JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 004 ISSUED AT 2200Z ON 04 JAN 1993
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100Z TO 04/2100Z: SOLAR ACTIVITY WAS LOW. THE LARGEST X-RAY BURST OF THE DAY WAS AN OPTICALLY UNCORRELATED C6 AT 04/0055Z. THE LARGEST OBSERVED EVENT WAS A C4/BSL (BRIGHT SURGE) AT 04/2025Z IN NEW REGION 7391 (S07E76). THIS REGION HAS A NUMBER OF SMALL SPOTS WITH PENUMBRA AND IS NOT YET COMPLETELY IN VIEW. THE GROWTH RATE OF REGION 7388 (S07W57) HAS SLOWED. OTHER DISK REGIONS WERE QUIET. NEW REGION 7392 (N14E21) WAS ALSO NUMBERED.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. REGION 7391 MAY INCREASE THE LIKELIHOOD OF M-FLARES.
IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z: THE GEOMAGNETIC FIELD WAS AT UNSETTLED TO ACTIVE LEVELS AT MIDDLE LATITUDES AND ACTIVE TO STORM LEVELS AT HIGH LATITUDES. THE HIGH LATITUDE FIELD EXPERIENCED MAJOR TO SEVERE STORM CONDITIONS FROM 04/0900Z TO 1500Z.
IIB. GEOPHYSICAL ACTIVITY FORECAST: FOR THE NEXT 24 HOURS THE GEOMAGNETIC FIELD IS EXPECTED TO BE MOSTLY UNSETTLED AT MIDDLE LATITUDES AND ACTIVE TO STORM AT HIGH LATITUDES. ACTIVITY IS EXPECTED TO SUBSIDE TO QUIET TO UNSETTLED LEVELS BY THE END OF THE THREE DAY FORECAST PERIOD.
III. EVENT PROBABILITIES 05 JAN-07 JAN
CLASS M 05/10/20
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN
IV. PENTICTON 10.7 CM FLUX
OBSERVED 04 JAN 121
PREDICTED 05 JAN-07 JAN 128/130/135
90 DAY MEAN 04 JAN 139
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 03 JAN 024/024
ESTIMATED AFR/AP 04 JAN 016/023
PREDICTED AFR/AP 05 JAN-07 JAN 015/018-010/012-010/010
VI. GEOMAGNETIC ACTIVITY PROBABILITIES 05 JAN-07 JAN
A. MIDDLE LATITUDES
ACTIVE 40/30/20
MINOR STORM 10/10/10
MAJOR-SEVERE STORM 01/01/01
B. HIGH LATITUDES
ACTIVE 50/30/25
MINOR STORM 20/15/10
MAJOR-SEVERE STORM 05/05/05