

HFUS 180U 202200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 233

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 20 AUGUST 1980

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. C-CLASS
SUBFLARES HAVE OCCURRED FROM EIGHT OF THE FIFTEEN SPOTTED REGIONS
ON THE DISK. THE LARGEST, A C2/SB, OCCURRED IN REGION 2632 (N15E40)
AT 0745Z MAXIMUM. MINOR RADIO BURSTS WERE OBSERVED WITH THIS
EVENT. THIS REGION HAS SHOWN A TREND TOWARD INCREASING MAGNETIC
COMPLEXITY ALTHOUGH UNIMPRESSIVE IN OTHER PARAMETERS. REGION 2629
(N20E01) HAS PRODUCED SEVERAL SUBFLARES TODAY AND IS THE MOST
SIGNIFICANT REGION ON THE DISK. TRAILER POLARITY FIELDS HAVE
EMERGED IN THE NORTH-CENTRAL PORTION OF THE REGION MAKING IT
A BETA-GAMMA MAGNETIC CONFIGURATION WITH TIGHT GRADIENTS. NEW
REGION 2635 (N10E76) ROTATED OVER EAST LIMB AS AN H-TYPE GROUP
AND REGION 2636 EMERGED ON THE DISK AS A SIMPLE A-TYPE.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. REGION 2629'S
DEVELOPMENT COULD LEAD TO AN ISOLATED M-CLASS X-RAY EVENT, BUT
ACTIVITY FROM THE REMAINING REGIONS SHOULD BE RESTRICTED TO SMALL
C-CLASS SUBFLARES.

II. THE GEOMAGNETIC FIELD WAS UNSETTLED DURING THE PAST 24 HOURS.
HIGH UNSETTLED CONDITIONS SHOULD PERSIST FOR THE NEXT 24 HOURS
GRADUALLY APPROACHING QUIET CONDITIONS THROUGH THE REMAINDER OF
THE PERIOD.

III. EVENT PROBABILITIES 21 AUGUST - 23 AUGUST

CLASS M 20/25/25

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 AUGUST 189

PREDICTED 21-23 AUGUST 184/179/172

90-DAY MEAN 20 AUGUST 192

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 19 AUGUST 24

ESTIMATED AFR/AP 20 AUGUST 11/12

PREDICTED AFR/AP 21-23 AUGUST 12/12 - 09/10 - 08/10

SOLTERWARN

BT