

# 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

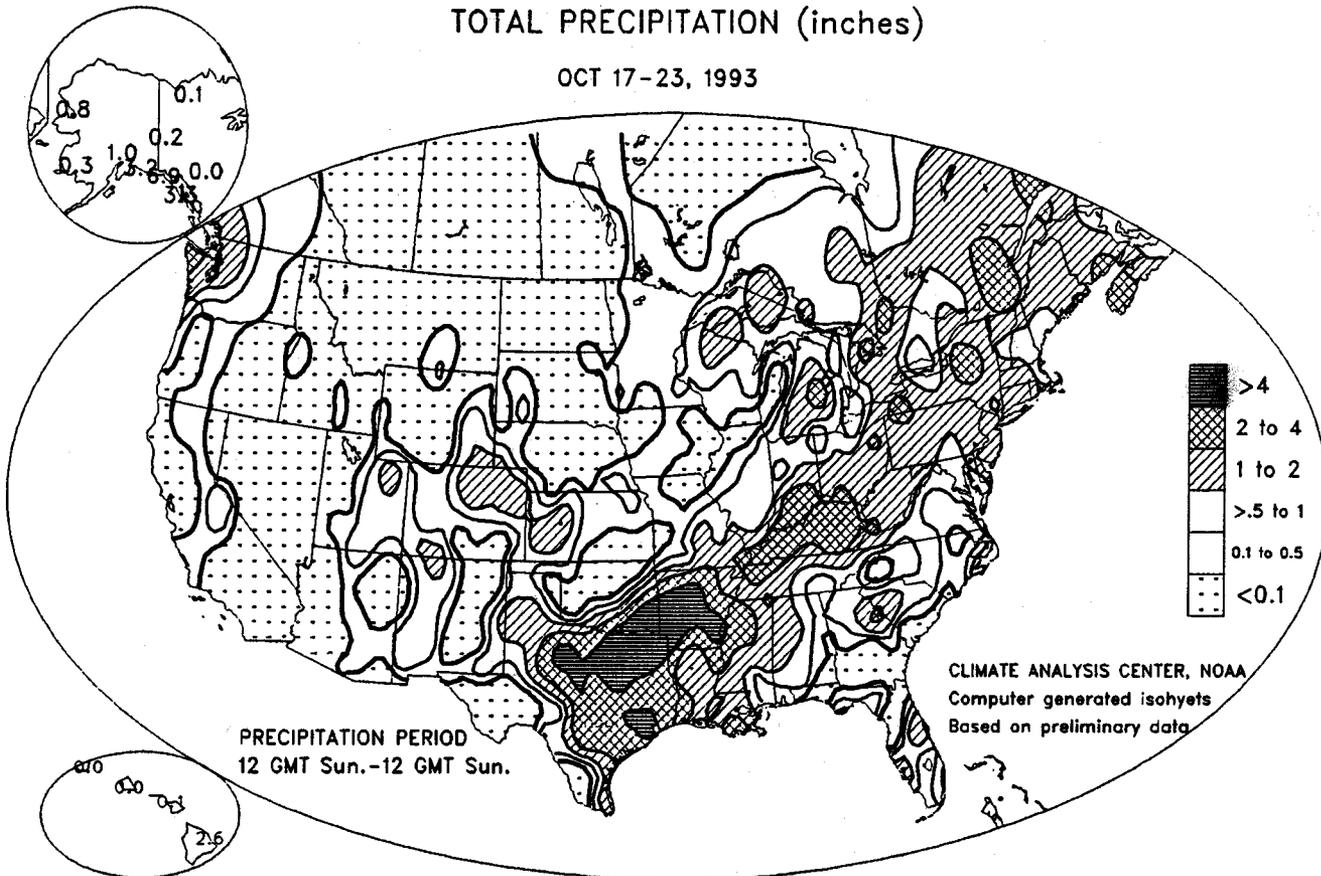
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October 26, 1993

## TOTAL PRECIPITATION (inches)

OCT 17-23, 1993



## HIGHLIGHTS

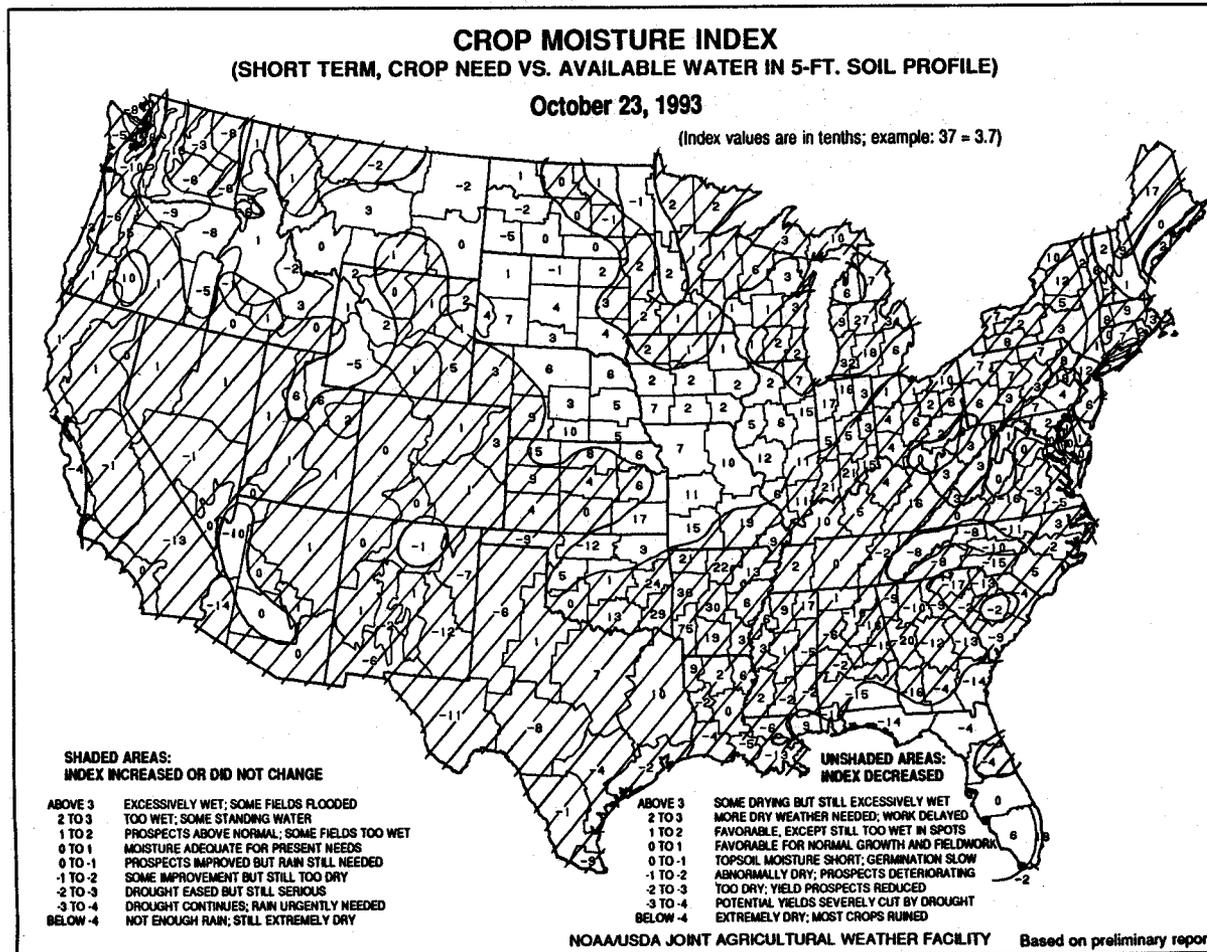
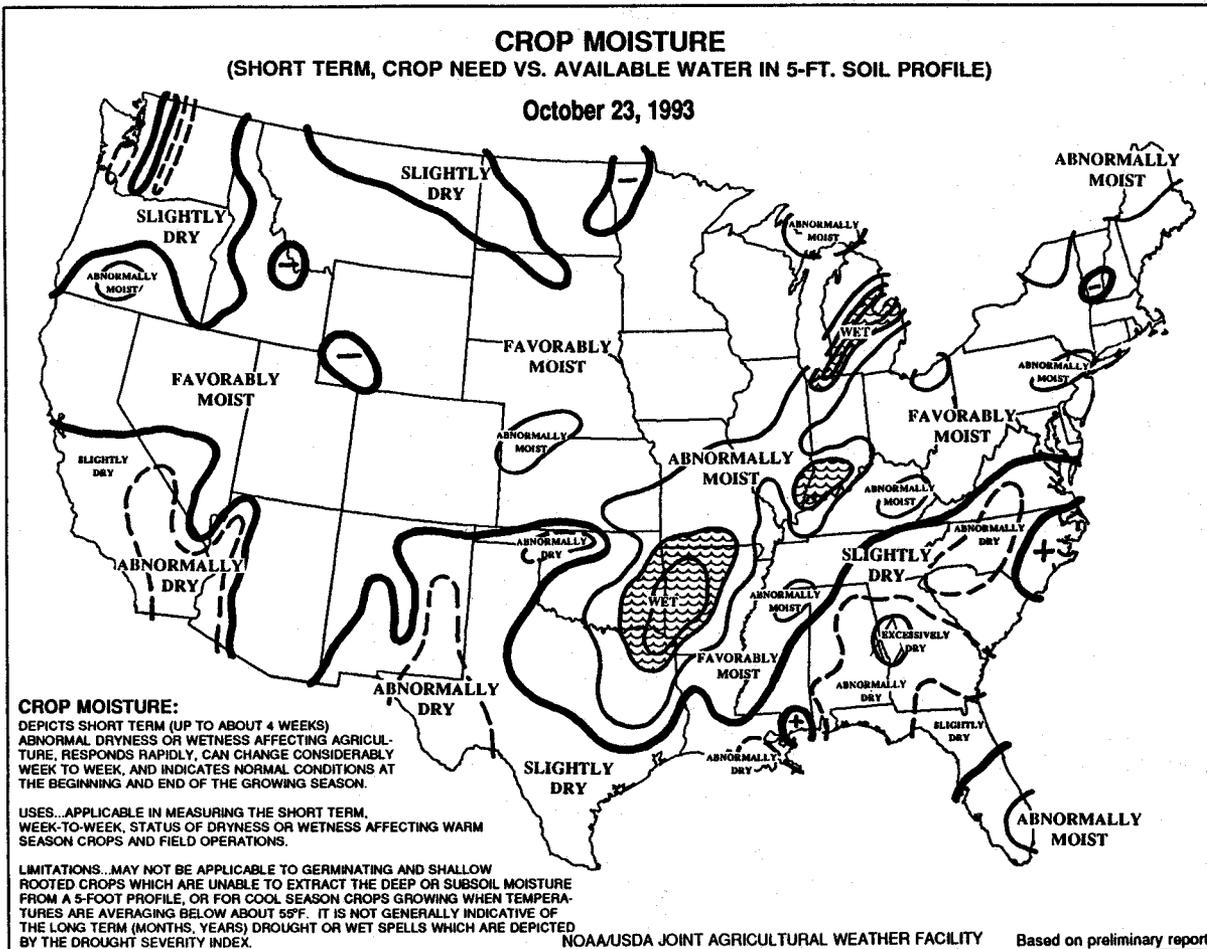
October 17 - 23, 1993

During the first half of the week, heavy rainfall drenched areas from Texas to the lower Ohio Valley. Thereafter, sharply cooler air plunged through the southern High Plains. Early in the week, a storm center drifted across the central Rockies, generating heavy mountain snowfall. As much as 2 feet of snow accumulated in south-central Wyoming's Park Range. East of the storm's center, warmth advanced quickly northward, resulting in more than 3 dozen daily record highs. Laredo, TX reached 100°F on Sunday, and Lynchburg, VA attained 85°F at midweek. But the storm's primary impact was its repeated heavy rainfall in a concentrated area. More than 2 inches of rain fell during a 4-day period from eastern Texas to the lower Ohio Valley, with local totals greater than 12 inches in northeastern Texas. Cotton harvest activities were delayed by rain on Texas' High Plains on Tuesday, while rainy weather plagued the Delta cotton region until midweek. A quickly advancing cold front dislodged the rainfall and warmth by Thursday,

but also delivered temperatures of 33°F in San Angelo, TX and 26°F in Gage, OK. Cooler air overspread the Nation's northeastern quadrant in blustery fashion. Wind gusts on Thursday were clocked to 61 mph in Buffalo, NY. But by Saturday morning, clear, calm conditions allowed temperatures to fall to 28°F in Toledo, OH and to 24°F in Elkins, WV.

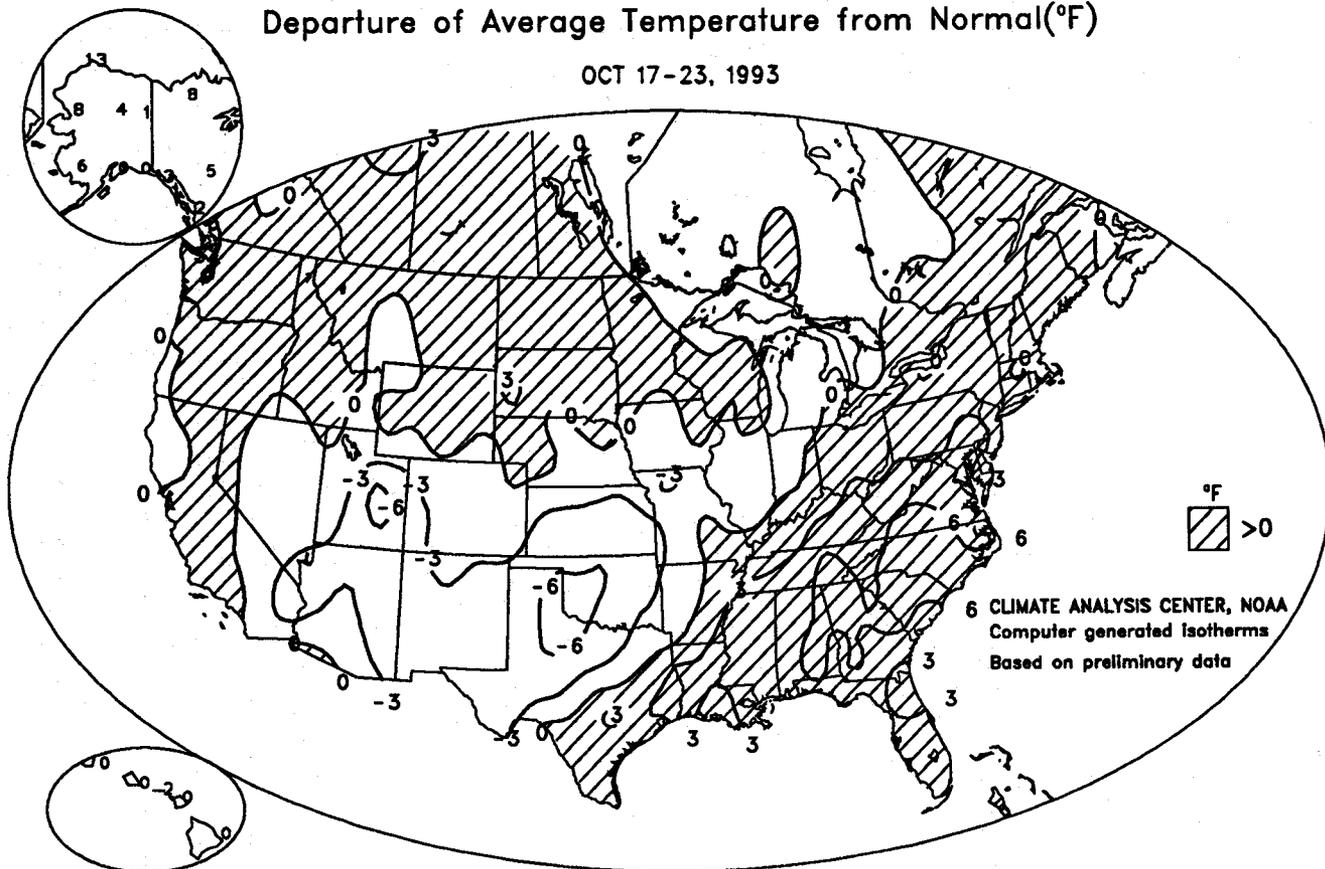
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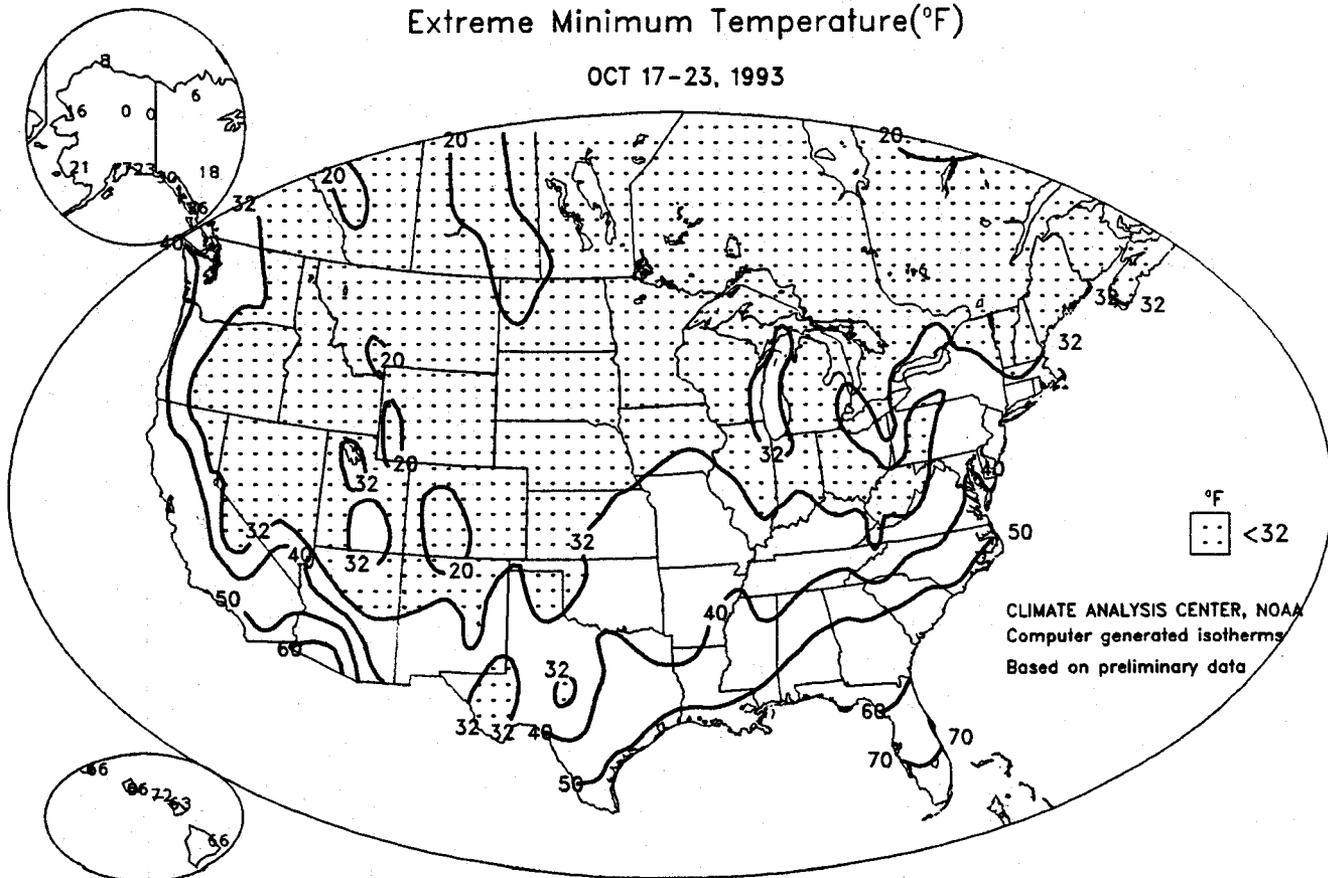
### Departure of Average Temperature from Normal(°F)

OCT 17-23, 1993



### Extreme Minimum Temperature(°F)

OCT 17-23, 1993



# National Weather Data for Selected Cities

Weather Data for the Week Ending **October 23, 1993**

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE		32 AND BELOW	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	75	56	85	46	66	5	1.3	.7	.9	6.1	102	31.1	70	95	67	0	0	4	1	
MOBILE	79	64	87	53	71	4	1.3	.3	.2	4.1	50	49.2	82	97	72	0	0	3	0	
MONTGOMERY	80	62	88	53	71	8	1.5	.1	.5	3.0	53	38.0	84	94	60	0	0	2	1	
AK ANCHORAGE	40	26	45	16	33	0	1.5	.5	.5	5.9	138	14.3	108	87	62	0	5	1	1	
BARRROW	27	22	32	8	25	13	1.1	.0	.0	2.0	210	9.9	128	89	80	0	7	1	0	
FAIRBANKS	27	14	34	6	20	0	1.1	.1	.1	1.97	9.9	110	91	81	0	7	7	0	0	
JUNEAU	47	41	50	39	44	3	2.5	.7	.4	11.9	94	45.6	101	98	77	0	0	3	2	
KODIAK	48	33	52	29	41	1	1.3	.3	.2	11.9	96	58.0	109	86	63	0	4	2	0	
WOME	37	28	39	22	33	0	1.1	.3	.2	5.8	164	14.9	117	93	78	0	6	2	0	
AZ PHOENIX	83	60	90	55	72	0	1.1	.1	.0	1.3	88	10.2	179	63	19	1	0	0	0	
PRESCOTT	66	38	72	35	52	1	1.1	.1	.1	1.7	60	15.2	94	85	28	0	1	1	0	
TUCSON	81	55	88	46	68	0	1.1	.0	.2	1.3	51	13.8	138	68	23	0	0	2	0	
YUMA	87	63	92	60	75	0	1.0	.0	.0	2	43	3.7	155	47	15	2	2	0	0	
AR FORT SMITH	68	52	73	39	60	0	3.0	2.1	2.4	11.0	185	40.4	123	91	58	0	0	2	2	
LITTLE ROCK	69	54	77	41	62	1	3.2	2.4	1.7	6.2	84	36.0	93	83	58	0	0	3	3	
CA BAKERSFIELD	81	53	88	49	67	0	1.1	.1	.0	.1	29	6.7	156	59	32	0	0	0	0	
BUREKA	59	49	62	47	54	24	1.1	.1	.0	.6	24	30.9	129	92	72	0	0	0	0	
FRESNO	79	50	85	46	64	0	1.1	.1	.0	.6	21	11.2	154	82	45	0	0	1	0	
LOS ANGELES	78	59	90	56	68	0	1.0	.0	.0	.1	18	18.5	221	84	44	1	1	0	0	
REDDING	77	46	82	43	62	0	1.0	.6	.0	2.9	125	39.2	180	91	29	0	0	0	0	
SACRAMENTO	77	49	82	45	63	0	1.0	.6	.0	2.9	125	39.2	180	91	29	0	0	0	0	
SAN DIEGO	76	57	84	55	67	0	1.1	.3	.0	.5	47	19.6	165	97	32	0	0	0	0	
SAN FRANCISCO	73	52	78	50	62	0	1.0	.3	.0	.5	47	19.8	150	89	51	0	0	0	0	
CO DENVER	59	37	70	34	48	0	1.5	.3	.7	4.0	202	12.5	91	90	46	0	0	3	2	
GRAND JUNCTION	60	38	66	33	49	0	1.3	.0	.3	1.7	89	10.7	127	87	43	0	0	2	1	
PUEBLO	64	34	75	22	49	0	1.4	.1	.0	.7	50	12.9	127	93	44	3	3	0	0	
CT BRIDGEPORT	62	48	71	39	55	1	1.3	.6	.7	9.7	182	30.3	90	88	59	0	0	1	1	
HARTFORD	60	43	67	35	52	1	1.4	.6	.6	8.3	130	36.5	104	92	53	0	0	3	2	
DC WASHINGTON	69	54	80	43	61	3	1.5	.3	.3	5.3	95	31.3	99	90	57	0	0	2	0	
FL APALACHICOLA	82	65	86	59	74	4	1.0	.7	.0	7.2	70	41.4	88	100	51	0	0	0	0	
DAYTONA BEACH	84	66	87	63	75	3	1.2	.4	1.2	7.0	73	30.7	74	100	66	0	0	1	1	
JACKSONVILLE	81	62	89	58	72	0	1.0	.4	.7	11.5	114	37.6	86	98	71	0	0	0	0	
KEY WEST	87	78	88	73	83	3	1.0	.4	.7	10.4	111	32.2	95	86	70	0	0	1	0	
MIAMI	88	76	90	74	82	4	1.8	.8	.8	19.3	159	53.8	107	89	64	1	0	2	1	
ORLANDO	87	68	91	65	78	3	2.3	1.8	2.3	9.5	120	43.2	100	96	64	1	0	1	1	
TALLAHASSEE	85	61	90	57	73	6	1.2	.5	.2	4.4	56	44.7	80	93	52	2	0	1	0	
TAMPA	88	69	91	67	79	5	1.0	.4	.0	9.6	125	34.7	88	95	59	3	0	0	0	
WEST PALM BEACH	87	75	88	71	81	3	1.7	.0	1.6	17.1	130	56.0	108	95	69	0	0	2	1	
GA ATLANTA	76	59	85	51	68	7	1.4	.3	.4	4.9	86	38.7	93	94	64	0	0	1	0	
AUGUSTA	80	59	89	52	69	7	1.2	.4	.2	4.1	79	30.4	80	96	54	0	0	2	0	
MACON	78	60	87	52	69	5	1.3	.2	.3	2.6	59	38.6	104	98	63	0	0	1	0	
SAVANNAH	81	63	89	57	72	6	1.0	.7	.7	7.2	114	38.4	88	95	57	0	0	0	0	
HI HILO	83	69	85	66	76	0	3.4	1.2	1.6	15.0	98	84.9	85	93	71	0	0	5	3	
HONOLULU	88	71	89	66	80	0	1.0	.6	.7	.3	11	3.7	25	76	32	0	0	0	0	
KAHULUI	85	69	90	63	77	0	1.1	.2	.1	.9	79	8.4	57	79	58	1	0	1	0	
LIHUE	83	72	84	67	77	0	1.0	.0	.0	4.5	83	14.8	48	76	61	0	0	1	0	
ID BOISE	64	36	74	31	50	0	1.0	.2	.0	.5	36	11.4	126	86	34	0	2	0	0	
LEWISTON	62	42	67	34	52	1	1.0	.2	.0	.5	35	11.3	115	77	40	0	0	0	0	
POCATELLO	62	30	71	25	46	-1	1.0	.2	.0	1.3	85	16.7	174	91	41	0	6	0	0	
IL CHICAGO	60	41	68	32	51	-1	1.4	.8	1.0	6.6	117	42.3	142	93	57	0	1	2	1	
MOLINE	62	39	74	29	51	-1	1.0	.6	.7	4.4	71	48.1	143	91	51	0	1	1	0	
PEORIA	62	42	70	31	52	-1	1.4	.2	.3	10.0	169	50.7	166	92	60	0	1	4	0	
QUINCY	60	44	69	36	52	-2	1.0	.7	.7	8.5	116	33.9	101	87	57	0	0	1	0	
ROCKFORD	62	37	72	28	50	0	1.1	.5	.1	4.4	74	39.4	127	95	50	0	1	2	0	
SPRINGFIELD	62	43	69	32	52	-2	1.5	.1	.5	8.9	167	43.4	148	92	59	0	1	3	0	
IN EVANSVILLE	67	48	72	33	58	0	2.1	1.4	1.0	8.9	170	36.1	98	93	58	0	0	4	2	
FORT WAYNE	62	40	66	30	51	0	1.6	.0	.4	5.9	133	36.4	128	95	58	0	1	3	0	
INDIANAPOLIS	62	42	66	31	52	-1	1.6	.1	.4	7.7	161	40.1	123	96	63	0	1	3	0	
SOUTH BEND	60	40	66	32	50	-1	1.0	.3	.5	11.9	201	42.8	134	94	58	0	1	4	1	
IA DES MOINES	61	41	72	32	51	0	1.3	.3	.3	7.5	125	54.0	179	88	60	0	1	2	0	
SIoux CITY	62	38	74	30	50	0	1.0	.4	.7	3.1	70	30.8	131	89	52	0	1	1	0	
WATERLOO	62	38	74	27	50	2	1.1	.5	.1	4.7	85	51.3	171	92	44	0	2	2	0	
KS CONCORDIA	61	43	72	31	52	-3	1.3	.1	.2	3.9	85	42.7	162	87	54	0	1	2	0	
DODGE CITY	61	40	72	32	50	-6	1.7	.4	.6	1.8	63	24.8	126	92	59	0	1	3	1	
GOODLAND	60	38	73	31	49	-1	1.6	.4	.4	2.1	91	19.1	114	93	56	0	2	2	0	
TOPEKA	62	43	72	32	53	-2	1.3	.3	.3	8.4	135	45.2	145	95	62	0	1	1	0	
WICHITA	63	43	70	33	53	-5	1.1	.6	.1	3.4	56	30.9	101	90	58	0	0	1	0	
KY BOWLING GREEN	69	48	78	34	59	3	1.5	.8	1.3	6.3	106	28.8	71	100	63	0	0	4	1	
LEXINGTON	68	47	78	33	57	2	1.3	.7	.6	5.8	113	35.5	97	95	59	0	0	5	2	
LOUISVILLE	67	49	75	35	58	2	2.4	1.8	1.2	7.6	148	41.2	113	97	60	0	0	3	3	
LA BATON ROUGE	79	60	89	48	69	2	1.7	.0	.4	2.4	32	49.3	98	98	57	0	0	2	0	
LAKE CHARLES	80	61	87	52	71	3	1.1	.3	1.0	3.0	35	47.9	107	90	54	0	0	2	1	
NEW ORLEANS	81	64	89	55	72	5	1.7	.0	.6	3.3	42	44.5	87	96	70	0	0	3	1	
SHERBOURNE	76	59	88	43	67	4	1.8	.9	1.4	7.4	112	50.4	128	94	59	0	0	4	1	

Based on 1961-90 normals.

Weather Data for the Week Ending October 23, 1993

STATES  AND  STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
ME CARIBOU	50	35	59	24	42	1	1.3	.6	1.0	9.2	160	32.8	113	86	54	0	4	4	4	1		
ME PORTLAND	56	41	66	29	48	1	1.3	.6	1.0	6.9	117	33.4	100	87	50	0	2	3	3	1		
MD BALTIMORE	66	50	78	38	58	3	1.6	.1	.4	5.8	104	33.7	101	92	60	0	0	0	0	0		
MA SALLSBURY	69	49	81	35	58	3	1.7	.2	.3	4.8	77	38.4	102	98	59	0	0	0	4	1		
MA BOSTON	65	46	70	41	54	0	1.4	.5	.7	6.1	92	29.2	83	93	55	0	0	0	4	1		
MA CHESTER	58	47	66	40	53	0	1.4	.5	.7	6.1	92	29.2	83	93	55	0	0	0	4	1		
MI ALPENA	54	34	62	28	44	-1	1.2	.7	.6	3.4	72	22.8	95	97	59	0	0	3	3	1		
MI DETROIT	62	44	68	34	53	-3	1.4	.1	.2	6.2	139	27.9	105	91	57	0	0	0	3	0		
MI FLINT	58	38	62	28	48	-1	1.3	.8	.7	6.7	129	29.2	117	94	57	0	1	2	2	2		
MI GRAND RAPIDS	57	38	67	30	47	-1	2.2	1.6	1.8	12.5	196	42.9	147	94	62	0	2	4	1	1		
MI HOUGHTON LAKE	53	36	63	25	45	-1	1.1	.6	.6	3.9	76	24.3	103	88	61	0	2	3	3	1		
MI LANSING	58	37	63	29	48	0	1.2	.7	.7	7.8	131	33.4	128	98	59	0	2	3	3	1		
MI MARQUETTE	52	34	66	29	43	1	1.0	.5	.6	7.0	103	28.2	97	95	57	0	3	4	0	0		
MI MUSKEGON	56	38	60	29	47	-2	1.0	.3	.6	6.2	103	33.0	128	97	74	0	2	3	3	1		
MI SAULT ST. MARIE	52	35	61	28	43	-1	1.3	.5	.9	8.3	136	28.3	105	92	67	0	3	4	1	1		
MN ALEXANDRIA	57	36	72	30	46	2	1.3	.3	.2	2.2	50	24.6	106	91	51	0	2	2	0	0		
MN DULUTH	50	33	69	26	42	-1	1.3	.2	.2	2.3	40	28.4	108	92	59	0	3	1	0	0		
MN INT'L FALLS	51	29	68	24	40	-1	1.2	.2	.2	2.3	50	19.8	90	92	58	0	6	3	0	0		
MN MINNEAPOLIS	60	38	73	30	49	1	1.3	.2	.2	2.8	64	30.2	120	89	51	0	2	1	0	0		
MN ROCHESTER	59	35	71	27	47	1	1.3	.2	.3	3.6	68	36.8	139	96	53	0	2	1	0	0		
MS GREENWOOD	77	59	87	40	68	5	2.7	1.9	1.3	6.8	114	36.7	86	95	53	0	0	3	3	3		
MS JACKSON	75	58	85	45	67	4	1.8	.0	.5	4.2	79	37.9	88	98	68	0	0	0	3	0		
MS MERIDIAN	78	58	87	47	68	5	2.4	1.7	1.4	5.2	91	43.9	97	94	68	0	0	3	2	2		
MO CAPE GIRARDEAU	67	50	72	36	59	1	1.8	1.1	1.2	10.4	180	41.3	111	98	57	0	0	0	2	0		
MO COLUMBIA	62	44	69	35	53	-1	1.3	.5	.2	14.1	219	56.8	177	96	66	0	0	0	0	0		
MO KANSAS CITY	62	44	70	34	53	-3	1.4	.3	.4	9.4	126	48.3	144	90	60	0	0	0	0	0		
MO SAINT LOUIS	63	48	68	38	56	-1	1.1	.5	1.1	11.8	231	48.4	159	89	62	0	1	2	1	1		
MO SPRINGFIELD	63	46	68	35	55	-1	1.5	.3	.4	18.8	249	50.1	139	94	65	0	0	0	4	0		
MT BILLINGS	62	37	72	33	50	0	1.0	.3	.0	3.8	170	15.2	115	73	36	0	0	0	0	0		
MT GLASGOW	59	30	68	24	45	1	1.0	.1	1.0	1.0	70	15.5	152	89	45	0	0	0	0	0		
MT GREAT FALLS	58	36	66	28	47	1	1.1	.1	1.1	2.7	144	21.7	160	70	39	0	4	1	0	0		
MT HAVRE	60	30	70	22	45	0	1.0	.1	1.0	4	24	12.8	126	83	35	0	5	1	0	0		
MT HELENA	57	28	67	20	42	-2	1.1	.1	1.1	1.8	111	18.1	174	93	46	0	6	1	0	0		
MT KALISPELL	57	31	63	22	44	3	1.0	.2	1.0	2.3	123	20.3	154	92	47	0	4	0	0	0		
MT MILES CITY	63	34	73	29	49	2	1.2	.2	1.2	1.1	55	18.1	143	91	38	0	2	1	0	0		
MT MISSOULA	57	31	65	24	44	4	1.0	.2	1.0	1.9	113	12.8	113	93	43	0	4	1	0	0		
NE GRAND ISLAND	62	38	75	27	50	-1	1.1	.2	1.1	2.9	75	31.7	138	92	50	0	2	2	0	0		
NE LINCOLN	59	40	72	29	50	-2	1.4	.1	.3	5.1	98	24.8	97	96	55	0	1	2	0	0		
NE NORFOLK	63	40	78	32	51	2	1.0	.3	1.0	4.6	123	33.1	143	88	51	0	1	1	0	0		
NE NORTH PLATTE	63	35	77	23	49	1	1.1	.1	1.1	2.3	97	24.7	138	94	49	0	3	2	0	0		
NE OMAHA	59	43	71	32	51	-1	1.3	.2	1.2	5.1	91	40.7	153	84	56	0	1	2	0	0		
NE SCOTTSBLUFF	61	33	71	26	47	-1	1.7	.5	.3	4.4	263	22.0	159	94	40	0	4	4	0	0		
NE VALENTINE	65	32	78	20	48	-2	1.1	.2	1.0	2.4	73	18.8	91	88	32	0	4	2	0	0		
NV ELY	59	26	67	22	43	-2	1.1	.1	1.1	1.3	76	9.4	108	86	33	0	7	1	0	0		
NV LAS VEGAS	77	51	83	49	64	-2	1.0	.1	1.0	1.0	5	4.7	145	51	19	0	0	0	0	0		
NV RENO	68	38	77	35	53	3	1.0	.1	1.0	1.4	235	6.3	114	83	29	0	0	0	0	0		
NV WINNEMUCCA	66	29	74	26	47	0	1.0	.1	1.0	.6	70	6.8	109	89	30	0	6	1	0	0		
NE CONCORD	57	39	67	25	48	1	1.6	.1	1.6	6.8	132	23.7	83	93	50	0	2	1	1	1		
NJ ATLANTIC CITY	66	47	77	32	56	3	1.1	.5	1.1	5.1	102	31.9	98	93	59	0	1	4	1	1		
NM ALBUQUERQUE	65	41	68	38	53	-2	1.4	.2	1.4	1.1	66	7.8	101	85	33	0	0	2	0	0		
NM CLOVIS	66	42	73	35	54	-2	1.0	.8	1.0	1.7	52	13.5	85	83	30	0	0	3	1	0		
NM ROSWELL	70	42	78	33	56	-5	1.2	.1	1.1	1.1	37	9.4	82	86	30	0	0	2	0	0		
NY ALBANY	58	43	65	34	50	2	1.8	.1	1.3	5.3	106	33.1	113	87	55	0	0	4	0	0		
NY BINGHAMTON	54	41	60	33	48	0	1.3	.7	1.3	6.2	114	34.4	115	89	58	0	0	4	0	0		
NY BUFFALO	58	42	65	36	50	1	1.0	.3	1.0	8.6	148	32.9	109	85	54	0	0	3	1	1		
NY NEW YORK	64	52	70	46	58	2	1.5	.8	1.5	8.0	144	36.1	106	81	60	0	0	3	2	1		
NY ROCHESTER	57	42	65	33	50	0	1.1	.5	1.0	6.6	138	23.3	90	90	56	0	0	3	1	1		
NY SYRACUSE	57	43	64	33	50	1	1.2	.5	1.2	9.9	188	42.0	135	88	58	0	0	5	1	1		
NC ASHEVILLE	73	48	81	32	61	6	1.0	1.0	1.0	1.7	22	30.0	65	97	47	0	1	1	0	0		
NC CHARLOTTE	78	57	85	44	67	7	1.4	.4	1.4	2.1	21	27.9	78	95	53	0	0	2	0	0		
NC GREENSBORO	75	53	85	38	64	7	1.1	.7	1.1	3.1	50	35.5	100	96	56	0	0	1	0	0		
NC HATTERAS	76	64	84	59	70	6	2.1	1.0	1.9	10.7	119	47.2	104	88	62	0	0	3	1	1		
NC NEW BERN	77	59	85	51	68	6	1.1	.5	1.0	6.1	82	39.2	84	96	53	0	0	3	1	1		
NC RALEIGH	74	56	84	39	65	7	1.2	.4	1.1	4.5	84	29.7	86	94	58	0	0	3	0	0		
NC WILMINGTON	79	60	85	51	69	7	1.7	.0	1.6	11.3	120	51.5	105	97	58	0	0	2	1	0		
ND BISMARCK	63	29	75	22	46	2	1.0	.2	1.0	1.3	13	25.1	176	92	43	0	6	0	0	0		
ND FARGO	61	32	76	28	47	3	1.1	.3	1.0	.6	19	19.0	107	88	44	0	4	2	0	0		
ND GRAND FORKS	58	31	69	26	44	2	1.1	.2	1.1	1.0	31	20.0	119	87	44	0	5	2	0	0		
ND WILLISTON	60	28	69	18	44	1	1.0	.2	1.0	.3	17	17.6	141	88	44	0	5	0	0	0		
OH AKRON-CANTON	61	41	67	32	51	0	2.9	2.4	1.0	7.4	146	31.6	105	95	59	0	1	4	4	4		
OH CINCINNATI	66	45	73	29	56	2	1.6	.0	1.6	4.7	95	31.3	92	95	58	0	1	4	0	0		
OH CLEVELAND	62	44	70	33	53	2	1.7	.1	1.7	7.6	143	32.6	110	90	61	0	0	3	1	1		
OH COLUMBUS	65	44	72	31	55	4	1.1	.6	1.1	4.1	84	30.5	99	93	59	0	1	4	1	1		
OH DAYTON	62	44	69	32	53	1	1.3	.7	1.3	7.3	169	42.8	143	92	61	0	1	3	0	0		

Based on 1961-90 normals.

Weather Data for the Week Ending October 23, 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
OKLAHOMA CITY	65	46	68	36	55	5	1.2	1.2	1.2	100	100	100	100	95	63	0	1	2	4	1	
TULSA	65	45	68	35	55	4	1.1	1.1	1.1	100	100	100	100	96	61	0	0	2	2	0	
OR ASTORIA	61	45	64	40	53	2	1.9	1.5	1.1	2.0	33	36.5	83	99	68	0	0	2	2	0	
BURNS	61	29	68	25	45	1	0.0	0.2	0.0	0.0	37	8.4	114	88	38	0	0	0	0	0	
MEDFORD	70	37	75	33	54	0	0.0	0.4	0.0	0.0	36	13.5	115	94	37	0	0	0	0	0	
PENDLETON	65	40	70	37	52	1	0.0	0.2	0.0	0.0	11	11.9	139	83	42	0	0	0	0	0	
PORTLAND	66	47	70	44	56	3	1.1	1.6	1.1	1.3	37	23.6	99	94	55	0	0	0	0	0	
SALEM	67	41	71	37	54	3	1.1	1.6	1.1	1.3	27	26.3	105	90	50	0	0	0	0	0	
PA ALLENTOWN	62	46	70	36	54	2	1.7	1.0	1.1	1.9	27	26.3	105	94	50	0	0	0	0	0	
ERIE	60	44	68	34	52	0	1.4	0.0	0.0	11.3	186	43.4	123	92	57	0	0	0	0	0	
HARRISBURG	63	50	70	40	56	3	1.4	0.8	0.8	7.1	98	29.2	89	93	57	0	0	0	0	1	
PHILADELPHIA	67	53	78	41	60	7	1.9	2.2	2.2	9.5	168	39.1	119	87	59	0	0	0	0	0	
PITTSBURGH	63	43	69	32	53	2	1.8	2.4	2.4	8.3	128	35.3	94	90	60	0	0	0	0	0	
SCRANTON	59	44	66	36	52	2	1.0	0.3	0.3	5.4	115	30.6	101	90	61	0	1	0	0	0	
RI PROVIDENCE	61	45	71	36	53	1	1.2	0.4	0.5	9.0	168	31.7	106	89	56	0	0	0	0	0	
SC CHARLESTON	79	62	88	56	71	5	1.2	0.4	0.9	5.8	95	31.3	88	92	53	0	0	0	0	1	
COLUMBIA	80	58	89	50	69	9	1.9	2.2	2.2	6.1	87	44.8	99	96	59	0	0	0	0	0	
FLORENCE	80	59	88	52	70	7	1.9	2.2	2.2	5.1	85	31.5	74	96	52	0	0	0	0	0	
GREENVILLE	76	53	84	42	65	6	1.5	0.3	0.3	3.9	72	28.3	75	98	52	0	0	0	0	0	
SD ABERDEEN	63	36	78	28	49	4	1.5	0.3	0.3	2.2	32	31.0	73	96	51	0	0	0	0	0	
BURON	64	32	77	27	49	2	1.3	0.0	0.2	1.6	51	25.7	131	86	45	0	0	0	0	0	
RAPID CITY	66	36	78	25	49	2	1.4	0.3	0.3	2.4	82	27.5	148	89	44	0	0	0	0	0	
SIOUX FALLS	61	36	74	29	49	2	1.1	0.2	0.2	2.3	111	18.6	121	83	35	0	0	0	0	0	
TN CHATTANOOGA	75	55	83	43	65	6	1.2	0.5	0.1	2.5	38	30.5	71	95	59	0	0	0	0	0	
KNOXVILLE	72	52	82	40	62	5	1.5	0.1	0.4	5.8	114	33.5	88	97	58	0	0	0	0	0	
MEMPHIS	74	56	80	42	65	3	1.2	0.5	0.7	5.3	94	34.0	84	93	58	0	0	0	0	0	
NASHVILLE	72	53	80	37	63	4	1.0	0.4	0.4	4.9	91	34.7	92	93	57	0	0	0	0	0	
TX ABILENE	73	50	91	38	61	4	2.2	1.6	2.1	5.4	104	17.3	81	93	53	1	0	0	0	0	
AMARILLO	64	39	73	31	52	2	1.4	0.1	0.4	1.4	46	16.7	92	92	50	0	1	0	0	0	
AUSTIN	81	63	95	48	72	2	1.9	1.1	1.8	2.3	39	23.9	89	81	46	3	0	0	0	0	
BEAUMONT	82	63	89	52	72	4	1.3	0.4	1.0	7.5	78	59.0	127	90	57	0	0	0	0	0	
BROWNSVILLE	84	67	91	53	75	0	1.5	0.0	0.5	6.3	76	23.4	100	88	56	4	0	0	0	0	
CORPUS CHRISTI	84	65	93	52	75	2	1.0	0.4	1.0	2.9	37	32.0	120	89	50	4	0	0	0	0	
DEL RIO	82	59	99	42	71	2	1.5	0.2	0.5	1.3	25	13.9	64	84	44	2	0	0	0	0	
EL PASO	75	46	78	37	60	3	1.1	0.1	0.0	1.4	60	8.3	108	74	31	0	0	0	0	0	
FORT WORTH	71	55	83	44	63	1	2.7	1.8	1.2	8.3	105	28.6	90	96	62	0	0	0	0	0	
GALVESTON	79	68	86	55	73	1	1.6	1.0	1.4	9.2	112	39.8	114	81	66	0	0	0	0	0	
HOUSTON	80	62	91	47	71	3	2.6	1.6	2.5	5.9	65	51.5	120	91	62	1	0	0	0	0	
LUBBOCK	69	44	80	33	56	4	1.3	0.1	0.3	0.6	15	12.0	71	91	35	0	0	0	0	0	
MIDLAND	72	45	90	36	59	5	1.5	0.6	0.5	2.9	67	15.7	114	86	43	1	0	0	0	0	
SAN ANGELO	74	47	95	33	61	4	1.3	0.2	0.2	2.3	43	14.1	78	90	50	1	0	0	0	0	
SAN ANTONIO	83	60	96	41	71	3	2.4	1.7	2.4	3.5	61	30.9	118	88	42	3	0	0	0	0	
VICTORIA	82	63	92	47	73	2	2.3	1.4	2.3	4.2	43	46.2	122	92	56	3	0	0	0	0	
WACO	75	55	89	40	65	2	2.8	2.1	2.4	8.5	139	27.8	103	95	56	0	0	0	0	0	
WICHITA FALLS	68	49	75	40	58	5	1.0	0.3	0.9	5.2	77	26.0	93	95	56	0	0	0	0	0	
UT CEDAR CITY	60	34	70	30	47	3	1.5	0.3	0.4	1.2	69	9.1	95	90	40	0	0	0	0	0	
SALT LAKE CITY	61	39	67	36	50	1	1.1	0.3	0.1	3.0	126	17.5	132	94	49	0	0	0	0	0	
VT BURLINGTON	55	43	62	30	49	2	0.7	0.1	0.5	5.9	109	28.6	102	85	58	0	1	0	0	0	
VA NORFOLK	72	56	85	43	64	4	1.7	0.0	0.4	5.2	83	29.4	78	91	60	0	0	0	0	0	
RICHMOND	73	52	86	39	63	5	1.6	0.2	0.4	3.7	63	33.7	94	93	53	0	0	0	0	0	
ROANOKE	72	51	83	34	62	6	1.4	0.5	0.3	5.7	90	30.8	91	90	52	0	0	0	0	0	
WA QUILLAYUTE	58	45	62	38	52	2	3.7	1.2	2.1	5.5	46	50.2	70	97	72	0	0	0	0	0	
SEATTLE-TACOMA	61	47	66	43	54	3	1.9	0.1	0.5	1.5	36	22.1	90	96	60	0	0	0	0	0	
SPOKANE	58	37	65	29	48	2	1.2	0.2	0.7	1.1	51	11.2	96	88	42	0	1	0	0	0	
YAKIMA	65	33	69	30	49	0	1.1	0.1	0.1	1.1	14	4.7	88	90	38	0	0	0	0	0	
WV BECKLEY	67	47	78	32	57	6	1.8	0.2	0.5	5.9	108	31.7	93	96	54	0	0	0	0	0	
CHARLESTON	69	47	79	32	58	3	1.9	0.3	0.4	8.5	160	33.5	96	98	59	0	0	0	0	0	
HUNTINGTON	69	46	79	30	58	5	1.1	0.4	0.5	7.2	134	34.6	98	94	56	0	1	0	0	0	
PARKERSBURG	66	44	74	31	55	1	1.1	0.5	0.6	5.5	112	32.3	94	99	60	0	0	0	0	0	
WI GREEN BAY	57	38	70	32	48	1	1.4	0.1	0.4	5.1	97	31.8	129	93	63	0	1	0	0	0	
LACROSSE	61	40	74	32	50	2	1.3	0.5	0.7	1.8	32	38.5	142	91	46	0	1	0	0	0	
MADISON	61	36	71	29	48	0	1.0	0.2	0.3	4.6	82	41.4	149	88	52	0	1	0	0	0	
MILWAUKEE	60	43	73	37	51	2	1.1	0.4	0.1	4.3	83	34.2	124	92	59	0	0	0	0	0	
HAUSAU	57	37	72	29	47	2	1.5	0.1	0.4	6.4	99	34.0	118	87	46	0	1	0	0	0	
WY CASPER	60	35	70	31	48	3	1.2	0.0	0.2	1.9	116	14.2	131	82	41	0	0	0	0	0	
CHEYENNE	54	34	67	28	44	4	1.0	0.8	0.6	4.8	261	17.2	130	87	45	0	0	0	0	0	
LANDER	58	33	69	26	46	1	1.1	0.3	0.1	1.5	76	14.2	125	75	28	0	0	0	0	0	
SHERIDAN	62	31	73	25	47	1	1.1	0.2	0.1	2.4	104	16.3	128	87	35	0	0	0	0	0	

Based on 1961-90 normals.

## National Agricultural Summary

October 18 - 24, 1993

**HIGHLIGHTS:** Showers across the central and northeastern parts of the Nation hindered harvest progress during the early part of the week. Heavy rains across the lower Mississippi Valley and Texas caused harvest delays at midweek. Although the rainfall benefited pastures and small grain emergence, it slowed corn dry down. The northern Great Plains and the West remained mostly dry. Temperatures were near normal in the west and north, below normal across the southwest and central, and above normal along the Gulf coast and the southeast. Frost was reported as far south as central Arizona, central New Mexico, and northern Texas.

**SMALL GRAINS:** Winter wheat seeding in the 19 major producing States advanced to 86 percent (%) complete, compared with 86% at this time in 1992 and an 87% average. Winter wheat emerged at 69%, compared with 66% last year and a 69% average. Rain delayed planting across the south, southeast, and central Plains. However, the moisture helped the already-planted crops to emerge and helped thicken the stands of the emerged crops. Dry conditions stressed winter wheat and small grains in the Northwest. Winter wheat condition for the Nation rated 74% good to excellent.

**CORN:** Corn harvest in the 17 major producing States reached 31% complete, compared with 30% last year and a 64% average. The crop has reached maturity on 92% of the acreage, compared with 94% last year and a 98% average. Rainfall across the Midwest hindered harvest by causing muddy fields and slowing the dry down process for the grain. Harvest neared completion in the South and Southeast.

**SOYBEANS:** Harvest progress remained very active in the central Great Plains, the upper and middle Mississippi Valley, and the Ohio Valley. Rains slowed the harvest in the Southeast. In the 19 major producing States, soybean harvest moved to 68%, compared with 74% a year ago and a 73% average.

**COTTON:** Cotton harvest in the 14 producing States advanced to 57%, compared with 49% last year and a 50% average. Rain delayed the harvest in Arizona the first part of the week, but the harvest was active by the end of the week. In Texas, rains slowed or stopped the harvest across the plains area of the State. On the Texas Northern High Plains, some harvesting occurred with above-average yields being reported. Rain in the Mississippi Delta delayed harvest, while favorable conditions allowed the California harvest to advance rapidly.

**SORGHUM:** The grain sorghum harvest advanced last week. In the 12 major producing States, harvest reached 56%, compared with 53% last year and a 71% average. A hard freeze affected immature sorghum in western areas of Kansas. The harvest was ahead of average in the South, but remained behind average in the central and northern Plains, and in the middle Mississippi Valley. However, good progress was made in Missouri and Illinois.

**RICE:** Harvest progress reached 90% complete, compared with 98% last year and an 95% average. Dry conditions allowed the California harvest to advance rapidly.

**OTHER FIELD CROPS:** Rains in the Southeast briefly delayed the peanut harvest. Rains slowed or stopped the peanut harvest in Texas. The cranberry harvest reached 80% complete in New England. Harvest was also active in Wisconsin and Oregon. The sugarcane harvest was hindered by mud in Louisiana. Excessive moisture hampered the sweetpotato harvest in east Texas.

**FRUITS AND NUTS:** Florida citrus groves remained in good condition with adequate moisture available. Some fruit splitting was reported in wet areas. The grapefruit, orange, and tangerine harvests advanced in Florida and California. Treatments for red scale and weeds were applied in some California orange groves. The Washington apple harvest neared completion. Walnuts, almonds, and pistachios were harvested in California. The pecan crop was in fair to good condition in New Mexico. In Texas, the pecan harvest continued in the Southern Low Plains, as rains hindered the harvest in the Blacklands, and high winds caused nut loss in the Cross Timbers region.

**VEGETABLES:** Dry conditions early in the week allowed Florida growers to transplant and harvest vegetables. Heavy rains at the end of the week slowed field work in southwest Florida. The chile pepper harvest advanced in New Mexico. Tomato plantings along the Rio Grande Valley in Texas made good progress. Worm problems occurred on some cabbage plants in Texas and California. Some California broccoli fields were also treated for worms. Mild days and cool nights increased cauliflower development in California's Tulare County.

**PASTURE AND LIVESTOCK:** Pasture feed conditions remained generally fair to good across the Nation, although some poor pasture feed conditions remained in the Southeast and were reported in California. This week's rain continued to improve or maintain some pastures. Feed shortages remained in some areas along the Atlantic coast and in parts of Texas. Increased cattle culling occurred in Georgia, and culling remained heavy in Tennessee. Feed supplies in other areas of the country were generally adequate. Some livestock in Kansas have respiratory problems due to this summer's unusual weather. Nationally, livestock conditions were reported as generally good.

## Crop Progress

for the Week Ending October 24, 1993

**SORGHUM**  
(Percent Mature)

	Current	Last Wk	1992	Avg.
AR	100	100	100	99
CO	89	77	77	85
IL	92	90	97	92
KS	90	85	75	90
LA	100	100	100	100
MS	100	100	100	100
MO	95	91	95	96
NE	95	90	97	100
NM	80	76	96	85
OK	92	66	76	78
SD	85	76	93	99
TX	97	91	94	94
12 States	94	88	89	94

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

**SORGHUM**  
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	92	90	99	95
CO	17	12	21	38
IL	38	21	54	64
KS	35	30	20	65
LA	99	98	100	98
MS	95	94	100	97
MO	56	41	67	73
NE	15	9	21	72
NM	21	15	29	24
OK	34	24	28	24
SD	32	24	49	82
TX	86	79	80	77
12 States	56	49	53	71

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

**RICE**  
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	89	83	97	94
CA	75	60	95	87
LA	99	98	100	99
MS	86	79	99	95
TX	100	100	100	100
5 States	90	85	98	95

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

**CORN**  
(Percent Mature)

	Current	Last Wk	1992	Avg.
CO	93	84	94	96
GA	100	100	100	100
IL	99	98	96	99
IN	100	99	100	99
IA	100	95	100	100
KS	100	100	99	100
KY	99	98	99	99
MI	100	70	60	90
MN	55	35	100	100
MO	100	97	100	100
NE	98	95	99	100
NC	100	100	100	100
OH	99	98	86	95
PA	85	74	68	78
SD	79	68	90	100
TX	100	100	100	100
WI	70	59	70	92
17 States	92	86	94	98

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

**CORN**  
(Percent Harvested)

	Current	Last Wk	1992	Avg.
CO	21	15	28	31
GA	98	97	96	97
IL	37	25	43	72
IN	28	23	23	49
IA	22	12	21	70
KS	70	65	70	90
KY	77	71	70	70
MI	15	10	8	30
MN	16	6	17	67
MO	50	39	54	79
NE	23	15	25	67
NC	90	88	79	80
OH	34	21	13	34
PA	25	15	11	25
SD	9	6	17	69
TX	99	96	97	97
WI	10	6	10	42
17 States	31	22	30	64

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

**WINTER WHEAT**  
(Percent Planted)

	Current	Last Wk	1992	Avg.
AR	24	17	40	33
CA	7	5	5	6
CO	100	97	100	99
GA	7	6	9	9
ID	88	76	95	94
IL	61	40	87	83
IN	72	63	75	76
KS	96	90	95	96
MI	90	75	80	85
MO	43	31	62	66
MT	85	83	98	99
NE	100	100	100	100
NC	24	17	25	26
OH	88	70	78	75
OK	95	94	84	92
OR	88	81	84	80
SD	100	99	100	100
TX	81	74	77	82
WA	96	94	100	94
19 States	86	80	86	87

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

**COTTON**  
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	68	47	40	63
AZ	68	57	68	46
AR	57	46	57	62
CA	55	35	80	58
GA	65	52	33	47
LA	78	68	88	84
MS	65	52	68	74
MO	72	55	52	68
NM	24	14	14	11
NC	55	42	25	36
OK	30	18	16	16
SC	60	47	29	44
TN	61	55	51	63
TX	48	43	29	28
14 States	57	47	49	50

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

**SOYBEANS**  
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	44	30	28	34
AR	25	20	46	31
GA	17	8	17	17
IL	82	73	89	88
IN	78	69	79	73
IA	85	70	93	96
KS	60	45	70	75
KY	27	19	36	35
LA	69	54	69	60
MI	55	40	25	55
MN	90	70	90	96
MS	42	34	53	46
MO	46	36	71	66
NE	90	87	92	93
NC	11	8	11	11
OH	85	69	74	65
SC	7	4	5	8
SD	73	54	81	96
TN	24	16	27	30
19 States	68	57	74	73

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

**WINTER WHEAT**  
(Percent Emerged)

	Current	Last Wk	1992	Avg.
AR	16	9	20	18
CA	3	1	1	1
CO	95	86	93	90
GA	5	2	4	6
ID	54	33	68	65
IL	30	7	55	50
IN	45	14	44	50
KS	80	65	80	80
MI	60	40	60	70
MO	25	11	35	42
MT	52	45	75	80
NE	98	96	100	97
NC	10	5	12	16
OH	60	20	46	45
OK	78	69	52	67
OR	59	47	61	48
SD	97	90	91	92
TX	65	52	55	61
WA	79	73	84	79
19 States	69	57	66	69

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

## 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 0.10 to 1.64 in. north; none to 2.01 in. central; 0.01 to 1.21 in. south. Temperatures 2 to 7° above normal north; 3 to 8° above normal central; 4 to 7° above normal south. Lows 35 to 49° north; 37 to 54° central; 50 to 56° south. Highs 80 to 85° north; 81 to 88° central; 85 to 88° south.

Days suitable for fieldwork 5.6. Soil moisture 70% short, 28% adequate, 2% surplus. Corn harvested 95%, 92% 1992, 94% avg. Sorghum harvested 60%, 79% 1992, 84% avg. Peanuts dug 91%, 93% 1992, 96% avg. Peanuts combined 87%, 86% 1992, 91% avg. Wheat seeded 41%, 40% 1992, 37% avg. Pasture 4% very poor, 29% poor, 52% fair, 15% good. Primary activities: Harvesting vegetables, sorghum, cotton, corn, soybeans, land preparation for seeding small grains, general care of livestock, poultry, catfish.

**ARIZONA:** Cloudy, scattered showers north, east, 17th; 18th. Light showers southeast, 19th. Sunny 20th to 23rd. Temperatures varied normal to 5° below normal; ranges 23 to 80°, higher elevations; 37 to 94° deserts.

Cotton harvest progress slow first part of week due rain, but active by week's end; 100% bolls open, 100% previous, 100% avg. 68% harvested, 68% previous, 46% avg. Weeds light to moderate, insects moderate. Defoliation light western areas, active in central, eastern areas. Alfalfa condition good. Harvest moderate to active all producing areas. Weeds light to moderate, insects light to moderate; disease light. Rain damage light to moderate central, south central. New stand establishment normal to above normal. Western area lemon, grapefruit harvest continues. Central Arizona, navel oranges, cantaloupe, watermelons, honeydews, broccoli, mixed greens, sweet corn, green onions, parsley, radishes, pecans harvested. Apples, sweet corn, chilies, lettuce, cabbage, pumpkins, cabbage, watermelon, tomato harvested eastern production areas.

**ARKANSAS:** Cool week, temperatures averaging a little below normal. Scattered showers beginning of week, heaviest rain Southwest region of state. Cool and dry latter part of week. Temperature extremes 30°; 85°. Rainfall 0.78 to 9.44 in.

Days suitable fieldwork 3. Moderate rate of crop growth. Soil moisture supplies 37% adequate, 63% surplus. Rice, sorghum, cotton, soybean harvests continued. The cotton classing office reported 462,381 bales had been classed as of 21th, compared to 478,781 bales as of the 22nd. Rice, soybean yields reported avg. Wet weather delayed winter wheat planting. Corn harvest 99% current week, 100% previous year, 99% avg. Oats planted 34% current week, 34% previous year, 41% avg. Fruit, vegetable crops good. Rain delayed planting cool season forages. Producers continued to apply fertilizer to pastures. Livestock good.

**CALIFORNIA:** Low pressure system moved out of State early in the week, leaving widely scattered showers. After strong high pressure started building over the area, weekly temperatures wound up near to a little below normal.

Warm, dry weather prevailed. Harvesting various crops increased after slowdowns previous week. Recent rain improved soil moisture many areas allowing field preparation fall, winter grains. Wheat seeding progressing. Rice harvest progressed, good yields reported. Harvesting cotton continued. Corn silage chopped, excellent quality. Harvesting corn grain slowed due high moisture content. Warm, dry conditions aid drying. Alfalfa hay harvest progressed, good yields, quality. Dry beans, sugarbeets harvested many areas. Table grape harvest slowed.

Fresno County all raisins rolled, boxed. Almond, walnut, pistachio harvests progressed. Fuji, Granny Smith apples, pomegranates harvested, packed. Olive harvest full speed. Date, avocado, persimmon, kiwifruit harvested. Riverside County lemons, grapefruits harvested. Coachella Valley tangerine harvest began. Valencia orange harvest essentially over. Navel oranges Western Riverside County good color. Navel orange harvest began. Orange orchards treated to control red scale, weeds. Broccoli harvest began central valley; Salinas fairly heavy, lighter Santa Maria. Broccoli fields treated for worms Fresno, Riverside counties. Cabbage fields worm control central valley. Cauliflower harvest underway San Joaquin Valley; moderate Salinas, Santa Maria. Tulare County crop developing better than normal, cool nights, mild days. Celery harvest moderate Santa Maria, increasing Salinas. Sweet corn harvest continued Tulare County, complete Riverside County. Lettuce harvest Kern County started slowly. Head lettuce harvest Salinas, Santa Maria moderate. Melon harvest San Joaquin Valley continued, Palo Verde Valley melons progressed well. Riverside County fall potato harvest continued. Stanislaus County harvest sweet potatoes active. Some fresh tomato harvest continued Sacramento Valley. Ground work tomatoes underway Merced County. Other crops harvested include: eggplant, cucumbers, cabbage, snap beans, peppers, pumpkins, squash. Rangeland, pasture poor to fair central, south; fair to good north. Recent rains benefitted scattered northern ranges; insufficient for growth elsewhere. Sheep grazing alfalfa, other crop residues. Calving, lambing active. Livestock movement decreased; ranchers awaiting rains, grass growth. Supplemental feeding moderate most areas.

**COLORADO:** A strong weather system moved out of the State on the 18th; cool temperatures, light rain or snow showers on the 18th gave way to dry conditions on the 19th. These conditions continued through the weekend as a high pressure system settled in over the State. Most of State experienced a warming trend during the period with maximum temperatures reaching 5 to 10° above normal by the 24th. Cool temperatures during the first part of the week kept temperatures near normal.

Days suitable for fieldwork 4.2. Soil moisture 1% very short, 17% short, 76% adequate, 6% surplus. Winter wheat emerged 95%, 93% 1992, 90% avg. Dry beans harvested 100%, 98% 1992, 97% avg. Corn mature 93%, 94% 1992, 96% avg.; harvested 21%, 28% 1992, 31% avg. Sorghum mature 89%, 77% 1992, 85% avg.; harvested 17%, 21% 1992, 38% avg. Sugar beets harvested 44%, 95% 1992, 48% avg. Corn 5% very poor, 11% poor, 24% fair, 48% good, 12% excellent. Sugarbeets 2% poor, 19% fair, 54% good, 25% excellent. Winter wheat 2% poor, 10% fair, 65% good, 23% excellent. Livestock good to excellent. Pasture, range feed is rated mostly fair to good.

**FLORIDA:** Temperatures 2 to 8° above normal. Highs; upper 80s to low 90s. Lows; mid to upper 50s north, low to mid 60s northern Peninsula, mid 60s to low 70s central, south. Rain less than 0.25 in. Panhandle, Big Bend areas, 0.20 to 2.00 in. Peninsula.

Soil moisture short to adequate throughout State except surplus in areas along lower east coast. Peanut harvesting winding down. Cotton, soybean harvest active. Small grain planting gaining momentum. Sugarcane harvest gaining momentum. Sugarcane planting active. Haymaking active where plant growth adequate. Tobacco markets closed. Citrus very good. Moisture adequate. New growth slowing. Light fruit splitting wet areas. Fruit coloring, progressing on the trees. Orange, grapefruit, tangerine harvest increasing all areas. Mostly sunny, slightly warmer than

normal over major vegetable growing areas. Drier weather permitted growers to transplant, harvest. Heavy rain 21th, 22nd in southwest slowed fieldwork. Harvesting north decreasing as season winds down. Winter potato, strawberry, sweet corn planting begun south. Available; snap beans, sweet corn, cucumbers, eggplant, peppers, radishes, squash, tomatoes, cherry tomatoes, watermelons. State's pastures poor to excellent. Planting small grain pastures where moisture adequate. Pasture ratings, 5% poor, 30% fair, 60% good, 5% excellent. State's cattle herds poor to good.

**GEORGIA:** Temperatures 3 to 6° above normal. First half of the week temperatures in 80s. Frontal system late in the week lowered temperatures to seasonal levels. Coolest temperatures 23rd from 30s mountains to 50s central, south. Rains north 0.50 to 1.00 in. Little rain across south.

Days suitable for fieldwork 5.6. Soil moisture 44% very short, 38% short, 18% adequate. Cotton 5% very poor, 13% poor, 33% fair, 48% good, 1% excellent; defoliating cotton south. Sorghum 11% very poor, 13% poor, 64% fair, 12% good; 88% harvested for grain, 71% 1992, 76% avg. Peanuts 95% dug, 98% 1992, 97% avg.; 89% threshed, 90% 1992, 90% avg.; Rains briefly delayed harvest. Soybeans 24% very poor, 25% poor, 43% fair, 8% good; rains slowed harvest. Rye 43% planted, 61% 1992, 51% avg. Other small grains 12% very poor, 23% poor, 43% fair, 22% good; 28% planted, 41% 1992, 31% avg. Vegetables 1% very poor, 8% poor, 69% fair, 22% good. Apples 45% fair, 55% good; 81% harvested, 91% 1992, 90% avg.; yields very good. Pecans 15% fair, 77% good, 8% excellent; 8% harvested, 12% 1992, 12% avg. Hay 24% very poor, 46% poor, 26% fair, 4% good. Pasture 19% very poor, 40% poor, 32% fair, 9% good; some brown pastures turning green again. Cattle 1% very poor, 6% poor, 61% fair, 31% good, 1% excellent; cattle sales increasing due to feed shortage. Hogs 2% very poor, 1% poor, 36% fair, 59% good, 2% excellent.

**HAWAII:** Weather sunny most of week; showers by the weekend. Northerly winds, showers caused cooler weather. Temperatures varied mid 60s to high 80s. Rainfall none to 4.40 in.

Rainfall benefited soil moisture levels, reservoirs. Pastures, north Kona, Hawaii island turning green after receiving showers. Heavy rains delayed normal field operations over weekend. Some fields were still hampered by insects, disease, drier areas. Banana output active, harvesting heavy. Papaya output lower.

**IDAHO:** Temperatures 3° above normal to 3° below normal. Precipitation 0.02 to 0.26 in. north, none to 0.27 in. southwest, none to 0.57 in. south-central, none to 0.14 in. east.

Days suitable for fieldwork 6. Soil moisture 10% short, 85% adequate, 5% surplus. Oats harvested 99%, 100% 1992, 100% avg. Potatoes turning or turned 6%, harvested 94%; 5% poor, 32% fair, 57% good, 6% excellent. Alfalfa third cutting 96%, 99% 1992, 99% avg. Lentils harvested 99%, 100% 1992, 100% avg. Apples harvested 73%, 98% 1992, 79% avg. Onions harvested 99%, 100% 1992, 100% avg. Dry beans harvested 94%, 100% 1992, 100% avg. Field corn silage harvested 86%, 98% 1992, 98% avg. Field corn grain harvested 43%, 44% 1992, 33% avg. Sugarbeets harvested 60%, 70% 1992, 60% avg. Irrigation water supplies, 9% fair, 81% good, 10% excellent. Activities: Harvesting field crops, apples; fall plowing, seeding, fertilizing. It is questionable whether Minidoka county dry bean harvest will reach completion due to the late season. Pasture, range 95% of normal. Livestock good to excellent.

**ILLINOIS:** Temperatures just above normal, as highs averaged from the lower 60s to upper 60s. Extremes 70°; 74°. Lows averaged from the upper 30s to the 40s. Precipitation fell towards the end of the week exceeding 1.00 in. in the extreme south; less than 0.50 in. more common, central, north.

Days suitable for fieldwork 2.75. Harvesting corn, soybeans continued across the State last week. Soil moisture supplies increased to 28% adequate, 72% surplus. Winter wheat emerged at 30%, 55% 1992, 50% avg. Other farm activities included harvesting sorghum, seeding wheat, fall tillage, fertilizer application, machinery repair, tending livestock. Pasture 93% of normal.

**INDIANA:** High temperatures low 60s north to upper 60s in the south. High readings were within 2° of normal. Lows from upper 30s to mid 40s, also close to normal. Rainfall over an inch in most southern areas of the State while totals in the north of 0.30 to 0.60 in. were common.

Days suitable for fieldwork 2. Harvesting was delayed until the end of the week. Pastures 91% normal, 92% last week. Topsoil 37% adequate, 63% surplus. Subsoil moisture 54% adequate, 46% surplus. Wheat acreage tilled 77%, 80% 1992, 86% avg. Moisture content of harvested corn 22%, soybeans 13%. Tobacco processed for sale 12%.

**IOWA:** Average temperature within 1° of normal. Extremes 25°; 75°. Rainfall 0.01 in. west central, southeast, 0.42 in. southwest; avg. 0.16 in. (normal 0.47 in.).

Days suitable for fieldwork 4.0. Topsoil 63% adequate, 37% surplus. Subsoil 28% adequate, 72% surplus. Field corn avg. moisture content 29%. Field corn moisture content now being harvested 25%. Corn lodging 3% none, 64% light, 31% moderate, 2% heavy. Corn ear dropping 4% none, 67% light, 27% moderate, 2% heavy. Winter Wheat seeded 85%, 87% 1992, 96% normal. 1994 row crop acreage fall tilled 14%, 11% 1992, 25% normal. 1994 row acreage fall fertilizer 10%, 8% 1992, 18% normal. Pasture 2% very poor, 8% poor, 40% fair, 46% good, 4% excellent. Most reports indicate that cattle, hogs good, although typical fall respiratory problems from the temperature change do exist.

**KANSAS:** Temperatures 5° below normal northwest, 0 to 3° below normal elsewhere. Moderate precipitation all areas. Southwest received most with 1.07 in.

Days suitable for fieldwork 3.0. Topsoil moisture 9% short to very short, 70% adequate, 21% surplus. Subsurface moisture 3% short to very short, 87% adequate, 10% surplus. Cool, moist weather early in week kept many farmers out of fields but wheat seeding able to proceed on lighter soils. Moisture early in week helped thicken emerging wheat stands. Unfavorable weather kept corn harvest to a minimum in most areas. Hard freeze affected immature sorghum in western areas, damage unknown. Sorghum 75% good to excellent, 24% fair, 1% poor to very poor. Soybean harvest made good progress despite moist. Double crop soybeans matured before first frost southeast. Soybean 82% good to excellent, 18% fair. Ranges, pastures generally good condition. Ranchers weaning calves, moving cattle to market, grain pasture. Some fall calving northeast. Respiratory, disease problems high due to unusual weather this past summer.

**KENTUCKY:** Temperature 57°. Precipitation 1.90 in.

Days suitable fieldwork 1.7. Soil moisture 5% short, 60% adequate, 35% surplus. Midweek rain beneficial to pastures, fall seeded grains, slowed soybean, corn harvest. Tobacco quality good. Burley 18% stripped, 13% 1992, 16% avg. Pastures good, winter hay supplies adequate. Fall wheat 51% complete, 45% 1992, 54% avg.

**LOUISIANA:** Temperatures 2.8 to 5.4° below normal. Extremes 39°; 91°. Rainfall 0.59 in. east-central to 2.63 in. northeast.

Days suitable for fieldwork 4.5. Soil moisture 24% short, 39% adequate, 37% surplus. Hay 98% final cutting, 98% 1992, 97% avg. Pecans 16% harvested, 17% 1992, 12% avg. Soybeans 99% turning color, 98% 1992, 96% avg.; 95% shedding leaves, 91% 1992, 84 avg. Harvest was delayed because of rain. Sweet

potatoes 74% harvested, 74% 1992, 80% avg. Sugarcane 2% poor, 24% fair, 74% good; 20% harvested, 20% 1992, 18% avg. Sucrose was good but tonnage was a little light. Wheat 16% planted, 15% 1992, 14% avg.; 11% emerged 4% 1992, 5% avg. Planting progress was slow due to rain. Livestock 54% fair, 46% good. Pastures 15% very poor, 5% poor, 18% fair, 59% good, 3% excellent. Rain helped pasture growth, rye grass seeding was active. Vegetables 18% poor, 59% fair, 23% good.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.80 in., normal 0.72 in. Temperature 60.3°, normal 54.1°. Extremes 31°; 85°.

Days suitable for fieldwork 4.5. Topsoil moisture 19% short, 81% adequate. Subsoil moisture 38% short, 62% adequate. Small grains good. Wheat 52% seeded, 40% 1992, 46% avg. Barley 89% seeded, 75% 1992, 77% avg. Rye 67% seeded, 37% 1992, 61% avg. Field corn poor to fair; 80% harvested for grain, 47% 1992, 67% avg.; 98% harvested for silage, 91% 1992, 96% avg. Soybeans fair; 88% shedding leaves, 86% 1992, 88% avg.; 34% harvested, 34% 1992, 34% avg. Sorghum fair to good; 88% mature, 100% 1992, n/a avg.; 23% harvested, 30% 1992, n/a avg. Other hay third cut 78% complete, 86% 1992, 80% avg.; fourth cut 57% complete, 43% 1992, 40% avg. Alfalfa fourth cut 93% complete, 92% 1992, 89% avg.; fifth cut 35% complete, 51% 1992, 33% avg. Hay supplies adequate. Pasture good. Apples 84% harvested, 78% 1992, 89% avg.

**DELAWARE:** Precipitation 0.96 in., normal 0.77 in. Temperature 60.7°, normal 54.8°. Extremes 38°; 81°.

Days suitable for fieldwork 5.4. Topsoil moisture 50% short, 50% adequate. Subsoil moisture 50% short, 50% adequate. Small grains good. Wheat 36% seeded, 27% 1992, 35% avg. Barley 82% seeded, 31% 1992, 67% avg. Rye 61% seeded, 53% 1992, 54% avg. Field corn poor; 86% harvested for grain, 62% 1992, 83% avg. Soybeans poor to fair; 82% shedding leaves, 93% 1992, 89% avg.; 25% harvested, 28% 1992, 30% avg. Sorghum poor to fair; 85% mature, 95% 1992, n/a avg.; 12% harvested, 15% 1992, 17% avg. Other hay fourth cut 0% complete, 78% 1992, 35% avg. Alfalfa hay fifth cut 35% complete, 47% 1992, 43% avg. Hay supplies short. Pasture very poor to fair. Apples 95% harvested, 84% 1992, 90% avg.

**MICHIGAN:** Extremes 23°; 70°. Precipitation 0.20 to 4.18 in.

Days suitable for fieldwork 4.0. Soil moisture 0% short, 40% adequate, 60% surplus. Dry Beans 95% harvested, 95% 1992, 90% avg. excellent. Corn Silage 85% harvested, 75% 1992, 90% avg. Potatoes 85% harvested, 95% 1992, 95% avg. Sugarbeets 45% harvested, 35% 1992, 45% avg. Hay 1% very poor, 4% poor, 25% fair, 50% good, 20% excellent. Pasture 85% of normal. Major activities included cutting silage, fall tillage, seeding wheat, harvesting corn, soybeans, sugarbeets.

**MINNESOTA:** Temperatures normal to 3° above normal for the State. Extremes 20°; 78°. Precipitation for the week 0.12 to 0.32 in. below normal. Precipitation ranged from 0.08 to 0.38 in. Greatest weekly precipitation 0.63 in.

Days suitable for fieldwork 4.8. Topsoil 4% short, 75% adequate, 21% surplus. Hay grain 85% stubble plowed or tilled, 84% 1992, 98% avg. Flax 84% harvested, 99% 1992, 99% avg. Sunflowers 55% harvested, 53% 1992, 88% avg. Sugarbeets 90% harvested, 89% 1992, 96% avg. Corn 16% combined, 17% 1992, 67% avg.; 95% silage cut, 93% 1992, 98% avg.; 29% moisture content, 28% 1992, 22% avg.; stubble 13% plowed, 11% 1992, 33% avg. Soybeans 90% combined, 90% 1992, 96% avg.; 14% moisture content 12% 1992, 11% avg.; stubble 48% plowed, 42% 1992, 54% avg. Corn 23% very poor, 43% poor, 32% fair, 2% good. Soybeans 15% very poor, 39% poor, 42% fair, 4% good.

**MISSISSIPPI:** Temperature 67°, 4.8° above normal. Extremes 32°; 90°. The entire State received rainfall. However, the upper

delta accumulated the most with over 2.00 in. during 4 days of rain. State average 1.31 in., 0.58 above normal. Soil temperature 69°.

Days suitable for fieldwork 2.3, 6.3 1992, 4.8 avg. Soil moisture 6% short, 44% adequate, 47% surplus, 3% excessive. Corn 93% harvested, 95% 1992, 93% avg.; 4% very poor, 15% poor, 65% fair, 15% good, 1% excellent. Cotton 100% open bolls, 100% 1992, 99% avg.; 65% harvested, 68% 1992, 74% avg.; 4% very poor, 57% poor, 38% fair, 1% good. Rice 100% mature, 100% 1992, 100% avg.; 86% harvested, 99% 1992, 95% avg.; 8% poor, 37% fair, 55% good. Sorghum 95% harvested, 100% 1992, 97% avg.; 18% poor, 75% fair, 7% good. Soybeans 99% coloring, 100% 1992, 99% avg.; 83% shedding, 94% 1992, 94% avg.; 42% harvested, 53% 1992, 46% avg.; 5% poor, 88% fair, 7% good. Sweetpotatoes 78% harvested, 81% 1992, 85% avg.; 8% poor, 33% fair, 50% good, 9% excellent; wheat 42% planted, 47% 1992, 49% avg.; 26% emerged, 30% 1992, 28% avg.; 3% poor, 43% fair, 54% good. Pecans 16% harvested, 22% 1992, 15% avg.; 7% very poor, 21% poor, 50% fair, 22% good. Livestock 15% fair, 74% good, 11% excellent. Pasture 83% of normal. Activities: Harvesting all crops.

**MISSOURI:** Temperatures 2° below normal west-central, east-central to 2° above normal southeast. Rainfall 0.61 in., varying from 0.20 in. northwest to 1.77 in. southeast.

Days suitable for fieldwork 2.6, ranging from 1.9 northeast to 3.0 southeast. Topsoil moisture 38% adequate, 62% surplus. Corn harvested by districts: 97% southeast, 38 percent or less northern third of State. Soybeans mature 95%, 95% 1992, 96% avg. Soybean harvest by district: 37% or less southern third of State to 65% northeast. Sorghum harvest ranges 22% northcentral to 90% southeast. Pasture 1% poor, 19% fair, 68% good, 12% excellent.

**MONTANA:** Temperatures near normal. Precipitation none to light statewide.

Days suitable for fieldwork 5.2. Topsoil moisture 22% short, 69% adequate, 9% surplus. Subsoil moisture 21% short, 73% adequate, 6% surplus. Spring wheat harvest 95% complete, 100% 1992, 100% avg. Barley harvest 95% complete, 100% 1992, 100% avg. Oats harvest 96% complete, 100% 1992, 100% avg. Corn silage harvest 98% complete, 100% 1992, 100% avg. Sugarbeets harvest 70% complete, 96% 1992, 95% avg. Dry beans harvest 80% complete, 100% 1992, 100% avg. Potato harvest 90% complete, 96% 1992, 97% avg. Pasture, range feed 102% of normal, unchanged from last week. Cattle, calves moved from summer ranges 61%, 73% 1992, 79% avg. Sheep, lambs moved from summer ranges 63%, 76% 1992, 81% avg.

**NEBRASKA:** Temperatures near normal across the State. Scattered light precipitation at the start of the week varied from trace amounts northeast to 0.65 in. northwest.

Days suitable for fieldwork 3.7. Topsoil moisture 1% short, 67% adequate, 32% surplus. Subsoil moisture 1% short, 82% adequate, 17% surplus. Corn harvest 23%, 25% 1992, 67% avg. Sorghum harvest 15%, 21% 1992, 72% avg. Soybean harvest 90%, 92% 1992, 93% avg. Dry bean harvest 94%. Wheat 4% poor, 7% fair, 71% good, 18% excellent; emerged 98%, 100% 1992, 97% avg. Pasture, range condition 104% of normal.

**NEVADA:** Widespread showers early in week, but skies cleared last half. Precipitation generally less than 0.25 in. Snow fell above 6500 ft., 1 to 2 in. higher elevations. Temperatures 1 to 2° below normal. Extremes 11°; 88°.

Harvesting operations essentially complete for 1993 season. Major activities center on preparing for winter. Livestock movement to winter grazing continues.

**NEW ENGLAND:** Precipitation 0.48 to 2.35 in. in the region. Temperatures 41 to 48° north; 45 to 54° south. Maximum temperatures 57 to 67° north; 63 to 72° south. Minimum temperatures 21 to 31° north; 22 to 36° south.

Maine potato harvest 98%, 100% 1992, 100% avg. Potato good. Field corn 95% harvested, 95% 1992, 95% avg. Field corn good to fair. Apples 99% harvested, size medium, color good, condition good. Cranberries 80% harvested, size medium to small, good to fair. Major farm activities: Chopping corn. Harvesting cranberries. Preparing for winter.

**NEW JERSEY:** Temperatures near normal. Extremes 27°; 81°. Rainfall 1.14 in. north, 1.48 in. central 1.05 in. south. Heaviest 24 hour amount 1.00 in. on 21st, 22nd. Estimated soil moisture, in percent field capacity, 98% north, 97% central, 92% south. Four-inch soil temperatures avg. 51° north, 55° central, 57° south. Soil moisture generally adequate for the State. Harvest of apples continues. Cranberry harvest also active. Harvest of some fall vegetables remains active.

**NEW MEXICO:** Temperatures over the State were generally below normal. Temperatures 5° below normal in the southeast to 1° below normal in the northeast. With a few exceptions, most areas of the State received precipitation during the week. Several locations on the eastern side of the State received over 1.00 in.

Days suitable for fieldwork 5.8. Soil moisture 68% short, 32% adequate. Light to moderate freeze felt over a majority of the State with most crops affected to some extent. Crop conditions: Alfalfa 6% poor, 31% fair, 57% good, 6% excellent; last cutting near end. Cotton 10% fair, 80% good, 10% excellent. Corn 8% poor, 31% fair, 61% good. Irrigated sorghum 35% fair, 65% good. Dryland sorghum 40% poor, 60% fair. Irrigated wheat 12% poor, 40% fair, 48% good. Dryland wheat 56% poor, 37% fair, 7% good. Winter wheat 99% planted; 82% emerged. Chile 10% poor, 30% fair, 50% good, 10% excellent; harvest active. Lettuce mostly good; harvest curtailed by slow market. Pecans fair to mostly good. Apples poor to good; harvest near end. Cattle, sheep fair to excellent. Range feed condition 70% of normal.

**NEW YORK:** Week started wet. Central, northern areas received up to 1.00 in. of rain. At midweek, the southeast received 0.50 in., other areas had lighter amounts. Temperatures were seasonable, except at end of week when highs soared into the 60s, low 70s (well above normal). Extremes 25°; 70°.

Days suitable for fieldwork 4.6. Soil moisture mostly adequate to surplus. Pasture 92% of normal. Corn fair to good. Silage corn 87% harvested, 69% 1992, 81% avg. Grain corn 16% harvested, 6% 1992, 24% avg. Wet fields slowed progress in areas receiving heavier amounts of rain. Potato harvest continued in full swing. Long Island potato harvest near 80% finished. Third cutting of alfalfa 96% finished, 91% 1992, 94% avg. Dry bean harvest nearly 90% complete. Onions being moved into storage. Hardy late season vegetables continued to be harvested. Growers plowing under crop residues, planting cover crops. Fruit growers harvesting late season apple varieties. Fruit packing facilities in high gear. Cider making in full swing.

**NORTH CAROLINA:** Daily temperatures ranged from 61° at Asheville to 70° at Cape Hatteras. Since September 1, total precipitation amounts have ranged from 1.28 in. at Charlotte to 11.34 in. at Wilmington. The largest precipitation deficit so far this fall has been in Asheville (greater than 6.00 inches).

Days suitable for fieldwork 5.7. Soil moisture 23% very short, 34% short, 41% adequate, 2% surplus. Crop condition pasture 6% very poor, 28% poor, 47% fair, 19% good; corn 12% very poor, 37% poor, 43% fair, 8% good; cotton 7% poor, 64% fair, 27% good, 2% excellent. Peanuts 4% very poor, 14% poor, 50% fair, 32% good; soybeans 21% poor, 60% fair, 19% good; sweetpotatoes 3% poor, 47% fair, 47% good, 3% excellent; apples 5% poor 56% fair, 39% good; sorghum 6% poor, 81% fair, 13% good; hay, roughage supplies 5% very short, 34% short, 58% adequate, 3% surplus. Apples harvested 79%, 79% 1992,

91% avg.; corn for grain 90%, 79% 1992, 80% avg; sorghum for grain 81%, 51% 1992, 64% avg.; sweetpotatoes harvested 69%, 68% 1992, 75% avg.; cotton harvested 55%, 25% 1992, 36% avg.; peanuts dug 80%, 79% 1992, 83% avg.; peanuts threshed 60%, 62% 1992, 68% avg.; soybean drop leaf 77%, 80% 1992, 74% avg.; wheat emerged 10%, 12% 1992 16% avg. Major activities: Planting small grain; harvesting, marketing tobacco; harvesting corn for grain, peanuts, corn for grain, cotton, sweetpotatoes. Other activities included: Cutting hay; land preparation; tending livestock; general farm maintenance.

**NORTH DAKOTA:** Warm temperatures with very little precipitation over State. Temperatures 2° above normal northern tier, west-central, east-central to 5° above normal south-central. Extremes 13°; 76°.

Days suitable for fieldwork 6.9. Soil moisture supplies decreased, but remained well above avg. Topsoil 8% very short, 60% short, 30% adequate, 2% surplus. Subsoil 2% very short, 15% short, 79% adequate, 4% surplus. Corn, sunflower harvest continued well behind while harvest of other late season crops neared completion, slightly behind avg. Flax 96% harvested, 98% 1992, 100% avg. Corn for grain 34% harvested, 43% 1992, 76% avg. Dry beans 95% harvested, 96% 1992, 99% avg. Soybeans 97% harvested, 98% 1992, 99% avg. Sunflowers 27% harvested, 56% 1992, 85% avg. Sugarbeets 99% lifted, 100% 1992, 100% avg. Range, pasture 89% of normal.

**OHIO:** Temperatures in the low to mid 60s were 1 to 3° above normal. On the warmest days, highs ranged from the upper 60s in the north to the low 70s in the south. Lows averaged from the upper 30s to the low 40s, exceeding normal by 2 to 3° in the central, south. Lowest readings were in the 20s to around 30° on the 24th. Most precipitation fell at or before midweek with dry, mild weather at the end of the period. Rainfall exceeded 1.00 in. in the south, east. Soil temperatures at 4 in. under bare ground continue to average in the low 50s with 4 in. sod temperatures still in the mid 50s in the south.

Days suitable for fieldwork 3.2. Topsoil moisture 11% short, 74% adequate, 15% surplus. Potatoes harvested 99%, 92% 1992, 90% avg. Fall apples harvested 82%, 78% 1992, 80% avg. Grapes harvested 88%, 77% 1992, 88% avg. Sugarbeets harvested 30%. Pasture 4% very poor, 15% poor, 35% fair, 40% good, 6% excellent. Harvested corn moisture 21%. Harvested soybean moisture 13%. Corn dry-down slow due to damp weather. Stalk quality poor due to stalk rot, corn borer damage. Double-cropped soybeans killed by frost across the State. Planted wheat has benefitted from recent precipitation; stands are emerging evenly. Vegetable harvests are complete except for carrots. Tobacco stripping has started south.

**OKLAHOMA:** Temperatures 5° below normal Panhandle to 8° below normal southwest, south-central. Precipitation 0.03 in north central to 2.93 in. southeast.

Days suitable for fieldwork 4.9. Topsoil moisture 22% short, 61% adequate, 17% surplus. Subsoil moisture 12% short, 88% adequate. Wheat 7% poor, 27% fair, 66% good; 78% emerged, 52% 1992, 67% avg. Soybeans 86% mature, 75% 1992, 69% avg.; 33% harvested, 31% 1992, 29% avg. Peanuts 38% fair, 62% good; 77% mature, 88% 1992, 94% avg.; 30% harvested, 57% 1992, 45% avg. Alfalfa 73% 5th cut, 62% 1992, 58% avg; 4% 6th cut, none 1992, none avg. Pastures 96% of normal. Feeders, steer steady to \$3.00 higher. Heifer calves weak to \$2.00 lower.

**OREGON:** Temperatures above normal statewide; exceptions southern coast 2° below normal, northeastern sections 1 to 6° below normal. Precipitation: mostly dry statewide, only light precipitation northern coast; Coastal Range 0.25 to 1.00 in.

Soil moisture 26% short, 74% adequate. Barley 49% planted. 1994 winter wheat crop 88% planted, 59% emerged, condition 69%

good, 31% excellent. Russian wheat aphid infestation slight no spraying yet, Columbia Basin. Malheur & Klamath Co. sugarbeets harvest winding down. Potato, onion harvest winding down most areas. Willamette Valley cole crops, pumpkin, squash, sweet corn harvests continued. Hood River Valley winter pear, apple picking continued. Willamette Valley apple, hazelnut, wine grape harvests continued; walnut harvest underway. Cranberry harvest continued, southern coast, yield poor to fair, small fruit size. Livestock good to excellent. Range, pasture 96% of normal. Supplemental hay, protein being feed, western sections. Weaning, pre-conditioning, hauling calves to market full swing; weaning weights above normal. Fall pasture "green-up" underway statewide.

**PENNSYLVANIA:** Early-week coolness, warm later. Average temperature 55°; 3° above normal. Extremes 24°; 78°. Precipitation 0.94 in., 0.28 in. above normal.

Days suitable for fieldwork 3. Soil moisture 2% short, 68% adequate, 30% surplus. Ensilage corn harvested 92% complete, 72% 1992. Corn 2% very poor, 9% poor, 33% fair, 42% good, 14% excellent. Soybean harvest 30% complete, 20% 1992. Soybean 2% very poor, 9% poor, 28% fair, 45% good, 16% excellent. Potato harvest 92% complete, 89% 1992. Fall plowing 82% complete, 77% 1992. Wheat planted 85% complete, 83% 1992. Barley planted 96% complete, 91% 1992. Third cutting alfalfa 100% complete, 92% 1992. Fourth-cutting alfalfa 72% complete, 66% 1992. Quality of hay made 41% poor, 41% fair, 18% good. Feed from pastures poor to fair. Apple harvest 83% complete, 81% 1992. Grapes harvest 96% complete, 85% 1992. Activities: Making hay, haylage; plowing; planting wheat, barley; planting cover crops; harvesting fruits, vegetables; harvesting corn silage; harvesting corn; harvesting soybeans; storing equipment; hauling manure; fixing fence; caring for livestock.

**PUERTO RICO:** Island rainfall 1.06 in. was 0.68 in. below normal. Highest weekly total was 4.96 in. at Pico Del Este followed by 2.44 in. at Dos Bocas. Highest 24 hour total was 2.42 in. at Dos Bocas. At WSFO San Juan, mean temperature was 82.3° which is 1.3° above normal, rainfall was 0.78 in. which is 0.55 in. below normal. Island temperatures 80 to 81° on the coasts, 74 to 77° in the interior with mean station temperature 84.6° at Guayama to 66.8° at Pico Del Este. Extremes 59°; 94°.

**SOUTH CAROLINA:** Week began with "Indian Summer," ended with abrupt return to fall weather. Sunny skies, record warmth through middle of week ahead of approaching cold front. On 20th, front made way into Upstate spreading clouds, showers. On 22nd, 23rd, front stalled over State as low pressure area developed in southwest. As low moved along front, showers enveloped State. Partly sunny skies, seasonal temperatures returned on 24th. Daily temperatures last week averaged 3 to 5° above normal. Statewide rainfall avg. 0.40 in.

Days suitable for fieldwork 6.1. Soil moisture 21% very short, 62% short, 17% adequate. Apples poor to fair; 92% harvested, 88% 1992, 93% avg. Barley fair; 41% planted, 30% 1992, 25% avg.; 18% emerged, 22% 1992, 16% avg. Oats fair; 45% planted, 41% 1992, 34% avg.; 29% emerged, 25% 1992, 20% avg. Rye fair; 53% planted, 42% 1992, 37% avg.; 37% emerged, 31% 1992, 24% avg. Wheat fair; 9% planted, 6% 1992, 7% avg.; 5% emerged, 3% 1992, 4% avg. Sorghum poor to fair; 66% harvested, 71% 1992, 67% avg. Soybeans 13% very poor, 28% poor, 43% fair, 16% good; 90% leaves turning, 91% 1992, 91% avg.; 60% dropping leaves, 52% 1992, 58% avg.; 42% mature, 35% 1992, 41% avg.; 7% harvested, 5% 1992, 8% avg. Cotton 6% very poor, 40% poor, 53% fair, 1% good; 60% harvested, 29% 1992, 44% avg.; 92% tobacco stalks destroyed, 95% 1992, 89% avg. Sweetpotatoes fair; 62% harvested, 62% 1992, 69% avg. Fall hay poor to fair; 82% harvested, 91% 1992, 89% avg.

Pecans fair. Pasture 25% very poor, 34% poor, 32% fair, 9% good. Winter grazing fair; 70% planted, 69% 1992, 65% avg.; 50% emerged, 54% 1992, 48% avg.

**SOUTH DAKOTA:** Temperatures were near normal last week. Extremes 15°; 82°. Precipitation for the week was a quarter of an in. below normal. The greatest rainfall amounts were in the west-central, southwest, northeast. Maximum 0.62 in.

Days suitable for fieldwork 5.1. Topsoil moisture: 15% short, 75% adequate, 10% surplus. Subsoil moisture: 15% short, 64% adequate, 21% surplus. Soybeans 2% very poor, 14% poor, 47% fair, 31% good, 6% excellent. Sunflowers 3% poor, 23% fair, 54% good, 20% excellent. Sorghum 2% very poor, 38% poor, 30% fair, 26% good, 4% excellent. Winter rye 14% fair, 63% good, 23% excellent. Corn 87% silage harvested, 91% 1992, 92% avg. Sorghum 89% silage harvested, 86% 1992, 95% avg. Sunflowers 34% harvested, 65% 1992, 84% avg. The soybean harvest made good progress while the corn harvest was progressing slowly due to high moisture content. Early in the week, light rain, fog delayed the harvest of all crops in the south, east. Livestock 1% fair, 73% good, 26% excellent. Pasture 89% of normal. Fall feeding has started in areas.

**TENNESSEE:** Temperatures averaged near or above normal. The largest departures from normal were in the southeast, southwest. Chattanooga 6° above normal; Memphis, Knoxville 4° above normal. Rainfall totals were above normal in west, below normal east. Dyersburg was the wettest, with 2.36 in. Memphis recorded 1.26 in. Rainfall was generally under 0.50 in. east of Nashville.

Days suitable for fieldwork 4.0. Soil moisture 29% short, 57% adequate, 14% surplus. Corn 82% grain harvested, 79% 1992, 81% avg. Cotton 61% harvested, 51% 1992, 63% avg. Sorghum 96% harvested, 86% 1992, 86% avg. Soybeans 93% dropping leaves, 92% 1992, 91% avg.; 68% mature, 67% 1992, 69% avg.; 24% harvested, 27% 1992, 30% avg. Tobacco 27% burley stripped, 29% 1992, 33% avg. Wheat 35% seeded, 39% 1992, 41% avg. Pastures 10% poor, 43% fair, 45% good, 2% excellent. Cattle 2% poor, 24% fair, 73% good, 1% excellent. Corn harvest is virtually complete in west, but late-maturing crop in east has put growers behind schedule. Warm, moist have tobacco producers off to a good start stripping, grading the crop. The rain brought tobacco into case, foggy mornings have maintained the good conditions. Progress would be farther along if it wasn't for the late-maturing this year. Not many fall seedings took place because of the excessive moisture, but improved soil moisture continued to benefit already-sown fields. Warm temperatures were ideal for germination, growth. Pastures are showing modest improvement, but many producers have abandoned hope of getting any more forage from them. Cattle movement continues to be heavy.

**TEXAS:** A slow moving front, and a series of upper level disturbances moving along it generated showers, thunderstorms across State. Rainfall amounts were heavy in eastern half of Texas, with crop districts receiving weekly totals in excess of 2.00 in. No district reported below normal rainfall for week, departures from normal ranged from +0.03 in. in Lower Valley to +2.54 in. in Northern East Texas. Some of larger individual station totals were 5.21 in. at Texarkana, 3.73 in. at Lufkin. Mean temperatures were well below normal across entire state last week, except for South Central district at 1° above normal. Departures for other districts ranged from -2° along Upper Coast to -12° in Southern High Plains. Seven of ten districts reported departures of 5° below normal. Mean soil temperatures ranged from 55° at Bushland to 79° at Uvalde.

**Crops:** Corn: Harvest almost completed in High Plains where rain hampered harvest activities in some areas. Cotton: Last week's rains were an unwelcomed sight to cotton producers as it slowed or stopped harvest of cotton across Plains area of State. Heavy rains in Blacklands prevented farmers from plowing up fields that have

been harvested. In Northern High Plains, some harvesting occurred with above average yields being reported. South Central Texas harvest winding down. Statewide cotton 72% normal, 68% 1992. Grain Sorghum: Harvesting continued in High Plains where conditions allowed. In Edwards Plateau, harvest was virtually complete except for few fields. Statewide grain sorghum 78% normal, 81% 1992. Small grains: Early planted grains were making good to excellent progress across most of State due to recent rains and cooler temperatures. In South Central Texas, last weeks rains should help oat plantings to germinate, give a much needed boost to existing stands. In Edwards Plateau, some wheat fields were damaged by army worms. Statewide wheat 72% normal, 52% 1992. Peanuts: Rains slowed or stopped harvesting in Blacklands, Cross Timbers. Reported dryland yields continued to be below avg. as some farmers continued to bale crop for hay. Statewide peanut 70% normal, 83% 1992. Soybeans: Harvesting continued to wind down in Blacklands where producers still had some late beans to harvest. Harvest continued in other areas of State where conditions allowed.

**Commercial Vegetables, Fruits and Pecans:** Rio Grande Valley: tomato, onion plants made good progress with only minor insect problems. Watermelon harvest began in some irrigated fields. Cucumber harvest continued, fall vegetable planting was still active. San Antonio-Winter Garden: cabbage made good progress with some worm pressure. Onion seeding continued. East Texas: it was too wet to harvest sweet potatoes in many areas. Pumpkin harvest continued. Some planting of cole crops, greens, onions occurred. High Plains: cabbage, carrot, pepper, pumpkin harvest was active. Trans-Pecos: cucumbers, peppers were harvested. Some producers continued to prepare onion fields for planting. Pecans: Harvest spread into Southern Low Plains. In Cross Timbers, some nuts lost due to wind. Harvest slowed in many parts of Blacklands due to heavy rains.

**Range and Pasture:** Recent rains have caused new growth of summer grasses, but additional growth may be slowed due to cooler temperatures. Cool season grasses continued to improve across state with additional rain and cooler temperatures. In East Texas, ranchers busy planting winter pastures. Stock tank water levels were greatly improved due to last week's rain. Livestock good.

**UTAH:** Temperature maximums avg. 6 to 7° below normal, minimums avg. 1 to 2° above normal. Precipitation was light in Dixie, moderate to heavy across the rest of the State.

Days suitable for field work 5.0. Soil moisture 6% short, 61% adequate, 33% surplus. winter wheat emerged 88%, 81% 1992, 72% avg. Corn mature 83%; grain harvested 21%, 82% 1992; silage harvested 92%. Alfalfa hay 4th cutting 89% complete. Apples picked 68%. Potatoes harvested 86%. Onions harvested 84%. Cattle moved from summer range 91%, 92% 1992. Sheep moved from summer range 94%, 94% 1992. Pasture, range good to excellent.

**VIRGINIA:** Temperatures near normal. Extremes 36°; 87°. Precipitation near normal.

Days suitable for fieldwork 5.5. Topsoil moisture was 20% very short, 42% short, 36% adequate, 2% surplus. Pasture 11% very poor, 29% poor, 27% fair, 27% good, 6% excellent. Corn silage harvested 99%, 96% 1992, 96% avg. Corn harvested for grain 79%, 67% 1992, 75% avg. Soybean condition 11% very poor, 53% poor, 34% fair, 2% good. Soybeans harvested 17%, 17% 1992, 21% avg. Cotton harvesting 50% completed, 2% 1992, 21% avg. Peanuts dug 76%, 90% 1992, 93% avg. Peanuts combined 55%, 78% 1992, 85% avg. Flue tobacco 100% harvested, 100% 1992, 100% avg. Sweetpotato harvest nearly completed. Fall apples 93% harvested. Winter wheat 38% seeded, 25% 1992, 30% avg. Oats 68% seeded, 62% 1992, 73% avg. Barley 73% seeded, 50% 1992, 68% avg. Reseeding

pastures, hayfields. Harvesting, selling pumpkins. Broccoli looks good. Beginning to grade fire, burley tobacco.

**WASHINGTON:** Temperatures normal to 3° above normal west; 2° below normal to 5° above normal east. Precipitation 0.17 in. to 0.58 in. west; none to 0.45 in. east. Freezing temperatures were reported across most of eastern Washington except for the east-central area. Little, if any, freeze damage occurred.

Days suitable for fieldwork 6.4, unchanged from last week. Soil moisture 24% short, 76% adequate. Irrigation water supply 19% short, 81% adequate. Hay, other roughage 13% short, 85% adequate, 2% surplus. Range, pasture 10% poor, 61% fair, 29% good. Winter wheat dryland 25% fair, 75% good; irrigated 70% good, 30% excellent. Barley dryland 30% fair, 70% good; irrigated 100% good. Potatoes, dry beans, 100% good. Corn, 3% fair, 97% good. Fall grain seeding was winding down in many areas, completed in others. Moisture stress was evident in many fields. Potato digging continued. Apples harvest was winding down across the State except for a few late varieties. Grape harvest continued to be slow as frost was beginning to reduce canopy efficiency. The cranberry crop is expected to be above avg. as harvest nears. Most cattle were on fall pastures.

**WEST VIRGINIA:** Temperature 55°. Extremes 23°; 82°. Precipitation averaged 0.75 in.

Days suitable for fieldwork 4.3. Soil moisture, 10% short, 90% adequate. Pastures, 8% poor, 60% fair, 32% good; 80% of normal. Cattle, 3% fair, 97% good. Sheep, 1% fair, 99% good. Corn, 75% harvested. Wheat good; 35% sown. Barley good; 90% sown. Soybeans 10% fair, 90% good; 100% dropping leaves, 50% harvested. Farm activities: Moving livestock, feeding livestock, stripping tobacco, chopping silage, harvesting corn, harvesting apples, harvesting soybeans, sowing barley, sowing wheat.

**WISCONSIN:** The week began cool, wet, but pleasant Indian Summer weather settled in for the weekend. Temperature 48°, 3° above normal. Extremes 20°; 76°. Precipitation 0.02 to 0.80 in.

Days suitable for fieldwork 5.4. Soil moisture 71% adequate, 29% surplus. Pasture 77% of normal, 73% 1992, 71% avg. General 6% poor, 44% fair, 49% good, 1% excellent. Corn condition 19% poor, 36% fair, 44% good, 1% excellent; 70% mature, 70% 1992, 92% avg.; for grain 10% harvested, 10% 1992, 42% avg.; silo filling 83% complete, 75% 1992, 90% avg. Soybean condition 3% poor, 22% fair, 7u2% good, 3% excellent; harvested 75%, 35% 1992, 63% avg. Fall tillage 29% complete, 26% 1992, 33% avg. Hay, roughage supplies 14% short, 74% adequate, 12% surplus. Farmers were busy plowing, harvesting soybeans, corn, cranberries. Weather has been cooperating with the dry down process of the crops. These conditions have also helped farmers with harvesting activities as soybean jumped 25 percentage points, corn for silage jumped 11 percentage points from last week. Soybean yields good. Some farmers have started harvesting their corn for high moisture, while others are still waiting for moisture levels to drop. Cranberries were being harvested this past week; early production has been reported lower than last year. Winter wheat, rye is good.

**WYOMING:** Temperatures below normal over most of the State, ranging from 6° below normal in Powell to near normal in Thermopolis. Precipitation below normal everywhere except the southeast where precipitation was well above normal. Carpenter, Archer reported the largest amounts with 1.63 and 1.35 in. respectively.

Days suitable for fieldwork 5.6 days. Topsoil moisture 11% short, 69% adequate, 20% surplus. Winter wheat for harvest in 1994 92% emerged, 97% 1993, 95% avg. Dry beans combined 82%, 99% 1992, 99% avg. Sugarbeets harvested 63%, 84% 1992, 79% avg. Cattle, calves moved from summer ranges 80%, 90% 1992. Sheep, lambs moved from summer ranges 78%, 91% 1992. All classes of livestock good to excellent.

International Weather and Crop Summary  
HIGHLIGHTS

October 17 - 23, 1993

**FSU:** In western areas, warm, dry weather in Ukraine and North Caucasus helped summer crop harvests. In the New Lands, late-week wintry weather halted late spring grain harvesting.

**EUROPE:** Drier weather allowed some harvesting in the west, but rain persisted over flood-ravaged northern Italy.

**SOUTH ASIA:** Rain helped fall crop establishment in the south, but may have affected cotton quality in central India.

**SOUTHEAST ASIA:** Unseasonable showers in Indochina boosted Thailand's reservoirs but caused additional flooding to Vietnam's rice.

**EASTERN ASIA:** Dry weather from southern China to Manchuria aided summer crop harvests and late winter wheat planting.

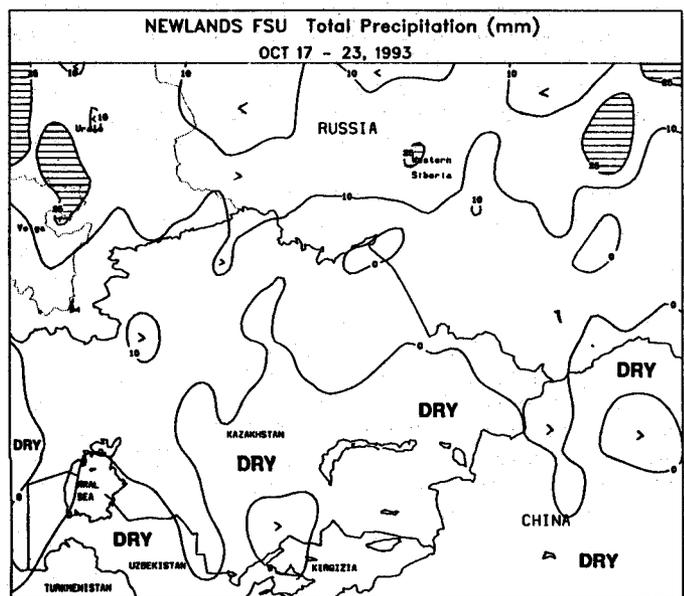
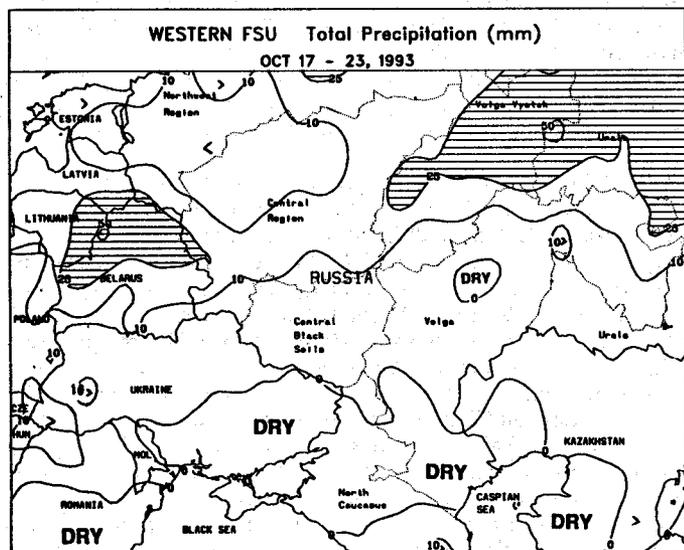
**AUSTRALIA:** Rain continued to maintain adequate moisture conditions for wheat in eastern areas. A drying trend continued in the west.

**SOUTH AMERICA:** Scattered frost in southern Buenos Aires province may have damaged winter wheat in or nearing reproduction. Inundating rains in southern Brazil worsened conditions for summer crop planting and winter wheat harvests.

**MEXICO:** A strong cold front ushered in cooler weather and scattered showers as far south as the Southern Plateau corn belt.

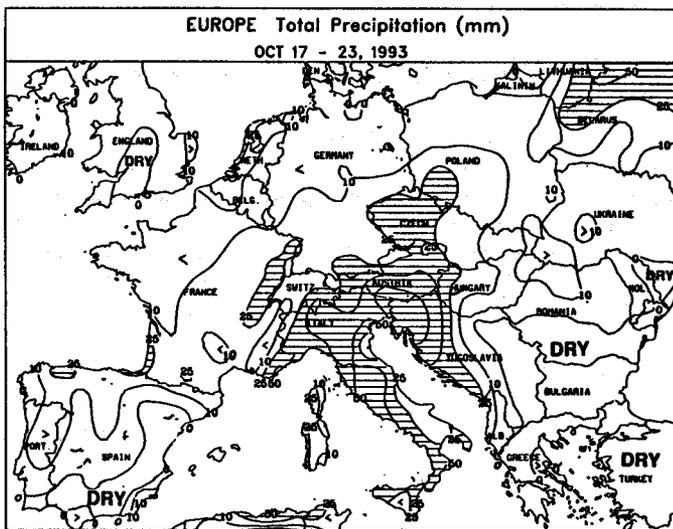
**NORTHWESTERN AFRICA:** Light showers moistened topsoils for upcoming winter grain planting.

**SOUTH AFRICA:** Persistent rain increased topsoil moisture for corn establishment but hampered winter wheat harvest.

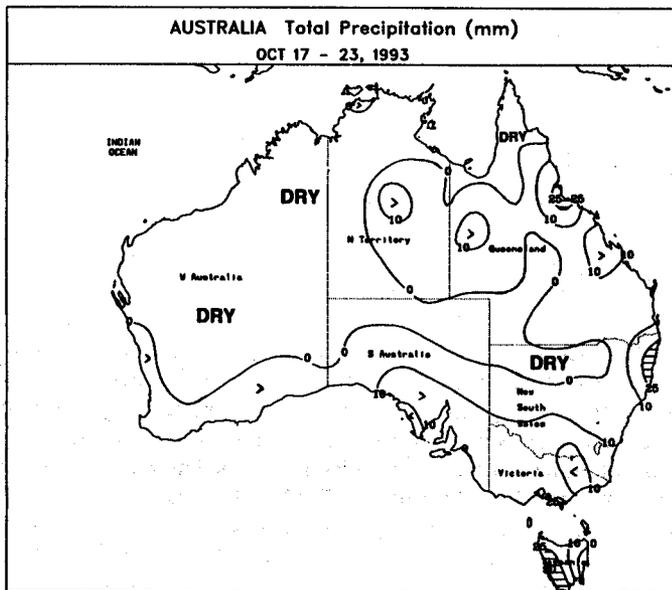


**FSU-WESTERN:** Dry weather covered most of Ukraine and southern Russia (Black Soils Region, lower Volga Valley, and North Caucasus), benefiting summer crop harvesting and late winter grain planting. In Ukraine, reports as of October 18 indicated the sugar beet harvest was 79 percent complete, while the corn harvest was still in the early stages, about 34 percent complete. In southern Ukraine, persistent dryness has created unfavorable conditions for winter grain germination and establishment. The affected areas historically account for about 25 percent of Ukraine's winter wheat production. Elsewhere, light to moderate rain (10-25 mm, with local amounts in excess of 35 mm) turned to snow by week's end over the Baltic States, Belarus, and northern Russia (Central and Volga Vyatsk regions), halting late harvest activities. Weekly average temperatures over the region were 1-3 degrees Celsius (C) above normal in the south and 1-3 degrees C below normal in the north. Average temperatures were below 5 degrees C in crop areas north of a line that stretched eastward from the northern Ukraine through the middle Volga Valley, halting further vegetative growth in winter grains. In contrast, winter grains in Ukraine and North Caucasus continued to add on vegetative growth but were cold hardening.

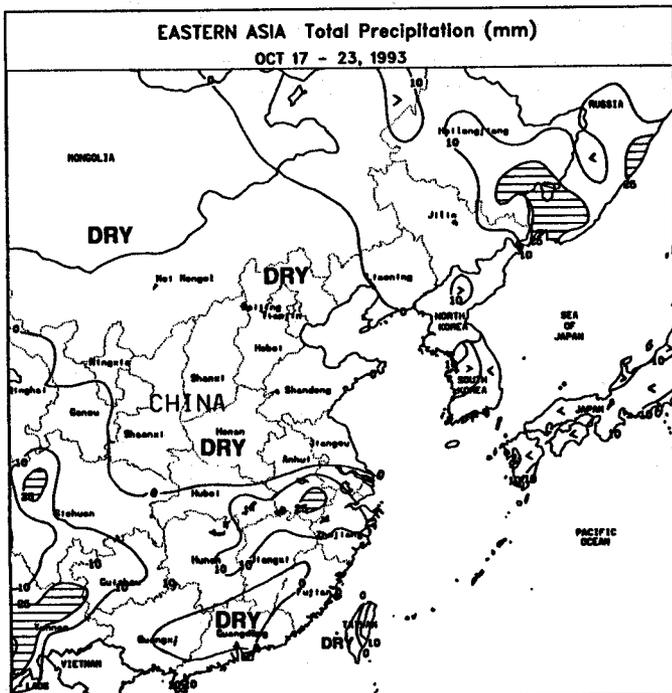
**FSU-NEW LANDS:** Reports indicated the grain harvest in Kazakhstan was completed by October 18. In Russian growing areas of the Urals and Western Siberia, the grain harvest continued under deteriorating weather conditions. Early-week mild, dry conditions were followed by sharply colder weather and locally heavy snow. Precipitation amounts in the Urals and northern areas in Western Siberia generally ranged from 10 to 25 mm, with local amounts in excess of 25 mm, delaying late harvest activities. Reports as of October 18 indicated the Russian grain harvest, excluding corn, was 93 percent complete. In cotton growing areas of Central Asia, warm, dry weather favored rapid cotton harvesting. Usually, the cotton harvest continues through November. Weekly coverage of the New Lands will be suspended until next year's growing season.



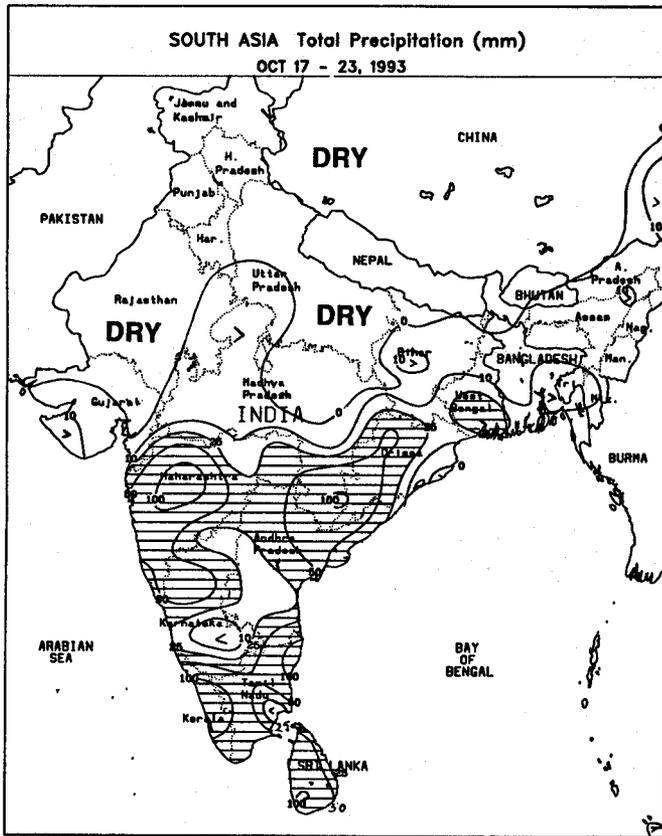
**EUROPE:** Drier weather prevailed over western Europe, improving conditions for sugar beet harvesting and winter crop planting in northern France, Great Britain, and western Iberian peninsula. Lingering showers (10-20 mm) in southern France and western Germany kept crop areas unfavorably wet for harvesting, although some corn and sugar beet harvesting likely resumed. A late-week storm brought locally heavy rain (40-142 mm) to saturated northern areas of both Italy and former Yugoslavia, causing additional fieldwork delays. Significant showers (20-46 mm) spread into extreme southern Germany, the Czech Republic, and southwestern Poland, providing beneficial topsoil moisture for winter crop establishment. Beneficial showers (7-16 mm) also moistened topsoils for winter grains in Slovakia and Hungary. In contrast, unfavorably dry weather prevailed over southern Romania, Bulgaria, and Greece, where soil moisture is low. Colder weather pushed across western and northern Europe early in the week, with average temperatures ranging from 2 to 5 degrees C below normal. Lowest minimum temperatures ranged from -2 to -8 degrees C over all but extreme southern England, the Netherlands, northern Germany, and most of Poland. Temperatures moderated by week's end.



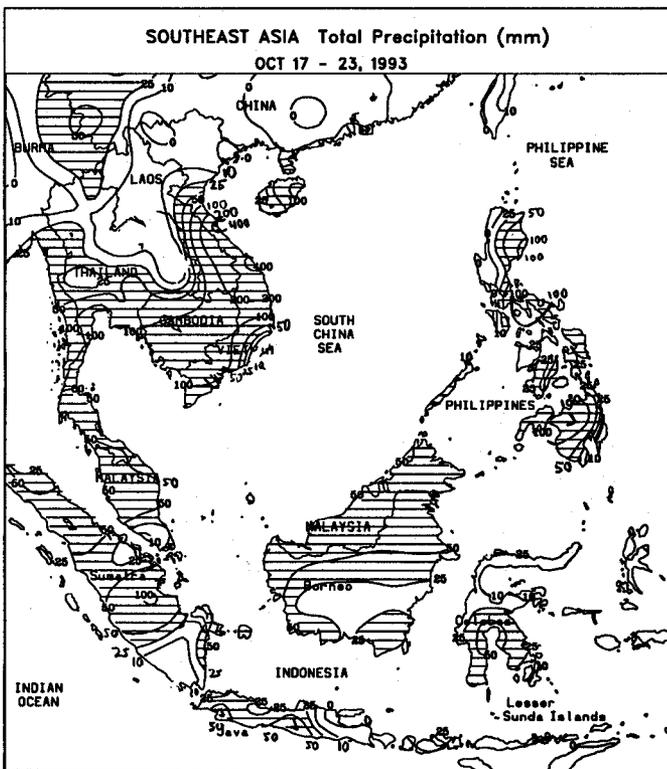
**AUSTRALIA:** Early-week showers covered eastern Australia, maintaining favorable moisture conditions for reproductive-filling wheat. Greatest amounts of rain (10-25 mm) fell over South Australia and Victoria, with lesser amounts (4-10 mm) covering New South Wales and southern Queensland. In West Australia, dry weather for the third consecutive week limited moisture for wheat in the filling stage. Weekly average temperatures were near normal in West Australia and 1-3 degrees C below normal in eastern areas.



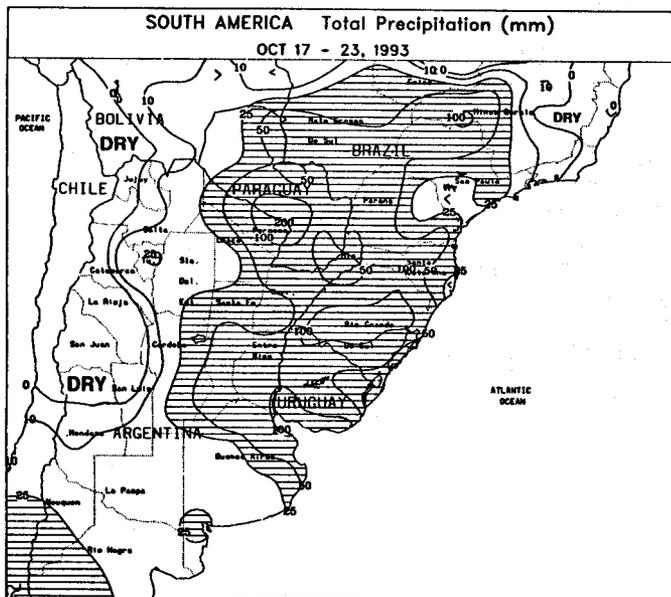
**EASTERN ASIA:** Mostly dry weather from southern China to Manchuria aided summer crop harvests and, in the North China Plain, late winter wheat planting. Light rain (generally 15 mm or less) in southern Japan and the Koreas caused only minor delays, but moderate to locally heavy showers (15-50 mm or more) slowed crop harvests in northern Honshu and Hokkaido. A brief period of light showers (10-28 mm) in the lower Yangtze Valley interrupted rice harvests but increased topsoil moisture for winter wheat germination. Light to moderate showers (10-48 mm) fell in southwestern China, boosting reservoirs but missing the main winter wheat areas.



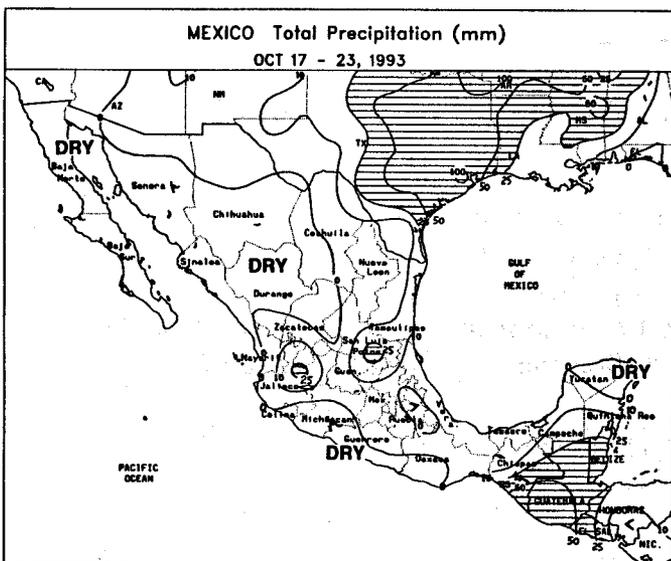
**SOUTH ASIA:** Moderate to heavy showers (25-50 mm, with local amounts exceeding 100 mm) continued throughout southern India, increasing moisture for grain, oilseed, and cotton establishment, but causing some flooding. The rain has been especially heavy in recent weeks over Maharashtra and northern Karnataka, where main-season cotton is opening. Drier weather is needed to prevent declines in cotton quality. To the north, mostly dry, warm weather stretching from Gujarat to far-eastern India aided maturing summer crops and promoted early planting of winter grains and oilseeds.



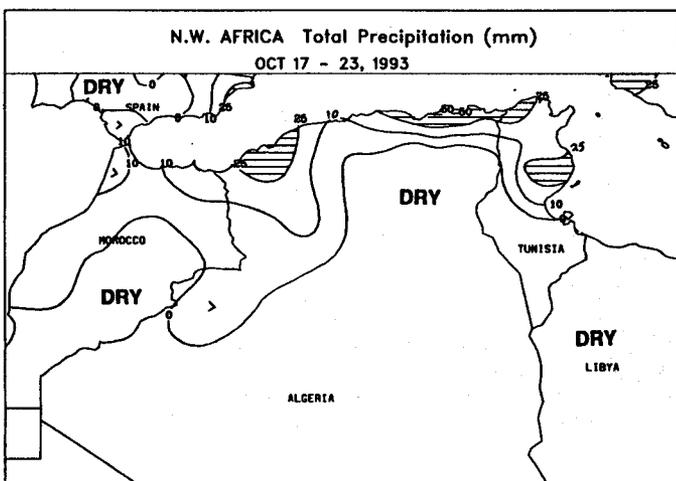
**SOUTHEAST ASIA:** Unseasonable showers (15-80 mm, with totals near Bangkok exceeding 100 mm) fell throughout Thailand's primary rice regions, with heaviest accumulations extending northward along the Chao Phraya river. The rainfall was welcomed for upcoming dry-season rice planting. Inundating rain (100-300 mm or more) brought renewed flooding to coastal rice areas of central and southern Vietnam. Mostly moderate showers (33-94 mm) fell throughout peninsular Thailand, Malaysia, and much of Java. Rainfall in southern Indonesia rises dramatically at this time of year, with rice planting usually beginning in November. In the Philippines, moderate to heavy showers (25-50 mm or more, exceeding 100 mm in isolated areas) fell throughout the islands, increasing moisture for fall grain planting.



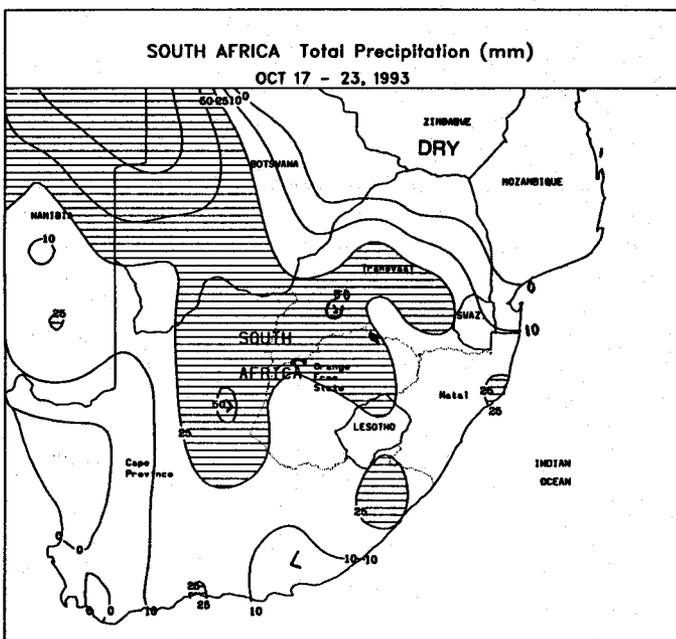
**SOUTH AMERICA:** On October 23, frost was scattered throughout southern winter wheat areas of Buenos Aires province, Argentina, likely causing some damage to crops in or nearing reproduction. Lows of 1 degree C were reported as far north as Colonel Suarez, with temperatures reaching -2 at Viedma, in the southern tip of the province. Prior to the freeze, light rain covered the affected area. Further north, moderate to heavy showers (25-50 mm or more) fell from northern Buenos Aires to Formosa, bringing some relief to reproductive winter wheat stressed by recent dryness. Temperatures averaged above normal from northern Santa Fe northward and below normal elsewhere. In southern Brazil, inundating rains (50-137 mm) covered most of Rio Grande do Sul, causing some local flooding and halting summer crop planting. More moderate showers (25-50 mm or more) from Santa Catarina north and westward boosted moisture for corn and soybean establishment but slowed fieldwork. Winter wheat harvesting is usually underway throughout southern Brazil, and this week's heavy rain slowed fieldwork and likely caused some lodging. Temperatures averaged 2-4 degrees C above normal over most of southern Brazil.



**MEXICO:** The first strong cold front of the autumn plunged southward into central Mexico, ushering in unseasonably cold air and showers as far south as the Southern Plateau corn belt. Scattered freezing temperatures were confined to higher elevations in the northwest. Light to moderate rain (10-25 mm, with local amounts in excess of 25 mm) slowed early corn harvesting in the corn belt. Dry weather prevailed over wheat and vegetable areas of northwest Mexico, helping planting activities. Weekly average temperatures were 1-3 degrees C below normal in the northwest, and 1-2 degrees C above normal in central and southern Mexico.



**NORTHWESTERN AFRICA:** Light showers (2-10 mm) over Morocco, Algeria, and Tunisia moistened topsoils, increasing pre-planting moisture. Heaviest rain (25-54 mm) fell outside the principle winter grain-producing areas, along the coasts of Algeria and Tunisia. Winter grain planting usually begins in November, when the autumn rains become more consistent.



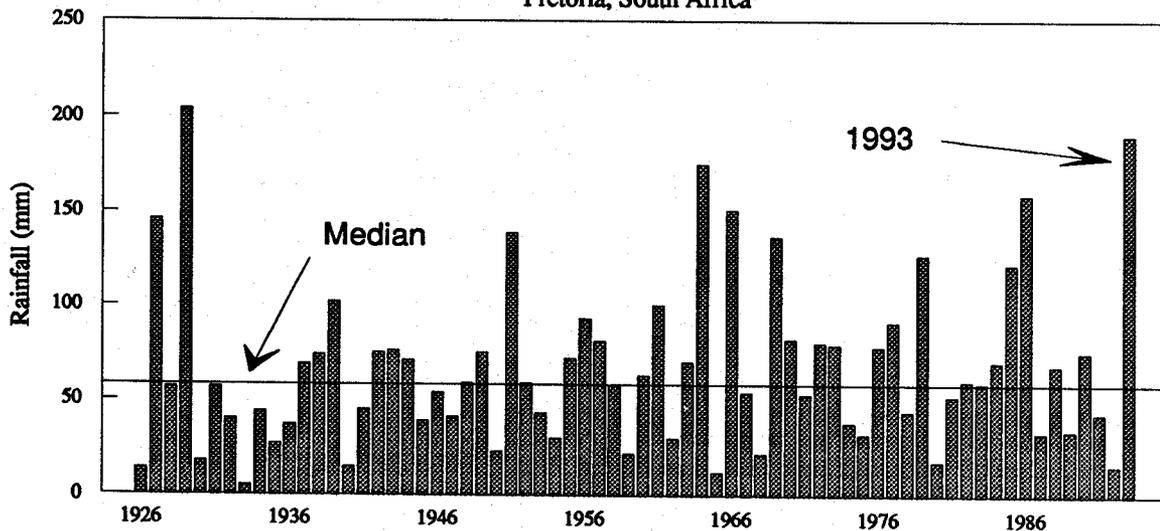
**SOUTH AFRICA:** Moderate to heavy showers (10-53 mm) continued throughout primary grain areas of Orange Free State and southern Transvaal. In the first 3 weeks of October, rainfall totaled 70-195 mm across major eastern crop regions, helping to recharge soil moisture following two drier-than-normal seasons. However, winter wheat harvesting and corn planting are typically in full swing by November, requiring much drier conditions. In the Cape Province and Natal, drier weather prevailed, aiding fieldwork. Sugarcane regions along the coast, suffering from 2 years of drought, will need continued rain throughout the season due to their low subsoil moisture reserves.

## A Wet Start to South Africa's Growing Season

October 1993 has been one of the wettest Octobers on record across South Africa's summer crop areas, with rainfall ranging from 100 to 190 mm over the principal corn- and sugar-growing areas. In Pretoria, rainfall of 190 mm through October 25 has already made this the wettest October since 1929. The heavy rains have helped to recharge soil moisture following two drier-than-normal seasons but have caused local flooding and delayed fieldwork.

## October Rainfall (mm)

Pretoria, South Africa



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**U.S. DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration  
National Weather Service/Climate Analysis Center  
Managing Editor . . . . . **Douglas Le Comte**  
Editor . . . . . **Brad Rippey** (202) 720-1444  
Meteorologists . . . . . **David Secora**  
**Vilhelm Bjerknes and Jeff Savadel**

Subscriptions . . . . . **Joyce Houston** (202) 720-7917

**U.S. DEPARTMENT OF AGRICULTURE**

Economics Management Staff  
E.M.S. Editor . . . . . **Sharon Lee**  
National Agricultural Statistics Service  
Agricultural Statistician . . **David Mueller** (202) 720-2157  
State Summaries Editor . . . **Klara Haskins** (202) 720-8033  
World Agricultural Outlook Board  
Agricultural Weather Analysts . . **Ray Motha** (202) 720-9805  
**Tom Puterbaugh, Mark Brusberg, and Bob Stefanski**

**Crop Condition  
(Percent)**

for the Week Ending October 24, 1993

**CORN**

State	VP	P	F	G	EX
CO	5	11	24	48	12
GA	18	16	51	15	0
IL	0	1	14	74	11
IN	0	0	20	73	7
IA	5	31	56	8	0
KS	0	0	38	58	4
KY	0	0	62	38	0
MI	1	4	20	55	20
MN	23	43	32	2	0
MO	3	11	66	19	1
NE	0	8	35	51	6
NC	12	37	43	8	0
OH	3	13	36	39	9
PA	2	9	33	42	14
SD	3	18	43	31	5
TX	0	0	57	22	21
WI	0	19	36	44	1
17 State	4	15	36	39	6
Prev Week	3	15	36	40	6
Prev Year	1	3	16	55	25

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

**WINTER WHEAT**

State	VP	P	F	G	EX
AR	0	0	24	72	4
CA	0	0	5	90	5
CO	0	2	10	65	23
GA	23	7	50	20	0
ID	1	1	10	81	7
IL	N/A	N/A	N/A	N/A	N/A
IN	1	4	32	58	5
KS	0	0	8	49	43
MI	2	8	30	40	20
MO	0	7	40	51	2
MT	0	2	30	55	13
NE	0	4	7	71	18
NC	0	6	81	13	0
OH	1	5	27	55	12
OK	0	7	27	66	0
OR	0	0	0	69	31
SD	0	0	12	65	23
TX	0	6	54	30	10
WA	0	0	18	79	3
18 State	0	3	23	56	18
Prev Week	N/A	N/A	N/A	N/A	N/A
Prev Year	N/A	N/A	N/A	N/A	N/A

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