

HFUS3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 242

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 29 AUG 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/2100 TO 29/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4567 (S06E11) HAS SHOWN SIGNIFICANT RECONFIGURATION IN THE PAST 24 HOURS. THE LEADER PORTION OF THE SPOT GROUP HAS SPLIT IN TWO AND THE TRAILER PORTION HAS INCREASED IN AREA SIGNIFICANTLY. THE OVERALL AREA OF THE GROUP HAS INCREASED BY 30%, BUT THIS GROUP REMAINS A D-TYPE. THIS REGION PRODUCED FIVE OPTICAL SUBFLARES IN THE LAST 24 HOURS. REGION 4565 (S14W77) REMAINS A C-TYPE SPOT GROUP AND WILL EXIT THE DISK SOMETIME LATE ON THE 30TH OF AUGUST. OLD REGIONS EXPECTED TO RETURN DURING THE FORECAST PERIOD ARE THE FOLLOWING: 4556 (N02, L=54), 4554 (N08, L=51), 4563 (N04, L=25). OF ALL THESE REGIONS, REGION 4554 WAS THE MOST ACTIVE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. REGION 4567 STILL SHOWS A SLIGHT POSSIBILITY OF PRODUCING AN M-LEVEL X-RAY EVENT DURING THE FORECAST PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 28/2100Z TO 29/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT GENERALLY ACTIVE LEVELS AT ALL LATITUDES THIS PERIOD. THERE WAS ONE PERIOD (0600-0900Z) WHEN THE FIELD WAS AT MINOR STORM LEVELS AT MIDDLE LATITUDES. THESE ACTIVE CONDITIONS ARE POSSIBLY DUE TO A HIGH SPEED CORONAL STREAM THAT PASSED CENTRAL MERIDIAN ON THE 26TH OF AUGUST.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE AT ALL LATITUDES ON THE 30TH OF AUGUST. AFTER THAT THE FIELD SHOULD DECREASE TO UNSETTLED TO ACTIVE LEVELS ON THE 31ST OF AUGUST. GENERALLY UNSETTLED LEVELS ARE EXPECTED ON THE 1ST OF SEPTEMBER.

III. EVENT PROBABILITIES 30 AUG-01 SEP

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 AUG 089

PREDICTED 30 AUG-01 SEP 090/088/089

90 DAY MEAN 29 AUG 091

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 AUG 029/037

ESTIMATED AFR/AP 29 AUG 020/028

PREDICTED AFR/AP 30 AUG-01 SEP 015/020-010/015-010/010

SOLTERWARN

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