

HFUS 1 BOU 181300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 199A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 18 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
17/1200Z TO 18/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION
3804 (N14W46) PRODUCED AN M6/2B FLARE AT 17/2320Z MAXIMUM WITH
MINOR DISCRETE FREQUENCY RADIO BURSTS THROUGH THE SPECTRUM. IT
ALSO PRODUCED AN M2/1B AT 18/1146Z MAXIMUM. TWO OTHER SMALL
M-CLASS FLARES WERE OBSERVED EARLY IN THE PERIOD, ONE FROM 3804
AND ONE FROM 3806 (S24W65). REGION 3804 CONTINUES TO DECAY
SLOWLY IN THE CENTRAL PORTION OF ITS SPOT GROUP, BUT ARCH
FILAMENTS INDICATE NEW GROWTH IN THE LEADER WHERE MOST OF THE
FLARES HAVE BEEN OCCURRING. THE MAGNETIC GRADIENTS HAVE
WEAKENED AS THE REGION CONTINUES TO ELONGATE. THE 3810/3812
COMPLEX CENTERED AT N17W04 IS BECOMING MORE AND MORE DIFFICULT
TO SEPARATE AS THE REGIONS CONTINUE TO INTERACT ALONG A COMMON
NEUTRAL LINE. BOTH THESE REGIONS HAVE PRODUCED NUMEROUS
SUBFLARES DURING THE PAST 24 HOURS. THE REMAINING SEVEN SPOTTED
REGIONS HAVE SHOWN LITTLE CHANGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
MODERATE TO HIGH WITH ANOTHER X-CLASS EVENT FROM REGION 3804
LIKELY PRIOR TO ITS WEST LIMB ROTATION. ACTIVITY IS ALSO
EXPECTED FROM THE 3810/3812 COMPLEX.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD
VARIED BETWEEN MINOR STORM AND ACTIVE CONDITIONS DURING THE
PAST 24 HOURS. RECENT TRENDS INDICATE A GRADUAL SETTLING OF THE
FIELD DURING THE PAST 6 HOURS. ACTIVE CONDITIONS SHOULD BE THE
NORM THROUGH THE NEXT 36 HOURS FOLLOWED BY MINOR STORM
CONDITIONS BY MID-DAY ON THE 20TH AS A RESULT OF YESTERDAY'S
X3/2B.

III. EVENT PROBABILITIES 19 JUL-21 JUL

CLASS M	99/99/99
CLASS X	40/30/30
PROTON	30/20/20
PCAF	YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED	17 JUL	265
ESTIMATED	18 JUL	255
PREDICTED	19 JUL-21 JUL	250/245/235
90 DAY MEAN	17 JUL	164

V. GEOMAGNETIC A INDICES

OBSERVED AFR	16 JUL	050	AP 17 JUL	027
ESTIMATED AFR	17 JUL	024	AFR/AP 18 JUL	022/020
PREDICTED AFR/AP	19 JUL-21 JUL	025/027-035/035-020/025		

SOLTERWARN

BT

HFUS 3 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 199B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 18 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/1200Z TO 18/2100Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 9 HOURS. THE LARGEST EVENT WAS C7/SB AT 1520Z FROM REGION 3804(N14W54). THIS VERY LARGE REGION HAS CLEARLY DIMINISHED IN SIZE, INTENSITY AND MAGNETIC COMPLEXITY EXCEPT FOR LOCALIZED GROWTH IN ITS LEADER PORTION. SLOW SPOT GROWTH CONTINUES IN REGION 3810(N13W11) WHICH NOW IS BRIGHTER THAN REGION 3804. ITS SPOT GROUP HAS EXPANDED SO THAT THERE IS NO SEPARATION BETWEEN IT AND REGION 3812(N20W11). ONLY MINOR SUBFLARES HAVE OCCURRED TODAY IN THIS COMPLEX. THE REMAINING SIX SPOTTED REGIONS ARE SMALL AND DECLINING. MOST OF THE GREAT FILAMENT NE OF REGION 3804 SLOWLY DISAPPEARED BETWEEN 1400Z AND 1600Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO DECLINE DURING THIS PERIOD AS ALL ACTIVE REGIONS BEGIN TO DISSIPATE. POTENTIAL FOR CLASS X ACTIVITY CONTINUES IN REGIONS 3804 AND 3810 ONLY AS LONG AS NEW SPOTS APPEAR.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. CONDITIONS ARE EXPECTED TO INCREASE TO MINOR STORM BY MIDDAY TOMORROW AND CONTINUE WITH STORM CONDITIONS THROUGH 20 JULY.

III. EVENT PROBABILITIES 19 JUL-21 JUL

CLASS M 90/90/90

CLASS X 40/30/30

PROTON 30/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 JUL 246

PREDICTED 19 JUL-21 JUL 235/220/205

90 DAY MEAN 18 JUL 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 JUL 020/027

ESTIMATED AFR/AP 18 JUL 020/030

PREDICTED AFR/AP 19 JUL-21 JUL 025/027-035/035-020/025

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HXUS BOU 182200

PREDM 09019 09020 09021

PREDX 04019 03020 03021

PREDP 03019 02020 02021

PCAF 00219

TENCM 23519 22020 20521

AFRED 02519 03520 02021

AFAPF 02719 03520 02521

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