

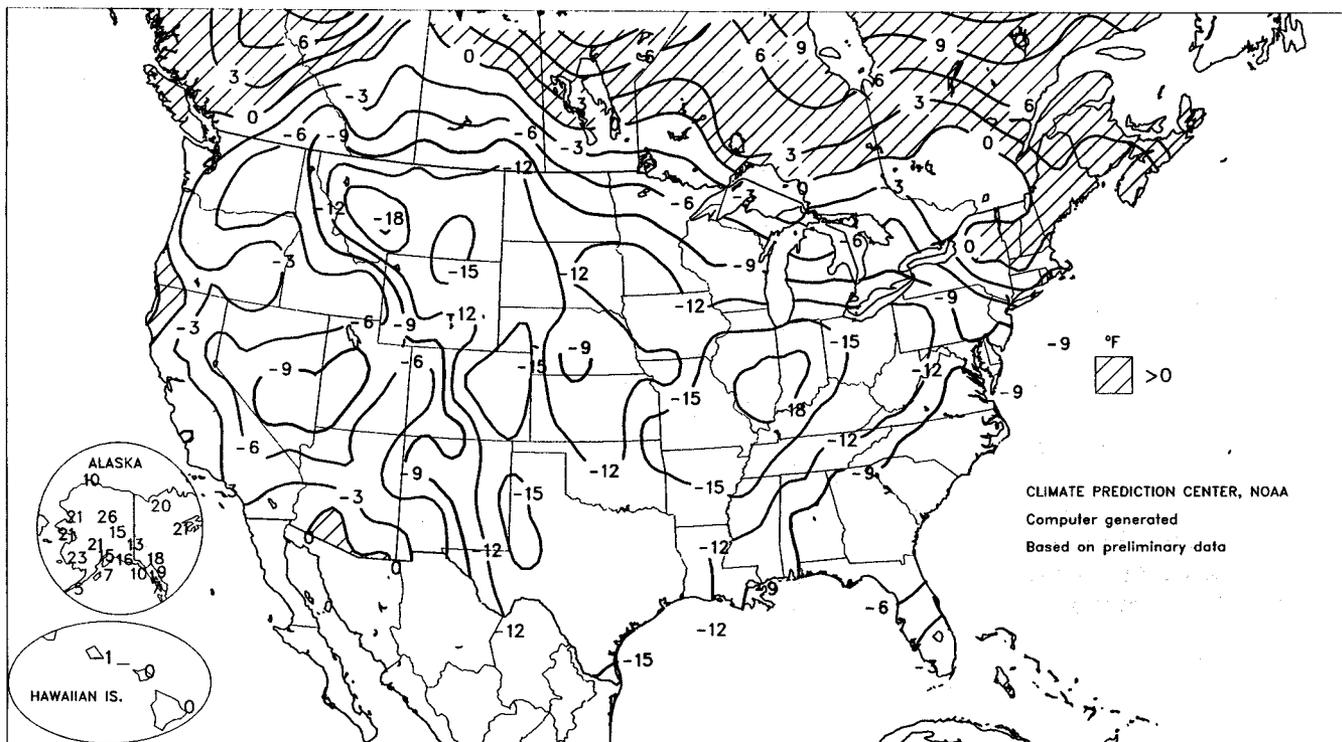
# WEEKLY WEATHER AND CROP BULLETIN

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

Departure of Average Temperature from Normal (°F)

JAN 12 - 18, 1997



CLIMATE PREDICTION CENTER, NOAA  
Computer generated  
Based on preliminary data

## HIGHLIGHTS

January 12 - 18, 1997

**C**old air overspread the Nation in two stages, perpetuating harsh conditions across the **North Central States**, stressing unprotected winter wheat on the **central Plains**, and delivering late-week freeze damage to crops in **Peninsular Florida**. Snow cover protected winter wheat from the cold elsewhere on the **Plains** and in the **Ohio Valley**. Despite a late-week warm-up, weekly temperatures averaged 10 to 20°F below normal between the **Rockies** and **Appalachians**. Farther west, rain returned to flood-stricken areas of **California**, but much more significant precipitation fell across the **Northwest** and **Southwest**. Widespread ice and snow accumulated from **Texas** and **Louisiana** into the **Midwest**. Rain dampened the **East**, while in the **Great Lakes** region, record-setting snow squalls continued. In

**Florida**, warm weather and locally heavy rain preceded a late-week cold snap.

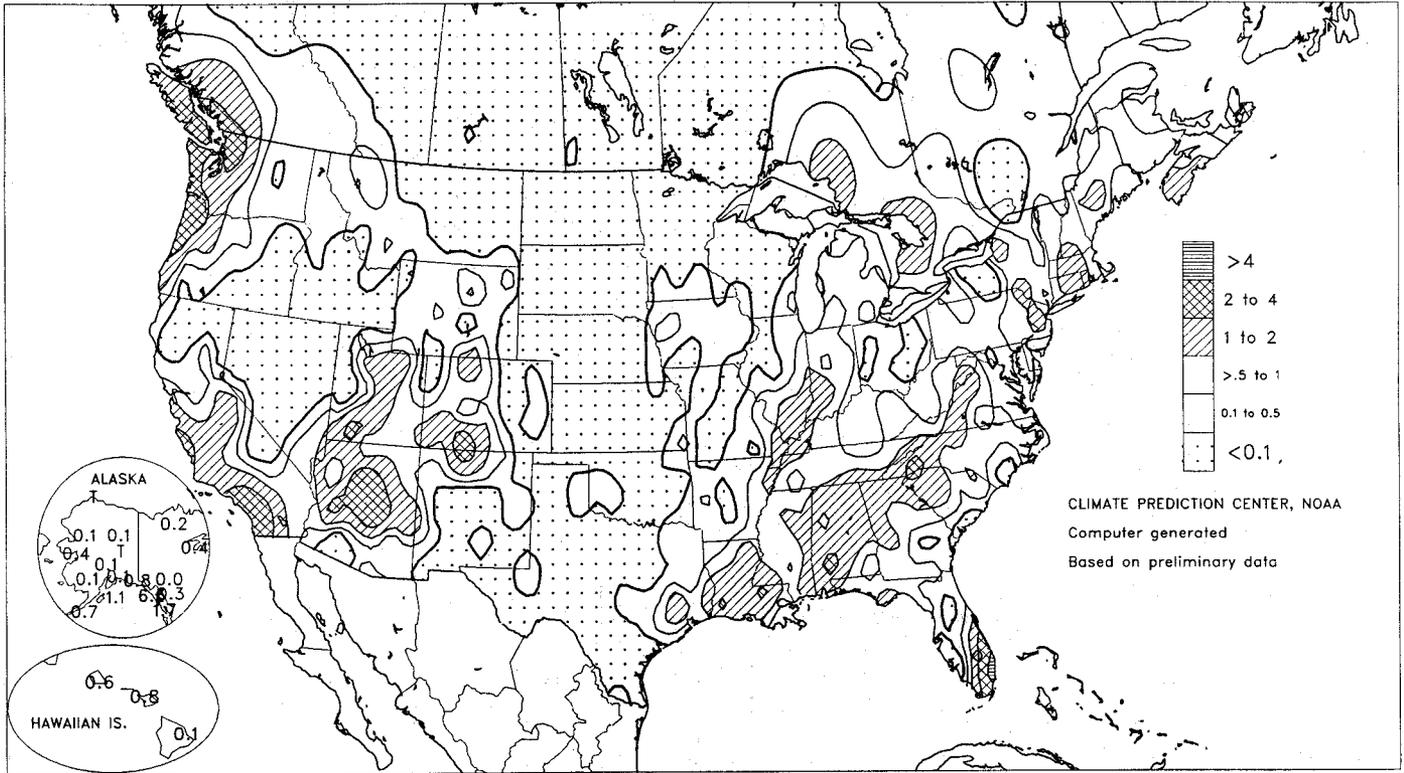
*(Continued on page 3)*

## Contents

Total Precipitation &	
Extreme Minimum Temperature Maps	2
Mid-Winter Palmer Update	4
National Weather Data for Selected Cities	5
Crop Progress 1996	8
National Agricultural Summary &	
Snow Cover Map	11
International Weather and Crop Summary	12
U.S. Crop Production Highlights	15
Subscription Information &	
Florida Freeze Map (January 19)	16

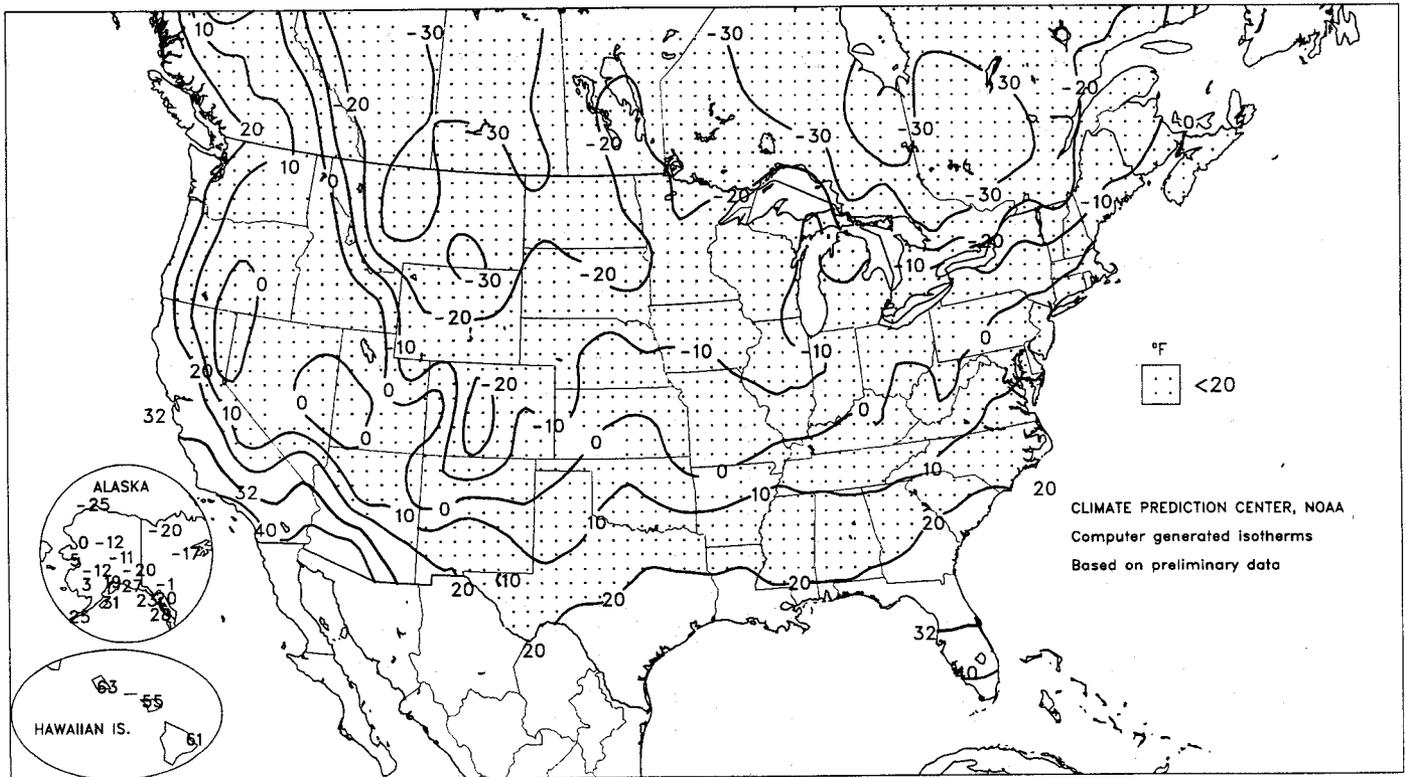
Total Precipitation (Inches)

JAN 12 - 18, 1997



Extreme Minimum Temperature (°F)

JAN 12 - 18, 1997



(Continued from front cover)

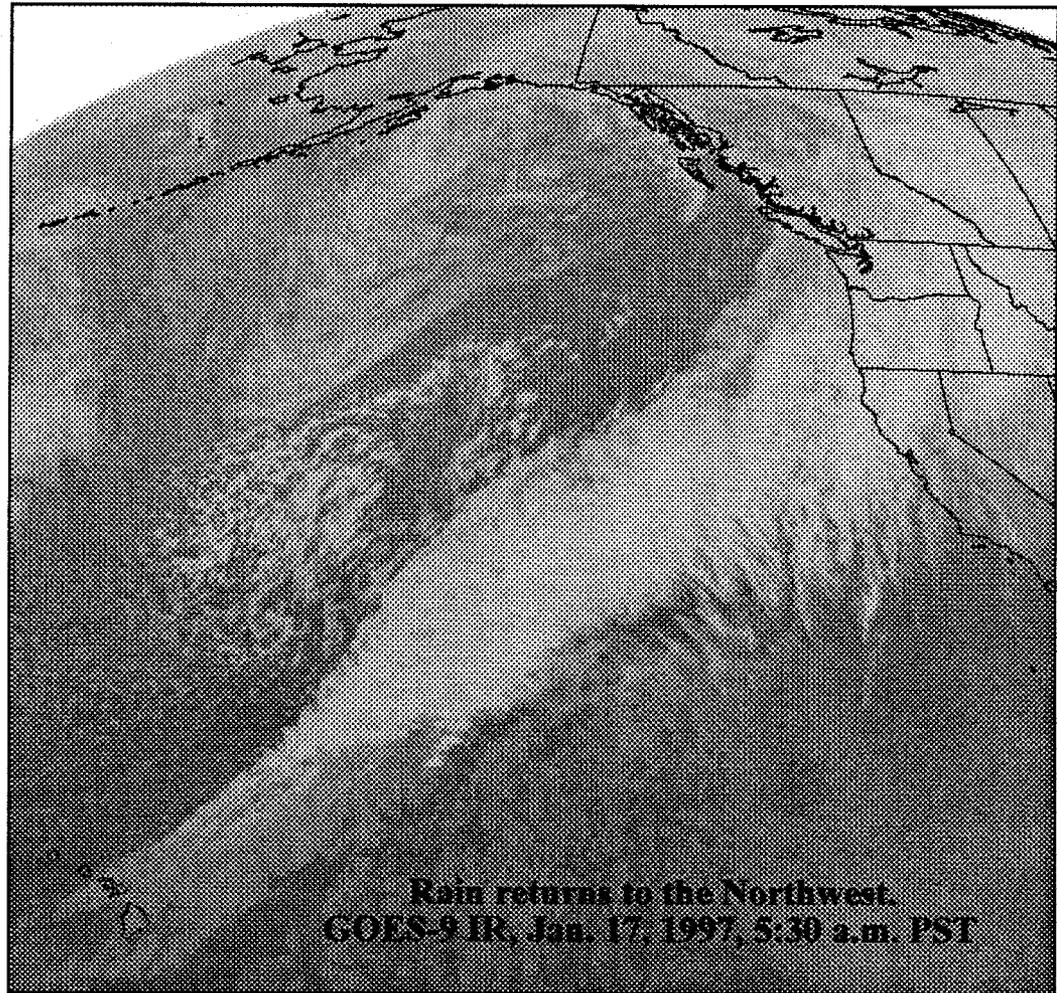
Early in the week, a major snowstorm buried mountain areas of the **Southwest**, while more than an inch of ice glazed parts of **southeastern Texas** and **Louisiana**. By Monday afternoon, snow depths in **southern California** reached 22 inches in **Idyllwild** and 18 inches atop **Mt. Laguna**. Up to 3 feet blanketed **Mt. Charleston**, near **Las Vegas, NV**. In **Utah**, 48-hour (January 12-14) snowfall totaled 38 inches in **Monticello**. **Flagstaff, AZ** netted 30.8 inches during the January 12-14 storm, their greatest single-storm total since 31.5 inches fell on February 28 - March 2, 1991.

Bitterly cold air resulted in more than three dozen daily-record lows across the Nation. On Sunday, minima dipped to  $-35^{\circ}\text{F}$  in **Sheridan, WY** and  $-30^{\circ}\text{F}$  in **Billings, MT**. A day later, daily records included  $-20^{\circ}\text{F}$  in **Yuma, CO**

and  $-17^{\circ}\text{F}$  in **Goodland, KS**. In **Colorado**, **Denver's** temperatures remained below  $0^{\circ}\text{F}$  for about 60 hours (January 11-14), their longest such streak since December 1990. The temperature in **Lubbock, TX** remained below  $32^{\circ}\text{F}$  for 129 consecutive hours (January 10-15), their longest sub-freezing spell since January 1988. Elsewhere in **Texas**, **Brownsville's** high struggled only to  $33^{\circ}\text{F}$  on Monday, following a low of  $30^{\circ}\text{F}$ . Enough cold air oozed west of the **Rockies** to chill the **West Coast States**. In **California**, downtown **Sacramento's** freeze on Monday was their first since December 9, 1994. A day later, **Redding** recorded  $19^{\circ}\text{F}$ .

In contrast, temperatures averaged 10 to  $26^{\circ}\text{F}$  above normal over mainland **Alaska**. **Nome** notched daily-record highs on Sunday ( $43^{\circ}\text{F}$ ), Tuesday ( $39^{\circ}\text{F}$ ), and Wednesday ( $37^{\circ}\text{F}$ ). But over the **Lower 48**, a second wave of cold air spilled southward late in the week. By Friday, daily-record lows were noted in locations such as **Aberdeen, SD** ( $-32^{\circ}\text{F}$ ), **Atlantic, IA** ( $-22^{\circ}\text{F}$ ), and **Chanute, KS** ( $-7^{\circ}\text{F}$ ). In advance of the cold front, highs soared on January 15-16 in **Florida**, where **West Palm Beach** ( $85^{\circ}\text{F}$ ) logged consecutive daily records. Heavy rain dotted **southeastern Florida**, where **Ft. Lauderdale** received an all-time-record, 24-hour total of 5.82 inches on January 13-14. By week's end, however, sub-freezing conditions reached **central and interior southern Florida**, resulting in freeze durations of 1 to 9 hours on January 18-19. Scattered citrus and ground-crop locations reported temperatures at or below  $28^{\circ}\text{F}$  for up to 4 hours, causing locally significant damage to the latter. Lows on Sunday (January 19) included  $26^{\circ}\text{F}$  in **Orlando**,  $27^{\circ}\text{F}$  in **Ruskin**,  $29^{\circ}\text{F}$  in **Leesburg**,  $31^{\circ}\text{F}$  in **Winter Haven**, and  $31^{\circ}\text{F}$  in **Ft. Myers**.

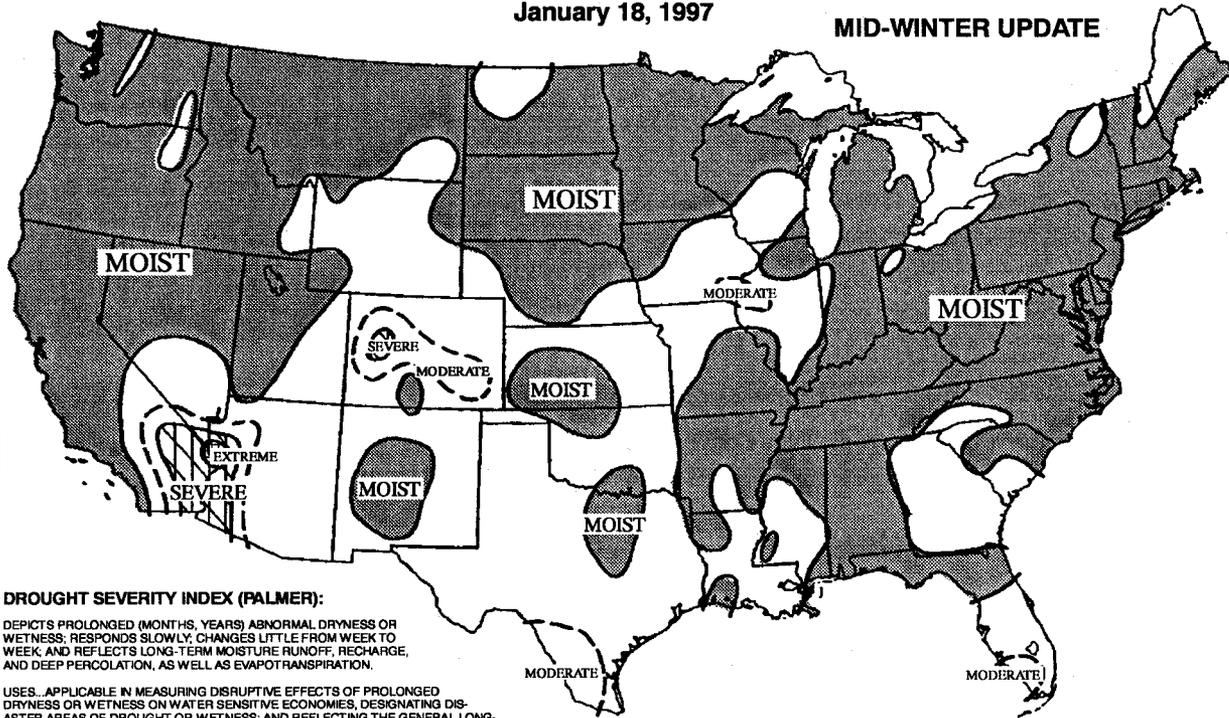
The **Tuolumne River** finally fell below flood stage near **Modesto, CA** early in the week. Precipitation returned to the region on January 12, totaling 0.82 inches during the week in **Blue Canyon, CA**. In the **Pacific Northwest**, more than 4 inches of rain pelted **Quillayute, WA**. Farther east, weekly snowfall totaled 3.9 inches in **Amarillo, TX**, 4.0 inches in **St. Louis, MO**, and 4.2 inches in **Dubuque, IA**. Lake-enhanced totals included 14.7 inches in **Grand Rapids, MI** and 16.5 inches in **South Bend, IN**. In **New York**, 77 inches of **Montague's** 91-inch lake-effect storm total fell in 24 hours on January 11-12, tentatively breaking the U.S. record of 76 inches, set at **Silver Lake, CO**, in April 1921. At week's end, warmer air spread eastward across the Nation, while bitterly cold air shifted into the **East**. On Saturday, **Olympia, WA** tallied a daily-record high of  $59^{\circ}\text{F}$ . A day later (January 19), **St. Louis' temperature** topped the freezing mark for the first time since January 5.



**DROUGHT SEVERITY**  
(LONG TERM PALMER)

January 18, 1997

MID-WINTER UPDATE



**DROUGHT SEVERITY INDEX (PALMER):**

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNATING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

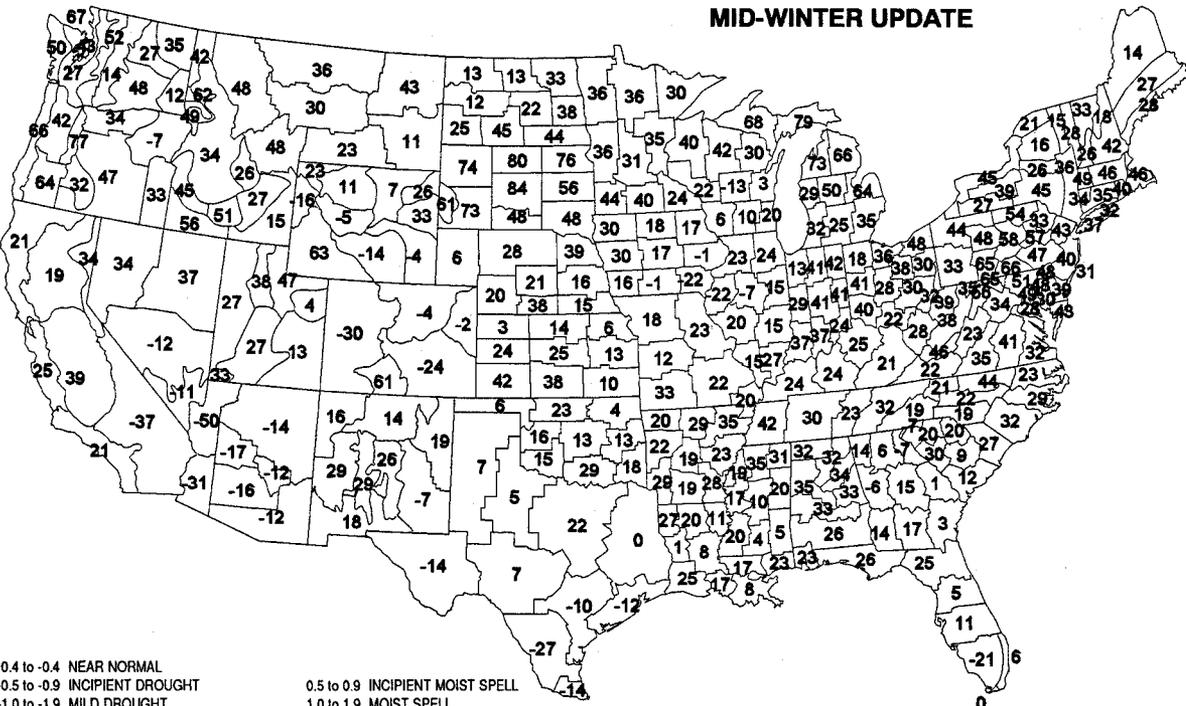
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

**DROUGHT SEVERITY INDEX BY DIVISION**  
(LONG TERM, PALMER)

January 18, 1997

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

MID-WINTER UPDATE



- 0.4 to -0.4 NEAR NORMAL
- 0.5 to -0.9 INCIPIENT DROUGHT
- 1.0 to -1.9 MILD DROUGHT
- 2.0 to -2.9 MODERATE DROUGHT
- 3.0 to -3.9 SEVERE DROUGHT
- BELOW -4.0 EXTREME DROUGHT

- 0.5 to 0.9 INCIPIENT MOIST SPELL
- 1.0 to 1.9 MOIST SPELL
- 2.0 to 2.9 UNUSUAL MOIST SPELL
- 3.0 to 3.9 VERY MOIST SPELL
- ABOVE 4.0 EXTREME MOIST SPELL

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

# National Weather Data for Selected Cities

Weather Data for the Week Ending January 18, 1997

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	05 INCH OR MORE	01 INCH OR MORE	05 INCH OR MORE
AL BIRMINGHAM	42	21	64	12	32	-9	1.13	-0.03	1.13	7.74	95	4.46	148	72	37	0	6	1	1	1	1
MOBILE	50	29	66	21	40	-10	0.92	-0.14	0.92	9.36	116	2.40	87	67	30	0	5	1	1	1	1
AK ANCHORAGE	36	24	46	19	30	15	0.06	-0.12	0.05	0.30	19	0.06	12	81	68	0	7	1	1	0	0
BARROW	4	-10	13	-25	-3	10	0.02	-0.01	0.02	0.04	21	0.04	57	84	77	0	7	1	1	0	0
FAIRBANKS	15	-6	28	-11	4	15	0.01	-0.10	0.01	0.51	46	0.04	13	89	81	0	7	1	1	0	0
JUNEAU	38	29	41	20	33	9	-	-	-	-	-	-	-	97	87	0	4	-	-	-	-
KODIAK	40	34	43	31	37	7	1.10	-0.60	0.69	12.22	109	5.84	132	92	76	0	3	4	1	1	1
NOME	33	23	43	5	28	21	0.36	0.17	0.14	1.65	122	1.02	208	92	73	0	6	4	0	0	0
AZ PHOENIX	62	45	72	39	53	0	0.78	0.61	0.68	0.78	56	0.78	190	71	27	0	0	0	3	1	1
PRESCOTT	40	22	48	12	31	-	1.45	1.10	1.14	1.89	68	1.45	159	92	52	0	7	3	1	1	1
TUCSON	60	40	69	33	50	-1	0.22	0.03	0.11	1.05	65	1.05	194	82	30	0	0	2	0	0	0
YUMA	64	48	69	44	58	-1	0.26	0.18	0.16	0.27	40	0.26	124	72	33	0	0	2	0	0	0
AR FORT SMITH	32	16	42	8	24	-13	0.11	-0.30	0.11	2.29	56	0.43	38	78	48	0	7	1	1	0	0
LITTLE ROCK	-	-	-	-	-	-	0.52	-0.13	-	4.80	70	1.31	69	-	-	-	-	-	-	-	-
CA BAKERSFIELD	53	38	57	35	46	-2	0.80	0.61	0.27	3.36	308	1.66	361	97	73	0	0	6	0	0	0
EUREKA	62	39	71	27	52	4	0.11	-1.26	0.06	24.63	257	3.37	94	80	43	0	1	2	0	0	0
FRESNO	49	38	56	28	44	-2	0.73	0.29	0.38	6.29	248	2.05	185	94	69	0	2	3	0	0	0
LOS ANGELES	62	48	76	46	55	-2	1.08	0.54	0.79	6.54	219	1.81	136	84	41	0	0	4	1	1	1
REDDING	49	34	55	19	41	-4	0.02	-1.38	0.02	8.78	98	1.07	30	84	50	0	3	1	0	0	0
SACRAMENTO	47	38	52	27	43	-2	0.26	-0.61	-	7.88	167	2.07	94	94	64	0	2	-	-	-	-
SAN DIEGO	63	50	73	46	58	-1	1.26	0.86	0.89	1.97	74	1.34	126	87	56	0	0	3	1	0	0
SAN FRANCISCO	49	41	53	33	45	-3	0.75	-0.27	0.42	10.10	179	3.31	130	90	67	0	0	3	0	0	0
CO DENVER	23	3	55	-13	13	-16	0.02	-0.09	0.02	0.23	25	0.19	66	91	58	0	7	1	1	0	0
GRAND JUNCTION	35	18	43	12	26	0	0.18	0.07	0.18	0.73	74	0.20	65	91	58	0	7	1	1	0	0
PUEBLO	27	0	57	-10	14	-16	0.01	-0.07	0.01	0.34	54	0.12	57	87	48	0	7	1	1	0	0
CT BRIDGEPORT	31	17	47	4	24	-5	0.84	0.10	0.84	7.74	143	1.21	63	73	43	0	7	1	1	1	1
HARTFORD	32	17	48	1	25	0	0.92	0.15	0.92	6.94	117	1.35	66	67	41	0	7	1	1	1	1
DC WASHINGTON	33	18	50	13	26	-8	0.44	-0.17	0.44	6.90	140	1.09	68	62	38	0	7	1	1	1	1
FL PANAMA CITY	56	35	70	27	46	-5	-	-	-	-	-	-	-	76	37	0	3	-	-	-	-
DAYTONA BEACH	61	45	74	29	53	-4	0.73	0.12	0.42	3.46	84	1.45	94	89	50	0	1	3	0	0	0
JACKSONVILLE	56	34	67	25	45	-10	0.33	-0.36	0.31	4.81	99	1.37	79	82	40	0	3	2	0	0	0
KEY WEST	72	64	82	52	68	-2	0.46	-0.01	0.27	2.43	78	1.01	84	85	65	0	0	4	0	0	0
MIAMI	71	57	83	39	64	-3	1.52	1.06	0.49	2.69	90	1.67	145	88	55	0	0	4	0	0	0
ORLANDO	64	48	75	32	55	-4	0.31	-0.20	0.20	2.79	81	0.85	51	88	53	0	1	3	0	0	0
TALLAHASSEE	55	32	66	20	44	-7	0.67	-0.40	0.67	8.47	108	2.32	84	79	35	0	4	1	1	1	1
TAMPA	65	47	73	34	56	-4	0.05	-0.38	0.03	2.70	83	0.59	55	87	50	0	0	3	0	0	0
WEST PALM BEACH	70	56	85	38	63	-4	3.48	2.92	1.70	5.72	157	4.23	304	85	54	0	0	4	2	2	2
GA ATLANTA	45	24	57	15	35	-6	0.73	-0.34	0.73	5.91	83	3.01	110	59	31	0	6	1	1	1	1
AUGUSTA	51	24	61	21	37	-6	0.60	-0.31	0.54	4.83	84	2.76	120	80	29	0	7	2	1	1	1
MACON	50	25	60	18	38	-7	0.76	-0.26	0.41	7.82	112	4.59	175	73	28	0	7	2	0	0	0
SAVANNAH	53	30	64	24	41	-7	0.26	-0.57	0.26	5.17	102	2.47	118	88	42	0	4	1	0	0	0
HI HILO	81	63	86	61	72	0	0.06	-2.15	0.06	7.69	43	0.80	14	85	57	0	0	4	1	0	0
HONOLULU	78	66	83	63	72	-1	0.71	-0.11	0.58	5.98	98	4.10	179	84	63	0	0	2	1	1	1
KAHULUI	80	63	84	55	72	0	0.75	-0.21	0.47	13.17	229	2.98	122	92	59	0	0	2	0	0	0
LIHUE	-	-	-	-	-	-	-	-	-	-	-	-	-	87	68	-	-	-	-	-	-
ID BOISE	33	18	42	8	25	-3	0.00	-0.33	0.00	4.07	185	1.31	154	82	47	0	7	0	0	0	0
LEWISTON	35	21	47	12	28	-6	0.09	-0.21	0.06	3.37	168	0.76	97	80	49	0	6	2	0	0	0
POCATELLO	26	10	37	3	18	-5	0.01	-0.23	0.01	3.76	217	0.63	100	87	58	0	7	1	1	0	0
IL CHICAGO	13	-2	25	-8	6	-15	0.25	-0.09	0.24	1.96	57	0.81	83	84	60	0	7	2	0	0	0
MOLINE	12	-3	25	-10	5	-15	0.00	-0.35	0.00	0.77	24	0.06	6	80	60	0	7	0	0	0	0
PEORIA	13	-2	27	-9	6	-16	0.21	-0.13	0.21	1.44	43	0.36	38	78	56	0	7	1	1	0	0
QUINCY	16	0	27	-9	8	-16	-	-	-	-	-	-	-	89	59	0	7	-	-	-	-
ROCKFORD	11	-3	22	-12	4	-14	0.18	-0.11	0.18	2.66	93	0.52	64	83	58	0	7	1	1	0	0
SPRINGFIELD	14	-5	29	-17	4	-19	0.31	-0.02	0.31	1.22	33	0.51	53	85	59	0	7	1	1	0	0
IN EVANSVILLE	22	3	36	-2	13	-20	0.61	-0.06	0.61	5.25	95	1.75	98	78	60	0	7	1	1	1	1
FORT WAYNE	13	-2	35	-8	6	-17	0.39	-0.03	0.39	4.26	105	1.07	91	83	68	0	7	1	1	0	0
INDIANAPOLIS	17	-3	36	-11	7	-18	0.71	0.19	0.71	4.43	93	2.11	149	81	56	0	7	1	1	1	1
SOUTH BEND	14	-1	29	-8	7	-16	0.33	-0.17	0.20	3.43	73	1.03	74	91	65	0	7	3	0	0	0
IA DES MOINES	14	-3	25	-12	5	-14	0.00	-0.22	0.00	0.57	29	0.05	8	79	61	0	7	0	0	0	0
SIoux CITY	14	-3	34	-12	8	-12	0.00	-0.12	0.00	0.50	45	0.34	103	84	64	0	7	0	0	0	0
WATERLOO	10	-5	22	-12	3	-12	0.05	-0.12	0.05	1.27	72	0.36	75	85	60	0	7	1	0	0	0
KS CONCORDIA	26	6	51	-3	16	-10	0.00	-0.14	0.00	0.07	6	0.00	0	77	43	0	7	0	0	0	0
DODGE CITY	29	9	58	1	19	-11	0.00	-0.11	0.00	0.04	4	0.04	11	84	49	0	7	0	0	0	0
GOODLAND	26	2	57	-17																	

Weather Data for the Week Ending January 18, 1997

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	TEMP., °F		PRECIP.	
																30 AND ABOVE	32 AND BELOW	01 INCH OR MORE	05 INCH OR MORE
ME CARIBOU	22	3	38	-21	12	4	0.82	0.07	0.58	6.18	131	2.58	171	84	60	0	7	3	1
ME PORTLAND	32	12	46	-2	22	1	0.53	-0.28	0.53	7.38	111	1.05	49	74	42	0	7	1	1
MD BALTIMORE	30	11	46	6	21	-11	0.46	-0.23	0.48	8.03	155	1.08	59	76	42	0	7	1	0
MD SALISBURY	34	16	54	5	25	-9	0.40	-0.43	0.40	7.24	124	0.98	48	86	34	0	7	1	0
MA BOSTON	34	19	51	4	26	-2	0.71	-0.08	0.71	6.87	109	1.00	47	68	43	0	7	1	1
MA CHATHAM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MI ALPENA	21	8	29	-11	14	-3	0.33	-0.04	0.22	7.75	258	2.58	263	86	58	0	7	3	0
MI DETROIT	20	2	36	-4	11	-11	0.18	-0.21	0.18	3.22	82	0.66	59	81	61	0	7	1	0
MI FLINT	19	2	34	-8	11	-11	0.18	-0.13	0.18	2.58	87	0.52	60	87	66	0	7	1	0
MI GRAND RAPIDS	19	5	28	-4	12	-10	0.57	0.15	0.40	3.74	94	1.50	128	91	70	0	7	5	0
MI HOUGHTON LAKE	18	5	27	-14	11	-8	0.27	-0.07	0.21	3.59	125	1.41	152	89	68	0	7	3	0
MI LANSING	19	3	32	-9	11	-9	0.26	-0.07	0.26	3.26	111	0.84	70	90	65	0	7	1	0
MI MARQUETTE	16	1	25	-17	8	-4	0.80	0.01	0.25	8.76	223	4.32	325	86	64	0	7	4	0
MI MUSKEGON	21	7	28	-7	14	-9	0.10	-0.44	0.10	3.08	89	1.20	81	89	68	0	7	1	0
MI SAULT ST. MARIE	17	-1	25	-26	8	-5	0.73	0.17	0.32	4.93	113	0.86	58	85	64	0	7	5	0
MN ALEXANDRIA	3	-14	14	-20	-5	-12	-	-	-	-	-	-	-	85	64	0	7	-	-
MN DULUTH	7	-9	17	-16	-1	-7	0.00	-0.28	0.00	0.93	48	0.42	55	78	57	0	7	0	0
MN INT'L FALLS	7	-13	15	-24	-3	-4	0.03	-0.17	0.03	1.68	121	0.20	37	76	53	0	7	1	0
MN MINNEAPOLIS	9	-7	20	-14	1	-11	0.13	-0.09	0.07	2.73	167	1.04	182	77	57	0	7	3	0
MN ROCHESTER	7	-7	19	-13	0	-11	0.05	-0.12	0.04	2.21	148	1.03	215	80	69	0	7	2	0
MS GREENWOOD	38	22	58	16	30	-12	-	-	-	-	-	-	-	79	39	0	6	-	-
MS JACKSON	40	24	61	15	32	-10	0.67	-0.58	0.62	5.97	62	2.85	80	78	41	0	6	2	1
MS MERIDIAN	43	25	67	14	34	-11	0.89	-0.28	0.89	5.28	58	2.58	85	77	36	0	6	1	1
MO CAPE GIRARDEAU	24	5	34	0	15	-17	0.74	0.10	0.74	4.01	66	1.17	66	87	52	0	7	1	1
MO COLUMBIA	20	1	29	-5	10	-15	0.20	-0.13	0.17	0.96	27	0.57	61	82	58	0	7	3	0
MO KANSAS CITY	21	4	34	-3	12	-13	0.02	-0.23	0.01	0.04	2	0.04	6	78	54	0	7	2	0
MO SAINT LOUIS	19	4	32	-2	11	-18	0.54	0.14	0.54	1.80	44	0.90	80	78	57	0	7	1	1
MO SPRINGFIELD	24	0	37	-9	12	-18	0.16	-0.21	0.15	1.40	38	0.89	66	83	58	0	7	2	0
MT BILLINGS	17	-2	44	-30	8	-15	0.00	-0.22	0.00	0.80	67	0.74	132	81	61	0	7	0	0
MT GLASGOW	6	-17	33	-27	-5	-15	0.05	-0.03	0.05	0.56	90	0.05	21	82	67	0	7	1	0
MT GREAT FALLS	22	-2	46	-30	10	-11	0.00	-0.22	0.00	0.41	29	0.05	9	81	66	0	6	0	0
MT HAVRE	13	-16	42	-36	-2	-15	0.00	-0.12	0.00	0.53	60	0.08	24	80	65	0	7	0	0
MT HELENA	7	-14	38	-32	-4	-23	0.00	-0.14	0.00	0.77	79	0.18	46	84	68	0	7	0	0
MT KALISPELL	14	-7	29	-17	4	-17	0.41	0.06	0.22	4.28	160	1.01	107	86	70	0	7	2	0
MT MILES CITY	13	-10	41	-21	2	-14	0.00	-0.13	0.00	0.49	51	0.06	14	89	64	0	7	0	0
MT MISSOULA	14	-3	34	-13	5	-17	0.21	-0.08	0.18	5.66	293	1.21	159	85	64	0	7	2	0
NE GRAND ISLAND	25	1	60	-8	13	-8	0.00	-0.11	0.00	0.15	15	0.00	0	79	45	0	7	0	0
NE LINCOLN	22	0	48	-11	11	-10	0.04	-0.07	0.04	0.16	13	0.04	12	87	48	0	7	1	0
NE NORFOLK	19	-2	48	-11	8	-10	0.04	-0.07	0.02	0.40	38	0.08	20	79	58	0	7	2	0
NE NORTH PLATTE	28	2	58	-8	15	-6	0.00	-0.08	0.00	0.00	0	0.00	0	77	41	0	7	0	0
NE OMAHA	18	0	36	-8	9	-12	0.09	-0.08	0.09	0.48	31	0.14	29	80	59	0	7	1	0
NE SCOTTSBLUFF	24	3	54	-9	14	-11	0.00	-0.11	0.00	0.35	41	0.16	57	85	55	0	7	0	0
NE VALENTINE	21	-5	50	-13	8	-14	0.00	-0.08	0.00	0.18	24	0.04	17	84	52	0	7	0	0
NV ELY	28	-2	45	-10	13	-11	0.08	-0.09	0.08	1.17	101	0.84	195	84	55	0	7	1	0
NV LAS VEGAS	48	33	65	29	41	-5	0.21	0.10	0.21	0.21	32	0.21	75	73	39	0	4	1	0
NV RENO	35	12	50	-1	24	-9	0.10	-0.15	0.09	4.30	267	1.34	209	92	51	0	7	2	0
NV WINNEMUCCA	37	13	52	5	25	-4	0.00	-0.17	0.00	3.57	268	0.59	131	85	48	0	7	0	0
NH CONCORD	29	12	42	-3	21	2	0.68	0.12	0.68	7.28	157	1.53	103	75	42	0	7	1	1
NJ ATLANTIC CITY	31	13	48	6	22	-8	0.04	-0.76	0.04	7.06	131	0.48	23	68	39	0	7	1	0
NM ALBUQUERQUE	32	11	43	3	21	-12	0.10	-0.01	0.10	0.40	52	0.40	148	82	56	0	7	1	0
NM CLOVIS	29	12	50	5	21	-16	-	-	-	-	-	-	-	99	66	0	7	-	-
NM ROSWELL	36	18	53	12	27	-12	-	-	-	-	-	-	-	92	52	0	7	-	-
NY ALBANY	25	15	36	-3	20	-1	0.17	-0.36	0.16	4.71	109	0.53	37	77	50	0	7	2	0
NY BINGHAMTON	20	7	34	-8	13	-8	0.11	-0.43	0.11	7.05	159	0.71	49	86	55	0	7	1	0
NY BUFFALO	23	10	40	-4	17	-7	0.25	-0.36	0.09	5.94	112	2.52	151	86	60	0	7	4	0
NY NEW YORK	32	19	46	7	25	-6	0.89	0.20	0.89	7.20	138	1.29	71	63	39	0	7	1	1
NY ROCHESTER	24	10	39	-7	17	-7	0.20	-0.27	0.10	3.89	93	0.72	58	85	56	0	7	3	0
NY SYRACUSE	25	13	40	-1	19	-4	0.13	-0.40	0.10	5.00	108	0.75	52	84	55	0	7	3	0
NC ASHEVILLE	34	14	44	6	24	-12	0.72	-0.15	0.71	6.20	92	2.29	100	78	37	0	7	2	1
NC CHARLOTTE	45	22	52	15	33	-6	0.44	-0.39	0.40	4.39	78	1.78	84	60	23	0	7	2	0
NC GREENSBORO	38	16	48	10	27	-9	0.70	-0.02	0.70	5.59	107	1.75	95	71	32	0	7	1	1
NC HATTERAS	44	30	63	21	37	-7	0.85	-0.36	0.85	7.38	97	3.07	99	63	40	0	5	1	1
NC NEW BERN	48	24	66	17	35	-8	0.59	-0.39	0.59	5.03	82	2.72	111	73	27	0	6	1	1
NC RALEIGH	43	20	56	15	31	-7	0.66	-0.12	0.66	5.00	96	2.12	106	70	33	0	7	1	1
NC WILMINGTON	48	25	65	19	37	-8	0.61	-0.46	0.61	5.31	78	2.68	97	82	29	0	6	1	1
ND BISMARCK	10	-15	38	-30	-2	-11	0.07	-0.04	0.07	1.37	178	0.69	246	77	59	0	7	1	0
ND FARGO	6	-13	21	-18	-4	-9	0.00	-0.17	0.00	0.51	48	0.31	72	80	66	0	7	0	0
ND GRAND FORKS	6	-11	22	-17	-2	-6	0.08	-0.11	0.06	0.94	88	0.21	49	86	65	0	7	1	0
ND WILLISTON	7	-20	33	-31	-7	-15	0.05	-0.06	0.02										

Weather Data for the Week Ending January 18, 1997

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	TEMP. °F		PRECIP.		
																80 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.05 INCH OR MORE	
OK TOLEDO	16	1	36	-4	8	-14	0.38	-0.01	0.38	3.87	96	1.31	118	84	62	0	7	1	0	
OK YOUNGSTOWN	20	0	41	-7	10	-13	0.08	-0.40	0.08	3.05	72	0.37	28	83	54	0	7	1	0	
OK OKLAHOMA CITY	33	16	52	10	24	-12	0.12	-0.13	-	0.50	26	0.50	81	82	42	0	7	-	0	
OR TULSA	29	11	47	4	20	-16	0.04	-0.29	0.04	0.37	12	0.27	30	80	48	0	7	1	0	
OR ASTORIA	49	32	61	20	41	-1	3.31	1.02	1.45	27.24	164	7.20	119	81	42	0	4	3	3	
OR BURNS	35	13	42	2	24	1	0.14	-0.08	0.14	4.13	236	1.18	197	92	62	0	7	1	0	
OR MEDFORD	51	27	64	18	39	1	0.00	-0.82	0.00	12.30	247	2.34	140	84	33	0	5	0	0	
OR PENDLETON	29	18	31	11	24	-10	0.09	-0.26	0.09	2.11	83	0.42	46	86	63	0	7	1	0	
OR PORTLAND	41	32	46	26	36	-3	2.15	0.92	1.70	15.90	169	3.77	116	62	39	0	3	3	1	
OR SALEM	42	27	49	19	36	-5	2.49	1.14	2.12	19.26	186	4.55	126	89	53	0	5	3	1	
PA ALLENTOWN	25	11	39	4	18	-8	0.63	-0.09	0.63	8.51	159	1.20	64	75	48	0	7	1	1	
PA ERIE	22	7	43	1	15	-11	0.10	-0.39	0.07	2.87	58	0.55	40	86	58	0	7	2	0	
PA HARRISBURG	-	-	-	-	-	-	0.36	-0.27	-	6.70	138	0.72	44	65	41	0	7	-	-	
PA PHILADELPHIA	29	16	44	9	23	-7	0.98	0.19	0.98	10.13	178	1.39	68	64	39	0	7	1	1	
PA PITTSBURGH	23	4	45	0	13	-13	0.13	-0.45	0.09	2.73	82	0.84	55	77	52	0	7	2	0	
PA SCRANTON	24	9	39	-1	16	-8	0.36	-0.11	0.36	5.99	160	0.72	58	75	50	0	7	1	0	
RI PROVIDENCE	33	16	50	4	24	-4	0.81	-0.07	0.81	8.10	121	1.49	85	68	40	0	7	1	0	
SC CHARLESTON	53	29	67	23	41	-7	0.06	-0.72	0.06	3.88	75	1.74	87	77	28	0	5	2	0	
SC COLUMBIA	48	23	58	16	35	-8	0.73	-0.29	0.73	5.22	86	2.88	113	80	30	0	7	1	1	
SC FLORENCE	48	25	61	17	37	-7	-	-	-	-	-	-	-	78	27	0	6	-	-	
SC GREENVILLE	44	21	52	11	32	-8	0.63	-0.28	0.50	6.81	104	2.65	112	69	23	0	7	2	1	
SD ABERDEEN	9	-17	34	-32	-4	-13	0.04	-0.10	0.04	2.23	259	1.36	389	83	82	0	7	1	0	
SD HURON	11	-11	34	-21	0	-13	0.02	-0.06	0.02	1.13	169	0.85	405	83	73	0	7	1	0	
SD RAPID CITY	19	-4	47	-16	8	-14	0.05	-0.03	0.05	1.46	209	0.47	224	82	58	0	7	1	0	
SD SIOUX FALLS	9	-11	29	-18	-1	-14	0.02	-0.09	0.01	1.07	107	0.29	97	83	64	0	7	2	0	
TN CHATTANOOGA	40	18	57	9	29	-8	0.73	-0.37	0.73	5.90	73	2.62	87	89	33	0	7	1	1	
TN KNOXVILLE	37	15	56	8	26	-10	0.86	-0.08	0.86	8.11	115	2.78	111	77	39	0	7	1	1	
TN MEMPHIS	32	16	50	11	24	-15	0.80	-0.02	0.80	7.98	98	1.89	74	73	38	0	7	1	1	
TN NASHVILLE	32	11	55	7	22	-14	0.51	-0.29	0.51	5.47	81	1.41	66	75	38	0	7	1	1	
TX ABILENE	41	20	72	14	31	-12	0.00	-0.22	0.00	0.08	5	0.08	14	80	47	0	7	0	0	
TX AMARILLO	30	12	53	1	21	-14	0.09	-0.02	0.09	0.51	74	0.46	164	90	85	0	7	3	0	
TX AUSTIN	43	28	63	23	35	-13	0.11	-0.28	0.10	3.04	107	0.88	92	72	46	0	5	2	0	
TX BEAUMONT	45	32	59	27	38	-12	0.84	-0.25	0.44	6.28	82	3.02	105	94	55	0	5	3	0	
TX BROWNSVILLE	51	36	66	30	44	-16	0.00	-0.36	0.00	0.84	39	0.06	7	93	52	0	4	0	0	
TX CORPUS CHRISTI	48	34	67	29	41	-14	0.00	-0.38	0.00	0.84	38	0.11	12	78	42	0	3	0	0	
TX DEL RIO	48	29	67	25	38	-11	0.00	-0.25	0.00	0.45	28	0.10	16	78	45	0	5	0	0	
TX EL PASO	49	26	58	19	37	-5	0.00	-0.08	0.00	0.31	37	0.31	129	66	31	0	7	0	0	
TX FORT WORTH	38	22	58	18	30	-11	0.02	-0.37	0.02	0.81	26	0.34	33	80	50	0	7	1	0	
TX GALVESTON	44	35	58	32	40	-13	0.36	-0.37	0.26	4.74	86	1.18	59	90	58	0	3	3	0	
TX HOUSTON	45	30	62	28	38	-12	1.47	0.63	1.18	5.95	86	1.85	82	88	50	0	5	3	1	
TX LUBBOCK	35	16	62	7	25	-13	0.00	-0.08	0.00	0.22	30	0.22	105	84	54	0	7	0	0	
TX MIDLAND	37	18	56	10	28	-16	0.00	-0.11	0.00	0.08	10	0.08	29	85	48	0	7	0	0	
TX SAN ANGELO	39	21	59	16	30	-13	0.00	-0.17	0.00	0.46	38	0.41	95	84	48	0	7	0	0	
TX SAN ANTONIO	45	31	69	24	38	-11	0.00	-0.39	0.00	1.73	71	0.19	20	73	45	0	4	0	0	
TX VICTORIA	46	32	65	28	39	-13	0.21	-0.56	0.17	3.57	72	1.57	80	85	49	0	6	2	0	
TX WACO	40	25	61	20	33	-12	0.01	-0.35	0.01	3.75	136	1.78	193	81	47	0	7	1	0	
TX WICHITA FALLS	37	19	57	14	28	-11	0.08	-0.22	-	0.35	19	0.35	59	80	45	0	7	-	-	
UT CEDAR CITY	29	6	38	-9	18	-11	0.84	0.48	0.25	2.50	236	1.52	400	95	58	0	7	3	0	
UT SALT LAKE CITY	29	13	37	10	21	-8	0.29	0.04	0.24	3.14	151	1.41	210	83	60	0	7	3	0	
VT BURLINGTON	24	8	37	-14	16	0	0.10	-0.31	0.10	4.57	130	0.95	86	75	51	0	7	1	0	
VA NORFOLK	38	24	58	16	31	-8	0.55	-0.30	0.55	5.18	86	1.36	82	70	38	0	7	1	1	
VA RICHMOND	37	17	55	9	27	-8	0.53	-0.21	0.52	6.08	119	1.15	63	81	34	0	7	2	1	
VA ROANOKE	33	15	44	8	24	-10	0.08	-0.50	0.08	3.68	83	1.03	68	69	35	0	7	1	0	
WA QUILLAYUTE	48	30	62	19	39	-1	4.03	0.77	2.12	24.70	103	10.36	121	86	46	0	5	3	3	
WA SEATTLE-TACOMA	44	31	49	21	37	-3	1.75	0.52	0.93	15.22	166	3.93	121	86	49	0	4	3	1	
WA SPOKANE	28	14	34	7	21	-8	0.59	0.14	0.35	5.01	138	0.91	75	83	54	0	7	2	0	
WA YAKIMA	29	11	34	-3	20	-10	0.35	0.07	-	6.17	292	0.58	78	84	58	0	7	-	-	
WV BECKLEY	25	5	42	-1	15	-14	0.23	-0.43	0.17	4.24	85	1.33	77	77	46	0	7	2	0	
WV CHARLESTON	31	9	54	5	20	-12	0.23	-0.43	0.18	2.40	47	0.63	37	75	45	0	7	2	0	
WV HUNTINGTON	29	7	53	3	18	-12	0.28	-0.39	0.23	2.93	55	0.80	45	74	45	0	7	2	0	
WV PARKERSBURG	27	5	49	1	16	-14	0.18	-0.55	0.12	3.37	70	0.95	51	88	47	0	7	2	0	
WI GREEN BAY	13	-1	28	-12	8	-8	0.04	-0.22	0.04	2.03	91	0.81	114	76	58	0	7	1	0	
WI LACROSSE	12	-2	23	-8	5	-9	0.05	-0.16	-	2.80	144	1.19	220	78	52	0	7	-	-	
WI MADISON	12	-2	20	-10	5	-11	0.02	-0.24	0.02	2.14	91	0.84	117	78	53	0	7	1	0	
WI MILWAUKEE	15	2	25	-7	8	-10	0.15	-0.21	0.15	2.06	82	0.72	72	79	51	0	7	1	0	
WI WAUSAU	11	-5	19	-15	3	-8	0.04	-0.17	0.04	3.01	150	1.24	210	71	46	0	7	1	0	
WY CASPER	20	1	42	-18	10	-12	0.04	-0.08	0.04	0.93	94	0.49	148	81	64	0	7	1	0	
WY CHEYENNE	22	4	45	-14	13	-14	0.01	-0.07	0.01	0.30	48	0.28	127	83	55	0	6	1	0	
WY LANDER	16	-4	42	-12	8	-13	0.13	0.02	0.12	0.59	69	0.28	100	89	67	0	7	2	0	
WY SHERIDAN	16	-7	48	-35	4	-16	0.00	-0.17	0.00	1.00	86	0.29	67	81	61	0	7	0	0	
PR SAN JUAN	-	-	-	-	-	-	0.01	-0.62	0.01	4.36	70	1.07	80	93	81	-	-	1	0	

Based on 1961-90 normals

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

## Crop Progress 1996

### Winter Wheat

The 1996 winter wheat crop experienced a harsh winter over parts of the major growing areas. The Nation's winter wheat crop started the year evenly split between poor and fair condition. Spring rain across the central Great Plains improved wheat condition. Winter wheat development in the central Great Plains was behind normal for early spring. Wheat endured drought conditions in the Central States and southwest. Wheat progress in the Central States started the spring behind normal due to cold weather and the continued lack of soil moisture. Late-spring rain in the central Great Plains did little to revive the wheat crop hurt by wind and low temperatures. The wheat harvest started slightly ahead of the average for the major producing States. By June, warm, sunny weather across the Central States dried wheat fields and allowed good harvest progress in the southern Great Plains, unlike wet field conditions that slowed harvest in the central Great Plains. By early August, wheat harvest progress in the Central States and Ohio Valley slipped farther behind the average due to wet fields. As summer ended, wheat harvest activity accelerated when drier weather allowed producers into their fields to complete the harvest.

### Spring Wheat

Planting of 1996 spring wheat was delayed by the cool, wet spring weather. Rain, snow, and low soil temperatures prevented planting in the Northern States. Some wheat fields in South Dakota were replanted after being damaged by spring storms and strong winds. Spring wheat seeding was nearly complete by early June, slightly ahead of the

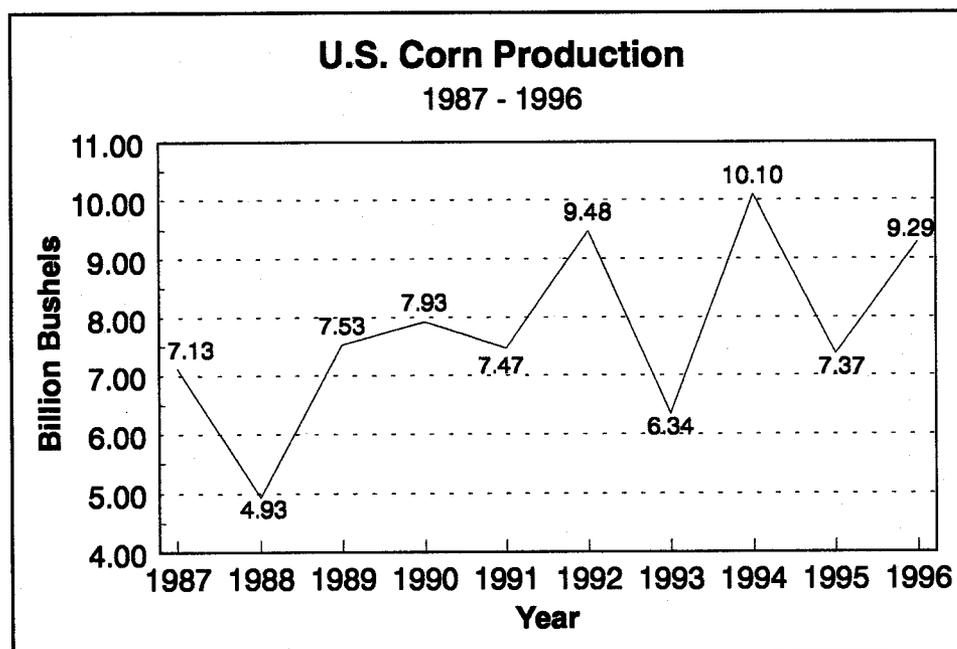
average. Spring wheat condition was mostly good to fair by the summer. The development of spring wheat started the year behind the average and remained there. Later in the year, dry weather in the Dakota's was favorable for harvest activity. By early fall, spring wheat harvest ended the year ahead of normal.

### Corn

Corn planting started the season on time, but low soil temperatures in the Midwest limited corn planting, with most producers waiting for warmer weather before seeding. Cool, wet soils in the Ohio Valley slowed field preparation and delayed the start of planting. Unseasonably cold weather in the Great Lakes restricted pre-planting activities. The prolonged wet, cool weather over the Ohio Valley slowed corn emergence and development. Wet fields in the western Corn Belt in the late spring prevented

farmers from applying herbicides or cultivating for weed control. By late June, corn silking started slightly behind the average. Corn grew rapidly in the Midwest due to warm, sunny weather and favorable soil moisture. Uneven corn development resulted from the wet spring conditions that disrupted

planting and required significant replanting. The average height of corn in the Great Lakes region was half of normal by early summer. Corn silking fell further behind the average by mid-July in the Central States. Crop stress from dry conditions in the central Corn Belt was reduced by rain that arrived just before much of the crop entered the pollination stage. Extreme heat and dryness in the southern Great Plains caused many fields to fail. In the eastern Corn



Belt, corn silking was 2 weeks behind normal by early August. In the Great Lakes region, European corn borers attacked alternative crops since corn development was later than normal. Doughing and denting remained behind normal during September in the Ohio and middle Mississippi Valleys. Much-needed moisture arrived in the late summer in the Central States, improving corn condition. Corn harvest started later than normal at the end of the summer and remained behind schedule. A late frost in the eastern Corn Belt allowed corn development to continue for some late-planted fields, while some producers delayed harvest, with the hope that a frost would dry the corn. In the Midwest, high-average corn moisture levels for early November slowed the completion of the harvest, which ended the season later than normal in most States.

progress in the Delta and the Southeast remained ahead of normal. Persistent dry weather in the Midwest stressed some late-planted fields. Progress remained behind normal through late summer, with soybeans dropping leaves significantly behind the average. Cool fall weather across most of the Midwest and Southeast slowed soybean development. As fall approached, soybean development neared normal levels. Soybean acreage harvested started the season behind the average, with progress in the eastern Corn Belt significantly behind the average. A hard freeze in early November in the Corn Belt ended the growing season for soybeans. Wet weather in the Ohio, Tennessee, and middle Mississippi Valleys left the soybean harvest nearly 2 weeks behind normal. Harvest was completed in late November slightly behind the average.

**Soybeans**

Soybean planting for 1996 was delayed by the cold, wet spring and started the year behind the average. Widespread rains in early June soaked fields and slowed soybean planting in the Midwest. Planting was postponed by some producers until they completed corn planting. Spring soybean planting was significantly behind schedule in the Ohio and middle Mississippi Valleys. Warmer weather in late June improved soybean growth in the Midwest and allowed producers to nearly complete soybean planting. The

average height of soybeans in the Great Lakes region was 1 inch below the 5-year average by early July. Soybeans blooming in the Midwest were significantly behind the average by late July but ahead of normal in the Delta States. Soybeans in the Corn Belt were stressed from the persistent hot, dry July weather. In parts of the eastern Corn Belt, soybeans blooming were 18 days behind normal by early August. Setting pods and dropping leaves in the Ohio Valley were behind the average by late August, while

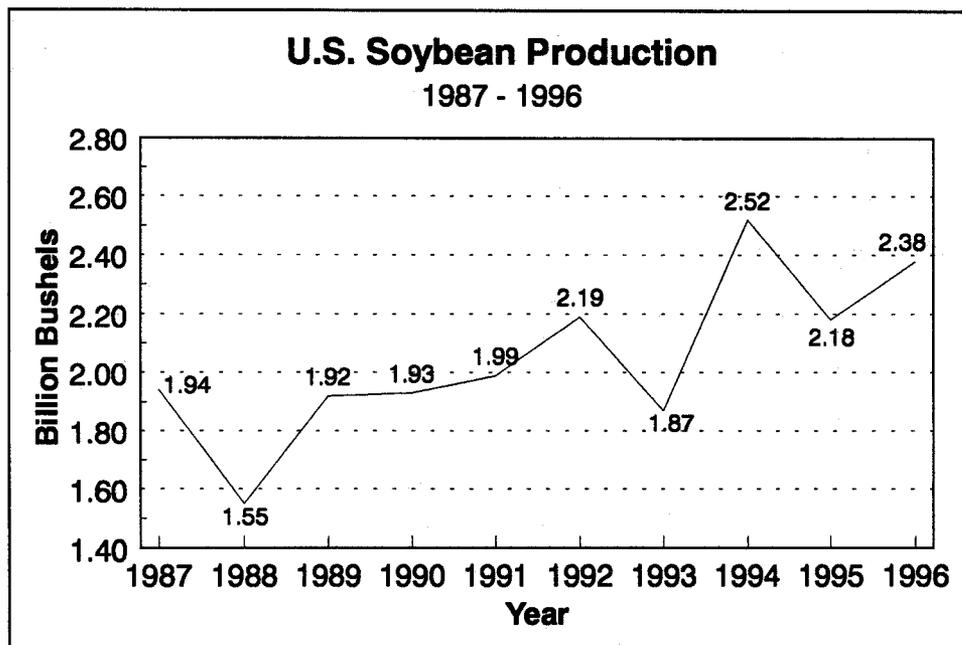
proceeding with planting. Continued warm, dry summer weather lowered sorghum condition in the Southwest, where the crop showed signs of heat stress. Sorghum planting in the Midwest was significantly behind the average, since many producers were waiting to finish planting other row crops.

**Sorghum**

Sorghum planting started later than normal due to the wet field conditions. Thunderstorms and flooding in the lower Ohio and middle Mississippi Valleys delayed sorghum planting. The lack of soil moisture in early June in the Southwest caused some producers to wait for rain before

proceeding with planting. Continued warm, dry summer weather lowered sorghum condition in the Southwest, where the crop showed signs of heat stress. Sorghum planting in the Midwest was significantly behind the average, since many producers were waiting to finish planting other row crops.

By mid-July, sorghum development was accelerated by hot weather across the Southern States. Midsummer rains from Hurricane Dolly benefited sorghum development in the southern Great Plains. Sorghum turning color passed the halfway mark in early September, with some central Great Plains and Midwestern States behind the average. By early October, sorghum harvested was one-quarter complete, slightly behind the average. Fall harvest activity was slowed in some States due to high grain moisture



By mid-July, sorghum development was accelerated by hot weather across the Southern States. Midsummer rains from Hurricane Dolly benefited sorghum development in the southern Great Plains. Sorghum turning color passed the halfway mark in early September, with some central Great Plains and Midwestern States behind the average. By early October, sorghum harvested was one-quarter complete, slightly behind the average. Fall harvest activity was slowed in some States due to high grain moisture

levels and producers concentrating first on completing the harvest of other row crops. Powerful winds in early November toppled some sorghum fields in the central Great Plains, where wet fields slowed harvest activity. Cold, damp weather in the southern Great Plains slowed harvest activity in some late-planted fields. Sorghum harvest was completed in November slightly behind the average.

### Rice

Rice seeding began the year ahead of normal, but emergence was slow in the Delta due to cool spring weather. Producers in the Delta flushed emerged rice fields in mid-April and reported some problems with salt-water in their irrigation systems. Beneficial summer rains aided

rice growth, leaving rice in mostly good to excellent condition. Rice headed started in late June ahead of the average. Early rice harvesting started in mid-July in the Delta but was hindered by wet conditions. By the end of the summer, rice headed in California was halfway complete, significantly ahead of the average, while in Arkansas, rice fields were drained to prepare for harvest. Rice development in California was slowed by low morning temperatures in the early fall. Heavy rains in Texas slowed harvest activity and damaged some fields, but the moisture benefited the second crop. Heavy rains in September caused lodging across the Delta. Rice producers in Texas and Louisiana prepared for the second crop. As November started, the rice harvest neared completion ahead of the average.

## Crop Production Highlights 1996

The 1996 **corn** for grain production was estimated at 9.29 billion bushels, up 26 percent from 1995 but virtually unchanged from the November 1 forecast. The 1996 production level ranked third behind 1994 and 1992, respectively. The U.S. yield of 127.1 bushels per acre was up 13.6 bushels from 1995, but 11.5 bushels below the record of 1994.

**Sorghum** production for 1996 was estimated at 803 million bushels, down 2 percent from the November forecast but up 74 percent from the 1995 production. This was the largest production level since 1992. Grain yields, at 67.5 bushels per acre, were down 0.9 bushels from November 1 but almost 12 bushels above the 1995 average. Yield increases in 10 of the 18 estimating States from the November 1 forecast were more than offset by declines in Arkansas, Kansas, Missouri, New Mexico, and Texas.

**All wheat** production for 1996 totaled 2.28 billion bushels. This was up 5 percent from 1995. The U.S. yield was placed at 36.3 bushels per acre, up 0.5 bushels from 1995. Grain area was estimated at 62.9 million acres. This was up 3 percent from last season.

**Rice** production totaled 171 million cwt during 1996, down 1 percent from the 1995 total and 2 percent below the November 1996 forecast. Area for harvest, at 2.80 million acres, was down 10 percent from 1995 as acreage reductions in Arkansas, Louisiana, Mississippi, Missouri, and Texas more than offset increased acreage in California. Yield per acre averaged a record high 6,121 pounds for 1996, 500 pounds above 1995 and 157 pounds above the previous record set in 1994.

**Soybean** production totaled 2.38 billion bushels in 1996, up 9 percent from 1995, but down 1 percent from the November 1 forecast. The 1996 production was the second highest on record behind the bumper crop of 1994. Planted area for the U.S. totaled 64.2 million acres, up 3 percent from plantings in 1995. Harvested area was estimated at 63.4 million acres, an increase of 3 percent from a year ago. The average yield per acre, estimated at 37.6 bushels, was 2.3 bushels above 1995. This tied 1992 as the second highest yield on record.



# International Weather and Crop Summary

January 12 - 18, 1997

## HIGHLIGHTS

**FSU-WESTERN:** A warming trend occurred throughout most of the region, improving overwintering conditions for winter grains.

**EUROPE:** Seasonable temperatures were accompanied by mostly dry weather in the north and east, while rain fell in Mediterranean crop areas.

**AUSTRALIA:** Rain in the east benefited western sections of the main summer crop and grazing areas.

**SOUTH AFRICA:** Scattered, mostly light rain covered the corn belt, keeping topsoils moist as crops approach reproduction.

**NORTHWESTERN AFRICA:** Light showers and mild weather favored winter grain development in Morocco, while unfavorably dry weather returned to crop areas in Algeria.

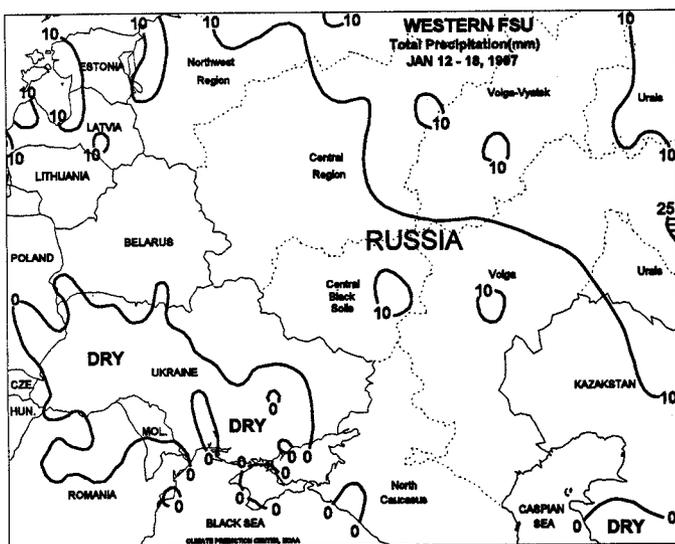
**SOUTHEAST ASIA:** Across Java, seasonable showers maintained irrigation supplies for main-season rice, while isolated heavier showers caused some flooding.

**EASTERN ASIA:** Seasonable weather prevailed across the North China Plain, keeping winter wheat dormant.

**SOUTH AMERICA:** In southern Brazil, widespread weekend showers relieved dryness for reproductive soybeans and corn.

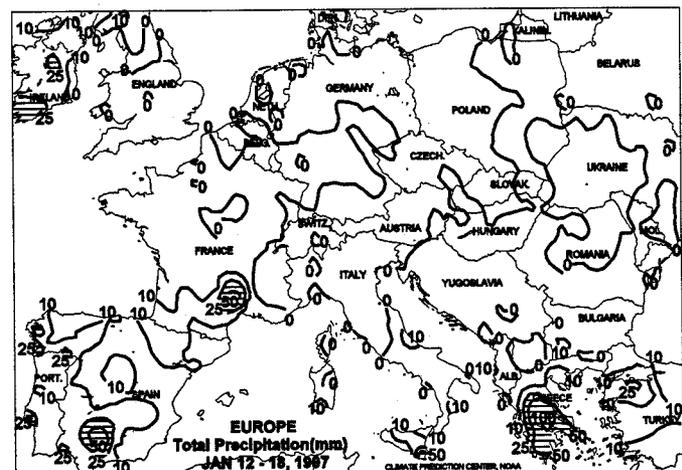
### FSU-WESTERN

A warming trend occurred over the region with temperatures rising above normal as the week progressed. The mild weather improved overwintering conditions for winter grains in Russia, Ukraine, Belarus, and the Baltics, previously stressed by bitterly cold weather. Weekly temperatures averaged 1 to 5 degrees C above normal in northern Ukraine, northern Russia, Belarus, and the Baltics. However, the warming trend was more gradual in southern Ukraine and the North Caucasus region in Russia, where weekly temperatures averaged slightly below normal. Maximum temperatures rose above freezing in most areas during the week, melting some protective snow cover. Little, if any, precipitation accompanied the warming trend in most areas, with precipitation amounts mostly below 10 mm.

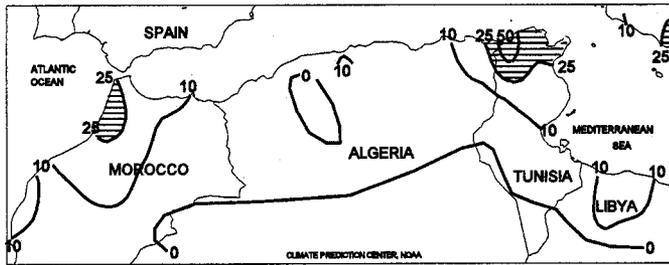


### EUROPE

Temperatures returned to more seasonable levels in northern and eastern Europe during the week, providing favorable overwintering conditions for winter grains. However, maximum temperatures rose above freezing in these areas, melting some protective snow cover. High pressure persisted over the continent during the week, bringing mostly dry weather. The exceptions were in the Iberian peninsula, southern France, and Greece, which received light to moderate rain. Precipitation amounts in these areas generally ranged from 10 to 50 mm, with locally heavy amounts in excess of 70 mm occurring in southern Greece. In southern Spain, precipitation amounts this past week (mostly 10-25 mm) decreased from excessive amounts which fell in prior weeks, but the moisture kept soils waterlogged, limiting fieldwork.

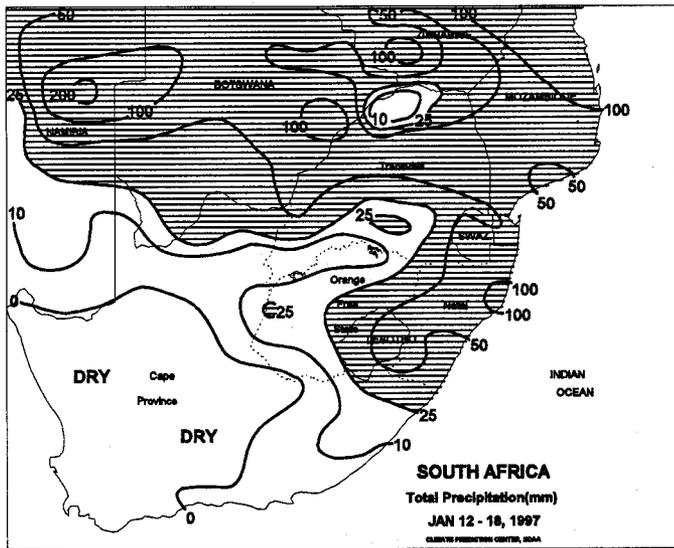


**NORTHWEST AFRICA TOTAL PRECIPITATION (mm)**  
JAN 12 - 18, 1997



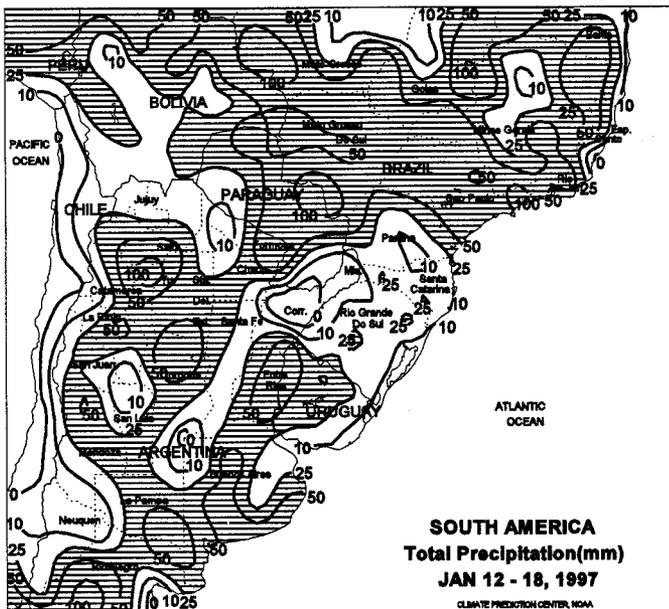
**NORTHWESTERN AFRICA**

Light showers (10-25 mm) fell over winter grain areas in Morocco, maintaining favorable moisture conditions for winter grains in the vegetative stage. Furthermore, unusually mild weather (temperatures averaging 2-4 degrees C above normal) promoted rapid vegetative growth in winter grains in Morocco. Farther east, unseasonably warm, dry weather returned to winter grain areas in Algeria, creating unfavorable conditions for crop development. In Tunisia, light to moderate rain (10-72 mm) improved soil moisture conditions for winter grains that were previously stressed by prolonged dryness.



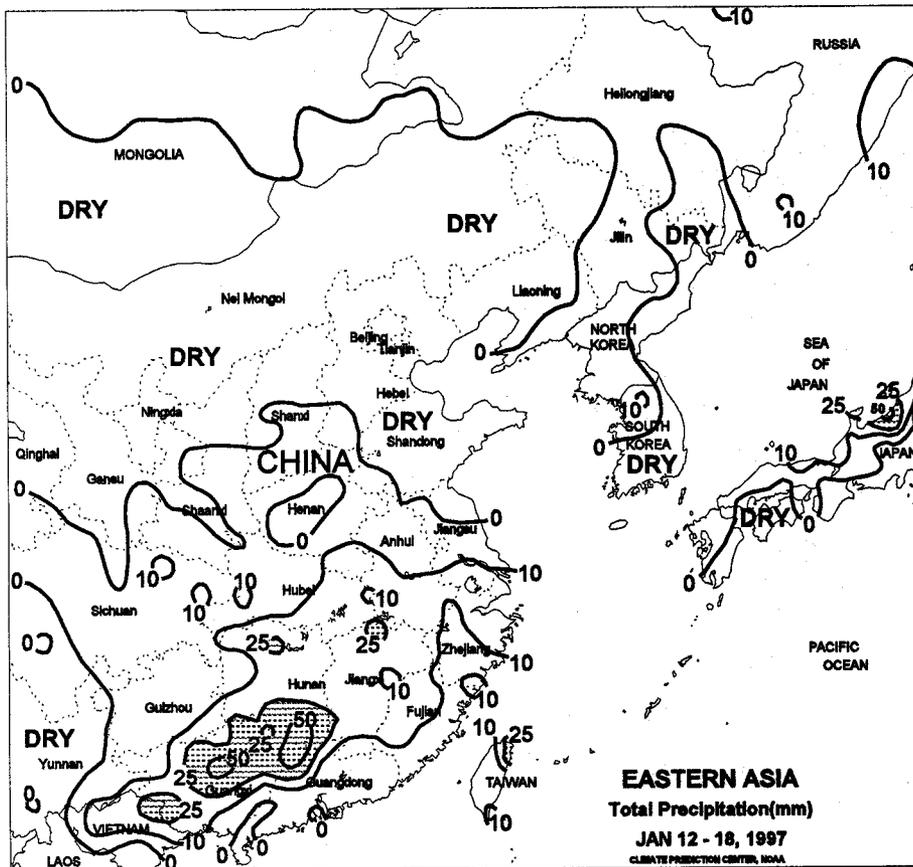
**SOUTH AFRICA**

Scattered, mostly light showers (3-25 mm) fell across the main corn-producing areas. Heavier rain (25-50 mm or more) covered extreme eastern sections of the corn belt and sugarcane areas of Kwazulu-Natal. Temperatures averaged near to below normal, with highs ranging from the middle to upper 20's C in the east to the low to mid 30's C in traditionally warmer areas of the west. Corn is in or approaching the critical reproductive phase of growth, and requires additional moisture for normal development. Prolonged periods of heat or dryness, especially in the west, would likely cause losses in yield potential.



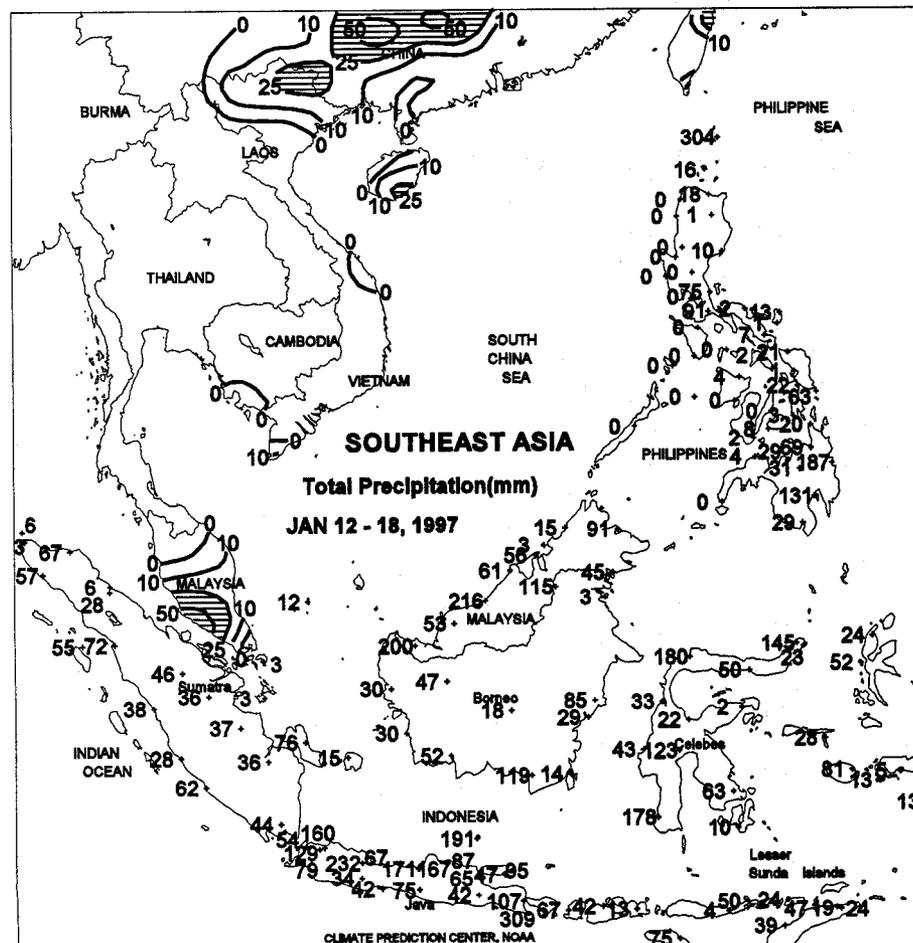
**SOUTH AMERICA**

In southern Brazil, hot weather (maximum temperatures ranging from 35 to 38 degrees C) across Rio Grande do Sul, along with isolated pockets of dryness, stressed flowering soybeans and corn. However, during January 19 and 20, widespread showers (40-60 mm) relieved dryness across the region. Additional rain is needed to increase soil moisture for potentially hot weather during the rest of the Brazilian summer. Elsewhere in Brazil, showers (30-80 mm) covered most soybean areas, maintaining adequate moisture supplies for soybean reproduction. Showers (20-60 mm) increased moisture supplies for soybeans and cotton in southern Paraguay. In central Argentina, moderate showers (15-60 mm) favored vegetative soybeans and reproductive corn. Across southern Buenos Aires, the showers slowed winter wheat harvesting, which was over 95 percent completed. Showers (10-35 mm) also favored cotton in northern Argentina. Temperatures averaged 1 to 3 degrees C above normal across Argentina and 2 to 4 degrees C above normal in southern Brazil.



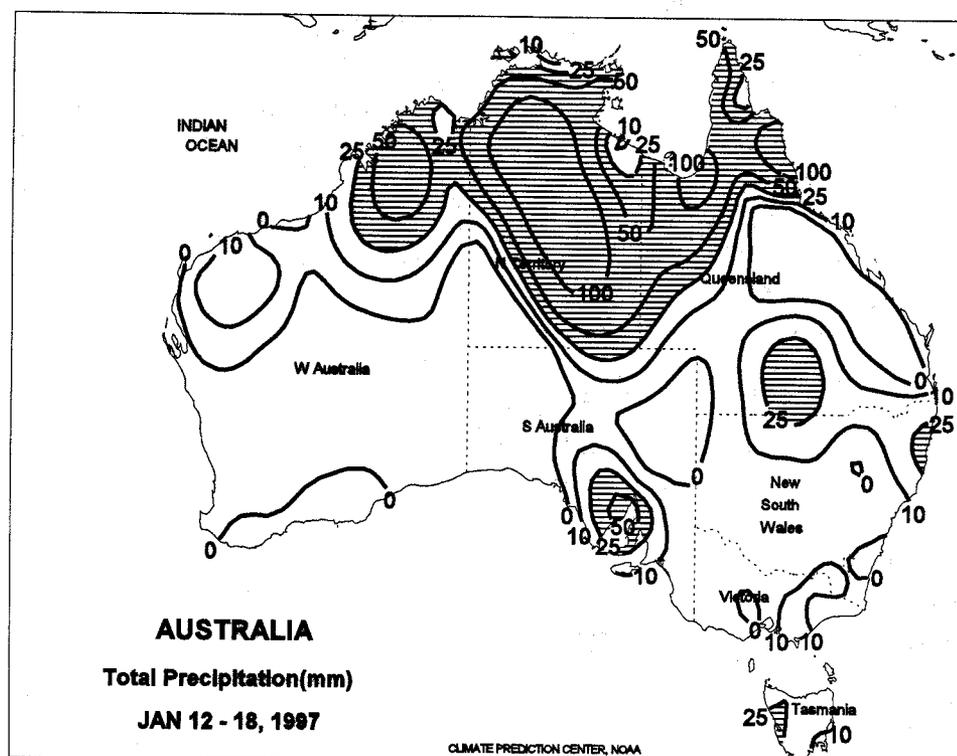
**EASTERN ASIA**

Seasonably dry, cool weather kept winter wheat dormant across the North China Plain. Light to moderate rain (5-20 mm) fell across the southern half of China, favoring winter grains and oilseeds. Heavier amounts (30-55 mm) were reported in northern Guangxi, Guangdong, and southern Hunan.



**SOUTHEAST ASIA**

Widespread showers (35-130 mm) fell across Java, maintaining irrigation supplies for main-season rice. Isolated heavier showers (greater than 200 mm) likely caused some flooding. Dry weather favored rice fieldwork across Indochina. In the Philippines, moderate to heavy showers (30-150 mm) fell across Mindanao, while drier weather (less than 25 mm) prevailed elsewhere.



### AUSTRALIA

Beneficial rain (10-25 mm or more, exceeding 50 mm locally) covered a broad section of southern Queensland and northwestern New South Wales, aiding pastures and grazing lands. The rain reached western sections of the main summer crop area, but the bulk of the region's sorghum, cotton, and sugarcane was mostly dry. Highs ranged from the low to mid-30's C throughout eastern Australia's main agricultural areas. In New Zealand, rainfall was light (25 mm or less) in most of the main pasture areas.

### U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on January 9, 1997. Forecasts refer to January 1.

**All oranges** production for the 1996-97 season is forecast at a record-high 12.5 million tons, up 1 percent from December's forecast and up 6 percent from a year ago. This year's crop is 5 percent larger than the previous record of 11.8 million tons set in the 1979-80 season. Florida's production amounts to 220 million boxes (9.90 million tons), unchanged from December but 8 percent above last season. Florida's all orange, early varieties, and Valencia production forecasts remained unchanged from last month and are each record-large crops. Early- and mid-season varieties are expected to produce 130 million boxes (5.85 million tons), 7 percent above last season. The Valencia forecast is 90 million boxes (4.05 million tons), 10 percent above a year ago. The California all orange production forecast, at 65 million boxes (2.44 million tons), is up 3 percent from the previous forecast in October but

is 2 percent less than last season. The California Navel orange forecast is 39 million boxes (1.46 million tons), up 5 percent from October and up 3 percent from last year's production. The California Valencia forecast is unchanged at 26 million boxes (975,000 tons), 7 percent less than last year.

**All cotton** production is forecast at 19.0 million bales, up 1 percent from last month and a 6 percent increase from last year. This is the second-largest production on record. Yield is a record-high 709 pounds per harvested acre, up 172 pounds from 1995. Although early-season weather caused high abandonment in Texas, favorable growing conditions in late summer and an open harvest period resulted in large numbers of bolls and high boll counts.

The *Weekly Weather and Crop Bulletin* 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), 53rd Congress, 3rd Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic first class \$45, foreign \$55 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to: Climate Prediction Center, W/NP52, Attn: *Weekly Weather and Crop Bulletin*, NOAA/NWS/NCEP, NOAA Science Center, Room 605, 5200 Auth Road, Camp Springs, MD 20746. Order subscriptions from the office and address listed above. First-class postage paid at Washington, DC, and other mailing offices. Correspondence to the meteorologists should be directed to: *Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250. Internet URL: <http://www.usda.gov/oce/waob/jawf/>; E-mail address: [wwcb@jawfsrv.wwb.noaa.gov](mailto:wwcb@jawfsrv.wwb.noaa.gov)

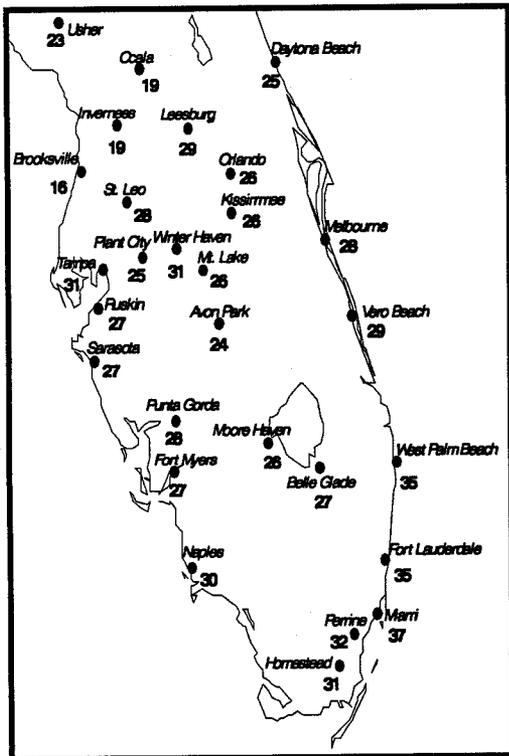
**U.S. DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration  
National Weather Service/Climate Prediction Center  
Managing Editor ..... *Douglas Le Comte* (202) 720-7919  
fax (202) 720-1455  
Editor ..... *Brad Rippey* (202) 720-1444  
Meteorologists . . . *David Secora, Jeff Savadel, Brian Morris*  
Special Requests ..... (202) 720-7917  
Subscriptions ..... *John Kopman* (301) 763-8227, ext. 7534  
fax (301) 763-8395

**U.S. DEPARTMENT OF AGRICULTURE**

Economic Research Service  
E.R.S. Editor ..... *Sharon Lee*  
National Agricultural Statistics Service  
Agricultural Statistician ..... *Greg Preston* (202) 720-7621  
State Summaries Editor ..... *Klara Haskins* (202) 720-8033  
World Agricultural Outlook Board  
Agricultural Weather Analysts ..... *Ray Motha*  
..... *Tom Puterbaugh, Mark Brusberg, Bob Stefanski*  
Secretary ..... *Teresa Davis* (202) 720-9807

**Minimum Temperatures  
(Degrees F)**



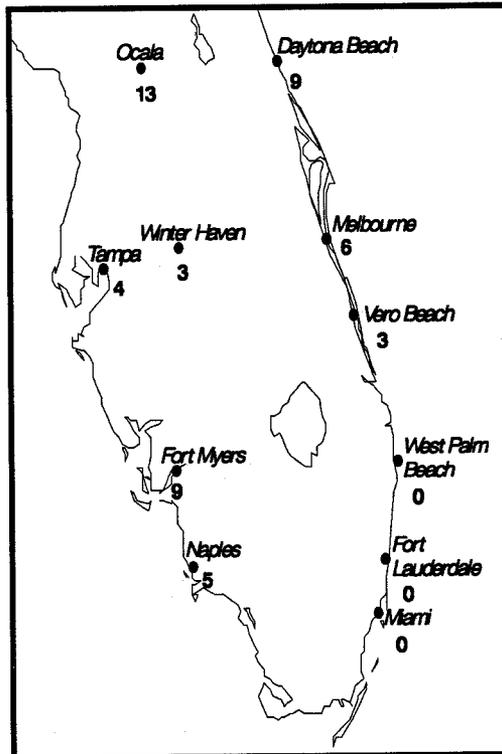
**January 18-19, 1997**

*The freezing temperatures occurred during the evening of January 18 and into the morning of January 19.*

*Freezing temperatures are defined as at or below 32 degrees F.*

**SOURCES: Southeast Regional Climate Center and National Weather Service**

**Duration of Freezing Temperatures (Hours)**



Climate Prediction Center, W/NP52  
Attn: *Weekly Weather & Crop Bulletin*  
NOAA/NWS/NCEP  
NOAA Science Center, Room 605  
5200 Auth Road  
Camp Springs, MD 20746

**WEEKLY NEWS BULLETIN  
FIRST CLASS**

FIRST CLASS MAIL  
POSTAGE & FEES PAID  
NOAA  
PERMIT NO. G-19

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300