

HFUS 1 BOU 051300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDE NUMBER 248A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 05 SEP 1981

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

SOLAR ACTIVITY HAS BEEN MODERATE AS REGION 3317 (N08E73) HAS
PRODUCED TWO M-CLASS EVENTS THIS PERIOD. THE LARGEST EVENT A
M2/SN, WITH SHORT WAVE FADE TO 22 MHZ, OCCURRED AT 05/1036UT.
REGION 3317 IS A LARGE E-TYPE BETA GAMMA GROUP. REGION 3310
(S11W04) HAS ALSO SHOWN GROWTH AND AGAIN CONTAINS A DELTA MAG-
NETIC CONFIGURATION AND WITH REGION 3318 (S06W00) GROWING,
DYNAMIC CHANGES COULD OCCUR IN THIS AREA.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE AS REGIONS 3300
(S13W53), 3310 AND 3317 ARE PROVEN M-EVENT PRODUCERS. AN ISO-
LATED X-EVENT IS ALSO POSSIBLE FROM REGIONS 3310 AND 3317.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN GENERALLY AT ACTIVE CONDITIONS
DURING THIS PERIOD. THE GEOMAGNETIC FIELD IS EXPECTED TO BE
AT ACTIVE CONDITIONS DURING MOST OF THE FORECAST PERIOD AS THE
EFFECTS OF THE M-7 EVENT OF 03 SEP ARE REALIZED. A LARGE M-
EVENT FROM REGIONS 3300 OR 3310 COULD PRODUCE PROTONS AND/OR
A MAJOR MAGNETIC STORM DURING THIS FORECAST PERIOD.

III. EVENT PROBABILITIES: 06-08 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

ESTIMATED 05 SEP 226

PREDICTED 06-08 SEP 223/218/210

90 DAY MEAN 04 SEP 195

V. GEOMAGNETIC INDICES

OBSERVED AFR 03 SEP 09 AP 04 SEP 12

ESTIMATED AFR 04 SEP 10 AFR/AP 05 SEP 12/15

PREDICTED AFR/AP 06-08 SEP 14/20 18/20 12/12

SOLTERWARN

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NNNNZCLZU

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HFUS 3 BOU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 248B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 05 SEP 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
05/1200Z TO 05/2100Z:

SOLAR ACTIVITY HAS BEEN MODERATE THE LAST 10 HOURS. REGION 3300
(S12W58) PRODUCED A M4/1B AT 1824Z. STRONG SHORT WAVE FADE
THROUGH 15 MHZ AND MODERATE CENTIMETRIC BURSTS ACCOMPANIED THIS
FLARE. THIS FLARE AND SEVERAL LESSER CLASS C FLARES OCCURRED BELOW
THE EXTENDED LEAD SPOT OF REGION 3300, WHERE NEW SUNSPOTS HAVE
ERUPTED. REGION 3317 (N09E64) PRODUCED A M2/1M AT 1910Z. THIS
REGION HAS A LARGE PENUMBRA AREA. THOUGH OPPOSITE POLARITY SPOTS
EXIST IN THE SAME PENUMBRA, THE UMBRA ARE GREATER THAN 2
DEGREES APART; THUS MT WILSON HAS NOT DEFINED IT AS A DELTA
CONFIGURATION. REGION 3310 (S09W10) PRODUCED A C6/SN AT 1809Z.
THE MAIN UMBRA OF THIS GROUP THAT FORMS THE DELTA ARE SEPARATING
WITH AN E-W SHEAR. NEW SPOT GROWTH HAS OCCURRED ON THE NORTH SIDE
OF THE LARGE NAKED EYE SPOT IN REGION 3314 (S16W02). THIS NEW
GROWTH HAS A DELTA CONFIGURATION. FIVE NEW REGIONS, ALL SIMPLE,
HAVE BEEN ADDED TODAY.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. THE FIELD IS EXPECTED TO BE
ACTIVE THROUGH 07 SEP.

III. EVENT PROBABILITIES: 06 - 08 SEP

CLASS M 85/85/85

CLASS X 10/10/10

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 05 SEP 245

PREDICTED 06 - 08 SEP 250/252/245

90 DAY MEAN 05 SEP 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 SEP 09/12

ESTIMATED AFR/AP 05 SEP 19/23

PREDICTED AFR/AP 06 - 08 SEP 14/20 18/20 12/12

SOLTERWARN

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