

# WEEKLY WEATHER AND CROP BULLETIN

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

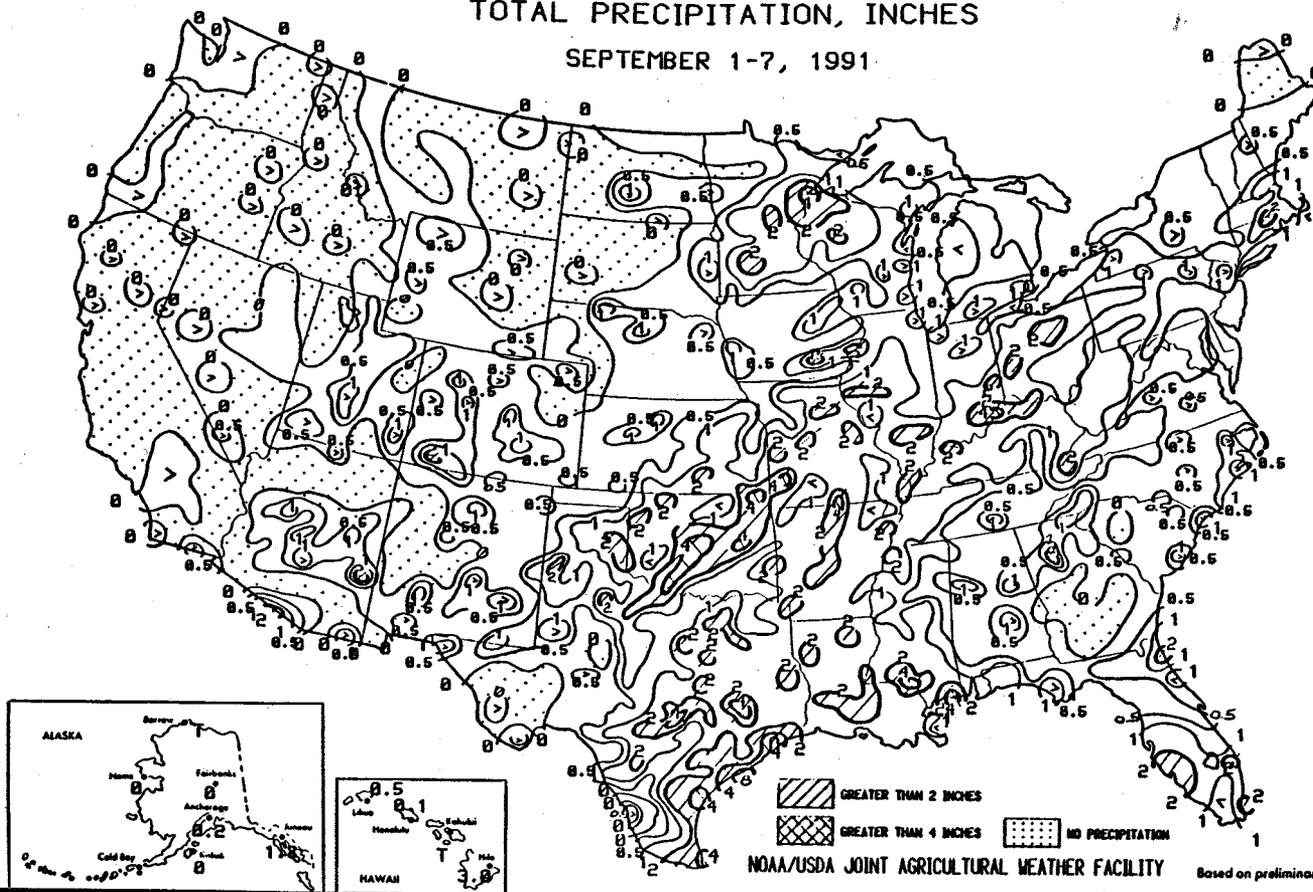
U.S. DEPARTMENT  
OF AGRICULTURE  
National Agricultural  
Statistics Service  
and World Agricultural  
Outlook Board

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September 10, 1991

TOTAL PRECIPITATION, INCHES  
SEPTEMBER 1-7, 1991



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

## HIGHLIGHTS

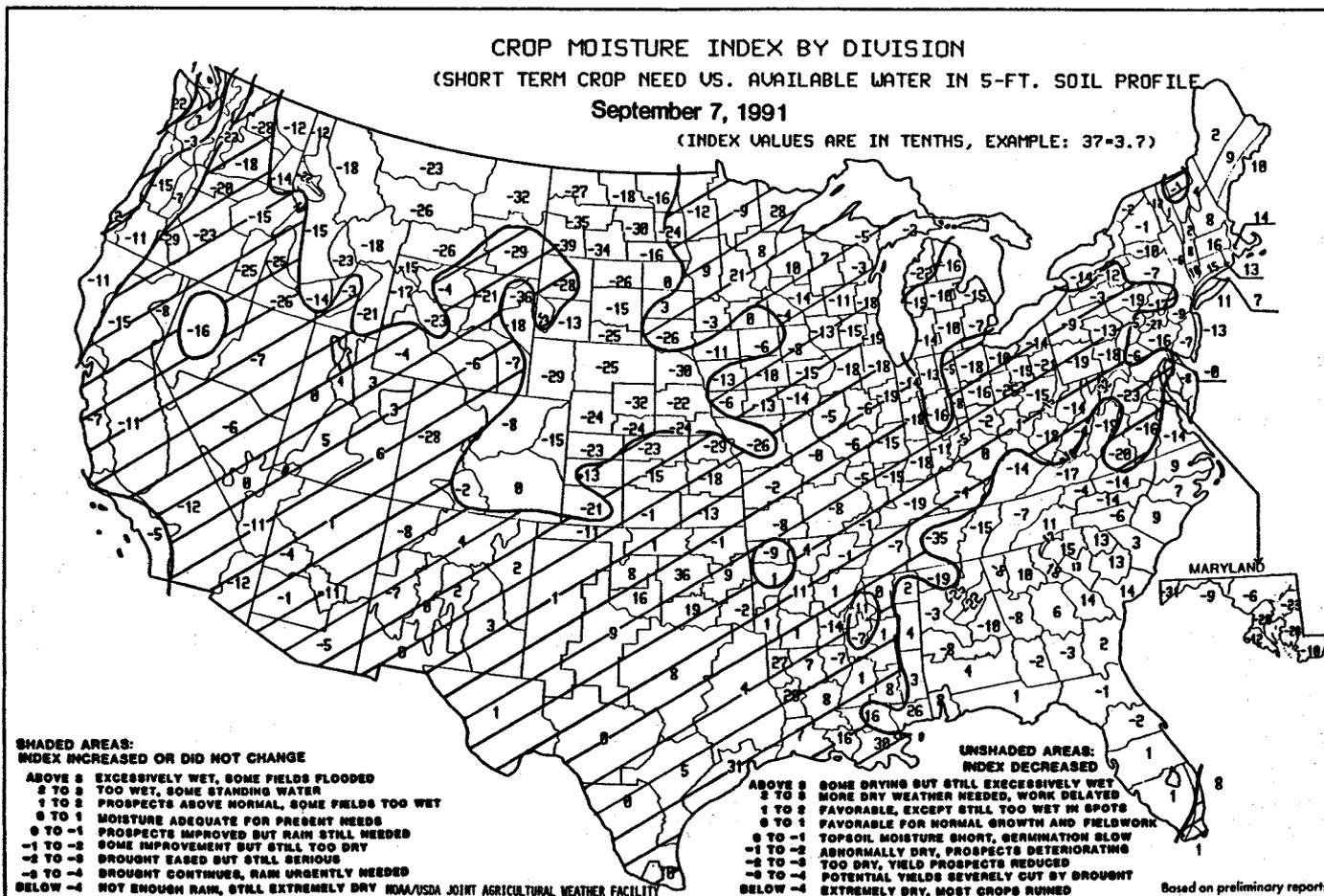
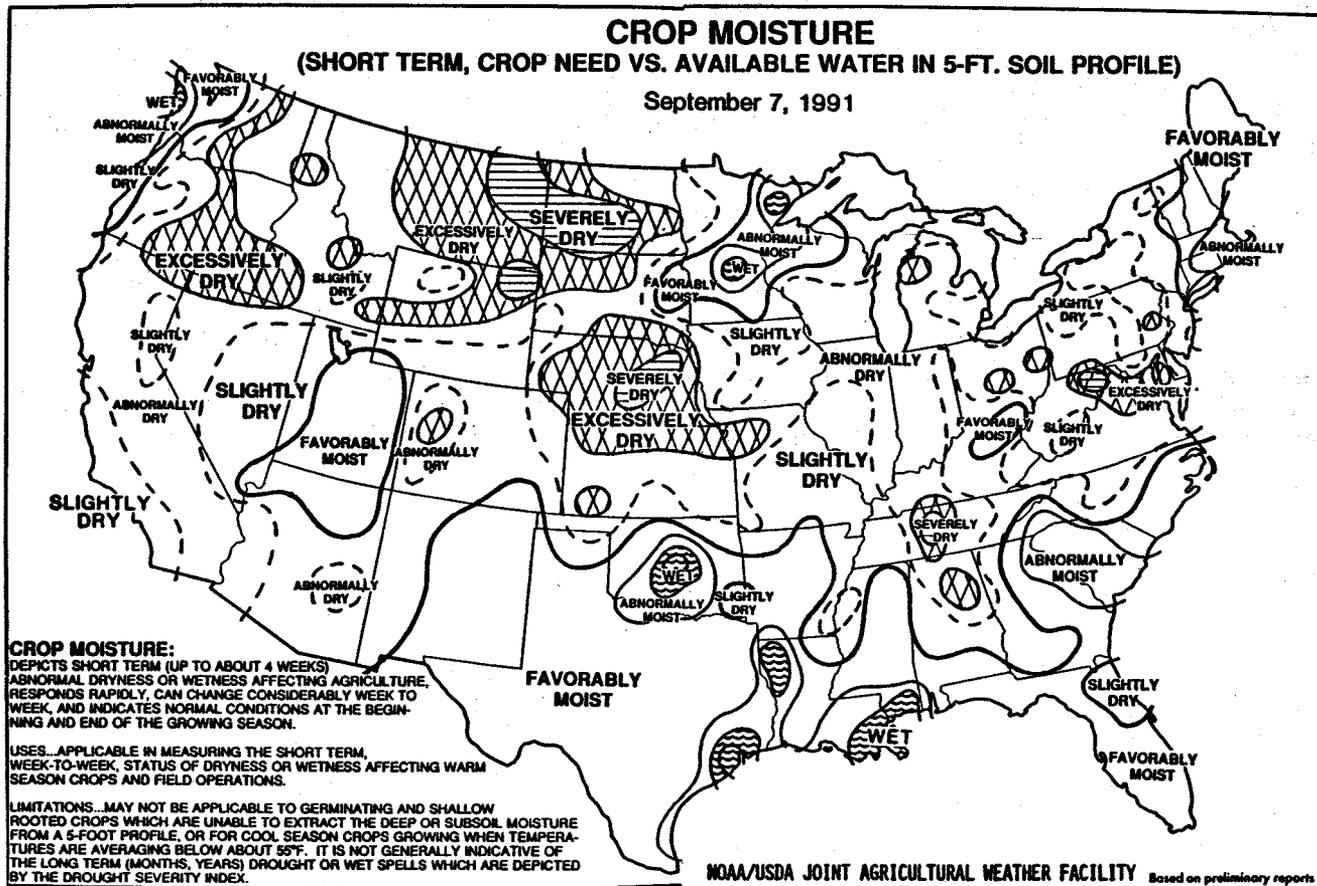
September 1 - 7, 1991

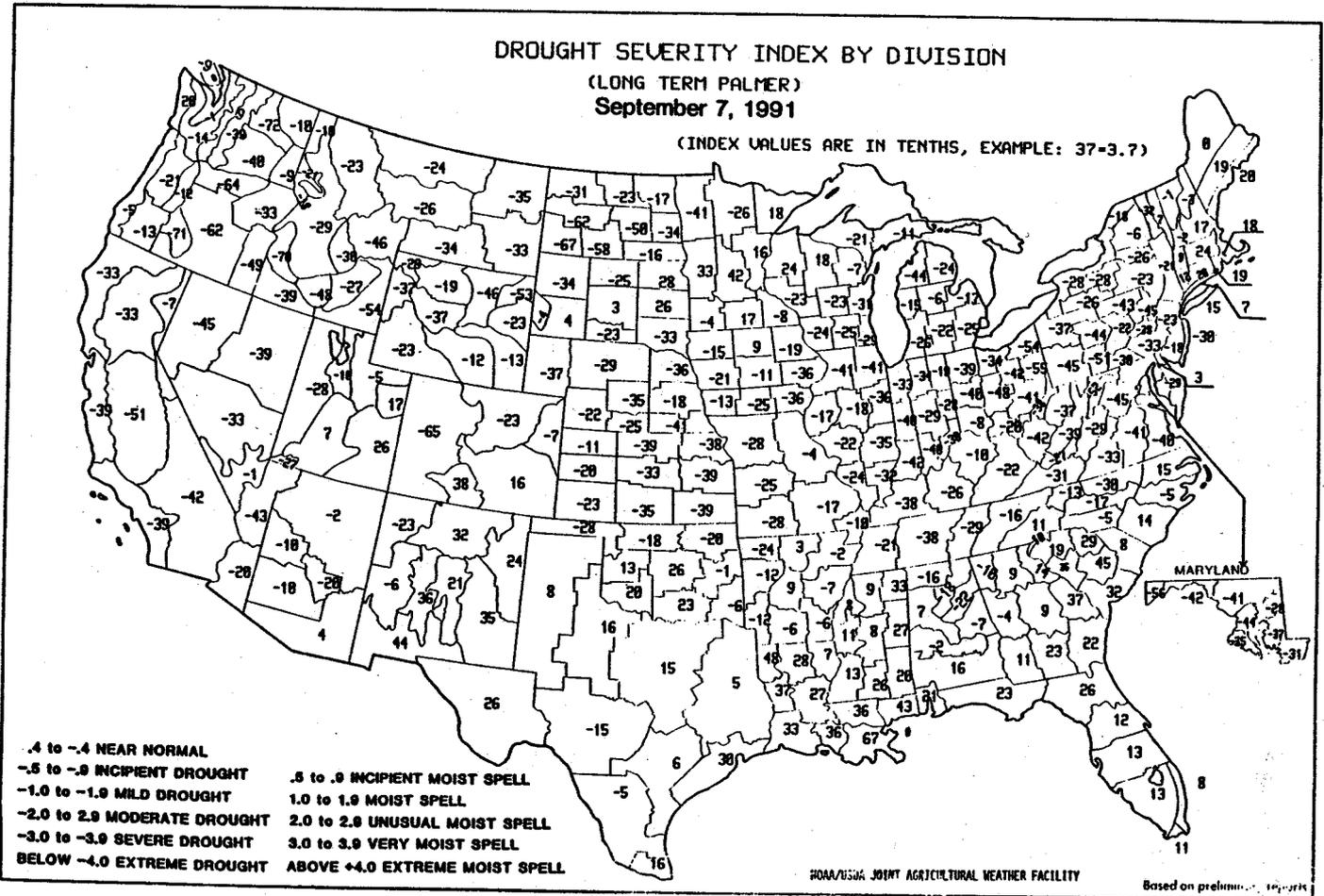
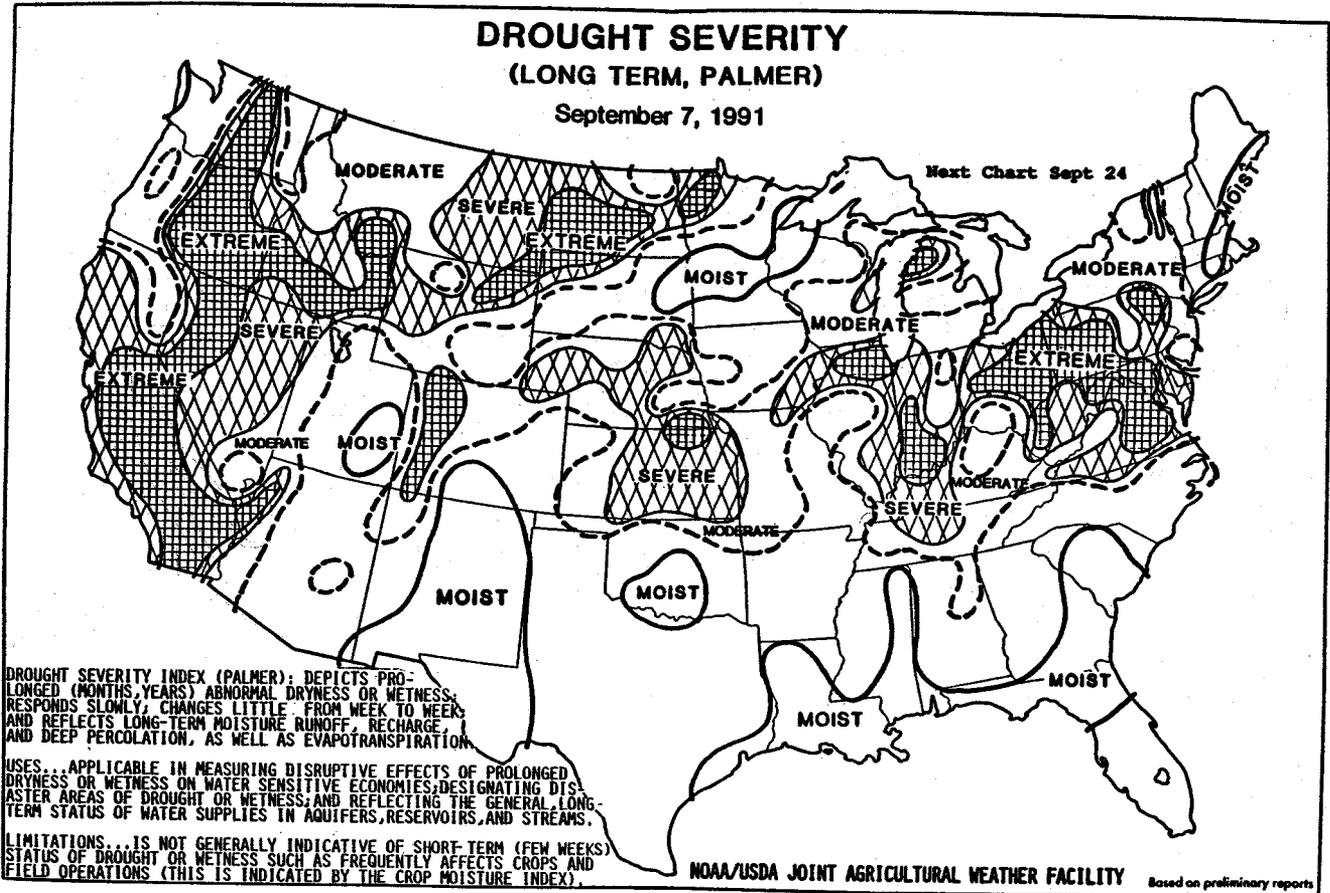
Late-summer heat continued to bake portions of the **Great Plains and Rockies**, while strong thunderstorms doused the **upper Midwest and southern Plains** with up to 7 inches of rain. Highs exceeding 100°F were felt across the **Dakotas and Montana** on Sunday and Monday. However, by Tuesday, readings were as much as 20°F cooler after a cold front trekked across the central United States. Weekly departures up to 10°F were observed in the **northern Plains**. Meanwhile, unseasonably cool conditions settled into **New England** as crisp Canadian air pushed southward. Record daily lows were reported from **Michigan to Maine** as readings dipped into the thirties in **northern New England**. By midweek the front in the central United States had pushed into the **Midwest**, while the trailing edge dropped into the **southern Plains**. Strong thunderstorms erupted along and ahead of the front, (Continued to back cover)

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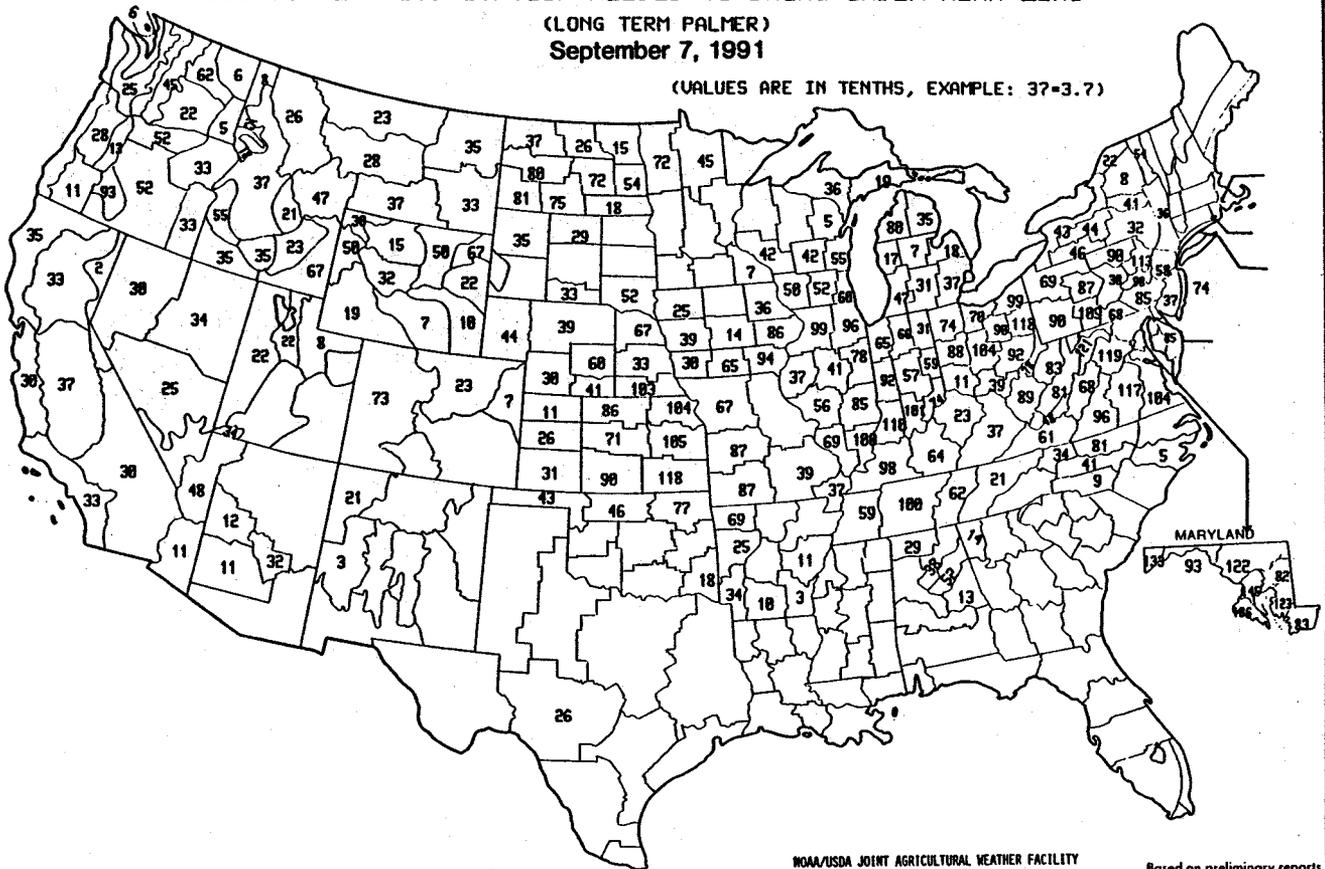
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ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX NEAR ZERO  
(LONG TERM PALMER)  
September 7, 1991

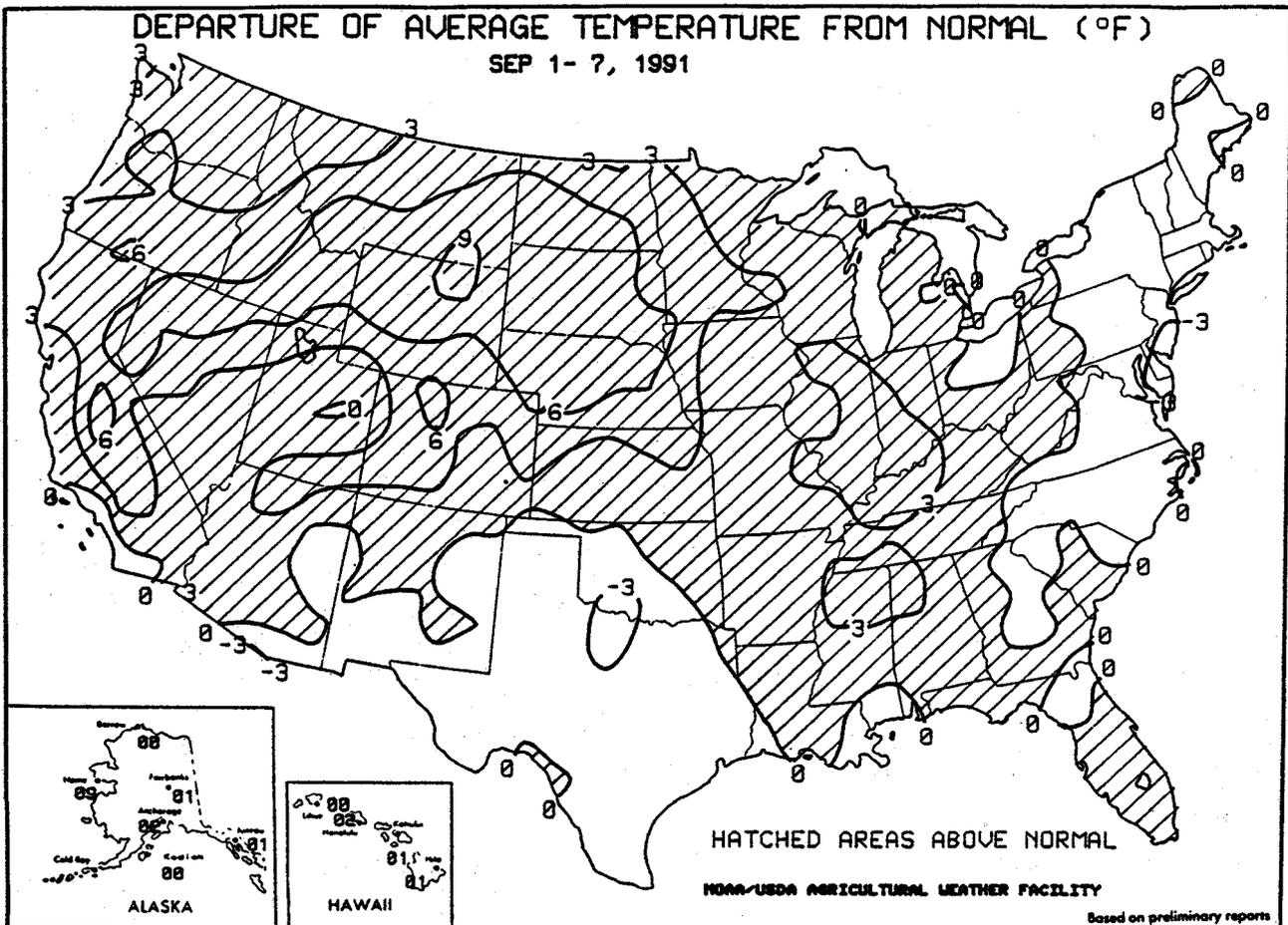
(VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

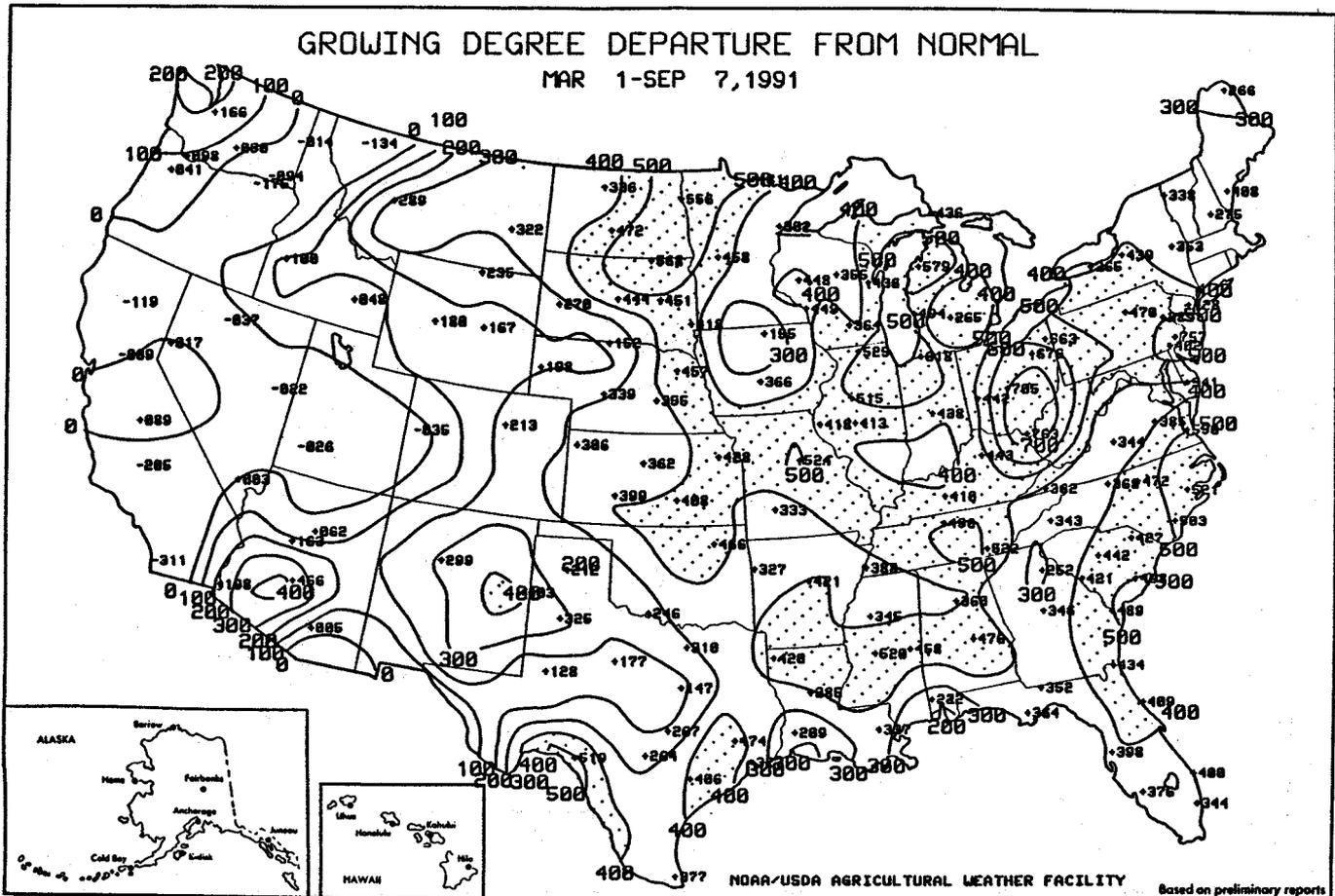
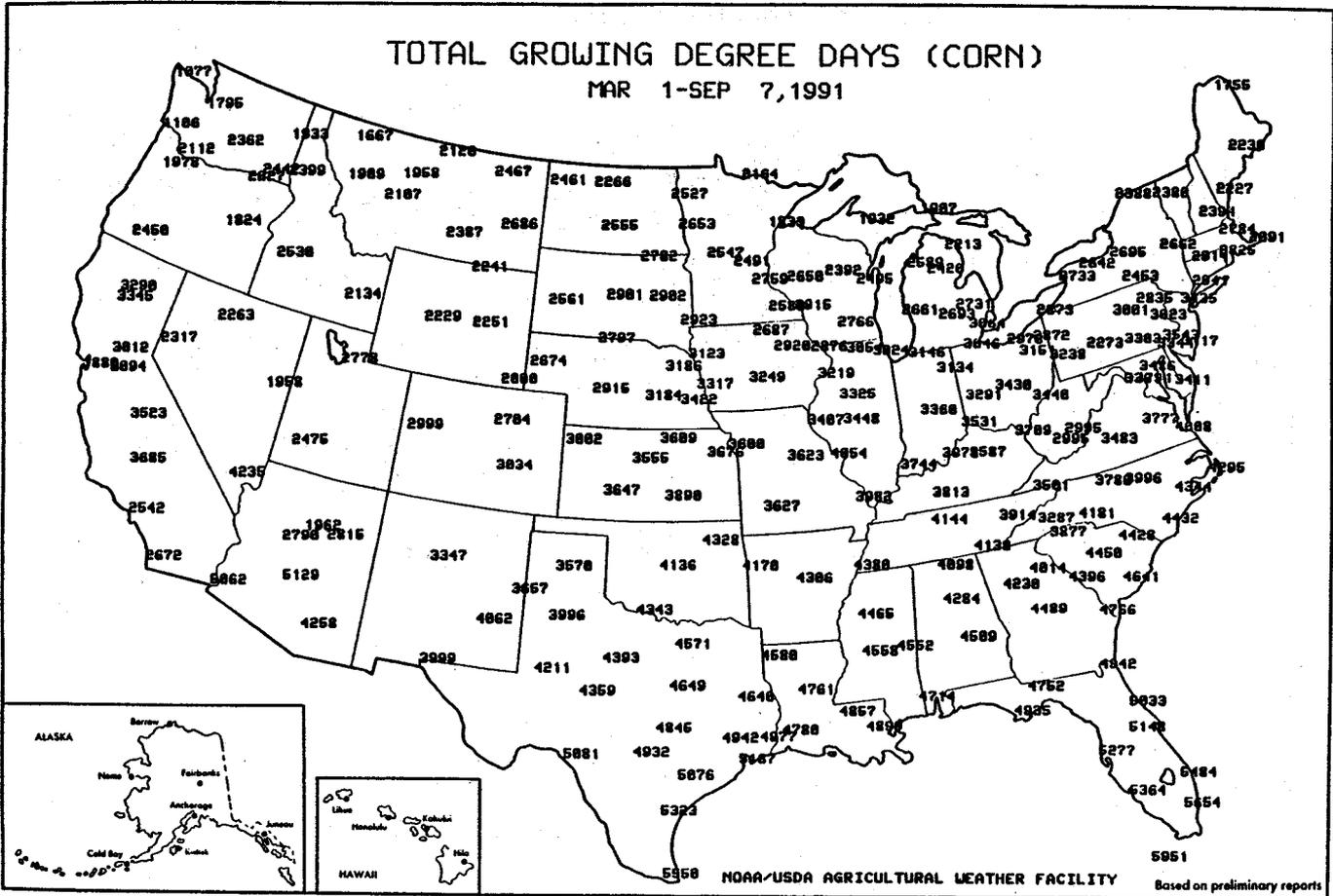
DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)  
SEP 1-7, 1991

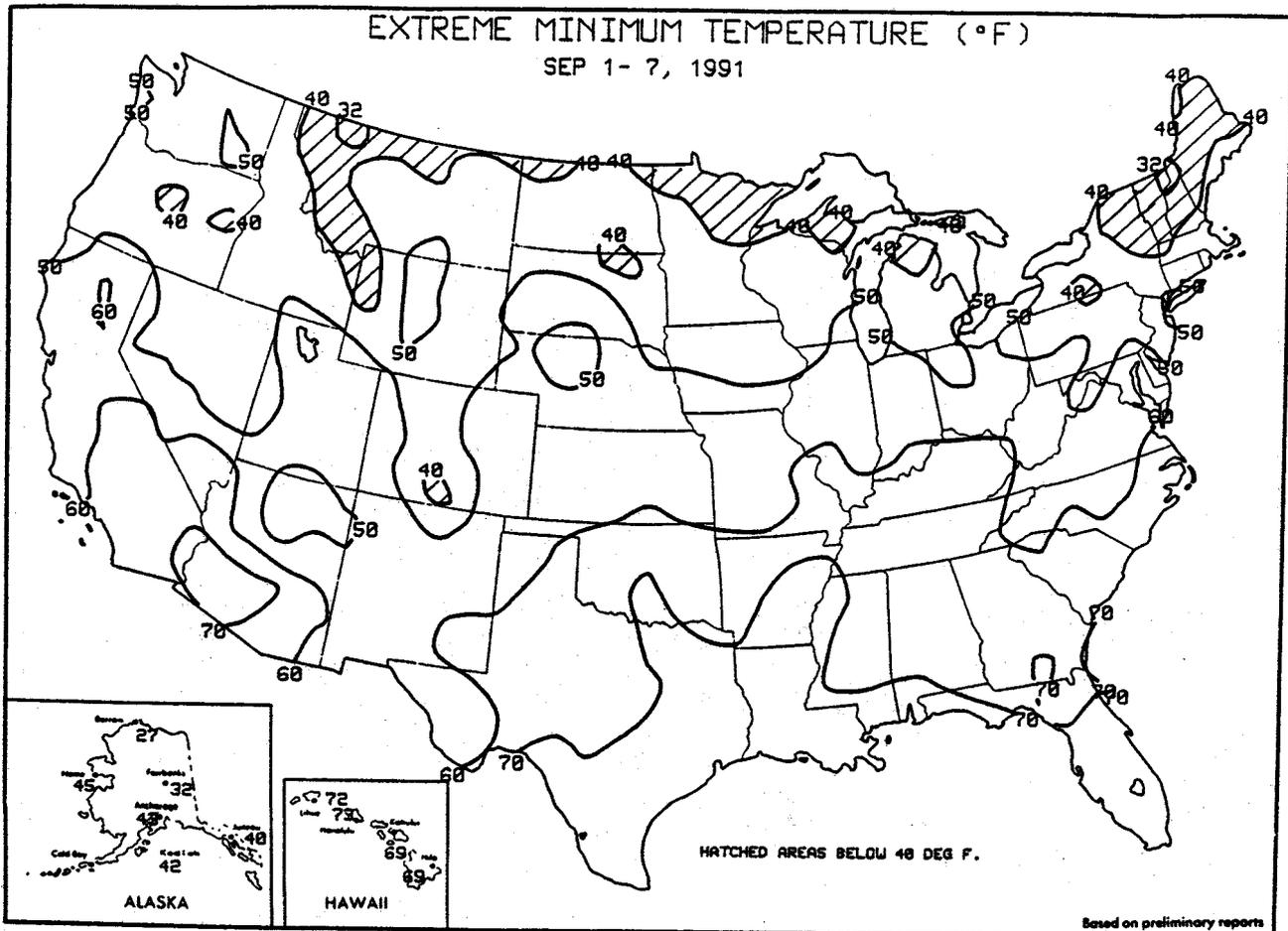
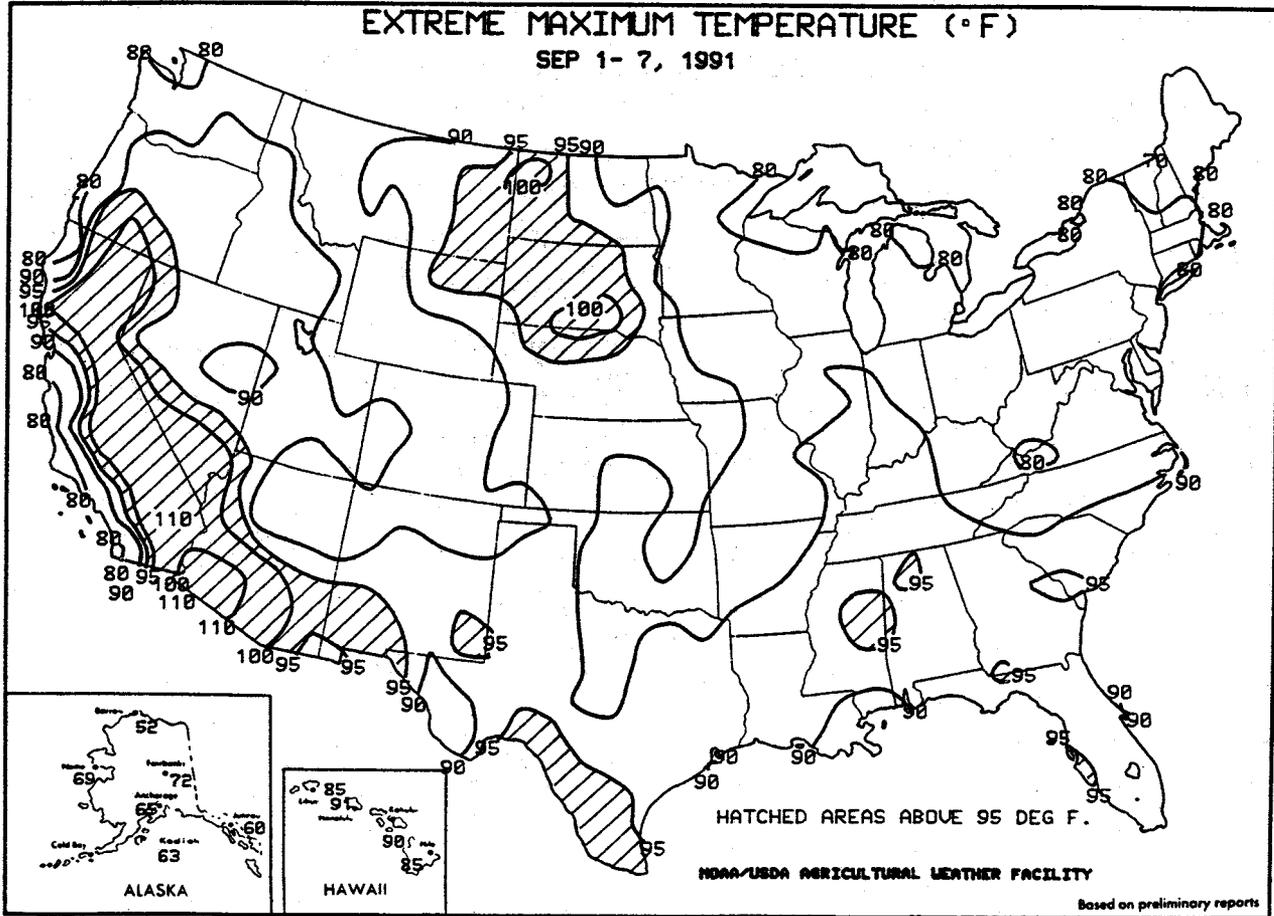


HATCHED AREAS ABOVE NORMAL

NOAA/USDA AGRICULTURAL WEATHER FACILITY

Based on preliminary reports





# National Weather Data for Selected Cities

Weather Data for the Week Ending September 7, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE		.50 INCH OR MORE	
																		90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	92	69	96	66	81	3	.3	-.8	.3	.3	28	42.6	107	91	48	4	0	1	0	0	
MOBILE	87	73	90	72	80	-1	1.1	-.6	.8	1.1	65	71.2	149	98	65	1	0	4	1	1	
MONTGOMERY	92	69	96	66	81	1	1.7	-.6	1.4	1.7	153	53.3	151	97	46	5	0	2	0	1	
AK ANCHORAGE	60	48	65	43	54	2	.9	.3	.3	.9	147	9.5	103	95	67	0	0	6	0	0	
BARROW	41	30	52	27	35	0	0	.3	.3	0	0	0	30	96	72	0	0	0	0	0	
FAIRBANKS	64	39	72	32	52	1	1.1	-.2	.1	1.1	31	6.2	83	91	41	0	1	1	0	0	
JUNEAU	57	48	60	40	52	1	3.3	2.0	1.1	3.3	251	44.8	148	99	82	0	0	6	3	3	
KODIAK	57	48	63	42	53	0	1.0	-.4	.4	1.0	70	55.9	149	99	71	0	0	5	0	0	
WOME	62	49	69	45	56	2	.2	-.4	.2	.2	34	8.8	88	82	46	0	0	3	0	0	
AZ PHOENIX	100	78	108	75	90	2	1.3	-.8	.8	1.3	262	11.0	80	91	35	7	0	2	1	1	
PRESCOTT	81	58	89	55	70	2	.8	-.6	.7	.8	441	4.3	94	67	25	0	0	2	0	0	
TUCSON	96	70	103	63	83	0	.4	-.4	.4	.4	0	6.3	82	77	28	6	0	0	0	0	
YUMA	106	81	114	70	93	3	.2	-.1	.1	.2	267	2.0	134	66	27	7	0	2	0	0	
AR FORT SMITH	87	72	90	70	80	2	1.0	-.2	.5	1.0	131	25.2	91	96	59	1	0	5	0	0	
LITTLE ROCK	86	71	89	70	78	1	1.4	-.4	.7	1.4	144	41.8	122	94	74	0	0	5	2	0	
CA BAKERSFIELD	98	71	103	67	85	5	.0	.0	.0	.0	0	4.6	118	55	25	7	0	0	0	0	
SUBKA	67	55	73	52	61	3	.0	-.1	.1	.0	25	17.8	78	96	77	0	0	1	0	0	
FRESNO	99	69	103	64	84	7	.0	.0	.0	.0	0	8.5	121	68	23	7	0	0	0	0	
LOS ANGELES	73	63	79	62	68	0	.0	.0	.0	.0	0	8.0	95	87	65	0	0	0	0	0	
REDDING	101	64	108	61	83	4	.0	-.2	.0	.0	0	17.3	68	57	17	7	0	0	0	0	
SACRAMENTO	96	60	103	59	78	5	.0	.0	.0	.0	0	12.7	118	83	26	5	0	0	0	0	
SAN DIEGO	74	64	77	64	69	-3	.0	.0	.0	.0	133	10.8	173	91	69	0	0	1	0	0	
SAN FRANCISCO	74	57	89	55	66	2	.0	.0	.0	.0	0	11.3	91	93	56	0	0	0	0	0	
CO DENVER	83	56	88	55	70	3	.1	-.2	.1	.1	23	16.0	135	79	29	0	0	1	0	0	
GRAND JUNCTION	85	60	94	57	73	2	.9	.8	.8	.9	541	5.0	96	70	30	3	0	2	1	1	
PUEBLO	87	55	92	50	71	1	1.0	.7	.9	1.0	365	10.2	118	92	28	2	0	2	1	0	
CT BRIDGEPORT	76	59	81	51	68	-1	.2	-.6	.1	.2	19	28.2	101	82	47	0	0	0	0	0	
FARTFORD	78	54	83	44	66	-1	.2	-.7	.1	.2	26	31.7	107	94	44	0	0	2	0	0	
DC WASHINGTON	82	63	87	59	73	-2	1.4	.5	.9	1.4	161	19.6	71	89	45	0	0	3	1	0	
FL APALACHICOLA	89	74	91	72	81	0	.1	-.1	.1	.1	6	86.0	220	95	63	3	0	1	0	0	
DAYTONA BEACH	88	75	91	70	82	1	.6	-.1	.5	.6	34	57.2	168	93	64	1	0	2	0	0	
JACKSONVILLE	90	72	95	69	81	0	1.0	-.7	.5	1.0	56	66.8	172	97	59	4	0	3	1	1	
KEY WEST	90	78	91	75	84	0	1.5	-.1	1.0	1.5	104	29.3	120	89	61	5	0	3	1	1	
MIAMI	91	76	93	75	84	1	1.4	-.4	.5	1.4	79	38.7	98	95	58	6	0	5	1	1	
ORLANDO	91	75	94	73	83	1	.4	-.2	.3	.4	27	51.6	137	98	54	5	0	3	0	0	
TALLAHASSEE	93	70	96	68	82	1	.4	-.7	.3	.4	2	68.0	140	98	47	6	0	2	0	0	
TAMPA	93	74	96	71	83	1	1.8	.1	.9	1.8	106	38.8	109	99	52	7	0	4	2	1	
WEST PALM BEACH	90	76	95	74	83	1	1.8	-.2	1.5	1.8	89	60.9	157	97	62	3	0	5	1	1	
CA ATLANTA	87	69	94	65	78	2	.1	-.7	.1	.1	14	47.7	133	92	50	3	0	2	0	0	
AUGUSTA	91	65	96	63	78	1	.2	-.7	.2	.2	25	50.8	154	99	47	5	0	2	0	0	
MACON	89	67	94	66	78	-1	.1	-.8	.1	.1	6	47.0	139	95	48	4	0	1	0	0	
SAVANNAH	89	71	95	68	80	1	.3	-.2	.3	.3	18	63.7	163	94	52	4	0	2	0	0	
HI HILO	84	71	85	69	77	1	1.4	-.3	.9	1.4	83	117.8	138	97	68	0	0	5	1	0	
HONOLULU	90	76	91	73	83	2	.0	-.1	.0	.0	0	11.1	78	74	46	6	0	0	0	0	
KARULUI	88	71	90	69	80	1	.1	.0	.1	.1	100	9.3	76	87	54	1	0	1	0	0	
LIRUE	84	75	85	72	79	0	.3	-.1	.2	.3	70	24.4	92	84	65	0	0	2	0	0	
ID BOISE	89	56	94	47	72	5	.0	-.1	.1	.0	0	6.3	81	51	17	3	0	0	0	0	
LEWISTON	85	55	92	48	70	2	.0	-.2	.1	.0	0	8.5	97	51	19	2	0	0	0	0	
POCATELLO	87	52	91	45	69	6	.0	-.1	.1	.0	0	10.4	140	70	19	1	0	0	0	0	
IL CHICAGO	82	59	90	53	71	3	.7	-.3	.7	.7	68	21.1	86	87	41	1	0	1	1	1	
MOLINE	85	58	90	49	71	3	1.1	.2	.9	1.1	118	20.3	74	96	40	1	0	2	1	1	
PEORIA	84	61	88	52	72	3	1.6	.8	1.4	1.6	187	21.2	83	93	48	0	0	2	1	1	
QUINCY	82	62	86	53	72	2	2.0	1.0	2.0	2.0	203	24.6	90	83	48	0	0	1	1	1	
ROCKFORD	84	57	90	50	70	3	.8	-.1	.8	.8	91	17.8	67	90	36	1	0	1	1	1	
SPRINGFIELD	84	62	88	57	73	2	2.2	1.4	1.9	2.2	286	24.7	99	99	52	0	0	3	1	1	
IN EVANSVILLE	88	67	96	61	77	4	1.4	.7	1.4	1.4	209	21.0	70	97	50	3	0	1	1	1	
FORT WAYNE	84	56	89	51	70	2	.9	.3	.9	.9	147	29.4	118	93	37	0	0	2	1	1	
INDIANAPOLIS	86	60	90	55	73	3	.1	-.6	.1	.1	19	25.6	90	90	40	1	0	0	0	0	
SOUTH BEND	83	56	88	49	69	2	.7	-.1	.7	.7	82	21.1	80	91	40	0	0	1	1	1	
IA DES MOINES	84	59	89	50	71	3	.0	-.8	.0	.0	5	28.2	119	89	41	0	0	0	0	0	
SIoux CITY	87	59	92	48	73	6	.4	-.2	.3	.4	65	18.8	94	91	42	2	0	1	1	1	
WATERLOO	81	55	88	47	68	3	.9	.0	.7	.9	100	30.9	123	94	48	2	0	2	1	1	
KS CONCORDIA	87	65	92	55	76	4	.2	-.6	.2	.2	27	15.3	72	85	43	2	0	0	0	0	
DODGE CITY	86	65	93	56	75	2	.2	-.3	.2	.2	41	7.3	44	93	43	1	0	1	0	0	
GOODLAND	86	60	90	53	73	4	.0	-.4	.0	.0	0	19.1	145	85	38	1	0	0	0	0	
TOPEKA	87	64	93	52	75	3	1.4	.6	1.2	1.4	172	20.6	83	97	49	2	0	4	1	1	
WICHITA	84	67	88	59	75	1	1.7	1.0	1.1	1.7	220	21.0	100	92	55	0	0	4	1	1	
KY BOWLING GREEN	87	68	95	65	78	4	.5	-.3	.4	.5	62	31.8	90	100	61	2	0	3	0	0	
LEXINGTON	82	66	88	60	74	2	.4	-.5	.3	.4	42	28.9	85	99	61	0	0	2	0	1	
LOUISVILLE	86	70	92	66	78	4	1.6	.8	1.6	1.6	199	27.6	88	90	55	1	0	2	1	1	
LA ALEXANDRIA	88	74	90	72	81	1	1.1	.3	.9	1.1	137	60.1	158	96	63	2	0	4	1	1	
BATON ROUGE	88	73	91	73	81	1	1.7	.6	1.3	1.7	149	58.8	144	98	66	2	0	5	1	1	
LAKE CHARLES	87	73	91	72	80	0	1.3	-.1	.6	1.3	94	59.3	161	100	67	2	0	5	1	1	
NEW ORLEANS	87	73	89	72	80	0	1.9	.4	1.2	1.9	126	94.1	218	99	71	0	0	5	1	1	

Based on 1951-80 normals

Weather Data for the Week Ending September 7, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT			NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE		.50 INCH OR MORE	
																		5	4	3	2
SHREVEPORT	89	72	91	70	81	0	1.9	1.2	.9	1.9	257	65.4	212	100	66	3	0	5	2		
ME CARIBOU	71	46	77	36	59	1	T	.9	T	1	23.7	98	91	45	0	0	1	1	2		
PORTLAND	73	50	81	41	61	-1	.3	.4	.3	44	40.8	147	94	50	0	0	1	1	0		
MD BALTIMORE	82	59	86	51	70	-2	.5	.4	.3	58	18.7	63	89	43	0	0	2	0	0		
SALISBURY	80	57	84	51	68	-4	.3	.8	.3	28	32.7	102	97	51	0	0	1	1	0		
MA BOSTON	75	58	85	51	67	-2	.9	.1	.9	107	25.9	89	87	51	0	0	1	1	1		
CHATHAM	69	58	74	50	63	-2	.1	.1	.1	15	22.4	73	86	70	0	0	3	3	0		
MI ALPENA	74	48	79	41	61	-1	.2	.6	.1	29	22.3	110	96	46	0	0	1	1	0		
DETROIT	81	57	86	53	69	-2	.3	.3	.3	42	20.4	92	88	37	0	0	0	0	0		
FLINT	80	52	85	47	66	1	.1	.6	.1	8	22.4	107	91	39	0	0	1	1	0		
GRAND RAPIDS	81	52	87	47	67	1	.1	.7	.1	9	27.4	119	94	38	0	0	1	1	0		
HOUGHTON LAKE	75	48	78	40	61	1	.5	.2	.5	65	21.4	110	90	44	0	0	1	1	0		
LANSING	81	50	86	42	65	0	.1	.7	.1	7	20.9	100	99	40	0	0	2	1	0		
MARQUETTE	72	45	80	35	58	1	.6	.3	.6	69	22.5	88	94	54	0	0	2	1	0		
MUSKEGON	78	53	83	48	66	1	.1	.7	.1	4	24.6	118	90	42	0	0	1	0	0		
SAULT ST. MARIE	73	47	79	42	60	2	.6	.4	.3	59	17.9	83	96	53	0	0	2	0	0		
MN ALEXANDRIA	77	55	85	50	66	4	1.7	1.1	1.7	268	23.6	123	87	45	0	0	1	1	0		
DULUTH	69	47	77	37	58	0	4.1	3.3	3.6	487	29.8	136	96	54	0	0	4	1	1		
INT'L FALLS	72	46	86	36	59	2	.6	.2	.3	78	19.3	108	95	44	0	0	3	3	0		
MINNEAPOLIS	79	56	85	48	68	3	1.7	1.0	1.6	247	24.1	118	92	45	0	0	3	1	0		
ROCHESTER	79	52	85	45	65	2	T	.8	T	2	25.3	120	93	49	0	0	2	0	0		
MS GREENWOOD	92	72	95	70	82	3	.2	.6	.2	20	49.7	132	96	54	7	0	1	0	0		
JACKSON	91	71	94	69	81	2	.8	.1	.3	93	49.8	133	99	56	0	0	3	0	0		
MERIDIAN	92	70	95	68	81	2	.2	.7	.2	24	54.7	141	93	48	6	0	1	0	0		
MO CAPE GIRARDEAU	85	69	90	62	77	-1	1.4	.5	1.1	151	29.5	92	97	58	2	0	3	1	0		
COLUMBIA	84	63	87	55	74	1	1.0	.2	.7	117	22.9	87	93	51	0	0	2	1	1		
KANSAS CITY	86	63	91	51	75	1	.3	.7	.2	28	19.1	72	94	48	2	0	3	0	0		
SAINT LOUIS	88	69	93	65	79	5	.8	.1	.7	119	20.2	82	86	47	3	0	2	1	0		
SPRINGFIELD	85	65	87	57	75	2	.9	.4	.9	97	23.9	87	96	54	0	0	5	0	0		
MT BILLINGS	84	57	91	50	71	2	T	.3	T	0	15.1	135	50	22	2	0	0	0	0		
GLASGOW	83	53	97	45	68	6	1.1	.2	.1	21	9.8	108	60	21	1	0	1	0	0		
GREAT FALLS	82	48	91	38	65	4	T	.3	T	0	11.4	95	61	17	1	0	0	0	0		
HAVRE	82	47	91	39	65	3	.0	.3	.0	0	8.4	90	69	20	2	0	0	0	0		
HELENA	84	52	91	44	68	9	.0	.2	.0	0	8.4	93	56	19	1	0	0	0	0		
KALISPELL	78	40	84	33	59	1	T	.3	T	10	10.9	98	89	25	0	0	1	0	0		
MILES CITY	86	60	98	47	73	8	.2	.1	.2	54	15.4	137	50	19	3	0	1	0	0		
MISSOULA	82	46	89	40	64	4	T	.3	T	0	8.4	90	68	21	0	0	0	0	0		
NE GRAND ISLAND	87	61	92	56	74	5	T	.6	T	0	23.7	127	86	34	2	0	0	0	0		
LINCOLN	89	61	95	51	75	5	.2	.6	.2	22	18.3	85	84	35	3	0	1	0	0		
NORFOLK	88	61	93	50	74	7	.1	.5	.1	11	22.7	117	85	36	1	0	2	0	0		
NORTH PLATTE	88	58	91	50	73	7	.1	.3	.1	22	15.1	94	88	33	2	0	1	0	0		
OMAHA	85	63	91	55	74	4	.7	.2	.7	77	29.4	125	80	44	1	0	2	1	0		
SCOTTSBLUFF	89	56	93	50	72	7	.3	.0	.3	108	11.8	98	83	25	5	0	1	0	0		
VALENTINE	89	57	100	47	73	7	.4	.1	.4	85	18.9	130	81	29	3	0	1	0	0		
NV RLY	76	46	86	41	61	1	.8	.6	.4	441	7.7	119	86	40	0	0	4	0	0		
LAS VEGAS	96	73	104	66	85	1	.1	.0	.0	56	3.4	120	50	21	6	0	2	0	0		
RENO	91	52	93	48	71	8	.2	.1	.2	317	3.5	71	64	16	5	0	1	0	0		
WINNEMUCA	90	51	93	44	70	7	T	.1	T	0	4.9	94	47	14	5	0	0	0	0		
NH CONCORD	77	46	83	36	61	-1	.2	.6	.1	22	22.4	93	99	40	0	0	2	0	0		
NJ ATLANTIC CITY	79	52	85	44	65	-5	T	.8	T	4	26.0	89	97	46	0	0	1	0	0		
NM ALBUQUERQUE	86	62	93	57	74	1	.8	.5	.8	330	7.3	130	74	30	2	0	1	1	0		
CLOVIS	81	61	91	58	71	-1	1.6	1.1	1.4	1.6	334	17.8	139	91	43	1	0	2	1	0	
ROSWELL	86	64	95	61	75	0	1.6	1.1	1.3	1.6	343	15.0	200	89	43	2	0	3	1	0	
NT ALBANY	76	50	85	39	63	-2	.1	.7	.1	10	21.0	87	99	43	0	0	3	1	0		
BINGHAMTON	74	50	80	43	62	-1	.1	.7	.1	14	22.0	87	93	43	0	0	1	0	0		
BUFFALO	79	54	84	48	67	1	.2	.7	.2	21	26.3	105	88	33	0	0	1	0	0		
NEW YORK	78	63	84	57	71	-1	.2	.7	.1	17	28.3	97	79	43	0	0	2	0	0		
ROCHESTER	77	52	86	42	65	-1	.1	.6	.1	18	19.5	91	91	38	0	0	1	0	0		
SYRACUSE	78	51	84	43	64	-1	.1	.6	.1	30	24.6	92	91	41	0	0	1	0	0		
NC ASHEVILLE	79	61	85	56	70	0	.1	.9	.1	11	34.1	108	99	61	0	0	2	0	0		
CHARLOTTE	85	67	89	63	76	1	.0	.9	.0	0	37.2	119	87	52	0	0	0	0	0		
GREENSBORO	81	62	86	57	72	-2	.9	.1	.9	106	32.7	107	90	55	0	0	1	1	0		
HATTERAS	83	72	86	69	78	1	.3	.3	.3	24	49.9	134	87	57	0	0	2	0	0		
NEW BERN	86	67	91	64	77	0	2.0	.5	1.7	135	38.9	101	94	51	2	0	2	1	0		
RALEIGH	83	63	87	58	73	-1	T	.9	T	0	27.5	90	92	51	0	0	2	0	0		
WILMINGTON	87	66	91	64	77	0	1.0	.7	1.0	67	49.1	124	95	56	1	0	3	1	1		
ND BISMARCK	86	52	95	41	69	-1	1.0	.7	1.0	286	12.1	98	77	24	4	0	1	1	1		
FARGO	81	54	93	47	67	5	.6	.1	.6	118	18.6	121	82	38	1	0	1	1	0		
GRAND FORKS	84	51	92	40	68	7	.1	.4	.1	19	15.5	109	81	33	2	0	3	0	0		
WILLISTON	81	52	100	40	68	7	T	.3	T	0	13.9	129	66	22	3	0	0	0	0		
OH AKRON-CANTON	81	53	87	50	67	0	1.2	.5	.8	1.2	168	16.0	62	93	38	0	0	2	1	0	
CINCINNATI	83	64	88	59	74	-2	1.9	1.2	1.9	280	31.1	107	90	49	0	0	2	1	0		
CLEVELAND	79	54	89	50	67	-1	1.4	.7	1.1	189	22.8	91	91	41	0	0	2	1	0		
COLUMBUS	83	57	87	51	70	0	.4	.4	.4	53	22.2	80	93	38	0	0	2	0	0		

Based on 1951-80 normals

Weather Data for the Week Ending September 7, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT	NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1		AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.
														.01 INCH OR MORE						.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	83	57	88	52	70	0	2.3	1.7	2.3	2.3	373	29.0	113	90	37	0	0	0	0	1	1	
TOLEDO	83	54	88	49	68	0	.2	-4	.2	.2	34	17.6	77	95	38	0	0	0	0	1	1	
YOUNGSTOWN	81	50	90	45	66	0	1.2	.4	1.2	1.2	154	18.4	69	92	35	0	0	0	0	2	2	
OK OKLAHOMA CITY	83	70	89	69	77	0	6.9	6.2	4.1	6.9	909	26.9	119	97	67	0	0	0	0	7	4	
TULSA	87	71	91	64	79	2	1.3	.3	.9	1.3	135	17.0	62	93	56	1	0	0	0	5	4	
OR ASTORIA	72	52	82	48	62	2	T	-5	T	T	0	37.7	96	94	61	0	0	0	0	0	0	
BURNS	85	46	91	42	66	3	.0	-1	.0	.0	0	4.4	70	58	17	1	1	1	0	0	0	
MEDFORD	93	56	103	49	75	6	T	-1	T	T	0	10.6	96	78	21	0	0	0	0	0	0	
PENDLETON	83	54	90	47	68	1	.0	-1	.0	.0	0	9.2	123	50	15	1	0	0	0	0	0	
PORTLAND	83	56	93	52	70	5	T	-3	T	T	0	21.4	100	82	38	0	0	0	0	0	0	
SALEM	84	51	93	44	68	3	T	-3	T	T	0	22.0	97	82	31	0	0	0	0	0	0	
PA ALLENTOWN	80	53	86	46	66	-2	.1	-9	.1	.1	11	22.6	74	82	40	0	0	0	0	1	1	
ERIE	77	56	89	51	66	1	.7	-3	.7	.7	72	19.8	75	82	45	0	0	0	0	1	1	
HARRISBURG	79	57	85	49	68	-3	.3	-6	.2	.3	31	22.0	81	89	41	0	0	0	0	2	0	
PHILADELPHIA	82	62	88	55	72	0	.4	-5	.4	.4	48	26.0	89	85	40	0	0	0	0	1	0	
PITTSBURGH	83	55	87	51	69	1	.9	.2	.9	.9	125	23.3	87	85	34	0	0	0	0	2	0	
SCRANTON	77	53	82	46	65	-1	.9	.1	.9	.9	118	19.6	82	84	39	0	0	0	0	1	1	
RI PROVIDENCE	74	56	82	47	65	-2	1.1	.3	1.1	1.1	129	31.3	104	92	51	0	0	0	0	1	1	
SC CHARLESTON	88	71	94	68	79	1	1.1	.2	.6	1.1	82	44.4	112	93	54	2	2	0	0	4	1	
COLUMBIA	90	67	93	63	79	0	.4	.8	.2	.4	34	55.8	149	96	48	5	5	0	0	2	0	
FLORENCE	88	66	93	62	77	-1	.6	.5	.4	.6	53	37.1	111	93	50	2	2	0	0	2	0	
GREENVILLE	84	64	89	59	74	-1	T	-1.1	T	T	0	41.3	112	94	53	0	0	0	0	0	0	
SD ABERDEEN	86	56	96	40	71	7	T	.4	T	T	0	21.0	145	81	35	2	2	0	0	0	0	
HURON	88	57	97	43	72	7	T	-1	.2	.4	117	20.0	134	86	32	2	2	0	0	2	0	
RAPID CITY	89	56	97	50	73	7	.1	-2	.1	.1	23	15.0	110	73	22	4	4	0	0	1	0	
SIoux FALLS	86	58	94	46	72	7	.8	.1	.4	.8	111	20.7	111	90	38	1	1	0	0	4	0	
TN CHATTANOOGA	89	68	95	63	78	3	T	-1.0	T	T	2	40.5	109	94	48	4	4	0	0	1	0	
KNOXVILLE	85	68	90	66	76	1	.1	.6	.1	.1	9	38.6	114	99	57	1	0	0	0	4	0	
MEMPHIS	90	73	94	71	82	4	.5	.4	.3	.5	55	43.2	116	92	54	5	5	0	0	1	0	
NASHVILLE	87	69	94	67	78	2	.1	.8	.1	.1	12	26.9	77	99	57	3	3	0	0	4	0	
TX ABILENE	85	68	91	66	77	-3	2.6	1.9	2.1	2.6	374	20.9	127	94	55	1	0	0	0	4	1	
AMARILLO	83	63	94	60	73	0	1.3	.8	.8	1.3	269	11.7	76	99	51	2	0	0	6	1		
AUSTIN	88	73	91	71	80	-2	1.8	1.0	.5	1.8	236	33.6	161	97	63	1	0	0	6	1		
BRAUNTON	87	75	92	73	81	0	1.8	.4	.9	1.8	131	56.9	149	96	69	2	0	0	4	1		
BROWNSVILLE	92	74	96	72	83	0	3.3	2.2	1.2	3.3	293	23.7	158	97	58	5	0	0	5	3		
CORPUS CHRISTI	89	75	91	74	82	-1	3.8	2.2	1.9	3.8	246	31.5	153	97	67	3	0	0	5	3		
DEL RIO	93	73	97	72	83	0	.1	.5	.0	.1	21	10.4	91	78	39	6	0	0	5	0		
EL PASO	91	64	100	60	77	-1	.1	.2	.1	.2	48	6.5	126	85	31	4	0	0	4	0		
FORT WORTH	88	72	91	70	80	-2	2.4	1.7	1.4	2.4	329	32.2	149	97	58	2	0	0	3	2		
GALVESTON	86	75	88	72	80	-2	3.9	2.5	1.5	3.9	269	48.9	184	89	69	0	0	0	6	3		
HOUSTON	87	73	91	72	80	-1	1.3	.1	.5	1.3	105	42.6	137	98	68	2	0	0	6	1		
LUBBOCK	85	64	94	63	74	0	1.4	.9	.4	1.4	272	14.8	112	100	54	2	0	0	5	0		
MIDLAND	86	66	92	64	76	-2	.5	.0	.4	.5	104	16.7	176	91	49	2	0	0	3	0		
SAN ANGELO	89	68	93	66	79	-1	T	.7	T	T	0	12.0	100	94	45	4	0	0	0	0	0	
SAN ANTONIO	89	72	93	70	81	-1	.2	.6	.1	.2	25	26.3	135	93	54	3	0	0	3	0		
VICTORIA	89	73	94	71	81	-1	1.3	.1	1.0	1.3	91	44.7	184	99	68	2	0	0	7	1		
WACO	84	71	93	69	81	-2	1.4	.7	.5	1.4	209	29.5	140	98	63	2	0	0	6	1		
WICHITA FALLS	89	71	90	69	77	-3	4.2	3.5	2.6	4.2	566	20.2	108	100	68	1	0	0	4	2		
UT CEDAR CITY	84	56	92	52	69	2	.9	.7	.8	.9	387	8.8	121	71	29	2	0	0	3	1		
SALT LAKE CITY	84	61	92	58	72	3	1.0	.8	.9	1.0	521	11.6	107	74	31	4	0	0	2	1		
VT BURLINGTON	75	50	81	41	62	0	.1	-.7	.1	.1	10	19.5	84	96	43	0	0	0	1	0		
VA NORFOLK	82	66	87	62	74	-2	.4	-.8	.3	.4	32	32.3	100	95	56	0	0	0	2	0		
RICHMOND	82	61	87	54	72	-2	.1	-.8	.1	.1	8	25.5	83	95	49	0	0	0	1	0		
ROANOKE	81	63	86	58	72	0	.1	-.7	.1	.1	8	30.6	111	93	51	0	0	0	1	0		
WA QUILLAYUTE	73	52	88	49	62	4	.1	-1.0	.0	.1	6	67.1	111	98	52	0	0	0	2	0		
SEATTLE-TACOMA	75	55	85	52	65	3	T	-.4	T	T	0	25.4	118	93	47	0	0	0	0	0	0	
SPokane	81	50	88	45	65	2	.0	-.2	.0	.0	0	9.7	93	63	21	0	0	0	0	0	0	
YAKIMA	85	46	91	42	66	1	.0	-.1	.0	.0	0	5.3	110	87	23	2	0	0	0	0	0	
WV BECKLEY	74	60	80	54	67	1	.4	-.5	.3	.4	45	26.8	87	96	65	0	0	0	2	0	0	
CHARLESTON	82	65	88	58	73	2	1.2	.4	.7	1.2	151	26.2	84	96	56	0	0	0	2	1		
HUNTINGTON	83	65	88	61	74	2	.5	-.3	.3	.5	58	27.4	91	94	57	0	0	0	2	0	0	
FARKERSBURG	80	61	84	55	71	0	1.0	.3	1.0	1.0	136	31.2	111	95	53	0	0	0	1	1		
WI GREEN BAY	79	52	84	46	65	3	.2	-.5	.1	.2	30	16.6	82	98	45	0	0	0	2	0	0	
LACROSSE	81	55	88	50	68	3	T	-.9	T	T	0	25.5	112	96	45	0	0	0	0	0	0	
MADISON	81	52	86	47	67	3	.2	-.6	.2	.2	27	24.4	107	94	40	0	0	0	1	0	0	
MILWAUKEE	79	62	88	58	71	5	1.1	.4	1.1	1.1	154	23.8	106	80	47	0	0	0	1	1		
WAUSAU	76	50	81	46	63	1	1.1	.2	.8	1.1	115	26.7	114	98	47	0	0	0	3	1		
WY CASPER	86	53	92	49	69	7	T	-.1	T	T	7	10.0	116	65	22	1	0	0	1	0	0	
CHEYENNE	79	53	85	51	66	5	1.0	.7	.6	1.0	361	16.4	150	79	30	0	0	0	3	1		
LANDER	83	56	88	53	70	7	T	-.2	T	T	0	10.7	109	62	24	0	0	0	0	0	0	
SHERIDAN	88	55	96	49	72	10	.0	-.3	.0	.0	0	10.7	94	58	21	2	0	0	0	0	0	

Based on 1951-80 normals

## August Weather and Crop Summary

August 1991 got mixed reviews nationwide. Lazy summer frontal boundaries brought the wettest weather since May to parts of the Corn Belt and central Plains. Farther west and south, a wetter-than-normal region arced from the central Rockies to the Southeast. Hurricane Bob accounted for most of the rainfall excesses in the Northeast. Elsewhere, precipitation deficits mounted in the mid-Atlantic region, and dryness persisted from the Nebraskan Plains northwestward. In the West, a mid-month storm dropped unusual moisture from central California to the Great Basin. A pair of late-month storms contributed heavily toward rainfall totals in the Pacific Northwest.

Across the Nation's northern tier, unusual heat accompanied the often dry conditions. Temperature departures exceeded +4 degrees F from southern Idaho to northern Minnesota. In the South, extensive cloud cover, wet ground, and rainfall depressed temperatures to near- or below-normal. Upper air low pressure systems off the West coast held temperatures slightly below normal in interior California.

An airmass battle kept thunderstorms active from the Corn Belt southward in early August. The boundary between Canadian and subtropical air punched through the Northeast, dropping only showers, but loitered across the Midwest for several days, dumping locally heavy rain. The Canadian high pressure system conquered after the 10th, shifting heavy rainfall into the South. After mid-August, the influence of two tropical systems changed the rainfall pattern. The remnants of eastern Pacific Tropical Storm Hilda linked with an encroaching Canadian cold front to produce rain from central California to the Corn Belt. Hurricane Bob struck the densely populated coastal Northeast, causing extensive wind and flood damage from southeastern New York to Maine. Bob's rains were followed by additional significant thunderstorms in New England. Convection became far more scattered after the 20th, primarily plaguing the South. As cool weather settled across the Northeast toward month's end, a late summer heat wave waxed in the Southwest and spread eastward. Temperatures regularly reached 100 degrees F in the northern Plains during the final week of August.

Boosted by a 7.83-inch rainfall from Hurricane Bob, Portland, ME, notched its wettest month ever (15.22 inches; former record was 13.50 inches in November 1983). Shreveport, LA, returned to the weather headlines with its third wettest August (9.23 inches), which leaves the city less than 4 inches shy of an all-time wettest year. Yearly precipitation in New Orleans, LA, rose to 92.23 inches by the end of the month. The normal annual total is 59.74 inches. The monthly average temperature of 72.8 degrees F in Helena, MT, was 0.6 degrees F higher than in August 1929, the previous hottest August on record. In the East, one remarkable streak remained intact: Raleigh, NC, recorded its 20th consecutive warmer-than-normal month.

### August Crop Development

Scattered thundershowers throughout August provided varying quantities of moisture to developing crops in the eastern two-thirds of the Nation, while dry weather predominated in the West. Small grain harvests approached completion and row crop harvests got underway. Heavy rains from Hurricane Bob stalled farm activity in the latter half of the month in New England, and associated high winds damaged northern Atlantic coast fruits and vegetables.

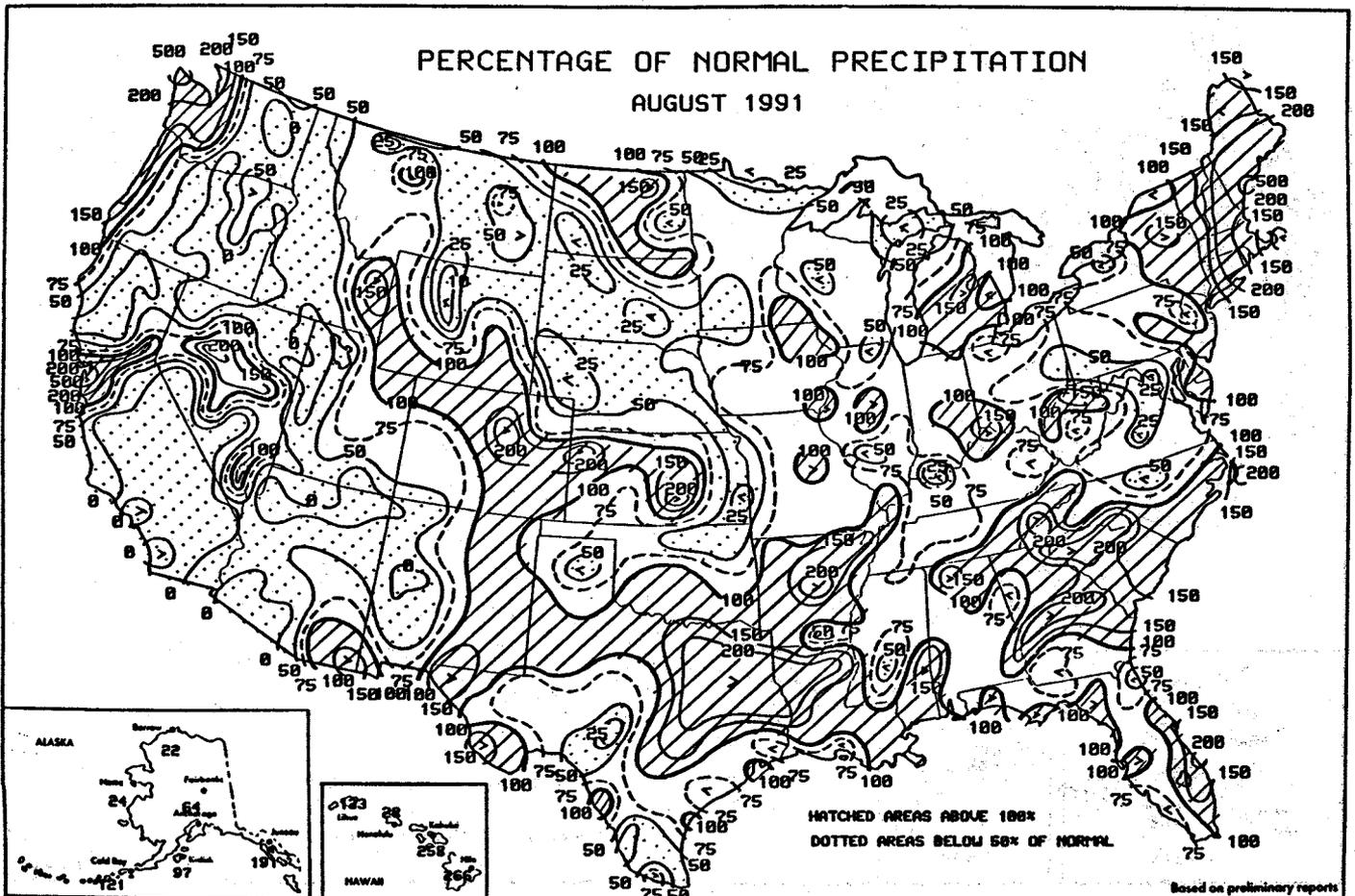
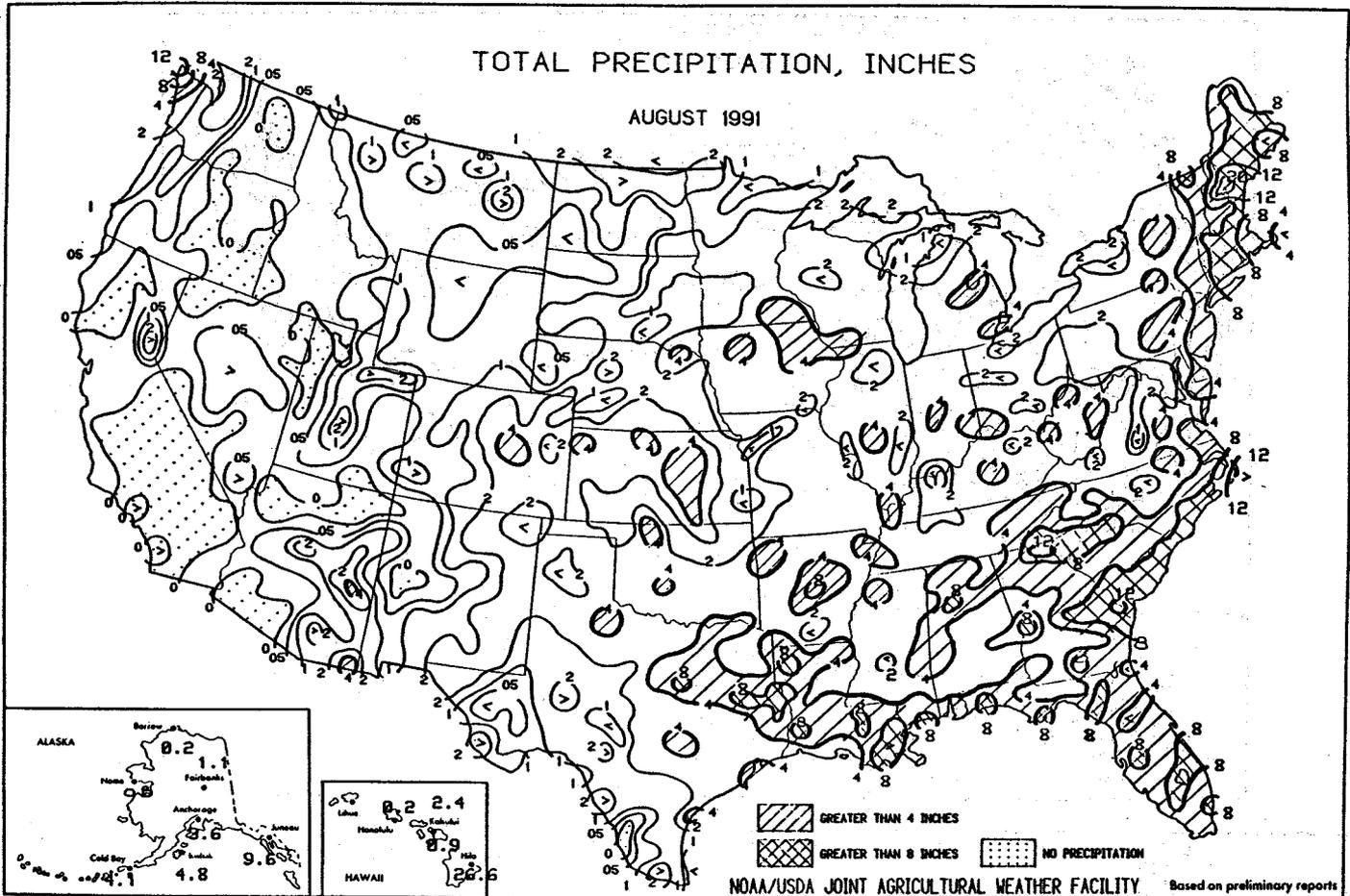
Development of the corn crop was ahead of normal entering the month, with about one-third of the acreage in the dough stage. Crop maturity was much ahead of normal in the Ohio Valley, and harvest was underway in the South. Crops were being stressed by drought conditions in the eastern Corn Belt. Limited rainfall during the month provided little relief to the parched fields in the eastern Corn Belt, while periodic rains interrupted harvest in Texas and the Gulf. By the end of the month, 76 percent (%) of the corn was denting in the 17 major producing States, 37 percentage points ahead of last year and 10 points ahead of the 5-year average. Twenty-nine percent of the crop was mature, compared with 8% last year and 23% average. Crop condition ratings remained mostly fair to good for the 17 major States, with good conditions in the Great Lakes, Southeast, Colorado, and Minnesota. However, poor or very poor conditions continued for much of the corn in the Ohio Valley, Illinois, Kansas, Missouri, and Pennsylvania.

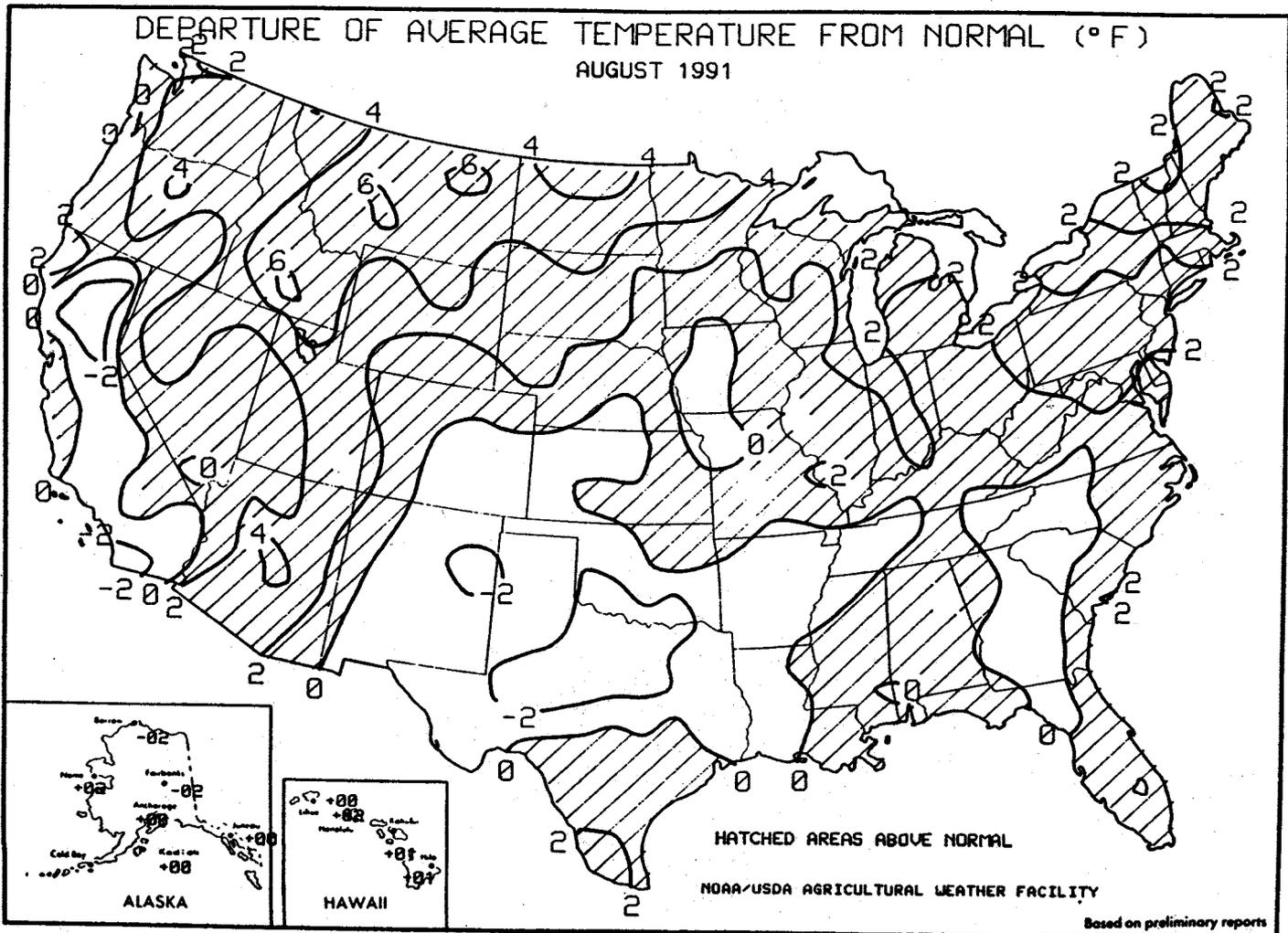
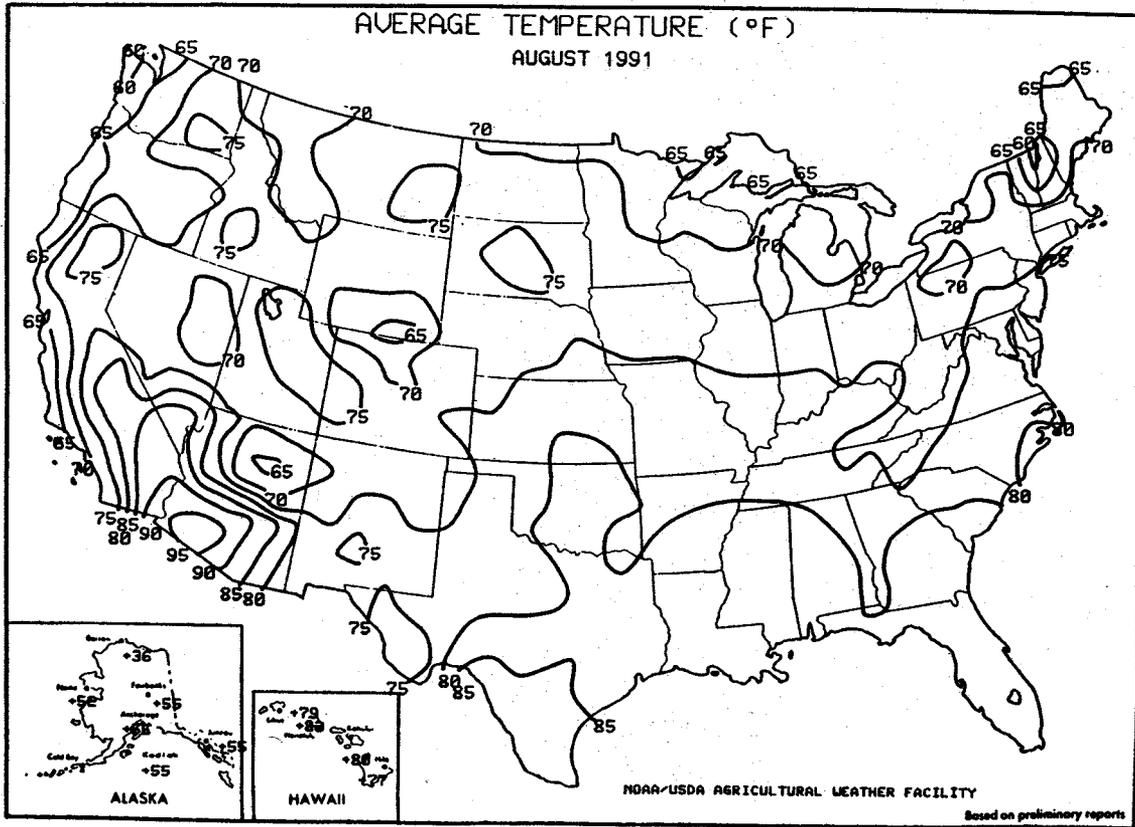
Entering August, the soybean crop was developing much earlier than normal in the Ohio Valley and South Dakota, with pods setting on over half of the acreage. Nationwide, crop development was only slightly ahead of normal as seeding was late in Alabama, Tennessee, and the Delta. Crop condition rated mostly fair to good, with the highest ratings in the northernmost States. Lack of rainfall during the month stressed the crop in Kansas, Nebraska, and Missouri, while showers during the second half of the month benefited the later seeded beans in the Ohio Valley. Pod setting was nearly complete by the end of the month. Plants were dropping their leaves on over 40% of the acreage in Ohio and South Dakota, and over 20% in Illinois, Indiana, and Kansas--all much earlier than normal. Leaves were dropping on 15% of the acreage in the 19 major producing States, 12 percentage points ahead of last year and 6 points ahead of the average.

Cotton progress was slightly behind schedule entering August with a significant lag in Tennessee due to rain delays at planting time. Squaring was approaching completion in the 14 major producing States, and bolls were setting on over 60% of the acreage. Picking was underway in southern Texas. Cooler-than-normal temperatures during August kept the California crop behind schedule, while high temperatures promoted development of Tennessee's late-seeded crop. Crop condition rated mostly good in the Southwest and Southeast during the first half of the month, and mostly fair in the Mississippi and Tennessee Valleys. Timely rains at the end of the month raised condition ratings to mostly good in the Delta, while good conditions were sustained in the Southwest and Southeast. By the end of the month, bolls were opening on 26% of the acreage in the 14 major producing States, 7 points behind last year and 5 points behind the average. Growers in the Southwest and Gulf Coast were defoliating fields in preparation for picking, and harvest was advancing into central Texas.

Heading of the Nation's rice crop by August 1, at roughly 40% complete, was ahead of last year but slightly behind the historic average. Harvest was underway in Texas and Louisiana with less than 20% of each State's crop harvested. Cool temperatures during the month kept the California crop behind schedule and the late-seeded Mississippi crop remained behind schedule. Heading of the rice crop advanced to 89% complete by the end of the month, 1 point behind last year and 6 points behind the average. Harvest progress reached 30% complete, 6

(Continued to back cover)





# TEMPERATURE AND PRECIPITATION SUMMARY

## August 1991

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	81	1	4.6	0.8	LA ALEXANDRIA	81	-2	5.4	1.2	TOLEDO	73	3	1.9	-1.2
AL BUNTSVILLE	80	1	4.5	1.4	LA BATON ROUGE	82	1	10.7	5.6	TOLEDO YOUNGSTOWN	72	3	0.9	-2.6
AL MOBILE	81	-1	5.2	-1.6	LA LAKE CHARLES	81	-1	7.4	1.9	OK OKLAHOMA CITY	81	0	3.2	0.7
AK ANCHORAGE	56	0	2.5	-0.7	LA NEW ORLEANS	82	0	7.9	1.9	OK TULSA	83	1	1.2	-1.8
AK BARROW	36	0	3.6	1.4	ME SHERBOURNE	81	-1	9.2	6.8	OR ASTORIA	60	-1	2.3	0.7
AK FAIRBANKS	54	0	0.2	-0.8	ME CARIBOU	65	3	6.7	2.8	OR BURNS	67	0	0.3	-0.1
AK JUNEAU	55	0	1.2	-0.7	ME PORTLAND	70	3	15.2	12.4	OR MEDFORD	74	2	0.2	-0.2
AK KODIAK	55	0	9.6	4.6	MD BALTIMORE	78	2	2.5	-2.1	OR PORTLAND	73	2	0.4	-0.1
AK NOME	52	0	4.8	-0.1	MD SALLISBURY	76	1	6.1	0.4	OR PORTLAND	70	3	0.7	-0.4
AZ FLAGSTAFF	67	3	0.8	-2.3	MA BOSTON	74	2	5.3	1.6	PA SALEM	68	2	0.7	-0.1
AZ PHOENIX	94	5	1.6	-1.0	MA CHEATHAM	69	2	3.4	-0.7	PA ALLENTOWN	74	2	2.5	-1.9
AZ PRESCOTT	74	3	0.1	-0.9	MI ALPENA	68	3	3.4	0.3	PA ERIE	73	3	3.1	-0.9
AZ TUCSON	87	3	1.9	-1.5	MI DETROIT	73	3	4.3	1.1	PA HARRISBURG	76	2	5.0	1.7
AZ WINSLOW	74	-2	2.2	0.1	MI FLINT	70	1	3.3	0.0	PA PHILADELPHIA	79	3	3.8	-0.2
AR YUMA	96	3	1.4	0.0	MI GRAND RAPIDS	71	0	3.8	0.7	PA PITTSBURGH	74	4	1.6	-1.7
AR FORT SMITH	80	-1	0.0	-0.4	MI HOUGHTON LAKE	68	3	2.4	-0.6	PA SCRANTON	72	2	3.3	-0.2
AR LITTLE ROCK	80	-1	1.8	-1.2	MI LANSING	69	1	3.8	0.8	PA WILLIAMSPORT	74	3	3.1	-0.2
CA BAKERSFIELD	80	-3	8.4	5.4	MI MARQUETTE	65	3	0.8	-2.4	RI PROVIDENCE	74	2	6.0	2.0
CA BISHOP	75	0	0.0	0.0	MI MUSKEGON	71	2	3.9	0.8	SC CHARLESTON	82	2	8.1	1.6
CA EUREKA	60	3	0.3	0.0	MI SAULT ST. MARIE	66	3	1.6	-1.9	SC COLUMBIA	80	0	7.8	2.2
CA FRESNO	79	0	2.6	-1.0	MI ALEXANDRIA	71	3	2.6	-1.0	SC FLORENCE	80	0	6.3	1.5
CA LOS ANGELES	69	-2	0.0	-0.1	MI DULUTH	66	3	2.5	-1.6	SC GREENVILLE	77	-1	9.0	5.0
CA REDDING	78	-3	0.0	-0.5	MI INT'L FALLS	68	5	0.6	-2.4	SD ABERDEEN	73	3	2.3	0.4
CA SACRAMENTO	73	-2	0.1	0.1	MI MINNEAPOLIS	71	0	3.1	-0.5	SD HURON	74	3	1.2	-0.8
CA SAN DIEGO	69	-3	0.1	-0.1	MI ROCHESTER	69	1	4.7	1.1	SD RAPID CITY	74	3	0.6	-0.8
CA SAN FRANCISCO	64	1	0.3	0.2	MI ST. CLOUD	69	2	2.9	-1.4	SD SIOUX FALLS	73	1	1.4	-1.7
CA STOCKTON	74	-3	0.1	0.0	MS GREENWOOD	81	0	2.4	-0.4	TX BRISTOL	73	-1	4.0	0.8
CO ALAMOSA	63	1	0.9	-0.2	MS JACKSON	81	0	1.5	-2.1	TX CHATTANOOGA	80	1	4.0	0.6
CO CO. SPRINGS	68	-1	4.6	2.0	MS MERIDIAN	81	0	6.6	3.3	TX KNOXVILLE	76	-1	6.1	3.1
CO DENVER	71	0	3.7	2.2	MO CAPE GIRARDEAU	81	1	3.2	0.3	TX MEMPHIS	81	0	2.1	-1.7
CO GRAND JUNCTION	76	1	0.6	-0.3	MO COLUMBIA	77	0	4.7	1.2	TX NASHVILLE	78	0	1.8	-1.6
CO PUEBLO	74	-1	2.1	0.3	MO KANSAS CITY	78	-1	1.4	-2.4	TX ABILENE	79	-4	1.8	-0.6
CT BRIDGEPORT	75	2	7.8	4.2	MO SAINT LOUIS	80	3	1.0	-1.6	TX AMARILLO	76	-1	1.3	-1.6
CT HARTFORD	73	2	8.7	4.7	MO SPRINGFIELD	78	1	2.7	-0.1	TX AUSTIN	85	1	4.3	2.1
DC WASHINGTON	80	2	2.0	-2.4	MT BILLINGS	76	5	0.4	-0.7	TX BRAUNTON	83	-1	3.0	-2.6
FL APALACHICOLA	82	0	9.4	1.8	MT GLASGOW	75	6	0.5	-0.8	TX BROWNSVILLE	86	2	0.9	-1.9
FL DAYTONA BEACH	82	1	7.6	1.2	MT GREAT FALLS	72	4	1.4	0.1	TX CORPUS CHRISTI	85	1	4.6	1.0
FL FT. MYERS	84	1	5.9	-2.7	MT HAVRE	73	5	1.3	0.1	TX DEL RIO	87	1	0.8	-0.8
FL JACKSONVILLE	83	1	3.5	-4.3	MT HELENA	73	7	0.7	-0.5	TX EL PASO	80	-1	2.1	0.9
FL KEY WEST	85	1	2.2	-2.5	MT KALISPELL	66	3	0.7	-0.7	TX FORT WORTH	83	-2	4.3	2.3
FL MIAMI	85	2	8.4	1.8	MT MILES CITY	77	4	0.7	-0.5	TX GALVESTON	84	0	4.4	0.0
FL ORLANDO	83	1	7.1	0.6	MT MISSOULA	70	4	0.6	-0.3	TX HOUSTON	83	0	3.0	-1.0
FL TALLAHASSEE	82	0	3.9	-3.4	NE GRAND ISLAND	75	0	1.3	-1.2	TX LAREDO	88	0	--	--
FL TAMPA	83	1	7.4	-0.3	NE LINCOLN	76	1	1.3	-2.2	TX LUBBOCK	78	0	2.4	0.2
FL WEST PALM BEACH	84	1	7.3	1.6	NE NORFOLK	75	1	1.3	-1.3	TX MIDLAND	78	-3	1.6	0.0
GA ATHENS	77	-2	5.2	1.6	NE NORTH PLATTE	74	1	0.5	-1.4	TX SAN ANGELO	80	-3	1.4	-0.5
GA ATLANTA	79	1	4.4	1.0	NE OMAHA	75	0	3.9	-0.2	TX SAN ANTONIO	86	2	2.8	0.2
GA AUGUSTA	80	0	7.0	3.0	NE SCOTTSDALE	74	2	0.1	-0.9	TX VICTORIA	85	0	2.4	-0.9
GA MACON	80	0	8.6	5.0	NE VALENTINE	74	1	1.2	-1.2	TX WACO	83	-2	7.2	5.3
GA SAVANNAH	82	1	10.5	3.9	NV RENO	69	1	0.2	-0.4	TX WICHITA FALLS	81	-3	2.8	0.6
HI HILO	77	1	26.6	16.6	NV ELKO	67	1	0.9	0.3	UT BLANDING	--	--	--	--
HI HONOLULU	82	2	0.2	-0.4	NV LAS VEGAS	88	0	0.8	0.3	UT CEDAR CITY	73	1	0.5	-0.7
HI KAHULUI	80	1	1.1	0.7	NV RENO	71	5	0.2	0.0	UT SALT LAKE CITY	78	4	0.9	0.0
HI LIHUE	79	0	2.4	0.6	NH WINNEBUCCA	71	2	0.3	-0.1	VT BURLINGTON	71	3	4.0	0.2
ID BOISE	77	5	0.4	-0.4	NH CONCORD	70	2	7.3	4.0	VA LYNCHBURG	75	0	1.9	-1.8
ID LEWISTON	75	3	0.8	-0.8	NJ ATLANTIC CITY	76	2	3.4	-1.3	VA NORFOLK	80	2	3.8	-1.6
ID POCAHELLO	72	4	0.8	0.3	NM ALBUQUERQUE	76	-1	1.3	-0.2	VA RICHMOND	79	2	3.3	-1.7
IL CAIRO	--	--	--	--	NM CLOVIS	74	-2	3.5	1.0	VA ROANOKE	75	0	2.3	-1.6
IL CHICAGO	74	2	3.3	-0.2	NM ROSWELL	78	0	3.1	1.0	VA COLVILLE	59	0	1.3	0.1
IL MOLINE	74	1	2.1	-1.7	NY ALBANY	71	2	4.3	1.0	VA QUILLAYUTE	67	0	15.1	12.2
IL PEORIA	74	1	3.4	0.0	NY BINGHAMTON	69	2	3.8	0.4	VA SEATTLE-TACOMA	67	3	2.2	0.9
IL QUINCY	74	0	1.5	-2.4	NY BUFFALO	71	2	2.8	-1.3	VA SPOKANE	70	2	0.2	-0.6
IL ROCKFORD	74	3	1.7	-2.0	NY NEW YORK	78	3	6.8	2.5	VA WALLA WALLA	77	3	0.2	-0.5
IL SPRINGFIELD	74	0	4.0	0.6	NY ROCHESTER	70	1	1.8	-1.4	VA YAKIMA	71	3	0.1	-0.3
IN EVANSVILLE	77	1	0.5	-2.6	NY SYRACUSE	72	2	4.0	0.3	WV BECKLEY	70	2	3.6	-0.1
IN FORT WAYNE	73	1	3.2	-0.1	NC ASHVILLE	72	-1	3.8	-0.5	WV CHARLESTON	75	2	3.0	-1.2
IN INDIANAPOLIS	75	2	3.5	0.1	NC CHARLOTTE	78	0	9.2	4.5	WV ELKINS	69	1	3.5	-0.7
IN SOUTH BEND	73	2	3.7	-0.2	NC GREENSBORO	76	0	1.9	-2.3	WV HUNTINGTON	74	1	4.0	0.2
IA DES MOINES	74	0	3.6	-0.4	NC HATTERAS	80	1	13.2	7.1	WV PARKERSBURG	74	0	5.7	2.2
IA DUBUQUE	71	1	3.9	-0.6	NC NEW BERN	80	2	6.8	0.5	WV GREEN BAY	70	2	2.1	-1.0
IA STOUX CITY	74	1	2.2	-1.0	NC RALEIGH	78	1	1.9	-2.6	WV LACROSSE	73	2	0.6	-3.1
IA WATERLOO	72	1	4.9	1.2	NC WILMINGTON	80	0	8.6	2.0	WV MADISON	70	1	2.3	-1.5
KS CONCORDIA	78	0	2.6	-0.8	ND BISMARCK	74	5	1.8	0.1	WV MILWAUKEE	73	4	2.3	-0.8
KS DOGUE CITY	79	0	1.4	-1.1	ND FARGO	73	4	1.9	-0.8	WV NAUSAU	68	1	2.7	-1.4
KS GOODLAND	73	0	4.1	2.2	ND GRAND FORKS	71	4	1.4	-1.0	WV CASPER	72	3	0.6	0.0
KS TOPEKA	77	0	1.8	-1.9	ND HILLSTON	74	5	1.5	0.1	WV CHEYENNE	68	1	1.5	0.1
KY WICHITA	89	1	7.6	4.7	OH AKRON-CANTON	73	2	1.7	-1.6	WV LANER	71	3	0.1	-0.3
KY BOWLING GREEN	77	0	2.4	-0.9	OH CINCINNATI	75	0	5.0	2.1	WV SHERIDAN	73	5	0.4	-0.5
KY JACKSON	--	--	2.2	-1.4	OH CLEVELAND	73	2	2.8	-0.6	PR SAN JUAN	84	2	1.9	-3.9
KY LEXINGTON	74	1	3.1	-0.9	OH COLUMBUS	75	2	2.0	-1.7					
KY LOUISVILLE	79	3	3.4	0.0	OH DAYTON	74	1	2.1	-1.0					
KY PADUCAH	78	1	2.4	-0.8	OH MANSFIELD	72	1	2.4	-0.9					

Based on 1951-80 normals

### August Weather in Historical Perspective

August 1991 was warmer than normal nationwide, but rainfall varied widely among regions (table 1). Nationally, August ranked as the 16th warmest August on record, according to preliminary data provided by the National Climatic Data Center. The month was warmer than August 1990 and 1989, but not as warm as August 1988 (fig. 1). This was the seventh consecutive month of above-normal temperatures.

The year so far, for the Nation as a whole, has been unusually warm, with January-August 1991 ranking as the sixth warmest January-August period on record (fig. 2). The warmth of the recent years has caused the smoothed curve (a 9-point binomial filter) to reach unprecedented levels. Connecticut, Maryland, and Virginia recorded their warmest January-August period on record, while 10 other States in the Midwest and Northeast recorded their second warmest such period since records began in 1895.

Though national rainfall was below normal according to the weighted precipitation index (fig. 3), many areas in the eastern, southern, and western parts of the country were wet. The Northeast had the seventh wettest August on record (table 1), thanks partially to Hurricane Bob. The South had its 18th wettest August. The Corn Belt observed its third consecutive month with below-normal precipitation (fig. 4). The 3 dry summer months followed 3 wet spring months.

TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR AUG 1991, BASED ON THE PERIOD 1895-1991. 1 = DRIEST/COLDEST, 97 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	90	84
EAST NORTH CENTRAL	26	76
CENTRAL	29	62
SOUTHEAST	52	59
WEST NORTH CENTRAL	8	92
SOUTH	79	33
SOUTHWEST	31	69
NORTHWEST	70	87
WEST	65	57
NATIONAL	43	82

Figure 2

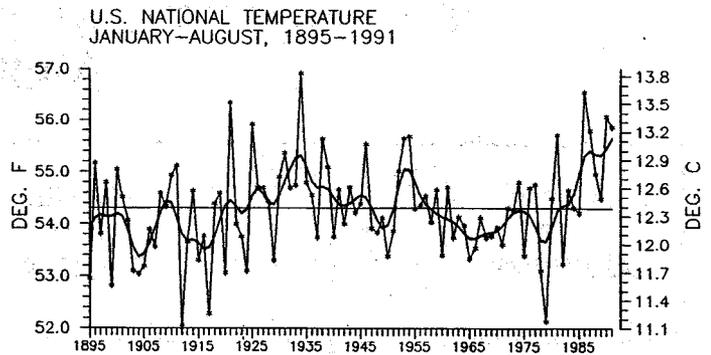


Figure 3

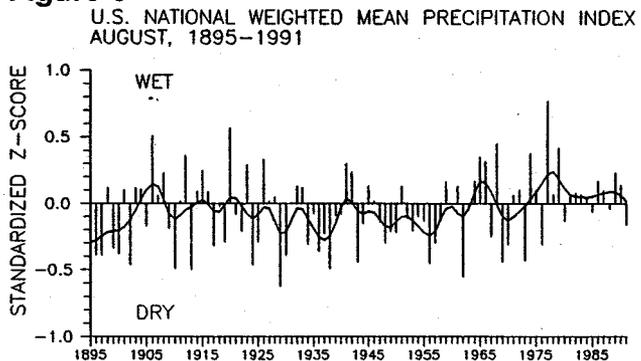


Figure 4

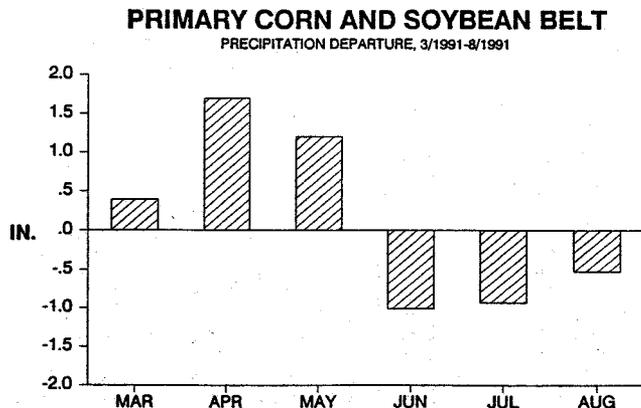
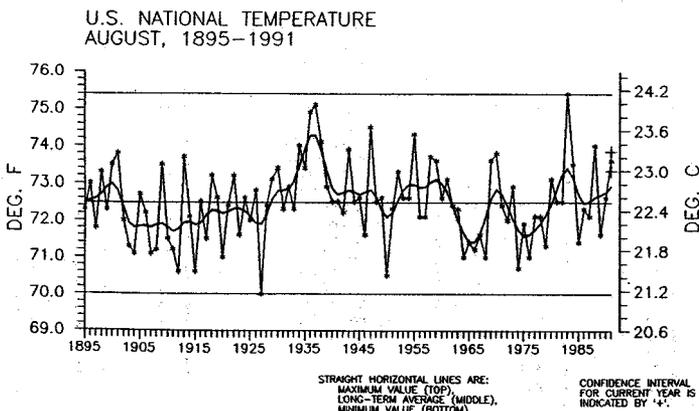


Figure 1



## National Agricultural Summary

September 2 - 8, 1991

**HIGHLIGHTS:** Light rainfall across the eastern half of the Nation provided some relief from short supplies of topsoil moisture in the Midwest and Northeast, but did little to quench regional needs for subsoil moisture. High temperatures further dried soils in the northern Great Plains, while locally heavy rains interrupted fieldwork in Texas and the Gulf.

**SMALL GRAINS:** Mostly dry, hot weather was conducive to harvests of small grains in the West and Great Plains. Winter wheat harvest was nearly complete in the Pacific Northwest. Seeding of 1992 crop winter wheat was active in 14 of the 19 major producing States. Seeding reached 7 percent (%) complete in the major States, compared with 6% last year and 8% for the historic average. Spring wheat harvest reached 97% complete in the five major producing States, matching last year and 3 percentage points ahead of the 5-year average. Harvest was completed in Minnesota but remained behind schedule in Idaho. Oats and barley harvests were well along.

**CORN:** The corn crop continued to mature earlier than last year and the historic average, led by much earlier-than-normal development in the eastern Cornbelt. Eighty-seven percent of the crop had denting in the 17 major producing States, 25 percentage points ahead of last year and 6 points ahead of the 5-year average. Fifty percent of the crop was mature, compared with 16% last year and 38% average. Harvest got underway in the Cornbelt and progressed in the more southerly regions. Harvest was 7% complete in the 17 major States, 4 points ahead of last year and 3 points ahead of the average. Crop conditions improved slightly in response to rains in the Cornbelt, but much of the acreage was too advanced to benefit significantly. Ratings remained mostly fair to good for the 17 major States, with poor or very poor conditions for much of the corn in the Ohio Valley, Illinois, and Pennsylvania.

**SOYBEANS:** Soybean progress remained ahead of schedule in the 19 major producing States, with the greatest departures from normal in the Ohio Valley and South Dakota. Slower-than-normal progress was indicated for the Gulf Coast States. Plants were dropping leaves on 28% of the acreage in the 19 major producing States, compared with 9% last year and the 20% average. Harvest of the earliest fields was getting underway in several States. Crop conditions improved somewhat with rains in most producing regions. Crop condition rated mostly fair for the 19 major States and good in the Southeast and Northern States.

**COTTON:** Crop progress remained behind schedule in the West and ahead of schedule in the Southeast and Texas. Bolls were opening on 39% of the acreage in the 14 major producing States, 4 points behind last year and 3 points behind the average. Crop condition rated mostly fair in Missouri, Oklahoma, South Carolina, and Tennessee and mostly good in the other producing States. Defoliation continued in the Southwest and Gulf Coast, while picking continued in south-central Texas and got

underway in Alabama. Boll rot due to wet, humid conditions was reported in several Arkansas counties, and cotton fields were plagued by bollworms and aphids in Texas.

**GRAIN SORGHUM:** Above-normal temperatures in the Great Plains kept sorghum progress slightly ahead of schedule. Grain heads were turning color in 74% of the acreage in the 12 major producing States, 8 points ahead of last year and 4 points ahead of the historic average. Forty-one percent of the crop was mature, compared with 32% a year ago. Crop maturity continued to lag behind normal in the Mississippi Valley and Colorado, while running ahead of schedule elsewhere. Crop condition rated mostly fair to good in the 12 major producing States, with much of the acreage in Nebraska, Missouri, and Kansas rating poor or very poor due to lack of moisture. Harvest continued in the Southern States and was advancing northward.

**RICE:** Rice heading neared completion at 96% complete in the five major producing States, matching last year and lagging just 2 points behind the average. Harvest was 33% complete, 3 points ahead of last year and 2 points behind the average. Harvest was well along but slowed by rain in Louisiana and Texas, and gaining momentum in Arkansas and Mississippi. Commencement of California's harvest remained 1-2 weeks away. Condition of unharvested fields rated mostly fair in Mississippi and mostly good elsewhere.

**OTHER FIELD CROPS:** Open weather in the West allowed haying of alfalfa to advance sharply with late second and early third cuttings being taken. Third-cut haying was active in the Midwest and East. Potato digging was active from Washington to Maine. Dry bean harvest was well along in Minnesota and North Dakota while increasing further West. Peanut digging progressed as conditions allowed in the Southeast. Flax harvest surpassed the midpoint in Minnesota and North Dakota, and sunflower harvest began. Tobacco harvest was completed in Georgia and passed the midpoint further north.

**FRUIT AND NUTS:** Lemons, peaches, apples, and pistachios were being harvested in Arizona. California's grape harvest for raisins, juice, wine, and table grape production continued. Harvests of almonds, pears, grapefruit, nectarines, plums, apples, and peaches were also active in the State. Early grapefruit harvest was increasing in Florida. Cranberry harvest got underway in New England with berries small to average and in good condition. Grape harvest was active in New York which is much earlier than

(Continued to back cover)

Crop Progress

for Week Ending September 8, 1991

	Winter Wheat % Planted		
	1991	1990	Avg.
AR	0	0	0
CA	0	0	0
CO	14	18	28
GA	1	1	1
ID	4	3	6
IL	0	0	0
IN	4	0	1
KS	3	2	5
MI	5	0	0
MO	0	0	0
MT	7	8	7
NE	8	10	15
NC	3	0	0
OH	0	0	0
OK	11	5	7
OR	4	1	0
SD	12	20	21
TX	12	12	12
WA	8	18	25
19 States	7	6	8

These 19 states produced .91% of the 1990 winter wheat crop.

	Spring Wheat % Harvested		
	1991	1990	Avg.
ID	75	82	89
MN	100	100	100
MT	88	91	86
ND	99	97	94
SD	100	100	100
5 States	97	97	94

These 5 states produced 97% of the 1990 spring wheat crop.

	Soybeans % Dropping Leaves		
	1991	1990	Avg.
AL	4	14	11
AR	7	0	3
GA	10	17	12
IL	37	4	27
IN	48	6	27
IA	12	3	21
KS	35	20	20
KY	15	7	14
LA	1	14	10
MI	25	2	5
MN	34	30	38
MS	2	16	14
MO	12	2	12
NE	30	12	17
NC	8	5	NA
OH	70	6	18
SC	1	0	2
SD	70	34	33
TN	8	12	17
19 States	27	9	NA
Excl. States with NA	28	9	20

These 19 states produced 95% of the 1990 soybeans crop.

NA - not available.

	Grain Sorghum % Coloring		
	1991	1990	Avg.
AR	74	74	88
CO	53	60	54
IL	74	34	68
KS	55	50	55
LA	88	94	95
MS	84	89	93
MO	85	43	75
NE	86	68	78
NM	46	16	NA
OK	85	65	82
SD	70	65	65
TX	85	85	79

12 States 73 65 NA

Excl. States with NA 74 66 70

These 12 states produced 98% of the 1990 grain sorghum crop.

NA - not available.

	Grain Sorghum % Mature		
	1991	1990	Avg.
AR	60	52	61
CO	5	9	10
IL	39	4	31
KS	15	5	15
LA	74	84	83
MS	62	72	73
MO	42	15	37
NE	36	9	18
NM	5	3	NA
OK	20	4	15
SD	28	11	16
TX	76	83	67

12 States 41 32 NA

Excl. States with NA 41 32 35

These 12 states produced 98% of the 1990 grain sorghum crop.

NA - not available.

	Corn % Dent		
	1991	1990	Avg.
CO	61	63	70
GA	100	100	100
IL	99	64	88
IN	97	55	84
IA	75	69	86
KS	85	80	85
KY	93	76	90
MI	75	20	50
MN	80	61	82
MO	95	75	93
NE	98	75	86
NC	97	92	94
OH	95	42	69
PA	53	27	42
SD	93	63	63
TX	98	100	97
WI	68	29	63

17 States 87 62 81

These 17 states produced 95% of the 1990 corn crop.

	Corn % Mature		
	1991	1990	Avg.
CO	20	27	31
GA	99	99	99
IL	88	9	45
IN	55	9	42
IA	40	18	48
KS	65	45	55
KY	55	25	51
MI	13	0	5
MN	28	3	30
MO	62	26	61
NE	44	13	27
NC	91	89	83
OH	38	3	20
PA	13	3	8
SD	53	19	25
TX	71	84	78
WI	28	4	2

17 States 50 16 38

These 17 states produced 95% of the 1990 corn crop.

	Corn % Harvested		
	1991	1990	Avg.
CO	0	0	0
GA	74	82	76
IL	9	0	3
IN	5	0	2
IA	3	0	2
KS	25	5	10
KY	14	3	7
MI	3	0	0
MN	0	0	0
MO	19	3	10
NE	4	0	0
NC	27	22	17
OH	3	0	0
PA	2	0	0
SD	3	0	0
TX	59	69	67
WI	0	0	0

17 States 7 3 4

These 17 states produced 95% of the 1990 corn crop.

	Cotton % Bolls Opening		
	1991	1990	Avg.
AL	33	57	49
AZ	60	98	81
AR	33	29	48
CA	40	45	52
GA	38	70	47
LA	66	91	74
MS	42	76	72
MO	45	29	45
NM	43	40	51
NC	68	43	49
OK	8	12	16
SC	58	54	40
TN	42	45	46
TX	33	26	24
14 States	39	43	42

These 14 states produced 99% of the 1990 cotton crop.

	Rice % Headed		
	1991	1990	Avg.
AR	95	94	97
CA	95	95	97
LA	98	98	99
MS	90	100	100
TX	100	100	100
5 States	96	96	98

These 5 states produced 98% of the 1990 rice crop.

	Rice % Harvested		
	1991	1990	Avg.
AR	12	2	13
CA	0	0	0
LA	74	80	74
MS	17	23	26
TX	87	85	91
5 States	33	30	35

These 5 states produced 98% of the 1990 rice crop.

**Crop Condition**

PERCENT

for Week Ending September 8, 1991

State	Corn				
	VP	P	F	G	EX
CO	1	3	20	53	23
GA	0	0	16	63	21
IL	10	13	46	28	3
IN	11	37	44	8	0
IA	1	5	37	52	5
KS	2	14	37	32	15
KY	2	10	61	22	5
MI	2	6	25	47	20
MN	0	5	28	61	6
MO	3	19	52	26	0
NE	4	9	27	56	4
NC	0	1	23	74	2
OH	10	26	40	22	2
PA	17	30	35	17	1
SD	6	15	31	36	12
TX	0	0	7	67	26
WI	1	4	18	64	13
17 State	5	12	35	42	6
Prev Week	4	14	37	37	8
Prev Year	1	4	19	61	15

State	Grain Sorghum				
	VP	P	F	G	EX
AR	5	20	55	20	0
CO	1	6	29	45	19
IL	0	12	39	49	0
KS	6	41	33	18	2
LA	0	23	53	24	0
MS	0	8	59	33	0
MO	6	26	47	21	0
NE	22	15	44	19	0
NM	0	3	3	77	17
OK	0	1	33	66	0
SD	0	6	49	42	3
TX	0	1	23	64	12
12 State	6	18	34	37	5
Prev Week	5	18	36	36	5
Prev Year	1	8	42	44	5

State	Soybeans				
	VP	P	F	G	EX
AL	0	3	32	65	0
AR	0	7	46	47	0
GA	0	0	25	71	4
IL	3	13	56	24	4
IN	4	10	64	22	0
IA	0	3	39	52	6
KS	15	35	42	6	2
KY	0	16	63	21	0
LA	5	14	35	46	0
MI	0	5	25	45	25
MN	2	3	30	61	4
MS	0	2	45	53	0
MO	5	19	50	25	1
NE	8	35	43	14	0
NC	0	0	19	80	1
OH	6	21	40	30	3
SC	0	0	16	78	6
SD	2	10	34	44	10
TN	0	5	48	42	5
19 State	3	11	44	39	3
Prev Week	4	12	45	35	4
Prev Year	3	10	35	45	7

State	Rice				
	VP	P	F	G	EX
AR	0	0	17	83	0
CA	0	0	25	75	0
LA	0	0	37	63	0
MS	0	0	65	35	0
TX	0	0	0	100	0
5 State	0	0	24	76	0
Prev Week	0	0	39	60	1
Prev Year	0	0	34	64	2

State	Cotton				
	VP	P	F	G	EX
AL	0	8	40	52	0
AZ	0	0	0	80	20
AR	0	11	29	60	0
CA	0	0	5	90	5
GA	0	2	15	83	0
LA	0	2	38	60	0
MS	0	0	22	78	0
MO	0	10	60	30	0
NM	0	9	27	64	0
NC	0	0	34	63	3
OK	0	0	61	39	0
SC	0	0	60	40	0
TN	6	3	71	20	0
TX	0	1	38	54	7
14 State	0	2	34	60	4
Prev Week	0	4	33	56	7
Prev Year	2	9	38	48	3

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:** Rain mostly less than 0.50 in.; 1.00 to over 2.00 in. local areas. Temperatures 2° above normal.

Days suitable for fieldwork 6.0. Soil moisture 52% short, 44% adequate, 4% surplus. Corn 94% mature, 95% 1990, 96% avg.; 58% harvested, 52% 1990, 56% avg.; 6% poor, 19% fair, 59% good, 16% excellent. Sorghum 21% harvested, 30% 1990, 34% avg.; 23% fair, 73% good, 4% excellent. Peanuts 23% dug, 26% 1990, 15% avg.; 13% combined, 13% 1990, 7% avg.; 9% fair, 91% good. Cotton 33% bolls opened, 57% 1990, 49% avg.; few fields harvested, 5% 1990, 3% avg.; 8% poor, 40% fair, 52% good. Soybeans 94% blooming, 95% 1990, 94% avg.; 82% setting pods, 84% 1990, 84% avg.; 10% turning color, 24% 1990, 22% avg.; 4% dropping leaves, 14% 1990, 11% avg.; 3% poor, 32% fair, 65% good. Few fields wheat seeded, 4% 1990, 4% avg. Pastures 10% poor, 23% fair, 56% good, 11% excellent. Livestock 10% fair, 76% good, 14% excellent.

**ALASKA:** Railbelt-wide, generally clear skies prevailed until scattered rain began mid week. Highs 2° below normal to 4° above normal. Lows 5° below normal at Anchorage to 6° above normal at Homer. Seasonal precipitation 3.89 in. drier than normal at Fairbanks to 1.37 in. wetter than normal at Anchorage.

Days suitable for haying, combining 3.0. Topsoil 4% short, 85% adequate, 12% surplus. Subsoil 2% short, 96% adequate, 2% surplus. Barley 30% ripe, 30% swathed, 40% harvested. Oats, 10% turning, 50% ripe, 30% swathed, some harvest. Second crop hay 60% complete. Commercial potato harvest 20% complete. Some light to moderate lodging to small grains occurred.

**ARIZONA:** Hot, humid throughout period. Heavy thunderstorms, central, southwest, 1st. Thunderstorms, 2nd, statewide. Rain showers north, east, central 3rd; east, northeast, 4th; southwest, central, 5th; north, 6th. Precipitation trace south central to 2.47 ins. northwest. Temperatures 3° below to 3° above normal. Extremes 42°; 95° higher elevations, 59°; 108° desert.

Cotton bolls opening 60%, 98% 1990, 81% avg.; activities included irrigating, monitoring of insects, defoliation; cotton 80% good, 20% excellent; weed, insect infestations light to moderate. Alfalfa harvest moderate; weed, insect infestations light to moderate; rain damage light to moderate; alfalfa rated good. Lemons harvested, west. Watermelons, cantaloupe harvested, central. Mixed vegetables harvested central, east. Peaches, apples, pistachios harvested, east.

**ARKANSAS:** Temperatures slightly above normal scattered showers statewide. Extremes 63°; 95°. Rainfall 0.03 to 5.70 in.

Days suitable for fieldwork 3. Soil moisture 2% short, 68% adequate, 30% surplus. Corn harvested 60%, 37% 1990, 65% avg.; 13% poor, 26% fair, 61% good. Sorghum harvested 27%, 10%

1990, 38% avg. Pasture 4% poor, 28% fair, 60% good, 8% excellent. Alfalfa 71% fair, 29% good. Other hay 13% poor, 47% fair, 40% good. Livestock excellent. Soybeans growing profusely, blooming, setting pods rapidly with ideal moisture, temperature conditions. Recent moisture helped late sorghum mature, warm, hot, sunshiny weather is needed for additional harvesting. Moisture caused some sprouting heads in the early maturing sorghum that was not harvested yet.

**CALIFORNIA:** Labor Day weekend was hot with a few thunderstorms over the Sierra, a bit of rain on the north coast and low clouds over the rest of the coast. Remainder of the week, saw a general cooling trend with spotty shower activity by weekend.

Open weather permitted progress field activities. Rice field draining continued. Harvest one to two weeks. Cotton defoliation continued desert; just underway San Joaquin Valley. Irrigation, treatments aphids, lygus, worms ongoing. Alfalfa seed, corn silage, dry bean, safflower, sugarbeet harvests active. Sunflower harvest began. Dry beans sprayed mite control. Alfalfa treated armyworms, caterpillars, weevils. Sugarbeet planting progressed. Alfalfa hay harvest normal. Small grain field preparation continued. Grapes for raisin, juice, wine, table grape production continued. Some grapes used for champagne, canning purposes. 40% Of Fresno County raisins on trays. Leaf hopper spraying progressed. Harvest of almond, pear, grapefruit, avocado, nectarine, plum, apple, peaches continued. Harvest of late variety peaches began. Serr walnut harvest began in Selma district. Prune harvest nearing completion. Harvest of Early Foothill variety pomegranates started. Navel oranges continued to mature, size well; red scale spraying continued. Fig harvesting picked up. Coachella Valley began date harvest. Broccoli moderate supply, generally good quality. Cauliflower moderate supply, variable quality. Harvest, packing all types melons slowed down, especially cantaloupe. Celery heavy supply, generally good quality. Iceberg lettuce moderate supply, variable quality. Fresh market, processing tomato harvest continued, major producing areas: Whitefly infestation heavy Desert vegetable, melon fields. Irrigation completed early variety fall crop potatoes Tulelake area. Field preparation, fall planting, continued, Desert districts. Sweet potato harvest continued. Range conditions very poor to good northern State. Southern areas very poor to fair. Supplemental feeding continued.

**COLORADO:** Isolated showers on 2nd, severe weather on the 3rd. Strong winds, heavy rain in southeast. Foot deep hail Logan County. Conditions improved mid week, cloudy again on the 6th with rain southern portions. Mostly cloudy rest of week. Temperatures 1 to 3° above normal statewide.

Days suitable for fieldwork 6.2. Soil moisture 9% very short, 33% short, 57% adequate, 1%

surplus. Second cutting alfalfa 90% complete, 93% 1990, 94% avg.; third cutting 37% complete, 43% 1990, 35% avg. Barley harvest 66% complete, 93% 1990, 94% avg. Spring wheat harvested 42% complete, 75% 1990, 63% avg. Oats harvested 80% complete, 89% 1990, 81% avg. Sorghum 97% headed, 91% 1990, 95% avg.; 53% turning color, 60% 1990, 54% avg.; 5% mature, 9% 1990, 10% avg. Onion harvest 52% complete, 63% 1990, 44% avg. Summer potato harvest 66% complete, 60% 1990, 56% avg. Corn 84% dough, 89% 1990, 94% avg.; 61% dent, 63% 1990, 70% avg.; silage harvest 25% complete, 20% 1990, 27% avg. Dry beans 32% cut, 32% 1990, 43% avg.; harvest 20% complete, 20% 1990, 22% avg. Winter wheat seeded is 14% complete, 18% 1990, 28% avg. Corn 1% very poor, 3% poor, 20% fair, 54% good, 23% excellent. Sorghum 1% very poor, 6% poor, 29% fair, 45% good, 19% excellent. Livestock mostly good. Pasture, range feed excellent.

**FLORIDA:** Temperatures 2° above to 4° below normal north, within 2° of normal central, south. Extreme highs mid 90s, lows upper 60s. Rainfall mostly under 1.00 in., few local areas over 3.00 in.

Soil moisture adequate to surplus. Peanut, corn harvest active. Haying active, weather permitting. Cotton, soybeans, sugarcane continue to make good progress. Pasture ratings 10% fair, 70% good, 20% excellent. States herds mostly good to excellent. Citrus groves, trees very good to excellent. Moisture continues adequate, rainfall variable, abundant new growth. New crop fruit progressing well. Early grapefruit harvest increasing. First Hamlin oranges picked, packed. Caretakers cutting cover crops all areas. Few sprays, fertilizer still being applied. Weather continued hot, wet over major vegetable producing areas. Condition all crops generally good. Planting continued active central areas, increasing southern areas.

**GEORGIA:** Central, southwest no rain, elsewhere 0.50 in. or less. Heavy thunderstorms late week produced 2.00 to 3.00 in. northwest. Temperatures within 1 to 2° of normal. Cooler than normal early week; hotter than normal late week. Coolest mid 50s mountains, near 70° along coast. Hottest mid 80s mountains to mid 90s southwest. Extremes 53° Blairsville; 97° Albany.

Days suitable for fieldwork 6.0. Soil moisture 2% very short, 18% short, 76% adequate, 4% surplus. Cotton 0% harvested, 13% 1990, 4% avg. Sorghum 16% fair, 80% good, 4% excellent; 36% harvested for grain, 27% 1990, 27% avg. Peanuts 4% poor, 32% fair, 64% good; 21% dug, 22% 1990, 16% avg.; 13% threshed, 11% 1990, 7% avg. Tobacco 100% harvested, 96% 1990, 97% avg. Apples 15% fair, 79% good; 50% harvested, 51% 1990, 52% avg. Pecans 3% very poor, 4% poor, 28% fair, 64% good, 1% excellent. Hay, pastures good. Cattle, hogs good.

**HAWAII:** No Data Available.

**IDAHO:** No precipitation. Temperatures normal to 9° above normal across State.

Days suitable for fieldwork 7. Soil moisture 10% very short, 41% short, 49% adequate. Winter wheat 94% harvested. Spring wheat 75% harvested. Spring barley 79% harvested. Potato good; 88% turning, 44% vines dying/killed, 8% harvested. Oats 75% harvested, 80% 1990, 84%

avg. Second cutting alfalfa 95% complete, 92% 1990, 97% avg. Third cutting alfalfa 20% complete, 36% 1990, 34% avg. Dry peas 99% harvested, 100% 1990, 100% avg. Lentils 99% harvested, 100% 1990, 98% avg. Mint 93% harvested, 99% 1990, 98% avg. Plum, prune harvest 87% complete, 84% 1990, 79% avg. Hops 53% harvested, 18% 1990, 41% avg. Onions 27% harvested, 39% 1990, 32% avg. Sweet corn harvest 40% complete. Dry bean harvest 28% complete, 18% 1990, 26% avg. Livestock good to excellent. Pasture, range conditions 79% of normal.

**ILLINOIS:** Temperatures 1 to 6° above normal across the State. Precipitation generally 0.33 to 3.52 in. across the State.

Days suitable for fieldwork 5.00. Soil moisture 69% short, 30% adequate, 1% surplus. Soybeans turning yellow 76%, 17% 1990, 52% avg.; harvested 4%, 0% 1990, 3% avg. Pasture condition as a % of normal, where 100% = normal, was 70%. Alfalfa third cutting 82%, 73% 1990, 81% avg.; 3% very poor, 17% poor, 49% fair, 30% good, 1% excellent.

**INDIANA:** Temperatures 2 to 6° above normal. Highs 80s. Lows upper 50s to 60. Precipitation 0.40 to 1.60. More rain south.

Days suitable for fieldwork 5.4. Topsoil 48% short, 52% adequate. Subsoil 75% short, 25% adequate. Soybean harvest 2%, 0% 1990, 2% avg.; turning color 83%, 22% 1990, 50% avg. Tobacco harvested 65%, 30% 1990, 50% avg. Winter wheat seeding 4%, 0% 1990, 1% avg. Alfalfa hay 3rd cutting 75%. Silo filling 64%, 9% 1990, 41% avg. Pasture 49% of normal. Wheat acres plowed 31%, 33% 1990, 33% avg. Corn, soybean harvest continues. Fall apple harvest underway.

**IOWA:** Temperatures 4 to 6° above normal. Extremes 43°; 92°. Precipitation none to 2.28 in.; average 0.70 in.

Days suitable for fieldwork 6.2. Topsoil 62% short, 38% adequate. Subsoil 41% short, 59% adequate. Pasture condition 74% of normal. Corn 92% in dough stage, 96% 1990, 99% avg. Soybeans 38% leaves turning color, 17% 1990, 48% avg. Third cutting alfalfa 78% harvested, 78% 1990, 86% avg. Livestock good to excellent, cool weather favorable.

**KANSAS:** Temperatures 2 to 4° below normal. Rainfall scattered; generally light to moderate. Western, northern areas none to 0.50 in.; elsewhere 0.70 to 1.35 in.

Days suitable for fieldwork 6.0. Surface 85% short, 15% adequate. Subsurface 89% short, 11% adequate. Corn harvest good progress; sorghum harvest just started. Wheat planting underway many areas; short moisture delaying progress most areas. Range, pasture generally poor except northwest, west central fair. Stockwater short all areas. Some early herd culling underway. Fourth cutting alfalfa slow progress.

**KENTUCKY:** Warm, humid weather. Highest afternoon temperatures upper 80s, lower 90s. Temperatures mid to upper 70s, 1° above normal. Rainfall heaviest along Ohio River from Paducah to Louisville, around 2.00 in. Eastern areas least rainfall, up to 0.50 in.

Days suitable for fieldwork 3.9. Soil moisture 14% very short, 41% short, 44% adequate, 1% surplus. Rain benefitted late soybeans, tobacco. Burley, Dark Tobacco 71% cut. Housed tobacco curing well, limited houseburn. Tobacco in fields 2% very poor, 9% poor, 64% fair, 25% good.

Hay crops 7% very poor, 26% poor, 44% fair, 23% good. Pastures greening. Hay fed to livestock continues drier areas.

**LOUISIANA:** Temperatures 0.9° below to 1.7° above normal. Extremes 68°; 94°. Rainfall 0.81 in., northeast to 3.81 in., south central.

Days suitable for fieldwork 3.3. Soil moisture 2% short, 54% adequate, 44% surplus. Corn 95% harvested, 97% 1990, 85% avg. Cotton 0% harvested, 14% 1990, 6% avg. Hay 55% final cutting, 72% 1990, 61% avg. Drying potential low due to high humidity, daily showers. Rice 83% ripe, 87% 1990, 84% avg. Second crop management continued; harvesting of first crop slowed due to rain. Sorghum 99% headed, 97% 1990, 99% avg.; 59% harvested, 75% 1990, 63% avg. Soybeans 91% setting pods, 97% 1990, 94% avg., 7% leaves turning color, 47% 1990, 29% avg. Insect, weed pressure increased. Sweet potatoes 1% poor, 61% fair, 38% good; 35% harvested, 40% 1990, 40% avg. Weevil outbreak, south central. Sugarcane 21% fair, 69% good, 10% excellent; 49% planted, 25% 1990, 38% avg. Planting slowed by rain; some lodging experienced in heavier storms. Vegetables 3% very poor, 13% poor, 61% fair, 23% good. Pastures 5% fair, 28% good, 67% excellent. Armyworm problems continue mainly northern half. Livestock 14% fair, 82% good, 4% excellent.

**MARYLAND & DELAWARE:** **MARYLAND:** Rainfall 0.77 in. Temperature 72.5°, normal 71.5°. Extremes 45°; 99°.

Days suitable for fieldwork 5.6. Topsoil 5% very short, 50% short, 40% adequate, 5% surplus. Subsoil 10% very short, 65% short, 25% adequate. Field corn fair, soybeans, sorghum fair to good, tobacco good. Field corn 91% dent, 78% 1990, 78% avg.; 55% mature, 22% 1990, 32% avg.; 67% harvested for silage, 23% 1990, 37% avg. Soybeans 18% turned, 13% 1990, 12% avg. Sorghum 75% turned; 25%. Tobacco 92% topped, 89% 1990, 86% avg.; 71% harvested, 62% 1990, 56% avg. Lima beans 73% harvested, 55% 1990, 68% avg. Sweet potatoes 27% harvested, 0% 1990, N/A avg. Tomatoes 95% harvested, 89% 1990, 90% avg. Other hay second cut 80% complete, 98% 1990, 93% avg.; third cut 30% complete, 37% 1990, 47% avg. Alfalfa third cut 93% complete, 93% 1990, 91% avg.; fourth cut 40% complete, 27% 1990, 29% avg. Hay supplies adequate. Pasture very poor. Apples good, 27% harvested, 29% 1990, 31% avg.

**DELAWARE:** Precipitation 0.13 in. Temperature 71.4°, normal 72.1°. Extremes 46°; 92°.

Days suitable for fieldwork 6.7. Topsoil 17% very short, 83% short. Subsoil 83% short, 17% adequate. Field corn, soybeans fair to good, sorghum good. Field corn 62% mature, 25% 1990, 37% avg.; 64% harvested for silage, 38% 1990, 54% avg. Soybeans 95% set pods, 82% 1990, 84% avg.; 11% turned, 3% 1990, 7% avg. Sorghum 34% turned, N/A 1990, N/A avg. Sweet corn 89% harvested, 91% 1990, 93% avg. Potatoes 78% harvested, 95% 1990, 92% avg. Canteloupes 92% harvested, 98% 1990, 99% avg. Cucumbers 84% harvested, 84% 1990, N/A avg. Lima beans 42% harvested, 41% 1990, 44% avg. Snap beans 94% harvested, 93% 1990, N/A avg. Tomatoes 87% harvested, 92% 1990, 83% avg. Other hay third cut 67% complete, 58% 1990, 77% avg.; fourth cut 40% complete. Alfalfa hay fourth cut 69% complete, 24% 1990, 41% avg. Hay supplies adequate. Pasture good. Apples good, 33% harvested, 37% 1990, 30% avg.

**MICHIGAN:** Temperatures 1° below to 3° above normal. Extremes 39°; 88°. Precipitation none to 1.94 in. across the State.

Days suitable for fieldwork 6.5. Soil moisture 60% short, 40% adequate. Corn 75% dent, 20% 1990, 50% avg.; 13% mature, 0% 1990, 5% avg.; 3% harvested; 2% very poor, 6% poor, 25% fair, 47% good, 20% excellent. Soybeans 25% dropping leaves, 2% 1990, 5% avg.; 0% very poor, 5% poor, 25% fair, 45% good, 25% excellent. Winter wheat 3% planted. Pasture condition 65% of normal.

**MINNESOTA:** Temperatures 2 to 6° above normal. Extremes 33°; 93°. Precipitation 1.03 to 4.50 in. Greatest weekly total 6.45.

Days suitable for fieldwork 6.2. Topsoil 16% very short, 47% short, 36% adequate, 1% surplus. Field corn 80% denting, 61% 1990, 82% avg.; 28% mature, 3% 1990, 30% avg.; 17% silage cut, 6% 1990, 18% avg. Soybeans 67% turning yellow, 56% 1990, 71% avg.; 34% dropping leaves, 30% 1990, 38% avg.; 7% mature, 1% 1990, 10% avg. Dry beans 73% harvested, 34% 1990, 29% avg. Potatoes 22% harvested, 9% 1990, 19% avg. Flax 68% harvested, 56% 1990, 51% avg. Sugarbeets 1% harvested. Sunflowers 1% harvested. Sweet corn 72% harvested, 70% 1990, 85% avg. Winter wheat 62% seeded, 56% 1990, 55% avg. Rye 56% seeded, 47% 1990, 54% avg. Hay, small grain 58% stubble plowed/tilled, 61% 1990, 58% avg. Field corn 2% very poor, 3% poor, 30% fair, 61% good, 4% excellent. Soybeans 5% poor, 28% fair, 61% good, 6% excellent.

**MISSISSIPPI:** Temperature 80°, 1.2° above normal. Extremes 62°; 95°. Mostly dry statewide except showers in southern part of State. Rainfall 0.91 in. to 0.02 in. below normal. Soil temperatures 84°.

Days suitable for fieldwork 5.1, 6.5 1990, 5.7 avg. Soil moisture 4% very short, 14% short, 79% adequate, 3% surplus. Corn 95% denting, 100% 1990, 99% avg.; 84% mature, 85% 1990, 84% avg.; 44% harvest, 40% 1990, 46% avg.; silage harvest 82%, 84% 1990, 86% avg.; 13% poor, 40% fair, 47% good. Cotton open bolls 42%, 76% 1990, 72% avg.; 22% fair, 78% good. Peanuts 60% harvest 32% 1990, 46% avg. Rice 90% heading, 100% 1990, 100% avg.; 57% mature, 59% 1990, 70% avg.; 17% harvest, 23% 1990, 26% avg.; 65% fair, 35% good. Sorghum 98% heading, 100% 1990, 100% avg.; 84% coloring, 89% 1990, 93% avg.; 62% mature, 72% 1990, 73% avg.; 37% harvest, 42% 1990, 44% avg.; 78% silage harvest, 87% 1990, 72% avg.; 8% poor, 59% fair, 33% good. Soybeans 92% blooming, 100% 1990, 97% avg.; 82% podding, 90% 1990, 83% avg.; 28% turning color, 37% 1990, 31% avg.; 2% shedding leaves, 16% 1990, 14% avg.; 2% poor, 45% fair, 53% good. Sweetpotatoes 42% harvest, 28% 1990, 35% avg. Hay 90% harvested, 82% 1990, 83% avg. Pecans 17% very poor, 47% poor, 19% fair, 17% good. Livestock 14% fair, 53% good, 33% excellent. Pasture 92% of normal.

**MISSOURI:** Temperatures 1 to 3° above normal. Rainfall 1.38 in.; 0.72 in. east central to 2.34 in. southeast. All other regions over 1.00 in.

Days suitable for fieldwork 4.8. Topsoil 65% short, 30% adequate, 5% surplus. Subsoil 78% short, 21% adequate, 1% surplus. Corn mature ranges 47% northeast to 91% southeastern district. Corn harvesting ranges 10% or less northern districts to 52% southeast district. Soybeans setting pods 77% southwest district to 90% or more northern two thirds; turning color ranges 19% southeast to 59% south central; dropping leaves most advanced west central 31%.

Sorghum mature ranges 18% east central to 61% southeast; harvested 7% or less northern two thirds to 17% southeast district. Alfalfa hay third cutting 90%, 89% 1990, 89% avg. Pasture 28% very poor, 35% poor, 28% fair, 9% good.

**MONTANA:** Temperatures 1 to 4° above normal west, 3 to 11° above normal east. Scattered precipitation, dry overall.

Days suitable for fieldwork 6.0. Topsoil 81% short, 19% adequate. Subsoil 70% short, 30% adequate. Barley harvested 91%, 86% 1990, 81% avg. Oats harvested 85%, 86% 1990, 85% avg. Second cutting alfalfa harvested 90%, 84% 1990, 83% avg. Dry beans harvested 25%, 10% 1990, 19% avg. Corn silage harvested 23%, 15% 1990, 20% avg. Pasture, range feed condition 89% of normal.

**NEBRASKA:** Temperatures 7 to 8° above normals. Precipitation latter half of week none west to 0.70 in. Omaha.

Days suitable for fieldwork 6.8. Topsoil 96% short, 3% adequate, 1% surplus. Subsoil 87% short, 12% adequate, 1% surplus. Corn 4% very poor, 9% poor, 27% fair, 56% good, 4% excellent; 98% dent, 75% 1990, 86% avg.; 44% mature, 13% 1990, 27% avg.; 4% harvested, 0% 1990, 0% avg. Sorghum 22% very poor, 15% poor, 44% fair, 19% good; 86% coloring, 68% 1990, 78% avg.; 36% mature, 9% 1990, 18% avg.; 2% harvested. Soybeans 8% very poor, 35% poor, 43% fair, 14% good; 67% turning, 44% 1990, 53% avg.; 30% dropping leaves, 12% 1990, 17% avg.; 1% harvested. Alfalfa 9% very poor, 36% poor, 27% fair, 27% good, 1% excellent; 88% third cutting, 85% 1990, 85% avg. Wheat sown 8%, 10% 1990, 15% avg. Pasture, range 62% of normal.

**NEVADA:** Temperatures above normal. Extremes 35°; 111°. Precipitation trace to 0.98. Scattered thunderstorms occurred across the State, mostly northern half of State.

Irrigation water 50% very short; 45% short; 5% adequate. Late season reallocations provided for an extra irrigation in some areas. Winter wheat harvested 95%; 100% 1990; 100% avg. Spring wheat harvested 85%; 85% 1990; 85% avg. Oats harvested 95%, 95% 1990; 90% avg. Barley harvested 90%; 90% 1990; 90% avg. Garlic harvested 90%; 95% 1990; 95% avg. Onion harvest beginning, defoliation of potato acreage underway. Alfalfa second cutting complete most areas; third cutting 20%; 45% 1990; 40% avg. Several areas will not harvest normal third cutting due to water shortage. Other hay harvested 95%; 85% 1990; 90% avg. Alfalfa seed fair to good; harvested 30%; 35% 1990; 30% avg. Livestock mostly good. Early movement to fall ranges necessary due to reduced forage. Pasture and range condition extremely poor south, very poor northwest, poor to fair northeast.

**NEW ENGLAND:** Precipitation none to 0.50 in. north, 0.10 to 1.50 in. south, up to 2.88 in. Kingston, Rhode Island. Temperatures mid 50s to high 60s; 4 to 7° below normal. Maximum temperatures mid 70s to mid 80s; minimum temperatures low 30s to low 50s.

Days suitable for fieldwork 6.0. Soil moisture 8% short, 88% adequate, 4% surplus. Grazing availability 38% short, 57% adequate, 5% surplus. Fieldwork 4.4 days ahead of schedule. Maine potatoes 5% harvested, 7% 1990, 8% avg.; fair to good. Rhode Island potatoes 50% harvested, 75% 1990, 57% avg.;

Connecticut Valley potatoes 44% harvested, 23% 1990, 23% avg.; fair to good. Maine oats 59% harvested, 74% 1990, 58% avg.; good. Field corn 9% harvested, 8% 1990, 10% avg.; fair to good. Sweet corn 87% harvested, 81% 1990, 83% avg.; fair to good. Second cut hay 90% complete, fair. Third cut hay 41% complete, 50% 1990, 47% avg.; fair. Connecticut Valley shade tobacco, outdoor tobacco harvest complete. Apples 23% harvested, size small to medium, fair to good. Peaches 92% harvested, size small to medium, fair to good. Pears 65% harvested, size small to medium, fair to good. Cranberry harvest underway, berry size small to average, good. Blueberry harvest 99% complete, size medium, fair. Raspberry harvest 99% complete, size medium, good.

**NEW JERSEY:** Temperatures near normal. Extremes 41°; 90°. Rainfall 0.39 in. north, 0.30 in. central, 0.08 in. south. Heaviest 24 hour total 0.65 in. on 4th, 5th. Estimated soil moisture percent field capacity, 58% north, 49% central, 35% south. Four inch soil temperature 66° north, 68° central, 69° south.

Soil moisture short most areas. Conditions good for late season crops. Summer vegetable harvest complete. Fall vegetable growth good. Irish potato harvest increasing. Late season peach harvest about complete. Fall variety apple prospects good. Cranberry prospects look very good. Fourth cutting hay very active. Pasture growth fair most areas. Good soaking rain would be beneficial.

**NEW MEXICO:** Most sections of the State received some rainfall, 2.52 in. being the highest. Temperatures few degrees of normal. Extremes 38°; 97°.

Days suitable for fieldwork 5.7. Soil moisture 21% short, 79% adequate. Crop conditions: Alfalfa 4% very poor, 31% fair, 61% good, 4% excellent. Rains remain a problem with hay harvest. Corn 76% good, 24% excellent. Irrigated, dryland wheat fair to good as planting continues. Chile 38% fair, 54% good, 8% excellent. Onions fair to good. Lettuce fair to good. Pecans 29% fair, 71% good. Apples very poor to good across the State as harvest continues. Cattle 15% fair, 74% good, 11% excellent. Sheep 16% fair, 72% good, 12% excellent. Range 88% of normal, low of 50%, high of 120%.

**NEW YORK:** Started cold. Scattered frost morning of 3rd. Gradual warm up ensued for remainder of week. Extremes 30°; 90°. Only precipitation fell on 4th, 5th. Rainfall less than 0.10 in. to just over 1.50 in.

Days suitable for fieldwork 5.9. Soil moisture short to adequate. Dry weather continued. Pasture condition 42% of normal. Corn silage harvest in full swing. Oats 95% harvested, 88% 1990, 93% avg. Third cutting of alfalfa 59% finished, 38% 1990, 38% avg. Potato harvest active. McIntosh apple harvest underway in Lake Champlain area. Grape harvest active. Growers harvesting grapes at earliest date many can remember. Tree fruits generally good. Vegetable harvest continued in full swing. Processing tomato harvest underway. Irrigation still active in many fields.

**NORTH CAROLINA:** Temperatures normal to 1° below. Precipitation none to 2.49 in.

Days suitable for fieldwork 6.0. Soil moisture 1% very short, 10% short, 80% adequate, 9%

surplus. Crop condition: Corn 1% poor, 23% fair, 74% good, 2% excellent; cotton 34% fair, 63% good, 3% excellent; peanuts 26% fair, 74% good; soybeans 19% fair, 80% good, 1% excellent; hay 10% fair, 89% good, 1% excellent. Sweet potatoes 5% poor; 37% fair, 58% good. Apples 35% fair, 65% good; sorghum 32% fair, 68% good. Pasture 1% poor, 12% fair, 85% good, 2% excellent. Harvested: Flue cured tobacco 75%; burley tobacco 52%; corn silage 70%; corn for grain 27%; sorghum for grain 22%; sweet potatoes 12%; apples 38%; hay second cutting 90%, third cutting 48%. Cotton opening bolls 68%, dent 97%, mature 91%; soybeans blooming 98%, setting pods 88%.

**NORTH DAKOTA:** Temperatures 1° above normal north central, northeast to 5° above normal west central, southwest, south central. Extremes 35° northeast, west central; 101° southwest. Precipitation none southwest, south central to 0.15 in. east central.

Days suitable for fieldwork 6.2. Topsoil 19% very short, 47% short, 34% adequate. Subsoil 33% very short, 47% short, 20% adequate. Spring wheat 99% combined, 97% 1990, 94% avg.; durum 96% combined, 92% 1990, 89% avg. Corn for grain 3% poor, 29% fair, 67% good, 1% excellent; 41% ripe and beyond, 5% 1990, 11% avg. Corn for silage 23% poor, 43% fair, 28% good, 6% excellent; 52% cut, 25% 1990, 28% avg. Sunflower 3% poor, 26% fair, 62% good, 9% excellent; 34% bracts turned brown, 18% 1990, 24% avg. Flax 5% poor, 14% fair, 72% good, 9% excellent; 69% combined, 49% 1990, 39% avg. Potatoes 100% good; 21% dug, 10% 1990, 16% avg. Soybeans 37% fair, 50% good, 13% excellent; 9% combined, 1% 1990, 3% avg. Dry edible beans 1% poor, 17% fair, 72% good, 10% excellent; 70% combined, 40% 1990, 23% avg. Sugarbeets 100% good. Winter wheat 16% planted, 20% 1990, 20% avg. Rye 17% planted, 17% 1990, 18% avg. Pasture conditions 71% of normal. Alfalfa hay second cutting 98% complete, other hay first cutting 99% complete. Stockwater 14% very short, 44% short, 42% adequate.

**OHIO:** Temperatures highs 80°, 85° with low temperatures mid 50 to 60°. Rainfall fell across the State late 3rd afternoon to 4th, varying from 0.10 in. some areas to over 2.00 in. others.

Days suitable for fieldwork 5.4. Soil moisture 59% short, 40% adequate, 1% surplus. Pastures 26% very poor, 38% poor, 26% fair, 9% good, 1% excellent. Tomato harvest 69%, 48% 1990, 66% avg. Potato harvest 51%, 37% 1990, 35% avg. Summer apple harvest 85%, 90% 1990, 82% avg. Third cut alfalfa 82%, 78% 1990, 83% avg. Third cut other hay 55%, 35% 1990, 41% avg. Corn for silage 60%, 7% 1990, 24% avg.

**OKLAHOMA:** No weather data available.

Days suitable for fieldwork 3.8. Topsoil 12% short, 62% adequate, 26% surplus. Subsoil 52% short, 48% adequate. Wheat 100% seedbed prepared, 96% 1990, 82% avg.; 11% planted, 5% 1990, 7% avg.; 1% up to stand, 1% 1990, 1% avg. Cotton 100% setting bolls, 98% 1990, 95% avg.; 8% open bolls, 12% 1990, 16% avg.; fair to good. Sorghum 85% milk to soft dough, 65% 1990, 82% avg.; 20% mature, 4% 1990, 15% avg.; 1% harvested, 1% 1990, 3% avg.; good to fair. Soybeans 100% flowering, 97% 1990, 100% avg.; 68% setting pods, 68% 1990, 85% avg.; 9% mature, 1% 1990, 11% avg.; 1% harvested, 0% 1990, 0% avg. Peanuts 96% setting pods, 96%

1990, 96% avg.; 11% mature, 5% 1990, 22% avg. Corn 91% mature, 52% 1990, 82% avg.; 61% harvested, 21% 1990, 39% avg. Pasture condition 87%. Crop insect activity light. Cattle good condition; marketings average, prices mixed.

**OREGON:** Temperatures above normal, entire State; departures above normal as high as 8° south; to 5° elsewhere. Precipitation scant across State; 0.10 to 0.20 fell, Willamette Valley.

Soil moisture 78% short, 22% adequate. Winter wheat, barley harvest continued. 1992 winter wheat planted, 4%. Hay harvest continued; mint harvest near completion; red clover harvest continued, Washington, Yamhill County. Bartlett pear harvest continued, Anjou starting, Hood River Valley. Bartlett pears, Wasco County; winter pear harvest, Medford district. Peach, Bartlett pear, Gravenstein, other early apples being harvested, Willamette Valley. Very short peach, nectarine season, Lane County. Blackberry, blueberry harvest continued, west. Strawberry fields fertilized, red raspberries pruned. Cranberry growers sprinkled, prevent scald, south coast. Sweet corn 80% complete, potato harvest half finished, Malheur County. Potatoes sizing well, dying back, Baker County. Potato harvest continued, Hermiston, Boardman, Willamette Valley. Garlic harvest completed, carrot planting finished, central areas. Livestock mostly good; yearling calves sold, new crop calf sales starting, Wallowa County; cattle movement from allotment, Grant County; sheep breeding almost finished, Douglas County. Rangelands dry, east; some forage higher elevations. Statewide range, pasture, 1% very poor, 17% poor, 33% fair, 43% good, 6% excellent.

**PENNSYLVANIA:** Below normal rainfall, temperature. Temperature 65°, 3° below normal. Extremes 36°; 89°. Precipitation 0.60 in., 0.24 in. below normal.

Days suitable for fieldwork 6. Soil moisture 89% short, 11% adequate. Corn 99% silk, 97% 1990, 98% avg.; 90% dough, 74% 1990, 82% avg.; 53% dent, 27% 1990, 42% avg.; 13% mature, 3% 1990, 8% avg.; 2% harvested, 0% 1990, 0% avg. Ensilage corn harvested 33% complete, 5% 1990. Corn 17% very poor, 30% poor, 35% fair, 17% good, 1% excellent. Soybean harvest 1% complete, 0% 1990; 15% very poor, 24% poor, 34% fair, 25% good, 2% excellent. Wheat planted 9% complete, 5% 1990. Barley planted 8% complete, 6% 1990. Tobacco harvest 73% complete, 57% 1990. Potato harvest 49% complete, 35% 1990. Second cutting alfalfa 97% complete, 95% 1990. Third cutting alfalfa 71% complete, 59% 1990. Fourth cutting alfalfa 27% complete, 14% 1990. Second cutting clover timothy 92% complete, 82% 1990. Feed from pastures 51% very poor, 28% poor, 21% fair. Quality of hay made mostly fair. Apple harvest 28% complete, 28% 1990. Peach harvest 90% complete, 85% 1990. Grapes harvest 47% complete, 16% 1990. Fall plowing 31% complete, 38% 1990.

**PUERTO RICO:** No Data Available.

**SOUTH CAROLINA:** Temperatures across State near normal to 1° above normal. Rainfall none many areas to 1.00 in. north, east.

Days suitable for fieldwork 5.93. Soil moisture 28% short, 72% adequate. Apples good; 66% harvested, 70% 1990, 41% avg. Cantaloupes fair to good; 95% harvested, 93% 1990, 99% avg.

Corn 56% harvested, 67% 1990, 48% avg. Cotton 60% fair, 40% good; 58% open bolls, 54% 1990, 40% avg. Fall hay fair to good; 58% harvested, 41% 1990, 52% avg. Peanuts fair to good; 5% harvested, 6% 1990, 5% avg. Sorghum fair to good; 28% harvested, 33% 1990, 25% avg. Soybeans 16% fair, 78% good, 6% excellent; 97% blooming, 96% 1990, 95% avg.; 80% setting pods, 74% 1990, 75% avg.; 5% leaves turning, 6% 1990, 7% avg. Sweet potatoes fair to good; 39% harvested, 12% 1990, 11% avg. Tobacco fair to good; 94% harvested, 85% 1990, 88% avg.; 38% stalks destroyed, 20% 1990, 22% avg. Winter grazing N/A; 13% planted, 7% 1990, 12% avg.; 3% emerged, 1% 1990, 5% avg.

**SOUTH DAKOTA:** Temperatures 5 to 10° above normal. Extremes 33°; 100°. Rainfall spotty, maximum 1.38 in.. Most stations reported less than 0.25 inches of rain.

Days suitable for fieldwork 6.2. Topsoil 38% critical, 52% short, 9% adequate, 1% surplus. Subsoil 28% critical, 53% short, 17% adequate, 2% surplus. Flax 37% fair, 49% good, 14% excellent. Sunflowers 3% poor, 18% fair, 68% good, 11% excellent. Livestock 1% poor, 6% fair, 81% good, 12% excellent. Pasture conditions 80% of normal.

**TENNESSEE:** Temperatures 3 to 4° above normal middle, west; normal east; 3° below normal Plateau. Above normal rainfall west, middle. Slightly below normal rainfall east, Plateau.

Days suitable for fieldwork 5.2. Soil moisture 10% very short, 36% short, 53% adequate, 1% surplus. Abundant rainfall west, middle helped maturing crops. Corn 50% mature, 42% 1990, 60% avg.; 52% harvested silage, 40% 1990, 63% avg.; 14% harvested grain, 5% 1990, 11% avg.; 2% very poor, 3% poor, 62% fair, 29% good, 4% excellent. Burley tobacco 72% harvested, 62% 1990, 63% avg.; 2% poor, 29% fair, 67% good, 2% excellent.

**TEXAS:** Rainfall, cooler temperatures across State brought relief many areas. Heavy rainfall East Texas limited field activities. Cooler temperatures slowed maturing some cotton, sorghum fields. Harvest activities across Texas delayed by showers throughout week. Hay baling progressed where conditions allowed. Range, pastures showed excellent growth, land preparations continued for winter pastures.

**Crops:** Wet conditions delayed corn harvest in Plains; wet fields in Blacklands, Central Texas brought harvest activities stand still. Sorghum fields in High Plains sustained minor damage from high winds. Rain could cause additional heading some dryland fields. Headworm, other insects continued cause some problems. Sorghum 71% harvested, 57% 1990, 56% avg. Cotton fields were plagued by bollworms, aphids. Spraying continued in areas of Plains, Hill Country where conditions allowed. Although aphid population decreased, there is continued concern of possible resurgence. Harvest in Blacklands delayed by rain throughout week. Cotton 17% harvested, 13% 1990, 13% avg. Land preparation continued small grains. Some wheat emerged, progressing well in High Plains. Rice harvest hampered by showers in Upper Coast. Soybean fields continued mature. Pod worms started increasing. Harvest activities in Blacklands limited, although good yields reported. Peanuts continued make excellent growth. Light

disease problems continued. Some dryland fields in South Texas need additional moisture.

**Commercial Vegetables:** Rio Grande, crop planting continued for carrots, cabbage, spinach. East Texas, sweet potato harvest remained active. High Plains, harvest of onions virtually complete. Carrots, bell peppers harvest continued. Trans Pecos, chile growth fair, good. Pecan weevils continued affect development some areas. Heavy rainfall caused some scab damage in Blacklands.

**Range and Livestock:** Ranges, pastures have good forage supplies. Recent rains have improved pastures, grasses. Some supplemental protein feeding continued in Hill Country, late rain could reduce amount of protein required early fall. Range, pasture 1% very poor, 5% poor, 26% fair, 46% good, 22% excellent.

**UTAH:** Temperature maximums 5° above normal, minimums 6° above normal. Precipitation light west, north central divisions to moderate elsewhere, except no rainfall Dixie division.

Days suitable for fieldwork 6.1. Soil moisture 67% short, 31% adequate, 2% surplus. Winter wheat seeded 29% complete, 38% 1990, 40% avg. Oats 75% harvested for grain, 94% 1990, 93% avg. Corn 75% in dough, 75% avg. Field corn mature 20%, 40% 1990, 31% avg. Corn silage harvest 4% complete, 12% 1990, 9% avg. Alfalfa third cutting 47% completed, 60% 1990, 56% avg. Pasture, range mostly good to excellent. Apple harvest is underway. Peach harvest 53% complete, 81% 1990, 81% avg. Potato harvest 18% complete, 14% 1990, 11% avg. Dry onion harvest 24% complete, 27% 1990, 24% avg. Cattle moved from summer range 11% complete, 26% 1990, 16% avg. Sheep moved from summer range 8% complete, 20% 1990, 15% avg.

**VIRGINIA:** Temperatures well above normal until 1st, then below normal. Precipitation 0.79 in. southeast, 0.13 in.

Days suitable for fieldwork 6.1. Topsoil 7% very short, 55% short, 32% adequate, 6% surplus. Corn for grain harvested 22%, 17% 1990, 11% avg.; silage harvested 45%, 38% 1990, 32% avg.; dented 80%, 74% 1990, 71% avg.; mature 65%, 58% 1990, 56% avg. Soybeans setting pods 90%, 87% 1990, 82% avg. Sweet potato harvest neared 33% complete. Flue tobacco harvested 60%, 58% 1990, 47% avg. Fire cured tobacco harvested 80%, 78% 1990, 61% avg. Burley tobacco harvested 45%, 42% 1990, 30% avg. Sun tobacco harvested 65%, 57% 1990, 46% avg. Soybean 15% poor, 31% fair, 54% good. Peanut 20% fair, 80% good. Pasture 8% very poor, 38% poor, 32% fair, 22% good. Oats seeded 3%, 0% 1990, 1% avg. Winter wheat seeded 1%, 0% 1990 0% avg. Barley seeded 2%, 0% 1990, 15% avg.

**WASHINGTON:** Temperatures 0 to 3° above normal, east; 3° above normal to 1° below normal, west. Precipitation none east; 0.37 to 1.40 in. west.

Days suitable for fieldwork 7.0. Soil moisture 52% short, 48% adequate. Roughage 18% short, 80% adequate, 2% surplus. Range, pasture 29% poor, 20% fair, 51% good. Potatoes 100% good; 23% harvested. Dry beans 100% good. Corn 100% good. Dry peas 94% harvested. Alfalfa hay 3rd cutting 70%. Winter wheat planting is getting off to a slow start; rain is needed to improve planting in summer fallow fields. Bartlett pear harvest was nearing completion, harvest of early varieties of apples was underway. Harvest of vegetables continued statewide. Ranges, pastures holding up very well for this time of year.

**WEST VIRGINIA:** Temperature 69°. Extremes 45°; 89°. Precipitation 0.80 in.

Days suitable for fieldwork 5.2. Soil moisture 15% very short, 65% short, 20% adequate. Corn, 55% poor, 3% fair, 42% good; 98% silked, 92% dough stage, 62% mature. Oats good; 99% harvested. Gardens, fair. Tobacco, good; 88% topped, 57% harvested. Hay, 12% very poor, 17% poor, 62% fair, 9% good; 74% second cutting, 69% third cutting. Apples fair. Peaches 100% harvested. Pastures, 27% very poor, 21% poor, 42% fair, 10% good; 63% of normal. Cattle, fair. Sheep, good.

**WISCONSIN:** Temperature 66°, 3° above normal. Extremes 36°; 90°. Rainfall 0.80 to 5.50 in.

Days suitable for fieldwork 4.8. Soil moisture 50% short, 50% adequate. Pasture condition 69% of normal, 89% 1990, 77% avg. General condition of crops 3% poor, 20% fair, 72% good, 5% excellent. Corn 1% very poor, 4% poor, 18% fair, 64% good, 13% excellent; in dent 68%, 29% 1990, 63% avg.; mature 28%, 4% 1990, 22% avg. Corn silo filling 10% complete, 2% 1990, 10% avg. Soybean 10% poor, 19% fair, 64% good, 7% excellent; leaves 63% turned, 12%

1990, 30% avg. Third crop hay 67% harvested, 52% 1990, 51% avg.

**WYOMING:** Temperatures above normal. Precipitation mostly below normal.

Days suitable for fieldwork 6.3. Topsoil 48% short, 43% adequate, 9% surplus. Barley 15% mature, 15% 1990, 10% avg.; 85% harvested, 85% 1990, 90% avg. Spring wheat 10% mature, 5% 1990, 5% avg.; 90% harvested, 95% 1990, 95% avg. Oats 15% mature, 20% 1990, 15% avg.; 85% harvested, 80% 1990, 85% avg. Alfalfa second cutting 90% complete, 90% 1990, 90% avg.; third cutting 15% complete, 10% 1990, 20% avg. Dry beans 100% leaves turning color, 85% 1990, 90% avg.; 55% windrowed, 35% 1990, 40% avg.; 20% combined, 10% 1990, 15% avg. Corn 10% milk, 5% 1990, 10% avg.; 35% dough, 50% 1990, 45% avg.; 50% dented, 40% 1990, 40% avg.; 5% mature, 5% 1990, 5% avg. Corn silage 5% harvested, 20% 1990, 15% avg. Potatoes small amount harvested, 20% 1990, 10% avg. 1992 winter wheat 40% seeded, 55% 1990, 40% avg.; 5% emerged, 10% 1990, 10% avg. Range, pastures good to excellent. Stockwater 10% short, 90% adequate.

International Weather and Crop Summary

HIGHLIGHTS

September 1 - 7, 1991

**USSR ...** In Western USSR, mostly dry weather in the Ukraine benefits summer crop maturation and early winter grain planting. In the New Lands, wet, cool weather delays the spring grain harvest.

**EUROPE ...** Showers and cooler weather ease crop stress in Spain. Dry weather favors fieldwork across the north.

**EASTERN ASIA ...** Tropical Storm Joel brings heavy rains and flooding to southern China. Wetness slows corn harvesting in the North China Plain.

**SOUTHEAST ASIA ...** Showers benefit Thailand's late planted rice.

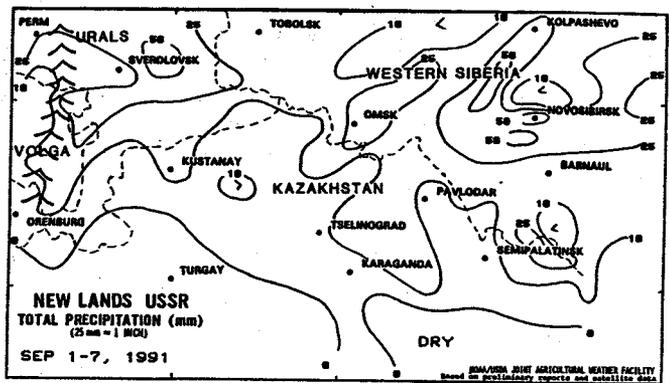
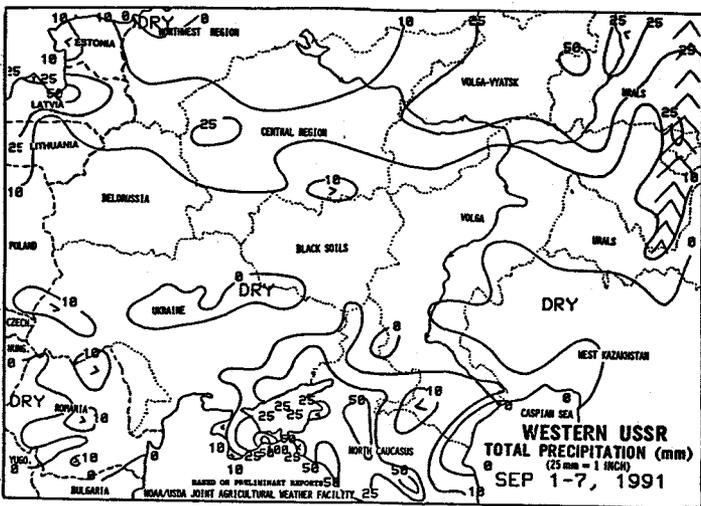
**SOUTH ASIA ...** Beneficial rains over northern and eastern grain areas favor immature rice and improve moisture for wheat planting.

**SOUTH AMERICA ...** Moisture remains adequate, and warm temperatures speed winter wheat development in Argentina. In southern Brazil, topsoils are dry in Parana for corn planting.

**AUSTRALIA ...** Dryness continues in Queensland.

**CANADA ...** Mostly favorable harvest conditions continue across the Prairies.

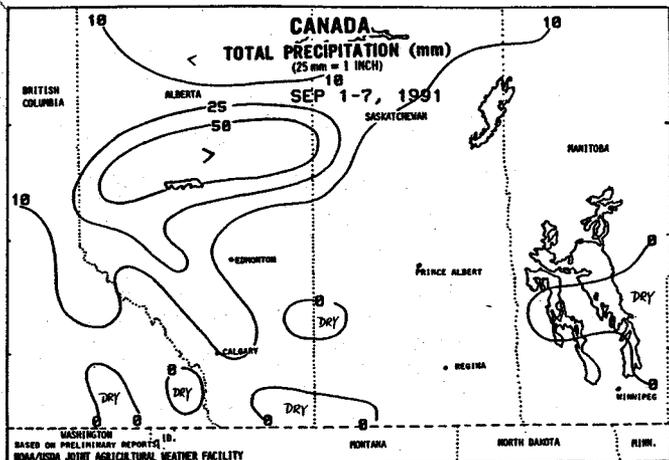
**MEXICO ...** Widespread rain slows corn harvesting.

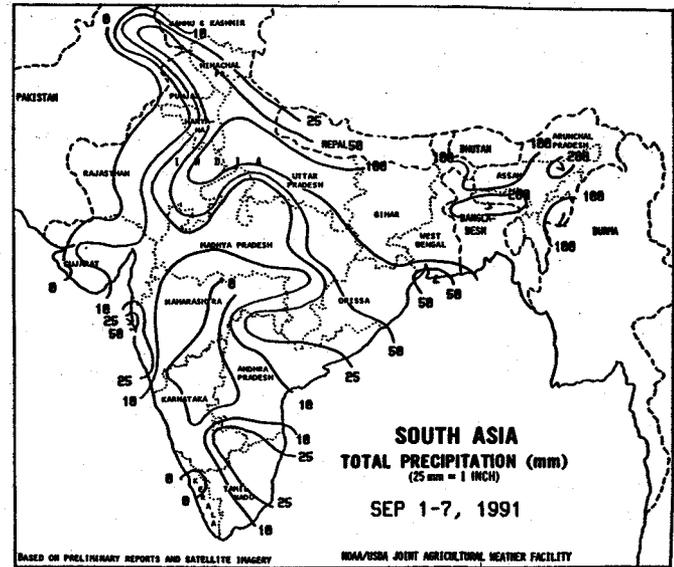
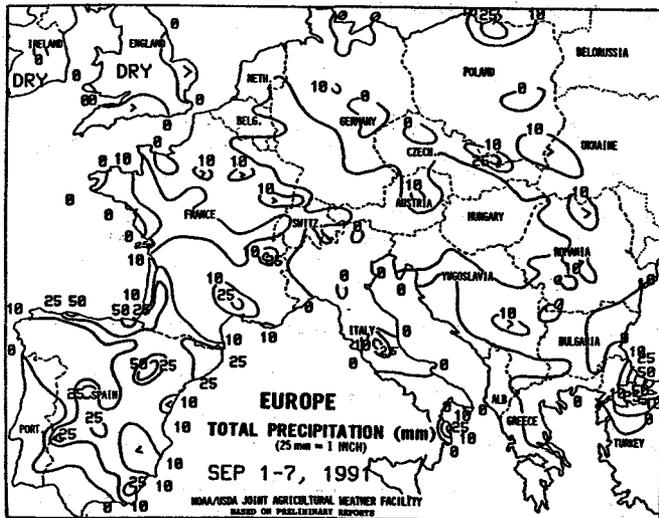


**USSR ...** In Western USSR, winter grain planting usually extends as far south as the northern Ukraine, the northern North Caucasus, and the lower Volga. Corn and sunflower harvests were underway in the southern Ukraine and the North Caucasus. Little, if any, precipitation over most of the Ukraine benefited corn maturation and early winter grain planting. In contrast, although soaking rain (precipitation ranging from 13 to 57mm) over the North Caucasus slowed sunflower and corn maturation, it provided abundant topsoil moisture for winter grain planting. Much cooler weather spread south over the region. Daytime maximum temperatures of around 25 degrees Celsius (C) during midweek dropped to readings which ranged from 10 to 15 degrees C by week's end.

In the New Lands, a cooling trend was accompanied by widespread rain. Greatest amounts of rain (20-50mm, with local amounts in excess of 50mm) soaked spring grain areas in the northern Urals and Western Siberia during midweek, halting harvest activities. Lesser amounts of rain (6-23mm) covered the southern Urals and Kazakhstan, interrupting harvest. Highest weekly temperatures ranged from 19 to 30 degrees C from north to south, respectively. Lowest weekly temperatures ranged from 2 to 10 degrees C. This past week's cool, wet weather pattern is likely prompting concern, because it further hampered harvest progress already off to a slow start due to the late ripening of crops.

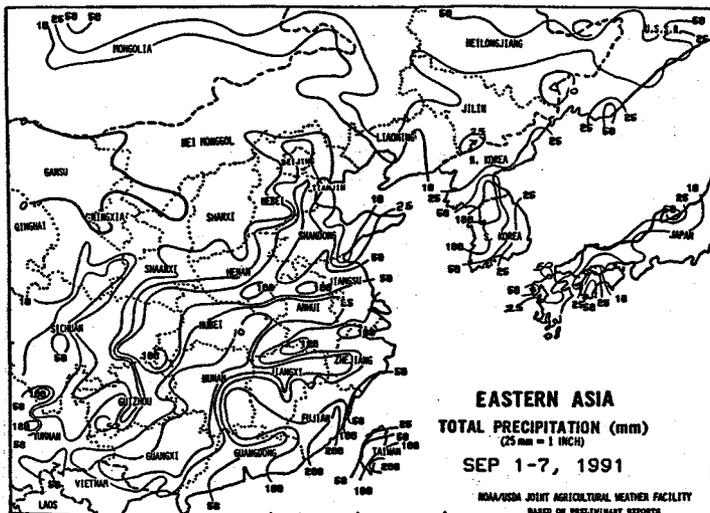
**CANADA ...** Precipitation was light over most Prairie crop regions, with amounts of 5-9mm causing minor harvest delays in northwestern Saskatchewan. Heavy showers (25-64mm) persisted in Alberta's Peace River Valley, possibly lodging unharvested grains. Seasonably cooler temperatures covered the region, with the first freeze arriving around the usual date in Saskatchewan and Alberta and having no impact on maturing grains and oilseeds.



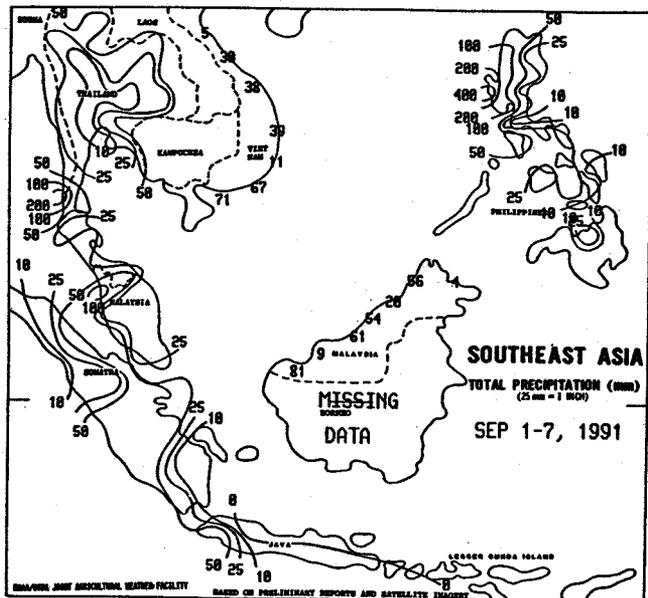


**EUROPE** ... Showers continued over southwestern France, producing 15-35mm in the extreme southern corn areas. Widespread rain (10-54mm) fell over western and central Spain, easing extremely dry soil conditions and improving topsoil moisture for winter wheat planting following the long summer drought. Significant rain (10-24mm) also fell in central France, benefiting immature crops and topsoils for the winter grain planting season. Corn is maturing across the Mediterranean region. Dry weather from the United Kingdom to Hungary and Italy favored summer crop harvesting and early winter wheat planting. Mostly light showers (1-10mm, with isolated 11-29mm amounts) caused minor fieldwork delays in Poland and Romania. Weekly average temperatures ranged from the low to mid 20's C across the north, and mid to upper 20's C in the south. Cooler weather eased heat stress in the southwest.

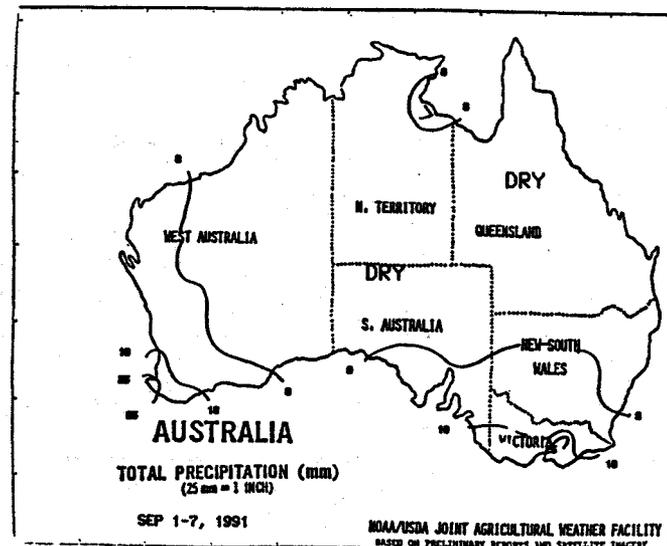
**SOUTH ASIA** ... Moderate to heavy showers (50-100mm or more) continued across primary grain regions of northern and eastern India and Bangladesh, increasing irrigation supplies for immature late-planted rice and upcoming wheat plantings. Excessive rain (190-250mm) caused local flooding and crop damage in Bangladesh and India's eastern states. Elsewhere, drier weather continued in the northwest and much of India's southern interior with only local areas receiving more than 10mm. The dryness spread into primary crop regions of western and central Madhya Pradesh as rainfall ranged from 9 to 23mm. In contrast, moderate showers (17-45mm) improved fall planting moisture in Tamil Nadu and southern Karnataka. As the southwest monsoon retreats from northwestern crop areas over the next few weeks, typically drier weather will aid crop drydown. However, more rain would be welcomed in groundnut and cotton regions of Gujarat and Madhya Pradesh that planted late due to the monsoon's late onset.



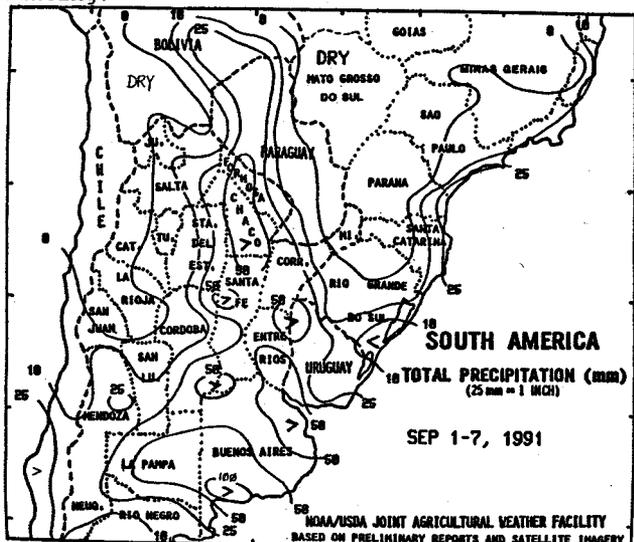
**EASTERN ASIA** ... Tropical Storm Joel hit Guangdong province in southern China, causing local flooding and minor wind damage to sugarcane. Drier weather is needed for late double-crop rice in the grain-filling stage. Further to the north, Jiangxi, Zhejiang, and Fujian received mostly beneficial rains, ranging from 15 to over 100mm, which helped to replenish reservoir levels following the previous long-term dryness. Locally heavy rain (50-140mm) north of the Yangtze River hampered fieldwork. Showers (20-69mm) across southern portions of the North China Plain also delayed corn harvesting. Soybeans and cotton in this region will need dry weather in the next 2-4 weeks for favorable harvest conditions. Substantial rain (20-50mm or more) fell across Manchuria, where corn and soybean harvesting will begin soon.



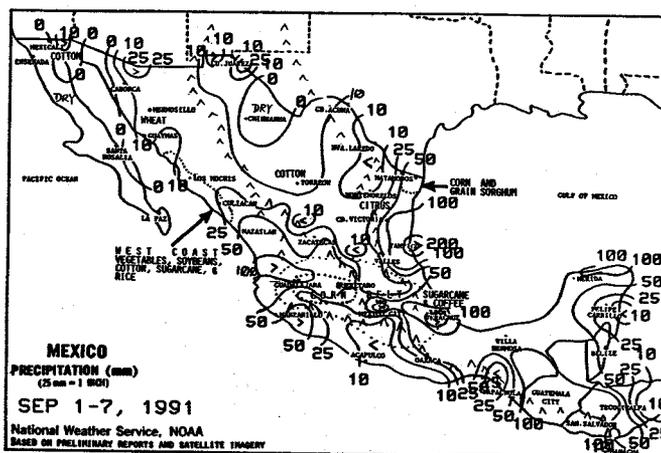
**SOUTHEAST ASIA** ... Moderate to heavy rain (25-50mm or more) continued over Thailand's primary rainfed rice areas, accompanied by seasonably warm temperatures that favored growth of late-planted crops. Heavy rain (54-112mm) in eastern Thailand maintained flood levels along the Mekong River. Moderate to heavy showers fell elsewhere in Indochina. Further south, seasonable rain (25-100mm) continued over Malaysia and extended southward through Sumatra and Borneo, but showers failed to reach Java. A timely start to the rainy season is crucial across southern Indonesia for main-season rice planting, due to begin in November, following this season's failure of secondary rains to develop. In the Philippines, heavy showers (50-200mm) persisted along Luzon's west coast, but rainfall elsewhere ranged from 10 to 42mm, improving local conditions for grain planting.



**AUSTRALIA** ... Dryness continued in Queensland and northern New South Wales, stressing vegetative wheat. Rain is needed soon as winter wheat advances into reproduction with a severe soil moisture deficiency. Little or no rain fell in Western Australia, where the inland wheat regions have been tending dry. Light rains (2-9mm) covered the southern wheat areas (South Australia and Victoria), where moisture for vegetative winter wheat remains adequate.



**SOUTH AMERICA** ... In Argentina, widespread showers (25-75mm) covered the wheat belt, maintaining favorable moisture conditions for crop growth. Mild weather continued to speed winter wheat development. In southern Brazil, corn planting has begun in some areas, but topsoil moisture is low from Parana northward into the primary coffee growing areas. Light, scattered showers (3-14mm) brought little improvement to low soil moisture reserves. Substantial rain is needed soon in south-central Brazil for summer crop planting, and citrus and coffee flowering.



**MEXICO** ... Moderate to heavy rain (25-60mm) again covered the Southern Plateau corn belt, delaying corn harvesting. Heavier rain (100-212mm) fell over both the western and eastern extremes of the Plateau. Substantial rain also fell along the west coast farming areas and the Yucatan peninsula. Showers (10-21mm) in northwestern wheat areas favored the upcoming wheat planting season.

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(Continued from front cover)

generating brief and intense rain in the **Midwest, Ohio Valley, and southern Plains**, causing flooding in **Illinois and Indiana**. Heavy rain also drenched parts of **Texas** with nearly 4 inches falling at **Silver Creek, TX**, on Tuesday. Toward the weekend, the cold front continued rapidly eastward, spreading rain across **New England** and the **mid-Atlantic**. Meanwhile, a second cold front dropped out of south-central Canada, producing up to 7 inches of rain at **Hector, MN**, on Saturday which caused flash flooding. Farther south, heavy rains continued to soak the **Mississippi Valley** and **eastern Texas**. Elsewhere, thunderstorms packing heavy rain and strong wind gusts battered portions of the **southern Rockies, Great Basin, and Southwest**, causing flooding in **Utah, New Mexico, and Arizona** and mud-slides in **southern California**.

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usual. Peach, pear, and early varieties of apples were being picked in Oregon. Apple, peach, and grape harvests were active in Pennsylvania. Washington's Bartlett pear harvest was nearing completion, and harvest of early varieties of apples was underway.

**VEGETABLES:** Arizona melon and mixed vegetable harvests continued. California broccoli, cauliflower, and lettuce were in moderate supply, while melon packing slowed down. California celery supplies were heavy and tomato harvest continued. Onion harvest continued in Colorado and Idaho. Sweet corn harvest was active in Idaho and Minnesota. Maryland and Delaware summer vegetable harvests were well along. New York vegetable harvests continued in full swing. Ohio's tomato harvest was active. Fall carrot, cabbage, and spinach planting continued in Texas.

**PASTURES AND LIVESTOCK:** Range and pasture conditions, bolstered by additional rains, remained good from Texas through the Southeast, and good to excellent in Colorado. Dryness and high temperatures caused ranges in the Great Plains to deteriorate. Early movement of livestock to fall pastures was necessary in parts of the West.

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points ahead of last year and 3 points ahead of the average, with harvest active in all States except California. Some early-seeded fields had been drained in preparation for harvest in California.

Grain sorghum was heading on nearly half of the acreage in the 12 major producing States by the beginning of August, ahead of both last year and the historic average. Harvest was underway in southern Texas. Crop condition was mostly good in the High Plains and fair in Kansas and the Mississippi Valley. Lack of rain and high temperatures in the Great Plains during the month hurt crop conditions. Grain sorghum heads were turning color on 60% of the acreage by the end of the month, 13 points ahead of last year and 3 points ahead of the historic average. Thirty-three percent of the crop was mature, ahead of 27% recorded a year ago. Crop maturity remained behind normal in the Mississippi Valley and Colorado but ahead of schedule elsewhere. Harvest was continuing in the Southern States and getting underway in Missouri.

Spring wheat harvest was in the early stages entering August, and mostly dry weather during the month allowed harvest to progress unhindered. Harvest was 92% complete by the end of the month, compared with 91% last year and 88% average.

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