

HFUSS BOU 102200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 345

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 10 DEC 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/2100 TO 10/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW THE PAST 24 HOURS. TWO NEW REGIONS WERE NUMBERED TODAY AS REGION 4607(S12E09) AND REGION 4608(N17E79). REGION 4607 HAS A WELL DEFINED ARCH FILAMENT SYSTEM IN PROGRESS AND SIGNIFICANT FLUCUATIONS IN PLAGE BRIGHTENINGS HAVE ALSO BEEN OCCURRING. REGION 4608 HAD SURGING MATERIAL OUT TO .10 RADIUS VECTOR AT 09/2308UT. A NEW REGION WAS NUMBERED LATE YESTERDAY AS REGION 4606(S15W08) HOWEVER IT HAS UNDERGONE SOME DECAY AND HAS NO SPOTS TODAY AND REMAINS AS A PLAGE REGION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW DURING THE FORECAST PERIOD. HOWEVER WITH THE WELL DEFINED ARCH FILAMENT SYSTEM AND INHANCED FLUCUATIONS FROM REGION 4607 AND THE SURGING FROM REGION 4608 POSSIBLE ENERGETIC ACTIVITY COULD OCCUR IF RAPID CHANGE TAKES PLACE.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 09/2100Z TO 10/2100Z: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED WITH ACTIVE CONDITIONS AT THE HIGHER LATITUDES THE PAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT UNSETTLED TO ACTIVE LEVELS REACHING MINOR STORM CONDITIONS ON 12 DECEMBER AND MAJOR STORM CONDITIONS ON 13 DECEMBER. THIS INCREASE IN ACTIVITY IS EXPECTED DUE TO RECURRENT HIGH SPEED STREAM FROM A SOUTHERN CORONAL HOLE.

III. EVENT PROBABILITIES 11 DEC-13 DEC

CLASS M 05/05/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 DEC 078

PREDICTED 11 DEC-13 DEC 080/082/082

90 DAY MEAN 10 DEC 075

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 DEC 004/006

ESTIMATED AFR/AP 10 DEC 012/010

PREDICTED AFR/AP 11 DEC-13 DEC 015/020-035/040-070/070

SOLTERWARN

RT