

NNNNUUV  
PP KGFF  
DE BOU 170500Z  
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 746C ISSUED 0500Z DEC 17 1967  
MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS.  
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PP KGFF

DE BOU 171100Z

THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 746D ISSUED 1100Z DEC 17 1967

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS.

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PP KGFF  
DE BOU 171740Z  
THIS IS THE MESSAGE FOR REFILE

ESSA/SPACE DISTURBANCE  
FORECAST CENTER

Dec 17 1967

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 747A ISSUED 1700Z DECEMBER 17 1967  
MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS  
A. NO MAJOR FLARES HAVE BEEN REPORTED BUT MINOR FLARES HAVE  
BEEN FREQUENT OCCURRING MOSTLY IN THE LARGE REGION AT N20 W06.  
THERE HAVE BEEN IMPORTANCE ONE FLARES REPORTED THERE AT 0441Z  
0637Z 0835Z AND 1621Z ALL WITH MODERATE IONOSPHERIC EFFECTS AND  
RADIO EMISSION. THE SPOT GROUP THERE HAS EXTENDED TO TYPE E  
IN LENGTH WITH NEARLY 100 SPOTS BUT THE AREA AND COMPACTNESS  
OF THE GROUP HAS DECLINED SOMEWHAT. SEVERE WINTER WEATHER  
CONTINUES TO LIMIT OBSERVATIONS AND MAKES IT DIFFICULT TO ASSESS  
THE EVOLUTION OF THIS IMPORTANT REGION. SIGNIFICANT GROWTH  
CONTINUES IN THE REGION AT N25 W42 BUT IT IS NOT LIKELY TO  
BECOME A MAJOR REGION. THE WEAK PROTON EVENT WAS STILL EVIDENT  
AT 0430Z. RADIO FLUX AT 10 CM HAS RISEN VERY SHARPLY TO 203.  
B. MAJOR FLARES ARE STILL EXPECTED FROM THE NORTH CENTRAL REGION  
BUT THE NUMBER OF SUCH EVENTS MAY BE SMALL.

FORECASTS FOR DECEMBER 18-20

C. THE DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS  
IMPORTANCE TWO OR GREATER 60/55/50  
IMPORTANCE THREE OR GREATER 20/10/10  
PROTON EVENTS 3/3/3

D. OTTAWA 10.7 CM FLUX TODAY AT 1400Z IS 203. NO READING  
POSSIBLE AT 1700Z. PREDICTED DEC 18-20 190/190/190.

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NNNNUV  
PP KGFF  
DE BOU 172305Z  
THIS IS THE MESSAGE FOR REFILE

ESSA/SPACE DISTURBANCE  
FORECAST CENTER

DEC 17 23 35 62

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 747B ISSUED 2300Z DECEMBER 17 1967

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS

A. A MAJOR SOLAR FLARE AT 1836Z WAS INDICATED BY A STRONG  
IONOSPHERIC DISTURBANCE AND STRONG RADIO CONTINUUM AT 1843 TO 1908.  
SIGNIFICANT RADIO EMISSION OCCURRED AT ALL FREQUENCIES. CLOUDS  
PREVENTED OPTICAL OBSERVATIONS UNTIL 1854 WHEN A FLARE OF AT LEAST  
IMPORTANCE ONE WAS SIGHTED THROUGH HEAVY OVERCAST. IT WAS LOCATED  
NEAR N20 W06 IN A COMPLEX SUNSPOT GROUP WHICH IS NOW CLASS E/450  
AREA WITH NEARLY 100 SPOTS. AS OF 2200Z THE REGION WAS FLUCTUATING  
AND HAD COMPLEX PLAGE RIBBONS OF NEAR FLARE BRIGHTNESS. A SMALLER  
BRIGHT AND FLUCTUATING PLAGE INDICATES FURTHER GROWTH IS OCCURRING  
AT N26 W45 WHERE A CLASS D/130 AREA SPOT GROUP IS LOCATED. ALL  
OTHER REGIONS ON THE VISIBLE SUN ARE OF LITTLE SIGNIFICANCE. A  
WEAK PROTON EVENT IS STILL BEING OBSERVED BY ANCHORAGE RECEIVERS.  
B. FURTHER GROWTH IN BOTH PLAGE AND SUNSPOTS APPEARS LIKELY IN THE  
NORTH CENTRAL REGION. IT EVEN NOW APPEARS CAPABLE OF PRODUCING AN  
IMPORTANCE 3 FLARE. IMPORTANCE 1 FLARES ARE LIKELY IN THE REGION AT  
N26 W45. A MAGNETIC STORM IS LIKELY BY DECEMBER 20 AS A RESULT OF  
THE EVENT AT 1836Z TODAY.

FORECASTS FOR DEC 18-20

C. THE DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS  
IMPORTANCE TWO OR GREATER 80/80/80

IMPORTANCE THREE OR GREATER 35/40/40

PROTON EVENTS 5/7/10

D. OTTAWA 10.7 CM FLUX TODAY 204. PREDICTED 210/210/210.

E. MAGNETIC A-FREDERICKSBURG YESTERDAY 08. TODAY ABOUT 10.  
PREDICTED AP UNDER 10/10-20/20-30.

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