

BT

HFUS 1 BOU 061300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 006A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 06 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 05/1200Z TO 06/1200Z: SOLAR ACTIVITY HAS REMAINED VERY LOW THIS PERIOD, HOWEVER THE FREQUENCY OF THE SMALL SOLAR FLARES HAS INCREASED IN THE LAST FEW HOURS. THE LARGEST EVENT WAS A C1/SF FLARE FROM REGION 4048 (S14E44). THIS REGION HAS GROWN SIGNIFICANTLY IN WHITE LIGHT AREA AND DURING THE LAST HALF OF THE PERIOD HAS HAD AN ARCHED FILAMENT SYSTEM. ITS MAGNETIC GRADIENT HAS TIGHTENED DURING THE PERIOD AND IT IS CURRENTLY CLASSED AS A BETA-GAMMA GROUP, HOWEVER IT MAY BE TWO OR THREE GROUPS. REGION 4046 (S15W17) HAS HAD RESTRUCTURING AND SLIGHT GROWTH IN AREA IN WHITE LIGHT. ITS MAGNETIC GRADIENT HAS DECREASED BUT IT HAS HAD AN ARCHED FILAMENT SYSTEM FOR THE ENTIRE PERIOD. THREE REGIONS WERE NUMBERED THIS PERIOD, THESE ARE REGIONS 4051 (N11E57) A SMALL A TYPE, 4052 (S07E61) A SMALL H TYPE, AND REGION 4053 (S08E77) WHICH IS ROTATING ONTO THE DISK AND IS CURRENTLY AN H TYPE. THIS LAST REGION IS THE RETURN OF OLD REGION 4025 WHICH PRODUCED SEVERAL M AND X CLASS EVENTS DURING ITS LAST TRANSIT OF THE DISK.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW TO LOW THROUGH THE PERIOD. THE POSSIBILITY OF AN M CLASS EVENT IS INCREASING AS REGION 4048 DEVELOPES, AND AS REGION 4053 ROTATES ONTO THE DISK.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. ACTIVE CONDITIONS ARE EXPECTED ON THE 7TH AND THE 8TH IN RESPONSE TO A FAVORABLY LOCATED CORONAL HOLE. UNSETTLED CONDITIONS SHOULD THEN RETURN ON THE 9TH.

III. EVENT PROBABILITIES 07 JAN-09 JAN

CLASS M 30/40/40

CLASS X 01/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 JAN 160

ESTIMATED 06 JAN 175

PREDICTED 07 JAN-09 JAN 185/190/191

90 DAY MEAN 05 JAN 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR 04 JAN 003 AP 05 JAN 008

ESTIMATED AFR 05 JAN 008 AFR/AP 06 JAN 010/015

PREDICTED AFR/AP 07 JAN-09 JAN 020/020-015/020-010/010

SOLTERWARN

BT

BT

HFUS 3 BOU 062200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 006B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 06 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 06/1200Z TO 06/2100Z: SOLAR ACTIVITY HAS BEEN LOW. THE FREQUENCY OF FLARES HAS CONTINUED TO INCREASE THE LARGEST BEING A C1/SF. REGION 4048 (S12E31 APPROXIMATE LOCATION) REMAINS THE MOST SIGNIFICANT REGION ON THE DISK, RETAINING THE SAME AREA AND MAGNETIC COMPLEXITY. REGIONS 4054 (S16E28 APPROXIMATE LOCATION) A HSX GROUP AND REGION 4055 (S12E13 APPROXIMATE LOCATION) AN AXB GROUP, ARE THE ONLY NEW REGIONS NUMBERED THIS PERIOD. ALL OTHER REGIONS ON THE DISK SHOW LITTLE POTENTIAL FOR MAJOR FLARE ACTIVITY AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW. MODERATE LEVEL ACTIVITY IS POSSIBLE WITH FURTHER DEVELOPMENT WITHIN REGION 4048. THE INCREASE IN C LEVEL FLARE ACTIVITY MAY ALSO SHOW A TREND TOWARD MODERATE ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED THIS PERIOD. THE LEVEL OF ACTIVITY SHOULD INCREASE ON THE SEVENTH OF JANUARY DUE TO THE CENTRAL MERIDIAN PASSAGE OF A CORONAL HOLE. THIS LEVEL SHOULD THEN DROP TO UNSETTLED CONDITIONS ON THE EIGHTH AND NINETH OF JANUARY.

III. EVENT PROBABILITIES 07 JAN-09 JAN

CLASS M 30/40/40

CLASS X 01/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 06 JAN 170

PREDICTED 07 JAN-09 JAN 185/190/191

90 DAY MEAN 06 JAN 175

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 05 JAN 006/008

ESTIMATED AFR/AP 06 JAN 010/015

PREDICTED AFR/AP 07 JAN-09 JAN 020/020-015/020-010/010

SOLTERWARN

BT