

HFUS 1 BOU 161300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 350A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 16 DEC 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
15/1200Z TO 16/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION  
3492 (N19W105) PRODUCED AN M3/SB/SPRAY AT 15/1949UT. THIS  
EVENT WAS ACCCOMPANIED BY A 190 FLUX UNIT BURST AT 10CM AND A  
STRONG SHORT WAVE FADE. FAINT LIMB SURGING AND CORONAL RAIN  
CONTINUE TO BE OBSERVED OVER THE NORTHWEST LIMB. REGION 3504  
(S15W52) IS BEGINNING TO DECAY AND SIMPLIFY. ONLY SUBFLARES  
ARE BEING PRODUCED BY THIS STRONGLY LEADER DOMINANT REGION.  
3507 (S08W66) IS EXHIBITING A LESSER DECAY TREND IN WHITE LIGHT  
AND IS ALSO SUBFLARING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BECOME LOW.  
WITH MOST OF THE POTENTIALLY ACTIVE REGIONS BEYOND THE LIMB,  
AND DECAY BEING OBSERVED IN MOST DISK REGIONS, CLASS M FLARE  
PRODUCTION SHOULD BE VERY INFREQUENT. NO PREVIOUSLY ACTIVE  
REGIONS ARE EXPECTED TO RETURN TO THE EAST LIMB UNTIL THE END  
OF THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN QUIET TO SLIGHTLY UNSETLED. CURRENT 10830 CORONAL HOLE  
DATA ARE AMBIGUOUS IN THAT AN AREA IN THE SOUTHWEST QUADRANT  
DISPLAYS REDUCED NETWORK STRUCTURE IN AN UNIPOLAR CELL, BUT IT  
APPEARS TRANSIENT AND VAGUE. THEREFORE, QUIET TO SLIGHTLY  
UNSETLED CONDITIONS ARE FORECAST TO CONTINUE FOR THE NEXT  
THREE DAYS.

III. EVENT PROBABILITIES 17 DEC-19 DEC

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 DEC 178

ESTIMATED 16 DEC 155

PREDICTED 17 DEC-19 DEC 150/142/148

90 DAY MEAN 15 DEC 220

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 DEC 007 AP 15 DEC 005

ESTIMATED AFR 15 DEC 004 AFR/AP 16 DEC 006/005

PREDICTED AFR/AP 17 DEC-19 DEC 008/008-008/008-008/008

SOLTERWARN

BT

HFXS 3 BOU 162200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 350B  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 16 DEC 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 16/2100Z: SOLAR ACTIVITY HAS BEEN LOW. THE PRINCIPAL ACTIVITY HAS BEEN LIMITED TO A C7 XRAY EVENT ASSOCIATED WITH EJECTA TO .9SR, AND ASR, AND FOLLOWED BY LOOP FORMATION AT NW20. THIS APPEARS TO BE A SECOND OCCURANCE OF MAJOR ACTIVITY FROM REGION 3492(N19W112) SINCE THIS REGION HAS PASSED BEHIND THE WEST LIMB. REGIONS OF SIGNIFICANCE ON THE DISK ARE LIMITED TO 3504(S15W59) AND 3507(S08W75), D AND E CLASS GROUPS RESPECTIVELY BOTH OF WHICH HAVE BEEN SIMPLIFYING IN W.L. AND IN MAG. IN RECENT HOURS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW FOR THE FORECAST PERIOD. ONLY SIMPLE REGIONS ARE VISIBLE ON THE DISK. THEIR COMBINED POTENTIAL FOR LARGE FLARES IS NOT SIGNIFICANT. ACTIVE RETURNING REGIONS ARE NOT EXPECTED WITHIN THE PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET UNTIL THE MOST RECENT REPORT. A K-INDEX OF 3 WAS REACHED DUE TO A VERY BRIEF INTERVAL OF ACTIVITY. QUIET CONDITIONS ARE EXPECTED TO PERSIST WITH POSSIBLE BRIEF PERIODS AT UNSETTLED LEVELS.

III. EVENT PROBABILITIES 17 DEC-19 DEC

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 DEC 163

PREDICTED 17 DEC-19 DEC 150/142/148

90 DAY MEAN 16 DEC 219

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 DEC 006/005

ESTIMATED AFR/AP 16 DEC 006/006

PREDICTED AFR/AP 17 DEC-19 DEC 008/008-008/008-008/008

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HFXS BOU 162200  
PREDM 02017 02018 02019  
PREDX 00117 00118 00119  
PREDP 00117 00118 00119  
PCAFT 00117  
TENCM 15017 14218 14819  
AFRED 00817 00818 00819  
AFAPF 00817 00818 00819  
BT