

HFUS:1-POU/291235

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 272A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1300Z 29 SEPT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
28/1200Z TO 29/1200Z:

SOLAR ACTIVITY IS LOW. THE VISIBLE DISK REGIONS HAVE NOT SHOWN MUCH CHANGE AS THEY REMAIN BASICALLY SIMPLE IN STRUCTURE. COHESION IN THE PENUMBRAL SEGMENTS OF 3368 (N 08W 19) IS ABOUT THE MOST DRAMATIC CHANGE. ANOTHER SMALL REGION 3374 (S 18E 64) WAS NUMBERED, AND ONE SMALL REGION 3362 (N 16W 44) LOST ITS SPOTS. SMALL SURGES ARE BEING REPORTED NEAR SE 10 AND SE 27.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD REMAIN LOW WITH THE POTENTIAL IN 3368 STILL POSING A THREAT FOR AN ISOLATED M EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD IS UNSETLED. NO CHANGE EXPECTED DURING THE NEXT 24 TO 36 HOURS; HOWEVER, CORONAL HOLE EFFECTS COULD APPEAR LATE IN THE PERIOD.

III. EVENT PROBABILITIES: 30 SEP-02 OCT

CLASS M 50/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 28 SEP 200

ESTIMATED 29 SEP 203

PREDICTED 30 SEP-02 OCT 205/212/218

90 DAY MEAN 28 SEP 209

V. GEOMAGNETIC INDICES

OBSERVED AFR 27 SEP 16 AP 28 SEP 08

ESTIMATED AFR 28 SEP 08 AFP/AP 29 SEP 08/10

PREDICTED AFR/AP 30 SEP-02 OCT 09/08 10/08 15/10

SOUTERWARN

BT

HFUS 3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SITE NUMBER 272B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 29 SEPTEMBER 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/1200Z TO 29/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. AN M1 X-RAY EVENT WITH MINOR RADIO NOISE AND A SHORT WAVE FADE OUT TO 15 MHZ WHICH MAXED AT 1431Z COULD NOT BE OBVIOUSLY ASSOCIATED WITH DISK OR LIMB FLARE ACTIVITY. HOWEVER, ENHANCED PLAGE AND SUBSEQUENT PROMINENCE ACTIVITY ON THE SOUTHWEST LIMB NEAR REGION 3361 (S08W68) MAY OFFER A CANDIDATE SOURCE. OTHERWISE, NUMEROUS SUPERFLARES FROM 5 SEPARATE REGIONS HAVE BEEN OBSERVED. SIGNIFICANT GROWTH WAS REPORTED IN REGIONS 3363 (S07W28), 3370 (N15E33), AND 3373 (N17E23). REGION 3375 (N14E53) IS A NEW C-TYPE GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW, BUT ISOLATED M-CLASS EVENTS ARE POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN NEAR ACTIVE LEVELS FOR THE PAST 9 HOURS. THESE CONDITIONS ARE BEING CAUSED BY A HIGH DENSITY DISTURBANCE IN THE SOLAR WIND WHICH IS CARRYING A STRONGLY SOUTHWARD INTERPLANETARY MAGNETIC FIELD. THE SOLAR ORIGIN OF THIS DISTURBANCE IS UNIDENTIFIED. THESE HIGHLY UNSETLED CONDITIONS ARE NOT EXPECTED TO PERSIST, AND THE FIELD SHOULD RETURN TO MILDLY UNSETLED LEVELS UNTIL THE POTENTIAL EFFECTS OF A/NORTHERN CORONAL HOLE ARE FELT NEAR THE END OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 30 SEPTEMBER - 02 OCTOBER

CLASS M 50/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 SEPTEMBER 204

PREDICTED 30 SEPTEMBER - 02 OCTOBER 205/212/218

90-DAY MEAN 29 SEPTEMBER 210

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 28 SEPTEMBER 07/08

ESTIMATED AFR/AP 29 SEPTEMBER 13/10

PREDICTED AFR/AP 30 SEPTEMBER - 02 OCTOBER 09/08 - 10/08 - 15/10

SOLAR/WARN

BT