

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 MAZIMUM. 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.

III. 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*

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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SST NUMBER 325E

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 21 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/1200Z TO 21/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. A LONG-LIVED 2R FLARE IN 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 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

SOLAR TERM WARN

BT