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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDE NUMBER 296A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 23 OCT 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
22/1200Z TO 23/1200Z:

SOLAR ACTIVITY HAS BEEN AT A LOW LEVEL DURING THE PAST 24 HOURS. THE LARGEST EVENT RECORDED WAS A C4/1B FROM NEW REGION 3423 (S15E50), NO SPOTS HAVE YET BEEN OBSERVED FROM THIS REGION. REGION 3403 (S11W61) NO LONGER POSSESSES A DELTA MAGNETIC CONFIGURATION AND CONTINUES TO DECAY MAGNETICALLY. REGION 3406 (N08W37), 3418 (N15E48) AND 3422 (N08W60) HAVE ALL EXHIBITED DECAY. REGION 3419 (S28E28) HAS DOUBLED IN SIZE THIS PERIOD, AND IS A C-TYPE GROUP.

II. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE AS REGION 3403 CONTINUES TO APPEAR CAPABLE OF PRODUCING M-CLASS EVENTS. THE CHANCE OF AN X-CLASS EVENT CONTINUES TO DECREASE AS THE GENERAL DECAY OF THE LARGE REGIONS CONTINUES.

III. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN NEAR MINOR STORM CONDITIONS THIS PERIOD. AS THE SOLAR WIND SPEED HAS DECREASED THE GEOMAGNETIC FIELD IS EXPECTED TO BECOME ACTIVE THEN UNSETTLED DURING THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 24 OCT-26 OCT

CLASS M 70/60/50

CLASS X 10/05/05

PROTON 10/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 OCT 221

ESTIMATED 23 OCT 212

PREDICTED 24 OCT-26 OCT 202/190/180

90 DAY MEAN 22 OCT 224

V. GEOMAGNETIC INDICES

OBSERVED AFR 21 OCT 026 AFR/AP 22 OCT 042

ESTIMATED AFR 22 OCT 042 AFR/AP 23 OCT 018/025

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

SOLAR/WARN

ET

HFUS 3 BOU 232200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 296B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 23 OCT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/1200Z TO 23/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 9 HOURS. SEVERAL SMALL C-CLASS X-RAY BURSTS HAVE BEEN NOTED, EACH WITHOUT ANY OPTICAL FLARE REPORTED. MINOR DECAY SEEMS TO HAVE TAKEN PLACE IN REGION 3403 (S11W68). OTHER REGIONS REMAIN UNIMPRESSIVE COMPARED TO REGION 3403.

IR. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO OCCASIONALLY MODERATE WITH REGION 3403 RETAINING THE CAPACITY TO PRODUCE AN ISOLATED M-CLASS FLARE. X-CLASS PROBABILITIES CONTINUE TO DECREASE AS THE LARGE REGIONS OF THE PAST WEEK DISINTEGRATE OR PASS OVER THE WEST LIMB.

II. GEOPHYSICAL SUMMARY AND FORECAST: MINOR GEOMAGNETIC STORM CONDITIONS QUIETED RATHER SUDDENLY SHORTLY AFTER 0900Z. SINCE THEN THE FIELD HAS BEEN ESSENTIALLY UNSETTLED WITH MID-LATITUDE K-VALUES OF 2 AND 3. THE FIELD IS EXPECTED TO BE MILDLY ACTIVE IN NIGHTTIME SECTORS FOR THE NEXT 24 HOURS, WITH CONDITIONS TRENDING TOWARD UNSETTLED TO QUIET LEVELS.

III. EVENT PROBABILITIES 24 OCT-26 OCT

CLASS M 70/60/50

CLASS X 10/05/05

PROTON 10/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 OCT 210

PREDICTED 24 OCT-26 OCT 200/188/178

90 DAY MEAN 23 OCT 223

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 OCT 043/042

PREDICTED AFR/AP 23 OCT 020/025

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

SOLTERWARN

BT

HXUS BOU 232200

PREDM 07024 06025 05026

PREDX 01024 00525 00526

PREDP 01024 00525 00526

PCAF 00124

TENCM 20024 18825 17826

AFRED 01524 01025 00826

AFAPF 01524 01025 00826

BT