

HFUS 1 BOU 311300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 212A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 31 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 30/1200Z TO 31/1200Z: SOLAR ACTIVITY CONTINUES VERY LOW, BUT WITH SOME INCREASE IN SUBFLARE ACTIVITY. SIGNIFICANT GROWTH IN REGION 3829(S10E44) HAS DEVELOPED A BRIGHT FLUCTUATING PLAGE WITH A SMALL CLASS D SPOT GROUP. VERY SMALL NEW REGIONS HAVE EMERGED: REGION 3832(S12E02) IN THE MIDST OF AN AGED PLAGE AND REGION 3833(S16W47). REGION 3830(N16E63) IS NOW VISIBLE AS A SMALL CLASS D SPOT GROUP WITH AN ACTIVE PROMINENCE FOLLOWING IT. A LARGE FILAMENT DISAPPEARED FROM S25W45 AT ABOUT 30/1000Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO RETURN TO ITS ACTIVE EXTREME WITH THE 10TH CONSECUTIVE EAST LIMB PASSAGE OF THE ACTIVE LONGITUDES MARKED LAST BY REGION 3804. LIMB ACTIVITY AT NE05-20 MAY OCCUR BY MIDDAY ON 02 AUGUST.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD RESUMED MINOR STORM CONDITIONS TODAY WITH BRIEF PERIODS OF MAJOR STORM PROPORTIONS NEAR THE MIDNIGHT SECTOR. THERE IS NO CLEAR SOLAR SOURCE FOR THIS UNEXPECTED ACTIVITY. FILAMENT ACTIVITY IN THE WESTERN SOLAR HEMISPHERE IN THE PAST FEW DAYS MAY BE A SUBTLE INDICATOR OF TURBULENT CORONAL CONDITIONS. A SMALL SHRINKING CORONAL HOLE JUST PAST CENTRAL MERIDIAN TODAY IS ANOTHER SUSPICIOUS FACTOR. A LARGE FILAMENT DISAPPEARED EARLY ON 30 JULY AND MAY RESULT IN RENEWAL OF GEOMAGNETIC ACTIVITY MIDWAY THROUGH THIS FORECAST PERIOD. NO TRULY QUIET CONDITIONS CAN BE FORESEEN FOR DAYS OR EVEN WEEKS AHEAD.

III. EVENT PROBABILITIES 01 AUG-03 AUG

CLASS M 30/50/70

CLASS X 01/10/15

PROTON 01/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 JUL 109

ESTIMATED 31 JUL 120

PREDICTED 01 AUG-03 AUG 130/145/160

90 DAY MEAN 30 JUL 161

V. GEOMAGNETIC A INDICES

OBSERVED AFR 29 JUL 019 AP 30 JUL 024

ESTIMATED AFR 30 JUL 023 AFR/AP 31 JUL 036/040

PREDICTED AFR/AP 01 AUG-03 AUG 020/020-015/015-020/020

SOLTERWARN

BT

HFUS 3 BOU 312200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 212B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 31 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
31/1200Z TO 31/2100Z: SOLAR ACTIVITY HAS BEEN LOW. A SMALL FLARE  
IN REGION 3828 (N07W13) IS THE ONLY ACTIVITY NOTED DURING PAST  
9 HOURS. REGION 3830 (N16E56) SHOWS ARCH FILAMENTS AND POINT  
BRIGHTENINGS WHILE GROWING SLOWLY. REGION 3829 (S12E37) IS ALSO  
GROWING AND HAS AN ARCH FILAMENT SYSTEM. LITTLE ELSE HAS  
CHANGED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE  
LOW. THE RETURN OF REGION 3804 IS EXPECTED TO RAISE ACTIVITY  
LEVELS CONSIDERABLY. THE LEADING EDGE OF 3804 SHOULD BE VISIBLE  
LATE ON 2 AUG OR EARLY ON 3 AUG.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN AT ACTIVE TO MINOR STORM LEVELS. GENERALLY ACTIVE  
CONDITIONS THROUGH 3 AUG CAN BE EXPECTED.

III. EVENT PROBABILITIES 01 AUG-03 AUG

CLASS M 30/50/70

CLASS X 01/10/15

PROTON 01/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 31 JUL 111

PREDICTED 01 AUG-03 AUG 122/133/145

90 DAY MEAN 31 JUL 160

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 30 JUL 022/024

ESTIMATED AFR/AP 31 JUL 024/031

PREDICTED AFR/AP 01 AUG-03 AUG 020/020-015/015-020/020

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HXUS BOU 312200

PREDM 03001 05002 07003

PREDX 00101 01002 01503

PREDP 00101 01002 01503

PCAFT 00101

TENCM 12201 13302 14503

AFRED 02001 01502 02003

AFAPF 02001 01502 02003

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