

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 110

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 APR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100  
TO 20/2100Z: SOLAR ACTIVITY CONTINUED LOW DURING THIS PERIOD.

THE LARGEST EVENT OBSERVED THIS PERIOD WAS A C2/SN FROM REGION  
4150 (S12E57) AT 1724UT. REGIONS 4143 (S30W78), 4149 (S10W44)  
AND 4150 HAVE PRODUCED MINOR RADIO BURSTS, THROUGHOUT THE RADIO  
SPECTRUM, DURING THEIR FLARES. NEW SPOTS HAVE BEEN OBSERVED IN  
THE TRAILER PORTION OF 4150 THE REGION IS A BETA/GAMMA "C" TYPE  
GROUP. REGION 4148 HAS HAD ALMOST CONTINUOUS POINT BRIGHTENINGS  
TODAY. NO NEW REGIONS WERE OBSERVED TODAY. CONTINUOUS BRIGHTENINGS

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE  
MODERATE DURING THE FIRST PORTION OF THE FORECAST PERIOD THEN  
LOW DURING THE REST OF THE PERIOD. REGION 4148 CONTINUES TO  
EXHIBIT COMPLEXITY, HOWEVER IT WILL ROTATE OFF THE VISIBLE DISK  
IN THE NEXT 36 HOURS. REGION 4150 APPEARS STILL CAPABLE OF  
PRODUCING AN ISOLATED "M" CLASS EVENT DURING THE NEXT THREE  
DAYS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z:  
THE GEOMAGNETIC HAS BEEN UNSETTLED TO SLIGHTLY ACTIVE AT THE  
MID-LATITUDE SITES AND GENERALLY ACTIVE WITH SHORT PERIODS AT  
MINOR STORMS LEVELS OBSERVED AT THE HIGH-LATITUDE SITES. THE  
NEUTRAL LINE ALONG THE FILAMENT WHICH DISAPPEARED ON 18 APRIL  
IS LITTLE CHANGED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS  
EXPECTED TO BE GENERALLY ACTIVE DURING THIS FORECAST PERIOD. A  
SHORT PERIOD OF MINOR STORM CONDITIONS MAY OCCUR ON 22 APRIL IN  
RESPONSE TO THE FILAMENT DISAPPEARANCE OF 18 APRIL.

III. EVENT PROBABILITIES 21 APR-23 APR disappearance

CLASS M 40/20/20

CLASS X 10/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 APR 126

PREDICTED 21 APR-23 APR 127/122/115

90 DAY MEAN 20 APR 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 APR 010/015

ESTIMATED AFR/AP 20 APR 012/015

PREDICTED AFR/AP 21 APR-23 APR 020/025-025/030-015/030

SOLTERWARN

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