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HFUS 1 BOU 201300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 171A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 20 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z TO 20/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD WITH FIVE M-CLASS EVENTS BEING OBSERVED. REGION 3776 (N13W26) PRODUCED FOUR OF THE EVENTS THE LARGEST WAS A M5/2B WHICH OCCURRED AT 20/0146UT, MAJOR RADIO BURSTS ACCOMPANIED THIS EVENT, 770 FLUX UNITS AT 2695MHZ, HOWEVER NO TYPE II/IV SWEEPS WERE REPORTED. REGION 3776 CONTINUES TO UNDER GO CHANGE AND NOW APPEARS TO HAVE ESTABLISHED IT'S SELF AGAIN AS A CONSISTENT LARGE FLARE PRODUCER. REGION 3781 (N16E10) PRODUCED A SINGLE M1/SN AT 20/0358UT ONLY MINOR RADIO WAS OBSERVED WITH THIS EVENT. REGION 3781 CONTINUES TO XHIBIT GROWTH AND SOME INCREASE IN MAGNETIC COMPLEXITY. ALL OTHER REGIONS ARE REPORED TO BE STABLE OR LITTLE CHANGED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE THIS FORECAST PERIOD. REGION 3776 CONTINUES AS A LARGE COMPLEX GROUP WITH STRONG MAGNETIC GRADIENTS WHICH GIVES IT THE POTENTIAL FOR CONTINUED M-CLASS ACTIVITY WITH A CHANCE FOR AN ISOLATED X-CLASS EVENT. REGION 3781 IS EXPECTED TO PRODUCE AN OCCASIONAL M-CLASS EVENT DURING THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE PAST 24 HOURS IN RESPONSE TO RECENT LARGE FLARE ACTIVITY. THE FIELD IS EXPECTED TO CONTINUE AT ACTIVE LEVELS UNTIL 22 JUNE WHEN THE EFFECTS OF A LARGE CORONAL HOLE IS EXPECTED TO CAUSE THE FIELD TO BE AT OR NEAR MINOR STORM CONDITIONS FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 21 JUN-23 JUN

CLASS M 70/65/60

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 JUN 201

ESTIMATED 20 JUN 198

PREDICTED 21 JUN-23 JUN 196/194/190

90 DAY MEAN 19 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 18 JUN 010 AP 19 JUN 022

ESTIMATED AFR 19 JUN 017 AFR/AP 20 JUN 018/022

PREDICTED AFR/AP 21 JUN-23 JUN 015/015-025/030-033/030

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HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 171B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/1200Z TO 20/2100Z: SOLAR ACTIVITY HAS REMAINED MODERATE. AFTER PRODUCING FOUR CLASS M FLARES DURING THE FIRST SEVEN HOURS OF THIS ZULU DAY, REGION 3776 (N15W29) HAS GONE INTO A REST PERIOD. REGION 3776 CONTINUES A SLOW DECAY; HOWEVER, THE DELTA CONFIGURATION REMAINS ON THE NORTH SIDE OF THE LARGE LEADER PENUMBRA. THE COMPLEXITY AND GRADIENTS IN THE CENTRAL PORTION OF THE REGION ARE SIMPLIFYING AND WEAKENING. REGION 3781 (N16E03) HAS CONTINUED ITS STEADY GROWTH AND IS NOW A BETA GAMMA DELTA MAGNETIC CONFIGURATION. REGION 3781 PRODUCED A M2/SB FLARE AT 1159Z WITH STRONG SHORT WAVE FADE THROUGH 15 MHZ AND WEAK TO MODERATE CENTIMETRIC BURSTS. AGAIN AT 1716Z (X-RAY MAX), REGION 3781 PRODUCED A M1/1B FLARE WITH STRONG SHORT WAVE FADE THROUGH 15 MHZ AND WEAK CENTIMETRIC BURSTS. REGION 3782 (N15E40) HAS NOT PRODUCED FLARES DURING THE PAST NINE HOURS BUT SLOW GROWTH CONTINUES AND A WEAK BETA GAMMA CONFIGURATION EXISTS. REGION 3785 (N23E06) IS EMERGING NORTH OF REGION 3781. IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH AN ISOLATED CHANCE FOR A CLASS X EVENT DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. THE FIELD IS EXPECTED TO REMAIN ACTIVE; INTERSPERSED WITH SHORTER PERIODS OF STORM CONDITIONS ON 22-23 JUNE.

III. EVENT PROBABILITIES 21 JUN-23 JUN

CLASS M 85/85/85

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 JUN 201

PREDICTED 21 JUN-23 JUN 198/196/194

90 DAY MEAN 20 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 JUN 022/022

ESTIMATED AFR/AP 20 JUN 021/022

PREDICTED AFR/AP 21 JUN-23 JUN 015/015-025/030-033/030

SOLTERWARN

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