

HFUS 1 BOU 251300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 298A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 25 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 25/1200Z: SOLAR ACTIVITY HAS CONTINUED MODERATE WITH A SINGLE M CLASS FLARE, AN M2/1B IN REGION 3960(N11E28) AT 24/1504Z. REGION 3960 HAS GROWN SLIGHTLY IN WHITE LIGHT AND CONTINUES TO SHOW SOME MAGNETIC COMPLEXITY WITH A DELTA STILL PRESENT. REGION 3955(S10W05) IS THE LARGEST MOST COMPLEX REGION VISIBLE WITH CONSIDERABLE COMPLEXITY AND TWO PERSISTENT DELTAS REPORTED. THIS REGION HAS GROWN SIGNIFICANTLY BUT HAS PROVIDED ONLY SMALL C CLASS SUBFLARE ACTIVITY. REGIONS 3959(N12E01) AND 3963(N13W08) HAVE GROWN SOMEWHAT IN WHITE LIGHT. REGION 3961(S06E37) REMAINS A SMALL SIMPLE BETA REGION BUT HAS MORE THAN DOUBLED IN AREA IN RECENT HOURS, AND HAS SHOWN AFS WITH BRIGHT POINTS AT THE FEET CONSISTENTLY THROUGH THE REPORT PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE MODERATE WITH A LARGER AMOUNT OF SMALL SCALE ACTIVITY EXPECTED AS WELL AS THE POSSIBILITY OF MORE AND LARGER M CLASS FLARES DUE TO THE DEVELOPMENT OF REGIONS 3955 AND 3960.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY QUIET EXCEPT FOR WHAT APPEARS TO BE AN ISOLATED PULSE TO A K OF FOUR BEFORE 25/0600Z, SUBSIDING TO A K OF THREE FOR THE NEXT PERIOD. MAGNETIC ACTIVITY IS EXPECTED TO REMAIN GENERALLY UNSETTLED THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 26 OCT-28 OCT

CLASS M 70/75/80

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 OCT 193

ESTIMATED 25 OCT 198

PREDICTED 26 OCT-28 OCT 195/195/192

90 DAY MEAN 24 OCT 161

V. GEOMAGNETIC A INDICES

OBSERVED AFR 23 OCT 005 AP 24 OCT 007

ESTIMATED AFR 24 OCT 006 AFR/AP 25 OCT 012/015

PREDICTED AFR/AP 26 OCT-28 OCT 015/015-015/010-015/020

SOLTERWARN

BT

HXUS BOU 251300

PREDM 07026 07527 08028

PREDX 00526 00527 00528

PREDP 00526 00527 00528

PCAF 00126

TENCM 19526 19527 19228

AFRED 01526 01527 01528

AFAPF 01526 01027 02028

KKK 33243 32233 34332

BT

KBOU

HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO.

SDF NUMBER 2988

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 25 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/1200Z TO 25/2100Z: SINCE THE LAST REPORT AT 12Z SOLAR ACTIVITY HAS BEEN MODERATE. THE MAJORITY OF ACTIVITY HAS COME FROM REGION 3955 (S10W11) WHICH MANAGED TO PRODUCE A 1B/C8 AT 1558Z IN ADDITION TO SEVERAL OTHER SMALLER SUBFLARES. WHILE THIS REGION IS CURRENTLY THE LARGEST SUNSPOT GROUP ON THE SUN IT IS DECAYING RAPIDLY IN WHITE LIGHT. OF THE VARIOUS ACTIVE REGIONS ON THE SUN REGION 3961 (S06E29) IS SHOWING THE MOST GROWTH. THIS REGION HAS TRIPLED IN AREA AND IS REACHING THE SIZE WHERE IT IS CAPABLE OF PRODUCING M-CLASS XRAY FLARES. A NEW REGION 3966 (N07E53) HAS BEEN CONFIRMED DURING THE PERIOD. OTHER REGIONS ON THE DISK REMAIN LARGEY UNCHANGED SINCE YESTERDAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT MODERATE LEVELS WITH AN ABOVE AVERAGE CHANCE OF M-CLASS XRAY FLARES FROM REGIONS 3955 AND 3961.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE WITH MINOR MID-LATITUDE STORM CONDITIONS OBSERVED BETWEEN 12 AND 16Z. ACTIVE CONDITIONS ARE EXPECTED TO PERSIST OVER THE NEXT SEVERAL DAYS.

III. EVENT PROBABILITIES 26 OCT-28 OCT

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 OCT 202

PREDICTED 26 OCT-28 OCT 200/198/195

90 DAY MEAN 25 OCT 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 OCT 006/007

ESTIMATED AFR/AP 25 OCT 021/018

PREDICTED AFR/AP 26 OCT-28 OCT 020/020-015/020-015/020

SOLTERWARN

BT