

HFUS 1 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 153

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 01 JUNE 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. THE LARGEST X-RAY EVENT WAS AN M2.8 MAXING AT 1938 UT FROM A BRIGHT SURGE ON THE EAST LIMB AT S15. THIS IS THE LOCATION OF OLD REGION 2438, WHICH PRODUCED M-CLASS FLARES LAST ROTATION, AND IT HAS BEEN NUMBERED 2490 (S15E88). REGION 2478 (S11W26) PRODUCED SEVERAL C-CLASS SUBFLARES TODAY. THIS REGION GREW IN AREA AND SPOT COUNT AND MT WILSON OBSERVATORY REPORTS A SMALL DELTA SOUTHWEST OF THE MAIN LEADER SPOT. NEW REGION 2488 (S11E44) IS A D-TYPE GROUP WHICH APPEARED ON THE DISK.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE ESPECIALLY OWING TO THE OBSERVED ACTIVITY IN 2490. REGION 2478 RETAINS POTENTIAL FOR SIGNIFICANT FLARES.

II. THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS FOR THE PAST 24 HOURS. THE DISTURBANCE BEGAN NEAR 2130 UT ON 31 MAY AND IS PROBABLY DUE TO AN X1/2B FLARE ON 28 MAY EVEN THOUGH THE DELAY TIME (74 HOURS) IS UNUSUALLY LONG. HOWEVER, A SMALL POSTIVE CORONAL HOLE IS FAVORABLY LOCATED IN THE SOUTHWEST CENTER AT (S37W35 ON 31 MAY) FOR GEOMAGNETIC EFFECTS. ACTIVE LEVELS ARE EXPECTED TO END ON 02 JUNE BUT THE FIELD SHOULD REMAIN UNSETTLED THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 02 JUNE - 04 JUNE

CLASS M 60/60/60

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 JUNE 189

PREDICTED 02 - 04 JUNE 183/180/178

90-DAY MEAN 01 JUNE 202

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 31 MAY 17

ESTIMATED AFR/AP 01 JUNE 21/23

PREDICTED AFR/AP 02 - 04 JUNE 20/20 12/15 08/10

SOLTERWARN

BT