

HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 023

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 23 JAN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/2100 TO 23/2100Z: THE SOLAR ACTIVITY HAS BEEN AT A LOWER LEVEL DURING THE PAST 24 HOUR PERIOD. REGION 4399 (N12E72) PRODUCED ~~A~~ C9/1B EVENT AT 23/0834UT. THIS REGION HAS GROWN TO 450 MILLIONTHS IN AREA AND A CLASSIFICATION OF "DKI" BETA-TYPE. IT ALSO PRODUCED MANY SUB-FLARES WITH LOW ~~CATAGORY~~ "C" X-RAY EVENTS THROUGHOUT THE PERIOD. REGION 4398 (N15E52) PRODUCED 3 SUB-~~FLARS~~ BUT WITH- *category* ~~FLARES~~ OUT ANY ASSOCIATED X-RAY EVENTS. IT WAS A "CAO" BETA-TYPE CLASSIFICATION WITH 170 MILLIONTHS IN AREA. NO NEW REGIONS WERE ASSIGNED DURING THE PERIOD.

IB. SOLAR ACTIVITY FORECAST: THE SOLAR ACTIVITY IS EXPECTED TO BE AT A LOW LEVEL THROUGHOUT THE FORECAST PERIOD. REGION 4399 PROVIDES THE FAIR CHANCE OF MODERATE LEVEL ACTIVITY AS IT IS STILL GROWING SOMEWHAT AND ONLY MISSED THE CLASS "M" X-RAY EVENT THRESHOLD BY THE SMALLEST MARGIN POSSIBLE.

THE REGIONS 4397 (N17E41)/4398/4399 GROUP NOW ON THE EASTERN LIMB SHOULD CONTINUE TO PROVIDE AT LEAST LOW LEVEL CLASS "C" X-RAYS THROUGHOUT THE PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 22/2100Z TO 23/2100Z: THE GEOMAGNETIC ACTIVITY HAS BEEN AT AN UNSETTLED LEVEL DURING THE PAST 24 HOUR PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT UNSETTLED TO ACTIVE LEVELS THROUGHOUT THE FORECAST PERIOD. THE EFFECT OF THE CORONAL HOLE AT CENTRAL MERIDIAN ON THE 20/21ST OF JANUARY WILL BE TO SLIGHTLY RAISE THE RECURRENT VALUES, BUT NO STORM LEVEL ACTIVITY IS EXPECTED EXCEPT THE NORMALLY BRIEF POSSIBILITY OF NIGHT-TIME RECORDINGS AT HIGH LATITUDE SITES.

III. EVENT PROBABILITIES 24 JAN-26 JAN

CLASS M 40/40/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JAN 117

PREDICTED 24 JAN-26 JAN 120/121/122

90 DAY MEAN 23 JAN 095

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 JAN 009/012

ESTIMATED AFR/AP 23 JAN 006/010

PREDICTED AFR/AP 24 JAN-26 JAN 015/020-015/020-015/020

SOLTERWARN

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