

HFUS 1 BOU 081300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 159A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 08 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 07/1200Z TO 08/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. REGION 3763 (S09E02) PRODUCED 3 M-CLASS FLARES, THE LARGEST BEING AN M4/1B FLARE MAXING ON 07 JUNE 1348Z. MINOR SOLAR RADIO NOISE BURSTS AND MAJOR SHORT WAVE FADES ACCCOMPANIED EACH EVENT. RESTRUCTURING IS EVIDENT IN THE MAIN SPOT OF REGION 3763 (WHICH STILL CONTAINS MIXED MAGNETIC POLARITIES) AND SPOTS WHICH HAD SEPARATED FROM THE WESTERN PORTION OF THE MAIN SPOT ARE THEMSELVES GROWING. TWO NEW REGIONS WERE NUMBERED UPON EAST LIMB PASSAGE, REGION 3769 (N10E48) AND 3770 (S18E54). THEY ARE BOTH SHOWING BRIGHT POINTS AND REGION 3770 IS GROWING RAPIDLY. REGION 3767 (S08W36) HAS SHOWN SOME GROWTH WHILE REGION 3759 (N10W26) IS UNDERGOING DECAY. MEANWHILE, THE EAST LIMB IS BECOMING INTERESTING. A NEW REGION IS CROSSING THE LIMB NEAR SE02 AND SURGING HAS BEEN OBSERVED NEAR SE20 AND NE17. LOOPS TO .03 RADII WERE REPORTED AT NE19 BETWEEN 2045-2312Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH. EVEN THOUGH THE FREQUENCY OF SIGNIFICANT EVENTS FROM REGION 3763 HAS LESSENED, ITS EXTREME COMPLEXITY AND STRONG MAGNETIC GRADIENTS PORTEND ADDITIONAL MAJOR FLARES. SURGING AND LOOPS OBSERVED ON THE NORTHEAST LIMB INDICATE THE ACTIVE RETURN ON JUNE 11 OF REGIONS THAT WERE PRODUCING ENERGETIC EVENTS UPON WEST LIMB PASSAGE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO QUIET FOR THE PAST 24 HOURS. EXPECTED GEOMAGNETIC ACTIVITY FROM X-CLASS FLARES ON 3, 4, AND 5 JUNE HAS NOT OCCURRED. HOWEVER, A GEOMAGNETIC STORM IS STILL POSSIBLE FROM THE X12/3B FLARE OF 5 JUNE. THE DRIZZLE OF HIGH ENERGY PROTONS AT SATELLITE LEVELS PRESUMABLY FROM THAT FLARE HAS INCREASED SLIGHTLY DURING THE PAST 3 HOURS AND THERE IS SIGNIFICANT 3 KHZ NOISE ON THE ISEE-3 INSTRUMENT. A SUDDEN COMMENCEMENT AND A FOLLOWING GEOMAGNETIC DISTURBANCE ARE THEREFORE EXPECTED WITHIN THE NEXT FEW HOURS.

III. EVFNT PROBABILITIES 09 JUN-11 JUN

CLASS M 99/99/99

CLASS X 45/40/35

PROTON 35/30/25

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 JUN 151

ESTIMATED 08 JUN 162

PREDICTED 09 JUN-11 JUN 165/170/175

90 DAY MEAN 07 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 06 JUN 020 AP 07 JUN 022

ESTIMATED AFR 07 JUN 023 AFR/AP 08 JUN 019/030

PREDICTED AFR/AP 09 JUN-11 JUN 045/050-025/025-020/020

SOLTERWARN

BT

NNNNZCVZEGVZLVZOUU

KBOU 131000Z JUN 82

HEU 131000Z JUN 82

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO.

SDF NUMBER 159B

JO INT USAF/WOG REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 0200Z 08 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 08/1200Z TO 08/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD AS REGION 3763 (S09W00) PRODUCED TWO M1/1B EVENTS AT 1753UT AND 1959UT, ONLY MINOR MICROWAVE RADIO BURSTS WERE RECORDED WITH THESE EVENTS. REGION 3763 RETAINS A DELTA IN THE CENTRAL PORTION OF THE REGION. NEW REGIONS TODAY ARE 3771 (S03E67) AND 3772 (N19E80).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH AS REGION 3763 CONTINUES TO BE VERY COMPLEX WITH STRONG MAGNETIC FIELDS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED THIS PERIOD. THE FIELD IS EXPECTED TO BE AT MINOR STORM LEVELS DURING THE FIRST 24 HOURS OF THE FORECAST, AS THE EFFECTS OF THE X12/3 B OF 6 JUNE ARRIVE, THEN ACTIVE DURING THE REST OF THE FORECAST.

III. EVENT PROBABILITIES 08 JUN-11 JUN:

CLASS M 99/99/99

CLASS X 45/40/35

PROTON 35/30/25

PCAF 100% YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 JUN 162

PREDICTED 09 JUN-11 JUN 165/170/175

90 DAY MEAN 08 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 07 JUN 021/022

ESTIMATED AFR/AP 08 JUN 008/012

PREDICTED AFR/AP 09 JUN-11 JUN 045/050-025/025-020/020

SOLTERWARN

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