

HFUS 1 BOU 071300 COR
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 219A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 07 AUG 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
06/1200Z TO 07/1200Z:

SOLAR ACTIVITY HAS BEEN LOW. REGION 3257 (S09E46) REMAINS STABLE,
COMPLEX AND HAS A SIGNIFICANT MAGNETIC GRADIENT WITH MULTIPLE
DELTA'S. REGION 3247 (N16W69) APPEARS SOMEWHAT SIMPLIFIED. ONLY
A SMALL NUMBER OF C CLASS SUBFLARES HAVE BEEN OBSERVED. THE
REMAINING REGIONS ON THE DISK ARE SIMPLE AND APPEAR RELATIVELY
INSIGNIFICANT.

IB. SOLAR ACTIVITY FORECAST:

BOTH REGIONS 3257 AND 3247 ARE CAPABLE OF SIGNIFICANT ACTIVITY.
OBSERVATIONS OF 3257 WOULD SUGGEST CAPACITY FOR ONE OR MORE
MAJOR FLARES. PERHAPS INCREASED ACTIVITY FROM THIS REGION WILL
OCCUR WITH ONSET OF DECLINE PHASE. WITH THAT POSSIBILITY SOLAR
ACTIVITY IS EXPECTED TO BE MODERATE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE MINOR STORM TO ACTIVE LEVELS OBSERVED EARLY ON 06
AUGUST DECLINED RAPIDLY TO NEAR QUIET LEVELS EARLY ON 07 AUG.
ACTIVITY MAY BE EXPECTED AT UNSETTLED LEVELS DURING THE FORE-
CAST PERIOD.

III. EVENT PROBABILITIES: 08-10 AUG

CLASS M 20/80/80

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 06 AUG 170

ESTIMATED 07 AUG 170

PREDICTED 08-10 AUG 168/165/165

90 DAY MEAN 06 AUG 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR 05 AUG 16 AP 06 AUG 26

ESTIMATED AFR 06 AUG 15 AFR/AP 07 AUG 08/10

PREDICTED AFR/AP 08-10 AUG 12/15 15/15 12/10

SOLTERWARN

BT

HFUS 3 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 219B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 07 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
07/1200Z TO 07/2100Z:

SOLAR ACTIVITY WAS AT MODERATE LEVELS DURING THE PERIOD. FOLLOWING
SEVERAL SUBFLARES, REGION 3257 (S10E27) PRODUCED A LONG LIVED
M4/2B FLARE AT 1916 UT (MAX). THIS FLARE WAS ACCOMPANIED BY A
MODERATE TYPE IV AND 10 CM BURST OF 480 F.U. REGION 3257, ALTHOUGH
UNDERGOING MINOR EVOLUTION, APPEARS TO HAVE REACHED MATURITY AND
EARLY STAGES OF DECAY ARE APPARENT. GRADIENTS IN THIS REGION HAVE
CONTINUED A SLOW DECLINE BUT FIELD STRENGTHS REMAIN HIGH AND DELTA
CONFIGURATIONS ALSO REMAIN. REGION 3259 (N25E55) HAS EXHIBITED A
MODERATE GROWTH TREND AND PRODUCED SEVERAL SUBFLARES.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD CONTINUE AT MODERATE LEVELS WITH 3257 REMAINING
THE PRIME SOURCE REGION. LARGE AREA/LARGE INTEGRATED FLUX FLARES
SHOULD CONTINUE FROM REGION 3257 BUT ON AN INCREASINGLY INFREQUENT
BASIS AS DECAY BEGINS. NO SIGNIFICANT REGIONS ARE EXPECTED TO
RETURN DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE LAST NINE HOURS.
UNSETTLED CONDITIONS SHOULD PREVAIL UNTIL MIDDAY ON 9 AUGUST WHEN
ACTIVE LEVELS SHOULD BE EXPERIENCED THROUGH THE END OF THE FORECAST
PERIOD DUE TO THE M4 FLARE TODAY. IT IS LIKELY THAT PARTICLES
WERE ACCELERATED BY THIS FLARE BUT APPARENT PROPAGATION PATHS DO NOT
INDICATE TERRESTRIAL INTERCEPTION OF THIS STREAM.

III. EVENT PROBABILITIES: 08 - 10 AUGUST

CLASS M 90/90/85

CLASS X 10/10/10

PROTON 20/15/10

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 07 AUGUST

PREDICTED 08 - 10 AUGUST

90 DAY MEAN 07 AUGUST

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 AUGUST

ESTIMATED AFR/AP 07 AUGUST

PREDICTED AFR/AP 08 - 10 AUGUST

SOLTERWARN

BT

168

168/165/165

178

15/26

10/12

12/15 25/25 20/25