

# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service and World Agricultural Outlook Board

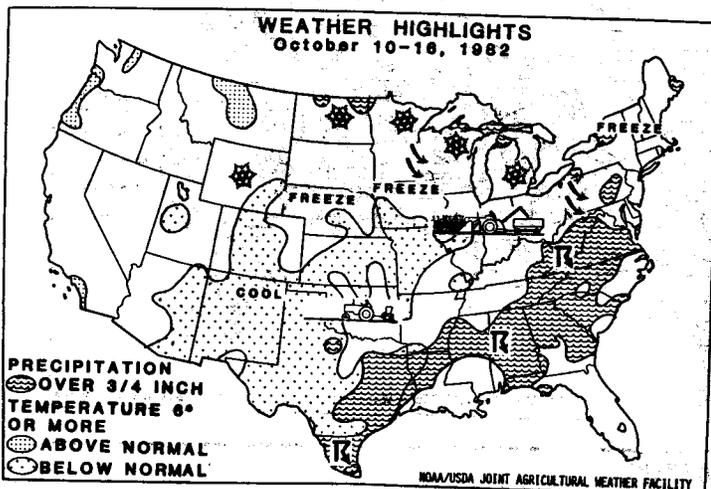
Volume 69, No. 42

WASHINGTON, D.C.

Oct. 19, 1982

## National Weather Summary

October 10 - 16



**HIGHLIGHTS:** Precipitation was relatively light over most of the Nation. The greatest concentration of showers and some thunderstorms covered the area from southern and eastern Texas to the central Appalachians, where total amounts ranged from 1 to 4 inches. Freezing temperatures covered all of the Rockies early in the week and spread into the High Plains as far south as the northern Texas Panhandle. Later, freezing weather covered most of the northern Plains into Nebraska and northern Iowa. Snow fell in the Rockies, the northern Plains, and Great Lakes, and in the central and northern Appalachians.

**SUNDAY . . .** Cold temperatures covered the Rockies. Snow tapered off, but low temperatures continued into the twenties from Montana to northern New Mexico. Snow turned to rain over the northern Plains, and light rain extended across the Great Lakes to the upper Ohio Valley, and through the central and southern Appalachians, to the southeastern coast. Some moderate showers fell in the southern Appalachians. Showers continued over southeastern Texas.

**MONDAY . . .** Freezing temperatures spread out of the Rockies to the western portion of the Plains and as far south as the northern Texas Panhandle. Light rain continued over the northern Plains, the Great Lakes, and through the Appalachians from southern New York to Georgia. Light showers were widespread over the southern Plains and southern Mississippi River Valley. Some heavier amounts fell in southeastern Texas, Louisiana, and Mississippi.

**TUESDAY . . .** Widespread freezing temperatures covered the Rockies, but it was somewhat warmer in the Plains. A few areas in western Nebraska and Kansas were below freezing, and all of New England had

frost. Rain over the northern Plains and Great Lakes became very light and intermittent, but showers were light to moderate over all of the East Coast States except Maine and Florida. Light showers reached from New Mexico to eastern Texas, and moderate to heavy showers fell from Louisiana to the southern Appalachians. Light showers also fell from Tennessee through West Virginia.

**WEDNESDAY . . .** Showers and thunderstorms fell over all of the East Coast States from northern Florida through New England. Some heavy showers fell in the Southeast. Early in the day, very light rain or drizzle fell from the Upper Mississippi Valley through the Great Lakes. There were some moderate showers in southeastern Colorado. Freezing temperatures again spread over the northern High Plains and southern Rockies.

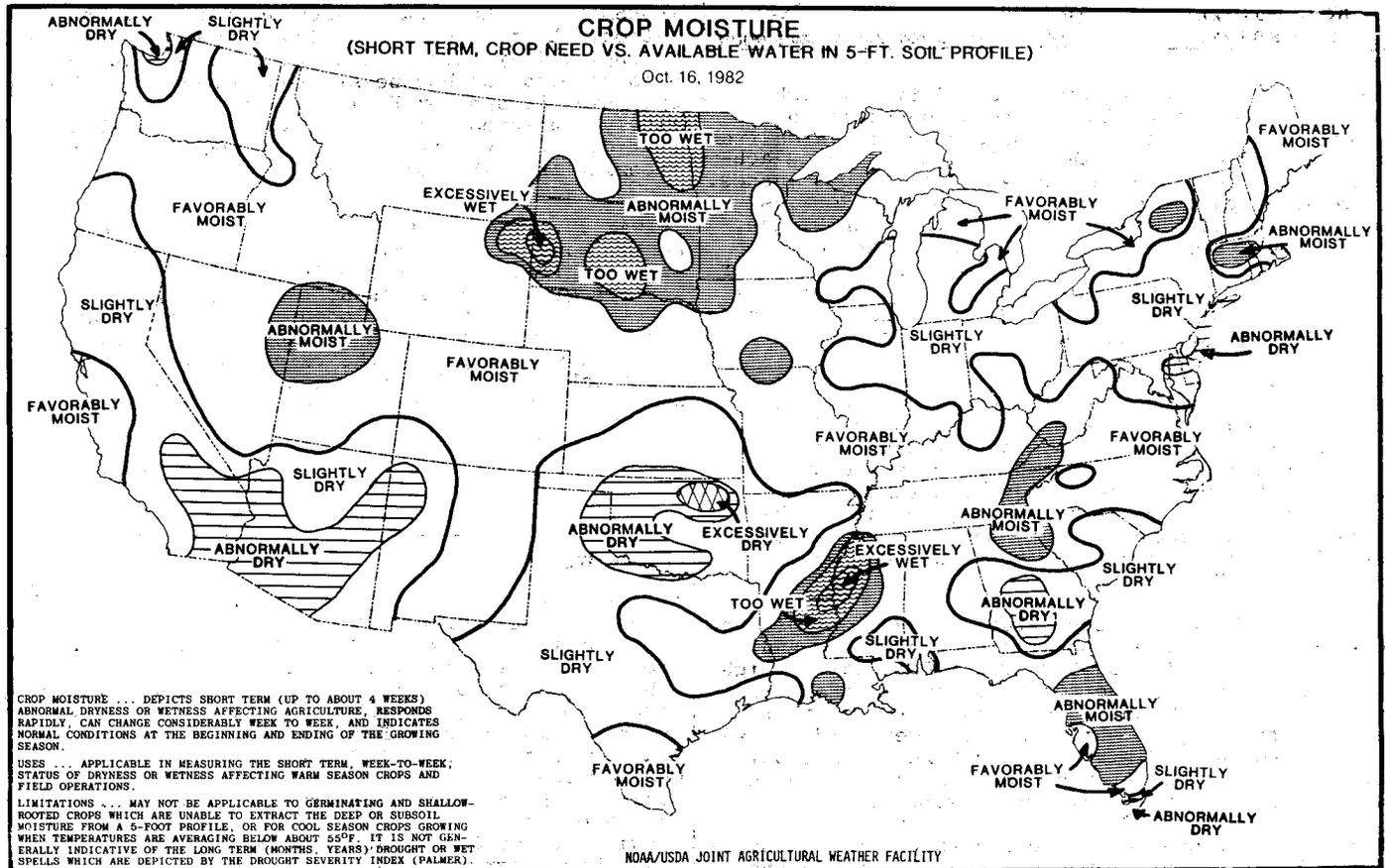
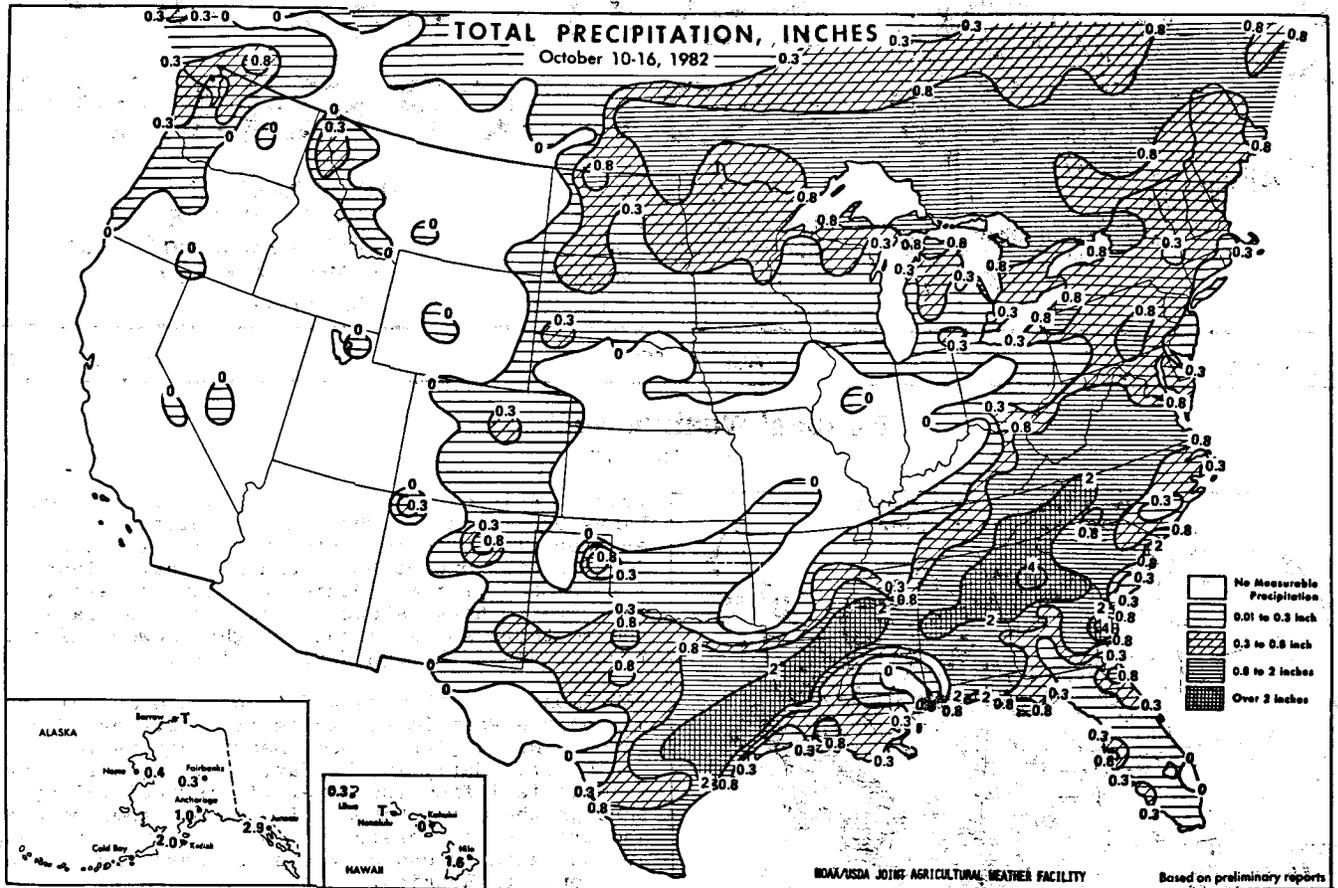
**THURSDAY . . .** Rain was scarce over most of the Nation. Light showers continued from the upper Mississippi Valley through the Great Lakes. Showers also covered the Northeast from west-central Pennsylvania through New England. Light showers were widely scattered along the east coast and through Florida. Early-morning temperatures were near freezing through most of Nebraska.

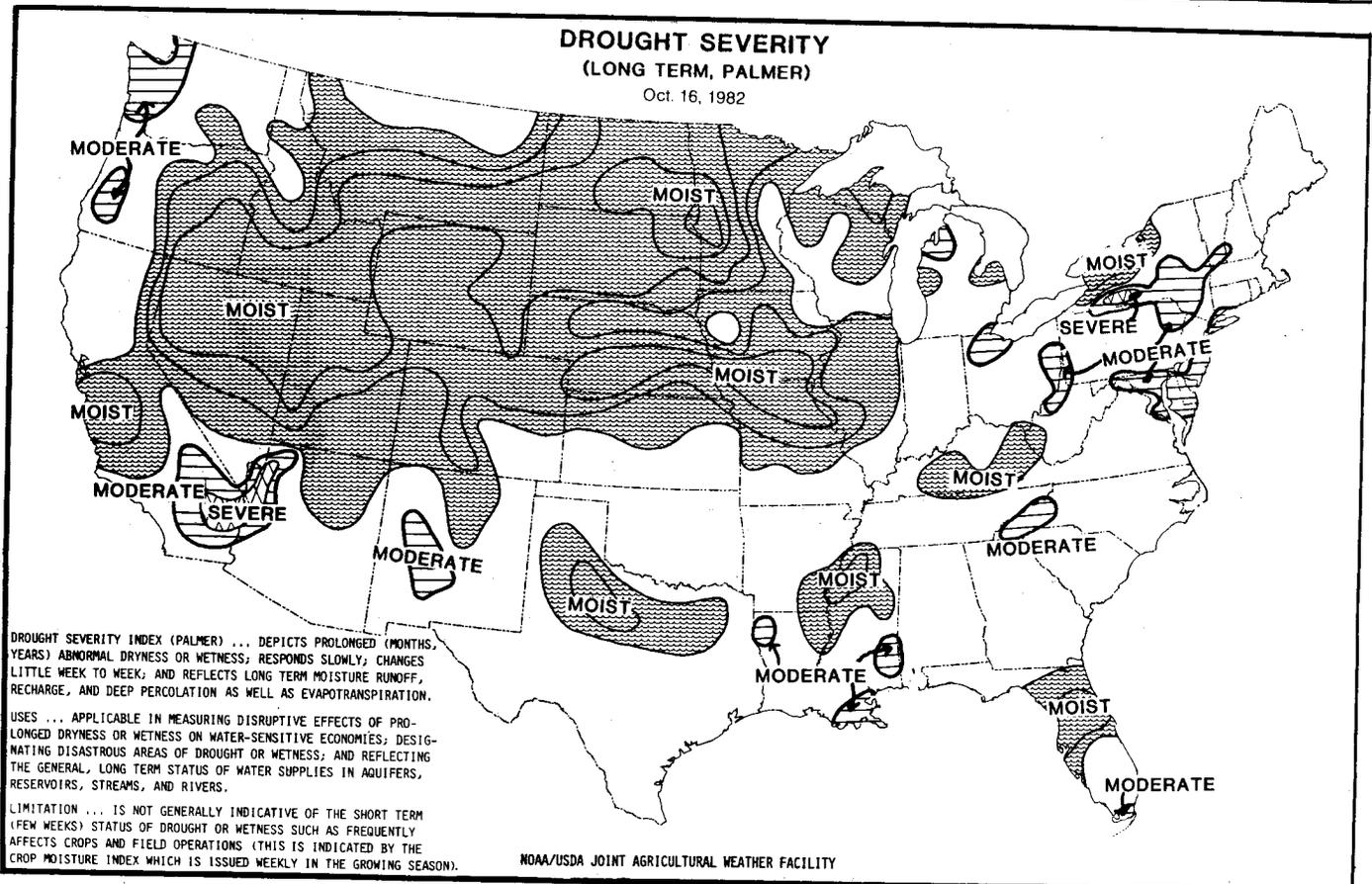
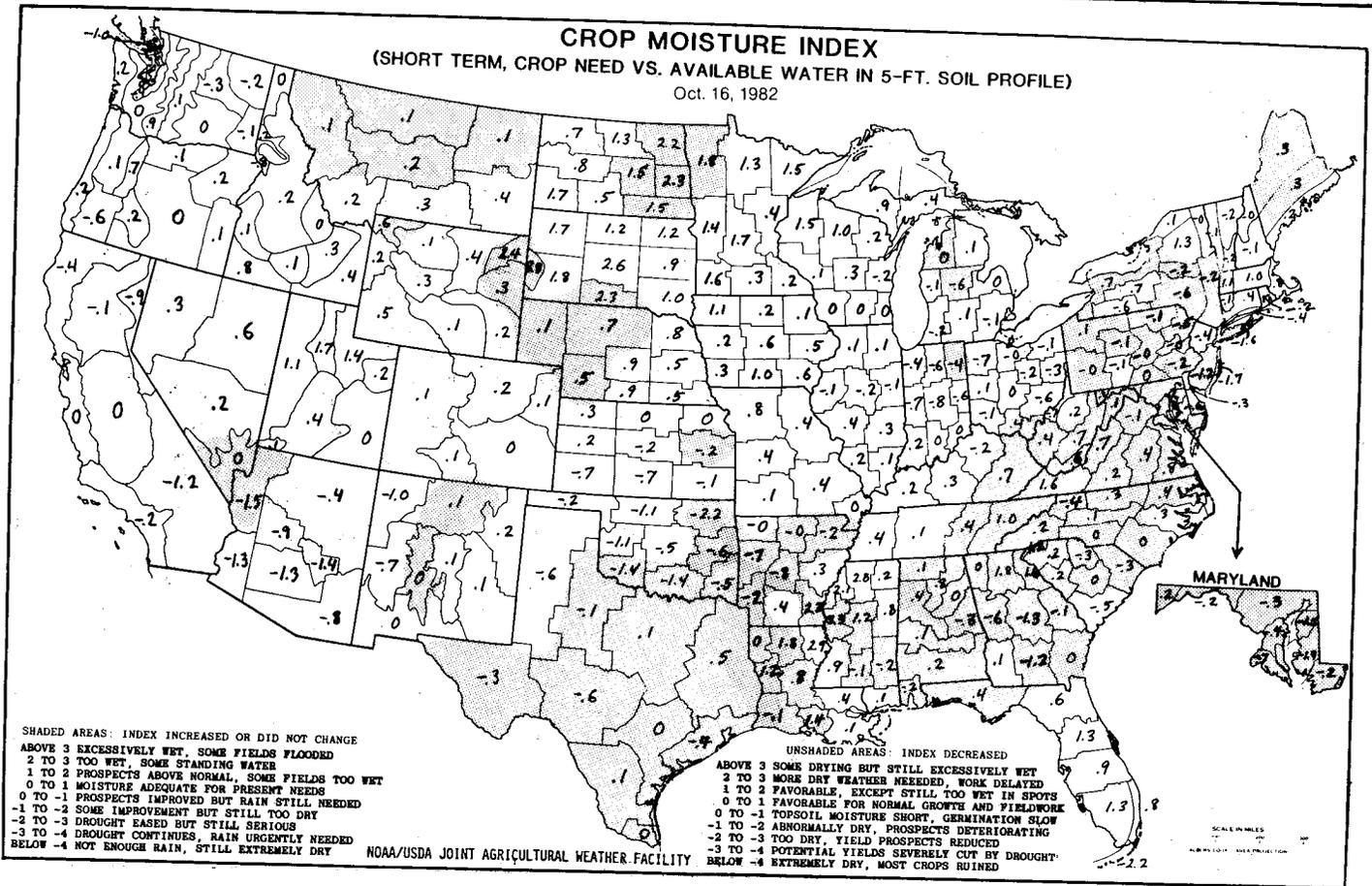
**FRIDAY . . .** The quiet weather pattern continued across most of the Nation. Light rain fell from Lake Michigan to the upper Ohio Valley, through West Virginia and Maryland, and northward. A few light showers developed in Washington and Oregon and spread to western Montana. Strong westerly winds accompanied the rain from the eastern Great Lakes into the Northeast. Freezing weather was confined to the high elevations in the Rockies.

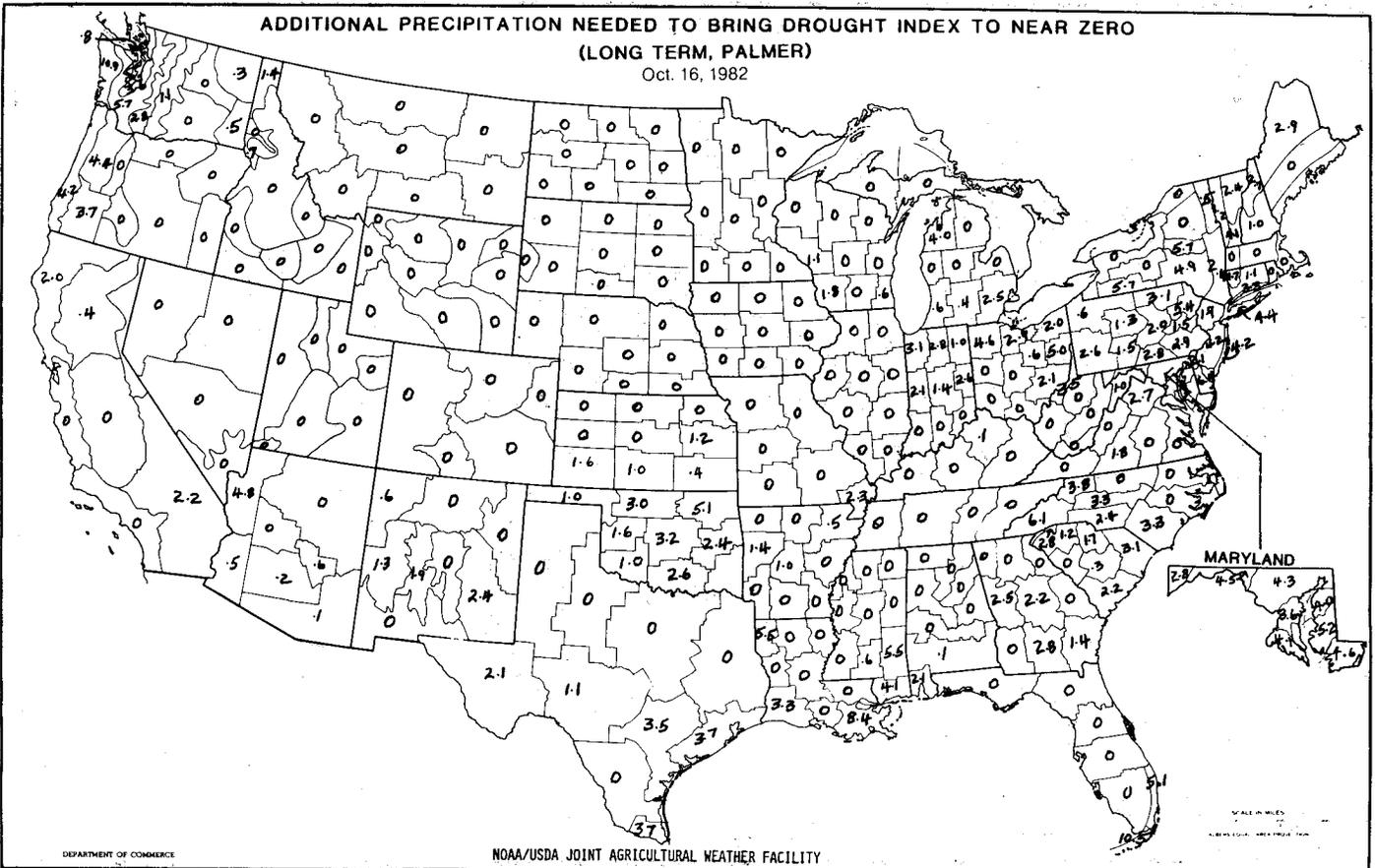
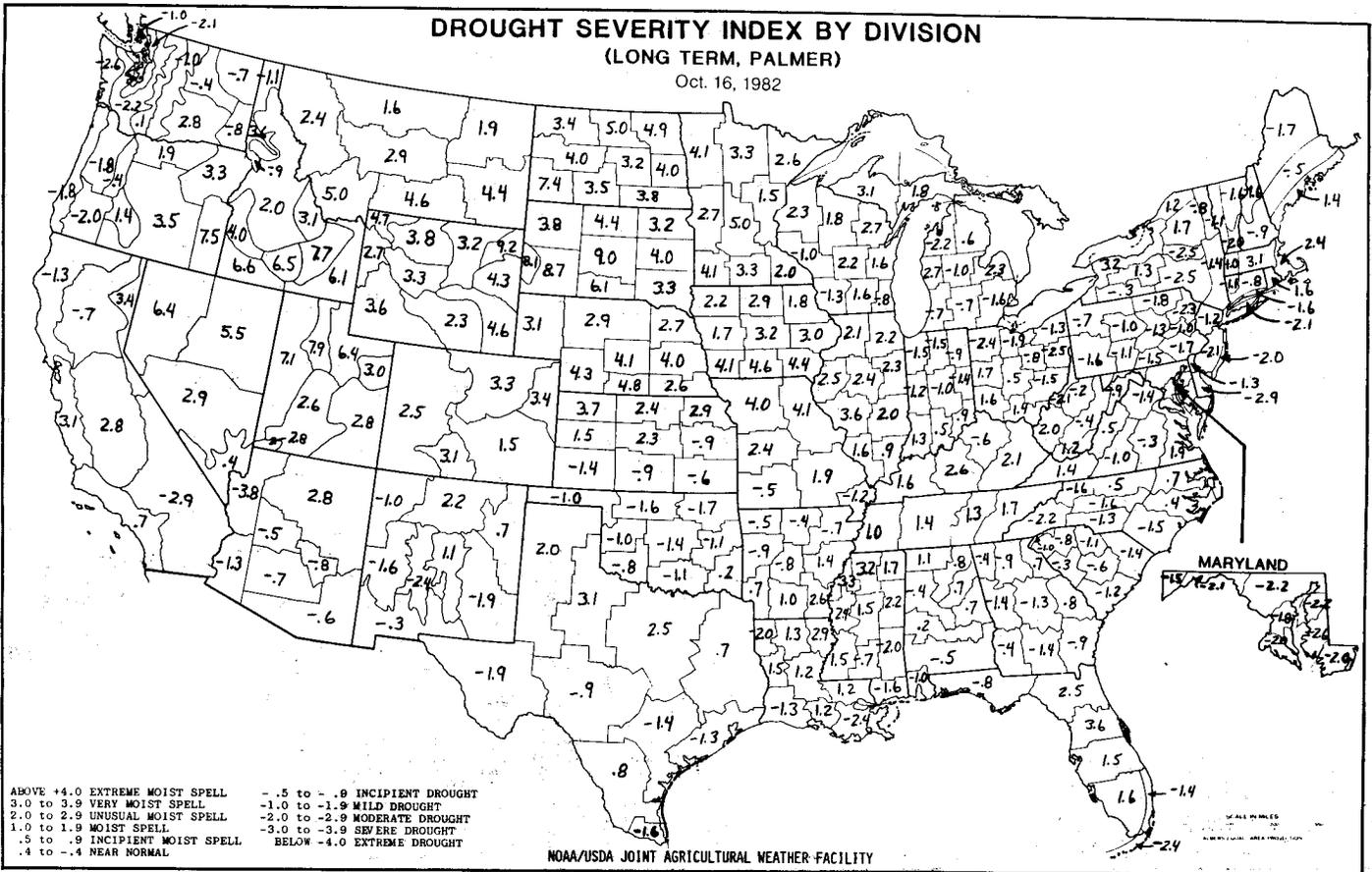
(continued on p. 24)

### Contents

	Page
National Weather Summary . . . . .	1
Precipitation & Crop Moisture . . . . .	2
Crop Moisture Index and Drought Severity . . . . .	3
Drought Severity Index & Precipitation Needed to End Drought . . . . .	4
Streamflow During September . . . . .	5
Average Temperature & Departure . . . . .	6
Weather Data for Selected Cities . . . . .	7
Cooling Degree Days . . . . .	10
National Agricultural Summary . . . . .	11
Crop Progress . . . . .	12
Growing Degree Days & State Summaries of Weather & Agriculture . . . . .	13
International Weather & Crop Summary . . . . .	20

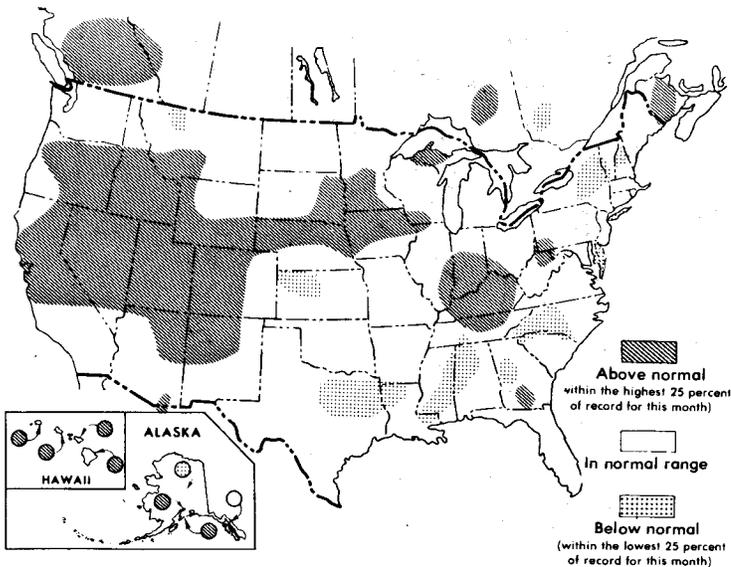






# Streamflow During September

U.S. Geological Survey



The combined streamflow of the Nation's "Big Five" rivers--Mississippi, St. Lawrence, Columbia, Ohio, and Missouri--ended the 1982 water year by averaging 617 billion gallons a day (bgd) during September, 33 percent above normal for the month, according to the U. S. Geological Survey (USGS), Department of the Interior.

The water year, running from October 1 to September 30, roughly follows the growing season and begins and ends during a period of generally low streamflow.

The combined flow of the "Big Five" averaged 12 percent above normal for the 1982 water year. The wet finish to a generally good year was a welcome contrast to the 1981 water year, which was the driest in 5 years. The water years have been generally wet over the past decade, with the combined flow of the "Big Five" falling below normal only in 1977 and 1981.

The "Big Five" rivers, together draining more than half of the conterminous United States, provide a quick, useful check on the status of the Nation's water resources.

Regular monitoring at more than 160 key index stations located on streams throughout the United States also provide information on streamflow conditions on many large and small streams. During September, 88 percent of the key index gaging stations reported normal to above-normal streamflow conditions. Streamflow was below normal in parts of New England, New York, Maryland, and other scattered locations. Below-normal streamflows were reported from the Carolinas, west across Georgia, Alabama, Louisiana, and into Texas. Pockets of below-normal flow were also reported in Montana, Tennessee, and Kansas. In contrast, record-high streamflows were set on streams in California, Idaho, and Nevada, and all four of the key stations in Colorado reported above-normal flows for this time of year.

"The Nation's streams have shown good recovery after the drought conditions that were still lingering at the beginning of the 1982 water year," said Carroll Saboe, USGS hydrologist, Reston, Va., and chief of the Hydrologic Information Unit. "The majority of the key index stations across the coun-

try were normal to above normal during most of the 1982 water year. During June and July of 1982, usually a period when streamflow naturally declines somewhat and water use is particularly high, more than 90 percent of the key index stations were normal to above normal. This strong trend was a significant change from June and July of 1981 when streamflow was well-below normal at 25-30 percent of the key stations."

For the 1982 water year, individual flows of the "Big Five" were all above the levels reported during the previous water year. Mississippi River at Vicksburg, Miss., 400 bgd, 11 percent above normal for the 1982 year and 42 percent above the 1981 water year; St. Lawrence River near Massena, N.Y., 180 bgd, 7 percent above normal and 6 percent above the previous water year; Columbia River at The Dalles, Ore., 150 bgd, 21 percent above normal and 26 percent above the previous water year; Ohio River at Louisville, Ky., 69 bgd, 6 percent below normal but 2 percent above last water year; and the Missouri River at Hermann, Mo., 65 bgd, 39 percent above normal and 48 percent above last water year.

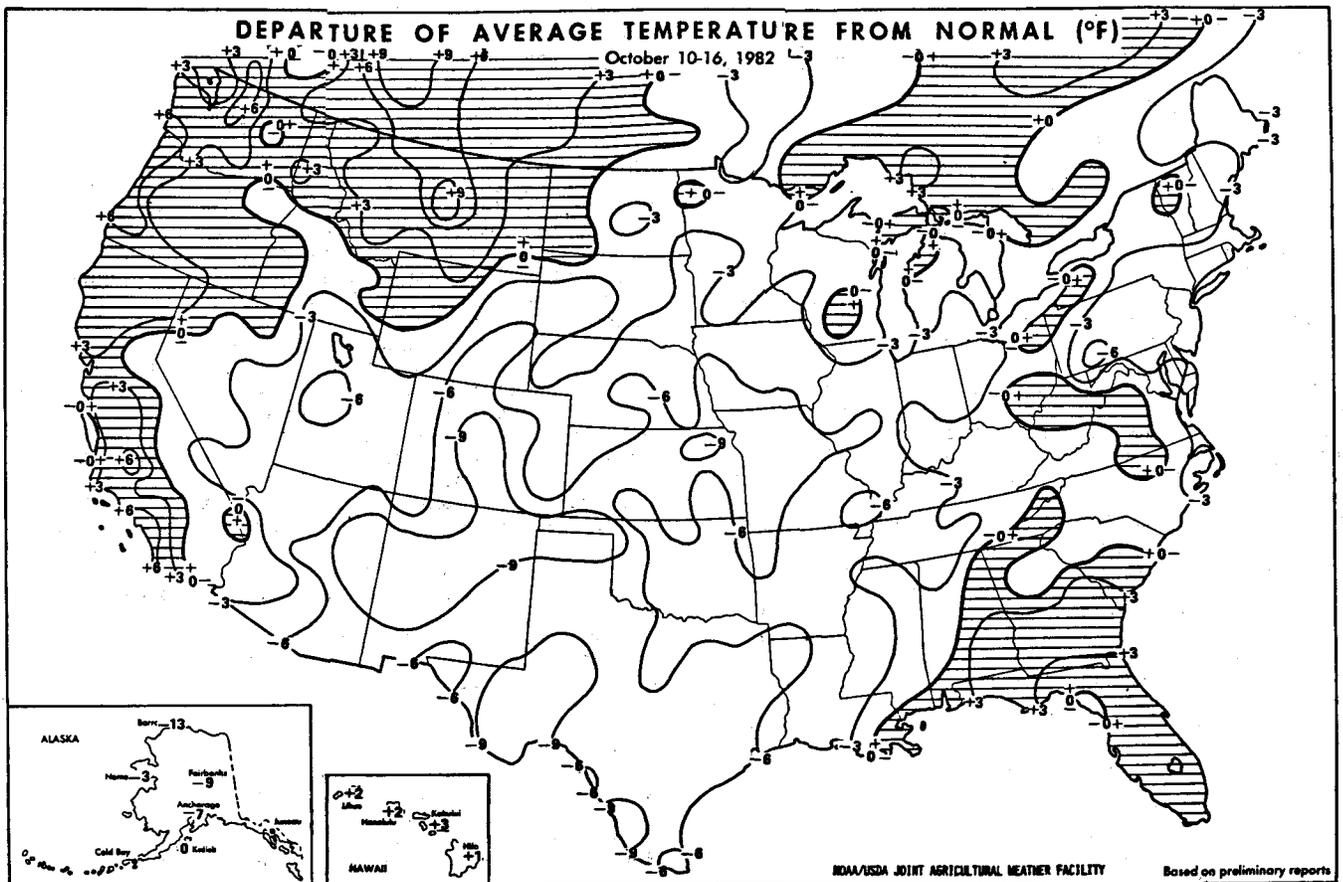
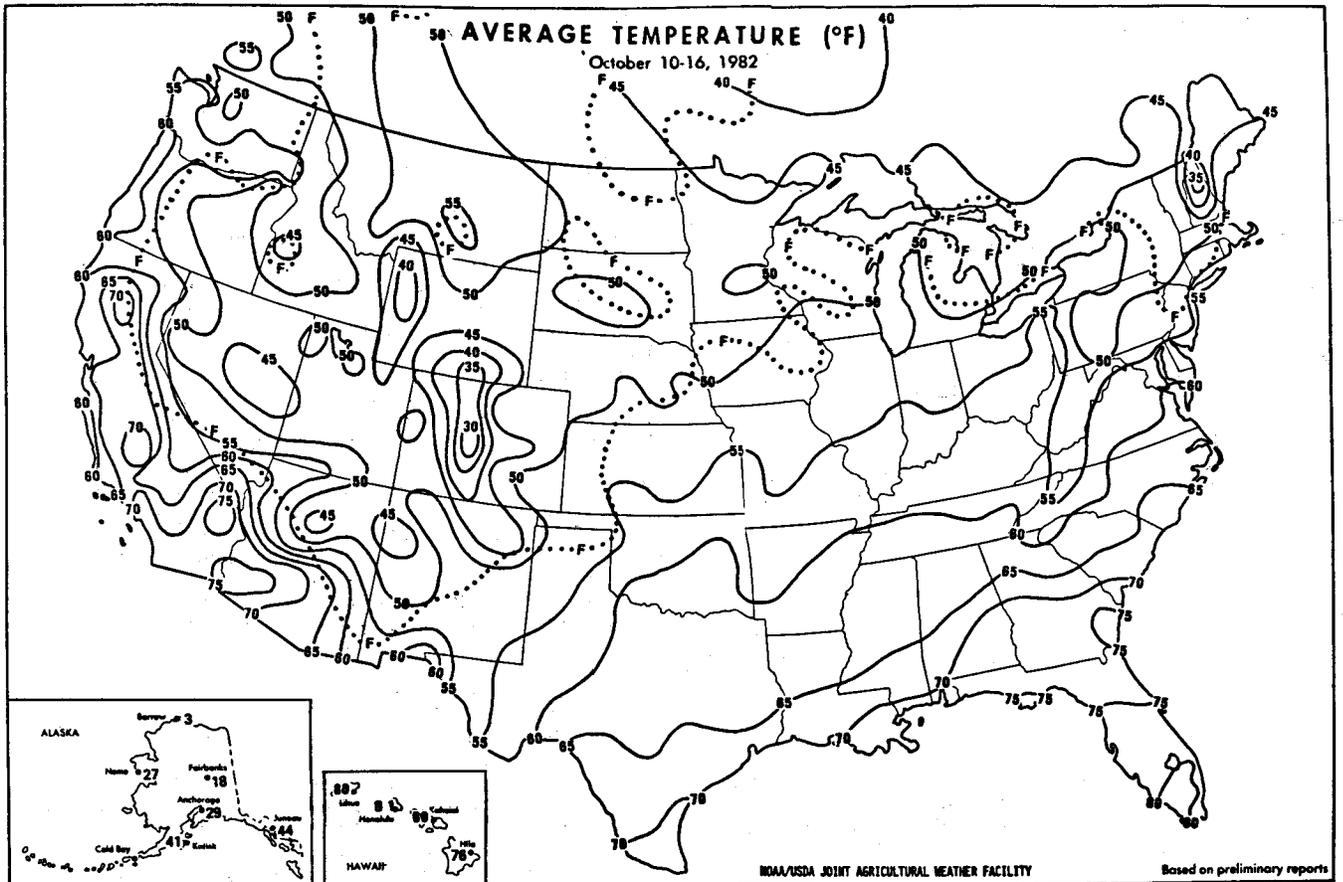
The USGS, working in cooperation with Federal, State, and local agencies, monitors the quantity and quality of surface- and ground-water resources at more than 43,000 sites across the country. USGS compiled the following highlights of September water-resource condition:

**\*"Big Five"--Individual flows:** Mississippi River near Vicksburg, Miss., 273 bgd, 51 percent above normal but 2 percent below the August runoff; St. Lawrence River near Massena, N.Y., 125 bgd, 4 percent above normal but 3 percent below August; Columbia River at The Dalles, Ore., 79 bgd, 26 percent above normal for September but 27 percent below August; Missouri River at Hermann, Mo., 70 bgd, 99 percent above normal and 4 percent above August; and Ohio River at Louisville, Ky., 22 bgd, 43 percent above normal and 6 percent above August. Combined flow of the "Big Five" was 5 percent below that of August.

**\*New England--Streamflow conditions in New England** were generally normal, with below-normal streamflow reported in eastern New Hampshire and well-above-normal streamflow in Rhode Island and southeastern Massachusetts. Flow of the Pawcatuck River at Wood River Junction, R.I., averaged 87 million gallons a day (mgd), 96 percent above normal for September. Storage in the major reservoirs in Massachusetts; New Hampshire, Vermont, and Rhode Island declined slightly and ranged from 9 percent below to 26 percent above average for the end of September. Total storage contents of all the index reservoirs was about 2 percent above the level of this time last year. Ground-water levels ranged from above normal in southeastern New Hampshire, eastern Massachusetts, and northern Rhode Island to well below normal in extreme northwestern New Hampshire and most of northern and central Vermont. Throughout New England, 56 percent of the key index wells were above normal during September, and about 11 percent of the wells in Massachusetts and Rhode Island set new highs for the month. Streamflow in Maine was normal to slightly above normal during September. Preliminary information for the 1982 water year shows that annual streamflow runoff in the State was about 1 to 13 percent above normal. Ground-water levels in Maine generally declined and were lower than a year ago.

**\*New York--Streamflow in New York State** was generally below normal, with four of the five key index stations reporting well-below-normal streamflow for September. Streamflow in both the Susquehanna and lower Genesee River basins in western New York were well below normal--within the lowest

(continued on p. 24)



Weather Data for the Week Ending Oct. 16, 1982

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 Aug. 29	PCT. NORMAL SINCE Aug. 29	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
AL BIRMINGHAM	73	53	83	41	63	-1	1.9	1.3	1.1	3.7	56	53.7	128	96	46	0	0	2	2
MOBILE	80	59	89	46	70	0	T	T	T	6.3	59	62.3	113	94	49	0	0	0	0
MONTGOMERY	81	61	91	49	71	4	.8	.4	.8	3.9	56	49.3	126	87	47	1	0	2	1
AK ANCHORAGE	33	25	35	20	29	-7	1.0	.6	.5	8.3	184	15.2	125	98	76	0	7	4	0
BARROW	8	-2	11	-11	3	-13	.3	.2	.2	2.0	100	10.3	106	80	56	0	7	3	0
FAIRBANKS	28	8	34	-5	18	-9	2.9	1.1	1.3	10.0	65	36.6	91	99	78	0	2	4	2
JUNEAU	50	38	55	27	44	1	2.0	.6	1.2	12.1	96	47.7	113	87	53	0	3	3	2
KODIAK	48	34	58	29	41	0	.4	0	.2	5.3	123	16.0	113	76	44	0	6	2	0
NOME	35	19	41	7	27	-3	0	0	0	.7	9	5.8	109	33	9	2	0	0	0
AZ PHOENIX	88	58	96	49	73	-1	0	0	0	1	9	10.8	73	42	14	0	2	0	0
PRESCOTT	69	36	77	30	52	-6	0	0	0	2	28	10.8	73	42	14	0	2	0	0
TUCSON	80	51	89	42	66	-6	0	0	0	2	96	10.5	114	34	10	0	0	0	0
YUMA	90	61	95	54	75	-2	0	0	0	1	14	2.9	145	31	11	4	0	0	0
AR FORT SMITH	72	46	79	41	59	-6	0	0	0	.1	42	35.2	103	89	32	0	0	0	0
LITTLE ROCK	71	51	79	47	61	-4	.1	0	.1	2.4	35	43.0	117	78	44	0	0	1	0
CA BAKERSFIELD	89	59	92	57	74	6	0	0	0	.5	500	5.3	139	54	18	4	0	0	0
EUREKA	67	49	77	47	58	3	T	T	T	1.1	38	25.5	105	96	63	0	0	0	0
FRESNO	86	53	88	50	69	4	0	0	0	1.1	220	9.7	147	71	21	0	0	0	0
LOS ANGELES	85	59	88	57	72	6	0	0	0	1.4	400	9.4	122	70	18	0	0	0	0
RED BLUFF	85	54	91	52	70	4	0	0	0	1.4	156	14.2	103	65	22	1	0	0	0
SACRAMENTO	80	48	82	43	64	0	0	0	0	1.8	225	19.9	163	90	29	0	0	0	0
SAN DIEGO	83	61	89	59	72	5	0	0	0	.4	200	9.4	162	67	28	0	0	0	0
SAN FRANCISCO	71	50	83	47	61	-1	0	0	0	.9	150	23.5	201	83	45	0	0	0	0
CO DENVER	59	34	72	27	46	-7	.4	0	.4	2.5	100	11.2	87	82	30	0	3	2	0
GRAND JUNCTION	65	38	72	29	52	-5	T	T	T	2.8	133	6.6	99	71	22	0	1	0	0
PUEBLO	63	32	77	25	48	-8	.1	0	.1	2.1	124	14.4	136	96	32	0	3	1	0
CT BRIDGEPORT	59	47	66	35	53	-5	.2	0	.2	1.8	32	37.4	127	82	54	0	0	1	0
HARTFORD	60	41	67	30	51	-3	.2	0	.2	5.0	72	42.9	133	92	49	0	1	1	0
DC WASHINGTON	66	53	71	43	59	-2	.5	0	.4	2.3	38	29.9	95	79	53	0	0	2	0
FL APALACHICOLA	82	66	87	55	74	2	1.2	.6	1.2	22.8	163	64.8	131	92	55	0	0	1	1
DAYTONA BEACH	82	65	88	55	74	-1	.3	0	.2	6.1	43	44.0	102	90	55	0	0	2	0
JACKSONVILLE	82	61	90	49	72	0	.7	0	.4	11.2	79	46.1	96	98	57	1	0	4	0
KEY WEST	85	77	87	73	81	1	.4	0	.4	7.3	51	33.7	102	80	62	0	0	2	0
MIAMI	86	74	92	65	80	1	T	T	T	13.6	74	56.9	111	88	55	1	0	1	0
ORLANDO	84	67	90	55	76	1	T	T	T	7.7	60	50.0	109	88	52	1	0	1	0
TALLAHASSEE	84	61	91	47	72	2	.4	0	.4	7.3	67	51.7	99	95	52	1	0	1	0
TAMPA	83	69	89	61	76	1	.5	0	.5	13.0	126	53.7	123	93	59	0	0	2	0
WEST PALM BEACH	87	72	90	65	80	2	0	0	0	10.0	49	63.3	119	78	50	1	0	0	0
GA ATLANTA	71	56	85	44	63	0	3.7	3.2	2.6	8.9	146	47.0	121	93	64	0	0	4	2
AUGUSTA	77	58	84	48	68	3	3.0	2.5	1.5	5.6	95	33.9	95	89	53	0	0	4	2
MACON	80	61	90	48	71	4	.7	0	.5	3.6	59	37.6	105	98	55	1	0	2	0
SAVANNAH	81	62	90	51	72	3	1.1	.4	.7	4.2	44	47.6	107	89	52	1	0	3	1
HI HILO	82	70	83	67	76	1	1.6	0	.5	20.2	112	157.5	165	92	64	0	0	6	0
HONOLULU	89	74	91	71	81	2	T	T	T	.6	35	23.3	159	77	47	1	0	1	0
KAHULUI	89	72	91	66	80	3	0	0	0	.4	50	23.3	197	74	45	2	0	0	0
LIHUE	85	74	86	73	80	2	.3	0	.1	2.8	55	48.9	171	89	61	0	0	4	0
ID BOISE	70	41	76	34	55	2	0	0	0	1.9	190	9.4	111	82	33	0	0	0	0
LEWISTON	69	44	77	36	56	3	0	0	0	1.1	61	9.2	96	91	43	0	0	0	0
POCATELLO	66	33	72	23	50	0	0	0	0	3.9	390	13.7	167	81	33	0	3	0	0
IL CHICAGO	60	42	65	32	51	-4	T	T	T	2.3	38	29.0	109	88	43	0	1	1	0
MOLINE	61	42	67	36	52	-4	T	T	T	3.8	52	33.0	111	85	47	0	0	0	0
PEORIA	61	43	68	36	52	-4	T	T	T	2.3	33	34.1	116	91	49	0	0	1	0
QUINCY	61	43	68	36	52	-5	0	0	0	5.4	68	35.6	88	47	0	0	0	0	0
ROCKFORD	60	43	65	34	51	-3	T	T	T	3.8	51	32.9	108	92	49	0	0	1	0
SPRINGFIELD	63	44	72	37	53	-5	T	T	T	5.4	79	30.8	109	84	50	0	0	0	0
IN EVANSVILLE	67	46	78	41	57	-3	T	T	T	8.4	150	39.7	119	93	43	0	0	0	0
FORT WAYNE	62	42	76	30	52	-3	T	T	T	1.9	33	32.0	111	81	42	0	1	1	0
INDIANAPOLIS	63	42	75	37	53	-4	.1	0	.1	2.2	39	31.9	104	93	45	0	0	1	0
SOUTH BEND	59	43	73	31	51	-4	.1	0	.1	2.9	44	31.9	111	93	50	0	1	2	0
IA DES MOINES	59	42	70	35	51	-5	T	T	T	6.4	116	36.8	140	85	49	0	0	1	0
SIOUX CITY	58	39	74	33	49	-6	.1	0	.1	6.9	144	25.0	107	91	53	0	0	1	0
WATERLOO	58	41	69	32	50	-4	T	T	T	4.3	62	26.0	90	87	51	0	1	1	0
KS CONCORDIA	63	38	71	32	51	-8	0	0	0	3.2	57	34.9	141	90	40	0	1	0	0
DODGE CITY	68	41	78	34	55	-5	0	0	0	2.1	55	18.0	99	71	26	0	0	0	0
GOODLAND	65	36	77	30	51	-4	0	0	0	4.1	146	24.5	164	75	29	0	2	0	0
TOPEKA	65	37	73	30	51	-8	0	0	0	2.3	35	32.3	107	88	36	0	2	0	0
WICHITA	68	40	80	37	54	-7	0	0	0	2.4	34	24.8	94	83	33	0	0	0	0
KY BOWLING GREEN	67	45	78	37	56	-5	.1	0	.1	8.9	162	40.1	107	98	46	0	0	1	0
LEXINGTON	66	48	79	41	57	-3	T	T	T	5.0	106	30.1	86	91	49	0	0	2	0
LOUISVILLE	66	49	78	40	57	-2	T	T	T	4.9	91	34.5	100	81	45	0	0	0	0
LA ALEXANDRIA	73	57	79	51	65	-4	2.1	1.2	1.6	9.5	140	41.8	88	95	52	0	0	3	1
BATON ROUGE	76	57	85	49	67	-3	.3	.3	.3	4.6	68	37.7	88	87	50	0	0	1	0
LAKE CHARLES	76	57	82	51	67	-4	.2	.6	.2	14.5	184	43.5	100	87	44	0	0	1	0
NEW ORLEANS	79	63	89	52	71	0	.6	.1	.5	9.5	104	50.0	108	93	52	0	0	2	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending Oct. 16, 1982

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 Aug. 29	PCT. NORMAL SINCE Aug. 29	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
LA SHREVEPORT	71	51	78	45	61	-8	1.0	-.3	.9	4.4	72	26.7	78	99	53	0	0	2	1
LA CARIBOU	52	33	58	25	42	-3	.6	-.1	.4	5.4	73	29.3	105	93	57	0	4	3	0
OR PORTLAND	59	36	64	30	47	-3	.5	-.2	.3	4.0	57	34.7	119	91	47	0	3	3	0
MD BALTIMORE	62	47	70	37	55	-4	.3	-.3	.3	4.0	66	27.8	87	89	56	0	0	3	0
MD SALISBURY	64	46	70	39	55	-5	.6	-.2	.6	3.3	41	31.5	88	99	59	0	0	2	1
MA BOSTON	58	46	68	40	52	-4	.3	-.4	.2	4.3	65	39.5	124	83	51	0	0	2	0
MA CHATHAM	57	48	62	44	53	-1	.6	-.1	.3	11.1	--	39.5	--	89	69	0	0	4	0
MI ALPENA	53	42	64	33	48	-1	.5	-.1	.2	4.4	76	20.2	93	94	64	0	0	7	0
MI DETROIT	60	41	72	33	51	-4	.1	-.5	T	2.8	60	24.4	96	89	53	0	0	2	0
MI FLINT	58	41	68	32	49	-3	.2	-.3	.1	3.2	65	20.5	86	94	64	0	1	2	0
MI GRAND RAPIDS	60	42	74	31	51	-2	.3	-.3	.2	2.9	46	24.3	96	86	51	0	1	3	0
MI HOUGHTON LAKE	53	42	62	31	48	-1	.4	-.2	.3	4.5	73	24.3	109	94	66	0	1	5	0
MI LANSING	59	39	73	27	49	-4	.2	-.4	.2	4.0	77	20.3	83	98	55	0	1	2	0
MI MARQUETTE	51	40	60	31	45	-1	.6	0	.4	7.1	97	29.7	106	94	68	0	2	5	0
MI MUSKEGON	57	46	68	28	52	-1	.2	-.4	T	3.4	55	25.2	105	88	56	0	1	6	0
MI SAULT STE. MARIE	51	42	58	31	47	-1	1.0	.3	.4	8.2	112	28.2	117	93	67	0	1	6	0
MN ALEXANDRIA	52	40	65	32	46	-3	.4	-.1	.2	6.0	143	25.1	116	98	66	0	1	4	0
MN DULUTH	50	40	63	29	45	-2	.4	-.1	.2	9.1	160	29.4	117	89	64	0	1	3	0
MN INT'L FALLS	50	38	63	29	44	-1	.3	-.1	.2	7.1	122	22.5	100	97	74	0	1	3	0
MN MINNEAPOLIS	56	43	69	31	50	-2	.3	-.1	.2	4.7	90	20.8	92	87	56	0	1	5	0
MN ROCHESTER	56	41	69	31	48	-3	.1	-.4	T	7.0	127	29.7	121	89	56	0	1	3	0
MS GREENWOOD	72	52	78	44	62	-4	2.4	1.9	2.3	9.4	168	44.6	--	95	47	0	0	3	1
MS JACKSON	73	53	81	43	63	-4	.3	-.1	.3	7.8	142	50.5	134	98	51	0	0	2	0
MS MERIDIAN	77	54	88	44	66	-1	.7	-.3	.7	2.5	44	44.0	110	90	45	0	0	2	1
MO CAPE GIRARDEAU	69	45	79	41	57	-6	0	-.7	0	3.5	49	39.9	116	96	53	0	0	0	0
MO COLUMBIA	63	43	74	37	53	-6	0	-.8	0	6.7	78	37.7	121	89	50	0	0	0	0
MO KANSAS CITY	62	41	70	35	51	-8	0	-.8	0	4.1	49	40.4	127	83	42	0	0	0	0
MO SAINT LOUIS	66	47	75	40	57	-4	0	-.6	0	6.9	121	42.2	146	92	47	0	0	0	0
MO SPRINGFIELD	65	44	75	37	55	-6	T	-.8	T	3.1	39	33.4	103	76	38	0	0	1	0
MT BILLINGS	68	44	76	34	56	5	0	-.2	0	1.9	79	16.0	132	72	29	0	0	0	0
MT GLASGOW	66	36	77	26	51	2	0	-.1	0	1.6	94	10.5	112	80	29	0	2	0	0
MT GREAT FALLS	69	39	74	29	54	4	T	-.1	T	2.8	133	15.7	121	77	34	0	1	0	0
MT HAVRE	70	38	76	27	54	5	0	-.1	0	1.6	76	13.9	135	93	31	0	1	0	0
MT HELENA	66	37	69	26	51	4	T	-.1	T	3.1	172	12.4	131	87	37	0	1	0	0
MT KALISPELL	62	30	68	23	46	2	T	-.3	T	1.9	79	15.6	129	99	49	0	5	1	0
MT MILES CITY	64	38	78	30	51	0	T	-.1	T	3.1	141	13.7	113	86	33	0	3	0	0
MT MISSOULA	65	35	71	27	50	4	T	-.2	T	2.4	114	13.8	137	97	45	0	2	0	0
NE GRAND ISLAND	61	35	74	33	48	-7	0	-.3	0	4.4	100	32.7	154	88	43	0	0	0	0
NE LINCOLN	62	38	75	33	50	-6	T	-.4	T	4.2	81	34.4	140	79	42	0	0	0	0
NE NORFOLK	60	38	75	30	49	-5	T	-.3	T	6.1	142	26.1	119	92	47	0	1	0	0
NE NORTH PLATTE	63	31	74	25	47	-6	T	-.2	T	3.6	103	17.9	99	91	35	0	4	0	0
NE OMAHA	58	40	71	35	49	-7	T	-.4	T	5.3	95	29.9	114	94	58	0	0	1	0
NE SCOTTSBLUFF	64	34	75	25	49	-3	T	-.2	T	2.2	110	19.6	152	80	26	0	4	0	0
NE VALENTINE	62	33	77	31	48	-4	T	-.2	T	3.3	118	21.0	130	83	39	0	4	0	0
NV ELY	63	24	69	17	43	-4	0	-.1	0	4.9	544	12.7	190	83	27	0	7	0	0
NV LAS VEGAS	78	51	83	49	64	-5	0	-.1	0	.1	20	2.7	82	31	13	0	0	0	0
NV RENO	68	30	72	26	49	-2	0	-.1	0	2.4	343	6.7	129	94	23	0	7	0	0
NV WINNEMUCCA	69	27	73	21	48	-1	0	-.1	0	1.4	175	6.1	98	73	21	0	7	0	0
NH CONCORD	59	34	64	28	46	-4	.4	-.2	.2	3.3	59	30.8	114	90	45	0	4	2	0
NJ ATLANTIC CITY	63	44	70	34	54	-4	.3	-.5	.2	1.6	25	25.0	72	97	55	0	0	3	0
NM ALBUQUERQUE	64	38	72	31	51	-9	.2	0	.2	1.5	88	5.9	87	80	32	0	2	1	0
NM CLOVIS	63	43	74	38	53	-7	.1	-.4	.1	2.0	51	14.2	--	81	46	0	0	1	0
NM ROSWELL	66	42	76	38	54	-7	.2	-.1	.2	2.0	63	6.4	59	73	35	0	0	1	0
NY ALBANY	57	39	63	30	48	-4	.3	-.3	.2	2.5	42	27.1	106	97	52	0	1	2	0
NY BINGHAMTON	54	40	61	33	47	-4	.4	-.3	.1	2.5	42	28.6	99	93	64	0	0	5	0
NY BUFFALO	59	47	67	35	53	0	.6	-.1	.4	4.9	78	30.5	113	89	55	0	0	5	0
NY NEW YORK	60	51	66	44	55	-4	T	-.6	T	1.5	25	27.9	89	81	53	0	0	1	0
NY ROCHESTER	60	46	66	39	53	0	.8	-.2	.4	4.7	94	25.1	103	90	51	0	0	5	0
NY SYRACUSE	56	42	61	34	49	-5	.5	-.2	.2	5.0	83	28.1	101	95	62	0	0	5	0
NC ASHEVILLE	68	50	77	41	59	1	2.2	1.4	1.1	4.0	54	41.3	113	93	65	0	0	4	2
NC CHARLOTTE	68	54	72	44	61	-2	.6	0	.6	2.2	34	32.2	96	94	61	0	0	2	1
NC GREENSBORO	67	52	70	40	59	-1	1.6	1.0	1.5	3.7	54	36.8	111	89	58	0	0	4	1
NC HATTERAS	70	54	74	52	62	-4	.3	-.8	.2	4.8	43	44.9	103	94	60	0	0	2	0
NC NEW BERN	71	53	73	45	62	-3	.4	-.4	.3	5.0	50	35.9	77	89	56	0	0	2	0
NC RALEIGH	69	52	74	37	61	0	1.2	-.6	1.0	3.0	42	35.5	103	92	54	0	0	3	1
NC WILMINGTON	73	55	78	46	64	-2	.4	-.4	.3	7.8	76	47.7	104	89	52	0	0	3	0
ND BISMARCK	56	36	72	32	46	-3	.2	-.1	.1	4.3	179	16.3	113	96	57	0	1	3	0
ND FARGO	53	38	68	31	46	-3	.7	-.4	.3	8.0	235	18.5	105	96	69	0	1	4	0
ND GRAND FORKS	53	39	70	33	46	0	.7	-.4	.4	6.0	182	19.5	117	98	72	0	0	5	0
ND WILLISTON	61	34	77	25	48	0	0	-.1	0	3.6	164	14.6	111	91	48	0	3	0	0
OH AKRON-CANTON	60	47	71	35	54	-1	.2	-.4	.1	3.5	64	26.0	91	81	48	0	0	4	0
OH CINCINNATI	67	48	81	39	57	-1	T	-.4	T	2.5	52	35.7	114	82	44	0	0	0	0
OH CLEVELAND	61	49	71	43	55	0	.3	-.3	.2	5.1	98	27.4	99	84	50	0	0	3	0
OH COLUMBUS	63	48	80	34	56	0	T	-.4	T	5.1	106	30.1	99	88	48	0	0	2	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

In Volume 69, No. 38, September 21, 1982 there was an error at Roswell, New Mexico. Precipitation was reported as 2.0. This value should have been 0.2. Corrections have been made and the numbers beginning with issue No. 42 are correct.

Weather Data for the Week Ending Oct. 16, 1982

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/Aug. 29	PCT. NORMAL SINCE/Aug. 29	TOTAL, IN., SINCE/Jan. 1	PCT. NORMAL SINCE/Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMPERATURE °F		PRECIPITATION	
																		.01 INCH OR MORE	.50 INCH OR MORE		
DAYTON	62	45	78	34	53	-4	T	-.4	T	2.3	53	34.5	122	89	50	0	0	0	0	0	0
TOLEDO	61	41	79	32	51	-4	.2	-.3	.1	2.4	50	20.4	81	91	53	0	1	3	0	0	0
YOUNGSTOWN	61	49	76	37	55	1	.1	-.5	.1	2.3	39	25.4	85	79	50	0	0	3	0	0	0
OK OKLAHOMA CITY	73	46	81	42	59	-5	.1	-.6	.1	3.7	54	31.2	117	77	31	0	0	2	0	0	0
TULSA	72	48	82	43	60	-4	.1	-.7	.1	3.1	39	26.2	85	80	31	0	0	2	0	0	0
OR ASTORIA	70	49	79	44	60	6	.3	-1.2	.3	5.4	64	46.9	116	84	57	0	0	1	0	0	0
BURNS	70	29	73	25	49	1	0	-.2	0	1.4	156	8.1	103	84	31	0	6	0	0	0	0
MEDFORD	79	42	83	40	60	6	0	-.4	0	1.6	76	10.8	86	90	32	0	0	0	0	0	0
PENDLETON	67	42	72	38	55	1	T	-.2	T	1.1	73	7.0	83	86	40	0	0	0	0	0	0
PORTLAND	71	46	76	41	58	4	.1	-.6	.1	5.1	119	27.5	121	96	52	0	0	1	0	0	0
SALEM	72	41	79	39	57	3	.1	-.7	.1	2.7	60	24.1	96	93	45	0	0	1	0	0	0
PA ALLENTOWN	59	45	62	35	52	-3	.5	-.1	.5	2.1	32	37.4	112	94	58	0	0	2	1	1	1
ERIE	61	48	71	39	55	2	1.0	-.3	.7	4.4	64	30.5	106	75	54	0	0	6	1	1	1
HARRISBURG	59	46	63	42	53	-4	1.0	-.4	1.0	3.9	76	34.2	107	93	61	0	0	1	1	1	1
PHILADELPHIA	64	48	69	39	56	-3	.1	-.5	.1	3.0	49	33.7	109	89	48	0	0	2	0	0	0
PITTSBURGH	60	46	75	35	53	-2	.2	-.4	.1	2.9	54	25.6	88	79	49	0	0	4	0	0	0
SCRANTON	57	44	61	37	50	-4	.8	-.2	.7	1.9	34	30.4	112	93	66	0	0	3	1	1	1
RI PROVIDENCE	59	43	66	36	51	-4	.2	-.5	.1	6.5	97	42.9	138	85	49	0	0	2	0	0	0
SC CHARLESTON	76	60	81	50	68	1	.1	-.7	T	6.5	47	42.9	138	85	49	0	0	2	0	0	0
COLUMBIA	75	56	83	44	66	0	4.2	-.5	4.2	45	39.5	89	96	62	0	0	2	0	0	0	0
FLORENCE	72	56	81	45	64	-2	.8	.2	.8	4.5	57	43.7	112	96	55	0	0	2	1	1	1
GREENVILLE	69	54	74	44	62	-1	.5	0	.5	2.3	32	32.9	89	97	58	0	0	1	1	1	1
SD ABERDEEN	56	39	71	30	48	-2	1.7	1.0	1.3	4.2	55	46.7	123	89	62	0	0	4	1	1	1
HURON	57	41	71	33	49	-3	-.2	-.1	.2	7.5	208	23.6	138	95	63	0	0	3	0	0	0
RAPID CITY	61	36	73	32	49	-3	.2	0	.2	6.3	274	25.2	162	82	36	0	2	2	0	0	0
SIoux FALLS	54	38	68	30	46	-6	.1	-.3	T	12.6	247	28.0	126	95	65	0	1	2	0	0	0
TN CHATTANOOGA	71	53	86	40	62	0	1.3	-.6	1.0	3.3	48	42.1	105	95	52	0	0	2	1	1	1
KNOXVILLE	69	52	84	40	61	-1	2.1	-1.5	1.2	5.1	93	44.4	124	98	58	0	0	4	2	2	2
MEMPHIS	71	53	79	49	62	-2	.3	-.3	.3	6.2	105	47.7	125	86	39	0	0	2	0	0	0
TX NASHVILLE	70	50	79	43	60	-2	.3	-.1	.3	5.3	96	38.9	109	92	46	0	0	2	0	0	0
ABILENE	71	49	78	44	60	-8	.4	-.3	.3	1.7	33	18.2	91	80	34	0	0	2	0	0	0
AMARILLO	66	39	76	37	53	-8	T	-.4	T	2.1	53	17.0	98	72	29	0	0	2	0	0	0
AUSTIN	75	56	85	53	66	-5	1.1	-.3	.5	4.5	62	20.9	80	83	43	0	0	3	0	0	0
BEAUMONT	75	57	82	49	66	-5	T	-.8	T	3.2	33	44.5	102	92	49	0	0	1	0	0	0
BROWNSVILLE	81	63	90	56	72	-5	.4	-.4	.4	3.7	39	19.2	93	94	54	1	0	0	1	0	0
CORPUS CHRISTI	77	59	87	57	68	-7	1.0	-.4	1.0	2.3	26	17.5	74	86	47	0	0	3	1	1	1
DEL RIO	78	57	88	51	68	-5	T	-.5	T	4.1	20	9.3	63	72	33	0	0	1	0	0	0
EL PASO	75	45	81	41	60	-6	T	-.2	T	5.2	260	7.9	118	70	22	0	0	0	0	0	0
FORT WORTH	73	54	78	51	64	-5	.7	0	.7	3.1	48	32.9	126	76	33	0	0	1	1	1	1
GALVESTON	74	62	80	60	68	-6	T	-.6	T	2.1	22	20.8	62	89	58	0	0	1	1	1	1
HOUSTON	75	56	82	50	66	-6	3.8	-2.9	3.4	5.2	58	26.5	71	92	46	0	0	3	1	1	1
LUBBOCK	67	41	76	38	54	-8	T	-.5	T	1.8	37	18.0	110	80	36	0	0	1	0	0	0
MIDLAND	68	45	80	41	57	-11	.2	-.1	.2	2.5	81	12.7	109	86	37	0	0	2	0	0	0
SAN ANGELO	72	49	84	43	61	-8	.6	-.1	.6	1.4	26	16.2	107	94	36	0	0	1	1	1	1
SAN ANTONIO	74	53	83	49	63	-9	1.7	1.0	1.1	3.3	46	15.7	70	85	44	0	0	3	1	1	1
VICTORIA	76	57	84	54	67	-7	.5	-.3	.4	4.8	53	22.6	81	90	47	0	0	3	0	0	0
WACO	76	52	88	48	64	-6	.7	-.1	.6	1.6	27	23.4	94	92	40	0	0	2	1	1	1
WICHITA FALLS	74	48	81	45	61	-6	.2	-.4	.2	2.9	48	33.3	148	86	30	0	0	3	0	0	0
UT BLANDING	63	33	69	29	48	-5	0	-.4	0	2.6	104	11.9	121	61	25	0	3	0	0	0	0
CEDAR CITY	67	31	73	25	49	-4	0	-.2	0	1.9	112	12.0	154	65	19	0	3	0	0	0	0
SALT LAKE CITY	63	38	70	30	50	-3	T	-.3	T	7.6	362	18.8	163	83	40	0	2	0	0	0	0
VT BURLINGTON	57	43	63	32	50	0	.7	-.2	.5	4.4	71	27.1	104	86	52	0	1	4	0	0	0
VA NORFOLK	66	54	70	46	60	-2	1.6	-.9	1.5	5.2	66	38.8	106	81	53	0	0	2	1	1	1
RICHMOND	66	52	73	38	59	-1	1.0	-.4	1.0	4.0	57	39.0	112	92	60	0	0	2	1	1	1
ROANOKE	64	51	70	43	58	-1	1.3	-.5	1.1	5.5	79	37.4	120	90	64	0	0	4	1	1	1
WA COLVILLE	64	37	68	29	51	3	0	-.3	0	1.8	95	13.4	118	96	52	0	2	0	0	0	0
QUILLAYUTE	68	40	76	38	54	2	.7	-1.9	.7	9.3	61	75.6	114	99	60	0	0	1	1	1	1
SEATTLE-TACOMA	65	47	69	44	56	3	.2	-.6	.2	2.7	53	24.2	101	97	64	0	0	1	0	0	0
SPOKANE	64	39	70	30	52	2	0	-.3	0	2.1	111	11.5	99	98	52	0	2	0	0	0	0
YAKIMA	71	38	74	34	55	3	T	-.1	T	1.2	150	6.4	123	89	39	0	0	0	0	0	0
WV BECKLEY	58	46	65	37	52	-2	1.7	1.2	.9	4.6	72	36.7	106	94	65	0	0	5	1	1	1
CHARLESTON	65	51	79	41	58	0	.8	-.2	.4	4.5	78	35.6	108	91	55	0	0	4	0	0	0
HUNTINGTON	65	50	80	39	57	-1	.9	-.5	.4	4.3	86	35.4	112	88	53	0	0	4	0	0	0
PARKERSBURG	66	53	78	38	60	3	.3	-.2	.2	3.1	60	29.4	86	89	54	0	0	3	0	0	0
WI GREEN BAY	55	42	63	32	49	-2	T	-.4	T	2.4	44	21.2	96	87	56	0	1	3	0	0	0
LA CROSSE	58	44	71	35	51	-3	.1	-.4	T	4.3	70	18.6	73	84	52	0	0	4	0	0	0
MADISON	58	41	66	31	50	-2	.1	-.4	.1	3.4	54	23.1	91	89	49	0	-1	1	0	0	0
MILWAUKEE	59	42	63	35	51	-2	.1	-.4	.1	1.9	35	25.5	106	90	47	0	0	2	0	0	0
WAUSAU	53	43	62	34	48	-1	.2	-.4	.1	7.2	103	31.4	115	92	62	0	0	4	0	0	0
WY CASPER	60	31	71	14	46	-4	T	-.2	T	4.1	228	15.8	166	90	35	0	3	0	0	0	0
CHEYENNE	56	33	67	25	45	-5	.1	-.2	.1	3.6	180	17.5	139	83	35	0	3	1	0	0	0
LANDER	61	37	68	27	49	0	.1	-.2	.1	3.8	158	10.4	90	76	38	0	2	1	0	0	0
SHERIDAN	67	36	77	27	52	2	0	-.2	0	2.4	89	12.0	89	74	32	0	2	0	0	0	0
PR SAN JUAN	91	77	93	75	84	3	.5	-.8	.4	4.2	34	34.1	75	85	59	7	0	3	0	0	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING OCT. 17, 1982.

BASED ON 1941-70 NORMALS.

+ACCUMULATION FROM JAN. 1, 1982

STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +		
	TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1981		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1981		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1981
ALA. BIRMINGHAM...	14	14	1928	14	75	MAINE CARIBOU...	0	0	164	36	11	YOUNGSTOWN.....	0	0	447	71	159
MOBILE.....	14	14	2519	10	125	PORTLAND.....	0	0	250	27	27	OKLA. OKLAHOMA CITY	0	16	1883	22	111
MONTGOMERY.....	14	14	2449	74	74	MD. BALTIMORE...	0	0	1054	54	152	TULSA.....	0	17	2289	359	121
ARIZ FLAGSTAFF...	14	14	124	16	133	MASS BOSTON.....	0	0	637	24	213	OREG ASTORIA.....	1	1	13	1	29
PHOENIX.....	14	14	4069	207	511	MICH ALPENA.....	0	0	22	11	18	BURNS.....	0	0	15	1	29
TUCSON.....	14	14	2538	140	419	DETROIT.....	0	0	49	4	64	HEDFORD.....	0	0	651	87	119
HINSLON.....	14	14	1063	140	231	FLINT.....	0	0	133	11	18	PENDLETON.....	0	0	647	137	60
YUMA.....	14	14	4028	10	505	GRAND RAPIDS...	0	0	600	29	41	PORTLAND.....	0	0	309	99	47
ARK. FORT SMITH...	14	14	1838	166	30	HOUGHTON LAKE...	0	0	255	19	4	SALEM.....	0	0	284	41	18
LITTLE ROCK.....	14	14	2039	126	122	LANSING.....	0	0	225	4	4	PA ALLENTOWN.....	0	0	600	172	211
CALIF. BAKERSFIELD	6	34	2661	515	71	MARQUETTE.....	0	0	133	1	1	ERIE.....	0	0	488	11	85
EUREKA.....	6	34	1600	10	6	MUSKEGON.....	0	0	463	1	13	HARRISBURG.....	0	0	782	243	134
FRESNO.....	6	34	1678	10	28	S. STE. MARIE...	0	0	61	1	0	PHILADELPHIA...	0	0	1031	73	72
LOS ANGELES.....	6	34	1578	10	28	MINN. DULUTH...	0	0	111	63	42	PITTSBURGH.....	0	0	570	169	61
RED BLUFF.....	6	34	1020	10	36	INTERNATL FALLS...	0	0	180	10	10	SCRANTON.....	0	0	439	169	196
SAN DIEGO.....	6	34	1020	10	36	WINNEAPOLIS...	0	0	12	12	12	R. I. PROVIDENCE...	0	0	570	38	182
SAN FRANCISCO...	6	34	1020	10	36	ROCHESTER.....	0	0	46	38	77	S. C. CHARLESTON...	0	0	2113	67	189
STOCKTON.....	6	34	1141	115	599	ST. CLOUD.....	0	0	1	1	1	COLUMBIA.....	0	0	1907	158	47
COLO DENVER.....	1	1	617	3	295	MISS. JACKSON...	0	0	246	279	30	GREENVILLE...	0	0	1433	138	188
GRAND JUNCTION...	1	1	1020	12	250	MERIDIAN.....	0	0	120	179	48	S. DAK. ABERDEEN...	0	0	665	103	103
PUEBLO.....	1	1	1020	12	250	MO. COLUMBIA...	0	0	107	196	164	HURON.....	0	0	424	210	167
CONN BRIDGEPORT...	0	0	539	196	136	KANSAS CITY...	0	0	148	113	38	RAPID CITY.....	0	0	424	89	84
HARTFORD.....	0	0	613	29	20	ST. LOUIS.....	0	0	117	117	117	SIoux FALLS...	0	0	638	89	84
DEL. WILMINGTON...	0	0	1053	61	21	SPRINGFIELD...	0	0	113	113	113	TENN. CHATTANOOGA...	0	0	1572	60	70
D.C. WASHINGTON...	0	0	1445	31	225	MONT. BILLINGS...	0	0	676	178	42	KNOXVILLE.....	0	0	1425	103	215
FLA. APALACHICOLA...	0	0	2469	75	66	GLASGOW.....	0	0	442	4	4	MEMPHIS.....	0	0	1572	11	22
DAVONA BEACH...	0	0	2021	14	14	GREAT FALLS...	0	0	219	121	121	NASHVILLE.....	0	0	1572	11	22
FORT MYERS.....	0	0	2021	14	14	HAVRE.....	0	0	299	101	101	TEXAS ABILENE...	0	0	135	135	89
JACKSONVILLE...	0	0	2021	14	14	HELENA.....	0	0	355	98	46	AMARILLO.....	0	0	135	135	141
KEY WEST.....	0	0	2021	14	14	KALISPELL.....	0	0	103	10	10	AUSTIN.....	0	0	135	135	141
LAKELAND.....	0	0	2021	14	14	KANSAS CITY...	0	0	198	10	10	BEAUMONT.....	0	0	135	135	141
MIAMI.....	0	0	2021	14	14	HISSOULA.....	0	0	198	10	10	BEAUMONT.....	0	0	135	135	141
ORLANDO.....	0	0	2021	14	14	NEBR. GRAND ISLAND...	0	0	82	212	124	BEAUMONT.....	0	0	135	135	141
TALLAHASSEE...	0	0	2021	14	14	LINCOLN.....	0	0	108	212	124	DEL PASO.....	0	0	135	135	141
TAMPA.....	0	0	2021	14	14	NORFOLK.....	0	0	781	144	125	FORT WORTH...	0	0	135	135	141
NEST PALM BEACH...	0	0	2021	14	14	NORTH PLATTE...	0	0	720	144	125	GALVESTON...	0	0	135	135	141
GA. ATLANTA.....	13	13	1704	123	273	OMAHA.....	0	0	996	86	49	HOUSTON.....	0	0	135	135	141
AUGUSTA.....	13	13	1986	10	148	VALENTINE...	0	0	799	9	4	LUBBOCK.....	0	0	135	135	141
Macon.....	13	13	2285	22	69	NEV. ELY.....	0	0	220	4	120	HIDLAND.....	0	0	135	135	141
SAVANNAH.....	13	13	2385	118	11	LAS VEGAS...	0	0	2713	207	73	SAN ANGELO...	0	0	135	135	141
IDAHO BOISE.....	0	0	615	99	43	RENO.....	0	0	422	91	80	SAN ANTONIO...	0	0	135	135	141
LEAISTON.....	0	0	842	185	49	WINNEHUCCA...	0	0	469	63	143	VICTORIA.....	0	0	135	135	141
POCAHELLO.....	0	0	397	49	72	N. H. CONCORD...	0	0	313	36	89	WICHITA FALLS...	0	0	135	135	141
ILL. CAIRO.....	1	1	1746	50	29	N. J. ATLANTIC CITY...	0	0	916	52	74	UTAH SALT LAKE CITY	0	0	1052	125	121
CHICAGO.....	1	1	719	29	29	TRENTON.....	0	0	919	51	80	VT. BURLINGTON...	0	0	352	44	130
HOLINE.....	1	1	847	49	49	N. MEX. ALBUQUERQUE	0	0	1349	33	81	VA. LYNCHBURG...	0	0	1106	6	57
PEORIA.....	1	1	782	49	49	ROSMELL.....	0	0	1820	261	198	NORFOLK.....	0	0	1372	79	188
ROCKFORD.....	1	1	1098	16	100	N. Y. ALBANY...	0	0	344	230	109	RICHMOND.....	0	0	1443	77	49
SPRINGFIELD...	1	1	1098	16	100	BINGHAMTON...	0	0	308	61	159	ROANOKE.....	0	0	990	40	82
IND. EVANSVILLE...	0	0	1331	45	505	BUFFALO.....	0	0	387	184	159	WASH. OULLAVUTE...	0	0	16	8	30
FORT WAYNE...	0	0	990	50	505	NEW YORK.....	0	0	387	184	159	SEATTLE-TACOMA...	0	0	156	25	40
INDIANAPOLIS...	0	0	682	13	511	ROCHESTER.....	0	0	450	61	114	SPOKANE.....	0	0	485	53	121
SOUTH BEND...	0	0	682	13	511	SYRACUSE.....	0	0	319	232	353	HALLA HALLA...	0	0	1016	154	123
IOWA BURLINGTON...	0	0	94	50	505	N. C. ASHEVILLE...	0	0	911	39	44	YAKIMA.....	0	0	467	12	74
DES MOINES...	0	0	94	50	505	CHARLOTTE...	0	0	1573	30	55	W. VA. BECKLEY...	0	0	405	85	70
DUBUQUE.....	0	0	94	50	505	GREENSBORO...	0	0	1176	36	100	CHARLESTON...	0	0	974	91	84
STOUX CITY.....	0	0	829	103	41	HATTERAS.....	0	0	1176	36	100	HUNTINGTON...	0	0	974	91	341
KANS. CONCORDIA...	0	0	1318	120	97	RALEIGH.....	0	0	1176	36	100	PARKERSBURG...	0	0	1110	65	123
DODGE CITY.....	0	0	1529	114	217	WILMINGTON...	0	0	1176	36	100	WIS. GREEN BAY...	0	0	361	25	19
GOODLAND.....	0	0	1529	114	217	N. DAK. BISMARCK...	0	0	397	90	44	LACROSSE.....	0	0	361	25	19
GOODLAND.....	0	0	1529	114	217	FARGO.....	0	0	440	99	59	MADISON.....	0	0	415	40	71
TOPICA.....	0	0	1529	114	217	HILLSTON.....	0	0	532	110	188	WILMAURKEE...	0	0	415	40	71
WICHITA.....	0	0	1529	114	217	OHIO AKRON-CANTON...	0	0	627	7	55	WYO. CASPER...	0	0	551	33	43
KY. LEXINGTON.....	0	0	1092	115	30	CINCINNATI...	0	0	1013	13	13	CHEYENNE...	0	0	551	33	43
LOUISVILLE...	0	0	1185	91	237	CLEVELAND...	0	0	632	38	38	LANDER.....	0	0	551	33	43
LA. BATON ROUGE...	30	30	2899	381	262	COLUMBUS...	0	0	732	99	99	SHERIDAN.....	0	0	551	33	43
LAKE CHARLES...	30	30	2593	51	45	COLUMBUS...	0	0	732	99	99		0	0	551	33	43
NEW ORLEANS...	30	30	2849	243	84	DAYTON.....	0	0	808	128	96		0	0	551	33	43
SHREVEPORT...	30	30	2481	1	188	TOLEDO.....	0	0	622	63	16		0	0	551	33	43

## National Agricultural Summary

October 12-17

**HIGHLIGHTS:** Rain in the southern Plains aided winter wheat, while clear weather further north promoted rapid seeding progress and harvesting of crops. Little rain fell in the Corn Belt, and farmers were able to make good progress with this year's harvests. Wet conditions halted fieldwork in the northern Plains. Farmers had less than 4 days suitable for fieldwork in Wisconsin, North Dakota, Georgia, North Carolina, Virginia, Alabama, Louisiana and Mississippi due to rainy weather and wet fields. In other States, up to 7 days were available. Soil moisture was adequate to surplus in Michigan, Wisconsin, North Dakota, Louisiana, Mississippi, Utah, and in parts of Georgia. Elsewhere, supplies were mostly adequate, except in Indiana and Ohio where short to adequate supplies were recorded. Corn and soybean development and harvest was slower than average. Corn was 95% mature and 28% combined. Soybeans were 37% harvested, while 88% of the crop was dropping leaves. Sorghum harvest also lagged--only 36% had been harvested. Cotton harvest reached 25% completion. Rice was 82% harvested. Winter wheat seeding advanced to 78% completion, and 54% of the acreage had emerged. Progress was generally on schedule. Fall apple and vegetable harvests remained in full swing. Pastures rated fair to good condition, although cool weather slowed growth of grasses.

**SMALL GRAINS:** In the 15 major producing States, 78% of the 1983 winter wheat crop was seeded, and 54% of the acreage had emerged. Progress was just slightly behind schedule. Seeding was complete in Nebraska and South Dakota, neared completion in Colorado and Kansas, and was just getting underway in California. Showers in the eastern half of Texas helped germinate small grains, although more rain is needed to produce good stands. Moisture is needed over the northern High Plains where many fields are drying out. Some stands were replanted because of poor development. Winter wheat in Nebraska was in good condition with adequate soil moisture supplies.

**CORN:** In the 17 major producing States, corn was 28% combined, behind last year's 30% and the 40% average. Progress lagged in 10 of the 17 States. Harvest was 33 percentage points behind average in Nebraska, 30 points behind in South Dakota, 26 in Iowa, and 24 in Minnesota. Even though harvesting was lagging in the western Corn Belt, most of the corn in that region was mature and safe from frost. In the eastern Corn Belt, harvest remained ahead of schedule. During the week, farmers in Kentucky and Indiana harvested 15% of their acreage, while those in Illinois combined 22% of their acreage.

**SOYBEANS:** Soybean harvest was 37% complete in the 18 major producing States, compared with 40% in 1981 and the average of 47%. Progress was behind average in 12 of the 18 States. Harvest was 55 percentage points behind average in Nebraska, 47 in Iowa, 45 in Minnesota, and 20 in Kansas. In contrast, the Illinois, Indiana, Michigan, and Ohio harvests were ahead of schedule by 10 to 30 points. Farmers in Michigan and Ohio harvested 25% of their acreage during the week as good weather permitted farmers to spend long hours in fields.

**COTTON:** In the 14 major producing States, bolls were opening on 80% of the acreage, about on schedule with last year and the average. Harvesting was 25% completed, only 5 points behind

a year ago and the average. Harvest had not yet started in Oklahoma and was picking up momentum in Arizona, California, and New Mexico. In other States, harvest ranged from 19 to 75% finished. Progress was behind schedule in 8 of the 14 States by as much as 16 points in Louisiana. The Tennessee harvest was 36 points ahead of average and in Missouri picking was 25 points ahead. Scattered showers interrupted harvesting operations in Texas from the southern High Plains through the south-central areas and Edwards Plateau.

**OTHER CROPS:** In the 7 major producing States, sorghum was 81% mature and 36% harvested, both lagging last year and the average. Harvest was behind average in all States except Colorado. Progress lagged by 46 percentage points in Nebraska, 37 points in South Dakota, 30 in Kansas, and 20 in Oklahoma. Although maturity of the crop was not far behind normal, harvesting was well behind due to adverse weather. Harvest in Texas gained momentum, although some stands were still high in moisture. Some fields on the Plains were lodged by high winds.

Rice was 82% harvested in the 5 major producing States, compared with 88% a year earlier and the average of 86%. Harvest was finished in Texas and near completion in Louisiana. The California harvest reached 40% completion.

Tobacco stripping continued in full swing. The Tennessee burley crop was 25% stripped and the Kentucky burley crop 8% stripped, with another 30% ready for stripping. Virginia growers were grading burley tobacco, firing dark tobacco, and marketing flue-cured tobacco.

Peanut digging and combining remained very active. The Georgia crop was 98% harvested, the Virginia crop 86%, and the North Carolina crop 66%.

**VEGETABLES:** Fall vegetable harvests were in full swing in Northern areas. Harvests of most tender crops were finished. Maine potato growers were virtually finished harvesting this year's crop. Sunny weather prevailed in Florida's vegetable growing areas. Little or no rainfall aided the drying of fields. Land preparations and planting continued active. Harvesting of crops was light but increasing. Rain interrupted harvest operations in the San Antonio-Winter Garden region of Texas. In East Texas, showers benefited fall vegetables. Cool weather slowed the growth of crops in the Trans-Pecos and Plains areas. California growers continued harvesting a wide variety of crops.

**FRUITS AND NUTS:** Fall apple harvests remained very active in Northern areas. Florida's citrus groves were in very good condition, although cooler weather slowed the flush of new growth. Harvest of early fruit was ahead of normal. Citrus in Texas sized well. Harvest of early oranges made good progress. Arizona's citrus groves were in good condition with fruit sizing well. The lemon harvest progressed at a steady rate. The Navel orange harvest was expected to get underway soon.

**PASTURES AND LIVESTOCK:** Pastures were in fair to good condition, although cool weather has slowed the growth of grasses. Additional rainfall benefited winter grass development in Texas. Grazing prospects were poor on some wheat pastures in Texas due to dry weather. Supplemental feeding increased. Movement of livestock to winter pastures continued active. Some cattle in Wyoming were stranded at higher elevations by heavy snow.

**CROP PROGRESS**

FOR WEEK ENDING OCT 17

	WINTER WHEAT % PLANTED		
	1982	1981	AVG.
CALIF	10	8	7
COLO	95	96	97
IDAHO	79	76	79
ILL	70	56	65
IND	75	50	60
KANS	90	90	85
MO	39	47	48
MONT	85	90	95
NEBR	100	100	100
OHIO	80	60	70
OKLA	70	80	80
OREG	74	75	69
S DAK	100	100	100
TEX	64	66	71
WASH	86	88	84
15 STATES	78	79	79

	CORN % HARVESTED		
	1982	1981	AVG.
COLO	7	11	26
GA	97	97	89
ILL	50	34	46
IND	35	20	35
IOWA	15	32	41
KANS	55	50	60
KY	58	65	60
MICH	15	10	15
MINN	6	15	30
MO	49	54	57
NEBR	7	20	40
N C	89	89	85
OHIO	30	20	25
PA	15	34	27
S DAK	10	31	40
VA	70	70	64
WIS	7	8	16
17 STATES	28	30	40

	SOYBEANS % DROPPING LEAVES		
	1982	1981	AVG.
ALA	70	85	NA
ARK	69	73	72
GA	84	79	99
ILL	100	100	100
IND	100	98	100
IOWA	98	100	100
KANS	85	85	NA
KY	82	70	92
LA	73	74	77
MICH	100	100	100
MINN	99	99	99
MISS	100	93	95
MO	73	83	85
NEBR	95	100	100
N C	37	52	41
OHIO	100	100	100
S C	54	70	61
TENN	86	76	80
18 STATES	88	89	NA

	COTTON % BOLLS OPENING		
	1982	1981	AVG.
ALA	98	95	78
ARIZ	99	100	100
ARK	98	99	89
CALIF	95	100	98
GA	88	93	90
LA	100	100	92
MISS	100	100	99
MO	100	100	98
N MEX	98	97	95
N C	98	90	90
OKLA	55	95	85
S C	95	96	97
TENN	100	100	79
TEX	67	69	73
14 STATES	80	83	83

	WINTER WHEAT % EMERGED		
	1982	1981	AVG.
CALIF	5	0	0
COLO	86	83	85
IDAHO	60	40	51
ILL	38	28	NA
IND	45	20	25
KANS	70	75	NA
MO	28	30	35
MONT	70	75	NA
NEBR	95	99	NA
OHIO	45	25	30
OKLA	30	55	40
OREG	28	39	43
S DAK	89	93	97
TEX	31	46	48
WASH	65	68	66
15 STATES	54	60	NA
EXCL. STATES WITH NA	43	50	49

	CORN % MATURE		
	1982	1981	AVG.
COLO	81	86	89
GA	100	100	NA
ILL	100	100	100
IND	100	95	100
IOWA	97	100	100
KANS	98	97	98
KY	100	100	99
MICH	99	97	99
MINN	92	99	99
MO	91	97	97
NEBR	75	95	99
N C	100	100	100
OHIO	100	90	100
PA	80	93	85
S DAK	95	100	100
VA	100	100	100
WIS	98	100	100
17 STATES	95	98	NA

	SOYBEANS % HARVESTED		
	1982	1981	AVG.
ALA	24	30	25
ARK	14	15	13
GA	12	17	12
ILL	85	70	75
IND	75	40	60
IOWA	25	68	72
KANS	25	35	45
KY	20	14	30
LA	28	36	41
MICH	50	25	20
MINN	20	39	65
MISS	21	25	31
MO	25	37	43
NEBR	15	55	70
N C	5	8	7
OHIO	75	40	50
S C	4	7	11
TENN	10	12	21
18 STATES	37	40	47

	COTTON % HARVESTED		
	1982	1981	AVG.
ALA	42	61	34
ARIZ	10	25	19
ARK	56	45	44
CALIF	10	15	16
GA	31	58	45
LA	36	59	52
MISS	49	75	55
MO	75	22	50
N MEX	10	9	9
N C	34	40	34
OKLA	0	10	5
S C	46	53	53
TENN	72	37	36
TEX	19	21	28
14 STATES	25	30	30

THESE 15 STATES PRODUCED 88% OF THE 1981 WINTER WHEAT CROP.

THESE 17 STATES PRODUCED 93% OF THE 1981 CORN CROP.

THESE 18 STATES PRODUCED 95% OF THE 1981 SOYBEAN CROP.

THESE 14 STATES PRODUCED 99% OF THE 1981 COTTON CROP.

NA - NOT AVAILABLE

NA - NOT AVAILABLE

NA - NOT AVAILABLE

	SORGHUM % HARVESTED		
	1982	1981	AVG.
COLO	21	24	15
KANS	15	20	45
MO	49	43	57
NEBR	4	15	50
OKLA	15	30	35
S DAK	13	41	50
TEX	76	78	82
7 STATES	36	42	58

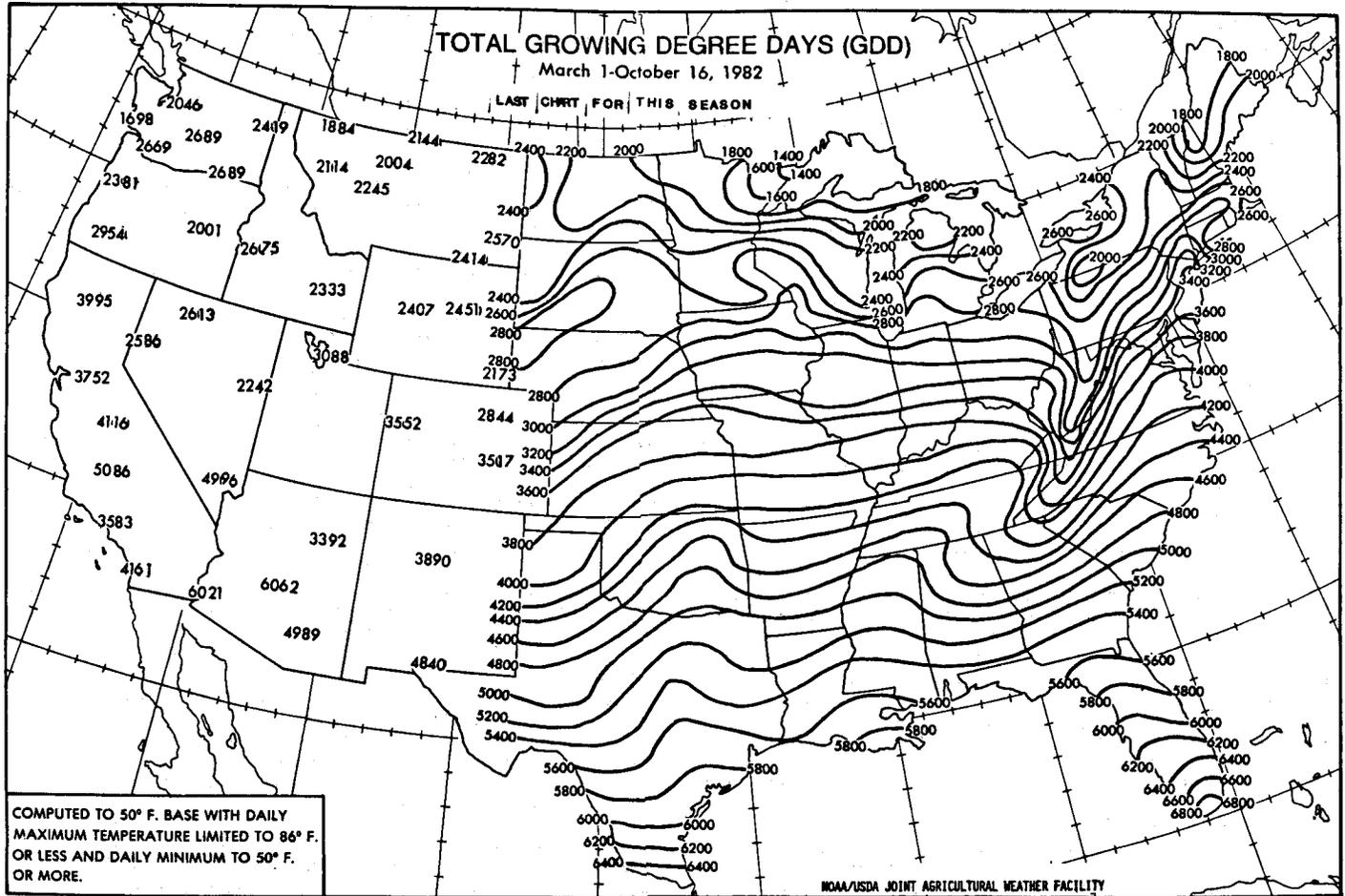
	SORGHUM % MATURE		
	1982	1981	AVG.
COLO	81	75	82
KANS	75	75	90
MO	83	81	92
NEBR	65	90	97
OKLA	85	90	90
S DAK	87	96	95
TEX	91	90	91
7 STATES	81	85	92

	RICE % HARVESTED		
	1982	1981	AVG.
ARK	86	93	88
CALIF	40	50	53
LA	97	99	98
MISS	82	90	87
TEX	100	100	100
5 STATES	82	88	86

THESE 7 STATES PRODUCED 92% OF THE 1981 SORGHUM CROP.

THESE 7 STATES PRODUCED 92% OF THE 1981 SORGHUM CROP.

THESE 5 STATES PRODUCED 98% OF THE 1981 RICE CROP.



### 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 SRS State Offices in cooperation with the National Weather Service.

**ALABAMA:** Temperatures averaged 5° below normal to near normal. Heavy rainfall midweek 2.00 to 5.00 in.

Fieldwork: 3.3 days. Soil moisture mostly adequate. Soybeans: Dropping leaves 70%, 85% 1981; mature 49%, 64% 1981, 59% average; harvested 24%, 30% 1981, 25% average. Cotton: Harvested 42%, 61% 1981, 34% average. Sorghum harvested 75%, 66% 1981. Wheat seeded 20%, 27% 1981, 30% average. Condition: Cotton, sorghum and livestock good, soybeans and pastures fair to good.

**ARIZONA:** Sunny, warm days and clear, cool nights over State with warming trend last part week. No precipitation. Average temperatures 1 to 10° below seasonal normals.

Cool temperatures favorable fall vegetables, caused slow down cotton harvest activities. Several fields sprayed with defoliant, cool weather prevented bolls from opening, leaves from falling. Warming trend over weekend should stimulate defoliation, harvest activities for next week; 10% cotton harvested. Continues behind both last year, average of 25%, 19%, respectively. Bolls open 99% cotton. Holds in line with last year's 100%, average 100%. Cotton crop looked good. Yields average or better. Yuma Pinal Counties seeding new acreage alfalfa. Renovation current acreage reported

Yuma County. Other alfalfa haying made seasonal progress. Land preparations underway for planting wheat, barley in Yuma, Pinal Counties. Pinal County some wheat already planted. Corn for grain reached peak harvest Cochise County. Sorghum harvest ranged just starting to winding down southeastern areas of State. Cool temperatures favorable toward vegetable growth Yuma County. Activities range from seeding to post thinning irrigations for fall mixed vegetables. Fall plantings cantaloup, watermelons, honeydews sizing well Yuma, Mohave Counties. Vines generally good condition. Some harvest fall melons Parker area next week. Cantaloup harvest continued Maricopa County. Lettuce harvest continued southeastern counties, expected to begin in a week Aguila area. Pumpkin, squash harvest full swing Willcox area. Lemon harvest progressed steady rate Maricopa, Yuma Counties, some slow down last week due to poor market condition. Navel orange harvest expected underway next week Maricopa County. Citrus groves good condition. Fruit continuing size well.

**ARKANSAS:** Temperatures below normal. Highest temperature 81°, lowest 32°. All departures from normal ranged from -3 to -9°. Most rainfall 2.58 in., least zero.

Five days suitable for fieldwork. Soil moisture adequate. Crop growth moderate. Soybean condition fair; turning yellow 87%, 91% 1981, 88% average; shedding 69%, 73% 1981, 72% average; mature 42%, 46% 1981, 43% average; harvested 14%, 15% 1981, 13% average. Rice good condition, harvested 86%, 93% 1981, 88% average. Cotton good condition; harvested 56%, 45% 1981, 44% average. Oats good condition; planted 29%, 23% 1981, 34% average. Wheat good condition; planted 22%, 21% 1981, 28% average. Pastures below average. Cattle good condition.

**CALIFORNIA:** A ridge of high pressure at the surface and aloft created warm and dry weather. Temperatures ranged from 7° above normal at Oxnard to 6° below normal at Blyth. Actually only the Desert southeast and the Sierra-Cascade showed below normal temperatures. The only precipitation reported was a thunderstorm in the Yosemite Valley and a trace at Eureka. Light easterly flow of dry air over the mountains maintained normal to below normal humidity for the period.

Rice harvest progressing rapidly with good weather. Harvest 40% complete, 50% last year, 53% average. Cotton progressing well with 95% of cotton open, 100% last year, 98% average. Harvest increasing with 10% complete, 15% last year, 16% average. Defoliation continues. Good yields reported. Harvest of dry edible beans, grain sorghum, field corn and sugar beets remains active. Cutting of alfalfa hay and corn for silage continues. Planting of winter wheat picking up with 10% planted, 8% last year and 7% average. Emerged wheat in 5% of acreage, 0% last year and average. Few lots of Susan and Bacon avocados packed. Apple harvest slow in Sebastopol area. Roadside apple sales full swing in mountain areas. Soft date harvest continued. Desert lemon harvest continued. Many lots of raisin grapes going to dehydrators. Emperor and Calmeria variety table grape harvest increased volume. Wine grape harvest continued. Olive harvest active. Walnut and pistachio harvest continued. Weather conditions continued favorable. Artichokes, light supply, variable quality, Central Coast. Broccoli, supply moderate, quality good, Central Coast. Carrots, moderate supply, variable quality, Central Coast. San Joaquin Valley crop doing well. Cauliflower supply moderate, variable quality, Central Coast. San Joaquin Valley planting look good. Celery, heavy supply, good quality Central Coast. Season past peak. Poor market curtailing harvest activities. Cucurbit harvest continues, northern part of the State. Melon harvest ending Marysville-Yuba City area. Desert harvest increasing. Large sizes, variable quality. Some abandoned fields due to White Fly. Bell pepper supply moderate, quality good, Central Coast. Harvest past peak. Lettuce supplies decreasing Central Coast. Wide range in quality. San Joaquin Valley harvest underway, quality very good. Palo Verde crop doing well. Planting continues Imperial Valley. Fall Potato harvest underway Tulalake-Butte Valley. Fresh market tomato harvest underway Central, South Coast districts, San Joaquin Valley. Processing tomato harvest almost complete. Range grasses sprouted, by recent rains showing stress due to north winds. Movement livestock winter grazing areas nearly complete. Calving, lambing continue active. Turkeys moving processors good volume. Bee colonies being moved wintering locations.

**COLORADO:** Generally light precipitation fell in the mountains as snow and as rain over the eastern plains. Temperatures ranged from 3 to 11° below normal.

Completion of small grain harvest behind normal due to earlier rains. Row crop prospects mostly good. Winter wheat: 95% seeded, 86% emerged; last

year 96% seeded; 83% emerged. Dry beans in only fair condition with 95% cut and 76% threshed; last year 97% cut and 90% threshed. Corn, moisture content still too high for volume harvest, 81% mature and 7% harvested, in 1981, 86% mature and 11% harvested. Corn silage 95% harvested. Sorghum, poor to fair condition depending on planting and subsequent moisture, 81% mature and 21% harvested. Last year, 75% mature and 24% harvested. Sorghum forage 79% harvested. Alfalfa third cutting 66% complete, fourth cutting 26%. Top and subsoil moisture adequate. Five and one-half days suitable for fieldwork. Livestock in good to very good condition.

**FLORIDA:** A stalled frontal system in western Panhandle the first of the week finally swept through State by the 15th. Temperatures much warmer than normal in the front, then dropping to some of the coolest readings of the fall by the 17th. Spotty, 1.00 to 4.00 in. rainfall northwest with some 1.00 in. amounts along the lower east coast. Elsewhere rainfall was limited to less than 0.50 in.

Soil moisture mostly adequate north, adequate to surplus central and south, adequate to short Panhandle. Peanut harvest near completion. Cotton, soybean, sugarcane harvest increases. Hay making continued. Last cutting being made in the south. Seed corn good growth. Spraying active for worms. Land preparation planting small grain winter forage continue. Pasture continues very good to excellent, but only poor to fair for some low lying Peninsular areas in some dry localities. Cattle good to excellent. Cooler night time temperature have begun to slow the flush of new growth. Fruit color breakage. Fruit sizes large for all types. Harvest ahead of normal. Sunny weather prevail most of week in vegetable areas. A weak cool front in late week brought cloudy skies, cool temperatures, scattered light showers. Rainfall ranged from little to none. Dry weather beneficial. Drainage pumping remain active southwest area because of continued high water tables. Land preparation, planting, spray programs active. Strawberries transplanting underway. Harvest light but increasing. Sweet corn, cucumbers, eggplants, peppers, squash, polebeans harvest continue. Gadsden County light harvest of fair quality. Fall watermelon on the way.

**GEORGIA:** Warm and humid, showers heaviest in north. Amounts ranged from 5.43 to 0.01 in. in parts of southeast. Temperatures ranged 2 to 6° above normal but cooled significantly toward the end of the week. No rainfall 16th and 17th, with temperatures near normal to 5° below normal in northern parts.

Soil moisture surplus most of northern third, short south, adequate elsewhere. Three days suitable for fieldwork. Harvest and fall seeding active where weather permitted. Corn: 97% harvested this year and last, 89% average. Cotton condition 32% fair, 61% good; 88% has open bolls, last year 93%, average 90%; 31% harvested, last year 58%, average 45%; yields exceptionally good. Peanuts 99% dug, last year 93%, average 92%; 98% threshed, last year 86%, average 85%. Soybean condition 9% poor, 36% fair, 53% good; 84% shedding leaves, last year 79%; 12% harvested, last year 17%, average 12%. Wheat 11% planted, last year 13%, average 21%. Rye 36% planted, last year 33%, average 32%. Other small grains 26% planted, last year and average 28%. Pecan condition 47% fair, 47% good; 4% harvested, last year 6%, average 5%.

**HAWAII:** Weather favorable. Light beneficial showers some sections. Insect damage heavy to some vine and solanaceous crops. Spraying intensified and irrigation frequent to maintain fair to good crop progress. Vegetables: Supplies adequate. Chinese cabbage and sweetpotato harvest very ac-

tive. Bananas: Supplies increasing gradually. Papayas: Most orchards in seasonal flush. Pine-apples: Harvest down. Sugar: Harvesting steady. Pastures: Generally fair to good.

IDAHO: High pressure dominated for much of the week bringing mostly dry conditions and warmer temperatures. High of 80° in Mountain Home, low of 12° in Hamer. Precipitation was almost non-existent.

Six and one-half days suitable for fieldwork as harvest advanced rapidly in most localities. Potato harvest 70% complete, 68% last year, 78% average. Sugarbeet harvest 23% complete, 22% last year, 18% average. Onion harvest was virtually complete and silage corn harvest 95% cut. Dry bean combining advanced but remained 10 points behind average with 83% harvested. Winter wheat seeding reached 79%, 76% last year and 79% average. Emergence stood at 60%, 40% last year, and 51% average. Ranges remained in excellent condition. Soil moisture supplies were adequate to surplus.

ILLINOIS: Temperatures 3 to 8° below normal as a 2-week warm trend ended. Minimum temperatures fell near the freezing mark in many sections of the State at the end of the week. Precipitation was very light in most sections with little or no rain being recorded.

Corn 100% mature, 100% 1981, 100% average; 50% harvested, 34% 1981, 46% average. Soybeans 100% dropping leaves, 100% 1981, 100% average; 85% harvested, 70% 1981, 75% average. Seventy percent of the 1983 winter wheat crop seeded, 56% 1981, 65% average; 38% emerged, 28% 1981, 24% average. Fifty percent of the sorghum crop has been harvested. Intended ground for corn and soybeans has been 18% tilled (plowed or chiseled) for next year's crop. This compares with 15% last year and the average of 20%. Pastures 10% excellent, 68% good, 20% fair, and 2% poor. Soil moisture 15% short, 79% adequate and 6% surplus. Days suitable for fieldwork: 5.8.

INDIANA: Fieldwork averaged 5 days. Topsoil and subsoil moisture short to mostly adequate. Corn 35% harvested, 1981 20%, average 35%. Corn 100% mature, 1981 95%, average 100%. Soybeans 75% combined, 1981 40%, average 60%. Soybeans 100% dropping leaves, 1981 98%, average 100%. Moisture content: Corn 21%, soybeans 13%. Wheat 75% seeded, 1981 50%, average 60%. Wheat 45% emerged, 1981 20%, average 25%. Silos 98% filled, 1981 90%, average 95%.

IOWA: A cool week with negligible precipitation. Topsoil moisture: 30% surplus, 70% adequate. Subsoil moisture: 20% surplus, 79% adequate, 1% short. Corn mature: 97%, last year 100%, normal 100%. Corn harvested: 15%, last year 32%, normal 41%. Soybeans with leaves shedding: 98%, last year 100%, normal 100%. Soybeans mature: 87%, last year 100%, normal 100%. Soybeans harvested: 25%, last year 68%, normal 72%. Sorghum harvested: 10%, last year 27%, normal 43%. Winter wheat sown: 85%, last year 74%, normal 81%. Fieldwork: 4.0 days suitable. Livestock in good condition.

KANSAS: No precipitation. Temperatures averaged 53 to 56°, normal northwest, 2 to 5° below normal elsewhere. Freezes occurred early in week and midweek west and north.

Wheat 90% planted, 90% last year, 85% average; 70% emerged, 75% last year. Corn 98% mature, 97% last year, 98% average; 55% harvested, 50% last year, 60% average. Soybeans 85% dropping leaves, 85% last year; 25% harvested, 35% last year, 45% average. Sorghum 75% mature, 75% last year, 90% average; 15% harvested, 20% last year, 45% aver-

age; some early week freeze damage reported. Fieldwork: 6.0 days suitable.

KENTUCKY: Temperatures averaged 3 to 5° below normal. Precipitation varied from none in some spots to nearly 1.00 in. Normal rainfall for week's period is about 0.50 in. First temperatures below 32° reported at a number of stations.

Days favorable for fieldwork averaged 4.7. Soil moisture 12% short to 82% adequate and 6% surplus. Burley 8% stripped, another 30% ready for stripping. Houseburn on quite a bit of burley, especially early housed. Corn nearly all mature, 58% harvested compared 65% last year, 60% average. Soybeans 20% harvested, last year 14%, average 30%. About 18% soybeans still have leaves yellow or earlier. Wheat 30% seeded, last year 38%, average 44%. Pasture good to excellent.

LOUISIANA: Rainfall averaged near 2.00 in. north central and west central, 0.29 to 1.60 in. elsewhere. Temperatures normal to 5° below normal.

Soil moisture adequate to surplus. Days suitable: 2.7. Corn harvested 100%, 99% 1981, 97% average. Rice harvested 97%, 99% 1981, 98% average. Cotton open bolls 100% 1982 and 1981, 92% average; harvested 36%, 59% 1981, 52% average; condition fair to good. Soybeans leaves turning 92%, 91% 1981, 92% average; shedding 73%, 74% 1981, 77% average; harvested 28%, 36% 1981, 41% average; condition fair to good. Sorghum harvested 95%, 97% 1981, 94% average. Wheat seeded 5%, 11% 1981, 36% average. Sweetpotatoes harvested 84%, 92% 1981, 82% average. Sugarcane planted 91%, 97% 1981, 87% average; harvested 6%, 11% 1981, 7% average; condition good. Pecans harvested 4%, 3% 1981; condition poor to fair. Last cutting of hay 92%, 95% 1981, 75% average. Vegetables rated fair. Pastures rated fair to good. Livestock good.

MARYLAND AND DELAWARE: Temperatures averaged 3° above normal, third consecutive week with above average temperatures. Highs averaged in the high 70's to low 80's; lows ranged from the mid 30's in the lower Eastern Shore to mid 40's elsewhere. Week was mostly sunny and warm with rainfall averaging nearly 0.50 in. but ranging from 0.25 in. on the lower Eastern Shore to 0.84 in. at Smithsburg.

Maryland: Soybeans 15% combined, last year 25%. All soybeans turned color and 70% shed leaves, last year 95% turned, 65% shed. Corn all mature, harvest in full gear; 60% of grain corn harvested, 70% last year. Nearly 6 days suitable for fieldwork. Farmers made excellent progress in planting small grains. Barley 65% planted, 70% last year, 60% week earlier. Wheat 35% sown, 40% last year, and more than double the progress and week earlier. Rye plantings 50%, last year 70%, 15% previous week. Oats, planted 45%, 40% last year.

Delaware: Soybean harvested 15%, equal last year. All beans had turned color, 93% shed leaves; year earlier levels, 95% turned, 75% shed leaves. Corn for grain harvest 75% completed; 80% last year. Six days suitable for fieldwork and small grain planting. Barley, wheat and rye seeding were at the 70, 15 and 55% mark, behind last year's progress of 80% and 25% for barley and wheat respectively but ahead the 35% planted for rye.

MICHIGAN: Average temperatures, 2 to 7° below normal. Highs, 56 to 66, lows, 22 to 35. Only one station didn't record freezing temperatures. Precipitation was light in southern Lower

Peninsula, it was moderate in northern Lower Peninsula and upper Peninsula. Fieldwork: 5.5 days. Topsoil moisture surplus in north, mostly adequate in south. Some shortages in southwest causing minor wheat germination problems. Soybean harvest, 50% complete, 25% in 1981, 20% average. Corn for grain harvest, 15% complete, 10% last year, 15% average. Wheat planting, 90%, 60% in 1981, 75% average. Corn silage chopping, 95%, 85% in 1981, 85% average. Dry edible beans, 97% done, 75% in 1981, 80% average. Frost over weekend will help corn dry-down. Harvest for grain will be widespread. Average moisture of corn harvested was 26%. Average moisture of soybeans harvested was 14.5%. Two weeks left of apple picking. Container shortages have slowed progress in some areas. One week left of grape harvest.

MINNESOTA: Cloudy weather early in the week gave way to sunshine by midweek which allowed some drying of the soil to occur. Temperatures averaged from the mid 40's north to around 50° south and were generally 1 to 4° above normal. The highest reported temperature was 72° at Redwood Falls and the coolest was 23° at Pipestone. Light rain persisted early in the week and showers occurred again on 15th but amounts were generally considerably less than the previous couple of weeks. Rain averaged around 0.50 in. in the north down to around 0.10 in. in the southwest and south central. The largest reported total was 0.94 in. at Aitkin.

Some clear skies by end of week, but effects of long rainy period likely to linger. Almost entire State in surplus moisture situations. Soft ground and standing water made fieldwork difficult in some areas and impossible in others. Topsoil moisture 22% adequate, 78% surplus. Mature: Field corn 92%, 1981 99%, normal 99%; soybeans 97%, 1981 99%, normal 99%. Harvested: Field corn 6%, 1981 15%, normal 30%; soybeans 20%, 1981 39%, normal 65%; sunflowers 8%, 1981 39%, normal 60%; sugarbeets 40%, 1981 44%, normal 68%; potatoes 85%, 1981 92%, normal 91%.

MISSISSIPPI: Temperatures averaged 1 to 10° below normal. The first light frosts were reported in the northeast hills. Rain fell over most of the State except in the southeast and coastal counties. Greatest 24-hour rainfall was 2.38 in. Temperature extremes 33 and 90°.

Soil moisture adequate to surplus over most of State; adequate to short in the southeast. Fieldwork: 2.9 days suitable. Cotton 49% harvested, 75% last year, 55% average; condition good. Soybeans 100% shedding, last year 93%, average 95%; harvest 21% complete, 25% last year, 31% average; condition fair to good. Rice 82% harvested, 90% last year, 87% average. Corn 82% harvested, sorghum 90%, peanuts 78%, sweetpotatoes 66%, pecan 11%. Winter wheat 16% seeded, 25% last year, 39% average. Pecan condition fair. Pasture condition fair to good.

MISSOURI: Temperatures in Missouri were well below normal. Rainfall was next to done with the only measurable amounts being received in southeast and southwest. In general, a typical fall week.

Fieldwork was 5.0 days suitable. Corn 91% mature, last year 97%, normal 97%. Corn 49% harvested, last year 54%, normal 57%. Grain sorghum 83% mature, 81% last year, 92% normal. Sorghum 49% harvested, last year 43%, normal 57%. Soybeans 65% mature, 74% last year, 76% normal. Soybeans 25% harvested, last year 37%, normal 43%. Winter wheat seeding 39% completed, last year 47%, normal 48%. Plowing for spring-planted crops 24% completed, last year 24%, normal 20%. Cotton 75% harvested, last year 22%,

normal 50%. Pasture condition 14% excellent, 54% good, 30% fair and 2% poor. Topsoil moisture supply 10% surplus, 85% adequate and 5% short.

MONTANA: A mild, mostly dry week. A few showers end of the week in the west and southeast. Temperatures averaged 7° above normal in north central to normal in northeast and southeast.

Topsoil and subsoil moisture adequate. Days suitable for fieldwork: 4. Harvest progress compared with last year and normal: Sugarbeets 30, 40, 65; corn silage 95, 100, 100; dry beans 90, 100, 90; potatoes 60, 80, 75. Winter wheat seeded 85, 90, 95. Winter wheat condition good, 70% emerged. Cattle and calves moved from summer ranges 65%. Sheep and lambs moved 70%.

NEBRASKA: Dry week. Amounts varied from only trace to a few hundredths of an inch. Temperatures: Near normal in Panhandle to 5° below normal in the east.

Corn harvested for grain 7%, 20% last year and 40% normal. Mature 75%, 95% year ago and 99% normal. Soybeans harvested 15%, 55% last year and 70% normal. Current harvest progress two full weeks behind normal. Soybeans shedding leaves 95%, 100% last year and normal. Sorghum harvest 4% complete, 15% last year and 50% normal. Ripe 65%, 90% year ago and 97% normal. Winter wheat good. Current conditions well above last three years. Emerged 95%, 99% last year. Pasture and range feed supplies adequate. Days suitable for fieldwork: 4.1. Topsoil and subsoil moisture adequate.

NEVADA: Strong high pressure system north of State brought north winds and clear skies to much of State early in week. Highs 5 to 10° below normal. Nighttime lows northern and central in 20's and low 30's. As system moved south temperatures warmed to normal levels by weekend. No measurable rain reported during week.

Potato harvest neared completion by weekend. Few fields alfalfa seed remaining for harvest. Ranges and pastures condition good to excellent. Livestock good to excellent condition.

NEW ENGLAND: Week began with a cool high pressure ridge from Canada on the 11th, followed by a dissipating front moving west to east on the 12th. However, a low developed along the Gulf coast and moved northeastward across the Carolinas, then just offshore New England during the 13th and 14th. This system brought the bulk of the precipitation for the week. A westerly flow followed on 15th which gradually became northwesterly and increasingly colder. Average temperatures ran close to, but below normal in most sections. However, from the 12th through the 15th, there were many readings in the low 60's. The lowest was 19° at Clayton Lake, Me., and 21° at Ft. Kent, Me. early on the 12th. Precipitation occurred mostly as a result of the mid week low. Snow flurries and showers followed on the backside of that low in the unstable, moist, cold flow. Eastport, Me. had the highest total for the week with 1.10 in.

Maine potatoes: harvest nearly complete, variable quality. Cranberry harvest over 75% complete.

NEW JERSEY: Temperatures averaged 5° below normal. Extremes: 23° at Pemberton on 18th and 71° at Hammonton and Toms River on 16th. Rainfall averaged 0.23 in. north, 0.17 in. central and 0.29 in. south. The heaviest 24-hour total 0.31 in. at Newton on 13th to 14th. Estimated soil moisture, in percent of field capacity, averaged 86% north, 68% central and

57% south. Four inch soil temperatures averaged 52° north, 56° central and 58° south.

Fieldwork: 6.3 days suitable. Showers beneficial but a good soaking rain needed. Additional frost damage to tender crops. Harvest of hardy crops continues but low prices increasing volumes to storages. Field corn and soybeans maturing rapidly. Planting grains and cover crops. Pasture growth very limited.

NEW MEXICO: Average temperatures were between 4 and 6° below normal in most sections.

Soil moisture adequate most areas. However, some areas remain in a very short supply. Cotton remains in good condition in most areas. Growth and development has been slowed due to cool temperatures. Alfalfa hay harvest continues to wind down in the more northern producing areas as growth hampered by cooler temperatures. Corn silage harvest nearing completion with grain harvest about 40% complete. About 10% of the grain sorghum fields harvested. Winter wheat and barley seeding mostly complete on the eastside. Fall lettuce harvest underway. Red chile harvest very active. Approximately 80% of the peanut fields dug with about 20% completely harvested. Range conditions remain varied from fair to excellent across most of the State. Livestock in good condition and progressing well.

NEW YORK: Cool week, frost in most of northern and eastern areas. No frost central and west. Rainfall subnormal.

Good fieldwork conditions. Corn silage harvest 73% done, 44% 1981, 69% average. Grain corn harvest 11% done, 7% 1981, 12% average. Third cutting alfalfa 80% in, 76% 1981, 12% average.

Apple harvest active. Concord grapes about 90% harvested. Finger Lakes Catawba grape harvest active. Cabbage harvest in progress, sweet corn harvest complete.

NORTH CAROLINA: Temperatures near normal. Precipitation general. Heaviest over east and northeast.

Fieldwork: 3.6 days suitable. Soil moisture: 1% very short, 10% short, 76% adequate, and 13% surplus. Conditions: Pasture, soybeans fair to good. Cotton, peanuts, sweetpotatoes and sorghum mostly good. Harvest: Cotton 34%, 1981 40%, average 34%; sweetpotatoes 77%, 1981 74%, average 70%; sorghum 63%, 1981 70%, average 65%; soybeans 5%, 1981 8%, average 7%; burley tobacco 100%, 1981 100%, average 100%; corn for grain 89%, 1981 89%, average 85%; peanuts dug 77%, 1981 84%, average 69%; peanuts threshed 66%, 1981 75%, average 57%; apples 98%, 1981 85%, average 80%. Phenological stages: Cotton open bolls 99%, 1981 90%, average 90%; soybeans shedding leaves 38%, 1981 52%, average 41%. Major farm activities: Corn harvest for grain, seeding of small grains, harvest of peanuts, sweetpotatoes and cotton.

NORTH DAKOTA: Temperatures averaged 1 to 3° below normal. Temperature extremes from 77° northwest to 25° also northwest. Precipitation averaged from 1.43 in. above normal northeast to 0.03 in. above normal south central. Average from 0.24 in. south central to 1.43 in. northeast.

Wet conditions continued, virtually halting harvest of remaining crops. Exception was sugarbeets where progress was made late in the week. Average of 3.0 days suitable for fieldwork, but crops mostly too wet to harvest. Sunflower harvest about 2.5 weeks behind normal. Other crops also behind normal. The percentage of harvest completed with last year and average was: Sunflower 7, 29, 39; flax 84, 89, 85; potatoes 85, 89, 94; dry beans 78, 91, 94; soybeans 43, 48, 71; corn 17, 32, 44; and sugarbeets 48, 51, 73. An

extended period of warm, dry weather needed. Sunflower producers also awaiting a hard frost to speed drying. Soil moisture supplies well above average. Entire state has adequate to surplus topsoil moisture.

OHIO: Temperatures fell late week, highs averaging 5 to 8° below normal, reaching in 70's south, 60's north. Lows averaged in upper 30's to low 40's, falling to freezing level most sections; some weekend lows in 20's. Four inch soil temperatures from mid 50's north to upper 50's south. Scattered light precipitation, generally less than 0.15 in.

Activities included fall plowing, harvesting corn and soybeans, sowing winter wheat, green chopping alfalfa, spreading fertilizer, picking apples and grapes, cutting wood and general farm maintenance. Virtually all the corn was mature and safe from frost before temperatures plunged below freezing over the weekend. Corn mature and beyond 100%, 90% 1981, 100% average. Corn harvested for grain 30%, 20% 1981, 25% average. Soybeans shedding 100%, 100% 1981, 100% average. Soybeans harvested 75%, 40% 1981, 50% average. Winter wheat planted 80%, 60% 1981, 70% average. Winter wheat emerged 45%, 25% 1981, 30% average. Days favorable 6. Pasture condition fair. Soil moisture 40% short, 60% adequate.

OKLAHOMA: Temperatures averages ranged from 9° below normal in the Panhandle to 4° below normal in the northeast district. Rainfall ranged from none in the Panhandle to an average 0.13 in. in the south central district. Rain needed to boost the fall seeded wheat crop and fall grazing conditions. Harvesting of most fall crops progressed slowly as many producers wait for frost. The first frost occurred in the Panhandle district. Wheat planted: 70%, 80% 1981, 80% average. Wheat up-to-stand: 30%, 55% 1981, 40% average. Sorghum mature: 85%, 90% 1981, 90% average. Sorghum harvested: 15%, 30% 1981, 35% average. Cotton open bolls: 55%, 95% 1981, 85% average. Cotton harvested: 0%, 10% 1981, 5% average. Days suitable for fieldwork: 6.3.

OREGON: Average temperatures 5 to 8° above normal in west; 3° above normal in most of east. Rainfall light; up to 0.10 in. along coast; less elsewhere. Weekend brought additional showers.

Good weather for harvesting, planting and emergence. Winter wheat seeded 74%, 75% last year; 69% average. Emergence 28%; 39% previous year, 43% average. Late emergence due to late planting because of weed control. Field corn harvest progressing; sugarbeets slowed; final hay going in stack. Tree fruit harvest about over except late apples in west. Grapes being picked. Filbert harvest in final stages; walnuts just starting. Potato harvest going well. Onions about over; moving into storage. Harvest of fall and winter vegetables in progress. Livestock good shape. Movement from high ranges continues. Range and pastures good condition.

PENNSYLVANIA: Partly cloudy and seasonably mild with spotty rainfall through 14th. Windy and much colder 15th through weekend with first snow of season central and northern mountains where up to 1 to 2 in. snowfall reported 16th. Temperatures averaged near to 5° below normal for coolest week since mid-April. Extremes: 75 and 25°. Precipitation totaled from less than 0.25 in. southwest and extreme southeast to near 1.00 in. Lower Susquehanna Valley and northwest.

Five days suitable. Moisture adequate to short. Activities: Plowing; planting wheat and rye; making hay; and harvesting corn silage, soybeans, grain corn, potatoes, tomatoes, cabbage, peppers, pumpkins, and apples. Potatoes 92% harvested, last year

87%. Soybeans 30% harvested, last year 19% harvested. Corn 80% mature and 15% harvested; last year 93% mature and 34% harvested; average 85% mature and 27% harvested. Corn silage 91% harvested, last year 88% harvested. Fall plowing 91% complete; last year 88%; average 91%. Wheat 88% planted, last year 86%. Harvest of third crop alfalfa virtually complete, approximately 2 weeks later than last year. Fourth crop alfalfa 53% harvested, last year 62%. Quality of hay made mostly fair. Feed from pastures average to below average.

PUERTO RICO: Island average rainfall 0.76 in. or 1.07 in. below normal. Highest weekly total 3.27 in. Temperatures averaged 82 to 81° on Coasts and 75 to 74° Interior Divisions. Extremes: 94 and 53°.

SOUTH CAROLINA: Temperature, above normal early week, below normal weekend. Rain Statewide.

Soil moisture adequate. Fieldwork: 4 days suitable. Cotton harvest interrupted by rain. Yields remain good quality reduced. Cotton, 95% open bolls, 96 last year; 46% harvested, 53 last year and average. Soybeans 88% leaves turning, 94 last year; 84 average, 54% shedding leaves, 70 last year, 61 average; 18% mature, 33 last year, 23 average; 4% harvested, 7 last year, 11 average. Winter grazing 72% planted, 40 last year, 61 average; 52% emerged, 25 last year, 41 average. Fall cucumbers 51% harvested, 63 last year, 54 average. Fall snap beans 16% harvested, 31 last year, 37 average.

SOUTH DAKOTA: Temperatures averaged 0 to 2° above normal north, 1 to 5° below normal south. Extremes: 80 and 25°. Precipitation light, under 0.40 in.

All districts have areas with surplus topsoil moisture. Central, east central, south central and southeast mostly surplus. Remainder adequate. Reports received 49% adequate, 51% surplus. One day suitable. Harvest slowed by wet fields. Soybeans and sorghum harvest averages 16 days behind, corn 14 days, sunflowers 12 days. Winter grains in good condition. Corn mature 95%, 1981 100%, average 100%. Sorghum mature 87%, 1981 96%, average 95%. Corn for grain harvested 10%, 1981 31%, average 40%. Sorghum for grain harvested 13%, 1981 41%, average 50%. Soybeans harvested 22%, 1981 68%, average 70%. Sunflowers harvested 16%, 1981 37%, average 50%. Winter wheat emerged 89%, 1981 93%, average 97%. Winter rye emerged 92%, 1981 99%, average 100%.

TENNESSEE: Farmers averaged 5.3 days in the field. Soil moisture 81% adequate, 18% surplus and 1% short. Corn harvested 53%, 1981 63%, average 48%. Cotton harvested 72%, 1981 37%, average 36%. Soybeans shedding leaves 86%, 1981 76%, average 80%; mature 40%, 1981 39%, average 48%; harvested 10%, 1981 12%, average 21%. Burley tobacco stripped 25%, 1981 32%, average 29%. Oats sown 61%, 1981 67%, average 74%. Wheat sown 33%, 1981 37%, average 51%. Pastures fair to good. Livestock good.

TEXAS: A high pressure system kept temperatures cool over most State. A stationary front produced some heavy rainfall southeast Texas. By midweek upper level disturbance moved across Panhandle into Northeast Texas, southward to Upper Coast. This disturbance produced brief, locally heavy rain along its path. Temperatures below normal. Precipitation below normal Rolling Plains, South Central Texas. North Central and East Texas above normal, elsewhere, normal rainfall reported.

Crops: Most small grain fields eastern half State benefited from recent moisture. The

showers, too late to help most spring-planted crops, interrupted harvest many areas. Cool temperatures continued slow crop development Panhandle, light frost recorded. Cotton good progress across High Plains, cool weather slowed maturity some areas. Some early fields Rolling Plains beginning string out. Scattered showers interrupted harvesting operations Southern High Plains through South Central Texas and Edwards Plateau. Harvest good progress Blacklands, good yields reported. Condition across the State, at 58% of normal, down from last week with 3% excellent; 15% good; 61% fair; and 21% poor. This compares with 78% of normal last year. High winds Plains lodged some sorghum fields. Harvest gaining momentum although some stands still high moisture. As harvest progresses, shortage of storage facilities severe problem. Statewide condition 82% of normal with 11% excellent; 55% good; and 34% fair. Corn yields Plains above average. Harvest good progress although lodging some late-planted fields caused delays. Corn borer damage some stands. The recent showers eastern half State help small grain germination most areas. Although showers beneficial, many producers welcome additional moisture. East and South Central Texas seedbed preparation, planting active following rainfall. Moisture needed over Northern High Plains, many dryland wheat fields drying out. Some stands replanted because poor development. Armyworms problem some Central Texas oat fields. Some dryland peanut fields abandoned Cross-Timbers because poor crop prospects. Yields irrigated fields only fair to good. South Central Texas some dryland stands dried up, not be harvested. Rains delayed harvest South Texas. Soybean harvest active High Plains, yields good. Low Plains some fields cut for hay because poor crop development. Scattered showers delayed harvesting operations along Coast. Second-crop rice harvest continues Coast. Sugarbeet harvest full swing over High Plains, yields have been good. Cotton open bolls 67%, 69% 1981, 73% average. Cotton harvested 19%, 21% 1981, 28% average. Sorghum turning color 99%, 99% 1981, 98% average. Sorghum mature 91%, 90% 1981, 91% average. Sorghum harvested for grain 76%, 78% 1981, 82% average. Wheat planted all purposes 64%, 66% 1981, 71% average. Wheat emerged 31%, 46% 1981, 48% average. Corn harvested 98%, 90% 1981, 91% average. Peanuts harvested 37%, 35% 1981, 31% average. Soybeans harvested 18%, 20% 1981, 29% average. Sugarbeets harvested 23%, 7% 1981, 13% average. Pecans harvested 2%, 2% 1981, 3% average. Sunflowers harvested 62%, 51% 1981, 67% average. Oats planted 44%, 60% 1981, 66% average.

Commercial vegetables: Lower Rio Grande Valley, cool season vegetables planted. Cool, overcast days ideal fungal development, fungicide applications being made. Citrus fruit sizing well, harvest early oranges good progress. Coastal Bend, cucumbers benefited from recent showers. San Antonio-Winter Garden, rain interrupted most operations. Cabbage, broccoli, cucumbers and squash harvested, tomatoes and bell peppers ready soon. East Texas, scattered showers helped most fall vegetables. Melon and sweetpotato harvest continued. Trans-Pecos, cool weather slowed growth fall vegetables. Bell peppers harvested, and onions and cabbage good growth. Plains, growth some vegetables affected recent cold weather. Harvest slowed over area, few carrots moving to market. Pecan harvest under-way limited areas.

Range and pasture: Cool temperatures slowed range and pasture growth many areas. Native pastures eastern half State benefited from recent showers, additional rainfall welcomed for good winter grass development. Good supply dry grasses remains available Edwards Plateau, but nutritional quality poor. Grazing prospects poor some wheat pastures. Producers culling herds preparation winter, supplemental feeding active across State.

UTAH: Mostly clear skies except for northern portions of State where there was light precipitation in a few areas. Average temperatures were below normal at all reporting stations, ranging from 1 to 13° below.

Killing frost has brought the growing season to a halt. Clean-up harvest still active on corn, apples, onions, and potatoes. Corn silage 62% cut, apples 74% picked, and potatoes 69% dug. Weather has been favorable with 5.9 days suitable for fieldwork, but some fields still wet. Livestock movement from summer ranges continues active.

VIRGINIA: Rainfall averaged 1.50 in. with west and southwest receiving 2.00 in. Temperatures slightly above normal but falling well below normal with freezing temperatures in west and near freezing with frost elsewhere except coastal sections. Nighttime lows: mid 30's except coastal lows in 40's. Last two days brought plenty of sunshine with strong northwest winds.

Widespread rains limited fieldwork to only 3.4 days, but improved conditions of small grains, grasses, hay and soybeans. Topsoil moisture rated only 14% short, 67% adequate and 19% surplus compared with 57% short and 43% adequate last week. Prime farm activities included corn grain, apple, hay and corn silage harvesting. Tobacco marketing and livestock care and marketing. Corn for grain 70% harvested, 70% 1981, 64% average. Corn for silage 98%, 92% 1981. Soybean harvest 9% complete, 16% 1981, 7% average; good to excellent condition and leaves have dropped on 69% of acreage. Peanuts good to excellent condition; 98% dug, 88% 1981, 62% average, and 86% combined, 70% 1981, 42% average. Wheat seeded at 28%, 28% 1981 and 23% average. Barley seeding 56% complete, 56% 1981, 46% average. Oats 82% seeded, 76% 1981, 59% average.

Apple picking 72% completed, 74% 1981, 74% 1981 and 70% average. Sweetpotatoes 76% dug, 82% 1981 and 79% average. Grain sorghum combining 10% complete, 17% 1981, 11% average. Pasture condition good to excellent. Additional rain needed. Vegetable harvest continues active. Burley tobacco grading active. Firing dirt tobacco in progress and flue-cured marketing active. Preparation of livestock and feeder cattle sales active.

WASHINGTON: On the 10th, a few showers occurred across the State because of an unstable air mass behind a weak front. Most of the precipitation report was associated with showers. A drying ridge of high pressure then began building on 11th, keeping the weather dry and warm through the rest of the week. Some morning fog occurred west of the Cascades and also in some areas in the east most mornings, but the fog gave way to sunny skies later in the day.

West: Carrots, celery, lettuce, corn, tomatoes, squash, and cauliflower continues to be harvested. Strawberry fields being weeded and cleared of runners. Raspberry fields being caned. Livestock in good condition. Feeder cattle being moved to market. Feed corn being harvested and green chopping continues. Some ranges short. Hay supplies adequate.

East: Winter wheat seeding continues with some farmers delaying to avoid footrot or to wait for additional moisture. Significant bluegrass acreage being taken out of production in Spokane County. Corn for grain harvest continues with good yields. Silage corn still being cut. Potato harvest continues. Apple harvest in full swing with yields remaining below previous estimates, but good quality. Granny Smith apple variety starting to be picked. Green lima bean harvest over. Pumpkin and winter squash harvest continues. Frosts halt-

ed harvest of most vegetables in Yakima except for late cabbage and other cole crops. Asparagus fields will be disked in next few weeks after frost kills back asparagus fern. Livestock remain in good condition and being moved to corn and turnip fields. Ranges adequate. Hay supplies short in a few areas. Winter wheat planted 86%, 1981 88%, average 84%. Winter wheat planted 65%, 1981 68%, average 66%.

WEST VIRGINIA: Temperatures averaged near normal in central, southern and northeastern areas; above normal in southwest, north central and northwest areas. High 80° at Huntington, low 36° at Terra Alta. Precipitation below normal in northwest, near normal in north central and northeast, above normal in southwest, central and southern areas.

Soil moisture adequate. Days suitable for fieldwork averaged 4.0. Hay in fair to good condition; 3rd hay 86% harvested. Tobacco good to fair condition, harvest nearly completed. Corn in good condition; 51% mature, 49% harvested. Wheat, 84% seeded, barley, 87% seeded. Pasture in fair condition. Remaining gardens in fair condition.

WISCONSIN: A relatively cool and cloudy week. Temperatures averaged 1° below normal and ranged from a pleasant 71° in Lacrosse on the 14th to a much cooler 28° in Lake Thompson and Minong on the 16th and in Green Bay on the 17th. A killing frost occurred in central and western areas on the 16th and over much of east on the 17th. Light drizzle occurred somewhere everyday except 14th. Most districts reported precipitation totals 0.50 in. or less. First notable snowfall occurred in Wausau on the 17th as 0.25 in. recorded.

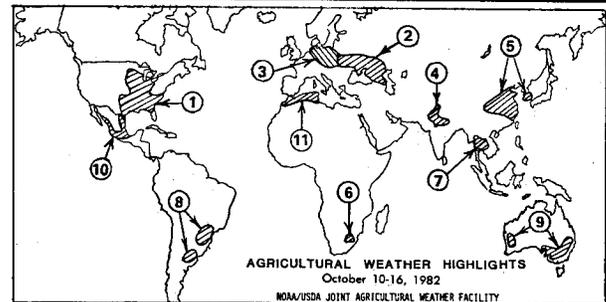
Fieldwork: 3 days suitable. Farmers geared up their combines and pickers for the corn grain harvest which was 7% complete, 8% 1981, 16% average. Most of the corn crop now safe from frost, 98%, 100% 1981, 100% average. Progress was made on the corn silage harvest which was 55% complete, 78% 1981, 87% average. Corn silage yields appear to be very good. Good progress was made combining soybeans. Currently 25% of soybeans have been harvested, 13% 1981, 22% average. Fall plowing activity continues and was 13% complete, 18% 1981, 19% average. Adequate moisture supplies have kept late season pastures green and lush. Pastures rated at 87% of normal, 91% 1981, 81% average. Some 3rd and 4th crop hay was made although drying conditions were not optimal. Topsoil moisture supplies were rated 6% short, 48% adequate, and 46% surplus. Surplus moist supplies continue to burden respondents in the north central district where supplies were rated 100% surplus. Poor field conditions exist over much of the northern third of the State.

WYOMING: All stations below normal temperatures. Greatest departure in southeast.

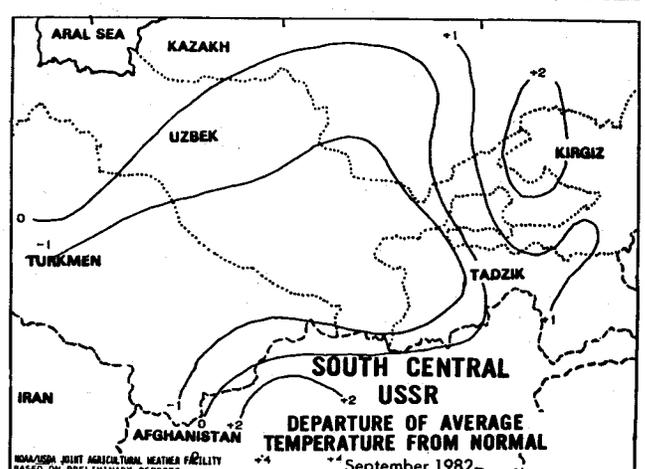
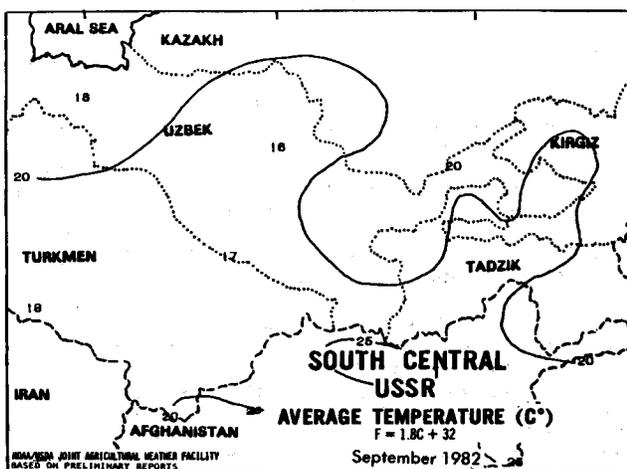
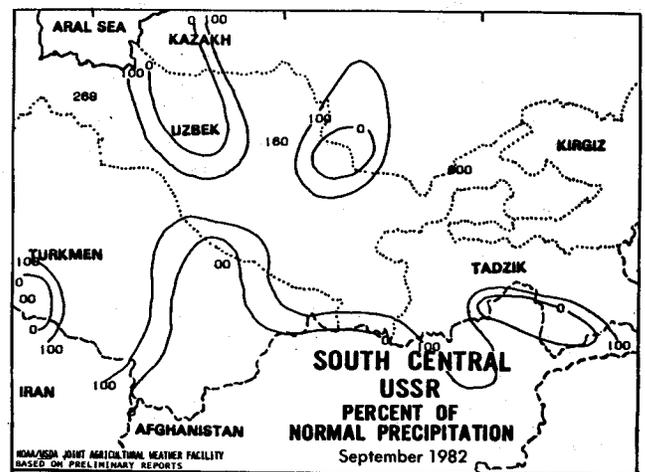
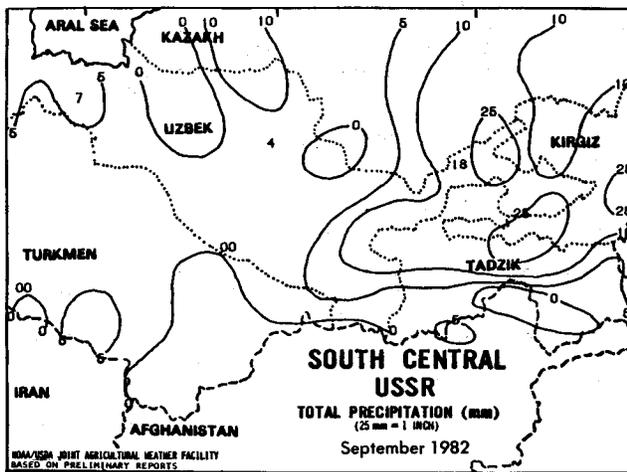
Winter storm brought well above normal precipitation to east half. Topsoil moisture adequate. Average 5 days suitable fieldwork. Most winter wheat planted. Winter wheat emerged: 90%; year ago 95%. Condition good most areas. Some concern for late seeded fields. Corn for grain mature: 75%; year ago 75%. Corn for grain harvested: 10%; year ago 20%. Corn for silage harvested: 90%; most year ago. Potatoes dug: 75%; year ago 70%. Sugarbeets dug: 40%; year ago 85%. Dry beans windrowed: 90%; most year ago. Dry beans combined: 60%; year ago most. Some crops still in the fields may be lost from continued wet weather and snow. Hay supplies for wintering livestock adequate most areas. Livestock condition mostly good. Heavy snow at higher elevations in northeastern area slowing livestock movement to winter pastures. Some cattle stranded.

# International Weather and Crop Summary

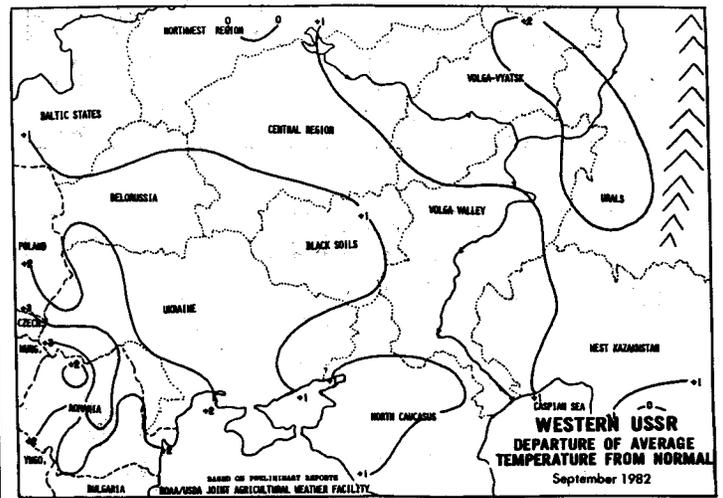
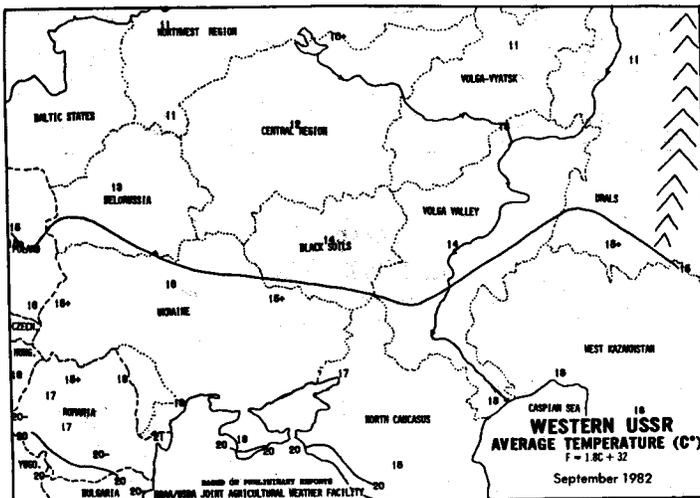
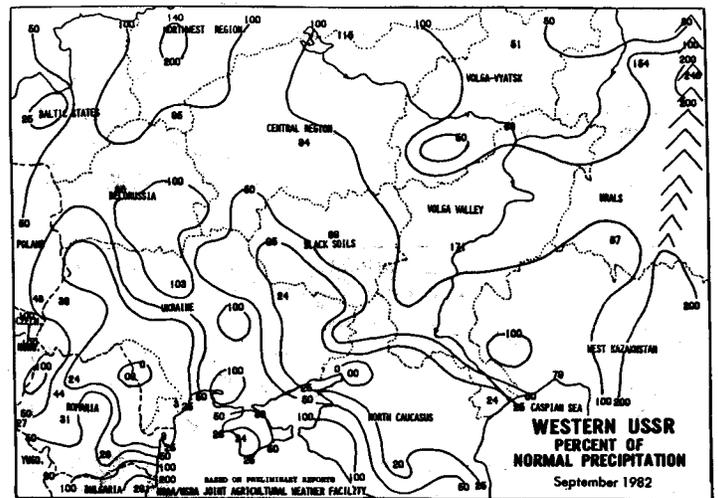
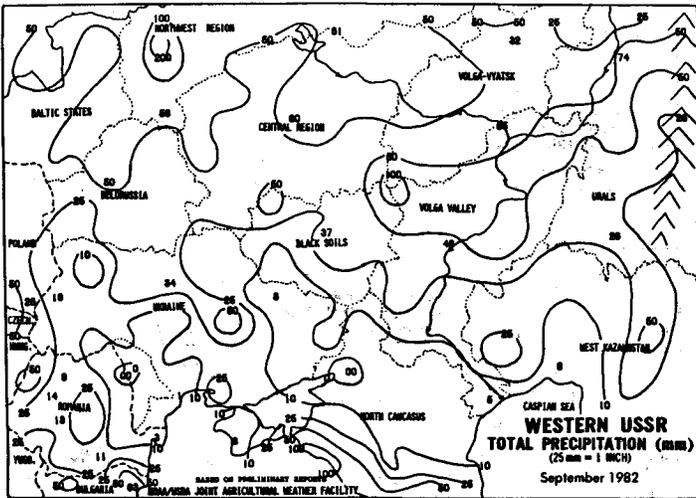
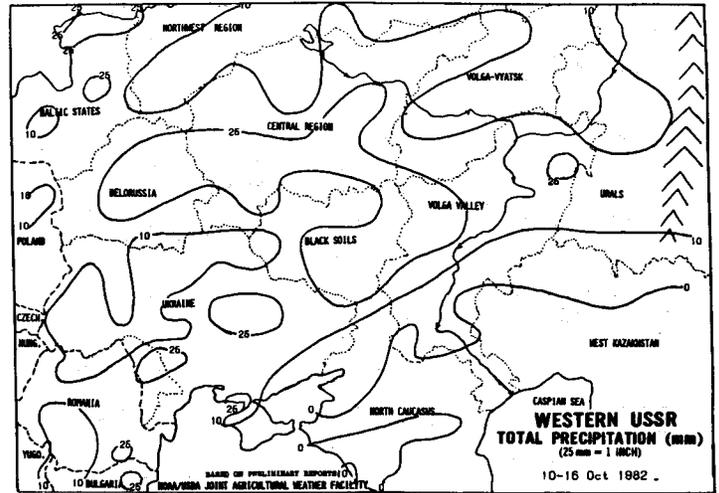
October 10-16

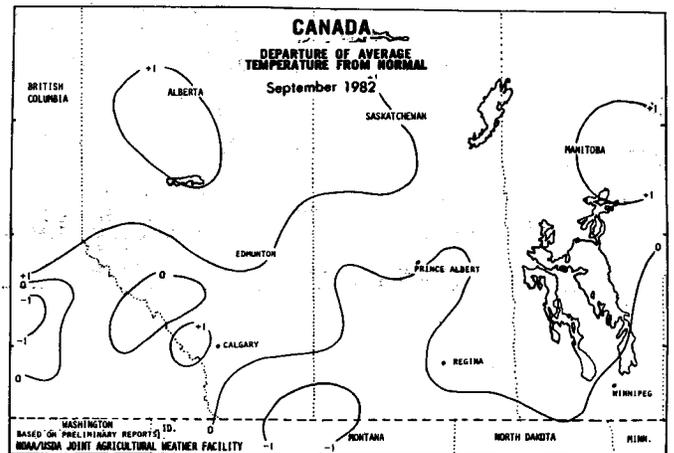
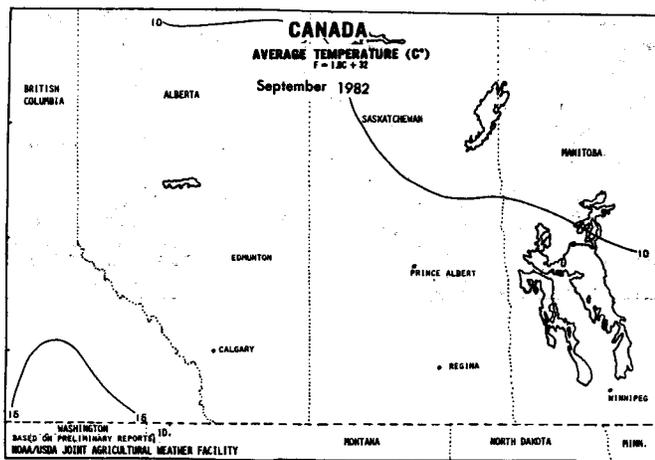
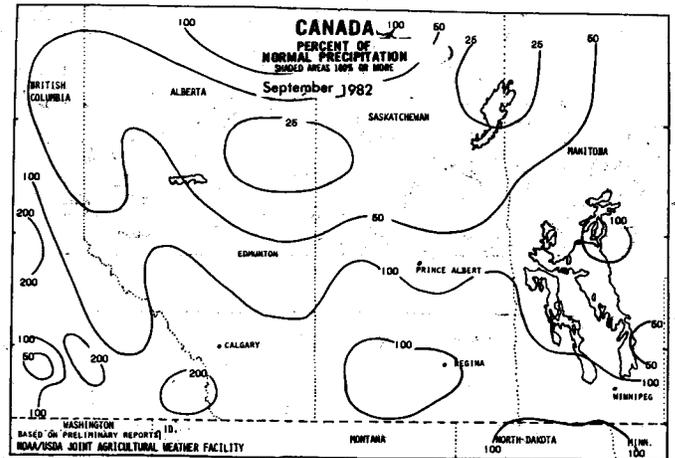
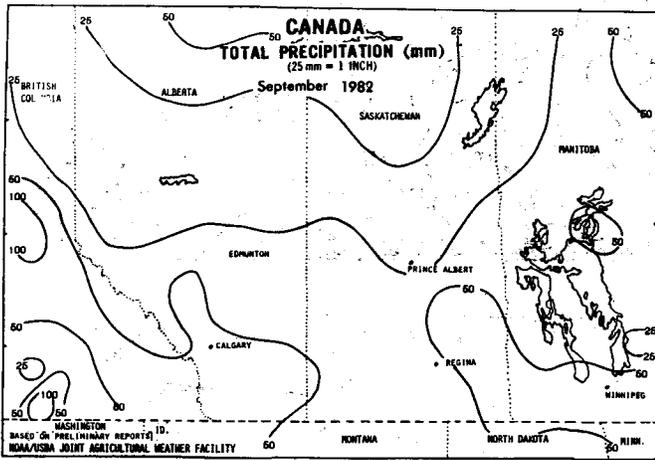
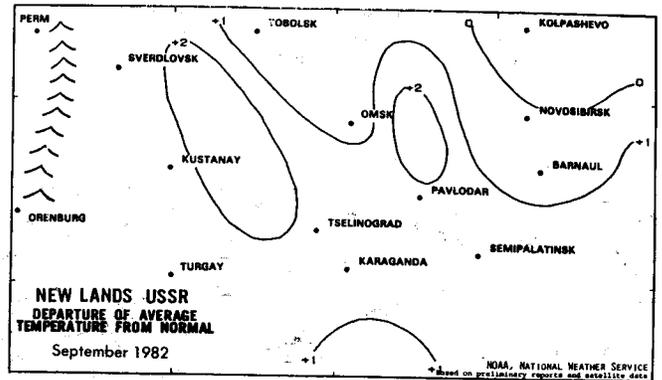
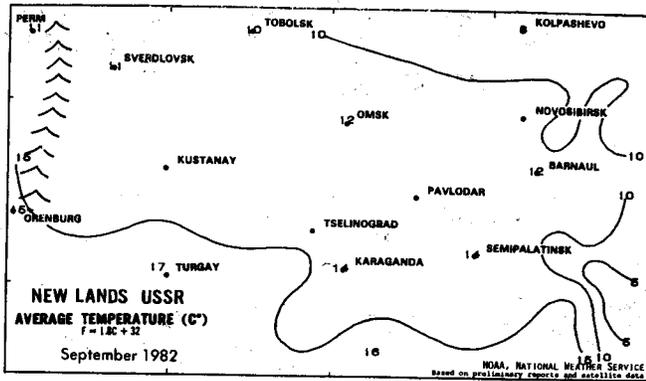
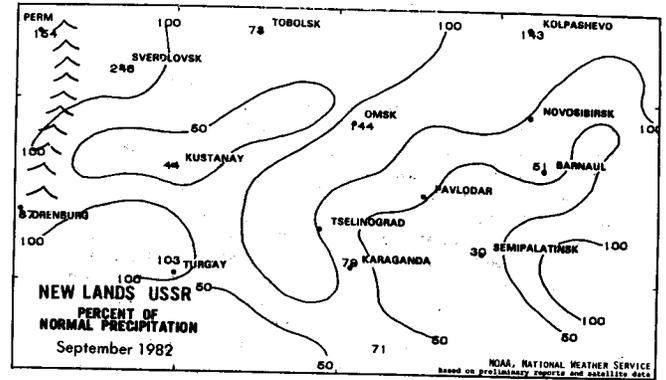
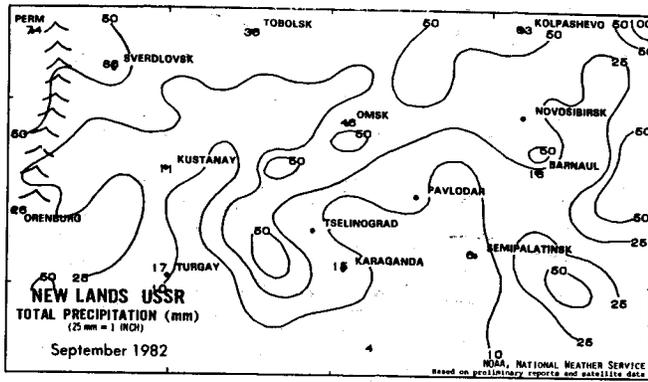


1. **UNITED STATES:** Generally sunny weather favors harvesting and fieldwork across the Corn Belt. Heavy rains improve soil moisture but hinder fieldwork over parts of the southern Plains into the Southeast.
2. **WESTERN USSR:** Showers benefit grains over most of the Ukraine; still too dry in the North Caucasus and southern Volga Valley.
3. **EUROPE:** Light rain aids winter wheat planting conditions in East Germany and Poland; warm temperatures needed for growth before dormancy begins.
4. **SOUTH ASIA:** Continued dry weather in the north stresses the cotton crop, and topsoil moisture levels are unfavorably low for winter grain planting.
5. **EASTERN ASIA:** Moisture slightly short for winter grains in most areas except very dry in South Korea.
6. **SOUTH AFRICA:** Beneficial rains fall over the Maize Triangle region as the corn planting season begins.
7. **SOUTHEAST ASIA:** Showers aid reservoirs and rice crops in Thailand except too dry in west; Typhoon Nancy hits Philippines and Vietnam.
8. **SOUTH AMERICA:** Unseasonably cold weather after a frontal passage brings beneficial showers to Argentina's crop areas and continues wetness in Brazil.
9. **AUSTRALIA:** Significant rains fall over limited crop areas of eastern Australia, but drought continues over much of east and south; favorable crop conditions in west.
10. **MEXICO:** Rainfall decreases seasonably over most of the country, favoring planting and harvesting. Showers help citrus, sugarcane, and coffee over the east-central coast.
11. **NORTHWEST AFRICA:** Too dry for early winter grain planting in Morocco and western Algeria; moisture supplies appear favorable in eastern Algeria and Tunisia.

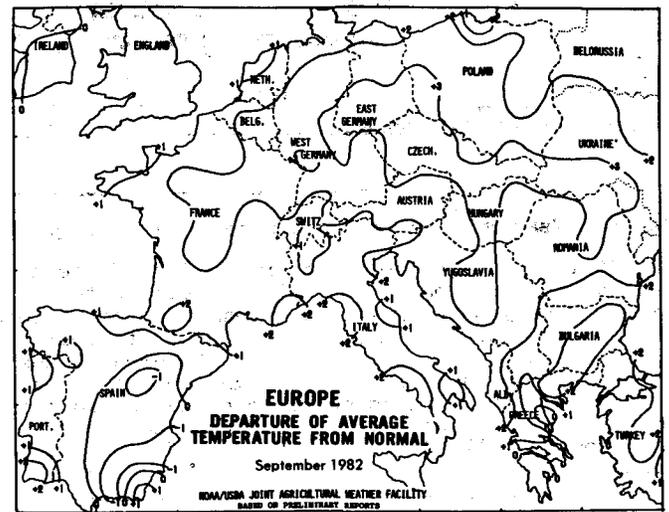
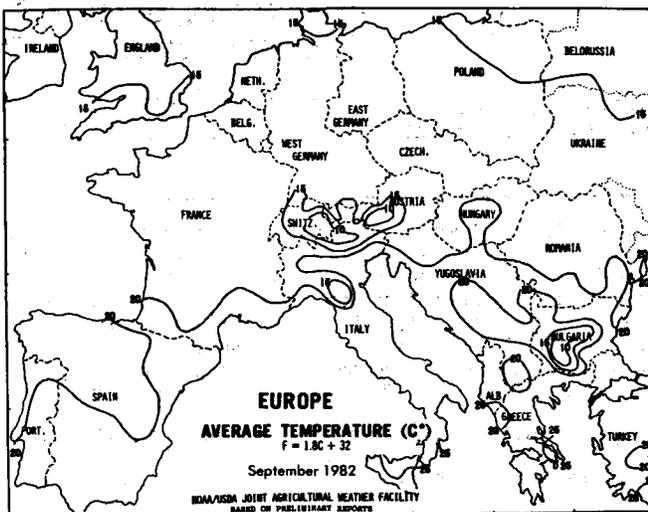
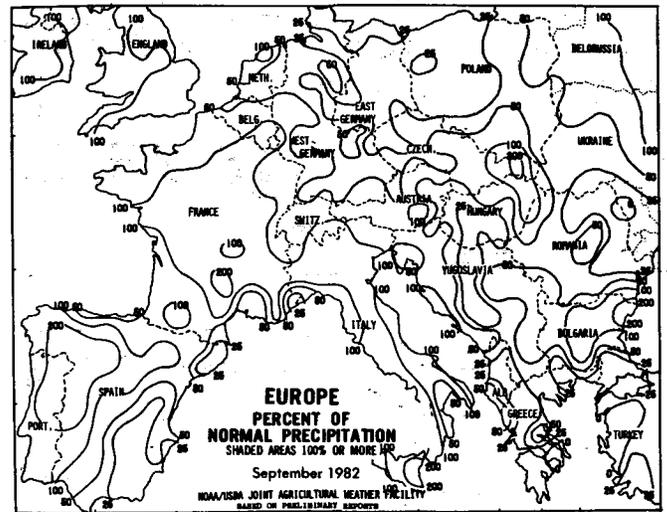
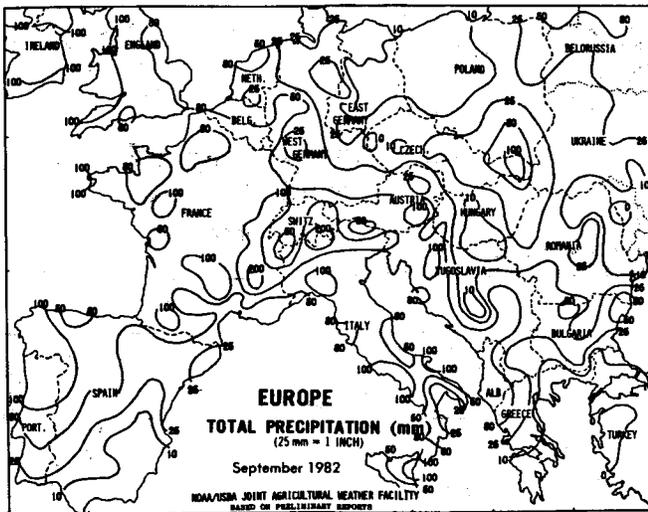
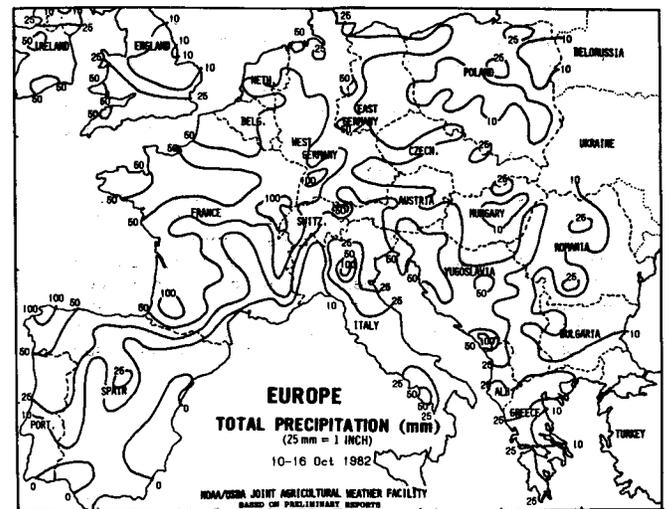


**WESTERN USSR:** Showers covered much of the Ukraine, benefiting winter grains. In contrast, mostly dry weather in the North Caucasus and southern Volga Valley continued to aggravate the low moisture situation in these areas. In September, well-below-normal precipitation in the Ukraine, southern Volga Valley, and North Caucasus delayed winter grain planting and caused emergence problems, particularly in the eastern Ukraine and North Caucasus. However, the dry weather favored maturing crops and aided the harvest. Wet weather covered most of Belorussia, the Central Region, eastern Black Soils, and central Volga Valley, maintaining adequate moisture conditions for winter grains which received favorable moisture in these areas during September. Weekly temperatures continued September's above-normal pattern in the south but were near to below normal in the north.

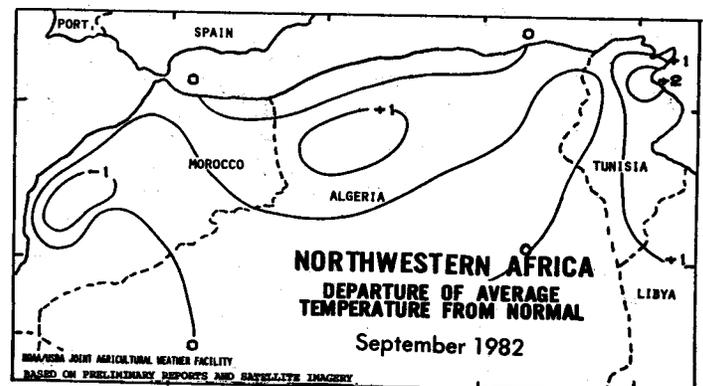
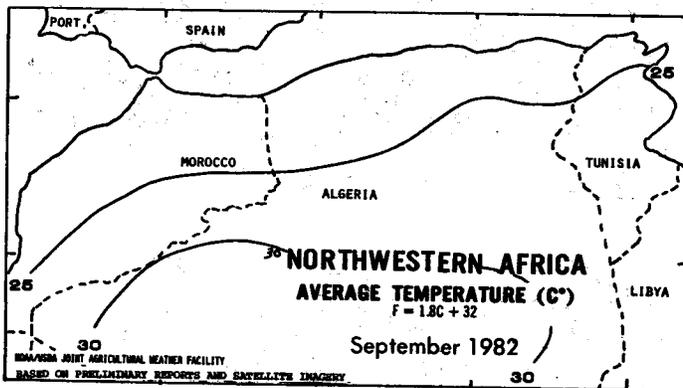
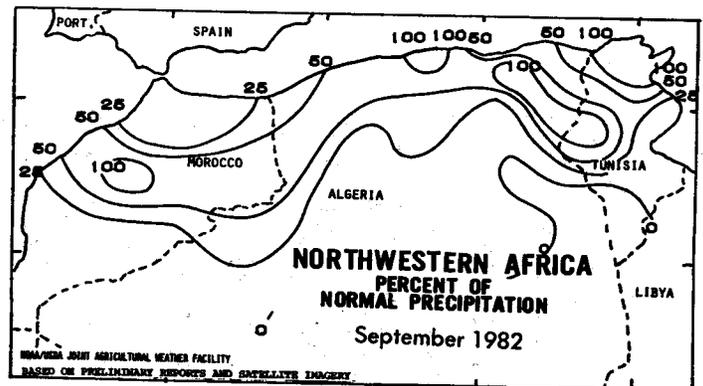
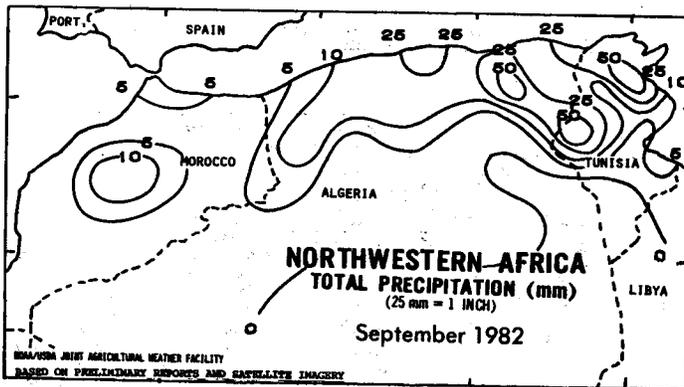
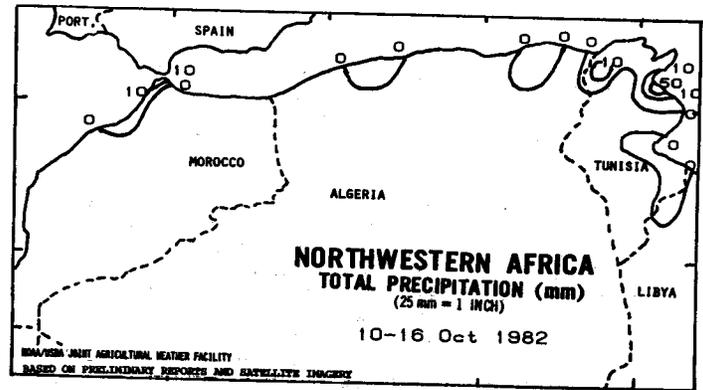




**EUROPE:** Wet weather covered most of the region, continuing September's above-normal precipitation pattern in England, France, and northern Italy. Moisture conditions may be too wet for winter grains in northern France and southern England, with seed rot possible in the wettest areas. Beneficial showers fell on continued dry areas of East Germany and Poland, improving topsoil moisture conditions for winter grains. Favorable temperatures will now be needed to ensure good crop establishment before seasonably cold weather induces the crop into dormancy. Showers also benefited the southeast, most of which received below-normal precipitation in September. Weekly temperatures were below normal in the west and above normal in the east.



**NORTHWESTERN AFRICA:** Showers covered northern crop areas of Tunisia early in the period. Elsewhere, mostly dry weather covered Morocco and Algeria. In September, above-normal precipitation fell on parts of eastern Algeria and northern Tunisia, providing favorable topsoil moisture conditions for early winter grain sowing. Winter grain planting normally begins in November over most of the region, coinciding with the onset of the autumn rainy season. Cumulative precipitation since mid-April indicates above-normal rains have fallen over eastern Algeria and northern Tunisia, but rainfall has been well below normal in Morocco eastward through central Algeria. Therefore, timely rains from planting through the growing season will be needed in these dry areas to ensure favorable crop prospects.



**National Weather Summary** (continued from front page)

**SATURDAY . . .** Much cooler air moved into Eastern United States accompanied by brisk northwesterly winds. Early-morning freezing temperatures reached through the northern Mississippi Valley to northern Iowa and across the upper half of the Great Lakes region. Snow showers fell through the same area. Light to moderate rain showers were widespread from western Pennsylvania through New England. A few snow showers fell in the mountains of New York and Pennsylvania.

**Streamflow During September** (continued from p. 5)

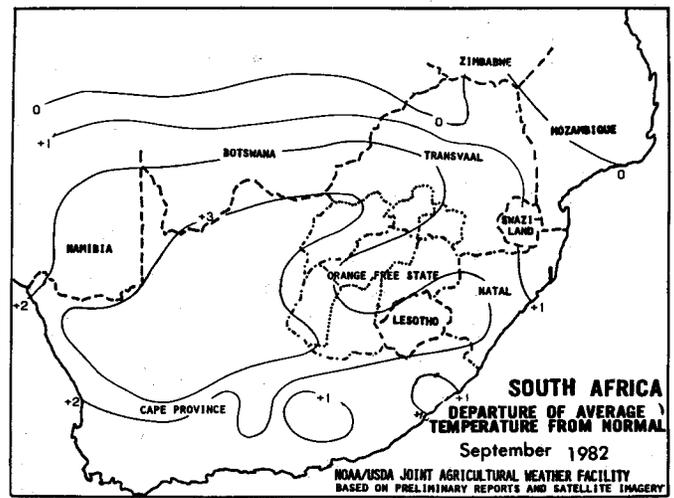
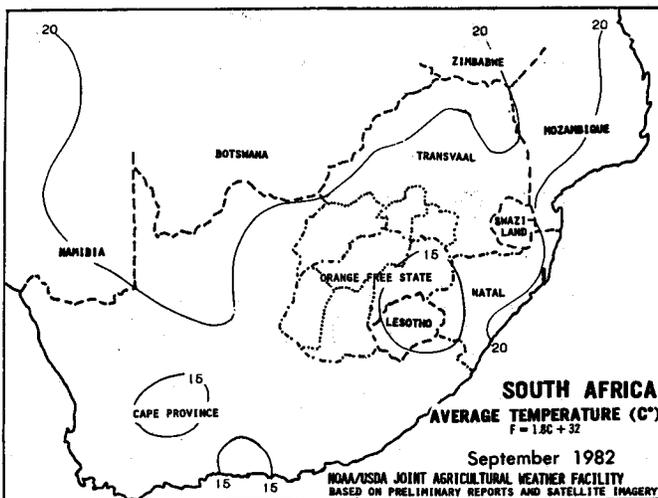
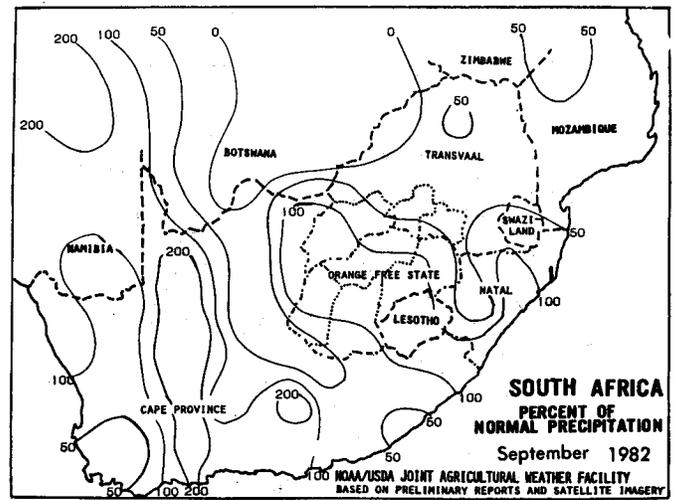
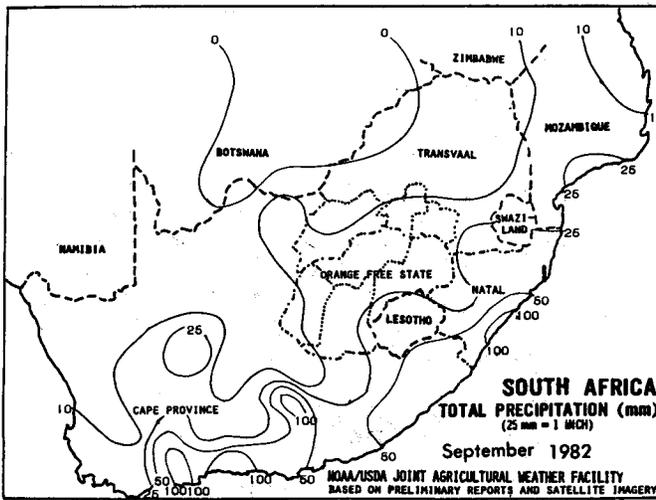
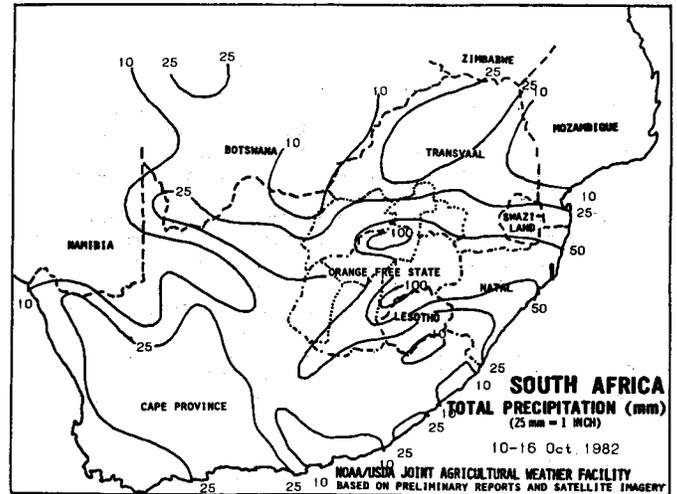
25 percent of record--during the month. Flow of the Susquehanna River at Conklin, N.Y. averaged 175 mgd, 54 percent below normal for this time of year. Ground-water levels in the State declined

seasonally and were generally below normal. The water level in the key index well in Greene County, stood at 13 feet below the land surface, about 4.3 feet below normal for September. On September 27, the storage capacity of the major reservoirs that supply New York City was about 30 percent below its full storage level; normal for this time of year is about 25 percent less than full capacity.

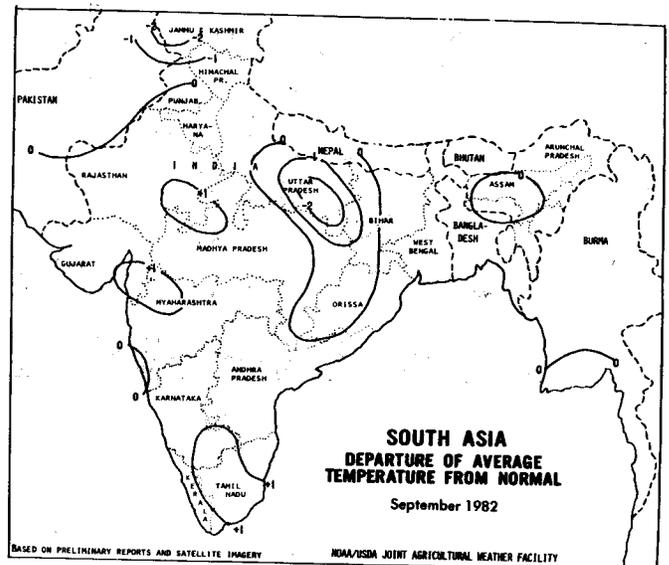
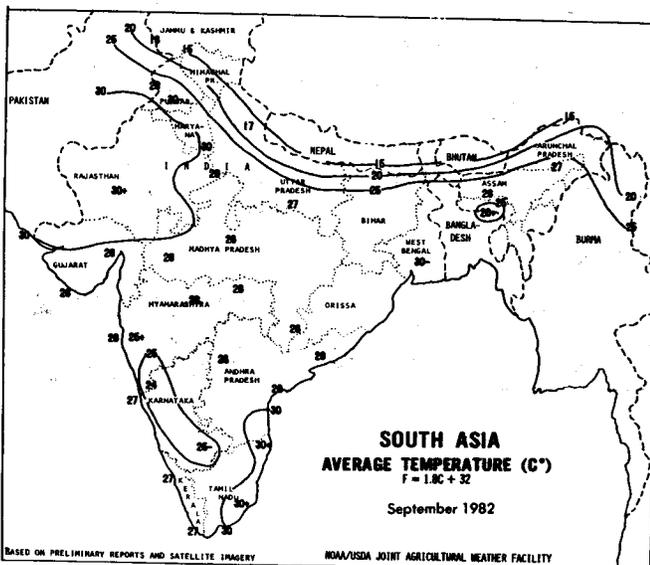
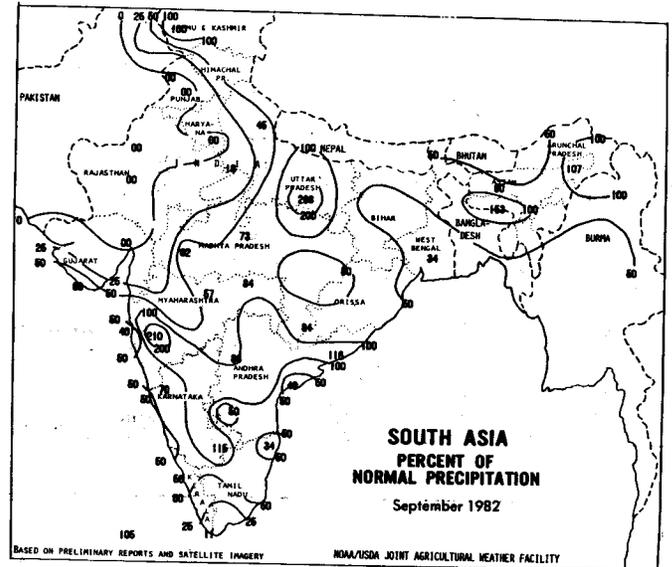
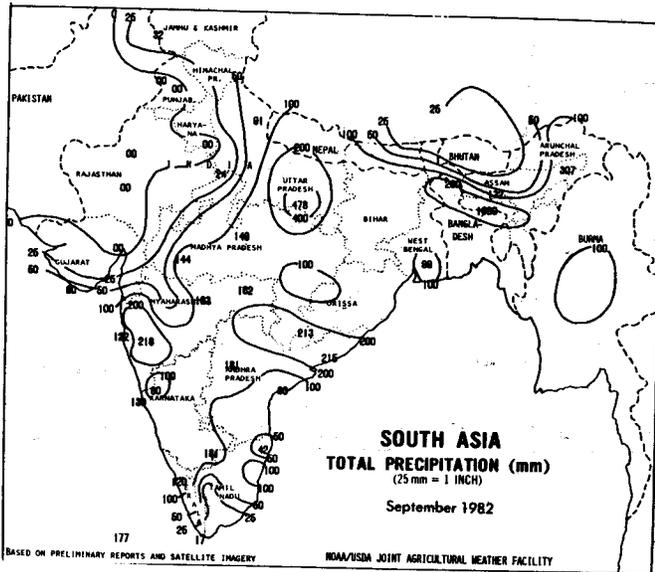
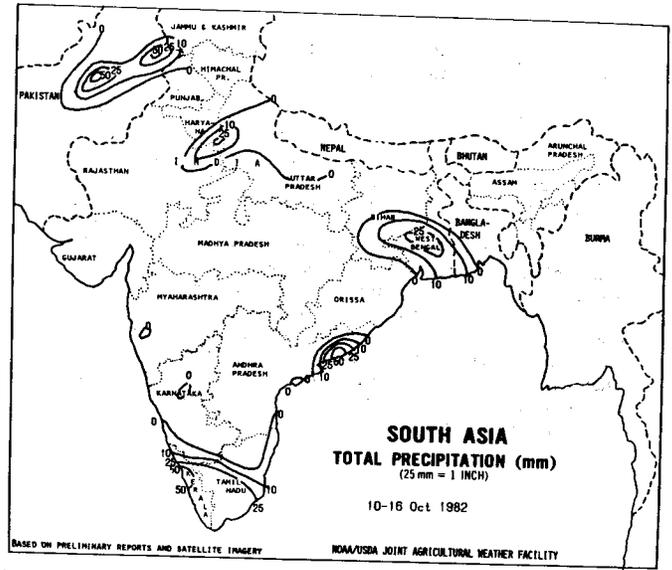
**\*Gulf Coast States--** Streamflow was generally normal to below normal in Alabama, Mississippi, and Louisiana. In Louisiana, 5 of the 10 key stations reported well-below-normal flows, 4 stations reported normal flows, and 1 station reported well-below-normal flows. Flow of the Saline Bayou near Lucky, La., set a new record low for September, averaging only 2.6 million gallons per day (mgd), 84 percent below normal and the lowest average September flow in 43 years of re-

(continued on back cover)

**SOUTH AFRICA:** Substantial rains fell over much of the region commonly referred to as the Maize Triangle. The moisture was extremely beneficial, especially in eastern crop areas where the optimum period for corn planting is during October. Further west, planting may occur later due to the longer growing season at the lower elevations. In fact, corn can still be planted as late as early December in the Western Transvaal. Follow-up rains will be needed in all areas to establish the crop since moisture reserves are low. The wet season usually begins in September; however, except for some rain during the early part of the month, the last several weeks were mostly dry until the recent storm systems. Reports indicate that the long dry period of about 5 months has drastically reduced the levels of reservoirs, rivers, and streams.

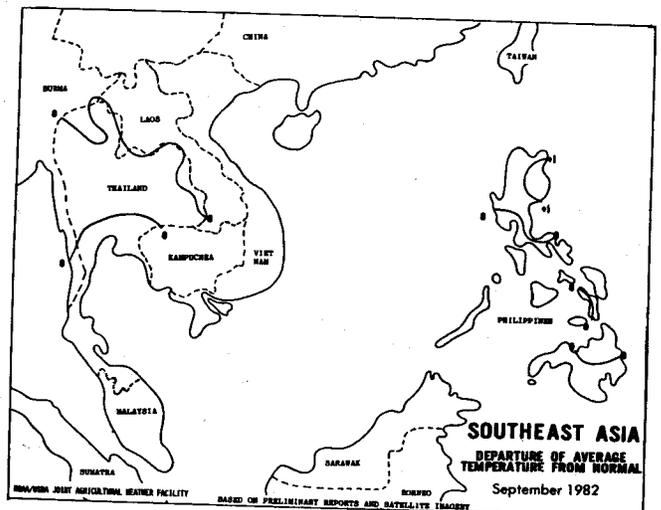
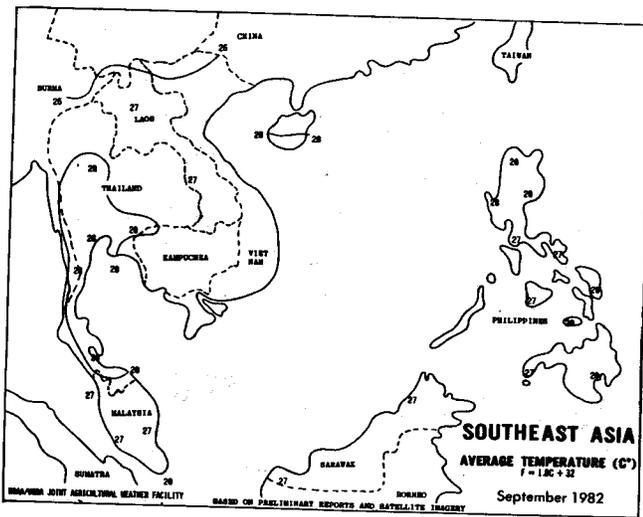
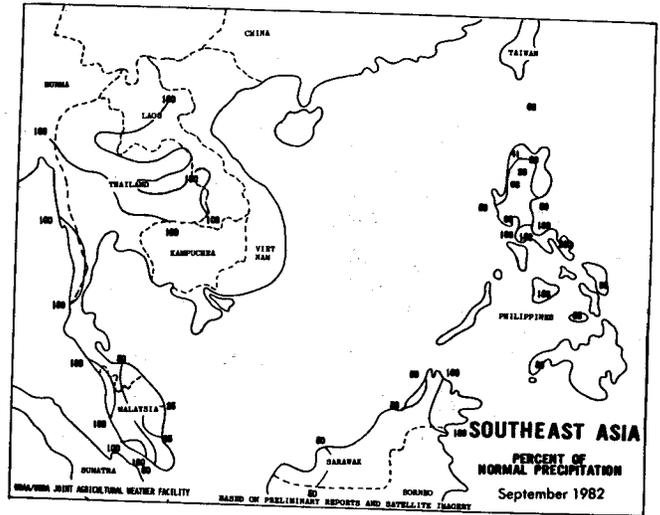
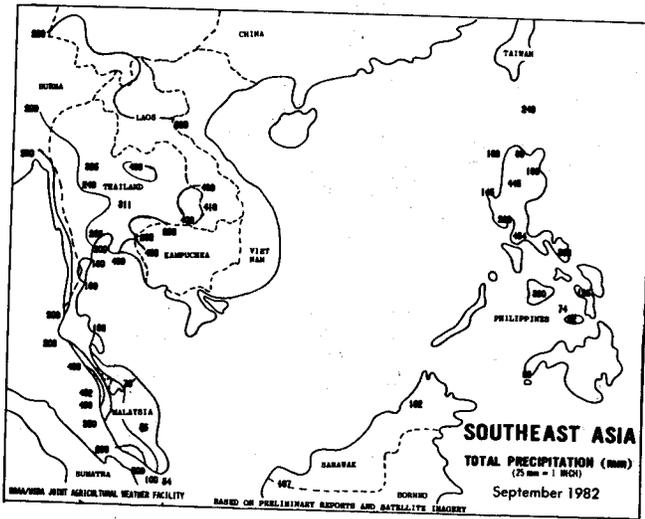
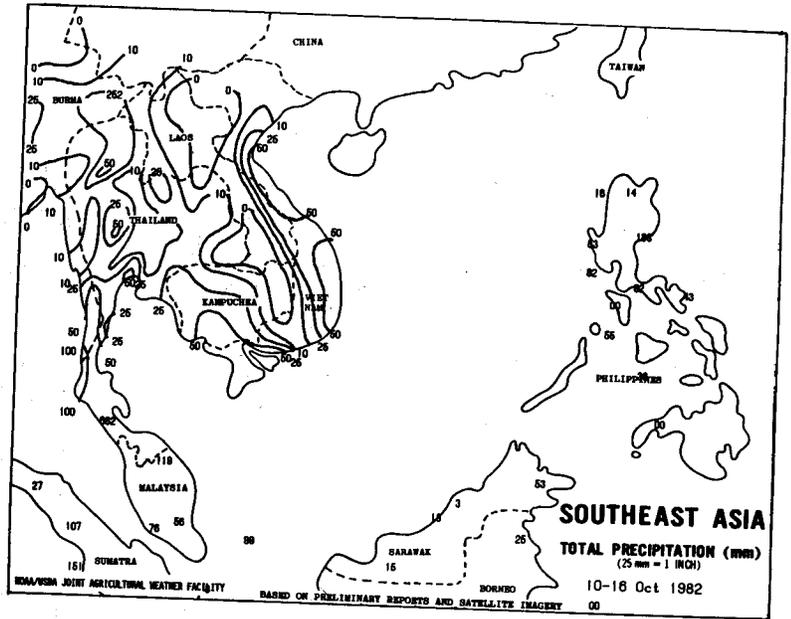


**SOUTH ASIA:** Showers produced by westerly systems covered northern Pakistan and parts of Uttar Pradesh. Rainfall amounts in Uttar Pradesh were generally light and scattered, continuing September's below-normal pattern. In addition, this below-normal precipitation pattern covered most of India's winter grain area, reducing topsoil moisture levels to unfavorably low levels for winter grain planting, particularly in Punjab and Haryana. The dry weather also stressed cotton grown in these areas. In central India, dry weather in September reduced yield prospects for peanuts, particularly in Gujarat, and stressed cotton in the boll formation stage of development. Showers this past week in Tamil Nadu and west Bengal benefited winter rice varieties in the critical heading stage.

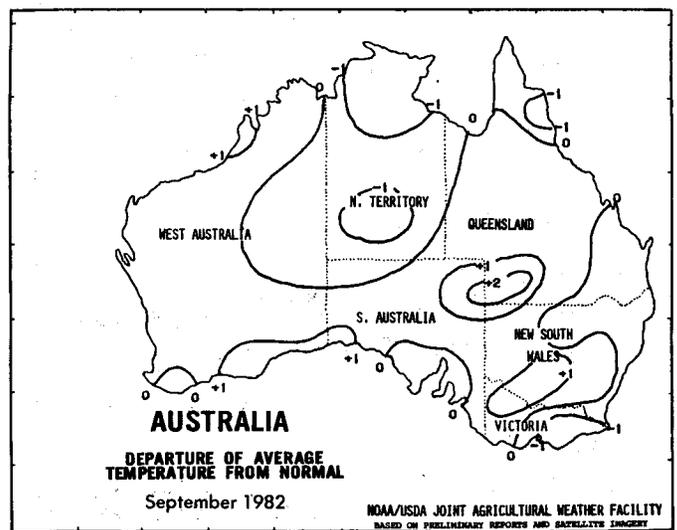
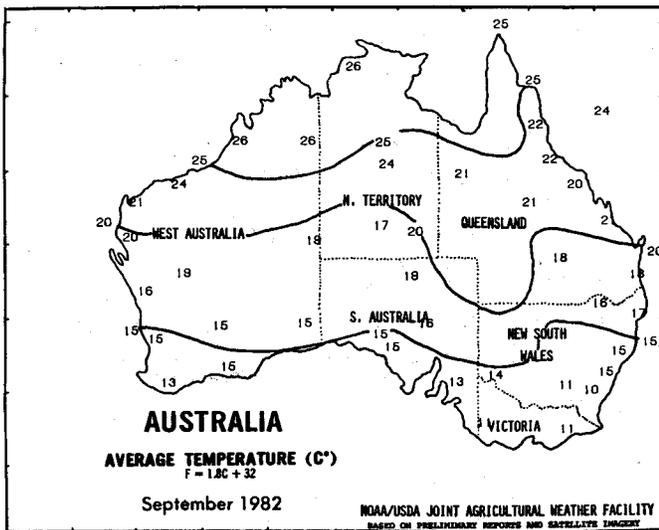
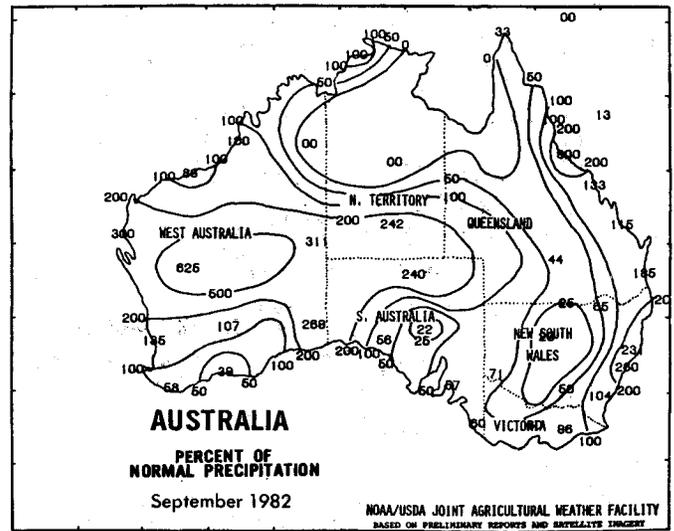
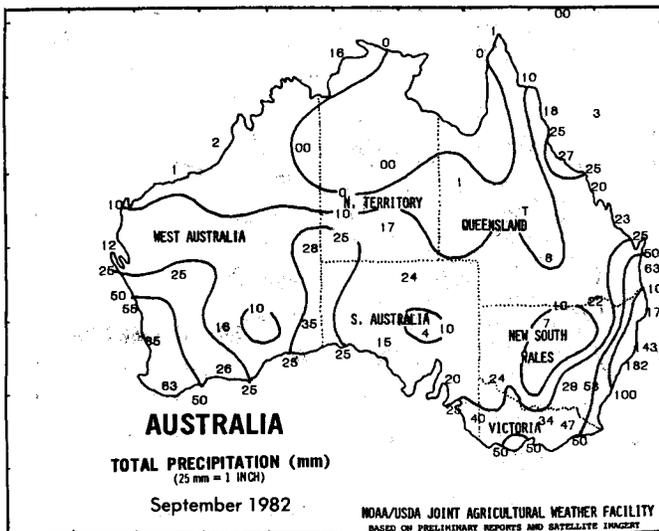
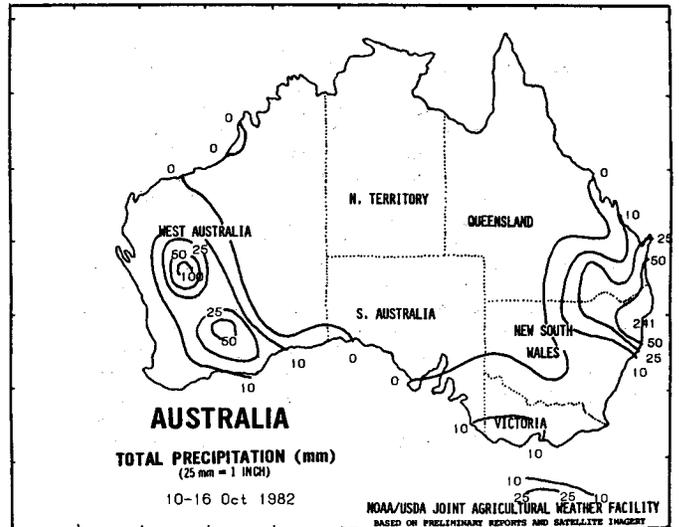




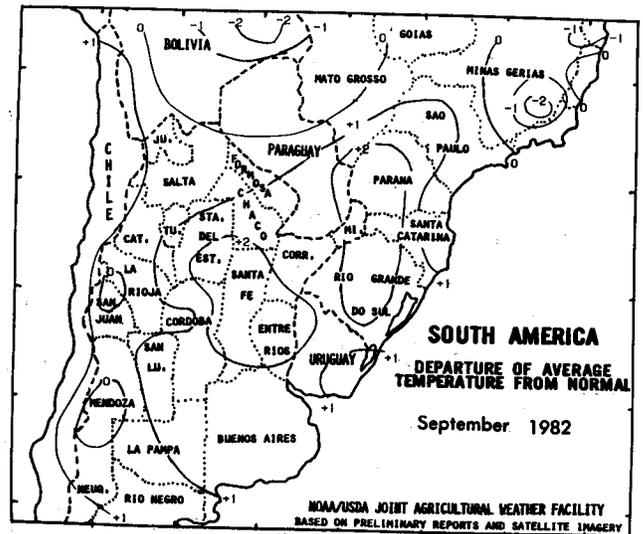
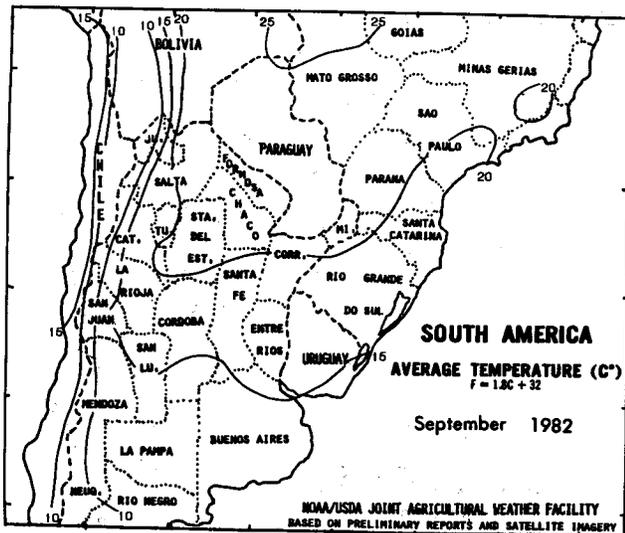
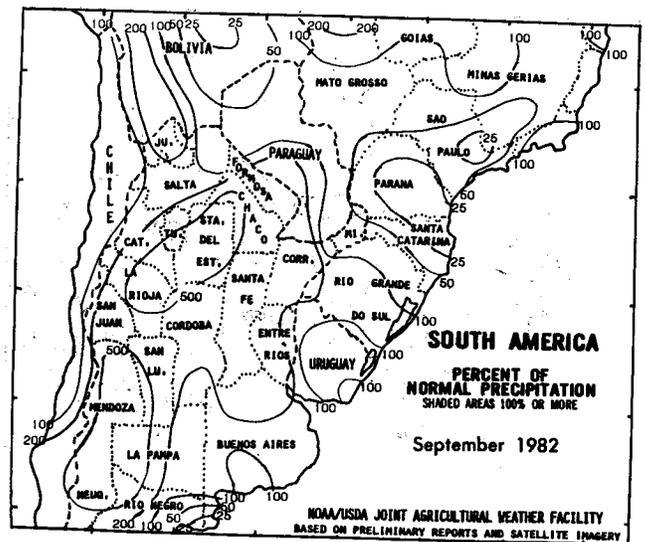
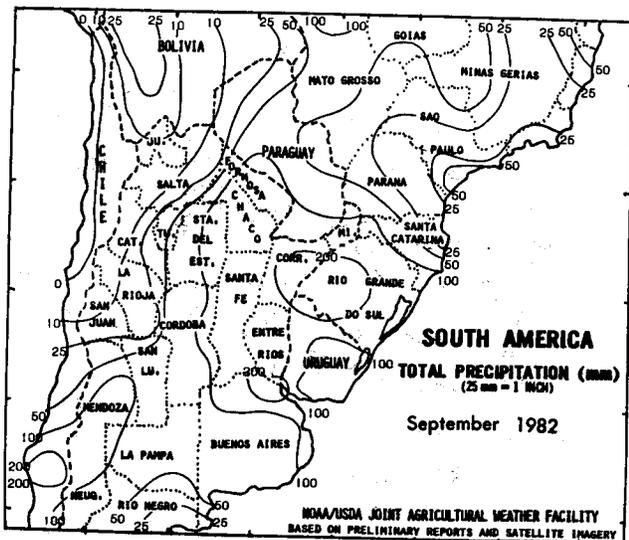
**SOUTHEAST ASIA:** Widespread showers fell over most of Southeast Asia, but weekly amounts varied highly. Significant rainfall over portions of northern and central Thailand improved reservoir levels in the north and aided rice crop development in the Central Plains as well as in eastern Thailand. Seasonal amounts of rain fell in these areas during September, but western and southern crop areas received below-average monthly rainfall. Weekly rainfall amounts were again below normal for this time of year in the west, while beneficial rains fell in the south. Typhoon Nancy dumped heavy rain and produced high winds over northern Luzon in the Philippines before entering the South China Sea. By week's end, the typhoon moved westward, producing substantial rain over Vietnam. Wet weather continued over much of Kampuchea.



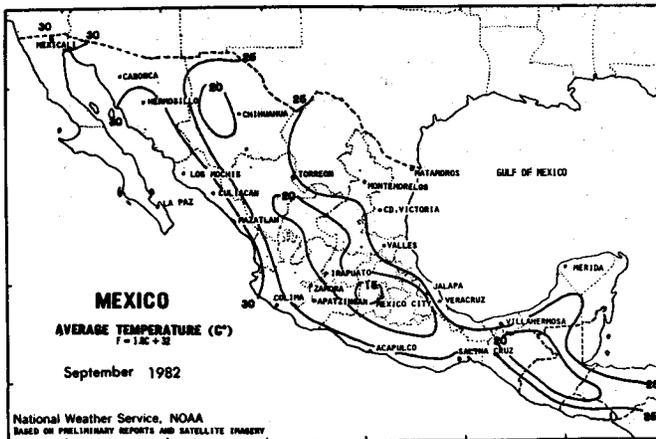
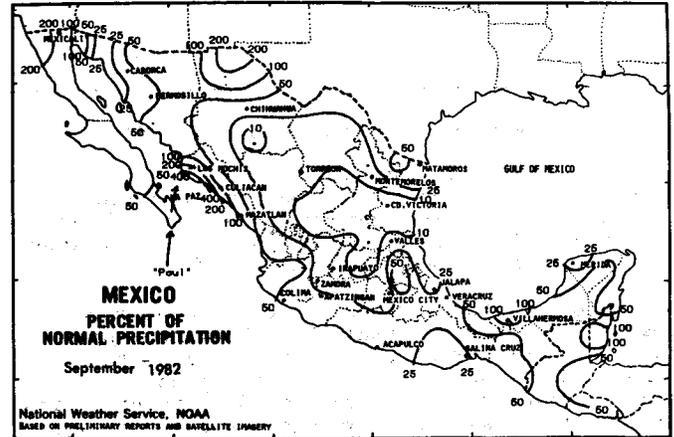
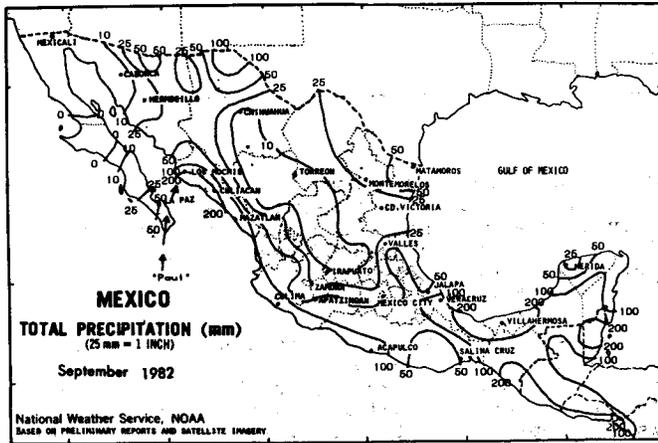
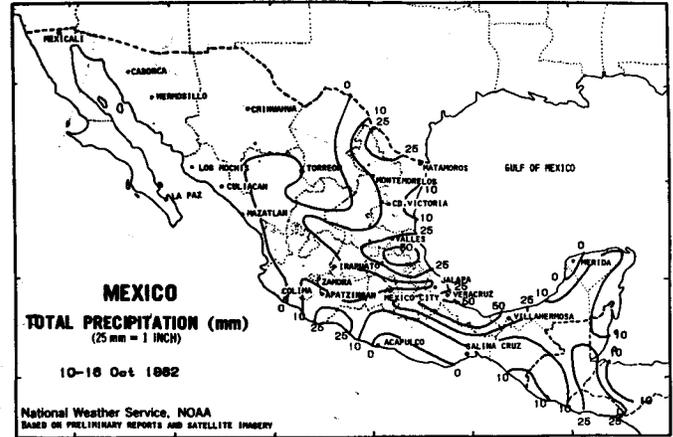
**AUSTRALIA:** Drought-relieving rains fell over limited portions of southeastern Queensland and northern New South Wales early in the period. Although too late to substantially benefit the severely stressed wheat crop, the moisture improved conditions for planting sorghum, corn, and other summer crops in the area. Frequent, follow-up rains are needed to end the agricultural drought in this area, however. Furthermore, only minimal amounts of rain fell over southern New South Wales, Victoria, and South Australia as the persistent drought continues to have disastrous agricultural consequences throughout eastern and southern crop areas. In contrast, above-average September rains and frequent showers in early October favored good crop prospects in much of Western Australia.



**SOUTH AMERICA:** A fast-moving frontal system produced showers over most crop areas of Argentina and Brazil as it passed through the region early in the week. Moisture supplies remain favorable for crops in Argentina due to beneficial September rains. Drier weather in southern Brazil during September, as compared with the previous 3 wet months, was welcomed in Rio Grande do Sul and aided the wheat harvest in Parana. After the passage of the latest frontal system, an unusually cold anticyclone settled over the grain areas, dropping minimum temperatures to near freezing in some areas of Buenos Aires. Wheat in the heading stage is susceptible to frost damage resulting in little or no seedset on the heads. Any damage becomes apparent only after the grain-filling period begins. The unseasonably cold weather followed a long period of above-average temperatures in September throughout the crop areas.



**MEXICO:** Rainfall decreased seasonably over most of the country except over the east-central coast where showers benefited citrus, sugarcane, coffee and other immature crops. Dry weather favored replanting of vegetables destroyed by Hurricane Paul during the last of September on the west coast. Paul's strong winds and heavy rains also damaged considerably maturing soybeans and other summer crops. The prolonged dryness that began in late May over the northeast continued through September, critically stressing citrus, pastures, and livestock. Rains during early October helped relieve the stress, but the moisture arrived too late to be of great benefit in most cases.





Streamflow During September (continued from p. 24)

cord. In contrast, heavy rainfall in north-eastern Louisiana boosted streamflow to a record high flow for September on Bayou Macon near Delhi, La., averaging 3.2 bgd, compared with the previous record high of 2.8 bgd in September of 1958.

\*Upper Midwest--Water-resources conditions were normal to well-above normal throughout the upper Midwest. Reservoir storage increased in both of the key index reservoir systems in Wisconsin--Wisconsin River reservoir system, 87 percent of its full capacity; Lake Chippewa and Flambeau Flowage, 84 percent of its full capacity. Flow of the Wisconsin River at Muscoda, Wis., averaged 4.6 bgd during September, 22 percent above normal for this time of year. In neighboring Minnesota, streamflow increased and was well above normal in the central, south-central, and southwestern parts of the State. Flow of the Minnesota River near Jordan averaged 1.1 bgd, 72 percent above normal for September. Monthend storage in the Mississippi River Headwater System was about 5 percent above normal and 67 percent below its full storage capacity. Ground-water levels in southwestern Minnesota rose about 1 foot in the unconfined aquifers (water-bearing rock formations) around Redwood Falls, and were

about 1 foot above the normal September levels. In central Minnesota, ground-water levels in the Elk River area rose as much as 7 feet. According to USGS, Elk River is an area of heavy irrigation, and the rise in water levels was due to the decrease in pumping after the growing season.

\*Far West--Streamflow conditions continued to be normal to well above normal all along the west coast and in Idaho, Arizona, and Nevada. Streams in Idaho, Nevada, and California set record high flows for September. In Idaho, streamflow for the Salmon, Boise, and Snake River basins remained well-above normal for the 5th straight month, with the Snake River at both stations--Heise and Weiser--setting the highest average September flows in 72 years of record. In California, combined storage contents of the 10 key index reservoirs were 34 percent above normal and 45 percent above the level at this time last year. Streamflow was well above normal at four of the six key index stations in California, and three of those four stations set new record-high flows for September. Flow of the North Fork American River at North Fork Dam averaged 53 mgd and was the highest flow for the month in 42 years of record.

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

Annual subscription: domestic \$25, foreign \$33 (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 NOAA/USDA Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration  
National Weather Service/Climate Analysis Center

Managing Editor . . . . . Don Haddock  
Meteorologists . . . . . Jim Williams  
Ray McInturff Wes Byrd  
Lyle Denny Karen Brown

Subscriptions (202) 447-7917 . . . . Cheryl Caleco

U.S. DEPARTMENT OF AGRICULTURE  
Economic Management Service

Editor . . . . . Linda Hatcher  
Statistical Reporting Service  
Agricultural Statistician . . . . . Bill Blackson  
World Agricultural Outlook Board  
Agricultural Weather Analysts . . . . Laras Lambert  
Ray Motha Tom Puterbaugh