

HFUS 1 BOU 291300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 302A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 29 OCT 1981

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/1200Z TO 29/1200Z: SOLAR ACTIVITY HAS BEEN LOW. REGION 3416(S04W74) HAS PRODUCED SEVERAL CLASS C FLARES AND HAS EXHIBITED A SLOW GROWTH TREND. OTHER REGIONS CURRENTLY ON THE DISK ARE SMALL OPEN SPOT GROUPS WITH LITTLE OR NO RECENT FLARE ACTIVITY. A C6 X-RAY BURST WAS OBSERVED AT 29/0847UT AND CORRELATED WITH BRIGHT SURGING AT SE 12. NO REGION WAS EXPECTED AT THIS LOCATION AND NO SPOTS HAVE YET BEEN OBSERVED.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW. REGION 3416 SHOULD CONTINUE TO PRODUCE SEVERAL CLASS C FLARES/DAY WITH A SLIGHT POSSIBILITY OF PRODUCING AN ISOLATED CLASS M FLARE PRIOR TO WEST LIMB TRANSIT. IT IS TOO EARLY TO ASSESS THE FLARE PRODUCTION CAPABILITY OF THE REGION AT THE SE LIMB, BUT PRELIMINARY INDICATIONS ARE THAT IT IS NOT A MAJOR REGION.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. THE GEOMAGNETIC DISTURBANCE FROM THE NORTHERN HEMISPHERE CORONAL HOLE IS NOT EXPECTED TO MATERIALIZE. UNSETLED GEOMAGNETIC CONDITIONS ARE FORECAST FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 30 OCT-01 NOV

CLASS M 0/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 OCT 185

ESTIMATED 29 OCT 187

PREDICTED 30 OCT-01 NOV 190/192/194

90 DAY MEAN 28 OCT 221

V. GEOMAGNETIC A INDICES

OBSERVED AFR 27 OCT 009 AP 28 OCT 018

ESTIMATED AFR 28 OCT 014 AFR/AP 29 OCT 013/018

PREDICTED AFR/AP 30 OCT-01 NOV 010/020-010/012-008/010

SOLTERWARN

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HFUS 3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 302B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 29 OCTOBER 1981

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/1200Z TO 29/2100Z: SOLAR ACTIVITY HAS BEEN LOW. OLD REGION 3388 HAS RETURNED TO THE DISK AS REGION 3432 (S11E75), PRODUCING A C6 X-RAY EVENT AT 0839Z. THIS REGION MAY CONTAIN A DELTA, HAS SIGNIFICANT SPOT STRUCTURE BUT IS TOO FAR EAST FOR CAREFUL ANALYSIS. OTHER NEW REGIONS TODAY ARE 3431 (N28E54), 3433 (N13E02), AND 3434 (S12E39). OTHER ACTIVITY TODAY HAS BEEN LIMITED TO A C6/SN FLARE OUT OF 3416 AT 2005Z.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW. REGION 3416 MAY CONTINUE LOW LEVEL ACTIVITY TO LIMB TRANSIT. NEW REGION 3432 IS THE MOST LIKELY SOURCE OF ADDITIONAL ACTIVITY, WITH C CLASS LEVELS LIKELY AND M CLASS EVENTS POSSIBLE.

I.II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. THE GEOMAGNETIC DISTURBANCE FROM THE NORTHERN HEMISPHERE CORONAL HOLE IS NOT EXPECTED TO MATERIALIZE. UNSETLED GEOMAGNETIC CONDITIONS ARE FORECAST FOR THE NEXT THREE DAYS.

I.III. EVENT PROBABILITIES 30 OCTOBER - 01 NOVEMBER

CLASS M            50/50/50

CLASS X            10/10/10

PROTON            01/01/01

PCAF              GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED            29 OCTOBER 191

PREDICTED          30 OCTOBER - 01 NOVEMBER 205/207/209

90-DAY MEAN        29 OCTOBER 221

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP    28 OCTOBER 12/16

ESTIMATED AFR/AP    29 OCTOBER 09/13

PREDICTED AFR/AP    30 OCTOBER-01 NOVEMBER 10/15 - 10/12 - 08/10

SOLTERWARN

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