

# WEEKLY WEATHER AND CROP BULLETIN

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

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

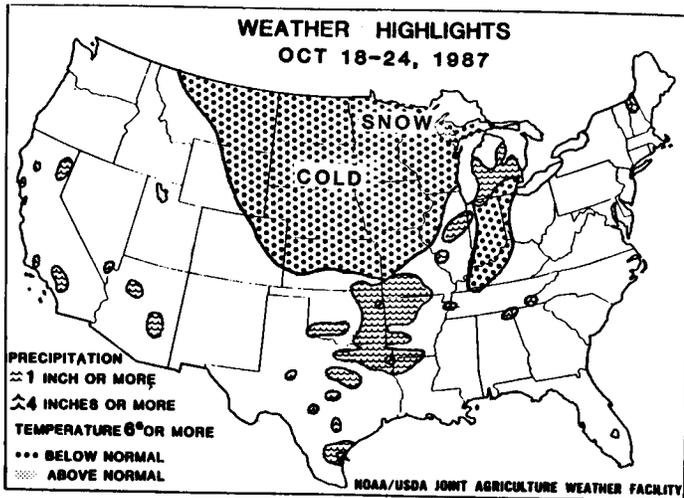
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Oct. 27, 1987

## National Weather Summary

October 18-24, 1987



**HIGHLIGHTS:** Much colder-than-normal weather covered most of the Nation east of the Rockies. Snow fell from the northern Great Plains to New England, and Minnesota had its first major snowfall of the season. Heavy rain fell in southern Texas and much of the lower Mississippi Valley. Late in the week, rainshowers caused local flooding in southern California, southern Nevada, and parts of Arizona.

**SUNDAY...** Scattered thunderstorms developed in Texas and southern Oklahoma, some with large hail and damaging winds. By evening, showers and thunderstorms produced the first significant rainfall in a month over parts of southwestern Arkansas and northwestern Louisiana. Rain fell across parts of South Dakota and was mixed with snow in the west. Mostly clear skies prevailed west of the Rockies, over the east coast, the Ohio Valley, and portions of Missouri and Kansas.

**MONDAY...** Cold air pushed across the lower Great Lakes, the Ohio Valley, the Mississippi Valley, and into the southern Great Plains, bringing light rain to parts of the Mississippi Valley and a few thunderstorms to Texas. Fair skies prevailed west of the Rockies. High temperatures were only in the thirties in Montana and North Dakota.

**TUESDAY...** Cold air continued to plunge southward across the Great Plains and the Mississippi Valley. Low temperatures were in the teens and twenties across the northern and central Rockies and the northern Plains. Light snow fell from eastern North Dakota to the upper Great Lakes. Rainshowers developed ahead of the leading edge of cold air over the lower Great Lakes, the Ohio Valley, and the Tennessee Valley. Showers and thunderstorms

were scattered across the lower Mississippi Valley into central Texas. Skies were mostly clear over the western third of the Nation.

**WEDNESDAY...** Record-cold weather extended across the Great Plains, with freezing temperatures as far south as Arkansas. Snow squalls were scattered across Michigan, Minnesota, and Wisconsin. Brisk winds brought rainshowers mixed with snow to Ohio, Pennsylvania, and upstate New York.

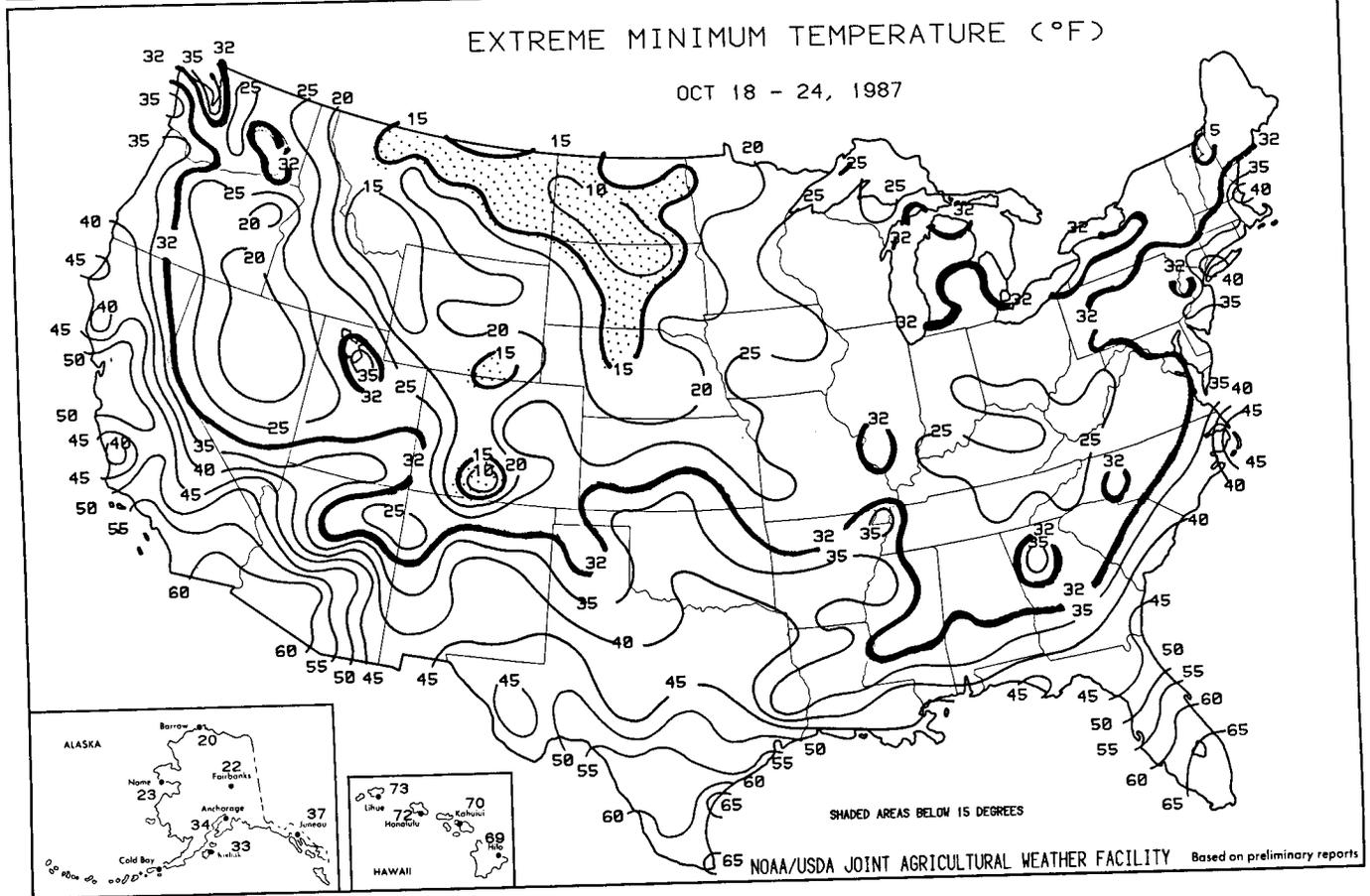
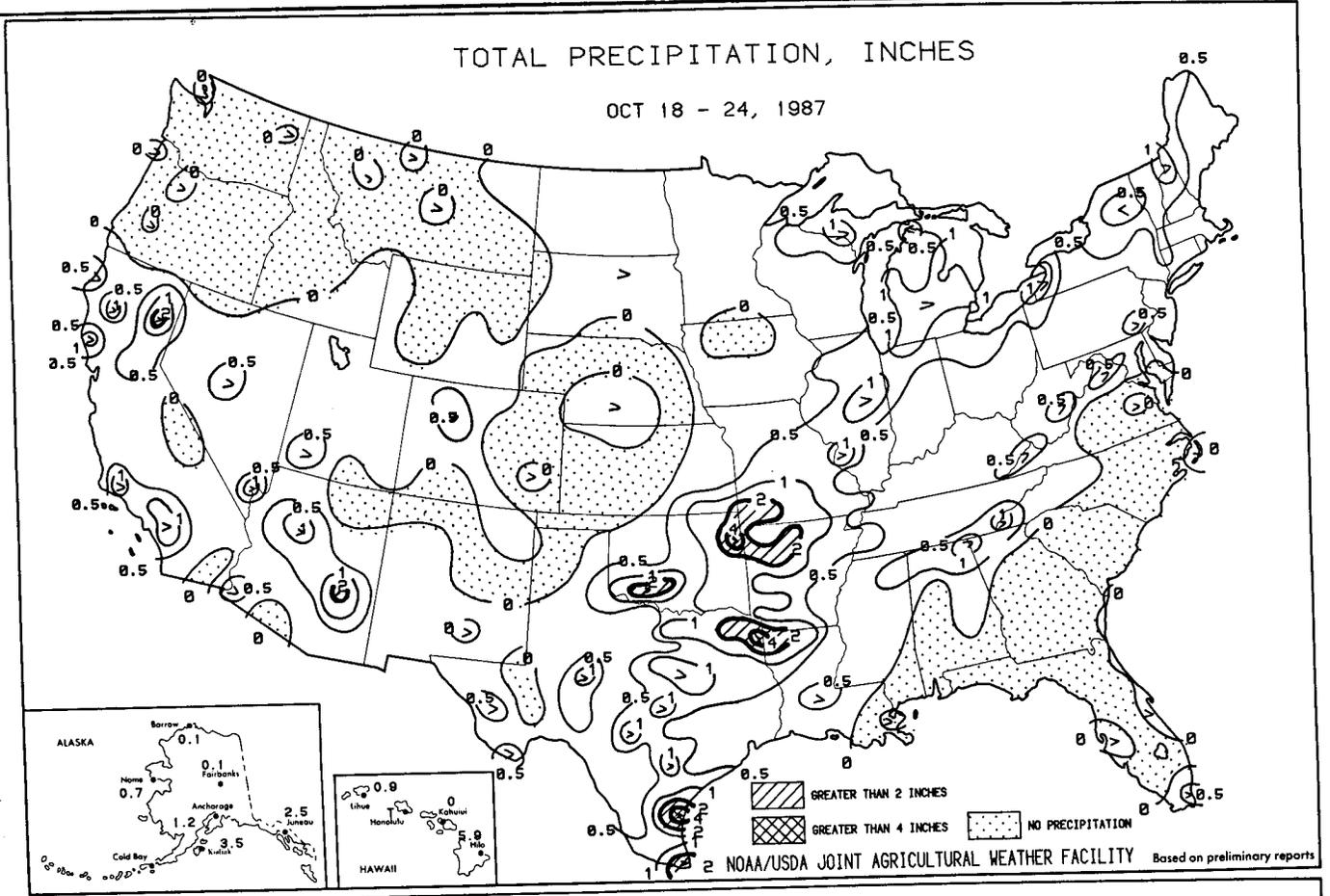
**THURSDAY...** Temperatures fell to record lows again in the eastern part of the Nation, from Pennsylvania to the gulf coast of Alabama. As cold air continued to pour into the Nation's midsection, snowshowers were scattered across Minnesota, Wisconsin, and upper Michigan. Northern Minnesota had its first big snow of the season, with 5-10 inches on the ground at many locations. Showers and thunderstorms moved into California and the southern Rockies, causing some mudslides.

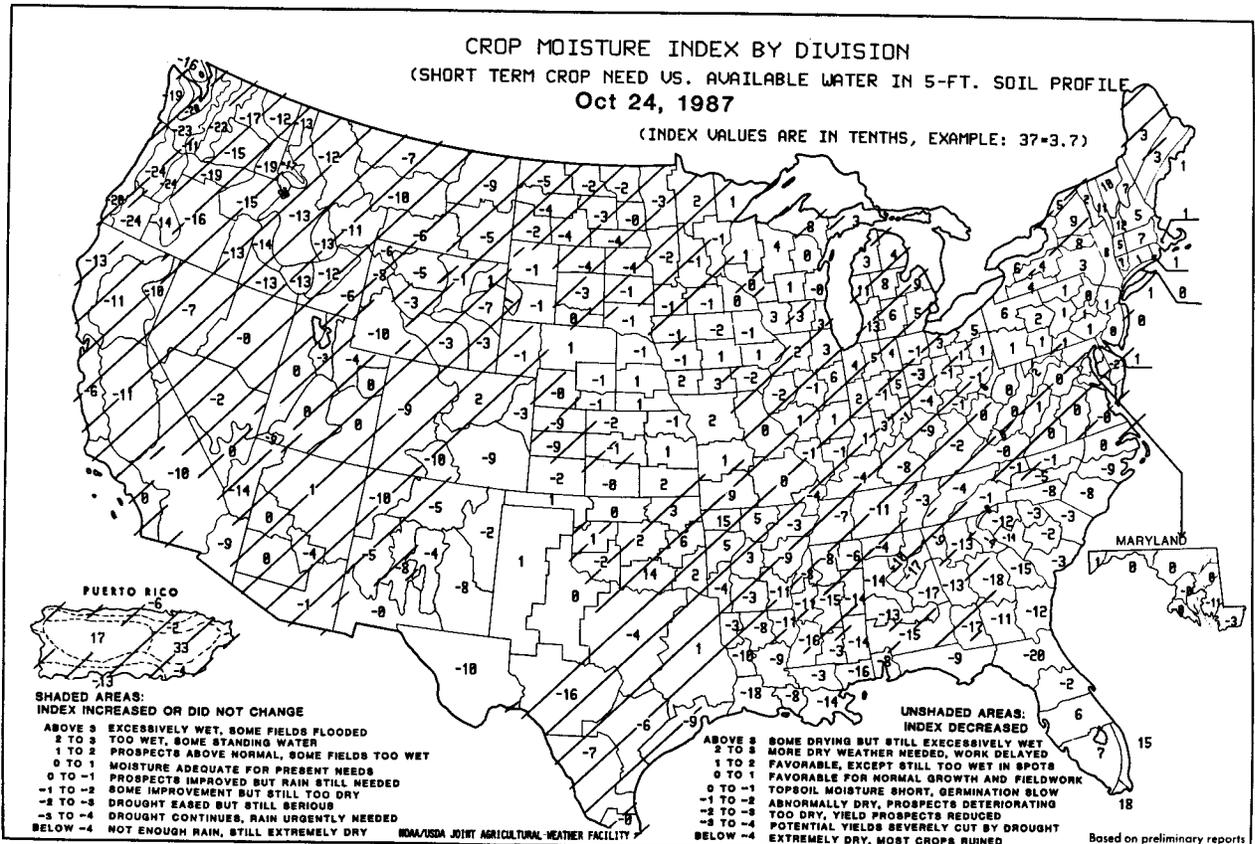
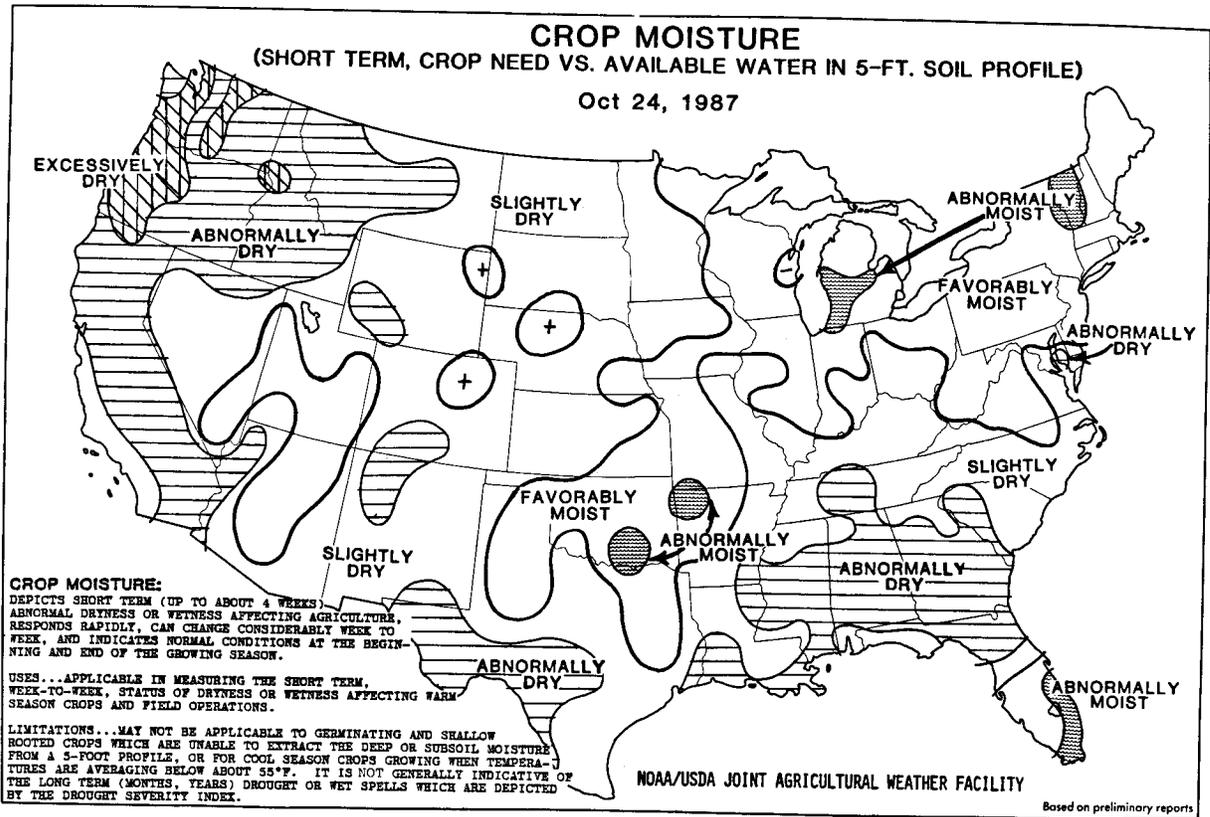
**FRIDAY...** More record-low temperatures for this date occurred in the Southeast, with morning lows below freezing as far south as Macon, Georgia. Light snow again fell from North Dakota to upper Michigan. Rain mixed with snow was scattered across upstate New York and Vermont. Rainshowers spread from California across Nevada and Arizona and into southern Utah and New Mexico.

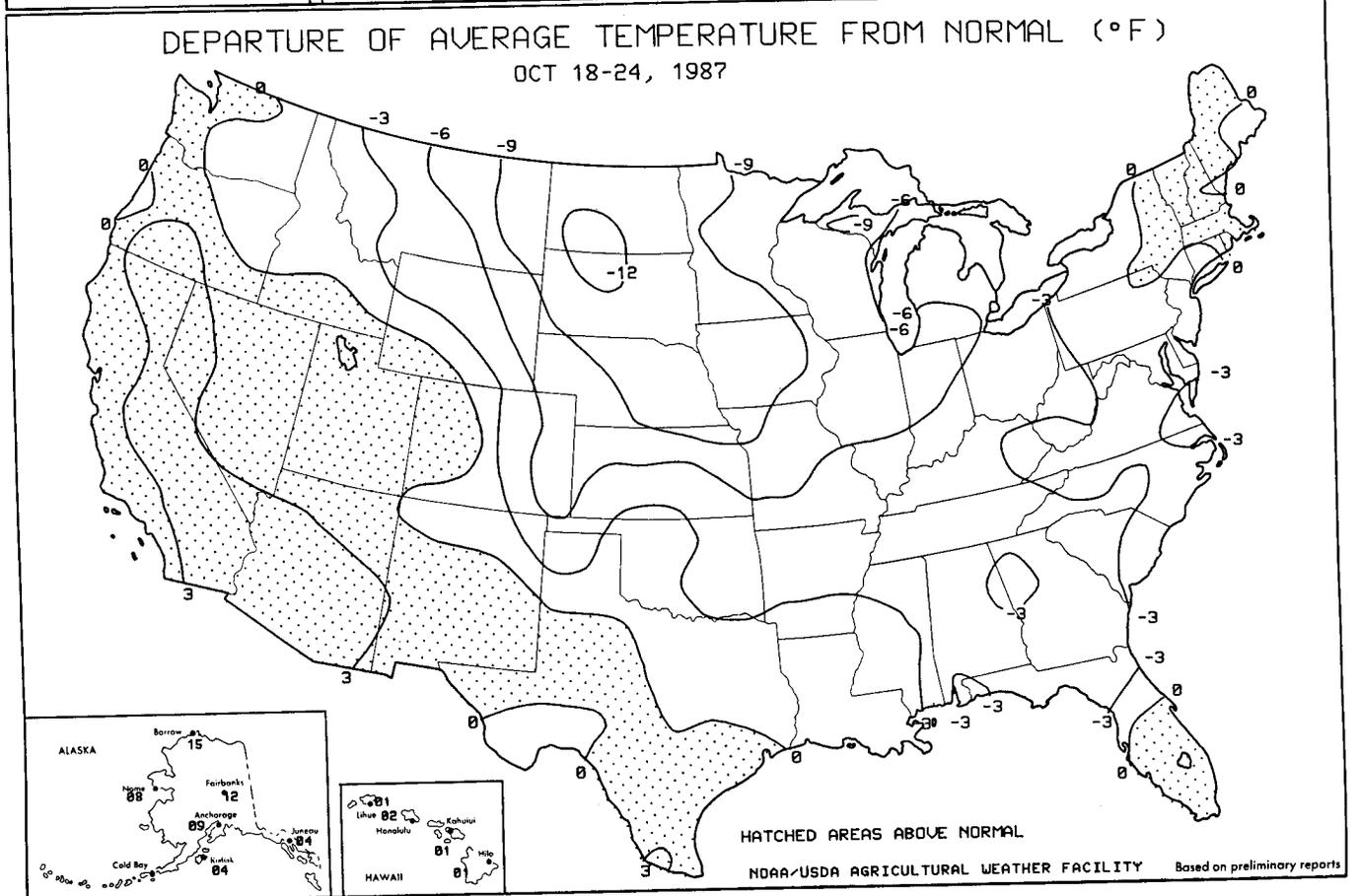
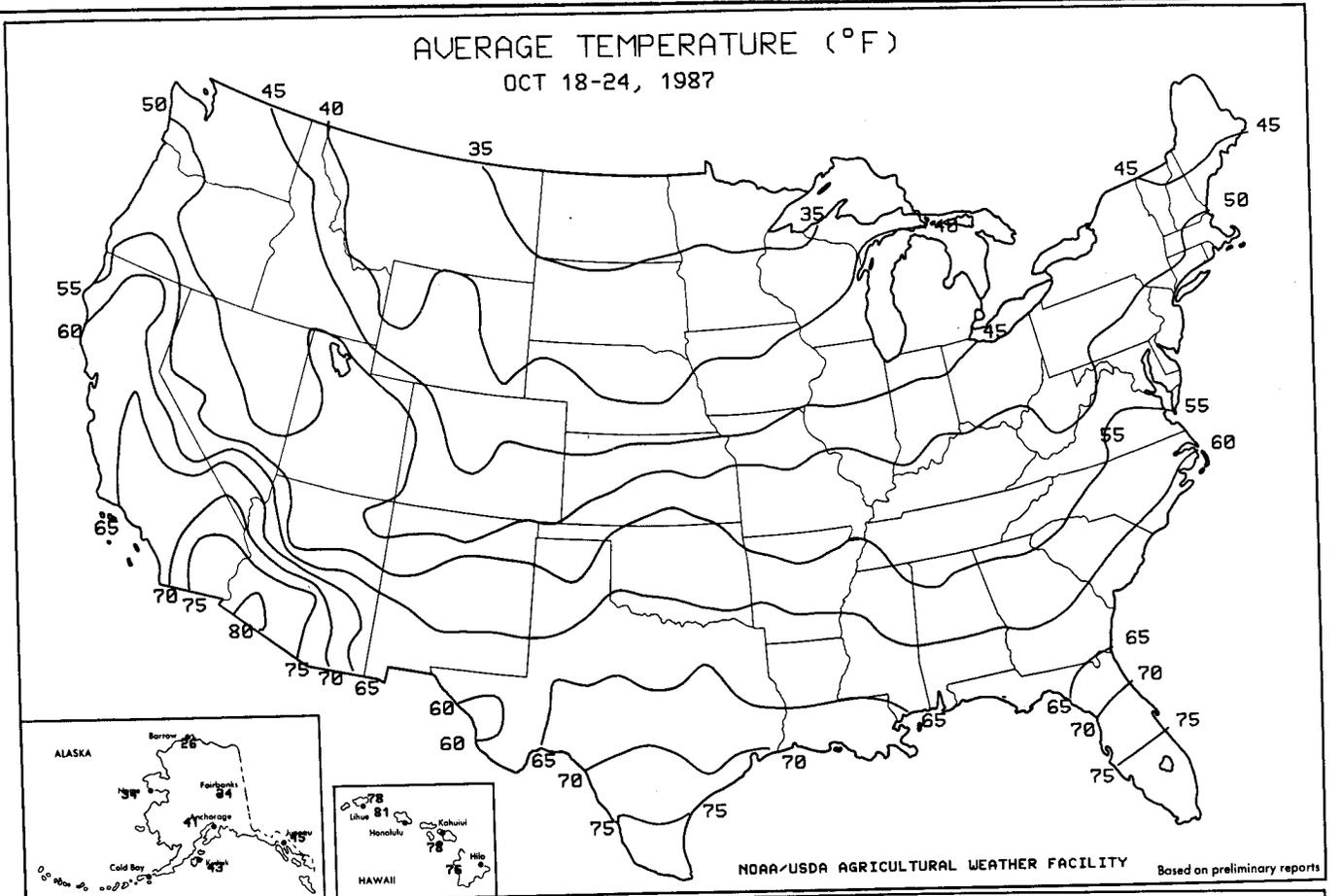
**SATURDAY...** Rain extended along a frontal zone from Lake Erie southwestward through Ohio, Indiana, southern Illinois, southern Missouri, northern Louisiana, and northeast Texas. Some thunderstorms were embedded in the rainclouds over northwestern Louisiana and northeast Texas, resulting in locally heavy downpours. Showers and thunderstorms dotted the desert Southwest, with the greatest activity in Arizona and southern Nevada, where local flooding occurred.

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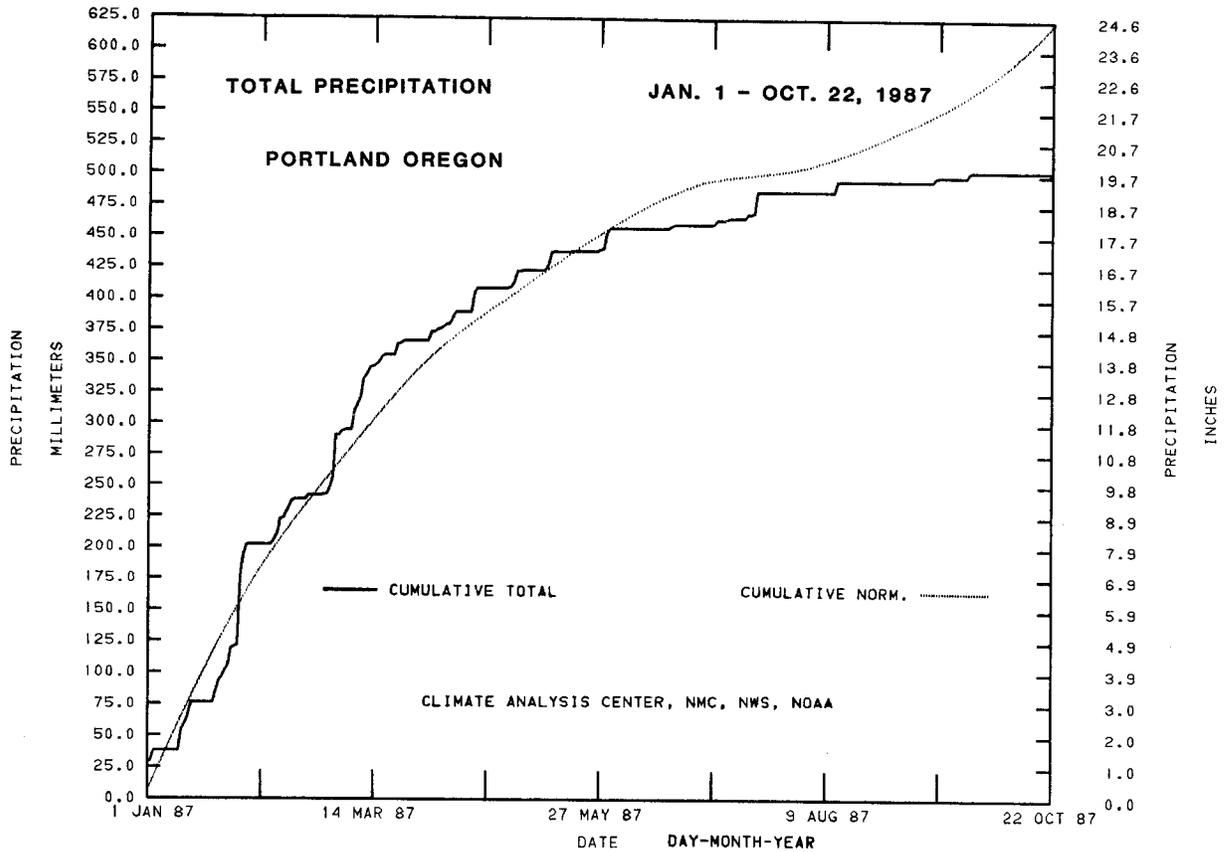






# DROUGHT STRESSES WINTER GRAINS, PASTURES IN PACIFIC NORTHWEST

Figure 1



**PERCENTAGE OF NORMAL PRECIPITATION**  
**JULY 1 - OCT. 22, 1987**

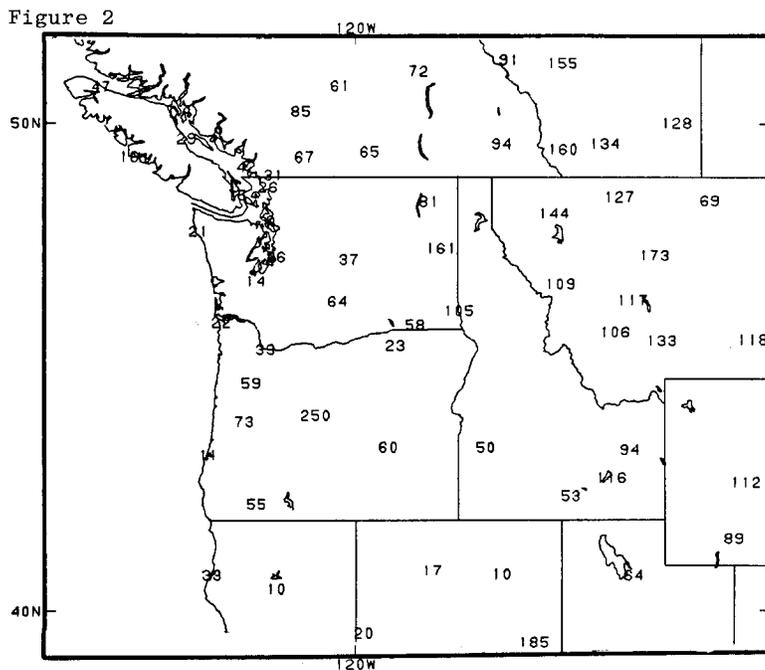


Figure 2

A drought which began in the Columbia River basin in 1986 (see Weekly Weather and Crop Bulletin, June 10, 1986, Vol. 73, No. 23, p. 4) worsened considerably in 1987 (see Weekly Weather and Crop Bulletin, Oct. 20, 1987, Vol. 74, No. 42, p. 4). Summers are normally dry in the Pacific Northwest, but autumn rains usually begin by late September. In 1987, however, the dry weather typical of midsummer has persisted into late October. Figure 1 shows traces of observed and normal cumulative precipitation which are representative, in this situation, of coastal Oregon and Washington. Yakima, Washington as of October 26, 1987, had gone for 100 days without measurable precipitation, the longest dry period since recordkeeping began in 1909. Figure 2 shows percentage of normal precipitation for July 1-October 22 for selected stations. Lack of moisture has delayed planting of winter grains and has stressed those already planted throughout the important production regions of eastern Washington, Oregon, and Idaho. Conditions of pastures and livestock have deteriorated. The dryness has also increased the risk of forest fires.

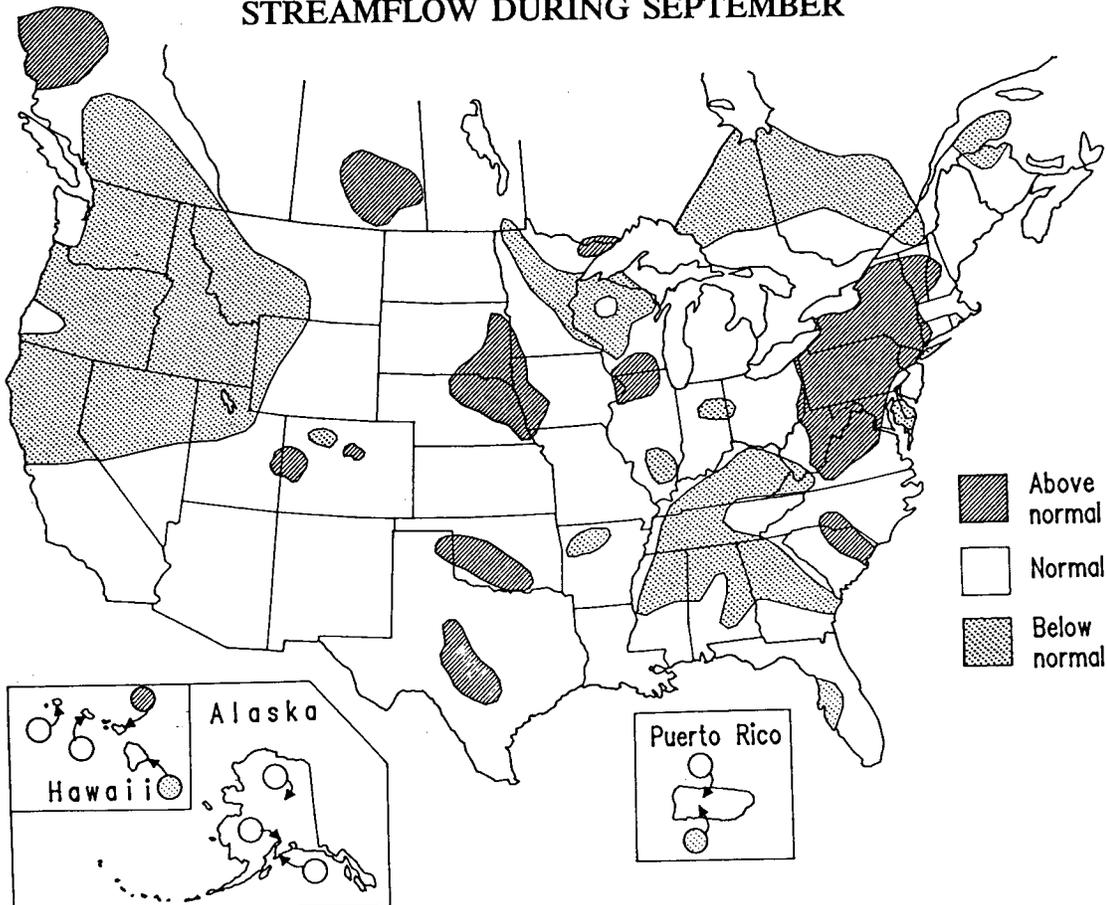
# National Water Conditions

UNITED STATES  
Department of the Interior  
Geological Survey

CANADA  
Department of the Environment  
Water Resources Branch

## SEPTEMBER 1987

### STREAMFLOW DURING SEPTEMBER



Streamflow was in the normal- to above-normal range at 72.2 percent of the 191 reporting index stations in southern Canada, the United States, and Puerto Rico, compared with the 59.7 percent in those ranges for August. This is the lowest percentage of stations with flow in the normal- to above-normal range for September in the last 5 years but the highest percentage of stations in those ranges since April 1987 (76 percent). Total September flow was 6.2 percent above median (the first month of above-median flow since April 1987) but was still the second lowest for September in the last 5 years, about 56,400 cubic feet per second (cfs) and 4.7 percent above that of September 1983, the lowest September during the period.

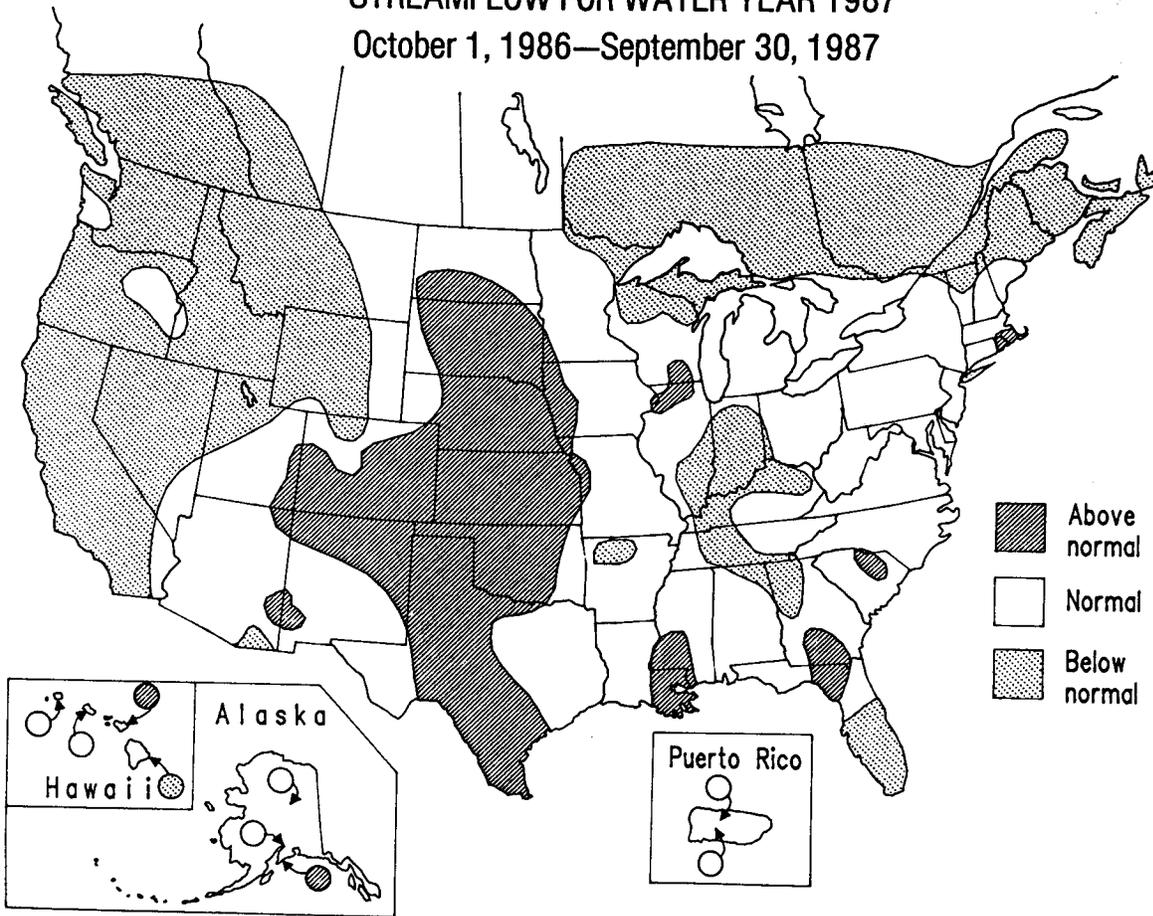
The monthly mean flow of 65,300 cfs (67 percent of median) on the Columbia River at The Dalles, Oregon (drainage area 237,000 square miles), was the lowest in 108 years of record, about 8,900 cfs less than the September 1973 minimum.

Mean September elevations for the Great Lakes (provisional National Ocean Service data) ranged from 0.74 foot (Lake Erie) to 1.63 feet (Lake Ontario) lower than September 1986 elevations.

The level of Utah's Great Salt Lake fell 0.60 foot during September, reaching 4,210.10 feet above National Geodetic Vertical Datum (NGVD) of 1929 on September 30. Lake level has fallen 1.75 feet since the March 30, 1987, seasonal high of 4,211.85 feet above NGVD of 1929, that equaled the record high set July 3-8, 1986. The lake level is 1.20 feet lower than a year ago but 5.25 feet higher than it was in September 1983.

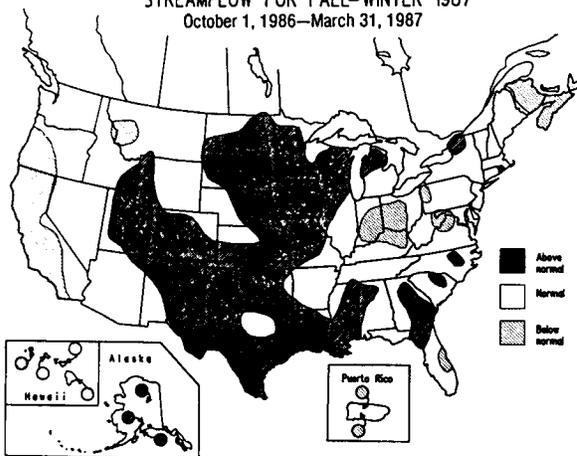
The combined flow of the three largest rivers in the lower 48 States (Mississippi, St. Lawrence, and Columbia) averaged a normal 617,800 cfs during September despite an approximate 4-percent decrease from August to September and was about 3 percent below median. Mean flow of the St. Lawrence River at Cornwall, Ontario decreased by about 4 percent from that for August and was in the normal range after 31 consecutive months in the above-normal range. Mean flow of the the Mississippi River at Vicksburg, Mississippi increased by about 3 percent from that for August and moved into the normal range. Mean flow of the Columbia River at The Dalles, Oregon set a record low for September after decreasing by about 25 percent from that for August and was in the below-normal range for the fourth consecutive month.

### STREAMFLOW FOR WATER YEAR 1987 October 1, 1986—September 30, 1987

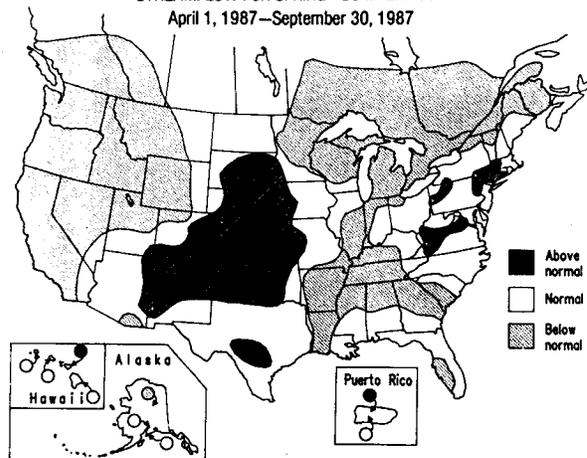


The water year starts and ends during a period of generally low streamflow. Below and above normal indicate the lowest and highest quartile (25 percent), respectively, in the reference period, 1951-80.

### STREAMFLOW FOR FALL-WINTER 1987 October 1, 1986—March 31, 1987



### STREAMFLOW FOR SPRING-SUMMER 1987 April 1, 1987—September 30, 1987





# National Weather Data for Selected Cities

## Weather Data for the Week Ending October 24, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	71	41	79	29	56	-5	T	-6	T	3.7	57	33.4	74	91	31	0	1	0	0
MOBILE	76	50	86	38	63	-4	T	-5	T	3.6	42	58.1	106	81	31	0	0	0	0
MONTGOMERY	77	42	87	30	60	-4	.1	-4	.1	4.0	62	45.9	113	88	24	0	1	1	0
AK ANCHORAGE	45	37	50	34	41	9	1.2	.8	.6	4.6	120	11.9	96	92	60	0	0	6	1
BARROW	29	23	30	20	26	15	.1	0	0	1.5	150	4.9	122	98	79	0	7	3	0
FAIRBANKS	42	26	48	22	34	12	.1	-1	.1	.8	45	5.1	58	90	57	0	7	1	0
JUNEAU	47	42	51	37	45	4	2.5	.7	.7	17.8	143	45.3	109	97	80	0	0	6	3
KODIAK	49	37	53	33	43	4	3.5	1.9	1.2	13.9	119	61.7	129	96	63	0	0	6	2
NOME	37	31	42	23	34	8	.7	.5	.4	4.2	124	10.0	79	92	70	0	5	6	0
AZ PHOENIX	89	67	94	65	78	7	.2	.1	.2	.9	77	5.5	102	53	25	5	0	2	0
PRESCOTT	72	44	77	39	58	4	.7	.4	.4	2.2	88	11.5	74	67	27	0	0	2	0
TUCSON	86	59	91	55	73	4	.1	-1	.1	2.6	127	10.7	115	66	23	1	0	2	0
YUMA	91	68	98	63	79	5	.5	.5	.5	.6	144	1.7	93	57	27	4	0	1	1
AR FORT SMITH	69	47	81	32	58	-3	1.5	.8	.8	3.3	58	29.3	90	94	47	0	1	5	1
LITTLE ROCK	65	49	75	39	57	-4	.9	.3	.7	6.0	94	30.3	76	72	41	0	0	4	1
CA BAKERSFIELD	80	57	87	54	68	2	.1	-1	.1	.1	44	4.2	100	77	37	0	0	1	0
EUREKA	60	50	66	46	55	1	.9	.2	.6	.9	35	18.9	74	95	83	0	0	3	1
FRESNO	79	55	84	50	67	4	.2	-1	.2	.2	51	6.9	93	87	40	0	0	2	0
LOS ANGELES	71	62	76	57	66	1	.5	.4	.5	.6	261	3.6	42	94	69	0	0	1	1
REDDING	81	48	88	41	65	1	.4	-2	.3	.4	16	19.7	71	80	28	0	0	3	0
SACRAMENTO	77	52	87	46	64	2	.9	.7	.9	1.0	120	9.8	85	94	42	0	0	2	1
SAN DIEGO	72	63	75	61	68	1	.3	.2	.2	1.8	484	7.0	105	90	71	0	0	4	0
SAN FRANCISCO	70	54	74	51	62	2	.2	-1	.2	.2	21	8.7	65	91	58	0	0	1	0
CO DENVER	59	30	73	27	45	-5	0	-2	0	1.3	68	16.5	122	75	29	0	6	0	0
GRAND JUNCTION	67	37	69	32	52	-1	.3	.1	.3	.6	44	8.5	132	62	20	0	2	1	0
PUEBLO	64	28	79	22	46	-5	0	-2	0	.3	24	9.4	96	70	25	0	6	0	0
CT BRIDGEPORT	62	44	68	38	53	-1	T	-8	T	3.5	61	26.7	81	88	52	0	0	1	0
HARTFORD	63	37	69	33	50	-1	.3	-4	.3	10.0	151	38.7	110	95	44	0	0	2	0
DC WASHINGTON	67	45	73	39	56	-1	T	-6	T	6.0	110	27.9	87	87	37	0	0	1	0
FL APALACHICOLA	77	51	82	44	64	-4	T	-5	T	5.2	46	41.4	86	90	41	0	0	0	0
DAYTONA BEACH	80	62	82	50	71	-1	T	-1.0	T	7.9	76	39.1	91	93	60	0	0	0	0
JACKSONVILLE	78	51	85	43	65	-4	0	-2	0	7.2	74	38.0	81	98	52	0	0	0	0
KEY WEST	83	74	84	71	79	-1	.9	-2	.9	15.4	150	40.5	122	90	66	0	0	1	1
MIAMI	85	72	89	71	79	2	T	-1.5	T	14.8	107	41.4	80	90	57	0	0	1	0
ORLANDO	84	65	89	59	75	1	0	-6	0	11.7	131	45.5	101	91	50	0	0	0	0
TALLAHASSEE	80	46	86	41	63	-4	T	-6	T	4.0	44	60.4	108	90	29	0	0	0	0
TAMPA	85	62	89	54	73	0	.1	-4	.1	6.2	76	44.2	105	94	47	0	0	1	0
WEST PALM BEACH	84	72	86	69	78	1	0	-1.6	0	16.1	103	47.3	90	89	56	0	0	0	0
GA ATLANTA	73	47	81	37	60	-1	0	-6	0	3.0	60	39.1	97	73	26	0	0	0	0
AUGUSTA	76	40	85	28	58	-4	0	-4	0	2.0	40	35.6	96	96	27	0	2	0	0
MACON	76	40	84	28	58	-5	0	-4	0	1.5	31	32.9	87	88	23	0	1	0	0
SAVANNAH	76	49	83	41	62	-3	0	-4	0	8.2	115	52.8	118	90	39	0	0	0	0
HI HILO	81	71	86	69	76	0	5.9	3.4	3.0	26.0	188	104.0	107	95	71	0	0	5	2
HONOLULU	86	75	89	72	81	2	T	-4	T	1.2	64	4.8	30	79	53	0	0	1	0
KAHULUI	84	73	86	70	78	1	T	-2	T	1.4	168	14.5	112	81	57	0	0	0	0
LIHUE	82	75	83	73	78	1	.9	-2	.4	7.6	136	23.0	73	85	69	0	0	4	0
ID BOISE	65	34	68	26	50	0	0	-2	0	0	0	6.5	75	53	21	0	2	0	0
LEWISTON	64	34	66	31	49	-1	0	-2	0	T	1	8.0	79	58	23	0	2	0	0
POCATELLO	63	28	68	20	46	0	.2	-1	.1	.2	16	8.6	100	74	20	0	5	2	0
IL CHICAGO	53	35	68	29	44	-8	.6	.2	.2	1.8	32	34.1	116	97	53	0	3	4	0
MOLINE	54	32	65	25	43	-8	.4	-1	.2	1.7	28	29.7	91	91	42	0	4	5	0
PEORIA	55	33	70	28	44	-7	.4	-1	.2	2.1	37	20.2	66	96	49	0	3	3	0
QUINCY	58	35	72	28	47	-7	.5	-2	.2	2.4	35	22.7	68	88	40	0	2	4	0
ROCKFORD	51	32	62	25	42	-8	.4	-2	.4	2.9	49	34.0	107	95	55	0	5	2	0
SPRINGFIELD	58	37	70	30	48	-6	.7	-1	.3	2.1	40	21.0	71	94	45	0	1	4	0
IN EVANSVILLE	64	37	70	24	50	-5	.2	-4	.1	3.0	66	25.2	74	87	34	0	2	3	0
FORT WAYNE	54	33	64	27	44	-7	.4	-2	.2	2.5	54	26.4	91	98	59	0	4	3	0
INDIANAPOLIS	59	34	67	25	47	-6	.2	-3	.2	2.1	44	25.4	79	92	43	0	3	4	0
SOUTH BEND	51	35	66	30	43	-8	1.0	.3	.3	6.6	116	28.2	89	97	58	0	1	5	0
IA DES MOINES	53	33	60	27	43	-9	T	-4	T	1.7	36	30.4	110	89	37	0	4	1	0
SIOUX CITY	51	29	57	21	40	-10	T	-4	T	1.6	42	23.1	99	84	38	0	5	1	0
WATERLOO	51	29	60	22	40	-9	T	-5	T	2.3	44	27.4	93	91	39	0	6	0	0
KS CONCORDIA	57	34	65	23	45	-9	0	-4	0	2.1	47	31.3	125	83	32	0	3	0	0
DODGE CITY	62	39	67	30	50	-5	0	-3	0	2.0	70	22.5	119	90	38	0	2	0	0
GOODLAND	60	29	75	24	45	-6	0	-2	0	1.5	71	18.3	122	75	28	0	5	0	0
TOPEKA	59	35	73	24	47	-8	T	-6	T	2.7	47	32.3	108	88	36	0	3	1	0
WICHITA	64	42	74	34	53	-4	T	-5	T	2.9	53	34.7	135	87	43	0	0	1	0
KY BOWLING GREEN	64	36	71	23	50	-6	T	-6	T	3.5	66	32.7	82	92	37	0	2	1	0
LEXINGTON	63	38	73	26	50	-4	.2	-3	.1	1.3	26	27.7	73	85	35	0	2	2	0
LOUISVILLE	64	40	73	25	52	-3	T	-6	T	1.4	27	25.3	71	82	32	0	2	1	0
LA ALEXANDRIA	76	50	84	33	63	-3	.2	-5	.2	1.7	32	40.1	94	94	42	0	0	1	0
BATON ROUGE	79	53	86	41	66	0	T	-5	T	.8	13	52.8	114	89	34	0	0	1	0
LAKE CHARLES	79	54	84	40	67	-1	.2	-6	.2	4.0	47	48.2	110	91	44	0	0	1	0
NEW ORLEANS	77	55	84	48	66	-2	T	-5	T	1.4	17	54.1	109	87	38	0	0	0	0

Based on 1951-80 normals.

Weather Data for the Week Ending, October 24, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
ME SHREVEPORT	74	53	85	40	63	-2	3.2	2.6	2.3	4.1	78	32.9	93	88	40	0	0	2	2	
ME CARIBOU	50	35	58	24	43	1	.2	-5	.1	5.6	94	22.9	78	98	66	0	2	2	0	
MD PORTLAND	59	34	69	26	47	0	.1	-8	.1	6.5	106	34.3	103	95	53	0	3	1	0	
MD BALTIMORE	65	39	69	33	52	-3	T	-7	T	8.1	139	32.4	94	96	42	0	0	1	0	
MA SALTISBURY	68	39	73	33	54	-2	T	-8	T	5.2	75	30.3	80	96	37	0	0	0	0	
MA BOSTON	65	47	72	41	56	3	.1	-7	.1	9.5	161	39.5	116	92	47	0	0	1	0	
MA CHATHAM	59	47	66	39	53	1	.1	-7	.1	10.2	155	42.2	116	90	65	0	0	1	0	
MI ALPENA	49	31	63	26	40	-6	.9	.5	.4	5.6	118	20.6	85	100	63	0	5	4	0	
MI DETROIT	51	37	62	32	44	-6	.7	.2	.4	4.1	106	29.9	96	100	79	0	2	4	0	
MI FLINT	48	35	63	31	42	-7	1.2	.7	.5	7.2	183	23.1	96	98	66	0	4	5	1	
MI GRAND RAPIDS	50	34	64	28	42	-7	1.6	1.0	.6	6.7	126	27.2	99	98	66	0	0	5	0	
MI HOUGHTON LAKE	47	37	60	33	42	-3	6.6	.1	.3	5.8	127	20.1	86	93	65	0	0	5	0	
MI LANSING	49	34	63	29	42	-7	1.1	.7	.3	6.2	140	23.7	97	96	71	0	4	5	0	
MI MARQUETTE	43	28	52	24	35	-11	.9	.3	.4	6.8	115	28.5	111	97	59	0	7	5	0	
MI MUSKOGON	50	38	58	33	44	-5	1.1	.5	.4	6.1	121	26.2	104	96	60	0	0	4	1	
MI SAULT ST. MARIE	48	31	54	26	39	-4	.6	0	.5	5.9	96	23.4	87	95	55	0	6	3	1	
MN ALEXANDRIA	42	29	49	21	36	-9	.2	-.2	-.2	3.1	82	15.5	70	96	54	0	6	2	0	
MN DULUTH	40	27	49	24	34	-9	.2	-.3	-.1	3.9	77	17.8	68	93	53	0	7	3	0	
MN INT'L FALLS	39	27	46	20	33	-8	.1	-.2	0	1.9	41	18.3	85	93	61	0	7	2	0	
MN MINNEAPOLIS	45	32	53	28	38	-9	.1	-.3	0	2.0	50	29.0	123	89	54	0	4	3	0	
MS ROCHESTER	44	29	52	25	37	-10	.1	-.4	.1	3.6	68	23.7	93	91	52	0	5	1	0	
MS GREENWOOD	73	46	83	35	60	-2	.3	-.3	.2	1.4	25	31.9	75	83	39	0	0	2	0	
MS JACKSON	76	47	87	31	62	-1	T	-.5	T	1.6	29	39.3	94	91	32	0	1	1	0	
MS MERIDIAN	76	43	85	29	59	-3	T	-.6	T	4.4	79	46.7	107	96	32	0	1	0	0	
MO CAPE GIRARDEAU	64	41	72	31	53	-3	T	-.5	T	4.0	70	29.4	80	85	35	0	1	3	0	
MO COLUMBIA	59	37	73	28	48	-7	.7	0	.3	4.3	67	24.4	77	89	43	0	2	2	0	
MO KANSAS CITY	58	34	72	21	46	-11	T	-.7	T	4.5	64	29.5	91	91	37	0	2	4	0	
MO SAINT LOUIS	61	41	72	31	51	-5	.6	.1	.3	3.3	74	26.8	94	83	43	0	1	4	2	
MO SPRINGFIELD	60	40	74	25	50	-6	1.8	1.2	.8	6.9	101	38.5	115	90	50	0	2	4	0	
MT BILLINGS	54	30	64	24	42	-6	0	-.3	0	.7	31	11.8	90	72	32	0	4	0	0	
MT GLASGOW	47	23	56	12	35	-9	T	-.1	T	.7	52	9.2	91	78	36	0	7	1	0	
MT GREAT FALLS	54	28	65	20	41	-5	T	-.2	T	1.4	84	13.5	101	74	26	0	6	0	0	
MT HAVRE	52	21	64	15	37	-8	T	-.1	T	.8	51	7.8	74	79	34	0	7	0	0	
MT HELENA	58	26	69	20	42	-1	0	-.1	0	.9	63	9.5	94	72	25	0	6	0	0	
MT KALISPELL	56	19	60	16	38	-3	T	-.2	T	.6	34	13.4	106	89	30	0	7	0	0	
MT MILES CITY	49	23	59	13	36	-11	T	-.2	T	.8	46	12.0	94	78	33	0	7	0	0	
MT MISSOULA	59	21	64	19	40	-3	0	-.2	0	.1	7	8.8	81	82	23	0	7	0	0	
NE GRAND ISLAND	54	26	59	17	40	-11	T	-.2	T	1.3	39	23.2	108	85	31	0	6	1	0	
NE LINCOLN	54	29	61	20	42	-10	T	-.3	T	3.6	84	29.3	117	88	33	0	5	0	0	
NE NORFOLK	51	25	58	15	38	-12	0	-.3	0	3.3	103	25.5	116	84	34	0	7	0	0	
NE NORTH PLATTE	55	25	64	16	40	-8	.1	-.1	.1	1.4	59	16.9	93	88	30	0	6	1	0	
NE OMAHA	53	33	59	24	43	-10	T	-.4	T	2.3	44	29.8	107	79	47	0	4	0	0	
NE SCOTTSBLUFF	57	24	72	20	41	-7	T	-.2	T	1.6	96	21.8	162	86	29	0	7	0	0	
NE VALENTINE	51	21	60	12	36	-11	T	-.2	T	.9	40	18.8	117	81	30	0	7	0	0	
NV ELY	64	28	69	19	46	2	.2	.1	.2	1.0	87	9.7	129	92	30	0	5	1	0	
NV LAS VEGAS	81	56	86	52	68	3	.2	.2	.2	.2	47	3.7	114	50	23	0	0	2	0	
NV RENO	71	35	77	30	53	5	.2	.2	.2	.4	79	6.4	121	75	21	0	3	2	0	
NV WINNEMUCCA	71	28	76	20	50	3	T	-.1	T	.1	6.9	117	56	18	0	6	1	0	0	
NH CONCORD	60	31	68	24	46	-1	.4	-.3	.4	6.8	125	31.5	109	98	48	0	5	1	0	
NJ ATLANTIC CITY	66	38	74	32	52	-3	T	-.7	T	4.8	93	35.7	106	96	44	0	1	2	0	
NM ALBUQUERQUE	70	44	74	40	57	1	T	-.2	T	.4	26	7.3	107	77	28	0	0	2	0	
NM CLOVIS	70	43	78	35	56	-1	T	-.4	T	3.8	113	22.6	144	85	32	0	0	2	0	
NM ROSWELL	73	46	80	41	59	2	T	-.2	T	1.1	41	14.2	147	96	34	0	0	2	0	
NY ALBANY	60	39	65	31	49	1	.5	-.2	.3	10.3	187	32.3	112	97	48	0	1	2	0	
NY BINGHAMTON	56	40	65	32	48	1	.3	-.4	.2	5.8	103	29.3	97	94	52	0	1	3	0	
NY BUFFALO	57	38	66	34	48	-2	1.0	.4	.4	7.8	139	34.8	117	94	57	0	0	4	0	
NY NEW YORK	63	49	68	43	56	0	.1	-.7	.1	6.3	105	37.9	110	89	46	0	2	4	0	
NY ROCHESTER	57	37	67	32	47	-3	.3	-.3	.2	5.9	128	28.4	111	99	57	0	0	5	0	
NY SYRACUSE	58	39	66	33	48	-1	.1	0	.2	8.1	143	27.7	88	95	54	0	0	5	0	
NC ASHEVILLE	66	33	76	24	49	-5	.7	-.6	.1	6.9	111	37.6	102	92	30	0	4	1	0	
NC CHARLOTTE	70	43	78	32	57	-2	0	-.6	0	6.8	120	31.1	86	85	27	0	1	0	0	
NC GREENSBORO	69	38	77	29	54	-3	T	-.7	T	7.4	120	40.2	113	88	28	0	2	1	0	
NC HATTERAS	69	56	76	50	63	-1	.2	-.9	.2	8.4	88	53.3	118	92	59	0	0	1	0	
NC NEW BERN	74	45	79	35	60	-2	0	-.7	0	2.4	28	44.0	96	98	38	0	0	0	0	
NC RALEIGH	70	40	79	29	55	-3	0	-.6	0	6.3	117	36.8	105	95	30	0	2	0	0	
NC WILMINGTON	75	48	79	37	61	-2	0	-.6	0	6.4	79	43.7	95	96	40	0	0	0	0	
ND BISMARCK	43	21	52	8	32	-12	-.1	-.1	.1	4	19	17.0	121	92	50	0	7	2	0	
ND FARGO	44	27	53	17	36	-9	.1	-.2	.1	1.9	66	13.9	78	91	51	0	7	3	0	
ND GRAND FORKS	40	24	51	14	32	-11	-.1	-.1	.1	2.0	68	18.0	108	85	45	0	7	2	0	
ND WILLISTON	43	21	53	10	32	-12	-.1	-.1	0	.8	39	11.4	92	92	50	0	1	2	0	
OH AKRON-CANTON	55	37	64	29	46	-4	.2	-.3	.2	3.8	82	25.6	85	86	35	0	2	2	0	
OH CINCINNATI	62	35	71	23	48	-5	.1	-.4	.1	2.3	47	27.0	81	96	51	0	1	3	0	
OH CLEVELAND	57	37	68	30	47	-5	.6	-.1	.4	5.3	110	33.8	116	95	51	0	2	1	0	
OH COLUMBUS	61	35	69	27	48	-4	.2	-.3	.2	2.8	68	22.0	71	89	40	0	2	1	0	

Based on 1951-80 normals.

Weather Data for the Week Ending October 24, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	59	36	69	28	47	-5	.2	-.3	.2	1.2	32	19.7	68	83	38	0	2	1	0
TOLEDO	53	33	62	28	43	-7	.6	-.2	.4	3.9	97	23.7	91	99	63	0	4	3	0
YOUNGSTOWN	56	34	64	30	45	-4	.4	-.2	.2	6.0	117	33.8	109	98	52	0	2	3	0
OK OKLAHOMA CITY	68	49	79	38	58	-2	.3	-.2	.3	4.9	87	37.4	136	91	51	0	0	2	0
TULSA	66	47	77	34	57	-4	1.2	.5	.9	4.8	67	35.0	104	85	49	0	0	3	1
OR ASTORIA	62	41	71	33	52	0	T	-1.5	T	1.0	12	33.6	73	95	56	0	0	0	0
BURNS	68	25	71	20	46	1	0	-.2	0	T	2	7.1	87	**	**	0	7	0	0
MEDFORD	78	40	83	35	59	7	0	-.4	0	0	0	9.4	73	77	24	0	0	0	0
PENDLETON	65	34	71	31	49	-1	0	-.2	0	T	2	5.7	65	60	26	0	3	0	0
FORTLAND	68	41	74	37	54	1	0	-.8	0	.3	8	19.8	80	97	40	0	0	0	0
SALEM	69	35	79	32	52	1	0	-.8	0	.1	4	22.0	83	90	35	0	1	0	0
PA ALLENTOWN	62	39	67	32	50	-1	.2	-.5	.1	10.2	161	39.5	110	94	42	0	1	3	0
ERIE	57	40	66	33	48	-2	1.0	-.2	.6	9.9	147	37.8	118	93	51	0	0	3	1
HARRISBURG	62	40	69	33	51	-2	.2	-.4	.1	9.3	162	30.9	96	95	41	0	0	2	0
PHILADELPHIA	65	43	70	37	54	-1	T	-.6	T	4.0	71	28.2	84	91	38	0	0	1	0
PITTSBURGH	59	37	68	29	48	-3	.1	-.5	0	4.7	101	34.4	112	92	44	0	1	2	0
SCRANTON	60	39	67	36	50	0	.2	-.4	.2	9.6	177	35.0	122	94	39	0	0	4	0
RI PROVIDENCE	63	41	71	34	52	1	.1	-.8	.1	8.7	137	34.1	96	94	51	0	0	1	0
SC CHARLESTON	76	51	81	42	63	-1	0	-.6	0	14.6	200	50.4	111	89	41	0	0	0	0
COLUMBIA	75	38	85	27	57	-5	0	-.5	0	5.3	84	47.2	111	94	30	0	2	0	0
FLORENCE	76	44	86	34	60	-2	0	-.5	0	4.2	69	31.6	82	95	30	0	0	0	0
GREENVILLE	71	38	79	26	55	-5	T	-.7	T	3.2	44	36.9	86	92	29	0	2	0	0
SD ABERDEEN	46	23	53	9	35	-11	T	-.2	T	1.6	68	11.4	70	89	42	0	7	1	0
HURON	48	25	54	17	36	-10	T	-.3	T	1.8	73	17.4	102	89	42	0	7	1	0
RAPID CITY	51	24	68	19	38	-10	.1	-.1	.1	1.0	58	11.8	79	87	38	0	5	2	0
SIoux FALLS	48	25	54	18	37	-11	T	-.3	T	2.2	53	15.4	70	88	39	0	7	2	0
TN CHATTANOOGA	68	39	78	29	53	-5	.9	-.3	.9	4.9	75	40.7	96	99	34	0	1	1	1
KNOXVILLE	68	35	79	25	51	-6	.2	-.4	.2	2.2	44	29.6	78	95	33	0	3	1	0
MEMPHIS	68	47	78	34	57	-4	.2	-.3	.2	1.2	22	28.6	69	79	33	0	0	2	0
NASHVILLE	67	38	73	26	52	-6	.1	-.4	.1	2.1	37	21.1	53	83	33	0	2	2	0
TX ABILENE	74	55	83	42	65	1	.2	-.3	.1	2.4	48	21.4	104	86	46	0	0	3	0
AMARILLO	67	40	75	31	54	-3	0	-.3	0	4.5	158	19.7	112	94	42	0	1	0	0
AUSTIN	76	59	87	51	68	0	.3	-.4	.2	5.3	85	32.3	122	93	52	0	0	2	0
BEAUMONT	78	58	84	45	68	0	.2	-.6	.1	11.6	141	52.2	116	95	53	0	0	3	0
BROWNSVILLE	82	68	87	65	75	1	2.6	1.9	1.4	7.4	91	22.8	103	96	62	0	0	3	2
CORPUS CHRISTI	82	65	87	60	73	1	1.4	1.0	1.3	2.4	27	28.0	100	95	57	0	0	3	1
DEL RIO	75	61	84	56	68	-1	.1	-.4	.1	.3	5	20.5	132	84	50	0	0	2	0
EL PASO	76	50	80	47	63	1	T	-.1	T	1.2	63	7.9	116	91	39	0	0	1	0
FORT WORTH	73	55	87	40	64	-2	.1	-.5	.1	1.5	26	20.2	76	92	49	0	0	3	0
GALVESTON	77	67	81	61	72	1	.1	-.4	0	4.5	55	30.5	92	90	56	0	0	2	0
HOUSTON	80	58	87	45	69	0	.2	-.6	.2	3.6	44	32.8	86	99	50	0	0	2	0
LUBBOCK	73	48	80	39	60	1	.1	-.3	.1	3.4	98	17.8	110	95	45	0	0	1	0
MIDLAND	76	53	83	48	64	2	.2	-.1	.2	1.8	57	13.8	113	91	40	0	0	1	0
SAN ANGELO	76	55	85	44	65	1	.2	-.2	.1	4.2	89	29.0	181	93	47	0	0	2	0
SAN ANTONIO	79	62	86	53	70	2	.4	-.2	.3	2.7	45	33.2	135	90	52	0	0	2	0
VICTORIA	81	60	89	52	70	0	.3	-.3	.3	3.5	39	35.3	111	98	55	0	0	3	0
WACO	75	55	90	41	65	-2	1.2	.5	1.0	6.9	123	27.3	105	95	51	1	0	3	1
WICHITA FALLS	74	51	85	38	62	-1	.1	-.4	.1	2.3	42	28.2	120	87	45	0	0	2	0
UT BLANDING	64	40	68	35	52	2	.4	-.1	.4	2.0	99	15.5	168	82	46	0	0	2	0
CEDAR CITY	67	37	71	33	52	2	.7	-.5	.4	2.2	150	9.7	114	85	31	0	0	2	0
SALT LAKE CITY	65	40	68	35	52	2	.1	-.2	.1	1.0	56	10.0	81	75	30	0	0	1	0
VT BURLINGTON	58	40	64	29	49	3	.5	-.1	.5	5.3	99	22.5	81	90	51	0	2	4	0
VA NORFOLK	68	42	77	34	55	-5	T	-.7	T	7.8	112	37.9	99	97	42	0	0	0	0
RICHMOND	70	39	77	30	54	-2	T	-.8	T	4.9	76	33.5	92	91	32	0	1	1	0
ROANOKE	68	38	75	26	53	-2	0	-.8	0	11.7	200	44.0	134	90	34	0	2	0	0
WA COLVILLE	59	27	60	24	42	-2	0	-.3	0	.6	34	13.1	104	73	45	0	6	0	0
QUILLAYUTE	63	37	71	29	50	1	T	-2.5	T	2.0	14	56.8	78	98	51	0	3	0	0
SEATTLE-TACOMA	62	43	69	40	52	1	T	-.8	T	.9	21	20.3	79	97	54	0	0	0	0
SPOKANE	61	29	63	24	45	-1	0	-.3	0	T	2	11.3	97	76	27	0	6	0	0
YAKIMA	64	26	66	21	45	-3	0	-.1	0	0	0	4.6	84	88	28	0	7	0	0
WV BECKLEY	63	37	72	22	50	0	.5	-.1	.5	3.9	69	32.4	91	78	33	0	2	1	0
CHARLESTON	64	38	73	26	51	-3	.2	-.4	.2	4.5	90	30.1	85	86	36	0	2	1	0
HUNTINGTON	64	36	73	23	51	-4	.2	-.4	.2	2.6	54	26.1	76	84	36	0	2	1	0
PARKERSBURG	62	37	71	28	49	-4	.1	-.5	.1	3.2	68	20.9	65	87	39	0	2	1	0
WI GREEN BAY	49	32	58	27	40	-6	.2	-.2	.1	2.9	61	17.7	73	98	56	0	5	4	0
LACROSSE	49	34	57	29	41	-8	.1	-.3	.1	2.3	46	28.7	107	88	43	0	3	1	0
MADISON	50	30	59	25	40	-8	.4	-.1	.3	4.6	96	25.8	96	94	53	0	6	3	0
MILWAUKEE	52	36	62	30	44	-5	.4	-.1	.2	2.9	63	30.7	117	97	60	0	2	3	0
WAUSAU	43	31	52	29	37	-8	.2	-.2	.2	4.1	71	20.6	73	95	60	0	6	2	0
WY CASPER	56	24	68	21	40	-5	.3	-.1	.3	1.1	76	11.7	118	87	33	0	7	2	0
CHEYENNE	55	27	67	20	41	-5	T	-.1	T	1.1	67	13.8	113	73	29	0	7	1	0
LANDER	57	29	67	22	43	-2	0	-.3	0	1.2	66	13.2	115	71	27	0	5	0	0
SHERIDAN	54	26	68	21	40	-5	T	-.3	T	2.1	99	13.1	99	87	35	0	6	0	0
PR SAN JUAN	90	76	92	74	83	2	.4	-.8	.2	3.5	34	45.5	107	96	81	4	0	3	0

Based on 1951-80 normals.

Heating Degree Days Summary

CLIMATE ANALYSIS CENTER-NHC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 10-24-1987
ACCUMULATIONS ARE FROM JULY 1
\*\* = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL, WEEK TOTAL, WEEK DEV, WEEK DEV FROM NORM L YR, CUM TOTAL, CUM DEV FROM NORM L YR, CUM DEV FROM NORM L YR, CUM DEV FROM NORM L YR, CUM DEV FROM NORM L YR. Rows list various cities and their corresponding heating degree day data.

## National Agricultural Summary

October 19 to 25, 1987

**HIGHLIGHTS:** Dry weather continued pushing row crop harvest considerably ahead of normal. Rain and wetness caused minor delays from Texas through the Delta and into the Corn Belt. Dryness and cool temperatures hampered winter wheat seeding germination, and growth in most areas of the Nation. Soil moisture was short except in a few Corn Belt States and in New England. Fieldwork averaged 5 to 6 days in most areas of the Nation.

Winter wheat seedings climbed 4 percentage points above the previous week to 91 percent (%) completion. This compares with 80% planted normally. Emergence was 15 points ahead of normal. Central Great Plains growers were concerned about the lack of growth before winter. Corn harvest reached 86% completion, 36 points ahead of normal. Harvest neared completion in most Corn Belt States. Eighty-four percent of the soybeans were combined, compared with the 55% 5-year average. Cotton was 51% harvested, 12 points above the 39% average. Slow harvesting progress in New Mexico, Oklahoma, and Texas limited gains to 5 points. Sorghum was 75% harvested, compared with 58% in 1986 and 60% average. Livestock was mostly good.

**SMALL GRAINS:** In the 20 major producing States, winter wheat was 91% seeded, 10 points ahead of 1986 and 11 points above average. Seeding advanced 4 points ahead of the previous week. Dry weather continued hampering seeding in the Southeast, Delta, Corn Belt, central Great Plains, and the Pacific Northwest. Seeding neared completion in the central Great Plains and Corn Belt. Emergence was 79% complete, compared with 69% in 1986 and the 64% average. Winter wheat was mostly fair to good, but dry conditions hampered growth in most areas. In Arkansas, rain helped germination but cool weather suppressed growth. Small grain planting was slowed greatly by the lack of moisture in Georgia. Missouri's wheat need rain, especially in eastern counties. Inadequate moisture continued plaguing wheat in Nebraska. Oklahoma's wheat seeding was about 3 weeks ahead of schedule. Late-planted wheat needed rain to stimulate growth. Oregon's winter wheat seeding trailed 12 points behind normal because of inadequate moisture. Kansas producers were concerned about the lack of moisture for wheat emergence and stand development before winter. Wheat streak mosaic and leaf rust were prevalent in the State.

**CORN:** Corn harvest reached 86% completion, 40 points above 1986 and 36 points above the 50% average. Harvest increased by 10 points or more from the previous week in Iowa, Kansas, Michigan, Minnesota, Nebraska, Ohio, Pennsylvania, South Dakota, and Wisconsin. Colorado's corn harvest trailed 9 points behind normal as producers allow the crop to dry prior to cutting. Rain slowed harvest a little in portions of the Corn Belt and Texas. Harvest was nearing completion in Georgia, Illinois, Kansas, Missouri, Iowa, and Texas.

**SOYBEANS:** Soybean harvest inched 7 points closer to completion. Eighty-four percent of the acreage was harvested, 27 points greater than in 1986 and 29 points above the average. Harvest neared completion in most Corn Belt States but was slowed a little by rain. Most of the acreage left to be harvested remains in the central Great Plains, Delta, and Southeast. Dry conditions caused soybeans to mature quickly in Georgia.

**COTTON:** Cooler temperatures slowed cotton development in Texas, but harvest progressed as

some bolls opened rapidly. Harvest-aid chemicals were applied in the Plains, and general harvest should not be far away. Cotton harvest progressed normally in Oklahoma, but bolls were opening slower than normal. California cotton harvest reached the halfway mark. Growth regulator and defoliant applications were still active. Rain delayed harvest in central, western, and southeastern Arizona. Cotton harvest was nearing end in the Delta. In the 14 major producing States, cotton harvest was 51% finished, 12 points ahead of normal. The slow harvest pace in Texas and Oklahoma limited the weekly gain to 5 points.

**SORGHUM:** Sorghum was 75% harvested, compared with 60% normally. Harvest was near completion except in Kansas, Nebraska, Oklahoma, and Texas. Wetness restricted harvest gains to 5 and 3 points in Oklahoma and Texas, respectively. In Oklahoma some dryland sorghum in the Panhandle will be grazed or destroyed.

**OTHER CROPS:** Second crop rice harvest was underway along the coast in Texas. California rice harvest reached 90% completion, 10 points ahead of normal.

Kentucky's burley stripping was 16% finished, just slightly ahead of normal. Moisture was needed to allow tobacco to come into case and improve quality and leaf color. Burley tobacco was 35% stripped in Tennessee, compared with 30% last year and average.

Peanut harvest was nearing completion in Alabama and Georgia. Hard soils caused some digging problems in Georgia. Peanut harvest remained behind normal in the other southeast States but by no more than 5 points. Texas harvest trailed 14 points behind normal at 28% completion. Frost damaged some peanuts dug awaiting to be combined in Florida.

**FRUIT AND NUTS:** Fresh citrus fruit harvest increased slowly in Florida. Early fruit showed color, but maturity was lagging for juice utilization. Citrus trees were excellent, but rain was needed. Texas grapefruit and orange harvests were active. Arizona citrus groves were good. Navel oranges were harvested, but packing was limited. Lemon and grapefruit harvests advanced in western areas, and lemon packing was active in the central valley. California apple and table grape harvests were nearing end. Navel orange harvest gained momentum with large sizes and poor color. Almond, walnut, and valencia orange harvests were nearly complete. Pruning activities were underway.

**VEGETABLES:** Irrigation was active in Florida's vegetable producing areas. Winter vegetable planting progressed well. Fall crop harvest gained momentum with largest volume from sweet corn, cucumbers, squash, tomatoes, eggplant, and radishes. Fall and winter vegetables needed rain in east Texas. Vegetable harvest consisted mostly of cucumbers and mixed greens in the Rio Grande Valley and carrots, peppers, and pumpkins in the High Plains. Lettuce, cauliflower, broccoli, and celery progressed well in Arizona. Some lettuce fields were virus-infected in California. Broccoli harvest progressed normally throughout the State. Celery and lettuce supplies were fairly heavy in some areas.

**PASTURES AND LIVESTOCK:** Pastures continued deteriorating in most areas. Supplemental feeding increased in most areas. Livestock was mostly good. The dry weather was causing respiratory problems in some areas.

**Crop Progress**

FOR WEEK ENDING OCTOBER 25, 1987

WINTER WHEAT % PLANTED			
	1987	1986	AVG.
ARK	54	38	32
CALIF	15	15	14
COLO	98	98	98
GA	11	25	18
IDAHO	90	94	93
ILL	95	63	71
IND	93	71	78
KANS	99	90	85
MICH	90	40	80
MO	83	36	51
MONT	100	85	92
NEBR	100	100	100
N MEX	98	97	NA
N C	30	25	31
OHIO	93	60	79
OKLA	95	75	75
OREG	70	87	82
S DAK	100	100	100
TEX	89	84	72
WASH	90	96	94

20 STATES 91 81 NA  
 EXCL. STATES WITH NA 91 81 80  
 THESE 20 STATES PRODUCED 91%  
 OF THE 1986 WINTER WHEAT CROP.  
 NA - NOT AVAILABLE.

WINTER WHEAT % EMERGED			
	1987	1986	AVG.
ARK	32	21	22
CALIF	2	3	4
COLO	91	89	90
GA	8	14	NA
IDAHO	66	64	68
ILL	70	28	48
IND	68	41	63
KANS	90	80	70
MICH	65	15	NA
MO	56	26	31
MONT	92	52	68
NEBR	100	100	100
N MEX	95	95	NA
N C	12	11	NA
OHIO	64	24	54
OKLA	75	60	50
OREG	29	66	57
S DAK	100	98	96
TEX	77	70	52
WASH	68	79	79

20 STATES 77 67 NA  
 EXCL. STATES WITH NA 79 69 64  
 THESE 20 STATES PRODUCED 91%  
 OF THE 1986 WINTER WHEAT CROP.  
 NA - NOT AVAILABLE.

SOYBEANS % HARVESTED			
	1987	1986	AVG.
ALA	45	38	35
ARK	63	39	26
GA	23	18	21
ILL	98	79	79
IND	97	70	73
IOWA	100	69	67
KANS	75	40	50
KY	59	32	27
LA	74	41	42
MICH	70	25	45
MINN	99	82	59
MISS	60	45	33
MO	86	32	40
NEBR	96	63	57
N C	15	12	13
OHIO	96	63	71
S C	11	12	9
S DAK	100	67	70
TENN	55	30	25
19 STATES	84	57	55

THESE 19 STATES PRODUCED 96%  
 OF THE 1986 SOYBEANS CROP.

**COTTON  
% BOLLS OPENING**

	1987	1986	AVG.
ALA	100	100	98
ARIZ	100	100	100
ARK	100	100	98
CALIF	100	100	100
GA	95	95	93
LA	100	100	100
MISS	100	100	100
MO	100	100	100
N MEX	100	100	100
N C	100	100	100
OKLA	70	55	90
S C	100	100	100
TENN	100	100	100
TEX	63	51	72

14 STATES 81 74 86  
 THESE 14 STATES PRODUCED 100%  
 OF THE 1986 COTTON CROP.

**COTTON  
% HARVESTED**

	1987	1986	AVG.
ALA	91	75	66
ARIZ	55	40	40
ARK	91	82	64
CALIF	50	25	23
GA	67	46	46
LA	94	90	65
MISS	95	97	66
MO	94	86	72
N MEX	15	20	20
N C	52	42	46
OKLA	10	0	10
S C	82	50	66
TENN	90	80	65
TEX	20	17	23

14 STATES 51 43 39  
 THESE 14 STATES PRODUCED 100%  
 OF THE 1986 COTTON CROP.

**CORN  
% HARVESTED**

	1987	1986	AVG.
COLO	33	25	42
GA	97	98	97
ILL	96	68	66
IND	91	58	50
IOWA	93	34	47
KANS	95	75	70
KY	91	81	66
MICH	55	15	25
MINN	89	25	33
MO	94	60	67
NEBR	75	38	42
N C	89	89	90
OHIO	86	45	43
PA	39	39	31
S DAK	84	21	45
TEX	98	94	96
WIS	73	23	23
17 STATES	86	46	50

THESE 17 STATES PRODUCED 94%  
 OF THE 1986 CORN CROP.

**GRAIN SORGHUM  
% HARVESTED**

	1987	1986	AVG.
ARK	99	100	94
ILL	98	69	61
KANS	65	45	40
LA	100	100	99
MISS	99	100	95
MO	94	59	63
NEBR	85	42	45
OKLA	30	25	35
S DAK	93	43	56
TENN	100	90	75
TEX	71	69	78

11 STATES 75 58 60  
 THESE 11 STATES PRODUCED 96%  
 OF THE 1986 GRAIN SORGHUM CROP.

**Crop Condition**

FOR WEEK ENDING OCTOBER 25, 1987

WINTER WHEAT					
STATE	VP	P	F	G	EX
ARK	0	3	51	31	15
COLO	1	5	31	53	10
GA	2	34	45	19	0
IDAHO	0	15	28	50	7
ILL	0	2	31	61	6
IND	2	10	39	48	1
KANS	0	10	24	26	40
MICH	1	4	20	50	25
MO	2	14	49	34	1
MONT	0	1	33	58	8
NEBR	0	6	48	45	1
N MEX	0	0	25	50	25
OHIO	0	3	29	61	7
OKLA	0	0	5	94	1
OREG	0	65	27	8	0
S DAK	0	2	17	65	16
TEX	0	7	35	42	16
WASH	0	10	35	55	0

VP - VERY POOR P - POOR  
 F - FAIR G - GOOD  
 EX - EXCELLENT

## 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:** Beneficial rainfall limited northern quarter. Totals mostly under 0.50 in.; local amounts 1.00 in. Temperatures averaged 2 to 5° below normal.

Days suitable for fieldwork 6.6. Soil moisture 100% short. Moisture promoted small grain seedings few areas; drought conditions persisted. Corn 97% harvested, 94% 1986, 96% avg. Sorghum 82% harvested, 83% 1986, 83% avg. Cotton 91% harvested, 75% 1986, 66% avg. Soybeans 93% dropping leaves, 86% 1986, 87% avg.; 83% mature, 73% 1986, 71% avg.; 45% harvested, 38% 1986, 35% avg.; 7% very poor, 25% poor, 64% fair, 4% good. Peanuts 95% dug, 75% 1986, 94% avg.; 89% combined, 58% 1986, 88% avg. Wheat 40% seeded, 37% 1986, 29% avg. Pastures mostly poor; livestock mostly fair. Primary activities: Harvesting row crops, pecans, some fall vegetables; defoliating cotton; soil testing; marketing cattle; general care of livestock, poultry.

**ARIZONA:** Sunny warm days, mostly clear cool nights continued through 20th. Variable cloudiness developed 21st as westerly winds brought increased amounts of moisture from Pacific storm system. Scattered showers, thunderstorms developed over east; rain minimal. Cloudiness, moisture continued 22nd, scattered thunderstorms Mogollon Rim, White Mountains; showers southeast. Weather disturbance late 22nd, produced rain. Cool unstable air mass 23rd coupled with afternoon heating set off showers, thunderstorms, mostly northern two-thirds. Moisture continued 24th, activity mainly confined west, north, central sections. Locally heavy showers; 1.00 in. Wickenburg. Rainfall mostly between 0.02 to 0.75 in. eastern two-thirds, except locally over 1.00 in. Precipitation traces to 0.02 in. extreme west. Temperatures 1 to 7° above normal.

Rains delayed cotton harvest west, central, southeast. Light winds west offset effect of rain. Yields excellent long, short staple cotton central. Limited acreage long staple picked. High bollworm counts southeast. Harvest, ginning continued steady pace west; stalk shredding, plowing, defoliation of long staple active. Land preparation subsequent crops progressed. Established alfalfa stands utilized for sheep pasture west; small amounts cut; statewide good. Lemon, grapefruit harvest advanced west; lemon packing active central valley. Grapefruit picked, packed. Citrus groves good. Navels picked; packing limited. Lettuce, cauliflower, broccoli, celery good progress; normal cultural operations. Lettuce markets strong southeast; harvest active. Green onions, rapini shipped central valley. Asparagus, red and green chilies harvested. Granny smith apple harvest southeast; picking progressed as cold storage space available. Cantaloup, honeydew shipments from central valley; cantaloup movement light. Mixed melons shipped from west. Honeydews harvested. Watermelon movement light from central valley; pumpkin, squash shipments slow.

**ARKANSAS:** Cold weather continued. Below normal temperature readings all areas. Temperature extremes 26°; 80°. Rainfall widespread, generally moderate amounts, early and latter part of week. Rainfall total 0.12 to 2.51 in.

Days suitable for fieldwork 6.0. Soil moisture 75% short, 25% adequate. Cotton, soybean harvest continued. Rice, sorghum harvest virtually

complete. Soybeans 7% poor, 69% fair, 24% good; 89% shedding leaves, 74% 1986, 77% avg.; 77% mature, 60% 1986, 57% avg. Wheat seeding excellent progress; 54% seeded, 38% 1986, 32% avg.; 32% emerged, 21% 1986, 22% avg. Rainfall helped wheat germination, cool weather suppressed growth. Pecan harvest started. Pastures greened up. Livestock good.

**CALIFORNIA:** First good rains, temperatures averaged slightly above normal. State due more rain next week.

Wet fields slowed fieldwork. Rice harvest good progress, 90%, 90% 1986, 80% avg. Burning stubble. Cotton 50% harvested. Growth regulators, defoliant applications active. Shredding, discing after harvest. Winter grain seeding increased, few earliest germinating. Dry bean harvest down swing. Field corn, sugarbeet, grain sorghum harvests progressed. Alfalfa hay harvest wound down cooler areas, active warmer valleys. Apple picking near end. Fall avocados being harvested. Date harvest continued. Table grape harvest winding down. Kiwi harvest continued. Pomegranates, persimmons actively being packed. Olive harvest progressed. Valencia orange harvest nearly complete. Navel orange harvest gained momentum; large sizes, poor color. Almond, walnut harvests winding down. Pruning activities started. Artichokes fairly light, good quality Salinas. Broccoli harvest progressed normally throughout State. Supplies fairly heavy Salinas, moderate Santa Maria good quality. Carrot supplies moderate good quality Salinas. Cauliflower harvest progressed normally Westside, Cutler, Riverside. Movement moderate good quality Salinas. Celery supplies fairly heavy, good quality Salinas, Santa Maria. Cucumber harvest active Cutler, Riverside. Horseradish roots dug, graded, packed Tulelake. Lettuce harvest continued Westside. Salinas supplies light, decreasing, variable quality, some fields virus infected. Central San Joaquin Valley fairly heavy supplies, variable weight, quality. Supplies Santa Maria area moderate but decreased, variable quality. Mixed melon harvest slowed Riverside; watermelon harvest remained active. Late honeydew harvest Huron District. Pepper supplies moderate, good quality Santa Maria. Pumpkin harvest continued Westside, north Sacramento. Sweet corn harvest active Westside, Cutler, Riverside. Sweetpotato harvest continued Selma District. Dehydrated onion harvest peaked Tulelake. Fall potato harvest nearly complete Tulelake District, small size, good quality. Fresh tomato harvest continued Westside, winding down Merced. Rains reduced fire danger, aided fighting existing forest fires. Pastures about depleted, cattle moving market some districts. Supplemental feeding continued. Calving, lambing increased. More rain needed to replenish stockwater supplies, start new grass.

**COLORADO:** Temperatures 7° below to 1° above normal, most temperatures below normal. Light rain some areas, mostly dry throughout State. Precipitation none to 0.40 in.

Days suitable for fieldwork 6.5. Soil moisture 19% very short, 55% short, 26% adequate. Corn harvest slower than average as producers allow crop to dry prior to cutting. Oat, spring wheat harvests complete. Dry beans 96% threshed. Fall potato harvests complete. Sugarbeets 89% harvested. Livestock good; pastures dry, fair to good.

**FLORIDA:** Near normal conditions; seasonally mild temperatures, light or no precipitation. Dry cool front 21st, reinforced moderate northeast to east wind flow which blew few showers on shore along Atlantic Coast; amounts less than 0.25 in. Elsewhere, predominantly dry. Temperatures averaged near normal.

Soil moisture lower half Peninsula adequate; other areas mostly short. Moisture shortages delayed planting fall sown crops. Lack of rain, cool temperatures slowed peanut maturity, delaying harvest. Some peanuts dug but not combined damaged by frost. Cotton, hay, soybean harvests good progress. Sugarcane harvest started, planting continued. Pastures upper Peninsula, Panhandle very poor to fair because of extended dryness, cool temperatures; elsewhere, generally good. Cattle mostly good. Citrus trees excellent. Rain needed; drier areas irrigated. Early fruit showed color in groves. Fresh fruit harvest increased slowly. Maturity lagging for utilization for juice. Fruit sizes small. Caretakers clean cultivating. Trees being prepared for winter. Cool, dry weather prevailed, vegetable producing areas. Irrigation more active. Planting winter crops good progress. Harvest fall crops gaining; largest volume from: Sweet corn, cucumbers, squash, tomatoes, eggplant, radishes.

**GEORGIA:** Beneficial rain extreme north, southeast border, coastal areas; totals under 0.33 in., local amounts over 1.00 in. Temperatures 2 to 6° below normal. Warmest temperatures mid to upper 70s along Tennessee border, mid 80s central, few upper 80s extreme south. Lowest temperatures near 20° mountains to mid and upper 30s near Florida border.

Days suitable for fieldwork 6.3. Soil moisture 87% very short, 12% short, 1% adequate. Cotton 1% poor, 51% fair, 48% good. Dry conditions allowed harvest to progress. Sorghum grain 2% very poor, 10% poor, 49% fair, 32% good, 7% excellent; 83% harvested, 74% 1986. Peanuts 9% very poor, 28% poor, 49% fair, 14% good; 96% dug, 79% 1986, 94% avg.; 91% threshed, 64% 1986, 89% avg. Hard soils caused some problems. Threshing progressed. Soybeans 2% very poor, 12% poor, 55% fair, 19% good, 12% excellent; 96% dropping leaves, 95% 1986, 91% avg. Dry conditions caused soybeans to drop leaves quickly. Rye 1% very poor, 28% poor, 67% fair, 4% good; 41% planted, 41% 1986, 47% avg. Pecans 9% poor, 44% fair, 45% good, 2% excellent; 8% harvested, 8% 1986, 11% avg. Pasture 11% very poor, 41% poor, 42% fair, 5% good, 1% excellent; need rain. Hay 10% very poor, 45% poor, 35% fair, 10% good. Cattle 2% poor, 46% fair, 51% good, 1% excellent. Hogs 3% poor, 28% fair, 66% good, 3% excellent. Main activities: Apple harvest completed. Haying where available. Pastures very dry, hay being fed to livestock some areas. Peanut harvest neared completion. Cotton harvest progressed well. Small grain plantings slowed down greatly due to lack of moisture.

**HAWAII:** Weather mostly cloudy, rain light to moderate. Crops generally benefited. Irrigation still necessary some localities. Temperatures high 80s to low 70s. Rainfall none to 6.90 in.

Days suitable for fieldwork 7.0. Banana production steady. Cool season. Vegetable crops improved. Papaya production steady, heavy. Rains beneficial to sugarcane, harvesting active.

**IDAHO:** Temperatures 1 to 4° below normal. No precipitation.

Days suitable for fieldwork 7.0. Potato harvest virtually complete. Sugarbeets 72% harvested, 72% 1986, 57% avg. Apple harvest virtually complete. Winter wheat 90% seeded, 94% 1986, 93% avg. Winter wheat 66% emerged, 64% 1986, 68% avg. Winter wheat fair to good. Livestock good.

**ILLINOIS:** Temperatures averaged 7 to 11° below normal north, 2 to 6° below normal south. Precipitation widespread, total exceeded 1.00 in. east central, 0.30 to 0.60 in. common elsewhere.

Days suitable for fieldwork 6.3. Soil moisture 69% short, 31% adequate. Finishing harvest of corn, soybeans, sorghum; almost all farmers southern two-thirds of State done. Good weather, field conditions mean record finish. Pastures 3% very poor, 18% poor, 47% fair, 29% good, 3% excellent.

**INDIANA:** Temperatures averaged 3 to 10° below normal. Lows lower to mid 20s, highs mid 50s to near 70°. Precipitation 0.50 to 1.00 in. north, 0.10 to 0.30 in. south.

Days suitable for fieldwork 6.2. Topsoil moisture 53% short, 45% adequate, 2% surplus. Subsoil moisture 53% short, 45% adequate, 2% surplus. Rye 96% seeded, 82% 1986, 85% avg. Winter wheat cropland 93% plowed, 79% 1986, 86% avg. Pastures 8% very poor, 26% poor, 44% fair, 22% good. Corn, soybean harvest continued to advance ahead of previous pace.

**IOWA:** Cool, dry week. Precipitation light, early; late week. Temperatures 9° subnormal. Waterloo, Mason City 19° 25th. Daily high temperatures 50s, night lows 20s.

Days suitable for fieldwork 6.5. Topsoil moisture 27% short, 73% adequate; subsoil moisture 18% short, 82% adequate. Winter wheat 97% seeded, 70% 1986, 83% avg. Fall tillage 38%, 7% 1986, 15% avg.; fall fertilizer application 28%, 5% 1986, 13% avg. Livestock good to excellent; good gains. Movement slow due to price, harvest. Pastures mostly fair to good.

**KANSAS:** Temperatures averaged 50° northwest to 57° southeast; 3° below normal northwest, 9° below normal north central, 5° below normal elsewhere. No precipitation except southeast district, 0.43 in., includes local amounts of 1.00 to 1.50 in.

Days suitable for fieldwork 6.0. Soil moisture 56% short, 43% adequate, 1% surplus. Moisture still concern many areas, especially for wheat emergence, stand development before winter. Wheat streak mosaic all but eastern third, heaviest incidence western third. Leaf rust present statewide, most prevalent early-seeded wheat. Row crop harvest well ahead of normal. Corn harvest neared completion except northwest, north central. Sorghum harvest farthest along eastern third. Pastures good, improved west to east. Cattle continued to move off pastures onto corn, sorghum stubble, some wheat grazing underway.

**KENTUCKY:** Mild temperatures early week, weekend. Precipitation very light. Average temperatures mostly lower 50s, 3 to 5° below normal. Precipitation averaged less than 0.25 in., 0.33 to 0.50 in. below normal.

Days suitable for fieldwork 5.6. Very dry conditions continued. Soil moisture 85% very short, 15% short. Corn harvest virtually completed west. Soybean harvest substantially ahead of 1986 and average. Rain needed to allow tobacco to come into case before stripping. Should improve quality, leaf color. Burley 16% stripped, 18% 1986, 14% avg.; very little houseburn. Crop generally fair to good. Wheat 68% seeded, 62% 1986, 49% avg.; 6% very poor, 29% poor, 60% fair, 5% good. Grain sorghum harvest virtually complete. Continued harvesting hay. Pastures very poor to poor. Continued to feed hay to livestock.

**LOUISIANA:** Temperature 1 to 2° below normal. Temperature extremes 34°; 87°. Rainfall averaged none to 2.30 in.

Days suitable for fieldwork 6.7. Soil moisture 73% very short, 25% short, 2% adequate. Soybean

harvest continued well above average due to dry conditions. Winter wheat 16% planted, behind normal due to very dry soil. Sugarcane good; 99% planted, 19% harvested, both above average. Sweetpotatoes 93% harvested, above normal, but slowed because of dry weather. Pecans poor to fair; 4% harvested, below 9% avg. Livestock fair to good; pastures poor to fair; both declined because of dry conditions. Main activities: Harvesting cotton, soybeans, sugarcane, sweetpotatoes; baling hay; planting winter wheat, winter pastures.

MARYLAND & DELAWARE: Maryland: Average temperature 53°, normal 54°. Precipitation averaged 0.15 in.

Days suitable for fieldwork 6.6. Topsoil, subsoil moisture short to adequate. Corn fair. Corn 99% mature, 100% avg. Corn silage 99% cut, 99% avg. Corn for grain 90% harvested, 75% avg. Soybeans poor to fair. Soybeans 98% turning, 100% avg. Soybeans 90% shed leaves, 85% avg. Soybeans 40% harvested, 30% avg. Winter wheat 65% planted, 60% avg. Barley 85% planted, 85% avg. Oats 75% planted, 75% avg. Small grains good. Apples 97% harvested, 95% avg.

Delaware: Average temperature 55°, normal 55°. Precipitation averaged 0.03 in.

Days suitable for fieldwork 6.6. Topsoil moisture short. Subsoil moisture very short to short. Corn poor to fair. Corn 90% harvested, 90% avg. Soybeans poor to fair, mostly poor. Soybeans 100% turn color, 99% avg. Soybeans 95% shed leaves, 90% avg. Soybeans 45% harvested, 35% avg. Small grains good. Wheat 45% planted, 35% avg. Barley 85% planted, 80% avg.

MICHIGAN: Temperatures 3 to 7° below normal. Temperature extremes 18°; 65°. Precipitation 0.17 to 2.04 in. across State.

Days suitable for fieldwork 2.5. Soil moisture 40% adequate, 60% surplus. Corn 55% harvested, 15% 1986, 25% avg. Soybeans 70% harvested, 25% 1986, 45% avg. Winter wheat 90% planted, 40% 1986, 80% avg.; 65% emerged, 15% 1986, NA avg.; 1% very poor, 4% poor, 20% fair, 50% good, 25% excellent. Dry beans 80% harvested, 45% 1986, 85% avg. Major activities: Corn for grain, soybean, sugarbeet, dry bean harvesting, wheat planting. Fruit, vegetable harvests virtually complete. Cool, rainy weather delayed harvest.

MINNESOTA: Temperatures averaged 7 to 11° below normal for State. Temperature extremes 13°; 59°. Precipitation averaged 0.04 to 0.38 in. below normal for State. Precipitation totals averaged 0.03 to 0.33 in. Greatest weekly total 0.50 in. Weather favorable most of week.

Harvest neared completion. Regular fall activities ahead of normal. Field corn 89% picked, 25% 1986, 33% avg.; 52% stubble plowed or tilled, 9% 1986, 15% avg. Soybeans 69% stubble plowed or tilled, 35% 1986, 26% avg. Sunflowers 91% harvested, 49% 1986, 41% avg.

MISSISSIPPI: Temperatures near normal to 8° below; extremes 22°; 87°. Cloudy skies, scattered rain during week. Greatest 24-hour rainfall 0.87 in.; greatest weekly rainfall 0.98 in.

Days suitable for fieldwork 6.2, 3.9 1986, 3.4 avg. Soil moisture 75% very short, 20% short, 5% adequate. Cotton 95% harvested, 97% 1986, 66% avg. Soybeans 60% harvested, 45% 1986, 33% avg. Pecans 15% harvested, 15% 1986; 65% fair, 35% good. Corn, sorghum, hay and silage harvest nearly completed. Wheat planting behind normal due to dry weather. Danger of brush, forest fires. Pasture 30% very poor, 25% poor, 40% fair, 5% good. Livestock 10% poor, 40% fair, 45% good, 5% excellent. Some producers feeding hay due to poor pastures.

MISSOURI: Temperatures 5 to 8° below normal; less than 0.50 in. rain most areas, over 1.50 in. southwest.

Days suitable for fieldwork 5.2. Topsoil moisture 52% short, 48% adequate. Harvest approached completion. Rain needed for wheat, particularly eastern counties. Fall tillage for spring crops 38%, 13% 1986, 27% avg. Pasture 4% very poor, 21% poor, 50% fair, 24% good, 1% excellent.

MONTANA: Temperatures below normal; 1 to 3° west, southwest; 5 to 10° rest of State. No precipitation.

Days suitable for fieldwork 6.6. Topsoil moisture 69% short, 31% adequate. Subsoil moisture 32% short, 68% adequate. Sugarbeets 88% harvested, 89% 1986, 81% avg. Alfalfa seed 80% harvested. Cattle, calves moved from summer pastures 78%, 78% 1986, 79% avg. Sheep, lambs moved from summer pastures 80%, 84% 1986, 83% avg. Supplemental feed supply 66% adequate, 34% surplus.

NEBRASKA: Temperatures averaged 5 to 12° below normal. Extremes 12°; 73°. Precipitation 0.02 to 0.50 in.

Days suitable for fieldwork 6.0. Topsoil moisture 68% short, 32% adequate. Subsoil moisture 32% short, 68% adequate. Winter wheat still stressed due to lack of moisture. Corn, soybean, sorghum harvest 2 weeks ahead of normal. Low moisture content generally eliminating extra drying. Storage availability limited, still may become problem. Dry beans, sugarbeets, millet, sunflowers being harvested. Cattle on stalks, calves weaned, marketed. Dry conditions promoted potential respiratory problems.

NEVADA: Weak high pressure dominated 18th through 22nd, mild temperatures no precipitation. Scattered showers across State 23rd, early 24th. Temperatures few degrees above normal, lowest 9° Mountain City on 20th, highest 92° Logandale on 19th. Rainfall heaviest southern, northwest, northeast areas. Light snow limited elevations above 8,500 ft.

General mild, sunny weather favored fall work operations. Most livestock on winter grazing areas.

NEW ENGLAND: Temperatures averaged near normal, ranged low to mid 40s northern State in upper 40s to low 50s most of southern part. Average precipitation 0.25 to 0.50 in. across southern State to between 0.50 to 1.00 in. northern part.

Days suitable for fieldwork 6.0. Soil moisture adequate. Field corn 90% chopped, 89% 1986, 94% avg. Third crop hay 95% cut, 99% 1986, 99% avg. Major farm activities: Chopping corn, fall clean up.

NEW JERSEY: Temperatures averaged below normal. Extremes 24°; 73°. Rainfall averaged 0.24 in. north, 0.05 in. central, south. Heaviest 24-hour total 0.28 in. on 20th, 21st. Estimated soil moisture percent field capacity averaged 95% north, 78% central, 70% south. Four inch soil temperatures averaged 49° north, 52° central, 53° south.

Days suitable for fieldwork 7.0. Fieldwork continued very active. Harvest of hardy fall vegetables continued. Sweetpotato, apple, cranberry harvest well advanced. Combining of soybeans, corn for grain progressed well. Fall sown grains, cover crops continued to make good growth with adequate soil moisture. Pasture growth very limited.

NEW MEXICO: Temperatures over State ranged 18° Quemado, 87° Roswell; light precipitation statewide, mostly southern areas.

Days suitable for fieldwork 6.6. Soil moisture 33% short, 67% adequate. Light frosts many areas; freezing to near freezing mountain areas, northern localities. Cotton 25% fair, 75% good; harvest activity continued southern valleys, other areas. Barley 17% fair, 66% good, 17% excellent. Irrigated, dryland wheat continued fair to excellent; some planting continued following peanut harvest; good emergence of crop. Irrigated grain sorghum 13% fair, 74% good, 13% excellent; harvest activity continued. Dryland sorghum 25% fair, 50% good, 25% excellent; good yields continued. Corn 33% fair, 50% good, 17% excellent; harvest activity continued. Pecans 20% fair, 80% good; preparation for harvest continued. Lettuce 100% good; harvest activity finished some localities. Red chile harvest continued; crop fair to good. Cattle 18% fair, 82% good. Pace of cattle movement picked up. Sheep 100% good. Range 45% fair, 55% good; additional rains needed many areas.

**NEW YORK:** Precipitation midweek slightly below normal. Temperatures 2 to 3° above normal east, near or below normal west.

Days suitable for fieldwork 6.0. Soil moisture adequate. Good harvest weather prevailed statewide. Harvest progress advanced rapidly. Grain corn 30%, 13% 1986, 20% avg. Corn silage 83%, 63% 1986, 79% avg. Pastures, hay good.

**NORTH CAROLINA:** Temperatures averaged 5° below normal, mountain region; 1 to 3° below normal, remainder of State. Coldest October in history. Temperature extremes 18°; 84°. Precipitation none to 0.70 in. across State.

Days suitable for fieldwork 6.5. Soil moisture 19% very short, 72% short, 9% adequate. Peanuts 77% dug, 95% 1986, 81% avg.; 66% threshed, 81% 1986, 69% avg. Sorghum 73% harvested, 56% 1986, 67% avg. Sweetpotatoes 80% harvested, 72% 1986, 73% avg. Apples 90% harvested, 90% 1986, 88% avg. Oats 51% planted, 38% 1986, 56% avg. Barley 62% planted, 38% 1986, 44% avg. Rye 46% planted, 41% 1986, 46% avg. Pasture 2% very poor, 12% poor, 60% fair, 26% good. Major farm activities: Harvesting corn, cotton, sweetpotatoes, hay, peanuts, soybeans, apples, sorghum, vegetables; seeding small grains; shearing Christmas trees; planting strawberries; tending livestock; digging ornamentals; general farm maintenance.

**NORTH DAKOTA:** Temperatures averaged 12 to 14° below normal. Extremes 5° southwest, 66° southeast. Precipitation light, spotty.

Days suitable for fieldwork 6.1. Topsoil moisture well below normal; 18% very short, 70% short, 12% adequate. Subsoil moisture well below normal; 6% very short, 55% short, 39% adequate. Harvest of late season crops ahead of normal pace. Sunflower 89% combined, 46% 1986, 43% avg.; corn grain 86% harvested, 42% 1986, 50% avg. Pastures mostly poor.

**OHIO:** Cold week average temperatures 5 to 9° below normal on western side, 2 to 4° below central, eastern sections. Clouds parted long enough to allow minimums to plunge to low and mid 20s across State. Highest readings ranged low 60s north to low 70s south. Soil surface temperatures four inch depth fell as low as upper 30s, low 40s. Averages under bare exposure upper 40s, low 50s under sod, average readings few to 2° higher. Rain totals of 0.50 to 0.60 in. matched normal many northern locations. Most totals less than 0.50 in., ranged 0.10 to 0.30 in.

Days suitable for fieldwork 6.1. Soil moisture 42% short, 54% adequate, 4% surplus. Potatoes 93% dug. Apples 90% harvested. Grapes 95% harvested.

**OKLAHOMA:** Temperatures averaged 3° below normal southeast to 6° below normal north central.

Precipitation averaged 0.01 in. Panhandle to 1.92 in. east central.

Days suitable for fieldwork 6.1. Topsoil moisture 55% short, 45% adequate, Subsoil moisture 10% short, 90% adequate. Wheat 5% fair, 94% good, 1% excellent; 95% planted, 75% 1986, 75% avg.; 75% emerged, 60% 1986, 50% avg. Seeding, progress 3 weeks ahead of schedule. Moisture short west, rain needed to stimulate late planted wheat growth. Sorghum 1% fair, 95% good, 4% excellent; 95% mature, 90% 1986, 95% avg.; 30% harvested, 25% 1986, 35% avg. Some dryland Panhandle sorghum with little production will be grazed, destroyed. Cotton 15% fair, 85% good; 70% open bolls, 55% 1986, 90% avg.; 10% harvested, none 1986, 10% avg. Pastures, livestock good. Cattle marketings average, prices steady to lower than preceding week.

**OREGON:** Temperatures near normal, except southwest slightly warmer than normal. High pressure forced overnight lows down, limited precipitation throughout State with minor exceptions along coast.

Soil moisture 100% short. Barley 52% seeded. Dryness delayed progress of fall seeded wheat, grass for seed, clover. Emerged fall grain stands Wallowa County irrigated or summer fallow only. Sugarbeet harvest continued Malheur County; impaired by dryness. Apple harvest near end Milton-Freewater; poor market conditions. Some apples to be harvested north Willamette Valley. Filbert harvest near end north Willamette Valley. Disease in walnuts north Willamette; one-third nuts fallen. Washington County awaiting rain or windstorm to drop nuts. Lane County irrigating strawberries, blueberries. Cranberry harvest neared Coos County; water shortage could create bog flooding difficulties. Potatoes 99% harvested Klamath County. Seed potato harvest near end Wallowa County. Onion growers applied herbicides on fall seeded onions Milton-Freewater. Vegetable harvest still underway Clackamas County; some irrigation systems being shut off by water master. All vegetables finished Benton, Linn Counties. Livestock poor to good west; good to excellent east. Ranges, pastures poor, dry west; poor to fair, dry east. Dust pneumonia in cattle Malheur, Lake Counties. Many ranchers feeding supplemental feed to cattle early. Feeder sale well timed Wasco County. Cattle on crop aftermath.

**PENNSYLVANIA:** Indian summer continued most sections beginning of week. Average temperature 48°, 1° below normal. Temperature extremes 28°; 78°. Average precipitation 0.25 in., 0.41 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 5% short, 80% adequate, 15% surplus. Corn 95% mature, 96% 1986, 93% avg.; 39% harvested, 39% 1986, 31% avg. Corn 4% very poor, 12% poor, 27% fair, 37% good, 20% excellent. Ensilage corn 93% harvested, 94% 1986, 94% avg. Soybean 42% harvest, 30% 1986, 29% avg. Soybeans 2% very poor, 8% poor, 28% fair, 42% good, 20% excellent. Potatoes 91% harvested, 94% 1986, 97% avg. Third cutting alfalfa 92%, 100% 1986. Fourth cutting alfalfa 68%, 87% 1986. Quality of hay good to fair. Amount of feed being obtained from pastures average to above average. Apples 85% harvest, 89% 1986. Grapes 90% harvested, 94% 1986. Fall plowing 90%, 93% 1986. Winter wheat 85% planted, 90% 1986. Barley 94% planted, 97% 1986. Activities: Harvesting hay, haylage, corn for grain, silage, soybeans, fruit, potatoes, other vegetables; seeding wheat, barley; hauling manure; spreading lime, fertilizer; installing conservation practices; machinery maintenance; caring for livestock.

**PUERTO RICO:** Island average rainfall 2.27 in., 0.53 in. above normal. Highest weekly total

rainfall 4.59 in. Pico Del Este-Luquillo, 4.45 in. San Lorenzo Farm, 4.39 in. Juncos. Highest 24-hour total 3.55 in. Quebradillas. San Juan mean temperature 83<sup>o</sup>, 2<sup>o</sup> below normal. Total rainfall 0.72 in., 0.68 in. below normal. Divisional temperature averaged about 81 to 82<sup>o</sup> on coasts, 76 to 80<sup>o</sup> interior, mean station temperature 69<sup>o</sup> Pico Del Este-Luquillo to 83<sup>o</sup> San Juan. Lowest minimum temperature 62<sup>o</sup> Pico Del Este-Luquillo. Highest maximum temperature 94<sup>o</sup> several places.

**SOUTH CAROLINA:** Temperatures averaged 4 to 6<sup>o</sup> below normal. No rainfall. Hard frost midweek, central, western parts of State.

Days suitable for fieldwork 6.1. Soil moisture 55% very short, 42% short, 3% adequate. Cotton 82% harvested, 50% 1986, 66% avg.; 1% very poor, 3% poor, 96% fair. Soybeans 95% leaves turning, 91% 1986, 94% avg.; 72% leaves shedding, 71% 1986, 74% avg.; 56% mature, 53% 1986, 40% avg.; 11% harvested, 12% 1986, 9% avg.; 1% very poor, 1% poor, 73% fair, 25% good. Peanuts fair to good; 75% harvested, 57% 1986, 80% avg. Pastures fair. Livestock fair to good.

**SOUTH DAKOTA:** Average temperatures 5 to 12<sup>o</sup> below normal. Extremes 6<sup>o</sup>; 74<sup>o</sup>. Scattered light rainfall.

Days suitable for fieldwork 5.7. Topsoil moisture slightly improved some areas due to scattered rainfall; 19% critically short, 56% short, 25% adequate. Row crop harvest continued ahead of normal.

**TENNESSEE:** Precipitation mostly less than 0.25 in. Temperatures below normal. Extremes 20<sup>o</sup>; 79<sup>o</sup>.

Days suitable for fieldwork 5.5. Soil moisture 52% very short, 41% short, 7% adequate. Corn grain 93% harvested, 80% 1986, 70% avg. Burley 35% stripped, 30% 1986, 30% avg. Winter wheat 50% seeded, 40% 1986, 40% avg. Pastures fair to poor.

**TEXAS:** Early week cold front moved across State brought windy, cooler weather plus some thunderstorms mainly northeast. First freezing temperatures Panhandle, Northern High Plains. Warming started midweek across State. Rainfall below normal most sections, except coast, south, northeast. Temperatures below normal Southern High Plains, Low Plains, north, Upper Coast, Coastal Bend. Above normal readings south central counties.

**Crops:** Corn harvest continued High Plains neared completion. Harvest grain sorghum active, high moisture continued problem. Harvest some high moisture fields delayed until after freeze to dry down grain. Cotton benefited from open weather. Cooler temperatures slowed development, some progress, bolls open rapidly. Harvest aid chemicals applied more advanced fields Plains, general harvest activity not far away. Some increased harvest activity underway. Blacklands, central harvest winding down. Small grain seeding continued slow pace, conditions remained dry. All areas need good general rain to provide moisture for germination, help get newly seeded fields established. Most areas, except High Plains, forage growth limited, little grazing. Soybean harvest continued. Some yields affected by prolonged dry weather. Peanut harvest active, only minor delays from damp weather. Harvest 2nd crop rice underway along coast, yields good. Sugarcane harvest active Rio Grande Valley. Other field crops: Peanuts 28% harvested, 43% 1986, 42% avg. Pecans 11% harvested, 29% 1986, 12% avg. Soybeans 43% harvested, 50% 1986, 36% avg. Sugarbeets 27% harvested, 17% 1986, 32% avg. Sunflowers 52% harvested, 42% 1986, 58% avg. Oats 75% planted, 72% 1986, 64% avg.

**Commercial Vegetables:** Rio Grande Valley harvest cucumbers, mixed greens continued. Cabbage,

tomatoes, peppers good progress. Onion planting continued. Grapefruit harvest active, fruit continued to size well. Oranges good progress. San Antonio-Winter Garden fall vegetables progressed; irrigation continued. High Plains open weather allowed harvest carrots, peppers, pumpkins. East harvest sweetpotatoes continued. Fall, winter vegetables need rain. Trans-Pecos harvest red, green chilies; green peppers continued. Onion planting continued Presidio. Pecan harvest increased, nuts split shucks, droppage increased. Squirrels problem.

**Range and Pasture:** New forage growth mostly nonexistent. Although some areas received scattered showers, amounts generally too little to provide any significant improvement. High Plains better, most small grains holding on, providing little or no grazing. Some supplemental feeding started. Overall, livestock good. Prices declined slightly.

**UTAH:** Precipitation very light. Temperatures normal to 3<sup>o</sup> above normal.

Corn for grain, apple harvests continued. Dry bean, potato, onion harvests complete. Winter ranges dry. Livestock movement to winter ranges almost complete. Livestock good to excellent. Major farm activities: Finalizing harvest, hauling hay, livestock movement, marketing calves, lambs, culls, deer hunting.

**VIRGINIA:** Generally cool, dry. Temperatures 2<sup>o</sup> below normal. Widespread frost, range 22 to 79<sup>o</sup>. Scattered, light rain.

Days suitable for fieldwork 6.0. Topsoil moisture 65% short, 35% adequate. Grain corn 83% harvested, 78% 1986, 74% avg. Soybeans 16% harvested, 24% 1986, 20% avg. Some peanuts hurt by frost. Peanuts 90% dug, 96% 1986, 92% avg. Peanuts 77% combined, 88% 1986, 85% avg. Marketing flue-cured tobacco, stripped, graded burley tobacco. Some fall hay harvested. Market preparation for cattle active. Apples 86% harvested, 98% 1986, 90% avg. Wheat 46% seeded, 33% 1986, 41% avg. Barley 84% seeded, 70% 1986, 77% avg. Oats 84% seeded, 81% 1986, 85% avg.

**WASHINGTON:** High pressure, offshore winds Pacific northwest continued fair, dry weather. Minimal cloud cover at night allowed temperatures into low 20s, 30s. Temperature extremes 19<sup>o</sup> Rosalia to 74<sup>o</sup> Vancouver. Precipitation negligible.

Soil moisture 90% short, 10% adequate. Dry conditions stalled planting. Winter wheat 90% planted, 96% 1986, 94% avg. Winter wheat 68% emerged, 79% 1986, 79% avg. East, southeast emerged winter wheat continued to deteriorate from lack of moisture. Warm, dry weather allowed 5th cutting alfalfa to be completed Grant County. CRP planting underway Douglas County, delayed Adams County due to dry conditions. Potato harvest winding down, crop good. Apple harvest completed most major producing area: quality variable, water-core problems. Grape harvest continued. Concord yield higher than predicted Benton County. Renovation of blueberry, caneberry fields continued King, Pierce Counties. Late vegetable crop harvest continued. Pumpkin harvest continued Spokane County. Range, pasture 90% short, 10% adequate. Supplemental feedings on livestock operations typical Adams County. Hay, other roughage feed supplies adequate, surplus.

**WEST VIRGINIA:** Average temperature 49<sup>o</sup>. Temperatures below normal north, central. Above normal south, east. Extremes 19<sup>o</sup> Greenbank, Flat Top; 78<sup>o</sup> Creston. Precipitation averaged 0.22 in.; below normal.

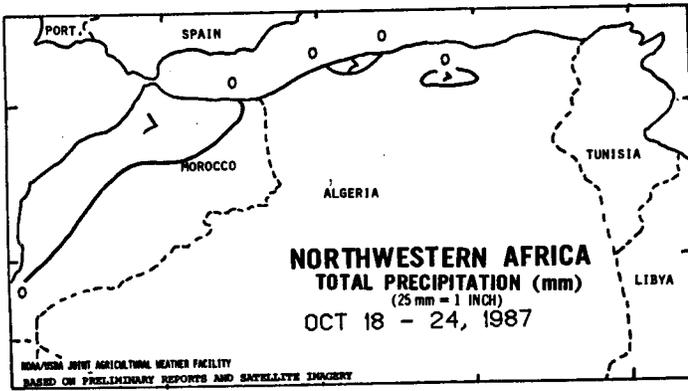
Days suitable for fieldwork 4.8. Soil moisture 46% short, 54% adequate. Farm activities: General  
(Continued to back cover)

# Global Weather Satellite Image

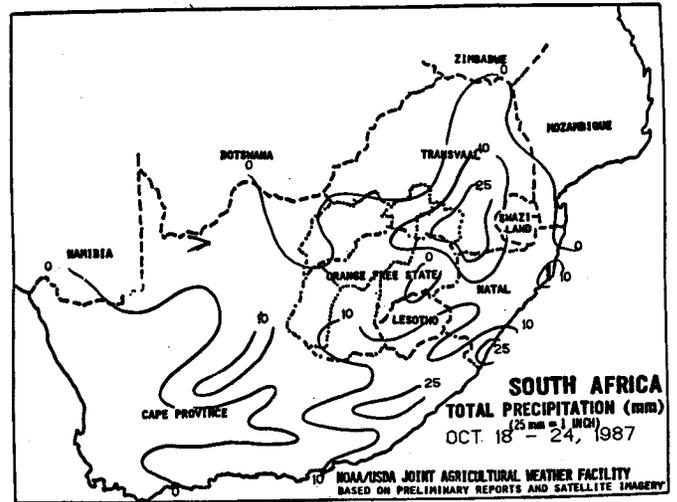
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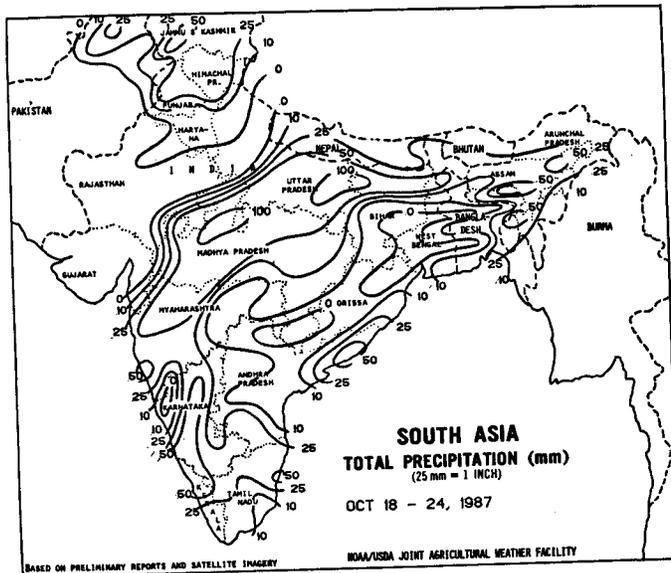




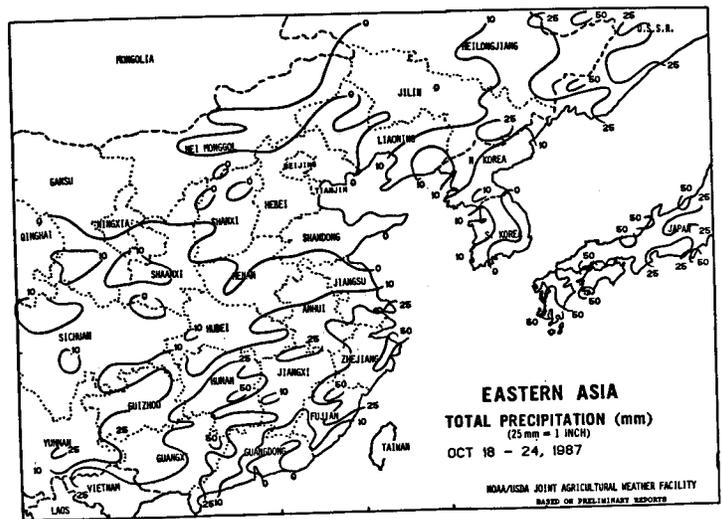
**NORTHWESTERN AFRICA...**Light rain (less than 10mm) fell over northwestern Morocco, while most other production areas remained dry. Although wheat planting has begun in some northernly areas, dry weather over the past 2 weeks has kept pre-plant soil moisture reserves at unfavorably low levels over much of the region. Winter grain planting normally begins in late October in the north and spreads south in November and December with the onset of the rainy season.



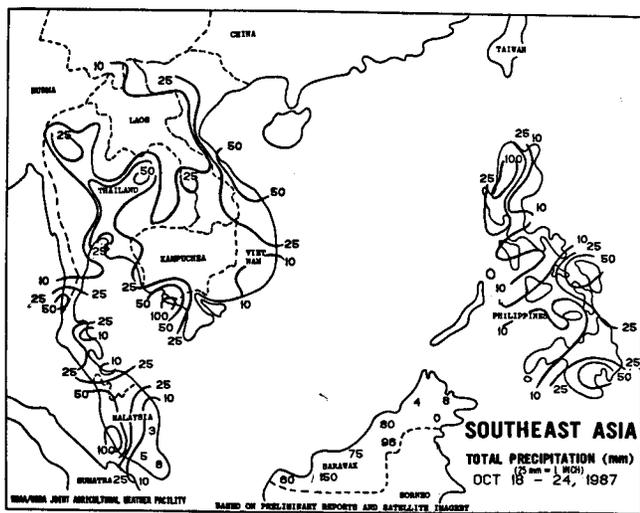
**SOUTH AFRICA...**Light to moderate showers (5-39mm) covered South Africa's major corn regions, maintaining the adequate to abundant moisture levels caused by this season's early wet weather pattern. Many regions in the east continued too wet for fieldwork, but periodic dry weather helped dry fields. Planting normally takes place from October through December.



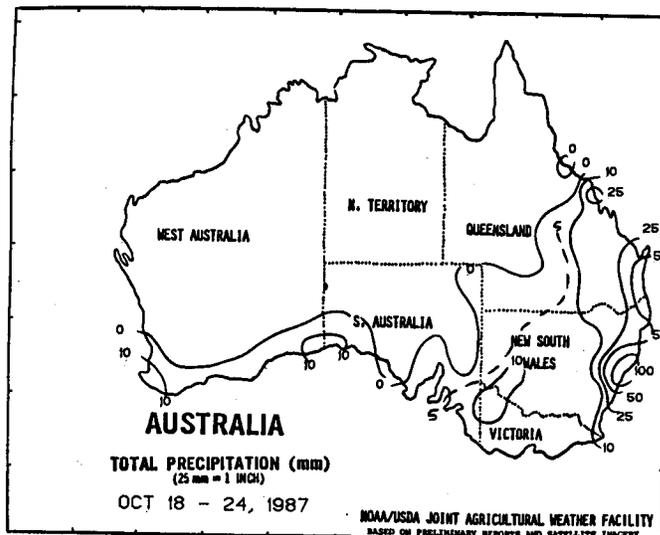
**SOUTH ASIA...**Brief, beneficial showers (10-100mm or more) covered winter wheat areas of northern Pakistan, India's Punjab state, and from Maharashtra to eastern Uttar Pradesh, improving moisture levels for wheat planting and emergence. Dry weather persisted in Gujarat and western Uttar Pradesh, areas hardest hit by this season's drought, further delaying plantings in areas with insufficient irrigation reserves. Moderate to heavy showers (25-100mm or more) continued in summer crop areas of Karnataka, Tamil Nadu, and western Andhra Pradesh, benefiting filling groundnuts and flowering to boll forming cotton. Showers (25-92mm) lingered along north coastal Andhra Pradesh, but mostly dry weather covered heading to filling rice from northern Andhra Pradesh to southern Bihar and West Bengal. Heavy showers (50-148mm) returned to areas east of Bangladesh, likely flooding some regions.



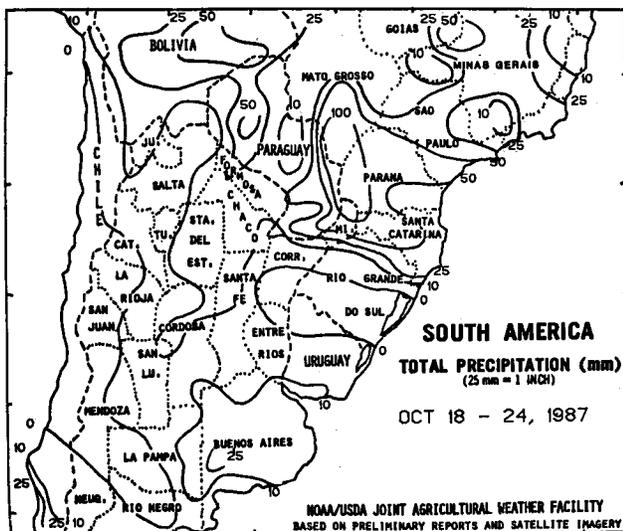
**EASTERN ASIA...**Dry weather covered the North China Plain, helping cotton and soybean harvesting. Winter grain planting normally ends by early November in the North China Plain, where topsoil moisture is mostly adequate for emergence and early plant establishment. Early-week showers (14-40mm) fell over southern China crop areas in Guangxi, Hunan, Guangdong, Jiangxi, Fujian, and Zhejiang. Weekly average temperatures over southern China were 3-6 degrees C below normal, slowing crop maturation. Scattered, light showers (1-10mm) covered South Korea, continuing a below-normal precipitation pattern which has covered the area since September. Although the persistent dryness in South Korea has helped harvesting, rain is needed for winter grain planting which usually begins in mid-October. In Taiwan, inundating rain (100-300mm) from Typhoon Lynn covered eastern areas.



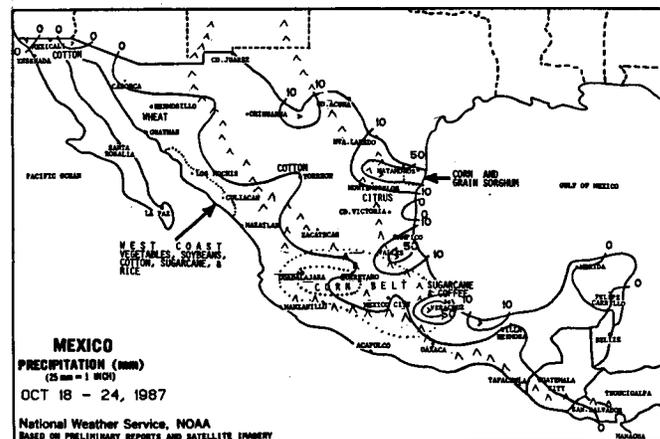
**SOUTHEAST ASIA...** Typhoon Lynn brought locally heavy rain (50-100mm or more) and wind to northern Luzon island, Philippines, likely damaging unharvested grain and causing local flooding. Rainfall elsewhere in the Philippines was generally light, but local areas of Mindanao and the central islands received up to 79mm. Light to moderate showers (10-69mm) covered most rainfed rice regions of Thailand, maintaining adequate moisture levels for heading rice. Rainfall ranged from 10-50mm or more elsewhere in Indochina except for northern Laos which was mostly dry. Variable tropical showers covered Malaysia and Indonesia except for chronically dry regions in the south from central Java eastward.



**AUSTRALIA...** Light to moderate showers (up to 20mm) fell over southern coastal areas and much of eastern Australia, with heavy rainfall (up to 143mm) over the eastern coast of New South Wales and extreme southeastern Queensland. The rain benefited heading wheat in New South Wales and Victoria and wheat nearing maturity in eastern Queensland. Most production areas of Western Australia and South Australia, where wheat is also heading, remained dry. Scattered showers fell along the eastern coast of Queensland, temporarily delaying late sugar harvest activities.



**SOUTH AMERICA...** In Argentina, showers (10-25mm) over southern Buenos Aires and eastern La Pampa benefited wheat in the filling stage. Minimal precipitation covered filling wheat in southern Cordoba, southern Santa Fe, and northern Buenos Aires. Topsoil moisture in these areas remained limited for summer crop planting. In south-central Brazil, mostly dry weather in Rio Grande do Sul improved weather conditions for wheat harvesting and summer crop planting. Further north, moderate to heavy rain (50-136mm) in western Santa Catarina, western Parana, and southern Mato Grosso do Sul delayed corn and soybean planting. In addition, the heavy rain likely caused localized flooding, and re-planting may be necessary in some areas.



**MEXICO...** Scattered moderate to heavy showers (up to 65mm) fell along the east coast, with light rain (less than 10mm) over interior crop areas. The light wheat rain caused little or no delay in winter wheat planting in the northwest or in corn harvesting in the Southern Plateau. Mostly dry weather covered much of the north-central rangelands, favoring cotton harvest activities, which are now nearing completion. Dryness also continued over the west coast farming region, which has had to rely on irrigation reserves for much of the season.

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(Continued from p. 19)  
farm maintenance, livestock care, harvesting hay,  
corn. Corn poor to good. Hay fair to poor.  
Fall seedings: Wheat 80%, barley 81%.

WISCONSIN: Temperatures averaged 37°, 8° below  
normal. Extremes 16°; 64°. Rainfall 0.10 to 0.50  
in. Snow most areas, maximum 12 in. near Lake  
Superior.

Days suitable for fieldwork 3.9. Soil moisture  
19% short, 78% adequate, 3% surplus. Corn for  
grain 73% harvested, 23% 1986, 23% avg. Yields  
good, moisture levels low. Soybeans 85% harvested,  
30% 1986, 34% avg. Yields above previous years.  
Fall plowing 42%, 15% 1986, 21% avg. Winter wheat,  
new hay seedings look good going into winter.

WYOMING: Temperatures, precipitation below normal.  
Days suitable for fieldwork 6.0. Topsoil  
moisture 83% short, 17% adequate. Corn for grain  
40% harvested, 15% 1986, 35% avg. Dry beans most  
harvested, 90% 1986, 90% avg. Potatoes most  
harvested, most 1986. Sugarbeets 90% dug, 80%  
1986, 85% avg. Winter wheat fair to good.  
Livestock good to excellent. Hay supplies for  
wintering livestock adequate or better. Livestock  
movement to winter pastures, markets continued.

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