

HFUS 1 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 024

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 24 JANUARY 1980

IA. A CLASS M1/SB FLARE AT 1603Z (MAX) AND FREQUENT CLASS C EVENTS HAVE GIVEN TODAY A MODERATE LEVEL OF SOLAR ACTIVITY. REGION 2247 (S16W40) PRODUCED THE LARGEST AND THE MOST FREQUENT ACTIVITY. THIS REGION IS A COMPOUND OF A VIGOROUS NEW SPOT GROUP THAT EMERGED THROUGH AN OLD REGION WITH A SINGLE SPOT. THE NEW SPOT GROUP APPEARS TO BE ROTATING CLOCKWISE. THE PLAGE AND MAGNETIC STRUCTURE CONTINUE TO GROW MORE COMPLICATED, NUMEROUS CLASS C EVENTS OCCURRED IN REGION 2245 (N12W55) WHERE PLAGE AND SPOT GROWTH NEAR THE LEADER SPOT HAS MADE THIS AREA BECOME SIMILAR TO REGION 2247 BUT OF MUCH SMALLER SPOT AREA. REGION 2258 (S18E70) IS A RETURN OF OLD REGION 2215 AND IS A SMALL CLASS C SPOT GROUP. RADIO EMISSION INDICATES ADDITIONAL ACTIVITY IS IMMINENT AT EAST LIMB.

IB. SOLAR ACTIVITY IS EXPECTED TO INCREASE AS GROWTH CONTINUES IN REGIONS 2245 AND 2247 AND WITH ACTIVE LONGITUDES RETURNING TO EAST LIMB.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. UNSETTLED CONDITIONS ARE EXPECTED BY MIDDAY TOMORROW AND CONTINUING THROUGH THE REMAINDER OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 25-27 JANUARY

CLASS M 60/70/80

CLASS X 10/10/10

PROTON 05/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 JANUARY 178

PREDICTED 25-27 JANUARY 184/190/194

SD-DAY MEAN 24 JANUARY 216

V. GEOMAGNETIC ALINDICES

OBSERVED FREDERICKSBURG 23 JANUARY 05

ESTIMATED AFR/AP 24 JANUARY 04/06

PREDICTED AFR/AP 25-27 JANUARY 11/15 14/18 11/15

SOLTERWARN

BT