

HFUS 1 BOU 091300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 160A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 09 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 08/1200Z TO 09/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3763(S08W12) CONTINUES TO PRODUCE SMALL CLASS M XRAY EVENTS. THOSE IN THE PAST 24 HOURS: M1/1B 08/1806Z, M1/1B 08/2003Z, M3/1N 08/2345Z, M1/1B 09/0732Z AND M1/1B 09/1138Z. THE ASSOCIATED SUNSPOT GROUP IS SHOWING SIGNS OF DECAY AND RELAXED MAGNETIC GRADIENTS. IT RETAINS A DELTA CONFIGURATION AND HAS SOME EMBEDDED FILAMENTS, INDICATING POTENTIAL FOR AN ADDITIONAL MAJOR FLARE. MINOR GROWTH HAS OCCURRED IN REGION 3770(S18E41), BRINGING ITS SPOT CLASS UP TO DAO. IMPORTANT SURGES ARE NOW APPEARING AT S12 E90 IN ASSOCIATION WITH A LARGE PLAGE THAT HAS YET TO SHOW SPOTS. THIS REGION IS DESIGNATED 3773. MINOR SURGES ACCOMPANY THE EASTLIMB PASSAGE OF REGION 3772 (N18E79). A SMALL SINGLE SPOT AT S03E60 HAS BEEN DESIGNATED 3771.

IB. SOLAR ACTIVITY FORECAST: THE LEVEL OF SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE UNTIL MORE SUBSTANTIAL DECAY OF REGION 3763. AN ADDITIONAL CLASS X/PROTON EVENT IS POSSIBLE FROM THIS REGION. THE RETURN OF REGIONS 3739/3740 TO NE LIMB ON 11 JUNE MAY UPHOLD MODERATE ACTIVITY EVEN IF REGION 3763 SUBSIDES.

II. GEOPHYSICAL SUMMARY AND FORECAST: A SUDDEN COMMENCEMENT OF 73 GAMMAS OCCURRED AT 0040Z ACCOMPANIED BY A SHARP INCREASE IN PROTON FLUX AT GT 10 MEV. THE GEOMAGNETIC FIELD HAS BEEN ONLY UNSETTLED SINCE THE SSC. THE PROTON EVENT PEAKED AT 31 CTS/SEC AT 0510Z AND REMAINS NEAR 22 CTS/SEC AT 1200Z.

III. EVENT PROBABILITIES 10 JUN-12 JUN

CLASS M 99/90/80

CLASS X 20/15/10

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 JUN 162

ESTIMATED 09 JUN 162

PREDICTED 10 JUN-12 JUN 162/163/166

90 DAY MEAN 08 JUN 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 07 JUN 021 AP 08 JUN 012

ESTIMATED AFR 08 JUN 008 AFR/AP 09 JUN 016/020

PREDICTED AFR/AP 10 JUN-12 JUN 025/025-014/020-014/020

SOLTERWARN

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