

~~FRUS-5-B00-172200~~----- 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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