

HFUS 1 BOU 271300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 361A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 27 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/1200Z TO 27/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE TO LOW. AFTER THE UNASSOCIATED M1 X-RAY FLARE AT 26/1456Z, ONLY LOW LEVEL CLASS C/SUBFLARES HAVE OCCURRED. SOME ADDITIONAL SMALL SPOTS HAVE EMERGED IN REGION 4033 (S13E07). MOST OF THE RECENT FLARES IN THIS REGION HAVE OCCURRED ON THE NORTH SIDE OF THE LEADER WHERE AN ANOMOLOUS POLE EXISTS. SPOTS ARE EMERGING IN THE SF PORTION OF REGION 4039 (S15E31). REGION 4040 (S20E56) BEGAN EMERGING YESTERDAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH REGION 4033 CAPABLE OF PRODUCING AN ISOLATED MAJOR FLARE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO OCCASIONALLY ACTIVE. THE FIELD IS EXPECTED TO BE GENERALLY UNSETLED WITH OCCASIONAL ACTIVE PERIODS THROUGH THE NEXT 36 HOURS. THE GREATER THAN 10 MEV PROTONS AT SATELLITE LEVEL CROSSED THE THRESHOLD OF 10 P/CM²/SEC/STER AT 2600Z. A MAXIMUM FLUX OF 170 WAS ATTAINED AT 1145Z. SOURCE OF THIS PROTON EVENT IS UNCERTAIN AT THIS TIME.

III. EVENT PROBABILITIES 28 DEC-32 DEC

CLASS M 85/85/85

CLASS X 15/15/15

PROTON 15/15/15

PCAF IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 DEC 175

ESTIMATED 27 DEC 172

PREDICTED 28 DEC-32 DEC 170/170/170

90 DAY MEAN 26 DEC 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR 25 DEC 011 AP 26 DEC 010

ESTIMATED AFR 26 DEC 010 AFR/AP 27 DEC 013/020

PREDICTED AFR/AP 28 DEC-32 DEC 012/022-012/015-010/010

SOLARWARN

BT