

HFXUS 1 BOU 271300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 300A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 27 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/1200Z TO 27/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3955(S10W31) DEVELOPED A DOUBLE PEAK FLARE STARTING AT 27/0331Z. THE M3/2B FLARE WITH MAXIMUM AT 0409Z HAS A SECOND M2/1B PEAK AT 0438Z. THIS EVENT WAS ACCCOMPANIED BY SIGNIFICANT DISCRETE FREQUENCY BURSTS ACROSS THE SPECTRUM AND BY AN INITIAL WEAK TYPE II. THIS WAS FOLLOWED BY A STRONG TYPE II AND TYPE IV SWEEP. THE CENTRAL PENUMBRA IN THIS REGION HAS VISIBLE DECAYED AND THE REGION IS SOMEWHAT SIMPLIFIED FOLLOWING THE FLARE. REGION 3960(N12E01) PRODUCED A C7/1B FLARE AT 27/0301Z. REMAINING EVENTS WERE LIMITED TO SMALL C CLASS SUBFLARES. REGIONS 3955, 3960, AND 3961(S06E09) CONTINUE TO SHOW POTENTIAL FOR M CLASS ACTIVITY. REGION 3960 HAS DECLINED IN WHITE LIGHT AND IN MAGNETIC COMPLEXITY WHILE REGION 3961 HAS CONTINUED SIGNIFICANT GROWTH.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE. ISOLATED M CLASS EVENTS SHOULD BE EXPECTED FROM ANY OF THE THREE MAJOR REGIONS. REMAINING REGIONS MAY BE EXPECTED TO CONTRIBUTE ONLY TO LOW LEVEL ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS DECLINED TO UNSETTLED IN RECENT HOURS. ACTIVE CONDITIONS ARE EXPECTED TO RESUME WITH MINOR STORM LEVELS POSSIBLE ON 29 OCT DUE TO DISAPPEARING FILAMENTS AND ON 30 OCT DUE TO FLARE RESPONSE.

III. EVENT PROBABILITIES 28 OCT-30 OCT

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 OCT 196

ESTIMATED 27 OCT 195

PREDICTED 28 OCT-30 OCT 193/188/183

90 DAY MEAN 26 OCT 163

V. GEOMAGNETIC A INDICES

OBSERVED AFR 25 OCT 013 AP 26 OCT 026

ESTIMATED AFR 26 OCT 027 AFR/AP 27 OCT 018/020

PREDICTED AFR/AP 28 OCT-30 OCT 020/025-025/025-030/030

SOLTERWARN

BT

HFXUS BOU 271300

PREDM 07028 07029 07030

PREDX 00528 00529 00530

PREDP 00528 00529 00530

PCAF 00128

TENCM 19328 18829 18330

AFRED 02028 02529 03030

AFAPF 02528 02529 03030

KKK 33344 33333 45443

BT

REST OF THE REGIONS ARE GENERALLY LITTLE CHANGED THIS PERIOD.

HFUS 3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 300B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 27 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/1200Z TO 27/2100Z: SOLAR ACTIVITY WAS LOW DURING THIS PERIOD WITH THE LARGEST EVENTS, BOTH FROM REGION 3960 (N12W05), ONE OF WHICH OCCURRED AT 1616UT, A C7/SN AND A C4/1N AT 2015UT. ONLY MINOR RADIO WAS OBSERVED WITH THESE EVENTS. REGION 3961 (S07E03) CONTINUES TO EXHIBIT RAPID GROWTH AND IS NOW 800 MILLIONTHS WITH A BETA GAMMA MAGNETIC CONFIGURATION, HOWEVER ONLY SUB FLARES HAVE BEEN OBSERVED FROM THIS REGION. REGION 3955 (S12W37) HAS BEEN GENERALLY STABLE THIS PERIOD BUT IT STILL CONTAINS A DELTA. THE REST OF THE REGIONS ARE GENERALLY LITTLE CHANGED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE WITH REGIONS 3955, 3960 AND 3961 THE PRIME CANDIDATES FOR "M" CLASS ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY ACTIVE THIS PERIOD. THE FIELD IS EXPECTED TO REMAIN ACTIVE UNTIL LATE ON 29 OCT WHEN MINOR STORM CONDITIONS ARE EXPECTED FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 28 OCT-30 OCT

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 OCT 191

PREDICTED 28 OCT-30 OCT 188/183/176

90 DAY MEAN 27 OCT 164

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 OCT 025/026

ESTIMATED AFR/AP 27 OCT 018/020

PREDICTED AFR/AP 28 OCT-30 OCT 020/025-025/025-030/030

SOLTERWARN

BT