

NNNNUU0450

NNNNUM

KMSC

HAUS BOU 160438Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 598A ISSUED 0400Z 16 APR 1970

HARD X-RAY PRODUCING FLARES ARE POSSIBLE WITHIN THE NEXT 13 HOURS.

A. THROUGHOUT THE PAST DAY SURGES AND LOOPS LOCATED ON THE AVERAGE ABOUT N10 ACCOMPANIED THE WL PASSAGE OF MCMATH REGION #670-THE SOURCE OF YESTERDAY'S 0407Z CLASS X FLARE. THE MOST RECENT ADDITION TO 670'S LIMB DISPLAY HAS BEEN "A BRIGHT ARCH SURGE" BEGINNING ABOUT 16/0150Z NEAR N14. DISK OBSERVATIONS UP TO MESSAGE TIME INDICATE THAT THE TEN CURRENTLY VISIBLE GROUPS ARE QUIET.

B. TWO AREAS ON THE DISK APPEAR TO BE THE MOST LIKELY CANDIDATES FOR M-FLARE ACTIVITY IN THE NEXT TWO DAYS, NAMELY THOSE NEAR N17W43 AND S08E56. SUBSTORM LEVEL FLUCTUATIONS OF THE GEOMAGNETIC FIELD SHOULD BEGIN ABOUT MIDDAY 17 APR. PROJECTED BOULDER A INDICES OF THE ORDER OF 10 AND 17 ARE ANTICIPATED FOR 17TH AND 18TH RESPECTIVELY.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 16 APR/0400Z ENDING 19/0400Z.

CLASS M OR GREATER 70/70/60

CLASS X 20/10/10

PROTON EVENTS 20/10/10

D. OTTAWA 10.7CM FLUXES FOR 15/1700 AND 2000Z WERE 162 AND 161 RESPECTIVELY.

SOLTERWARN

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KMSC

HAUS BOU 161700Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 593B ISSUED 1700Z 16 APRIL 1970

CLASS M FLARES ARE EXPECTED DURING THE NEXT 11 HOURS

A. SOLAR ACTIVITY IS AT A VERY LOW LEVEL WITH ONLY A FEW CLASS C FLARES BEING OBSERVED. THE MOST DYNAMIC CHANGE ON THE DISK HAS BEEN THE EMERGENCE OF A NEW BIPOLAR SPOT GROUP JUST EAST OF THE LARGE LEADER AT N17W50. THIS NEW REGION CONSISTS OF A GROWING PENUMBRALE LEADER SPOT WITH A POSSIBLE DELTA MAGNETIC CONFIGURATION, STRONG PROPER MOTIONS AND STRONG FIELD STRENGTH GRADIENTS. HOWEVER, ITS 8.6 MM TEMPERATURE IS UNIMPRESSIVE. A NEW C-TYPE/30 MILLIONTHS SPOT GROUP IS LOCATED AT N12W10 ALONG WITH A NEW B-TYPE/10 MILLIONTHS SPOT GROUP AT N10E06. THE REMAINING REGIONS ARE UNCHANGED. THE GEOMAGNETIC FIELD IS SLIGHTLY DISTURBED.

B. A STRONG CLASS M FLARE IS PROBABLE DURING THE NEXT 24-48 HOURS FROM THE N17W50 REGION.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 16/1700Z ENDING 19/1700Z.

CLASS M OR GREATER 80/80/70

CLASS X 30/30/20

PROTON EVENTS 30/30/20

D. OTTAWA 10.7CM FLUX AT 1400Z WAS 152. PREDICTED 145/140/140.

E. MAGNETIC A-FREDERICKSBURG FOR 15 APRIL WAS 05. FOR 16 APRIL ABOUT 10. PREDICTED AP FOR 17-19 APRIL 06/06/08.

SOLTERWARN

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