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UUV  
PP KGFF  
DE BOU 190500Z  
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 748C ISSUED 0500Z DEC 19 1967  
MAJOR FLARES ARE POSSIBLE DURING THE NEXT 12 HOURS.  
BT

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UUV  
PP KGFF  
DE BOU 191100Z  
HERE IS THE MSG FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 748D ISSUED AT 1100Z DEC 19 1967  
MAJOR FLARES ARE POSSIBLE DURING THE NEXT 12 HOURS  
BT

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PP KGFF  
DE BOU 191740Z  
HERE IS THE 1700Z MSG FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 749A ISSUED 1700Z DECEMBER 19 1967

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS.

A. FLARE ACTIVITY TODAY HAS BEEN LIMITED TO IMPORTANCE ONE AND SMALLER. MANY SUBFLARES HAVE BEEN OBSERVED IN THE REGION NEAR N20W30. CONSIDERABLE GROWTH AND REORGANIZATION HAS OCCURRED IN THE SUNSPOT GROUP THERE AND IT NOW MEASURES F/910. MAGNETIC MEASUREMENTS OF THIS REGION ARE STILL NOT AVAILABLE DUE TO WEATHER CMMA BUT JUDGING FROM ITS STRUCTURE IT MUST BE COMPLEX. THE HYDROGEN PLAGE IS LARGE AND BRIGHT AND CONTAINS CONSIDERABLE STRUCTURE. THIS PLAGE IS TENDING TO MERGE WITH THAT ASSOCIATED WITH THE N21W42 SPOT GROUP. GROWTH AND INCREASING COMPLEXITY HAVE ALSO OCCURRED IN THE N26W70 AND N25E20 REGIONS WHICH ARE NOW E /140 AND E/410 RESPECTIVELY. ADDITIONAL SPOT GROUP HAVE APPEARED IN THE PLAGE TRAILING THE N25E20 GROUP. AT S23E43 THERE IS A MODERATELY LARGE STABLE SPOT GROUP WHICH IS H/380. WEATHER CONDITIONS STILL CURTAIL OBSERVATIONS AT MANY OBSERVATORIES.  
B. MAJOR FLARES ARE EXPECTED FROM THE N20W30 REGION AND TO A LESSER EXTENT FROM THE N25E20 REGION.

FORECASTS FOR DECEMBER 20/22

C. THE DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS  
IMPORTANCE TWO OR GREATER 85/85/85  
IMPORTANCE THREE OR GREATER 40/40/40  
PROTON EVENTS 10/15/20

D. OTTAWA 10.7 CM FLUX TODAY IS 213. PREDICTED 215/218/215.  
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PP KGFF  
DE BOU 192320Z  
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 749B ISSUED 2300Z DEC 19 1967

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS.

A. IMPORTANCE ONE FLARES WERE REPORTED IN THE N20W34 REGION AT 1623Z AND 2154Z. MAGNETIC DATA FOR THE N20W34 SPOT GROUP INDICATES THAT IT IS BETA-GAMMA BUT APPARENTLY NOT DELTA. NO SIGNIFICANT CHANGES HAVE BEEN REPORTED IN ANY OF THE VISIBLE REGIONS SINCE THE DISCUSSION IN SDF749A. THE SLIGHT MAGNETIC DISTURBANCE WHICH BEGAN EARLY YESTERDAY STILL CONTINUES. THE VERY SLIGHT PROTON FLUX REPORTED IN SDF747B WAS STILL BEING DETECTED BY SOME SENSORS AT ABOUT 1700Z TODAY.

B. MAJOR FLARES ARE STILL EXPECTED PRIMARILY FROM THE N20W34 REGION AND POSSIBLY FROM THE N25E16 REGION. IN VIEW OF THE ABSENCE OF DELTA CONFIGURATION IN THE NW REGION A FLARE PRODUCED PROTON EVENT IS SOMEWHAT LESS LIKELY.

FORECASTS FOR DEC 20-22

C. THE DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS  
IMPORTANCE TWO OR GREATER 75/75/70

IMPORTANCE THREE OR GREATER 30/25/25

PROTON EVENTS 10/10/10

D. OTTAWA 10.7 CM FLUX TODAY 213. PREDICTED 205/203/209. <sup>200</sup>

E. MAGNETIC A-FREDERICKSBURG YESTERDAY 11. TODAY ABOUT 16.

PREDICTED AP 12-16/8-12/UNDER 10.

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