

HFUS 1 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 079

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 19 MARCH 1980

IA. THE PACE OF SOLAR ACTIVITY HAS INCREASED SOMEWHAT DURING THE PAST 24 HOURS. REGION 2339 (S27W04), WHICH COULD REASONABLY BE DIVIDED INTO TWO SEPARATE REGIONS, HAS SHOWN SUBSTANTIAL GROWTH IN WHITE LIGHT AND IN H-ALPHA INTENSITY. THIS REGION CONTAINS TWO SEPARATE ARCH FILAMENT SYSTEMS AND A MIXED MAGNETIC POLARITY SITUATION (GAMMA CONFIGURATION) WHICH IMPLIES A TIGHTER MAGNETIC GRADIENT. REGION 2339 HAS PRODUCED MOST OF THE DOZEN C-CLASS SUBFLARES NOTED DURING THIS UT DAY. REGION 2343 (S19W55) HAS BRIGHTENED IN H-ALPHA AND SHOWS SOME MINOR MAGNETIC COMPLEXITY. IT HAS, HOWEVER, PRODUCED ONLY A COUPLE OF SCATTERED SMALL C-CLASS SUBFLARES. TWO NEW REGIONS 2346 (N06E76) AND 2347 (S28E67) HAVE APPEARED AT THE EAST LIMB. SUBFLARES WERE REPORTED IN REGION 2346 BY CULGOORA AS SATELLITE X-RAY SENSORS SHOWED RISING X-RAY BACKGROUND VALUES CHARACTERISTIC OF LIMB ACTIVITY. OPTICAL REPORTS INDICATE A SURGING ACTIVE REGION MAY BE APPROACHING THE EAST LIMB BEHIND REGION 2346.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO OCCASIONALLY MODERATE THROUGH THE NEXT 24 HOURS.

II. THE GEOMAGNETIC FIELD EXPERIENCED AN IMPULSE AT 19/0620 UT. MID-LATITUDE K-VALUES OF 3 WERE REPORTED FOR SEVERAL 3-HOUR PERIODS THEREAFTER. THE FIELD IS ONCE AGAIN QUIET. UNSETTLED CONDITIONS MAY BE EXPECTED DURING NIGHTTIME HOURS FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 20 - 22 MARCH 1980

CLASS M 20/25/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 MAR 164

PREDICTED 20 - 22 MAR 166/168/172

90-DAY MEAN 19 MAR 192

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 18 MAR 04

ESTIMATED AFR/AP 19 MAR 08/08

PREDICTED AFR/AP 20-22 MAR 07/07 - 07/08 - 07/08

SOLTERWARN

BT