

HFUS 1 BOU 051300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 339A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 05 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 04/1200Z TO 05/1200Z: SOLAR ACTIVITY IS MODERATE. CLASS M ACTIVITY CONTINUES TO OCCUR AT THE RATE OF 3 OR 4 PER DAY. THE SOURCE OF THIS ACTIVITY HAS BEEN REGION 4014 (N07E27) AND 4017 (S12E81). REGION 4014 REMAINS A MODERATE SIZE D GROUP WITH A BETA-GAMMA MAGNETIC CLASSIFICATION. THE PLAGUE IS FLUCTUATING ALMOST CONTINUOUSLY AND SPOT GROWTH IS EVIDENT IN THE LEADER AREA. REGION 4017 HAS ONLY EXHIBITED TWO SMALL SPOTS BUT MAY HAVE TRAILERS BEHIND THE LIMB. REGION 4007 (S14W55) HAS ONLY PRODUCED AN OCCASIONAL SUBFLARE BUT COALESCENCE OF THE SPOT GROUP HAS OCCURRED AND PROBABLY SUGGEST INCREASING COMPLEXITY. THE LARGE REGION 4005 (S10W38) IS LITTLE CHANGED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE. REGIONS 4017 AND 4014 ARE EXPECTED TO CONTINUE TO PRODUCE M CLASS FLARES AND REGION 4007 MAY BECOME A PARTICIPANT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 06 DEC-08 DEC

CLASS M 90/95/95

CLASS X 05/10/10

PROTON 01/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 DEC 200

ESTIMATED 05 DEC 205

PREDICTED 06 DEC-08 DEC 210/215/215

90 DAY MEAN 04 DEC 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 03 DEC 008 AP 04 DEC 013

ESTIMATED AFR 04 DEC 010 AFR/AP 05 DEC 011/015

PREDICTED AFR/AP 06 DEC-08 DEC 010/015-010/020-015/020

SOLTERWARN

BT

HFUS 3 BOU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 339B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 05 DEC 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 05/1200Z TO 05/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST NINE HOURS. AN M1/SB FLARE AT 1613Z WAS THE LARGEST OF SEVERAL FLARES THIS PERIOD IN REGION 4014(N07E19). THIS REGION HAS APPARENTLY REACHED ITS PEAK SIZE AS A CLASS EAI SPOT GROUP BUT CONTINUES TO PRODUCE NEW SPOTS AND ALTER ITS MAGNETIC CONFIGURATION. THERE IS NO LONGER A DELTA CONFIGURATION BUT MAGNETIC GRADIENTS AND COMPLEXITY REMAIN HIGH. RAPID GROWTH HAS BUILT A LARGE DELTA CONFIGURATION IN THE TRAILING PORTION OF REGION 4007(S15W62). FLARE ACTIVITY, HOWEVER, HAS BEEN NEARLY ABSENT FROM THIS AREA. REGION 4017(S10E69) IS NOW CLEARLY VISIBLE AS ONLY A SMALL PLAGE AND SPOT GROUP. SMALL NEW REGIONS HAVE APPEARED AT S09W15(REGION 4018) (ANS) S22W21(REGION 4019).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE MODERATE WITH ONLY ONE OR TWO SMALL CLASS M EVENTS PER DAY. A SINGLE GREAT EVENT MAY OCCUR IN REGION 4007 BEFORE ITS WEST LIMB PASSAGE. THE STRUCTURE AND LOCATION OF THIS REGION FAVOR PRODUCTION OF A PROTON EVENT. THE OTHER LARGE REGIONS NOW ON THE DISK ARE EXPECTED TO DECLINE DURING THIS PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ONLY SLIGHTLY UNSETTLED. UNSETTLED CONDITIONS WILL CONTINUE FOR ABOUT ANOTHER 48 HOURS BEFORE COMMENCEMENT OF ACTIVE CONDITIONS RESULTING FROM A SLOW CORONAL TRANSIENT ON 03 DECEMBER.

III. EVENT PROBABILITIES 06 DEC-08 DEC

CLASS M 95/95/80

CLASS X 20/20/05

PROTON 30/30/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 DEC 216

PREDICTED 06 DEC-08 DEC 215/200/193

90 DAY MEAN 05 DEC 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 DEC 011/013

ESTIMATED AFR/AP 05 DEC 012/015

PREDICTED AFR/AP 06 DEC-08 DEC 010/015-015/020-018/020

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