

NNNN

KBOU

HFUS 1 BOU 271300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 178A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 27 JUN 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

26/1200UT TO 27/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE. BOTH REGIONS 3170 (N13W25) AND 3178 (N18E30) HAVE PRODUCED "M" CLASS ACTIVITY DURING THE PAST 24 HOURS. REGION 3170 HAS A DELTA MAGNETIC CONFIGURATION, IS MODERATELY BRIGHT WITH OCCASIONAL PLAGE FLUCTUATIONS. REGION 3178 IS SHOWING SLOW GROWTH IN WHITE LIGHT BUT REMAINS BASICALLY SIMPLE IN STRUCTURE. REGION 3180 (S17E54) IS THE SECOND LARGEST REGION ON THE DISK, HAS POINT BRIGHTENINGS AND IS COMPLEX AND WELL ORGANIZED STRUCTUALLY. 3180 PRODUCED A C6/IN FLARE AT 270814Z (MAX) FOLLOWED CLOSELY BY AN M1/1B FLARE IN REGION 3178 AT 270827Z (MAX). THIS FLURRY OF ACTIVITY WAS CULMINATED WITH AN M3/2B IN 3178 AT 270909Z (MAX).

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD CONTINUE AT A MODERATE LEVEL. CONTINUED DEVELOPMENT IN REGION 3180 WOULD AID 3170 AND 3178 IN MAINTAINING THIS LEVEL.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO ACTIVE. RECENT FLARE ACTIVITY IS EXPECTED TO BRING MINOR STORM CONDITIONS ON 28 JUNE WITH A RETURN TO ACTIVE CONDITIONS ON 29 AND 30 JUNE.

III. EVENT PROBABILITIES: 28 JUNE - 30 JUNE

CLASS M 90/90/90

CLASS X 15/15/15

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 26 JUNE 188

ESTIMATED 27 JUNE 193

PREDICTED 28-30 JUNE 195/197/197

90 DAY MEAN 26 JUNE 194

V. GEOMAGNETIC INDICES

OBSERVED AFR 25 JUNE 18 AP 26 JUNE 14

ESTIMATED AFR 26 JUNE 16 AFR/AP 27 JUNE 16/15

PREDICTED AFR/AP 28-30 JUNE 35/35 25/25 20/20

SOLTERWARN

BT

NNNN

HEUS 3 ROU 672200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 178B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 27 JUNE 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/1200UT TO 27/2200UT:

SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 10 HOURS. REGION 3180 (S16E48) PRODUCED AN M2/1B FLARE WHICH MAXED AT 1256UT. THIS EVENT WAS ACCCOMPANIED BY A BURST OF 580 FLUX UNITS AT 10.7 CM AND CAUSED SHORT WAVE FADING OUT TO 22 MHZ. RECENT OBSERVATIONS INDICATE THAT 3170 (N14W32) NO LONGER CONTAINS A MAGNETIC DELTA CONFIGURATION, ALTHOUGH THE REGION HAS REMAINED MOSTLY STABLE IN WHITE LIGHT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH SIGNIFICANT FLARE ACTIVITY LIKELY FROM REGIONS 3170 AND 3180. REGION 3178 (N19E24) IS CAPABLE OF ISOLATED M-CLASS ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS REMAINED UNSETTLED FOR THIS REPORTING PERIOD. GEOMAGNETIC LEVELS ARE EXPECTED TO BE ACTIVE FOR THE NEXT THREE DAYS POSSIBLY REACHING MINOR STORM LEVELS ON 28 JUNE. THIS FORECAST IS BASED ON THE OCCURENCE OF SEVERAL FAVORABLY LOCATED M-CLASS FLARES ON 25 JUNE.

III. EVENT PROBABILITIES: 28 - 30 JUNE

CLASS M 90/90/90

CLASS X 15/15/15

RROTEN 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 27 JUNE 187

PREDICTED 28 - 30 JUNE 190/190/190

90 DAY MEAN 27 JUNE 193

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 JUNE 19/14

ESTIMATED AFR/AP 27 JUNE 15/12

PREDICTED AFR/AP 28 - 30 JUNE 35/35 25/25 20/20

SOLTERWARN

BT,