

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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