

HEIUS 1 BOU 211300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDE NUMBER 233A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1300Z 21 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
20/1200Z TO 21/1200Z:

SOLAR ACTIVITY HAS BEEN MODERATE. AN M4/2R FLARE OCCURRED AT
21/0831Z IN REGION 3279 (S17W03). THE EVENT WAS A CLASSIC
PARALLEL RIBBON FLARE WITH PARTIAL UMBRAL COVERAGE, TYPE IV
RADIO EMISSION. MAJOR RADIO PURSTS ON ALL FREQUENCIES WITH
3 MAXIMA AND STRONG SHORT WAVE FADING. RADIO PURSTS OF 340
FLU AT 2695 MHZ AT 0831Z AND 23000 FLU AT 245 MHZ AT 0902Z
WERE REPORTED. THIS REGION PRODUCED TWO SMALLER FLARES
EARLIER, A C4/1B AT 20/1850Z AND A C8/1B AT 21/0632Z. REGION
3266 (S15W45) CONTINUES TO DECAY SLOWLY AND HAS PRODUCED
NUMEROUS CLASS C EVENTS THROUGHOUT THE DAY. THE LARGEST
OF THESE, A C8/1B AT 0216Z AND A C8/SN AT 0436Z, WERE
ACCOMPANIED BY MODERATE RADIO PURSTS. SIX NEW REGIONS WERE
NUMBERED TODAY. THE NEW REGIONS WITH THE LARGEST SPOT
GROUPS ARE 3287 (S08E62) CLASS/AREA C/70 AND 3288 (N22E77)
CLASS/AREA H/80.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT A MODERATE LEVEL,
WITH REGIONS 3266 AND 3279 CONTRIBUTING THE MAJORITY OF THE
FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. ACTIVE CONDITIONS
ARE EXPECTED ON 23-24 AUG AS A RESULT OF THE M4/2B FLARE
21/0831Z. AN INCREASE IN PARTICLE COUNTS AT SATELLITE ALTITUDES
MAY BE OBSERVED AFTER 21/1500Z, BUT IT IS NOT EXPECTED
TO REACH EVENT LEVELS.

III. EVENT PROBABILITIES: 22-24 AUG

CLASS M 80/80/80

CLASS X 05/05/05

PROTON 05/05/05

PCAF 1 GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 20 AUG 258

ESTIMATED 21 AUG 260

PREDICTED 22-24 AUG 258/255/250

90 DAY MEAN 20 AUG 179

V. GEOMAGNETIC INDICES

OBSERVED AFR 19 AUG 12 AFR/AP 20 AUG 10

ESTIMATED AFR 20 AUG 08 AFR/AP 21 AUG 11/18

PREDICTED AFR/AP 22-24 AUG 14/20 25/35 20/25

SOLTELMARN

BT

HEUUS-3 BOUL-212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 2338.

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 21 AUG 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
21/1200Z TO 21/2100Z:

SOLAR ACTIVITY HAS BEEN LOW TO MODERATE SINCE THE M4/2B FLARE
AT 21/0839Z FROM REGION 3279 (S 17W 06). THIS REGION HAS BEEN
SHIFT DURING THIS PERIOD, BUT IT STILL SHOWS MAJOR FLARE POTEN-
TIAL. REGION 3266 (S 15W 51) ACCOUNTED FOR MOST OF THE FLARE
ACTIVITY, THE LARGEST OF WHICH WAS AN M1/1B AT 21/1728Z.

II. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE.

III. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. ACTIVE CONDITIONS,
BEGINNING WITH A SUDDEN COMMENCEMENT IS EXPECTED ON 23 OR 24
AUG AS A RESULT OF THE M4/2B FLARE. RECURRENCE ALSO SUGGESTS
ACTIVITY DURING THE NEXT 72 HOURS. REGION 3279 HAS AN INCREASED
PROBABILITY OF PRODUCING A PROTON FLARE AS IT ROTATES FURTHER
WEST.

III. EVENT PROBABILITIES: 22-24 AUG

CLASS M 80/80/80

CLASS X 15/15/15

PROTON 10/10/15

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 21 AUG 261

PREDICTED 22-24 AUG 258/255/250

90 DAY MEAN 21 AUG 180

GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 AUG 09/10

PREDICTED AFR/AP 21 AUG 13/18

PREDICTED AFR/AP 22-24 AUG 14/20/25/35/20/25

SOLAR TERMARN

PT