

HXUS BOU 201300

PREDM 06021 06022 06023

PREDX 00521 00522 00523

PREDP 00121 00122 00123

PCFT 00121

TENCM 15721 16022 16323

HFUS 1 BOU 201300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 140A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 20 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z TO 20/1200Z: SOLAR ACTIVITY HAS BEEN LOW, WHILE THE FREQUENCY OF ACTIVITY HAS INCREASED. THIRTEEN SUBFLARES HAVE BEEN OBSERVED, NONE EXCEEDING C CLASS IN XRAY. THE LARGEST EVENT OF THE PERIOD WAS A C4/1N FLARE IN REGION 3740 (N21E28) AT 20/0538Z MAX. REGIONS CONTRIBUTING TO ACTIVITY WERE 3740, 3733 (S13W46), 3741 (N23E41), 3742 (S12E36), MOST OF THIS FROM 3740. REGIONS 3740 AND 3741 SHARE A COMMON NEUTRAL LINE AND THE FLARES OF 3741 ARE TYPICALLY SYMPATHETIC WITH THOSE OF 3740. REGION 3740 HAS DEVELOPED A DELTA IN RECENT HOURS, HAS INCREASED IN SIZE AND COMPLEXITY AND APPEARS TO HAVE POTENTIAL FOR MAJOR ACTIVITY. REMAINING REGIONS ARE STABLE OR DECLINING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN GENERALLY LOW WITH THE POSSIBILITY OF AN INFREQUENT MAJOR FLARE IN REGION 3740.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS DECLINED FROM ACTIVE TO UNSETTLED LEVELS. UNSETTLED TO NEAR ACTIVE LEVELS ARE EXPECTED FOR THE FORECAST INTERVAL BASED PRIMARILY ON EXPECTED EFFECTS OF DISAPPEARING FILAMENT OCCURANCES ON 17 AND 19 MAY.

III. EVENT PROBABILITIES 21 MAY-23 MAY

CLASS M 60/60/60

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 MAY 152

ESTIMATED 20 MAY 154

PREDICTED 21 MAY-23 MAY 157/160/163

90 DAY MEAN 19 MAY 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR 18 MAY 019 AP 19 MAY 016

ESTIMATED AFR 19 MAY 016 AFR/AP 20 MAY 015/015

PREDICTED AFR/AP 21 MAY-23 MAY 015/020-014/015-012/015

SOLTERWARN

BT

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 140B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 20 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
20/1200Z TO 20/2100Z: SOLAR ACTIVITY WAS MODERATE THIS PERIOD  
DUE TO A M4/2B EVENT FROM REGION 3740 (N21E23) AT 20/1410UT.

THIS EVENT HAD ONLY MINOR RADIO EMISSION, 120 FLUX UNITS AT  
2695MHZ, NO SWEEPS WERE OBSERVED. REGION 3740 HAS EXHIBITED  
RAPID GROWTH TODAY AND IS REPORTED TO BE A BETA-GAMMA/DELTA.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
CONTINUE AT MODERATE LEVELS WITH AN ISOLATED CHANCE FOR AN  
X-CLASS EVENT IF REGION 3740 CONTINUES TO CHANGE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED THIS PERIOD. THE FIELD IS EXPECTED TO BE  
UNSETTLED TO ACTIVE DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 21 MAY-23 MAY

CLASS M 60/60/60

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 MAY 155

PREDICTED 21 MAY-23 MAY 157/160/163

90 DAY MEAN 20 MAY 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 MAY 015/016

ESTIMATED AFR/AP 20 MAY 011/013

PREDICTED AFR/AP 21 MAY-23 MAY 015/020-014/015-012/015

SOLTERWARN

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PCAFT 00121

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AFRED 01521 01422 01223

AFAPF 02021 01522 01523

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