

HFUS 1 BOU 151300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 258A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 15 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 14/1200Z TO 15/1200Z: SOLAR ACTIVITY HAS REMAINED LOW. REGION 3908 (N19E66) HAS PRODUCED TWO C4/1B FLARES (150212Z AND 150557Z) AS WELL AS SEVERAL LESSER FLARES. POINT BRIGHTENINGS AND PLAGE FLUCTUATIONS CONTINUE IN 3908 WHICH TEND TO SUGGEST THE POTENTIAL FOR INCREASED ACTIVITY. REGIONS 3901 (S13E07) AND 3905 (S15E38) ARE ALSO SHOWING DYNAMIC TRAITS BUT NEITHER OF THESE REGIONS EXHIBIT THE GROWTH TRENDS THAT WOULD INDICATE THIS BEHAVIOR WILL LEAD TO ENERGETIC FLARES. THE REMAINING DISK REGIONS ARE LITTLE CHANGED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW BUT ISOLATED M EVENTS ARE BECOMING MORE LIKELY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS UNSETTLED DURING THE PAST 24 HOURS. NO MAJOR CHANGES ARE ANTICIPATED. THE MAIN PORTIONS OF A CORONAL HOLE ARE STILL EAST OF CENTRAL MERIDIAN AND SHOULD NOT EFFECT THE FIELD BEFORE VERY LATE IN THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 16 SEP-18 SEP

CLASS M 40/40/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 SEP 146

ESTIMATED 15 SEP 143

PREDICTED 16 SEP-18 SEP 146/147/148

90 DAY MEAN 14 SEP 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 13 SEP 014 AP 14 SEP 013

ESTIMATED AFR 14 SEP 012 AFR/AP 15 SEP 010/014

PREDICTED AFR/AP 16 SEP-18 SEP 013/015-010/015-010/015

SOLTERWARN

BT

HFUS 3 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 258B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 15 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 15/2100Z: SOLAR ACTIVITY INCREASED TO THE MODERATE LEVEL WITH THE OCCURRENCE OF AN M2/2B FLARE FROM REGION 3908 (N18E61) AT 1826Z MAXIMUM. THE FLARE WHICH WAS IMPULSIVE IN X-RAYS, BUT SHORT-LIVED, PRODUCED A TYPE II SPECTRAL SOLAR RADIO BURST, A 2695MHZ RADIO BURST OF 190 FLUX UNITS (TENFLARE), AND STRONG SHORT WAVE FADES TO 15MHZ. THIS REGION, WHICH IS NOT PARTICULARLY IMPRESSIVE IN WHITE LIGHT, HAS BEEN THE PRIME SOURCE OF MOST OF TODAY'S EVENTS. REGION 3901 (S13E02) HAS MANAGED MINOR ACTIVITY TODAY, BUT SHOWS EVIDENCE OF SLOW DECAY AND SIMPLIFICATION. REGION 3907 (S10E55) HAS DEVELOPED A WEAK MAGNETIC DELTA CONFIGURATION, BUT HAS BEEN QUIET TODAY. TWO NEW REGIONS APPEARED TODAY, REGION 3909 (N17W06) DEVELOPED ON THE DISK AND IS A SIMPLE BI-POLAR STRUCTURE, WHILE 3910 (N14E74) APPEARS TO BE THE RETURN OF OLD ACTIVE REGION 3870. THIS REGION HAS YET TO SHOW ANY SIGNIFICANT ACTIVITY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW, HOWEVER, AN ISOLATED M-CLASS EVENT IS POSSIBLE FROM REGION 3908.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. NO SIGNIFICANT CHANGE IS EXPECTED DURING THE FORECAST PERIOD. THE POSSIBILITY OF A SMALL DISTURBANCE INDUCED FROM TODAY'S FLARE SHOULD NOT ARRIVE AT THE EARTH UNTIL LATE ON THE 18TH OF SEPTEMBER.

III. EVENT PROBABILITIES 16 SEP-18 SEP

CLASS M 40/50/60

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 SEP 148⁹

PREDICTED 16 SEP-18 SEP 150/153/155

90 DAY MEAN 15 SEP 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 SEP 012/013

ESTIMATED AFR/AP 15 SEP 013/014

PREDICTED AFR/AP 16 SEP-18 SEP 013/013-010/012-010/015

SOLTERWARN

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