

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 110

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 APR 1983

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100 TO 20/2100Z: SOLAR ACTIVITY CONTINUED LOW DURING THIS PERIOD. THE LARGEST EVENT OBSERVED THIS PERIOD WAS A C2/SN FROM REGION 4150 (S12E57) AT 1724UT. REGIONS 4148 (S30W78), 4149 (S10W14) AND 4150 HAVE PRODUCED MINOR RADIO BURSTS, THROUGHOUT THE RADIO SPECTRUM, DURING THEIR FLARES. NEW SPOTS HAVE BEEN OBSERVED IN THE TRAILER PORTION OF 4150. THE REGION IS A BETA/GAMMA "C" TYPE GROUP. REGION 4148 HAS HAD ALMOST ~~CONTINUOUS~~ POINT ~~BRIGHTNINGS~~ ~~BRIGHTENINGS~~ TODAY. NO NEW REGIONS WERE OBSERVED TODAY. ~~CONTINUOUS~~ ~~BRIGHTNINGS~~

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE FIRST PORTION OF THE FORECAST PERIOD. THEN LOW DURING THE REST OF THE PERIOD. REGION 4148 CONTINUES TO EXHIBIT COMPLEXITY, HOWEVER IT WILL ROTATE OFF THE VISIBLE DISK IN THE NEXT 36 HOURS. REGION 4150 APPEARS STILL CAPABLE OF PRODUCING AN ISOLATED "M" CLASS EVENT DURING THE NEXT THREE DAYS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO SLIGHTLY ACTIVE AT THE MID-LATITUDE SITES AND GENERALLY ACTIVE WITH SHORT PERIODS AT MINOR STORM LEVELS OBSERVED AT THE HIGH-LATITUDE SITES. THE NEUTRAL LINE ALONG THE FILAMENT WHICH DISAPPEARED ON 18 APRIL IS LITTLE CHANGED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE GENERALLY ACTIVE DURING THIS FORECAST PERIOD. A SHORT PERIOD OF MINOR STORM CONDITIONS MAY OCCUR ON 22 APRIL IN RESPONSE TO THE FILAMENT ~~DISAPPEARANCE~~ OF 18 APRIL.

III. EVENT PROBABILITIES 21 APR-23 APR ~~DISAPPEARANCE~~

CLASS M 40/20/20

CLASS X 10/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 APR 126

PREDICTED 21 APR-23 APR 127/122/115

90 DAY MEAN 20 APR 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 APR 010/015

ESTIMATED AFR/AP 20 APR 012/015

PREDICTED AFR/AP 21 APR-23 APR 020/025-025/030-015/030

SOLTERWARN

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