

HFUS 1 BOU 181300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 018A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 18 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 18/1200Z: SOLAR ACTIVITY WAS AGAIN LOW DURING THE PERIOD. ONLY MINOR SUBFLARES WITH LITTLE XRAY OR RADIO RESPONSE WERE OBSERVED FROM A VARIETY OF SMALL REGIONS. REGION 4064 (N08E12) CONTINUES TO DISPLAY THE MOST MAGNETIC COMPLEXITY OF THESE REGIONS, BUT HAS REMAINED QUIET DURING THE 24 HOUR PERIOD. ITS WEAK DELTA CONFIGURATION HAS APPARENTLY DECAYED, BUT ITS MODERATE MAGNETIC GRADIENTS CONTINUE IN THE NORTHERN PORTION OF THE LEADER SPOTS. REGION 4065 (S13E17) IS THE ONLY DISK GROUP DISPLAYING ANY DYNAMICS WITH SLOW SPOT GROWTH AND A STRONG ARCH FILAMENT SYSTEM VISIBLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW. THERE ARE NO DISK REGIONS OR EXPECTED RETURNING REGIONS WHICH ARE CAPABLE OF ANYTHING MORE THAN SMALL C-CLASS XRAY EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS FOR MID-LATITUDE SITES WITH BRIEF PERIODS OF MAJOR STORM CONDITIONS REPORTED FOR HIGH-LATITUDE STATIONS. THE 09-12Z AND 12-15Z PERIODS HAVE BEEN THE MOST DISTURBED FOR ALL REPORTING SITES. THE FIELD SHOULD CONTINUE TO BE INFLUENCED BY THIS CORONAL HOLE INDUCED ACTIVITY FOR AT LEAST ANOTHER 48 TO 60 HOURS, BUT THE FREQUENCY OF THE BRIEF MINOR STORM LEVELS SHOULD DIMINISH. THE LAST DAY OF THE PERIOD IS EXPECTED TO BE UNSETTLED.

III. EVENT PROBABILITIES 19 JAN-21 JAN

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 JAN 143

ESTIMATED 18 JAN 145

PREDICTED 19 JAN-21 JAN 145/143/143

90 DAY MEAN 17 JAN 176

V. GEOMAGNETIC A INDICES

OBSERVED AFR 16 JAN 020 AP 17 JAN 025

ESTIMATED AFR 17 JAN 022 AFR/AP 18 JAN 020/020

PREDICTED AFR/AP 19 JAN-21 JAN 015/020-015/020-010/020

SOLTERWARN

BT

HFUS 3 BOU 182200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 018B  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 18 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
18/1200Z TO 18/2100Z: SOLAR ACTIVITY HAS BEEN LOW. REGION 4064  
(N08E07) HAS AGAIN FORMED A WEAK DELTA CONFIGURATION BUT THE  
GROUP REMAINS BASICALLY BIPOLAR AND IS GROWING SLOWLY. REGION  
4065 (S14E12) IS ALSO GROWING SLOWLY AND HAS INCREASED IN ITS  
NUMBER OF SMALL SPOTS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW  
FOR THE NEXT THREE DAYS. NO SIGNIFICANT ACTIVE REGIONS ARE  
EXPECTED TO RETURN TO THE EAST LIMB DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD  
CONTINUES ACTIVE. ACTIVE LEVELS ARE FORECAST TO CONTINUE FOR  
THE NEXT TWO DAYS DUE TO A CORONAL HOLE RELATED HIGH SPEED  
SOLAR WIND STREAM. INTERMITTENT PERIODS AT MINOR STORM LEVELS  
ARE PROBABLE DURING THAT TIME. UNSETTLED TO ACTIVE CONDITIONS  
ARE EXPECTED FOR 21 JAN.

III. EVENT PROBABILITIES 19 JAN-21 JAN

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 JAN 139

PREDICTED 19 JAN-21 JAN 135/133/133

90 DAY MEAN 18 JAN 176

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 JAN 020/025

ESTIMATED AFR/AP 18 JAN 023/030

PREDICTED AFR/AP 19 JAN-21 JAN 015/020-015/020-010/020

SOLTERWARN

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