

HFUS 1 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 245

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 02 SEPTEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH DURING THE PAST 24 HOURS WITH NEARLY ALL THE FLARES COMING FROM REGION 1272 (S31E26). THIS REGION, WHICH HAS GROWN IN SIZE AND COMPLEXITY AND NOW CONTAINS A WEAK DELTA CONFIGURATION, HAS BEEN PRODUCING LARGE C-CLASS AND SMALL M-CLASS FLARES REGULARLY - BUT PRODUCED AN M9 X-RAY FLARE (SB OPTICALLY) AT 02/0556Z. REGIONS 1271/1276 (N17E20/N17E11) HAVE BEEN RELATIVELY QUIET BUT REGION 1276 HAS PRACTICALLY TRIPLED IN SIZE SINCE YESTERDAY AND THE TWO REGIONS APPEAR TO BE COLLIDING.

IB. FREQUENT C-CLASS FLARES AND OCCASIONAL M-CLASS FLARES ARE EXPECTED DURING THE NEXT 24 HOURS. HOWEVER, THE APPARENT RAMMING TOGETHER OF REGIONS 1271 AND 1276 IS ALMOST CERTAIN TO PRODUCE A MAJOR EVENT AND THAT EVENT IS LIKELY IN THE NEXT DAY OR TWO.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED DURING THE PAST 24 HOURS, ALTHOUGH A SINGLE SUBSTORM BEGINNING AT 02/0700Z PRODUCED A K-VALUE OF 5. THE FIELD IS EXPECTED TO BE GENERALLY UNSETTLED THROUGH THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 03 SEPTEMBER - 05 SEPTEMBER

CLASS M 85/90/80

CLASS X 50/50/40

PROTON 25/30/35

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 SEPTEMBER 172

PREDICTED 03-05 SEPTEMBER 178/182/186

90-DAY MEAN 02 SEPTEMBER 131

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 01 SEPTEMBER 22

ESTIMATED AFR/AP 02 SEPTEMBER 14/16

PREDICTED AFR/AP 03-05 SEPTEMBER 13/15 - 10/12 - 08/10

SOLTERWARN

HFUS 1 BOU 3222 02

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 245

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 02 SEPTEMBER 1979

I. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE. REGION 1966 (S19E54) PRODUCED A M1/1B AT 01/2329Z. A 140 F.U. BURST WAS RECORDED AT 2700 MHZ. CULGOORA REPORTED A WEAK SLOW DRIFT TYPE TWO BURST. BEFORE THE X-RAY FLUX FROM THIS FLARE DECAYED, A SLOW RISE BEGAN AT 0130Z AND REACHED M1 AT 0200Z. NO OPTICAL REPORT WAS RECEIVED; HOWEVER, X-RAY PROFILE WOULD INDICATE A BEHIND THE LIMB FLARE.

FOR THE DISK, REGIONS 1966 AND 1962 (N20E25) HAVE THE MOST SIGNIFICANT H-ALPHA STRUCTURE. REGIONS 1958 (N18W10) AND 1965 (N12W13) FORM A LARGE H-ALPHA COUPLETT BUT BOTH ARE SIMPLE IN MAGNETIC STRUCTURE.

II. SOLAR ACTIVITY IS EXPECTED TO BE LOW, PRIMARILY CONFINED TO CLASS C FLARES.

III. THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY UNSETLED. THESE CONDITIONS ARE EXPECTED TO CONTINUE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 23 SEPTEMBER - 05 SEPTEMBER

CLASS M 30/30/30

CLASS X 01/01/01

PREDICTED 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 SEPTEMBER 177

PREDICTED 03-05 SEPTEMBER 175/173/175

90-DAY MEAN 22 SEPTEMBER 172

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 01 SEPTEMBER 07

ESTIMATED AFR/AP 02 SEPTEMBER 07/10

PREDICTED AFR/AP 03-05 SEPTEMBER 06/11 - 06/10 - 10/10

SOLTERWARN

BT