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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 286A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 12 OCTOBER 1980

IA. SOLAR ACTIVITY HAS BEEN LOW DESPITE SUCH INDICATORS AS HIGH SOLAR FLUX, HIGH SUNSPOT NUMBER, HIGH X-RAY BACKGROUND, AND FOUR REGIONS ON THE DISK WHICH ARE EXTREMELY THREATENING. THE LARGEST EVENT IN THE PAST 14 HOURS WAS A C8/S8 FROM REGION 2724 (N12W27) AT 1234Z MAXIMUM, FOLLOWED BY A C7/1B AT 0723Z MAXIMUM. THE 2725/2726 COMPLEX CENTERED AT S10E14 CONTINUED ITS FREQUENT FLARE PRODUCTION, BUT ALL ACTIVITY WAS CONFINED TO SMALL C-CLASS SUBFLARES. THIS AREA CONTINUES TO BE THE MOST IMPRESSIVE ON THE DISK WITH INTERACTION BETWEEN THE TWO REGIONS NOW MAKING IT NEARLY IMPOSSIBLE TO SEPARATE INTO TWO CENTERS. A GAMMA MAGNETIC CONFIGURATION WITH SEVERAL POLARITY REVERSALS IS CONTAINED IN THIS LARGE COMPLEX. REGION 2724 HAS CONTINUED ITS SLOW GROWTH AND NOW IS MORE INTERESTING THAN REGION 2717 (N14W12) WHICH IS DECLINING SLOWLY. REGION 2713 (S08W59), 2722 (S25W26) AND 2731 (S21E32) HAVE ALSO PRODUCED SUBFLARES. REGION 2733 (N06W48) IS AT THE SAME LOCATION AS REGION 2730. THE 2730 IDENTIFIER WILL BE DROPPED ON THE 2000Z REGION REPORT.

IB. SOLAR ACTIVITY IS EXPECTED TO RETURN TO MODERATE LEVELS WITH THE POSSIBILITY OF AN ISOLATED X-CLASS FLARE FROM 2724 OR THE 2725/2726 COMPLEX. THE 10CM FLUX IS EXPECTED TO PEAK TODAY, THEN GRADUALLY FALL WITH THE LOSS OF SEVERAL SMALL REGIONS OVER WEST LIMB.

II. THE GEOMAGNETIC FIELD WAS UNSETTLED DURING THE PAST 14 HOURS. UNSETTLED CONDITIONS WITH BRIEF PERIODS UP TO ACTIVE LEVELS ARE FORECAST THROUGH THE NEXT 24 HOURS.

III. EVENT PROBABILITIES: 13 OCTOBER - 15 OCTOBER

CLASS M 90/90/90

CLASS X 15/20/20

PROTON 15/20/20

PROTON GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 OCT. 242

ESTIMATED 12 OCT. 244

PREDICTED 13 - 15 OCT. 240/238/235

90 DAY MEAN 11 OCT. 185

V. GEOMAGNETIC A INDICES

OBSERVED AFR 10 OCT. 17 AP 11 OCT. 37

ESTIMATED AFR 11 OCT. 32 AFR/AP 12 OCT. 13/15

PREDICTED AFR/AP 13 - 15 OCT. 13/15 12/10 08/10

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HFUS 1 BOU 122200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 2863

JOINT USAF/NCAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 12 OCTOBER 1980

IA. SOLAR ACTIVITY HAS BEEN LOW IN SPITE OF IMPRESSIVE INCREASES IN X-RAY, RADIO AND SUNSPOT INDICES. THE LARGEST CLASS C EVENTS OCCURRED IN REGIONS 2717 (N14W18), 2724 (N12W33) AND 2725 (S-9E09). REGION 2717 HAS DECLINED IN SPOT AREA AND FLARE INTENSITY AS RAPID SPOT GROWTH OCCURRED IN NEARBY REGION 2724. REGION 2725 IS NOW THE DESIGNATION FOR THE 2725-26 COMPLEX AS SPOT GROWTH HAS MERGED THE TWO REGIONS. THE SPOT COUNT REMAINS NEAR 100 IN THIS GROUP ALONE AND THE CONFIGURATION IS HIGHLY UNUSUAL. THE NEUTRAL LINE PATTERNS HERE ARE EXTREMELY COMPLEX. SPOTS, FLARE AND SURGES FROM N05 TO N21 ALONG EAST LIMB INDICATE THE RETURN OF A MODERATE ACTIVITY COMPLEX.

IB. MAJOR EVENTS ARE EXPECTED IN REGIONS 2724 AND 2725.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TODAY. CONDITIONS WILL BECOME INCREASINGLY QUIET THROUGH THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 13 OCTOBER - 15 OCTOBER

CLASS M 95/95/95

CLASS X 20/25/30

PROTON 20/25/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 OCTOBER 259

PREDICTED 13-15 OCTOBER 250/245/230

90-DAY MEAN 12 OCTOBER 186

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 11 OCTOBER 31/37

ESTIMATED AFR/AP 12 OCTOBER 11/12

PREDICTED AFR/AP 13-15 OCTOBER 10/12 - 08/10 - 08/10

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