

HFUS 1 BOU 251315

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 176A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1200UT 25 JUNE 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
24/1200UT TO 25/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3170 (N14E04) PRODUCED AN M<sub>2</sub>/1B FLARE MAXIMUM AT 25/0130. THIS EVENT WAS ACCOMPANIED BY EMISSION ACROSS THE RADIO SPECTRUM. A FLUX OF 2000 UNITS OCCURRED AT 245 MHZ. LOWER LEVELS WERE OBSERVED AT THE OTHER FREQUENCIES. REGION 3178 (N19E63) BEGAN FLARING SOON AFTER REGION 3170 AND REACHED 1B OPTICALLY, POSSIBLY CONTRIBUTING TO THE XRAY LEVEL ASSIGNED TO REGION 3170. ADDITIONAL SUB CLASS FLARES WERE OBSERVED IN REGIONS 3170, 3178 AND 3172 (S08E27). REGION 3170 HAS STABILIZED OPTICALLY AND MAY BE APPROACHING DECLINE. THE REGION REMAINS MAGNETICALLY COMPLEX. REGION 3178 APPEARS TO HAVE STABILIZED AS A RATHER SIMPLE BIPOLAR GROUP. REGION 3174 (N15W45) HAS BEEN PLAGE ENHANCED AND MAY BE REDEVELOPING. OTHER REGIONS ARE STABLE AND UNIMPRESSIVE.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY MAY BE EXPECTED TO CONTINUE MODERATE WITH MOST ACTIVITY EXPECTED FROM REGION 3170. ACTIVITY MAY ALSO OCCUR IN REGION 3178.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. IT MAY BE EXPECTED TO REMAIN UNSETTLED EXCEPT FOR A POSSIBLE INCREASE TO MINOR STORM LEVELS EARLY ON 28 JUNE DUE TO THE EFFECTS OF THE M2 FLARE IN REGION 3170.

III. EVENT PROBABILITIES: 26-28 JUNE

CLASS M 80/80/80

CLASS X 10/10/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 24 JUNE 169

ESTIMATED 25 JUNE 172

PREDICTED 26-28 JUNE 175/178/181

90 DAY MEAN 24 JUNE 194

V. GEOMAGNETIC A INDICES

OBSERVED AFR 23 JUNE 05 AP 24 JUNE 11

ESTIMATED AFR 24 JUNE 09 AFR/AP 25 JUNE 13/15

PREDICTED AFR/AP 26-28 JUNE 10/12 10/15 35/35

SOLTERWARN

BT

HFUS 3 80U 252200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 176B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200 UT 25 JUNE 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/1200UT TO 25/2200UT: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3178 (N18E54) PRODUCED A VERY LONG FLARE WITH FIRST MAXIMUM OF C9/1N AT 25/1615UT AND A LATER MAXIMUM OF M1/1B AT 25/1746UT. REGION 3170 (N13W05) APPEARS TO BE DECLINING SLIGHTLY IN WHITE LIGHT. IT HAS PRODUCED ONLY SMALL SUBFLARES SINCE 1200UT. A NEW REGION, 3180 (S18E70), HAS ROTATED ONTO THE DISK WITH A SPOT GROUP OF CLASS/AREA C/300 AND A SCATTERED PLAGE. NEW REGION 3179 (S22W14) DEVELOPED ON THE DISK WITH A SMALL SIMPLE SPOT GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN AT A MODERATE LEVEL DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE PAST 12 HOURS. UNSETTLED CONDITIONS ARE EXPECTED UNTIL 28 JUNE WHEN MINOR STORM LEVELS ARE POSSIBLE DUE TO RECENT FLARE ACTIVITY.

III. EVENT PROBABILITIES 26 JUNE - 28 JUNE

CLASS M 80/80/80

CLASS X 10/10/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 JUNE 178

PREDICTED 26-28 JUNE 181/184/185

90-DAY MEAN 25 JUNE 194

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 JUNE 13/11

ESTIMATED AFR/AP 25 JUNE 18/15

PREDICTED AFR/AP 26-28 JUNE 10/12 - 10/15 - 35/35

SOLTERWARN

BT