

HFUS 1 BOU 051300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 217A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 300Z 5 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
04/1200Z TO 05/1200Z:

SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS DUE TO
AN M1 AT 04/1801UT WITHOUT OPTICAL CORRELATION. REGION 3257
(S09E59) IS NOW AN E-TYPE GROUP WITH A BETA-GAMMA MAGNETIC
CONFIGURATION AND A POSSIBLE DELTA. ALTHOUGH THIS REGION IS
CURRENTLY STABLE, ITS FEATURES ARE CHARACTERISTIC OF AN ACTIVE
REGION. REGION 3247 (N16W43) IS ALSO STABLE AT THIS TIME, BUT
HAS RETAINED ITS DELTA AND STRONG MAGNETIC GRADIENT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE DUE PRIMARILY
TO THE KNOWN POTENTIAL OF REGION 3257 AND THE APPARENT POTEN-
TIAL IN REGION 3247.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 24
HOURS WITH AN ACTIVE PERIOD FROM 03-06UT. UNSETTLED CONDI-
TIONS ARE EXPECTED TO DOMINATE THE NEXT TWO DAYS, BECOMING
MILDLY ACTIVE ON 08 AUG IN RESPONSE TO A LARGE, BUT APPARENTLY
WEAK, CORONAL HOLE IN THE NORTH.

III. EVENT PROBABILITIES: 06 AUG - 08 AUG

CLASS M 75/80/80

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 04 AUG 181

ESTIMATED 05 AUG 185

PREDICTED 06-08 AUG 188/190/185

90 DAY MEAN 04 AUG 179

V. GEOMAGNETIC A INDICES

OBSERVED AFR 03 AUG 19 AP 04 AUG 14

ESTIMATED AFR 04 AUG 13 AFR/AP 05 AUG 12/15

PREDICTED AFR/AP 06-08 AUG 09/10 14/15 15/15

SOLTERWARN

BT

HFUS 3 BOU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 217B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 05 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 05/1200Z TO 05/2100Z. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST NINE HOURS. REGION 3257 (S09E55) HAS BEEN THE ONLY PRODUCER OF

ACTIVITY. FREQUENT SUBFLARES HAVE BEEN OBSERVED DURING THE PERIOD FROM THIS REGION, WITH THE LARGEST, A C5/SB OCCURRING AT 1545Z MAXIMUM. ITS MAGNETIC STRUCTURE IS COMPLEX WITH POSSIBLY TWO DELTAS PRESENT, BUT THE REGION APPEARS TO HAVE STABILIZED SOMEWHAT SINCE YESTERDAY. NEW REGION 3258 (S24E24) HAS EMERGED ON THE DISK AS A SIMPLE B-TYPE GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. REGION 3257 IS CAPABLE OF M-CLASS FLARE PRODUCTION. ACTIVE LONGITUDES (CARRINGTON 80-60 DEGREES) ROTATING OVER EAST LIMB DURING THE PERIOD SHOULD ALSO CONTRIBUTE TO THE OVERALL LEVEL OF ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD REMAINED UNSETTLED DURING THE PERIOD. UNSETTLED CONDITIONS SHOULD CONTINUE THROUGH THE FORECAST PERIOD WITH BRIEF INTERVALS AT ACTIVE LEVELS POSSIBLE DURING NIGHT-TIME HOURS.

III. EVENT PROBABILITIES 06 AUGUST - 08 AUGUST

CLASS M 75/80/80

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 AUGUST 174

PREDICTED 06-08 AUGUST 175/175/178

90-DAY MEAN 05 AUGUST 179

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 AUGUST 15/14

ESTIMATED AFR/AP 05 AUGUST 13/15

PREDICTED AFR/AP 06-08 AUGUST 12/15 - 14/15 - 15/15

SOLTERWARN

BT