

# 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

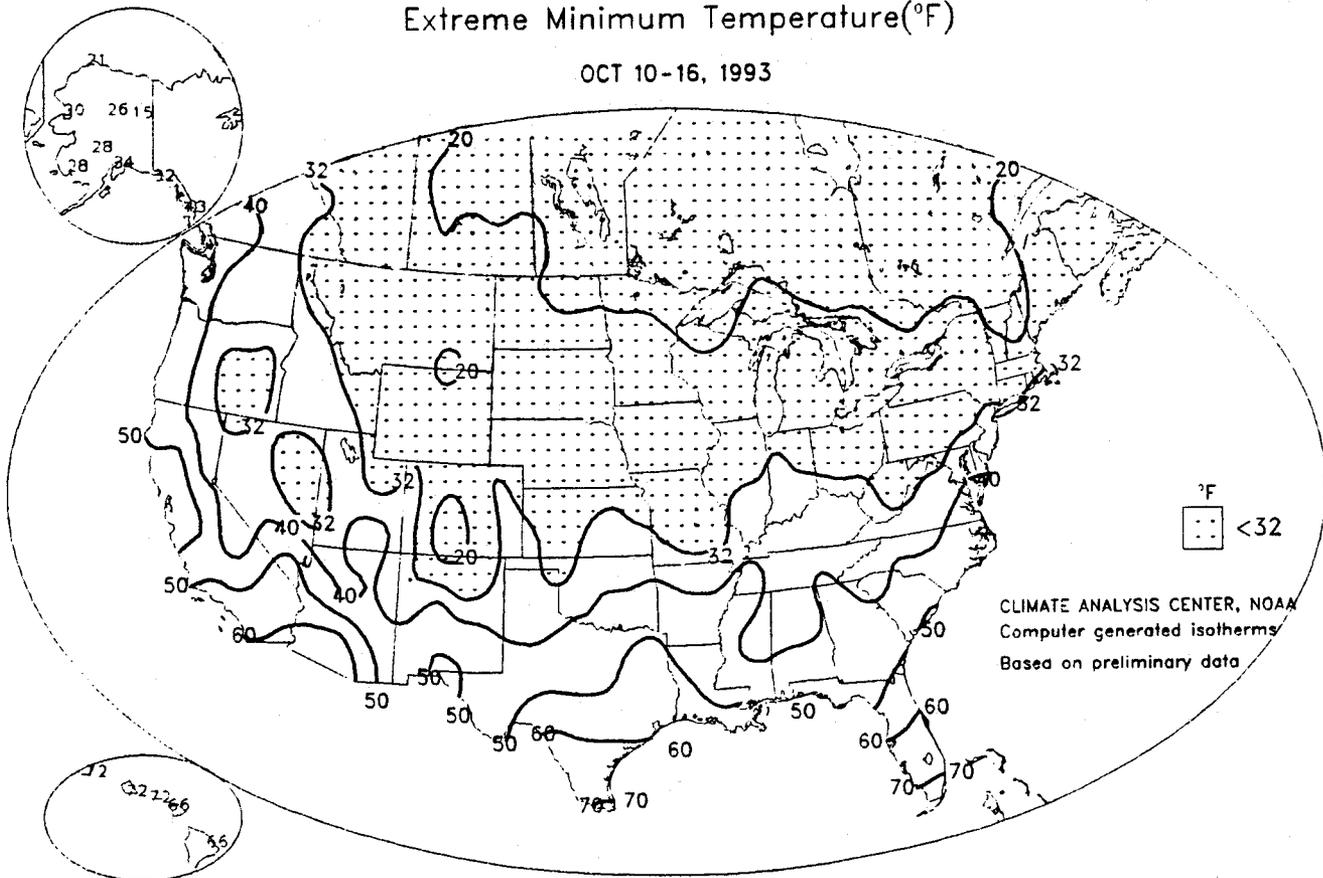
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Washington, D.C.

October 19, 1993

## Extreme Minimum Temperature(°F)

OCT 10-16, 1993



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

## HIGHLIGHTS

October 10 - 16, 1993

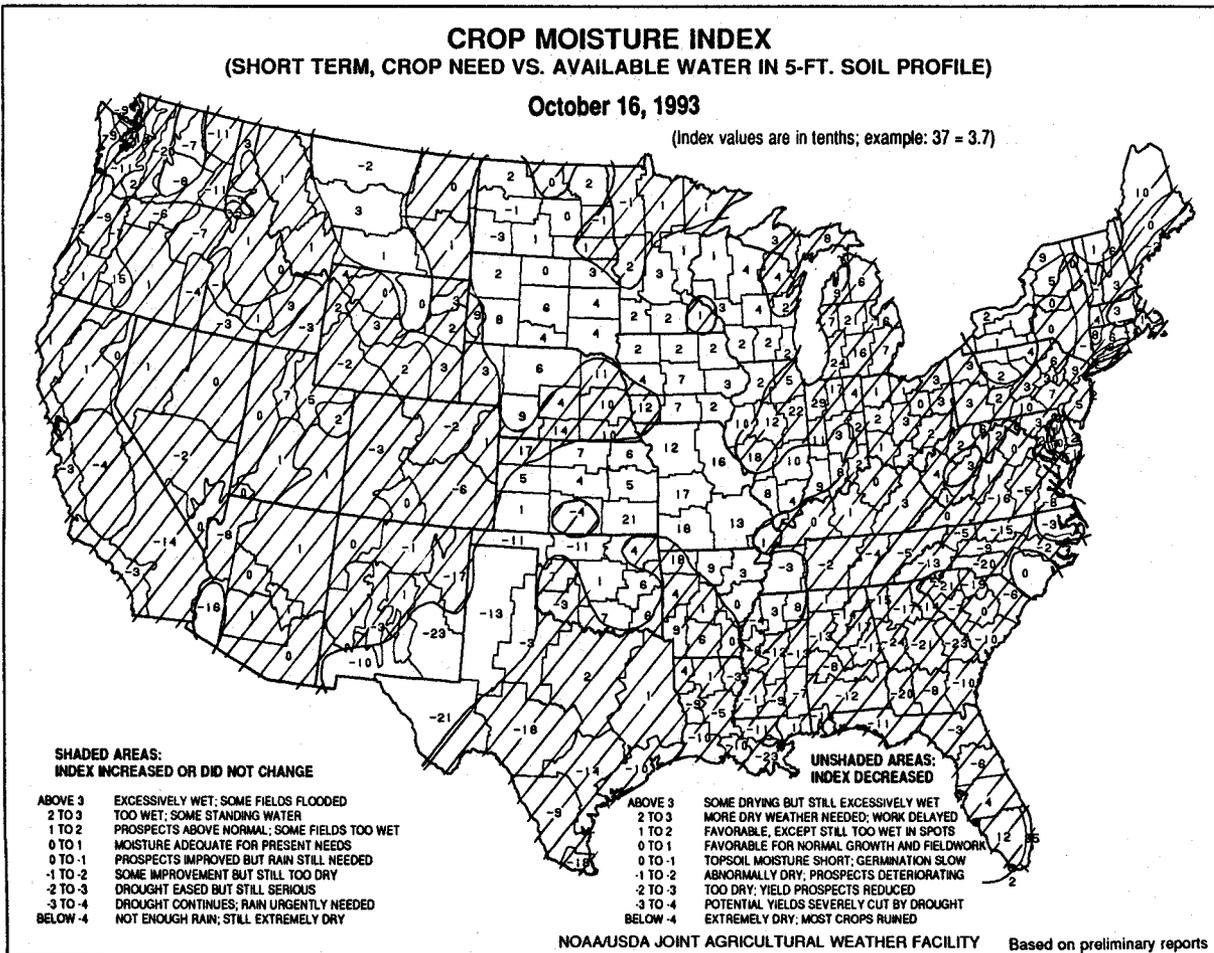
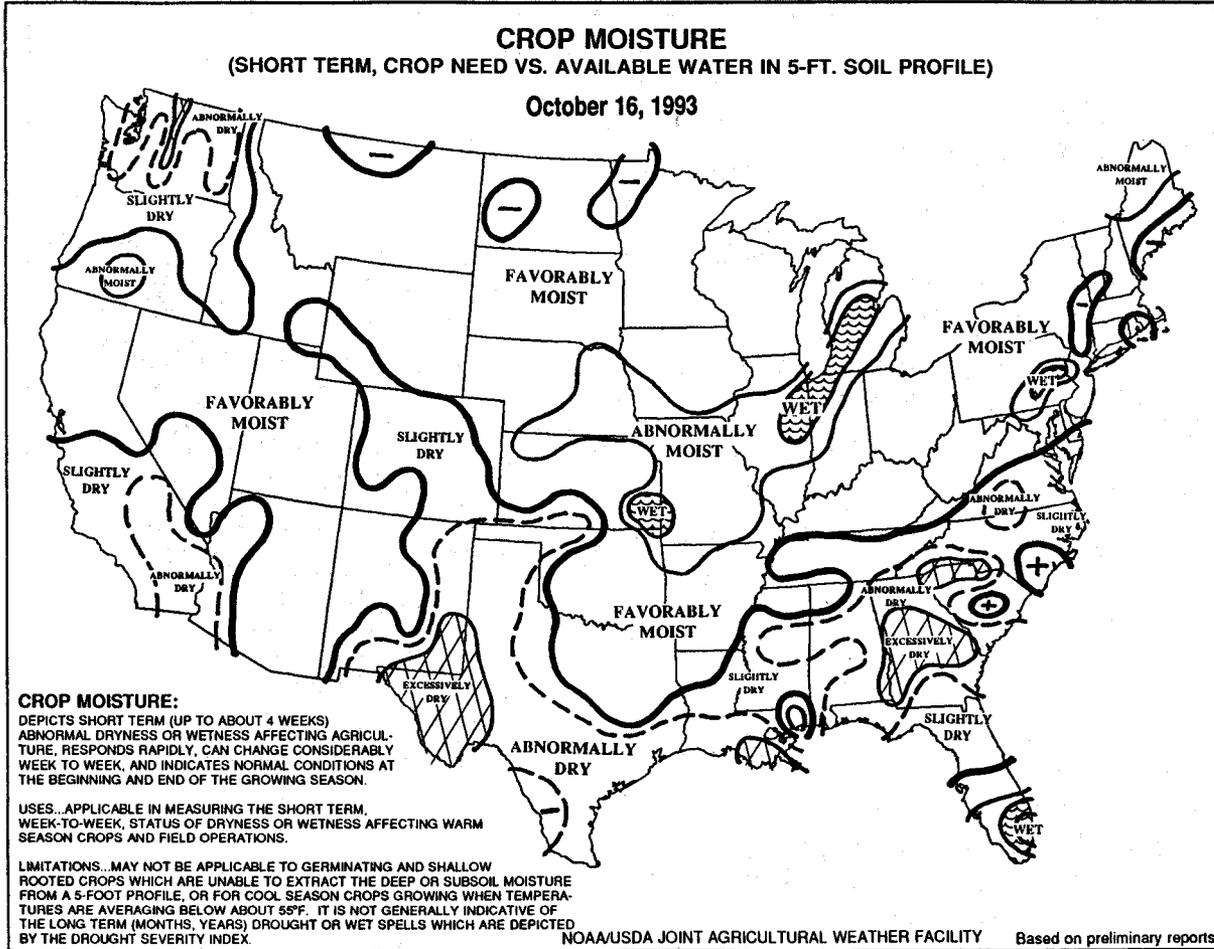
After an early-week freeze that ended the growing season across much of the Corn Belt, a warmer, stormier pattern evolved across the United States. Temperatures slipped below freezing on Sunday morning as far south as Jefferson City, MO, Springfield, IL, and Dayton, OH. A hard freeze (28°F or below) struck areas north of a line from eastern Nebraska to southern Michigan. A day later, eight Northeastern cities broke or tied daily record lows, including Concord, NH (18°F). A secondary surge of cold air dropped temperatures across the Northeast again at midweek, resulting in an additional 20 daily records. Concord again noted 18°F, while Rochester, NY reported 24°F. Meanwhile, a moist, mild fetch of sub-tropical energy rushed northeastward into the Western and Southern States, touching off widespread showers. More than 2 inches of rain fell in Redding, CA, while nearly 3 inches drenched Santa Rosa, CA. Farther east, heavy rain developed on Tuesday in the eastern half of Texas—where Dallas-Ft. Worth reported 2.03 inches and Brownsville collected 3.79 inches—before spreading across the Mississippi Delta at midweek. Late in the week, showery,

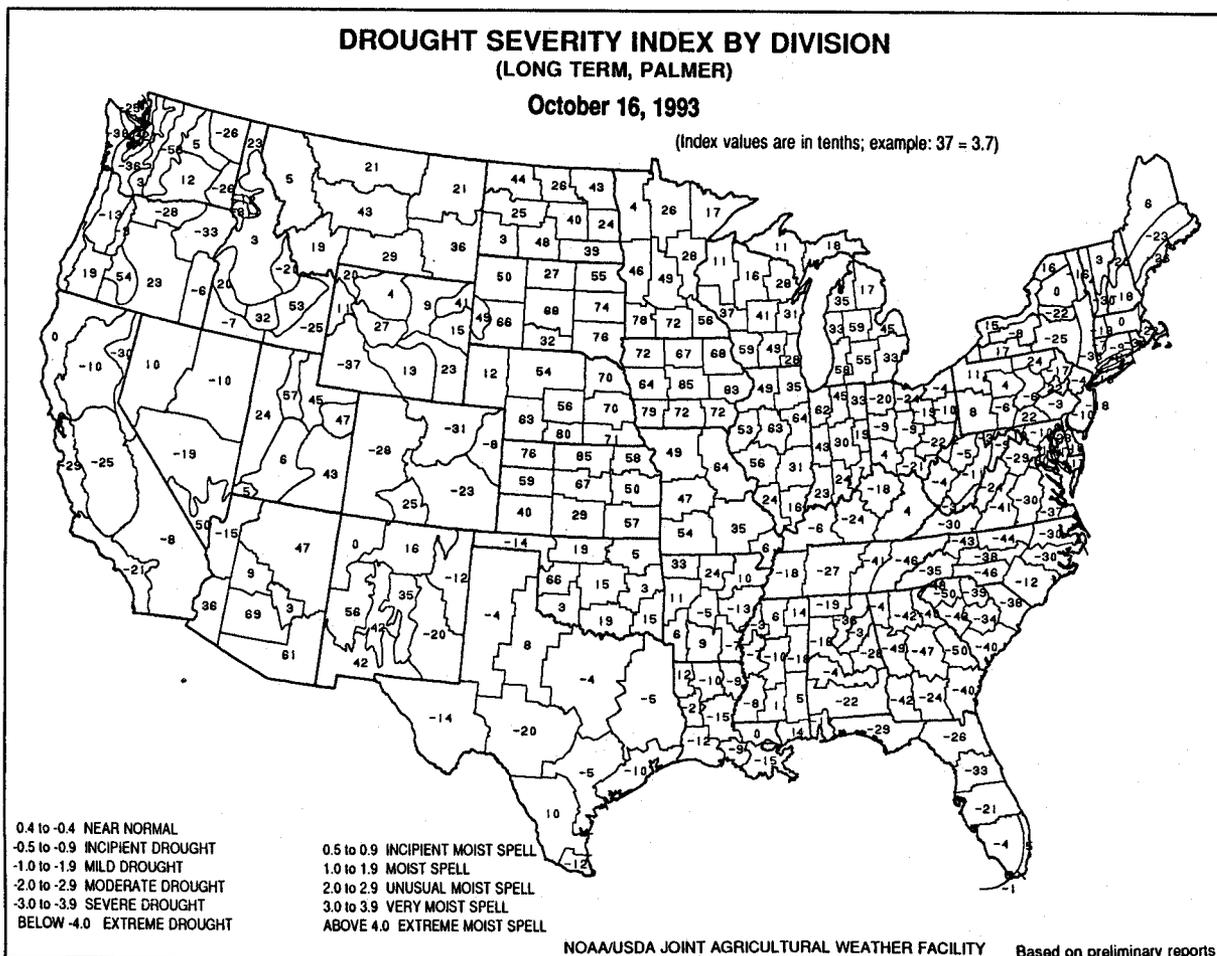
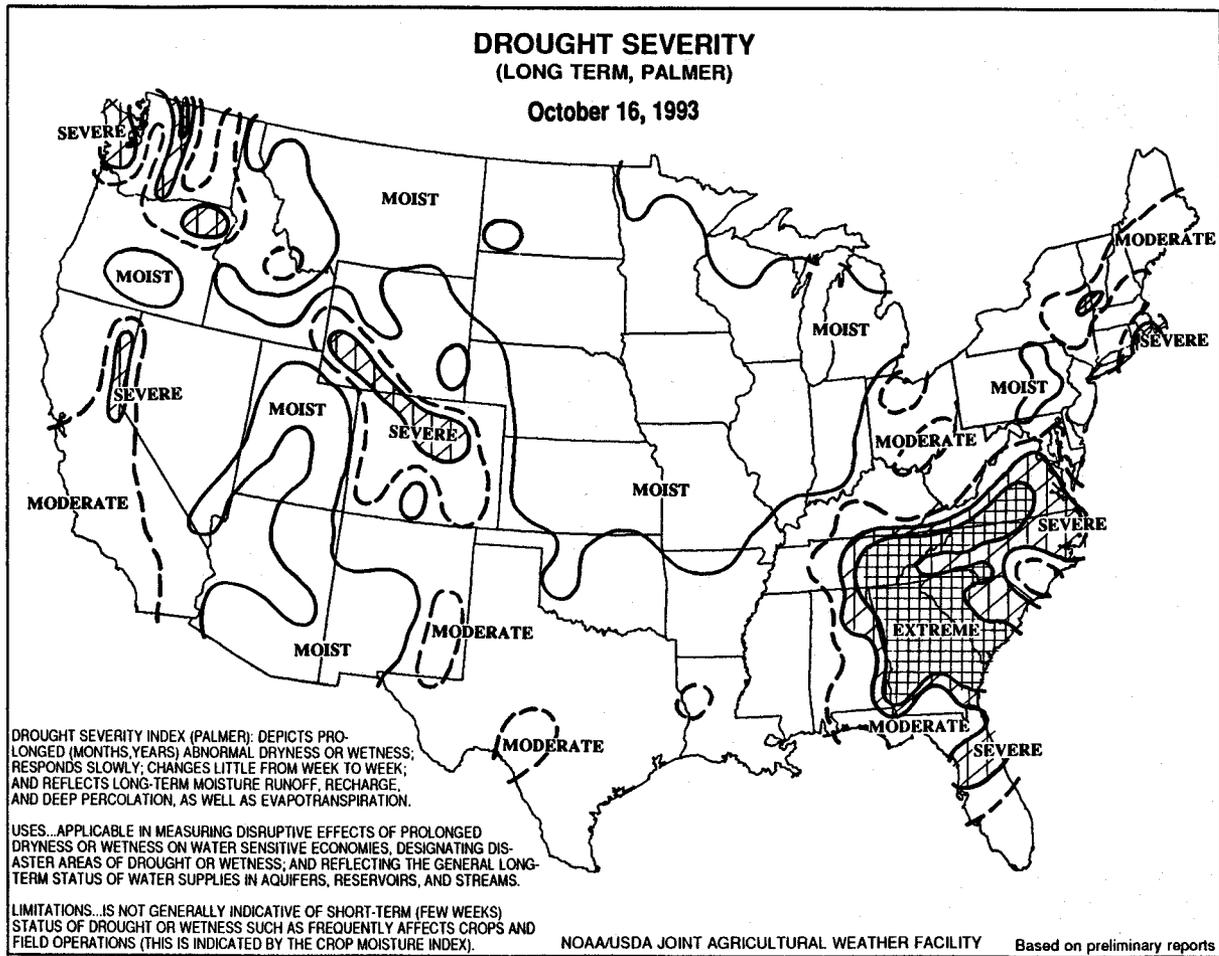
unsettled weather continued across the West. Elsewhere, separate low pressure systems induced heavy rainfall across the Southern Atlantic States, and from the east-central Plains to the eastern Great Lakes States. In Florida, Miami's weekly rainfall of nearly 4 inches increased their autumn total (since September 1) to more than 18 inches.

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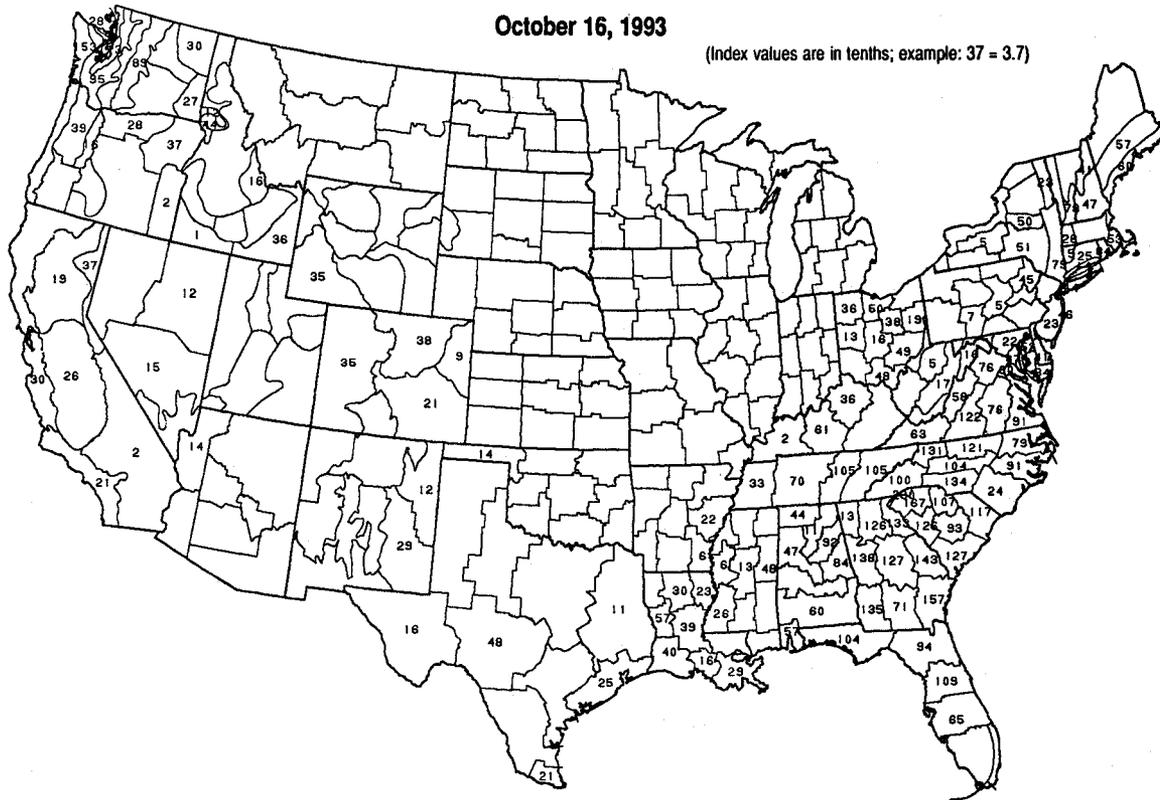




ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX NEAR ZERO  
(LONG TERM, PALMER)

October 16, 1993

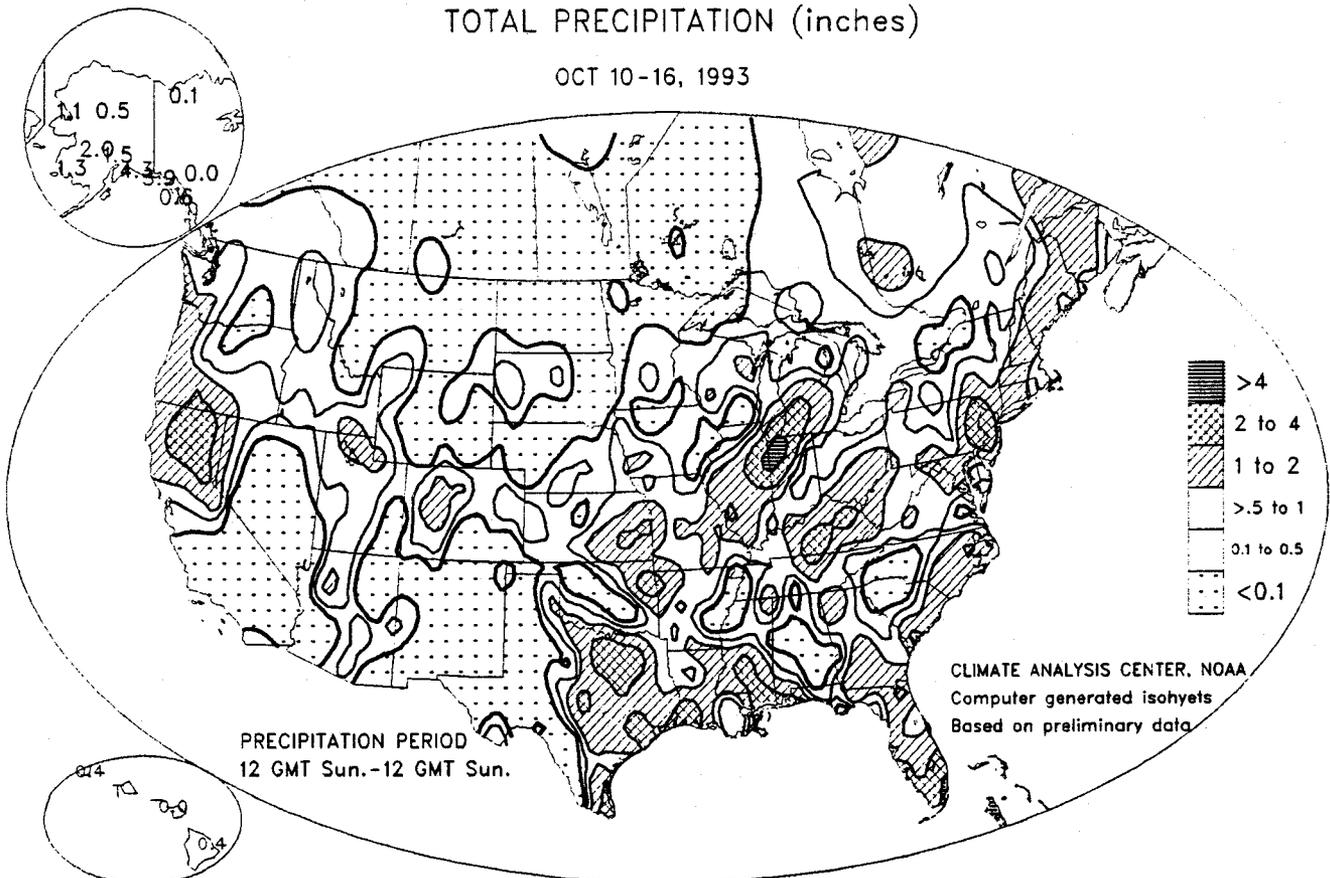
(Index values are in tenths; example: 37 = 3.7)



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

TOTAL PRECIPITATION (inches)

OCT 10-16, 1993



PRECIPITATION PERIOD  
12 GMT Sun.-12 GMT Sun.

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

## CUMULATIVE GROWING DEGREE DAYS (CORN\*)

### April 1 - October 16, 1993

Last Tabulation for Season

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL ANNISTON	4436	+ 85	TOPEKA/BILLARD	3561	- 169	GAGE	3929	- 80
BIRMINGHAM	4445	+ 8	WICHITA	3830	- 158	HOBART	4295	- 63
MOBILE	4915	- 138	KY LEXINGTON	3676	+ 54	MCALESTER	4600	+ 141
MONTGOMERY	4714	+ 156	BOWLING GREEN	3943	+ 47	PONCA CITY	4266	+ 48
MUSCLE SHOALS	4388	+ 101	PADUCAH	4081	+ 41	TULSA	4193	- 217
OZARK	4788	+ 77	LA LAFAYETTE	5090	+ 18	OR BAKER	2127	- 116
TUSCALOOSA	4618	+ 35	LAKE CHARLES	5165	- 3	EUGENE	2389	+ 60
AZ DOUGLAS	4294	+ 215	MONROE	4799	+ 55	NORTH BEND	1673	+ 251
FLAGSTAFF	2510	+ 250	NEW ORLEANS	5054	- 58	PENDLETON	2667	- 118
PHOENIX	5965	+ 680	SHREVEPORT	4786	+ 143	REDMOND	2094	- 148
TUCSON	5125	+ 267	ME AUGUSTA	2426	+ 187	PORTLAND	2593	+ 230
YUMA	6055	+ 593	CARIBOU	1872	+ 184	SALEM	2550	+ 255
PRESCOTT	3483	+ 428	HOULTON	1944	+ 80	SEXTON SUMMIT	1575	- 250
AR EL DORADO	4527	- 35	PORTLAND	2348	+ 211	PA ALLENTOWN	3314	+ 249
FAYETTEVILLE	3967	+ 94	MD SALLSBURY	3794	+ 222	PHILADELPHIA	3935	+ 690
FORT SMITH	4469	+ 86	MA WORCESTER	2462	+ 58	WILLIAMSPORT	3187	+ 245
JONESBORO	4305	- 80	MI JACKSON	2643	- 162	SC BEAUFORT	5062	+ 267
LITTLE ROCK	4526	+ 123	LANSING	2621	- 216	CHARLESTON	4927	+ 241
TEXARKANA	4669	- 69	MUSKOGON	2565	+ 35	COLUMBIA	4650	+ 131
CA BAKERSFIELD	4419	- 32	PELLSTON	2004	- 6	FLORENCE	4809	+ 284
BLUE CANYON	2043	- 204	SAULT STE. MARIE	1592	- 86	SUMTER/SHAW AFB	4618	+ 129
DAGGETT	4812	+ 100	TRAVERSE CITY	2405	+ 72	SD ABERDEEN	2494	- 64
EUREKA	1554	+ 544	MN DULUTH	1526	- 209	HURON	2535	- 295
FRESNO	4250	+ 319	INT'L FALLS	1720	- 168	PIERRE	2589	- 284
MARYSVILLE	4003	+ 232	MINNEAPOLIS	2435	---	RAPID CITY	2281	- 378
MT SHASTA	2093	- 269	ROCHESTER	2233	---	SIoux FALLS	2604	- 279
PASO ROBLES	3360	+ 164	ALEXANDRIA	2112	- 266	WATERTOWN	2110	- 386
RED BLUFF	3856	- 153	MS BILOXI	5192	+ 9	TN BRISTOL	3682	+ 82
RIVERSIDE	4056	+ 337	COLUMBUS	4548	+ 104	CHATTANOOGA	4434	+ 299
SANTA ANA	4242	+ 645	JACKSON	4698	+ 149	CROSSVILLE	3705	+ 438
SAN DIEGO	3622	+ 175	MERIDIAN	4712	+ 115	MEMPHIS	4646	+ 87
SACRAMENTO	3591	+ 89	GREENWOOD	4701	+ 35	NASHVILLE	4223	+ 56
THERMAL	5109	- 127	MO COLUMBIA	3551	- 39	TX ABILENE	4774	+ 37
CO ALAMOSA	2127	- 122	JOPLIN	3953	- 96	AMARILLO	3787	- 14
DENVER	2836	- 31	SPRINGFIELD	3778	- 10	AUSTIN	5283	+ 145
EAGLE	2145	- 268	VICHY	3716	- 47	BROWNSVILLE	5775	+ 108
GRAND JUNCTION	3299	- 224	MT HELENA	1862	- 248	COLLEGE STATION	5117	+ 49
LA JUNTA	3410	- 101	KALISPELL	1808	- 273	DALHART	3616	+ 48
DE DOVER	3631	- 56	MILES CITY	2355	- 358	DALLAS/FT WORTH	5038	+ 233
WILMINGTON	3731	+ 295	NE GRAND ISLAND	3012	- 240	GALVESTON	5732	+ 201
FL DAYTONA BEACH	5152	+ 60	NORFOLK	2959	- 182	HOUSTON/INTCNEL	5244	+ 243
FORT MYERS	5617	+ 93	NORTH PLATTE	2794	- 176	KINGSVILLE/NAS	5741	+ 294
GAINESVILLE	4917	- 170	VALENTINE	2596	- 468	LARDO	5811	+ 226
JACKSONVILLE	4978	- 159	SCOTTSBLUFF	2623	- 239	LUBBOCK	4385	+ 278
FORT LAUDERDALE	6058	+ 423	SIDNEY	2572	- 89	MCALLEN	5861	+ 359
MIAMI	5986	+ 187	NV ELKO	2247	- 289	MIDLAND	4565	+ 40
MILTON	4926	+ 90	ELY	2340	- 24	PALACIOS	5496	+ 80
PENSACOLA	5120	- 44	LAS VEGAS	5222	+ 392	SAN ANTONIO	5353	+ 139
ST PETERSBURG	5610	- 68	RENO	2800	+ 98	VICTORIA	5404	+ 174
TALLAHASSEE	4899	- 43	WINNEMUCCA	2694	- 11	WACO	5020	- 72
TAMPA	5411	- 32	NH CONCORD	2667	+ 192	WICHITA FALLS	4551	- 86
VERO BEACH	5399	+ 43	NJ NEWARK	3937	+ 491	WINK	4726	+ 122
GA W. PALM BEACH	5697	+ 146	NM ALBUQUERQUE	3924	+ 471	UT CEDAR CITY	2948	+ 22
ATHENS	4496	+ 224	CARLSBAD	4643	+ 230	VT BARRÉ-MONTPELIER	2195	+ 160
AUGUSTA	4706	+ 226	CLOVIS	3903	+ 244	BURLINGTON	2586	+ 244
BRUNSWICK	5061	- 20	GALLUP	2949	+ 69	VA CHARLOTTESVILLE	3906	+ 176
COLUMBUS/METRO	4841	+ 171	TRUTH OR CONSEQ.	4268	+ 272	HAMPTON/LANGLEY	4324	+ 315
MACON	4733	+ 67	NY ALBANY	2855	+ 163	LYNCHBURG	3994	+ 403
SAVANNAH	5030	+ 211	ELMIRA	2747	+ 173	NORFOLK	4313	+ 294
ID BOISE	2692	- 132	GLENS FALLS	2598	+ 154	RICHMOND	4103	+ 227
BURLEY	2466	- 30	ROCHESTER	2666	+ 3	WA BELLINGHAM	1875	+ 223
IDAHO FALLS	2051	- 233	SYRACUSE	2705	+ 71	HOQUIAM	1718	+ 190
POCATELLO	2215	- 260	UTICA	2469	+ 23	SEATTLE-TACOMA	2131	+ 215
IL BELLEVILLE	3813	+ 51	WATERTOWN	2448	- 20	SPOKANE	2135	- 143
CHICAGO/MIDWAY	3061	- 143	NC ASHEVILLE	3574	+ 250	TACOMA	2179	+ 127
DECATUR	3410	- 182	FAYETTEVILLE	4432	+ 194	WALLA WALLA	2916	- 22
PEORIA	3360	+ 93	GREENSBORO	4196	+ 318	WENATCHEE	2915	- 27
ROCKFORD	2946	- 6	HICKORY	4054	+ 199	YAKIMA	2671	0
SPRINGFIELD	3505	- 31	RALPHIGH	4264	+ 258	WV HUNTINGTON	3734	+ 365
QUINCY	3334	- 135	WILMINGTON	4727	+ 196	MARTINSBURG	3369	+ 39
IN INDIANAPOLIS	3390	+ 5	NEW BERN	4534	+ 158	MORGANTOWN	3308	+ 87
SOUTH BEND	2955	- 2	ND BISHARCK	2131	- 272	WI EAU CLAIRE	2298	- 222
TERRE HAUTE	3511	+ 50	DICKINSON	1878	- 391	GREEN BAY	2372	- 6
IA DES MOINES	3018	- 332	JAMESTOWN	2024	- 321	LACROSSE	2622	- 221
MASON CITY	2524	- 426	MINOT	1869	- 330	MADISON	2760	- 35
OTTUMWA	3187	- 150	GRAND FORKS	2115	- 134	WAUSAU	2134	- 194
KS CHANUTE	3740	- 186	OH AKRON-CANTON	2976	+ 99	WY CASPER	2365	- 80
DODGE CITY	3493	- 231	COLUMBUS	3344	+ 178	LANDER	2199	- 198
GARDEN CITY	3331	- 316	DAYTON	3275	- 28	SHERIDAN	2061	- 283
GOODLAND	2870	- 224	FINDLAY	2896	- 105	WORLDAND	2440	- 106
MEDICINE LODGE	3997	- 36	YOUNGSTOWN	2805	+ 117			
RUSSELL	3482	- 185	ZANESVILLE	3192	+ 104			
SALINA	3672	- 142	OK ALTUS	4443	- 86			

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 16, 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		
AL BIRMINGHAM	68	51	75	38	59	-4	.2	-1.5	.1	4.8	89	29.7	68	92	60	0	0	0	2	0		
MOBILE	76	57	82	45	66	-3	.4	-1.2	.3	3.8	50	49.0	92	90	57	0	0	0	3	0		
MONTGOMERY	75	52	80	40	64	-1	.4	-1.6	.4	2.5	49	37.4	84	92	53	0	0	0	2	0		
AK ANCHORAGE	47	39	52	34	43	7	.7	.2	.2	5.4	139	13.8	108	96	76	0	0	0	5	0		
BAKROV	31	27	36	21	29	14	.3	.2	.2	1.9	227	4.9	130	92	82	0	0	7	4	0		
FALKBANKS	43	31	48	25	37	10	.3	.1	.2	3.0	216	9.8	111	94	67	0	0	5	4	0		
JUNEAU	49	42	53	37	45	2	.4	.4	.4	9.5	87	41.1	99	97	78	0	0	0	2	0		
KODIAK	52	39	60	33	45	4	1.2	-1.5	.7	11.6	107	57.7	112	91	68	0	0	0	3	1		
NOME	42	36	44	33	39	10	.8	.5	.3	5.4	168	14.6	117	94	77	0	0	0	5	0		
AZ PHOENIX	88	68	92	62	78	2	.1	.0	.1	1.3	109	10.6	184	59	25	4	4	4	1	0		
PRESCOTT	70	47	76	44	59	3	.3	.1	.3	1.6	63	15.1	95	78	33	0	0	0	1	0		
TUCSON	87	61	92	58	74	3	.1	-1.2	.1	1.1	48	13.7	139	62	24	3	0	1	0	0		
YUMA	91	71	98	66	81	4	.1	.0	.1	.2	48	3.7	158	54	24	5	0	0	2	0		
AR FORT SMITH	72	52	80	46	62	-1	.6	-1.2	.6	8.0	158	37.5	117	90	57	0	0	0	2	1		
LITTLE ROCK	72	53	79	44	62	-2	.7	-1.8	.7	3.0	45	32.8	86	80	51	0	0	0	0	0		
CA BAKERSFIELD	79	58	84	55	68	-1	.1	.0	.1	.1	36	6.7	159	65	40	0	0	0	2	0		
EUREKA	63	54	66	50	59	4	.5	.0	.2	.6	32	30.9	132	94	73	0	0	0	3	0		
FRESNO	79	57	86	54	68	2	.1	.0	.1	.1	26	11.6	156	87	40	0	0	0	2	0		
LOS ANGELES	75	63	80	62	69	2	.1	.1	.1	.1	22	18.5	223	90	67	0	0	0	3	0		
REDDING	68	56	76	52	62	-3	2.8	2.3	1.1	2.9	165	39.2	185	97	59	0	0	0	6	3		
SACRAMENTO	74	55	77	50	65	-1	.5	.3	.2	.5	63	19.6	169	97	55	0	0	0	3	0		
SAN DIEGO	73	64	77	61	68	0	.2	.2	.1	.2	67	15.7	237	86	66	0	0	0	2	0		
SAN FRANCISCO	70	57	74	55	64	2	.5	.2	.4	.5	71	19.8	154	90	66	0	0	0	3	0		
CO DENVER	66	38	71	30	52	-2	.2	-1.2	.2	2.5	144	11.0	82	89	36	0	1	0	0	0		
GRAND JUNCTION	64	44	71	38	54	-3	.2	-1.1	.1	1.4	86	10.4	128	88	46	0	0	0	5	0		
PUEBLO	70	33	75	26	52	-3	.2	-1.1	.1	.6	52	12.9	128	88	31	0	0	3	0	0		
CT BRIDGEPORT	55	41	62	32	48	-9	1.7	1.0	1.7	8.4	183	29.0	88	88	53	0	1	1	1	1		
HARTFORD	53	33	62	25	43	-10	1.2	.4	1.2	6.9	124	35.2	102	93	49	0	4	1	1	1		
DC WASHINGTON	64	47	69	40	56	-5	.9	.2	.9	4.8	98	30.7	99	92	60	0	0	0	3	1		
FL APALACHICOLA	79	59	87	48	69	-2	3.7	2.9	3.2	7.2	75	41.4	89	92	60	0	0	0	3	1		
DAYTONA BEACH	83	66	87	60	74	0	.5	-1.5	.2	5.7	66	29.5	72	100	64	0	0	0	4	0		
JACKSONVILLE	79	60	87	51	69	-4	1.4	.5	.7	11.5	123	37.6	88	97	71	0	0	0	2	2		
KEY WEST	87	75	90	73	81	1	1.7	.6	1.6	10.3	123	32.2	98	86	69	1	0	0	2	1		
MIAMI	87	73	90	71	80	2	3.8	2.5	2.5	18.5	169	53.0	108	90	63	1	0	0	4	2		
ORLANDO	83	66	85	58	74	-2	1.2	.6	.8	7.3	96	40.9	96	95	62	0	0	0	3	1		
TALLAHASSEE	81	55	87	41	68	-2	2.4	1.8	1.9	4.2	59	44.5	80	91	49	0	0	0	2	2		
TAMPA	83	65	87	58	74	-2	.6	.1	.3	9.6	131	34.7	88	94	68	0	0	0	3	0		
WEST PALM BEACH	86	71	89	68	78	0	3.9	2.1	1.4	15.4	135	54.3	109	99	72	0	0	0	4	3		
GA ATLANTA	68	53	75	46	60	-3	.6	-1.1	.5	4.5	90	38.3	93	87	55	0	0	0	2	0		
AUGUSTA	74	52	85	42	63	-1	.4	-1.3	.4	3.8	85	30.2	81	92	52	0	0	0	1	0		
MACON	73	52	79	39	63	-3	1.0	.5	1.0	2.3	58	38.3	105	89	54	0	0	0	2	1		
SAVANNAH	76	58	87	48	67	-1	.3	-1.2	.3	7.2	123	38.4	89	93	63	0	0	0	1	0		
HI HONO	82	69	86	67	76	0	1.5	-1.5	.5	11.6	89	81.4	84	91	68	0	0	0	6	1		
HONOLULU	87	74	88	72	81	1	.7	-1.5	.7	.3	14	3.7	26	72	51	0	0	0	1	0		
KAHULUI	86	71	88	66	78	0	.7	-1.3	.7	.8	98	8.3	58	74	53	0	0	0	0	0		
LIHUE	83	74	83	72	78	1	.2	-1.8	.2	4.5	102	14.8	49	78	64	0	0	0	1	0		
ID BOISE	66	45	70	40	55	2	.4	.3	.3	.5	42	11.4	129	83	45	0	0	0	0	0		
LEWISTON	65	48	72	40	56	3	.3	.2	.2	.5	41	11.3	117	83	49	0	0	0	3	0		
POCATELLO	59	38	63	32	48	-1	.6	.4	.3	1.3	99	16.7	178	94	57	0	1	1	0	0		
IL CHICAGO	59	38	70	28	49	-5	.3	-1.3	.3	5.3	103	41.0	140	92	57	0	0	3	5	0		
MOLINE	62	40	70	30	51	-3	.1	-1.6	.0	4.4	78	48.1	146	89	52	0	0	3	2	0		
PEORIA	63	42	72	30	52	-3	1.5	.9	1.1	9.6	180	50.3	168	90	52	0	0	1	1	0		
QUINCY	61	43	69	32	52	-4	1.2	.8	.8	8.5	129	33.9	103	88	51	0	1	2	1	1		
ROCKFORD	60	37	69	27	48	-4	.1	-1.6	.1	4.3	80	39.3	129	88	49	0	4	2	2	1		
SPRINGFIELD	64	42	73	31	53	-4	1.5	1.0	1.3	8.3	176	42.9	149	91	52	0	1	2	1	0		
IN EVANSVILLE	66	44	77	38	55	-5	.1	-1.6	.1	6.8	149	34.0	94	94	59	0	0	0	1	0		
FORT WAYNE	62	38	75	29	50	-4	.1	-1.5	.1	5.4	137	35.9	129	91	50	0	2	1	1	0		
INDIANAPOLIS	62	39	74	32	51	-5	.7	-1.6	.7	7.1	169	39.5	123	92	56	0	1	1	1	0		
SOUTH BEND	59	39	72	29	49	-5	2.5	1.8	2.5	10.9	208	41.8	134	87	54	0	2	1	1	1		
IA DES MOINES	60	41	64	29	50	-4	.5	-1.2	.3	7.2	133	53.7	181	92	58	0	2	2	0	0		
STOUC CITY	60	39	68	26	49	-4	.6	-1.1	.3	3.1	76	30.8	133	93	58	0	1	2	0	0		
WATERLOO	61	40	70	28	50	-1	.2	-1.4	.2	4.6	92	51.2	174	93	50	0	2	1	0	0		
KS CONCORDIA	65	43	70	30	54	-3	.3	-1.2	.2	3.6	86	42.4	163	92	55	0	1	4	0	0		
DODGE CITY	71	43	76	30	57	-2	.3	.0	.3	1.2	44	24.2	124	89	43	0	1	2	1	0		
GOODLAND	67	39	72	31	53	-1	.8	.6	.6	1.5	73	18.6	112	91	42	0	1	2	1	0		
TOPEKA	65	45	74	31	55	-3	.9	.2	.5	8.1	146	44.9	147	95	58	0	1	5	0	0		
WICHITA	69	46	76	35	58	-3	1.4	.7	1.3	3.4	61	30.9	103	92	52	0	0	2	1	1		
KY BOWLING GREEN	66	45	77	35	56	-4	.7	.1	.7	4.8	91	27.3	68	100	68	0	0	0	3	1		
LEXINGTON	62	45	75	34	54	-5	.9	.4	.9	4.5	99	34.2	95	94	62	0	0	0	2	1		
LOUISVILLE	65	46	76	38	56	-4	.8	.2	.7	5.1	114	38.8	109	94	59	0	0	0	2	1		
LA BATON ROUGE	76	58	84	47	67	-3	.2	-1.6	.2	1.6	24	48.6	98	98	58	0	0	0	1	0		
LAKE CHARLES	79	60	85	53	70	0	.3	-1.6	.3	1.9	24	46.8	107	93	59	0	0	0	1	0		
NEW ORLEANS	79	62	85	51	70	0	.1	-1.5	.1	2.6	37	43.9	87	92	65	0	0	0	1	0		
SHREVEPORT	73	57	86	50	65	-1	.6	-1.3	.6	5.7	98	48.6	126	95	68	0	0	0	1	1		

Based on 1961-90 normals.

Weather Data for the Week Ending October 16, 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	.01 INCH OR MORE
													.01 INCH OR MORE						.50 INCH OR MORE
ME CARIBOU	46	27	53	21	37	-8	1.0	.3	1.7	7.9	156	31.5	111	87	47	0	6	3	1
PORTLAND	51	31	57	24	41	-6	1.3	.4	1.2	6.1	124	32.7	100	92	50	0	5	1	1
MD BALTIMORE	63	44	67	37	53	-4	1.0	.4	1.0	5.3	107	33.1	102	92	58	0	0	0	0
SALISBURY	67	42	72	37	54	-4	.4	.3	.2	4.2	76	37.8	103	98	57	0	0	0	0
MA BOSTON	53	40	57	34	46	-9	.8	.3	.7	5.8	123	31.2	99	88	57	0	0	0	0
CHATHAM	56	43	63	37	49	-5	.4	.5	.4	4.7	82	27.8	81	89	53	0	0	0	0
MI ALPENA	54	30	63	24	42	-6	.3	.2	.1	2.2	52	21.7	92	91	50	0	0	0	0
DETROIT	58	39	69	30	49	-4	.4	.0	.0	5.8	145	27.5	105	89	54	0	2	6	0
FLINT	55	35	67	24	45	-6	.4	.1	.4	5.5	116	27.9	114	89	51	0	1	1	0
GRAND RAPIDS	56	36	64	24	46	-5	1.9	1.3	1.8	10.3	179	40.7	142	86	54	0	4	4	0
HOUGHTON LAKE	53	36	59	23	44	-4	.3	.2	.2	2.8	61	23.3	101	89	57	0	3	3	0
LANSING	56	35	66	23	45	-5	1.3	.7	1.3	6.5	122	32.1	126	92	49	0	5	3	0
MARQUETTE	49	29	60	22	39	-6	.3	.6	.3	6.5	107	27.6	98	89	49	0	6	5	0
MUSKEGON	55	37	64	25	46	-5	.5	.1	.5	5.2	97	32.1	128	98	66	0	3	3	0
SAULT ST. MARIE	50	34	55	25	42	-4	.8	.1	.1	7.1	131	27.1	103	92	62	0	4	4	0
MN ALEXANDRIA	54	35	59	27	44	-3	.2	.4	.2	2.0	51	24.3	107	90	45	0	2	2	1
DULUTH	51	29	58	20	40	-5	.2	.5	.2	2.0	38	28.2	109	82	47	0	5	2	0
INT'L FALLS	47	23	57	16	35	-9	.2	.4	.2	2.2	50	19.6	91	92	52	0	7	7	0
MINNEAPOLIS	56	34	63	27	45	-5	.2	.3	.2	2.6	66	29.9	121	88	52	0	3	3	0
ROCHESTER	56	34	68	26	45	-4	.1	.4	.2	3.3	68	36.4	140	92	57	0	3	3	0
MS GREENWOOD	74	52	82	40	63	-2	1.1	.7	.1	4.1	80	34.0	82	97	50	0	0	0	0
JACKSON	70	51	81	40	60	-5	1.4	.0	.8	3.4	75	37.2	88	100	63	0	0	0	0
MERIDIAN	74	51	82	38	62	-3	1.1	.4	.8	2.8	56	41.6	93	91	55	0	0	0	0
MO CAPE GIRARDEAU	68	46	78	38	57	-3	.1	.5	.1	8.6	168	39.5	108	93	51	0	0	0	0
COLUMBIA	64	43	71	31	54	-3	.7	.1	.6	13.9	243	56.6	181	97	62	0	1	1	0
KANSAS CITY	63	45	72	29	54	-4	1.4	.1	.6	9.0	132	47.9	146	93	57	0	0	0	0
SAINT LOUIS	64	47	73	36	56	-4	1.4	.8	1.3	10.7	237	47.3	158	86	55	0	0	0	0
SPRINGFIELD	67	46	75	31	57	-2	1.1	.7	.1	18.2	271	49.6	140	93	57	0	0	0	0
MT BILLINGS	58	40	65	24	49	-2	.4	.1	.2	3.8	191	15.2	117	88	51	0	1	1	0
GLASGOW	59	33	64	28	46	-2	.0	.2	.0	1.0	76	15.5	154	93	50	0	3	3	0
GREAT FALLS	61	37	66	31	49	0	.0	.2	.0	2.5	150	21.6	161	87	43	0	1	1	0
HAVRE	61	31	69	25	46	-1	1.1	.1	.0	1.8	23	12.7	127	94	41	0	4	4	0
HELENA	61	33	70	23	47	-1	1.1	.1	.1	1.8	117	18.1	176	97	44	0	3	3	0
KALISPELL	58	34	62	23	46	3	.4	.2	.3	2.3	136	20.3	156	97	53	0	3	3	0
MILES CITY	61	36	66	24	49	-1	.4	.2	.3	1.1	60	18.1	145	98	51	0	1	1	0
MISSOULA	59	39	67	26	49	4	.2	.2	.2	1.9	125	12.8	114	98	55	0	0	0	0
NE GRAND ISLAND	62	40	71	28	51	-3	1.0	.6	.9	2.9	78	31.6	140	95	61	0	2	2	1
LINCOLN	61	39	68	28	50	-5	.5	.0	.5	4.7	100	24.5	97	100	60	0	1	1	0
NORFOLK	61	39	69	26	50	-3	.1	.3	.1	4.5	134	33.0	145	94	60	0	1	2	0
NORTH PLATTE	65	36	71	26	51	-1	.2	.1	.1	2.2	102	24.6	139	95	52	0	2	3	0
OMAHA	59	43	65	30	51	-4	.7	.1	.5	4.8	94	40.4	155	91	61	0	2	3	0
SCOTTSSBLUFF	63	37	67	29	50	-1	.5	.3	.3	3.8	247	21.3	156	94	43	0	2	4	0
VALENTINE	63	34	68	25	48	-5	.5	.3	.3	2.4	77	18.8	91	89	44	0	3	1	0
NV ELY	59	30	71	23	44	-3	1.0	.8	.4	1.2	78	9.2	109	86	40	0	5	5	0
LAS VEGAS	82	60	87	56	71	1	.0	.0	.0	.0	5	4.7	147	49	23	0	0	0	0
RENO	65	45	71	40	55	3	.2	.1	.1	1.4	271	6.3	116	85	43	0	0	0	0
WINNEMUCCA	63	42	70	36	53	3	.5	.4	.4	.5	82	6.8	111	88	45	0	0	6	0
NE CONCORD	52	26	63	18	39	-10	1.4	.7	1.4	6.2	141	23.1	83	97	45	0	5	1	1
NJ ATLANTIC CITY	62	39	67	33	51	-5	1.1	.4	1.0	3.9	91	30.8	96	95	62	0	0	3	1
NM ALBUQUERQUE	74	46	79	43	60	2	.2	.2	.7	.7	48	7.4	98	73	24	0	0	1	0
CLOVIS	78	45	83	36	62	3	.0	.3	.6	.6	22	12.5	80	72	24	0	0	0	0
ROSWELL	82	49	85	46	65	2	.0	.3	.0	.9	33	9.3	82	66	23	0	0	0	0
NY ALBANY	54	31	69	23	43	-8	.4	.3	.4	4.5	103	32.4	113	92	46	0	5	1	0
BINGHAMTON	50	33	65	24	41	-9	.3	.4	.2	4.9	101	33.1	113	91	54	0	4	3	0
BUFFALO	56	35	70	28	46	-7	.4	.3	.4	7.5	148	31.8	108	88	42	0	4	1	0
NEW YORK	58	46	68	40	52	-6	1.0	.3	1.0	6.6	134	34.6	104	80	53	0	0	2	1
ROCHESTER	57	33	72	24	45	-8	.1	.4	.1	5.5	130	22.2	88	92	46	0	4	2	0
SYRACUSE	55	34	72	25	44	-7	.1	.6	.1	10.4	190	40.8	134	90	44	0	3	3	0
NC ASHEVILLE	62	43	69	34	53	-4	.1	.9	.1	1.7	25	30.0	66	97	56	0	0	2	0
CHARLOTTE	69	49	79	43	59	-3	.2	.8	.9	.9	18	27.5	79	89	49	0	0	1	0
GREENSBORO	65	44	73	36	55	-5	.2	.6	.1	3.0	56	35.4	102	95	59	0	0	3	0
HATTERAS	74	63	80	56	68	2	.4	.3	.3	8.6	109	45.1	102	86	63	0	0	3	0
NEW BERN	72	53	80	46	63	-2	.3	.2	.2	5.0	73	38.0	83	96	57	0	0	3	0
RALEIGH	66	45	76	38	56	-5	.3	.3	.3	4.2	91	29.5	87	97	56	0	0	3	0
WILMINGTON	75	53	86	48	64	0	1.0	.3	1.0	10.7	122	50.8	105	96	56	0	0	1	1
ND BISMARCK	60	28	69	20	44	-3	.2	.2	.3	.3	14	25.1	178	95	50	0	5	0	0
FARGO	55	32	63	21	44	-4	.1	.3	.1	.6	20	19.0	109	87	42	0	4	1	0
GRAND YORKS	52	29	63	21	41	-6	.2	.3	.3	1.0	31	19.9	121	85	40	0	6	0	0
WILLISTON	58	30	62	23	44	-3	.2	.2	.3	.3	18	17.6	143	93	49	0	5	1	0
OH AKRON-CANTON	58	37	70	29	47	-6	.3	.3	.3	4.5	98	28.7	97	92	51	0	3	2	0
CINCINNATI	62	42	75	33	52	-4	.4	.3	.4	4.1	95	30.7	92	92	56	0	0	1	0
CLEVELAND	59	38	71	31	49	-5	.2	.6	.6	7.0	146	31.9	109	88	51	0	2	1	0
COLUMBUS	62	41	76	35	52	-1	1.0	.5	1.0	3.0	69	29.4	97	89	49	0	0	1	1
DAYTON	61	39	72	31	50	-5	.2	.5	.6	6.0	161	41.6	142	93	56	0	1	1	0

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Weather Data for the Week Ending October 16, 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	.01 INCH OR MORE		.50 INCH OR MORE	
																		90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	59	35	73	28	47	.6	.1	-.3	.1	5.3	135	25.2	96	95	61	0	4	1	0		
YOUNGSTOWN	58	35	70	26	46	.6	.2	-.4	.1	4.3	89	27.3	91	93	48	0	4	3	0		
OK OKLAHOMA CITY	73	50	81	39	61	-.2	.7	-.7	.7	3.6	64	30.1	105	97	58	0	0	2	0		
TULSA	70	47	76	36	59	-.5	.8	-.1	.7	7.9	117	35.5	106	97	60	0	0	2	1		
OR ASTORIA	60	50	63	44	55	-.5	.8	-.4	.5	1.3	24	35.6	84	98	67	0	0	5	0		
BURNS	57	36	63	27	47	1	.3	.2	.2	.4	43	8.4	117	86	52	0	1	2	0		
MEDFORD	69	50	73	45	60	4	.7	.4	.2	.7	46	13.5	118	95	54	0	0	6	0		
PENDLETON	65	48	71	44	57	3	.1	-.1	-.1	.1	13	11.9	142	79	42	0	0	3	0		
PORTLAND	64	50	68	46	57	2	1.1	.6	.6	1.3	44	23.6	101	97	64	0	0	3	1		
SALEM	67	49	72	44	58	4	.8	.2	.5	.8	30	26.2	108	88	55	0	0	5	1		
PA ALLENTOWN	57	37	69	29	47	-.7	2.6	2.0	2.6	10.6	196	42.7	123	95	51	0	1	1	1		
ERIE	57	39	69	32	48	-.6	.2	-.7	.2	5.7	89	27.9	87	84	44	0	1	2	1		
HARRISBURG	56	42	66	32	49	-.7	.7	.0	.7	9.1	180	38.7	120	84	53	0	1	1	1		
PHILADELPHIA	63	46	71	40	54	-.1	.7	-.1	.6	7.4	128	34.4	94	87	53	0	0	2	2		
PITTSBURGH	60	39	73	30	49	-.4	-.4	-.1	.4	4.6	109	29.8	100	91	52	0	1	3	1		
SCRANTON	53	35	68	28	44	-.4	.9	.3	.9	8.0	168	30.7	105	95	56	0	4	1	1		
RI PROVIDENCE	56	37	64	30	47	-.6	.3	-.5	.3	4.6	87	30.1	86	95	49	0	2	3	0		
SC CHARLESTON	75	56	87	49	66	-.2	.6	-.1	.6	6.1	95	44.8	101	95	65	0	0	1	1		
COLUMBIA	71	51	85	41	61	-.3	.3	-.4	.3	4.2	80	30.7	73	92	53	0	0	1	1		
FLORENCE	74	53	89	48	63	-.5	.5	-.1	.5	3.6	75	28.0	76	96	55	0	0	1	0		
GREENVILLE	69	48	78	37	58	-.1	.7	-.9	.7	1.7	29	30.5	73	89	53	0	0	1	0		
SD ABERDEEN	58	31	65	24	45	-.4	.1	-.3	.1	1.2	45	25.4	132	93	51	0	4	1	0		
HURON	59	33	66	24	46	-.4	.1	-.3	.1	2.4	93	27.5	151	95	56	0	2	1	0		
RAPID CITY	64	38	69	26	51	-.5	.5	-.2	.3	2.3	125	18.6	123	86	44	0	0	3	0		
ST LOUIS	60	36	69	26	48	-.2	.1	-.3	.1	2.5	60	34.3	161	94	56	0	0	1	0		
TN CHATTANOOGA	69	50	78	42	60	-.3	.4	-.3	.2	2.3	39	30.3	72	94	63	0	0	3	0		
KNOXVILLE	65	46	74	37	56	-.3	.3	-.3	.3	5.3	118	33.0	88	97	63	0	0	2	0		
MEMPHIS	73	54	82	47	64	-.1	.1	-.6	.1	4.1	82	32.7	82	92	56	0	0	2	0		
NASHVILLE	67	48	78	39	57	-.8	.8	-.3	.8	3.9	82	33.8	91	91	57	0	0	1	0		
TX ABILENE	81	55	88	45	68	1	.2	-.4	.2	3.3	70	15.2	73	90	47	0	0	1	1		
AMARILLO	77	45	83	34	61	1	.0	-.3	.0	1.0	36	16.3	91	80	32	0	0	0	0		
AUSTIN	84	64	93	53	74	2	.1	-.7	.1	5	9	22.1	85	84	60	2	0	0	0		
BRAUNSBURG	79	63	87	58	71	0	2.6	1.7	1.8	6.2	71	57.6	126	97	67	0	0	2	2		
BROWNSVILLE	90	73	95	71	81	5	3.8	3.1	2.9	5.8	74	22.9	100	93	61	5	0	2	2		
CORPUS CHRISTI	87	70	91	65	79	4	.9	.0	.7	2.0	27	13.0	119	90	61	4	0	2	1		
DEL RIO	87	67	93	61	77	6	.0	-.2	.0	.8	18	13.4	64	75	49	3	0	0	0		
EL PASO	85	59	89	55	72	7	.0	-.2	.0	1.3	60	8.3	109	52	23	0	0	0	0		
FORT WORTH	75	57	89	49	66	0	2.0	1.1	1.2	5.6	80	25.9	83	92	64	0	0	4	2		
GALVESTON	79	67	85	61	73	1	2.5	1.9	2.2	7.6	100	38.2	112	98	66	0	0	2	1		
HOUSTON	79	62	89	55	71	1	.7	-.3	.6	3.3	41	48.9	117	96	68	0	0	2	1		
LUBBOCK	81	48	87	38	64	2	.7	-.5	.7	.3	8	11.7	70	87	29	0	0	0	0		
MIDLAND	83	53	90	44	68	2	.7	-.3	.7	2.1	51	14.9	110	89	32	1	0	0	0		
SAN ANGELO	84	57	91	48	71	3	.0	-.6	.0	2.0	41	13.8	78	87	49	2	0	0	0		
SAN ANTONIO	87	65	94	57	76	4	.6	-.1	.6	1.1	22	28.5	112	84	54	2	0	2	1		
VICTORIA	86	66	91	61	76	4	.1	-.9	.1	1.9	22	43.9	119	89	59	2	0	0	0		
WACO	75	58	87	50	67	-.3	.9	-.1	.7	5.6	105	25.0	96	93	66	0	0	2	1		
WICHITA FALLS	76	52	85	40	64	-.1	1.0	.2	.8	4.1	69	25.0	92	89	55	0	0	2	1		
UT CEDAR CITY	67	39	72	35	53	0	.2	.0	.1	.6	43	8.5	92	89	32	0	0	2	0		
SALT LAKE CITY	62	45	66	37	53	-.1	1.0	.6	.3	2.9	143	17.4	135	94	57	0	0	6	0		
VT BURLINGTON	52	31	70	24	42	-.6	.6	.0	.5	5.2	109	27.9	102	91	45	0	5	2	1		
VA NORFOLK	67	50	71	45	58	-.4	.3	-.4	.1	4.6	82	28.8	78	94	63	0	0	3	0		
RICHMOND	68	44	74	39	56	-.4	.1	-.7	.1	3.1	60	33.1	95	94	57	0	0	3	0		
ROANOKE	62	42	73	37	52	-.5	.6	-.3	.4	5.3	97	30.4	92	94	59	0	0	2	0		
WA QUILLAYUTE	62	48	70	41	55	4	1.3	-.1	.7	1.8	19	46.5	67	98	74	0	0	4	1		
SEATTLE-TACOMA	63	51	67	46	57	4	.4	-.3	.2	.6	18	21.2	90	97	60	0	0	3	0		
SPOKANE	63	42	68	35	53	4	.4	.2	.4	.7	62	11.2	98	90	49	0	0	3	0		
YAKIMA	67	39	71	33	53	2	.1	.0	.0	.1	18	4.7	90	93	43	0	0	2	0		
WV BECKLEY	57	40	69	31	49	-.4	.5	-.2	.4	5.1	105	30.8	92	93	60	0	2	3	0		
CHARLESTON	62	43	75	32	53	-.5	.9	.2	.3	7.6	162	32.6	95	98	63	0	1	5	0		
HUNTINGTON	62	44	77	35	53	-.2	1.3	.7	1.1	6.2	131	33.5	97	97	58	0	0	5	1		
PARKERSBURG	60	43	74	30	52	-.4	.5	-.1	.5	4.4	102	31.2	92	97	55	0	1	3	0		
WI GREEN BAY	55	34	60	25	44	-.5	1.0	.5	1.0	4.7	99	31.4	130	92	55	0	4	1	1		
LACROSSE	58	37	69	27	47	-.4	.7	-.5	.7	1.8	35	38.5	144	93	49	0	3	0	0		
MADISON	59	35	65	25	47	-.4	.1	-.5	.1	4.3	84	41.1	151	87	51	0	3	2	0		
MILWAUKEE	59	40	66	32	50	-.2	.7	-.5	.7	4.2	90	34.1	126	88	54	0	1	2	0		
WAUSAU	54	33	65	23	44	-.5	.8	.2	.8	5.9	101	33.5	119	84	46	0	3	2	1		
WY CASPER	62	37	66	31	50	2	.7	-.2	.7	1.7	118	13.9	132	85	43	0	1	1	0		
CREYENNE	59	38	65	32	48	0	.4	.3	.2	3.8	226	16.2	124	87	43	0	1	5	0		
LANDER	59	37	64	31	48	0	.7	-.3	.7	1.5	87	14.2	128	84	37	0	1	0	0		
SHERIDAN	59	32	66	15	46	-.3	.1	-.2	.1	2.3	114	16.2	130	94	54	0	2	2	0		

Based on 1961-90 normals.

## National Agricultural Summary

October 11 - 17, 1993

**HIGHLIGHTS:** Cool, dry conditions at the early part of the week allowed producers to make good progress with the fall harvest. Soybean producers had another good week of harvesting, cutting another quarter of the Nation's acreage. Late in the week, rain fell across the middle Mississippi and upper Ohio Valleys, and scattered showers occurred elsewhere. The precipitation helped fall-seeded small grain crops and pastures, but delayed harvest.

**SMALL GRAINS:** Winter wheat seeding in the 19 major producing States reached 80 percent (%) complete, compared with 79% at this time in 1992 and an 81% average. Winter wheat emerged at 57%, compared with 58% last year and average. The cool, dry conditions allowed rapid planting progress from Illinois to Ohio. Producers in the Southeast were delayed by excessively dry soils. The weekend rains across the central part of the Nation and the southeastern coastal regions improved planting and emergence prospects.

**CORN:** Corn harvest in the 17 major producing States advanced to 22% complete, compared with 21% last year and a 51% average. The crop has reached maturity on 86% of the acreage, compared with 88% last year and a 95% average. Harvest progress in the upper Midwest was slowed by excessive moisture in the corn. In Nebraska, the early corn harvest was plagued by poorly filled ears, low test weights, and stalk rot.

**SOYBEANS:** Harvest progress accelerated as producers across the Midwest took advantage of last week's favorable conditions. In Minnesota and Iowa, at least an additional third of their crop was harvested. In the 19 major producing States, soybean harvest jumped to 57%, compared with 60% a year ago and a 61% average. Soybeans were dropping leaves on 92% of the acreage, compared with 93% last year and a 92% average.

**COTTON:** Cotton harvest in the 14 producing States reached 47%, compared with 38% last year and a 40% average. Rain delayed the harvest in parts of Arizona and northern Texas. Some producers in Tennessee experienced harvesting problems due to small bolls and fiber sticking to the bolls. Cotton bolls opening in the 14 States advanced to 92%, compared with 78% a year ago and an 84% average.

**SORGHUM:** The grain sorghum harvest made steady gains last week. In the 12 major producing States, 49% of the acreage had been harvested, compared with 47% last year and a 61% average. The harvest was at or ahead of average in the South, but well behind average in the central and northern Plains, and in the middle Mississippi Valley. In Texas, producers hoped for a few more weeks of mild weather to aid maturity. In Nebraska, a late planting and cool conditions caused crop maturity and harvest progress to lag average.

**RICE:** Progress of the harvest reached 85% complete, compared with 96% last year and an 89% average. Rain slowed

harvest progress in California. In Texas, limited harvesting of the second crop began. However, second crop acreage was limited by late planting and poor prices.

**OTHER FIELD CROPS:** The sweetpotato harvest in Louisiana was behind last year and average, with below-average yields reported. The dry bean harvest was again active in New York after being delayed by the previous week's wet conditions. The peanut harvest continued in Texas. Continued dry conditions in the Cross Timbers area reduced yield prospects. In Massachusetts, cranberry harvest reached 70% complete. Berry size was medium to small and condition was good to fair. The Washington cranberry crop neared maturity. The sugar cane harvest was active in Louisiana, with the crop shorter than normal but with a good sucrose content.

**FRUITS AND NUTS:** Rain fell on the Florida citrus areas last week, keeping the groves in very good to excellent condition and promoting new growth. In California, the Valencia orange harvest continued as the navel orange crop neared maturity. The apple harvest advanced across the Nation. In the East, previous dry conditions limited fruit size. Recent freezing temperatures in New York increased the risk of fruit drop. In the West, the apple harvest continued in California and Washington. The Delicious apple harvest neared completion as the Fuji and Granny Smith harvests began in Washington. The pecan harvest started well in Louisiana and increased in Texas. In the Cross Timbers region, some trees suffered nut loss due to high winds and hail. Producers in Georgia expected a good crop.

**VEGETABLES:** Heavy rains in Florida delayed planting in the Everglades, and hurt crop development and harvest progress along the Florida east coast. In Texas and California, planting and harvesting continued. Pepper and tomato crops made good progress in Texas, with only minor insect damage experienced.

**PASTURE AND LIVESTOCK:** Pasture feed conditions generally rated fair to good across the Nation, although some poor pasture feed conditions were reported in the Southeast. This week's rain helped improve or maintain some pastures. Feed shortages were reported or feared in some parts of Tennessee, some areas along the Atlantic coast, and in parts of Texas. Feed supplies in other areas of the country were generally adequate. Some weaned-calves in Iowa weighed less than normal. Increased cattle culling occurred in Tennessee due to a fear of less than adequate winter feed supplies. Livestock conditions were reported as generally good.

### Crop Progress

for the Week Ending October 17, 1993

#### COTTON (Percent Bolls Opening)

	Current	Last Wk	1992	Avg.
AL	91	89	78	94
AZ	100	100	100	99
AR	94	86	93	94
CA	100	100	100	100
GA	93	91	79	87
LA	100	97	100	99
MS	98	95	99	97
MO	93	92	91	94
NM	99	94	96	93
NC	100	99	100	100
OK	87	83	47	74
SC	100	98	96	94
TN	100	100	98	98
TX	85	76	57	68
14 States	92	87	78	84

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

#### COTTON (Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	47	32	25	52
AZ	57	40	56	35
AR	46	26	36	45
CA	35	20	65	40
GA	52	42	18	34
LA	68	59	75	72
MS	52	38	49	60
MO	55	31	43	57
NM	14	7	13	6
NC	42	30	11	24
OK	18	12	11	8
SC	47	39	14	32
TN	55	37	33	49
TX	43	35	27	25
14 States	47	34	38	40

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

#### RICE (Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	83	69	95	87
CA	60	50	90	75
LA	98	94	99	98
MS	79	69	95	90
TX	100	93	100	100
5 States	85	74	96	89

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

#### CORN (Percent Mature)

	Current	Last Wk	1992	Avg.
CO	84	71	85	90
GA	100	100	100	100
IL	98	96	93	98
IN	99	96	98	94
IA	95	75	100	100
KS	100	99	97	100
KY	98	95	96	96
MI	70	60	45	80
MN	35	20	83	96
MO	97	95	100	100
NE	95	84	96	99
NC	100	100	100	100
OH	98	86	69	82
PA	74	55	53	65
SD	68	50	85	99
TX	100	98	99	100
WI	59	42	57	84
17 States	86	75	88	95

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

#### CORN (Percent Harvested)

	Current	Last Wk	1992	Avg.
CO	15	8	18	17
GA	97	95	92	95
IL	25	13	27	58
IN	23	13	16	38
IA	12	8	12	53
KS	65	50	65	80
KY	71	55	54	62
MI	10	4	5	20
MN	6	4	8	49
MO	39	28	45	71
NE	15	9	16	52
NC	88	82	75	79
OH	21	15	9	24
PA	15	8	8	18
SD	6	5	9	54
TX	96	91	94	95
WI	6	4	7	30
17 States	22	16	21	51

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

#### WINTER WHEAT (Percent Planted)

	Current	Last Wk	1992	Avg.
AR	17	12	25	20
CA	5	3	3	3
CO	97	95	99	98
GA	6	6	8	7
ID	76	50	91	89
IL	40	20	71	68
IN	63	35	61	62
KS	90	85	85	90
MI	75	60	70	80
MO	31	18	46	49
MT	83	73	92	97
NE	100	99	100	100
NC	17	15	17	18
OH	70	42	64	61
OK	94	81	78	85
OR	81	75	74	68
SD	99	98	100	100
TX	74	66	73	76
WA	94	89	99	90
19 States	80	72	79	81

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

#### SOYBEANS (Percent Dropping Leaves)

	Current	Last Wk	1992	Avg.
AL	71	59	70	74
AR	54	38	65	56
GA	84	75	81	82
IL	99	98	98	98
IN	100	99	100	98
IA	99	86	100	100
KS	100	98	95	97
KY	83	64	83	80
LA	87	83	84	71
MI	100	100	100	100
MN	90	70	99	99
MS	73	65	76	81
MO	95	81	96	92
NE	100	100	100	100
NC	59	46	56	59
OH	100	100	100	100
SC	40	26	34	41
SD	99	96	100	100
TN	86	70	82	81
19 States	92	84	93	92

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

#### SOYBEANS (Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	30	16	16	23
AR	20	10	27	16
GA	8	5	12	12
IL	73	51	80	77
IN	69	42	67	59
IA	70	36	80	87
KS	45	25	55	55
KY	19	9	22	18
LA	54	46	52	43
MI	40	15	15	40
MN	70	26	73	88
MS	34	23	38	32
MO	36	19	53	45
NE	87	62	79	82
NC	8	2	5	7
OH	69	42	59	50
SC	4	2	2	4
SD	54	31	61	87
TN	16	9	16	17
19 States	57	33	60	61

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

#### WINTER WHEAT (Percent Emerged)

	Current	Last Wk	1992	Avg.
AR	9	N/A	7	9
CA	1	N/A	0	0
CO	86	N/A	90	84
GA	2	N/A	4	4
ID	33	N/A	58	55
IL	7	N/A	27	28
IN	14	N/A	25	34
KS	65	N/A	70	70
MI	40	N/A	50	55
MO	11	N/A	20	26
MT	45	N/A	68	73
NE	96	N/A	97	93
NC	5	N/A	8	11
OH	20	N/A	24	28
OK	69	N/A	47	46
OR	47	N/A	37	35
SD	90	N/A	89	89
TX	52	N/A	50	52
WA	73	N/A	79	72
19 States	57	N/A	58	58

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

**SORGHUM**  
(Percent Mature)

	Current	Last Wk	1992	Avg.
AR	100	100	100	98
CO	77	62	63	75
IL	90	87	94	91
KS	85	65	60	85
LA	100	100	100	98
MS	100	99	100	99
MO	91	77	91	91
NE	90	67	85	97
NM	76	50	95	73
OK	66	62	65	69
SD	76	67	89	98
TX	91	88	88	91
12 States	88	77	81	90

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

**SORGHUM**  
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	90	82	97	91
CO	12	10	18	29
IL	21	9	43	54
KS	30	15	15	45
LA	98	95	99	97
MS	94	89	98	94
MO	41	33	57	59
NE	9	5	9	58
NM	15	10	11	14
OK	24	23	19	14
SD	24	4	34	70
TX	79	76	78	74
12 States	49	42	47	61

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

**Crop Condition**  
(Percent)

for the Week Ending October 17, 1993

**SORGHUM**

State	VP	P	F	G	EX
AR	0	7	60	33	0
CO	1	9	24	51	15
IL	0	0	15	78	7
KS	0	2	20	65	13
LA	0	5	55	40	0
MS	0	5	79	16	0
MO	0	6	67	27	0
NE	0	2	68	28	2
NM	0	33	40	27	0
OK	0	2	25	73	0
SD	0	20	41	31	8
TX	0	8	23	58	11
12 State	0	6	34	52	8
Prev Week	0	4	34	54	8
Prev Year	1	4	24	49	22

**COTTON**

State	VP	P	F	G	EX
AL	0	19	74	7	0
AZ	0	0	15	75	10
AR	0	6	63	31	0
CA	0	0	0	90	10
GA	10	11	52	21	6
LA	0	22	63	15	0
MS	4	30	60	6	0
MO	0	20	70	10	0
NM	0	0	13	72	15
NC	0	7	69	22	2
OK	0	0	56	44	0
SC	5	55	39	1	0
TN	0	35	46	19	0
TX	0	11	32	54	3
14 State	1	14	41	41	3
Prev Week	0	12	41	43	4
Prev Year	0	5	50	40	5

**CORN**

State	VP	P	F	G	EX
CO	3	6	21	59	11
GA	18	16	51	15	0
IL	0	1	14	74	11
IN	0	0	14	76	10
IA	2	29	58	10	1
KS	0	0	29	66	5
KY	0	0	62	38	0
MI	1	4	20	50	25
MN	18	47	31	4	0
MO	3	11	66	19	1
NE	0	7	33	56	4
NC	15	43	38	4	0
OH	3	11	35	41	10
PA	3	10	27	46	14
SD	3	17	50	25	5
TX	0	0	57	22	21
WI	0	10	35	54	1
17 State	3	15	36	40	6
Prev Week	3	12	36	43	6
Prev Year	1	3	17	61	18

**SOYBEANS**

State	VP	P	F	G	EX
AL	0	19	57	24	0
AR	0	1	52	47	0
GA	19	40	37	4	0
IL	0	1	14	77	8
IN	0	0	13	73	14
IA	3	17	61	18	1
KS	0	0	16	70	14
KY	0	3	46	50	1
LA	0	25	67	8	0
MI	1	4	20	50	25
MN	10	36	47	7	0
MS	2	6	80	12	0
MO	1	8	54	35	2
NE	0	0	24	68	8
NC	3	12	68	17	0
OH	3	9	32	44	12
SC	13	27	35	25	0
SD	0	24	55	18	3
TN	0	10	47	43	0
19 State	2	11	40	42	5
Prev Week	3	10	40	42	5
Prev Year	0	2	19	60	19

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 0.07 to 0.71 in. north; 0.02 to 0.50 in. central; 0.09 to 1.04 in. south. Temperatures 4° below normal to 2° above normal north; 2° below normal to 3° above normal central; 2° below normal to 3° above normal south. Lows 30 to 43° north; 33 to 43° central; 37 to 49° south. Highs 73 to 81° north; 77 to 86° central; 81 to 87° south.

Days suitable for fieldwork 6.4. Soil moisture 93% short, 7% adequate. Corn harvested 90%, 85% 1992, 91% avg. Sorghum harvested 55%, 49% 1992, 74% avg. Peanuts dug 87%, 82% 1992, 90% avg.; combined 80%, 74% 1992, 83% avg. Wheat seeded 32%, 33% 1992, 30% avg. Pasture condition 5% very poor, 28% poor, 57% fair, 10% good. Activities: harvesting vegetables, sorghum, cotton, corn, land preparation for seeding small grains, general care of livestock, poultry, catfish.

**ARIZONA:** Cloudy, scattered showers west, 10th; 11th statewide. Sunny 12th, 14th. Cloudy statewide 15th. Temperatures varied from 1° below to 5° above normal; extremes 29 to 87°, higher elevations; 45 to 97° deserts.

Cotton harvest progress slow first part of week due to previous rain, but active by week's end; 100% bolls open, 100% previous, 99% avg. 57% harvested, 56% previous, 35% avg. Weeds light to moderate, insects moderate. Defoliation light western areas, active in central, eastern areas. Alfalfa good. Harvest moderate all producing areas. Weeds light to moderate, insects light to moderate; disease light. Rain damage light all areas. Western area lemon harvest continues. Central area, cantaloupe, watermelons, honeydews, sweet corn, green onions, parsley, pecans harvested. Apples, sweet corn, chilies, lettuce, broccoli, cabbage, squash, pumpkins, cabbage harvested eastern production areas.

**ARKANSAS:** Cool week, temperatures averaging near normal. Scattered showers latter part of week. Extremes 36°; 84°. Rainfall none to 2.22 in.

Days suitable for fieldwork 6. Moderate rate of crop growth. Soil moisture supplies 24% short, 73% adequate, 3% surplus. Rice, sorghum, cotton, soybean harvests continued. Corn harvest 97% current week, 99% previous year, 98% 5-year avg. Fruit, vegetable crops in good condition. Fertilizer applied to pastures. Producers continued to plant cool season forages. Livestock good condition, external parasites reported.

**CALIFORNIA:** Varying amounts of rain received over much of State. Snow fell at highest elevations of Sierra Nevada. Only southern interior of State was dry.

Cool weather again prevailed. Harvesting, ground preparation slowed by wet weather. Planting winter wheat progressed. Field preparation fall, winter planted small grains continued. Rice harvest moved along, slowed by rain. Good yields most areas. Corn silage chopped. Alfalfa hay harvest progressed, good yields, quality; seed harvest winding down, concluded many areas. Dry bean harvest decreased most areas. Picking fruit, nut crops continued. Apple, table, wine grapes, avocado, date, olives, persimmon, pomegranate harvests active. Kiwifruit picking beginning. Almond, pistachio, walnut harvests continued. Pruning, floorwork active. Lemon, grapefruit, Valencia orange harvests continued. New crop Navel oranges maturing. Shipments broccoli lighter Santa Maria, Salinas fairly heavy. Broccoli fields treated Fresno area aphids, worms. Carrot packing continued Fresno area. Cauliflower movement moderate central coast, valley. Celery harvest moderate Santa Maria, increasing Salinas. Sweet corn harvest central valley tapering off. Head lettuce movement Salinas, Santa Maria increased.

Pepper harvest San Benito heavy. Modoc County fall potato harvest half complete, Siskiyou County 20 percent complete avg. quality, yields. Western Riverside County fall potato harvest continued. San Joaquin sweetpotatoes going storage. Melon harvest San Joaquin Valley very slow. Other crops harvested: eggplant, cucumbers, cabbage, snap beans, pumpkins, squash. Rangeland continued fair to good condition. Irrigation summer pastures ended. Cows remain in good condition, calving activity increased. Sheep returned from upper pastures, placed on alfalfa, other crop residue. Livestock movement active.

**COLORADO:** Clouds began moving into the western part of State on the 11th, by the 12th cloudy, cool conditions affected most of the State. These conditions continued throughout the rest of the week with periods of rain at lower elevations, snow in the mountains. Average moisture amounts over the major River Basins varied between 0.50 and 0.75 in. Temperatures during the period varied from near normal in the southern, western parts of State to 2 to 4° below normal in the north, east.

Days suitable for fieldwork 5.5. Soil moisture 7% very short, 29% short, 60% adequate, 4% surplus. Alfalfa 3rd cutting 96%, 86% 1992, 84% avg.; 4th cutting 36%, 52% 1992, 53% avg. Winter wheat seeded 97%, 99% 1992, 98% avg.; emerged 86%, 90% 1992, 84% avg. Dry beans cut 99%, 99% 1992, 97% avg.; harvested 98%, 97% 1992, 92% avg. Corn mature 84%, 85% 1992, 90% avg.; harvested 15%, 18% 1992, 17% avg. Sorghum turning color 97%, 90% 1992, 95% avg.; mature 77%, 63% 1992, 75% avg.; harvested 12%, 18% 1992, 29% avg. Dry onions harvested 99%, 100% 1992, 92% avg. Sugarbeets harvested 24%, 60% 1992, 22% avg. Corn 3% very poor, 6% poor, 21% fair, 59% good, 11% excellent. Sugarbeets 2% poor, 14% fair, 66% good, 18% excellent. Winter wheat 3% poor, 16% fair, 63% good, 18% excellent. Livestock rated good to excellent. Pasture, range feed condition is rated fair to good.

**FLORIDA:** Temperatures within 2° of normal. Highs; 80s, varying from low 80s Big Bend, interior northeast, 85 to 90° elsewhere. Lows; 40s Panhandle, Big Bend, 50s northeast, central, 60s south, low 70s immediate southeast coast. Rain totals 0.50 to 3.00 in. range. Amounts varied from under 0.50 in. to locally 3.00 to 5.00 in. Heaviest rains occurred in the southeast.

Soil moisture short to adequate throughout State except surplus in areas along the lower east coast. Peanut harvesting winding down. Cotton harvest active. Soybean harvest gaining momentum. Small grain planting starting. First sugarcane mill open. Sugar-cane planting active. Haymaking active where plant growth adequate. Citrus groves, trees, fruit very good to excellent. Moisture, warm weather producing new growth. Color break some early fruit. Harvest active early oranges, Navels, grapefruit, K-Early, early tangerines. Moderate to heavy rains latter part of week central, south. Heavy rainfall delayed planting Everglades, hurt crop development, harvesting. Caretakers cutting cover crops, spraying, fertilizing. Available; snap beans, sweet corn, cucumbers, eggplant, peppers, radishes, squash, tomatoes, cherry tomatoes, watermelons. Pasture 20% poor, 10% fair, 60% good, 10% excellent. State's pastures poor to excellent, cattle herds are in poor to good condition.

**GEORGIA:** Temperatures 1 to 5° below normal except some small positive departures extreme southwest. Warmest highs 70s north, upper 70s to low 80s central, south. Coolest lows mid 30s to mid 40s north, central mid 40s to near 50 south. Rainfall 0.25 to 1.00 in. north, central, 0.33 to 2.75 in. south.

Days suitable for fieldwork 6.5. Soil moisture 77% very short, 19% short, 4% adequate. Sorghum 3% very poor, 23% poor, 62% fair, 12% good; 78% harvested for grain, 60% 1992, 68% avg. Peanuts 17% very poor, 47% poor, 30% fair, 6% good; 91% dug, 88% 1992, 91% avg.; 80% threshed, 73% 1992, 80% avg. Wheat 11% very poor, 22% poor, 46% fair, 21% good; Planting stopped from dry soils, emergence very slow. Rye 25% planted, 47% 1992, 39% avg. Other small grains 12% very poor, 44% poor, 43% fair, 1% good; 18% planted, 29% 1992, 22% avg. Vegetables 1% very poor, 13% poor, 65% fair, 17% good, 4% excellent. Apples 17% poor, 20% fair, 63% good; 80% harvested, 86% 1992, 87% avg. Pecans 12% fair, 88% good; 5% harvested, 4% 1992, 6% avg.; expecting an excellent crop. Hay 29% very poor, 40% poor, 27% fair, 4% good; baling peanut vine hay active. Pasture 27% very poor, 34% poor, 32% fair, 7% good. Cattle 5% poor, 72% fair, 22% good, 1% excellent. Hogs 3% poor, 31% fair, 63% good, 3% excellent.

**HAWAII:** Sunshine, showers typified the weather. A high pressure system to the north sustained trade winds for cooler conditions. Temperatures varied from the high 60s to high 80s. Rainfall ranged from none to 8.80 in.

Weather beneficial for normal field operations, crop progress. Soil moisture levels generally ample with some areas requiring added water supplies. Insects and disease still hampering some fields. Banana output near last week's level. Papaya supplies lower.

**IDAHO:** Temperatures 4° above normal to 4° below normal. Precipitation 0.29 to 1.40 in. north, 0.07 to 0.16 in. southwest, 0.08 to 0.60 in. south-central, 0.30 to 1.30 in. east.

Days suitable for fieldwork 5. Soil moisture 0% very short, 7% short, 80% adequate, 13% surplus. Winter wheat harvested 99%, 100% 1992, 100% avg. Oats harvested 98%, 100% 1992, 100% avg. Potatoes turning or turned 14%, harvested 86%; 1% very poor, 3% poor, 28% fair, 64% good, 4% excellent. Alfalfa third cutting 83%, 98% 1992, 97% avg. Lentils harvested 97%, 100% 1992, 100% avg. Apples harvested 61%, 93% 1992, 71% avg. Onions harvested 95%, 100% 1992, 95% avg. Dry beans harvested 91%, 98% 1992, 99% avg. Field corn silage harvested 74%, 97% 1992, 93% avg. Field corn grain harvested 31%, 39% 1992, 24% avg. Sugarbeets harvested 38%, 51% 1992, 39% avg. Irrigation water supplies 0% very poor, 0% poor, 5% fair, 72% good, 23% excellent. Activities: Harvesting potatoes, sugarbeets, spring wheat, hay, dry beans, apples. Planting winter wheat. Good apple coloring Payette county. Sugarbeets smaller size, higher sucrose content. Pasture, range condition 96% of normal. Livestock reported in good to excellent condition.

**ILLINOIS:** High pressure hovered over the Great Lakes keeping temperatures chilly; frontal system over the south brought moderate rain late in the period. Highs near 60° north, 70° south, lows from the upper 30s north to upper 40s south. Rainfall 0.50 in. north, south to 1.00 to 2.00 in. central areas.

Days suitable for fieldwork was 5.5. Harvest was widespread across the State. Soil moisture supplies were 31% surplus, 69% adequate. Winter wheat emerged at 7%, 28% 1992, 28% avg. Farm activities included harvesting corn, beans, sorghum, seeding wheat, fall tillage, fertilizer applications, cutting alfalfa, machinery preparation, repair, tending livestock. Pasture condition 95% of normal.

**INDIANA:** Highs were 2 to 4° below normal. Lows ranged from the upper 30s to as high as 50, averaging 1 to 2° below normal. Rainfall totals were over an inch in the north to under a half inch in much of the south and east.

Days suitable for fieldwork 5. Harvesting continued during most of the week until weekend rains came. Pastures are rated 92% of normal, 91% last week. Topsoil rated 4% short, 86%

adequate, 10% surplus. Subsoil moisture 4% short, 85% adequate, 11% surplus. Wheat acreage tilled 70%, 69% 1992, 59% avg. Moisture content of harvested corn 22.5%, soybeans 12.6%.

**IOWA:** Temperatures 1 to 3° below normal. Extremes 24°; 73°. Rainfall trace north central to 1.33 in. southwest; average 0.37 in. (normal 0.52 in).

Days suitable for fieldwork 5.1. Topsoil 71% adequate, 29% surplus. Subsoil 33% adequate, 67% surplus. Winter Wheat seeded 70%, 71% 1992, 88% normal. 1994 Row crop acreage fall tilled 10%, 6% 1992, 16% normal. 1994 row acreage fall fertilizer 8%, 6% 1992, 12% normal. Pasture condition 1% very poor, 9% poor, 39% fair, 44% good, 7% excellent. Livestock mostly good. There were reports that the weaned calves are a lighter weight than they normally are.

**KANSAS:** Temperatures 3° below normal northwest, 5 to 7° below normal elsewhere. Precipitation light to moderate all areas, ranged from 0.02 in. west central to 0.92 in. northwest.

Days suitable for fieldwork 6.0. Topsoil moisture 36% short to very short, 59% adequate, 5% surplus. Subsurface moisture 11% short to very short, 82% adequate, 7% surplus. Dry weather continued most of the week, allowed wheat seeding to proceed on schedule. Moisture late in the week helped the emerging crop. Corn harvest made good progress in all areas. Central, eastern areas sorghum harvest in full swing. Northwest not yet underway. Soybean harvest progressing rapidly. Farmers took advantage of good weather earlier in week to harvest fall crops, plant wheat. Cool season grasses producing good forage east. Ranges, pastures generally good condition. Ranchers weaning calves, moving cattle to market.

**KENTUCKY:** Temperature 57°. Mean high 67°, mean low 46°. Precipitation avg. 0.68 in.

Days suitable fieldwork 5.1. Soil moisture 3% very short, 45% short, 52% adequate. Weekend rains benefitted tobacco stripping, seeded small grains. Burley 13% stripped, 11% 1992, 12% avg.; Housed 1% poor, 11% fair, 78% good, 10% excellent. Pastures good condition. Corn harvested well ahead of last year, avg. Fall wheat 40% seeded, 31% 1992, 39% avg.

**LOUISIANA:** Temperatures 0.5 to 4.0° below normal. Extremes 43°; 87°. Rainfall 0.13 in. southeast areas to 1.97 in. southwest.

Days suitable for fieldwork 5.0. Soil moisture 14% very short, 26% short, 50% adequate, 10% surplus. Hay 96% final cutting, 98% 1992, 94% avg. Pecans 7% harvested, 9% 1992, 6% avg. Harvest was off to a good start. Soybeans 96% turning color, 96% 1992, 88% avg. Harvest active. Sweet potatoes 65% harvested, 68% 1992, 74% avg. Yields reported below avg. in most areas. Sugarcane 2% poor, 24% fair, 74% good; 100% planted, 89% 1992, 94% avg.; 13% harvested, 10% 1992, 10% avg. Harvest active. Wheat 8% planted, 6% 1992, 8% avg.; 2% emerged 1% 1992, 3% avg. Planting active in areas with good moisture. Livestock 2% poor, 40% fair, 56% good, 2% excellent. Pastures 4% very poor, 19% poor, 21% fair, 56% good. Some planting of rye grass was done where moisture was adequate. Vegetables 14% poor, 60% fair, 26% good.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.94 in. Temperature 54.4°, normal 56.7°. Extremes 27°; 85°.

Days suitable for fieldwork 5.4. Topsoil moisture 21% short, 79% adequate. Subsoil moisture 5% very short, 37% short, 58% adequate. Small grains good. Wheat 32% seeded, 19% 1992, 26% avg. Barley 74% seeded, 44% 1992, 58% avg. Rye 53% seeded, 22% 1992, 46% avg. Field corn poor to fair; 73% harvested for grain, 36% 1992, 58% avg.; 97% harvested for silage, 79% 1992, 92% avg. Soybeans poor to mostly fair, 76% shedding leaves, 66% 1992, 76% avg.; 21% harvested, 23% 1992, 21% avg. Sorghum 65% mature, 98% 1992, n/a avg.; 20% harvested, 14% 1992, n/a

avg. Other hay third cut 76% complete, 85% 1992, 74% avg.; fourth cut 55% complete, 39% 1992, 35% avg. Alfalfa fourth cut 89% complete, 87% 1992, 83% avg.; fifth cut 30% complete, 47% 1992, 25% avg. Hay supplies short to adequate. Pasture good. Apples 80% harvested, 62% 1992, 83% avg.

**DELAWARE:** Precipitation 0.82 in. Temperature 54.2°, normal 57.3°. Extremes 38°; 80°.

Days suitable for fieldwork 6.0. Topsoil moisture 60% short, 40% adequate. Subsoil moisture 60% short, 40% adequate. Small grains good. Wheat 18% seeded, 10% 1992, 19% avg. Barley 71% seeded, 23% 1992, 49% avg. Rye 48% seeded, 30% 1992, 38% avg. Field corn poor; 75% harvested for grain, 42% 1992, 74% avg. Soybeans poor to fair; 72% shedding leaves, 70% 1992, 68% avg.; 17% harvested, 11% 1992, 14% avg. Sorghum poor to fair; 78% mature, 83% 1992, n/a avg.; 2% harvested, 6% 1992, 14% avg. Other hay third cut 91% complete, 93% 1992, 99% avg.; fourth cut 0% complete, 58% 1992, 30% avg. Alfalfa hay fourth cut 85% complete, 91% 1992, 95% avg.; fifth cut 15% complete, 39% 1992, 32% avg. Hay supplies short. Pasture very poor. Apples 89% harvested, 72% 1992, 82% avg.

**MICHIGAN:** Extremes 18°; 70°. Precipitation 0.03 to 3.31 in.

Days suitable for fieldwork 5.5. Soil moisture 0% short, 90% adequate, 10% surplus. Dry Beans 90% harvested, 85% 1992, 85% avg.; 5% very poor, 10% poor, 25% fair, 45% good, 15% excellent. Corn Silage 80% harvested, 50% 1992, 80% avg. Potatoes 80% harvested, 90% 1992, 85% avg. Sugarbeets 30% harvested, 30% 1992, 25% avg. Hay 95% third cutting, 80% 1992, 90% avg.; 1% very poor, 4% poor, 25% fair, 50% good, 20% excellent. Pasture 85% normal. Major activities included cutting silage, fall tillage, seeding wheat, harvesting corn, soybeans, dry beans, sugarbeets.

**MINNESOTA:** Temperatures 3 to 7° below normal. Extremes 15°; 72°. Precipitation 0.09 to 0.54 in. below normal, ranging from none to 0.41 in. Greatest weekly precipitation was 0.55 in.

Days suitable for fieldwork 6.0. Topsoil 2% short, 84% adequate, 14% surplus. Hay grain 69% stubble plowed or tilled, 72% 1992, 89% avg. Potatoes 95% harvested, 94% 1992, 95% avg. Flax 78% harvested, 78% 1992, 95% avg. Dry Beans 95% harvested, 97% 1992, 98% avg. Sunflowers 20% harvested, 41% 1992, 78% avg. Sugarbeets 88% harvested, 85% 1992, 87% avg. Corn 6% combined, 8% 1992, 49% avg.; 85% silage cut, 86% 1992, 96% avg.; 31% moisture content, 29% 1992, 23% avg. Soybeans 70% combined, 73% 1992, 88% avg.; 13% moisture content 12% 1992, 11% avg. Corn 18% very poor, 47% poor, 31% fair, 4% good. Soybean 10% very poor, 36% poor, 47% fair, 7% good.

**MISSISSIPPI:** Temperature 62°, 3.4° below normal. Extremes 32°; 89°. The entire lower half of the State received the most precipitation with the coastal district accumulating over 2.5 in. State 0.88 in., 0.18 above normal. Soil temperature 68°.

Days suitable for fieldwork 5.8, 5.7 1992, 6.0 avg. Soil moisture 11% very short, 39% short, 47% adequate, 3% surplus. Corn 91% harvested, 89% 1992, 90% avg.; 4% very poor, 13% poor, 69% fair, 13% good, 1% excellent. Cotton 98% open bolls, 99% 1992, 97% avg.; 52% harvested, 49% 1992, 60% avg.; 4% very poor, 30% poor, 60% fair, 6% good. Rice 98% mature, 100% 1992, 100% avg.; 79% harvested, 95% 1992, 90% avg.; 57% fair, 43% good. Sorghum 100% mature, 100% 1992, 99% avg.; 94% harvested, 98% 1992, 94% avg.; 96% silage harvested, 100% 1992, 99% avg.; 5% poor, 79% fair, 16% good. Soybeans 97% coloring, 99% 1992, 97% avg.; 73% shedding, 76% 1992, 81% avg.; 34% harvested, 38% 1992, 32% avg.; 2% very poor, 6% poor, 80% fair, 12% good. Sweetpotatoes 73% harvested, 65% 1992, 77% avg.; 55% fair, 45% good. Wheat 26% planted, 39% 1992, 37% avg.; 2% very poor, 7% poor, 75% fair, 16% good. Hay 100% harvested, 100% 1992, 97% avg. Pecans 4%

harvested, 18% 1992, 7% avg.; 6% very poor, 12% poor, 43% fair, 39% good. Livestock 1% poor, 22% fair, 72% good, 5% excellent. Pasture 82% of normal. Activities: Crop harvesting.

**MISSOURI:** Temperatures 4° below normal. Rainfall avg. 0.80 in., varying from 0.40 in. southwest to 1.48 in. west-central.

Days suitable for fieldwork 5.0, ranging from 4.1 northwest to 5.7 south-central. Topsoil moisture 82% adequate, 18% surplus. Some late beans showing signs of frost damage. Corn harvested by districts: 90% southeast, 36% or less northern districts. Soybeans mature 75%, 87% 1992, 80% avg.; harvest 18% southeast to 40% northeast. Sorghum harvest ranges 12% east-central to 73% southeast. Pasture 1% poor, 15% fair, 67% good, 17% excellent.

**MONTANA:** Temperatures near normal. Precipitation light to moderate statewide.

Days suitable for fieldwork 4.4. Topsoil moisture 13% short, 82% adequate, 5% surplus. Subsoil moisture 22% short, 72% adequate, 6% surplus. Spring wheat harvested 91% complete, 98% 1992, 100% avg. Barley harvested 93% complete, 100% 1992, 100% avg. Oats harvested 94% complete, 100% 1992, 100% avg. Corn silage harvested 91% complete, 99% 1992, 98% avg. Sugarbeets harvested 36% complete, 87% 1992, 86% avg. Dry beans harvested 77% complete, 100% 1992, 98% avg. Potatoes harvested 89% complete, 94% 1992, 91% avg. Pasture, range feed 102% of normal, down 1 point from last week. Cattle, calves moved from summer ranges 45%, 61% 1992, 69% avg. Sheep, lambs moved from summer ranges 53%, 63% 1992, 73% avg.

**NEBRASKA:** Temperatures near normal. Scattered precipitation latter half of week varied from 0.10 in. north central to 1.10 in. central.

Days suitable for fieldwork 3.9. Topsoil moisture 2% short, 78% adequate, 20% surplus. Subsoil moisture 1% short, 83% adequate, 16% surplus. Corn harvest 15%, 16% 1992, 52% avg. Early corn harvest reflects some problems from stalk rot, poorly filled ears, low test weight, stalk breakage. Sorghum harvest 9%, 9% 1992, 58% avg. Soybean harvest 87%, 79% 1992, 82% avg. Dry bean harvest 91%. Wheat 96% emerged, 97% 1992, 93% avg. Pasture, range 102% of normal.

**NEVADA:** Weather unsettled with scattered showers, cool temperatures. Precipitation 0.68 in. central, 0.50 in. north, 0.25 in. southern areas. Temperatures slightly below normal.

Some late hay harvest, winter wheat seeding continues. Potato harvest essentially complete. Livestock movement to market, winter grazing progressing normally.

**NEW ENGLAND:** Weather data unavailable.

Days suitable for fieldwork 5.6. Soil moisture 10% short, 71% adequate, 19% surplus. Available grazing 28% short, 67% adequate, 5% surplus. Fieldwork progress 2 days behind schedule. Pasture condition 77% of normal. Maine potato harvest 80%, 100% 1992, 90% avg. Connecticut, Massachusetts potatoes 90% harvested, 95% 1992, 90% avg. Rhode Island potatoes 95% harvested, 100% 1992, 90% avg. Potato good to fair regionwide. Maine oat fair. Maine oats harvested 90%, 100% 1992, 100% avg. Field corn good to fair. Field corn 75% harvested, 80% 1992, 80% avg. Second cutting hay 90% harvested, 100% 1992, 100% avg.; condition good. Third cutting hay 90% harvested, 80% 1992, 90% avg.; condition good. Sweet corn harvested 100%, 100% 1992, 100% avg.; condition good to fair. Apples 90% harvested, size medium, color good, condition good. Peaches 100% harvested, size medium, condition good. Pears 100% harvested, size medium, condition good. Raspberries 100% harvested, size medium, condition good. Cranberries 70% harvested, size medium to small, condition good to fair. Major farm activities: Chopping corn, seeding cover crops, picking apples.

**NEW JERSEY:** Temperatures below normal. Extremes 24°; 75°. Rainfall 0.32 in. north, 1.55 in. central, 1.09 in. south. Heaviest 24 hour total 1.85 in. on 12th, 13th. Estimated soil moisture, in percent field capacity, avg. 96% north, 95% central, 88% south. Four inch soil temperatures 50° north, 54° central, 55° south.

Soil moisture content remains adequate for State. Harvest of peppers is nearing completion in most areas. Harvest of fall spinach, cabbage, snap beans, lettuce remains active. Harvest of sweet potatoes is also active. Apple harvest continues with damage reported in some areas due to dry weather during the summer. Cranberry harvest is active. Harvesting of early planted corn, soybeans are active. Pasture conditions are normal; the amount of feed requirements pastures are supplying is average.

**NEW MEXICO:** The northwestern third of the State turned cool with temperatures 2 to 5° below normal while readings elsewhere remained 2 to 4° warmer than avg. Except for a few mountain locations, precipitation for the week was scarce totaling less than 0.10 in. A few locations received more than 0.50 in. from showers on the 8th and 10th.

Days suitable for fieldwork 6.4. Soil moisture 75% short, 25% adequate. Light freeze damage in isolated areas. Crop conditions: Alfalfa 4% poor, 25% fair, 67% good, 4% excellent; last cutting continues. Corn 6% poor, 24% fair, 58% good, 12% excellent; most silage complete; grain started in few areas. Irrigated wheat 10% poor, 34% fair, 56% good. Dryland wheat 67% poor, 33% fair. Wheat crop 98% planted; 74% emerged. Chile 6% poor, 22% fair, 61% good, 11% excellent; green harvest slowing; red harvest increasing. Lettuce good; harvest progressing. Pecans fair to good. Apples fair to good; harvest slowing. Cattle, sheep fair to excellent. Range feed 69% of normal.

**NEW YORK:** Temperatures much below normal early in the week with snow flurries in central areas. Temperatures fell into the 20s even in the east. Warm front moved in on 12th, bringing rainfall to upstate locations. High pressure moved in on 15th, bringing a return of seasonable warmth. Temperatures climbed to 70 to 75° on 16th. Light rain fell in the west.

Days suitable for fieldwork 5.8. Soil moisture mostly adequate. Pasture 89% of normal. Corn silage harvest 75% finished, 56% 1992, 70% avg. Grain corn 12% harvested, 1% 1992, 12% avg. Third cutting alfalfa 94% complete, 85% 1992, 90% avg. Potato harvest near completion. Dry bean harvest back in full swing after being delayed by wetness. Apple harvesting continued in high gear. Cider making was in full swing. Risk of fruit drop increased with recent freezing temperatures. Storage cabbage harvest underway. Harvesting of hardy late season vegetables continued, harvesting of other vegetable crops drew to a close. Growers continued moving onions into storages.

**NORTH CAROLINA:** Temperatures 5° below normal to 2° above normal. The largest negative departures were in the Piedmont, Coastal Plains. Total precipitation 3.84 in. at Thompkinsville to no rain at Oxford Shoals.

Days suitable for fieldwork 5.6. Soil moisture 16% very short, 42% short, 40% adequate, 2% surplus. Crop condition: Pasture 7% very poor, 25% poor, 46% fair, 22% good. Field Tobacco 1% very poor, 8% poor, 56% fair, 35% good. Corn 15% very poor, 43% poor, 38% fair, 4% good. Cotton 7% poor, 69% fair, 22% good, 2% excellent. Peanuts 3% very poor, 10% poor, 61% fair, 26% good. Soybeans 3% very poor, 12% poor, 68% fair, 17% good. Sweetpotatoes 3% poor, 50% fair, 44% good, 3% excellent. Apples 11% poor 50% fair, 39% good. Sorghum 11% poor, 67% fair, 22% good. Hay, roughage supplies 7% very short, 35% short, 55% adequate, 3% surplus. Apples harvested 74%, 76% 1992, 87% avg. Flue-Cured Tobacco harvested 95%, 100% 1992, 100% avg. Burley Tobacco harvested 100%, 100% 1992, 100%

avg. Corn for Silage harvested 98%, 94% 1992, 95% avg. Corn for Grain 88%, 75% 1992, 79% avg. Sorghum for Grain 78%, 55% 1992, 56% avg. Sweet-potatoes harvested 54%, 56% 1992, 64% avg. Cotton harvested 42%, 11% 1992, 24% avg. Peanuts Dug 72%, 50% 1992, 65% avg.; Threshed 48%, 30% 1992, 48% avg. Cotton Open Bolls 100%, 97% 1992, 96% avg. Soybean drop leaf 59%, 56% 1992, 59% avg. Second cutting of the hay crop is 99% completed. Third cutting of the hay crop is 71% completed. Major activities: Harvesting, marketing tobacco; harvesting corn for grain, harvesting peanuts, harvesting sweet potatoes. Other activities: Cutting corn for silage; seeding cover crops; tending livestock.

**NORTH DAKOTA:** Cool with little moisture. Temperatures 1° below normal south central to 5° below normal northeast. Extremes: 15°; 71°.

Days suitable for fieldwork 6.8. Soil moisture supplies continued well above avg. Topsoil 2% very short, 52% short, 44% adequate, 2% surplus. Subsoil 18% short, 74% adequate, 8% surplus. The small grain harvest, one of the latest in history, virtually complete. Combining of late season crops continued behind avg. Progress variable due to high moisture content of many standing crops. Flax 89% harvested, 93% 1992, 98% avg. Corn for grain 9% harvested, 25% 1992, 60% avg. Corn for silage 97% cut, 97% 1992, 99% avg. Dry beans 86% harvested, 89% 1992, 97% avg. Soybeans 82% harvested, 90% 1992, 95% avg. Sunflowers 6% harvested, 35% 1992, 71% avg. Potatoes 100% dug, 97% 1992, 98% avg. Sugarbeets 95% lifted, 94% 1992, 93% avg. Range, pasture 90% of normal.

**OHIO:** Daily highs were in the low, mid 60s; 1 to 5° below normal. Lows avg. in the 40s; 1 to 4° above normal south, northeast, central; 1 to 4° below normal northwest. Coldest readings were in the mid 20s to mid 30s north to around 40° far southeast. Rainfall totals 0.40 to 1.20 in., which was wetter than normal by 0.15 to 0.60 in. Soil temperatures at the 4-in. depth under bare ground averaged in mid to upper 50s.

Days suitable for fieldwork 5.7. Topsoil moisture 36% short, 63% adequate, 1% surplus. Subsoil moisture short. Potatoes harvested 93%, 85% 1992, 84% avg. Fall apples harvested 75%, 67% 1992, 69% avg. Grapes harvested 71%, 61% 1992, 71% avg. Sugarbeets harvested 18%. Corn harvested for silage 95%, 79% 1992, 80% avg. Pasture 7% very poor, 18% poor, 38% fair, 32% good, 5% excellent. Hay 2% very poor, 8% poor, 42% fair, 43% good, 5% excellent. Harvested corn moisture 23%. Harvested soybean moisture 13%. Extensive European corn border damage in scattered areas. Double-cropped soybeans were killed by frost north. Good sugar content in harvested sugarbeets. Little growth in pastures.

**OKLAHOMA:** Temperatures 2° below normal south central to 1° above normal Panhandle. Precipitation none central to 0.79 in. west central.

Days suitable for fieldwork 6.1. Topsoil moisture 24% short, 74% adequate, 2% surplus. Subsoil moisture 6% short, 94% adequate. Soybeans 82% mature, 67% 1992, 59% avg.; 30% harvested, 26% 1992, 20% avg. Peanuts 26% fair, 74% good; 73% mature, 75% 1992, 89% avg.; 29% harvested, 41% 1992, 29% avg. Alfalfa 65% 5th cut, 54% 1992, 42% avg; 2% 6th cut, none 1992, none avg. Pastures 95% of normal. Feeders, calves \$1.00 to \$4.00 lower.

**OREGON:** Temperatures above normal statewide, greatest departures Willamette Valley, southwestern valleys 3 to 5° above normal. Precipitation significant statewide; Portland reported more than 1.00 in.

Soil moisture 26% short, 74% adequate. Barley 44% planted. 1994 winter wheat crop 81% planted, 47% emerged. Columbia Basin field corn for grain and silage harvest continues. Russian wheat aphid infestation slight, Columbia Basin. Malheur &

Klamath Co. sugarbeets harvest continues. Potato, onion harvest continued most areas, potato harvest complete Malheur County. 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; hazelnut harvest underway; wine grape harvest underway; strawberry, cranberry fields being prepared for winter. Cranberry harvest 33% complete, southern coast. Livestock good to excellent. Range, pasture conditions 93% of normal. Supplemental hay, protein being feed, statewide. Weaning, pre-conditioning, hauling calves to market.

**PENNSYLVANIA:** Cool beginning of week; warm end of week. Average temperature 6° below normal. Extremes 20°; 75°. Precipitation 0.75 in., 0.07 in. above normal.

Days suitable for fieldwork 4. Soil moisture 6% short, 81% adequate, 13% surplus. Ensilage corn harvested 87% complete, 61% 1992. Soybean harvest 22% complete, 11% 1992. Soybean crop 4% very poor, 7% poor, 26% fair, 47% good, 16% excellent. Potato harvest 86% complete, 85% 1992. Fall plowing 78% complete, 72% 1992. Wheat planted 74% complete, 73% 1992. Barley planted 87% complete, 87% 1992. Third cutting alfalfa 98% complete, 87% 1992. Fourth-cutting alfalfa 70% complete, 63% 1992. Quality of hay made 7% poor, 59% fair, 34% good. Feed from pastures good to excellent. Apple harvest 76% complete, 72% 1992. Grapes harvest 89% complete, 81% 1992. Activities: Making hay, filling silos; plowing; planting wheat, barley; harvesting fruits, vegetables; harvesting corn silage; harvesting corn; cleaning, storing, repairing equipment; hauling manure; fixing fence; caring for livestock.

**PUERTO RICO:** Island rainfall 0.47 in. was 1.32 in. below normal. Weekly total 4.88 in. at San Sebastian, 2.58 in. at Arecibo Ionospheric Obs. Highest 24 hour total 1.63 in. at San Sebastian. WSFO San Juan Mean temperature was 83.3 which is 1.7° above normal. Island temperatures 80 to 82° on coasts, 74 to 78° in interior with mean station temperature 84.6° at Guayama to 66.9° at Pico Del Este. Extremes 59°; 95°.

**SOUTH CAROLINA:** Week began, ended with area of low pressure offshore providing cool weather, scattered showers. Middle of week was seasonal with sunny skies. Low pressure area late in week accompanied annual high tides along coast. Localized flooding at time of high tide reported on 15th. Much of heavy rain remained offshore, showers heaviest along coastal plain. Daily temperatures last week averaged 2° below normal. Statewide rainfall avg. nearly 0.50 in.

Days suitable for fieldwork 6.3. Soil moisture 37% very short, 41% short, 22% adequate. Barley fair; 22% planted, 17% 1992, 15% avg.; 4% emerged, 12% 1992, 9% avg. Oats fair; 31% planted, 24% 1992, 23% avg.; 15% emerged, 15% 1992, 12% avg. Rye fair; 39% planted, 31% 1992, 28% avg.; 25% emerged, 25% 1992, 17% avg. Wheat fair; 7% planted, 3% 1992, 4% avg.; 3% emerged, 1% 1992, 3% avg. Sorghum poor to fair; 61% harvested, 63% 1992, 61% avg. Soybeans 13% very poor, 27% poor, 35% fair, 25% good; 77% leaves turning, 78% 1992, 79% avg.; 40% dropping leaves, 34% 1992, 41% avg.; 20% mature, 22% 1992, 25% avg.; 4% harvested, 2% 1992, 4% avg. Cotton 5% very poor, 55% poor, 39% fair, 1% good; 47% harvested, 14% 1992, 32% avg. Tobacco fair; 87% stalks destroyed, 91% 1992, 84% avg. Sweetpotatoes fair; 52% harvested, 52% 1992, 62% avg. Fall hay poor to fair; 76% harvested, 88% 1992, 85% avg. Apples poor to fair; 85% harvested, 84% 1992, 89% avg. Pecans fair. Pasture 30% very poor, 30% poor, 33% fair, 7% good. Winter grazing fair; 59% planted, 58% 1992, 56% avg.; 39% emerged, 43% 1992, 38% avg.

**SOUTH DAKOTA:** Temperatures were near normal last week. Extremes 18°; 71°. Precipitation for the week was generally

light, scattered. Greatest rainfall (locally over 2.00 in.) were in the west-central division. Maximum 2.08 in.

Days suitable for fieldwork 5.1. Topsoil moisture: 26% short, 64% adequate, 10% surplus. Subsoil moisture: 21% short, 65% adequate, 14% surplus. Sunflowers 3% poor, 14% fair, 75% good, 8% excellent. Winter wheat 21% fair, 59% good, 20% excellent. Winter rye 37% fair, 53% good, 10% excellent. Sorghum 80% silage harvested, 69% 1992, 87% avg. Corn 81% silage harvested, 87% 1992, 87% avg. Sunflowers 23% harvested, 44% 1992, 70% avg. Soybean harvest progressing well; yields vary greatly. Corn harvest progressing slowly as farmers waiting for the corn crop to dry down before harvesting. Livestock 2% fair, 81% good, 17% excellent. Pasture 90% of normal. Cattle were being moved to fall pastures. Calves were being weaned, moved to market.

**TENNESSEE:** Temperatures 1 to 6° below normal. Precipitation below normal, except Nashville 0.62 in. above normal.

Days suitable for fieldwork 5.4. Soil moisture 4% very short, 44% short, 52% adequate. Corn 77% grain harvested, 74% 1992, 76% avg. Cotton 100% open bolls, 98% 1992, 98% avg.; 55% harvested, 33% 1992, 49% avg.; 35% poor, 46% fair, 19% good. Sorghum 93% harvested, 77% 1992, 78% avg. Soybeans 86% dropping leaves, 82% 1992, 81% avg.; 54% mature, 48% 1992, 52% avg.; 16% harvested, 16% 1992, 17% avg.; 10% poor, 47% fair, 43% good. Tobacco 17% burley stripped, 19% 1992, 24% avg. Wheat 26% seeded, 28% 1992, 29% avg. Pastures 8% poor, 50% fair, 42% good. Cattle 1% poor, 23% fair, 74% good, 2% excellent. Ideal weather allowing harvest progress to run ahead of normal for most crops. Several cotton growers report difficulty in picking crop. While there is a large number of bolls, they are small in size and fiber is sticking to the bolls. Single-crop soybean harvest is underway across the State. Early yields have varied by location, some better than expected, some worse. Most tobacco is in the barns, stripping is active. A few acres of late-set tobacco remain to be cut in East, but will be completed this week. Weekend rainfall benefitted growers who were waiting for improved moisture to begin fall seedings. The rain also eased concern of cattle producers whose farm ponds were beginning to run dry. There has been considerable movement of cattle to market with winter feed supplies expected to be short.

**TEXAS:** Weather data unavailable.

**Crops:** Corn: mainly dry, open conditions in Northern High Plains allowed producers to continue to harvest corn without much interruption. Statewide corn 77% normal, 87% 1992. Cotton: Producers were applying harvest aid chemicals, stripping cotton on Plains. Some yields continued to be disappointing but other fields yielding better than expected. In Northern Blacklands harvesting delayed in some areas due to rain but remaining harvest was active elsewhere. Statewide cotton 74% normal, 64% 1992. Rice limited harvesting of second crop began last week. Second crop continued to make good progress, but acreage is limited due to late planting, poor price. Grain Sorghum: Harvest in full swing in Plains. Producers hoping for a few more weeks of mild weather to aid maturity. Statewide grain sorghum 80% normal, 81% 1992. Small grains: Northern High Plains, existing stands of irrigated wheat look good, but dry land fields in need of rain. Small grain planting continued to be active where conditions allowed. Planting delayed by rain in Blacklands where some producers were having to contend with army worms in existing stands. Statewide wheat 68% normal, 58% 1992. Peanuts: Harvest active where conditions allowed. In Cross Timbers many fields continued to be baled for hay as prospects for dryland crop continued to diminish. On Plains, some good yields were being reported. Statewide peanut 69% normal, 82% 1992. Soybeans: Harvesting made good progress with generally open weather in Northern High Plains. In Blacklands, harvesting of beans winding down.

**Commercial Vegetables, Fruit and Pecans:** Rio Grande Valley, cucumber harvest continued. Some fields of onions and fall

vegetables were planted. Pepper, tomato crops made good progress with only minor insect damage. San Antonio-Winter Garden, cabbage, greens, onions, peppers made good progress. East Texas, sweet potato harvest active. High Plains, pumpkins, peppers were harvested. Trans-Pecos, harvesting of peppers continued. Fall onions made good progress. Pecans: Harvesting continued to increase across State. In Cross Timbers some trees suffered nut loss due high winds and hail.

**Range and Livestock:** Winter pasture planting increased in many areas due to recent rains. Pasture, grazing short in South Central Texas. Pastures in Blacklands benefitted from rains last week. Rain should also help warm season grasses in East Texas where some producers are hoping for one more cutting. Hay supplies continue to be short in many areas. Livestock continued to be in good condition across State.

**UTAH:** Temperature maximums 6 to 7° below normal, minimums 2° above normal. Precipitation was moderate in the southern half of State, heavy across the north.

Days suitable for fieldwork 3.3. Soil moisture 4% short, 82% adequate, 14% surplus. Winter wheat seeded 95%, 94% 1992, 94% avg.; emerged 84%, 64% 1992, 59% avg. Corn mature 80%, 100% 1992; harvested for grain 16%, 66% 1992, 44% avg.; harvested for silage 89%. Alfalfa hay 4th cutting 75% complete, 95% 1992, 86% avg. Apples picked 52%, 97% 1992, 84% avg. Potatoes harvested 72%, 96% 1992, 88% avg. Onions harvested 82%. Cattle moved from summer range 82%, 89% 1992, 81% avg. Sheep moved from summer range 89%, 90% 1992. Pasture, range good to excellent.

**VIRGINIA:** Temperatures near to slightly below normal. Extremes 28°; 86°. Precipitation a little below normal.

Days suitable for fieldwork 5.4. Topsoil moisture was 12% very short, 29% short, 59% adequate. Pasture 9% very poor, 22% poor, 50% fair, 19% good. Corn silage harvested 96%, 94% 1992, 93% avg. Corn harvested for grain 74%, 65% 1992, 69% avg. Soybean condition 7% very poor, 55% poor, 37% fair, 1% good. Soybeans harvested 15%, 12% 1992, 11% avg. Cotton harvesting 44% completed, 1% 1992, 15% avg. Peanuts dug 71%, 66% 1992, 77% avg. Peanuts combined 52%, 43% 1992, 63% avg. Flue tobacco 98% harvested, 100% 1992, 98% avg. Fire tobacco 100% harvested, 100% 1992, 100% avg. Burley tobacco 100% harvested, 100% 1992, 100% avg. Sweetpotato harvest about 95% completed. Fall apples 86% harvested. Winter wheat 19% seeded, 14% 1992, 20% avg. Oats 48% seeded, 50% 1992, 62% avg. Barley 52% seeded, 35% 1992, 52% avg. Livestock fair to good. Marketing feeder cattle. Late pasture growth good. Reseeding pastures, hayfields. Fall vegetable harvesting continued.

**WASHINGTON:** Temperatures normal to 5° above normal west; 1° below normal to 4° above normal east. Precipitation 0.04 in. to 0.86 in. west; none to 0.21 in. east. Freezing temperatures along central eastern slope of the Cascades, northeast corner of State. No freeze damage was reported.

Days suitable for fieldwork 6.4. Soil moisture 24% short, 76% adequate. Irrigation water supply 19% short, 81% adequate. Hay, other roughage 13% short, 85% adequate, 2% surplus. Range, pasture 1% poor, 71% fair, 28% good. Winter wheat dryland 20% fair, 60% good, 20% excellent; irrigated 80% good,

20% excellent. Barley dryland 20% fair, 80% good; irrigated 100% good. Potatoes, dry beans, and corn, 100% good. Fall grain seeding continued. Some disease, pest problems were reported, but nothing too severe. 3rd cutting of alfalfa harvest was completed. Delicious apples harvest was winding down, Fujis, Granny Smiths starting to be picked. Grape harvest continued, expected to run into November. Cranberries near harvest. Cattle continued to be moved to fall pastures.

**WEST VIRGINIA:** Temperature 52°. Extremes 26°; 77°. Precipitation 0.77 in.

Days suitable for fieldwork 4.8. Soil moisture, 10% short, 90% adequate. Tobacco, 100% harvested. Hay 100% 3rd cut. Pastures 8% very poor, 8% poor, 44% fair, 40% good; 79% normal. Cattle, 6% fair, 94% good. Sheep, 3% fair, 97% good. Apples, poor to fair. Corn, 60% harvested. Wheat 21% Sown. Barley, 3% fair, 97% good; 88% Sown. Soybeans, 10% fair, 90% good; 94% dropping leaves, 45% harvested. Farm activities: Moving livestock, feeding livestock, stripping tobacco, chopping silage, harvesting corn, harvesting apples, harvesting soybeans, sowing barley, sowing wheat, general maintenance.

**WISCONSIN:** Mostly dry except for one mainly rain event late in the week. Temperatures generally close to or slightly below normal for mid-October. Temperature 3 to 6° below normal. Extremes 13°; 69°. Precipitation 0.10 to 0.70 in.

Days suitable for fieldwork 5.3. Soil moisture 2% short, 78% adequate, 20% surplus. Pasture condition 82% of normal, 69% 1992, 70% 5-yr avg. General condition of crops: 2% poor, 37% fair, 61% good. Corn 10% poor, 35% fair, 54% good, 1% excellent; mature 59%, 57% 1992, 84% 5-yr avg.; grain 6% harvested, 7% 1992, 30% 5-yr avg.; silo filling 72% complete, 63% 1992, 83% 5-yr avg. Soybean 2% poor, 16% fair, 75% good, 7% excellent; harvested 50%, 19% 1992, 42% 5-yr avg. Fall tillage 18% complete, 22% 1992, 25% 5-yr avg. Minimal precipitation, near normal temperatures helped farmers proceed with their harvesting activities. Dry conditions allowed farmers to continue soybean, corn harvest. Many farmers are about finished with chopping their corn for silage. However, corn moisture levels are still too high to harvest for grain. Comments from reporters suggest corn moisture levels range from as low as 20% to as high as 40%. Soybean harvesting jumped 35 percentage points from last week, is now 50% complete. Comments have indicated that yields are better than last year, moisture levels are between 10% and 18%. Farmers have reported that alfalfa is still being harvested for dry hay. Early planted winter wheat, rye are up, conditions look good.

**WYOMING:** Temperatures 2 to 11° below normal. Precipitation was above normal across much of the State. Exceptions were isolated areas in the north and west, which received slightly below normal amounts.

Days suitable for fieldwork 3.0. Topsoil moisture 3% short, 66% adequate, 31% surplus. Subsoil moisture 11% short, 73% adequate, 16% surplus. Winter wheat planted for harvest in 1994 99%, 100% 1993, 100% avg; emerged 81%, 93% 1993, 89% avg. Corn silage harvested 95%, 97% 1992, 100% avg. Dry beans combined 73%, 93% 1992, 94% avg. Sugarbeets harvested 41%, 62% 1992, 61% avg. Cattle, calves moved from summer ranges 68%, 76% 1992. Sheep, lambs moved from summer ranges 68%, 81% 1992. Pasture and range feed condition good to excellent.

International Weather and Crop Summary  
HIGHLIGHTS

October 10 - 16, 1993

**FSU:** Several days of dry weather accompanied a warming trend over Russia, Ukraine, and Kazakhstan, helping harvest activities.

**EUROPE:** Wet weather persisted in western Europe, while autumn fieldwork progressed with mostly light showers in the east.

**SOUTH ASIA:** Showers over central and southern India benefited newly planted grains, oilseeds, and cotton.

**EASTERN ASIA:** Rains boosted topsoil moisture for wheat planting, but slowed summer crop harvesting across the North China Plain. Dry weather aided rice harvesting across South Korea and Japan.

**SOUTHEAST ASIA:** Tropical showers increased over locally flooded areas of the Philippines, southern Vietnam, and the Malay Peninsula.

**AUSTRALIA:** Rains continued to favor eastern wheat.

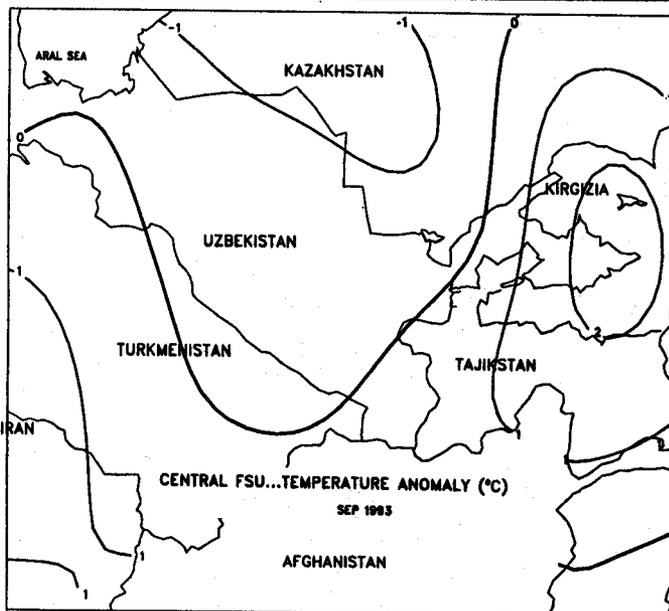
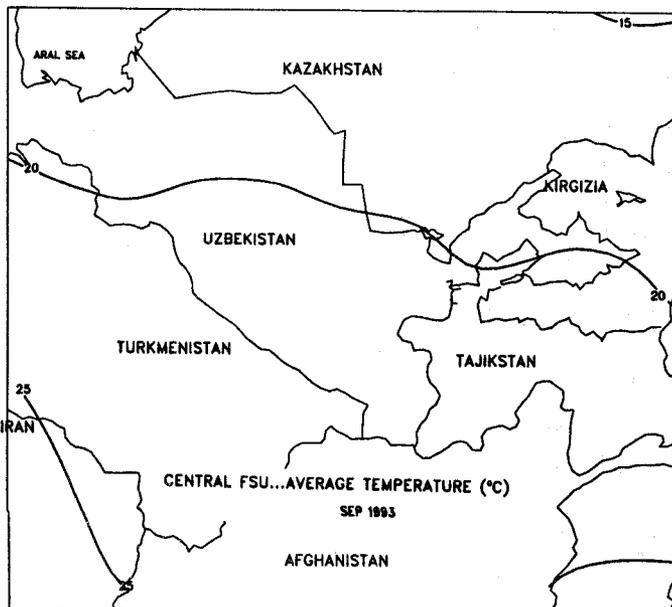
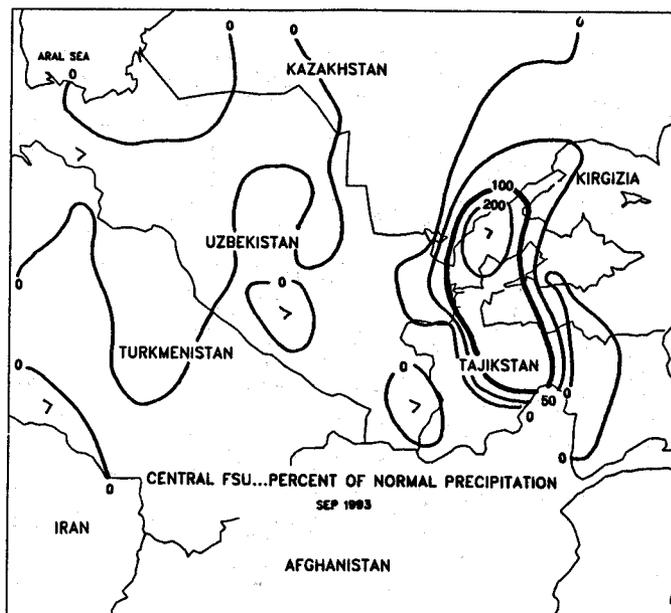
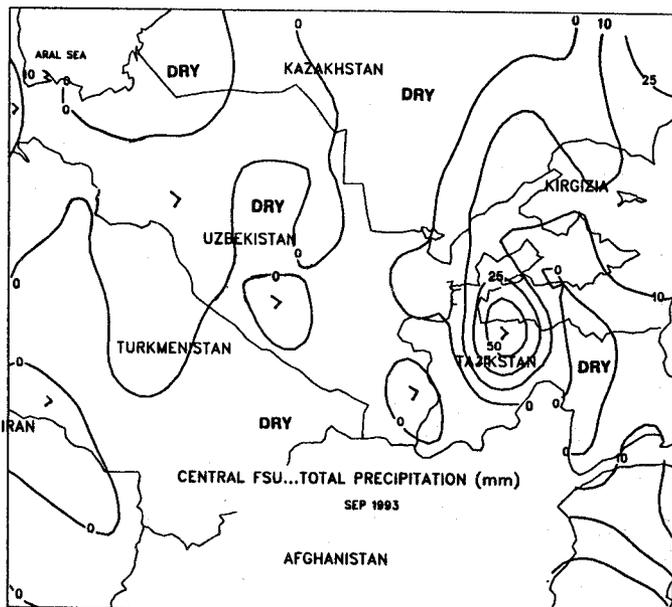
**SOUTH AMERICA:** Warm and somewhat dry weather began to stress winter wheat across portions of central Argentina. Drier weather favored corn and soybean planting across southern Brazil.

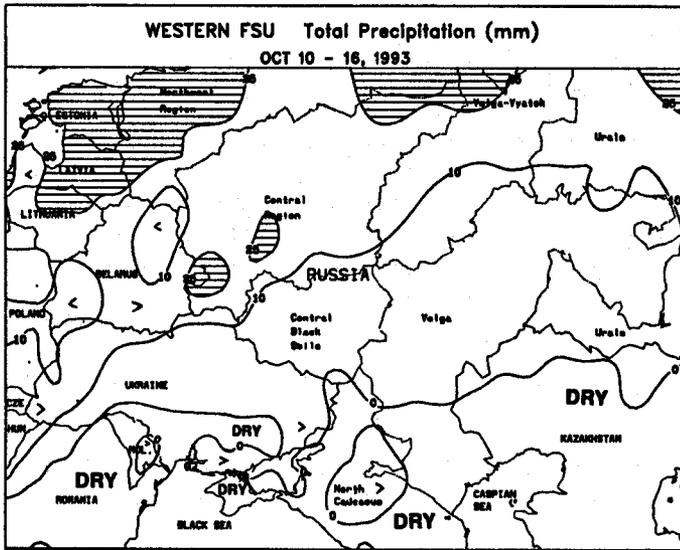
**MEXICO:** Dry weather favored fieldwork across the northwest.

**CANADA:** Prairie grain and oilseed harvests advanced toward completion.

**NORTHWESTERN AFRICA:** Light showers over Morocco moistened soils in preparation for winter grain planting.

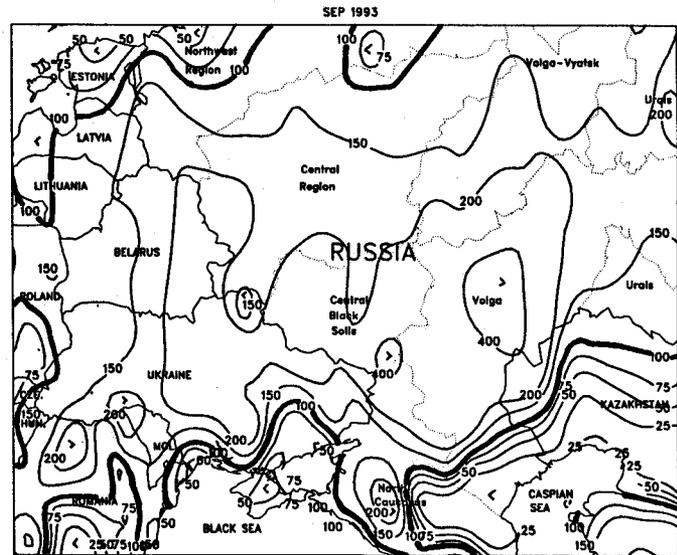
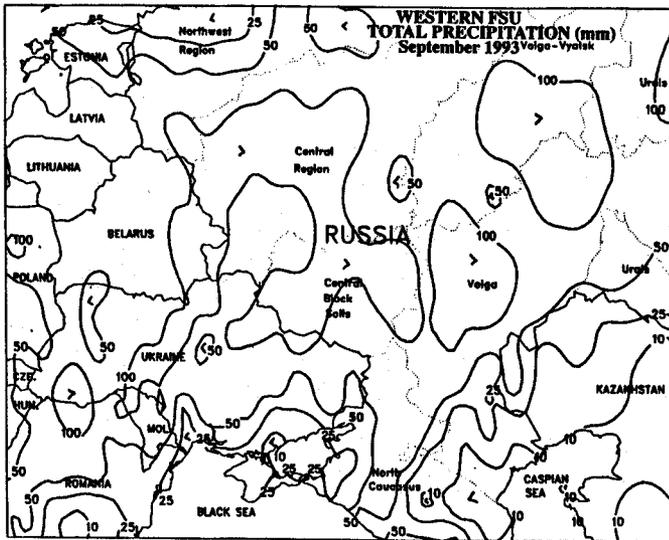
**SOUTH AFRICA:** Rain continued to improve corn planting prospects.





**FSU-WESTERN:** Mostly dry weather in Belarus, western Russia, and Ukraine accompanied a warming trend, allowing the corn, sunflower, potato, and sugar beet harvests to progress at a rapid pace. Weekly average temperatures ranged from 10 to 17 degrees Celsius (C) (4-8 degrees C above normal), favoring continued growth in winter grains. However, soil moisture in the southern Ukraine was limited for winter grain establishment. By week's end, a cold front brought cooler weather and widespread precipitation (10-47 mm) to the Baltic States, Belarus, western Ukraine, and parts of northern Russia. In September, the spring grain harvest was nearing completion, summer crop harvesting was well underway, and winter grain planting advanced southward. In Russia, excessive wetness caused small grain harvest delays, reduced grain quality, and hampered planting and establishment of 1994 winter grain crops. The Volga Valley and eastern Black Soils Region received over 4 times the normal amount of rain. Although generally dry weather from September 16-27 in Russia favored fieldwork, a brief period of mixed rain and snow returned by month's end. In central and northern Ukraine, above-normal September precipitation provided beneficial moisture for winter grain planting but slowed the corn harvest. In contrast, the southern Ukraine received below-normal precipitation and rain was needed for winter grain germination.

WESTERN FSU...PERCENT of NORMAL PRECIPITATION



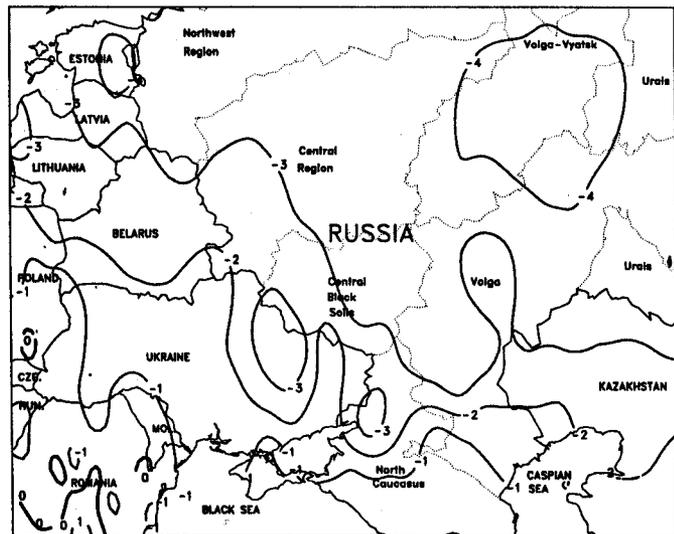
WESTERN FSU...AVERAGE TEMPERATURE (°C)

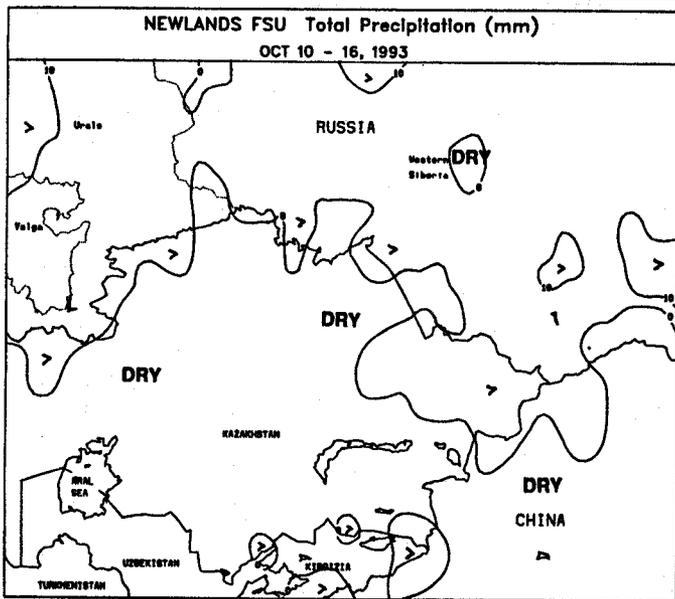
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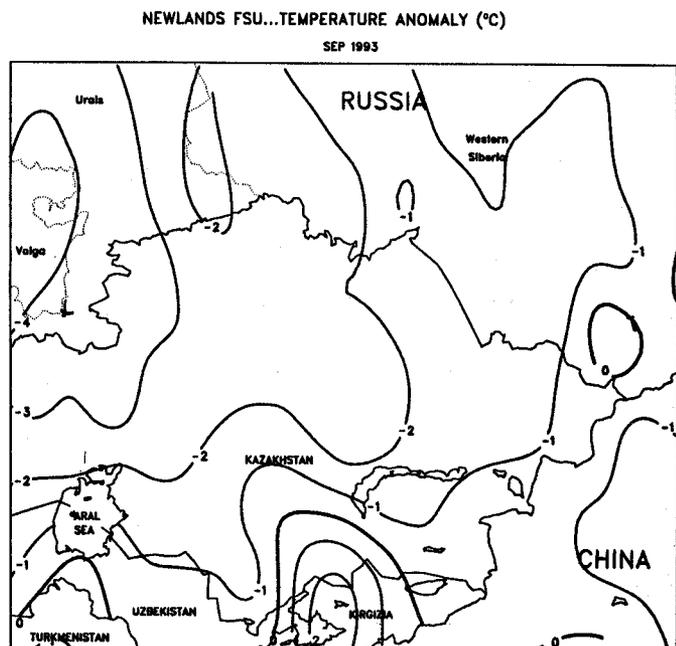
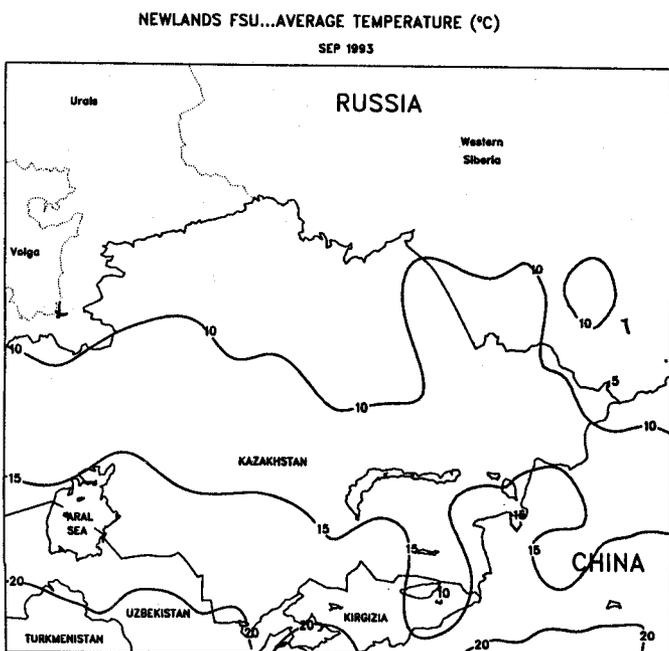
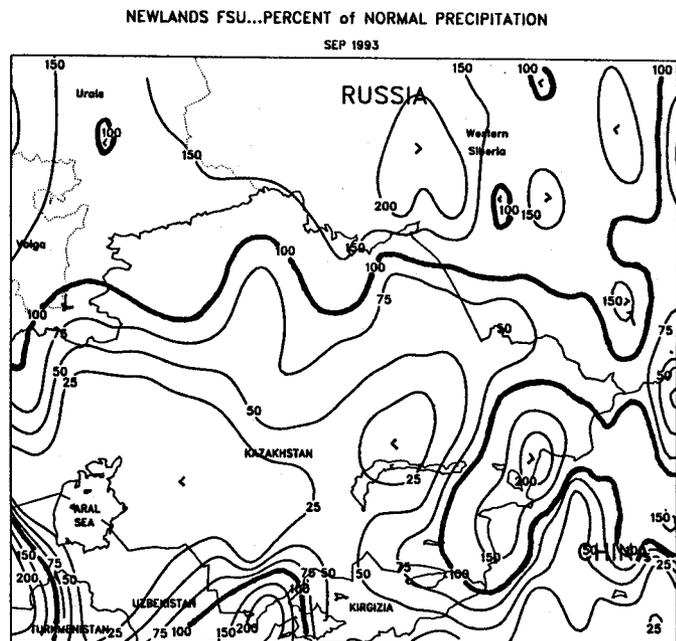
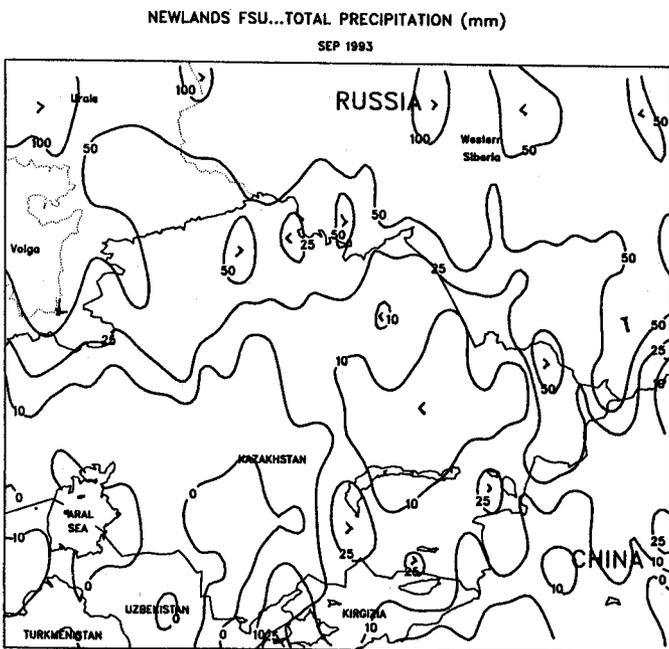
WESTERN FSU...TEMPERATURE ANOMALY (°C)

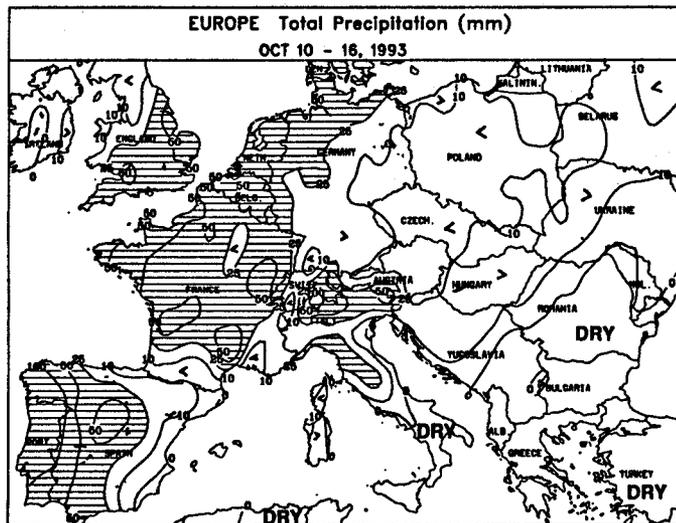
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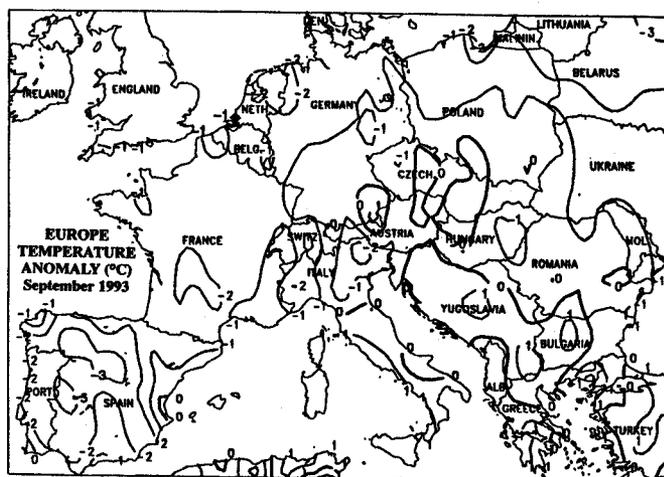
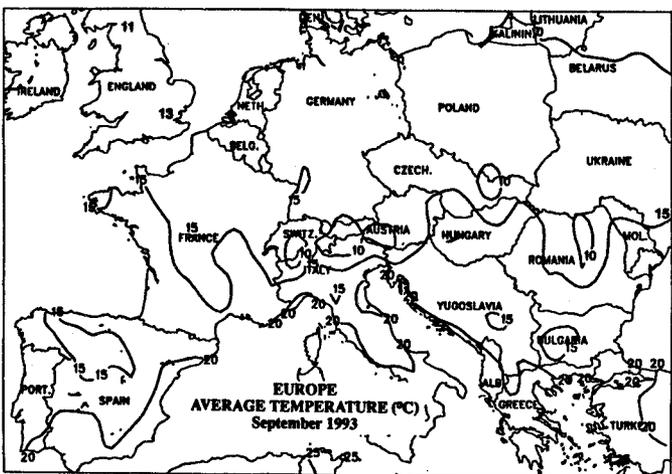
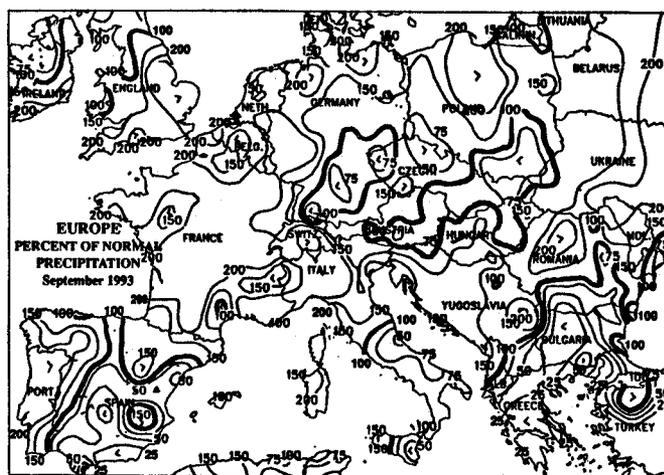
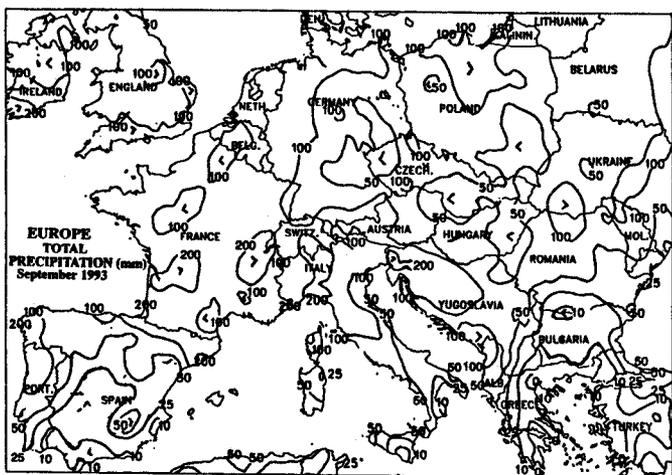


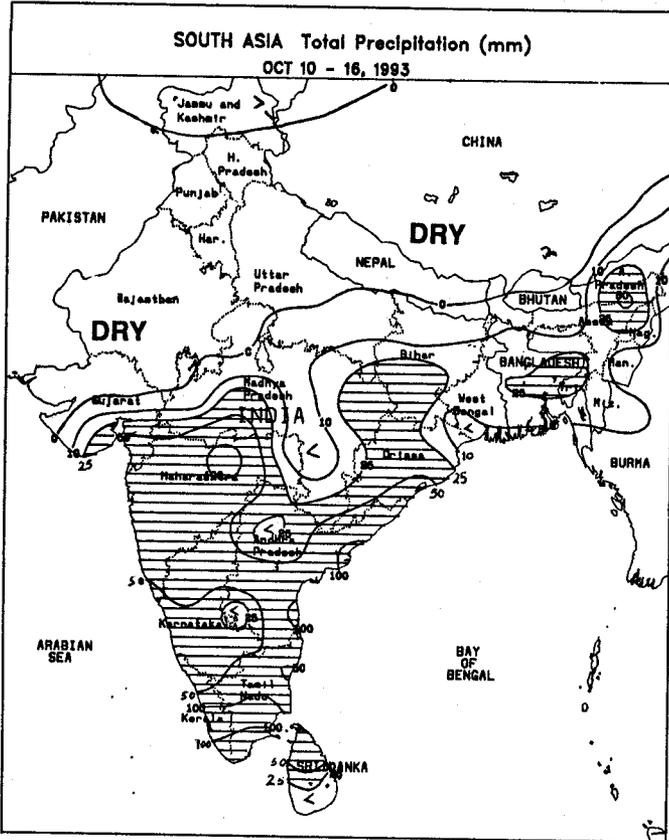
**FSU-NEW LANDS:** Unseasonably warm, dry weather in the Urals, Western Siberia, and Kazakhstan helped spring grain harvesting delayed by previous wetness. Weekly average temperatures were 3-6 degrees C above normal over most of the region. In September, wet weather, including some wet snow in major spring grain-producing areas, delayed the harvest, lodged crops, reduced crop quality, and lowered crop yield. In Russia, reports as of October 11 indicated the small grain harvest, excluding corn, was about 86 percent complete.



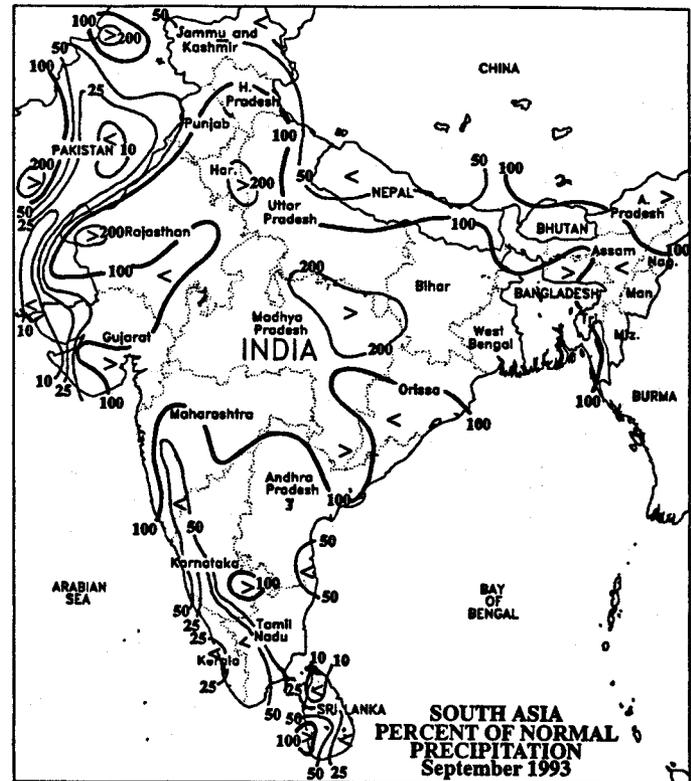
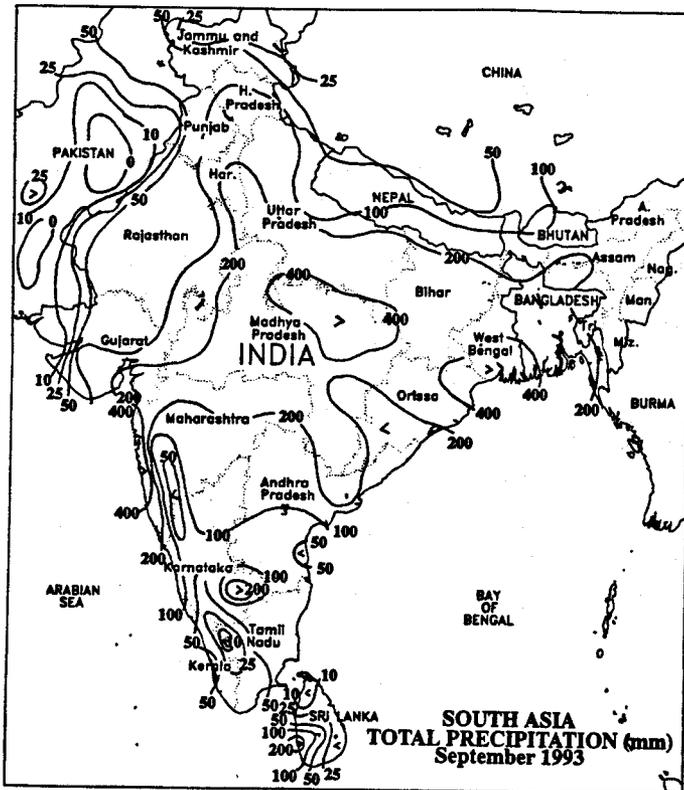


**EUROPE:** More rain drenched western Europe, but amounts diminished from the previous week, especially in southeastern France and northern Italy. The heaviest rain (75-160 mm) fell in Portugal and extreme western Spain. Rainfall averaged 20-84 mm in already inundated areas of southern England, France, and northwestern Germany. The wetness continued to hamper corn and sugar beet harvesting and winter crop planting. Further east, rainfall slackened to less than 20 mm in southern Poland and Hungary, and less than 10 mm over northeastern Europe. Topsoil moisture is generally adequate in the northeast, and recently increased in Hungary for winter crop planting. Dry weather returned to southeastern Europe, from Romania to Greece, where the usual increase in winter rainfall is needed for crop development. Milder-than-normal weather kept minimum temperatures above freezing in northern Europe. In September, wet weather soaked much of Europe with up to 200 percent of normal rainfall prevalent across western and northern Europe, as well as in northwestern Romania and southern portions of former Yugoslavia. The wet September weather disrupted harvesting and caused flooding from England to northern Italy. In contrast, well-below-average rainfall persisted over Bulgaria, Greece, and southeastern Spain.

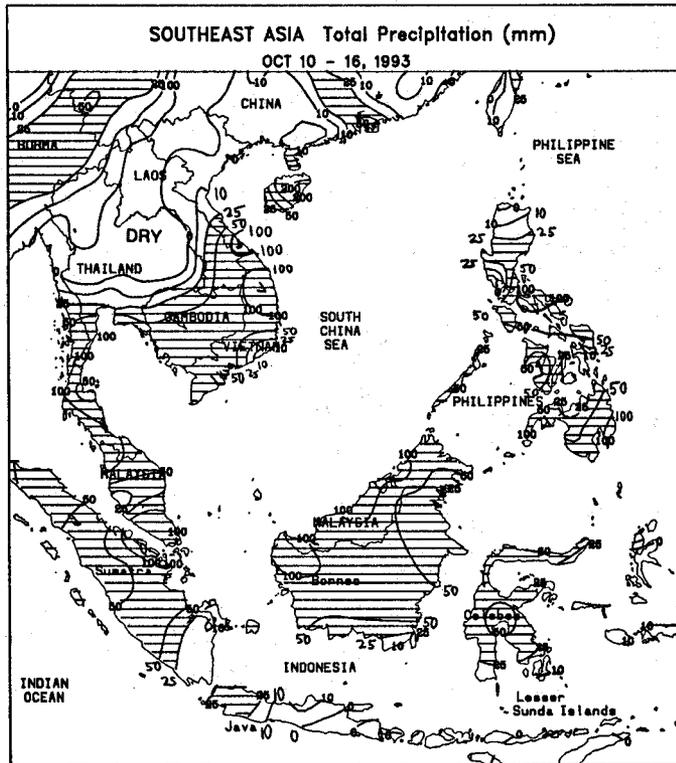
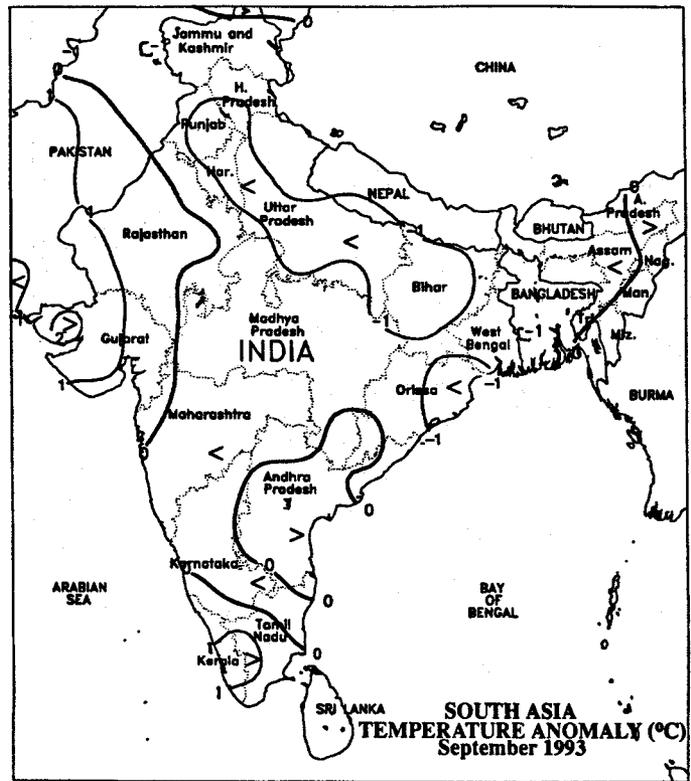
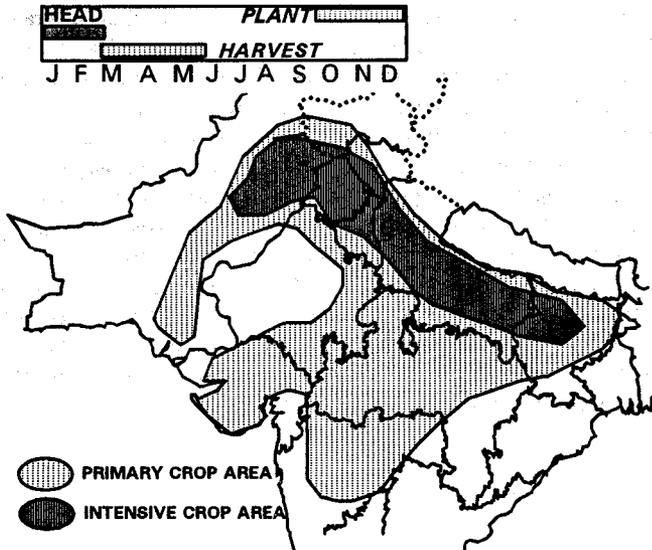




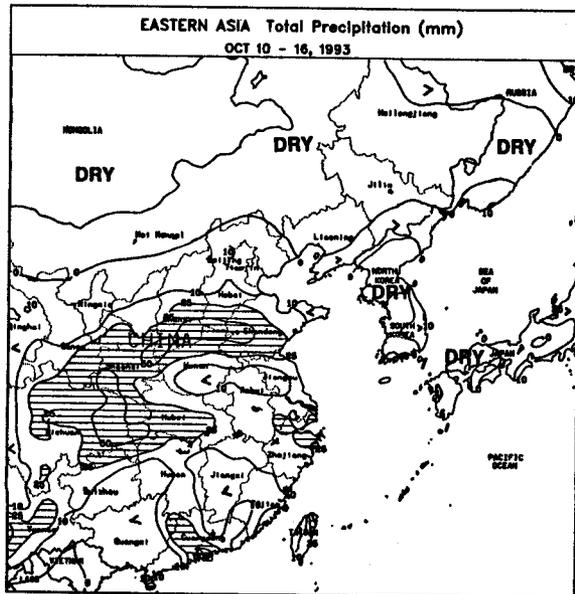
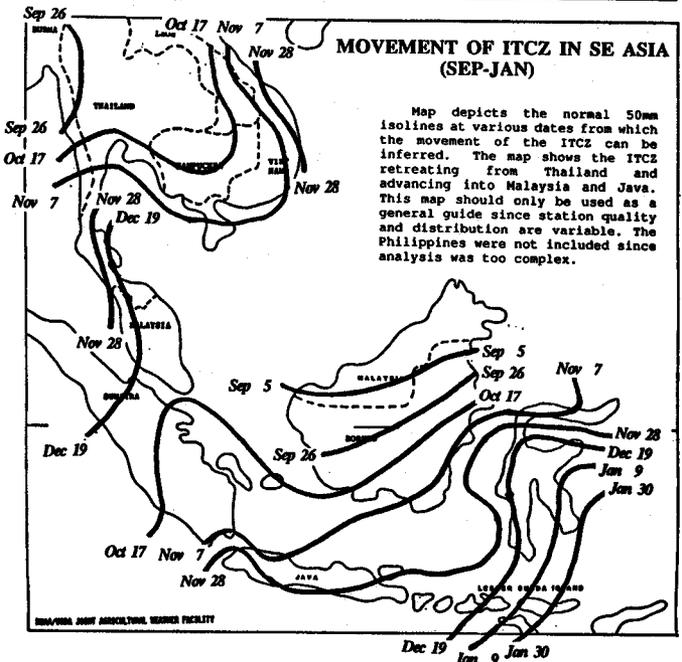
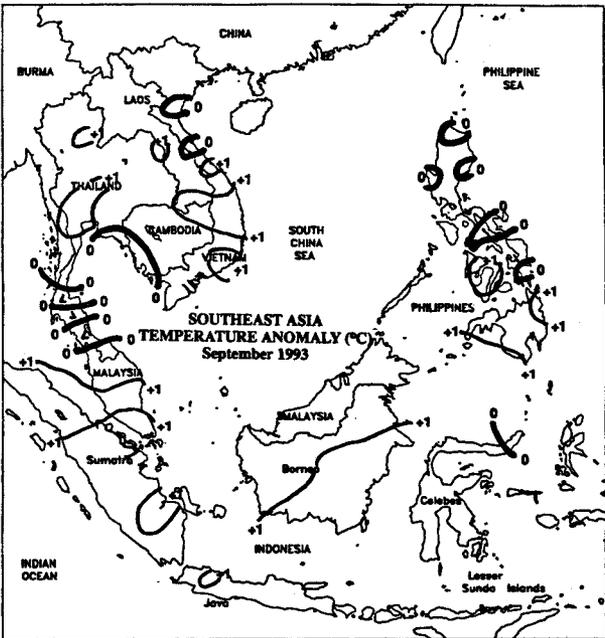
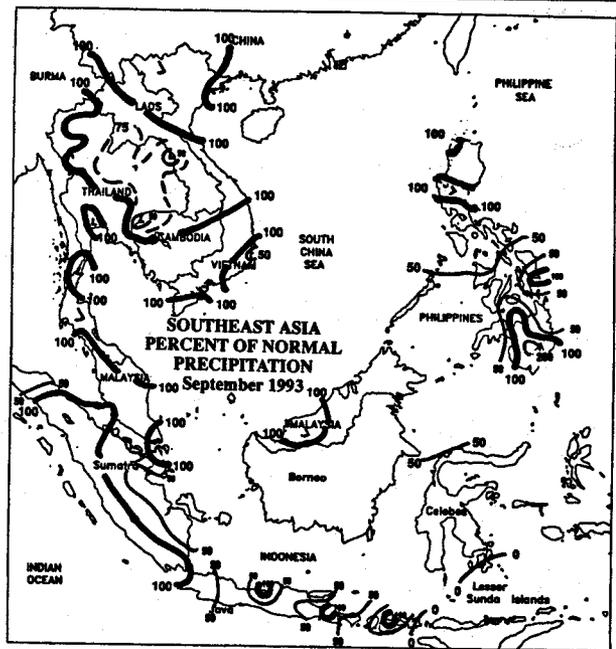
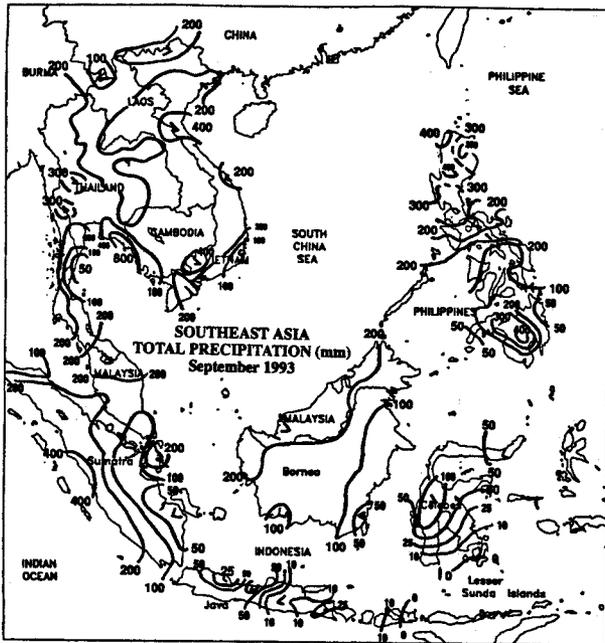
**SOUTH ASIA:** Moderate to heavy rain (25-50 mm or more, with some reports exceeding 100 mm) covered southern and central India, with amounts of 25 mm reported as far north as Bihar. The moisture in the southern interior helped newly planted grain, oilseeds, and cotton, and further north, the rain benefited central India's boll-forming to filling cotton. Warm, dry weather in the north and northwest benefited maturing summer crops. During September, the monsoon withdrew from Pakistan and northwestern India about on schedule. However, needed rainfall surged into northern India's winter grain and oilseed areas before the post-monsoon dry weather became entrenched, improving planting prospects. Late-season showers also fell throughout central and eastern India and Bangladesh, aiding late-developing summer crops and increasing irrigation reserves for dry-season rice. September rainfall was below normal throughout southern India, but by month's end, the monsoon was advancing toward the region, and showers became more frequent.



INDIA & PAKISTAN: WINTER WHEAT



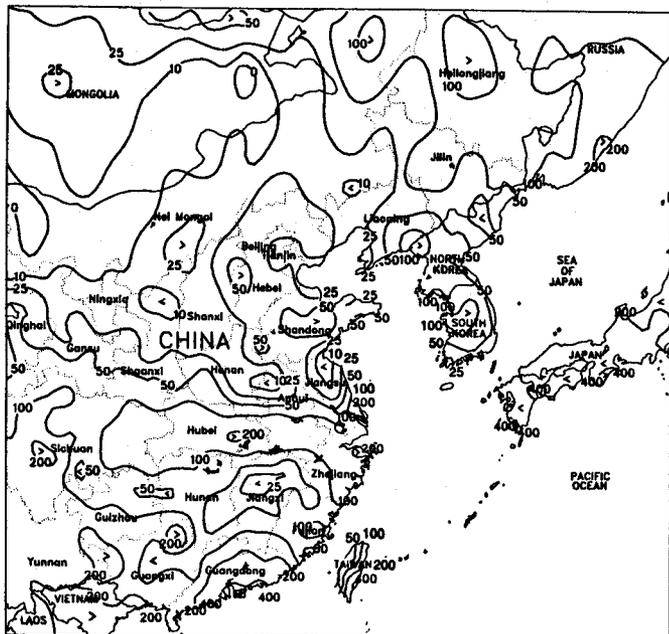
**SOUTHEAST ASIA:** Heavy showers (50-100 mm or more) continued over southern Vietnam, the Malay Peninsula, and local areas of the Philippines, worsening flooding. Further south, scattered showers in western Java aided rice pre-planting activities. In contrast, seasonably dry, warm weather continued over Thailand's northern grain regions. During October, the Intertropical Convergence Zone moves southward, marking the beginning of the dry season in Indochina and the wet season in Indonesia. The Philippine rainy season shifts from one of wet weather throughout the islands to rainy weather in eastern crop regions. In September, showers were frequent and, at times, heavy throughout Indochina and the Philippines. Heavy rain was especially welcomed along the Chao Phraya following this summer's dryness. Rainfall accumulated below normal, however, in eastern Thailand and central Philippines, continuing this season's drier-than-normal trend.



**EASTERN ASIA:** Light to moderate rains (10-70 mm) fell across the North China Plain and eastern Sichuan, boosting topsoil moisture for winter wheat but delaying summer crop harvesting. Mostly dry weather aided summer crop harvesting across Manchuria and southern China. Weekly temperatures averaged 1-2 degrees C above normal across the Yangtze Valley, favoring rice harvesting. Temperatures averaged near normal elsewhere across China. Dry weather prevailed across South Korea and Japan, favoring rice harvesting. During September, near- to above-normal rainfall aided late-filling summer crops across Manchuria and the North China Plain. Above-normal rainfall delayed single-crop rice harvesting across the Yangtze Valley. Two typhoons brought heavy rains and local damage to sugarcane and rice across extreme southern China (Guangdong). South Korea received somewhat below-normal September rainfall (30-70 percent of normal), favoring rice harvesting. Above normal rainfall (100-150 percent of normal) further delayed rice harvesting across southern Japan.

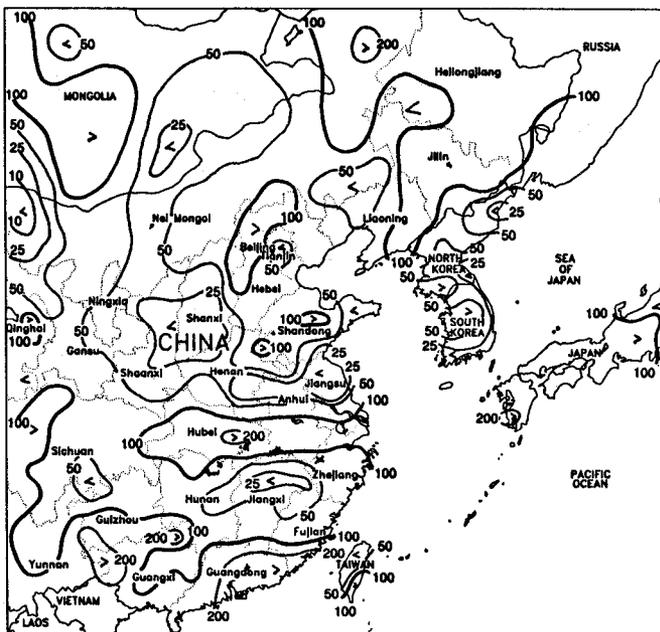
EASTERN ASIA...TOTAL PRECIPITATION (mm)

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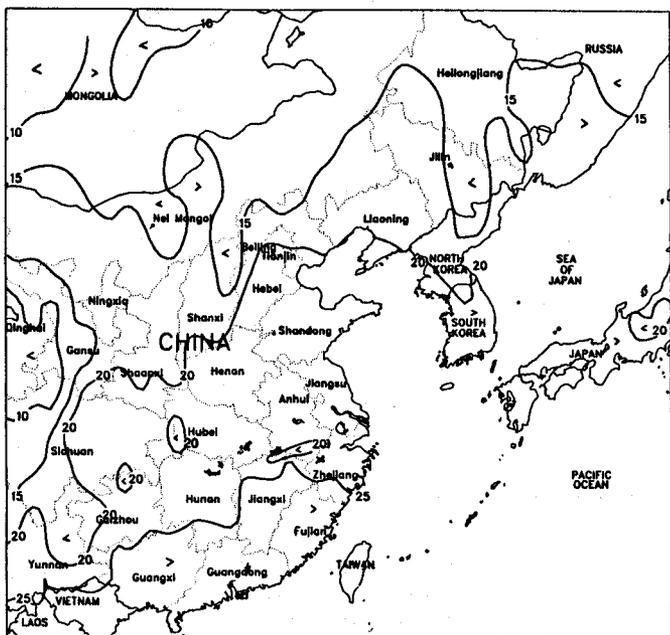
EASTERN ASIA...PERCENT OF NORMAL PRECIPITATION

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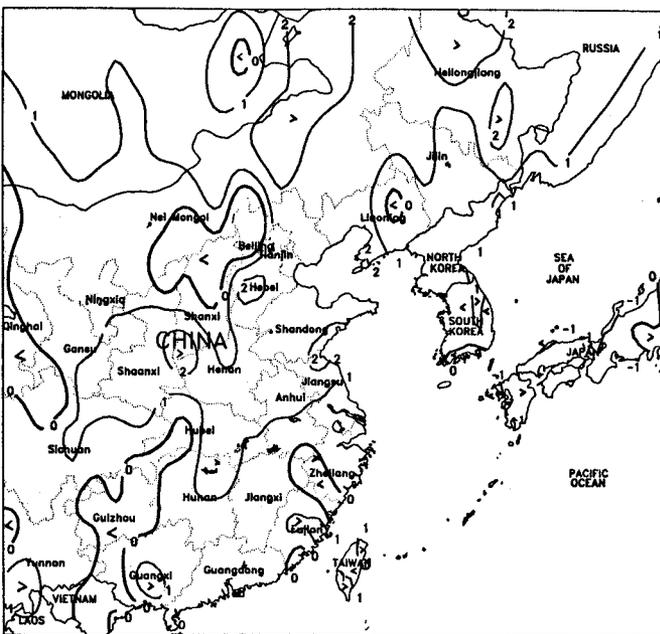
EASTERN ASIA...AVERAGE TEMPERATURE (°C)

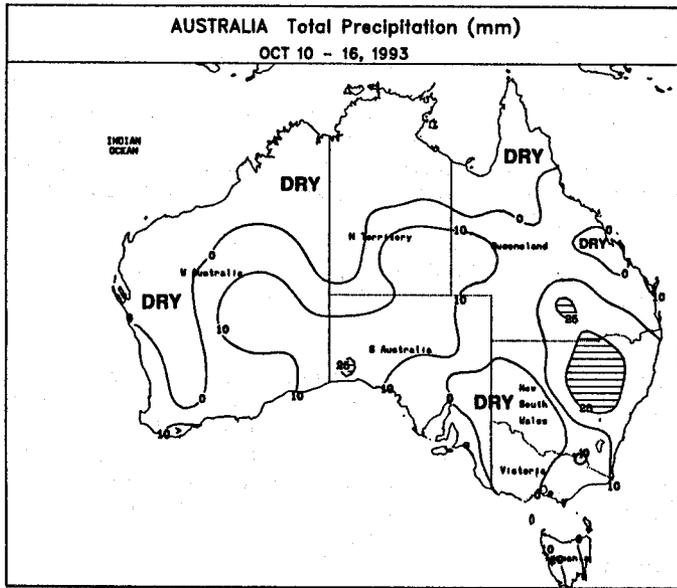
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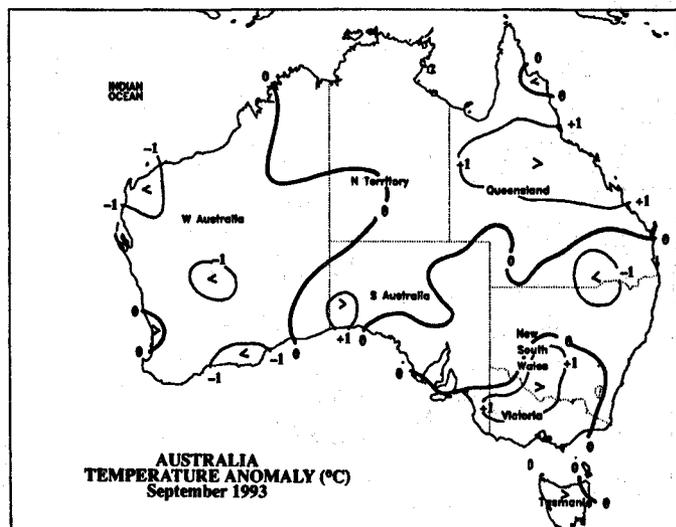
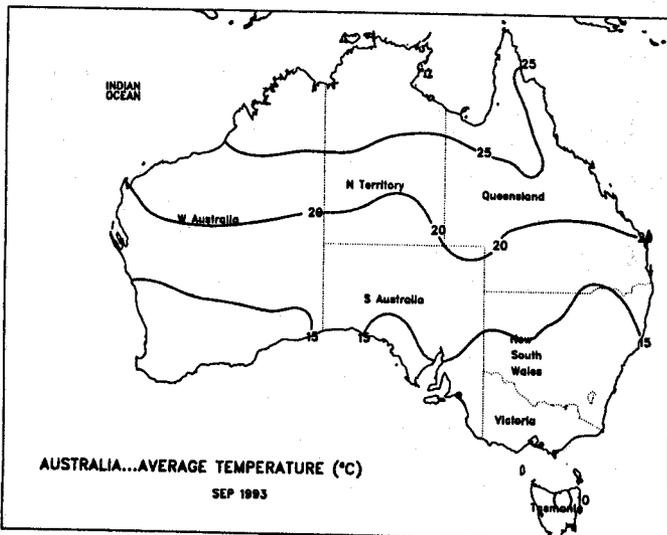
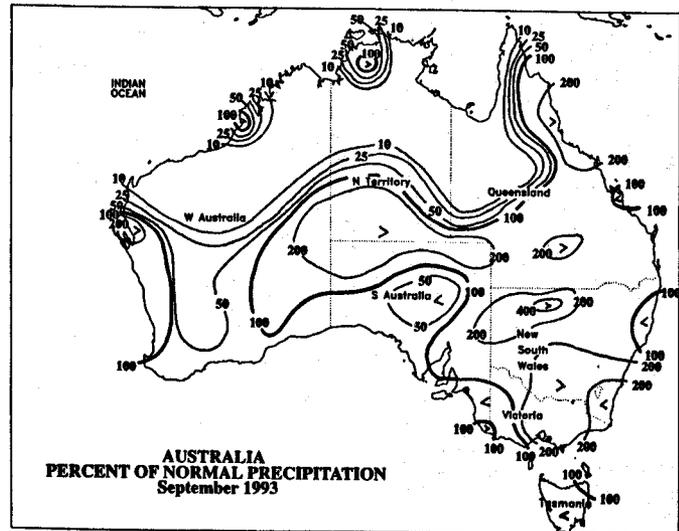
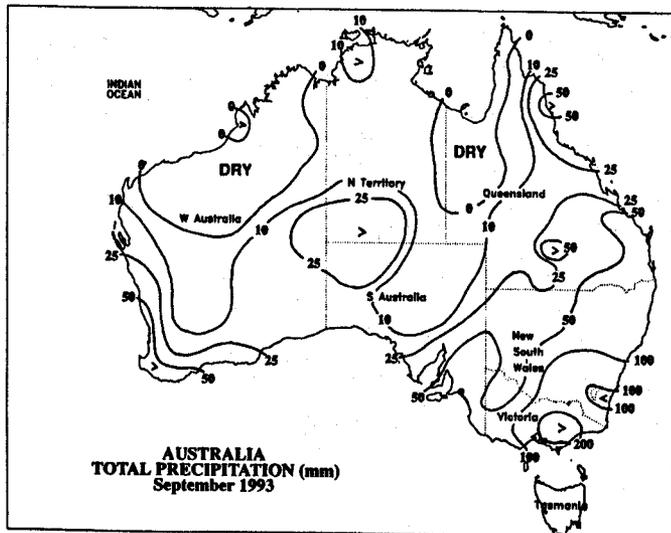
EASTERN ASIA...TEMPERATURE ANOMALY (°C)

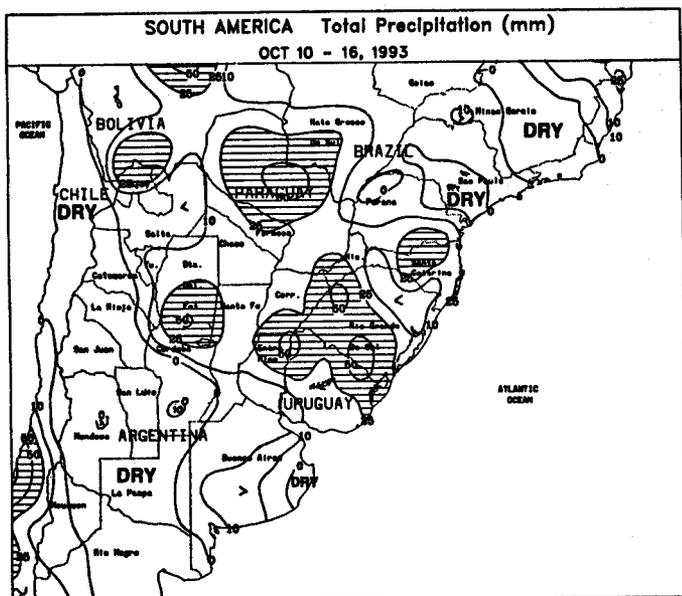
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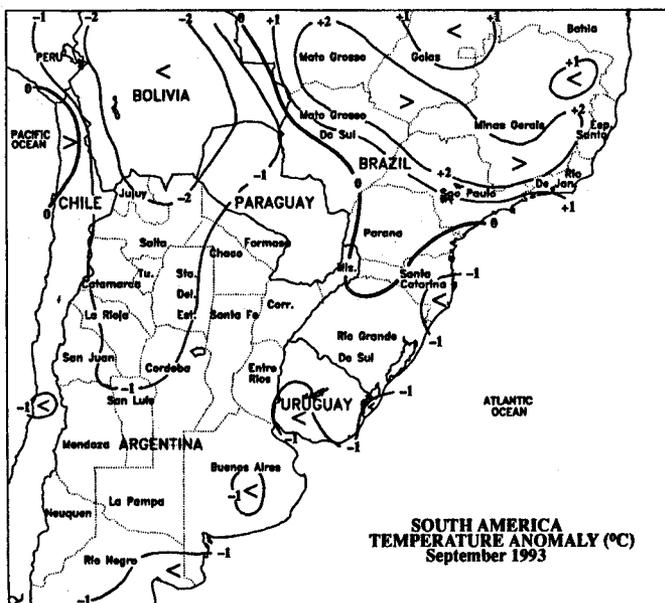
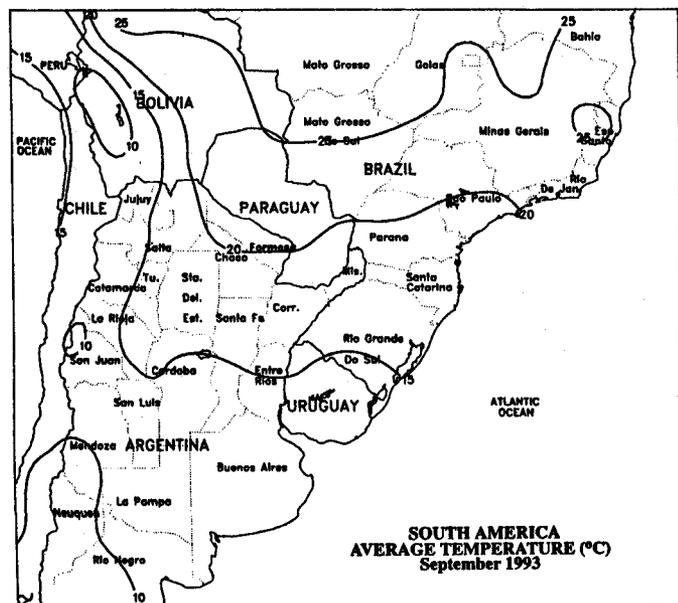
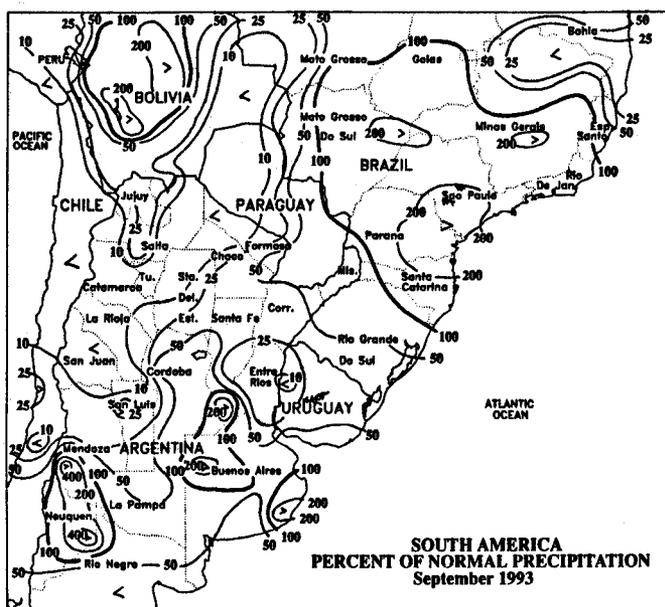
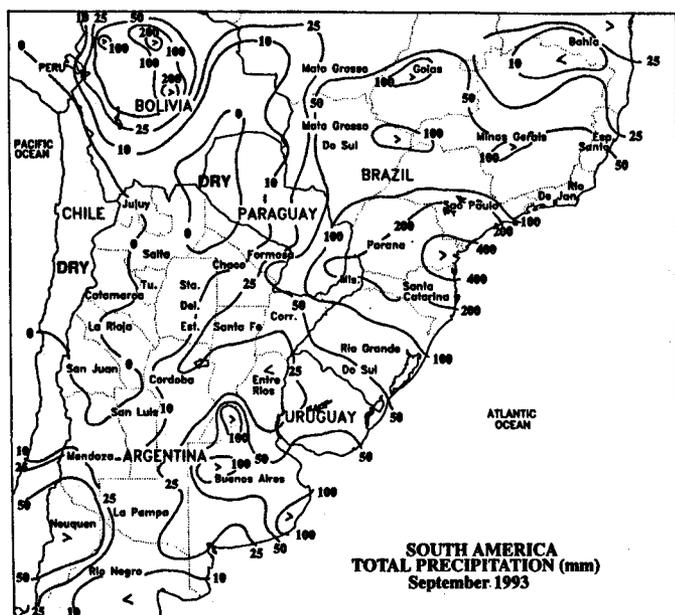


**AUSTRALIA:** Light to moderate rains (14-46 mm) covered southern Queensland and northern New South Wales, favoring reproductive winter wheat. Only light rain (less than 10 mm) fell across the wheat areas of South and Western Australia, but cool weather (2-5 degrees C below normal) helped lower evaporation rates. During September, rainfall averaged near to below normal across these areas, where additional rains would still benefit wheat. Above- to much-above-normal September rainfall improved yield prospects across the eastern wheat areas.





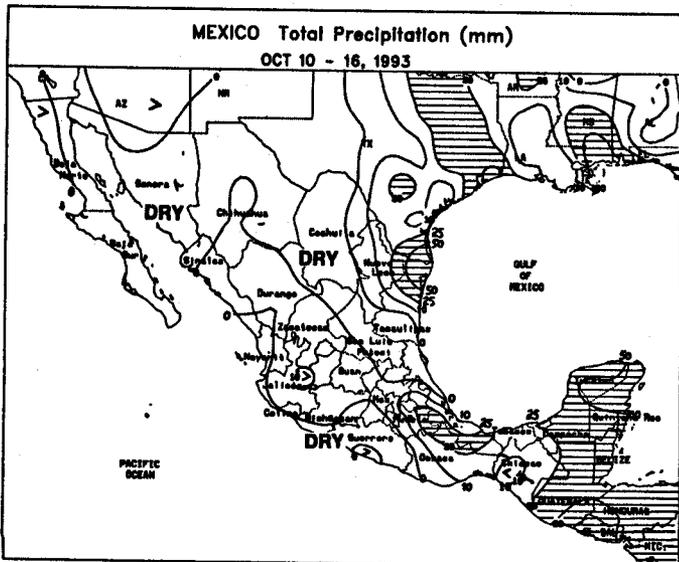
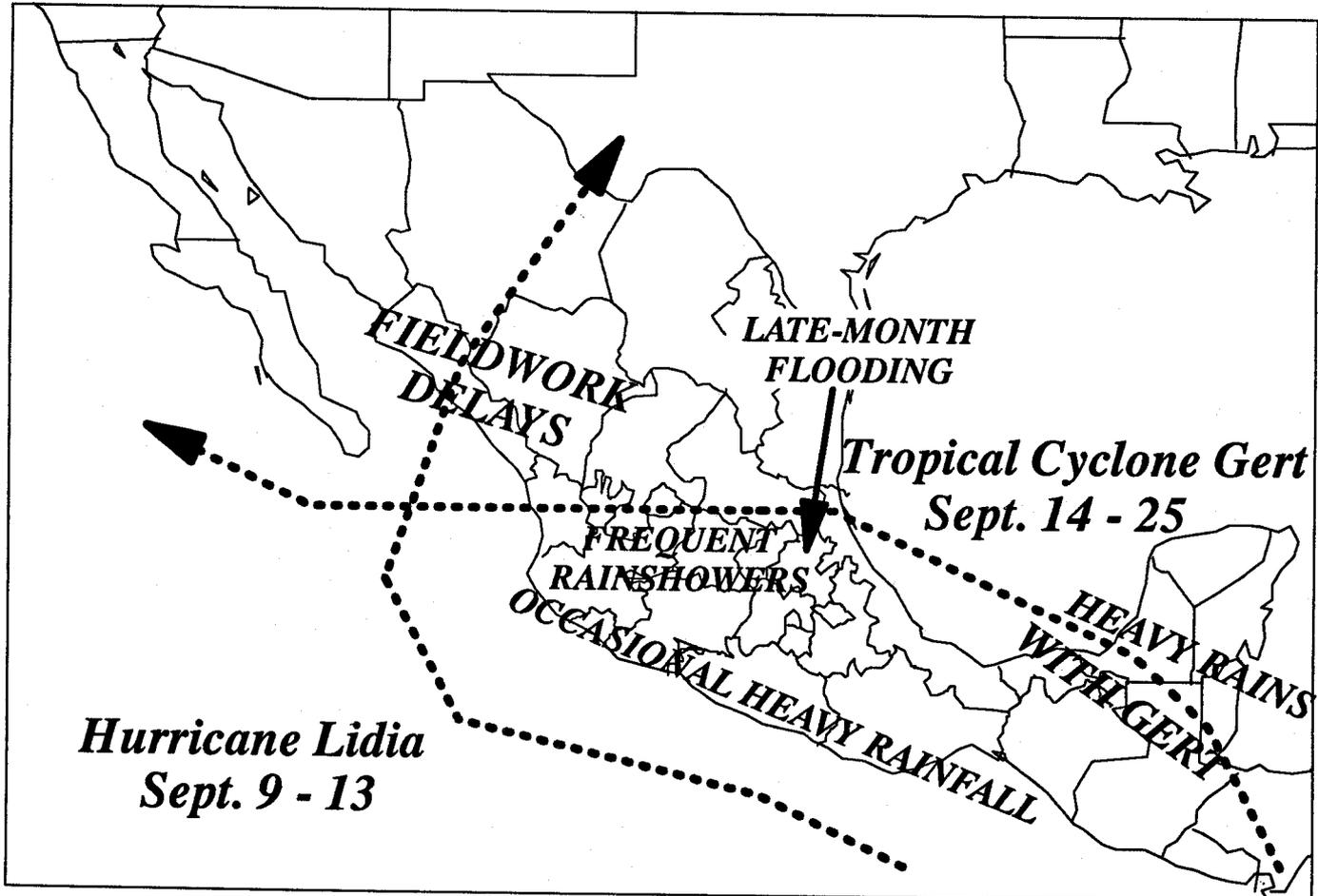
**SOUTH AMERICA:** In Argentina, scattered showers (2-14 mm) in northern and central Buenos Aires favored vegetative to reproductive winter wheat. However, warm (3-5 degrees C above normal) and dry weather was beginning to stress wheat in portions of La Pampa, southern Cordoba, and southern Santa Fe. Widespread rain is needed to prevent reductions in wheat yield potential. Topsoils are also becoming dry for summer crop planting. Light to moderate rain (10-25 mm) favored germinating cotton across northern Argentina. In southern Brazil, showers (15-60 mm) caused some additional planting delays in Rio Grande do Sul. However, drier weather prevailed across the remaining crop areas, allowing corn and soybean planting to progress. Weekly temperatures averaged 3-5 degrees C above normal across southern Brazil. During September, only extreme southern Santa Fe and central and eastern Buenos Aires received above-normal rainfall. The remainder of central Argentina averaged 25-60 percent of normal September rainfall. Across southern Brazil, rainfall was more widespread, with most areas averaging near- to above-normal rainfall. Portions of eastern Sao Paulo and Parana reported much-above-normal September rainfall, delaying summer crop fieldwork.



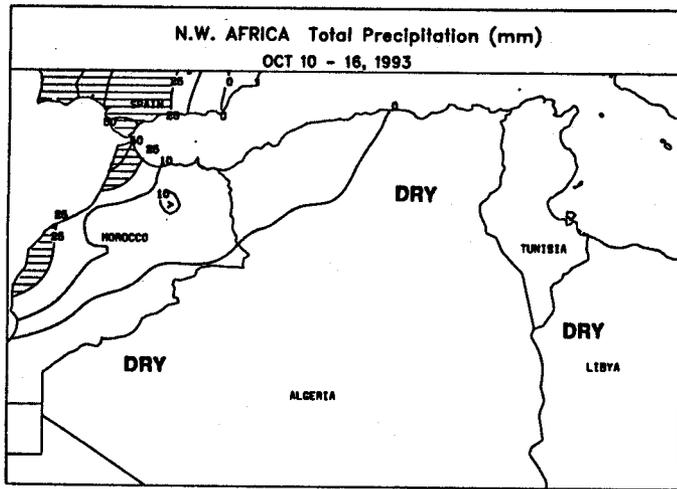
# MEXICO

## Weather Highlights

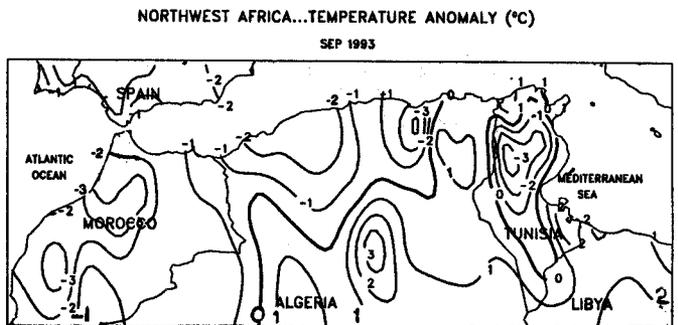
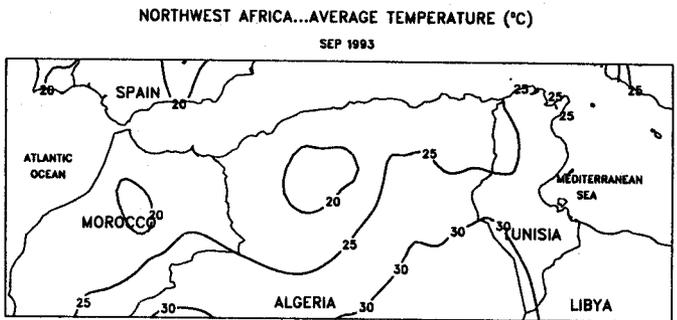
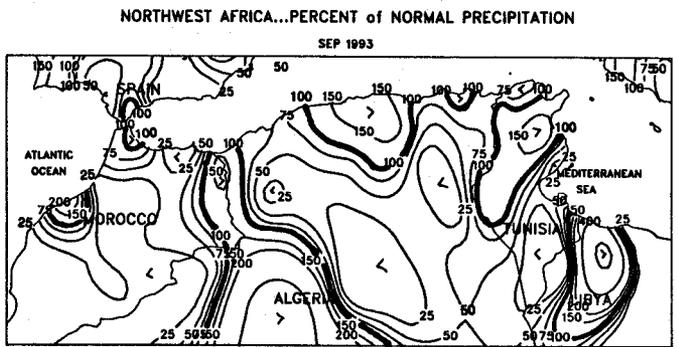
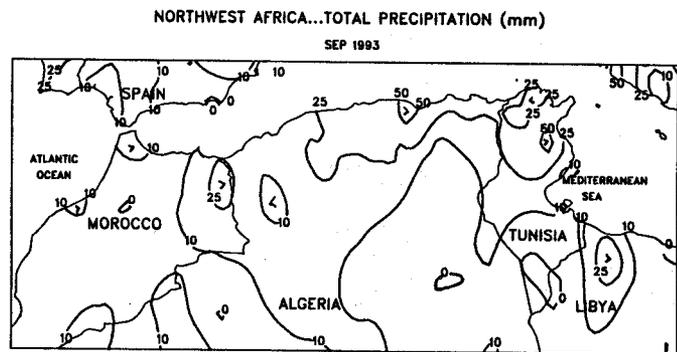
### September 1993

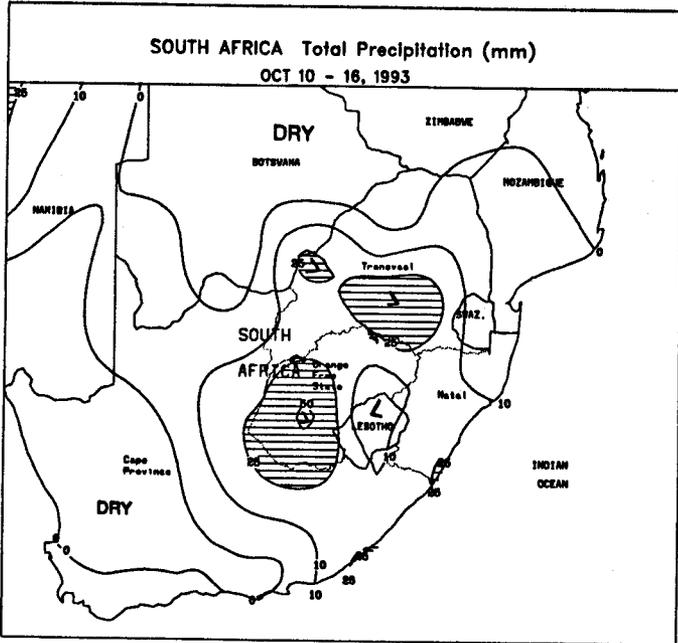


**MEXICO:** Light rains (3-15 mm) slowed early corn harvesting across the main corn belt. Dry weather favored wheat and vegetable planting across northwest Mexico. Widespread showers (10-50 mm) favored corn across the Yucatan peninsula. During September, Hurricane Lidia brought heavy rain to the west coast before making landfall in the Sinaloa vegetable area. The storm caused fieldwork delays and brought heavy rains to north-central Mexico. Tropical Storm Gert, after traversing Central America, produced heavy rains and flooding across east-central Mexico. Frequent showers during the month favored filling corn across the Southern Plateau Corn Belt.

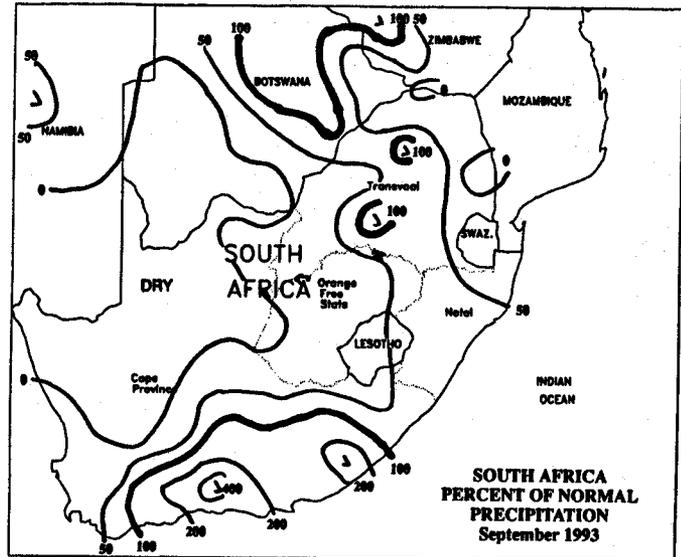
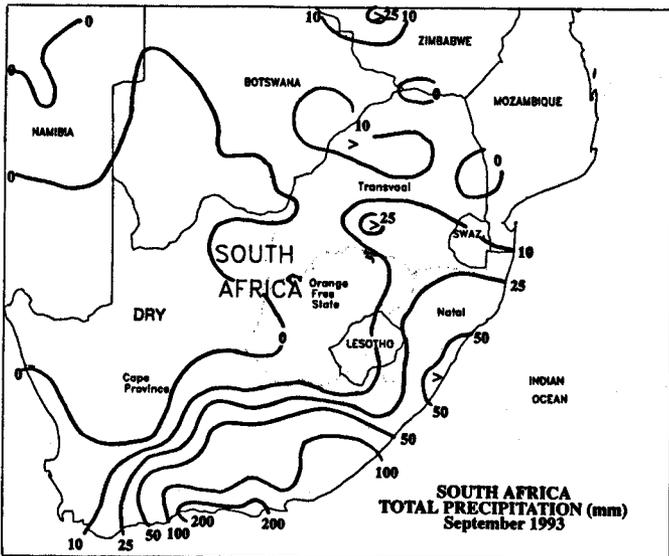


**NORTHWESTERN AFRICA:** Preparations for winter grain planting were in the early stages over most of the region. Light showers over Morocco helped to condition topsoils for fieldwork. Although dry weather covered Algeria and Tunisia this past week, near- to above-normal rainfall in September increased pre-planting moisture. The bulk of winter grain planting over the region usually occurs from mid-November to mid-December.

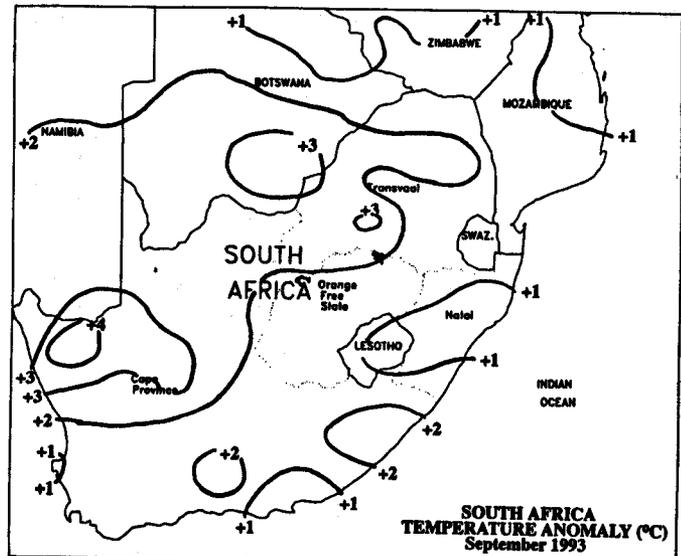
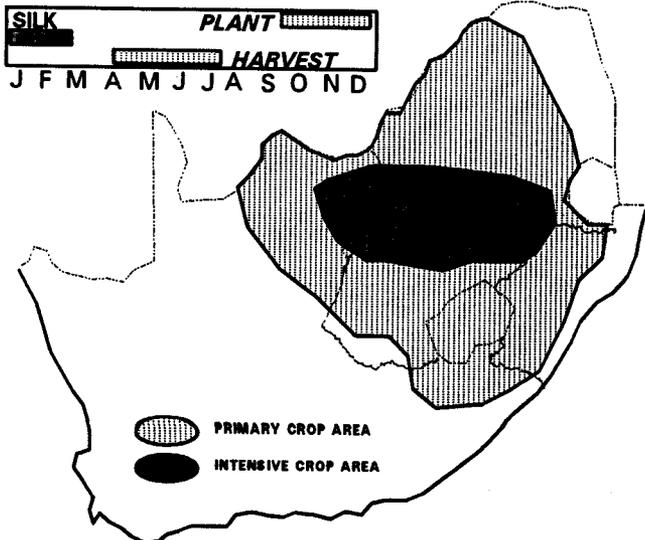


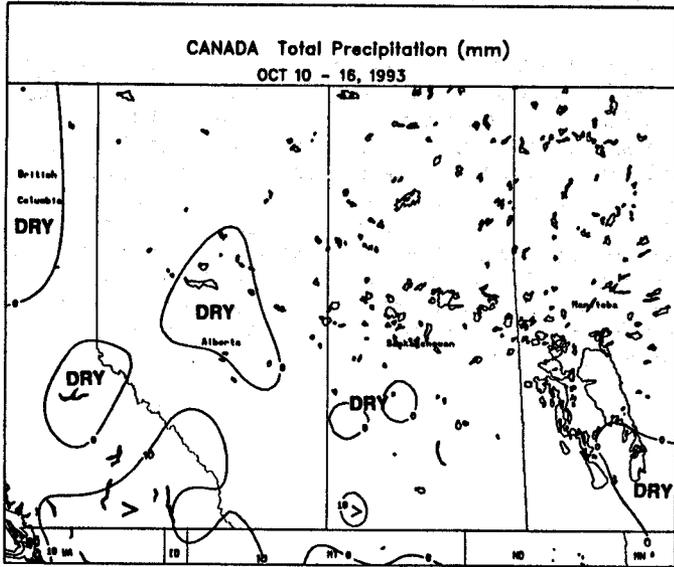


**SOUTH AFRICA:** Moderate to heavy showers (25-54 mm) covered corn areas of south-central Transvaal and southern Orange Free State, boosting planting moisture. Rainfall was light elsewhere, although moderate rain (15-28 mm) covered southern Natal, including much of the sugarcane region. Early field preparation and planting is likely underway across the Nation following last week's unusually heavy rain (50-110 mm, most primary corn areas). In contrast, dry weather aided winter wheat harvests in the Cape Province. In September, drier- and warmer-than-normal weather dominated the primary crop regions, reducing available moisture for immature winter wheat. Summer crops are usually planted from October to December.

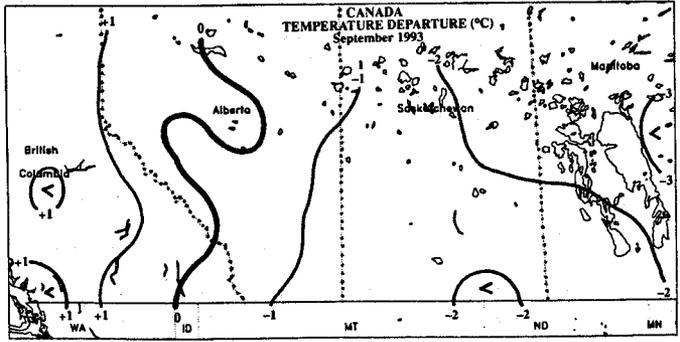
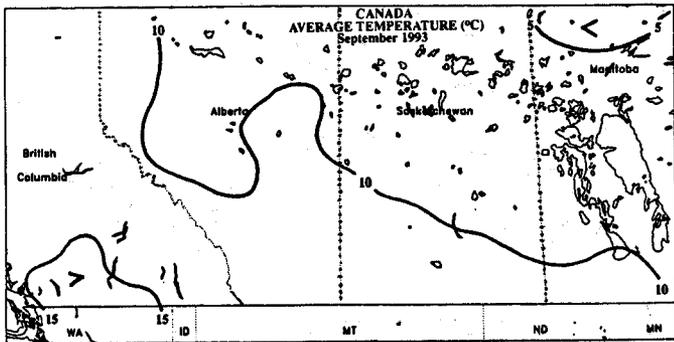
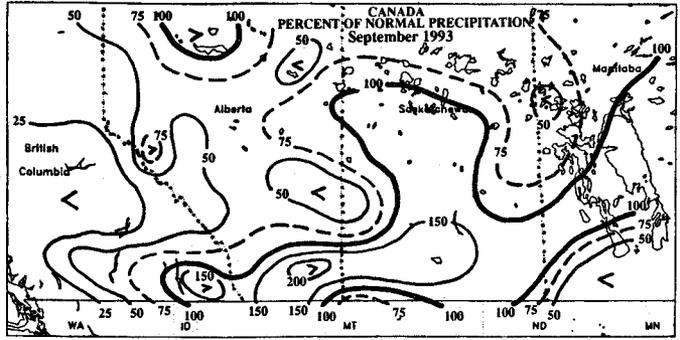
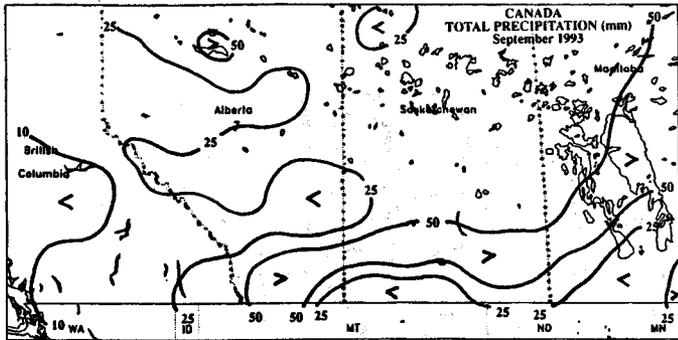


**SOUTH AFRICA: CORN**





**CANADA:** Cold, mostly dry weather aided Prairie grain and oilseed harvests, which ranged from about 70 to 90 percent complete according to last week's reports. In Ontario, cool, mostly dry weather helped corn harvests and winter wheat planting. Minimum temperatures of -2 to -3 burned back vegetative winter wheat. In September, the first hard freeze hit the Prairies on the 13th and 14th, about on schedule. The following week, showers swept from southern Alberta to western Manitoba, soaking standing crops and stalling harvests. Drier, albeit cool, weather since late September has improved harvest conditions. This is the final summary of the season. Coverage will resume in May as spring planting begins.



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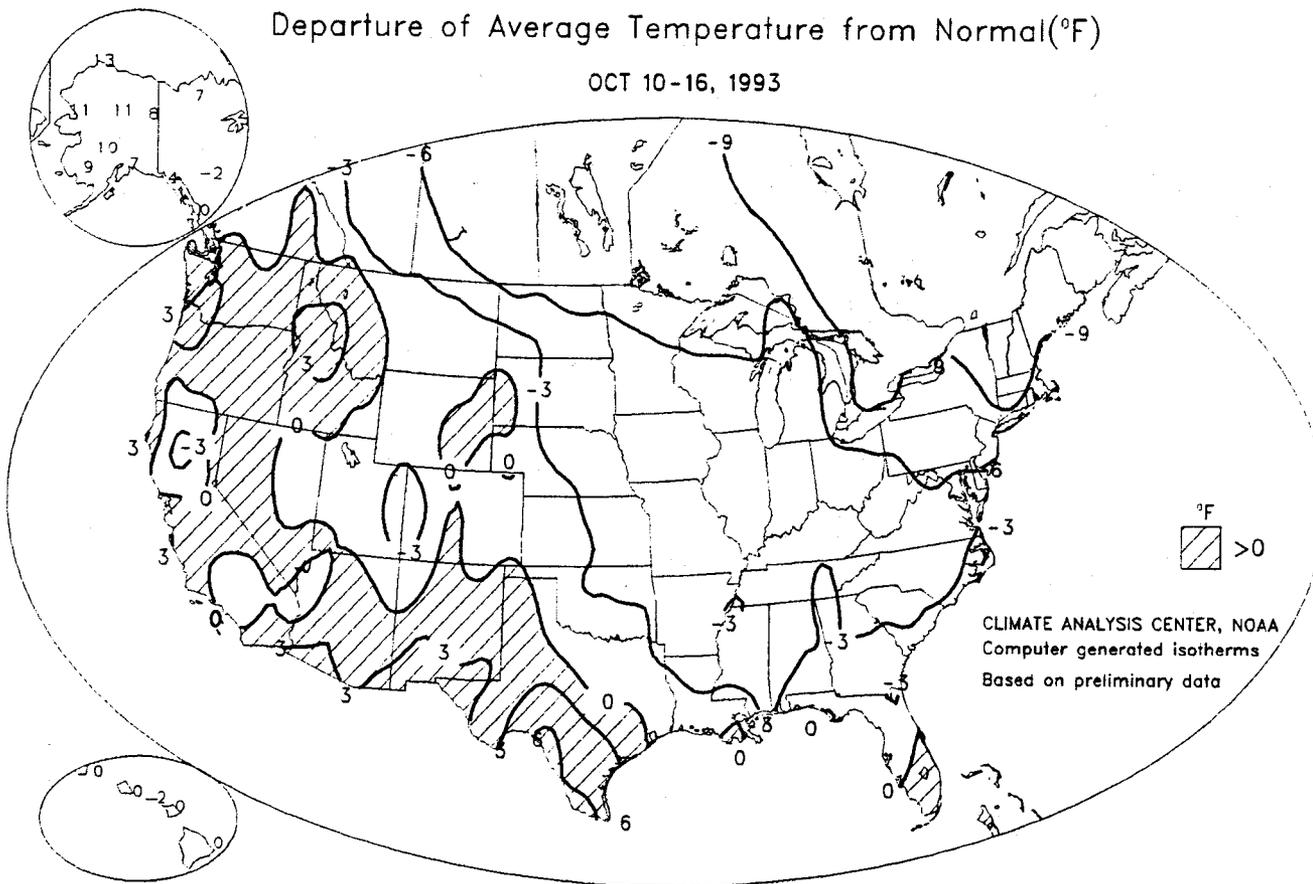
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Departure of Average Temperature from Normal(°F)

OCT 10-16, 1993



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