JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 068 ISSUED AT 2200Z ON 09 MAR 1993
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 08/2100Z TO 09/2100Z: SOLAR ACTIVITY WAS LOW. REGION 7440 (S06W14) CONTINUED TO PRODUCE LITTLE IN THE WAY OF FLARES, WHILE STILL REMAINING LARGE AND MAGNETICALLY COMPLEX. DECAY HAS OCCURRED IN THE LEADER SPOTS OF THE REGION, BUT A DELTA PERSISTS IN THE TRAILER. LITTLE ELSE OF INTEREST WAS REPORTED TODAY, AS BACKGROUND X-RAY FLUXES DROPPED TO WELL BELOW C-LEVEL.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. REGION 7440, VERY QUIET SINCE ITS MAJOR FLARE LATE ON MARCH 6, MAY PRODUCE ANOTHER IF AN INSTABILITY DEVELOPS WITHIN THE REGION. NONE OF THE REMAINING FOUR SPOTTED REGIONS SEEMS CAPABLE OF ANYTHING BEYOND AN OCCASIONAL SUBFLARE.
IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 08/2100Z TO 09/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT MINOR TO SEVERE STORM LEVELS AT ALL LATITUDES. A SUDDEN IMPULSE OF 50 NANOTESLA WAS OBSERVED AT BOULDER AT 08/2139Z. CONDITIONS QUICKLY DETERIORATED WITH THE MOST INTENSE DISTURBANCE OCCURRING IN THE 12-15 HOURS AFTER THE PASSAGE OF THE SHOCK. THIS ACTIVITY IS THOUGHT TO BE A RESULT OF THE MAJOR FLARE/CME EVENTS LATE ON MARCH 6.
IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE THE NEXT 24 HOURS, WITH POSSIBLE EPISODES OF MINOR STORM LEVELS OCCURRING DURING LOCAL NIGHTTIMES. STRICTLY UNSETTLED CONDITIONS SHOULD PREVAIL 11-12 MARCH AS THE CURRENT STORM WEAKENS.
III. EVENT PROBABILITIES 10 MAR-12 MAR
CLASS M 60/60/60
CLASS X 15/15/15
PROTON 25/25/25
PCAF YELLOW
IV. PENTICTON 10.7 CM FLUX
OBSERVED 09 MAR 143
PREDICTED 10 MAR-12 MAR 140/135/135
90 DAY MEAN 09 MAR 137
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 08 MAR 023/019
ESTIMATED AFR/AP 09 MAR 041/075
PREDICTED AFR/AP 10 MAR-12 MAR 020/020-010/015-010/010
VI. GEOMAGNETIC ACTIVITY PROBABILITIES 10 MAR-12 MAR
A. MIDDLE LATITUDES
ACTIVE 30/20/20
MINOR STORM 35/15/15
MAJOR-SEVERE STORM 25/05/05
B. HIGH LATITUDES
ACTIVE 15/25/25
MINOR STORM 35/15/15
MAJOR-SEVERE STORM 35/05/05