

HFUS 3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 076

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 16 MAR 1984.

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100 TO 16/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD. THERE WERE NUMEROUS CLASS C XRAY EVENTS AND ONE M CLASS EVENT. THIS M1 EVENT HAD AN XRAY MAXIMUM TIME OF 16/0906Z AND WAS ACCCOMPANIED BY RADIO BURSTS ACROSS THE SPECTRUM INCLUDING A 10 CM (2695MHZ) BURST OF 430 FU. THIS EVENT WAS ALSO ACCOMPANIED BY FLARES IN REGIONS 4441 (N13E52) AND 4443 (N15E71) AND WAS THEREFORE NOT CORRELATED WITH A SINGLE REGION. REGION 4438 (S4W34) IS THE MOST IMPRESSIVE REGION TODAY. OPTICALLY IT IS A DAO REGION WITH A WHITE LIGHT AREA OF 300 MILLIONTHS. MAGNETICALLY IT IS A BETA DELTA WITH A STRONG MAGNETIC GRADIENT. REGION 4433 (S10W74) ALSO REMAINS IMPRESSIVE IN WHITE LIGHT AS AN DAO GROUP WITH 390 MILLIONTHS IN AREA. REGION 4443 (N15E71) WAS ONE OF TWO REGIONS NUMBERED THIS PERIOD. IT IS THE RETURN OF OLD REGION 4421 AND IS NOW A CHO GROUP WITH AN AREA OF 370 MILLIONTHS IN WHITE LIGHT. REGION 4444 (S23W08), A SMALL BXO GROUP, WAS THE SECOND REGION NUMBERED TODAY..

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE. M CLASS ACTIVITY IS MOST LIKELY TO COME FROM REGIONS 4438, 4443, AND 4433.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT UNSETTLED TO ACTIVE LEVELS AT MIDLATITUDES AND UNSETTLED TO STORM LEVELS AT HIGH LATITUDES THIS PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD BE AT ACTIVE LEVELS, AT ALL LATITUDES, THROUGHOUT THE FORECAST PERIOD. THE EXPECTED INCREASE IN ACTIVITY IS DUE TO THE DISAPPEARANCE OF TWO SOLAR FILAMENTS, ONE ON 12 MARCH AND THE OTHER ON 14 MARCH. THE FILAMENT THAT DISAPPEARED ON 12 MARCH WAS LOCATED AT S12W46 AND THE ONE ON 14 MARCH WAS LOCATED AT S11W43.

III. EVENT PROBABILITIES 17 MAR-19 MAR

CLASS M 85/80/75

CLASS X 20/15/10

PROTON 15/10/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 MAR 119

PREDICTED 17 MAR-19 MAR 121/128/138

90 DAY MEAN 16 MAR 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 MAR 008/011

ESTIMATED AFR/AP 16 MAR 020/020

PREDICTED AFR/AP 17 MAR-19 MAR 020/025-020/020-015/015

SOLTERWARN

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