

HFUS 1 BOU 211300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 294A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 21 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
20/1200Z TO 21/1200Z: SOLAR ACTIVITY HAS REMAINED LOW. THE  
LARGEST EVENT WAS A C7 (X-RAY MAX AT 0746Z) ASSOCIATED WITH A  
1N IN REGION 3955 (S09E50) AND A SN IN REGION 3954 (S07E30).  
THE FLARE HAD SEVERAL ERUPTIVE CENTERS, STARTING IN THE LEADER  
OF REGION 3955 AND EXTENDING WESTWARD INTO REGION 3954. THE  
BULK OF THE FLARE EMISSION WAS ALONG THE FILAMENT CHANNEL  
SEPARATING THESE TWO REGIONS. THE COMBINED EMISSION WOULD HAVE  
MADE THE FLARE A 2N. ONLY MINOR RADIO BURSTS OCCURRED WITH THIS  
FLARE. REGION 3955 HAS HAD A STRONG GROWTH IN BOTH AREA AND  
NUMBER OF SUNSPOTS. LEARNMOTH MAG ANALYSIS INDICATES THE  
PROBABLE EMERGENCE OF A DELTA CONFIGURATION IN THE TRAILER  
SECTION. REGION 3958 (N10E00) CONTAINS ARCH FILAMENTS AND  
CONTINUES ITS GROWTH. OTHER DISK REGIONS ARE STABLE. A LARGE  
SPOT AND MODERATE INTENSITY PLAGE, ACCOMPANIED BY SURGING, IS  
CROSSING THE LIMB AT NE13. THIS IS THE RETURN OF OLD REGION  
3922; WHICH PRODUCED TWO CLASS M EVENTS AND NUMEROUS LESSER  
FLARES LAST ROTATION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
TRANSIT TO A MODERATE LEVEL WITHIN THE NEXT 24-36 HOURS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED. THE FIELD IS EXPECTED TO REMAIN UNSETTLED UNTIL  
THE LATTER PART OF 23 OCTOBER. THE FIELD IS THEN EXPECTED TO BE  
ACTIVE TO MINOR STORM LEVEL; RESPONDING TO THE FILAMENT WHICH  
ERUPTED ON 20 OCTOBER AND THE HIGH SPEED STREAM FROM A SOUTHERN  
CORONAL HOLE.

III. EVENT PROBABILITIES 22 OCT-24 OCT

CLASS M	40/60/70
CLASS X	02/05/05
PROTON	01/01/05
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	20 OCT	149
ESTIMATED	21 OCT	158
PREDICTED	22 OCT-24 OCT	169/178/187
90 DAY MEAN	20 OCT	158

V. GEOMAGNETIC A INDICES

OBSERVED AFR	19 OCT	017	AP 20 OCT	017
ESTIMATED AFR	20 OCT	017	AFR/AP 21 OCT	009/012
PREDICTED AFR/AP	22 OCT-24 OCT	010/015-020/020-035/025		

SOLTERWARN

BT

HXUS BOU 211300  
PREDM 04022 06023 07024  
PREDX 00222 00523 00524  
PREDP 00122 00123 00524  
PCAF 00122  
TFNCM 16922 17823 18724  
AFRED 01022 02023 03524  
AFAPF 01522 02023 02524  
KKK 22343 32233 34433  
BT

NNNN CVZGVZLVZO UU

KBOU

HFUS 3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
OF NUMBER 294B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 21 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
21/1200Z TO 21/2100Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 9  
HOURS. REGION 3955 (S10E44) APPEARS THREATENING BUT NO FLARES  
HAVE BEEN REPORTED FROM THERE SINCE 0740Z THIS MORNING. REGION  
3958 (N10W07) HAS CONTINUED TO GROW BUT HAS ALSO REMAINED QUIET  
DURING RECENT HOURS. NEW REGION 3960 (N13E73), NOW SEEN TO BE A  
C-TYPE GROUP, PRODUCED SOME SMALL FLARE AND SURGE ACTIVITY. AN  
INVERSION-LINE FILAMENT EXTENDING FROM APPROXIMATELY S15W10 TO  
S30E30 AT 1500Z HAD ALMOST COMPLETELY DISSIPATED BY FORECAST  
TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
BECOME MODERATE. IF DEVELOPMENT CONTINUES, REGION 3955 SHOULD  
BEGIN PRODUCING SIGNIFICANT FLARES WITHIN THE NEXT 36 HOURS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED FOR THE PAST 9 HOURS. THE FIELD IS EXPECTED TO  
REMAIN MOSTLY UNSETTLED UNTIL LATE ON 23 OCTOBER WHEN MINOR  
STORM CONDITIONS ARE EXPECTED TO COMMENCE IN RESPONSE TO A  
HIGH-SPEED SOLAR WIND STREAM AND A FILAMENT ERUPTION EVENT.

III. EVENT PROBABILITIES 22 OCT-24 OCT

CLASS M 40/60/70

CLASS X 02/05/05

PROTON 01/01/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 OCT 163

PREDICTED 22 OCT-24 OCT 169/173/187

90 DAY MEAN 21 OCT 158

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 OCT 016/017

ESTIMATED AFR/AP 21 OCT 008/012

PREDICTED AFR/AP 22 OCT-24 OCT 010/015-020/020-035/040

SOLTERWAR N

BT

NNNN SV

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