

HFUS 1 BOU 3022 00

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 274

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 30 SEPTEMBER 1980

IA. SOLAR ACTIVITY HAS INCREASED DURING THE PAST 24 HOURS TO MODERATE CONDITIONS. AN M1/1B FLARE WITH ASSOCIATED RADIO EMISSION OCCURRED IN REGION 2697 (S18W13), MAXIMUM REACHED AT 2246 UT ON 29 SEPTEMBER. ON 30 SEPTEMBER AN M2/1B FLARE OCCURRED IN REGION 2701 (N14E36) WITH THE MAXIMUM AT 1823 UT. A COMPANION REGION 2699 (N2E26), IN THE COMPLEX OF REGIONS 2701, 2699, 2698 (N3E20) HAS SHOWN SPOT GROWTH, AND 2701 SHOWS SOME DETAILED RESTRUCTURING. THE MAGNETIC GRADIENT IN 2701 HAS INCREASED. REGION 2697 (S18W13) APPEARS TO HAVE STABILIZED SOMEWHAT. OTHER REGIONS APPEAR STABLE OR DECLINING SLIGHTLY. THE LARGE FILAMENT IN THE SOUTHWEST QUADRANT HAS GAINED MORE ALTITUDE AND APPEARS INCREASINGLY UNSTABLE.

IB. SOLAR ACTIVITY MAY BE EXPECTED TO INCREASE SLIGHTLY TO MODERATE LEVELS DURING THE FORECAST PERIOD. REGION 2697 REMAINS CAPABLE OF ACTIVITY. REGION 2701 HAS DEVELOPED INCREASED POTENTIAL AND MAY EVOLVE STILL FURTHER, ALONE OR IN CONJUNCTION WITH REGION 2699.

III. THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY UNSETLED AND IS EXPECTED TO REMAIN UNSETLED FOR THE EARLY PART OF THE FORECAST PERIOD. IT CAN BE EXPECTED TO DECLINE SLIGHTLY REMAINING NEAR UNSETLED FOR THE BALANCE OF THE PERIOD.

III. EVENT PROBABILITIES 01 OCTOBER - 03 OCTOBER

CLASS M 60/55/50

CLASS X 05/05/02

PROTON 01/01/01

RCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 SEPTEMBER 174

PREDICTED 01-03 OCTOBER 172/168/162

90-DAY MEAN 30 SEPTEMBER 180

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 29 SEPTEMBER 08

ESTIMATED AFR/AP 30 SEPTEMBER 08/09

PREDICTED AFR/AP 01-03 OCTOBER 08/12 - 06/10 - 06/08

EFFECTIVE 1 OCT 1980, NOAA-SESC/AFGWC WILL ISSUE TWO DAILY FORECASTS, ONE AT 1200Z AND THE OTHER AT 2200Z. THE 1200Z FORECAST WILL EMPHASIZE DETAILS ON SOLAR ACTIVE REGION ANALYSIS. THE 2200Z FORECAST WILL DISCUSS MAJOR SOLAR GEOPHYSICAL EVENTS.

SOLIERWARN

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