

HFUS 1 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 091

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 01 APRIL 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE. AN M5/2B FLARE WAS  
OBSERVED FROM REGION 1661 AT S24E19 ON 31/2318Z. MINOR RADIO  
BURSTS WERE ASSOCIATED WITH THE FLARE. REGION 1661 (S25E06)  
CONTINUES TO BE THE DOMINANT FORCE ON THE VISIBLE DISK WITH  
SEVERAL SUBFLARES OBSERVED FROM A VERY MAGNETICALLY COMPLEX BETA  
GAMMA DELTA REGION. THIS REGION APPEARS TO HAVE AT LEAST TWO AREAS  
OF DELTA CONFIGURATIONS AND HIGH MAGNETIC GRADIENTS. H-ALPHA  
FILTERGRAMS SHOW CONTINUOUS PLAGE FLUCTUATIONS AND POINT BRIGHTEN-  
INGS WITH A DARK ACTIVATED FILAMENT. WHITE LIGHT SHOWS A SPOT  
GROUP WITH 80 SPOTS COVERING AN AREA APPROXIMATELY 1200 SQ. HELIO.  
DEGREES. OTHER MINOR SUBFLARES WERE OBSERVED FROM REGION 1666  
(S20W19).

IB. SOLAR ACTIVITY COULD POTENTIALLY GO TO HIGH LEVELS. REGION  
1661 HAS THE CHARACTERISTICS TO PRODUCE A LARGE ENERGETIC EVENT  
AND IS MOVING INTO A POSITION TO PRODUCE SIGNIFICANT TERRESTRIAL  
EFFECTS IF A LARGE EVENT SHOULD OCCUR.

II. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE FOR THE PAST PERIOD.  
IT IS EXPECTED TO GENERALLY DECREASE TO UNSETTLED LEVELS OVER THE  
NEXT 24 HOURS. NO AVAILABLE DATA SOURCES INDICATE THE APPROACH  
OF FURTHER GEOMAGNETIC DISTURBANCES OF SOLAR ORIGIN DURING THIS  
PERIOD.

III. EVENT PROBABILITIES 2-4 APRIL

CLASS M 85/85/85

CLASS X 20/20/25

PROTON 15/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 1 APR 210

PREDICTED 2-4 APR 210/210/212

90-DAY MEAN 1 APR 199

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 31 MAR 12

ESTIMATED AFR/AP 1 APR 18/31

PREDICTED AFR/AP 2-4 APR 14/18 - 10/15 - 08/10

SOLTERWAR'N

BT