

WEEKLY WEATHER AND CROP BULLETIN

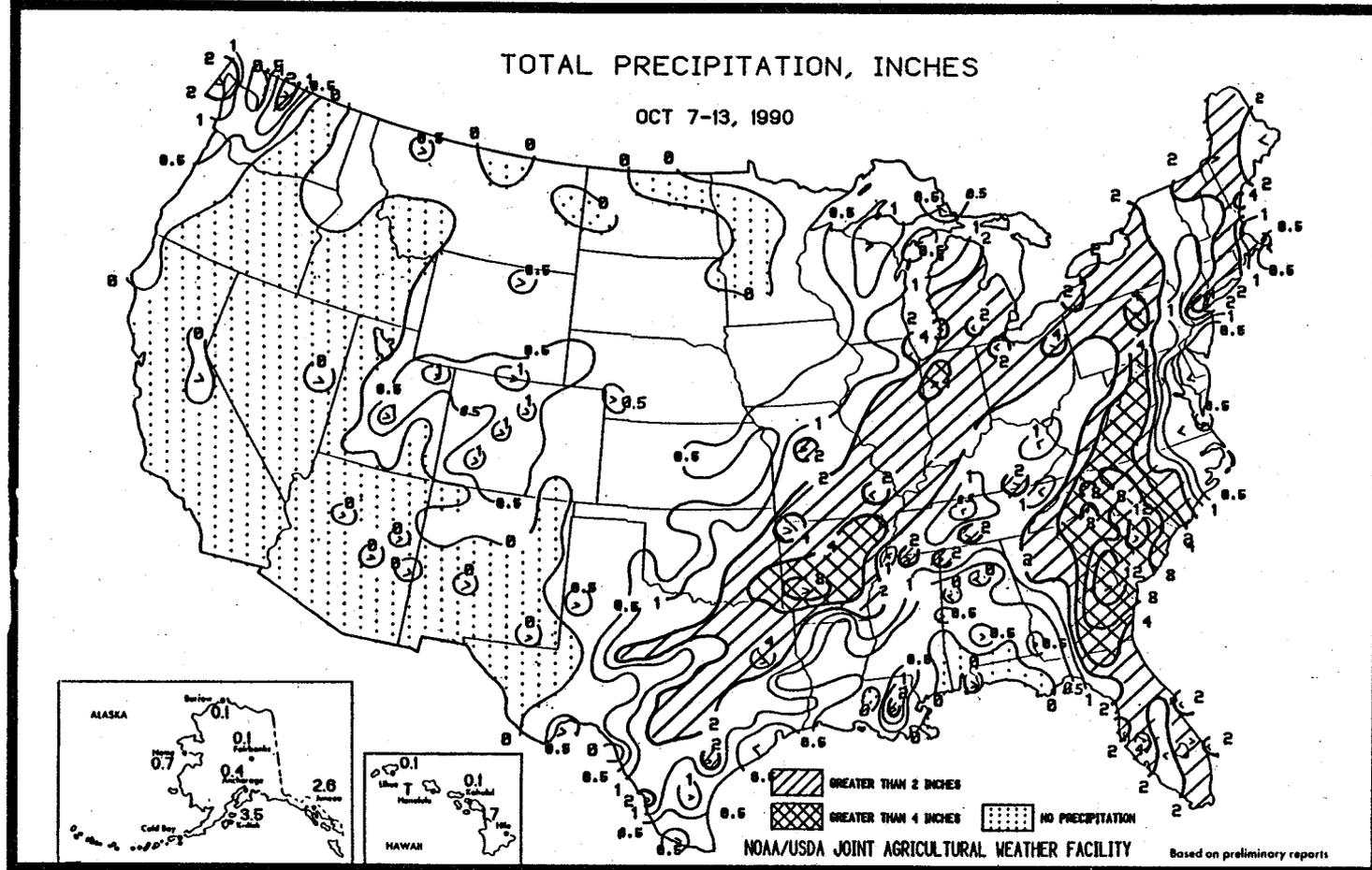
U.S. DEPARTMENT OF COMMERCE
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HIGHLIGHTS

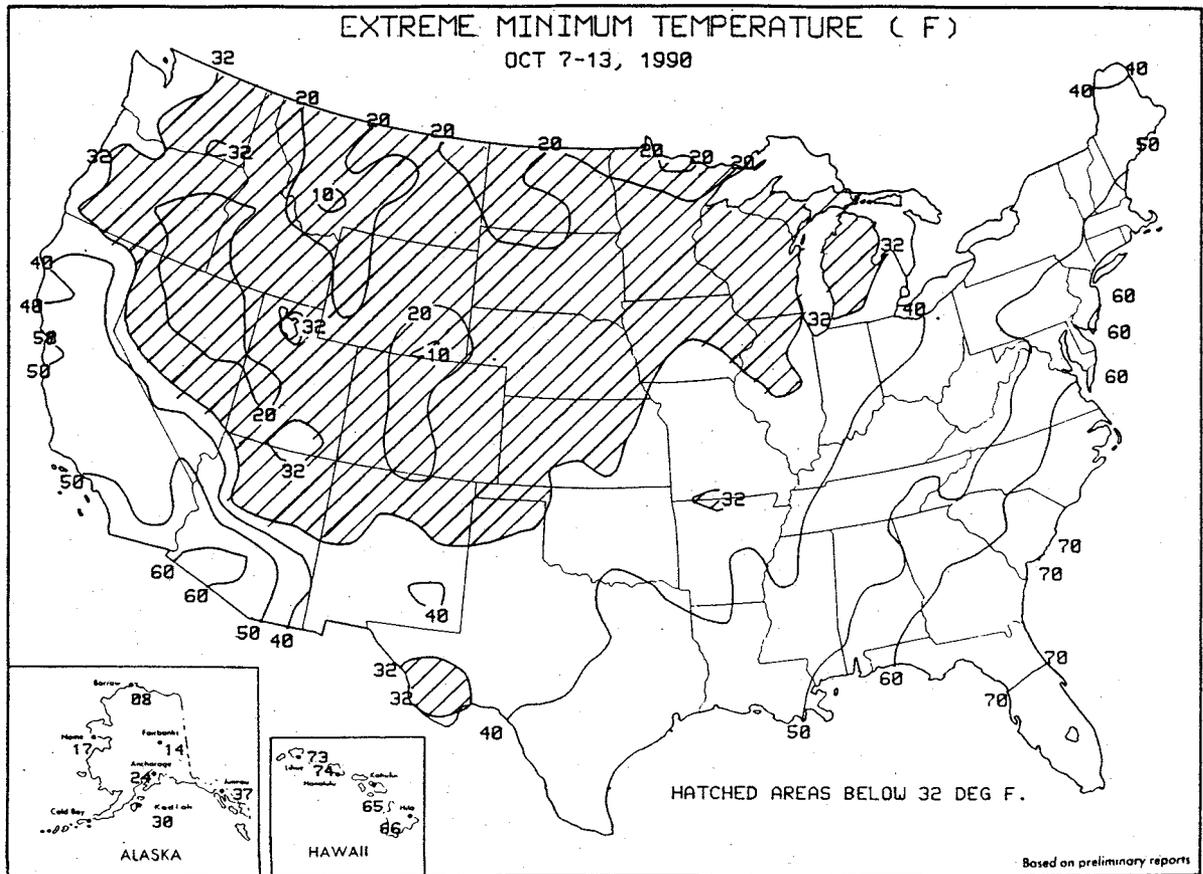
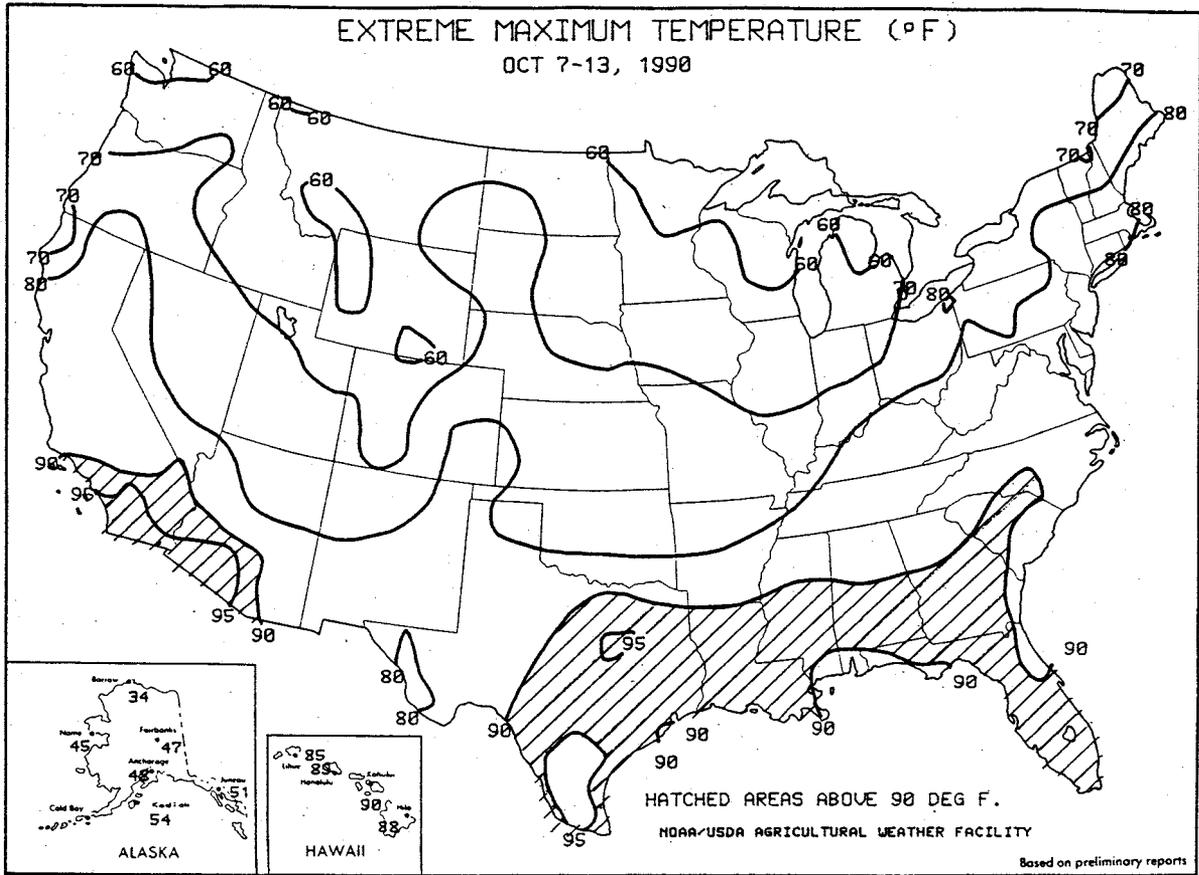
October 7-13, 1990

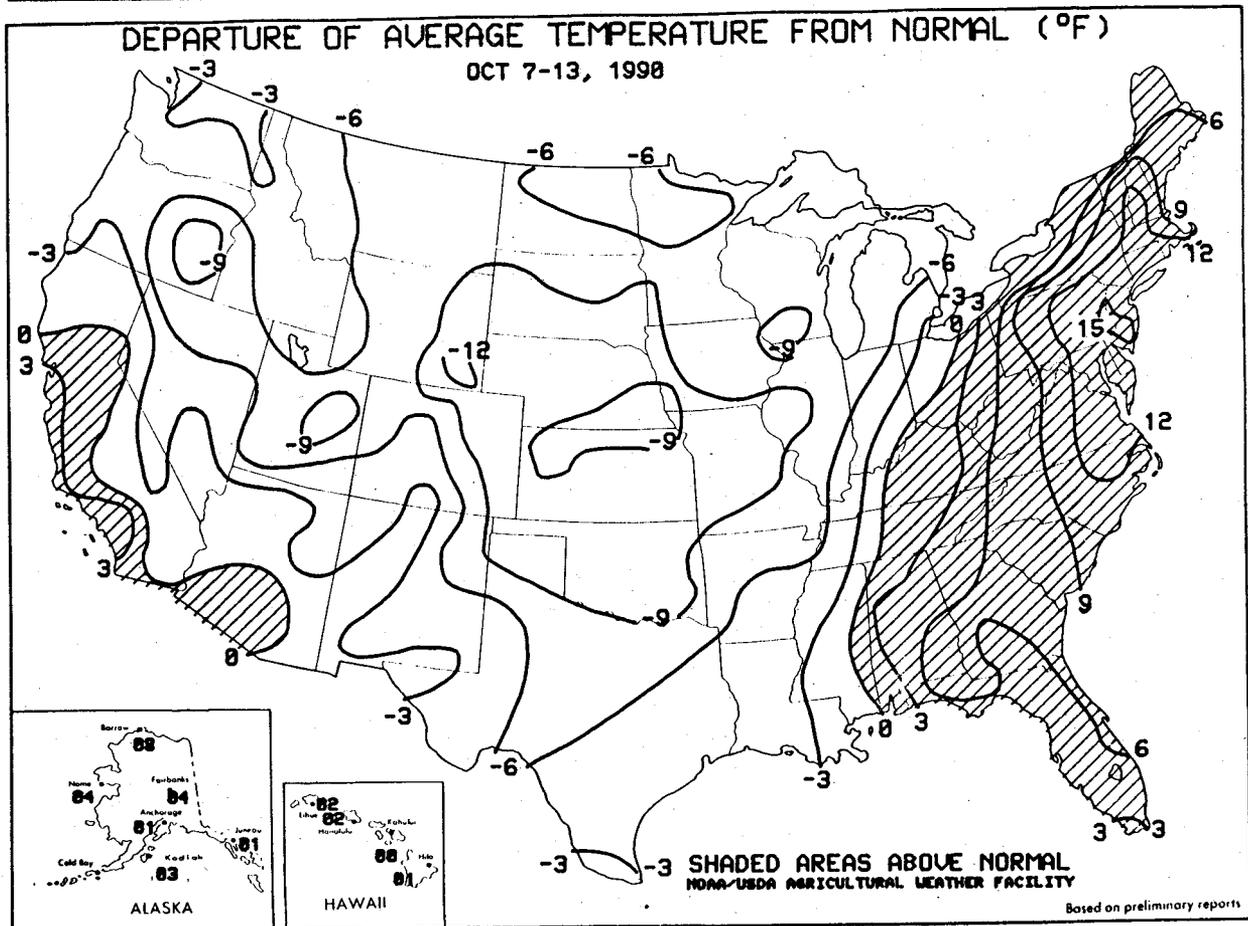
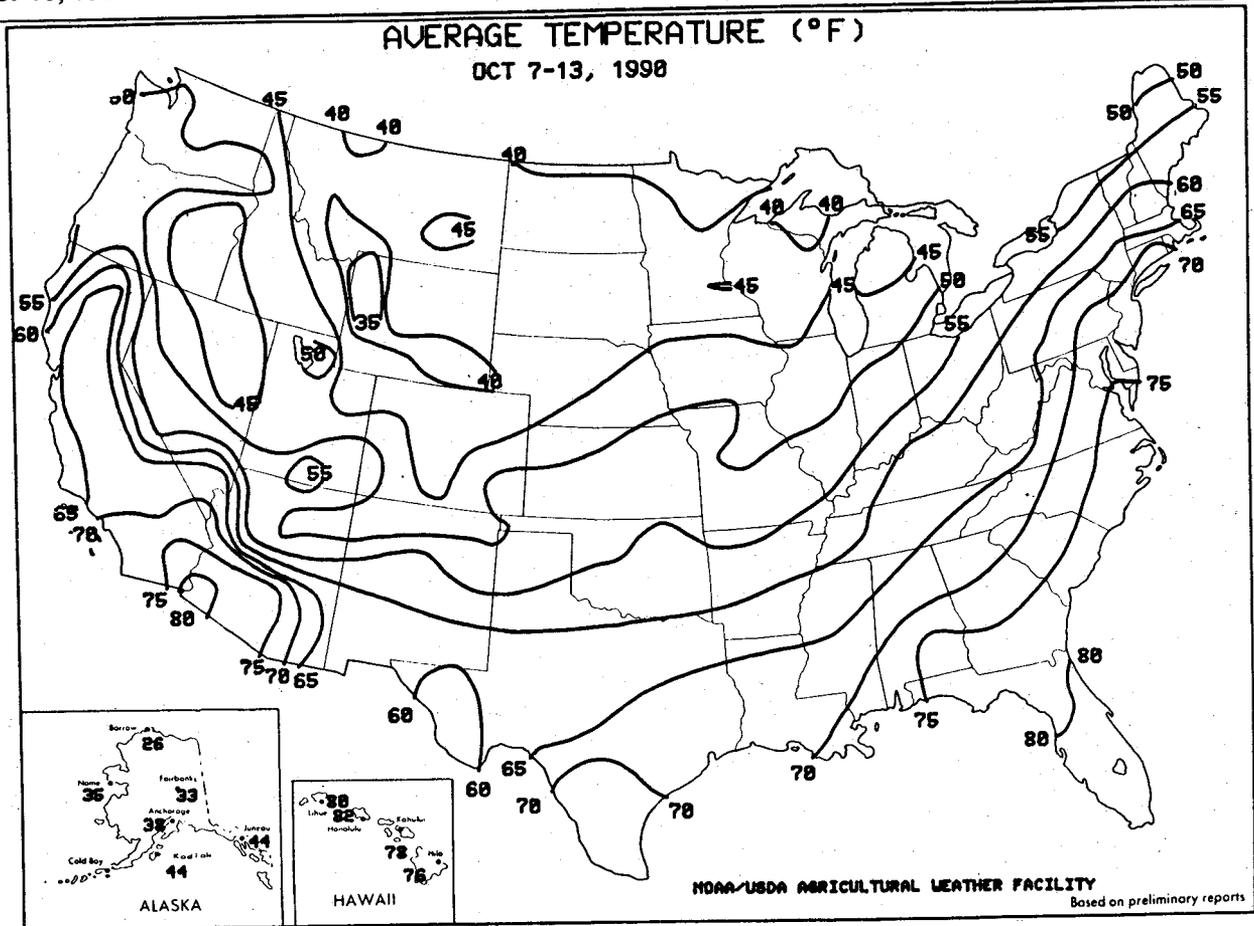
A strong frontal system edged eastward through the week, causing showers and severe thunderstorms from the **southern Plains** to the **Great Lakes** and **Atlantic coast**. Intense thunderstorms developed along the system at the first of the week, and dumped torrential rains across **southeastern Oklahoma** and **Arkansas**, producing flash floods. Heavy rains then soaked the **eastern Corn Belt** as Tropical Storm Marco formed over the **Florida Keys**, and remnants from Hurricane Klaus brought drenching rain to the **southern Atlantic coast**. Marco proceeded northward into **Georgia**, causing damage along **Florida's gulf coast**. During the latter part of the week, moisture from the remnants of Marco and Klaus combined with the stalled front to bring torrents of rain (8-14 inches) and
(Continued to back cover)

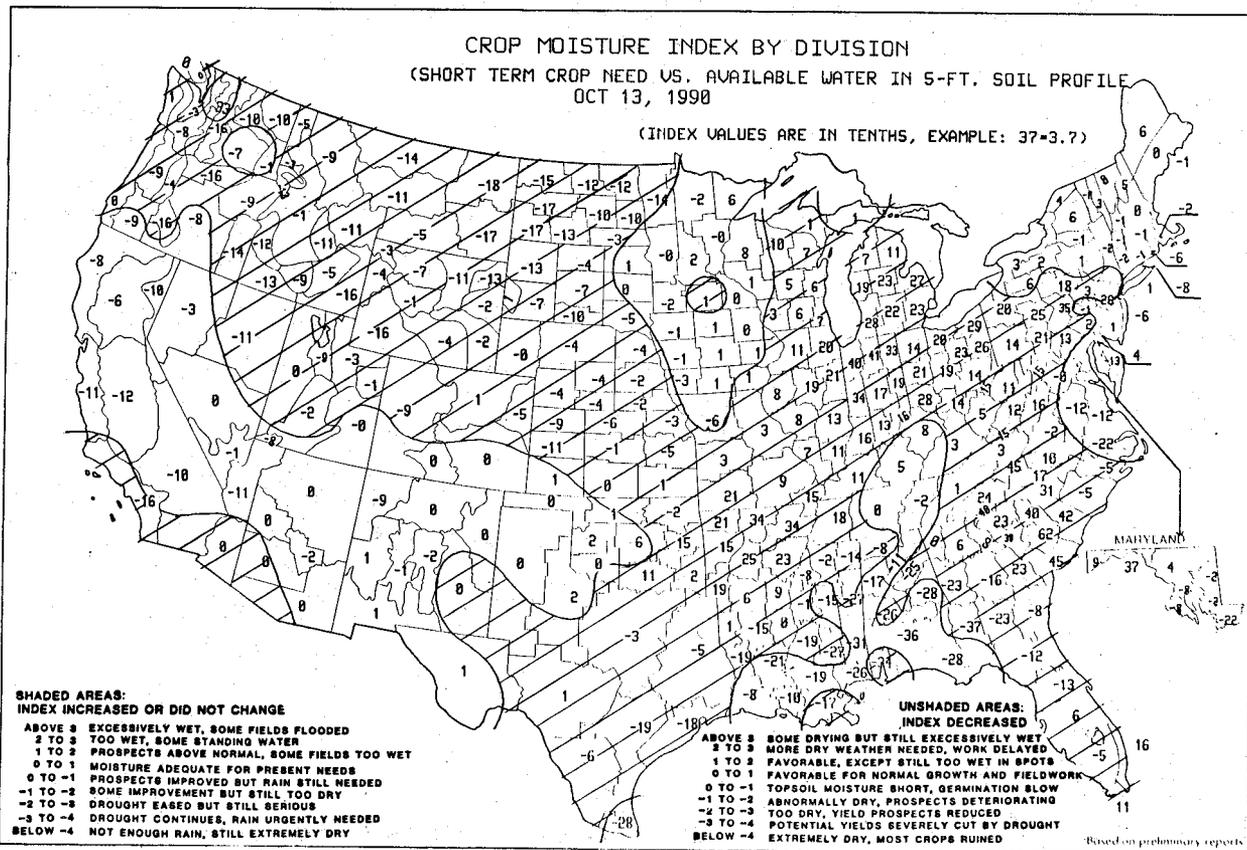
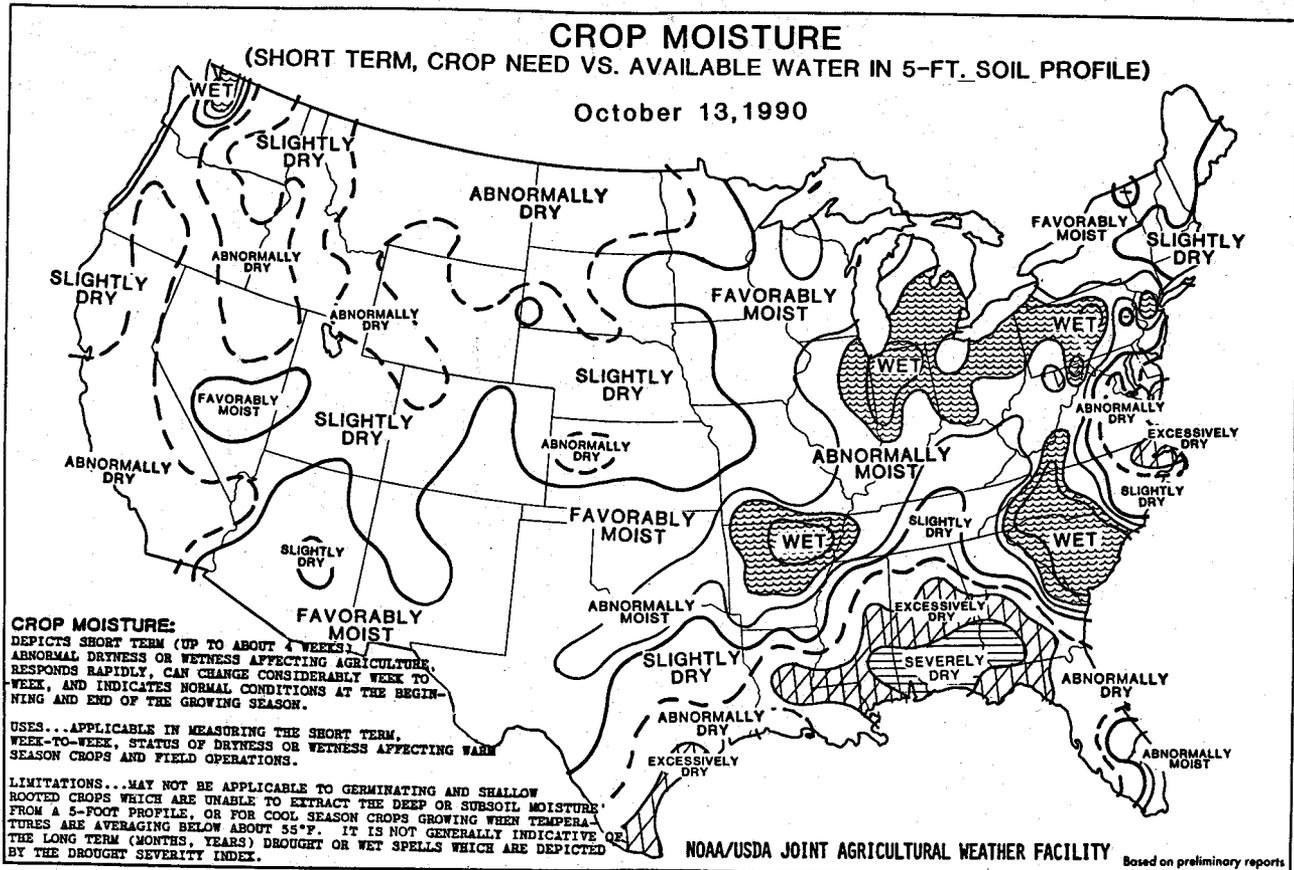
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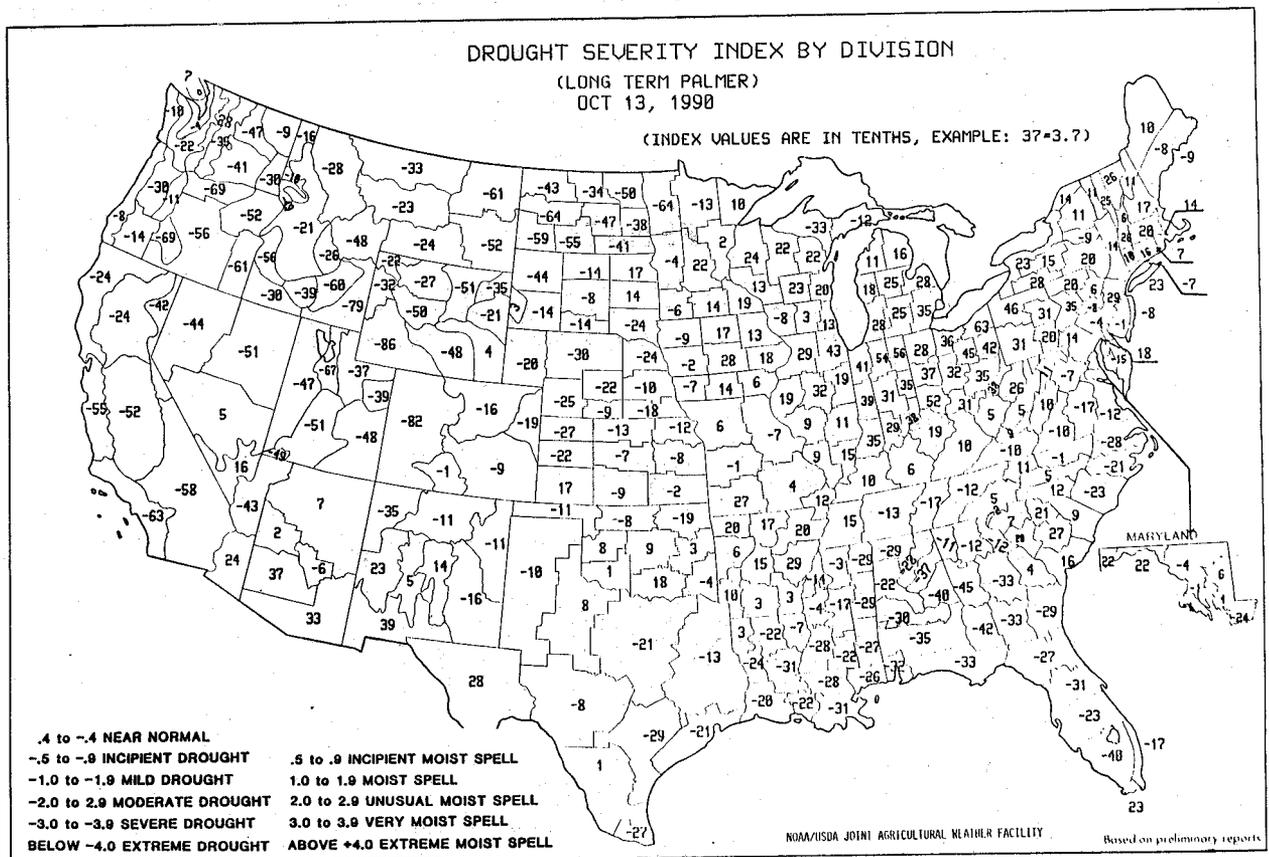
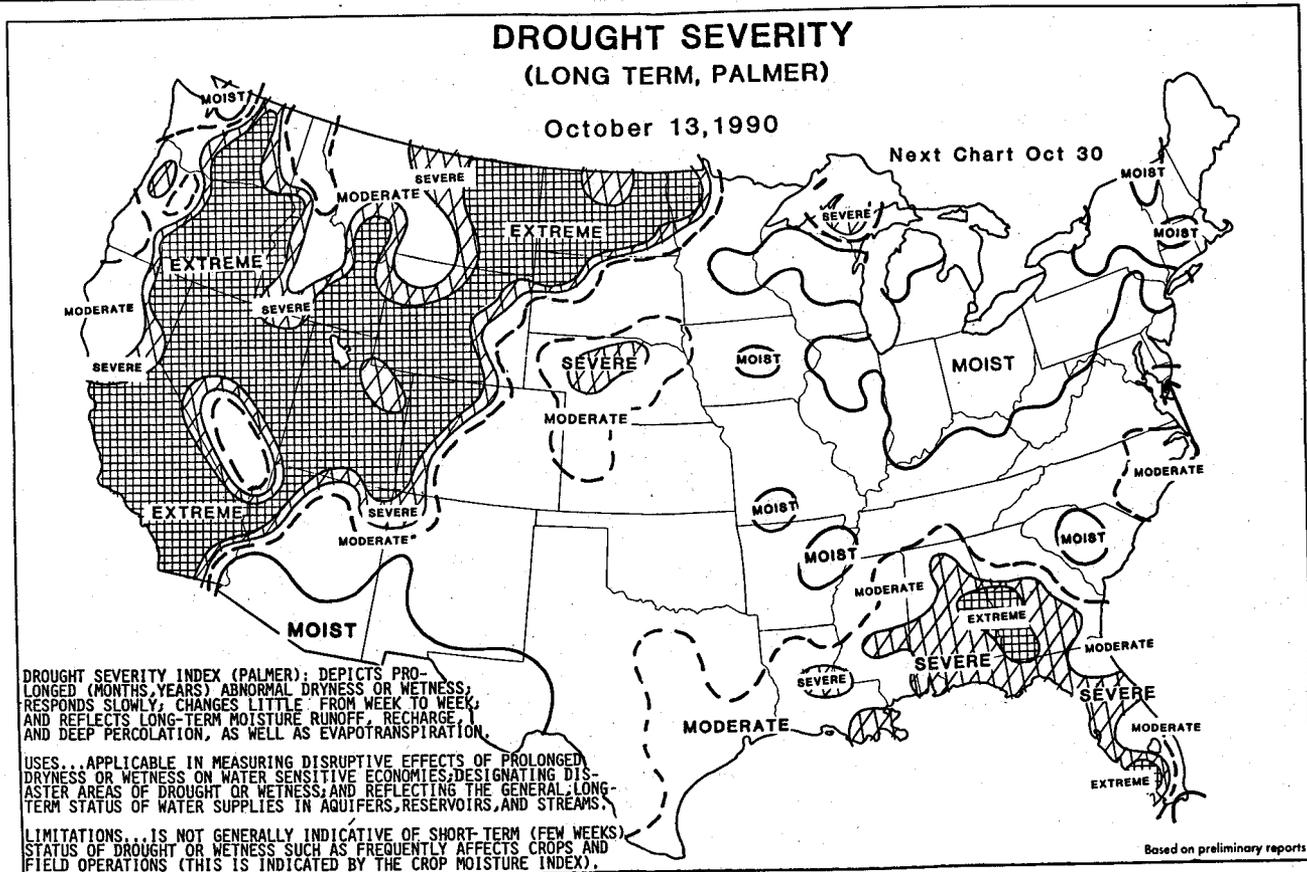
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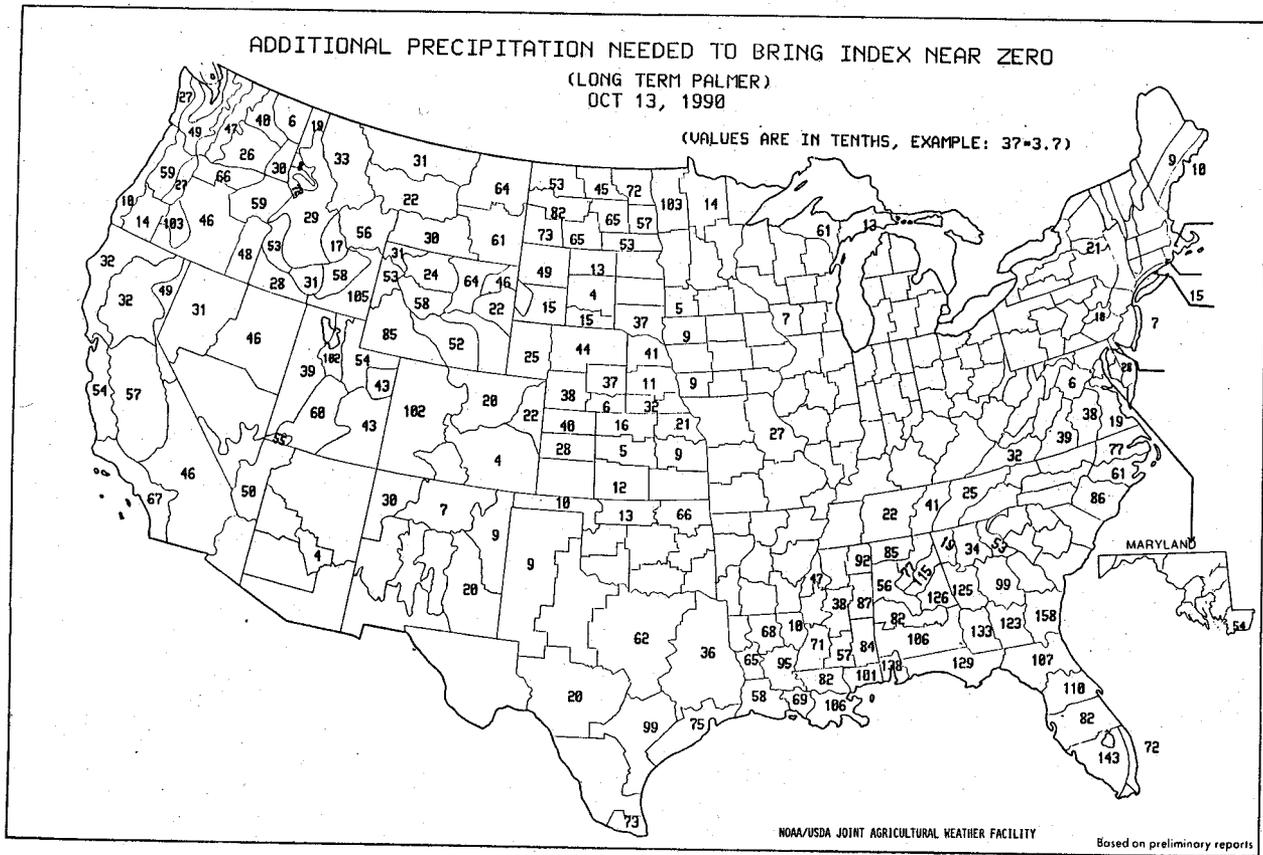
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ERRATA

The figure below is the correct figure 1 for the "September Weather in Historical Perspective" story that appeared in last week's bulletin (No. 40) on page 8.

Figure 1

U.S. NATIONAL TEMPERATURE
SEPTEMBER, 1895-1990

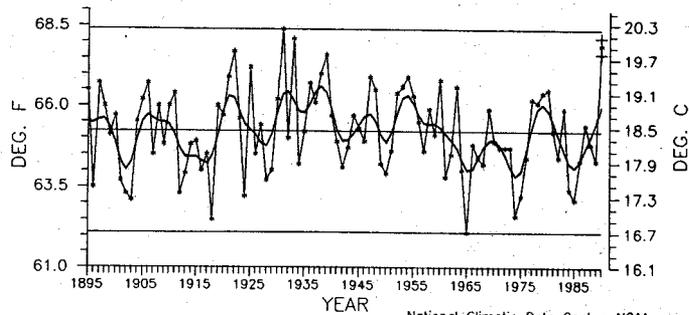


FIG. 1

National Climatic Data Center, NOAA

STRAIGHT HORIZONTAL LINES ARE:
MAXIMUM VALUE (TOP),
LONG-TERM AVERAGE (MIDDLE),
MINIMUM VALUE (BOTTOM)

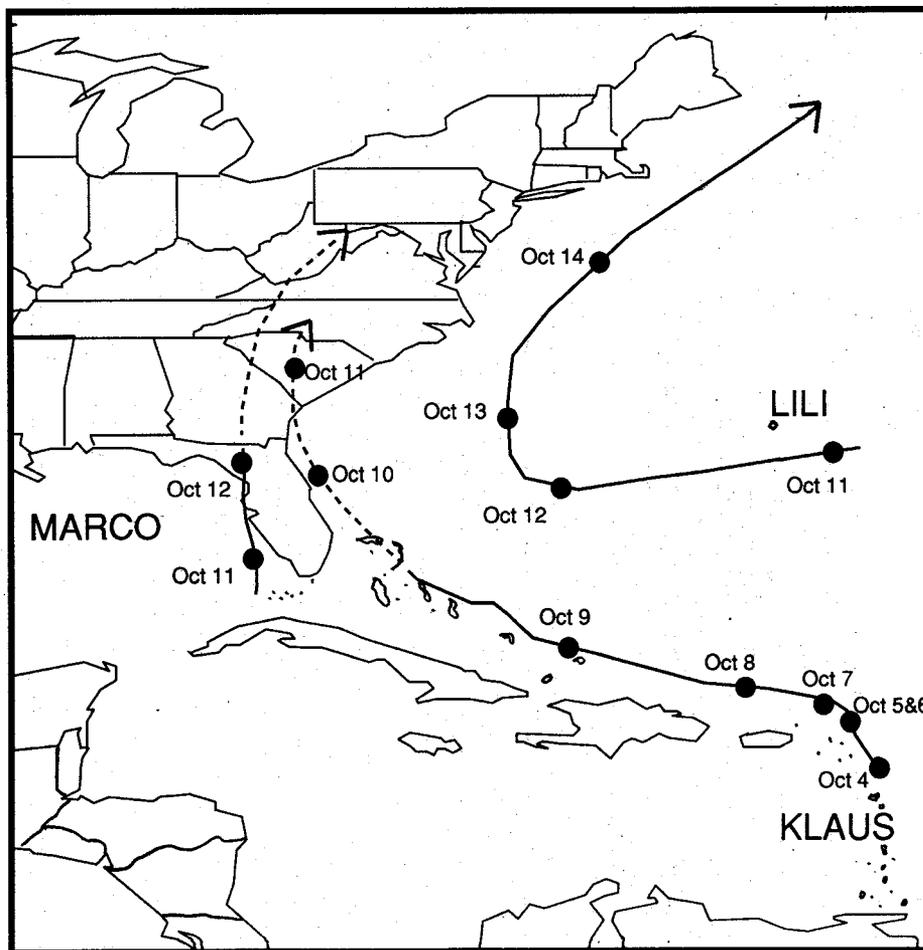
Tropical Systems Drench Southeast and Threaten East Coast

Two tropical systems brought drought-breaking rains to the southeastern United States last week, while another threatened but missed the Mid-Atlantic States. On October 3, Tropical Storm Klaus developed near the Lesser Antilles and produced heavy rains in Antigua and Anguilla. The storm moved slowly northwestward on October 5-9 but weakened into a tropical depression (sustained winds < 34 mph) before reaching the Bahamas. The remnants of Klaus then moved inland on October 10 and combined with a stalled frontal system, producing heavy rains in eastern Georgia and the Carolinas.

While the remnants of Klaus were drenching the Southeast, Tropical Storm Marco formed north of western Cuba on October 11. Marco remained at tropical storm strength until it weakened at landfall. The storm brought 2-4 inches of rain with locally heavier amounts and wind gusts up to 80 mph along the western gulf coast of Florida. As the remnants of Marco moved northward, it produced

heavy rains again in eastern Georgia and South and North Carolina, merging with the same stalled frontal system as the remnants of Klaus. The two tropical remnants combined with the frontal system, bringing moderate to heavy rains all along the Appalachian Mountains from North Carolina to Pennsylvania. (The dashed lines on the inland tracks of Klaus and Marco indicate the estimated paths of the subsequent remnants of the storms.)

Tropical Storm Lili formed on October 8 in the western Atlantic and moved west-southwestward on October 8-11. Lili gave Bermuda heavy rains and gusty winds but passed well south of the island. As it passed Bermuda, Lili threatened to move closer to land but turned sharply north on October 12 and moved northeast away from the East Coast on October 14. According to records of the National Hurricane Center, the 1990 Atlantic hurricane season has been the seventh most active season on record with 13 named storms and the most active since 1971, when there were the same number of storms.



CIRCLES DENOTE ESTIMATED POSITIONS OF STORMS AT 00Z G.M.T.

National Weather Data for Selected Cities

Weather Data for the Week Ending October 13, 1990

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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	
																		.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	80	59	89	48	69	4	.4	-1.6	.4	2.9	.53	35.3	80	86	53	0	0	0	0
MOBILE	84	59	90	51	71	1	.0	-1.6	.0	2.7	.35	47.9	89	91	44	2	0	0	0
MONTGOMERY	87	61	95	53	74	6	.1	-1.5	.1	1.3	.22	46.8	117	82	41	3	0	0	0
AK ANCHORAGE	44	32	48	24	38	1	.4	-1.1	.1	7.1	219	15.1	127	94	53	0	3	1	0
BARROW	30	21	34	8	26	8	.1	-1.1	.0	.7	.88	4.1	107	97	79	0	7	2	0
FAIRBANKS	40	27	47	14	34	4	.1	-1.1	.1	1.9	129	13.9	162	90	56	0	6	2	0
JUNEAU	47	41	51	37	44	1	2.7	1.9	1.6	13.9	143	45.6	118	97	78	0	0	6	5
KODIAK	51	38	54	30	45	3	3.5	1.9	2.5	12.6	137	56.9	125	89	51	0	1	1	2
NOME	39	30	45	17	35	4	.7	1.4	.3	3.6	122	18.9	153	93	65	0	4	5	0
AZ PHOENIX	91	65	95	61	78	2	.0	-1.1	.0	1.2	129	7.1	136	34	10	6	0	0	0
PRESCOTT	74	37	78	30	56	-2	.4	-1.3	.4	2.4	118	14.8	98	55	14	0	2	0	0
TUCSON	89	57	91	53	73	1	.0	-1.2	.0	2.2	128	13.1	145	51	13	4	0	0	0
YUMA	94	66	100	60	80	1	.0	-1.1	.0	1.0	274	2.2	125	34	12	6	0	0	0
AR FORT SMITH	68	47	79	37	57	-8	2.6	1.9	1.5	7.9	176	52.1	166	98	56	0	0	3	2
LITTLE ROCK	70	51	80	40	60	-5	5.7	5.1	3.2	10.4	191	51.6	133	87	55	0	0	3	3
CA BAKERSFIELD	86	52	88	48	69	-1	.0	-1.1	.0	.1	24	2.7	66	52	19	0	0	0	0
FUREKA	59	44	62	42	52	-3	.1	-1.4	.1	.3	17	21.7	89	90	65	0	0	2	0
FRESNO	85	49	88	48	67	0	.0	-1.1	.0	.2	56	7.5	104	64	19	0	0	0	0
LOS ANGELES	81	61	94	58	71	4	.0	.0	.0	.0	0	5.1	60	82	36	1	0	0	0
REDDING	84	49	86	42	67	-2	.0	-1.3	.0	1.2	73	22.5	84	57	13	0	0	0	0
SACRAMENTO	86	49	88	45	68	2	.0	-1.1	.0	.0	0	11.5	103	61	12	0	0	0	0
SAN DIEGO	80	60	90	56	70	3	.0	-1.1	.0	.0	0	5.9	88	75	36	1	0	0	0
SAN FRANCISCO	79	53	85	50	66	4	.0	-1.2	.0	.2	42	8.1	63	84	27	0	0	0	0
CO DENVER	57	33	75	27	45	-9	.3	1.1	.2	2.0	120	14.6	111	87	36	0	4	2	0
GRAND JUNCTION	63	36	72	31	49	-8	.1	-1.1	.1	1.6	147	6.2	101	69	25	0	1	1	0
PUEBLO	65	32	84	27	49	-8	.1	-1.1	.1	2.0	177	14.4	150	87	28	0	5	1	0
CT BRIDGEPORT	76	64	78	59	70	13	2.9	2.1	2.2	5.2	113	36.1	113	96	74	0	0	0	5
HARTFORD	79	60	85	54	70	15	3.6	2.8	2.2	5.9	110	40.7	120	99	70	0	0	0	5
DC WASHINGTON	83	66	86	57	75	13	.2	-1.5	.1	1.2	27	31.0	99	96	60	0	0	0	4
FL APALACHICOLA	84	70	88	65	77	5	.4	-1.9	.4	5.2	50	32.9	70	95	63	0	0	0	0
DAYTONA BEACH	88	75	90	70	81	7	2.8	1.7	1.4	5.6	63	33.1	80	93	62	1	0	0	5
JACKSONVILLE	87	70	88	65	78	6	3.0	2.0	1.6	5.6	67	26.4	58	97	61	0	0	0	5
KEY WEST	87	76	88	74	81	1	3.7	2.5	3.2	9.7	114	31.5	100	92	65	0	0	0	3
MIAMI	88	77	93	75	82	4	2.1	.3	1.4	6.1	54	46.8	95	93	63	3	0	0	3
ORLANDO	89	73	89	71	81	5	1.2	.4	.5	3.9	48	29.1	66	96	56	0	0	0	6
TALLAHASSEE	87	68	92	64	78	7	.4	-1.7	.4	6.1	76	39.5	72	97	55	3	0	0	1
TAMPA	89	72	92	70	80	4	1.8	1.2	1.2	4.5	61	33.1	80	97	57	3	0	0	3
WEST PALM BEACH	89	77	91	74	83	4	1.7	-1.2	.8	13.5	104	51.0	102	91	60	2	0	0	5
GA ATLANTA	78	61	87	53	70	5	2.5	2.0	1.6	6.3	149	50.4	128	96	63	0	0	0	3
AUGUSTA	84	64	91	59	74	8	12.2	11.8	5.0	13.5	303	33.7	92	99	63	3	0	0	3
MACON	83	64	92	62	74	6	1.2	.7	.8	3.1	73	26.0	70	97	60	3	0	0	3
SAVANNAH	85	70	88	68	77	8	10.2	9.6	5.7	12.8	201	37.6	85	97	61	0	0	0	5
HI HILO	84	69	88	66	76	1	1.7	-1.3	.9	23.2	228	119.2	127	74	65	0	0	0	4
KAHULUI	88	75	89	74	82	2	.4	-1.4	.4	1.0	82	11.4	74	74	46	0	0	0	0
KANULUI	87	69	90	65	78	0	.1	-1.1	.0	.6	112	16.3	129	87	52	1	0	0	2
LIHUE	84	75	85	73	80	2	.1	-1.8	.1	2.1	55	23.3	78	80	60	0	0	0	1
ID BOISE	62	34	69	22	48	-7	.4	-1.1	.4	.6	67	10.1	120	59	21	0	3	0	0
LEHISTON	64	42	68	33	53	-1	.4	-1.2	.4	.1	7	8.5	87	51	21	0	0	0	1
POCATELLO	59	31	69	21	45	-5	.4	-1.2	.4	.4	38	7.9	95	59	19	0	5	0	0
IL CHICAGO	57	40	64	32	48	-8	3.0	2.5	1.2	4.5	88	34.5	120	97	65	0	2	4	4
MOLINE	58	37	69	28	48	-8	.9	-1.2	.4	2.6	51	43.6	138	96	59	0	2	3	0
PEORIA	57	39	67	30	48	-9	2.0	1.4	.7	3.5	73	43.8	148	100	73	0	2	4	3
QUINCY	59	40	69	33	49	-9	1.7	.9	1.1	5.4	95	34.6	108	97	66	0	0	4	1
ROCKFORD	56	37	68	28	47	-8	1.1	.5	.6	3.1	61	37.5	122	93	62	0	2	4	1
SPRINGFIELD	59	40	68	32	49	-9	3.1	2.5	1.3	6.2	141	43.5	152	100	70	0	1	4	2
IN EVANSVILLE	67	47	79	36	57	-3	2.5	2.0	1.9	6.5	177	41.3	124	98	62	0	0	0	4
FORT WAYNE	59	43	65	34	51	-4	3.2	2.6	1.1	5.9	164	42.7	153	96	67	0	0	0	4
INDIANAPOLIS	63	45	69	35	54	-3	2.1	1.5	.8	6.6	177	38.9	124	99	65	0	0	0	3
SOUTH BEND	57	40	67	32	48	-7	3.5	2.7	1.7	9.7	212	42.5	140	97	65	0	1	4	3
IA DES MOINES	58	38	67	35	48	-9	.3	-1.2	.3	2.8	68	38.8	144	89	46	0	0	0	2
SIOUX CITY	57	35	64	26	46	-9	.3	-1.1	.3	1.9	55	22.5	99	92	40	0	2	2	0
WATERLOO	56	34	65	28	45	-8	.1	-1.5	.1	2.3	50	38.3	133	91	47	0	4	1	0
KS CONCORDIA	61	40	76	32	51	-9	.2	-1.3	.2	2.1	54	23.6	97	86	41	0	1	1	0
DODGE CITY	64	38	77	32	51	-10	.1	-1.2	.1	1.6	67	19.9	108	83	31	0	1	1	0
GOODLAND	60	34	78	28	47	-9	.1	-1.1	.1	1.9	100	17.3	118	86	34	0	3	1	0
TOPEKA	62	41	75	34	51	-9	.4	-1.7	.4	3.2	68	30.3	105	92	54	0	0	0	1
WICHITA	63	41	74	31	52	-10	.2	-1.4	.2	2.6	57	16.6	67	87	48	0	1	2	0
KY BOWLING GREEN	71	51	85	45	61	1	1.0	.3	.6	8.1	187	36.8	94	97	63	0	0	0	3
LEXINGTON	67	53	80	44	60	0	1.1	.6	.6	4.6	109	37.3	100	96	74	0	0	0	3
LOUISVILLE	70	54	82	43	62	2	1.1	.5	1.0	5.2	117	45.0	129	93	63	0	0	0	2
LA ALEXANDRIA	79	53	92	41	66	-4	.1	-1.5	.1	3.9	94	45.4	110	95	42	2	0	0	1
BATON ROUGE	80	55	92	42	68	-3	.4	-1.6	.4	5.6	101	56.0	123	94	45	3	0	0	0
LAKE CHARLES	79	55	90	45	67	-4	.4	-1.8	.4	9.8	133	44.8	105	95	48	1	0	0	0
NEW ORLEANS	81	59	92	50	70	-1	.1	-1.5	.1	4.9	68	46.1	94	95	52	3	0	0	0

Based on 1951-80 normals

Weather Data for the Week Ending October 13, 1990

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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1		PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F
													.01 INCH OR MORE						.50 INCH OR MORE
SHREVEPORT	77	52	82	41	65	-4	1.3	-.7	1.3	4.5	101	50.1	145	96	47	2	0	2	1
ME CARIBOU	53	45	70	40	49	4	3.0	2.3	1.3	7.4	155	31.6	112	98	86	0	0	6	2
PORTLAND	64	53	83	49	59	8	2.4	1.6	1.8	5.8	121	32.5	102	96	80	0	0	5	1
MD BALTIMORE	83	64	86	52	73	14	.3	-.4	-.1	1.8	37	33.1	99	96	57	0	0	3	0
BALTIMORE	83	63	85	52	73	14	.2	-.7	-.1	3.0	54	30.9	84	99	55	0	0	4	0
MA BOSTON	72	58	85	53	65	9	.9	.2	.8	3.0	64	35.9	109	99	80	0	0	2	1
CHATHAM	70	60	75	58	65	9	.2	-.6	.2	2.5	47	34.0	97	100	86	0	0	1	0
MI ALPENA	52	34	58	29	43	-7	1.9	1.5	1.3	3.9	97	25.7	109	98	60	0	0	4	1
DETROIT	59	45	69	37	52	-2	2.8	2.3	1.0	9.2	296	34.6	140	96	67	0	0	5	3
FLINT	57	40	67	32	49	-4	2.5	2.0	1.0	6.3	197	25.5	109	96	63	0	1	4	2
GRAND RAPIDS	55	38	66	31	47	-7	2.8	2.2	1.5	7.9	181	31.1	117	96	66	0	1	4	3
Houghton Lake	51	35	59	27	43	-7	1.4	.9	1.0	4.5	120	25.1	111	96	61	0	1	5	1
LANSING	57	39	66	31	48	-5	3.4	3.0	1.4	8.9	234	28.7	120	95	63	0	2	4	3
MARQUETTE	47	27	56	25	37	-10	.9	-.1	-.7	6.0	112	26.0	87	95	61	0	2	3	1
MUSKEGON	54	36	64	28	45	-4	2.5	1.9	.9	6.8	167	28.0	115	99	65	0	2	4	3
SAULT ST. MARIE	52	34	60	32	43	-4	.5	-.2	-.4	5.6	108	26.6	103	92	47	0	1	2	0
MN ALEXANDRIA	53	34	61	28	43	-6	T	-.5	T	2.0	65	19.3	89	82	37	0	3	0	0
DULUTH	52	28	58	21	40	-7	.3	-.3	-.2	7.7	182	30.1	119	92	37	0	6	3	0
INT'L FALLS	52	27	56	21	39	-6	-.1	-.4	-.1	2.1	52	17.8	85	90	34	0	6	1	0
MINNEAPOLIS	56	36	63	27	46	-6	-.2	-.2	-.1	2.6	78	30.9	134	87	39	0	1	3	0
ROCHESTER	54	32	63	25	43	-9	-.1	-.5	-.1	2.1	47	40.9	165	91	46	0	5	2	0
MS GREENWOOD	75	51	87	40	63	-4	1.3	.6	-.7	6.7	152	41.4	100	96	56	0	0	3	2
JACKSON	78	53	93	43	66	-1	T	-.5	T	5.7	126	43.9	107	95	48	3	0	1	0
MERIDIAN	82	55	94	47	68	2	.0	-.6	.0	2.2	47	53.5	125	96	45	3	0	0	0
MO CAPE GIRARDEAU	65	45	76	34	55	5	2.2	1.7	1.3	6.1	128	41.2	115	99	60	0	0	3	2
COLUMBIA	60	40	71	32	50	-10	1.7	.9	.8	3.4	62	47.0	153	94	65	0	1	4	1
KANSAS CITY	60	42	72	32	51	-11	.3	-.5	-.2	3.7	62	36.4	117	88	55	0	1	2	0
SAINT LOUIS	61	44	71	37	53	-8	3.5	3.0	1.7	5.3	143	34.8	125	95	61	0	0	4	3
SPRINGFIELD	62	42	71	35	52	-9	2.6	1.8	1.2	10.7	188	54.6	169	98	63	0	0	3	2
MT BILLINGS	56	33	64	28	45	-7	-.1	-.2	-.1	.8	43	10.1	80	81	30	0	4	1	0
GLASGOW	56	27	66	20	42	-8	T	T	T	.2	15	5.8	58	80	33	0	6	2	0
GREAT FALLS	54	29	65	22	42	-9	T	-.2	T	.2	11	12.6	96	80	28	0	5	1	0
HAVRE	56	30	67	23	43	-6	T	-.2	T	.1	5	5.5	53	71	29	0	5	0	0
HELENA	56	29	67	19	43	-5	T	-.1	T	.2	15	7.5	76	74	28	0	4	2	0
KALISPELL	54	30	64	20	42	-3	-.2	-.1	-.1	.3	21	16.1	131	88	36	0	4	3	0
MILES CITY	58	32	71	24	45	-6	T	-.2	T	.3	19	7.6	61	78	32	0	5	3	0
MISSOULA	55	30	65	20	43	-4	-.1	-.1	-.1	.4	28	11.0	105	82	34	0	3	1	0
NE GRAND ISLAND	59	34	72	28	47	-9	-.1	-.2	-.1	1.3	41	24.7	117	88	35	0	3	1	0
LINCOLN	61	37	74	28	49	-7	-.1	-.3	-.1	1.9	49	24.3	99	87	40	0	1	1	0
NORFOLK	56	34	64	24	45	-10	-.5	-.1	-.4	2.1	77	24.7	114	91	38	0	3	2	0
NORTH PLATTE	57	29	72	24	43	-10	.3	.0	.3	1.5	71	14.6	82	95	42	0	5	1	0
OMAHA	59	39	71	31	49	-9	-.2	-.3	-.2	2.6	58	21.9	81	84	48	0	1	1	0
SCOTTSBLUFF	55	28	71	23	42	-11	-.6	-.4	-.6	1.6	114	15.7	119	96	40	0	7	2	1
VALNTINE	54	27	70	20	41	-12	.3	.0	.2	.9	52	15.9	100	93	42	0	7	3	0
NV RLY	64	24	71	20	44	-4	.4	.3	.4	1.1	114	7.8	108	76	14	0	7	1	0
LAS VEGAS	82	55	88	49	68	-2	.0	-.1	.0	.2	46	3.5	111	27	12	0	0	0	0
RENO	72	33	80	28	52	0	.0	-.1	.0	.3	94	4.6	89	64	15	0	5	0	0
WHEATBECCA	67	23	75	16	45	-6	.0	-.1	.0	.2	41	5.6	97	52	12	0	6	0	0
NH CONCORD	69	54	86	49	61	11	1.9	1.2	1.5	4.7	107	31.4	113	99	77	0	0	4	1
NJ ATLANTIC CITY	81	64	83	59	73	14	-.2	-.4	-.2	2.5	62	29.2	90	98	64	0	0	2	0
NM ALBUQUERQUE	72	43	79	36	58	-3	.0	-.2	.0	1.0	87	8.7	133	57	18	0	0	0	0
CLOVIS	71	40	84	35	55	-6	T	-.4	T	4.4	160	11.6	77	86	29	0	0	1	0
ROSWELL	78	45	87	41	62	-1	.0	-.3	.0	1.8	79	6.7	72	73	23	0	0	0	0
NY ALBANY	72	55	83	46	63	11	.6	-.1	.3	2.7	61	35.2	126	93	69	0	0	3	0
BINGHAMTON	71	52	76	47	62	11	2.7	2.0	1.5	6.1	132	33.7	116	96	68	0	0	4	2
BUFFALO	61	50	77	46	55	1	2.1	1.5	.9	6.5	143	37.8	132	96	75	0	0	6	2
NEW YORK	80	68	84	62	74	14	2.3	1.6	.7	4.3	89	40.8	123	95	61	0	0	5	3
ROCHESTER	63	51	80	47	57	3	2.4	1.9	.8	6.4	171	32.4	132	97	78	0	0	6	3
SYRACUSE	67	51	82	46	59	5	2.9	2.3	1.2	7.0	153	38.4	126	98	79	0	0	6	2
NC ASHEVILLE	74	56	80	43	65	7	4.4	3.7	2.8	6.1	119	45.7	128	100	69	0	0	5	3
CHARLOTTE	77	64	85	58	70	7	7.5	6.8	4.3	9.5	200	36.7	104	97	71	0	0	4	3
GREENSBORO	78	61	85	53	70	9	7.3	6.5	4.3	8.8	175	32.5	94	97	65	0	0	4	3
RATONAS	86	71	87	63	78	11	-.2	-1.0	-.1	1.3	16	35.4	81	87	57	0	0	2	0
NEW HESN	87	67	89	63	77	11	-.2	-.6	.2	2.4	33	40.8	91	97	53	0	0	2	0
RALIGH	84	64	88	60	74	12	1.7	1.1	1.3	2.3	51	29.3	86	100	58	0	0	4	1
WILMINGTON	85	68	87	64	77	10	1.8	1.1	1.8	3.5	49	43.6	97	97	55	0	0	1	1
ND BISMARCK	58	28	71	15	42	-7	T	-.2	T	1.3	73	12.0	87	83	25	0	5	2	0
FARGO	56	30	65	24	43	-6	-.1	-.3	.1	1.8	73	15.0	87	75	27	0	5	1	0
GRAND FORKS	55	28	62	21	42	-6	-.1	-.3	.1	1.9	72	15.1	93	71	28	0	5	0	0
WILLISTON	58	28	69	16	43	-6	-.1	-.1	.1	.4	22	8.8	72	81	28	0	6	1	0
OH AKRON-CANTON	65	51	77	42	58	3	4.2	3.1	2.0	14.6	375	55.3	189	98	77	0	0	6	3
CINCINNATI	66	52	79	42	59	1	1.7	1.2	1.1	7.5	191	45.7	141	96	71	0	0	4	1
CLEVELAND	63	49	77	42	56	0	2.2	1.6	1.0	10.5	266	41.2	146	99	78	0	0	6	2
COLUMBUS	67	52	78	42	59	3	2.2	1.8	1.2	8.9	252	42.8	141	95	70	0	0	5	2

Based on 1951-80 normals

Weather Data for the Week Ending October 13, 1990

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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE		.50 INCH OR MORE	
																		OR MORE	OR MORE		
DAYTON	64	48	74	40	56		2.4	1.9	1.4	6.8	213	45.5	161	99	74	0	0	4	2		
TOLEDO	59	44	69	36	51		1.6	1.1	1.8	3.8	115	29.9	118	99	70	0	0	5	2		
YOUNGSTOWN	66	52	81	37	59		2.4	1.8	1.0	8.6	205	37.2	124	98	76	0	0	4	2		
OK OKLAHOMA CITY	66	45	77	37	55		.4	-1.3	.2	8.4	181	37.4	140	93	50	0	0	2	0		
TULSA	66	46	79	40	56		.4	-1.2	.6	6.2	106	33.4	103	92	53	0	0	3	1		
OR ASTORIA	60	41	63	35	50		1.0	-1.3	.3	3.3	61	50.4	115	98	82	0	0	4	0		
BURNS	59	22	71	14	41		.0	-1.2	.0	.4	5	3.9	56	62	20	0	0	0	0		
MEDFORD	73	35	82	29	54		.0	-1.2	.0	.4	5	3.9	56	62	20	0	0	0	0		
PORTLAND	62	40	70	31	51		.4	-1.2	.4	.4	10	9.6	79	84	23	0	0	0	0		
PORTLAND	64	43	67	37	54		.4	-1.2	.4	.4	3	7.0	84	67	28	0	0	0	0		
SALEM	63	38	68	37	54		.1	-1.5	.1	1.1	41	22.9	97	97	48	0	0	2	0		
PA ALLENTOWN	79	62	82	47	70		.2	-1.5	.1	1.0	38	23.1	92	97	44	0	0	3	0		
ERIE	65	51	82	46	70		.7	0.0	.4	2.8	53	32.8	94	99	64	0	0	6	0		
HARRISBURG	80	61	84	47	71		1.9	1.1	.9	10.5	192	40.9	133	99	73	0	0	0	1		
PHILADELPHIA	84	65	85	52	71		1.8	1.2	1.0	3.6	76	32.4	104	98	60	0	0	3	2		
PITTSBURGH	70	56	80	49	73		.3	-1.3	.2	2.2	48	29.6	90	100	61	0	0	0	0		
SCRANTON	77	59	80	52	68		1.3	.7	.8	8.0	211	40.2	134	97	71	0	0	4	1		
RI PROVIDENCE	78	60	83	56	68		1.7	1.1	1.0	5.1	115	36.1	131	96	57	0	0	4	1		
SC CHARLESTON	84	70	91	69	77		1.3	.5	.7	3.8	75	33.4	97	99	72	0	0	3	1		
COLUMBIA	82	64	91	57	73		6.4	5.7	4.2	10.6	106	36.6	82	100	63	1	0	0	2		
FLORANCE	84	67	92	65	76		6.9	6.3	3.9	9.7	179	35.2	84	99	65	3	0	3	3		
GREENVILLE	77	61	85	52	69		8.1	7.5	5.3	9.2	176	27.1	72	98	59	3	0	4	2		
SD AMBUSH	56	30	61	23	43		5.6	4.8	4.4	7.9	128	40.6	97	99	67	0	0	3	2		
SURON	55	30	62	26	43		.1	-1.1	.1	3.2	161	20.1	125	86	37	0	0	4	1		
RAPID CITY	55	28	75	25	42		.5	-1.3	.2	1.3	65	22.0	133	88	36	0	0	5	2		
SIOUX FALLS	55	32	60	24	44		.5	-1.3	.2	2.9	212	15.6	106	93	37	0	0	6	4		
TN CHATTANOOGA	76	58	84	52	67		1.1	-1.3	.1	1.8	51	17.5	81	92	37	0	0	3	0		
KNOXVILLE	75	57	83	51	66		1.2	.5	1.0	5.5	98	51.8	124	96	65	0	0	3	4		
MEMPHIS	70	51	82	39	60		.9	.3	.6	4.6	113	42.7	115	98	61	0	0	5	1		
NASHVILLE	72	54	85	46	63		.2	.0	.4	7.4	162	43.6	106	96	59	0	0	0	2		
TX ABILENE	72	48	84	36	60		1.2	-1.3	.2	4.2	87	29.7	77	91	58	0	0	2	0		
AMARILLO	66	38	80	32	52		1.2	.6	1.0	6.2	151	28.0	141	88	46	0	0	0	3		
AUSTIN	81	56	94	45	68		2.0	1.2	2.0	3.2	136	16.8	98	81	36	0	1	1	0		
BEAUMONT	81	55	93	44	68		.7	1.2	2.0	3.7	73	22.5	89	89	37	2	0	1	1		
BROWNSVILLE	84	61	94	49	73		.7	1.2	.7	6.6	94	54.1	123	94	45	2	0	1	1		
COMPTON CHRISTI	86	58	95	45	71		.5	1.2	.5	4.0	57	15.7	75	87	41	3	0	1	0		
DEL RIO	79	55	90	42	67		.5	-1.2	.5	3.2	39	18.5	68	90	39	2	0	1	1		
EL PASO	79	48	87	40	64		.9	-1.3	.9	7.7	202	24.2	163	72	36	1	0	2	1		
FORT WORTH	75	49	84	41	62		2.5	-1.2	.0	4.1	230	11.2	170	81	21	0	0	0	0		
GALVESTON	77	64	88	52	71		.3	-1.4	.3	3.7	77	39.8	155	94	44	1	0	0	3		
HOUSTON	80	55	93	44	68		.3	-1.4	.3	8.9	120	33.7	104	75	50	0	0	1	0		
LUBBOCK	71	43	84	37	68		.9	-1.0	.9	2.8	40	33.0	90	90	42	2	0	1	1		
MIDLAND	77	47	88	38	57		.3	-1.1	.3	3.1	108	14.1	91	85	34	0	0	1	0		
SAN ANGELO	75	47	88	36	62		.7	-1.4	.7	4.3	157	12.7	108	94	33	0	0	0	0		
SAN ANTONIO	82	55	93	42	68		.4	-1.1	.4	7.6	189	25.1	163	94	42	0	0	2	0		
VICTORIA	82	57	93	46	69		2.8	2.1	2.8	6.5	129	34.1	144	92	37	2	0	1	1		
WACO	78	51	87	40	65		1.1	.3	1.1	4.7	59	32.2	104	93	42	2	0	1	1		
WICHITA FALLS	71	47	82	38	59		2.4	1.7	2.4	9.0	199	31.5	126	94	42	2	0	2	1		
UT CEDAR CITY	64	29	75	21	47		.9	1.3	.9	3.0	64	34.2	132	82	45	0	0	2	1		
SALT LAKE CITY	62	37	72	33	50		.0	-1.3	.0	1.1	88	7.7	93	59	20	0	5	0	0		
VT BURLINGTON	62	49	80	42	56		2.1	1.5	.8	4.7	108	30.8	116	97	78	0	0	6	2		
VA NORFOLK	86	68	88	65	77		13	.7	-1.1	1.9	33	38.3	103	95	52	0	0	3	0		
RICHMOND	77	59	85	48	68		14	.4	-1.4	3.5	49	34.3	98	97	52	1	0	3	0		
ROANOKE	77	59	85	48	68		9	5.5	4.7	7.4	162	34.5	110	100	67	0	0	5	3		
WA QUILLAYUTE	56	40	61	37	48		3.2	1.0	1.4	7.7	76	69.2	100	100	72	0	0	4	3		
SEATTLE-TACOMA	59	43	63	38	51		.4	-1.3	.2	1.5	48	26.2	108	93	55	0	0	3	0		
SPokane	57	33	66	24	45		.4	-1.2	.2	.1	13	13.5	119	73	27	0	4	2	0		
YAKIMA	62	32	64	24	47		.5	-1.2	.2	.1	8	5.5	105	84	30	0	3	0	0		
WV BECKLEY	69	56	84	47	62		.9	2.6	2.0	1.1	5.0	32.0	82	96	70	0	0	5	2		
CHARLESTON	73	57	85	50	65		7	1.4	.8	6.3	154	33.6	97	97	70	0	0	5	1		
HUNTINGTON	71	55	83	47	63		4	.9	.4	7.2	180	39.8	119	98	62	0	0	5	1		
PARKERSBURG	70	55	80	47	63		5	1.6	1.0	1.1	5.8	150	40.2	129	94	70	0	0	5	1	
WI GREEN BAY	52	36	58	31	44		-7	.6	-1.4	6.2	151	31.7	135	94	56	0	2	3	0		
LACROSSE	55	36	64	32	46		-8	.1	-1.1	2.8	62	34.0	129	92	45	0	1	1	1		
MADISON	52	35	60	30	44		-9	1.0	.5	.8	3.1	30.7	118	95	60	0	3	2	1		
MILWAUKEE	55	41	65	33	48		-5	1.3	.8	3.6	94	33.8	132	90	62	0	0	0	1		
KAUSAU	49	32	55	27	41		-9	1.4	.8	1.0	6.4	129	31.3	114	96	51	0	5	4		
WY CASPER	53	28	69	22	41		-9	.4	-2.3	1.0	98	10.2	107	88	35	0	6	4	1		
CHEYENNE	49	28	62	18	38		-12	1.0	.8	.9	2.0	143	18.4	153	83	44	0	5	4		
LANDER	55	32	69	26	43		-6	.2	-1.9	1.9	140	8.5	77	82	34	0	5	2	1		
SHERIDAN	56	28	74	22	42		-7	.3	.0	2.2	86	11.4	89	89	33	0	5	2	0		

Based on 1951-80 normals

National Agricultural Summary

October 8-14, 1990

HIGHLIGHTS: Winter wheat planting was 71 percent (%) complete, 1 percentage point behind the 5-year average. Thirty-two percent of the corn crop was harvested, 13 points behind normal. Soybean harvest was 40% complete, 7 points behind normal. Cotton harvest was 37% complete, 4 points ahead of normal. Sorghum was 45% harvested, 3 points below average.

Tropical storms from Florida to the New England States brought needed moisture but delayed harvest and crop maturity. Many areas had 2 or more inches of rain with some flooding. Dry weather and below-average temperatures in the Great Plains and the West aided crop maturity and allowed harvest and fall crop seeding to progress rapidly. Frost was reported as far south as the Texas High Plains.

SMALL GRAINS: Winter wheat planting was 71% complete, 1 point behind normal. Fifty-one percent of the crop was emerged, same as the average. Planting was over 90% complete in Colorado, Idaho, Montana, Nebraska, South Dakota, and Washington. Emergence was 90% in Nebraska, 2 points behind normal.

CORN: The corn crop was mostly good. Harvest advanced 9 points from last week, but was 13 points behind normal. Ninety-three percent of the crop was mature, 4 points behind normal. In Illinois and Indiana, harvest was 23 and 11% complete, 34 and 29 points behind average, respectively. Harvest advanced 22 points in South Dakota and was 11 points above normal. Harvest was over 90% in Georgia and Texas. Some Ohio corn tested 24% moisture, adding to farmers' concerns about rising energy costs for drying activities. Nebraska corn growers did not push harvest to allow the crop to dry in the field and to save drying expense.

SOYBEANS: Soybeans were mostly good to fair. Soybean harvest advanced 9 points and was 40% complete, 7 points below average. Eighty-five percent of the crop was dropping leaves, 5 points behind normal. Illinois and Indiana harvests were 32 and 20% complete, 40 and 34 points below normal, respectively. In Iowa, Minnesota, Nebraska, and South Dakota, harvest advanced 25 or more points from last week and was over 75% complete. Texas harvest continued with good yields, while the later crop benefited from rains.

COTTON: Cotton was mostly good to fair. Cotton harvest was 37% complete, 4 points ahead of normal. Eighty-five percent of the acres had opening bolls, 5 points ahead of normal. Harvest was over 72% complete in Alabama, Louisiana, and Mississippi. Missouri had 39% harvested, 24 points behind normal. Opened bolls were average or ahead of average in all States except Missouri and New Mexico. Georgia cotton crop had wind and rain damage in south and central areas. Arizona had disappointing yields in the central region.

SORGHUM: Sorghum was mostly good to fair. Ninety-two percent of the crop was mature, 3 points ahead of normal. Harvest was 45% complete, 3 points below average. Harvest in Missouri was 25% complete, 35 points below average. Louisiana and Mississippi had over 90% harvested. Frost in the Texas High Plains damaged some later planted fields.

OTHER FIELD CROPS: Rice harvest was 79% complete, 11 points behind normal. All States had over 80% harvested except Arkansas which had 64% harvested, 27 points behind normal. Wyoming dry beans were 95% combined, 10 points ahead of normal. Washington potato harvest was 71% complete, 1 point above average. Virginia peanuts were in good condition with harvest 57% complete, 12 points above average. Montana dry beans were 89% harvested, 1 point below normal. Potatoes in Minnesota were 94% harvested, 2 points ahead of normal. In Kentucky, most tobacco fields had been cut, burley was 10% stripped with weight and quality mostly good to excellent. Idaho potatoes were 89% harvested, 5 points ahead of normal. Oregon barley was 31% seeded, 4 points behind average. South Dakota sunflower harvest was 66% complete, 26 points ahead of normal.

FRUIT AND NUTS: Pennsylvania apple and grape harvests were 72% complete, 1 and 2 points ahead of last year, respectively. Heavy rain in the New York Finger Lakes region delayed grape harvest. In Florida, rain fell in all citrus areas. Fruit color was good with active movement of early orange, grapefruit, and specialty fruit. Arizona lemon harvest continued west, and apple harvest continued east. In Oregon, weather was favorable for tree fruit harvest. In California, new crop navel orange and kiwi harvests began. Granny Smith and fuji apples were picked, and roysum plums were boxed.

VEGETABLES: Texas Rio Grande Valley pepper and tomato crops were progressing and onion planting had begun. In the Winter Garden area of Texas, rain and wet conditions slowed planting. New York onion and Orange County's lettuce harvests were complete, while cabbage, cauliflower, and broccoli harvests continued. Tropical storms in Florida were mostly welcome with minimal damage to vegetable producing areas. In Arizona, fall melon, pumpkin, and mixed vegetable harvests continued east. California onion, sweetpotato, and garlic harvest continued.

PASTURES AND LIVESTOCK: Pastures and livestock were in generally good to fair condition. Alabama and North Dakota reported pastures in poor condition. Feedlot stocker cattle continued to arrive in the Texas High Plains. Iowa and Kansas stalk fields began to be grazed. Calving increased in Florida. California range conditions were generally poor with water in short supply in most areas.

Crop Progress

FOR WEEK ENDING OCTOBER 14, 1990

RICE
% HARVESTED

	1990	1989	AVG.
AR	64	91	91
CA	80	50	67
LA	98	98	98
MS	82	86	94
TX	100	100	100

5 STATES 79 87 90

THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.

COTTON
% BOLLS OPENING

	1990	1989	AVG.
AL	99	91	97
AZ	100	99	99
AR	96	89	95
CA	100	100	100
GA	95	81	89
LA	100	98	100
MS	100	93	97
MO	91	97	96
NM	90	98	92
NC	98	96	98
OK	80	65	70
SC	96	93	95
TN	98	94	98
TX	69	66	60

14 STATES 85 81 80

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

COTTON
% HARVESTED

	1990	1989	AVG.
AL	78	20	51
AZ	34	24	22
AR	40	24	55
CA	15	20	17
GA	61	17	37
LA	81	52	71
MS	72	16	61
MO	39	56	63
NM	8	10	10
NC	38	15	20
OK	7	1	7
SC	53	18	39
TN	48	36	55
TX	23	19	19

14 STATES 37 22 33

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

WINTER WHEAT
% PLANTED

	1990	1989	AVG.
AR	11	18	18
CA	1	5	8
CO	97	98	98
GA	3	4	11
ID	94	91	83
IL	25	67	58
IN	32	54	54
KS	85	90	85
MI	60	90	60
MO	26	47	42
MT	92	93	80
NE	100	99	99
NC	13	11	14
OH	26	43	53
OK	75	85	65
OR	74	73	55
SD	99	100	99
TX	67	77	73
WA	90	91	87

19 STATES 71 79 72

THESE 19 STATES PRODUCED 91% OF THE 1990 WINTER WHEAT CROP.

SOYBEANS
% DROPPING LEAVES

	1990	1989	AVG.
AL	80	67	66
AR	41	42	52
GA	94	72	81
IL	90	100	100
IN	93	96	99
IA	100	100	100
KS	98	90	90
KY	57	67	77
LA	59	85	73
MI	100	100	98
MN	99	99	99
MS	66	69	77
MO	76	89	91
NE	100	100	100
NC	59	43	38
OH	94	100	100
SC	41	37	38
SD	100	100	100
TN	64	74	81

19 STATES 85 88 90

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

SOYBEANS
% HARVESTED

	1990	1989	AVG.
AL	33	18	19
AR	5	5	16
GA	17	9	12
IL	32	78	72
IN	20	41	54
IA	80	89	64
KS	45	30	35
KY	8	7	19
LA	40	45	36
MI	10	55	25
MN	78	93	65
MS	24	18	24
MO	17	33	34
NE	75	63	57
NC	8	3	4
OH	16	18	46
SC	3	1	3
SD	83	95	57
TN	10	15	17

19 STATES 40 52 47

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

WINTER WHEAT
% EMERGED

	1990	1989	AVG.
AR	2	0	5
CA	0	0	0
CO	85	79	83
GA	2	2	6
ID	52	55	47
IL	10	25	21
IN	23	23	30
KS	65	65	60
MI	45	60	40
MO	14	18	22
MT	63	66	55
NE	90	94	92
NC	8	7	NA
OH	13	13	20
OK	40	45	40
OR	48	33	24
SD	88	92	88
TX	43	51	52
WA	69	67	64

19 STATES 50 53 NA

EXCL. STATES WITH NA 51 53 51

THESE 19 STATES PRODUCED 91% OF THE 1990 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

CORN
% HARVESTED

	1990	1989	AVG.
CO	10	16	19
GA	97	95	96
IL	23	48	57
IN	11	24	40
IA	40	52	47
KS	75	65	65
KY	46	64	65
MI	10	15	15
MN	26	45	40
MO	52	71	66
NE	40	38	37
NC	82	73	76
OH	8	8	26
PA	7	10	17
SD	43	48	32
TX	97	93	93
WI	11	24	27

17 STATES 32 44 45

THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.

CORN
% MATURE

	1990	1989	AVG.
CO	94	88	92
GA	100	100	100
IL	98	100	100
IN	88	92	98
IA	100	100	100
KS	100	99	99
KY	89	95	97
MI	70	95	90
MN	97	99	96
MO	98	100	100
NE	100	100	100
NC	100	100	100
OH	69	57	87
PA	52	58	73
SD	100	100	100
TX	100	100	100
WI	80	98	95

17 STATES 93 96 97

THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.

GRAIN SORGHUM
% MATURE

	1990	1989	AVG.
AR	96	99	NA
CO	77	78	78
IL	64	99	NA
KS	90	60	85
LA	99	100	100
MS	99	94	98
MO	68	93	94
NE	100	99	99
NM	92	NA	NA
OK	75	70	80
SD	100	100	91
TX	97	87	88

12 STATES 92 NA NA
 EXCL. STATES WITH NA 92 79 89

THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

GRAIN SORGHUM
% HARVESTED

	1990	1989	AVG.
AR	77	92	94
CO	30	32	20
IL	9	55	59
KS	30	25	30
LA	93	100	99
MS	92	84	92
MO	25	60	60
NE	40	43	45
NM	25	NA	NA
OK	10	15	20
SD	67	75	42
TX	68	68	68

12 STATES 44 NA NA
 EXCL. STATES WITH NA 45 47 48

THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

Crop Condition
PERCENT

FOR WEEK ENDING OCTOBER 14, 1990

SOYBEANS

STATE	VP	P	F	G	EX
AL	28	38	21	13	0
AR	0	25	50	25	0
GA	42	40	16	2	0
IL	0	1	16	79	4
IN	0	1	29	67	3
IA	0	0	13	72	15
KS	0	14	44	35	7
KY	0	3	50	45	2
LA	4	16	48	32	0
MI	0	2	18	50	30
MN	0	3	40	45	12
MS	20	30	30	17	3
MO	0	3	67	29	1
NE	0	10	53	35	2
NC	1	19	53	26	1
OH	2	7	26	48	17
SC	8	19	55	18	0
SD	2	3	24	62	9
TN	4	20	56	20	0
19 STATE	3	8	33	49	7
PREV WEEK	2	8	33	50	7
PREV YEAR	NA				

CORN

STATE	VP	P	F	G	EX
CO	1	5	15	53	26
GA	14	37	23	21	5
IL	0	1	13	82	4
IN	0	1	26	69	4
IA	0	1	12	74	13
KS	0	2	18	50	30
KY	2	14	42	41	1
MI	0	5	20	45	30
MN	1	4	32	56	7
MO	0	0	44	55	1
NE	1	4	25	61	9
NC	9	31	39	21	0
OH	2	6	26	52	14
PA	1	6	19	48	26
SD	0	6	20	58	16
TX	0	0	21	68	11
WI	0	1	7	78	14
17 STATE	1	3	21	65	10
PREV WEEK	1	3	20	64	12
PREV YEAR	NA				

GRAIN SORGHUM

STATE	VP	P	F	G	EX
AR	2	7	70	21	0
CO	3	6	27	46	18
IL	0	7	29	60	4
KS	0	0	37	45	18
LA	0	13	31	56	0
MS	2	6	55	28	9
MO	0	0	49	51	0
NE	3	8	42	43	4
NM	0	10	20	70	0
OK	0	5	35	60	0
SD	0	6	32	60	2
TX	0	5	37	55	3
12 STATE	1	4	38	49	8
PREV WEEK	1	5	42	46	6
PREV YEAR	NA				

COTTON

STATE	VP	P	F	G	EX
AL	1	9	75	15	0
AZ	0	0	50	50	0
AR	0	4	44	43	9
CA	0	0	10	85	5
GA	8	29	39	19	5
LA	0	0	38	62	0
MS	2	12	53	20	13
MO	0	0	100	0	0
NM	0	8	38	54	0
NC	0	3	31	66	0
OK	0	0	10	75	15
SC	2	46	52	0	0
TN	4	11	71	14	0
TX	0	4	36	58	2
14 STATE	1	5	40	50	4
PREV WEEK	1	4	44	47	4
PREV YEAR	NA				

NA - NOT AVAILABLE VP - VERY POOR
 P - POOR F - FAIR G - GOOD EX - EXCELLENT

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall light most areas; 0.50 to near 1.00 in. isolated areas north, east. Temperatures near normal north, west; 2 to 4° above normal east central, southeast.

Days suitable for fieldwork 6.0. Soil moisture 38% very short, 42% short, 20% adequate. Mostly open weather allowed favorable progress of row crop harvest. Corn 96% harvested, 83% 1989; 90% avg. Sorghum 87% harvested, 79% 1989, 77% avg.; 7% very poor, 19% poor, 53% fair, 21% good. Cotton 99% bolls opened, 91% 1989, 97% avg.; 78% harvested, 20% 1989, 51% avg.; 1% very poor, 9% poor, 75% fair, 15% good. Peanuts 98% dug, 97% 1989, 79% avg.; 94% combined, 85% 1989, 66% avg. Soybeans 93% turning color, 82% 1989, 87% avg.; 80% dropping leaves, 67% 1989, 66% avg.; 67% mature, 52% 1989, 44% avg.; 33% harvested, 18% 1989, 19% avg.; 28% very poor, 38% poor, 21% fair, 13% good. Winter wheat 23% seeded, 30% 1989, 26% avg. Pastures 35% very poor, 32% poor, 25% fair, 8% good. Livestock 21% poor, 57% fair, 22% good. Primary activities: harvesting row crops, sweetpotatoes, fall vegetable crops; destroying cotton stalks; harvesting catfish; providing supplemental feed to livestock; preparing land, seeding winter annuals; routine care of livestock, poultry, catfish.

ARIZONA: Cloudy 7th, showers central mountains, southeast; clear, dry 8th; continued cooler 9th; sunny, mild days, clear, cool nights 9th to 13th. Temperatures 5° below to 2° above normal. Extremes 47°; 99° deserts, 23°; 88° higher elevations; precipitation none to 0.25 in.

Cotton harvest 34%, 24% 1989, 22% avg.; all areas harvesting; defoliation active; disappointing yields reported central; crop rated 50% fair, 50% good. Alfalfa harvest continued; crop good. Corn for grain 50% harvested. Lemon harvest continued; cantaloupe, honeydew harvests began west. Fall melon, green onion harvests continued central. Apple, fall lettuce, pumpkin, mixed vegetables harvested east.

ARKANSAS: First frost of the year mid week after heavy rains, flooding stopped harvest, week ended in dry, warm weather. Extremes 31°; 87°. Rainfall 0.83 to 12.32 in.

Days suitable for fieldwork 3.0. Soil moisture 2% short, 46% adequate 52% surplus. Main activities: Corn, soybean, grain sorghum, rice, cotton harvest; draining rice fields, repairing water damage; planting winter forages; working cattle; shop work. Rice: 64% harvested, 91% 1989, 91% avg.; 95% ripe, 99% 1989, 99% avg.; 50% fair, 50% good. Cotton: 40% harvested, 24% 1989, 55% avg.; 96% open bolls, 89% 1989, 95% avg.; 4% poor, 44% fair, 43% good, 9% excellent. Corn 95% harvested, 98% 1989, 98% avg.; 18% fair, 82% good. Sorghum: 77% harvested, 92% 1989, 94% avg.; 96% mature, 99% 1989; 2% very poor, 7% poor, 70% fair, 21% good. Soybeans 5% harvested, 5% 1989, 16% avg.; 28% mature, 19% 1989, 33% avg.; 41% shedding, 19% 1989, 52% avg.; 25% poor, 50% fair, 25% good. Wheat 11% planted, 18% 1989, 18% avg.; 2% emerged, 0% 1989, 5% avg.; 17% poor, 15% fair, 68% good. Oats 10% planted, 21% 1989, 17% avg. Pecan prospects poor. Pasture 25% poor, 63% fair, 12% good. Livestock good. Rain caused some lodging in rice fields, flooding of cropland across the State.

CALIFORNIA: High pressure, a westerly flow brought sunny, dry weather to most of the State.

Temperatures were mostly at or above normal. Weak systems brushed the northern most end of the State, only brought a few high clouds, minor changes to temperatures, humidity.

Field activities progressed, mostly clear weather. Rice harvest continued, some stubble fields burned. Cotton defoliation, harvest progressed. Shredding, discing full swing. Sugarbeet harvest nearly complete; planting underway for next year. Corn, dry bean, sunflower harvest continued. Alfalfa hay received worm treatments. Small grain field preparation slowed, moisture lacking. Granny Smith, Fuji apples picked. Deglet Noor date harvest started. Avocado harvest gained momentum. Raisin crop virtually all picked, boxed. Several table grape varieties harvested. Wine grape harvest neared completion. Wonderful, Foothill pomegranates harvested continued. Kiwi harvest started. Roysum plums packed. Almond, pistachio harvest nearing completion. Walnut harvest in full swing. Olive harvest continued. Valencia orange harvest winding down. Harvesting of new crop Navel oranges started. Picking of desert lemons, grapefruit continued. Broccoli light supply, generally good quality. Cauliflower moderate supply, variable quality. Celery heavy supply, variable quality. Iceberg head lettuce moderate supply, variable quality, some tip burn. Tomato, sweetcorn harvest continued. Potato harvest underway Hemet Perris, Tulelake Butte Valley areas. Sweetpotato harvest continued. Onion, garlic planting continued Westside. Livestock in good condition, Statewide with supplemental feeding. Range conditions generally poor. Continued movement of cattle from summer ranges to feedlots, winter pastures. Water in short supply most areas. Sheep continue grazing harvested seed alfalfa fields Fresno area.

COLORADO: Cooler weather, accompanied by the seasons first snowfall, freezing temperatures on the eastern plains. Three to 6.00 in. of snow fell across the northern plains while precipitation 0.04 in to 1.52 in. Temperatures generally 6 to 12° below normal.

Days suitable for fieldwork 4.9. Soil moisture 2% very short, 23% short, 72% adequate, 3% surplus. Alfalfa 3rd cutting 84% complete; 4th cutting 41% complete. Dry bean harvest 91% complete. Corn 94% mature, 10% harvested. Corn silage harvest 96% complete. Sorghum 77% mature, 30% harvested. Dry onion harvest 96% complete. Summer potato harvest 90% complete. Fall potato harvest 85% complete. Sugarbeets 12% harvested. Winter wheat 85% emerged, in mostly good to excellent. Pasture, range feed conditions 4% very poor, 7% poor, 34% fair, 44% good, 11% excellent. Livestock mostly good to excellent.

FLORIDA: Wet over Peninsula; dry weather continued, Panhandle. Rainfall 2.00 to 4.00 in. Peninsula, local areas over 6.00 in. as tropical systems moved through State. Rain tapered rapidly west of Big Bend area with dry weather over Panhandle. Temperatures 3 to 6° above normal. Extreme highs reached low 90s most of State. Coolest lows reached mid, upper 40s Panhandle to around 70° along southeast coast.

Soil moisture short Panhandle, much of upper Peninsula; adequate central Peninsula; adequate to surplus southern Peninsula. Tropical storms slowed field activity, otherwise very limited damage.

Pastures 5% poor, 40% fair, 35% good, 20% excellent. Cattle, Panhandle, northern Peninsula continued fair to good; elsewhere, good to excellent. Calving increased. Rain all citrus areas, 2.00 to 3.00 in. most groves, 4.00 to over 6.00 in. Sarasota Bradenton area. Fruit color good. Early orange, grapefruit, specialty fruit movement active. Caretakers cutting cover crops, spraying, pruning. Tropical storms dominated weather over vegetable producing areas. Damage minimal, rainfall mostly welcomed. Land preparation, planting slowed. Fall harvest gaining. Available: Snap beans, sweet corn, cucumbers, eggplant, peppers, radishes, squash, tomatoes. First Palmetto Ruskin tomatoes picked.

GEORGIA: Heavy rains from tropical storms Klaus, Marco eastern half mid, late week. Rainfall 4.00 to 8.00 in. common, local exceeding 10.00 in. Heaviest east central, around 12.00 in. Midville and Augusta areas. Most western State missed rains, totals less 0.50 in. Warm week, 3 to 5° above normal north, 5 to 8° above normal elsewhere. Extremes 39°; 95°.

Days suitable for fieldwork 4.4. Soil moisture 15% very short, 26% short, 39% adequate, 20% surplus. Corn harvest slow. Cotton rapid progress early in period, wind, rain damage south, central. Sorghum 8% very poor, 30% poor, 52% fair, 10% good; 70% harvested for grain, 66% 1989, 69% avg. Peanuts 27% very poor, 41% poor, 32% fair; 94% dug, 95% 1989, 86% avg.; 85% threshed, 87% 1989, 76% avg. Soybean harvest rapid early in period. Wheat 6% very poor, 32% poor, 39% fair, 23% good; 3% planted, 4% 1989, 11% avg.; 2% emerged, 2% 1989, 6% avg. Moisture will aid seeding. Rye 4% very poor, 33% poor, 43% fair, 20% good; 24% planted, 41% 1989, 38% avg.; Seeding active. Other small grains 15% planted, 21% 1989, 20% avg. Apples 7% poor, 4% fair, 89% good; 93% harvested, 69% 1989, 87% avg. Pecans 7% very poor, 43% poor, 50% fair; 7% harvested, 4% 1989, 4% avg. Hay, pastures variable, moisture will boost late hay, pastures. Cattle, hogs fair to good. Main activities: Cleaning up, assessing storm damage east central. Harvesting hay, reseeding pastures, planting fall pastures.

HAWAII: Strengthening trade winds brought beneficial showers. High clouds with light to moderate showers increased as week progressed. Winds gusty up to 30 mph. Temperatures mid 60s to low 90s. Rainfall none to 4.40 in.

Days suitable for farm work 7.0. Papaya production declined. Sugar, pineapple production continuous.

IDAHO: Temperatures 3 to 8° below normal statewide, precipitation north, east below normal statewide.

Days suitable for fieldwork 6.0. Soil moisture 20% very short, 37% short, 43% adequate. Winter wheat 94% planted, 91% 1989, 83% avg.; 52% emerged, 55% 1989, 47% avg. Potatoes 89% harvested, 80% 1989, 84% avg. Sugarbeets 32% harvested, 27% 1989, 33% avg. Alfalfa 3rd cutting 96% harvested, 99% 1989, 97% avg. Onions 90% harvested, 91% 1989, 89% avg. Corn for silage 89% harvested. Corn for grain 7% harvested, 22% 1989, 26% avg. Apples 77% harvested, 71% 1989, 72% avg. Livestock coming off ranges good to excellent. Rangeland, pasture 9% very poor, 25% poor, 36% fair, 31% good, 1% excellent.

ILLINOIS: Temperatures 4 to 10° below normal. Precipitation 1.00 to 2.50 in. Isolated areas 3.00 to 3.50 in.

Days suitable for fieldwork 1.75. Soil moisture 1% short, 42% adequate, 57% surplus. Soybeans turning yellow 97%, 100% 1989, 100% avg. Sorghum

coloring 92%, 100% 1989. Late soybean harvest delays winter wheat seeding. Pasture 19% fair, 63% good, 18% excellent.

INDIANA: Temperatures 3 to 9° below normal most areas, 2 to 6° above normal east central, southeast. Lows upper 30s to low 50s, highs upper 50s to upper 60s. Precipitation 1.00 to 3.75 in.

Days suitable for fieldwork 1.4. Topsoil 12% adequate, 88% surplus. Subsoil 38% adequate, 62% surplus. Corn 26% moisture content, soybeans 14% moisture content. Tobacco 94% harvested, 97% 1989, 99% avg. Apples harvested 75%. Pasture 2% poor, 20% fair, 69% good, 9% excellent. Fields very wet from rains early in week.

IOWA: Temperatures 7 to 8° below normal. Extremes 21°; 71°. Rainfall 0.03 to 1.03 in.; average 0.32 in.

Days suitable for fieldwork 5.1. Topsoil 14% short, 86% adequate. Subsoil 14% short, 86% adequate. Pasture 6% poor, 35% fair, 53% good, 6% excellent. Winter wheat 90% sown, 94% 1989, 75% avg. 1991 row crop acreage 8% tilled, 14% 1989, 13% avg. 1991 row crop acreage 7% fertilizer applied, 11% 1989, 9% avg. Livestock continue to enjoy the beautiful fall weather. Sale barns are humming with activity. Some stalk and stubble fields are being grazed.

KANSAS: Temperatures 6° below normal over northwest, 9° below normal over south central, southeast. Precipitation generally light; averaged 0.12 to 0.74 in.

Days suitable for fieldwork 4.5. Surface moisture 36% short, 61% adequate, 3% surplus. Subsurface moisture 46% short, 53% adequate, 1% surplus. Harvest corn, sorghum, soybean good progress; generally on or ahead schedule. Wheat seeding good progress and on schedule. Acreage remaining to be planted in eastern third of State. Early seeded fields showing good emergence. Range, pastures fair to good for time of year. Livestock moving from pasture to stubble fields following corn, sorghum harvest.

KENTUCKY: High temperatures below normal upper 60s to lower 70s. Low temperatures above normal, upper 40s to lower 50s. Temperature near 60°. Precipitation above normal, averaged 2.50 in., 1.00 in. central, east.

Days suitable for fieldwork 2.9. Soil moisture 5% short, 70% adequate, 25% surplus. Rain slowed harvest. Corn, soybean harvest continues. A few tobacco fields yet to be cut. Burley 10% stripped, weight and quality mostly good to excellent. Some houseburn reported. Soybeans 12% leaves entirely green. Fall wheat 20% seeded, mostly cover crop to date. Hay crops mostly good. Pastures improved to 2% poor, 18% fair, 68% good, 12% excellent.

LOUISIANA: Temperatures 2 to 3° below normal. Extremes 37°; 94°. Rainfall 0.05 to 1.20 in.

Days suitable for fieldwork 6.0. Soil moisture 5% very short, 28% short, 67% adequate. Cotton harvested 81%, 52% 1989, 71% avg. Hay final cutting 92%, 95% 1989, 94% avg. Pecans harvested 2%, 1% 1989, 2% avg. 11% very poor, 67% poor, 11% fair, 11% good. Rice harvested 98%, 98% 1989, 98% avg. Sorghum ripe 99%, 100% 1989, 100% avg., harvested 93%, 100% 1989, 99% avg. Soybeans turning color 95%, 98% 1989, 91% avg.; shedding leaves 59%, 85% 1989, 73% avg., harvested 40%, 45% 1989, 36% avg.; 4% very poor, 16% poor, 48% fair, 32% good. Sugarcane planted 90%, 97% 1989, 94% avg.; harvested 0%, 9% 1989, 6% avg.; 11% very poor, 11% poor, 33% fair, 45% good. Sweetpotatoes harvested 71%, 69% 1989, 79% avg. Wheat planted 3%, 7% 1989, 7% avg.; emerged 1%, 1% 1989, 2% avg. Livestock 4% poor, 36% fair, 60% good. Pasture 2%

very poor, 17% poor, 58% fair, 23% good. Vegetable 2% very poor, 15% poor, 57% fair, 23% good, 3% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.79 in. Temperature 72°, normal 59°. Extremes 39°; 89°.

Days suitable for fieldwork 5.1. Topsoil 10% very short, 38% short, 42% adequate, 10% surplus. Subsoil 14% very short, 33% short, 48% adequate, 5% surplus. Corn good; 93% mature, 93% 1989, 96% avg.; grain 57% harvested, 54% 1989, 65% avg.; silage 92% harvested, 93% 1989, 96% avg. Soybeans good; 94% turned, 91% 1989, 92% avg.; 70% shedding leaves, 65% 1989, 75% avg.; 13% harvested, 17% 1989, 21% avg. Wheat 22% seeded, 18% 1989, 34% avg. Oats 25% seeded, 8% 1989, 26% avg. Barley 60% seeded, 40% 1989, 58% avg. Rye 53% seeded, 37% 1989, 53% avg. Sweetpotatoes 82% harvested, 69% 1989, 73% avg. Hay supplies adequate. Alfalfa hay fourth cut 83% complete, 67% 1989, 80% avg. Other hay third cut 81% complete, 65% 1989, NA avg.; fourth cut 35% complete, 28% 1989, NA avg. Apples fair to good; 83% harvested, 92% 1989, 85% avg. Pasture good.

DELAWARE: Precipitation 0.09 in. Temperature 73°, normal 60°. Extremes 56°; 87°.

Days suitable for fieldwork 6.3. Topsoil 33% short, 67% adequate. Subsoil 33% short, 67% adequate. Corn good; grain 78% harvested, 77% 1989, 76% avg. Soybeans good; 91% turned, 70% 1989, 85% avg.; 67% shedding leaves, 44% 1989, 64% avg.; 16% harvested, 8% 1989, 9% avg. Wheat 19% seeded, 11% 1989, 13% avg. Barley 66% seeded, 29% 1989, 34% avg. Rye 39% seeded, 23% 1989, 29% avg. Lima beans 97% harvested, 87% 1989, 88% avg. Hay supplies adequate. Alfalfa hay fourth cut 95% complete, 87% 1989, 96% avg. Apples fair to good; 86% harvested, 90% 1989, 74% avg. Pasture good.

MICHIGAN: Temperatures 4 to 8° below normal. Extremes 24°; 69°. Precipitation 0.18 to 4.22 in. across State.

Days suitable for fieldwork 1.5. Soil moisture 20% adequate, 80% surplus. Corn 70% mature, 95% 1989, 90% avg.; 10% harvested, 15% 1989, 15% avg.; 5% poor, 20% fair, 45% good, 30% excellent. Soybeans 100% dropping leaves, 100% 1989, 98% avg.; 10% harvested, 55% 1989, 25% avg.; 2% poor, 18% fair, 50% good, 30% excellent. Winter wheat 60% seeded, 90% 1989, 60% avg. Major activities: Baling 3rd cutting hay, planting winter wheat, cutting corn silage, harvesting dry beans, soybeans, potatoes, sugarbeets, corn, grapes, apples, vegetables, repairing equipment.

MINNESOTA: Temperatures 5 to 7° below normal. Extremes 18°; 68°. Precipitation 0.03 to 0.20 in., greatest weekly total 0.74 in.

Days suitable for fieldwork 6.5. Topsoil 30% very short, 30% short, 70% adequate. Corn 26% combined, 45% 1989, 40% avg. Soybeans 78% combined, 93% 1989, 65% avg. Sugarbeets 87% harvested, 76% 1989, 77% avg. Potatoes 94% harvested, 92% 1989, 92% avg. Sunflowers 73% harvested, 76% 1989, 45% avg. Field corn 93% silage, 97% 1989, 87% avg. Corn 12% plowed, tilled, 13% 1989, 16% avg. Soybeans 32% plowed, tilled, 42% 1989, 33% avg. Soybeans 11% moisture, 11% 1989, 13% avg. Corn 23% moisture, 20% 1989, 23% avg.

MISSISSIPPI: Temperatures 2° below normal. Extremes 38°; 94°. Mostly wet north, dry central, south. Rainfall 0.57 in., 0.04 in. below normal. Soil temperatures 70°.

Days suitable for fieldwork 4.4, 6.0 1989, 5.1 avg. Soil moisture 16% very short, 36% short, 27% adequate, 21% surplus. Cotton 72% harvested, 16% 1989, 61% avg.; 2% very poor, 12% poor, 53% fair,

20% good, 13% excellent. Corn 89% harvested, 79% 1989, 88% avg.; 8% poor, 34% fair, 49% good, 9% excellent. Rice 99% mature, 99% 1989, 100% avg.; 82% harvested, 86% 1989, 94% avg.; 12% poor, 21% fair, 62% good, 5% excellent. Soybeans 87% turning color, 86% 1989, 83% avg.; 66% shedding leaves, 69% 1989, 77% avg.; 24% harvested, 18% 1989, 24% avg.; 20% very poor, 30% poor, 30% fair, 17% good, 3% excellent. Sorghum 99% mature, 94% 1989, 98% avg.; 92% harvested, 84% 1989, 92% avg.; 2% very poor, 6% poor, 55% fair, 28% good, 9% excellent. Hay 94% harvested, 92% 1989, 93% avg. Peanuts 93% harvested, 87% 1989, 89% avg. Sweetpotatoes 70% harvested, 69% 1989, 75% avg. Wheat 16% planted, 20% 1989, 19% avg.; 14% emerged, 10% 1989.; 13% avg.; 3% poor, 50% fair, 34% good, 13% excellent. Pasture, Livestock fair to good. Activities: Harvesting crops, planting ryegrass.

MISSOURI: Temperatures 6 to 12° below normal. Rainfall less than 0.50 in. northwest, 0.65 to 0.75 in. other northern, west central districts, 1.50 to 2.00 in. central, south, up to 4.50 in. parts of Dunklin county.

Days suitable for fieldwork 2.5. Topsoil 13% short, 59% adequate, 28% surplus, driest northwest, north central, wettest southeast at 77% surplus. Corn harvested varies 34% east central to 87% southeast. Soybeans harvested around 23% northern districts to less than 10% southwest, southeast. Sorghum harvested 7% or less northeast, central, east central districts to 45% southeast. Wheat seeding varies 16% southeast to 39% northwest. Tillage for spring crops 6%, 13% 1989, 18% avg. Pasture 6% poor, 52% fair, 36% good, 6% excellent.

MONTANA: Temperatures west 2° below normal, east 5 to 8° below normal. Precipitation was spotty although all areas some moisture.

Days suitable for fieldwork 6.2. Topsoil 78% short, 22% adequate. Subsoil 78% short, 22% adequate. Dry beans 89% harvested, 96% 1989, 90% avg. Corn silage 93% harvested, 97% 1989, 94% avg. Potatoes 78% harvested, 78% 1989, 68% avg. Sugarbeets 54% harvested, 51% 1989, 39% avg. Newly seeded winter wheat 2% very poor, 27% poor, 46% fair, 25% good.

NEBRASKA: Temperatures 7 to 10° below normal. Extremes 20°; 74°. Light precipitation up to 0.45 in. northeast.

Days suitable for fieldwork 5.5. Topsoil 70% short, 29% adequate, 1% surplus. Subsoil 77%, 23% adequate. Winter wheat 11% poor, 45% fair, 38% good, 6% excellent. Moisture helped emergence, improved stands. Some areas still need rain for germination. Snow West, rain remainder of State slowed harvest activities. Corn growers not pushing harvest too fast, allowing crop to dry down in field, saving drying costs. Corn harvest not started yet in a few western counties. Killing frost, South, helped sorghum dry down, harvest gain momentum. Soybean harvest slowed, North, beans dry but vines still green, don't feed well into combine. Hard frost during week helped situation. Regular sugarbeet harvest in full swing, Panhandle. Pasture, range 11% very poor, 32% poor, 43% fair, 14% good. Cattle moving into harvested fields. Some supplemental feeding, where no harvested fields available, or snow was too deep. Producers working weaning calves. Main activities: Harvest, tillage after harvest, fencing fields for stalk grazing.

NEVADA: First significant cold front of fall season. Temperatures fell below normal all areas, biggest drop noted in northwest. Most areas remained dry, trace amounts northeast, 2.00 in. snow east central. Extremes 5°; 95°.

Potato harvest full swing. Alfalfa seed harvest in wind up stage. Hay harvest virtually over. Livestock mostly good despite drought conditions. Early feeding hay expected to be common.

NEW ENGLAND: Precipitation 4.00 to 7.00 in. over southeastern New England, some flooding; data for other areas unavailable.

Days suitable for fieldwork 4.0. Soil moisture north 19% adequate, 81% surplus; south 77% adequate, 23% surplus. Grazing availability 17% short, 76% adequate, 7% surplus. Pasture 4% poor, 24% fair, 63% good, 9% excellent. Maine potatoes 82% harvested, 94% 1989, 91% avg.; good. Rhode Island potatoes 87% harvested, 100% 1989, 100% avg.; good. Connecticut River Valley potatoes 90% harvested, 89% 1989, 79% avg.; good. Field corn 74% harvested, 76% 1989, 77% avg.; good. Sweet corn 100% harvested. Second cut hay 100% harvested. Third crop hay 99% harvested; good. Apples 82% harvested, size medium to large; good. Pears 95% harvested; fair to good. Major farm activities: Cutting hay, picking apples, chopping corn, sowing winter cover crops, harvesting vegetables.

NEW JERSEY: Temperatures much above normal. Extremes 51°; 86°. Rainfall 3.33 in. north, 0.79 in. central, 0.22 in. south. Heaviest 24 hour total 4.19 in. on 8th, 9th. Estimated soil moisture percent field capacity averaged 89% north, 62% central, 52% south. Four inch soil temperatures 69° north, 70° central, 71° south. Weekend rainfall varied.

Soil moisture adequate to short. Above normal temperatures continued to advance crop growth, maturity. Fall vegetable harvest continued active. Apple, cranberry harvest advanced well. Sweetpotatoes continued to move to storage. Silage making well advanced. Harvest of corn for grain, soybeans active as fields mature. Preparation, seeding of grain, cover crops active. Early seeding growth good. Pasture growth above normal.

NEW MEXICO: Temperatures generally below normal. Precipitation observed in northern quarter of the State, eastern Plains, a trace at Clovis to 0.32 in. at Chama.

Days suitable for fieldwork 6.4. Soil moisture 21% short, 79% adequate. Light to moderate freeze across much of State. Cattle, sheep are in poor to excellent. Range 4% poor, 60% fair, 36% good.

NEW YORK: Rainfall well above normal, exceeding 2.00 in. at many places, a few areas exceeding 3.00 in. Temperatures much above normal in eastern areas. It was warm in western areas at beginning of week, cooled to near normal during the week. Extremes 37° and 85°.

Days suitable for fieldwork 3.9. Soil moisture adequate to surplus. Pastures 11% poor, 11% fair, 61% good, 17% excellent. Corn in fair to good. Corn for silage 59% harvested, 1989 57%, average 60%. Grain corn harvest 9% complete, 11% average 10%. Harvest limited to fields with well drained soils. Third cutting of alfalfa near complete. Dry bean harvest near completion. Heavy rains in Finger Lakes region delayed grape harvest. Wetness also caused bunch rot problems in some cultivars. Apple harvest slowing down. Onion harvest virtually complete. Orange County lettuce harvest finished. Cabbage harvest continued active. Some cauliflower, broccoli still being harvested.

NORTH CAROLINA: Temperatures 4 to 10° above normal across State. Extremes 37°; 93°. Precipitation none to 9.68 in.

Days suitable for fieldwork 4.8. Soil moisture 15% very short, 26% short, 37% adequate, 22% surplus. Pasture 5% very poor, 26% poor, 44%

fair, 25% good. Livestock feed from pasture 66%. Harvested: corn for grain 82%; sweet potatoes 74%; apples 87%; sorghum 53%; peanuts dug 61%; peanuts threshed 43%. Soybeans dropping leaves 59%. Planted: wheat 13%; oats 26%; barley 33%; rye 32%. Crop condition: cotton 3% poor, 31% fair, 66% good; soybeans 1% very poor, 19% poor, 53% fair, 26% good, 1% excellent; peanuts 54% fair, 46% good; sorghum 17% poor, 58% fair, 25% good; sweet potatoes, 3% poor, 38% fair, 59% good; apples 14% poor, 29% fair, 57% good. Major activities: Harvesting tobacco, corn, cotton, peanuts, soybeans; cutting hay; harvesting sorghum, sweet potatoes, apples; planting small grains; land preparation. Other activities included: Seeding pastures; planting vegetables; cutting corn silage; tending livestock; general farm maintenance.

NORTH DAKOTA: Temperatures 6 to 7° below normal. Precipitation none northeast to 0.09 in. southeast.

Days suitable for fieldwork 7.0. Topsoil 56% very short, 44% short. Subsoil 59% very short, 41% short. Corn for grain 31% harvested, 48% 1989, 37% avg. Corn for silage 99% cut, 100% 1989, 94% avg. Sunflower 66% harvested, 71% 1989, 40% avg. Potatoes 99% dug, 97% 1989, 94% avg. Dry beans 98% combined, 97% 1989, 83% avg. Soybeans 88% combined, 94% 1989, 72% avg. Sugarbeets 94% lifted, 77% 1989, 83% avg. Pastures 30% very poor, 45% poor, 25% fair. Stockwater 17% very short, 42% short, 41% adequate.

OHIO: Very slow moving cold front brought rain much of period. Temperatures 1 to 3° subnormal north; 3 to 6° above normal south. Daytime highs in 60s; daily lows in 40s to mid 50s. Extreme lows in mid to upper 30s. Rainfall 1.50 to 2.50 in.; 1.00 to 2.00 in. above normal.

Days suitable for fieldwork 2.8. Soil moisture 30% adequate, 70% surplus. Wet soils, standing water delayed harvest. Corn good; some lodging by weekend stalks, storms. Harvested corn tested 24% moisture. Farmers concerned about rising energy cost during harvest, drying activities. Soybeans good; some mold, lodging. Rain delayed winter wheat planting; some crops must be harvested before seeding can be done. Winter wheat planting at half the usual progress. Pasture 1% very poor, 3% poor, 22% fair, 62% good, 12% excellent. Vegetable harvest included bell peppers, squash, pumpkins. processing tomatoes. Sugarbeet digging slowed by rain.

OKLAHOMA: Temperatures 10° below normal southeast to 13° below normal north central. Precipitation 0.03 in. west central to 2.15 in. east central.

Days suitable for fieldwork 5.3. Topsoil 95% adequate, 5% surplus. Subsoil 10% short, 90% adequate. Highest subsoil since late June. Wheat 5% fair, 85% good, 10% excellent; 75% planted, 85% 1989, 65% avg.; 40% emerged, 45% 1989, 40% avg. Cotton 10% fair, 75% good, 15% excellent; 80% open bolls, 65% 1989, 70% avg.; 7% harvested, 1% 1989, 7% avg. Sorghum 5% poor, 35% fair, 60% good; 75% mature, 70% 1989, 80% avg.; 10% harvested, 15% 1989, 20% avg. Corn 80% harvested, 90% 1989, 95% avg. Soybeans 50% mature, 45% 1989, 65% avg.; 20% harvested, 25% 1989, 15% avg. Peanuts 75% mature, 90% 1989, 85% avg.; 15% harvested, 20% 1989, 20% avg. Pastures 60% fair, 38% good, 2% excellent. Cattle good; marketings stable; prices down slightly from preceding week.

OREGON: Temperatures below normal all areas except extreme southern coast, Brookings 3° above, west 3° below, east 5° below. Minimum temperatures unusually cool Burns, Ukiah, Enterprise. Numerous days minimums in teens. Precipitation confined

northern section Willamette Valley, northern Cascades. 0.50 in. fell along coast, 0.20 in. Willamette Valley, 0.90 in. north Cascades. Elsewhere 0.10 in. or less fell.

Soil moisture 78% short, 22% adequate. Barley 31% seeded, 36% 1990, 35% avg. Fall field preparation, grain seeding continued east of Cascades, although short soil moisture delayed planting in some areas. Sugarbeets, dry beans harvested Malheur Co. Field preparation, cereal, grass seed planting in full swing Willamette Valley. Pear harvest completed Hood River, other districts. Apple harvest continued. Weather was favorable for tree fruit harvest this year. Hazelnut harvest continued Willamette Valley; grape harvest set to begin. Cooler temperatures, some frost improved cranberry fruit color south coast; harvest in full swing. Potato harvest continued areas, 85% complete Malheur Co. Onions 85% harvested Malheur Co. Sweet corn harvest essentially completed Willamette Valley. Livestock good to excellent. Movement of cattle to winter pastures continued east; weaning, shipping in full swing. Range, pasture 17% poor, 58% fair, 25% good.

PENNSYLVANIA: Mild, wet week across State. Stalled front caused very heavy rains across eastern half of State. Mild tropical air covered most of region. Temperature 65°, 10° above normal. Extremes 40°, 85°. Precipitation 2.20 in., 1.52 in. above normal.

Days suitable for fieldwork 4. Soil moisture 6% short, 55% adequate, 39% surplus. Corn 100% dented, 99% 1989, 99% avg.; 52% mature, 58% 1989, 73% avg.; 7% harvested, 10% 1989, 17% avg. Ensilage corn 55% harvested, 64% 1989, 77% avg. Corn 1% very poor, 6% poor, 19% fair, 48% good, 26% excellent. Soybean harvest 6% complete, 18% 1989, 19% avg. Soybean 5% poor, 22% fair, 53% good, 20% excellent. Potato harvest 76% complete, 82% 1989, 84% avg. Fall plowing 76% complete, 70% 1989, 81% avg. Winter wheat 63% planted, 69% 1989, 70% avg. Barley 82% planted, 82% 1989, 87% avg. Third cutting alfalfa 86% complete, 88% 1989. Fourth cutting alfalfa 56% complete, 50% 1989. Second cutting timothy clover 93% complete, 100% 1989. Quality of hay made during week mostly fair. Amount of feed being obtained from pasture 0% very poor, 16% poor, 51% fair, 33% good. Apple harvest 72% complete, 71% 1989. Grapes harvest 72% complete, 70% 1989. Activities: Harvesting hay, haylage, potatoes, corn, corn silage, soybeans, fruits, vegetables; fall plowing, planting; maintaining machinery; caring for livestock.

PUERTO RICO: Rainfall 3.45 in. was 1.62 in above normal. Highest weekly total rainfall was 6.46 in. at Corral Viejo, 6.30 in at Sabana Grande, 6.07 in at Pico Del Este Luquillo. The highest 24 hour was 4.05 in at Manati. Divisional temperature 80 to 82° on the coast, 75 to 78° in the interior with mean station temperature 68° at Pico Del Este Luquillo to 83° at Borinquen airport, Roosevelt Roads N.S. Extremes 63°; 96°.

SOUTH CAROLINA: Temperatures 65° in mountains to 70° in the south. Rainfall 4.60 in. in mountains to 9.60 in. in central State.

Days suitable for fieldwork 3.2. Soil moisture 4% short, 65% adequate, 31% surplus. Cotton 2% very poor, 46% poor, 52% fair, 96% open bolls, 93% 1989, 95% avg.; 53% harvested, 18% 1989, 39% avg. Soybeans 8% very poor, 19% poor, 55% fair, 18% good, 81% leaves turning, 65% 1989, 71% avg.; 41% shedding leaves, 37% 1989, 38% avg.; 28% matured, 16% 1989, 23% avg.; 3% harvested, 1% 1989, 3% avg. Corn poor to fair, 97% harvested, 87% 1989, 92% avg. Sorghum fair, 69% harvested, 47% 1989, 54% avg. Tobacco 86% stalks destroyed, 73% 1989, 80%

avg. Peanuts fair, 55% harvested, 52% 1989, 47% avg. Pastures 20% poor, 44% fair, 36% good.

SOUTH DAKOTA: Temperatures 4 to 12° below normal. Extremes 90°; 75°. Precipitation generally less than 0.25 in.; however, southwest, Black Hills had 0.25 to 0.50 in. Maximum 0.51 in. Harvest season precipitation none to 1.00 in. below normal west, 2.00 in. above to 0.50 in. below normal north central, northeast, 0.25 in. to 1.75 in below normal rest of State. Range 2.08 in. above to 1.86 in. below normal.

Days suitable for fieldwork 5.6. Subsoil 31% critically short, 51% short, 18% adequate. Topsoil 20% critically short, 53% short, 27% adequate. Range, pasture 7% very poor, 26% poor, 37% fair, 29% good, 1% very good. Row crop conditions mostly good. Winter grain conditions mostly good. Dry conditions continued. Row crop harvesting continuing. Corn borer, green bug, germination problems. Major activities combining, fieldwork, fencing.

TENNESSEE: High pressure dominated most of week with fair weather. Frontal system passed through State mid week, producing heavy widespread showers. Temperatures averaged slightly below normal. Precipitation averaged above normal.

Days suitable for fieldwork 3.6. Soil moisture 8% short, 77% adequate, 15% surplus. Corn 60% harvested for grain, 78% 1989, 77% avg. Cotton 98% open bolls, 94% 1989, 98% avg., 48% harvested, 36% 1989, 55% avg. Sorghum 58% harvested, 92% 1989, 87% avg. Soybeans 64% shedding leaves, 74% 1989, 81% avg., 30% mature, 44% 1989, 56% avg.; 4% very poor, 20% poor, 56% fair, 20% good. Tobacco 24% stripped, 20% 1989, 19% avg. Pastures 1% very poor, 7% poor, 40% fair, 50% good, 2% excellent. Cattle 1% poor, 25% fair, 71% good, 3% excellent. Harvest delayed by rain.

TEXAS: Mid week frontal system produced significantly cooler weather last half of week, drying out State. Showers, storms in advance of front affected much of State 9th to 10th, heaviest rainfall amounts northeast to south central sections Edwards Plateau. Front produced first freeze of the season portions Texas Panhandle 9th. Temperatures below normal all locations, despite early week readings 90s many locations. Rainfall amounts ranged from generally less than 0.25 inch west, Lower Valley to over an inch northeast, south central, Edwards Plateau.

Crops: Cool, wet conditions slowed corn harvest early week, progress increased mid week. Yields very good. Grain sorghum harvest slowed early week across Plains, Cross Timbers. Frost damaged later fields Plains. Harvest nearing completion Blacklands weekend. Harvest delayed some Hill Country. Cotton development slowed early week Plains, Cross Timbers. Harvest getting underway Plains. Light frost may have hurt some later fields. Wet conditions slowed harvest Blacklands, northeast. Isolated heavy rains Trans Pecos hurt some open cotton. Harvest winding down Upper Coast. Small grain seeding slowed early week Plains. Cool, wet conditions helped emergence. Weather conditions delayed planting slightly Blacklands, central. Additional moisture benefitted emerged fields. Soybean harvest increased late week High Plains. Yields good. Later crop Blacklands benefitted from moisture. Harvest early crop continued slowly, yields remained low. Harvest Upper Coast delayed early week. Peanut harvest beginning more fields Cross Timbers, despite some delays early week. Producers noticed some pod rot, overall yields good. Rain hurt some fields Hill Country. Harvest delays southcentral. Disease increasing. Sugarcane harvest beginning Rio Grande Valley.

Sugarbeet harvest continued High Plains. Yields good. Sugar content will improve. Other field crops: Peanuts 35% harvested, 19% 1989, 28% avg. Pecans 5% harvested, 2% 1989, 7% avg. Soybeans harvested 48%, 50% 1989, 39% avg. Sugarbeets 2% harvested, 7% 1989, 10% avg. Sunflowers harvested 27%, 19% 1989, 35% avg. Oats planted 41%, 54% 1989, 55% avg.

Commercial Vegetables: Rio Grande Valley, pepper, tomato crops progressing fairly. Onion planting underway. San Antonio Winter Garden, wet conditions slowed planting. Eastern State, sweetpotato harvest continued. White flies causing some concern. High Plains, harvest cabbage, carrots, peppers, cucumbers, pumpkins continued. Trans Pecos, too much water causing some wilt chilies. Frost may have ended bell pepper production some parts of region. Pecan harvest spread into many areas. Improved crop looks very good. Rain slowed harvest south.

Range and Livestock: Ranges, pastures look good most areas, cooler temperatures did slow growth some. Wet conditions delayed haying activities some east. Livestock conditions remained good. Stocker arrivals continued Plains. Range, pasture conditions 4% very poor, 9% poor, 39% fair, 38% good, 10% excellent.

UTAH: No Data available.

Days rated suitable for fieldwork 6.7. Soil moisture 89% short, 11% adequate. Winter wheat 90% seeded, 92% 1989, 94% avg. Fourth crop alfalfa cutting nearing completion. Field corn 95% mature, 84% 1989, 86% avg. Corn for grain harvest continuing. Potato harvest 94% complete, 70% 1989. Majority of cattle, sheep moved from summer range. Range, pasture 2% very poor, 50% poor, 48% adequate. Major farm activities include fall land preparation, completion of fall harvest.

VIRGINIA: Temperatures about 10° above normal. Precipitation fell across the State with over 4.00 in. falling in central State.

Days suitable for fieldwork 5.0. Topsoil 7% very short, 39% short, 42% adequate, and 12% surplus. Corn for grain 61% harvested, 59% 1989, 61% avg. Corn silage 89% harvested, 85% 1989, 88% avg. Soybean 9% poor, 47% fair, 43% good, 1% excellent. Soybeans 6% harvested, 6% 1989, 2% avg. Sweetpotatoes 82% harvested. Peanut 20% fair, 80% good. Peanuts 70% dug, 84% 1989, 60% avg. Peanuts 57% combined, 61% 1989, 45% avg. Wheat 18% seeded, 13% 1989, 10% avg. Oats 60% seeded, 56% 1989, 49% avg. Barley 38% seeded, 33% 1989, 33% avg. Apple harvest continued. Pasture 3% very poor, 22% poor, 45% fair, 26% good, 4% excellent. Livestock mostly good. Flue, burley tobacco harvest nearly completed. Rains have improved small grains, peanut digging.

WASHINGTON: Temperatures 4 to 9° below normal, east; 4 to 7° below normal, west. Precipitation none to 0.11 in., east; 0.23 in. to 1.05 in., west.

Days suitable for fieldwork 5.8. Soil moisture 55% short, 45% adequate. Range, pasture 2% very poor, 30% poor, 35% fair, 33% good. Hay, other roughage 2% short, 92% adequate, 6% surplus. Winter wheat planted 90%, 91% 1989, 87% avg. Winter wheat emerged 69%, 67% 1989, 64% avg. Potatoes harvested 71%, 82% 1989, 70% avg. Dry beans harvested 78%, 89% 1989, 95% avg. Corn silage harvested 84%, 88% 1989, 88% avg. Alfalfa hay, 3rd cutting, 100%, 100% 1989, 100% avg. Fall seeding continued but many areas were still short of soil moisture. First frost was received in many areas of the State. Harvests of mint, grapes, apples, carrots, squash, pumpkins continued. The apple harvest was in full swing. Livestock continued to be placed on stubble, calves were being weaned, marketed. Fall forages improved in western area with recent rains.

WEST VIRGINIA: Temperature 63°, 5 to 14° above normal. Extremes 40°; 88°. Precipitation 2.10 in.

Days suitable for fieldwork 3.1. Soil moisture 73% adequate, 27% surplus. Pasture 16% fair, 84% good. Cattle, sheep good. Corn 3% fair, 39% good, 58% excellent; 97% dough, 77% mature, 35% harvested. Hay 16% fair, 84% good; second cutting 95% complete, third cutting 82% complete. Wheat 82% planted. Tobacco 30% fair, 70% good; 99% harvested. Farm activities: Hay, tobacco, corn harvesting, livestock marketing, wheat seeding.

WISCONSIN: Temperature 44°, 6° below normal. Extremes 17°; 69°. Precipitation 0.40 to 1.80 in. First killing frost 10th to 11th.

Days suitable for fieldwork 3.7. Soil moisture 3% short, 78% adequate, 19% surplus. Pasture 15% fair, 71% good, 14% excellent. General condition of crops 4% fair, 88% good, 8% excellent. Soybeans 17% harvested, 43% 1989, 31% avg. Corn 1% poor, 7% fair, 78% good, 14% excellent. Corn for grain 11% harvested, 24% 1989, 27% avg. Corn silo filling 69% complete, 89% 1989, 72% avg. Fall tillage 18% complete, 20% 1989, 20% avg.

WYOMING: Temperatures below normal. Precipitation above normal.

Days suitable for fieldwork 4.0. Topsoil 27% short, 64% adequate, 9% surplus. Subsoil 34% short, 66% adequate. 1991 winter wheat crop most seeded, most 1989, most avg.; 85% emerged, 90% 1989, 85% avg.; mostly good. Corn for grain 20% harvested, 20% 1989, 15% avg. Dry beans 95% combined, 80% 1989, 85% avg. Potatoes 85% harvested, 90% 1989, 80% avg. Sugarbeets 35% dug, 55% 1989, 45% avg. Sugar content 16.0%. Livestock mostly average condition for this time of year. Ranges, pastures 15% poor, 85% good. Producers continue culling, marketing.

International Weather and Crop Summary

HIGHLIGHTS

October 7-13, 1990

USSR ... In Western USSR, dry weather covers southern areas, helping corn, sunflower, and sugarbeet harvests. In the New Lands, increasing precipitation slows final harvest efforts.

EUROPE ... Dry weather favors fall planting and harvesting in the north and west. Scattered rain in sections of the south increases preplanting soil moisture levels.

EASTERN ASIA ... Typhoon Hattie brushes southern Japan. Mostly dry weather speeds fall harvest in the northeast.

SOUTH ASIA ... Showers continue in central and eastern crop regions. Dry, warm weather in the north favors maturing summer crops and early wheat planting.

SOUTHEAST ASIA ... Widespread showers continue over Thailand. Rain improves planting conditions over the Philippines.

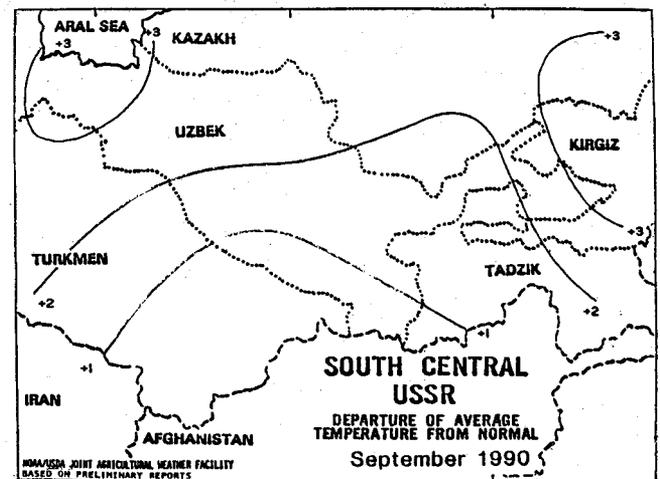
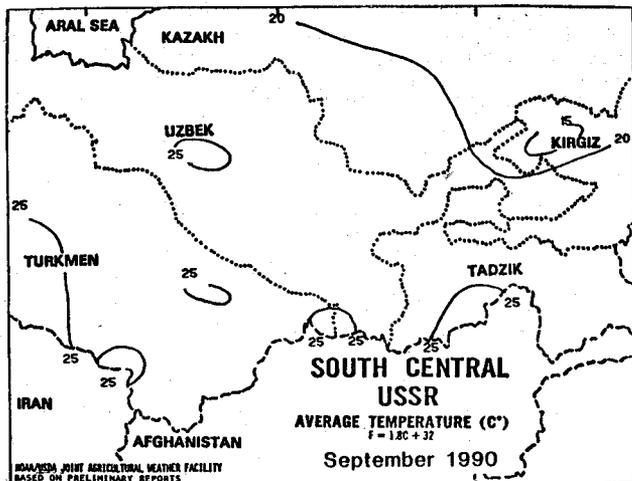
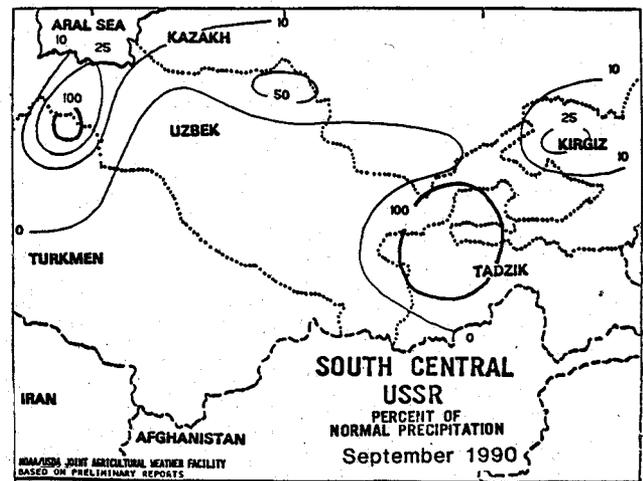
SOUTH AMERICA ... Widespread rain in Argentina favors crops, but soaking rain in southern Brazil hampers fieldwork.

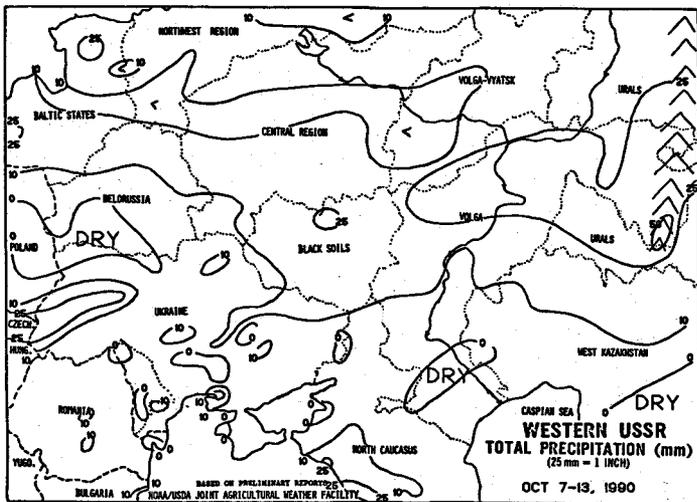
AUSTRALIA ... Rain favors winter grains in most growing areas.

CANADA ... Cool, wet weather hampers final oilseed harvests.

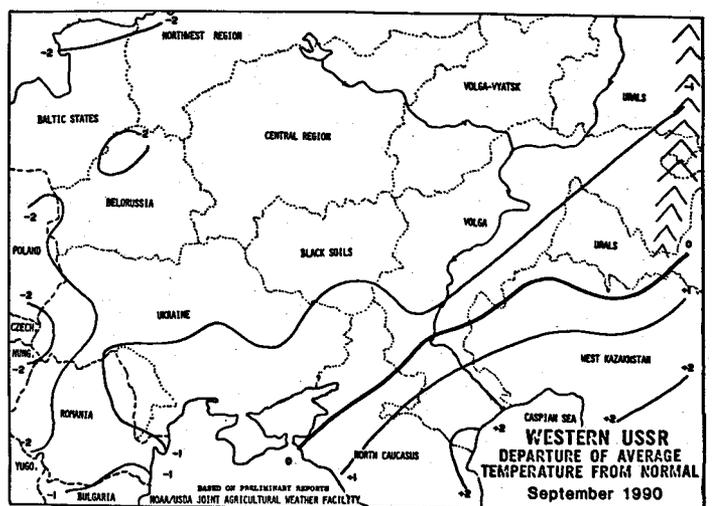
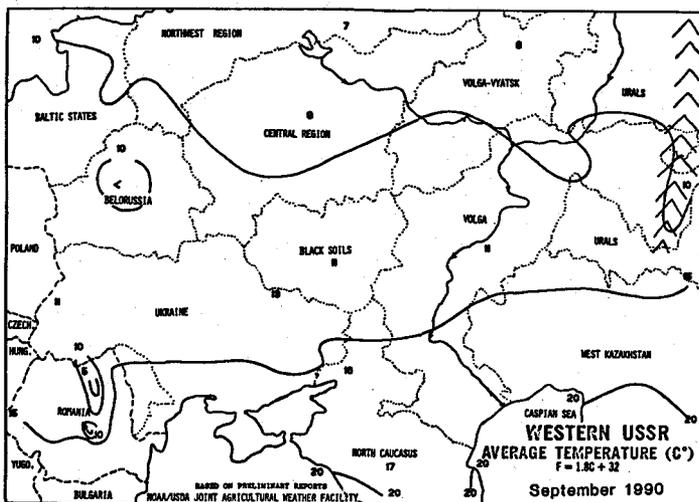
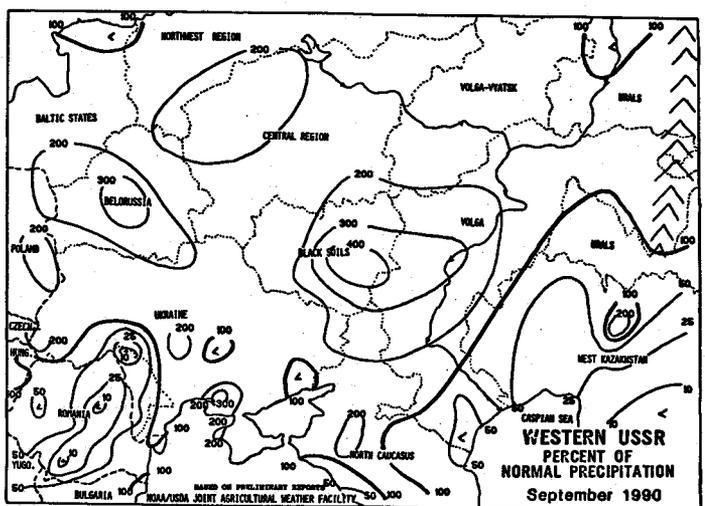
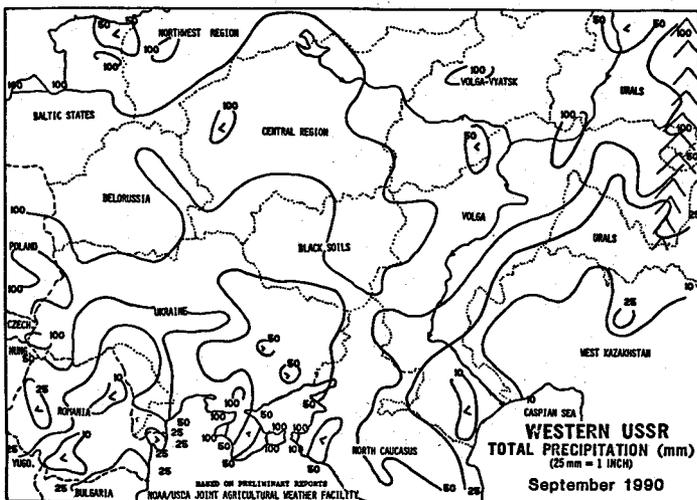
MEXICO ... Drier weather returns to the northwest, while substantial rain continues in the Southern Plateau corn belt.

SOUTH AFRICA ... Timely rain helps immature wheat and improves conditions for corn planting.

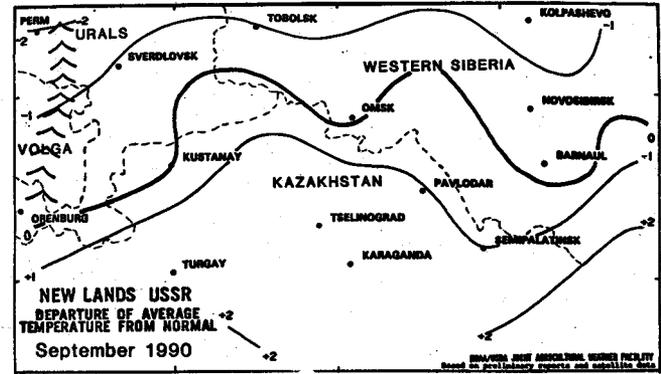
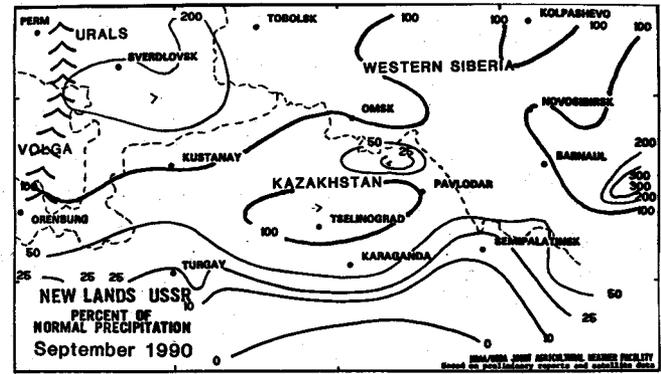
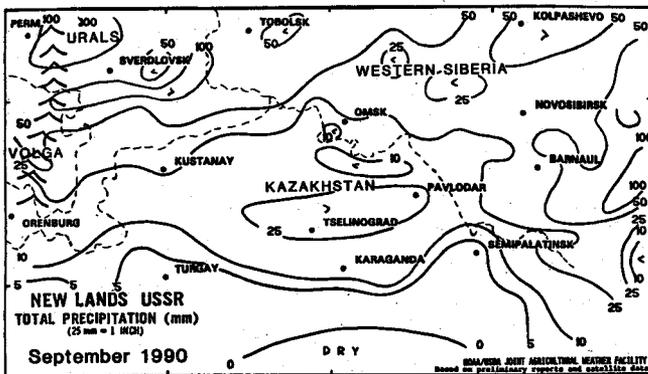
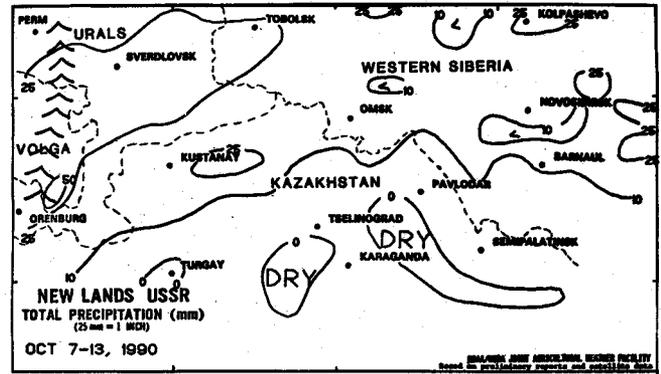


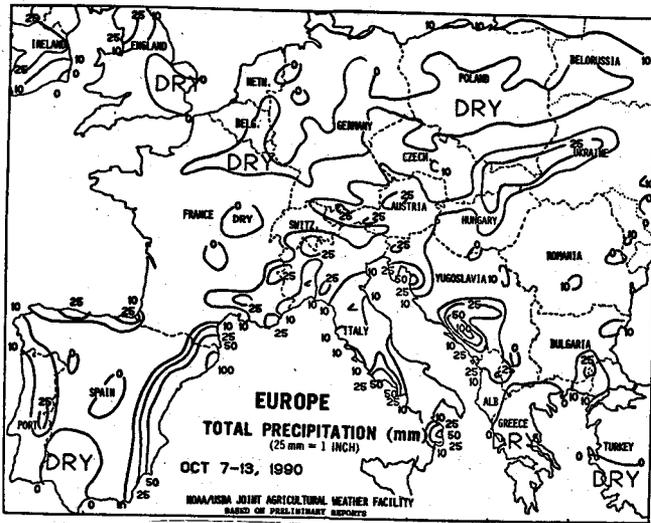


USSR ... Unseasonably warm, dry weather covered most of Belorussia, the Ukraine, North Caucasus, and lower Volga, helping summer crop harvests and late winter grain planting efforts. By October 8, reports indicated the sunflower and sugarbeet harvests were 44 and 49 percent complete, respectively. Light precipitation (10-33mm) over the Baltic States, extreme northern Belorussia, the Central Region, and the upper Volga Valley maintained wet conditions. In September, corn, sunflower, and sugarbeets were being harvested, while winter grain planting advanced southward. Frequent precipitation (100-144mm) over the Baltic States, Belorussia, the Central Region, and the eastern Black Soils Region produced above-normal rainfall. In some areas rainfall was as much as four times normal. The wetness, accompanied by cool weather, caused harvest delays, reduced grain quality, and hampered planting and establishment of 1991 winter grain crops. Further south, although above-normal precipitation in September over most of the Ukraine, North Caucasus, and lower Volga increased topsoil moisture for winter grain plating, it caused only minor delays in harvesting.

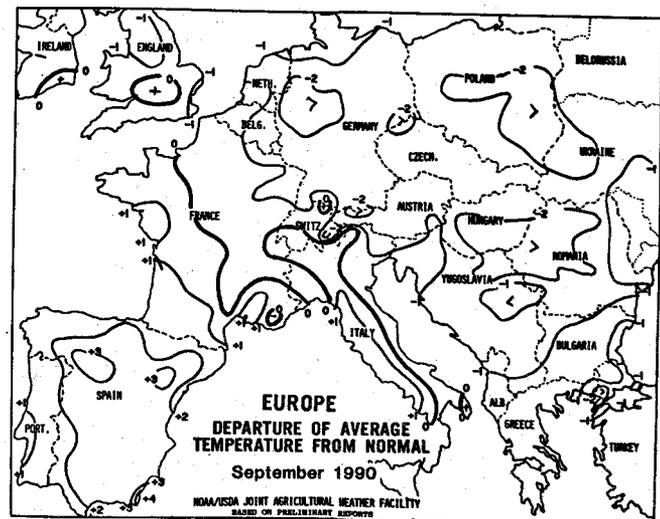
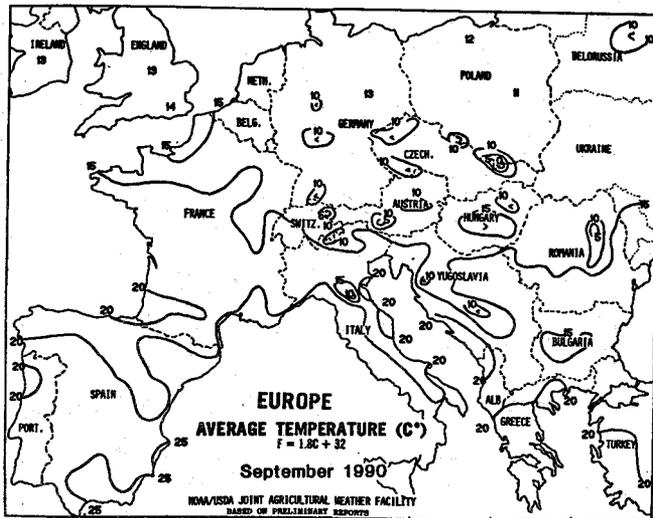
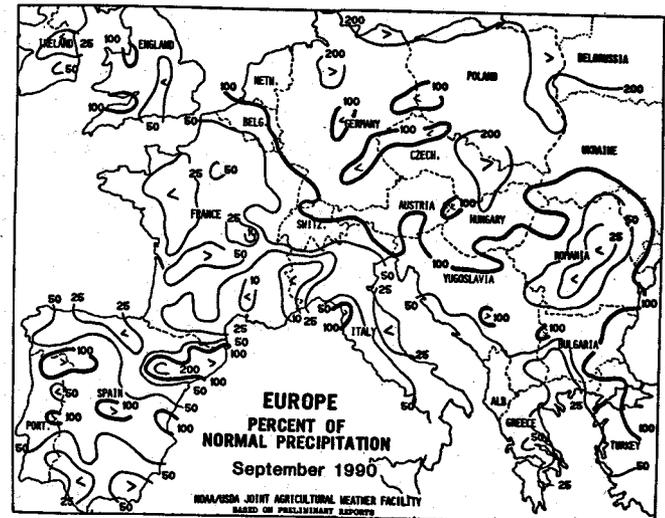
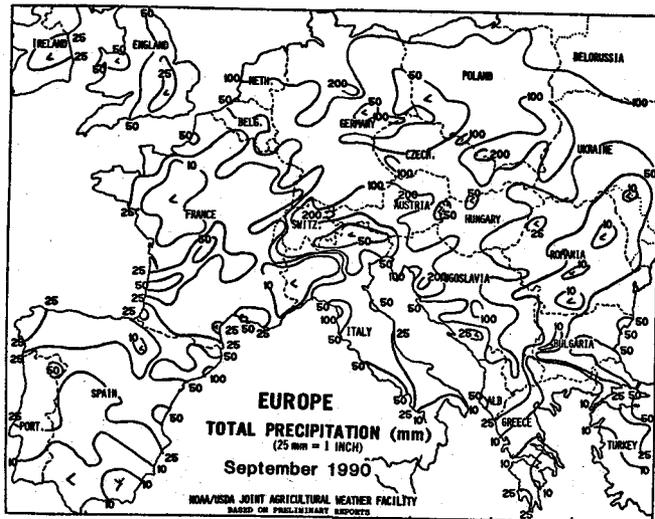


NEW LANDS ... Light precipitation (10-25mm) over spring grain areas in northern Kazakhstan and West Siberia slowed spring grain harvesting. Wet weather (25-50mm) over the Urals interrupted harvest. By October 8, reports indicated small grains and pulses had been harvested on 94 percent of the sown area. In September, below-normal precipitation covered Kazakhstan and most of West Siberia, creating excellent harvest conditions. Above-normal rainfall over the Urals and parts of East Siberia slowed harvesting. Coverage of the New Lands will be suspended until the beginning of next year's growing season.

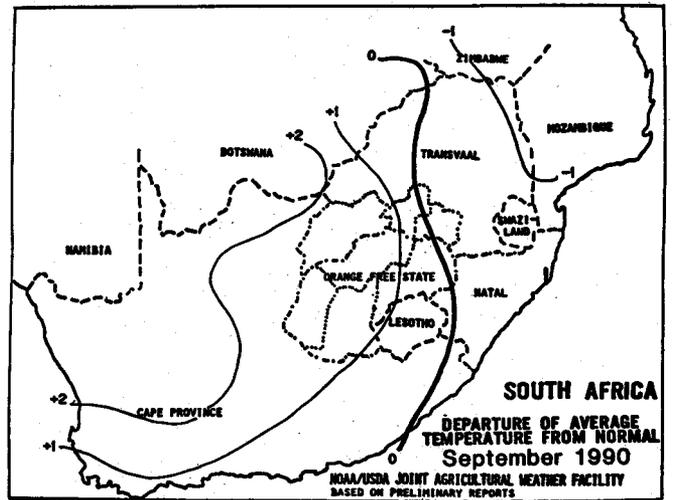
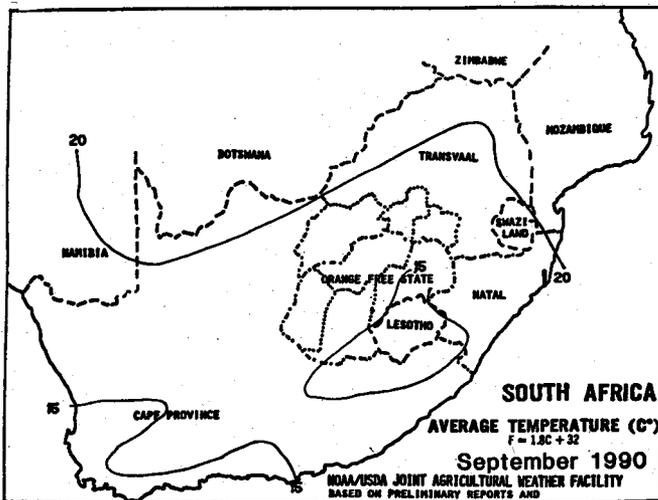
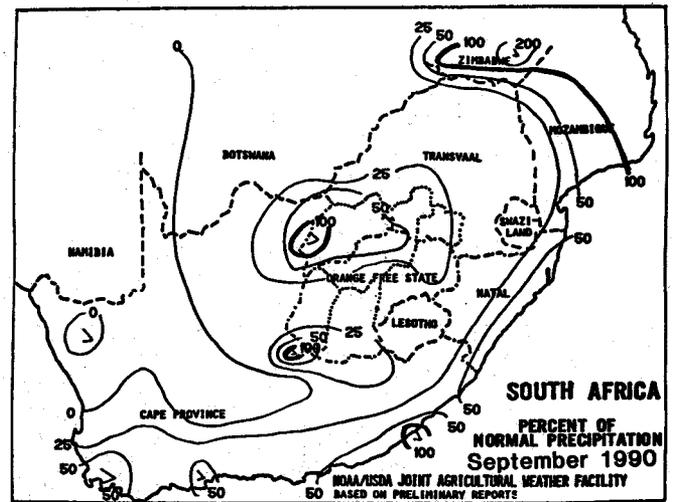
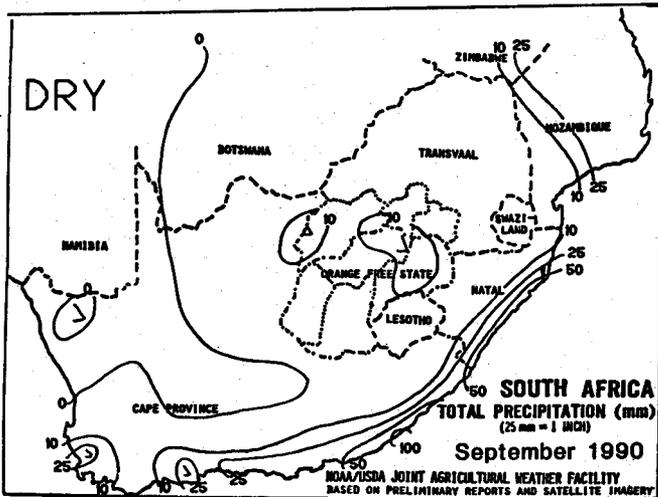
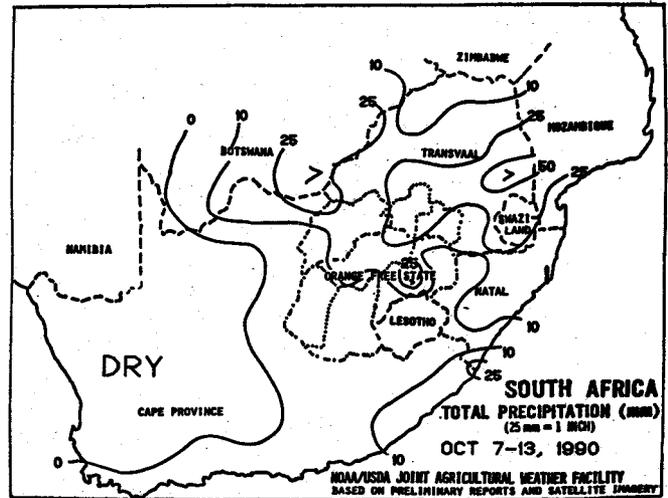


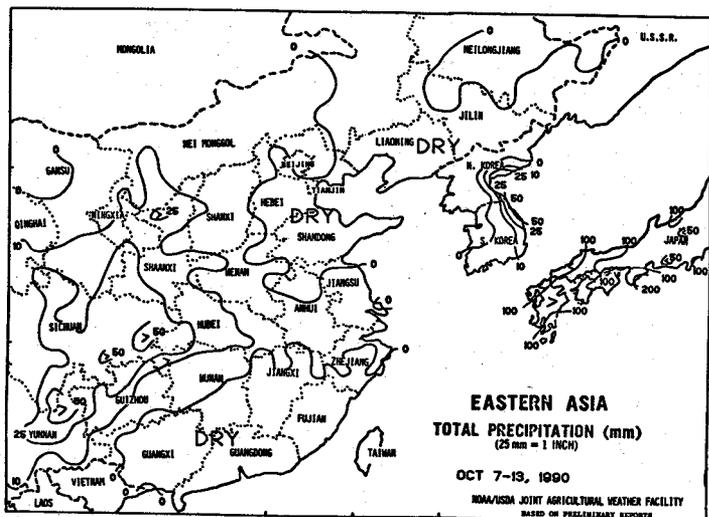


EUROPE ... Mostly dry and warm weather (mean weekly temperatures 1-3 degrees C above normal) covered western and northern Europe, favoring winter grain planting and late summer crop harvests. In the south, scattered showers (10-60mm, with isolated amounts in excess of 100mm) increased preplanting soil moisture for winter crops in sections of eastern Spain, Italy, and western Yugoslavia. During September, below-normal rainfall and soil moisture levels delayed early fall planting in much of western and southeastern Europe. Seasonal rainfall in south-central and southwestern crop areas normally reaches a maximum from late October through early December. In contrast, cooler- and wetter-than-normal weather from Benelux and western Germany eastward to Poland during September recharged depleted soil profiles but delayed fall fieldwork.

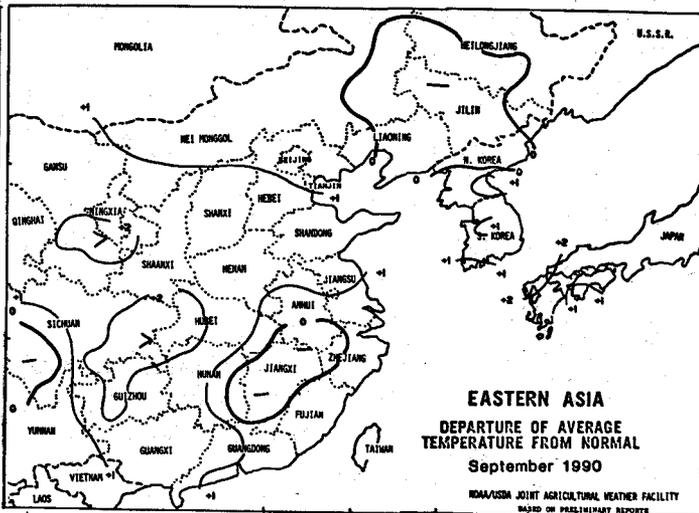
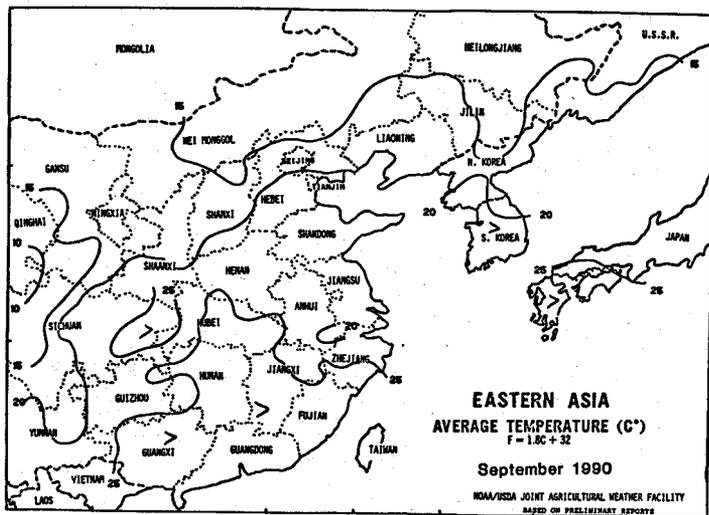
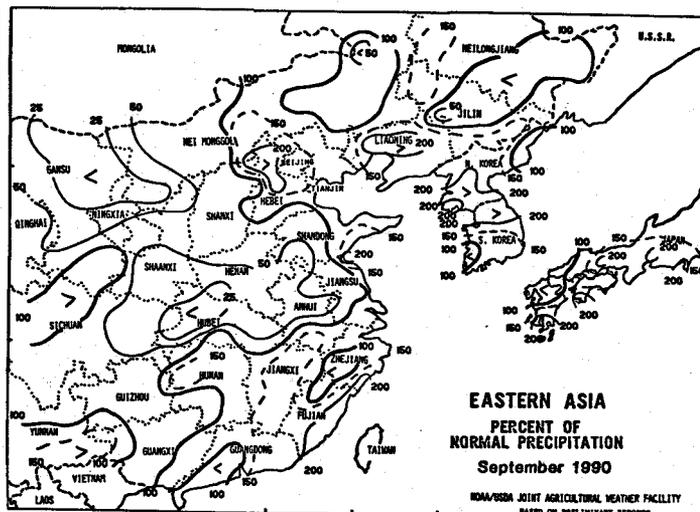
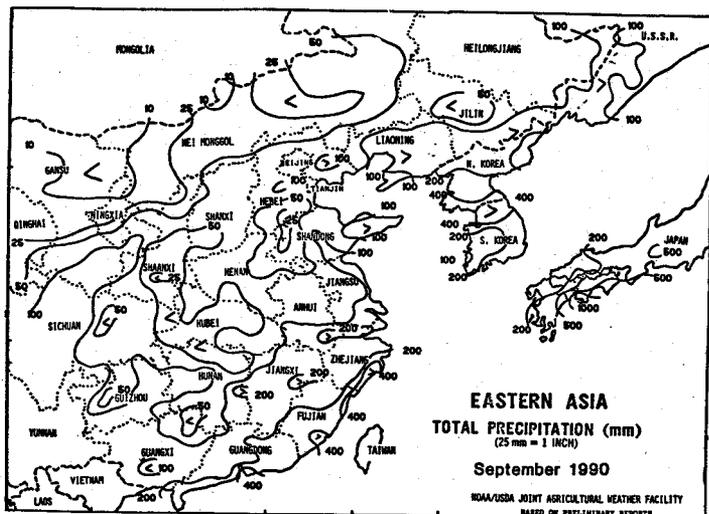


SOUTH AFRICA ... Highly beneficial rainfall (10-25mm or more) brought some relief to immature wheat in the Orange Free State and Southern Transvaal, although dry weather during September stressed reproductive crops. The rain boosted moisture reserves across the primary corn regions of the southern Transvaal and Orange Free State (generally known as the Maize Triangle) but missed western and southernmost areas. Corn planting should be well underway by mid-November but can begin as early as October. Elsewhere, mostly light rain (2-14mm) covered crop regions of the eastern Cape Province and Natal, and dry weather dominated wheat regions of the southern Cape Province. September rainfall was near to above normal only in localized coastal areas of the Cape Province and Natal.

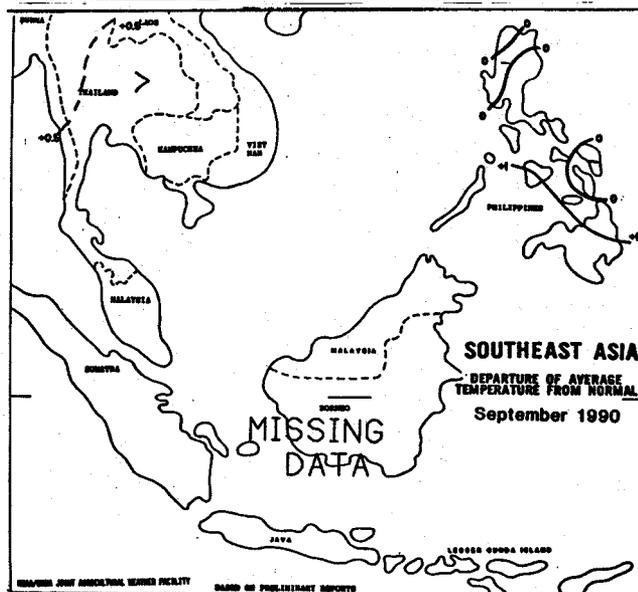
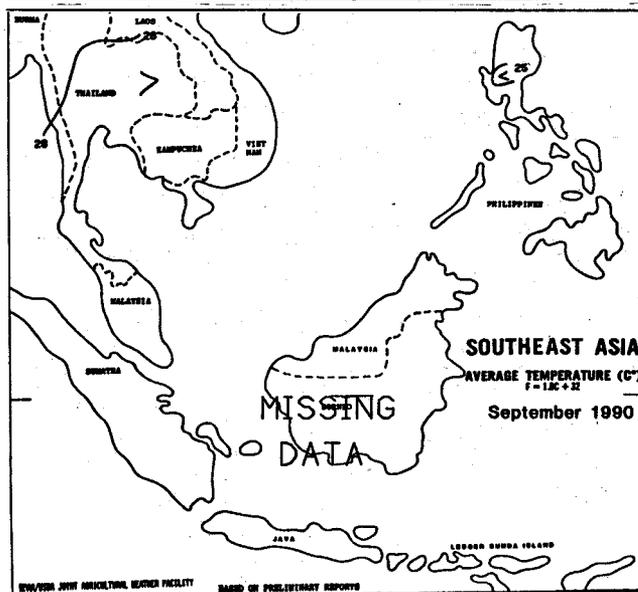
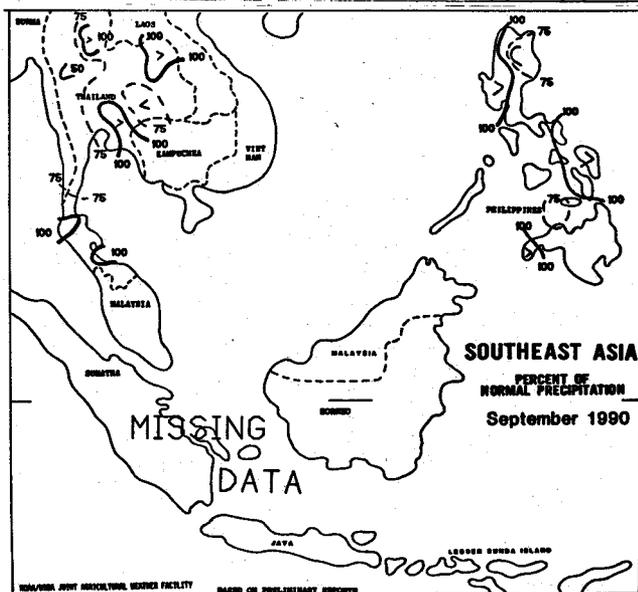
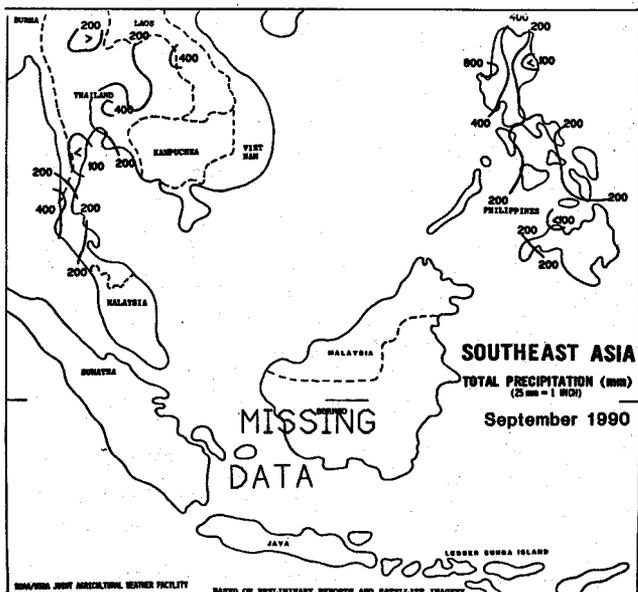
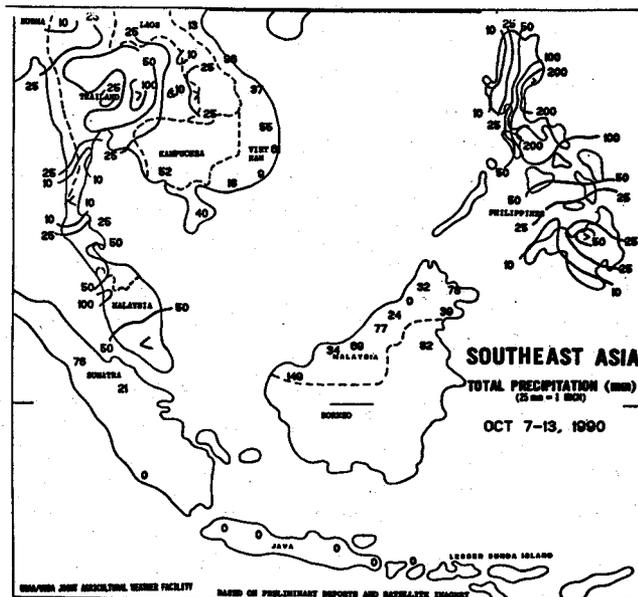


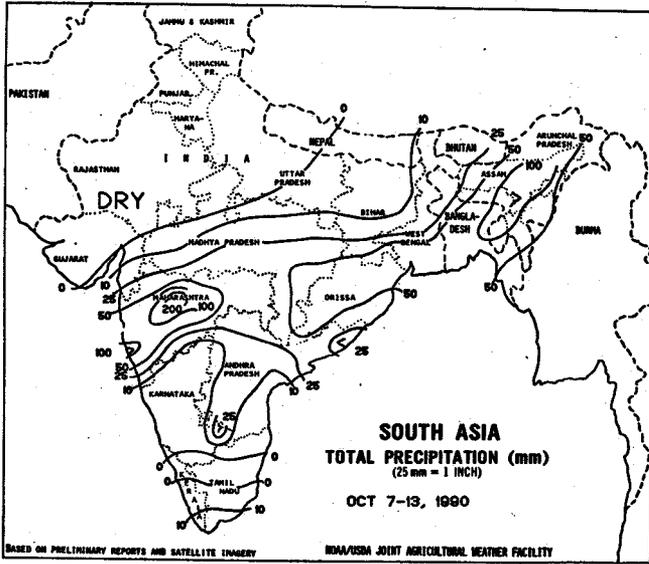


EASTERN ASIA ... Typhoon Hattie brushed southern Japan on the 7th and 8th, bringing torrential rains (100-200mm, with isolated amounts up to 250mm) and renewed flooding to sections of Ryukyu, Shikoku, and southern Honshu. A series of typhoons during September and early October has caused widespread flooding and summer crop harvest delays in much of southern Japan. Elsewhere, mostly dry and warmer-than-normal weather continued in Manchuria, the North China Plain, and Korean Peninsula, providing near optimal fall harvest conditions. Widespread rain (15-50mm) in western Chinese crop areas benefited early planted winter crops, while southern China turned mostly dry. Rainfall during September was above normal in extreme southern and eastern China, the Korean Peninsula, and southern and central Japan. Below-normal rainfall covered middle and upper sections of the Yangtze Valley, central and northern Manchuria, and much of the North China Plain.

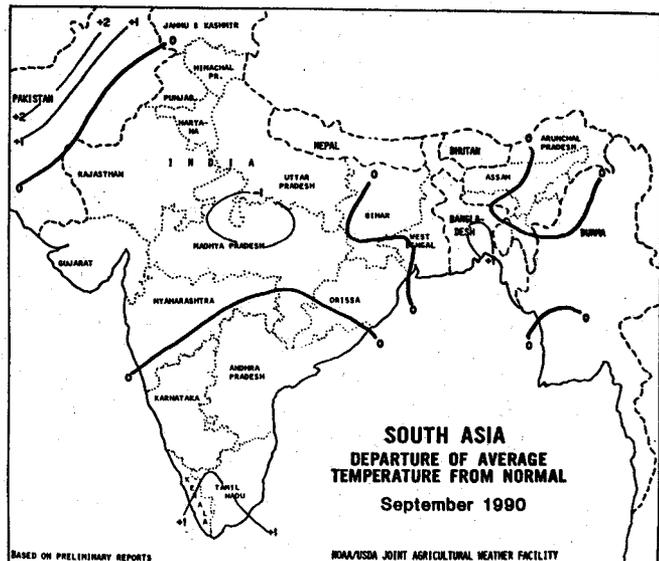
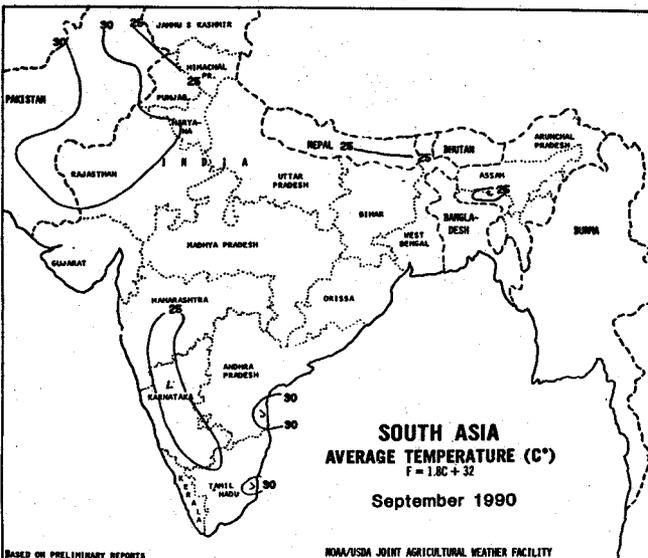
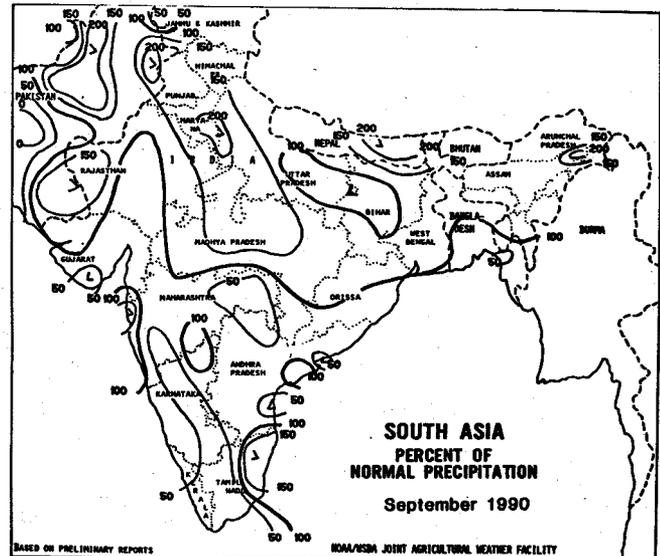
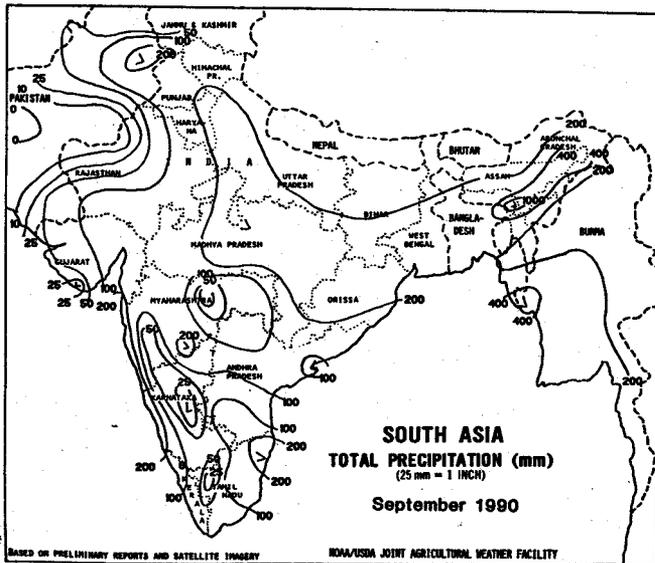


SOUTHEAST ASIA ... Moderate to heavy showers (25-50mm or more) continued over Thailand, including areas near Bangkok flooded by last week's inundating rains. Heaviest rain (100-200mm) was concentrated over the western Khorat Plateau. In September, increased rainfall over Indochina, caused partly by the remnants of Typhoon Ed which struck Vietnam on the 18th, increased reservoir levels for secondary plantings. September temperatures averaged slightly above normal over Indochina. In the Philippines, moderate showers (25-50mm or more) continued over most crop regions. The rain in northern Luzon's Cagayan Valley improved reservoir levels for secondary grain planting, which typically begins in November. Heavy rain (100-200mm or more) caused flooding in southern and eastern Luzon. In September, rainfall averaged near to above normal over most of the islands, due mainly to heavy rain early in the month caused by Typhoons Becky and Ed. The storms caused some flooding and crop damage in northwestern Luzon. September temperatures averaged near normal over the primary crop regions.

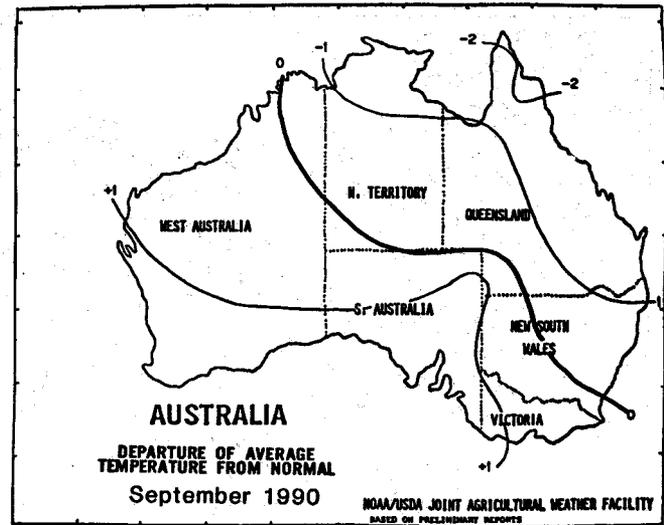
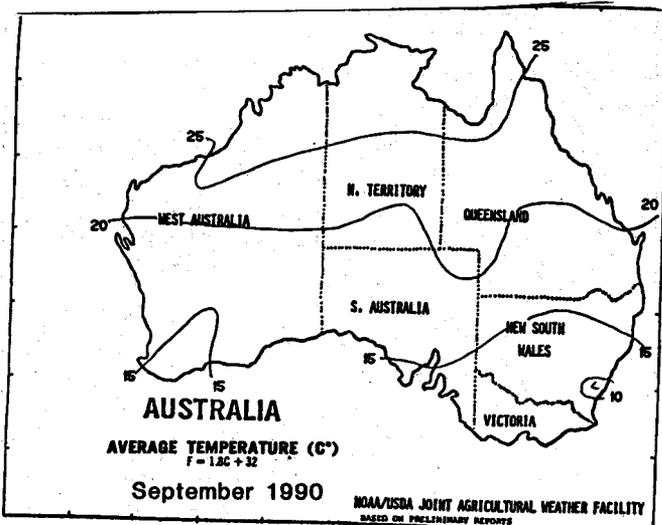
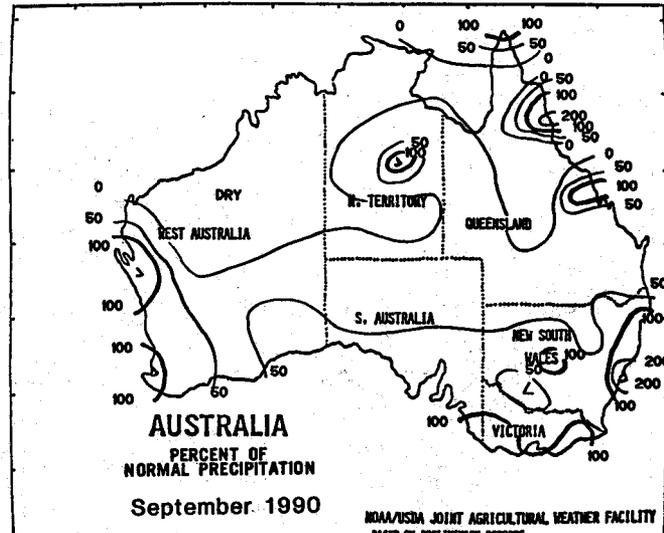
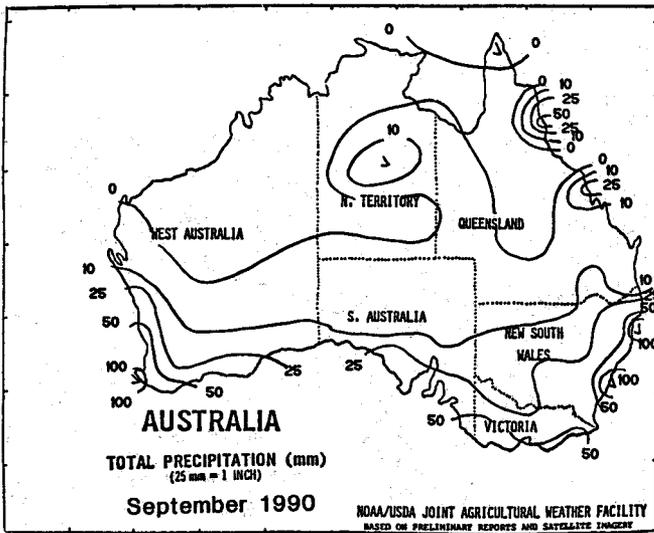
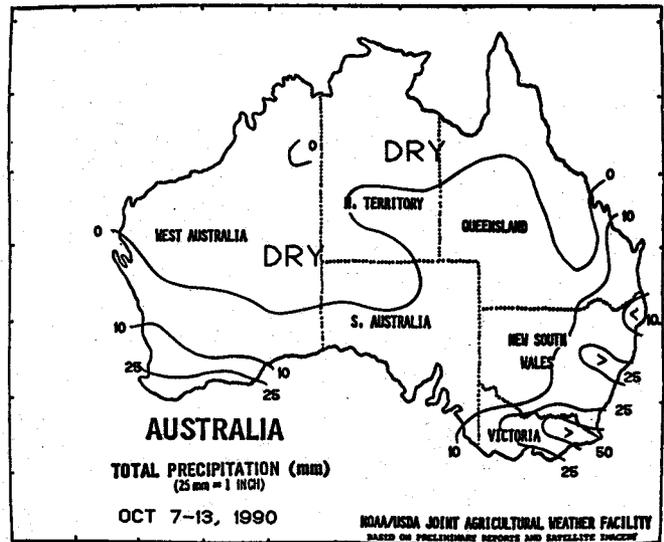


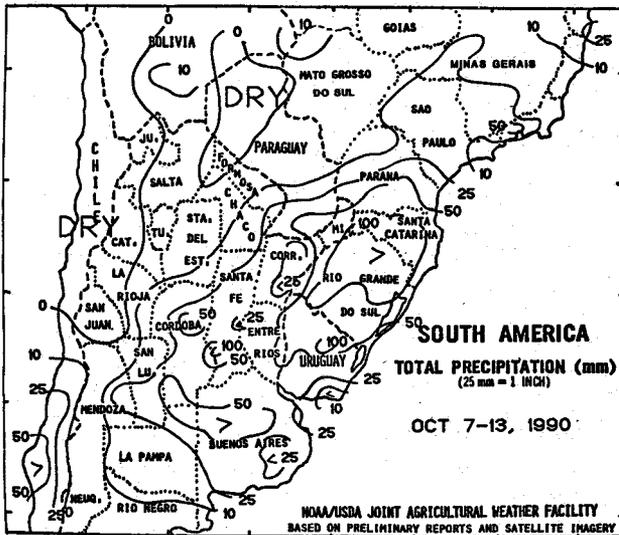


SOUTH ASIA ... Light to moderate rain (10-25mm or more) continued over most summer crop regions of central and southern India, although drier weather persisted from Karnataka southward. However, local heavy showers (96-306mm) in west-central Maharashtra likely caused flooding and some damage to immature crops. Heavy showers (50-100mm or more) from Bangladesh eastward caused more local flooding but maintained adequate irrigation reserves for fall plantings. In the north, dry, warm weather from northern Pakistan to northern Bihar state in India benefited mature summer crops and favored early fieldwork over primary winter wheat regions. In September, rainfall was below normal over large sections of India's southern interior, benefiting maturing summer crops but keeping soils unfavorably dry for fall plantings. The exception was eastern Tamil Nadu, where beneficial rain improved planting conditions. Near- to above-normal rainfall elsewhere in South Asia benefited immature summer crops and improved pre-planting irrigation levels over most primary winter wheat regions. Local flooding and crop damage occurred in parts of the eastern rice region and central India.

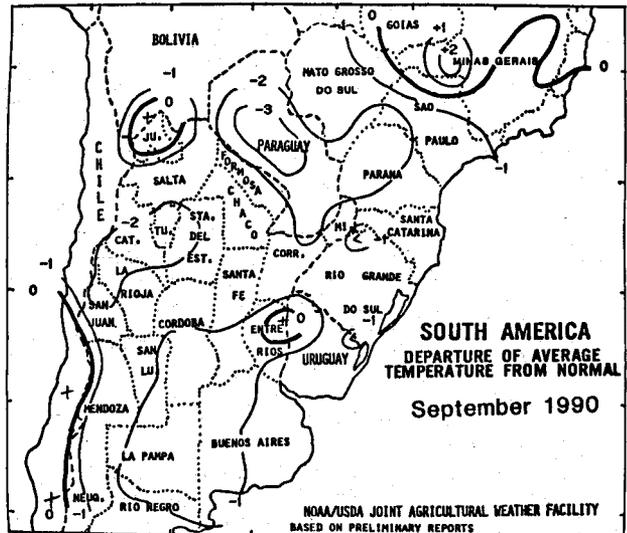
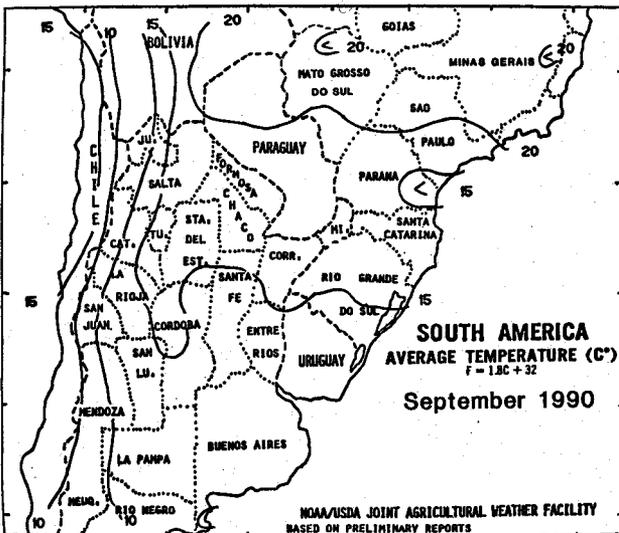
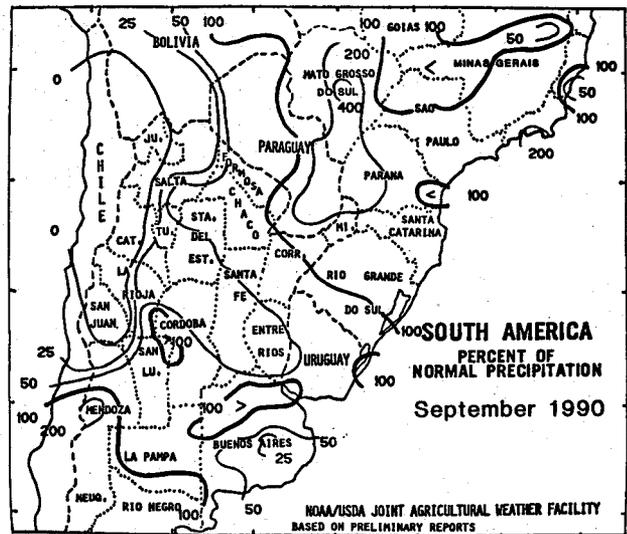
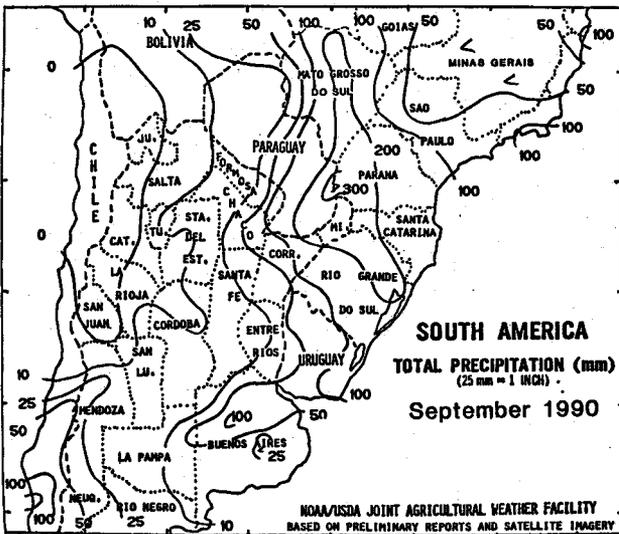


AUSTRALIA ... Widespread rain (10-25mm, with isolated amounts greater than 25mm) covered crop areas of extreme southeastern Queensland and New South Wales, benefiting heading to filling winter grains. East central Queensland remained unseasonably dry. Drier-than-normal weather during September and early October in the east left some soils abnormally dry for developing winter grains. Elsewhere, light to moderate rain (5-20mm) fell in southern South Australia, while moderate to heavy rain (15-35mm) fell across crop areas of Western Australia. The rain favored heading to reproductive winter grains. September precipitation was below normal in most southern crop areas. Mean monthly temperatures were above normal in the south and below normal in the east.

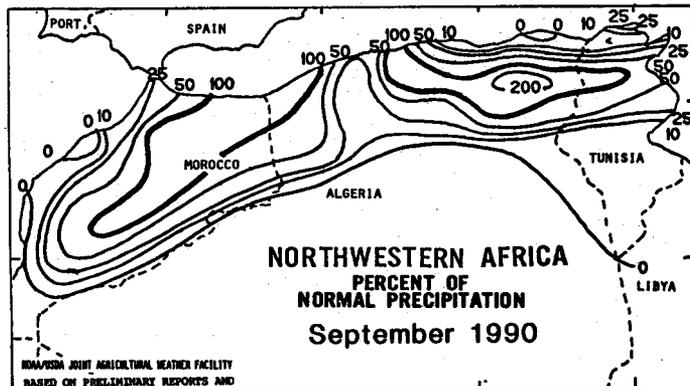
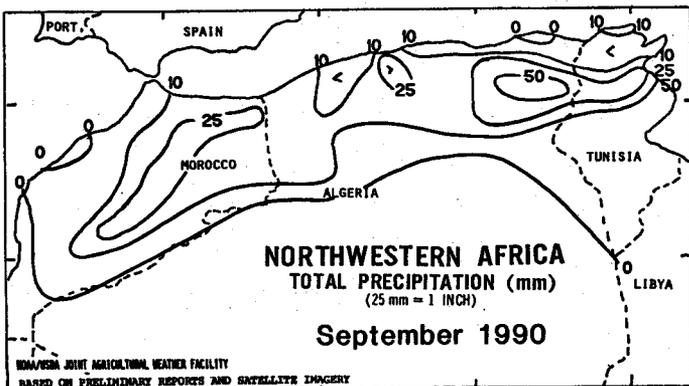
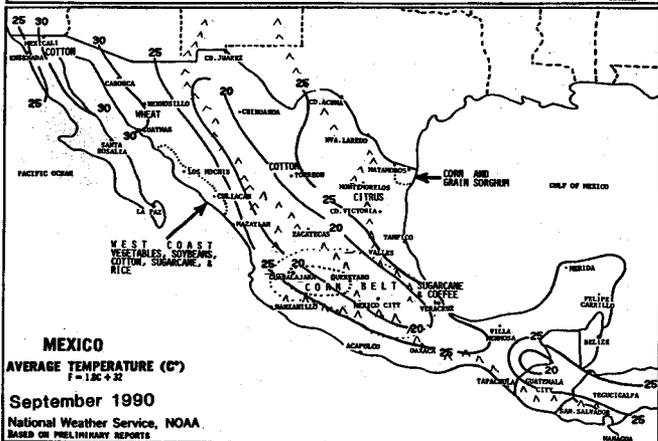
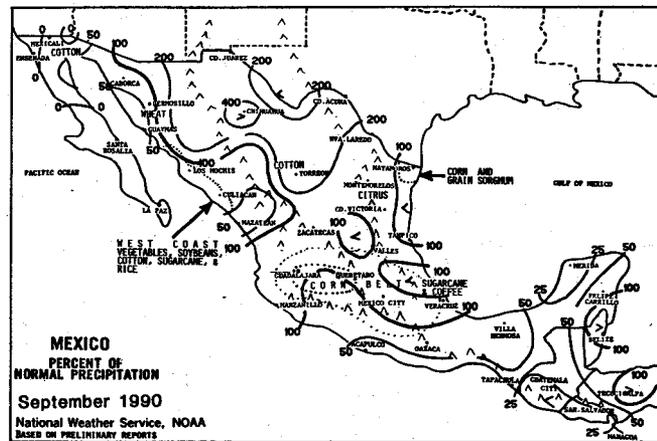
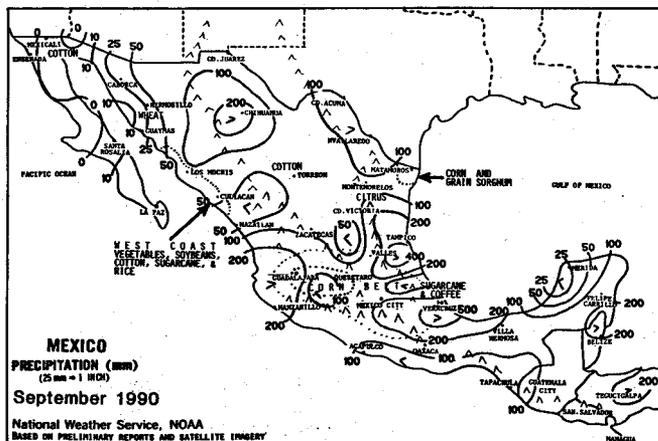
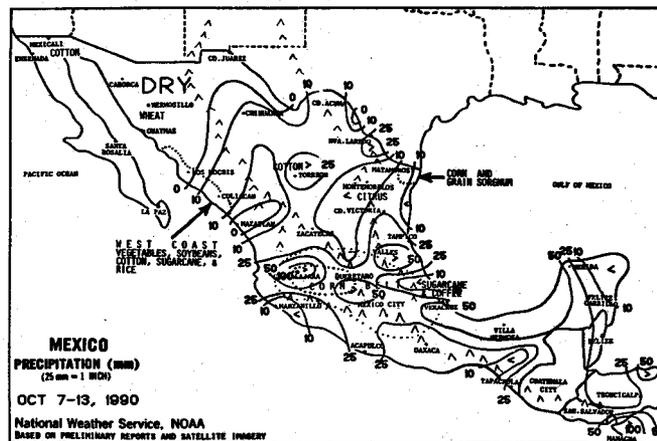


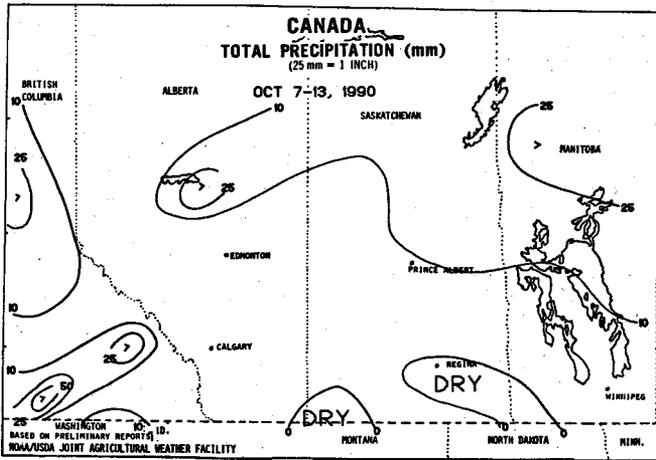


SOUTH AMERICA ... In Argentina, widespread rain throughout the primary crop areas improved wheat growing conditions and alleviated topsoil moisture deficiencies for summer crop plantings. Weekly rainfall generally averaged 25-50mm, with scattered amounts of 50-137mm. The much needed moisture that fell during the first 2 weeks of October followed below-average September rainfall, especially in Cordoba, Santa Fe, and scattered areas of Buenos Aires. Recent showers also helped cotton planting in southern Chaco. In south-central Brazil, recent soaking rain (80-180mm) drenched Rio Grande do Sul and Santa Catarina, causing fieldwork delays. Showers diminished further north, with 25-72mm in southern Parana, 10-20mm in northern Parana, Sao Paulo, and extreme southern Minas Gerais. Very light showers (5mm or less) fell over far northern and western crop areas. September rainfall generally averaged near to above normal, providing sufficient moisture but slowing fieldwork.

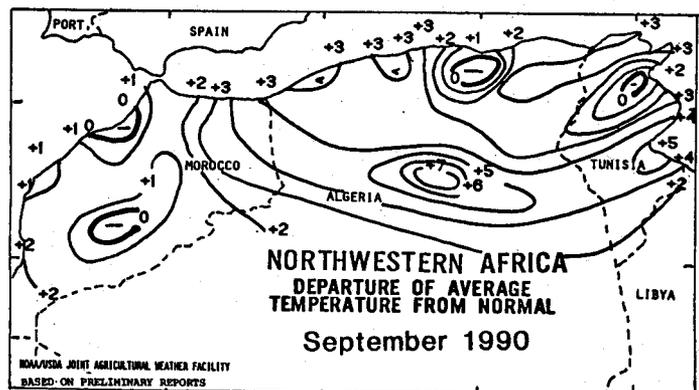
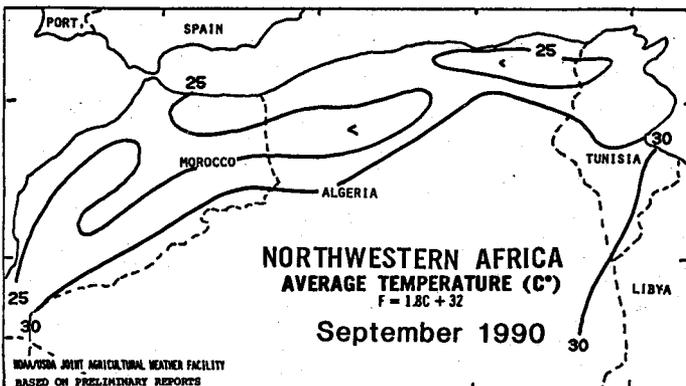
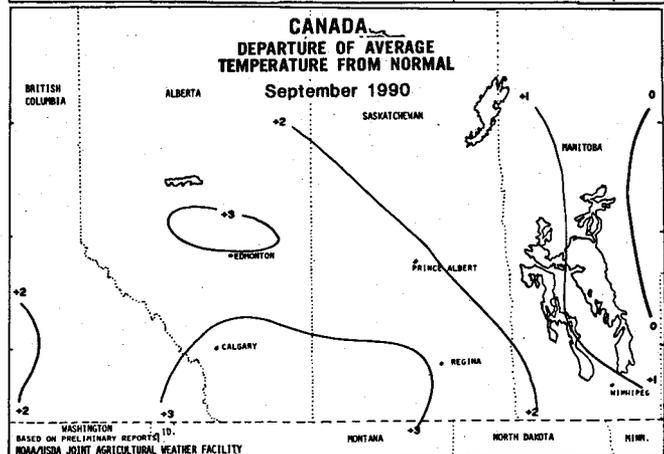
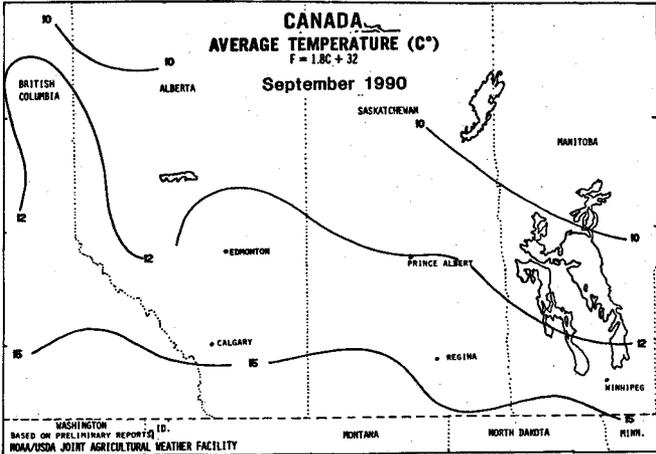
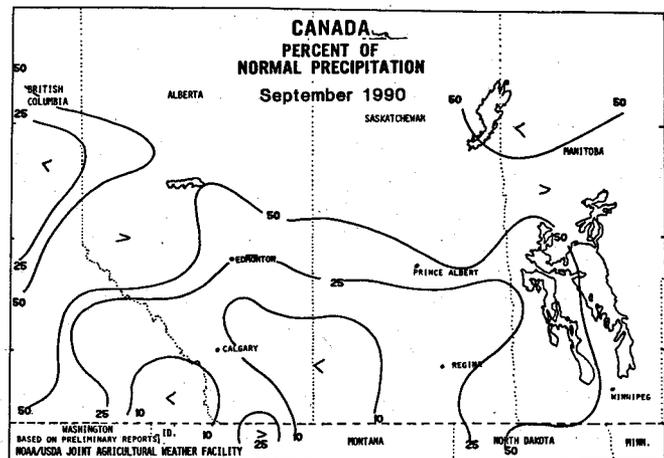
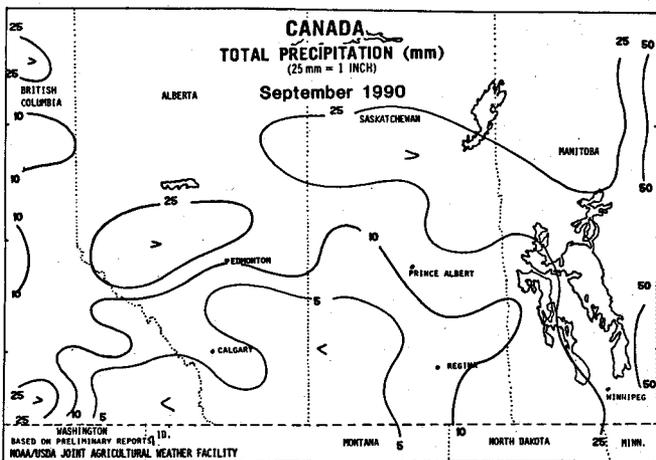


MEXICO ... Drier weather prevailed in the northwest following last week's tropical storm. Wheat planting is underway. Scattered light showers covered much of the north, where September rainfall averaged well above normal. The moisture provided favorable moisture for wheat planting and range growth, but caused some harvest delays. Substantial rain (25-50mm, with scattered amounts of 50-102mm) over most of the Southern Plateau helped immature crops but slowed harvesting. September rainfall averaged near to slightly above normal in the Plateau, promoting corn development. Widespread rain this past week in the south benefited corn growth, following below-average rainfall during September.





CANADA ... Light precipitation (5-9mm) and colder-than-normal temperatures across the northernmost growing regions of the Prairie Provinces hampered final oilseed harvests. In September, much drier- and warmer-than-normal weather provided optimal harvest conditions across the Prairies and promoted higher grain and oilseed quality. This is the last summary of the season. Coverage will resume in May, coinciding with spring grain and oilseed planting.



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(Continued from front cover)

widespread flooding to **Georgia** and the **Carolinas**. At week's end, heavy rain continued up the **eastern seaboard** into **New England** as Hurricane Lili veered northward before reaching the **North Carolina shoreline**, creating only heavy surf along the **middle and northern Atlantic coast**. Pacific storms brought rain into the extreme **Northwest**, while snow again blanketed the **central Rockies** and **central High Plains**. Early season snow also fell in **Wisconsin** as unseasonably cold air flowed into the **Central States** behind the frontal system. Record low temperatures for the date were broken in the **central and southern Plains** on Wednesday as freezing temperatures dipped into the **Texas panhandle**. Hot, moist air remained along the **Atlantic seaboard**, where a number of high temperature records were set on Monday and Tuesday.

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