

HEUS : ROU 161300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 228A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 16 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 16/1200Z:

SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS PRIMARILY DUE TO THE DIMINISHED FLARE PRODUCTION FROM REGION 3257 (S08W87) WHICH IS NOW ROTATING OVER WEST LIMB. REGION 3266 (S15E24) PRODUCED A C4/SB FLARE AT 0532Z MAXIMUM WITH MINOR RADIO BURSTS. THIS REGION CONTINUES ITS SLOW INCREASE IN SPOT AND MAGNETIC COMPLEXITY, BUT STILL REMAINS A BASICALLY SIMPLE BIPOLE WITH A WEAK DELTA. REGIONS 3278 (S02E66) AND 3279 (S18E66) ARE APPARENTLY GROWING SLOWLY, WHILE REGION 3274 (S07E47) CONTAINS AN UNUSUAL SPOT STRUCTURE. SURGING AT NORTHEAST 10 IS INCREASING, INDICATING A LARGE SIGNIFICANT REGION COULD BE APPROACHING EAST LIMB. REGION 3278 WAS INCORRECTLY LISTED AS S02W72 ON THE BOULDER 0200Z REGION REPORT. THE CORRECT LOCATION SHOULD HAVE BEEN S02E72.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO RETURN TO THE MODERATE LEVEL; HOWEVER, THE SOURCE OF THE ACTIVITY IS EXPECTED TO SHIFT FROM THE SW COMPLEX OF 3257 TO THE EASTERN HEMISPHERE REGIONS. THE PACE OF M-CLASS FLARE PRODUCTION WHICH REGION 3257 WAS ABLE TO MAINTAIN, WILL DECREASE SINCE 3266, 3274, AND 3279 ARE NOT YET AS DYNAMIC AS 3257.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS. UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED DURING THE NEXT 24 HOURS IN RESPONSE TO A SMALL CORONAL HOLE NOW MOVING INTO A FAVORABLE SUN-EARTH CONNECTION POINT.

III. EVENT PROBABILITIES: 17 AUGUST - 19 AUGUST

CLASS M 95/85/80

CLASS X 10/10/05

PROTON 10/10/05

POAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 15 AUG 219

ESTIMATED 16 AUG 220

PREDICTED 17-19 AUG 221/223/228

90 DAY MEAN 15 AUG 176

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 AUG 08 AP 15 AUG 12

ESTIMATED AFR 15 AUG 10 AFR/AP 16 AUG 12/10

PREDICTED AFR/AP 17-19 AUG 15/15 - 10/08 - 15/10

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HEUS 3 POW 162200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 2288

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 16 AUGUST 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 16/2100Z: SOLAR ACTIVITY CONTINUED MODERATE DURING THIS PERIOD WITH M1/SN EVENTS FROM DEPARTING REGION 3257-3267 (S09-20, W90) AT 1430Z AND 1731Z. REGION 3266 (S16E16) CONTINUES LARGE BUT WITH LITTLE EVOLUTION AND ONLY A FEW SMALL SUBFLARES. REGION 3274 IS MORE INTERESTING WITH AN EMPEDDED FILAMENT NOW FORMING ON ITS EAST-WEST ORIENTED NEUTRAL LINE. ITS D-CLASS SPOT GROUP IS UNUSUAL BUT SMALL. REGION 3181 (N13E82) HAS PRODUCED A SINGLE SUBFLARE AND NOW SHOWS A SMALL SPOT. REGION 3182 (S08E55) HAS FORMED NEAR REGION 3178 (S03E60). CORONAL RAIN AND SMALL SURGES MARK REGIONS RETURNING AT N04 AND S10E90.

IP. SOLAR ACTIVITY FORECAST: SOLAR INDICES ARE EXPECTED TO RISE SLOWLY AS ADDITIONAL REGIONS COME OVER EAST LIMB AND GROWTH OCCURS AMONG REGIONS IN THE SE QUADRANT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS MOSTLY QUIET DURING THIS PERIOD. ACTIVITY IS EXPECTED TO INCREASE TOMORROW AS DISTURBANCES ARRIVE FROM A SMALL CORONAL HOLE AND TRANSIENTS ASSOCIATED WITH REGION 3257.

III. EVENT PROBABILITIES 17 AUGUST - 19 AUGUST

CLASS M 95/85/80

CLASS X 10/10/05

PROTON 10/10/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 AUGUST 219

PREDICTED 17-19 AUGUST 221/223/228

90-DAY MEAN 16 AUGUST 176

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 AUGUST 12/12

ESTIMATED AFR/AP 16 AUGUST 10/13

PREDICTED AFR/AP 17-19 AUGUST 15/15 - 10/08 - 15/10

SOLTERWAPN

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