

AFUS3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 110

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 APR 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100Z TO 20/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4646 (S07E37) REGENERATED INTO A FOUR-SPOTTED BETA-TYPE IN WHITE-LIGHT. NEWLY ASSIGNED REGION 4647 (N05E74) WAS ALSO A BETA-TYPE THAT PRODUCED A ZERO-FAINT OPTICAL FLARE AT 20/1754Z. BOTH REGIONS HAD DEVELOPED ARCHED FILAMENT SYSTEMS LATE IN THE PERIOD.

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

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: GEOMAGNETIC ACTIVITY WAS AT ACTIVE TO MINOR STORM LEVELS. THE HIGH LATITUDE MINOR STORM THAT STARTED AT 19/0800Z LASTED CONTINUALLY UNTIL MAJOR STORM LEVELS WERE REALIZED AT 19/1930Z WHICH THEN PERSISTED UNTIL 20/1200Z. INTERMITTENT MINOR STORM LEVELS CONTINUED THROUGHOUT THE REMAINDER OF THE PERIOD. MID LATITUDES ALSO EXPERIENCED A GRADUAL STORM COMMENCEMENT AT 19/0800Z WITH UNSETTLED TO ACTIVE LEVELS LASTING UNTIL A SUDDEN IMPULSE AT 20/0311Z THAT PRODUCED MINOR TO MAJOR STORM LEVELS UNTIL 20/1200Z ALSO. MID LATITUDE MINOR STORM LEVELS WILL PROBABLY BE ENDED AT 20/0900Z. 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 RECENTLY.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETTLED TO ACTIVE.

III. EVENT PROBABILITIES 21 APR-23 APR

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 APR 072

PREDICTED 21 APR-23 APR 072/072/072

90 DAY MEAN 20 APR 073

V. -- GEOMAGNETIC-A INDICES

OBSERVED AFR/AP 19 APR 015/029

ESTIMATED AFR/AP 20 APR 030/042

PREDICTED AFR/AP 21 APR-23 APR 011/015-009/015-014/020

SOLTERWARN

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