

HFUS-1 BOU 171300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 260A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 17 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
16/1200Z TO 17/1200Z: SOLAR ACTIVITY HAS BEEN VERY LOW. THE  
LARGEST XRAY EVENT DURING THE PAST 24 HOURS WAS A CLASS C1 AT  
162038Z (MAX) WITH NO OPTICAL CORRELATION. REGION 3909 (N18W26)  
HAS AN ARCH FILAMENT SYSTEM AND IS FLUCTUATING IN BRIGHTNESS.  
REGION 3906 (N02E10) ALSO HAS AN ARCH FILAMENT SYSTEM AND  
REGION 3905 (S16E10) IS FLUCTUATING IN BRIGHTNESS. THE OTHER  
DISK FEATURES ARE QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE  
LOW. HOWEVER, DESPITE THE CURRENT LULL IN ACTIVITY, THE REGIONS  
MENTIONED ABOVE, ALONG WITH REGION 3907 (S10E34), ARE CAPABLE  
OF AN ISOLATED M EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS  
GENERALLY UNSETTLED DURING THE PAST 24 HOURS. AT 170900Z, THE  
FIELD WENT INTO A VERY PRONOUNCED EXCURSION AND HAS FLUCTUATED  
BROADLY SINCE THAT TIME. THIS IS INTERPRETED AS A SUBSTORM AND  
SHOULD BE A SHORT LIVED EXCURSION. GENERALLY ACTIVE CONDITIONS  
SHOULD DOMINATE THE FIELD FOR THE NEXT 24 TO 48 HOURS FOLLOWING  
THE END OF THIS SUBSTORM.

III. EVENT PROBABILITIES 18 SEP-20 SEP

CLASS M 50/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 SEP 146

ESTIMATED 17 SEP 149

PREDICTED 18 SEP-20 SEP 151/152/154

90 DAY MEAN 16 SEP 164

V. GEOMAGNETIC A INDICES

OBSERVED AFR 15 SEP 012 AP 16 SEP 012

ESTIMATED AFR 16 SEP 011 AFR/AP 17 SEP 018/020

PREDICTED AFR/AP 18 SEP-20 SEP 015/015-015/020-012/020

SOLTERWARN

BT

HFUS 3 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 260B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 17 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
17/1200Z TO 17/2100Z: SOLAR ACTIVITY REMAINS LOW. THE LARGEST  
EVENT DURING THE PERIOD WAS A C3/SB FROM REGION 3908 (N20E34)  
AT 1401Z MAXIMUM. MINOR FLARES HAVE ALSO BEEN OBSERVED FROM  
REGIONS 3905 (S16E06) AND 3910 (N14E48). REGIONS 3908 AND 3909  
ARE LINKED BY A COMMON NEUTRAL LINE AND HAVE DISPLAYED SOME  
INTERACTION. BOTH HAVE HAD SOME SPOT GROWTH REPORTED ALONG WITH  
POINT BRIGHTENINGS AND PLAGE FLUCTUATIONS. REGION 3907 (S11E29)  
HAS LOST ITS DELTA MAGNETIC CONFIGURATION, BUT IS DISPLAYING  
SPOT ROTATION AND FRAGMENTATION. THIS REGION HAS BEEN QUIET  
DURING THE PERIOD. REGION 3901 (S14W30) HAS DECAYED VERY  
RAPIDLY DURING THE PAST NINE HOURS AND NOW IS A SIMPLE A-TYPE  
SPOT GROUP. NO NEW REGIONS WERE SEEN TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW,  
HOWEVER, INTERACTION BETWEEN REGIONS 3908 AND 3909 COULD  
PRODUCE AN ISOLATED M-CLASS EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD  
RETURNED TO UNSETTLED LEVELS FOLLOWING THIS MORNINGS (1200Z)  
K-INDEX OF FIVE OBSERVED AT BOULDER. DURING THIS SAME TIME  
PERIOD THE FREDERICKSBURG MAGNETOMETER RECORDED A THREE ACTIVE  
CONDITIONS ARE FORECAST THROUGH THE NEXT 48 HOURS FOLLOWED BY  
UNSETTLED LEVELS ON THE LAST DAY.

III. EVENT PROBABILITIES 18 SEP-20 SEP

CLASS M 50/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 SEP 150

PREDICTED 18 SEP-20 SEP 151/152/154

90 DAY MEAN 17 SEP 164

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 SEP 012/012

ESTIMATED AFR/AP 17 SEP 012/015

PREDICTED AFR/AP 18 SEP-20 SEP 015/015-015/020-012/020

SOLTERWARN

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