

PROGNOSTIC DISCUSSION FOR MONTHLY OUTLOOK
CLIMATE PREDICTION CENTER NCEP
NATIONAL WEATHER SERVICE WASHINGTON DC
3 PM EDT THURSDAY JUNE 15 2000

30-DAY OUTLOOK DISCUSSION FOR JULY 2000

THE PRIMARY SOURCE OF PREDICTIVE SIGNALS FOR TEMPERATURE AND PRECIPITATION IN THE MAINLAND U.S. IN JULY IS THE ANTECEDENT SOIL MOISTURE CONDITIONS. WITH THE SUN ANGLE HIGH AT THIS TIME OF YEAR ANOMALOUS SOIL MOISTURE CONDITIONS TRANSLATE READILY INTO SURFACE HEATING ANOMALIES. LA NINA INDIRECTLY INFLUENCES THE CLIMATE IN JULY OVER THE MAINLAND U.S. THROUGH THE ANOMALOUS SOIL MOISTURE CONDITIONS THAT DEVELOP IN RESPONSE TO THE COLD EVENT DURING THE COOL SEASON. IN ADDITION - THE OVERALL MEAN GLOBAL CIRCULATION PATTERN CONTINUES TO FEATURE STRONGER THAN NORMAL SUB-TROPICAL HIGHS THROUGHOUT MOST OF THE MID-LATITUDES IN THE NORTHERN HEMISPHERE. THIS FEATURE MAY BE RELATED TO LA NINA AND HAS BEEN PRESENT IN THE MEAN GLOBAL CIRCULATION FOR OVER A YEAR - AND MAY KEEP WESTERLIES NORTH OF THEIR NORMAL POSITION IN THE COMING MONTH SINCE THE TROPICAL PACIFIC CIRCULATION CONTINUES TO REFLECT A COLD EVENT.

THE SOIL MOISTURE CONDITIONS CONTINUE TO BE DRIER THAN NORMAL ACROSS MUCH OF THE SOUTHERN THIRD OF THE COUNTRY. SOIL MOISTURE CONDITIONS IN THE MIDDLE MISSISSIPPI VALLEY AND PARTS OF THE GREAT PLAINS ARE ALSO DRIER THAN USUAL. THE SOIL MOISTURE TOOL SHOWS INDICATIONS FOR DRY CONDITIONS IN THE SOUTHEAST WHERE IT HAS BEEN DRY OVER THE LAST SEVERAL MONTHS. THE COUPLED MODEL INDICATES ABOVE MEDIAN PRECIPITATION FOR THE LOWER GREAT LAKES AND UPPER OHIO VALLEY WHICH HAVE RECENTLY BECOME WET. THE COUPLED MODEL ALSO FORECASTS CONTINUED BELOW MEDIAN PRECIPITATION OVER PARTS OF THE MIDDLE AND UPPER MISSISSIPPI VALLEY AND CENTRAL PLAINS. THE SOUTHWESTERN MONSOON IS EXPECTED TO BE WETTER THAN NORMAL DUE TO STRONG MIDDLE TROPOSPHERE SUBTROPICAL RIDGE DEVELOPMENT AND LOW-LEVEL HEAT LOW FORMATION RESULTING FROM INCREASED SURFACE WARMING DUE TO THE LACK OF SNOW PACK OVER THE MOUNTAINS DURING THE PREVIOUS LA NINA-INFLUENCED WINTER.

INDICATIONS FROM VARIOUS TOOLS FAVOR ABOVE NORMAL TEMPERATURES - WITH SEVERAL TOOLS FORECASTING ABOVE NORMAL TEMPERATURES FOR MOST OF THE COUNTRY WHILE TRENDS INDICATE WARMER THAN NORMAL TEMPERATURES THROUGHOUT MOST OF THE EAST - SOUTH - AND SOUTHWEST WITH STRONG SIGNALS IN SOUTHERN FLORIDA AND PORTIONS OF THE DESERT SOUTHWEST. THE TRENDS FOR TEMPERATURES OVER MUCH OF THE UPPER MISSISSIPPI VALLEY AND NORTHERN AND CENTRAL PLAINS CONFLICT WITH THE OTHER TOOLS - HOWEVER - THE WARMING INFLUENCE OF CURRENTLY DRY SOILS IN PARTS OF THE MIDWEST SHOULD COUNTERACT LONGER-TERM TRENDS FOR COOLING LEADING TO A WEAKER OVERALL PREDICTIVE SIGNAL FOR JULY TEMPERATURES IN THAT REGION. NEAR TO BELOW NORMAL SSTs AROUND THE ALEUTIANS WILL HELP TO MODERATE TEMPERATURES THERE WHILE THE RECENT WARMING TRENDS TO FAVOR ABOVE NORMAL TEMPERATURES FOR MUCH OF THE REST OF ALASKA.

NOTE - THIS CLIMATE OUTLOOK IS INTENDED FOR USE ONLY PRIOR TO THE START OF THE VALID PERIOD. WITHIN THE VALID PERIOD OBSERVATIONS AND MEDIUM RANGE FORECASTS SHOULD BE CONSULTED.

NOTE - THE NEXT 0.5 MONTH LEAD-TIME MONTHLY OUTLOOK WILL BE ISSUED THURSDAY JULY 13 2000.

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