

HFUS 1 BOU 251300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 298A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 25 OCT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

~4/1200Z TO ~5/1200Z:

SOLAR ACTIVITY WAS AT MODERATE LEVELS THIS PERIOD DUE TO A M1/1B FROM REGION 3406 (S08W65) AT 24/2352UT. REGION 3406 HAS SHOWN MINOR GROWTH, WITH ALL OTHER REGIONS BEING REPORTED AS GENERALLY STABLE. THERE HAVE BEEN NO REPORTS OF SURGING ON THE EAST LIMB SO NO LARGE REGIONS ARE EXPECTED TO RETURN IN THE NEXT 24 HOURS.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE AT A LOW LEVEL DURING THE FORECAST PERIOD. REGION 3403 (S11W89) COULD STILL PRODUCE A LARGE EVENT AS IT PASSES OVER THE LIMB, HOWEVER IT IS DOUBTFUL. REGION 3406 MAY PRODUCE ISOLATED SMALL M-CLASS EVENTS DURING THIS FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE THIS PERIOD. THE FIELD IS EXPECTED TO BE GENERALLY UNSETTLED UNTIL LATE ON 28 OCT WHEN ACTIVE CONDITIONS ARE EXPECTED, AS THE EFFECTS OF A LARGE CORONAL HOLE ARE REALIZED.

III. EVENT PROBABILITIES 26 OCT-28 OCT

CLASS M 35/25/15

CLASS X 02/01/01

PROTON 02/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 OCT 203

ESTIMATED 25 OCT 188

PREDICTED 26 OCT-28 OCT 175/168/165

90 DAY MEAN 24 OCT 223

V. GEOMAGNETIC A INDICES

OBSERVED AFR 23 OCT 023 AP 24 OCT 016

ESTIMATED AFR 24 OCT 013 AFR/AP 25 OCT 014/025

PREDICTED AFR/AP 26 OCT-28 OCT 010/015-012/012-014/014

SOLTERWARN

HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 298B.

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 25 OCT 1981

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM (25/1200Z TO 25/2100Z):
SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST NINE HOURS. ONLY MINOR C-CLASS X-RAY EVENTS ASSOCIATED WITH SUBFLARES HAVE BEEN OBSERVED FROM A VARIETY OF UNIMPRESSIVE DISK REGIONS. THE LARGEST X-RAY EVENT (A C4 AT 1450Z) WAS NOT CORRELATED OPTICALLY. WITH REGION 3403 NOW PAST WEST LIMB (STRONG SURGING FROM SW10 NOW VISIBLE) AND REGION 3406 (S08W71) NEARING WEST LIMB, THE DISK IS COMPOSED OF NINE SIMPLE REGIONS. REGION 3416 (S05W28) HAS SHOWN SIGNIFICANT GROWTH, BUT IS STILL ONLY A C-TYPE GROUP. REGION 3418 (N16E15) CONTAINS THE LARGEST AND BRIGHTEST H-ALPHA PLAGE BUT IS SIMPLE MAGNETICALLY. NEW REGION 3425 (N08E77) ROTATED OVER EAST LIMB AS A SMALL C-TYPE GROUP WHILE 3426 (N15E46) IS A SMALL EMERGING GROUP WITH ONE SPOT.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW. REGION 3406 RETAINS A SLIGHT CAPABILITY FOR AN ISOLATED M-CLASS EVENT, BUT WILL BE ROTATING OVER WEST LIMB SOON. THE REMAINING DISK REGIONS ARE AT PRESENT CAPABLE OF ONLY C-CLASS FLARES.

I.I. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE THROUGH MOST OF THE PERIOD BUT NOW SHOWS SOME INDICATION OF SLOW SETTLING CONDITIONS. UNSETTLED LEVELS ARE EXPECTED DURING THE NEXT 24 HOURS, HOWEVER, SHORT PERIODS OF ACTIVE CONDITIONS ARE LIKELY DURING THE UT NIGHT-TIME.

III. EVENT PROBABILITIES 26 OCT-28 OCT

CLASS M 35/25/15

CLASS X 02/01/01

PROTON 02/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 OCT 188

PREDICTED 26 OCT-28 OCT 175/168/165

90 DAY MEAN 25 OCT 222

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 OCT 013/016

ESTIMATED AFR/AP 25 OCT 023/025

PREDICTED AFR/AP 26 OCT-28 OCT 010/015-012/012-014/014

SOLTERWARN

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