

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 05/21/87 00:00:00

End : 05/21/87 23:59:00

05/21 22:00

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HFUS3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 141

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 21 MAY 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/2100Z TO 21/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4811 (N30W03) CONTINUES TO PRODUCE SMALL FLARE ACTIVITY: THE LARGEST FLARE DURING THE PERIOD WAS A C7.6/1B AT ABOUT 0329UT. THIS EVENT WAS ACCCOMPANIED BY RADIO BURSTS ACROSS THE SPECTRUM AND A TYPE II/TYPE IV SWEEP WITH AN ESTIMATED SHOCK VELOCITY OF 1500 KM/S. THE REGION SHOWED SOME GROWTH IN AREA AND SPOTS, AND APPEARS TO HAVE A BETA MAGNETIC CLASS. REGION 4810 (S32W12) HAS DECAYED TO SPOTLESS PLAGE. NUMEROUS TYPE V AND TYPE III SWEEPS AND NUMEROUS SMALL RADIO BURSTS CONTINUED TO OCCUR DURING THE PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. REGION 4811 IS EXPECTED TO CONTINUE PRODUCING C-CLASS X-RAY FLARES AND MAY YET PRODUCE M-FLARE ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 20/2100Z TO 21/2100Z: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE FOR 22 MAY DUE TO THE COMBINED EFFECTS OF THE FLARES ON 19 MAY AND 21 MAY. THE FIELD IS EXPECTED TO BE UNSETTLED ON 23 MAY, BECOMING QUIET TO UNSETTLED FOR 23 MAY.

III. EVENT PROBABILITIES 22 MAY-24 MAY

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 MAY 098

PREDICTED 22 MAY-24 MAY 098/098/098

20 DAY MEAN 21 MAY 081

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 MAY 005/008

ESTIMATED AFR/AP 21 MAY 005/008

PREDICTED AFR/AP 22 MAY-24 MAY 012/020-010/012-007/010

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