

HFUS 1 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 105

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 14 APRIL 1980

IA. SOLAR ACTIVITY HAS BEEN LOW. A C9 X-RAY EVENT OCCURRED AT
2037Z (MAX); THIS EVENT WAS ASSOCIATED WITH SIMULTANEOUS OPTICAL
FLARES: A SB FLARE FROM REGION 2290 (S17E18) AT 2037Z (MAX) AND
A IN FLARE FROM REGION 2275 (S31W37) AT 2032Z (MAX). THE FLARES
WERE ACCOMPANIED BY MINOR RADIO BURSTS (100 FU AT 2695 MHZ).
REGION 2277 WAS THE MOST PROLIFIC REGION OVER THE LAST 24 HOURS
WITH SEVERAL SUBFLARES ASSOCIATED WITH MINOR C-CLASS X-RAY
EVENTS. REGION 2277 IS A LARGE E-TYPE BETA GAMMA DELTA REGION
WITH STRONG MAGNETIC GRADIENTS, PLAGE FLUCTUATIONS AND ARCH
FILAMENT SYSTEM. REGION 2375 HAS SHOWN SOME DECAY BUT REMAINS
A MAGNETICALLY COMPLEX, BETA GAMMA DELTA GROUP WITH STRONG FLARE
POTENTIAL. REGION 2390 IS A REVERSED POLARITY GROUP WITH STRONG
PLAGE FLUCTUATIONS. REGION 2389 (N19E20) MAY POSSIBLY CONTAIN
A DELTA. AN M2 FLARE IS NOW IN PROGRESS FROM REGION 2375 AT
2139Z (MAX). FLARE IS CENTERED IN TRAILER PORTION IN VICINITY
OF THE DELTA.

2390

2375

2377

2377

IB. SOLAR ACTIVITY SHOULD RETURN TO MODERATE LEVELS OVER THE
NEXT 24 HOURS. REGIONS 2377, 2375, AND 2370 (N24W83) ALL
APPEAR TO BE CAPABLE OF PRODUCING M-CLASS FLARES OR AN ISOLATED
X-CLASS EVENT.

II. THE GEOMAGNETIC FIELD HAS BEEN AT PREDOMINATELY UNSETTLED
LEVELS AND IS FORECAST TO REMAIN AT UNSETTLED LEVELS DURING THE
NEXT PERIOD.

III. EVENT PROBABILITIES 15 - 17 APRIL

CLASS M 90/90/90

CLASS X 00/15/15

PROTON 20/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 APR 225

PREDICTED 15 - 17 APR 218/210/206

90-DAY MEAN 14 APR 191

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 13 APR 18

ESTIMATED AFR/AP 14 APR 05/10

PREDICTED AFR/AP 15 - 17 APR 10/12 10/12 10/17

SOLTERWARN

BT