

SDF NUMBER 030

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 30 JANUARY 1979

IA. IN TERMS OF FLARE EVENTS, SOLAR ACTIVITY HAS BEEN AT A LOW LEVEL WITH ONLY MINOR CLASS C EVENTS BEING OBSERVED. THE LARGEST WAS A C5 AT 30/1107Z, HOWEVER, DUE TO LIMITED GROUND BASED OBSERVATIONS, OPTICAL CONFIRMATION WAS NOT POSSIBLE. MOST OF THE OTHER EVENTS WERE APPARENTLY ASSOCIATED WITH DEPARTING REGION 1525 (N14W90). THE AREA NEAR THE NE LIMB IS SOMEWHAT COMPLEX AND COMPOSED OF AT LEAST 4 SPOT GROUPS: 1543 (N16E41), 1545 (N09E50), 1547 (N22E52), AND 1550 (N16E54). AN ISOLATED POLE EXISTS BETWEEN 1543 AND 1545. REGIONS ARE ALSO RETURNING ON THE SE LIMB. PLAGE FROM 1548 (S12E66) EXTENDS SE TO THE LIMB. SOME INCREASE IN COMPLEXITY HAS OCCURRED IN 1533 (S26W42).

IB. INFREQUENT CLASS M EVENTS ARE EXPECTED FROM THE REGIONS ROTATING OVER THE WEST LIMB AND FROM THE RETURNING REGIONS ON THE EAST LIMB. MORE ENERGETIC EVENTS ARE POSSIBLE FROM THE AREA AROUND REGIONS 1545 AND 1543 IF NEW DEVELOPMENT OCCURS.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED THE PAST 24 HOURS. THE EXPECTED CORONAL HOLE DISTURBANCE HAS NOT YET APPEARED. THIS DISTURBANCE MAY STILL DEVELOP, CONSEQUENTLY UNSETTLED TO OCCASIONAL ACTIVE CONDITIONS ARE EXPECTED THROUGH THE 31ST. CONDITIONS SHOULD THEN DECREASE TO UNSETTLED TO QUIET THE REMAINDER OF THE PERIOD.

III. EVENT PROBABILITIES 31 JANUARY - 2 FEBRUARY

CLASS M 75/70/70

CLASS X 20/15/15

PROTON 20/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CMF LUX

OBSERVED 30 JANUARY 202

PREDICTED 31 JAN-02 FEBRUARY 202/195/190

90-DAY MEAN 30 JANUARY 179

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 29 JANUARY 09

ESTIMATED AFR/AP 30 JANUARY 08/12

PREDICTED AFR/AP 31 JAN-02 FEBRUARY 18/25 - 10/15 - 09/12

SOLTERWARN