

HFUS 1 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 185

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY,  
ISSUED 2200Z 04 JULY 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.  
FOUR M-CLASS X-RAY BURSTS WERE NOTED: AN M2 (0610Z MAX), AN M2  
(0850Z MAX), AN M3 (1135Z MAX) AND AN M1 (1943Z MAX). THE LAST  
M-CLASS BURST HAD A IN OPTICAL FLARE ASSOCIATED WITH IT IN REGION  
1849 (N11E36). NO REPORTS WERE RECEIVED REGARDING OPTICAL  
ACTIVITY ASSOCIATED WITH THE OTHER BURSTS DUE TO INCOMPLETE  
GROUND COVERAGE OF SOLAR ACTIVITY. THE OPTICAL ACTIVITY IN REGION  
1849 OCCURRED AHEAD OF THE LEADER SPOT AND MAY HERALD NEW GROWTH  
IN COMPLEXITY OF THE REGION. THE REGION ALREADY CONTAINS A WEAK  
MAGNETIC DELTA CONFIGURATION. REGION 1840 (N09W12) IS STILL  
THE MOST COMPLEX ON THE DISK, BUT APPEARS TO HAVE DECAYED SLIGHTLY  
OVERALL AND SPREAD IN LONGITUDINAL EXTENT. NO NEW REGIONS WERE  
SEEN TODAY. PROMINENCE AND SURGE ACTIVITY AT THE SE LIMB INDICATE  
MORE ACTIVE REGIONS MAY BE ABOUT TO ROTATE ONTO THE DISK.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE NEXT 24  
HOURS WITH A GOOD CHANCE OF AN OCCASIONAL SMALL M-CLASS X-RAY  
EVENT. HOWEVER, THERE IS LITTLE LIKELIHOOD OF ANY MAJOR (X-CLASS)  
FLARE DURING THAT PERIOD.

II. THE GEOMAGNETIC FIELD WAS ACTIVE DURING THE FIRST PART OF THE  
UT DAY AND HAS BEEN QUIET SINCE THEN. A LARGE DISTINCT EQUATORIAL  
CORONAL HOLE IS EXPECTED TO PRODUCE A MAGNETIC DISTURBANCE WITHIN  
THE NEXT 24 HOURS. ACTIVITY LEVELS SHOULD APPROACH MINOR MAGNETIC  
STORM LEVELS IN NIGHTTIME SECTORS.

III. EVENT PROBABILITIES 05 JULY - 07 JULY

CLASS M 50/40/40

CLASS X 10/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 JULY 211

PREDICTED 05-07 JULY 217/217/209

90-DAY MEAN 04 JULY 174

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 03 JULY 15

ESTIMATED AFR/AP 04 JULY 07/15

PREDICTED AFR/AP 05-07 JULY 25/30 - 26/30 - 20/20

SOLTERWARN

BT