

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 08/25/87 00:00:00

End : 08/25/87 23:59:00

08/25 22:00

2201

HFUS3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 237

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 25 AUG 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/2100Z TO 25/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4845 (N16E22) CONTINUES TO PRODUCE OCCASIONAL C FLARES, THE LARGEST BEING A C8 AT 24/2231UT WHICH WAS ACCOMPANIED BY A WEAK TYPE II RADIO SWEEP. THE REGION APPEARS TO HAVE REACHED ITS MAXIMUM SIZE AND IS LOSING SOME OF ITS INTENSITY AT THIS TIME. A NEW REGION 4846 (N19W61) DEVELOPED RAPIDLY DURING THE PERIOD AND PRODUCED SOME SUBFLARE ACTIVITY. REGION 4846 IS MAGNETICALLY SIMPLE. REGIONS 4841 (S29W90) AND 4842 (S24W88) DISPLAYED SURGING AND PROMINENCE ACTIVITY AS THEY ROTATE OFF THE SOLAR DISK. THE RADIO SUN WAS NOISY DURING THE PERIOD: NUMEROUS TYPE III AND TYPE V SWEEPS AND A RADIO NOISE STORM ON 245 MHZ WERE REPORTED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. NONETHELESS, THE COMPLEXITY OF REGION 4845'S INVERSION LINE SUGGESTS A CONTINUING POSSIBILITY FOR MODERATE LEVELS OF ACTIVITY.

I. GEOPHYSICAL ACTIVITY SUMMARY FROM 24/2100Z TO 25/2100Z: THE GEOMAGNETIC FIELD WAS GENERALLY QUIET TO UNSETTLED UNTIL ABOUT 25/0730UT WHEN A GEOMAGNETIC DISTURBANCE BEGAN AND CONTINUED FOR THE REMAINDER OF THE PERIOD. MID-LATITUDE CONDITIONS RANGED FROM ACTIVE TO MAJOR STORM LEVELS AND HIGH-LATITUDES WERE AT MAJOR STORM LEVELS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE WITH PERIODS OF MINOR STORM CONDITIONS FOR 26 AUGUST, BECOMING GENERALLY UNSETTLED AT MID-LATITUDES AND GENERALLY ACTIVE AT HIGH-LATITUDES FOR 27-28 AUGUST. SUBSTORMS ARE LIKELY TO OCCUR IN THE LOCAL MIDNIGHT TO DAWN SECTOR.

III. EVENT PROBABILITIES 26 AUG-28 AUG

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 AUG 088

PREDICTED 26 AUG-28 AUG 087/088/088

90 DAY MEAN 25 AUG 084

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 AUG 011/017

ESTIMATED AFR/AP 25 AUG 030/045

PREDICTED AFR/AP 26 AUG-28 AUG 020/030-011/025-009/017

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