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KMSC  
HAUS BOU 180400Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 449A ISSUED 0400Z 18 NOVEMBER 1969

CLASS M FLARES ARE EXPECTED IN THE NEXT 13 HOURS.

A. A CLASS M FLARE OPTICAL CLASSIFICATION ONE FAINT WAS REPORTED  
17/1720Z AT N08E48. THE TWO REGIONS NOW AT N13E57 AND N08E46 ARE  
BOTH CLASSIFIED BY MT. WILSON AS HAVING DELTA CONFIGURATION. THE  
STANFORD 9.1 CM MAP INDICATES THAT THE REGIONS HAVE INCREASED IN  
TEMPERATURE BY 20 PERCENT OVER YESTERDAY. GROWTH IN BOTH OF THESE  
REGIONS IN THE PAST 24 HOURS HAS BEEN SIGNIFICANT. THE GEOMAGNETIC  
FIELD REMAINS RELATIVELY QUIET WITH ONLY MINOR VARIATIONS.

B. MAJOR FLARE ACTIVITY FROM THE REGIONS N13E57 AND N08E46 IS  
EXPECTED WITHIN THE NEXT 24 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR  
PERIODS BEGINNING 18 NOV/0400Z ENDING 21 NOV/0400Z.

CLASS M OR GREATER 80/80/90

CLASS X 25/25/30

PROTON EVENTS 25/25/30

D. OTTAWA 10.7 CM FLUX 17/1700Z AND 2000Z WERE 164 AND 163  
RESPECTIVELY

SOLTERWARN

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NNNN1720

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KMSC

HAUS BOU 181720Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 449B ISSUED 1700Z 18 NOVEMBER 1969

CLASS X FLARES ARE EXPECTED DURING THE NEXT 11 HOURS

A. THE VERY LARGE AND COMPLEX GROUP OF REGIONS IS CURRENTLY  
LOCATED AT N07E34 /E-TYPE/560/ AND N14E40 /E-TYPE/1390/.

CONSIDERABLE PENUMBRA GROWTH HAS OCCURRED IN THE N14E40 REGION  
WITH VERY BRIGHT PLAGE NEAR FLARE BRIGHTNESS AND A SHARP  
INCREASE IN ITS FIELD STRENGTHS. ITS 9.1 CM TEMPERATURE IS AT  
82000 DEGREES K. A NEW SPOT GROUP ROTATED OVER EL AT S12E81.

B. THE ABOVE NE COMPLEX OF REGIONS IS CONSIDERED VERY  
DANGEROUS IN TERMS OF MAJOR FLARE PRODUCTION WITHIN 24 HOURS.

IF A MAJOR FLARE OCCURS PROTONS ARE VERY PROBABLE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24  
HOUR PERIODS BEGINNING 18/1700Z ENDING 21/1700Z.

CLASS M OR GREATER 90/90/90

CLASS X 40/50/50

PROTON EVENTS 40/50/50

D. OTTAWA 10.7CM FLUX AT 1400Z WAS 189. PREDICTED 195/200/200.

E. MAGNETIC A-FREDERICKSBURG FOR 17 NOV WAS 02. FOR 18 NOV ABOUT

04. PREDICTED AP FOR 19-21 NOV 05/08/10.

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Use this instead of  
18/1900Z forecast words

A 2B Flare occurred at 1625Z  
with strong radio and X ray emissions.

This same region produced a large 1B flare  
at 2130Z again with strong radio and X ray  
emissions. As of this time ~~radio~~  
~~have been~~ there have been no increases in solar  
proton flux at satellite altitudes.

This region (N15E55) continues to be a  
major source of major flares with the  
strong possibility that some of these flares will be  
proton flares.