

FUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 171

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 JUN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100 TO 20/2100Z: SOLAR ACTIVITY HAS BEEN LOW TO MODERATE. REGION 4213 (S12W12) PRODUCED AN M1/SB AT 2335Z AND A C8/SB AT 1421Z. ONLY MINOR RADIO BURSTS ACCOMPANIED THESE FLARES. THE PENUMBRA WHICH HAD FORMED THE DELTA YESTERDAY HAS DISSIPATED, SEPARATING THE OPPOSITE POLARITY SPOTS. A MODERATE GRADIENT REMAINS BUT THE REGION IS NOW CLASSIFIED BETA GAMMA. SLOW DECAY CONTINUES IN REGION 4210 (N18W19) AND REGION 4209 (N15W13) REMAINS ESSENTIALLY UNCHANGED. BOTH REGIONS 4214 (N14E23) AND 4216 (N18E39) CONTINUE TO GROW. A LARGE FILAMENT JUST WEST OF REGION 4214 DISSIPATED IN THE MIDDLE; LEAVING A SPLIT FILAMENT NORTH AND SOUTHWEST OF THE REGION. REGION 4217 (N18E58) MAY BE TWO REGIONS; CLARIFICATION WILL BE MADE TOMORROW. THOUGH SPOTLESS, REGION 4211 (N11W85) HAS BEEN OF MODERATE INTENSITY AND HAS HAD FREQUENT SURGING. IT MAY BE REJUVENATING AT WEST LIMB PASSAGE. REGIONS 4218 (N04E40) AND 4219 (S08E74) WERE ADDED TODAY. REGION 4219 PRODUCED A C3/1N AT 1304Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW WITH A CHANCE OF AN ISOLATED CLASS M FLARE POSSIBLE FROM SEVERAL OF THE DISK REGIONS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE BUT WITH OCCASIONAL PERIODS OF STORM LEVEL AT HIGH LATITUDES ASSOCIATED WITH INDIVIDUAL SUBSTORMS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: UNSETTLED TO ACTIVE FIELD CONDITIONS ARE EXPECTED THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 21 JUN-23 JUN

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 JUN 133

PREDICTED 21 JUN-23 JUN 135/138/140

90 DAY MEAN 20 JUN 129

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 JUN 018/023

ESTIMATED AFR/AP 20 JUN 017/025

PREDICTED AFR/AP 21 JUN-23 JUN 012/020-012/020-012/015

SOLTERWARN

BT