

HFUS 1 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 266

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 22 SEPTEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. AN M1.1B FLARE OCCURRED IN REGION 2687 (N11W11) WHICH MAXED AT 0744 UT. NO RADIO BURSTS WERE ASSOCIATED WITH THIS FLARE. AT 0543 UT, A C5 X-RAY EVENT OCCURRED (NO OPTICAL REPORT) WHICH HAD MODERATE INTENSITY TYPE II AND TYPE III RADIO NOISE AND WHICH REACHED 490 FLUX UNITS AT 245 MHZ. RAPID GROWTH IN WHITE LIGHT AND MAGNETIC COMPLEXITY WAS OBSERVED IN REGIONS 2687, 2684 (N18W11) AND 2691 (N05W13) WHICH ALL SHARE A COMMON NEUTRAL LINE. REGION 2693 (N19E62), A C-TYPE GROUP, APPEARED ON THE DISK TODAY. AN ERUPTIVE PROMINENCE NEAR N14 ON THE EAST LIMB NEAR 1940 UT MAY BE SIGNALLING THE RETURN OF OLD ACTIVE REGION 2645, AND THERE IS NEW FLARE AT SE12 NEAR THE RETURNING POSITION OF OLD REGION 2645.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TOMORROW BUT WITH AN INCREASING PROBABILITY OF SIGNIFICANT ACTIVITY BASED ON DEVELOPMENT IN REGIONS 2684, 2687 AND 2691, AND ON THE RETURN OF PREVIOUSLY ACTIVE REGIONS.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED FOR THE PAST 24 HOURS, WITH ACTIVE CONDITIONS FROM 1200-1500 UT. THIS IS A RECURRENT DISTURBANCE ORIGINATING IN A NORTHERN CORONAL HOLE. UNSETLED TO MILDLY ACTIVE CONDITIONS ARE EXPECTED TO CONTINUE TOMORROW AND END ON 24 SEPTEMBER.

III. EVENT PROBABILITIES 23 SEPTEMBER - 25 SEPTEMBER

CLASS M 25/30/35

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 SEPTEMBER 177

PREDICTED 23-25 SEPTEMBER 185/191/195

90-DAY MEAN 22 SEPTEMBER 180

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 21 SEPTEMBER 02

ESTIMATED AFR/AP 22 SEPTEMBER 14/12

PREDICTED AFR/AP 23-25 SEPTEMBER 17/18 - 10/12 - 08/10

SOLIERWARN

BT