

HFUS 1 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 271

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 28 SEPT 1978

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE 24 HOUR PERIOD. REGION 1304 (N30W37) APPEARS TO HAVE DECAYED RAPIDLY BUT SOME OCCURRENCES OF PLAGE FLUCTUATIONS AND BRIGHT POINTS CONTINUE. REGION 1315 (N37E38) HAS HAD SIGNIFICANT GROWTH IN MAGNETIC COMPLEXITY AND POINT BRIGHTENINGS. C-CLASS X-RAY FLARES ASSOCIATED WITH REGIONS 1304 AND 1315 HAVE OCCURRED INFREQUENTLY. THE REMAINDER OF THE REGIONS HAVE BEEN RELATIVELY QUIET. THE SE QUADRANT SHOWS NEW PLAGE COMING ONTO THE VISIBLE DISK WITH SOME ASSOCIATED INCREASES APPARENT IN THE K-CORONA AND CALCIUM PLAGE INTENSITIES.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW FOR THE NEXT 24 HOURS WITH SOME SMALL C-CLASS FLARES POSSIBLE FROM REGIONS 1304, 1308 (S18W64), AND 1315.

II. THE GEOMAGNETIC FIELD IS UNSETLED WITH SOME ACTIVE PERIODS. MINOR STORM CONDITIONS HAVE BEEN OBSERVED DURING THE LAST 24 HOURS. THE GEOMAGNETIC FIELD SHOULD BE PREDOMINATELY ACTIVE DURING THE COMING NIGHTTIME PERIOD WITH MOSTLY UNSETLED CONDITIONS EXPECTED TO FOLLOW TOMORROW.

III. EVENT PROBABILITIES 29 SEPT - 01 OCT

CLASS M 50/40/40

CLASS X 10/05/05

PROTON 10/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 SEPT 147

PREDICTED 29 SEPT - 01 OCT 150/152/158

90-DAY MEAN 28 SEPT 135

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 SEPT 32

ESTIMATED AFR/AP 28 SEPT 26/45

PREDICTED AFR/AP 29 SEPT - 01 OCT 25/40 - 20/25 - 15/20

SOLTERWARN

BT

SDF NUMBER 271

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 28 SEPTEMBER 1979

IA. SOLAR ACTIVITY WAS LOW DURING THE PAST 24 HOURS. A C3/SN EVENT FROM REGION 2006 (N17W21) WAS THE LARGEST FLARE OBSERVED. OTHER MINOR ACTIVITY OCCURRED IN REGIONS 2001 (N27W56), 2015 (S26W06), 2017 (N17E08), 2019 (S21E13), 2021 (N22W19), AND ALSO IN REGION 1994 (NO6W85), WHICH WILL ROTATE OFF THE SOLAR DISK TOMORROW. REGION 2021 EXPERIENCED VERY RAPID SPOT GROWTH DURING THE PERIOD AND WAS CHARACTERIZED BY ARCH FILAMENTS AND BRIGHT POINTS THROUGHOUT THE DAY. REGIONS 2011 (N14W06) AND 2019 ALSO SHOWED GOOD SPOT GROWTH BUT ARE NOT YET COMPLEX MAGNETICALLY. REGIONS 2017 AND 2016 WERE COMBINED AND THIS COMPLEX, NOW CALLED REGION 2017, IS MOSTLY UNCHANGED FROM YESTERDAY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE NEXT 24 HOURS. THE 2021/2006 COMPLEX OFFERS THE BEST CHANCE OF A CLASS EVENT.

II. THE GEOMAGNETIC FIELD REACHED HIGH ACTIVE LEVELS FROM 0300 TO 0900Z BUT WAS MOSTLY UNSETTLED DURING THE OTHER PERIODS. UNSETTLED CONDITIONS ARE FORECAST FOR THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 29 SEPTEMBER 01 OCTOBER

CLASS M 40/40/50

CLASS X 01/01/05

PROTON 01/01/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 SEPT 233

PREDICTED 29 SEPT 01 OCT 228/224/222

90DAY MEAN 28 SEPT 180

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 SEPT 13

ESTIMATED AFR/AP 28 SEPT 13/17

PREDICTED AFR/AP 29 SEPT 01 OCT 08/08 08/11 10/13

SOLTERWARN