JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 350 ISSUED AT 2200Z ON 16 DEC 1993
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100Z TO 16/2100Z: SOLAR ACTIVITY REMAINED VERY LOW. NEW REGION 7637 (N08W05) EMERGED RAPIDLY AND IS NOW A SMALL D-CLASS GROUP. A STRONG ARCH FILAMENT SYSTEM IS VISIBLE THERE. REGION 7635 (N03E51) REMAINED STABLE. A RECENT MAGNETOGRAM SHOWS MIXED POLARITIES IN THE PLAGE FIELD OF THIS REGION.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE VERY LOW. IF GROWTH CONTINUES IN REGION 7637, SMALL C-CLASS BURSTS SHOULD BEGIN TO OCCUR.
IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD WAS QUIET UNTIL APPROXIMATELY 0500Z WHEN A CORONAL HOLE RELATED DISTURBANCE BEGAN. MID-LATITUDES WERE PREDOMINANTLY ACTIVE AFTER THAT TIME. PLANETARY INDICES WERE ALSO IN THE ACTIVE CATEGORY BUT SOME HIGH LATITUDE STATIONS EXPERIENCED MINOR TO MAJOR STORM CONDITIONS IN THE LATTER HALF OF THE PERIOD.
IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD BE GENERALLY UNSETTLED ON 17 DEC WITH ACTIVE CONDITIONS PROBABLE DURING LOCAL NIGHTTIME. MOSTLY UNSETTLED LEVELS ARE FORECAST FOR 18 DEC. ACTIVE CONDITIONS ARE EXPECTED TO RETURN ON 20 DEC AS A RESULT OF THE FILAMENT DISRUPTION NOTED YESTERDAY. THE TIMING AND SEVERITY OF FILAMENT RELATED DISTURBANCES ARE DIFFICULT TO FORECAST.
III. EVENT PROBABILITIES 17 DEC-19 DEC
CLASS M 05/05/05
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN
IV. PENTICTON 10.7 CM FLUX
OBSERVED 16 DEC 085
PREDICTED 17 DEC-19 DEC 087/089/090
90 DAY MEAN 16 DEC 098
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 15 DEC 009/009
ESTIMATED AFR/AP 16 DEC 015/015
PREDICTED AFR/AP 17 DEC-19 DEC 012/012-010/010-020/022
VI. GEOMAGNETIC ACTIVITY PROBABILITIES 17 DEC-19 DEC
A. MIDDLE LATITUDES
ACTIVE 30/15/30
MINOR STORM 20/05/20
MAJOR-SEVERE STORM 05/01/05
B. HIGH LATITUDES
ACTIVE 30/15/30
MINOR STORM 20/05/20
MAJOR-SEVERE STORM 05/01/10