

ABUD

HF US 3 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 153B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 02 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 02/1200Z TO 02/2100Z: SOLAR ACTIVITY HAS INCREASED TO MODERATE LEVELS DURING THE PAST 9 HOURS. THE MOST SIGNIFICANT EVENT DURING THE PERIOD WAS AN M9/1B FLARE FROM REGION 3763 (S08E73). THE EVENT BEGAN AT 1525UT AND PEAKED AT 1554UT. THE FLARE WAS ACCCOMPANIED BY CENTIMETRIC MICROWAVE BURSTS WHICH INCREASED IN INTENSITY THROUGHOUT THE SPECTRUM, PEAKING AT 1000 SOLAR FLUX UNITS AT 15.4 GHZ. ALSO OBSERVED IN CONJUNCTION WITH THIS EVENT WERE MODERATE SHORT WAVE FADES UP TO 22MHZ IN THE SUN-LIT HEMISPHERES. TYPE II/IV SWEEPS WERE ALSO OBSERVED WITH THE EVENT. OTHER REGIONS ON THE SUN PRODUCED ONLY SMALL C-CLASS EVENTS OF LITTLE CONSEQUENCE.

IB. SOLAR ACTIVITY FORECAST: CONSIDERABLE GROWTH IS OCCURRING IN THE EASTERN HALF OF THE SUN. REGION 3758 (N18E21) HAS DEVELOPED AN ARCH FILAMENT SYSTEM AND HAS SHOWN STEADY GROWTH IN BOTH MICROWAVE AND OPTICAL EMISSIONS. REGION 3763 MENTIONED EARLIER WILL CONTINUE TO BE CAPABLE OF M-CLASS XRAY EVENTS AND WILL POSE AN INCREASED RISK OF NEAR-EARTH PROTON ENHANCEMENTS AS IT CROSSES THE CENTER OF THE SOLAR DISK IN SEVERAL DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: DURING THE CURRENT UT DAY, GEOMAGNETIC ACTIVITY HAS DECLINED TO UNSETLED LEVELS FROM ACTIVE CONDITIONS OBSERVED YESTERDAY. SINCE MOST OF THE LARGE ACTIVE REGIONS ON THE SUN ARE EAST OF CENTRAL MERIDIAN, IT IS UNLIKELY THAT A MAJOR FLARE-INDUCED GEOMAGNETIC DISTURBANCE WILL OCCUR OVER THE NEXT 1 TO 3-DAYS. THEREFORE, THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT QUIET TO UNSETLED LEVELS OVER THE NEAR TERM.

III. EVENT PROBABILITIES 03 JUN-05 JUN

CLASS M 70/70/70

CLASS X 20/20/30

PROTON 05/10/15

PCAF GREEN

IV. OTAWA 10.7 CM FLUX

OBSERVED 02 JUN 131

PREDICTED 03 JUN-05 JUN 135/140/150

90 DAY MEAN 02 JUN 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 JUN 023/026

ESTIMATED AFR/AP 02 JUN 015/022

PREDICTED AFR/AP 03 JUN-05 JUN 008/010-008/010-008/010

SOLAR/WARN

BT

HFUS 1 BOU 021300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 153A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 02 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/1200Z TO 02/1200Z: SOLAR ACTIVITY HAS BEEN LOW WITH ONLY C-CLASS EVENTS REPORTED IN THE PAST 24 HOURS. SMALL REGION 3759 (N08E53) AND SPOTLESS REGION 3754 (S04E12) CONTRIBUTED MOST OF THE FLARES. BOTH REGIONS ARE IN PLAGE AREAS WHICH WERE ACTIVE ON PREVIOUS ROTATIONS AND THEY COULD BEGIN TO DEVELOP RAPIDLY ALTHOUGH THEY ARE NOT GROWING AT THIS TIME. NEW REGION 3763 (S09E82) IS PRODUCING MINOR SURGE ACTIVITY AS IT ROTATES AROUND THE LIMB. THE FIRST INDICATIONS ARE THIS IS A LARGE AND POSSIBLY MODERATELY ACTIVE REGION. SMALL NEW REGION 3762 (N19E61) WAS ALSO NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW WITH THE POSSIBILITY OF INCREASED ACTIVITY FROM REGION 3763 AS IT ROTATES ONTO THE DISK.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE PAST 24 HOURS BUT IS EXPECTED TO BE QUIET TO SLIGHTLY UNSETTLED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES 03 JUN-05 JUN

CLASS M 30/30/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 JUN 130

ESTIMATED 02 JUN 132

PREDICTED 03 JUN-05 JUN 135/140/142

90 DAY MEAN 01 JUN 171

V. GEOMAGNETIC A INDICES

OBSERVED AFR 31 MAY 035 AP 01 JUN 026

ESTIMATED AFR 01 JUN 015 AFR/AP 02 JUN 014/025

PREDICTED AFR/AP 03 JUN-05 JUN 008/010-008/010-008/010

SOLTERWARN

BT