

HFUS 1 BOU 201300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 263A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 20 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z TO 20/1200Z: SOLAR ACTIVITY HAS BEEN LOW. HOWEVER, A BOUNDARY FILAMENT SOUTH AND EAST OF REGION 3907 (S11W06) DISRUPTED AND PRODUCED A LONG-LIVED C9/2B PARALLEL RIBBON FLARE WITH X-RAY MAXIMUM AT 1546Z. PORTIONS OF THE FLARE COVERED SOME OF THE SMALL TRAILER SPOTS. A BURST OF 140 FU AT 2695 MHZ ACCOMPANIED THIS FLARE. ADDITIONAL SPOTS HAVE EMERGED IN THE TRAILER SECTIONS OF REGIONS 3905 (S16W32), 3910 (N15E17), AND 3907; WITH THE STRONGEST FLUX EMERGENCE OCCURRING IN REGION 3910. REGIONS 3912 (S10E16) AND 3913 (S08E27) EMERGED ON 19 SEPTEMBER. THE EAST LIMB REMAINS QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. HOWEVER, CONTINUED FLUX EMERGENCE IN REGIONS 3907 AND 3910 WOULD ACTIVATE CLASS M FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. BOULDER EXPERIENCED A STRONG K5 SUBSTORM IN THE 06-09Z TIME PERIOD. AS A CONSEQUENCE OF THE DISRUPTING FILAMENT/FLARE ON 19 SEPTEMBER, THE FIELD IS EXPECTED TO BE AT STORM LEVEL THE LATTER HALF OF THE 21ST AND THE FIRST HALF OF THE 22ND. THE FIELD IS EXPECTED TO BE ACTIVE THE BALANCE OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 21 SEP-23 SEP

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 SEP 137

ESTIMATED 20 SEP 136

PREDICTED 21 SEP-23 SEP 134/132/132

90 DAY MEAN 19 SEP 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR 18 SEP 020 AP 19 SEP 025

ESTIMATED AFR 19 SEP 019 AFR/AP 20 SEP 021/025

PREDICTED AFR/AP 21 SEP-23 SEP 030/025-030/035-015/025

SOLTERWARN

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HFUS 3 BOU 202200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 263B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 20 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
20/1200Z TO 20/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. A
SINGLE C1 XRAY EVENT OCCURRED IN THE PAST NINE HOURS. MINOR
SPOT GROWTH IN THE TRAILING PORTION OF REGION 3810(N14E09) HAS
CREATED NEW REGION 3814(N16E14). SMALL SPOTS HAVE ALSO FORMED
IN THE SOUTHERN PORTION OF REGION 3907(S12W12) NEAR WHERE A
FLARE AND FILAMENT ERUPTION OCCURRED YESTERDAY. ALL OTHER
REGIONS ARE SMALL AND DECAYING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN LOW. MINOR REGIONS RETURNING IN THE NEXT THREE DAYS
WILL BE COMPENSATED BY CONTINUED DECLINE IN REGIONS NOW
PRESENT. THE TWO AREAS OF GROWTH ON THE DISK GIVE ONLY SLIGHT
CHANCES OF CLASS M ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE FOR THE PAST 9 HOURS. ACTIVE CONDITIONS ARE
EXPECTED TO CONTINUE UNTIL THE ARRIVAL OF A MINOR STORM MIDDAY
TOMORROW. PERIODS OF MAJOR STORM PROPORTIONS ARE EXPECTED EARLY
ON 22 SEPTEMBER.

III. EVENT PROBABILITIES 21 SEP-23 SEP

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 SEP 146

PREDICTED 21 SEP-23 SEP 150/150/150

90 DAY MEAN 20 SEP 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 SEP 020/025

ESTIMATED AFR/AP 20 SEP 017/025

PREDICTED AFR/AP 21 SEP-23 SEP 030/025-030/035-015/025

SOLTERWARN

BT