

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

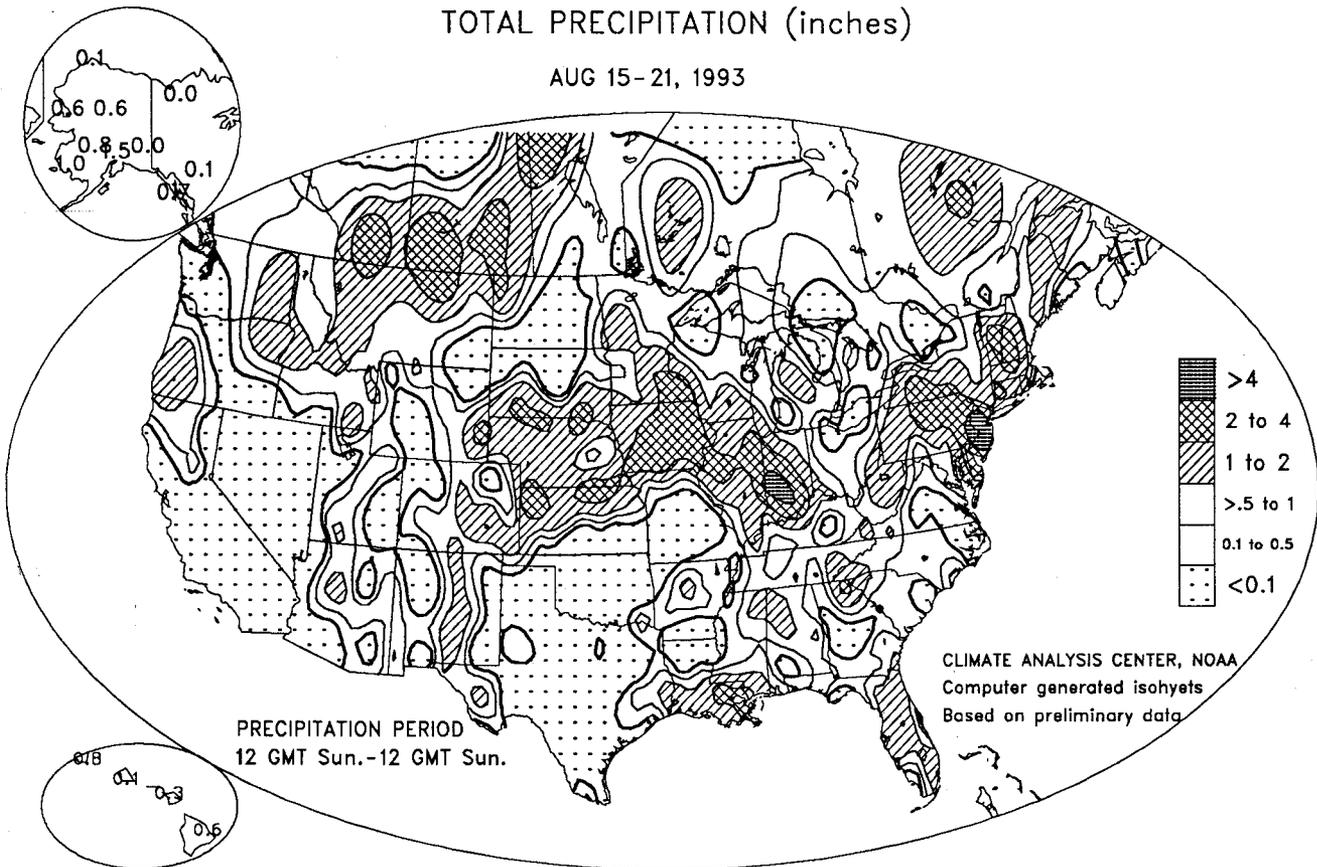
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Washington, D.C.

August 24, 1993

TOTAL PRECIPITATION (inches)

AUG 15-21, 1993



CLIMATE ANALYSIS CENTER, NOAA
Computer generated isohyets
Based on preliminary data

PRECIPITATION PERIOD
12 GMT Sun.-12 GMT Sun.

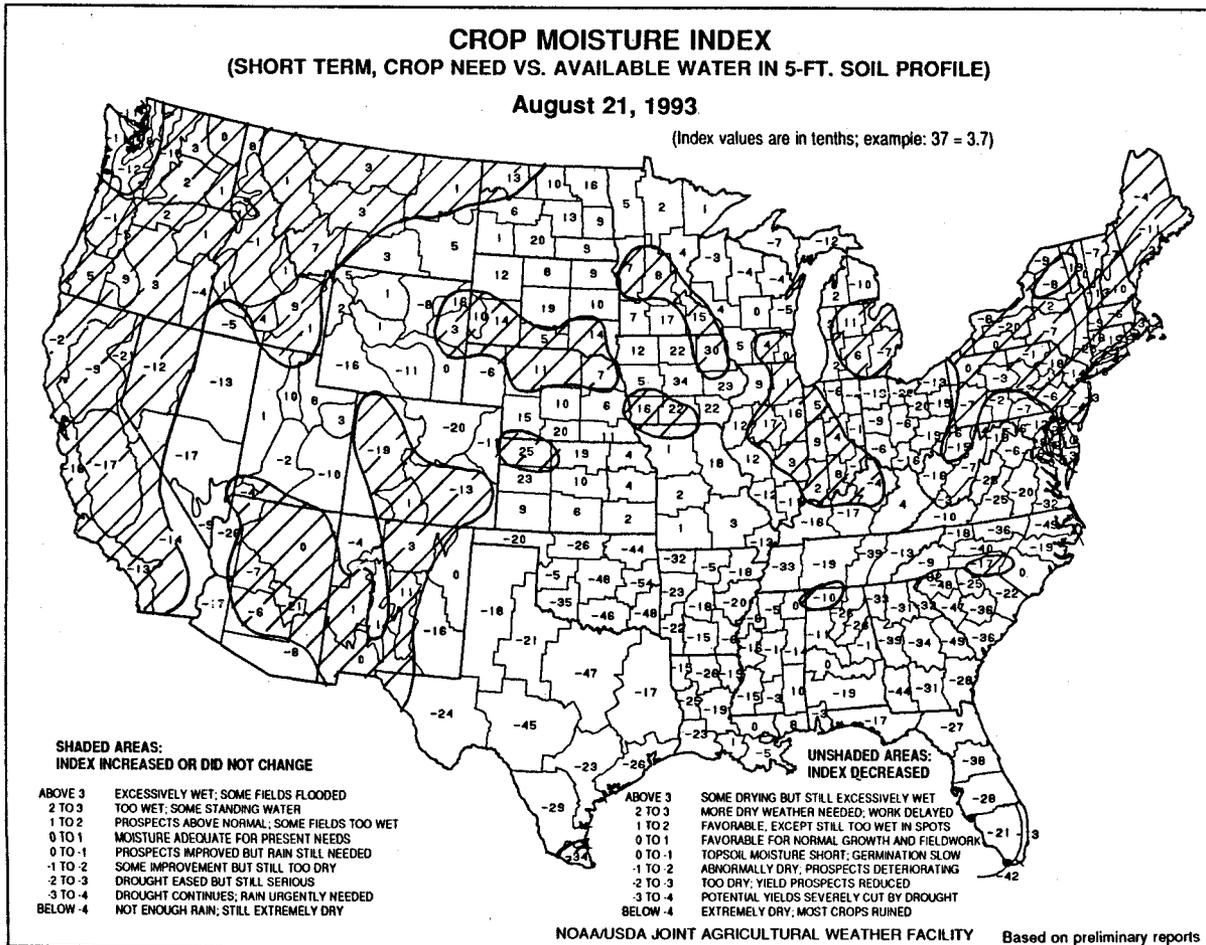
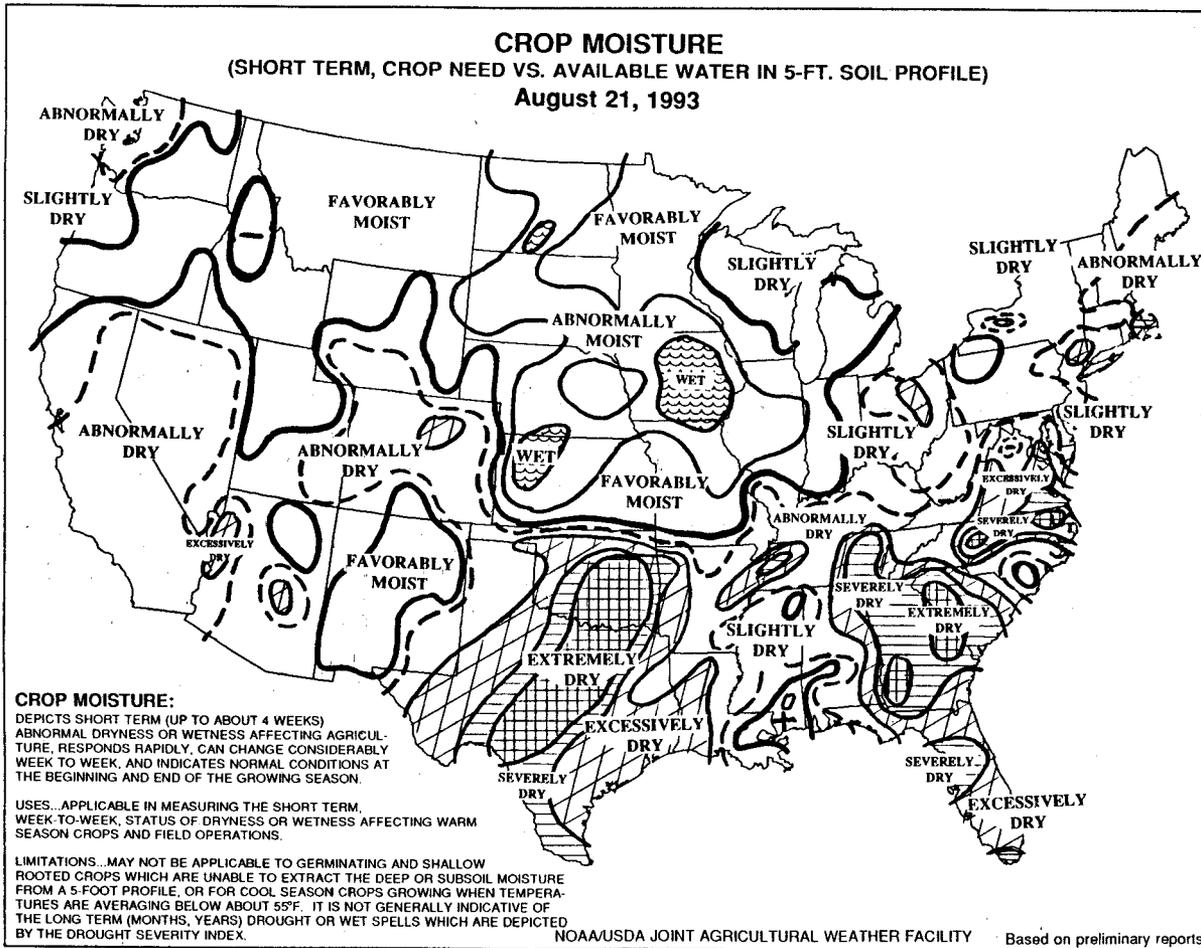
HIGHLIGHTS

August 15 - 21, 1993

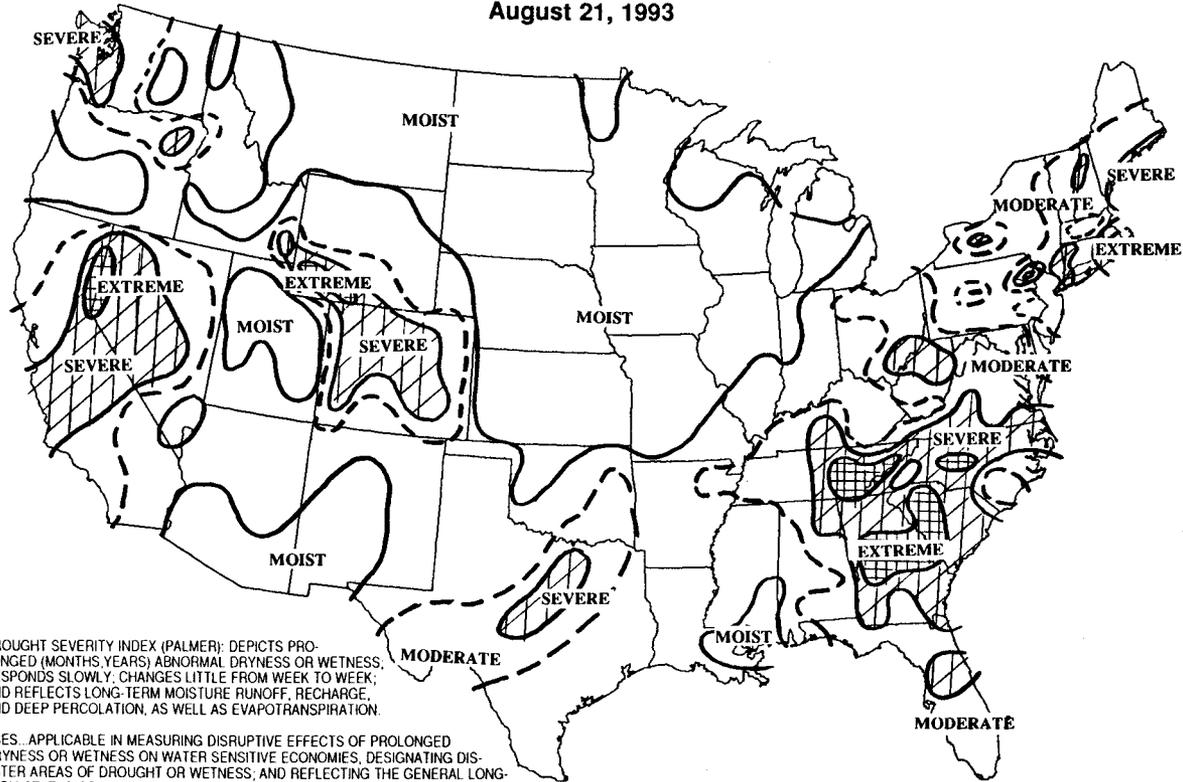
Frontal systems trekking across the northern half of the country triggered substantial rainfall (1 to 4 inches) across the Northwest, Midwest, and the Northeast, with especially heavy rains (over 4 inches) falling on southern Indiana and much of New Jersey. Dry weather prevailed over the Great Basin and into central and southern California. Favorably dry weather was noted across central North Dakota, but lack of widespread rain worsened crop conditions in Ohio. Hot, dry weather gripped the southern Plains, intensifying drought in Texas and Oklahoma. On Saturday, August 21, San Antonio, TX, endured its 56th day without rain.

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DROUGHT SEVERITY
(LONG TERM, PALMER)
August 21, 1993



DROUGHT SEVERITY INDEX (PALMER): DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.

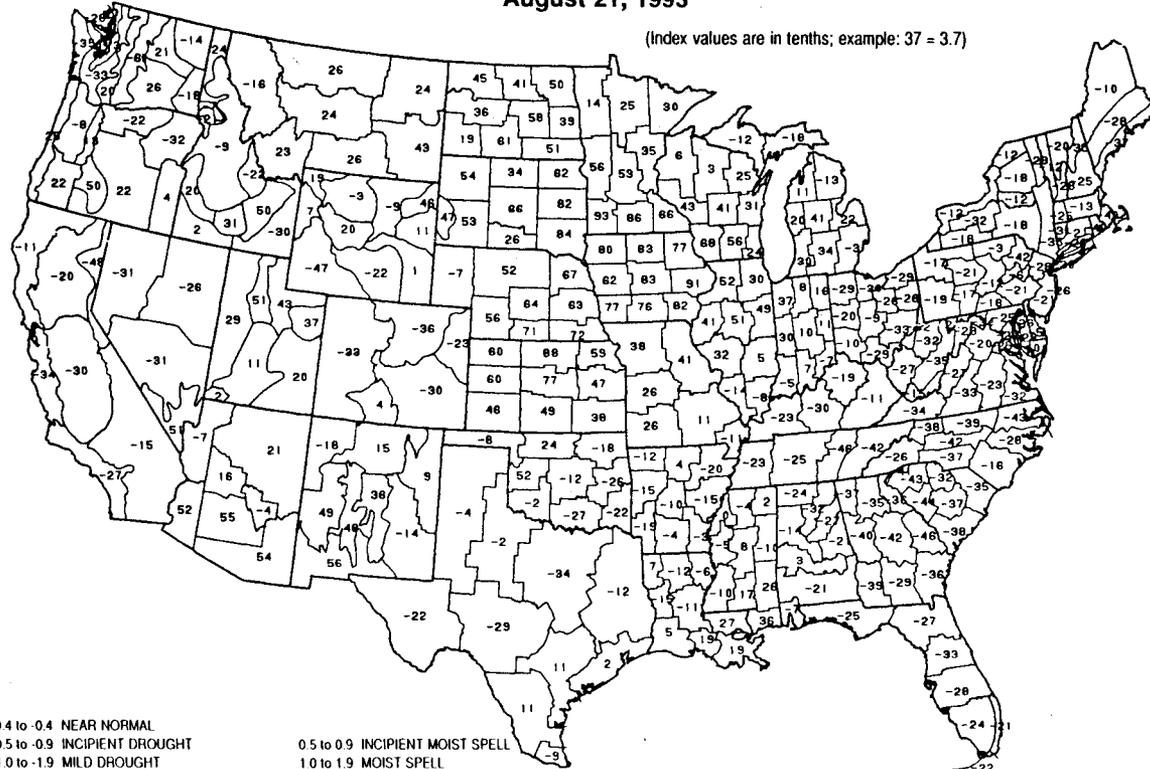
USES: APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES; DESIGNATING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.

LIMITATIONS: IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

DROUGHT SEVERITY INDEX BY DIVISION
(LONG TERM, PALMER)
August 21, 1993

(Index values are in tenths; example: 37 = 3.7)



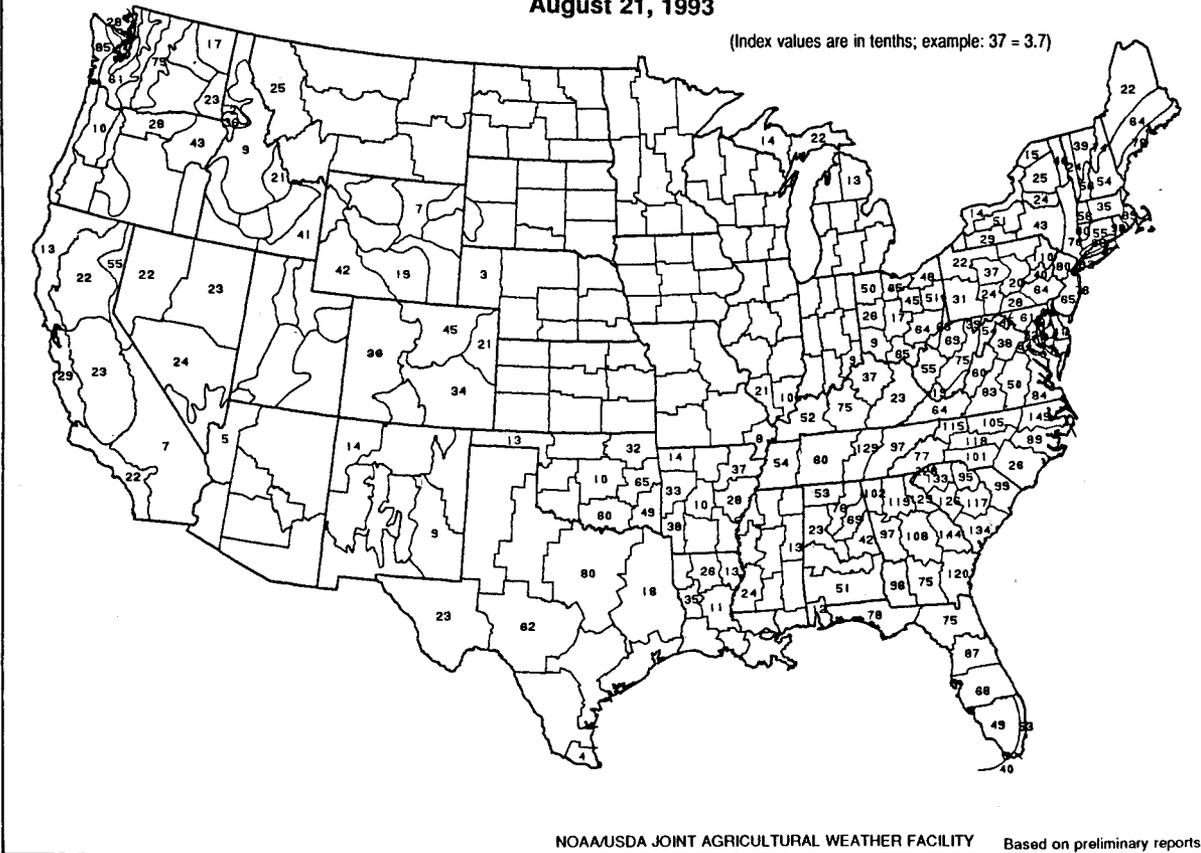
- | | |
|-------------------------------|----------------------------------|
| 0.4 to -0.4 NEAR NORMAL | 0.5 to 0.9 INCIPIENT MOIST SPELL |
| 0.5 to -0.9 INCIPIENT DROUGHT | 1.0 to 1.9 MOIST SPELL |
| 1.0 to -1.9 MILD DROUGHT | 2.0 to 2.9 UNUSUAL MOIST SPELL |
| 2.0 to -2.9 MODERATE DROUGHT | 3.0 to 3.9 VERY MOIST SPELL |
| 3.0 to -3.9 SEVERE DROUGHT | ABOVE 4.0 EXTREME MOIST SPELL |
| BELOW -4.0 EXTREME DROUGHT | |

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

**ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX NEAR ZERO
(LONG TERM, PALMER)**

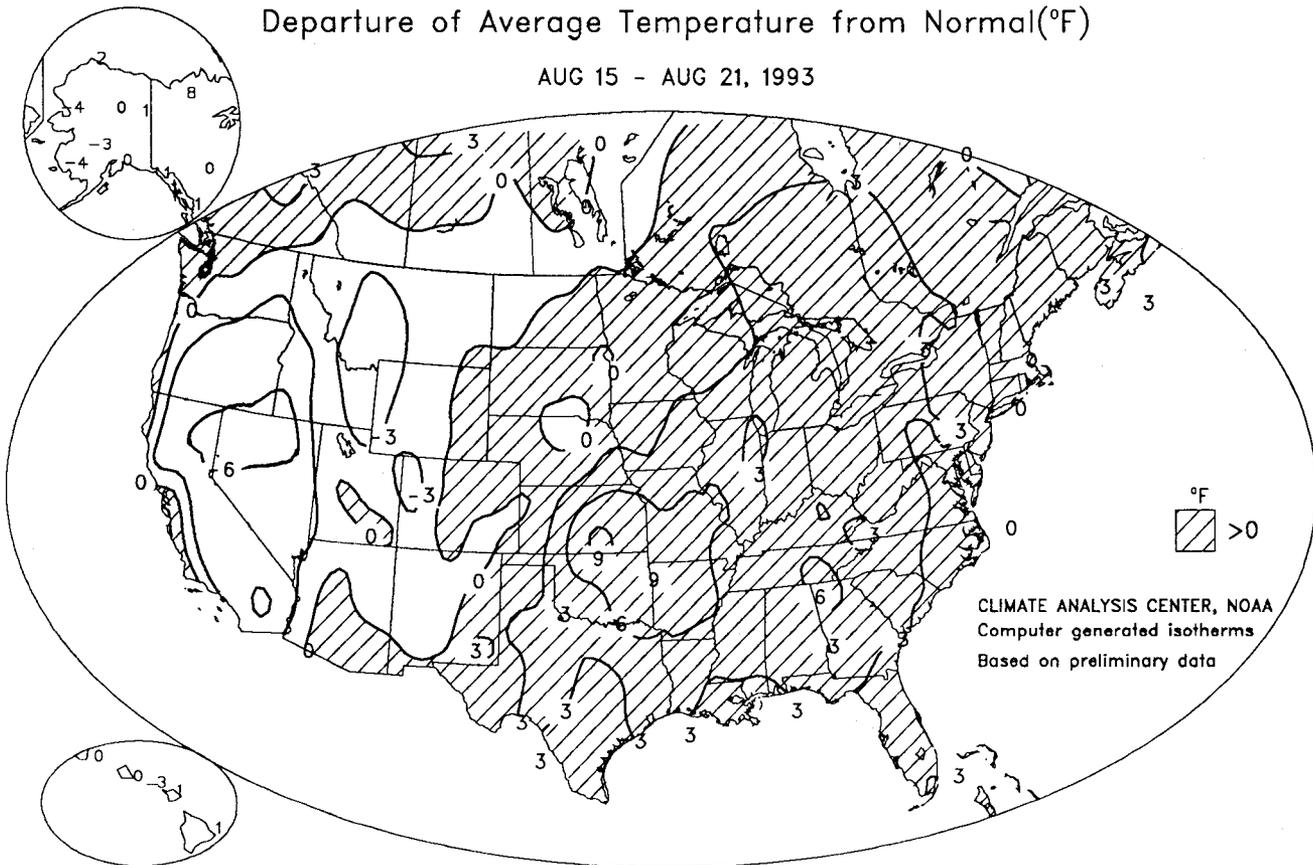
August 21, 1993

(Index values are in tenths; example: 37 = 3.7)



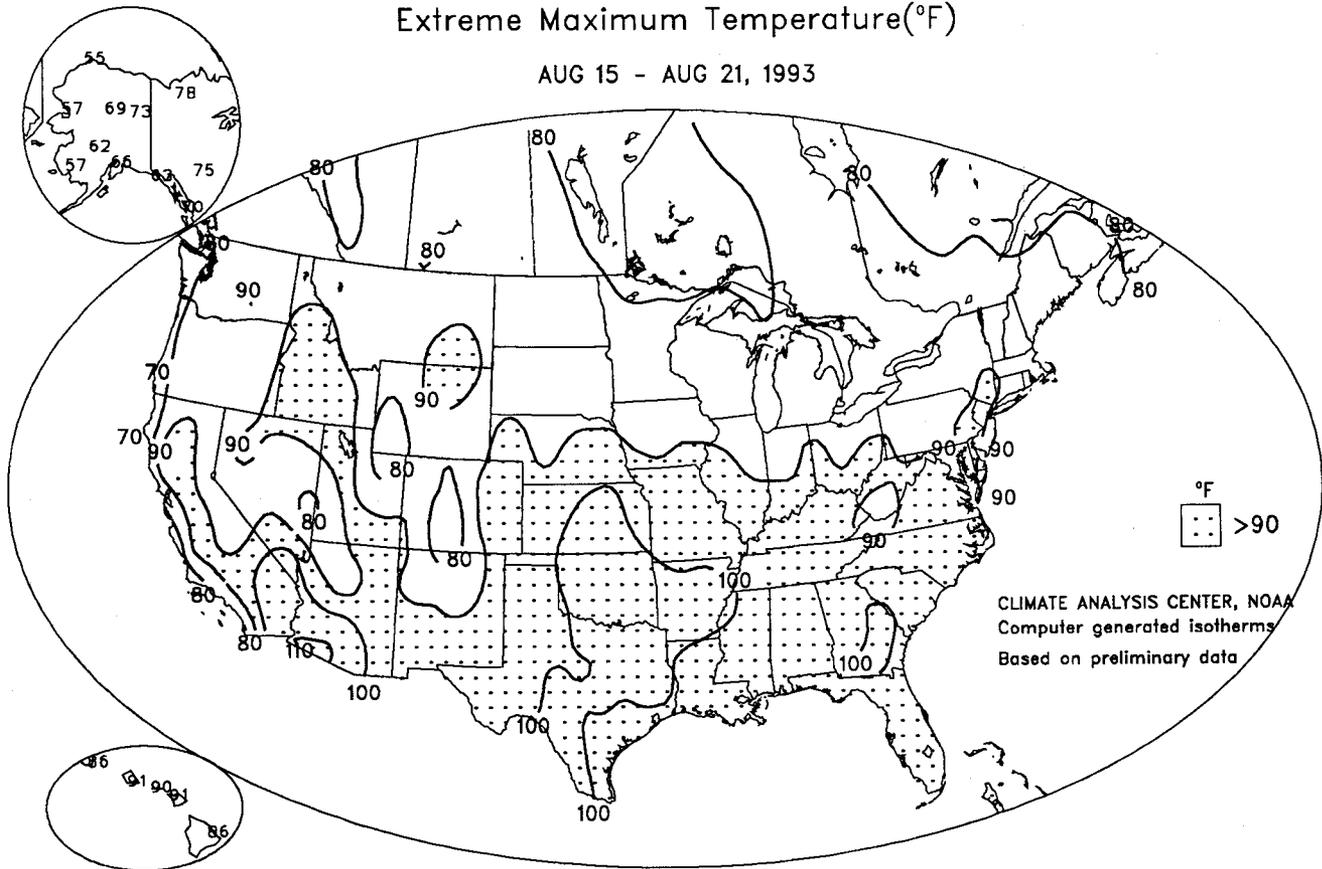
Departure of Average Temperature from Normal(°F)

AUG 15 - AUG 21, 1993



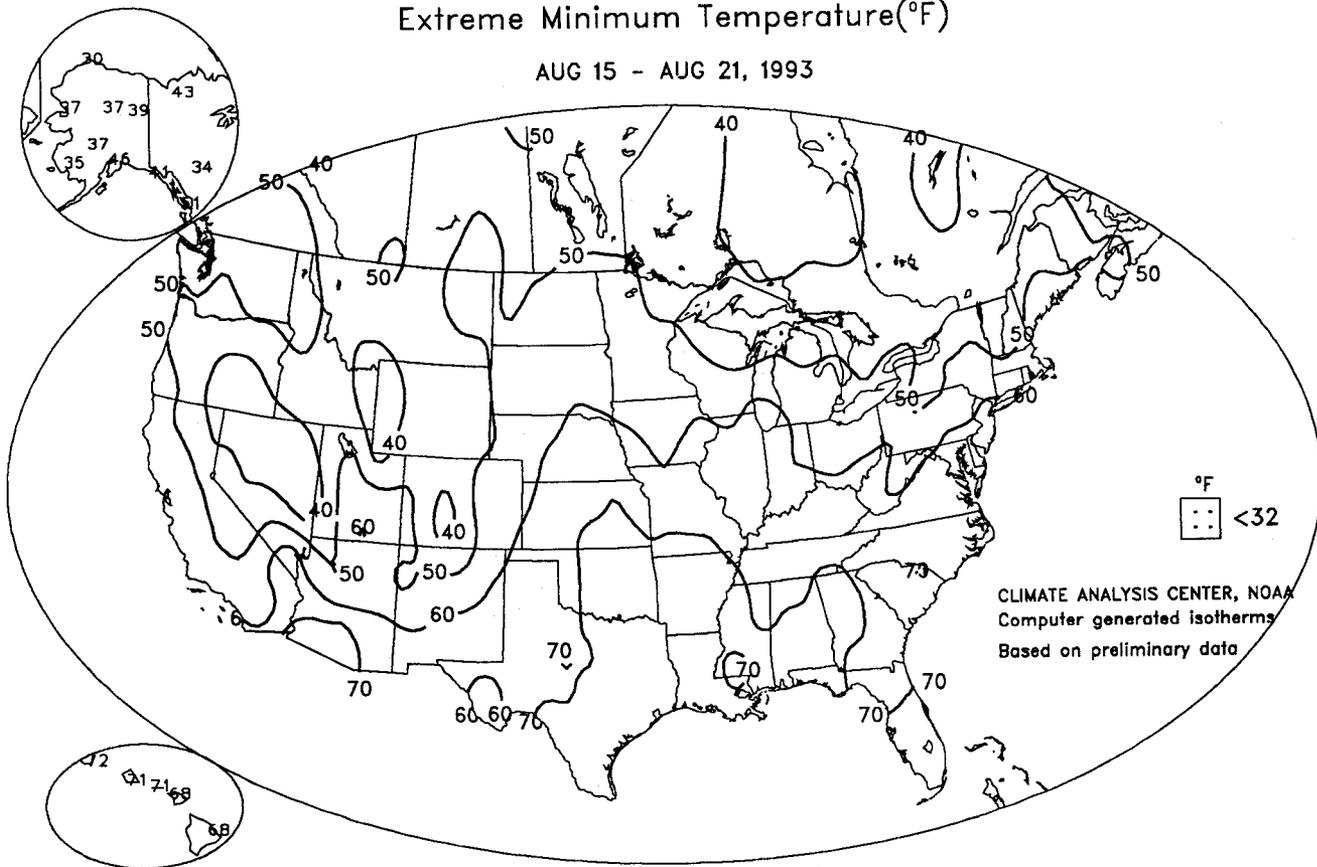
Extreme Maximum Temperature(°F)

AUG 15 - AUG 21, 1993



Extreme Minimum Temperature(°F)

AUG 15 - AUG 21, 1993



CUMULATIVE GROWING DEGREE DAYS (CORN*) April 1 - August 21, 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL ANNISTON	3183	+ 26	AL ANNISTON	3183	+ 26	OK ALTUS	3273	- 27
BIRMINGHAM	3215	- 7	TOPEKA/BILLARD	2675	- 72	GAGE	2910	- 20
MOBILE	3481	- 158	WICHITA	2826	- 90	HOBART	3152	- 23
MONTGOMERY	3377	+ 89	KY LEXINGTON	2726	+ 82	MCALESTER	3388	+ 140
MUSCLE SHOALS	3220	+ 95	BOWLING GREEN	2920	+ 68	PONCA CITY	3160	+ 77
OZARK	3428	+ 30	PADUCAH	3057	+ 99	TULSA	3125	- 94
TUSCALOOSA	3341	+ 13	LA LAFAYETTE	3620	- 41	OR BAKER	1455	- 160
AZ DOUGLAS	3118	+ 193	LAKE CHARLES	3685	- 44	EUGENE	1606	- 31
FLAGSTAFF	1842	+ 218	MONROE	3480	+ 16	NORTH BEND	1210	+ 272
PHOENIX	4278	+ 523	NEW ORLEANS	3554	- 115	PENDLETON	1882	- 162
TUCSON	3669	+ 234	SHREVEPORT	3451	+ 80	REDMOND	1422	- 180
YUMA	4293	+ 423	ME AUGUSTA	1831	+ 149	PORTLAND	1785	+ 106
AR PRESCOTT	2521	+ 336	CARBON	1448	+ 148	SALEM	1754	+ 142
EL DORADO	3306	- 11	HOULTON	1490	+ 64	SEXTON SUMMIT	921	- 335
FAYETTEVILLE	2941	+ 106	PORTLAND	1745	+ 180	PA ALLENTOWN	2497	+ 247
FORT SMITH	3256	+ 64	MD SALLSBURY	2769	+ 182	PHILADELPHIA	2897	+ 532
JONESBORO	3183	- 31	MA WORCESTER	1860	+ 66	WILLIAMSPORT	2416	+ 250
LITTLE ROCK	3301	+ 93	MI JACKSON	2039	- 27	SC BEAUFORT	3619	+ 171
TEXARKANA	3397	- 41	LANSING	2024	- 58	CHARLESTON	3520	+ 143
CA BAKERSFIELD	3113	- 46	MUSKEGON	1965	+ 111	COLUMBIA	3366	+ 84
BLUE CANYON	1298	- 249	PELLSTON	1554	+ 50	FLORENCE	3465	+ 183
DAGGETT	3432	+ 72	SAULT STE. MARIE	1227	- 30	SUMNER/SHAW AFB	3338	+ 71
EUREKA	1166	+ 530	TRaverse CITY	1840	+ 116	SD ABERDEEN	1905	- 12
FRESNO	3009	+ 209	MN DULUTH	1178	- 153	HURON	1934	- 182
MARYSVILLE	2833	+ 157	INT'L FALLS	1372	- 102	PIERRE	1944	- 170
MERCED	2824	+ 172	MINNEAPOLIS	1916	---	RAPID CITY	1669	- 277
MT SHASTA	1405	- 262	ROCHESTER	1745	---	STOIX FALLS	1988	- 180
PASO ROBLES	2384	+ 140	ALEXANDRIA	1644	- 177	WATERSTOWN	1619	- 262
RED BLUFF	2723	- 124	MS BILOXI	3692	- 35	TN BRISTOL	2714	+ 95
RIVERSIDE	2865	+ 262	COLUMBUS	3270	+ 38	CHATTANOOGA	3208	+ 200
SANTA ANA	2994	+ 534	JACKSON	3419	+ 119	CROSSVILLE	2728	+ 347
SAN DIEGO	2534	+ 204	MERIDIAN	3388	+ 56	MEMPHIS	3390	+ 57
SACRAMENTO	2528	+ 74	GREENWOOD	3404	+ 3	NASHVILLE	3099	+ 61
THERMAL	3699	- 53	MO COLUMBIA	2689	+ 63	TX ABILENE	3489	+ 45
ALAMOSA	1580	- 47	JOPLIN	2942	- 23	AMARILLO	2788	+ 9
DENVER	2116	+ 24	SPRINGFIELD	2808	+ 46	AUSTIN	3740	+ 36
EAGLE	1568	- 162	VICHY	2802	+ 39	BROWNSVILLE	4109	+ 24
GRAND JUNCTION	2423	- 143	MT HELENA	1376	- 194	COLLEGE STATION	3633	- 19
LA JUNTA	2546	- 31	KALISPELL	1326	- 248	DALHART	2664	+ 44
DE DOVER	2687	+ 24	MILES CITY	1765	- 273	DALLAS/FT WORTH	3634	+ 155
WILMINGTON	2758	+ 264	NE GRAND ISLAND	2262	- 151	GALVESTON	4049	+ 107
FL DAYTONA BEACH	3582	- 85	NORFOLK	2246	- 98	HOUSTON/INWCNTL	3739	+ 130
FORT MYERS	3961	+ 61	NORTH PLATTE	2104	- 82	KINGSVILLE/NAS	4058	+ 119
GAINESVILLE	3456	- 158	VALENTINE	1959	- 299	LAREDO	4143	+ 107
JACKSONVILLE	3514	- 100	SCOTTSBUFF	1983	- 119	LUBBOCK	3226	+ 199
FORT LAUDERDALE	4296	+ 311	SIDNEY	1936	- 1	MCCALLEN	4167	+ 199
MIAMI	4251	+ 136	NV ELKO	1565	- 232	MIDLAND	3365	+ 57
MILTON	3525	+ 44	ELY	1652	- 28	PALACIOS	3885	- 22
PENSACOLA	3623	- 78	LAS VEGAS	3753	+ 284	SAN ANTONIO	3796	+ 38
ST PETERSBURG	3957	- 82	RENO	1957	+ 52	VICTORIA	3819	+ 53
TALLAHASSEE	3457	- 71	WINNEMUCCA	1908	- 21	WACO	3624	- 47
TAMPA	3806	- 54	NH CONCORD	2029	+ 189	WICHITA FALLS	3321	- 49
VERO BEACH	3782	+ 6	NJ NEWARK	2948	+ 457	WINK	3456	+ 86
GA W. PALM BEACH	4021	+ 83	NM ALBUQUERQUE	2901	+ 385	UT CEDAR CITY	2105	- 5
ATHENS	3247	+ 146	CARLSBAD	3415	+ 171	VT BARRE-MONTPELIER	1677	+ 140
AUGUSTA	3405	+ 159	CLOVIS	2870	+ 183	BURLINGTON	1991	+ 214
BRUNSWICK	3556	- 71	GALLUP	2159	+ 69	VA CHARLOTTESVILLE	2865	+ 138
COLUMBUS/METRO	3467	+ 93	TRUTH OR CONSEQ.	3089	+ 168	HAMPTON/LANGLEY	3136	+ 251
MACON	3409	+ 29	NY ALBANY	2164	+ 165	LYNCHBURG	2932	+ 302
SAVANNAH	3586	+ 125	ELMIRA	2070	+ 178	NORFOLK	3119	+ 230
ID BOISE	1916	- 156	GIENS FALLS	1973	+ 139	RICHMOND	2993	+ 162
BURLEY	1768	- 45	ROCHESTER	2022	+ 66	WA BELLINGHAM	1347	+ 159
IDAHO FALLS	1427	- 243	SYRACUSE	2047	+ 106	HOQUIAM	1213	+ 199
POCATELLO	1550	- 245	UTICA	1867	+ 46	SEATTLE-TACOMA	1474	+ 92
IL BELLEVILLE	2853	+ 91	WATERTOWN	1820	- 7	SPOKANE	1519	- 172
CHICAGO/MIDWAY	2339	+ 4	ASHEVILLE	2606	+ 156	TACOMA	1529	+ 55
DECATUR	2573	- 52	FAYETTEVILLE	3226	+ 143	WALLA WALLA	2052	- 92
PEORIA	2550	+ 138	GREENSBORO	3077	+ 230	WENATCHEE	2107	- 85
ROCKFORD	2269	+ 86	HICKORY	2961	+ 139	YAKIMA	1909	- 55
SPRINGFIELD	2653	+ 61	RALEIGH	3107	+ 185	WV HUNTINGTON	2770	+ 309
QUINCY	2550	- 3	WILMINGTON	3362	+ 115	MARTINSBURG	2511	+ 68
IN INDIANAPOLIS	2563	+ 75	NEW BERN	3249	+ 97	MORGANTOWN	2461	+ 105
SOUTH BEND	2269	+ 108	ND BISMARCK	1603	- 203	WI EAU CLAIRE	1806	- 112
TERRE HAUTE	2644	+ 113	DICKINSON	1372	- 329	GREEN BAY	1825	+ 45
IA DES MOINES	2318	- 158	JAMESTOWN	1553	- 222	LACROSSE	2032	- 107
MASON CITY	1943	- 256	MINOT	1409	- 273	MADISON	2120	+ 39
OTTUMWA	2447	- 38	GRAND FORKS	1645	- 75	WAUSAU	1660	- 113
KS CHANUTE	2793	- 80	OH AKRON-CANTON	2230	+ 122	CASPER	1707	- 76
DODGE CITY	2587	- 133	COLUMBUS	2454	+ 139	LANDER	1596	- 158
GARDEN CITY	2481	- 192	DAYTON	2449	+ 24	SHERIDAN	1509	- 201
GOODLAND	2144	- 124	FINDLAY	2160	- 40	WORLAND	1820	- 67
MEDICINE LODGE	2947	+ 1	YOUNGSTOWN	2115	+ 148			
RUSSELL	2584	- 101	ZANESVILLE	2373	+ 109			

Based on 1951-80 normals.

* Growing degree days for corn are computed to a 50°F base with the daily maximum temperature limited to 86°F or lower, and the daily minimum to 50°F or higher.

National Weather Data for Selected Cities

Weather Data for the Week Ending August 21, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	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 Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
AL BIRMINGHAM	95	71	98	69	83	4	.3	-1.5	.3	5.3	47	25.0	67	93	48	7	0	2	0	0		
MOBILE	95	73	97	71	84	2	.9	-1.7	.4	11.3	68	44.3	102	95	55	7	0	3	0	0		
MONTGOMERY	96	74	98	72	85	6	.2	-1.7	.2	11.8	87	34.0	89	94	50	7	0	1	0	0		
AK ANCHORAGE	62	51	66	47	56	0	1.4	-1.8	.7	3.1	69	6.7	83	94	56	0	0	4	1	0		
BARROW	46	35	56	31	41	3	.1	-1.8	.0	1.6	82	2.4	92	93	43	0	2	2	2	0		
FAIRBANKS	68	44	78	38	56	0	.3	-1.2	.3	2.4	51	6.0	87	92	52	0	0	3	1	0		
JUNEAU	63	50	66	44	57	2	1.4	-1.1	.3	7.1	66	30.9	108	99	70	0	0	3	3	1		
KODIAK	59	49	63	44	54	1	4.4	-3.2	3.4	10.7	91	42.8	110	93	70	0	0	5	5	2		
NOME	51	40	53	30	45	15	1.8	-1.2	.8	4.5	87	9.2	109	91	67	0	2	2	2	2		
AZ PHOENIX	106	81	108	75	94	2	1.1	-1.2	.4	.2	13	8.9	211	49	20	0	0	0	0	0		
PRESCOTT	86	59	89	52	73	3	.1	-1.7	.1	.9	14	12.8	103	57	24	0	0	2	2	0		
TUCSON	100	74	103	69	87	3	.2	-1.3	.1	4.1	98	11.5	166	64	27	0	0	0	0	0		
YUMA	105	80	109	77	92	0	.0	-1.2	.0	.0	0	3.3	196	48	20	0	0	0	0	0		
AR FORT SMITH	103	77	106	76	90	10	.0	-1.7	.0	6.2	75	27.9	107	88	33	0	0	0	0	0		
LITTLE ROCK	99	76	101	73	87	7	.4	-1.2	.2	7.6	83	29.1	96	84	47	0	0	3	3	0		
CA BAKERSFIELD	90	62	97	59	76	-6	.0	.0	.0	.5	282	6.6	169	61	17	0	0	0	0	0		
EUREKA	65	57	67	56	61	3	.5	.0	.4	2.1	226	30.3	142	92	57	0	0	0	0	0		
FRESNO	90	61	96	59	75	-5	.0	.0	.0	1.6	>1000	11.5	165	71	25	0	0	0	0	0		
LOS ANGELES	74	63	77	61	69	-2	.0	.0	.0	.7	925	18.5	236	91	63	0	0	0	0	1		
REDDING	89	60	97	53	75	-5	1.0	.9	.8	1.6	166	36.3	189	82	25	0	0	2	0	0		
SACRAMENTO	87	57	94	55	72	-3	.0	.0	.0	1.3	735	19.1	177	89	29	0	0	0	0	0		
SAN DIEGO	74	64	75	63	69	-4	.0	.0	.0	4	287	15.5	248	84	62	0	0	0	0	0		
SAN FRANCISCO	76	57	82	54	66	3	.0	.0	.0	.2	133	19.4	158	91	42	0	0	0	0	0		
CO DENVER	87	57	94	53	72	1	1	-1.3	.3	3.1	66	8.4	75	79	32	2	0	0	0	0		
GRAND JUNCTION	86	58	91	52	72	-5	.5	.3	.5	1.2	61	8.7	141	70	24	2	0	3	3	1		
PUEBLO	88	58	95	53	73	-1	2.3	1.9	1.5	7.5	158	13.2	159	86	29	4	0	4	2	1		
CT BRIDGEPORT	81	68	88	64	74	1	.9	.2	.5	4.1	43	20.1	74	88	60	0	0	4	4	2		
HARTFORD	81	62	91	54	71	0	.9	.0	.4	9.0	96	27.8	101	97	56	1	0	0	1	0		
DC WASHINGTON	88	71	93	69	80	1	1.0	.2	1.0	7.0	70	25.9	104	91	60	2	0	2	4	1		
FL APALACHICOLA	92	75	95	71	84	3	.5	-1.2	.4	6.6	56	27.6	80	91	54	5	0	3	3	0		
DAYTONA BEACH	93	72	97	69	82	1	1.3	-1.2	1.2	8.7	56	22.5	75	97	54	7	0	3	1	0		
JACKSONVILLE	94	72	97	67	83	2	.5	-1.7	.4	9.6	65	24.8	79	98	59	0	0	3	0	0		
KEY WEST	92	79	93	76	85	1	.0	-1.2	.0	4.2	35	20.1	89	80	56	7	0	0	0	0		
MIAMI	94	78	97	75	86	3	.3	-1.7	.7	13.7	68	32.1	90	85	50	6	0	1	4	0		
ORLANDO	94	75	96	70	84	2	.3	-1.3	.1	12.1	63	28.8	87	91	53	6	0	4	0	0		
TALLAHASSEE	98	72	101	69	85	3	.7	-1.7	.7	14.9	71	38.1	83	93	48	0	0	0	0	0		
TAMPA	92	75	93	71	83	1	.6	-1.1	.6	7.9	46	21.9	74	87	57	6	0	1	1	1		
WEST PALM BEACH	93	75	96	74	84	1	.8	-1.7	.6	10.6	58	36.4	100	94	55	7	0	5	0	1		
GA ATLANTA	94	76	96	74	85	7	.0	-1.8	.0	12.0	108	33.8	97	86	51	7	0	0	0	0		
AUGUSTA	97	70	99	65	84	4	1	-1.0	.1	6.7	58	26.2	83	94	45	7	0	1	0	0		
MACON	94	74	97	71	84	4	.7	-1.8	.7	11.4	109	36.0	114	90	54	7	0	0	0	0		
SAVANNAH	95	74	99	70	84	3	.2	-1.5	.2	8.9	52	30.2	86	90	49	7	0	1	4	0		
HI HILO	85	70	86	68	78	1	.6	-1.5	.3	34.4	154	67.8	83	91	66	0	0	4	0	0		
HONOLULU	89	74	91	71	82	0	1	.1	.1	1.2	87	2.8	23	82	55	2	0	1	0	0		
KAHULUI	88	72	91	68	80	1	.3	.2	.3	1.8	180	7.2	54	78	58	2	0	2	2	0		
LIHUE	85	74	86	72	80	0	.8	.4	.7	3.5	70	9.7	39	85	66	0	0	2	2	1		
ID BOISE	80	53	98	47	67	-6	.1	-1.1	.0	2.8	201	10.9	144	84	35	1	0	2	2	0		
LEWISTON	80	59	91	55	70	-4	.3	.1	.2	3.1	126	10.5	129	76	35	1	0	2	0	1		
POCATELLO	81	47	92	41	64	-4	.9	.7	.5	5.7	271	15.2	193	84	27	1	0	3	3	0		
IL CHICAGO	83	67	87	61	75	3	2.1	1.1	1.9	17.1	167	32.6	143	96	63	0	0	2	3	1		
MOLINE	86	69	91	61	78	5	1.3	.3	.6	24.0	198	40.9	157	96	62	3	0	3	2	2		
PEORIA	86	68	90	62	77	4	3.4	2.8	2.6	21.6	210	39.1	166	96	64	2	0	4	2	1		
QUINCY	87	69	92	60	78	4	.8	.0	.8	13.7	127	24.4	97	91	64	4	0	2	1	1		
ROCKFORD	83	66	85	60	75	4	.8	-1.2	.7	17.3	151	33.6	142	97	59	0	0	2	1	1		
SPRINGFIELD	88	69	92	60	79	5	.9	.1	.8	19.1	208	33.7	147	93	62	4	0	3	1	1		
IN EVANSVILLE	92	71	96	66	81	4	.7	-1.7	.7	8.5	80	26.5	86	90	56	6	0	0	0	0		
FORT WAYNE	88	66	90	57	77	5	.2	-1.6	.2	11.1	118	30.1	132	97	54	2	0	2	3	0		
INDIANAPOLIS	87	66	89	59	77	4	2.5	1.7	1.0	14.8	140	30.7	114	93	55	0	0	3	3	1		
SOUTH BEND	84	67	87	62	75	4	.6	-1.3	.5	14.8	142	28.9	117	96	58	0	0	2	1	1		
IA DES MOINES	85	68	90	61	76	5	1.2	.3	.8	23.6	212	40.4	176	96	60	1	0	3	1	0		
SIOUX CITY	84	64	90	60	74	2	.6	-1.1	.3	13.3	148	23.7	130	94	54	1	0	4	4	0		
WATERLOO	83	65	87	58	74	4	2.8	2.0	1.3	26.0	220	41.7	178	98	64	0	0	3	3	2		
KS CONCORDIA	90	72	100	68	81	4	1.7	.9	.9	27.0	256	37.7	182	91	58	4	0	5	2	0		
DODGE CITY	95	69	99	68	82	4	.5	-1.1	.5	12.0	145	22.4	140	84	41	6	0	1	0	0		
GOODLAND	84	62	95	59	73	0	4.8	4.4	2.5	10.6	144	16.1	115	94	51	1	0	4	3	0		
TOPEKA	91	73	98	69	82	6	.4	-1.5	.4	15.9	136	34.4	145	84	57	5	0	1	0	0		
WICHITA	100	75	102	74	88	9	.0	-1.8	.0	11.9	103	27.5	118	75	31	7	0	0	0	0		
KY BOWLING GREEN	94	69	97	64	81	5	.2	-1.6	.2	7.1	62	22.3	66	96	45	6	0	1	0	0		
LEXINGTON	88	66	91	63	77	3	.2	-1.6	.2	12.4	108	28.7	95	93	53	3	0	1	0	0		
LOUISVILLE	90	70	94	66	80	4	2.5	1.7	2.0	13.9	133	33.2	110	95	58	4	0	2	2	2		
LA BATON ROUGE	94	73	96	71	84	2	2.4	1.1	1.4	11.3	73	46.5	114	98	59	7	0	3	2	2		
LAKE CHARLES	96	76	98	74	86	4	1.3	.1	1.3	13.5	98	44.1	129	92	50	7	0	1	1	1		
NEW ORLEANS	95	74	97	70	84	3	.6	-1.8	.3	12.6	78	40.8	99	96	58	7	0	3	0	0		
SHREVEPORT	99	75	100	74	87	6	.0	-1.6	.0	20.1	204	42.9	134	89	47	7	0	0	0	0		

Based on 1961-90 normals.

Weather Data for the Week Ending August 21, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	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 Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	75	55	82	50	65	2	2.3	1.4	2.0	9.9	102	22.9	104	93	48	0	0	3	1	
PORTLAND	77	60	82	56	69	1	.4	-.3	.2	6.6	77	26.3	98	95	46	0	0	2	0	
MD BALTIMORE	87	67	91	65	77	1	.2	-.7	.1	6.8	68	27.8	105	91	52	1	0	2	0	
SALISBURY	87	67	92	66	77	2	2.4	1.2	1.1	10.1	87	33.6	113	99	62	1	0	3	3	
MA BOSTON	77	64	84	61	71	-1	1.0	.2	.7	4.8	59	25.4	98	95	65	0	0	2	1	
CHATHAM	74	61	80	59	67	0	T	-.7	T	5.1	60	23.1	84	96	51	0	0	2	0	
MI ALPENA	82	58	89	45	70	5	.2	-.6	.1	7.0	85	15.2	83	89	57	0	0	2	0	
DETROIT	86	67	92	59	77	6	.3	-.5	.2	8.9	98	20.8	99	89	53	1	0	2	0	
FLINT	82	62	88	53	72	4	.6	-.2	.4	9.4	114	20.9	112	95	48	0	0	2	0	
GRAND RAPIDS	82	64	85	56	73	4	.1	-.7	.1	11.2	121	25.9	120	96	55	0	0	2	0	
HOUGHTON LAKE	80	62	87	48	71	6	.8	.0	.4	8.3	105	16.9	98	97	56	0	0	2	0	
LANSING	82	62	88	53	72	4	.6	-.2	.5	11.5	139	23.8	126	100	62	0	0	2	0	
MARQUETTE	76	55	83	39	66	4	.4	-.4	.3	7.5	87	20.3	97	96	51	0	0	3	0	
MUSKEGON	81	65	86	58	73	4	.2	-.6	.2	10.6	160	22.8	123	98	64	0	0	2	0	
SAULT ST. MARIE	79	57	84	43	68	5	.1	-.7	.1	8.2	99	19.3	97	99	48	0	0	2	0	
MN ALEXANDRIA	77	60	84	57	69	0	.3	-.5	.2	11.9	124	21.7	123	96	58	0	0	2	0	
DULUTH	74	56	80	52	65	2	T	-.9	T	14.4	142	24.2	125	94	46	0	0	2	0	
INT'L FALLS	77	55	79	47	66	2	.2	-.5	.1	10.0	104	15.6	96	93	42	0	0	3	0	
MINNEAPOLIS	81	63	85	60	72	2	1.8	1.0	1.4	16.5	164	25.5	129	93	52	0	0	3	1	
ROCHESTER	79	61	82	56	70	2	3.0	2.2	2.0	18.2	172	32.0	160	97	47	0	0	3	2	
MS GREENWOOD	98	74	100	71	86	5	T	-.6	T	5.8	56	29.9	83	99	46	7	0	0	0	
JACKSON	95	75	97	73	85	5	.3	-.4	.2	12.8	133	33.2	90	100	48	7	0	2	0	
MERIDIAN	97	73	100	71	85	5	.3	-.5	.3	9.6	85	38.5	100	94	46	7	0	1	0	
MO CAPE GIRARDEAU	92	72	95	68	82	5	.5	-.3	.5	9.9	106	30.6	101	92	57	6	0	1	0	
COLUMBIA	91	72	95	67	82	7	.0	-.7	.0	24.6	253	41.5	169	96	61	5	0	0	0	
KANSAS CITY	91	74	97	68	82	6	.7	-.2	.6	19.5	166	37.8	154	87	60	4	0	2	1	
SAINT LOUIS	92	76	97	69	84	7	T	-.6	T	16.4	171	36.1	147	83	52	5	0	0	0	
SPRINGFIELD	94	74	96	71	84	7	.0	-1.0	.0	15.5	144	31.2	115	89	52	7	0	0	0	
MT BILLINGS	84	54	89	48	69	-1	.3	.1	.3	7.7	217	11.3	106	85	31	0	0	1	0	
GLASGOW	80	56	87	52	68	-1	2.7	2.4	1.3	9.7	202	14.0	167	88	40	0	0	4	2	
GREAT FALLS	72	53	84	49	63	-4	1.7	1.3	1.2	9.1	196	18.0	161	89	46	0	0	4	1	
HAVRE	79	55	86	49	67	-1	.2	-.1	.2	8.0	201	10.8	133	92	41	0	0	1	0	
HELENA	73	53	82	46	63	-5	1.2	.9	.5	10.0	263	15.7	188	89	45	0	0	6	0	
KALISPELL	72	54	85	50	63	0	1.0	.7	.4	10.6	250	17.6	163	93	48	0	0	4	0	
MILES CITY	86	58	92	52	72	-1	.3	.1	.3	11.8	231	16.7	162	86	34	1	0	2	0	
MISSOULA	76	53	90	48	64	-2	.8	.5	.3	4.4	126	10.5	113	93	45	1	0	6	0	
NE GRAND ISLAND	84	67	95	64	76	2	.4	-.2	.3	19.0	220	27.5	153	97	61	1	0	3	0	
LINCOLN	87	70	96	66	79	4	.3	-.5	.3	8.4	90	18.9	98	97	57	4	0	1	0	
NORFOLK	83	65	90	62	74	2	.5	.0	.3	16.4	174	26.6	144	94	57	1	0	2	0	
NORTH PLATTE	83	63	87	60	73	1	1.9	1.5	1.8	15.2	197	22.2	147	97	51	0	0	3	1	
OMAHA	84	69	90	64	76	2	.8	.0	.3	20.1	216	31.6	159	90	59	1	0	6	0	
SCOTTSBLUFF	84	59	92	51	71	0	1.0	.8	.5	11.2	203	17.5	148	97	43	1	0	3	1	
VALENTINE	83	61	89	56	72	-1	1.2	.6	1.2	8.9	102	15.7	94	94	50	0	0	1	1	
NV ELY	81	43	85	32	62	-3	.0	-.2	.0	2.0	93	7.7	117	66	13	0	1	0	0	
LAS VEGAS	100	72	104	69	86	-2	.0	-.1	.0	.3	42	4.6	176	34	11	7	0	0	0	
RENO	81	51	89	45	66	-4	T	-.1	T	.4	38	4.9	102	65	21	0	0	0	0	
WINNEMUCCA	83	45	90	37	64	-6	T	-.1	T	1.3	88	6.2	118	69	16	1	0	1	0	
NH CONCORD	80	57	87	46	68	1	1.0	.3	.8	5.8	66	16.7	74	95	48	0	0	2	1	
NJ ATLANTIC CITY	83	66	86	61	74	1	2.6	1.7	1.4	8.3	89	26.7	101	97	60	0	0	4	2	
NM ALBUQUERQUE	87	63	90	59	75	-1	.1	-.3	.1	1.9	61	4.9	88	83	36	2	0	3	0	
CLOVIS	89	64	90	62	77	2	.0	-.7	.0	9.7	128	11.8	101	74	29	3	0	0	0	
ROSWELL	95	67	97	63	81	2	.1	-.5	.1	5.7	113	8.2	106	80	24	7	0	1	0	
NY ALBANY	79	62	88	51	71	1	.7	-.2	.4	10.5	115	27.4	119	96	59	0	0	4	0	
BINGHAMTON	75	61	83	50	68	1	2.1	1.4	1.4	10.1	108	27.8	118	95	58	0	0	2	2	
BUFFALO	82	62	88	51	72	3	2.3	1.4	1.7	10.2	108	23.8	103	92	53	0	0	3	2	
NEW YORK	82	69	89	67	75	0	1.9	1.1	1.1	8.5	83	27.1	99	89	61	0	0	3	2	
ROCHESTER	81	62	87	51	71	3	.6	-.1	.5	5.7	71	16.3	82	94	53	0	0	2	0	
SYRACUSE	80	62	86	52	71	3	.5	-.3	.4	9.3	93	27.3	114	98	61	0	0	2	0	
NC ASHEVILLE	88	65	90	63	77	4	1.2	-.2	.9	8.4	61	28.3	77	98	48	2	0	2	1	
CHARLOTTE	93	71	96	70	82	4	.3	-.6	.3	5.2	53	26.3	93	86	46	7	0	1	0	
GREENSBORO	91	69	93	67	80	4	.2	-.7	.2	8.1	73	31.8	113	91	54	5	0	2	0	
HATTERAS	87	70	88	63	78	0	.2	-1.2	.2	6.7	51	29.0	84	91	60	0	0	1	0	
NEW BERN	90	70	95	66	80	2	.4	-1.1	.4	11.4	67	33.1	89	94	51	3	0	1	0	
RALEIGH	91	69	93	67	80	3	.2	-.7	.2	4.2	40	25.2	90	93	50	6	0	1	0	
WILMINGTON	92	72	95	68	82	3	.9	-.7	.9	16.4	99	40.1	108	98	52	6	0	1	1	
ND BISMARCK	82	56	87	50	69	1	.0	-.4	.0	19.9	329	24.5	212	94	40	0	0	0	0	
FARGO	81	59	84	56	70	1	.1	-.5	.1	12.9	179	18.2	133	93	44	0	0	1	0	
GRAND FORKS	80	56	84	54	68	1	T	-.5	T	12.9	179	15.6	123	95	51	0	0	0	0	
WILLISTON	79	54	83	50	66	-2	3.7	3.4	3.0	14.0	266	16.5	162	94	44	0	0	3	2	
OH AKRON-CANTON	87	64	90	53	76	5	.4	-.3	.4	8.8	92	24.0	100	93	45	1	0	2	0	
CINCINNATI	88	66	92	61	77	4	.9	-.2	.6	9.3	89	25.6	92	96	57	1	0	3	1	
CLEVELAND	84	65	89	54	75	4	.1	-.7	.1	9.2	97	24.8	107	91	56	0	0	2	0	
COLUMBUS	89	67	91	59	78	8	T	-.8	T	9.9	99	26.3	106	88	52	2	0	2	0	
DAYTON	88	65	92	57	76	4	.4	-.3	.2	11.9	124	33.2	134	93	54	2	0	3	0	

Based on 1961-90 normals.

Weather Data for the Week Ending August 21, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	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 Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE		
TOLEDO	89	65	91	54	77	7	.2	-.5	.2	6.8	73	19.3	91	94	47	4	0	0	0	0	
YOUNGSTOWN	85	61	89	48	73	4	.1	-.7	.1	8.2	79	21.8	90	95	46	0	0	0	0	0	
OK OKLAHOMA CITY	101	72	102	71	86	5	.0	-.6	.0	4.4	51	25.2	115	72	26	0	0	0	0	0	
TULSA	102	75	104	70	89	7	.0	-.7	.0	6.2	66	25.4	99	75	30	0	0	0	0	0	
OR ASTORIA	68	54	71	50	61	0	.1	-.3	.0	6.0	137	34.1	93	97	57	0	0	0	0	0	
BURNS	75	45	85	36	60	-4	.3	.2	.1	1.5	87	8.0	132	85	33	0	0	0	0	0	
MEDFORD	79	56	90	51	67	-5	1.2	1.1	.9	3.1	270	12.9	132	90	35	1	0	0	0	0	
PENDLETON	79	57	86	53	68	-4	2.2	2.1	2.2	4.4	323	11.8	163	82	36	0	0	0	1	1	
PORTLAND	78	59	86	55	69	0	.1	-.2	.1	4.3	153	22.1	111	90	44	0	0	0	0	0	
SALEM	78	56	87	46	67	0	.2	.1	.2	4.6	194	25.3	119	88	40	0	0	0	0	0	
PA ALLENTOWN	82	65	92	57	73	1	4.0	3.1	2.8	12.2	113	31.9	114	91	64	1	0	0	0	0	
ERIE	81	67	86	58	74	4	.7	-.2	.3	9.4	92	22.0	90	89	61	0	0	0	0	2	
HARRISBURG	86	69	89	66	77	3	.5	-.2	.4	9.6	100	29.1	111	93	55	0	0	0	0	0	
PHILADELPHIA	86	71	92	68	78	5	1.2	.3	1.1	7.7	67	25.9	87	83	53	2	0	0	0	1	
PITTSBURGH	87	67	92	61	77	7	1.3	.6	.9	8.1	84	24.7	100	85	45	2	0	0	0	0	
SCRANTON	80	64	89	54	72	2	.9	-.2	.9	4.9	48	20.8	89	94	63	0	0	0	0	1	
RI PROVIDENCE	82	64	86	59	73	2	.7	-.1	.6	4.5	51	25.2	89	95	52	0	0	0	0	1	
SC CHARLESTON	92	74	95	70	83	2	.6	-1.0	.6	14.7	80	37.9	105	94	56	5	0	0	0	1	
COLUMBIA	96	71	98	66	83	4	T	-1.4	T	5.0	34	26.4	76	90	43	7	0	0	0	0	
FLORENCE	94	72	98	70	83	4	.1	-1.1	.0	9.2	68	24.4	80	93	46	7	0	0	0	0	
GREENVILLE	94	69	98	66	81	4	.1	-.8	.1	1.6	13	28.6	83	93	43	7	0	0	0	0	
SD ABERDEEN	83	61	86	55	72	2	T	-.7	T	15.3	178	21.5	137	92	45	0	0	0	0	0	
HURON	82	62	86	57	72	1	1.4	.9	1.4	16.0	216	25.0	166	96	53	0	0	0	0	0	
RAPID CITY	85	59	89	55	72	1	.9	.5	.6	8.9	142	16.3	127	88	39	0	0	0	1	1	
STOUX FALLS	82	64	87	59	73	2	2.3	1.6	1.2	17.0	213	31.4	193	95	54	0	0	0	1	1	
TN CHATTANOOGA	98	73	99	72	86	8	T	-.8	T	4.9	45	27.9	79	91	45	7	0	0	3	3	
KNOXVILLE	91	69	93	69	80	4	2.1	1.4	1.7	9.0	83	27.7	87	96	57	6	0	0	0	0	
MEMPHIS	97	77	99	75	87	6	T	-.8	T	8.7	90	28.6	85	84	50	0	0	0	3	3	
NASHVILLE	95	73	97	68	84	6	.1	-.7	.1	10.2	103	29.4	94	85	43	7	0	0	0	0	
TX ABILENE	98	74	99	72	86	3	.0	-.7	.0	5.0	74	11.0	73	62	24	7	0	0	2	0	
AMARILLO	91	65	92	61	78	1	.0	-.7	.0	8.2	96	12.9	92	76	32	6	0	0	0	0	
AUSTIN	100	75	101	74	87	3	.0	-.5	.0	4.0	57	20.9	104	86	32	7	0	0	0	0	
BEAUMONT	97	75	99	74	86	3	.2	-1.1	.1	18.0	124	48.6	138	96	50	7	0	0	0	0	
BROWNSVILLE	95	76	96	73	86	1	.0	-.6	.0	6.7	109	17.1	123	93	47	0	0	2	0	0	
CORPUS CHRISTI	96	74	96	72	85	1	.0	-.8	.0	12.0	155	28.4	163	95	49	7	0	0	0	0	
DEL RIO	99	75	100	73	87	4	.0	-.6	.0	6.3	96	10.1	65	71	35	7	0	0	0	0	
EL PASO	95	69	98	66	82	2	.8	.4	.5	4.1	124	5.9	120	80	31	7	0	0	4	0	
FORT WORTH	102	78	103	76	90	8	.0	-.5	.0	4.5	66	20.2	88	64	30	7	0	0	0	0	
GALVESTON	93	82	94	80	87	4	T	-1.0	T	3.4	30	30.1	120	78	60	7	0	0	0	0	
HOUSTON	100	75	101	74	88	5	T	-.9	T	12.6	96	43.8	135	92	43	7	0	0	1	0	
LUBBOCK	96	69	97	64	82	4	.0	-.6	.0	5.9	87	10.9	91	60	27	7	0	0	0	0	
MIDLAND	96	68	98	65	82	2	.0	-.4	.0	4.3	102	8.7	100	62	25	7	0	0	0	0	
SAN ANGELO	99	73	100	68	86	4	.0	-.5	.0	2.1	46	9.5	79	67	23	7	0	0	0	0	
SAN ANTONIO	99	76	99	73	87	2	.0	-.6	.0	6.4	85	27.3	141	83	32	7	0	0	0	0	
VICTORIA	98	75	100	73	86	4	.0	-.8	.0	12.5	113	41.2	154	94	43	7	0	0	0	0	
WACO	99	76	101	74	88	2	.1	-.3	.1	3.0	48	19.3	96	77	32	7	0	0	1	0	
WICHITA FALLS	101	74	102	71	88	5	.0	-.6	.0	4.3	60	20.1	99	64	26	7	0	0	0	0	
UT CEDAR CITY	85	54	89	45	70	-2	.0	-.3	.0	1.1	44	7.9	107	46	17	0	0	0	0	0	
SALT LAKE CITY	86	59	92	53	73	-3	T	-.3	T	3.0	129	14.5	138	69	26	3	0	0	0	0	
VT BURLINGTON	79	61	88	50	70	2	.9	.0	.6	8.9	89	20.4	95	96	49	0	0	3	1	1	
VA NORFOLK	88	70	93	69	79	2	.4	-.6	.4	4.6	38	24.2	81	82	53	4	0	0	0	0	
RICHMOND	89	69	94	67	79	2	.4	-.6	.4	6.4	64	30.0	105	91	53	3	0	0	2	0	
ROANOKE	91	67	93	64	79	5	.0	-.9	.0	7.8	48	25.1	95	89	46	5	0	0	0	0	
WA QUILLAYUTE	69	54	77	53	62	2	.1	-.5	.1	5.2	71	44.0	75	97	46	0	0	2	0	0	
SEATTLE-TACOMA	73	57	83	56	65	-1	.1	-.2	.1	3.8	129	20.5	103	88	45	0	0	3	0	0	
SPOKANE	75	55	86	51	65	-3	1.2	1.1	.8	3.8	156	10.5	105	90	43	0	0	3	1	1	
YAKIMA	85	53	90	45	69	0	.2	-.1	.2	1.5	156	4.6	102	88	37	2	0	2	0	0	
WV BECKLEY	82	63	86	59	72	4	.3	-.5	.2	8.3	76	25.7	93	96	54	0	0	2	0	0	
CHARLESTON	87	66	90	64	76	3	.4	-.5	.4	9.3	81	24.6	87	98	57	1	0	2	0	0	
HUNTINGTON	88	67	92	63	78	5	.2	-.7	.2	10.8	94	26.9	93	93	56	1	0	1	0	0	
PARKERSBURG	88	66	94	62	77	4	1.4	.5	.9	6.8	62	24.4	86	96	47	2	0	2	1	1	
WI GREEN BAY	80	61	85	49	71	4	.4	-.8	T	14.8	167	25.5	140	95	58	0	0	1	0	0	
LACROSSE	82	66	86	61	74	4	1.3	.4	.9	16.7	162	33.6	165	99	57	0	0	3	1	1	
MADISON	82	65	87	54	74	5	2.7	1.8	2.7	19.8	194	35.0	167	93	56	0	0	1	1	1	
MILWAUKEE	79	67	87	61	73	4	1.1	.3	.9	12.3	135	27.3	129	92	64	0	0	2	1	1	
WAUSAU	79	61	84	49	70	3	.3	-.7	.3	12.0	111	25.0	119	94	55	0	0	1	0	0	
WY CASPER	85	53	90	47	69	0	.6	-.4	.6	4.7	148	12.2	136	85	24	1	0	1	1	1	
CHEYENNE	80	55	85	50	67	0	.1	-.8	.5	5.9	111	12.1	111	84	31	0	0	3	0	0	
LANDER	83	52	86	46	68	-1	.1	-.1	.4	6.2	238	12.7	138	58	18	0	0	0	0	0	
SERRIDAN	83	49	93	44	66	-2	T	-.2	T	7.4	204	14.0	138	87	31	1	0	2	0	0	

Based on 1961-90 normals.

Figure 1 Corn Belt Freeze Dates

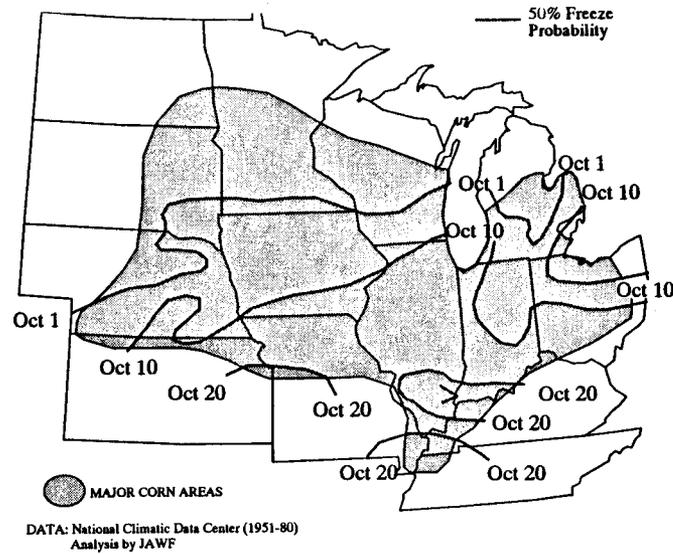
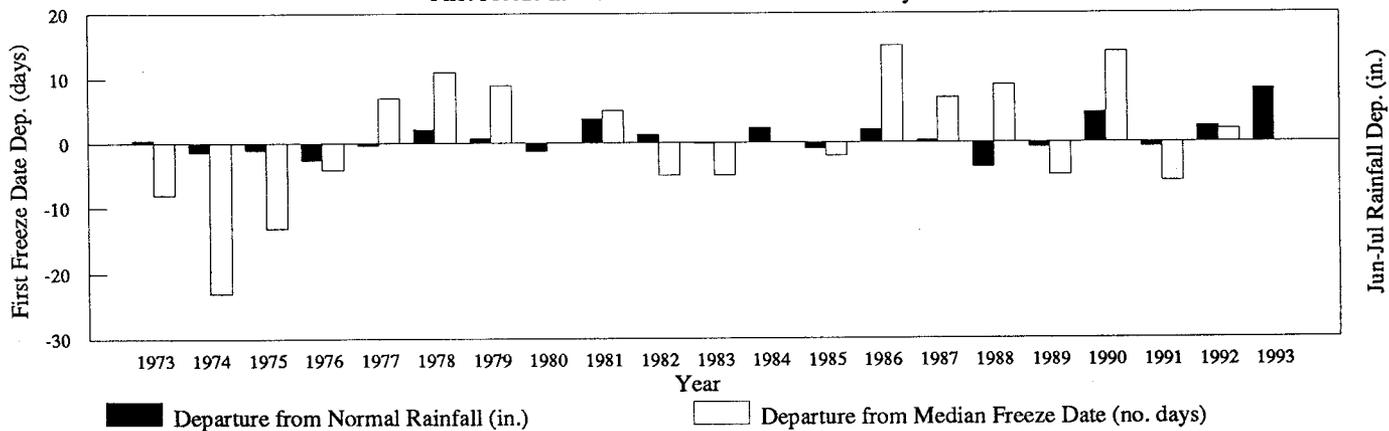


Figure 2

Freeze Date Departure Vs. Summer Rainfall

First Freeze in Western Corn Belt versus June-July Rainfall



Freeze dates shown as number of days before (negative) and after (positive) the median date (September 26).
Rainfall shown as western Corn Belt June-July total (inches). Rainfall data courtesy of the National Climatic Data Center, NOAA.

Because of the late development of crops this year in the Corn Belt, there is considerable interest in knowing when the first freeze will occur. Based on 1951-80 data, the median date for the first 32-degree temperatures ranges from late September in the northwestern Corn Belt to late October in the southern areas (fig. 1). There have been media reports that the heavy rains received this summer in the western Corn Belt could lead to an early freeze. To test this premise, a preliminary historical analysis of first freeze dates for the past 20 years was made and these dates were compared with June-July total rainfall for the western Corn Belt (fig. 2). The "western Corn Belt" included Iowa and the surrounding climate divisions of the adjacent States. Rainfall during this period ranged from 3.77 inches during the 1988 drought to 15.71 inches in 1993. This year's deluge is unprecedented, as records going back to 1895 show no other June-July rainfall exceeding 14 inches. To check first freeze dates, past issues of the *Weekly Weather and Crop Bulletin* were examined for reports of 32-degree temperatures in the western Corn Belt. Such an analysis is somewhat subjective, as precise dates and extent of freezes were not always detailed. The goal was to obtain approximate dates of freezes that were more than local in nature. Based on 20 years of data, the median date of the first freeze was September 26. Dates ranged from September 3 (1974) to October 11 (1986). There were six cases where the June-July rainfall exceeded 9 inches. In each case, the first freeze occurred either at or later than the median date. Of the eight cases where rainfall was less than 7 inches, seven of the freezes occurred at or before the median date. This preliminary look at freezes versus summer rainfall is not intended as a forecast of a freeze occurrence this year, but it does give some insight into the recent history of summer rainfall and fall freezes.

National Agricultural Summary

August 16 - 22, 1993

HIGHLIGHTS: Heavy rains fell over parts of the central portion of the Nation. Rain also occurred over the Northeast and the Upper Great Plains. Light amounts fell over the South and Southeast. The southern Great Plains and the Great Basin remained dry. Temperatures were above-normal over the eastern two-thirds of the Nation. The warm conditions benefited row crops in the central and upper Mississippi Valleys, and stressed crops in the Ohio Valley, the South, and Southeast.

SMALL GRAINS: Winter wheat harvest in the 19 major wheat-producing States reached 91 percent (%) complete, compared with 98% by this time in 1992 and average. Harvest progress in the Northwest was delayed by the slow maturing crop. The spring wheat harvest reached 17% of the crop harvested, compared with 31% last year and 73% average. Drier conditions allowed the harvest to advance in South Dakota. Wet fields remained a problem for producers in North Dakota. Scabbing problems occurred in some South Dakota fields. Spring wheat condition rated 49% good to excellent, compared with 54% last week. Oats, barley, and rye harvests continued. Wet field conditions hindered the harvest in North Dakota. Below-average oat yields were reported in some harvested fields in Wisconsin. Small grain progress continued to be hindered by the cool, wet conditions in the Pacific Northwest.

CORN: Corn silking in the 17 major producing States reached 95%, compared with 98% a year ago and 99% average. Corn in the dough stage was at 45%, compared with 56% last year and 71% average. Corn in dent was 13%, compared with 19% last year and 35% average. Warm weather across the Midwest allowed crop progress to accelerate but progress was well behind normal. Corn harvest advanced in the South, but yields were adversely affected by previous dry conditions. Nationally, corn condition improved slightly with 52% good to excellent versus 51% the last week.

SOYBEANS: Soybean blooming reached 92%, compared with 96% last year and 94% average. Setting pods averaged 68%, compared with 83% a year ago and 81% average. Nationally, less than 1% of the acreage had dropped leaves, similar to last year at this time, and less than the 2% average. Pod setting made good progress in all major soybean States except in Mississippi, Alabama, and Missouri. Spider mite problems occurred in some fields of Ohio. Double-cropped soybeans in Tennessee could benefit considerably from more rainfall. The condition of the crop increased slightly.

COTTON: Cotton-setting bolls in the 14 major producing States reached 94%, compared with 87% last year and 94% average. Boll opening occurred on 16% of the acreage, the same as last year and average. Hot, dry conditions caused cut-out in some dryland fields in Georgia and Texas. Insect problems were reported in some Tennessee and Texas fields. Continued hot, dry conditions caused cotton condition to decline with 54% of the crop rated good to excellent, compared with 59% last week.

SORGHUM: Grain sorghum headed in the 12 major producing States (excluding New Mexico) reached 82%, compared with 76% last year and 84% average. Grain sorghum coloring averaged 37%, compared with 40% last year and 43% average. Dry, hot conditions pushed sorghum headed progress in Kansas, Nebraska,

and South Dakota. Harvesting began in the south Texas Low Plains and continued in the Texas Blacklands. Early reported yields were below average. Above-normal temperatures improved sorghum condition, with 58% of the crop rated good to excellent.

RICE: Rice headed in the five major producing States reached 78%, compared with 92% last year and 81% average. Progress of the rice harvest reached 13%, compared with 17% last year and 16% average. Water grass problems occurred in some fields in California, and sheath blight problems continued in some Arkansas fields. Crop progress remained behind normal in Texas. Rice condition improved with 79% good to excellent, compared with 73% last week.

OTHER FIELD CROPS: Dry conditions hurt pod set on some New York dry beans. The Tennessee tobacco harvest began, but uneven blooming and black shank adversely affected yields. Spider mites damaged some peanut fields in Virginia. In Texas, most peanut fields needed rain. The hay harvest continued nationwide. Wet fields and high humidity impeded harvest in the Midwest, while showers caused delays in the Northwest. Dry conditions in the South limited regrowth. Hay quality concerns were expressed by producers in many areas. Dry conditions hindered planting of Louisiana sugarcane. New England cranberries were reportedly good to excellent.

FRUIT AND NUTS: Hot and dry conditions forced many Florida citrus growers to irrigate their groves, and very little fruit droppage or splitting was reported. In California, plum, peach, and nectarine harvests continued. Early variety apple harvests advanced in the East. The New Mexico pecan crop had average nut drop. In Texas, the dry conditions caused nut drop in some orchards. The almond harvest advanced in California, while walnut producers sprayed their orchards for insects. Prospects for the Oregon hazelnut crop remained good.

VEGETABLES: Dry conditions caused heavy use of irrigation in the vegetable fields in southern Florida. High winds damaged some melons in the Rio Grande Valley of Texas, and cool weather hampered the harvest of melons in the San Joaquin Valley of California. Hot weather adversely affected the sweetpotato crop in east Texas.

PASTURE AND LIVESTOCK: Pasture feed conditions were good to poor in the Southeast, and declined slightly in the Midwest due to the dry conditions. Pastures in the Northwest remained in good condition due to continued showers. Pastures in Texas and California declined with the hot, dry conditions. Supplemental feeding increased, especially in Texas. This activity has cut the hay supply in some areas of east Texas. Livestock in the Southeast continued to be stressed by the hot conditions. Drier conditions in the Midwest helped muddy feedlots to dry. Livestock condition across the Nation remained generally good.

Crop Progress

for the Week Ending August 22, 1993

COTTON (Percent Setting Bolls)

	Current	Last Wk	1992	Avg.
AL	95	92	100	100
AZ	100	100	100	100
AR	100	98	100	100
CA	99	95	100	100
GA	100	100	100	100
LA	99	96	100	99
MS	100	99	100	99
MO	100	100	100	100
NM	98	96	99	99
NC	92	90	87	92
OK	99	96	72	88
SC	100	99	99	96
TN	100	100	100	100
TX	88	80	71	87
14 States	94	90	87	94

These 14 States produced 99% of the 1992 cotton crop.

COTTON (Percent Bolls Opening)

	Current	Last Wk	1992	Avg.
AL	9	8	4	14
AZ	58	40	48	49
AR	5	0	4	4
CA	10	5	20	10
GA	19	5	5	10
LA	10	6	45	25
MS	7	3	13	23
MO	3	2	0	5
NM	6	0	2	7
NC	5	1	13	13
OK	5	4	3	1
SC	13	3	1	9
TN	5	0	3	5
TX	24	16	16	17
14 States	16	10	16	16

These 14 States produced 99% of the 1992 cotton crop.

SPRING WHEAT (Percent Harvested)

	Current	Last Wk	1992	Avg.
ID	5	2	79	59
MN	17	7	19	78
MT	3	0	19	58
ND	10	1	26	71
SD	56	34	63	90
5 States	17	7	31	73

These 5 States produced 96% of the 1992 spring wheat crop.

SOYBEANS (Percent Blooming)

	Current	Last Wk	1992	Avg.
AL	78	69	80	80
AR	81	69	89	73
GA	91	80	95	93
IL	96	91	98	99
IN	100	97	100	100
IA	90	84	100	100
KS	95	85	90	95
KY	90	75	90	84
LA	95	84	96	88
MI	100	95	95	96
MN	95	85	99	99
MS	84	79	96	86
MO	89	84	93	91
NE	97	91	100	100
NC	71	62	64	73
OH	100	99	100	97
SC	79	67	81	79
SD	81	58	93	99
TN	89	76	90	81
19 States	92	85	96	94

These 19 States produced 95% of the 1992 soybean crop.

SOYBEANS (Percent Setting Pods)

	Current	Last Wk	1992	Avg.
AL	55	47	58	56
AR	50	36	68	47
GA	61	48	79	73
IL	78	65	92	93
IN	88	68	86	85
IA	72	56	95	96
KS	75	55	75	75
KY	50	36	52	45
LA	87	66	88	69
MI	75	60	50	70
MN	50	37	94	96
MS	53	48	83	64
MO	58	50	78	72
NE	78	55	87	89
NC	50	35	41	47
OH	87	70	83	83
SC	44	32	51	44
SD	52	32	78	90
TN	60	39	59	53
19 States	68	53	83	81

These 19 States produced 95% of the 1992 soybean crop.

SOYBEANS (Percent Dropping Leaves)

	Current	Last Wk	1992	Avg.
AL	7	NA	7	9
AR	0	NA	0	0
GA	0	NA	1	1
IL	0	NA	1	3
IN	0	NA	0	2
IA	0	NA	0	0
KS	1	NA	2	10
KY	1	NA	6	3
LA	0	NA	0	0
MI	0	NA	0	0
MN	0	NA	0	3
MS	0	NA	0	0
MO	0	NA	0	0
NE	0	NA	0	0
NC	0	NA	0	0
OH	0	NA	0	0
SC	0	NA	0	0
SD	2	NA	0	7
TN	0	NA	0	0
19 States	0	NA	0	2

These 19 States produced 95% of the 1992 soybean crop.

CORN (Percent Silking)

	Current	Last Wk	1992	Avg.
CO	86	82	88	92
GA	100	100	100	100
IL	100	99	100	100
IN	100	99	100	100
IA	92	78	100	100
KS	100	99	99	100
KY	99	99	99	99
MI	100	95	100	99
MN	94	75	99	99
MO	96	94	100	100
NE	98	94	100	100
NC	99	98	100	100
OH	100	98	100	98
PA	93	84	87	87
SD	84	61	93	98
TX	100	100	100	100
WI	79	68	85	96
17 States	95	88	98	99

These 17 States produced 94% of the 1992 corn crop.

CORN (Percent Dough)

	Current	Last Wk	1992	Avg.
CO	32	17	36	45
GA	100	100	100	100
IL	71	52	79	83
IN	77	56	73	77
IA	15	8	40	62
KS	75	60	70	90
KY	91	85	90	85
MI	15	2	4	30
MN	7	5	34	67
MO	60	51	86	89
NE	51	28	63	79
NC	89	87	88	93
OH	68	42	69	68
PA	40	24	27	40
SD	17	8	31	74
TX	90	86	89	95
WI	23	7	27	49
17 States	45	31	56	71

These 17 States produced 94% of the 1992 corn crop.

CORN (Percent Dent)

	Current	Last Wk	1992	Avg.
CO	2	0	3	10
GA	99	94	99	99
IL	21	10	29	45
IN	15	4	19	34
IA	0	0	10	32
KS	35	15	30	50
KY	56	42	52	51
MI	1	0	0	6
MN	0	0	2	24
MO	24	19	55	63
NE	7	0	11	31
NC	78	69	73	79
OH	12	3	14	25
PA	8	1	2	8
SD	1	0	12	28
TX	74	67	75	82
WI	5	1	4	17
17 States	13	8	19	35

These 17 States produced 94% of the 1992 corn crop.

SORGHUM
(Percent Headed)

	Current	Last Wk	1992	Avg.
AR	93	88	99	90
CO	57	43	49	65
IL	87	79	92	84
KS	75	50	55	75
LA	97	95	100	95
MS	97	89	100	96
MO	79	71	93	87
NE	79	49	85	88
NM	69	60	66	NA
OK	81	70	63	75
SD	50	25	55	75
TX	90	86	85	89
12 States	81	67	76	NA
Excl. States with NA	82	67	76	84

These 12 States produced 99% of the 1992 grain sorghum crop.

SORGHUM
(Percent Coloring)

	Current	Last Wk	1992	Avg.
AR	54	38	82	62
CO	6	5	7	10
IL	9	6	40	35
KS	5	3	10	15
LA	81	61	95	76
MS	71	68	95	71
MO	26	16	45	39
NE	3	0	8	22
NM	11	5	12	NA
OK	28	17	22	35
SD	3	0	6	25
TX	77	71	71	70
12 States	37	32	40	NA
Excl. States with NA	37	32	40	43

These 12 States produced 99% of the 1992 grain sorghum crop.

WINTER WHEAT
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	100	100	100	100
CA	99	99	99	99
CO	96	96	96	96
GA	100	100	100	100
ID	21	13	94	73
IL	100	99	100	100
IN	100	100	100	100
KS	100	99	100	100
MI	100	99	97	99
MO	100	99	100	100
MT	24	5	73	86
NE	100	100	100	100
NC	100	100	100	100
OH	100	100	100	100
OK	100	100	100	100
OR	82	67	98	90
SD	95	86	91	100
TX	100	100	100	100
WA	62	48	96	87
19 States	91	89	98	98

These 19 States produced 90% of the 1992 winter wheat crop.

RICE
(Percent Headed)

	Current	Last Wk	1992	Avg.
AR	75	60	91	75
CA	75	45	80	65
LA	86	79	95	91
MS	66	58	98	89
TX	89	81	96	99
5 States	78	64	92	81

These 5 States produced 97% of the 1992 rice crop.

RICE
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	1	0	3	2
CA	0	0	0	0
LA	45	26	51	44
MS	2	1	2	2
TX	25	17	43	53
5 States	13	7	17	16

These 5 States produced 97% of the 1992 rice crop.

SOYBEANS

State	VP	P	F	G	EX
AL	0	4	62	34	0
AR	0	2	69	29	0
GA	9	40	41	10	0
IL	0	2	12	75	11
IN	0	1	16	73	10
IA	2	18	60	19	1
KS	0	0	33	45	22
KY	0	1	55	40	4
LA	0	7	66	27	0
MI	1	4	20	55	20
MN	8	49	37	6	0
MS	0	16	74	10	0
MO	0	6	51	42	1
NE	0	0	18	78	4
NC	4	11	56	28	1
OH	2	10	28	45	15
SC	12	24	64	0	0
SD	3	18	46	32	1
TN	0	7	53	40	0
19 State	2	12	39	41	6
Prev Week	3	11	39	42	5
Prev Year	1	4	23	60	12

Crop Condition
(Percent)

for the Week Ending August 22, 1993

RICE

State	VP	P	F	G	EX
AR	0	0	0	100	0
CA	0	0	10	85	5
LA	0	0	56	44	0
MS	0	14	57	24	5
TX	0	0	17	80	3
5 State	0	1	20	78	1
Prev Week	0	2	25	73	0
Prev Year	0	0	30	67	3

CORN

State	VP	P	F	G	EX
CO	1	8	11	60	20
GA	21	14	38	27	0
IL	0	2	11	69	18
IN	0	0	20	73	7
IA	3	24	58	14	1
KS	0	0	19	52	29
KY	0	8	40	50	2
MI	1	4	20	55	20
MN	13	58	26	3	0
MO	0	11	41	47	1
NE	0	2	15	78	5
NC	22	38	30	10	0
OH	3	10	28	45	14
PA	2	11	29	46	12
SD	4	11	52	30	3
TX	2	6	30	54	8
WI	1	8	42	45	4
17 State	3	14	31	44	8
Prev Week	4	12	33	43	8
Prev Year	1	4	16	61	18

SORGHUM

State	VP	P	F	G	EX
AR	0	7	48	45	0
CO	0	9	25	52	14
IL	0	0	8	83	9
KS	0	0	29	46	25
LA	0	14	63	23	0
MS	0	11	62	27	0
MO	0	9	48	42	1
NE	0	10	36	52	2
NM	0	20	44	35	1
OK	0	2	25	73	0
SD	5	10	44	35	6
TX	1	5	38	51	5
12 State	1	5	36	49	9
Prev Week*	1	8	37	45	9
Prev Year	0	2	26	54	18

* Revised

SPRING WHEAT

State	VP	P	F	G	EX
ID	1	1	16	70	12
MN	8	29	50	12	1
MT	1	5	20	46	28
ND	0	10	37	48	5
SD	1	10	47	42	0
5 State	2	12	37	42	7
Prev Week	1	10	35	47	7
Prev Year	1	4	20	59	16

COTTON

State	VP	P	F	G	EX
AL	0	12	56	32	0
AZ	0	0	10	80	10
AR	0	0	32	68	0
CA	0	0	0	90	10
GA	1	20	67	12	0
LA	0	0	68	32	0
MS	0	26	68	6	0
MO	0	0	77	23	0
NM	0	0	29	67	4
NC	2	5	54	39	0
OK	0	0	30	68	2
SC	14	54	28	4	0
TN	0	0	29	71	0
TX	0	6	35	51	8
14 State	0	7	39	49	5
Prev Week	1	6	34	52	7
Prev Year	5	5	48	37	5

VP - Very Poor P - Poor F - Fair
G - Good EX - Excellent

Correction: In the August 17, 1993, Weekly Weather and Crop Bulletin, crop condition data for sorghum and soybeans were switched.

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 0.01 to 3.65 in. north; 0.02 to 1.50 in. central; none to 1.19 in. south. Temperatures 2 to 5° above normal north, south; 3 to 6° above normal central. Lows 63 to 71° north; 67 to 72° central; 66 to 72° south. Highs 92 to 98° north; 94 to 99° central; 96 to 99° south.

Days suitable for fieldwork 6.2. Soil moisture 66% short, 32% adequate, 2% surplus. Corn dented 90%, 95% 1992, 95% avg.; mature 65%, 74% 1992, 75% avg.; harvested 24%, 22% 1992, 38% avg.; 15% very poor, 39% poor, 41% fair, 5% good. Sorghum harvested 8%, 4% 1992, 17% avg.; 9% poor, 73% fair, 18% good. Peanut 28% poor, 57% fair, 15% good. Pasture feed condition 20% poor, 52% fair, 24% good, 4% excellent. Primary activities: Cultivating, scouting, spraying fields, harvesting vegetables, corn, general care of livestock, poultry, catfish.

ALASKA: Most areas received some significant rainfall by week-end. Below freezing temperatures 17th to 18th in Clearwater area.

Days suitable for fieldwork 4. Barley 80% ripe 70% 1992, 10% swathed, 25% harvested, 10% 1992. Second crop hay harvest was 10% complete. Many growers anticipate a light second cut due to a very dry summer. Harvesting of seed potatoes began last week in the Matanuska Valley. Commercial vegetable harvest continues. Topsoil 40% short, 60% adequate. Subsoil 65% short, 35% adequate.

ARIZONA: Light showers 15th, 16th, 17th, eastern; 18th, central. Showers 19th, north, central; 20th east central; 21st north. Temperatures 4° below to 3° above normal. Extremes 40°; 96° higher elevations; 62°; 111° deserts.

Cotton open bolls 58%, 48% 1992, 49% avg. Activities included: Final irrigating, pesticide applications, pest monitoring, defoliating. Cotton 10% fair, 80% good, 10% excellent. Weeds light to moderate, insects moderate. Whitefly, aphids increasing in western areas. Alfalfa mostly good. Harvest moderate to active. Weeds light to moderate, insects light to moderate; disease light. Central areas, cantaloupe, honeydews, watermelons, red chili, harvested. Apples, peaches, sweet corn harvested eastern production areas.

ARKANSAS: Hot week, temperatures averaging above normal. Scattered showers occurred mainly in the northeast the latter part of week. Extremes 66°; 106°. Rainfall none to 1.02 in.

Days suitable for fieldwork 7. Moderate rate of crop growth. Soil moisture supplies 89% short, 11% adequate. Soybean, cotton irrigation continued. Soybean cultivation continued. Armyworm larvae infestation in soybean fields. Producers continued to apply herbicides to soybean fields. Boll weevils in cotton fields. Beet armyworms in some cotton fields. Sheath blight disease in rice fields. Sorghum, rice harvesting began. Corn harvested 13% current week, 12% 1992, 14% avg. Corn 3% poor, 44% fair, 53% good. High temperatures continued to stress poultry flocks. Hay cuttings continued. Pastures continued to be sprayed for weeds. Producers prepared for planting cool season forages. Pastures good. Livestock good, parasites.

CALIFORNIA: Cooler temperatures, rain in parts of north.

Ground preparation fall small grains beginning. Rice crop maturing. Expect rice harvest one month. Water grass problems. Harvesting wild rice underway. Cotton crop two weeks behind normal. Defoliation underway south. Treatments aphids, mites, lygus ongoing. Corn irrigated, treated mites. Early corn silage harvested. Later silage fertilized. Good silage yields. Safflower harvest underway most areas. Sunflowers headed, drying for harvest. Sugarbeets harvested some area, new crop thinned, weeded. Planting 1994 sugarbeets commenced scattered areas. Alfalfa hay cut, good yields, quality. Army worm treatment alfalfa

fields. Picking of plums, peaches, nectarines, apples, Asian pears, prunes, almonds, table grapes, Valencia oranges continued. Raisin grape harvest in Fresno County picked up speed. Gravenstein apple harvest mostly complete, Sonoma County. Treatment for mites, codling moth, navel orange worm in walnuts. Broccoli fairly light to moderate central coast. Cauliflower fairly light, celery moderate to heavy, increasing central coast. Sweet corn harvest progressed San Joaquin, Coachella valleys. Summer head lettuce moderate, increasing central coast. Fall lettuce planting advanced San Joaquin Valley. Fresh market tomato harvest ongoing, central valley fall fields being planted. Processing tomato production gained momentum. Picking watermelons, cantaloupe, honeydew, other melons active San Joaquin Valley, south district. Cool weather, market conditions slowed melon harvest San Joaquin Valley. Yellow onion digging in full swing central coast. Bell pepper packing increased San Joaquin Valley, central coast. Other crops harvested: Cucumbers, eggplant, garlic, green beans, squash, various oriental vegetables. Range, pasture feed conditions fair to good. Higher elevation ranges drying rapidly. Limited supplemental feeding. Livestock movement slow. Cattle good.

COLORADO: 16th was dry, warm by the 17th. Scattered afternoon thunderstorms over the mountains, isolated to widely scattered in the plains. 17th through 20th storms over the plains were slow moving, producing heavy rain over small areas. Showers in the San Luis Valley; weekly totals were consistently the highest. On the 21st fairly high coverage of rainfall west and mountains, scattered thunderstorms Eastern Plains. Temperatures near normal.

Days suitable for fieldwork 5.6. Soil moisture 6% very short, 46% short, 45% adequate, 3% surplus. Alfalfa 2nd cutting 76%, 74% 1992, 73% avg; 3rd cutting 17%, 16% 1992, 14% avg. Spring barley harvested 62%, 65% 1992, 62% avg. Oats harvested 64%, 61% 1992, 58% avg. Dry beans flowering 88%, 81% 1992, 89% avg.; cut 1%, 2% 1992, 5% avg. Corn dough stage 32%, 36% 1992, 45% avg.; denting 2%, 3% 1992, 10% avg. Sorghum headed 57%, 49% 1992, 65% avg.; turning color 6%, 7% 1992, 10% avg. Summer potatoes harvested 45%, 39% 1992, 25% avg. Dry onions harvested 17%, 25% 1992, 20% avg. Summer potato 1% poor, 11% fair, 48% good, 40% excellent. Fall potato 8% poor, 15% fair, 52% good, 25% excellent. Dry onion 1% poor, 12% fair, 60% good, 27% excellent. Corn 1% very poor, 8% poor, 11% fair, 60% good, 20% excellent. Sugarbeets 4% poor, 12% fair, 59% good, 25% excellent. Livestock mostly good to excellent. Pasture, range feed mostly fair.

FLORIDA: Temperatures 3 to 5° above normal, Panhandle, Big Bend areas, 1 to 4° above elsewhere. Highs 100° Panhandle, Big Bend, middle, upper 90s elsewhere. Lows around 70° except Big Bend, northeast, mid to upper 60s. Rain 1 to 3 days most areas. Many areas received less than 0.50 in. rain, some local spots 1 to 2 inches.

Soil moisture mostly short with scattered areas of adequate moisture. Tobacco harvest winding down, marketing active. Farmers preparing to start peanut harvest. Cotton bolls starting to open. Soybeans, sugarcane continue making good progress. Corn harvest active. Citrus groves hot, dry, irrigating many areas. Fruit growth variable depending on grove care, irrigation. Abundant new growth most predominant in well cared for groves. Very little droppage or splitting. Caretakers cutting cover crops, working irrigation ditches, equipment for water movement. Dry conditions promoting heavy irrigation southern areas; some planting delayed central localities. Northern vegetables in good condition with sweet corn, snap bean harvest starting by mid-September. Pastures feed condition poor to excellent. Pastures stressed due to dry weather. Scattered showers covering some areas. Hay yield down. Pasture feed 10% poor, 55% fair, 20% good, 15% excellent. States cattle herds fair to good.

GEORGIA: Hotter than normal again. Temperatures 3 to 5° above normal. Hottest near 90° northeast mountains to 100° or above much of center, south. Valdosta 103° 18th. Coolest upper 50s, low 60s northeast mountains to mostly upper 60s to low 70s elsewhere. Widely scattered thunderstorms most of week. Rain under 1 in. most locations, isolated 1 to 3 in., few locations dry.

Days suitable for fieldwork 6.4. Soil moisture 37% very short, 55% short, 7% adequate, 1% surplus. Corn 96% mature, 95% 1992, 94% avg.; 24% harvested for grain, 21% 1992, 34% avg.; silage yields down. Many dryland cotton fields "cutting out". Sorghum 2% very poor, 34% poor, 50% fair, 14% good; 3% harvested for grain, 3% 1992, 3% avg. Peanuts 2% very poor, 30% poor, 50% fair, 18% good; 0% dug, 0% 1992, 1% avg. Soybeans 91% blooming, 95% 1992, 93% avg.; 61% setting pods, 79% 1992, 73% avg.; 0% dropping leaves, 1% 1992, 1% avg. Tobacco 8% very poor, 5% poor, 44% fair, 40% good, 3% excellent; 74% harvested, 86% 1992, 85% avg. Watermelons 98% harvested, 100% 1992, 98% avg. Vegetables 20% poor, 58% fair, 22% good. Apples 15% poor, 29% fair, 56% good; 16% harvested, 27% 1992, 33% avg. Peaches 99% harvested, 95% 1992, 99% avg. Pecans 1% poor, 9% fair, 89% good, 1% excellent. Hay 14% very poor, 34% poor, 48% fair, 4% good. Pasture feed condition 11% very poor, 33% poor, 47% fair, 9% good. Hay, pastures off slightly. Supplemental feeding hay increasing. Hay crop very short. Cattle 1% very poor, 6% poor, 62% fair, 31% good; cattle, hogs fair to good. Hogs 4% very poor, 1% poor, 30% fair; 63% good, 2% excellent.

HAWAII: Weather variable due to Hurricane Fernanda passing north of Island chain early in week. High surf windward coasts with localized heavy showers. Some minor property damage to coastal areas, minor adverse effects to agriculture. Heavy rains 19th, flash flood affected Hanalei area of Kauai causing road closures, minor damage to taro plantings. Temperatures varied high 60s to low 90s. Rainfall none to 3.20 inches.

Days suitable for fieldwork 7.0. Weather mixed, gusty winds, wet conditions, adverse for some crops, sunny, warm beneficial to crops other areas. Soil moisture levels generally ample. Banana production seasonally increasing. Papaya output declining. Watermelon production moderate levels.

IDAHO: Temperatures normal to 7° below normal. Rainfall 0.16 to 0.82 in. north; 0.09 to 0.36 in. southwest; 0.08 to 0.29 in. south central; 0.10 to 0.95 in. east. Hail, thunderstorms caused scattered damage.

Days suitable for fieldwork 6. Soil moisture 3% short, 96% adequate, 1% surplus. Winter wheat 21% harvested, 79% turning color. Spring wheat, 19% headed, 76% turning color, 5% harvested. Spring barley, 17% headed, 75% turning color, 8% harvested. Oats harvested 29%, 77% 1992, 56% avg. Potatoes 12" high 3%, closing middles 71%, turning 25%, harvested 1%; 1% very poor, 3% poor, 15% fair, 71% good, 10% excellent. Alfalfa second cutting 75%, 93% 1992, 88% avg. Alfalfa third cutting 13%, 30% 1992, 15% avg. Dry peas harvested 17%, 99% 1992, 84% avg. Lentils harvested 8%, 98% 1992, 77% avg. Peaches harvested 29%, 92% 1992, 69% avg. Prunes, plums harvested 3%, 30% 1992, 21% avg. Mint first cutting 89%, 98% 1992, 90% avg. Hops harvested 39%, 20% 1992, 10% avg. Irrigation water 5% fair, 76% good, 19% excellent. Activities: Vine killing, early potato harvest, cereal harvest, haying. Pasture, range feed condition 95% of normal. Livestock good.

ILLINOIS: Warmer than normal weather, highs in the mid to upper 80s, which was 3° above normal, while lows in the 60s to lower 70s, 4 to 7° above normal. Wetter than normal in the central areas, drier than normal in the northern, southern areas.

Days suitable for fieldwork 3.75, unchanged from last week. Corn crop made a slight catch up in development last week, as 71% reached dough stage, 21% dented, while soybeans made minimal progress. Crops remained generally good. Farmers concerns were for weed, insect control, some stressed corn, soybeans, effects of heat, humidity on livestock, quality of hay due to rains. Farm activities included: Mowing, bailing hay, straw, machinery maintenance, disking wheat stubble, harvesting sweet corn, tending

livestock, attending fairs. Soil moisture as of 20th 3% short, 59% adequate, 38% surplus. Pasture 96% normal.

INDIANA: Temperatures 72 to 81°, 2 to 5° above normal. Highs the low 80s north to near 90s south. Lows between the low 60s north to near 70s south. Rainfall mostly around 1 to over 2 in., however some extreme areas received as little as 0.25 in. if any rain.

Days suitable for fieldwork 5. Rain throughout the State helped improve overall crop conditions, however heavy rain storms damaged some crop acreage. Pastures feed condition 87% of normal, 85% last week. Topsoil 20% short, 60% adequate, 20% surplus. Subsoil 17% short, 74% adequate, 9% surplus. Tobacco harvested 13%, 21% 1992, 11% avg. Silos filled 7%, 1% 1992, 7% avg.

IOWA: Temperatures 6 to 8° below normal southeast. Extremes 46°; 85°. Dry northwest to 1.44 in. rainfall west central; average 0.45 in. (normal 0.94 in.). Coolest week in 9 weeks, driest in 19 weeks.

Days suitable for fieldwork 4.5. Topsoil 1% short, 46% adequate, 53% surplus. Subsoil 14% adequate, 86% surplus. Corn tasseled 72%, 100% 1992, 100% normal; in or past milk stage 8%, 42% 1992, 60% normal. Soybean acreage cultivated for the first time 72%, 100% 1992, 100% normal. Oat acreage harvested 69%, 83% 1992, 95% normal. Second crop alfalfa hay harvested 57%, 81% 1992, 94% normal. First crop clover hay harvested 92%, 100% 1992, 100% normal. Second crop clover hay harvested 22%, 59% 1992, 77% normal. Winter wheat harvested 70%, 86% 1992, 97% normal. Oat 19% very poor, 46% poor, 31% fair, 4% good. Pasture feed condition 2% very poor, 6% poor, 30% fair, 50% good, 12% excellent. Hay 5% very poor, 32% poor, 41% fair, 20% good, 2% excellent. Weather has been good for livestock as the muddy lots begin to dry. Cool temperature raised many concerns for farmers about an early frost this year. Many are also worried about the very low hay quality harvested, whether the hay will last through the winter.

KANSAS: Temperatures 3 to 7° above normal except southwest 1° above normal. Precipitation recorded all areas 0.04 in. south central to 1.78 in. northwest.

Days suitable for fieldwork 6.0. Topsoil 45% short, 50% adequate, 5% surplus. Subsurface 6% short, 83% adequate, 11% surplus. Wheat harvest finally complete. Corn good progress, still behind schedule. Some high moisture corn cut, harvest still weeks away. Sorghum good progress, only slightly behind schedule. Hot, dry weather helping push sorghum stand to maturity. Soybeans on schedule. Range, pasture feed condition good to excellent; livestock looking good. Haying behind schedule; many areas will be one cutting short this year.

KENTUCKY: Hot, dry weather continued. Temperatures 3 to 5° above normal, highs upper 80s to low 90s. Warmest temperatures first, middle of week, cooler by weekend. Significant precipitation spotty. Most locations received less than 0.50 in., a few received above normal rainfall, most 0.50 to 0.75 in. below normal.

Days suitable for fieldwork 4.8. Soil moisture 9% very short, 41% short, 49% adequate, 1% surplus. Tobacco 5% poor, 50% fair, 43% good, 2% excellent. Burley tobacco 15% cut, dark tobacco 20% cut. Hay, pasture feed conditions improved slightly, mostly fair to good.

LOUISIANA: Temperatures 2.0 to 5.0° above normal. Extremes 67°; 103°. Rainfall none northwest to 1.49 in. east central.

Days suitable for fieldwork 6.5. Soil moisture 13% very short, 54% short, 33% adequate. Corn 4% poor, 55% fair, 41% good; 100% dough stage, 100% 1992, 100% avg.; 91% mature, 98% 1992, 97% avg.; 38% harvested, 46% 1992, 53% avg. Corn harvest progressed in the south. Yields are below average. Hay 40% final cutting, 68% 1992, 35% avg. Peaches 95% harvested, 100% 1992, 99% avg. Rice 62% ripe, 70% 1992, 61% avg. Rice harvest active. Sorghum 34% ripe, 77% 1992, 51% avg.; 7% harvested, 39% 1992, 24% avg. Soybeans 3% turning color, 11% 1992, 5% avg. Soybeans under drought stress in most areas. Sweet potatoes 11% poor, 26% fair, 63% good; 6% harvested, 14% 1992, 16% avg. Harvest continued. Sugarcane 1% poor, 5% fair, 94% good; 6% planted, 2% 1992, 6% avg. Shorter than normal crop, dry conditions hindered planting.

Livestock 31% fair, 67% good, 2% excellent. Cattle under heat stress. Pastures feed conditions 4% poor, 15% fair, 81% good. Vegetables 20% poor, 59% fair, 21% good.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.35 in. Temperature 77.8°, normal 74.3°. Extremes 51°, 96°.

Days suitable for fieldwork 5.9. Topsoil 6% very short, 44% short, 50% adequate. Subsoil 6% very short, 63% short, 31% adequate. Corn poor to fair; 96% silked, 95% 1992, 95% avg.; 63% dough, 54% 1992, 70% avg.; 35% dent, 21% 1992, 39% avg.; 12% silage harvested, 1% 1992, 9% avg. Soybean poor to mostly fair; 85% bloomed, 72% 1992, 74% avg.; 57% setting pods, 47% 1992, 59% avg. Sorghum fair; 95% headed, 93% 1992, N/A avg. Tobacco poor to fair; 78% bloomed, 91% 1992, 83% avg.; 43% topped, 71% 1992, 61% avg.; 18% cut, 22% 1992, 24% avg. Pasture feed conditions mostly poor to fair; hay supplies mostly adequate. Alfalfa hay 90% third cut, 64% 1992, 71% avg. Other hay 37% third cut, 25% 1992, 15% avg. Sweet corn 84% harvested, 70% 1992, 76% avg. Watermelons 85% harvested, 60% 1992, 76% avg. Cantaloupes 91% harvested, 62% 1992, 79% avg. Potatoes 85% harvested, 81% 1992, 75% avg. Tomatoes 76% harvested, 57% 1992, 71% avg. Peaches, apples good; peaches 67% picked, 59% 1992, 68% avg. Apples 13% harvested, 11% 1992, 17% avg.

DELAWARE: Precipitation 4.02 in. Temperature 76.9°, normal 74.4°. Extremes 58°, 92°.

Days suitable for fieldwork 5.8. Topsoil 100% short. Subsoil 67% short, 33% adequate. Corn poor; 63% dough, 65% 1992, 75% avg.; 41% dent, 18% 1992, 40% avg.; 8% mature, 1% 1992, 5% avg.; 17% silage harvested, 12% 1992, 11% avg. Soybeans poor to fair; 81% bloomed, 75% 1992, 84% avg.; 32% setting pods, 33% 1992, 41% avg. Sorghum poor to mostly fair, 58% headed, 82% 1992. Alfalfa hay 81% third cut, 77% 1992, 79% avg. Other hay 30% third cut, 42% 1992, 47% avg. Pasture feed conditions very poor; hay supplies short. Sweet corn 92% harvested, 73% 1992, 76% avg. Cantaloupes 75% harvested, 65% 1992, 81% avg. Watermelons 82% harvested, 49% 1992, 69% avg. Potatoes 63% harvested, 70% 1992, 66% avg. Tomatoes 76% harvested, 42% 1992, 60% avg. Peaches, apples mostly good; peaches 79% harvested, 66% 1992, 86% avg. Apples 21% harvested, 7% 1992, 21% avg.

MICHIGAN: Extremes 32°, 92°. Rainfall 0.05 to 2.02 inches.

Days suitable for fieldwork 6.5. Soil moisture 35% short, 55% adequate, 10% surplus. Dry beans 80% setting pods, 50% 1992, 70% avg.; 15% turning, 2% 1992, 15% avg.; 2% very poor, 8% poor, 25% fair, 50% good, 15% excellent. Oats 100% ripe, 65% 1992, 95% avg.; 65% harvested, 35% 1992, 75% avg.; 3% very poor, 12% poor, 30% fair, 40% good, 15% excellent. Potatoes 45% harvested, 25% 1992, 25% avg. Hay 80% second cutting, 70% 1992, 80% avg.; 25% third cutting, 15% 1992, 20% avg.; 3% very poor, 7% poor, 25% fair, 45% good, 20% excellent. Pasture feed condition 80% of normal. Major activities: Combining small grains, cutting hay, harvesting potatoes, picking fruit.

MINNESOTA: Temperatures near normal to 3° above normal. Extremes 47°, 87°. Precipitation 0.31 to 0.67 in. below normal northern 1/3 of State, 0.27 to 0.91 in. above normal elsewhere. Greatest weekly precipitation 2.46 inches.

Days suitable for fieldwork 3.2. Topsoil 27% adequate, 73% surplus. Spring wheat 31% cut/swathed, 37% 1992, 82% avg.; 17% combined, 19% 1992, 78% avg. Oats 78% cut/swathed, 84% 1992, 96% avg.; 52% combined, 69% 1992, 92% avg. Barley 64% cut/swathed, 63% 1992, 92% avg.; 44% combined, 36% 1992, 86% avg. Corn 95% tasseled, 99% 1992, 99% avg.; 19% milk, 74% 1992, 91% avg.; 7% dough, 34% 1992, 67% avg. Soybeans 95% blooming, 99% 1992, 99% avg.; 50% setting pods, 94% 1992, 96% avg.; N/A yellowing, 4% 1992, 14% avg. Spring wheat 8% very poor, 29% poor, 50% fair, 12% good, 1% excellent. Oats 14% very poor, 25% poor, 38% fair, 20% good, 3% excellent. Barley 1% very poor, 15% poor, 51% fair, 30% good, 3% excellent. Corn 13% very poor, 58% poor, 26% fair, 3% good. Soybeans 8% very poor, 49% poor, 37% fair, 6% good. Sunflowers 3% very poor, 28% poor, 38% fair, 31% good.

MISSISSIPPI: Temperatures 84°, 3.5° above normal. Extremes 64°, 101°. Coastal district accumulated nearly an inch of rain, while the rest of the State received little rainfall. Rainfall 0.45 in., 0.40 in. below normal. Soil temperature 90°.

Days suitable for fieldwork 6.2, 4.7 1992, 5.7 avg. Soil 8% very short, 72% short, 20% adequate. Corn 98% dough, 100% 1992, 96% avg.; 75% dent, 94% 1992, 83% avg.; 36% mature, 69% 1992, 57% avg.; 12% harvested, 18% 1992, 16% avg.; 55% silage harvested, 72% 1992, 66% avg.; 16% poor, 53% fair, 30% good, 1% excellent. Cotton 100% setting bolls, 100% 1992, 99% avg.; 7% open bolls, 13% 1992, 23% avg.; 26% poor, 68% fair, 6% good. Rice 66% heading, 98% 1992, 89% avg.; mature 12%, 36% 1992, 26% avg.; 2% harvested, 2% 1992, 2% avg.; 14% poor, 57% fair, 24% good, 5% excellent. Sorghum 97% heading, 100% 1992, 96% avg.; 71% turning color, 95% 1992, 71% avg.; 31% mature, 58% 1992, 38% avg.; 3% harvested, 11% 1992, 10% avg.; 40% silage harvested, 55% 1992, 54% avg.; 11% poor, 62% fair, 27% good. Soybeans 84% blooming, 96% 1992, 86% avg.; 53% podding, 83% 1992, 64% avg.; 6% coloring, 10% 1992, 8% avg.; 0% shedding, 0% 1992, 0% avg.; 16% poor, 74% fair, 10% good. Sweet potatoes 5% harvested, 12% 1992, 13% avg.; 14% poor, 57% fair, 29% good. Watermelons 96% harvested, 97% 1992, 92% avg. Hay 80% harvested, 84% 1992, 77% avg. Livestock 16% fair, 73% good, 11% excellent. Pasture feed condition 90% of normal. Activities: Insect control, hay harvesting.

MISSOURI: Temperatures varied 3° above normal southeast, to 7° above normal across remainder of State. Rainfall 0.14 in., varying none southwest to 0.41 in. northeast.

Days suitable for fieldwork 5.6, ranging 4.3 northeast to 7.0 southwest. Topsoil 25% short, 53% adequate, 22% surplus. Corn dent stage ranges 6% northeast to 91% southeast. Soybeans podding by district ranges 41% southwest to 65% southeast; turning color 1%, 2% 1992, 4% avg. Second crop alfalfa 96%, 98% 1992, 100% avg. Third crop alfalfa 28%, 62% 1992, 74% avg. Other hay 91%, 95% 1992, 99% avg. Pasture feed conditions 4% poor, 25% fair, 65% good, 6% excellent.

MONTANA: Temperatures varied statewide. Light to moderate precipitation statewide.

Days suitable for fieldwork slightly over 5.0. Topsoil 8% short, 86% adequate, 6% surplus. Subsoil 10% short, 83% adequate, 7% surplus. Barley 1% very poor, 4% poor, 15% fair, 50% good, 30% excellent. Oats 2% poor, 14% fair, 55% good, 29% excellent. Sugarbeets 4% fair, 84% good, 12% excellent. Second cutting alfalfa hay 32% complete, 65% 1992, 70% avg. Other hay 60% complete, 91% 1992, 94% avg. Pasture, range feed conditions 102% of normal, unchanged from last week.

NEBRASKA: Temperatures near normal to 3° above normal. Precipitation occurred throughout the week varying from 0.30 in. northeast to almost 2.00 in. southwest.

Days suitable for fieldwork 4.8. Topsoil 13% short, 77% adequate, 10% surplus. Subsoil 90% adequate, 10% surplus. Oats 98% harvested, 100% 1992, 100% avg. Dry beans 34% fair, 66% good; 100% blooming; 88% setting pods. Alfalfa 2% poor, 15% fair, 75% good, 8% excellent; 30% third cutting, 50% 1992. Wild hay 15% fair, 58% good, 27% excellent. Pasture, range feed conditions 105% of normal.

NEVADA: Temperatures 3 to 6° below normal all areas. Lows dropped to freezing a couple of nights some northern valleys. Extremes 31°, 109°. Rainfall light, limited to northern, central sections.

Hay, small grain harvest continues. Combining alfalfa seed full swing. Potato digging to get underway soon. Most ranges still providing good grazing.

NEW ENGLAND: Precipitation 0.02 to 2.73 in. region. Temperatures 64 to 69° north; 67 to 74° south. Maximum temperatures 81 to 89° north; 80 to 91° south. Minimum temperatures 38 to 51° north; 40 to 57° south.

Days suitable for fieldwork 5.7. Soil moisture 13% very short, 36% short, 46% adequate, 5% adequate. A available grazing 22% very short,

33% short, 45% adequate. Fieldwork progress 2 days behind schedule. Pasture feed conditions 60% of normal. Maine early potatoes harvested less than 5%. Connecticut, Massachusetts potatoes 20% harvested, 20% 1992, 15% avg. Rhode Island potatoes 10% harvested, 15% 1992, 20% avg. Potato good region wide. Maine oats good; harvested 20%, 15% 1992, 10% avg. Field corn fair. Second cutting hay 70% harvested, 65% 1992, 70% avg.; good; 3rd cutting 15% harvested, 10% 1992, 20% avg. Shade tobacco 70% harvested, good. Outdoor tobacco 75% harvested, good. Sweet corn harvested 50%, 50% 1992, 60% avg.; good. Apples 5% harvested, size medium, color good, good. Peaches 40% harvested, size medium, good. Pears 5% harvested, size medium, good. Raspberries 85% harvested, size medium, good. Highbush blueberries 85% harvested, size medium, fair to good. Maine wild blueberries 50% harvested, good. Cranberries size medium, good to excellent. Major farm activities: Applying herbicides, insecticides, fungicides as needed. Harvesting some second cutting of hay, chopping haylage continues. Fall seeding of hay fields. Early varieties of potatoes, apples being harvested. Harvesting small fruits. Harvesting shade, broadleaf tobacco. Picking late summer vegetables for roadside markets.

NEW JERSEY: Temperatures near normal. Extremes 46°; 92°. Rainfall 1.37 in. north, 2.60 in. central, 1.29 in. south. Heaviest 24 hour total 4.65 in. on 16th, 17th. Estimated soil moisture, in percent field capacity, averaged 65% north, 87% central, 65% south. Four inch soil temperatures averaged 71° north, 73° central, 75° south.

Soil moisture content is adequate. Rainfall beneficial to pastures, most crops. Harvesting of apples, peaches statewide. Spraying of pesticides active. Moderate to good supply of summer vegetables including cucumbers, eggplant, peppers, squash sweet corn, tomatoes. Moderate supply of beans, cantaloupe, watermelon are available. Light volume of beets, cabbage, green onions, greens, leeks, spinach, okra, parsley also available.

NEW MEXICO: Temperatures 2 to 3° above normal in the eastern plains, near normal elsewhere. Extremes 44°; 101°. Precipitation fell at most locations, heaviest totals over 2.50 in. south central mountains.

Days suitable for fieldwork 5.8. Soil moisture 51% short, 45% adequate, 4% surplus. Crop conditions: Alfalfa 33% fair, 64% good, 3% excellent; various rain damage. Corn 11% fair, 79% good, 10% excellent. Chile 7% poor, 21% fair, 62% good, 10% excellent; green harvest active. Onion harvest near end. Apples 42% fair, 58% good; harvest increasing in south. Pecans 29% fair, 71% good; average drop thus far. Cattle, sheep poor to good, mostly good. Range feed conditions 74% of normal.

NEW YORK: Muggy air mass over State. Moisture helped breed showers, thunderstorms, especially in western, southern areas where rainfall was heavy. Nearly 4.00 in. fell in western parts. Drier, cooler air entered region on 28th.

Days suitable for fieldwork 5.6. Soil moisture supplies short to adequate. Very short in some areas. Corn poor to good. Recent rains have helped appreciably. Pasture feed conditions 74% of normal. Hay poor to good. Second cuttings of alfalfa 84% done, 69% 1992, 79% avg. Third cuttings alfalfa 23% done, 16% 1992, 19% avg. Wheat harvest done in most areas. Oat harvest 70% done, 22% 1992, 63% avg. Dry beans need rain. Pod set not as good as expected. Potato harvest underway. Onion harvest continues. Quality, condition good to excellent. Sweet corn harvest active. Tomato fields ripened nicely. Lettuce, cabbage, snap beans, celery harvest continues.

NORTH CAROLINA: Temperatures normal to 4° above normal. Precipitation 1.21 in. at Asheville to no rain at several locations.

Days suitable for fieldwork 6.2. Soil moisture 14% very short, 48% short, 36% adequate, 2% surplus. Crop condition: Pasture feed conditions 6% very poor, 27% poor, 45% fair, 21% good, 1% excellent. Field tobacco 4% poor, 50% fair, 46% good. Corn 22% very poor, 38% poor, 30% fair, 10% good. Hay 6% very poor, 25% poor, 47% fair, 22% good. Peaches 3% poor, 30% fair, 57% good

10% excellent. Truck crops 2% very poor, 15% poor, 56% fair, 27% good. Cotton 2% very poor, 5% poor, 54% fair, 39% good. Peanuts 5% poor, 51% fair, 42% good, 2% excellent. Soybeans 4% very poor, 11% poor, 56% fair, 28% good, 1% excellent. Sweet potatoes 43% fair, 55% good, 2% excellent. Apples 9% poor, 56% fair, 35% good. Sorghum 4% very poor, 18% poor, 60% fair, 18% good. Hay, roughage supplies 3% very short, 33% short, 63% adequate, 1% surplus. Peaches harvested 87%, 87% 1992, 93% avg. Flue cured tobacco harvested 37%, 50% 1992, 50% avg. Corn for silage harvested 36%, 21% 1992, 35% avg. Cotton setting bolls 92%, 87% 1992, 92% avg. Corn silked 99%, 100% 1992, 100% avg.; soft dough 89%, 88% 1992, 93% avg.; dented 78%, 73% 1992, 79% avg.; mature 51%, 51% 1992, 53% avg. Soybeans flowered 71%, 64% 1992, 73% avg.; setting pods 50%, 41% 1992, 47% avg. Hay 2nd cutting 76% completed; 3rd cutting 30% completed. Major activities: Topping, suckering, harvesting, marketing tobacco. Other activities included: Scouting cotton, soybeans; spraying cotton, peanuts; harvesting vegetables; cutting hay; harvesting corn for silage; tending livestock; general farm maintenance.

NORTH DAKOTA: Near normal temperatures, dry conditions returned. Precipitation none southwest to 1.24 in. northwest. Temperatures 0 to 1° above normal. Extremes 41°; 90° both in southwest.

Days suitable for fieldwork 6.2. Topsoil 2% short, 76% adequate, 22% surplus. Subsoil 82% adequate, 18% surplus. Small grain harvest progress continued slowly as wet field conditions were a major problem. Small grain quality was still a concern, extent of disease damage unknown. Spring wheat 10% poor, 37% fair, 48% good, 5% excellent; durum 7% poor, 31% fair, 53% good, 9% excellent; barley 8% poor, 36% fair, 51% good, 5% excellent; oats 1% poor, 31% fair, 60% good, 8% excellent; winter wheat 7% poor, 27% fair, 63% good, 3% excellent. Hard red spring wheat 10% combined, 26% 1992, 71% avg.; durum wheat 2% combined, 10% 1992, 55% avg.; oats 14% combined, 46% 1992, 80% avg.; barley 31% combined, 52% 1992, 86% avg.; winter wheat 45% combined, 82% 1992, 96% avg. Warm weather provided a boost to late season crop development, which remained well behind average. Corn for grain 10% very poor, 56% poor, 34% fair; corn for silage 2% very poor, 27% poor, 44% fair, 27% good; flax 26% fair, 62% good, 12% excellent; sugarbeets 30% fair, 70% good; potatoes 41% poor, 32% fair, 27% good; dry beans 2% very poor, 24% poor, 60% fair, 14% good; soybeans 9% very poor, 1% poor, 79% fair, 11% good; sunflowers 11% poor, 55% fair, 34% good. Flax 1% swathed or combined, 2% 1992, 19% avg.; corn for grain 1% denting to dented and beyond, 2% 1992, 23% avg.; dry beans none mature, 2% 1992, 29% avg.; soybeans 2% lower leaves yellowing and beyond, 3% 1992, 31% avg.; potatoes 1% dug, 1% 1992, 2% avg.; sunflowers 4% ray flowers dried or dropped, 7% 1992, 40% avg. Range, pasture feed conditions 94% of normal. Hay 81% of normal. Alfalfa hay first cutting 98% complete, second cutting 56%, other hay 72%. Stockwater supplies 87% adequate, 13% surplus.

OHIO: Many fields remained dry as rainfall remained scattered. A cold front to slip south on the 17th, another cold front on the 20th allowed dry Canadian airmass over weekend. Temperatures mostly 3 to 6° above normal. Highs generally in the middle to upper 80s, lows mainly in the 60s to upper 50s. Temperatures dropped into the 40s in the north on the 22nd. Base 50 growing degree-day accumulations for the week generally 160 to 180°. Rainfall generally under 0.50 in., many locations no more than 0.10 inch. Some areas in the south received over 1 inch. Rainfall over the past four weeks has averaged 2 to 3 in. below normal.

Days suitable for fieldwork 6.5. Topsoil 75% short, 25% adequate. Subsoil adequate to critically short. Oats harvested 100%, 86% 1992, 94% avg. Processing tomatoes harvested 17%, 17% 1992, 20% avg. Summer apples harvested 68%, 60% 1992, 64% avg. Potatoes harvested 18%, 20% 1992, 18% avg. Alfalfa 3rd cut harvested 40%, 34% 1992, 40% avg.; other hay 2nd cut harvested 88%, 76% 1992, 77% avg.; 3rd cut harvested 15%, 20% 1992, 21% avg. Pasture feed conditions 15% very poor, 23% poor, 32% fair, 28% good, 2% excellent. Hay 4% very poor, 20% poor, 40% fair, 33% good, 3% excellent. Dry soils remain a concern. Spider mites have been reported in soybeans. Potato harvest is slow as farmers are hoping for

rain to increase potato size, make hard ground softer for digging. Cucumber harvest also slow. Tobacco chopping has started in the south.

OKLAHOMA: Arid weather continues. Temperatures 4° above normal Panhandle, southwest district to 9° above normal northeast, east central districts. Precipitation none in northeast, central, east central, south central districts to 0.13 in. in the Panhandle.

Days suitable for fieldwork 6.8. Topsoil 84% short, 16% adequate. Subsoil 52% short, 48% adequate. Corn 97% milk to soft, 98% 1992, 95% avg.; 19% mature, 63% 1992, 38% avg.; 4% harvested, 2% 1992, 6% avg. Sorghum 2% poor, 25% fair, 73% good; 81% heading, 63% 1992, 75% avg.; 28% milk to soft, 22% 1992, 35% avg.; 7% mature, 2% 1992, 5% avg. Soybeans 76% flowering, 67% 1992, 75% avg.; 37% setting pods, 36% 1992, 46% avg.; 4% mature, 6% 1992, 3% avg. Peanuts 4% poor, 12% fair, 84% good; 96% pegging, 95% 1992, 97% avg.; 81% setting pods, 73% 1992, 79% avg.; 1% mature, 6% 1992, 2% avg. Cotton 30% fair, 68% good, 2% excellent; 99% setting bolls, 72% 1992, 88% avg.; 5% open bolls, 3% 1992, 1% avg. Alfalfa 94% 3rd cut, 94% 1992, 94% avg.; 27% 4th cut, 18% 1992, 38% avg. Pastures feed conditions 91% of normal. Cattle prices lower. Marketings average.

OREGON: Temperatures 5 to 8° below normal south, northeast 1 to 2° below normal, northwest 2 to 3° above normal. Precipitation heavy northeast, 2.00 to 2.50 in., thunderstorms creating rock and mud slides north central areas, southwest, west central regions 1 to 1.50 inches.

Soil moisture 15% short, 84% adequate, 1% surplus. Winter wheat 82% harvested. Barley 58% harvested. Grain harvest continued, statewide. Grass seed harvest, mint harvest continued, hops harvest underway; Willamette Valley. Rain slowed haying activities. Willamette Valley snap beans harvest continued. Columbia Basin early potato, onion, watermelon, carrot harvest continued. Malheur County potato, onion harvest underway. Cranberry development continued, average size, showing red coloring; southern coast. Evergreen blackberry harvest continued, blueberry harvest winding down, peach, early apple harvest continued, hazelnut prospects look good; Willamette Valley. Bartlett pear harvest underway, Hood River, Medford districts. Early apple harvest underway, Hood River, Milton-Freewater districts. Livestock good to excellent. Cattle movement underway, eastern areas. Western areas continue to graze without feed supplements. Range, pastures feed conditions above normal statewide, 108% of normal.

PENNSYLVANIA: Above normal precipitation, temperatures. Temperature 78°, 8° above normal. Extremes 39°, 92°. Precipitation 1.08 in., 0.24 in. above normal.

Days suitable for fieldwork 5. Soil moisture 57% short, 43% adequate. Ensilage corn harvested 2% complete, 2% 1992. Soybean 2% very poor, 10% poor, 30% fair, 45% good, 13% excellent. Wheat harvest 100% complete, 91% 1992; planted 2% complete, 4% 1992. Oats harvest 87% complete, 74% 1992. Barley harvest 100% complete, 95% 1992; planted 2% complete, 7% 1992. Tobacco harvest 13% complete, 6% 1992. Potato harvest 20% complete, 19% 1992. Second cutting alfalfa 96% complete, 77% 1992; 3rd cutting 47% complete, 32% 1992; 4th cutting 6% complete, 6% 1992. Second cutting clover-timothy 77% complete, 57% 1992. Quality of hay made 24% poor, 54% fair, 22% good. Feed from pastures severe drought. Apple harvest 12% complete, 12% 1992. Peach harvest 65% complete, 45% 1992. Grapes harvest 21% complete, 5% 1992. Fall plowing 14% complete, 11% 1992. Activities: Making hay, filling silos; baling straw; harvesting small grains; harvesting fruits, vegetables; attending Ag Progress days, county fairs; hauling manure; caring for livestock.

PUERTO RICO: Island rainfall 2.26 in. was 0.53 in. above normal. Highest weekly total rainfall 4.15 in. Lajas, 3.89 in. Yauco, 3.49 in. Ponce. Highest 24 hour total 2.90 in. at Lajas. Island temperatures about 80 to 82° coasts, 77 to 79° interior with mean station temperatures 84.4° at San Juan WSFO to 67.8° at Pico Del Este. Extremes 59°, 98°.

SOUTH CAROLINA: Rainfall 0.30 inches. Temperatures 3 to 5° above normal.

Days suitable for fieldwork 6.5. Soil moisture 31% very short, 62% short, 7% adequate. Corn very poor to poor; 81% mature, 88% 1992, 80% avg.; 25% harvested, 20% 1992, 23% avg. Sorghum poor; 28% harvested, 19% 1992, 18% avg. Soybeans 12% very poor, 24% poor, 64% fair; 79% blooming, 81% 1992, 79% avg.; 44% setting pods, 51% 1992, 44% avg.; 1% leaves turning, 2% 1992, 2% avg. Cotton 14% very poor, 54% poor, 28% fair, 4% good; 13% open bolls, 1% 1992, 9% avg. Tobacco fair; 44% harvested, 73% 1992, 71% avg.; 2% stalks destroyed, 13% 1992, 8% avg. Cantaloupes poor to fair; 87% harvested, 87% 1992, 88% avg. Watermelons poor to fair; 93% harvested, 99% 1992, 93% avg. Sweet potatoes poor to fair; 6% harvested, 3% 1992, 9% avg. Fall hay poor; 40% harvested, 50% 1992, 46% avg. Peaches poor to fair; 84% harvested, 91% 1992, 93% avg. Apples poor to fair; 6% harvested, 12% 1992, 15% avg. Pasture feed condition poor.

SOUTH DAKOTA: Temperatures near to just slightly below normal. Extremes 39°, 95°. Northwest, north central, central had little or no rain, most other areas had some precipitation. Heaviest rain southwest, southeast, 2 to over 3 inches. Scattered trace to nearly 1 in. noted across south central, northeast. Maximum 3.46 inches.

Days suitable for fieldwork 4.3. Topsoil 11% short, 62% adequate, 27% surplus. Subsoil 4% short, 67% adequate, 29% surplus. Flax 35% fair, 65% good. Sunflowers 2% poor, 14% fair, 74% good, 10% excellent. Oats 81% harvested, 85% 1992, 97% avg. Barley 82% harvested, 83% 1992, 97% avg. Winter rye 79% harvested, 97% 1992, 99% avg. Spring grains harvest was in full swing. Scabbing in some spring wheat fields. Row crops were still behind normal, needed a late frost to produce. Livestock 1% fair, 77% good, 22% excellent. Pasture feed condition 98% of normal. Haying conditions varied.

TENNESSEE: Temperatures 8 to 9° above normal for most of the State, except Bristol in east 2° below normal. Low temperatures mainly 70s. Extremes 60°, 90°. Rainfall remained below average. Memphis, Dyersburg, Chattanooga dry. Knoxville, Bristol received above average rain due to thunderstorms on 20th, showers on 18th. Knoxville most rainfall at 2.09 in.

Days suitable for fieldwork 5.9. Soil moisture 13% very short, 61% short, 26% adequate. Corn 90% dough stage, 90% 1992, 83% avg.; 53% dent stage, 67% 1992, 61% avg.; 9% mature, 14% 1992, 14% avg.; 22% silage harvested, 14% 1992, 13% avg.; 4% very poor, 11% poor, 60% fair, 25% good. Cotton 5% open bolls, 3% 1992, 5% avg.; 29% fair, 71% good. Sorghum 43% turning color, 53% 1992, 48% avg.; 10% mature, 9% 1992, 9% avg.; 1% poor, 59% fair, 40% good. Soybeans 89% blooming, 90% 1992, 81% avg.; 60% setting pods, 59% 1992, 53% avg.; 7% poor, 53% fair, 40% good. Tobacco 77% topped, 85% 1992, 78% avg.; 16% burley harvested, 26% 1992, 23% avg.; 15% dark air harvested, 20% 1992, 19% avg.; 17% dark fire harvested, 26% 1992, 21% avg.; 9% poor, 69% fair, 22% good. Pasture feed conditions 5% very poor, 19% poor, 61% fair, 15% good. Cattle 2% poor, 47% fair, 50% good, 1% excellent. Cotton growers still battling insect pressures. Boll weevils, bud worms the worst, loopers, army worms, web worms also active. Some cotton needs more rain. Soybeans progressing well, early planted real good. Late planted, double crop would improve considerably with a little more rain. Corn starting to mature. Silage harvest in full swing. Tobacco harvest underway in most areas. Uneven blooming, black shank reduced burley yields. Pastures showing growth, beginning to supply feed again. Amount of hay being fed to cattle is dwindling.

TEXAS: Mostly dry. Significant rainfall Upper Coast, southern part of East Texas, with 0.36 to 0.74 in., respectively. All districts except southern part of East Texas below normal, departures -0.68 inches. Coastal Bend to +0.17 in. southern East Texas. Some of largest weekly amounts for single stations were 1.08 in. at Lake Livingston, 2.00 in. at Sam Rayburn Dam. Temperatures above normal except Southern High Plains, Northern Low Plains, Coastal Bend, South Texas, Lower Valley. Greatest departure from normal +4° Northern High Plains, Blacklands, northern portion of East Texas. Much of Blacklands, East Texas recorded daily high temperatures above 100°.

Crops: Corn silage cutting continued High Plains. Harvesting progressed rapidly in Blacklands, yields appear below average. Harvesting along Upper Coast winding down. Corn 77% normal, 89% 1992. Cotton irrigated fields made good progress High Plains. Some dryland fields in Low Plains cutting out due to dry weather. Some Blacklands producers started to defoliate fields, in Upper Coast a few producers harvesting. Cotton 77% normal, 57% 1992. Rice harvest made rapid progress along Upper Coast where conditions favorable. Some producers still draining fields. Crop still lags behind normal progress. Rice 86% normal, 83% 1992. Grain sorghum fields continued to make good progress in High Plains. Some sorghum harvested in Southern Low Plains, early yields below average. Harvesting progressed rapidly in Blacklands, below average yields reported. Sorghum 76% normal, 78% 1992. Peanuts still heavily irrigated Edwards Plateau. Some fields of Spanish peanuts showed signs of stress Cross Timbers. Irrigated fields looked good in Low Plains, crop pegging. Most areas need a good rain. Peanuts 73% normal, 85% 1992. Soybeans some fields along Upper Coast dropping leaves due to dryness. Harvest continued Blacklands, yields below normal, some farmers continued to bale crop for hay.

Commercial Vegetables: Rio Grande Valley, some melon plants suffered wind damage due high winds, hot weather. Irrigation continued, land prepared for fall onion planting. San Antonio-Winter Garden, producers irrigated fall cabbage and cucumbers. East Texas, hot weather took its toll on sweet potatoes. Activity limited primarily to irrigated fields. Some land preparations continued for fall planting. High Plains, limited onion harvesting occurred. Cabbage, cucumber and peppers also continued to be harvested. Potato harvest winding down. Trans-Pecos, harvest of peppers continued while cantaloupe harvest winding down. Peaches: Limited harvesting took place in East Texas, Cross Timbers. Pecans dropping of nuts continued due dry weather. Some East Texas producers sprayed for insect control. Irrigation heavy in South Central Texas. Cross Timbers pecan weevil population has been low. **Range and Livestock:** Ranges, pastures feed continued to decline across most areas due dry conditions. Supplemental feeding increased. Emergency Feed Programs implemented in some counties, fire threat increased. In East Texas, some ranchers contended with army worms in pastures, hay fields. If rain not received soon, winter hay supplies may be short parts of East Texas.

UTAH: Temperature maximums 2° below normal, minimums 2° below normal. Precipitation was light.

Days suitable for fieldwork 6.4. Soil moisture 31% short, 69% adequate. Irrigation water supply 13% short, 86% adequate, 1% surplus. Stockwater supply 5% short, 95% adequate. Winter wheat harvested 63%, 100% 1992, 99% avg. Spring wheat ripe 82%; harvested 42%, 91% 1992, 89% avg. Barley ripe 81%; harvested 48%, 92% 1992, 89% avg. Oats ripe 72%, 94% 1992; harvested for hay/silage 90%, 94% 1992; harvested for grain 26%, 61% 1992, 62% avg. Corn tasseling 87%. Alfalfa hay 3rd cutting 21% complete, 51% 1992, 30% avg. Other hay cut 94%, 98% 1992, 96% avg. Peaches picked 47%, 51% 1992. Apples picked 5%, 17% 1992. Pears picked 5%, 30% 1992. Pasture, range feed conditions good to excellent.

VIRGINIA: Temperatures slightly or much above normal. Extremes 50°; 96°. Precipitation below normal most areas with amounts none to 1.02 in. at Washington National.

Days suitable for fieldwork 6.4. Topsoil 28% very short, 50% short, 22% adequate. Pasture feed conditions 15% very poor, 44% poor, 40% fair, 1% good. Alfalfa 4% very poor, 25% poor, 53% fair, 18% good. Other hay 14% very poor, 44% poor, 40% fair, 2% good. Corn dough stage 78%, 64% 1992, 68% avg.; dented 58%, 50% 1992, 49% avg.; mature 27%, 19% 1992, 26% avg.; silage harvested 11%, 12% 1992, 11% avg.; 19% very poor, 42% poor, 31% fair, 8% good. Peanut 14% poor, 86% fair. Soybeans blooming 81%, 70% 1992, 77% avg.; setting pods 55%, 45% 1992, 55% avg.; 4% very poor, 58% poor, 37% fair, 1% good. All tobacco 23% poor, 42% fair, 35% good. Flue tobacco 28% harvested, 33% 1992, 35% avg. Fire tobacco 22% harvested, 10% 1992, 34% avg. Sun tobacco 18% harvested, 40% 1992, 25% avg. Cotton 27% fair,

73% good. Peach harvest 73% completed. Apple 12% poor, 44% fair, 38% good, 6% excellent. Summer apple harvest 72% completed. Quantity excellent however size appears small. Livestock 10% poor, 50% fair, 40% good. Topping, spraying burley tobacco. Harvesting hay, corn silage. Spider mites heavy in several counties on peanuts, corn earworms on soybeans in a few southeastern locations.

WASHINGTON: Temperatures 5° below normal to 3° above normal west; 5° below normal to 2° above normal east. Precipitation 0.03 to 0.40 in. west; none to 1.55 in. east.

Days suitable for fieldwork 6.0. Soil moisture 8% short, 92% adequate. Irrigation water supply 16% short, 84% adequate. Hay, other roughage 12% short, 86% adequate, 2% surplus. Range, pasture 15% poor, 23% fair, 47% good, 15% excellent. Winter wheat dryland 90% good, 10% excellent; irrigated 100% good. Spring wheat dryland 10% fair, 90% good; irrigated 100% good. Barley dryland 10% fair, 90% good; irrigated 100% good. Potatoes 100% good. Unseasonably cool, rainy weather returned after brief dry period. Grain harvests lagging well behind normal, yields good to excellent. Rains continue to plague alfalfa hay producers in their 2nd, 3rd cuttings. Pear harvest winding down; apple harvest underway for early varieties, districts. Ranges, pastures holding up very well due to cool, rainy weather.

WEST VIRGINIA: Temperature 74°. Extremes 52°; 94°. Precipitation 0.57 in.

Days suitable for fieldwork 5.5. Soil moisture 25% very short, 65% short, 10% adequate. Tobacco 1% poor, 42% fair, 57% good; 75% topped. Hay 20% very poor, 44% poor, 36% fair; 53% 2nd cut, 49% 3rd cut. Pastures feed conditions 31% very poor, 47% poor, 22% fair; 56% of normal. Gardens 6% very poor, 17% poor, 61% fair, 16% good. Cattle 31% fair, 69% good. Sheep 33% fair, 67% good. Apples poor to fair. Peaches poor to fair. Corn 5% very poor, 3% poor, 91% fair, 1% good; 96% silked, 73% dough stage. Soybeans 43% fair, 57% good; 99% blooming, 76% setting pods. Farm activities: Moving livestock, cutting hay, topping tobacco, harvesting apples, peaches, general maintenance.

WISCONSIN: Typical late summer week. More rain across west with lesser amounts in east. Fog blanketed many areas early mornings, especially near Lake Michigan. Temperature 70°; 3° above normal. Extremes 33°; 92°. Precipitation 0.10 to 1.20 inches.

Days suitable for fieldwork 4.2. Soil moisture 7% short, 67% adequate, 26% surplus. Pasture feed conditions 88% of normal, 71% 1992, 67% avg. General condition of crops: 7% poor, 37% fair, 55% good, 1% excellent. Oats 1% very poor, 10% poor, 51% fair, 36% good, 2% excellent; 50% harvested, 54% 1992, 78% avg. Corn 1% very poor, 8% poor, 42% fair, 45% good, 4% excellent; silked or beyond: 79% silked, 85% 1992, 96% avg.; dough or beyond: 23% in dough, 27% 1992, 49% avg.; dent or beyond: 5% in dent, 4% 1992, 17% avg. Soybean 1% poor, 19% fair, 68% good, 12% excellent. 2nd cut alfalfa: 70% harvested; 3rd cut alfalfa: 12% harvested, 22% 1992, 23% avg. Winter wheat 80% harvested, 85% 1992. Second, third crop alfalfa continues to be harvested. However, humidity, moist ground making for poor hay drying. Corn continues to improve with humid weather, low areas not responding. Late frost needed most areas for corn to mature. Soybeans beginning to yellow, setting beans in pods. Oats being harvested, below average yields. Potato crop excellent, large scale harvest beginning soon. Fruit trees heavy with fruit north central, southwest. Major activities: Small grain, hay harvesting.

WYOMING: Temperatures 2° above normal Casper to 6° below normal Powell. Rainfall above normal east, well below normal elsewhere. Gillette wettest with 1.80 inches. Hail in parts of northeast.

Days suitable for fieldwork 5.6. Topsoil 8% short, 92% adequate. Subsoil 8% short, 92% adequate. Spring wheat 14% harvested, 58% 1992, 69% avg. Oats 16% harvested, 41% 1992, 55% avg. Barley 41% harvested, 73% 1992, 72% avg. Winter wheat 70% harvested, 87% 1992, 94% avg.; planted for harvest in 1994 2%, 9% 1992, 5% avg. Corn in milk stage 25%, 67% 1992, 71% avg.; dough stage 2%, 22% 1992, 25% avg. Dry beans with leaves turning color 2%, 34% 1992, 38% avg. Alfalfa 2nd cutting completed 39%, 53% 1992, 67% avg. Hay harvested 82%, 85% 1992, 88% avg. Crops fair to good.

International Weather and Crop Summary HIGHLIGHTS

August 15 -21, 1993

FSU: Continued generally dry weather in Ukraine allowed spring grain harvesting to advance toward completion, but stressed grain-filling corn. Harvest progressed slowly in Russia.

EUROPE: Mostly dry weather helped grain harvesting. Unseasonably hot, dry weather covered corn areas in France.

SOUTH ASIA: Showers returned to central India, helping reproductive grains and oilseeds. Drought continued, however, in Gujarat's rainfed groundnut and cotton areas.

SOUTHEAST ASIA: Tropical Storm Tasha brought heavy rain to the northern and central Philippines. Scattered showers helped immature rice in Indochina and Java.

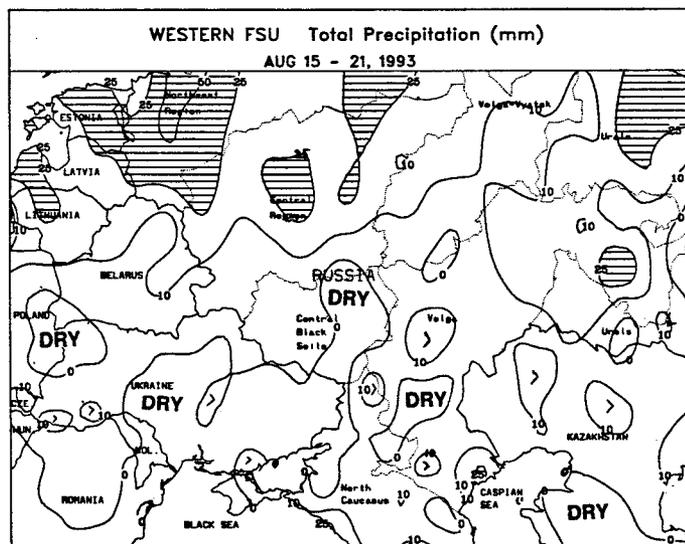
EASTERN ASIA: Southern China and southern Japan received heavy rains, causing flooding. Rain slowed spring wheat harvesting in Manchuria.

AUSTRALIA: Growing conditions remained favorable across most wheat areas.

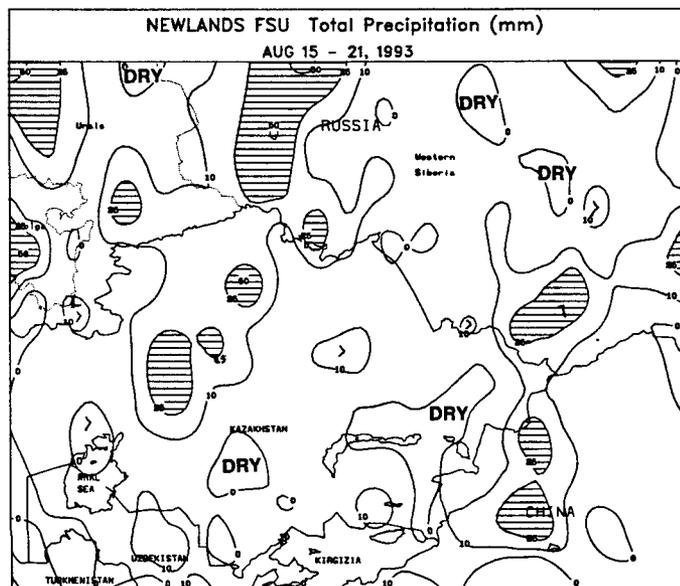
SOUTH AMERICA: Cool weather still prevailed across southern Brazil, possibly damaging winter wheat.

CANADA: Heavy showers and thunderstorms caused some lodging to maturing crops in the southwestern Prairies.

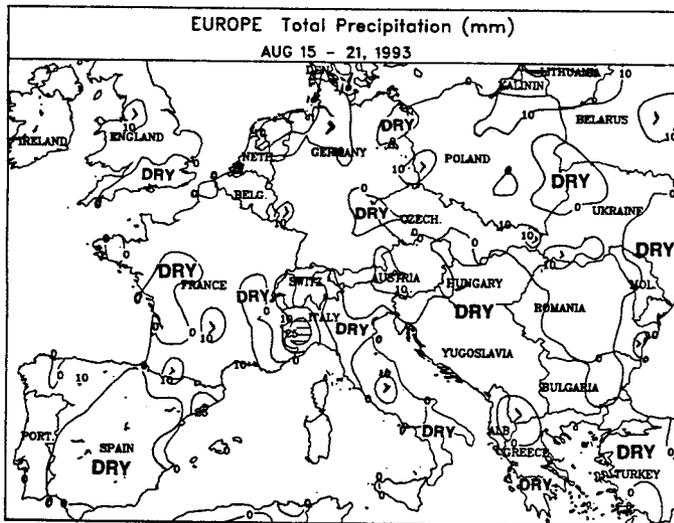
MEXICO: Tropical moisture spurred heavy rains across portions of Mexico.



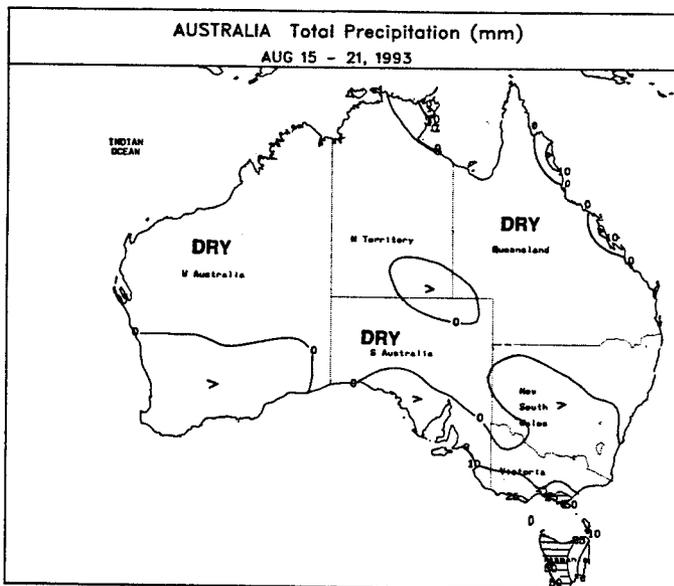
FSU-WESTERN: Little, if any, precipitation covered the southern two-thirds of the region, helping harvest work. As of August 16, reports indicated Ukraine's 1993 grain harvest was nearing completion, while the grain harvest was progressing slowly in Russia (about 30 percent complete compared to 50 percent last year). The slow harvest progress in Russia was due to a late spring which delayed planting, while wet June-July weather hampered early harvesting. Harvest weather has improved since early August. Although this week's mostly dry weather in Russian regions of North Caucasus, Black Soils Region, Volga Valley, and Volga Vyatsk helped harvesting, light to moderate rain (10-25 mm) slowed harvesting in Northwest Region and Central Region. Light to moderate rain also slowed harvest in the Baltic States. While generally dry weather in Ukraine since early August has favored harvesting, the dryness has limited moisture for filling corn. Fieldwork, in preparation for planting 1994 winter grain crops, began in the north, where the optimum planting time is late August. Planting usually progresses southward during September.



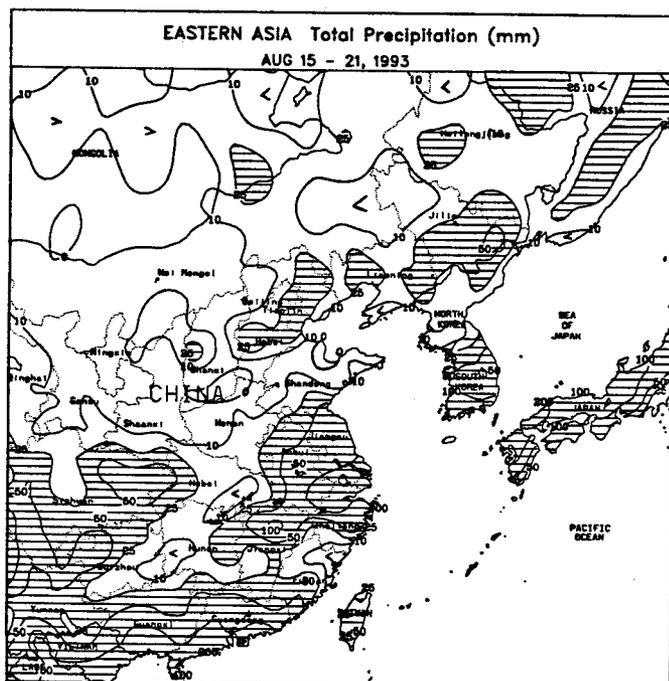
FSU-NEW LANDS: Spring grains were maturing in southern Urals and Kazakhstan, with early harvesting in some areas. Widespread, light to moderate rain (10-25 mm, with local amounts in excess of 30 mm) over southern Urals and Kazakhstan caused only minor delays in early harvesting. Further north, light to moderate rain (10-50 mm) over Urals and Western Siberia continued to provide abundant moisture for grain-filling crops. Average temperatures were near normal in Kazakhstan, and 2-4 degrees Celsius (C) above normal in Western Siberia.



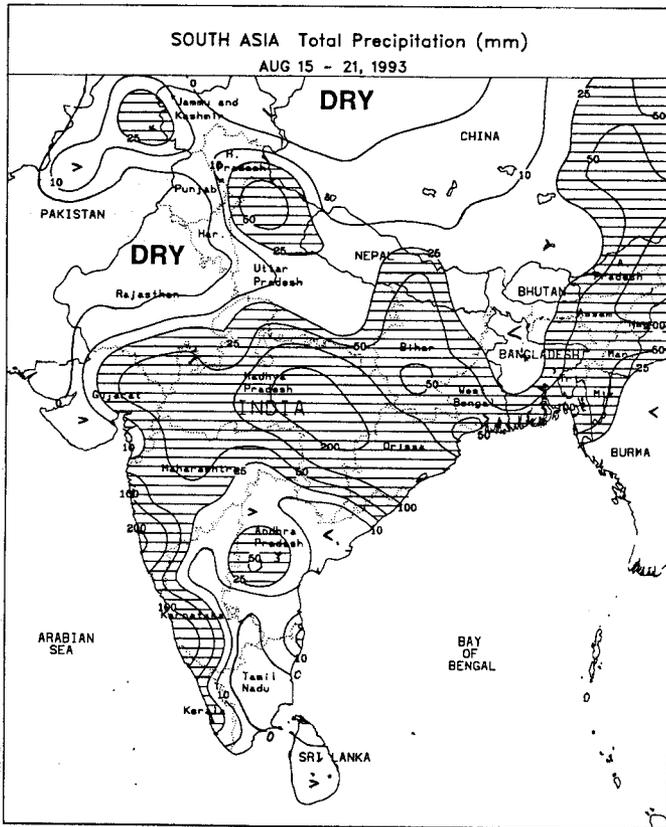
EUROPE: Dry weather prevailed over most of the region, benefiting winter and spring grain harvesting. Generally dry weather in England, the Netherlands, Belgium, Germany, and western Poland was especially beneficial for harvesting, following several weeks of wetness. In Hungary and Bulgaria, dry weather returned to drought-stressed corn areas. In France, the third consecutive week of dry weather was accompanied by unseasonably high temperatures (maximum temperatures ranging from 31 to 35 degrees C). The combination of heat and continued dryness in France diminished moisture reserves for grain-filling corn. Unusually hot weather also covered Spain and Italy, where highest maximum temperatures ranged from 33 to 42 degrees C.



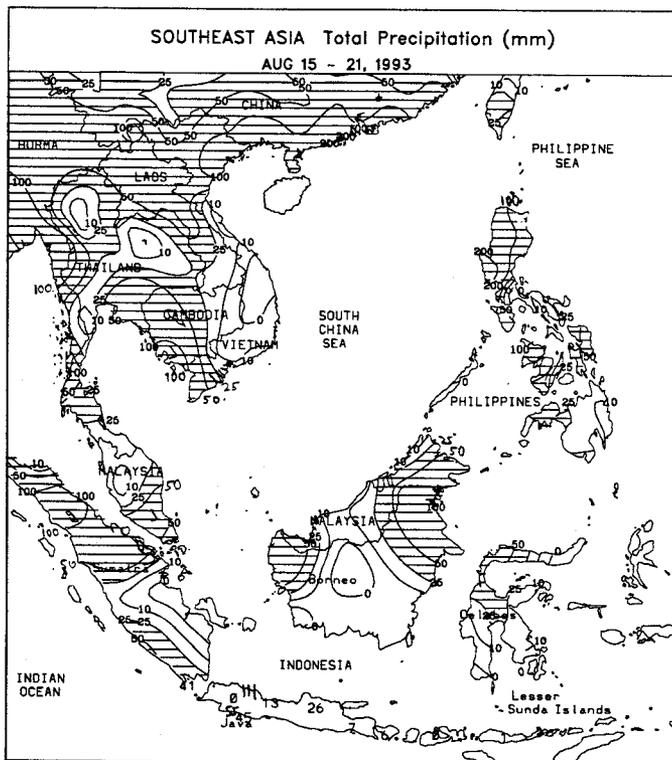
AUSTRALIA: Drier weather (less than 5 mm of rain) prevailed across western and most of the southern winter wheat areas. Soil moisture levels remained favorable across these areas. Heavier rain (5-20 mm) favored vegetative wheat across Victoria. Rainfall is still needed across southern Queensland and northern New South Wales. Temperatures averaged near normal across the wheat regions.



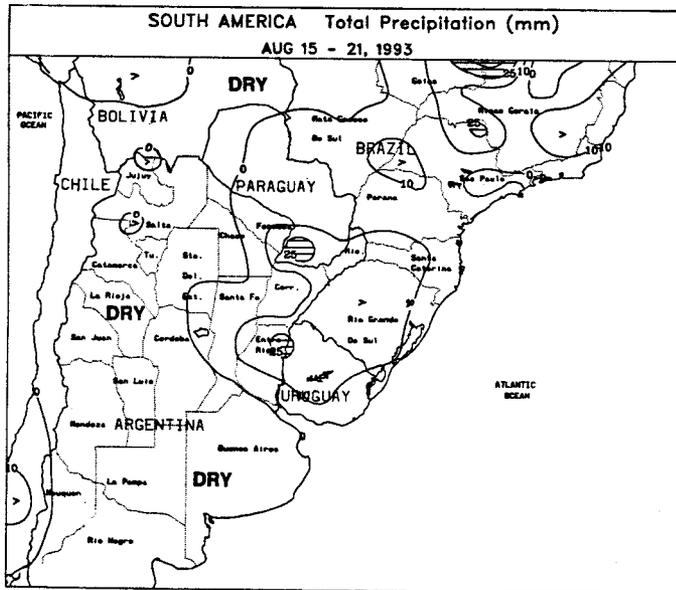
EASTERN ASIA: Light to moderate rains (10-35 mm) fell across Manchuria, slowing spring wheat harvesting. The North China Plain received mostly light rain (5-20 mm), with heavier amounts (15-40 mm) in Hebei. Soil moisture should be adequate for filling summer crops. Moderate to heavy showers (30-70 mm, with isolated amounts greater than 100 mm) kept irrigation supplies high across central China. However, the rain and cool weather (2-5 degrees C below normal) could negatively impact maturing single-crop rice, since maturing rice needs warm, sunny weather. Typhoon Tasha made landfall along the coast of Guangdong (west of Hong Kong) with sustained winds of 75-85 mph. The storm brought widespread heavy rain (50-175 mm) to Guangdong and southern Guangxi, possibly damaging rice paddies. Southern Japan received heavy rains (100-300 mm) again, exacerbating flooding.



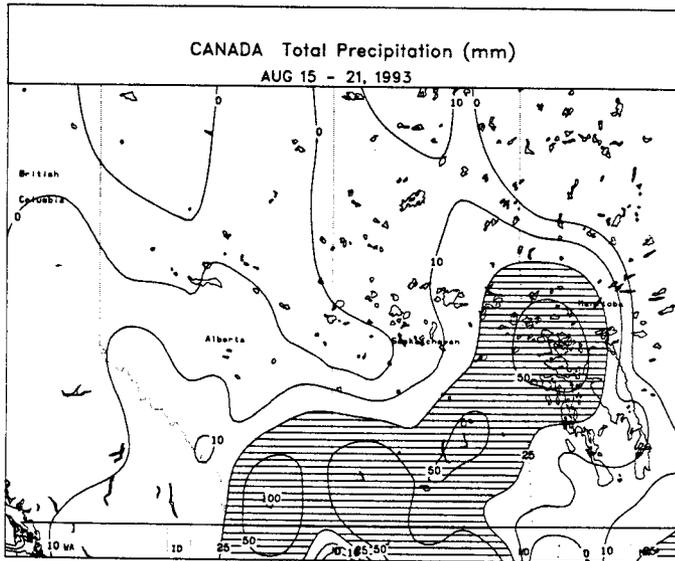
SOUTH ASIA: Moderate to heavy rain (40-100 mm or more) returned to central India, benefiting reproductive grains and oilseeds and rainfed cotton. Heavy showers (100-296 mm) in rice areas of eastern Madhya Pradesh and Orissa caused some flooding. Seasonable rainfall (50-135 mm) extended eastward through Assam, maintaining adequate to abundant rice irrigation levels. In the northwest, however, drier- and warmer-than-normal weather prevailed, reducing moisture for immature rainfed crops. Along with western Gujarat, crop areas of northern India and Pakistan have been in a drying trend since late July. Cotton, which is mostly irrigated, may be accelerated in development due to recent above-normal temperatures, putting open bolls at risk of a late surge in the monsoon.



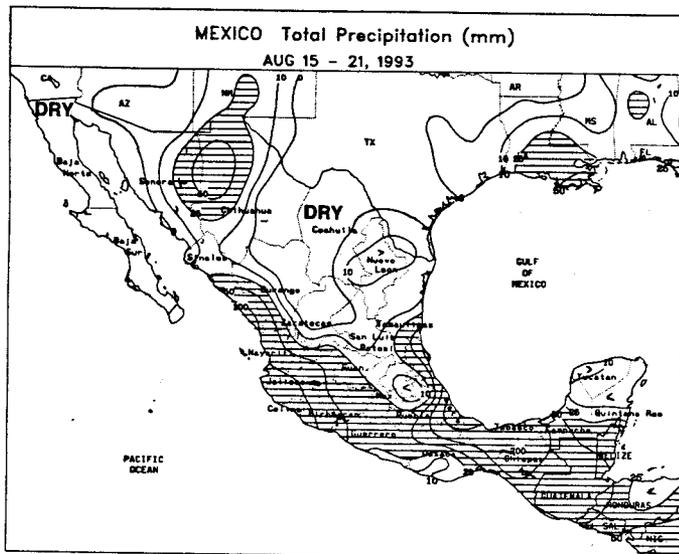
SOUTHEAST ASIA: Tropical Storm Tasha brought moderate to heavy showers (25-100 mm or more, with local reports exceeding 200 mm) to the northern and central Philippines. Although local flooding and wind damage were likely, especially in western Luzon, moisture from the storm was welcomed for immature grains and sugarcane. In Thailand, light to moderate showers (10-50 mm) covered primary rainfed rice areas, stabilizing immature crops but improving only local reservoirs. Heavier showers (50-100 mm or more) were concentrated near Bangkok, and in irrigated rice areas of northern Vietnam and the Mekong Delta. Further south, variable showers were scattered throughout peninsular Thailand, Malaysia, and Indonesia, with amounts totaling 25-100 mm in many primary rice and oil palm areas. The showers over Java boosted irrigation levels for dry-season rice.



SOUTH AMERICA: In southern Brazil, cool weather (minimum temperatures ranged from -1 to 3 degrees C) still prevailed across Santa Catarina and Rio Grande do Sul, possibly damaging vegetative to early reproductive wheat. Typically, winter wheat is less advanced across these areas than in Parana, where wheat should be entering the filling stage. Scattered light to moderate rain (5-10 mm) fell across southern Brazil, aiding winter wheat. Central Argentina remained dry, aiding fieldwork. Soil moisture reserves should still be adequate for vegetative winter wheat.



CANADA: A moisture-laden storm produced moderate to heavy showers (25-112 mm) from southern Alberta to Manitoba's northern interlake region. Thunderstorms were reported throughout the southwestern Prairies, raising the likelihood of localized lodging and flooding of mature grains and oilseeds. In northwestern and southeastern growing areas, warmer and drier weather aided crop development. The break in rainy weather was especially welcomed in southern Manitoba, where disease is threatening crop quality. In Ontario, warm, mostly dry weather aided summer crop development and final winter grain harvests.



MEXICO: Hurricane Hilary and Tropical Storm Irwin brushed the southwestern Mexican coast (Colima and Jalisco) during the week, bringing locally heavy rains (100-200 mm) and flooding. Moderate to heavy showers (20-80 mm) fell across the Southern Plateau Corn Belt, favoring corn. Scattered heavy rains (125-300 mm) fell across portions of eastern Mexico (Veracruz and Chiapas) causing flooding. Tropical moisture produced moderate showers across portions of northwestern Mexico (Sonora and Chihuahua), increasing reservoir levels.

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