

HFUS 1 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 234

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 21 AUGUST 1980

IA. SOLAR ACTIVITY INCREASED TO THE MODERATE LEVEL DURING THE PAST 24 HOURS. REGION 2629 (N19W14) HAS BEEN THE PRIMARY CONTRIBUTOR TO THE ACTIVITY PRODUCING TWO M-CLASS EVENTS WITHIN 6 HOURS OF EACH OTHER. THE LARGEST, AN M7/2B OCCURRED AT 1903Z MAXIMUM WITH AN 82 FLUX UNIT BURST RECORDED AT 2695 MHZ AND SHORT WAVE FADES TO 12 MHZ REPORTED. THIS FLARE WAS SYMPATHETIC TO A C8/1B FLARE OBSERVED FROM REGION 2635 (N10E60) AT 1855Z MAXIMUM. THE OTHER M-CLASS FLARE OCCURRED AT 1353Z MAXIMUM WITH MINOR RADIO BURSTS AND SHORT WAVE FADES REPORTED. REGION 2629 HAS UNDERGONE SIGNIFICANT DEVELOPMENT AND IS NOW A COMPLEX REGION WITH A BETA GAMMA CONFIGURATION AND POSSIBLE WEAK DELTA. REGION 2635 IS THE ONLY OTHER ACTIVE AREA ON THE DISK, PRODUCING SEVERAL C-CLASS SUBFLARES TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE LEVELS THROUGH THE NEXT FEW DAYS. ALTHOUGH INDICATIONS ARE THAT THE RAPID DEVELOPMENT IN REGION 2629 HAS NOW SLOWED, IT COULD PRODUCE AN M-CLASS EVENT ALMOST DAILY FOR THE NEXT SEVERAL DAYS. REGION 2635 COULD ALSO PRODUCE AN ISOLATED MODERATE FLARE.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS. UNSETTLED LEVELS ARE EXPECTED TO PERSIST THROUGH THE NEXT 48 HOURS FOLLOWED BY A LOW ACTIVE PERIOD ON THE 24TH AS A RESULT OF TODAY'S M7 FLARE.

III. EVENT PROBABILITIES 22 AUGUST - 24 AUGUST

CLASS M 50/50/40

CLASS X 05/05/02

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 AUGUST 190

PREDICTED 22 - 24 AUGUST 185/180/176

90-DAY MEAN 21 AUGUST 191

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 20 AUGUST 10

ESTIMATED AFR/AP 21 AUGUST 10/10

PREDICTED AFR/AP 22 - 24 AUGUST 08/10 08/10 15/18

SOLTERWARN

BT