

HFUS 1 BOU 241300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 205A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 24 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
23/1200Z TO 24/1200Z: SOLAR ACTIVITY HAS BEEN LOW. ALL REGIONS
HAVE EITHER DECAYED SIGNIFICANTLY OR ARE STABLE. RECENT
REPORTS INDICATE ONLY TWO CLEARLY DEFINED REGIONS, 3822(S19E26)
AND 3817(N17W43). ARCH FILAMENTS WERE REPORTED NEAR BOTH OF
THESE AND ALTHOUGH A FEW MORE SPOTS MAY HAVE DEVELOPED, BOTH
REGIONS REMAIN SMALL.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BECOME VERY
LOW. NO REGIONS APPEAR CAPABLE OF SIGNIFICANT ACTIVITY NOR ARE
SUCH REGIONS EXPECTED TO ARRIVE OVER THE EAST LIMB DURING THE
FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD
INCREASED FROM ACTIVE TO MINOR STORM CONDITIONS AFTER 24/0300Z.
IT REMAINS AT MINOR STORM LEVELS, ALTHOUGH A TREND TOWARD LOWER
LEVELS APPEARS TO BE DEVELOPING. THE FIELD IS EXPECTED TO
RETURN TO ACTIVE LEVELS DURING 24 JULY AND EXHIBIT UNSETLED
CONDITIONS ON THE FOLLOWING DAYS OF THE FORECAST PERIOD. THE
ENERGETIC PARTICLE EVENT BEGINNING AT 22/2030Z, ENDED AT
23/1225Z. THIS EVENT HAS BEEN FOLLOWED BY AN ENERGETIC
PARTICLE ENHANCEMENT TO NEAR-EVENT THRESHOLD PERSISTING TO THE
PRESENT AND EXPECTED TO CONTINUE FOR A FEW MORE HOURS.

III. EVENT PROBABILITIES 25 JUL-27 JUL

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JUL 125

ESTIMATED 24 JUL 110

PREDICTED 25 JUL-27 JUL 101/096/097

90 DAY MEAN 23 JUL 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 22 JUL 019 AP 23 JUL 014

ESTIMATED AFR 23 JUL 012 AFR/AP 24 JUL 028/035

PREDICTED AFR/AP 25 JUL-27 JUL 015/020-012/015-010/015

SOLTERWARN

BT

HFXS 3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 205B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 24 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 24/2100Z: SOLAR ACTIVITY HAS REMAINED AT VERY LOW LEVELS THROUGHOUT THE DAY. ONLY TWO DISTINCT SUNSPOT REGIONS ARE ON THE VISIBLE DISK OF THE SUN: REGION 3817 (N18W53) AND REGION 3822 (S20E21). BOTH REGIONS ARE VERY SMALL; NEITHER HAS PRODUCED ANY FLARES OF SIGNIFICANCE DURING THE PAST 10 HOURS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE TO DECLINE OVER THE NEXT THREE DAYS REACHING A MINIMUM AROUND 27 JULY. ONLY VERY SPORADIC LOW LEVEL CLASS-C XRAY EVENTS CAN BE EXPECTED TO RESULT FROM THE UNIMPRESSIVE REGIONS ON THE SOLAR DISK.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN DISTURBED DURING THE DAY. CONDITIONS HAVE RANGED FROM ACTIVE TO MINOR STORM LEVELS. A MINOR GEOMAGNETIC STORM WHICH BEGAN AROUND 24/1630Z PRODUCED ENHANCED LEVELS OF LOW ENERGY CHARGED PARTICLE FLUXES AT GEOSYNCHRONOUS SATELLITE ALTITUDES. THE DISTURBED CONDITIONS CAN BE ATTRIBUTED TO THE PRESENCE OF A HIGH LATITUDE CORONAL HOLE SITUATED IN THE NORTHWEST QUADRANT OF THE SOLAR DISK. AS THE CORONAL HOLE ROTATES TOWARDS THE WEST LIMB OVER THE NEXT FEW DAYS THE GEOMAGNETIC FIELD CAN BE EXPECTED TO GRADUALLY RETURN TO ACTIVE LEVELS ON THE 25TH OF JULY WITH ACTIVE TO UNSETTLED CONDITIONS ON THE FOLLOWING DAY.

III. EVENT PROBABILITIES 25 JUL-27 JUL

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 JUL 114

PREDICTED 25 JUL-27 JUL 105/100/100

90 DAY MEAN 24 JUL 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 JUL 013/014

ESTIMATED AFR/AP 24 JUL 035/045

PREDICTED AFR/AP 25 JUL-27 JUL 020/025-020/015-015/015

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HFXS BOU 242200

PREDM 01525 01526 01527

PREDX 00125 00126 00127

PREDP 00125 00126 00127

PCAF 00125

TENCM 10525 10026 10027

AFRED 02025 02026 01527

AFAPF 02525 01526 01527

BT