

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 10/20/86 00:00:00

End : 10/20/86 23:59:00

10/20 22:00

2217

HFUS3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 293

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 OCT 1986

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100Z

TO 20/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4750

(N23E34) APPARENTLY REACHED ITS PEAK IN GROWTH AND EVOLUTION

AND MAY HAVE ENTERED ITS INITIAL DECAY PHASE. IT SIMPLIFIED

TO A BETA-GAMMA MAGNETIC CONFIGURATION. IT PRODUCED SEVERAL

SMALL C-CLASS X-RAY EVENTS - THE LARGEST WAS A C5/0N EVENT WITH

A MAXIMUM AT 19/2116Z WITH ASSOCIATED MINOR RADIO PARAMETERS.

IT CONTINUED TO PRODUCE A 245 MHZ RADIO NOISE STORM THROUGHOUT

THE PERIOD. NEWLY NUMBERED REGION 4751 (S14E71) WAS AN

ALPHA-TYPE WITH RUDIMENTARY PENUMBRA.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE

LOW TO MODERATE. REGION 4750 PROVIDES A GOOD CHANCE OF M-CLASS

X-RAY EVENTS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE TO UNSETTLED. BRIEF

MAJOR STORM CONDITIONS OCCURRED AT HIGH LATITUDES LATE IN THE

PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS

EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS. THIS IS IN

ACCORDANCE WITH A RECURRENT ACTIVE-TO-MINOR STORM DISTURBANCE

PATTERN AS WELL AS AN EFFECT OF ACTIVE FLARE EVENTS OF THE

PAST FIVE DAYS. STORM CONDITIONS ARE EXPECTED AT HIGH LATITUDES

OCCASIONALLY AND DURING LOCAL MIDNIGHT PERIODS AT MID-LATITUDES.

III. EVENT PROBABILITIES 21 OCT-23 OCT

CLASS M 70/65/60

CLASS X 07/06/05

PROTON 05/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 OCT 093

PREDICTED 21 OCT-23 OCT 095/097/098

90 DAY MEAN 20 OCT 071

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 OCT 017/027

ESTIMATED AFR/AP 20 OCT 013/020

PREDICTED AFR/AP 21 OCT-23 OCT 025/035-026/030-025/030

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