

NNNN2056
NNNN2058
NNNN

KMSC
PP KGFF
DE BOU 011700Z
HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 401A ISSUED 1700Z 01 OCTOBER 1969
CLASS M FLARES ARE PROBABLE DURING THE NEXT SIX HOURS
A. HIGHLIGHTS FOR THE PERIOD 19-30 SEPTEMBER 1969--
SIGNIFICANTLY MAGNETIC FLARES WERE CONFINED TO THE NORTHERN
HEMISPHERE DURING THE ABOVE 2-WEEK PERIOD. MCMATH PLAGE REGIONS
325 /CURRENTLY BEHIND WEST LIMB/ AND 333 /N08W60/ PROVED TO BE
THE MOST ACTIVE, GIVING RISE TO THE FOLLOWING CLASS M EVENTS--
24/1031Z /333/, 25/1413Z /325/, 27/0342Z /333/, AND 28/0326Z
/325/. REGION 325 NEVER EXCEEDED 500 MILLIONTHS IN AREA AND
MAINTAINED A SIMPLE BIPOLE MAGNETIC CONFIGURATION BEFORE PASSING
OVER THE LIMB ON 28 SEPTEMBER. MCMATH'S NUMBER 333 WAS OF SIMILAR
UNIMPRESSIVE SIZE, HOWEVER, THIS REGION EXHIBITED STRONG
STRUCTURAL CHANGES WHILE SLOWLY INCREASING IN MAGNETIC COMPLEXITY
TO A GAMMA-DELTA. IN ADDITION TO THE ABOVE DOCUMENTED FLARES,
2 CLASS M EVENTS WERE INDIRECTLY DETECTED ON THE 23RD AT 0528 AND
0934Z. NO PLAGE BRIGHTENINGS WERE REPORTED AT THOSE TIMES.
TERRESTRIAL EFFECTS FOR THE PERIOD BEGAN APPROXIMATELY AT 25/0745Z
WITH A SHORT-LIVED /OF THE ORDER OF 1.5 DAYS/ BUT ENERGETIC, PCA.
THE ABSORPTION FOLLOWED BY AN HOUR A 108-MINUTE DURATION IN FLARE
OCCURRING NEAR THE VACANT POSITION OF N12W14. SIGNAL STRENGTH ON
THE 30MHZ THULE RIOMETER REACHED A MAXIMUM OF ABOUT 2DB ATTENUATION
SHORTLY BEFORE LOCAL NOON ON THE 26TH. THE GEOMAGNETIC FIELD BECAME
DISTURBED ON 27 SEPTEMBER WITH AN SC AT 2125Z. A PRELIMINARY
ANALYSIS POINTS TO THE NW QUADRANT FLARES OF THE 25TH AS ITS REGION.
THE 27/0343Z FLARE MENTIONED ABOVE WAS OPTICALLY AN IMPORTANCE 2B
AND IS BELIEVED TO BE THE SOURCE OF A LOW-ENERGY PARTICLE EVENT
OBSERVED AT HIGH LATITUDES ON SEPTEMBER 28. ABSORPTION VALUES
ALONG THE ALASKAN RIOMETER CHAIN WERE SLIGHTLY ABOVE BACKGROUND
DURING THE EVENING HOURS; THE DAYTIME PROFILE FOR THE 28TH SUGGESTED
A WEAK AURORAL EVENT. THIS SEQUENCE OF GEOPHYSICAL PHENOMENA
WAS APPROPRIATELY CAPPED BY A SHARP RISE IN MAGNETIC ACTIVITIES
SEPTEMBER 30. WHAT MOST CERTAINLY MUST BE CALLED A SECOND MAG-
NETIC STORM ACCCOMPANIED BY A MINOR FORBUSH DECREASE BEGAN GRADUALLY
ON SEPTEMBER 29, REACHING A PEAK DURING THE 30/0000-0300Z INTERVAL.
IT GENERATED AN A-INDEX OF ABOUT 75 FOR BOULDER AND PRODUCED
READILY VISIBLE LOW-LATITUDE RED ARC AURORAE.
B. FORECAST FOR THE PERIOD 02-08 OCTOBER 1969--
ONE, PERHAPS TWO, CLASS M FLARES ARE ANTICIPATED FROM MCMATH PLAGE
REGION 333 /N08W60/ BEFORE IT PASSES OVER THE LIMB. ATTENTION
WILL THEN SHIFT BY OCTOBER 4 TO REGION 344 /S11E23/ WHICH HAS
GROWN RAPIDLY IN THE LAST 24 HOURS. OVERALL ACTIVITY IS EXPECTED
TO BE MODERATE. PIONEER 6 AND 7 SPACECRAFTS' SAMPLING OF LON-
GITUDES BEHIND THE EAST LIMB INDICATE NO UNUSUAL ACTIVITY IN THOSE
HIDDEN LONGITUDES.)
C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24
HOUR PERIODS BEGINNING 01/1700Z ENDING 04/1700Z.
CLASS M OR GREATER 50/60/70
CLASS X 5/10/10
PROTON EVENTS 5/10/10
D. OTTAWA 10.7CM FLUX AT 1400Z WAS 130, PREDICTED 130/135/140.
E. N/A.
F. KP ESTIMATED FOR 1200-1500Z WAS 2. KP FORECAST FOR NEXT 24
HOURS-PER KP 15.3; 2/2/2/2/2/2/2/2.
SOFTERWARN
BT

NNNN2257

NNNN

KMSC

PP KGFF

DE BOU 012300Z

THIS MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 401B ISSUED 2300Z 01 OCT 1969

CLASS M FLARES ARE PROBABLE DURING THE NEXT 18 HOURS.

A. SOLAR ACTIVITY HAS INCREASED WITH A NEW AND VERY BRIGHT REGION AT N26E90. THIS REGION HAS PRODUCED NUMEROUS CLASS C FLARES DURING THE PAST 6 HOURS AND HAS REMAINED AT NEAR FLARE BRIGHTNESS DURING THE SAME TIME PERIOD. NO SPOTS ARE YET VISIBLE. CONTINUED GROWTH, ESPECIALLY PENUMBRA, HAS OCCURRED AT S12E18. THIS REGION ALSO CONTAINS MODERATELY ACTIVE ARCH FILAMENTS. THE GEOMAGNETIC FIELD IS QUIET.

IN SDF 401A, IN PART A, THE FIRST SENTENCE SHOULD READ-
SIGNIFICANTLY ENERGETIC.....

SECTIONS B AND C REMAIN UNCHANGED FROM SDF 401A.

D. OTTAWA 10.7 CM FLUX AT 1700Z WAS 134.

E. MAGNETIC A-FREDERICKSBURG FOR 30 SEPT WAS 70. FOR 01 OCT ABOUT 16. PREDICTED AP FOR 02-04 OCT 10/10/15.

BT