

HFUS 1 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 226

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 14 AUGUST 1979

IA. SOLAR ACTIVITY HAS SHIFTED DECIDEDLY TOWARD AN UPWARD TREND. FOUR CLASS "M" AND SEVERAL STRONG CLASS "C" X-RAY BURSTS HAVE BEEN REPORTED SO FAR THIS ZULU DAY! ALTHOUGH CLOUDINESS HAS HAMPERED OBSERVATIONS AT SEVERAL OBSERVATORIES, LIMITED REPORTS INDICATE THAT THE BULK OF THE ACTIVITY IS COMING FROM REGION 1929 (S25E65). THE MOST INTERESTING EVENT OCCURRED AT 141306 UT (SECOND SIGNIFICANT MAXIMUM). OPTICAL CLASSIFICATION OF THIS FLARE WAS IMPORTANCE IN AND RADIO EMISSION WAS QUITE STRONG WITH 5900 FLUX UNITS REPORTED ON 10 CM. POST FLARE LOOPS WERE STILL BEING OBSERVED TWO HOURS AFTER THE FLARE AND THE X-RAY TRACE STAYED ABOVE "M" LEVEL FOR OVER THREE HOURS. REGION 1929 IS STILL TOO CLOSE TO THE LIMB FOR ADEQUATE ANALYSIS, BUT ITS BEHAVIOR RENDERS THIS POINT ACADEMIC. REGION 1915 (N14W13) IS TENDING TOWARD REGENERATION AS THE SPOT GROUP IS RESTRUCTURING AND MAY BE EXTENDED ENOUGH FOR A CLASS "E" GROUP. AT LEAST ONE FLARE HAS BEEN OBSERVED IN 1915 TODAY. REGION 1926 (S25E47) WHICH IS JUST AHEAD OF REGION 1929 IS ALSO BECOMING INTERESTING AS SPOT GROWTH AND PLAGE FLUCTUATIONS HAVE CHARACTERIZED ITS BEHAVIOR. THE REST OF THE DISK IS RELATIVELY STABLE. A FAINT MAGNETIC FIELD STRUCTURE NEAR SE 15 MAY PRESAGE THE RETURN OF OLD 1887.

IB. SOLAR ACTIVITY SHOULD BE AT MODERATE LEVELS WITH POSSIBLE HIGH LEVELS FOR THE NEXT 24 HOURS.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY QUIET SINCE 140300 UT. QUIET TO UNSETTLED CONDITIONS SHOULD PERSIST FOR THE COMING 24 HOURS.

III. EVENT PROBABILITIES 15 AUGUST - 17 AUGUST

CLASS M 90/90/90

CLASS X 15/20/25

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 AUGUST 173 (FLARE ENHANCED)

PREDICTED 15-17 AUGUST 169/176/179

90-DAY MEAN 14 AUGUST 167

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 13 AUGUST 46

ESTIMATED AFR/AP 14 AUGUST 11/12

PREDICTED AFR/AP 15-17 AUGUST 10/14 - 10/15 - 08/10

SOLTERWARN

BT