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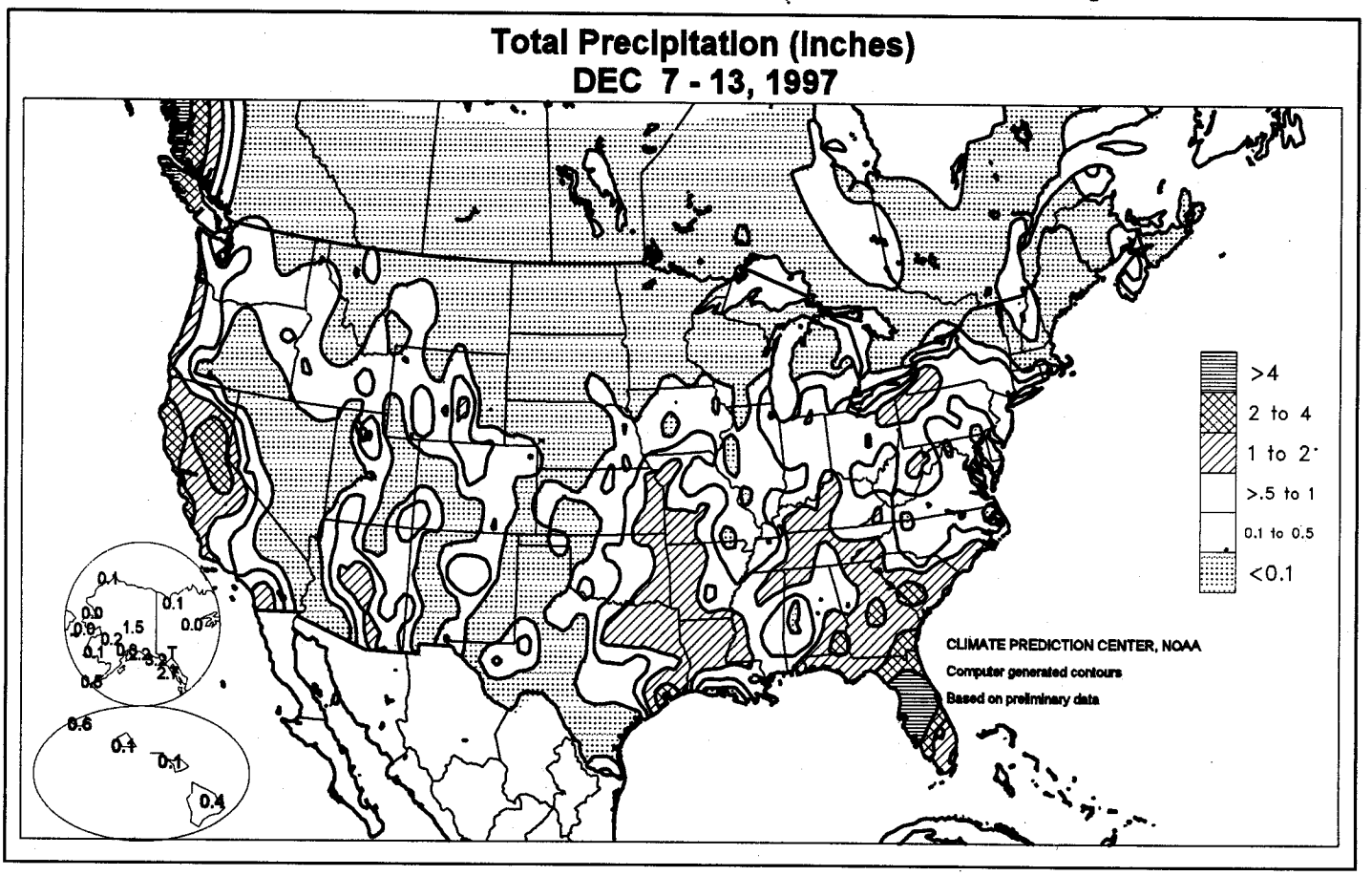
WEEKLY WEATHER AND CROP BULLETIN

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

December 7 - 13, 1997

A slight weather-pattern shift allowed **California** to dry out and permitted moisture to return to the **Pacific Northwest**. Across the **Southeast**, however, damp, cloudy weather persisted. Wetness intensified in **central Florida**, where weekly rainfall approached a foot in a few locations. Meanwhile, a sprawling high-pressure system drifted across the **Intermountain West** during the week, building to a strength of 31.07 inches (1,052 millibars) by Friday. Although the high was not of Arctic origin, its strength resulted in very low temperatures in valleys of the **West** and delivered a freeze to most of **South Texas** at week's end. The high's other effects included Santa Ana winds in **southern**

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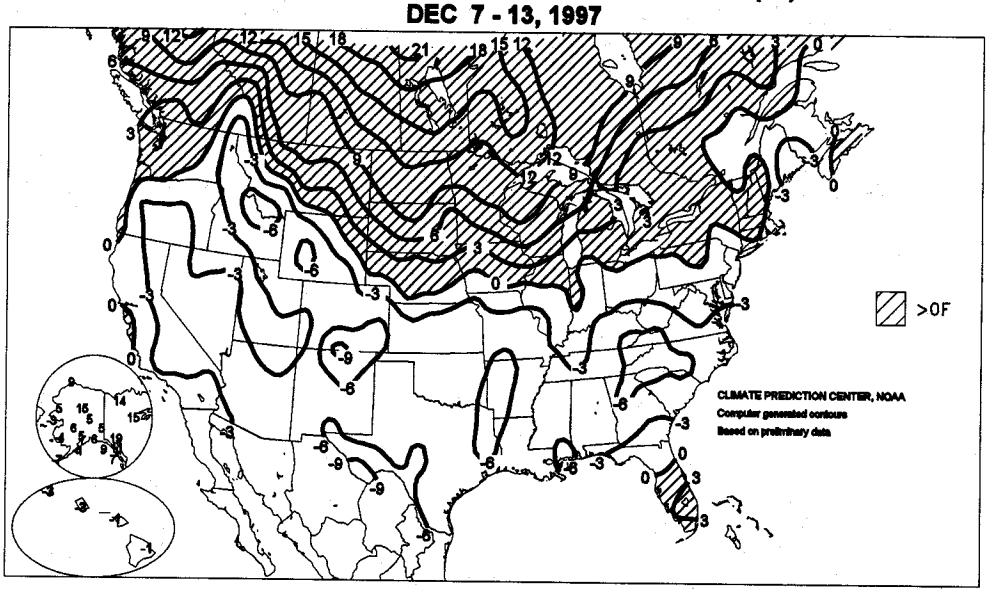
California and downslope warming across the **northern Plains** and **upper Midwest**. Weekly temperatures averaged more than 10°F below normal in a few high-elevation valleys of the **northern Rockies** and 2 to 7°F below normal from the **central and southern Plains** into the **Southeast**. Departures reached +12°F on the **northern Plains**.

Early in the week, precipitation abated across **California** and the **Southwest**, shifting into the **central and southern Plains, Midwest**, and **East**. On Sunday, daily-record rainfalls were reported in downtown **Sacramento, CA** (1.32 inches), **Tucson, AZ** (0.56 inches), and **Dallas-Ft. Worth, TX** (1.31 inches). In **California**, early-week rainfall topped 2 inches in some coastal and Sierra Nevada foothill locations.

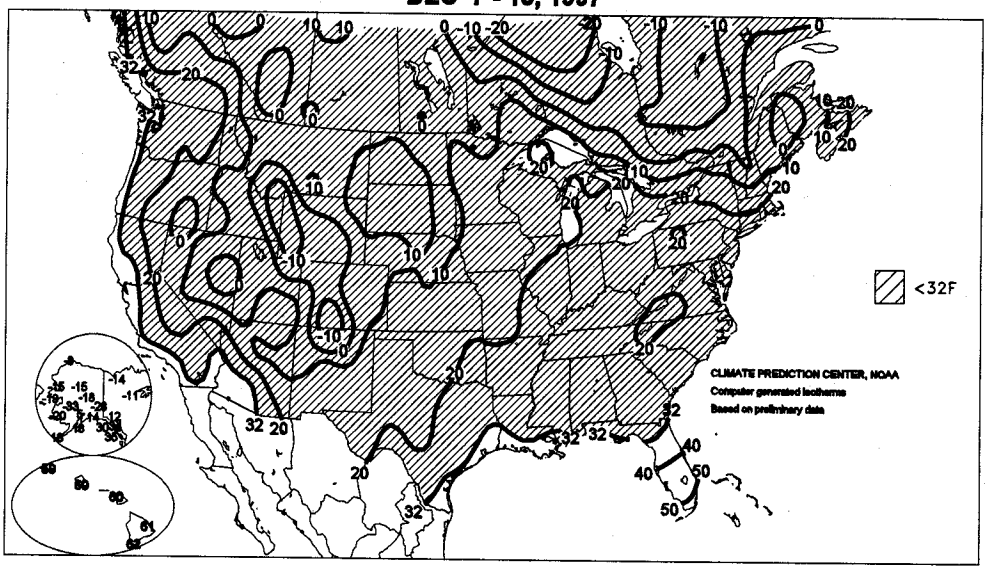
Snow fell frequently across the **Midwest** and **Northeast**, accumulating several inches. By Wednesday, snow depths reached 4 inches in **Madison, WI**, 6 inches in **Peoria, IL**, and 8 inches in **Kirksville, MO**. A day later, snow was on the ground as far south as **Amarillo, TX** (2 inches) and **Oklahoma City, OK** (1 inch), and as far east as **Poughkeepsie, NY** (5 inches). Much-needed moisture fell on the **northern High Plains**, where midweek snow depths included 7 inches in **Lewistown, MT** and 2 inches in **Billings, MT**. By week's end, however, warm, breezy weather returned to the **northern Plains**, where a daily-record high was set on Saturday in **Glendive, MT** (54°F).

Toward week's end, cloudiness finally began to erode across many areas **east of the Rockies**. When the sun appeared in **Chicago, IL** for 70 minutes on Friday, it topped the 65 minutes that had been recorded during the previous 15 days (November 27 to December 11). **Indianapolis, IN** experienced 3 minutes of sunshine on December 12, their first since 28 minutes on December 5. Sunshine also returned to **Des Moines, IA** on Friday. **Des Moines'** 11-day cloudy streak (December 1-11) marked their longest stretch without sunshine since 12 days in December 1991-January 1992.

Departure of Average Temperature from Normal (°F)
DEC 7 - 13, 1997



Extreme Minimum Temperature (°F)
DEC 7 - 13, 1997



More than a dozen daily-record highs were set across **Florida** from December 9-12. From Tuesday to Thursday, **Ft. Lauderdale** (87, 86, and 87°F) and **Miami** (86, 85, and 85°F) notched three consecutive records apiece. Heavy rainfall developed across **central Florida** around midweek, continuing through week's end. Some of the heaviest precipitation fell north of **Tampa**, in **Pasco County**, where weekly totals approached 11 inches, and south of **Orlando**, in **Osceola County**, where December 9-14 rainfall totaled 11.65 inches in **St. Cloud**. December 1-14 rainfall reached 9.05 inches in **Tampa** and 8.26 inches in **Orlando**, establishing monthly records.

On Wednesday morning, temperatures dipped to near or below freezing in the vicinity of **Phoenix, AZ**. Lows included 29°F in **Coolidge** and 31°F in **Glendale**. High-elevation valleys of the **West** reported very low temperatures after midweek. On Thursday, **West Yellowstone, MT** recorded -32°F. A day later, **Soda Springs, ID** notched -20°F. Very cold weather shifted into **southern Texas** at week's end. Sleet developed on Friday in **Brownsville, TX**, their 12th occurrence of frozen precipitation during this half-century and first since November 3, 1991. Lows on Saturday included 14°F in **Junction**, 17°F in **Hondo**, and 34°F in **Brownsville**.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 13, 1997

Data Provided by Climate Prediction Center (301-763-8000 EXT. 7511)

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 Dec 1	PCT. NORMAL SINCE Dec 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	48	36	61	21	42	-5	0.81	-0.34	0.30	1.30	62	52.04	101	91	64	0	2	4	0
	HUNTSVILLE	44	33	55	20	38	-6	1.02	-0.31	0.47	1.57	64	55.76	104	91	71	0	3	3	0
	MOBILE	55	41	71	29	48	-6	1.65	0.45	0.93	2.57	117	78.34	129	95	63	0	1	7	1
	MONTGOMERY	52	37	67	23	45	-6	0.30	-0.88	0.14	0.49	23	46.16	92	88	53	0	1	4	0
AK	ANCHORAGE	28	16	35	5	22	5	0.34	0.09	0.13	0.49	107	17.93	118	96	79	0	7	6	0
	BARROW	2	-5	16	-8	-1	9	0.06	0.03	0.02	0.06	120	5.53	130	84	79	0	7	4	0
	FAIRBANKS	6	-8	10	-18	-1	5	1.46	1.27	1.40	1.75	486	7.26	70	90	80	0	7	2	1
	JUNEAU	42	35	48	34	39	11	--	--	--	--	--	--	--	99	89	0	0	-	-
	KODIAK	34	25	37	13	30	-1	1.25	-0.24	0.77	2.45	90	59.58	94	91	65	0	7	4	1
	NOME	12	-2	29	-19	5	-3	0.00	-0.19	0.00	0.44	122	17.24	119	81	73	0	7	0	0
AZ	FLAGSTAFF	32	17	42	3	25	-6	0.99	0.44	0.49	1.30	130	15.93	74	75	49	0	7	3	0
	PHOENIX	61	43	65	35	52	-3	0.28	0.06	0.21	1.58	385	5.42	76	66	28	0	0	2	0
	PRESCOTT	43	23	54	15	33	-4	0.60	0.24	0.31	1.30	194	15.41	83	74	42	0	6	2	0
	TUCSON	55	38	62	29	46	-6	0.89	0.65	0.56	2.30	535	9.97	88	77	39	0	2	2	1
	YUMA	63	46	65	39	54	-2	0.01	-0.10	0.01	0.58	322	5.69	198	59	32	0	0	1	0
AR	FORT SMITH	41	33	45	24	37	-5	0.86	0.12	0.65	1.54	108	37.94	96	90	74	0	3	2	1
	LITTLE ROCK	44	34	50	25	39	-5	0.74	-0.41	0.45	1.22	56	56.68	121	87	68	0	2	3	0
CA	BAKERSFIELD	54	35	65	30	45	-3	0.16	0.02	0.11	1.03	396	5.88	110	96	60	0	3	3	0
	EUREKA	57	38	65	34	48	-1	1.75	0.36	1.02	1.79	69	34.10	100	88	59	0	0	3	2
	FRESNO	50	37	54	32	44	-2	0.46	0.16	0.34	0.96	171	7.85	81	99	70	0	1	2	0
	LOS ANGELES	65	48	68	43	57	-1	0.29	-0.07	0.29	4.36	651	12.32	112	55	33	0	0	1	0
	REDDING	54	34	61	32	44	-1	0.67	-0.55	0.65	1.38	61	33.37	111	93	54	0	4	2	1
	SACRAM/MCCLELL	53	39	61	34	46	--	1.38	--	1.38	1.49	--	14.48	--	96	70	0	0	1	1
	SAN DIEGO	65	49	72	44	57	0	0.34	-0.02	0.21	0.88	131	6.25	69	58	32	0	0	2	0
	SAN FRANCISCO	56	44	60	41	50	0	2.17	1.52	1.80	3.64	303	20.10	113	85	62	0	0	2	1
CO	ALAMOSA	25	-5	29	-16	10	-9	0.04	-0.07	0.04	0.10	50	7.62	105	87	52	0	7	1	0
	CO SPRINGS	40	19	53	14	30	-1	0.00	-0.11	0.00	0.00	0	23.02	144	70	36	0	7	0	0
	DENVER	35	18	48	13	27	-5	0.38	0.22	0.14	0.45	150	20.71	137	78	52	0	7	3	0
	GRAND JUNCTION	37	23	43	13	30	0	0.10	-0.04	0.08	0.11	42	13.19	159	81	49	0	7	2	0
	PUEBLO	39	17	50	4	28	-4	0.33	0.22	0.31	0.37	185	14.33	131	84	52	0	7	3	0
CT	BRIDGEPORT	39	29	46	24	34	-2	0.58	-0.22	0.48	0.87	58	34.46	87	84	58	0	7	2	0
	HARTFORD	37	24	43	20	30	-1	0.24	-0.67	0.23	0.35	21	37.01	88	89	58	0	7	2	0
DC	WASHINGTON	46	35	49	29	40	-1	0.32	-0.40	0.20	0.40	30	32.47	88	82	62	0	2	3	0
DE	WILMINGTON	42	31	46	26	37	-1	0.42	-0.38	0.42	0.68	46	--	--	85	63	0	5	1	0
FL	DAYTONA BEACH	69	54	80	34	62	1	3.84	3.26	1.32	3.97	371	50.89	110	97	74	0	0	6	3
	JACKSONVILLE	64	47	80	29	56	0	6.07	5.48	2.86	6.27	592	53.69	108	97	66	0	2	6	2
	KEY WEST	78	68	82	58	73	1	0.25	-0.22	0.23	3.26	366	38.07	99	91	76	0	0	2	0
	MIAMI	79	65	86	50	72	2	1.10	0.69	0.87	3.40	430	68.55	125	95	65	0	0	2	1
	ORLANDO	71	56	83	38	64	1	4.95	4.45	1.98	6.59	716	58.50	125	94	63	0	0	6	4
	TAMPA	69	57	76	41	63	0	6.85	6.36	2.26	8.89	999	61.03	143	95	77	0	0	5	4
	VALPARAISO/EGLIN	57	44	75	28	51	-2	1.42	0.49	0.60	1.42	84	61.70	104	90	64	0	1	6	1
	WEST PALM BEACH	80	63	87	45	71	3	1.42	0.83	1.42	2.57	220	58.76	99	93	61	0	0	1	1
GA	ATHENS	48	34	61	23	41	-6	1.05	0.15	0.39	1.67	101	50.47	107	90	68	0	2	4	0
	ATLANTA	46	33	65	23	40	-6	1.03	0.07	0.39	1.58	90	48.41	100	91	68	0	2	4	0
	AUGUSTA	53	36	67	24	44	-4	2.83	2.10	0.75	2.88	220	47.89	112	93	62	0	2	6	3
	COLUMBUS	51	39	70	27	45	-4	0.82	-0.29	0.26	1.31	65	45.58	95	93	59	0	1	5	0
	MACON	52	38	71	27	45	-5	2.24	1.30	0.57	2.30	137	40.23	96	92	61	0	2	6	2
	SAVANNAH	59	42	78	28	50	-2	1.49	0.86	0.41	1.54	136	53.43	113	97	62	0	2	6	0
HI	HILO	80	65	81	61	72	-1	0.39	-2.47	0.24	1.70	31	125.67	103	88	61	0	0	3	0
	HONOLULU	79	65	83	60	72	-3	0.02	-0.83	0.02	0.15	10	19.77	100	83	54	0	0	1	0
	KAHULUI	80	64	83	60	72	-1	0.12	-0.58	0.08	0.72	57	--	--	88	56	0	0	4	0
	LIHUE	74	65	77	59	70	-3	0.56	-0.57	0.40	0.60	28	--	--	85	62	0	0	4	0
ID	BOISE	37	24	45	18	30	-1	0.52	0.22	0.31	0.58	102	10.98	97	89	69	0	7	2	0
	LEWISTON	35	25	40	20	30	-5	0.31	0.03	0.16	0.31	61	15.26	129	92	77	0	7	3	0
	POCATELLO	28	14	38	0	21	-5	1.02	0.77	0.53	1.10	239	13.66	119	93	74	0	7	4	1
IL	CHICAGO/O'HARE	33	28	36	20	30	2	0.64	0.04	0.55	0.87	76	31.10	90	88	76	0	6	3	1
	MOLINE	32	26	35	18	29	2	0.31	-0.21	0.22	0.63	63	33.80	89	93	81	0	7	2	0
	PEORIA	33	27	35	22	30	1	0.35	-0.24	0.26	0.51	46	31.12	89	89	75	0	7	2	0
	ROCKFORD	32	25	34	17	29	2	0.30	-0.20	0.21	0.63	67	26.85	76	90	78	0	7	3	0
	SPRINGFIELD	33	28	35	21	30	-1	0.33	-0.33	0.28	0.55	45	28.94	86	92	82	0	7	3	0
IN	EVANSVILLE	39	29	45	22	34	-3	0.50	-0.37	0.29	0.85	62	46.08	112	91	72	0	5	3	0
	FORT WAYNE	32	27	34	23	29	-1	0.43	-0.26	0.38	0.57	45	39.76	120	90	80	0	7	2	0
	INDIANAPOLIS	35	27	42	24	31	-1	0.28	-0.51	0.16	0.54	36	32.26	85	92	77	0	6	3	0
	SOUTH BEND	32	25	34	19	29	-2	0.66	-0.11	0.62	1.01	69	32.34	87	91	80	0	7	3	1
IA	BURLINGTON	--	--	--	--	--	--	0.53	0.12	--	0.67	74	31.67	91	--	--	-	-	-	-
	CEDAR RAPIDS	--	--	--	--	--	--	0.18	-0.14	--	0.70	92	25.60	78	--	--	-	-	-	-
	DES MOINES	30	23	35	18	27	0	0.27	-0.04	0.09	0.60	100	31.49	97	95	85	0	7	4	0
	DUBUQUE	31	23	34	18	27	3	0.15	-0.33	0.08	0.66	71	29.46	79	94	82	0	7	3	0
	SIOUX CITY	33	19	42	7	26	3	0.03	-0.16	0.02	0.03	8	18.25	72	93	75	0	7	2	0
	WATERLOO	30	22	34	14	26	4	0.03	-0.29	0.02	0.39	64	31.31	95	94	84	0	7	2	0
KS	CONCORDIA	32	21	40	12	27	-5	0.28	0.09	0.28	0.82	216	24.91	88	93	78	0	7	1	0
	DODGE CITY	35	25	45	12	30	-4	0.06	-0.10	0.03	0.37	123	27.54	130	92	69	0	7	3	0
	GOODLAND	32	20	43	12	26	-4	0.10	0.00	0.07	0.23	121	18.35	103	87	73	0	7	2	0
	TOPEKA	33	24	38	15	29	-4	0.67	0.33	0.30	1.17	180	29.33	85	93	76	0	7	3	0

Based on 1961-90 normals

Weather Data for the Week Ending December 13, 1997

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 Dec 1	PCT. NORMAL SINCE Dec 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	36	27	48	20	32	-3	0.13	-0.16	0.08	0.72	131	35.10	122	91	71	0	7	4	0
KY	JACKSON	38	28	55	23	33	-7	0.42	-0.60	0.31	0.95	50	47.49	101	93	75	0	5	4	0
	LEXINGTON	38	28	49	21	33	-5	0.93	-0.01	0.65	1.14	66	57.60	136	92	72	0	5	4	1
	LOUISVILLE	39	32	47	28	35	-3	0.64	-0.21	0.41	0.93	58	54.55	129	91	71	0	4	3	0
	PADUCAH	41	30	49	20	35	-3	0.73	-0.37	0.51	1.13	55	49.36	106	96	73	0	3	3	1
LA	BATON ROUGE	57	41	77	28	49	-5	0.28	-0.97	0.17	0.41	18	62.59	108	88	57	0	1	3	0
	LAKE CHARLES	55	43	74	37	49	-5	0.60	-0.54	0.56	1.33	64	61.31	118	87	64	0	0	3	1
	NEW ORLEANS	60	45	80	37	52	-3	0.41	-0.90	0.33	0.67	28	49.76	85	86	60	0	0	4	0
	SHREVEPORT	50	39	72	32	44	-5	1.11	0.17	1.10	1.68	95	64.79	148	85	60	0	1	2	1
ME	CARIBOU	23	7	33	-10	15	-2	0.07	-0.69	0.07	0.93	65	33.22	95	93	82	0	7	1	0
	PORTLAND	37	19	40	13	28	0	0.01	-1.07	0.01	0.37	18	35.21	84	81	52	0	7	1	0
MD	BALTIMORE	44	31	48	23	37	-1	0.27	-0.50	0.21	0.43	29	36.72	95	87	69	0	5	2	0
MA	BOSTON	41	29	44	25	35	0	0.00	-0.93	0.00	0.49	28	30.25	77	86	63	0	7	0	0
	WORCESTER	35	25	41	21	30	1	0.45	-0.49	0.34	0.76	43	34.67	76	83	61	0	7	3	0
MI	ALPENA	34	26	39	23	30	4	0.03	-0.44	0.03	0.34	38	28.70	104	88	69	0	7	1	0
	GRAND RAPIDS	33	28	37	24	31	2	0.37	-0.31	0.35	0.55	42	29.17	85	91	74	0	6	2	0
	HOUGHTON LAKE	32	23	36	15	28	3	0.00	-0.46	0.00	0.18	21	25.93	95	88	73	0	7	0	0
	LANSING	33	28	38	23	31	2	0.37	-0.19	0.34	0.45	42	26.27	90	90	73	0	6	2	0
	MARQUETTE	--	--	--	--	--	--	0.02	-0.61	--	1.77	151	32.27	95	--	--	-	-	-	-
	MUSKEGON	34	28	36	20	31	1	0.20	-0.51	0.15	0.54	41	25.75	83	89	71	0	6	3	0
MN	DULUTH	29	18	33	11	23	8	0.00	-0.29	0.00	0.05	9	23.57	80	94	77	0	7	0	0
	INT'L FALLS	27	14	33	2	20	11	0.00	-0.19	0.00	0.09	25	18.80	79	94	79	0	7	0	0
	MINNEAPOLIS	32	22	39	16	27	7	0.01	-0.24	0.01	0.12	24	34.26	124	90	76	0	7	1	0
	ROCHESTER	29	21	34	16	25	6	0.00	-0.25	0.00	0.10	21	29.34	101	93	82	0	7	0	0
	ST. CLOUD	30	21	36	16	26	9	0.00	-0.19	0.00	0.07	18	24.43	91	92	73	0	7	0	0
MS	JACKSON	51	37	67	23	44	-5	0.45	-0.89	0.28	0.75	31	53.65	103	92	67	0	2	4	0
	MERIDIAN	52	37	69	22	44	-5	0.18	-1.19	0.15	0.61	24	51.13	96	92	57	0	2	2	0
	TUPELO	47	34	59	21	40	-5	0.72	-0.69	0.41	1.04	40	61.16	117	91	68	0	2	2	0
MO	COLUMBIA	33	26	36	19	30	-4	0.57	-0.03	0.34	0.81	71	36.17	96	94	80	0	7	4	0
	KANSAS CITY	34	25	40	18	29	-3	0.99	0.62	0.59	1.46	209	32.17	88	90	76	0	7	4	1
	SAINT LOUIS	35	29	42	25	32	-3	0.30	-0.43	0.22	0.64	46	30.09	84	93	78	0	6	3	0
	SPRINGFIELD	36	27	41	16	31	-6	1.19	0.42	0.48	1.64	112	36.98	89	96	81	0	7	4	0
MT	BILLINGS	35	21	44	13	28	1	0.26	0.09	0.19	0.39	126	15.39	105	74	52	0	7	2	0
	BUTTE	27	2	33	-9	15	-4	0.17	0.08	0.12	0.19	100	20.04	169	92	64	0	7	3	0
	GLASGOW	34	15	49	11	25	8	0.00	-0.08	0.00	0.00	0	11.71	109	82	58	0	7	0	0
	GREAT FALLS	36	20	51	12	28	3	0.26	0.07	0.16	0.27	82	14.21	97	73	50	0	6	2	0
	KALISPELL	28	17	33	9	22	-1	0.10	-0.29	0.08	0.10	14	17.08	111	91	75	0	7	2	0
	MILES CITY	37	16	54	8	27	6	0.02	-0.12	0.02	0.02	8	10.46	76	84	54	0	7	1	0
	MISSOULA	27	13	34	6	20	-4	0.23	-0.02	0.23	0.23	51	14.64	115	90	72	0	7	1	0
NE	GRAND ISLAND	35	20	51	8	28	1	0.02	-0.15	0.02	0.03	9	28.73	117	91	73	0	7	1	0
	LINCOLN	33	22	43	14	28	1	0.08	-0.14	0.07	0.22	52	24.56	88	93	77	0	7	2	0
	NORFOLK	34	18	45	7	26	2	0.08	-0.10	0.07	0.08	24	19.88	80	93	71	0	7	2	0
	NORTH PLATTE	37	18	57	6	28	2	0.03	-0.08	0.03	0.08	38	17.49	92	94	62	0	7	1	0
	OMAHA	32	21	40	14	27	0	0.10	-0.15	0.06	0.38	79	30.30	103	94	86	0	7	3	0
	SCOTTSBLUFF	39	18	49	11	28	1	0.12	-0.02	0.11	0.12	46	20.14	135	85	52	0	7	2	0
	VALENTINE	36	20	51	9	28	4	0.01	-0.07	0.01	0.04	24	22.07	123	87	66	0	7	1	0
NV	ELY	31	5	38	-7	18	-8	0.47	0.30	0.25	0.47	152	9.41	96	84	52	0	7	2	0
	LAS VEGAS	53	39	56	29	46	-1	0.04	-0.04	0.02	0.10	67	3.82	99	49	24	0	2	2	0
	RENO	40	21	44	16	30	-3	0.24	0.02	0.15	0.56	137	7.73	112	91	48	0	7	2	0
	WINNEMUCCA	39	18	44	10	29	-2	0.24	0.04	0.12	0.31	79	7.94	102	92	57	0	6	3	0
NH	CONCORD	36	19	39	13	28	1	0.00	-0.75	0.00	0.24	17	32.26	93	81	55	0	7	0	0
NJ	NEWARK	41	30	46	25	35	-2	0.67	-0.12	0.56	0.84	56	39.00	93	84	62	0	6	3	1
NM	ALBUQUERQUE	41	25	51	17	33	-3	0.15	0.04	0.11	0.49	245	11.91	140	81	38	0	5	4	0
NY	ALBANY	34	25	37	18	29	1	0.04	-0.65	0.04	0.21	16	32.70	95	84	68	0	7	1	0
	BINGHAMTON	31	24	32	20	27	-1	0.52	-0.18	0.42	0.92	70	29.59	84	96	79	0	7	4	0
	BUFFALO	34	29	37	25	31	1	0.85	-0.02	0.55	1.32	81	39.52	108	90	74	0	7	5	1
	ROCHESTER	33	28	36	25	31	0	0.50	-0.14	0.42	1.12	93	33.08	109	91	78	0	7	5	0
	SYRACUSE	34	27	37	19	30	0	0.77	0.01	0.55	1.13	78	29.59	80	92	74	0	7	5	1
NC	ASHEVILLE	41	27	60	17	34	-6	0.57	-0.23	0.27	1.05	70	47.44	104	91	63	0	5	3	0
	CHARLOTTE	46	33	53	24	39	-4	0.66	-0.11	0.34	1.02	71	45.68	111	85	63	0	3	3	0
	GREENSBORO	44	29	48	19	37	-5	0.33	-0.43	0.30	0.56	40	37.83	93	87	53	0	4	3	0
	HATTERAS	47	42	54	33	44	-6	0.49	-0.50	0.28	0.77	41	49.90	94	85	69	0	0	4	0
	RALEIGH	46	30	50	20	38	-6	0.56	-0.16	0.45	0.72	54	38.79	98	90	58	0	3	3	0
	WILMINGTON	54	37	72	28	46	-4	1.41	0.61	0.45	1.94	133	45.50	87	94	60	0	2	5	0
ND	BISMARCK	33	22	48	14	28	12	0.03	-0.08	0.03	0.08	40	14.89	98	87	72	0	7	1	0
	DICKINSON	35	22	50	16	29	10	0.02	-0.06	0.02	0.02	13	16.05	101	85	67	0	7	1	0
	FARGO	29	18	33	9	23	9	0.00	-0.14	0.00	0.02	8	26.63	139	91	79	0	7	0	0
	GRAND FORKS	29	18	36	7	23	11	--	--	--	--	--	--	--	92	80	0	7	-	-
	JAMESTOWN	29	21	36	13	25	10	0.06	-0.05	0.04	0.23	115	20.60	124	91	82	0	7	2	0
	WILLISTON	33	18	42	10	25	10	0.00	-0.14	0.00	0.00	0	11.75	88	87	69	0	7	0	0
OH	AKRON-CANTON	32	27	38	25	30	-3	0.88	0.19	0.75	1.41	108	31.81	90	93	81	0	7	5	1
	CINCINNATI	38	30	47	26	34	-1	0.74	0.00	0.43	1.07	77	38.43	97	88	71	0	5	3	0
	CLEVELAND	33	30	36	27	32	-1	0.82	0.08	0.66	1.34	98	34.27	98	91	75	0	7	5	1
	COLUMBUS	36	30	46	28	33	0	0.83	0.15	0.72	1.11	87	36.70	100	92	76	0	6	2	1
	DAYTON	34	29	44	25	32	-2	0.66	-0.03	0.58	1.00	77	30.09	86	93	78	0	7	2	1
	MANSFIELD	31	27	34	23	29	-3	0.66	-0.08	0.61	1.06	75	38.07	100	94	82	0	7	4	1

Based on 1961-90 normals

Weather Data for the Week Ending December 13, 1997

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 Dec 1	PCT. NORMAL SINCE Dec 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	33	28	36	25	30	1	0.64	-0.06	0.63	1.00	76	37.81	121	90	78	0	7	2	1
	YOUNGSTOWN	34	28	40	26	31	0	0.94	0.25	0.79	1.39	107	32.36	91	90	76	0	6	5	1
OK	OKLAHOMA CITY	42	30	59	17	36	-5	0.19	-0.14	–	0.35	54	25.36	78	88	66	0	4	-	-
	TULSA	40	30	54	21	35	-5	0.65	0.12	0.44	1.10	108	38.31	97	90	67	0	4	4	0
OR	ASTORIA	51	38	53	34	45	2	1.53	-0.87	1.22	1.53	34	78.89	131	91	69	0	0	4	1
	BURNS	31	13	38	6	22	-4	0.44	0.16	0.21	0.46	88	9.46	101	94	77	0	7	4	0
	EUGENE	42	32	50	28	37	-4	0.91	-1.06	0.44	1.02	28	37.44	84	91	80	0	6	4	0
	MEDFORD	48	30	61	26	39	1	0.25	-0.52	0.18	0.33	23	16.90	100	98	65	0	5	2	0
	PENDLETON	35	28	43	26	32	-4	0.67	0.30	0.37	0.67	96	11.29	101	96	85	0	7	4	0
	PORTLAND	45	37	52	34	41	0	0.90	-0.50	0.34	0.90	35	41.78	128	94	72	0	0	4	0
	SALEM	43	32	51	30	38	-3	0.50	-1.07	0.37	0.52	18	42.69	121	95	70	0	4	3	0
PA	ALLENTOWN	38	26	43	19	32	-1	0.36	-0.45	0.30	0.51	34	36.66	88	88	67	0	7	3	0
	ERIE	36	31	38	27	33	0	1.46	0.59	0.91	2.79	170	39.87	101	92	79	0	5	4	1
	MIDDLETOWN	39	29	42	26	34	-1	0.37	-0.38	0.35	0.38	26	30.69	79	86	67	0	5	2	0
	PHILADELPHIA	43	32	47	27	37	0	0.52	-0.25	0.35	0.69	48	30.09	76	78	58	0	4	3	0
	PITTSBURGH	36	29	47	26	33	0	0.40	-0.26	0.38	0.62	50	33.88	96	86	73	0	6	2	0
	SCRANTON	35	27	37	20	31	-1	0.56	-0.03	0.50	0.85	75	26.35	76	89	71	0	7	3	1
	WILLIAMSPORT	37	29	43	22	33	1	0.34	-0.38	0.34	0.44	32	28.60	73	88	67	0	6	1	0
RI	PROVIDENCE	41	26	47	24	33	-1	0.34	-0.67	0.33	0.73	39	37.99	88	92	59	0	7	2	0
SC	BEAUFORT	58	42	78	30	50	-3	0.33	-0.36	0.29	0.34	27	40.15	81	93	64	0	2	2	0
	CHARLESTON	57	41	76	27	49	-3	1.05	0.36	0.30	1.09	88	58.46	118	95	64	0	2	6	0
	COLUMBIA	50	35	59	23	42	-6	1.48	0.71	0.54	1.50	108	44.76	94	94	66	0	2	5	1
	GREENVILLE	45	31	52	22	38	-6	0.83	-0.10	0.31	1.44	85	47.24	97	92	64	0	4	3	0
SD	ABERDEEN	32	18	43	8	25	8	0.02	-0.07	0.02	0.19	100	19.38	106	88	75	0	7	1	0
	HURON	35	19	47	10	27	7	0.05	-0.06	0.04	0.13	65	24.62	124	87	68	0	7	2	0
	RAPID CITY	37	20	61	16	28	3	0.00	-0.11	0.00	0.00	0	20.64	126	77	55	0	7	0	0
	SIOUX FALLS	31	17	39	6	24	4	0.07	-0.10	0.05	0.16	48	20.18	86	92	77	0	7	2	0
TN	BRISTOL	41	28	58	18	35	-5	0.34	-0.43	0.19	1.04	74	40.43	104	90	67	0	5	3	0
	CHATTANOOGA	44	34	62	26	39	-3	0.55	-0.62	0.31	1.04	48	54.04	107	87	65	0	2	3	0
	KNOXVILLE	41	32	60	26	37	-5	0.51	-0.51	0.35	0.84	45	50.47	114	86	68	0	3	3	0
	MEMPHIS	46	34	61	26	40	-5	0.65	-0.71	0.63	1.12	44	67.72	138	87	67	0	2	2	1
	NASHVILLE	43	33	53	27	38	-4	0.56	-0.51	0.38	0.87	44	52.83	118	89	69	0	4	3	0
TX	ABILENE	51	32	72	18	42	-5	0.39	0.15	0.39	0.86	187	24.78	104	85	42	0	4	1	0
	AMARILLO	44	23	63	10	33	-4	0.11	0.01	0.05	0.46	230	23.29	121	89	50	0	7	3	0
	AUSTIN	59	40	80	29	50	-3	0.20	-0.24	0.20	0.22	27	43.02	140	80	36	0	1	1	0
	BEAUMONT	57	43	77	34	50	-5	1.06	-0.01	0.89	1.83	91	47.65	88	86	65	0	0	2	1
	BROWNSVILLE	66	52	79	34	59	-4	0.24	-0.04	0.23	0.24	46	35.98	139	92	54	0	0	2	0
	CORPUS CHRISTI	64	47	83	32	56	-4	0.08	-0.20	0.07	0.08	16	36.05	123	82	50	0	1	2	0
	DEL RIO	61	37	79	27	49	-4	0.01	-0.13	0.01	0.06	22	22.61	126	71	35	0	2	1	0
	EL PASO	49	32	62	18	41	-4	0.21	0.07	0.21	0.49	204	8.73	102	77	34	0	4	1	0
	FORT WORTH	51	35	72	23	43	-5	1.31	0.89	1.31	2.29	286	40.31	123	88	47	0	2	1	1
	GALVESTON	59	48	73	38	54	-4	2.15	1.35	1.45	2.15	145	57.77	144	84	67	0	0	3	2
	HOUSTON	58	41	77	28	49	-5	1.72	0.93	1.49	2.86	195	57.17	130	91	60	0	1	3	1
	LUBBOCK	48	25	66	13	36	-5	0.07	-0.06	0.07	0.24	96	21.16	115	86	41	0	5	1	0
	MIDLAND	53	30	69	20	41	-4	0.56	0.42	0.37	0.59	227	16.36	111	81	33	0	4	2	0
	SAN ANGELO	54	31	74	19	42	-5	0.06	-0.13	0.06	0.17	49	22.17	111	88	34	0	4	1	0
	SAN ANTONIO	59	37	79	23	48	-5	0.18	-0.17	0.16	0.32	46	30.72	102	79	36	0	2	2	0
	VICTORIA	60	43	79	27	51	-5	0.10	-0.37	0.09	0.25	29	65.72	181	86	53	0	1	2	0
	WACO	53	36	73	22	45	-5	0.71	0.27	0.71	1.36	163	34.91	113	87	44	0	3	1	1
	WICHITA FALLS	46	31	64	19	38	-6	0.35	0.05	0.35	1.02	182	20.69	73	88	51	0	4	1	0
UT	SALT LAKE CITY	35	21	45	12	28	-3	0.51	0.18	0.42	0.55	90	16.83	109	91	63	0	5	3	0
VT	BURLINGTON	30	19	37	12	25	0	0.03	-0.55	0.02	0.35	32	29.28	88	91	71	0	7	2	0
VA	LYNCHBURG	43	26	48	17	34	-5	0.33	-0.41	0.29	0.95	69	33.78	87	92	56	0	5	2	0
	NORFOLK	48	36	53	29	42	-3	0.38	-0.32	0.36	0.62	48	35.38	83	91	68	0	2	2	0
	RICHMOND	45	30	47	23	38	-4	0.37	-0.37	0.35	0.65	48	32.43	79	90	63	0	5	2	0
	ROANOKE	41	30	45	21	36	-4	0.20	-0.49	0.20	0.40	31	33.63	85	83	58	0	4	1	0
	WASH/DULLES	44	29	47	22	37	0	0.42	-0.32	0.29	0.58	42	34.41	90	88	69	0	5	3	0
WA	HANFORD	40	30	46	26	35	–	0.29	0.07	0.29	0.29	69	6.37	113	89	65	0	5	1	0
	OLYMPIA	46	30	51	26	38	0	0.43	-1.42	0.16	0.43	13	60.29	131	96	78	0	4	4	0
	QUILLAYUTE	52	37	61	31	45	4	0.69	-2.84	0.34	0.75	11	117.08	122	85	61	0	1	5	0
	SEATTLE-TACOMA	47	35	51	33	41	0	0.32	-1.03	0.14	0.32	13	42.29	125	98	68	0	0	3	0
	SPOKANE	32	25	34	22	28	0	0.31	-0.24	0.17	0.31	30	16.75	111	96	82	0	7	4	0
	YAKIMA	34	26	37	14	30	-1	0.18	-0.14	0.18	0.18	33	6.87	97	96	84	0	7	1	0
WV	BECKLEY	34	26	51	18	30	-5	0.36	-0.38	0.29	0.66	49	36.24	93	92	78	0	6	3	0
	CHARLESTON	40	31	58	25	35	-3	0.22	-0.57	0.17	0.60	41	39.79	98	89	73	0	5	3	0
	ELKINS	37	28	53	21	32	-1	0.66	-0.14	0.56	1.01	68	40.59	95	91	74	0	6	5	1
	HUNTINGTON	40	31	54	26	35	-3	0.27	-0.50	0.22	0.44	31	36.84	93	88	69	0	5	3	0
WI	EAU CLAIRE	33	23	40	18	28	9	0.06	-0.19	0.04	0.16	33	29.44	95	92	75	0	7	2	0
	GREEN BAY	34	25	35	17	29	7	0.01	-0.36	0.01	0.42	59	27.17	97	88	72	0	7	1	0
	MADISON	32	24	36	18	28	4	0.15	-0.29	0.12	0.60	71	28.00	94	90	75	0	7	2	0
	MILWAUKEE	33	27	36	22	30	4	0.18	-0.37	0.14	0.25	24	31.78	100	89	76	0	7	2	0
WY	CASPER	30	15	43	-6	23	-2	0.25	0.08	0.20	0.41	132	11.68	96	81	63	0	7	2	0
	CHEYENNE	36	20	48	12	28	-1	0.50	0.40	0.20	0.59	295	19.89	141	77	50	0	7	3	0
	LANDER	21	6	30	-6	13	-8	0.78	0.64	0.54	1.22	469	13.83	109	91	73	0	7	3	1
	SHERIDAN	33	11	44	5	22	-2	0.08	-0.09	0.08	0.40	129	15.14	107	83	65	0	7	1	0

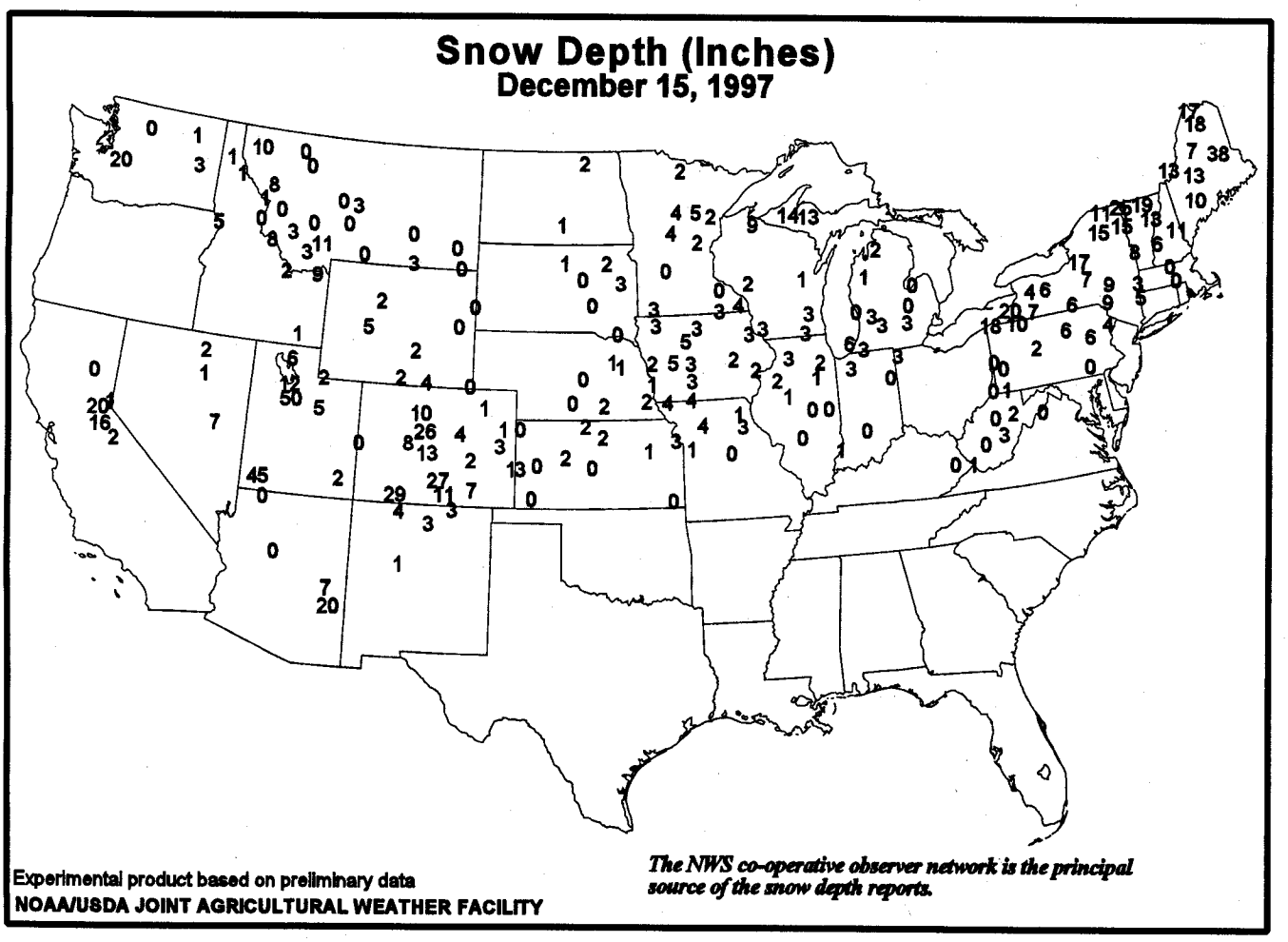
NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

National Agricultural Summary

December 8 - 14, 1997

HIGHLIGHTS

Storms moved across the Southern United States again last week, bringing rain, snow, and below-normal temperatures. After early-week showers in California, fruit and vegetable harvests and small grain seeding resumed as soils dried. Late-week good weather allowed Arizona farmers to harvest cotton and alfalfa fields. However, seeding of small grains remained well behind the normal pace due to late cotton harvest in the central area of the State. The rains moved eastward into the southern Plains, cutting some harvest activities short of completion, but bringing needed moisture to winter wheat fields. Below-normal temperatures as far south as the Mexico border slowed the growth and development of winter wheat fields, limiting grazing. Continued rainfall in the Southeast slowed harvest of remaining fall crops as most farmers turned their focus to general farm maintenance. Rare snow fell in Mississippi and Alabama late in the week, halting fieldwork activities. In Florida, heavy rain and flooding slowed citrus harvest and may have affected the quality of some vegetables. Areas of Florida have already received record monthly total precipitation. Snow fell across the Corn Belt, halting fieldwork but bringing needed soil moisture. The High Plains remained mostly dry, especially farther north, where little precipitation has fallen in the last 2 months.



International Weather and Crop Summary

December 7 - 13, 1997

HIGHLIGHTS

FSU-WESTERN: The coldest weather so far this season in winter grain areas of Russia and northern Ukraine was accompanied by snow.

EUROPE: Widespread showers and mild weather favored winter grains.

NORTHWESTERN AFRICA: Light showers maintained favorable moisture for winter grains in Algeria and Tunisia, while dry weather in Morocco allowed rapid planting progress.

AUSTRALIA: Widespread, timely rain covered primary summer crop areas.

SOUTH ASIA: Unseasonable wetness continued to plague mature cotton but further increased moisture reserves for winter grains and oilseeds.

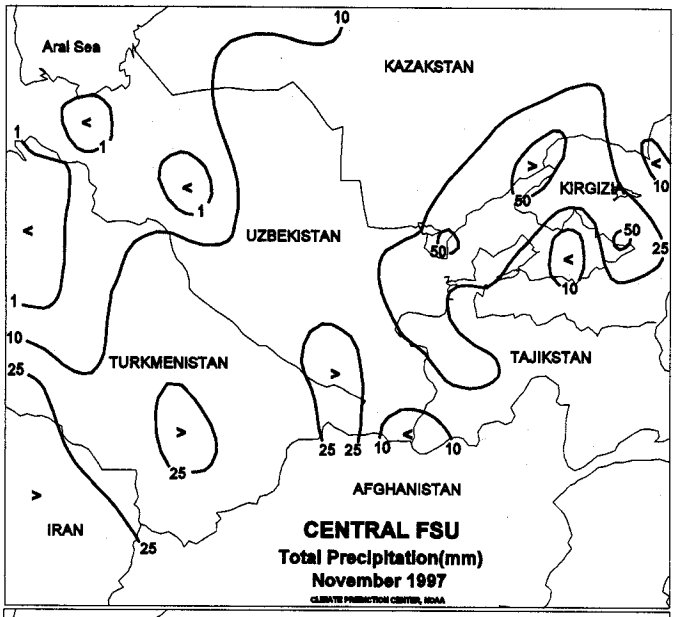
SOUTH AFRICA: Unfavorably warm, dry weather covered the corn belt.

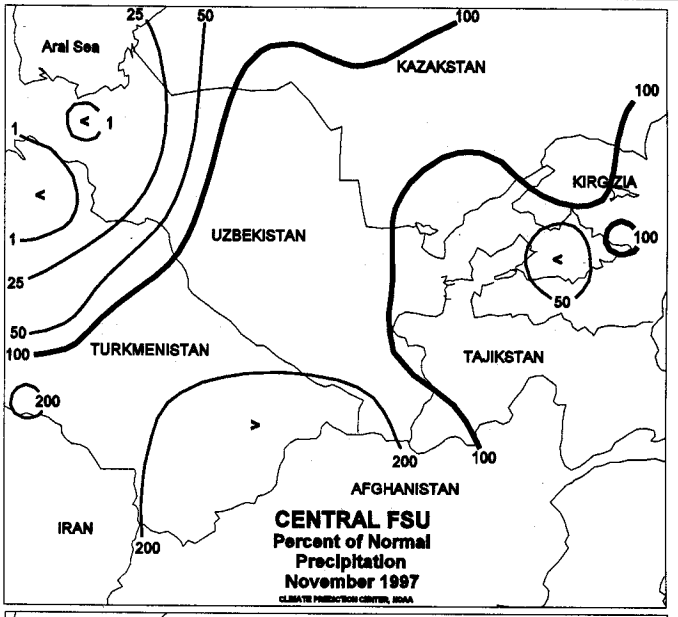
SOUTHEAST ASIA: Widespread showers brought drought relief for main-season rice in Java. Below-normal rainfall continued to worsen drought across the Philippines.

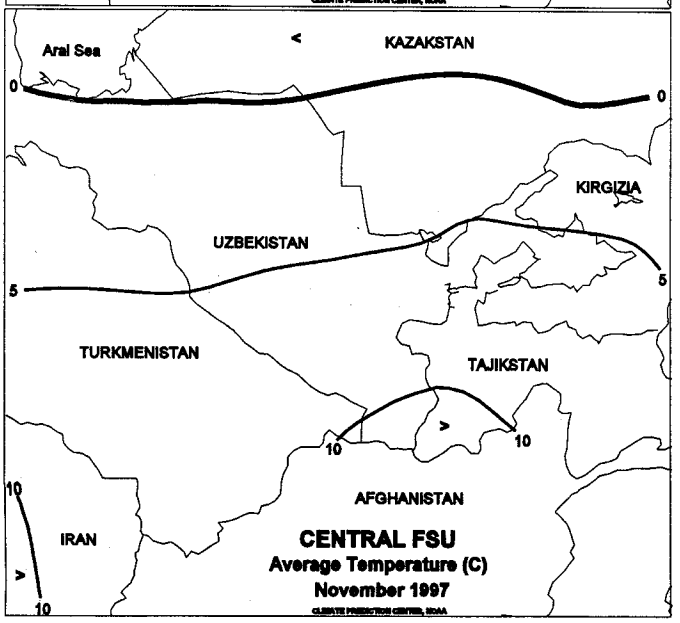
EASTERN ASIA: Winter wheat entered dormancy across the North China Plain.

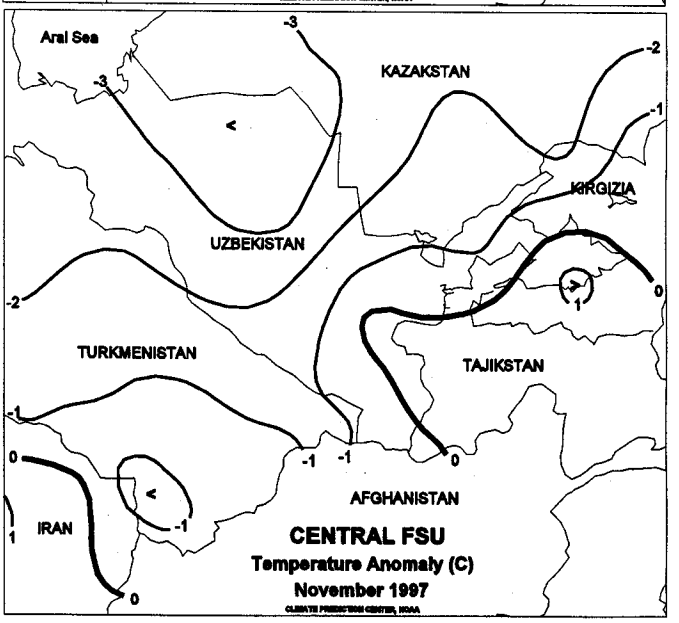
SOUTH AMERICA: Showers boosted topsoil moisture for germinating summer crops across the region, but heavy rain in Argentina caused flooding.

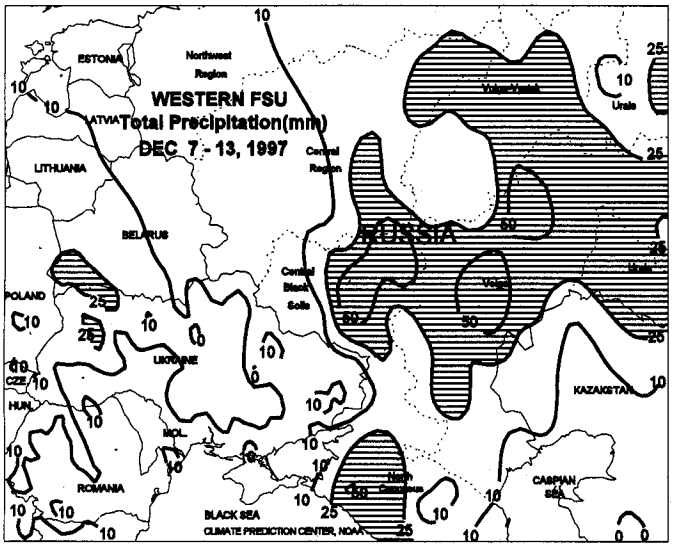
MEXICO: Freezing temperatures possibly damaged coffee in east-central Mexico.





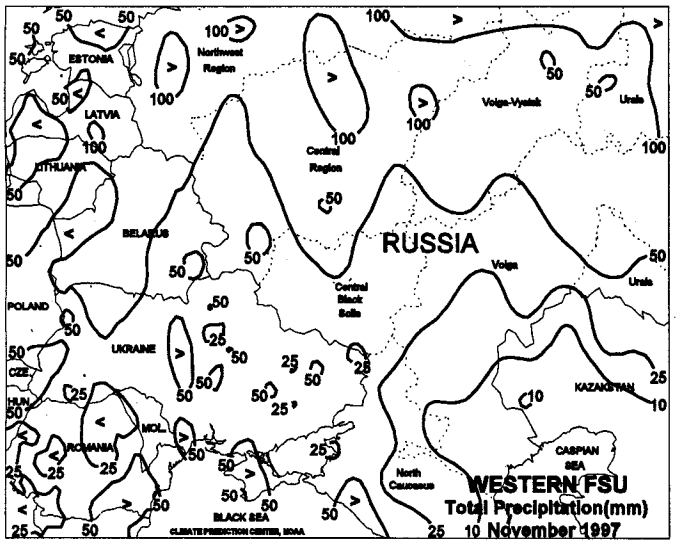


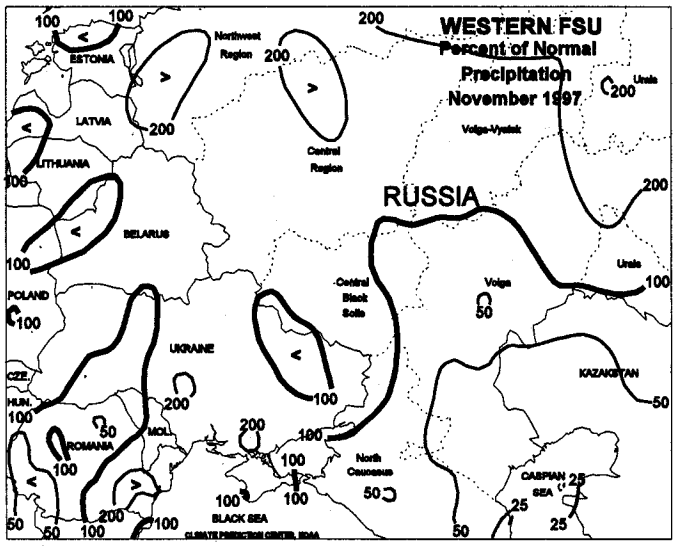


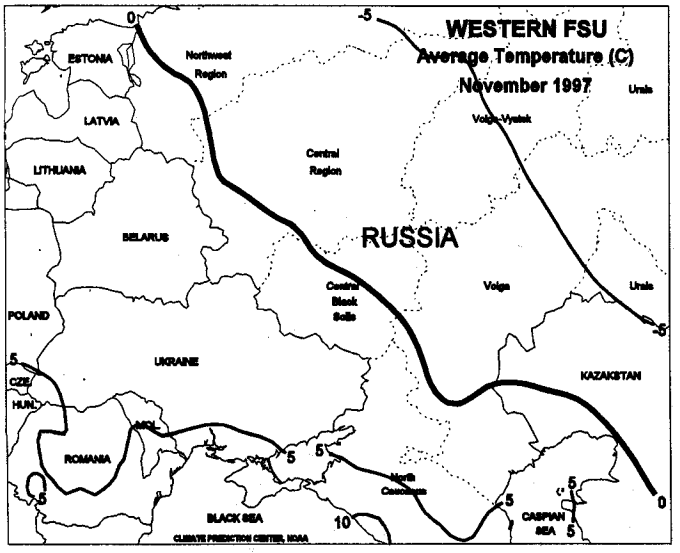


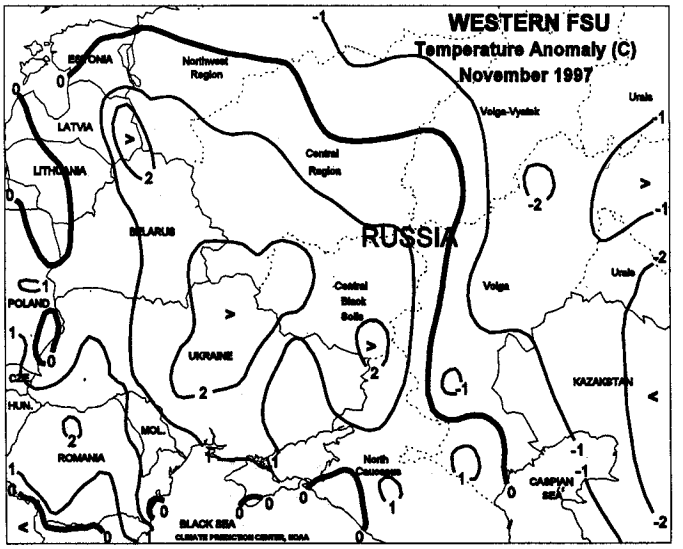
FSU-WESTERN

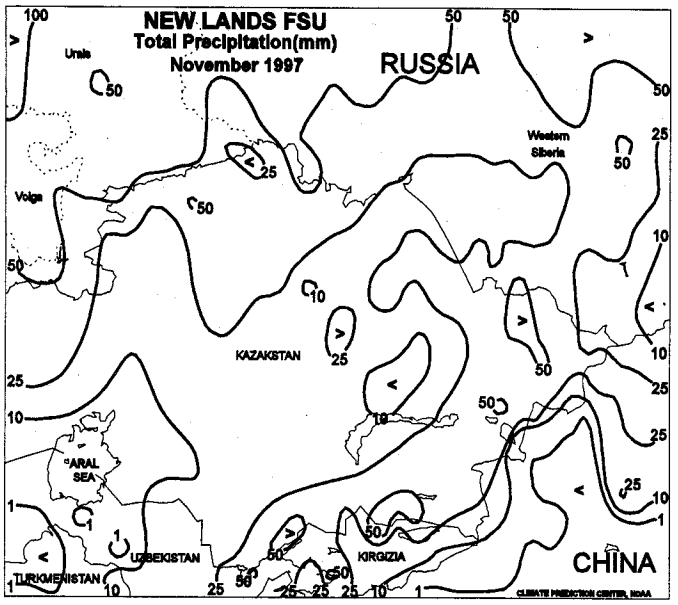
In Russia and Ukraine, mild weather early in the week was replaced by much colder weather by week's end. The bitter cold (minimum temperatures ranging from -10 to -19 degrees C) plunged as far south as winter grain areas in the northern tip of the North Caucasus region and northern and eastern Ukraine. In both Russia and Ukraine, the cold snap was accompanied by light to moderate snowfall, providing protection from extreme cold. Farther south, mild weather was accompanied by light to moderate rain (10-50 mm) in winter wheat areas in the southern Ukraine and the southern half of North Caucasus, Russia. Elsewhere, a cooling trend in the Baltics and Belarus was accompanied by rain that turned to snow at week's end, increasing snow cover. In November, weather conditions favored winter grains throughout most of the region. Near- to above-normal temperatures prevailed over most crop areas in Russia, Ukraine, Belarus, the Baltics, and Moldova. Temperatures in November were low enough to keep winter grains dormant in northern Russia. During the month, winter wheat in major growing areas in Ukraine and southern Russia entered dormancy with sufficient hardening. Near- to above-normal precipitation in November helped recharge soil moisture in Ukraine, northern Russia, most of Belarus, Latvia, and Estonia. Elsewhere, below-normal precipitation occurred in the lower Volga Valley and the North Caucasus regions in Russia.

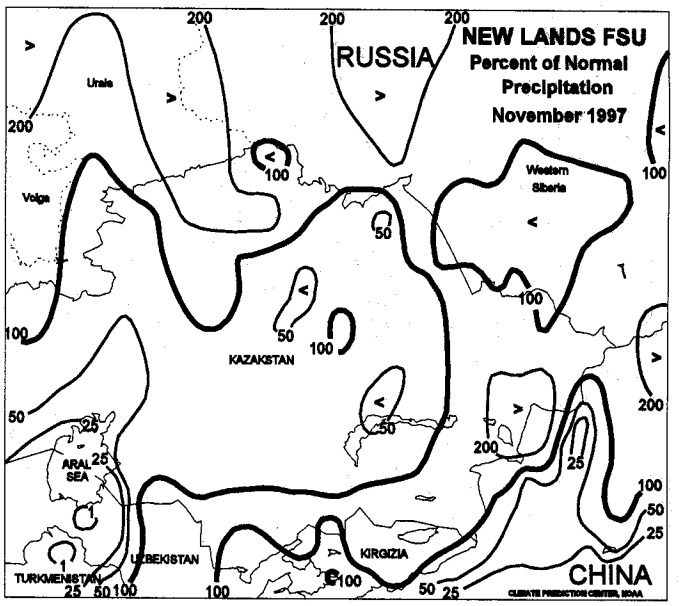


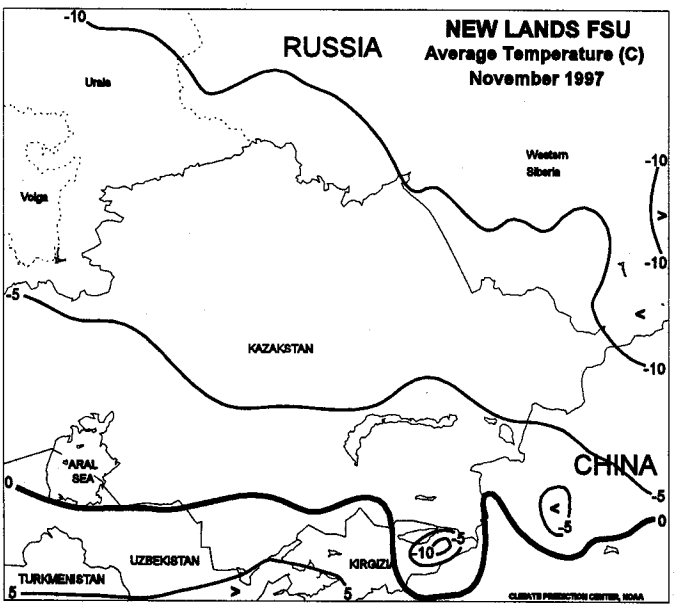


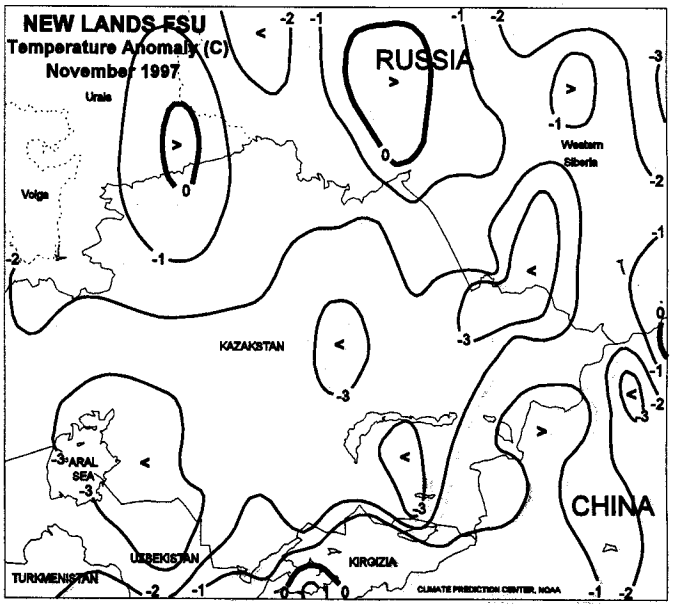


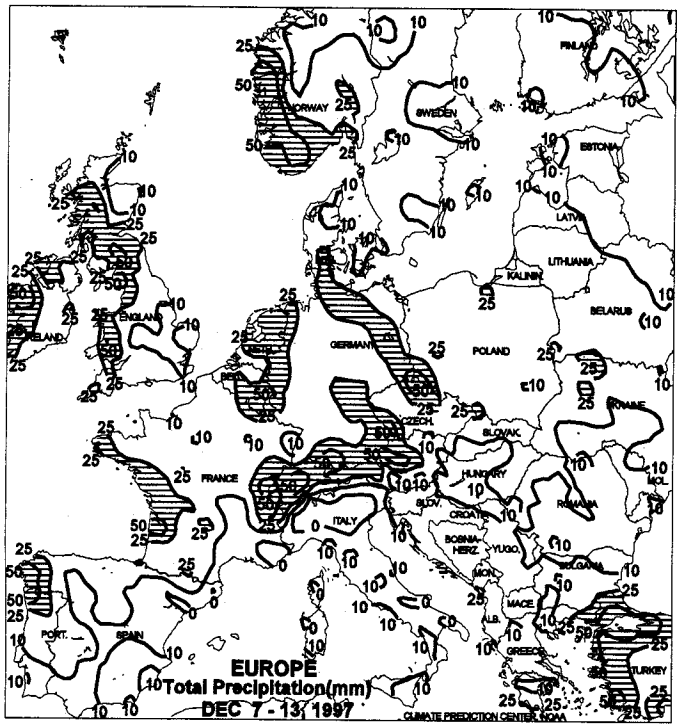



NEW LANDS FSU
Total Precipitation(mm)
November 1997
RUSSIA
Urals
Volga
Western Siberia
KAZAKSTAN
ARAL SEA
UZBEKISTAN
TURKMENISTAN
KIRGIZIA
CHINA
CLIMATE PREDICTION CENTER, NOAA


NEW LANDS FSU
Percent of Normal
Precipitation
November 1997
RUSSIA
Urals
Volga
Western Siberia
KAZAKSTAN
ARAL SEA
UZBEKISTAN
TURKMENISTAN
KIRGIZIA
CHINA
CLIMATE PREDICTION CENTER, NOAA

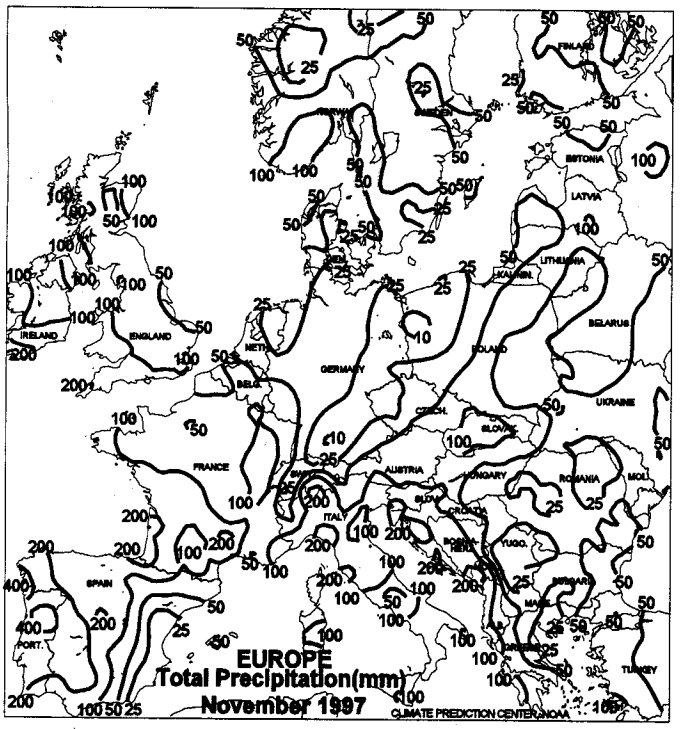

NEW LANDS FSU
Average Temperature (C)
November 1997
RUSSIA
Urals
Volga
Western Siberia
KAZAKSTAN
ARAL SEA
UZBEKISTAN
TURKMENISTAN
KIRGIZIA
CHINA
CLIMATE PREDICTION CENTER, NOAA

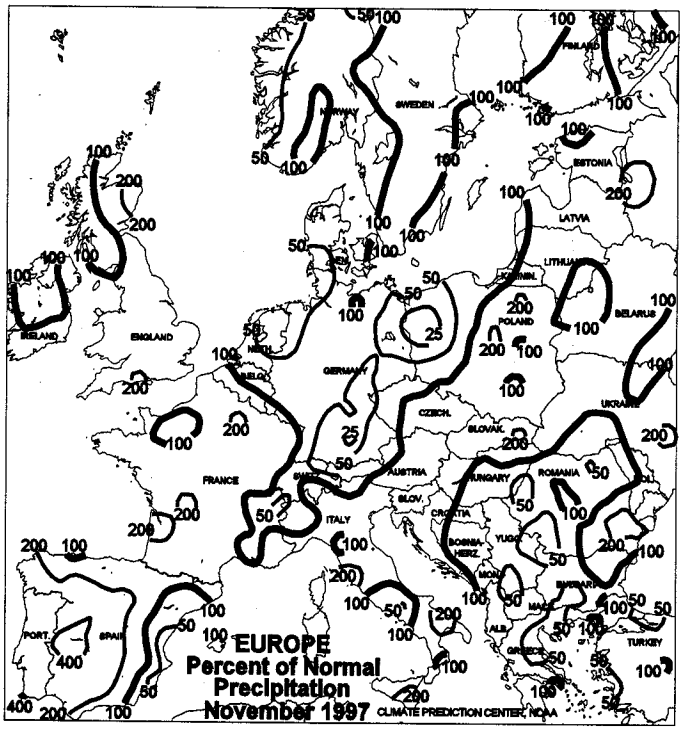

NEW LANDS FSU
Temperature Anomaly (C)
November 1997
RUSSIA
Urals
Volga
Western Siberia
KAZAKSTAN
ARAL SEA
UZBEKISTAN
TURKMENISTAN
KIRGIZIA
CHINA
CLIMATE PREDICTION CENTER, NOAA

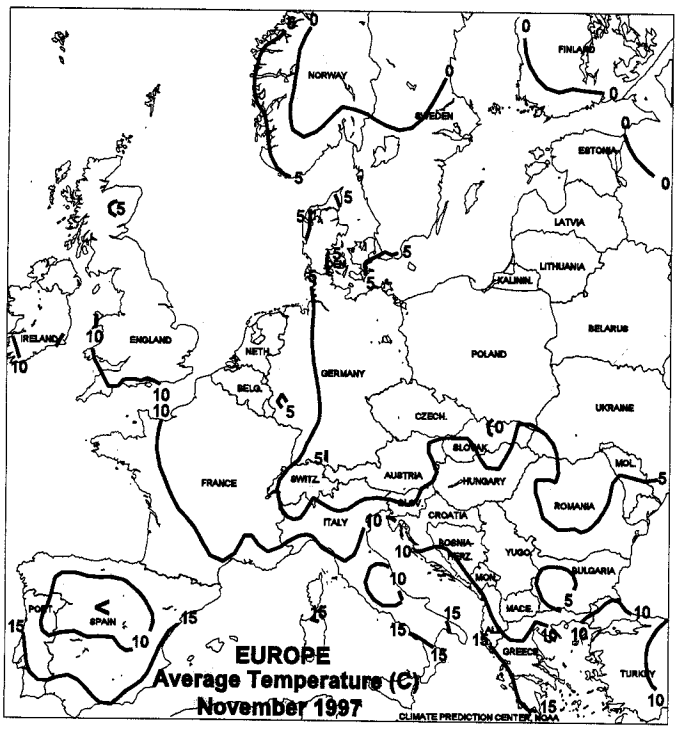


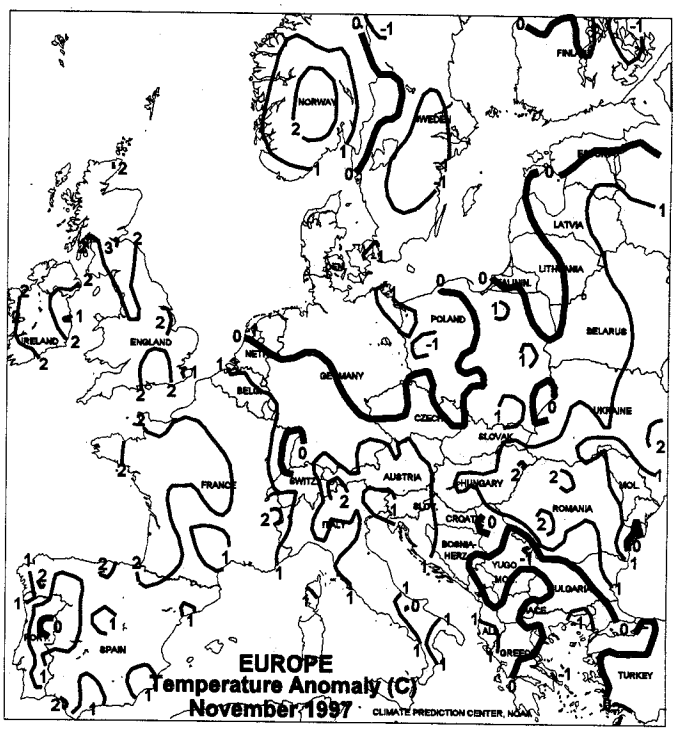
EUROPE

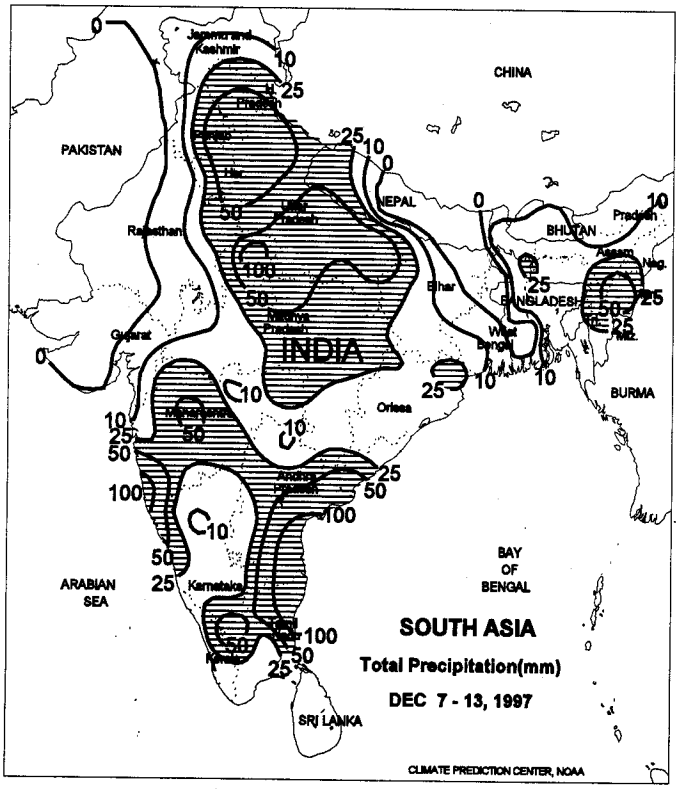
Widespread light precipitation and mild weather favored winter grains over most of Europe. Precipitation amounts generally ranged from 10 to 25 mm, with local amounts in excess of 50 mm. Mostly dry weather in Italy improved conditions for winter grain planting. Light to moderate showers (4-33 mm) in Portugal maintained soggy field conditions, while farther east, drier weather in southern Spain helped late winter grain planting. Weekly temperatures averaged 2 to 5 degrees C over most of Europe, except in Bulgaria and Greece, where temperatures averaged 1 to 3 degrees C below normal. In November, above-normal precipitation and mild weather in England, France, and northern Spain benefited winter grain establishment. Farther east, precipitation tapered off in Germany, with well-below-normal amounts of moisture in southern and eastern areas. In eastern Europe, above-normal precipitation fell in eastern Poland, the Czech Republic, and Slovakia, while below-normal rainfall in Hungary continued to limit moisture for winter grain development. In southeastern Europe, below-normal precipitation and seasonable temperatures in Yugoslavia and Bulgaria favored late-season fieldwork and allowed further establishment of winter grains. Elsewhere, persistent heavy rain fell in Portugal and adjacent areas in Spain. Two to six times the normal amount of rain fell in these areas, delaying fieldwork and causing some flooding. Farther east during the month, above-normal precipitation in peninsular Italy frequently fell, slowing winter grain planting.





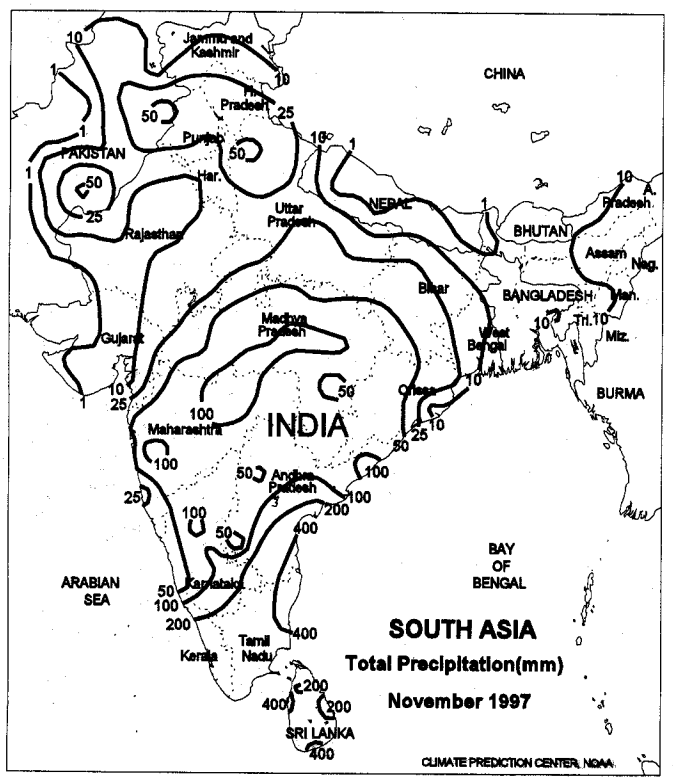


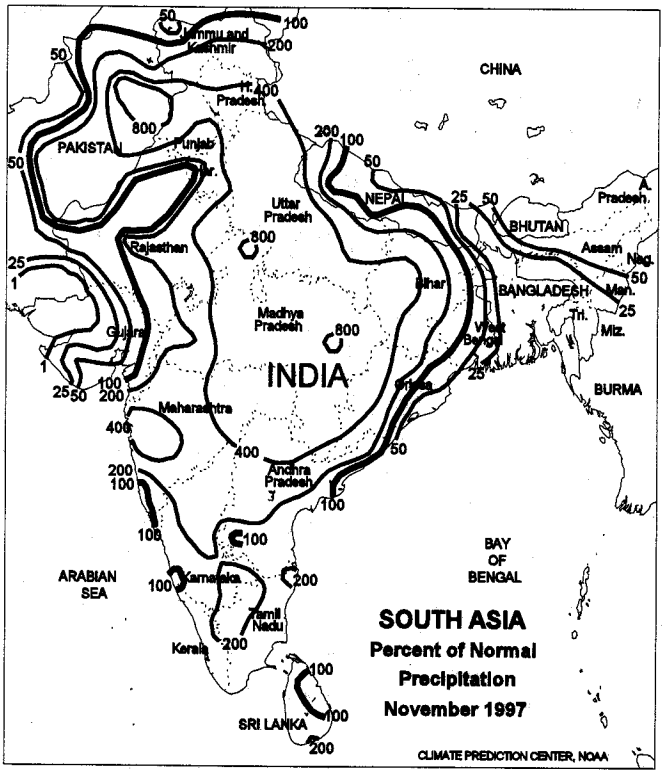


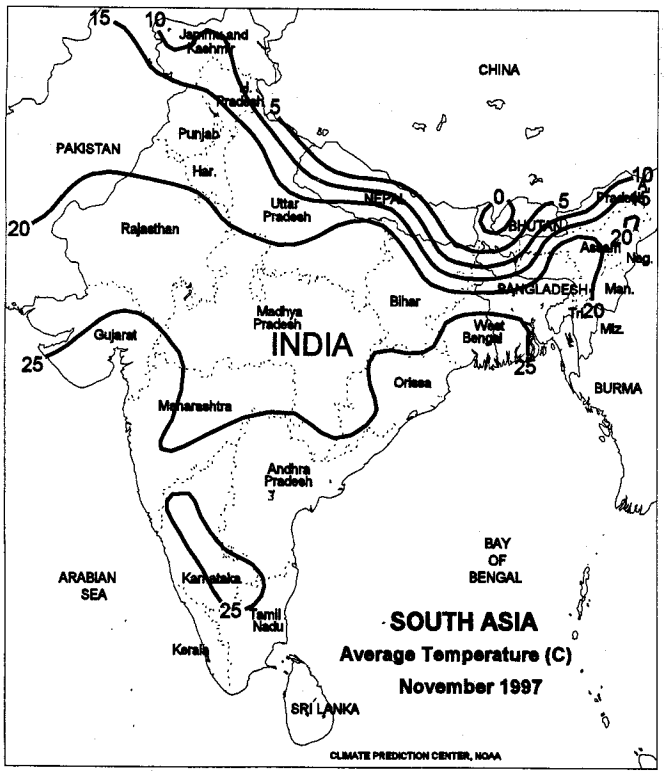


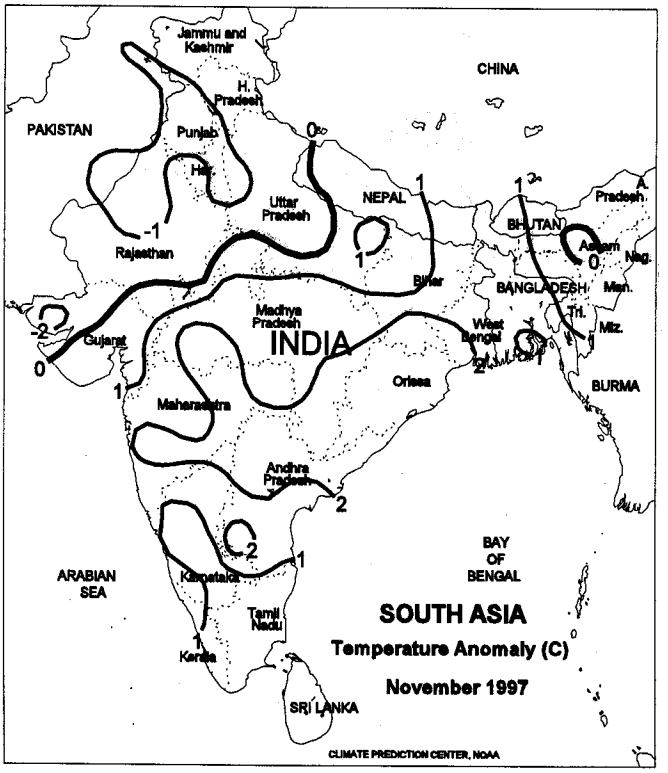
SOUTH ASIA

Unseasonable rain (10-25 mm, exceeding 50 mm at many locations) covered much of India. While slowing seasonal fieldwork and keeping mature cotton unfavorably wet, moisture is adequate to abundant for winter grains and oilseeds. Heavy rain (50-100 mm or more) persisted over southeast coastal rice areas, likely causing some additional damage. In November, early-month dryness favored maturing grains, oilseeds, and cotton. However, conditions became progressively wetter as heavy rains spread northward from the southern interior. By month's end, showers were reaching northern Pakistan and cotton areas of north-central India. Rainfall totaled 200 to as much as 800 percent of normal (25-50 mm or greater) and was extremely untimely for maturing cotton and other summer crops. The moisture was overall beneficial for winter grains and oilseeds, although some fieldwork delays resulted.

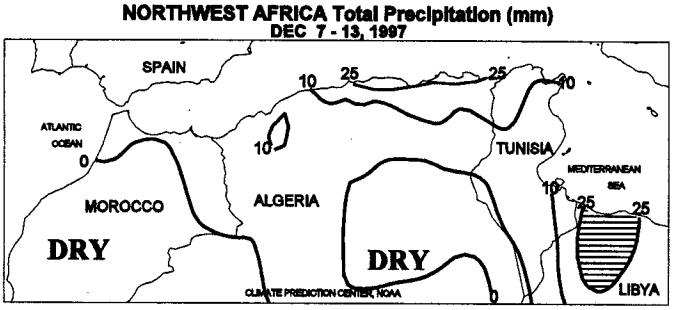

CHINA
PAKISTAN
NEPAL
BHUTAN
BANGLADESH
BURMA
INDIA
ARABIAN SEA
BAY OF BENGAL
SRI LANKA
SOUTH ASIA
Total Precipitation(mm)
November 1997
CLIMATE PREDICTION CENTER, NOAA


CHINA
PAKISTAN
NEPAL
BHUTAN
BANGLADESH
BURMA
INDIA
ARABIAN SEA
BAY OF BENGAL
SRI LANKA
SOUTH ASIA
Percent of Normal
Precipitation
November 1997
CLIMATE PREDICTION CENTER, NOAA


CHINA
PAKISTAN
NEPAL
BHUTAN
BANGLADESH
BURMA
INDIA
ARABIAN SEA
BAY OF BENGAL
SRI LANKA
SOUTH ASIA
Average Temperature (C)
November 1997
CLIMATE PREDICTION CENTER, NOAA


CHINA
PAKISTAN
NEPAL
BHUTAN
BANGLADESH
BURMA
INDIA
ARABIAN SEA
BAY OF BENGAL
SRI LANKA
SOUTH ASIA
Temperature Anomaly (C)
November 1997
CLIMATE PREDICTION CENTER, NOAA

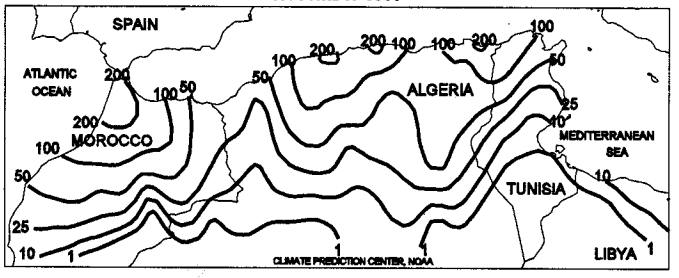
NORTHWEST AFRICA Total Precipitation (mm)
DEC 7 - 13, 1997



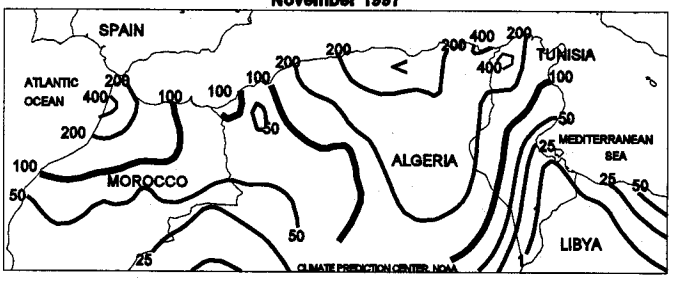
NORTHWESTERN AFRICA

Light showers (4-18 mm) fell in Algeria and Tunisia, maintaining favorable moisture conditions for winter grain emergence and establishment. Greatest amounts of precipitation (37-43 mm) fell along the coast, outside the principal winter grain-producing area. Mostly dry weather prevailed in Morocco, allowing winter grain planting to rapidly progress. Usually, the bulk of winter grains are planted in the region by mid-December. However, planting can extend into early January without a loss in yield potential. In November, winter grain planting was well underway across the region. Well-above-normal precipitation fell in northern Morocco, Algeria, and Tunisia, providing abundant planting moisture. Below-normal precipitation prevailed in southern Morocco, where additional rain is needed to ensure a good start to this year's growing season.

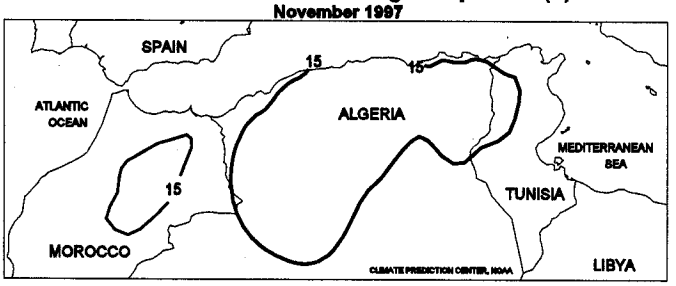
NORTHWEST AFRICA Total Precipitation (mm)
November 1997



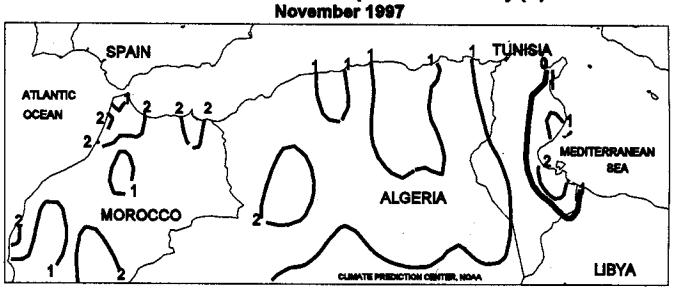
NORTHWEST AFRICA Percent of Normal Precipitation
November 1997

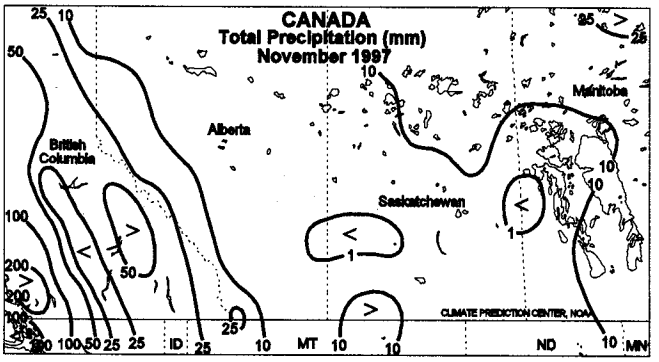


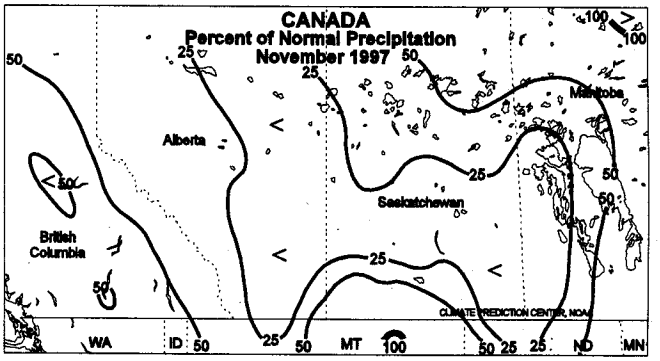
NORTHWEST AFRICA Average Temperature (C)
November 1997

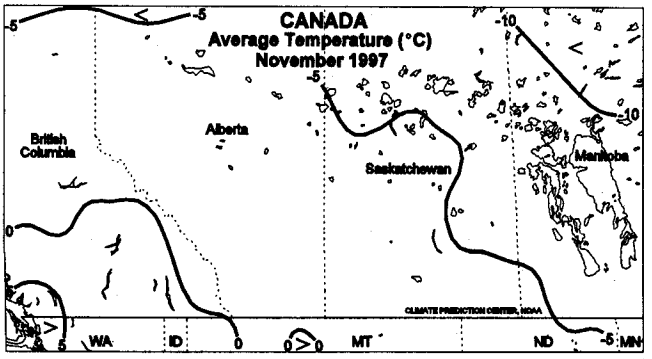


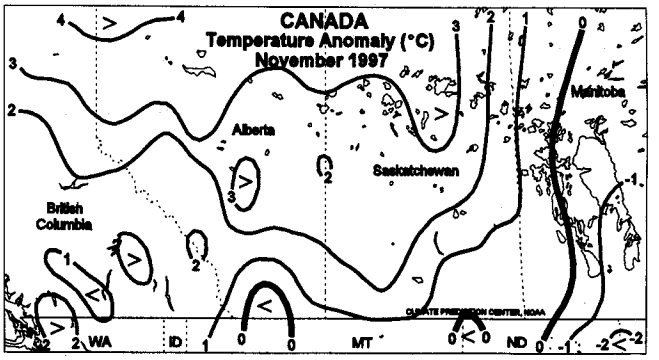
NORTHWEST AFRICA Temperature Anomaly (C)
November 1997

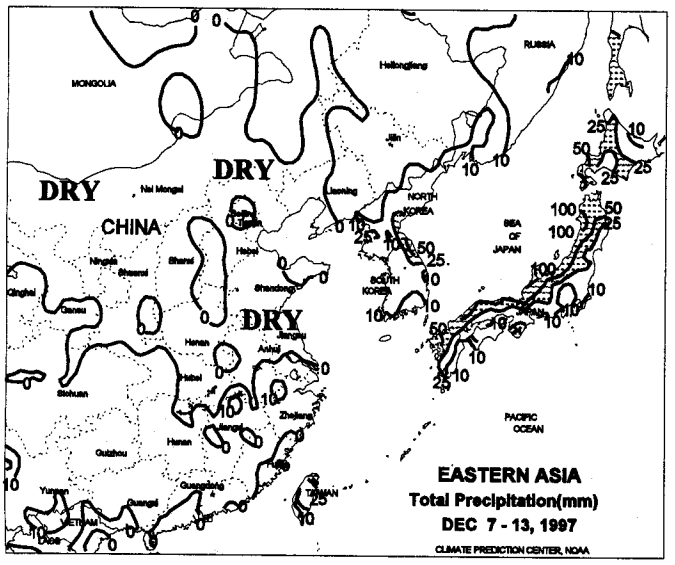






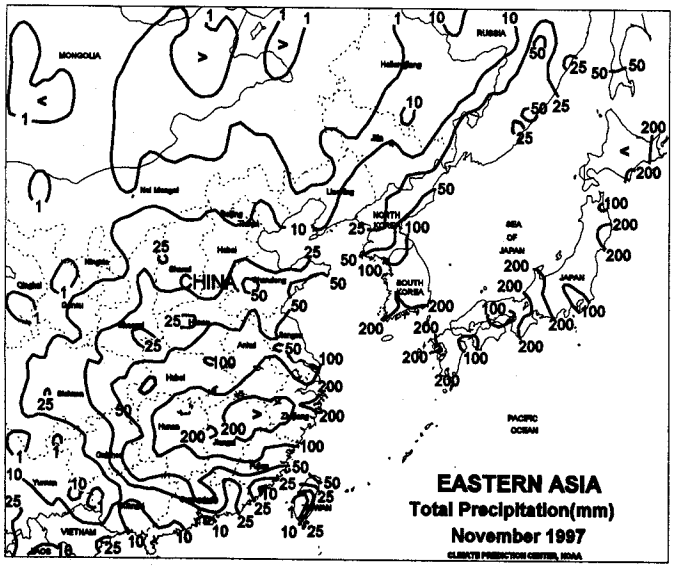


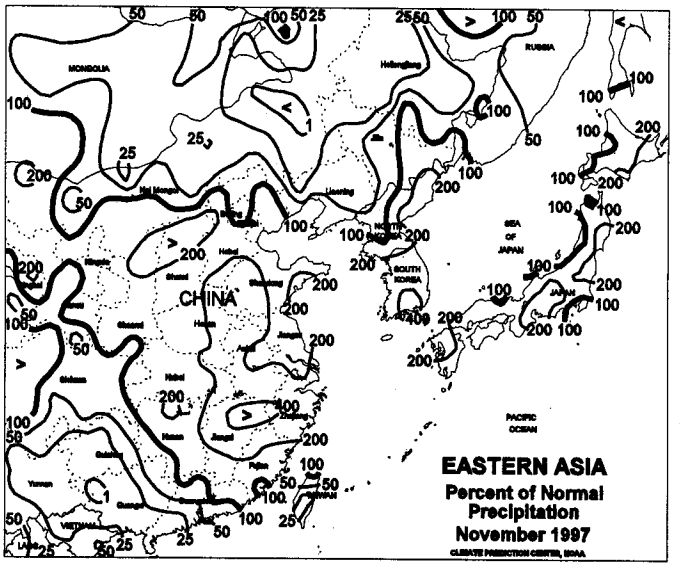


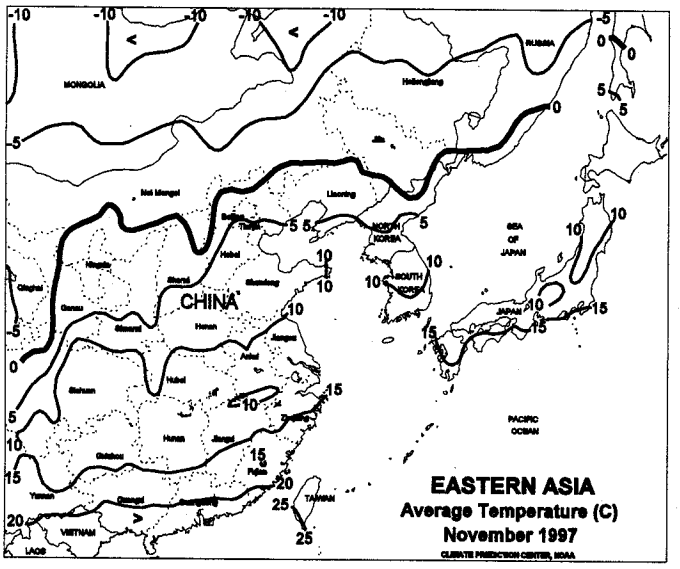


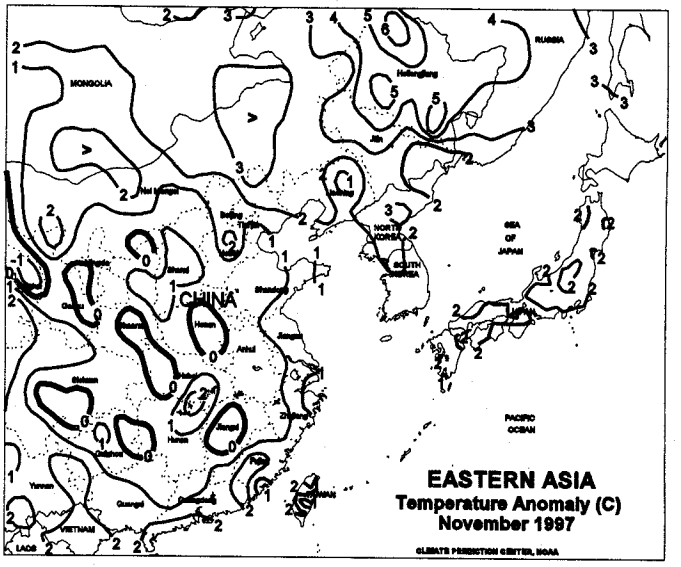
EASTERN ASIA

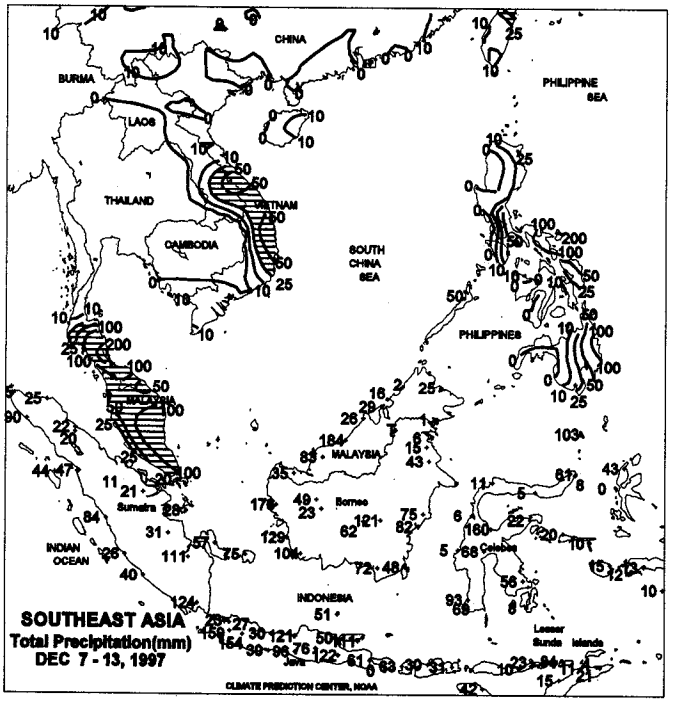
Seasonably dry, cold weather prevailed across north-central China, prompting winter wheat to enter dormancy. Minimum temperatures ranged from -3 to -9 degrees C (1-2 degrees C below normal) across the main wheat areas, causing some burn back. During November, rainfall averaged 150 to 300 percent of normal (20-60 mm for the month) across the North China Plain, aiding vegetative wheat and boosting moisture reserves. Much-above-normal rainfall also increased moisture supplies for winter grains and oilseeds in the lower Yangtze Valley.





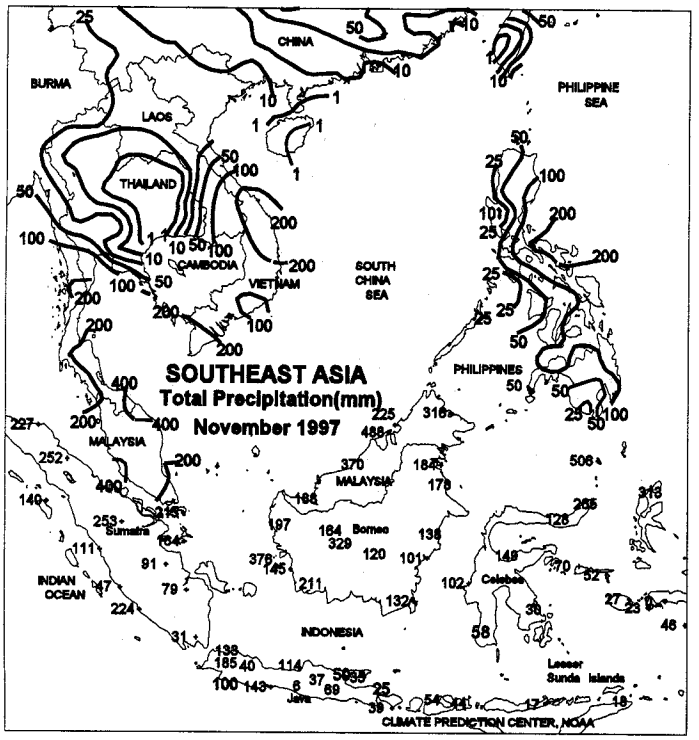


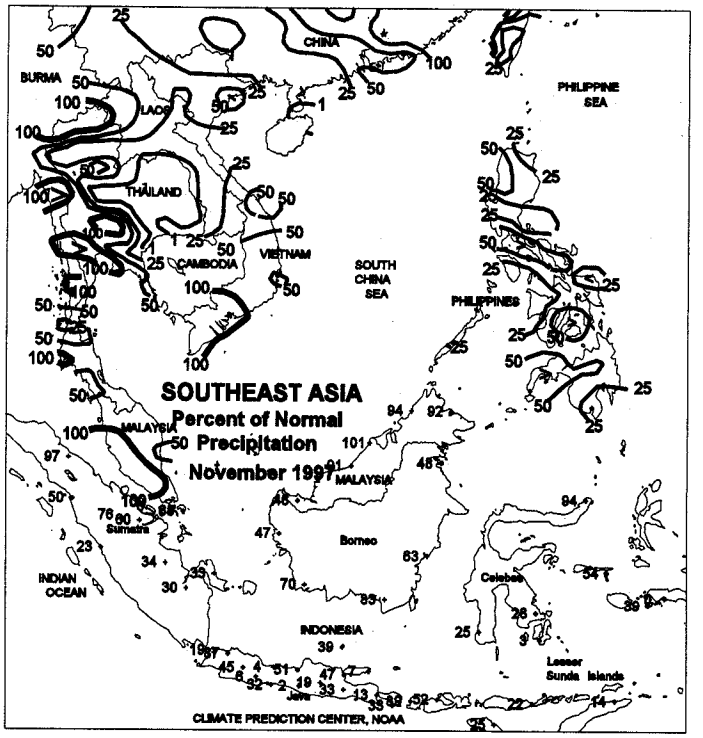


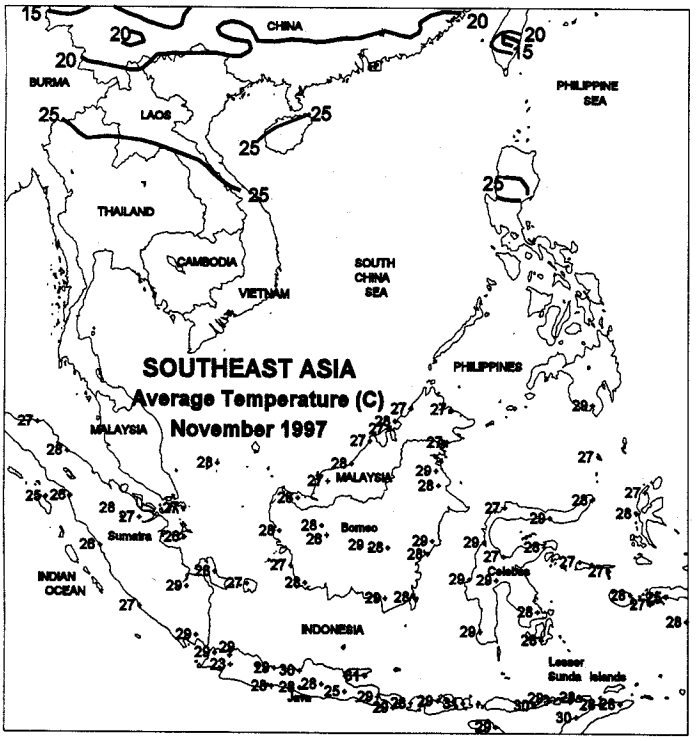


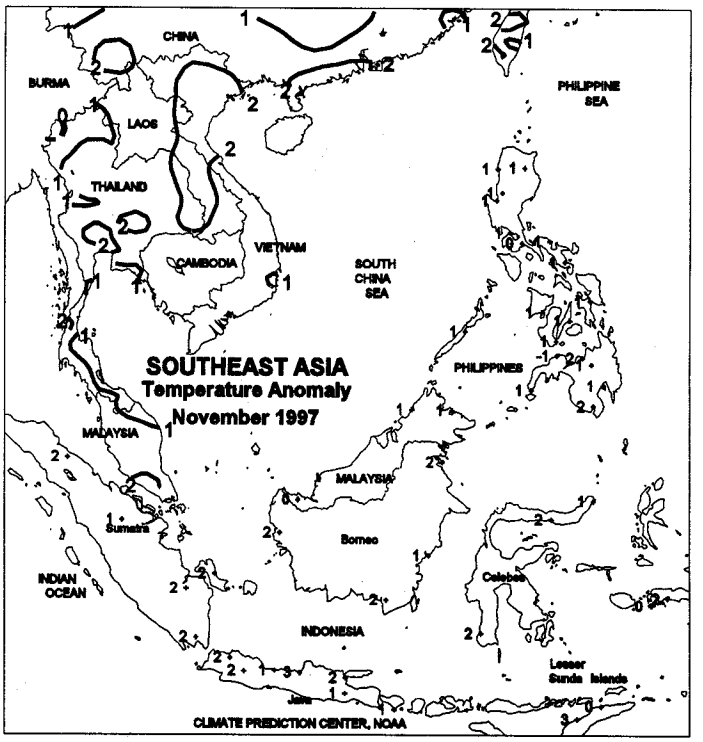
SOUTHEAST ASIA

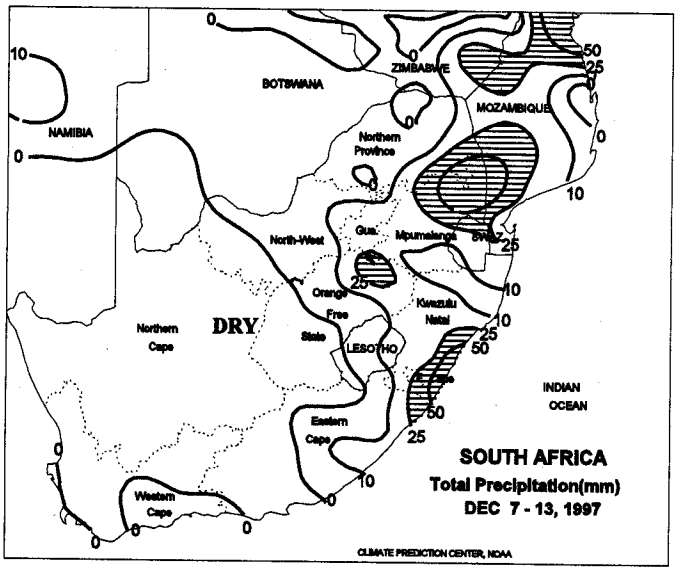
Widespread showers (27-150 mm) finally covered Java and southern Sumatra, bringing additional drought relief and increasing moisture supplies for main-season rice planting. Unseasonably light showers (less than 30 mm) worsened drought conditions across the Philippines. Only portions of southern Luzon received seasonable rainfall (50-200 mm). Dry weather favored late main-season rice harvesting and early second-season rice transplanting in Thailand and Vietnam. Showers (25-190 mm) benefited oil palm across peninsular Malaysia and Thailand. By mid-November, the rainy season started across Java and southern Sumatra, about 2 months behind schedule. Below-normal November rainfall also prevailed across the Philippines, reducing moisture supplies for second-season rice. Below-normal rainfall aided rice harvesting in Thailand and most of Vietnam. Typhoon Linda, which hit extreme southern Vietnam on November 2, caused minor damage to rice.


SOUTHEAST ASIA
Total Precipitation(mm)
November 1997
CLIMATE PREDICTION CENTER, NOAA
CHINA
BURMA
LAOS
THAILAND
CAMBODIA
VIETNAM
SOUTH CHINA SEA
PHILIPPINE SEA
PHILIPPINES
MALAYSIA
Sumatra
Borneo
Celebes
INDONESIA
INDIAN OCEAN
Lesser Sunda Islands
Java


SOUTHEAST ASIA
Percent of Normal
Precipitation
November 1997
CLIMATE PREDICTION CENTER, NOAA
CHINA
BURMA
LAOS
THAILAND
CAMBODIA
VIETNAM
SOUTH CHINA SEA
PHILIPPINE SEA
PHILIPPINES
MALAYSIA
Sumatra
Borneo
Celebes
INDONESIA
INDIAN OCEAN
Lesser Sunda Islands
Java

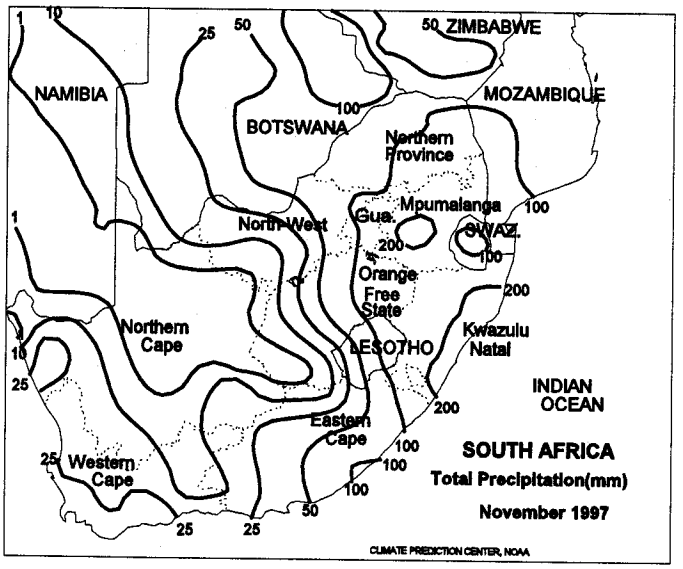

SOUTHEAST ASIA
Average Temperature (C)
November 1997
CHINA
BURMA
LAOS
THAILAND
CAMBODIA
VIETNAM
SOUTH CHINA SEA
PHILIPPINE SEA
PHILIPPINES
MALAYSIA
Sumatra
Borneo
Celebes
INDONESIA
INDIAN OCEAN
Lesser Sunda Islands
Java

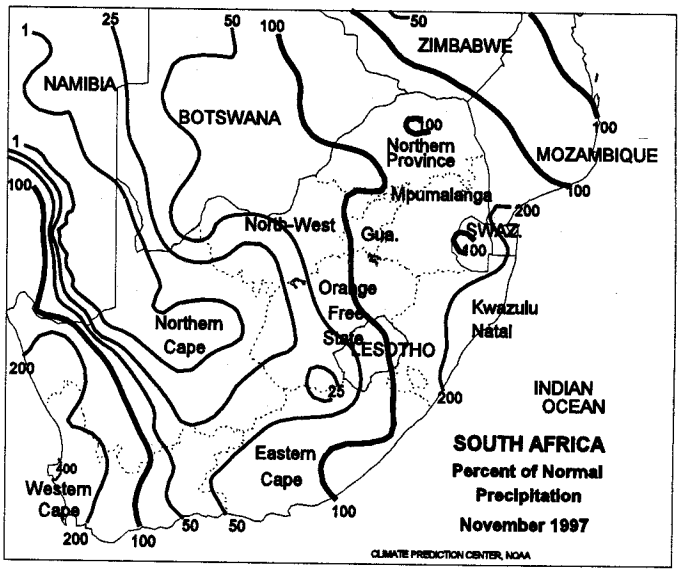

SOUTHEAST ASIA
Temperature Anomaly
November 1997
CLIMATE PREDICTION CENTER, NOAA
CHINA
BURMA
LAOS
THAILAND
CAMBODIA
VIETNAM
SOUTH CHINA SEA
PHILIPPINE SEA
PHILIPPINES
MALAYSIA
Sumatra
Borneo
Celebes
INDONESIA
INDIAN OCEAN
Lesser Sunda Islands
Java

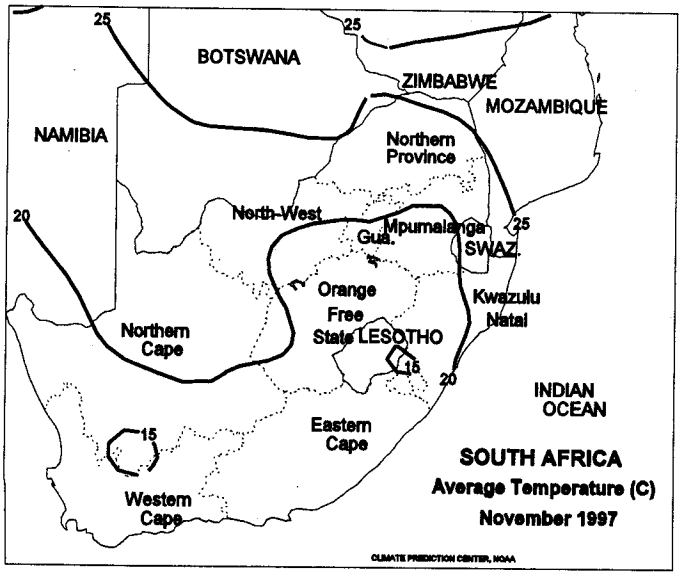


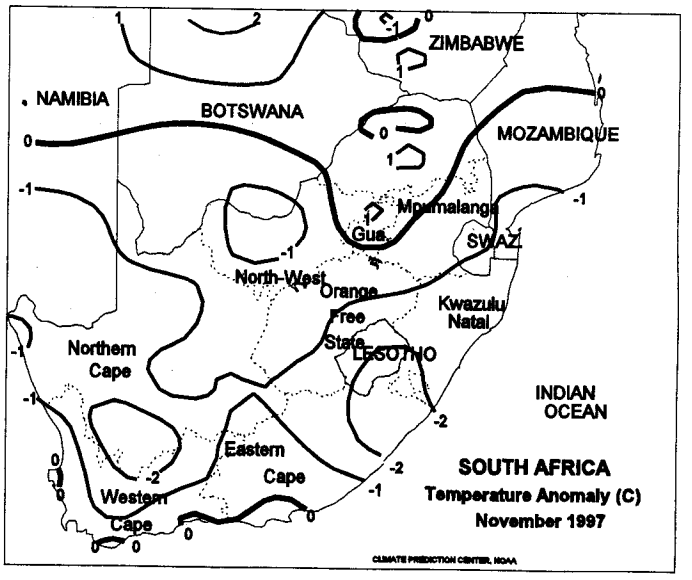
SOUTH AFRICA

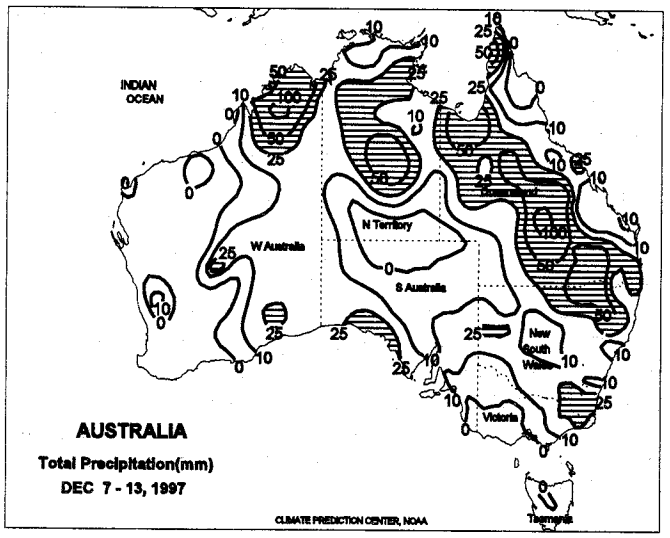
Warmer- and drier-than-normal weather dominated the corn belt. In the west, temperatures hit the upper 30's and lower 40's C, stressing emerged corn and depleting topsoil moisture reserves for late plantings. Farther east, light rain (10-25 mm) covered vegetative corn as above-normal temperatures kept crop moisture demands high. During November, rainfall was near to below normal in the western corn belt and near to above normal in the east, with temperatures averaging near to below normal even in the driest areas. As a result, corn prospects were generally favorable in the east but guarded for the west, with just a few weeks remaining in the optimal planting period. Farmers tried to plant as early as possible to avoid potential problems typically associated with El Niño later in the growing season. However, dryness precluded planting in sections of the west, and crops planted on schedule have already experienced some degree of heat and moisture stress.





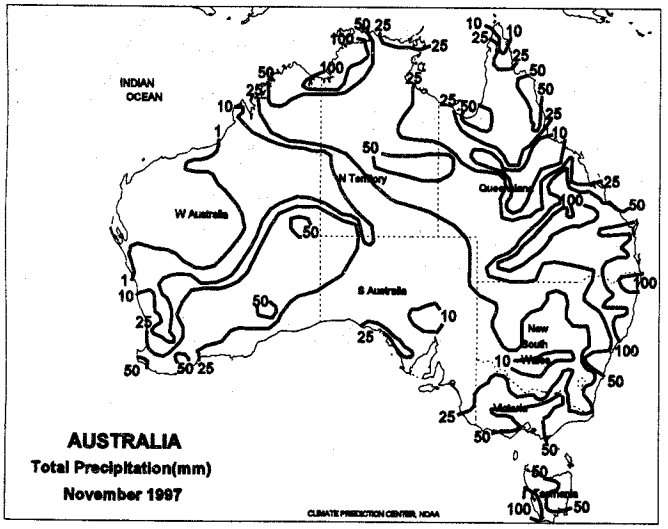


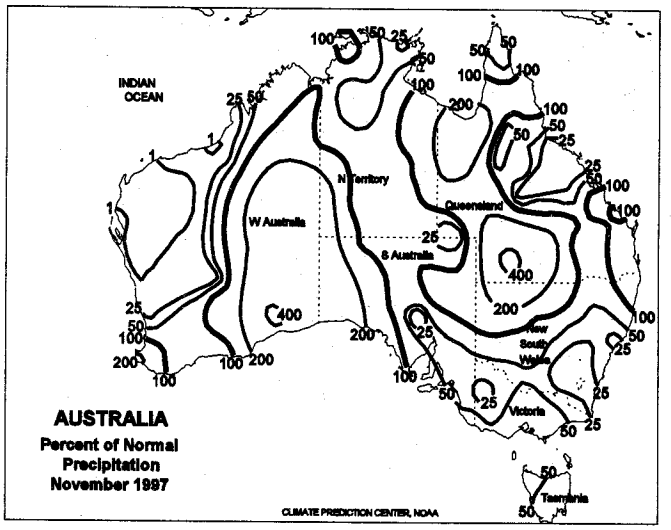


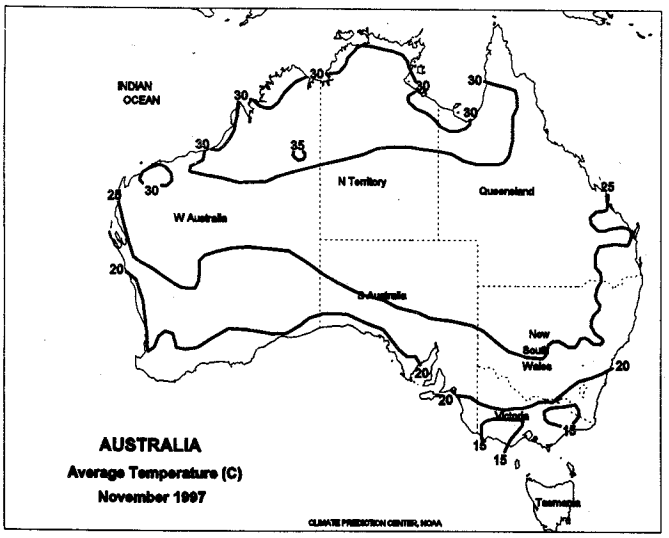


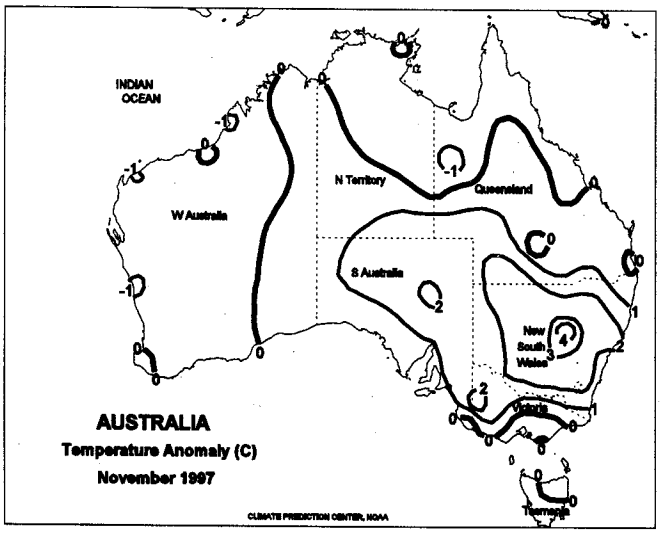
AUSTRALIA

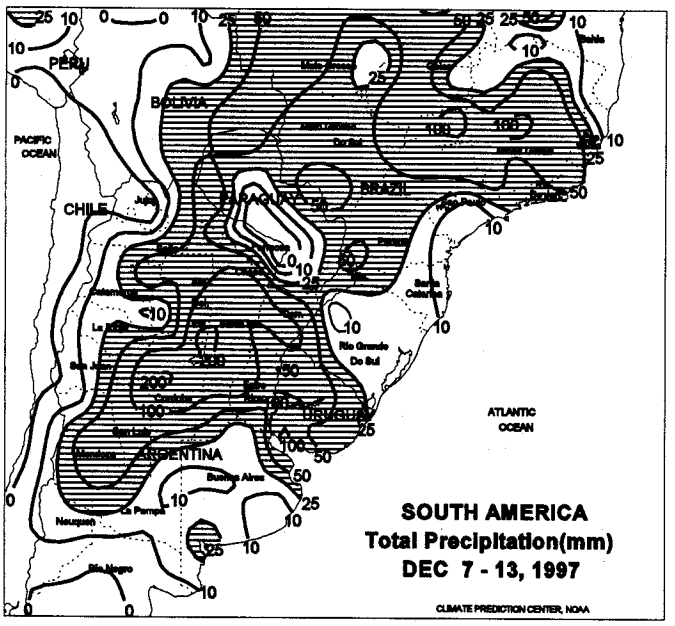
Widespread, moderate to heavy rain (25-50 mm or more) covered primary sorghum and cotton areas of Queensland and New South Wales. The rain ended a brief period of untimely dryness and unseasonable warmth. Western crop areas in New South Wales and Queensland's northeastern districts received somewhat lighter rainfall (1-25 mm). Winter grain harvesting progressed, but rain (5-25 mm) caused some delays in sections of the southeast, notably western crop areas of South Australia. Light rain (10 mm or less) covered New Zealand's main pasture and grazing lands. During November, rainfall was near to above normal in Australia's primary summer crop areas, the exception being Queensland's northern sugarcane areas. Shower activity was frequent over Queensland, but the bulk of the New South Wales rain came in 1 week. Showers from that series of storms reportedly lowered the quality of unharvested winter grains. Aside from that one wet week, generally warm, dry weather favored the east's unharvested winter crops. However, unseasonable heat late in the month stressed immature winter grains in the far south. Conditions remained generally favorable for winter grains in Western Australia.





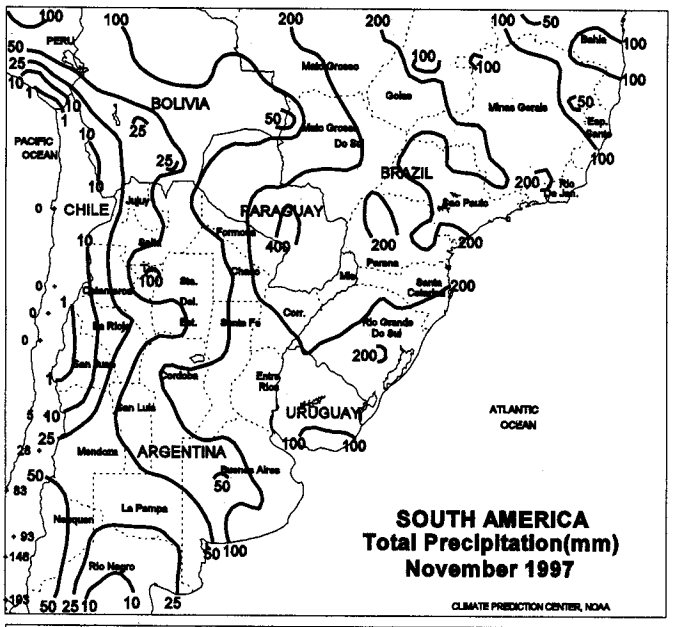


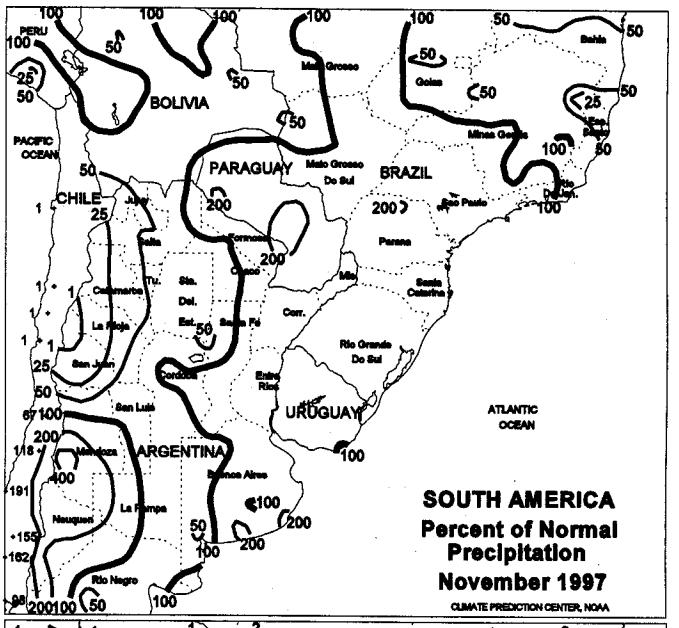


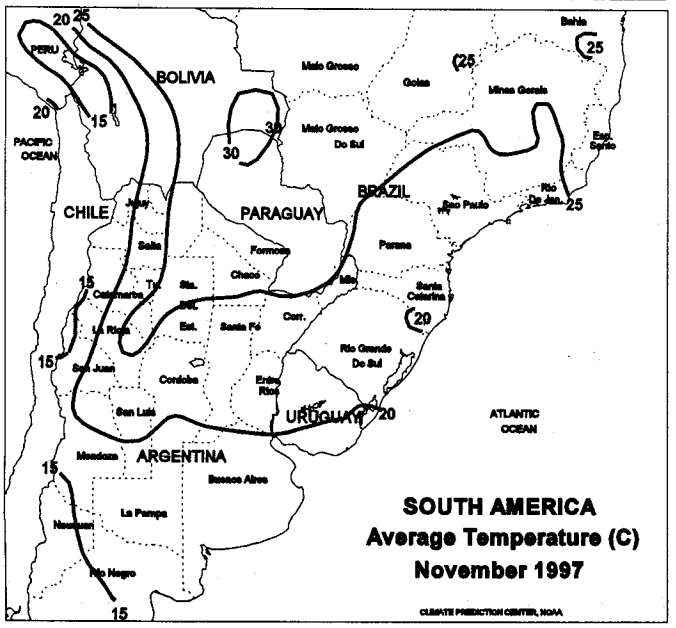


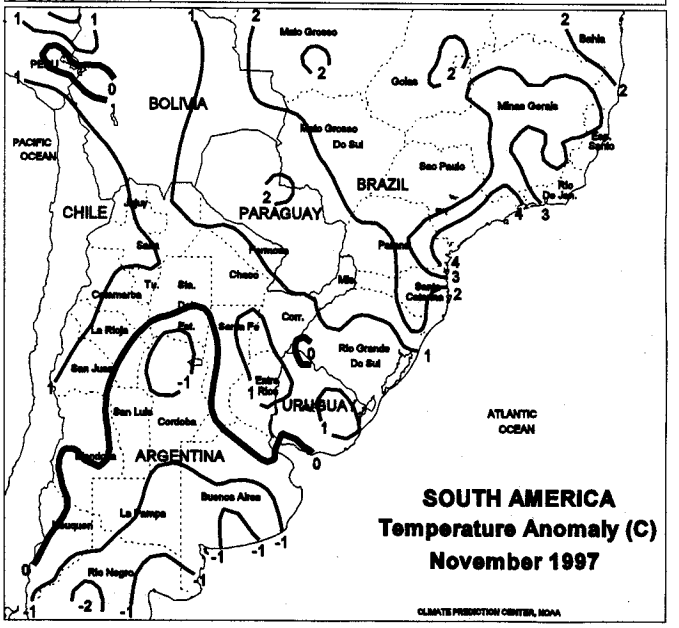
SOUTH AMERICA

Moderate showers (20-75 mm) maintained favorable soil moisture supplies for germinating soybeans across southern Brazil. The rain was especially beneficial across Rio Grande do Sul, which had been trending dry. According to reports as of December 4, 85 percent of the Brazilian soybean crop has been planted, equaling the 5-year average. In Argentina, a large area of heavy showers (100-200 mm) drenched northern Cordoba, northern and central Santa Fe, and southern Chaco, causing flooding and possibly washing out some cotton fields. Farther south, light to moderate rain (10-30 mm) covered the main summer crop area. On December 14, scattered heavy rain (greater than 100 mm) slowed winter wheat harvesting in Buenos Aires, and possibly caused some crop damage. Weekly temperatures averaged 1 to 2 degrees C above normal across the region. In November, near- to above-normal rainfall covered most of central Argentina and southern Brazil. Only La Pampa and western Buenos Aires in Argentina and portions of Goias and Minas Gerais in Brazil received below-normal November rainfall.









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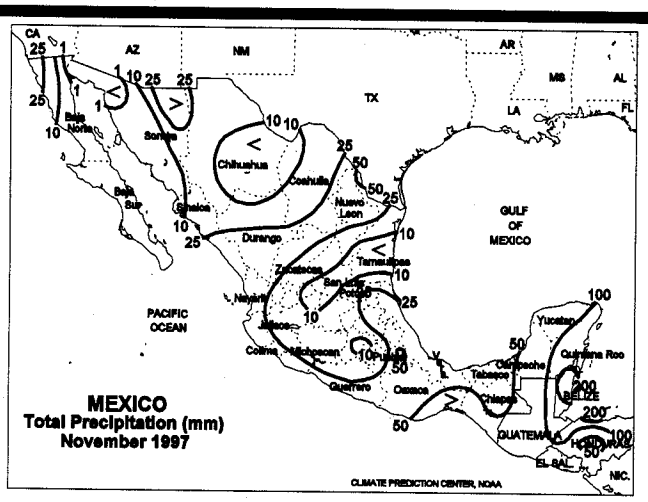

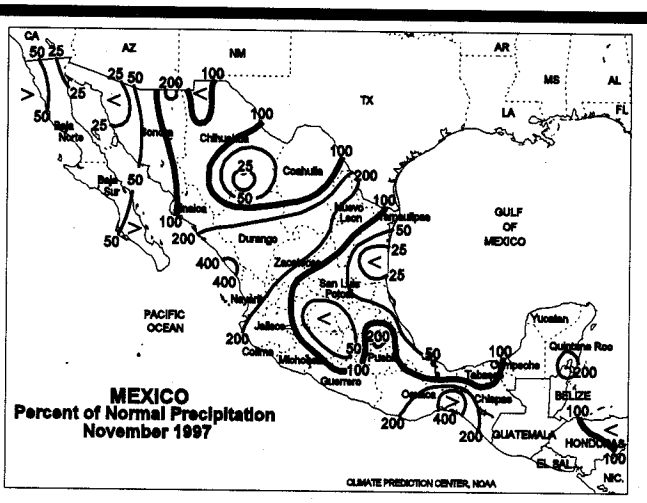

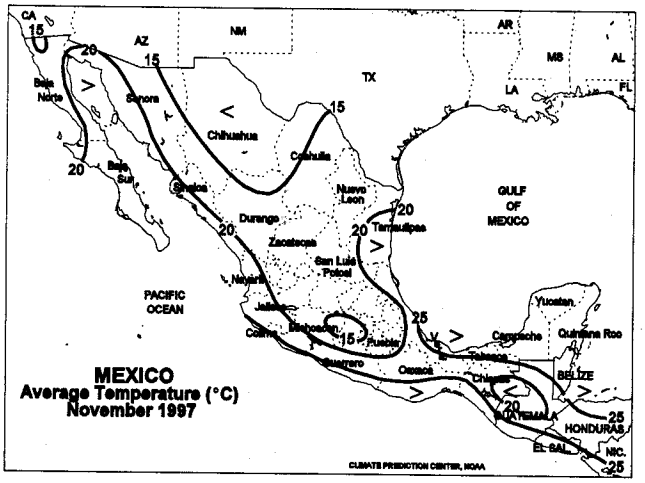

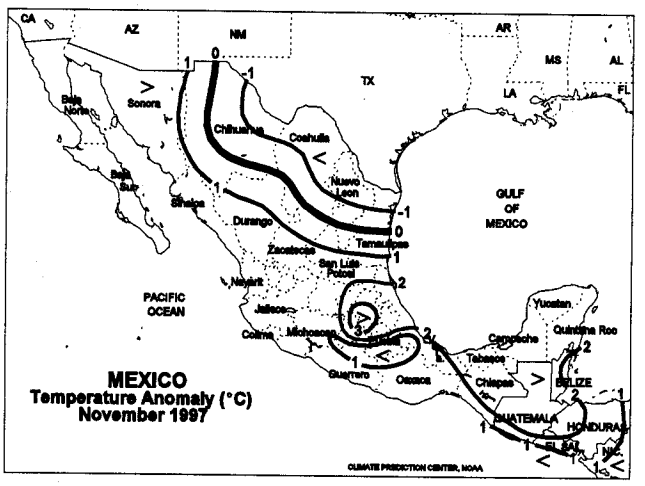

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