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PP KGFF

DE BOU 281755Z

HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 214A ISSUED 1700Z 28 MARCH 1969

CLASS X FLARES ARE EXPECTED DURING THE NEXT 12 HOURS

A. HIGHLIGHTS FOR 20-27 MARCH 1969 CLN

SOLAR ACTIVITY DURING THIS WEEK WAS DOMINATED BY A ZONE OF ACTIVE REGIONS WHICH EXTENDED NEARLY 90 DEGREES IN LONGITUDE AND 10 DEGREES IN LATITUDE. PRINCIPAL SPOT GROUPS WITHIN THIS STRUCTURE WERE LOCATED AT N14W29 /L104/, N12W18 /L093/, N20E02 /L073/ AND N21E11 /L064/ ON 21 MARCH, WITH CLASS/AREAS C/290, F/430, E/660 AND D/760, RESPECTIVELY. THE N21L064 REGION PRODUCED CLASS X EVENTS AT 21/0143Z /IMP 2B/, 21/1315Z /IMP 2B/ AND 27/1305Z /IMP 2B, AND NUMEROUS VERY ENERGETIC CLASS M EVENTS. A MAJOR MAGNETIC DISTURBANCE BEGAN 23/1826Z AND CONTINUED MORE THAN 24 HOURS /A-INDEX OF 93 ON 24TH/. IT IS BELIEVED TO HAVE BEEN DUE TO THE FLARES OF THE 21ST, BUT INTERPRETATION IN TERMS OF LONG-LIVED FEATURES OF THE REGION, REFLECTED IN SOLAR WIND OBSERVATIONS 27 DAYS EARLIER, MAY BE POSSIBLE. ENHANCED LOW ENERGY PROTON FLUXES ALSO RESULTED FROM THE FLARE OF THE 21ST. TWO OR MORE MAGNETIC DELTA CONFIGURATIONS DEVELOPED WITHIN THIS REGION DURING THE WEEK. ANOTHER PORTION OF THE ACTIVE ZONE, AT N12L093, PRODUCED A CLASS X EVENT AT 18/0630Z /IMP 1N/ AND SEVERAL LARGE CLASS M EVENTS. AN EXCEPTIONALLY LARGE PLAGE WITH A COMPLEX SPOT GROUP E/1000 IS NOW LOCATED AT N10E65 /L279/. THE REGION EXHIBITS GAMMA-DELTA CHARACTERISTICS. EAST LIMB PASSAGE WAS ACCCOMPANIED BY CORONAL RAIN, WEAK YELLOW LINE CORONA AND FREQUENT SURGES, BUT NO MAJOR FLARES HAVE BEEN OBSERVED THERE AS YET. PIONEER 6 DATA INDICATED THIS REGION WAS POSSIBLY FLARE-ACTIVE BEFORE EL PASSAGE.

B. FORECAST FOR 29 MAR 04 APR 1969 CLN

THE N21L064 REGION, NOW AT WEST LIMB, MAY PRODUCE FURTHER MAJOR ACTIVITY DURING LIMB TRANSIT. THE N10E65 /L279/ REGION WAS RELATIVELY INACTIVE LAST ROTATION UNTIL WEST LIMB PASSAGE WHEN IT PRODUCED A PROTON FLARE. ITS PRESENT EVOLUTIONARY STAGE IS NOT KNOWN. OBSERVATIONS INDICATE IT IS STILL CAPABLE OF MAJOR FLARE PRODUCTION. ADDITIONAL ACTIVE CENTER IS EXPECTED AT N15-20EL.

28-DAY FORECAST FOR 29 MAR-25 APR 1969 CLN

SOLAR ACTIVITY SHOULD REMAIN ENHANCED THROUGHOUT THIS PERIOD.

FORECASTS FOR 29-31 MARCH 1969 AND EXPECTED MEAN FORECASTS FOR 01-04 APRIL 1969

C. DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS

CLASS M OR GREATER 80/70/70 /70/

CLASS X 40/25/25 /25/

PROTON EVENTS 30/15/15 /15/

D. OTTAWA 10.7 CM FLUX TODAY IS 178. PREDICTED 165/165/170 /175/.

E. N/A.

F. KP ESTIMATED FOR 1200-1500Z WAS 1. 24 HOUR FORECAST PER KP 15.3; 2-2-2-2-2-2-2-2.

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THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 214B ISSUED 2300Z 28 MARCH 1969

CLASS X FLARES ARE POSSIBLE DURING THE NEXT 12 HOURS.

A. A MODERATE NUMBER OF SUBFLARES HAVE OCCURRED IN THE REGION
CURRENTLY AT N10E60. PLAGE HAS BEEN ADDED TO THE SOUTH SIDE OF
THIS REGION WHICH IS NOW MAGNETICALLY A BETA-GAMMA WITH A DELTA
CONFIGURATION. A NEW J-TYPE SPOT HAS APPEARED AT N18E1 WITH PLAGE
RUNNING FROM THIS REGION BACK TO N10E60. A SMALL SPOT REGION AT
S11E10 HAS BEEN REPORTED TO HAVE GROWN RAPIDLY THE PAST 6 HOURS.
IMPORTANCE ONE FLARES HAVE BEEN REPORTED AT N17W90 (28/0058Z),
N15E90 (28/0216Z), N22W90 (28/0355Z), N22W90 (28/0424Z), N23W76
(28/0615Z), N22W80 (28/1522Z), N20E80 (28/0625Z) AND N11E73
(28/1907Z). THE IMPORTANCE 1N FLARE AT 28/0058Z IS NOW
CLASSIFIED AS A CLASS M FLARE BASED ON ASSOCIATED X-RAY PRODUCTION.

B. THE REGION AT N10E60 HAS THE POTENTIAL TO PRODUCE A CLASS X
FLARE DURING THE NEXT 12-24 HOURS.

SECTIONS C AND D REMAIN UNCHANGED FROM SDF 214A.

E. MAGNETIC A-FREDERICKSBURG FOR 27 MAR WAS 05. FOR 28 MAR ABOUT 05.
PREDICTED AP FOR 29-31 MARCH 10/10/10.

BT