

HFUS 1 BOU 191300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 019A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 19 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
18/1200Z TO 19/1200Z: SOLAR ACTIVITY REMAINS LOW. THE LARGEST
EVENT OF THE PERIOD WAS A C2 XRAY BURST AT 19/0843Z MAXIMUM
WHICH WAS ASSOCIATED WITH AN ERUPTIVE PROMINENCE EXTENDING FROM
SE09 TO SE24. THE PROMINENCE BEGAN TO ERUPT AT 0754Z AND
REACHED EXTENT OF .3 RADII ABOVE THE LIMB. A WEAK TYPE II RADIO
SWEEP WAS ASSOCIATED WITH THIS EVENT. A SMALL SPOTLESS PLAGE
HAS BEEN OBSERVED AT S14, EAST LIMB, BUT THE TRIGGER TO THIS
EPL COULD BE AN ACTIVE REGION STILL BEHIND EAST LIMB. THE SEVEN
SPOTTED DISK REGIONS HAVE BEEN GENERALLY QUIET AND LITTLE
CHANGED DURING THE PERIOD. REGIONS 4064 (N08W14) AND 4065
(S13W09) HAVE BOTH DISPLAYED SLOW GROWTH AND SOME MAGNETIC
COMPLEXITY, BUT HAVE MANAGED ONLY MINOR SUBFLARES DURING THE
PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN LOW. NO SIGNIFICANT REGIONS ARE EXPECTED BACK AT THE
EAST LIMB, HOWEVER, TODAY'S PROMINENCE ERUPTION COULD INDICATE
THAT SOME DEVELOPMENT HAS OCCURRED ON THE BACKSIDE OF THE SUN.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE WITH BRIEF PERIODS AT MINOR STORM LEVELS,
ESPECIALLY AT HIGHER LATITUDES. A GENERAL DECREASE IN SUBSTORM
ACTIVITY HAS BEEN NOTED IN RECENT HOURS HOWEVER. THE FIELD IS
EXPECTED TO CONTINUE AT ACTIVE LEVELS THROUGH THE NEXT 24-36
HOURS, FOLLOWED BY UNSETTLED CONDITIONS FOR THE REMAINDER OF
THE PERIOD.

III. EVENT PROBABILITIES 20 JAN-22 JAN

| | |
|---------|----------|
| CLASS M | 10/20/20 |
| CLASS X | 01/01/01 |
| PROTON | 01/01/01 |
| PCAF | GREEN |

IV. OTTAWA 10.7 CM FLUX

| | | |
|-------------|---------------|-------------|
| OBSERVED | 18 JAN | 139 |
| ESTIMATED | 19 JAN | 135 |
| PREDICTED | 20 JAN-22 JAN | 135/137/140 |
| 90 DAY MEAN | 18 JAN | 176 |

V. GEOMAGNETIC A INDICES

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|------------------|---------------|-------------------------|---------------|---------|
| OBSERVED AFR | 17 JAN | 020 | AP 18 JAN | 029 |
| ESTIMATED AFR | 18 JAN | 023 | AFR/AP 19 JAN | 015/020 |
| PREDICTED AFR/AP | 20 JAN-22 JAN | 015/020-010/015-008/015 | | |

SOLTERWARN

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HFUS 3 BOU 192200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 019B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 19 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
19/1200Z TO 19/2100Z: SOLAR ACTIVITY HAS CONTINUED LOW THIS
PERIOD WITH ONLY MINOR ENHANCEMENTS BEING OBSERVED. REGION 4064
(N08W07) HAS BEEN STABLE AND IS A SIMPLE BIPOLAR GROUP NOW.
REGION 4065 (S12W01) HAS ELONGATED INTO A CLASS E GROUP AND IS
EXHIBITING MINOR GROWTH. THE ERUPTIVE PROMINENCE OBSERVED THIS
MORNING AT THE SOUTHEAST LIMB DOES NOT APPEAR TO BE A PRECURSOR
OF THE EAST LIMB TRANSIT OF A SIGNIFICANT ACTIVE REGION.
SYNOPTIC DATA FROM LAST ROTATION SHOW A QUIESCENT SECTOR
BOUNDARY FILAMENT (NOT ACTIVE REGION RELATED) AT THE LOCATION OF
TODAY'S ERUPTION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE
LOW. INTERMITTENT CLASS C FLARES ARE FORECAST 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 HAS
BEEN ACTIVE AT MID AND HIGH LATITUDES WITH MINOR STORM
CONDITIONS EXPERIENCED AT HIGH LATITUDES BETWEEN 19/1500-1700Z.
GENERALLY ACTIVE CONDITIONS ARE FORECAST TO CONTINUE THROUGH 20
JAN WITH ANOTHER PERIOD AT MINOR STORM LEVELS POSSIBLE DURING
THAT TIME. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS ARE EXPECTED
FOR 21-22 JAN.

III. EVENT PROBABILITIES 20 JAN-22 JAN

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 JAN 132

PREDICTED 20 JAN-22 JAN 128/126/125

90 DAY MEAN 19 JAN 176

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 JAN 024/029

ESTIMATED AFR/AP 19 JAN 017/020

PREDICTED AFR/AP 20 JAN-22 JAN 015/020-010/015-008/015

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