

HX US BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 139

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 18 MAY 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE. REGION 2455 (N15E06) PRODUCED A M3/1B FLARE WITH X-RAY MAX AT 0114Z. MODERATE SHORTWAVE FADE AND MINOR CENTIMETRIC BURSTS ACCCOMPANIED THIS FLARE. REGION 2455 HAS LOST ITS DELTA CONFIGURATION AND ITS MAGNETIC GRADIENT HAS WEAKENED. OTHER FLARES HAVE BEEN LOW LEVEL CLASS C X-RAY BURSTS. REGIONS 2452 (S07W17) AND 2456 (S13E23) HAVE BOTH EVOLVED DELTA CONFIGURATIONS WITH MODEST GRADIENTS. THOUGH QUIET TODAY, BOTH THESE REGIONS HAVE OMINOUS STRUCTURES. REGION 2464 (S23E71) MAY ACTUALLY BE TWO REGIONS BUT HAS NOT ROTATED FAR ENOUGH ONTO THE DISK FOR CERTAIN EVALUATION. REGION 2465 (N17E58) HAS EMERGED TODAY WITH REGION 2466 (S07E79) ROTATING ONTO THE DISK. REGION 2466 IS MODERATELY BRIGHT WITH VIGOROUS SURGING OCCURRING.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH REGIONS 2452 AND 2456 EXPECTED TO PRODUCE CLASS M EVENTS WITH CLASS M ACTIVITY ALSO POSSIBLE FROM REGIONS 2455 AND 2466.

II. THE GEOMAGNETIC FIELD WAS QUIET THROUGH 0900Z AND UNSETTLED THEREAFTER. THE FIELD IS EXPECTED TO BE GENERALLY QUIET THROUGH THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 19 MAY - 21 MAY

CLASS M            80/80/80

CLASS X            05/05/05

PROTON            05/05/05

PCAF              GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED           18 MAY 214

PREDICTED          19-21 MAY 216/218/220

90-DAY MEAN        18 MAY 190

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 17 MAY 01

ESTIMATED AFR/AP    18 MAY 05/09

PREDICTED AFR/AP    19-21 MAY 05/07 - 05/07 - 05/07

SOLTERWARN

BT