

HFUS 1 BOUL 141400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 104A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1200UT 14 APRIL 1981

1A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
13/1200UT TO 14/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS.  
REGION 3027 (N 18W 58) PRODUCED AN M1/IN FLARE AT 13/1900UT  
WHICH HAD SEVERAL FRUITLET CENTERS. A SECOND M-CLASS X-RAY  
EVENT OCCURRED AT 13/2128UT BUT WAS NOT ASSOCIATED WITH AN  
OPTICAL FLARE. MOST OF THE NUMBERED REGIONS HAVE SHOWN  
GROWTH SINCE YESTERDAY WITH REGIONS 3038 (N 10E 11) AND 3045  
(S 07E 39) SHOWING DRAMATIC GROWTH. REGION 3038 HAS BECOME  
MAGNETICALLY COMPLEX AND MAY CONTAIN A DELTA CONFIGURATION.  
REGION 3035 (N 14W 02) DID NOT PRODUCE SIGNIFICANT ACTIVITY  
BUT REMAINS VERY DYNAMIC AND THE MOST INTERESTING GROUP ON  
THE DISK. REGION 3026 (N 07W 75) HAS DECAYED AND IS NO  
LONGER A MAJOR THREAT. SURGING WAS OBSERVED ON THE NORTH  
AND SOUTHEAST LIMBS.

1B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH WITH REGIONS  
3035, 3027, AND 3038 PROVIDING MOST OF THE ACTION. REGION  
3035 IS STILL CAPABLE OF A PROTON PRODUCING FLARE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS  
FOR THE PAST 24 HOURS. CONDITIONS ARE EXPECTED TO DECLINE  
TOWARD UNSETLED FOR THE REMAINDER OF TODAY, BUT SHOULD THEN  
INCREASE TOMORROW AND THE NEXT DAY IN RESPONSE TO RECENT FLARE  
ACTIVITY. A SLOW DECREASE IN GEOMAGNETIC ACTIVITY WILL BEGIN  
ON THE THIRD DAY.

III. EVENT PROBABILITIES: 15 - 17 APR JL

CLASS M 95/95/95

CLASS X 40/30/30

PROTON 40/30/30

PCAF 1 - YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 13 APR 257

ESTIMATED 14 APR 255

PREDICTED 15-17 APR 245/235/230

90 DAY MEAN 13 APR 205

V. GEOMAGNETIC A-FR INDICES

OBSERVED A-FR 12 APR 57 APR 13 APR 74

ESTIMATED A-FR 13 APR 105 APR/AP 14 APR 23/30

PREDICTED A-FR/AP 15-17 APR 30/20, 30/35, 25/35

SOLAR WARN

BT

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HFUS 3 BOU 14200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 104B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 14 APR 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
14/1200UT TO 14/2200UT:

SOLAR ACTIVITY HAS BEEN LOW DURING THIS PERIOD. ONLY SMALL  
C-CLASS EVENTS HAVE BEEN RECORDED. THE LARGEST EVENT HAS  
BEEN A C7/SB FROM REGION 3027 (N18W67) AT 14/2056UT. NEW  
REGIONS TODAY ARE 3047 (S29E06) SIMPLE A-TYPE, 3048 (N17E52)  
P-TYPE, 3049 (N13E76) C-TYPE (MAY BE REVERSED POLARITY),  
3050 (S11E77) H-TYPE AND 3051 (N22E76) C-TYPE.

IB. SOLAR ACTIVITY FORECAST:

THE SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH. REGION  
3035 (N14W08) HAS THE POTENTIAL FOR AN ISOLATED X-EVENT. REGIONS  
3027, 3038 (N10E05) AND REGION 3049 LOOK CAPABLE OF M-CLASS  
EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN NEAR ACTIVE LEVELS DURING THIS  
PERIOD. THE GEOMAGNETIC FIELD IS EXPECTED TO INCREASE TO NEAR  
MINOR STORM CONDITIONS DURING THE FORECAST PERIOD. THE AURORA  
WAS VISIBLE FROM HOPART AUSTRALIA ON 13 APRIL FROM 1200-1400UT.  
AURORA WAS SIGHTED AS FAR SOUTH AS 30 DEGREES NORTH FROM  
0330-1000UT 13 APRIL THRU OUT NORTH AMERICA.

III. EVENT PROBABILITIES: 15-17 APRIL

CLASS M 95/95/95

CLASS X 40/30/30

PROTON 40/30/30

PCAF 100% YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 14 APR 258

PREDICTED 15-17 APR 260/260/260

90 DAY MEAN 14 APR 206

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 APR 121/74

ESTIMATED AFR/AP 14 APR 19/30

PREDICTED AFR/AP 15-17 APR 30/20 30/35 25/35

SOLTERWARN

BT