

HFUS 1 BOU 041300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 338A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 04 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/1200Z TO 04/1200Z: SOLAR ACTIVITY REMAINED MODERATE DURING THE PAST 24 HOURS. AN M1/1B FLARE WAS PRODUCED BY REGION 4014 (N08E42) AT 040915Z (MAX). REGION 4014 HAS AN ARCH FILAMENT SYSTEM AND THE PLAGE IS BRIGHT, COMPACT AND CONCENTRATED TO THE NORTHEAST OF THE SPOT GROUP. REGIONS 4012 (N12E31) AND 4005 (S10W25) HAVE RESTRICTED THEIR ACTIVITY TO THE SUBFLARE CATEGORY WITH C LEVEL XRAY EMISSION. REGION 4012 IS UNCHANGED IN SIZE WHILE 4005 HAS DECLINED SLIGHTLY. REGION 4007 (S15W45) IS ALSO UNCHANGED IN SIZE BUT MAY POSSIBLY HAVE DEVELOPED A DELTA MAGNETIC CONFIGURATION IN ITS SOUTHEAST PORTIONS. THE REMAINDER OF THE DISK IS RELATIVELY QUIET. IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE LEVELS. THE RETURN OF 3984, 3987 AND 3990 SHOULD HELP TO SUSTAIN THIS LEVEL.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. NO MAJOR CHANGES ARE EXPECTED.

III. EVENT PROBABILITIES 05 DEC-07 DEC

CLASS M 85/85/85

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 DEC 187

ESTIMATED 04 DEC 195

PREDICTED 05 DEC-07 DEC 210/215/215

90 DAY MEAN 03 DEC 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 02 DEC 003 AP 03 DEC 008

ESTIMATED AFR 03 DEC 010 AFR/AP 04 DEC 010/015

PREDICTED AFR/AP 05 DEC-07 DEC 010/015-010/015-008/015

SOLTERWARN

BT

HFUS 3 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 338B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 04 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 04/1200Z TO 04/2100Z: SOLAR ACTIVITY HAS CONTINUED MODERATE WITH A CLASS M2 FLARE AT 1200Z AND AN M1 AT 1713Z. ONE, AND POSSIBLY BOTH, OF THESE EVENTS ORIGINATED WITH SURGES AND ACTIVE PROMINENCES AT S12E90 (REGION 4017). THIS AREA IS THE RETURN OF AN ACTIVITY COMPLEX WHICH PRODUCED CLASS M EVENTS LAST MONTH. SIGNIFICANT GROWTH CONTINUES IN REGION 4014(N07E33), A TYPE EAI SPOT GROUP OF COMPLEX FORM. ITS IMPORTANCE IS ENHANCED BY ITS MERGER WITH REGIONS 4010(N09E13) AND 4012(N12E23). THOSE OTHER TWO REGIONS HAVE CEASED THEIR GROWTH. MAJOR GROWTH IN REGION 4007(S14W49) HAS CREATED A PAIR OF ABUTTED SPOT GROUPS. LARGE REGION 4005(S10W32) HAS STABILIZED AND REMAINS SIMPLE. NEW SMALL REGIONS HAVE APPEARED AT N03E04(REGION 4015) AND S09E67(REGION 4016).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH AN INCREASING FREQUENCY OF SMALL CLASS M FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN MOSTLY QUIET WITH OCCASIONAL PERIODS THAT WERE UNSETTLED. UNSETTLED CONDITIONS ARE EXPECTED THROUGHOUT MOST OF THIS FORECAST PERIOD. ACTIVE CONDITIONS MAY BEGIN LATE ON 07 DECEMBER AS A CONSEQUENCE OF A SLOW CORONAL TRANSIENT ON 03 DECEMBER.

III. EVENT PROBABILITIES 05 DEC-07 DEC

CLASS M 85/90/95

CLASS X 05/05/10

PROTON 01/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 DEC 200

PREDICTED 05 DEC-07 DEC 215/225/230

90 DAY MEAN 04 DEC 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 DEC 008/008

ESTIMATED AFR/AP 04 DEC 010/015

PREDICTED AFR/AP 05 DEC-07 DEC 010/015-010/015-015/020

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