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HFUS BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 019 ISSUED 2200Z 19 JANUARY 1972

A. FREQUENCY AND ENERGETIC RESPONSES HAVE MARKEDLY INCREASED DURING THE PAST 28 HOURS FROM REGION 015. THIS REGION TODAY HAS BEEN CLASSED MAGNETICALLY BY MT WILSON AS A GAMMA DELTA. SUNSPOT STRUCTURE CONTINUES TO INCREASE SLIGHTLY. THE 8.6MM REGION TEMPERATURE / ABOVE AVE SFC TEMP./ INCREASED FROM 543 DEG KEL, 18/1600Z, TO 722 DEG, 19/1500Z. AT 19/1730Z, 8.6MM REGION TEMP WAS 1494 DEG, PROBABLY FLARE ENHANCED. A CLASS C5 X-RAY EVENT, BEGINNING 18/1935Z WITH MAX AT 18/1959Z HAD TWO OPTICAL SUBFLARES IN REGION 015. AN IMP 1 IN FLARE /REGION 015/ BEGINNING 19/0623Z PRODUCED TYPE 3 DECAMETRIC AND SIMPLE MICROWAVE BURSTS. THE ASSOCIATED X-RAY EVENT WAS A C-8 /SOLRAD 9/, HOWEVER THE X-RAY FLUX WAS ABOVE 10<sup>-3</sup> ERGS/CM<sup>2</sup>/SEC IN EXCESS OF 5 HOURS. REGION 015 ALSO PRODUCED A 1B FLARE BEGINNING 19/1634Z WITH ACCOMPANYING DECAMETRIC TYPE 3 AND CONTINUUM, SIMPLE MICROWAVE BURSTS AND IMP 2 SWF AT 15-18 MHZ. REGION 015 IS CURRENTLY LOCATED AT S15E06. REGION 017 /N14W02/ HAS GROWN IN BOTH SUNSPOT AND H ALPHA STRUCTURE BUT REMAINS SIMPLE MAGNETICALLY. NUMBEROUS TYPE 3 DECAMETRIC BURSTS ARE OCCURRING AND ASSUMED TO BE COMING FROM REGION 015. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED.

B. ONE OR TWO CLASS M FLARES PER DAY ARE EXPECTED FROM REGION 015. CLASS X AND/OR PROTON EVENTS ARE POSSIBLE. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN UNSETLED TO QUIET.

C. EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 20 JAN/0000Z ENDING 22 JAN/2400Z.

CLASS M OR GREATER 85/75/85

CLASS X 15/10/15

PROTON EVENT 25/15/20

D. OTTAWA 10.7 CM FLUXES FOR 19/1400Z, 1700Z AND 2000Z WERE 124, 124 AND 124. PREDICTED 10.7 CM FLUXES FOR 20-22 JAN ARE 122/124/124.

E. MAGNETIC A-FREDERICKSBURG FOR 18 JAN WAS 20. FOR 19 JAN ABOUT 08. PREDICTED AP FOR 20-22 JAN ARE 07/04/08.

SOLTERWARN

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