JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 271 ISSUED AT 2200Z ON 28 SEP 1993
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/2100Z TO 28/2100Z: SOLAR ACTIVITY WAS MODERATE. REGION 7590 (N12E63) PRODUCED THE PERIOD'S ONLY M-CLASS EVENT: AN M1/SN AT 27/2249Z. THE REGION HAS ROTATED MORE FULLY INTO VIEW AS AN IMPRESSIVE FKI SPOT GROUP WITH AN AREA OF ABOUT 1100 MILLIONTHS. THERE IS SOME EVIDENCE OF A MAGNETIC DELTA CONFIGURATION IN THE TRAILING SECTION OF THE LARGE LEADER SPOT COMPLEX. REGION 7585 (N07W56) SHOWED STEADY DECAY DURING THE PERIOD. NEW REGION 7591 (N07E47) EMERGED ON THE DISK JUST SOUTHWEST OF 7590.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DUE TO CONTINUED ACTIVITY FROM 7590. THERE IS A SLIGHT CHANCE FOR AN ISOLATED MAJOR FLARE FROM THE GROUP DURING THE FORECAST PERIOD.
IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 27/2100Z TO 28/2100Z: THE GEOMAGNETIC FIELD WAS PREDOMINANTLY QUIET TO UNSETTLED. SOME HIGH LATITUDE SITES REPORTED ISOLATED PERIODS OF ACTIVE CONDITIONS.
IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE FOR THE NEXT TWO DAYS, BECOMING INCREASINGLY ACTIVE BY DAY THREE. THE INCREASE IS EXPECTED DUE TO EFFECTS FROM A FAVORABLY POSITIONED CORONAL HOLE.
III. EVENT PROBABILITIES 29 SEP-01 OCT
CLASS M 65/65/65
CLASS X 15/15/15
PROTON 15/15/15
PCAF GREEN
IV. PENTICTON 10.7 CM FLUX
OBSERVED 28 SEP 111
PREDICTED 29 SEP-01 OCT 115/115/115
90 DAY MEAN 28 SEP 093
V. GEOMAGNETIC A INDICES
OBSERVED AFR/AP 27 SEP 009/008
ESTIMATED AFR/AP 28 SEP 007/006
PREDICTED AFR/AP 29 SEP-01 OCT 015/018-015/025-025/025
VI. GEOMAGNETIC ACTIVITY PROBABILITIES 29 SEP-01 OCT
A. MIDDLE LATITUDES
ACTIVE 20/35/35
MINOR STORM 10/15/15
MAJOR-SEVERE STORM 05/15/10
B. HIGH LATITUDES
ACTIVE 20/35/35
MINOR STORM 10/25/20
MAJOR-SEVERE STORM 05/15/10