

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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