

HFUS 180U 302200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 273

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 30 SEPTEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN LOW. THREE NEW REGIONS NOW DISPLAY
SMALL SPOT GROUPS. THESE ARE RGN 1321 (N17E 65) UNIPOLAR WITH
3 SPOTS, RGN 1322 (S12E28) UNIPOLAR WITH 1 SPOT AND RGN 1323
(N20E29) BIPOLAR WITH 3 SPOTS. EIGHT OTHER REGIONS ON THE DISK
NOW HAVE SPOTS. RGN 1314 (S17W 13) HAS DISPLAYED AN AFS AND REGIONS
1320 (S11E 61) AND 1321 (N17E 65) HAVE BOTH PRODUCED SF FLARES AT
1503Z AND 1519Z RESPECTIVELY. SURGING HAS BEEN OBSERVED AT SW22,
SW15 AND ON THE NW LIMB. ALL OTHER DISK AND LIMB FEATURES APPEAR
QUIET AND STABLE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO VERY LOW WITH THE
OCCURENCE OF C-CLASS SUBFLARES PROBABLE.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED WITH THE
END OF MAJOR STORM CONDITIONS AT 19XX ON 29 SEPT. QUIET TO SLIGHTLY
UNSETTLED CONDITIONS ARE EXPECTED TO CONTINUE DURING THE FORECAST
PERIOD.

III. EVENT PROBABILITIES 01 OCTOBER - 03 OCTOBER

CLASS M 30/30/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 SEPTEMBER 142

PREDICTED 01-03 OCTOBER 140/140/140

90-DAY MEAN 30 SEPTEMBER 135

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 29 SEPTEMBER 59

ESTIMATED AFR/AP 30 SEPTEMBER 09/12

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

SOLTERWARN

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SDF NUMBER 273

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 30 SEPTEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24.
REGIONS 2006 AND 2021 NOW SEEM BETTER DEFINED AS ONE REGION AND
HAVE BEEN LABELED REGION 2006 (N21W46). AT THE SAME TIME, REGION
2017 (N17W19) MAY BE SEPARATING INTO TWO REGIONS. OLD REGION 2016
WAS COMBINED WITH REGION 2017 ON 27 SEPTEMBER. REGIO 2006 PRODUCED
AN M2 (SB OPTICALLY) WITH A MIXIMUM AT 30/0616Z AND POSSIBLY PRO-
DUCED ANOTHER M2 (NO OPTICAL ASSOCIATION) WITH A MAXIMUM AT 30/1120Z.
THESE M-CLASS BURSTS HAD LITTLE IN THE WAY OF GEOPHYSICAL EFFECTS
AND VERY SMALL RADIO BURSTS WITH THEM. OTHER WISE, ELEVEN OF THE
FOURTEEN SPOTTED REGIONS ON TODAY'S SUN PRODUCED MINOR C-CLASS SUB-
FLARES DURING THE PAST 24 HOURS.

IB. REGION 2006 HAS THE POTENTIAL TO PRODUCE MORE SMALL M-CLASS
FLARES BUT DOES NOT CURRENTLY APPEAR TO HAVE MAJOFLARE CAPABILITY.
REGION 2017 HAS SOME POSSIBILITY OF PRODUCING SMALL M-CLASS FLARES
BUT PROBABLY NEEDS FURTHER DEVELOPMENT TO ACHIEVE EVEN THIS. REGION
2019 (S22W13) MAY BE DEVELOPING A MAGNETIC DELTA CONFIGURATION AND
COULD BEGIN PRODUCING ENERGETIC FLARES IF ITS DEVELOPMENT CONTINUES.

II. THE GEOMAGNETIC FIELD HAS BEEN MILDLY ACTIVE DURING THE PAST
24 HOURS. THE FIELD IS EXPECTED TO BECOME UNSETTLED AND TO REMAIN
SO THROUGH THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 01 OCTOBER - 03 OCTOBER 1979

CLASS M 40/50/50

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 SEPTEMBER 231

PREDICTED 01 - 03 OCTOBER 227/226/222

90-DAY MEAN 30 SEPTEMBER 181

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 29 SEPTEMBER 15

ESTIMATED AFR/AP 30 SEPTEMBER 17/22

PREDICTED AFR/AP 01 - 03 OCTOBER 09/13 09/19 12/17

SOLTERWARN