

HFUS , BOU 141300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 226A1

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 14 AUGUST 1981

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200Z TO 14/1200Z:

SOLAR ACTIVITY REMAINS MODERATE. THREE M-CLASS EVENTS HAVE BEEN OBSERVED SINCE 13/1200UT, TWO OF WHICH WERE ASSOCIATED WITH REGION 3257 (S09W64). THE THIRD, AN M2.1 IN AT 14/0053UT MAXIMUM, WAS FROM A PREVIOUSLY QUIET REGION 3259 (N25W31). THIS FLARE HAD AN ASSOCIATED TYPE IV SWEEP FREQUENCY BURST AND MINOR DISCRETE FREQUENCY BURSTS. REGIONS 3257 AND 3266 (S16E52) REMAIN THE MOST IMPRESSIVE ON THE DISK, BUT 3266, EVEN WITH ITS THREATENING WHITE LIGHT APPEARANCE, IS APPARENTLY A FAIRLY SIMPLE MAGNETIC RIPOLE. MINOR SPOT GROWTH IN THIS REGION HAS BEEN REPORTED, BUT VERY LITTLE FLARE ACTIVITY HAS BEEN OBSERVED. SMALL SURGES ARE VISIBLE AT THE SOUTHEAST LIMB.

I.B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY WILL CONTINUE MODERATE WITH REGION 3257 REMAINING THE PRIME CONTRIBUTOR UNTIL IT ROTATES OVER WEST LIMB IN 2 DAYS. IF GROWTH IN REGION 3266 CONTINUES, IT COULD REPLACE 3257 AS THE PRIME ACTIVE CENTER. RETURNING LONGITUDES OVER THE NEXT 3 DAYS COULD YIELD A NEW ACTIVE AREA.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED DURING THE PAST 24 HOURS. ACTIVE CONDITIONS ARE EXPECTED BY LATE TODAY, IN RESPONSE TO THE X2.1B FLARE ON 12 AUGUST. ACTIVE CONDITIONS SHOULD THEN CONTINUE FOR THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 15-17 AUG

CLASS M 95/95/85

CLASS X 65/15/10

PROTON 25/15/10

KPCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 AUG 203

ESTIMATED 14 AUG 207

PREDICTED 15-17 AUG 212/215/210

90-DAY MEAN 13 AUG 176

V. GEOMAGNETIC A INDICES

OBSERVED AFR 12 AUG 11 AP 13 AUG 10

ESTIMATED AFR 13 AUG 08 AFR/AP 14 AUG 15/15

PREDICTED AFR/AP 15-17 AUG 20/15 - 12/10 - 15/15

SOLTERWARN

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HEUS 3 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 6268

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 14 AUG 1981

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
14/1200Z TO 14/2100Z

SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 12 HOURS. THE LARGEST
EVENT WAS A C8/SN FLARE FROM REGION 3257 (S08W72) WHICH RETAINS
COMPLEX MAGNETIC STRUCTURES IN SPITE OF DECLINING SPOTS.

PLACE, SPOT AND FILAMENT ACTIVITY ON THE SOUTHERN EDGE OF THIS
REGION MAY CREATE ADDITIONAL MAGNETIC COMPLEXITY. REGION 3266
(S16F46) IS A LARGE BUT SIMPLE BIPOLE REGION. REGION 3274 (S08E66)
HAS ROTATED INTO VIEW AS A BIPOLE CLASS D SPOT GROUP OF ANOMALOUS
ORIENTATION. THE EAST-WEST 10 CM RADIO SCAN INDICATED A SIGNIFICANT
REGION NEARING EAST LIMB.

I.B. SOLAR ACTIVITY FORECAST:

CLASS M EVENTS ARE EXPECTED FROM BOTH REGION 3257 AND 3266.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. A MINOR MAGNETIC STORM IS
EXPECTED TO BEGIN WITHIN THE NEXT FEW HOURS AS A CONSEQUENCE OF
THE X2/1B FLARE ON 12 AUGUST.

III. EVENT PROBABILITIES: 15 - 17 AUG

CLASS M .95/95/85

CLASS X .15/10/10

PROTON .15/10/10

PCAF . . . YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED . 14 AUG . . 203

PREDICTED .15 - 17 AUG . 212/215/210

90 DAY MEAN . 14 AUG . . 193.176

V. GEOMAGNETIC A-F INDICES

OBSERVED AFR/AP . 13 AUG . . 08/10

ESTIMATED AFR/AP 14 AUG . . 09/10

PREDICTED AFR/AP 15 - 17 AUG . . 20/15 12/10 15/15

SOLTERWARN

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