

HFUS3 BOU 212200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 080

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 21 MAR 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/2100  
TO 21/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW FOR THE PAST 24  
HOURS. A NEW REGION EMERGED TODAY AND WAS NUMBERED REGION 4637  
(N05E80). THIS REGION PRODUCED A BRILLIANT INTENSITY OPTICAL  
SUBFLARE AT 21/1511UT WITH AN ASSOCIATED X-RAY CLASS C7. DURING  
THE EVENT MAXIMUM THE FLARE FROM THIS REGION EXTENDED TO  
ONE-ONEHUNDRETH OF A SOLAR RADIUS. BECAUSE OF THE PROXIMITY TO  
THE LIMB OF REGION 4637, NO SPOTS ARE CURRENTLY OBSERVED.  
REGION 4636 (S15E55) PRODUCED A NORMAL INTENSITY OPTICAL  
SUBFLARE AT 21/1351UT. REGION 4633 (S11W18) HAS HAD AN ACTIVE  
FILAMENT WHICH RUNS THROUGH THE REGIONS CENTER N-S, PORTIONS OF  
THIS FILAMENT HAVE DISAPPEARED. A FOUR DEGREE LONG FILAMENT  
DISAPPEARED AT S18W21.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
REMAIN VERY LOW. DUE TO THE ACTIVITY ALREADY EXHIBITED BY  
REGION 4637, AN INCREASE IN THE PROBABILITY OF M-LEVEL ACTIVITY  
EXISTS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 20/2100Z TO 21/2100Z:  
THE GEOMAGNETIC FIELD WAS GENERALLY QUIET TO UNSETTLED FOR THE  
PAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS  
EXPECTED TO BE UNSETTLED ON THE 22ND OF MARCH. UNSETTLED TO  
ACTIVE CONDITIONS ARE EXPECTED TO BE PREDOMINATE ON THE 23RD  
AND 24TH OF MARCH. THIS ACTIVITY IS BASED ON RECURRENT  
PATTERNS.

III. EVENT PROBABILITIES 22 MAR-24 MAR

CLASS M 02/02/02

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 MAR 077

PREDICTED 22 MAR-24 MAR 077/077/077

90 DAY MEAN 21 MAR 073

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 MAR 004/008

ESTIMATED AFR/AP 21 MAR 008/008

PREDICTED AFR/AP 22 MAR-24 MAR 010/010-015/015-015/015

SOLTERWARN

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