

HFUS 1 BOU 211300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 325A

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

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
20/1200Z TO 21/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. THREE M1  
X-RAY FLARES OCCURRED WITH MAXIMA AT 0640Z, 0927Z, AND 1022Z.  
THE FIRST WAS A LONG-LIVED EVENT. TWO SB FLARES IN REGION 3994  
(S12W21) AND A SN FLARE IN REGION 3987 (S12W85) ERUPTED AT THE  
RISE PHASE OF THE X-RAY EVENT. HOWEVER, ALL OPTICAL MAXIMA  
OCCURRED WELL AHEAD OF THE X-RAY MAXIMUM. NO OPTICAL FLARE  
REPORTS WERE RECEIVED FOR THE LATTER TWO CLASS M EVENTS. REGION  
3994 IS LARGE AND COMPLEX; SLOW GROWTH CONTINUES IN THIS  
REGION. ITS PLAGE HAS BEEN MODERATE IN INTENSITY AND HAS  
MAINTAINED NEAR FLARE INTENSITY FOR EXTENDED PERIODS. EVEN  
THOUGH REGION 3994 WILL DOMINATE IN PRODUCING SIGNIFICANT  
FLARES, LESSER FLARES ARE EXPECTED FROM REGIONS 3997 (S08E30),  
3998 (N12E40), 4000 (S21E68), AND 4001 (N10W15).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
REMAIN MODERATE WITH REGION 3994 CAPABLE OF PRODUCING A CLASS X  
FLARE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
VARIED FROM QUIET TO ACTIVE CONDITIONS. UNSETTLED TO SLIGHTLY  
ACTIVE CONDITIONS ARE EXPECTED TO CONTINUE. THE FIELD IS  
EXPECTED TO BECOME GENERALLY ACTIVE THE LATTER PART OF 24  
NOVEMBER AS REGION 3994 REACHES A FAVORABLE GEOMETRIC LOCATION.

III. EVENT PROBABILITIES 22 NOV-24 NOV

CLASS M 80/80/80  
CLASS X 15/15/15  
PROTON 10/10/10  
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 NOV 193  
ESTIMATED 21 NOV 196  
PREDICTED 22 NOV-24 NOV 197/197/194  
90 DAY MEAN 20 NOV 163

V. GEOMAGNETIC A INDICES

OBSERVED AFR 19 NOV 008 AP 20 NOV 007  
ESTIMATED AFR 20 NOV 004 AFR/AP 21 NOV 011/015  
PREDICTED AFR/AP 22 NOV-24 NOV 012/015-012/015-014/020

SOLTERWARN

BT

*unable to make  
correction in  
BEDIT jst*

HFUS 3 EOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 325E

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 21 NOV 1982

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/1200Z TO 21/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. A LONG LIVED 2R FLARE IS REGION 3994 (S11W29) PRODUCED AN M1 AT 1312Z (MAX) AND AN M2 AT 1420Z (MAX). THIS EVENT ALSO PRODUCED SHORT WAVE FADES TO 15 MHZ BUT NO SIGNIFICANT RADIO EMISSION. REGION 3994 REMAINS LARGE, COMPLEX AND PROLIFIC IN FLARE PRODUCTION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE LEVELS. IN ADDITION TO REGION 3994, THE POTENTIAL FOR M CLASS ACTIVITY FROM REGIONS 4000 (S23E64) AND 4001 (N11W22) IS INCREASING.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. UNSETTLED TO ACTIVE CONDITIONS SHOULD CONTINUE.

III. EVENT PROBABILITIES 22-24 NOV

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 NOV 206

PREDICTED 22-24 NOV 207/206/203

30-DAY MEAN 21 NOV 164

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 NOV 05/07

ESTIMATED AFR/AP 21 NOV 19/20

PREDICTED AFR/AP 22-24 NOV 12/15 - 12/15 - 14/20

SOLTERWAEN

BT