

HFUS 1 BOU 121300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 255A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 12 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 11/1200Z TO 12/1200Z: SOLAR ACTIVITY HAS BEEN LOW. REGIONS 3895 (S10W12), 3902 (S21W06), AND 3901 (S12E45) HAVE PRODUCED FREQUENT SUBFLARES BUT NO X-RAY BURSTS HAVE EXCEEDED C2. REGION 3902 CONTINUES TO GROW AND NOW IS A MODERATE SIZE D GROUP. PLAGE HAS DEVELOPED BETWEEN THIS REGION AND 3895 AND THESE AREAS NOW SHARE A COMMON NEUTRAL LINE OCCUPIED BY AN ACTIVE FILAMENT. GROWTH HAS SLOWED IN 3901 WHICH IS NOW A CLASS E GROUP WITH INDICATIONS OF MIXED POLARITIES. A DENSE PATCH OF FILAMENT MATERIAL AT N16-19W13-19 ERUPTED RAPIDLY AT 12/0007Z. A SMALL H-ALPHA FLARE WAS OBSERVED WITH THIS ERUPTION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE GENERALLY LOW WITH A POSSIBILITY EXISTING FOR AN ISOLATED CLASS M FLARE FROM REGIONS 3895, 3902, AND 3901. REGIONS 3895 AND 3902 DO NOT AT THIS TIME APPEAR TO BE CONNECTED CLOSELY ENOUGH TO RESULT IN MAJOR ACTIVITY. HOWEVER, SHOULD 3902 CONTINUE TO GROW THIS SITUATION COULD CHANGE. A MODERATELY ACTIVE REGION IS EXPECTED TO RETURN TO THE EAST LIMB ON 15 SEP.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. THE EXPECTED DISTURBANCE HAS NOT AS YET MATERIALIZED. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS ARE EXPECTED FOR 13-14 SEP WITH GENERALLY ACTIVE CONDITIONS FORECAST FOR 15 SEP IN RESPONSE TO TODAY'S NEAR CM RAPID FILAMENT DISAPPEARANCE.

III. EVENT PROBABILITIES 13 SEP-15 SEP

CLASS M 40/40/45

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 SEP 156

ESTIMATED 12 SEP 152

PREDICTED 13 SEP-15 SEP 150/148/155

90 DAY MEAN 11 SEP 168

V. GEOMAGNETIC A INDICES

OBSERVED AFR 10 SEP 011 AP 11 SEP 012

ESTIMATED AFR 11 SEP 011 AFR/AP 12 SEP 013/016

PREDICTED AFR/AP 13 SEP-15 SEP 015/020-012/015-020/010

SOLTERWARN

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HFUS 3 BOU 122200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 255B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 12 SEP 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/1200Z TO 12/2100Z: SOLAR ACTIVITY HAS BEEN LOW. THE ONLY SIGNIFICANT ACTIVITY REPORTED THIS PERIOD HAS BEEN A C7/1N LONG DURATION EVENT. BRIGHT POINTS TO NEAR FLARE INTENSITY WERE OBSERVED FIRST IN REGION 3895(S10W19). XRAYs BEGAN TO RISE AT 1534Z WITH DISCRETE RADIO BURSTS AT ALL FREQUENCIES. FLARES WERE OBSERVED OPTICALLY AT 1606Z IN REGIONS 3895 AND 3902(S22W11). THE FLARE IN REGION 3895 MOVED OUT ALONG THE NEUTRAL LINE AND BY THE TIME OF FLARE MAXIMUM AT 1611Z IT APPEARED AS PARALLEL RIBBONS ALONG THE NEUTRAL LINE BETWEEN THE TWO REGIONS WHERE AN ACTIVE FILAMENT HAD BEEN REPORTED EARLIER. THE TOTAL DURATION OF THE XRAY EVENT WAS MORE THAN 2.5 HOURS. NEW REGIONS TODAY ARE 3905(S16E73), A SMALL INTENSE COMPACT PLAGE WITH 2 SPOTS, AND 3904(S08W28) OBSERVED TO DEVELOP AS A SINGLE SPOT EARLY IN THE UT DAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW. OLD REGION 3870, CARRINGTON LOCATION 129 IS DUE BACK 15 SEPT AND MAY BRING AN INCREASE IN ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. THE FIELD IS EXPECTED TO BE MOSTLY UNSETTLED WITH A POSSIBLE BRIEF INCREASE TO ACTIVE CONDITIONS ON 15 SEPTEMBER DUE TO A FILAMENT DISAPPEARANCE EARLY ON 12 SEPTEMBER.

III. EVENT PROBABILITIES 13 SEP-15 SEP

CLASS M 40/40/45

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 SEP 152

PREDICTED 13 SEP-15 SEP 150/148/155

90 DAY MEAN 12 SEP 167

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 11 SEP 011/012

ESTIMATED AFR/AP 12 SEP 013/016

PREDICTED AFR/AP 13 SEP-15 SEP 015/015-012/025-020/020

SOLTERWARN

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