

HYUS-8-BOU-172200 2300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 137  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 17 MAY 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/2100 TO 17/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS PERIOD WITH ONLY SMALL "C" CLASS EVENTS OBSERVED. REGION 4183 (N17E79) HAS PRODUCED SEVERAL MINOR SURGES THIS PERIOD AND MAGNETIC ANALYSIS SUGGESTS REVERSE POLARITY. REGION 4172 (S11W67) CONTINUES WITH A MAGNETIC DELTA HOWEVER IT HAS BEEN GENERALLY STABLE THIS PERIOD. OTHER NEW REGIONS TODAY ARE 4182 (N13E08) NEAR THE TRAILER OF 4174 AND 4184 (S20W37) A SIMPLE "A" TYPE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW WITH ONLY A SLIGHT CHANCE FOR "M" CLASS ACTIVITY FROM REGIONS 4172 OR 4183.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 16/2100Z TO 17/2100Z: THE GEOMAGNETIC FIELD WAS ACTIVE UNTIL 1155UT WHEN A SMALL SUDDEN COMMENCEMENT WAS OBSERVED ON THE BOULDER MAGNETOMETER. THE FIELD HAS BEEN AT MINOR STORM LEVELS, MAJOR STORM LEVELS AT THE HIGH LATITUDE SITES, SINCE 1450UT. THESE EFFECTS ARE BELIEVED TO BE FROM THE "X2" EVENT OF 15 MAY.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT ACTIVE TO MINOR STORM LEVELS, MINOR TO MAJOR STORM LEVELS AT THE HIGH LATITUDE SITES, UNTIL EARLY ON 19 MAY. THE FIELD WILL THEN RETURN TO ACTIVE LEVELS FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 18 MAY-20 MAY

CLASS M	15/10/10
CLASS X	05/01/01
PROTON	05/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	17 MAY	130
PREDICTED	18 MAY-20 MAY	128/121/121
90 DAY MEAN	17 MAY	122

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP	16 MAY	012/014
ESTIMATED AFR/AP	17 MAY	033/045
PREDICTED AFR/AP	18 MAY-20 MAY	030/025-015/025-015/020

SOLTERWARN  
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