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HFUS 180U 101300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 222A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 10 AUG 1982

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/1200Z TO 10/1200Z: SOLAR ACTIVITY HAS REMAINED MODERATE. REGION 3837 (N1W7) PRODUCED A M2/1B WITH X-RAY MAX AT 0532Z AND A M2/5E WITH X-RAY MAX AT 1030Z. MINOR CENTIMETRIC BURSTS ACCOMPANIED THESE FLARES. REGION 3837 HAS INCREASED ITS NEUTRAL LINE COMPLEXITY AND IN THE KITT PEAK MAGNETOGRAM HAS ENLARGED ITS TRAILER POLARITY. REGION 3839 (N11E08), THOUGH REMAINING COMPLEX IN STRUCTURE, HAS BEEN QUIET THROUGH THIS PERIOD. OTHER DISK REGIONS ARE SIMPLE IN STRUCTURE. NEAR 1700Z ON 09 AUGUST, A FILAMENT SYSTEM DEFINING AN ISLAND OF UNIPOLAR STRUCTURE NORTHWEST OF REGION 3837 DISRUPTED. THE DISRUPTION CAUSED A FRAGMENTED HYDRE FLARE VISIBLE IN H-ALPHA AND ALSO IN KITT PEAKS 10830 GRAM. A SLOW RISE/FALL IN X-RAY ALSO OCCURRED. THESE SIGNATURES ARE ASSOCIATED WITH A CORONAL TRANSIENT.

B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE. THE POSSIBILITY OF AN ISOLATED CLASS X EVENT FROM THE 3837/3839 COMPLEX EXISTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVEL. ACTIVE CONDITIONS ARE EXPECTED TO CONTINUE WITH STRONG MAGSTORM CONDITIONS EXPECTED ON 12 AUGUST IN RESPONSE TO THE CORONAL TRANSIENT.

III. EVENT PROBABILITIES 11 AUG-13 AUG

CLASS M 90/90/90

CLASS X 15/15/15

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 9 AUG 207

ESTIMATED 10 AUG 206

PREDICTED 11 AUG-13 AUG 205/200/195

90 DAY MEAN 09 AUG 164

V. GEOMAGNETIC A INDICES

OBSERVED AFR 08 AUG 007 AP 09 AUG 024

ESTIMATED AFR 09 AUG 023 AFR/AP 10 AUG 028/035

PREDICTED AFR/AP 11 AUG-13 AUG 018/030+045/050-022/025

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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 222B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 10 AUG 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 10/1200Z TO 10/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS PERIOD. REGION 3837(N10W13), PRODUCED SEVERAL CLASS C XRAY EVENTS WITH THE LARGEST A C5/2N. REGIONS 3837 AND 3839 (N11E02), BOTH DECREASED IN WHITE LIGHT, BUT BOTH HAVE INCREASED IN MAGNETIC COMPLEXITY AND SHOW ENHANCEMENT IN H ALPHA. SEVEN NEW REGIONS 3847 (S19W50), 3848 (S17W33), 3949(S12W35), 3850 (N15W18), 3851 (N20W03), 3852 (S12E18), 3853 (S12E37), WERE NUMBERED TODAY. ALL OF THESE ARE SMALL A OR B REGIONS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. THESE CONDITIONS SHOULD CONTINUE UNTIL 12 AUG. WHEN A MAJOR MAGNETIC STORM IS EXPECTED IN RESPONSE TO A CORONAL TRANSIENT WHICH OCCURRED 09/1700Z.

III. EVENT PROBABILITIES 11 AUG-13 AUG

CLASS M 90/90/90

CLASS X 15/15/15

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 AUG 204

PREDICTED 11 AUG-13 AUG 205/200/195

90 DAY MEAN 10 AUG 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 AUG 031/024

ESTIMATED AFR/AP 10 AUG 028/035

PREDICTED AFR/AP 11 AUG-13 AUG 018/030-045/050-022/025

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