

# WEEKLY WEATHER AND CROP BULLETIN

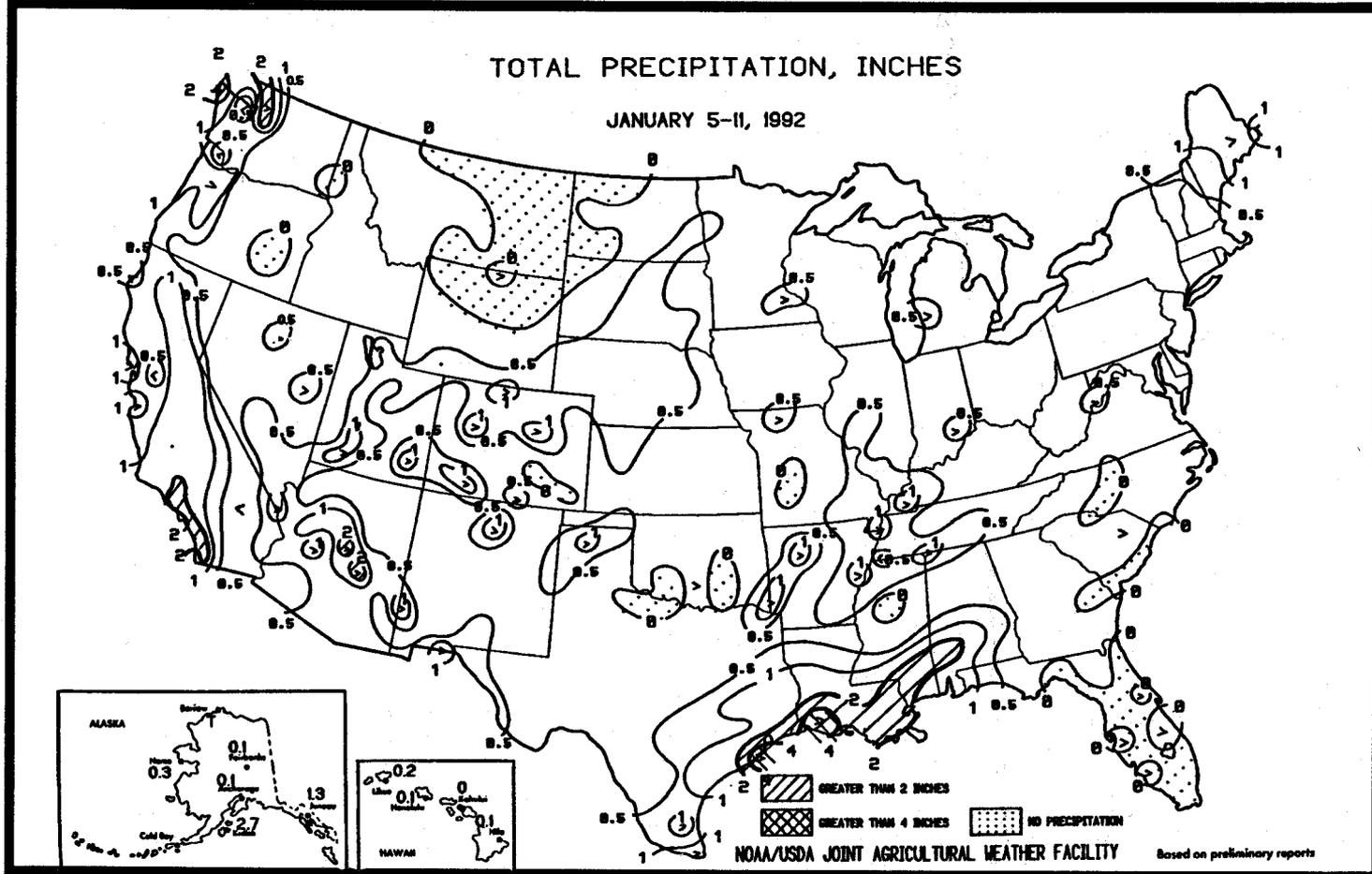
U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration,  
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE  
National Agricultural Statistics Service and  
World Agricultural Outlook Board

Volume 79, No. 2

Washington, D.C.

January 14, 1992



## HIGHLIGHTS

January 5 - 11, 1992

A fifth week passed without an arctic intrusion into the conterminous States, while a winter storm dumped heavy snow in parts of the West and heavy rain along the western Gulf coast. Early in the week, a departing east coast storm drenched Maine with up to 2 inches of rare January downpours. Meanwhile, the last in a series of storms struck California, soaking the southern half of the State (see related article on p. 19), and producing snow above the 3,500 foot level. The storm deposited a band of heavy snow from the Southwest's mountains to Minnesota's northern tier. Pioche, NV, was buried under a 22-inch snowfall, and Denver, CO, was paralyzed by a 14-inch accumulation. Farther east, heavy rain developed along the Gulf coast. Midweek rainfall topped 3 inches in Galveston, TX, and Lake Charles, LA. After midweek, the storm weakened and accelerated northeastward, but still produced a 7-inch snowfall in Grand Forks, ND. After a couple of tranquil days, a new storm pushed

southeastward into the Great Basin. In advance of the system, a dozen daily record highs were set in the North Central States, including a 54° F mark in Dickinson, ND. At week's end, snow developed in the Rockies, and rain returned to the western Gulf coast.

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## 1991 Weather Review

A mild winter, warm spring, and hot summer contributed to an unusually warm year, though wintry weather struck in late October and early November. Temperatures averaged across the contiguous United States were much above normal, ranking 1991 as the 13th warmest year on record (fig. 1). As in 1990, nearly every part of the country had above-normal temperatures (fig. 2), with many central and eastern locations as much as 3 or 4° F above normal. A month-by-month look at temperatures (fig. 3) shows the prevalent warmth, though February and May were especially noteworthy. Only November had outstanding cold. Most of the country measured above-normal precipitation (fig. 4), though a dry summer contributed to a below-normal year in the **Ohio Valley**. Storms in March and December eased **California's** long drought. As a result, much of **southern California** ended the year with above-normal precipitation. Annual rainfall totals (fig. 5) were impressively large in the **lower Mississippi Valley**, exceeding 100 inches at **New Orleans**. Much of the country was wet in the spring and in November and December (fig. 6), with **Texas** flooding the legacy of that State's wettest December ever.

### Winter (December 1990 - February 1991)

Despite the severe Western freeze of late December 1990, which damaged **California's** citrus crops and **Washington's** wheat crop, this was a mild winter, especially **east of the Mississippi**. Portions of the **central Plains** winter wheat region, including much of **Kansas** and **Nebraska**, became very dry. **California** suffered through an extremely dry winter until the final 2 days of February. Statewide precipitation from October through January was one-fourth of normal, causing hundreds of lakes and reservoirs to reach record-low levels. Stormy, wet weather prevailed from **Texas** northeastward through the **Ohio Valley**.

### Spring (March - May)

Warm, wet, and wild could summarize the spring of 1991. All of the country **east of the Continental Divide** had above-normal temperatures, with **New York City** already reaching 90° F on April 8, the earliest such reading ever. During a late May heat wave, **Baltimore** hit 96° F. More than 35 cities, mainly from **Wisconsin** to the **mid-Atlantic coast**, set records for their hottest May average temperatures.

Spring precipitation exceeded normal over most of the country, **west Texas** being one of the few exceptions. **California's** "March miracle" rains caused most of the State to record spring totals from 150 percent to more than 200 percent of normal. Thunderstorms in April and May ended winter dryness in much of the **Plains** hard red winter wheat region, but excessive wetness hurt soft red wheat **east of the Mississippi**. In the **East North Central region** of the country, which includes **Iowa**, farmers' fields often turned into ponds. Spring rainfall totals of 12 to 20 inches were the highest in more than 90 years. Incessant rains in the **lower Mississippi Valley** also wreaked havoc with spring planting. Rainfall in

**northern Louisiana** and **northern Mississippi** exceeded 35 inches.

Severe weather was widespread this season, with a preliminary spring tornado count of more than 800, which is well over twice the average. On 1 day alone, April 9, over 400 locations from the **South** to the **Northeast** reported large hail or wind damage. On April 26, up to 100 tornadoes took over two dozen lives and caused widespread property damage from **Texas** to **Iowa**. Most of the fatalities came from the storms which struck near **Wichita, KS**.

### Summer (June - August)

Hot, dry weather from the **Corn Belt** to the **mid-Atlantic region** shrunk crop yields and dried pastures, though showers were frequent enough to prevent national yields from falling to levels comparable to those of such drought years as 1988 or 1983. The U.S. corn crop's yield of 108.6 bushels per acre was down 8 percent from the year before. Soybean yields of 34.3 bushels per acre set a record. Wheat took the biggest hit of the three major U.S. crops, dropping 13 percent to 34.3 bushels per acre. The freeze in **Washington**, late winter and early spring dryness in the **southern Plains**, and wetness in **eastern winter wheat areas** and the **northern spring wheat areas** all took their toll.

Summer rainfall totaled under 50 percent of normal from **southeast Iowa** eastward to **northwest Ohio**. In **Illinois**, **Moline's** total of 3.79 inches was 29 percent of normal and the lowest June-August rainfall since 1886. Heavy rains again pounded the South, as **New Orleans'** year-to-date total exceeded 92 inches by the end of August. This was a new annual record even though the year was only two-thirds complete.

Heat waves affected much of the country. The average summer temperature of 77.8° F in **Philadelphia, PA**, was the highest on record. **Washington, DC**, suffered through 26 days of 95° F heat from May to August, the hottest such period in over a century.

Hurricane Bob brought 100mph gusts to **eastern Long Island** on the afternoon of August 19. Hurting northward, the storm caused major property damage for **eastern New England** and contributed to a number of rainfall records in **Maine**.

### Autumn (September - November)

The country was wet in the interior and dry along both coasts, with temperatures below normal in the **Plains States**. However, the numbers fail to do justice to a season with numerous episodes of dramatic weather.

A late heat wave scorched the **East** during the middle of September, but a sudden shot of cold air swooped down from the **Canadian prairies**, bringing freezing temperatures to the **western Corn Belt**. Crops were sufficiently developed that only late-maturing soybeans were damaged. In October, worsening dryness in the **central Appalachians** and the **Pacific States** contributed to wildfires, while dryness in **Kansas** hurt the new winter wheat crop.

As a result of a reversal in the weather pattern, the jet stream delivered unprecedented cold to much of the country from October 28 to November 11. The **northern Plains** felt the brunt of the wintry weather, with high winds, subzero temperatures, and heavy snow. The 28 inches of snow falling from October 31 to November 2 set the all-time record for snow from a single storm in the **Minneapolis-St. Paul** area. By November 4, the severe cold stretched southward to the **Gulf coast** and eastward to **Ohio**, setting over 100 minimum temperature records on that day alone. By November 11, over 640 daily record lows were set or tied throughout the **eastern three-quarters of the country**.

While the arctic outbreak was giving the **Midwest** a strong dose of winter, a major Atlantic storm battered the east coast from **North Carolina to Maine** on October 29-November 1. Storm force winds and extremely high tides brought more damage to some areas than Hurricane Bob. Another coastal storm caused additional damage on November 9.

### December 1991

Unlike the previous 2 years, there were no major outbreaks of arctic air this December. Nevertheless, the weather was not without drama, as a deluge of rain in the **South Central States** on December 17-22 brought widespread flooding to **eastern Texas**. On a positive note, the unusual wetness erased remaining dryness in **Kansas**, improving winter wheat prospects. Heavy rain and snow on December 27-30 also eased the drought in **California**.

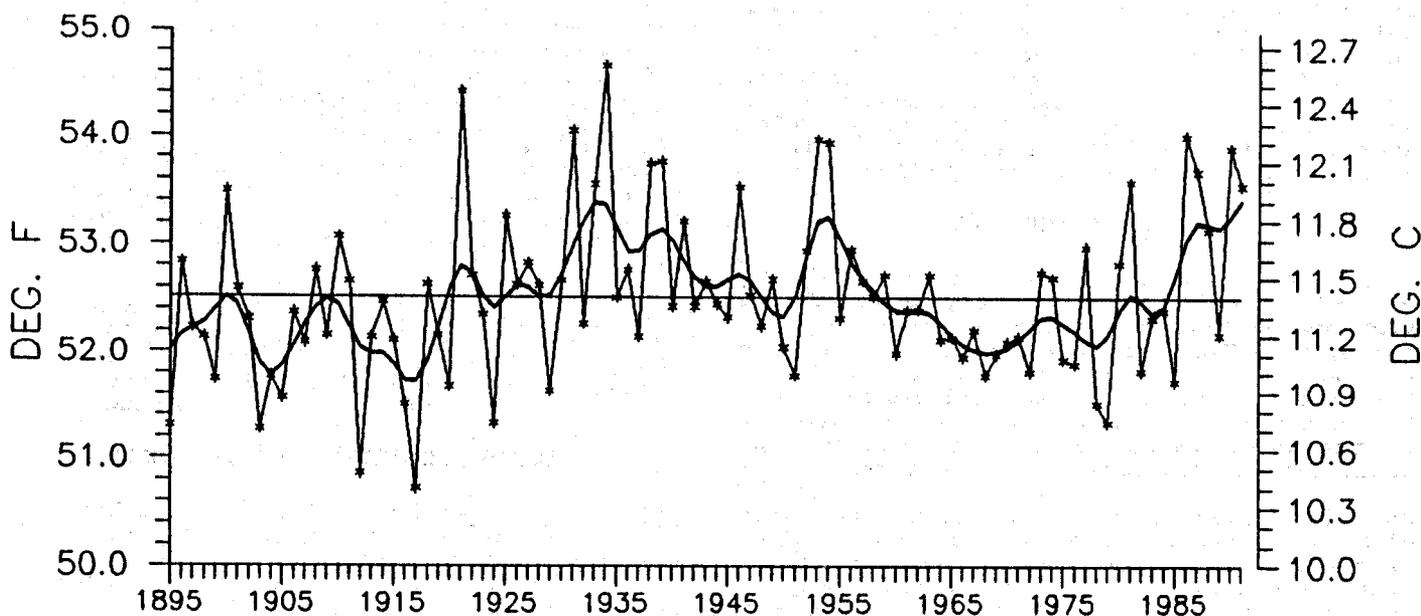
### Summary

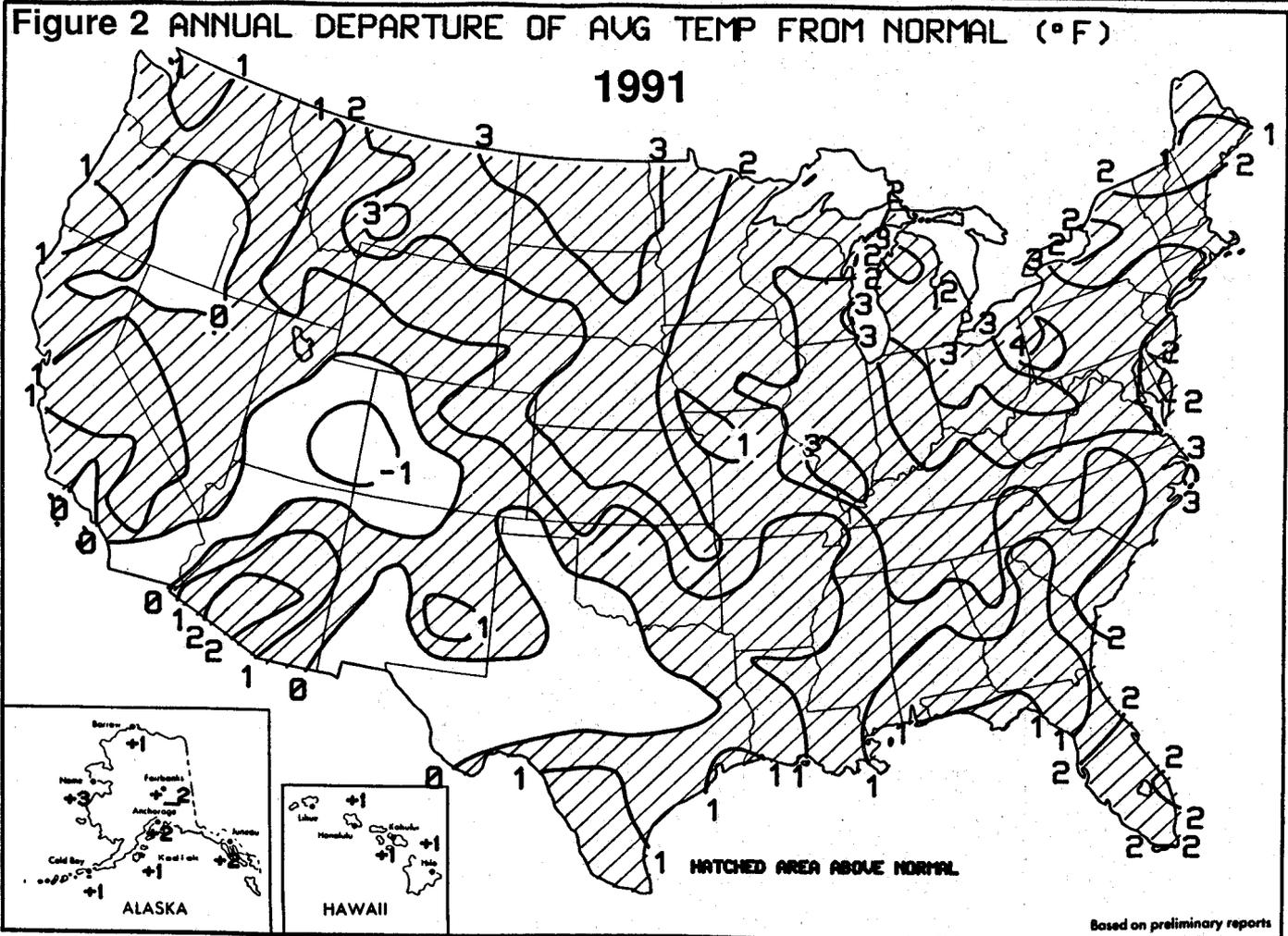
The temperature and precipitation rankings show that the year was warm and wet in much of the country (Table 1). Temperatures in 5 of the last 6 years averaged well above normal. Twenty States ranked in the top 10 warmest category, with **Delaware** and **Maryland** having the second warmest year on record (Table 2). This was the 11th wettest year on record, on an areally averaged basis. Nine States had wetness which put 1991 in the top 10 rankings, while **Louisiana** had the wettest year on record (table 3).

--Douglas Le Comte,  
Managing Editor

Figure 1

U.S. NATIONAL TEMPERATURE  
JANUARY-DECEMBER, 1895-1991





**Figure 3 U.S. NATIONAL TEMPERATURE PERCENT AREA, 1/1991 - 12/1991**

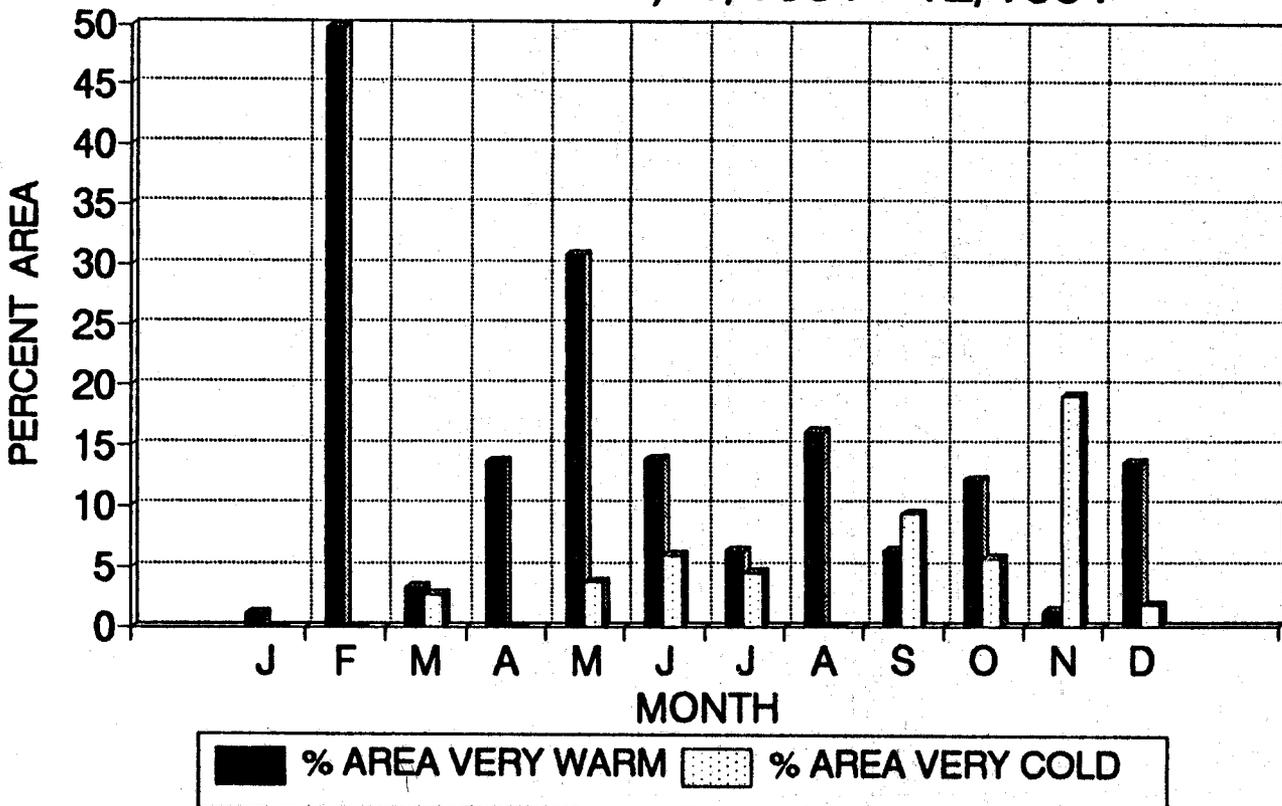


Figure 4

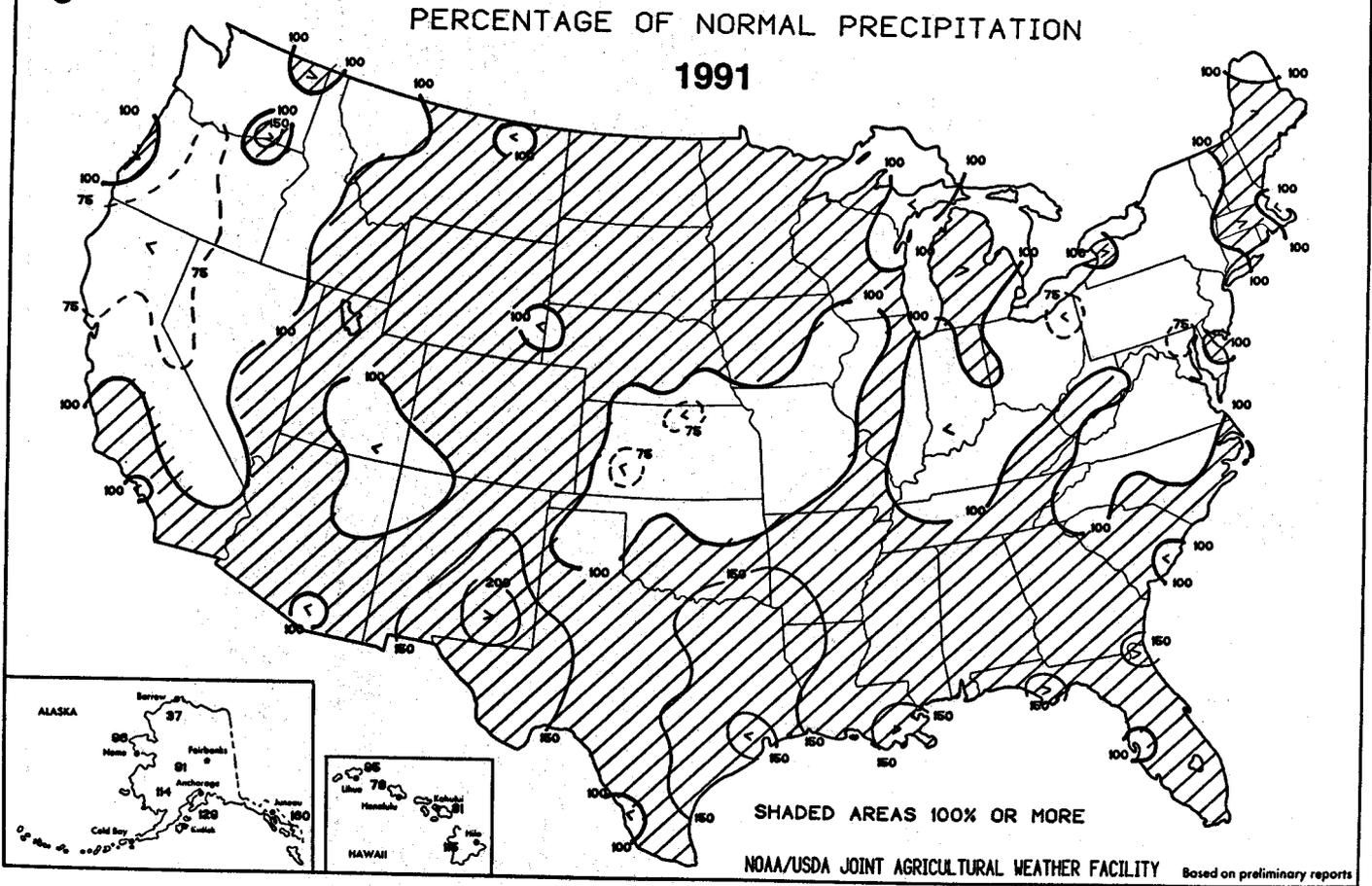


Figure 5

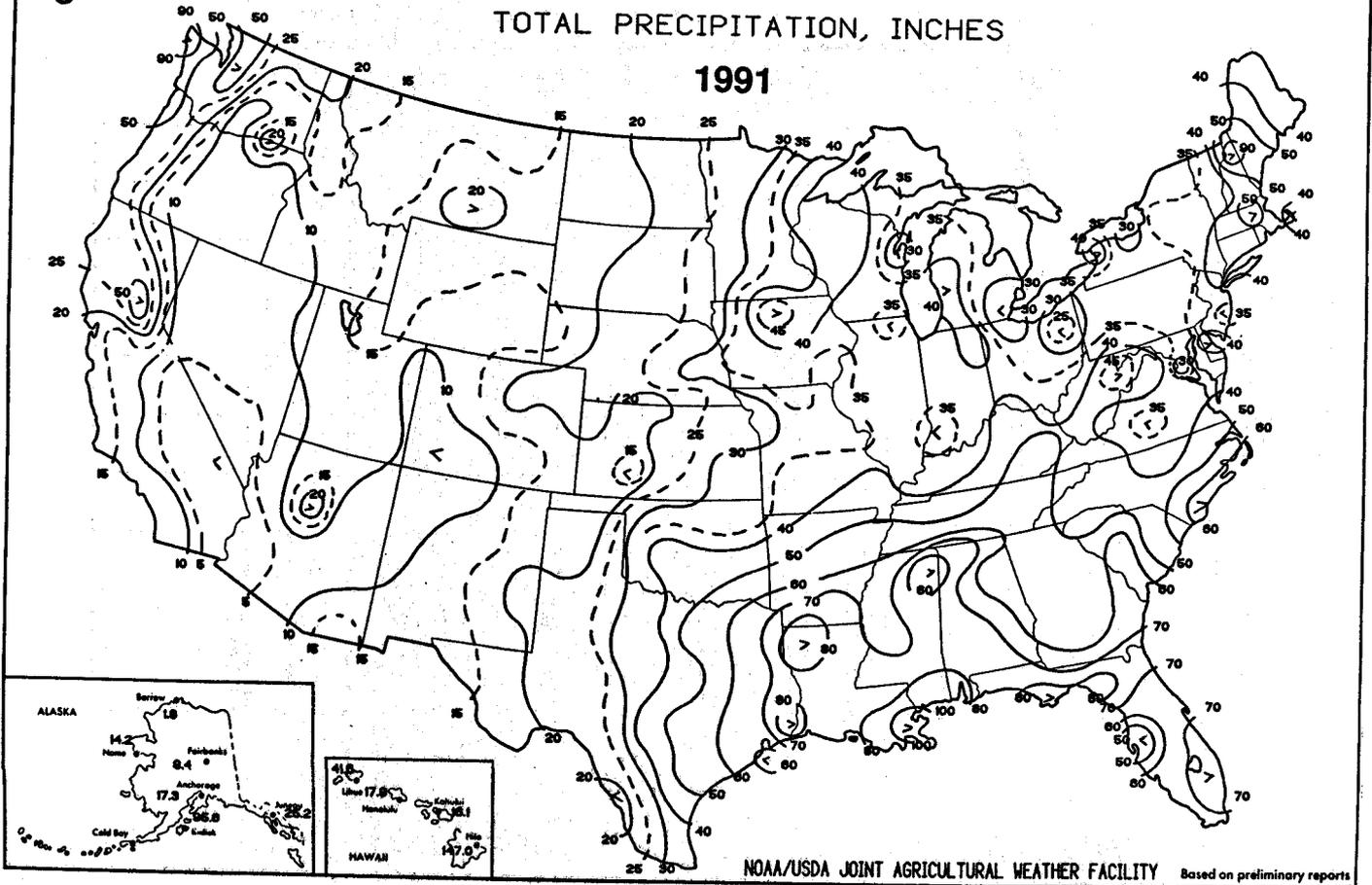


Figure 6

# U.S. NATIONAL PRECIPITATION PERCENT AREA, 1/1991 - 12/1991

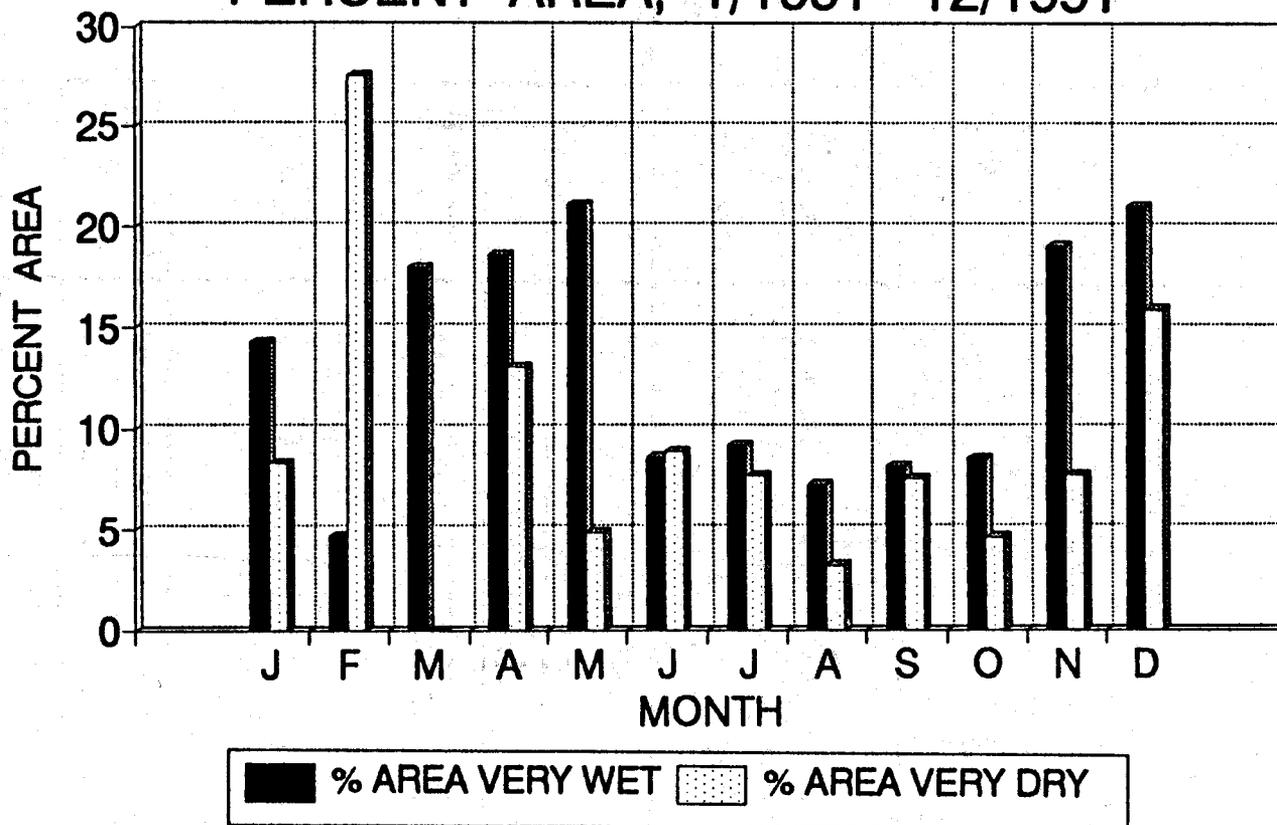


TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR JAN-DEC 1991, BASED ON THE PERIOD 1895-1991. 1 = DRIEST/COLDEST, 97 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NATIONAL	87	85
NORTHEAST	24	91
EAST NORTH CENTRAL	95	88
CENTRAL	38	90
SOUTHEAST	81	87
WEST NORTH CENTRAL	75	86
SOUTH	93	71
SOUTHWEST	78	56
NORTHWEST	29	77
WEST	31	72

TABLE 2. TEMPERATURE RANKINGS FOR JAN-DEC 1991, BASED ON THE PERIOD 1895 TO 1991. 1 = COLDEST, 97 = WARMEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	66	IA	79	NE	83	RI	95
AZ	70	KS	85	NV	70	SC	83
AR	72	KY	95	NH	94	SD	87
CA	72	LA	66	NJ	95	TN	81
CO	59	ME	67	NM	28	TX	48
CT	95	MD	96	NY	93	UT	50
DE	96	MA	94	NC	93	VT	92
FL	92	MI	93	ND	92	VA	94
GA	79	MN	87	OH	95	WA	76
ID	71	MS	64	OK	78	WV	95
IL	85	MO	85	OR	81	WI	83
IN	91	MT	89	PA	94	WY	74

TABLE 3. PRECIPITATION RANKINGS FOR JAN-DEC 1991, BASED ON THE PERIOD 1895 TO 1991. 1 = DRIEST, 97 = WETTEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	87	IA	86	NE	51	RI	74
AZ	53	KS	21	NV	43	SC	75
AR	80	KY	41	NH	71	SD	83
CA	33	LA	97	NJ	43	TN	84
CO	64	ME	52	NM	93	TX	93
CT	66	MD	6	NY	30	UT	57
DE	50	MA	76	NC	39	VT	51
FL	92	MI	92	ND	77	VA	18
GA	88	MN	94	OH	8	WA	47
ID	33	MS	94	OK	76	WV	24
IL	45	MO	33	OR	20	WI	96
IN	24	MT	76	PA	7	WY	68

# TEMPERATURE AND PRECIPITATION SUMMARY Annual 1991

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	% of NORMAL		AVERAGE	DEPARTURE	TOTAL	% of NORMAL		AVERAGE	DEPARTURE	TOTAL	% of NORMAL
AL BIRMINGHAM	64	2	52.9	101	LOUISVILLE	60	3	38.2	88	OK YOUNGSTOWN	52	3	25.2	68
AL HUNTSVILLE	62	2	70.3	128	LA BATON ROUGE	60	3	39.4	84	OK OKLAHOMA CITY	61	1	43.7	142
AL MOBILE	68	0	81.7	126	LA LAKE CHARLES	69	1	77.7	139	OK TULSA	63	2	33.5	87
AL MONTGOMERY	66	1	67.6	138	LA NEW ORLEANS	68	1	70.3	133	OR ASTORIA	51	0	57.3	82
AK ANCHORAGE	37	2	17.3	114	ME SHREVEPORT	66	1	102.4	171	OR BURNS	46	-1	7.9	78
AK BARROW	10	1	1.8	37	ME CARIBOU	40	1	82.0	187	OR MEDFORD	55	1	14.5	73
AK FAIRBANKS	26	2	9.4	91	ME PORTLAND	47	2	35.3	97	OR PENDLETON	52	1	13.5	111
AK JUNEAU	42	2	85.2	160	MD BALTIMORE	58	3	57.1	131	OR PORTLAND	54	1	33.6	90
AK KODIAK	41	1	95.6	129	MA BOSTON	53	2	30.2	72	OR SALEM	53	1	33.4	83
AK NOME	29	3	14.2	96	MA CHATHAM	51	2	42.3	96	PA ALLENTOWN	54	3	34.4	78
AZ FLAGSTAFF	47	1	21.8	104	MI ALPENA	45	2	40.0	85	PA ERIE	52	4	31.7	81
AZ PHOENIX	75	3	8.4	117	MI DETROIT	52	3	33.8	117	PA HARRISBURG	56	3	31.1	79
AZ TUCSON	69	1	10.8	97	MI FLINT	49	2	29.6	96	PA PHILADELPHIA	58	4	36.2	87
AZ WINSLOW	51	-3	7.3	96	MI GRAND RAPIDS	49	2	31.7	108	PA PITTSBURGH	54	4	32.0	88
AZ YUMA	75	2	3.2	120	MI HOUGHTON LAKE	50	2	44.9	131	PA SCRANTON	52	3	30.3	86
AR FORT SMITH	62	1	46.2	116	MI LANSING	46	3	38.5	137	PA WILLIAMSPORT	53	3	32.8	79
AR LITTLE ROCK	63	1	58.5	126	MI MARQUETTE	41	1	30.8	104	RI PROVIDENCE	53	3	45.7	101
CA BAKERSFIELD	65	0	6.5	114	MI MUSKEGON	49	2	37.1	100	SC CHARLESTON	67	3	49.7	96
CA BISHOP	65	-	4.6	82	MI SAULT ST. MARIE	42	2	41.3	131	SC COLUMBIA	65	2	62.4	127
CA EUREKA	53	1	25.1	65	MN DULUTH	39	1	33.2	99	SC GREENVILLE	62	1	47.3	94
CA FRESNO	64	2	10.5	100	MN INT'L FALLS	39	2	43.4	146	SD ABERDEEN	46	3	23.1	130
CA LOS ANGELES	64	0	11.1	91	MN MINNEAPOLIS	39	2	27.9	114	SD HURON	47	3	23.4	125
CA REDDING	63	-1	25.6	63	MN ROCHESTER	46	1	36.7	139	SD RAPID CITY	48	2	17.3	106
CA SACRAMENTO	62	1	14.0	82	MS ST. CLOUD	43	1	36.9	131	SD SIOUX FALLS	48	2	27.4	114
CA SAN DIEGO	63	-1	13.5	145	MS JACKSON	66	2	34.0	123	TN BRISTOL	58	2	44.4	108
CA SAN FRANCISCO	58	1	16.0	81	MS MERIDIAN	66	2	63.1	119	TN CHATTANOOGA	62	3	56.0	106
CA STOCKTON	62	1	11.7	85	MO KANSAS CITY	66	2	73.6	138	TN KNOXVILLE	60	2	58.3	123
CO ALAMOSA	40	-1	7.3	102	MO TUPERO	64	2	81.8	144	TN MEMPHIS	64	2	59.2	115
CO CO. SPRINGS	49	0	17.5	114	MO COLUMBIA	56	1	34.9	97	TN NASHVILLE	61	2	46.9	97
CO DENVER	51	1	20.3	133	MO SAINT LOUIS	56	0	28.7	82	TX ABILENE	64	0	33.3	143
CO GRAND JUNCTION	51	-1	9.2	115	MO SPRINGFIELD	59	4	33.5	99	TX AMARILLO	57	0	15.9	83
CO PUEBLO	53	0	14.3	131	MT BILLINGS	58	2	37.6	95	TX AUSTIN	69	1	52.2	166
CT BRIDGEPORT	54	3	40.5	97	MT GLASGOW	49	2	20.7	137	TX BEAUMONT	70	1	81.6	154
CT HARTFORD	53	3	47.3	106	MT GREAT FALLS	45	3	11.0	95	TX BROWNSVILLE	75	1	31.7	125
DC WASHINGTON	60	3	29.6	76	MT HAVRE	46	1	14.0	92	TX CORPUS CHRISTI	73	1	48.1	159
FL APALACHICOLA	70	2	88.2	160	MT HELENA	45	2	13.2	118	TX DEL RIO	71	1	22.0	128
FL DAYTONA BEACH	73	2	67.2	139	MT KALISPELL	46	2	11.9	105	TX EL PASO	63	-1	12.4	158
FL FT. MYERS	75	2	67.0	125	MT MILES CITY	43	0	15.2	95	TX FORT WORTH	67	1	53.5	182
FL JACKSONVILLE	70	2	79.6	151	NE GRAND ISLAND	48	2	20.0	141	TX GALVESTON	71	1	59.1	147
FL KEY WEST	79	2	41.2	104	NE MISSOULA	45	1	11.6	87	TX HOUSTON	69	1	61.1	136
FL MIAMI	78	2	71.4	124	NE LINCOLN	52	2	29.9	128	TX LAREDO	--	--	18.8	93
FL ORLANDO	74	2	60.9	127	NE NORFOLK	53	3	24.9	92	TX LUBBOCK	61	1	24.0	135
FL TALLAHASSEE	69	2	72.3	112	NE NORTH PLATTE	51	2	29.2	123	TX MIDLAND	63	0	23.5	171
FL TAMPA	74	2	43.2	92	NE OMAHA	51	3	20.6	106	TX SAN ANGELO	65	-1	24.3	134
FL WEST PALM BEACH	76	2	79.4	133	NE SCOTTSBLUFF	52	1	37.3	125	TX SAN ANTONIO	70	1	42.8	147
GA ATHENS	63	1	55.4	111	NE VALENTINE	49	1	14.3	98	TX VICTORIA	71	1	56.7	154
GA ATLANTA	64	3	55.9	115	NV ELKO	49	2	23.3	136	TX WACO	67	0	46.6	147
GA AUGUSTA	65	2	56.4	131	NV ELY	46	0	7.9	85	TX WICHITA FALLS	64	0	35.9	134
GA MACON	66	1	52.2	116	NV LAS VEGAS	45	0	10.0	111	UT BLANDING	--	--	10.6	90
GA SAVANNAH	68	3	68.4	138	NV RENO	67	1	4.1	97	UT CEDAR CITY	50	-1	--	--
HI HILO	74	1	147.0	115	NH WINNEMUCCA	52	2	5.2	69	UT SALT LAKE CITY	52	0	17.8	116
HI HONOLULU	78	1	17.9	76	NH CONCORD	49	0	7.8	99	VT BURLINGTON	47	3	32.5	97
HI KAHULUI	76	1	16.1	81	NJ ATLANTIC CITY	48	2	39.5	108	VA LYNCHBURG	59	3	34.5	86
HI LIHUE	75	0	41.6	95	NM ALBUQUERQUE	56	2	34.4	82	VA NORFOLK	62	3	42.9	95
ID BOISE	51	0	9.5	81	NM ROSWELL	62	2	11.6	87	VA RICHMOND	61	3	35.8	81
ID LEWISTON	53	1	11.3	89	NY ALBANY	57	0	19.8	204	VA ROANOKE	58	2	37.1	95
ID POCAHELLO	47	0	13.7	126	NY BINGHAMTON	50	3	35.7	100	WA COLVILLE	--	--	21.7	124
IL CAIRO	--	--	37.5	79	NY BUFFALO	49	3	33.4	91	WA QUILLAYUTE	49	1	99.0	95
IL CHICAGO	51	2	35.0	105	NY SEATTLE-TACOMA	51	3	40.2	107	WA SEATTLE-TACOMA	53	1	35.0	92
IL CAIRO	52	2	34.5	93	NY SPOKANE	58	3	38.2	89	WA SPOKANE	47	0	14.5	86
IL CHICAGO	52	2	36.1	104	NY SYRACUSE	50	2	29.2	93	WA WALLA WALLA	53	0	25.1	157
IL ROCKFORD	50	2	32.4	88	NC ASHEVILLE	57	2	37.1	95	WA YAKIMA	50	0	7.6	95
IL SPRINGFIELD	54	2	37.9	112	NC CHARLOTTE	63	3	43.7	92	WV BECKLEY	54	4	40.2	95
IN EVANSVILLE	58	2	32.7	79	NC GREENSBORO	60	3	45.2	105	WV CHARLESTON	58	3	42.5	100
IN FORT WAYNE	53	3	44.8	130	NC HATTERAS	63	3	41.8	98	WV ELKINS	52	2	45.5	106
IN INDIANAPOLIS	55	3	37.5	96	NC RALEIGH	65	3	64.5	116	WV HUNTINGTON	58	3	38.7	95
IN SOUTH BEND	52	3	36.3	95	NC WILMINGTON	62	3	35.5	85	WV PARKERSBURG	56	2	38.9	94
IA DES MOINES	51	2	39.8	129	ND BISMARCK	65	2	60.7	114	WI GREEN BAY	46	2	26.5	95
IA DUBUQUE	48	2	37.1	96	ND FARGO	45	3	16.8	109	WI LA CROSSE	48	1	42.3	140
IA SIOUX CITY	50	2	26.2	103	ND WILLISTON	44	3	20.9	107	WI MADISON	48	2	39.1	127
IA WATERLOO	48	1	43.2	130	OH AKRON-CANTON	53	4	17.6	127	WI MILWAUKEE	50	4	39.4	127
KS CONCORDIA	56	2	20.0	74	OH CINCINNATI	56	3	24.1	67	WI CASPER	47	1	12.4	109
KS DODGE CITY	57	2	12.7	62	OH CLEVELAND	53	3	40.1	100	WI CHEYENNE	46	1	18.7	140
KS GOODLAND	52	2	23.2	143	OH COLUMBUS	56	3	32.7	92	WI LANDEER	46	1	14.7	112
KS TOPEKA	57	2	29.2	87	OH DAYTON	55	3	32.7	89	WI SHERIDAN	46	2	16.0	107
KS WICHITA	59	2	26.7	93	OH MANSFIELD	54	2	32.2	107	PR SAN JUAN	80	1	35.5	66
KY JACKSON	58	3	55.1	125	OH TOLEDO	52	2	32.5	93					
KY LEXINGTON	57	2	41.8	92										

Based on 1951-80 normals.

# Global Warming Meets Mt. Pinatubo

## Can a volcano offset a global warming trend?

Sulfur particles from the June eruption of Mount Pinatubo in the Philippines may have started to lower global temperatures during 1991. Though this was another very warm year, analysis by Helene Wilson and James Hansen of the NASA Goddard Institute for Space Studies points to a substantial cooling trend during the last 5 months of 1991. The preliminary data suggest the mean temperature for the year was below the record reached in 1990 but, as in the United States, the instrumental record continued to show a marked warming of global temperatures since at least the late 1970's.

Based on both theoretical and empirical studies, the cooling impact from Pinatubo should persist at least through 1992, lowering the global average temperature by as much as 1° F. This cooling would be the same magnitude of the warming which appears to have taken place in the past century and which some climatologists ascribe to the effects of increased levels of carbon dioxide in the atmosphere.

The current El Nino event complicates the picture, as El Ninos typically have a slight warming impact on global temperatures. The two events may not be entirely unrelated. Interesting, but controversial, research by Paul Handler at the University of Illinois

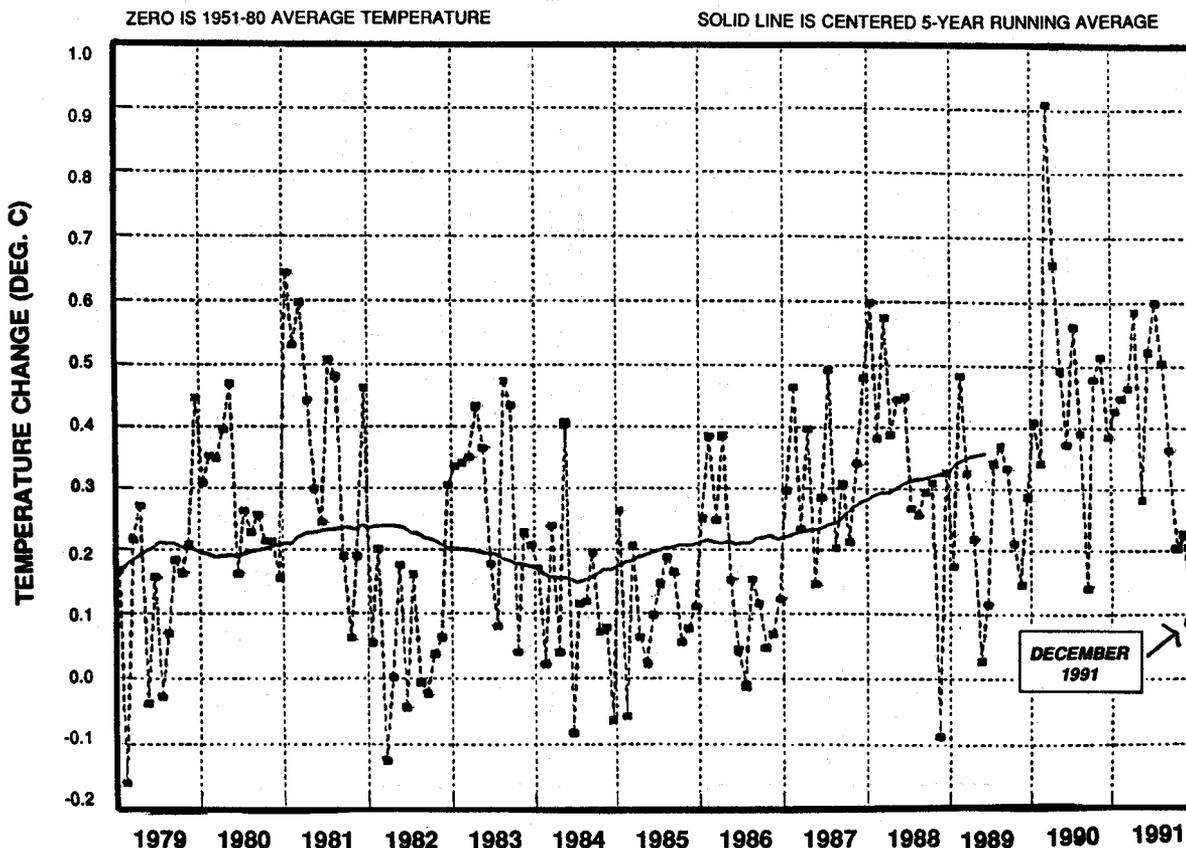
suggests that volcanic eruptions in the past have triggered El Ninos.

Additionally, two Danish scientists, E. Friis-Christensen and K. Lassen, published research in 1991 indicating that the sun's influence on climate may be stronger than previously believed. They found that the duration of the sunspot cycle produced a set of data that closely matched long-term variations of Northern Hemisphere temperatures during the past 130 years. Their data appeared to explain the sharp increase of hemispheric temperatures measured since the 1970's.

As noted last year ("Climate Warming in the United States?" *Weekly Weather and Crop Bulletin*, Jan. 15, 1991), warming is not necessarily detrimental to food production. Record world crop production occurred in 1990, the warmest year ever measured by thermometers. A NOAA study headed by the National Climatic Data Center's Tom Karl found that most of the climatic warming is reflected in the nighttime temperatures. Using the same data, Patrick J. Michaels from the University of Virginia showed that summer maximum temperatures were actually declining, while winter minima were rising sharply. This implies a longer growing season without increased heat stress to plants. Farmers might actually welcome this kind of climate.

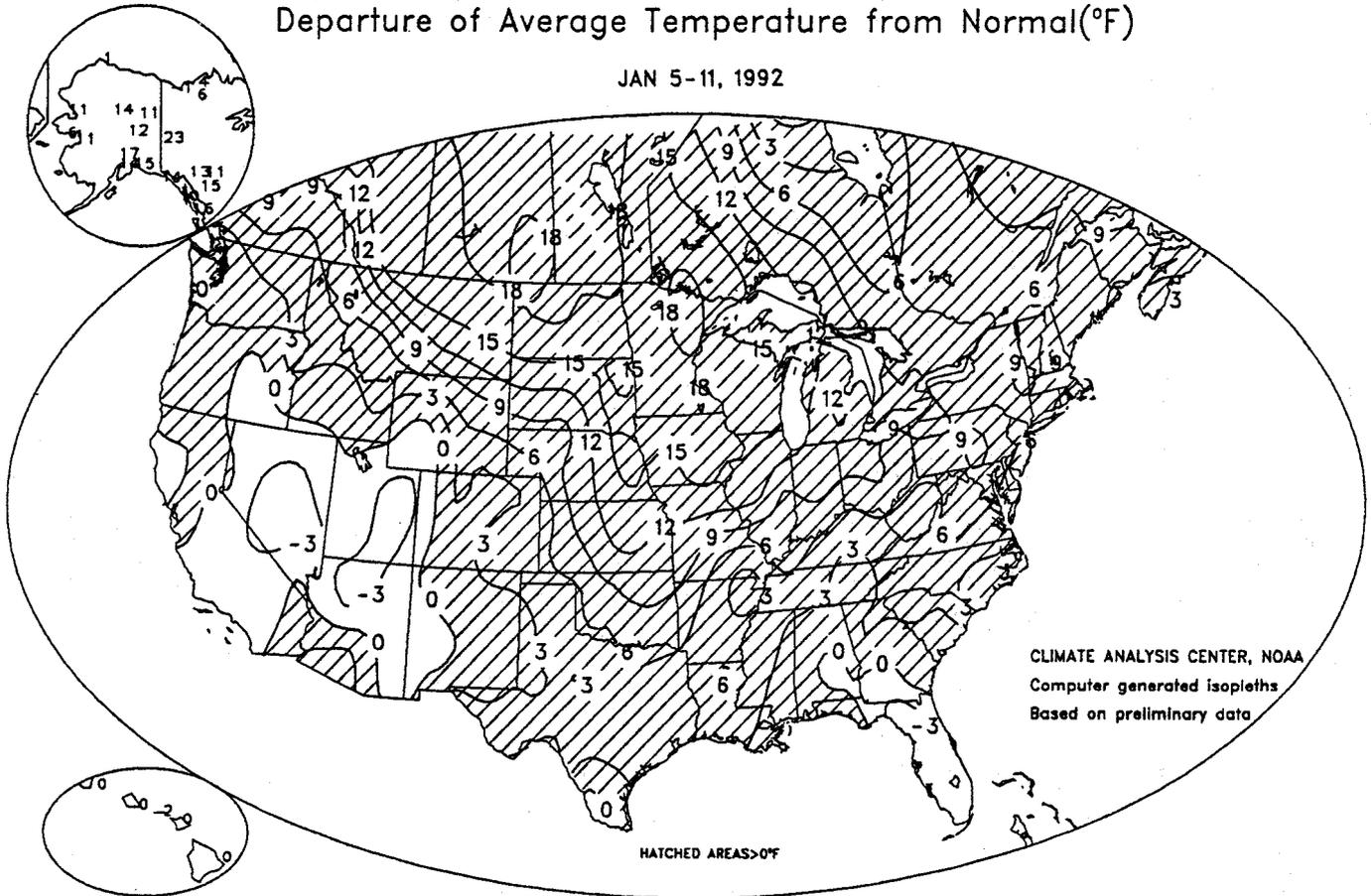
--Douglas Le Comte  
Managing Editor

### MONTHLY GLOBAL MEAN TEMPERATURE, 1979 - 1991



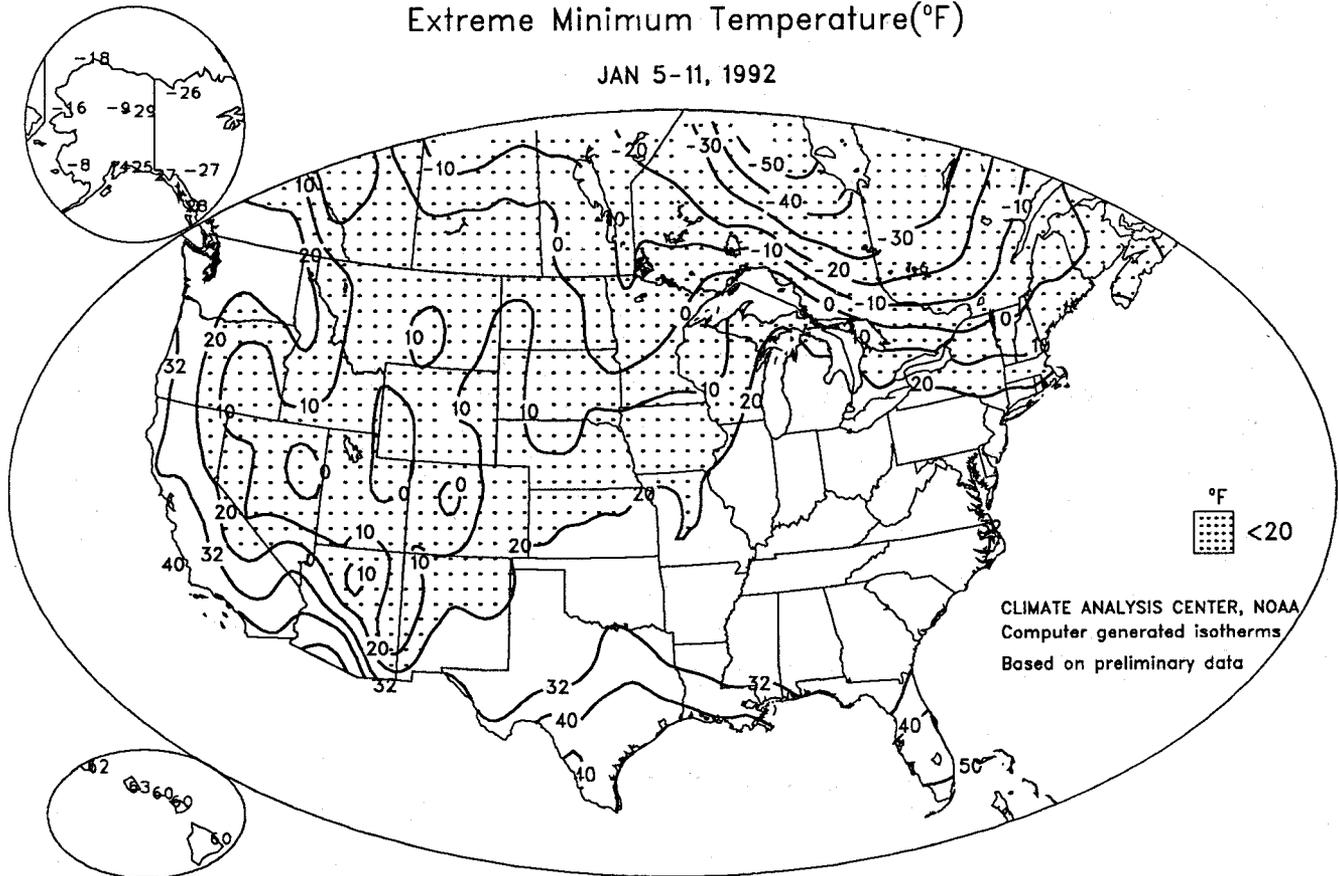
### Departure of Average Temperature from Normal(°F)

JAN 5-11, 1992



### Extreme Minimum Temperature(°F)

JAN 5-11, 1992





# National Weather Data for Selected Cities

Weather Data for the Week Ending January 11, 1992

STATES AND STATIONS	TEMPERATURE °F							PRECIPITATION							RELATIVE HUMIDITY, PERCENT	NUMBER OF DAYS					
	AVERAGE	MAXIMUM	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	MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE
															.50 INCH OR MORE						.01 INCH OR MORE
AL BIRMINGHAM	56	33	65	22	44	2	.2	-1.0	.2	4.1	61	.5	26	92	48	0	4	1	2	0	
MOBILE	62	41	67	32	52	1	1.2	.2	1.2	4.4	61	1.2	73	93	53	0	4	1	2	1	
MONTGOMERY	57	34	67	25	46	-1	.9	-1.1	.9	6.9	109	1.3	86	95	50	0	3	1	1	1	
AK ANCHORAGE	30	21	33	10	26	14	1.1	.1	.1	2.0	146	.2	54	95	74	0	7	2	0	0	
BARROW	-9	-15	-5	-18	-12	2	T	T	T	1	27	T	33	81	73	0	7	2	0	0	
FAIRBANKS	10	-12	16	-23	-1	12	1.1	.1	.0	1.2	127	.2	73	87	77	0	7	2	0	0	
JUNEAU	40	34	44	31	37	15	1.3	.5	.4	10.5	174	1.4	104	98	82	0	3	7	0	0	
KODIAK	39	30	41	18	34	4	2.7	1.4	1.1	8.6	114	2.8	136	93	73	0	4	4	3	3	
NOME	23	2	29	-16	13	7	3	.7	.1	.8	86	.3	107	95	72	0	7	4	0	0	
AZ PHOENIX	63	47	70	41	55	3	.7	.5	.6	2.7	245	1.1	393	79	40	0	0	0	3	1	
PRESCOTT	45	23	50	18	34	-4	.9	.7	.8	3.0	205	1.3	349	92	57	0	7	2	1	1	
TUCSON	60	42	66	36	51	0	.5	.3	.4	2.1	172	.7	230	92	47	0	0	0	2	0	
YUMA	66	51	71	47	58	3	.3	.2	.2	1.1	228	.5	362	59	33	0	0	0	0	0	
AR FORT SMITH	53	36	59	24	45	7	1.1	.4	.4	4.7	134	.3	36	93	55	0	3	2	2	0	
LITTLE ROCK	53	36	59	31	44	4	.3	.6	.3	4.7	83	.8	57	78	58	0	2	0	1	0	
CA BAKERSFIELD	51	41	62	37	46	-1	1.5	1.3	1.3	1.9	196	1.5	494	98	68	0	0	0	3	1	
BUREKA	54	41	58	36	48	1	1.9	1.4	1.4	3.4	39	1.4	53	92	67	0	0	0	4	0	
FRESNO	47	38	59	34	43	4	1.4	1.0	1.0	3.2	138	1.9	277	94	77	0	0	0	3	2	
LOS ANGELES	63	46	73	42	55	-1	1.2	.6	.8	4.5	174	1.6	163	79	46	0	0	0	3	1	
REDDING	55	36	61	28	46	0	1.4	.6	.7	7.6	76	2.6	84	97	52	0	3	3	1	1	
SACRAMENTO	51	40	59	33	45	1	1.0	.1	.7	2.5	59	1.0	70	99	70	0	0	0	3	1	
SAN DIEGO	65	48	73	43	56	0	1.7	1.2	.9	3.5	170	1.8	248	84	46	0	0	0	3	2	
SAN FRANCISCO	56	43	57	37	49	1	1.4	.4	.9	4.5	87	1.8	110	96	59	0	0	0	3	1	
CO DENVER	42	16	50	7	29	0	.7	.6	.6	1.1	150	.9	500	89	41	0	7	2	1	1	
GRAND JUNCTION	31	15	42	6	23	-2	.2	.0	.2	.8	97	.2	105	99	72	0	7	1	0	0	
PUEBLO	49	21	56	14	35	5	T	T	T	.5	137	T	0	83	33	0	7	0	0	0	
CT BRIDGEPORT	45	32	51	27	38	8	.2	.6	.2	4.9	99	.6	51	78	47	0	4	1	0	0	
HARTFORD	40	28	50	18	34	8	.1	.7	.1	3.5	63	.5	38	81	46	0	4	1	0	0	
DC WASHINGTON	49	36	53	32	42	7	1.1	.6	.1	7.1	169	2.0	196	88	52	0	2	1	0	0	
FL APALACHICOLA	65	42	75	27	53	0	T	T	T	1.5	32	T	3	96	46	0	1	1	0	0	
DAYTONA BEACH	70	45	79	37	58	0	T	T	T	2.8	94	1.3	165	95	44	0	0	0	1	0	
JACKSONVILLE	68	40	74	30	54	0	T	T	T	.9	27	.4	36	96	41	0	1	0	0	0	
KEY WEST	74	63	81	56	69	-2	T	T	T	.8	33	T	5	92	61	0	0	0	1	0	
MIAMI	76	57	83	50	67	-1	.0	.5	.0	.3	13	.2	21	94	48	0	0	0	0	0	
ORLANDO	72	47	79	41	60	0	T	T	T	.3	13	.1	14	96	42	0	0	0	0	0	
TALLAHASSEE	67	34	77	23	51	-1	T	T	T	1.6	26	T	0	96	36	0	4	0	0	0	
TAMPA	71	51	76	44	61	1	T	T	T	.7	24	T	1	92	48	0	0	1	0	0	
WEST PALM BEACH	74	54	82	48	64	-2	.0	.6	.0	2.0	62	.6	67	95	52	0	0	0	0	0	
GA ATLANTA	55	37	62	28	46	4	.2	.9	.1	3.9	65	1.2	68	94	51	0	3	2	0	0	
AUGUSTA	61	33	65	25	47	2	.1	.8	.1	3.3	72	.8	55	98	45	0	4	1	0	0	
MACON	60	35	64	27	48	1	T	T	T	4.4	80	.8	54	97	48	0	3	1	0	0	
SAVANNAH	64	39	72	29	52	2	T	T	T	1.9	50	.2	19	95	44	0	1	1	0	0	
HI HILO	82	62	83	60	72	0	.1	-2.0	.1	15.9	98	.8	25	90	54	0	0	1	0	0	
HONOLULU	82	66	83	63	74	1	.1	.8	.1	1.3	27	.1	6	87	54	0	0	1	0	0	
KAHULUI	84	61	86	60	73	1	.0	.9	.0	1.6	37	.1	6	90	49	0	0	0	0	0	
LIHUE	78	66	82	62	72	1	.2	-1.2	.1	7.5	97	.5	22	91	63	0	0	0	3	0	
ID BOISE	39	24	51	15	31	2	.2	.2	.2	.6	31	.2	41	95	58	0	7	2	0	0	
LEWISTON	41	30	50	24	35	4	T	T	T	.4	22	T	0	84	56	0	5	0	0	0	
POCATELLO	35	14	44	5	24	1	.1	.2	.1	.3	25	.1	23	91	56	0	7	2	0	0	
IL CHICAGO	40	31	45	25	35	15	.3	.2	.2	3.9	127	.3	40	98	80	0	5	2	0	0	
MOLINE	40	31	51	20	36	16	.1	.3	.1	2.2	87	.4	62	92	75	0	3	2	0	0	
PEORIA	41	31	50	22	36	14	.2	.2	.2	2.5	94	.4	68	94	71	0	3	1	0	0	
QUINCY	43	31	52	22	37	14	T	T	T	2.1	95	.2	31	92	68	0	3	1	0	0	
ROCKFORD	37	30	46	23	34	15	.2	.2	.2	2.3	93	.5	82	93	78	0	6	1	0	0	
SPRINGFIELD	42	32	50	26	37	13	.6	.2	.6	2.0	73	.6	98	90	70	0	3	2	1	1	
IN EVANSVILLE	44	32	50	26	38	7	.2	.6	.2	4.0	87	.2	22	91	71	0	4	1	0	0	
FORT WAYNE	40	31	45	26	35	12	.1	.4	.1	2.4	73	.3	37	91	71	0	3	2	0	0	
INDIANAPOLIS	41	31	48	22	36	10	.1	.5	.1	1.7	42	.2	21	92	74	0	3	2	0	0	
SOUTH BEND	40	32	47	27	36	12	.5	.1	.4	2.3	59	.6	65	93	71	0	3	1	0	0	
IA DES MOINES	42	27	55	16	35	16	.2	.1	.1	2.5	181	.3	83	95	72	0	5	3	0	0	
SIoux CITY	41	25	53	15	33	17	.3	.1	.2	1.3	132	.4	182	95	77	0	5	3	0	0	
WATERLOO	37	27	51	15	32	17	.2	.0	.1	1.8	122	.2	68	97	81	0	7	4	0	0	
KS CONCORDIA	45	30	55	17	37	12	.4	.3	.3	2.2	238	.5	236	91	65	0	6	3	2	0	
DODGE CITY	48	28	53	23	38	9	.3	.2	.3	2.4	346	.3	176	89	43	0	6	1	0	0	
GOODLAND	39	21	47	16	30	3	.2	.1	.1	1.6	304	.2	162	89	62	0	4	1	0	0	
TOPEKA	47	31	55	19	39	13	.1	.1	.1	2.7	166	.2	65	90	64	0	4	2	0	0	
WICHITA	48	33	58	23	41	11	T	T	T	2.2	173	.1	31	89	58	0	4	1	0	0	
KY BOWLING GREEN	46	30	53	24	38	4	.3	.8	.3	8.1	130	1.0	59	96	66	0	5	1	0	0	
LEXINGTON	43	29	53	24	36	4	T	T	T	9.0	178	1.8	139	97	68	0	4	2	0	0	
LOUISVILLE	46	32	51	27	39	6	T	T	T	6.3	135	1.1	89	89	62	0	5	2	0	0	
LA ALEXANDRIA	61	46	69	34	53	5	1.4	.4	1.3	8.5	131	1.5	90	93	53	0	0	3	1	1	
BATON ROUGE	64	47	70	34	56	5	1.6	.6	1.6	4.0	60	1.6	100	86	47	0	0	3	1	1	
LAKE CHARLES	62	50	70	39	56	6	4.9	3.8	4.6	7.1	104	4.9	283	95	62	0	0	5	1	1	
NEW ORLEANS	62	47	69	41	55	2	2.1	1.0	2.1	4.8	68	2.1	120	92	56	0	0	3	1	1	

Based on 1951-80 normals.

Weather Data for the Week Ending January 11, 1992

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE 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	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
SHREVEPORT	61	42	67	30	51	6	.4	-.5	.2	8.3	154	.7	50	92	42	0	0	1	2	0	0	
ME CARIBOU	25	16	38	-3	20	20	1.8	1.2	1.5	3.9	97	1.8	200	83	65	0	0	6	5	1	1	
PORTLAND	37	23	47	9	30	8	.7	-.2	.5	5.6	95	1.5	109	86	45	0	0	6	2	1	1	
MD BALTIMORE	47	31	52	26	39	5	.1	-.6	.1	4.6	103	.5	49	90	52	0	0	5	1	0	0	
SALISBURY	48	32	50	27	40	5	.2	-.6	.1	5.5	110	1.2	98	93	56	0	0	4	2	0	0	
MA BOSTON	42	29	48	17	36	6	.1	-.8	.2	4.1	68	1.5	101	79	43	0	0	4	2	0	0	
CHATHAM	43	31	50	23	37	6	.1	-.9	.1	3.7	56	.5	34	83	52	0	0	4	2	0	0	
MI ALPENA	34	25	38	17	30	3	.4	-.1	.3	2.7	102	1.2	186	93	71	0	0	7	3	0	0	
DETROIT	39	32	46	28	36	11	.4	-.4	.3	2.1	65	.2	25	87	62	0	0	4	1	0	0	
FLINT	37	30	42	24	34	12	.2	-.2	.1	2.5	96	.3	52	92	65	0	0	5	2	0	0	
GRAND RAPIDS	37	31	41	26	34	11	.5	-.1	.5	3.4	101	.8	96	92	70	0	0	6	2	0	0	
HOUGHTON LAKE	33	26	38	20	30	12	.3	-.1	.2	2.5	102	.8	133	91	72	0	0	7	4	0	0	
LANSING	37	30	42	25	34	12	.2	-.2	.2	2.7	86	.6	81	94	74	0	0	5	2	0	0	
MARQUETTE	31	19	37	10	25	12	.2	-.3	.1	1.8	57	.3	45	96	80	0	0	7	4	0	0	
MUSKEGON	38	32	41	29	35	12	.6	-.0	.4	2.4	69	.6	67	92	71	0	0	3	2	0	0	
SAULT ST. MARIE	31	19	35	9	25	11	.3	-.2	.2	3.2	96	.7	88	90	68	0	0	7	3	0	0	
MN ALEXANDRIA	30	15	43	-4	23	17	.3	-.1	.2	.9	86	.3	100	98	79	0	0	7	2	0	0	
DULUTH	30	20	33	7	25	18	.4	-.1	.3	1.1	62	.4	102	93	75	0	0	7	3	0	0	
INT'L FALLS	30	12	38	-6	21	21	.4	-.2	.4	1.4	112	.4	131	93	77	0	0	7	3	0	0	
MINNEAPOLIS	34	22	39	6	28	17	.4	-.2	.2	1.4	124	.4	123	94	76	0	0	7	3	0	0	
ROCHESTER	33	23	39	11	28	18	.2	-.0	.1	1.7	139	.2	60	98	86	0	0	7	4	0	0	
MS GREENWOOD	58	36	67	24	47	4	T	-1.2	T	8.6	117	.2	10	98	45	0	0	2	0	0	0	
JACKSON	61	37	68	24	49	4	.1	-1.0	.1	5.5	76	.2	9	97	47	0	0	2	1	0	0	
MERIDIAN	59	36	67	28	48	2	.8	-.4	.8	7.8	103	.9	50	95	50	0	0	2	1	1	1	
MO CAPE GIRARDEAU	48	33	53	26	41	1	.9	-.2	.9	6.7	138	1.6	148	91	57	0	0	2	1	1	1	
COLUMBIA	47	31	61	20	39	11	T	-.4	T	2.8	106	.1	12	91	60	0	0	3	1	0	0	
KANSAS CITY	45	31	54	19	38	10	.3	.0	.3	2.9	150	.8	172	92	69	0	0	4	1	0	0	
SAINT LOUIS	49	35	57	27	41	12	.5	-.1	.5	2.6	93	.5	83	83	57	0	0	3	2	0	0	
SPRINGFIELD	49	33	56	18	41	10	T	-.4	T	3.6	112	.2	24	91	57	0	0	3	0	0	0	
MT BILLINGS	43	24	52	16	33	12	T	-.2	T	.4	32	T	9	70	40	0	0	6	1	0	0	
GLASGOW	35	15	51	5	25	16	T	-.1	T	.2	33	T	0	93	58	0	0	7	0	0	0	
GREAT FALLS	41	23	52	10	32	13	.1	-.2	.0	.1	12	.1	14	81	43	0	0	6	2	0	0	
HAVRE	40	19	54	3	30	18	.0	-.1	.0	T	4	.0	0	84	49	0	0	6	0	0	0	
HELENA	32	10	40	7	21	3	T	-.2	T	.8	93	T	8	94	59	0	0	7	7	0	0	
KALISPELL	32	19	38	10	26	6	.2	-.2	.1	.9	43	.3	49	95	75	0	0	7	7	0	0	
MILES CITY	42	18	54	5	30	16	T	-.1	T	.1	8	T	0	85	43	0	0	7	2	0	0	
MISSOULA	33	19	37	14	26	5	.1	-.2	.1	1.0	61	.1	19	90	63	0	0	7	2	0	0	
NE GRAND ISLAND	42	25	50	13	33	13	.7	.6	.3	3.3	400	1.2	718	94	67	0	0	6	3	0	0	
LINCOLN	44	29	52	19	37	17	.5	.3	.3	2.8	323	.8	364	91	72	0	0	6	4	0	0	
NORFOLK	43	26	54	17	34	17	.3	-.2	.2	1.3	172	.6	324	94	70	0	0	4	3	0	0	
NORTH PLATTE	42	19	55	13	31	10	.8	.7	.8	1.6	294	.9	685	96	57	0	0	7	3	0	0	
OMAHA	42	27	54	16	35	14	.3	-.2	.3	2.3	229	.7	254	91	77	0	0	5	4	1	1	
SCOTTSBLUFF	41	17	53	13	29	5	.7	.6	.7	.7	111	.7	418	90	52	0	0	5	4	0	0	
VALENTINE	39	13	55	0	26	8	.6	.5	.6	.6	134	.6	656	92	60	0	0	7	2	1	1	
NV ELY	34	9	47	-3	22	-2	.5	.3	.5	.8	81	.5	200	84	62	0	0	7	4	0	0	
LAS VEGAS	53	35	58	31	44	1	.4	.3	.4	.7	152	.5	265	84	41	0	0	7	2	0	0	
RENO	42	23	46	18	32	1	.1	-.2	.1	1.0	63	.1	29	95	49	0	0	7	2	0	0	
WINNEMUCCA	37	21	41	14	29	0	.1	-.1	.1	.7	63	.1	30	93	62	0	0	7	1	0	0	
NE CONCORD	38	24	46	9	31	11	.1	-.5	.1	4.0	88	.4	33	81	48	0	0	7	1	0	0	
NJ ATLANTIC CITY	48	29	51	23	38	6	T	-.8	T	4.1	84	.3	27	92	55	0	0	5	1	0	0	
NM ALBUQUERQUE	44	25	54	19	34	0	.3	-.2	.2	1.8	283	.3	200	87	44	0	0	6	2	0	0	
CLOVIS	47	29	55	23	38	1	.7	.6	.5	3.6	474	.7	424	89	43	0	0	6	2	1	0	
ROSWELL	49	29	58	22	39	1	.4	.3	.2	3.0	608	.4	315	86	42	0	0	6	2	1	0	
NY ALBANY	36	25	42	14	31	9	T	-.5	T	3.3	86	.4	46	84	56	0	0	5	2	0	0	
BINGHAMTON	33	26	37	20	30	8	.2	-.4	.1	3.3	86	.5	57	91	70	0	0	6	5	0	0	
BUFFALO	37	27	47	18	32	7	.2	-.6	.1	4.0	88	.2	16	96	75	0	0	7	3	0	0	
NEW YORK	45	36	52	32	40	8	.2	-.6	.2	3.9	82	.5	39	76	48	0	0	1	1	0	0	
ROCHESTER	35	26	44	20	31	7	.3	-.3	.1	3.3	94	.3	40	92	71	0	0	7	3	0	0	
SYRACUSE	35	25	43	13	30	7	.3	-.3	.1	3.9	94	.8	82	90	67	0	0	5	4	0	0	
NC ASHVILLE	53	32	59	25	42	6	T	-.7	T	6.0	139	1.1	100	90	46	0	0	4	1	0	0	
CHARLOTTE	56	36	60	28	46	6	T	-.9	T	4.8	101	1.8	135	82	38	0	0	3	0	0	0	
GREENSBORO	54	34	61	29	44	6	T	-.8	T	5.3	114	2.5	194	85	41	0	0	4	0	0	0	
HATTERAS	55	42	67	35	48	3	.1	-1.0	.1	6.8	111	2.4	138	94	65	0	0	3	2	0	0	
NEW BERN	57	37	62	29	47	3	.1	-.8	.1	7.3	143	4.5	317	95	57	0	0	3	2	0	0	
RALEIGH	54	35	57	27	44	5	.1	-.7	.0	5.5	126	2.9	231	92	47	0	0	3	3	0	0	
WILMINGTON	59	39	64	29	49	3	T	-.8	T	4.0	85	1.9	143	94	56	0	0	1	1	0	0	
ND BISMARCK	37	12	51	1	24	18	T	-.1	T	.2	26	T	6	95	58	0	0	7	1	0	0	
FARGO	30	12	38	-6	21	16	.7	.6	.4	1.1	128	.7	323	95	76	0	0	7	2	0	0	
GRAND FORKS	30	10	39	-8	20	18	.5	.3	.3	.8	91	.5	185	94	69	0	0	7	2	0	0	
WILLISTON	36	17	49	10	26	19	T	-.1	T	.2	28	T	0	90	53	0	0	7	0	0	0	
OH AKRON-CANTON	38	30	46	24	34	8	.2	-.4	.1	3.5	98	.2	20	91	67	0	0	5	2	0	0	
CINCINNATI	41	29	48	23	35	6	.1	-.6	.1	6.5	159	1.4	126	93	72	0	0	5	3	0	0	
CLEVELAND	39	32	47	25	36	9	.2	-.3	.1	2.6	70	.3	33	91	68	0	0	4	3	0	0	
COLUMBUS	42	33	50	27	37	10	.1	-.6	.0	3.9	109	.1	10	80	61	0	0	3	3	0	0	

Based on 1951-80 normals.

Weather Data for the Week Ending January 11, 1992

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT	NUMBER OF DAYS								
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1		PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE		.50 INCH OR MORE
DAYTON	40	30	47	24	35	8	.2	-.4	.2	4.7	139	1.1	115	92	68	0	0	0	0	0	0	0
TOLEDO	39	31	46	25	35	12	-.1	-.4	1.7	51	.2	31	86	64	0	0	0	0	0	0	0	0
YOUNGSTOWN	37	29	47	19	33	9	-.2	-.5	2.7	72	.2	17	92	68	0	0	0	0	0	0	0	0
OK OKLAHOMA CITY	54	34	63	27	44	8	.2	.2	5.4	358	.9	88	88	42	0	0	0	0	0	0	0	0
TULSA	54	38	60	28	46	11	.7	.3	4.6	201	.8	89	55	55	0	0	0	0	0	0	0	0
OR ASTORIA	46	34	51	27	40	-1	-.7	-.9	4.0	58	2.4	59	95	68	0	0	0	0	0	0	0	0
BURNS	36	15	38	1	25	-1	-.0	-.4	1.2	7	.5	3	93	57	0	0	0	0	0	0	0	0
MEDFORD	47	33	54	28	40	3	.2	.6	3.4	34	.5	42	98	68	0	0	0	0	0	0	0	0
PENDLETON	39	27	43	22	33	1	.7	.4	1.7	30	.7	2	89	65	0	0	0	0	0	0	0	0
PORTLAND	47	35	50	31	41	3	.3	-.1	5.6	64	1.3	53	93	60	0	0	0	0	0	0	0	0
SALEM	47	33	51	27	40	1	.8	-.6	5.6	57	1.8	69	92	66	0	0	0	0	0	0	0	0
PA ALLENTOWN	42	33	46	28	37	10	.2	.6	3.8	78	.3	27	83	55	0	0	0	0	0	0	0	0
ERIE	39	32	48	24	35	10	.2	.3	3.5	83	.3	32	92	63	0	0	0	0	0	0	0	0
HARRISBURG	44	37	49	31	40	10	.3	.4	4.3	100	1.5	136	76	53	0	0	0	0	0	0	0	0
PHILADELPHIA	46	32	50	28	39	7	-.1	-.6	4.1	90	.3	22	84	54	0	0	0	0	0	0	0	0
PITTSBURGH	40	32	50	24	36	8	-.2	-.4	3.9	108	.2	21	90	65	0	0	0	0	0	0	0	0
SCRANTON	37	29	40	24	33	7	-.1	-.4	2.9	89	.2	26	89	61	0	0	0	0	0	0	0	0
RI PROVIDENCE	45	28	51	21	36	7	-.2	-.8	4.7	79	1.5	101	82	42	0	0	0	0	0	0	0	0
SC CHARLESTON	62	41	70	31	52	4	.7	-.7	2.6	61	1.0	82	93	44	0	0	0	0	0	0	0	0
COLUMBIA	60	33	66	26	47	2	.2	-.7	1.0	64	.6	41	97	44	0	0	0	0	0	0	0	0
FLORENCE	60	38	63	30	49	4	-.1	-.7	2.9	69	.9	73	92	48	0	0	0	0	0	0	0	0
GREENVILLE	57	34	63	26	46	5	.7	-.9	3.6	64	.7	43	88	39	0	0	0	0	0	0	0	0
SD ABERDEEN	31	12	45	-2	21	13	-.5	-.4	.6	89	.5	271	96	76	0	0	0	0	0	0	0	0
BURON	37	20	43	9	29	17	-.4	-.3	.5	78	.4	315	95	71	0	0	0	0	0	0	0	0
RAPID CITY	41	21	51	12	31	10	-.2	-.1	.3	45	.2	162	80	49	0	0	0	0	0	0	0	0
SIoux FALLS	36	22	46	9	29	16	-.4	-.3	.4	74	.5	265	99	80	0	0	0	0	0	0	0	0
TN CHATTANOOGA	52	33	57	26	43	4	.4	-.2	10.3	146	2.3	120	97	57	0	0	0	0	0	0	0	0
KNOXVILLE	50	32	53	24	41	3	-.2	-.9	12.3	196	2.0	121	94	54	0	0	0	0	0	0	0	0
MEMPHIS	53	37	64	26	45	5	-.4	-.6	8.0	122	.9	51	95	53	0	0	0	0	0	0	0	0
NASHVILLE	49	32	58	22	40	3	-.2	-.8	8.4	134	1.1	68	96	59	0	0	0	0	0	0	0	0
TX ABILENE	56	35	62	28	46	2	.4	-.2	6.4	526	.1	26	88	34	0	0	0	0	0	0	0	0
AMARILLO	50	28	56	23	39	4	-.3	-.1	2.5	377	.3	147	85	33	0	0	0	0	0	0	0	0
AUSTIN	60	49	63	45	54	5	.5	-.2	15.6	608	1.5	275	84	57	0	0	0	0	0	0	0	0
BEAUMONT	61	50	69	42	56	4	2.6	1.6	14.1	221	2.6	173	92	65	0	0	0	0	0	0	0	0
BROWNSVILLE	68	55	78	49	62	1	1.8	1.6	3.1	205	1.9	497	98	74	0	0	0	0	0	0	0	0
CORPUS CHRISTI	63	55	72	49	59	4	1.0	-.6	10.8	612	1.0	180	94	68	0	0	0	0	0	0	0	0
DEL RIO	66	50	71	45	58	8	-.1	-.1	3.2	443	.1	76	82	38	0	0	0	0	0	0	0	0
EL PASO	56	38	68	34	47	3	-.6	-.5	3.9	774	.6	446	84	39	0	0	0	0	0	0	0	0
FORT WORTH	58	43	62	36	50	7	-.2	-.2	9.2	396	.5	80	92	54	0	0	0	0	0	0	0	0
GALVESTON	62	55	69	50	58	4	4.0	3.3	3.2	6.5	137	4.1	359	93	68	0	0	0	0	0	0	0
HOUSTON	61	49	68	43	55	3	1.0	-.2	10.5	208	1.2	91	91	60	0	0	0	0	0	0	0	0
LUBBOCK	52	31	60	23	42	3	-.1	-.0	2.4	482	.2	131	90	39	0	0	0	0	0	0	0	0
MIDLAND	57	33	65	26	45	2	.7	-.1	2.4	423	.2	138	86	38	0	0	0	0	0	0	0	0
SAN ANGELO	61	37	69	30	49	3	-.2	-.0	4.2	495	.2	82	93	38	0	0	0	0	0	0	0	0
SAN ANTONIO	61	48	65	44	55	5	.8	-.5	15.6	842	1.6	318	89	54	0	0	0	0	0	0	0	0
VICTORIA	62	52	71	48	57	4	1.9	1.5	.7	8.3	298	2.1	322	95	65	0	0	0	0	0	0	0
WACO	57	43	60	37	50	4	-.4	-.1	9.1	367	.7	112	95	59	0	0	0	0	0	0	0	0
WICHITA FALLS	58	35	65	27	46	6	.7	-.2	7.0	451	.7	6	89	42	0	0	0	0	0	0	0	0
UT CEDAR CITY	41	16	49	8	28	-1	-.2	-.1	.6	71	.3	118	93	49	0	0	0	0	0	0	0	0
SALT LAKE CITY	35	19	44	10	27	-1	-.5	-.2	.4	1.1	.60	.7	146	95	69	0	0	0	0	0	0	0
VT BURLINGTON	32	18	38	2	25	8	-.1	-.4	.0	59	.5	66	90	66	0	0	0	0	0	0	0	0
VA NORFOLK	51	38	57	33	44	4	-.1	-.8	.1	5.7	129	3.3	252	91	56	0	0	0	0	0	0	0
RICHMOND	51	33	54	25	42	5	-.2	-.6	.2	5.6	122	1.0	87	93	53	0	0	0	0	0	0	0
ROANOKE	52	33	59	23	42	7	.7	-.6	.7	4.4	112	1.9	185	79	45	0	0	0	0	0	0	0
WA QUILLAYUTE	46	34	53	24	40	1	2.1	-1.4	1.7	16.3	71	5.6	102	99	67	0	0	0	0	0	0	0
SEATTLE-TACOMA	45	35	51	25	40	1	.4	-1.1	.3	6.9	81	1.6	70	89	59	0	0	0	0	0	0	0
SPOKANE	33	24	35	21	29	3	-.1	-.5	.1	1.8	52	.6	59	97	82	0	0	0	0	0	0	0
YAKIMA	37	23	42	19	30	3	-.1	-.2	.1	1.4	77	.1	25	95	69	0	0	0	0	0	0	0
WV BECKLEY	44	29	59	23	37	6	-.2	-.6	.1	6.7	154	.3	21	92	60	0	0	0	0	0	0	0
CHARLESTON	45	32	57	23	38	5	-.2	-.6	.2	6.1	136	.2	18	92	59	0	0	0	0	0	0	0
HUNTINGTON	45	32	58	24	39	5	-.2	-.6	.2	5.8	135	.5	39	89	60	0	0	0	0	0	0	0
PARKERSBURG	43	33	53	27	38	6	-.3	-.4	.3	5.5	146	.4	38	94	66	0	0	0	0	0	0	0
WI GREEN BAY	35	27	39	20	31	17	-.3	-.0	.2	1.8	95	.3	75	93	69	0	0	0	0	0	0	0
LACROSSE	35	26	41	13	31	16	-.1	-.1	.1	1.8	124	.1	31	92	74	0	0	0	0	0	0	0
MADISON	37	28	45	17	33	16	-.2	-.1	.2	1.9	98	.2	49	94	73	0	0	0	0	0	0	0
MILWAUKEE	38	32	45	25	35	16	-.4	-.0	.4	2.5	93	.5	86	87	67	0	0	0	0	0	0	0
WAUSAU	33	21	37	11	27	16	-.1	-.1	.1	1.6	101	.2	66	98	80	0	0	0	0	0	0	0
WY CASPER	37	21	45	13	29	7	.7	-.1	.7	.3	52	.7	0	76	47	0	0	0	0	0	0	0
CHEYENNE	41	21	52	15	31	5	-.1	-.0	.0	.2	38	.1	54	73	38	0	0	0	0	0	0	0
LANDER	28	9	33	5	19	-1	-.3	-.2	.3	.6	81	.3	171	91	64	0	0	0	0	0	0	0
SHERIDAN	39	17	45	9	28	9	.7	-.2	.6	56	.7	0	83	47	0	0	0	0	0	0	0	0

Based on 1951-80 normals.

# HEATING DEGREE DAYS (Base 65° F)

## January 5 - 11, 1992

(Cumulative totals and departures from normal are for the period July 1, 1991 - January 11, 1992)

STATES AND STATIONS	WEEKLY		CUMULATIVE		STATES AND STATIONS	WEEKLY		CUMULATIVE		STATES AND STATIONS	WEEKLY		CUMULATIVE				
	TOTAL	DEPARTURE	TOTAL	DEPARTURE		TOTAL	DEPARTURE	TOTAL	DEPARTURE		TOTAL	DEPARTURE	TOTAL	DEPARTURE			
AL BIRMINGHAM	144	-10	1266	-108	197	NEW ORLEANS	71	-24	727	27	197	CINCINNATI	209	-43	2195	-181	165
MOBILE	92	-13	869	56	286	SHREVEPORT	94	-39	1030	-53	-53	DAYTON	208	-58	2414	-129	134
MONTGOMERY	133	4	1092	-1	260	ME CARIBOU	311	-67	4185	-181	85	TOLEDO	206	-88	2594	-327	11
AK ANCHORAGE	274	-97	4909	-493	-731	PORTLAND	246	-55	3017	-261	259	YOUNGSTOWN	219	-65	2616	-265	137
BARRROW	534	-14	9659	147	253	MD BALTIMORE	182	-42	1965	-122	202	OK OKLAHOMA CITY	143	-62	1644	-99	-85
FAIRBANKS	458	-95	6908	-376	-295	SALISBURY	172	-38	1758	-174	136	TULSA	134	-76	1569	-178	-76
JUNEAU	194	-112	3940	-492	-599	MA BOSTON	205	-40	2201	-164	213	OR ASTORIA	174	6	2262	-108	-52
KODIAK	212	-19	4008	-227	-147	CHATHAM	194	-39	2116	-285	113	BURNS	276	4	3212	-74	-569
NOME	366	-48	6167	-577	-172	MI ALPENA	246	-82	3440	-209	18	MEDFORD	173	-23	1886	-365	-475
AZ FLAGSTAFF	275	16	2967	-283	-224	DETROIT	202	-86	2601	-295	36	PENDLETON	222	-9	2365	-152	-294
PHOENIX	69	-24	474	-211	-40	FLINT	218	-86	2923	-155	02	PORTLAND	164	-23	1771	-381	-323
PRESCOTT	216	13	2009	-174	-109	GRAND RAPIDS	216	-82	2948	-86	87	SALEM	176	-6	1909	-353	-320
TUCSON	98	-1	712	-80	25	HOUGHTON LAKE	244	-87	3421	-238	-49	PA ALLENTOWN	192	-72	2290	-294	25
WINSLOW	245	7	2443	123	-117	LANSING	218	-82	3017	-47	70	ERIE	206	-74	2392	-453	107
YUMA	45	-25	320	-166	-124	MARQUETTE	279	-90	4257	-8	-41	HARRISBURG	172	-73	2140	-238	49
AR FORT SMITH	141	-55	1513	-141	-105	MUSKOGON	207	-82	2855	-126	30	PHILADELPHIA	179	-57	1842	-323	109
LITTLE ROCK	144	-32	1387	-120	-37	SAULT ST MARIE	280	-77	3834	-234	-115	PITTSBURGH	203	-63	2369	-295	128
CA BAKERSFIELD	130	4	1045	8	-140	MN ALEXANDRIA	297	-120	4054	-107	06	SCRANTON	222	-56	2575	-242	131
EUREKA	120	-6	1963	-263	-66	DULUTH	278	-133	4491	-6	28	RI PROVIDENCE	199	-58	2177	-352	67
FRESNO	153	9	1124	-159	-169	INT'L FALLS	305	-151	4690	-222	-161	SC CHARLESTON	93	-30	829	-171	195
LOS ANGELES	71	3	384	-226	-30	MINNEAPOLIS	258	-118	3730	96	157	COLUMBIA	127	-16	1166	-86	168
REDDING	134	-8	1135	-99	-231	ROCHESTER	259	-121	3873	122	152	FLORENCE	110	-31	1059	-135	177
SACRAMENTO	135	-11	1111	-166	-218	SAINT CLOUD	281	-125	4080	-20	02	GREENVILLE	133	-35	1388	-138	141
SAN DIEGO	65	3	347	-149	-90	MS GREENWOOD	123	-29	1158	-155	60	SD ABERDEEN	303	-94	3707	-223	-250
SAN FRANCISCO	109	-10	1068	-344	-82	JACKSON	110	-25	1066	-72	84	HURON	253	-124	3477	-235	-314
STOCKTON	148	1	1149	-114	-156	MERIDIAN	120	-18	1082	-117	186	RAPID CITY	236	-75	3138	-174	-303
CO DENVER	247	-5	2821	87	148	MO CAPE GIRARDEAU	168	-63	1856	-199	-39	STIOUX FALLS	249	-120	3522	-94	-183
GRAND JUNCTION	293	6	2818	80	-174	COLUMBIA	181	-83	2287	-86	27	TN CHATTANOOGA	154	-30	1529	-172	223
PUEBLO	210	-42	2726	157	93	KANSAS CITY	190	-86	2403	-8	38	KNOXVILLE	167	-22	1661	-76	225
CT BRIDGEPORT	186	-59	2066	-191	106	SAINT LOUIS	167	-87	2000	-261	02	MEMPHIS	139	-39	1371	-141	71
HARTFORD	217	-62	2473	-278	163	SPRINGFIELD	167	-69	2001	-142	-25	NASHVILLE	172	-24	1624	-132	168
DE WILMINGTON	179	-57	1909	-274	50	MT BILLINGS	220	-93	3020	-281	-308	TX ABILENE	135	-19	1355	81	20
DC WASHINGTON	157	-51	1634	-199	119	GLASGOW	281	-117	3698	-407	-539	AMARILLO	182	-28	2116	130	51
FL APALACHICOLA	85	-2	638	5	274	GREAT FALLS	229	-98	3184	-367	-512	AUSTIN	72	-40	766	-74	-60
DAYTONA BEACH	49	-7	296	-84	153	HAYVE	246	-136	3598	-441	-547	BEAUMONT	63	-35	672	-31	06
FORT MYERS	21	-13	92	-90	60	HELENA	304	-29	3699	-193	-6	BROWNSVILLE	31	-18	296	17	-31
JACKSONVILLE	79	-12	615	-48	237	KALISPELL	273	-51	3737	-293	-249	CORPUS CHRISTI	44	-26	421	-32	-46
KEY WEST	3	-4	3	-31	00	MILES CITY	245	-114	3274	-395	-439	DEL RIO	49	-56	673	-107	-19
MIAMI	10	-4	20	-48	16	MISSOULA	269	-42	3490	-278	-252	EL PASO	124	-26	1292	-89	34
ORLANDO	35	-13	211	-67	119	NE GRAND ISLAND	222	-92	2862	-148	-92	FORT WORTH	102	-38	1098	14	-127
TALLAHASSEE	99	1	776	-8	294	LINCOLN	198	-121	2758	-172	-60	GALVESTON	48	-31	508	-32	07
TAMPA	31	-18	238	-77	147	NORFOLK	213	-122	3087	-154	-143	HOUSTON	69	-28	722	-13	-25
WEST PALM BEACH	16	-3	57	-36	44	NORTH PLATTE	238	-70	2988	-237	-223	LUBBOCK	161	-23	1742	60	124
GA ATLANTA	130	-31	1218	-203	140	OMAHA	211	-104	2882	40	-86	MIDLAND-ODESSA	138	-14	1476	163	151
AUGUSTA	126	-14	1140	-86	176	SCOTTSDRUFF	251	-39	3017	-107	-195	SAN ANGELO	113	-27	1224	79	-23
MACON	120	-9	1036	-55	153	VALENTINE	271	-55	3304	-68	-196	SAN ANTONIO	70	-35	723	-58	-92
SAVANNAH	93	-26	767	-158	173	NV ELY	300	13	3333	-182	-173	VICTORIA	56	-34	550	-45	-61
ID BOISE	236	-16	2661	-80	-520	LAS VEGAS	142	-6	1152	-99	-134	WACO	101	-32	965	-35	-108
LEWISTON	205	-31	2362	-245	57	RENO	227	-11	2270	-577	-454	WICHITA FALLS	132	-43	1401	-43	-105
POCATELLO	284	-10	3287	-21	-185	WINNEMUCCA	251	-2	2743	-287	-617	UT BLANDING	272	1	2592	-249	-202
IL CHICAGO	207	-98	2802	-38	42	NH CONCORD	237	-78	3066	-285	148	CEDAR CITY	255	3	2692	-49	-314
MOLINE	204	-116	2813	-111	-103	NJ ATLANTIC CITY	185	-46	2022	-151	108	SALT LAKE CITY	268	9	2648	-68	-246
PEORIA	202	-104	2684	-132	-59	NM ALBUQUERQUE	213	-4	2040	-96	-67	VT BURLINGTON	278	-57	3245	-249	197
QUINCY	194	-96	2549	-65	10	CLOVIS	187	-10	2090	160	259	VA LYNCHBURG	156	-54	1755	-230	73
ROCKFORD	219	-109	3010	-117	-68	ROSWELL	172	4	1741	150	292	NORFOLK	143	-32	1297	-190	192
SPRINGFIELD	193	-90	2439	-106	-38	NY ALBANY	236	-71	2833	-231	160	RICHMOND	158	-38	1551	-263	139
IN EVANSVILLE	187	-53	2031	-149	79	BINGHAMTON	246	-60	2873	-342	-71	ROANOKE	157	-49	1741	-257	179
FORT WAYNE	206	-84	2605	-200	64	BUFFALO	229	-58	2699	-208	117	WA COLVILLE	265	-22	3194	-281	-304
INDIANAPOLIS	202	-70	2312	-239	-3	NEW YORK	171	-60	1747	-325	115	QUILLAYUTE	176	-7	2486	-276	-139
SOUTH BEND	204	-88	2672	-129	95	ROCHESTER	238	-48	2801	-76	117	SEATTLE-TACOMA	174	-10	1937	-431	-316
IA DES MOINES	210	-116	2958	4	-23	SYRACUSE	243	-49	2753	-167	72	SPOKANE	252	-28	2987	-297	-343
DUBUQUE	238	-109	3285	-45	-19	NC ASHEVILLE	156	-40	1806	-199	206	YAKIMA	241	-24	2639	-308	-418
STIOUX CITY	220	-123	3192	6	-63	CAPE HATTERAS	116	-22	844	-232	102	WV BECKLEY	199	-46	2690	122	660
WATERLOO	232	-124	3334	-95	-82	CHARLOTTE	128	-47	1261	-309	125	CHARLESTON	184	-40	1904	-261	228
KS CONCORDIA	193	-89	2477	-81	-69	GREENSBORO	147	-46	1555	-243	138	HUNTINGTON	182	-42	1943	-215	186
DODGE CITY	188	-64	2364	33	-45	NEW BERN	124	-30	1070	-232	123	PARKERSBURG	188	-48	2141	-103	210
GOODLAND	244	-23	2728	-82	-36	RALEIGH-DURHAM	144	-32	1421	-214	167	WI GREEN BAY	235	-120	3448	-164	02
TOPEKA	180	-94	2305	-163	-63	WILMINGTON	113	-20	1038	-81	231	LA CROSSE	238	-118	3461	55	158
WICHITA	168	-82	2128	-89	-116	ND BISMARCK	283	-127	3896	-285	-400	MADISON	225	-120	3266	-185	-31
KY BOWLING GREEN	190	-27	1851	-153	158	FARGO	308	-117	4092	-168	-54	MILWAUKEE	208	-115	2859	-315	43
LEXINGTON	201	-32	2020	-168	136	GRAND FORKS	311	-128	4299	-223	-128	WAUSAU	264	-112	3886	18	114
LOUISVILLE	183	-43	1815	-250	90	WILLISTON	269	-141	3915	-374	-430	WY CASPER	248	-53	3338	-151	-166
LA ALEXANDRIA	80	-39	885	-49	-29	OH AKRON-CANTON	217	-61	2564	-176	130	CHEYENNE	236	-37	3208	-72	-106
BATON ROUGE	63	-41	747	-58	73	CLEVELAND	205	-68	2407	-266	23	LANDER	323	1	3757	67	53
LAKE CHARLES	62	-36	717	-33	22	COLUMBUS	193	-72	2293	-264	96	SHERIDAN	256	-66	3432	-191	-181

Based on 1951-80 normals.

## National Agricultural Summary

January 6 - 12, 1992

**HIGHLIGHTS:** Temperatures averaged above normal in the Central and Eastern United States for the fifth consecutive week, with the most dramatic departures from normal observed in the northern Great Plains.

**SMALL GRAINS:** Small grain seeding continued between rains in the West. Warm temperatures kept wheat in good condition and snowfall across much of the Midwest provided beneficial moisture and protection against freeze. Lack of snow cover for winter wheat, however, remained a concern in several areas. Excess moisture caused some problems in wheat fields in the Texas Blacklands, slowed the growth of oats, and led to more widespread incidence of rust. Topdressing of small grains got underway in the East. North Dakota grain marketings continued to outpace the normal, but rail car shortages were reported.

**COTTON:** Limited cotton harvest resumed on the Texas Plains, although fields remained damp, and some gins began moving modules from fields. Lint quality continued to deteriorate due to the excessive rains in the State. Cotton stalk shredding continued in Arizona, while plowdown for pink boll worm control was complete in California.

**OTHER FIELD CROPS:** Sugarbeet harvest resumed on the Texas Plains where conditions allowed. Weather damage reduced yields and quality in most beet fields, and much of the unharvested production may be used for cattle feed. Planting and harvesting of sugarcane continued in Florida. Tobacco bed preparation continued in the East, and seedbed planting was nearly complete in South Carolina. A few peanut fields remained for harvest in Texas.

**FRUIT AND NUTS:** Lemon, grapefruit, orange, and tangerine harvests progressed in Arizona. Wet weather slowed orchard work and citrus picking in parts of California, while desert valley

citrus harvests progressed. Lemons, grapefruit, tangelos, tangors, tangerines, and navel oranges were being picked. Florida citrus trees remained in good condition, with irrigation continuing. Orange and grapefruit picking was active. Pecan harvest resumed in Texas, as areas began to dry, and continued in Arizona. Banana, papaya, and pineapple harvests were active in Hawaii. Pruning of fruit trees continued in the central and northern production regions.

**VEGETABLES:** Arizona's lettuce harvest continued, as did lettuce packing in California's southern desert. Broccoli, carrot cauliflower, and celery harvests also continued in California. Planting of late winter and early spring vegetable crops was active in Florida, while harvest of winter crops increased. Volume leaders in Florida were tomatoes, peppers, cabbage, celery, squash, lettuce, and carrots. Onion transplanting was active in Georgia, and Texas onions progressed well with the additional rains. Rio Grande Valley, Texas lettuce harvest is expected to begin shortly. New Jersey farmers were pulling leeks with a high volume available due to unseasonably warm temperatures.

**PASTURES AND LIVESTOCK:** Hay and roughage supplies remained adequate in most parts of the Nation, as mild early winter weather has minimized supplemental feed demands. Hay supplies were becoming tight, however, in the eastern Cornbelt. The mild winter has caused feedlots to become messy, and erratic changes in the temperature have caused cattle stress. Recent rains improved range conditions in California, where calving and lambing continued.

### State Summaries of Weather and Agriculture

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

**ALABAMA:** Heavy weekend rains central, south; some local flooding. Rainfall mostly under 1.00 in. north; over 1.00 in. few areas northwest; 1.00 to 2.00 in. central; 3.00 to 4.00 in. south; over 8.00 in. isolated areas south. Temperatures 1 to 5° above normal.

Winter wheat mostly good. Activities: Soil testing; herbicide application small grains; some winter tillage; feeding, managing cattle; general care of livestock, poultry, catfish.

**ARIZONA:** Cloudy, rainy statewide, 5th, 6th; two small tornados, central, 6th. Cloudy statewide, showers southwest, 7th. Cloudy far south, clear rest of State, 8th. Cloudy southeast, sunny rest of the State, 9th; showers southeast, 10th. Scattered showers 11th. Tem-

peratures 5° below to 4° above normal. Extremes -1°; 41° higher elevations, 27°; 73° deserts.

Cotton stalk shredding light to moderate statewide. Alfalfa condition good; sheeping off, light, moderate to heavy west. Small grains seeded 89%, 93% 1990, 90% avg.; small grains established, 74%, 82% 1990, 72% avg. Lemons, grapefruit, oranges, tangerines, mixed vegetables, lettuce harvested central, west. Pecans harvested, central.

**ARKANSAS:** Temperatures slightly above normal with light rain statewide. Extremes 16°; 68°. Rainfall none to 2.21 in.

Farming activities normal for this time of year. Delta region was saturated, too wet to cultivate. No fertilizer applied to the wheat crop, however,

condition is good. Livestock good. Some fescue pasture growth reported.

**CALIFORNIA:** Over the weekend, early in the week a deep low pressure trough allowed several systems to bring welcome rainfall and snow in the mountains. By midweek the trough moved inland, offshore winds brought drying before the central valley fog returned. Temperatures were mostly normal or below.

Rain slowed field activities most areas. Rice stubble burning halted. Plow down harvested cotton, pink boll worm control complete. Small grains, winter forages seeded limited areas. Emergence, growth continued improvement. Herbicide applications some fields. Established alfalfa green chopped. New fields fertilized, treated weeds, weevils. New sugarbeets maturing normally. Wet weather slowed orchard floor work, citrus picking, some areas. Other areas dormant spraying, pruning, weed control, fumigating, replanting active. Some pruning, tying of grape vines continued. Desert valley avocados were picked. Desert valley citrus harvest was progressing slowly for lemons, grapefruit, tangelos, tangors, tangerines. Navel orange harvest continued slowly; approximately one fourth crop picked. Broccoli light good quality Salinas Watsonville, Santa Maria. Packing active Huron district, Patterson Newman area good quality. Carrot harvest progressed Coachella Valley good quality. Cauliflower supplies continued Huron district, Patterson Newman area. Celery supplies light Santa Maria good quality. Harvest continued Coachella Valley, Patterson Newman area. Lettuce packing active desert area good quality. Spring harvest fields Westside area being weeded, thinned. Fall potato movement Tulelake Butte valley moderate. Desert area strawberries blooming, setting fruit. Other vegetables harvested: cabbage, spinach, green onions, various oriental vegetables. Range conditions fair to good. Recent rains some improvement. Supplemental feeding light. Water supplies short. Calving, lambing continued. Sheep grazing alfalfa.

**COLORADO:** Major winter storm began late on the 6th, lasted through early on the 8th bringing most of the State significant amounts of snow along with locally strong winds, much colder temperatures. Moisture amounts with the storm were mostly 0.25 to 0.50 in. west of the Continental Divide, in the San Luis Valley, 0.50 to 1.00 in. northeast. The southeast received little moisture with this storm. Blizzard conditions several locations in the northeast. A system moved into the State from the west late on the 11th bringing some light snow to mainly the east part of the State. Highest temperature reported during the period was 62° at Lamar, the lowest -20° at Alamosa. Precipitation was 1.20 in. at Holyoke; most locations reported at least some measurable precipitation.

Snow early in the week limited farm activities to the feed, care of livestock. Blizzard conditions caused some discomfort to animals, no major losses have been reported. Muddy conditions existed in cattle, sheep feed lots late in the week. The recent moisture should benefit the State's winter wheat crop which remains dormant and snow covered in most areas.

**FLORIDA:** Temperatures a couple degrees above normal. Warmest; low 70s, Panhandle, low 80s south areas. Coldest; mid, upper 20s Panhandle, upper 20s, mid 30s remainder of north areas, mid 30s to mid 40s central areas, mid 40s to upper

50s south areas. Rainfall; Panhandle, 1.00 in. common, locally 3.00 to 6.00 in. extreme western counties. Only traces, central, south.

Soil moisture short: Panhandle, north, central Peninsula; adequate: southern east coast. Ground preparation underway for spring crops some northern counties. Sugarcane harvesting, planting continue. Citrus trees, fruit good condition. Irrigation all areas, some rain east coast. Very little new growth, trees quasi dormant. Early mid orange harvest very active. Most processors open 6 days per week. Grapefruit movement mostly from lower east coast. Caretakers cutting cover crops, hedging, and topping. Mild temperatures turned cool by weekend over vegetable producing areas. Rainfall limited, irrigation becoming heavy most areas. Planting late winter, early spring crops active. Harvest winter crops increasing. Volume leaders: tomatoes, peppers, cabbage, celery, squash, lettuce, carrots. Also available: snap beans, sweet corn, cucumbers, eggplant, escarole, endive, radishes, strawberries, cherry tomatoes. Planting Homestead potatoes complete. States pastures poor to good condition. Pasture ratings; 50% poor, 40% fair, 10% good. State's cattle herds poor to good.

**GEORGIA:** Warm week. Temperatures 1 to 5° above normal. Highs mid, upper 50s mountains; mid, upper 60s central; low 70s extreme south. Lows mid 20s north, low 20s colder locations, to near 30° elsewhere with mid 20s colder locations. Rain 2 to 3 days north, totals under 0.25 in. Rain 2 to 3 days southwest, totals between 1.50 to 3.00 in. Rain 1 day southeast, totals under 0.20 in.

Soil moisture short south, adequate elsewhere. Onions good, transplanting active, 8% remaining south. Small grains good, seeding complete. Top dressing nitrogen small grains west and south. Tobacco bed preparation more than 55% complete, plants good. Some limited land preparation activities. Pruning peach trees west. Pastures poor west, south. Cattle, hogs good.

**HAWAII:** Calm, dry weather occurred after several weeks of wind, rain, allowing damaged crops to recover. Farmers able to catch up on farm activities. Rainfall short in some areas, adequate in others. Insect populations light with cooler weather. Winds 5 to 15 mph. Temperatures low 60s to mid 80s. Rainfall none to 0.90 in.

Days suitable for fieldwork 7.0. Banana, papaya harvesting active. Sugar, pineapple harvesting normal, seasonally slower.

**IDAHO:** Temperatures above normal across State. Precipitation fell statewide: Sandpoint in the north received the most with 0.66 in.

Soil moisture varied across State. Short in south central; rest of State adequate. Activities: Marketing potato, grain crops, attending meetings, repairing equipment. Hay, roughage supplies adequate. Hay was continuing to be fed. Livestock reported in good to excellent.

**ILLINOIS:** Temperatures 3 to 12° above normal in the south, 7 to 18° above normal in the northern, central parts of the State. Temperatures across the State upper 20s to the 40s. Precipitation 0.20 to 0.60 in. over most of the State, 0.10 to 0.30 in. below normal. However, southern part of the State had 0.60 to 1.00 in. of precipitation which was 0.10 to 0.30 in. above normal. The State had no snow cover during this period.

**INDIANA:** Temperatures 4 to 14° above normal. Highs upper 30s to mid 40s. Lows, upper 20s to

mid 30s. Precipitation light, 0.10 to 0.40 in. Mild, cloudy week.

Limited field activity. Other activities: Hauling manure, selling grain, soil testing, machinery repair, cleaning fence rows, building maintenance, attending farm sales, purchasing supplies, tax preparation, care of livestock. Winter wheat poor, some fields. Hay supplies tight. Livestock mostly good.

**IOWA:** Another very mild week with temperatures 15 to 19° above normal. Extremes 11° (Decorah, 10th); 55° (Des Moines, 26th). Precipitation 0.07 in. northwest to 0.73 in. northeast. State 0.29 in., weekly normal 0.19 in.

Mild weather has allowed farmers to graze more cattle in stalk fields. Hay, bedding supplies running short in central, west central. Quality of hay, roughage fair to good. Soil moisture is adequate to surplus.

**KANSAS:** Temperatures 5° above normal northwest; 11 to 12° above normal elsewhere. Precipitation recorded most areas; northwest highest 0.61 in.; southeast lowest with 0.06 in.

Topsoil moisture generally adequate to surplus; subsurface moisture generally adequate. Wheat slow growth; some secondary root development. Some stands still susceptible to freeze damage, soil moisture will help buffer potential freeze damage. Producers feeding, tending to livestock. Some disease problems, mild weather generally beneficial.

**KENTUCKY:** Cloudy, mild. Temperatures mid 30s, about 5° above normal. West most rain, amounts above 1.00 in. Statewide rainfall 0.25 in.

Agricultural activity minimal due to wet conditions. Tobacco markets reopened to lower prices. Wet weather stressful on livestock; especially newborn, young stock.

**LOUISIANA:** Temperatures 2° below to 7° above normal. Extremes 26°; 71°. Rainfall 1.06 in. northwest to 5.24 in. southwest.

Main activities: Heavy rains midweek kept most farmers out of the fields. Farmers attending various crop production meetings across the State. Top dressing winter pastures, wheat was limited due to wet fields. Crawfishing, farm equipment maintenance, repair, livestock care, feeding continued.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.71 in. Temperature 40.9°, normal 32.7°. Extremes 0°; 60°.

Activities: Preparing fields for spring planting; cleaning fields; liming, fertilizer applications; marketing, caring for livestock.

**DELAWARE:** Precipitation 0.67 in. Temperature 40.6°, normal 33.8°. Extremes 28°; 65°.

Activities: cleaning seed for next year; marketing, caring for livestock.

**MICHIGAN:** Temperatures 12 to 14° above normal. Extremes 4°; 47°. Precipitation 0.04 to 0.46 in. across State. In 1992, sunshine did not fall on State until 12th. Temperatures above normal, some areas received light snow. Cattle appear to be in good shape, feed stocks continue to be adequate. Major activities: Hauling manure; pruning fruit trees; caring for livestock; making winter repairs on equipment.

**MINNESOTA:** Temperatures 16 to 19° above normal for the State. Extremes 11°; 48°. Precipitation 0.25 to 0.67 in., which is near normal to 0.47 in. above normal. Greatest weekly total 1.23 in. at Waseca. Snowfall trace to 7 in. for the

State. Snow depth 7 to 15 in. northeast, north central, east central, 5 in. or less elsewhere.

**MISSISSIPPI:** No Weather Data Available.

Days suitable for fieldwork 2.5, 0 1990, 1.2 avg. Soil moisture 13% short, 50% adequate, 12% surplus, 25% excessive. Wheat 29% fair, 71% good. Hay supply, 14% short 43% adequate, 43% surplus. Feed grain 100% adequate. Livestock 14% fair, 86% good. Activities: Feeding livestock, preparing for spring.

**MISSOURI:** Temperatures 10° above normal. Rainfall 0.27 in.; most north, southwest less than 0.25 in., nearly 1.00 in. southeast.

Mild weather good for livestock. Farmers doing chores, working on taxes, planning for new year.

**MONTANA:** Another warm, dry week across State. Temperatures 5° above normal west to 20° above normal northeast. Eastern half reported little or no precipitation. Some moisture reported elsewhere.

Winter wheat 9% poor, 52% fair, 37% good, 2% excellent. Snow cover protection 87% poor, 6% fair, 7% good. Cattle, calves on supplemental feed 87%, sheep, lambs 77%. Grazing 96% open, 3% difficult, 1% closed.

**NEBRASKA:** Temperatures 4° above normal in the northwest to 18° above normal in the east central. Scattered precipitation 0.20 to 1.00 in.

**NEVADA:** Weak cold fronts moved across State leaving little precipitation. Rainfall 0.12 in. northwest to 0.98 in. south central. Extremes -9° north; 70° extreme south.

Livestock feeding requirements continued favorable due to near normal temperatures, lack of snow. Activities: caring for, feeding livestock, maintenance, working on income tax.

**NEW ENGLAND:** Precipitation 0.05 to 0.70 in. north, up to 2.40 in. northern Maine; 0.10 to 0.25 in. south. Average temperatures high teens to low 30s north, high 20s to high 30s south. Maximum temperatures mid 30s north to mid 50s south; minimum temperatures -16° north to low 20s south.

Major activities: Tending livestock, cutting firewood, making general repairs.

**NEW JERSEY:** Temperatures much above normal, averaged 35° north, 37° south, 39° coastal. Extremes 22°; 52°. Precipitation below normal; averaged 0.19 in. north, 0.09 in. south, 0.08 in. coastal. Heaviest 24-hour total 0.23 in. on 9th, 10th.

Farmers pulling leeks, high volume available due to unseasonably warm temperatures. Also selling sweet potatoes, butternut squash from storage; caring for livestock.

**NEW MEXICO:** Unsettled weather both early, late in the week kept temperatures generally 2° to 4° below average for much of the State. Temperatures along the eastern border, however, were near to slightly above normal. Extremes: low of -6° in the northern portion of the State to a high of 61° at several southern locations.

Nearly all areas reported precipitation, with greatest amounts occurring during winter storm conditions 10th to 11th. Many southern locations reported amounts between 0.50 to 1.50 in.

**NEW YORK:** Mild week. Extremes -10°; 52°. Weather turned colder by end of week. Lows plummeted below zero. Precipitation very light. Amounts varied from none to over one half inch. Some areas received snow.

Major activities: Tending livestock, spreading manure, maintenance work, chores, attending meetings. Milder weather made caring for livestock a little easier.

**NORTH CAROLINA:** Temperatures above normal. Extremes 19°; 67°. Hail on 10th in northern Piedmont; no damage. Precipitation none to 0.63 in.

Small grains good condition. Soil moisture adequate to surplus. Hay, roughage supplies and feed grain supplies adequate. Activities: Tending livestock; cutting wood; preparing tobacco plant beds; pruning fruit trees; land preparation; farm repair and maintenance.

**NORTH DAKOTA:** Temperatures 14 to 18° above normal. Extremes -10° northeast; 55° southwest. Precipitation none west to 0.71 in. east central.

Livestock good to excellent condition. Hay stocks and concentrate supplies adequate. Snow cover adequate in most areas to protect winter wheat, rye, alfalfa. Grain marketings above normal, rail car shortages.

**OHIO:** Another mild week across State; temperatures 4 to 12° above normal. Highs upper 30s to mid 40s. Lows upper 20s to middle 30s.

Days suitable for fieldwork 3.0. Soils generally remained unfrozen, muddy. A high pressure system kept moisture trapped near the soil surface. Skies remained cloudy for most of the week until 9th, when a cold front moved into the State. Light rain and some snow occurred. Most locations experienced accumulated precipitation of none to 0.25 in. Farms are in a period of hibernation except for activities centered on farm management, crop planning, working with livestock. Snow cover is still a concern for those who have planted winter wheat. Soil moisture 35% short, 55% adequate, and 10% surplus. Pastures 14% very poor, 15% poor, 48% fair, 16% good, 7% excellent.

**OKLAHOMA:** Temperatures 5° above normal south central to 9° above normal northeast. Precipitation 0.02 in. northeast to 0.41 in. southwest.

Warm temperatures kept wheat in good condition. Recent snowfall should provide beneficial moisture. Cattle supplemental feeding active. Slaughter cattle prices sharply higher, feeder cattle prices lower than preceding week.

**OREGON:** Temperatures near normal statewide. Precipitation near normal statewide; coast 1.00 in., west of the Cascades 0.25 to 1.00 in., north central, southeastern areas 0.25 in., elsewhere none to 0.20 in.

Soil moisture mostly adequate. Winter wheat condition fair to good. Weather permitted some wheat to be sown. Orchard, cranberry cleanup, pruning continued. Livestock condition good to excellent. Mild winter has assured surplus hay quantity statewide. Range, pasture, fair to good across most of State.

**PENNSYLVANIA:** Warmer, dryer than normal across the State. Temperature 34°, 7° above normal. Extremes 7°; 50°. Precipitation 0.23 in., 0.67 in. below normal.

Activities: Repairing fence; hauling manure; maintaining machinery; caring for livestock.

**PUERTO RICO:** No Weather Data Available.

**SOUTH CAROLINA:** Temperatures 2 to 4° above normal. Rainfall 0.20 in. Midlands to none elsewhere.

Farm activities: Tobacco seed bed planting nearly complete; spring planting preparations, small grain fertilizing nearly complete; pastures average; livestock condition good.

**SOUTH DAKOTA:** Temperatures 10 to 20° above normal last week except for the Black Hills, southwest part of the State which were zero to 10° above normal. Extremes 9°; 63°. The south central part of the State received 9 in. of snow last week. Precipitation was scattered, ranged from a trace northwest to 0.95 in. south central. Maximum 0.95 in.

Topsoil: 5% critical, 32% short, 61% adequate, 2% surplus. Subsoil: 19% critical, 39% short, 42% adequate. Rye 39% fair, 61% good. Winter wheat 41% fair, 59% good. Livestock 84% good, 16% excellent. The mild winter is causing the feedlots to become messy which is causing stress to the cattle. There were reports of calves with pneumonia due to erratic changes in the temperature. Stock dams are being reported dry in some areas of the State. The lack of snow cover for winter wheat is causing concern in some areas.

**TENNESSEE:** Cold front moved through State midweek, brought rainfall. Rain again over weekend caused by warm Gulf moisture overriding warm front to the south. Temperatures averaged above normal Statewide. Greatest deviation was 5° above normal west. Plateau only 1° above normal. Highs averaged upper 40s to mid 50s, lows averaged upper 20s to mid 30s. Coldest readings reported northeast. Rainfall averaged below normal Statewide. Ranged 0.25 in. below normal west, 0.75 to 1.00 in. below normal east.

Topsoil moisture short to adequate West, short East. Wheat crop in mostly good condition. Winter pastures mostly fair. Hay, roughage supplies adequate. Activities: Tending livestock, cutting firewood, preparing tobacco plant beds, pruning fruit trees, land preparation.

**TEXAS:** Wet weather continued over Texas. Early in week, cool front triggered rain over eastern third of State. Midweek, overrunning pattern set up, yielded rain in extreme south, across eastern half of State. Weekend, major upper air storm, strong cold surge combined to produce heavy snow over High Plains. Temperatures averaged mostly above normal, but a few degrees below normal on Southern High Plains, Lower Valley. Precipitation ran above normal except Cross Timbers, Blacklands and Edwards Plateau. Amounts more than 1 in. above normal in southern East Texas, Upper Coast.

**Crops:** Some cotton harvest resumed on Plains although fields remained damp. Some gins began moving modules from fields. Harvest, ginning continued stretched out, while lint quality deteriorated. Sunshine, warm weather improved most small grain fields. Excess moisture caused some problems in wheat fields in Blacklands. Growth in oat fields slowed, rust more widespread. Statewide wheat 81% normal compared 61% 1991. Few peanut fields remained for harvest. Sugarbeet harvest resumed on Plains where conditions allowed. Weather damage reduced yields, qualities most fields. Most unharvested beets will be used for cattle feed.

**Commercial Vegetables:** Rio Grande Valley, lettuce harvest should begin next week. Onions progressed well with rains. East Texas, some cole crops harvested. Wet fields delayed sweetpotato planting another week. Trans-Pecos, most fields along Rio Grande too wet to control weeds. Onions progressing well. Pecan harvest resumed as areas began to dry. Insect, weather problems early in season caused lower yields, weights.

**Range and Livestock:** East Texas, livestock conditions started to deteriorate from wet weather. Elsewhere, winter ranges, pastures improved. Forage availability good, pastures good growth cool season forages. Supplemental feeding most areas, however, offset limited grazing of wet grazing lands.

**UTAH:** Temperature maximums 5° less than normal, minimums 3° above normal. Moderate precipitation reported in all areas.

State precipitation for the water year is at 102% of normal, compared to 90% of normal a year ago. Farm activities include: Onion shipping, supplemental feeding of hay, preparations for February calving, snow removal, manure hauling. Snow presently covers most tilled land. Livestock comments: most cattle look good, feed supplies still good following high moisture last summer. Feed supplies and range condition: low elevation winter ranges experienced forage production during fall, wild horses pose a problem with high numbers competing with livestock, desert winter ranges look good. More snow is needed for most of the State.

**VIRGINIA:** Warm with temperatures averaging 6 to 10° above normal. Extremes 18°; 59°. Rain at the end of the week averaged less than 0.25 in.

Days suitable for fieldwork 1.8. Topsoil 63% adequate and 37% surplus. Winter grains, grazing crops 4% very poor, 8% poor, 52% fair, 34% good, 2% excellent. Forage from winter grains, grazing crops dairy cattle 6%, beef cattle 23%, sheep 19%. Beginning to top dress small grains; prepare burley, dark fired tobacco for marketing; repair equipment, prepare taxes.

**WASHINGTON:** Temperatures 2° below to 1° above normal, west; 1° above normal to 5° above normal, east. Precipitation 0.48 to 1.82 in. west; 0.05 to 0.50 in. east.

Days suitable for fieldwork 3. Soil moisture 32% short, 58% adequate, and 10% surplus. Hay, other roughage 22% short, 64% adequate, 14% surplus. Range and pasture 6% very poor, 19% poor, 11% fair, 42% good, 22% excellent. Winter wheat 15% fair, 85% good. Above normal seasonal temperatures continued to dominate. Moist air in dryland wheat producing areas created excellent conditions. More moisture is needed in most areas to replenish the deep moisture. Pruning continued in all orchard areas. Tying of caneberrries was active in the berry producing areas. Properly managed pastures were in good shape in the western portion of the State. Livestock continued on winter feeding programs.

**WEST VIRGINIA:** Temperature 37°. Extremes 15°; 59°. Precipitation 0.28 in.

Days suitable for fieldwork 3.5. Soil moisture, 8% short, 84% adequate, 8% surplus. Wheat, good. Barley, good. Hay feed supplies, 84% adequate, 16% surplus. Other feed supplies, 20% short, 77% adequate, 3% surplus. Cattle, good. Sheep, good. Farm activities: marketing livestock, stripping tobacco, harvesting soybeans.

**WISCONSIN:** Temperature 29°. Extremes -5°; 50°. Snowfall on 7th, 8th across northern half of State; 1 to 5 in. At the same time, the south was receiving rain, freezing rain.

Frost depth for mid-January, 3.4 in. 1992, 11.3 in. avg. Frost depth at a record low for this period. Snow depth 2.9 in. 1992, 8.5 in. avg.

**WYOMING:** Temperatures mostly above normal, the exception being in the southwest. Precipitation was above normal in the southern half of the State and below normal in the north.

1992 Winter wheat fair to good, with beneficial precipitation received last week. Livestock mostly good, supplemental feeding continuing. Some ranchers beginning to calve.

## California Rainy Season Update

Though five storms crossed California between December 27, 1991 and January 7, 1992, water year (since October 1, 1991) precipitation deficits persist in the northern half of the State. The recent storminess has barely improved dryness along the northern coast (Eureka) and the western Sierra Nevada (Blue Canyon). Other northern locations have noted improvement, but still have received less than

75 percent of normal rainfall since October 1 (Redding, Sacramento, San Francisco). Meanwhile, the southern half of the State has received the storms' bounty, pushing water year precipitation from well-below normal to above normal in Bakersfield, Los Angeles, San Diego, and Santa Maria. Since the latest storm's passage on January 7, little additional rain or snow has fallen in California (as of January 12).

CITIES	PRECIPITATION		PERCENT OF NORMAL PRECIP.	
	Oct 1-Dec 26, '91	Oct 1, '91-Jan 12, '92	Oct 1-Dec 26, '91	Oct 1, '91-Jan 12, '92
Bakersfield	0.68	2.88	44	143
Blue Canyon	5.64	8.62	26	29
Eureka	4.95	6.74	36	38
Fresno	1.14	4.00	38	99
Los Angeles	0.42	4.55	14	103
Redding	4.82	10.83	36	61
Sacramento	1.96	4.02	36	54
San Diego	1.52	4.25	60	118
San Francisco	2.17	6.48	34	74
Santa Maria	0.65	5.73	19	126

### International Weather and Crop Summary

#### HIGHLIGHTS

January 5 - 11, 1992

**WESTERN USSR** ... Continued mild weather favors dormant winter grains but melts protective snow cover.

**EUROPE** ... Significant moisture benefits winter grains in the United Kingdom. More seasonal temperatures return to the south.

**EASTERN ASIA** ... Light rain and snow aid northern winter wheat. Rains continue to benefit reservoirs and winter crops across southern China.

**SOUTHEAST ASIA** ... Rainfall tapers off across Indonesia and Malaysia. Rains linger in eastern Thailand.

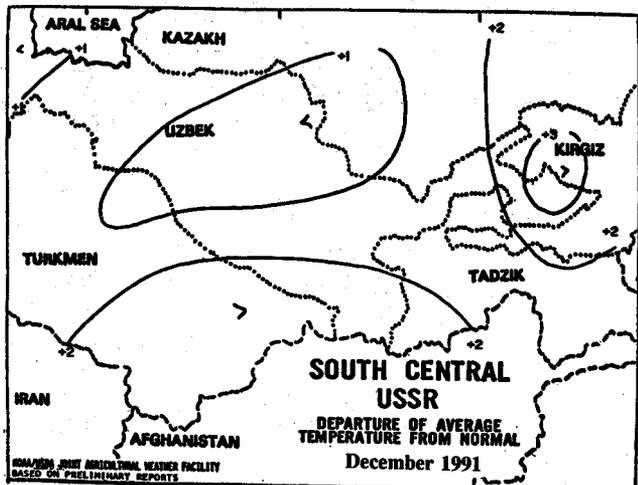
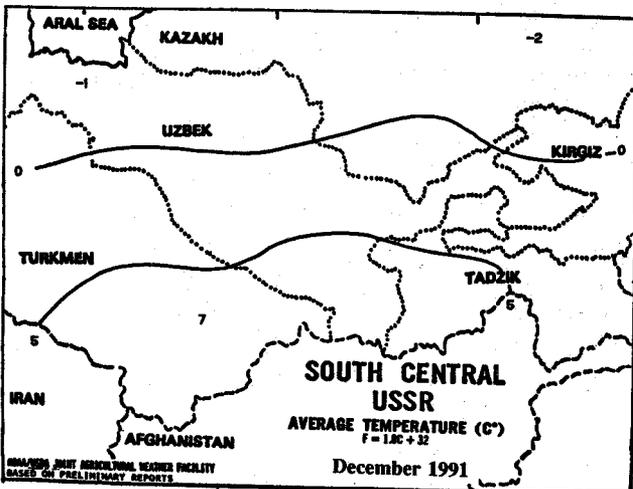
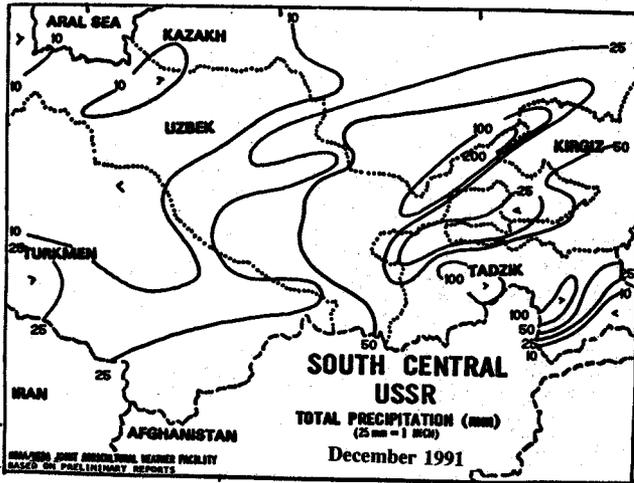
**SOUTH ASIA** ... Dry weather dominates. Scattered frost likely has no major impact on winter wheat.

**SOUTH AMERICA** ... Somewhat drier weather in central Argentina aids fieldwork, while rain continues in the north. Summer crop prospects are favorable in Argentina and southern Brazil.

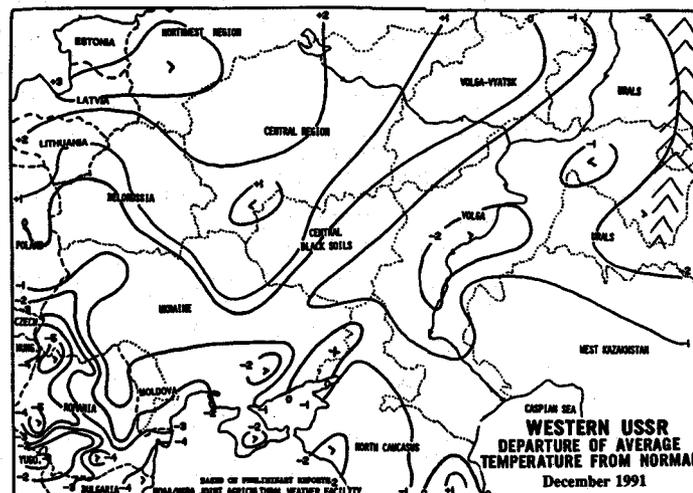
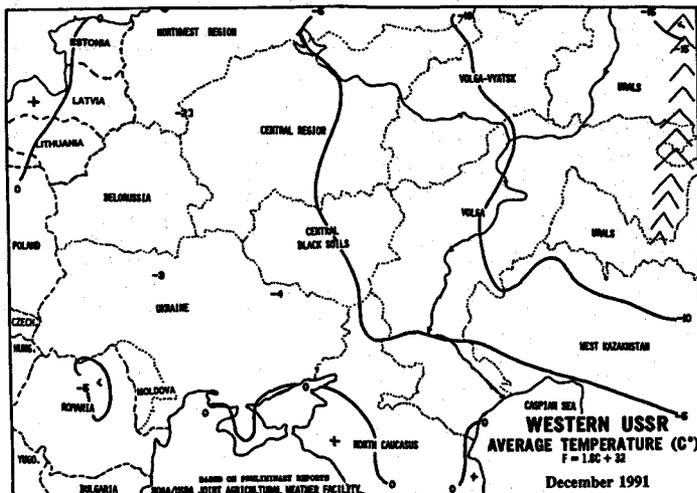
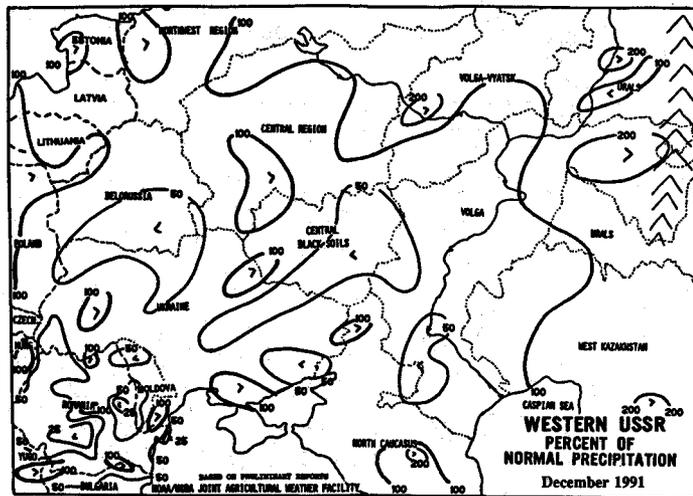
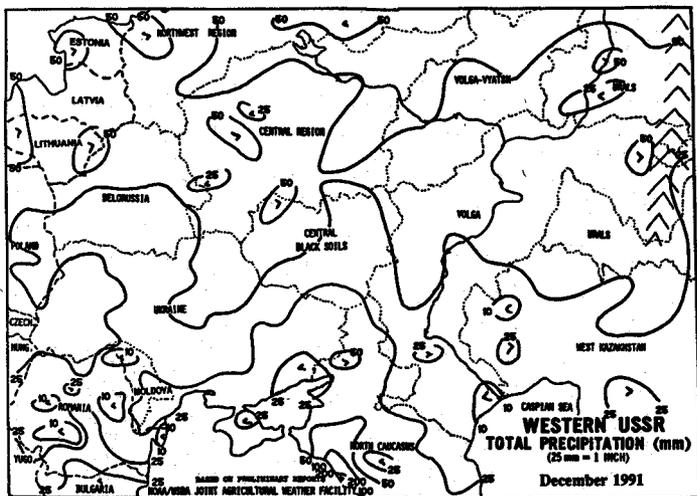
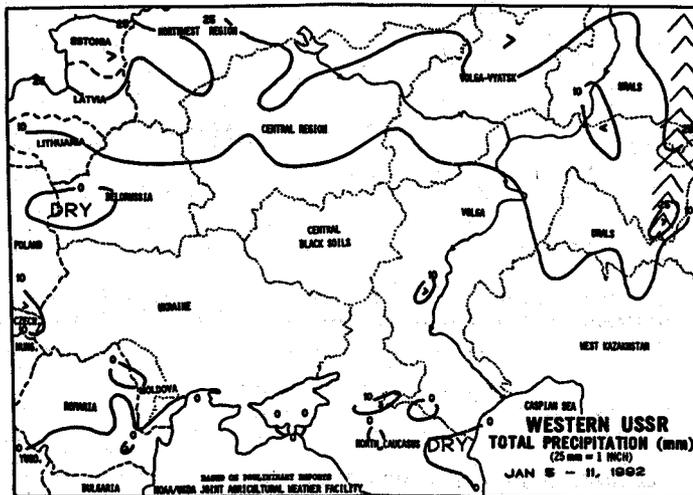
**AUSTRALIA** ... Dryness continues across the east, raising concerns for developing summer crops.

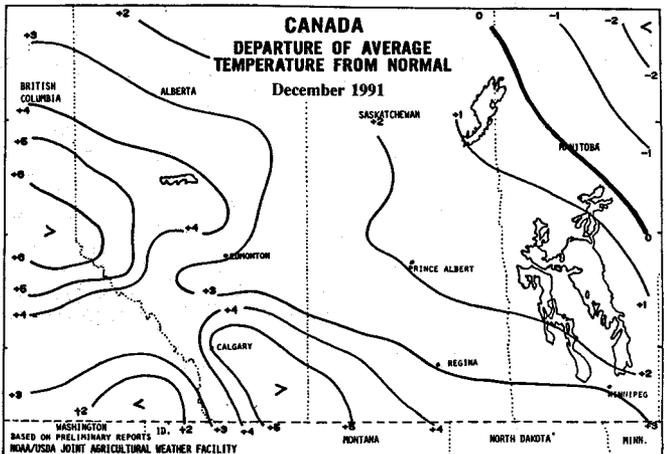
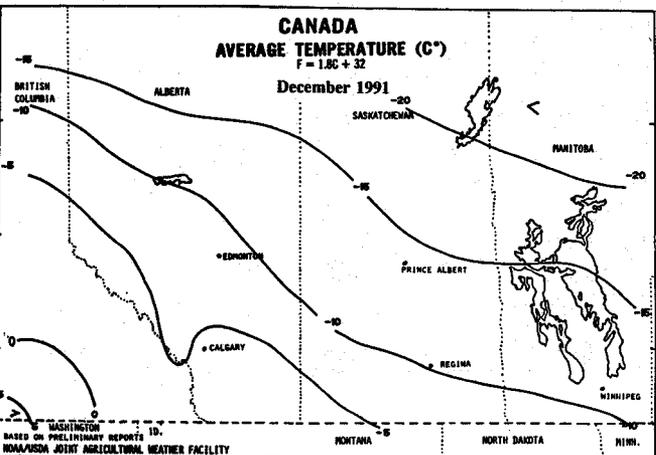
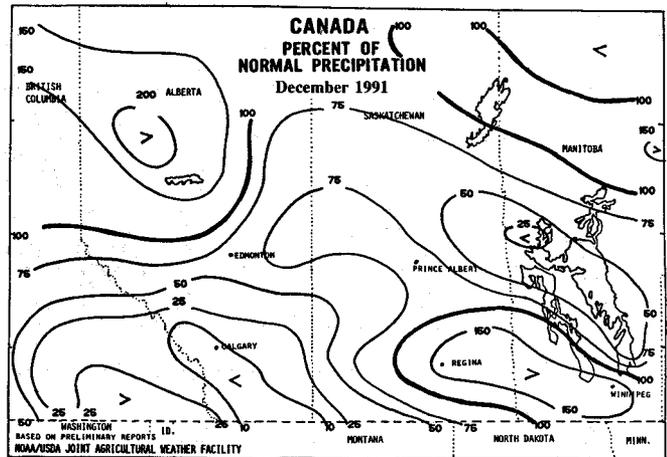
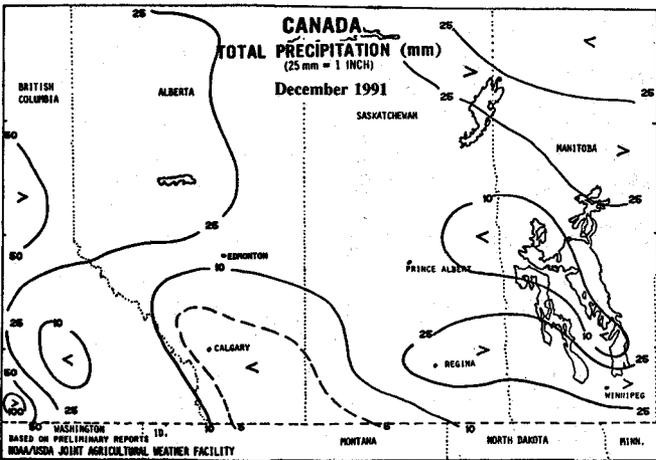
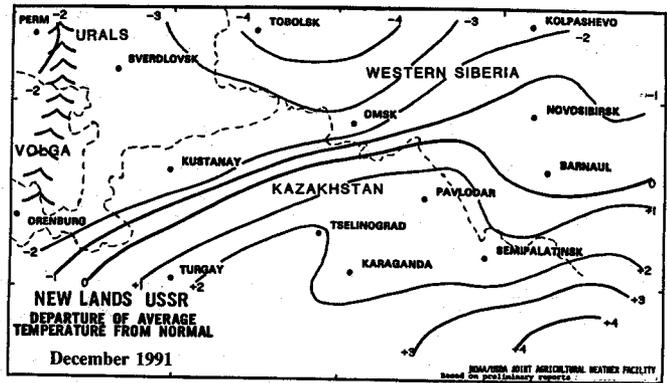
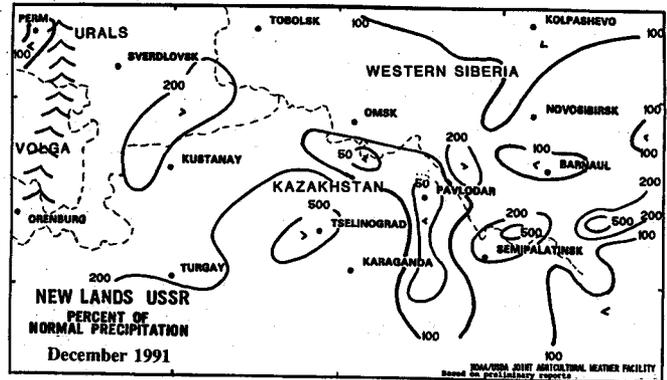
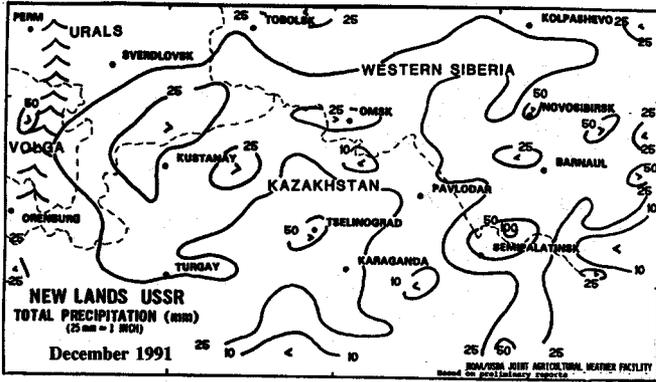
**NORTHWESTERN AFRICA** ... Dry weather in Morocco, Algeria, and Tunisia stresses winter grains in the early vegetative stage. Subfreezing temperatures in Algeria burn tender growth.

**SOUTH AFRICA** ... Hot, dry weather stresses corn approaching reproduction.

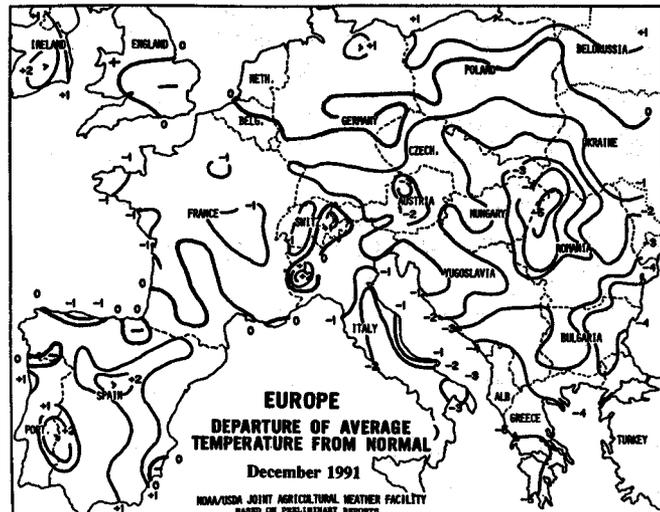
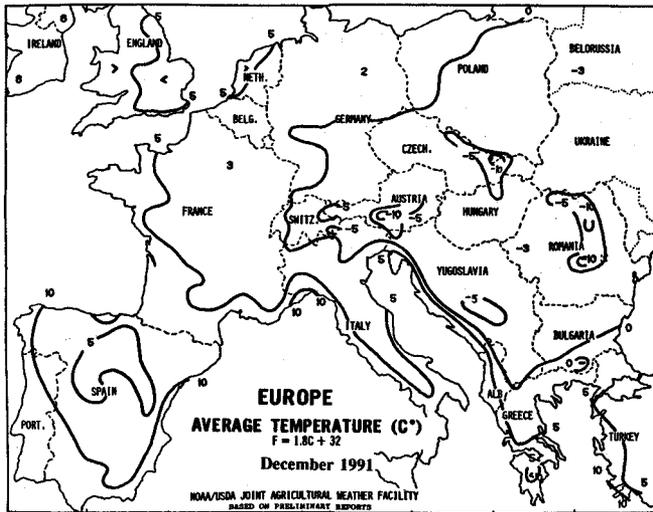
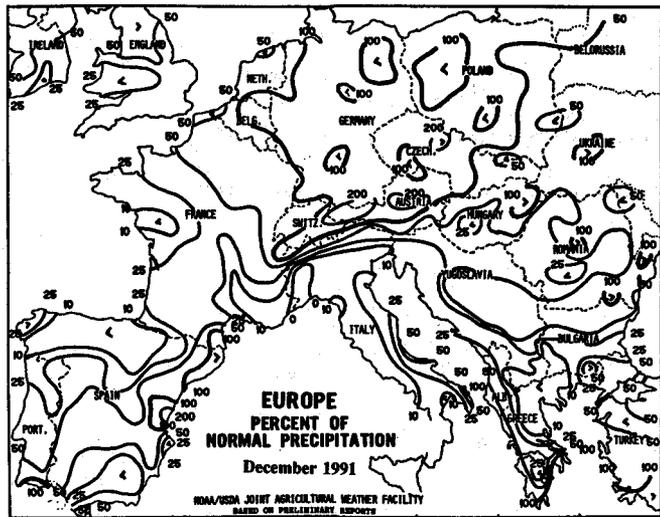
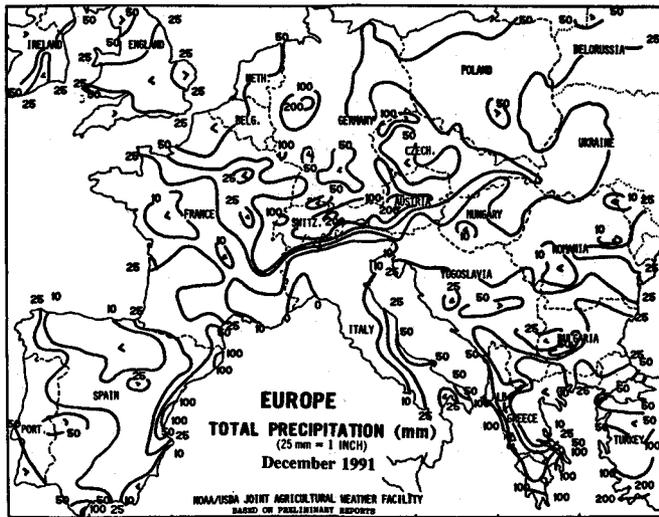
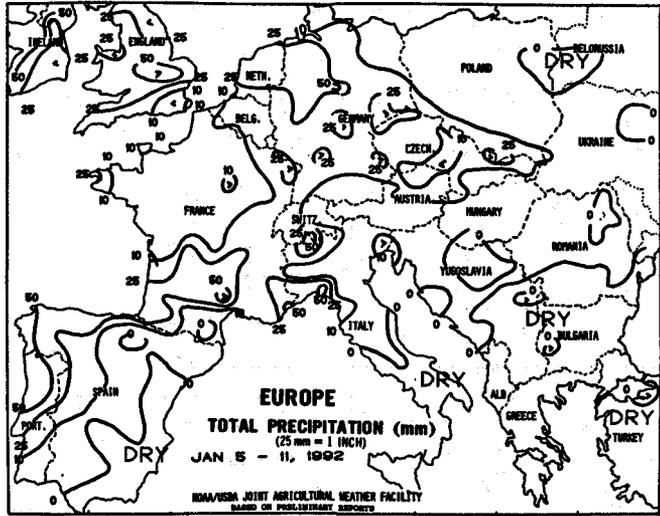


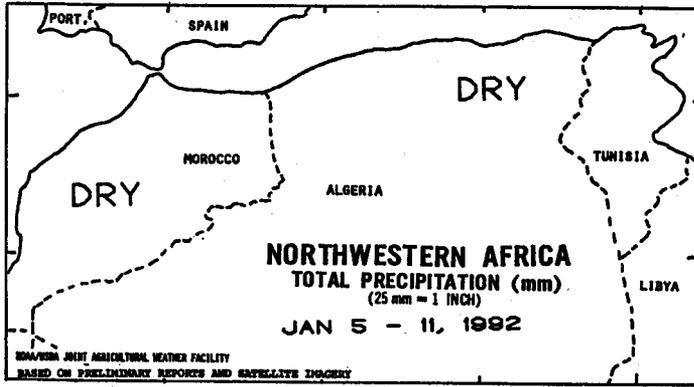
**FORMER USSR ...** Unseasonably mild weather continued over winter grain areas. Precipitation was generally light (less than 10mm), with wettest weather (10-36mm) confined to northernmost crop areas. Highest weekly temperatures ranged from 3 to 5 degrees Celsius (C) in the north and from 5 to 10 degrees C across the south. Rain was reported as far north as Moscow. The continued mild weather pattern has melted protective snow cover in the west and south. In December, overwintering conditions for winter grains continued favorable. Below-normal precipitation since September in southern and eastern areas limited moisture recharge. Temperatures in December were 1-3 degrees C above normal in the Baltic States, Belorussia, Northwestern Region, and Central Region, and 1-3 degrees C below normal in southern Ukraine, North Caucasus, and the Volga Valley. Two episodes of extreme cold (December 7-10 and December 28-30) covered winter grains as far south as the southern Ukraine and North Caucasus. Minimum temperatures in the south dropped to around -15 degrees C. Lowest temperatures of around -25 degrees C covered crop areas further north. The bitter cold was accompanied by light to moderate snow, which provided protection from potential winterkill.



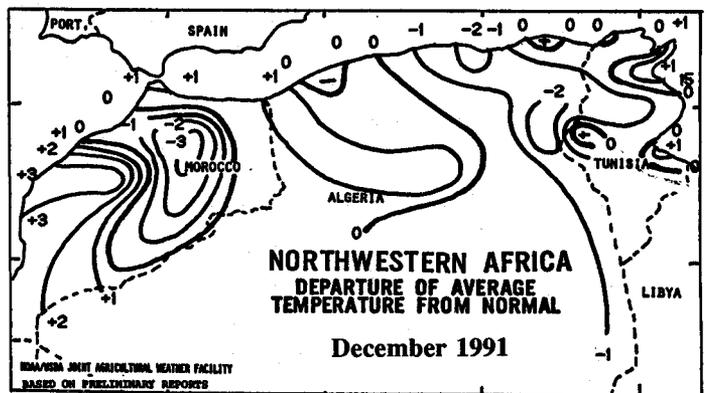
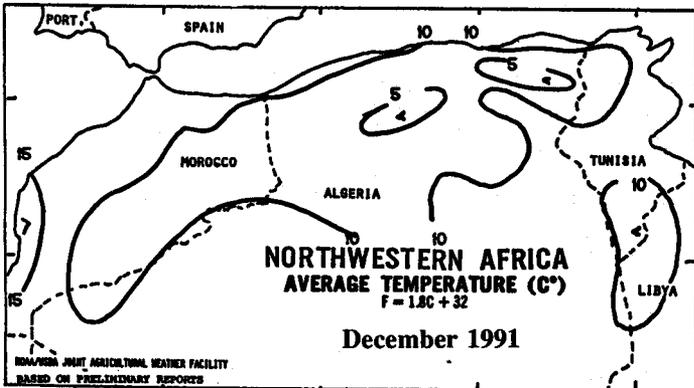
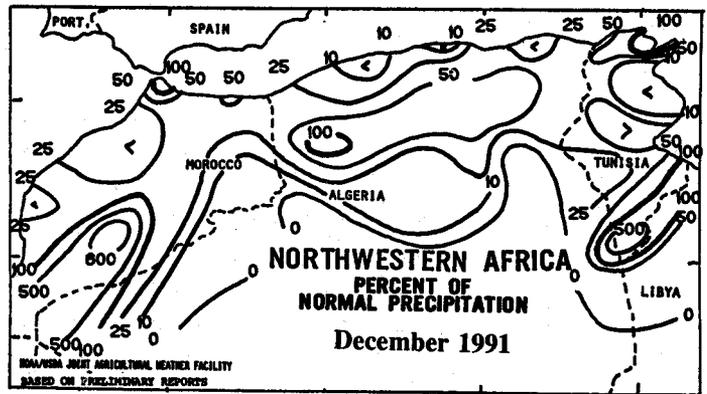
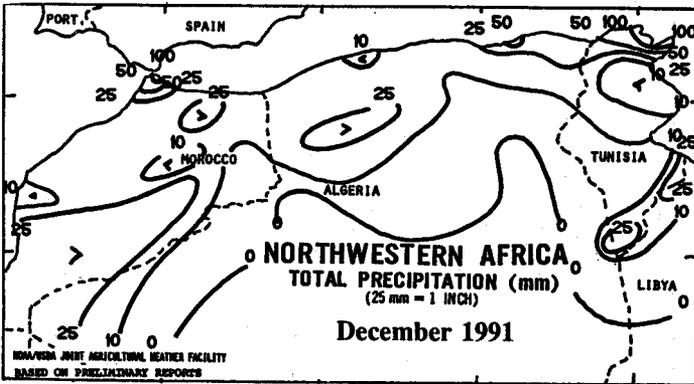


**EUROPE** ... Significant precipitation (25-50mm or more) fell in the United Kingdom, southern France, the Netherlands, northwestern Germany, and northwestern portions of the Iberian peninsula. Most of these areas received below-normal December rainfall. The recent precipitation improved soil moisture supplies for spring growth. Light showers (mostly less than 10mm) over the remainder of France and Spain, and dry weather across the Mediterranean region into the Balkans, continued December's trend of below-average precipitation in the south. Mostly light moisture also fell over much of eastern Europe, while heavier precipitation (10-25mm) in north-central Europe continued December's near- to above-normal precipitation pattern. Weekly average temperatures were above normal in the southeast, reversing the much below-average temperature pattern of late December. Above-average temperatures this week across the north favored dormant winter grains, and more seasonal temperatures returned to the Iberian peninsula following the earlier unusual cold weather.

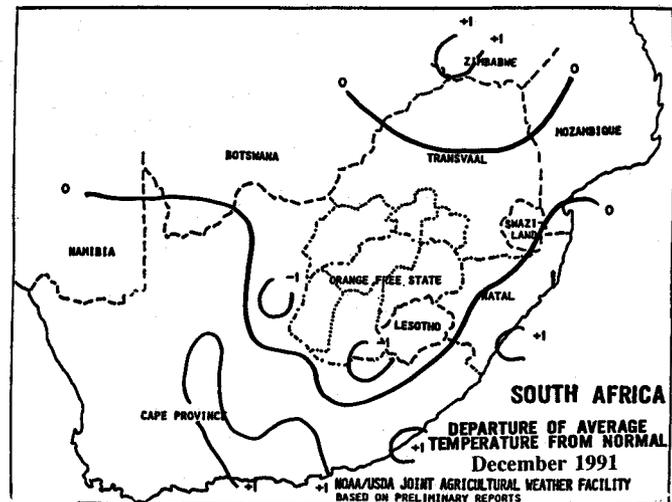
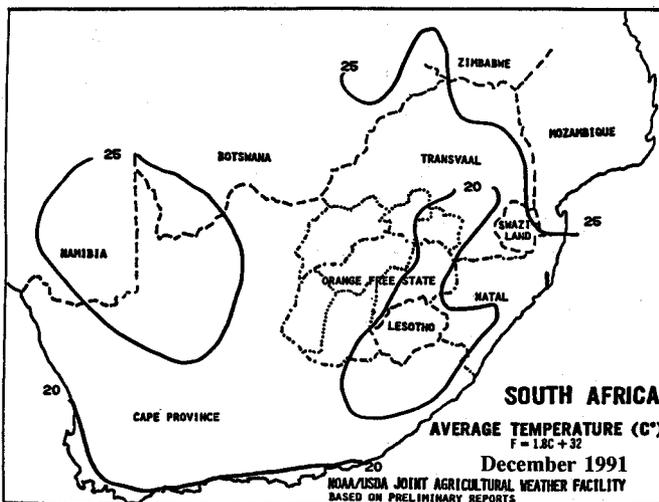
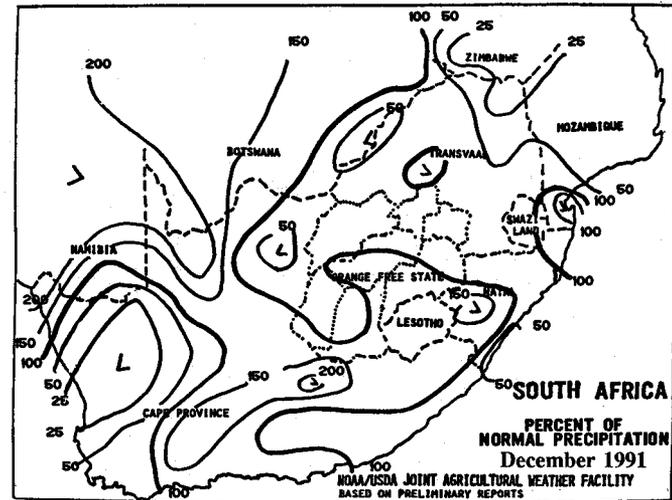
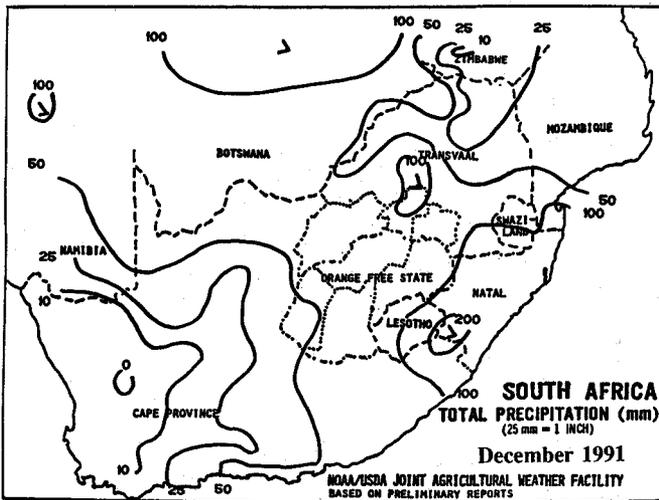
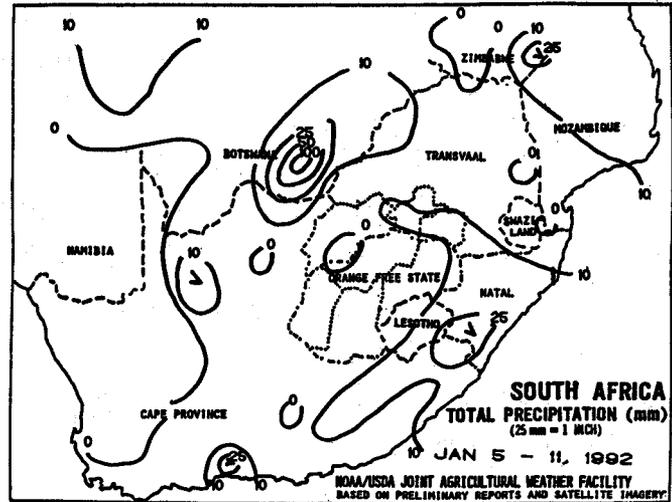


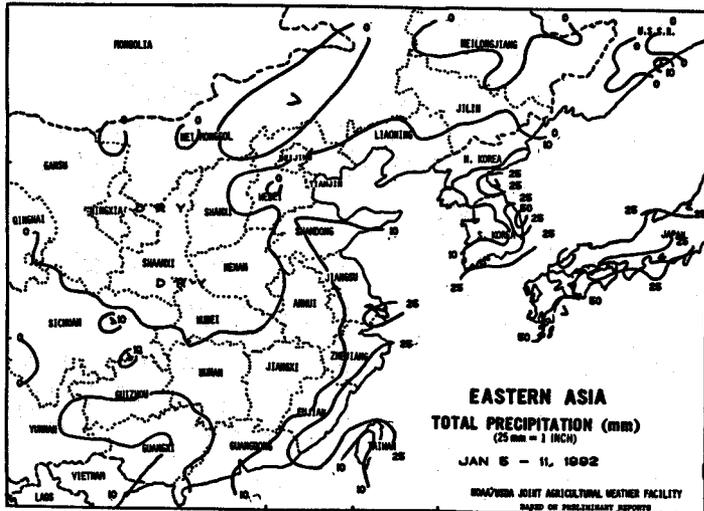


**NORTHWESTERN AFRICA** ... Dry weather continued to cover vegetative winter grains over most of the region. Subfreezing temperatures (-2 to -8 degrees C) on several nights in southernmost Algerian crop areas were low enough to burn tender growth. In December, rainfall tapered off over most winter grain areas in Morocco, Algeria, and Tunisia. Precipitation was well below normal (11-25mm) in Morocco, Algeria, and southern Tunisia, and near normal (39-89mm) in northern Tunisia. While December's meager precipitation allowed the swift completion of winter grain planting, crops had to rely on soil moisture reserves to sustain early growth. Since the dryness has lasted since early November in Morocco and most of Algeria, moisture reserves are becoming depleted. Rain is needed soon to halt deteriorating crop conditions.

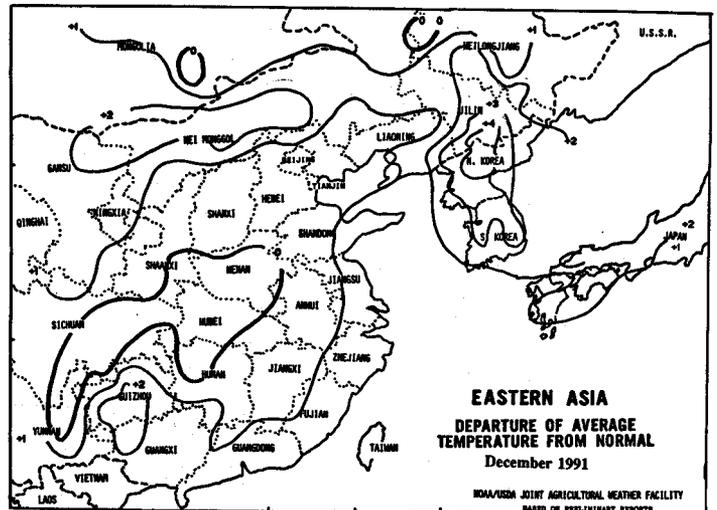
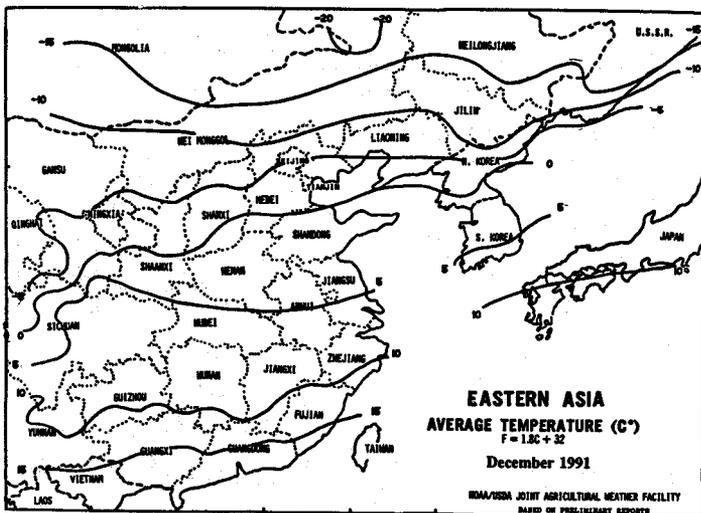
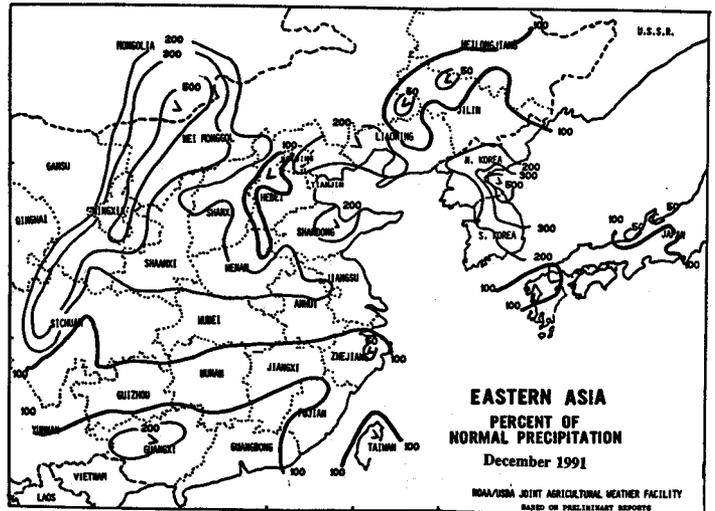
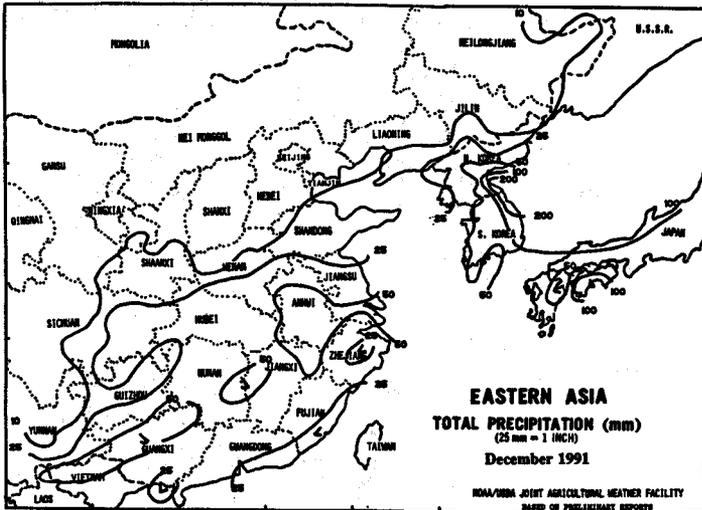


**SOUTH AFRICA** ... Drier- and warmer-than-normal weather persisted across primary corn regions, with frequent high temperatures of 35-38 degrees C in the western half of the corn region stressing crops approaching reproduction. Rain is critically needed to prevent significant losses in yield potential. Elsewhere, showers (10-41mm) benefited crops in Natal and easternmost Cape Province. In December, rainfall was near to below normal across the region, but timely showers and seasonable temperatures aided vegetative corn. The current trend of dry, warm weather in the western corn regions (southwestern Transvaal, and, central and southern Orange Free State) began in late December.

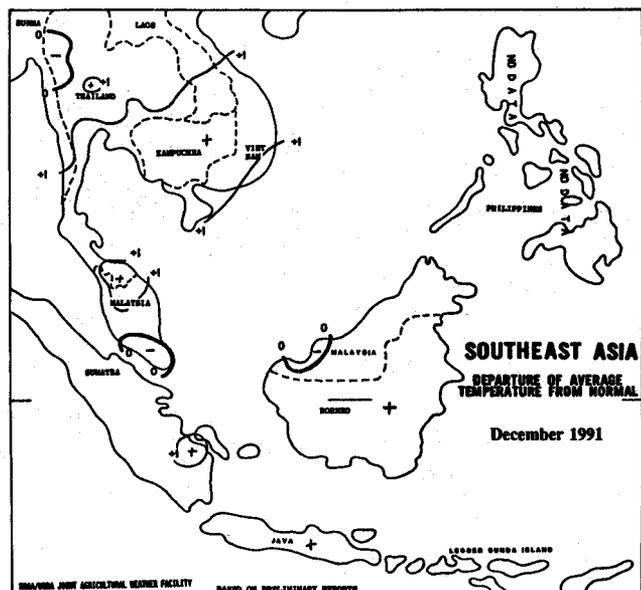
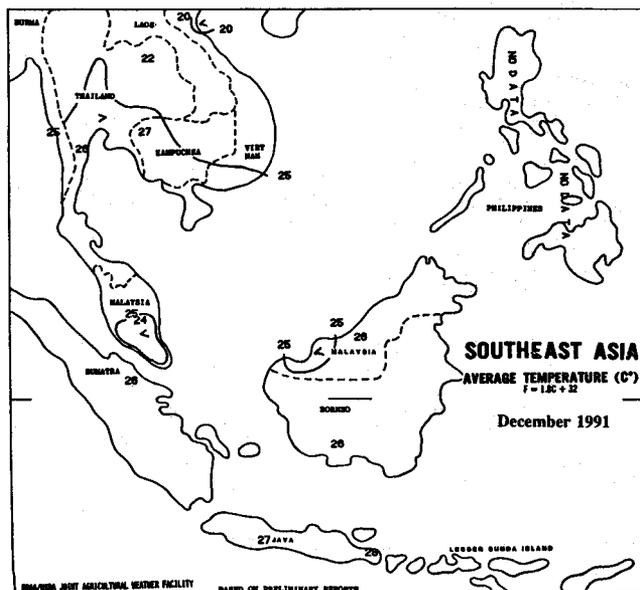
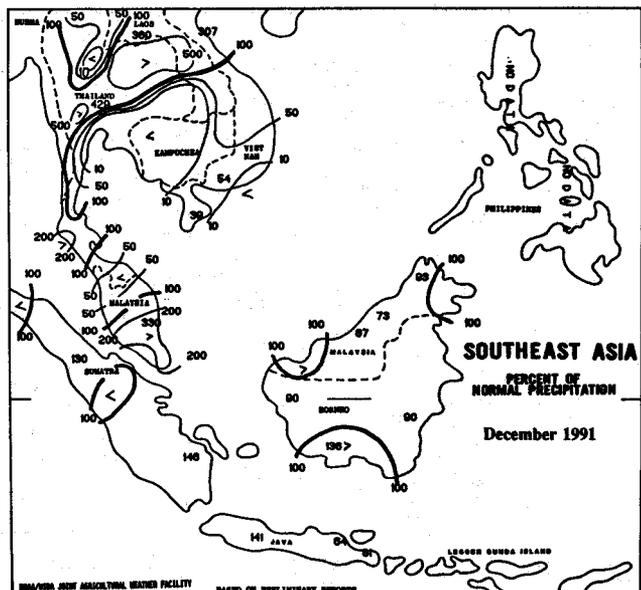
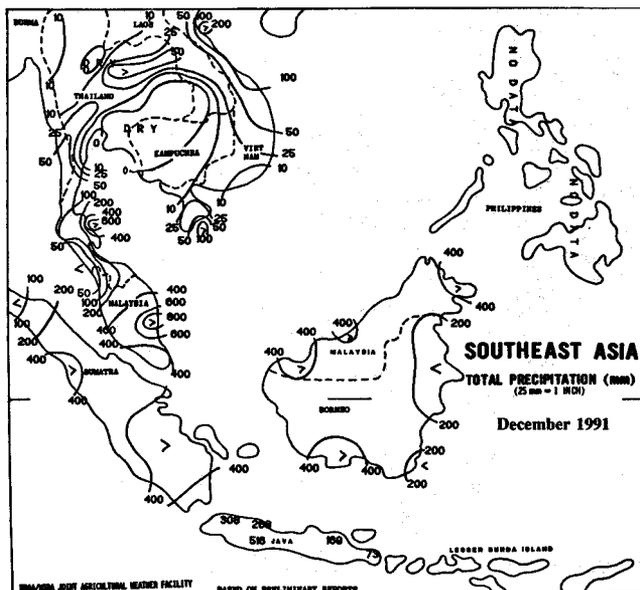
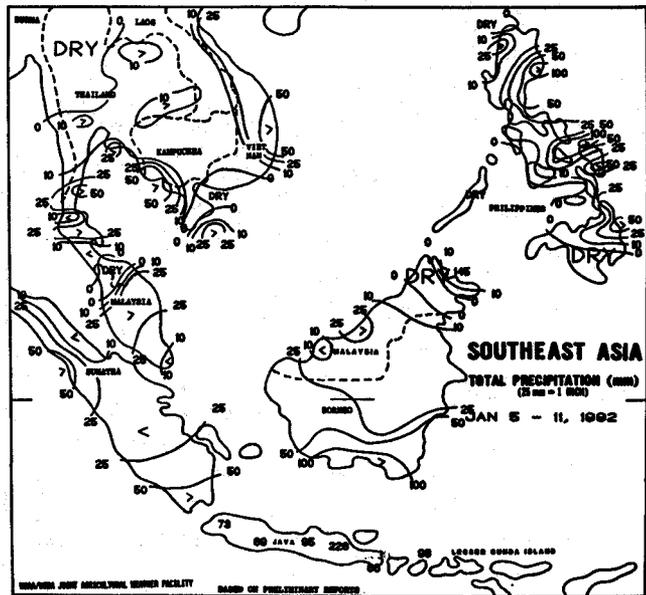


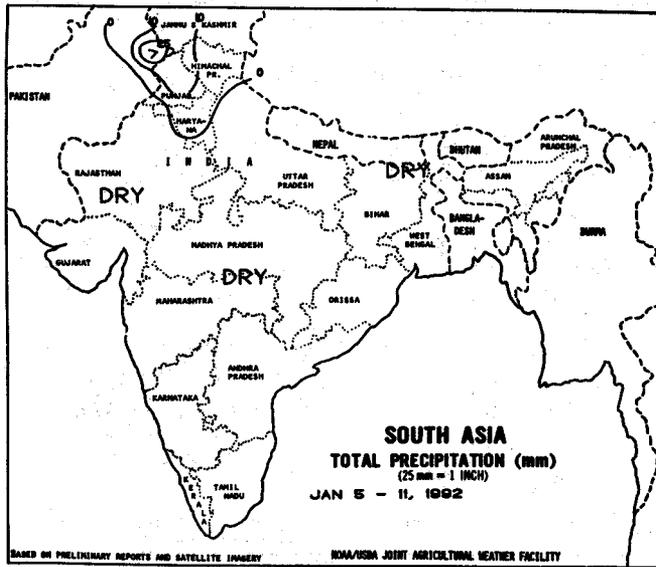


**EASTERN ASIA** ... Light precipitation (3-18mm) fell across the North China Plain as rain and snow, helping moisture for spring growth and adding protective snow cover. Seasonal temperatures kept winter wheat dormant, but protected from cold weather. Widespread light rain (2-11mm) covered southern China, with heavier amounts of 15-48mm along the southeast coast, benefiting winter grains and reservoirs. Much needed precipitation covered the North China Plain during late December, ending several months of dry conditions which caused poor establishment. The moisture will mainly benefit spring growth, since wheat entered dormancy late in the month. Above-normal rainfall increased reservoir levels in southwest China, while areas just south of the Yangtze received slightly below-normal to near-normal rainfall. Despite a late-month cold spell that caused possible damage to winter crops in southern China, monthly temperatures averaged near normal throughout most of the country.

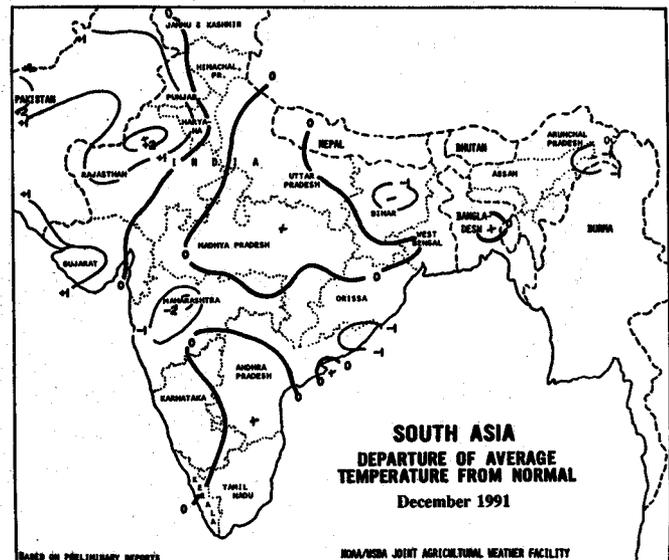
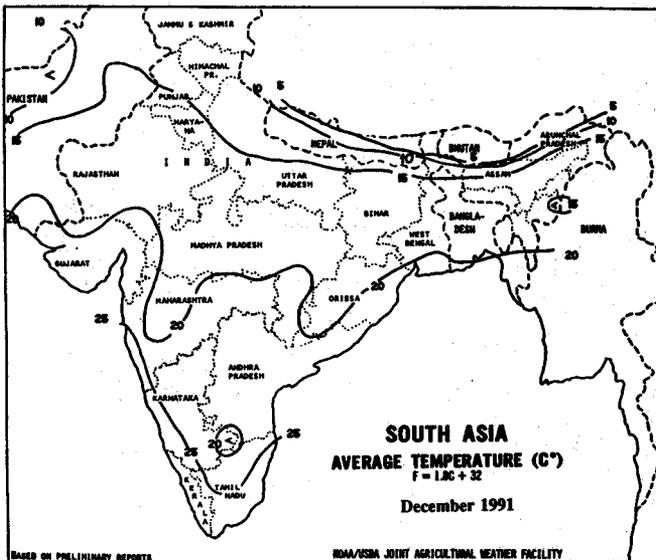
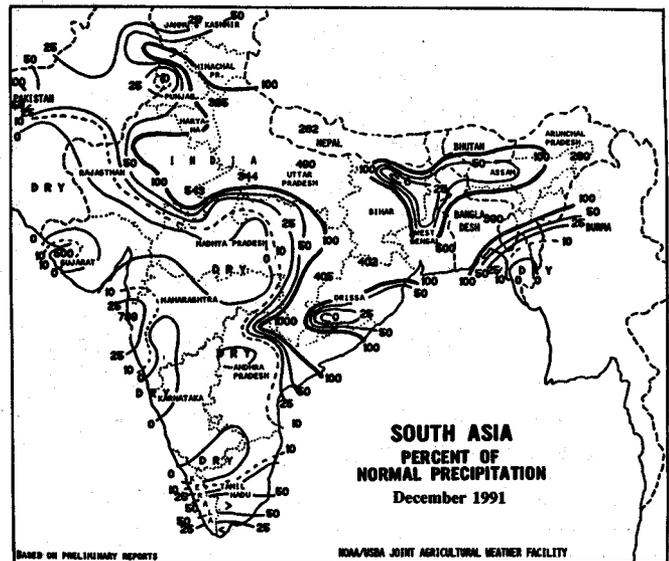
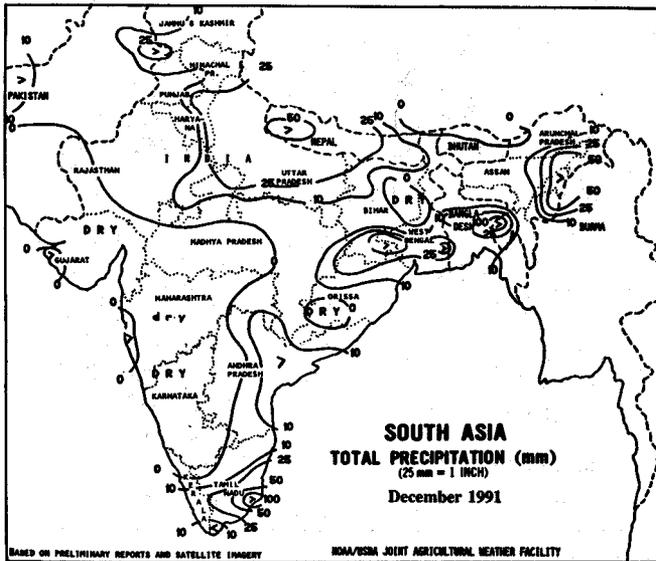


**SOUTHEAST ASIA** ... Rainfall tapered off from recent weeks over primary crop regions of Malaysia and Indonesia, although seasonably heavy showers (50-100mm or more) continued across Java's rice areas. In December, near- to above-normal rainfall improved reservoir conditions across the region, especially in Java following the late start to the rainy season. Some flooding, however, accompanied November's showers. Further north, scattered, light to moderate rain (5-78mm) covered peninsular Thailand and lingered over eastern Thailand, while heavier showers (50-146mm) were reported in Kampuchea and central Vietnam. In late December, unseasonable showers (10-75mm) fell from Bangkok to the Vietnamese coast, boosting reservoirs for dry season crops but likely affecting unharvested main season rice. In the Philippines, scattered showers (25-50mm or more) benefited fall grains from southern Luzon through the eastern Visayas to northern Mindanao, reflecting December's rainfall pattern.

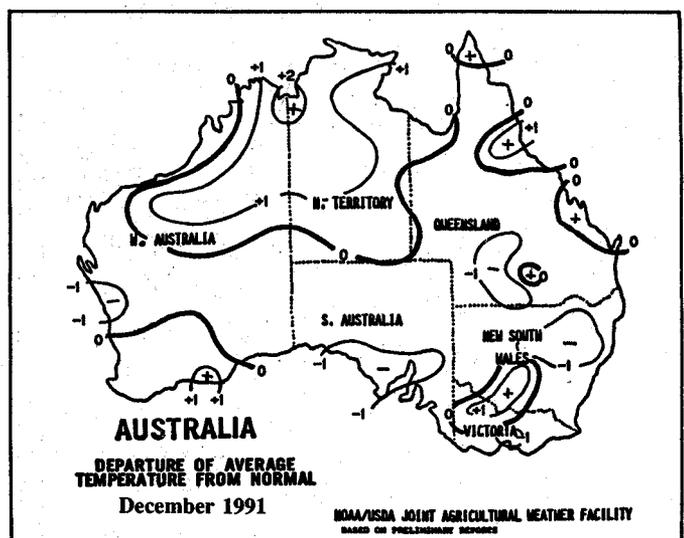
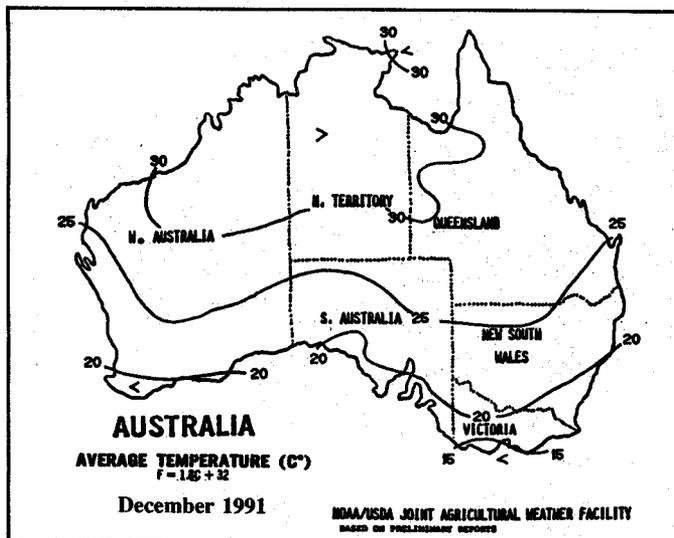
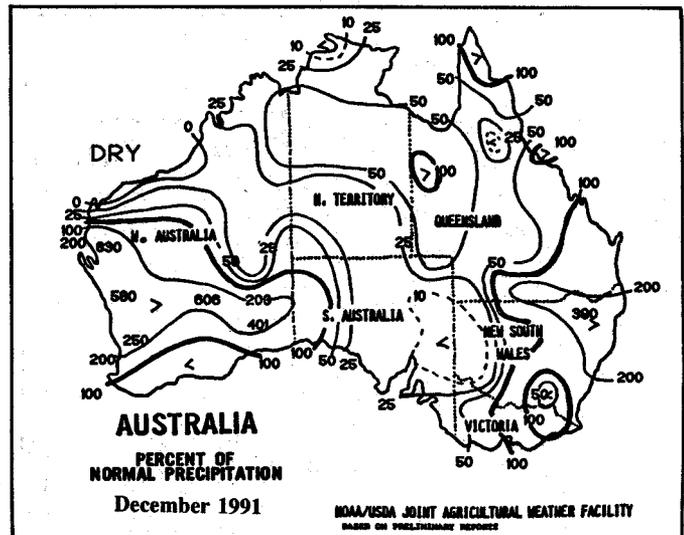
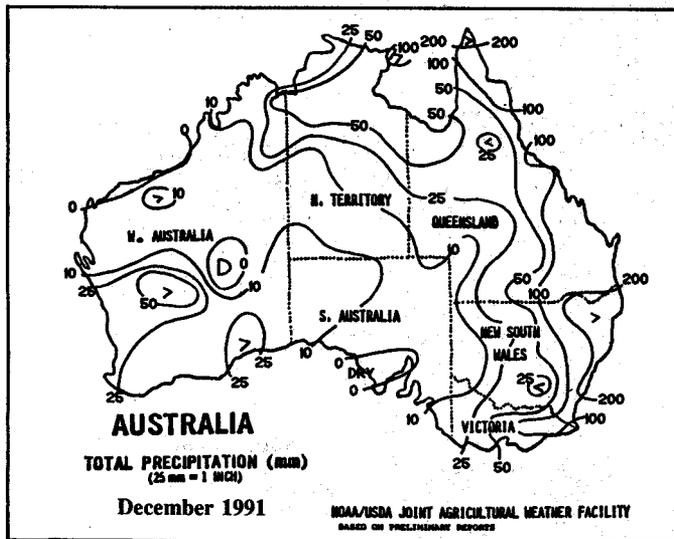
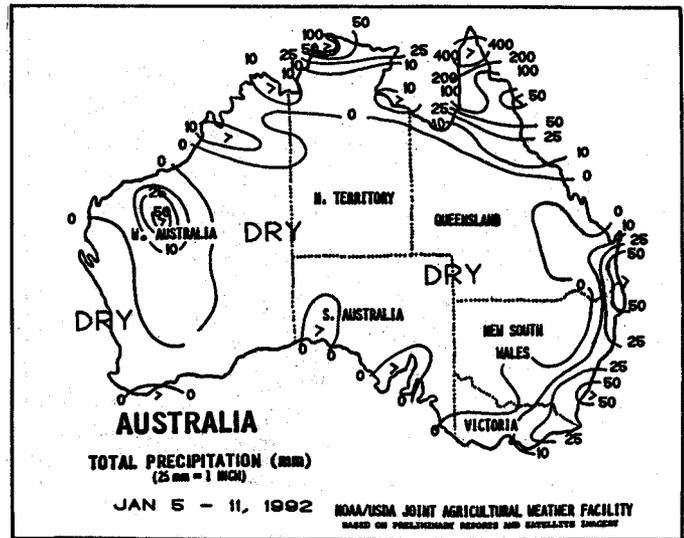




**SOUTH ASIA** ... Dry weather dominated the region, except for northernmost crop areas of Pakistan and northwestern India, which received 6-37mm. Scattered frost was possible in central India but had no major impact on winter wheat. However, crops are typically approaching heading by mid-January and are vulnerable to unusually cold weather. In December, late-month showers improved irrigation reserves and late planting prospects for winter grains and oilseeds. Rainfall was less frequent over fall crop regions of the southern interior than in November, and were generally limited to coastal rice areas. December temperatures were generally favorable for summer crop harvests and winter crop germination.

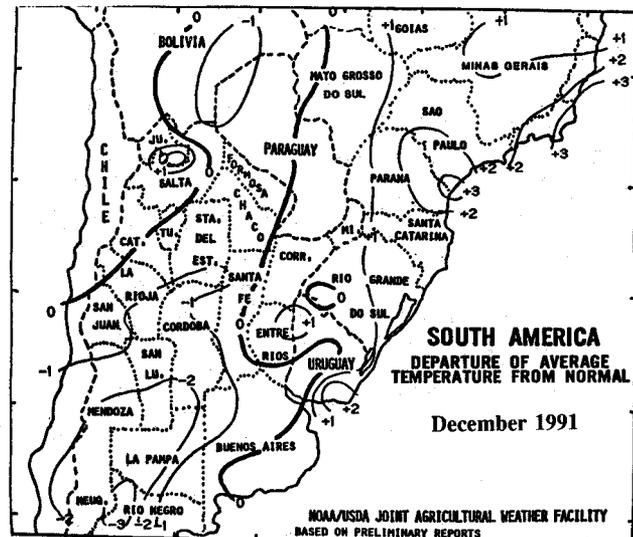
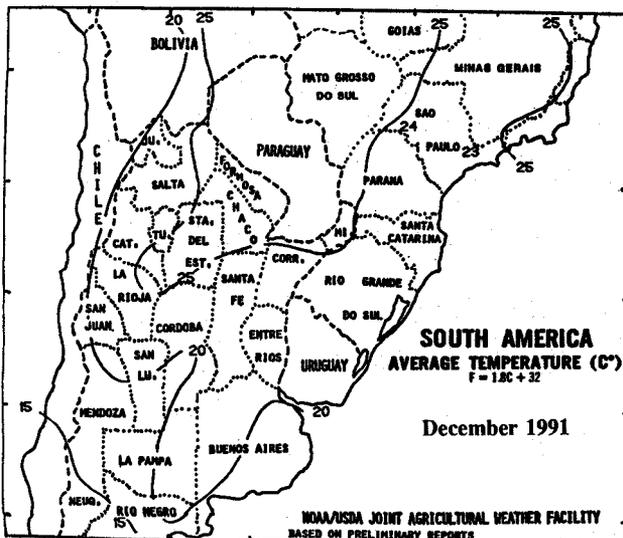
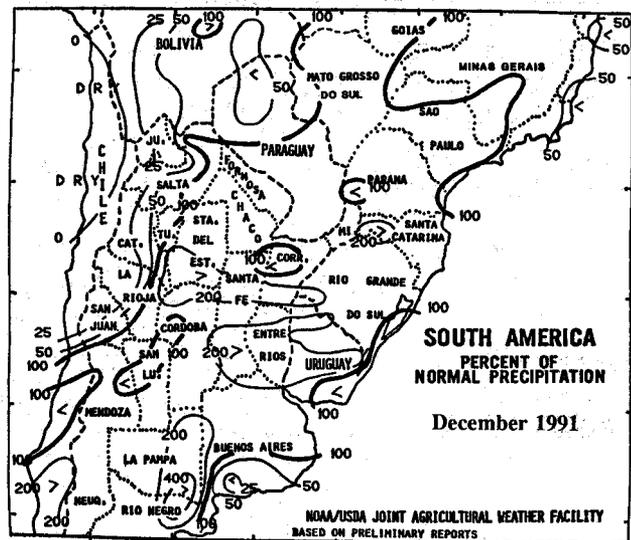
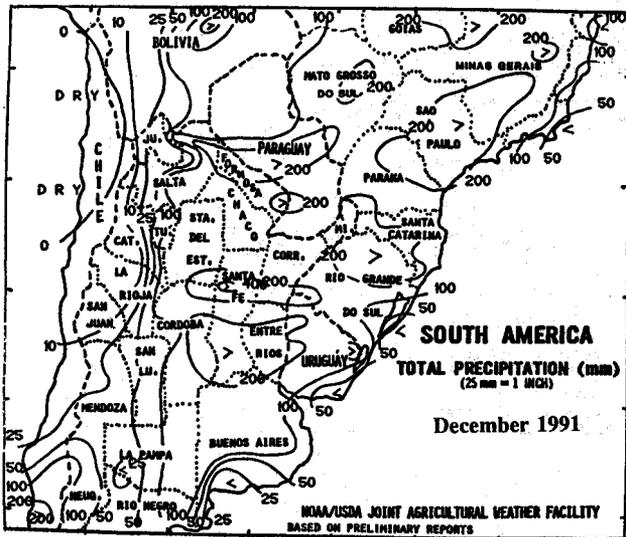


**AUSTRALIA** ... Dry weather prevailed across the eastern summer crop areas, as developing cotton and sorghum deplete soil moisture reserves through normal crop water use. Crop prospects are favorable now, as previous rains aided germination, but periodic rain in the weeks ahead will be needed for adequate crop growth. Northeastern Queensland received 7-85mm, aiding vegetative sugarcane. Weekly temperatures averaged near normal across the eastern summer crop regions. During December, above- to much above-normal rainfall across eastern Australia favored germinating summer crops. In the west, above-normal rainfall caused minor winter wheat harvesting delays. Queensland sugarcane areas received near- to slightly below-normal rainfall.

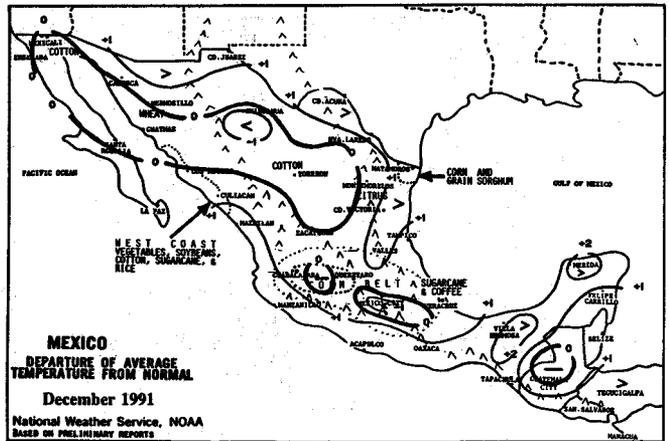
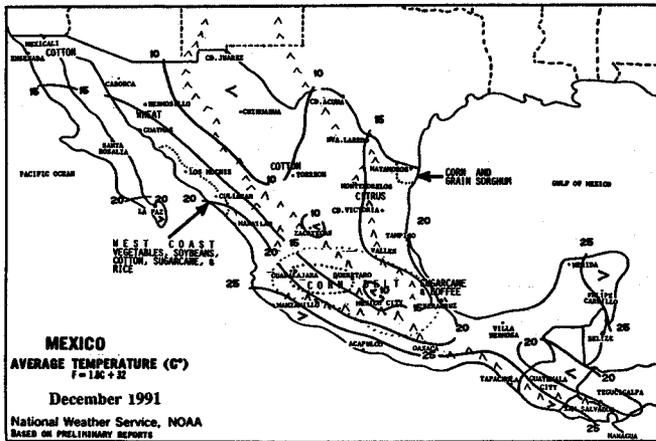
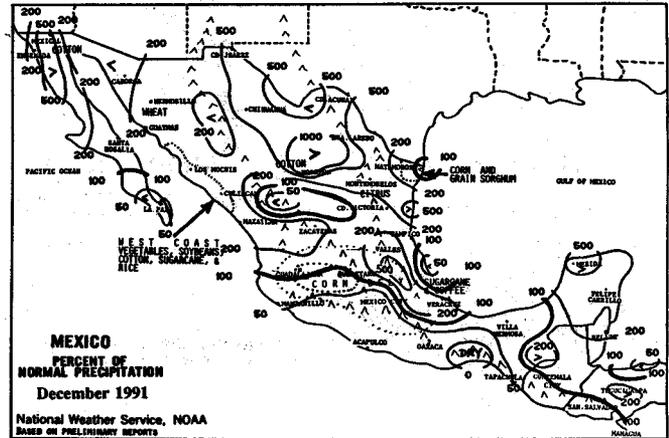
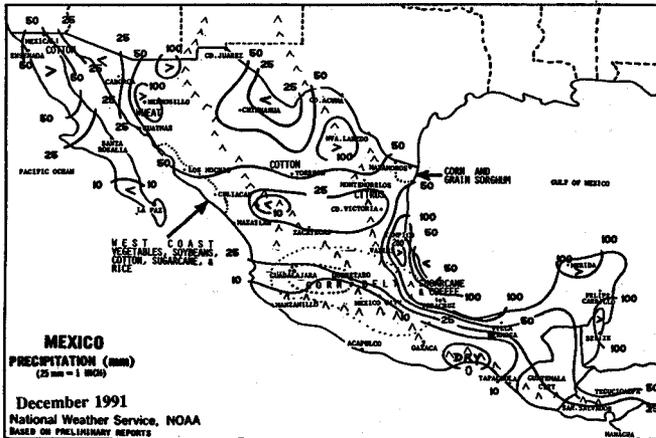




**SOUTH AMERICA** ... In Argentina, somewhat drier weather (6-31mm) across Buenos Aires province improved conditions for soybean planting and winter wheat harvesting. However, moderate rain (24-45mm) to the north in southern Santa Fe and Cordoba prevented soybean planting and replanting of any washed out fields. Heavy rain across northern Argentina caused further flooding of cotton fields. While the rains have boosted corn, soybean, and cotton yield prospects, drier weather is needed for the completion of soybean planting and to prevent the incidence of disease problems next month. Across southern Brazil, light to moderate rain (10-55mm) spread from northern Rio Grande do Sul into eastern Sao Paulo, keeping soil moisture levels adequate for corn and soybeans. Moderate to heavy rain fell in Mato Grosso do Sul and Minas Gerais (33-111mm), causing some local flooding but, overall, favoring summer crops. However, less than 10mm of rain fell in northern Parana and southern Sao Paulo, where moisture is needed for adequate corn and soybean development. Weekly temperatures averaged near normal across Argentina and southern Brazil. Above- to much above-normal rainfall covered Argentina in December, delaying soybean planting, winter wheat harvesting and reducing winter wheat quality. However, the rains improved yield prospects for corn, soybeans, cotton, and sunflower seed. Above-normal rainfall across southern Brazil countered a slow start to the wet season.



**MEXICO** ... Unseasonably heavy rains during December (40-100mm; 200-500 percent above normal) covered most of the country, causing some isolated flooding, but benefiting reservoirs and west coast vegetative winter wheat. Above normal rains also favored coffee and sugarcane along the central east coast. Only the south central coast received below-normal rainfall for the month. Monthly temperatures averaged near normal.



The Weekly Weather and Crop Bulletin (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

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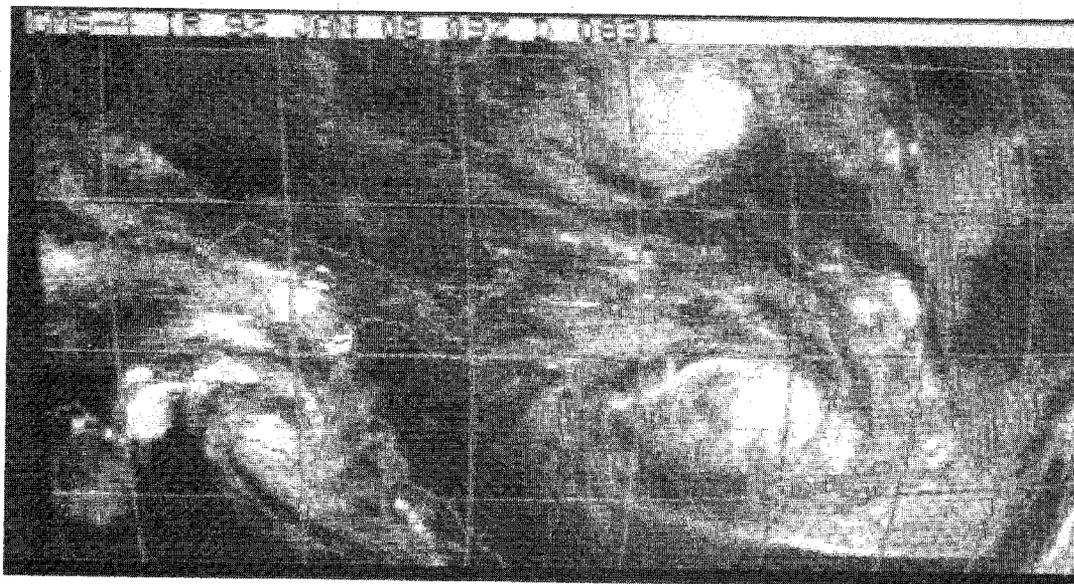
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**Three for the Price of One**

The Japanese geostationary meteorological satellite orbiting above the western Pacific observed three tropical storms on January 8, 1992. Typhoon Axel (upper center, in the Northern Hemisphere) and Cyclone Betsy (lower right center, in the Southern Hemisphere) straddled the Equator near 165° E, east of Papua-New Guinea, and were drifting west. Cyclone Mark (lower left) formed in the Gulf of Carpentaria immediately north of Australia, and was drifting east. It is uncommon to have a typhoon and a cyclone (the equivalent of an Atlantic hurricane) to form so close together on either side of the Equator, and it is even more uncommon for this to occur at this time of year. It is unknown whether this event is associated with the current El Niño. The formation of a cyclone in the Gulf of Carpentaria is not unusual at this time of year.

NOAA/USDA Joint Agricultural  
Weather Facility  
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