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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 175A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 24 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
23/1200Z TO 24/1200Z: SOLAR ACTIVITY HAS CONTINUED MODERATE.  
REGION 3781 (N15W45) PRODUCED LOW LEVEL CLASS M X-RAY AND 18  
OPTICAL FLARES AT 23/1844UT, 23/1913UT, 23/2331UT, AND  
24/0532UT. THE LATTER EVENT PRODUCED WEAK TYPE IV EMISSION BUT  
ALL FLARES REMAIN WEAK CENTIMETRIC BURST PRODUCERS. MAGNETIC  
GRADIENTS IN THE CENTRAL PORTION OF THIS REGION HAVE INCREASED  
AND MODERATE DECAY HAS BEEN REPORTED IN VARIOUS AREAS. REGION  
3776 (N13W84) HAS PRODUCED SEVERAL SUBFLARES WITH MINOR SURGING  
AND DECAY IS APPARENTLY CONTINUING. TWO SMALL REGIONS WERE  
NUMBERED - 3788 (N07E55) AND 3789 (S22W33).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE  
OWING TO CONTINUED M CLASS FLARE PRODUCTION FROM 3781. MAJOR  
FLARE OCCURRENCE REMAINS A POSSIBILITY. NO SIGNIFICANT REGIONS  
ARE EXPECTED TO RETURN TO THE EAST LIMB DURING THE FORECAST  
PERIOD.

IL. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD  
BECAME UNSETTLED FOLLOWING THE DISTURBANCE DURING THE FIRST  
HALF OF 23 JUNE. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS WILL  
PREVAIL UNTIL EARLY ON 25 JUNE WHEN NEAR MINOR STORM CONDITIONS  
SHOULD BE EXPERIENCED. THIS DISTURBANCE IS FORECAST BASED UPON  
THE PROJECTED ARRIVAL OF A HIGH SPEED SOLAR WIND STREAM. ACTIVE  
TO MINOR STORM LEVELS SHOULD THEN CONTINUE THROUGH 27 JUNE.

III. EVENT PROBABILITIES 25 JUN-27 JUN

CLASS M 90/90/90

CLASS X 20/10/10

PROTON 15/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JUN 181

ESTIMATED 24 JUN 174

PREDICTED 25 JUN-27 JUN 160/150/143

90 DAY MEAN 23 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 22 JUN 022 AFR 23 JUN 029

ESTIMATED AFR 23 JUN 019 AFR/AP 24 JUN 015/015

PREDICTED AFR/AP 25 JUN-27 JUN 025/030-025/030-018/025

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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 175B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 24 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 24/2100Z: SOLAR ACTIVITY HAS BEEN LOW. SUBFLARES WITH NO MORE THAN C CLASS XRAY EMISSION HAVE BEEN OBSERVED IN REGIONS 3776(N13W90), 3782(N16W14), 3785(N23W49), 3787(S02W41), 3788(N07E48). A C8/EPL AND ACTIVE SURGE WITH HEDGEROW TO .4R WAS PROBABLY ASSOCIATED WITH A FLARE BEHIND THE LIMB IN REGION 3776 AT 1951Z MAXIMUM. REGIONS 3782 AND 3787 ARE RESTRUCTURING AND REGION 3781 IS IN DECLINE. A NEW REGION 3790(N12W28) WITH EMERGING FLUX, AND AFS WAS SEEN AS A SMALL B CLASS GROUP TODAY. IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE. HOWEVER THE FREQUENCY OF M CLASS FLARES IS EXPECTED TO DECREASE FURTHER AND MAJOR FLARES APPEAR ~~TO~~<sup>42</sup> LONGER LIKELY FROM ANY OF THE REGIONS BEING OBSERVED. RETURNING REGIONS ARE NOT EXPECTED TO CONTRIBUTE SIGNIFICANT ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED WITH BRIEF PERIODS NEAR ACTIVE DURING 24 JUNE. ACTIVE CONDITIONS ARE EXPECTED FOR THE DURATION OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 25 JUN-27 JUN

CLASS M 80/70/60

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 JUN 163

PREDICTED 25 JUN-27 JUN 153/143/133

90 DAY MEAN 24 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 JUN 019/029

ESTIMATED AFR/AP 24 JUN 015/015

PREDICTED AFR/AP 25 JUN-27 JUN 025/030-025/030-018/025

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