

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

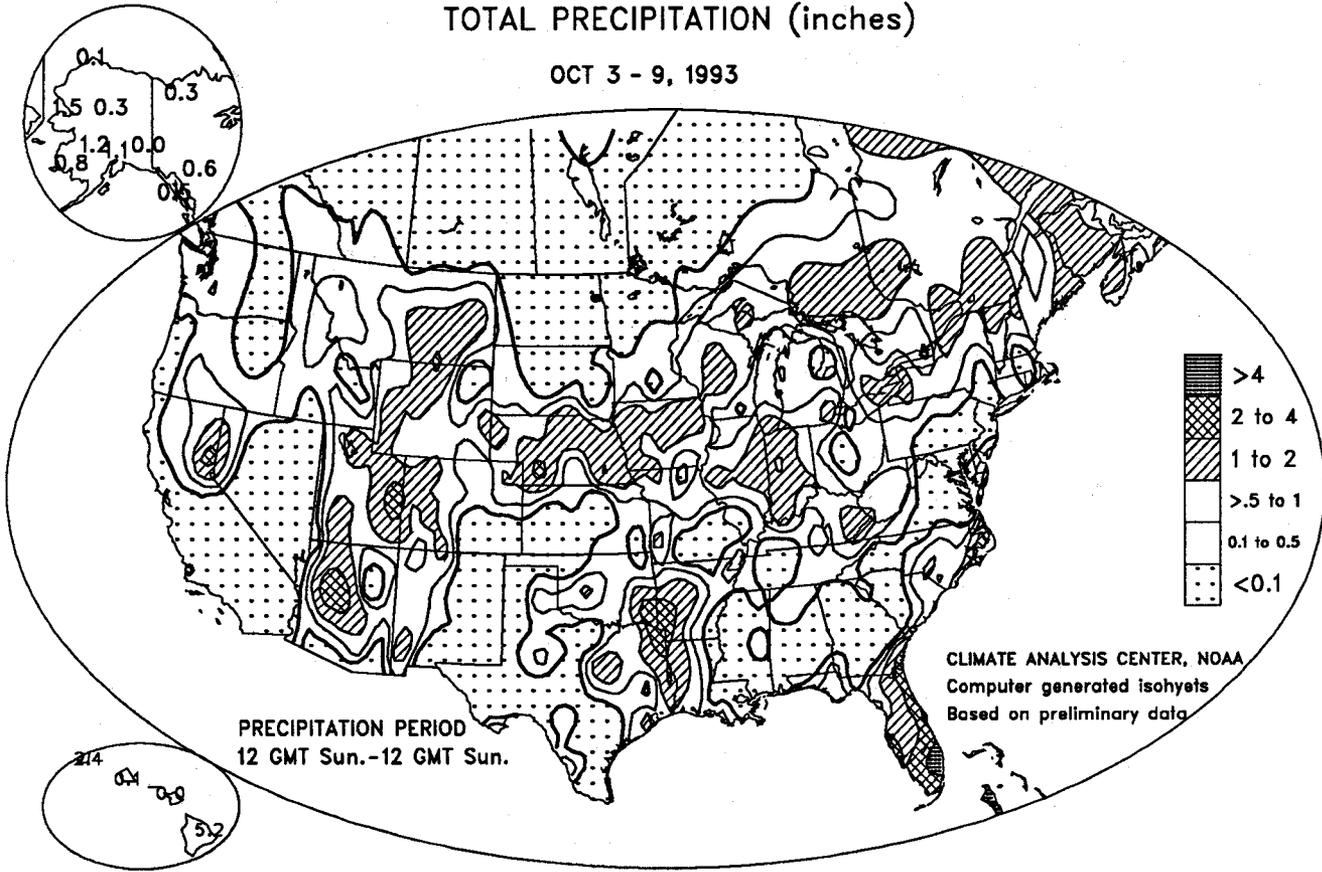
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Washington, D.C.

October 13, 1993

TOTAL PRECIPITATION (inches)

OCT 3 - 9, 1993



HIGHLIGHTS

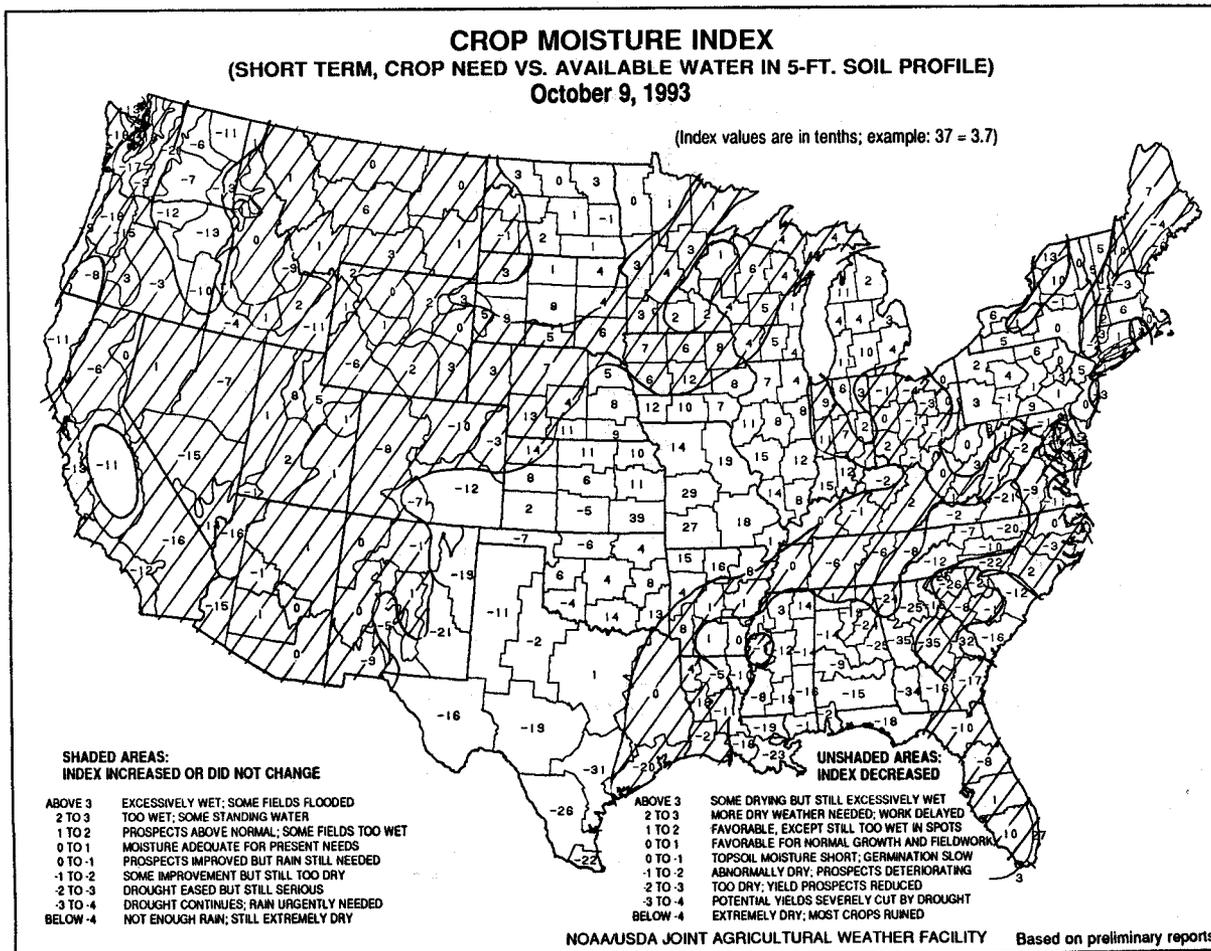
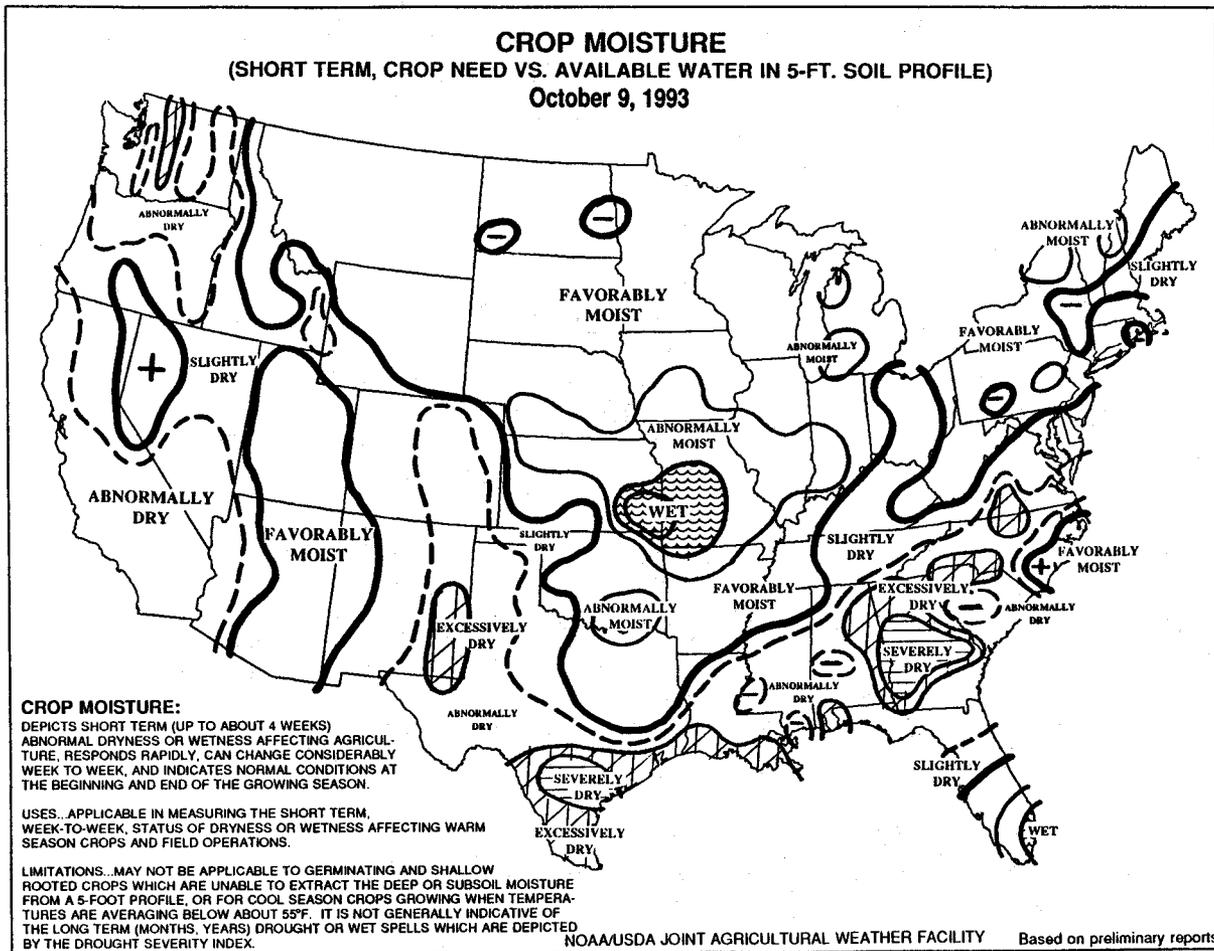
October 3 - 9, 1993

More than a week of primarily dry weather ended with the passage of a winter-like storm through the Rockies and the Midwest. The storm ended the West's recent heat wave, and produced a brief but dramatic warm-up in the Nation's mid-section before delivering a wintry late-week blast. Early in the week, dry conditions continued nationwide, with temperatures approaching or exceeding daily record levels in the West and the northern Plains. On Sunday, daily records were shattered in locations such as Olympia, WA (83°F) and Tucson, AZ (102°F). Two days later, an 87-degree reading in Casper, WY tied an October record for that city. At midweek, record warmth spread into the Dakotas. Fargo, ND attained 90°F, and Pierre, SD was the Nation's hot spot with 98°F. But by Wednesday afternoon, tropical moisture surged into the Southwest (remnants of Tropical (Continued to back cover)

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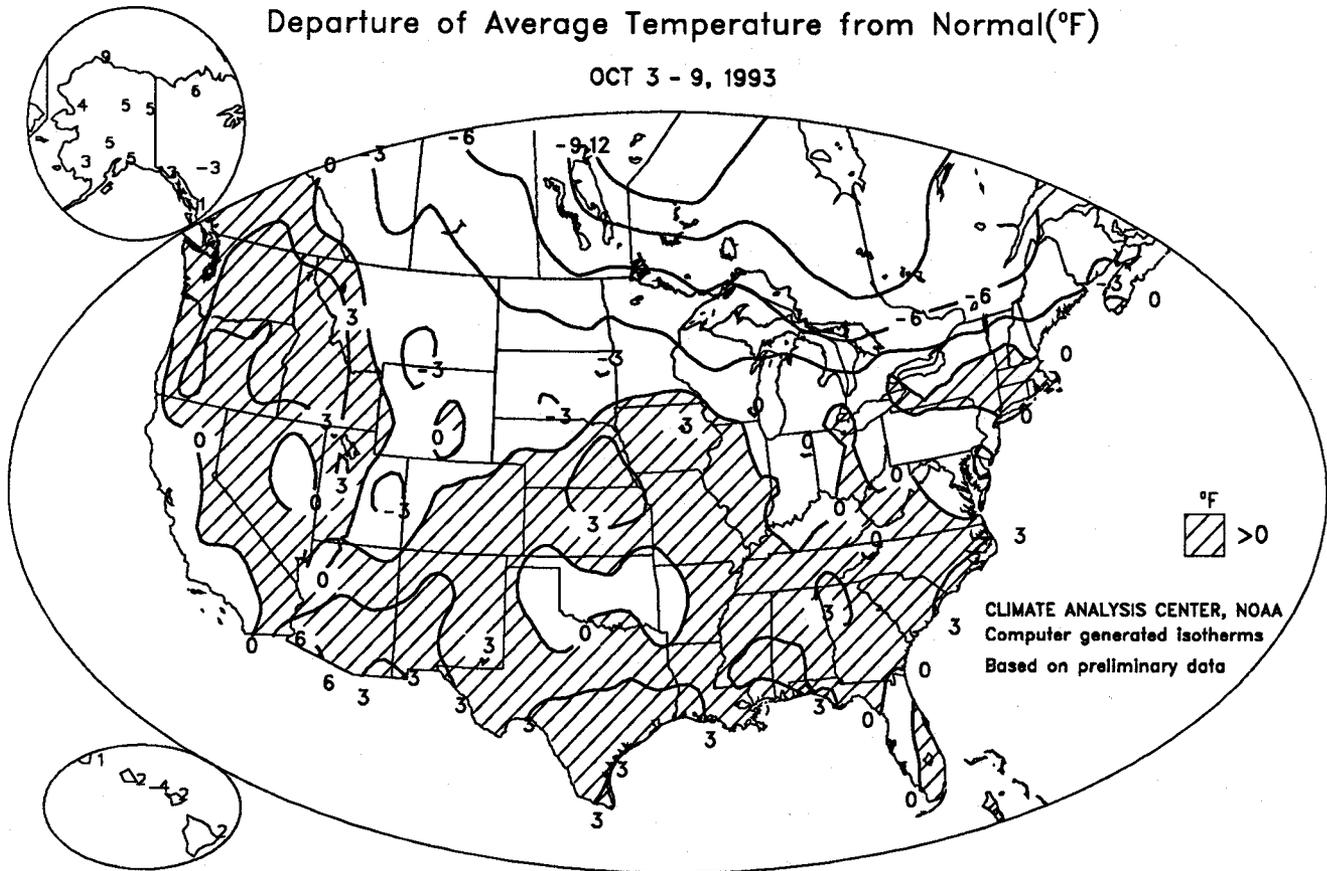
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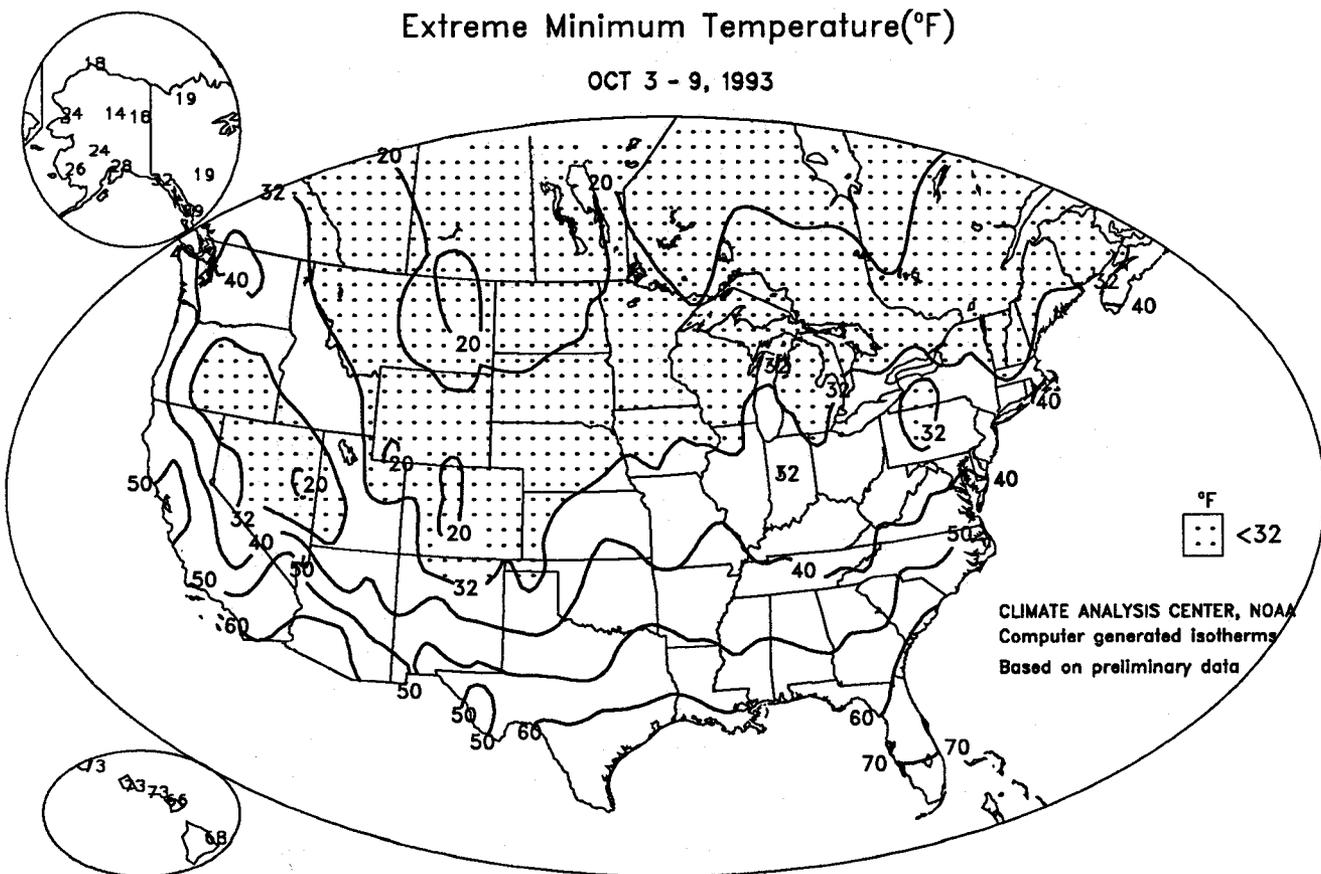
Departure of Average Temperature from Normal(°F)

OCT 3 - 9, 1993



Extreme Minimum Temperature(°F)

OCT 3 - 9, 1993



CUMULATIVE GROWING DEGREE DAYS (CORN*) April 1 - October 9, 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL ANNISTON	4349	+ 107	TOPEKA/BILLARD	3503	- 140	GAGE	3835	- 74
BIRMINGHAM	4362	+ 34	WICHITA	3757	- 132	ROBART	4193	- 54
MOBILE	4796	- 119	KY LEXINGTON	3624	+ 82	MCALISTER	4496	+ 153
MONTGOMERY	4603	+ 166	BOWLING GREEN	3879	+ 72	PONCA CITY	4184	+ 70
MUSCLE SHOALS	4309	+ 124	PADUCAH	4009	+ 66	TULSA	4116	- 186
OZARK	4676	+ 95	LA LAFAYETTE	4961	+ 30	OR BAKER	2085	- 111
TUSCALOOSA	4521	+ 52	LAKE CHARLES	5027	+ 3	EUGENE	2324	+ 49
AZ DOUGLAS	4167	+ 202	MONROE	4701	+ 80	NORTH BEND	1617	+ 243
FLAGSTAFF	2464	+ 259	NEW ORLEANS	4910	- 60	FENDLETON	2611	- 123
PHOENIX	5781	+ 653	SHREVEPORT	4681	+ 165	REDMOND	2053	- 138
TUCSON	4965	+ 253	ME AUGUSTA	2418	+ 210	PORTLAND	2536	+ 226
YUMA	5859	+ 563	CARIBOU	1868	+ 196	SALEM	2486	+ 245
PRESCOTT	3409	+ 438	HOULTON	1938	+ 95	SEKTON SUMMIT	1557	- 229
AR EL DORADO	4441	- 3	PORTLAND	2338	+ 237	PA ALLENTOWN	3287	+ 282
FAYETTEVILLE	3895	+ 116	MD SALLISBURY	3734	+ 242	PHILADELPHIA	3888	+ 712
FORT SMITH	4377	+ 104	MA WORCESTER	2457	+ 94	WILLIAMSPORT	3164	+ 279
JONESBORO	4221	- 56	MI JACKSON	2616	- 135	SC BEAUFORT	4942	+ 274
LITTLE ROCK	4434	+ 146	LANSING	2595	- 185	CHARLESTON	4816	+ 250
TEXARKANA	4578	- 32	MUSKEGON	2540	+ 56	COLUMBIA	4563	+ 155
CA BAKERSFIELD	4290	- 31	PELLSTON	1987	+ 10	FLORENCE	4714	+ 300
BLUE CANYON	2029	- 165	SAULT STE. MARIE	1584	- 71	SUMTER/SHAW AFB	4536	+ 157
DAGGETT	4673	+ 96	TRAVLERSE CITY	2383	+ 90	SD AMERSDEN	2463	- 52
EUREKA	1493	+ 303	MN DULUTH	1516	- 194	HURON	2501	- 276
FRESNO	4123	+ 303	INT'L FALLS	1715	- 150	PIERRE	2551	- 262
MARYSVILLE	3897	+ 234	MINNEAPOLIS	2413	---	RAPID CITY	2230	- 374
MT SHASTA	2072	- 234	ROCHESTER	2211	---	SIoux FALLS	2567	- 261
PASO ROBLES	3259	+ 166	MS BILOXI	5070	+ 31	WATERTOWN	2088	- 365
RED BLUFF	3765	- 135	COLUMBUS	4448	+ 117	TN BRISTOL	3624	+ 105
RIVERSIDE	3931	+ 327	JACKSON	4612	+ 184	CHATTANOOGA	4354	+ 313
SANTA ANA	4094	+ 617	MERIDIAN	4608	+ 130	CROSSVILLE	3652	+ 458
SAN DIEGO	3493	+ 161	GREENWOOD	4597	+ 50	MEMPHIS	4546	+ 100
SACRAMENTO	3487	+ 91	MO COLUMBIA	3495	- 11	NASHVILLE	4154	+ 85
THERMAL	4944	- 138	JOPLIN	3881	- 71	ABILENE	4645	+ 38
CO ALAMOSA	2083	- 112	SPRINGFIELD	3711	+ 15	AMARILLO	3691	- 20
DENVER	2776	- 26	VICHY	3657	- 19	AUSTIN	5122	+ 131
EAGLE	2122	- 234	MT HELENA	1823	- 252	BROWNSVILLE	5568	+ 79
GRAND JUNCTION	3249	- 192	KALISPELL	1777	- 277	COLLEGE STATION	4971	+ 48
LA JUNTA	3333	- 95	MILLS CITY	2314	- 352	DALHART	3523	+ 40
DE DOVER	3592	- 12	NE GRAND ISLAND	2966	- 216	DALLAS/FT WORTH	4923	+ 253
WILMINGTON	3687	+ 321	WORFOLK	2920	- 157	GALVESTON	5570	+ 207
FL DAYTONA BEACH	4982	- 62	NORTH PLATTE	2739	- 163	HOUSTON/INTCNL	5100	+ 241
FORT MYERS	5426	+ 85	VALENTINE	2550	- 448	KINGSVILLE/NAS	5547	+ 266
GAINESVILLE	4773	- 159	SCOTT'S BLUFF	2577	- 221	LAREDO	5611	+ 201
JACKSONVILLE	4841	- 137	SDNEY	2531	- 70	LUBBOCK	4273	+ 268
FORT LAUDERDALE	5849	+ 407	NV ELKO	2219	- 256	MCALLEN	5651	+ 320
MILAMI	5778	+ 174	ELY	2307	- 3	MIDLAND	4437	+ 36
MILTON	4807	+ 105	LAS VEGAS	5074	+ 373	PALACIOS	5318	+ 61
PENSACOLA	4990	- 28	RENO	2747	+ 118	SAN ANTONIO	5180	+ 119
ST PETERSBURG	5438	- 55	WINNEMCCA	2648	+ 11	VICTORIA	5227	+ 153
TALLAHASSEE	4764	- 38	NH CONCORD	2653	+ 222	WACO	4900	- 48
TAMPA	5241	- 28	NJ NEWARK	3905	+ 531	WICHITA FALLS	4443	- 68
VERO BEACH	5212	+ 36	NM ALBUQUERQUE	3838	+ 477	WINN	4596	+ 113
W. PALM BEACH	5501	+ 141	CARLSBAD	4507	+ 204	UT CEDAR CITY	2889	+ 31
GA ATHENS	4411	+ 242	CLOVIS	3800	+ 234	VT BARRE-MONTPELIER	2179	+ 173
AUGUSTA	4604	+ 236	GALLUP	2885	+ 78	BURLINGTON	2570	+ 260
BRUNSWICK	4926	- 16	TRUTH OR CONSEQ.	4155	+ 258	VA CHARLOTTESVILLE	3855	+ 209
COLUMBUS/METRO	4732	+ 183	NY ALBANY	2836	+ 193	HAMPTON/LANGLEY	4257	+ 337
MACON	4632	+ 86	ELMIRA	2725	+ 203	LYNCHBURG	3946	+ 434
SAVANNAH	4910	- 135	GLENS FALLS	2581	+ 175	WORFOLK	4249	+ 321
ID BOISE	2634	- 22	ROCHESTER	2638	+ 26	RICHMOND	4040	+ 252
BURLEY	2420	- 216	SYRACUSE	2681	+ 94	WA BELLINGHAM	1826	+ 206
IDAHO FALLS	2024	- 242	UTICA	2450	+ 44	HOQUIAM	1670	+ 184
POCATELLO	2182	+ 75	NC WATERGOWN	2421	- 7	SEATTLE-TACOMA	2075	+ 197
IL BELLEVILLE	3749	- 111	ASHEVILLE	3528	+ 278	SPOKANE	2086	- 157
CHICAGO/MIDWAY	3026	- 162	FAYETTEVILLE	4364	+ 226	TACOMA	2132	+ 124
DECATUR	3348	+ 107	GREENSBORO	4138	+ 345	WALLA WALLA	2849	- 32
PEORIA	3307	+ 14	HICKORY	3993	+ 225	WENATCHEE	2863	- 29
ROCKFORD	2908	- 9	RALEIGH	4203	+ 288	YAKIMA	2610	- 5
SPRINGFIELD	3448	- 104	WILMINGTON	4627	+ 210	WV HUNTINGTON	3687	+ 395
QUINCY	3287	+ 28	NEW BERN	4443	+ 176	MARTINSBURG	3343	+ 83
IN INDIANAPOLIS	3342	+ 23	BIGGARCK	2093	- 271	MORGANTOWN	3271	+ 119
SOUTH BEND	2919	+ 63	DICKINSON	1842	- 389	WI EAU CLAIRE	2278	- 201
TERRE HAUTE	3448	- 293	JAMESTOWN	2002	- 305	GREEN BAY	2354	+ 16
IA DES MOINES	2980	- 398	MINOT	1849	- 319	LACROSSE	2591	- 200
MASON CITY	2493	- 125	GRAND FORKS	2101	- 118	MADISON	2725	- 16
OTTUMWA	3144	- 156	OH AKRON-CANTON	2944	+ 124	WAUSAU	2116	- 176
KS CHANUTE	3677	- 218	COLUMBUS	3298	+ 201	CASPER	2321	- 75
DODGE CITY	3417	- 305	DAYTON	3234	- 1	LANDER	2164	- 186
GARDEN CITY	3257	- 217	FINDLAY	2864	- 79	SHERIDAN	2028	- 266
GOOLAND	2808	- 24	YOUNGSTOWN	2774	+ 138	WORLDAND	2403	- 91
MEDICINE LODGE	3907	- 168	LAMESVILLE	3158	+ 135			
RUSSELL	3414	- 119	OK ALTUS	4334	- 71			
SALINA	3605							

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 **October 9, 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 Sept 1	PCT. NORMAL SINCE Sept 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	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	84	53	86	44	68	2	.0	-1.6	.0	4.6	97	29.6	69	90	37	0	0	0	0	0	
MOBILE	87	62	89	58	74	4	.0	-1.8	.0	3.4	48	48.5	92	90	46	0	0	0	0	0	
MONTGOMERY	87	55	89	49	71	1	.0	-1.6	.0	2.9	55	37.4	91	91	39	0	0	0	0	0	
AK ANCHORAGE	52	37	61	28	45	4	.4	-1.1	3.0	4.7	139	13.1	106	91	53	0	0	0	0	0	
BARROW	33	25	38	18	29	10	T	T	T	1.6	219	4.6	125	89	77	0	2	7	3	0	
FAIRBANKS	50	30	62	20	40	7	T	T	T	2.7	224	9.4	109	88	47	0	4	4	0	0	
JUNEAU	53	41	56	34	47	2	1.5	0.4	1.0	9.1	100	40.7	103	100	74	0	0	0	0	1	
KODIAK	51	45	54	40	48	2	5.0	3.3	2.4	10.4	113	56.5	113	98	79	0	0	0	0	3	
Nome	40	32	44	28	36	4	1.1	0.7	0.7	4.6	158	13.8	113	90	62	0	4	4	6	1	
AZ PHOENIX	94	71	104	66	83	3	1.2	1.0	1.2	1.2	113	10.5	186	59	24	4	0	0	1	1	
PRESCOTT	76	50	88	45	63	4	1.2	0.9	1.2	1.3	54	14.8	94	72	34	0	0	0	2	1	
TUCSON	91	65	102	56	78	4	1.2	0.9	1.2	1.0	49	13.6	142	64	26	3	7	0	0	0	
YUMA	98	75	107	69	87	4	.5	.3	.5	.2	39	3.7	160	47	19	0	0	0	1	0	
AR FORT SMITH	79	54	84	47	66	2	.5	.3	.5	7.4	173	36.9	118	91	54	0	0	0	1	0	
LITTLE ROCK	79	57	86	50	68	2	.6	.3	.6	3.0	52	32.8	88	78	45	0	0	0	2	1	
CA BAKERSFIELD	84	58	95	54	71	1	.0	-1.1	.0	.0	0	6.6	158	53	28	1	0	0	0	0	
BUREKA	60	50	64	48	55	-1	.1	-1.3	.1	.1	10	30.5	133	94	71	0	0	0	3	0	
FRESNO	82	57	95	53	70	1	.0	-1.1	.0	.0	0	11.5	157	76	34	1	0	0	0	0	
LOS ANGELES	73	62	77	59	68	1	T	T	T	T	0	18.5	223	89	70	0	0	0	0	0	
REDDING	78	54	93	47	66	1	.1	-2.2	.1	.1	10	36.4	176	84	37	1	0	0	1	0	
SACRAMENTO	77	53	84	49	65	-1	T	T	T	T	4	19.1	168	92	43	0	0	0	1	0	
SAN DIEGO	71	64	73	63	68	1	T	T	T	T	0	15.5	236	82	71	0	0	0	0	0	
SAN FRANCISCO	68	55	77	53	62	-1	T	T	T	T	0	19.4	153	87	61	0	0	0	0	0	
CO DENVER	70	42	85	28	56	1	.3	.0	.3	2.5	164	11.0	83	78	31	0	2	2	0	0	
GRAND JUNCTION	71	47	85	36	59	1	.8	.5	.5	1.2	87	10.2	129	78	36	0	0	0	4	1	
PUEBLO	76	38	89	29	57	1	.1	-1.1	.6	.6	58	12.9	130	75	27	0	1	0	0	0	
CT BRIDGEPORT	69	51	75	39	60	-1	T	T	T	T	6.8	173	27.4	85	84	48	0	0	1	0	
HARTFORD	70	44	80	34	57	2	.3	-1.5	.2	5.7	119	34.0	101	89	42	0	0	0	2	0	
DC WASHINGTON	73	51	80	45	62	-1	.2	-1.5	.2	3.8	92	29.8	98	92	45	0	0	0	1	0	
FL APALACHICOLA	84	66	88	63	75	2	.1	-1.1	.1	3.5	39	37.7	83	91	63	0	0	0	2	0	
DAYTONA BEACH	84	69	87	66	77	1	2.5	1.4	1.7	5.3	68	29.0	73	88	70	0	0	0	5	2	
JACKSONVILLE	82	64	86	60	73	-2	2.5	1.4	1.2	10.1	120	36.2	87	97	70	0	0	0	3	3	
KEY WEST	85	76	89	72	81	-1	2.2	1.1	1.4	8.7	118	30.5	96	93	75	0	0	0	5	1	
MIAMI	88	74	90	74	81	1	2.0	.5	.7	14.6	153	49.2	103	92	66	3	0	0	6	2	
ORLANDO	85	69	88	67	77	0	.7	.0	.5	6.1	87	39.7	94	95	62	0	0	0	4	0	
TALLAHASSEE	87	60	93	53	73	1	.1	-1.1	.1	1.8	27	42.1	77	91	49	3	0	1	0	0	
TAMPA	85	70	90	68	78	0	2.4	1.8	1.6	9.0	131	34.2	88	93	63	0	0	0	4	2	
WEST PALM BEACH	86	72	89	71	79	0	4.5	2.6	3.6	11.6	120	50.4	105	99	70	0	0	0	6	2	
GA ATLANTA	82	60	86	54	71	5	.0	-1.7	.0	3.9	91	37.7	93	73	40	0	0	0	0	0	
AUGUSTA	84	55	89	46	69	2	T	-1.7	T	3.5	89	29.8	81	90	45	0	0	0	0	0	
MACON	85	56	89	48	71	2	T	-1.5	T	1.3	38	37.3	103	84	39	0	0	0	1	0	
SAVANNAH	82	64	88	61	73	2	T	-1.6	T	6.9	130	38.1	90	93	56	0	0	0	1	0	
HI HILO	85	71	87	68	78	2	5.1	3.2	4.9	10.1	92	79.9	84	90	67	0	0	0	3	1	
HONOLULU	90	76	93	74	83	3	T	-1.4	T	.2	18	3.7	27	77	52	5	0	0	0	0	
KAHULUI	90	72	94	67	81	3	T	-2.2	T	.8	141	8.3	59	75	54	4	0	0	0	0	
LIHUE	85	75	88	74	80	2	2.4	1.6	2.2	4.3	124	14.5	50	85	71	0	0	0	2	1	
ID BOISE	72	47	87	35	60	4	.1	-1.1	.1	.1	7	11.0	126	68	33	0	0	0	1	0	
LEWISTON	73	47	82	38	60	4	.1	-1.1	.1	.2	17	11.0	116	66	29	0	0	0	2	0	
POCATELLO	68	38	84	34	53	1	.4	-1.3	.2	.7	65	16.1	176	89	39	0	0	0	4	0	
IL CHICAGO	69	40	81	32	55	-2	.5	-1.1	.3	5.0	108	40.7	142	86	53	0	1	2	0	0	
MOLINE	73	43	85	32	58	1	.3	-1.4	.2	4.4	88	48.1	149	85	45	0	0	1	2	0	
PEORIA	74	44	81	33	59	1	.6	-1.1	.3	8.1	171	48.8	166	93	45	0	0	0	2	0	
QUINCY	73	47	81	35	60	1	.8	.0	.8	7.3	126	32.7	102	85	46	0	0	0	1	1	
ROCKFORD	71	40	83	30	55	0	.5	-2.3	.3	4.2	89	39.2	132	90	39	0	2	2	0	0	
SPRINGFIELD	75	47	82	33	61	2	.7	-1.1	.7	6.8	164	41.3	147	85	43	0	0	1	1	1	
IN EVANSVILLE	77	48	82	38	62	0	.6	.0	.4	6.8	171	33.9	95	90	46	0	0	0	2	0	
FORT WAYNE	73	42	83	33	58	1	.5	-1.1	.3	5.3	157	35.8	131	90	44	0	0	0	2	0	
INDIANAPOLIS	72	43	80	32	58	-1	1.3	-1.7	1.3	7.1	196	39.5	126	91	45	0	1	2	1	1	
SOUTH BEND	70	43	82	33	56	0	.6	-1.1	.4	8.4	185	39.3	129	88	47	0	0	0	2	0	
IA DES MOINES	71	46	84	32	59	2	.9	-2.2	.9	6.7	142	53.2	184	89	46	0	1	2	1	1	
SIOUX CITY	73	44	87	29	59	2	1.2	-1.7	.9	2.5	70	30.2	133	86	43	0	1	2	1	1	
WATERLOO	72	45	86	32	58	4	1.5	.8	1.4	4.3	99	51.0	177	88	38	0	1	2	1	1	
KS CONCORDIA	77	51	88	35	64	4	.2	-1.1	.1	3.3	88	42.1	165	84	42	0	0	0	2	0	
DODGE CITY	77	49	90	33	63	1	.0	-1.3	.0	.8	35	23.8	124	84	37	2	0	0	0	0	
GOODLAND	75	44	90	29	59	3	.4	-2.4	.7	.7	39	17.8	108	76	36	1	2	2	0	0	
TOPEKA	77	51	84	35	64	4	.1	-1.7	.0	7.1	149	44.0	148	90	47	0	0	0	2	0	
WICHITA	79	52	88	40	65	2	.2	-1.5	.2	2.0	41	29.5	100	86	39	0	0	0	2	0	
KY BOWLING GREEN	77	45	82	39	61	0	.1	-1.6	.1	4.0	88	26.5	67	99	52	0	0	0	1	0	
LEXINGTON	74	47	81	36	61	0	.3	-1.3	.3	3.5	89	33.2	94	97	42	0	0	0	1	0	
LOUISVILLE	76	47	83	37	61	0	.3	-1.3	.3	4.4	112	38.0	108	96	46	0	0	0	1	0	
LA BATON ROUGE	84	61	87	58	73	1	T	-1.8	T	1.5	24	48.4	99	98	47	0	0	0	1	0	
LAKE CHARLES	87	64	90	62	75	3	.4	-1.6	.4	1.7	24	46.5	109	93	54	2	0	0	1	0	
NEW ORLEANS	86	63	87	58	74	2	T	-1.8	T	2.5	38	43.7	88	95	57	0	0	0	0	0	
SHREVEPORT	81	59	88	56	70	2	1.0	-1.2	.9	5.1	103	48.0	127	97	57	0	0	0	3	1	

Based on 1961-90 normals.

Weather Data for the Week Ending October 9, 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 Sept 1	PCT. NORMAL SINCE Sept 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		
ME CARIBOU	49	33	62	28	41	-5	1.2	.5	.4	6.9	158	30.4	110	92	56	0	0	3	6	0	0	
PORTLAND	63	40	74	33	51	0	.7	.1	.4	4.9	119	31.4	99	89	43	0	0	0	5	0	0	
MD BALTIMORE	71	46	80	39	59	-2	.1	.5	.1	4.2	99	32.1	100	92	40	0	0	0	2	0	0	
SALISBURY	72	44	78	38	58	-3	.4	.4	.3	3.8	80	37.4	104	96	49	0	0	0	3	0	0	
MA BOSTON	68	49	77	43	58	0	.4	.3	.3	5.0	127	30.5	99	86	50	0	0	0	2	0	0	
CHATHAM	64	50	68	42	57	1	.8	.1	.4	4.3	89	27.4	82	90	53	0	0	0	3	0	0	
MI ALPENA	58	35	71	26	47	-4	.4	.1	.2	1.9	51	21.4	92	94	47	0	0	3	3	0	0	
DETROIT	72	42	83	35	57	2	1.0	.5	1.0	5.4	153	27.1	106	88	49	0	0	1	1	1	1	
FLINT	66	37	79	26	51	-2	.5	.1	.5	5.1	119	27.5	114	90	47	0	0	4	1	1	0	
GRAND RAPIDS	66	41	80	31	54	0	.2	.5	.2	8.4	164	38.8	139	87	48	0	0	1	2	0	0	
HOUGHTON LAKE	59	39	75	32	49	-1	.4	.2	.2	2.5	60	23.0	102	90	50	0	0	2	3	0	0	
LANSING	67	38	80	29	53	-1	.4	.3	.4	5.2	110	30.8	124	94	44	0	0	3	2	0	0	
MARQUETTE	54	33	72	28	44	-4	1.3	.4	.8	6.2	119	27.3	100	88	52	0	0	5	3	2	2	
MUSKEGON	62	42	73	30	52	-2	.1	.6	.1	4.7	99	31.6	129	92	56	0	0	1	1	1	0	
SAULT ST. MARIE	49	32	57	28	40	-8	1.8	.1	.7	6.3	134	26.3	102	91	55	0	0	4	6	2	2	
MN ALEXANDRIA	61	37	86	26	49	-2	.7	.6	.7	1.8	54	24.2	109	86	38	0	0	2	0	0	0	
DULUTH	57	32	76	22	45	-3	.1	.5	.1	2.0	42	28.1	111	87	45	0	0	3	2	0	0	
INT'L FALLS	54	31	76	20	43	-4	.1	.1	.1	2.1	55	19.6	93	85	39	0	0	4	2	0	0	
MINNEAPOLIS	64	39	81	29	51	-2	.3	.2	.3	2.4	69	29.7	123	86	48	0	0	1	2	0	0	
ROCHESTER	65	39	83	27	52	0	.4	.2	.4	3.2	74	36.3	142	88	45	0	0	3	1	0	0	
MS GREENWOOD	84	57	89	50	71	3	.7	.8	.7	4.0	94	34.0	83	91	37	0	0	0	0	0	0	
JACKSON	82	55	86	50	69	1	.0	.7	.0	2.1	53	35.8	86	97	44	0	0	0	0	0	0	
MERIDIAN	86	57	90	53	72	4	.0	.7	.0	1.8	40	40.5	92	90	40	1	0	0	0	0	0	
MO CAPE GIRARDEAU	77	50	83	42	64	1	.7	.7	.7	8.4	190	39.3	110	95	46	0	0	0	0	0	0	
COLUMBIA	74	48	82	36	61	1	1.1	.3	1.1	13.2	266	55.9	183	95	52	0	0	2	2	1	1	
KANSAS CITY	76	51	83	34	64	3	.4	.5	.4	8.1	134	46.9	147	84	51	0	0	0	0	0	0	
SAINT LOUIS	76	53	82	40	64	2	.1	.5	.1	9.3	237	45.9	157	81	47	0	0	0	0	0	0	
SPRINGFIELD	74	50	82	36	62	0	.4	.5	.3	18.1	307	49.4	143	91	48	0	0	0	2	2	0	
MT BILLINGS	62	36	85	18	49	-4	1.7	1.4	1.2	3.4	197	14.8	117	81	46	0	0	3	3	2	2	
GLASGOW	62	36	81	25	49	-2	.4	.3	.4	1.0	85	15.5	156	84	41	0	0	2	2	0	0	
GREAT FALLS	61	36	81	25	49	-2	.8	.6	.5	2.5	168	21.6	164	87	48	0	0	3	3	0	1	
HAVRE	62	35	84	18	49	-2	.7	.2	.5	4	25	12.7	129	86	40	0	0	2	3	0	0	
HELENA	60	35	79	30	47	-1	.4	.3	.3	1.7	123	18.0	178	89	49	0	0	3	3	0	0	
KALISPELL	64	34	73	25	49	3	.3	.1	.2	1.9	126	19.9	155	94	46	0	0	2	2	0	0	
MILES CITY	65	37	87	21	51	-1	.9	.7	.7	1.1	67	18.1	147	89	45	0	0	3	2	2	1	
MISSOULA	67	37	80	29	52	4	1.1	.9	1.0	1.4	107	12.3	112	88	41	0	0	1	2	2	1	
NE GRAND ISLAND	76	47	90	29	61	5	.5	.1	.5	1.9	58	30.7	137	88	44	1	1	1	1	1	1	
LINCOLN	75	48	85	32	61	3	1.3	.9	1.3	4.2	99	23.9	97	93	47	0	0	1	1	1	1	
NORFOLK	75	46	89	28	60	4	1.3	1.0	1.3	4.5	149	33.0	147	84	41	0	0	1	1	1	1	
NORTH PLATTE	74	38	91	28	56	2	1.3	1.0	1.3	2.0	106	24.4	139	89	37	1	2	2	2	1	1	
OMAHA	72	48	84	32	60	3	.7	.0	.7	4.1	90	39.7	156	89	48	0	0	1	2	2	1	
SCOTTSBLUFF	67	35	87	25	51	-3	1.0	.8	.7	3.3	246	20.8	154	89	38	0	0	2	2	2	1	
VALENTINE	68	36	96	21	52	-5	.6	.5	.5	2.4	84	18.7	92	83	40	1	2	2	2	0	0	
NV RLY	66	28	82	15	47	-3	.1	.2	.1	.2	17	8.3	100	83	27	0	0	5	3	0	0	
LAS VEGAS	88	63	96	57	76	3	.7	.0	.7	.7	6	4.7	149	28	11	3	0	0	1	0	0	
RENO	68	44	89	38	56	2	1.2	1.1	1.1	1.2	277	6.1	113	72	38	0	0	0	3	1	1	
WINNEMUCCA	71	38	87	30	55	3	.0	.1	.0	.7	6	6.3	105	77	24	0	0	1	0	0	0	
NH CONCORD	67	37	79	26	52	1	.6	.1	.4	4.7	129	21.7	80	94	43	0	0	2	4	0	0	
NJ ATLANTIC CITY	70	43	77	34	56	-2	.2	.4	.1	2.9	78	29.7	95	95	49	0	0	0	2	0	0	
NM ALBUQUERQUE	79	50	86	44	65	4	.2	.0	.2	.7	52	7.4	101	65	21	0	0	0	1	0	0	
CLOVIS	81	49	88	37	65	3	.7	.4	.7	.6	24	12.5	81	76	24	0	0	0	0	0	0	
ROSWELL	85	53	96	46	69	3	.7	.3	.7	.9	37	9.3	84	69	23	2	0	0	1	0	0	
NY ALBANY	67	43	79	33	55	1	.4	.3	.3	4.2	111	32.0	114	92	49	0	0	0	2	0	0	
BINGHAMTON	64	41	76	33	52	0	.3	.4	.2	4.6	110	32.8	114	87	48	0	0	0	2	0	0	
BUFFALO	65	44	74	35	54	0	1.4	.7	.8	7.1	163	31.4	109	84	46	0	0	0	2	2	2	
NEW YORK	70	54	79	46	62	1	.3	.4	.3	5.6	131	33.7	103	79	45	0	0	0	2	0	0	
ROCHESTER	65	42	79	33	53	-2	.9	.3	.5	5.4	146	22.1	90	90	49	0	0	0	2	0	0	
SYRACUSE	66	40	80	35	53	-1	.6	.1	.5	10.3	216	40.7	137	95	48	0	0	0	2	1	0	
NC ASHEVILLE	75	45	82	37	60	1	.7	.0	.7	1.6	28	29.9	68	96	42	0	0	0	1	0	0	
CHARLOTTE	79	56	86	52	68	3	.7	.8	.7	.9	21	27.5	81	82	40	0	0	0	0	0	0	
GREENSBORO	76	51	84	45	64	2	.7	.8	.7	2.8	61	35.2	104	88	45	0	0	0	0	0	0	
HATTERAS	80	66	84	57	73	5	5.2	4.1	5.2	8.2	122	44.7	104	84	60	0	0	0	2	1	1	
NEW BERN	79	60	84	57	70	3	.8	.0	.7	4.7	76	37.7	83	96	52	0	0	0	2	1	1	
RALEIGH	77	51	83	45	64	1	.4	.3	.4	3.9	97	29.1	88	94	54	0	0	0	1	0	0	
WILMINGTON	81	62	87	60	72	5	1.6	.7	1.1	9.7	121	49.8	105	96	54	0	0	0	2	2	2	
ND BISMARCK	64	34	86	18	49	-2	.7	.2	.7	.3	15	25.1	181	85	38	0	0	2	1	0	0	
FARGO	64	35	90	18	50	-1	.7	.4	.7	.5	18	18.9	111	80	38	1	3	0	0	0	0	
GRAND FORKS	60	32	79	20	46	-3	.2	.2	.2	1.0	35	19.9	123	85	39	0	0	4	2	0	0	
WILLISTON	61	32	82	18	47	-3	.7	.2	.7	.3	20	17.6	145	86	38	0	0	4	1	0	0	
OH AKRON-CANTON	69	42	78	31	55	-1	.2	.4	.2	4.2	104	28.4	97	88	45	0	0	1	1	0	0	
CINCINNATI	73	44	80	31	59	0	.9	.3	.9	3.7	102	30.3	93	88	45	0	0	1	1	1	1	
CLEVELAND	70	43	80	34	56	0	.4	.2	.4	7.0	165	31.9	112	88	42	0	0	0	1	0	0	
COLUMBUS	74	43	83	33	58	2	.1	.4	.1	2.0	52	28.4	95	87	39	0	0	0	1	0	0	
DAYTON	72	43	80	33	57	-1	.6	.1	.6	6.0	188	41.6	144	89	46	0	0	0	1	1	1	

Based on 1961-90 normals.

Weather Data for the Week Ending October 9, 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 Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	71	40	80	31	56	0	.7	.2	.7	5.2	149	25.1	97	91	49	0	1	2	1	
YOUNGSTOWN	68	40	77	32	54	-1	.5	.1	.5	4.1	96	27.1	92	92	49	0	1	2	0	
OK OKLAHOMA CITY	78	51	87	44	65	2	.3	.5	.2	3.6	74	30.1	108	93	54	0	0	0	0	
TULSA	76	51	83	42	64	-2	.1	.8	.1	7.1	121	34.8	106	93	54	0	0	0	0	
OR ASTORIA	62	50	74	47	56	1	.4	.6	.3	.5	12	34.8	84	97	74	0	0	0	0	
BURNS	67	38	83	32	52	4	.1	.1	.0	.1	9	8.1	115	77	32	0	1	0	0	
MEDFORD	79	47	92	35	63	4	T	T	T	0	12.9	116	80	30	1	0	0	0	0	
PENDLETON	73	47	83	37	60	4	T	T	T	0	11.8	144	73	34	0	0	0	0	0	
PORTLAND	71	50	83	45	60	3	.2	.3	.2	.2	7	22.5	99	97	49	0	0	0	0	
SALEM	73	44	84	39	58	3	.1	.4	.1	.1	3	25.4	107	93	43	0	0	0	0	
PA ALLENTOWN	69	43	78	35	56	-1	T	T	T	8.0	167	40.1	118	95	45	0	0	0	0	
ERIE	68	45	79	37	57	0	.7	.1	.5	5.5	99	27.7	88	80	42	0	0	0	0	
HARRISBURG	71	47	78	39	59	T	T	T	T	8.5	195	38.0	120	92	43	0	0	0	0	
PHILADELPHIA	73	52	80	45	63	5	.1	.7	.1	6.8	133	33.7	94	90	47	0	0	0	0	
PITTSBURGH	70	43	79	36	56	0	.1	.5	.1	4.2	113	29.4	100	86	44	0	0	0	0	
SCRANTON	67	43	76	34	55	0	.1	.5	.1	7.1	171	29.8	104	88	48	0	0	0	0	
RI PROVIDENCE	68	47	78	37	58	1	.2	.6	.2	4.3	96	29.8	88	88	48	0	0	0	0	
SC CHARLESTON	80	63	87	61	72	2	.5	.3	.4	5.5	96	44.3	101	98	63	0	0	0	0	
COLUMBIA	81	56	86	50	69	2	T	T	T	3.9	86	30.4	74	91	48	0	0	0	0	
FLORENCE	82	59	87	56	71	3	.7	.0	.5	3.2	75	27.6	76	97	50	0	0	0	0	
GREENVILLE	79	51	85	46	65	1	T	T	T	1.7	33	30.5	75	86	39	0	0	0	0	
SD ABERDEEN	65	36	91	22	51	-1	T	T	T	1.2	50	25.4	134	90	41	1	2	1	0	
HURON	66	37	88	22	51	-2	.6	.2	.6	2.3	105	27.5	153	91	46	0	2	2	1	
RAPID CITY	67	38	94	21	53	0	.4	.1	.4	1.8	115	18.1	122	78	41	1	2	2	0	
STIOUX FALLS	68	40	87	25	54	1	.5	.0	.4	2.3	64	34.2	163	88	44	0	1	2	0	
TN CHATTANOOGA	84	51	88	43	67	3	.1	.6	.1	1.8	36	29.9	72	95	35	0	0	0	0	
KNOXVILLE	77	50	82	42	63	1	.2	.4	.2	5.0	128	32.7	89	95	47	0	0	0	0	
MEMPHIS	81	56	87	47	68	1	.1	.5	.1	4.1	93	32.7	84	89	49	0	0	0	0	
NASHVILLE	79	50	86	41	64	0	.1	.4	.1	3.1	73	33.0	90	89	43	0	0	0	0	
TX ABILENE	80	60	88	47	70	0	.7	.0	.5	3.1	76	15.0	74	85	48	0	0	0	0	
AMARILLO	77	46	86	32	62	-1	.0	.4	.0	1.0	41	16.3	93	81	36	0	1	0	0	
AUSTIN	90	66	94	61	78	3	T	T	T	.3	8	22.0	87	90	41	4	0	0	0	
BEAUMONT	87	67	91	64	77	4	1.1	.1	1.0	3.5	46	55.0	123	97	54	2	0	0	0	
BROWNSVILLE	92	69	94	65	80	2	.0	.9	.0	2.0	28	19.1	86	93	47	7	0	0	0	
CORPUS CHRISTI	90	68	94	64	79	2	.1	.8	.1	1.2	18	30.2	119	91	47	3	0	0	0	
DEL RIO	90	67	93	63	79	5	T	T	T	.8	21	13.4	66	73	47	5	0	0	0	
EL PASO	87	60	93	54	73	6	.0	.2	.0	1.3	66	8.3	111	60	26	3	0	0	0	
FORT WORTH	82	61	88	51	72	3	.3	.7	.3	3.6	59	23.9	79	88	56	0	0	0	0	
GALVESTON	85	74	87	70	80	4	.2	.6	.2	5.1	73	35.7	106	79	65	0	0	0	0	
HOUSTON	89	66	91	62	77	5	1.5	.5	1.3	2.6	37	48.3	118	95	55	1	0	0	0	
LUBBOCK	82	52	90	39	67	2	.1	.4	.1	.3	10	11.7	72	79	32	2	0	0	0	
MIDLAND	82	57	91	50	70	1	T	T	T	2.1	55	14.9	113	79	36	1	0	0	0	
SAN ANGELO	83	60	90	53	72	2	T	T	T	2.0	47	13.8	81	80	43	2	0	0	0	
SAN ANTONIO	90	66	94	63	78	5	T	T	T	.5	12	27.9	113	90	38	4	0	0	0	
VICTORIA	92	67	93	66	79	5	T	T	T	1.8	23	43.7	122	93	47	6	0	0	0	
WACO	83	63	89	52	73	1	1.6	.7	1.5	4.8	104	24.1	95	91	54	0	0	0	0	
WICHITA FALLS	81	55	89	44	68	0	.1	.7	.1	3.2	60	24.1	91	90	49	0	0	0	0	
UT CEDAR CITY	71	41	85	27	56	0	.4	.1	.2	.5	36	8.3	92	76	30	0	1	2	0	
SALT LAKE CITY	70	49	87	40	59	2	1.8	1.4	1.5	2.0	116	16.5	131	77	43	0	0	0	0	
VT BURLINGTON	58	40	70	30	49	-3	.9	.2	.7	4.6	112	27.3	102	91	51	0	1	2	1	
VA NORFOLK	75	56	82	49	65	1	.1	.6	.1	4.3	88	28.5	78	89	55	0	0	0	0	
RICHMOND	75	50	84	46	63	1	T	T	T	3.0	69	33.0	96	93	46	0	0	0	0	
ROANOKE	74	47	82	40	60	0	.2	.7	.2	4.7	103	29.8	93	83	43	0	0	0	0	
WA QUILLAYUTE	61	45	70	36	53	1	.3	.6	.2	.6	8	45.3	68	98	64	0	0	0	0	
SEATTLE-TACOMA	65	49	80	46	57	1	.2	.4	.2	.2	8	20.8	91	98	65	0	0	0	0	
SPOKANE	68	42	79	31	55	4	T	T	T	.3	30	10.8	96	84	38	0	1	0	0	
YAKIMA	75	42	82	36	58	5	T	T	T	.8	4	7.0	90	80	31	0	0	0	0	
WV BECKLEY	69	46	75	37	58	2	.4	.3	.4	4.6	109	30.3	93	94	46	0	0	0	0	
CHARLESTON	73	45	80	40	59	-1	.5	.1	.5	6.7	166	31.7	95	99	50	0	0	0	0	
HUNTINGTON	75	45	82	40	60	2	.4	.2	.4	4.9	120	32.2	95	95	44	0	0	0	0	
PARKERSBURG	71	44	80	38	57	-2	.4	.2	.4	3.9	104	30.6	93	96	48	0	0	0	0	
WI GREEN BAY	62	37	75	28	50	0	.9	.3	.4	3.6	87	30.4	128	91	48	0	0	0	0	
LACROSSE	67	42	86	31	55	0	T	T	T	1.8	39	38.5	147	86	44	0	1	0	0	
MADISON	67	41	82	29	54	0	.5	.1	.2	4.2	93	41.1	153	84	45	0	2	0	0	
MILWAUKEE	68	44	85	36	56	2	.3	.3	.1	4.2	100	34.0	128	79	44	0	0	0	0	
WAUSAU	60	37	73	28	48	-3	1.0	.3	.5	5.1	98	32.8	118	88	45	0	0	0	0	
WY CASPER	66	38	87	25	52	2	.7	.5	.4	1.7	138	13.9	134	69	38	0	0	0	0	
CHRYSTENNE	63	36	80	20	50	-1	.3	.1	.2	3.4	224	15.8	122	77	36	0	2	0	0	
LANDER	63	39	80	25	51	0	1.1	.8	.8	1.5	103	14.2	131	71	35	0	2	0	0	
SHERIDAN	63	35	86	17	49	-2	1.6	1.3	1.1	2.2	126	16.1	132	82	46	0	3	0	2	

Based on 1961-90 normals.

September Weather in Historical Perspective

Temperatures and precipitation averaged below normal in six of the nine United States climate divisions, resulting in the 12th coldest and 10th driest September on record (table 1). Nationally, it was the coldest September since 1985 (fig. 1), and the driest since 1956 (fig. 2).

Nevertheless, wet weather persisted across the middle Mississippi Valley and much of the Corn Belt (except northwestern growing areas). The primary Corn and Soybean Belt concluded its wettest growing season since at least 1895, with precipitation averaging more than 130 percent of normal since March 1, 1993 (fig. 3). The Central region, which includes seven States from Missouri eastward to West Virginia, registered its third wettest September in the past 99 years. The Northeast was the only other region to report above-normal rainfall (17th wettest September). The three westernmost

regions paced the parade of September dryness, with near-record rankings notched by the West and the Northwest.

The areal percentage of the Nation affected by severe to extreme drought (as determined by the Palmer Drought Index) crept upward to 4.6%, while the area covered by severe to extreme wetness decreased to 28.8% (fig. 4).

Cool weather hampered the progress of crops toward maturity during the month. Temperatures averaged more than 5°F below normal in the East North Central region (IA, MN, WI, MI) en route to the coldest September since 1918 (fig. 5). Temperatures ranked in the lowest third of the historical distribution in five other regions, including the Central (9th coldest). No regions recorded temperatures in the warmest third of the September distribution.

Table 1. Temperature and precipitation rankings for September 1993, based on the period 1895-1993
1 = Driest/Coldest, 99 = Wettest/Hottest.

Region	Precipitation	Temperature
Northeast	83	29
East North Central	39	2
Central	97	9
Southeast	33	63
West North Central	23	13
South	35	26
Southwest	11	30
Northwest	5	59
West	4	58
National	10	12

Figure 1 U.S. NATIONAL TEMPERATURE SEPTEMBER, 1895-1993

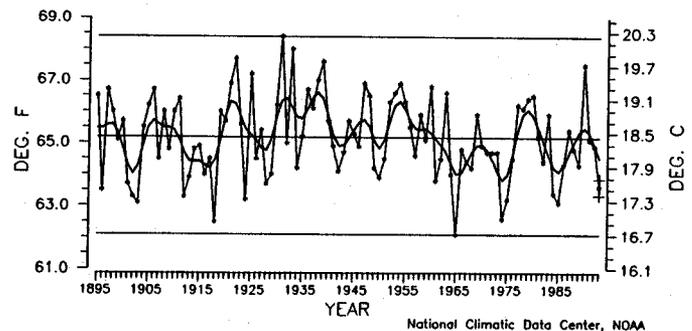


Figure 2 U.S. NATIONAL NORMALIZED PRECIPITATION INDEX SEPTEMBER, 1895-1993

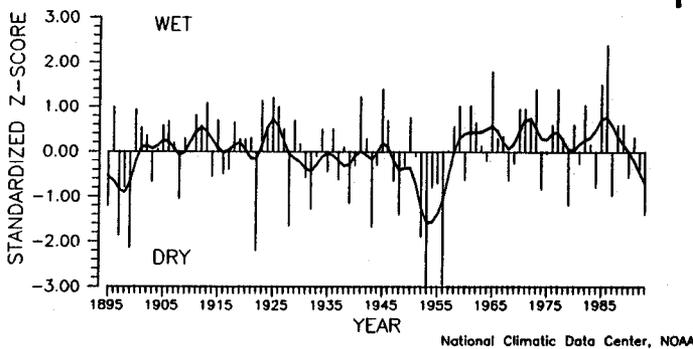


Figure 3 PRIMARY CORN AND SOYBEAN BELT PRECIPITATION MARCH-SEPTEMBER, 1895-1993

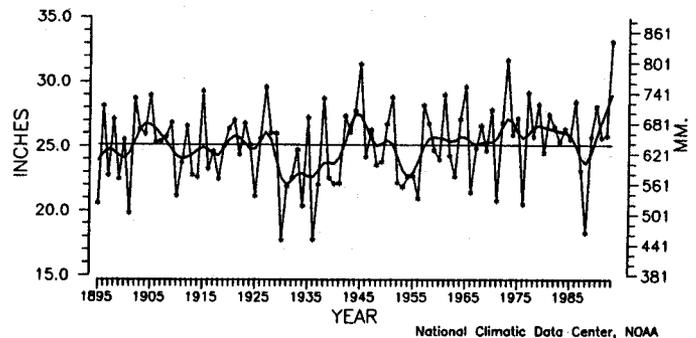


Figure 4 U.S. PERCENT AREA DRY AND WET JANUARY 1988 THROUGH SEPTEMBER 1993 BASED ON THE PALMER DROUGHT INDEX.

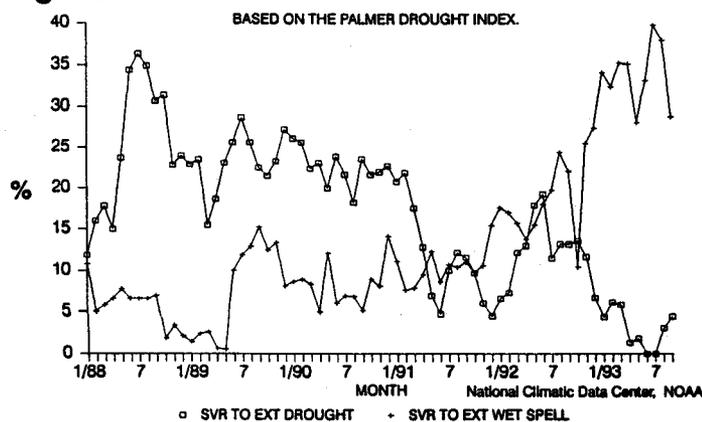
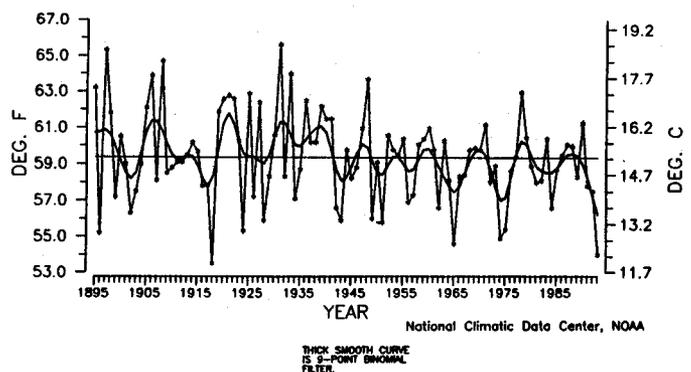


Figure 5 EAST-NORTH CENTRAL REGION TEMPERATURE SEPTEMBER, 1895-1993



National Agricultural Summary

October 3 - 10, 1993

HIGHLIGHTS: Farmers were harvesting crops as weather conditions permitted. Soybean growers harvested over one-quarter of their crop during the week. Flooding occurred in Arizona and Utah about mid-week. Late in the week, record low temperatures in the Central Plains, middle Mississippi Valley, and Great Lakes ended the growing season. With an average of 5 to 6½ days suitable for fieldwork, farmers took full advantage of good weather conditions.

SMALL GRAINS: Winter wheat planted in the 19 major producing States reached 72 percent (%) complete, holding at the same pace as this time in 1992 and the 5-year average. Growers in the central Great Plains and Rockies made progress as weather permitted. Excessive moisture in Idaho and Montana caused delays that continued to hold them several days behind normal. The spring wheat harvest reached 95% complete, compared with 98% by this time in 1992 and a 100% average.

CORN: Corn harvest was complete on 16% of the Nation's acreage, compared with 15% last year and 38% average. In the 17 major producing States, the crop has reached the maturity stage in 75% of the acreage, compared with 80% last year and a 91% average. Frost and freezing temperatures over the past 2 weeks have ended the growing season in the Midwest and upper Mississippi Valley. Corn condition was rated fair to good.

SOYBEANS: Soybean growers took advantage of clear weather and have harvested over a third of the crop. In the 19 major producing States, soybean harvest reached 33%, compared with 43% a year ago and a 45% average. Illinois and Nebraska farmers made the most progress from the previous week as they averaged 6.5 and 6.1 days suitable for fieldwork. Soybeans were dropping leaves on 84% of the acreage, compared with 88% last year and 86% average. The condition of the crop was rated as fair to good.

COTTON: Cotton harvest in the 14 producing States reached 34%, compared with 27% this time a year ago. Harvest moved ahead of normal as farmers took advantage of clear weather and the early crop. Defoliation was active in the Mississippi Valley and Texas. Cotton bolls opening advanced to 87%, compared with 72% a year ago and a 78% average. The crop was rated in fair to excellent condition.

SORGHUM: Farmers made good harvest progress where conditions were not too wet. In the 12 major producing States, 42% of the acreage had been harvested, compared with 42% last year and 51% average. Condition of the crop was mostly fair to good.

RICE: Progress of the harvest reached 74% complete, compared with 91% last year and an 81% average. Second crop rice management continued in southern Louisiana as the first crop harvest was active in the northern part of the States. Texas' second crop rice continued to lag behind normal.

OTHER FIELD CROPS: Crops such as hay, tobacco, dryland peanuts, and potatoes were being harvested across various parts of the Nation. Third and fourth cutting of hay was active in parts where conditions were not too wet. Burley harvest in Kentucky and Tennessee was nearly complete, with stripping underway. The Texas dryland peanut harvest was active in the Edwards Plateau and the south. Producers in Low Plains were just beginning. Potato harvest continued in the Rockies, Midwest, and New England.

FRUITS AND NUTS: Rains over Florida helped the new growth of citrus. Light splitting on early oranges in wet soils was reported. Harvest of early oranges and white and colored grapefruit continued to be slow. Valencia orange and lemon harvests continued in California as navel orange harvest got underway. Grape harvest of all types was also active. Harvest of almonds, walnuts, and pistachios continued.

VEGETABLES: Harvesting and planting of winter vegetables continued throughout the United States. Movement considered moderate to heavy in major producing areas.

PASTURE AND LIVESTOCK: Pastures across the Nation were generally in good condition. Application of fertilizer and seeding pastures for fall and winter was active. Livestock was generally in fair to good condition.

USDA Lowers Crop Production Estimates

The following information was released by USDA's Agricultural Statistics Board on October 12, 1993.

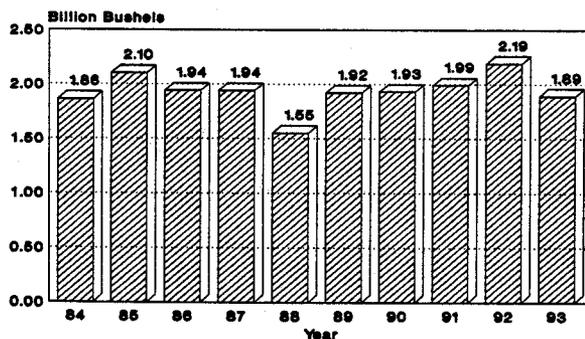
Corn production is forecast at 6.96 billion bushels, down 4 percent from the September 1 forecast and 27 percent below the record high production of 1992. Yields are expected to average 110.3 bushels per acre, down 2.8 bushels from last month and 21.1 bushels below the record high yield of 131.4 bushels set last year. Acreage for harvest as grain is estimated at 63.1 million acres, down 800,000 acres from last month, due primarily to additional acreage being destroyed to qualify for Government programs. Yields are down as a result of a late-maturing crop dying prematurely, insects, and an Ohio drought.

Soybean production is forecast at 1.89 billion bushels as of October 1, down 1 percent from the September 1 forecast and 14 percent below 1992. If realized, this would be the lowest production since 1988. Yield is forecast at 33.7 bushels per acre, 0.3 bushel below September and 3.9 bushels below 1992. Area to be harvested, at 56.0 million acres, is down 160,000 acres from the September estimate. Missouri and North Dakota reduced acreage from last month due to wet weather. Acreage reductions in Georgia and South Carolina were due to drought conditions.

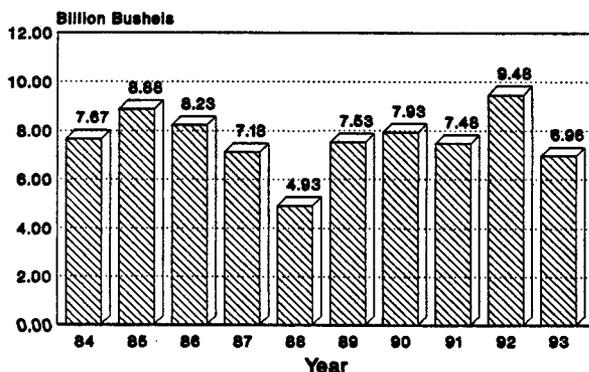
All cotton production is forecast at 17.0 million bales, down 5 percent from September 1 but 5 percent above 1992. Continued below-average precipitation coupled with insect problems in the Delta States combined to decrease U.S. yields 31 pounds during the month to 614 pounds per harvested acre. The Delta region's yield, at 638 pounds, is 67 pounds below the last month. Texas' production was reduced 200,000 bales from September 1.

Scattered frost during the second half of September caused crop damage in the western Corn Belt and northern half of the United States. The growing season ended for much of the northern Great Plains, the western parts of Nebraska, much of Wisconsin, and Minnesota between September 14 and October 2. This season-ending weather occurred at a near-normal time. The expected damage to an unusually late-maturing crop has been factored into forecasts throughout the season.

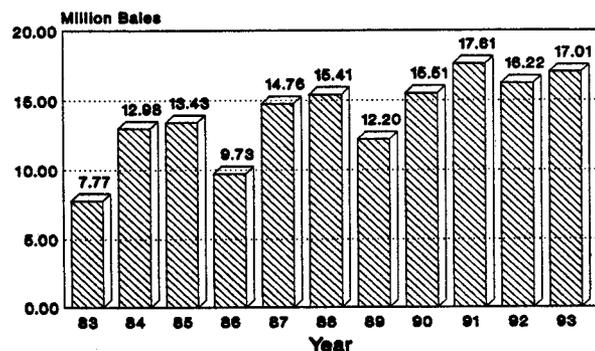
U.S. Soybean Production
1984 - 1993



U.S. Corn Production
1984 - 1993



U.S. All Cotton Production
1983 - 1993



Crop Progress

for the Week Ending October 10, 1993

COTTON (Percent Bolls Opening)

	Current	Last Wk	1992	Avg.
AL	89	79	69	89
AZ	100	100	100	98
AR	86	79	86	89
CA	100	100	100	100
GA	91	88	75	83
LA	97	95	99	98
MS	95	93	97	95
MO	92	85	85	89
NM	94	88	87	86
NC	99	98	96	90
OK	83	72	39	66
SC	98	95	92	91
TN	100	99	94	94
TX	76	69	48	59

14 States 87 82 72 78
These 14 States produced 99% of the 1992 cotton crop.

COTTON (Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	32	16	18	42
AZ	40	28	38	24
AR	26	16	18	29
CA	20	5	45	21
GA	42	26	9	24
LA	59	39	59	57
MS	38	16	34	46
MO	31	17	15	34
NM	7	3	3	1
NC	30	15	5	11
OK	12	6	6	3
SC	39	23	8	22
TN	37	21	17	34
TX	35	31	23	22

14 States 34 22 27 29
These 14 States produced 99% of the 1992 cotton crop.

SPRING WHEAT (Percent Harvested)

	Current	Last Wk	1992	Avg.
ID	96	89	100	100
MN	95	93	98	99
MT	84	64	95	99
ND	97	91	99	100
SD	100	100	100	100

5 States 95 89 98 100
These 5 States produced 96% of the 1992 spring wheat crop.

CORN (Percent Mature)

	Current	Last Wk	1992	Avg.
CO	71	48	74	81
GA	100	100	100	100
IL	96	82	88	96
IN	96	84	86	89
IA	75	50	96	99
KS	99	90	95	99
KY	95	90	90	90
MI	60	35	25	65
MN	20	15	71	93
MO	95	90	94	98
NE	84	79	88	97
NC	100	100	100	100
OH	86	70	62	67
PA	55	35	34	48
SD	50	36	66	92
TX	98	93	97	99
WI	42	33	38	77

17 States 75 62 80 91
These 17 States produced 94% of the 1992 corn crop.

CORN (Percent Harvested)

	Current	Last Wk	1992	Avg.
CO	8	4	9	9
GA	95	92	91	93
IL	13	8	15	45
IN	13	7	9	29
IA	8	5	9	38
KS	50	35	50	70
KY	55	41	44	51
MI	4	2	4	10
MN	4	1	1	31
MO	28	19	36	60
NE	9	4	9	37
NC	82	74	70	71
OH	15	9	6	16
PA	8	3	3	10
SD	5	1	4	37
TX	91	82	90	90
WI	4	3	2	18

17 States 16 11 15 38
These 17 States produced 94% of the 1992 corn crop.

RICE (Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	69	52	89	77
CA	50	25	80	53
LA	94	93	97	96
MS	69	50	88	82
TX	93	84	100	100

5 States 74 60 91 81
These 5 States produced 97% of the 1992 rice crop.

SOYBEANS (Percent Dropping Leaves)

	Current	Last Wk	1992	Avg.
AL	59	43	55	59
AR	38	27	44	36
GA	75	58	70	63
IL	98	80	95	95
IN	99	91	98	94
IA	86	66	100	100
KS	98	75	90	90
KY	64	50	64	62
LA	83	65	77	62
MI	100	95	95	97
MN	70	52	99	99
MS	65	44	69	66
MO	81	55	91	81
NE	100	97	98	99
NC	46	25	42	40
OH	100	99	98	95
SC	26	10	19	26
SD	96	70	96	99
TN	70	47	61	63

19 States 84 67 88 86
These 19 States produced 95% of the 1992 soybean crop.

SOYBEANS (Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	16	7	8	14
AR	10	5	14	8
GA	5	4	3	4
IL	51	7	66	61
IN	42	10	50	42
IA	36	8	58	68
KS	25	5	45	40
KY	9	4	13	10
LA	46	27	36	29
MI	15	2	10	20
MN	26	3	51	72
MS	23	9	22	19
MO	19	3	36	26
NE	62	15	56	63
NC	2	0	2	3
OH	42	15	36	33
SC	2	1	1	0
SD	31	3	35	69
TN	9	3	7	8

19 States 33 7 43 45
These 19 States produced 95% of the 1992 soybean crop.

WINTER WHEAT (Percent Planted)

	Current	Last Wk	1992	Avg.
AR	12	7	13	9
CA	3	2	1	1
CO	95	89	97	93
GA	6	5	6	6
ID	50	41	86	76
IL	20	5	42	42
IN	35	10	42	44
KS	85	55	80	85
MI	60	30	60	65
MO	18	7	28	32
MT	73	43	83	89
NE	99	90	100	98
NC	15	12	13	12
OH	42	12	40	42
OK	81	69	70	72
OR	75	63	57	51
SD	98	93	97	95
TX	66	55	70	69
WA	89	79	94	83

19 States 72 55 72 72
These 19 States produced 90% of the 1992 winter wheat crop.

SORGHUM
(Percent Mature)

	Current	Last Wk	1992	Avg.
AR	100	96	99	96
CO	62	41	41	58
IL	87	65	81	85
KS	65	50	45	75
LA	100	98	100	98
MS	99	97	100	97
MO	77	62	86	85
NE	67	47	66	92
NM	50	27	68	41
OK	62	34	34	63
SD	67	36	62	92
TX	88	86	83	87
12 States	77	65	69	83

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

SORGHUM
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	82	71	92	83
CO	10	8	14	19
IL	9	2	21	34
KS	15	5	10	30
LA	95	90	97	94
MS	89	79	95	89
MO	33	24	47	46
NE	5	1	7	41
NM	10	9	8	7
OK	23	15	13	10
SD	4	2	10	52
TX	76	73	74	70
12 States	42	36	42	51

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

Crop Condition
(Percent)

for the Week Ending October 10, 1993

SORGHUM

State	VP	P	F	G	EX
AR	0	0	69	31	0
CO	1	4	27	59	9
IL	0	0	15	78	7
KS	0	0	23	64	13
LA	0	5	55	40	0
MS	0	2	78	20	0
MO	0	9	65	26	0
NE	3	6	54	35	2
NM	1	23	46	30	0
OK	0	2	22	71	5
SD	0	15	57	23	5
TX	0	3	23	64	10
12 State	0	4	34	54	8
Prev Week	0	4	37	52	7
Prev Year	0	6	19	50	25

COTTON

State	VP	P	F	G	EX
AL	0	22	60	18	0
AZ	0	0	15	75	10
AR	0	7	58	35	0
CA	0	0	0	85	15
GA	6	13	59	15	7
LA	0	21	64	15	0
MS	0	30	68	2	0
MO	0	10	80	10	0
NM	0	0	11	84	5
NC	0	10	60	30	0
OK	0	0	54	38	8
SC	5	68	26	1	0
TN	0	35	53	12	0
TX	0	6	29	61	4
14 State	0	12	41	43	4
Prev Week	0	11	41	44	4
Prev Year	0	6	48	41	5

CORN

State	VP	P	F	G	EX
CO	3	10	30	44	13
GA	18	16	51	15	0
IL	0	1	14	74	11
IN	0	0	14	78	8
IA	2	18	65	15	0
KS	0	0	23	68	9
KY	0	0	62	38	0
MI	1	4	20	50	25
MN	20	45	32	3	0
MO	2	17	58	22	1
NE	0	5	23	67	5
NC	13	46	36	5	0
OH	4	13	35	40	8
PA	3	9	29	50	9
SD	3	11	48	35	3
TX	0	0	58	21	21
WI	1	8	40	50	1
17 State	3	12	36	43	6
Prev Week	3	12	36	44	5
Prev Year	2	3	16	61	18

SOYBEANS

State	VP	P	F	G	EX
AL	0	12	58	30	0
AR	0	0	63	37	0
GA	17	35	41	7	0
IL	0	1	14	77	8
IN	0	0	14	72	14
IA	2	13	63	21	1
KS	0	0	14	74	12
KY	0	2	41	56	1
LA	0	25	67	8	0
MI	1	4	20	50	25
MN	16	40	38	6	0
MS	0	2	89	9	0
MO	2	7	55	36	0
NE	0	0	23	67	10
NC	5	16	60	19	0
OH	3	11	34	43	9
SC	14	31	39	16	0
SD	0	25	48	27	0
TN	0	2	48	50	0
19 State	3	10	40	42	5
Prev Week	3	11	40	41	5
Prev Year	1	2	19	61	17

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

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall none to 0.35 in. north; none to 0.06 in. central; none to 0.24 in. south. Temperatures 2 to 4° north; 3 to 3° central; 1 to 3° south. Lows 29 to 47° north; 32 to 44° central; 38 to 46° south. Highs 83 to 87° north; 85 to 89° central; 87 to 90° south.

Days suitable for fieldwork 6.7. Soil moisture 89% short, 11% adequate. Corn harvested 86%, 82% 1992, 87% avg. Sorghum harvested 45%, 47% 1992, 68% avg. Sorghum condition 11% poor, 46% fair, 43% good. Peanuts dug 77%, 72% 1992, 82% avg. Peanuts combined 68%, 62% 1992, 71% avg. Peanut condition 37% poor, 63% fair. Wheat seeded 18%, 27% 1992, 23% avg. Pasture condition 5% very poor, 19% poor, 61% fair, 15% good. Primary activities: Defoliating cotton, harvesting vegetables, sorghum, cotton, corn, land preparation for seeding small grains, general care of livestock, poultry, catfish.

ALASKA: Agricultural and weather summaries will resume next spring.

ARIZONA: Cloudy, scattered showers south, 3rd and 4th. Showers statewide, 5th and 6th. Temperatures varied 1° below to 5° above normal; ranges 31 to 93°, higher elevations; 48 to 108° deserts.

Cotton harvest slowed due to rain; 100% bolls open, 100% previous, 98% avg., 40% harvested, 38% previous, 24% average. Weeds light to moderate, insects moderate. Defoliation light to moderate western areas, active in central, eastern areas. Alfalfa good. Harvest moderate all producing areas, except active central. Weeds light to moderate, insects moderate; disease light. Rain damage light all areas. Western area lemon harvest continues. Central Arizona, cantaloupe, watermelons, honeydews, sweet corn, green onions, parsley harvested. Pecan harvest underway. Apples, sweet corn, chilies, lettuce, squash, watermelons, cabbage harvested eastern production areas.

ARKANSAS: Warm, dry first part of week, turning cool with scattered showers latter part of week. Extremes 35°; 92°. Rainfall none to 2.32 in.

Days suitable for fieldwork 6. Moderate rate of crop growth. Soil moisture 21% short, 75% adequate, 4% surplus. Cotton, rice, soybean, sorghum harvests continued. Producers continued to defoliate cotton fields. Cotton yields reported average. Cool temperatures delayed development of late cotton bolls. Sunflowers in fair condition. Corn harvest 94% current week, 95% previous year, 94% 5 year avg. Pecans, apples, watermelons good. Planting cool season forages continued. Armyworm larvae infestation in pastures. Fertilizer applied to pastures. Pastures bush hogged. Livestock good, external parasites reported.

CALIFORNIA: Scattered rain, mostly light, fell in parts of State. Temperatures below normal along central, northern coast; generally above normal interior parts.

Cool weather, scattered rain showers prevailed. Ground preparation fall planted small grains continued. Planting winter wheat progressed. Milo matured, harvest expected shortly. Rice

harvest active, slowed by rain. Good yields most areas. Cotton good to excellent condition. Harvest continued most areas. Sunflower harvest progressed. Corn harvest grain, silage winding down. Alfalfa hay harvest progressed, good yields, quality. Dry bean harvest increased most areas. Rain damage windrowed dry beans reported. Table grape harvest neared completion. Raisins rolled, binned. Walnuts, pistachios harvested. Almond harvest wound down. Tree fruit orchards, grape vineyards irrigated, fertilized. Plum harvest almost complete. Fuji, Granny Smith apples, Asian pears picked, packed. Pomegranate, olive harvests continued steady pace. Harvest persimmons, Coachella Valley dates picked up speed. Valencia orange harvest neared end. New crop Navel oranges good color. Lemon, avocado harvests continued. Coachella Valley grapefruit harvest began. Strawberry harvest continued. New asparagus fields planted Fresno area. Broccoli movement fairly heavy, good quality. Planting broccoli continued Coachella Valley. Carrot packing continued Fresno area. Cauliflower shipments fairly heavy, variable quality. Celery harvest moderate, good quality Salinas, Santa Maria. Sweet corn harvest central valley winding down. Head lettuce movement central coast moderate, variable quality. Head lettuce Huron treated worms, leafhoppers. Ground work Coachella Valley fall crops. Tulelake area fall potato harvest full swing, average quality; harvest fall potatoes started San Jacinto. Central valley sweet potatoes harvested. Melon harvest winding down. Fresh market tomato harvest. Other crops harvested: peppers, cucumbers, cabbage, snap beans, pumpkins, squash. Range, pasture fair to good. Some sheep moved to alfalfa fields for lambing. Cows continued fall calving. Livestock remain in good condition, limited supplemental feeding. Water supplies adequate.

COLORADO: Week began with mostly fair skies, above normal temperatures in most locations through the 5th. Clouds began to increase on the 6th, by evening, showers, thunderstorms were beginning to affect the mountains, west. Generally 0.10 to 0.30 in. with 1 to 3 in. of snow in the mountains. Precipitation occurred over all of the Basins with amounts ranging from around 0.20 in. across the Platte River Basin to around 1.00 in. over the Kansas River Basin. Temperatures were generally 1 to 5° above normal.

Days suitable for fieldwork 5.5. Soil moisture 5% very short, 32% short, 60% adequate, 3% surplus. Alfalfa 3rd cutting 57%, 60% 1992, 63% avg. Alfalfa 4th cutting 10%, 11% 1992, 9% avg. Oats harvested 94%, 95% 1992, 93% avg. Winter wheat seeded 73%, 82% 1992, 62% avg; emerged 32%, 49% 1992, 30% avg. Dry beans cut 69%, 75% 1992, 74% avg; harvested 57%, 53% 1992, 49% avg. Corn denting 86%, 83% 1992, 89% avg.; mature 23%, 32% 1992, 48% avg. Corn silage harvested 59%, 58% 1992, 65% avg. Sorghum turning color 56%, 61% 1992, 77% avg.; mature 23%, 25% 1992, 32% avg. Summer potatoes harvested 68%, 91% 1992, 76% avg. Dry onions harvested 66%, 72% 1992, 69% avg. Fall potatoes harvested 50%, 50% 1992, 25% avg. Corn condition 3% very poor, 8% poor, 26% fair, 52% good, 11% excellent. Sugar beet condition 1% poor, 15% fair, 65% good, 19% excellent. Livestock rated mostly good to excellent. Pasture, range feed condition is rated mostly good.

FLORIDA: Highs upper 80s, low 90s. Lows mid to upper 40s Panhandle, low to mid 50s Big Bend, mid to upper 50s northern Peninsula, south mid 60s to low 70s. Temperatures 1 to 3° above normal Panhandle, 1 to 2° below normal Peninsula. Rain less than 1.00 in. Panhandle, 0.50 in. to 2.50 in. north, central Peninsula, 1.00 to 5.50 in. south.

Soil moisture short to adequate, scattered areas surplus moisture. Peanut harvest active. Cotton harvest gaining momentum. Soybean harvest starting. Making preparations for small grain planting, sugarcane harvest. Hay making active where plant growth adequate. Tobacco marketing activity winding down. Sugarcane planting active. Citrus groves very good condition. Rain most areas, dry areas irrigating. New growth slowing. Little fruit splitting wet areas. Early fruit showing color break. Harvest increasing Navels, other early oranges, grapefruit, K-Early, tangerines. Crops in good condition all major vegetable production areas. Light rain north, central areas. Heavy rain southeast end of week hampered field work. Bell pepper harvest to begin this week. Available: Snap beans, sweet corn, cucumbers, eggplant, peppers, radishes, squash, tomatoes, cherry tomatoes, watermelons. State's pastures poor to excellent. Pasture ratings, 10% poor, 35% fair, 40% good, 15% excellent. State's cattle herds fair to good condition.

GEORGIA: Temperatures 1 to 2° above normal. Near 80° Mountains of northeast; upper 80s, low 90s central, south. Upper 40s to mid 50s, 30s in the colder Mountain locations; upper 50s, low 60s Atlantic Coast. Week dry, scattered showers mid to late week, north 10th, 11th. Rain light, under 0.25 in. Exception along Atlantic Coast 2.00 to 4.00 in.

Days suitable for fieldwork 6.3. Soil moisture 60% very short, 34% short, 4% adequate, 2% surplus. Cotton 6% very poor, 13% poor, 59% fair, 15% good, 7% excellent. Sorghum 6% very poor, 25% poor, 62% fair, 7% good, 0% excellent; 77% harvested for grain, 60% 1992, 63% avg. Peanuts 24% very poor, 22% poor, 49% fair, 5% good; 85% dug, 76% 1992, 82% avg.; 71% threshed, 58% 1992, 68% avg. Soybeans 17% very poor, 35% poor, 41% fair, 7% good, 0% excellent. Wheat 9% very poor, 10% poor, 56% fair, 25% good; 1% emerged, 3% 1992, 2% avg. Rye 21% planted, 33% 1992, 26% avg. Other small grains 14% very poor, 21% poor, 54% fair, 11% good; 18% planted, 18% 1992, 14% avg. Other vegetables 2% very poor, 5% poor, 76% fair, 17% good. Apples 24% poor, 22% fair, 54% good; 75% harvested, 80% 1992, 77% avg. Pecans 2% very poor, 4% poor, 31% fair, 51% good, 12% excellent; 2% harvested, 3% 1992, 3% avg. Hay 24% very poor, 39% poor, 35% fair, 2% good. Pasture 16% very poor, 42% poor, 34% fair, 8% good; Cattle fair, hogs fair to good.

HAWAII: Returning trade winds at midweek brought relief from hot, humid conditions that have persisted in recent weeks. Record equaling high 90° recorded 4th in Honolulu. Showers mainly windward, higher elevations. Temperatures varied high 60s to mid 90s. Rainfall 3.40 in.

Heavy irrigation necessary to maintain normal crop progress. Papaya production lower. Pineapple, sugarcane operations on normal schedules.

IDAHO: Temperatures 5° above normal. Precipitation 0.34 in. north, 0.05 to 0.11 in. southwest, 0.03 to 0.33 in. southcentral, 0.10 to 0.60 in. east. High winds reported in Minidoka, Cassia counties.

Days suitable for fieldwork 6. Soil moisture 1% very short, 18% short, 81% adequate. Winter wheat harvested 99%, 100% 1992, 100% avg. Oats harvested 97%, 100% 1992, 100% avg. Potatoes turning or turned 23%, harvested 77%; 0% very poor, 3% poor, 28% fair, 62% good, 7% excellent. Alfalfa third cutting 76%, 96% 1992, 94% avg. Dry pea harvest complete. Lentils harvested 93%, 100% 1992, 100% avg. Apples harvested 48%, 78% 1992, 53% avg. Hops harvest completed. Onions harvested 81%, 99% 1992, 90% avg. Dry beans harvested 85%, 94% 1992, 94% avg. Field corn silage harvested 70%, 94% 1992, 85% avg. Field corn grain harvested 29%, 22% 1992, 15% avg. Sugarbeets harvested 17%, 32% 1992, 26% avg. Irrigation water supplies 5% fair, 75% good, 20% excellent. Activities: Potato, sugarbeets, dry bean, grain, hay harvest; fall ground preparation, planting winter wheat continued. Pasture, range condition 93% of normal. Livestock reported in good condition.

ILLINOIS: A cold front crossed State, with a high pressure behind bringing mild, dry weather ideal for outdoor work. Sunshine, breezy winds created good drying conditions. Highs upper 60s to middle 70s. Lows mostly 40s. A frost touched most of the State over the weekend. Precipitation was 0.25 to 0.80 in.

Days suitable for fieldwork was 6.5. Harvest progressed across the State last week. Soil moisture supplies 34% surplus, 66% adequate. Winter wheat emerged 3%, 7% 1992, 11% avg. Farm activities include harvesting corn, beans, seeding wheat, hauling grain, fall tillage, fertilizer applications, cutting alfalfa, machinery preparation, repair, tending livestock. Pasture 95% normal.

INDIANA: High temperatures mid 60's to near 70° in the north to the low, mid 70's in the south. These readings were near normal to as much as 4° above normal. Lows averaged from the upper 30's to mid 40's in the north to the 40's in the south. Lows were mostly 2 to 7° below normal, except for near normal over the far south along the Ohio River. Rainfall 0.35 to 1.25 in. over State.

Days suitable for fieldwork 6. Harvesting made good strides. Pastures 91% of normal, 90% last week. Topsoil 7% short, 86% adequate, 7% surplus. Subsoil moisture 4% short, 88% adequate, 8% surplus. Wheat acreage tilled 47%, 55% 1992, 65% avg. Moisture content of harvested corn 24%, soybeans 12.5%.

IOWA: Temperatures within 1° of normal, very warm conditions at midweek were replaced by unseasonably cold air over the weekend. A hard freeze was recorded over most areas the 10th. Extremes, 24°; 88°. Rainfall, mainly confined to the 8th, 0.20 in. southeast to 2.50 in. southwest; avg. 0.80 in., normal 0.59 in.

Days suitable for fieldwork 6.4. Topsoil 76% adequate, 24% surplus. Subsoil 32% adequate, 68% surplus. Corn in dough stage 97%, 100% 1992, 100% normal. Corn lodging 6% none, 67% light, 26% moderate, 1% heavy. Corn ear dropping 14%, 63% light, 22% moderate, 1% heavy. Soybeans with leaves turning color 99%, 100% 1992, 100% normal. Third crop alfalfa hay harvested 95%, 91% 1992, 98% normal. Second crop clover hay harvested 96%, 100% 1992, 100% normal. Winter Wheat seeded 60%, 41% 1992, 53% normal. 1994 Row crop acreage fall tilled 5%, 3% 1992, 8% normal. 1994 row acreage fall fertilizer 4%, 2% 1992, 6% normal. Pasture condition 1% very poor, 8% poor, 35% fair, 51% good, 5% excellent. Livestock are reported to be in mostly good condition, feedlots are finally drying out. Some cattlemen are culling herds at a higher rate than normal in anticipation of short hay supplies.

KANSAS: Temperatures 4 to 6° above normal; 1 to 3° above south. Precipitation light, generally avg. 0.50 in. or less.

Days suitable for fieldwork 6.0. Topsoil moisture 28% short to very short, 72% adequate. Subsurface moisture 5% short to very short, 90% adequate, 5% surplus. Weather nearly ideal for both planting wheat, harvesting fall crops. Wheat seeding on schedule, early emergence, growth good. Very few insect or disease problems. Corn, sorghum, soybean harvest good progress but still behind schedule. Most corn, sorghum stands mature. Range, pasture good condition, ranchers weaning calves, moving cattle to market. Most livestock in good condition.

KENTUCKY: Slightly warmer than normal, fairly dry conditions. High temperatures mid 70s, 1 to 3° above normal most locations. Low temperatures near normal at mid 40s to 50°. Rainfall amounts limited. Most areas experiencing deficits of 0.33 to 0.75 in. Many sites recorded no precipitation. Few locations in east reported 1.00 in.

Days suitable fieldwork 5.4. Soil moisture 5% very short, 39% short, 56% adequate. Minimal damage double crop soybeans from light frosts some areas. Leaves still green 10% of crop. Burley 8% stripped, 1992 9%, avg. 8%. Tobacco curing well. Tobacco 14% fair, 73% good, 13% excellent. Pasture good. Corn harvest over half done.

LOUISIANA: No precipitation reported.

Days suitable for fieldwork 6.6. Soil moisture 37% very short, 46% short, 17% adequate. Hay 93% final cutting, 95% 1992, 91% avg. Made good progress. Pecans 4% harvested, 2% 1992, 4% avg. Rice 100% ripe, 99% 1992, 99% avg. Soybeans 95% turning color, 93% 1992, 83% avg. Harvest was active. Sweet potatoes 61% harvested, 61% 1992, 68% avg. Harvest was slow due to bruising from dry conditions. Sugarcane 2% poor, 24% fair, 74% good; 99% planted, 78% 1992, 88% avg.; 5% harvested, 4% 1992, 3% avg. Harvest began, planting should be completed by end of week. Wheat 5% planted, 3% 1992, 4% avg.; 1% emerged, 0% 1992, 1% avg. Planting was very slow due to dry conditions. Livestock 4% poor, 43% fair, 53% good. Cattlemen sold a few calves because of poor pastures. Pastures 28% very poor, 11% poor, 21% fair, 40% good. Pastures suffered severely from dry conditions. Vegetables 28% poor, 58% fair, 14% good.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.09 in. Temperature, normal 59.4°. Extremes 30°; 80°.

Days suitable for fieldwork 6.0. Topsoil moisture 14% short, 86% adequate. Subsoil moisture 5% very short, 33% short, 62% adequate. Small grains good condition. Wheat 16% seeded, 5% 1992, 13% avg. Barley 53% seeded, 21% 1992, 41% avg. Rye 44% seeded, 17% 1992, 37% avg. Field corn poor to fair condition; 94% mature, 80% 1992, 91% avg.; 63% harvested for grain, 20% 1992, 47% avg.; 95% harvested for silage, 68% 1992, 87% avg. Soybeans fair to good, 88% turned, 74% 1992, 82% avg.; 67% shedding leaves, 50% 1992, 58% avg.; 11% harvested, 6% 1992, 8% avg. Sorghum 54% mature, 89% 1992; 17% harvested, 8% 1992. Other hay 3rd cut 75% complete, 78% 1992, 69% avg.; 4th cut 53% complete, 31% 1992, 29% avg. Alfalfa 4th cut 87% complete, 79% 1992, 74% avg.; Alfalfa 5th cut 27% complete, 41% 1992, 18% avg. Hay supplies short to mostly adequate. Pasture good condition. Apples 78% harvested, 55% 1992, 75% avg.

DELAWARE: Precipitation 0.04 in. Temperature 58.6°, normal 59.8°. Extremes 35°; 76°.

Days suitable for fieldwork 6.9. Topsoil moisture 60% short, 40% adequate. Subsoil moisture 80% short, 20% adequate. Small grains good condition. Wheat 7% seeded, 6% 1992, 10% avg. Barley 62% seeded, 10% 1992, 31% avg. Field corn poor condition; 63% harvested for grain, 28% 1992, 63% avg. Soybeans poor to fair condition; 86% turned, 80% 1992, 76% avg.; 61% shedding leaves, 57% 1992, 49% avg.; 12% harvested, 7% 1992, 8% avg. Sorghum poor to fair condition; 85% turned, 93% 1992, 63% mature, 64% 1992. Other hay 3rd cut 87% complete, 90% 1992, 98% avg. Other hay 4th cut 0 complete, 37% 1992, 24% avg. Alfalfa hay 4th cut 74% complete, 86% 1992, 90% avg.; 5th cut 8% complete, 27% 1992, 20% avg. Hay supplies short. Pasture very poor condition. Apples 78% harvested, 64% 1992, 71% avg.

MICHIGAN: Extremes 25°; 83°. Precipitation 0.11 to 1.77 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 5% short, 75% adequate, 20% surplus. Dry Beans 100% mature, 95% 1992, 90% avg.; 75% harvested, 75% 1992, 75% avg.; condition 2% very poor, 13% poor, 25% fair, 45% good, 20% excellent. Corn Silage 65% harvested, 45% 1992, 70% avg. Potatoes 70% harvested, 80% 1992, 80% avg. Sugarbeets 10% harvested, 15% 1992, 15% avg. Hay 80%, 80% 1992, 85% avg.; 2% very poor, 8% poor, 25% fair, 45% good, 20% excellent. Pasture condition 85% of normal. Major activities included cutting silage, picking fruit, vegetables, harvesting corn, soybeans, dry beans, sugarbeets, fall tillage, seeding wheat.

MINNESOTA: Temperatures 1 to 5° below normal. Extremes 16° to 94°. Precipitation 0.04 to 0.53 in. below normal. Precipitation avg. 0.07 to 0.49 in. Greatest weekly precipitation 1.10 in.

Days suitable for fieldwork 5.7. Topsoil 2% short, 73% adequate, 25% surplus. Rye 92% seeded, 90% 1992, 97% avg. Winter wheat 84% seeded, 99% 1992, 98% avg. Hay grain 58% stubble plowed or tilled, 61% 1992, 82% avg. Potatoes 69% harvested, 83% 1992, 86% avg. Flax 68% harvested, 52% 1992, 89% avg. Dry Beans 71% harvested, 92% 1992, 95% avg. Sunflowers 8% harvested, 21% 1992, 50% avg. Sugarbeets 61% harvested, 63% 1992, 55% avg. Corn 4% combined, 1% 1992, 31% avg.; 61% silage cut, 75% 1992, 90% avg.; 32% moisture content, 32% 1992, 25% avg. Soybeans 26% combined, 51% 1992, 72% avg.; 14% moisture content 12% 1992, 12% avg. Corn 20% very poor, 45% poor, 32% fair, 3% good. Soybeans rated 16% very poor, 40% poor, 38% fair, 6% good.

MISSISSIPPI: Temperature 69°; 1.2° above normal. Extremes 37°; 91°. A very dry week. Virtually no precipitation over the entire State. Rainfall 0.02 in., 0.72 below normal. Soil temperature 73°.

Days suitable for fieldwork 6.5. Soil moisture 35% very short, 42% short, 23% adequate. Corn 80% harvested, 79% 1992, 84% 5 yr avg.; 7% very poor, 7% poor, 77% fair, 8% good, 1% excellent. Cotton 95% open bolls, 97% 1992, 95% 5 yr avg.; 38% harvested, 34% 1992, 46% 5 yr avg.; 30% poor, 68% fair, 2% good. Rice 95% mature, 100% 1992, 98% 5 yr avg.; 69% harvested, 88% 1992, 82% 5 yr avg.; 60% fair, 40% good. Sorghum 99% mature, 100% 1992, 97% 5 yr avg.; 89% harvested, 95% 1992, 89% 5 yr avg.; 93% silage harvested, 100% 1992, 97% 5 yr avg.; 2% poor, 78% fair, 20% good. Soybeans 88% coloring, 95% 1992, 88% 5 yr avg.; 65% shedding, 69% 1992, 66% 5 yr. avg.; 23% harvested, 22% 1992, 19% 5 yr avg.; 2%

poor, 89% fair, 9% good. Sweetpotatoes 63% harvested, 60% 1992, 67% 5 yr avg.; 17% poor, 33% fair, 50% good. Wheat 12% planted, 18% 1992, 21% 5 yr avg. Hay 99% harvested, 100% 1992, 95% 5 yr avg. Pecans 2% harvested, 10% 1992, 4% 5 yr avg.; 20% poor, 45% fair, 35% good. Livestock 14% fair, 83% good, 3% excellent. Pasture 81% of normal.

MISSOURI: Temperatures normal to 2° above normal across State. Rainfall avg. 0.42 in., varying from 0.19 in., east central to 0.73 in. northeast.

Days suitable for fieldwork 5.2., ranging from 4.7 central to 5.7 southwest. Topsoil moisture 75% adequate, 25% surplus. Weekend frost in many northern counties caused limited damage to late crops, primarily soybeans. Corn harvested by districts: 86% southeast, 15 percent or less northern districts. Soybeans turning color 93%, 100% 1992, 94% avg. Soybeans mature 63%, 74%, 62% avg. Soybean harvest by district: 9% southeast to 30% northeast. Sorghum harvest ranges 7% or less northern districts to 69% southeast. Pasture condition 1% poor, 20% fair, 67% good, 12% excellent.

MONTANA: Temperatures above normal west, near normal east. Precipitation above normal.

Days suitable for fieldwork 5.1. Topsoil moisture 23% short, 63% adequate, 14% surplus. Subsoil moisture 14% short, 73% adequate, 13% surplus. Winter wheat harvested 98% complete, 100% 1992, 100% avg. Barley harvested 89% complete, 100% 1992, 100% avg. Oats harvested 89% complete, 100% 1992, 100% avg. Corn silage harvested 84% complete, 96% 1992, 95% avg. Sugar beets harvested 22% complete, 45% 1992, 51% avg. Dry beans harvested 67% complete, 100% 1992, 96% avg. Potatoes harvested 55% complete, 75% 1992, 79% avg. Second cutting alfalfa hay 95% complete, 100% 1992, 100% avg. Other hay 96% complete, 100% 1992, 100% avg. Pasture, range feed condition is rated at 103% of normal, up 2 points from last week. Cattle, calves moved from summer ranged 37%, sheep, lambs moved 44%.

NEBRASKA: Temperatures 4° below normal northwest to 2° above normal northeast. Precipitation end of week varying from 0.10 in. north central to 1.30 in. northeast and southwest.

Days suitable for fieldwork 6.1. Topsoil moisture 14% short, 76% adequate, 10% surplus. Subsoil moisture 4% short, 89% adequate, 7% surplus. Dry beans 15% very poor, 27% poor, 34% fair, 24% good; 75% harvested. Corn harvested 9%, 9% 1992, 37% avg. Sorghum harvested 5%, 7% 1992, 41% avg. Soybeans harvested 62%, 56% 1992, 63% avg. Pasture, range 102% of normal.

NEVADA: Western areas received significant rainfall, lesser amounts received east. Hard freeze in parts of the north, east. Extremes 15°; 100°.

Good weather aided potato digging, winter grain seeding. Late cutting alfalfa hay still in progress some localities. Livestock mostly good condition. Movement from summer ranges to winter grazing, market continues.

NEW ENGLAND: Precipitation 0.12 to 0.99 in., 0.22 in. south. Temperatures 40 to 52° north; 44 to 58° south. Maximum temperatures 62 to 80° north; 69 to 83° south. Minimum temperatures 26 to 33° north; 24 to 39° south.

Days suitable for fieldwork 5.8. Soil moisture 26% short, 61% adequate, 13% surplus. Available grazing 37% short, 58%

adequate, 5% surplus. Fieldwork progress 1 day behind schedule. Pasture condition 69% of normal. Maine potato harvest 80%, 100% 1992, 80% 5 year avg. Connecticut, Massachusetts potatoes 90% harvested, 90% 1992, 90% 5 year avg. Rhode Island potatoes 90% harvested, 90% 1992, 80% 5 year avg. Potato condition good regionwide. Maine oat condition good. Maine oats harvested 90%, 90% 1992, 100% 5 year avg. Field corn condition good to fair. Field corn 70% harvested, 60% 1992, 50% 5 year avg. Hay 90% harvested, 100% 1992, 100% 5 year avg.; condition good. Hay 80% harvested, 75% 1992, 90% 5 year avg.; condition good. Sweet corn harvested 100%, 100% 1992, 100% 5 year avg.; condition good to fair. Apples 75% harvested, size medium, color good, condition good. Peaches 100% harvested, size medium, condition good. Pears 80% harvested, size medium, condition good. Raspberries 100% harvested, size medium, condition good to fair. Cranberries 60% harvested, size medium, condition good. Major farm activities: Chopping corn. Seeding cover crops. Picking squash, pumpkins for roadside stands. Picking apples.

NEW JERSEY: Temperatures averaged below normal. Extremes 23°; 82°. Rainfall avg. 0.01 in. north, none central, 0.08 in. south. Heaviest 24 hour total 0.20 in. on 10th, 11th. Estimated soil moisture, in percent field capacity, avg., 94% north, 87% central, 64% south. Four inch soil temperatures avg. 52° north, 55° central, 56° south. Soil moisture content is adequate overall for the State. Harvest of fall spinach, cabbage, snap beans, lettuce are active. Harvest of sweet potatoes is still active. Apple harvest remains active. Cranberry harvest is active. Some planting of cover crop small grains, harvesting of early planted corn, soybeans continues. Pasture conditions are avg. Amount of feed requirements pastures are supplying is also avg.

NEW MEXICO: Cooler temperatures were felt at night across the State with daytime temperatures remaining warm. A maximum of 96° was recorded in the southeast and a minimum of 27° in the northeast.

Days suitable for fieldwork 6.5. Soil moisture 74% short, 26% adequate. Light freeze damage in higher locations. Crop conditions: Alfalfa 13% fair, 78% good, 9% excellent. Hay harvest complete in higher locations. Corn 2% poor, 31% fair, 66% good, 1% excellent. Irrigated wheat 6% poor, 39% fair, 55% good. Dryland wheat 56% poor, 33% fair, 11% good; moisture needed. Chile 15% fair, 70% good, 15% excellent; green harvest slowing; red harvest increasing. Lettuce mostly good; harvest increasing. Apples poor to good; harvest continues. Pecans mostly good. Cattle fair to excellent. Sheep poor to excellent. Range feed condition 70% of normal.

NEW YORK: Week began cool with light rain. Rainfall up to 0.50 in. was common on 4th. Mostly dry on 5th and 6th, but temperatures continued subnormal with frost during early morning hours. Indian summer weather on 7th and 8th, temperatures peaked in 70's. Cold front moved in end of week. Temperatures dropped, rainfall fell on most of the State. Extremes: 80°; 24°.

Days suitable for fieldwork 5.8. Soil moisture mostly adequate, except short in southeastern areas. Pasture condition 87% of normal. Corn fair to mostly good condition. Grain corn harvest progressed slowly; 6% harvested, 0% 1992 due to late start caused by wetness, 9% average. Corn silage harvest in full swing; 55% completed, 39% 1992, 54% average. Hay in good condition; third cutting alfalfa 84% finished, 80% 1992, 85% avg. Potato harvest 68% completed. Dry bean harvest stalled due to wet conditions.

Apples in Lake Ontario region picking out below earlier expectations. Hail damaged fruit originally intended for fresh market diverted to processing. Apple harvest continued in full swing across the State. Cider making continued very active. Vegetable harvesting limited to late season hardy crops. Earlier frosts ended growing season for other vegetable crops.

NORTH CAROLINA: Temperatures 1 to 5° above normal. The largest positive departures were at Wilmington, Cape Hatteras. Precipitation 5.24 in. at Cape Hatteras to no rain at several locations.

Days suitable for fieldwork 6.1. Soil moisture 20% very short, 60% short, 20% adequate. Crop condition: Pasture 4% very poor, 23% poor, 60% fair, 13% good; field tobacco 12% poor, 47% fair, 41% good. Corn 13% very poor, 46% poor, 36% fair, 5% good. Cotton 10% poor, 60% fair, 30% good. Peanuts 3% very poor, 11% poor, 64% fair, 22% good. Soybeans 5% very poor, 16% poor, 60% fair, 19% good. Sweetpotatoes 10% poor, 50% fair, 37% good, 3% excellent. Apples 9% poor 61% fair, 30% good. Sorghum 20% poor, 65% fair, 15% good. Hay, roughage supplies 1% very short, 40% short, 57% adequate, 2% surplus. Apples Harvested 64%, 73% 1992, 79% avg. Flue-Cured tobacco harvested 90%, 99% 1992, 98% avg. Burley tobacco harvested 97%, 97% 1992, 96% avg. Corn for silage harvested 96%, 87% 1992, 95% avg. Corn for Grain 82%, 70% 1992, 71% avg. Sorghum for Grain 39%, 49% 1992, 49% avg. Sweetpotatoes harvested 47%, 49% 1992, 49% avg. Cotton harvested 30%, 5% 1992, 11% avg. Peanuts dug 47%, 26% 1992, 42% avg. Peanuts threshed 26%, 16% 1992, 25% avg. Cotton open bolls 99%, 96% 1992, 82% avg. Soybean drop leaf 46%, 42% 1992, 40% avg. Second cutting hay crop is 98% completed. Third cutting hay crop is 65% completed. Major activities: Harvesting, marketing tobacco; harvesting corn for grain. Other activities included: Cutting corn for silage; harvesting apples; defoliating cotton; seeding cover crops; tending livestock, general farm maintenance.

NORTH DAKOTA: Temperatures were generally cool with very little moisture over State. Temperatures 3° below normal northern tier to 1° above normal south central. Extremes 12°; 94°.

Days suitable for fieldwork 6.6. Topsoil 2% very short, 45% short, 51% adequate, 2% surplus. Subsoil 12% short, 79% adequate, 9% surplus. Small grain harvest, virtually complete, continued in the northern counties. Hard red spring wheat 97% harvested, 99% 1992, 100% avg. Durum wheat 93% harvested, 98% 1992, 100% avg. Oats 99% harvested, 100% 1992, 100% avg. Barley 98% harvested, 100% 1992, 100% avg. Intended winter wheat acres planted 87%, 93% 1992, 96% avg. Intended rye acres planted 96%, 93% 1992, 96% avg. Dry weather helped farmers make good harvest progress on late season crops. Flax 75% harvested, 84% 1992, 95% avg. Corn for grain 14% harvested, 14% 1992, 42% avg. Corn for silage 94% cut, 92% 1992, 97% avg. Dry beans 75% harvested, 73% 1992, 92% avg. Soybeans 56% harvested, 69% 1992, 83% avg. Sunflowers 2% harvested, 13% 1992, 46% avg. Potatoes 94% dug, 86% 1992, 93% avg. Sugarbeets 71% lifted, 63% 1992, 64% avg. Range, pasture feed conditions 91% of normal.

OHIO: Summer like weather highs in the upper 70s, lower 80s arrived on the 7th, 8th before a surge of Canadian air brought frost, freezing temperatures on the 10th, 11th. Daily high temperatures avg. mid 60s to 70° in the north, 70° in the south,

1 to 4° above normal across the State except in the southeast where avg. were around 1° below normal. Lows avg. in the upper 30s, 40s, 2 to 5° below normal in the north, up to 4° below normal in the central, southern areas. Coldest readings were in the upper 20s to mid 30s. Rainfall totals avg. 0.20 to 0.70 in., drier than normal by 0.20 to 0.50 in. in most areas, wetter than normal in the far west by up to 0.30 in. Soil temperatures 4 in. depth under bare ground avg. in the mid 50s to 60°.

Days suitable for fieldwork 6.2. Topsoil moisture 34% short, 65% adequate, 1% surplus. Subsoil moisture short. Processing tomatoes harvested 99%, 92% 1992, 95% avg. Potatoes harvested 91%, 79% 1992, 77% avg. Fall apples harvested 57%, 54% 1992, 54% avg. Grapes harvested 60%, 40% 1992. Sugarbeets harvested 4%. Corn harvested for silage 89%, 71% 1992, 69% avg. Pasture 7% very poor, 17% poor, 38% fair, 33% good, 5% excellent. Hay 2% very poor, 10% poor, 43% fair, 40% good, 5% excellent. Harvested corn moisture 23%. Harvested soybean moisture 13%. Ear drop, weak stalks in some corn fields due to the dry summer. Double-cropped soybeans were damaged by frost; some are being used for hay. Tobacco harvest is virtually complete. Good sugar content reported in harvested sugarbeets. Good digging conditions for potatoes.

OKLAHOMA: Temperatures 1° below normal north central to 5° below normal south central. Precipitation none Panhandle to 0.46 in. northeast.

Days suitable for fieldwork 6.5. Topsoil moisture 33% short, 64% adequate, 3% surplus. Subsoil moisture 13% short, 87% adequate. Corn 97% harvested, 89% 1992, 89% avg. Soybeans 98% setting pods, 100% 1992, 100% avg.; 56% mature, 60% 1992, 46% avg.; 22% harvested, 20% 1992, 14% avg. Peanuts 19% fair, 81% good; 60% mature, 61% 1992, 82% avg.; 17% harvested, 22% 1992, 15% avg. Alfalfa 97% 4th cut, 99% 1992, 91% avg; 41% 5th cut, 49% 1992, 32% avg. Pastures 96% of normal. Feeders steady to \$2.00 higher. Calves \$2.00 to \$6.00 lower.

OREGON: Temperatures above normal north central, elsewhere near normal. Precipitation mostly dry, exception south central 0.20 to 0.50 in., coast 0.25 to 0.50 in.

Soil moisture 30% short, 70% adequate. Barley 37% planted. 1994 winter wheat crop 75% planted, 36% emerged. Willamette Valley red clover, sugarbeets seed crop harvests continued, field corn silage harvest underway. Columbia Basin field corn for grain, silage harvest underway. Malheur & Klamath Co. sugarbeets harvest underway. Garlic planting underway, central areas. Potato, onion harvest continued, statewide. Willamette Valley cole crops, sweet corn harvests continued. Hood River Valley Bosc, Anjou picking continued, Red, Golden Delicious harvest underway. Willamette Valley apple harvest continued; hazelnuts falling, harvest set to begin; strawberry, caneberry fields being prepared for winter. Cranberry harvest continued, southern coast. Livestock good to excellent. Range, pasture conditions 90% of normal. Weaning, pre-conditioning, hauling calves to market.

PENNSYLVANIA: Temperature 58°, same as normal. Extremes 21°; 81°. Precipitation 0.18 in., 0.58 in. below normal.

Days suitable for fieldwork 6. Soil moisture 6% short, 91% adequate, 4% surplus. Ensilage corn harvested 75% complete, 41% 1992. Soybean harvest 10% complete, 6% 1992. Soybean crop condition 4% very poor, 6% poor, 27% fair, 51% good, 12% excellent. Potato harvest 78% complete, 77% 1992. Fall plowing

74% complete, 64% 1992. Wheat planted 60% complete, 62% 1992. Barley planted 78% complete, 75% 1992. Third cutting alfalfa 95% complete, 80% 1992. Fourth-cutting alfalfa 63% complete, 55% 1992. Quality of hay made 4% poor, 47% fair, 49% good. Feed from pastures good to excellent. Apple harvest 74% complete, 62% 1992. Grapes harvest 72% complete, 68% 1992. Activities: Making hay, filling silos; plowing; planting wheat, barley; planting winter cover crops; harvesting fruits, vegetables; harvesting corn silage; harvesting corn; cleaning, storing, repairing equipment; hauling manure; fixing fence; caring for livestock.

PUERTO RICO: Island rainfall of 1.14 in. was 0.69 in. below normal. The highest weekly total rainfall was 6.02 in. at San Sebastian followed by 5.90 in. at Maricao 2SSW, 3.51 in. at Coloso. The highest 24 hour total was 2.70 in. at San Sebastian. At WSFO San Juan Mean temperature was 83.1 which is 1.1° above normal. San Juan rainfall 0.59 in. which is 0.74 in. below normal. Island temperatures 80° on the coasts, 76 to 78° in the Interior with Mean Station Temperature ranging from 84.1° at Guayama to 73.7° at Adjuntas Aes. Extremes 58°, 94°.

SOUTH CAROLINA: Mild conditions prevailed throughout early part of period. As week progressed, frontal boundary to south of state provided clouds, small amounts of rainfall. Late in week, weak frontal system moved into State allowing scattered showers, thunderstorms to develop. Heaviest amount 1.35 in. Daily temperatures avg. 3° above normal. Statewide rainfall avg. 0.20 in.

Days suitable for fieldwork 6.1. Soil moisture 30% very short, 51% short, 19% adequate. Corn very poor to poor; 96% harvested, 93% 1992, 91% avg. Sorghum poor; 56% harvested, 56% 1992, 55% avg. Soybeans 14% very poor, 31% poor, 39% fair, 16% good; 56% leaves turning, 61% 1992, 60% avg.; 26% dropping leaves, 19% 1992, 26% avg.; 12% mature, 9% 1992, 15% avg.; 2% harvested, 1% 1992, 0% avg. Cotton 5% very poor, 68% poor, 26% fair, 1% good; 39% harvested, 8% 1992, 22% avg. Tobacco fair; 98% harvested, 100% 1992, 100% avg.; 77% stalks destroyed, 88% 1992, 79% avg. Sweetpotatoes fair; 45% harvested, 44% 1992, 50% avg. Fall hay poor to fair; 73% harvested, 84% 1992, 80% avg. Apples fair to poor; 78% harvested, 81% 1992, 85% avg. Pecans fair. Pasture 28% very poor, 43% poor, 26% fair, 3% good.

SOUTH DAKOTA: Temperatures ranged 5° below normal to 3° above normal. Extremes 7°, 98°. Showers, thunderstorms prevailed over much the east, while the first snow of the season fell across parts of the west late last week. Rainfall ranged from near 1.00 in. across the extreme southeast, to 0.25 to 0.50 in. over the south and east, with less than 0.25 in. in the central and north. Maximum: 1.35 in.

Days suitable for fieldwork 5.6. Topsoil moisture: 2% very short, 21% short, 64% adequate, 13% surplus. Subsoil moisture: 2% very short, 21% short, 57% adequate, 20% surplus. Sunflowers 2% poor, 20% fair, 73% good, 5% excellent. Winter wheat 16% fair, 68% good, 16% excellent. Winter rye 24% fair, 61% good, 15% excellent. Flax 89% harvested, 77% 1992, 100% avg. Sorghum 69% silage harvested, 57% 1992, 78% avg. Corn 73% silage harvested, 77% 1992, 79% avg. Sunflowers 20% harvested, 23% 1992, 50% avg. Warm weather early in the week, a statewide frost late in the week moved row crops closer to harvest. The corn, sorghum harvest was moving at a slow pace while the soybean, sunflower harvest made good

progress. Most areas are waiting for the corn crop to dry down more before harvesting. Livestock: 2% fair, 78% good, 20% excellent. Pasture conditions 91% of normal. Cattle were being moved to fall pastures.

TENNESSEE: Temperatures below normal by 2 to 5° in the east and 1 to 2° in west. Precipitation was below normal with east receiving nearly 0.50 in. of rain, the west receiving only 0.10 in. during the week.

Days suitable for fieldwork 6.2. Soil moisture 6% very short, 45% short, 49% adequate. Corn 65% grain harvested, 61% 1992, 64% avg. Cotton 100% open bolls, 94% 1992, 94% avg.; 37% harvested, 17% 1992, 34% avg.; 35% poor, 53% fair, 12% good. Sorghum 87% harvested, 66% 1992, 67% avg. Soybeans 70% dropping leaves, 61% 1992, 63% avg.; 37% mature, 29% 1992, 34% avg.; 9% harvested, 7% 1992, 8% avg.; 2% poor, 48% fair, 50% good. Tobacco 95% burley harvested, 98% 1992, 97% avg.; 9% burley stripped, 13% 1992, 15% avg.; 97% dark air harvested, 100% 1992, 96% avg.; 97% dark fire harvested, 98% 1992, 97% avg. Wheat 16% seeded, 18% 1992, 19% avg. Excellent week for harvests. Tobacco harvest winding down, soybeans picking up. Cotton and corn for grain harvests made good progress as well. Additional moisture is needed for fall seedings to resume, for good wheat germination. Cattle are in good condition. There is still some late hay being cut, but majority is in barns. Some cattle producers are grazing hay fields.

TEXAS: Quite warm, dry weather was rule over Texas early to middle portions of week. Rather strong cold front moved in late in week bringing much cooler temperatures. First freeze of season was recorded at Dumas and Amarillo. Moisture was limited with front and rainfall was restricted mainly to eastern and coastal areas of State. However, some heavy rains developed over northeast, east central counties. For week, temperatures avg. slightly below normal on Southern High Plains, Low Plains with near normal readings recorded elsewhere. Rainfall amounts were below normal except for near normal totals in East Texas.

Crops: Corn: Harvest was winding down in Northern High Plains. Statewide corn condition 77% normal, 88% 1992. Cotton: Producers were busy applying harvest aid chemicals in High Plains where early harvest is progressing well. Disappointing dryland yields were being reported in Low Plains where lack of moisture has affected yields. Harvest in Blacklands continued to make rapid progress while harvest was winding down in South Central Texas. Statewide cotton condition 78% normal, 64% 1992. Rice: Second crop of rice looks good. Fertilizer was applied to some fields. Grain Sorghum: Harvesting continued to make good progress last week. Harvesting active in High, Low Plains. Harvest winding down in Cross Timbers, Edwards Plateau. Statewide grain sorghum condition 83% normal, 78% 1992. Small grains: Planting was active across most of State last week. Entire state could use some rain to insure germination, good stand development for wheat pastures. Army worms still problem in some fields in Blacklands. Small grains made good progress where soil moisture was adequate. Statewide wheat condition 68% normal, 58% 1992. Peanuts: Harvest continued in many areas of State. Dry land crop remained in need of moisture in Cross Timbers, where some fields were baled for hay. Some dry land fields in South Central Texas also had a poor potential for harvest. Statewide peanut condition 71% normal, 82% 1992. Soybeans: Producers continued to harvest fields in High Plains, while harvest was winding down in Blacklands. Yields were disappointing along Upper Coast.

Commercial Vegetables, Fruit and Pecans: Rio Grande Valley tomato, onion and pepper crops made good progress with only minor insect problems. Some onion fields were planted. Cucumber harvest continued. San Antonio-Winter Garden cabbage crop continued to make good progress. Some fields of spinach were planted. East Texas sweet potato harvest continued, but yields continue to be disappointing. Harvesting of pumpkins, watermelons continued. High Plains pepper, pumpkin harvest continued. Trans-Pecos watermelon harvest virtually complete. Pecans: Harvesting increased slowly across State as producers were primarily harvesting early varieties.

Range and Livestock: Ranges, pastures were in need of rain across State. Hay supplies continued to be short in many areas and grazing has become limited due to dry conditions. Horn flies a problem in some areas of State. Livestock remained in good condition across most of State.

UTAH: Temperature maximums 2 to 3° above normal, minimums 4 to 5° above normal. Precipitation was light in the west, heavy across the rest of the State.

Days suitable for fieldwork 5.0. Soil moisture 11% short, 81% adequate, 8% surplus. Stock water supply 96% adequate, 4% surplus. Winter wheat seeded 88%, 90% 1992, 88% avg.; emerged 69%, 58% 1992, 49% avg. Corn mature 70%, 99% 1992; harvested for grain 10%, 48% 1992, 31% avg.; harvested for silage 77%, 96% 1992. Alfalfa hay 4th cutting 57% complete, 91% 1992, 77% avg. Apples picked 34%, 95% 1992, 73% avg. Potatoes harvested 59%, 94% 1992, 77% avg. Onions harvested 73%, 96% 1992. Cattle moved from summer range 68%, 85% 1992, 67% avg. Sheep moved from summer range 73%, 85% 1992, 74% avg. Pasture, range good to excellent.

VIRGINIA: Temperatures near to slightly below normal. Extremes 30°; 90°. Precipitation was isolated.

Days suitable for fieldwork 6.2. Topsoil moisture was 6% very short, 63% short, 31% adequate. Pasture condition rated 5% very poor, 37% poor, 35% fair, 21% good and 2% excellent. Corn silage harvested 91%, 86% 1992, 90% avg. Corn harvested for grain 70%, 60% 1992, 61% avg. Soybean condition 6% very poor, 53% poor, 39% fair and 2% good. Soybeans harvested 10%, 5% 1992 and 5% avg. Cotton defoliation, picking continued. Cotton harvesting 27% completed, 10% avg. Peanuts dug 61%, 33% 1992, 62% avg. Peanuts combined 43%, 15% 1992, 47% avg. Flue tobacco 93% harvested, 98% 1992, 93% avg. Fire tobacco 99% harvested, 100% 1992, 100% avg. Burley tobacco 98% harvested, 100% 1992, 98% avg. Sweetpotato harvest about 87% completed. Fall apples 67% harvested. Fruit size smaller than normal. Winter wheat 14% seeded, 13% 1992, 13% avg. Oats 42% seeded, 48% 1992, 49% avg. Barley 37% seeded, 33% 1992, 33% avg. Livestock condition mostly fair to good. Late pasture growth good. Harvesting vegetables.

WASHINGTON: Temperatures 1° below normal to 4° above normal west; 1° above normal to 7° above normal east. Precipitation 0.03 in. to 0.34 in. west; none to 0.13 in. east. Mostly warm, dry weather dominated the State last week. No station went below freezing.

Days suitable for fieldwork 6.8. Soil moisture 16% short, 84% adequate. Irrigation water supply 19% short, 81% adequate. Hay, other roughage 6% short, 92% adequate, 2% surplus. Range, pasture 1% poor, 74% fair, 25% good. Winter wheat dryland 10% fair, 50% good, 40% excellent; irrigated 100% good. Barley dryland 80% good, 20% excellent; irrigated 100% good. Potatoes, and dry beans, 100% good. Corn 2% fair and 98% good. Fall grain seeding continued with many areas becoming increasingly concerned with the lack of fall moisture.

Corn grain harvest began. Alfalfa harvest was completed in most areas. Christmas tree operations were busy preparing for the upcoming season. Apples were being picked. Grape harvest was still being delayed by maturity problems in many areas. Pumpkin harvest was underway in most areas. Fall gathering of cattle was well underway.

WEST VIRGINIA: Temperature 56°. Extremes 31°, 83°. Precipitation avg. 0.38 in.

Days suitable for fieldwork 5.0. Soil moisture, 40% short, 60% adequate. Tobacco, 95% harvested. Hay; 95% 3rd cut. Pastures, 8% very poor, 15% poor, 49% fair, 28% good; 76% of normal. Cattle, 35% fair, 65% good. Sheep, 29% poor, 31% fair, 40% good. Apples, poor to fair. Corn, 7% poor, 25% fair, 68% good; 55% harvested. Soybeans, 10% fair, 90% good; 76% dropping leaves, 20% harvested. Farm activities: Moving livestock, feeding livestock, cutting hay, stripping tobacco, chopping silage, harvesting corn, harvesting apples, sowing barley, sowing wheat, general maintenance.

WISCONSIN: Temperatures were near normal, but only because the beginning of the week was warm while the end of the week was cold. Temperature 1 to 49° below normal. Extremes 18°; 87°. Precipitation 0.30 to 0.90 in.

Days suitable for fieldwork 6.0. Soil moisture: 73% adequate, 27% surplus. Pasture condition: 84% of normal, 75% 1992, 72% 5-yr avg. General condition of crops: 3% poor, 36% fair, 60% good, 1% excellent. Corn condition: 1% very poor, 8% poor, 40% fair, 50% good, 1% excellent. Dent stage or beyond, 77%, 77% 1992. Mature 42%, 38% 1992, 77% 5-yr avg. Corn for grain 4% harvested, 2% 1992, 18% 5-yr avg. Silo filling 44% complete, 42% 1992, 72% 5-yr avg. Soybean condition: 4% poor, 21% fair, 66% good, 9% excellent. Soybeans with leaves shedding 88% 1993, 58% 1992, 88% 5-yr avg. Harvested 15%, 8% 1992, 22% 5-yr avg. Fall tillage 15% complete, 12% 1992, 18% 5-yr avg. Farmers had a good week for harvesting soybeans, corn for silage. The warm, windy conditions helped dry out fields, remove moisture from the crops. Overall, crop conditions continue to be in good condition. The corn crop benefited from the good weather as some farmers wait for their crop to dry enough to harvest for grain. Corn silage harvesting was in full swing this past week. The weather also helped dry down the soybean crop. Comments have indicated that harvesting is progressing very rapidly, yields are favorable. There were reports of alfalfa being harvested for dry hay last week. Comments suggest that forage supplies are more than adequate, but grain supplies will be short. Farmers finished planting their winter wheat, rye.

WYOMING: Temperatures were generally near normal to above normal across the State, ranging from 1° below normal in Powell to 5° above normal in Afton. Precipitation was above normal in all parts of the State except the Northeast. Sheridan, Worland reported the largest amounts with 1.61 and 1.28 in. respectively.

Days suitable for fieldwork 3.7. Topsoil moisture 15% short, 60% adequate, 25% surplus. Spring wheat 97% harvested, 100% 1992, 100% avg. Oats 98% harvested, 100% 1992, 100% avg. Barley 98% harvested, 100% 1992, 100% avg. Winter wheat planted for harvest in 1994 99%, 99% 1993, 98% avg.; emerged 79%, 86% 1993, 79% avg. Winter wheat planted for harvest in 1994 46% fair condition, 54% good condition. Corn silage harvested 91%, 90% 1992, 95% avg. Dry beans combined 56%, 90% 1992, 88% avg. Sugarbeets harvested 33%, 34% 1992, 36% avg. Cattle and calves moved from summer ranges 56%, 63% 1992. Sheep, lambs moved from summer ranges 58%, 69% 1992. Stock water supplies 100% adequate or surplus, 54% 1992. Hay, roughage supplies 97% adequate or surplus, 60% 1992.

International Weather and Crop Summary HIGHLIGHTS

October 3 - 9, 1993

FSU: In western areas, mostly dry weather favored crop harvesting and winter grain planting. In the New Lands, drier weather improved conditions for spring grain harvesting.

EUROPE: More wet weather hampered fieldwork in the west, while mostly light showers promoted winter crop planting in the east.

SOUTH ASIA: The monsoon continued its seasonal withdrawal, providing warm, dry weather for maturing summer crops in the north and showers in the southern interior for fall planting.

EASTERN ASIA: Dry weather favored summer crop maturation and harvesting across most of China. Tropical Storm Flo brought additional heavy rain to Japan.

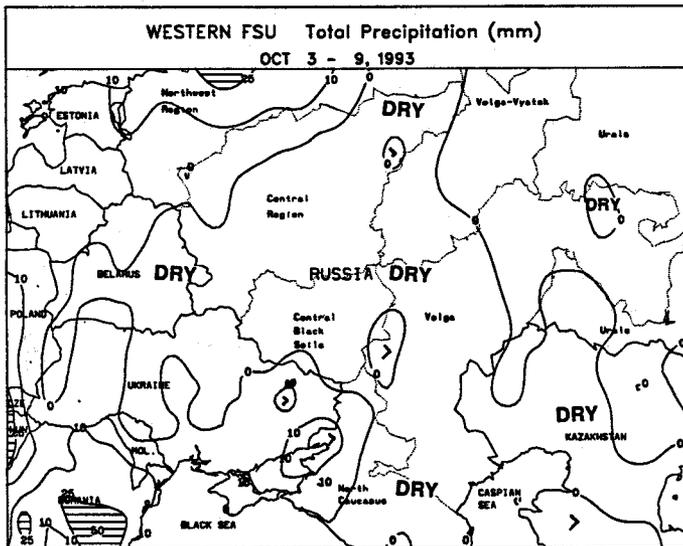
SOUTHEAST ASIA: Typhoon Flo caused crop damage in Luzon, Philippines. Seasonably drier weather developed over Thailand.

AUSTRALIA: Timely rains continued to favor vegetative to reproductive wheat across the eastern grain regions.

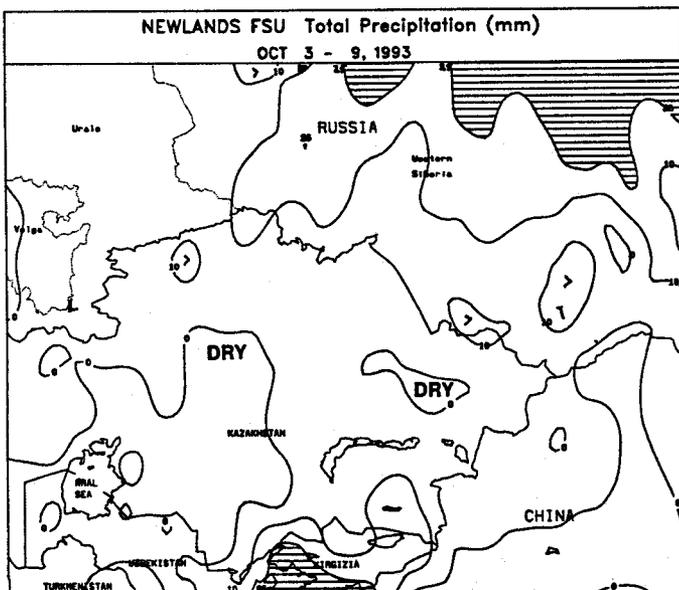
SOUTH AMERICA: Rains caused some fieldwork delays across southern Brazil, while dry weather prompted early summer crop planting across Argentina.

MEXICO: Drier weather favored maturing summer grains and winter grain planting.

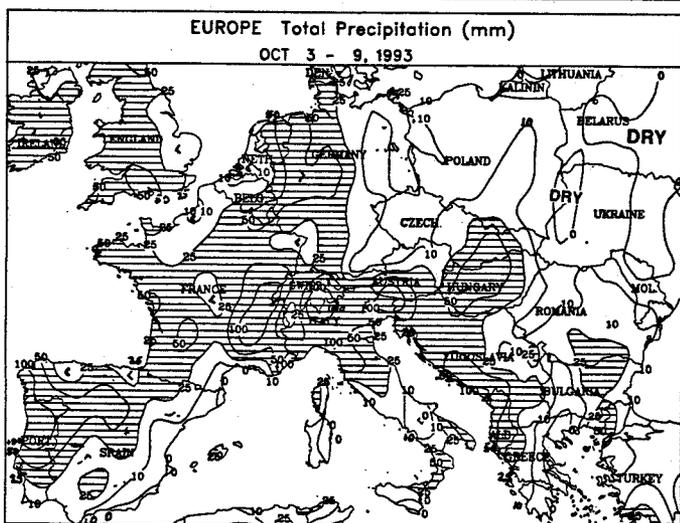
CANADA: Cold, dry weather aided Prairie harvest progress.



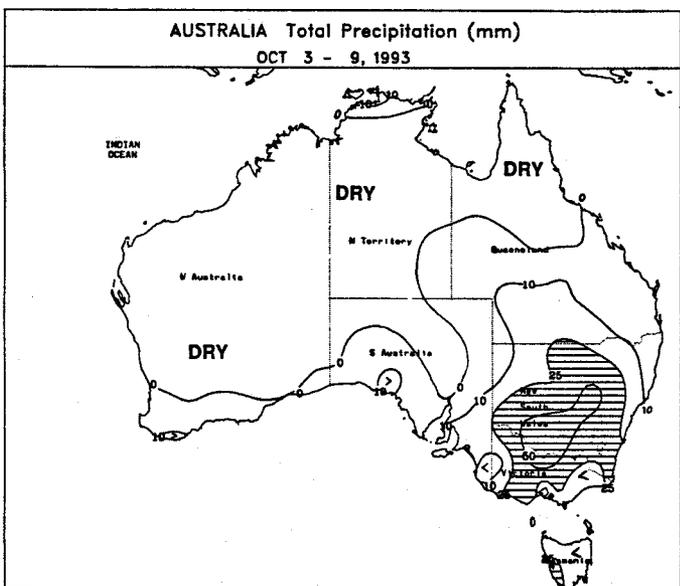
FSU-WESTERN: Little, if any, precipitation covered Russia, Ukraine, Belarus, Moldova, and the Baltic States, improving conditions for crop harvesting and late-winter grain planting. In Russia, dry weather favored corn harvesting in the south and allowed late-spring grain harvesting in the north. The potato and sugar beet harvests also benefited from this past week's dryness. As of October 4, reports indicated the potato harvest was about 62 percent complete, while the sugar beet harvest was about 43 percent complete. In Ukraine, the small grain harvest was virtually complete, while the corn harvest was just beginning. As of October 4, reports indicate the corn harvest was about 8 percent complete, compared with 17 percent last year. Winter grain planting was nearing completion, and rain is needed in the southern Ukraine for germination. Weekly average temperatures over the region were 1-2 degrees Celsius (C) above normal in the north and 1-2 degrees C below normal in the south. Although winter grains were cold hardening in the north, vegetative growth continued.



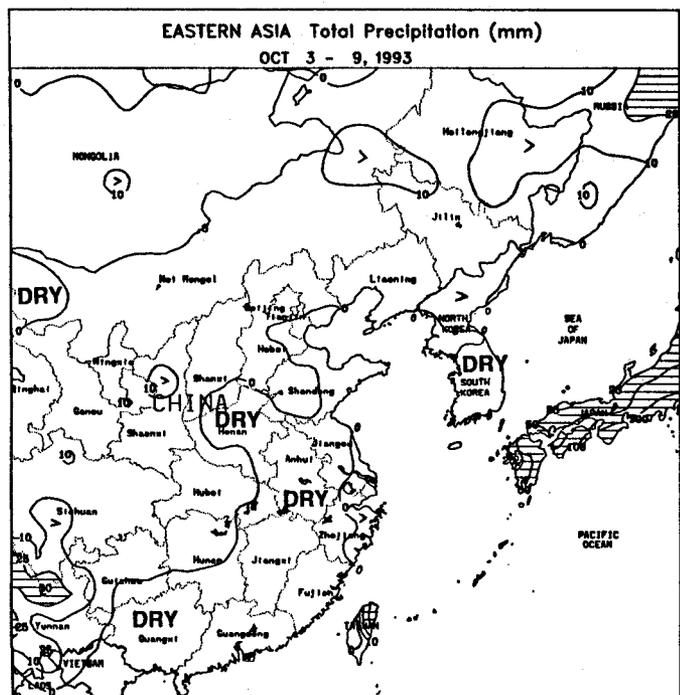
FSU-NEW LANDS: Early-week light precipitation (1-10 mm) was followed by welcomed drier weather over the Urals, Kazakhstan, and the southern portion of Western Siberia, improving conditions for spring grain harvesting. In contrast, light precipitation (10-25 mm) persisted throughout the week in northern areas of Western Siberia, and parts of Eastern Siberia. As of October 4, reports indicated the grain harvest, excluding corn, was 82 percent complete, about 8 percentage points behind last year's pace. Usually, the spring grain harvest is nearing completion by early October. However, cold, wet weather in September in major spring grain producing areas delayed the harvest, lodged crops, reduced crop quality, and lowered crop yields. Average temperatures were near normal in the north and 1-2 degrees C below normal in the south. In cotton areas of Central Asia, wet, cold weather in eastern Uzbekistan, Tajikistan, and Kyrgyzstan slowed boll maturation and interrupted harvesting.



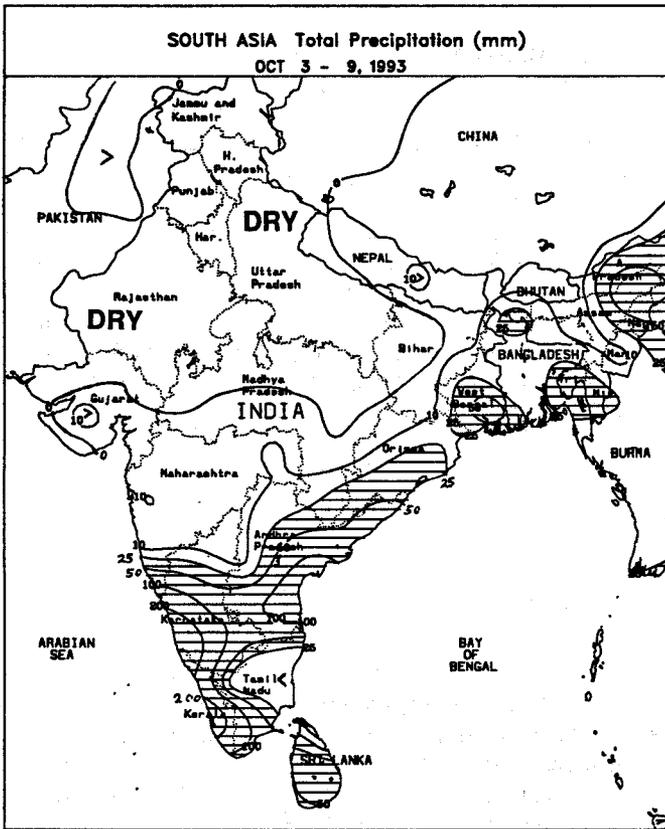
EUROPE: Rainfall averaged well above normal over much of the Iberian peninsula, France, northern Italy, England, western Germany, Hungary, and along the Adriatic region of the former Yugoslavia. Amounts generally ranged from 25 to 100 mm, with 100-200 mm amounts in northern Portugal, southeastern France, and the Alpine region of northern Italy. Corn and sugar beet harvesting and winter crop plantings were delayed by wetness in western Europe. However, the rain boosted soil moisture for the winter grain planting season in the Iberian peninsula, and in Hungary where summer drought stressed developing crops. Rainfall diminished in both northeastern and extreme southeastern Europe. Variable rain (1-20 mm) in Poland, the Czech Republic, and Romania brought some beneficial topsoil moisture for winter crop emergence. The showers were also needed in Bulgaria, but in Greece, moisture was limited mostly to western portions of the country. Temperatures averaged 2-4 degrees C below normal in the Iberian peninsula, and 2-4 degrees C above normal in eastern Europe. Minimum temperatures stayed well above freezing throughout Europe.



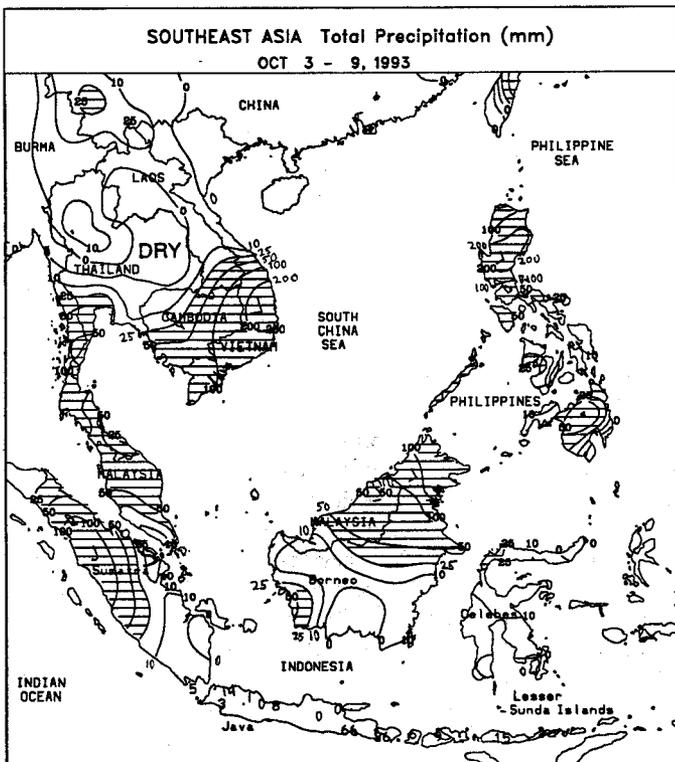
AUSTRALIA: Widespread light to moderate rains (10-60 mm) covered the eastern wheat growing areas of Queensland, New South Wales, and Victoria, benefiting vegetative to reproductive winter wheat. Timely rain since early September has greatly improved wheat yield prospects across this region. Light rain (1-13 mm) fell across most of South and Western Australia, where soil moisture should still be adequate for winter grains. Temperatures averaged 1-2 degrees C below normal across the west and 1-2 degrees C above normal across the southeast.



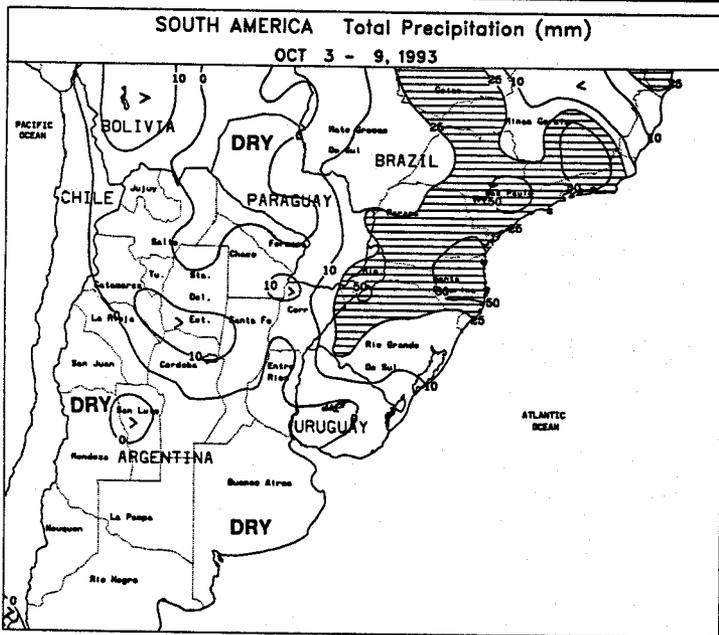
EASTERN ASIA: Dry weather stretched from Beijing to Hong Kong, favoring summer crop maturation and harvesting, especially across the southern rice areas. Manchuria received scattered rain (5-20 mm) slowing harvesting. Freezing temperatures were scattered across southern Manchuria (Liaoning and Jilin). The growing season has already ended in the north (Heilongjiang) due to last week's freeze, but some areas in the south still have not received a killing freeze. Temperatures averaged 1-3 degrees C above normal across the northern two-thirds of China, aiding the dry down of summer crops. The southern third of China reported average temperatures 1-3 degrees C below normal. Dry, warm weather favored rice harvesting across South Korea. Tropical Storm Flo remained offshore of Japan, but still helped to produce moderate to heavy rain (50-140 mm, with isolated amounts greater than 200 mm) across the coastal areas of southern and central Japan, causing flooding and delaying rice fieldwork. The cool summer temperatures, especially across northern Japan, sterilized rice during reproduction. This prompted the U.S. Department of Agriculture to further decrease its official estimate of Japan's milled rice production to 7.5 million metric tons (22 percent reduction from last year).



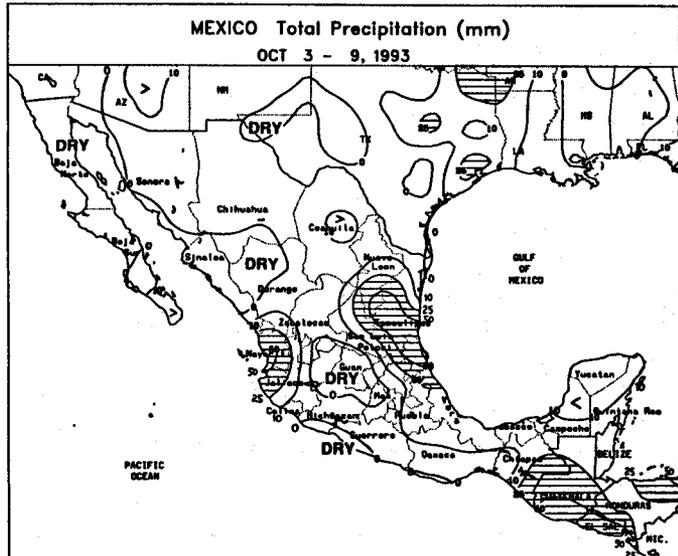
SOUTH ASIA: The southwest monsoon continued its withdrawal, providing warm, dry weather to maturing summer crops across central and northern India and Pakistan. Showers over India's eastern rice areas were widely scattered, with just a few locations reporting more than 50 mm. Normally the monsoon is completely withdrawn from central and eastern India by mid-October, and this year's progress appears to be on schedule. In contrast, moderate to heavy rain (20-80 mm, with some coastal locations receiving 100-200 mm or more) covered the interior of southern India, with heaviest accumulations over Karnataka and southern Andhra Pradesh. This week's rainfall, the heaviest yet for newly planted rabi grains, oilseeds, and cotton, is representative of the expected seasonal increase as the monsoon becomes re-established over southern India.



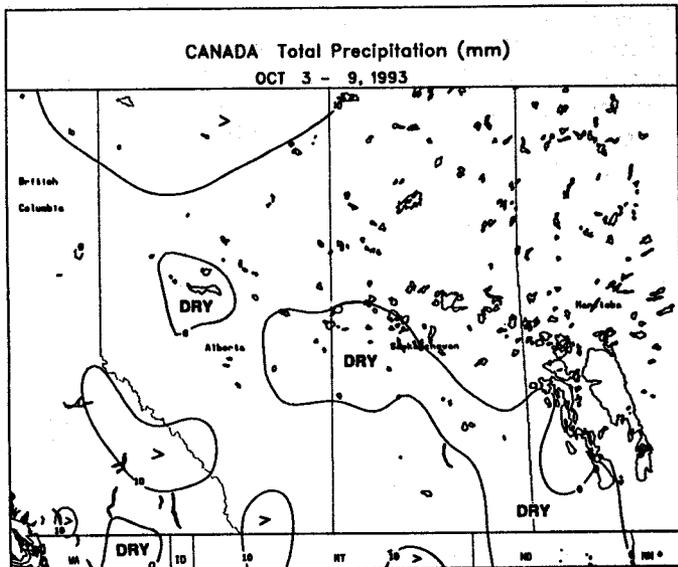
SOUTHEAST ASIA: Typhoon Flo hit eastern Luzon, Philippines on October 4, with sustained winds of 65 knots. Flo moved very slowly westward, taking about 24 hours to reach the western coast, then turned sharply to the northeast, taking another day to exit the northern coast just west of the Cagayan Valley. Inundating rains (100-300 mm) and strong winds over the 2-day period damaged rice, corn, and sugarcane at varying stages of development. Further west, seasonably drier weather dominated Thailand's rainfed grain areas, with only isolated reports exceeding 25 mm. However, heavy showers (50-100 mm or more) fell over peninsular Thailand and southern Vietnam, boosting irrigation for dry-season rice, but causing some flooding. Inundating rains (100-300 mm) occurred early in the week along Vietnam's southern coast, caused by a tropical low-pressure system which hit the northern Philippines, but brought only moderate showers (10-25 mm or more). Showers were highly variable (10-100 mm) over Malaysia's oil palm and rice areas and mostly light in Java.



SOUTH AMERICA: In southern Brazil, early-week showers (20-80 mm) spread from Rio Grande do Sul northward into Sao Paulo, continuing to boost soil moisture levels, but causing summer crop planting delays. However, dry weather prevailed late in the week, allowing some fieldwork to resume. The recent wet weather also aided sugarcane, coffee, and cotton in Parana and Sao Paulo. Scattered showers benefited germinating soybeans and corn across Mato Grosso do Sul, Mato Grosso, and Goias. In Argentina, mostly dry weather allowed early-summer crop planting to progress. Minimum temperatures ranged from 1 to -2 degrees C across southern Buenos Aires, burning back vegetative wheat. Temperatures averaged 1-3 degrees C above normal across central Argentina and near normal across southern Brazil.



MEXICO: Drier weather prevailed across central and northwestern Mexico, favoring corn maturation and wheat planting. Light to moderate showers (13-80 mm) aided sugarcane and flowering coffee across east-central Mexico. Scattered showers (10-30 mm) favored vegetative corn across the Yucatan Peninsula.



CANADA: Cold, mostly dry weather covered the Prairies, allowing fieldwork to progress. In fact, grain and oilseed harvest progress nearly doubled from the previous week to about 60 percent complete, as indicated in last week's provincial wheat pool reports. Temperatures averaged 2-4 degrees C below normal over Saskatchewan and Manitoba, with bitter cold (-7 to -10 degrees C) reported at nearly all locations. These extremes raised concern for unharvested canola, which was at risk of pod-shattering. Further east, drier, milder weather covered Ontario, favoring maturing summer crops and aiding winter wheat planting.

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(Continued from front cover)

Storm Norma), while cold air plunged into the northern Rockies. Rainfall neared 4 inches in Scottsdale, AZ, and surpassed an inch in Phoenix, AZ. Salt Lake City, UT endured its wettest October day on record with a 1.53-inch deluge on October 7. Heavy rain also drenched southern Florida, which remained underneath a rich flow of tropical energy during most of the week. In the northern Plains and northern Rockies, rain changed to snow on Thursday, accumulating to a depth of 8 inches in Billings, MT. At high elevations, heavy snow was reported as far south as the Wasatch Range, where more than 1 foot fell at Alta, UT. Farther east, selected snowfall totals by late Friday included 10 inches at Sheridan, WY, 4 inches in Chadron, NE, and 1 inch in Rapid City, SD. As the storm shifted eastward, rain spread through the Corn Belt, often totaling an inch or more. Rainfall in Columbia, MO (1.11 inches) and Waterloo, IA (1.46 inches) was enough to make 1993 the wettest year on record at both stations. The previous wettest year on record in Columbia was 1985 (55.37 inches), and in Waterloo was 1965 (50.79 inches). By week's end, cold air plunged through the Plains and the Corn Belt. On Saturday morning, sub-freezing temperatures were reported northwest of a line extending roughly from southeastern Colorado to northern Michigan. Temperatures dropped quickly across the Midwest on Saturday night, en route to a freeze that would cover all but the southern Corn Belt on October 10.

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