

UUV
PP KGFF
DE BOU 160500Z
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 745C ISSUED 0500Z DEC 16 1967

MAJOR FLARES ARE POSSIBLE DURING THE NEXT 12 HOURS.

AN IMPORTANCE THREE BRIGHT FLARE WAS OBSERVED AT 0245Z AT N23E64.
IT WAS ACCCOMPANIED BY A LARGE RADIO BURST AND STRONG IONOSPHERIC
EFFECTS. A PROTON EVENT IS NOT EXPECTED FROM THIS FLARE. THIS REGION
DOES NOT CONTAIN A BRIGHT PLAGE AND THE SPOT GROUP IS CLASS/AREA
H/270. IT IS THE RETURN OF A REGION WHICH WAS ACTIVE ON ITS LAST
ROTATION. ADDITIONAL MAJOR FLARE ACTIVITY IS NOT EXPECTED FROM THIS
REGION DURING THE NEXT 24 HOURS. MAJOR FLARES ARE POSSIBLE FROM THE
REGION AT N20E20.

BT

NNNN

UVV
PP KGFF
DE BOU 161100Z
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 745D ISSUED 1100Z DEC 16 1967
MAJOR FLARES ARE POSSIBLE DURING THE NEXT 12 HOURS.
BT

VUVV

PP KGFF

DE BOU 16/1715Z

THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CNTR ESSA BOULDER COLO

SDF NUMBER 746A ISSUED AT 1700Z DEC 16 1967

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS

A. A FLARE OF AT LEAST IMPORTANCE 2 OCCURRED TODAY AT 0245Z ACCCOMPANIED BY MAJOR IONOSPHERIC AND RADIO EFFECTS. IT WAS LOCATED IMMEDIATELY WEST OF A LARGE SYMMETRIC SUNSPOT NOW AT N25 E62. THE ASSOCIATED PLAGE IS RELATIVELY FAINT AND APPEARS INACTIVE. PRIMARY INTEREST IS NOW CENTERED ON A RAPIDLY DEVELOPING COMPLEX REGION AT N20 E09 WHICH HAS INCREASED IN PLAGE BRIGHTNESS TO NEAR FLARE LEVELS. THE SPOT GROUP HAS CONTINUED TO GROW AND CONTAINS SEVERAL VERY DARK UMBRAE. THE MAGNETIC STRUCTURE CONTINUES SLIGHTLY COMPLEX. A NEW REGION HAS FORMED AT N25 W25. A FAINT PLAGE WITH J/100 SPOT HAS APPEARED AT S23 E87. RADIO FLUX LEVELS HAVE INCREASED SHARPLY DUE TO THE NORTH - CENTRAL DEVELOPMENT. FLARE REPORTS HAVE CONTINUED LIMITED DUE TO ADVERSE WEATHER. BUT CONDITIONS ARE IMPROVING AT MOST OBSERVATORIES.

B. MAJOR FLARES ARE EXPECTED TO BEGIN IN THE NORTH CENTRAL REGION TODAY AS THE REPID DEVELOPMENT CONTINUES. NO FURTHER MAJOR ACTIVITY IS EXPECTED NEAR NE LIMB. NO PROTONS OR MAGNETIC DISTURBANCE ARE ANTICIPATED FROM THE FLARE EARLY TODAY.

FORECASTS FOR DEC 17-19

C. THE DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS
IMPORTANCE TWO OR GREATER 70/75/80
IMPORTANCE THREE OR GREATER 20/25/25
PROTON EVENTS 3/3/3

D. OTTAWA 10.7 CM FLUX TODAY IS 184. PREDICTED 185/185/185
BT

NNNNUV

PP KGFF

DE BOU 162315Z

THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 746B ISSUED 2300Z DEC 16 1967

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS.

A. THE REGION NOW AT N20E04 IS THE MOST ACTIVE REGION ON THE DISK.
IMPORTANCE 1 FLARES AT 1720Z 1910Z AND 2100Z AND NUMEROUS SUBFLARES
IN THIS REGION HAVE ALL PRODUCED MODERATE IONOSPHERIC EFFECTS. THE
SUNSPOT GROUP HAS DOUBLED IN AREA OVER YESTERDAY AND THE PLAGE HAS
INCREASED. THE SPOT GROUP IS NOW CLASS/AREA E/350. A 2 FAINT FLARE
WAS OBSERVED AT 1904Z IN THE REGION PASSING WEST LIMB AT S23.
SIGNIFICANT GROWTH IS OCCURRING IN THE REGION AT N25W33. A WEAK
FLUX OF LOW ENERGY PROTONS HAS BEEN DETECTED BY SATELLITE AND GROUND
BASED RECEIVERS BEGINNING AT ABOUT 0500Z. MAXIMUM ABSORPTION WAS
ONLY 10 DB ON VLF PATHS.

B. MAJOR FLARES WITH IMPORTANT IONOSPHERIC EFFECTS ARE EXPECTED FROM
THE NORTH CENTRAL REGION. NO FURTHER PROTON EMISSION IS EXPECTED.

FORECASTS FOR DEC 17-19

C. THE DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS
IMPORTANCE TWO OR GREATER 70/75/80
IMPORTANCE THREE OR GREATER 20/25/25
PROTON EVENTS 3/3/3

D. OTTAWA 10.7 CM FLUX TODAY 184. PREDICTED 185/185/185.

E. MAGNETIC A-FREDERICKSBURG YESTERDAY 7. TODAY ABOUT 9.
PREDICTED AP UNDER 10/UNDER 10/10-20.

BT