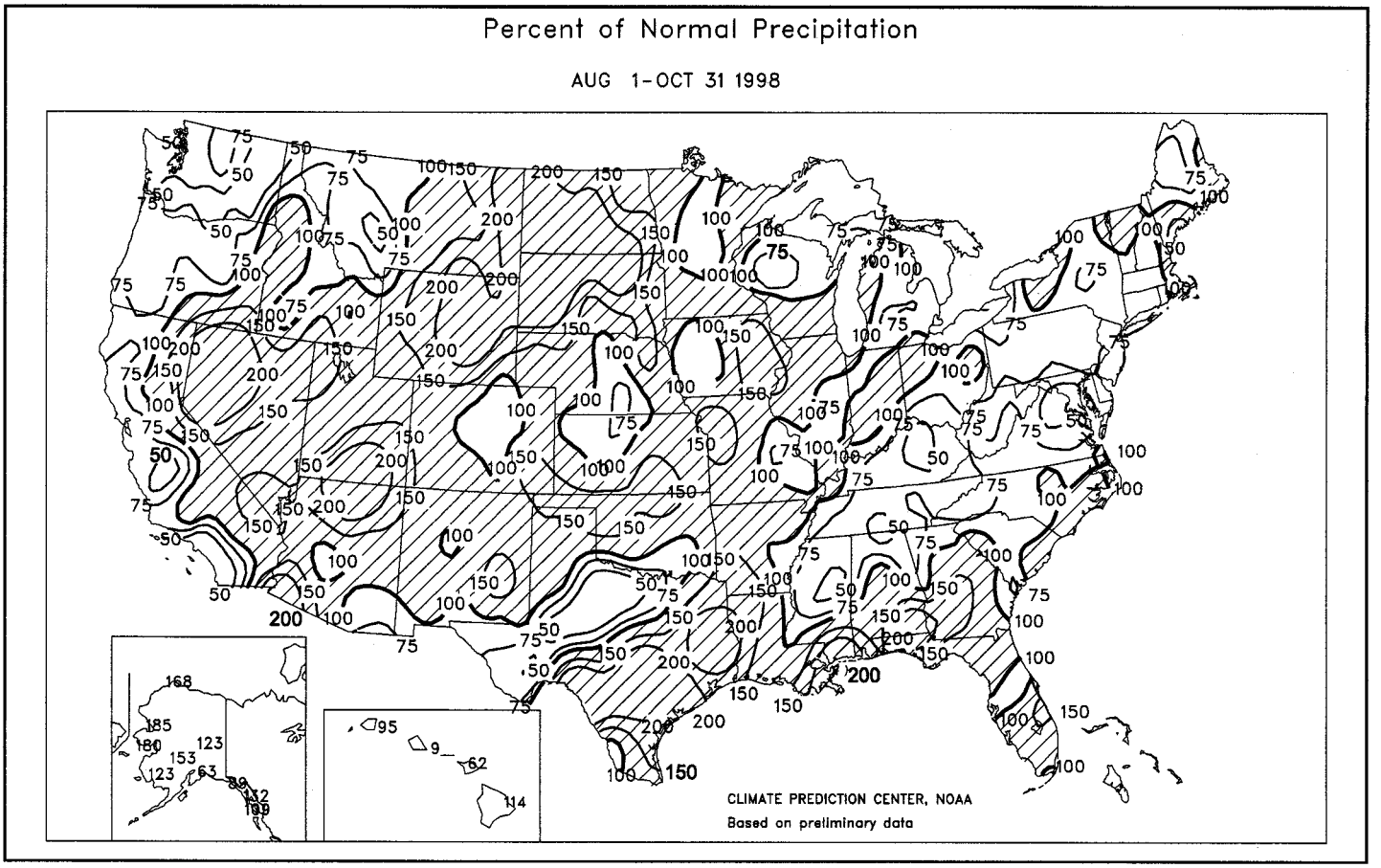
Volume 85, No. 45 November 10, 1998

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



HIGHLIGHTS

November 1 - 7, 1998

Cold weather abruptly overspread much of the Nation, halting winter wheat growth across the **northern Plains** and **Northwest**, and slowing wheat development elsewhere. Weekly temperatures ranged from 3 to 9°F below normal throughout the **Plains** and the **Corn Belt**. Temperatures failed to climb to 50°F during the week as far south as **west-central Kansas**. In **California**, where readings were as much as 5°F below normal, cooler-than-normal conditions prevailed for the sixth time in 7 weeks. Late in the week, frost and near-freezing temperatures were noted as far south as southern portions of **Mississippi, Alabama**, and **Georgia**.

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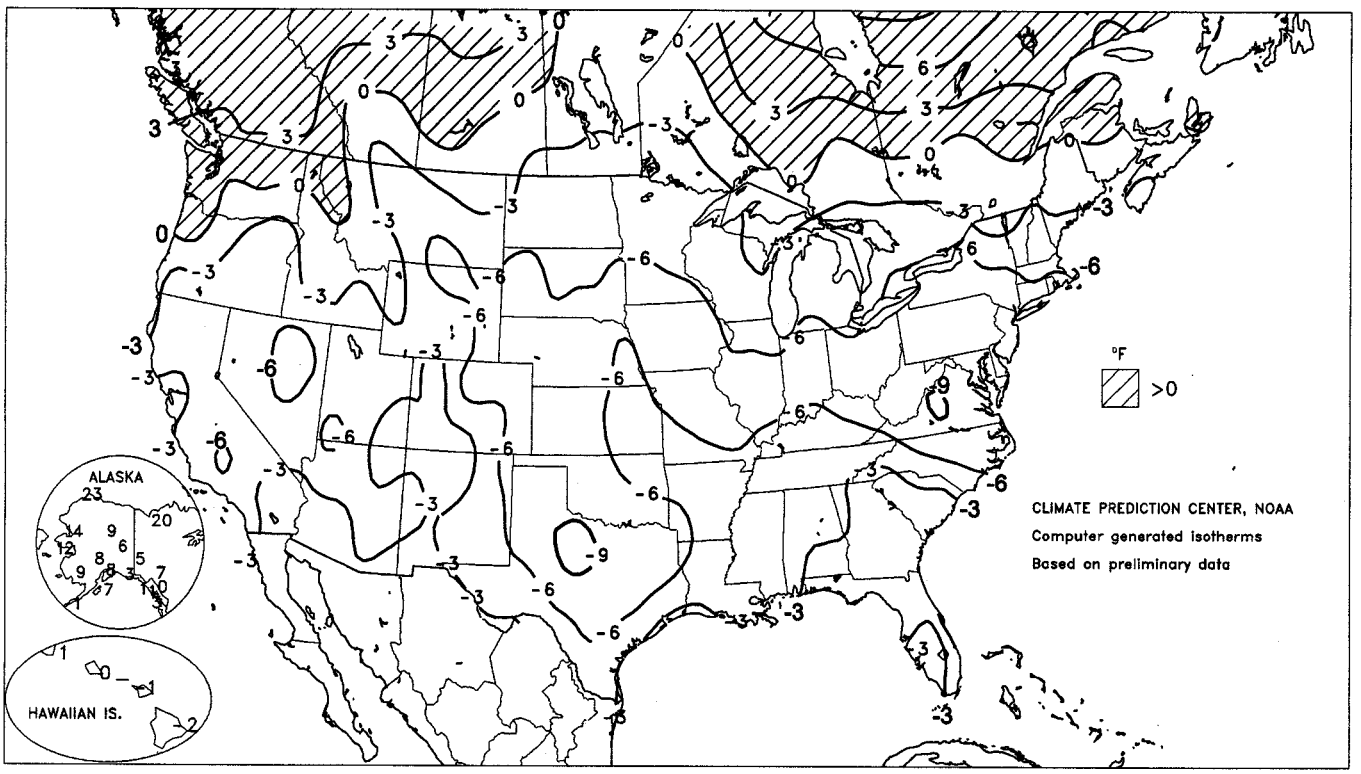
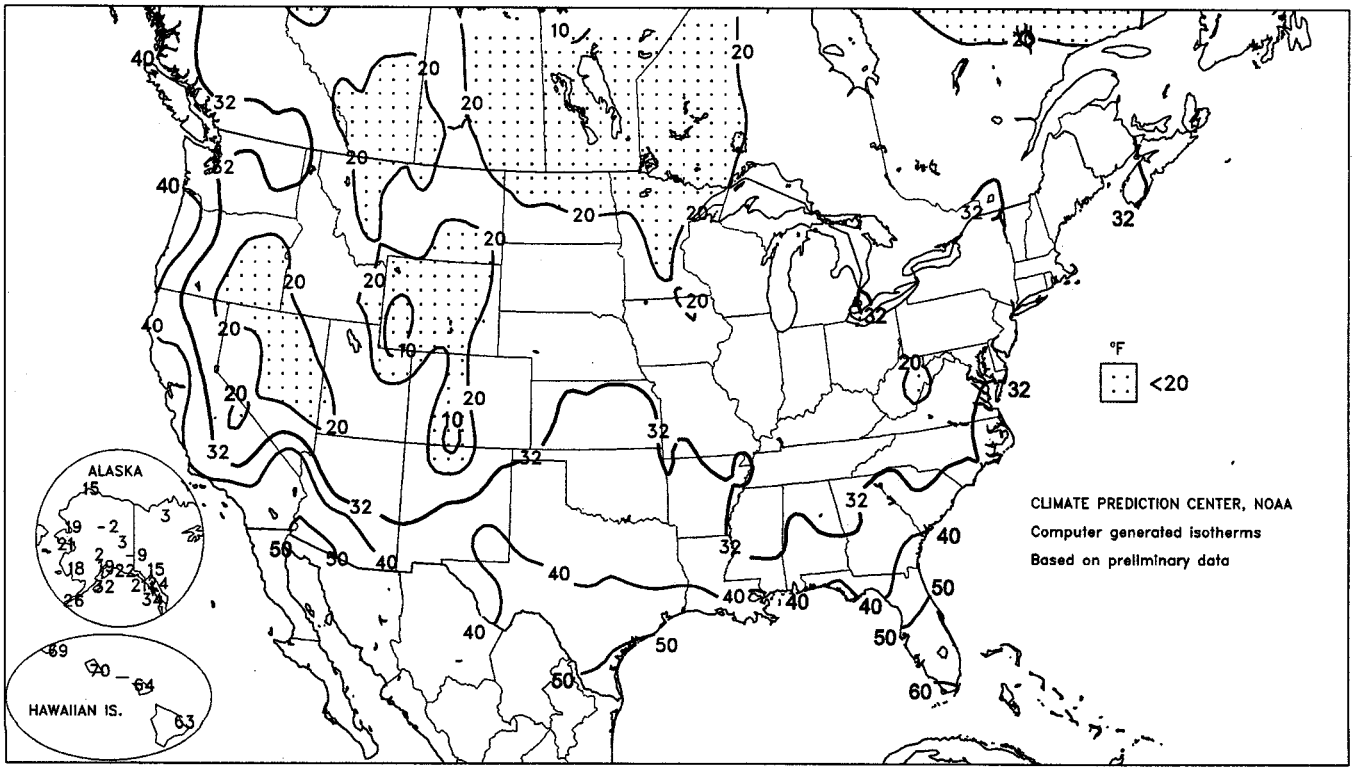
Departure of Average Temperature from Normal (°F)

NOV 1 - 7, 1998



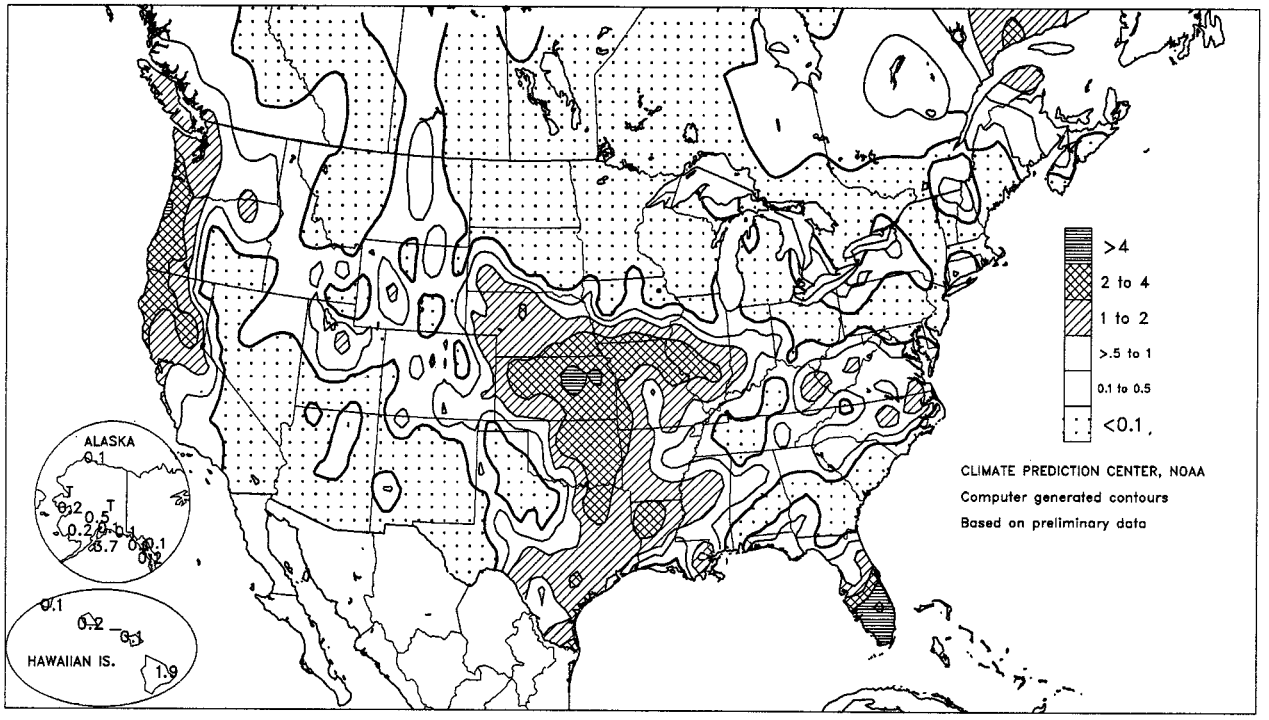
Extreme Minimum Temperature (°F)

NOV 1 - 7, 1998



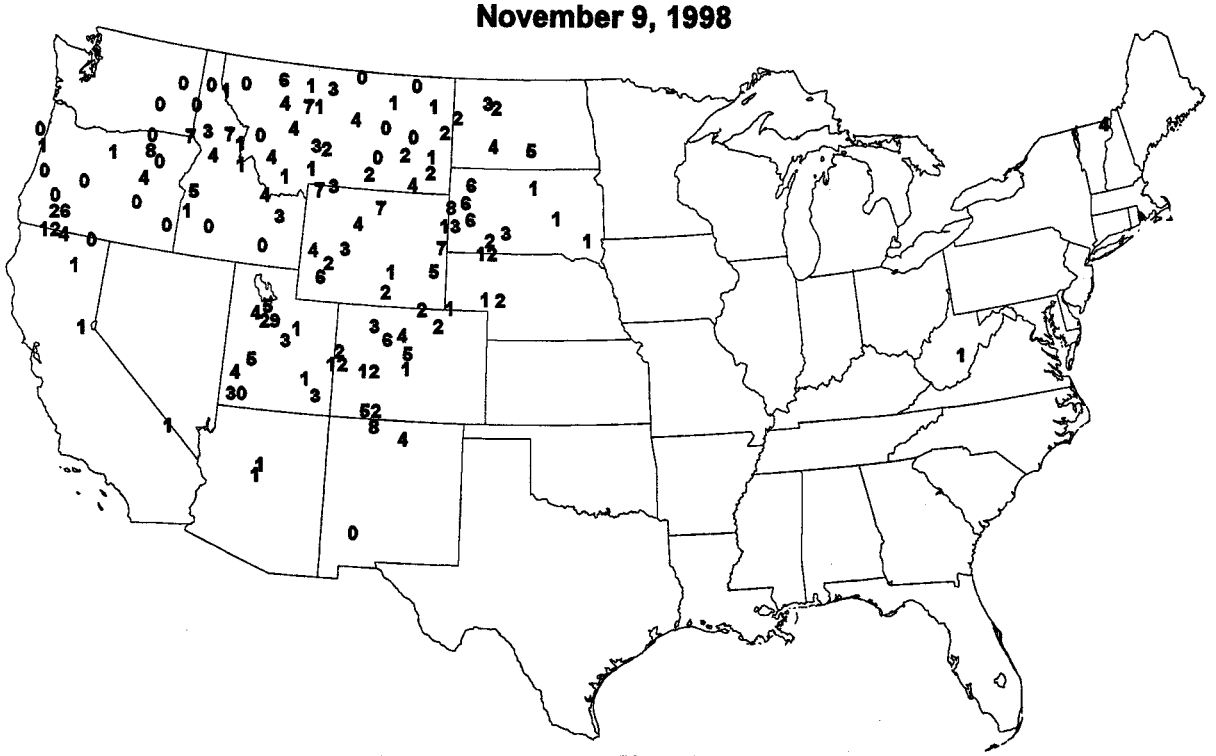
Total Precipitation (Inches)

NOV 1 - 7, 1998



Snow Depth (Inches)

November 9, 1998



Experimental product based on preliminary data
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

The NWS co-operative observer network is the principal source of the snow depth reports.

National Weather Data for Selected Cities

Weather Data for the Week Ending November 7, 1998

Data Provided by Climate Prediction Center (301-763-8000 EXT. 7503) and the Southern Regional Climate Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP, °F		PRECIP.	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	65	44	85	30	55	-2	0.12	-0.75	0.12	2.28	30	56.24	122	88	40	0	2	1	0
	HUNTSVILLE	61	42	81	27	52	-4	0.19	-0.78	0.17	3.05	37	35.80	76	93	46	0	2	2	0
	MOBILE	71	47	85	35	59	-4	0.01	-0.79	0.01	25.48	264	79.35	143	96	52	0	0	1	0
	MONTGOMERY	70	44	84	31	57	-3	0.04	-0.74	0.03	10.23	140	45.52	101	94	42	0	1	2	0
AK	ANCHORAGE	38	28	45	19	33	8	0.06	-0.25	0.04	1.33	27	9.85	70	92	65	0	6	2	0
	BARROW	31	21	35	15	26	23	0.08	0.00	0.02	1.94	175	4.23	105	90	74	0	7	5	0
	FAIRBANKS	24	7	29	3	16	6	0.01	-0.18	0.00	1.45	73	9.86	105	96	77	0	7	1	0
	JUNEAU	42	30	45	24	36	0	0.11	-1.25	0.08	18.78	118	57.60	125	100	85	0	5	2	0
	KODIAK	46	39	48	32	43	6	3.69	2.25	1.61	28.98	186	96.81	172	97	75	0	1	6	2
	NOME	35	30	37	21	32	12	0.20	-0.06	0.09	5.31	131	22.30	168	97	75	0	4	4	0
AZ	FLAGSTAFF	50	22	63	19	36	-4	0.00	-0.41	0.00	7.56	187	25.20	133	93	34	0	7	0	0
	PHOENIX	75	53	76	51	64	-3	0.09	-0.05	0.00	1.70	103	9.75	158	69	24	0	0	1	0
	TUCSON	75	45	78	44	60	-3	0.00	-0.16	0.00	1.34	46	12.50	120	59	18	0	0	0	0
	YUMA	80	57	82	51	68	0	0.00	-0.06	0.00	2.26	370	4.38	175	55	20	0	0	0	0
AR	FORT SMITH	56	46	70	32	51	-4	1.56	0.62	0.99	12.81	163	39.82	114	94	65	0	1	5	1
	LITTLE ROCK	60	47	78	35	53	-3	0.37	-0.75	0.22	8.93	100	35.68	85	88	58	0	0	3	0
CA	BAKERSFIELD	64	44	68	40	54	-6	0.04	-0.10	0.02	0.59	98	12.27	270	85	46	0	0	1	0
	EUREKA	58	45	64	38	52	-1	2.32	1.04	0.94	5.25	108	46.31	176	98	76	0	0	6	2
	FRESNO	64	44	70	38	54	-4	0.18	-0.09	0.04	0.48	46	16.46	205	94	45	0	0	2	0
	LOS ANGELES	67	53	71	51	60	-4	0.00	-0.33	0.00	0.00	0	23.83	287	96	56	0	0	0	0
	REDDING	61	42	64	38	52	-4	1.32	0.29	1.14	3.69	88	51.09	217	95	43	0	0	2	1
	SACRAMENTO	63	45	68	42	54	-3	0.43	-0.13	0.33	1.55	77	24.99	195	97	48	0	0	4	0
	SAN DIEGO	66	55	67	54	60	-4	0.00	-0.27	0.00	0.11	13	14.38	201	89	63	0	0	0	0
	SAN FRANCISCO	60	50	63	48	55	-2	0.42	-0.15	0.33	1.21	61	29.79	209	94	65	0	0	2	0
CO	ALAMOSA	46	24	49	11	35	0	0.19	0.08	0.08	2.71	159	6.68	99	96	40	0	7	4	0
	CO SPRINGS	42	33	52	31	37	-5	0.53	0.40	0.37	1.98	86	16.15	105	99	69	0	4	6	0
	DENVER	42	30	50	24	36	-7	0.39	0.17	0.22	2.38	97	15.86	112	99	70	0	5	4	0
	GRAND JUNCTION	51	33	57	27	42	-4	0.09	-0.10	0.05	2.88	144	8.50	113	89	43	0	4	2	0
	PUEBLO	49	36	58	33	43	-3	0.51	0.40	0.36	2.52	159	11.48	110	99	68	0	0	6	0
CT	BRIDGEPORT	52	34	58	30	43	-7	0.05	-0.80	0.00	5.86	83	39.76	113	81	40	0	4	1	0
	HARTFORD	48	31	53	27	40	-7	0.06	-0.85	0.00	8.31	101	42.24	114	80	42	0	5	1	0
DC	WASHINGTON	54	39	64	31	47	-7	0.17	-0.55	0.13	2.59	37	33.44	101	75	40	0	1	2	0
DE	WILMINGTON	53	34	60	28	44	-7	0.00	-0.72	0.00	4.59	65	34.25	98	77	39	0	3	0	0
FL	DAYTONA BEACH	76	59	82	51	68	-1	0.59	-0.15	0.31	8.22	73	38.09	88	96	64	0	0	2	0
	JACKSONVILLE	73	54	83	42	64	-1	0.01	-0.49	0.01	10.63	102	54.05	115	98	57	0	0	1	0
	KEY WEST	80	71	86	67	76	-2	2.11	1.34	2.11	18.53	168	36.17	102	86	64	0	0	2	1
	MIAMI	80	68	83	61	74	-2	5.89	5.06	5.50	26.04	185	67.54	129	92	62	0	0	2	1
	ORLANDO	76	59	85	51	68	-3	1.59	1.07	1.01	7.59	85	44.02	100	98	60	0	0	3	2
	PENSACOLA	72	53	82	39	62	-2	0.15	-0.68	0.00	19.92	192	60.19	109	90	47	0	0	1	0
	TALLAHASSEE	74	49	87	31	62	-1	0.01	-0.76	0.01	14.11	152	55.80	97	96	46	0	1	1	0
	TAMPA	76	61	83	53	69	-1	0.48	0.09	0.40	9.20	110	54.34	135	95	63	0	0	2	0
	WEST PALM BEACH	79	63	84	56	71	-3	6.74	5.45	5.13	21.46	131	62.69	114	94	58	0	0	2	2
GA	ATHENS	66	47	78	33	56	-1	0.22	-0.59	0.16	7.04	95	46.65	109	96	55	0	0	3	0
	ATLANTA	65	44	80	33	55	-2	0.10	-0.73	0.09	4.81	66	42.46	98	93	47	0	0	2	0
	AUGUSTA	69	45	81	30	57	-1	0.16	-0.40	0.06	8.72	136	45.87	117	98	51	0	1	2	0
	COLUMBUS	69	49	81	38	59	-1	0.06	-0.61	0.00	5.85	96	30.78	71	88	44	0	0	1	0
	MACON	71	46	81	32	58	-1	0.16	-0.37	0.14	8.54	156	41.28	108	96	45	0	1	3	0
	SAVANNAH	70	51	80	39	61	-2	0.01	-0.46	0.01	6.85	94	46.87	105	96	54	0	0	1	0
HI	HILO	79	67	81	63	73	-2	1.92	-1.25	0.67	28.85	136	84.92	81	99	74	0	0	7	2
	HONOLULU	85	72	87	70	78	0	0.15	-0.48	0.09	0.33	9	2.95	19	92	57	0	0	3	0
	KAHULUI	84	67	86	64	76	-1	0.08	-0.42	0.03	0.85	41	3.97	26	90	55	0	0	2	0
	LIHUE	82	73	82	69	77	1	0.14	-1.10	0.04	2.41	30	22.39	67	86	64	0	0	3	0
ID	BOISE	50	34	53	27	42	-3	0.26	-0.04	0.18	2.33	127	14.35	150	79	40	0	2	2	0
	LEWISTON	48	37	51	30	43	-3	0.46	0.21	0.33	3.20	162	14.57	140	97	64	0	2	4	0
	POCATELLO	45	27	50	18	36	-4	0.46	0.21	0.37	2.63	132	11.93	118	93	53	0	6	3	0
IL	CHICAGO/O'HARE	46	37	56	28	42	-4	0.24	-0.41	0.16	7.80	113	34.57	111	84	62	0	2	4	0
	MOLINE	45	33	54	22	39	-6	0.99	0.38	0.43	12.16	161	45.31	130	87	61	0	4	3	0
	PEORIA	45	37	55	26	41	-6	0.63	0.02	0.27	6.14	86	38.70	122	87	64	0	3	4	0
	ROCKFORD	44	32	53	21	38	-6	0.00	-0.63	0.00	7.20	98	36.71	114	84	58	0	4	0	0
	SPRINGFIELD	46	36	58	23	41	-7	2.10	1.52	1.18	6.67	103	43.56	143	94	69	0	2	3	2
IN	EVANSVILLE	54	38	70	26	46	-5	0.64	-0.17	0.53	4.51	68	38.06	104	90	56	0	2	3	1
	FORT WAYNE	46	31	55	24	39	-8	0.03	-0.59	0.03	5.33	93	35.70	120	87	56	0	5	1	0
	INDIANAPOLIS	47	35	60	23	41	-7	0.59	-0.11	0.31	8.35	135	46.44	136	89	63	0	4	2	0
	SOUTH BEND	45	33	54	27	39	-6	0.02	-0.72	0.01	4.14	56	31.99	96	94	64	0	4	2	0
IA	BURLINGTON	47	37	57	27	42	-4	1.51	0.93	0.69	16.45	215	48.62	150	83	62	0	3	4	1
	CEDAR RAPIDS	34	23	37	21	29	-15	0.07	-0.39	0.07	12.30	190	44.45	146	94	64	0	4	1	0
	DES MOINES	41	33	51	27	37	-8	0.97	0.49	0.41	4.58	69	38.89	128	92	67	0	4	4	0
	DUBUQUE	41	32	49	25	36	-8	0.05	-0.58	0.04	8.29	103	41.91	122	83	59	0	5	2	0
	SIOUX CITY	42	32	50	22	37	-5	0.30	-0.01	0.17	4.21	82	29.42	121	89	63	0	4	3	0
	WATERLOO	42	28	52	18	35	-7	0.14	-0.34	0.14	7.16	109	43.43	140	90	61	0	5	1	0
KS	CONCORDIA	44	38	51	33	41	-6	3.42	3.10	2.59	9.76	183	32.24	119	98	83	0	0	6	1
	DODGE CITY	44	37	53	33	41	-8	2.43	2.21	2.06	6.64	195	21.89	108	98	84	0	0	6	1
	GOODLAND	38	32	41	30	35	-8	1.14	0.96	0.42	3.17	120	17.23	100	97	85	0	5	4	0
	TOPEKA	48	40	57	35	44	-4	4.54	4.01	3.40	13.75	186	39.85	123	94	73	0	0	5	2

Based on 1961-90 normals

Weather Data for the Week Ending November 7, 1998

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP, °F		PRECIP.	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 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
	WICHITA	48	42	56	37	45	-5	2.08	1.67	1.34	14.76	241	32.49	120	98	77	0	0	5	1
KY	JACKSON	51	38	67	30	44	-7	0.20	-0.70	0.11	4.88	63	45.46	108	86	48	0	1	3	0
	LEXINGTON	50	36	66	27	43	-7	0.12	-0.58	0.10	3.13	48	44.57	118	92	55	0	3	1	0
	LOUISVILLE	54	40	70	31	47	-4	0.24	-0.55	0.17	3.53	53	42.93	113	86	46	0	2	3	0
	PADUCAH	57	39	75	27	48	-4	0.51	-0.38	0.35	8.02	106	50.16	122	93	53	0	3	3	0
LA	BATON ROUGE	71	47	84	38	59	-4	0.15	-0.73	0.15	10.92	118	50.02	96	95	47	0	0	1	0
	LAKE CHARLES	71	52	82	43	61	-2	1.34	0.42	1.28	19.33	183	51.39	111	95	53	0	0	3	1
	NEW ORLEANS	70	54	83	45	62	-2	1.04	0.18	1.04	21.84	232	74.42	141	87	50	0	0	1	1
	SHREVEPORT	62	47	74	36	54	-6	1.20	0.19	0.55	14.72	188	40.98	106	96	62	0	0	6	2
ME	CARIBOU	40	31	43	24	36	-1	0.19	-0.62	0.08	5.63	77	32.34	106	94	68	0	4	2	0
	PORTLAND	48	32	53	24	40	-3	0.00	-1.15	0.00	13.47	165	51.41	144	80	48	0	3	0	0
MD	BALTIMORE	54	33	63	24	43	-8	0.00	-0.74	0.00	2.33	33	31.98	92	80	35	0	3	0	0
MA	BOSTON	49	38	54	33	43	-6	0.00	-0.93	0.00	8.16	112	50.47	148	75	52	0	0	0	0
	WORCESTER	44	31	50	26	38	-6	0.00	-1.05	0.00	6.21	66	42.82	106	76	46	0	5	0	0
MI	ALPENA	40	31	47	29	36	-5	0.03	-0.47	0.03	7.57	133	29.44	117	87	60	0	6	1	0
	GRAND RAPIDS	44	33	52	27	39	-4	0.03	-0.71	0.03	5.50	71	28.81	94	87	56	0	5	1	0
	HOUGHTON LAKE	41	28	48	20	34	-6	0.04	-0.48	0.01	6.14	100	20.86	85	92	60	0	6	2	0
	LANSING	44	32	52	22	38	-5	0.00	-0.57	0.00	3.95	63	25.73	98	88	58	0	5	0	0
	MARQUETTE	35	30	43	28	33	-3	0.34	-0.36	0.27	5.74	68	35.33	116	89	68	0	6	5	0
	MUSKEGON	46	33	53	28	39	-4	0.07	-0.63	0.01	7.44	101	24.76	91	87	53	0	5	1	0
MN	DULUTH	36	25	49	20	31	-4	0.00	-0.48	0.00	7.54	111	28.28	103	87	61	0	6	0	0
	INT'L FALLS	34	23	44	13	28	-4	0.08	-0.24	0.01	4.56	84	20.56	91	93	62	0	7	2	0
	MINNEAPOLIS	40	28	55	21	34	-5	0.00	-0.42	0.00	3.23	61	31.33	120	81	52	0	5	0	0
	ROCHESTER	38	27	51	21	33	-6	0.02	-0.41	0.01	5.77	93	30.77	112	86	61	0	6	2	0
	ST. CLOUD	40	24	55	15	32	-4	0.00	-0.37	0.00	3.14	55	22.48	88	88	51	0	7	0	0
MS	JACKSON	68	44	86	32	56	-3	0.91	-0.06	0.69	3.83	49	41.91	92	95	45	0	1	4	1
	MERIDIAN	66	41	84	30	54	-5	0.28	-0.59	0.28	3.41	46	47.04	100	99	50	0	2	1	0
	TUPELO	64	41	82	29	53	-4	0.30	-0.67	0.16	3.48	43	40.48	88	88	44	0	2	3	0
MO	COLUMBIA	48	38	59	31	43	-6	1.05	0.34	0.77	12.72	163	42.93	125	95	71	0	2	4	1
	KANSAS CITY	46	37	56	27	42	-7	1.88	1.35	0.76	18.72	216	45.91	132	96	76	0	2	4	2
	SAINT LOUIS	49	39	63	28	44	-7	2.01	1.28	1.79	6.38	98	42.08	132	92	66	0	2	4	1
	SPRINGFIELD	50	42	70	36	46	-5	1.81	0.94	0.87	11.59	128	45.31	123	94	70	0	0	4	2
MT	BILLINGS	38	29	49	24	33	-7	0.43	0.21	0.22	2.74	100	13.50	98	100	84	0	7	4	0
	BUTTE	42	24	48	17	33	0	0.13	-0.01	0.07	1.49	71	13.51	120	89	50	0	7	4	0
	GLASGOW	38	30	52	24	34	-2	0.34	0.26	0.13	4.31	254	13.89	134	95	75	0	5	5	0
	GREAT FALLS	39	29	52	24	34	-5	0.14	0.00	0.07	1.67	77	15.60	113	89	66	0	4	4	0
	KALISPELL	44	27	48	22	36	1	0.13	-0.12	0.06	2.27	95	17.41	127	94	63	0	5	3	0
	MILES CITY	39	31	54	22	35	-3	0.39	0.25	0.23	3.16	136	13.28	102	90	73	0	4	5	0
	MISSOULA	46	29	50	20	38	1	0.02	-0.15	0.01	1.55	76	17.56	150	87	49	0	5	2	0
NE	GRAND ISLAND	40	34	46	31	37	-6	1.67	1.41	0.58	3.76	84	25.37	108	96	81	0	4	5	1
	LINCOLN	43	35	50	25	39	-6	2.18	1.83	1.05	7.32	123	33.02	125	95	74	0	1	5	1
	NORFOLK	41	32	48	22	37	-6	0.53	0.25	0.31	4.81	111	33.51	142	94	68	0	5	4	0
	NORTH PLATTE	38	32	47	29	35	-6	1.20	1.03	0.94	4.25	156	22.32	122	96	79	0	6	6	1
	OMAHA	43	35	50	26	39	-6	1.03	0.63	0.41	4.44	69	39.05	141	94	66	0	2	4	0
	SCOTTSBLUFF	38	31	46	28	35	-7	1.14	0.97	0.79	4.31	211	16.33	115	99	82	0	6	5	1
	VALENTINE	37	31	48	25	34	-6	1.10	0.93	0.48	5.26	202	23.75	137	93	73	0	5	5	0
NV	ELY	46	22	53	14	34	-5	0.38	0.21	0.36	2.71	130	11.76	130	96	41	0	7	2	0
	LAS VEGAS	68	46	69	44	57	-3	0.00	-0.08	0.00	1.51	265	6.59	196	59	26	0	0	0	0
	RENO	53	32	60	28	43	-2	0.28	0.11	0.13	2.79	310	11.49	197	89	37	0	4	5	0
	WINNEMUCCA	48	25	53	18	36	-5	0.17	-0.03	0.08	4.10	342	14.41	217	95	52	0	6	4	0
NH	CONCORD	46	33	49	19	39	-3	0.00	-0.85	0.00	5.21	76	32.44	107	73	44	0	2	0	0
NJ	NEWARK	52	37	58	32	45	-7	0.05	-0.82	0.00	4.58	61	41.61	111	69	39	0	1	1	0
NM	ALBUQUERQUE	56	39	59	36	48	-1	0.00	-0.13	0.00	1.95	97	9.15	114	91	35	0	0	0	0
NY	ALBANY	44	32	51	24	38	-6	0.04	-0.70	0.00	6.16	94	36.31	118	82	53	0	5	1	0
	BINGHAMTON	38	32	45	30	35	-8	0.09	-0.65	0.04	5.75	83	36.18	115	92	64	0	5	3	0
	BUFFALO	42	34	50	30	38	-7	0.07	-0.77	0.02	4.59	62	31.73	99	85	56	0	3	2	0
	ROCHESTER	43	35	51	31	39	-6	0.21	-0.44	0.12	4.65	77	39.15	145	81	59	0	2	4	0
	SYRACUSE	42	36	51	30	39	-6	0.42	-0.43	0.21	5.37	68	33.81	103	85	61	0	1	6	0
NC	ASHEVILLE	58	39	72	26	49	-2	0.52	-0.31	0.49	3.71	45	42.52	103	97	55	0	2	4	0
	CHARLOTTE	59	42	72	27	50	-6	1.07	0.33	1.06	6.24	82	36.56	98	96	62	0	1	2	1
	GREENSBORO	54	38	69	27	46	-7	0.26	-0.45	0.24	3.22	42	41.69	113	91	52	0	2	2	0
	HATTERAS	61	49	73	42	55	-5	0.03	-1.16	0.03	9.41	82	57.20	120	89	54	0	0	1	0
	RALEIGH	56	37	72	26	46	-8	1.27	0.59	0.95	7.60	113	48.06	134	96	52	0	2	3	1
	WILMINGTON	65	46	80	33	55	-5	0.02	-0.63	0.01	6.75	80	58.70	122	92	47	0	0	2	0
ND	BISMARCK	36	26	54	21	31	-4	0.11	-0.03	0.07	4.17	165	22.17	152	92	64	0	6	2	0
	DICKINSON	35	27	48	20	31	-5	0.06	-0.07	0.02	7.07	255	23.93	155	96	70	0	5	3	0
	FARGO	37	26	54	19	32	-4	0.00	-0.23	0.00	7.17	183	29.79	163	90	62	0	6	0	0
	GRAND FORKS	35	22	48	19	29	-5	0.02	-0.17	0.00	6.30	170	21.85	127	90	62	0	7	1	0
	JAMESTOWN	34	25	51	20	29	-6	0.01	-0.13	0.00	5.00	175	20.56	128	94	68	0	6	1	0
	WILLISTON	38	27	53	22	32	-2	0.14	0.03	0.10	4.27	192	15.95	125	90	62	0	6	2	0
OH	AKRON-CANTON	45	33	53	27	39	-7	0.00	-0.65	0.00	4.57	72	35.98	114	92	56	0	4	0	0
	CINCINNATI	48	34	63	25	41	-7	0.22	-0.56	0.15	3.71	57	45.45	128	96	60	0	4	3	0
	CLEVELAND	45	38	54	34	42	-5	0.07	-0.62	0.04	3.62	54	29.37	95	82	59	0	0	2	0
	COLUMBUS	47	37	58	31	42	-5	0.28	-0.41	0.24	4.61	79	32.61	100	88	57	0	2	2	0
	DAYTON	48	34	56	24	40	-7	0.33	-0.35	0.20	4.58	80	35.83	114	87	60	0	3	2	0
	MANSFIELD	44	33	52	25	38	-8	0.00	-0.74	0.00	3.53	55	34.38	102	87	58	0	4	0	0

Based on 1961-90 normals

Weather Data for the Week Ending November 7, 1998

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP, °F		PRECIP.	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 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
	TOLEDO	46	33	54	26	40	-5	0.00	-0.59	0.00	3.09	56	30.39	109	87	57	0	4	0	0
	YOUNGSTOWN	43	32	56	26	38	-7	0.24	-0.45	0.06	6.01	89	33.45	104	92	54	0	3	4	0
OK	OKLAHOMA CITY	51	44	56	34	47	-7	1.76	1.20	1.65	12.89	169	32.37	106	94	74	0	0	4	1
	TULSA	53	45	65	35	49	-6	2.03	1.24	1.68	16.20	177	43.74	121	96	67	0	0	4	1
OR	ASTORIA	53	44	57	41	49	-1	2.30	0.23	0.83	9.80	92	55.31	116	99	79	0	0	7	1
	BURNS	42	22	48	11	32	-6	0.26	0.00	0.09	1.34	84	13.16	167	90	55	0	6	4	0
	EUGENE	54	45	60	43	49	0	1.56	-0.07	0.69	4.26	63	32.07	94	97	73	0	0	7	1
	MEDFORD	52	42	57	39	47	-1	1.20	0.56	0.45	3.06	103	21.02	162	97	63	0	0	7	1
	PENDLETON	50	36	53	31	43	-2	0.83	0.51	0.29	2.54	144	11.57	126	97	68	0	2	4	0
	PORTLAND	53	45	57	43	49	0	2.05	1.00	0.60	5.35	98	30.36	117	97	73	0	0	7	2
	SALEM	53	45	58	41	49	1	1.29	0.05	0.45	4.48	78	32.98	121	97	74	0	0	7	0
PA	ALLENTOWN	50	29	55	25	39	-8	0.07	-0.78	0.00	7.56	98	37.74	102	83	43	0	6	1	0
	ERIE	45	37	51	32	41	-7	0.13	-0.80	0.09	3.70	41	28.36	81	85	56	0	1	3	0
	MIDDLETOWN	53	35	59	29	44	-5	0.00	-0.79	0.00	4.73	66	44.73	130	75	36	0	2	0	0
	PHILADELPHIA	52	37	59	32	45	-6	0.00	-0.72	0.00	3.70	55	29.66	84	69	40	0	1	0	0
	PITTSBURGH	46	34	55	27	40	-7	0.05	-0.57	0.05	3.41	57	30.95	98	82	47	0	3	1	0
	WILKES-BARRE	44	31	48	22	37	-8	0.02	-0.68	0.02	5.48	80	32.96	105	85	54	0	3	1	0
	WILLIAMSPORT	48	33	56	27	40	-6	0.06	-0.81	0.00	4.20	55	38.15	109	74	42	0	2	1	0
RI	PROVIDENCE	51	33	56	28	42	-6	0.00	-0.98	0.00	5.98	73	48.57	129	77	42	0	4	0	0
SC	BEAUFORT	69	53	81	40	61	-2	0.04	-0.48	0.04	7.16	89	46.70	101	94	58	0	0	1	0
	CHARLESTON	69	51	81	37	60	-2	0.03	-0.53	0.02	16.89	206	63.38	137	92	54	0	0	2	0
	COLUMBIA	67	46	81	30	56	-1	0.13	-0.53	0.06	6.96	95	43.22	98	91	49	0	1	2	0
	GREENVILLE	60	47	74	37	54	-1	0.91	0.06	0.91	7.99	91	46.27	104	89	58	0	0	1	1
SD	ABERDEEN	38	27	54	22	33	-5	0.08	-0.09	0.08	7.43	236	26.99	152	91	62	0	6	1	0
	HURON	41	26	49	19	33	-5	0.13	-0.09	0.12	5.25	154	23.22	122	94	63	0	6	2	0
	RAPID CITY	34	28	51	25	31	-9	0.81	0.64	0.41	7.91	315	20.78	132	98	83	0	6	5	0
	SIOUX FALLS	39	26	51	19	33	-7	0.07	-0.23	0.07	7.54	148	28.77	129	94	65	0	6	1	0
TN	BRISTOL	56	38	71	22	47	-3	0.15	-0.49	0.10	2.74	42	37.32	107	95	53	0	2	4	0
	CHATTANOOGA	61	43	78	29	52	-3	0.19	-0.77	0.13	2.33	28	44.80	100	96	52	0	1	1	0
	KNOXVILLE	58	41	73	28	49	-3	0.21	-0.57	0.09	2.95	44	45.67	115	94	53	0	2	3	0
	MEMPHIS	62	44	81	32	53	-3	0.22	-0.79	0.17	4.26	56	46.21	109	90	49	0	1	2	0
	NASHVILLE	60	40	76	25	50	-4	0.04	-0.79	0.02	3.02	44	42.93	109	87	46	0	2	2	0
TX	ABILENE	57	42	68	35	50	-9	0.88	0.48	0.88	2.47	40	12.33	55	94	61	0	0	1	1
	AMARILLO	49	36	63	34	43	-8	0.18	-0.03	0.02	7.89	222	16.57	89	96	65	0	0	4	0
	AUSTIN	65	49	78	42	57	-7	2.11	1.47	1.69	21.27	288	35.63	126	96	67	0	0	5	1
	BEAUMONT	72	53	83	45	62	-2	0.01	-1.07	0.01	18.53	159	52.06	107	94	56	0	0	1	0
	BROWNSVILLE	76	63	85	56	69	-2	2.64	2.22	2.29	14.12	153	18.55	76	96	73	0	0	6	1
	CORPUS CHRISTI	73	59	80	51	66	-3	0.83	0.37	0.43	17.19	191	28.08	101	97	67	0	0	4	0
	DEL RIO	67	50	76	47	59	-6	1.27	0.97	0.65	4.25	79	28.07	165	95	63	0	0	4	2
	EL PASO	67	44	70	42	56	-1	0.00	-0.11	0.00	2.80	109	6.10	76	86	35	0	0	0	0
	FORT WORTH	59	46	71	37	53	-8	2.12	1.49	1.97	8.44	112	27.03	89	89	59	0	0	3	1
	GALVESTON	73	60	84	50	66	-1	0.11	-0.56	0.08	18.53	195	45.73	127	95	64	0	0	2	0
	HOUSTON	70	52	81	44	61	-3	1.57	0.65	1.50	19.50	193	42.12	108	91	58	0	0	3	1
	LUBBOCK	53	40	66	36	47	-8	0.00	-0.25	0.00	3.08	65	12.52	71	96	62	0	0	0	0
	MIDLAND	59	45	70	41	52	-5	0.04	-0.18	0.03	1.42	31	4.47	32	94	62	0	0	2	0
	SAN ANGELO	60	45	69	42	52	-7	0.66	0.32	0.46	3.15	51	12.10	64	98	65	0	0	4	0
	SAN ANTONIO	65	50	78	45	58	-7	1.86	1.17	1.00	21.50	295	40.14	146	94	54	0	0	5	1
	VICTORIA	70	53	76	48	62	-5	1.46	0.82	0.55	20.04	207	34.12	102	99	68	0	0	4	2
	WACO	61	47	73	37	54	-8	1.43	0.78	1.01	12.98	172	28.94	102	95	67	0	0	5	1
	WICHITA FALLS	53	44	61	36	49	-8	0.19	-0.24	0.10	3.11	45	19.00	72	89	68	0	0	4	0
UT	SALT LAKE CITY	49	33	53	28	41	-5	0.88	0.58	0.56	3.66	120	22.13	160	88	44	0	3	4	1
VT	BURLINGTON	42	37	48	34	40	-2	0.17	-0.57	0.01	8.22	119	49.19	166	78	56	0	0	3	0
VA	LYNCHBURG	52	32	69	22	42	-10	0.30	-0.46	0.21	3.39	44	43.54	123	98	56	0	3	3	0
	NORFOLK	54	44	61	38	49	-7	0.75	0.09	0.53	4.74	61	48.35	123	90	60	0	0	2	1
	RICHMOND	54	35	67	31	45	-8	0.67	-0.09	0.50	5.04	66	41.11	110	88	42	0	2	3	1
	ROANOKE	52	36	71	27	44	-7	0.10	-0.70	0.05	2.67	33	41.94	117	88	48	0	2	2	0
	WASH/DULLES	53	30	64	21	41	-8	0.19	-0.58	0.15	2.95	40	34.88	101	84	38	0	4	2	0
WA	HANFORD	52	34	54	29	43	--	0.63	--	0.62	1.02	--	5.36	--	98	68	0	4	2	1
	OLYMPIA	52	38	56	33	45	1	0.80	-0.85	0.29	5.60	68	32.12	89	100	78	0	0	6	0
	QUILLAYUTE	53	42	54	30	48	1	1.28	-1.91	0.37	10.70	58	58.57	75	98	81	0	1	6	0
	SEATTLE-TACOMA	53	43	56	36	48	0	1.89	0.69	1.39	6.08	96	25.28	95	98	73	0	0	5	1
	SPOKANE	44	36	45	31	40	0	0.78	0.37	0.39	1.28	61	11.48	93	98	73	0	2	4	0
	YAKIMA	50	31	53	21	41	-2	0.18	-0.01	0.06	0.43	42	7.36	128	98	63	0	5	4	0
WV	BECKLEY	47	31	63	21	39	-8	0.79	0.12	0.74	4.20	61	42.43	120	96	59	0	4	3	1
	CHARLESTON	50	35	64	24	42	-8	0.45	-0.34	0.43	4.63	67	43.74	120	93	47	0	3	2	0
	ELKINS	44	29	56	17	36	-9	0.40	-0.34	0.12	5.75	76	43.10	111	94	55	0	5	4	0
	HUNTINGTON	51	37	66	27	44	-6	0.29	-0.44	0.15	3.55	55	38.93	110	90	47	0	1	3	0
WI	EAU CLAIRE	41	28	53	22	34	-4	0.00	-0.42	0.00	2.66	39	27.59	94	86	51	0	6	0	0
	GREEN BAY	44	32	52	26	38	-2	0.00	-0.52	0.00	5.10	82	26.80	104	75	54	0	4	0	0
	MADISON	43	29	52	21	36	-5	0.00	-0.50	0.00	5.68	94	37.70	137	87	58	0	5	0	0
	MILWAUKEE	46	34	53	28	40	-3	0.05	-0.53	0.03	4.69	73	30.90	108	86	60	0	4	2	0
WY	CASPER	38	27	45	20	33	-5	0.44	0.25	0.20	5.86	279	14.41	128	98	75	0	6	4	0
	CHEYENNE	39	27	45	25	33	-6	0.34	0.20	0.19	2.10	98	10.39	77	100	72	0	6	5	0
	LANDER	39	26	48	18	33	-4	1.38	1.16	0.74	6.02	247	17.16	145	99	66	0	7	5	1
	SHERIDAN	38	25	49	8	31	-7	0.79	0.57	0.23	6.13	221	17.17	130	99	62	0	6	4	0

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

(Continued from front cover)

Rain persisted across the **central Plains** through midweek, resulting in additional river and lowland flooding in portions of **Oklahoma** and **Kansas**. Mostly dry weather returned to cotton areas from **California** to the **southern High Plains**, allowing harvesting to proceed. Meanwhile, rain in the **Northwest** boosted topsoil moisture. In the **Southeast**, scattered showers also improved soil moisture but briefly disrupted fieldwork. On November 5, fast-moving Tropical Storm Mitch crossed **southern Florida**, preceded and accompanied by gusty winds and 4- to 10-inch rainfalls. In the **Corn Belt**, late corn and soybean harvesting continued uninterrupted across northern areas, but was slowed by widespread showers in southern areas. Light snow developed toward week's end from the **northern Plains** to the **western Corn Belt**.

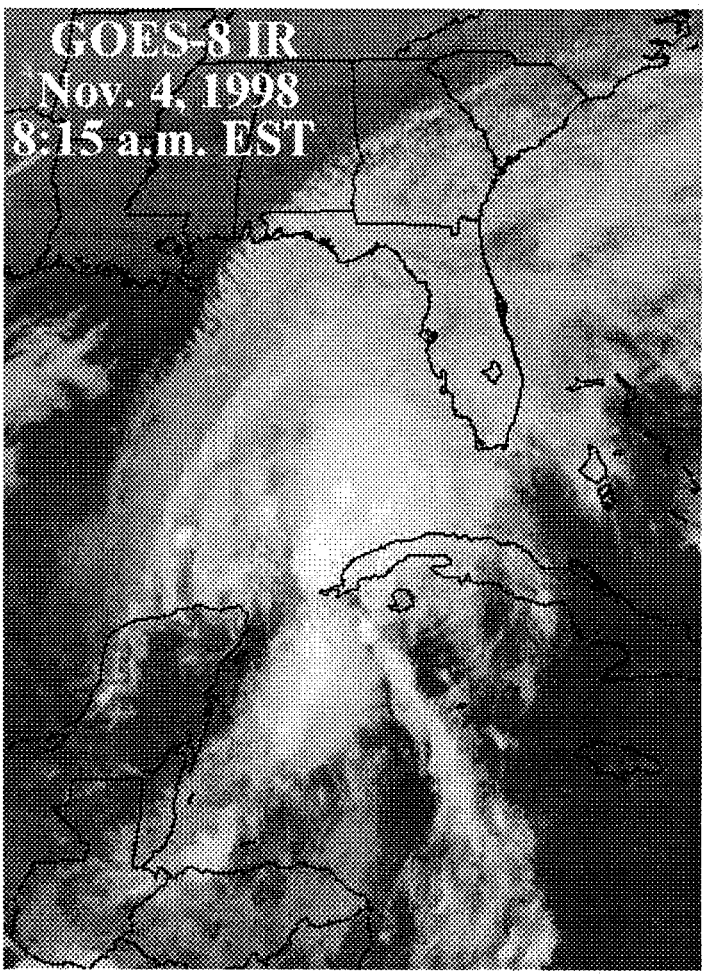
Early in the week, heavy rain and flooding continued across portions of the **central Plains**. From October 30 - November 1, rainfall exceeded 10 inches at a few sites in **southern Kansas**, including 10.47 inches in **Anthony** and 10.15 inches in **Madison**. On November 1, record crests were established on the **Arkansas River** at **Derby** (breaking a July 1993 standard) and the **Cottonwood River** at **Plymouth** (topping a June 1965 high-water mark). Two days later, record crests on the **Arkansas River** (11.89 feet above flood stage) and **Walnut River** (14.45 feet above flood stage) converged on **Arkansas City, KS**, causing extensive flooding.

Meanwhile, warm weather was finally displaced from the **Southeast**. On Sunday, **Birmingham, AL** noted a daily-record high of 85°F. By midweek, however, cold air edged into the **Northeast**, resulting in a daily-record low (22°F) in **Scranton, PA**. On Thursday, the passage of Tropical Storm Mitch across **Florida** helped to draw the cold air deeper into the **South**. Two days later, daily-record lows were established in **Lynchburg, VA** (21°F) and **Charlotte, NC** (26°F). Farther south, lows dipped to 30°F in **Meridian, MS** and 31°F in **Tallahassee, FL**.

Having produced catastrophic flooding in **Honduras**, **Nicaragua**, and elsewhere in **Central America**, former Hurricane Mitch nearly dissipated across **southeastern Mexico** in early November. However, the remnant circulation re-emerged over the **Gulf of Mexico** on Wednesday, regaining tropical-storm status. Mitch then accelerated northeastward, crossing **southern Florida** on the morning of November 5, with maximum sustained winds near 55 mph in squalls east of the center. A wind gust to 73 mph was clocked at **Fowey Rocks Lighthouse**, near **Miami**. Despite the storm's rapid movement (about 25 mph), November 4-5 rainfall reached 6.06 inches near the point of landfall at **Ft. Myers**, and 6.73 inches at **West Palm Beach**, just south of where Mitch departed **Florida's east coast**.

Stormy weather returned to the **Western and Central States** toward week's end. On the **Plains**, the renewed storminess maintained adequate to surplus soil moisture. Snowfall on Saturday totaled 2.5 inches in **Moline, IL** and 2.6 inches in **Burlington, IA**, the first accumulations of the season. Farther west, month-to-date snowfall reached 15.4 inches in **Rapid City, SD**. Cool weather lingered as far south as **Texas**, where **San Antonio** noted a high of 51°F on Friday. precipitation totaled 2.86 inches at **Blue Canyon** and 2.68 inches in **Kentfield**.

Very mild weather continued in **Alaska**, as mainland temperatures ranged from 3 to 23°F above normal. **Barrow** posted three daily-record maxima during the week, including a high of 35°F on Saturday.



Tropical Storm Mitch, centered just north of the Yucatán Peninsula, accelerates toward southern Florida.

October Weather and Crop Summary

Weather

A very wet weather pattern unfolded across the Plains, eliminating topsoil moisture deficits, but slowing cotton harvesting and causing some mid- to late-month flooding. Warm weather (up to 3°F above normal) accompanied the Plains' rainfall, however, fostering winter wheat establishment. Corn Belt harvesting advanced at an ahead-of-normal pace despite above-normal rainfall, as warm weather kept soils from becoming too wet. In the Southeast, where monthly readings ranged from 2 to 5°F above normal, dry weather reduced topsoil moisture, but promoted summer-crop harvesting and winter wheat planting. Unfavorably dry weather also developed in the Pacific Northwest. In contrast, unusually cool, occasionally showery conditions affected the remainder of the West. Monthly readings ranged from 2 to 5°F below normal in California and the Great Basin.

An active storm track across the Plains and the Northeast resulted in the aforementioned wet weather and contributed to widespread lowland flooding in several areas. In eastern New England, October 8-11 rainfall totaled 4 to locally more than 10 inches. A few days earlier, similar totals had produced minor flooding from northeastern Texas to the middle Mississippi and lower Missouri Valleys. Torrential rainfall (8 to 20 inches) struck southeastern Texas from October 17-19. Resultant flooding left low-lying areas submerged, stranded or washed away livestock, and damaged fences and farm buildings. At month's end, heavy rain (4 to 10 inches) erupted across the central and southern Plains. The rain further eased long-term drought on the southern Plains, but left standing water and caused some wash-outs in winter wheat fields near rivers and streams from western Oklahoma to eastern Kansas.

October precipitation records were established at several sites in the Plains States, including:

Location	Total (Inches)	Former Record/Year
San Antonio, TX	18.07	9.74 in 1994
Wichita, KS	9.42	6.13 in 1959
Mellette, SD	8.68	4.50 in 1982
Aberdeen, SD	7.29	5.14 in 1983
Rapid City, SD	5.60	3.82 in 1982
Glasgow, MT	3.05	1.80 in 1994

Severe thunderstorms erupted across Oklahoma on October 4, sparking 20 tornadoes. The previous single-day October record in one State was 18 tornadoes in Florida on October 7, 1996. Two weeks later, record rains suddenly struck southeastern Texas. On October 17, precipitation totaled 11.26 inches in San Antonio, nearly doubling their previous single-day record. By month's end, San Antonio's October rainfall shattered their former monthly record of 15.78 inches, set in September 1946. At Randolph AFB, near San Antonio, monthly rainfall reached 22.16 inches. The Colorado River at Wharton, TX crested at about 9.8 feet above flood stage on October 23, approximately 3.5 feet above the December 1991 crest, but slightly below the July 1940 record. Along the Guadalupe River, peak stages at Cuero and Victoria were calculated to be two to three times greater than the 100-year peak discharge. The river crested about 30 feet above flood stage in Cuero.

Amarillo, TX (6.48 inches), measured its greatest October precipitation since 1941, and third-highest October total on record. Similarly, Portland, ME (10.45 inches), experienced its third-wettest October. In contrast, pockets of long-term drought lingered across the southern Plains. Abilene, TX, posted their seventh consecutive month with below-normal rainfall *(fig. 1)*. In Midland, TX, January-October precipitation (4.43 inches, or 32 percent [%] of normal) was second only to a 4.04-inch total in 1951.

ABILENE, TEXAS
1998 CUMULATIVE RAINFALL VS. NORMAL

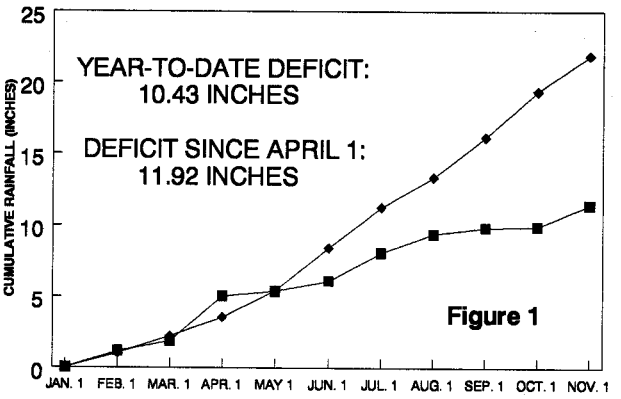


Figure 1

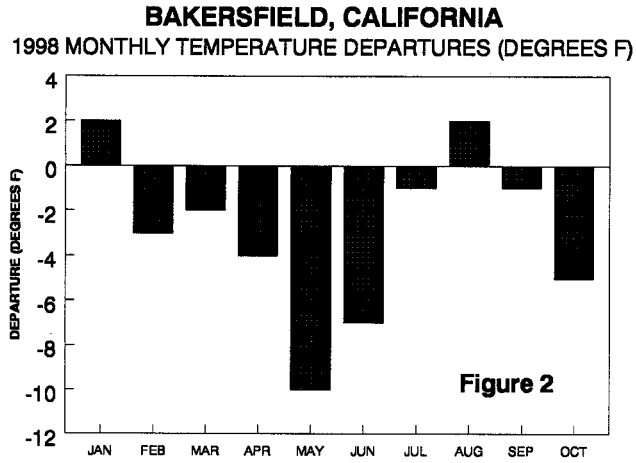
Meanwhile, drought continued to develop from the Southeast to the Mid-Atlantic region. Toward month's end, the level of the Tug Fork River at Welch, WV stood at 2.1 feet, slightly below the previous record-low stage set in September 1987. Farther south, rivers in areas affected by Hurricane Georges started the month very high, but quickly receded under a dry regime. The Choctawhatchee River at Caryville, FL crested at 5.7 feet above flood stage on October 2. But with warm weather accompanying monthly rainfall as low as 0.02 inch (1% of normal) in Augusta, GA and 0.11 inch (3%) in Pensacola, FL, topsoil moisture quickly evaporated. In Washington, DC, another dry month (0.59 inch, or 20% of normal) left 4-month rainfall at 35% of normal. Farther north, long-term drought continued in portions of the Great Lakes region. In Flint, MI, near-normal rainfall (2.23 inches, or 102% of normal) occurred for the first time since March, but April-October precipitation remained far below normal (11.20 inches, or 54%), breaking an 1895 record.

The Northwest, especially east of the Cascades, was also dry during October. Monthly precipitation totaled 0.27 inch (28% of normal) in Spokane, WA, 0.11 inch (15%) in Boise, ID, and 0.03 inch (4%) in Burns, OR. Although cooler-than-normal weather in the Northwest slowed evaporation rates, soil moisture continued to diminish. Meanwhile in California, monthly temperatures in Bakersfield averaged 62.7°F (5.1° below normal), their lowest in October since 1984. Near- to below-normal temperatures prevailed in Bakersfield during 9 of the last 10 months *(fig. 2)*.

Across the Midwest, a near- to later-than-normal first freeze date allowed crops to reach maturity and resulted in a longer-than-normal growing season. In Indiana, Indianapolis' growing season stretched to 212 days (March 25 to October 22), their longest since 1941. By October 23, sub-freezing temperatures were reported as far south as Charlotte, NC (31°F).

October was a mild month in Alaska, as temperatures ranged from near-normal levels in the south to as much as 11°F above normal in the north. However, a wet pattern continued across portions of southern Alaska. Juneau netted 12.33 inches (157% of normal), most of which fell on October 19-20. In fact Juneau's October 19-20 total (6.28 inches) was their greatest on record for any 2-day

period. In Kodiak, year-to-date precipitation reached 93.12 inches (169% of normal), aided by October's 13.96-inch total.



In Hawaii, drier-than-normal weather prevailed in nearly all areas except on portions of the Big Island. Only 0.13 inch (6% of normal) dampened Honolulu, leaving their year-to-date total at 2.28 inches (15%). Hilo, however, received 16.01 inches (167% of normal).

Fieldwork

Crops rapidly matured, as temperatures remained seasonable or above normal east of the Rocky Mountains throughout the month. Harvest momentum accelerated in the Corn Belt, Great Plains, and Southeast, as early-month dry weather aided progress. As the month progressed, most of the Corn Belt and Great Plains received substantial rainfall, but the harvest pace remained ahead of the 5-year average. Harvest operations lagged in the Southwest, as crops matured well behind normal, especially in California. Dry weather hindered fall seeding operations in the High Plains. Heavy rainfall caused local flooding in the Northeast early in the month, and some parts of Texas, Oklahoma, and Kansas experienced flooding and erosion late in the month.

As the month began, nearly all of the Nation's corn had reached maturity and most soybeans were dropping leaves, more than 1 week ahead of normal for both crops. Dry weather provided excellent harvest conditions for the first week of the month. Thereafter, periodic rains interfered with harvest activities, beginning in the western Corn Belt, then in the southern, central, and eastern Corn Belt. Harvest activities resumed in all areas after the brief rain delays and remained well ahead of normal throughout the month. By the end of the month, the harvest season was winding down, more than 1 week early for corn and nearly 1 week early for soybeans.

Cotton development began the month 1 week ahead of normal, with virtually all fields in the Mississippi Delta States in the boll opening stage, much of which was harvested. Most of the crop was mature in the southern Plains and Southeast, but continued to rapidly advance in California. Georges' heavy rains and subsequent flooding damaged cotton fields along the eastern Gulf coast and halted harvest activity. Harvest efforts were interrupted by rain in the northern and extreme southern areas of the Mississippi Delta, as well as parts of the Atlantic Coastal Plains during the first half of the month. Meanwhile, dry conditions in the central Mississippi Delta region and western Oklahoma aided progress. Harvest accelerated during the last half of the month, as rain delays were mostly limited to the southern Plains. As the month ended, two-thirds of the crop was harvested, ahead of the normal pace, but California producers lagged well behind the 5-year average.

Less than half of the winter wheat was seeded when the month began and only one-fourth had emerged. Early-month rains in the southern Plains were welcomed in spite of the resulting planting delays, as the moisture was needed to germinate seeds. In the northern Rocky Mountains and Pacific Northwest, favorable weather allowed planting to move ahead of the 5-year average. Growers in the eastern Corn Belt also made rapid seeding progress, especially in Ohio, where planting progressed well ahead of normal. In the southern Corn Belt and northern Delta region, rain curtailed planting until mid-month, when progress began to gain momentum. Emergence lagged in the central and southern Plains due to the slow planting pace, but rain during the first half of the month boosted emergence in the northern Plains.

The rice harvest progressed ahead of normal, except in California, where progress continued to lag behind normal throughout the month. Warm weather early in the month aided sorghum development, allowing the harvest pace to accelerate in the Great Plains and southern Corn Belt. By mid-month, harvest was virtually complete in most areas of the Mississippi Delta States. By the end of the month, growers in the southern Corn Belt and Great Plains were also nearly finished. Peanut harvesting fell behind the normal pace due to heavy rains and flooding from Hurricane Georges and continued to lag throughout the month in Georgia and Alabama. In the southern Plains and along the Atlantic Coastal Plains, the harvest progressed ahead of normal.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on November 10, 1998. Forecasts refer to November 1.

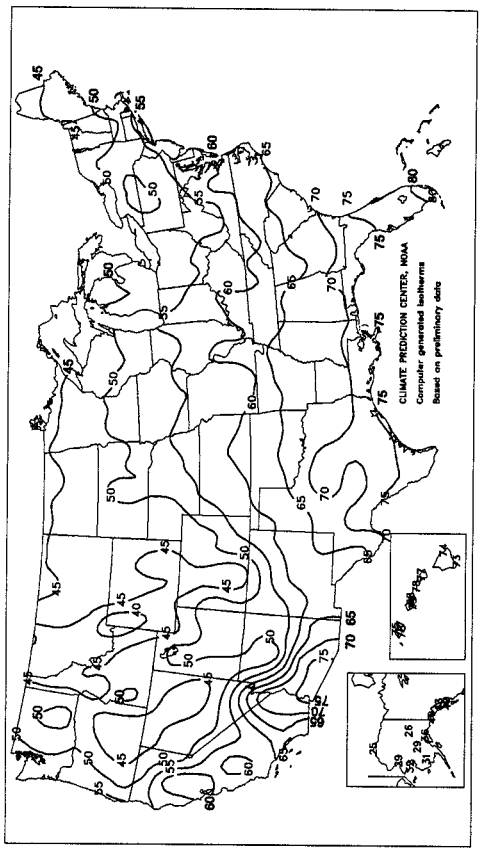
Corn for grain production is forecast at 9.84 billion bushels, up 1 percent (%) from last month and up 5% from 1997. Yields are expected to average 133.3 bushels per acre, up 1.3 bushels from last month and up 6.3 bushels from a year ago. If realized, this would be the second-largest production and the second-highest yield on record. Yield prospects increased in Iowa, Nebraska, Ohio, and Wisconsin due to ideal weather conditions during October. The yields in Illinois, Indiana, and Minnesota, the three other major-producing States, remained unchanged. Acreage for harvest is estimated at 73.8 million acres, unchanged from last month.

Soybean production is forecast at a record-high 2.76 billion bushels, down fractionally from October 1, but 2% above last year's record of 2.70 billion bushels. The yield forecast, at 38.6 bushels per acre, is down 0.1 bushel from last month and is 0.2 bushel below the 1997 final yield. If realized, this year's soybean yield will be the third highest on record. In the major-producing States, the forecasted yields decreased by 2.0 bushels in Arkansas and Missouri. Yield increased 3.0 bushels in Ohio but remained unchanged in the other major-producing States. Acreage for harvest is estimated at 71.6 million acres, unchanged from October 1.

All cotton production is forecast at 13.2 million bales, down 57,500 bales from last month and down 30% from 1997. Yield is expected to average 612 pounds per harvested acre, down 4 pounds from last month and down 68 pounds from last year. Georgia's production was lowered 100,000 bales from the October forecast, as yield potential continued to decline. Arkansas production was increased 50,000 bales.

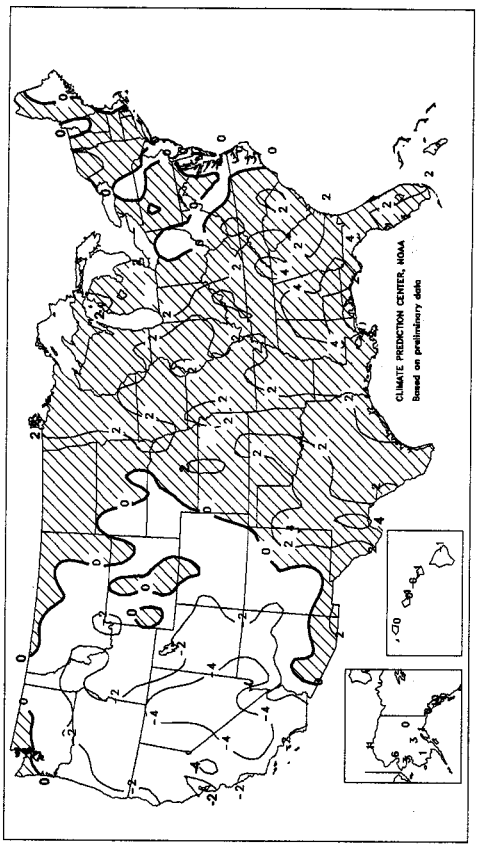
Average Temperature (°F)

OCT 1998



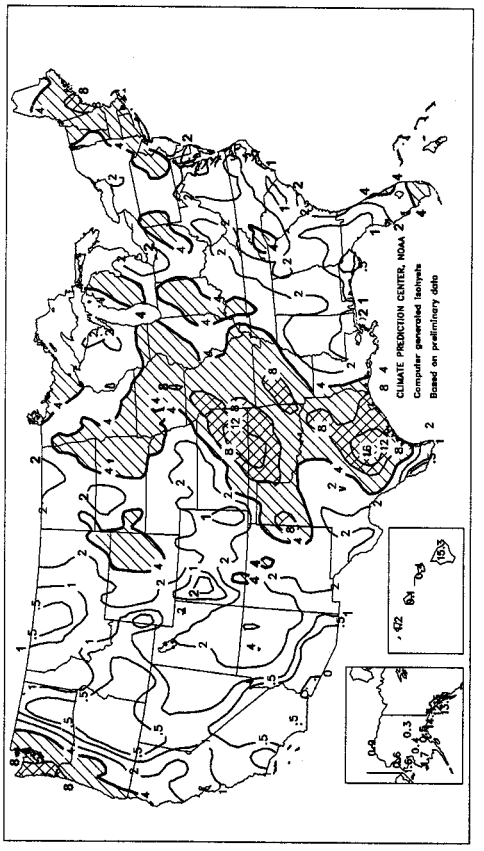
Departure of Average Temperature from Normal (°F)

OCT 1998



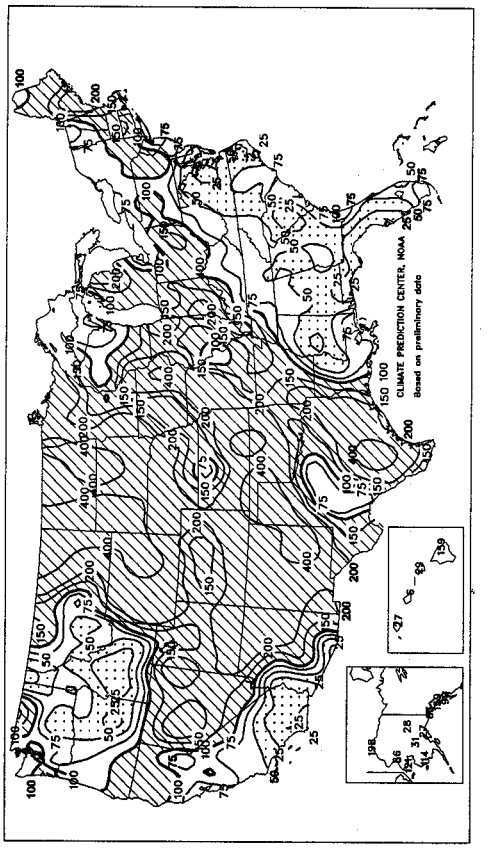
Total Precipitation (Inches)

OCT 1998



Percent Of Normal Precipitation

OCT 1998



TEMPERATURE AND PRECIPITATION SUMMARY
October 1998

STATES AND STATIONS		TEMP, °F		PRECIP.	
		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL	BIRMINGHAM	67	5	1.17	-1.64
	HUNTSVILLE	65	4	2.38	-0.87
	MOBILE	70	2	1.35	-1.59
	MONTGOMERY	68	2	0.72	-1.73
AK	ANCHORAGE	36	2	0.54	-1.49
	BARROW	25	12	0.89	0.45
	FAIRBANKS	26	1	0.25	-0.60
	JUNEAU	43	0	12.33	4.49
	KODIAK	40	0	13.96	6.78
	NOME	32	4	1.63	0.28
AZ	FLAGSTAFF	44	-3	3.11	1.50
	PHOENIX	74	-1	1.03	0.38
	TUCSON	71	0	0.24	-0.82
	YUMA	75	-1	0.00	-0.24
	FORT SMITH	65	3	5.79	2.11
AR	LITTLE ROCK	66	3	4.49	0.87
	BAKERSFIELD	62	-5	0.24	-0.06
CA	EUREKA	55	0	3.06	0.25
	FRESNO	63	-2	0.16	-0.37
	LOS ANGELES	65	-1	0.00	-0.35
	REDDING	62	-2	2.31	0.07
	SACRAMENTO	61	-3	0.81	-0.27
	SAN DIEGO	65	-2	0.08	-0.29
	SAN FRANCISCO	60	-1	0.62	-0.60
	ALAMOSA	43	-1	1.66	0.96
CO	CO SPRINGS	50	0	0.93	0.09
	DENVER	50	-2	1.20	0.21
	GRAND JUNCTION	53	-2	1.36	0.38
	PUEBLO	54	0	1.60	1.03
	BRIDGEPORT	55	-1	3.65	0.54
CT	HARTFORD	52	0	5.66	2.09
DC	WASHINGTON	60	0	0.59	-2.43
DE	WILMINGTON	57	1	2.81	-0.07
FL	DAYTONA BEACH	76	3	1.84	-2.29
	JACKSONVILLE	72	2	3.01	0.11
	KEY WEST	80	1	4.78	0.47
	MIAMI	81	2	5.71	0.07
	ORLANDO	77	2	0.64	-1.78
	PENSACOLA	72	2	0.11	-4.10
	TALLAHASSEE	71	3	0.18	-2.74
	TAMPA	77	3	0.47	-1.55
	WEST PALM BEACH	80	2	1.36	-5.24
GA	ATHENS	65	3	2.35	-0.93
	ATLANTA	66	3	0.26	-2.79
	AUGUSTA	66	2	0.02	-2.82
	COLUMBUS	69	3	0.54	-1.68
	MACON	66	2	0.94	-1.24
	SAVANNAH	69	1	1.26	-1.11
HI	HILO	74	-2	16.01	6.41
	HONOLULU	79	0	0.13	-2.15
	KAHULUI	77	-1	0.10	-1.13
	LIHUE	77	-1	0.98	-3.43
ID	BOISE	51	-1	0.11	-0.64
	LEWISTON	50	-3	0.62	-0.28
	POCATELLO	46	-2	0.28	-0.63
IL	CHICAGO/O'HARE	55	3	5.22	2.81
	MOLINE	54	1	7.61	4.68
	PEORIA	55	1	3.22	0.57
	ROCKFORD	53	2	4.59	1.70
	SPRINGFIELD	57	1	3.30	0.70
IN	EVANSVILLE	60	3	3.38	0.51
	FORT WAYNE	54	1	3.99	1.50
	INDIANAPOLIS	57	2	4.89	2.26
	SOUTH BEND	54	1	2.58	-0.50
IA	BURLINGTON	58	4	8.70	5.77
	CEDAR RAPIDS	50	-1	9.27	6.97
	DES MOINES	54	1	2.97	0.35
	DUBUQUE	52	1	4.48	1.75
	SIOUX CITY	54	2	3.49	1.55
	WATERLOO	52	2	5.39	2.82
KS	CONCORDIA	58	2	2.18	0.19
	DODGE CITY	59	2	4.20	2.92
	GOODLAND	52	0	1.68	0.78
	TOPEKA	59	3	5.01	1.95
	WICHITA	61	2	9.42	7.20
KY	JACKSON	59	2	2.59	-0.61
	LEXINGTON	58	1	2.40	-0.17
	LOUISVILLE	62	4	2.77	0.06
	PADUCAH	--	--	7.37	4.37
LA	BATON ROUGE	71	2	2.23	-1.25
	LAKE CHARLES	72	3	5.41	1.46
	NEW ORLEANS	73	4	1.82	-1.23
	SHREVEPORT	68	2	5.72	1.99
ME	CARIBOU	43	0	2.22	-0.88
	PORTLAND	49	0	10.45	6.55
MD	BALTIMORE	56	-1	1.06	-1.91
MA	BOSTON	54	-1	5.38	2.08
	WORCESTER	50	0	4.93	0.76
MI	ALPENA	47	1	4.61	2.52
	GRAND RAPIDS	52	3	2.98	0.17
	HOUGHTON LAKE	48	1	4.00	1.83
	LANSING	51	2	2.40	0.30
	MARQUETTE	47	4	1.93	-1.61
	MUSKEGON	52	2	4.09	1.29
MN	DULUTH	46	2	4.21	1.72
	INT'L FALLS	44	2	4.20	2.23
	MINNEAPOLIS	51	2	1.89	-0.30
	ROCHESTER	49	2	4.71	2.39
	ST. CLOUD	49	3	1.89	-0.32
MS	JACKSON	68	4	0.51	-2.75
	MERIDIAN	67	3	0.77	-2.29
	TUPELO	66	4	3.12	-0.31
MO	COLUMBIA	58	1	7.27	4.05
	KANSAS CITY	58	2	8.15	4.86
	SAINT LOUIS	60	2	2.51	-0.17
	SPRINGFIELD	58	1	3.97	0.39
MT	BILLINGS	49	-1	1.24	0.10
	BUTTE	41	0	0.33	-0.36
	GLASGOW	47	1	3.05	2.44
	GREAT FALLS	46	-1	0.65	-0.13
	KALISPELL	41	-1	0.82	-0.05
	MILES CITY	49	1	2.37	1.47
	MISSOULA	43	-1	0.36	-0.38
NE	GRAND ISLAND	55	2	2.07	0.72
	LINCOLN	56	2	3.19	1.07
	NORFOLK	54	2	3.74	2.14
	NORTH PLATTE	50	0	1.92	0.94
	OMAHA	56	2	2.56	0.28
	SCOTTSBLUFF	48	-1	2.76	1.95
	VALENTINE	49	0	3.55	2.64
NV	ELY	42	-4	1.35	0.46
	LAS VEGAS	66	-2	0.22	0.01
	RENO	50	-1	0.34	-0.04
	WINNEMUCCA	45	-3	1.10	0.48
NH	CONCORD	49	1	3.58	0.35
NJ	NEWARK	57	0	1.81	-1.24
NM	ALBUQUERQUE	58	0	1.80	0.91
NY	ALBANY	51	0	4.14	1.31
	BINGHAMTON	49	0	3.08	0.19
	BUFFALO	53	1	2.10	-0.99
	ROCHESTER	51	0	1.45	-0.99
	SYRACUSE	51	1	2.53	-0.70
NC	ASHEVILLE	58	2	1.79	-1.80
	CHARLOTTE	62	0	1.38	-1.98
	GREENSBORO	60	2	0.62	-2.88
	HATTERAS	66	0	1.01	-3.99
	RALEIGH	60	0	2.78	-0.06
	WILMINGTON	65	0	1.36	-1.33
ND	BISMARCK	47	1	3.09	2.19
	DICKINSON	47	1	4.73	3.77
	FARGO	47	2	4.73	3.05
	GRAND FORKS	45	1	5.83	4.51
	JAMESTOWN	46	1	4.31	3.35
	WILLISTON	46	1	3.24	2.47
OH	AKRON-CANTON	52	-1	3.96	1.61
	CINCINNATI	56	1	2.82	-0.04
	CLEVELAND	53	0	2.36	-0.18
	COLUMBUS	55	2	3.06	0.91
	DAYTON	55	1	3.48	1.00
	MANSFIELD	52	-1	2.83	0.47
	TOLEDO	53	2	2.13	0.03
	YOUNGSTOWN	52	0	3.41	0.79
OK	OKLAHOMA CITY	64	2	6.76	3.53
	TULSA	63	1	9.04	5.38
OR	ASTORIA	52	0	6.86	1.13
	BURNS	42	-3	0.03	-0.69
	EUGENE	52	-2	2.34	-1.07
	MEDFORD	53	-2	1.81	0.32
	PENDLETON	51	-2	0.60	-0.26
	PORTLAND	54	0	2.20	-0.47
	SALEM	52	0	2.51	-0.47
PA	ALLENTOWN	53	0	4.50	1.57
	ERIE	54	1	1.92	-1.85
	MIDDLETOWN	56	1	2.92	-0.01
	PHILADELPHIA	58	1	1.84	-0.78
	PITTSBURGH	53	0	2.27	-0.09
PA	WILKES-BARRE	50	0	2.99	0.20
	WILLIAMSPORT	52	0	2.61	-0.69
RI	PROVIDENCE	54	0	3.78	0.09
SC	BEAUFORT	69	1	1.48	-1.11
	CHARLESTON	68	2	1.99	-0.91
	COLUMBIA	66	2	0.25	-2.79
	GREENVILLE	63	3	2.77	-1.22
SD	ABERDEEN	48	1	7.29	6.17
	HURON	51	3	5.12	3.65
	RAPID CITY	47	-1	5.60	4.53
	SIOUX FALLS	51	2	6.28	4.60
TN	BRISTOL	57	1	1.68	-0.93
	CHATTANOOGA	64	4	0.67	-2.55
	KNOXVILLE	62	3	1.42	-1.42
	MEMPHIS	67	3	2.34	-0.68
	NASHVILLE	63	3	1.59	-1.03
TX	ABILENE	69	3	1.52	-0.99
	AMARILLO	60	2	6.46	5.11
	AUSTIN	72	0	12.39	8.96
	BEAUMONT	73	3	5.34	1.05
	BROWNSVILLE	77	1	3.59	0.79
	CORPUS CHRISTI	75	1	7.89	4.87
	DEL RIO	72	1	1.46	-0.78
	EL PASO	66	2	2.14	1.38
	FORT WORTH	69	2	5.64	2.12
	GALVESTON	76	3	5.63	2.85
	HOUSTON	72	3	7.77	3.50
	LUBBOCK	64	3	3.06	1.20
	MIDLAND	69	5	1.30	-0.44
	SAN ANGELO	68	2	2.39	-0.01
	SAN ANTONIO	71	1	18.07	14.90
	VICTORIA	73	2	8.24	4.78
	WACO	71	2	6.61	3.25
	WICHITA FALLS	68	4	2.71	-0.03
UT	SALT LAKE CITY	51	-2	1.25	-0.19
VT	BURLINGTON	49	2	2.42	-0.46
VA	LYNCHBURG	56	-1	1.50	-2.20
	NORFOLK	62	0	1.74	-1.41
	RICHMOND	59	1	0.47	-3.06
	ROANOKE	59	2	1.47	-2.38
	WASH/DULLES	56	1	1.50	-1.70
WA	HANFORD	52	--	0.28	-0.10
	OLYMPIA	50	0	3.40	-0.91
	QUILLAYUTE	51	1	8.16	-2.36
	SEATTLE-TACOMA	53	0	3.47	0.24
	SPOKANE	46	-1	0.27	-0.71
	YAKIMA	47	-3	0.19	-0.28
WV	BECKLEY	53	1	1.51	-1.37
	CHARLESTON	58	0	1.67	-1.22
	ELKINS	50	0	1.67	-1.42
	HUNTINGTON	57	1	2.57	-0.26
WI	EAU CLAIRE	50	2	1.09	-1.34
	GREEN BAY	51	3	1.56	-0.67
	MADISON	51	3	3.20	1.03
	MILWAUKEE	54	4	2.47	0.06
WY	CASPER	45	-2	4.62	3.65
	CHEYENNE	46	-1	1.27	0.53
	LANDER	45	-1	3.28	2.15
	SHERIDAN	45	-1	2.69	1.51
PR	SAN JUAN	--	--	6.82	1.15

Based on 1961-90 normals.

National Agricultural Summary

November 2 - 8, 1998

HIGHLIGHTS

A large mass of cold air brought below-normal temperatures to most of the Nation, and the first major snowstorm followed late in the week. Wheat fields in the northern Rocky Mountains and High Plains were blanketed by at least a few inches of snow. The cold weather did not hinder harvest efforts in the northern Corn Belt or Southeast, but rains delayed progress in parts of the southern Corn Belt and Great Plains. The rains aided germination and growth of winter wheat in the central and southern Plains, but also caused some isolated flooding. Harvest activities continued in California until late-week rains halted progress in the northern third of the State.

Winter Wheat: Planting progressed to 93 percent complete, slightly behind the 94 percent average for this date. Wheat had emerged on 83 percent of the acreage, 2 percentage points behind the 5-year average. Farmers in the northern Plains were finished planting, while growers in the central Plains, Pacific Northwest, and Corn Belt were nearly finished. Planting was active in Missouri, but lagged behind normal due to wet weather in the western parts of the State. Dry weather aided planting efforts in Arkansas, but in the Southeast, planting was delayed due to excessively dry soils. Progress was slow in California, but remained more than 1 week ahead of normal. Virtually all of the winter wheat was emerged in the northern Plains. In the central and southern Plains, emergence lagged slightly behind normal. In the Southeast, emergence was hindered by dry soils. Late-week snow in the northern Rocky Mountains provided some insolation from cold weather.

Corn: The Nation's corn harvest advanced 7 percentage points, to 90 percent complete, and remained more than 1 week ahead of the 82 percent normal pace. Dry weather aided harvest efforts in the eastern and northern Corn Belt, where combining remained fairly brisk. In the western and southern Corn Belt, progress was considerably slower, as rain delayed harvest of the remaining fields.

Soybeans: The harvest pace continued to decline, progressing just 5 percentage points, to 94 percent complete. Progress was slow in the Corn Belt, where few fields remained to be harvested. Dry conditions aided harvest efforts in the Mississippi Delta and Southeast. Harvest approached completion in the Delta States and neared the halfway point in the Southeast.

Cotton: The Nation's cotton harvest steadily progressed to 75 percent complete, up from 68 percent the previous week. Normally, 69 percent of the crop would be harvested by this date. California cotton growers harvested 20 percent of their cotton, more than doubling the total prior to last week. Despite the rapid progress, harvest remained well behind the 5-year average. Dry weather aided progress in the Southeast and the Bootheel of Missouri. Progress was nearly halted in the southern Plains, but remained far ahead of the 5-year average in Oklahoma.

Other crops: Sorghum harvested advanced to 88 percent complete, slightly ahead of the 86 percent average. Dry weather aided rapid progress in the southern and central High Plains, while rain halted combining in the southern Corn Belt. Eighty-eight percent of the peanuts were harvested, ahead of the normal pace of 84 percent. Florida peanut producers were nearly finished harvesting, far ahead of the normal progress of 39 percent. Growers in Alabama and Georgia also neared completion, but were slightly behind their normal pace. Progress fell behind normal in Oklahoma, as rain hindered harvest operations. The harvest remained ahead of the 5-year average in Texas, despite scattered rains.

Crop Progress and Condition

Week Ending November 8, 1998

Winter Wheat Percent Planted

	Nov 8 1998	Prev Week	Prev Year	5-Yr Avg
AR	78	63	70	68
CA	30	25	14	21
CO	100	100	100	100
GA	16	10	12	18
ID	98	96	99	98
IL	96	94	99	95
IN	97	92	98	97
KS	97	96	98	99
MI	99	97	99	99
MO	76	64	92	87
MT	100	99	100	98
NE	100	100	100	100
NC	55	45	52	51
OH	100	99	99	98
OK	92	89	96	97
OR	92	87	95	92
SD	100	100	100	100
TX	88	81	91	90
WA	100	100	100	98
ALL	93	90	94	94

These 19 States planted 91% of last year's winter wheat acreage.

Winter Wheat Percent Emerged

	Nov 8 1998	Prev Week	Prev Year	5-Yr Avg
AR	50	35	54	50
CA	8	5	5	8
CO	97	90	98	98
GA	8	6	8	11
ID	86	73	84	81
IL	84	71	92	84
IN	89	71	85	85
KS	90	84	91	94
MI	92	83	97	90
MO	55	42	75	68
MT	88	82	87	83
NE	100	99	100	100
NC	35	20	28	32
OH	98	90	86	86
OK	77	69	81	84
OR	79	69	74	74
SD	100	98	100	98
TX	74	64	79	79
WA	99	98	99	88
ALL	83	75	85	85

These 19 States planted 91% of last year's winter wheat acreage.

Soybeans Percent Harvested

	Nov 8 1998	Prev Week	Prev Year	5-Yr Avg
AL	85	68	67	60
AR	89	78	73	72
GA	53	34	30	36
IL	96	92	99	97
IN	98	94	98	96
IA	99	97	99	99
KS	88	86	91	91
KY	94	85	69	70
LA	100	97	98	92
MI	98	93	90	94
MN	98	97	99	98
MS	98	95	88	83
MO	87	81	86	85
NE	95	92	94	99
NC	40	25	20	22
OH	99	97	97	95
SC	40	22	15	20
SD	95	92	100	97
TN	90	78	61	58
ALL	94	89	91	90

These 19 States harvested 93% of last year's soybean acreage.

Corn Percent Harvested

	Nov 8 1998	Prev Week	Prev Year	5-Yr Avg
CO	78	73	80	79
GA	100	100	100	99
IL	92	82	92	89
IN	93	82	73	76
IA	92	86	90	85
KS	97	96	94	94
KY	97	96	89	92
MI	83	71	29	51
MN	96	90	95	85
MO	87	85	90	85
NE	86	83	79	81
NC	100	100	96	98
OH	85	71	55	66
PA	70	60	52	58
SD	78	66	90	75
TX	100	100	100	100
WI	86	73	56	65
ALL	90	83	82	82

These 17 States harvested 92% of last year's corn acreage.

Cotton Percent Harvested

	Nov 8 1998	Prev Week	Prev Year	5-Yr Avg
AL	91	79	66	75
AZ	63	53	73	74
AR	95	91	83	87
CA	35	15	84	78
GA	65	58	56	67
LA	99	97	98	96
MS	99	98	92	91
MO	87	70	81	86
NM	35	23	52	53
NC	85	75	48	64
OK	76	74	39	42
SC	82	77	53	64
TN	95	92	81	83
TX	71	66	60	56
ALL	75	68	68	69

These 14 States harvested 98% of last year's cotton acreage.

Sorghum Percent Harvested

	Nov 8 1998	Prev Week	Prev Year	5-Yr Avg
AR	100	100	99	99
CO	61	51	16	61
IL	86	86	91	83
KS	94	90	79	87
LA	100	100	100	100
MS	100	100	100	100
MO	88	85	88	85
NE	90	86	84	88
NM	46	34	57	49
OK	83	66	57	57
SD	87	82	89	87
TX	85	81	87	91
ALL	88	83	81	86

These 12 States harvested 99% of last year's sorghum acreage.

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

(Continued on Back Cover)

State Agricultural Summaries

These summaries, issued weekly through the summer growing season, 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. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at http://www.usda.gov/nass/ or from JAWF at http://www.usda.gov/oce/waob/jawf.

ALABAMA: Days suitable for fieldwork 6.4. Topsoil moisture 34% very short, 48% short, 18% adequate. Dry weather prevailed over most of the State. In areas where row-crop harvest has long since passed, farmers wait for moisture to plant wheat, fall forage crops. Cotton harvested 91%, 66% 1997, 75% avg. Soybeans harvested 85%, 67% 1997, 60% avg. Peanuts dug 97%, 100% 1997, 99% avg.; combined 92%, 99% 1997, 97% avg. Wheat planted 41%, 48% 1994, 51% avg. Livestock 2% very poor, 12%, poor, 60% fair, 24% good, 2% excellent. Fall harvest was completed in many areas. Pastures continued to suffer, many cattle producerscontinued feeding hay. Some cattle producers marketed cattle in anticipation of hay, grazing shortages.

ARIZONA: Cotton harvest is progressing but is still 1 week behind last year and the 5-year average. Alfalfa harvest activity was reported as 47% not being harvested, 9% light, 31% moderate, 13% active. Alfalfa virtually unchanged from the previous week. Condition 2% poor, 18% fair, 58% good, 22% excellent. Sheeping off increased slightly. Small grains are being planted in the areas where cotton harvest is furthest along. As of November 8, 9% of the durum wheat, 5% of other wheat, 8% of the barley, 8% of the other small grains had been planted. Other farmers reported preparing for small grain planting. Last week central areas growers harvested cantaloupes, cabbage, green onions, honeydews, mixed greens, spinach, a light volume of bok choy, cilantro, dill, flowering kale, kale. Eastern producers shipped chili peppers, head lettuce. Western producers shipped cantaloupes, honeydews, head lettuce. Western, central citrus groves harvested lemons, navel oranges last week.

ARKANSAS: Days suitable for fieldwork 6. Soil moisture 3% very short, 26% short, 70% adequate, 1% surplus. Week ended with normal temperatures, spotty rainfall, coldest temperatures experienced so far this fall. Heaviest rainfall quantities were in the west. The main farming activities included harvesting cotton, soybeans, planting wheat. Both the soybean, cotton harvest progressed ahead of the 5-year average. Other farm activities included over seeding pastures, treating wheat for ryegrass control, shredding cotton stalks, land preparation activities for next season. Cattle producers continued to wean, market calves, cull cows from their herds. Some producers were feeding hay and marketing cattle early due to lack of adequate pastures. Cattle were treated for worms, given vaccinations, were reported in good condition statewide. Oats 4% fair, 92% good, 4% excellent. Alfalfa 1% very poor, 27% poor, 53% fair, 19% good. Other hay 6% very poor, 15% poor, 42% fair, 36% good, 1% excellent. Range, pasture feed 7% very poor, 20% poor, 44% fair, 24% good, 5% excellent.

CALIFORNIA: Fieldwork progressed normally in most areas until late week rainfall halted activity in the northern half of the State. Elsewhere, growers experienced some very light rainfall, no significant delays occurred. Seeding of small grains, winter forages continued on irrigated land. Most dryland wheat growers were waiting for additional rain to increase soil moisture before planting. Cotton harvest was in full swing in the San Joaquin, Sacramento Valleys, followed immediately by shredding and discing for pink bollworm control. Desert area cotton harvest was winding down. Rice harvest was nearing completion in the Sacramento, northern San Joaquin Valleys. Dry beans, grain sorghum, sugar beets, corn for grain, silage were harvested where conditions permitted. Some harvested sugar beet fields were being planted with next year's sugarbeet crop. Alfalfa, clover were treated for weeds in the Sacramento Valley. Alfalfa, sudan grass were cut for hay or greenchopped. Seedbed preparation for planting small grains, forage crops, new alfalfa was ongoing. Fruit, nut growers were conducting post harvest irrigation, fertilization, pruning activities. Picking of grapes for fresh use continued in the San Joaquin Valley. Emperor, red globe, crimson seedless were the major varieties being picked. Nearly the entire raisin crop has been rolled, picked up. Harvest of grapes for wine use was nearing the end. Fuji, Granny Smith apple picking was active. Fig, olive, persimmon, pomegranate harvests continued. Kiwifruit picking was active, with good quality, but small fruit. Almond, pistachio, walnut harvests were nearing completion. Valencia orange harvest was also nearing completion. Harvest of new crop navel oranges has begun; picking was slow, fruit sizes were small. Lemon, grapefruit picking continued. Satsuma harvest was underway. Maturity problems were reported. Fall strawberry harvest continued. Broccoli, lettuce harvests continued in the San Joaquin Valley, central coast areas, but many broccoli fields were far from maturity. Fall cantaloupes, honeydew melons were harvested in the Imperial Valley. Only a few late bell pepper fields remained to be harvested. Additional vegetable crops harvested included fresh, processing onions, eggplant, turnips, cucumbers, green beans, squash, radishes, parsley, sweet potatoes, beets. Harvests of fall cabbage, cauliflower, spinach crops were beginning in the southern San Joaquin Valley. Garlic, carrot, onion, potato fields continued to be planted in central, southern counties. Rangeland, pasture conditions were mostly fair, except along the north coast, where conditions were good. Rainfall in central, northern State was very beneficial to foothill pastures. Stock cows were benefiting from the abundance of old feed on winter pastures, but most operators were still waiting for additional new grass growth before turning out stocker cattle. Sheep were grazing, lambing in alfalfa fields in the central area. Beehive maintenance continued in the central areas, while beekeepers worked on almond, plum contracts.

COLORADO: Days suitable for fieldwork 2.1. Topsoil moisture 1% very short, 5% short, 76% adequate, 18% surplus. Subsoil moisture 3% very short, 22% short, 69% adequate 6% surplus. The recent pattern of scattered rain/snow showers has created some wet field conditions, slowed harvest of corn, sorghum, sugar beets. Pasture, range feed in mostly good to fair condition. Livestock continue to be moved to graze crop residues as harvest is completed.

DELAWARE: Days suitable for fieldwork 6.7. Topsoil moisture 12% very short, 57% short, 31% adequate. Subsoil moisture 2% very short, 55% short, 43% adequate. Wheat 39% fair, 60% good, 1% excellent; 78% planted, 67% 1997, 70% avg. Soybeans 95% shedding leaves, 95% 1997, 99% avg.; 70% harvested, 36% 1997, 48% avg. Field corn 96% combined, 75% 1997, 91% avg. Sorghum 70% harvested, 34% 1997, 54% avg. Alfalfa hay 50% 5th cutting, 73% 1997, 62% avg. Hay supplies 31% short, 69% adequate. Pasture feed 17% poor, 34% fair, 49% good. Activities: Another very dry week for State, barley seeding finished up last week, corn harvesting near completion.

FLORIDA: Not Available.

GEORGIA: Days suitable for fieldwork 6.2. Soil moisture 29% very short, 49% short, 22% adequate. Cotton 12% very poor, 23% poor, 39% fair, 24% good, 2% excellent; 95% bolls open, 97% 1997, 97% avg. Peanuts 99% dug, 100% 1997, 100% avg. Rye 77% planted, 77% 1997, 79% avg. Sorghum 92% harvested for grain, 77% 1997, 86% avg. Soybeans 21% very poor, 27% poor, 36% fair, 15% good, 1% excellent; 99% dropping leaves, 98% 1997, 99% avg. Other small grains 61% planted, 62% 1997, 61% avg. Onions 8% transplanted, 7% 1997, 8% avg. Apples 98% harvested, 98% 1997, 97% avg. Pecans 17% very poor, 35% poor, 33% fair, 13% good 2% excellent; 38% harvested, 33% 1997, 34% avg. Pasture feed 15% very poor, 27% poor, 41% fair, 16% good, 1% excellent. Scattered showers brought limited moisture to fields mainly in the northern third of the State. Most areas remain extremely dry. Cotton, peanut, soybean harvest is active. Weather delays continue to hinder small grain plantings, land preparations. Northern soybean producers reporting above-average yields near river bottoms. Despite showers, pasture conditions declined slightly. Cattle producers still feeding cattle hay, supplements. Other activities included taking soil, nematode samples, general maintenance to harvesting equipment, defoliating cotton, routine care of livestock.

HAWAII: Cloudy skies, frequent showers slowed crop progress in windward areas. Spraying increased to prevent disease outbreaks. Drier conditions in leeward areas were fair for agriculture. Showers benefited parched areas in the southern end of Hawaii island. Banana, papaya harvesting steady. Head cabbage harvesting steady, quality good. Harvesting of sweet corn expected to increase.

IDAHO: Days suitable for fieldwork 5.3. Topsoil moisture 74% adequate, 26% short. Temperatures across the State were below normal. Precipitation fell across the State, yearly totals remain below normal. Apples harvested 91%, 1997 97%, avg. 96%. Corn harvested for grain 51%, 1997 56%, avg. 59%. Sugar beets harvested 95%, 1997 95%, avg. 91%. Activities: Fall ground preparation, wrapping up fall harvest, winter wheat planting, caring for livestock.

ILLINOIS: Days suitable for fieldwork 3.8. Topsoil moisture 1% very short, 5% short, 79% adequate, 15% surplus. In the northern part of the State, continued rains prevented farmers from completing corn, soybean harvest. With harvest winding down, storage is filling up, many areas are seeing corn piled on the ground. Scattered showers, mild temperatures have helped the winter wheat crop emerge. Other activities for last week included fall tillage, anhydrous ammonia application, preparing livestock facilities for the upcoming winter season.

INDIANA: Days suitable for fieldwork 5.1. Topsoil moisture 3% very short, 20% short, 72% adequate, 5% surplus. Subsoil moisture 5% very short, 29% short, 63% adequate, 3% surplus. Hoosier farmers continue to enjoy favorable harvest conditions. Soybean harvest is near completion, corn harvest is about 2 weeks ahead of normal. With the exception of occasional brief delays due to showers, the weather has been ideal all season for fall harvest activities. Activities: Harvesting corn, soybeans, seeding winter wheat, fall tillage, applying fertilizer, lime, caring for livestock.

IOWA: Days suitable for fieldwork 5.3. Northern, central portions near complete for harvest, fieldwork, southern districts still wet. Reports of corn piled on ground, rail car shortages. Topsoil moisture 6% short, 78% adequate, 16% surplus. Subsoil moisture 1% very short, 13% short, 75% adequate, 11% surplus. Corn acreage harvested 92%, 90% 1997, 85% avg. Percentage moisture of all field corn averaged 18%; harvested corn averaged 17%. Corn lodging 32% none, 48% light, 17% moderate, 3% heavy; corn ear droppage 36% none, 50% light, 13% moderate, 1% heavy. Soybean acreage harvested 99%, 99% 1997, 99% avg. Winter wheat planted 93%, 89% 1997, 97% avg. Completion of 1999 row-crop fall tillage 38%, 40% 1997, 31% avg; fall fertilizer applied 31%, 36% 1997, 27% avg. Grain movement rated 25% none, 41% light, 29% moderate, 5% heavy. Off-farm grain storage availability decreased dramatically to 43% short, 56% adequate, 1% surplus; on-farm storage 35% short, 62% adequate, 3% surplus. As corn harvest continues, cattle being moved to graze on stalks. Use of stubble fields 29% none, 36% limited, 28% moderate, 7% extensive.

KANSAS: Days suitable for fieldwork 0.2. Topsoil moisture 1% short, 35% adequate, 64% surplus. Subsoil moisture 3% short, 60% adequate, 37% surplus. Last weekend's rains, scattered showers across the State brought fieldwork to a snails pace. Sunflowers harvested 95%, 82% 1997. Pasture feed 1% very poor, 6% poor, 31% fair, 57% good, 5% excellent. Stockwater 1% short, 64% adequate, 35% surplus. Producers weaning calves, moving cattle to crop residue.

KENTUCKY: Days suitable for fieldwork 5.0. Topsoil moisture 12% very short, 49% short, 36% adequate, 3% surplus. Subsoil moisture 19% very short, 46% short, 34% adequate, 1% surplus. Below-normal temperatures statewide. Despite some light showers, accumulated rainfall continued below normal. Condition of stripped tobacco was reported as 1% very poor, 10% poor, 38% fair, 43% good, 8% excellent. Pasture feed 8% very poor, 24% poor, 44% fair, 22% good, 2% excellent. Winter wheat 94% seeded, 88% 1997, 86% avg.; 1% very poor, 4% poor, 32% fair, 55% good, 8% excellent.

LOUISIANA: Days suitable for fieldwork 6.0. Soil moisture 6% very short, 24% short, 67% adequate, 3% surplus. Cotton harvest is almost complete. Hay 97% final cutting, 100% 1997, 100% avg. Pecans 5% very poor, 16% poor, 46% fair, 29% good, 4% excellent; 46% harvested, 34% 1997, 29% avg. Soybeans harvest is complete. Sugarcane 2% very poor, 9% poor, 21% fair, 48% good, 20% excellent; 100% planted,

100% 1997, 100% avg.; 32% harvested, 33% 1997, 37% avg. Sweet potatoes 94% harvested, 87% 1997, 88% avg. Wheat 69% planted, 38% 1997, 46% avg.; 44% emerged, 21% 1997, 29% avg. Livestock 2% very poor, 10% poor, 38% fair, 46% good, 4% excellent. Cattle producers continue to plant winter pastures. Vegetables 3% very poor, 14% poor, 37% fair, 42% good, 4% excellent. Pastures feed 5% very poor, 20% poor, 47% fair, 26% good, 2% excellent.

MARYLAND: Days suitable for fieldwork 6.2. Topsoil moisture 26% very short, 59% short, 15% adequate. Subsoil moisture 34% very short, 56% short, 10% adequate. Rye 1% very poor, 7% poor, 31% fair, 60% good, 1% excellent; 92% planted, 87% 1997, 85% avg. Wheat 4% very poor, 9% poor, 31% fair, 55% good, 1% excellent; 86% planted, 72% 1997, 78% avg. Field corn 92% combined, 81% 1997, 87% avg. Soybeans 75% harvested, 55% 1997, 60% avg. Sorghum 85% harvested, 51% 1997, 60% avg. Tobacco 21% stripped, 10% 1997, 14% avg. Pasture feed 14% very poor, 32% poor, 21% fair, 32% good, 1% excellent. Alfalfa hay 61% 5th cutting, 68% 1997, 66% avg. Hay 3% very short, 23% short, 67% adequate, 7% surplus. Activities: Barley seeding completed this past week, corn harvest nearing completion, hay season almost over; small crop due to dry weather.

MICHIGAN: Days suitable for fieldwork 6.0. Topsoil moisture 14% very short, 30% short, 55% adequate, 1% surplus. Subsoil moisture 19% very short, 41% short, 40% adequate. Hay 4th cutting 91%, 92% 1997, 93% avg. Temperatures 2 to 6 degrees F below normal. Dry harvest weather continued for most of State. Harvest about 2 weeks ahead of 5-year average, three weeks ahead of last year. Most corn in Thumb, northeast area of State has been harvested. Additional precipitation needed to aid early wheat growth. Soil moisture would also benefit fall tillage.

MINNESOTA: Days suitable for fieldwork 5.3. Topsoil moisture 2% short, 87% adequate, 11% surplus. Subsoil moisture 2% very short, 9% short, 79% adequate, 10% surplus. Soybeans 82% stubble worked, 89% 1997, 76% avg. Sunflowers 86% harvested, 97% 1997, 95% avg. Corn 17% moisture content, 19% 1997, 21% avg.; 69% stubble worked, 77% 1997, 56% avg. A cold, dry week allowed farmers to work on remaining harvesting or fieldwork activities before the arrival of snow that is expected this week. Very little, if any, precipitation occurred last week around the State. Cold temperatures are beginning to cause the ground to freeze, especially in northern areas of the State.

MISSISSIPPI: Days suitable for fieldwork 6.2. Soil moisture 41% very short, 35% short, 18% adequate, 6% surplus. Cotton 99% harvested, 92% 1997, 91% avg. Soybeans 98% harvested, 88% 1997, 83% avg. Sweet potatoes 95% harvested, 88% 1997, 93% avg. Wheat 88% planted, 76% 1997, 77% avg.; 51% emerged, 63% 1997, 61% avg.; 4% very poor, 33% poor, 45% fair, 17% good, 1% excellent. Peanuts 100% harvested, 100% 1997, 100% avg. Cattle 5% very poor, 11% poor, 41% fair, 38% good, 5% excellent. Hay supply 24% short, 71% adequate, 5% surplus. Feed grain 18% short, 80% adequate, 2% surplus. Activities: Some areas of the State received a much-needed rain over the weekend. Harvesting activities are nearing completion for all crops.

MISSOURI: Days suitable for fieldwork 2.4. Topsoil moisture 5% short, 51% adequate, 44% surplus. Wettest area is the northern third of the State at 64% or more surplus, while south-central at 18% short, southeast at 35% short. Ground intended for next year's spring crops that has been worked at least once (excluding no-till) 32%, 35% 1997, 27% avg. Corn harvest in northern third of State ranged from 70% northeast to 85% north-central, while central third ranges from 92-98%, southern third of State has been complete for about a month. Soybean harvest ranges from 79% in west-central, southwest to 90% or more north-central east-central, south-central, southeast districts. Sorghum harvest in northern two-thirds of the State ranged from 72% northeast to 82% north-central and southern third of State is totally complete. Wheat planting most advanced in southern third of State at 90-93% complete, while least advanced is west-central at 42%. Cotton harvest is 1 day ahead of normal. Weekly precipitation averaged 1.15 in. Rainfall ranged from 0.35 in. in Bootheel to 2.11 in. in northeast, with the remaining districts averaging nearly 1 in. or more. Pasture feed 3% poor, 29% fair, 59% good, 9% excellent.

MONTANA: Starting on 5th, an upper level low pressure system located itself over the north-central part of the State. As of 8th night, most areas of State received varying amounts of snow, with 4 inches being reported in Missoula, 6 inches in Cut Bank, 3 inches in Butte. Temperatures over much of the State last week were in the 20's, low 30's.

NEBRASKA: Days suitable for fieldwork 2.3. Topsoil moisture 3% short, 80% adequate, 17% surplus. Subsoil moisture 3% very short, 12% short, 78% adequate, 7% surplus. Corn harvest 86%, 79% 1997, 91% avg. Soybean harvest 95%, 94% 1997, 99% avg. Sorghum harvest 90%, ahead of 84% 1997, 88% avg. Wheat 3% poor, 18% fair, 64% good, 15% excellent. Producer activities: Fall tillage, fertilizer application, fencing, weaning calves, livestock health programs, LDP requests.

NEVADA: Rainfall was common statewide, precipitation totals were limited. Temperatures averaged much below normal northeast, few degrees below normal in the south, west. Snow continued to fall in the High Sierra. Late- season haying efforts were interrupted by the rains. Harvesting of corn for grain slowed. Few fields remain to be planted to winter grains. Sod harvest continued south. Row-crop harvests (including onions, potatoes, garlic) complete. Pasture, range condition remained good. Cattle being vaccinated and moved to winter range. Pregnancy testing resulting in marketing of open cows, heifers. Main farm, ranch activities: Moving, vaccinating, testing cattle, haying, equipment maintenance.

NEW ENGLAND: Days suitable for fieldwork 6.5. Topsoil moisture 5% very short, 7% short, 77% adequate, 11% surplus.

NEW JERSEY: Days suitable for fieldwork 7. Amount of feed requirements pastures are supplying is average. Irrigation water supply is short to adequate. Farmers are planting cover crops (wheat, rye). Harvesting of fall items (beets, cabbage, endive, escarole, lettuce, parsley, spinach, turnips, winter squash) occurring. Apple harvest is decreasing.

Harvesting of soybeans, corn for grain continues. Pasture feed poor to fair.

NEW MEXICO: Days suitable for fieldwork 4.2. Topsoil moisture 5% very short, 27% short, 65% adequate, 3% surplus. Farmers waited for fields to dry enough to continue with fall harvest. Some light precipitation was received over about half of the State, amounts were small, with only one station reporting over half an inch. When possible, farmers continued with fall harvest of chile, corn, sorghum, cotton, lettuce. Red chile harvest advanced to 47% picked, 50% 1997; 2% poor, 33% fair, 62% good and 3% excellent. Corn harvest continued, with 95% of the grain in, 93% 1997; 7% poor, 9% fair, 80% good, 4% excellent. Cotton harvest was 35% completed, with rain damage reducing the quality of the crop in some areas. Final cutting of hay was slowed by rain and wet fields, with 80% of the last cut complete; 8% poor, 35% fair, 53% good, 4% excellent. In the south, 63% of the lettuce crop was harvested, 8% fair, 82% good, 10% excellent. Onion planting was almost complete, with condition at 3% fair, 95% good, 2% excellent. Pecans remained in mostly good condition. Cattle, sheep stayed in fair to good condition.

NEW YORK: Corn for grain harvest continues. Producers harvesting as much as possible before first snowfall. Apple, potato, onion growers grading, packing, shipping crops. Cider making continued. Winter conferences, meetings getting underway. Machinery repair, maintenance, storage major activities.

NORTH CAROLINA: Days suitable for fieldwork 5.9. Below-normal temperatures, precipitation were recorded in most areas of the State. Some much-needed precipitation was received in many parts of the State this week, but little moisture was received in the Northern mountains, parts of the Northern Piedmont, and the Southern Coastal plains. Soil moisture remains short to very short in most areas and for the State is rated 24% very short, 37% short, 39% adequate. Continued progress was made harvesting cotton, peanuts, sweet potatoes which are well above the 5-year averages. Pasture conditions, particularly in the western portions of the State, continue to deteriorate. Activities for the week included: Harvesting cotton, peanuts, sweet potatoes, soybeans and sorghum; planting small grains; tending livestock, cutting, shipping Christmas trees.

NORTH DAKOTA: Harvest of corn, sunflower has been hindered by wet conditions, nearing completion. A few acres of soybeans remain to be harvested. Field activity in the western half of the State is mostly done for the season; as frozen soils, snow are ending fall tillage, fertilizer application. Ranchers are moving cattle in from pasture, hauling hay. Adequate amounts of hay in a greater portion of the State are pressuring hay prices. Livestock marketings are mostly stagnant due to lack of bidders.

OHIO: Days suitable for fieldwork was 5.8 days. Topsoil moisture 2% very short, 24% short,72% adequate, 2% surplus. Corn harvested for grain 85%, 55% 1997, 67% avg. Soybeans harvested 99%, 97% 1997, 95% avg. Winter wheat emerged 98%, 86% 1997, 86% avg. Tobacco 22% stripped, 14% 1997. Winter wheat 2% poor, 18% fair, 60% good, 20% excellent. Weather conditions varied throughout the State as scattered showers, some snow flurries were reported. Activities include finishing fall harvest; some hay making; fall tillage, conservation practices; spreading potash, lime, manure, fertilizer; repairing equipment; drying grain; cutting firewood; pressing cider; harvesting popcorn; baling corn stalks; weaning calves; stripping tobacco. Many reporters mention that the corn harvest would be finished in some parts of the State if storage problems did not exist. Farmers are waiting in long lines at elevators, some have shut down temporarily. There were also a couple reports of grain being stored on the ground.

OKLAHOMA: Days suitable for fieldwork 2.3. Topsoil 1% very short, 5% short, 70% adequate, 24% surplus. Subsoil 5% very short, 8% short, 75% adequate, 12% surplus. Cool, damp weather hindered drying of fields, restricted wheat seeding. Oats 86% planted, 82% 1997, 75% avg.; 60% up-to-stand, 52% 1997, 53% avg. Soybeans 74% harvested, 66% 1997, 69% avg. Peanuts 64% combined, 80% 1997, 71% avg. Alfalfa hay 1% very poor, 11% poor, 38% fair, 47% good, 3% excellent; 89% 4th cutting, 99% 1997, 100% avg.; 32% 5th cutting, 70% 1997, 78% avg. Other hay 64% 2nd cutting, 84% 1997, 97% avg. Livestock 2% very poor, 5% poor, 28% fair, 63% good, 2% excellent. Pasture, range 4% very poor, 16% poor, 44% fair, 35% good, 1% excellent. Cattle marketings average.

OREGON: Grass seed and wheat planting winding down statewide. Winter preparations underway. Nurseries digging bareroot plant material. Greenhouses busy with starts for next season and Christmas plants. Sales and movement of containers and balled and burlapped plant material continued. Christmas tree harvest underway and trees flown and shipped. Vegetable harvested in Western Oregon. Root crops being dug and stored. Pumpkins, green peppers and squash were harvested. In Eastern Oregon, onion and potato crops were almost finished. Fall fruit and nut harvests winding down statewide. Berry fields ready for winter and orchards preparing for winter. Livestock condition mostly good. Fall weaning continued. Some grazing on alfalfa hay regrowth. Willamette Valley pastures continued to show good fall regrowth and reduce need for supplemental feeding. Some low land pastures getting soggy. Received the first large snowfall in the mountains for the season.

PENNSYLVANIA: Days suitable for fieldwork 5.9. Soil moisture 34% very short, 47% short, 18% adequate, 1% surplus. Ensilage corn harvested 100% harvested, 98% 1997, 98% avg. Soybean 1% poor, 13% fair, 73% good, 13% excellent. Potato harvest 100% complete, 97% 1997, 97% avg. Fall plowing 83% complete, 86% 1997, 86% avg. Barley planted 100% complete, 100% 1997, 99% avg.; emerged 92% complete, 89% 1997. Alfalfa 4th cutting 95% complete, 85% 1997, 84% avg. Quality of hay made 11% very poor, 16% poor, 22% fair, 50% good, 1% excellent. Grape harvest 100% complete, 100% 1997, 100% avg. Apple harvest 95% complete, 89% 1997, 94% avg. Activities: Fall plowing; cutting hay and haylage; harvesting grapes, apples, corn, soybeans, buckwheat, potatoes; seeding wheat, barley and cover crops; filling silos; machinery maintenance; fixing fences; hauling and spreading manure; spreading lime; making apple butter; caring for livestock.

SOUTH CAROLINA: Days suitable for fieldwork 6.2. Soil moisture 31% very short, 50% short, 19% adequate. Apples 100% harvested, 99% 1997, 97% avg. Barley 95% planted, 95% 1997, 69% avg.; 65% emerged, 84% 1997, 55% avg.; 90% fair, 10% good. Livestock 3% poor, 31% fair, 64% good, 2% excellent. Oats 74% planted, 79% 1997, 70% avg.; 56% emerged, 62% 1997, 54% avg.; 9% poor, 67% fair, 24% good. Pasture feed 7% very poor, 22% poor, 44% fair, 27% good. Peanuts 96% harvested, 93% 1997, 90% avg. Pecans 48% harvested, 49% 1997, 33% avg.; 1% poor, 62% fair, 36% good, 1% excellent. Rye 71% planted, 82% 1997, 67% avg.; 54% emerged, 65% 1997, 54% avg.; 15% poor, 57% fair, 28% good. Sorghum 95% harvested, 95% 1997; 6% poor, 74% fair, 20% good. Sweet potatoes 98% harvested, 93% 1997, 72% avg. Tobacco 100% stalks destroyed; 100% 1997, 99% avg. Winter grazings 84% planted, 86% 1997, 82% avg.; 65% emerged, 74% 1997, 67% avg.; 13% very poor, 14% poor, 39% fair, 34% good. Winter wheat 35% planted, 40% 1997, 26% avg.; 25% emerged, 30% 1997, 15% avg.; 7% poor, 69% fair, 24% good.

SOUTH DAKOTA: Days suitable for fieldwork 3.8. Topsoil 70% adequate, 30% surplus. Subsoil 1% short, 72% adequate, 27% surplus. Soil conditions remain in good condition from the moisture received, with pockets of surplus conditions being reported. Harvest was halted once again by rain and snow most of the week. Sunflower 90% harvested, 96% 1997, 91% avg. Winter rye 23% fair, 42% good, 35% excellent. Livestock remain in good to excellent condition. Pastures continue to benefit from the moisture and are reported in good condition for winter and next spring. Livestock 1% poor, 5% fair, 67% good, 27% excellent. Stock water supplies 3% short, 75% adequate, 22% surplus.

TENNESSEE: Days suitable for fieldwork 6.0. Topsoil 30% very short, 44% short, 26% adequate. Subsoil 31% very short, 43% short, 26% adequate. Burley 58% stripped, 46% 1997, 51% avg. Winter wheat 80% seeded, 75% 1997, 73% avg.; 1% very poor, 9% poor, 29% fair, 51% good, 10% excellent. Market preparation for tobacco continued as the burley crop came into order during the morning hours. By week's end burley stripping was about a week ahead of the five-year average. Despite very short to short moisture levels, wheat fall seedings were approximately 10 days ahead of the five-year average. Producers continued to report slow germination and growth of wheat fields, pastures due to the lack of rainfall since August.

TEXAS: Cloudy, wet, cold conditions covered State much last week. A few areas reported frost early week; however, major freeze has yet to occur Plains. Producers did not get much fieldwork completed. Hay cut few fields, but rain kept baling to minimum. There still a lot of fence mending, cleanup from recent flooding going on. Supplemental feeding operations hampered by wet conditions. Livestock conditions remained fair to good most areas.

Crops: Small Grains: Excellent moisture conditions most areas continued allow for good progress. Planting for grain remained slow due wet fields. Livestock turned out on older fields few areas. Insect activity greatly diminished. Cotton: Rain parts of North Central, High Plains caused delays in harvest operations. Cotton stringing out some fields, quality maybe affected. Volunteer cotton remained problem in Rio Grande Valley as wet fields prevented producers from plowing. Grain Sorghum: Rain interrupted much harvest progess during week in Plains. Peanuts: Many fields dug prior to recent rains. However, continuous rain kept combining to miniumum. Producers concerned a freeze may occur before they can get back into fields in Plains, North Central. Harvest winding down South Central but wet conditions also caused delays. Soybeans: Harvest delayed by rain in Plains.

Commercial Vegetables: Rio Grande Valley, rain caused further delays late onion, carrot planting. San Antonio-Winter Garden, fieldwork slowed but planted crops made good progress during week. East, most sweet potato harvest completed. However, much loss occurred due wet conditions. Trans Pecos, chili, bell pepper harvest slowly increased as conditions allowed. Pecans: Rain caused further delays harvest. Much production been lost to flooding Central, South Central counties.

Range and Livestock: Small grain pastures continued make good progress, livestock moved to graze on early planted fields. Cooler temperatures continued to limit warm season grasses. However, winter grasses have made good growth. Supplemental feeding continued but wet conditions caused feeding problems.

UTAH: Days suitable for fieldwork 5. Topsoil 1% very short, 6% short, 89% adequate, 4% surplus. Subsoil 1% very short, 9% short, 90% adequate. Farmers are nearing the end of harvest season.

VIRGINIA: Days suitable for fieldwork 5.5. Topsoil 41% very short, 41% short, 18% adequate. Subsoil 43% very short, 44% short, 13% adequate. Corn 95% harvested, 80% 1997, 88% avg. Cotton 90% harvested, 43% 1997, 57% avg. Soybeans 63% harvested, 37% 1997, 37% avg.; 11% very poor, 23% poor, 38% fair, 26% good, 2% excellent. Winter wheat 63% seeded, 52% 1997, 56% avg. Barley 85% seeded, 88% 1997, 90% avg. Winter apples 94% harvested, 94% 1997, 95% avg. Pasture feed 36% very poor, 40% poor, 20% fair, 4% good. Livestock 4% very poor, 15% poor, 32% fair, 44% good, 5% excellent. Scattered rain showers across the Commonwealth this past week resulted in moderately improved topsoil moisture levels. Acres of cropland categorized as short or very short last week totaled 82%. This is a decrease from 93% the previous week. The rain caused a temporary stoppage of fall harvest, planting. However, producers were able to make substantial progress for the week. Soybeans, corn, cotton harvest remain ahead of normal schedule. Wheat producers, in particular, benefited from the rain. Softer ground brought about by the rain showers allowed fall seeding to progress rapidly. The rain was of minimal help in replenishing surface water sources for livestock. Many producers are culling livestock above normal levels for this time of year in order to reduce supplemental feeding. Many localities have reported killing frosts, completely eliminating pasture growth. Before the latest hard frost occurred some vegetable producers reported seeing a large number of aphids. Other activities for the week included continued marketing of cattle, curing, preparing tobacco for market, harvesting vegetables, applying lime, fertilizer, manure to fields, repairing fences, barns.

WASHINGTON: Days suitable for fieldwork 6.4. Topsoil 5% very short, 59% short; 36% adequate. Subsoil 2% very short, 43% short, 55% adequate. Potatoes 60% harvested, 54% 1997, 59% avg. Potatoes, 10% fair, 90% good. Rain showers

received at the end of the week were expected to kick planting into full gear in eastern areas where producers have been waiting for precipiation before seeding winter wheat. Other regions reported emerged wheat in good condition. Sugar beet, potato harvests progressed, mint harvest was nearly complete. Hay, other roughage supplies, 2% short, 75% adequate, 23% surplus. Silage harvest continued, 4th, 5th cutting alfalfa hay production continued. Range, pasture feed 18% poor, 47% fair, 35% good. Cool, dry weather aided fruit harvests. Concord grape yields were low, but some areas expected record wine grape yields. Red Delicious, Granny Smith apple harvests continued. Cranberry harvest was underway in western areas with average yields reported. Vegetable harvests continued with pumpkin harvest also underway. Pre harvest activities in Christmas tree fields continued.

WEST VIRGINIA: Days suitable for fieldwork 5.2. Topsoil moisture 20% very short, 49% short, 31% adequate. Dry weather continues to plague some areas of the State, but corn and soybean harvest and winter wheat planting made good progress. Corn harvested for grain 83%, 67% 1997, 76% 5-yr avg. Soybeans harvested for grain 93%, 76% 1997, 71% 5-yr avg. Wheat 3% poor, 63% fair, 34% good. Wheat planted 89%, 72% 1997, 86% avg.; Wheat emerged 76%. Cattle 1% poor, 22% fair, 74% good, 3% excellent. Sheep 27% fair, 65% good, 8% excellent.

WISCONSIN: Days suitable for fieldwork 6.0. Soil moisture 2% very short, 22% short, 73% adequate, 3% surplus. Soybeans harvested 98%, 99% 1997, 96% avg. 1998 harvest season is rapidly coming to an end, and the progress is one to two weeks earlier than normal. Although last week was relatively cool and cloudy, it was predominantly dry, thus allowing harvest to continue. The individual districts varied from 5.6 to 6.6 days suitable for fieldwork. Soybean harvest is essentially complete, and this is the last week that we will be reporting on soybeans. What few fields remain are either waiting for a good, hard frost to kill weeds, or they are still in the field due to a lack of storage space. The problem of inadequate storage space is also affecting corn harvest. We continue to receive reports of long delays at the grain elevators, and some mills have even had to close until more room becomes available. Some may be leaving their corn in the fields, as they just don't know what to do with it. Some of our reporters have commented that corn harvest would be farther along if it were not for this bottleneck. Cranberry harvest is essentially complete, but packaging of fresh fruit will continue until the holidays.

WYOMING: Another cold wet week continued to hamper farmers trying to harvest corn for grain. Sugar beet harvest was wrapping up. Ranchers were busy weaning calves, vaccinating.

La Niña Update: November 9, 1998

The following is derived from Diagnostic Advisory 98/11 issued by the Climate Prediction Center/National Centers for Environmental Prediction (NCEP) on November 9, 1998.

Cold episode (La Niña) conditions strengthened in the tropical Pacific during October. The equatorial cold tongue is now firmly established in the eastern and central Pacific, extending well west of the date line into the western Pacific. Monthly averaged sea surface temperatures (SSTs) were 1°C below normal along the equator from 170°E eastward to near 100°W, with departures near 2°C below normal between 130°W and 170°W. The pattern of anomalous precipitation, as inferred from the anomalous outgoing longwave radiation (OLR), is consistent with cold episode conditions. Enhanced convection was observed over the eastern Indian Ocean, Indonesia, Malaysia, and the Philippines, while suppressed convection was observed over the western and central equatorial Pacific. Upper and lower tropospheric zonal winds have been displaying features consistent with the developing cold episode. Since early May, westerly anomalies have been observed at 200 hPa and easterly anomalies have been observed at 850 hPa over the equatorial central Pacific. This is a reversal from the anomalies observed during the 1997-98 warm episode (El Niño). Consistent with these features, the October SOI (Southern Oscillation Index) was positive (+1.0), reflecting above-normal pressure in the eastern tropical Pacific and below-normal pressure in the vicinity of Indonesia. Further development of cold episode conditions is likely, as negative subsurface temperature anomalies and a shallower-than-normal oceanic thermocline continue to dominate the equatorial Pacific. The latest NCEP coupled model predictions indicate that cold episode conditions in the tropical Pacific will continue through May 1999. Other statistical and coupled model forecasts are consistent with the NCEP coupled model.

International Weather and Crop Summary

November 1 - 7, 1998

HIGHLIGHTS

FSU-WESTERN: Light showers in eastern Ukraine and southern Russia continued to provide much-needed moisture for winter wheat establishment.

EUROPE: Intermittent showers maintained wet soils in northern Europe, slowing fieldwork.

NORTHWESTERN AFRICA: Growers continued to wait for consistent autumn rains before planting can become widespread.

SOUTH AFRICA: Beneficial rain swept across the corn belt, but in Western Cape, unseasonable rain was unwelcomed for maturing wheat.

SOUTHEAST ASIA: Heavy showers slowed rice harvesting in southern Vietnam and main-season rice planting and development in Java.

SOUTH ASIA: Heavy rain caused some flooding in rice areas of southeastern India.

EASTERN ASIA: Warm, dry weather hampered winter wheat establishment in the North China Plain.

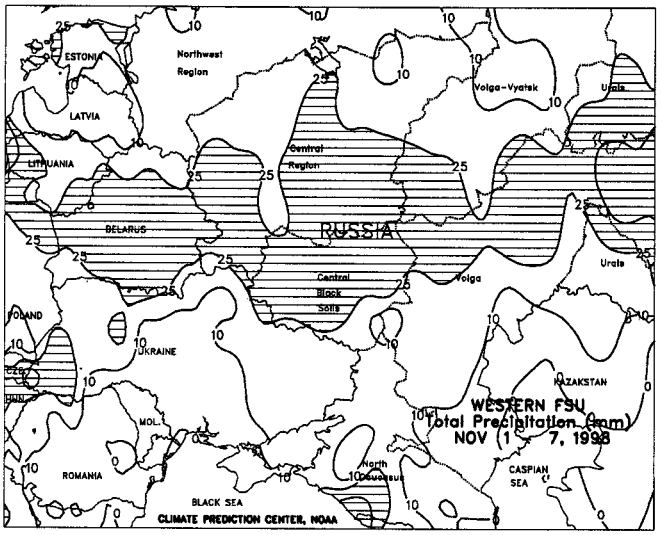
SOUTH AMERICA: In central Argentina, rain boosted soil moisture for reproductive to filling winter wheat and germinating corn and sunseed. However, the rain missed the major wheat areas of southern Buenos Aires.

MEXICO: Dry weather favored corn harvesting in Mexico's Southern Plateau corn belt, while rain hampered flood recovery efforts in Central America.

AUSTRALIA: Dry weather brought some relief to Queensland's mature winter grains.

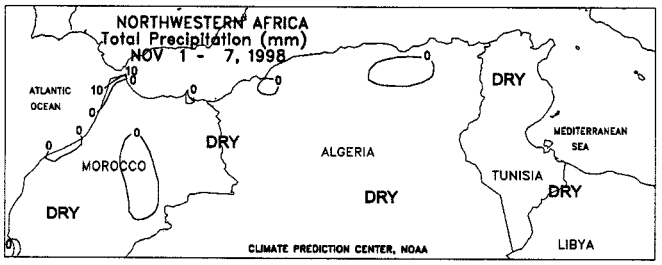
EUROPE

Intermittent showers (10-44 mm) maintained wet soils from England eastward through northern France into Germany, causing further delays in sugar beet and corn harvesting and winter wheat planting. Farther south, widespread showers (10-25 mm) prompted winter wheat planting in Portugal and Spain. Light to moderate rain (10-25 mm, with local amounts in excess of 50 mm) also fell in southern France and Italy, benefitting newly planted winter grains but slowing corn harvesting in southern France. Elsewhere, rain (10-37 mm) fell from Poland southward through the Czech Republic and Slovakia into Hungary, boosting soil moisture. Seasonable temperatures in these areas continued to favor cold-hardening of winter grains prior to dormancy. Heavy rains in Slovenia caused some flooding. Continued mostly dry weather in southern Romania and Bulgaria favored rapid winter grain planting, delayed by previous wetness. Reports as of November 3 indicated that winter wheat in Bulgaria was 56 percent planted. Typically, winter wheat planting in Bulgaria is finished by the end of October. In Greece, unseasonably warm, dry weather favored cotton harvesting. Weekly temperatures averaged near to slightly below normal across northern Europe and 2 to 4 degrees C above normal across the south.



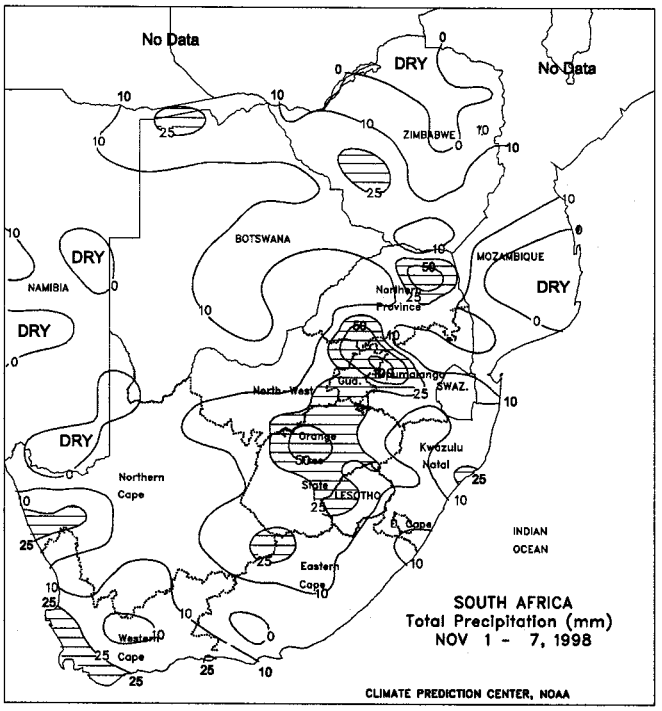
FSU-WESTERN

Light showers (10-25 mm) continued to provide much-needed moisture for winter wheat in eastern Ukraine and southern Russia (southern Black Soils Region, lower Volga Valley, and the North Caucasus). While the rain continued to improve prospects for the winter wheat crop in these areas, time was running out for further crop establishment since winter wheat typically enters dormancy by mid-November. Unseasonably mild weather is needed to ensure that crops become sufficiently established before entering dormancy. Elsewhere, light to moderate rain (10-34 mm) fell in western Ukraine, maintaining favorable moisture conditions for winter wheat establishment. Locally heavy rain (greater than 50 mm) in extreme southwestern Ukraine reportedly caused some flooding. Farther north, widespread rain and some snow fell from Belarus eastward through northern Russia (Central Region, Volga Vyatsk, Black Soils Region, and the middle Volga Valley), boosting soil moisture. Weekly temperatures in these areas were cool enough to induce winter grains into dormancy about 3 weeks later than usual. Weekly temperatures averaged 2 to 6 degrees C above normal in Ukraine and Russia and near normal in Belarus and the Baltics.



NORTHWESTERN AFRICA

Unseasonably warm, dry weather continued to prevail over Morocco, Algeria, and Tunisia. Weekly temperatures averaged 2 to 4 degrees C above normal in these areas. Growers throughout most of the region likely await the onset of consistent autumn rains before planting can become widespread. Although the bulk of the winter grain crop is typically planted from mid-November to mid-December, planting can extend into early January without a significant loss in yield potential.

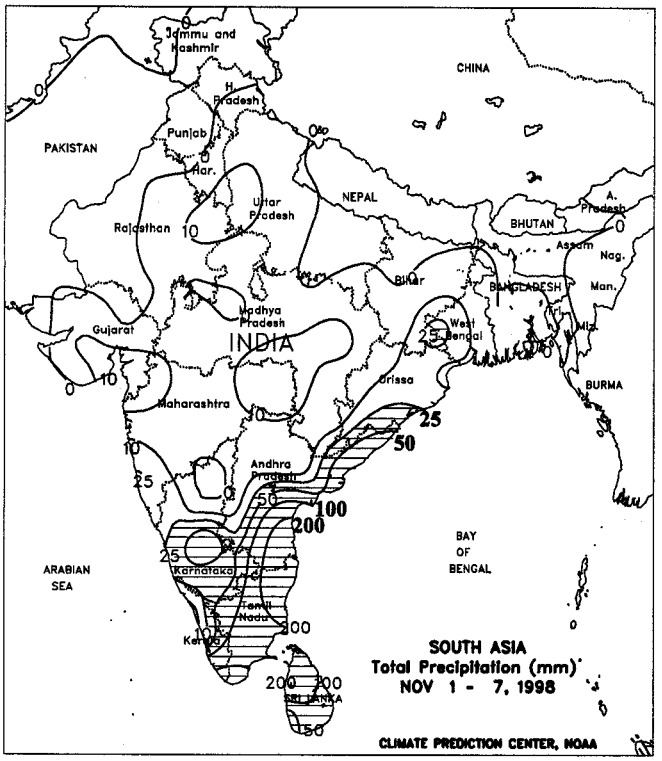


SOUTH AFRICA

Widespread, locally heavy rain (10-50 mm or more) swept across the corn belt. The moisture was highly beneficial for summer crop germination and establishment even though seasonal fieldwork, including wheat harvesting, was hampered. The heaviest rainfall was concentrated over eastern Free State, Gauteng, and neighboring sections of Mpumalanga. Light to moderate showers (2-33 mm) covered sugarcane areas of KwaZulu-Natal. Temperatures averaged 1 to 3 degrees C below normal in the major summer crop areas, reducing growth rates. In Western Cape, unseasonably heavy rain (15-45 mm) may have caused some lodging of maturing wheat.

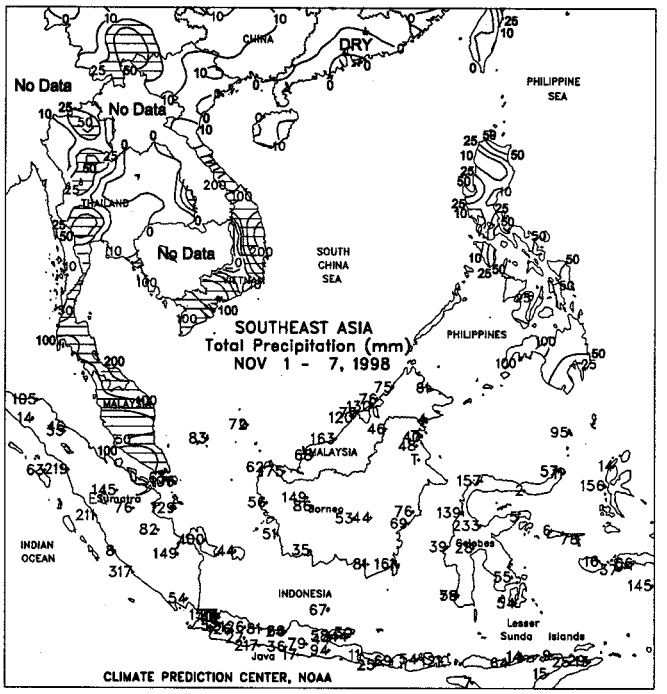
SOUTH ASIA

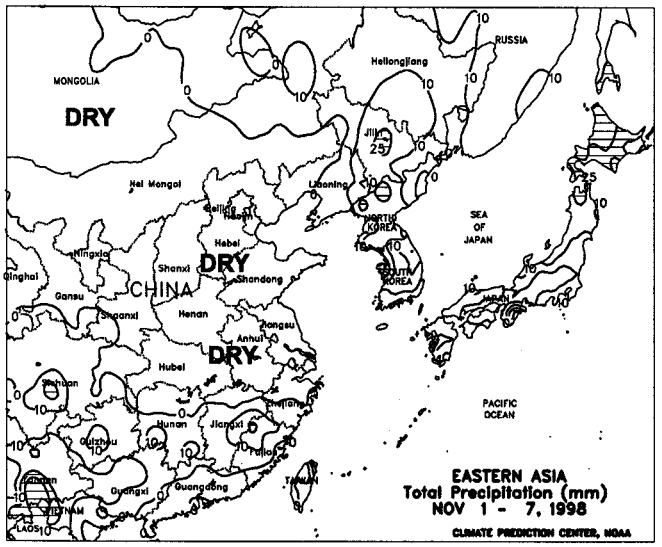
Very heavy rain (100-300 mm or more) fell over eastern portions of India's southern tip. The rain probably caused some flooding of coastal rice. Elsewhere, mostly dry, warm weather favored dry down and harvest of summer crops and spurred winter grain and oilseed plantings. The dryness was especially welcomed in the rice areas of eastern India and Bangladesh, which have been plagued by excessive wetness.



SOUTHEAST ASIA

Very heavy showers (50-350 mm) fell across central and southern Vietnam, slowing rice harvesting. Scattered showers (10-70 mm) boosted reservoir levels in western Thailand, while dry weather aided rice harvesting in the northeast. In the Philippines, drier weather (20-60 mm) eased wetness and favored main-season crop harvesting. Heavy showers (50-180 mm) fell across the oil palm areas of peninsular Malaysia. In Java, unseasonably heavy showers (40-125 mm) continued to slow main-season rice planting.



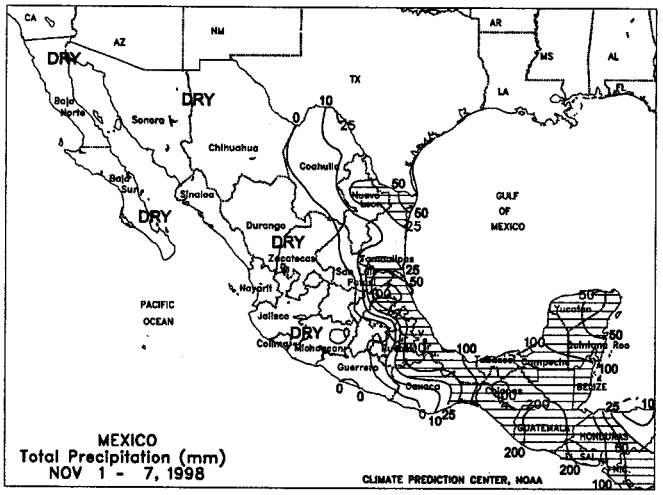


EASTERN ASIA

Continued dry, warm weather hampered rainfed winter wheat establishment across the North China Plain. Temperatures averaged 2 to 4 degrees C above normal. In Manchuria, light precipitation (1-10 mm) caused little or no delays in summer grain and oilseed harvesting. Mostly dry, sunny weather (rainfall less than 10 mm) favored filling late-rice in southern China. Dry weather favored rice harvesting in southern and central Japan, while moderate rain (25-60 mm) slowed fieldwork in northern Japan.

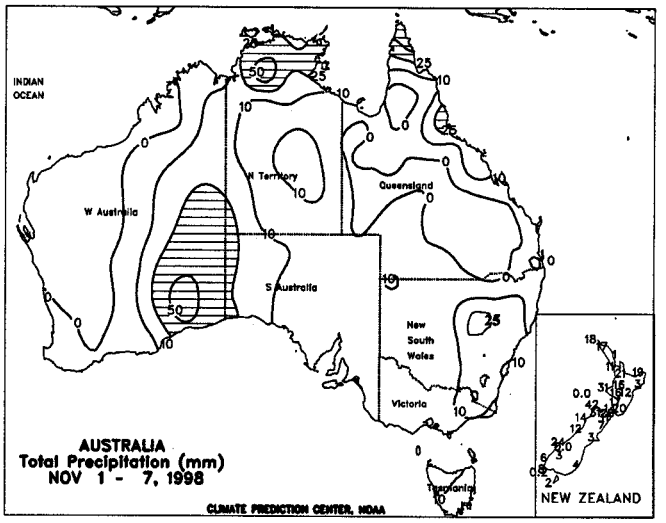
MEXICO

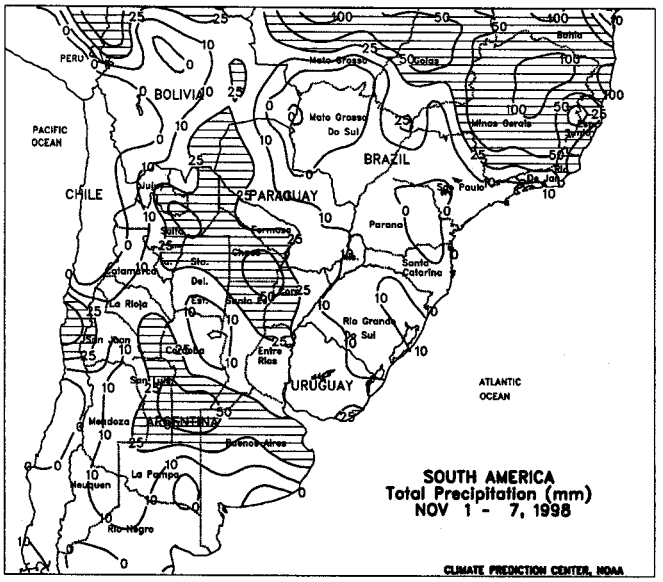
Warm, dry weather continued to favor corn harvesting across the Southern Plateau Corn Belt. Light to moderate showers (10-70 mm, with isolated amounts greater than 100 mm) fell across eastern Mexico (Tamaulipas, Veracruz, and the Yucatan peninsula). In Central America, moderate to heavy showers (50-200 mm) hampered flood recovery efforts.



AUSTRALIA

Dry, generally mild weather in southern Queensland brought some relief to overly wet, unharvested wheat and barley. The dryness also helped firm-up saturated topsoils in preparation for fieldwork, including cotton and sorghum planting. Rain (5-25 mm) continued, however, in primary agricultural areas centered over New South Wales. In the southeast, scattered, light showers (less than 10 mm) accompanied warmer-than-normal weather (temperatures 2-4 degrees C above normal), benefiting late grain development. Generally cool, dry weather continued in Western Australia, favoring wheat dry down. In New Zealand, mild, showery conditions covered the primary crop and pasture areas, with rainfall generally ranging from 10 to 25 mm.





SOUTH AMERICA

In central Argentina, moderate rain (10-40 mm, with amounts greater than 75 mm in southern Cordoba) covered northern Buenos Aires, southern Santa Fe, and Cordoba, boosting soil moisture for filling wheat and germinating corn and sunseed. However, the major winter wheat areas of southern Buenos Aires received little or no rain, further stressing reproductive wheat. Rain is needed in the next 2 to 3 weeks to stabilize wheat yield prospects. According to reports as of October 30, sunseed planting was 49 percent done, versus 39 percent last year. Corn planting was 50 percent planted, versus 58 percent last year. In southern Brazil, drier weather (less than 10 mm) favored winter wheat planting and summer crop planting in Parana and Rio Grande do Sul. Showers (25-75 mm) increased topsoil moisture for planting in Mato Grosso, Goias, and Minas Gerais.

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Crop Progress and Condition

Week Ending November 8, 1998

Peanuts Percent Harvested

	Nov 8 1998	Prev Week	Prev Year	5-Yr Avg
AL	92	85	99	97
FL	97	94	100	39
GA	94	90	99	98
NC	90	85	82	88
OK	78	70	90	79
SC	96	87	93	90
TX	71	62	75	63
VA	99	98	99	99
ALL	88	82	92	84

These 8 States harvested 99% of last year's peanut acreage.

Winter Wheat Crop Condition by Percent

	VP	P	F	G	EX
AR	2	2	39	50	7
CA	0	0	0	50	50
CO	0	2	14	56	28
GA	1	12	37	47	3
ID	0	0	8	73	19
IL	0	3	18	67	12
IN	0	1	26	57	16
KS	1	6	25	56	12
MI	0	3	33	51	13
MO	0	7	32	59	2
MT	1	9	50	39	1
NE	0	3	18	64	15
NC	0	4	48	37	11
OH	0	2	18	60	20
OK	0	4	19	71	6
OR	0	3	23	74	0
SD	0	0	12	65	23
TX	2	15	40	38	5
WA	3	16	46	31	4
ALL	1	6	27	55	11
Prev Wk	2	8	25	55	10
Prev Yr	0	4	21	63	12

(Continued from page 13)

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

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