

HFUS.1 BOU 2222.00

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLO

SOF NUMBER 203

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 22 JULY 1979

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. NUMEROUS SUB-FLARES AND C-CLASS X-RAY EVENTS HAVE OCCURRED, BUT NO M-CLASS ENERGETIC EVENTS WERE OBSERVED. REGION 1880 (N15W69) WAS THE MOST ACTIVE ON THE DISK WITH NINE FLARES THUS FAR. THE LARGEST WAS A C5/SN AT 1743Z (MAX) WITH IMPORTANCE THREE SHORT WAVE FADES. THIS REGION CONTINUES IT'S RAPID GROWTH AS IT APPROACHES WEST LIMB, AND NOW DISPLAYS AT LEAST ONE DELTA CONFIGURATION WITH REPORTS OF THE LEADER AND TRAILER PENUMbra MERGING. REGION 1882 (S06E02) HAS ALSO SHOWN SOME STRUCTURAL CHANGE BECOMING A BETA GAMMA GROUP WITH ARCH FILAMENTS, ALTHOUGH SPOT GROWTH HAS SLOWED TODAY. SUBFLARES HAVE BEEN OBSERVED FROM THIS REGION AND FROM 1877 (N31W11) AND 1883 (N13W56). TWO NEW REGIONS HAVE BEEN REPORTED, 1884 (N14E73), A SIMPLE H-TYPE AND 1885 (S17E51), A SMALL A-TYPE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE THROUGH THE NEXT 24 HOURS WITH THE POSSIBILITY OF ENERGETIC EVENTS FROM REGION 1880 PRIOR TO IT'S ROTATION. FOLLOWING THE ROTATION OF 1880, LOW LEVEL ACTIVITY WILL PREVAIL.

II. THE GEOMAGNETIC FIELD HAS BEEN AT LOW UNSETTLED CONDITIONS FOR THE PAST 24 HOURS. UNSETTLED CONDITIONS WILL CONTINUE THROUGH THE PERIOD. A CORONAL HOLE LOCATED IN THE SOUTHWEST QUADRANT WITH A NORTHERN MOST POINT AT S25W50 APPEARS TO BE TOO FAR SOUTH TO INDUCE A GEOMAGNETIC DISTURBANCE DURING THE PERIOD.

III. EVENT PROBABILITIES 23 JULY - 25 JULY

CLASS M 60/40/20

CLASS X 10/05/01

PREDICTED 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 JULY 15.1

PREDICTED 23-25 JULY 152/145/140

90-DAY MEAN 22 JULY 174

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 21 JULY 10

ESTIMATED AFR/AP 22 JULY 08/09

PREDICTED AFR/AP 23-25 JULY 10/15 - 08/12 - 06/10

SOLTERWARN

BT