

HFUS 1 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 257

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 14 SEPT 1978

IA. SOLAR ACTIVITY HAS BEEN LOW. CLASS C SUBFLARES HAVE OCCURRED IN REGIONS 1292 (N29E59), 1294 (N34E57), 1284 (N30W34) AND 1286 (N17E00). THE COMPLEX OF REGIONS IN THE NORTHEAST, COMPRISED OF 1294, 1292, 1287 (N36E38) AND 1289 (N28E43) HAS GROWN CONSIDERABLY, ESPECIALLY REGION 1294. REGION 1295 (S22E55), THOUGH NOT PARTICULARLY ACTIVE, IS MAGNETICALLY COMPLEX AND APPEARS TO HAVE POTENTIAL AS A SOURCE OF MAJOR FLARES.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE WITH INCREASING CHANCES OF MAJOR FLARES IN THE NORTHEAST AND IN REGION 1295. REGION 1262, THE SOURCE OF A NUMBER OF MINOR FLARES, IS DUE TO RETURN OVER EAST LIMB AT S17, ALONG WITH FOUR ADDITIONAL MINOR REGIONS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. IT IS EXPECTED TO REMAIN SO THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 15 SEPT - 17 SEPT

CLASS M 25/30/35

CLASS X 01/03/05

PROTON 01/01/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 SEPT 144

PREDICTED 15 - 17 SEPT 150/156/164

90-DAY MEAN 14 SEPT 136

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 13 SEPT 05

ESTIMATED AFR/AP 14 SEPT 04/05

PREDICTED AFR/AP 15 - 17 SEPT 05/09 - 05/08 - 05/08

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SDF NUMBER 257

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 14 SEPTEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN HIGH FOR THE PAST 24 HOURS. A LONG  
DURATION CLASS X-2 XRAY EVENT MAXED AT 0802 UT AND IS TENTATIVELY  
ASSOCIATED WITH FLARE LOOPS OBSERVED BEYOND THE EAST LIMB FROM  
N04 TO N10. THREE SMALL FLARES AND A LIMB SURGE WHICH OCCURED  
SIMULTANEOUSLY WITH THE X2 EVENT HAVE BEEN DISCOUNTED AS ITS  
ORIGIN. THREE M CLASS X-RAY EVENTS OCCURED TODAY AS FOLLOWS: M3,  
0327 UT MAX, UNASSOCIATED, M1/2N, 1708 UT MAX, REGION 1980 (N10W55),  
AND M2/1B, 1937 UT MAX, REGION 1982 (N08W15). REGION 1982  
CONTINUED DEVELOPING THROUGH THE DAY AND IS MAGNETICALLY VERY  
COMPLEX (BETA-GAMMA-DELTA) WITH HIGH GRADIENTS. THE LOOP-PRODUCING  
REGION BEYOND THE EAST LIMB WAS NUMBERED 1994, AND IS PRESUMED TO  
BE RETURNING REGION 1943 WHICH WAS ACTIVE (3M AND 2X CLASS FLARES)  
LAST ROTATION. TWO OTHER NEW REGIONS WERE IDENTIFIED TODAY.  
IB. SOLAR ACTIVITY IS EXPECTED TO BE HIGH FOR THE NEXT 72 HOURS  
OWING PRINCIPALLY TO REGIONS 1982 AND 1994. REGION 1980 IS  
ALSO CAPABLE OF AT LEAST M-CLASS XRAY ACTIVITY.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS.  
UNSETTLED CONDITIONS ARE EXPECTED NOW AS THE EARTH BECOMES  
ALIGNED WITH NEW CORONAL STRUCTURES. ANY MAGNETIC EFFECTS FROM THE  
EAST LIMB X-2 EVENT ARE NOT EXPECTED BEFORE SEPTEMBER 18, BUT A  
SIGNIFICANT CENTRAL DISK EVENT COULD BRING ACTIVE OR STORM GEOMAGNETIC  
CONDITIONS BEFORE THEN. A MINOR PROTON EVENT IS EXPECTED EARLY ON  
15 SEPTEMBER WITH A MAXIMUM FLUX OF 36 PROTONS OF GREATER THAN 10  
MEV ENERGY OCCURING LATER IN THE DAY. A DAYTIME PCA OF 2.5 DB IS  
PREDICTED.

III. EVENT PROBABILITIES 15 SEPTEMBER - 17 SEPTEMBER

CLASS M 90/90/90

CLASS X 30/35/40

PROTON 05/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 SEPTEMBER 199

PREDICTED 15 - 17 SEPTEMBER 207/210/210

90-DAY MEAN 14 SEPTEMBER 169

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 13 SEPTEMBER 06

ESTIMATED AFR/AP 14 SEPTEMBER 05/07

PREDICTED AFR/AP 15 - 17 SEPTEMBER 10/15 10/25 15/30

SOLTERWARN

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