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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO.

SDF NUMBER 174A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 23 JUN 1982

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z TO 23/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3781 (N16W31) HAS CONTINUED ITS M FLARE PRODUCTION WITH LOW-MID CLASS M FLARES AT 22/1439UT, 22/1837UT, 23/0007UT, 23/0659UT, 23/1029UT, AND 23/1158UT. MINOR RADIO BURSTS AND SHORT WAVE FADES WERE OBSERVED WITH THESE EVENTS. REGION 3781 IS DECREASING IN AREA BUT A STRONG INTRUSION OF TRAILER POLARITY IS ENCROACHING INTO THE CENTER OF THE REGION. THE LARGE FILAMENT WITHIN REGION 3776 (N13W69) HAS BEEN ACTIVE AND SEVERAL SUBFLARES HAVE OCCURRED. REGION 3787 (S01W20) HAS SLOWED ITS GROWTH RATE AND NOW IS A SMALL D CLASS GROUP.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE WITH MAJOR FLARES FROM REGIONS 3781 AND 3776 POSSIBLE. AS 3781 MATURES, FLARE RELATED RADIO BURSTS SHOULD INCREASE IN MAGNITUDE. A LARGE AREA, FILAMENT RELATED FLARE FROM 3776 IS EXPECTED DURING THE FORECAST PERIOD. NO REGIONS ARE EXPECTED TO RETURN DURING THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS UNSETTLED UNTIL NEAR 23/0000UT WHEN MINOR STORM CONDITIONS BEGAN. SOLAR WIND DATA INDICATE THE CAUSE OF THIS DISTURBANCE IS NOT THE ANTICIPATED CORONAL HOLE STREAM BUT MORE LIKELY FLARE EFFECTS FROM NEAR 3776. RECENT CORONAL HOLE DATA SHOW THAT THE HOLE HAS FRAGMENTED AND NOW THE LEADING EDGE OF THE MAIN BODY IS AT W25. THE CURRENT DISTURBANCE IS EXPECTED TO CONTINUE AT LOW MINOR STORM LEVELS FOR THE NEXT THREE DAYS WITH CORONAL HOLE EFFECTS BEGINNING LATE ON 24 JUNE.

III. EVENT PROBABILITIES 24 JUN-26 JUN

CLASS M 90/90/90

CLASS X 25/25/20

PROTON 15/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 JUN 206

ESTIMATED 23 JUN 200

PREDICTED 24 JUN-26 JUN 195/185/180

90 DAY MEAN 22 JUN 1.65

V. GEOMAGNETIC A INDICES

OBSERVED AFR 21 JUN 010 AP 22 JUN 016

ESTIMATED AFR 22 JUN 013 AFR/AP 23 JUN 028/030

PREDICTED AFR/AP 24 JUN-26 JUN 030/030-030/030-030/030

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HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 174B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 23 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
23/1200Z TO 23/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE FOR THE
PERIOD, WITH M1/0B FLARES OCCURRING IN REGION 3781(N16W38) AT
1844Z AND 1913Z MAXIMA. THE REGION SHOWS FEWER SPOTS TODAY, IS
RAPIDLY RESTRUCTURING WITH SHARPLY INCREASED MAGNETIC GRADIENT
IN THE CENTRAL PORTION AROUND THE DELTA LOCATED THERE. REGION
3776(N13W77) CONTINUES TO DECAY AS IT MOVES ONTO THE LIMB.
TWO SMALL A CLASS REGIONS APPEARED TODAY. 3788(N07E62) MOVED
ONTO THE DISK, AND 3789(S22W26) DEVELOPED IN RECENT HOURS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN MODERATE. THE FREQUENCY OF LARGE FLARES APPEARS TO BE
DECREASING BUT REGION 3781 STILL LOOKS CAPABLE OF MAJOR FLARE
ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN UNSETLED EXCEPT FOR A BRIEF PERIOD OF MINOR STORM
ACTIVITY EARLY ON 23 JUNE. ACTIVITY IS EXPECTED TO REMAIN
UNSETLED TO NEAR QUIET LEVELS UNTIL LATE ON 24 JUNE WHEN
CORONAL HOLE EFFECTS ARE EXPECTED TO DRIVE THE FIELD TO ACTIVE
LEVELS.

III. EVENT PROBABILITIES 24 JUN-26 JUN

CLASS M 90/90/90

CLASS X 25/25/20

PROTON 15/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JUN 181

PREDICTED 24 JUN-26 JUN 176/172/167

90 DAY MEAN 23 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 JUN 022/016

ESTIMATED AFR/AP 23 JUN 022/030

PREDICTED AFR/AP 24 JUN-26 JUN 022/030-030/030-030/030

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