

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 (S02W09) 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 N15-23E74-32, THE SECOND FADED  
NEAR 23/0000Z AND WAS LOCATED BETWEEN S04-10W07-12. 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 FIARES 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 23-25  
DEC.

III. EVENT PROBABILITIES 24 DEC-25 DEC

CLASS M 30/60/50

CLASS X 05/05/35

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 026 AP 22 DEC 040

ESTIMATED AFR 22 DEC 032 AFR/AP 23 DEC 018/020

PREDICTED AFR/AP 24 DEC-26 DEC 020/022-025/025-030/025

SOLTFWARN

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BT  
HFUS 3 ROU 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 MILLIONTHS APPEARING ON THE DISK IN  
RECENT HOURS. REGION 4030(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 4033(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 05/01/01

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 023/020

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

SOLTERWARN

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