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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 247

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 03 SEPTEMBER 1980

I A. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. TWO DOZEN C-CLASS SUBFLARES WERE OBSERVED DURING THAT PERIOD AS WELL AS AN M2/1B WHICH OCCURRED IN REGION 2645 (S08W17) WITH MAXIMUM AT 0434 UT. REGION 2645 ALSO PRODUCED A C6/1B WITH A MAXIMUM AT 1934 UT AND REGION 2657 (N15E56) PRODUCED A C5/1N WITH MAXIMUM AT 1401 UT. REGION 2645 HAS EXPERIENCED CONSIDERABLE PENUMBRAL GROWTH AND IS NOW VERY PECULIAR LOOKING IN WHITE LIGHT. AS A RESULT, MANY DELTAS HAVE FORMED; BUT THE REGION'S ABILITY OVER THE PAST SEVERAL DAYS TO RESTRUCTURE SIGNIFICANTLY EVERY 24 HOURS AND TO FLARE REGULARLY APPARENTLY PREVENTS GREAT BUILDUP OF STRESS. REGION 2646 (N11W15) HAS BEEN FLARING MORE FREQUENTLY BUT THE DELTA CONFIGURATION HAS DISAPPEARED AND THE REGION SEEKS TO BE SPREADING. REGION 2657 IS REPORTED TO BE GROWING BUT IT CURRENTLY APPEARS TO HAVE A CONVENTIONAL LEADER-TRAILER MAGNETIC CONFIGURATION.

I B. WITH THE OVERALL FAILURE OF REGIONS 2645 AND 2646 TO PRODUCE MAJOR ENERGETIC FLARES AND THE EASE WITH WHICH 2645 SEEKS TO RESTRUCTURE ITSELF, THE PROBABILITY OF A MAJOR X-CLASS EVENT IS DECREASING. HOWEVER, BOTH 2645 AND 2646 REMAIN FRIGHTENING IN WHITE LIGHT AND MUST CONTINUE TO BE REGARDED WITH CAUTION. REGION 2657 MAY BECOME THE NEXT HIGH POTENTIAL REGION, BUT ONLY WITH INCREASED SIZE AND COMPLEXITY.

II. THE GEOMAGNETIC FIELD WAS QUIET UNTIL ABOUT 1400 UT WHEN THE FIELD GRADUALLY BECAME ACTIVE. THIS ANTICIPATED DISTURBANCE SHOULD BE MOST EVIDENT IN NIGHT-TIME SECTORS FOR THE NEXT 24 HOURS. ACTIVITY LEVELS SHOULD THEN DECREASE SLOWLY TOWARD QUIET VALUES.

III. EVENT PROBABILITIES 04 SEPTEMBER - 06 SEPTEMBER

CLASS M 80/75/70

CLASS X 20/15/15

PREDICTED 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 SEPTEMBER 228

PREDICTED 04-06 SEPTEMBER 230/228/223

90-DAY MEAN 03 SEPTEMBER 185

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 02 SEPTEMBER 5

ESTIMATED AFR/AP 03 SEPTEMBER 12/12

PREDICTED AFR/AP 04-06 SEPTEMBER 16/15 - 11/10 - 08/10

~~COLLEGE PARK~~

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