

HFUS 1 BOU 051300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 005A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 05 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 04/1200Z TO 05/1200Z: SOLAR ACTIVITY HAS CONTINUED LOW. THE LARGEST FLARE WAS A C3/SN FROM REGION 4048 (S15E57). REGION 4046 (S15W03) HAS HAD AN ARCHED FILAMENT SYSTEM AND REGION 4341 (N07W23) HAS DEVELOPED INTO A MAGNETIC CLASS BETA-GAMMA. OTHER REGIONS REMAINED QUIET AND STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW THROUGHOUT THE PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. THE FIELD IS EXPECTED TO BE IN THE UNSETTLED TO LOW ACTIVE CATEGORIES UNTIL THE END OF THE 6TH. THEN THE CORONAL HOLE THAT CROSSED CENTRAL MERIDIAN ON THE 3RD IS EXPECTED TO CAUSE MODERATE ACTIVE CONDITIONS TO OCCUR.

III. EVENT PROBABILITIES 06 JAN-08 JAN

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 JAN 143

ESTIMATED 05 JAN 149

PREDICTED 06 JAN-08 JAN 153/158/162

90 DAY MEAN 04 JAN 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR 03 JAN 010 AP 04 JAN 011

ESTIMATED AFR 04 JAN 010 AFR/AP 05 JAN 010/015

PREDICTED AFR/AP 06 JAN-08 JAN 010/015-020/020-015/020

SOLFRWARN

BT

HFUS 3 BOU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 005B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 05 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 05/1200Z TO 05/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST NINE HOURS. ONLY ONE OPTICAL FLARE WAS OBSERVED DURING THE PERIOD, A SUBNORMAL FROM REGION 4046 (S15W15) WITH NO XRAY CORRELATION. DESPITE THIS LOW ACTIVITY A GENERAL UPTURN IN ALL SOLAR INDICES (XRAY BACKGROUND, 10.7CM RADIO FLUX, AND SUNSPOT NUMBER) HAS BEEN NOTED. REGION 4046 HAS GROWN IN SIZE AND COMPLEXITY AND DISPLAYS A STRONG ARCH FILAMENT SYSTEM. REGION 4048 (S15E45) HAS ALSO GROWN AND COULD BE CONSIDERED AS TWO OR THREE SEPARATE REGIONS, BUT LACK OF MAGNETIC DATA PROHIBITS EXTENSIVE ANALYSIS. AS ONE GROUP, IT HAS BEEN CLASSIFIED AS A DEVELOPING BETA-GAMMA REGION. THREE NEW REGIONS WERE NUMBERED TODAY, 4051 (N11E58), A SIMPLE A-TYPE GROUP, 4052 (S07E62), AN H-TYPE SPOT GROUP, AND 4053 (S08E77), A LARGE H-TYPE SPOT GROUP WITH POSSIBLY MORE SPOTS STILL BEHIND THE LIMB. THIS REGION IS THE RETURN OF OLD ACTIVE REGION 4025 (S07, CAR #99) WHICH PRODUCED SEVERAL X-CLASS FLARES LAST ROTATION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW, BUT WITH A GENERAL INCREASE TOWARDS MODERATE LEVELS DURING THE THREE DAY PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. UNSETTLED LEVELS ARE FORECAST TO CONTINUE THROUGH THE NEXT 24 HOURS FOLLOWED BY ACTIVE CONDITIONS IN RESPONSE TO A FAVORABLY LOCATED CORONAL HOLE.

III. EVENT PROBABILITIES 06 JAN-08 JAN

CLASS M 20/30/40

CLASS X 01/01/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 JAN 160

PREDICTED 06 JAN-08 JAN 175/185/190

90 DAY MEAN 05 JAN 174

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 JAN 008/011

ESTIMATED AFR/AP 05 JAN 009/015

PREDICTED AFR/AP 06 JAN-08 JAN 010/015-020/020-015/020

SOLTERWARN

BT