JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 364 ISSUED AT 2200Z ON 30 DEC 1993
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/2100Z TO 30/2100Z: SOLAR ACTIVITY WAS MODERATE BECAUSE OF A SINGLE, UNCORRELATED M1 XRAY BURST AT 30/0555UT. REGION 7640 (N08W66) CONTINUED TO GROW BUT PRODUCED ONLY A SINGLE C5/1N FLARE AT AT 30/1616UT. REGION 7645 (N11E54) SHOWED RAPID GROWTH THIS PERIOD AND PRODUCED FIVE C-CLASS FLARES, INCLUDING A C7/SN FLARE AT 30/1713UT. REGION 7646 (S10E54) SHOWED GOOD DEVELOPEMENT AS WELL BUT WAS GENERALLY FLARE QUIET.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. REGIONS 7640, 7645 AND 7646 ALL HAVE A GOOD POTENTIAL FOR C-CLASS FLARING. REGIONS 7640 AND 7645 HAVE THE BEST CHANCE OF OCCASIONAL M-CLASS ACTIVITY AND AN OUTSIDE CHANCE OF ISOLATED X-CLASS FLARING.
IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 29/2100Z TO 30/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT QUIET LEVELS FOR THE PAST 24 HOURS.
IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE QUIET TO ACTIVE OVER THE NEXT 24 HOURS THEN MOSTLY UNSETTLED. A WELL POSITIONED CORONAL HOLE HAS SO FAR FAILED TO PRODUCE AN ANTICIPATED MAGNETIC DISTURBANCE.
III. EVENT PROBABILITIES 31 DEC-02 JAN
CLASS M 65/65/65
CLASS X 05/05/05
PROTON 05/05/05
PCAF GREEN
IV. PENTICTON 10.7 CM FLUX
OBSERVED 30 DEC 143
PREDICTED 31 DEC-02 JAN 140/140/130
90 DAY MEAN 30 DEC 100
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 29 DEC 001/003
ESTIMATED AFR/AP 30 DEC 006/008
PREDICTED AFR/AP 31 DEC-02 JAN 025/035-015/020-010/015
VI. GEOMAGNETIC ACTIVITY PROBABILITIES 31 DEC-02 JAN
A. MIDDLE LATITUDES
ACTIVE 25/20/20
MINOR STORM 25/10/10
MAJOR-SEVERE STORM 05/05/01
B. HIGH LATITUDES
ACTIVE 25/25/20
MINOR STORM 25/20/10
MAJOR-SEVERE STORM 10/10/01