

HFUS 1 BOU 171300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 321A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 17 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 17/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THIS INTERVAL. REGION 3987 (S12W30) PRODUCED AN M2/1B FLARE AT 16/2118Z WITH LOW TO MODERATE RADIO BURSTS. AS WITH MANY FLARES FROM THIS REGION, THE RADIO BURST SPECTRUM WAS BIASED TOWARD HIGH FREQUENCIES. REGION 3987 IS EXHIBITING SLOW DECAY AND PLAGE AREA HAS DECREASED OVER THE PAST SEVERAL DAYS. HOWEVER, AT LEAST TWO DELTA CONFIGURATIONS REMAIN IN THE CENTRAL PORTION OF THIS REGION AND THE NEUTRAL LINE REMAINS PREDOMINANTLY EAST-WEST. REGION 3994 (S14E33) IS GROWING SLOWLY AND HAS ELONGATED INTO A CLASS E GROUP WITH SOME SLIGHTLY MIXED POLARITIES. AN OPTICALLY UNCORRELATED M1 FLARE OCCURRED AT 17/1057Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE FOR THE FORECAST PERIOD BUT THE FREQUENCY OF CLASS M FLARES FROM 3987 SHOULD BEGIN TO SLOWLY DECREASE. THE POSSIBILITY EXISTS OF A MAJOR, DECAY PHASE FLARE FROM 3987 PRIOR TO ITS WEST LIMB TRANSIT. NO SIGNIFICANT ACTIVE REGIONS ARE EXPECTED TO RETURN DURING THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED FOR THE PAST 24 HOURS. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS ARE EXPECTED TO BEGIN ON 18 NOV AND CONTINUE THROUGH 20 NOV. THIS FORECAST IS IN RESPONSE TO THE FACT THAT THE EARTH WILL BE CONNECTED TO SOLAR LONGITUDES CONTAINING REGION 3987 DURING THAT TIME PERIOD.

III. EVENT PROBABILITIES 18 NOV-20 NOV

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 15/15/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 NOV 167

ESTIMATED 17 NOV 165

PREDICTED 18 NOV-20 NOV 165/165/163

90 DAY MEAN 16 NOV 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR 15 NOV 013 AP 16 NOV 009

ESTIMATED AFR 16 NOV 008 AFR/AP 17 NOV 008/008

PREDICTED AFR/AP 18 NOV-20 NOV 012/015-012/015-010/015

SOLTERWARN

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SDF NUMBER 321B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 NOV 1982

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 17/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3987(S12W38) PRODUCED THE LARGEST FLARE, AN M2/1B WITH VERY MODEST CENTIMETRIC OUTPUT AT THE HIGHER OBSERVED FREQUENCIES. REMAINING ACTIVITY THIS PERIOD HAS BEEN LIMITED TO C CLASS SUBFLARES. REGION 3987 REMAINS A BETA-GAMMA-DELTA E SPOT CLASS REGION AND APPEARS STABLE IN WHITE LIGHT AND IN H ALPHA. WEATHER HAS LIMITED MAGNETIC ANALYSIS OF THE REGION IN RECENT HOURS. REGION 3994(S12E27) CONTINUES TO GROW AND IS NOW AN E SPOT CLASS REGION. NEW REGION 3997(S07E78) TODAY IS AN H SPOT CLASS REGION WITH ONE SPOT VISIBLE ON THE DISK. THE BUSHY FILAMENT LOCATED AT N45E00 TO N28W12 AT 16/1715Z HAS DISAPPEARED SINCE THAT TIME. THE NEUTRAL LINE IN THE VICINITY APPEARS TO BE IN NEARLY THE SAME PLACE AND FIELD REORGANIZATION DOES NOT APPEAR TO HAVE OCCURRED.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE WITH M CLASS ACTIVITY EXPECTED TO CONTINUE IN REGION 3987 AT A DECREASED FREQUENCY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED FOR THE PERIOD AND IS EXPECTED TO BE AT UNSETTLED LEVEL THROUGHOUT THE FORECAST INTERVAL. ISOLATED PERIODS OF FLARE INDUCED DISTURBANCE MAY OCCUR, HOWEVER THESE ARE NOT EXPECTED TO DOMINATE THE ACTIVITY.

III. EVENT PROBABILITIES 18 NOV-20 NOV

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 15/15/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 NOV 162

PREDICTED 18 NOV-20 NOV 165/165/163

90 DAY MEAN 17 NOV 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 NOV 008/009

ESTIMATED AFR/AP 17 NOV 006/012

PREDICTED AFR/AP 18 NOV-20 NOV 012/015-012/015-010/015

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