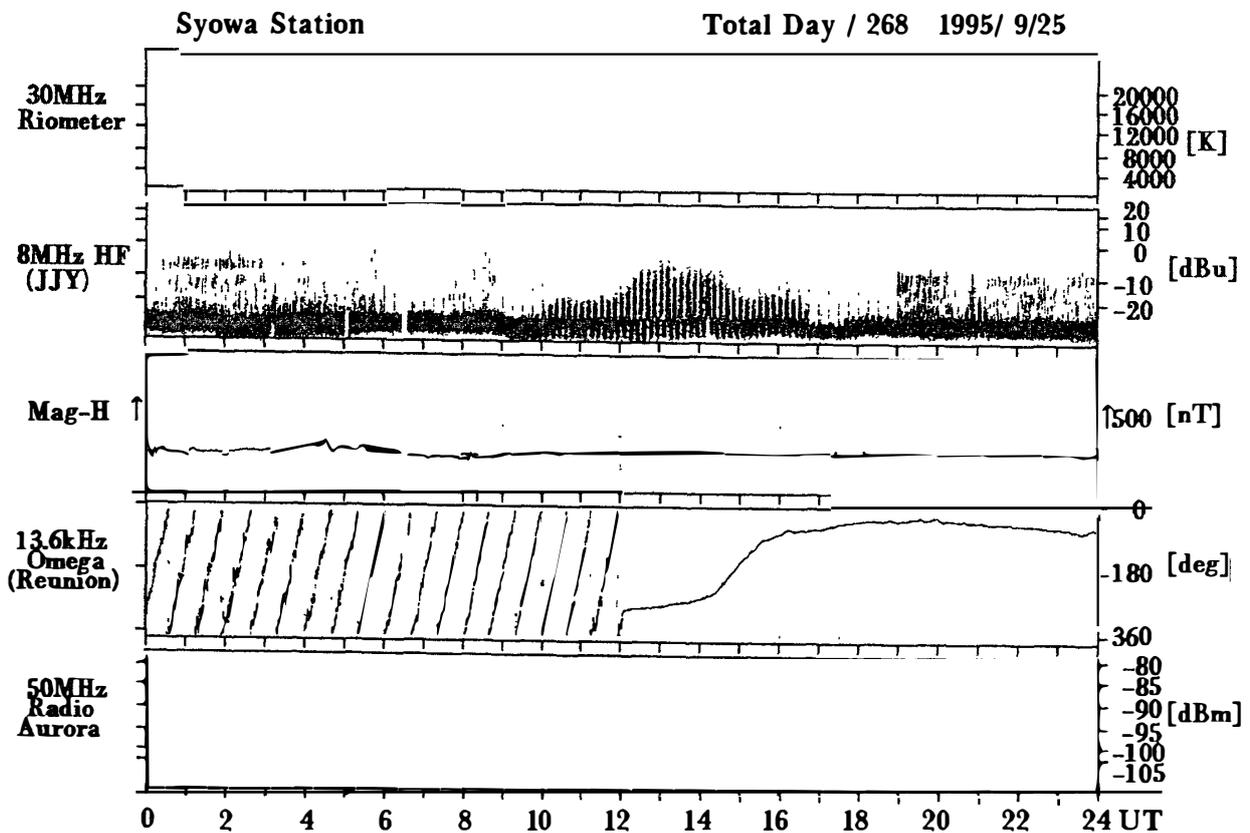
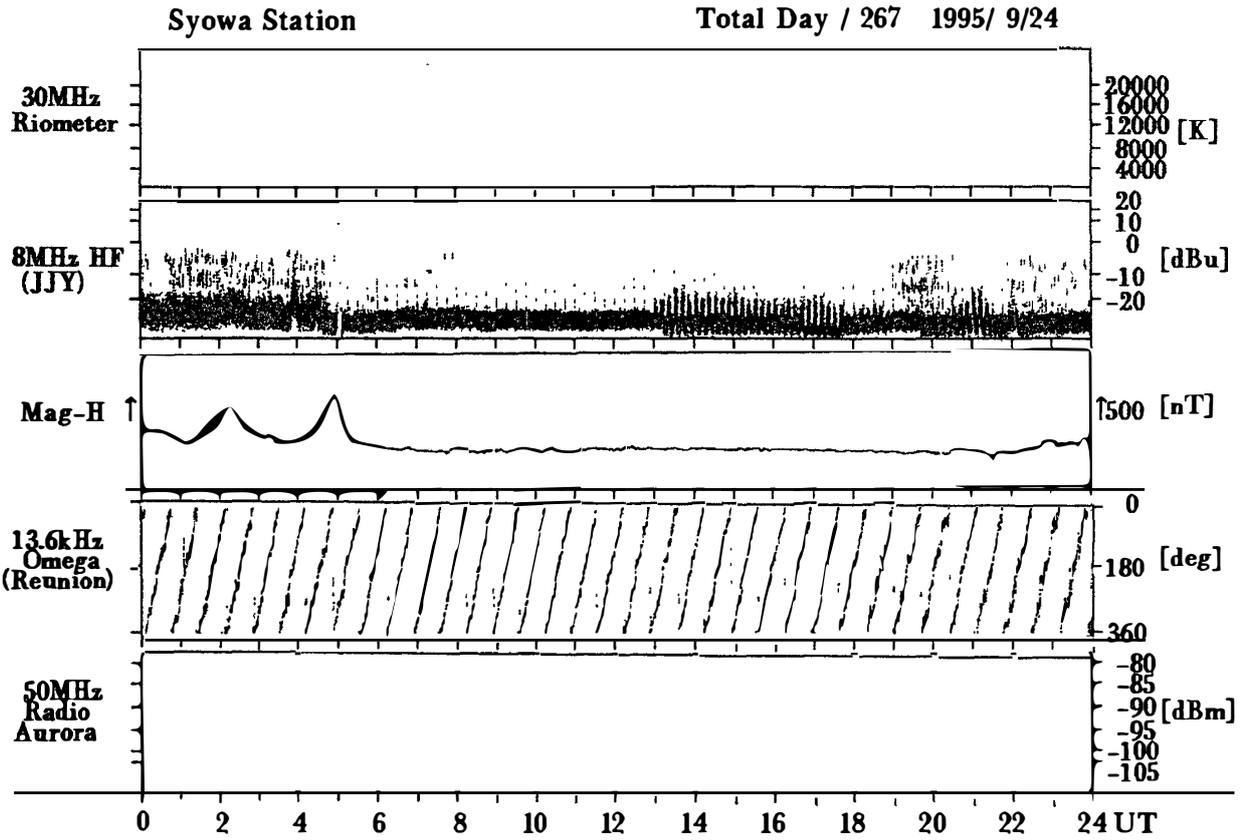
Total Day / 265 1995/ 9/22



Syowa Station

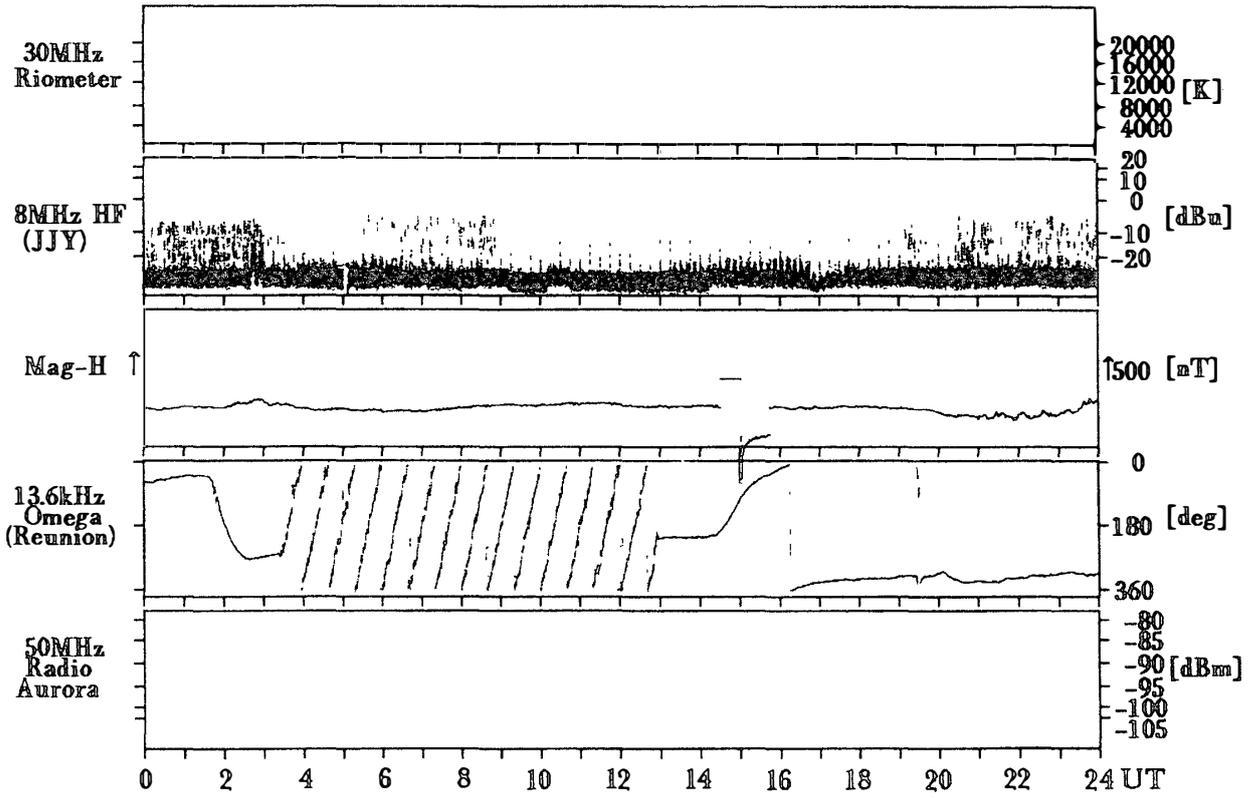
Total Day / 266 1995/ 9/23





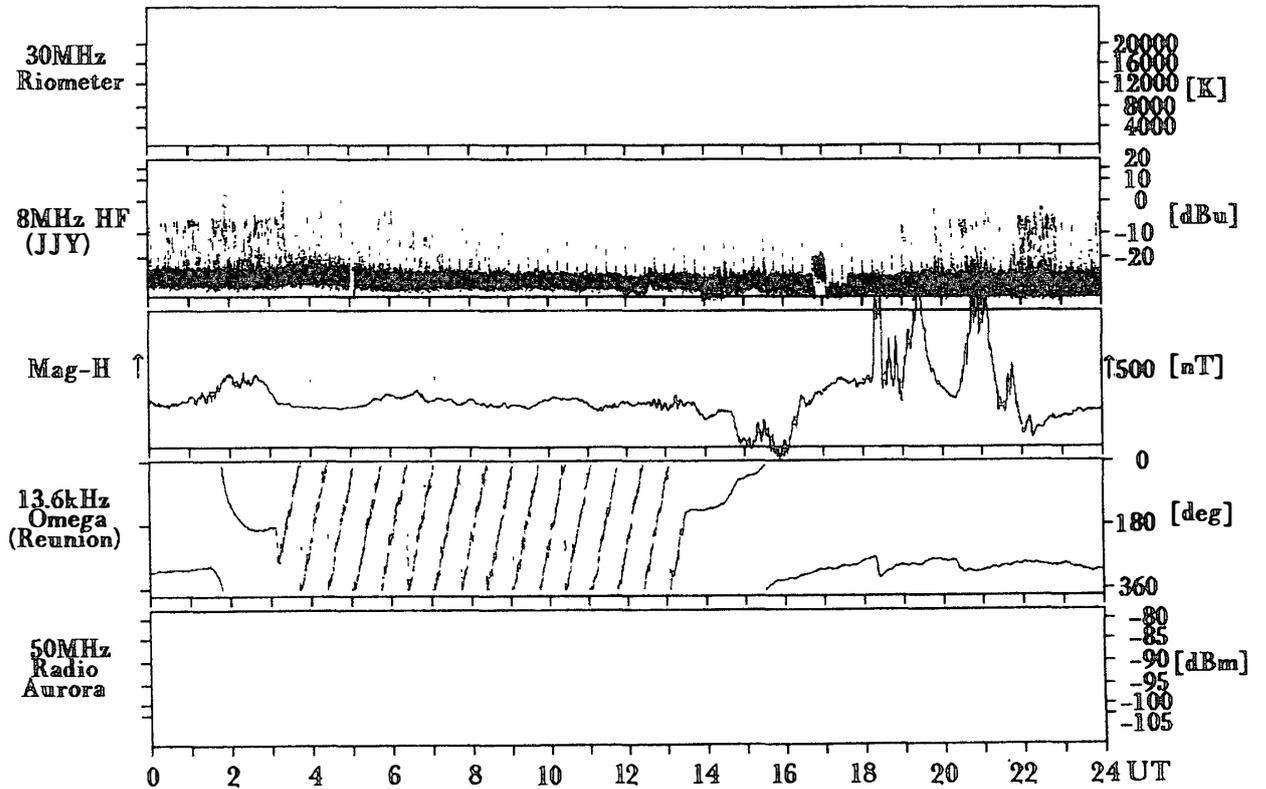
Syowa Station

Total Day / 269 1995/ 9/26



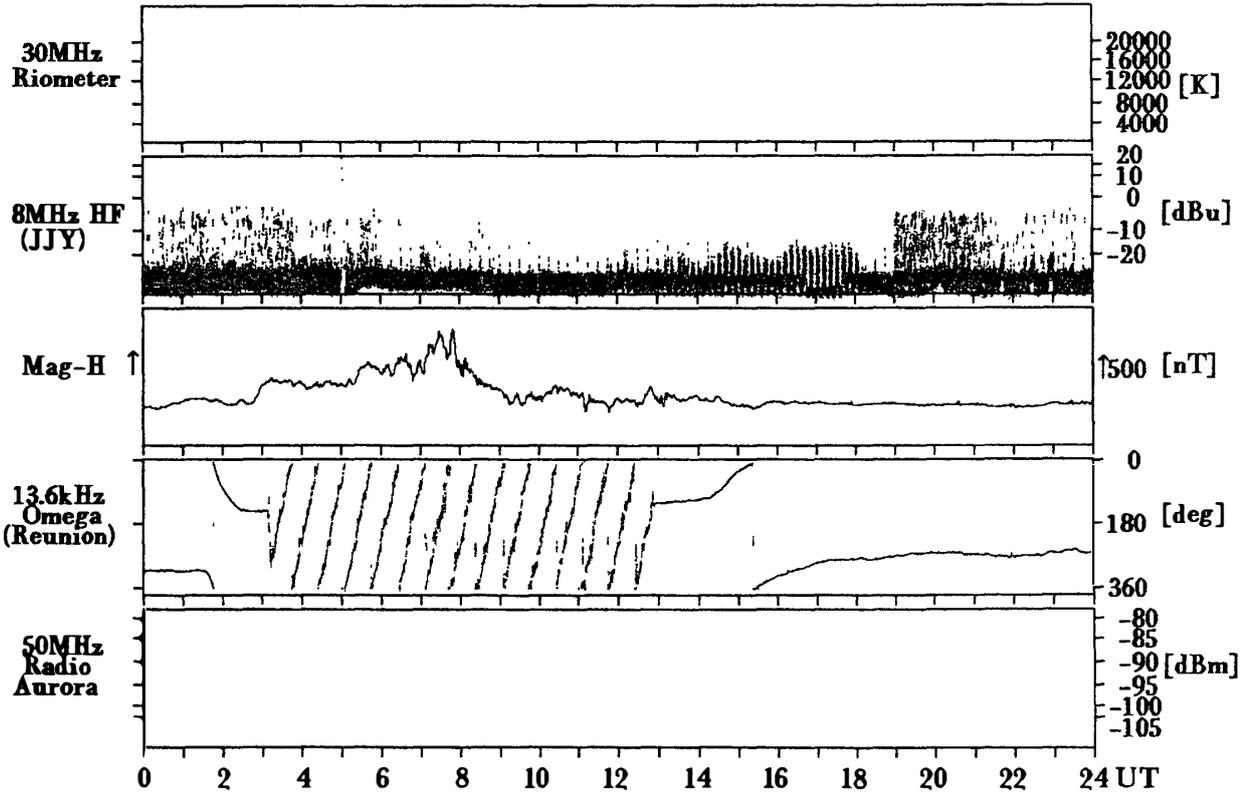
Syowa Station

Total Day / 270 1995/ 9/27



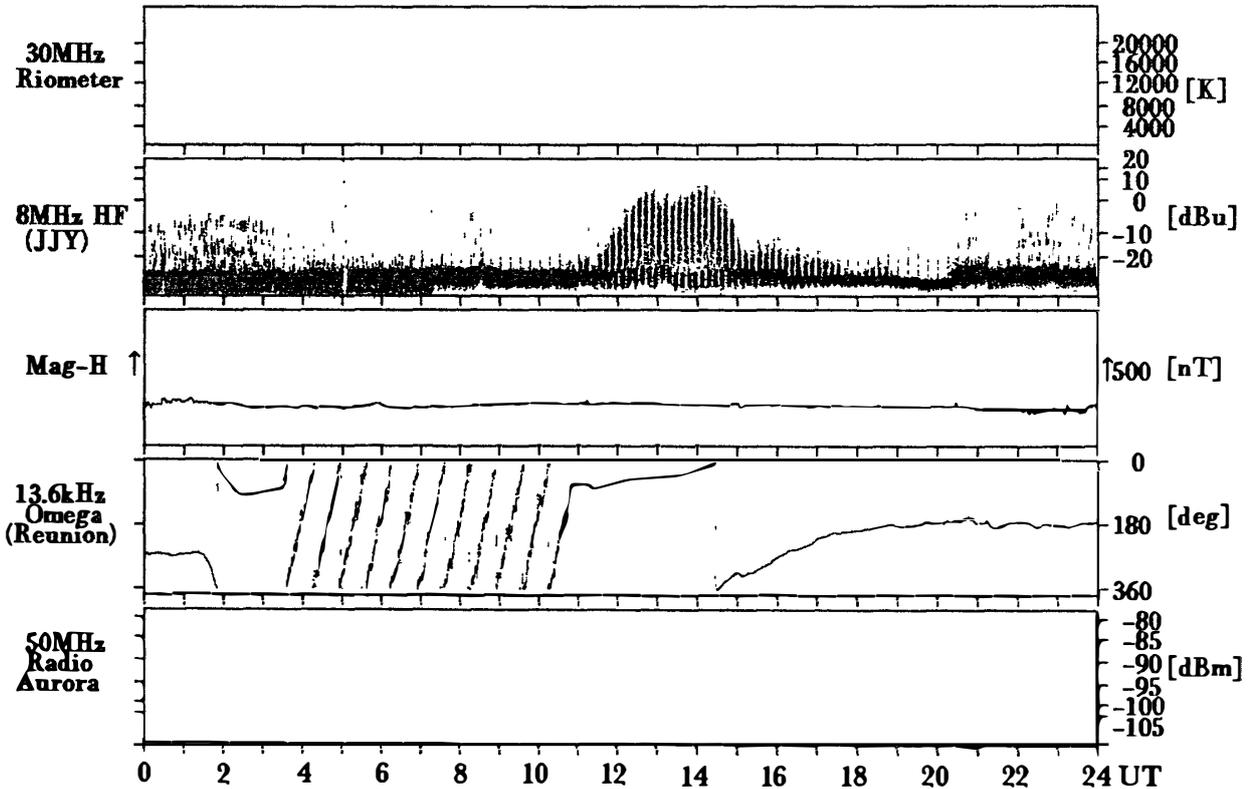
Syowa Station

Total Day / 271 1995/ 9/28



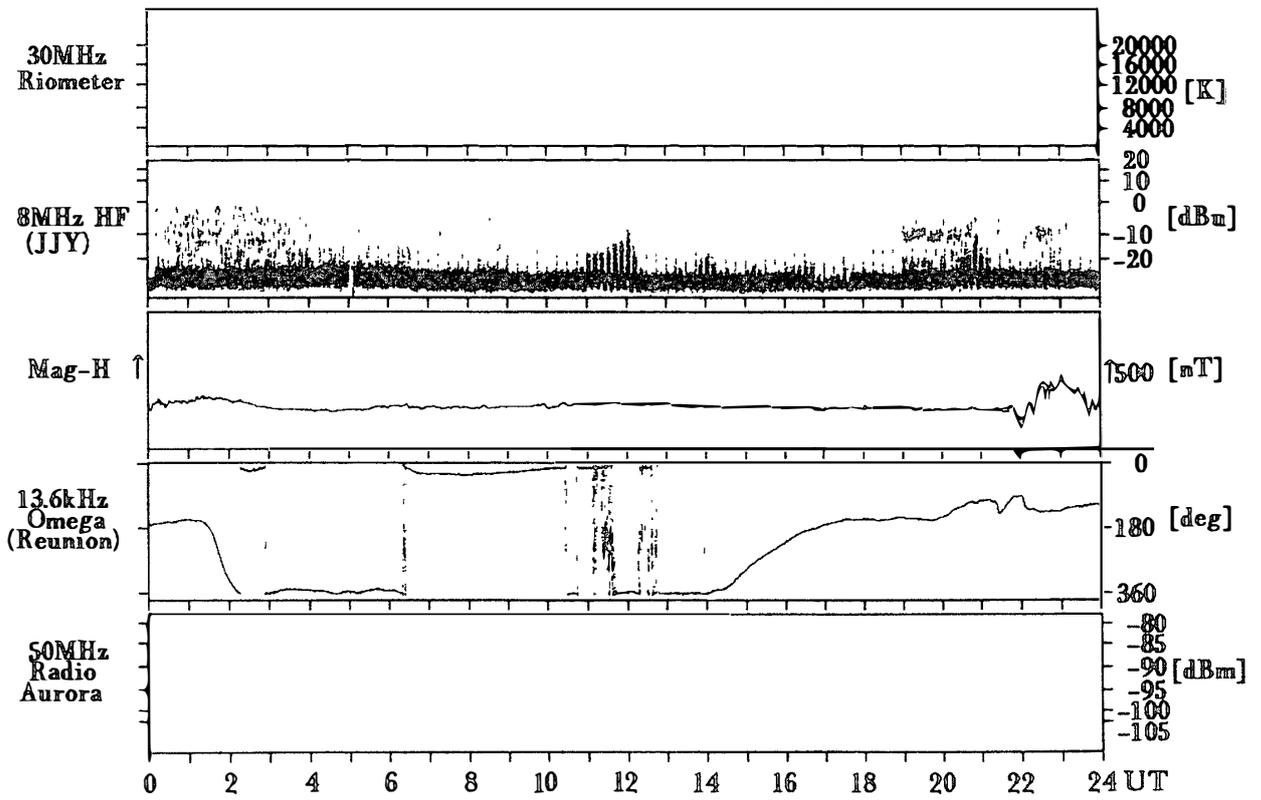
Syowa Station

Total Day / 272 1995/ 9/29



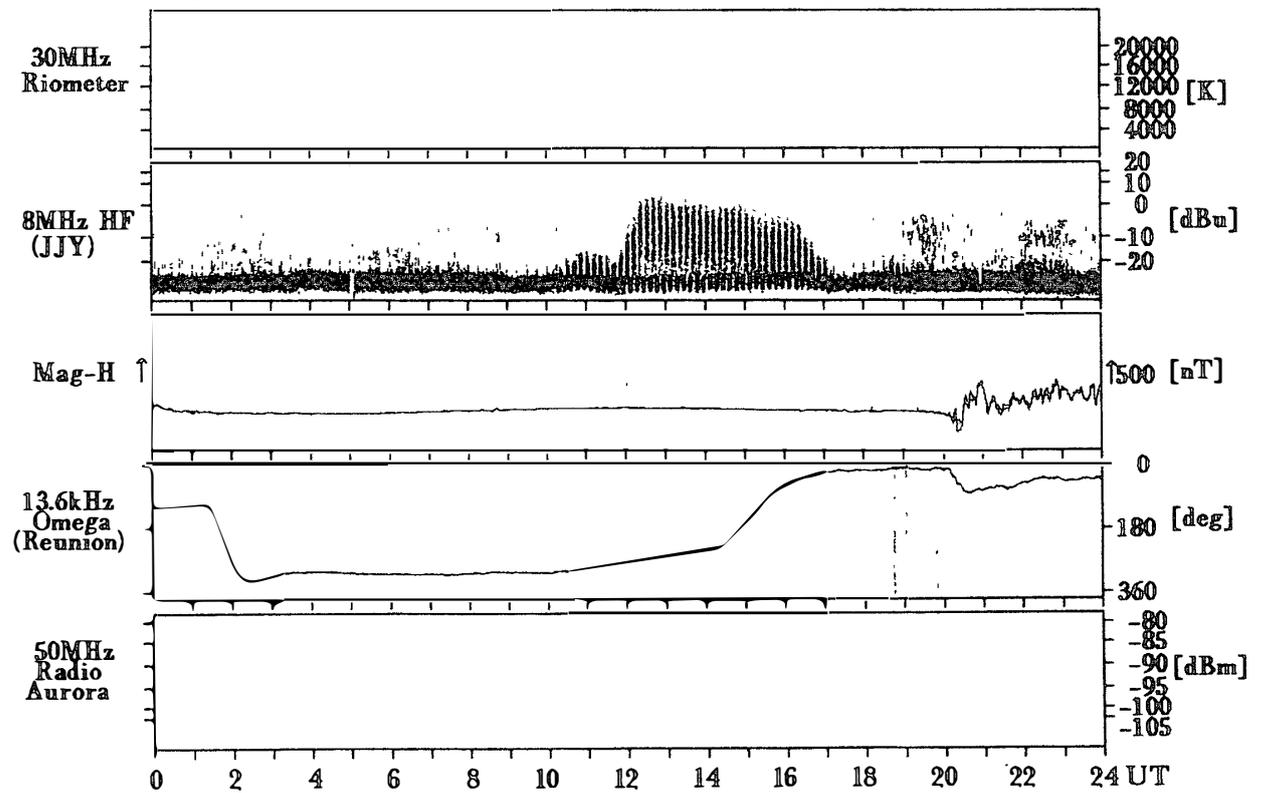
Syowa Station

Total Day / 273 1995/ 9/30



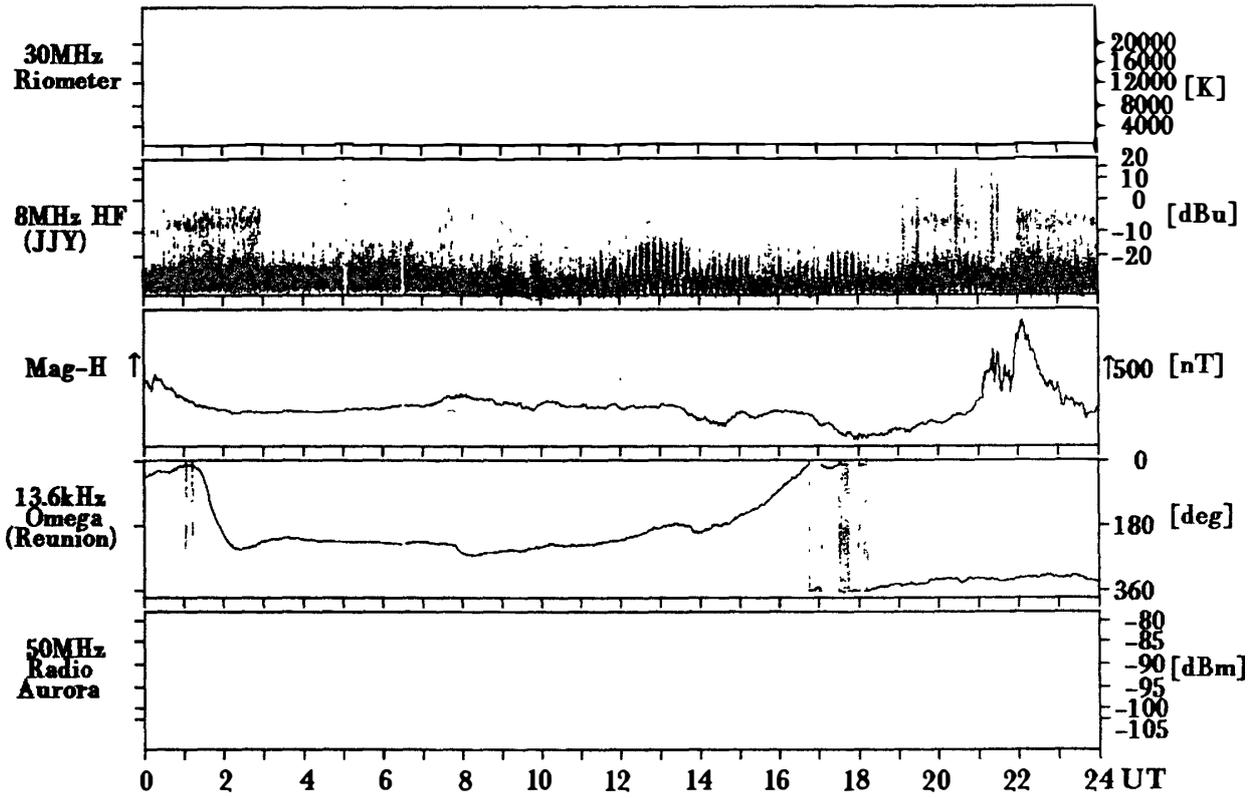
Syowa Station

Total Day / 274 1995/10/ 1



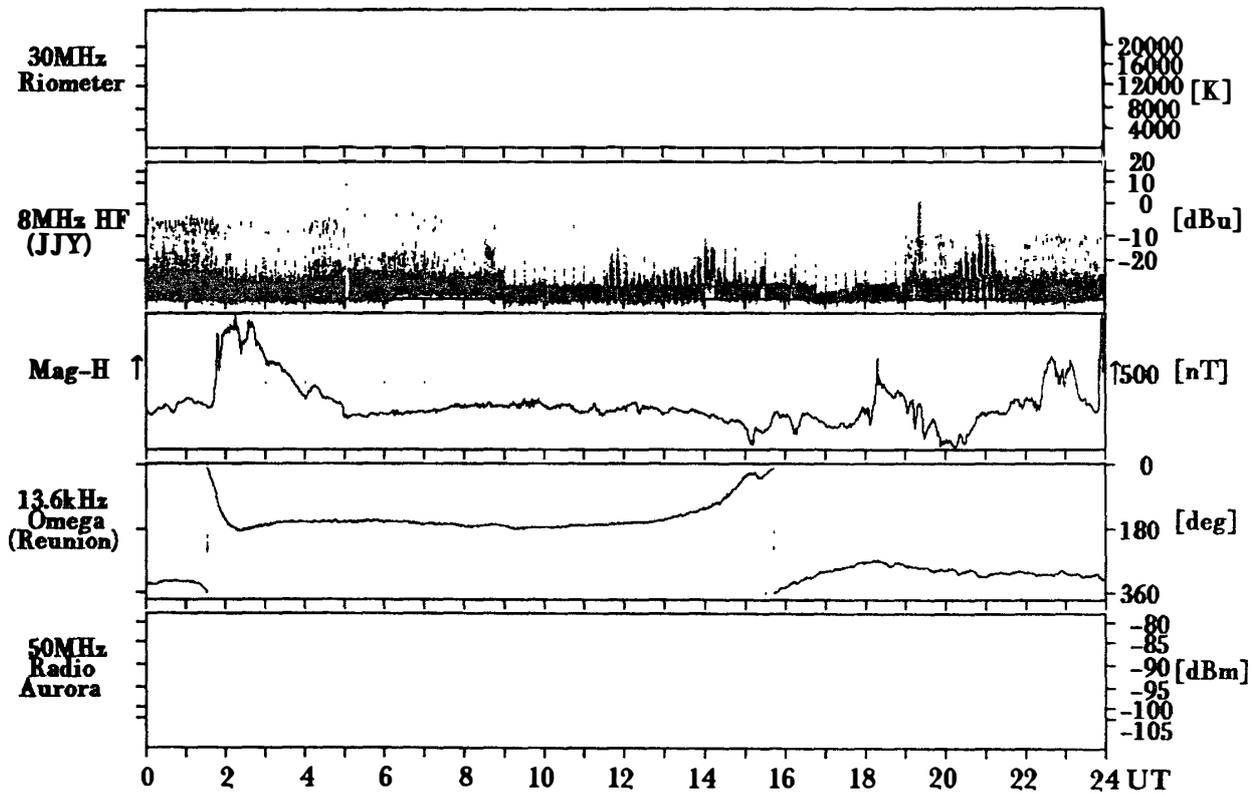
Syowa Station

Total Day / 275 1995/10/ 2



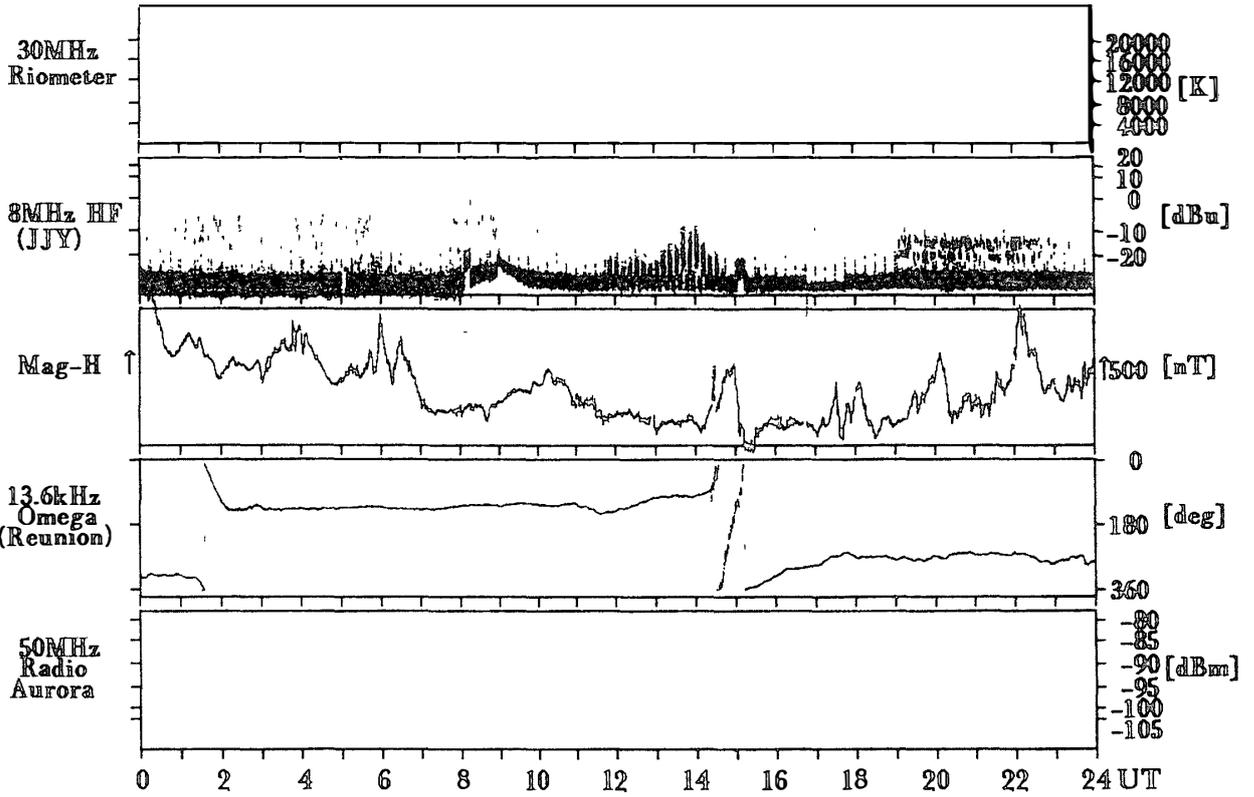
Syowa Station

Total Day / 276 1995/10/ 3



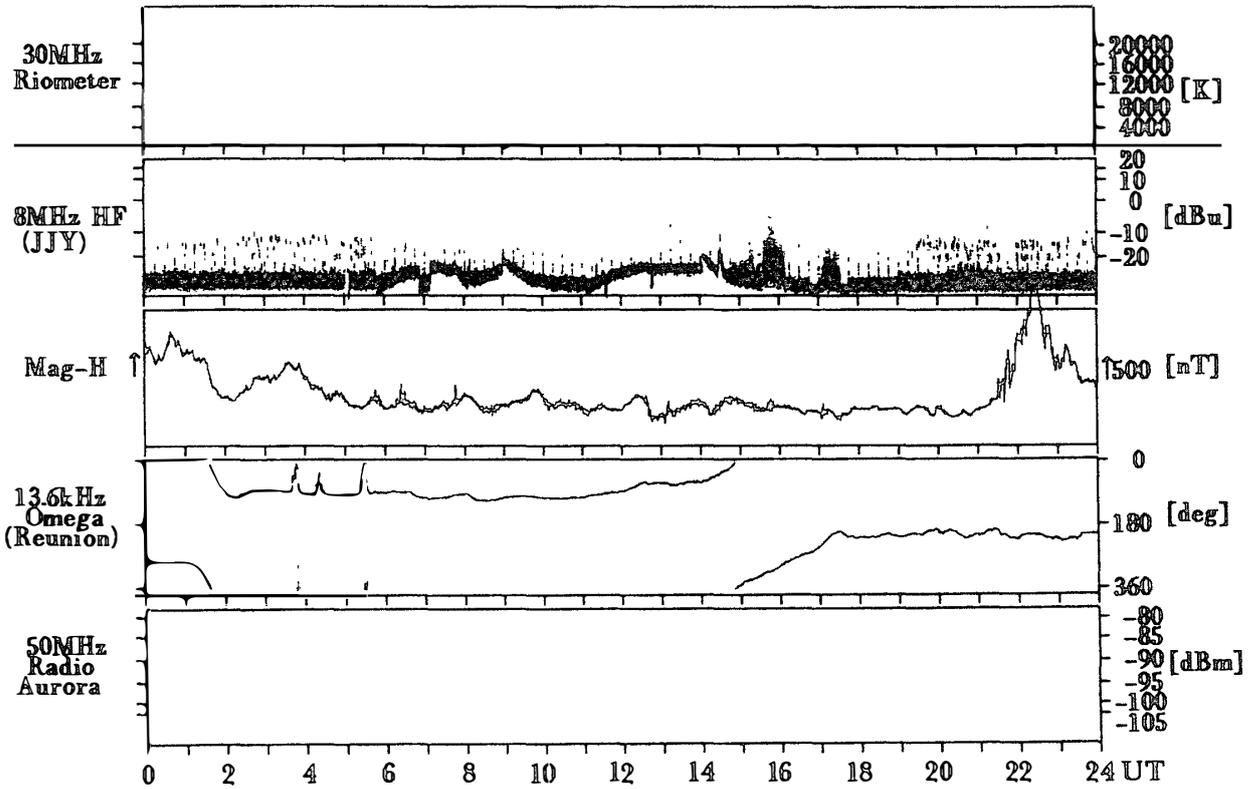
Syowa Station

Total Day / 277 1995/10/ 4



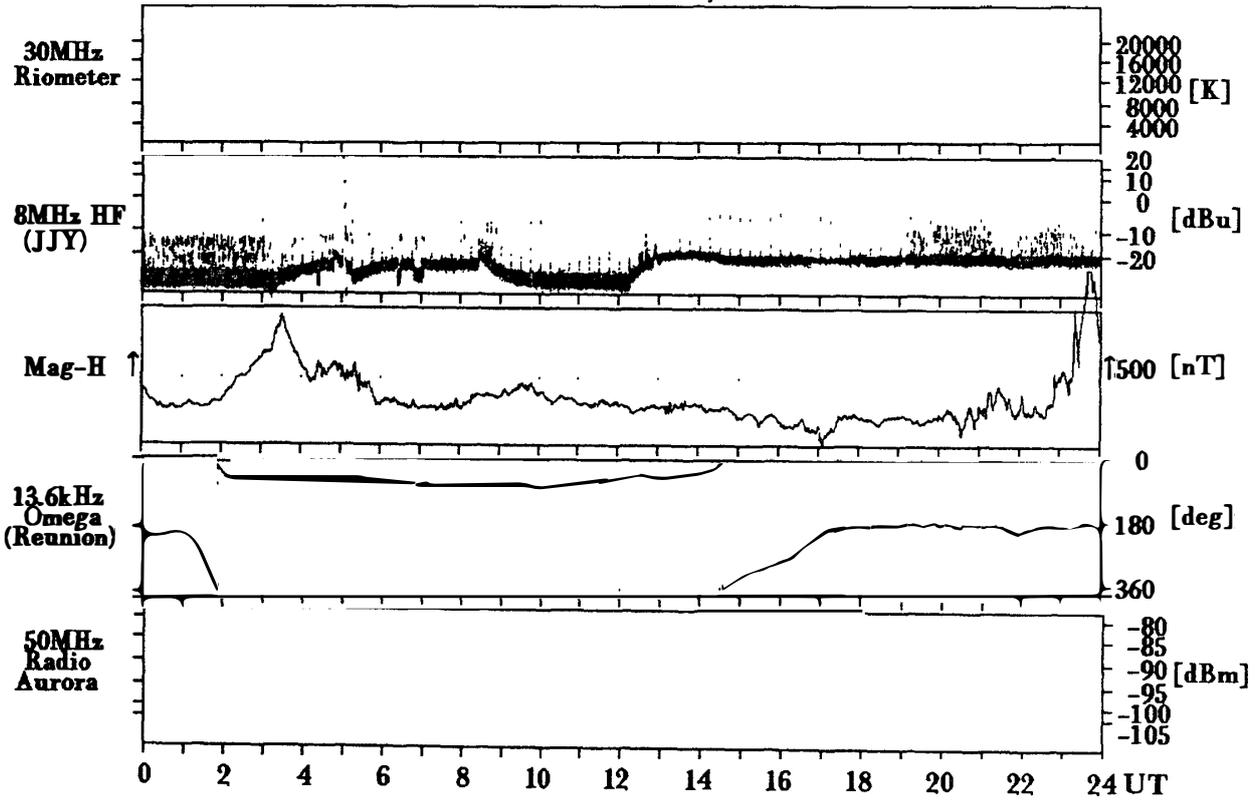
Syowa Station

Total Day / 278 1995/10/ 5



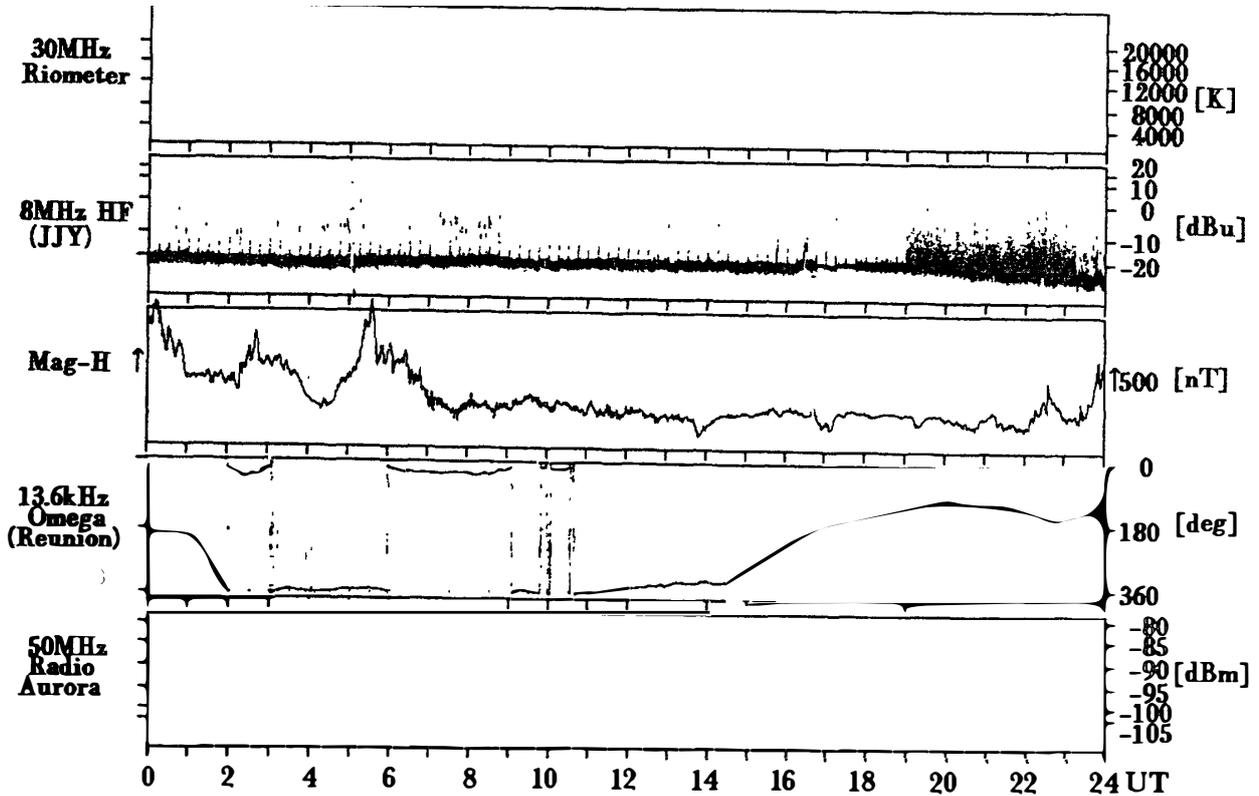
Syowa Station

Total Day / 279 1995/10/ 6



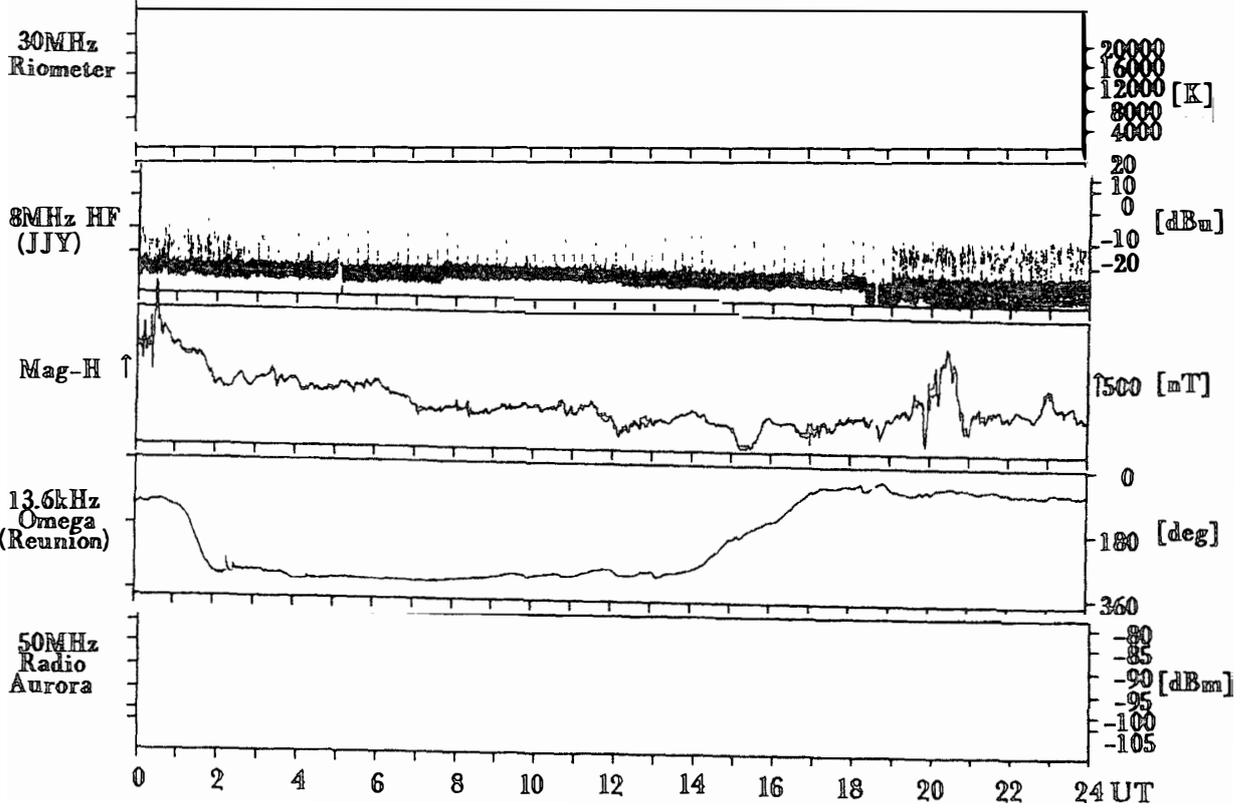
Syowa Station

Total Day / 280 1995/10/ 7



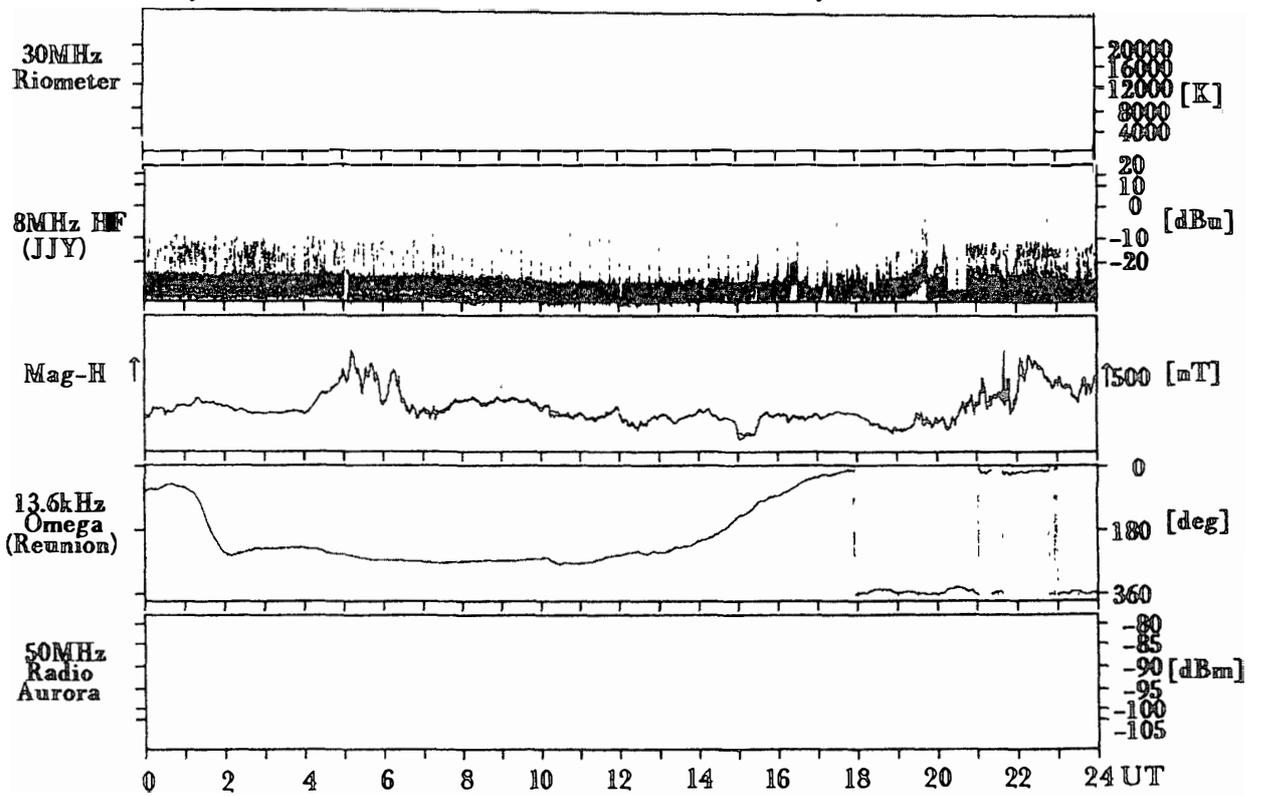
Syowa Station

Total Day / 281 1995/10/ 8



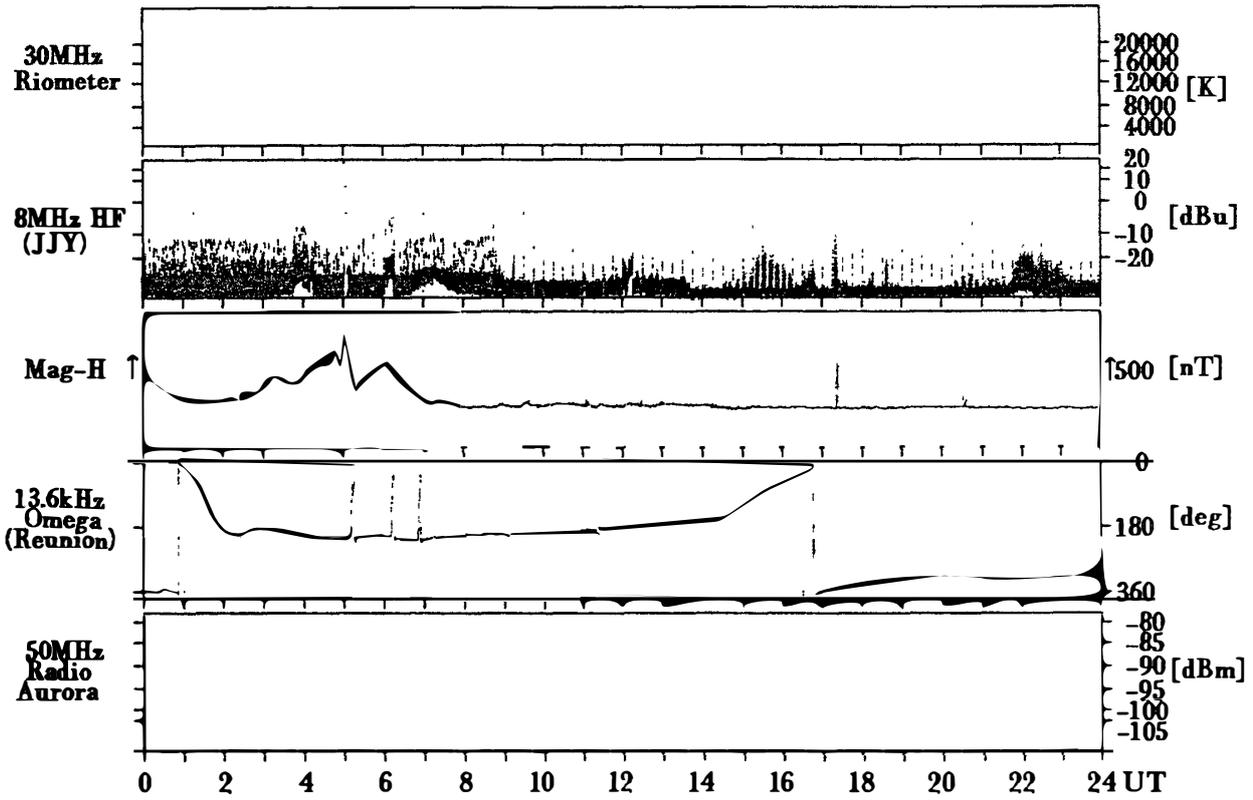
Syowa Station

Total Day / 282 1995/10/ 9



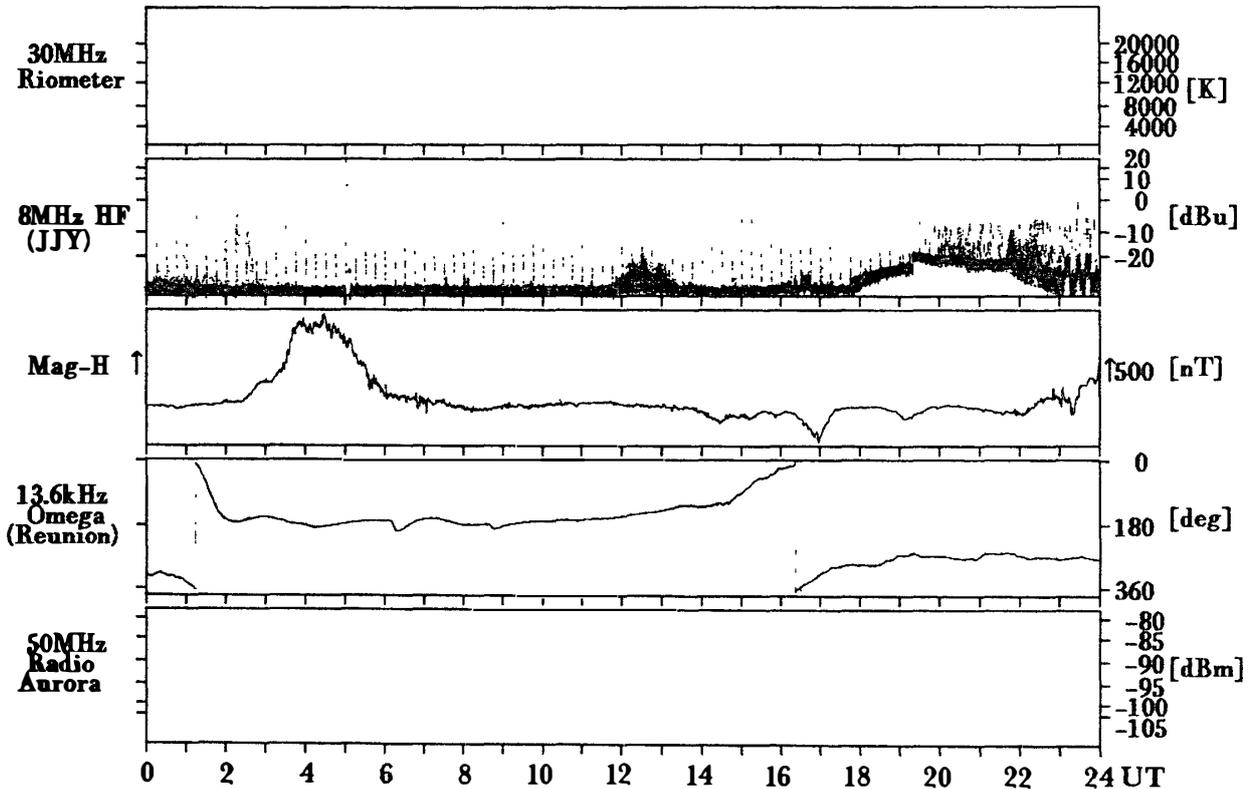
Syowa Station

Total Day / 283 1995/10/10



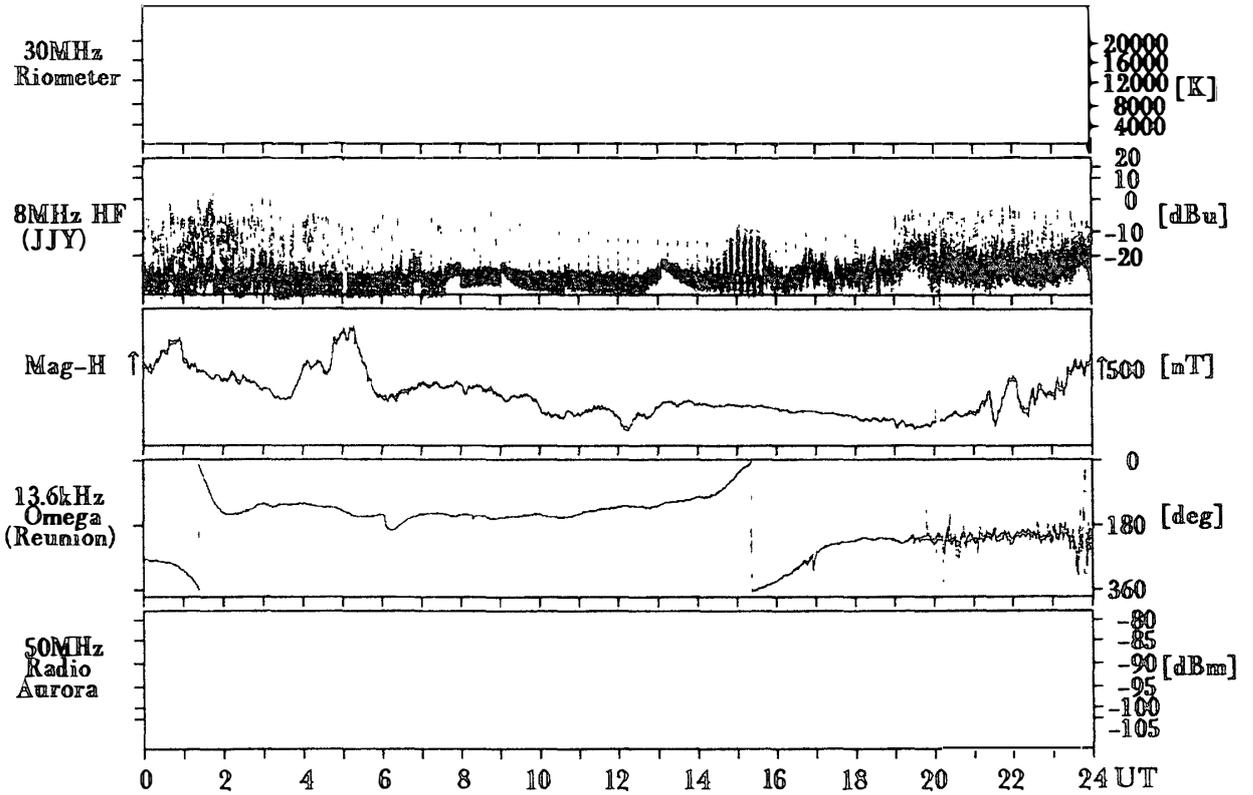
Syowa Station

Total Day / 284 1995/10/11



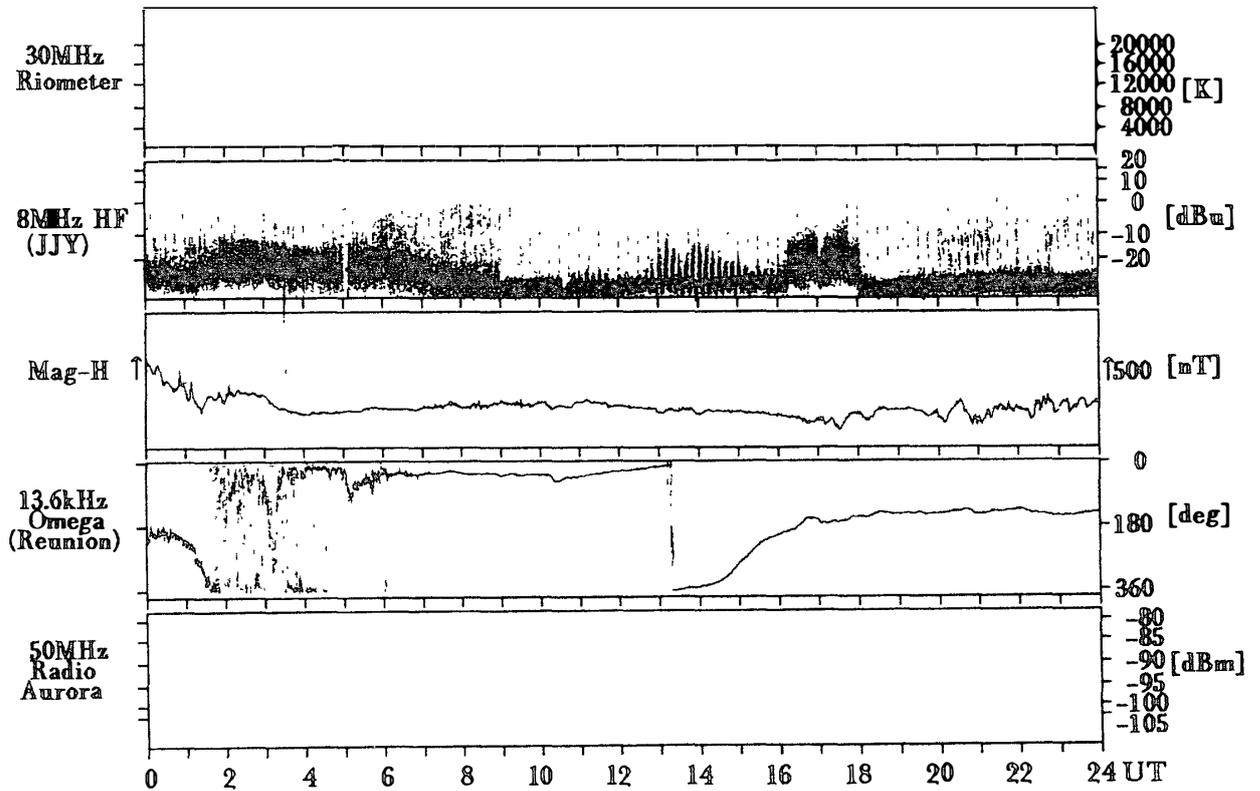
Syowa Station

Total Day / 285 1995/10/12



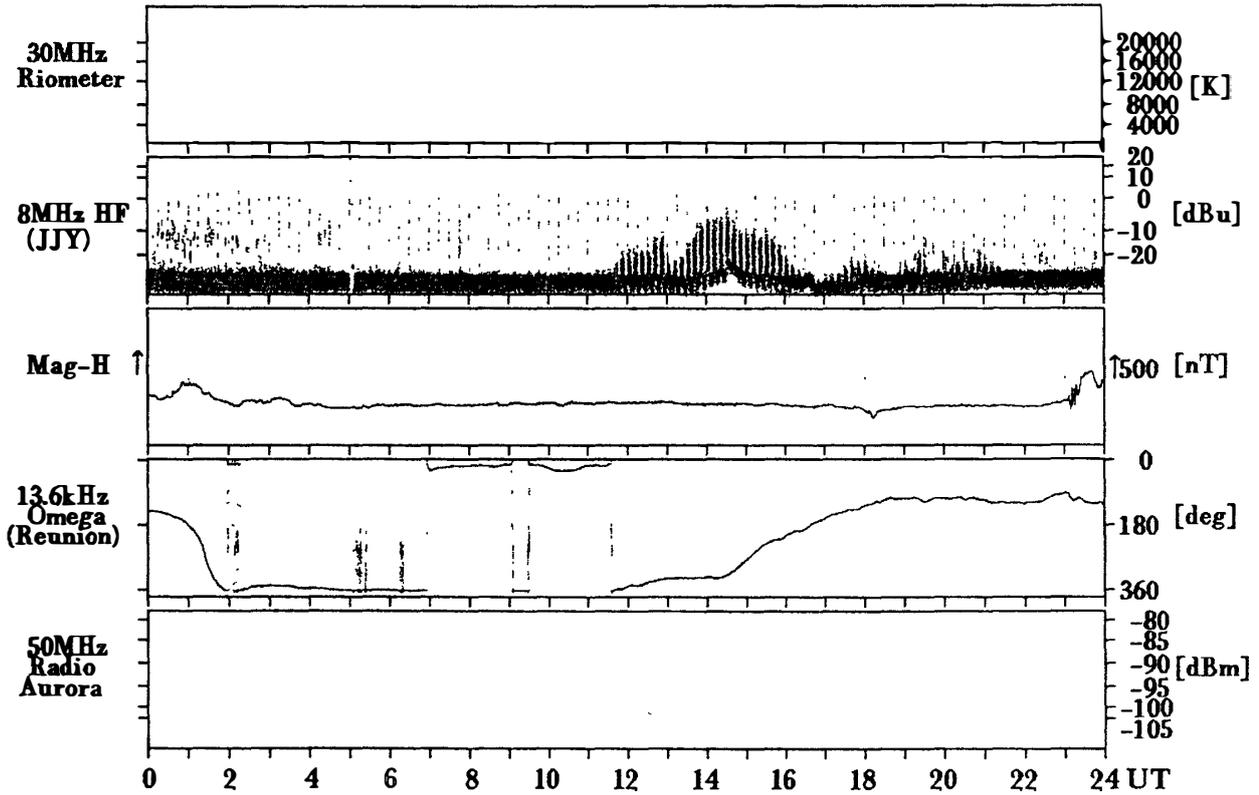
Syowa Station

Total Day / 286 1995/10/13



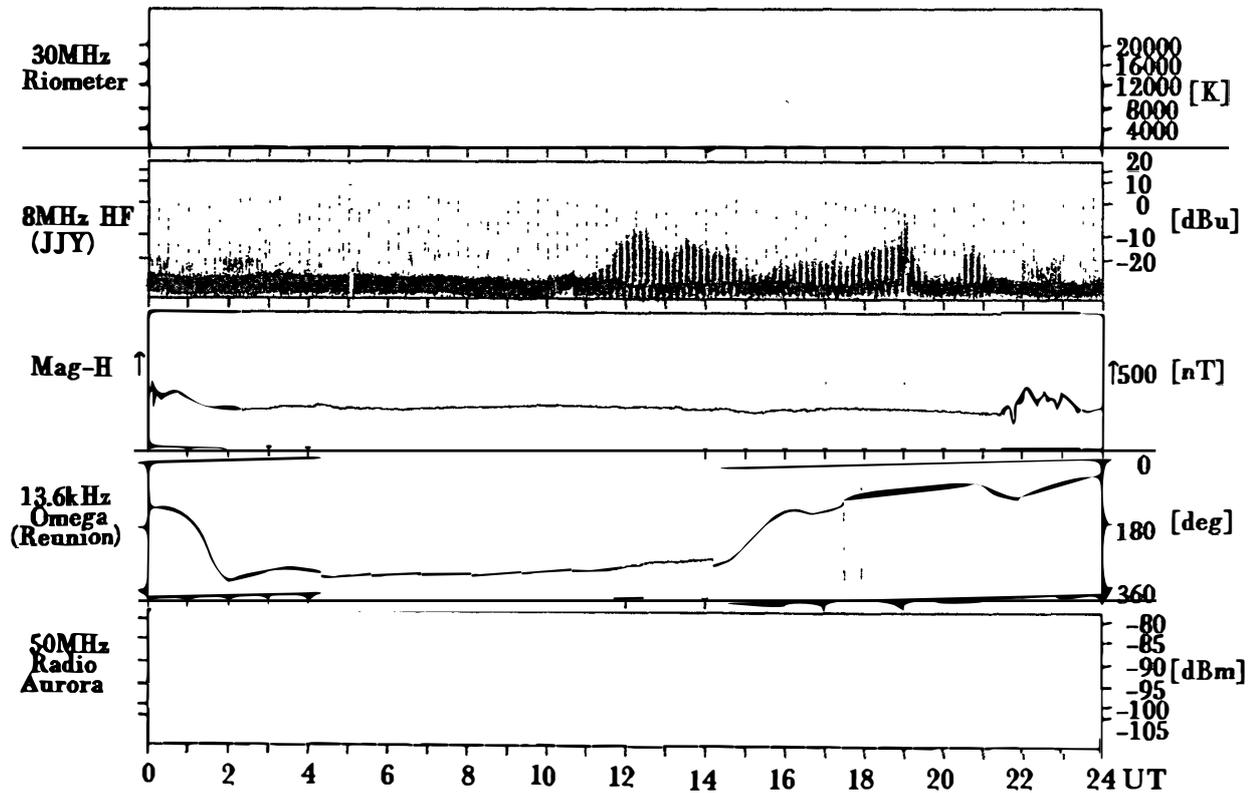
Syowa Station

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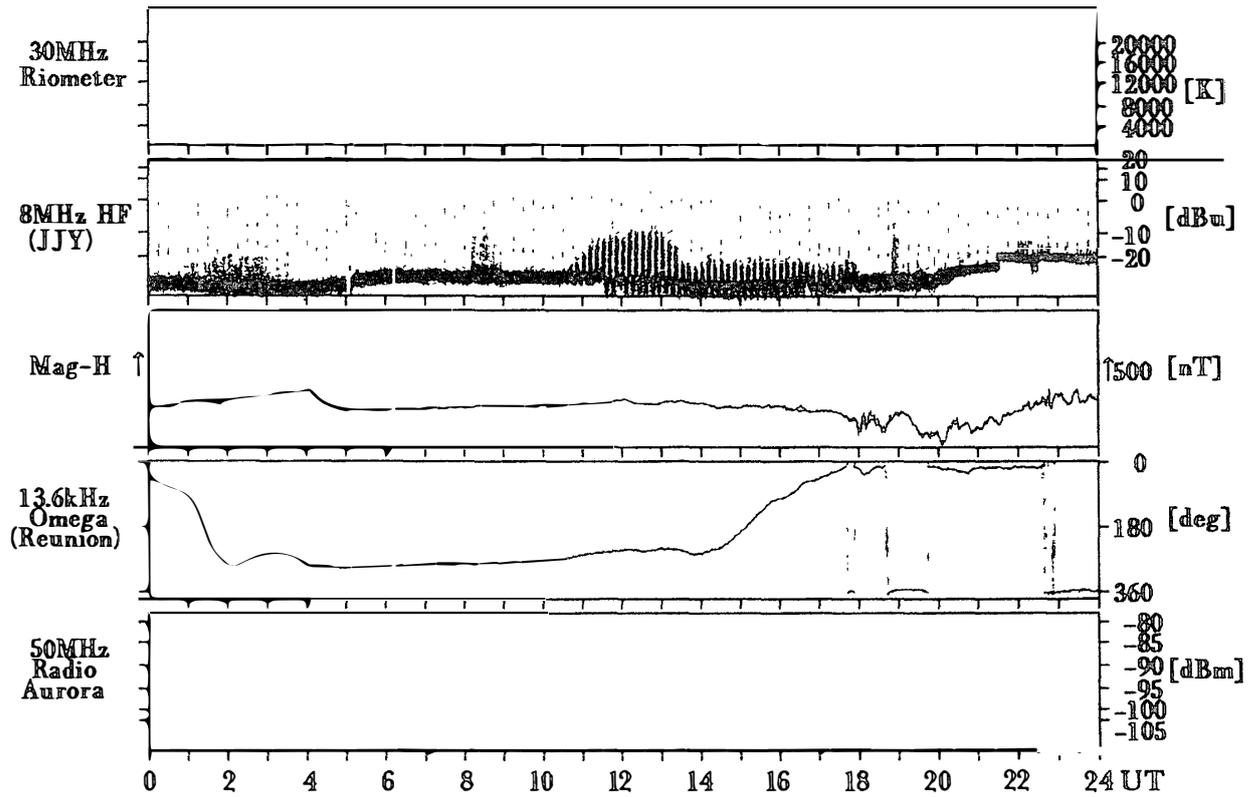
Syowa Station

Total Day / 288 1995/10/15



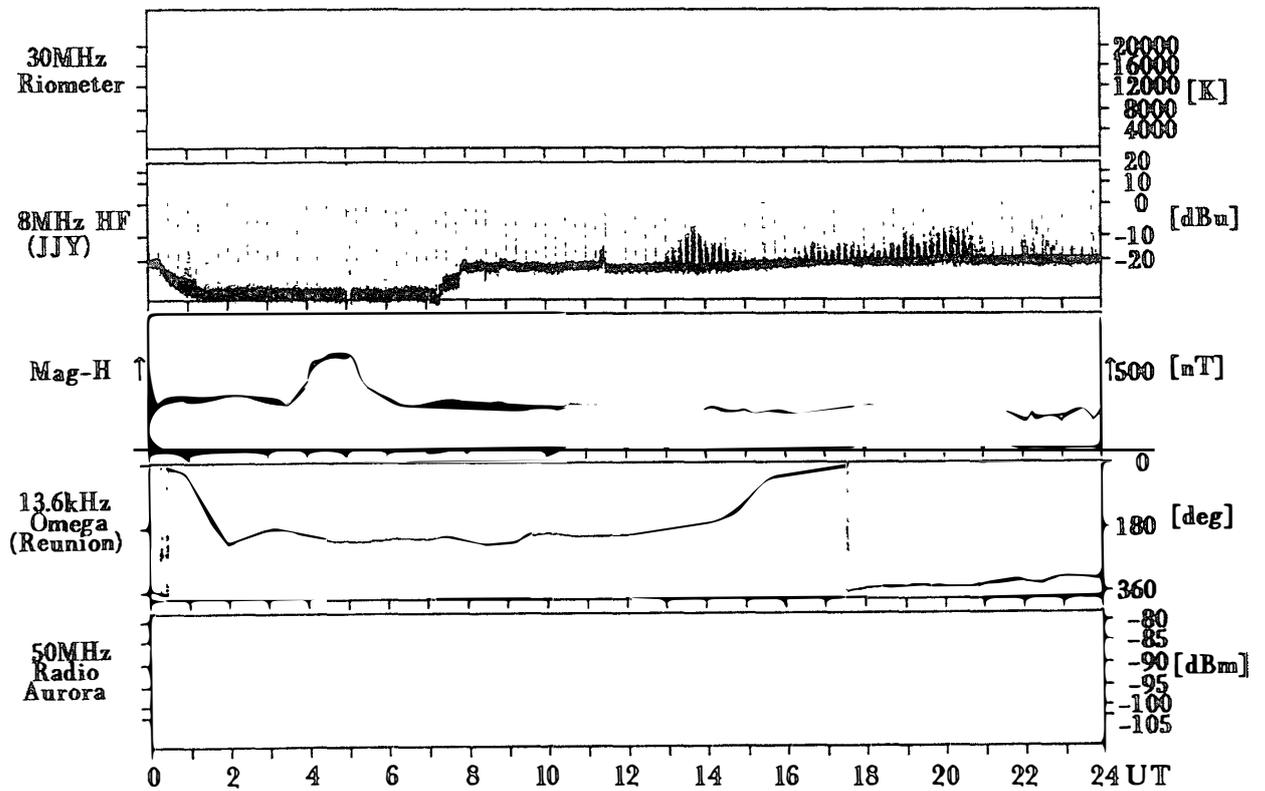
Syowa Station

Total Day / 289 1995/10/16



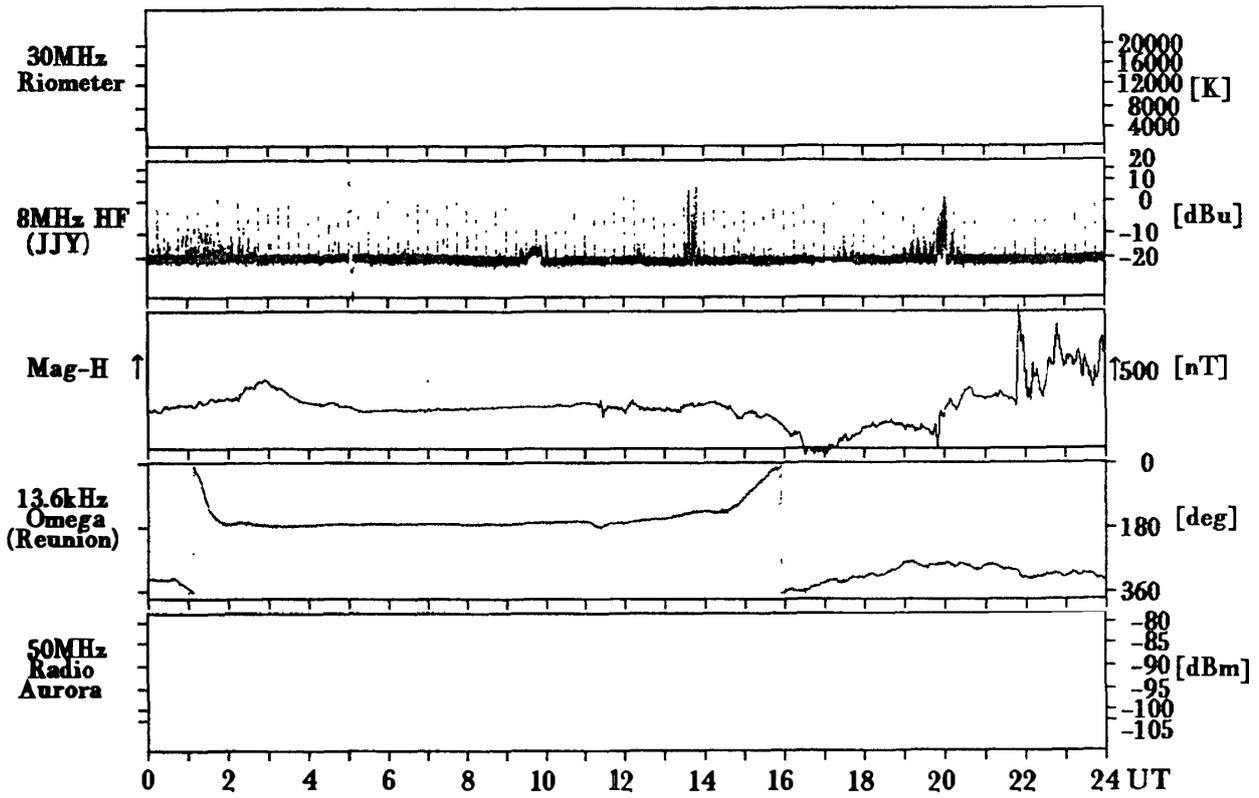
Syowa Station

Total Day / 290 1995/10/17



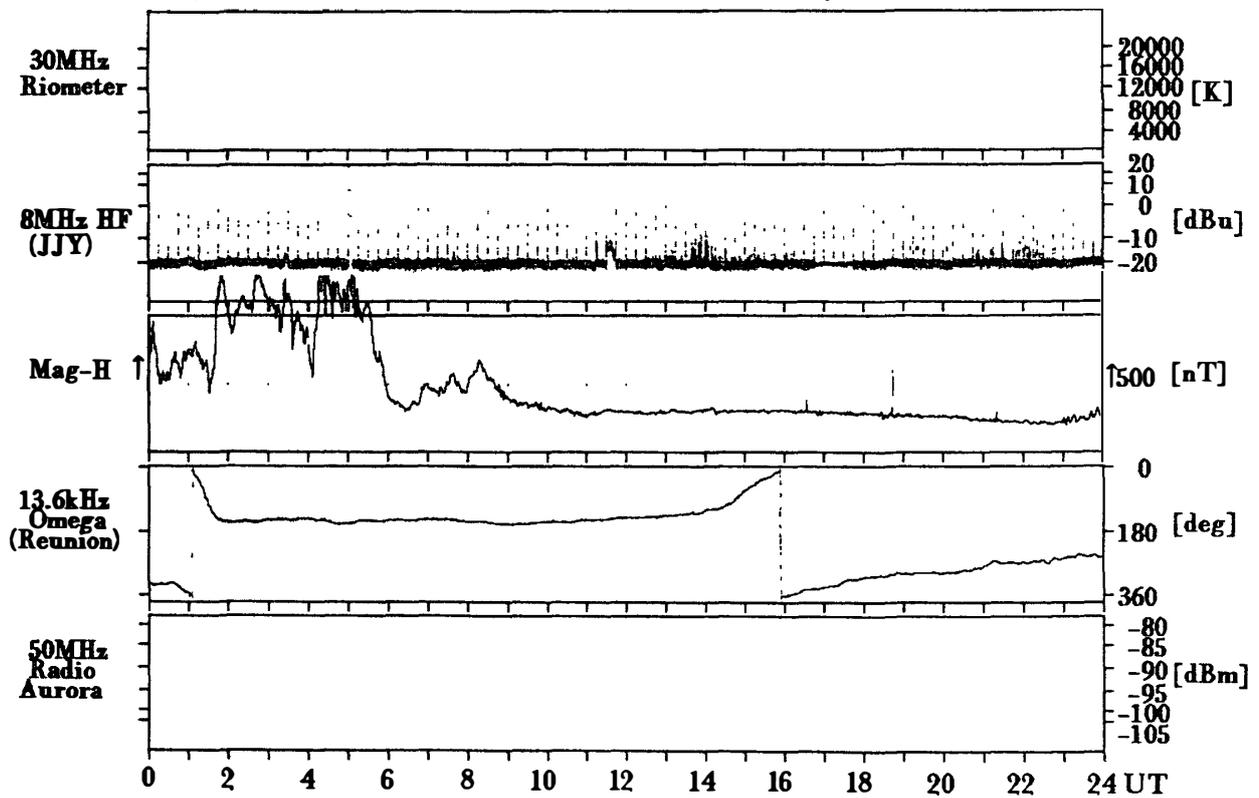
Syowa Station

Total Day / 291 1995/10/18



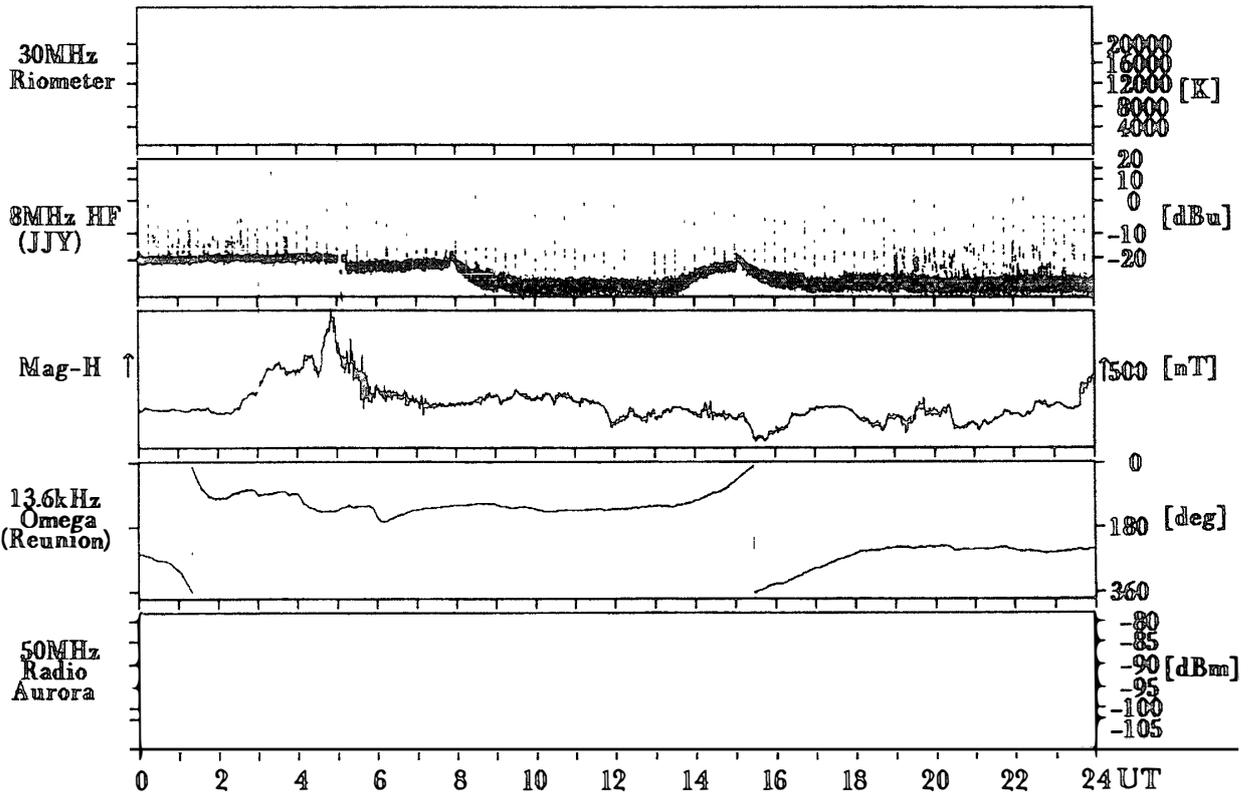
Syowa Station

Total Day / 292 1995/10/19



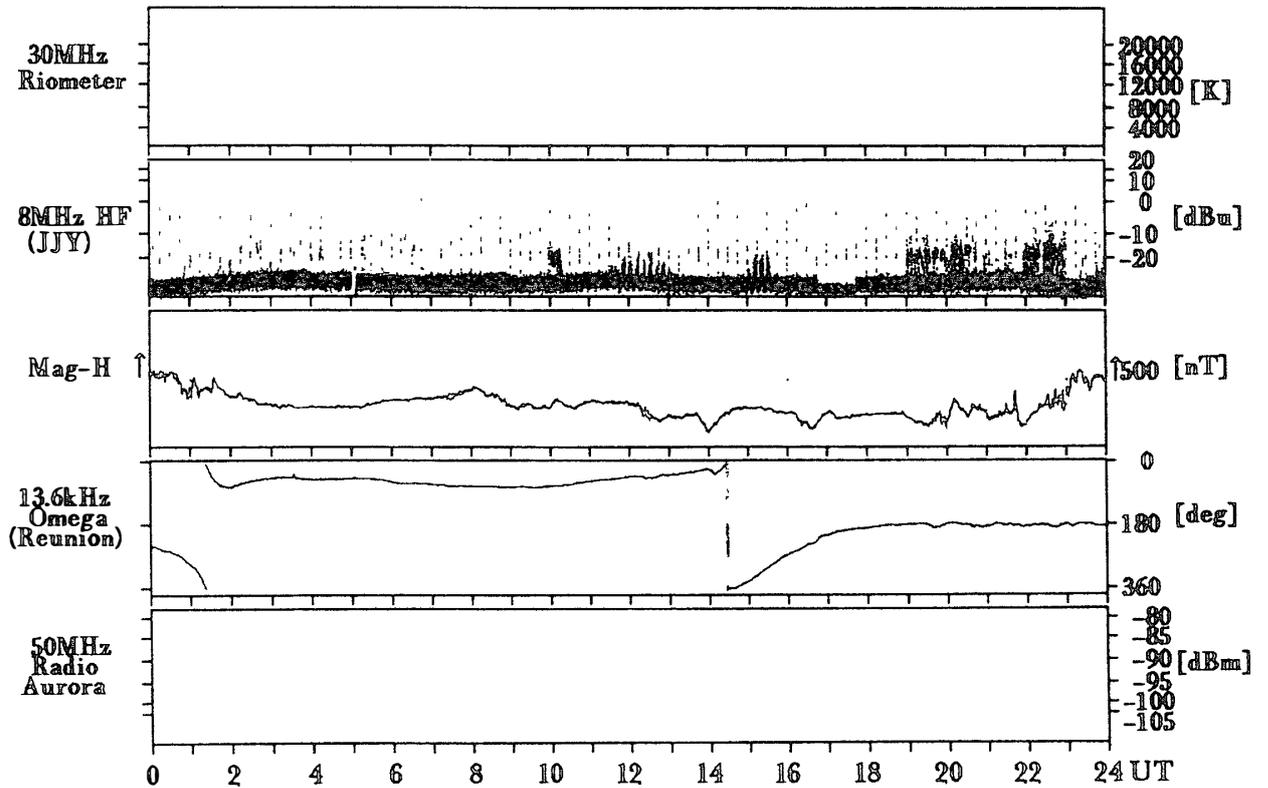
Syowa Station

Total Day / 293 1995/10/20



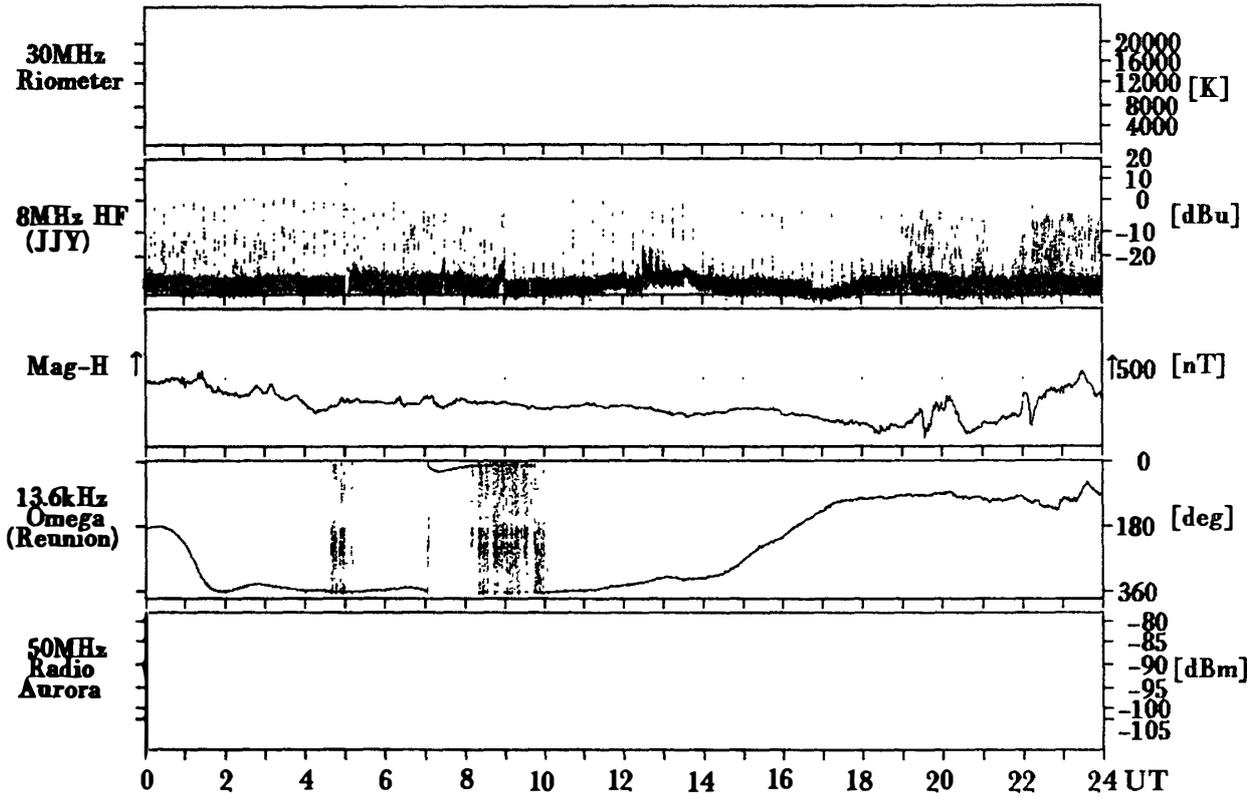
Syowa Station

Total Day / 294 1995/10/21



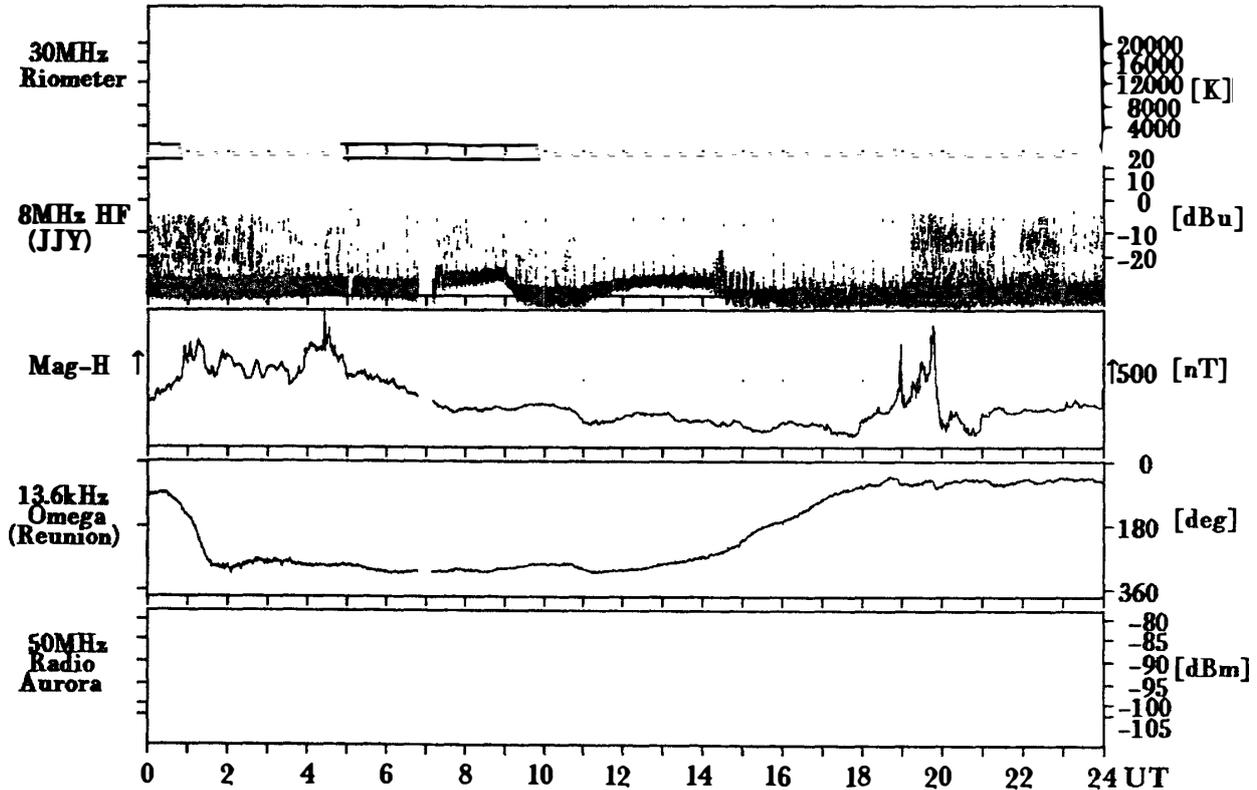
Syowa Station

Total Day / 295 1995/10/22



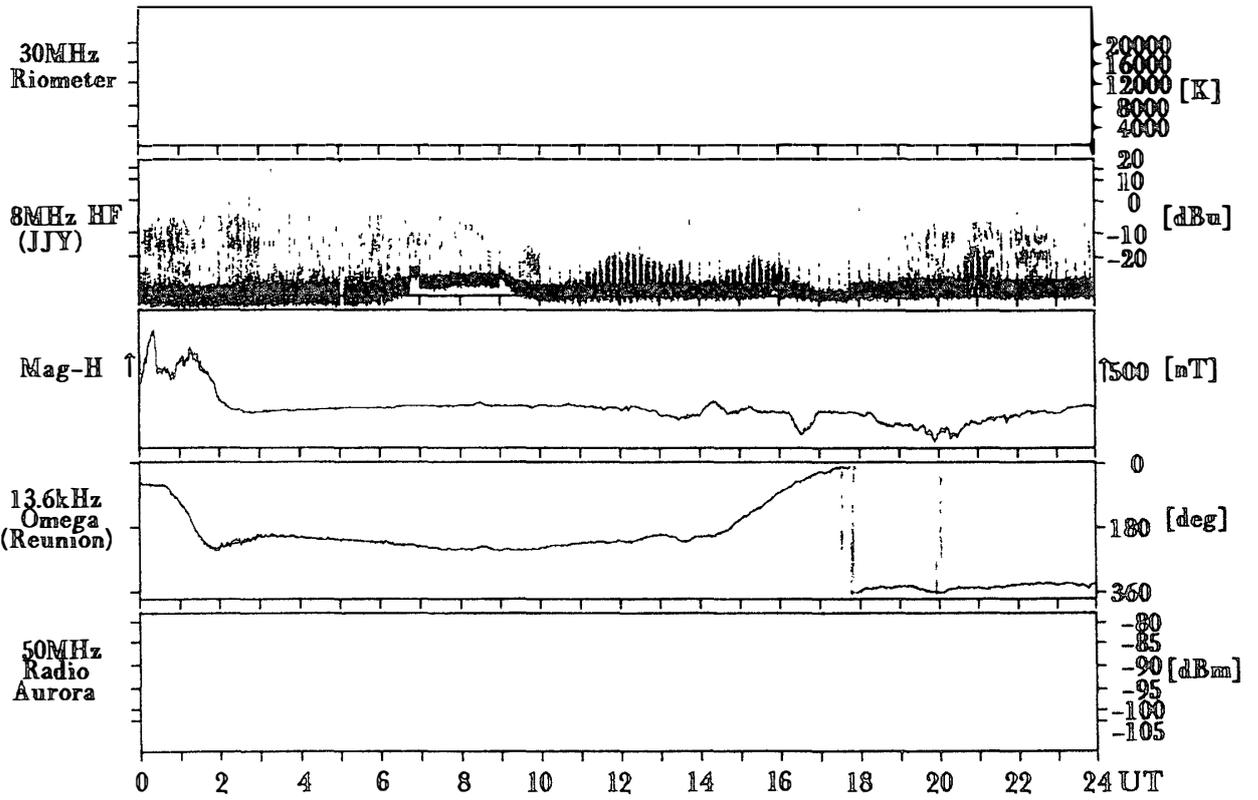
Syowa Station

Total Day / 296 1995/10/23



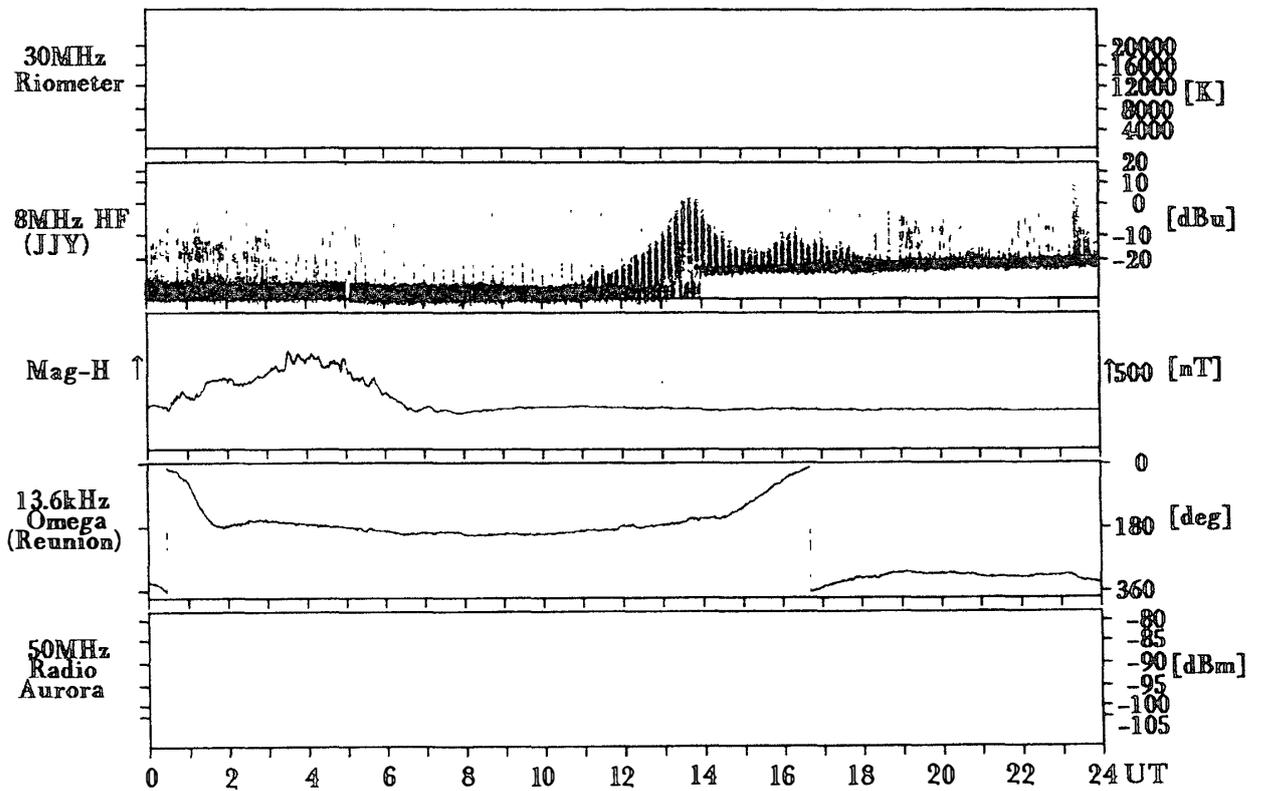
Syowa Station

Total Day / 297 1995/10/24



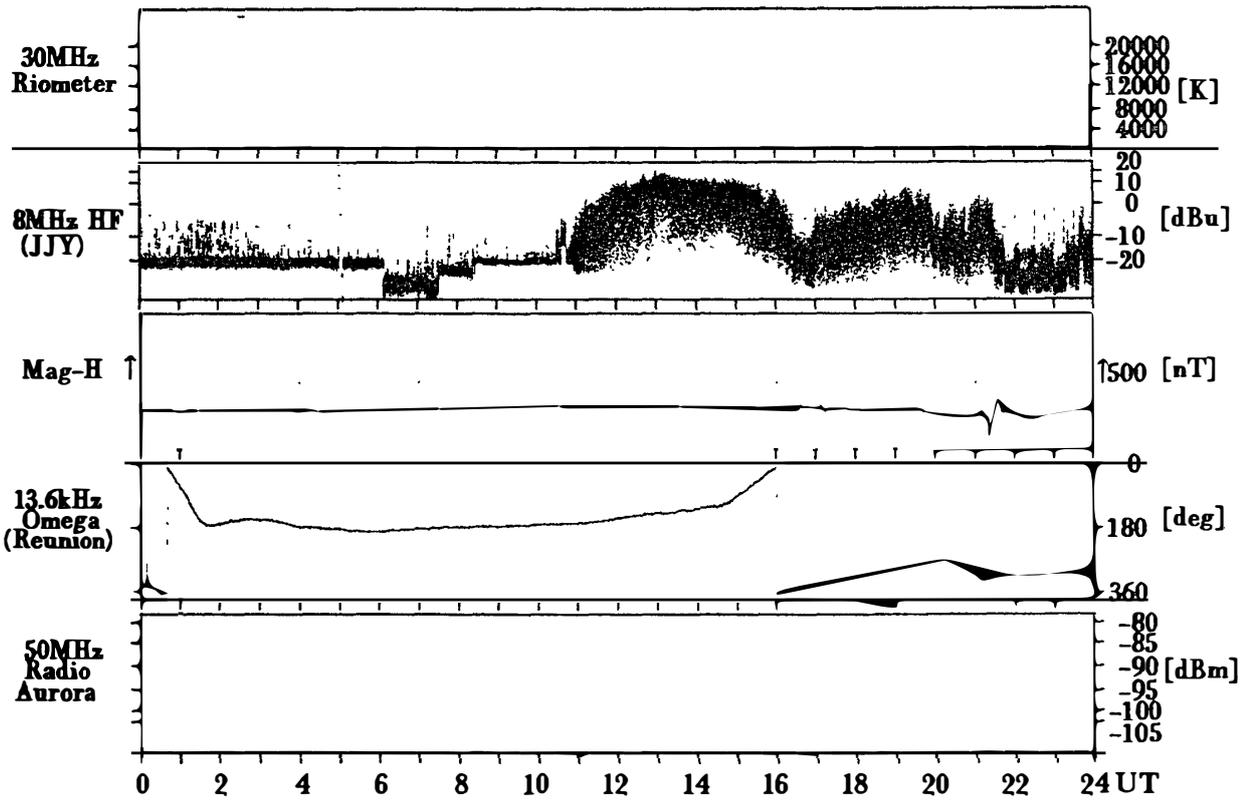
Syowa Station

Total Day / 298 1995/10/25



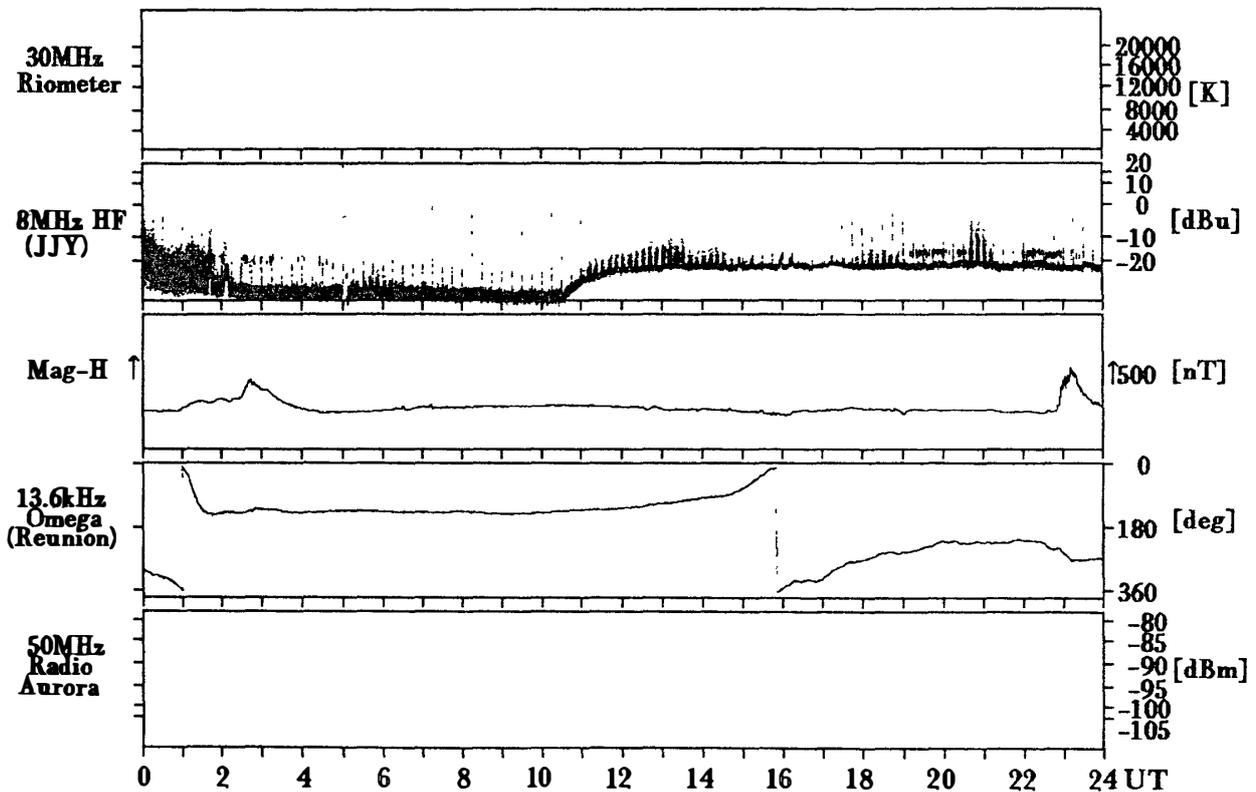
Syowa Station

Total Day / 299 1995/10/26



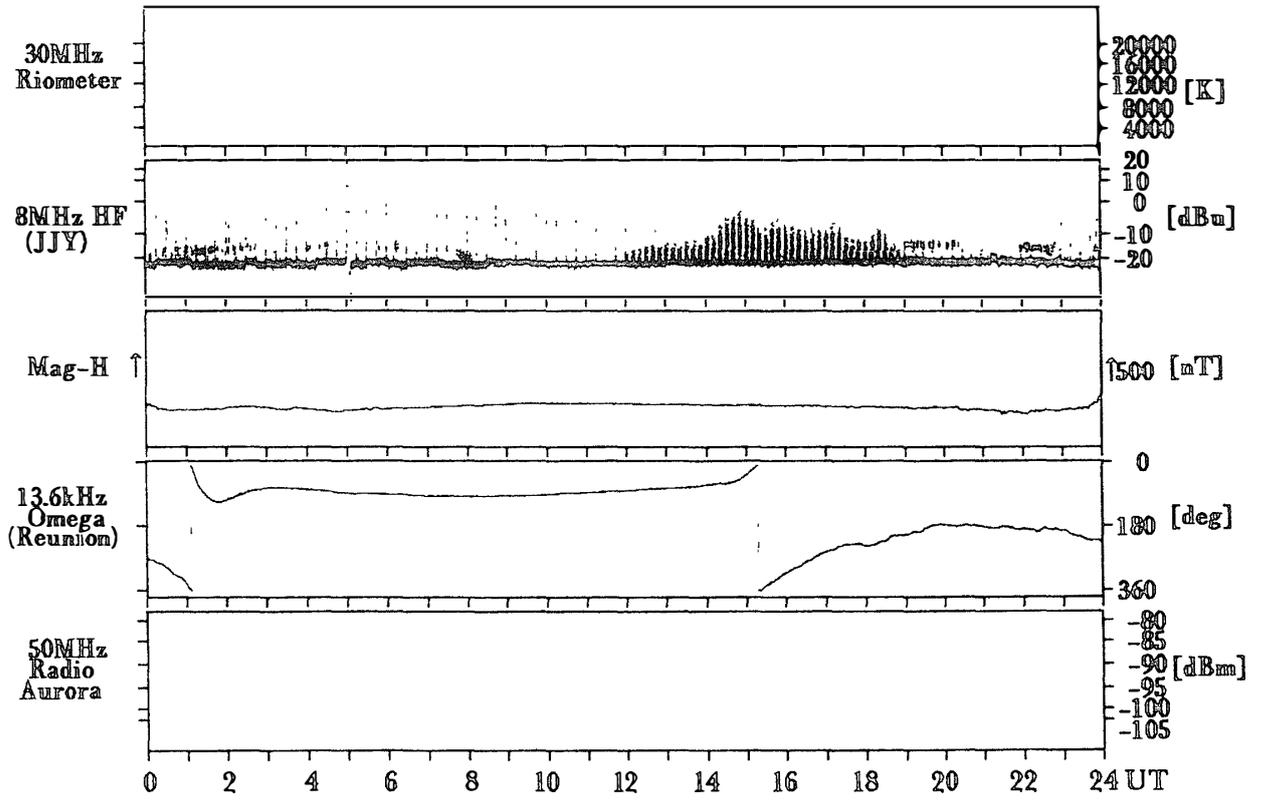
Syowa Station

Total Day / 300 1995/10/27



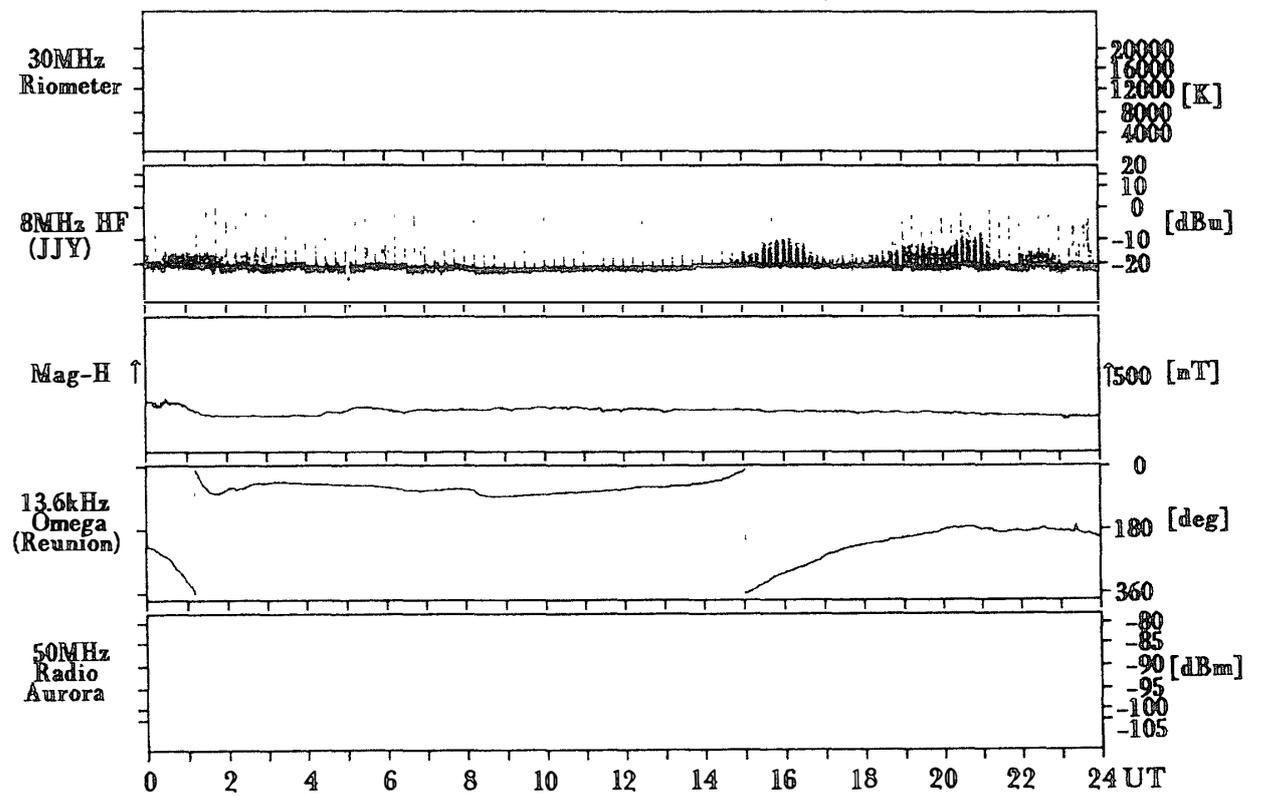
Syowa Station

Total Day / 301 1995/10/28



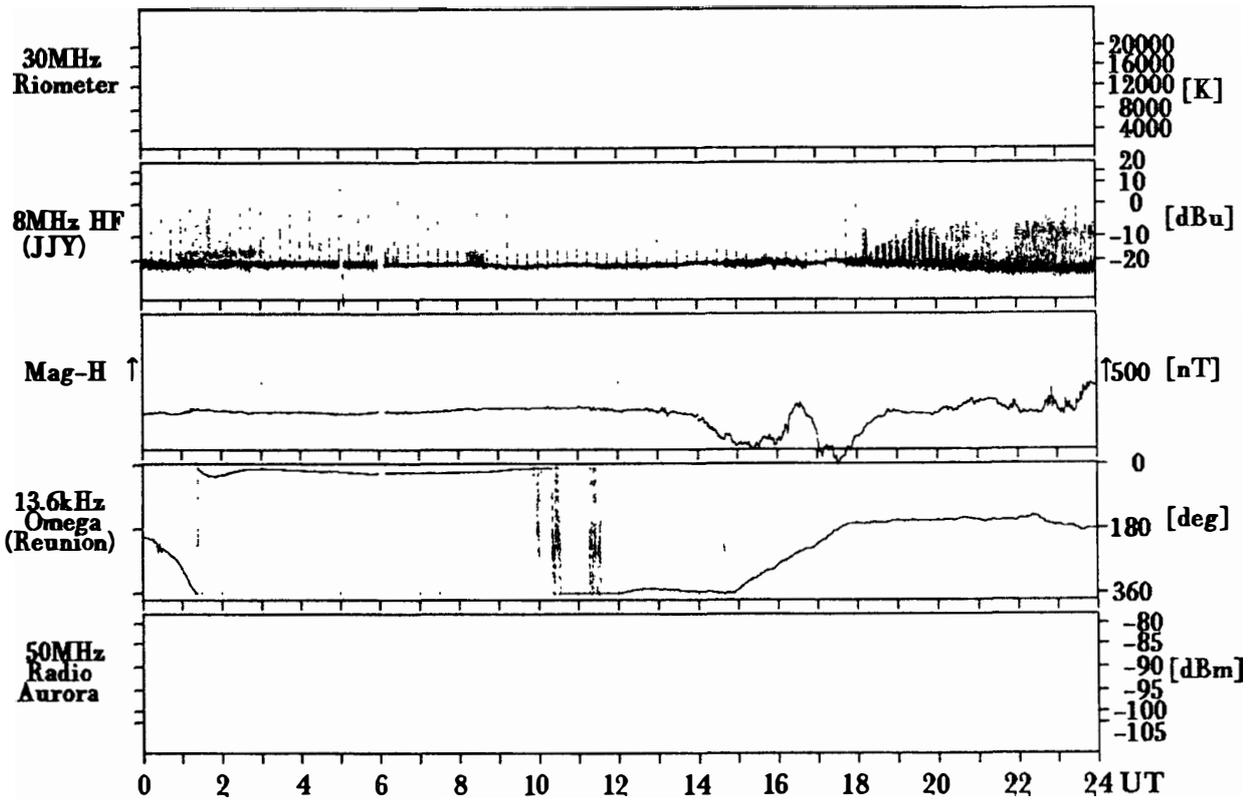
Syowa Station

Total Day / 302 1995/10/29



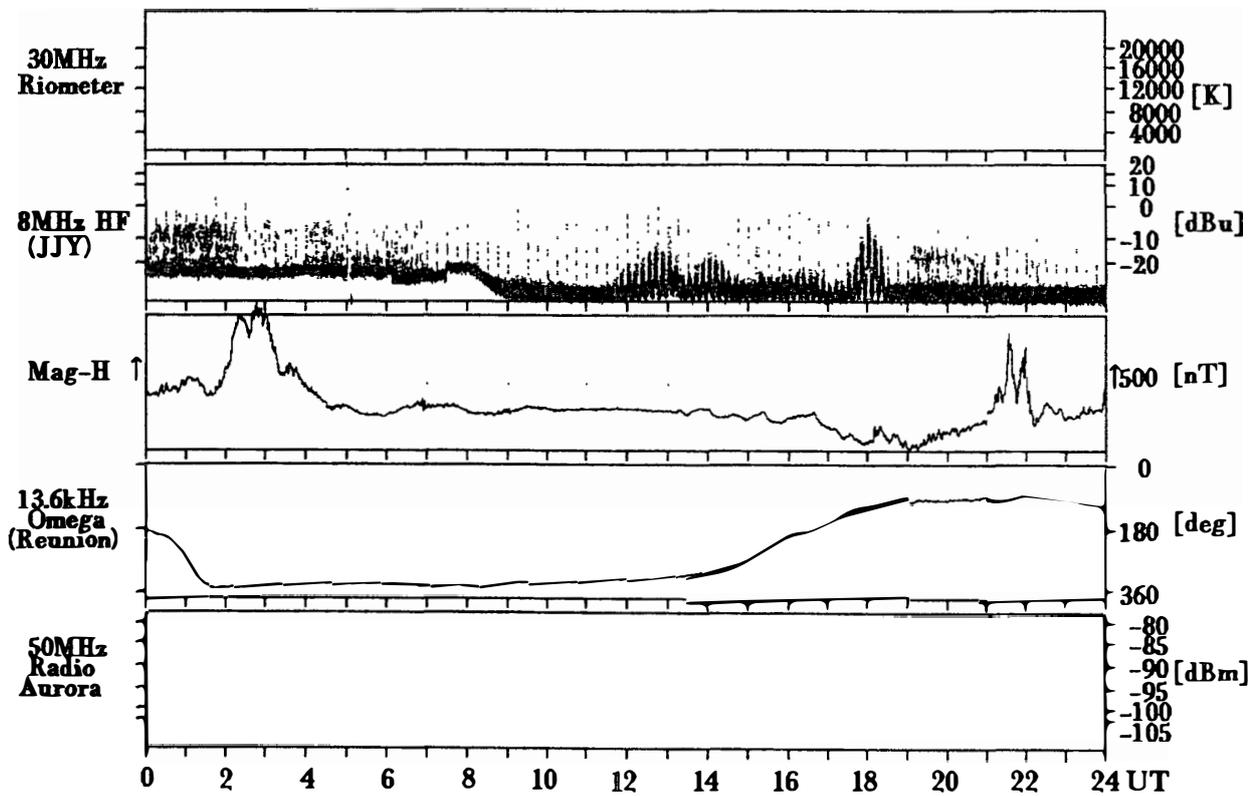
Syowa Station

Total Day / 303 1995/10/30



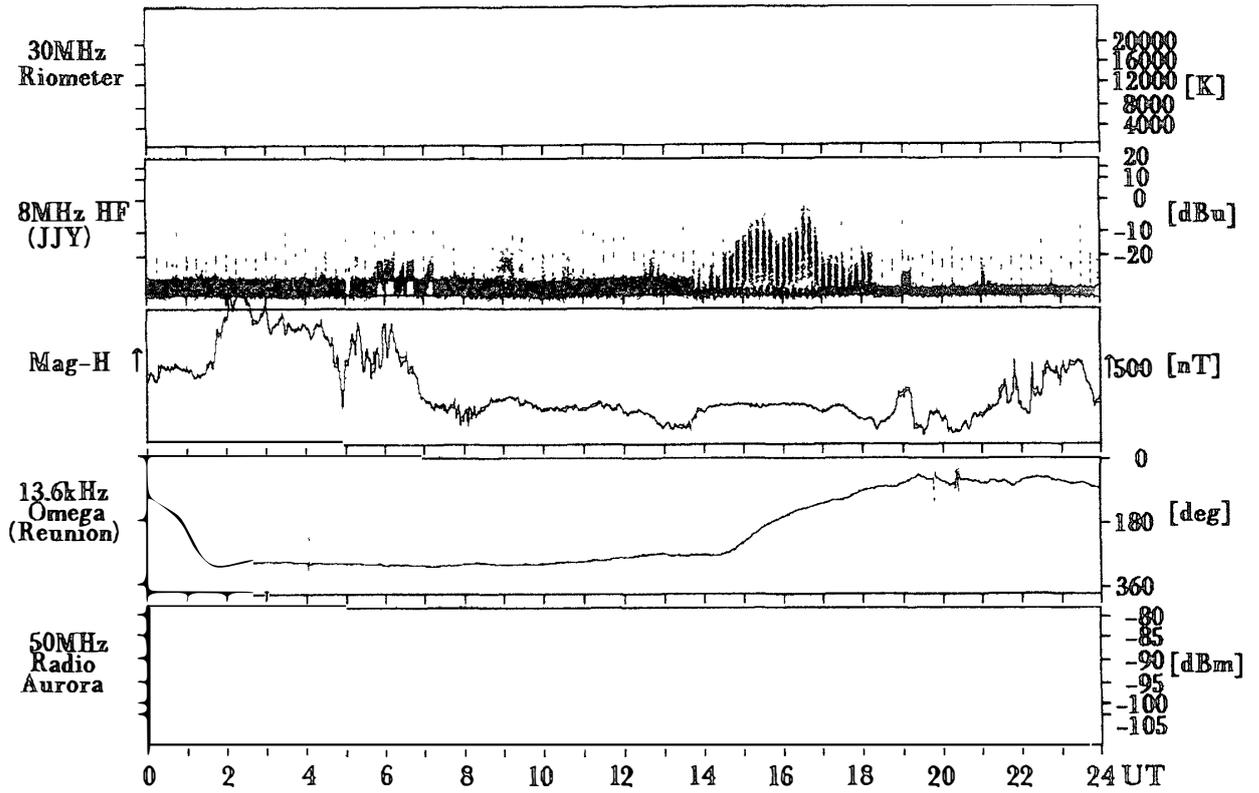
Syowa Station

Total Day / 304 1995/10/31



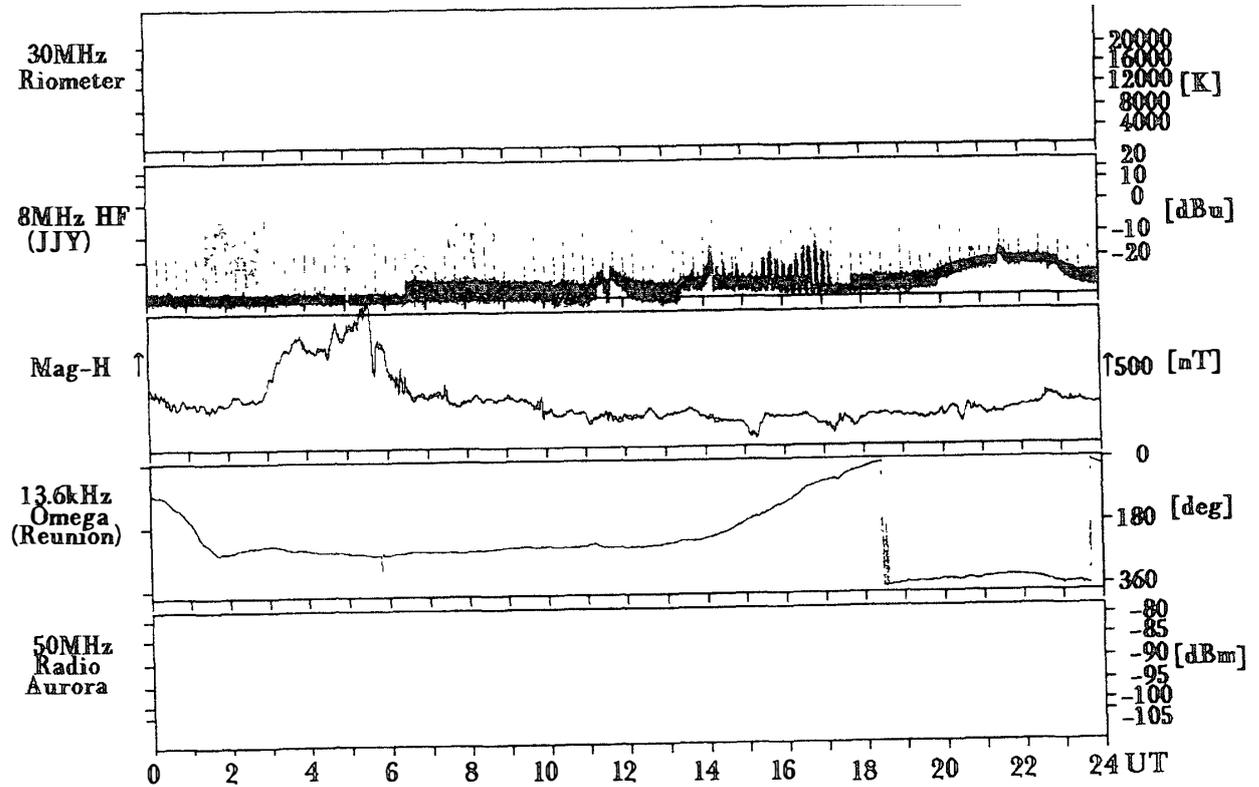
Syowa Station

Total Day / 305 1995/11/ 1



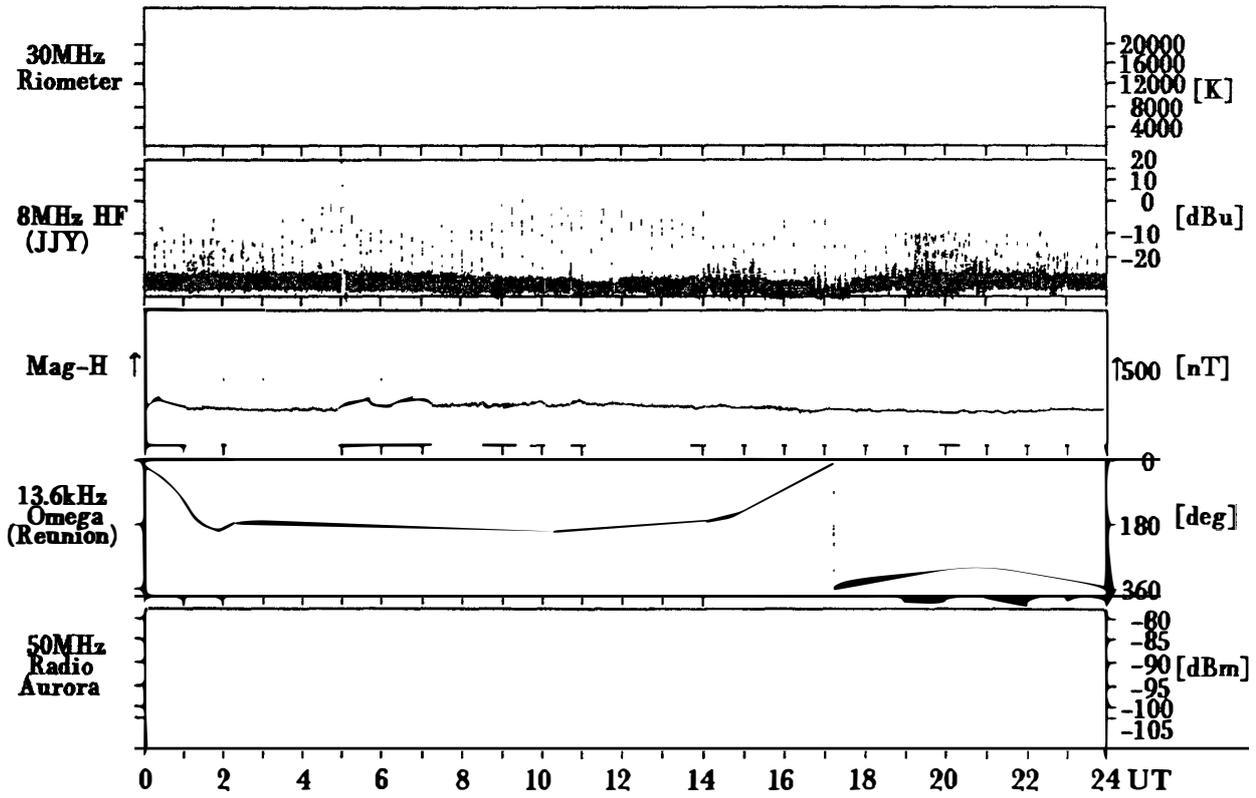
Syowa Station

Total Day / 306 1995/11/ 2



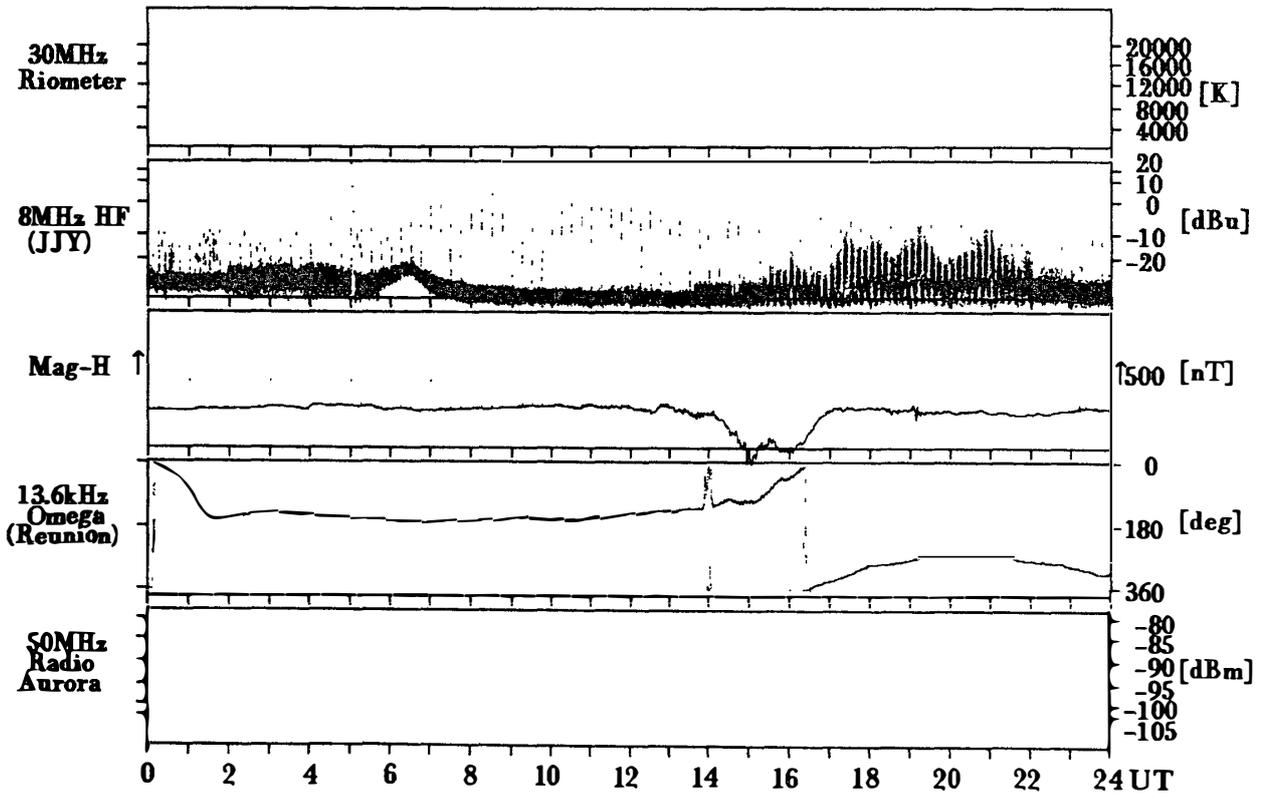
Syowa Station

Total Day / 307 1995/11/ 3



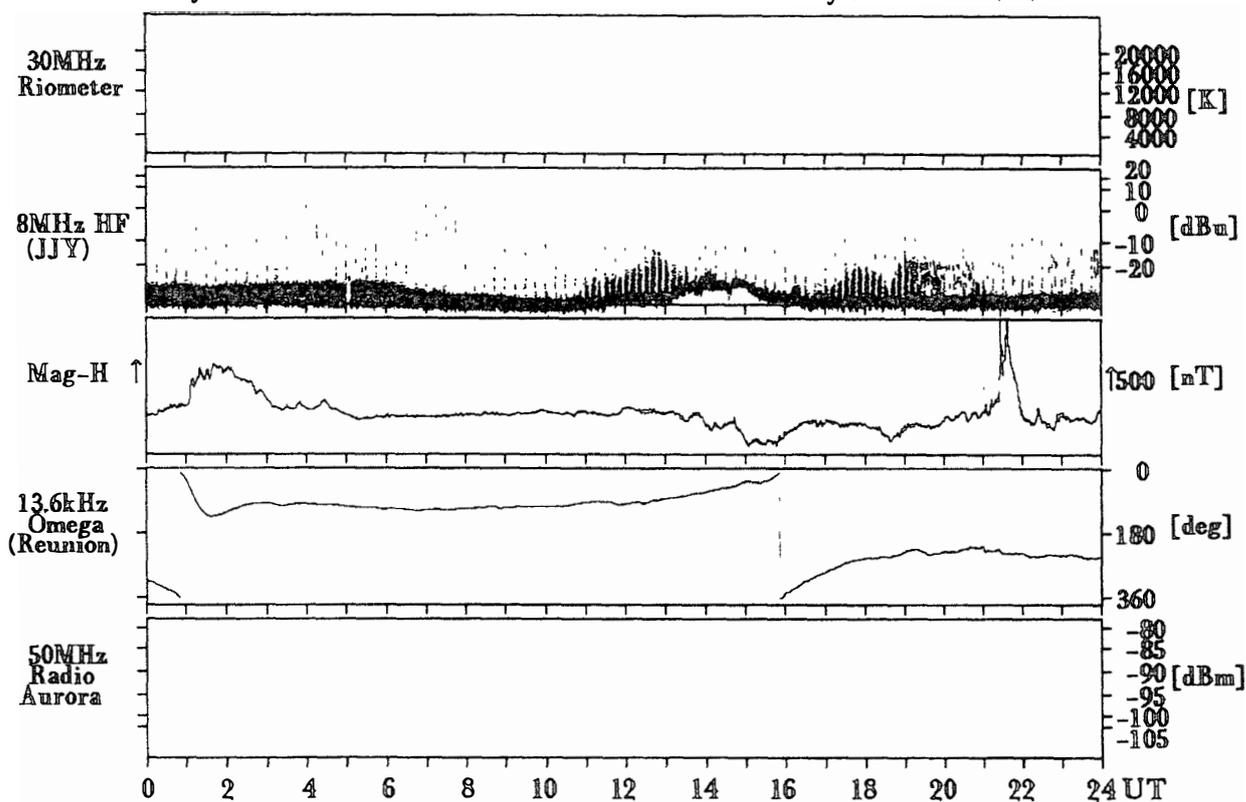
Syowa Station

Total Day / 308 1995/11/ 4



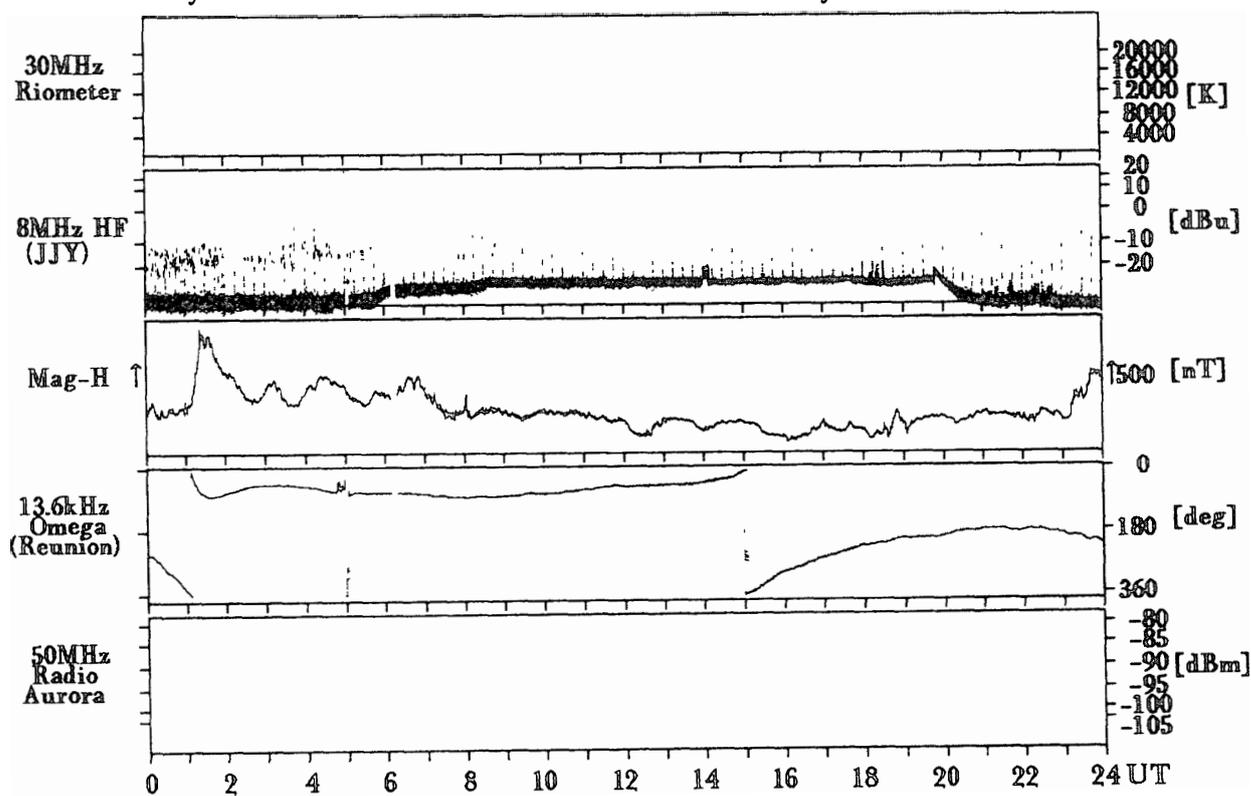
Syowa Station

Total Day / 309 1995/11/ 5



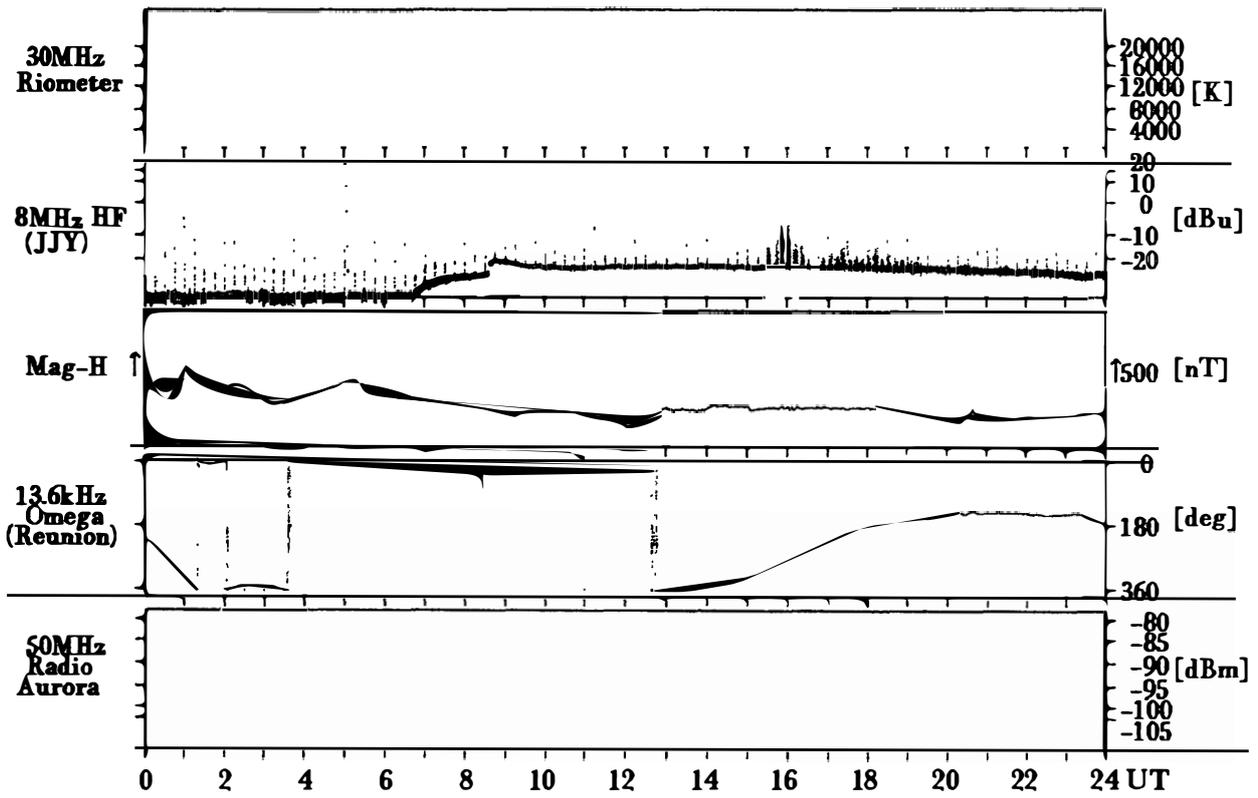
Syowa Station

Total Day / 310 1995/11/ 6



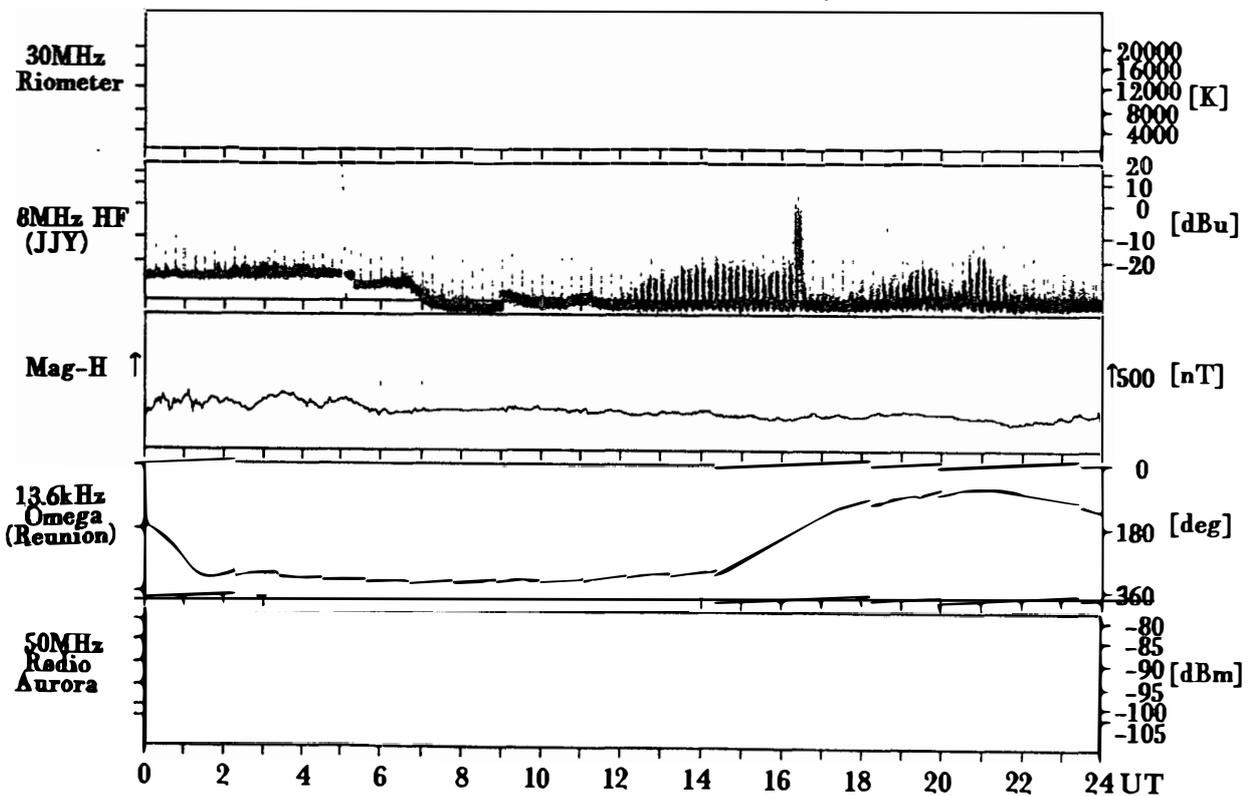
Syowa Station

Total Day / 311 1995/11/ 7



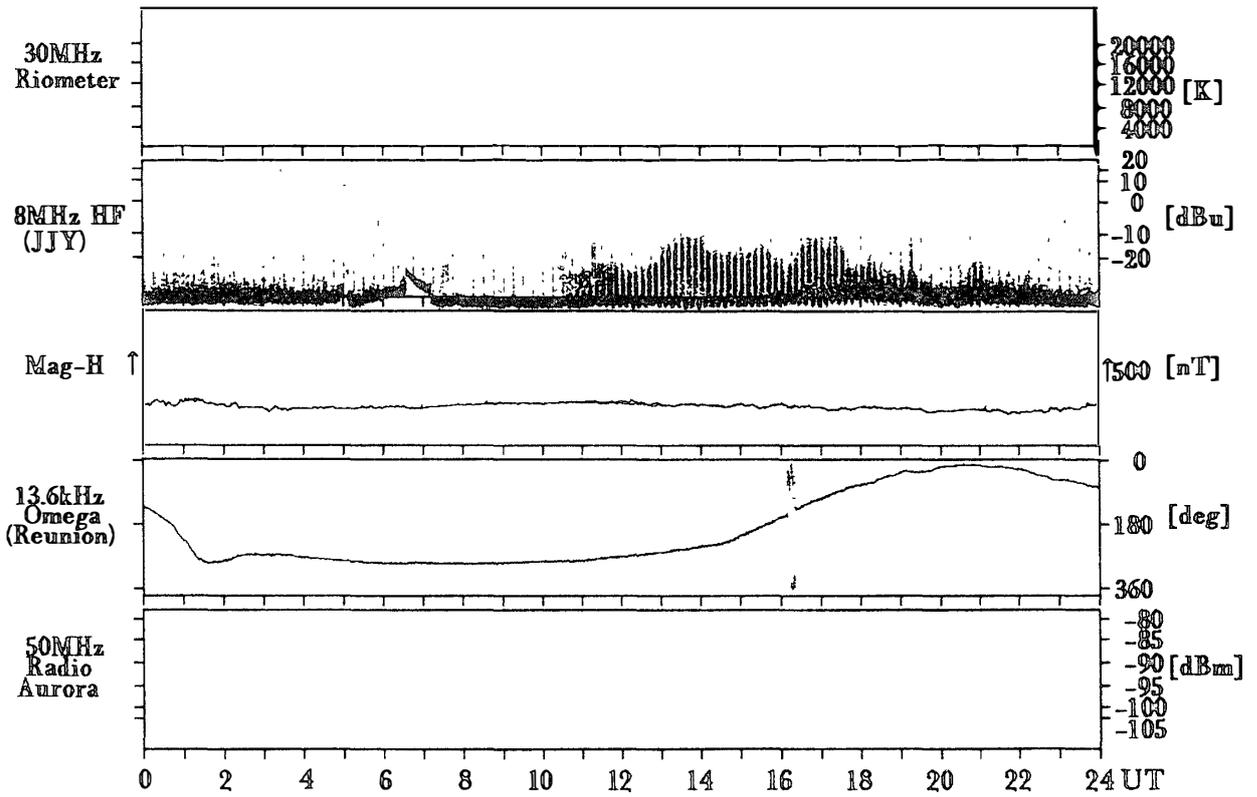
Syowa Station

Total Day / 312 1995/11/ 8



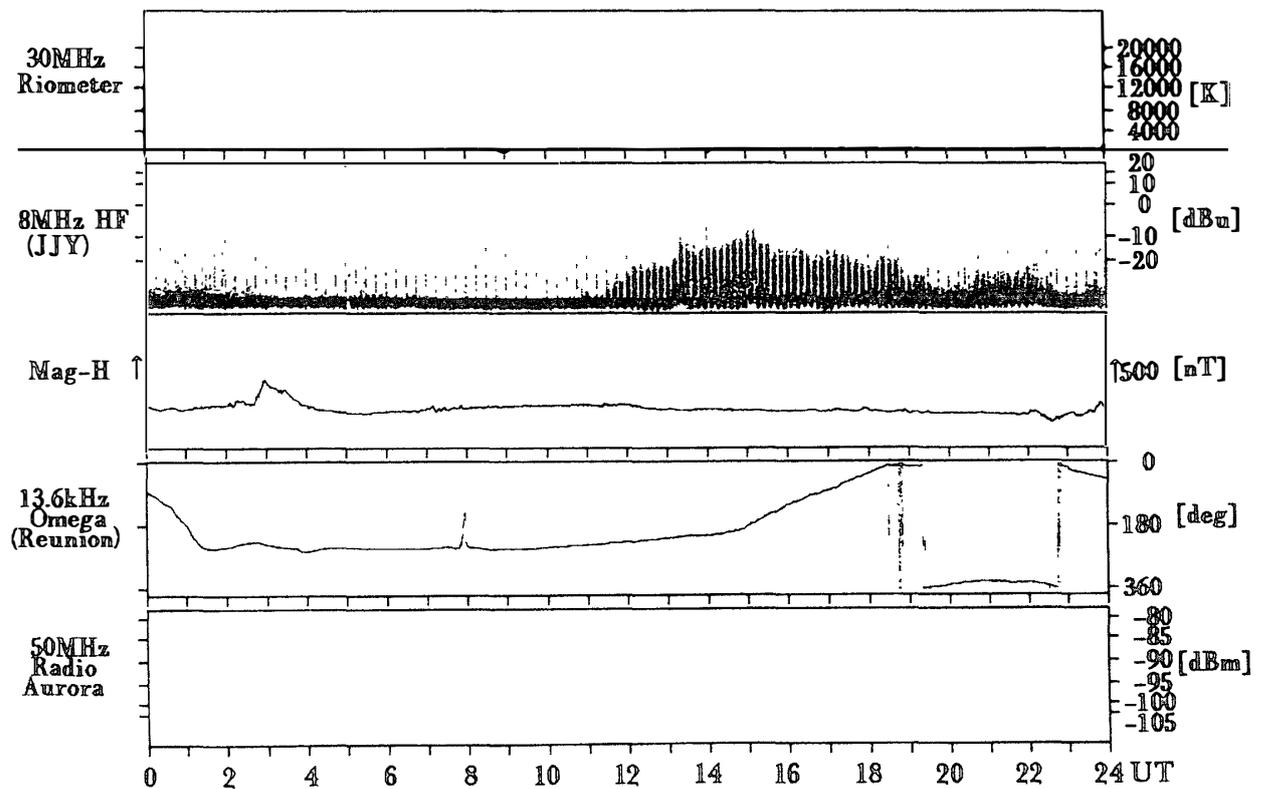
Syowa Station

Total Day / 313 1995/11/ 9



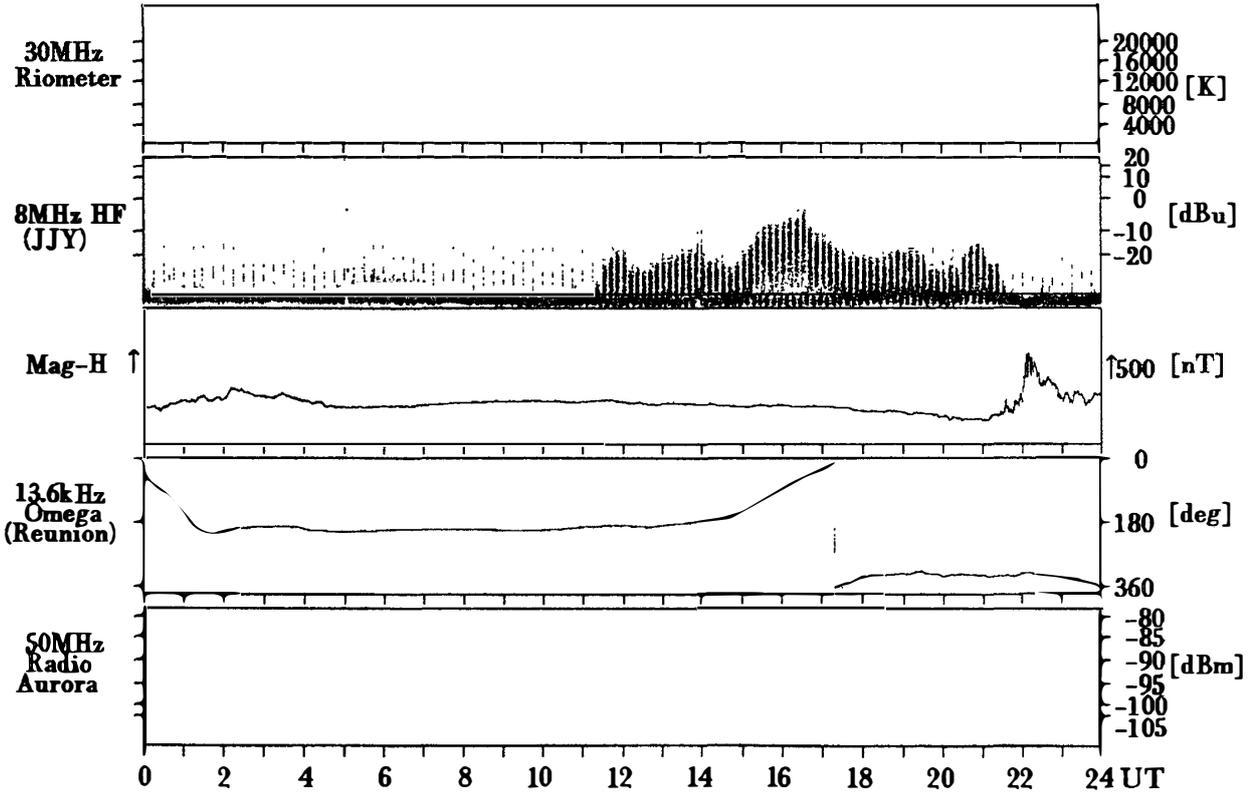
Syowa Station

Total Day / 314 1995/11/10



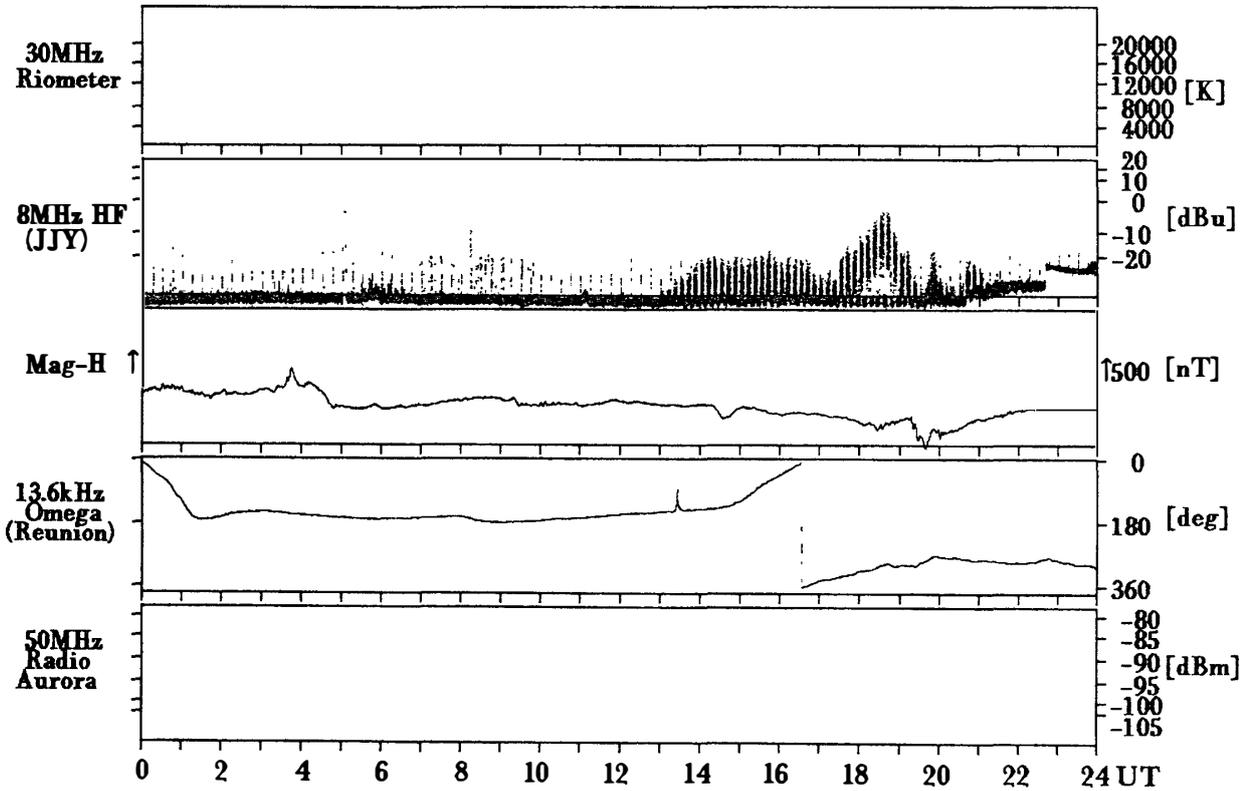
Syowa Station

Total Day / 315 1995/11/11



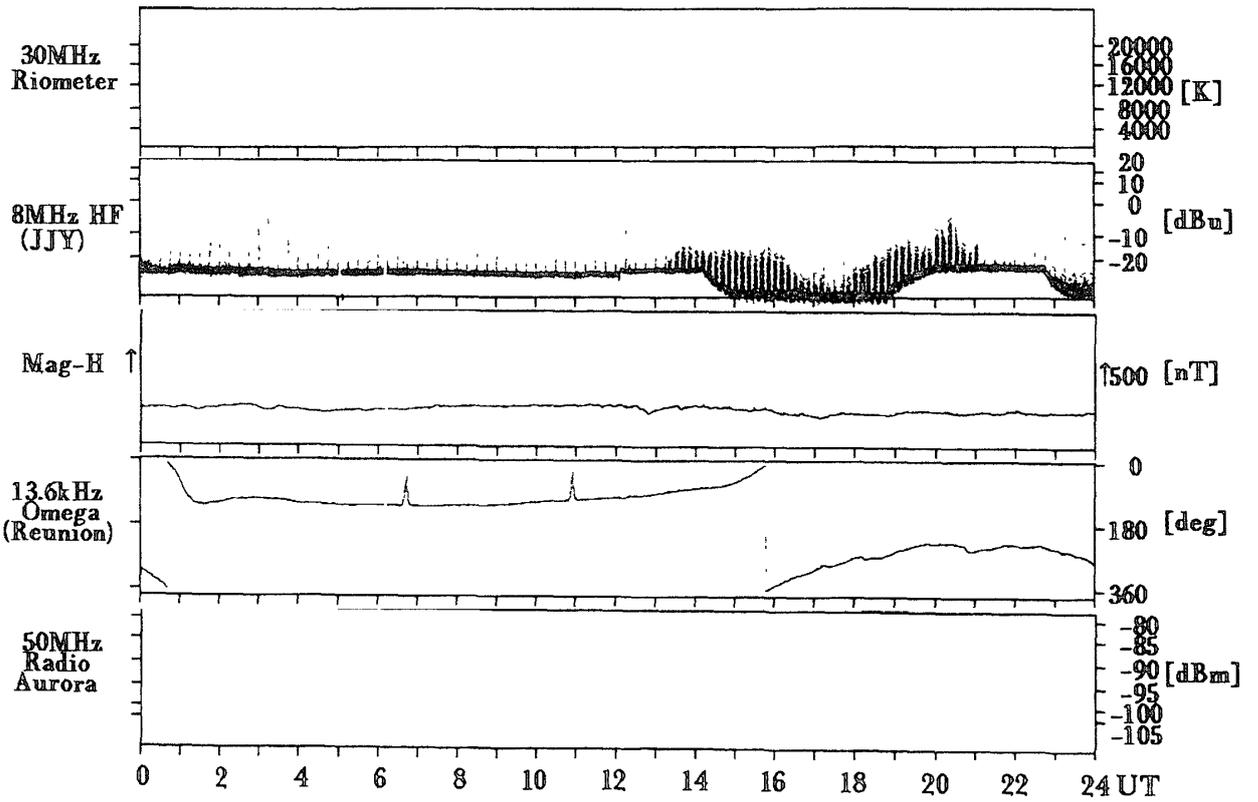
Syowa Station

Total Day / 316 1995/11/12



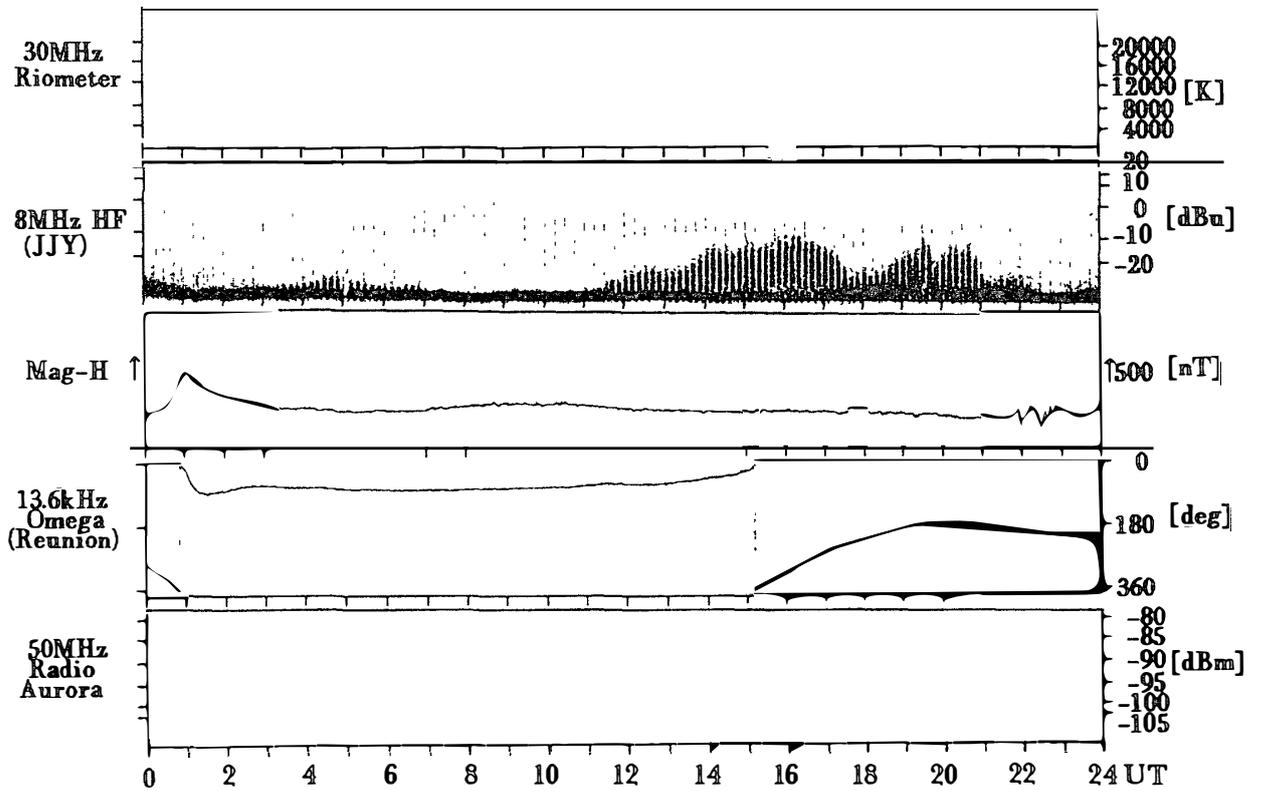
Syowa Station

Total Day / 317 1995/11/13



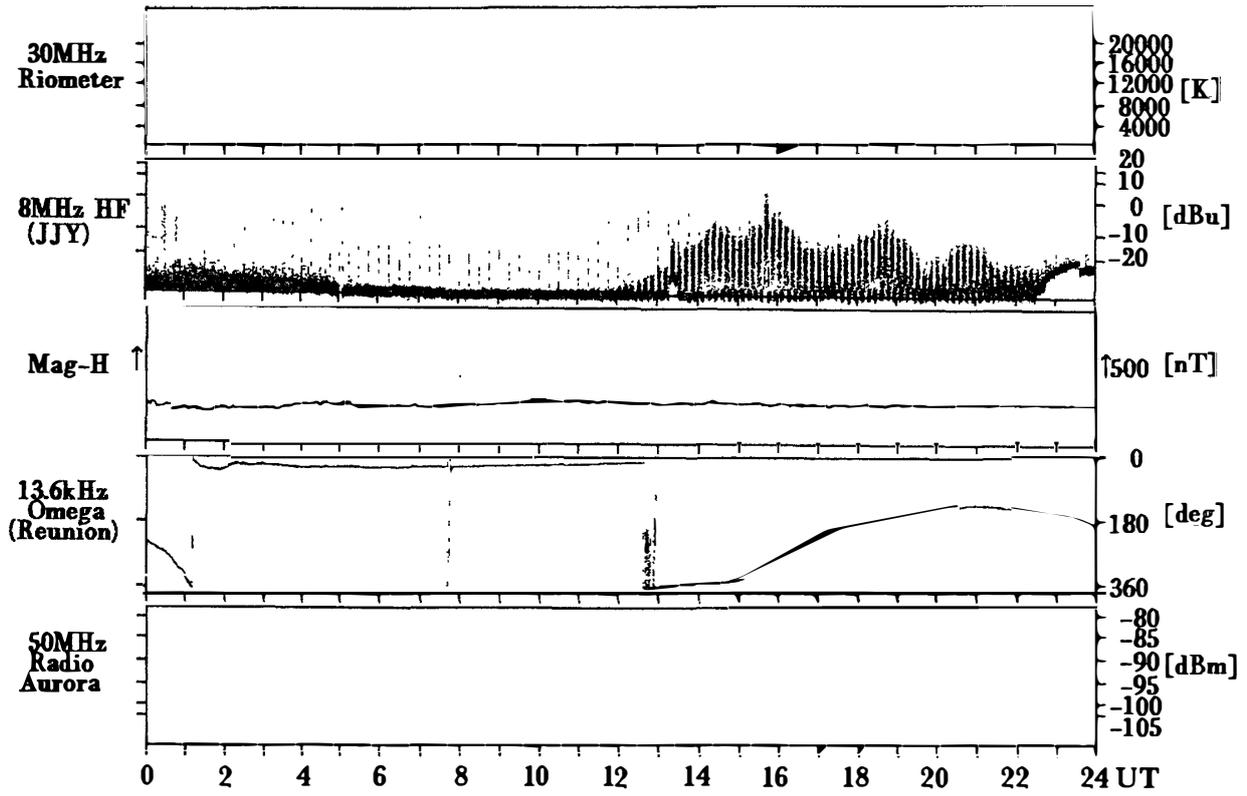
Syowa Station

Total Day / 318 1995/11/14



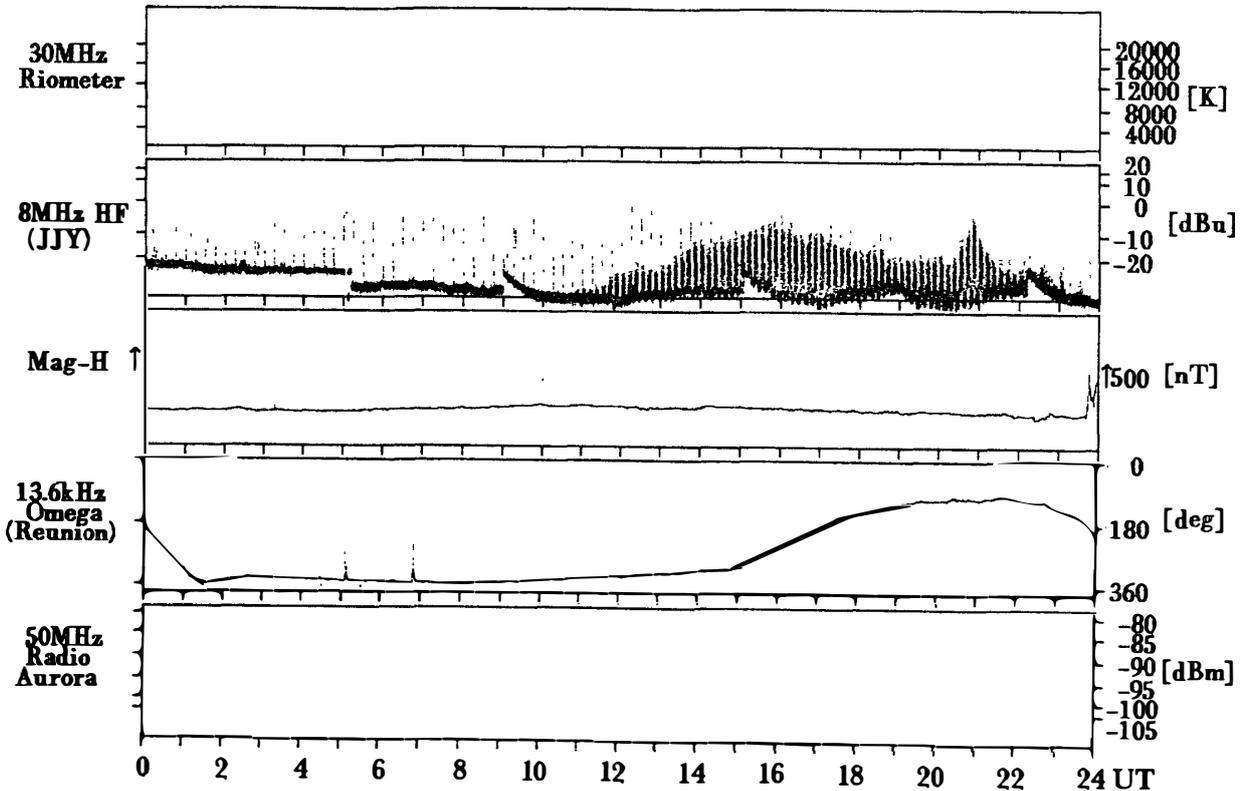
Syowa Station

Total Day / 319 1995/11/15



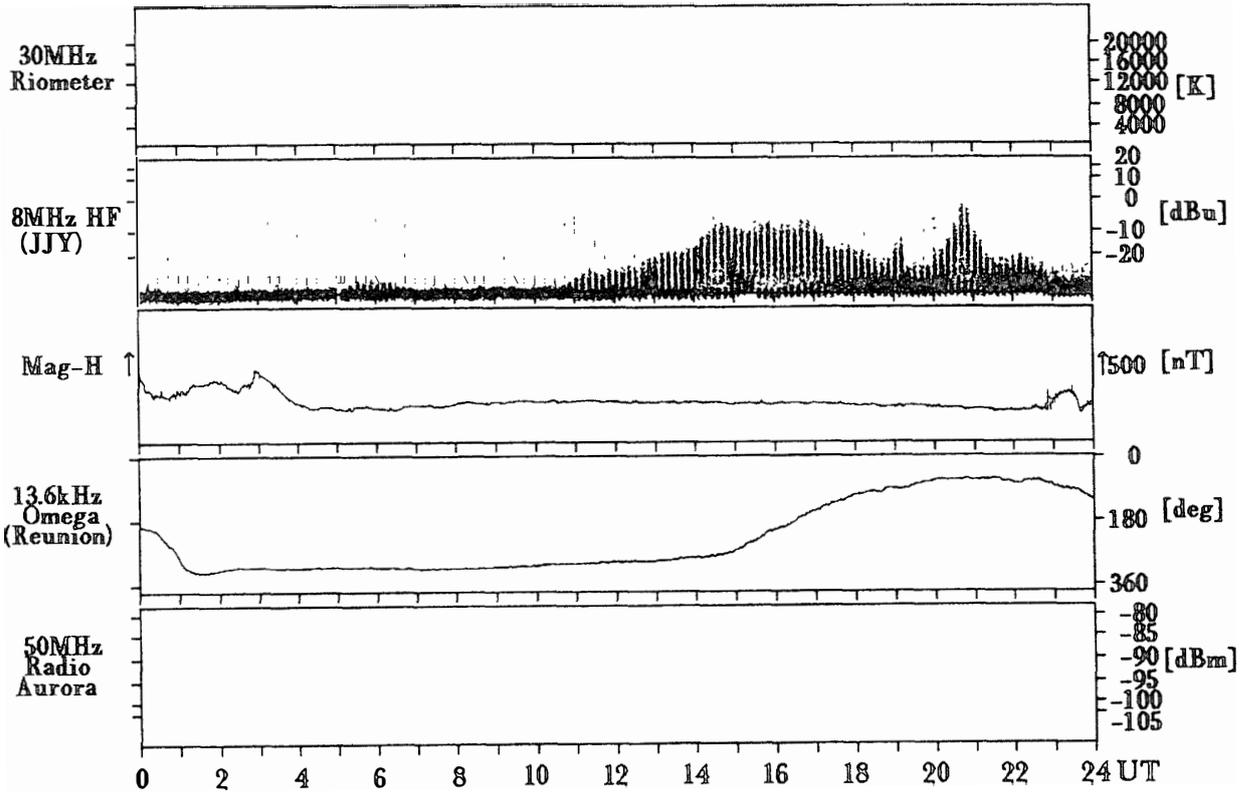
Syowa Station

Total Day / 320 1995/11/16



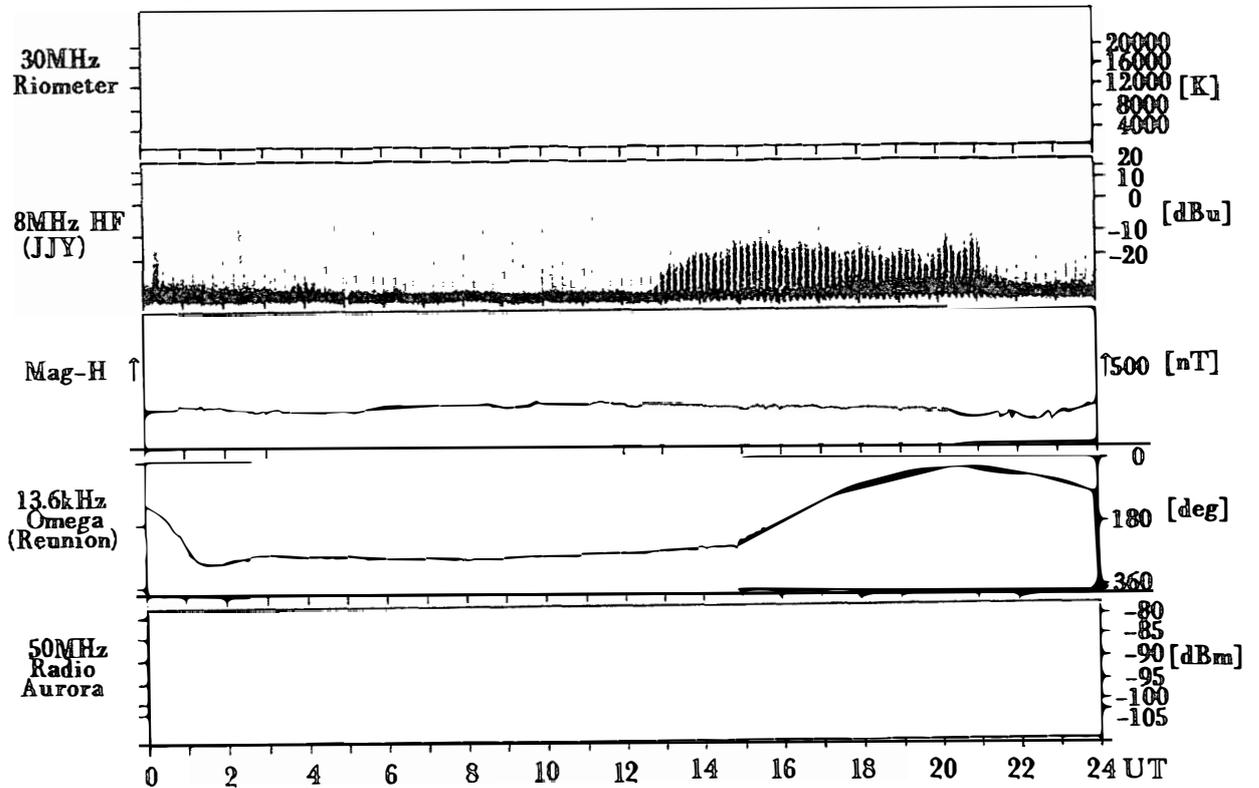
Syowa Station

Total Day / 321 1995/11/17



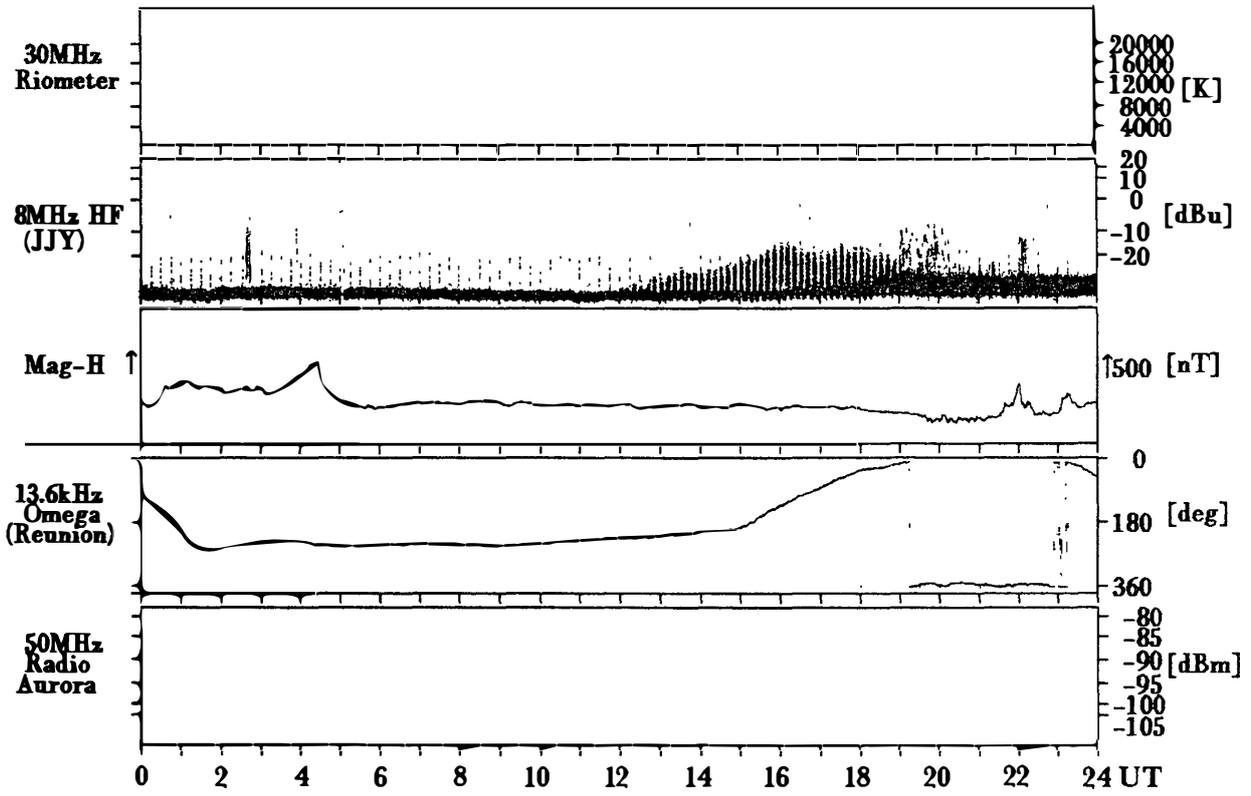
Syowa Station

Total Day / 322 1995/11/18



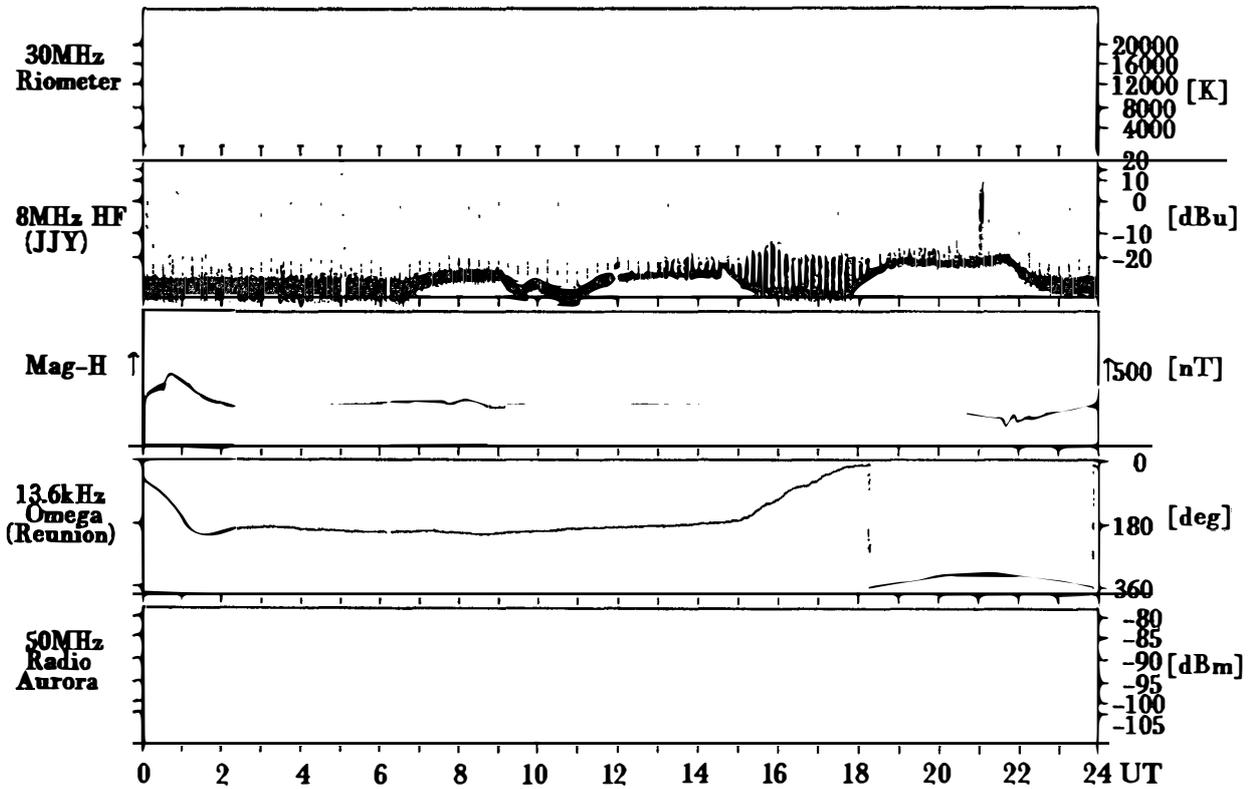
Syowa Station

Total Day / 323 1995/11/19



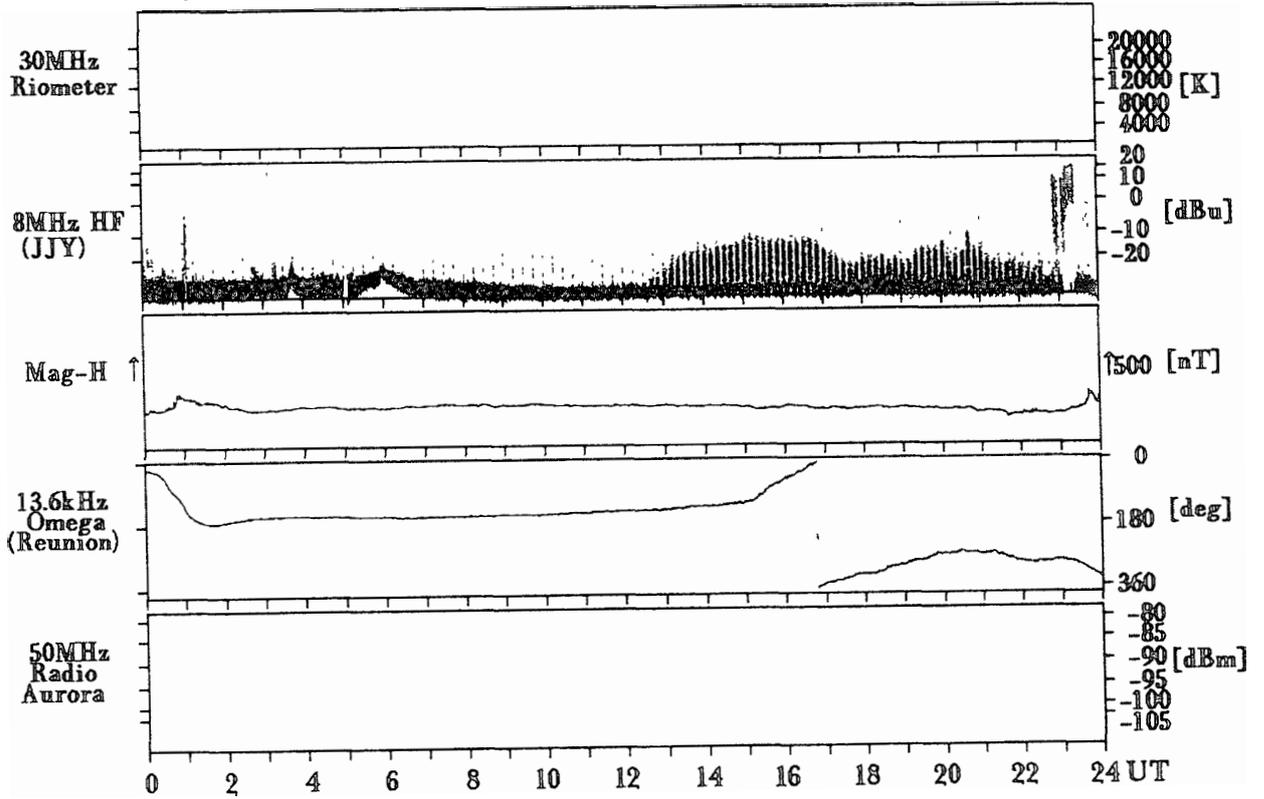
Syowa Station

Total Day / 324 1995/11/20



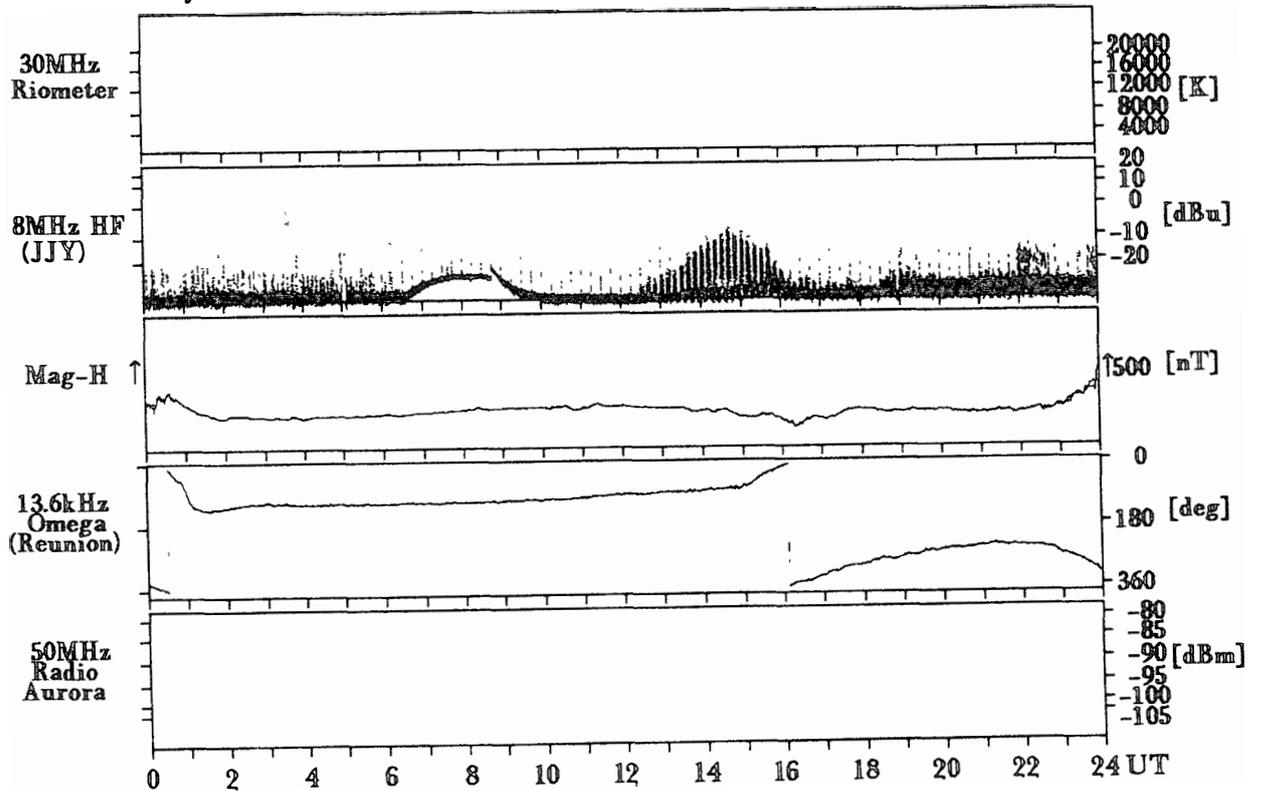
Syowa Station

Total Day / 325 1995/11/21



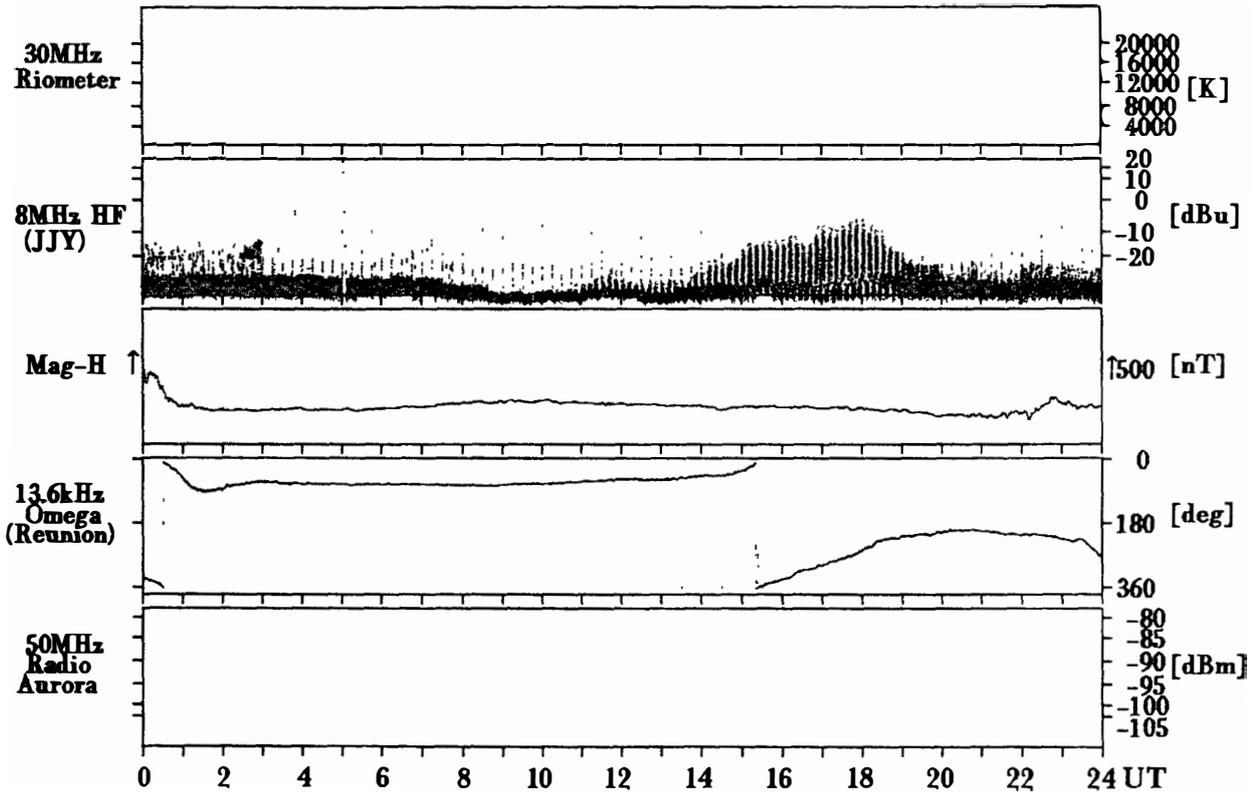
Syowa Station

Total Day / 326 1995/11/22



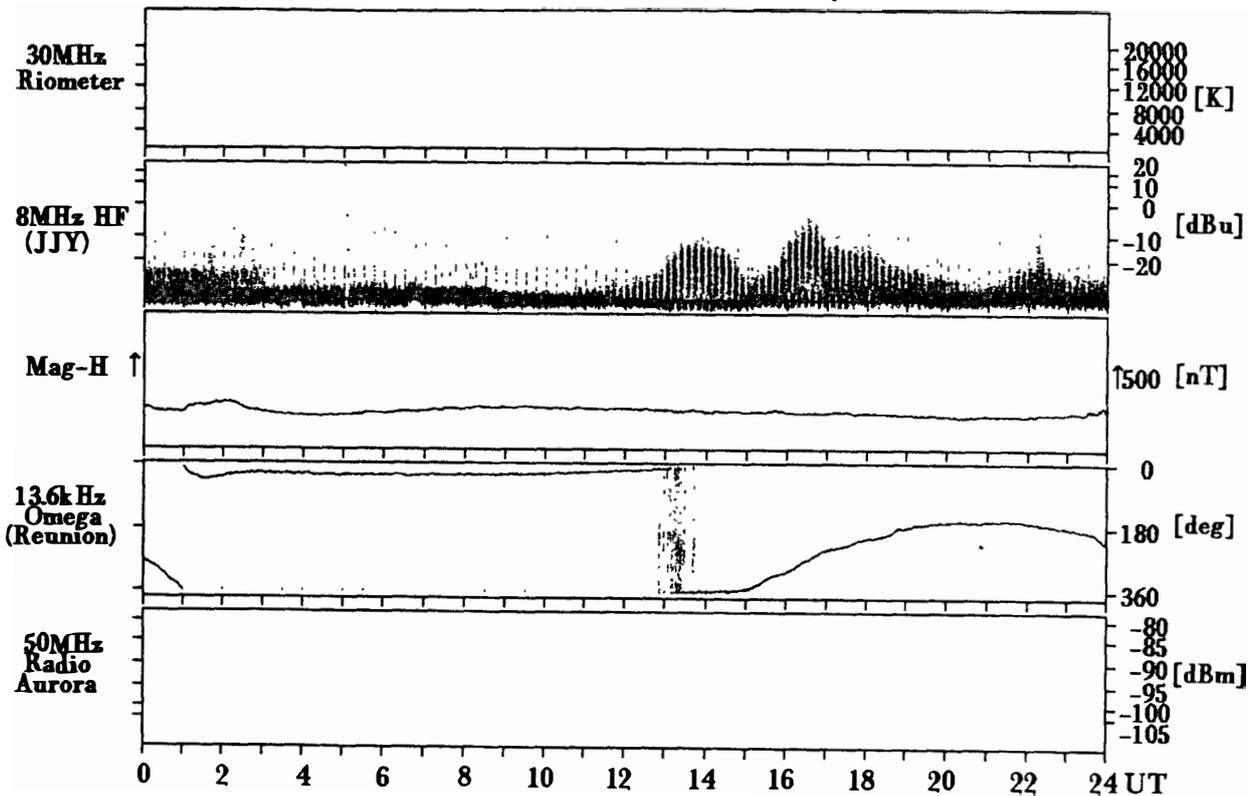
Syowa Station

Total Day / 327 1995/11/23



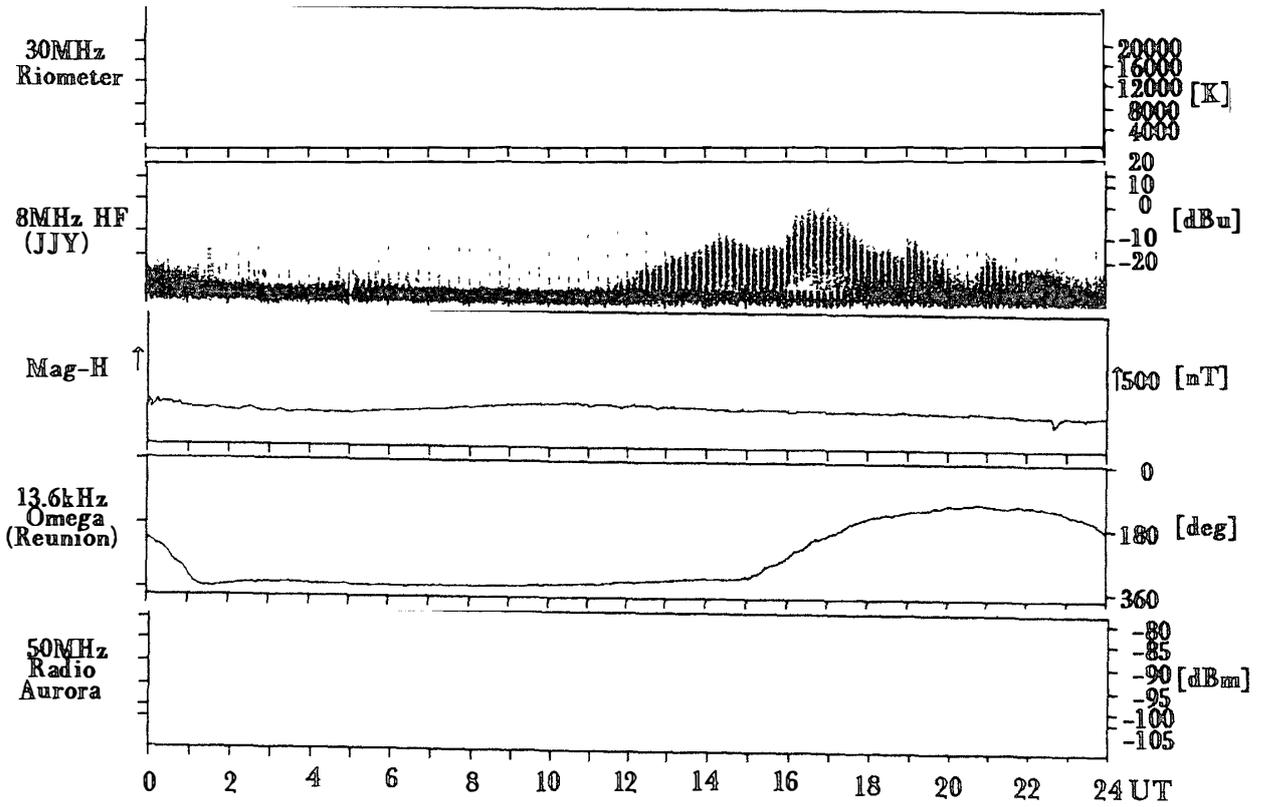
Syowa Station

Total Day / 328 1995/11/24



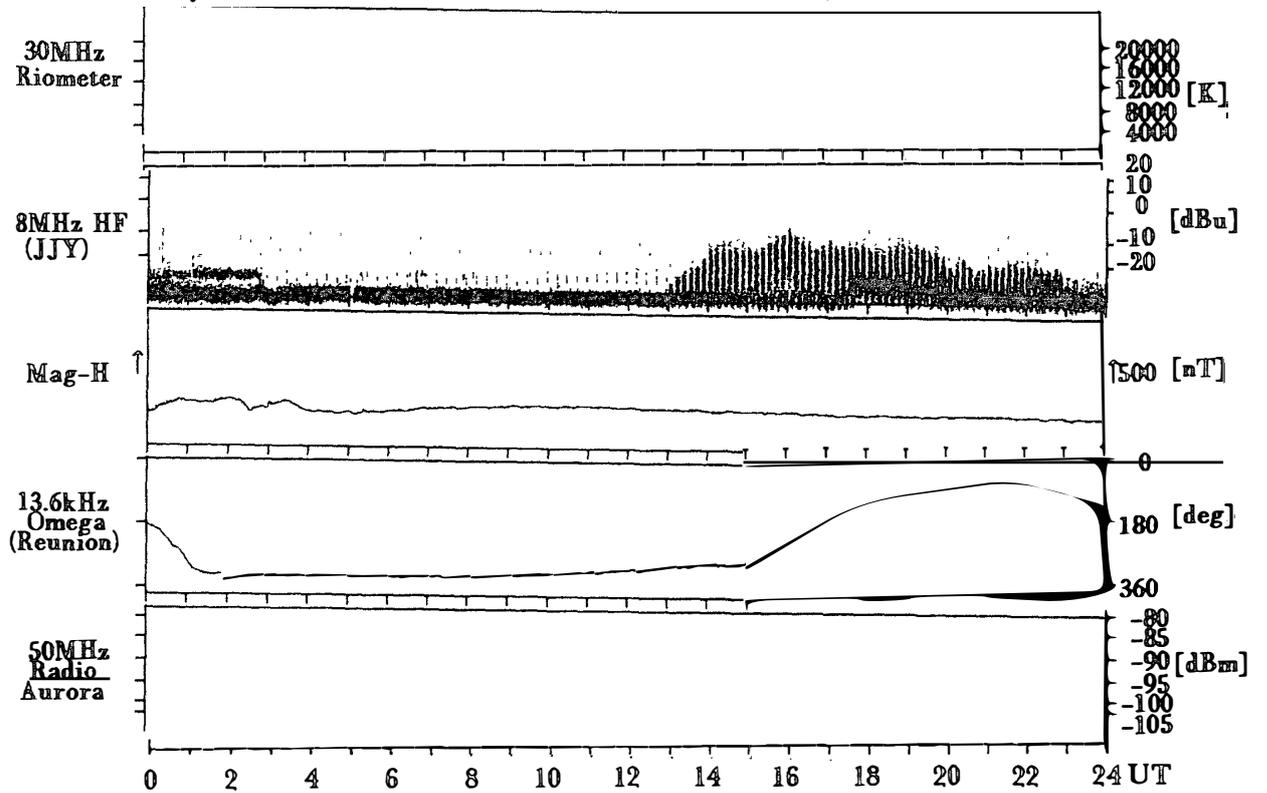
Syowa Station

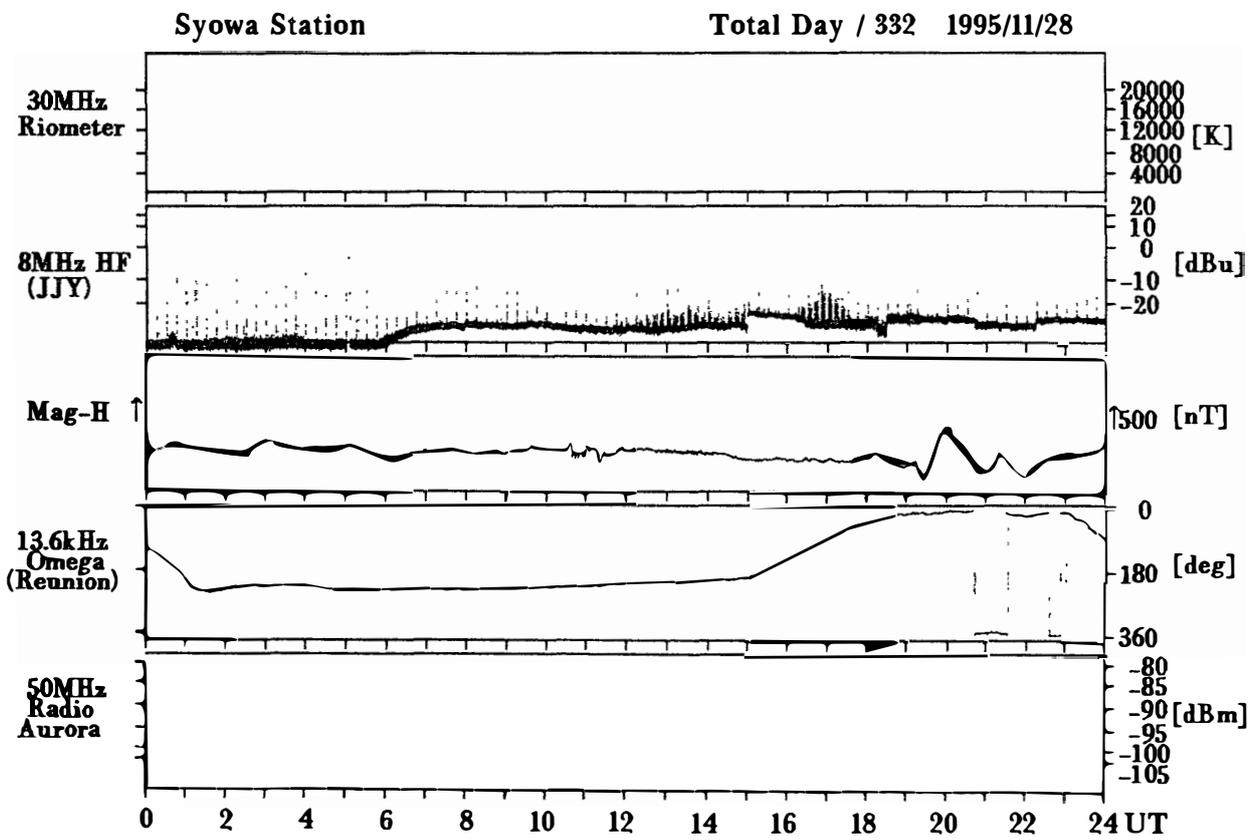
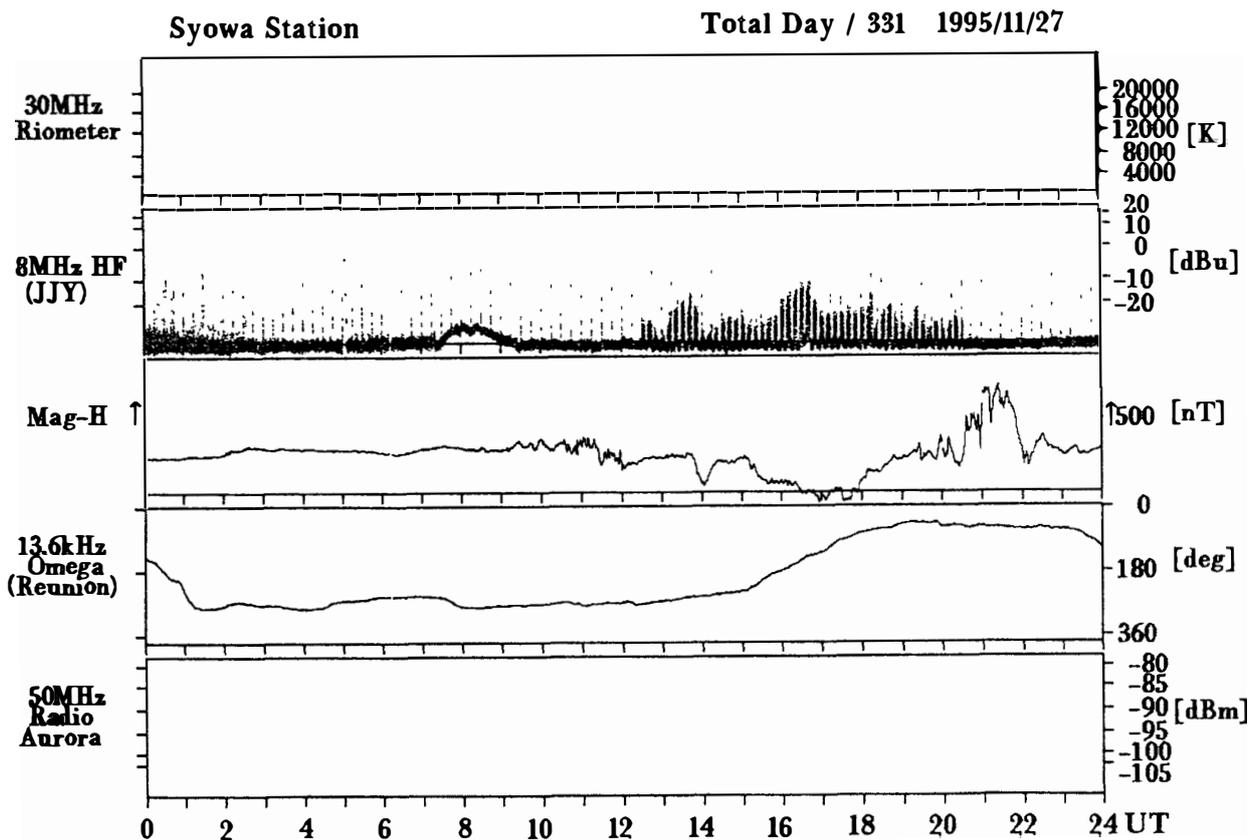
Total Day / 329 1995/11/25



Syowa Station

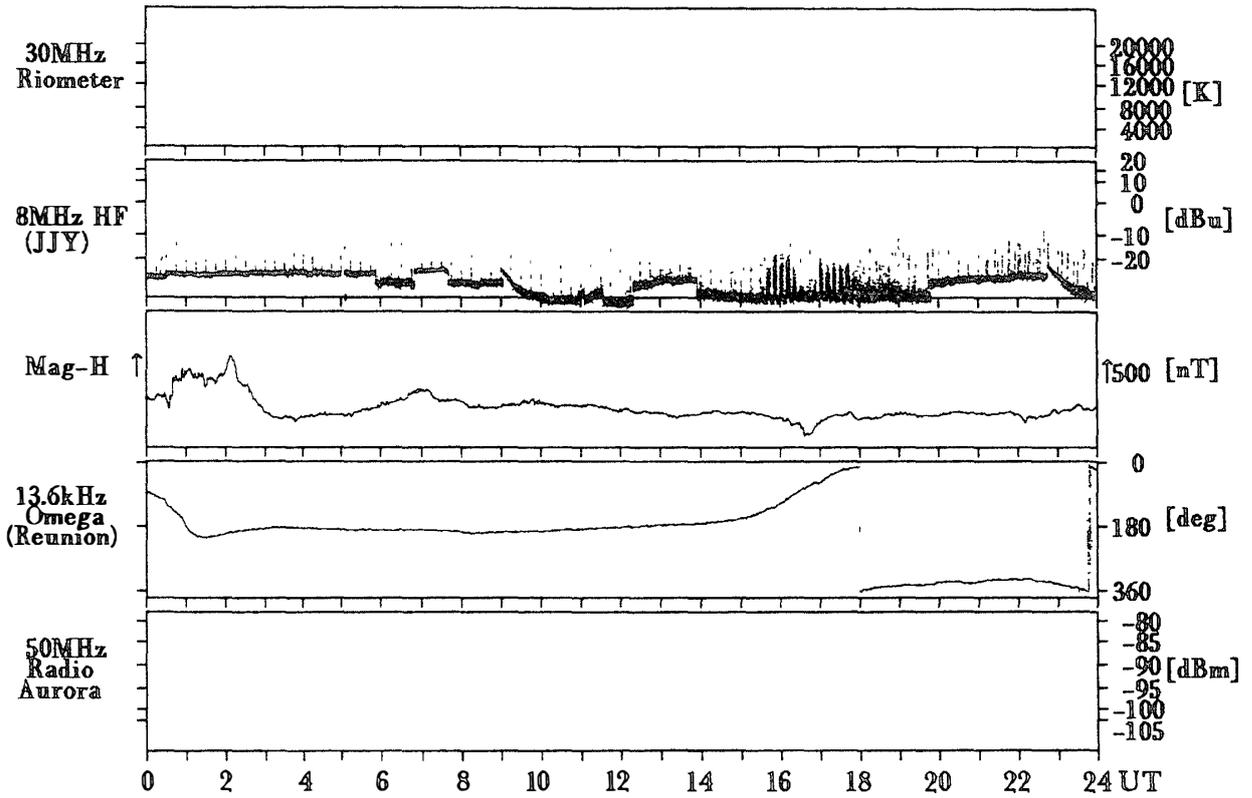
Total Day / 330 1995/11/26





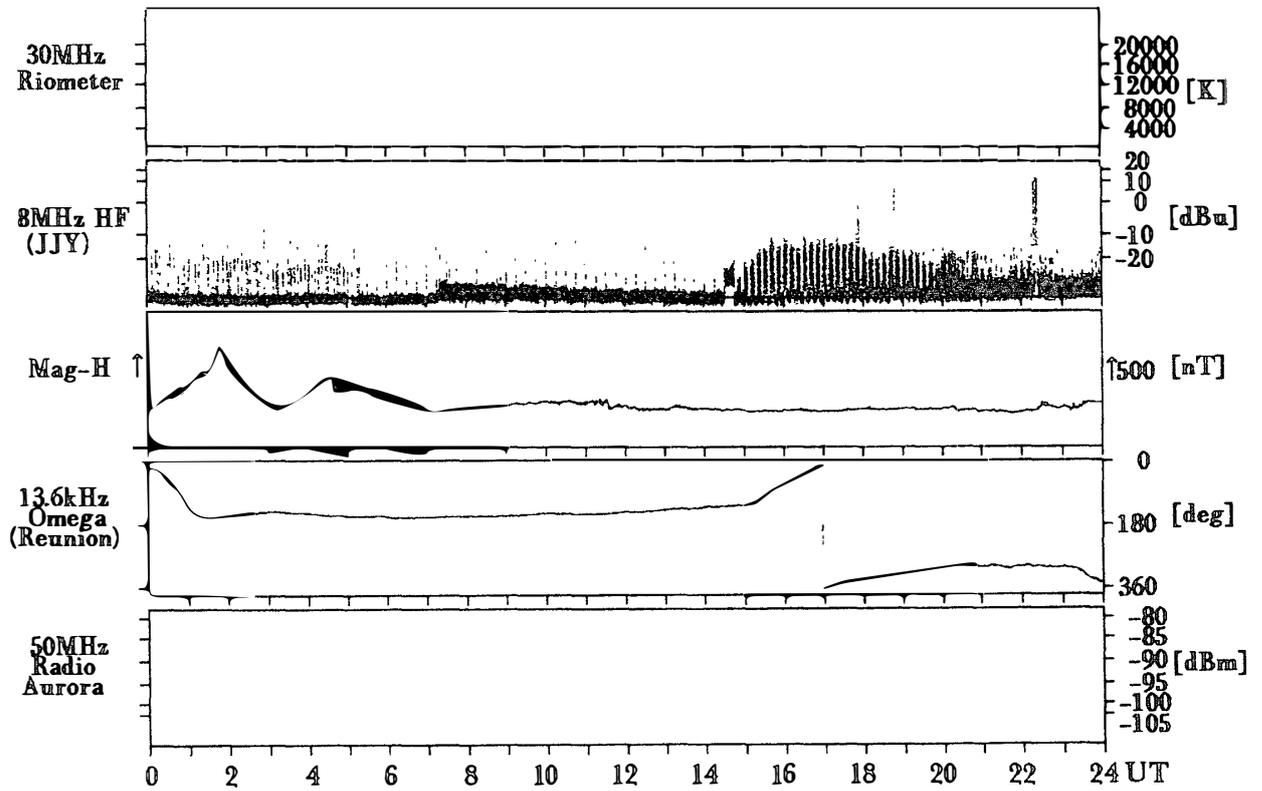
Syowa Station

Total Day / 333 1995/11/29



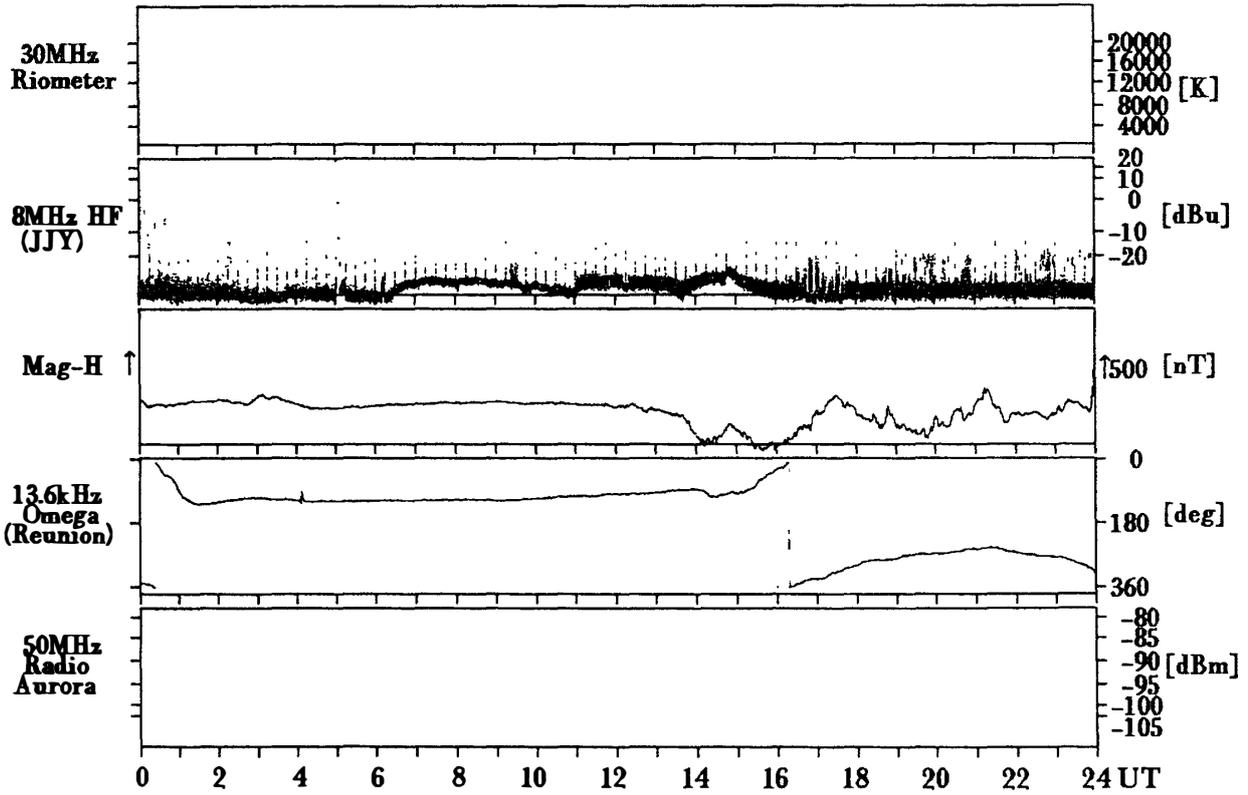
Syowa Station

Total Day / 334 1995/11/30



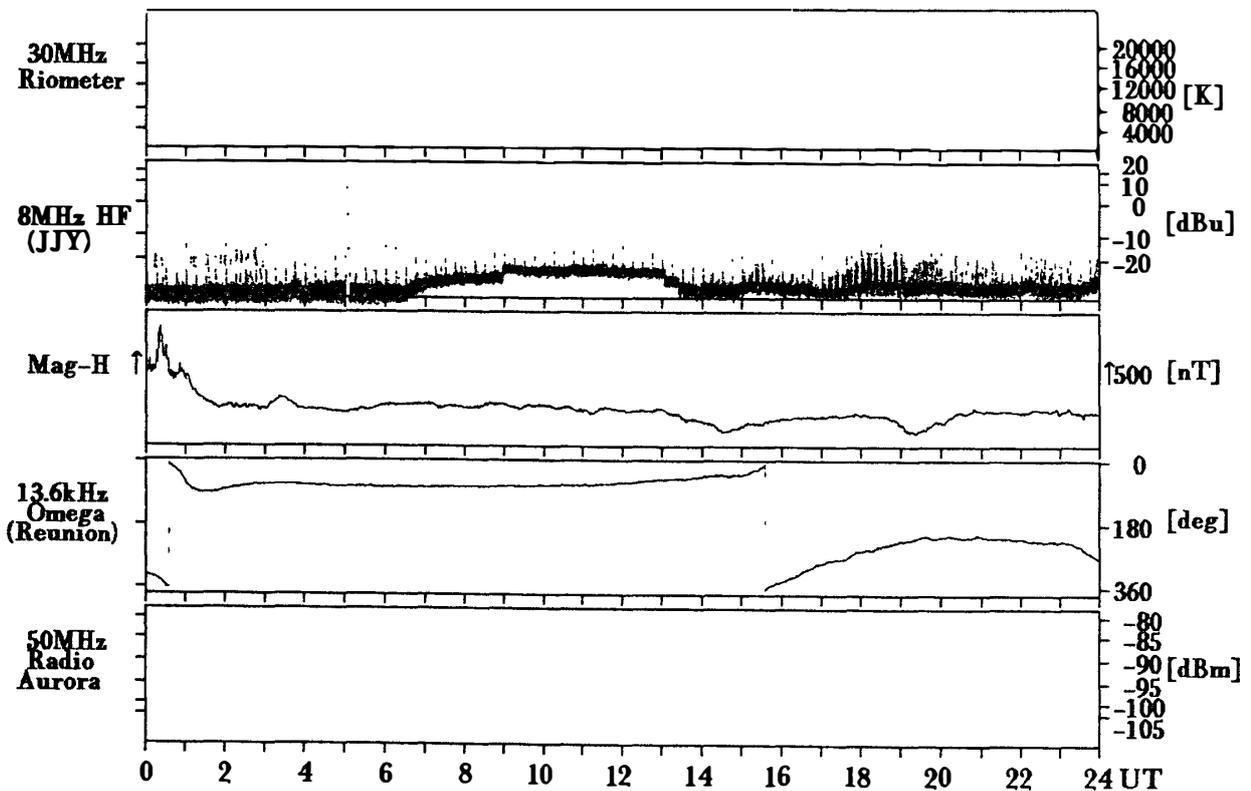
Syowa Station

Total Day / 335 1995/12/ 1



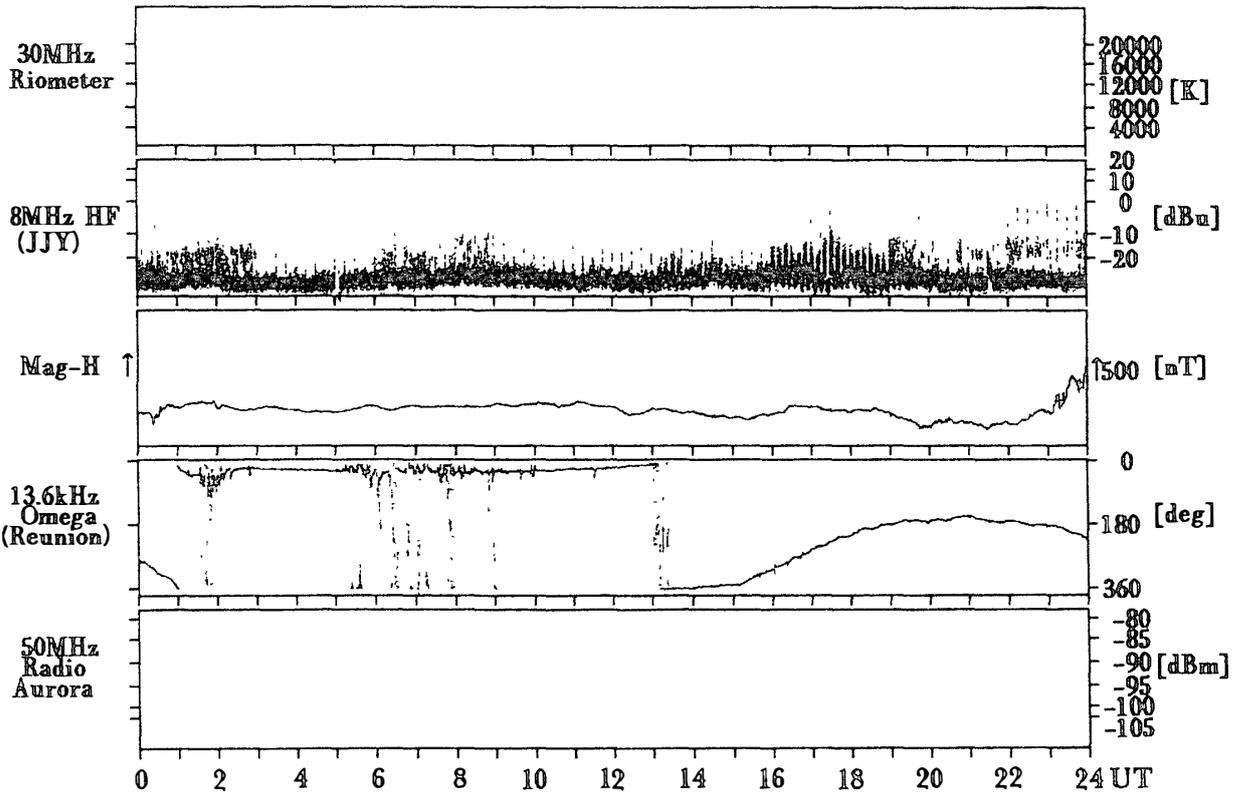
Syowa Station

Total Day / 336 1995/12/ 2



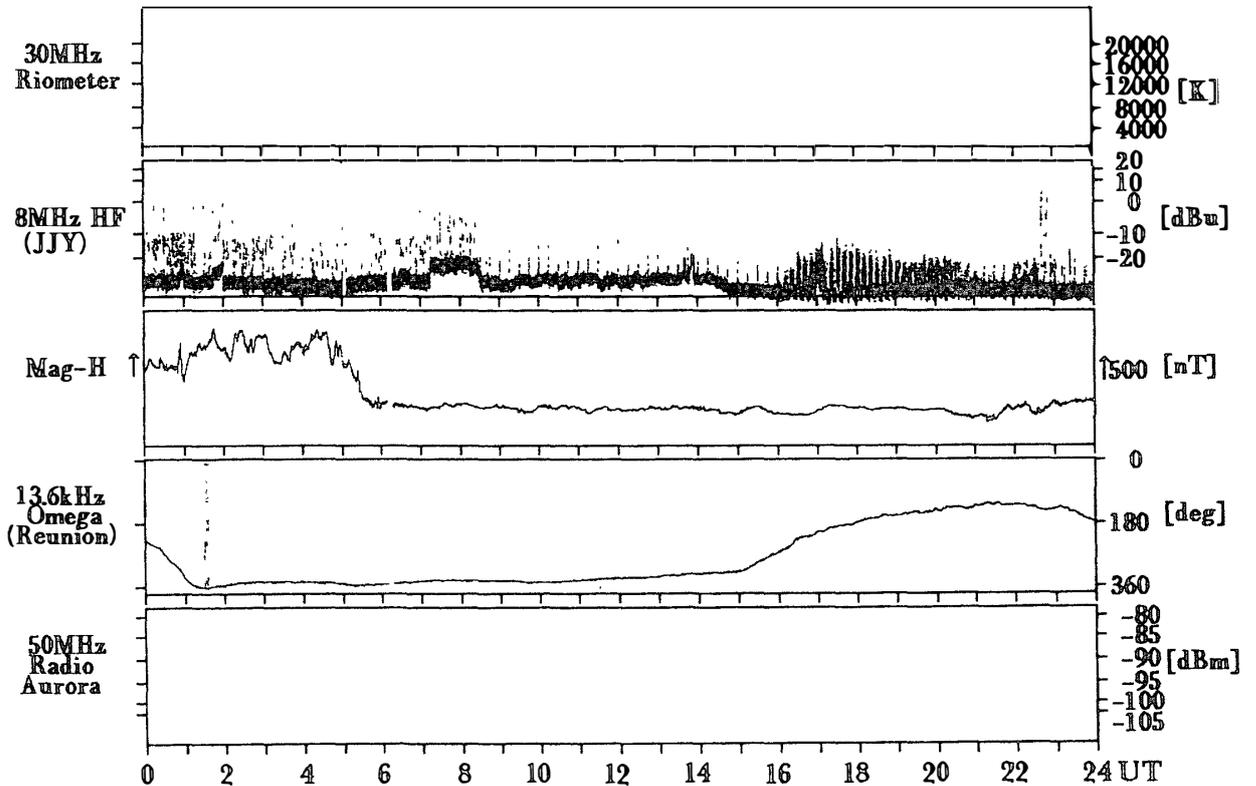
Syowa Station

Total Day / 337 1995/12/ 3



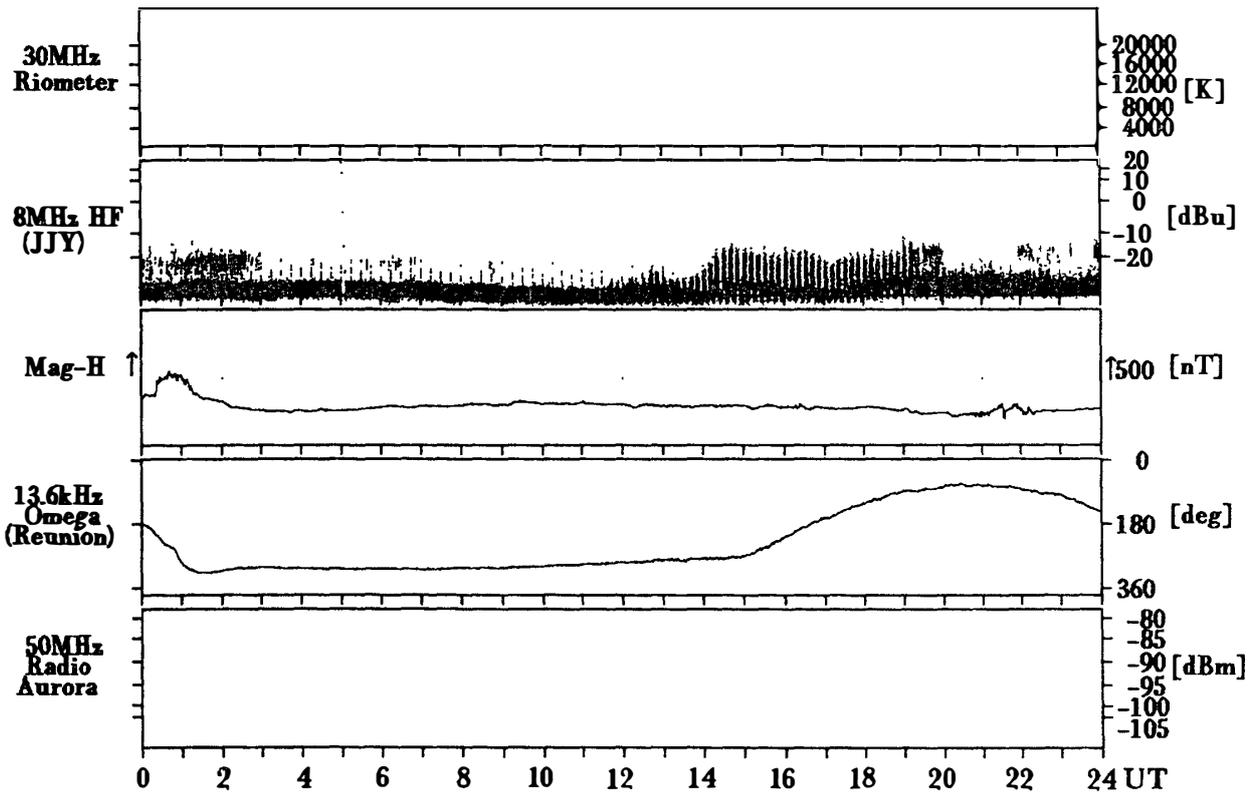
Syowa Station

Total Day / 338 1995/12/ 4



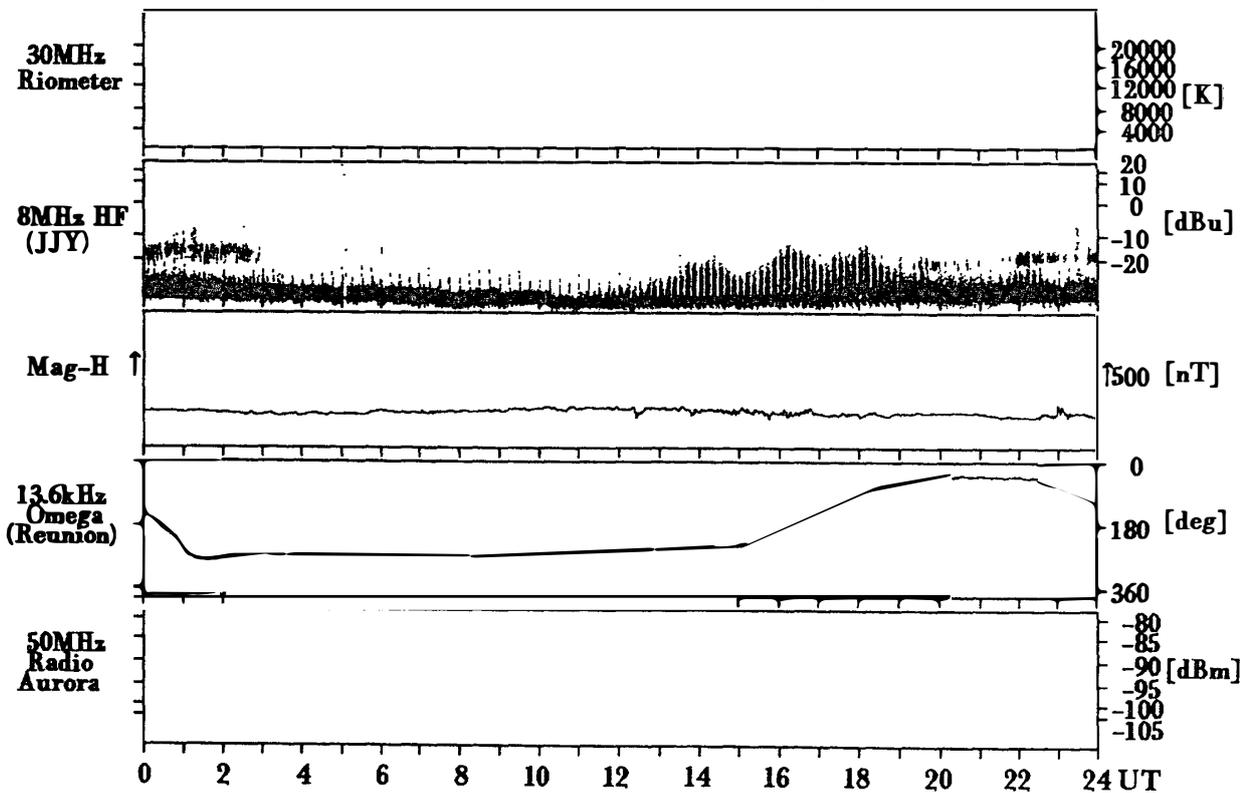
Syowa Station

Total Day / 339 1995/12/ 5



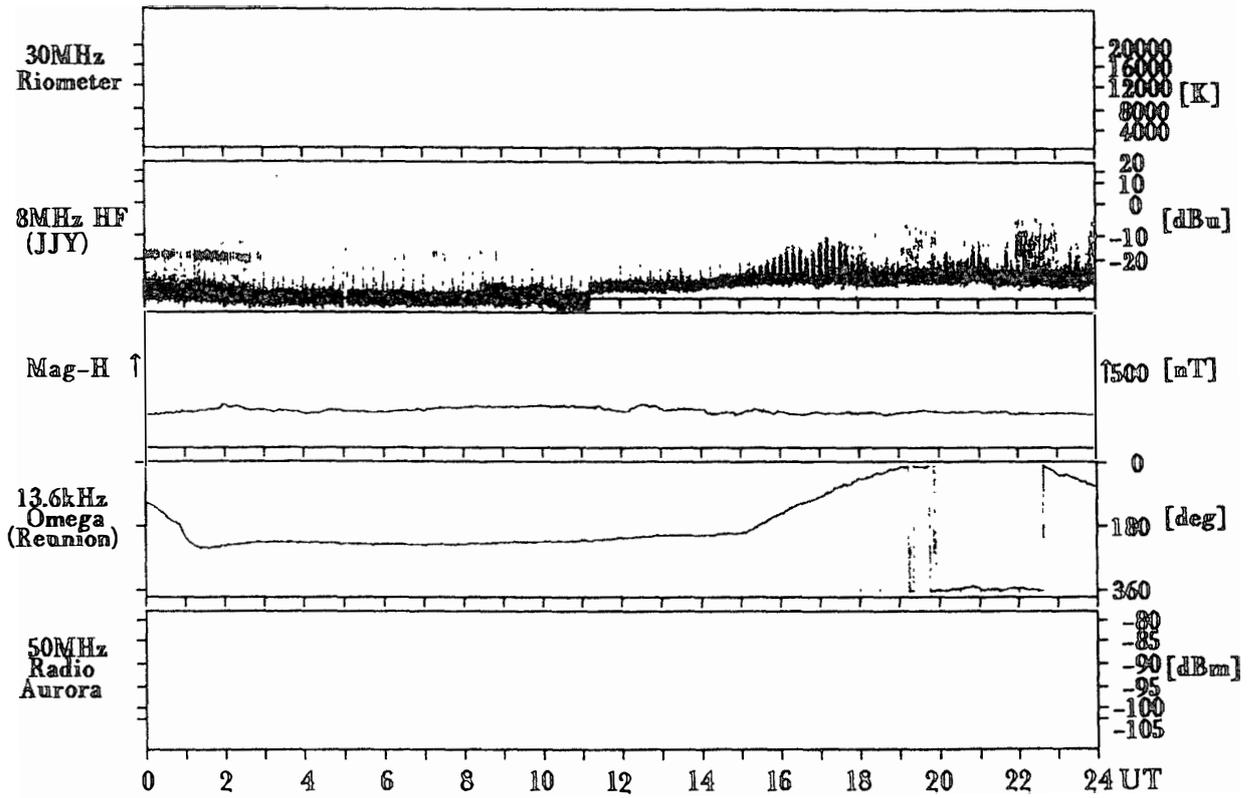
Syowa Station

Total Day / 340 1995/12/ 6



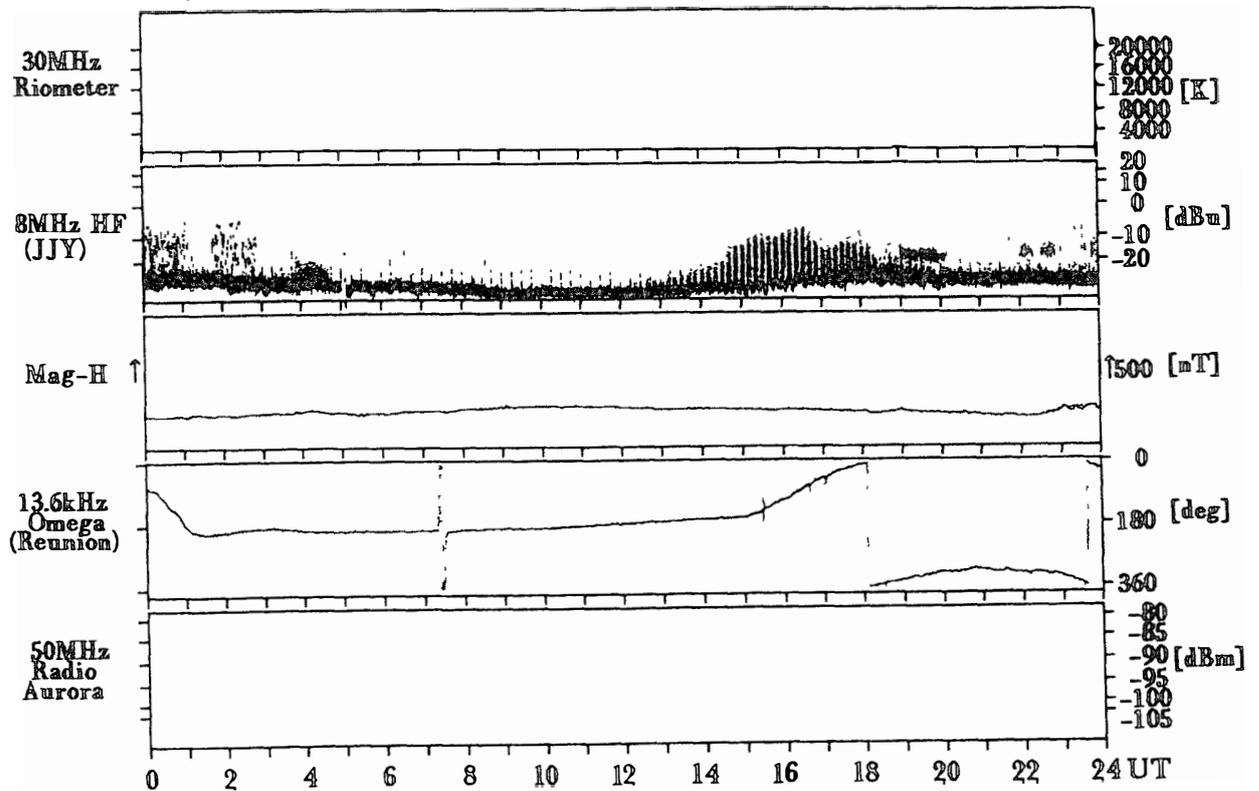
Syowa Station

Total Day / 341 1995/12/ 7



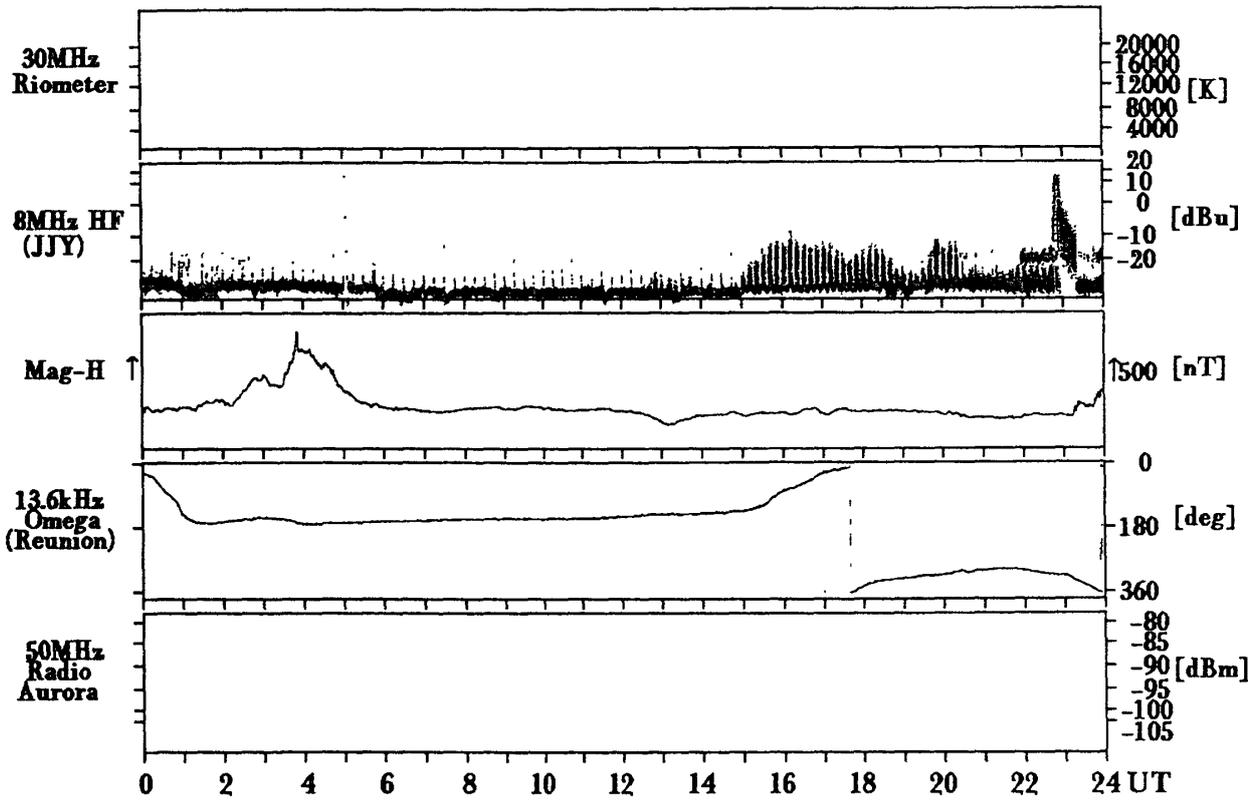
Syowa Station

Total Day / 342 1995/12/ 8



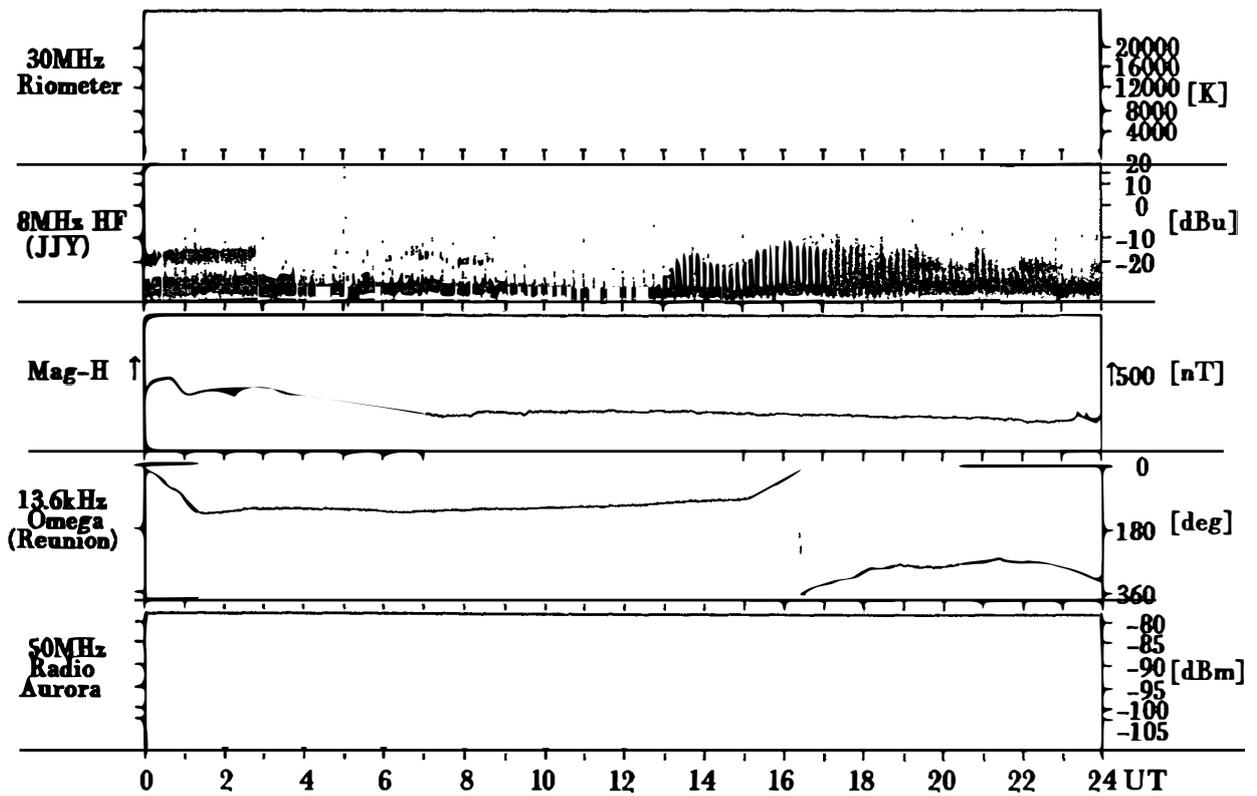
Syowa Station

Total Day / 343 1995/12/ 9



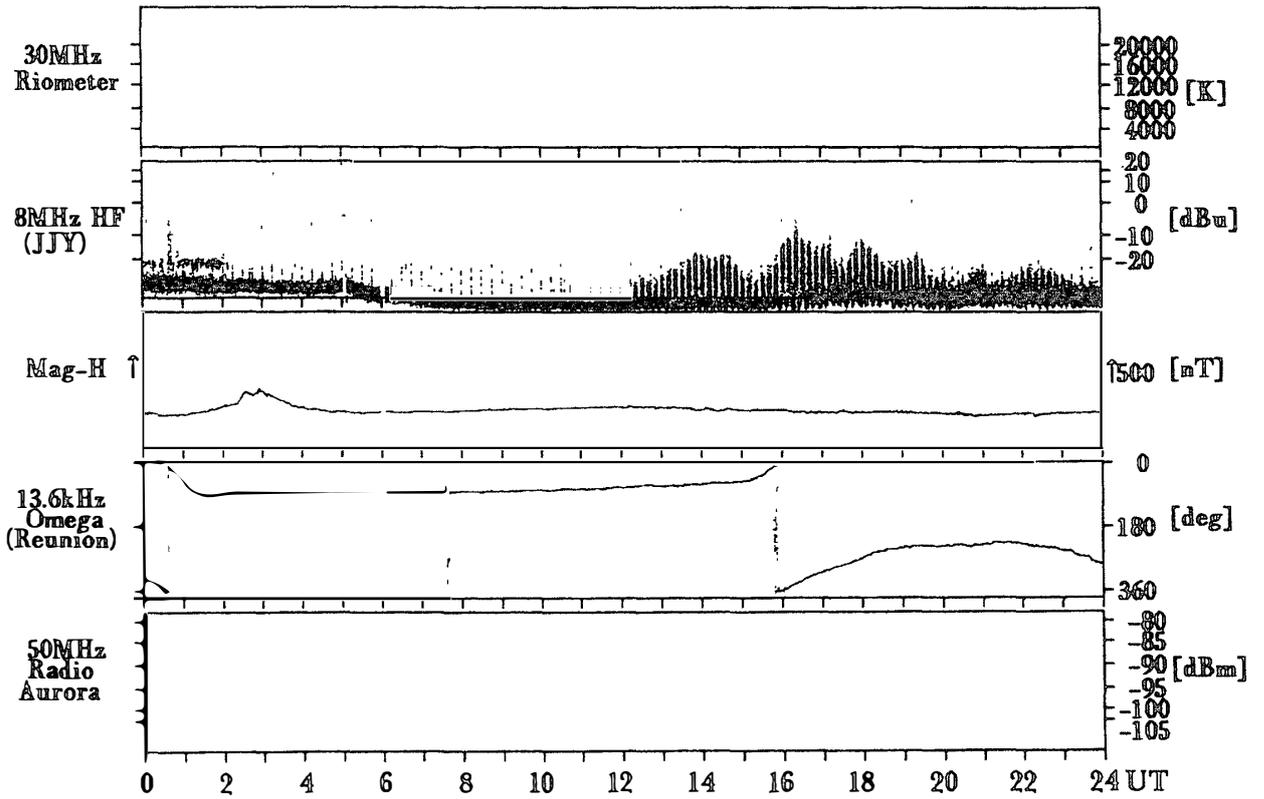
Syowa Station

Total Day / 344 1995/12/10



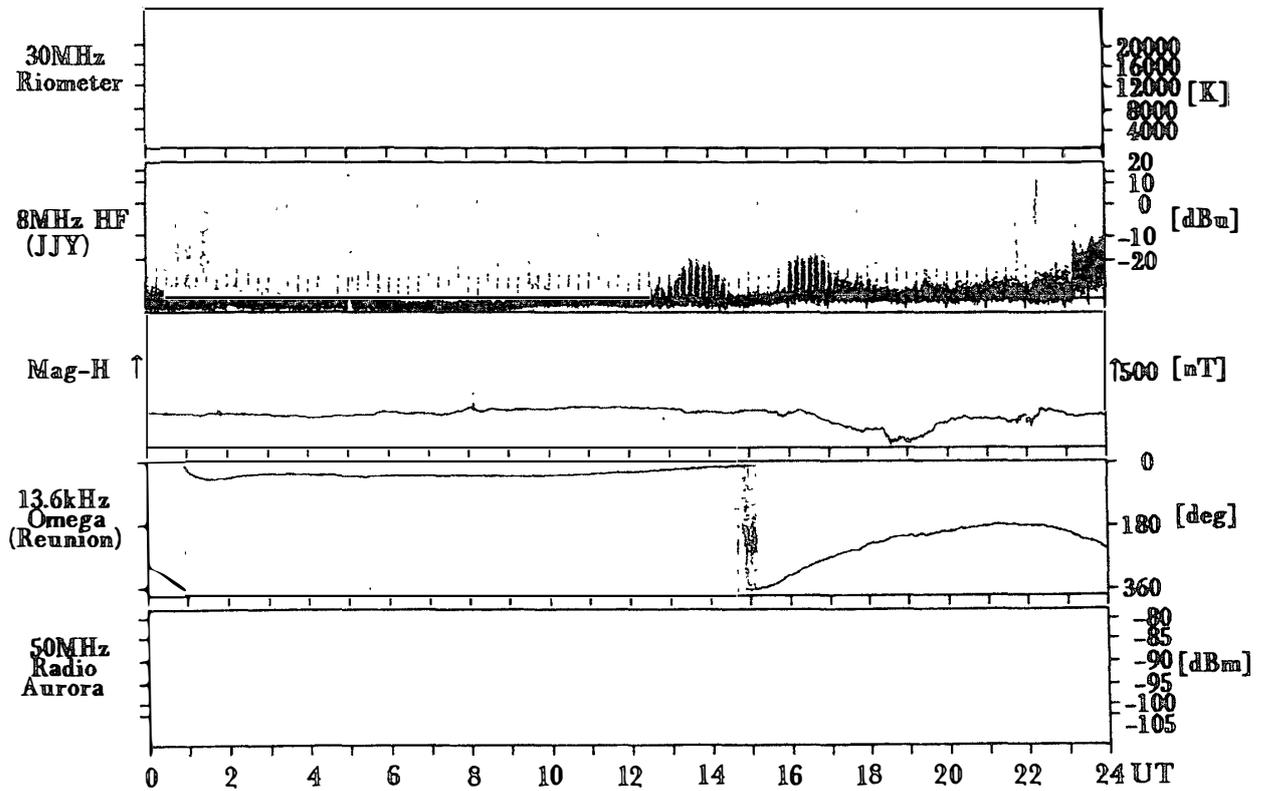
Syowa Station

Total Day / 345 1995/12/11



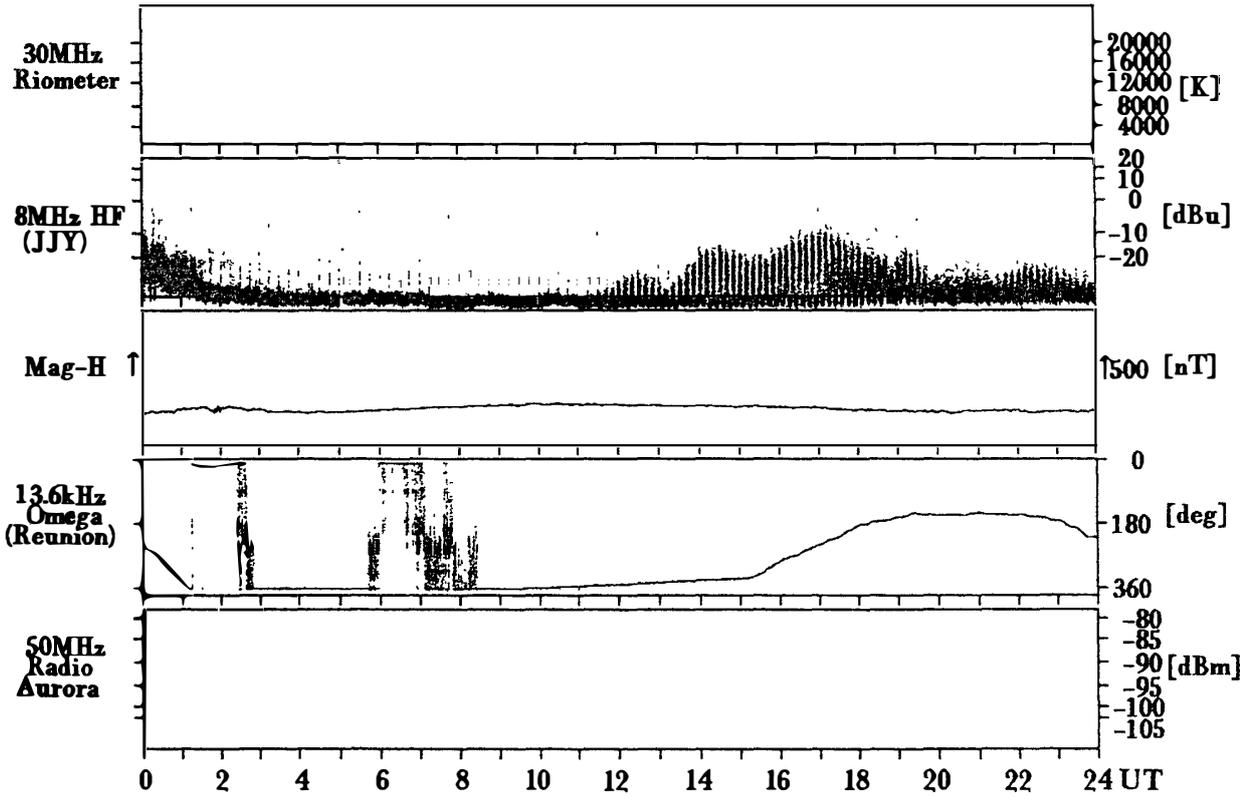
Syowa Station

Total Day / 346 1995/12/12



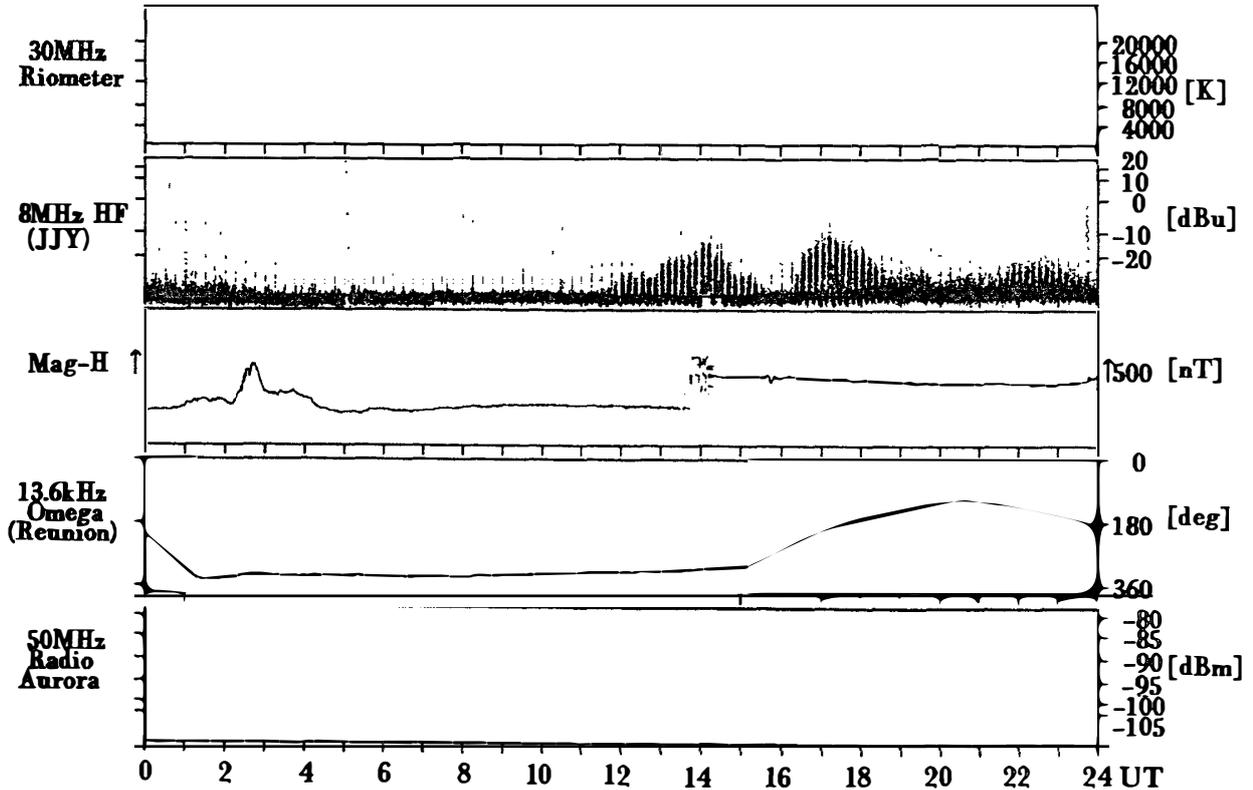
Syowa Station

Total Day / 347 1995/12/13



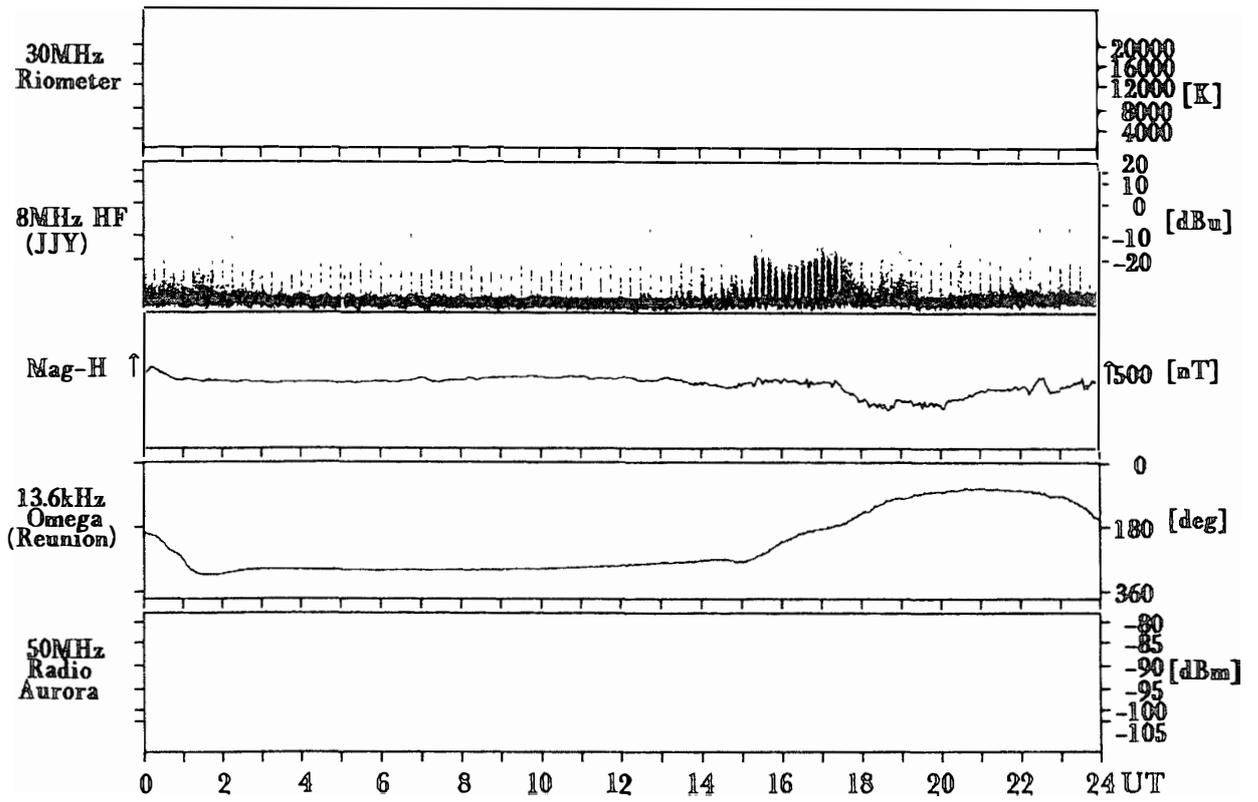
Syowa Station

Total Day / 348 1995/12/14



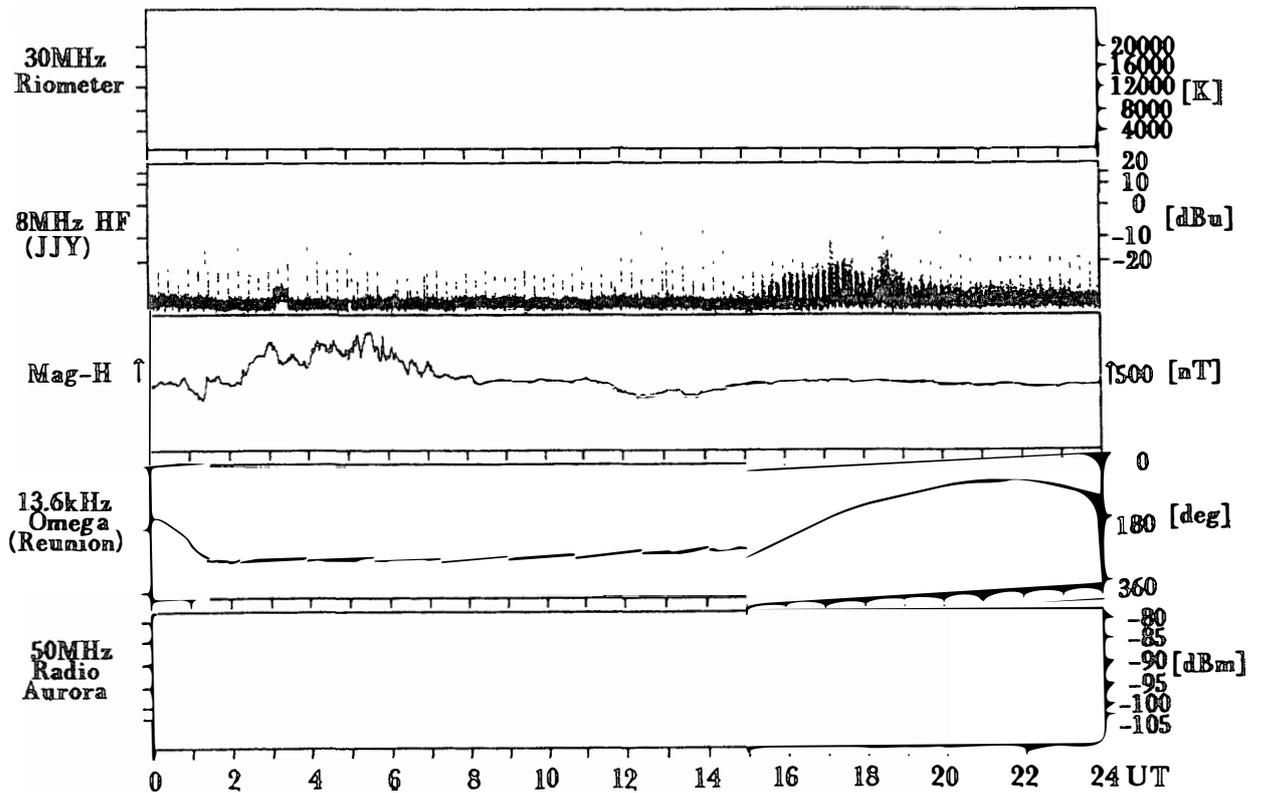
Syowa Station

Total Day / 349 1995/12/15



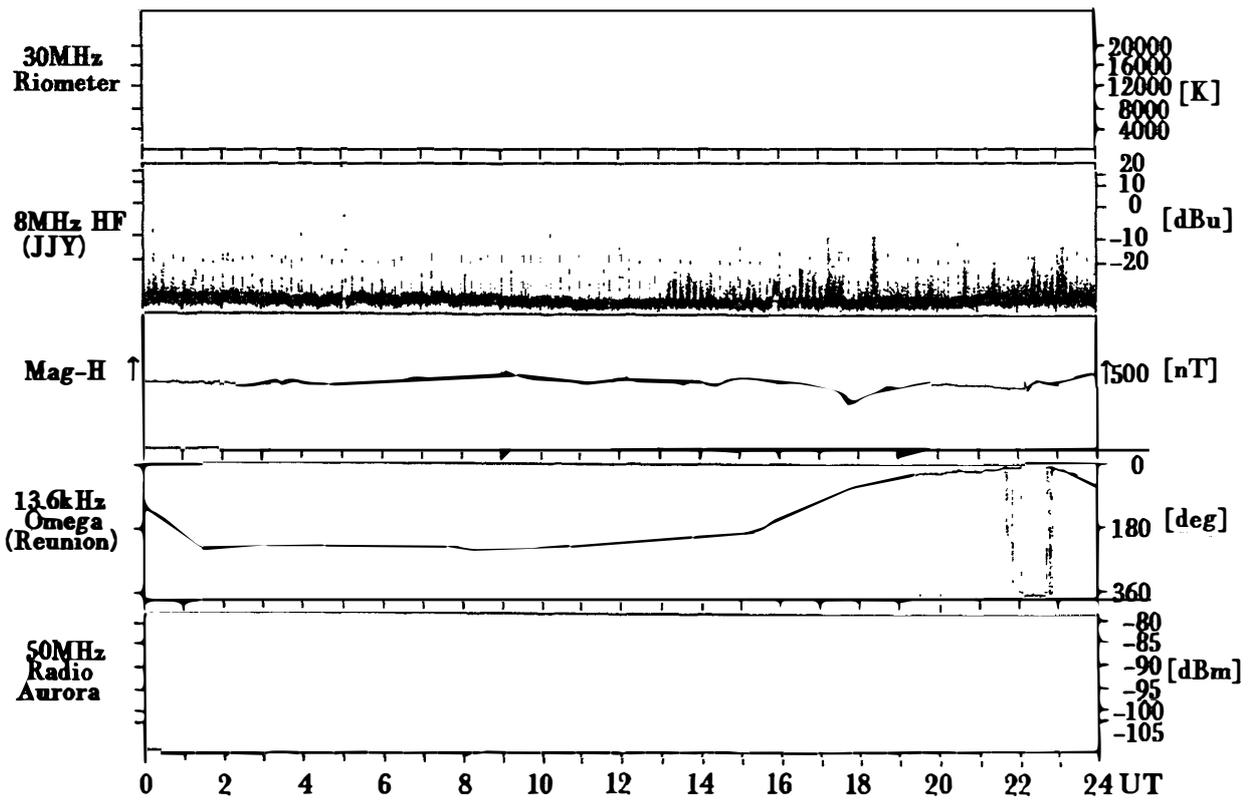
Syowa Station

Total Day / 350 1995/12/16



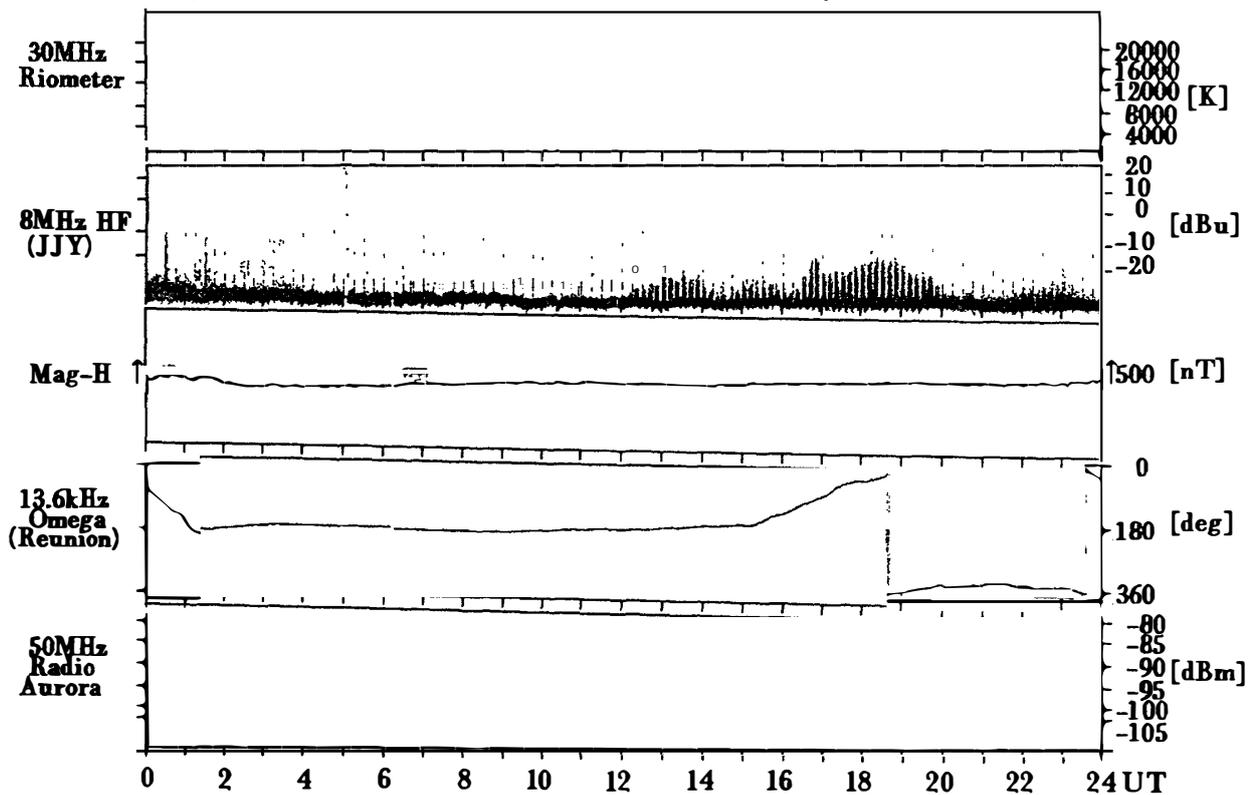
Syowa Station

Total Day / 351 1995/12/17



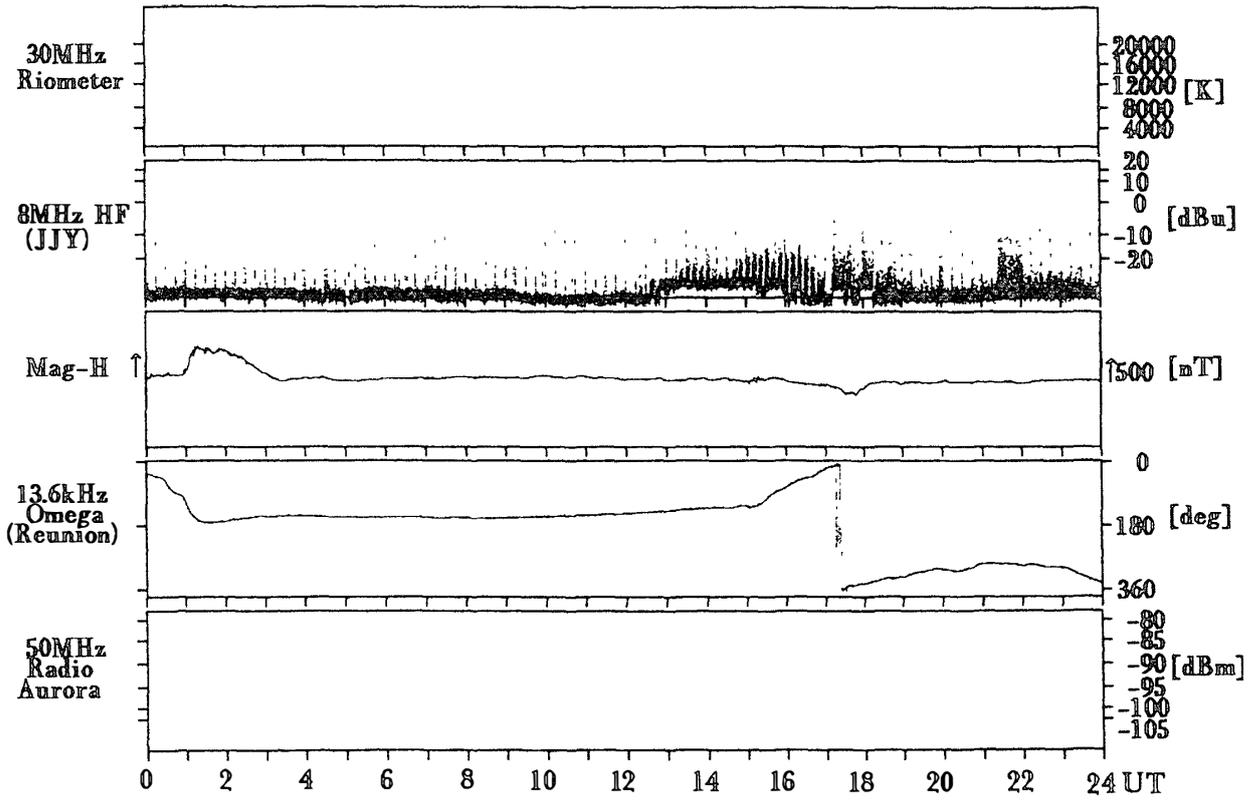
Syowa Station

Total Day / 352 1995/12/18



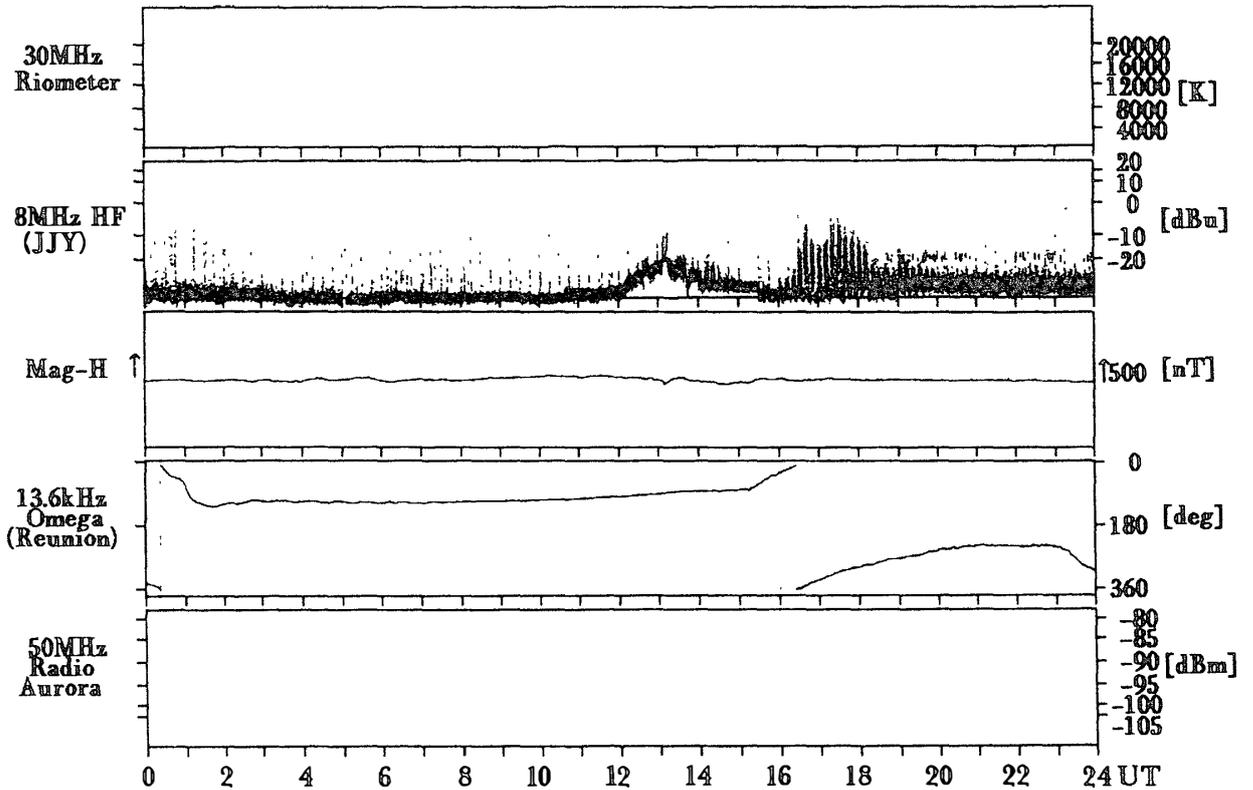
Syowa Station

Total Day / 353 1995/12/19



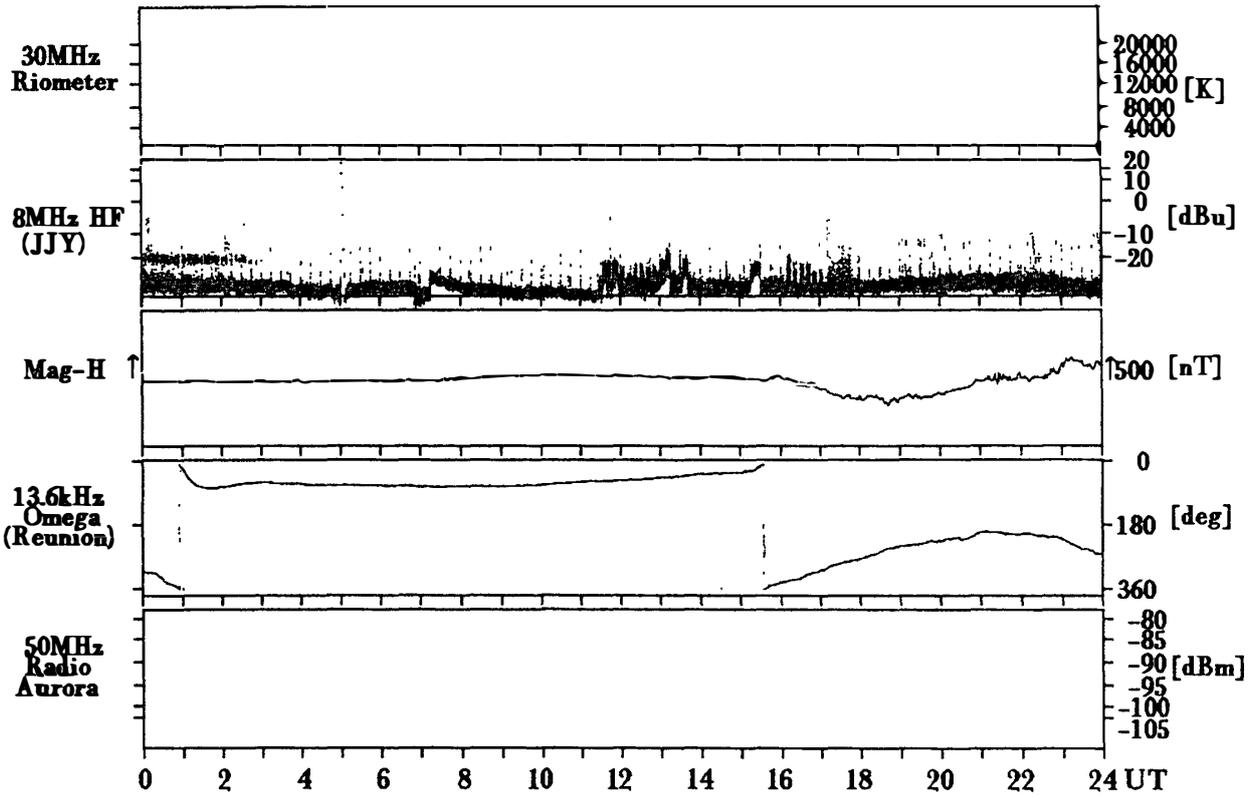
Syowa Station

Total Day / 354 1995/12/20



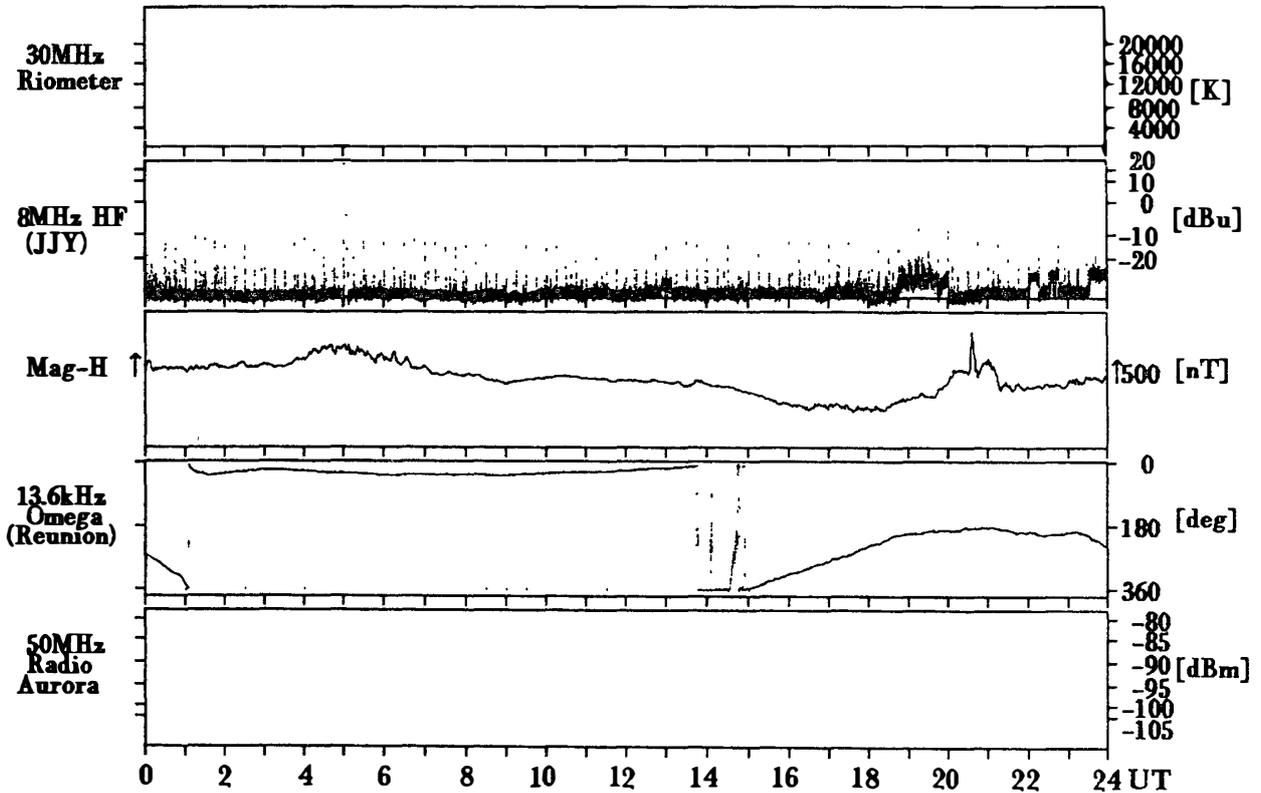
Syowa Station

Total Day / 355 1995/12/21



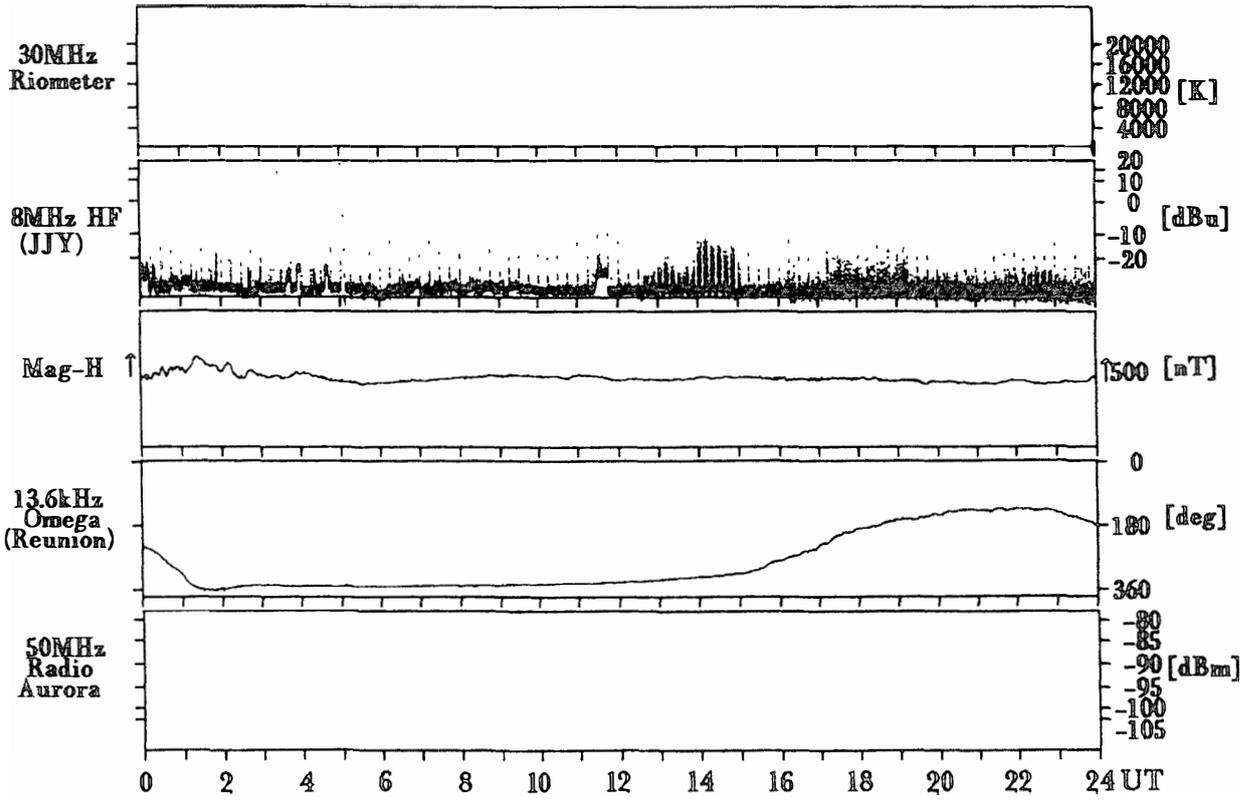
Syowa Station

Total Day / 356 1995/12/22



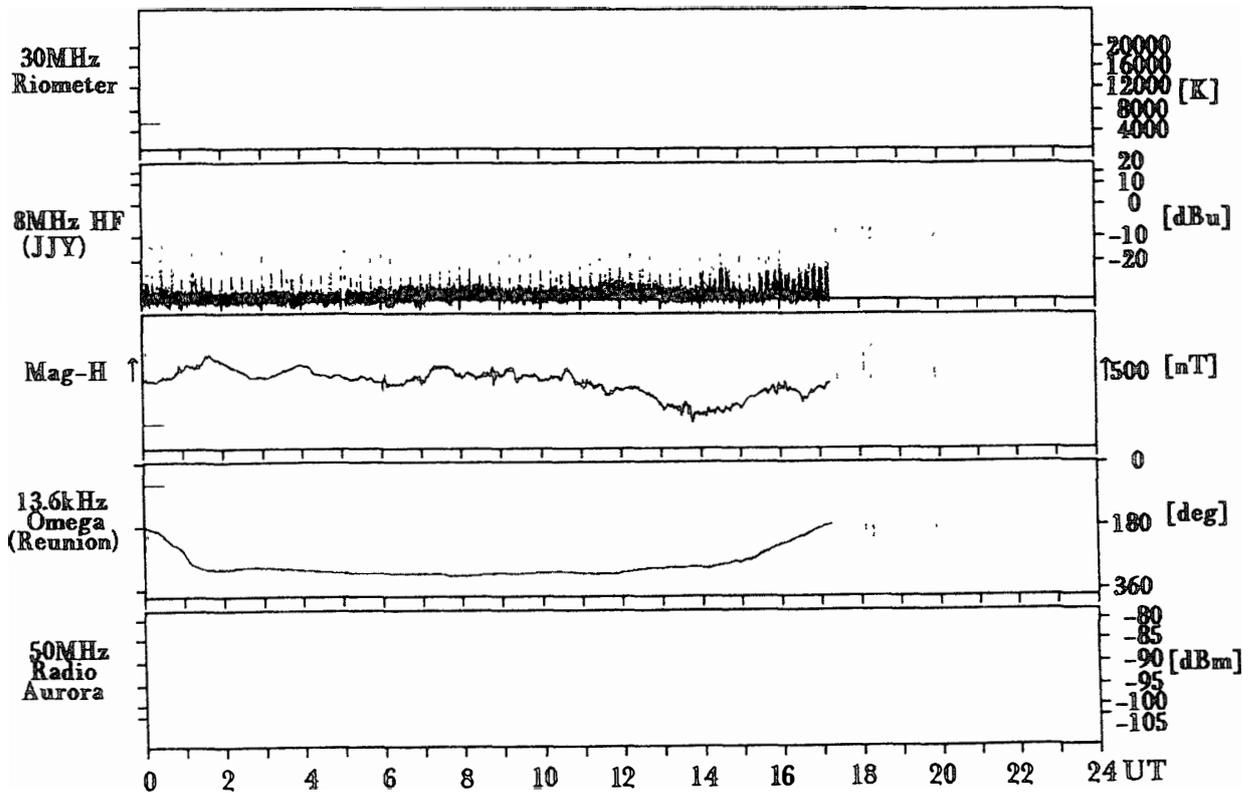
Syowa Station

Total Day / 357 1995/12/23



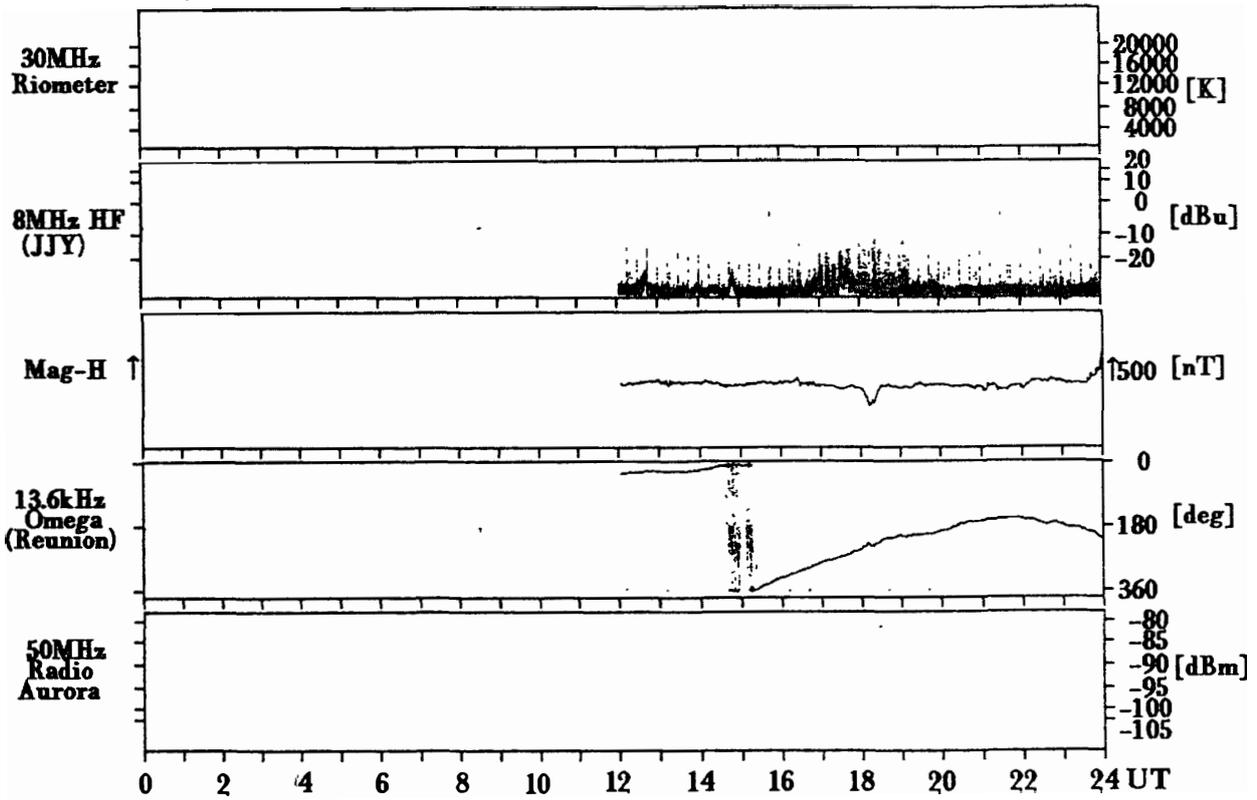
Syowa Station

Total Day / 358 1995/12/24



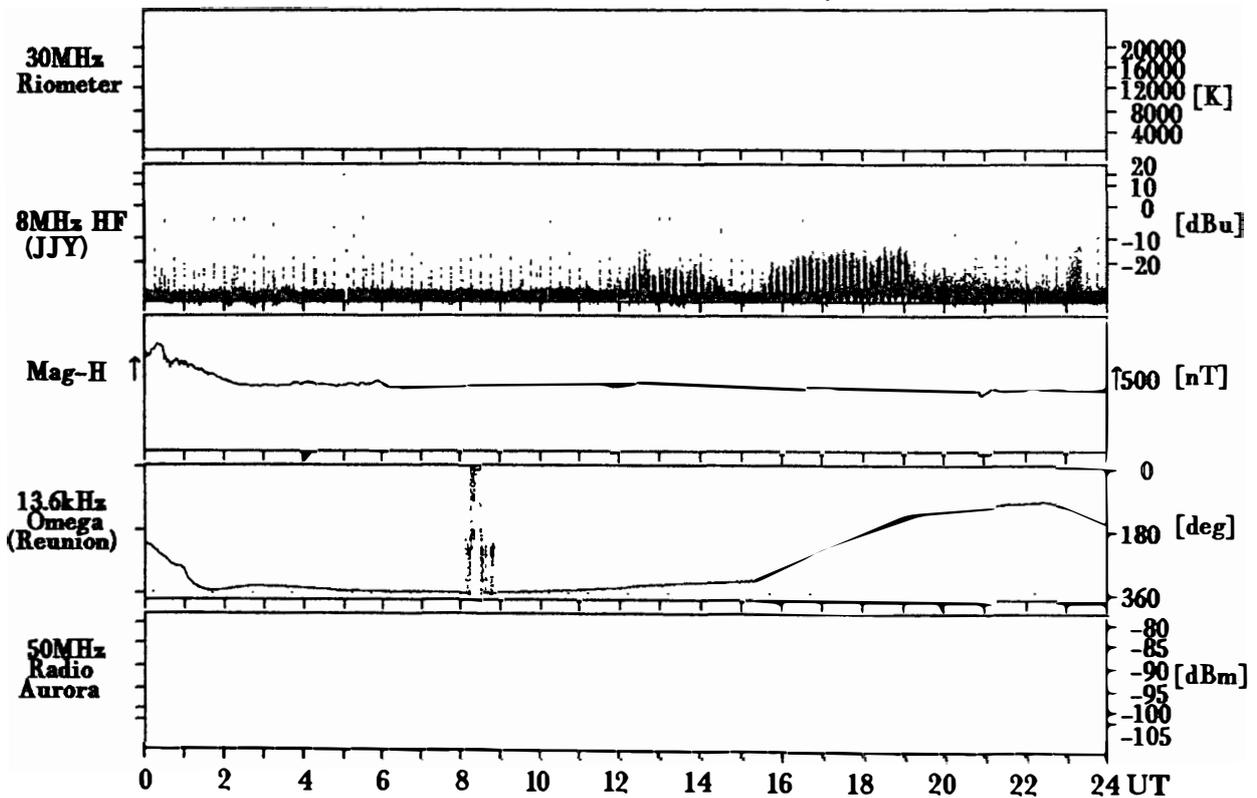
Syowa Station

Total Day / 360 1995/12/26



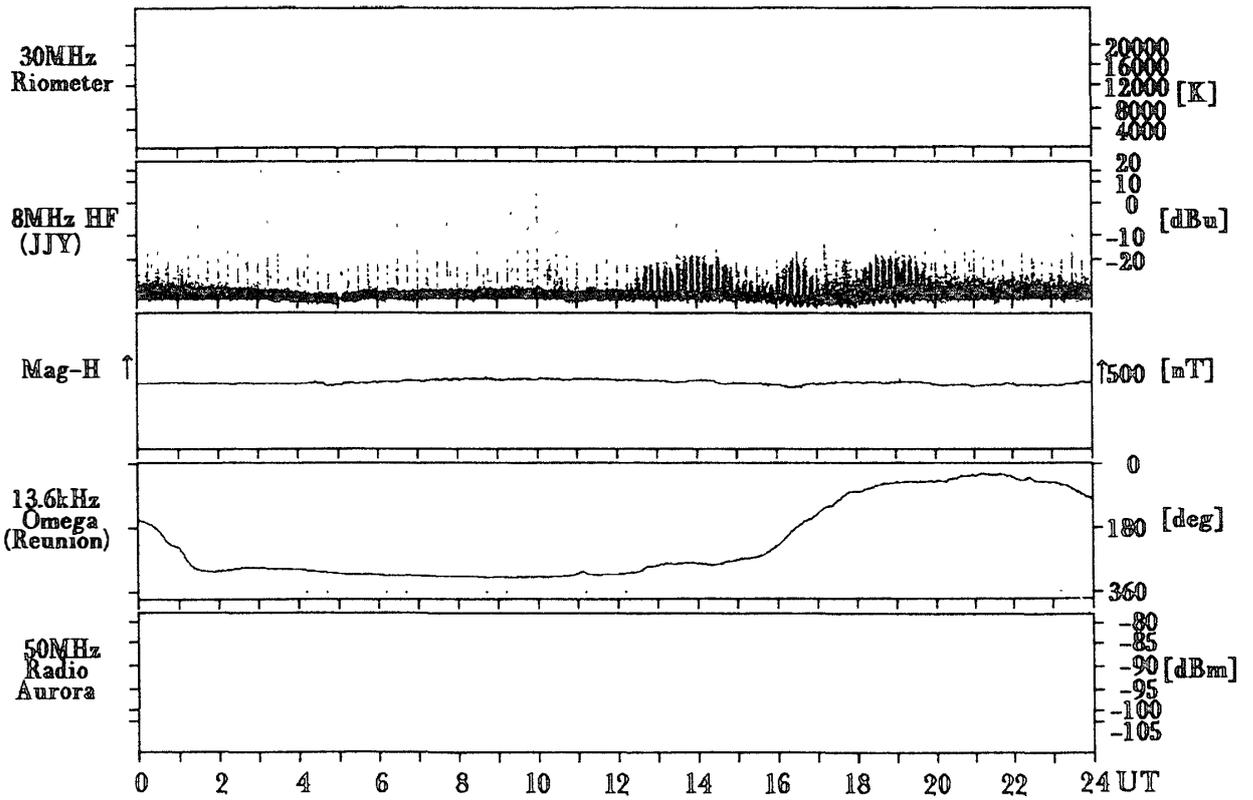
Syowa Station

Total Day / 361 1995/12/27



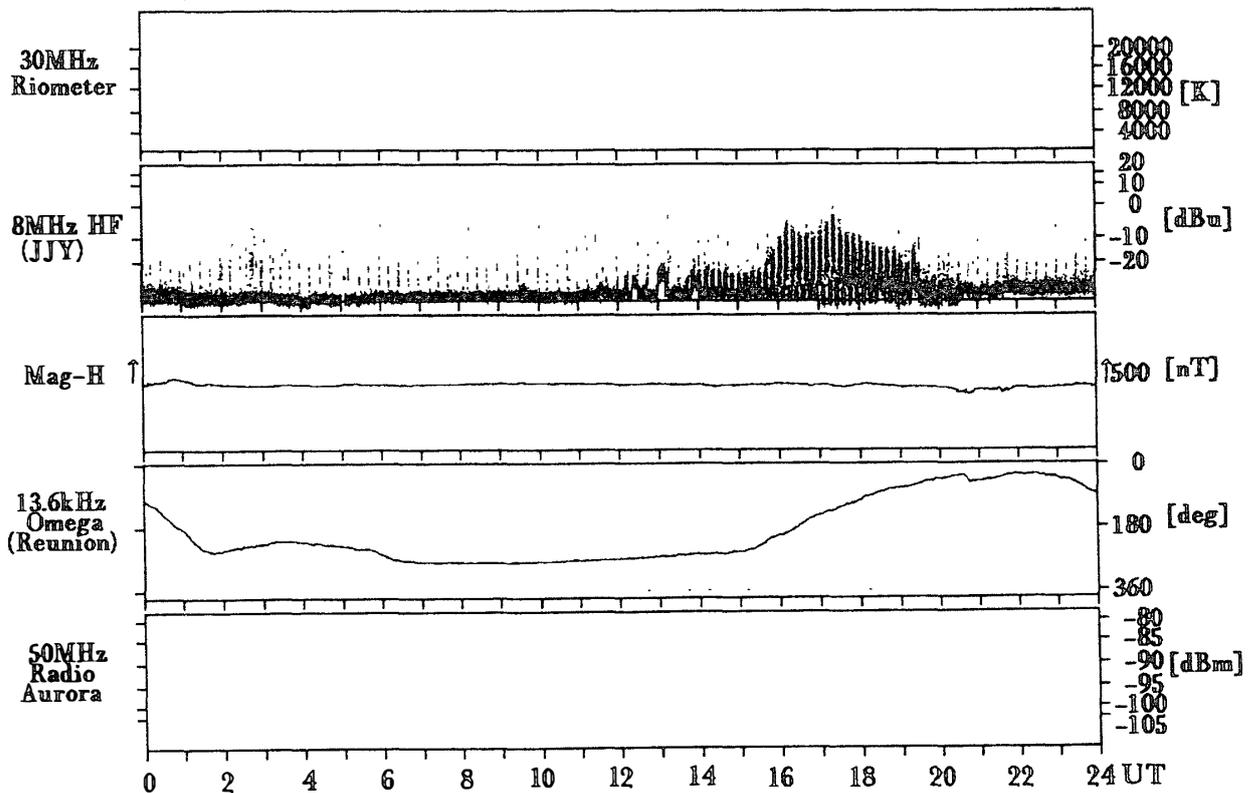
Syowa Station

Total Day / 362 1995/12/28



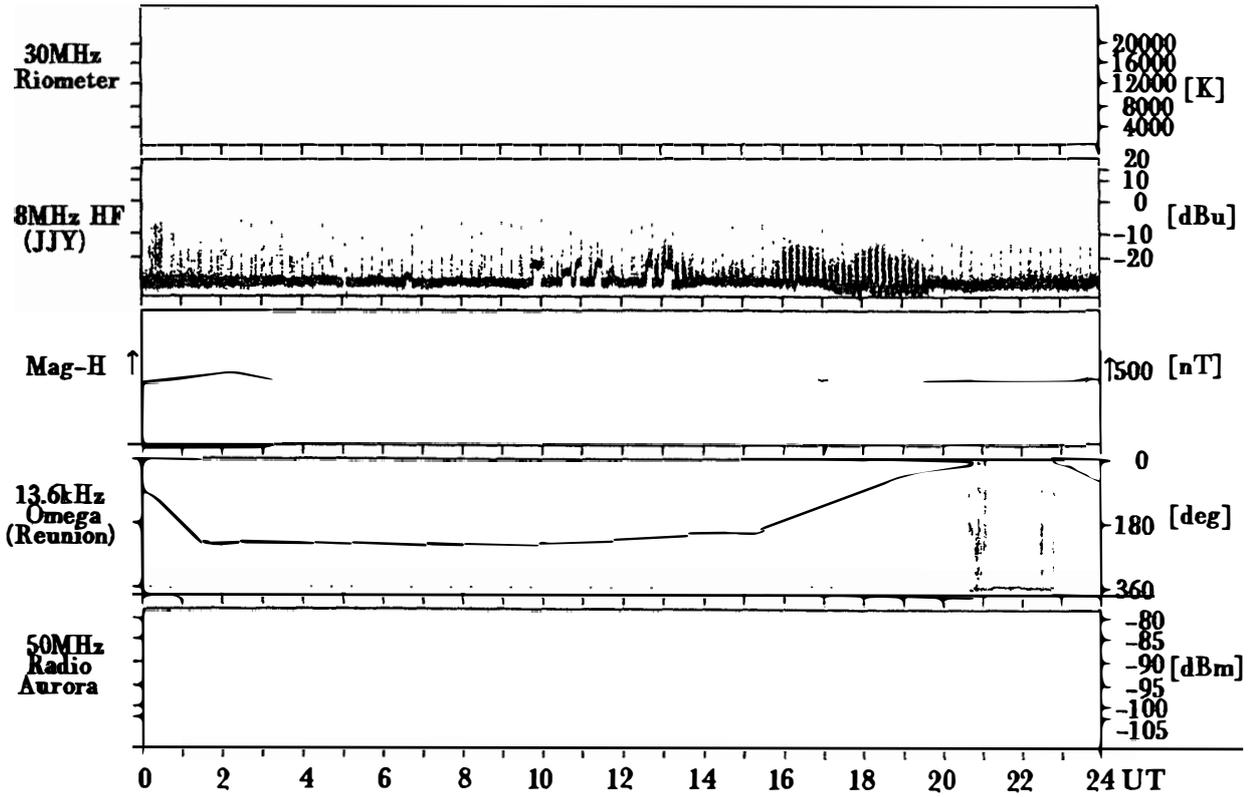
Syowa Station

Total Day / 363 1995/12/29



Syowa Station

Total Day / 364 1995/12/30



Syowa Station

Total Day / 365 1995/12/31

