

HFUS-1-B01 012237

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 213

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 01 AUGUST 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS WITH THE OCCURRENCE OF TWO M1 X-RAY EVENTS. THE FIRST M1 MAXED AT 1118 UT WITH NO OPTICAL REPORTS, BUT WITH SOME RADIO OUTPUT INCLUDING 160 FLUX UNITS AT 2695 MHZ (3 MINUTES DURATION). THE SECOND M1 WAS A 1R FLARE FROM REGION 1895 (S12W00) WHICH MAXED AT 1422 UT. SUB FLARES WERE REPORTED FROM REGIONS 1895, 1892 (S22W25) AND 1890 (N15W35). THREE NEW REGIONS WERE NUMBERED TODAY. REGIONS 1900 (N18E14) AND 1901 (S17E42) ARE BOTH A-TYPE SPOT GROUPS, AND REGION 1902 (S19E70) IS A B-TYPE GROUP ROTATING OVER THE EAST LIMB.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE DEPENDING ON REGION 1895, WHICH IS NOW VERY COMPLEX MAGNETICALLY (BETA-GAMMA-DELTA). REGION 1892 IS GROWING AND COULD ALSO PRODUCE ENERGETIC EVENTS.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO ACTIVE FOR THE PAST 24 HOURS. A SUDDEN COMMENCEMENT TODAY AT 1145 UT IS ATTRIBUTED TO THE EFFECTS OF A HIGH-SPEED SOLAR WIND STREAM FROM AN EQUATORIAL CORONAL HOLE. THE FIELD SHOULD REMAIN MOSTLY UNSETLED THROUGHOUT THE FORECAST PERIOD WITH OCCASIONAL ACTIVE PERIODS TOMORROW DECREASING TO QUIET CONDITIONS ON THE THIRD DAY.

III. EVENT PROBABILITIES: 02 AUGUST - 04 AUGUST

CLASS M 100% 02/03/79

CLASS X 10% 02/03/79

PREDICTED 100% 02/03/79

PCAF 100% GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 100% 01 AUGUST 145

PREDICTED 100% 02-04 AUGUST 146/145/142

90-DAY MEAN 100% 01 AUGUST 171

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 31 JULY 90

ESTIMATED AFR/AP 100% 01 AUGUST 11/11

PREDICTED AFR/AP 100% 02-04 AUGUST 13/10 - 10/14 - 06/12

SOLTERWARM 100% 02-04 AUGUST 13/10 - 10/14 - 06/12

BT 100% 02-04 AUGUST 13/10 - 10/14 - 06/12