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HFUS 1 BOU 141300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 165A

JOINT USAF/ NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 14 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200Z TO 14/1200Z: SOLAR ACTIVITY WAS AGAIN AT A HIGH LEVEL. AT LEAST SEVEN M AND ONE X FLARE HAVE BEEN OBSERVED OVER THE PAST 24 HOURS. THE X FLARE BEGAN AT 14/0620Z AND WAS COINCIDENT WITH OPTICAL FLARES IN REGION 3763 (S10 W81), A 2B MAX AT 14/0626Z AND IN REGION 3776 (N13 E56), A 1B MAX AT 14/0625Z. THIS FLARE WAS GENERALLY WEAK IN RADIO, NO TYPE II OR IV REPORTED, ALTHO A BURST OF 1000 FLUX UNITS WAS OBSERVED AT 10 CM. REGION 3776 HAS QUICKLY DOMINATED THE DISK WITH AN FKX SPOT GROUP WITH AN AREA OF OVER 3000 MILLIONTHS. RESTRUCTURING CONTINUES TO BE REPORTED IN REGION 3776 WHILE DECAY IS REPORTED IN 3763. THIS DECAY IS BEING ACCOMPANIED BY MANY FLARES AND SOMETIMES SPECTACULAR EJECTA. REGION 3770 (S18 W27) HAS ONLY PRODUCED MINOR FLARE ACTIVITY BUT ITS FILAMENT RUNNING TO THE NORTH HAS BEEN ACTIVE. SURGES ARE AGAIN BEING REPORTED ON THE EAST LIMB THIS TIME NEAR S20.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN AT A HIGH LEVEL THRU THE FORECAST PERIOD. MOST OF THE ENERGETIC ACTIVITY IS EXPECTED FROM 3776 WITH CONTRIBUTIONS FROM 3763 AND 3770. REGION 3776 IS CAPABLE OF PRODUCING MAJOR GEO-EFFECTIVE EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS AT ACTIVE TO MINOR STORM LEVELS THRU MOST OF THE PAST 24 HOURS. RECENT FLARE ACTIVITY AND THE EQUATORIAL CORONAL HOLE ARE EXPECTED TO KEEP THE FIELD ACTIVE THRU THE FORECAST PERIOD. A GOOD CHANCE EXIST FOR A PROTON EVENT FROM EITHER DEPARTING REGION 3763 OR FROM 3776. PROTON FLUXES AT SATELLITE ALTITUDES REMAIN ENHANCED BUT BELOW EVENT THRESHOLDS.

III. EVENT PROBABILITIES 15 JUN-17 JUN

CLASS M 99/99/99

CLASS X 60/60/60

PROTON 40/40/40

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 JUN 233

ESTIMATED 14 JUN 230

PREDICTED 15 JUN-17 JUN 225/220/208

90 DAY MEAN 13 JUN 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR 12 JUN 036 AP 13 JUN 051

ESTIMATED AFR 13 JUN 037 AFR/AP 14 JUN 027/038

PREDICTED AFR/AP 15 JUN - 17 JUN 025/028 - 025/025 - 205/015

SOLTERWARN

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HFUS 3 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 165B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z (14 JUNE 1982)

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 14/1200Z TO 14/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE SINCE THE CLASS X1 WHICH BEGAN AT 0620Z. DURING THE PAST NINE HOURS, THREE LOW LEVEL CLASS M EVENTS HAVE OCCURRED; TWO HAVE EMANATED FROM REGION 3776 (N13E48) AND THE OTHER WAS ASSOCIATED WITH SEQUENTIAL FLARES IN REGIONS 3776, 3774 (N09E21), AND 3763 (S10W86). THE ACTIVITY FROM REGION 3763 HAS BEGUN TO DIMINISH DURING THIS PERIOD. THE OTHER DISK REGIONS PALE BY COMPARISON WITH REGION 3776. BESIDES CONTAINING SEVERAL DELTA CONFIGURATIONS, ITS AREA IS IN EXCESS OF 3,000 MILLIONTHS OF THE DISK. THIS IS THE LARGEST SUNSPOT GROUP AREA SINCE OCTOBER 1957. AT 1723Z, JACK HARVEY (KITT PEAK) REPORTED THE LARGE FILAMENT NORTH OF REGION 3776 HAD DISRUPTED AND WAS VISIBLE ABOVE THE LIMB. HOLLOMAN REPORTED THE MASS OF THE DISRUPTING FILAMENT MOVED NORTHWARD. REGION 3780 (S17E77) HAS ROTATED ON TO THE DISK WITH MINOR SURGING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN HIGH.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC STORM WHICH BEGAN ON 12 JUNE IS SLOWLY DIMINISHING. ACTIVE CONDITIONS ARE EXPECTED THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 15 JUNE - 17 JUNE

CLASS M 99/99/99

CLASS X 60/60/60

PROTON 40/40/40

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 JUNE 233

PREDICTED 15-17 JUNE 226/220/208

90-DAY MEAN 14 JUNE 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 JUNE 48/51

ESTIMATED AFR/AP 14 JUNE 27/34

PREDICTED AFR/AP 15-17 JUNE 25/28 - 25/25 - 25/15

SOLTERWARN

BT