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HAUS BOU 230015

PROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SESC-PRF 007 ISSUED 23 DECEMBER 1970

HIGHLIGHTS FOR THE PERIOD 16-22 DECEMBER 1970--

ONLY THREE EVENTS OF CLASS M INTENSITY HAVE BEEN REPORTED DURING THE PAST SEVEN DAYS--

18/0118Z M1 NO OPTICAL COUNTERPART

22/1245Z M6 OPTICALLY 1B, N22W44

22/1516Z M5 OPTICALLY 1B, N24W44. ACCOMPANYING 10 CM BURST OF THE ORDER OF 100 FLUX UNITS.

IN ADDITION, A MAJOR RADIO BURST WITH NO OPTICAL COUNTERPART WAS OBSERVED BY THREE DIFFERENT OBSERVATORIES AT 17/0549Z. THE PEAK FLUX VALUES AT 21 AND 11 CM AS OBSERVED AT CARNARVON, AUSTRALIA, WERE 249 AND 5300 FLUX UNITS, RESPECTIVELY. MOREOVER, SOLRAD-9 OBSERVED NO X-RAY BURST CORRESPONDING TO THIS RADIO BURST. BOTH ENERGETIC FLARES ON 22 DECEMBER AROSE WITHIN MCMAH REGION 084. THE ASSOCIATED SPOT GROUP MADE ITS INITIAL APPEARANCE ON 18 DECEMBER NEAR N24, L 290 AND GREW RAPIDLY TO A TYPE/AREA D/180 BY 19 DECEMBER. IN TERMS OF DEVELOPMENT, REGION 084'S MOST ANOMALOUS FEATURE WAS AN APPARENT MAGNETIC POLARITY REVERSAL ON 21 DECEMBER. ANOTHER SPOT GROUP WITHIN MCMAH PLAGE 084 ATTAINED A CLASS/AREA OF D/490 BUT PRODUCED NO ENERGETIC EVENTS. PROTON COUNTING RATES NEAR EARTH HAVE REMAINED AT BACKGROUND. THE FREDERICKSBURG A-INDEX REMAINED UNDER 10 THROUGHOUT THE PAST SEVEN DAYS.

FORECAST FOR 24-30 DECEMBER 1970--

A LOW LEVEL OF ACTIVITY IS EXPECTED. NO PREVIOUSLY ACTIVE REGIONS ARE DUE TO RETURN. THE SURGE OF ACTIVITY WITNESSED ON 22 DECEMBER IS NOT EXPECTED TO BE REPEATED FROM MCMAH REGION 084 OR ANY OF THE OTHER VISIBLE GROUPS.

28-DAY FORECAST FOR 24 DECEMBER 1970 - 21 JANUARY 1971--

A GENERALLY LOW LEVEL OF ACTIVITY IS EXPECTED FOR THE REMAINDER OF 1970. A MODERATE LEVEL OF ACTIVITY IS EXPECTED DURING THE FIRST TWO WEEKS OF 1971.

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HAUS BOU 230400

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO
SDF NUMBER 849A ISSUED 0400Z 23 DECEMBER 1970

SMALL CLASS M FLARES ARE EXPECTED DURING THE NEXT 13 HOURS.

A. NO SIGNIFICANT ACTIVITY HAS OCCURRED SINCE THE TWO ENERGETIC EVENTS DESCRIBED IN SDF 848B. NO MAJOR CHANGES HAVE OCCURRED IN THE SOLAR DISK FEATURES. THE COMPLEX OF THREE SPOT GROUPS CENTERED NEAR N18W45 REMAIN THE MOST IMPRESSIVE DISK FEATURES. FILAMENTS WITHIN AND CONNECTING THESE REGIONS ARE REPORTED TO BE ACTIVE BUT LITTLE FLARE ACTIVITY HAS OCCURRED THE PAST 13 HOURS. THE GEOMAGNETIC FIELD REMAINS QUIET.

B. SPORADIC CLASS M FLARES ARE EXPECTED FROM THE NW COMPLEX DURING THE NEXT 72 HOURS. QUIET GEOMAGNETIC CONDITIONS SHOULD PREVAIL UNTIL 25 DECEMBER WHEN A SLIGHT DISTURBANCE MAY RESULT FROM THE PASSAGE OF A SECTOR BOUNDARY IN THE INTERPLANETARY FIELD.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 23 DEC/0400Z ENDING 26 DEC/0400Z

CLASS M OR GREATER 60/55/50

CLASS X 05/05/02

PROTON EVENTS 05/02/01

D. OTTAWA 10.7 CM FLUXES FOR 22/1700Z AND 22/2000Z WERE 145 AND 144 RESPECTIVELY.

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HAUS BOU 231700

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 849B ISSUED 1700Z 23 DEC 1970

INFREQUENT CLASS M FLARES ARE POSSIBLE DURING THE NEXT 11 HOURS.

A. BASED ON SOLRAD-9 DATA THE TWO 1B FLARES OF YESTERDAY ARE RECLASSIFIED AS M5 (22/1245Z) AND M9 (22/1516Z). NO SIGNIFICANT ACTIVITY HAS OCCURRED SINCE THESE EVENTS. SLOW DECAY IS REPORTED IN THE COMPLEX OF REGIONS CENTERED NEAR N18°53'. THESE REGIONS REMAIN THE MOST IMPRESSIVE AND MOST ACTIVE DISK FEATURES. SLIGHT GROWTH HAS OCCURRED IN THE REGION NEAR S09E11. SMALL SURGES HAVE BEEN REPORTED ON THE EAST LIMB NEAR N10. THE GEOMAGNETIC FIELD REMAINS QUIET.

B. SPORADIC CLASS M FLARES ARE EXPECTED FROM THE NW COMPLEX DURING THE NEXT 72 HOURS. QUIET GEOMAGNETIC CONDITIONS SHOULD PREVAIL UNTIL 25 DECEMBER WHEN A MINOR DISTURBANCE MAY RESULT FROM THE PASSAGE OF A SECTOR BOUNDARY IN THE INTERPLANETARY FIELD.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 23 DEC/1700Z ENDING 26 DEC/1700Z.

CLASS M OR GREATER 60/55/50

CLASS X 05/05/01

PROTON EVENTS 05/02/01

D. OTTAWA 10.7 CM FLUX FOR 23/1400Z WAS 137. PREDICTED 10.7 CM FLUX FOR 24-26 DEC IS 134/132/130.

E. MAGNETIC A-FREDERICKSBURG FOR 22 DEC WAS 06. FOR 23 DEC ABOUT 07. PREDICTED AP FOR 24-26 DEC, 05/10/10.

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