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HFUS 1 BOI 161300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 167A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 16 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 16/1200Z: SOLAR ACTIVITY HAS BEEN HIGH. REGION 3780 (S18E57), ALTHOUGH A SMALL REGION, PRODUCED AN X 1/2B FLARE WITH MAXIMUM OCCURRING AT 15/1514Z. ALL REMAINING MAJOR ACTIVITY OCCURRED IN REGION 3776 (N13E26), THE LARGEST AND MOST RECENT BEING AN X2/2B FLARE AT 16/0216Z MAXIMUM. MODEST AMOUNTS OF CENTIMETRIC RADIATION ACCOMPANIED THE MAJOR EVENTS AND TYPE II, TYPE IV EMISSION WAS OBSERVED WITH THE EVENT IN REGION 3780. INCREASED AREA AND SPOT NUMBER ARE REPORTED IN REGION 3780. REGION 3776 HAS ADDITIONAL TRAILER SPOTS REPORTED IN RECENT HOURS, AND IS ONCE AGAIN PLAGE ENHANCED AND FLUCTUATING SINCE THE X2 FLARE. BOTH REGIONS CONTAIN MAGNETIC DELTAS, SEVERAL ARE REPORTED IN REGION 3776. BOTH REGIONS APPEAR CAPABLE OF MAJOR ACTIVITY. THE FILAMENT WHICH LAY BETWEEN W40 AND W70 DISAPPEARED IN THE TIME PERIOD 16/0020 TO 16/0145Z. ACTIVE SURGING AT SE22 INDICATES THE PROBABLE RETURN OF OLD 3748, A REGION SHOWING GROWTH AND INCREASED ACTIVITY WHILE DEPARTING DURING LAST ROTATION. REMAINING REGIONS APPEAR STABLE AND QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN HIGH. MAJOR FLARES ARE LIKELY FROM REGION 3776, WHILE GROWTH IN REGION 3780 SUGGESTS A POSSIBLE INCREASE IN ACTIVITY THERE ALSO.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO SHOW A TREND TO LOW UNSETLED CONDITIONS EARLY IN THE PERIOD. ON 18 JUNE IT IS EXPECTED TO COME UNDER THE INFLUENCE OF RECENT MAJOR SOLAR ACTIVITY AND RETURN TO ACTIVE LEVELS.

III. EVENT PROBABILITIES 17 JUNE + 19 JUNE

CLASS M 99/99/99

CLASS X 70/70/70

PROTO N 45/50/55

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 JUN 229

ESTIMATED 16 JUN 220

PREDICTED 17-19 JUN 220/220/224

90 DAY MEAN 15 JUN 166

V. GEO MAGNETIC A INDICES

OBSERVED AFR 14 JUN 030 AP 15 JUN 029

ESTIMATED AFR 15 JUN 026 AFR/AP 16 JUN 009/015

PREDICTED AFR/AP 17-19 JUN 011/015 - 025/020 - 015/015

SOLTERWARN

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HFUS 3 BOU 162200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 167B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 16 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 16/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3780 (S19E49) PRODUCED AN M3/1B AT 16/2040UT WITH MINOR CM BURSTS AND A WEAK TYPE II REPORTED. THIS REGION NOW APPEARS AS A MODERATE CLASS D GROUP WHOSE DELTA CONFIGURATION HAS WEAKENED. REGION 3776 (N13E22) PRODUCED A C7/SB AT 16/1644UT. THE LARGE FILAMENT NORTH OF THIS REGION HAS BEEN QUITE ACTIVE LATELY BUT HAS NOT ERUPTED. THIS REGION STILL DISPLAYS SOME EMERGING FLUX BUT MAGNETIC DATA INDICATE A NEARLY STATIC NEUTRAL LINE CONFIGURATION. THE PLAGE AREA AND INTENSITY IN REGION 3776 APPEAR TO HAVE DECREASED. SMALL REGION 3781 (N16E63) WAS NUMBERED TODAY AND AN AREA OF SURGING IS VISIBLE AT NE16.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD RESUME GENERALLY HIGH LEVELS. REGION 3776 REMAINS A POTENT FLARE PRODUCING REGION HOWEVER THE FREQUENCY OF CLASS X FLARES SHOULD DECREASE DUE TO THE RECENT STABILIZATION OF THE MAGNETIC FIELD. MODERATE FLARES ARE EXPECTED TO CONTINUE FROM 3780. NO SIGNIFICANT ACTIVE REGIONS ARE EXPECTED TO RETURN DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. THE FIELD SHOULD REMAIN UNSETLED UNTIL 18 JUNE WHEN ACTIVE CONDITIONS SHOULD BEGIN AND CONTINUE THROUGH 19 JUNE. REGION 3776 IS MOVING NEAR CENTRAL MERIDIAN AND SHOULD ANOTHER MAJOR FLARE OCCUR, STORM CONDITIONS COULD BEGIN LATE IN THE PERIOD.

III. EVENT PROBABILITIES 17 JUN-19 JUN

CLASS M	99/99/99
CLASS X	50/50/50
PROTON	45/50/50
PCAF	YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED	16 JUN	209
PREDICTED	17 JUN-19 JUN	210/214/218
90 DAY MEAN	16 JUN	166

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP	15 JUN	029/029
ESTIMATED AFR/AP	16 JUN	012/015
PREDICTED AFR/AP	17 JUN-19 JUN	011/015-025/020-015/015

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