

NNNNUUUV  
PP KGFF  
DE BOU 161710Z  
HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 263A ISSUED 1700Z 16 MAY 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT SIX HOURS.

A. HIGHLIGHTS FOR THE PERIOD 08-15/1900Z MAY 1969 CLN NUMEROUS CLASS C EVENTS OCCURRED DURING THE PERIOD, BUT SIGNIFICANT SOLAR ACTIVITY WAS AT A VERY LOW LEVEL. ONLY TWO SMALL CLASS M EVENTS WERE OBSERVED. AT 12/0530Z AN IMP 2F FLARE IN THE REGION CURRENTLY NEAR N16W11 (L080) WAS ACCOMPANIED BY A LONG-DURATION X-RAY BURST, WHICH BARELY EXCEEDED THE THRESHOLD FOR CLASS M EVENTS. AT 12/0758Z, AS THE PREVIOUS BURST WAS SLOWLY DECAYING, A SECOND X-RAY BURST, WHICH ACCOMPANIED AN IMP 1B FLARE IN THE REGION NOW NEAR S15W30 (L099), BARELY REACHED THE M THRESHOLD. FOLLOWING THESE BURSTS THE 1-8A X-RAY FLUX DID NOT RETURN TO THE BACKGROUND LEVEL UNTIL ABOUT 12/1230Z. THE OLD COMPLEX OF REGIONS NEAR N20 (L064) WHICH WAS EXPECTED TO BEGIN EAST LIMB PASSAGE ON 8 MAY, AND WHICH WAS EXPECTED TO CAUSE AN INCREASE IN ACTIVITY DURING THE PERIOD, DECAYED ON THE INVISIBLE DISK. IN ITS PLACE WERE SEVERAL NEW AND GROWING REGIONS CONTAINING MANY SMALL SPOTS. THREE OF THESE REGIONS, NOW NEAR N16W11 (L080), N12W04 (L073), AND N17W00 (L069), WERE QUITE DYNAMIC EARLY IN THE PERIOD SHOWING CONSISTENT GROWTH AND FREQUENT STRUCTURAL CHANGES. HOWEVER, WITH THE EXCEPTION OF THE FLARE NOTED ABOVE, THESE REGIONS PRODUCED NO SIGNIFICANT ACTIVITY. A MINOR MAGNETIC STORM BEGAN WITH A GRADUAL ONSET ABOUT 12/18XX. DURING THE DECAYING PHASE OF THIS STORM, A SECOND STORM OF GREATER INTENSITY BEGAN WITH A SUDDEN COMMENCEMENT AT 14/1930Z. A FORBUSH DECREASE (MAGNITUDE ABOUT 6 PERCENT) WAS ASSOCIATED WITH THIS STORM. LOW ENERGY PROTONS (E LESS THAN 5 MEV) WERE ENHANCED DURING THE ONSET OF THIS EVENT, BUT ARE NOW DECAYING RAPIDLY. IT IS POSSIBLE THAT THESE PROTONS WERE ASSOCIATED WITH A PARTICLE EVENT ON THE BACK SIDE OF THE SUN WHICH WAS OBSERVED BY PIONEER VI AT ABOUT 1800Z ON 30 APRIL.

B. FORECAST FOR THE WEEK 17-23 MAY 1969 CLN  
REGIONS NEAR N18W40 (L098) AND N10W36 (L094) ARE GROWING AND HAVE BEEN FREQUENT SMALL FLARE PRODUCERS. CONTINUED ACTIVITY IS EXPECTED FROM THESE REGIONS, INCLUDING OCCASIONAL CLASS M EVENTS, PRIOR TO THEIR WEST LIMB PASSAGE 20 MAY. A REGION NEAR N12W14 (L073) HAS ALSO PRODUCED OCCASIONAL SMALL FLARES AND REGION CHARACTERISTICS DO NOT INDICATE INCREASED ACTIVITY PRIOR TO ITS WEST LIMB PASSAGE. A PREVIOUSLY ACTIVE REGION (N09L276) IS EXPECTED TO RETURN TO EAST LIMB 20-21 MAY. WHEN LAST VIEWED AT WEST LIMB, THIS REGION APPEARED TO BE GENERALLY DECAYING, HOWEVER, IT MAY BE RESPONSIBLE FOR ENHANCED LOW ENERGY PROTON EMISSION, OBSERVED BY PIONEER VI, DURING ITS INVISIBLE DISK TRANSIT. THE GEOMAGNETIC STORM WHICH BEGAN AT 14/1930Z IS NOW RECOVERING, HOWEVER, NEUTRON COUNTING RATES ARE STILL DEPRESSED (FORBUSH DECREASE).

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

CLASS M OR GREATER 70/75/75

CLASS X 10/05/05

PROTON EVENTS 10/05/05

D. OTTAWA 10.7 CM FLUX TODAY IS 156. PREDICTED 150/148/145.

F. KP ESTIMATED FOR 1200-1500Z WAS 03. KP FORECAST FOR NEXT 24 HOURS PER KP 15.3; 3/3/3/3/2/2/2/2.

SOLTERWARN

BT

NNNNUUU  
PP KGFF  
DE BOU 162305Z  
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 263B ISSUED 2300Z 16 MAY 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 18 HOURS.

A. SOLAR ACTIVITY HAS BEEN LIMITED TO SUBFLARES, MOSTLY FROM THE NORTHWEST REGION OF THE SOLAR DISK. THIS AREA OF THE DISK HAS SEVERAL REGIONS WHICH SHOW ACTIVE FILAMENTS BUT DO NOT APPEAR CAPABLE OF PRODUCING MAJOR FLARES. THE NORTH EAST LIMB HAS PRODUCED SOME SURGE ACTIVITY. THE GEOMAGNETIC FIELD IS PRESENTLY QUIET. THE FORBUSH DECREASE IS STILL IN EFFECT.

B. SOLAR ACTIVITY WILL REMAIN AT A LOW LEVEL DURING THE FORECAST PERIOD.

SECTIONS C AND D REMAIN UNCHANGED FROM SDF 263A.

E. MAGNETIC A-FREDERICKSBURG FOR 15 MAY WAS 64. FOR 16 MAY ABOUT 54. PREDICTED AP FOR 17-19 MAY 10/10/10.

BT