JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 358 ISSUED AT 2200Z ON 24 DEC 1993
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/2100Z TO 24/2100Z: SOLAR ACTIVITY WAS MODERATE. REGION 7640 (N08E21) PRODUCED TWO M1/1N FLARES MAXING AT 1507Z AND 1815Z. NO RADIO ACTIVITY WAS REPORTED WITH THESE TWO FLARES. NUMEROUS C-CLASS FLARING HAS ALSO OCCURRED IN THIS REGION OVER THE PAST 24 HOURS. WHITE LIGHT OBSERVATIONS INDICATE 7640 HAS NEARLY DOUBLED IN SPOT NUMBER AND HAS GROWN SIGNIFICANTLY IN AREA WITH RAPID PENUMBRA DEVELOPMENT THROUGHOUT THE REGION. TWO NEW REGIONS WERE NUMBERED OVERNIGHT -- RGN 7642 (N10W20) AND RGN 7643 (S16E69). ALL OTHER REGIONS WERE STABLE. ONE OTHER ITEM OF NOTE TO PASS ON: JUST MINUTES AGO, SANTA CLAUS WAS POSITIVELY IDENTIFIED ON RADAR LEAVING THE POLAR CAP AND PASSING THROUGH THE AURORAL OVAL. ANY MINOR DISTURBANCES IN IONOSPHERIC SIGNATURES SHOULD BE ATTRIBUTED TO THIS SEASONAL PHENOMENON.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. CONTINUED DEVELOPMENT IN REGION 7640 SHOULD PRODUCE MORE M-CLASS ACTIVITY WITH A SLIGHT CHANCE OF X-CLASS ACTIVITY.
IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 23/2100Z TO 24/2100Z: 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 MOSTLY QUIET.
III. EVENT PROBABILITIES 25 DEC-27 DEC
CLASS M 60/65/70
CLASS X 05/10/10
PROTON 01/05/05
PCAF GREEN
IV. PENTICTON 10.7 CM FLUX
OBSERVED 24 DEC 111
PREDICTED 25 DEC-27 DEC 115/117/120
90 DAY MEAN 24 DEC 098
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 23 DEC 009/010
ESTIMATED AFR/AP 24 DEC 008/010
PREDICTED AFR/AP 25 DEC-27 DEC 005/005-005/007-010/010
VI. GEOMAGNETIC ACTIVITY PROBABILITIES 25 DEC-27 DEC
A. MIDDLE LATITUDES
ACTIVE 10/10/15
MINOR STORM 05/05/05
MAJOR-SEVERE STORM 01/01/01
B. HIGH LATITUDES
ACTIVE 10/10/15
MINOR STORM 05/05/10
MAJOR-SEVERE STORM 01/01/01