

HFUS 1 BOU 312200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO.

SODE NUMBER 244

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 31 AUGUST 1980

I. SOLAR ACTIVITY HAS FINALLY BEEN MODERATE DURING THE PAST 24 HOURS. FIRST, REGION 2646 (N12E25) PRODUCED AN EXTREMELY IMPULSIVE M2/SB EVENT AT 1249 UT WHICH WAS ACCCOMPANIED BY STRONG RADIO BURSTS INCLUDING 1100 FU AT 2695 MHZ AND 2300 FU AT 245 MHZ. THEN, REGIONS 2645 (S08E25) AND 2648 (S04E36) INTERACTED TO PRODUCE AN M6/2B FLARE WHICH MAXED AT 1335 UT. VERY LITTLE RADIO NOISE ACCOMPANIED THE SECOND EVENT, AND NO TYPE II OR TYPE IV SIGNATURES WERE REPORTED FOR EITHER EVENT. REGION 2646 HAS CONTINUED TO DEVELOP DURING THE DAY AND HAS A STRONG DELTA CONFIGURATION WITH THE STRONGEST MAGNETIC GRADIENTS ON THE DISK. REGIONS 2645 AND 2648 ARE ALSO STILL DEVELOPING AND NOW APPEAR TO BE A SINGLE REGION MAGNETICALLY. HOWEVER, THEY ARE STILL EASILY SEPARABLE IN WHITE LIGHT. ONE NEW REGION, 2654 (N14E70), WAS NUMBERED TODAY. IT IS AN A-TYPE SPOT WHICH ROTATED OVER THE EAST LIMB.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH FOR THE NEXT 24 TO 72 HOURS Owing TO THE FLARE POTENTIAL CONTAINED IN REGIONS 2646, AND 2645/2648.

II. THE GEOMAGNETIC FIELD HAS BEEN MOSTLY QUIET WITH A FEW UNSETLED PERIODS FOR THE PAST 24 HOURS. THESE CONDITIONS ARE EXPECTED TO PERSIST UNTIL LATE IN THE DAY ON 02 SEP WHEN ACTIVE CONDITIONS COULD BEGIN IN RESPONSE TO TODAY'S M6/2B FLARE.

III. EVENT PROBABILITIES 01 SEP 03 SEP

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 05/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 31 AUG 208

PREDICTED 01 - 03 SEPT 220/225/225

90-DAY MEAN 31 AUG 183

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 30 AUG 07

ESTIMATED AFR/AP 31 AUG 08/10

PREDICTED AFR/AP 01 - 03 SEPT 07/15 12/18 20/12

SOLTERWARN

BT