

HFUS 3 BOU 132200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 347B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 13 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200Z TO 13/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PERIOD. A POWER FAILURE CAUSED THE LOSS OF SATELLITE X-RAY DATA FROM 13/1759Z-2016Z. REGION 4026 (S11E40) PRODUCED A 1B FLARE AT 13/1959Z WITH A 60 F.U. BURST AT 10CM. X-RAY FLUXES AT 13/2016Z WERE AT C7 LEVEL AND FALLING. ANALYSIS OF H-ALPHA PEAK INTENSITIES IMPLY THE PEAK X-RAY FLUX WAS IN THE LOW CLASS M RANGE. 4026 RETAINS ITS DELTA CONFIGURATION AND MAGNETIC GRADIENTS ARE HIGH. THE ACTIVE FILAMENT IN REGION 4022 (N11W00) REMAINS AND THIS REGION ALSO DISPLAYS A DELTA. REGION 4025 (S06E28) HAS SIMPLIFIED SLIGHTLY IN THE LAST TWO DAYS. REGION 4017 (S11W34) PRODUCED A SLOW RISE AND FALL 1F/C3 FLARE AT 13/1322Z PRECEDED BY A WEAK TYPE II BURST. THIS SEQUENCE IMPLIES A FILAMENT ERUPTION ALTHOUGH NO ERUPTIVE MATERIAL WAS OBSERVED AT THE TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE FOR THE NEXT THREE DAYS. MAJOR FLARES REMAIN POSSIBLE PRIMARILY FROM REGIONS 4026 AND 4022. NO SIGNIFICANT ACTIVE REGIONS ARE EXPECTED TO RETURN TO THE DISK DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED. GENERALLY UNSETTLED LEVELS ARE EXPECTED TO OCCUR DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 14 DEC-16 DEC

CLASS M 95/95/95

CLASS X 35/30/30

PROTON 20/20/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 DEC 247

PREDICTED 14 DEC-16 DEC 240/235/230

90 DAY MEAN 13 DEC 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 DEC 014/015

ESTIMATED AFR/AP 13 DEC 008/010

PREDICTED AFR/AP 14 DEC-16 DEC 010/015-010/015-010/010

SOLTERWARN

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