

HFUS-1 RDU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLORADO

SDF NUMBER 209

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 28 JULY 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. AN M1.1B PARALLEL RIBBON FLARE OCCURRED AT 1715 UT (MAXIMUM) FROM REGION 1888 (S14W21). THIS REGION GREW CONSIDERABLY TODAY IN AREA AND MAGNETIC COMPLEXITY. REGION 1887 (S13W42) PRODUCED ONLY SUBFLARES, BUT REMAINS MAGNETICALLY INTERESTING WITH A TIGHTLY KINKED NEUTRAL LINE. REGION 1890 (N15E16) HAD A PARALLEL RIBBON SUBFLARE MAXING AT 1455 UT AND RETAINS ITS DARK ACTIVE NEUTRAL LINE FILAMENT. SOME RELAXATION IN STRUCTURE IN 1890 IS EVIDENT BUT SIMILAR RELAXATION PRECEDED THE M1 FLARE IN 1888. TWO NEW REGIONS WERE NUMBERED TODAY. THEY ARE 1895 (S16E50), A B-TYPE GROUP, AND 1896 (N11E77), AN H-TYPE SPOT THAT ROTATED OVER THE EAST LIMB. 1896 IS THE RETURN OF REGION 1849 WHICH PRODUCED MODERATE ACTIVITY LAST ROTATION.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE Owing TO THE FLARE POTENTIAL IN REGIONS 1887, 1888, AND 1890.

II. THE GEOMAGNETIC FIELD WAS QUIET WITH SOME ACTIVE PERIODS DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE GENERALLY UNSETTLED THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 29 JULY - 31 JULY

CLASS M < 1% / 70/70/70

CLASS X < 1% / 15/15/15

PREDICTED 10/10/10 / 10/15/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 JULY 153.0 / 28 JULY 153.0

PREDICTED 29-31 JULY 155.1 / 15.7 / 15.7

90-DAY MEAN 28 JULY 172

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 27 JULY 21

ESTIMATED AFR/AP 28 JULY 07/14

PREDICTED AFR/AP 29-31 JULY 10/10 - 10/12 / 12/15

SOLTERWARN

BT