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KMSC

HAUS BOU 170435Z

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 721A ISSUED 0400Z 17 AUG 1970

CLASS M FLARES ARE POSSIBLE DURING THE NEXT 13 HOURS.

A. DISK ACTIVITY HAS BEEN QUITE LOW. RATHER PERMANENT IMPORTANCE 3 ARCHES ARE STILL VISIBLE ON THE NW LIMB (N16) - THE POSITION AT WHICH AN F/720 SPOT GROUP ROTATED FROM VIEW ON 15 AUG. OBSERVATIONS IN WHITE LIGHT AND H-ALPHA INDICATE NO LARGE STRUCTURAL CHANGES WITHIN ANY OF THE 7 DISK FEATURES. A MAGNETIC STORM BEGAN ABOUT 16/2204Z WITH AN SC OF ROUGHLY 100 GAMMAS. THIS INITIAL SHOCK HAS BEEN FOLLOWED BY SUBSTORM LEVEL MAGNETIC FLUCTUATIONS. THE HIGH-ENERGY CHANNEL ONBOARD ATS-1 HAS BEEN SLOWLY DIMINISHING SINCE ABOUT 16/1500Z. ITS CURRENT FLUX IS 8 PART/CM2/SEC. SATURATION CONTINUES ON THE 5-21 MEV WINDOW. IN TERMS OF EQUIVALENT RIOMETER ABSORPTION THE MOST RECENT THULE VALUE WAS 1.0DB - TAKEN AT 16/2100Z.

B. IT IS BECOMING INCREASINGLY EVIDENT THAT PCA IN THE REAL SENSE OF THE TERM WILL BE INTERCEPTED BY EARTH AS THE ACTIVE CARRINGTON LONGITUDE 70 DEGREES APPROACHES CM THREE DAYS FROM NOW. IF ABSORPTION OF THE ORDER OF 5 OR 6 DB OR EVEN HIGHER DOES INDEED OCCUR, SUCH AN EVENT MUST CERTAINLY BE CLASSIFIED AS UNPRECEDENTED FOR THE INITIATING ACTIVITY TOOK PLACE 7 DAYS EARLIER. THE MAGNETIC STORM IN PROGRESS IS EXPECTED TO INTENSIFY. ACTUALLY A SEPARATE STORM OF MAJOR PROPORTIONS SHOULD BEGIN SOMETIME BETWEEN 17/2200Z AND 18/0700Z; THIS SECOND COMPLEX-STRUCTURED SC IS CONSERVATIVELY ESTIMATED AT 150 GAMMAS IN MAGNITUDE. SINCE A BOULDER A-INDEX OF 60 TO 70 IS FORESEEN ON 18 AUG, AURORAL DISPLAYS ARE FORECAST. LOCAL TIMES OF MAXIMUM INTENSITY (18/0600-1200Z) ARE FAVORABLE FOR NORTH AMERICAN OBSERVATIONS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 17 AUG/0400Z ENDING 20 AUG/0400Z

CLASS M OR GREATER 90/85/30

CLASS X 20/20/10

PROTON EVENTS 20/40/60

D. OTTAWA 10.7 CM FLUXES FOR 16/1700Z AND 16/2000Z WERE 158 AND 161 RESPECTIVELY.

SOLTERWARN

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17/1540

HAUS BOU 171715Z

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 721B ISSUED 1700Z 17 AUG 1970

CLASS C FLARES EXPECTED DURING THE NEXT 11 HOURS.

A. ONE CLASS M EVENT OCCURRED AT 17/0300Z WITH NO ASSOCIATED OPTICAL REPORT. THE N10E34 REGION HAS A LARGE NUMBER OF SMALL SPOTS SURROUNDING THE MAJOR SPOTS WHICH TODAY LOOK LESS COMPLEX. THERE IS A BRIGHT RIBBON OF PLAGE RUNNING ALONG THE NEUTRAL LINE WHICH COULD BE A SOURCE OF SUBFLARES FROM THIS REGION. THE MAGNETIC STORM REMAINS IN PROGRESS. A FORBUSH DECREASE BEGAN 16/1900Z AND IS PRESENTLY 5 PER CENT BELOW BACKGROUND READINGS. ATS-1 PROTON RATES HAVE BEEN DECLINING THE LAST 13 HOURS.

B. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT A LOW LEVEL WITH OCCASIONAL SUBFLARES FROM N07E34, S09W52 AND S16W25. THE GEO-MAGNETIC FORECAST IN THE PREVIOUS REPORT (FORECAST 721A) REMAINS IN EFFECT.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 17 AUG/1700Z ENDING 20 AUG/1700Z.

CLASS M OR GREATER 70/60/50

CLASS X 15/10/5

PROTON EVENTS 20/30/20

D. OTTAWA 10.7 CM FOUX FOR 17/1400Z WAS 151. PREDICTED 10.7 CM FLUX FOR 18-20 AUG IS 149/147/145.

E. MAGNETIC A-FREDERICKSBURG FOR 16 AUG WAS 14. FOR 17 AUG ABOUT 60 PREDICTED AP FOR 18-20 AUG, 72/35/15.

SOLTERWARN

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