

HFUS 3 BOU 19 1400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 354A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 19 DECEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. REGION 2840 (N08W22) AND REGION 2841 (N14W13) FORM A COMPLEX WHICH IS STILL THE BRIGHTEST GENERAL AREA ON THE DISK BUT FLARE ACTIVITY HAS SLOWED IN THE COMPLEX (ONLY FIVE C-CLASS SUBFLARES DURING THE PAST 24 HOURS). REGION 2841 HAS CLEARLY DIMINISHED IN SIZE AND COMPLEXITY OVER THE PAST 48 HOURS. REGION 2840 SEEMS TO BE DECLINING VERY SLOWLY. THE ONLY OTHER REGION SHOWING ANY *IS GROWING* REAL FLARE POTENTIAL IS REGION 2849 (S07E54). IT ~~IS~~ *IS* GROWING BUT HAS SOME WAY TO GO BEFORE BECOMING A MAJOR CONTRIBUTOR TO ACTIVITY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY LOW DURING THE NEXT 24 HOURS. CHANCES FOR EVEN MODERATELY ENERGETIC FLARES SHOULD DECLINE STEADILY OVER THE NEXT 72 HOURS.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED FOR THE PAST 24 HOURS. A FAIRLY STRONG SUDDEN IMPULSE WAS NOTED IN BOULDER ON THE GEOMAGNETIC FIELD H-COMPONENT AT 19/0457 UT. THIS WAS FOLLOWED BY A K-VALUE OF 4 AT MID-LATITUDES, BUT THE FIELD WAS QUIETING AT THE TIME OF FORECAST PREPARATION. THE FIELD IS EXPECTED TO GO FROM UNSETTLED TO QUIET LEVELS OVER THE NEXT 2 DAYS AND THEN BACK TO UNSETTLED LEVELS.

III. EVENT PROBABILITIES: 20 DECEMBER - 22 DECEMBER 1980

CLASS M 45/40/35

CLASS X 05/05/01

PROTON 05/05/01

PCAF GREEN

IV. OTTAWA 0.7 FLUX

OBSERVED 18 DEC 264

ESTIMATED 19 DEC 255

PREDICTED 20-22 DEC 250/248/239

90 DAY MEAN 18 DEC 211

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 DEC 03 AP 18 DEC 14

ESTIMATED AFR 18 DEC 09 AFR/AP 19 DEC 17/20

PREDICTED AFR/AP 20-22 DEC 09/10 05/06 11/12

SOLTERWARN

BT 26 16 12.0

*54/raised*  
*30 (raised)*

HFUS 1 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 354B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200UT 19 DECEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS.  
REGION 2840 (N08W22) AND REGION 2841 (N14W13) FORM A COMPLEX  
WHICH IS STILL THE BRIGHTEST GENERAL AREA ON THE DISK BUT FLARE  
ACTIVITY HAS SLOWED IN THE COMPLEX (ONLY FIVE C-CLASS SUBFLARES  
DURING THE PAST 24 HOURS). REGION 2841 HAS CLEARLY DIMINISHED  
IN SIZE AND COMPLEXITY OVER THE PAST 48 HOURS. REGION 2840 SEEMS  
TO BE DECLINING VERY SLOWLY. THE ONLY OTHER REGION SHOWING ANY  
REAL FLARE POTENTIAL IS REGION 2849 (S07E54). IT IS GROWING BUT  
HAS SOME WAY TO GO BEFORE BECOMING A MAJOR CONTRIBUTOR TO ACTIVITY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY LOW DURING THE NEXT  
24 HOURS. CHANCES FOR EVEN MODERATELY ENERGETIC FLARES SHOULD  
DECLINE STEADILY OVER THE NEXT 72 HOURS.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED FOR THE  
PAST 24 HOURS. A FAIRLY STRONG SUDDEN IMPULSE WAS NOTED IN BOULDER  
ON THE GEOMAGNETIC FIELD H-COMPONENT AT 19/0457 UT. THIS WAS  
FOLLOWED BY A K-VALUE OF 4 AT MID-LATITUDES.

ADDITIONS TO 1200UT. FORECAST: FOLLOWING A BRIEF PERIOD OF RE  
LATIVE QUIET, A MAGNETIC BAY DEVELOPED BEFORE 1400UT GIVING A  
K-VALUE OF 7. K-VALUES GREATER THAN OR EQUAL TO 4 HAVE  
CONTINUED TO THE TIME OF THIS FORECAST, MAINTAINING MAJOR  
STORM LEVELS OF ACTIVITY AND SHOWING ONLY SLIGHT DECLINE.

III. EVENT PROBABILITIES: 20-22 DECEMBER

CLASS M 45/40/35

CLASS X 05/05/01

PROTON 05/05/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 19 DEC 246

PREDICTED 20-22 DEC 250/248/239

90 DAY MEAN 19 DEC 212

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 DEC 13/14

ESTIMATED AFR/AP 19 DEC 54/60

PREDICTED AFR/AP 20-22 DEC 22/20 16/15 12/12

SOLTERWARN

BT