

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 19 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

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