

HFUS 1 BOU 311300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 151A

JOINT USAF/NASA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 31 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 30/1200Z TO 31/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. REGION 3748 (S19W62) PRODUCED AN M1/SB FLARE AT 31/0313Z MAXIMUM WITH MODERATE DISCRETE FREQUENCY RADIO BURSTS INCLUDING 110 FLUX UNITS AT 2695MHZ. THIS REGION HAS BEEN UNIMPRESSIVE DURING ITS DISK TRANSIT DISPLAYING A SIMPLE SPOT STRUCTURE AND FEW SMALL FLARES PRIOR TO THIS M-CLASS FLARE. AN M1 FLARE AT 30/2252Z MAXIMUM WAS NOT CORRELATED OPTICALLY, BUT ITS SIGNATURE SUGGESTS A LIMB EVENT, POSSIBLY FROM REGION 3739, NOW WELL PAST WEST LIMB. REGIONS 3751 (S21W87) AND 3753 (S03W12) ARE NOW THE LARGEST ON THE VISIBLE DISK, BUT BOTH ARE DECAYING AND HAVE BEEN INACTIVE DURING THE PERIOD. TWO NEW REGIONS ARE BECOMING VISIBLE AT THE NORTHEAST LIMB (NE13 AND NE08). BOTH ARE REPORTED AS SMALL AND SIMPLE AND WILL PROBABLY BE NUMBERED LATER TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO DECREASE TO A LOW LEVEL DURING THE FORECAST PERIOD. THE CURRENT DISK REGIONS APPEAR CAPABLE OF ONLY C-CLASS XRAY EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS AGAIN THIS PAST PERIOD. THE 03-06Z PERIOD AND THE 06-09Z PERIOD ON THE 31ST HAS BEEN THE MOST ACTIVE, WITH K-INDEXES OF FIVE OBSERVED AT BOULDER. THE FIELD IS EXPECTED TO GRADUALLY TREND TOWARDS UNSETTLED CONDITIONS DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 01 JUN-03 JUN

CLASS M 50/30/20

CLASS X 21/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 MAY 139

ESTIMATED 31 MAY 125

PREDICTED 01 JUN-03 JUN 120/115/115

90 DAY MEAN 30 MAY 173

V. GEOMAGNETIC A INDICFS

OBSERVED AFR 29 MAY 035 AP 30 MAY 035 35-*Gwe Change*

ESTIMATED AFR 30 MAY 024 AFR/AP 31 MAY 025/025

PREDICTED AFR/AP 01 JUN-03 JUN 015/015-010/010-008/010

SOLTERWARN

BT

HFXS 3 BOU 312200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 151B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 31 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 31/1200Z TO 31/2100Z: SOLAR ACTIVITY HAS BEEN LOW THIS PERIOD. MINOR REDEVELOPMENT IS NOW EVIDENT IN REGION 3748(S21W64), ACCOUNTING FOR THE OCCURRENCE OF THE M1 EVENT EARLIER TODAY. MINOR NEW REGIONS HAVE APPEARED AT N10E73 (3759), N15E75(3761) AND N20E87(UNNUMBERED). REGION 3753(S03W19) CONTINUES WITH AN E-CLASS SPOT GROUP OF SIMPLE STRUCTURE. ITS SPOTS ARE NOW CLEARLY DECAYING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW AS ALL REGIONS NOW VISIBLE ARE SMALL AND OF SIMPLE STRUCTURE.

II. GEOPHYSICAL SUMMARY AND FORECAST: ACTIVE CONDITIONS HAVE CONTINUED ALL DAY AS SOLAR WIND HAS REMAINED HIGH NEAR THE EARTH. CONDITIONS ARE EXPECTED TO GRADUALLY IMPROVE TO UNSETTLED AS THE SOLAR WIND STREAM ROTATES AWAY FROM EARTH IN THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 01 JUN-03 JUN

CLASS M 50/30/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 31 MAY 133

PREDICTED 01 JUN-03 JUN 130/128/126

90 DAY MEAN 31 MAY 172

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 30 MAY 025/035

ESTIMATED AFR/AP 31 MAY 026/035

PREDICTED AFR/AP 01 JUN-03 JUN 015/020-010/010-008/010

SOLTERWARN

BT

HXUS BOU 312200

PREDM 05001 03002 02003

PREDX 00101 00102 00103

PREDP 00101 00102 00103

PCAFPT 00101

TENCM 13001 12802 12603

AFRED 01501 01002 00803

AFAPP 02001 01002 01003

BT