

HFUS 1 BOU 231300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 023A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 23 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z TO 23/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. HOWEVER, ACTIVITY HAS INCREASED SOMEWHAT WITH THE OCCURRENCE OF SEVERAL C-CLASS X-RAY EVENTS AND SUBFAINT FLARES. REGION 4065 (S14W47) IS CURRENTLY THE ONLY NUMBERED REGION OF BETA (BIPOLAR) MAGNETIC CLASS. IT HAS PRODUCED A SUBFLARE, BRIGHT POINTS AND PLAGE FLUCTUATIONS, AND HAS EXHIBITED ARCH FILAMENTS AND AN ACTIVE DARK FILAMENT BUT IS STILL CLEARLY DECAYING IN WHITE LIGHT. C-CLASS EVENTS WERE ASSOCIATED WITH REGION 4060 (N03W64), AND 4068 (S11W12) WHICH IS NOW SPOTLESS. A FILAMENT LOCATED FROM S07W07 TO S12W02 AT 0000Z DISAPPEARED IN CONJUNCTION WITH A C1/SF FLARE IN REGION 4068 AT 0240Z. REGION 4069 (S11W18) IS NOW SPOTLESS AND REGION 4070 (S13E46) CONSISTS OF A SINGLE A-TYPE SPOT. IN RECENT HOURS, A NEW REGION HAS CROSSED THE EAST LIMB NEAR N05. NUMBERED 4071, IT HAS BEEN THE SITE OF A SUBFAINT FLARE, A LIMB SURGE AND A DARK SURGE ON THE DISK, SEVERAL POINT BRIGHTENINGS AND AN ARCH FILAMENT SYSTEM. IT IS THE RETURN OF OLD REGION 4041 WHICH PRODUCED A FEW C-CLASS EVENTS LAST ROTATION. SURGING HAS ALSO BEEN NOTED AT SE08 NEAR A SMALL AREA OF COMPACT PLAGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. REGIONS RETURNING OVER THE EAST LIMB OFFER THE ONLY CHANCE OF SIGNIFICANT ACTIVITY IN THE NEAR FUTURE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED FOR THE PAST 24 HOURS. GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETTLED TOMORROW IN RESPONSE TO THE EFFECTS OF AN APPARENT EQUATORIAL CORONAL HOLE, BUT SHOULD BE AT MOSTLY QUIET LEVELS BY THE END OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 24 JAN-26 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

ESTIMATED 23 JAN 115

PREDICTED 24 JAN-26 JAN 110/115/115

90 DAY MEAN 22 JAN 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR 21 JAN 010 AP 22 JAN 010

ESTIMATED AFR 22 JAN 009 AFR/AP 23 JAN 008/010

PREDICTED AFR/AP 24 JAN-26 JAN 010/015-010/015-008/015

SOLTERWARN

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HFUS 3 BOU 232200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 023B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 23 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
23/1200Z TO 23/2100Z: SOLAR ACTIVITY REMAINS LOW. THE ONLY
ACTIVITY WAS A SUBFAINT FLARE IN REGION 4065 (S13W54).
RESTRUCTURING IS OCCURRING IN REGION 4065 WITH ADDITIONAL PLAGE
EMERGING NORTH AND SOUTH OF THE LEADER. REGION 4071 (N05E83) IS
ROTATING ON TO THE DISK. ADDITIONALLY, FLUX IS EMERGING NEAR
N10W25 ON A FILAMENT CHANNEL. THIS EMERGENCE MAY TRIGGER THE
DISRUPTION OF FILAMENT SEGMENTS EAST AND NORTH OF THIS SITE.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN QUIET TO UNSETTLED. GENERALLY UNSETTLED FIELD CONDITIONS
ARE EXPECTED THROUGH THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 24 JAN-26 JAN

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JAN 119

PREDICTED 24 JAN-26 JAN 120/120/115

90 DAY MEAN 23 JAN 173

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 JAN 009/010

ESTIMATED AFR/AP 23 JAN 008/010

PREDICTED AFR/AP 24 JAN-26 JAN 012/015-012/015-010/015

SOLTERWARN

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