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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 161

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 10 JUN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/2100  
TO 10/2100Z: SOLAR ACTIVITY WAS AT MODERATE LEVELS DURING THE  
PAST 24 HOURS. REGION 4204 (S10E04) PRODUCED TWO "M" CLASS  
EVENTS THE LARGEST WAS A M1/SB AT 09/2154UT THE OTHER WAS A  
M1/1B 10/1746UT. BOTH EVENTS HAD MINOR RADIO. REGION 4204 ALSO  
PRODUCED A C9/SB AT 10/1329UT THIS EVENT HAD 130 FLUX UNITS AT  
2695MHZ AND 420 FLUX UNITS AT 245 MHZ. NO TYPE II/IV SWEEPS  
HAVE BEEN OBSERVED THIS PERIOD. REGION 4204 HAS CHANGED LITTLE  
IN SIZE OR MAGNETIC CONFIGURATION DURING THIS PERIOD. REGION  
4201 (S09W75) HAS BEEN SOME WHAT SUBDUED THIS PERIOD WITH ONLY  
MINOR "C" CLASS EVENTS BEING OBSERVED. THE REST OF THE REGIONS  
HAVE BEEN GENERALLY UNCHANGED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE  
AT GENERALLY MODERATE LEVELS DURING THIS FORECAST PERIOD.  
REGION 4204 IS EXPECTED TO BE THE PRIME PRODUCER OF ACTIVITY.  
REGION 4201 MAY CONTRIBUTE AN ISOLATED "M" EVENT.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 09/2100Z TO 10/2100Z:  
THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS  
AT THE MIDLATITUDE SITES AND AT MINOR TO MAJOR STORM LEVELS AT  
THE HIGH LATITUDE SITES. THE DISTURBANCE APPEARS TO BE FROM THE  
LARGE NORTHERN CORONAL HOLE WHICH PASSED CENTRAL MERIDIAN ON 06  
JUNE. A SMALL SUDDEN IMPULSE WAS OBSERVED AT BOULDER AT  
10/0455UT.

A LARGE NW TO SE FILAMENT WHICH WAS LOCATED AT S21W16 AT 2200UT  
ON 09 JUNE DISAPPEARED BEFOR 10 JUNE. THIS FILAMENT WAS PART OF  
A LONG NETURAL LINE WHICH TRAVERSED THE EQUATOR NEAR N00W50, AT  
2100UT 10 JUNE, THEN PASSED OVER THE EAST LIMB AT NE52. THE  
LENGTH OF THE FILAMENT ALONG WITH ITS FAVORABLE LOCATION MAKES  
THE POSSIBILITY OF A MINOR MAGNETIC DISTURBANCE ON 14 TO 15  
JUNE LIKELY.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS  
EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS FOR THE NEXT 30  
HOURS AT THE MID LATITUDE SITES. THE HIGH LATITUDE SITES SHOULD  
BE AT MINOR STORM, WITH PERIODS AT MAJOR STORM LEVELS, FOR THE  
NEXT 40 HOURS. THE FIELD IS THEN EXPECTED TO BE AT ACTIVE TO  
UNSETTLED LEVELS FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 11 JUN-13 JUN

CLASS M	30/20/20
CLASS X	10/05/05
PROTON	05/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	10 JUN	154
PREDICTED	11 JUN-13 JUN	150/145/135
90 DAY MEAN	10 JUN	127

V. GEOMAGNETIC A INDICES

OBSERVED	AFR/AP 09 JUN	021/025
ESTIMATED	AFR/AP 10 JUN	023/035
PREDICTED	AFR/AP 11 JUN-13 JUN	017/020-012/020-012/015.

SOLTERWARN

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