

HFUS 1 BOU 221300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 022A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 22 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/1200Z TO 22/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. NO C-CLASS X-RAY EVENTS HAVE OCCURRED NOR HAVE ANY OPTICAL FLARES BEEN OBSERVED. MOST OF THE 6 SPOTTED REGIONS ON THE DISK ARE SIMPLE. REGION 4068 (S12E04) HAS DEVELOPED TRAILER SPOTS BUT ITS LEADER PORTION IS DETERIORATING. POINT BRIGHTENINGS AND PLAGE FLUCTUATIONS HAVE BEEN REPORTED IN REGIONS 4064 (N08W41) AND 4065 (S13W34). REGION 4065 IS DECAYING SLOWLY AND 4067 (N16W04) HAS LOST ITS TRAILER SPOTS. A DARK SURGE WAS NOTED AT S14E16 IN A SMALL AREA OF ENHANCED PLAGE BETWEEN APPROXIMATELY 0600Z AND 0900Z. NO LIMB ACTIVITY HAS BEEN OBSERVED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW. HOWEVER, THE POTENTIAL RETURN OF AN ERUPTIVE ACTIVE REGION ON 25 JAN COULD REVERSE THE DOWNWARD TREND IN SUNSPOT COUNT AND INTEGRATED 10 CM FLUX.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN MOSTLY UNSETTLED FOR THE PAST 24 HOURS ALTHOUGH BOTH QUIET AND ACTIVE PERIODS ALSO OCCURRED. THE PRESENCE OF A SMALL NEGATIVE-POLARITY EQUATORIAL CORONAL HOLE AT CENTER DISK ON 20 JAN WAS CONFIRMED IN HELIUM 10830 ANGSTROM DATA RECEIVED ON 21 JAN. GEOMAGNETIC ACTIVITY IS THEREFORE EXPECTED TO BE UNSETTLED FOR THE NEXT THREE DAYS TRENDING TOWARD QUIET LEVELS BY THE END OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 23 JAN-25 JAN

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 JAN 120

ESTIMATED 22 JAN 115

PREDICTED 23 JAN-25 JAN 110/105/110

90 DAY MEAN 21 JAN 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR 20 JAN 012 AP 21 JAN 010

ESTIMATED AFR 21 JAN 010 AFR/AP 22 JAN 010/010

PREDICTED AFR/AP 23 JAN-25 JAN 012/015-010/015-008/015

SOLTERWARN

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HFUS 3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 022B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 22 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z TO 22/2100Z: SOLAR ACTIVITY REMAINS LOW. THERE HAVE BEEN NO OPTICAL FLARES NOR X-RAY BURSTS DURING THE PAST 38 HOURS. THE ONLY ACTIVITY HAS BEEN OCCASIONAL BRIGHTENINGS IN REGION 4065 (S12W41). REGIONS 4069 (S11W11) AND 4070 (S12E55) EMERGED TODAY BUT NEITHER SHOW INDICATIONS OF SIGNIFICANT GROWTH. ADDITIONALLY, A BRIGHT BUT CURRENTLY SPOTLESS PLAGE EXISTS AT S09E78.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN UNSETTLED BUT AT A HIGHER INTENSITY LEVEL IN RESPONSE TO A WEAK EQUATORIAL CORONAL HOLE.

III. EVENT PROBABILITIES 23 JAN-25 JAN

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 JAN 117

PREDICTED 23 JAN-25 JAN 115/112/107

90 DAY MEAN 22 JAN 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 JAN 010/010

ESTIMATED AFR/AP 22 JAN 010/010

PREDICTED AFR/AP 23 JAN-25 JAN 012/015-014/015-012/015

SOLTERWARN

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