

HFUS 1 BOU 221300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 326A  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 22 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
21/1200Z TO 22/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION  
3994 (S11W35) PRODUCED A LON-LIVED 2B FLARE WITH A M1 MAX AT  
1312Z AND A M2 MAX AT 1420Z. RADIO BURSTS FOR THIS FLARE WERE  
MINOR. X-RAY EVENTS THEN REMAINED IN THE CLASS C LEVEL UNTIL  
1016Z TODAY WHEN AN IMPULSIVE M2 OCCURRED. NO OPTICAL REPORTS  
WERE RECEIVED FOR THIS FLARE. SUBFLARES ALSO OCCURRED IN  
REGIONS 4000 (S24E58) AND 4001 (N11W28). REGION 3994 CONTINUES  
TO RESTRUCTURE BUT RETAINS ITS SIZE AND MAGNETIC COMPLEXITY.  
FLUX IS EMERGING NEAR N10W73, N15W41, AND S24W41. THESE MAY BE  
NUMBERED AS NEW REGIONS LATER TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
REMAIN MODERATE. REGION 3994 STILL RETAINS THE POTENTIAL TO  
PRODUCE CLASS X ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN ACTIVE TO STORM LEVEL. THE MAIN RING CURRENT BEGAN TO  
INCREASE AFTER 21/2100Z WITH MAGSTORM CONDITIONS EXISTING FROM  
00-09Z. HIGH DENSITIES ON ISEE-3 INDICATES THE ACTIVITY OVER  
THE PAST 24 HOURS PROBABLY RELATES BACK TO THE HIGH LATITUDE  
FILAMENT WHICH DISAPPEARED ON 17 NOVEMBER. THE FIELD IS  
EXPECTED TO BE UNSETTLED TO SLIGHTLY ACTIVE FOR THE NEXT 24-36  
HOURS AND THEN BECOME FULLY ACTIVE.

III. EVENT PROBABILITIES 23 NOV-25 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
ESTIMATED	22 NOV	212
PREDICTED	23 NOV-25 NOV	214/214/210
90 DAY MEAN	21 NOV	164

V. GEOMAGNETIC A INDICES

OBSERVED AFR	20 NOV	005	AP 21 NOV	026
ESTIMATED AFR	21 NOV	015	AFR/AP 22 NOV	026/040
PREDICTED AFR/AP	23 NOV-25 NOV	012/015-014/020-020/020		

SOLTERWARN

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*Again unable to  
correct in BEDIT.  
jaf*  
*WORKED OKAY  
WHEN PH12  
CHECKED IT*

HFUS 3 BOU 222200  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 326P

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 22 NOVEMBER 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z  
TO 22/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH. REGION  
3994 (S09W42) PRODUCED AN M7 XRAY BURST WITH A MAX TIME OF  
22/1828Z. THIS EVENT WAS RADIO RICH IN BOTH DISCRETE AND SWEEP  
FREQUENCIES. THE 2695 MHZ FLUX REACHED 12000 FLUX UNITS AT  
ONE OBSERVATORY AND BOTH II AND IV SWEEP BURSTS WERE REPORTED.  
REGION 3994 HAS EXTENSIVE PENUMERA IN ITS TRAILING SECTION WHICH  
PROBABLY ACCOMMODATES SEVERAL DELTA MAGNETIC CONFIGURATIONS. A  
RAPIDLY GROWING REGION DEVELOPED OVER NIGHT AT N12W79 AND WAS  
NUMBERED 4003. A SECOND, LESSER IMPRESSIVE REGION DEVELOPED AT  
N18W51 AND IT IS NUMBER 4004.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN AT  
MODERATE TO HIGH LEVELS AS 3994 SHOWS NO INDICATIONS OF DECAY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD  
WAS OCCASIONALLY AT MINOR TO MAJOR STORM LEVELS DURING NIGHTTIME  
HOURS BUT RAPIDLY DECAYED TO QUIET CONDITIONS BETWEEN 0900Z AND  
1500Z. GENERALLY UNSETTLED CONDITIONS SHOULD DOMINATE THE NEXT  
TWO DAYS. BY 25 NOV, THE EFFECTS OF TODAYS FLARE WILL BE  
REFLECTED IN THE FIELD AND ACTIVE TO MINOR STORM CONDITIONS CAN  
BE EXPECTED THE LAST HALF OF THE DAY. THE PARTICLE FLUX IS  
RISING AS A RESULT OF TODAYS EVENT AND THE CURRENT READING IS  
18 PARTICLES/CM2/SEC/STER. A MAXIMUM ABSORPTION OF 4 DB IS  
EXPECTED DURING NIGHTTIME HOURS.

III. EVENT PROBABILITIES 23-25 NOV

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 15/15/15

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 NOV 222

PREDICTED 23-25 NOV 222/214/210

90-DAY MEAN 22 NOV 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 NOV 16/26

ESTIMATED AFR/AP 22 NOV 25/30

PREDICTED AFR/AP 23-25 NOV 12/15 - 14/20 - 20/40

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