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HFUS 1 BOU 221300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 173A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 22 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/1200Z TO 22/1200Z: SOLAR ACTIVITY HAS BEEN HIGH. REGION 3781 (N16W18) PRODUCED AN X2/1B AT 21/2303UT. 3781 HAS ALSO PRODUCED LOW-MID CLASS M FLARES AT 21/1616UT, 21/2231UT, 22/0013UT, AND 22/0537UT. NO TYPE II OR IV BURSTS WERE OBSERVED WITH ANY OF THESE FLARES. 3781 RETAINS ITS MAGNETIC COMPLEXITY AND FLUX EMERGENCE CONTINUES BUT AT A MUCH REDUCED RATE. REGION 3776 (N13W54) IS DECAYING SLOWLY AND HAS PRODUCED SEVERAL SUBFLARES. REGION 3782 (N16E26) CONTINUES TO GROW BUT ALSO AT A REDUCED RATE. A FILAMENT NEAR 3776 ERUPTED BETWEEN 22/0230-0309UT AND EXTENDED OVER THE WEST LIMB. A SMALL REGION IS EMERGING NEAR S02W04 AND HAS BEEN NUMBERED 3787.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE GENERALLY MODERATE WITH CLASS X FLARES POSSIBLE FROM REGION 3781 AND TO A LESSER EXTENT FROM REGION 3776. CLASS M FLARE FREQUENCY FROM 3781 SHOULD DECREASE SLIGHTLY FROM WHAT IT HAS BEEN THE PAST TWO DAYS. NO SIGNIFICANT REGIONS ARE EXPECTED TO RETURN TO THE EAST LIMB DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. MINOR STORM CONDITIONS SHOULD BEGIN LATER TODAY AND CONTINUE THROUGHOUT THE FORECAST PERIOD. THIS DISTURBANCE IS BASED UPON A RECURRENT CORONAL HOLE SOLAR WIND STREAM. NO FLARES OR FILAMENT-DISRUPTIONS OBSERVED RECENTLY HAVE PRODUCED RADIO SPECTRA INDICATIVE OF GEOMAGNETIC STORM POTENTIAL.

III. EVENT PROBABILITIES 23 JUN-25 JUN

CLASS M 90/90/90

CLASS X 25/25/25

PROTON 10/15/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 JUN 204

ESTIMATED 22 JUN 200

PREDICTED 23 JUN-25 JUN 197/194/185

90 DAY MEAN 21 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 20 JUN 021 AP 21 JUN 012

ESTIMATED AFR 21 JUN 011 AFR/AP 22 JUN 015/030

PREDICTED AFR/AP 23 JUN-25 JUN 030/030-030/030-030/030

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III

HFUS 3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 173B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 22 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z TO 22/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3781(N16W24) PRODUCED AN M3/1B FLARE AT 1439Z MAXIMUM AND AN M2/1B FLARE AT 1836Z MAXIMUM. ONLY SUBFLARES HAVE BEEN OBSERVED IN REGIONS 3776(N13W62) AND 3782(N16E13). REGION 3787(S01W13) IS A SMALL C CLASS GROUP WHICH HAS APPEARED NEAR CENTRAL MERIDIAN TODAY. REGION 3781 APPEARS TO HAVE SIMPLIFIED SLIGHTLY AND SHOWS SOME EVIDENCE OF DECAY. REGION 3776 CONTINUES TO DECAY. REMAINING REGIONS APPEAR QUIET AND STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE BUT WITH A POSSIBILITY OF ISOLATED X FLARES OCCURRING IN REGION 3776 OR 3781.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. RECURRENCE OF ACTIVE TO MINOR STORM LEVEL CONDITIONS IS PREDICTED EARLY IN THE FORECAST PERIOD. THESE CONDITIONS ARE EXPECTED TO PERSIST THROUGH 25 JUNE. THE CORONAL HOLE POSITIONED WEST OF CENTRAL MERIDIAN IS EXPECTED TO CAUSE THIS ACTIVITY.

III. EVENT PROBABILITIES 23 JUN-25 JUN

CLASS M 90/90/90

CLASS X 25/25/25

PROTON 10/15/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 JUN 206

PREDICTED 23 JUN-25 JUN 205/202/200

90 DAY MEAN 22 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 JUN 010/012

ESTIMATED AFR/AP 22 JUN 015/018

PREDICTED AFR/AP 23 JUN-25 JUN 030/030-030/030-030/030

SOLTERWARN

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