JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 082 ISSUED AT 2200Z ON 23 MAR 1993
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/2100Z TO 23/2100Z: SOLAR ACTIVITY WAS MODERATE. REGION 7448 (N16W86) BEGAN ITS WEST LIMB PASSAGE. IT PRODUCED AN M2/SF FLARE AT 23/0153Z WITH AN ASSOCIATED 310 SFU TENFLARE AND A WEAK TYPE IV SPECTRAL RADIO BURST. A FAINT LOOP PROMINENCE SYSTEM WAS SEEN IN THE WAKE OF THIS FLARE. REGION 7452 (S12W21) MAINTAINED A DELTA MAGNETIC STRUCTURE WITHIN ITS LEADER, BUT WAS STABLE THROUGHOUT THE PERIOD. NEW REGION 7458 (S12E08) WAS NUMBERED.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. REGION 7448 MAY PRODUCE ANOTHER M-CLASS FLARE AS IT CROSSES THE LIMB. REGION 7452 ALSO PROVIDES A SLIGHT CHANCE FOR AN ISOLATED M-CLASS FLARE.
IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 22/2100Z TO 23/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT QUIET TO UNSETTLED LEVELS FOR THE PAST 24 HOURS.
IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT QUIET TO UNSETTLED LEVELS DURING THE FIRST TWO DAYS. CONDITIONS ARE EXPECTED TO INCREASE TO ACTIVE LEVELS ON THE FINAL DAY DUE TO A FILAMENT WHICH DISAPPEARED LATE ON 21 MARCH. INTERMITTENT STORM PERIODS ARE ALSO POSSIBLE DURING THE FINAL DAY.
III. EVENT PROBABILITIES 24 MAR-26 MAR
CLASS M 30/20/20
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN
IV. PENTICTON 10.7 CM FLUX
OBSERVED 23 MAR 121
PREDICTED 24 MAR-26 MAR 115/115/115
90 DAY MEAN 23 MAR 134
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 22 MAR 020/020
ESTIMATED AFR/AP 23 MAR 007/010
PREDICTED AFR/AP 24 MAR-26 MAR 007/010-007/010-025/025
VI. GEOMAGNETIC ACTIVITY PROBABILITIES 24 MAR-26 MAR
A. MIDDLE LATITUDES
ACTIVE 10/10/40
MINOR STORM 05/05/30
MAJOR-SEVERE STORM 01/01/15
B. HIGH LATITUDES
ACTIVE 15/15/30
MINOR STORM 10/10/40
MAJOR-SEVERE STORM 05/05/25