

HFUS 1 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 235

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 22 AUGUST 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE. AT THE TIME OF THIS REPORT, REGION 2635 (N09E48) HAS AN M2/2B FLARE IN PROGRESS. FURTHER DATA ON THIS FLARE WILL BE MENTIONED TOMORROW. THIS REGION WAS THE MOST ACTIVE ON THE DISK PRODUCING SEVERAL SUBFLARES WITH SMALL RADIO RESPONSE AND TWO 1B FLARES. THE LARGEST OF THESE WAS A C9/1B AT 0543Z MAXIMUM WITH A TYPE II SWEEP AND MINOR RADIO BURSTS THROUGH THE SPECTRUM. REGION 2629 (N19W26), THE MOST IMPRESSIVE OF THE DISK REGIONS WITH TWO DELTA CONFIGURATIONS HAS MANAGED ONLY C-CLASS SUBFLARES TODAY. REGION 2620 (N11W81), A QUIET REGION FOR SEVERAL DAYS, PRODUCED A C7/1N FLARE AT 1724Z MAXIMUM. TWO NEW REGIONS HAVE ROTATED OVER EAST LIMB, REGION 2637 (N18E65) AND REGION 2638 (S18E65), BOTH B TYPE SPOT GROUPS.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE OR NEAR MODERATE FOR THE FORECAST PERIOD. REGION 2629 IS CAPABLE OF MODERATE EVENTS BUT THEIR FREQUENCY OF OCCURRENCE SEEMS TO BE DIMINISHING. THERE IS A SLIM POSSIBILITY OF AN X-CLASS EVENT FROM THIS REGION. REGION 2635 IS EXPECTED TO CONTINUE PRODUCING SMALL TO MODERATE FLARES, BUT UNLESS ITS STRUCTURE AND CHARACTERISTICS CHANGE, LARGE ENERGETIC FLARES ARE UNLIKELY.

II. THE GEOMAGNETIC FIELD WAS UNSETLED DURING THE PAST 24 HOURS. UNSETLED CONDITIONS SHOULD CONTINUE UNTIL THE 24TH, WHEN LOW ACTIVE LEVELS ARE EXPECTED AS A RESULT OF YESTERDAY'S M7/2B FLARE.

III. EVENT PROBABILITIES 23 AUGUST - 25 AUGUST

CLASS M 5/05 0/5 0

CLASS X 0/05 0/5

PROTON 0/05 0/5

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX 177

PREDICTED 23 - 25 AUGUST 172/168/162

90-DAY MEAN 22 AUGUST 190

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 21 AUGUST 11

ESTIMATED AFR/AP 22 AUGUST 09/11

PREDICTED AFR/AP 23 - 25 AUGUST 12/14 15/18 12/14

SOLTERWARN

BT