

HFUS 1 BOU 152200  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 258

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 15 SEPTEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN LOW. A C6 X-RAY EVENT (0951Z MAX) WAS THE LARGEST EVENT BUT NO OPTICAL REPORT HAS YET BEEN RECEIVED FOR THIS BURST. A IN/C4 (1924Z X-RAY MAX) OCCURED IN REGION 1294 (N35E44). REGION 1294 HAS HAD A STRONG GROWTH IN SUNSPOT STRUCTURE AND NOW CONTAINS A DELTA. REGION 1295 (S27E46) STILL RETAINS AN ISOLATED POLE BUT HAS BEEN STABLE. THE OTHER TEN REGIONS WITH SUNSPOT STRUCTURE ARE SIMPLE AND CURRENTLY STABLE.

IB. SOLAR ACTIVITY IS EXPECTED TO INCREASE WITH CONTINUED DEVELOPMENT IN REGION 1294. ADDITIONALLY, LONGITUDES CONTAINING NUMEROUS REGIONS LAST ROTATION ARE BEGINNING TO CROSS EAST LIMB.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. QUIET TO UNSETTLED CONDITIONS ARE EXPECTED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 16 - 18 SEPT

CLASS M 40/50/60

CLASS X 01/05/10

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 SEPT 151

PREDICTED 16 - 18 SEPT 160/167/175

90-DAY MEAN 15 SEPT 136

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 14 SEPT 04

ESTIMATED AFR/AP 15 SEPT 02/04

PREDICTED AFR/AP 16 - 18 SEPT 06/04 - 10/04 - 06/06

SOLTERWARN

BT

HFUS 1 BOU 152200  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO  
SDF NUMBER 258

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 15 SEPTEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. AN M8 X-RAY EVENT PROBABLY FROM REGION 1994 (NE03) WAS OBSERVED WITH FLARE MAXIMUM AT 1032Z. THIS REGION HAS PRODUCED SURGING DURING THE PAST 24 HOURS. A LARGE H-TYPE SPOT HAS ROTATED ON TO THE DISK AT THIS LOCATION DURING THE LAST FEW HOURS. THIS REGION IS OLD 1943 THAT PRODUCED SIGNIFICANT SOLAR ACTIVITY LAST ROTATION. THE COMPLEX REGION 1979 (N12W30) - REGION 1982 (N08W29) CONTINUES TO BE ACTIVE WITH REGION 1982 PRODUCING AN M2/SN WITH MAX TIME AT 0158Z. AN ACTIVE DARK FILAMENT AND AN ARCH FILAMENT SYSTEM WERE ALSO PRESENT IN THIS COMPLEX AND CONTINUES WITH A HIGH M AND X-CLASS FLARE POTENTIAL. OTHER REGIONS WITH MODERATE TO HIGH FLARE POTENTIAL ARE REGION 1986 (N20E22), REGION 1989 (S12E45), REGION 1991 (N32E39) AND NEW REGION 1995 (S12E22). ALL OTHER DISK AND LIMB FEATURES APPEAR QUITE AND STABLE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH WITH THE HIGH PROBABILITY OF BOTH M AND X-CLASS X-RAY EVENTS FROM 1994 AND THE 1979/82 COMPLEX.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS AND IS EXPECTED TO BE UNSETTLED TO ACTIVE DURING THE NEXT 3 DAY FORECAST PERIOD.

III. EVENT PROBABILITIES 16 SEPTEMBER - 18 SEPTEMBER

CLASS M 90/90/90

CLASS X 50/50/50

PROTON 40/10/10

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 SEPT 192

PREDICTED 16 SEPT - 18 SEPT 196/200/205

90-DAY MEAN 15 SEPT 170

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 14 SEPT 06

ESTIMATED AFR/AP 15 SEPT 09/10

PREDICTED AFR/AP 16 SEPT - 18 SEPT 15/25 20/30 20/20

SOLTERWARN

BT

17/20 18/90 19/15 20/30