

HFUS 1 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 172

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 20 JUNE 1980

IA. SOLAR ACTIVITY HAS BEEN SURPRISINGLY LOW DURING THE PAST 24 HOURS CONSIDERING THE COMPLEX OF REGIONS DEVELOPING IN THE SOUTH-EAST QUADRANT OF THE SUN. REGION 2522 (S29E31) HAS BEEN THE MOST ACTIVE OF THESE PRODUCING SEVERAL SUBFLARES WITH ASSOCIATED C-CLASS X-RAY BURSTS AND A IB SEEN AT 1206Z MAXIMUM. OF THE OTHER REGIONS IN THIS COMPLEX, REGIONS 2517 (S12E13), 2516 (S09E01), AND 2525 (S12E41) HAVE PRODUCED SMALL FLARES. REGION 2524 (N22W19) HAS GROWN SIGNIFICANTLY AND IN CONJUNCTION WITH 2514 (N17W24) HAS PRODUCED SUBFLARE ACTIVITY. NEW REGION 2531 (S21E73) HAS COME OVER THE EAST LIMB AS A SMALL H-TYPE SPOT.

IB. DESPITE TODAY'S LOW ACTIVITY, EVIDENCE OF RESTRUCTURING IN THE SOUTHEAST COMPLEXES SHOULD KEEP ACTIVITY AT THE MODERATE LEVEL FOR THE PERIOD. REGION 2522 IS CONTINUING TO GROW RAPIDLY, AND ALTHOUGH WHAT WAS THOUGHT TO BE A DELTA CONFIGURATION IN ITS LARGE LEADER SPOT IS NOW DETERMINED MORE CAPABLE OF M-CLASS ACTIVITY. INTERACTION BETWEEN REGIONS 2517, 2528 (S16E16) AND 2519 (S20E23) CONTINUES WITH ALL OF THEM SHARING A COMMON NEUTRAL LINE AND SHOWING SLOW GROWTH. REGION 2529 (S15E71) HAS BEEN DISAPPOINTING TODAY CONSIDERING ITS ACTIVITY AT THE LIMB. IT CONTAINS A LARGE LEADER SPOT AND SMALLER TRAILER SPOTS WITH FAIRLY DULL PLAGE.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS INDICATING THE EFFECTS OF THE CORONAL HOLE NOW LOCATED AT W50 HAVE YET TO INTERSECT THE EARTH. THESE EFFECTS ARE EXPECTED TO INCREASE THE MAGNETIC ACTIVITY TO HIGH UNSETTLED LEVELS EARLY ON THE 21ST, FOLLOWED BY A GENERAL QUIETING OF THE FIELD.

III. EVENT PROBABILITIES 21 JUNE - 23 JUNE

CLASS M 70/70/70

CLASS X 10/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 JUNE 224

PREDICTED 21 JUNE - 23 JUNE 230/232/232

90-DAY MEAN 20 JUNE 207

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 19 JUNE 09

ESTIMATED AFR/AP 20 JUNE 07/08

PREDICTED AFR/AP 21-23 JUNE 15/18 10/15 07/12

SOLTERWARN

BT