

HFUS 1 R01 231300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDE NUMBER 235A

JOINT USAF/MCAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 23 AUG 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
22/1200Z TO 23/1200Z:

SOLAR ACTIVITY HAS BEEN LOW SINCE 22/1200Z. SUPERFLARES HAVE
BEEN OCCURRING PRIMARILY IN REGIONS 3266 (S15W69) AND 3279
(S17W35) WITH THE EXCEPTION OF A C5/1N FLARE FROM REGION
3292 (S06E48) AT 22/1456 UT. REGIONS 3266 AND 3279 DECAYED,
BUT 3279 HAS A FAIRLY STRONG MAGNETIC GRADIENT NEAR ITS
LARGE SPOT. REGION 3284 (S10E10) HAS ALSO DECAYED, AND RE-
LAXED ITS GRADIENT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. DECAY IN REGIONS
3266, 3279 AND 3284 HAS THUS FAR NOT BEEN EXTENSIVE ENOUGH
TO ROB THEM OF ALL OF THEIR MODERATE FLARE POTENTIAL, ESPECIALLY
IF ONE OR MORE GOES INTO A RAPID DECAY PHASE, UPSETTING THE
REGION'S STABILITY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

A MINOR GEOMAGNETIC STORM IS IN PROGRESS. THE STORM COMMENCED
GRADUALLY AT THE BEGINNING OF THE UT DAY AND IS NOW IN ITS
MAIN PHASE. THE FIELD IS EXPECTED TO SUBSIDE TO ACTIVE CON-
DITIONS BY THE END OF THE UT DAY, BECOMING UNSETTLED ON 25-26
AUG.

III. EVENT PROBABILITIES: 24 AUG - 26 AUG

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 05/05/10

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 22 AUG 259

ESTIMATED 23 AUG 258

PREDICTED 24-26 AUG 250/245/240

90 DAY MEAN 22 AUG 181

V. GEOMAGNETIC A INDICES

OBSERVED AFR 21 AUG 10 AP 22 AUG 14

ESTIMATED AFR 22 AUG 12 AFR/AP 23 AUG 32/35

PREDICTED AFR/AP 24-26 AUG 20/25 10/15 14/10

SOLTERWARN

BT

HEUS 3 BOLL 632200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDE NUMBER 235R

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 23 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/1200Z TO 23/2100Z: SOLAR ACTIVITY HAS CONTINUED AT A LOW LEVEL DURING THE PERIOD. THE LARGEST EVENT WAS A C3/1N FROM 3295 (N14E67) AT 1751Z. MOST OF THE REGIONS ARE EITHER STABLE OR SHOWING SIGNS OF DECAY. REGION 3295 HAS SHOWN GROWTH HOWEVER IT APPEARS TO BE DUE TO ROTATION NOT TRUE GROWTH.

IP. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY LOW DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT MINOR STORM LEVELS DURING THIS PERIOD. THE FIELD IS EXPECTED TO CONTINUE AT OR NEAR MINOR STORM LEVELS UNTIL EARLY ON 24 AUGUST WHEN ACTIVE CONDITIONS ARE FORECAST. THE FIELD IS THEN FORECAST TO BE UNSETTLED FOR THE REMAINDER OF THE PERIOD.

III. EVENT PROBABILITIES 24 AUGUST - 26 AUGUST

CLASS M 40/40/40

CLASS X 03/03/03

PROTON 01/01/03

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 AUGUST 249

PREDICTED 24-26 AUGUST 242/235/227

90-DAY MEAN 23 AUGUST 182

V. GEOMAGNETIC 4 INDICES

OBSERVED AFR/AP 23 AUGUST 09/14

ESTIMATED AFR/AP 23 AUGUST 33/42

PREDICTED AFR/AP 24-26 AUGUST 20/25 - 10/15 - 14/10

SOLTERWARN

BT