

HFUS 1 BOU 041300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 247A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 04 SEP 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
03/1200Z TO 04/1200Z:

SOLAR ACTIVITY WAS MODERATE DUE TO A M7/2B FROM REGION 3310
(S09E09) AT 03/2312UT, THE EVENT WAS ACCOMPANIED BY WEAK TYPE
II/IV SWEEPS. THE NEXT LARGEST EVENT WAS A C5/SN AT 03/1521UT
FROM REGION 3300 (S12W39). REGION 3310 HAS SHOWN INCREASE IN
SIZE BUT NO LONGER CONTAINS A DELTA MAGNETIC CONFIGURATION.
THE REST OF THE REGIONS ARE STABLE OR SHOWING SIGNS OF DECAY.
NEW REGION 3317 (N08E82) IS A LARGE D-TYPE GROUP, HOWEVER LIMB
PROXIMITY PREVENTS DETAILED ANALYSIS.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE AS REGIONS 3310 AND
3300 HAVE THE POTENTIAL FOR AN OCCASIONAL M-CLASS EVENT WITH A
ISOLATED CHANCE FOR AN X-CLASS EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. THE FIELD IS
EXPECTED TO BE UNSETTLED UNTIL THE MIDDLE OF THE FORECAST PERIOD
WHEN ACTIVE CONDITIONS ARE EXPECTED IN RESPONSE TO THE M7 EVENT.
A X-CLASS EVENT FROM REGIONS 3310 OR 3300 COULD PRODUCE A PROTON
EVENT AND/OR A MAJOR MAGNETIC STORM DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 05-07 SEP

CLASS M 60/60/60

CLASS X 10/10/10

PROTON 15/15/15

PCAF YFLLQW

IV. OTTAWA 10.7 FLUX

OBSERVED 03 SEP 225

ESTIMATED 04 SEP 225

PREDICTED 05-07 SEP 225/220/212

90 DAY MEAN 03 SEP 194

V. GEOMAGNETIC A INDICES

OBSERVED AFR 02 SEP 20 AP 03 SEP 10

ESTIMATED AFR 03 SEP 09 AFR/AP 04 SEP 10/12

PREDICTED AFR/AP 05-07 SEP 10/12 14/20 18/20

SOLTERWARN

BT

HFHS 3 BOU 642200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 247B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 04 SEP 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
04/1200Z TO 04/2100Z:

SOLAR ACTIVITY HAS BEEN LOW THE LAST 10 HOURS. THE LARGEST X-RAY
BURST WAS A C9 AT 1547Z. NO OPTICAL REPORT HAS BEEN RECEIVED
FOR THIS BURST. OTHER ACTIVITY HAS BEEN CONFINED TO LOW LEVEL
CLASS C BURSTS. MT WILSON SHOWS THE PENUMBRA OF REGION 3310
(S09E03) COALESCING AGAIN. THESE STRUCTURAL CHANGES MAY HAVE
PRECIPITATED THE M7 ON 03/2312Z. REGION 3317 (N09E77) HAS ROTATED
ON TO THE DISK AS A FAIRLY COMPACT PLAGE AND FAIR N-S PENUMBRAL
EXTENT. REGION 3318 (S05E06) HAS EMERGED ADJACENT TO REGION 3310.
REGION 3319 (N28E44) IS EMERGING AS A BIPOLE WITH AN ATYPICAL
N-S SUNSPOT ORIENTATION.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED THE LAST 10 HOURS. THE
FIELD IS EXPECTED TO BE GENERALLY UNSETTLED UNTIL THE LATTER PART
OF 05 SEPTEMBER, WITH GENERALLY ACTIVE CONDITIONS THE BALANCE OF THE
FORECAST PERIOD. NO PROTONS WERE DETECTED FROM THE M7 FLARE.

III. EVENT PROBABILITIES: 05 - 07 SEP

CLASS M 60/60/60

CLASS X 10/10/10

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 04 SEP 223

PREDICTED 05 - 07 SEP 226/230/225

90 DAY MEAN 04 SEP 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 SEP 09/10

ESTIMATED AFR/AP 04 SEP 06/12

PREDICTED AFR/AP 05 - 07 SEP 10/12 14/20 18/20

SOLTERWARN

BT