

HFUS 1 BOU 101300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 069A  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 10 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/1200Z TO 10/1200Z: SOLAR ACTIVITY WAS AT LOW TO MODERATE LEVELS OF ACTIVITY DURING THIS PERIOD. THE ONLY M-CLASS EVENT OF THE DAY WAS AN M2/1B FROM NEW REGION 3640 (N03E75) AT 10/0314Z. THIS REGION IS STILL TOO CLOSE TO THE EAST LIMB TO DETERMINE ITS FUTURE FLARE POTENTIAL. THREE OTHER NEW REGIONS WERE ALSO NUMBERED TODAY, BUT NONE OF THEM APPEARS VERY COMPLEX AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT LOW TO OCCASIONALLY MODERATE LEVELS. THE DOZEN REGIONS ON THE SUN NOW MIGHT PRODUCE ONE OR TWO SMALL M-CLASS EVENTS PER DAY AT MOST, BUT AN X-CLASS EVENT IS HIGHLY IMPROBABLE. WE EXPECT A SLOW OVERALL DECLINE IN SOLAR ACTIVITY OVER THE NEXT SEVERAL DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT UNSETTLED TO ACTIVE LEVELS DURING THE LAST 24 HOURS. THESE LEVELS OF ACTIVITY ARE FORECAST TO CONTINUE DURING THE NEXT 3 DAYS. THE STRONGEST EFFECTS OF A RECURRENT CORONAL HOLE PASSAGE WILL BE FELT ON 12 MARCH.

III. EVENT PROBABILITIES 11 MAR-13 MAR

CLASS M 50/60/60

CLASS X 05/10/10

PROTON 01/02/02

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 MAR 195

ESTIMATED 10 MAR 190

PREDICTED 11 MAR-13 MAR 186/182/178

90 DAY MEAN 09 MAR 197

V. GEOMAGNETIC A INDICES

OBSERVED AFR 08 MAR 010 AP 09 MAR 016

ESTIMATED AFR 09 MAR 018 AFR/AP 10 MAR 015/014

PREDICTED AFR/AP 11 MAR-13 MAR 010/012-015/017-010/012

SOLTERWARN

BT

HXUS BOU 101300  
PREDM 05011 06012 06013  
PREDX 00511 01012 01013  
PREDP 00111 00212 00213  
PCAFT 00111  
TENCM 18611 18212 17813  
AFRED 01011 01512 01013  
AFAPF 01211 01712 01213  
KKK 33222 33222 33223  
BT

HFUS 3 BOU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 069B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 10 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 10/1200Z TO 10/2100Z: SOLAR ACTIVITY HAS BEEN LOW SINCE THE M2/1B FLARE AT 10/0314UT FROM REGION 3640 (N03E69). A C5/1B FLARE WAS REPORTED FROM REGION 3635 (S10W34) AT 10/1849UT. THIS SMALL X-RAY FLARE PRODUCED A STRONG SHORTLIVED TYPE IV AND MODERATE TYPE II. NO TRAILER SPOTS HAVE BEEN OBSERVED IN EITHER REGION 3639 (N14E66) OR 3640. REGION 3639 CONTAINS A MODERATELY LARGE ASYMMETRIC LEADER SPOT AND 3540 A SOMEWHAT SMALLER SYMMETRIC LEADER. SMALL REGIONS 3641 (N13W68) AND 3642 (S11E68) HAVE BEEN NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW WITH A POSSIBILITY OF CLASS M FLARES BEING OBSERVED FROM CURRENT DISK REGIONS. THE LACK OF SIGNIFICANT SUNSPOT STRUCTURE IN REGIONS 3639 AND 3640 IMPLIES THEY ARE NOT CURRENTLY CAPABLE OF FREQUENT FLARE PRODUCTION. NO SIGNIFICANT REGIONS ARE EXPECTED TO RETURN DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD CONTINUES AT HIGHLY UNSETTLED TO SLIGHTLY ACTIVE LEVELS. UNSETTLED CONDITIONS SHOULD PREVAIL THROUGH TOMORROW. ON 12 MARCH THE EARTH SHOULD BEGIN TO COME UNDER THE INFLUENCE OF A HIGH SPEED SOLAR WIND STREAM FROM A CORONAL HOLE IN THE SOUTHWEST QUADRANT. THIS HOLE HAS INTENSIFIED SINCE LAST ROTATION. THE HOLE IS SEVERAL DAYS WIDE IN LONGITUDINAL EXTENT THEREFORE ACTIVE CONDITIONS SHOULD BE EXPERIENCED THROUGH 14 MARCH.

III. EVENT PROBABILITIES 11 MAR-13 MAR

CLASS M 50/40/40

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 MAR 184

PREDICTED 11 MAR-13 MAR 178/170/167

90 DAY MEAN 10 MAR 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 MAR 016/018

ESTIMATED AFR/AP 10 MAR 016/018

PREDICTED AFR/AP 11 MAR-13 MAR 012/012-020/025-018/020

SOLTERWARN

BT

PLW

HXUS BOU 102200

PREDM 05011 04012 04013

PREDX 00511 00512 00513

PREDP 00111 00112 00113

PCAF 00111

TENCM 17811 17012 16713

AFRED 01211 02012 01813

AFAPF 01211 02512 02013

PT