

HFUS 1 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 001

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 01 JANUARY 1979

I A. SOLAR ACTIVITY HAS BEEN LOW-MODERATE DURING THE PAST 24 HOURS. SEVERAL C-CLASS X-RAY FLARES WERE OBSERVED; THE LARGEST A C4/SN FROM REGION 1487 (S13E28) REPORTED BY TEHRAN WITH MAX AT 0853Z. SHORT WAVE FADES ON 9-18 MHZ FREQUENCIES WERE OBSERVED DURING THE FLARE. REGIONS 1474 (N12W54) AND 1483 (S33W04) ALSO HAD SMALL C-CLASS FLARES. NEW REGION 1491 (S21E09) HAS EMERGED IN THE SOUTHEAST QUADRANT AS A C GROUP WITH 2 SPOTS.

I B. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH DURING THE FORECAST PERIOD. REGION 1487 HAS SHOWN RAPID OVER NIGHT GROWTH, AND IS BETA GAMMA MAGNETICALLY ALONG WITH 1474, 1483, 1484 (S35E30) AND 1482 (S22W09). ADDING TO THE ALREADY COMPLICATED DISK IS THE EXPECTED RETURN OF REGIONS 1444 (S15) AND 1446 (N20) WHICH ARE DUE BACK TOMORROW. REGION 1444 HAD SIGNIFICANT ACTIVITY LAST ROTATION.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED DURING THE PERIOD. UNSETLED CONDITIONS ARE EXPECTED THROUGH THE FIRST TWO DAYS OF THE FORECAST PERIOD BECOMING ACTIVE ON 4 JANUARY.

III. EVENT PROBABILITIES 02 JANUARY - 04 JANUARY

CLASS M 50/60/70

CLASS X 20/30/40

PROTON 10/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 JANUARY 203

PREDICTED 02 JAN - 04 JAN 207/210/212

90-DAY MEAN 01 JANUARY 165

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 31 DECEMBER 15

ESTIMATED AFR/AP 01 JANUARY 08/08

PREDICTED AFR/AP 02 JAN - 04 JAN 10/10 - 12/18 - 18/25

SOLTERWARN

BT