

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

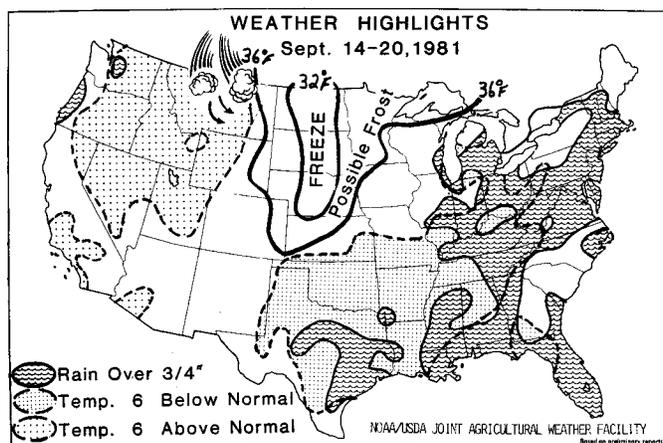
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WASHINGTON, D.C.

Sept. 22, 1981

National Weather Summary

Sept. 14-20, 1981



HIGHLIGHTS: A cold outbreak at midweek spread rapidly southward and eastward and was the coldest weather so far this fall. Average temperatures from Texas and the lower Mississippi Valley to Michigan and the upper Ohio Valley were six to nine degrees colder than normal for the week. Parts of the southern Plains and Tennessee Valley were nine to 12 degrees colder than normal. In contrast, temperatures were much above normal west of the Rockies and in Montana until a Pacific cold front brought in cooler air which spread rapidly eastward. Most of the precipitation fell in Texas and east of the Mississippi River.

MONDAY... Strong thunderstorms were scattered over the eastern two thirds of the Nation. The storms were concentrated along a line from central Texas to New England with the heaviest downpours in Texas and Ohio. Light showers fell just east of the Appalachians but the coastal area from the mid-Atlantic southward remained dry. Other light showers occurred in the central Rockies and in the Dakotas. Temperatures were unusually warm along the east coast.

TUESDAY... A cold front triggered showers and thunderstorms from eastern Texas and the lower Mississippi Valley, across the South, and up the east coast to southern New England. Late in the day, a few thundershowers developed from the central Rockies to the upper Mississippi Valley.

WEDNESDAY... The slow-moving cold front continued to cause showers and thunderstorms east of the Appalachians and through Georgia and Florida. An area of showers moved into the Great Lakes region and spread southward and eastward. Light showers in the central Rockies spread into Kansas and Oklahoma. Much cooler air moved into the northern

Plains. Light frost was scattered from the Dakotas into Nebraska.

THURSDAY... The cold air pushed southward through much of the Plains and eastward over the upper Mississippi Valley into the Ohio Valley. Frost was scattered from North Dakota to Colorado. Record cold temperatures were recorded as far south as Wichita Falls, Texas, 46°; and eastward to Cincinnati, Ohio, 42°. The record at Valentine, Nebraska, was 26°. On this day, record high temperatures occurred in the northern Plateau region and in central Montana. Showers continued in the Lakes area, from the mid-Atlantic through New England, and in Florida.

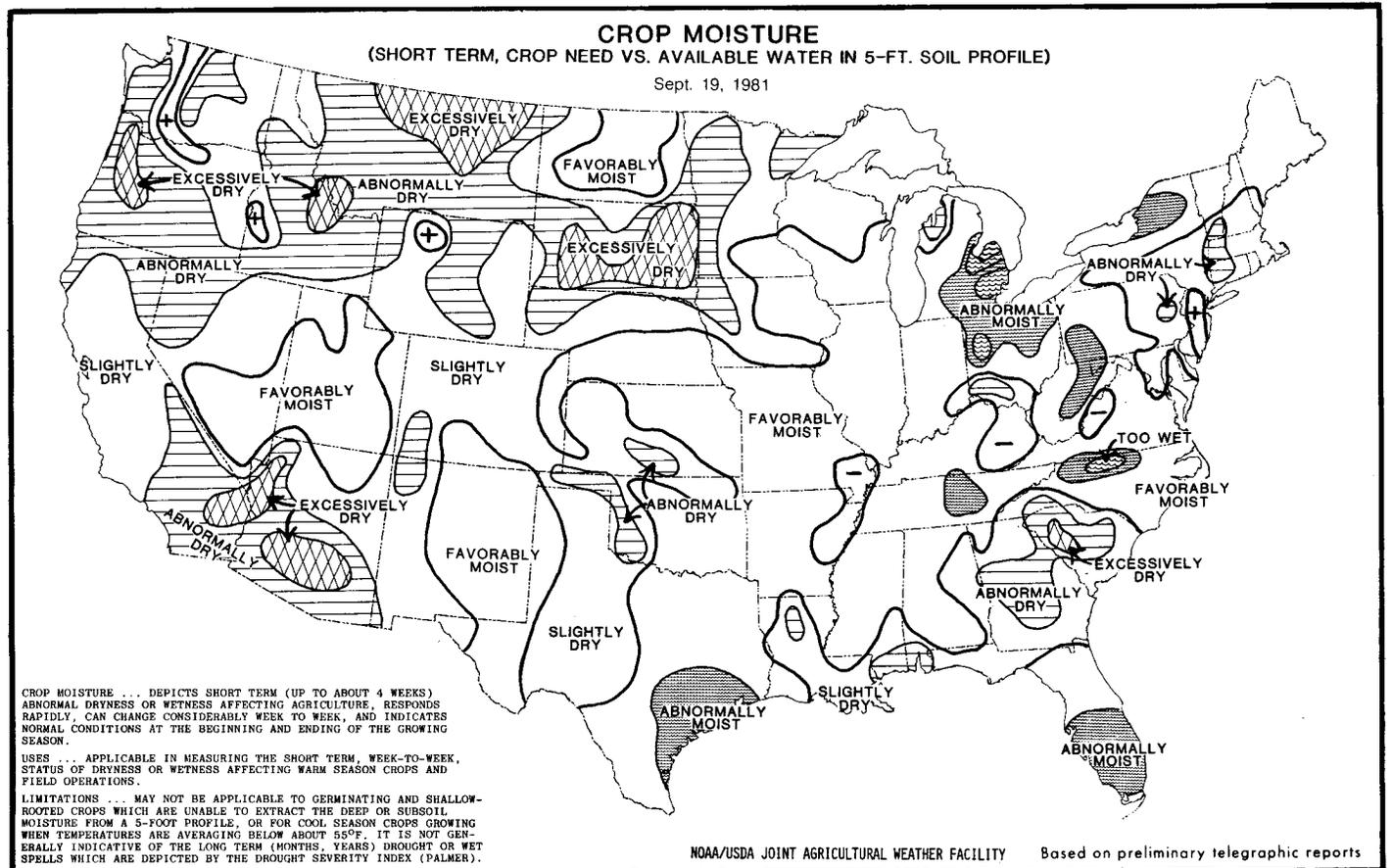
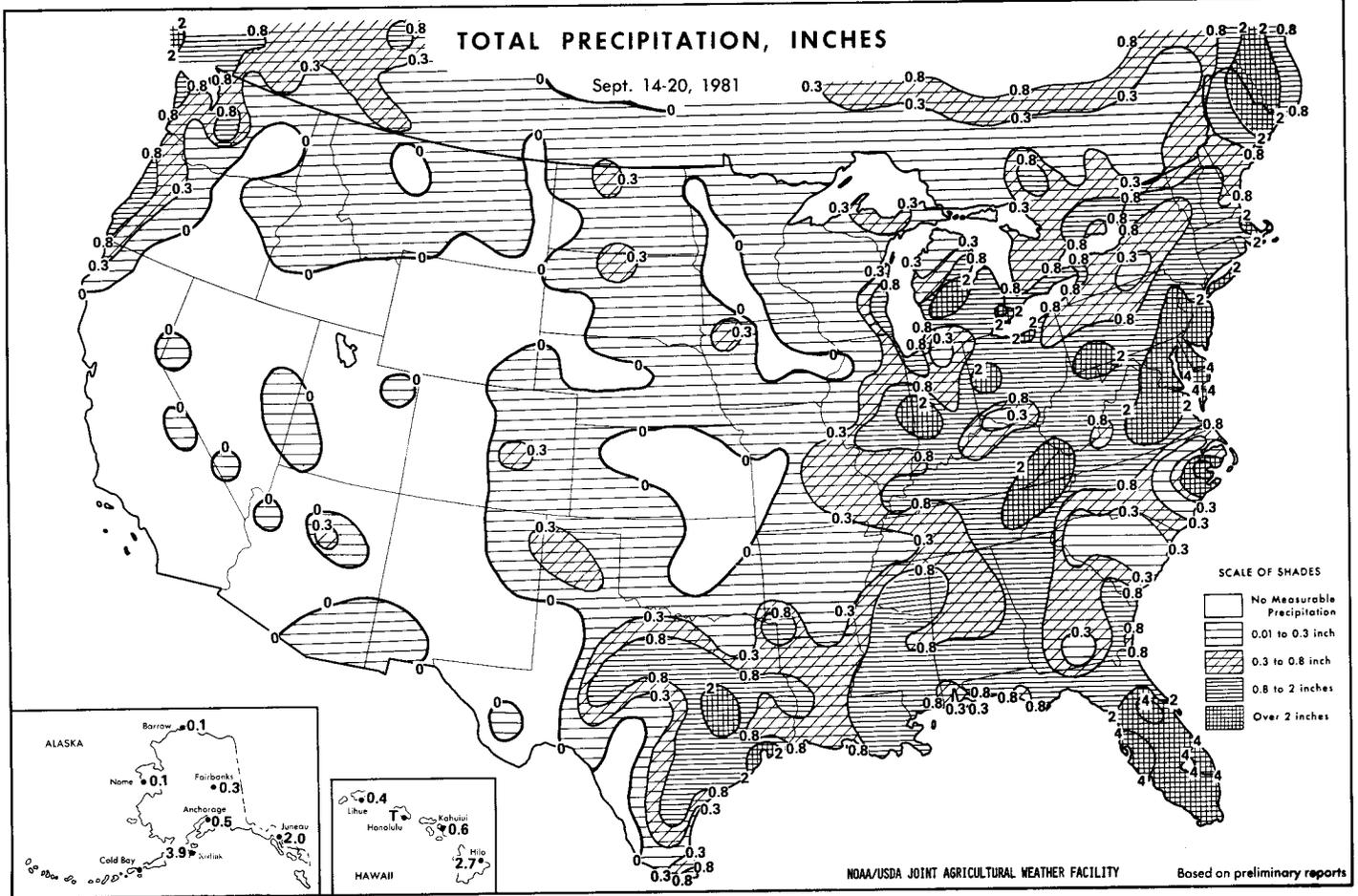
FRIDAY... A low pressure system off the Coast of Virginia kept showers in the Northeast and the upper Ohio Valley as the colder air enveloped most of the area from the Plains eastward. Record cool temperatures were experienced throughout the South and frost reached into northeastern Kansas and northern Missouri. A Pacific weather system moved over the Northwest and brought substantial rainfall.

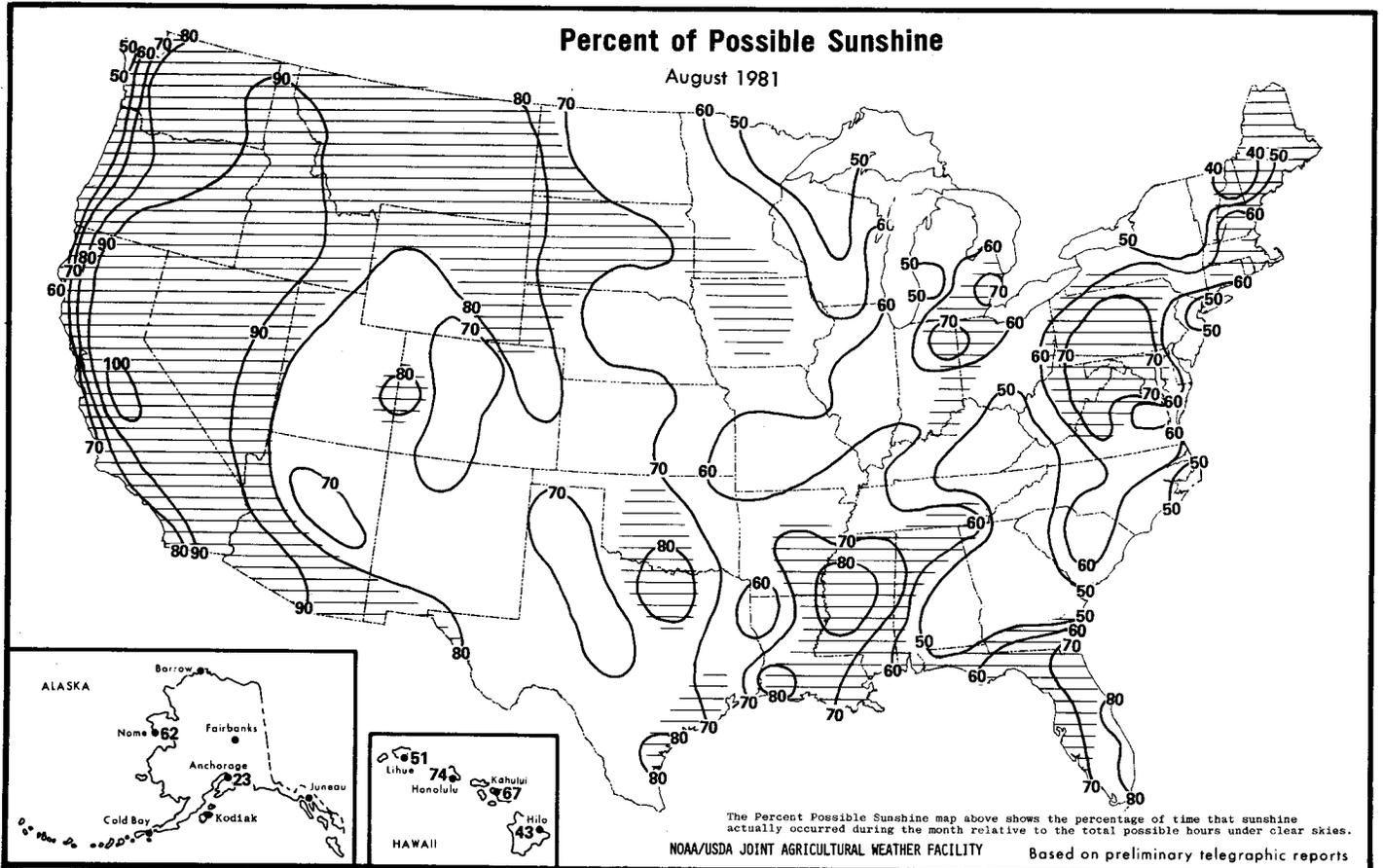
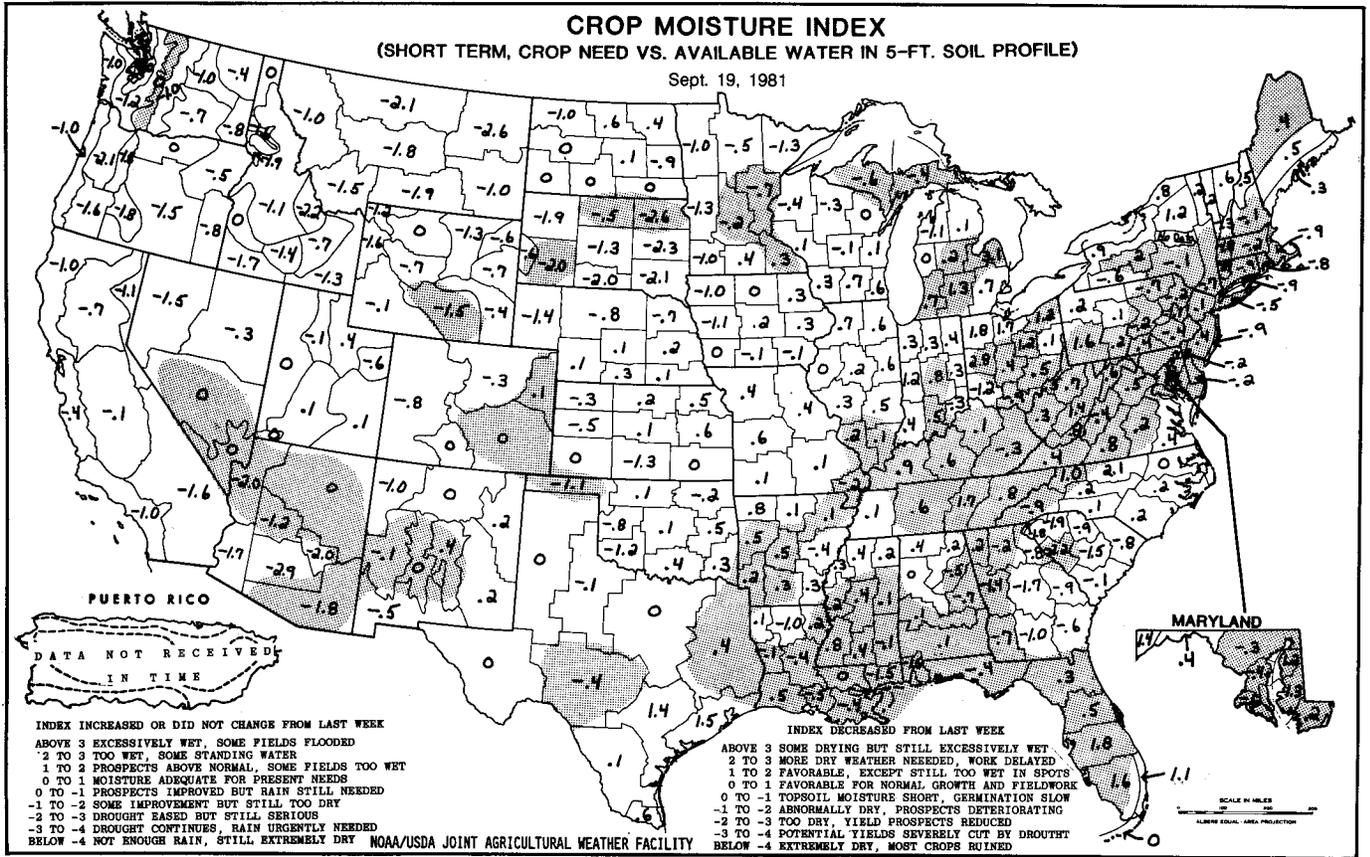
SATURDAY... Showers continued in the Northeast but most of the area from the Plains eastward was clear and cool. Many records were broken in the South as temperatures dropped into the forties. The Pacific cold front moved rapidly through the northern Rockies spreading showers over the area and displacing the very warm air that had persisted through the northern Plateau and Rockies.

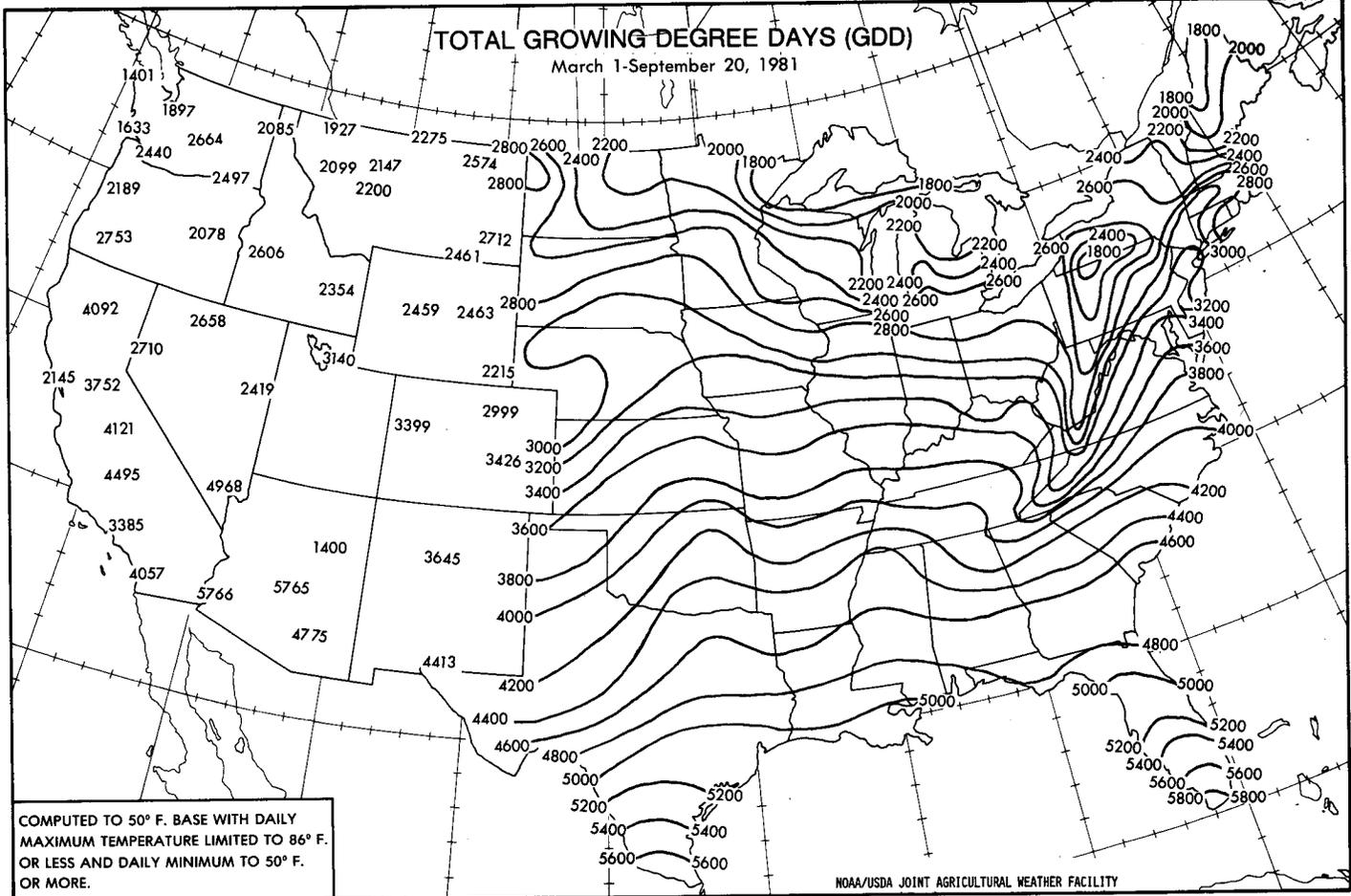
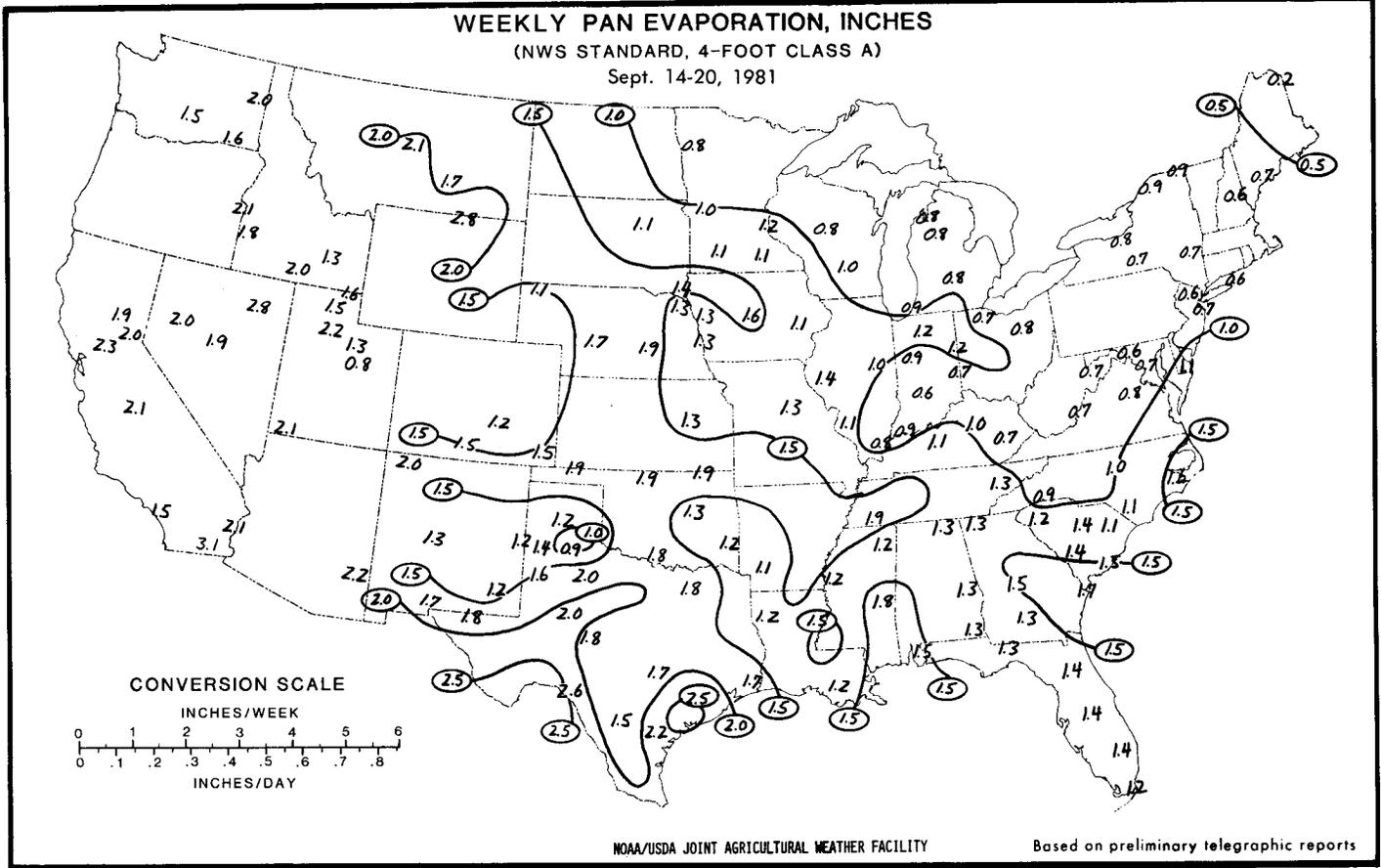
SUNDAY... The Pacific cold front continued on through the Plains. Showers were light as temperatures tended to equalize over the front but strong gusty winds blew across the northern Plains. Showers were more frequent along the northwest coast and light showers continued in the Northeast. The cold high pressure settled over the South, bringing the third consecutive day of low temperatures in the forties and fifties.

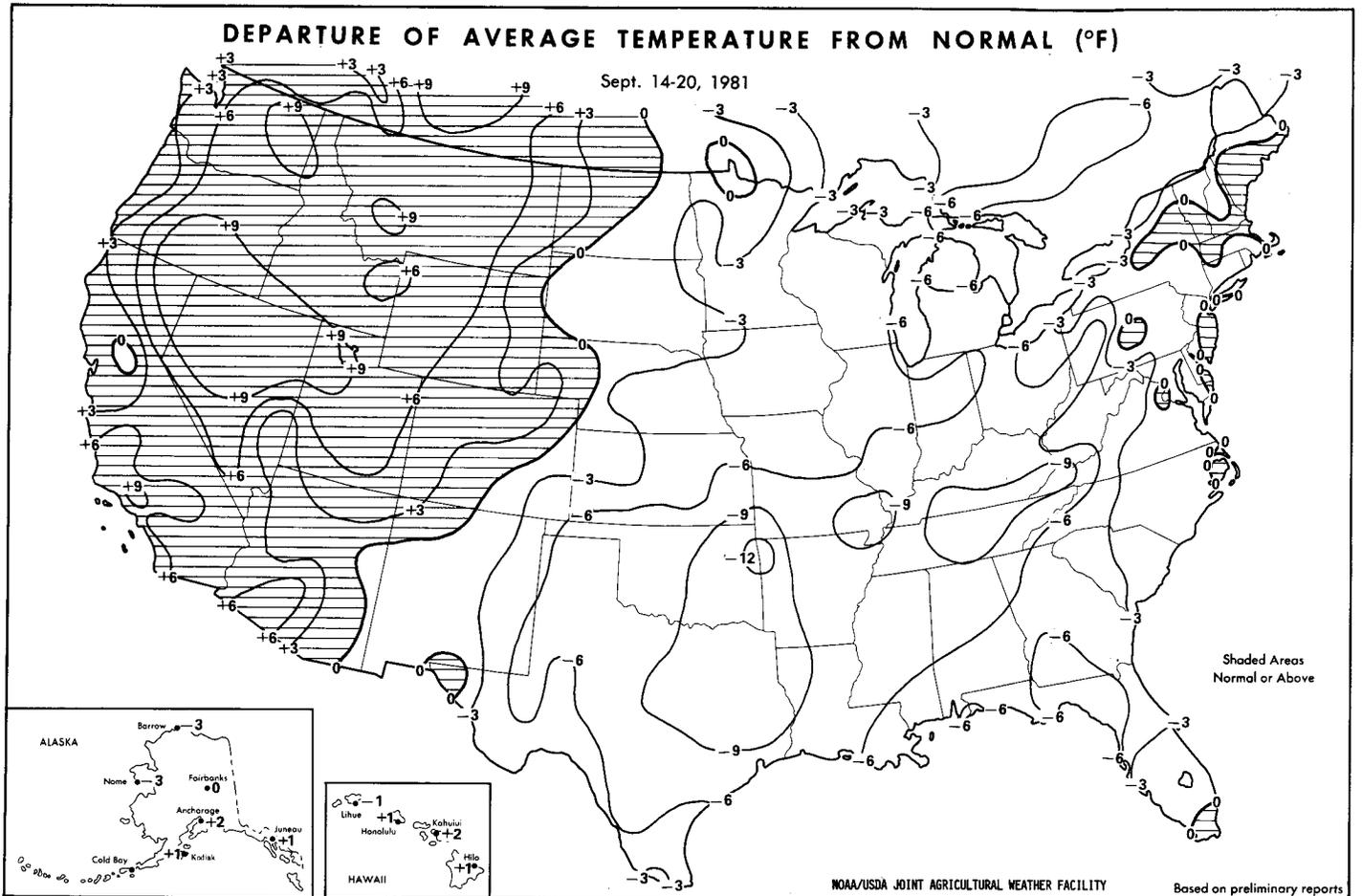
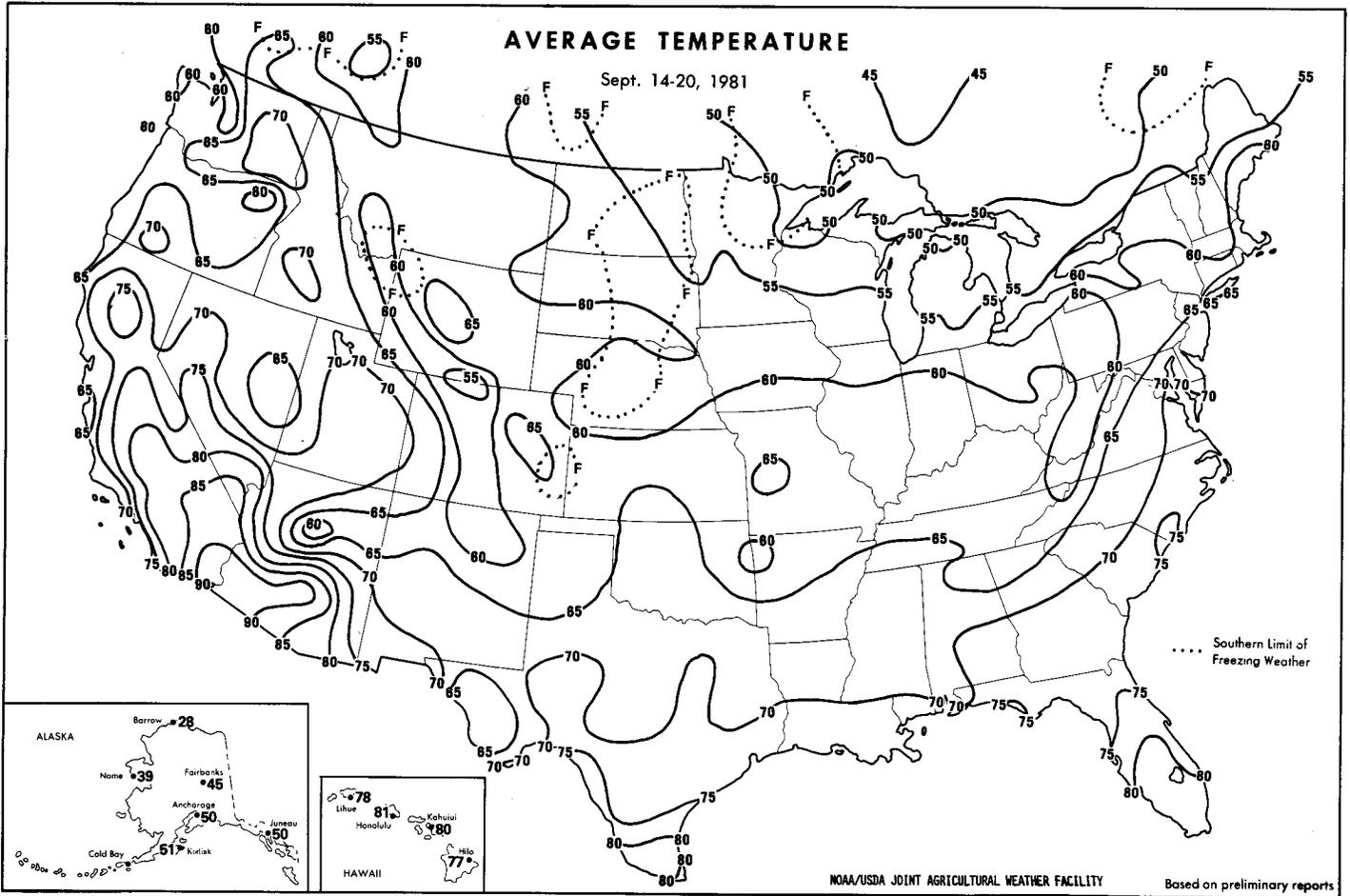
In This Issue

	Page
National Weather Summary	1
Precipitation & Crop Moisture	2
Crop Moisture Index by Division & August Percent of Possible Sunshine . . .	3
Pan Evaporation & Growing Degree Days . . .	4
Average Temperature & Departure	5
Weather Data for Selected Cities	6
Cooling Degree Days	9
Map of Mean Fall Freeze Dates	10
Freeze Probability Graph & Medfly Situation Report	11
National Agriculture Summary	12
Crop Progress	13
State Summaries of Weather & Agriculture . .	14
International Weather and Crop Summary . . .	20
Subscription Information	32









Weather Data for the Week Ending Sept. 20, 1981

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. 31	PCT. NORMAL SINCE Aug. 31	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMPERATURE		PRECIPITATION	
																		°F	°F	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	78	55	91	43	66	-7	.4	.5	.4	2.5	89	1.1	77	91	46	1	0	1	0	0	0
AL MOBILE	82	61	91	48	72	-6	.5	1.2	.5	4.1	82	48.6	91	87	43	1	0	1	0	1	0
AL MONTGOMERY	81	61	91	51	71	-5	.6	.5	.6	2.1	68	36.2	96	88	44	1	0	1	0	1	0
AK ANCHORAGE	56	44	61	39	50	2	.5	.1	.3	1.3	76	14.2	137	89	54	0	0	7	3	0	0
AK BARROW	31	24	43	19	28	-3	.1	0	.1	.4	80	--	--	99	84	0	1	5	6	1	0
AK FAIRBANKS	52	37	65	32	45	0	.3	.1	.1	.6	60	7.7	88	93	55	0	1	5	6	1	0
AK JUNEAU	55	44	58	39	50	1	2.0	.4	.7	8.8	191	36.2	106	94	76	0	0	6	2	2	0
AK KODIAK	54	48	58	44	51	1	3.9	2.4	2.1	6.9	168	51.9	137	91	75	0	0	4	6	2	0
AK NOME	47	31	53	25	39	-3	.1	.5	.1	.3	17	12.3	103	79	47	0	0	2	0	0	0
AZ FLAGSTAFF	74	44	77	41	59	2	T	.4	T	.5	36	16.9	119	91	33	0	0	0	0	0	0
AZ PHOENIX	103	79	106	74	91	7	T	.1	T	.1	20	4.5	90	39	17	7	0	0	0	0	0
AZ TUCSON	95	69	98	66	82	2	.1	.2	.1	.8	80	13.0	153	54	20	7	0	2	0	0	0
AZ WINSLOW	84	53	87	47	68	-1	.1	.2	.1	.6	75	6.8	105	--	--	0	0	1	0	0	0
AZ YUMA	106	76	110	73	91	4	0	0	0	0	0	1.4	61	46	17	7	0	0	0	0	0
AR FORT SMITH	77	51	84	40	64	-10	.1	.7	.1	1.4	61	30.8	97	94	43	0	0	2	0	0	0
AR LITTLE ROCK	76	56	83	46	66	-7	.2	.7	.1	2.3	88	34.2	95	80	52	0	0	2	0	0	0
CA BAKERSFIELD	95	69	96	68	82	5	0	0	0	0	0	4.4	110	60	24	7	0	0	0	0	0
CA EUREKA	66	54	71	51	60	3	.2	.1	.2	.2	67	19.2	79	94	72	0	0	1	0	0	0
CA FRESNO	95	63	96	60	79	5	0	0	0	0	0	7.5	107	82	27	7	0	0	0	0	0
CA LOS ANGELES	81	64	91	63	73	3	0	0	0	0	0	6.6	81	85	51	1	0	0	0	0	0
CA RED BLUFF	95	64	98	57	79	4	0	.1	0	0	0	16.3	115	69	23	7	0	0	0	0	0
CA SAN DIEGO	83	69	91	67	76	6	T	0	T	0	0	8.5	137	94	60	1	0	0	0	0	0
CA SAN FRANCISCO	71	57	78	52	64	-1	0	.1	0	0	0	12.2	98	83	53	0	0	0	0	0	0
CA STOCKTON	91	58	92	56	75	2	0	.1	0	0	0	9.2	101	82	29	7	0	0	0	0	0
CO DENVER	80	52	87	45	66	4	T	.3	T	.2	25	10.9	86	68	20	0	0	3	0	0	0
CO GRAND JUNCTION	87	55	88	50	71	4	T	.2	T	.4	67	5.5	98	49	18	0	0	0	0	0	0
CO PUEBLO	80	49	93	40	64	-2	.1	.1	.1	.5	83	6.9	64	80	33	2	0	2	0	0	0
CT BRIDGEPORT	70	56	82	49	63	-3	1.2	.6	.6	3.7	176	21.5	78	91	62	0	0	4	2	2	0
CT HARTFORD	68	56	85	49	62	0	1.8	.9	.9	3.2	126	22.2	71	93	56	0	0	4	2	1	0
DC WASHINGTON	76	63	94	53	70	-1	1.7	1.0	1.3	2.1	84	24.7	84	91	60	1	0	4	1	1	0
FL APALACHICOLA	82	64	89	54	73	-6	1.9	.3	1.9	2.5	37	32.3	70	86	52	0	0	2	1	0	0
FL DAYTONA BEACH	85	67	91	53	76	-4	1.4	.3	1.2	6.1	122	31.4	81	96	56	2	0	2	1	0	0
FL FORT MYERS	89	73	92	68	81	-1	3.0	.8	1.8	6.8	106	50.4	113	94	62	4	0	4	2	2	0
FL JACKSONVILLE	86	61	93	48	73	-5	.8	1.1	.7	1.5	26	26.4	61	97	48	2	0	3	1	0	0
FL KEY WEST	88	80	90	77	84	1	.4	1.5	.3	3.5	69	18.8	67	88	70	1	0	3	0	0	0
FL MIAMI	88	76	90	75	82	0	2.3	.2	1.0	7.2	124	39.5	89	95	63	2	0	5	2	2	0
FL ORLANDO	87	68	92	57	77	-3	4.5	2.8	3.2	8.0	157	38.7	93	95	55	4	0	2	2	2	0
FL TALLAHASSEE	82	59	90	45	70	-8	.9	.8	.4	4.9	98	41.5	83	95	46	2	0	2	0	0	0
FL TAMPA	84	66	90	57	75	-6	4.8	3.3	3.1	5.8	121	33.9	82	97	59	1	0	4	2	2	0
FL WEST PALM BEACH	88	72	92	70	80	-2	4.7	2.3	3.1	7.9	118	39.7	89	99	64	3	0	5	2	1	0
GA ATLANTA	77	57	89	46	67	-5	1.3	.5	1.1	5.3	221	31.0	83	90	51	0	0	3	0	1	0
GA AUGUSTA	83	57	91	45	70	-4	.5	.2	.3	.7	30	31.8	94	96	50	2	0	2	0	0	0
GA MACON	84	57	92	45	71	-5	.3	.4	.3	.7	77	34.5	99	97	41	2	0	2	1	0	0
GA SAVANNAH	84	62	91	48	73	-3	1.6	.3	1.6	2.8	68	33.9	82	89	45	2	0	2	1	0	0
HI HILO	85	69	90	66	77	1	2.7	1.1	2.4	5.0	96	--	--	86	60	1	0	2	1	0	0
HI HONOLULU	89	74	90	70	81	1	T	.1	T	.3	100	5.9	40	84	53	3	0	1	0	0	0
HI KAHULUI	88	72	90	66	80	2	.6	.5	.5	.7	350	--	--	78	55	1	0	2	0	0	0
HI LIHUE	86	70	88	64	78	-1	.4	0	.2	1.9	146	--	--	96	65	0	0	5	0	0	0
ID BOISE	87	53	96	41	70	7	T	.1	T	0	0	9.0	108	46	16	4	0	1	0	0	0
ID LEWISTON	89	55	99	45	72	9	.2	.1	.2	.2	29	9.1	94	58	19	5	0	1	0	0	0
ID POCATELLO	86	45	91	40	65	6	0	.1	0	0	0	8.9	114	55	16	2	0	0	0	1	1
IL CAIRO	73	54	82	46	63	-8	1.3	.5	1.3	1.5	58	34.0	95	--	--	0	0	1	1	0	0
IL CHICAGO	66	48	77	42	57	-6	.6	.1	.6	1.8	86	32.2	130	96	57	0	0	2	1	0	0
IL MOLINE	73	49	82	40	61	-3	0	.9	0	2.3	88	25.5	90	92	45	0	0	0	0	0	0
IL PEORIA	74	51	86	42	62	-3	T	.8	T	1.0	40	34.3	125	92	49	0	0	1	0	0	0
IL ROCKFORD	69	46	77	38	58	-5	T	.9	T	3.9	139	28.2	99	96	45	0	0	1	0	0	0
IL SPRINGFIELD	76	51	86	44	63	-4	T	.7	T	.9	39	40.9	153	93	46	0	0	1	0	0	0
IN EVANSVILLE	72	53	80	45	62	-6	.4	.3	.2	1.7	85	35.1	110	83	51	0	0	3	0	0	0
IN FORT WAYNE	68	55	76	51	61	-3	.3	.3	.2	2.5	139	29.1	107	84	52	0	0	2	0	0	0
IN INDIANAPOLIS	68	52	75	45	60	-6	.8	.1	.4	1.4	70	30.2	102	87	56	0	0	4	0	0	0
IN SOUTH BEND	67	49	79	42	58	-6	.2	.5	.1	.6	26	29.6	108	97	55	0	0	2	0	0	0
IA BURLINGTON	73	51	86	41	62	-3	T	.9	T	1.3	48	34.3	126	87	43	0	0	0	0	0	0
IA DES MOINES	73	49	84	40	61	-2	T	.7	T	1.0	43	24.4	95	83	39	0	0	1	0	0	0
IA DUBUQUE	59	47	82	40	53	-8	T	1.1	T	1.5	45	--	--	91	47	0	0	1	0	0	0
IA SIOUX CITY	75	44	88	36	60	-3	.2	.5	.2	.6	29	14.9	69	92	34	0	0	0	1	0	0
KS CONCORDIA	76	50	89	37	63	-3	T	.8	T	2.0	83	28.8	125	82	29	0	0	0	0	0	0
KS DODGE CITY	79	50	93	40	65	-4	.1	.3	.1	2.6	200	20.2	115	85	32	1	0	1	0	0	0
KS GOODLAND	80	46	92	32	63	-1	.1	.2	.1	.4	36	20.1	139	79	23	2	1	2	0	0	0
KS TOPEKA	74	49	84	38	62	-6	0	.8	0	1.3	54	31.0	110	92	42	0	0	0	0	0	0
KS WICHITA	78	51	87	41	65	-5	T	.9	T	1.7	68	19.0	77	79	35	0	0	4	0	0	0
KY LEXINGTON	70	52	85	44	61	-7	.6	.0	.4	1.9	95	28.8	83	97	60	0	0	0	4	0	0
KY LOUISVILLE	72	54	84	47	63	-6	.6	.1	.5	3.1	148	27.7	84	94	55	0	0	2	0	2	0
LA BATON ROUGE	81	61	90	50	71	-7	1.8	.9	1.4	4.0	143	35.4	85	97	53	1	0	0	2	0	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending Sept. 20, 1981

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. 31	PCT., NORMAL SINCE AUG. 31	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
LAKE CHARLES	82	61	89	49	71	-7	T	-1.0	T	2.6	90	42.3	103	93	49	0	0	1	0
NEW ORLEANS	82	65	92	52	74	-4	1.9	-.5	1.2	4.9	117	46.2	105	89	51	1	0	2	2
SHREVEPORT	80	57	86	43	68	-9	T	-.7	T	3.5	167	33.5	101	96	50	0	0	1	0
ME CARIBOU	59	42	67	33	50	-3	1.2	-.4	.9	1.7	71	33.9	133	97	61	0	0	3	1
PORTLAND	68	53	81	48	60	2	.7	-.1	.6	1.7	77	30.0	107	91	56	0	0	3	1
MD BALTIMORE	74	60	92	49	67	-2	2.6	1.9	1.1	3.3	143	25.1	84	87	57	1	0	5	2
MA BOSTON	70	57	90	53	64	0	1.4	.6	.4	2.0	83	20.6	69	96	65	1	0	4	0
CHATHAM	68	58	75	53	63	-1	3.3	-1	1.1	3.6	-	29.8	-	93	77	0	0	4	3
MI ALPENA	61	43	69	37	52	-4	.1	-.7	-1.	2.1	91	15.8	76	95	55	0	0	1	0
DETROIT	67	50	81	41	59	-5	1.2	-.7	.8	3.6	212	24.1	100	92	53	0	0	4	1
FLINT	62	47	70	38	55	-6	.9	-.3	.6	3.7	195	24.7	108	92	54	0	0	2	1
GRAND RAPIDS	66	46	80	38	56	-6	3.2	-2.3	2.3	3.3	143	32.5	135	92	59	0	0	2	2
HOUGHTON LAKE	62	45	71	38	53	-3	.4	-.3	.2	.7	32	23.4	111	93	50	0	0	4	0
LANSING	63	45	75	36	54	-5	.8	-.1	.6	2.2	122	22.0	96	99	67	0	0	2	1
MARQUETTE	58	40	67	35	49	-4	.5	-.5	.5	1.1	38	22.6	85	94	50	0	0	3	0
MUSKEGON	64	45	78	37	54	-7	.4	-.4	.2	1.2	50	20.9	93	94	56	0	0	2	0
SAULT STE. MARIE	59	35	64	30	47	-8	T	-.9	T	1.6	59	19.2	86	99	53	0	1	2	0
MN DULUTH	60	38	67	29	49	-5	T	-.7	T	.3	13	20.6	86	96	45	0	1	1	0
INT'L FALLS	63	41	74	33	52	-1	T	-.8	T	1.6	67	14.6	70	99	49	0	0	1	0
MINNEAPOLIS	68	44	74	39	56	-3	.1	-.6	.1	.3	14	21.1	98	82	37	0	0	1	0
ROCHESTER	66	42	72	36	54	-5	T	-.7	T	2.3	100	28.7	126	88	45	0	0	2	0
SAINT CLOUD	67	39	72	32	53	-4	.1	-.5	.1	.4	18	18.6	82	89	38	0	1	2	0
MS JACKSON	79	55	88	43	67	-9	1.2	-.5	.7	3.5	159	34.9	93	98	49	0	0	3	2
MERIDIAN	81	56	88	42	69	-6	.4	-.4	.2	1.7	71	32.0	81	93	42	0	0	2	0
MO COLUMBIA	76	49	91	40	63	-5	.3	-.8	.2	.9	31	39.8	136	91	40	1	0	3	0
KANSAS CITY	74	51	83	41	62	-5	T	-1.0	T	2.2	73	34.2	116	84	40	0	0	1	0
SAINT LOUIS	74	55	82	45	64	-5	.4	-.3	.2	2.2	116	36.9	135	95	45	0	0	3	0
SPRINGFIELD	75	48	87	37	62	-7	T	-1.0	T	.8	28	31.6	104	91	41	0	0	1	0
MT BILLINGS	81	47	93	42	64	7	T	-.3	T	0	0	13.7	119	61	21	2	0	0	0
GLASGOW	79	47	92	41	63	7	T	-.2	T	0	0	6.7	67	46	16	1	0	1	0
GREAT FALLS	82	47	93	43	64	8	T	-.3	T	0	0	12.1	97	56	18	2	0	0	0
HAVRE	82	43	93	40	63	3	T	-.3	T	0	0	7.5	76	64	19	1	0	1	0
HELENA	80	44	88	39	62	9	.1	-.2	.1	.1	14	11.3	123	64	21	0	0	1	0
KALISPELL	81	42	90	37	61	9	T	-.3	T	0	0	14.9	120	80	23	1	0	1	0
MILES CITY	80	48	93	43	64	5	T	-.3	T	0	0	7.6	64	57	16	1	0	1	0
MISSOULA	80	42	91	34	61	7	.1	-.2	.1	.1	11	12.7	126	76	25	2	0	1	0
NE GRAND ISLAND	75	43	90	33	59	-4	.1	-.6	.1	.4	21	17.9	87	91	32	1	0	1	0
LINCOLN	74	47	86	35	60	-5	.1	-.7	.1	1.4	64	17.8	78	87	42	0	0	1	0
NORFOLK	74	43	88	34	58	-4	T	-.6	T	.1	6	16.9	80	91	33	0	0	1	0
NORTH PLATTE	76	39	88	30	58	-4	0	-.5	0	.2	13	21.0	121	87	31	0	1	0	0
OMAHA	72	47	85	39	60	-4	T	-.7	T	.1	4	22.3	88	87	46	0	0	1	0
VALENTINE	74	40	91	26	57	-4	T	-.3	T	.1	8	14.5	91	74	25	1	2	1	0
NV ELY	86	40	93	37	63	7	.1	0	.1	.3	100	6.2	107	67	15	1	0	1	0
LAS VEGAS	99	71	102	69	85	5	0	-.1	0	.3	100	2.7	87	37	14	7	0	0	0
RENO	90	49	93	41	69	9	T	0	T	0	0	2.8	56	72	15	5	0	1	0
WINNEMUCCA	90	47	95	42	68	10	T	-.1	T	0	0	4.1	71	42	13	5	0	0	0
NH CONCORD	67	51	80	47	59	0	.4	-.3	.4	2.0	95	29.2	116	98	62	0	0	3	0
NJ ATLANTIC CITY	77	61	92	54	69	2	1.0	.4	.7	1.6	73	26.1	79	93	58	1	0	4	1
TRENTON	71	59	87	57	65	-2	1.4	-.6	.7	3.5	146	27.6	91	97	67	0	0	4	1
NM ALBUQUERQUE	83	54	88	51	69	-1	T	-.1	T	.4	80	5.9	97	72	21	0	0	0	0
ROSWELL	81	54	93	49	67	-3	0	-.4	0	2.3	209	22.8	268	81	31	1	0	0	0
NY ALBANY	69	51	84	42	60	-2	.3	-.5	.2	2.1	91	20.4	85	90	55	0	0	3	0
BINGHAMTON	66	53	79	45	59	-1	.2	-.6	.1	2.8	133	20.8	76	93	55	0	0	4	0
BUFFALO	66	52	76	48	59	-2	.9	-.1	.7	2.7	113	26.4	104	87	54	0	0	3	1
NEW YORK	70	60	86	54	65	-2	1.4	-.7	.8	3.0	120	24.9	81	86	57	0	0	3	2
ROCHESTER	67	51	79	41	59	-3	.7	-.2	.5	3.5	206	25.1	111	95	61	0	0	3	1
SYRACUSE	71	55	81	50	63	0	1.1	-.5	.7	3.5	175	20.5	78	96	56	0	0	4	1
NC ASHEVILLE	74	53	84	44	64	-3	.3	-.6	.2	1.4	54	26.4	76	95	49	0	0	2	0
CHARLOTTE	79	59	89	47	69	-3	.3	-.5	.3	3.5	146	26.8	81	90	44	0	0	2	0
GREENSBORO	77	56	88	46	67	-3	1.1	-.3	.7	6.3	242	31.5	100	86	45	0	0	2	1
HATTERAS	80	68	84	62	74	0	.4	-.9	.4	1.3	30	39.0	97	89	64	0	0	2	0
RALEIGH	77	60	87	48	68	-2	.2	-.6	.2	2.6	96	25.8	79	92	51	0	0	2	0
WILMINGTON	82	64	89	52	73	-2	T	-1.3	T	1.0	24	36.4	86	92	53	0	0	1	0
ND BISMARCK	70	39	81	32	55	-2	T	-.3	T	1.4	127	12.1	85	87	35	0	1	1	0
FARGO	67	39	78	33	53	-4	T	-.4	T	1.0	67	13.6	80	88	35	0	0	1	0
WILLISTON	80	41	93	31	60	4	.1	-.2	.1	.1	10	9.3	75	64	20	2	1	1	0
OH AKRON-CANTON	67	51	76	46	59	-4	.6	-.1	.3	3.1	163	34.1	124	89	57	0	0	4	0
CINCINNATI	70	51	87	42	61	-7	.1	-.5	.1	1.4	78	27.3	91	92	49	0	0	3	0
CLEVELAND	67	51	73	45	59	-5	2.3	1.7	1.3	5.8	290	30.5	112	87	52	0	0	5	2
COLUMBUS	66	51	74	45	58	-7	1.2	-.6	.9	2.2	122	31.9	109	89	61	0	0	3	1
DAYTON	66	52	78	47	59	-7	2.6	2.1	2.6	5.1	300	34.6	129	88	60	0	0	3	1
TOLEDO	66	49	81	43	58	-6	.8	-.2	.7	5.4	284	29.2	120	98	61	0	0	3	1
YOUNGSTOWN	66	48	77	40	57	-5	.4	-.1	.1	3.7	218	28.0	99	90	52	0	0	5	0
OK OKLAHOMA CITY	77	53	87	42	65	-8	T	-.8	T	1.5	63	28.8	114	82	38	0	0	0	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Sept. 20, 1981

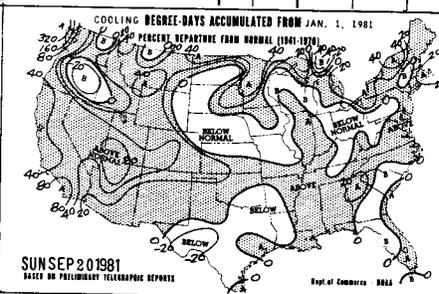
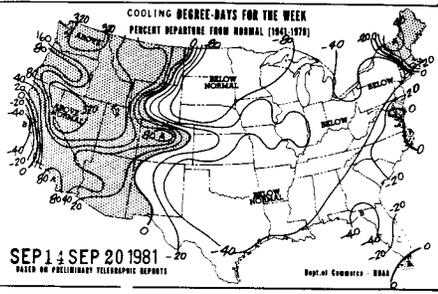
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Aug. 31	PCT. NORMAL SINCE Aug. 31	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
OR TULSA	77	51	86	42	64	-8	T	-1.0	T	3.0	107	27.8	96	90	44	0	0	1	0
OR ASTORIA	70	51	80	44	61	2	.5	.2	T	1.0	59	35.2	92	92	58	0	0	3	0
BURNS	83	39	93	30	61	3	T	.1	T	0	0	7.3	96	--	--	1	0	0	0
MEDFORD	91	53	104	44	72	7	.1	.1	T	0	0	6.4	54	77	23	4	0	1	0
PENDLETON	84	55	94	45	69	6	T	.1	T	0	0	9.0	111	52	22	2	0	0	0
PORTLAND	80	55	96	50	67	5	.5	.1	T	.6	60	16.1	75	95	44	1	0	3	0
SALEM	81	48	96	42	64	2	.5	.1	T	.4	75	17.3	73	97	39	1	0	3	0
PA ALLENTOWN	71	55	88	51	63	-1	2.4	1.5	1.0	2.7	100	27.1	87	98	58	0	0	3	1
ERIE	67	51	77	43	59	-2	.6	.3	.3	2.6	104	30.4	112	84	51	0	0	3	0
HARRISBURG	70	56	86	50	63	-3	1.2	.6	1.0	2.5	125	27.5	103	96	62	0	0	4	0
PHILADELPHIA	72	60	89	55	66	-2	2.3	1.6	.8	2.9	121	29.2	98	96	59	0	0	5	2
PITTSBURGH	66	50	80	40	58	-5	1.0	.4	.5	4.1	228	30.8	112	94	56	0	0	4	1
SCRANTON	69	56	83	46	62	-1	1.0	.4	.4	1.9	95	27.2	105	89	61	0	0	6	0
RI PROVIDENCE	71	53	89	44	62	-1	1.6	.9	.5	2.1	91	22.9	78	94	59	0	0	4	1
SC CHARLESTON	84	64	91	51	74	-1	.2	-1.1	.2	1.3	33	41.8	99	95	50	1	0	1	0
COLUMBIA	82	59	91	44	71	-4	.2	-.8	.2	.4	12	28.1	76	99	43	1	0	1	0
GREENVILLE	78	55	87	41	56	-5	T	-.9	T	2.0	74	22.3	62	84	43	0	0	0	0
SD ABERDEEN	74	40	86	31	57	-1	T	-.4	T	0	0	13.2	81	84	33	0	1	0	0
HURON	75	41	87	33	58	-2	.1	-.3	.1	1.2	100	12.6	77	98	37	0	0	2	0
RAPID CITY	76	43	86	35	59	-1	T	-.3	T	.1	11	11.8	76	69	24	0	0	0	0
SIoux FALLS	75	41	87	33	58	-2	T	-.7	T	.2	10	13.8	66	80	26	0	0	1	0
TN CHATTANOOGA	74	54	85	42	64	-7	1.1	.1	1.0	2.8	108	33.3	88	86	48	0	0	2	1
KNOXVILLE	73	56	88	46	65	-6	2.5	1.9	2.4	6.1	321	32.6	94	91	53	0	0	3	1
MEMPHIS	78	59	87	50	68	-5	T	-.7	T	2.9	126	30.0	80	86	43	0	0	0	0
NASHVILLE	73	53	86	41	63	-9	.7	-.1	.6	1.0	42	32.4	92	88	50	0	0	2	1
TX ABILENE	81	58	91	50	70	-6	.9	-.3	.9	1.7	113	16.2	89	77	34	1	0	1	1
AMARILLO	75	52	89	47	63	-6	.4	-.1	.2	2.5	178	17.0	105	96	44	0	0	3	0
AUSTIN	84	62	92	52	73	-6	.9	-.1	.5	2.8	104	37.9	156	79	39	2	0	2	0
BEAUMONT	81	61	88	51	71	-12	.6	-.6	.6	3.5	92	38.9	96	94	52	0	0	1	1
BROWNSVILLE	88	68	95	59	78	-4	1.4	.1	1.4	4.3	123	25.9	147	89	50	2	0	1	1
CORPUS CHRISTI	86	66	96	55	76	-5	.2	-1.0	.1	.5	15	31.8	150	88	44	3	0	3	0
DEL RIO	89	63	97	54	76	-4	.1	.3	.1	.3	14	20.6	162	70	34	4	0	1	0
EL PASO	88	60	92	53	74	0	T	-.3	T	.4	50	11.7	198	76	28	2	0	0	0
FORT WORTH	80	56	88	45	68	-9	.7	-.1	.7	2.4	114	28.9	116	87	40	0	0	1	1
GALVESTON	80	68	87	60	74	-6	2.1	-.7	2.1	2.5	63	29.0	94	86	62	0	0	2	1
HOUSTON	84	61	91	51	73	-6	.7	-.4	.7	8.9	270	41.7	119	94	45	2	0	1	0
LUBBOCK	76	54	88	49	65	-6	T	-.5	T	1.5	100	16.5	115	86	42	0	0	1	0
MIDLAND	84	57	93	50	71	-4	0	-.4	0	1.7	155	11.9	114	80	32	1	0	0	0
SAN ANGELO	82	54	91	42	68	-8	1.0	-.3	1.0	2.6	137	21.3	163	87	35	1	0	1	1
SAN ANTONIO	86	60	92	46	73	-6	.4	-.6	.4	1.4	54	27.4	131	85	39	3	0	1	0
VICTORIA	84	62	91	52	73	-7	1.1	-.1	1.1	1.2	36	33.5	134	88	43	2	0	1	1
WACO	82	57	91	45	69	-9	1.7	-.9	1.7	3.7	168	23.9	102	91	41	1	0	1	0
WICHITA FALLS	82	54	94	45	68	-8	.1	-.6	.1	1.4	74	22.5	105	87	35	1	0	1	0
UT BLANDING	82	50	83	49	66	3	0	-.2	0	1.5	188	9.9	121	70	25	0	0	0	0
SALT LAKE CITY	87	57	90	52	72	8	0	-.1	0	.5	100	9.8	88	55	17	1	0	0	0
VT BURLINGTON	73	50	86	40	62	3	T	-.7	T	2.3	105	28.4	122	91	57	0	0	0	0
VA LYNCHBURG	75	56	86	47	65	-2	1.8	-1.0	.7	3.6	150	28.2	98	90	52	0	0	3	2
NORFOLK	79	63	89	52	71	-1	.4	-.5	.3	3.2	97	30.3	88	90	56	0	0	3	0
RICHMOND	78	60	91	53	69	-1	2.2	1.4	1.5	2.7	104	28.1	88	91	57	1	0	3	2
ROANOKE	73	56	85	50	64	-3	.6	-.2	.5	4.5	188	23.0	79	89	50	0	0	2	0
WA COLVILLE	80	50	90	41	65	7	.1	-.1	.1	.6	100	17.1	155	80	39	2	0	1	0
OMAK	89	51	99	42	70	--	.1	--	.1	.2	--	6.7	--	--	5	0	0	1	0
QUILLAYUTE	69	48	89	42	59	2	1.4	-.2	.7	2.4	83	57.5	93	97	58	0	0	3	1
SEATTLE-TACOMA	75	53	89	48	64	5	.5	0	.2	.7	58	16.8	76	89	44	0	0	3	0
SPOKANE	83	52	92	40	68	8	T	-.2	T	.2	50	9.7	83	76	24	2	0	0	0
WALLA-WALLA	86	58	95	50	72	7	T	-.2	T	0	0	14.0	126	52	21	4	0	2	0
YAKIMA	85	48	95	43	67	6	.1	0	T	.1	50	3.4	71	77	23	4	0	2	0
WV BECKLEY	65	48	78	41	57	-6	.9	-.1	.5	5.2	208	29.5	89	99	63	0	0	5	1
CHARLESTON	72	53	88	46	63	-5	1.3	.6	.8	2.3	105	29.5	92	95	54	0	0	5	1
HUNTINGTON	72	53	91	42	62	-5	.7	0	.4	1.6	76	31.3	103	94	53	1	0	3	0
PARKERSBURG	69	53	87	45	61	-6	.7	-.1	.5	3.7	185	27.3	90	94	59	0	0	4	0
WI GREEN BAY	65	44	72	39	55	-4	.2	-.6	.2	.9	41	15.6	73	92	49	0	0	1	0
LA CROSSE	70	46	76	39	58	-3	T	-.8	T	1.4	58	30.0	128	100	42	0	0	1	0
MADISON	68	43	74	38	56	-4	T	-.8	T	2.6	108	24.9	104	90	44	0	0	1	0
MILWAUKEE	62	47	69	44	55	-6	1.8	-1.1	1.0	2.8	133	24.8	112	91	36	0	0	2	2
WY CASPER	80	44	89	36	62	4	T	-.2	T	0	0	8.9	105	55	15	0	0	0	0
CHEYENNE	76	46	84	39	61	3	T	-.2	T	.2	29	15.1	120	77	25	0	0	0	0
LANDER	80	50	85	46	65	7	T	-.3	T	.5	71	9.4	89	52	21	0	0	0	0
SHERIDAN	82	45	94	36	64	6	T	-.3	T	.4	44	12.1	93	63	16	2	0	0	0
PR SAN JUAN	91	77	95	72	84	3	.3	-1.1	.1	2.8	64	42.4	103	94	67	6	0	4	0

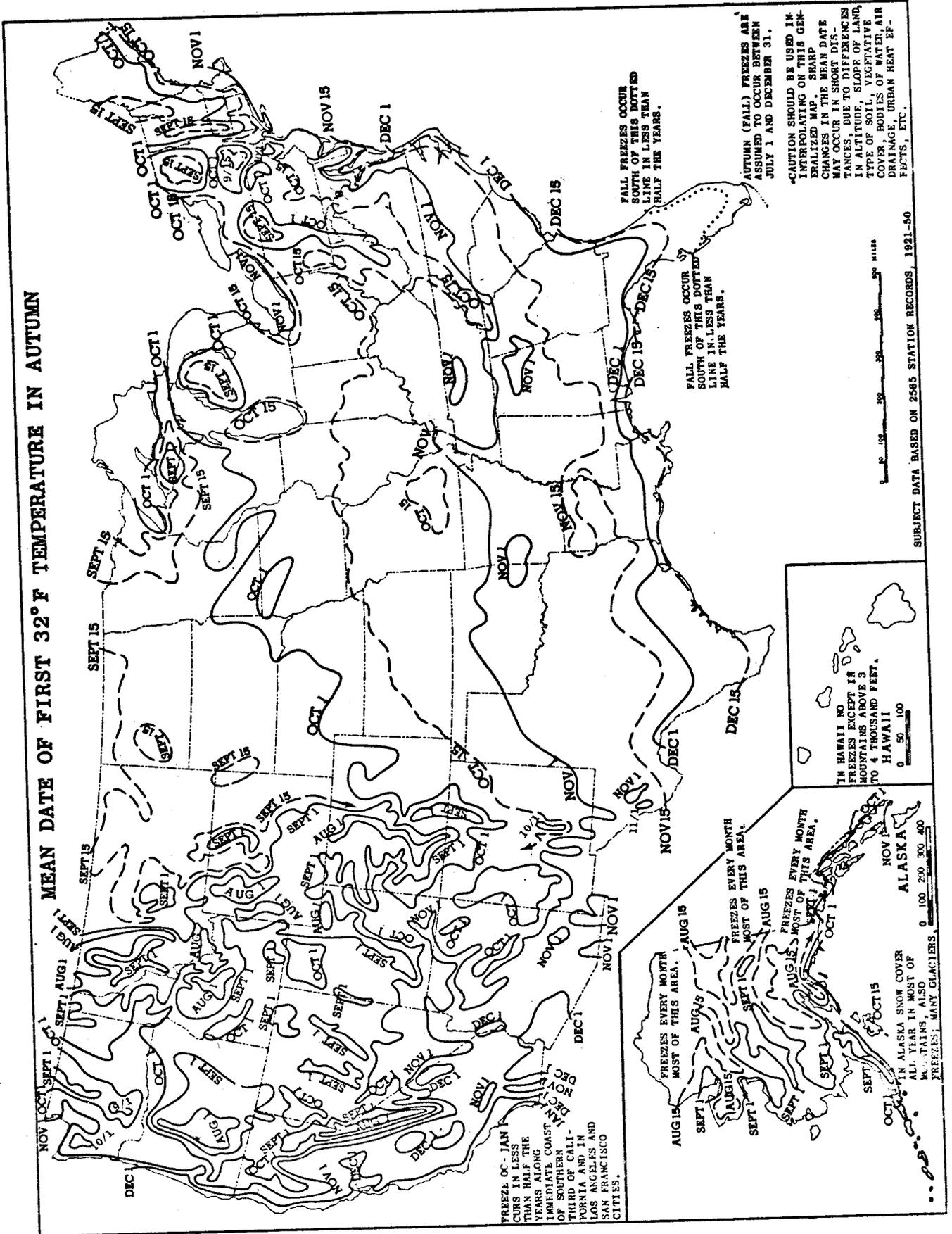
BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

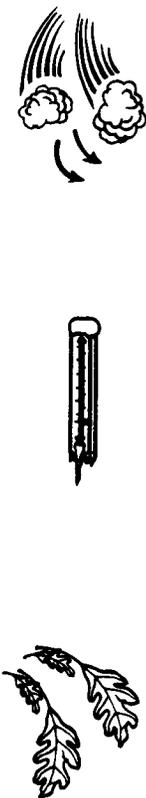
COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING SEP. 20, 1981.

BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JAN 1, 1981

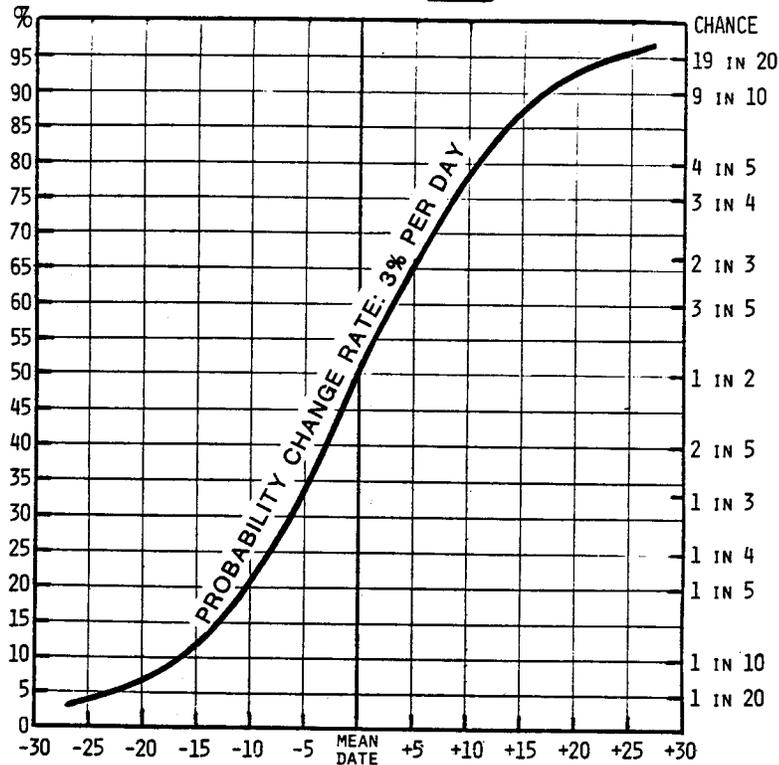
STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +		
	TOTAL	DEPARTURE*	DEPARTURE FROM 1980	TOTAL	DEPARTURE*	DEPARTURE FROM 1980		TOTAL	DEPARTURE*	DEPARTURE FROM 1980	TOTAL	DEPARTURE*	DEPARTURE FROM 1980		TOTAL	DEPARTURE*	DEPARTURE FROM 1980	TOTAL	DEPARTURE*	DEPARTURE FROM 1980
ALA. BIRMINGHAM...	31	31	1898	115	193	193	MAINE CARIBOU...	40	40	192	6	6	YOUNGSTOWN...	6	6	647	137	177		
MOBILE...	31	31	2238	115	193	193	PORTLAND...	40	40	258	6	6	OKLA. OKLAHOMA CITY	23	23	1806	56	615		
MONTGOMERY...	46	46	2206	175	315	315	MD. BALTIMORE...	27	1	1170	102	170	TULSA...	19	19	1980	169	756		
ARIZ FLAGSTAFF...	18	18	116	116	116	116	FLINT...	16	4	830	179	52	OREG ASTORIA...	5	5	44	30	227		
PHOENIX...	18	18	419	111	111	419	ALBANY...	16	4	271	60	47	BURNS...	5	5	201	10	10		
TUCSON...	18	18	157	111	111	157	DETROIT...	16	4	581	102	170	WEDFORD...	5	5	201	10	10		
WINSLON...	18	18	421	111	111	421	GRAND RAPIDS...	16	4	596	102	170	PENDLETON...	5	5	115	1	1		
YUMA...	18	18	136	111	111	136	HAUGHTON LAKE...	16	4	596	102	170	PORTLAND...	5	5	115	1	1		
ARK. FORT SMITH...	20	20	1716	163	540	540	HAWKINS...	16	4	161	102	170	SALEN...	5	5	27	1	1		
LITTLE ROCK...	20	20	1944	140	503	503	HUSKONG...	16	4	665	102	170	PA ALLENTOWN...	10	10	80	8	36		
CALIF. BAKERSFIELD	121	40	2629	662	744	744	MINN. DULUTH...	19	11	155	221	219	ERIE...	10	10	80	8	36		
EUREKA...	121	40	2629	662	744	744	INTERNATL FALLS...	19	11	284	143	143	HARRISBURG...	10	10	80	8	36		
FRESNO...	121	40	2629	662	744	744	WINNEPESK...	19	11	481	103	103	PHILADELPHIA...	10	10	80	8	36		
LOS ANGELES...	121	40	2629	662	744	744	ROCHESTER...	19	11	387	103	103	PITTSBURGH...	10	10	80	8	36		
RED BLUFF...	121	40	2629	662	744	744	ST. CLOUD...	19	11	670	103	103	SCRANTON...	10	10	80	8	36		
SAN DIEGO...	121	40	2629	662	744	744	MISS. JACKSON...	31	44	2223	109	203	S. I. PROVIDENCE...	10	10	745	219	30		
SAN FRANCISCO...	121	40	2629	662	744	744	MERIDIAN...	31	44	2273	109	203	S. C. CHARLESTON...	68	68	2172	285	44		
STOCKTON...	121	40	2629	662	744	744	MD. COLUMBIA...	19	11	1180	109	203	COLUMBIA...	31	31	1778	149	56		
COLO. DENVER...	21	11	883	249	197	197	KANSAS CITY...	19	11	1180	109	203	GREENVILLE...	31	31	1580	94	67		
GRAND JUNCTION...	21	11	1351	246	407	407	ST. LOUIS...	19	11	1144	109	203	S. DAK. ABERDEEN...	0	0	688	114	77		
PUEBLO...	17	11	1234	264	42	42	SPRINGFIELD...	19	11	1044	109	203	HURON...	0	0	688	114	77		
CONN. BRIDGEPORT...	7	11	682	32	25	25	FLA. APALACHICOLA...	15	15	716	221	76	RAPID CITY...	0	0	688	114	77		
HARTFORD...	7	11	748	167	34	34	DAYTONA BEACH...	15	15	716	221	76	SIoux FALLS...	0	0	688	114	77		
DEL. WILMINGTON...	23	2	1108	152	122	122	JACKSONVILLE...	15	15	716	221	76	TENN. CHATTANOOGA...	24	24	1600	57	132		
D. C. WASHINGTON...	38	0	1621	273	270	270	KEY WEST...	15	15	716	221	76	KNOXVILLE...	24	24	1600	57	132		
FLA. APALACHICOLA...	15	15	2222	67	69	69	LAKELAND...	15	15	716	221	76	NASHVILLE...	24	24	1600	57	132		
DAYTONA BEACH...	15	15	2222	67	69	69	MIAMI...	15	15	716	221	76	TEXAS ABILENE...	44	31	2334	93	342		
FORT MYERS...	14	3	2117	404	129	129	ORLANDO...	15	15	716	221	76	AMARILLO...	44	14	2020	97	177		
JACKSONVILLE...	14	3	2117	404	129	129	TALLAHASSEE...	15	15	716	221	76	AUSTIN...	44	14	2020	97	177		
LAKELAND...	14	3	2117	404	129	129	WEST PALM BEACH...	15	15	716	221	76	BEAUMONT...	44	14	2020	97	177		
MIAMI...	14	3	2117	404	129	129	GA. ATLANTA...	33	17	1874	395	400	BROOKSVILLE...	44	14	2020	97	177		
ORLANDO...	14	3	2117	404	129	129	Macon...	33	17	1874	395	400	BROWNVILLE...	44	14	2020	97	177		
TALLAHASSEE...	14	3	2117	404	129	129	Savannah...	33	17	1874	395	400	CORPUS CHRISTI...	44	14	2020	97	177		
WEST PALM BEACH...	14	3	2117	404	129	129	IDAHO. BOISE...	44	30	658	40	159	DEL. RAO...	44	14	2020	97	177		
GA. ATLANTA...	33	17	1874	395	400	400	LEWISTON...	44	30	803	158	263	FORT WORTH...	44	14	2020	97	177		
Macon...	33	17	1874	395	400	400	POCATELLO...	11	8	475	29	29	GALVESTON...	44	14	2020	97	177		
Savannah...	33	17	1874	395	400	400	ILL. CAIRO...	28	20	1711	11	372	HOUSTON...	44	14	2020	97	177		
IDAHO. BOISE...	44	30	658	40	159	159	CHICAGO...	28	20	1711	11	372	LUBBOCK...	44	14	2020	97	177		
LEWISTON...	44	30	803	158	263	263	MOLINE...	28	20	754	119	119	MIDLAND...	44	14	2020	97	177		
POCATELLO...	11	8	475	29	29	29	PEORIA...	14	14	950	119	119	SAN ANGELO...	44	14	2020	97	177		
ILL. CAIRO...	28	20	1711	11	372	372	ROCKFORD...	14	14	738	119	119	SAN ANTONIO...	44	14	2020	97	177		
CHICAGO...	28	20	1711	11	372	372	SPRINGFIELD...	14	14	738	119	119	VICTORIA...	44	14	2020	97	177		
MOLINE...	28	20	754	119	119	119	IND. EVANSVILLE...	10	2	1332	19	304	NACOGDOCHES...	44	14	2020	97	177		
PEORIA...	14	14	950	119	119	119	FORT WAYNE...	10	2	706	26	146	RICHTHA FALLS...	44	14	2020	97	177		
ROCKFORD...	14	14	738	119	119	119	INDIANAPOLIS...	10	2	946	61	376	UTAH SALT LAKE CITY	54	34	1177	277	213		
SPRINGFIELD...	14	14	738	119	119	119	SOUTH BEND...	10	2	616	61	376	VT. BURLINGTON...	3	1	576	180	72		
IND. EVANSVILLE...	10	2	1332	19	304	304	IOWA. BURLINGTON...	8	8	841	121	326	VA. LYNCHBURG...	21	11	1109	51	214		
FORT WAYNE...	10	2	706	26	146	146	DES MOINES...	12	8	979	79	275	NORFOLK...	17	17	1446	139	219		
INDIANAPOLIS...	10	2	946	61	376	376	DUBUQUE...	12	8	591	79	275	RICHMOND...	17	17	1446	139	219		
SOUTH BEND...	10	2	616	61	376	376	SIOUX CITY...	15	15	860	53	202	ROANOKE...	17	17	1446	139	219		
IOWA. BURLINGTON...	8	8	841	121	326	326	KANS. CONCORDIA...	19	10	1170	79	556	ASH. GUILLYAYUTE...	10	10	46	33	35		
DES MOINES...	12	8	979	79	275	275	DODGE CITY...	22	10	1635	281	281	SEATTLE-TACOMA...	10	10	46	33	35		
DUBUQUE...	12	8	591	79	275	275	GOODLAND...	15	15	839	64	64	SPOKANE...	10	10	46	33	35		
SIOUX CITY...	15	15	860	53	202	202	TOPEKA...	14	17	1239	72	72	WALSA HALLA...	10	10	46	33	35		
KANS. CONCORDIA...	19	10	1170	79	556	556	WICHITA...	23	20	1668	78	598	W. VA. BECKLEY...	10	10	46	33	35		
DODGE CITY...	22	10	1635	281	281	281	KY. LEXINGTON...	12	20	1037	115	291	CHARLESTON...	10	10	1033	11	75		
GOODLAND...	15	15	839	64	64	64	LOUISVILLE...	14	20	1375	158	286	HUNTINGTON...	14	14	1092	11	176		
TOPEKA...	14	17	1239	72	72	72	LA. BATON ROUGE...	49	38	2417	117	31	PARKERSBURG...	10	10	859	142	189		
WICHITA...	23	20	1668	78	598	598	LAKE CHARLES...	48	46	2307	94	138	WIS. GREEN BAY...	10	10	1033	11	75		
KY. LEXINGTON...	12	20	1037	115	291	291	NEW ORLEANS...	64	51	2611	245	202	LACROSSE...	10	10	1033	11	75		
LOUISVILLE...	14	20	1375	158	286	286	SHREVEPORT...	34	28	2042	237	604	MADISON...	10	10	1033	11	75		
LA. BATON ROUGE...	49	38	2417	117	31	31	OHIO. AKRON-CANTON...	10	1	672	54	72	HILMAURKEE...	10	10	1033	11	75		
LAKE CHARLES...	48	46	2307	94	138	138	CINCINNATI...	10	1	588	50	164	WYO. CASPER...	11	11	1033	11	75		
NEW ORLEANS...	64	51	2611	245	202	202	CLEVELAND...	10	1	590	50	164	CHEYENNE...	11	11	1033	11	75		
SHREVEPORT...	34	28	2042	237	604	604	COLUMBUS...	10	1	590	50	164	LANDER...	11	11	1033	11	75		
							DAYTON...	10	1	602	50	164	SHERIDAN...	11	11	1033	11	75		
							TOLEDO...	10	1	602	50	164								







PROBABILITY OF FIRST FALL FREEZE BEFORE A CERTAIN DATE



NUMBER OF DAYS TO SUBSTRACT FROM, OR ADD TO, THE MEAN DATE OF FIRST FREEZE (32 °F OR LOWER) IN THE FALL, TO OBTAIN OTHER PROBABILITIES OF OCCURRENCE. THE NATIONAL CURVE DEPICTED ABOVE WAS DERIVED FROM NUMEROUS, LONG-TERM REPORTS THROUGHOUT THE NATION. DH

**MEDFLY SITUATION
SEPTEMBER 18, 1981**

Five wild Medflies were found last weekend in an orchard near the intersection of Highways 237 and 17 in the quarantine area. All the flies were male and appeared to have recently emerged. The new finds were just outside spray Corridor 4 and had not received prior aerial applications of malathion bait spray. The new find has added three square miles to Corridor 4 and was treated by aerial application on September 15. Ground treatment was also made with malathion and the area will also be ground sprayed with diazinon. The new finds mean that the Milpitas area will be among the last to be sprayed before eradication can be declared.

The inspection stations on Highway 580 and Highway 680 have been changed to a random patrol with four additional checkpoints continuing to operate as usual. Stiff fines are being issued for transporting fruit outside of the quarantine area. This week in Gilroy, more than 20 people were fined \$100 plus court costs.

Japanese officials from the Ministry of Agriculture, spent four days touring the Medfly project this week in both Northern California and Los Angeles. Fumigation requirements for export to Japan continue to sharply curtail exports of lemons and strawberries and movement

of Sacramento Valley honeydews has been stopped since August 19. Lemon exports to Japan for the week ending September 12 totaled 8 carlot equivalents compared to 95 carlots for the same period last year.

Daily movement of San Joaquin Valley peaches, plums, and nectarines continues to wind down rapidly with daily volume now below 150,000 packages. Most of the packout is Casselma and Angeleno plums, Fairlane and September Grande nectarines and Summerset, Fairtime, and Carnival peaches. Movement of table grapes continues active while Clingstone peach harvest is virtually complete with deliveries through September 13 at 590,074 tons.

Canning tomato deliveries are expected to pass the 4.0 million ton mark the week ending September 19 with yields well below canner contracts. Peppers continue to be certified from the important Gilroy-Hollister quarantine area with the weekly malathion field treatment. Movement is below last season and grower prices have been disappointing.

Fresh apples from Santa Cruz County continue to be discounted in the market because of quarantine restrictions. Some certified malathion treated apples are being sold in the fresh market but most lots will require cold storage treatment.

National Agricultural Summary

September 14-20, 1981

HIGHLIGHTS: Cool temperatures dominated in the eastern two-thirds of the Nation and further slowed the already lagging crop development. Frost touched areas in western parts of the Corn Belt but crop damage, if any, was minimal. Most of the rainfall was confined to the Northwest and areas from the Great Plains eastward. Farmers generally had 3 to 6 days suitable for fieldwork except in the West where up to 7 days were available. Soil moisture supplies were short to mostly adequate in all areas except Ohio where adequate to surplus supplies were reported and in Montana where dry weather further depleted moisture. Corn was in good to excellent condition in much of the Corn Belt. In the 17 major States, 91% of the crop was in or past the dent stage and 50% was mature. Harvesting began in the Corn Belt on a limited scale. Soybeans were in fair to mostly good condition except in parts of the Corn Belt where the crop rated good to excellent. In the 18 major States, 30% of the crop was shedding leaves. Limited harvesting was underway across the South and as far north as Nebraska, Iowa, and Illinois. Cotton was in fair to mostly good condition; bolls were opening on 53% of the acreage. Harvesting became more widespread. Spring wheat harvest was virtually finished. Winter wheat seeding reached 27% complete in the 15 major States. Dry weather in northern production areas delayed seeding activities. Sorghum harvest was 27% complete in the seven major States. Combining advanced northward through Kansas. Rice was 54% harvested, about on schedule. Fall apple harvests gained momentum in northern production areas, as did fall vegetable harvests. Cool temperatures and rainfall promoted pasture growth. However, dry conditions persisted in the West. Producers moved cattle from summer pastures and ranges.

CORN: Corn continued in good to excellent condition in parts of the Corn Belt, although development still lagged normal in many States. Frost touched areas in the western portion of the Corn Belt, but damage, if any, was minimal. Warmer weather is needed to push the crop to maturity. The crop was in fair to mostly good condition in all other areas except parts of the Southeast where poor to fair conditions resulted from dry weather. In the 17 major producing States, 91% of the crop was in or past the dent stage and 50% was mature. The percentage of crop reaching the mature stage was well below normal in most of 17 States, ranging up to 30 points less than average in Indiana and Nebraska and 31 points in South Dakota. Harvesting started in the Corn Belt and was well advanced across the South, reaching 88% complete in Georgia.

SOYBEANS: Limited harvesting of early-planted soybeans stretched across the southern States and progressed as far north as Nebraska, Iowa, and Illinois. Soybeans continued in fair to mostly good condition, except in parts of the Corn Belt, where the crop was in good to excellent condition. In the 18 major producing States, 30% of the crop was shedding leaves, compared with 46% last year. Cool weather slowed crop development, with nearly all States behind normal.

SMALL GRAINS: Spring wheat harvesting was virtually complete in all States except Idaho, where the crop was 98% harvested. Winter wheat seeding of the 1982 crop lagged behind normal in Texas due to wet conditions. Seeding conditions were favorable in Kansas, Nebraska, and Oklahoma, and progress was at or ahead of

average. In the Northern Plains and Montana, growers delayed seeding as they waited for showers and improved germination conditions. Seeding reached 27% in the 15 major producing States, 2 points behind last year.

COTTON: Cotton was in fair to mostly good condition. In the 14 major producing States, bolls were opening on 53% of the acreage, 3 points behind last year. Harvesting was underway in all States except California, New Mexico, and Oklahoma. Cool temperatures slowed crop development, but helped to reduce bollworm activity. The Texas harvest reached 13% complete, 2 points behind normal--showers interrupted activities in the Blacklands and in southern areas.

SORGHUM: Sorghum harvest was 71% completed in Texas. Wet fields continued to delay harvest activity. Kansas sorghum harvest made good progress in the southeast but still lagged behind last year and average throughout the State. The 7 major producing States have harvested 27% of the sorghum crop, compared to 32% last year.

OTHER CROPS: Rice harvest reached 54% complete, 3 points above last year. Harvesting was finished in Texas and was picking up momentum in California. Progress generally exceeded last year and average.

Tobacco growers continued harvesting and marketing this year's crop. Harvest was well advanced in nearly all growing areas.

Peanut harvest became more widespread as growers continued digging and threshing activities. The Texas harvest was delayed by rain, but the moisture helped reduce irrigation needs.

Potato harvesting was underway in most major growing areas. Digging in Maine was 26% complete while the Idaho harvest reached 7%.

FRUITS AND NUTS: Harvesting of Red Delicious, McIntosh, and other fall apple varieties gained momentum in northern production regions. The New York grape harvest continued active. In California, the grape harvest continued ahead of normal. High sugar content was reported in wine grapes.

Florida's citrus groves were in very good to excellent condition. Fresh fruit harvests continued to increase. Lemon picking increased in the Yuma area of Arizona. Other new crop citrus sized well. The California citrus harvest included Valencia oranges and Desert Lemons. Growers also harvested almonds, walnuts, and pistachios. Texas fruit sized well; pecans began to split.

VEGETABLES: Fall vegetable harvests were fairly widespread as summer harvests declined seasonally. Florida growers planted and transplanted fall crops. Light harvest was underway in a few early-planted fields. The California artichoke and broccoli harvest was active with light to moderate supplies. Carrot and cauliflower harvests remained active as did celery transplanting. Fall potato digging was light.

PASTURES AND LIVESTOCK: Pastures and ranges were in fair to good condition except in parts of the Corn Belt where good to excellent conditions prevailed. In the West, dry range conditions persisted. Texas pastures and ranges, responding to cool temperatures and scattered rainfall, rated good. Livestock were in fair to good condition and were being moved from summer pastures and ranges.

CROP PROGRESS
FOR WEEK ENDING SEPT 20, 1981

	CORN % DENT		
	1981	1980	AVG.
COLO	80	87	87
GA	100	100	NA
ILL	93	100	97
IND	80	100	95
IOWA	97	99	97
KANS	90	95	90
KY	94	99	95
MICH	95	92	89
MINN	97	98	93
MO	95	100	100
NEBR	90	98	95
N C	100	100	NA
OHIO	85	100	97
PA	88	86	78
S DAK	81	94	89
VA	95	93	NA
WIS	77	99	86
17 STATES	91	98	NA
EXCL. STATES WITH NA	90	98	94

THESE 17 STATES PRODUCED 93% OF THE 1980 CORN CROP.

	CORN % MATURE		
	1981	1980	AVG.
COLO	30	31	44
GA	99	99	NA
ILL	60	93	86
IND	30	70	60
IOWA	58	67	76
KANS	55	65	60
KY	75	82	72
MICH	35	32	31
MINN	36	71	62
MO	62	83	59
NEBR	30	65	60
N C	98	93	NA
OHIO	35	65	60
PA	35	26	19
S DAK	44	57	75
VA	86	78	NA
WIS	56	82	74
17 STATES	50	71	NA
EXCL. STATES WITH NA	47	70	67

THESE 17 STATES PRODUCED 93% OF THE 1980 CORN CROP.

	COTTON % BOLLS OPENING		
	1981	1980	AVG.
ALA	64	69	37
ARIZ	85	85	85
ARK	69	85	49
CALIF	75	30	NA
GA	74	87	NA
LA	88	70	51
MISS	92	94	77
MO	62	85	56
N MEX	70	30	NA
N C	91	88	NA
OKLA	30	50	20
S C	72	92	79
TENN	39	81	31
TEX	37	47	NA
14 STATES	53	56	NA
EXCL. STATES WITH NA	71	79	56

THESE 14 STATES PRODUCED 99% OF THE 1980 COTTON CROP.

	COTTON % HARVESTED		
	1981	1980	AVG.
ALA	4	9	5
ARIZ	6	1	5
ARK	5	9	5
CALIF	0	0	NA
GA	11	27	9
LA	9	10	NA
MISS	7	6	5
MO	1	27	1
N MEX	0	0	0
N C	4	15	NA
OKLA	0	0	0
S C	2	13	9
TENN	2	16	7
TEX	13	19	15
14 STATES	9	13	NA
EXCL. STATES WITH NA	10	15	11

THESE 14 STATES PRODUCED 99% OF THE 1980 COTTON CROP.

	SOYBEAN % DROPPING LEAVES		
	1981	1980	AVG.
ALA	21	24	NA
ARK	7	38	NA
GA	14	21	NA
ILL	35	60	61
IND	25	55	55
IOWA	58	62	67
KANS	30	40	NA
KY	14	40	30
LA	28	32	29
MICH	45	34	47
MINN	55	80	77
MISS	45	53	45
MO	10	18	19
NEBR	40	50	55
N C	5	0	NA
OHIO	35	70	60
S C	4	19	10
TENN	12	22	NA
18 STATES	30	46	NA
EXCL. STATES WITH NA	36	52	51

THESE 18 STATES PRODUCED 95% OF THE 1980 SOYBEAN CROP.

	WINTER WHEAT % PLANTED		
	1981	1980	AVG.
CALIF	0	5	3
COLO	60	76	85
IDAHO	18	19	22
ILL	3	5	3
IND	5	5	5
KANS	25	25	25
MO	3	7	8
MONT	20	50	60
NEBR	65	70	55
OHIO	3	6	8
OKLA	25	15	20
OREG	10	12	NA
S DAK	74	86	77
TEX	25	28	32
WASH	43	38	30
15 STATES	27	29	NA
EXCL. STATES WITH NA	27	30	31

THESE 15 STATES PRODUCED 88% OF THE 1980 WINTER WHEAT CROP.

	SORGHUM % HARVESTED		
	1981	1980	AVG.
COLO	0	0	0
KANS	2	10	10
MO	15	27	17
NEBR	0	10	1
OKLA	15	10	10
S DAK	4	7	3
TEX	71	73	67
7 STATES	27	32	28

THESE 7 STATES PRODUCED 92% OF THE 1980 SORGHUM CROP.

	SORGHUM % MATURE		
	1981	1980	AVG.
COLO	23	25	30
KANS	15	25	35
MO	57	56	58
NEBR	15	80	40
OKLA	60	50	60
S DAK	47	39	39
TEX	73	78	NA
7 STATES	41	55	NA
EXCL. STATES WITH NA	25	43	40

	RICE % HARVESTED		
	1981	1980	AVG.
ARK	40	33	22
CALIF	5	2	NA
LA	90	85	86
MISS	41	50	35
TEX	100	100	99
5 STATES	54	51	NA
EXCL. STATES WITH NA	64	60	54

THESE 5 STATES PRODUCED 98% OF THE 1980 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 5 to 10° below normal. Rainfall varied, most locations received 0.50 in. plus.

Fieldwork: 4.7 days. Activities: Corn, hay, peanut, fruit, vegetable harvest; scouting, treating row crop pests. Corn: Harvested 75%, 71% 1980, 46% average. Soybeans: Leaves turning 41%, 57% 1980, 45% average; leaves dropping 21%, 27% 1980; mature 6%, 17% 1980, 18% average. Cotton: Bolls open 64%, 69% 1980, 37% average; harvested 4%, 9% 1980, 5% average. Peanuts: Dug 27%, 13% 1980, 35% average; combined 18%, 13% 1980, 27% average. Sorghum: Harvested 32%. Conditions: Soybeans, peanuts good; cotton, sorghum, pastures fair.

ARIZONA: Showers, mostly eastern mountains, south-east. Amounts mostly 0.10 to 0.50 in. Western 3rd State dry. Average temperatures 1° below to 7° above normal.

Cotton excellent progress, 85% open bolls. Sorghum very good progress, harvest activity increasing. Alfalfa haying seasonal progress, old stands renovated, planting underway new fields. Lemon picking increased volume Yuma area. Other new crop citrus, sizing well. Lettuce, other mixed vegetables good progress, planting fall harvest mostly complete. Melons sizing rapidly. Ranges fair to good, isolated localities southwestern Desert poor. Water supplies, soil moisture adequate. Cattle good, sheep excellent.

ARKANSAS: Unseasonably cold week. Highest temperature 90°, lowest 33°. All departures from normal -7 to -12°. Most rainfall 2.90 in., least zero.

Crops good condition. Cool nights slowed late maturing rice, soybeans, cotton. Rice headed 99%, 100% 1980; ripe 77%, 66% 1980; harvested 40%, 33% 1980, 22% average. Soybeans setting pods 97%, 82% 1980; yellowing 16%, 45% 1980; shedding 7%, 38% 1980; mature 5%, 13% 1980; harvested below 1%, 1% 1980, 1% average. Cotton open bolls 69%, 85% 1980, 49% average; harvested 5%, 9% 1980, 5% average. Corn harvested 79%, 95% 1980, 53% average. Sorghum harvested 71%, 81% 1980, 55% average. Soil moisture barely adequate. East central counties short. Pastures good. Livestock good condition. Six days suitable for fieldwork.

CALIFORNIA: First storm of the season on the North Coast midweek. Sacramento and San Joaquin Valley continue warm, as does all of southern California. All 3 to 5° above normal. Some shower activity over the southern Sierra Nevada and on the southeast Deserts-Blythe reports 1.77 in. for the week. Very warm in the northern Sierra Nevada, 10° above normal at Blue Canyon and Tahoe Valley.

Rice Harvested 5%, 2% one year earlier. Cotton open bolls 75%, 30% one year earlier. Milo and field corn in various growth stages. Corn for silage being cut and stored. Dry bean harvest gathering momentum. Fields being sprayed for army worm and corn earworm. Sugarbeet harvest increasing. Alfalfa cutting and baling continues. Apple harvest increased in volume. Grape harvest continued ahead of normal. High sugar content in wine grapes. Pomegranate and quince harvest started. Citrus harvest included Valencia oranges and Desert lemons. Harvest of almond, walnuts, and pistachios continued. Artichoke, broccoli harvest active. Supplies light to moderate. Cantaloup, mixed melon, carrot and cauliflower harvests remain active. Celery movement light,

transplanting active. Lettuce harvest active, supplies moderate. Green pepper harvest continues. Fall potatoes digging light. Summer potatoes shipped from Stockton area. Sweetpotato shipments moved from San Joaquin Valley. Strawberry picking active. Market tomato processing tomato harvests remain active. Cucumbers, watermelon crops for seed approaching harvest. Movement livestock from summer ranges progressing rapid rate. Dry range conditions continue.

COLORADO: Widely scattered afternoon and evening showers and thunderstorms. Heaviest precipitation in southeast. Temperatures above normal in mountains and western valleys, near normal in the northeast and below normal in the southeast.

Winter wheat seeded 70%, 76% 1980, 85% average; emerged 37%, 36% 1980, 52% average. Barley harvested 94%, 95% 1980, 96% average. Spring wheat harvested 74%, 82% 1980. Corn dented 85%, 87% 1980, 87% average; mature 34%, 31% 1980, 44% average; silage harvested 65%, 62% 1980, 70% average. Sorghum turned color 58%, 79% 1980; ripe 16%, 25% 1980; forage harvested 11%, 32% 1980. Dry beans cut 70%, 57% 1980, 78% average; threshed 36%, 37% 1980, 52% average. Summer potatoes harvested 85%, 70% 1980, 69% average. Alfalfa third cutting 69%, 60% 1980, 79% average. Five and one-half days suitable for fieldwork. Ranges and pastures good condition. Livestock good condition.

FLORIDA: Record or near record low temperatures in the 40's and 50's north, central, 18th, 20th. Rains of 0.50 to 3.00 in. were common but some 5.00 in. amounts, central, southeast.

Soil moisture mostly adequate Statewide a little excessive southern tip, a few dry spots continue in central areas. Corn harvest nearly complete. Peanut harvest full swing. Hay harvest continues as weather permits. Tobacco marketing about complete. Soybeans maturing rapidly. Some insect problems. Cotton maturing. Sugarcane very good growth, harvest to begin late October. Pastures good to excellent Peninsula, some poor to fair in Panhandle areas. Cattle mostly good condition. Citrus groves very good to excellent condition. Moisture adequate all areas, some lakes, ponds refilling from recent rains. Fresh fruit harvest continues to increase. Skies were mostly cloudy to partly cloudy during the week in vegetable areas. Scattered showers brought light to moderate rainfall to most areas. Soil moisture mostly adequate but excessive some locations. Normal temperatures were followed by record low readings, north, central areas as a cold front moved in during mid to late week. Light harvest some vegetables started in a few early planted fields. Planting, transplanting most fall crops gaining momentum.

GEORGIA: Moderately wet, with scattered showers mid-week. Average rainfall 0.75 to 1.00 in. north and west and near 0.25 in. elsewhere. Mild to warm temperatures, but cooler during late week. Average temperatures slightly above normal southwest but otherwise near normal. Dry, cool 19th and 20th. Temperatures 10 to 15° below normal, despite slow warming trend.

Soil moisture short eastern half, short to adequate western half. Five days suitable for fieldwork. Main activities harvesting and insect controls. Corn poor to fair, 88% harvest-

ed, 83% last year, 70% average. Soybeans fair to good, needing rain, 14% dropping leaves, last year 21%, 1% harvested, less than one-half percent last year and average. Peanuts fair to good, 31% dug, 19% threshed, last year 38% and 26%, average 39% and 28%, yields disappointing in southwest. Cotton declined to poor to fair, 74% open, last year 87%, 11% picked, last year 27% and average 9%. Tobacco marketing active, harvest virtually complete. Vegetables fair, volume declined seasonally. Wheat 3% planted, 2% last year, 4% average; rye 3% planted, equal to last year, 5% average. Other small grains 6% seeded, 4% last year and 6% average. Apples fair to good, 81% picked, same as last year, mid-State harvest above over. Pecans fair to mostly good, fighting insects. Pastures and hay crops fair to good, renovation active. Cattle and hogs fair to mostly good.

HAWAII: Weather favorable. Some heavy rains after mid-week, east sections, Island of Hawaii. Some minor flooding but no crop damage reported. Dry weather affecting the Waimea areas also on Island of Hawaii where voluntary water conservation was being advised again. Insects prevalent throughout the Island chain because of the hot weather. Spraying frequent to control infestations. Vegetables: generally light. Insects affecting yields. Bananas: supplies increasing. Papayas: active harvest, some orchards. Spraying was frequent because of the increased rainfall in the growing areas. Pineapples: harvesting decreasing. Sugar: harvesting steady. Pastures: rains beneficial to some areas. However, most leeward pastures still dry.

IDAHO: Hot weather prevailed again. Temperatures ranged from 5 to 13° above normal. High of 101 in Grandview, low of 22 in Elk City. Only reported precipitation in Montpelier of 0.01 in.

Excellent harvest conditions continued. Soil moisture was very low and rain essential for fall plantings. Winter wheat planted: 18%, 19% last year, 22% average. Barley harvest: 100%, 88%, 86%. Spring wheat harvest: 98%, 87%, 82%. Small grain harvest 2-3 weeks ahead of average. Potato harvest: 7%, 9%, 6%. Onion harvest: 55%, 41%, 61%. Dry bean harvest: 48%, 22%, 29%.

ILLINOIS: Temperatures 3 to 6° below normal. Precipitation 0.65 in. northeast, 0.75 to 1.40 in. south, little or none elsewhere.

Corn condition 29% excellent, 66% good, and 5% fair; 93% dented, 100% 1980, and 97% average; 60% mature, 93% 1980 and 86% average; 3% harvested, 9% 1980, 5% average. Soybeans 70% turning yellow, 84% 1980, 83% average; 35% shedding leaves, 60% 1980, 61% average; 3% combined, 8% 1980, 9% average; condition 13% excellent, 74% good, 13% fair. Winter wheat 3% seeded; 5% 1980, and 3% average. Pastures 28% excellent, 63% good, 9% fair. Soil moisture 80% adequate, 20% surplus. Fieldwork: 5.5 days suitable.

INDIANA: Cool week. Temperatures averaged 8° below normal during day and solar radiation only 53% of possible. Temperatures ranged from 41 to 84°. Growing degree days 33 below normal. Rainfall averaged 0.30 to 0.70 except 1.00 central and south central. Two to 3.00 in. around Kokomo and Hardinsburg.

Fieldwork averaged 5 days. Topsoil and subsoil moisture adequate. Corn 80% dented, 1980 100%, average 95%. Corn 30% mature, 1980 70%, average 60%. Soybeans 25% dropping leaves, 1980 55%, average 55%. Wheat land 45%

plowed, 1980 50%, average 50%. Wheat 5% seeded, 1980 5%, average 5%. Tobacco 65% harvested, 1980 75%, average 50%. Silos 30% filled, 1980 50%, average 50%.

IOWA: Another very dry week while temperatures averaged somewhat below normal. Rainfall was light and spotty while temperatures were much below normal until warming rapidly on the weekend.

Topsoil moisture: 14% short, 86% adequate, 0% surplus. Subsoil moisture: 22% short, 74% adequate, 4% surplus. Corn in or past dent stage: 97%, 1980 99%, normal 97%. Corn acreage mature: 58%, 1980 67%, normal 76%. Corn acreage harvested: 3%, 1980 6%, normal 4%. Soybeans with leaves turning: 89%, 1980 92%, normal 95%. Soybeans with leaves shedding: 58%, 1980 62%, normal 67%. Soybean acreage mature: 30%, 1980 33%, normal 47%. Soybean acreage harvested: 3%, 1980 3%, normal 5%. Third cut alfalfa hay harvested: 98% complete, 1980 92%, normal 92%. Winter wheat sown: 14%, 1980 24%, normal 18%. Fieldwork: 6.7 days suitable. Crop conditions: Soybeans, corn, pasture, and hay mostly good to excellent. Livestock reported to be in mostly good condition.

KANSAS: Cool dry week scattered moisture generally less than 0.10 in. Temperatures averaged 63 to 66° and near normal northwest to 7° below normal southeast to 3 to 5° below normal elsewhere. Record lows in mid 30's and low 40's 17th and 18th with 32° reported at Goodland to become the coolest so early in the season. Scattered light and brief frosts west and north.

Wheat seeding on schedule: this year 25%, last year 25%, average 25%. Progress most rapid west central, southwest. Corn harvest fast pace southeast but State lags: this year 10%, last year 25%, average 15%. Corn in dent stage: this year 90%, last year 95%, average 90%. Corn mature: this year 55%, last year 65%, average 60%. Some light frost north and western counties. Sorghum harvest good progress southeast, but State behind schedule: this year 2%, last year 10%, average 10%. Sorghum mature: this year 15%, last year 25%, average 35%. Soybean harvest under scattered localities. Soybean shedding leaves: this year 30%, last year 40%. Many fields late, need several weeks warm weather to reach full maturity.

KENTUCKY: The first real cool outbreak latter part of week. Temperatures averaged a few degrees below normal. Precipitation amounts averaged from 0.50 to 1.00 in. some areas over 2 in.

Soil moisture 12% short, 78% adequate, 10% surplus. Rain limited fieldwork to 4 days. Burley 80% cut, last year and average both 84%. Early housed tobacco curing satisfactorily; houseburn light to date. Dark tobacco 83% cut, firing of dark fired has begun. Corn 75% mature, other 25% needs additional frost-free days. Corn harvest 14% complete compared to 23% last year. Yields variable but generally good. Only 14% soybeans shedding leaves or beyond compared with 40% last year and average of 30%. A few soybean fields harvested. Wheat seeding 5% complete, mostly cover crop. Pastures good to excellent.

LOUISIANA: Rainfall generally less than 1.00 in. Temperatures 6 to 7° below normal north, 4 to 6° below normal south.

Soil moisture adequate. Days suitable: 4.7. Corn harvested 92%, 85% 1980, 79% average; condition good. Rice harvested 90%, 85% 1980, 86% average; condition fair to good.

Cotton open bolls 88%, 70% 1980, 51% average; harvested 9%, 10% 1980; condition fair. Soybeans leaves turning 56%, 54% 1980, 48% average; leaves shedding 28%, 32% 1980, 29% average; harvested 4%, 4% 1980; condition fair. Sorghum ripe 94%, 76% 1980, 81% average; harvested 74%, 63% 1980, 53% average; condition fair to good. Sugarcane planted 62%, 40% 1980, 36% average; condition good. Sweetpotatoes harvested 68%, 54% 1980, 41% average; condition good. Vegetables rated fair. Pecans rated fair to good. Pastures fair to good, livestock good.

MARYLAND AND DELAWARE: Temperatures 5° above normal. Precipitation 2.01 in.

Maryland: Corn 95% dent, 50% mature; last year 90% dent, 70% mature. Harvest for grain 15%. Corn silage 80%, last year 85%. Tobacco 90% harvested, 85% last year. Sweetpotatoes 5%. Lima beans 80% harvested. Small grain seeding 10% planted. Soybeans, 95% podded, 30% turned and 20% shed leaves, slightly behind last year.

Delaware: Corn, 80% dent, 50% mature; last year 100% dent, 90% mature. Corn for grain 15% harvested, 40% last year. Silage 70% cut, 85% last year. Lima beans 60%. Soybeans 20% turned, 5% shed leaves. Apples 40% harvested.

MICHIGAN: Cool temperatures were the rule with average temperatures 3 to 6° below normal. The central and southern areas had moderate amounts of rainfall. The rest of the State had only light rainfall reported.

The midweek rains brought field activity to standstill central and eastern sections. State-wide, about 3.5 days were suitable for fieldwork. Third cutting hay progressed slowly, about 55% cut. Dry bean harvest rapid early week, but stopped by midweek rains, about 40% harvested. Growers worried about effects long term wet weather will have on quality, yield and abandonment. About 40% crop mature. Soybeans leaves turning color on 95% of acreage, 50% shedding leaves. Corn silage progressed to 25% harvested. Silage making late in the "wet" southeastern area. Corn 30% mature and safe from frost. Potato digging slow, especially southeast where fields saturated. Statewide 45% harvested. Wheat planting increased and 5% in. Picking Red Delicious apples 10% complete and McIntosh 30%. Tomatoes poor in wet southeast. Sweet corn 90% in.

MINNESOTA: Temperatures were near normal to slightly below normal; except isolated areas in portions of central, east central and southeast, where temperatures departed 5 to 10° from normal. Extremes: Browns Valley 85° and Pipestone 25°.

Precipitation totals across were less than 0.25 in. Largest amount of rainfall was in Pipestone with 0.20 in. No rainfall in most of western State. Entire State was 0.40 to 0.80 in. below normal for the week. Temperatures cooler than normal but weather sunny and dry providing favorable development of crops. Light frost in many parts of State but no crop damage reported. Most crops near maturity and little concern over heavy frost. Topsoil moisture rated 4% very short, 18% short, 73% adequate and 5% surplus. Field corn: Denting 97%, 1980 98%, normal 93%; mature 36%, 1980 71%, normal 62%. Soybeans: Turning yellow 95%, 1980 95%, normal 96%; shedding leaves 55%, 1980 80%, normal 77%; mature 14%, 1980 20%, normal 37%. Potatoes: Harvested 48%, 1980 31%, normal 33%. Winter wheat: Seeded 74%, 1980 74%, normal 61%. Winter rye 71% seeded, 1980 71%, normal 56%.

MISSISSIPPI: Cold front brought rain and cool-

er temperatures. Extremes: 97 and 35°. Temperatures averaged 4 to 12° below normal. Greatest 24-hour rainfall 3.04 in.

Soil moisture adequate. Days suitable for fieldwork: 4.0. Cotton 92% open bolls, 94% last year, 77% average; 7% harvested, 6% last year, 5% average; condition fair to good. Soybeans 45% shedding this year and average, 53% last year; 13% mature, 16% last year, 14% average; 4% harvested, 3% last year, 2% average; condition fair to good. Rice 82% mature, 86% last year, 78% average; 41% harvested, 50% last year, 35% average; condition good. Corn 67% harvested; sorghum 57%; hay 91%; sorghum silage 87%; sweetpotatoes 31%; peanuts 44%. Winter wheat 8% planted. Pecan and pasture conditions good to fair.

MISSOURI: Temperatures were cool across State averaging 3 to 6° below normal. Precipitation averaged 0.20 across the State except in the Boot Hills where it averaged 0.60 in.

Fieldwork: 5.8 days suitable. Corn 62% mature, 83% last year, normal 59%. Corn harvested 15%, last year 31%, normal 17%. Grain sorghum 57% mature, 56% last year, 58% normal. Harvested 15%, 27% 1980, 17% average. Soybeans setting pods 95%, 100% 1980, 100% average. Soybeans turning color 42%, 65% 1980, 48% average; mature 10%, 18% 1980, 19% average; harvested 2%, 5% 1980, 4% average. Winter wheat 3% seeded, 7% 1980, 8% average. Cotton 62% open bolls, 85% 1980, 56% average. Cotton 1% harvested. Condition of soybeans and cotton fair to good. Pasture mostly good. Topsoil moisture short to adequate.

MONTANA: Very warm and dry. Temperatures averaged 7 to 11° above normal over central, western and southwestern divisions. Temperatures were about 5° above normal in northeast and southeast. Highest 97° at Thompson Falls, lowest 25° at Wisdom. Widely scattered light showers last of week.

Topsoil and subsoil moisture supplies continued very short. Fieldwork: 7 days suitable. Percent harvested compared with last year and normal: spring wheat 100, 85, 90; Barley 95, 85, 85; Oats 100, 85, 90; Corn silage 65, 55, 55; dry beans 45, 40, 45; potatoes 10, 5, 10; second cutting alfalfa 95, 90, 90.

Winter wheat planted 20, 50, 60; still being delayed due to lack of moisture. Growers harvesting 3rd cutting alfalfa, 15%. Fall grazing prospects fair to good except poor in northeast. Stock water supplies short eastern half of State. Cattle and sheep moved from summer ranges--25 and 30% respectively.

NEBRASKA: Temperatures: About 4° below normal except Panhandle 3° above. Light freezes in several locations. Precipitation: Very light but widespread. Few locations in Panhandle and southwest received 0.25 to 0.50 in.

Winter wheat seeding 65%, 70% last year and 55% normal. Corn mostly good; denting 90%, 98% last year, 95% normal; mature 30%, 65% last year and 60% normal; harvested 1%, 7% last year, 3% normal. Soybeans mostly good; turning color 85%, same as last year and normal; shedding leaves 40%, behind 50% last year and 55% normal; harvested 3%, same as last year, 4% normal. Sorghum mostly good; coloring 85%, 99% last year, 94% normal; ripe 15%, 80% last year, 40% normal. Pasture and range feed supplies mostly adequate. Topsoil and subsoil moisture short to mostly adequate. Days suitable for fieldwork: 6.8.

NEVADA: Scattered showers some localities early in week, warm and sunny remainder of period. Average temperatures mostly above normal, cooling trend end of week, gusty winds.

Progress alfalfa seed harvest earliest in many years. Some finished, other producers expected to be completed end of September instead of usual mid-October. Sixth cuttings alfalfa hay well along extreme south. Third cuttings nearing completion rest of State. Ranges still extremely dry.

NEW ENGLAND: Temperatures close to normal. Scattered showers throughout week, local readings over 0.50 in. General precipitation on 15th and 19th, total over 2.00 in. Chatham, MA; 3.30 in.

Fieldwork: 4.3 days favorable. Soil moisture mostly adequate. Hay harvested; second crop, 88%; third crop, 57%. Maine potatoes 26% harvested; variable yields. Apples most varieties being harvested. Vegetables harvesting, good quality. Cranberries harvesting, excellent quality, fair to good prospects. Sweet corn 91% harvested. Corn, potatoes, vegetables, cranberries in good conditions. Apples fair conditions. Grazing adequate.

NEW JERSEY: Temperatures averaged 2 to 4° below normal. Extremes: 36° at Newton on 21st and 94° at Long Branch on 14th. Rainfall averaged 1.42 in. north, 1.93 in. central and 2.27 in. south. Heaviest 24-hour total was 2.59 in. at Riegelsville on 15th to 17th. Estimated soil moisture, in percent of field capacity, averaged: 78 north, 85 central and 77 south. Four in. soil temperature averaged: 62 north, 66 central and 67 south.

Fieldwork: 4.0 days suitable. Recent showers beneficial but subsoil moisture continues short in most areas. Iceberg lettuce harvest beginning. Increased cabbage volume expected. Apple supplies good. Peach harvest nearing completion, good volume continues from storage. Cranberry harvest underway. Corn silage making continues. Harvest of corn for grain begun. Soybeans coloring. Preparation and planting of fall grains continue. Pasture growth responding to recent rain.

NEW MEXICO: Light rains occurred over most areas. Temperatures averaged near to a few degrees below normal.

Soil moisture in adequate supply in most areas. Showers continued with some hail. Most hail damage was light to moderate with severe damage limited to small areas. Cotton remains in good condition. However, some insect, rust, and wilt problems due to excessive rainfall. Harvest of good quality alfalfa hay continues to be limited. Corn ensilage continuing with grain harvest expected to begin on the eastside this week. Winter wheat seeding continuing with some earlier fields emerged and approaching an acceptable stand. Grain sorghum in good condition with most of the crop past the dough stage. Green chile harvest continuing with many fields turning red. Fall lettuce in the Mesilla Valley received some hail damage early in the week. Ranges in good condition. Cattle and sheep in good condition.

NEW YORK: Temperatures below normal western and northern areas, mostly above normal elsewhere. Showers in most areas.

Wet fields and poor drying conditions slowed fieldwork. Silage corn harvest 12% done, 14% 1980, 21% average. Third cutting alfalfa 58% in, 63% 1980, 61% average. Wheat planting behind schedule. Dry bean harvest underway. Orange County onions 90% harvested. Oswego County onion harvest nearly done. Ontario County snap beans 85% harvested. Vegetable harvests in all areas slowed by rain. Hudson, Champlain Valley apple growers waiting for color. Finger Lakes wine grape harvest active. Chautauqua County fresh

market grapes being harvested. Niagara County Bosc pear harvest active.

NORTH CAROLINA: Temperatures: 4 to 6° below normal in the mountains and 1 to 4° below normal across the rest of the State. Precipitation: light east of the mountains to 2.42 in. at Mt. Airy.

Fieldwork: 5.2 days suitable. Soil moisture: 1% very short, 33% short, 54% adequate, and 12% surplus. Conditions: pasture, cotton, peanuts, Soybeans, apples, and sorghum mostly good: sweet potatoes fair to mostly good. Harvest: Cotton 4%, 1980 15%; sweetpotatoes 24%, 1980 18%, 20% average; sorghum 24%; flue-cured tobacco 96%; burley tobacco 79%, 1980, 71%, 71% average; corn for grain 58%, 1980 63%, 51% average; corn for silage 88%, 1980 86; peanuts dug 6%, 1980 5%, 5% average; peanuts threshed 2%, 1980 1%, 4% average; apples 42%, 1980 43%, 43% average. Phenological stages: Cotton open bolls 91%, 1980 88%; corn matured 98%, 1980 93%; soybeans setting pods 94%; soybeans dropping leaves 5%. Major farm activities: Combining corn for grain, marketing tobacco, and preparation of land for fall seeding.

NORTH DAKOTA: Near normal temperatures and light precipitation last week. Precipitation in all divisions averaged less than 0.10 in. Butte (central portion) with 0.33 in. was the greatest amount for any reporting station. Frost and freezing temperatures occurred in all divisions at the beginning of the week. All divisions within 3° of normal with northwest the warmest. Extremes: High, 93° low, 25°.

Continued dry weather excellent for harvest of dry beans and corn silage. Small grain harvest virtually complete. Sunflower and corn development continue ahead of last year and average. An average of 6.5 days suitable for fieldwork. Soils getting drier. Forty-nine percent of the State short of topsoil moisture compared to 39 last week, 18% last year and 45% average. Percent harvest completion with last year and average: sunflower, 2, 1, not available; flax 63, 39, 55; potatoes, 56, 24, 32; dry beans 67, 14, 50, soybeans 7, 3, 17; corn for grain 12, 0, 3; and corn silage 39, 26, 50.

OHIO: A cool, damp week. Some heavy thunder-showers ushered in a cold front early last week and temperatures plunged to well below normal. Some moderation took place over the weekend, but another frontal system promises some more moisture to start the new week. Average temperatures from 4 to 7° below normal. Day temperatures down, but night temperatures above critical levels. Daily highs averaged in mid to upper 60's, 5 to 10° below normals. Daily lows ranged from 0 to 6° below normals and averaged in the upper 40's and lower 50's. Growing degree totals from 55 to near 80 lagged normal by 23 to 43. Precipitation locally heavy. Heaviest amounts just south of Lake Erie. Most areas had normal to above normal amounts.

Late corn and soybeans need 2 to 4 more weeks of frost-free weather. Less than 1% of the corn for grain has been harvested, which compares with 6% last year and 2% average. Only 1% of the soybean acreage has been harvested. There are early reports of small beans. Winter wheat planting will be a major activity in north this week if dry weather holds. Much rotting of processing tomatoes in north central area. Corn dented 85%, 100% 1980, 97% average. Corn mature 35%, 65% 1980, 60% average. Soybeans, dropping leaves 35%, 70% 1980, 60% average. Soybeans mature 15%, 35% 1980, 25% average. Silage harvested 25%, 55% 1980, 45% average. Tobacco harvested 60%, 90% 1980, 85% average. Wheat planted 3%, 6% 1980, 8% average. Days favorable 4. Pasture condition good. Soil moisture 68% adequate, 32% surplus.

OKLAHOMA: Rainfall ranged from zero northeast, southwest, and south central to 0.28 in. Panhandle. Temperatures were 6 to 10° below normal.

Below normal temperatures and dry weather prevailed. All row crops good condition. Pastures good to excellent. Wheat seed-bed prepared: 95%, 1981; 80%, 1980; 80%, average. Wheat planted: 25%, 1981; 15%, 1980; 20%, average. Wheat up-to-stand: 10%, 1981; 5%, 1980; 5%, average. Sorghum milk-to-dough: 95%, 1981; 90%, 1980; 95%, average. Sorghum mature: 60%, 1981; 50%, 1980; 60%, average. Sorghum harvested: 15% 1981; 10%, 1980; 10%, average. Cotton open bolls: 30%, 1981; 50%, 1980; 20%, average. Days suitable for fieldwork: 5.8.

OREGON: Record high temperatures. Mean temperatures averaged 10° above normal in western valleys. Only precipitation up to 18th along coast and northern Cascades. Rains moved into State on 18th and continued through weekend.

Moisture supplies mostly short to adequate. Winter wheat 10% seeded; 12% last year. Dry bean, corn silage, red clover seed, alfalfa harvesting continuing. Seeding coastal county pastures underway. Harvesting winter pears continues. Red Delicious apple harvest starting. Peach harvest virtually over. Prune and plum harvest continues, good yields. Filberts dropping; harvest should be October. English walnuts show sunburn and insect damage. Potatoes and onions continue to be harvested at good pace. Sweet corn about peaked. Weather for harvest has been excellent. Livestock good. Range and pastures poor to fair. Need rain.

PENNSYLVANIA: After warm beginning temperatures drifted lower remainder of period averageing 3 to 6° below normal for the coolest week since mid-May. Extremes were 89 and 28°. Five days widespread cloudiness with scattered showers. Rainfall totals of 0.50 to 1.00 in. most sections with 2.00 to 2.50 in. southeast.

Three days suitable. Soil moisture mostly adequate. Activities: plowing; planting wheat and barley; repairing machinery, and harvesting tobacco, potatoes, ensilage corn, hay crops, apples, cabbage, and tomatoes. Tobacco 90% harvested, last year 82%. Potato harvest 52% complete, last year 61%. Ensilage corn 33% harvested, last year 45%. Corn 88% in dent or past and 35% mature; last year 86% in dent or past and 26% mature; average 78% in dent or past and 19% mature. Fall plowing 56% complete, last year 61%. Wheat planting 24% complete, last year 43%. Barley planting 31% complete, last year 36%. Third cutting alfalfa 82% complete, last year 78%. Fourth cutting alfalfa 28% complete, last year 38%. Second cutting clo-tim 94% complete, last year complete. Hay quality fair to poor. Feed from pasture mostly average.

PUERTO RICO: Island average rainfall 1.18 in. or 0.62 in. below normal. Temperatures averaged 82 to 81° on Coasts and 79 to 77° Interior Divisions. Extremes: 96 and 60°.

SOUTH CAROLINA: Cooler and drier than usual in most areas. Temperatures at beginning of period quite warm but dropped sharply after cold front passed around mid-week. Rainfall fell as scattered showers ahead of front.

Soil moisture short to adequate. Fieldwork: 5.7 days suitable. Corn fair to good condition, 78% harvested, 79 last year, 73 average. Cotton good condition; 72% open bolls, 92 last year, 79 average; cotton harvested 2%, 13 last year, 9 average. Defoliation and harvesting underway. Soybean condition fair to good, in need of rainfall; 96% setting pods, 95 last year, 97 average; 13% turning color, 33 year ago, 23 average; 4% shedding leaves, 19 year ago, 10 average. Apple condition good, 70% harvested,

63 last year, 72 average. Fall snap beans 92% planted, 100 last year; 7% harvested, 15 year ago. Winter grazing 23% planted, 19 year ago, 24 average.

SOUTH DAKOTA: Precipitation light over the entire State for 2nd week. Most amounts under 0.50 in. Temperatures 3 to 6° below normal. Extremes: 91 and 23°.

Topsoil moisture critically short in most of West River extreme northeast, parts of north central and central districts. Adequate in small areas in north central and east central. Short elsewhere. Row crop conditions: Corn 84%, soybeans 88%, sorghum 91%, sunflowers 90% of normal. Silage cutting 50% complete. More than usual amount of silage cut due to reduced 1st cutting hay crop. Range and pasture condition 62%. Soybeans shedding leaves 76%, 1980 84%, average 76%. Corn dough 91%, 1980 100%, average 100%. Corn dented 81%, 1980 94%, average 89%. Corn mature 44%, 1980 57%, average 75%. Sorghum showing color 87%, 1980 84%, average 87%. Sorghum mature 47%, 1980 39%, average 39%. Sunflowers mature 76%, 1980 47%, average 47%.

TENNESSEE: A cold front moved on 15th bringing moderate rainfall in the middle and west and heavier amounts in the east. Temperatures averaged 5 to 9° below normal.

Fieldwork: 3.5 days suitable. Soil moisture adequate. Corn 85% mature, 1980 84%, average 66%. Corn harvested 21%, 1980 30%, average 13%. Cotton open bolls 39%, 1980 81%, average 31%. Cotton picked 2%, 1980 16%, average 7%. Soybeans mature 5%, 1980 7%, average 4%. Burley tobacco harvest 89%, 1980 81%, average 85%. Dark-fired tobacco 95% harvested, 1980 86%, average 76%. Air-cured tobacco 89% harvested, 1980 84%, average 79%. Livestock and pastures in good condition. Lespedeza hay 77% harvested, 1980 83%, average 76%. Wheat 9% seeded, 1980 16%, average 17%. Oats 27% seeded, 1980 30%, average 31%. Barley 22% seeded, 1980 32%, average 30%.

TEXAS: Weather: Cold front, first part of week with scattered thunderstorms. Arctic high pressure resulted in cooler temperatures. Temperatures were 5 to 9° below normal. Rainfall a 1/3 to 1/2 in. above average rainfall range.

Range and livestock: Range, pasture conditions favorable in response to cool temperatures, scattered showers. Grazing good, livestock condition good to excellent. Outlook for fall grazing excellent. Additional moisture prompted growth of weeds. Activity at local markets light. Insect, disease problems light.

Commercial Vegetables: Rio Grande Valley, fall vegetables progressing well, cucumbers, tomatoes showing good growth. Transplanting cauliflower, celery active. Bell peppers showing fertilizer stress. Citrus development continues, fruit sizing well. San Antonio-Winter Garden, recent rains have promoted growth, excellent progress being made. Cool temperatures favorable, cabbage, peppers, tomatoes developing well, East Texas, tomatoes, peppers progressing well, sweetpotato harvest continued. Yields, quality fair. Trans-Pecos region, harvest of peppers, tomatoes, cantaloups continued. Lettuce, cabbage continued to develop well. High Plains, most harvest delayed by showers. Some peppers, cucumbers harvested between showers. Carrots making good growth. Pecans continue to mature, beginning to split stands. Aphids, weevils, scab continue to cause problems.

Crops: Field work delayed as cool. Wet conditions continued. Scattered showers statewide. Some hail reported Plains. Crop development slowed by cool, wet conditions. Warm weather

needed to aid maturity. Cotton harvest continued, showers interrupted activity Blacklands, South-central Texas. Cool temperatures affected maturity. However, cool temperatures helped to reduce bollworm activity. Some hail damage High Plains. Cotton condition statewide 4% excellent; 73% good; 19% fair, 4% poor. Sorghum harvest continued as weather permitted. Wet fields delayed activity. Buildup of headworms High Plains. Condition 26% excellent; 64% good; 9% fair; 1% poor. Corn harvest virtually complete southern portion, wet fields delayed final harvesting. Wet conditions northern portion. Causing damage from heavy lodging, root rot. Corn condition 30% excellent; 57% good; 13% fair. Small grain seeding continued at slow pace. Recent rain helpful to early seeded fields. Land preparation, seeding of wheat in full swing as weather permits. Oat seeding well underway. Peanut harvest delayed by rain, however rain helpful in reducing irrigation. Leaf spot, blight continued problem. Soybean developing well, warm temperatures needed to hasten maturing. Early fields setting pods. Cotton open bolls 37%, 47%. Cotton harvested 13%, 19%, 15%. Sorghum turning color 91%, 88%. Sorghum mature 73%, 78%. Sorghum harvested for grain 71%, 73% 67%. Wheat planted all purposes 25%, 28%, 32%. Wheat emerged 4%, 6%. Corn harvested 51%, 35%, 49%. Peanuts harvested 11%, 19%, 23%. Soybeans harvested 0%, 5%, 1%. Sunflowers harvested 23%, 9%, 15%. Oats planted 13%, 17%, 22%.

UTAH: Few isolated showers and thunderstorms. Accumulated amounts moisture generally light to moderate. Average temperatures continued generally above normal. Averages ranged from 2° below to 9° above.

Fieldwork active 6 of 7 days. Major activities included hay harvest, silage cutting, fall grain planting and livestock movement. Corn about equally divided between dough and dent stage. Maturity ahead of last year. Ranges have improved with recent rains, but are still dry in many parts. Between 10 and 20% of livestock have left summer ranges. Movement will pick up around October 1 as deer season approaches.

VIRGINIA: Mild summertime temperatures first of period gave way to cool fall temperatures by end of period. Highs in 80's and lows in 50's dropped about 20° by weekend. Extremes: low 90's to near 40°. Rainfall heavy, occurring mid period, over entire State, averaging about 1.50 in.

Rainfall late in the week should help late soybeans and peanuts fill pods. Harvest and small grain plantings delayed by rains and soft ground. Soil moisture rated 16% short, 73% adequate, 11% surplus. Days suitable for fieldwork: 3.8. Corn 86% mature, 78% last year; 31% harvested for grain, 41% 1980, 38% average; 63% of silage harvested, 50% 1980. Soybeans in good to excellent condition, pods filling in late varieties. Leaves on mid-season varieties turning yellow. Peanuts in good to excellent condition, only a few fields have been dug. Flue-cured tobacco 84% harvested, 68% 1980, 75% average. Burley 73% cut, the same as last year and average. Fire-cured 93% harvested, 75% 1980, 78% average. Sun-cured harvest 84% complete, 75% 1980, 76% average. Apple harvest slowed due to rain, 31% picked, 18% 1980, 27% average. Sweetpotatoes 12% dug, 6% 1980, 14% average. Cotton looks good, bolls opening well. Most small grain plantings so far have been behind harvested tobacco. Other farmers busy with corn harvest when ground could be worked; 11% of winter oats planted, compared with 10% last year.

WASHINGTON: West: Average temperatures were near normal on the coast and 3 to 5° above normal in

the interior. Rainfall was reported late in the week with totals ranging from 2.00 to 8.00 in. below normals. Blackberry harvest near completion, raspberry growers cleaning up operations. Vegetable crops continued to be harvested. Bulb planting continued while greenhouse activities increase for poinsettia production. Seed potato harvest got underway. Pasture and range feed adequate. Soil moisture fair.

East: Warm to hot afternoon high temperatures but cool at night. Averages were 8 to 10° above normals. Rainfall was sparse. A wide assortment of field crops were harvested. Fruit harvested included Golden Delicious apples, late peaches and pears. Red Delicious apples continue to size slowly. Wine grapes were picked. Concord making good progress. Winter wheat harvest nearly completed. Spring grains harvests well along. Seeding of winter grains slowed due to lack of soil moisture. Hay and other roughage adequate. Soil moisture fair.

WEST VIRGINIA: Temperatures below normal. High 92°, low 33°. Precipitation above normal except in northwest. Range 0.10 to 2.42 in.

Soil moisture adequate to short. Days suitable for fieldwork: 3.4. Main activities: silage harvesting, hay harvesting, pasture clipping. Corn good to fair condition; 10% harvested, 9% in 1980. Wheat planted 25%, 5% in 1980. Barley planted 19%, 10% in 1980. Hay fair to good, 2nd cutting 92% complete, 88% in 1980; 3rd cutting 64% complete, 57% in 1980. Tobacco fair to good, 100% topped, 83% harvested, 99% and 84% in 1980. Pastures fair to good. Gardens fair to good. Fruit poor to fair.

WISCONSIN: Unseasonably cool weather as temperatures averaged 5° below normal. Highs were mostly in the 70's and lows were in the 30's. High of 81° was reported in Iola on 14th while Crivitz and Spooner were the cool spots, each reporting 30° on 19th. The first general frosts occurred on 19th in northern areas with temperatures in the 30 to 35° range. Rainfall was variable with amounts generally ranging from 0.50 to 1.00 in.

Fieldwork: 6 days suitable. Silo filling got underway and was 11% complete, which was ahead of the 1980 pace of 7% but behind the average of 24%. The 1981 corn crop 77% at dent stage of development, 99% 1980, 86% average. About 56% of corn crop dented hard enough to be safe from frost, 82% 1980, 74% average. Haymaking continuing and third crop harvest 57% complete. Pastures look good for this time of the year and rate 94% of normal, 100% 1980, 83% average. Harvest of specialty crops now in full swing. Topsoil moisture supplies were rated 13% short, 80% adequate and 7% surplus. Moisture supplies most abundant in the southeast crop reporting district.

WYOMING: All stations above normal temperatures. Highest 97° while lowest 27°. Below normal precipitation. Greatest amount 0.06 in.

Topsoil moisture short 78% State. Average 7 days suitable for fieldwork. Winter wheat seeded: 80%; year ago 90%; normal 87%, winter wheat emerged: 50%; year ago 65%; normal 58%. Corn silage harvested: 45%; year ago 50%; normal 68%. Corn for grain dented: 45%; year ago 55%; normal 57%. Corn for grain mature: 20%; year ago 20%; normal 30%. Dry beans windrowed: 85%; year ago 80%; normal 89%. Dry beans combined: 55%; year ago 40%; normal 57%. Potatoes harvested: 25%; year ago 50%; normal 36%. Sugarbeet harvest expected to start by end of month. Hay supplies for wintering livestock adequate most areas. Livestock

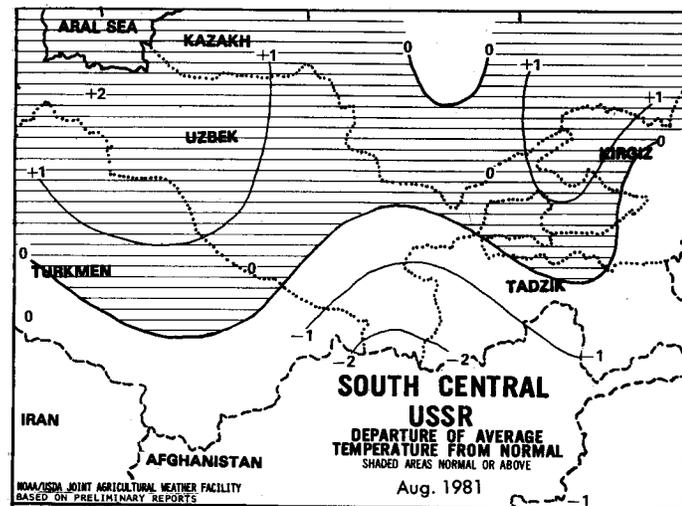
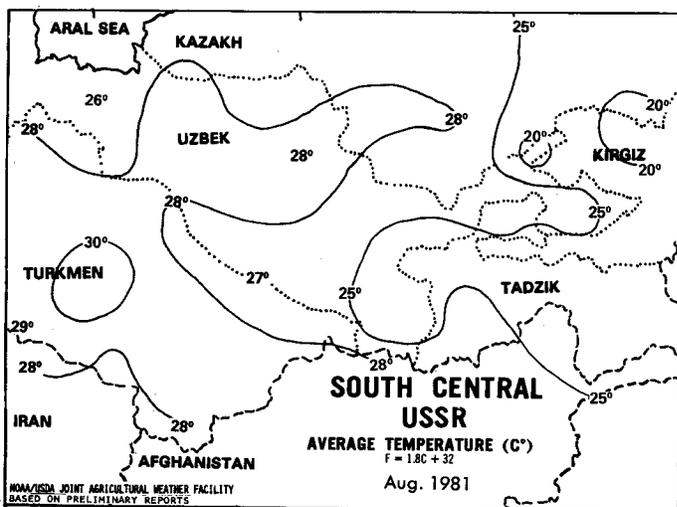
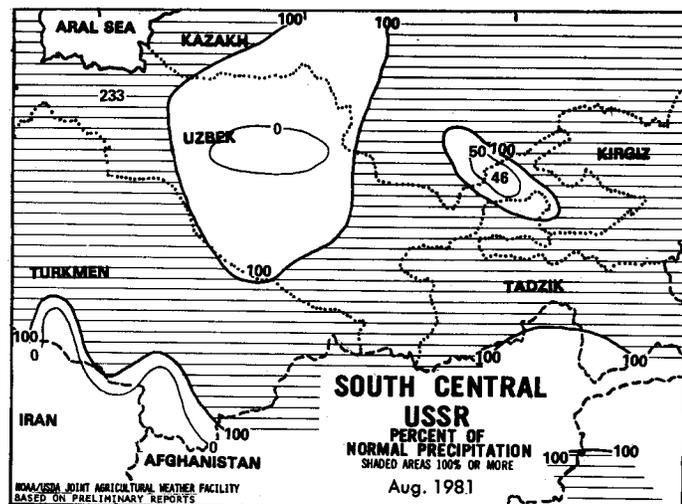
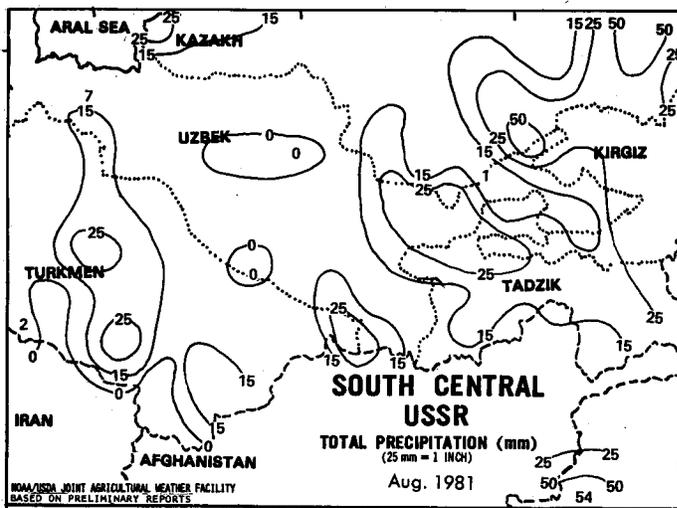
contracting slow. Percent contracted: cattle 15%; calves 15%; sheep 15%; lambs 20%.

Contracted last year: cattle 35%; calves 35%; sheep 40%; lambs 45%.

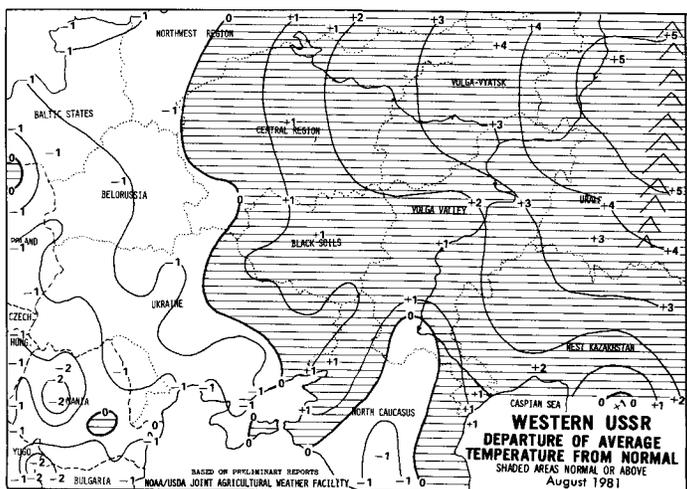
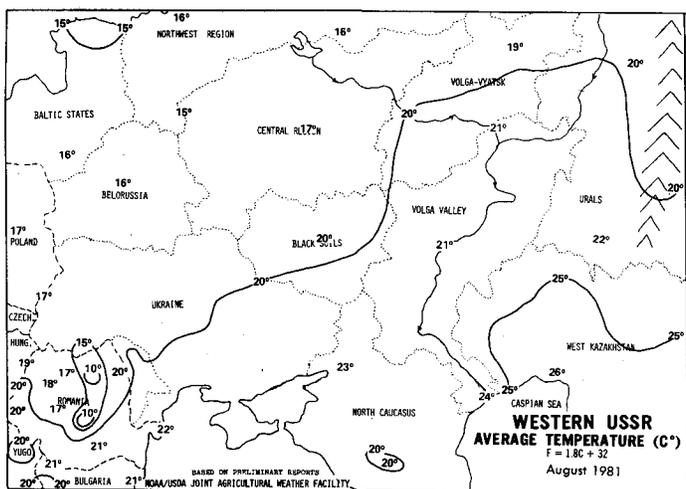
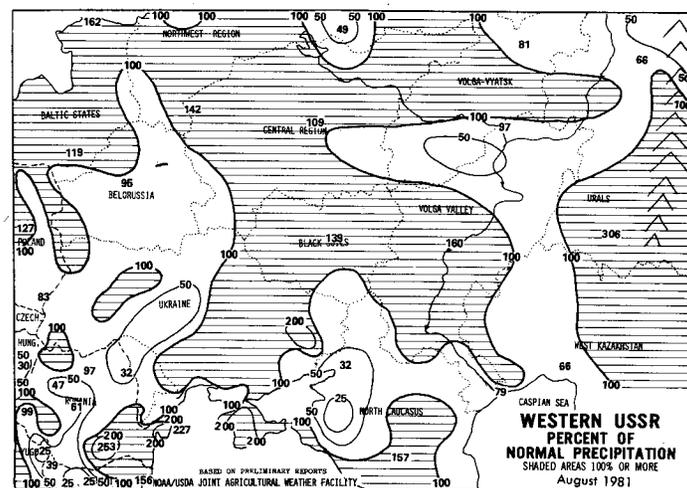
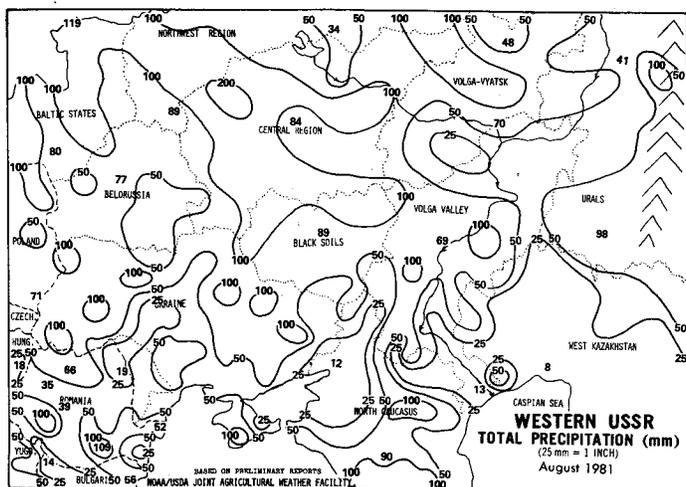
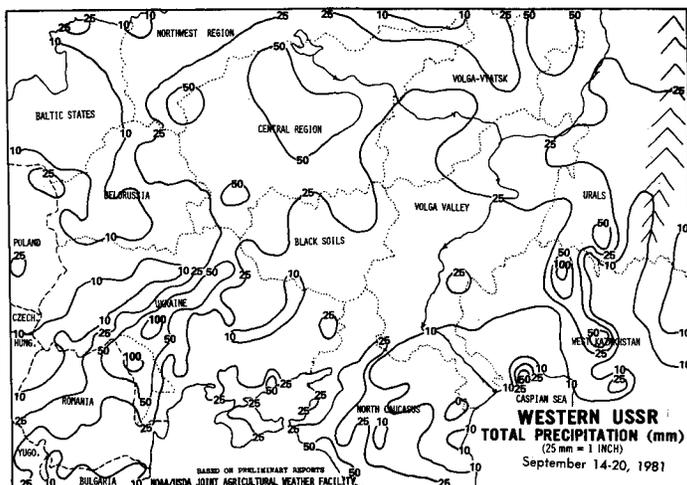
International Weather and Crop Summary

HIGHLIGHTS
Sept. 14-20, 1981

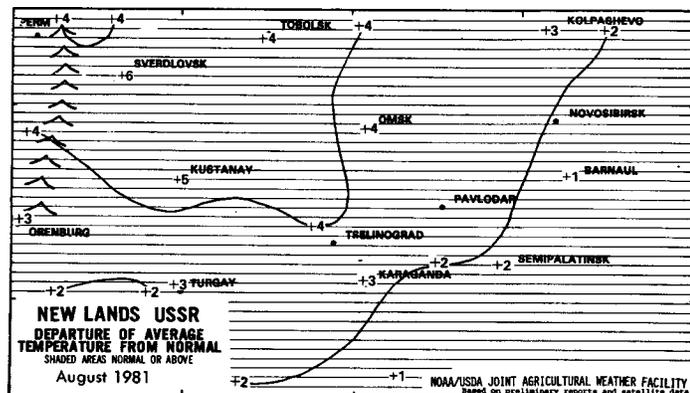
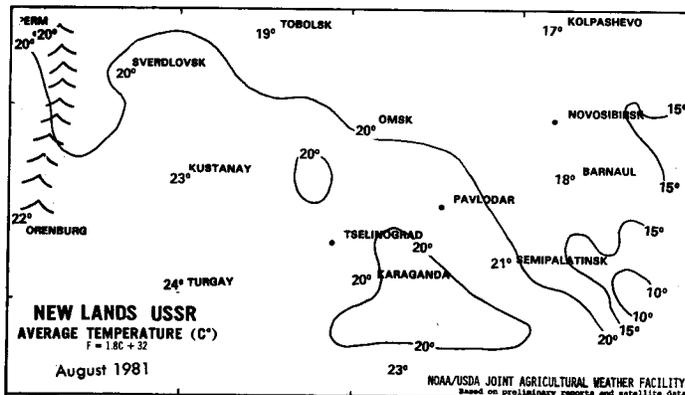
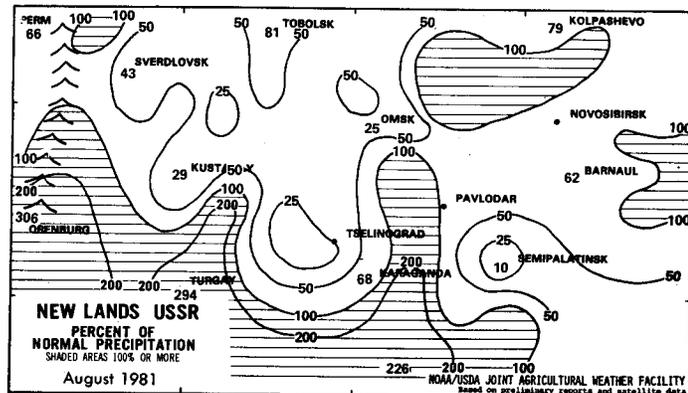
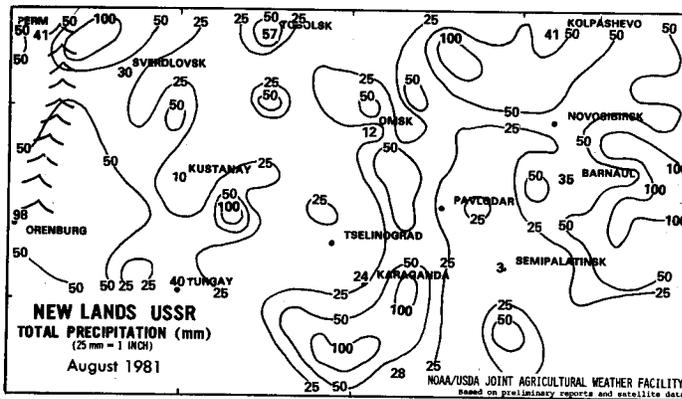
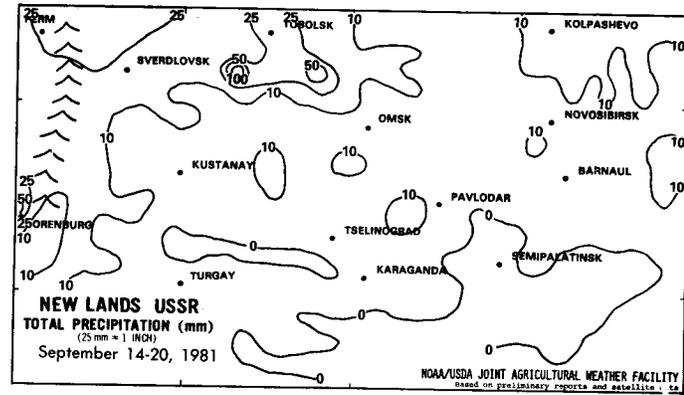
- USSR: Generous rains in European USSR interfered with harvesting spring crops but benefited newly sown winter grains.
- EUROPE: Beneficial rainfall for winter grains from northwest to southeast.
- CANADA: Favorable harvest weather in Saskatchewan and Manitoba; wet weather over the weekend in Alberta.
- MEXICO: Sunny weather over the west coast was ideal for planting fall vegetables but limited the rainfall needed to replenish reservoirs.
- SOUTH AMERICA: Dry weather persisted in coffee areas of Northern Brazil and wheat areas of Argentina; wet weather continued in Rio Grande do Sul.
- EASTERN ASIA: Mostly drier weather benefited harvesting. Winter grain areas need more rain.
- AUSTRALIA: Scattered showers in west; little precipitation and above normal temperatures in South Australia and southeastern areas.
- SOUTH ASIA: Monsoon continued to weaken, but good rains fell in central and southern India.
- SOUTHEAST ASIA: Erratic monsoon activity; dry in north, wet in extreme south.



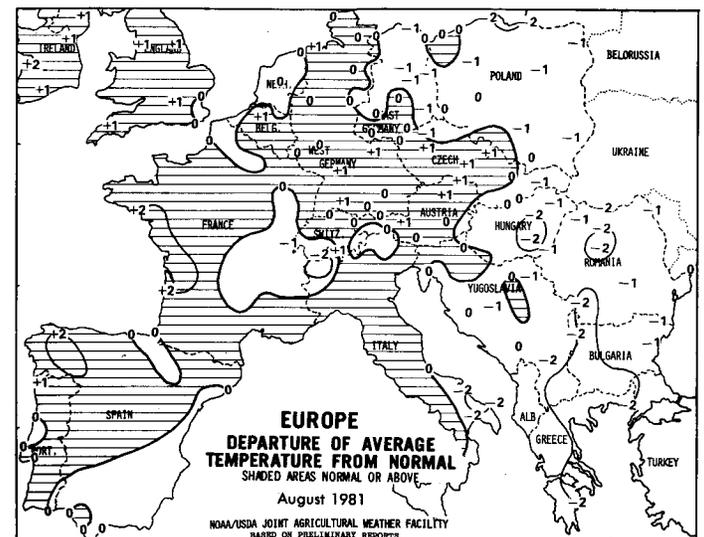
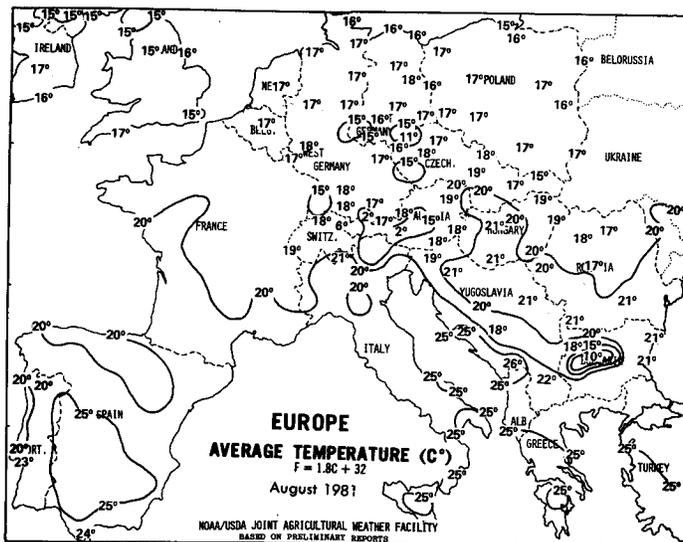
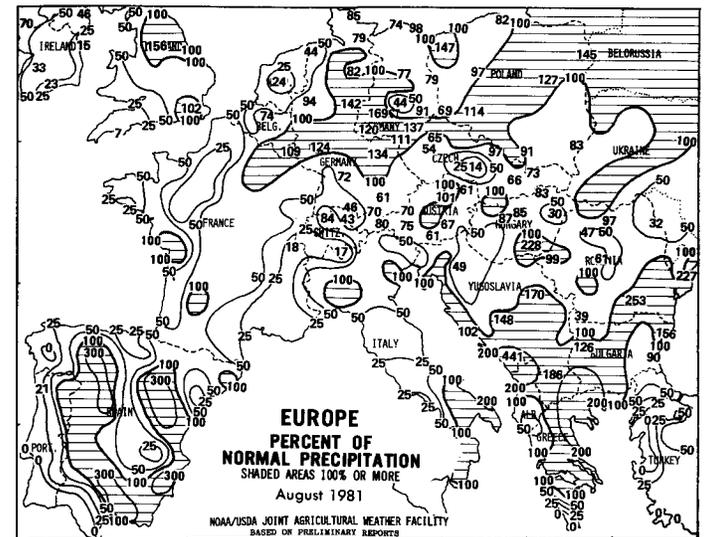
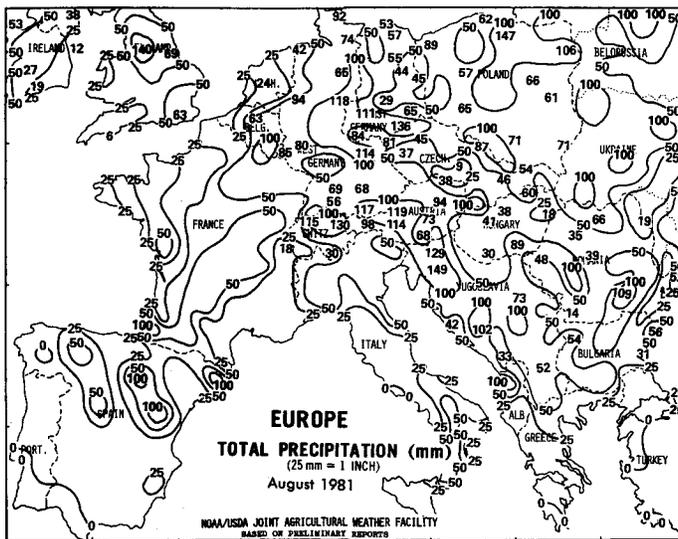
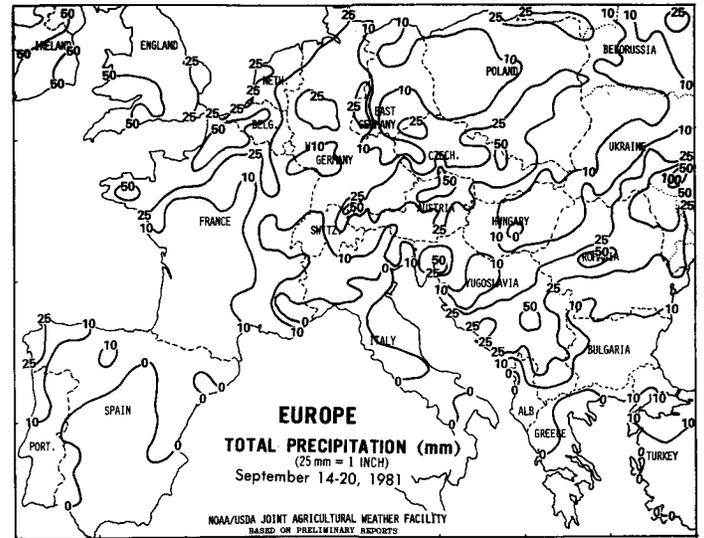
W. USSR: The weather turned wetter over most of the region as a strong storm moved slowly from southwest to northeast. Many locations reported weekly amounts in excess of the normal total for September. Only the Baltic states had extensive areas of below-normal rainfall. Although the wetness interfered with harvesting of many spring-planted crops, it improved growing conditions for winter grains in some dry pockets in the south which had developed in August. Sowing should be active in these southerly areas now. Temperatures were decidedly below normal; however, frost was confined to the more northerly areas and was light and scattered. August temperatures were slightly below normal in the west, but stayed much above normal in the Volga Valley as spring grain harvesting took place.

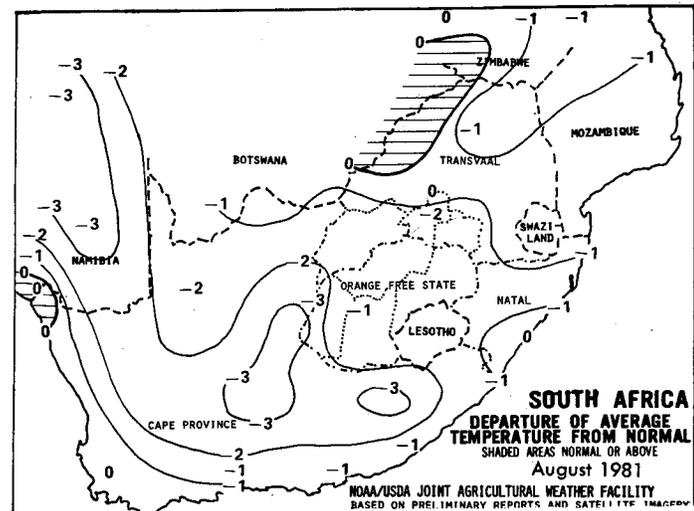
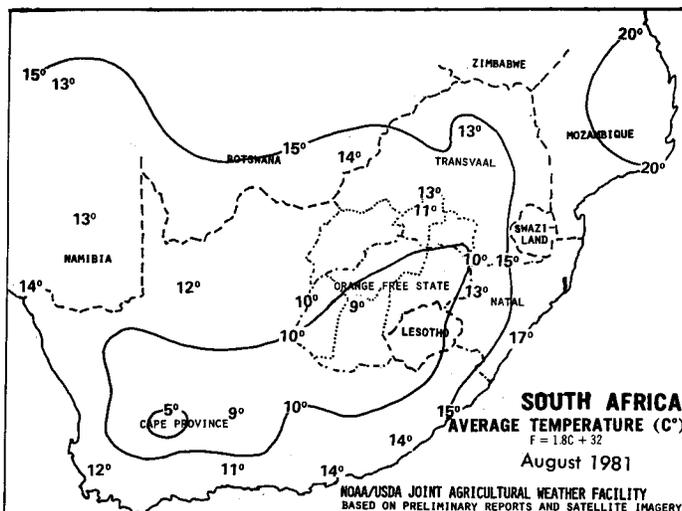
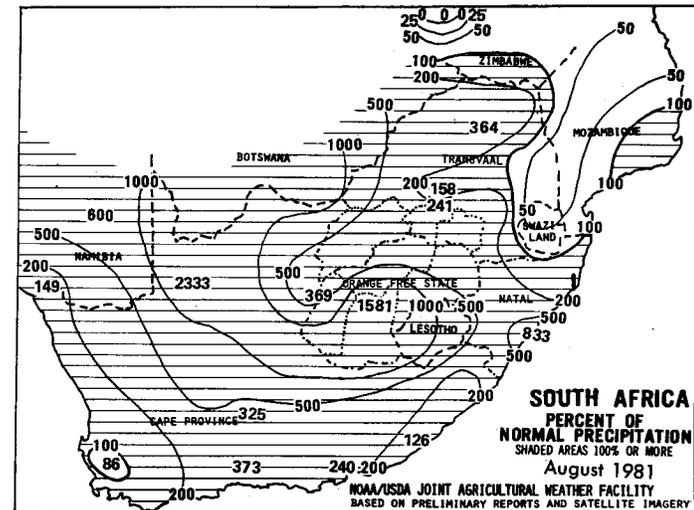
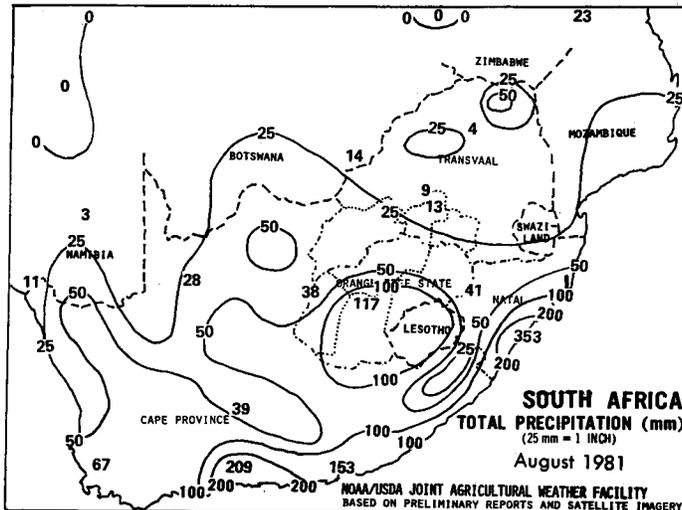
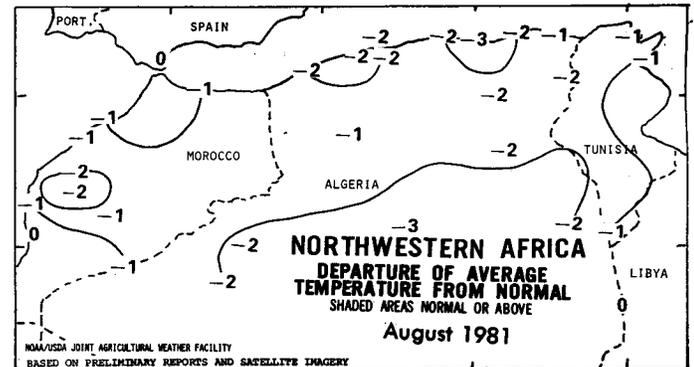
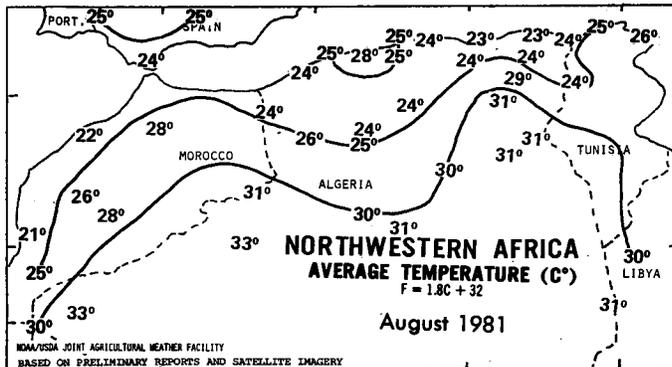
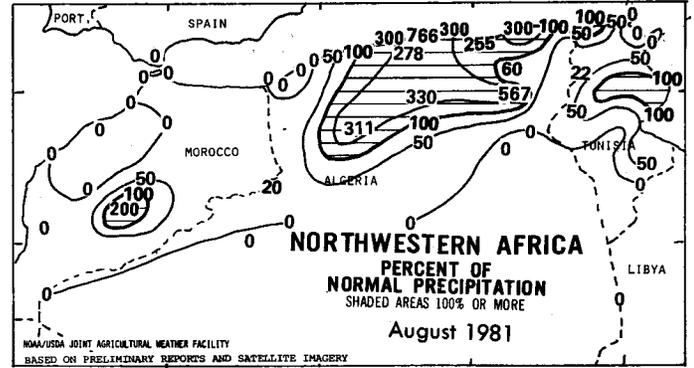
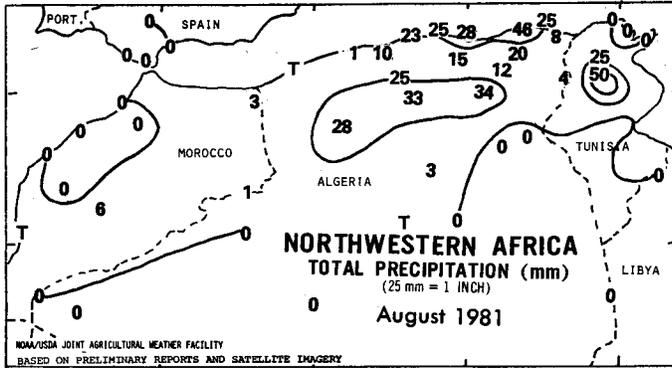


NEW LANDS: Mostly warm and dry weather occurred during the week, and spring grain harvesting continued through the latter stages. Wetter than normal weather persisted only in the northwest, causing delays in the harvest. Above-normal temperatures--especially in the northwest--and generally below-normal rainfall during August had favored harvesting. In cotton-growing areas to the south, temperatures this week ranged much above normal, allowing fields which had not been artificially defoliated to advance more rapidly toward maturity.

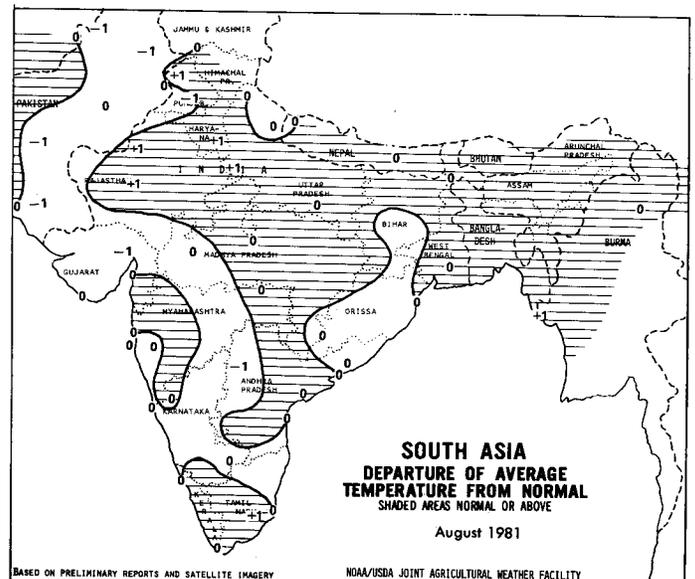
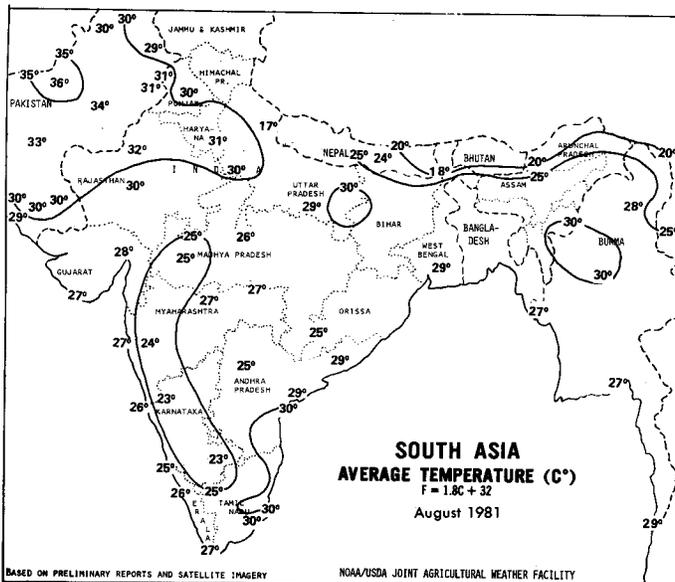
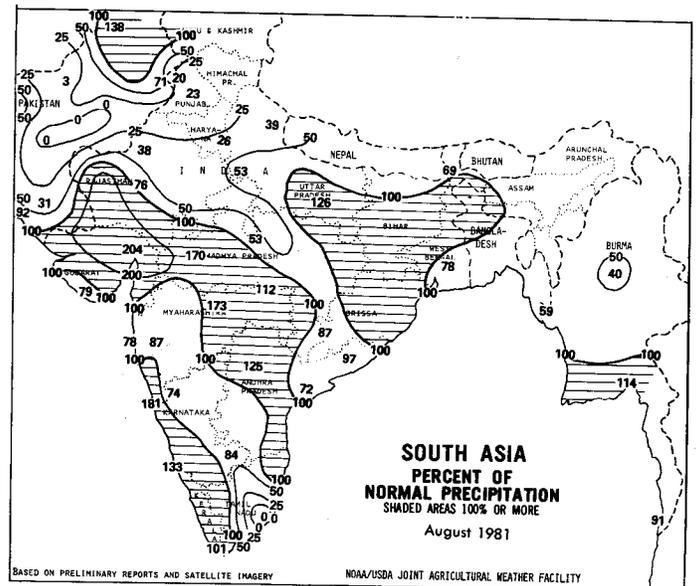
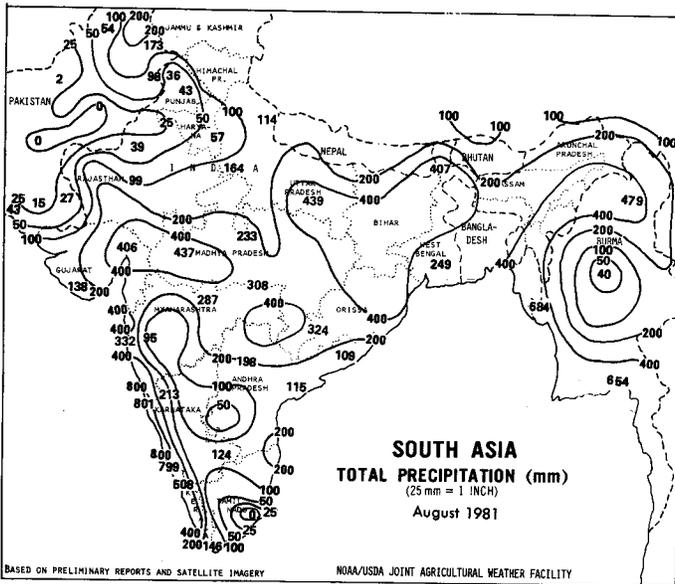
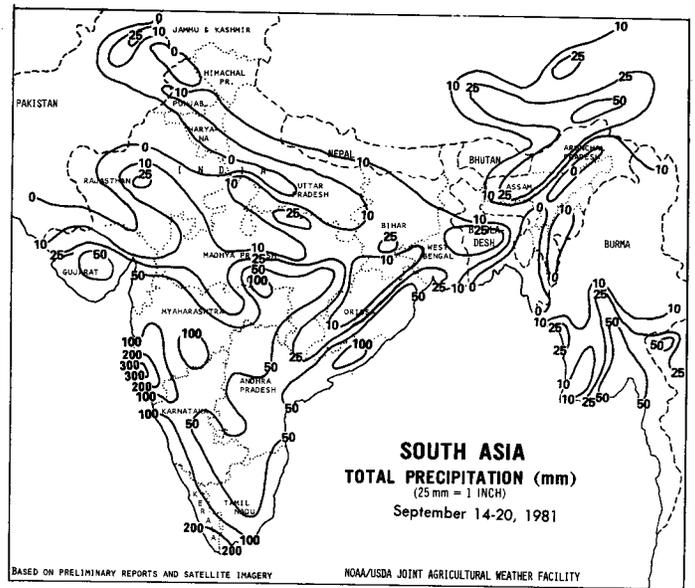


EUROPE: A vigorous storm dumped above-normal precipitation across many southeastern countries early in the week. However, spring crop yields had already been hurt by localized rainfall deficiencies which persisted through August. Generous rains also fell in the northwest, where broad-scale dryness occurred in August. The increased moisture improved early growing conditions for winter grains. Rainfall slackened in Spain and Italy. A large portion of Spain had received above-normal rainfall in August, and with the winter grain sowing season approaching, more will be needed soon. Temperatures stayed near normal, except in the east where northerly winds slid readings several degrees below normal. This temperature pattern persisted in August as well, with substantial departures below normal occurring in some southeastern areas.

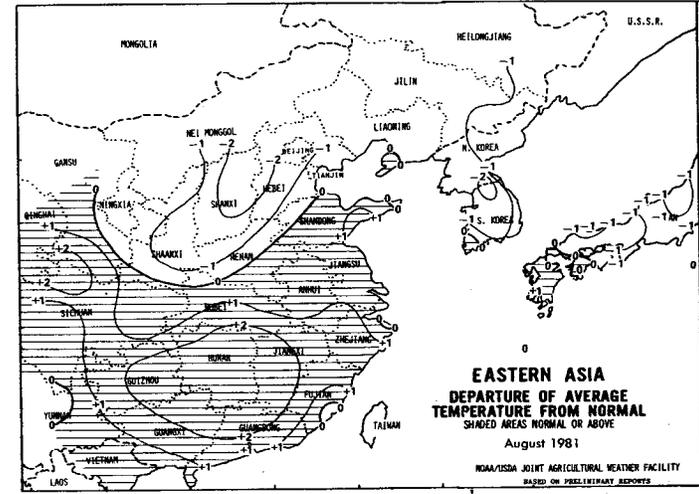
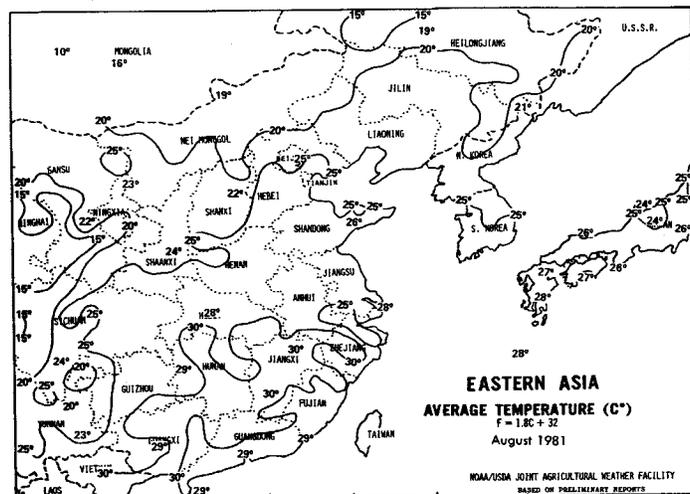
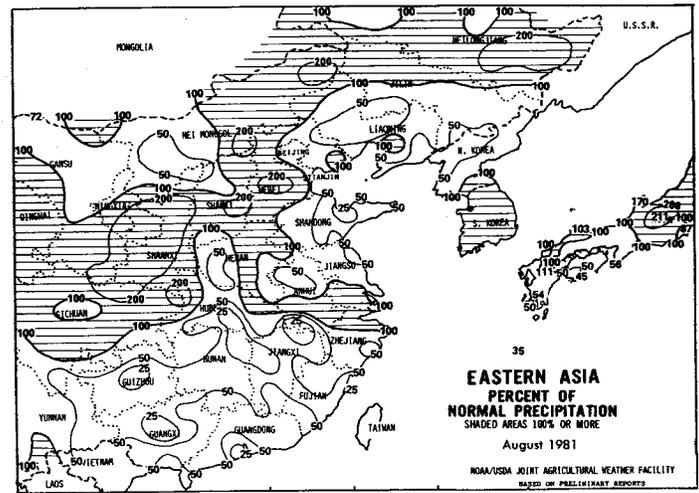
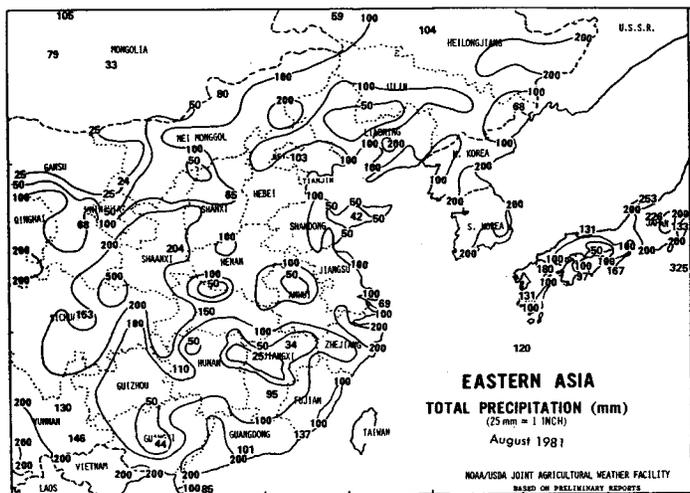
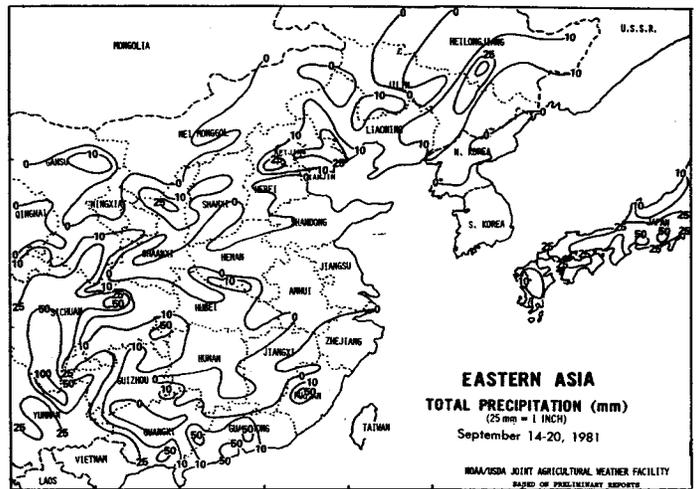


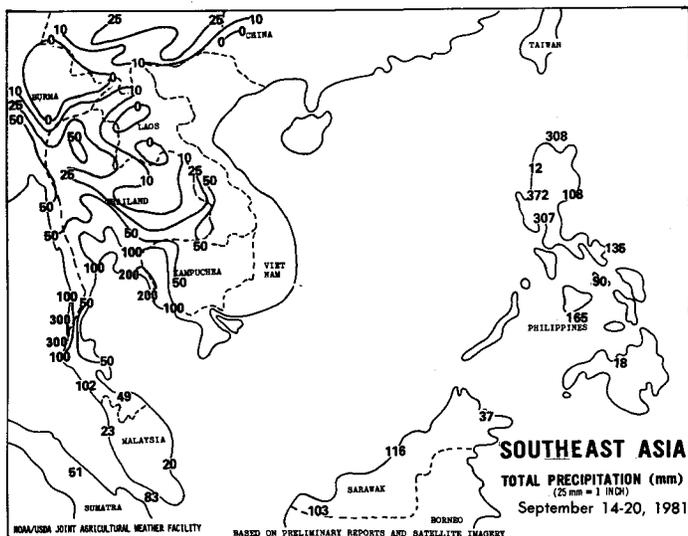


SOUTH ASIA: The monsoon continued to weaken in northwestern India. Pakistan received only scattered, post-monsoon showers. Evidence of the early withdrawal is seen in much lower than normal rainfall in northwestern India during August. Central parts of India had generous rains late in the week as a strong weather system moved across from the east, and crop prospects should be good there. Rainfall in Bangladesh and northeastern India dipped to below normal, with no particular significance to agriculture, since rainfall in that area has been adequate this season. Near-normal rainfall in southern India maintained favorable growing conditions, where relatively dry weather in some localized areas during August had dimmed crop prospects.

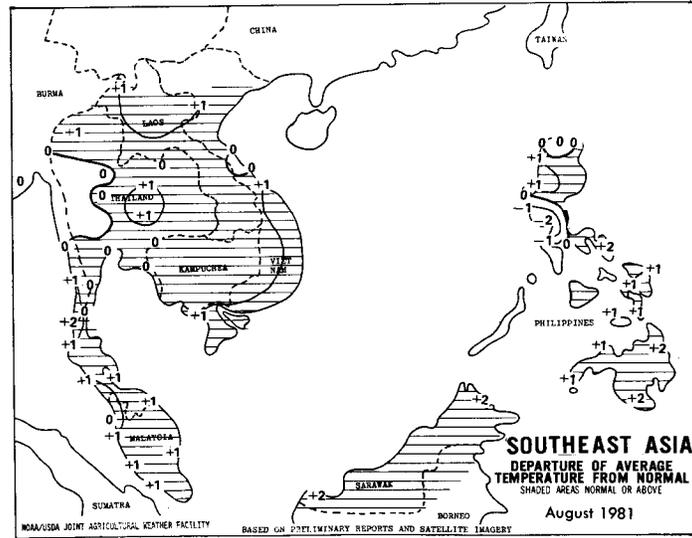
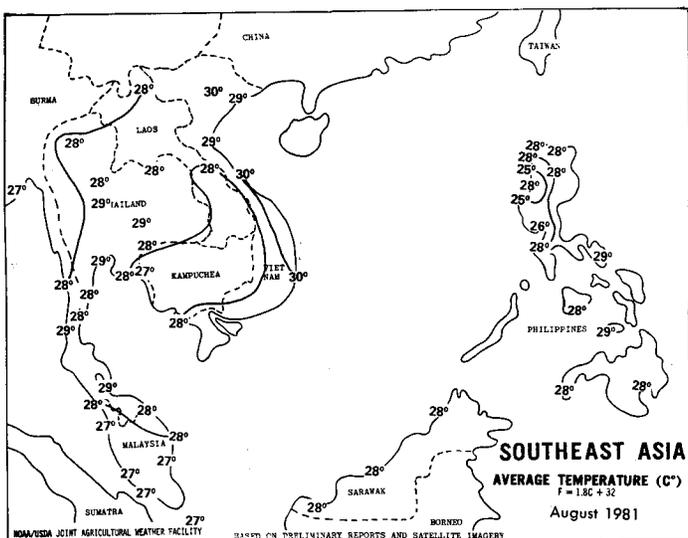
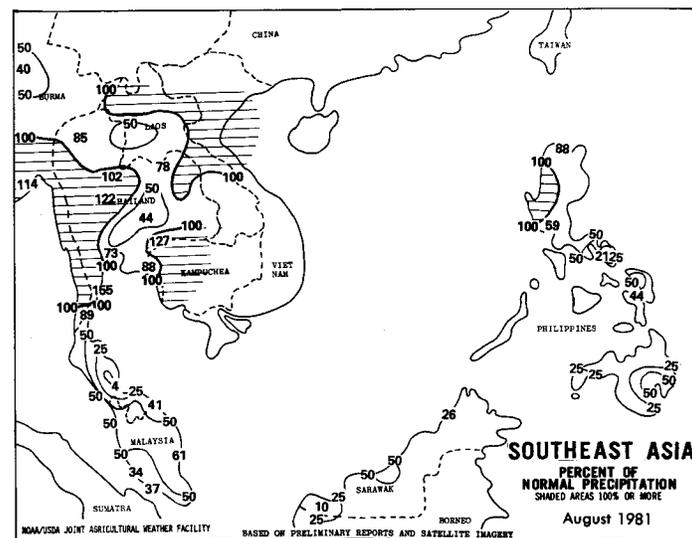
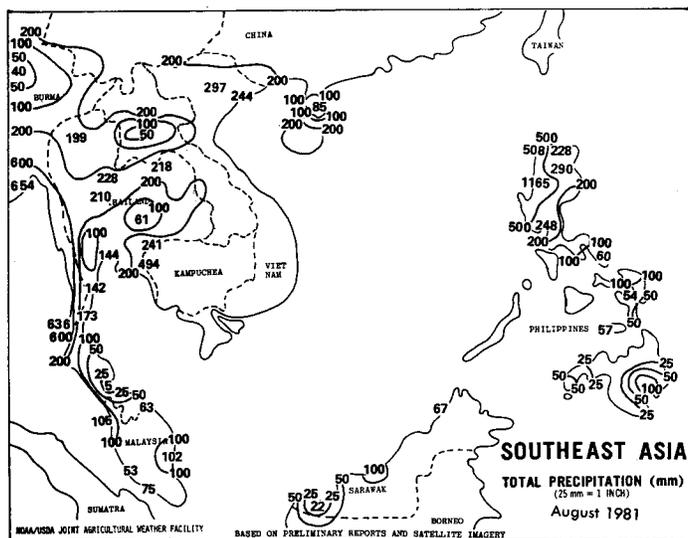


EASTERN ASIA: Drier weather occurred over many agricultural areas of China during the week. Most of the North China Plain and Yangtze Valley had favorable weather for harvesting spring-sown crops. Soils in the northern portion of this area are becoming too dry for successful sowing of winter grains, but the Beijing area received some much-needed rainfall. Only light, scattered showers fell in the upper Yellow River Valley, easing the threat of additional flooding. Much-above-normal rainfall in August had continued into the first two weeks of September, raising streams to extremely high levels. Wet weather continued in parts of the Manchurian Valley, keeping conditions unfavorably wet for harvesting of spring wheat and soybeans. Some areas along the southern coast of China received above-normal rainfall, but most had favorable harvest weather. August weather south of the Yangtze River had been unfavorably dry, and then many southern coastal locations received unwanted rains as late-season crops began to mature in early September. In South Korea, a second consecutive dry week favored agriculture, following the heavy rains which fell in late August and early September.

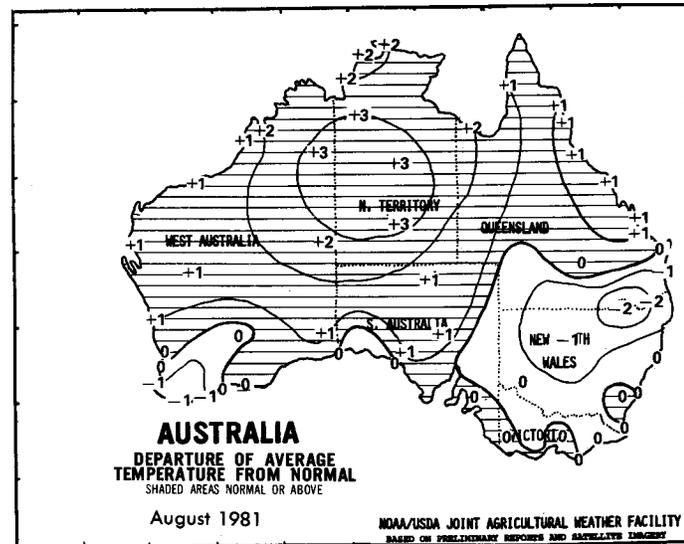
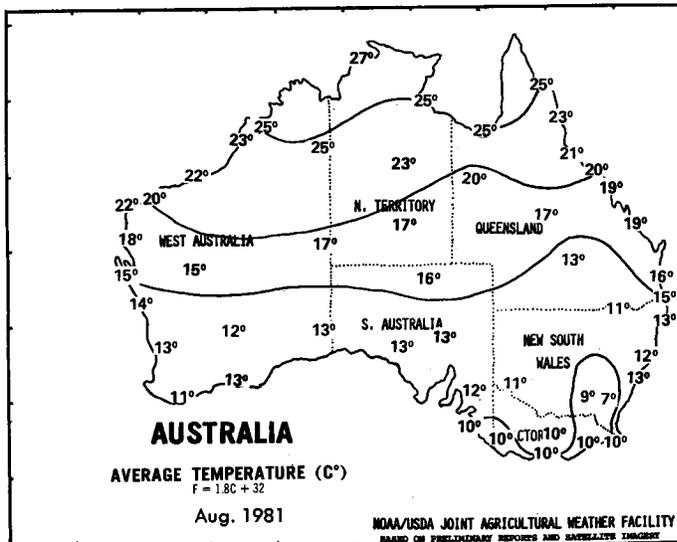
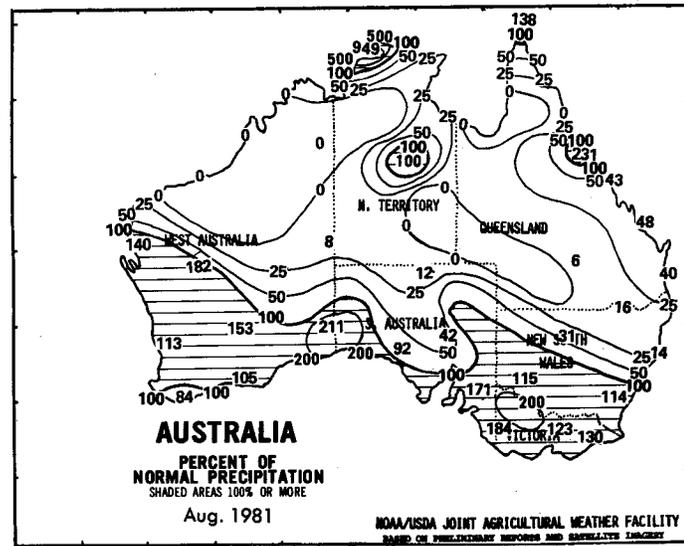
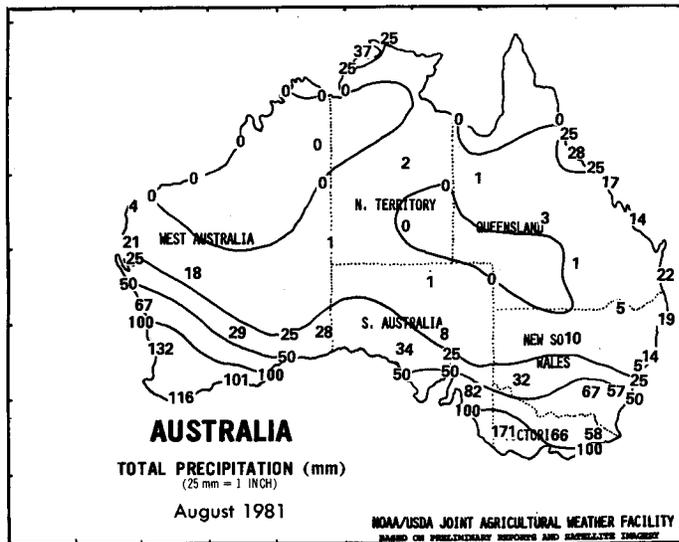
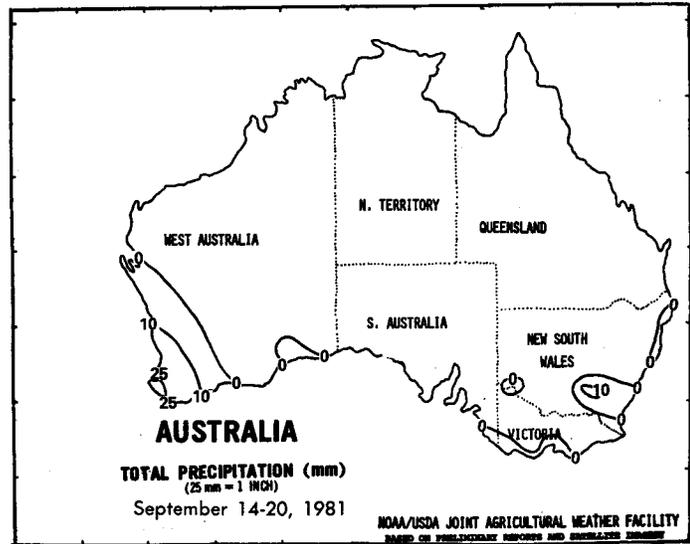




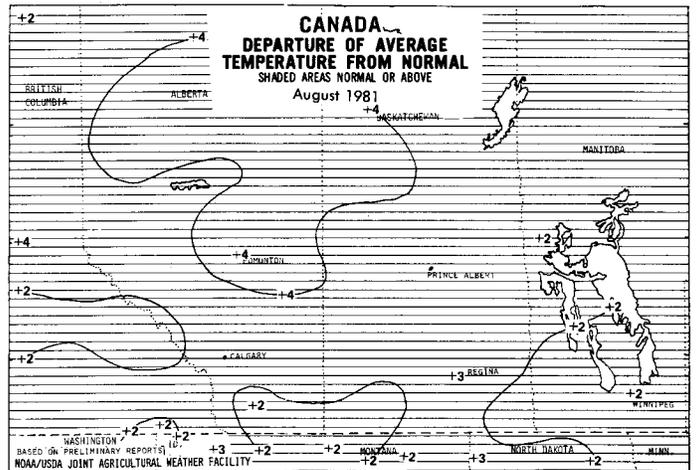
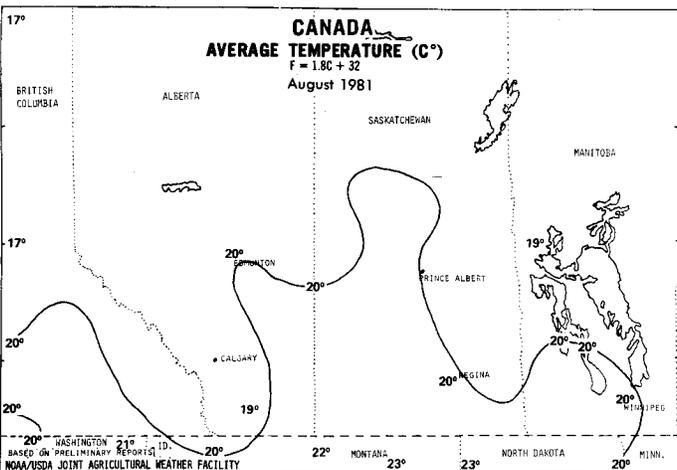
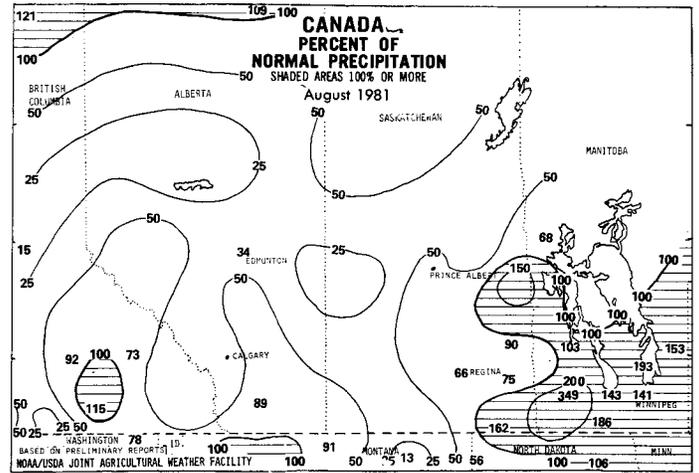
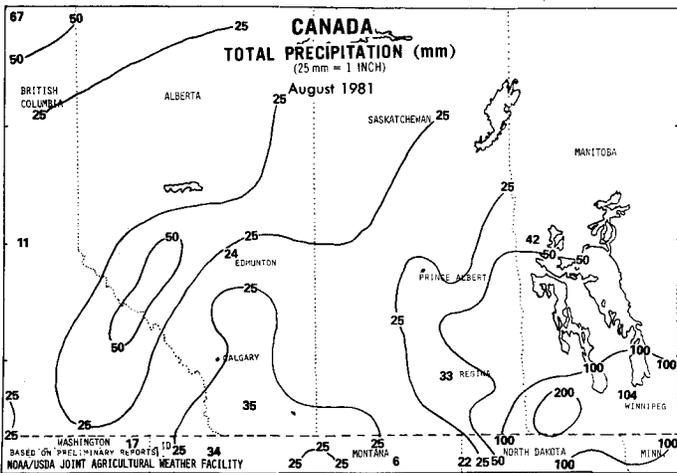
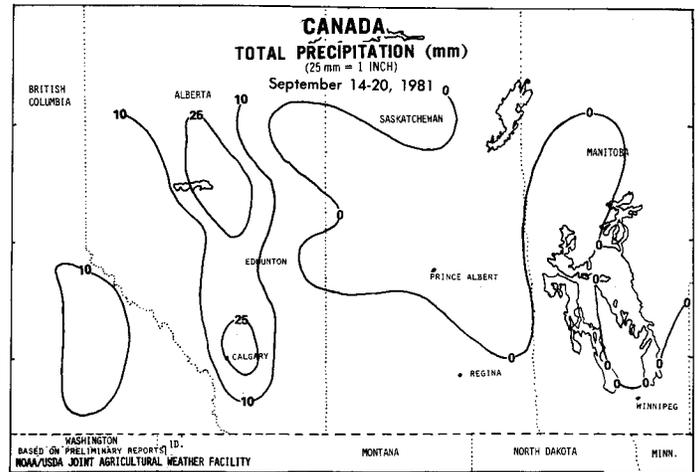
SOUTHEAST ASIA: The erratic behavior of the monsoon continued during the week with the central, northeast, and northern areas experiencing generally below-normal rainfall. These same areas received near- to below-normal rainfall in August. Therefore, precipitation during the week was insufficient to raise reservoir levels which support irrigation for crops, especially in the northeast. Rice is normally in the vegetative stage of development and more rain is needed to improve yield prospects. Continued heavy rains over southern Thailand may have caused some coastal flooding. This area received below-normal rainfall in August so the increase in precipitation was generally favorable.



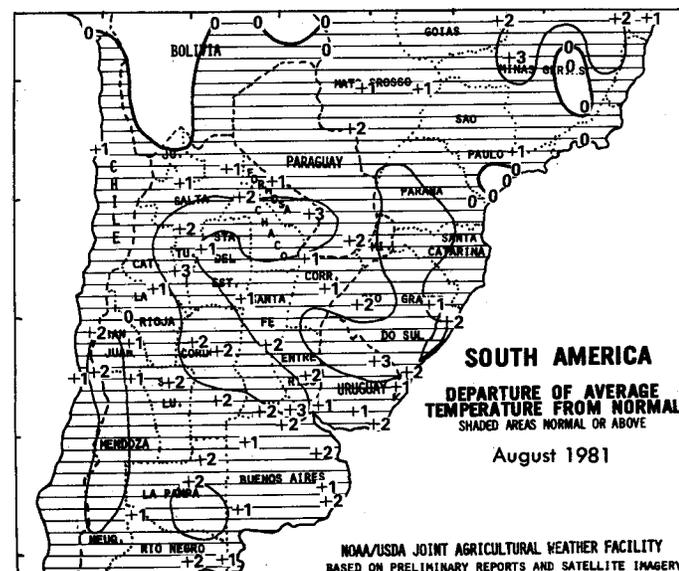
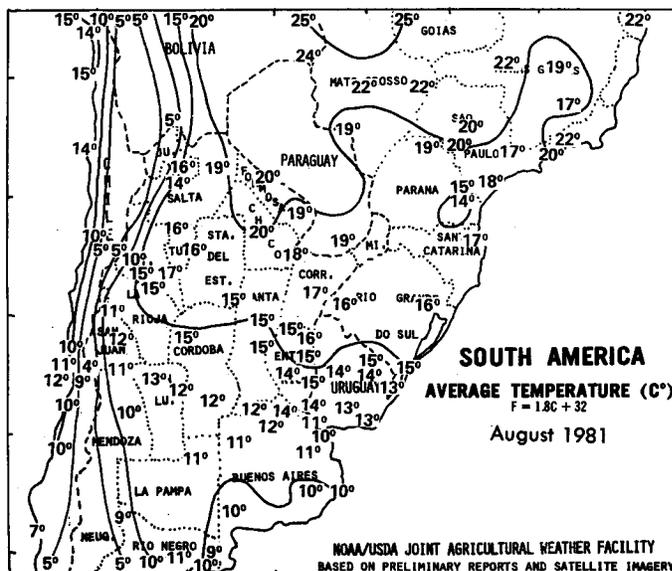
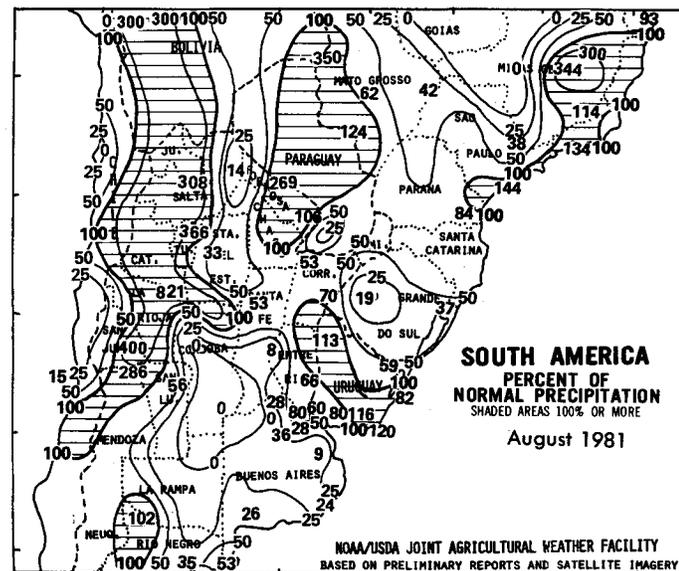
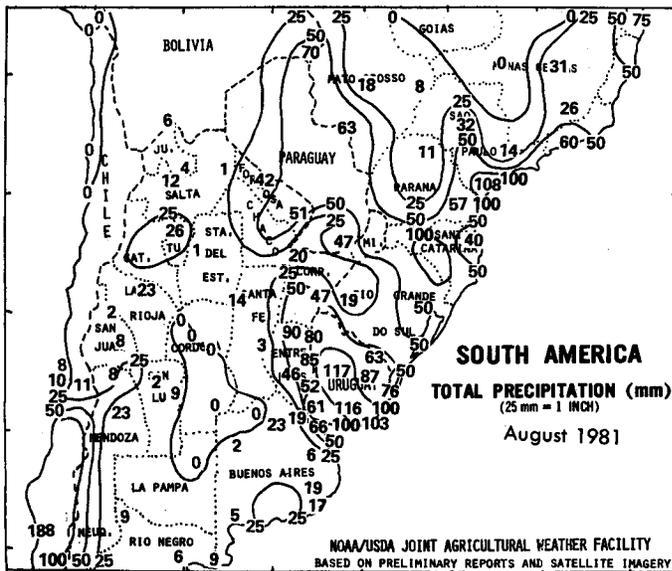
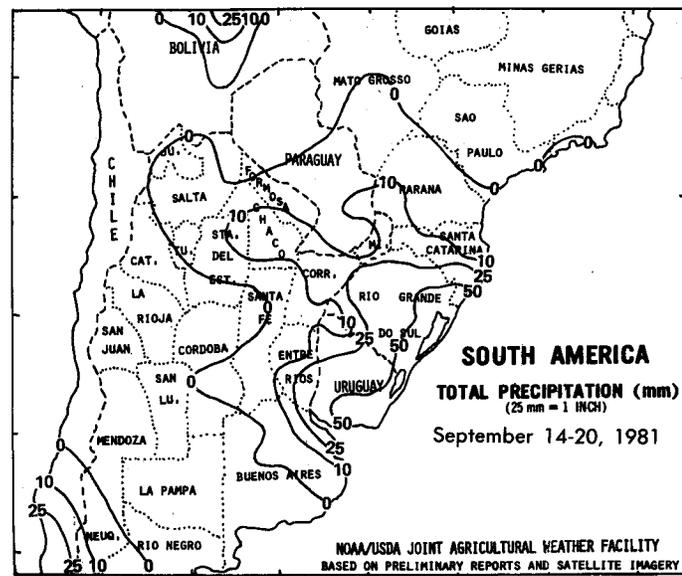
AUSTRALIA: Dry weather continued in the south central and southeastern grain areas during the week. Soil moisture supplies should be adequate in more southern areas which received above-normal rainfall in August. Grain areas further north, normally advancing into the heading stage at this time, have received well below-normal rainfall since early August, and more rain is needed to improve yield prospects. Above-normal temperatures occurred in the southeastern grain areas, with substantial departures reported in South Australia. Scattered showers benefited southwestern crop areas that are normally in the vegetative stage of growth. This area received above-normal rainfall along with near-normal temperatures in August, and soil moisture supplies remain adequate.



CANADA: Dry weather, favorable for the harvest of spring grains, continued in Saskatchewan this week, a pattern which has persisted since the harvest began in mid-August. Reports indicate that the harvest in Saskatchewan is virtually complete. Above-normal rainfall in the spring grain areas of Manitoba during August slowed the harvest somewhat, but activity should have picked up this week due to dry weather. Wet weather in Alberta may have briefly interrupted the work over the weekend, but drier than normal weather since early August had allowed the harvest to progress at a rapid pace. Below freezing temperatures at many locations in Alberta and Saskatchewan during the week probably had little effect on the mature grain crop.



SOUTH AMERICA: Dry weather in the Brazilian coffee areas and Parana continued this week. This pattern has persisted since early August, providing unfavorable conditions for coffee trees, normally in their flowering stage, and wheat, progressing into the grain-filling stage. The dryness was also unfavorable for corn planting. In Rio Grande do Sul, adequate to above-normal moisture benefited wheat in the vegetative stage of growth. The area had received much below-normal precipitation in August. Soil moisture reserves for soybeans, to be sown in upcoming weeks, look favorable. Beneficial rains fell over Entre Rios during the week while Buenos Aires remained dry. These areas have received well below-normal rainfall since early August and rain is very much needed as the wheat comes out of its semi-dormant period. Temperatures this week were generally above normal in Brazil and below normal in Argentina, while both areas had above-normal temperatures in August.



MEXICO: Subnormal rainfall over northwestern watersheds during August and the first half of September resulted in reservoirs being replenished less than usual. However, a tropical storm heading toward the tip of Baja California on the 20th may move inland and produce locally heavy rains next week over some northwestern watersheds and farming districts. The dry pattern since August was very good, though, for harvesting cotton, soybeans, and other summer crops, as well as for planting fall vegetables. A few showers slowed cotton harvesting in the north central region. Prolonged dryness in upper parts of the northeastern citrus belt since June critically stressed non-irrigated orchards, causing fruit to be small. Orchards further south, as well as the second-crop corn in the southern Plateau and sugarcane and coffee in the south central coastal states, generally received adequate rains for crop development.

