

HFUS 1 BOU 181300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 322A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 18 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 18/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3987 (S12W45) PRODUCED AN M2/1B AT 17/1406Z WITH MINOR RADIO BURSTS. THIS REGION HAS SHOWN SOME PENUMBRAL DECAY AND NOW ONLY ONE DELTA CONFIGURATION IS VISIBLE IN THE CENTER OF 3987. REGION 3994 (S12E20) PRODUCED AN M1/1B AT 18/0505Z. REGION FILAMENT MATERIAL ERUPTED WITH THIS EVENT AND A SUBSEQUENT WEAK TYPE II WAS OBSERVED OVER THE EAST LIMB. REGION 3994 IS GROWING SLOWLY IN WHITE LIGHT AND ITS PLAGE AREA AND INTENSITY HAVE INCREASED. TWO REGIONS HAVE ROTATED OVER THE EAST LIMB - 3997 (S07E71) AND 3998 (N11E76). REGION 3998 IS DISPLAYING A MODERATE SIZE CLASS H LEADER SPOT AND BRIGHT PLAGE. A DENSE FILAMENT LOCATED AT N28-45W04-16 (AT 17/0000Z) DISAPPEARED SOMETIME BETWEEN 17/0000Z-1530Z. THE LOCAL MAGNETIC FIELDS IN THIS AREA DID NOT CHANGE FOLLOWING THE ERUPTION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE FOR THE FORECAST PERIOD. REGION 3987 IS EXPECTED TO PRODUCE THE MAJORITY OF THE CLASS M FLARES WITH AN ISOLATED CLASS X FLARE POSSIBLE. REGION 3994 DOES NOT APPEAR CAPABLE OF FREQUENT CLASS M FLARE PRODUCTION. INADEQUATE DATA HAVE BEEN RECEIVED ON REGIONS 3997 AND 3998 TO CONFIDENTLY ASSESS THEIR FLARE POTENTIAL.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS QUIET DURING THE FIRST HALF OF THE PERIOD AND SLIGHTLY UNSETTLED DURING THE SECOND HALF. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS ARE FORECAST FOR THE NEXT THREE DAYS. THE FILAMENT ERUPTION YESTERDAY IN THE NORTHWEST QUADRANT IS NOT EXPECTED TO RESULT IN A SIGNIFICANT GEOMAGNETIC DISTURBANCE.

III. EVENT PROBABILITIES 19 NOV-21 NOV

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 15/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 NOV 162

ESTIMATED 18 NOV 163

PREDICTED 19 NOV-21 NOV 163/162/160

90 DAY MEAN 17 NOV 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR 16 NOV 008 AP 17 NOV 006

ESTIMATED AFR 17 NOV 003 AFR/AP 18 NOV 010/012

PREDICTED AFR/AP 19 NOV-21 NOV 012/015-012/015-016/015

SOLTERWARN

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HFUS 3 BOU 182200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 322B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 18 NOV 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
18/1200Z TO 18/2100Z: SOLAR ACTIVITY HAS BEEN LOW. NEITHER OF
THE TWO PRINCIPAL FLARING REGIONS 3987(S12W50) NOR 3994(S12E14)
HAS PRODUCED SIGNIFICANT ACTIVITY THIS PERIOD. REGION 3987
APPEARS STABLE AND PLAGE INTENSITY HAS DECLINED. REGION 3994
HAS MORE THAN DOUBLED IN AREA AND SPOT NUMBER. THE REGION
APPEARS MUCH MORE COMPLEX IN WHITE LIGHT AND HAS BEEN ENHANCED
THROUGH THE PERIOD IN H ALPHA. WEATHER HAS PREVENTED RECENT
MAGNETIC ANALYSIS IN BOTH OF THESE REGIONS. NEW REGIONS TODAY
ARE 3998(N11E70) A SIMPLE BIPOLE ARRIVING OVER THE LIMB AND
3999(S14W24) A SINGLE SPOT DEVELOPING IN THE LAST 24 HOURS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN MODERATE. THE FREQUENCY OF M CLASS FLARES IN REGION
3987 IS EXPECTED TO DECLINE SOMEWHAT MORE. REGION 3994 HAS
GROWN SO THAT M CLASS FLARES MAY BE OBSERVED FROM THAT REGION.
BOTH REGIONS NOW APPEAR CAPABLE OF AN ISOLATED MAJOR FLARE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE IN RECENT HOURS. GEOMAGNETIC ACTIVITY IS EXPECTED
TO CONTINUE AT UNSETTLED TO INTERMITTENTLY ACTIVE FOR THE
FORECAST PERIOD.

III. EVENT PROBABILITIES, 19 NOV-21 NOV

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

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 NOV 176
PREDICTED 19 NOV-21 NOV 172/168/165
90 DAY MEAN 18 NOV 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 NOV 003/006
ESTIMATED AFR/AP 18 NOV 012/012
PREDICTED AFR/AP 19 NOV-21 NOV 012/015-015/015-016/015

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