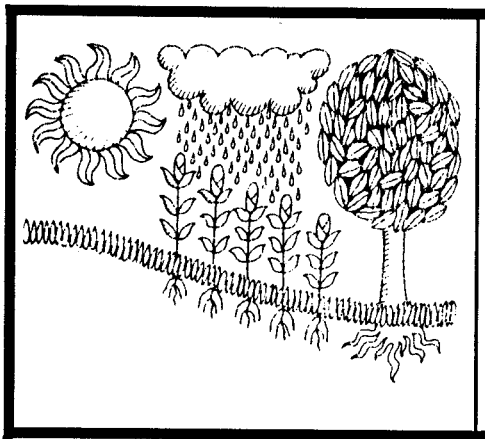
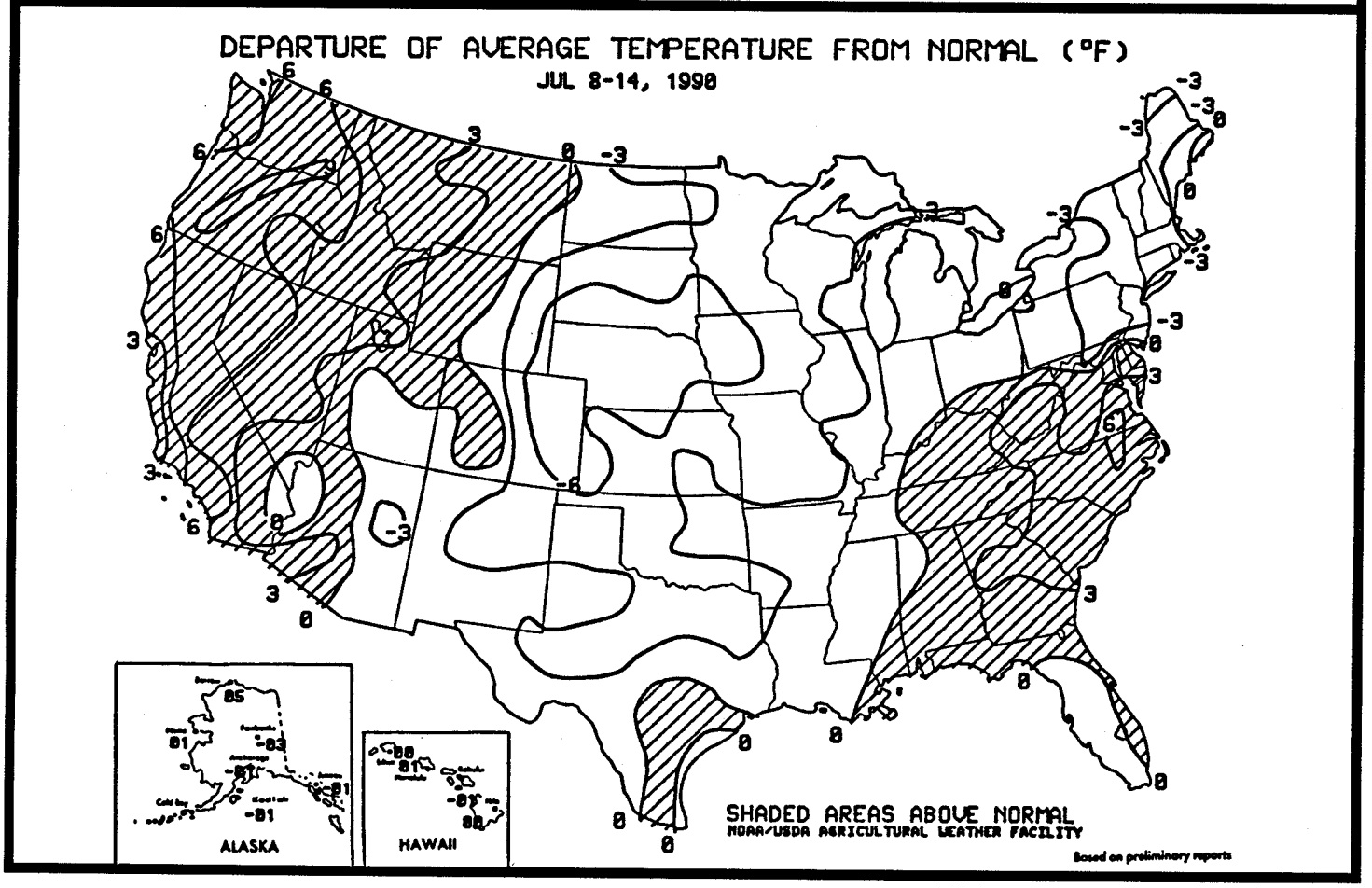


# WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service and World Agricultural Outlook Board

Volume 77, No. 28 | Washington, D.C. | July 17, 1990




## HIGHLIGHTS

### July 8-14, 1990

Showers and thunderstorms were wide-spread throughout the week over much of the **eastern half of the Nation**, causing locally heavy rains and flooding. During the first of the week, thunderstorms developed around a stationary front reaching **from the central Rockies to New Jersey**, producing moderate to heavy rainfall. **Armstrong County in western Pennsylvania** was pounded with 5.1 inches of rain in a 4-hour period. Scattered thunderstorms in the **Southeast** brought some relief from the heat. During the rest of the week, a stagnant weather pattern developed and resulted in extensive showers drenching parts of the **central and southern Plains**, much of the **Mississippi Valley**, and the **eastern third of the country**. Some severe thunderstorms produced

(Continued to back cover)

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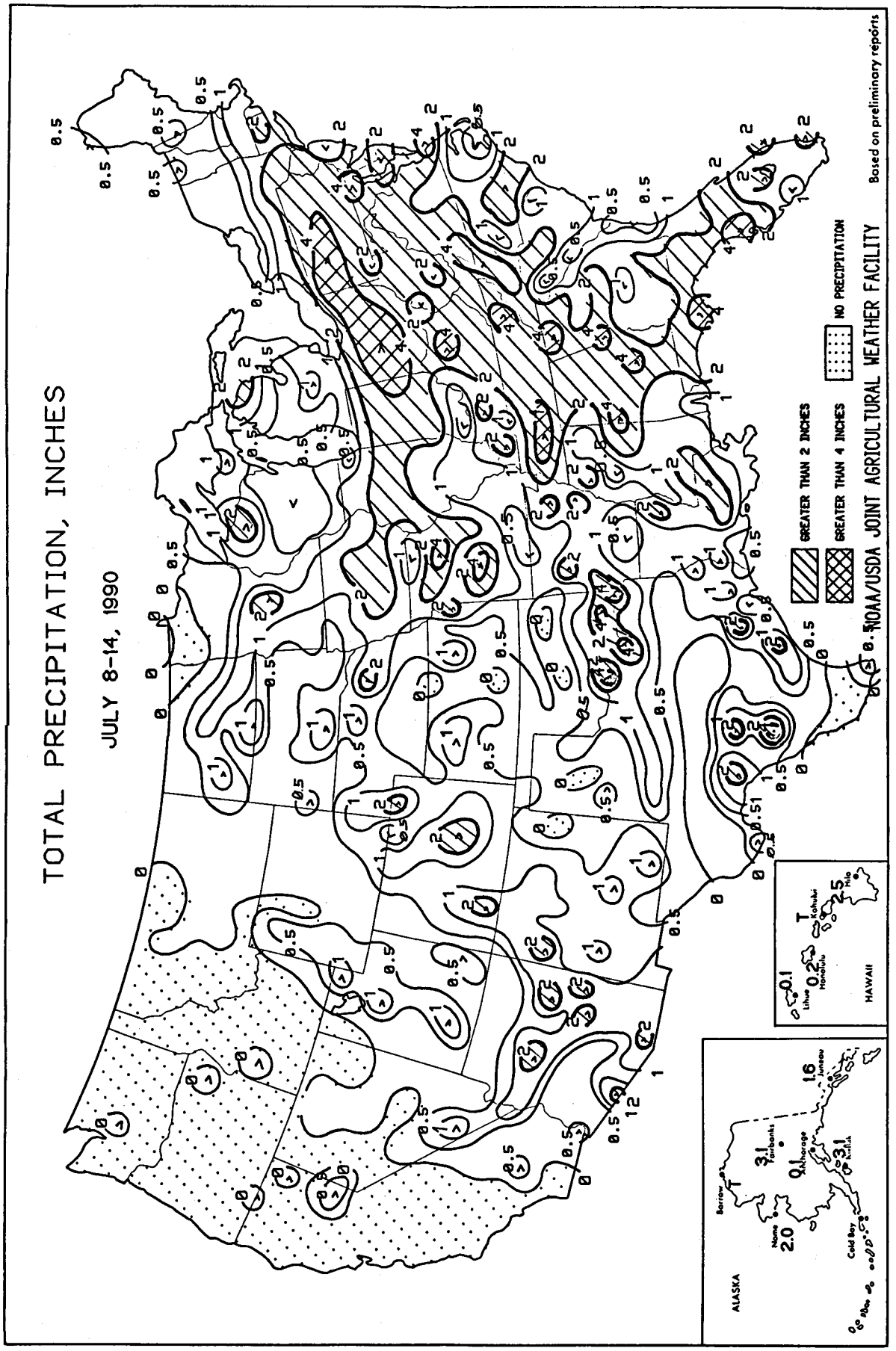
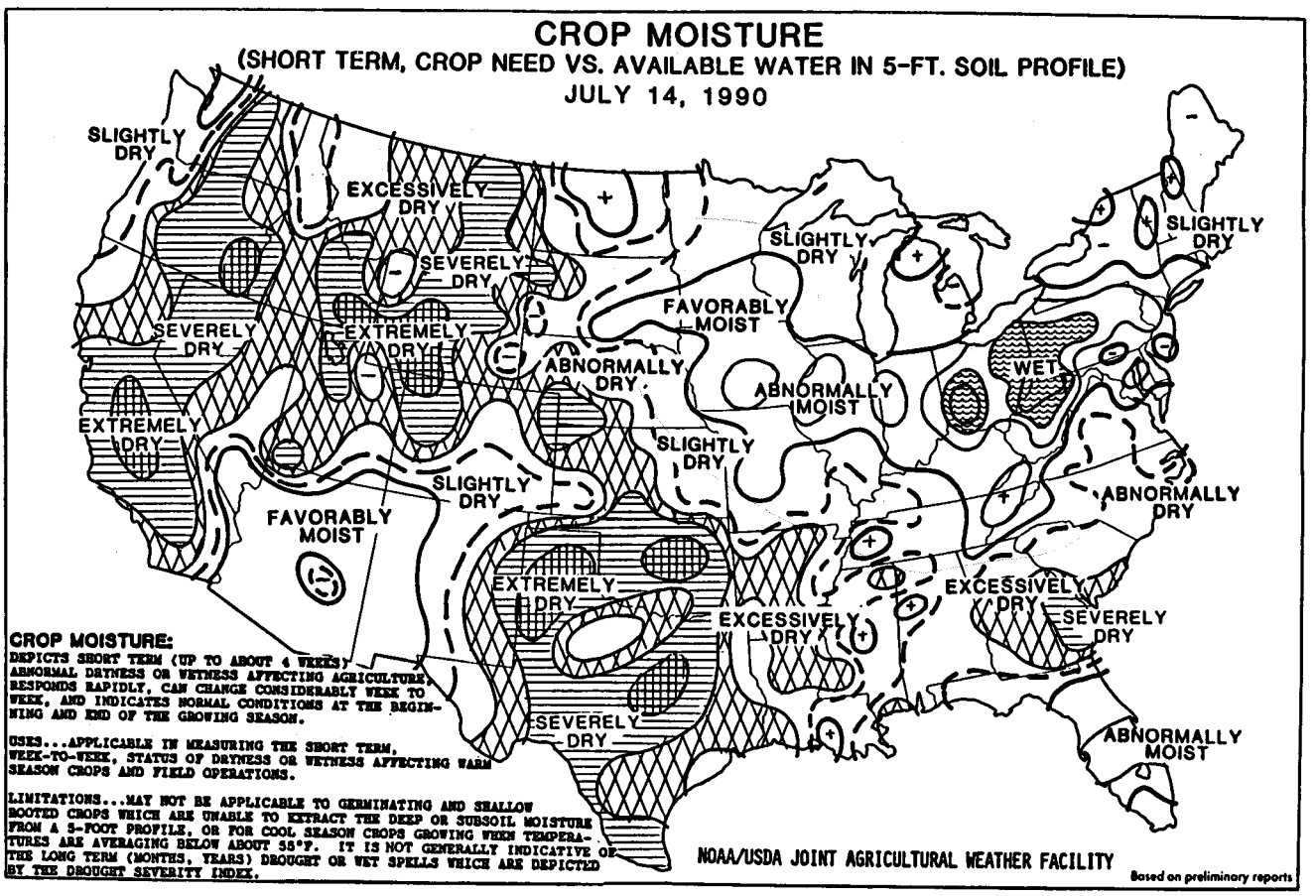
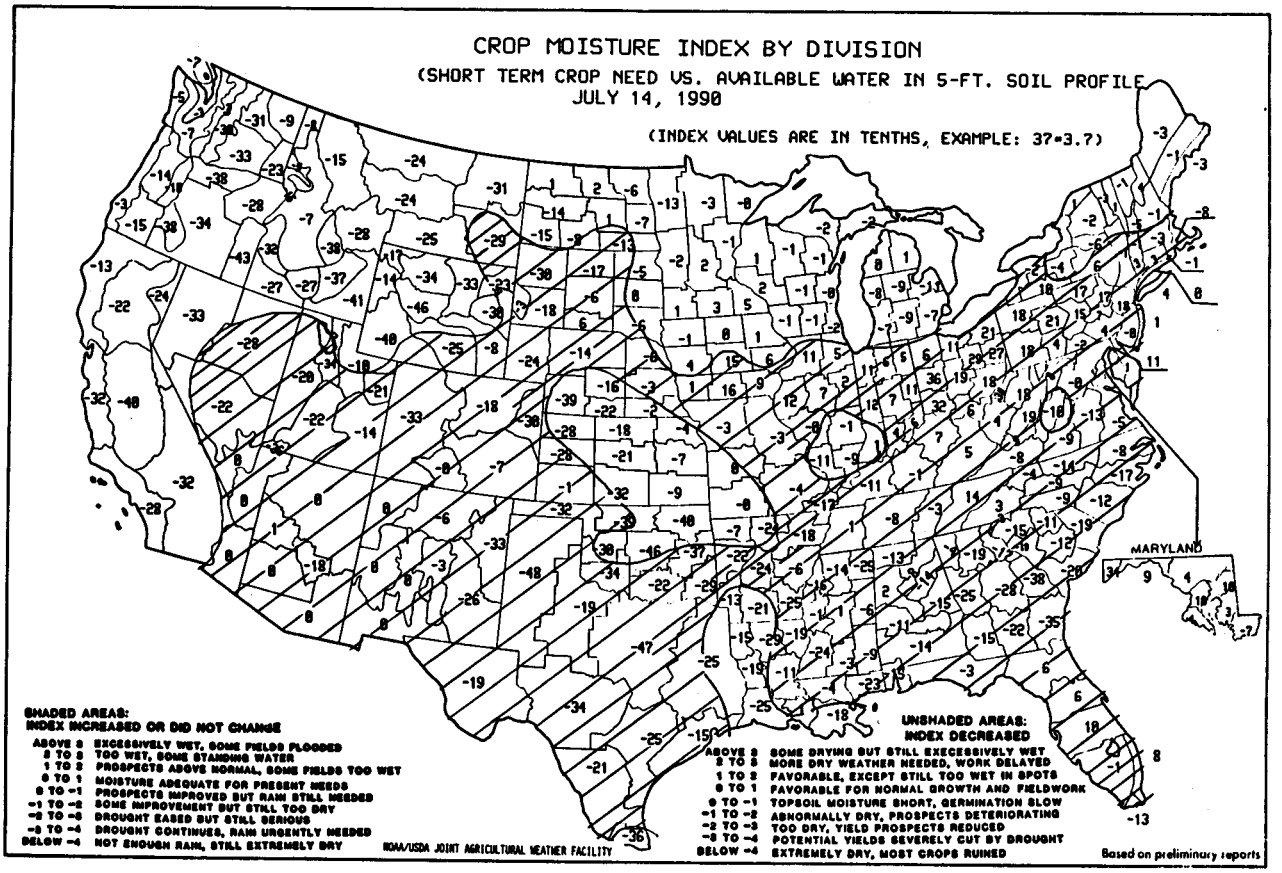
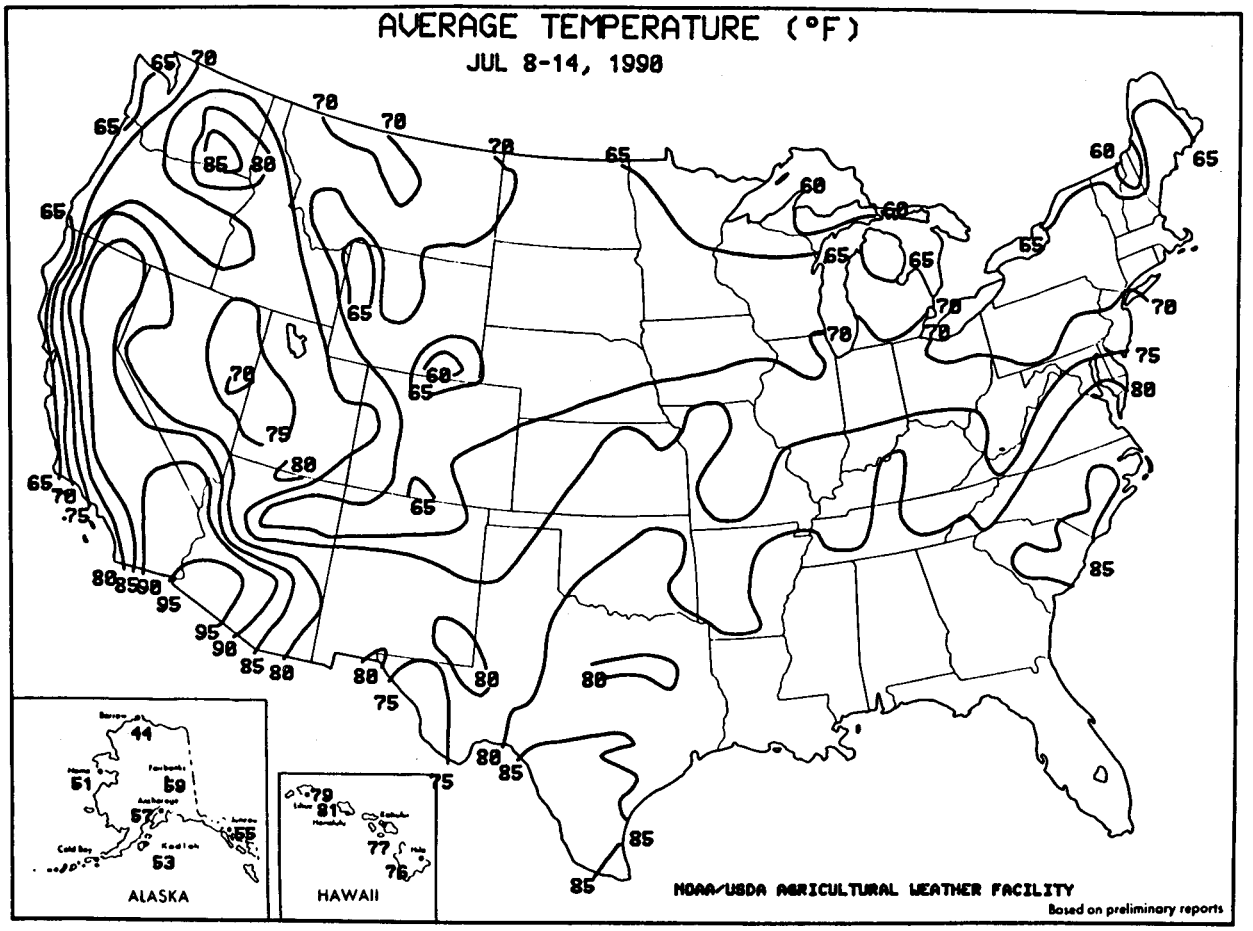
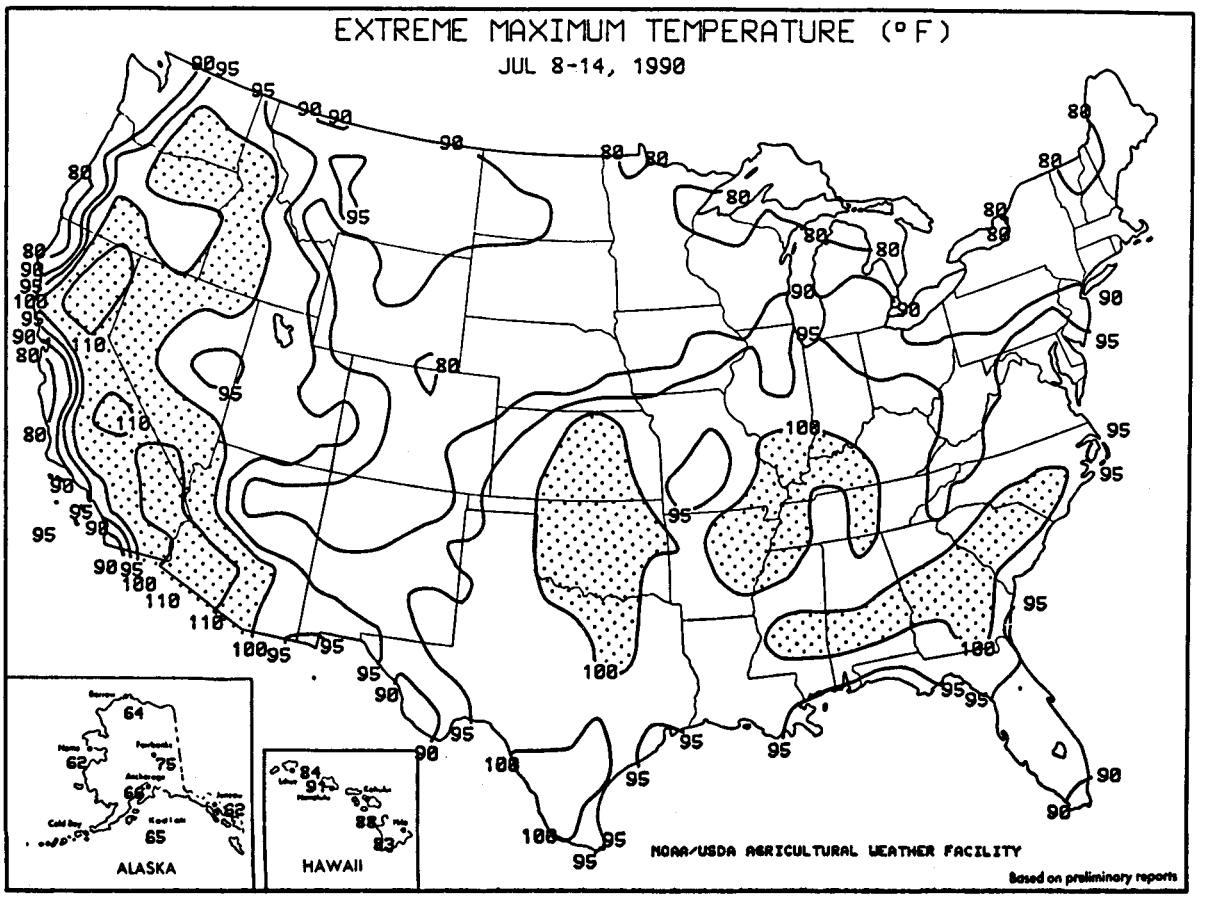
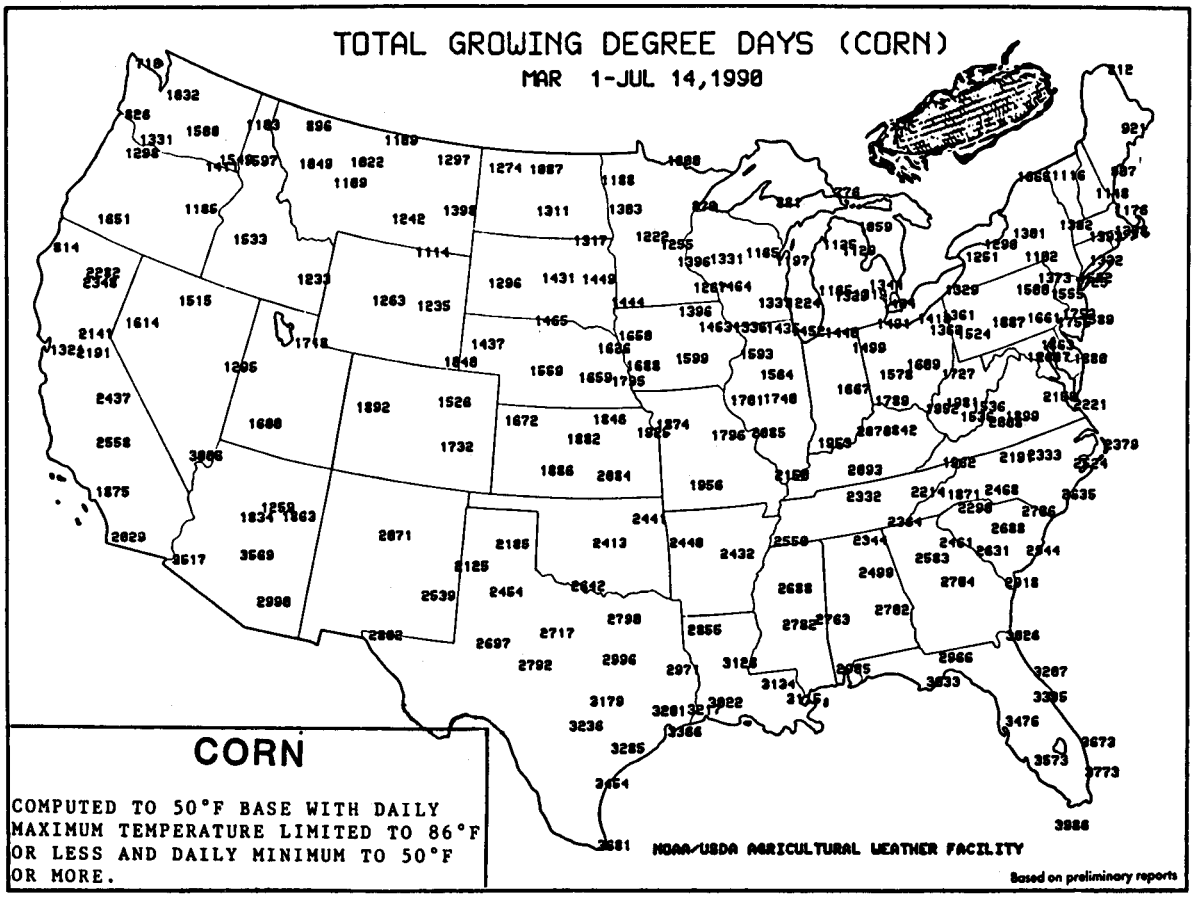

TOTAL PRECIPITATION, INCHES
JULY 8-14, 1990
GREATER THAN 2 INCHES
GREATER THAN 4 INCHES
NO PRECIPITATION
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports
ALASKA
HAWAII

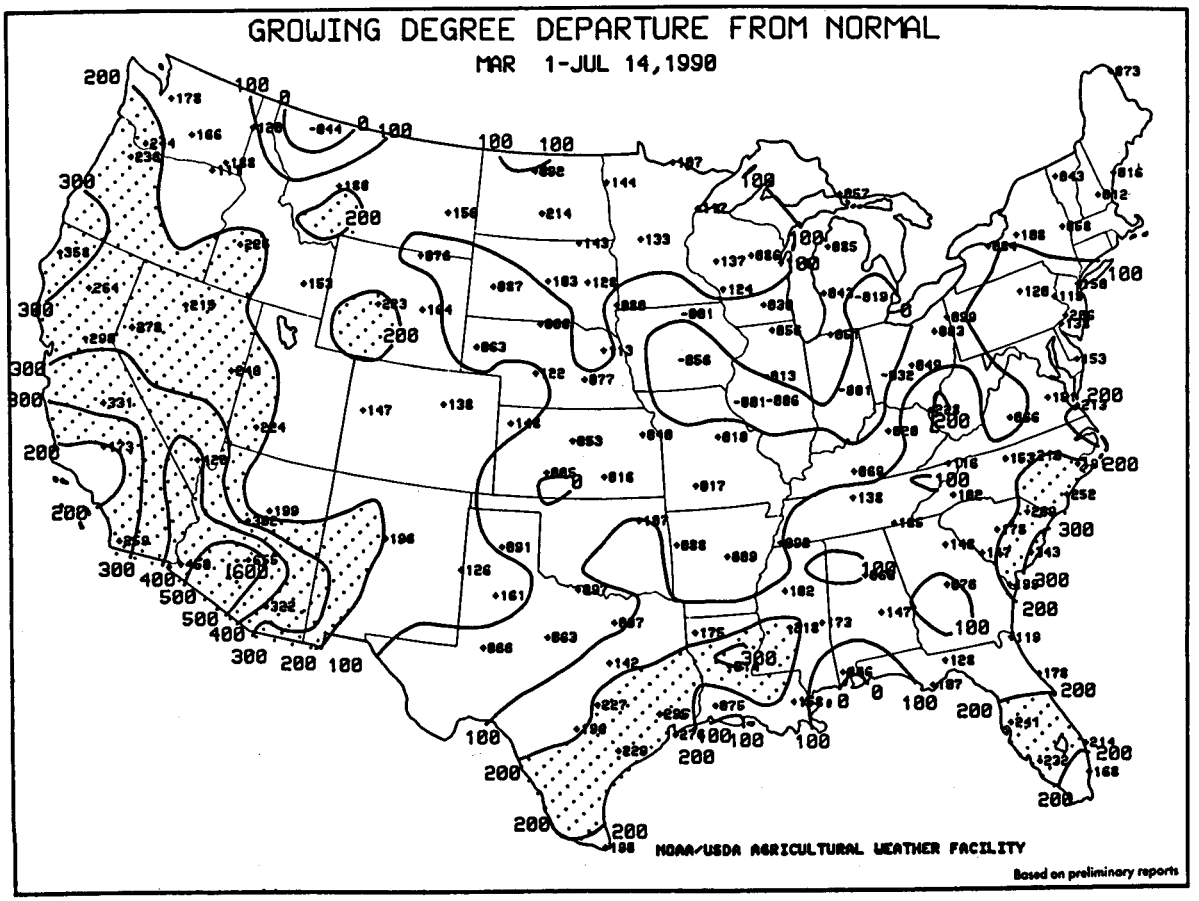

CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
JULY 14, 1990
SLIGHTLY DRY
EXCESSIVELY DRY
SEVERELY DRY
EXTREMELY DRY
SEVERELY DRY
EXTREMELY DRY
FAVORABLY MOIST
ABNORMALLY DRY
SLIGHTLY DRY
FAVORABLY MOIST
SLIGHTLY DRY
ABNORMALLY MOIST
WET
SLIGHTLY DRY
ABNORMALLY DRY
EXTREMELY DRY
EXCESSIVELY DRY
EXCESSIVELY DRY
SEVERELY DRY
SEVERELY DRY
ABNORMALLY MOIST
CROP MOISTURE:
DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES...APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.
LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


CROP MOISTURE INDEX BY DIVISION
(SHORT TERM CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
JULY 14, 1990
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
MARYLAND
SHADED AREAS:
INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
3 TO 2 TOO WET, SOME STANDING WATER
1 TO 2 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3 DROUGHT EASED BUT STILL SERIOUS
-3 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
UNSHADED AREAS:
INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
3 TO 2 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
JUL 8-14, 1990
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


EXTREME MAXIMUM TEMPERATURE (°F)
JUL 8-14, 1990
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


TOTAL GROWING DEGREE DAYS (CORN)
MAR 1-JUL 14,1990
CORN
COMPUTED TO 50°F BASE WITH DAILY MAXIMUM TEMPERATURE LIMITED TO 86°F OR LESS AND DAILY MINIMUM TO 50°F OR MORE.
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


GROWING DEGREE DEPARTURE FROM NORMAL
MAR 1-JUL 14,1990
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

# National Weather Data for Selected Cities

## Weather Data for the Week Ending July 14, 1990

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMP. °F | | PRECIP. | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Mar 1 | PCT. NORMAL SINCE Mar 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| AL BIRMINGHAM | 90 | 70 | 98 | 64 | 80 | 0 | 2.3 | 1.0 | .8 | 4.3 | 72 | 30.9 | 96 | 91 | 50 | 3 | 0 | 4 | 3 |
| MOBILE | 91 | 72 | 96 | 68 | 82 | 0 | .5 | -1.2 | .3 | 3.4 | 41 | 42.1 | 120 | 96 | 50 | 5 | 0 | 4 | 0 |
| MONTGOMERY | 94 | 71 | 102 | 68 | 83 | 1 | 3.1 | 2.0 | 2.3 | 4.5 | 81 | 42.7 | 150 | 97 | 48 | 5 | 0 | 4 | 2 |
| AK ANCHORAGE | 64 | 50 | 66 | 44 | 57 | -1 | .1 | -.3 | .1 | 1.7 | 88 | 6.0 | 113 | 85 | 46 | 0 | 0 | 3 | 0 |
| BARROW | 50 | 37 | 64 | 28 | 44 | 5 | T | -.2 | T | .5 | 78 | 1.0 | 64 | 96 | 66 | 0 | 2 | 1 | 0 |
| FAIRBANKS | 67 | 52 | 75 | 47 | 59 | -3 | 3.1 | 2.7 | 1.2 | 5.3 | 253 | 7.1 | 165 | 94 | 52 | 0 | 0 | 6 | 3 |
| JUNEAU | 59 | 50 | 62 | 46 | 55 | -1 | 2.6 | 1.7 | .9 | 7.4 | 157 | 23.3 | 107 | 97 | 72 | 0 | 0 | 5 | 3 |
| KODIAK | 58 | 48 | 65 | 42 | 53 | -1 | 3.1 | 2.3 | 1.9 | 7.6 | 136 | 34.0 | 116 | 98 | 75 | 0 | 0 | 5 | 1 |
| NOME | 56 | 46 | 62 | 40 | 51 | 1 | 2.0 | 1.6 | 1.3 | 3.6 | 176 | 8.8 | 176 | 97 | 73 | 0 | 0 | 3 | 2 |
| AZ PHOENIX | 105 | 82 | 112 | 78 | 94 | 1 | .3 | .1 | .3 | .4 | 93 | 2.6 | 89 | 70 | 24 | 7 | 0 | 3 | 0 |
| PRESCOTT | 86 | 61 | 93 | 56 | 73 | 0 | 1.9 | 1.2 | 1.3 | 3.9 | 230 | 8.6 | 111 | 76 | 34 | 3 | 0 | 4 | 2 |
| TUCSON | 97 | 73 | 102 | 71 | 85 | -1 | .4 | -.1 | .2 | 2.2 | 185 | 4.4 | 118 | 83 | 30 | 6 | 0 | 5 | 0 |
| YUMA | 108 | 87 | 113 | 83 | 97 | 4 | .4 | .4 | .4 | .4 | | .9 | 101 | 49 | 25 | 7 | 0 | 2 | 0 |
| AR FORT SMITH | 95 | 69 | 103 | 58 | 82 | 0 | T | -.7 | T | .8 | 15 | 38.4 | 172 | 88 | 34 | 5 | 0 | 0 | 0 |
| LITTLE ROCK | 91 | 72 | 101 | 61 | 81 | -1 | 1.2 | .4 | .6 | 1.8 | 34 | 37.1 | 131 | 84 | 48 | 4 | 0 | 4 | 2 |
| CA BAKERSFIELD | 103 | 75 | 109 | 65 | 89 | 5 | 0 | 0 | 0 | T | 0 | 2.6 | 69 | 58 | 22 | 7 | 0 | 0 | 0 |
| EUREKA | 66 | 56 | 73 | 55 | 61 | 5 | T | 0 | T | .5 | 88 | 20.7 | 93 | 94 | 76 | 0 | 0 | 0 | 0 |
| FRESNO | 103 | 72 | 108 | 65 | 88 | 7 | T | 0 | T | T | 0 | 7.4 | 106 | 59 | 24 | 7 | 0 | 0 | 0 |
| LOS ANGELES | 82 | 67 | 93 | 63 | 74 | 6 | 0 | 0 | 0 | T | 0 | 5.1 | 61 | 87 | 52 | 1 | 0 | 0 | 0 |
| REDDING | 108 | 70 | 114 | 61 | 89 | 6 | 0 | 0 | 0 | .8 | 87 | 19.8 | 80 | 57 | 13 | 7 | 0 | 0 | 0 |
| SACRAMENTO | 102 | 64 | 109 | 56 | 83 | 8 | 0 | 0 | 0 | 0 | 0 | 11.5 | 108 | 73 | 20 | 7 | 0 | 0 | 0 |
| SAN DIEGO | 80 | 67 | 85 | 62 | 74 | 4 | 0 | 0 | 0 | .9 | | 5.9 | 92 | 87 | 54 | 0 | 0 | 0 | 0 |
| SAN FRANCISCO | 75 | 57 | 82 | 55 | 66 | 4 | T | 0 | T | T | 0 | 7.9 | 64 | 90 | 52 | 0 | 0 | 0 | 0 |
| CO DENVER | 78 | 56 | 81 | 50 | 67 | -6 | 1.6 | 1.1 | 1.3 | 1.9 | 80 | 8.9 | 98 | 92 | 43 | 0 | 0 | 4 | 1 |
| GRAND JUNCTION | 92 | 66 | 97 | 63 | 79 | 0 | .2 | .1 | .2 | .8 | 137 | 3.8 | 97 | 60 | 22 | 5 | 0 | 1 | 0 |
| PUEBLO | 82 | 59 | 90 | 50 | 71 | -6 | 2.1 | 1.7 | .8 | 2.8 | 146 | 9.1 | 165 | 94 | 41 | 1 | 0 | 5 | 2 |
| CT BRIDGEPORT | 76 | 63 | 89 | 57 | 70 | -4 | 1.8 | 1.0 | .9 | 3.8 | 87 | 23.5 | 109 | 91 | 59 | 0 | 0 | 5 | 2 |
| HARTFORD | 79 | 59 | 90 | 55 | 69 | -4 | 1.8 | 1.1 | 1.8 | 5.3 | 114 | 26.2 | 114 | 92 | 52 | 1 | 0 | 1 | 1 |
| DC WASHINGTON | 86 | 70 | 96 | 63 | 78 | -1 | 2.1 | 1.2 | 1.2 | 6.4 | 128 | 22.5 | 112 | 93 | 66 | 2 | 0 | 3 | 2 |
| FL APALACHICOLA | 89 | 74 | 92 | 73 | 82 | 0 | 4.9 | 3.3 | 3.6 | 10.7 | 136 | 24.0 | 95 | 97 | 63 | 4 | 0 | 3 | 3 |
| DAYTONA BEACH | 89 | 72 | 92 | 71 | 81 | 0 | 1.7 | .5 | .7 | 6.6 | 74 | 18.5 | 80 | 97 | 62 | 6 | 0 | 3 | 3 |
| JACKSONVILLE | 93 | 74 | 97 | 72 | 84 | 2 | .3 | -1.1 | .2 | 4.4 | 52 | 13.3 | 52 | 90 | 52 | 6 | 0 | 3 | 0 |
| KEY WEST | 90 | 78 | 92 | 75 | 84 | -1 | 1.1 | .3 | .5 | 3.4 | 50 | 12.1 | 74 | 85 | 65 | 3 | 0 | 5 | 0 |
| MIAMI | 89 | 76 | 90 | 72 | 83 | 0 | 1.1 | -.2 | .4 | 9.9 | 82 | 28.3 | 102 | 90 | 61 | 2 | 0 | 7 | 0 |
| ORLANDO | 91 | 73 | 94 | 70 | 82 | 0 | 3.0 | 1.1 | 1.6 | 9.5 | 88 | 18.0 | 71 | 95 | 55 | 6 | 0 | 4 | 2 |
| TALLAHASSEE | 94 | 72 | 99 | 70 | 83 | 2 | 1.9 | -.1 | 1.0 | 6.4 | 62 | 25.6 | 73 | 99 | 50 | 5 | 0 | 5 | 2 |
| TAMPA | 91 | 72 | 96 | 68 | 82 | -1 | 4.7 | 3.1 | 2.7 | 11.5 | 137 | 21.6 | 97 | 97 | 61 | 5 | 0 | 6 | 2 |
| WEST PALM BEACH | 91 | 76 | 93 | 72 | 83 | 1 | 4.0 | 2.5 | 2.3 | 14.5 | 133 | 28.5 | 102 | 93 | 61 | 6 | 0 | 5 | 2 |
| GA ATLANTA | 92 | 72 | 99 | 70 | 82 | 4 | 1.7 | .7 | .7 | 3.1 | 57 | 37.7 | 130 | 94 | 46 | 4 | 0 | 5 | 1 |
| AUGUSTA | 98 | 72 | 103 | 69 | 85 | 5 | .3 | -.7 | .3 | 1.8 | 30 | 12.1 | 47 | 96 | 40 | 6 | 0 | 2 | 0 |
| MACON | 96 | 72 | 102 | 70 | 84 | 3 | 2.1 | 1.0 | .9 | 3.0 | 52 | 20.0 | 74 | 98 | 45 | 5 | 0 | 4 | 2 |
| SAVANNAH | 94 | 75 | 98 | 72 | 85 | 4 | .1 | -1.5 | .1 | 1.1 | 12 | 15.7 | 58 | 89 | 46 | 6 | 0 | 2 | 0 |
| HI HILO | 82 | 69 | 83 | 67 | 76 | 0 | 2.5 | .7 | .8 | 13.0 | 135 | 80.4 | 117 | 95 | 64 | 0 | 0 | 6 | 2 |
| HONOLULU | 89 | 73 | 91 | 69 | 81 | 1 | .2 | .1 | .1 | .3 | 39 | 10.2 | 76 | 79 | 46 | 2 | 0 | 2 | 0 |
| KAHULUI | 86 | 69 | 88 | 65 | 77 | -1 | T | -.1 | T | .9 | 233 | 14.9 | 128 | 92 | 59 | 0 | 0 | 0 | 0 |
| LIHUE | 83 | 74 | 84 | 72 | 79 | 0 | .1 | -.4 | 0 | .8 | 30 | 19.6 | 85 | 81 | 63 | 0 | 0 | 4 | 0 |
| ID BOISE | 99 | 62 | 104 | 51 | 80 | 6 | T | 0 | T | .3 | 24 | 8.9 | 125 | 53 | 14 | 7 | 0 | 1 | 0 |
| LEWISTON | 99 | 65 | 105 | 58 | 82 | 8 | 0 | -.1 | 0 | .8 | 48 | 7.0 | 93 | 50 | 14 | 7 | 0 | 0 | 0 |
| POCATELLO | 93 | 53 | 98 | 44 | 73 | 2 | T | -.1 | T | .9 | 70 | 6.8 | 105 | 76 | 20 | 5 | 0 | 0 | 0 |
| IL CHICAGO | 77 | 64 | 95 | 59 | 70 | -2 | .3 | -.4 | .2 | 4.8 | 83 | 20.8 | 114 | 89 | 58 | 2 | 0 | 3 | 0 |
| MOLINE | 79 | 64 | 97 | 57 | 72 | -3 | 1.9 | .7 | 1.0 | 11.5 | 175 | 33.0 | 163 | 92 | 56 | 2 | 0 | 5 | 1 |
| PEORIA | 78 | 63 | 93 | 55 | 71 | -5 | 2.6 | 1.6 | 1.3 | 10.6 | 186 | 28.3 | 148 | 97 | 68 | 2 | 0 | 4 | 2 |
| QUINCY | 81 | 66 | 97 | 57 | 74 | -3 | 2.1 | 1.1 | 1.3 | 7.2 | 120 | 24.2 | 120 | 95 | 63 | 2 | 0 | 3 | 2 |
| ROCKFORD | 78 | 62 | 93 | 56 | 70 | -3 | 1.1 | .1 | .9 | 10.5 | 157 | 24.0 | 122 | 85 | 51 | 1 | 0 | 3 | 1 |
| SPRINGFIELD | 80 | 66 | 95 | 57 | 73 | -4 | 1.7 | .9 | 1.2 | 10.9 | 213 | 30.8 | 163 | 92 | 63 | 2 | 0 | 3 | 1 |
| IN EVANSVILLE | 85 | 68 | 100 | 55 | 77 | -1 | .2 | -.8 | .1 | 3.4 | 64 | 30.5 | 125 | 92 | 58 | 3 | 0 | 2 | 0 |
| FORT WAYNE | 78 | 63 | 93 | 59 | 71 | -3 | 2.2 | 1.5 | 1.4 | 7.7 | 148 | 27.8 | 145 | 95 | 62 | 2 | 0 | 6 | 1 |
| INDIANAPOLIS | 81 | 64 | 97 | 58 | 73 | -2 | 2.2 | 1.2 | 1.8 | 5.3 | 90 | 24.2 | 111 | 98 | 65 | 3 | 0 | 6 | 1 |
| SOUTH BEND | 77 | 64 | 94 | 58 | 71 | -2 | .8 | 0 | .5 | 5.2 | 94 | 23.6 | 119 | 87 | 58 | 1 | 0 | 3 | 1 |
| IA DES MOINES | 77 | 63 | 90 | 56 | 70 | -6 | 4.0 | 3.3 | 1.6 | 14.7 | 262 | 30.6 | 180 | 93 | 63 | 1 | 0 | 5 | 4 |
| SIOUX CITY | 80 | 59 | 88 | 50 | 69 | -7 | .7 | -.1 | .4 | 5.1 | 92 | 17.0 | 117 | 92 | 43 | 0 | 0 | 3 | 0 |
| WATERLOO | 79 | 60 | 92 | 52 | 69 | -4 | 2.4 | 1.3 | 1.5 | 10.7 | 166 | 23.9 | 133 | 96 | 55 | 1 | 0 | 4 | 1 |
| KS CONCORDIA | 88 | 66 | 103 | 50 | 77 | -2 | T | -.8 | T | 3.9 | 67 | 16.2 | 105 | 83 | 34 | 3 | 0 | 0 | 0 |
| DODGE CITY | 88 | 61 | 98 | 46 | 74 | -5 | .1 | -.6 | .1 | 1.1 | 26 | 14.2 | 119 | 82 | 29 | 3 | 0 | 3 | 0 |
| GOODLAND | 84 | 57 | 91 | 43 | 70 | -5 | .2 | -.3 | .2 | 2.9 | 76 | 10.6 | 110 | 87 | 32 | 1 | 0 | 2 | 0 |
| TOPEKA | 85 | 66 | 98 | 51 | 75 | -3 | .2 | -.8 | .1 | 5.8 | 82 | 18.5 | 101 | 91 | 50 | 3 | 0 | 4 | 0 |
| WICHITA | 91 | 68 | 104 | 52 | 79 | -2 | T | -.9 | T | 1.9 | 33 | 10.2 | 66 | 74 | 29 | 3 | 0 | 0 | 0 |
| KY BOWLING GREEN | 91 | 69 | 103 | 57 | 80 | 2 | 1.6 | .6 | .9 | 3.9 | 59 | 25.0 | 86 | 93 | 52 | 4 | 0 | 2 | 2 |
| LEXINGTON | 87 | 68 | 97 | 61 | 78 | 2 | 4.4 | 3.3 | 2.4 | 9.1 | 140 | 26.4 | 100 | 93 | 57 | 4 | 0 | 5 | 3 |
| LOUISVILLE | 89 | 70 | 99 | 60 | 80 | 2 | .6 | -.3 | .3 | 6.9 | 127 | 35.4 | 142 | 90 | 57 | 4 | 0 | 4 | 0 |
| LA ALEXANDRIA | 89 | 73 | 96 | 64 | 81 | -1 | .7 | -.3 | .5 | 4.1 | 70 | 38.1 | 125 | 87 | 55 | 3 | 0 | 2 | 0 |
| BATON ROUGE | 92 | 71 | 96 | 64 | 82 | 0 | 3.4 | 1.8 | 2.2 | 12.2 | 200 | 43.6 | 142 | 98 | 53 | 5 | 0 | 6 | 2 |
| LAKE CHARLES | 89 | 71 | 97 | 63 | 80 | -2 | .2 | -1.0 | .1 | 6.2 | 98 | 32.9 | 122 | 98 | 53 | 2 | 0 | 5 | 0 |
| NEW ORLEANS | 91 | 73 | 96 | 65 | 82 | 0 | .6 | -.9 | .2 | 2.2 | 29 | 41.0 | 129 | 95 | 55 | 5 | 0 | 5 | 0 |

Based on 1951-80 normals

## Weather Data for the Week Ending July 14, 1990

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMP. °F | | PRECIP. | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Mar 1 | PCT. NORMAL SINCE Mar 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| SHREVEPORT | 90 | 71 | 97 | 64 | 81 | -2 | T | -.8 | T | 3.0 | 59 | 39.7 | 154 | 92 | 45 | 5 | 0 | 1 | 0 |
| ME CARIBOU | 74 | 50 | 83 | 42 | 62 | -3 | .4 | -.5 | .4 | 5.2 | 105 | 17.4 | 101 | 86 | 44 | 0 | 0 | 2 | 0 |
| PORTLAND | 79 | 56 | 87 | 50 | 67 | -1 | .1 | -.5 | .1 | 4.7 | 108 | 22.2 | 97 | 89 | 44 | 0 | 0 | 2 | 0 |
| MD BALTIMORE | 85 | 68 | 101 | 62 | 77 | 0 | 4.2 | 3.4 | 2.4 | 6.8 | 126 | 23.7 | 109 | 96 | 61 | 2 | 0 | 6 | 3 |
| SALISBURY | 87 | 70 | 95 | 66 | 79 | 2 | 1.4 | .5 | .8 | 3.7 | 68 | 23.3 | 103 | 100 | 72 | 3 | 0 | 5 | 1 |
| MA BOSTON | 79 | 63 | 89 | 59 | 71 | -2 | .8 | .2 | .7 | 1.7 | 43 | 23.3 | 101 | 89 | 47 | 0 | 0 | 3 | 1 |
| CHATHAM | 73 | 60 | 84 | 56 | 66 | -1 | .9 | .2 | .5 | 3.7 | 93 | 27.3 | 113 | 91 | 72 | 0 | 0 | 3 | 1 |
| MI ALPENA | 74 | 52 | 80 | 46 | 63 | -3 | 2.0 | 1.3 | 2.0 | 6.2 | 137 | 17.8 | 121 | 94 | 45 | 0 | 0 | 2 | 1 |
| DETROIT | 78 | 65 | 92 | 61 | 72 | -1 | .6 | -.1 | .4 | 5.5 | 115 | 20.7 | 124 | 87 | 51 | 2 | 0 | 4 | 0 |
| FLINT | 78 | 59 | 91 | 55 | 69 | -1 | .5 | -.2 | .2 | 4.3 | 95 | 15.5 | 101 | 86 | 47 | 1 | 0 | 3 | 0 |
| GRAND RAPIDS | 79 | 60 | 95 | 55 | 69 | -2 | .4 | -.3 | .3 | 3.4 | 68 | 16.5 | 94 | 92 | 48 | 1 | 0 | 4 | 0 |
| HOUGHTON LAKE | 76 | 53 | 81 | 44 | 64 | -3 | .7 | .1 | .7 | 3.3 | 74 | 13.3 | 93 | 88 | 46 | 0 | 0 | 2 | 1 |
| LANSING | 78 | 57 | 93 | 51 | 68 | -2 | 1.1 | .5 | .7 | 3.6 | 71 | 15.0 | 95 | 92 | 52 | 1 | 0 | 5 | 1 |
| MARQUETTE | 71 | 47 | 81 | 41 | 59 | -6 | .7 | -.1 | .7 | 4.2 | 78 | 16.4 | 83 | 90 | 47 | 0 | 0 | 1 | 1 |
| MUSKEGON | 81 | 59 | 88 | 53 | 70 | 0 | .1 | -.5 | .1 | 3.7 | 106 | 18.7 | 120 | 87 | 43 | 0 | 0 | 3 | 0 |
| SAULT ST. MARIE | 72 | 48 | 76 | 44 | 60 | -3 | .5 | -.2 | .5 | 5.4 | 119 | 17.5 | 111 | 98 | 50 | 0 | 0 | 1 | 0 |
| MN ALEXANDRIA | 75 | 59 | 79 | 53 | 67 | -4 | 1.2 | .5 | .9 | 5.2 | 96 | 14.8 | 111 | 93 | 45 | 0 | 0 | 2 | 1 |
| DULUTH | 74 | 49 | 80 | 39 | 61 | -4 | .5 | -.4 | .5 | 5.6 | 98 | 15.2 | 103 | 95 | 42 | 0 | 0 | 1 | 0 |
| INT'L FALLS | 78 | 51 | 82 | 45 | 65 | -2 | T | -.9 | T | 7.0 | 128 | 11.9 | 98 | 93 | 35 | 0 | 0 | 0 | 0 |
| MINNEAPOLIS | 77 | 59 | 83 | 50 | 68 | -5 | .7 | -.1 | .6 | 11.3 | 199 | 23.0 | 162 | 88 | 45 | 0 | 0 | 2 | 1 |
| ROCHESTER | 76 | 56 | 82 | 48 | 66 | -5 | .5 | -.3 | .5 | 12.0 | 220 | 27.9 | 190 | 91 | 56 | 0 | 0 | 2 | 1 |
| MS GREENWOOD | 91 | 72 | 99 | 63 | 81 | -1 | .4 | -.7 | .2 | 7.6 | 140 | 34.4 | 108 | 94 | 50 | 4 | 0 | 2 | 0 |
| JACKSON | 92 | 70 | 100 | 65 | 81 | -1 | .7 | -.4 | .6 | 2.2 | 42 | 36.2 | 119 | 100 | 52 | 5 | 0 | 2 | 1 |
| MERIDIAN | 93 | 71 | 99 | 66 | 82 | 0 | 1.7 | .5 | .8 | 5.8 | 98 | 48.3 | 152 | 97 | 51 | 5 | 0 | 3 | 2 |
| MO CAPE GIRARDEAU | 87 | 69 | 102 | 60 | 78 | -- | .1 | -.7 | .1 | 1.8 | 35 | 31.5 | 124 | 89 | 49 | 3 | 0 | 2 | 0 |
| COLUMBIA | 81 | 65 | 94 | 53 | 73 | -5 | 1.6 | .8 | 1.1 | 9.4 | 183 | 36.0 | 175 | 95 | 62 | 3 | 0 | 4 | 1 |
| KANSAS CITY | 83 | 65 | 96 | 54 | 74 | -6 | 1.3 | .4 | .7 | 7.6 | 115 | 24.7 | 127 | 92 | 53 | 3 | 0 | 4 | 1 |
| SAINT LOUIS | 85 | 70 | 100 | 57 | 78 | -1 | 1.1 | .3 | 1.0 | 4.3 | 79 | 24.6 | 125 | 85 | 49 | 3 | 0 | 4 | 1 |
| SPRINGFIELD | 82 | 65 | 93 | 52 | 74 | -4 | 1.7 | .8 | .8 | 7.3 | 114 | 42.0 | 192 | 92 | 57 | 3 | 0 | 3 | 2 |
| MT BILLINGS | 89 | 59 | 96 | 55 | 74 | 2 | T | -.2 | T | 1.0 | 40 | 8.3 | 88 | 69 | 22 | 2 | 0 | 1 | 0 |
| GLASGOW | 87 | 57 | 92 | 49 | 72 | 2 | T | -.4 | T | 1.3 | 38 | 3.6 | 55 | 75 | 23 | 2 | 0 | 1 | 0 |
| GREAT FALLS | 87 | 56 | 96 | 45 | 71 | 2 | T | -.2 | T | 1.9 | 56 | 8.8 | 89 | 69 | 24 | 1 | 0 | 1 | 0 |
| HAVRE | 87 | 56 | 94 | 45 | 72 | 2 | 0 | -.3 | 0 | .8 | 28 | 3.9 | 53 | 73 | 27 | 2 | 0 | 0 | 0 |
| HELENA | 90 | 55 | 95 | 48 | 73 | 5 | T | -.2 | T | .9 | 37 | 4.5 | 63 | 62 | 17 | 5 | 0 | 0 | 0 |
| KALISPELL | 87 | 52 | 92 | 46 | 70 | 5 | T | -.2 | T | 2.6 | 95 | 12.6 | 140 | 93 | 30 | 3 | 0 | 0 | 0 |
| MILES CITY | 87 | 61 | 94 | 53 | 74 | 0 | .4 | .1 | .2 | 2.3 | 63 | 6.4 | 71 | 75 | 29 | 3 | 0 | 5 | 0 |
| MISSOULA | 92 | 52 | 98 | 45 | 72 | 5 | T | -.2 | T | .5 | 22 | 7.3 | 93 | 72 | 17 | 5 | 0 | 0 | 0 |
| NE GRAND ISLAND | 78 | 58 | 86 | 49 | 68 | -9 | .1 | -.5 | .1 | 9.4 | 188 | 17.8 | 126 | 91 | 49 | 0 | 0 | 2 | 0 |
| LINCOLN | 84 | 62 | 94 | 49 | 73 | -5 | .6 | -.1 | .5 | 3.3 | 62 | 12.5 | 80 | 88 | 45 | 2 | 0 | 3 | 1 |
| NORFOLK | 79 | 57 | 88 | 47 | 68 | -7 | 1.6 | .8 | 1.3 | 9.2 | 156 | 16.7 | 114 | 93 | 43 | 0 | 0 | 2 | 1 |
| NORTH PLATTE | 83 | 53 | 88 | 40 | 68 | -6 | T | -.7 | T | 2.1 | 41 | 9.5 | 77 | 92 | 32 | 0 | 0 | 1 | 0 |
| OMAHA | 78 | 61 | 90 | 54 | 69 | -8 | 1.3 | .5 | .6 | 5.9 | 102 | 14.5 | 88 | 87 | 63 | 1 | 0 | 3 | 1 |
| SCOTTSBLUFF | 80 | 54 | 87 | 47 | 67 | -7 | 1.3 | .8 | .9 | 2.6 | 65 | 11.2 | 114 | 92 | 35 | 0 | 0 | 3 | 1 |
| VALENTINE | 77 | 55 | 86 | 42 | 66 | -8 | T | -.5 | T | 2.3 | 57 | 9.8 | 94 | 73 | 35 | 0 | 0 | 1 | 0 |
| NV ELY | 86 | 52 | 91 | 45 | 69 | 2 | .2 | .1 | .1 | 1.0 | 95 | 6.4 | 120 | 79 | 20 | 3 | 0 | 3 | 0 |
| LAS VEGAS | 103 | 77 | 110 | 73 | 90 | 0 | .3 | .2 | .3 | 1.3 | 573 | 3.0 | 155 | 59 | 22 | 7 | 0 | 2 | 0 |
| RENO | 95 | 60 | 98 | 54 | 78 | 8 | .5 | .5 | .5 | .6 | 134 | 3.8 | 84 | 64 | 17 | 7 | 0 | 3 | 1 |
| WINNEMUCCA | 97 | 61 | 101 | 55 | 79 | 7 | T | 0 | T | .2 | 22 | 4.3 | 90 | 49 | 16 | 7 | 0 | 1 | 0 |
| NH CONCORD | 80 | 52 | 87 | 48 | 66 | -4 | .1 | -.6 | .1 | 2.6 | 62 | 17.8 | 97 | 98 | 43 | 0 | 0 | 2 | 0 |
| NJ ATLANTIC CITY | 81 | 65 | 95 | 60 | 73 | -1 | 1.3 | .5 | .7 | 3.7 | 83 | 19.2 | 90 | 100 | 64 | 1 | 0 | 6 | 1 |
| NM ALBUQUERQUE | 87 | 62 | 90 | 53 | 75 | -4 | 1.7 | 1.4 | 1.1 | 2.1 | 207 | 5.3 | 171 | 85 | 32 | 2 | 0 | 5 | 1 |
| CLOVIS | 85 | 64 | 94 | 59 | 74 | -3 | .2 | -.5 | .1 | .2 | 4 | 3.8 | 47 | 84 | 37 | 3 | 0 | 2 | 0 |
| ROSWELL | 92 | 68 | 98 | 61 | 80 | -1 | .6 | .2 | .3 | .7 | 44 | 3.1 | 79 | 74 | 28 | 4 | 0 | 4 | 0 |
| NY ALBANY | 79 | 58 | 87 | 55 | 69 | -3 | .6 | -.1 | .4 | 3.5 | 76 | 24.9 | 135 | 93 | 53 | 0 | 0 | 2 | 0 |
| BINGHAMTON | 71 | 57 | 80 | 52 | 64 | -5 | 1.5 | .7 | 1.2 | 4.4 | 86 | 20.8 | 109 | 96 | 67 | 0 | 0 | 3 | 1 |
| BUFFALO | 79 | 60 | 84 | 55 | 70 | -1 | .9 | .2 | .6 | 4.5 | 115 | 25.9 | 143 | 86 | 48 | 0 | 0 | 3 | 1 |
| NEW YORK | 79 | 66 | 93 | 58 | 72 | -4 | 1.1 | .4 | .5 | 3.8 | 81 | 25.2 | 114 | 89 | 54 | 1 | 0 | 4 | 0 |
| ROCHESTER | 78 | 58 | 84 | 55 | 68 | -3 | .3 | -.2 | .2 | 4.0 | 102 | 20.4 | 126 | 91 | 49 | 0 | 0 | 3 | 0 |
| SYRACUSE | 78 | 58 | 84 | 54 | 68 | -3 | .3 | -.6 | .1 | 3.3 | 62 | 22.8 | 114 | 92 | 51 | 0 | 0 | 4 | 0 |
| NC ASHEVILLE | 85 | 66 | 91 | 65 | 76 | 2 | 4.7 | 3.9 | 1.6 | 5.6 | 104 | 29.9 | 124 | 100 | 62 | 3 | 0 | 4 | 3 |
| CHARLOTTE | 94 | 73 | 99 | 70 | 84 | 5 | .7 | -.2 | .6 | 2.0 | 38 | 22.1 | 90 | 90 | 44 | 5 | 0 | 3 | 1 |
| GREENSBORO | 93 | 71 | 99 | 70 | 82 | 5 | 1.1 | .1 | .4 | 1.1 | 19 | 21.3 | 92 | 94 | 50 | 4 | 0 | 4 | 0 |
| HATTERAS | 87 | 77 | 89 | 72 | 82 | 4 | .8 | -.4 | .6 | 3.8 | 58 | 28.7 | 108 | 93 | 68 | 0 | 0 | 2 | 1 |
| NEW BERN | 93 | 75 | 98 | 72 | 84 | 5 | .4 | -1.1 | .3 | 3.1 | 38 | 26.7 | 99 | 92 | 54 | 5 | 0 | 3 | 0 |
| RALEIGH | 93 | 72 | 98 | 70 | 83 | 5 | 1.5 | .5 | .5 | 2.5 | 45 | 23.6 | 104 | 94 | 51 | 6 | 0 | 5 | 2 |
| WILMINGTON | 92 | 75 | 98 | 72 | 84 | 4 | 4.0 | 2.3 | 2.5 | 6.5 | 73 | 26.5 | 97 | 94 | 55 | 5 | 0 | 5 | 2 |
| ND BISMARCK | 83 | 54 | 91 | 49 | 69 | -2 | .4 | -.1 | .4 | 5.7 | 142 | 8.8 | 94 | 93 | 36 | 1 | 0 | 2 | 0 |
| FARGO | 79 | 56 | 85 | 49 | 68 | -3 | .2 | -.6 | .2 | 6.5 | 142 | 11.9 | 114 | 92 | 43 | 0 | 0 | 2 | 0 |
| GRAND FORKS | 79 | 55 | 82 | 49 | 67 | -2 | T | -.7 | T | 5.2 | 123 | 10.5 | 110 | 91 | 38 | 0 | 0 | 0 | 0 |
| WILLISTON | 86 | 55 | 91 | 51 | 70 | 0 | .1 | -.3 | .1 | 2.3 | 64 | 5.8 | 71 | 83 | 29 | 2 | 0 | 1 | 0 |
| OH AKRON-CANTON | 75 | 62 | 89 | 57 | 69 | -3 | 5.1 | 4.2 | 3.5 | 8.7 | 172 | 29.5 | 149 | 97 | 71 | 0 | 0 | 5 | 2 |
| CINCINNATI | 85 | 66 | 96 | 60 | 75 | 0 | 2.8 | 1.8 | 1.0 | 7.9 | 130 | 31.7 | 137 | 95 | 64 | 3 | 0 | 4 | 4 |
| CLEVELAND | 77 | 65 | 89 | 59 | 71 | -1 | 2.3 | 1.6 | .7 | 4.1 | 82 | 22.7 | 118 | 93 | 61 | 0 | 0 | 5 | 3 |
| COLUMBUS | 82 | 65 | 96 | 60 | 74 | 0 | 5.7 | 4.8 | 2.3 | 10.9 | 188 | 29.7 | 141 | 97 | 66 | 3 | 0 | 6 | 4 |

Based on 1951-80 normals

## Weather Data for the Week Ending July 14, 1990

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMP. °F | | PRECIP. | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Mar 1 | PCT. NORMAL SINCE Mar 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| DAYTON | 81 | 65 | 95 | 59 | 73 | -2 | 6.9 | 6.1 | 2.9 | 10.1 | 189 | 33.3 | 165 | 96 | 67 | 2 | 0 | 6 | 4 |
| TOLEDO | 79 | 64 | 95 | 58 | 72 | 0 | .9 | .1 | .5 | 4.0 | 81 | 21.8 | 126 | 89 | 55 | 2 | 0 | 4 | 1 |
| YOUNGSTOWN | 76 | 62 | 88 | 57 | 69 | -1 | 4.2 | 3.3 | 1.6 | 7.3 | 137 | 22.8 | 113 | 97 | 66 | 0 | 0 | 5 | 3 |
| OK OKLAHOMA CITY | 91 | 69 | 100 | 58 | 80 | -2 | T | -.7 | T | 1.3 | 24 | 23.1 | 129 | 77 | 32 | 4 | 0 | 0 | 0 |
| TULSA | 91 | 71 | 101 | 60 | 81 | -2 | T | -.8 | T | 1.1 | 17 | 25.1 | 116 | 78 | 37 | 3 | 0 | 0 | 0 |
| OR ASTORIA | 72 | 56 | 77 | 52 | 64 | 4 | T | -.3 | T | 3.9 | 127 | 45.5 | 125 | 95 | 64 | 0 | 0 | 0 | 0 |
| BURNS | 94 | 55 | 97 | 45 | 75 | 6 | 0 | -.1 | 0 | .1 | 17 | 3.3 | 60 | 54 | 13 | 6 | 0 | 0 | 0 |
| MEDFORD | 101 | 62 | 105 | 55 | 81 | 9 | 0 | -.1 | 0 | .3 | 36 | 8.5 | 82 | 72 | 19 | 7 | 0 | 0 | 0 |
| PENDLETON | 99 | 64 | 105 | 54 | 81 | 8 | 0 | -.1 | 0 | .6 | 79 | 6.2 | 93 | 44 | 13 | 7 | 0 | 0 | 0 |
| PORTLAND | 89 | 61 | 93 | 58 | 75 | 8 | 0 | -.1 | 0 | 2.3 | 135 | 20.9 | 106 | 84 | 35 | 3 | 0 | 0 | 0 |
| SALEM | 92 | 56 | 98 | 50 | 74 | 8 | 0 | -.1 | 0 | 1.6 | 111 | 21.3 | 99 | 91 | 37 | 5 | 0 | 0 | 0 |
| PA ALLENTOWN | 76 | 63 | 96 | 57 | 69 | -4 | 2.7 | 1.8 | 2.1 | 5.9 | 113 | 23.3 | 102 | 95 | 65 | 1 | 0 | 4 | 1 |
| ERIE | 76 | 64 | 86 | 61 | 70 | 1 | 1.2 | .5 | .5 | 4.1 | 75 | 22.6 | 116 | 94 | 64 | 0 | 0 | 3 | 1 |
| HARRISBURG | 77 | 65 | 94 | 59 | 71 | -4 | 3.0 | 2.2 | 1.3 | 4.3 | 83 | 22.8 | 108 | 95 | 70 | 1 | 0 | 5 | 2 |
| PHILADELPHIA | 81 | 66 | 95 | 60 | 74 | -3 | 1.2 | .4 | .7 | 4.9 | 87 | 22.2 | 101 | 92 | 64 | 1 | 0 | 3 | 1 |
| PITTSBURGH | 79 | 64 | 94 | 59 | 71 | -1 | 3.9 | 3.1 | 1.6 | 8.2 | 157 | 25.9 | 124 | 97 | 69 | 1 | 0 | 6 | 3 |
| SCRANTON | 74 | 61 | 83 | 56 | 67 | -4 | 2.9 | 2.2 | 2.4 | 7.9 | 157 | 24.1 | 134 | 92 | 64 | 0 | 0 | 5 | 1 |
| RI PROVIDENCE | 78 | 60 | 87 | 56 | 69 | -4 | 1.5 | .8 | 1.3 | 3.2 | 80 | 24.5 | 104 | 97 | 52 | 0 | 0 | 2 | 1 |
| SC CHARLESTON | 94 | 76 | 99 | 73 | 85 | 4 | 1.7 | .1 | 1.3 | 5.3 | 54 | 22.4 | 80 | 93 | 50 | 6 | 0 | 3 | 1 |
| COLUMBIA | 98 | 74 | 105 | 70 | 86 | 5 | 3.2 | 2.0 | 1.2 | 4.5 | 66 | 17.0 | 61 | 93 | 41 | 6 | 0 | 4 | 3 |
| FLORENCE | 98 | 75 | 104 | 72 | 86 | 6 | 1.0 | -.4 | .8 | 1.7 | 23 | 11.2 | 46 | 92 | 38 | 6 | 0 | 4 | 1 |
| GREENVILLE | 92 | 70 | 99 | 69 | 81 | 2 | 2.4 | 1.4 | 1.5 | 3.3 | 52 | 25.3 | 86 | 98 | 49 | 5 | 0 | 6 | 1 |
| SD ABERDEEN | 80 | 55 | 84 | 47 | 67 | -5 | .7 | .2 | .4 | 9.0 | 205 | 13.6 | 124 | 98 | 42 | 0 | 0 | 2 | 0 |
| HURON | 78 | 59 | 84 | 49 | 69 | -5 | .4 | -.1 | .4 | 7.0 | 158 | 17.1 | 150 | 92 | 46 | 0 | 0 | 2 | 0 |
| RAPID CITY | 78 | 54 | 86 | 46 | 66 | -6 | .3 | -.2 | .3 | 2.2 | 52 | 9.7 | 89 | 85 | 39 | 0 | 0 | 2 | 0 |
| SIOUX FALLS | 78 | 56 | 86 | 46 | 67 | -7 | .5 | -.1 | .4 | 5.5 | 111 | 13.4 | 99 | 93 | 45 | 0 | 0 | 4 | 0 |
| TN CHATTANOOGA | 89 | 71 | 98 | 68 | 80 | 1 | 3.6 | 2.5 | 1.3 | 6.9 | 129 | 43.0 | 142 | 97 | 53 | 4 | 0 | 4 | 3 |
| KNOXVILLE | 89 | 70 | 98 | 66 | 80 | 2 | 6.7 | 5.7 | 3.0 | 8.4 | 142 | 34.2 | 123 | 93 | 55 | 4 | 0 | 4 | 3 |
| MEMPHIS | 90 | 74 | 100 | 61 | 82 | 0 | 1.5 | .6 | 1.4 | 4.2 | 79 | 34.2 | 112 | 85 | 48 | 4 | 0 | 2 | 1 |
| NASHVILLE | 92 | 71 | 102 | 61 | 81 | 2 | 2.7 | 1.9 | 1.3 | 5.4 | 100 | 20.6 | 72 | 90 | 44 | 4 | 0 | 4 | 2 |
| TX ABILENE | 92 | 70 | 98 | 57 | 81 | -3 | .4 | -.1 | .4 | .7 | 21 | 17.1 | 141 | 75 | 28 | 4 | 0 | 1 | 0 |
| AMARILLO | 87 | 63 | 96 | 51 | 75 | -4 | T | -.6 | T | .1 | 3 | 7.5 | 72 | 70 | 31 | 3 | 0 | 0 | 0 |
| AUSTIN | 97 | 73 | 100 | 70 | 85 | 1 | T | -.4 | T | 1.7 | 44 | 15.5 | 91 | 83 | 30 | 7 | 0 | 0 | 0 |
| BEAUMONT | 91 | 72 | 98 | 61 | 82 | -1 | .3 | -1.0 | .2 | 5.9 | 79 | 41.4 | 148 | 93 | 47 | 4 | 0 | 2 | 0 |
| BROWNSVILLE | 93 | 75 | 94 | 74 | 84 | 0 | .8 | .5 | .6 | 2.5 | 73 | 8.7 | 84 | 97 | 50 | 7 | 0 | 3 | 1 |
| CORPUS CHRISTI | 94 | 74 | 96 | 73 | 84 | 0 | .2 | -.3 | .2 | 1.4 | 29 | 13.4 | 95 | 94 | 43 | 7 | 0 | 2 | 0 |
| DEL RIO | 94 | 74 | 98 | 66 | 84 | -2 | .1 | -.3 | 0 | .1 | 3 | 12.1 | 144 | 72 | 34 | 6 | 0 | 3 | 0 |
| EL PASO | 94 | 69 | 99 | 62 | 82 | -1 | .2 | -.2 | .1 | .2 | 16 | 1.4 | 51 | 80 | 27 | 6 | 0 | 2 | 0 |
| FORT WORTH | 93 | 71 | 100 | 62 | 82 | -3 | .6 | .1 | .6 | 2.5 | 75 | 31.7 | 180 | 81 | 35 | 5 | 0 | 1 | 1 |
| GALVESTON | 90 | 77 | 91 | 70 | 83 | 0 | .7 | -.1 | .5 | 4.0 | 77 | 22.7 | 122 | 81 | 51 | 5 | 0 | 3 | 1 |
| HOUSTON | 92 | 71 | 95 | 62 | 82 | -2 | .1 | -.7 | .1 | 5.1 | 84 | 27.2 | 113 | 93 | 40 | 5 | 0 | 1 | 0 |
| LUBBOCK | 90 | 66 | 98 | 55 | 78 | -2 | .1 | -.4 | .1 | .1 | 3 | 6.1 | 66 | 79 | 32 | 4 | 0 | 3 | 0 |
| MIDLAND | 90 | 68 | 98 | 62 | 79 | -3 | .2 | -.2 | .2 | .2 | 11 | 4.8 | 74 | 74 | 33 | 4 | 0 | 1 | 0 |
| SAN ANGELO | 91 | 68 | 98 | 56 | 80 | -4 | T | -.3 | T | .1 | 3 | 12.3 | 139 | 74 | 30 | 4 | 0 | 0 | 0 |
| SAN ANTONIO | 97 | 74 | 98 | 72 | 85 | 1 | .1 | -.3 | .1 | 1.7 | 44 | 18.6 | 124 | 83 | 30 | 7 | 0 | 2 | 0 |
| VICTORIA | 96 | 73 | 101 | 67 | 85 | 0 | .6 | 0 | .6 | 1.6 | 27 | 13.2 | 72 | 93 | 35 | 7 | 0 | 1 | 1 |
| WACO | 96 | 72 | 102 | 60 | 84 | -2 | 0 | -.4 | 0 | 1.0 | 29 | 20.8 | 118 | 79 | 30 | 5 | 0 | 0 | 0 |
| WICHITA FALLS | 95 | 71 | 104 | 58 | 83 | -3 | .8 | .3 | .7 | 3.5 | 92 | 27.7 | 188 | 78 | 29 | 5 | 0 | 2 | 1 |
| UT CEDAR CITY | 88 | 60 | 95 | 54 | 74 | 0 | .2 | 0 | .1 | .6 | 70 | 6.1 | 117 | 73 | 23 | 4 | 0 | 2 | 0 |
| SALT LAKE CITY | 93 | 65 | 101 | 62 | 79 | 1 | .1 | 0 | .1 | .8 | 62 | 6.7 | 72 | 67 | 20 | 5 | 0 | 2 | 0 |
| VT BURLINGTON | 79 | 54 | 84 | 49 | 67 | -3 | T | -.7 | T | 3.7 | 73 | 17.2 | 104 | 91 | 42 | 0 | 0 | 1 | 0 |
| VA NORFOLK | 91 | 74 | 96 | 72 | 83 | 5 | 2.6 | 1.5 | 1.1 | 7.0 | 124 | 24.0 | 104 | 96 | 58 | 4 | 0 | 5 | 2 |
| RICHMOND | 93 | 72 | 101 | 65 | 82 | 5 | 3.2 | 2.1 | 1.7 | 4.5 | 78 | 21.9 | 99 | 93 | 53 | 6 | 0 | 4 | 3 |
| ROANOKE | 89 | 68 | 98 | 64 | 78 | 2 | 3.4 | 2.6 | 2.0 | 4.3 | 88 | 22.3 | 106 | 100 | 59 | 3 | 0 | 5 | 2 |
| WA QUILLAYUTE | 76 | 51 | 86 | 47 | 63 | 5 | 0 | -.6 | 0 | 7.4 | 184 | 59.1 | 108 | 97 | 50 | 0 | 0 | 0 | 0 |
| SEATTLE-TACOMA | 84 | 59 | 89 | 55 | 72 | 7 | T | -.2 | T | 3.6 | 212 | 24.0 | 123 | 83 | 38 | 0 | 0 | 0 | 0 |
| SPOKANE | 93 | 58 | 98 | 48 | 75 | 6 | T | -.1 | T | 2.0 | 135 | 10.7 | 115 | 71 | 19 | 6 | 0 | 1 | 0 |
| YAKIMA | 97 | 57 | 103 | 50 | 77 | 7 | T | 0 | T | .3 | 48 | 3.5 | 80 | 73 | 18 | 6 | 0 | 0 | 0 |
| WV BECKLEY | 82 | 66 | 88 | 64 | 74 | 5 | 1.7 | .7 | 1.2 | 5.5 | 91 | 22.3 | 94 | 95 | 64 | 0 | 0 | 3 | 1 |
| CHARLESTON | 88 | 69 | 96 | 63 | 79 | 4 | 2.5 | 1.3 | .6 | 6.0 | 106 | 22.3 | 95 | 99 | 63 | 4 | 0 | 6 | 2 |
| HUNTINGTON | 86 | 69 | 97 | 61 | 78 | 2 | 1.7 | .6 | .5 | 6.0 | 108 | 26.5 | 115 | 93 | 60 | 4 | 0 | 5 | 1 |
| PARKERSBURG | 83 | 66 | 95 | 59 | 74 | 0 | 2.7 | 1.8 | 1.5 | 6.1 | 107 | 24.8 | 115 | 99 | 67 | 2 | 0 | 5 | 2 |
| WI GREEN BAY | 75 | 57 | 86 | 51 | 66 | -3 | .1 | -.6 | .1 | 11.1 | 240 | 20.8 | 144 | 87 | 46 | 0 | 0 | 2 | 0 |
| LACROSSE | 79 | 59 | 86 | 48 | 69 | -4 | T | -.8 | T | 9.4 | 161 | 20.4 | 127 | 95 | 52 | 0 | 0 | 1 | 0 |
| MADISON | 79 | 59 | 90 | 47 | 69 | -2 | .1 | -.8 | .1 | 5.1 | 92 | 19.2 | 118 | 91 | 49 | 1 | 0 | 2 | 0 |
| MILWAUKEE | 73 | 62 | 95 | 58 | 68 | -3 | .7 | -.1 | .7 | 5.7 | 108 | 23.1 | 138 | 86 | 57 | 1 | 0 | 2 | 1 |
| WAUSAU | 77 | 56 | 82 | 47 | 66 | -3 | .2 | -.7 | .2 | 7.4 | 131 | 17.5 | 109 | 89 | 43 | 0 | 0 | 1 | 0 |
| WY CASPER | 84 | 52 | 89 | 45 | 68 | -3 | T | -.2 | T | 1.3 | 73 | 5.8 | 80 | 82 | 24 | 0 | 0 | 1 | 0 |
| CHEYENNE | 72 | 50 | 77 | 44 | 61 | -7 | .5 | .1 | .3 | 2.2 | 77 | 12.0 | 145 | 93 | 48 | 0 | 0 | 3 | 0 |
| LANDER | 87 | 57 | 90 | 54 | 72 | 2 | T | -.2 | T | .4 | 20 | 4.3 | 49 | 63 | 21 | 1 | 0 | 0 | 0 |
| SHERIDAN | 87 | 52 | 92 | 50 | 70 | 0 | .1 | -.1 | .1 | 2.2 | 78 | 8.8 | 90 | 87 | 25 | 1 | 0 | 1 | 0 |

Based on 1951-80 normals

# National Agricultural Summary

**July 9-15, 1990**

**HIGHLIGHTS:** Rain slowed winter wheat harvest in the **Corn Belt**. Winter wheat harvest was virtually complete in the **central and southern Great Plains** and was underway in most of the **Pacific Northwest**. Beneficial rains fell in the **Delta** and **Southeast**, but soil moisture was still mostly short to adequate. In the **Corn Belt**, soil moisture was adequate or adequate to surplus. Soil moisture was mostly adequate to short in the **central and northern Great Plains**. In the **southern Great Plains** and the **West**, soil moisture was short to adequate. Rain improved pasture conditions in the **Delta** and **Southeast**, but more was needed.

**SMALL GRAINS:** Winter wheat harvest was 77 percent (%) complete, 2 percentage points behind the 5-year average. Harvest was complete in Kansas and Oklahoma, and nearly complete in Texas. Rain slowed harvest in the Corn Belt and northern Great Plains. Harvest advanced rapidly in Indiana and Ohio but was slowed by rain at midweek. Harvest advanced 37 and 30 points in Indiana and Ohio, respectively, but was still behind normal. In Michigan, harvest was underway but lagged behind normal. Crop condition was good to fair in Montana and Washington and good in Idaho. Harvest was underway in Washington and continued in Idaho and Oregon.

Spring wheat was mostly good to fair with 95% of the acreage headed, 2 points ahead of normal. North Dakota's crop was in good to fair condition.

**CORN:** Corn was in mostly good to fair condition with 12% of the acreage in the silking stage or beyond, 26 points behind normal. Crop development lagged behind normal in the Corn Belt, especially in Illinois and Missouri. Crop condition improved in the Corn Belt. Corn was in good condition in Illinois and Nebraska and good to fair in Iowa. Rain improved crop condition in Georgia, but it was still mostly fair to poor. Harvest began in Georgia and continued in Texas.

**SOYBEANS:** Soybeans were in mostly good to fair condition with 19% of the acreage blooming, 21 points behind normal. The percentage of acreage blooming lagged behind normal in the central and western Corn Belt. In Illinois, 20% of the acreage was blooming, 47 points behind the 67% average. Crop condition was good or good to fair in the Corn Belt. Soybeans were mostly fair to good in the Delta and Southeast. Rain improved the crop late in the week but more was needed.

**COTTON:** Cotton was good to fair with 86% of the acreage squaring, 9 points ahead of normal. Thirty-seven percent of the acreage was setting bolls, 3 points ahead of normal. Crop development lagged behind normal in Missouri and Tennessee. Crop condition was good to fair in Mississippi, Arkansas, and Louisiana. In Texas, cotton was in fair to good condition. Rain improved crop condition in the central and Blacklands areas, but more was needed. Cotton was good in California and good to excellent in Arizona.

**SORGHUM:** Sorghum was in mostly fair to good condition with 21% of the acreage headed, 3 points behind normal. Crop development lagged behind normal in Arkansas and Missouri. Crop condition was good to fair in Nebraska and Kansas and mostly fair in Texas. Rain improved sorghum condition in the Plains area of Texas. Harvest activity was increasing in the Blacklands area and was nearly complete in the Rio Grande Valley.

**OTHER FIELD CROPS:** Rice was mostly good to fair with 18% of the acreage headed, 2 points behind normal. Early variety rice harvest was underway in southern Louisiana. Louisiana's sugarcane was in fair to good condition. Peanuts were in good to fair condition in Alabama and North Carolina and fair to good in Georgia. Tobacco harvest continued in Georgia and North Carolina. Tobacco was fair to good in Kentucky and Tennessee.

**FRUIT AND NUTS:** Rain fell in Florida's citrus producing areas. New growth was abundant and late bloom was nearly over. The new crop fruit was sizing well. Peach harvest continued ahead of normal in the Delta and Southeast. In Texas, pecan drop was above normal in some areas due to hot, dry weather. Grape harvest was active in central Arizona. Apricot harvest was nearly complete in California. Bartlett pear and early variety cling peach harvests began. Tart cherry harvest continued in Oregon and was underway in Michigan and New York.

**VEGETABLES:** Rain and warm temperatures prevailed in Florida's vegetable producing areas. Land preparation for fall planting was active. Watermelon harvest continued in Georgia and South Carolina. Tomato harvest was nearly complete in South Carolina. Irish potato harvest was 78% complete in North Carolina. Sweetpotato harvest was underway in Louisiana but was slowed by dry soil conditions. Louisiana's vegetables were in fair to good condition. Potato and onion harvests continued in the High Plains area of Texas. Land preparation for fall plantings was active in the Rio Grande Valley. Chipper potato and sweet corn harvests were complete in central Arizona. Melon harvests were active in the San Joaquin Valley of California. In Oregon, broccoli, lettuce, and snap bean harvests were underway in the Willamette Valley. Potatoes were in good condition in Idaho and North Dakota. Sweet corn harvest was underway in Michigan and New York.

**PASTURES AND LIVESTOCK:** Pastures were in good or good to fair condition in the Corn Belt and central and northern Great Plains. Rain improved pastures in Texas, but supplemental feeding continued in many areas. In the Delta and Southeast, rain improved pastures, but more was needed. Pasture condition was mostly fair to good. Supplemental feeding was necessary in portions of Kentucky and Georgia. Stock water supplies were short in portions of California and Oregon.

## Crop Progress

FOR WEEK ENDING JULY 15, 1990

GRAIN SORGHUM
% HEADED

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| AR | 12 | 22 | 41 |
| CO | 0 | 1 | 1 |
| IL | 0 | 5 | NA |
| KS | 4 | 2 | 4 |
| LA | 66 | 41 | 63 |
| MS | 37 | 32 | 43 |
| MO | 5 | 22 | 24 |
| NE | 0 | 1 | 3 |
| NM | 0 | NA | NA |
| OK | 3 | 20 | 10 |
| SD | 0 | 2 | 0 |
| TX | 61 | 60 | 62 |
| 12 STATES | 20 | NA | NA |
| EXCL. STATES WITH NA | 21 | 22 | 24 |

THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

COTTON
% SQUARING

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| AL | 95 | 94 | 96 |
| AZ | 100 | 100 | 98 |
| AR | 98 | 95 | 98 |
| CA | 90 | 97 | 98 |
| GA | 100 | 97 | 97 |
| LA | 94 | 83 | 91 |
| MS | 90 | 84 | 93 |
| MO | 82 | 99 | 99 |
| NM | 83 | 95 | 89 |
| NC | 89 | 63 | 78 |
| OK | 70 | 30 | 35 |
| SC | 83 | 73 | 83 |
| TN | 84 | 86 | 90 |
| TX | 80 | 58 | 60 |
| 14 STATES | 86 | 74 | 77 |

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

COTTON
% SETTING BOLLS

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| AL | 40 | 32 | 48 |
| AZ | 90 | 94 | 85 |
| AR | 45 | 29 | 56 |
| CA | 45 | 50 | 47 |
| GA | 70 | 42 | 58 |
| LA | 80 | 31 | 50 |
| MS | 60 | 13 | 46 |
| MO | 12 | 36 | 50 |
| NM | 40 | 40 | 38 |
| NC | 50 | 25 | 42 |
| OK | 10 | 1 | 10 |
| SC | 40 | 22 | 47 |
| TN | 10 | 19 | 29 |
| TX | 22 | 14 | 16 |
| 14 STATES | 37 | 25 | 34 |

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

SPRING WHEAT
% HEADED

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| ID | 95 | 84 | 92 |
| MN | 100 | 96 | 95 |
| MT | 82 | 78 | 89 |
| ND | 97 | 92 | 93 |
| SD | 100 | 100 | 99 |
| 5 STATES | 95 | 90 | 93 |

THESE 5 STATES PRODUCED 89% OF THE 1989 SPRING WHEAT CROP.

RICE
% HEADED

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| AR | 0 | 0 | 3 |
| CA | 0 | 0 | 0 |
| LA | 48 | 47 | 46 |
| MS | 15 | 19 | 16 |
| TX | 59 | 73 | 63 |
| 5 STATES | 18 | 20 | 20 |

THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.

WINTER WHEAT
% HARVESTED

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| AR | 100 | 96 | 99 |
| CA | 90 | 95 | 96 |
| CO | 68 | 47 | 69 |
| GA | 100 | 99 | 100 |
| ID | 2 | 0 | 1 |
| IL | 94 | 97 | 98 |
| IN | 81 | 73 | 89 |
| KS | 100 | 95 | 97 |
| MI | 5 | 3 | 25 |
| MO | 92 | 98 | 99 |
| MT | 0 | 0 | 5 |
| NE | 70 | 68 | 78 |
| NC | 100 | 93 | 97 |
| OH | 50 | 36 | 70 |
| OK | 100 | 100 | 100 |
| OR | 6 | 3 | 7 |
| SD | 12 | 33 | 30 |
| TX | 99 | 95 | 98 |
| WA | 2 | 2 | 5 |
| 19 STATES | 77 | 74 | 79 |

THESE 19 STATES PRODUCED 88% OF THE 1989 WINTER WHEAT CROP.

CORN
% SILKING

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| CO | 3 | 2 | 16 |
| GA | 98 | 96 | 98 |
| IL | 18 | 50 | 67 |
| IN | 10 | 19 | 43 |
| IA | 0 | 15 | 33 |
| KS | 40 | 35 | 45 |
| KY | 25 | 47 | 57 |
| MI | 2 | 2 | 10 |
| MN | 0 | 1 | 10 |
| MO | 19 | 62 | 69 |
| NE | 8 | 19 | 37 |
| NC | 84 | 66 | 79 |
| OH | 6 | 2 | 31 |
| PA | 2 | 3 | 7 |
| SD | 0 | 3 | 6 |
| TX | 82 | 74 | 79 |
| WI | 3 | 3 | 12 |
| 17 STATES | 12 | 23 | 38 |

THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.

SOYBEANS
% BLOOM

| | 1990 | 1989 | AVG. |
|---|---|---|---|
| AL | 23 | 17 | 22 |
| AR | 2 | 15 | 9 |
| GA | 29 | 20 | 26 |
| IL | 20 | 57 | 67 |
| IN | 23 | 28 | 48 |
| IA | 28 | 51 | 57 |
| KS | 25 | 20 | 25 |
| KY | 9 | 17 | 26 |
| LA | 24 | 23 | 25 |
| MI | 5 | 5 | 15 |
| MN | 31 | 42 | 49 |
| MS | 18 | 13 | 18 |
| MO | 7 | 34 | 43 |
| NE | 10 | 30 | 50 |
| NC | 13 | 6 | 9 |
| OH | 16 | 4 | 20 |
| SC | 11 | 5 | 7 |
| SD | 17 | 23 | 31 |
| TN | 10 | 8 | 17 |
| 19 STATES | 19 | 32 | 40 |

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

## Crop Condition

PERCENT

FOR WEEK ENDING JULY 15, 1990

### CORN

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| CO | 1 | 4 | 14 | 68 | 13 |
| GA | 21 | 24 | 38 | 17 | 0 |
| IL | 0 | 2 | 13 | 71 | 14 |
| IN | 0 | 4 | 19 | 68 | 9 |
| IA | 0 | 3 | 11 | 75 | 11 |
| KS | 0 | 7 | 32 | 49 | 12 |
| KY | 1 | 19 | 51 | 28 | 1 |
| MI | 0 | 5 | 20 | 45 | 30 |
| MN | 0 | 0 | 27 | 61 | 12 |
| MO | 1 | 6 | 64 | 28 | 1 |
| NE | 0 | 0 | 12 | 75 | 13 |
| NC | 13 | 36 | 40 | 11 | 0 |
| OH | 2 | 9 | 31 | 48 | 10 |
| PA | 1 | 6 | 24 | 48 | 21 |
| SD | 0 | 0 | 8 | 65 | 27 |
| TX | 8 | 25 | 32 | 34 | 1 |
| WI | 0 | 1 | 18 | 75 | 6 |
| 17 STATE | 1 | 4 | 20 | 63 | 12 |
| PREV WEEK | 1 | 4 | 27 | 59 | 9 |
| PREV YEAR | 1 | 8 | 33 | 49 | 9 |

### COTTON

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AL | 0 | 2 | 59 | 39 | 0 |
| AZ | 0 | 0 | 0 | 73 | 27 |
| AR | 0 | 0 | 37 | 63 | 0 |
| CA | 0 | 0 | 10 | 85 | 5 |
| GA | 1 | 12 | 62 | 25 | 0 |
| LA | 0 | 7 | 43 | 43 | 7 |
| MS | 5 | 3 | 35 | 51 | 6 |
| MO | 5 | 4 | 73 | 18 | 0 |
| NM | 0 | 5 | 50 | 40 | 5 |
| NC | 0 | 6 | 45 | 45 | 4 |
| OK | 0 | 0 | 45 | 55 | 0 |
| SC | 2 | 24 | 73 | 1 | 0 |
| TN | 4 | 9 | 35 | 49 | 3 |
| TX | 1 | 12 | 53 | 33 | 1 |
| 14 STATE | 1 | 7 | 43 | 46 | 3 |
| PREV WEEK | 3 | 7 | 40 | 47 | 3 |
| PREV YEAR | 1 | 13 | 45 | 38 | 3 |

### RICE

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AR | 0 | 0 | 43 | 57 | 0 |
| CA | 0 | 0 | 15 | 75 | 10 |
| LA | 0 | 0 | 21 | 79 | 0 |
| MS | 0 | 11 | 45 | 41 | 3 |
| TX | 3 | 0 | 24 | 67 | 6 |
| 5 STATE | 0 | 1 | 32 | 64 | 3 |
| PREV WEEK | 0 | 0 | 29 | 68 | 3 |
| PREV YEAR | 0 | 1 | 31 | 64 | 4 |

### SPRING WHEAT

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ID | 1 | 4 | 17 | 64 | 14 |
| MN | 0 | 0 | 22 | 50 | 28 |
| MT | 10 | 24 | 29 | 34 | 3 |
| ND | 0 | 0 | 24 | 61 | 15 |
| SD | 1 | 3 | 21 | 53 | 22 |
| 5 STATE | 2 | 6 | 24 | 53 | 15 |
| PREV WEEK | 2 | 6 | 18 | 57 | 17 |
| PREV YEAR | 7 | 13 | 56 | 21 | 3 |

### SORGHUM

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AR | 1 | 3 | 84 | 12 | 0 |
| CO | 1 | 1 | 37 | 53 | 8 |
| IL | 0 | 4 | 52 | 44 | 0 |
| KS | 0 | 0 | 42 | 53 | 5 |
| LA | 0 | 7 | 43 | 50 | 0 |
| MS | 0 | 8 | 52 | 40 | 0 |
| MO | 3 | 5 | 68 | 23 | 1 |
| NE | 0 | 0 | 31 | 64 | 5 |
| NM | 34 | 16 | 28 | 22 | 0 |
| OK | 0 | 5 | 80 | 15 | 0 |
| SD | 0 | 3 | 23 | 64 | 10 |
| TX | 4 | 24 | 41 | 30 | 1 |
| 12 STATE | 2 | 8 | 43 | 44 | 3 |
| PREV WEEK | 2 | 8 | 43 | 43 | 4 |
| PREV YEAR | 5 | 13 | 28 | 42 | 12 |

### SOYBEANS

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AL | 0 | 4 | 40 | 54 | 2 |
| AR | 2 | 4 | 66 | 28 | 0 |
| GA | 15 | 22 | 55 | 8 | 0 |
| IL | 0 | 3 | 32 | 63 | 2 |
| IN | 0 | 2 | 19 | 71 | 8 |
| IA | 0 | 4 | 22 | 66 | 8 |
| KS | 0 | 0 | 27 | 55 | 18 |
| KY | 0 | 23 | 40 | 37 | 0 |
| LA | 0 | 7 | 41 | 48 | 4 |
| MI | 0 | 5 | 20 | 50 | 25 |
| MN | 0 | 3 | 25 | 66 | 6 |
| MS | 7 | 6 | 69 | 17 | 1 |
| MO | 3 | 6 | 63 | 27 | 1 |
| NE | 0 | 0 | 13 | 77 | 10 |
| NC | 1 | 13 | 53 | 33 | 0 |
| OH | 2 | 8 | 31 | 48 | 11 |
| SC | 6 | 41 | 53 | 0 | 0 |
| SD | 0 | 3 | 6 | 76 | 15 |
| TN | 0 | 9 | 44 | 47 | 0 |
| 19 STATE | 1 | 6 | 35 | 52 | 6 |
| PREV WEEK | 1 | 5 | 40 | 50 | 4 |
| PREV YEAR | 2 | 8 | 37 | 48 | 5 |

VP - VERY POOR P - POOR F - FAIR G - GOOD EX - EXCELLENT

## State Summaries of Weather and Agriculture

**These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.**

**ALABAMA:** Rainfall under 0.50 in. east central, southeast; 1.00 to 3.00 in. several locations; near 5.00 in. isolated areas. Temperatures 2 to 4° below normal north, 1 to 2° below normal elsewhere.

Days suitable for fieldwork 5.2. Soil moisture 14% very short, 45% short, 41% adequate. Much needed rain benefitted all crops, pastures. Corn 93% silked, 83% 1989, 91% avg.; 50% dented, 44% 1989, 48% avg.; 20% mature, 21% 1989, 24% avg.; 36% poor, 35% fair, 23% good, 6% excellent. Cotton 95% squaring, 94% 1989, 96% avg.; 40% setting bolls, 32% 1989, 48% avg.; 2% poor, 59% fair, 39% good. Peanuts 85% pegging, 85% 1989, 76% avg.; 28% fair, 72% good. Soybeans 23% blooming, 17% 1989, 22% avg.; 12% setting pods, 8% 1989, 8% avg.; 4% poor, 40% fair, 54% good, 2% excellent. Pastures 12% very poor, 34% poor, 39% fair, 15% good. Livestock 8% poor, 39% fair, 52% good, 1% excellent. Primary activities: Controlling weeds, insects in row crops; applying fungicides to peanuts; harvesting fruits, vegetables; mowing pastures; repairing equipment, fences; routine care of livestock, poultry, catfish.

**ALASKA:** Rainfall brought relief to the Tanna Valley, upper regions of the Matanuska. Soil moisture was unduly short.

Topsoil 46% short, 54% adequate. Subsoil 32% short, 68% adequate. Small grain 15% oats; 25% barley in early dough stage of development. Heights of small grains 22 in., 8 in. below 1989. Harvest first crop hay 95% complete. Commercial potato heights 13 in. Harvest of cabbage, head, leaf lettuce, romaine, radishes, other greens continued.

**ARIZONA:** Monsoon 8th statewide; thunderstorms 9th south, west; monsoon 10th southern half, thunderstorms moved westward throughout day; scattered thunderstorms 11th to 13th; winds 40 mph to 70 mph many areas; rain, hail. Rainfall 0.18 in. southeast to 2.13 ins. east central. Temperatures 4° below to 1° above normal. Extremes 44°; 95° mountains; 78°; 113° deserts.

Cotton squaring 100%, 100% 1989, 98% avg.; setting bolls 90%, 94% 1989, 85% avg.; lygus controls applied west, pink boll worm applied central; 73% good, 27% excellent. Alfalfa hay mostly active; 70% good, 30% excellent; rain damage 60% moderate, 40% light; weeds moderate. Grapes, melons harvested central; chipper potato, sweet corn harvests completed; cabbage harvest continued east.

**ARKANSAS:** Mild week. Scattered showers throughout State. Temperatures below normal. Extremes 47°; 106°. Rainfall none to 2.60 in.

Days suitable for fieldwork 6.0. Soil moisture 86% short, 14% adequate. Main activities: Irrigation; cultivation; applying herbicides, insecticides, fungicides, fertilizer; cutting, baling hay. Corn 7% poor, 24% fair, 69% good. Cotton 98% squaring, 95% 1989, 98% avg.; 37% fair, 63% good. Soybeans 94% emerged, 85% 1989, 91% avg.; 2% very poor, 4% poor, 66% fair, 28% good. Sorghum 12% headed, 22% 1989, 41% avg.; 1% very poor, 3% poor, 84% fair, 12% good. Sheath blight control in rice. Corn tasseling, silking. Quality of blueberries, peaches, tomatoes, watermelons good. Pastures 56% poor, 43% fair, 1% good. Livestock good; continued stress from flies, ticks.

**CALIFORNIA:** Temperatures warmed much above normal breaking records many areas. Thunderstorm activity mainly southeastern desert areas, Sierra.

Widely scattered, thundershowers, few interruptions fieldwork. Small grain harvest rapidly approached completion except late high elevation fields. cotton good progress, warmer weather. Pest treatments ongoing. Seeding second crop corn, dry beans. Weeding, aphid, mildew controls sugarbeets. Harvest normal. Sudan, Bermuda grass seed harvests Imperial Valley. Alfalfa, other hay harvest normal. Apple growers sprayed for codling, oriental fruit moths. Apricot harvest winding down; fig harvest progressed. Bagging dates, Riverside County. Grapes irrigated; treated for pests, mildew. Picking table grapes increased. Desert valley table grape harvest virtually complete. Freestone peaches 56%, nectarines 46%, plums 44% packed. Peaches sprayed for pests. Cling peach early variety harvest begun. Bartlett pear harvest begun. Avocado harvest slow, steady. Summer grapefruit progressed, Valencia orange harvest slowed. Oranges sprayed for red scale. Almonds irrigated, treated for navel orange worm. Walnut husk fly in orchards. Broccoli continued, moderate supply central coast, generally good quality. Melon harvest active San Joaquin Valley. Cauliflower moderate supply, variable quality. Celery heavy supply, generally good quality. Sweet Corn picking active. Iceberg Head lettuce moderate supply, variable quality. Potato harvest continued seasonally. Processing, fresh market tomatoes being harvested. Strawberries moderate supply, good quality Watsonville area. Livestock continued good throughout State. Pasture, range northern third good; however, few have dry stock ponds. Pasture, range elsewhere very poor to fair. Short water supplies concern over much of lower two thirds of State.

**COLORADO:** Cool temperatures, moisture continued across most of the State. West slope continued to be hot. Temperatures 1 to 6° below normal with rainfall all river basins.

Days suitable for fieldwork 4.4. Soil moisture 5% very short, 41% short, 48% adequate, 6% surplus. Alfalfa first cutting 84% cut; second cutting 14% cut. Barley 90% headed; 56% turning color; 19% harvested. Oats 83% headed; 46% turning color; 17% harvested. Spring wheat 97% headed; 35% turning color; 3% harvested. Winter wheat 68% harvested. Dry beans 10% flowered; corn 3% silked. Sorghum 0% headed. Dry Onions, potatoes, sugarbeets, livestock remain mostly good. Condition for pasture, range feed 1% very poor, 10% poor, 36% fair, 46% good, 7% excellent.

**FLORIDA:** Temperatures 1° of normal, most locations. Extremes 63°; 100°. Rain varied considerably; some locations less than 1.00 in.; others more than 5.00 in. Greatest weekly total 7.14 in. Gainesville. Rain fell nearly each day most locations.

Soil moisture northern Peninsula short to adequate; elsewhere, mostly adequate. Hay, tobacco, corn silage harvests active. Corn harvest for grain starting. Soybeans, cotton peanuts, sugarcane good progress. Pasture 9% poor, 27% fair, 36% good, 27% excellent. Late week rains improved pasture prospects many areas. Cattle fair to excellent, most good. Rain all

citrus areas; irrigation stopped. Abundant new foliage. Late bloom almost over. New crop fruit sizes, progress good. Caretakers cutting cover crops, spraying, fertilizing, pruning. Rainy, warm over vegetable areas. Summer vegetables available most areas for local market. Fall crop land preparation active. Limited tomato plantings underway southern areas.

**GEORGIA**: Rain 2.00 to 5.00 in. common north Atlanta to Athens area. Heaviest 7.37 in. 1 mile south Ellijay. Elsewhere 0.50 to 1.50 in. isolated 3.00 plus in. Few areas central, south areas received under 0.50 in. Temperatures degree or two above normal. Hottest into 90s, 100° above common east Athens to Valdosta area. Coolest from mid 50s low 60s mountains, mid 60s low 70s elsewhere.

Days suitable for fieldwork 5.8. Soil moisture 42% very short, 46% short, 12% adequate. Corn 93% dough, 87% 1989, 89% avg.; 77% dent, 53% 1989, 63% avg.; 29% mature, 6% 1989, 21% avg.; 1% harvested for grain, 0% 1989, 2% avg. Cotton blooming out top some areas, insect pressure increasing. Sorghum 4% very poor, 32% poor, 55% fair, 9% good; 98% planted, 95% 1989, 98% avg. Peanuts 1% very poor, 4% poor, 56% fair, 39% good; 99% blooming, 98% 1989, 97% avg.; 80% pegging, 86% 1989, 84% avg.; Irrigation heavy in peanuts, disease control. Soybeans 98% planted, 96% 1989, 98% avg.; some soybean acreage not planted due drought. Tobacco 1% poor, 54% fair, 45% good; 38% harvested, 35% 1989, 29% avg. Watermelons 1% very poor, 31% poor, 64% fair, 4% good; 85% harvested, 70% 1989, 80% avg. Apples 3% very poor, 32% poor, 59% fair, 6% good; 7% harvested, 1% 1989, 6% avg. Peaches 34% very poor, 8% poor, 20% fair, 38% good; 91% harvested, 81% 1989, 84% avg. Hay, pastures poor to fair, more cattlemen feeding hay. Cattle, hogs fair to good. Main activities: Harvesting apples, peaches, tobacco, watermelons. Spraying for disease, insect control, irrigating row crops.

**HAWAII**: Fair weather continued over islands. Skies mostly sunny with scattered showers. Winds variable 10 to 20 mph. Temperatures high 60s to low 90s. Rainfall none to 5.40 in.

Days suitable for farm work 7.0. Papaya harvest low. Sugar, pineapple harvesting continuous. Banana production on up swing.

**IDAHO**: Temperatures above normal. Precipitation below normal except isolated areas southwest, east.

Days suitable for fieldwork 7.0. Soil moisture 4% very short, 32% short, 63% adequate, 1% surplus. Winter wheat good; 67% turning color; harvest began lower elevations north, isolated areas south. Winter barley harvest began. Spring wheat good; 20% turning color. Spring barley 92% headed, 76% 1989, 88% avg.; 21% turning color. Potato good; 90% over 12 in. high; 55% closing middles. Alfalfa 1st cutting virtually harvested; 2nd cutting 19% harvested, 13% 1989, 9% avg. Bluegrass seed harvest began north. Mint 4% harvested. Cherries harvested north. Peach, apricot harvest early stages. Apples developing well, 1.00 to 2.00 in. north. Irrigation major activity; water supplies good to fair, very poor areas east. Spraying grasshoppers. Range, pasture 9% poor, 38% fair, 43% good, 10% excellent; slightly lower than last week, lower than previous month.

**ILLINOIS**: Temperatures 5 to 8° below normal north, 1 to 5° below normal south. Precipitation generally 1.25 to 3.00 in., less than 1.00 in. south.

Days suitable for fieldwork 4.50. Soil moisture 16% short, 67% adequate, 17% surplus. Corn dough stage 1%, 3% 1989, 9% avg. Soybean setting pods 2%, 13% 1989, 21% avg. Oats 1% poor, 18% fair, 66% good, 15% excellent; filled 95%, 100% 1989, 100% avg.; turning color 69%, 92% 1989, 95% avg.; ripe 28%, 51% 1989, 70% avg.; harvested 9%, 22% 1989, 37% avg. Alfalfa 4% poor, 14% fair, 68% good, 14% excellent; second cutting 44%, 72% 1989, 72% avg. Clover hay cut 85%, 100% 1989, 100% avg. Pasture 4% poor, 20% fair, 58% good, 18% excellent.

**INDIANA**: Temperatures 3 to 6° below normal. Lows upper 50s to low 60s, highs low 70s to low 80s. Precipitation 1.00 to 2.00 in.

Days suitable for fieldwork 3.5. Topsoil 13% short, 51% adequate, 36% surplus. Subsoil 6% short, 78% adequate, 16% surplus. Corn 49 in. high, 56 in. 1989, 63 in. avg. Soybeans 14 in. high, 14 in. 1989, 18 in. avg. Rye 42% harvested, 50% 1989, 68% avg. Alfalfa hay 38% cut twice, 53% 1989, 62% avg. Pasture 3% poor, 29% fair, 59% good, 9% excellent. Mid week showers halted field activities, including combining wheat.

**IOWA**: Temperatures 5 to 8° below normal. Extremes 46°; 94°. Precipitation 0.10 to 4.36 in; average 1.54 in.

Days suitable for fieldwork 3.7. Topsoil 4% short, 58% adequate, 38% surplus. Subsoil 3% short, 75% adequate, 22% surplus. Winter wheat 50% harvested, 80% 1989, 77% avg.; mostly good. Hay 3% poor, 16% fair, 64% good, 17% excellent. Pasture 2% poor, 10% fair, 53% good, 35% excellent. Oats 90% turning color, 97% 1989, 98% avg. Oats 5% harvested, 14% 1989, 34% avg.; 2% poor, 10% fair, 74% good, 14% excellent. Second crop alfalfa hay 30% harvested, 55% 1989, 56% avg. Corn 10% tasseled, 36% 1989, 54% avg. Soybeans 85% cultivated first time, 100% 1989, 98% avg. Livestock mostly good. Cooler weather brought relief to States livestock herds.

**KANSAS**: Weather cool, dry. Temperatures lower 70s northwest, mid to upper 70s elsewhere, 4 to 6° below normal. Precipitation generally light, 0.15 in. in northwest, south central, to 0.65 in. northeast.

Days suitable for fieldwork 6.0. Topsoil 82% short, 15% adequate, 3% surplus. Subsoil 52% short, 48% adequate. Wheat harvest complete, ideal harvest weather produced one of quickest harvests in recent years. Corn excellent growth; silking only slightly behind schedule. Cool weather very beneficial at crucial pollination stage. Insect populations starting build up. Sorghum planting complete, heading started south central, southeast counties. Soybean planting still not complete. All unplanted acreage southeast counties. Blooming making good progress; some stands setting pods. Second cutting alfalfa nearing completion; third cutting underway. Rain needed to insure third cutting on dryland stands. Range, pasture still good for time of year.

**KENTUCKY**: Afternoon highs reaching 100° early in week west. Strong Canadian storm system 12th kept skies mostly cloudy, temperatures cool. Night lows 50s to lower 60s 13th, 14th. Temperatures mid 70s, few degrees below normal. Heavy rain east 2.00 to 3.00 in. West rain 0.25 in.

Days suitable for fieldwork 4.3. Soil moisture 21% very short, 39% short, 39% adequate, 1% surplus. Hot, dry conditions stressed crops. Late week rain brought much needed relief. Corn mostly fair to good. Dry weather hampered double crop soybean emergence, planting nearing completion. About 47% tobacco 24 in. or taller. Tobacco 2% very poor, 12% poor, 60% fair, 26% good. Pasture

declined; 4% very poor, 20% poor, 37% fair, 35% good, 4% excellent. Heat stressed cattle, hay feeding underway some areas.

**LOUISIANA:** Temperatures 1° below normal. Extremes 59°; 101°. Rainfall 0.11 to 1.80 in.

Days suitable for fieldwork 5.5. Soil moisture 2% very short, 51% short, 42% adequate, 5% surplus. Corn dough stage 90%, 79% 1989, 85% avg.; mature 24%, 14% 1989, 18% avg.; 31% fair, 61% good, 8% excellent. Cotton squaring 94%, 83% 1989, 91% avg.; setting bolls 80%, 31% 1989, 50% avg.; 7% poor, 43% fair, 43% good, 7% excellent. Irrigation in north continued. Hay first cutting 97%, 79% 1989, 93% avg. Peaches harvested 78%, 46% 1989, 71% avg.; 57% fair, 43% good. Rice headed 48%, 47% 1989, 46% avg.; ripe 4%, 2% 1989, 3% avg.; 21% fair, 79% good. Early varieties being harvested in south. Sorghum headed 66%, 41% 1989, 63% avg., turning color 4%, 3% 1989, 15% avg.; 7% poor, 43% fair, 50% good. Soybeans planted 98%, 93% 1989, 98% avg.; emerged 95%, 89% 1989, 94% avg.; blooming 24%, 23% 1989, 25% avg.; setting pods 4%, 1% 1989, 5% avg.; 7% poor, 41% fair, 48% good, 4% excellent. Sweet potatoes planted 95%, 88% 1989, 97% avg.; harvested 1%, 0% 1989, 0% avg.; 55% fair, 27% good, 18% excellent. Harvesting slowed by dry soils. Sugarcane 9% poor, 64% fair, 27% good. Livestock 33% fair, 62% good, 5% excellent. Calves being sold due to lack of sufficient pasture. Pasture 15% poor, 47% fair, 36% good, 2% excellent. Vegetable 8% poor, 68% fair, 24% good.

**MARYLAND & DELAWARE:** MARYLAND: Precipitation 1.94 in. Temperature 77°, normal 76°. Extremes 49°; 101°.

Days suitable for fieldwork 3.4. Topsoil 15% short, 30% adequate, 55% surplus. Subsoil 20% short, 50% adequate, 30% surplus. Corn good; 27% silked, 14% 1989, 35% avg.; 6% dough, 1% 1989, 6% avg. Soybeans good; 97% planted, 87% 1989, 92% avg. Small grains good. Wheat 92% harvested, 71% 1989, 88% avg. Oats 19% harvested, 10% 1989, 32% avg. Barley 99% harvested, 93% 1989, 98% avg. Rye 91% harvested, 68% 1989, 76% avg. Potatoes 6% harvested, 9% 1989, 13% avg. Snap beans 57% harvested, 52% 1989, 52% avg. Tomatoes 5% harvested, 9% 1989, 11% avg. Sweet corn 10% harvested, 16% 1989, 22% avg. Cucumbers 54% harvested, 73% 1989, 57% avg. Lima beans 0% harvested, 8% 1989, 5% avg. Cantaloupes 8% harvested, 26% 1989, 26% avg. Watermelons 4% harvested, 6% 1989, 9% avg. Hay supplies adequate. Alfalfa hay second cut 75% complete, 44% 1989, 79% avg. Other hay second cut 25% complete, 19% 1989, 49% avg. Apples fair. Peaches fair. Peaches 20% harvested, 7% 1989, 7% avg. Pasture fair.

DELAWARE: Precipitation 2.16 in. Temperature 77°, normal 76°. Extremes 60°; 98°.

Days suitable for fieldwork 4.9. Topsoil 57% adequate, 43% surplus. Subsoil 71% adequate, 29% surplus. Corn good; 51% silked, 41% 1989, 47% avg. Soybeans good; 98% planted, 90% 1989, 91% avg. Small grains good. Wheat 99% harvested, 87% 1989, 94% avg. Rye 94% harvested, 89% 1989, 85% avg. Snap beans 47% harvested, 49% 1989, 31% avg. Tomatoes 4% harvested, 11% 1989, 9% avg. Sweet corn 14% harvested, 20% 1989, 14% avg. Cucumbers 25% harvested, 43% 1989, 29% avg. Cantaloupes 8% harvested, 7% 1989, 13% avg. Watermelons 2% harvested, 3% 1989, 3% avg. Hay supplies adequate. Alfalfa hay second cut 66% complete, 61% 1989, 91% avg. Other hay second cut 25% complete, 60% 1989, 62% avg. Apples fair to good. Peaches very poor. Peaches 36% harvested, 16% 1989, 13% avg. Pasture fair to good.

**MICHIGAN:** Temperatures 0 to 4° below normal. Extremes 41°; 96°. Precipitation 0.03 to 2.03 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 50% short, 50% adequate, 0% surplus. Corn 2% silked, 2% 1989, 10% avg.; 5% poor, 20% fair, 45% good, 30% excellent. Soybeans 5% blooming, 5% 1989, 15% avg.; 5% poor, 20% fair, 50% good, 25% excellent. Wheat 5% harvested, 3% 1989, 25% avg.; 5% poor, 20% fair, 50% good, 25% excellent. Pasture 5% poor, 30% fair, 40% good, 25% excellent. Major activities: Hand hoeing, cultivating, irrigating, wheat harvesting, spraying for insects, haying. Tart cherries, blueberries, early peaches being harvested. First sweet corn, tomatoes being harvested.

**MINNESOTA:** Temperatures 2 to 6° below normal. Extremes 40°; 88°. Precipitation 0.10 to 0.80 in., greatest weekly total 1.70 in.

Days suitable for fieldwork 4.5. Topsoil 2% very short, 15% short, 71% adequate, 12% surplus. Spring wheat 25% turning ripe, not cut, 25% 1989, 37% avg.; 1% cut 1% 1989, 5% avg. Oats 46% turning ripe, 31% 1989, 59% avg.; 1% cut 4% 1989, 16% avg. Barley 37% turning ripe, 58% 1989, 52% avg.; 1% cut, 5% 1989, 7% avg. Corn 47 in. average unextended height, 54 in. 1989, 55 in. avg.; 10% tasseling, 11% 1989, 32% avg. Soybeans 15 in. average unextended height, 18 in. 1989, 18 in. avg.; 31% blooming, 42% 1989, 49% avg. Winter wheat 2% harvested, 5% 1989, 17% avg. Rye 3% harvested, 1% 1989, 18% avg. Field corn 27% fair, 61% good, 12% excellent. Soybeans 3% poor, 25% fair, 66% good, 6% excellent. Spring wheat 22% fair, 50% good, 28% excellent.

**MISSISSIPPI:** Temperatures 4° below normal. Extremes 57°; 100°. Dry northeast, wet northwest, central, south. Rainfall 1.22 in., 0.06 in. above normal. Soil temperatures 87°.

Days suitable for fieldwork 5.7, 2.3 1989, 4.8 avg. Soil moisture 17% very short, 43% short, 40% adequate. Cotton 90% squaring, 84% 1989, 93% avg.; 5% very poor, 3% poor, 35% fair, 51% good, 6% excellent. Corn 89% silking, 75% 1989, 85% avg.; dough 54%, 36% 1989, 52% avg.; dent 31%, 15% 1989, 27% avg., 5% mature; harvested silage 8%; 8% poor, 52% fair, 40% good. Rice 15% heading, 19% 1989, 16% avg.; 11% poor, 45% fair, 41% good, 3% excellent. Soybeans 97% planted, 77% 1989,; 92% emerged, 69% 1989.; 7% very poor, 6% poor, 69% fair, 17% good, 1% excellent. Sorghum 37% heading, 32% 1989, 43% avg.; 8% poor, 52% fair, 40% good. Peaches 79% harvested, 70% 1989, 70% avg.; 39% very poor, 31% poor, 15% fair, 15% good. Hay 54% harvested, 36% 1989, 51% avg. Pasture, livestock fair to good. Activities: Cultivating row crops, cutting hay.

**MISSOURI:** Temperatures 4° below normal. Rainfall 1.00 to 2.00 in. except southern third less than 0.75 in.

Days suitable for fieldwork 3.9. Topsoil 22% short, 64% adequate, 14% surplus, southeastern district mostly short. Subsoil 14% short, 79% adequate, 7% surplus. Double crop soybeans 91% planted, 96% 1989, 98% normal. Planting 77% northwest, north central, to 100% southeast. Second cutting alfalfa 57%, 84% 1989, 85% normal. Other hay cut 76%, 84% 1989, 87% normal. Pasture 1% very poor, 7% poor, 29% fair, 56% good, 7% excellent. Least favorable pasture south central.

**MONTANA:** Hot week. Temperatures 5 to 6° above normal west, southwest, near normal east. Most of State dry. Widely scattered thunderstorms mainly in east.

Days suitable for fieldwork 6.6. Topsoil 68% short, 32% adequate. Subsoil 59% short, 41% adequate. Winter wheat 3% very poor, 11% poor, 26% fair, 49% good, 11% excellent; ripe 3%, 3% 1989, 13% avg. Barley 6% very poor, 21% poor, 29% fair, 38% good, 6% excellent; 1% ripe, 0% 1989, 2%

avg. Oats 9% very poor, 25% poor, 32% fair, 30% good, 4% excellent; ripe 0%, 0% 1989, 2% avg. Pasture, range feed 9% very poor, 14% poor, 30% fair, 41% good, 6% excellent. First cutting alfalfa 86% done, 80% 1989, 89% avg. Other hay harvested 72%, 59% 1989, 62% avg.

**NEBRASKA:** Temperatures 6 to 10° below normal. Extremes 40°; 94°. Precipitation occurred first half of week traces southwest to 2.25 in. northwest.

Days suitable for fieldwork 5.6. Topsoil 51% short, 47% adequate, 2% surplus. Subsoil 47% short, 53% adequate. Oats 30% harvested, 50% 1989, 54% avg. Hot weather reduces test weights, more being cut for hay. Alfalfa hay 7% poor, 44% fair, 44% good, 5% excellent; 55% second cutting, 57% 1989, 66% avg. Pasture, range 14% poor, 39% fair, 41% good, 6% excellent. Cooler, wet weather slow harvest of small grains, hay. Hot, dry weather last of June, first of July causing concern about reduced yields, test weights in Panhandle. Corn borers active eastern, southern counties. Chinch bugs causing damage to sorghum east, southeast. Pastures south, southwest deteriorating rapidly. Cattlemen supplementing, beginning to sell cattle. Dryland crops, pastures showing stress especially southwest portion of the State. Irrigating across State, concern expressed about water supply in Panhandle. Spraying for grasshoppers eastern third, south central counties. Field activities: Harvesting small grains, hay; cultivating row crops; irrigating; insect control.

**NEVADA:** Moist, unstable high pressure system dominant weather future during past week. Resulting in warm temperatures, afternoon thunder storms due to daytime heating. Temperatures near normal south central to 6 to 13° above normal northwest. Extremes 36°; 113°.

Hot, mostly dry weather ideal for small grain, hay harvests. Growth 1990 potato crop favorable to date. Evening showers delayed harvesting operations small grains, hay some localities. Garlic harvesting underway. Ranges, pastures continued to deteriorate from searing daytime temperatures, although some benefitted from scattered thunderstorms. Stockwater supplies continued to dry.

**NEW ENGLAND:** Precipitation none to 0.40 in. Maine, New Hampshire, Vermont; 0.50 to 1.50 in. Massachusetts, Rhode Island; 1.50 to 2.50 in. Connecticut. Temperatures high 60s to low 70s Connecticut, Rhode Island, low to high 60s Maine, mid to high 60s elsewhere; normal Maine, 2 to 4° below normal elsewhere. Maximum temperatures low to mid 80s north, to low 90s south; minimums low 40s to low 50s north, low to mid 50s south.

Days suitable for fieldwork 6.0. Soil moisture north 27% short, 70% adequate, 3% surplus; south 5% very short, 30% short, 62% adequate, 3% surplus. Grazing availability 6% short, 94% adequate. Pasture condition 27% fair, 67% good, 6% excellent. Maine, Rhode Island, Connecticut River Valley potato good. Maine oat good. Field corn good. Sweet corn good. First cut hay 87% harvested, 90% 1989, 88% avg.; good. Second cut hay 14% harvested, 13% 1989, 16% avg.; good. Outdoor tobacco good to excellent; shade tobacco fair to good. Apple set average; fruit drop average, scab infection average. Strawberries 97% harvested, good. Cranberries two thirds out of bloom. Major farm activities: Cutting hay, harvesting early vegetables, top dressing field corn, cultivating potatoes, spraying fruit crops, irrigating tobacco, vegetables.

**NEW JERSEY:** Temperatures below normal. Extremes 53°; 96°. Rainfall 3.31 in. north, 1.74 in. central, 1.29 in. south. Heaviest 24 hour total 2.71 in. on 12th, 13th. Estimated soil moisture percent field capacity averaged 94% north, 79% central, 61% south. Four inch soil temperatures averaged 70° north, 72° central, 74° south.

Cloudy, showery weather hampered hay making, grain combining, straw baling. Summer vegetable harvest increased. Freestone peach harvest begun. Few summer apples harvested. Blueberry harvest past peak. Field corn, soybean prospects generally good. Some soybeans remain to be planted. Wheat combining active as conditions permit. Oats continue to mature. Pasture growth good, some browning where showers not received.

**NEW MEXICO:** Temperatures below normal northern half of State, normal to slightly above normal southern half. Precipitation widespread 0.14 to 2.78 in.

Days suitable for fieldwork 6.6. Soil moisture 83% short, 17% adequate. Rains helped range condition more than crops. Range condition improved in many areas of the State. Dryland crops, especially milo, still in very poor to poor. Cattle, sheep both holding in fair; 17% very poor, 58% poor, 17% fair, 8% good.

**NEW YORK:** Above normal temperatures, light rainfall early week. Below normal temperatures, dry second half of week. Extreme 40°; 93°. Rainfall below normal in north, near to above normal elsewhere.

Days suitable for fieldwork 5.3. Soil moisture adequate. Pasture 31% fair, 69% good. Hay, wheat good. First cutting alfalfa 89% finished, 84% 1989, 85% avg. Clo tim 88% cut, 68% 1989, 75% avg. Grass silage 94% harvested, 80% 1989, 90% avg. Locally grown vegetables moving to market. Early varieties of sweet corn being harvested. Strawberry harvest continued active. Lettuce planting active. Early onions available at markets. Hudson Valley apples excellent. Crop shows good development, above average fruit size. Sweet cherry harvest nearly complete. Tart cherry harvest underway. Apples in Lake Champlain Valley in good. Hail damage in Lake Ontario region.

**NORTH CAROLINA:** Temperatures 4 to 5° above normal across State. Precipitation 0.16 to 4.99 in.

Days suitable for fieldwork 6.1. Soil moisture 36% very short, 51% short, 13% adequate. Pasture 10% very poor, 37% poor, 46% fair, 6% good, 1% excellent. Livestock feed from pasture 68%. Hay second cutting 43%. Irish potatoes harvested 78%; peaches harvested 73%; flue cured tobacco harvested 12%. Corn silked 84%; cotton squared 89%; cotton setting bolls 50%; tobacco topped 70%. Crop condition: Corn 13% very poor, 36% poor, 40% fair, 11% good; cotton 6 % poor, 45% fair, 45% good, 4% excellent; soybeans 1% very poor, 13% poor, 53% fair, 33% good; peanuts 46% fair, 54% good; tobacco 13% poor, 55% fair, 31% good, 1% excellent; irish potatoes 2% very poor, 13% poor, 43% fair, 42% good; sweet potatoes 8% poor, 42% fair, 50% good; peaches 16% very poor, 35% poor, 36% fair, 13% good; apples 2% very poor, 20% poor, 50% fair, 28% good; truck crops 1% very poor, 18% poor, 54% fair, 27% good; hay 6% very poor, 26% poor, 53% fair, 14% good, 1% excellent. Major activities: Planting soybeans; cultivating, spraying, harvesting, topping, irrigating flue cured tobacco; hay harvesting; harvesting small grains; cultivating, spraying field crops; harvesting vegetables. Other activities included: Tending livestock; planting sorghum; harvesting irish potatoes; harvesting peaches; general farm maintenance.

**NORTH DAKOTA:** Temperatures normal northwest to 3° below normal southeast, east central. Precipitation 0.15 in. northwest to 0.96 in.

central. West central, southwest, south central, southeast still below normal for growing season rainfall.

Days suitable for fieldwork 6.9. Topsoil 18% very short, 45% short, 37% adequate. Subsoil 20% very short, 51% short, 29% adequate. Spring wheat 24% fair, 61% good, 15% excellent; 12% turning and beyond, 10% 1989, 19% avg. Durum wheat 21% fair, 60% good, 19% excellent; 6% turning and beyond, 5% 1989, 11% avg. Oats 38% fair, 52% good, 10% excellent; 16% turning and beyond, 20% 1989, 28% avg. Barley 19% fair, 58% good, 23% excellent; 30% turning and beyond, 27% 1989, 36% avg. Winter wheat 5% poor, 39% fair, 51% good, 5% excellent; 69% turning and beyond, 60% 1989, 80% avg. Late season crop growth near five year average. Flax 3% poor, 14% fair, 69% good, 14% excellent; 62% bloom or beyond, 40% 1989, 47% avg.; 14 in. height, 11 in. 1989, 12 in. avg. Potatoes 100% good; 72% bloom or beyond, 84% 1989, 64% avg.; 17 in. height, 16 in. 1989, 18 in. avg. Soybeans 99% good, 1% excellent; 48% bloom or beyond, 29% 1989, 38% avg.; 16 in. height, 16 in. 1989, 16 in. avg. Dry edible beans 12% fair, 85% good, 3% excellent; 29% bloom or beyond, 26% 1989, 37% avg.; 14 in. height, 13 in. 1989, 14 in. avg. Sunflower 12% fair, 71% good, 17% excellent; 1% bloom or beyond, none 1989, 2% avg.; 28 in. height, 24 in. 1989, 27 in. avg. Pastures 33% poor, 38% fair, 29% good. Stockwater 1% very short, 43% short, 56% good. Hay crop harvest over half complete, first cutting alfalfa 84%, other hay 53%.

**OHIO:** Temperatures that had climbed into the 90s early on were confined to the 60s to 70s the last half of the week. Temperature 1 to 4° above normal. Rainfall 2.00 to 4.00 in. above normal.

Days suitable for fieldwork 3.3. Soil moisture 1% short, 40% adequate, 59% surplus. Activities included: Harvesting tomatoes for fresh, processing markets, nitrogen applications, some replanting of vegetable crops. Corn silking slower than normal, army worms continue to be a problem. Winter wheat harvest held up by rains, some lodging, remains mostly good, test weights at 60 lbs. and above. Canola harvest is underway, test weights averaging 45-50 pounds. Southwestern area harvesting sweet corn, green beans, peas. Pastures 1% very poor, 6% poor, 31% fair, 50% good, 12% excellent. While harvesting operations lost momentum, the cooler weather lowered heat stress on livestock around the State.

**OKLAHOMA:** Temperatures 3° below normal east central to 7° below normal Panhandle, north central. Precipitation none central, northeast districts to 1.24 in. south central.

Days suitable for fieldwork 6.8. Topsoil 96% short, 4% adequate. Subsoil 50% short, 50% adequate. Wheat 100% harvested, 100% 1989, 100% avg.; 80% ground plowed, 70% 1989, 75% avg; 5% seedbed prepared, 2% 1989, 3% avg. Cotton 45% fair, 55% good; 100% up to stand, 100% 1989, 95% avg.; 70% squaring, 30% 1989, 35% avg.; 10% setting bolls, 1% 1989, 10% avg. Sorghum 5% poor, 80% fair, 15% good; 100% up to stand, 100% 1989, 95% avg.; 3% heading, 20% 1989, 10% avg.; 0% milk to soft, 2% 1989, 3% avg. Soybeans 85% up to stand, 95% 1989, 90% avg.; 10% flowering, 5% 1989, 10% avg.; 0% setting pods, 0% 1989, 1% avg. Peanuts 95% up to stand, 95% 1989, 95% avg.; 40% pegging, 50% 1989, 35% avg.; 4% setting pods, 5% 1989, 3% avg. Corn 50% tasselling, 50% 1989, 75% avg.; 30% milk to soft, 20% 1989, 30% avg.; Alfalfa 50% third cutting, 35% 1989, 25% avg.; 3% fourth cutting, 0% 1989, 1% avg. Pastures 4% very poor, 6% poor, 75% fair, 15% good. Cattle good; marketings average. Cooler temperatures brought relief to heat stressed crops, pastures.

**OREGON:** Minimal rainfall. Dry Willamette Valley, southwestern valleys, north Cascades. Other areas had at least traces of precipitation. High plateau wettest, with 0.10 in. Daytime highs in 90s, 100s across State except coast. Temperatures up to 14° higher than normal. Hottest areas southwestern valleys, north central, southeast with high readings 100 to 107°.

Soil moisture 58% short, 42% adequate. Barley 8% harvested, 11% 1989, 17% avg. Grass seed harvest continued Willamette Valley. Mildew on some sugarbeets Malheur Co. Mint growing nicely. Haying continued in full swing. Tart cherry harvest progressing nicely Willamette Valley. Lambert cherries harvested Lane Co. Cherry harvest nearly complete Wasco Co. Red raspberry harvest well underway Willamette Valley. Blueberry, Marionberry picking progressed; Boysenberry harvest beginning soon Willamette Valley. Hazelnut orchard spraying throughout valley. Pear cover spraying Jackson Co. Cranberry bloom complete south coast. Harvest underway on broccoli, lettuce, snap beans Willamette Valley. Green pea harvest completed Umatilla Co. Early potato harvest Hermiston Boardman area. Potatoes flowering central areas. Livestock good to excellent; some fair Malheur Co. Heat wave caused stockwater hauling, quick dry up to watering holes east. Range, pasture 19% poor, 36% fair, 32% good, 13% excellent. Thunderstorm activity did not improve soil moisture. Weed spraying continued on pastures coastal counties.

**PENNSYLVANIA:** State experienced well above normal precipitation, normal temperatures. Temperature 69°, at normal. Extremes 46°; 98°. Precipitation 2.90 in., 2.02 in. above normal.

Days suitable for fieldwork 2.0. Soil moisture 11% short, 56% adequate, 33% surplus. Corn 100% planted, 100% 1989, 100% avg.; 2% silk, 3% 1989, 7% avg.; height 34 in., 28 in. 1989, 39 in. avg.; 1% very poor, 6% poor, 24% fair, 48% good, 21% excellent. Tobacco 100% transplanted, 99% 1989, 99% avg. Soybeans 98% planted, 92% 1989, 98% avg.; 1% very poor, 4% poor, 25% fair, 54% good, 16% excellent. Barley 11% heading or headed, 5% 1989; 17% turning yellow, 16% 1989; 21% ripe, 27% 1989; 51% harvested, 52% 1989. Wheat 14% heading or headed, 10% 1989; 30% turning yellow, 30% 1989; 42% ripe, 43% 1989; 14% harvested, 17% 1989; 1% poor, 18% fair, 59% good, 22% excellent. Oats 48% heading or headed, 62% 1989; 46% turning yellow, 33% 1989; 5% ripe, 5% 1989. 1% harvested, 0% 1989; 2% poor, 16% fair, 54% good, 28% excellent. First cutting alfalfa 97% complete, 87% 1989. Second cutting alfalfa 36% complete, 26% 1989. First cutting clover timothy 90% complete, 77% 1989. Hay stands mostly average. Pasture 2% very poor, 22% poor, 60% good, 16% excellent. Peach 36% below avg., 64% avg. Apple 14% below avg., 83% avg., 3% above avg. Activities: Planting vegetables; harvesting hay, haylage, barley, vegetables; repairing fences; weed control; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

**PUERTO RICO:** Rainfall 0.77 in. was 0.43 in. below normal. Precipitation 5.51 in. at Arecibo Ionospheric Observatory, 3.45 in. at Pico Del Este Luquillo, 2.65 in. at San Sebastian. Highest 24 hour total 2.76 in. Arecibo Ionospheric Observatory. Divisional temperature averaged about 82° on the Coast, 76 to 80° Interior with mean station temperatures ranging from 67° at Pico Del Este Luquillo to 83° at Ponce 4E. Extremes 62°; 95°.

**SOUTH CAROLINA:** Temperatures 3 to 5° above normal. Rainfall 1.30 in. the southern part to 3.20 in. in the mountains.

Days suitable for fieldwork 6.1. Soil moisture 64% very short, 29% short, 7% adequate. Cotton 2% very poor, 24% poor, 73% fair, 1% good; 83% squaring, 73% 1989, 83% avg.; 40% setting bolls, 22% 1989, 47% avg. Soybeans 6% very poor, 41% poor, 53% fair; 11% blooming, 5% 1989, 7% avg.; 1% setting pods, 0% 1989, 0% avg. Corn poor; 97% silked, 86% 1989, 93% avg.; 78% dough stage, 42% 1989, 56% avg.; 41% matured, 2% 1989, 12% avg.; 2% harvested, 0% 1989, 0% avg. Sorghum poor to good; 93% planted, 85% 1989, 91% avg.; 2% harvested, 1% 1989, 1% avg. Tobacco poor to fair; 88% topped, 78% 1989, 84% avg.; 21% harvested, 8% 1989, 10% avg. Peanuts poor to fair. Watermelons poor to fair; 75% harvested, 55% 1989, 61% avg. Cantaloupes poor to fair; 74% harvested, 58% 1989, 56% avg. Peaches fair; 61% harvested, 43% 1989, 56% avg. Tomatoes fair; 95% harvested, 90% 1989, 92% avg. Pastures 31% very poor, 45% poor, 24% fair.

**SOUTH DAKOTA:** Temperatures 0 to 8° below normal. Extremes 39°; 103°. Precipitation large variations due to scattered thunderstorms. Above normal amounts south central, southern Black Hills. Maximum 4.47 in. Growing season precipitation above normal east, south central, below normal elsewhere. Range 6.39 in. above to 4.23 in. below normal. Growing degree days 219 units above to 119 units below normal.

Days suitable for fieldwork 4.8. Subsoil 14% critically short, 34% short, 50% adequate, 2% surplus. Topsoil 9% critically short, 40% short, 48% adequate, 3% surplus. Range, pasture 3% very poor, 6% poor, 27% fair, 50% good, 14% excellent. Flax 2% poor, 29% fair, 42% good, 27% excellent. Other crops mostly good. Dry weather continued north central, northwest, southeast. Rain south central, some east central. Some hail east central. Root worms, army worms, grasshoppers, barley yellow dwarf, rust, weed problems reported. Major activities: Haying, spraying, cultivating, fallow, early harvest, harvest preparation in small grains.

**TENNESSEE:** Very hot early week followed by unseasonably strong cold front at mid week through weekend. Front brought rain, cooler temperatures. Temperatures slightly below normal. Rainfall amounts heavy, in excess of 3.00 in. common. Some locations received 5.00 to 7.00 in.

Days suitable for fieldwork 4.6. Soil moisture 10% very short, 29% short, 56% adequate, 5% surplus. Corn 48% tasseling, 65% 1989, 72% avg.; 8% dough, 10% 1989, 24% avg.; 1% dent, 1% 1989, 5% avg.; 1% very poor, 9% poor, 57% fair, 30% good, 3% excellent. Cotton 84% squaring, 86% 1989, 90% avg.; 10% setting bolls, 19% 1989, 29% avg.; 4% very poor, 9% poor, 35% fair, 49% good, 3% excellent. Sorghum 8% headed, 20% 1989, 33% avg.; 1% very poor, 10% poor, 43% fair, 46% good. Soybeans 100% planted, 93% 1989, 98% avg.; 10% blooming, 8% 1989, 17% avg.; 1% setting pods, 1% 1989, 4% avg.; 9% poor, 44% fair, 47% good. Tobacco 4% topped, 4% 1989, 5% avg.; 8% poor, 71% fair, 21% good. Wheat 100% harvested, 90% 1989, 98% avg. Alfalfa 100% 2nd cutting, 67% 1989, 86% avg. Pastures 3% very poor, 29% poor, 52% fair, 15% good, 1% excellent. Rainfall greatly helped crops. Primary activities: Applying herbicides to soybeans, harvesting wheat, hay, vegetables.

**TEXAS:** Began hot with showers limited coastal sections, triggered by daily heating, sea breeze. Mid week unseasonably strong cold front, vigorous upper level low pressure system brought fall like temperatures to State. Front triggered good rains parts north, central, southeast. Rains tapered off late week. Temperatures below normal statewide. Rainfall above normal over most southern areas, Edwards Plateau, below normal most north, Plains.

Crops: Small grain harvest nearing completion Plains. Progress good through midweek. Scattered showers slowed progress late week. Corn Plains helped last week by cooler temperatures, some rain. Irrigation continued fairly steady region. Rain may have been too late many fields Blacklands. Harvest increasing. Some fields cut for silage because poor development. Aflatoxin concerns increasing. Harvest continued central, Upper Coast until late week. Harvest also continued Valley. Corn doughing 59%, 63% 1989, 64% avg.; dented 49%, 52% 1989, 52% avg.; mature 25%, 26% 1989, 17% avg.; harvested 7%, 8% 1989, 3% avg. Grain sorghum fields should benefit from rain Plains. Some early fields beginning to turn color Low Plains, Cross Timbers, mainly because hot, dry conditions. Harvest increasing Blacklands. Some fields fallen over. Insects increasing irrigated fields. Harvest continued until late week central southward to Upper Coast. Harvest wind down Valley. Sorghum turning color 49%, 51% 1989, 46% avg.; mature 28%, 26% 1989, 26% avg.; harvested 17%, 16% 1989, 13% avg. Cotton could benefit most from rain, cooler temperatures. Some dryland fields already failed Plains, remaining fields should benefit from showers. More rain needed. Irrigated fields good progress. Rain helped fields central, Blacklands, where boll shedding occurring. Bolls opening Coastal Bend, Valley. Insect activity increasing some parts State. Cotton 3% open bolls, 8% 1989, 4% avg.; harvested 0%, 1% 1989, 0% avg. Soybean planting virtually completed last week, more rain needed to make crop Blacklands. Late week moisture Upper Coast should help crop. High Plains crop looks good but needs rain. Rice fields continued head out but remained behind normal. Some red rice showing up Upper Coast. Peanut fields in the Plains, Cross Timbers were under steady irrigation, showing good stands. Dryland fields need rain. Growth slow Hill Country, south, late week rain should help. Planting should also increase with added moisture. Other Field Crops: Peanuts planted 100%, 98% 1989, 98% avg. Soybeans planted 100%, 98% 1989, 99% avg. Sunflowers 100% planted, 93% 1989, 94% avg. Oats harvested 97%, 92% 1989, 92% avg.

Commercial Vegetables: Rio Grande Valley, pepper planting increasing. Land preparation continued until late week. San Antonio Winter Garden, few more watermelons harvested. Eastern State, harvest continued. Sweet potato growth improving. High Plains, potato, onion harvest continued, producers reporting some below average yields. Irrigation continued other crops. Trans Pecos, cantaloupe, onion harvest continued. Peppers showing good development, few insect problems. Harvest late peaches continued with good quality. Heat affected some yields. Pecan crop continued varied conditions across State. Insects increasing. Drop above normal some areas because hot, dry conditions.

Range and Livestock: Range, pasture conditions should benefit from late week rains. Until now, growth nonexistent most areas. Supplemental feeding remained steady. Weight gains livestock not good. Herd reduction continued some areas. Grasshoppers continued work over pastures Low Plains, Cross Timbers. Range, pasture 6% very poor, 29% poor, 44% fair, 19% good, 2% excellent.

**UTAH:** Precipitation moderate western third, mostly light elsewhere. Temperatures 4° above normal northern mountains, about normal rest of State.

Days suitable for fieldwork 6.7. Soil moisture 100% short. Irrigation, insecticide spraying major activities. Some areas reporting moderate weevil damage in hay; some acreage in Beaver County not harvesting because of drought. Some grain laid down by strong winds. Winter wheat 52% ripe, 46%

1989, 47% avg; harvest 14% completed, 7% 1989, 16% avg. Barley acreage 71% turned color, 72% 1989, 80% avg. Spring wheat 74% turned color, 66% 1989, 72% avg. Oats 34% turned color, 31% 1989, 36% avg. Alfalfa hay second cutting 44% completed, 40% 1989, 26% avg. Corn height 37 in. Tart cherry, apricot harvests underway Box Elder, Utah Counties. Peaches appear smaller than normal Washington County. Irrigation stockwater supplies short some areas southern, eastern area. Non irrigated pasture, range 3% very poor, 29% poor, 60% fair, 8% good.

**VIRGINIA:** Rainfall across State in varying amounts with the northern area receiving the most. Dulles 3.25 in. while Earlehurst 0.20 in. Temperatures 1 to 5° above normal.

Days suitable for fieldwork 5.4. Topsoil 22% very short, 45% short, 22% adequate, 11% surplus. Corn silked 34%, 36% 1989, 34% avg.; dough stage 12%, 5% 1989, 6% avg.; 5% very poor, 38% poor, 54% fair, 3% good. Soybeans planted 96% complete, 91% 1989, 91% avg. Soybeans bloomed 12%; 6% very poor, 21% poor, 47% fair, 26% good. Wheat 94% harvested, 85% 1989, 89% avg. Barley harvest complete, 93% 1989, 97% avg. Flue tobacco 3% harvested, 0% 1989, 1% avg. Condition of all tobacco 17% poor, 46% fair, 37% good. Potato harvest near 70% complete. Peanut 20% fair, 80% good. All hay mostly fair. Pastures mostly poor to fair. Peaches very poor to poor. Apples very poor to fair. Livestock mostly good. Spraying fruit trees, cotton. Harvesting tomatoes, cucumbers.

**WASHINGTON:** Temperatures 2 to 9° above normal, east; 3 to 7° above normal, west. Precipitation none to 0.17 in., east; none to 0.12 in., west.

Days suitable for fieldwork 6.9. Soil moisture 45% short, 55% adequate. Range, pasture 20% poor, 45% fair, 35% good. Hay, other roughage 27% short, 71% adequate, 2% surplus. Winter wheat 43% fair, 52% good, 5% excellent; harvested 2%, 2% 1989, 5% avg. Spring wheat harvested 0%, 0% 1989, 1% avg. Barley harvested 4%, 3% 1989, 6% avg. Alfalfa hay, 2nd cutting, 40%, 48% 1989, 45% avg. Winter wheat harvest began in many areas of the State. Haying activities continued with favorable weather. Raspberries, blueberries, cherries, peaches, many vegetables harvested during week.

**WEST VIRGINIA:** Temperature 73°, 4 to 8° above normal. Extremes 52°; 101°. Precipitation 3.20 in., 1.15 in. to 2.41 in. above normal.

Days suitable for fieldwork 3.2. Soil moisture 4% very short, 22% short, 39% adequate, 35% surplus. Pasture 21% fair, 79% good. Cattle, sheep good. Wheat, barley good. Wheat 88% ripe; 47% harvested. Barley 96% ripe; 91% harvested. Oats good; 94% jointed; 80% headed. Hay good; first cutting 84% complete, second cutting 20% complete. Apples, peaches poor. Tobacco good. Farm activities: Making hay, clipping pastures, farm maintenance, caring for livestock.

**WISCONSIN:** Temperature 66°, 5° below normal. Extremes 34°; 88°. Precipitation 0.10 to 0.50 in.

Days suitable for fieldwork 5.7. Soil moisture 6% short, 89% adequate, 5% surplus. Pasture 6% fair, 66% good, 28% excellent. General condition of crops 2% poor, 8% fair, 81% good, 9% excellent. Soybean 79% of normal. Corn 1% poor, 18% fair, 75% good, 6% excellent; height 39 in., 48 in. 1989, 52 in. avg.; 3% silked, 3% 1989, 12% avg. Second cut hay 24% completed, 16% 1989, 27% avg. Winter wheat 2% completed, 5% 1989, 17% 4 year avg.

**WYOMING:** Temperatures 1 to 5° below normal. Precipitation below normal.

Days suitable for fieldwork 7.0. Topsoil 69% short, 31% adequate. Winter wheat 20% headed, 15% 1989, 15% avg.; 55% turning color, 60% 1989, 55% avg.; 25% mature, 25% 1989, 30% avg. Barley 10% boot, 10% 1989, 10% avg.; 40% headed, 55% 1989, 45% avg.; 40% turning color, 30% 1989, 35% avg.; 10% mature, 5% 1989, 10% avg. Spring wheat small amount boot, 10% 1989, 10% avg.; 70% headed, 60% 1989, 55% avg.; 25% turning color, 20% 1989, 25% avg.; 5% mature, 10% 1989, 10% avg. Oats 15% boot, 20% 1989, 25% avg.; 65% headed, 60% 1989, 60% avg.; 15% turning color, 15% 1989, 15% avg.; 5% mature, 5% 1989, 5% avg. Dry bean 20% in bloom, 25% 1989, 20% avg. Potatoes 75% in bloom, 30% 1989, 20% avg. Corn 10% tasseled, 15% 1989, 5% avg. Alfalfa hay first cutting 75% complete, 85% 1989, 80% avg. Other hay 30% harvested, 45% 1989, 40% avg. Ranges, pastures 25% poor, 75% good. Stockwater 30% short, 70% adequate.

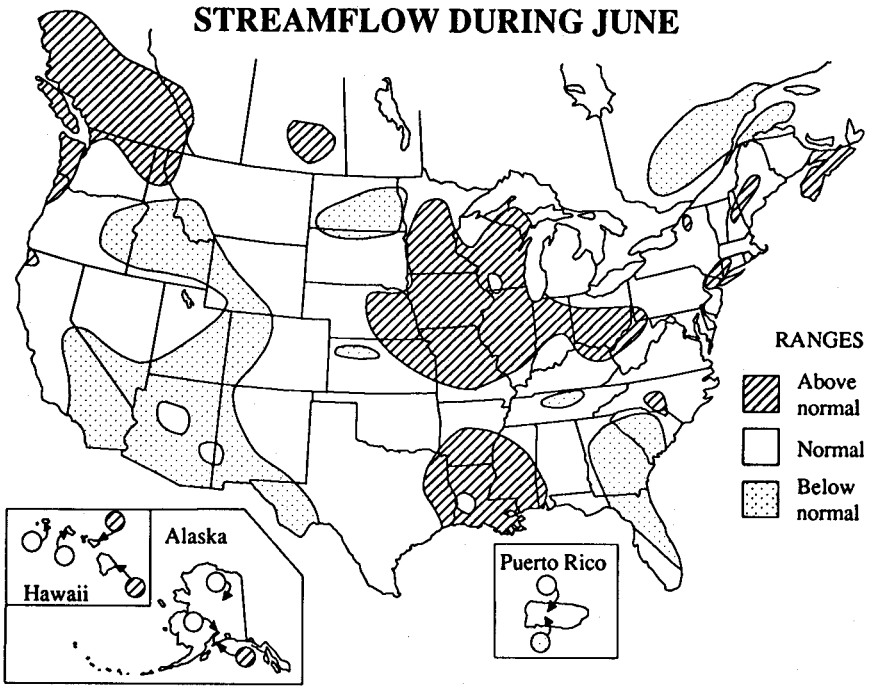
# National Water Conditions

UNITED STATES
Department of the Interior
Geological Survey

CANADA
Department of the Environment
Water Resources Branch

## JUNE 1990

### STREAMFLOW DURING JUNE




Heavy rains caused severe floods in parts of Nebraska, Iowa, and Ohio. The most damaging floods occurred on Wegee and Pipe Creeks in Belmont County, Ohio, where 26 people were killed and 1,200 homes and trailers were destroyed. Peak discharges exceeded those of record or the 100-year flood at 13 stations in the 3 States.

Streamflow was in the normal to above-normal range at 81 percent of the index stations in southern Canada, the United States, and Puerto Rico during June, compared with 74 percent of stations in those ranges during May. Below-normal streamflow occurred in 19 percent of southern Canada and the conterminous United States during June, compared with 28 percent during May. The total flow for the index stations in the conterminous United States and southern Canada was 40 percent above median.

# International Weather and Crop Summary

HIGHLIGHTS

July 8-14, 1990

USSR ... In Western USSR, soaking rain over northern areas benefits winter and spring grains in the filling stage. Dry weather in the south helps the winter grain harvest. In the New Lands, widespread significant rain covers southern crop areas, improving conditions for spring grains in the filling stage.

EUROPE ... Dryness in the south benefits winter grains harvest but continues to stress unirrigated summer crops.

SOUTH ASIA ... Beneficial rain covers portions of the southern interior. Heavy rain and flooding continue in the east.

EASTERN ASIA ... Tropical Storm Robyn brings heavy rain and flooding to sections of Taiwan, Zheijiang, and the Korean Peninsula. Unseasonable heat and dryness cover the central Yangtze Valley.

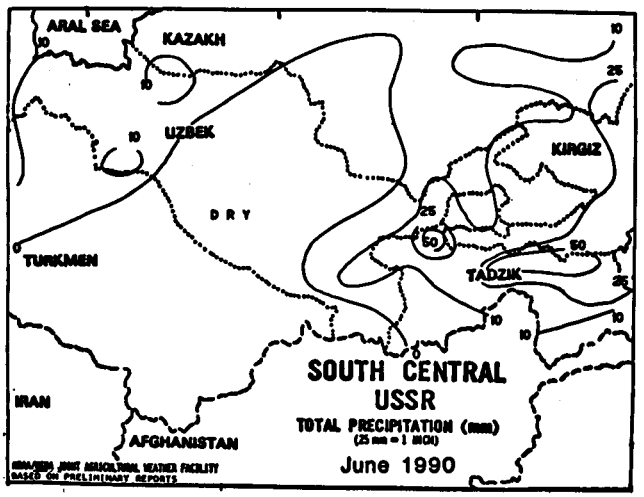
SOUTHEAST ASIA ... A drying trend continued over Thailand's primary corn region. Beneficial showers cover the Philippines.

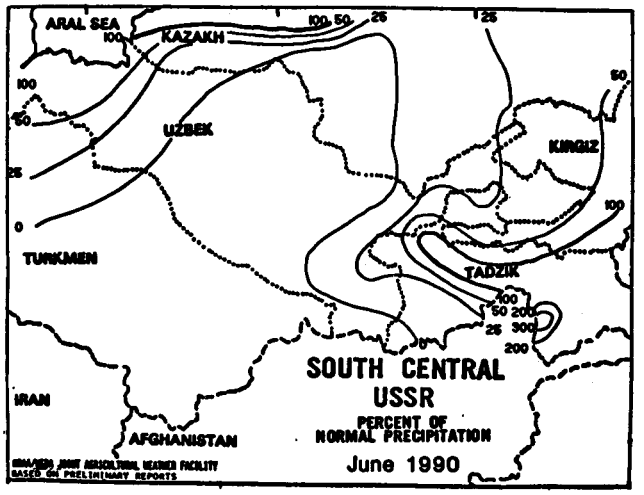
SOUTH AMERICA ... Beneficial showers help wheat planting in Argentina. Drier weather benefits wheat in southern Brazil.

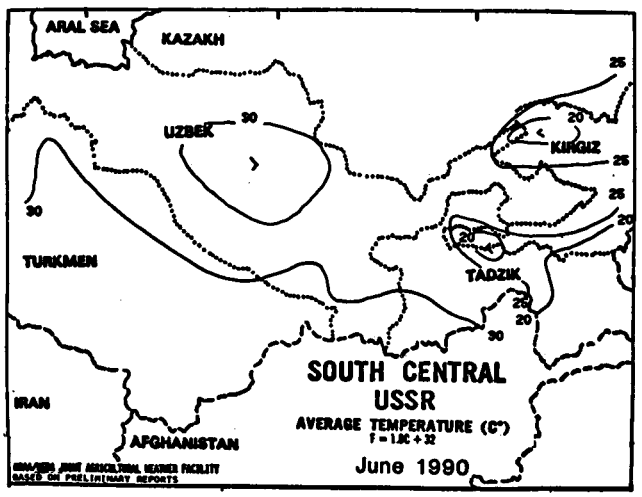
AUSTRALIA ... Widespread heavy rain returns to Western Australia. Light to moderate rain continues across South Australia and Victoria.

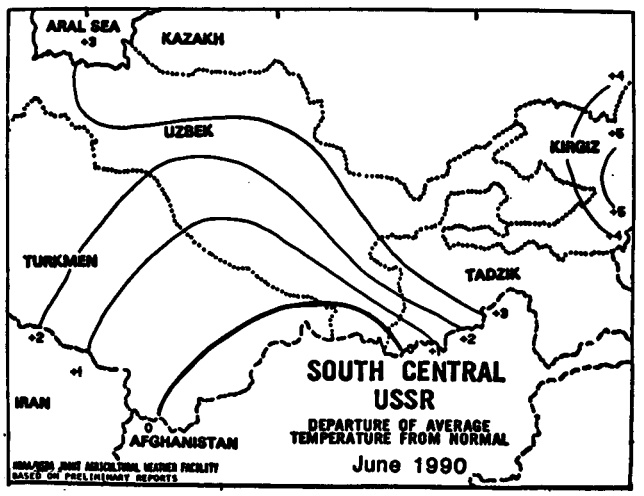
CANADA ... Drier weather favors growth of vegetative to heading wheat. Rain is needed, however, in the southwest following another week of dry, warm weather.

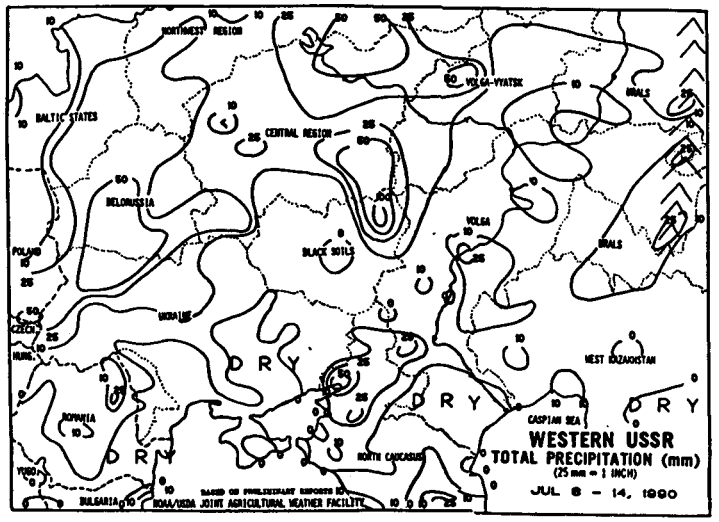
MEXICO ... Widespread rain favors immature crops in the western, north-central, and Southern Plateau regions.



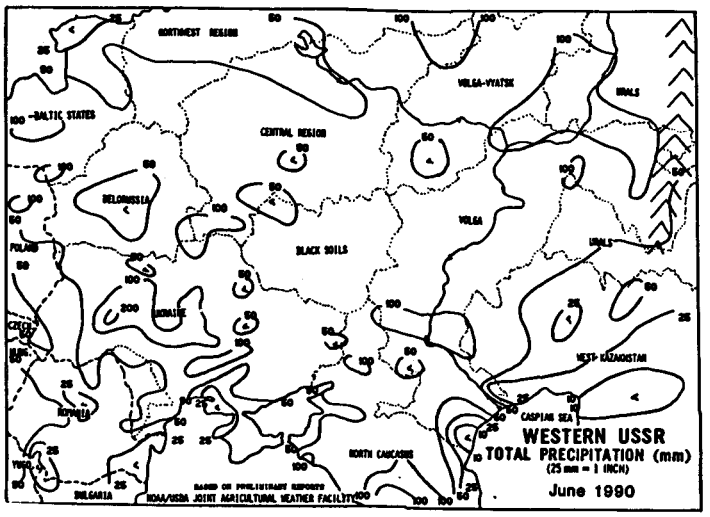



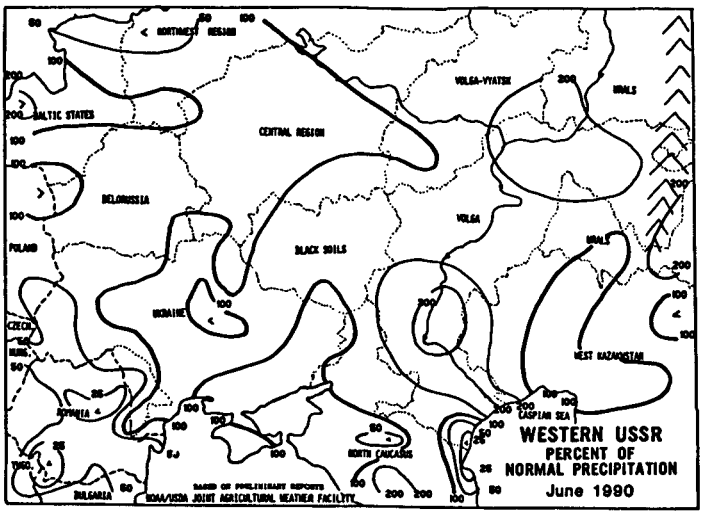



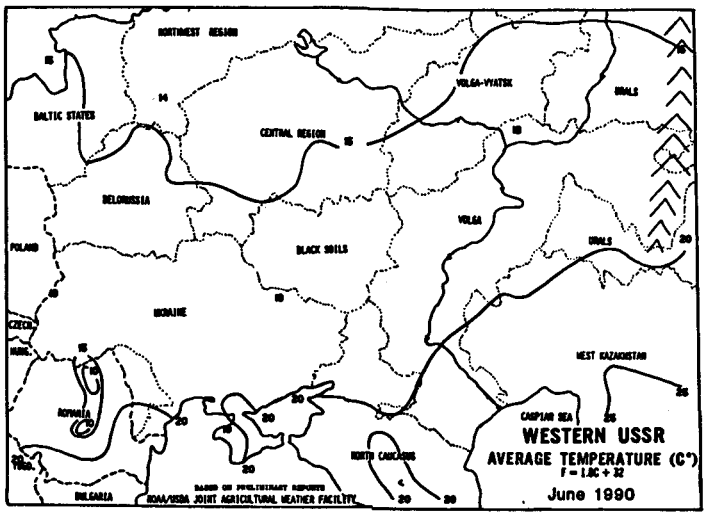



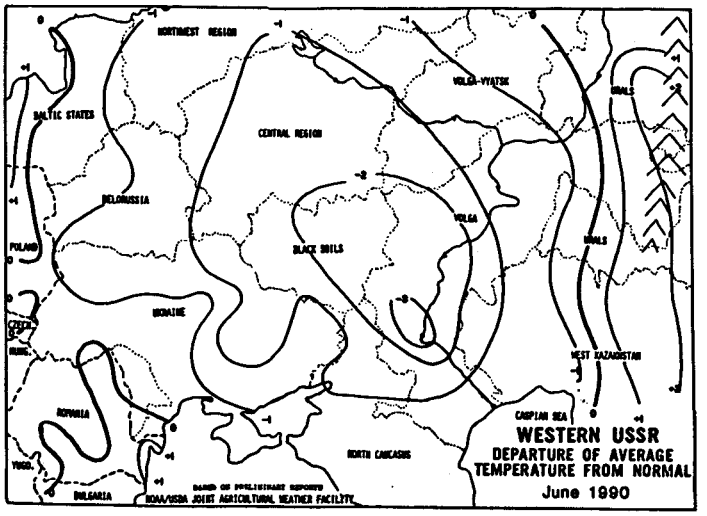



WESTERN USSR ... Soaking rain covered the eastern Baltic States, Belorussia, the northwestern Ukraine, the northeastern Black Soils Region, and the eastern portion of the Central Region. Although rainfall, ranging from 25 to 50mm in these areas, was mostly beneficial for winter and spring grains in the filling stage, local amounts in excess of 75mm may have resulted in some flooding. Further south, mostly dry weather in the southern half of the Ukraine and the central North Caucasus helped winter grain harvesting. Rain is needed in the south for corn in or nearing reproduction. In June, weather conditions continued mostly favorable for winter grains which advanced through reproduction in the north and were mostly filling in the south. Spring barley advanced through reproduction in the south. Near- to above-normal precipitation covered most areas with more than double the normal rainfall over the lower and middle Volga Valley. Although June's precipitation was mostly beneficial, locally heavy downpours, along with gusty winds over the western and central Ukraine, caused some lodging.

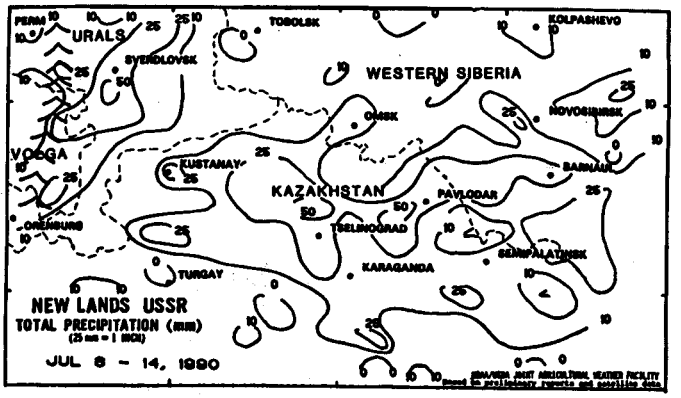


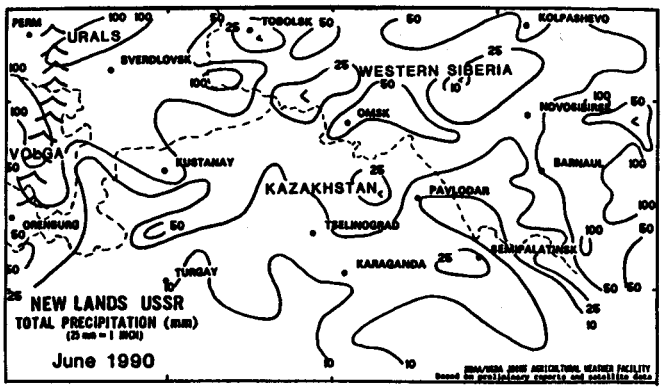



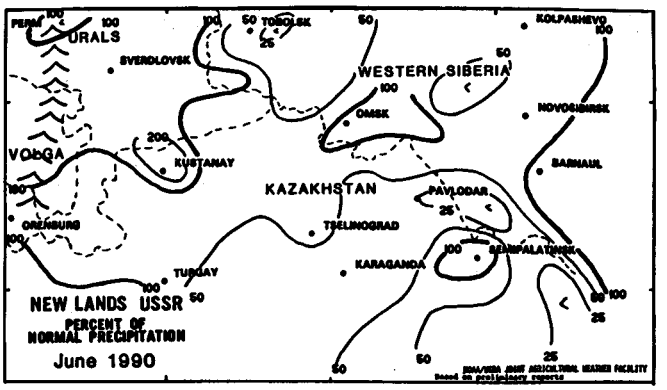



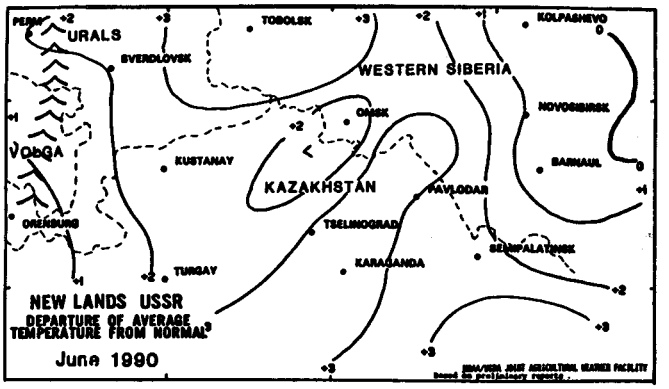



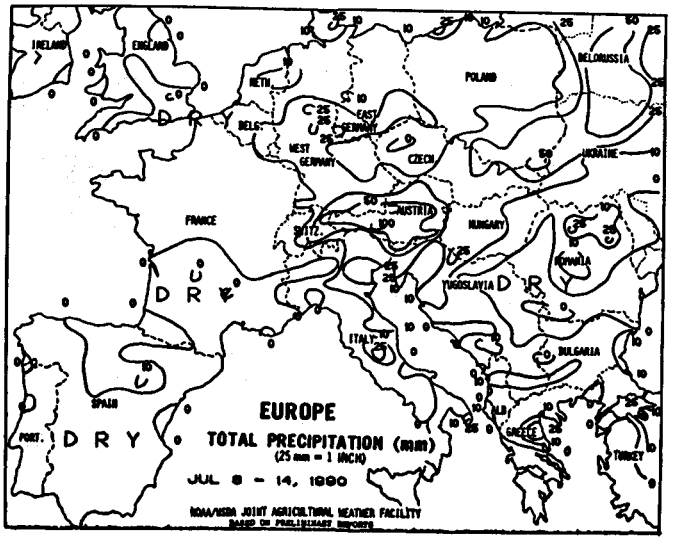
NEW LANDS ... Widespread significant rain fell in a band that stretched eastward from Kustanay, through Tselinograd, Pavlodar, and Semipalatinsk, to Barnaul. Precipitation amounts, ranging from 20 to 77mm reversed June's unfavorably low rainfall pattern in these areas, improving conditions for spring grains in the filling stage. Further north, light precipitation (3-10mm) and above-normal temperatures over northernmost crop areas in Western Siberia continued June's below-normal rainfall pattern. More rain is needed for spring grains in or nearing reproduction. In June, above-normal precipitation over the northern Urals provided abundant moisture for spring grains in the vegetative stage. Well-below-normal precipitation over minor spring grain producing areas in eastern Kazakhstan and southeastern areas in Western Siberia increased stress on crops approaching the heading stage. Although above-normal temperatures covered the major spring grain producing areas in central Kazakhstan and Western Siberia, adequate soil moisture reserves helped to minimize potential stress.



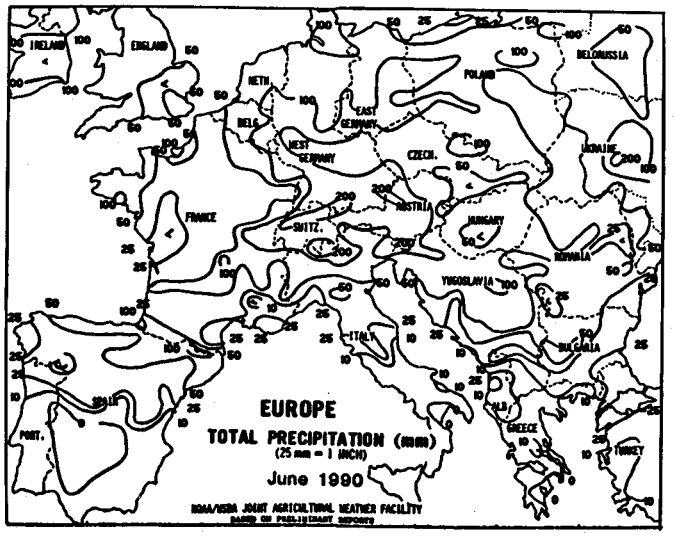



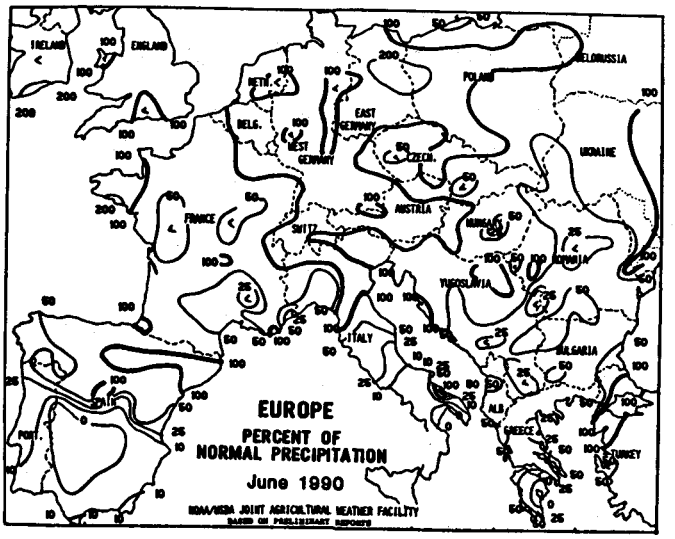



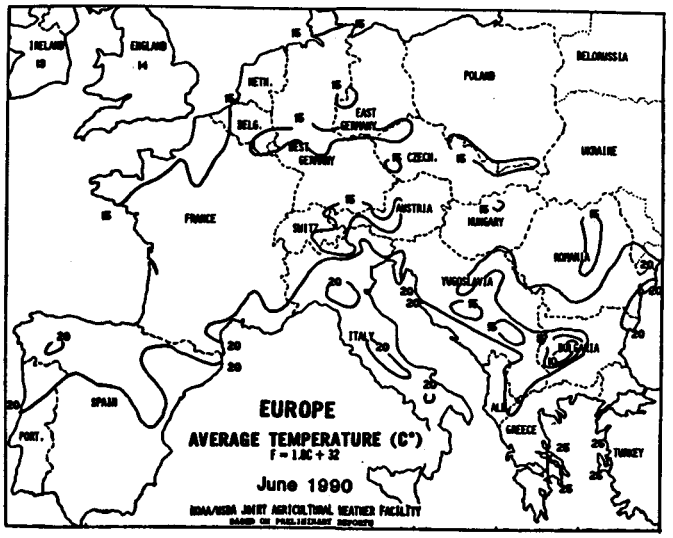


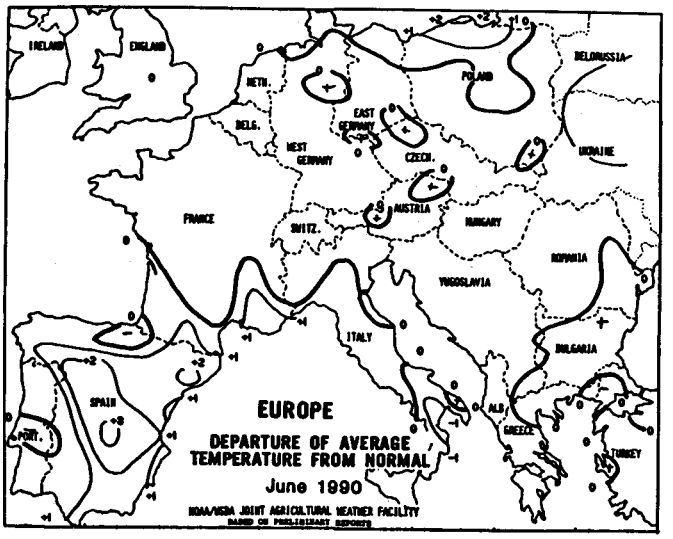


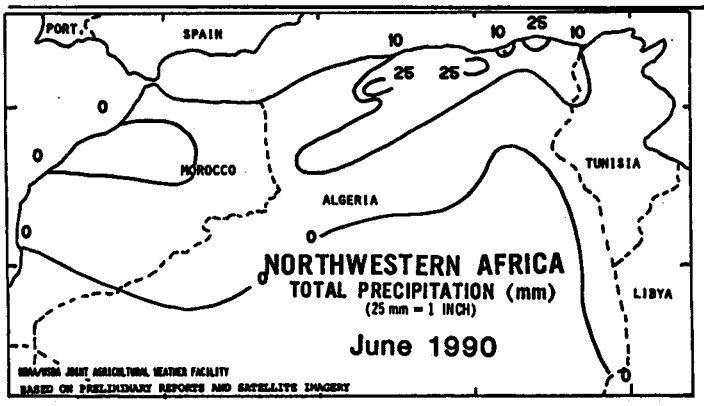

EUROPE ... Mostly dry and warm weather (weekly average temperatures 1-2 degrees C above normal) returned to France and England, hastening maturation, drydown, and early harvest of winter grains. Scattered, moderate to heavy rain (10-40mm, with isolated amounts in excess of 40mm) fell from Benelux eastward to southern Poland and Czechoslovakia, favoring most summer crops. Mostly light rain (less than 10mm) fell across northern sections of West Germany, East Germany, and Poland. In the south, scattered showers (5-20mm, with isolated amounts greater than 20mm) brought only limited relief to unirrigated summer crops from increasing dryness and moisture stress. Rainfall was below normal during June across much of southern Europe and France, while above-normal precipitation fell in many northern crop areas, including very beneficial rains which ended dryness in sections of England.

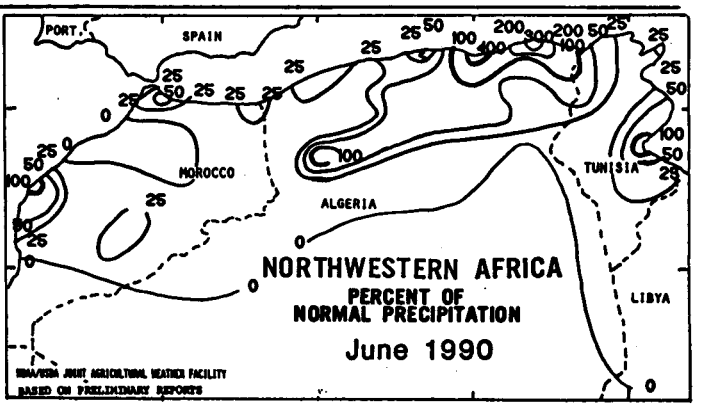


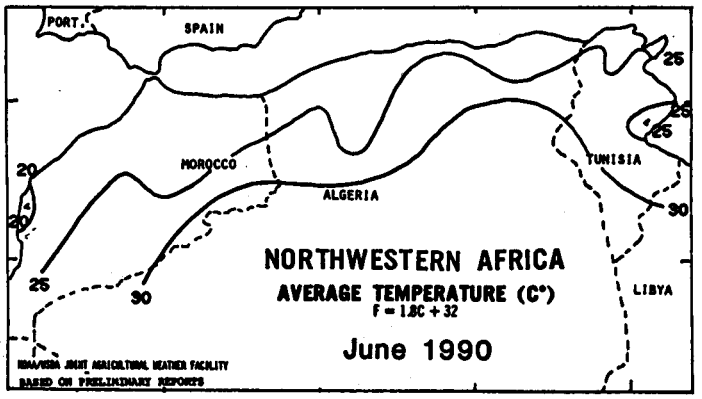



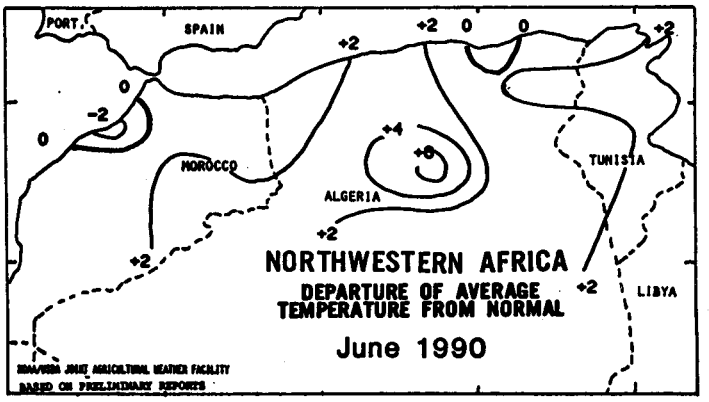



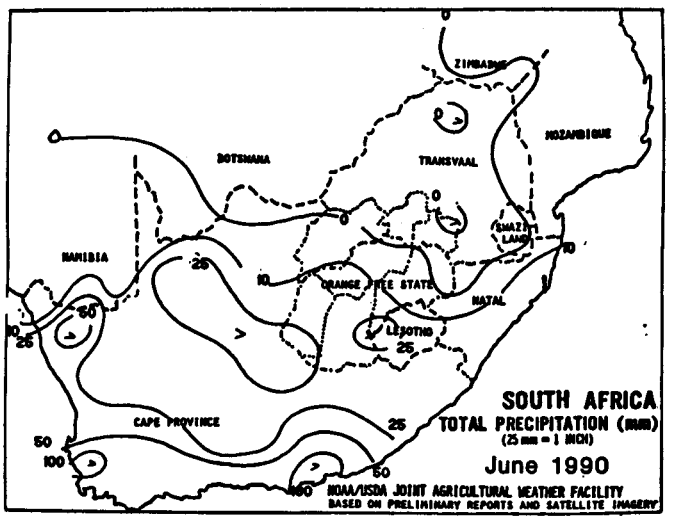



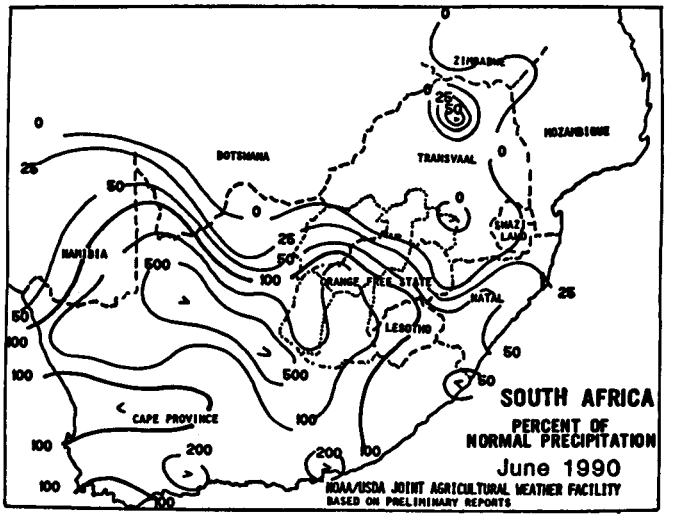

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

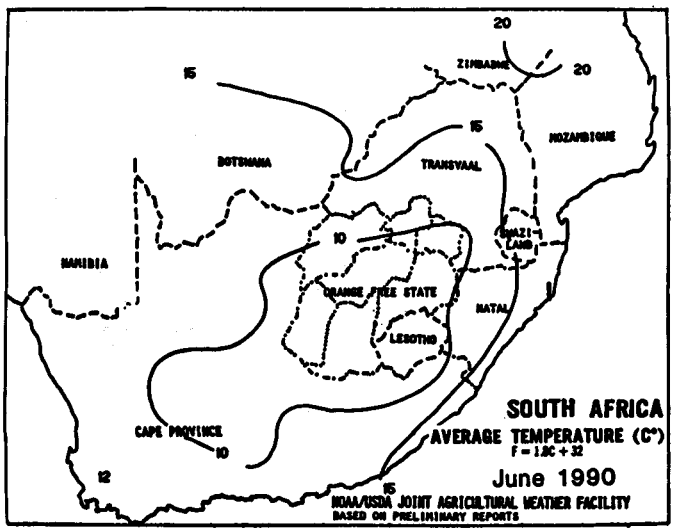

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
PERCENT OF
NORMAL PRECIPITATION
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

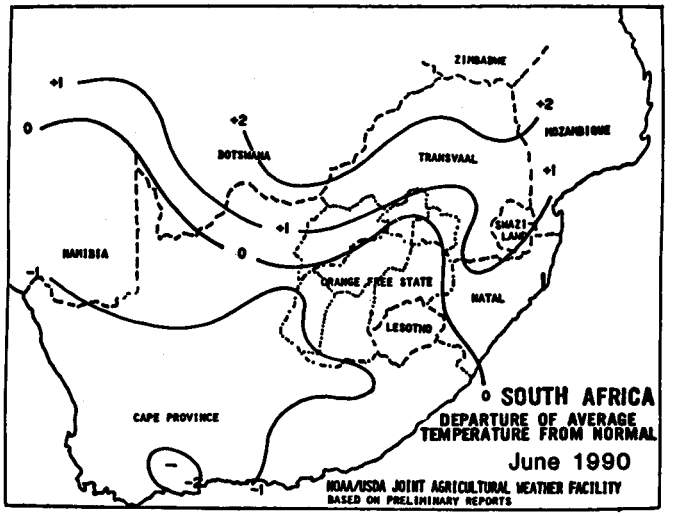

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS


PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS


ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
SWAZI-LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY


ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
SWAZI-LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
PERCENT OF
NORMAL PRECIPITATION
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS


ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
SWAZI-LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS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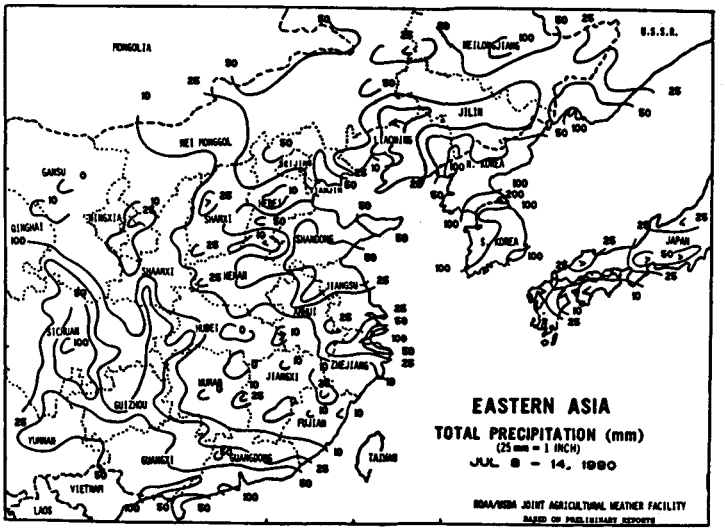
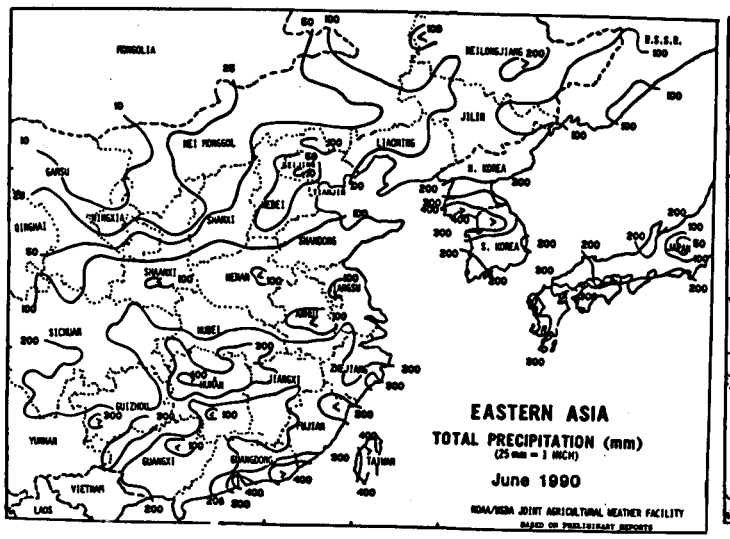
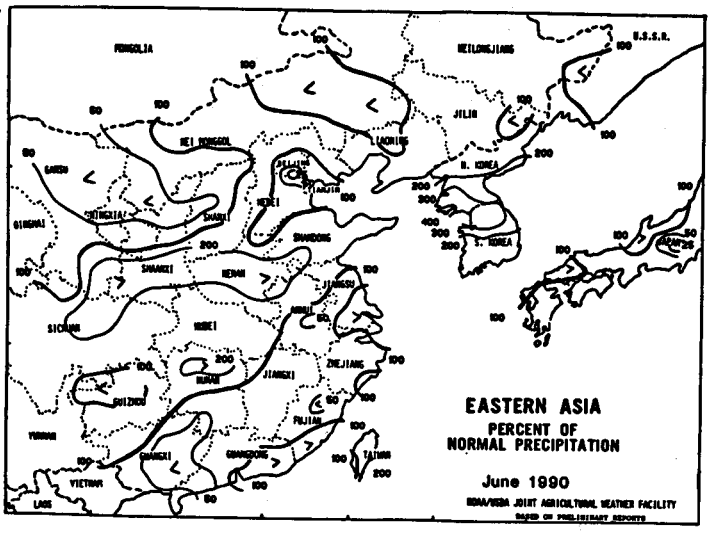
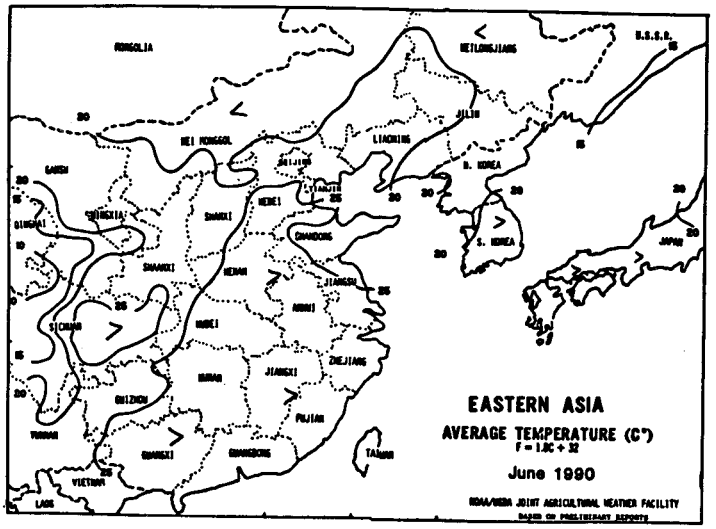
BOTSWANA
TRANSVAAL
SWAZI-LAND
NAMIBIA
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
June 1990
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

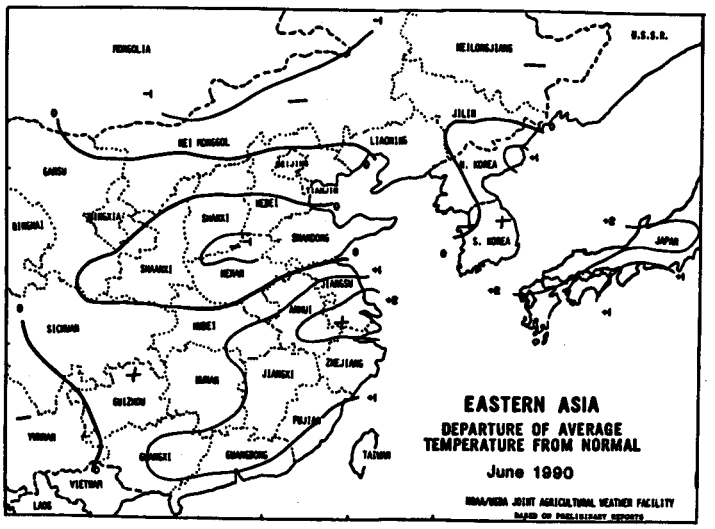



EASTERN ASIA ... Tropical Storm Robyn brushed eastern sections of Taiwan and Zhejiang on the 10th and continued across the Korean Peninsula as a tropical depression on the 10th. The storm brought gusty winds, very heavy rain (50-120, with isolated amounts in excess of 150mm), and flooding, especially to southern North Korea and northern South Korea, where torrential rain and flooding have persisted for 4 weeks. Heavy rain (25-60mm, with scattered amounts greater than 60mm) also fell over southwestern and northeastern Chinese crop areas, while unseasonable dryness and heat in the central Yangtze Valley (mean weekly temperatures 1-4 degrees C above normal) reversed a wetter-than-normal trend during June. Rainfall was below normal over interior sections of southeastern China, southern Manchuria, and Japan.

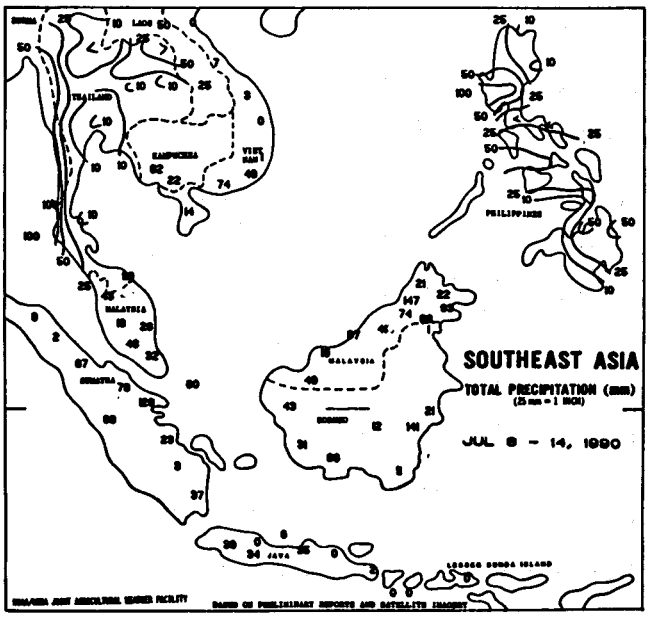


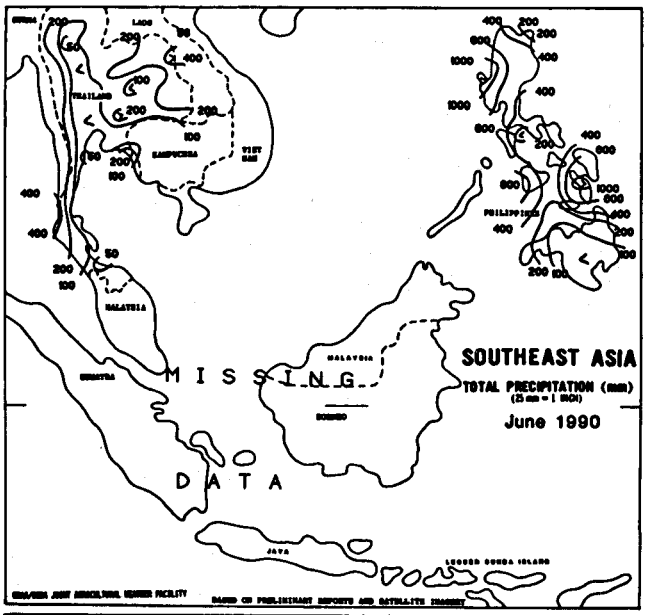



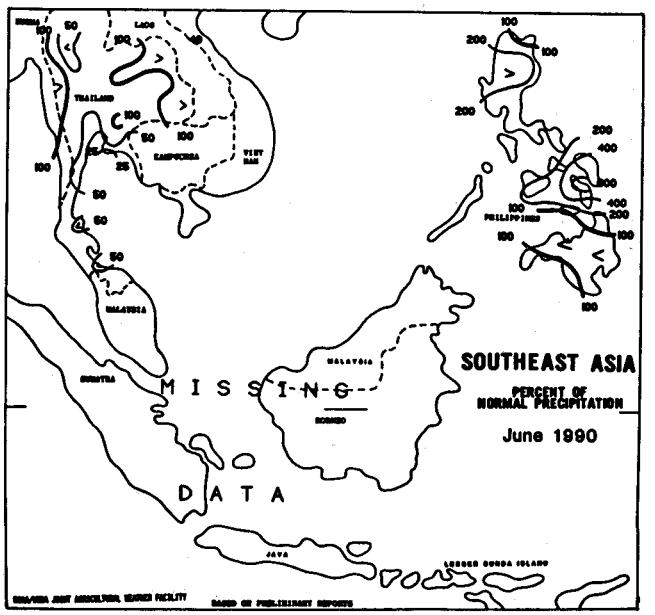



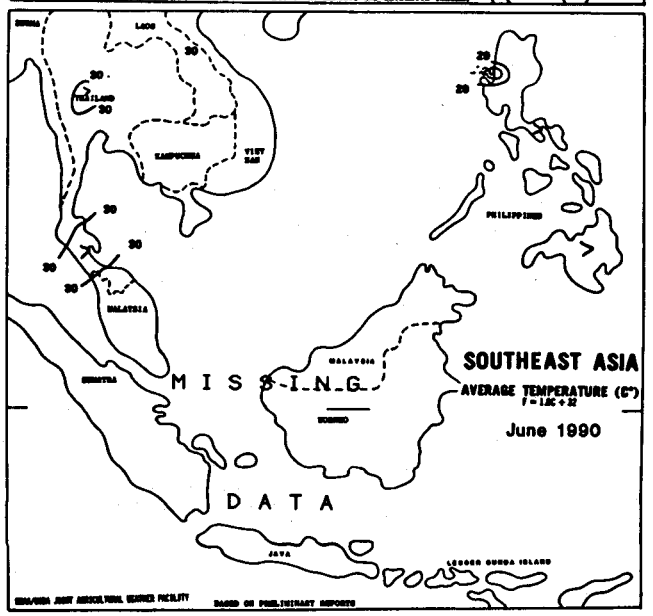



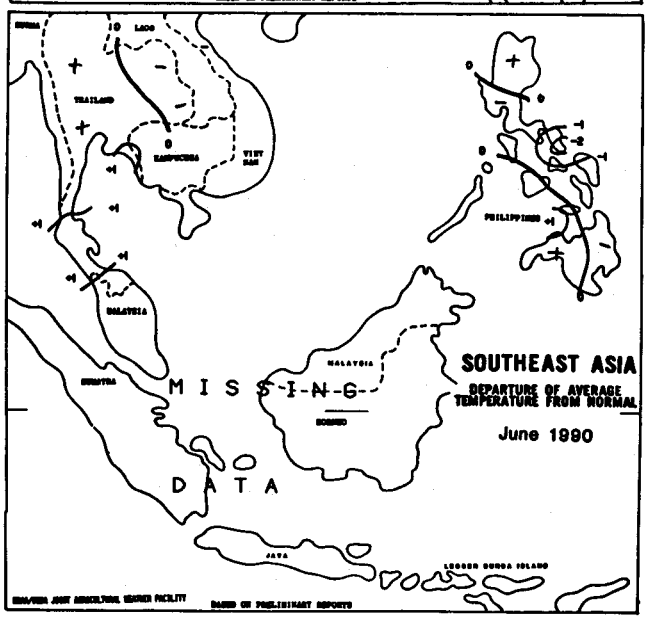
SOUTHEAST ASIA ... Unseasonably light rain (1-14mm), accompanied by warmer-than-normal temperatures, covered Thailand's central corn and northern rice areas, reflecting the drying trend that has lasted in these areas since mid-June. The recent weeks of timely, but below-normal rainfall benefited reproductive to filling crops but did little to rebuild moisture reserves. However, in eastern Thailand, continuing rainfall (21-83mm) maintained this season's favorable growing conditions for rain-fed rice. In the Philippines, moderate to heavy showers (25-50mm or more) covered most primary crop regions, including portions of the central islands and Mindanao that were drier than normal in recent weeks. Rainfall exceeded 100mm in only local areas of western Luzon. In June, rainfall averaged near to above normal over the Philippines, with large areas of Luzon and the east-central islands receiving 200 percent or more of total precipitation. The heavy rain was due mainly to the passages of Typhoon Ofelia and Percy, which caused some flooding and likely damaged some newly planted rice and corn.

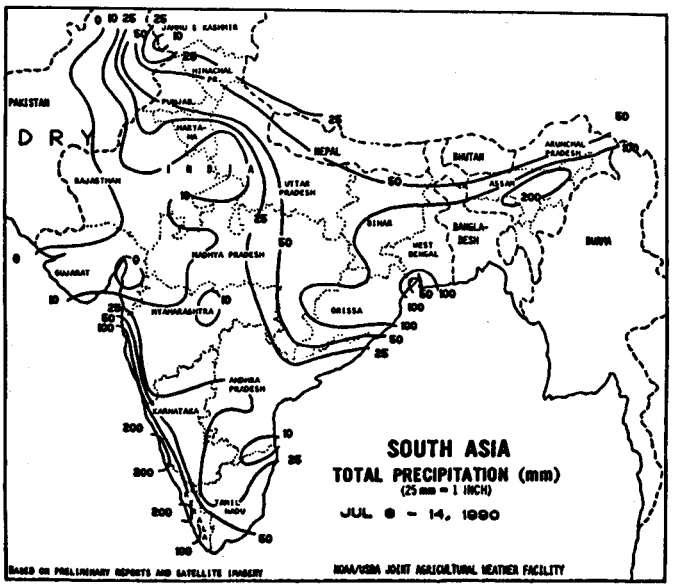


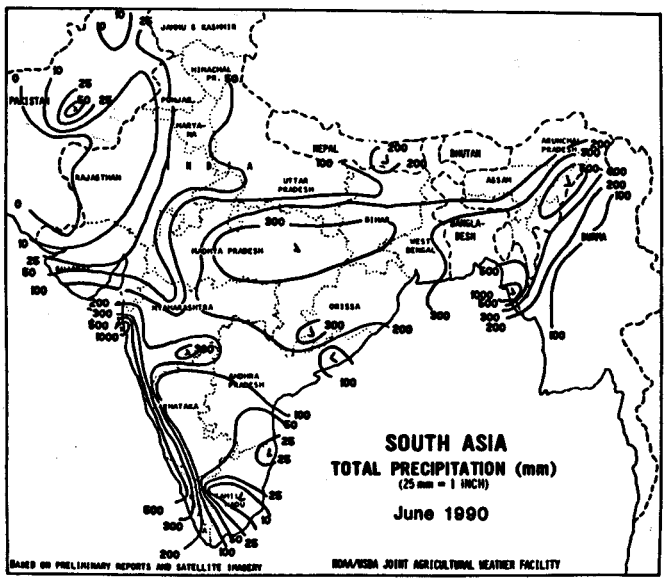



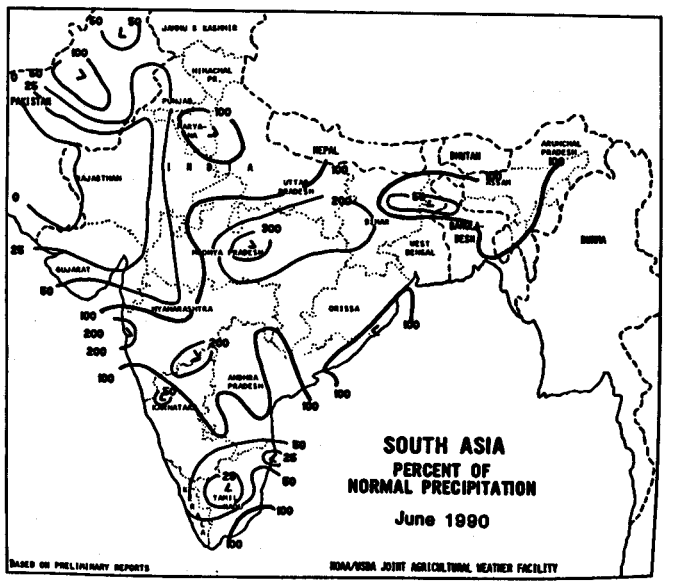



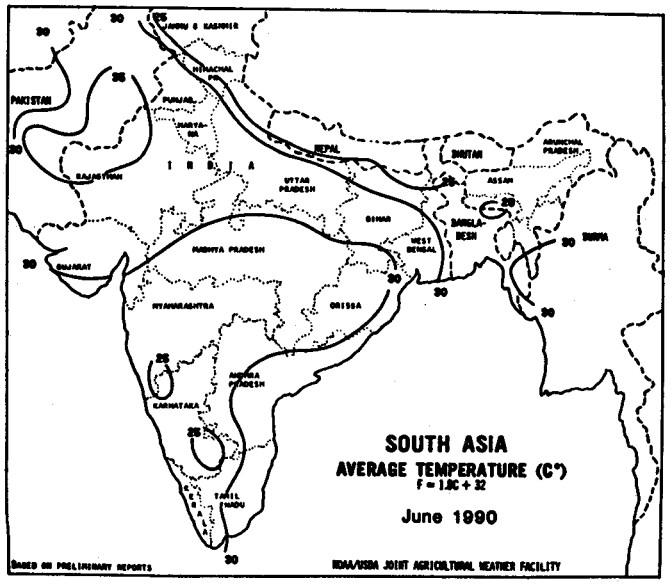



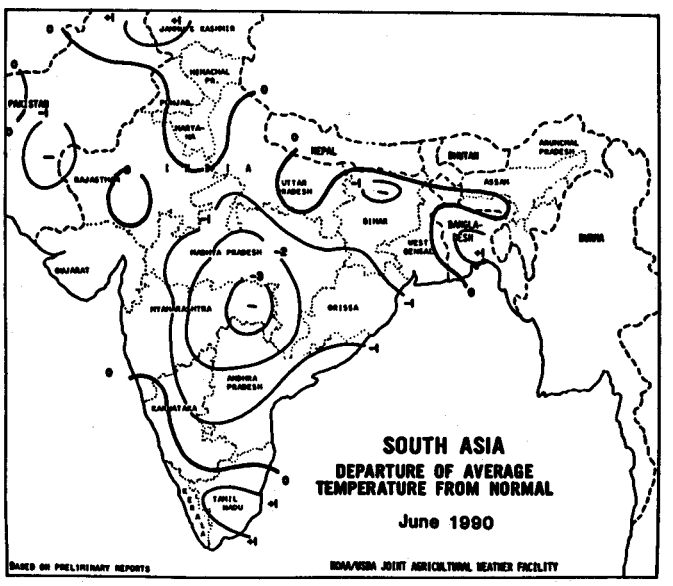



SOUTH ASIA ... Light to moderate rain (10-40mm) benefited vegetative summer crops across the southern interior, although accumulations continued to be below normal in Maharashtra and much of Andhra Pradesh. Rainfall tapered off from last week further north, but moderate to heavy rain (25-70mm) improved local planting conditions from northern Pakistan to Bihar. Continuing heavy rain (50-100mm or more) in the east exacerbated flooding, with very heavy rain (153-227mm) falling again in Assam along the Brahmaputra river. In June, rainfall totaled near to above normal over most summer crop areas as the southwest monsoon progressed at about the normal pace. By month's end, some flooding had occurred in eastern Madhya Pradesh and portions of the eastern rice areas. In contrast, a drying trend over the southern interior resulted in below-normal accumulations from Karnataka and southern Andhra Pradesh southward, reducing moisture for summer crop establishment. June temperatures averaged near to below normal, although periods of hot weather continued in the north and over local areas of the southeast coast.

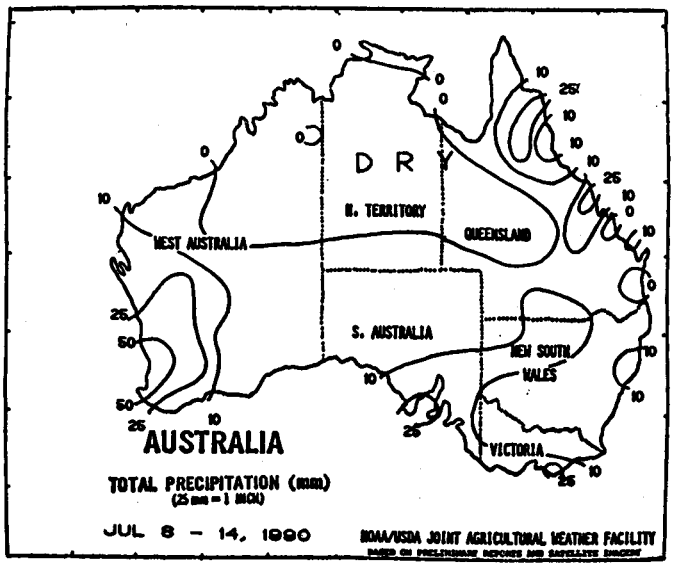


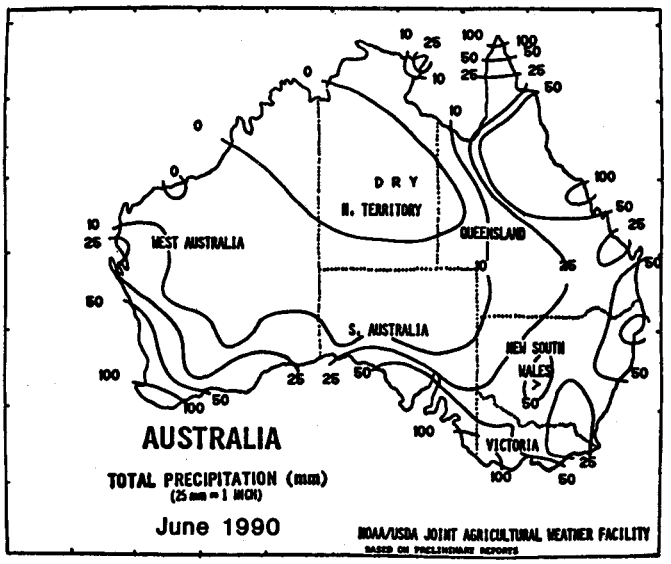



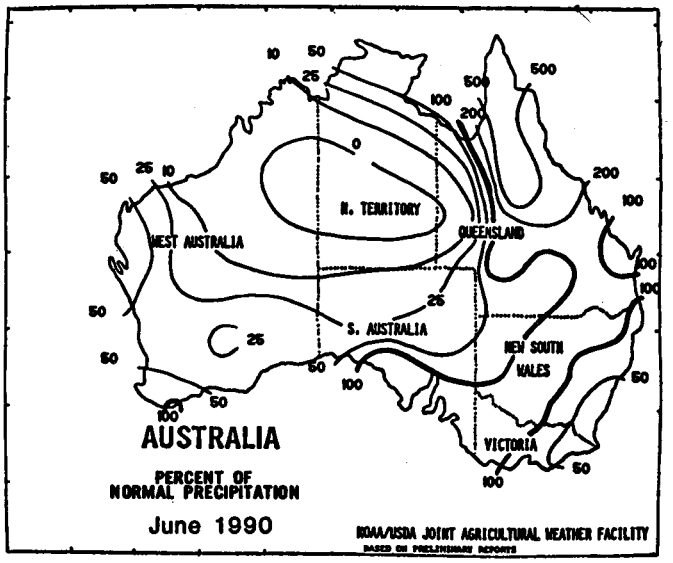



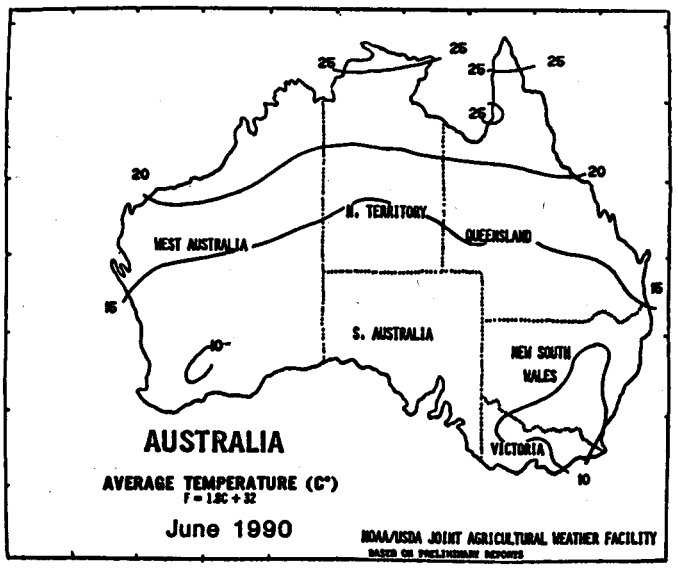



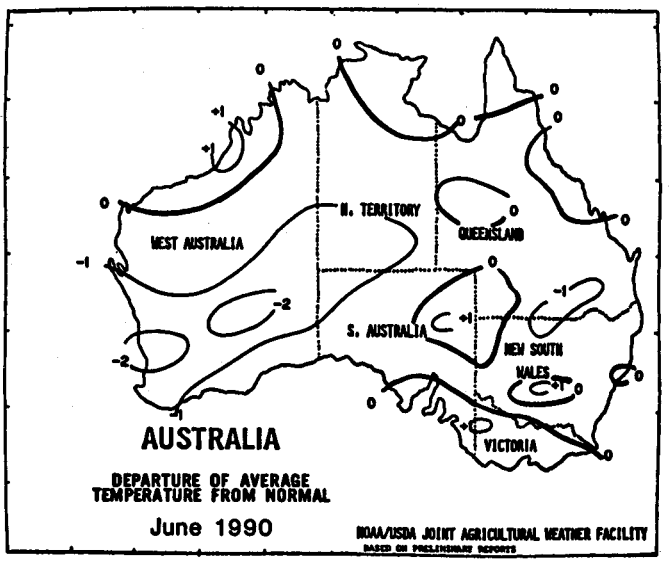
AUSTRALIA ... A strong frontal system brought widespread heavy rain (20-50mm, with isolated amounts in excess of 50mm) to crop areas of Western Australia, ending 3 weeks of below-normal rainfall during the climatologically wettest period of the year. The rain brought soil moisture for semidormant winter grains back to normal levels. Light to moderate rain (5-20mm) continued in crop areas of South Australia and Victoria, favoring winter grains which were planted late due to persistent dryness during early and mid-June. Elsewhere, light to moderate rain (5-15mm) covered winter grain areas of Queensland and New South Wales, while scattered showers (5-40mm) caused delays in sugarcane harvest along Queensland's northeast coast. Precipitation was above normal in all but southwestern crop areas during June, leaving favorable soil moisture levels for most winter crops. However, below-normal temperatures over nearly all areas slowed crop growth and development.

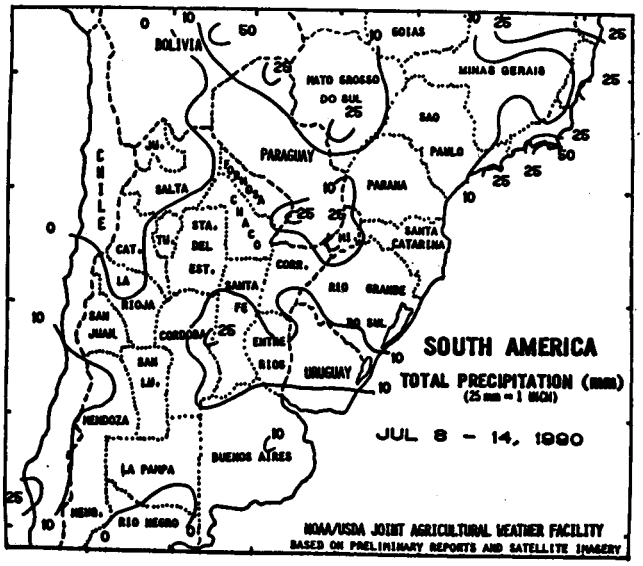


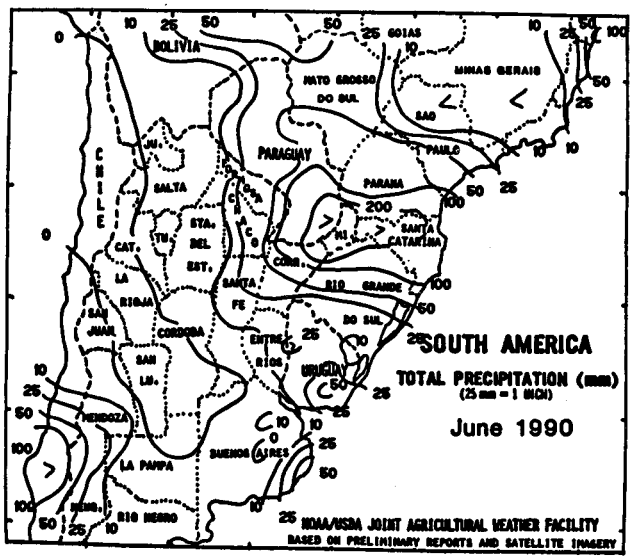



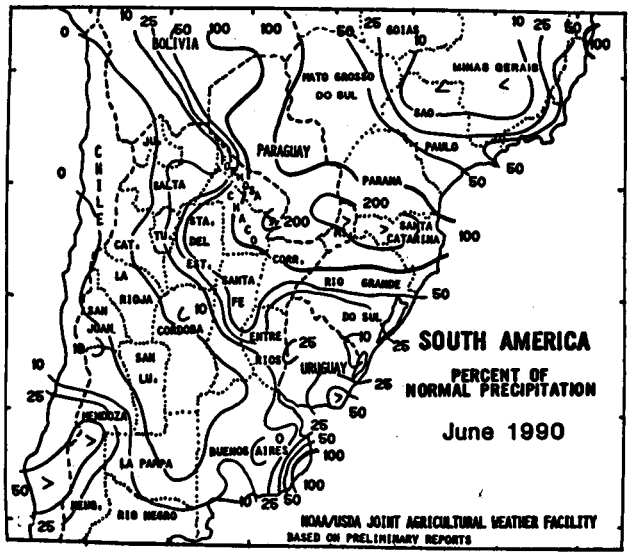



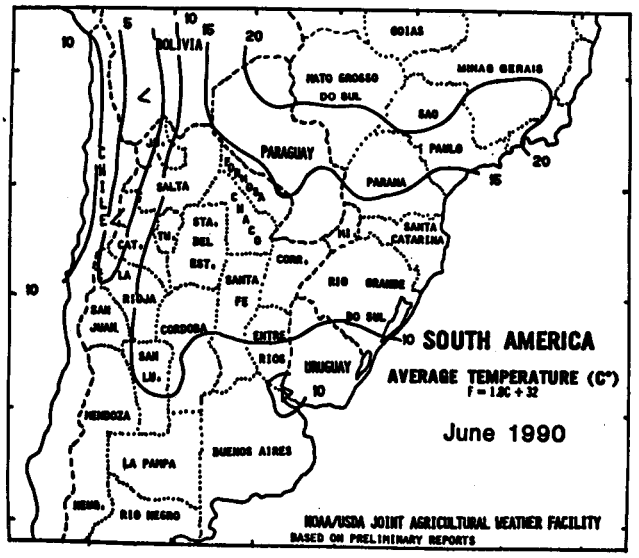



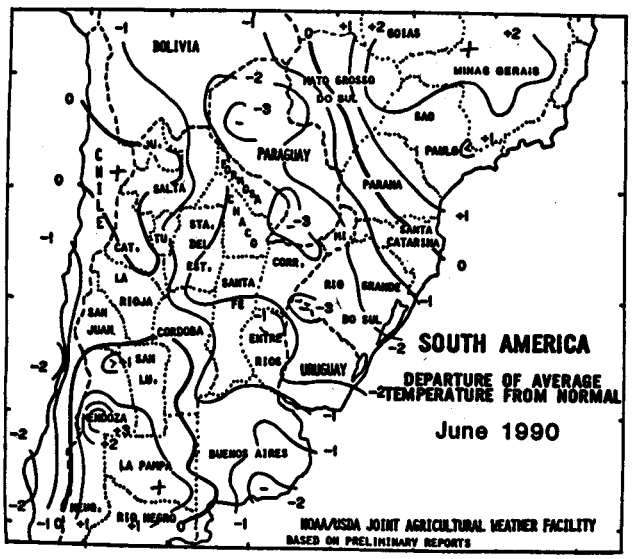



SOUTH AMERICA ... Beneficial showers fell early in the week over northern portions of Argentina's primary wheat areas. Weekly rainfall averaged 10-25mm in Santa Fe and eastern Cordoba, providing helpful topsoil moisture for wheat planting and emergence. Light showers (1-9mm) covered the remaining wheat areas of Buenos Aires, La Pampa, and western Cordoba. Minimal rain fell during June throughout Argentina's grain belt, promoting rapid fieldwork but reducing topsoil moisture. No rain fell during June in western wheat areas, making recent July showers important for crop establishment. Moisture is especially low in Cordoba. In south-central Brazil, mostly dry weather prevailed recently in the south. June rainfall averaged well above normal in northern Rio Grande do Sul, Santa Catarina, and southern Parana, slowing late wheat planting. Mostly light showers recently in the north caused only minor delays in the coffee harvest. Dry weather in June favored harvesting of citrus and coffee in Sao Paulo and Minas Gerais.

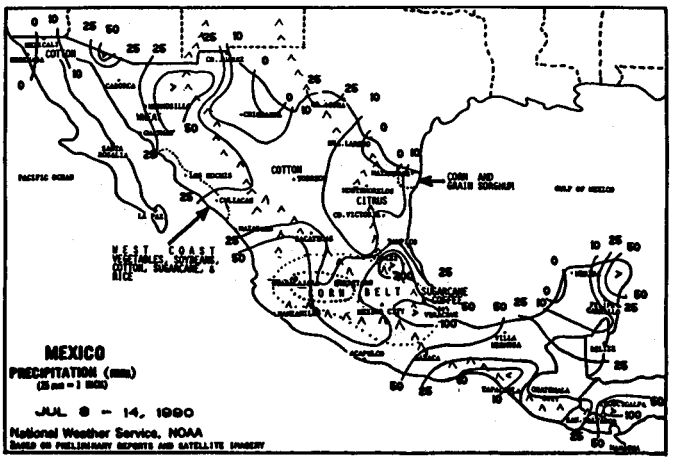


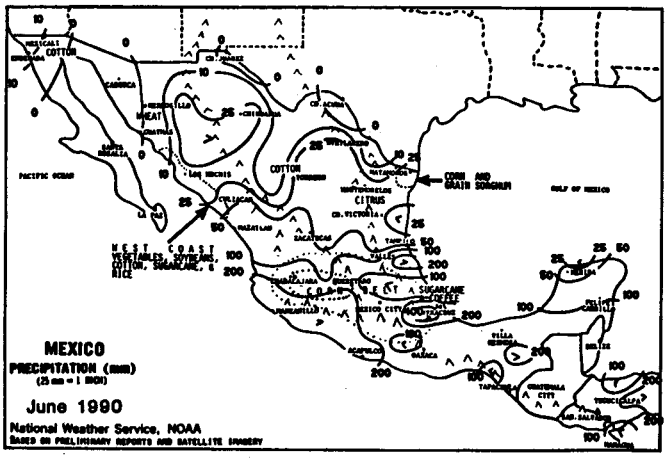



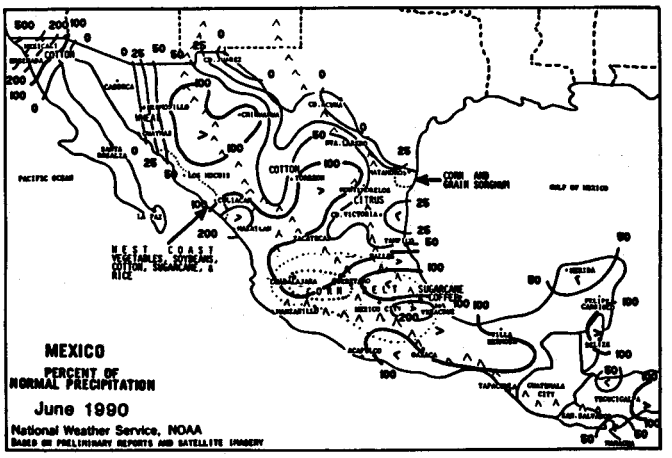



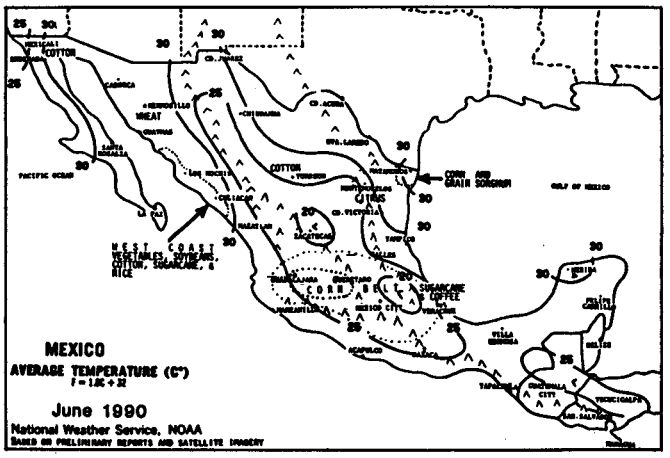



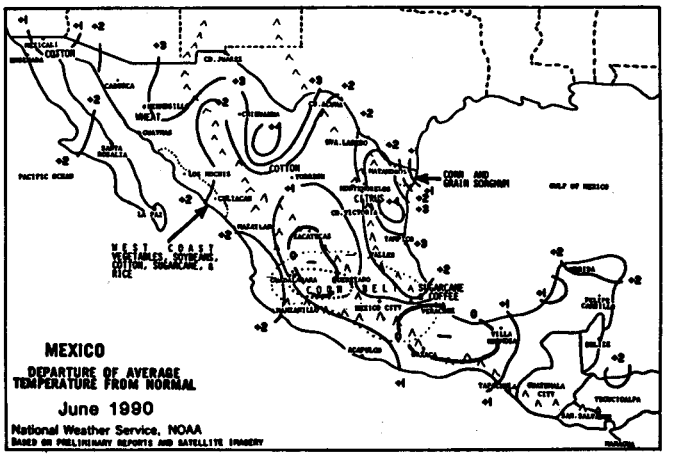
MEXICO ... Widespread, beneficial rain fell over most crop areas. Locally heavy showers (50-96mm) in the northwestern mountains benefited reservoirs and irrigated crops in the west. Showers (14-28mm) along the west coast farming region provided additional moisture for crop growth. Weekly rainfall averaged 10-18mm in the north-central range and cotton areas, but mostly dry weather prevailed in the northeast where some harvest activities are underway. In the Southern Plateau corn belt, widespread showers benefited corn growth. Locally heavy rain (100-326mm) soaked eastern corn areas from near Veracruz to Ciudad Valles. This wet weather pattern continues from the month of June, when near- to above-average monthly rainfall favored immature crops in the western, north-central, and Southern Plateau crop areas. Below-average June rainfall limited moisture for immature crops in the northeast.

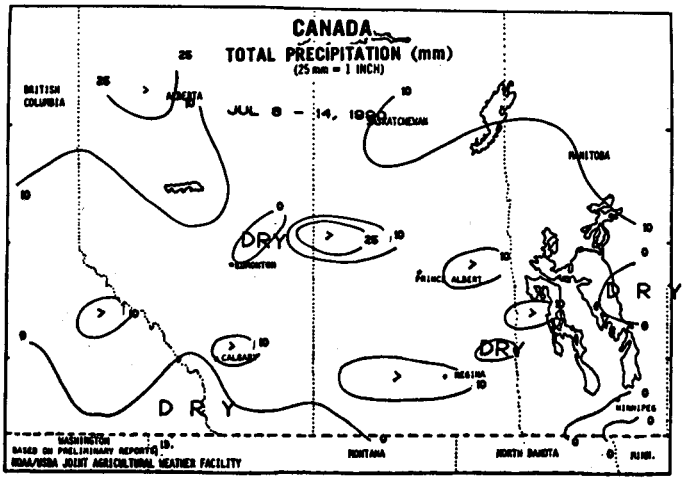


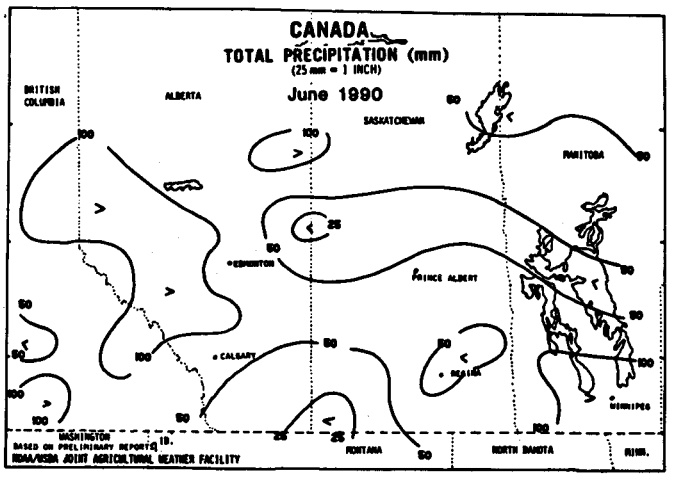



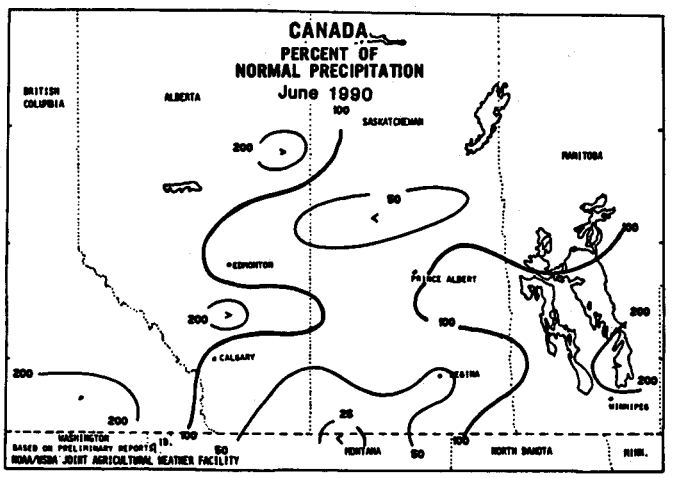



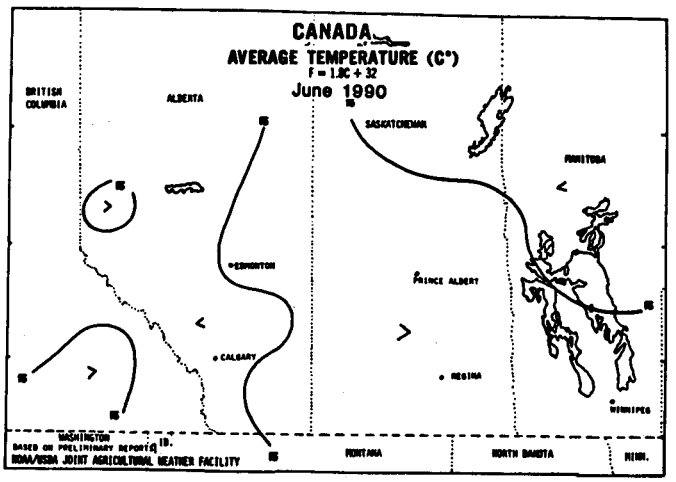



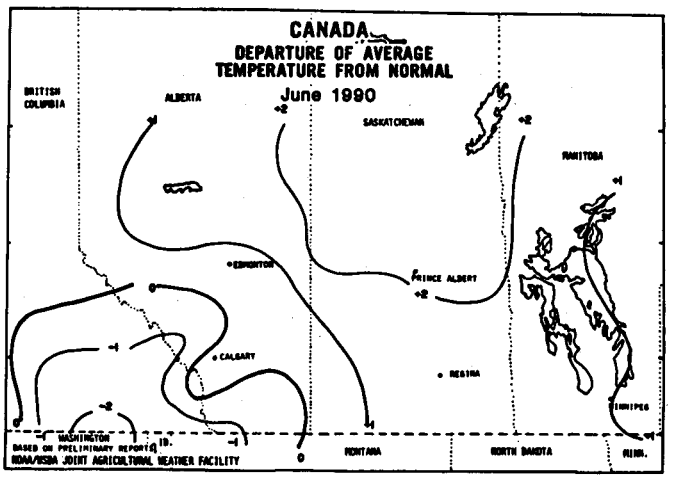



CANADA ... Light to moderate rain (10-20mm) covered an area of central Saskatchewan from Regina westward, but rainfall totaled less than 5mm over most other primary crop regions. The drier weather favored crop growth over most areas following last week's soaking rains. However, more rain is needed in the southwest for heading spring wheat as temperatures again averaged 1-3 degrees C above normal, drying topsoils. In June, rainfall averaged below normal from southern Alberta to south-central Saskatchewan, as well as some northernmost regions from Edmonton eastward. The dryness reduced moisture levels for spring wheat establishment, but late-month rain improved conditions in south-central Saskatchewan. In contrast, wet weather caused some wash-out of newly planted grains and oilseeds in local areas of Alberta and Manitoba. June temperatures averaged near to above normal across the Prairies, but local frost early in the month in northeastern Saskatchewan caused some damage to emerging oilseeds.



The Weekly Weather and Crop Bulletin (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic $35, foreign $50 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

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(Continued from front cover)
torrential rain and large hail, and spawned a few tornadoes. Nearly 6 inches of rain inundated **Virginia Beach, VA** in 6 hours on Thursday morning. The **Southwest** monsoon continued throughout the week, with scattered showers and thunderstorms across **Arizona, New Mexico, Utah,** and **Colorado.** Heavy rains at week's end caused a number of flash floods. A 12-foot wall of water was reported to be moving down the **Puerco River** in **Arizona** on Saturday. A wide area of torrential rain covered **southern Texas** on Sunday, July 15, as 12.5 inches deluged **Eldorado, TX.**

Unseasonably cool air spread into the **northeastern and central portions of the Nation** as numerous low temperature records for the date were broken in the **Plains, Mississippi Valley,** and **New England** at week's end. In contrast, abnormally hot weather remained in the **West,** and the **Middle and Southern Atlantic Coast States,** where record-high temperatures for the date were set during the middle of the week.

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**ISSN 0043 1974**