

HFUS 1 BOU 201300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 201A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1300Z 20 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z TO 20/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH FROM 9 M-CLASS EVENTS WITH MINOR TO STRONG RADIO BURSTS REPORTED IN THE PAST 24 HOURS. THE LARGEST FLARE WAS AN M8/1N AT 2150Z FROM REGION 3804 (N15W72) WHICH ALSO PRODUCED AN M2/SN AT 1812Z, AN M2/SN AT 1843Z, AN M2/1N AT 0233Z AND AN M3/1N AT 0411Z. THE REGION HAS NOT CHANGED SIGNIFICANTLY IN SIZE OR COMPLEXITY SINCE YESTERDAY. REGION 3810 (N14W28) PRODUCED 2 M-CLASS FLARES, M2/1N AT 1248Z AND M3/SB AT 0037Z. THIS REGION AND THE CLOSELY RELATED REGION 3812 (N20E29) ARE SHOWING ONLY SLIGHT SIGNS OF GROWTH BUT HAVE INCREASED IN FLARE ACTIVITY OVER THE PAST FEW DAYS. MINOR GROWTH IS ALSO REPORTED IN SMALL REGION 3817 (N18E08) AND 3820 (N11E55). ALL OTHER REGIONS ARE STABLE OR DECLINING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH WITH CONTINUED M-CLASS ACTIVITY EXPECTED FROM REGION 3804, 3810 AND 3812. AN X-CLASS FLARE IS POSSIBLE FROM ANY OF THESE REGIONS IN THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. THE FIELD SHOULD REMAIN UNSETTLED TO ACTIVE UNTIL 22 JULY WHEN ACTIVE CONDITIONS ARE EXPECTED FROM THE 18 JULY FILAMENT DISAPPEARANCE AND 19 JULY X1 FLARE.

III. EVENT PROBABILITIES 21 JUL-23 JUL

CLASS M 95/95/80

CLASS X 30/30/15

PROTON 20/20/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 JUL 227

ESTIMATED 20 JUL 210

PREDICTED 21 JUL-23 JUL 190/180/175

90 DAY MEAN 19 JUL 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR 18 JUL 022 AP 19 JUL 022

ESTIMATED AFR 19 JUL 027 AFR/AP 20 JUL 030/032

PREDICTED AFR/AP 21 JUL-23 JUL 020/025-025/020-025/020

SOLTERWARN

BT

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 201B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/1200Z TO 20/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE DUE TO A M3/1N EVENT FROM REGION 3804 (N16W76) AT 1250UT, ONLY MINOR RADIO WAS OBSERVED WITH THIS EVENT. REGIONS 3804 AND 3810 (N15W38) HAVE SHOWN SIGNS OF DECAY THIS PERIOD. ALL OTHER REGIONS LITTLE CHANGED. NEW REGION TODAY 3821 (N17W21) A SIMPLE A-TYPE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE UNTIL REGION 3804 ROTATES OVER THE WEST LIMB, THEN LOW CONDITIONS FOR THE REST OF THE PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. ACTIVE CONDITIONS ARE EXPECTED TO CONTINUE DURING THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 21 JUL-23 JUL

CLASS M 95/80/60

CLASS X 30/20/10

PROTON 20/20/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 JUL 190

PREDICTED 21 JUL-23 JUL 173/158/144

90 DAY MEAN 20 JUL 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 JUL 021/022

ESTIMATED AFR/AP 20 JUL 018/025

PREDICTED AFR/AP 21 JUL-23 JUL 020/025-025/020-025/020

SOLTERWARN

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HXUS BOU 202200

PREDM 09521 08022 06023

PREDX 03021 02022 01023

PREDP 02021 02022 01023

PCAF 00221

TENCM 17321 15822 14423

AFRED 02021 02522 02523

AFAPF 02521 02022 02023

BT