

HFUS 1 BOU 231300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 357A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 23 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z TO 23/1200Z: SOLAR ACTIVITY HAS BEEN LOW. NO OPTICAL DATA WERE RECEIVED TODAY. REGION 4033 (S14E50) IS VISIBLE AS A MODERATE SIZE CLASS F GROUP WITH SOME MIXED POLARITIES. THE WEST LIMB, INCLUDING REGIONS 4025 (S03W99) AND 4026 (S09W87), HAS DISPLAYED ACTIVE SURGING WITH SOME SURGES EXTENDING FAR INTO THE OUTER CORONA. HOWEVER, NO SIGNIFICANT X-RAY ENHANCEMENTS HAVE BEEN OBSERVED WITH THESE WEST LIMB EJECTIONS. A SMALL REGION APPEARS TO BE ROTATING OVER THE SOUTHEAST LIMB. TWO FILAMENTS HAVE DISRUPTED - THE FIRST DISAPPEARED PRIOR TO 22/1700Z AND WAS LOCATED BETWEEN N15-23E24-32, THE SECOND FADED NEAR 23/0000Z AND WAS LOCATED BETWEEN S34-16W07-12. THE LATTER WAS PRECEDED BY A WEAK TYPE II AT 22/2316Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BECOME MODERATE FOR THE FORECAST PERIOD. REGION 4033 APPEARS CAPABLE OF ISOLATED CLASS M FLARES AND THERE IS A VERY SLIGHT POSSIBILITY OF A CLASS X FLARE FROM THIS AREA. PREVIOUSLY ACTIVE OR EMERGING LONGITUDES ARE DUE BACK TO THE VISIBLE DISK OVER THE NEXT FIVE DAYS BUT POTENTIAL FLARE ACTIVITY FROM THESE AREAS CANNOT BE CONFIDENTLY PREDICTED.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE FOR THE PAST 24 HOURS. THIS ACTIVITY HAS CONSISTED OF STRONG SUBSTORMS INTERSPERSED THROUGH THE PERIOD. ACTIVE TO NEAR MINOR STORM CONDITIONS SHOULD BE EXPERIENCED FOR THE NEXT THREE DAYS IN RESPONSE TO RECENT FLARE ACTIVITY, A FAVORABLY LOCATED CORONAL HOLE, AND/OR RECENT FILAMENT DISRUPTIONS. THE MOST SEVERE DISTURBANCE SHOULD BE EXPERIENCED BETWEEN 25-25 DEC.

III. EVENT PROBABILITIES 24 DEC-26 DEC

CLASS M	30/60/50
CLASS X	05/05/05
PROTON	05/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	22 DEC	161
ESTIMATED	23 DEC	165
PREDICTED	24 DEC-26 DEC	168/175/180
90 DAY MEAN	22 DEC	179

V. GEOMAGNETIC A INDICES

OBSERVED AFR	21 DEC	226	AP 22 DEC	740
ESTIMATED AFR	22 DEC	332	AFR/AP 23 DEC	318/022
PREDICTED AFR/AP	24 DEC-26 DEC	320/022-325/225-030/025		
SOLARFLARE WARN				
BT				

BT

HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 357B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 23 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/1200Z TO 23/2100Z: SOLAR ACTIVITY HAS BEEN LOW. ACTIVITY HAS BEEN RESTRICTED TO SMALL C CLASS FLARES WITHOUT OPTICAL ASSOCIATIONS. WEATHER CONDITIONS AT THE OBSERVATORIES HAVE HAMPERED ALL ASPECTS OF OBSERVING AND THE RESULTING ANALYSIS. TWO NEW REGIONS WERE NUMBERED TODAY. REGION 4235(N08W04) IS A B CLASS GROUP OF ABOUT 10 MILLION TESLA APPEARING ON THE DISK IN RECENT HOURS. REGION 4239(S14E75) IS AN A CLASS SPOT ARRIVING IN PLACE OF OLD REGION 4205.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE LOW TO MODERATE WITH MOST ACTIVITY EXPECTED FROM REGION 4233(S15E54). A MAJOR FLARE SHOULD BE POSSIBLE FROM THIS REGION.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. ACTIVE TO INTERMITTENT MINOR STORM CONDITIONS ARE EXPECTED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES 24 DEC-26 DEC

CLASS M 80/60/50

CLASS X 05/05/05

PROTON 05/01/31

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 DEC 166

PREDICTED 24 DEC-26 DEC 168/175/180

90 DAY MEAN 23 DEC 179

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 DEC 030/040

ESTIMATED AFR/AP 23 DEC 023/026

PREDICTED AFR/AP 24 DEC-26 DEC 020/023-025/025-030/030

SOLTERWARN

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