

HFUS 3 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 287

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 14 OCT 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/2100Z TO 14/2100Z: SOLAR ACTIVITY REACHED MODERATE LEVELS DURING THE PAST 24 HOURS WITH A M1/1B EVENT FROM REGION 4335 (N21W26) AT 03854UT THIS EVENT PRODUCED MINOR RADIO BURSTS, 40 FLUX UNITS AT 2695MHZ. A SERIES OF EVENTS FROM FOUR DIFFERENT REGIONS PRODUCED A C8/2B EVENT FROM REGION 4331 (N13W63) AT 1606UT THE EVENT BEGAN WITH A SN FROM 4328 (N06W83) AT 1529UT THEN 4340 (S06E33) PRODUCED A SN FLARE AND AT 1537UT REGION 4335 ALSO HAD A SN FLARE, A SMALL TYPE II/IV RADIO SWEEP WAS ALSO OBSERVED TO START AT 1554UT. THE MAIN FLARE WAS A PARALLEL RIBBION EVENT THAT LASTED 147 MIN. REGION 4335 HAS EXHIBITED RAPID GROWTH IN SIZE BUT IS STILL A BETA TYPE MAGNETICALLY. THE REST OF THE REGIONS HAVE BEEN GENERALLY STABLE THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE AT A LOW LEVEL DURING THIS PERIOD HOWEVER REGION 4335 MAY PRODUCE ISOLATED "M" CLASS EVENTS DURING THE FIRST HALF OF THIS FORECAST PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 13/2100Z TO 14/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE LEVELS DURING THE PAST 24 HOURS. A FEW PERIODS OF MINOR STORM CONDITIONS WERE RECORDED AT THE HIGH LATITUDE SITES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT UNSETTLED LEVELS AT THE BEGINNING OF THIS FORECAST PERIOD TRENDING TOWARDS ACTIVE CONDITIONS FOR THE REST OF THE PERIOD.

III. EVENT PROBABILITIES 15 OCT-17 OCT

CLASS M 30/20/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 OCT 133

PREDICTED 15 OCT-17 OCT 129/125/116

90 DAY MEAN 14 OCT 121

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 OCT 024/031

ESTIMATED AFR/AP 14 OCT 020/020

PREDICTED AFR/AP 15 OCT-17 OCT 010/015-020/025-015/020

SOLTERWARN

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