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HAUS BOU 210400

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 021A ISSUED 0400Z 21 JAN 1971

CLASS-C FLARES AND AT LEAST ONE CLASS-M FLARE ARE EXPECTED DURING THE NEXT 13 HOURS.

A. SOLAR ACTIVITY HAS REMAINED AT A RELATIVELY LOW LEVEL DURING THE PAST 11 HOURS; ONLY A FEW CLASS-C SUBFLARES HAVE BEEN REPORTED. DEVELOPMENT OF THE REGITN AT N19E01 HAS CONTINUED. ARCH FILAMENTS ARE PRESENT IN THE CENTRAL PART OF THE PLAGE ABOVE SPOTS EXHIBITING MIXED MAGNETIC POLARITIES. THE NEW REGION JUST EAST OF THE N19E01 REGION ALSO CONTAINS ARCH FILAMENTS AND APPEARS TO BE INTERACTING WITH THE N19E01 REGION. DEVELOPMENT IS IN PROGRESS IN THE D/600 CENTER AT S12E34; THIS SOUTHEASTERN REGION CONTAINS BRIGHT PLAGE AND HAS PRODUCED OCCASIONAL SUBFLARES RECENTLY. SOME SLIGHT DEVELOPMENT ALSO HAS BEEN NOTED IN D/170 REGITN AT N11E33. OTHER CENTERS ARE RELATIVELY UNIMPRESSIVE. THE GEOMAGNETIC FIELD HAS EXHIBITED UNSETTLED CONDITIONS DURING THE PAST 11 HOURS.

B. A GENERAL INCREASE IN THE FREQUENCY AND MAGNITUDE OF SOLAR FLARES IS ANTICIPATED DURING THE NEXT THREE DAYS. IF INTERACTION BETWEEN THE N19E01 AND N19E12 CENTERS FOLLOWS ITS PRESENT TREND, MAJOR ENERGETIC FLARES WILL BECOME INCREASINGLY PROBABLE; IN THE PAST, SUCH COLLIDING REGIONS HAVE SOMETIMES LED TO THE PRODUCTION OF LARGE FLARES, OFTEN ACCOMPANIED BY PROTONS. ENERGETIC ACTIVITY ALSO IS BECOMING INCREASINGLY LIKELY AT THE S12E34 SITE. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN IN AN UNSETTLED CONDITION FOR THE NEXT SEVERAL DAYS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 21 JAN/0400Z ENDING 24 JAN/0400Z.

CLASS M OR GREATER 85/90/95

CLASS X 20/25/30

PROTON EVENTS 15/20/20

D. OTTAWA 10.7 CM FLUXES FOR 20/1700Z AND 20/2000Z WERE 178 AND 180 RESPECTIVELY.

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HAUS BOU 211800

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 21B ISSUED 1700Z 21 JAN 1971

CLASS M FLARES AND POSSIBLY CLASS X FLARES EXPECTED NEXT 11 HRS.

A. ENERGETIC POTENTIAL HAS PROBABLY INCREASED IN THE N18W07 REGION. EMERGING MAGNETIC FLUX STRUCTURES CONTINUE TO EXTEND WESTWARD INTO THE OLDER SECTION. THE FIRST STAGES OF DECAY ARE EVIDENT ON THE NORTH SIDE OF THE REGION. SPORADIC MODERATE FLARES SUCH AS THE CLASS M7 AT 21/1313Z ARE BEGINNING TO OCCUR IN THE DECAYING PORTION. SOME GEOMAGNETIC DISTURBANCE HAS CONTINUED TODAY.

B. EVIDENCE OF CONTINUING GROWTH AND THE BEGINNING OF CONTINUUM RF EMISSION TODAY INDICATES MORE ENERGETIC FLARES WILL OCCUR IN THE NORTH-CENTRAL REGION. THE PRESENCE OF SEVERAL OTHER ACTIVE CENTERS MAY TRIGGER THESE BEFORE SUFFICIENT ENERGY IS STORED TO GENERATE CATASTROPHIC FLARES. THE REGION IS NOW SITUATED SO THAT NEAR-EARTH PROTON FLUX INCREASES ARE MORE PROBABLE FROM MODERATE FLARES.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 21 JAN/1700Z ENDING 24 JAN/1700Z.

CLASS M OR GREATER 90/90/90

CLASS X 25/30/30

PROTON EVENTS 25/35/40

D. OTTAWA 10.7 CM FLUX FOR 21/1400Z WAS 185.7. PREDICTED 10.7 CM FLUX FOR 22-24 JAN IS 188/185/185.

E. MAGNETIC A-FREDERICKSBURG FOR 20 JAN WAS 19. FOR 21 JAN ABOUT 18 PREDICTED AP FOR 22-24JAN, 15/12/15.

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