

HFUS3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 111

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 21 APR 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/2100 TO 21/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4647 (N05E59) PRODUCED SEVERAL SUB-FLARES WITH ASSOCIATED B-LEVEL X-RAY EVENTS IN ADDITION TO A C2/C3 EVENT AT 21/1624Z. IT DEVELOPED INTO A DRI CLASSIFICATION IN WHITE-LIGHT WITH 16 SPOTS. AN AREA OF 60 MILLIONTHS, AND AN EXTENT OF SEVEN DEGREES LONGITUDE. IT REMAINED A BETA-TYPE BUT PRODUCED A STRONG ARCHED FILAMENT SYSTEM, DARK SURGES AND AN ACTIVE DARK FILAMENT. REGION 4646 (S07E24) DECAYED TO A SPOTLESS AREA WITHOUT ANY SIGNIFICANT ACTIVITY. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 20/2100Z TO 21/2100Z: GEOMAGNETIC ACTIVITY WAS AT MINOR TO MAJOR STORM LEVELS. THIS DISTURBANCE WAS POSSIBLY DUE TO SEVERAL SMALL DISAPPEARING FILAMENTS OF 14-16 APR ONLY BY THE FACT THAT NO OBSERVATIONS OF EITHER FLARE NOR CORONAL HOLE WERE OBSERVED IN THE PAST TWO TO EIGHT DAYS. A SOLAR SECTOR BOUNDARY PASSAGE ON 17 APR AND AGAIN 18 APR MAY HAVE ALSO CONTRIBUTED. BRIEF SEVERE STORM LEVELS (A-INDEX EQUAL TO OR GREATER THAN 100) OCCURRED AT 21/0300 AND 0900Z AT BOTH MID AND HIGH LATITUDE LOCATIONS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS THE FIRST DAY (22 APR) AS THE CURRENT DISTURBANCE SUBSIDES. THE SECOND AND THIRD DAYS (23-24 APR) ARE EXPECTED TO RESTABILIZE AT UNSETTLED TO ACTIVE LEVELS.

III. EVENT PROBABILITIES 22 APR-24 APR:

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 APR 077

PREDICTED 22 APR-24 APR 081/082/083

90 DAY MEAN 21 APR 073

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 APR 044/063

ESTIMATED AFR/AP 21 APR 080/120

PREDICTED AFR/AP 22 APR-24 APR 025/030-014/020-013/020

SOLTERWARN

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