

HFUS 1 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 240

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 28 AUGUST 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.
THE LARGEST EVENT RECORDED TODAY WAS AN M1/13 FLARE FROM REGION
1951 (N18W14) WHICH REACHED MAXIMUM AT 1308Z. THIS FLARE APPEARED
TO BE SYMPATHETIC WITH SMALL FLARES IN REGIONS 1958 (N18E55) AND
1943 (N06W37) WHICH BEGAN SHORTLY BEFORE THE IB IN 1951. MINOR
RADIO BURSTS AND IMPORTANCE THREE SHORT WAVE FADES WERE LINKED TO
THIS EVENT. THE REMAINING EVENTS OF THE DAY WERE CONFINED TO
CLASS-C X-RAY EVENTS WITH A TOTAL OF 18 SUBFLARES OBSERVED FROM
REGIONS 1951, 1948, 1958, 1959 (N24E50) AND 1955 (S27E23). TWO
NEW REGIONS HAVE BEEN NUMBERED TODAY, 1960 (N18E01) AND 1961
(N13E72), BOTH SIMPLE B-TYPE GROUPS.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE LEVELS.
ALTHOUGH REGION 1943 HAS DECAYED SIGNIFICANTLY, IT STILL RETAINS
ITS POTENTIAL FOR M-CLASS EVENTS AND AN ISOLATED X-CLASS FLARE.
REGIONS 1951, 1942 AND NOW 1958 HAVE M-CLASS POTENTIAL.

II. THE GEOMAGNETIC FIELD WAS AT HIGH UNSETTLED LEVELS WITH
OCCASIONAL SHORT PERIODS OF ACTIVE CONDITIONS. THE MINOR STORM
EXPECTED AS A RESULT OF THE X2 FLARE AND THE FAVORABLE LOCATION
OF A CORONAL HOLE HAS NEVER MATERIALIZED, PERHAPS OWING TO A
SIGNIFICANT FIELD LINE RESTRUCTURING. THE FIELD IS EXPECTED TO
REMAIN ACTIVE DURING THE NEXT TWO DAYS WITH POSSIBLE MINOR STORM
CONDITIONS DURING NIGHTTIME SECTORS.

III. EVENT PROBABILITIES 29 AUGUST - 31 AUGUST

CLASS M 70/60/60

CLASS X 30/25/20

PROTON 20/15/10

PCAF GREEN

IV. OTTAWA 40.7 CM FLUX

OBSERVED 28 AUGUST 210

PREDICTED 29-31 AUGUST 210/212/208

90-DAY MEAN 28 AUGUST 174

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 AUGUST 13

ESTIMATED AFR/AP 28 AUGUST 15/15

PREDICTED AFR/AP 29-31 AUGUST 25/25 - 20/20 - 12/15

SOLTERWARN

BT