

SDF NUMBER 138

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 18 MAY 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE DURING THE PAST 24 HOURS. THE LARGEST EVENT WAS A C7/SF (0051Z X-RAY MAX) FROM REGION 1729 WHICH IS CURRENTLY CROSSING WEST LIMB. DESPITE THE MAGNETIC COMPLEXITY OF REGIONS 1743 (N17W74) -BETA GAMMA- AND 1740 (N16W42) -A WEAK DELTA- THESE REGIONS HAVE BEEN RELATIVELY QUIET. REGION 1742 (N23E03) STILL RETAINS AN ISOLATED POLE ON THE SOUTH SIDE OF THE LEADER. REGIONS 1754 (S13E36), 1755 (S28E73), AND 1756 (S20E77) HAVE BEEN ADDED TODAY BUT NONE CURRENTLY APPEAR TO HAVE SIGNIFICANT GROWTH.

IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE WITH A CHANCE OF 1-2 CLASS M EVENTS OVER THE FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD WAS UNSETTLED THE FIRST HALF OF THE DAY AND SLIGHTLY ACTIVE THE LATTER HALF OF THE DAY. THE INTERPLANETARY SCINTILLATION DATA INDICATES INCREASED SOLAR WIND SPEEDS WILL AFFECT THE EARTH ON 19 AND 20 MAY. THE FIELD IS EXPECTED TO BE MODERATELY UNSETTLED TO ACTIVE ON 19 AND 20 MAY AND UNSETTLED ON 21 MAY.

III. EVENT PROBABILITIES

|         |          |
|---------|----------|
| CLASS M | 45/30/30 |
| CLASS X | 05/01/01 |
| PROTON  | 05/01/01 |
| PCAF    | GREEN    |

19 - 21 MAY

IV. OTTAWA 10.7 CM FLUX

|                       |             |
|-----------------------|-------------|
| OBSERVED 18 MAY       | 169         |
| PREDICTED 19 - 21 MAY | 165/162 158 |
| 90-DAY MEAN 18 MAY    | 183         |

V. GEOMAGNETIC A INDICES

|                                |                   |
|--------------------------------|-------------------|
| OBSERVED FREDERICKSBURG 17 MAY | 03                |
| ESTIMATED AFR/AP 18 MAY        | 09/12             |
| PREDICTED AFR/AP 19 - 21 MAY   | 14/16 14/14 10/10 |
| SOLTERWARN                     |                   |