

# 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

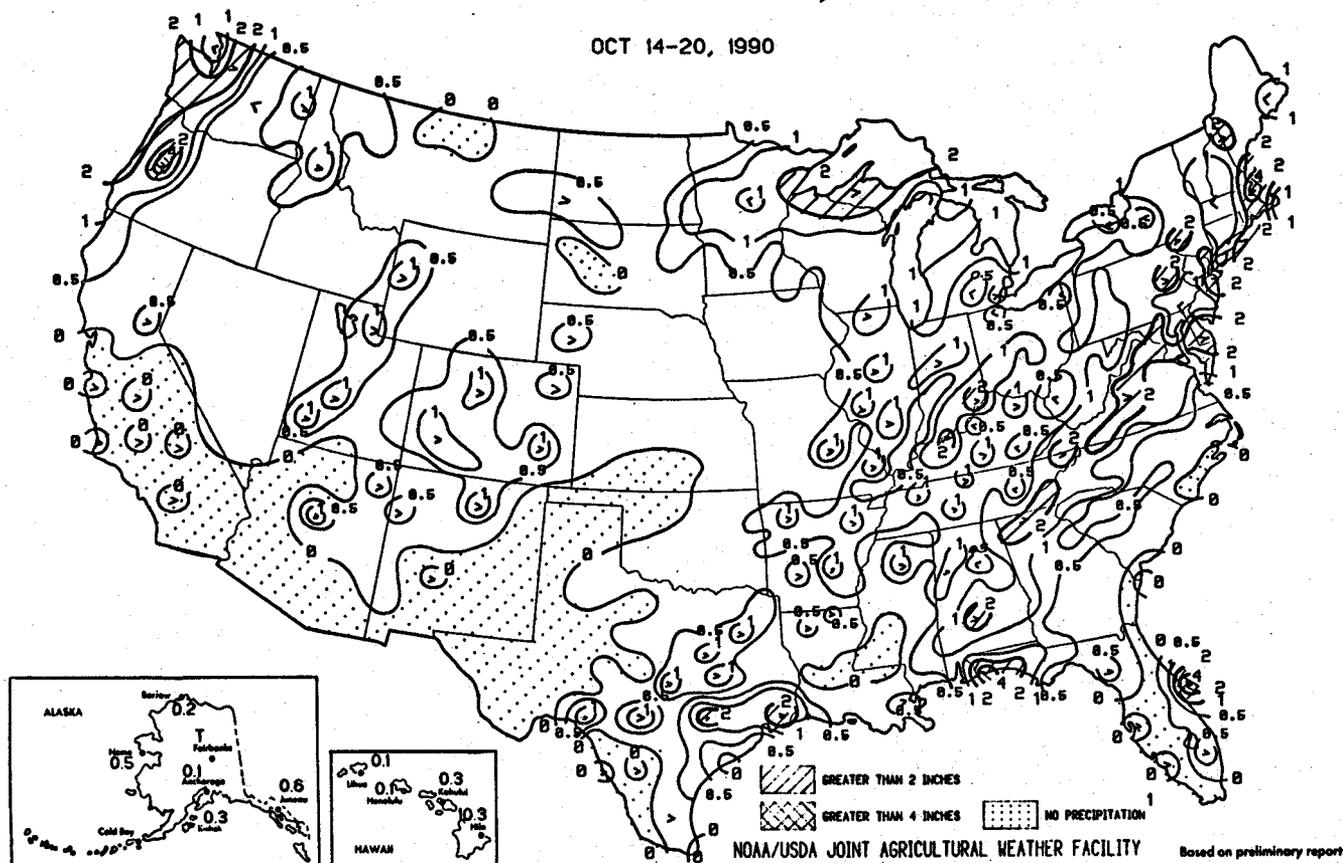
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October 23, 1990

## TOTAL PRECIPITATION, INCHES

OCT 14-20, 1990



## HIGHLIGHTS

October 14-20, 1990

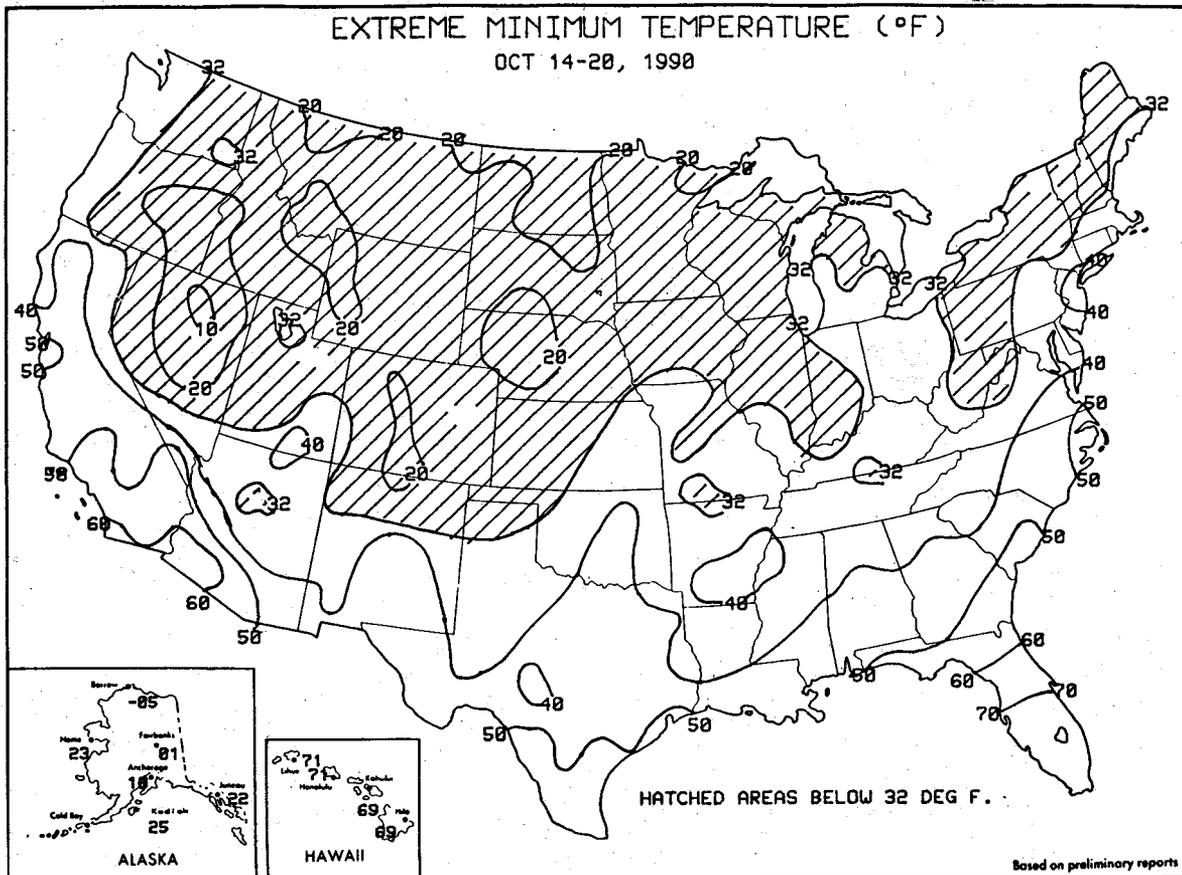
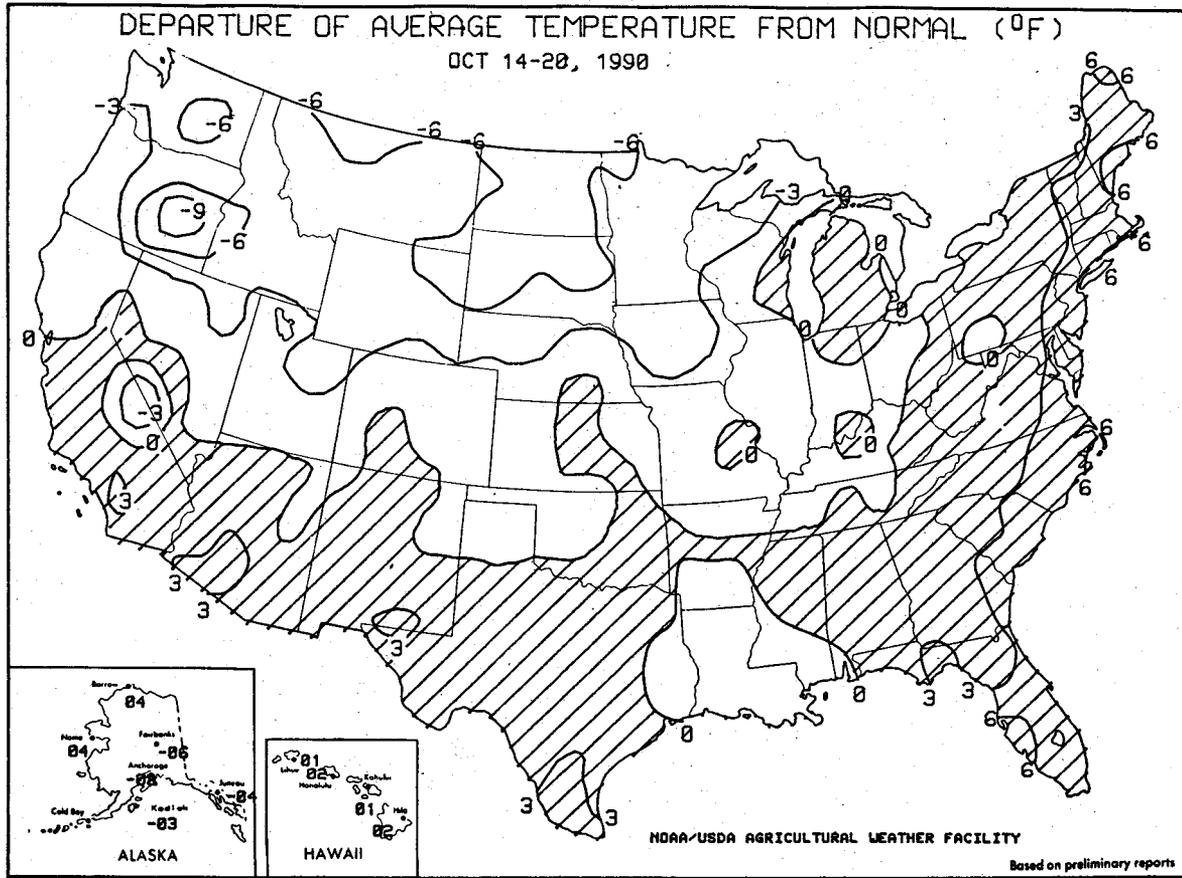
At the start of the week, heavy rains continued to drench the **New England coast**, while a pair of frontal systems swept across the **Great Lakes** and the **Pacific Northwest**, producing light to moderate precipitation. A strong winter storm, at midweek, spread rain, snow, and gusty wind from the **northern and central Rockies** to the **Great Lakes**. A powerful frontal system, during the remainder of the week, brought severe weather, with high wind and heavy rain, across the **Mississippi Valley** to the **Atlantic coast**. Tornadoes touched down in **Virginia** and **North Carolina** on Friday. At the same time, a Pacific front raced across the **West** into the **Central States** causing widespread precipitation. Temperatures remained abnormally low from the **Northwest** to the **upper**

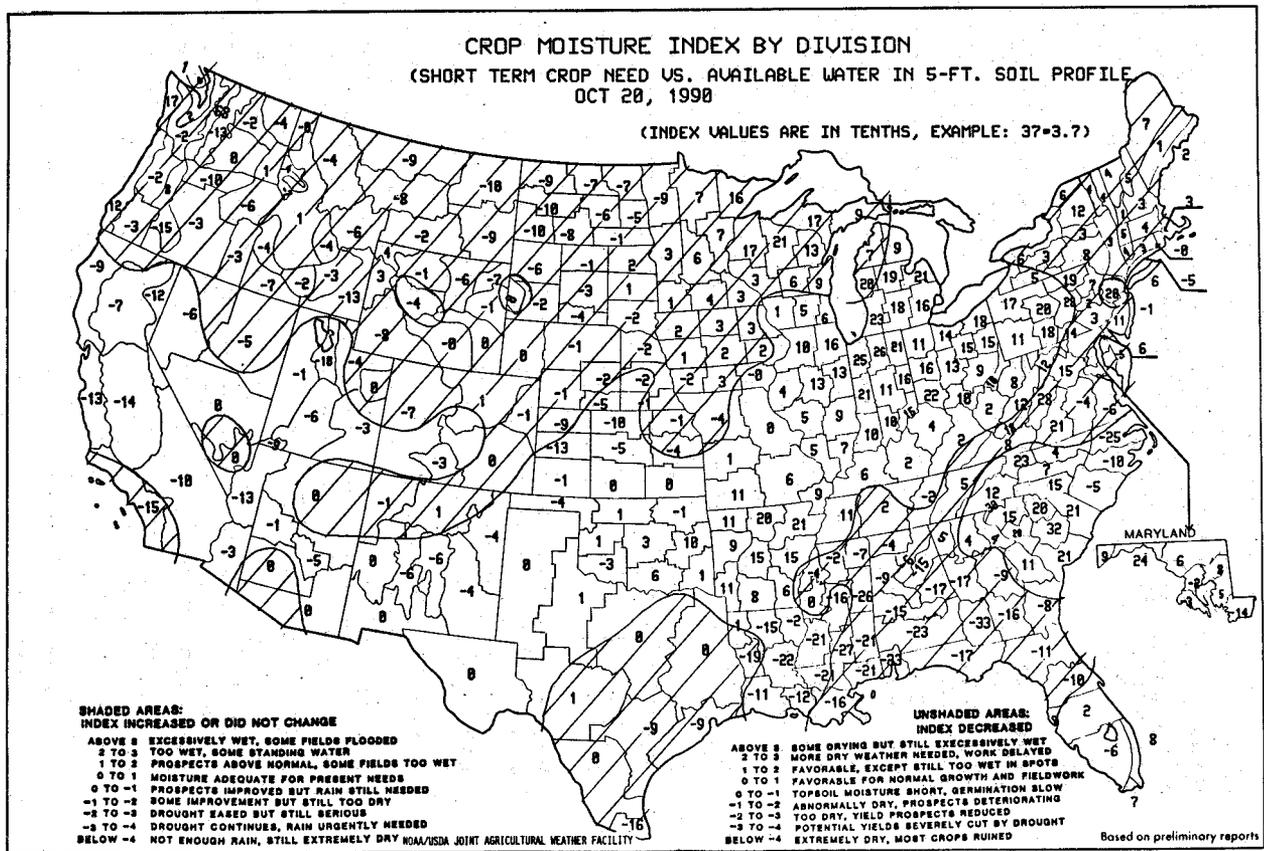
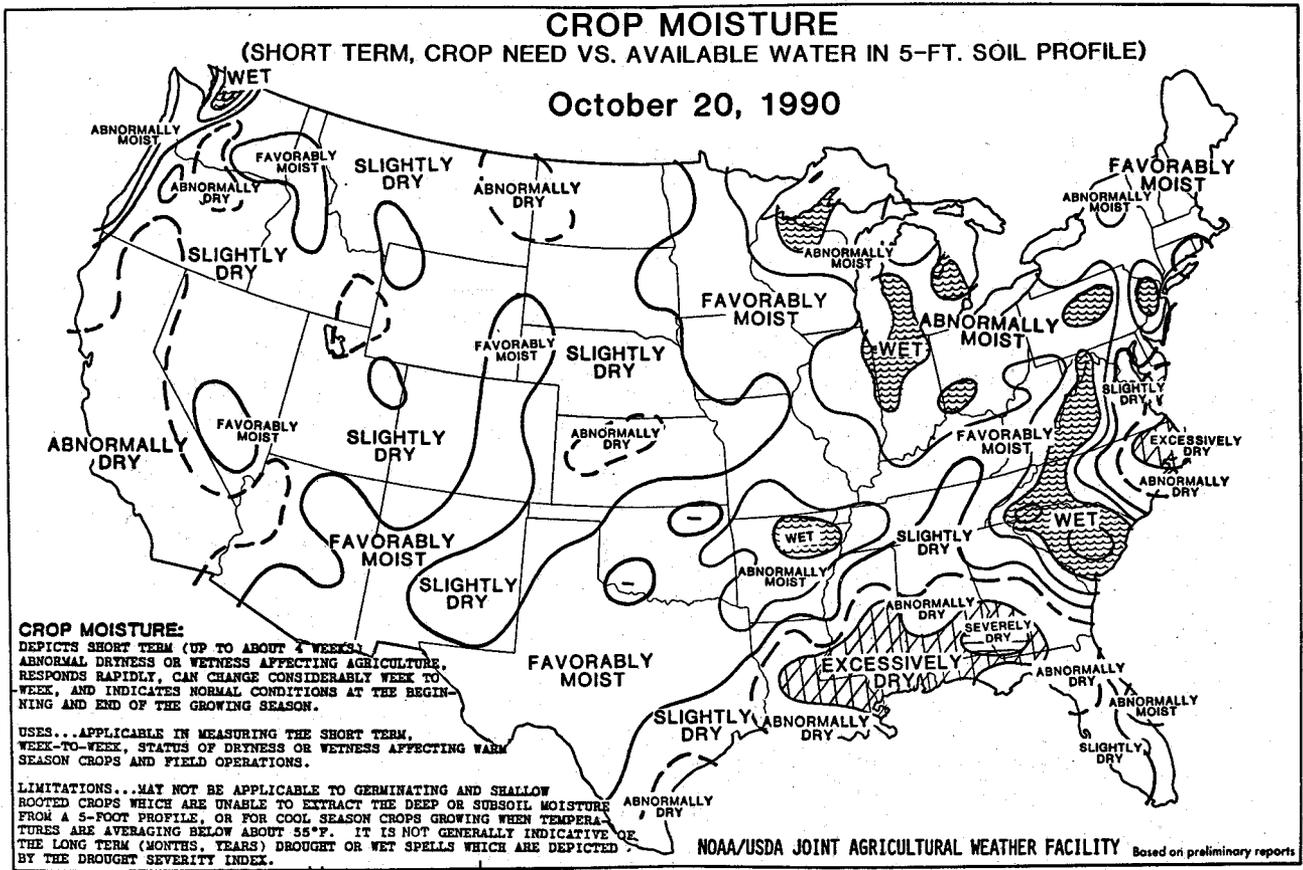
**Mississippi Valley**, while unseasonable warmth persisted along the **Eastern seaboard**. Cooler air, however, moved into the **East** at week's end.

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# National Weather Data for Selected Cities

## Weather Data for the Week Ending October 20, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	79	49	87	39	64	2	.4	-.2	.4	3.3	55	35.7	80	88	29	0	0	1	0		
MOBILE	81	54	87	47	67	-1	.4	-.2	1.7	3.4	41	48.6	89	89	35	0	0	1	1		
MONTGOMERY	83	49	92	44	66	2	1.5	1.0	1.3	2.7	43	48.2	119	96	29	2	2	2	1		
AK ANCHORAGE	34	19	41	10	27	-8	1.1	-.2	1.1	7.3	200	15.2	125	96	57	0	0	7	7		
BARROW	26	9	27	-5	17	-4	1.1	-.0	1.1	9	94	4.3	108	96	78	0	0	3	0		
FAIRBANKS	26	11	35	1	18	-6	1.1	-.2	1.9	116	13.9	159	89	63	0	0	7	7			
JUNEAU	42	32	45	22	37	-4	1.2	-.6	15.1	132	46.8	116	96	67	0	0	4	4			
KODIAK	45	29	50	25	37	-3	1.3	-.3	12.9	119	57.2	122	91	60	0	0	4	4			
NOME	35	28	37	23	31	4	1.5	-.3	4.1	128	19.5	155	93	71	0	0	5	5			
AZ PHOENIX	91	67	97	62	79	6	1.5	-.1	1.2	112	7.1	133	44	19	5	5	0	0			
PRESCOTT	74	41	80	34	57	3	1.4	-.3	2.4	104	14.9	96	65	20	0	0	0	0			
TUCSON	88	58	94	53	73	3	1.4	-.2	2.2	116	13.1	142	62	20	3	3	1	1			
YUMA	91	68	95	64	79	3	1.0	-.1	1.0	240	2.2	122	53	23	5	5	0	0			
AR FORT SMITH	76	48	85	35	62	0	1.4	-.4	8.3	159	52.5	163	88	36	0	0	1	1			
LITTLE ROCK	73	52	81	44	63	0	1.2	-.4	10.6	176	51.9	132	76	46	0	0	1	1			
CA BAKERSFIELD	81	56	88	50	68	0	1.1	-.0	1.1	39	2.8	67	73	30	0	0	0	0			
EUREKA	60	46	67	43	53	-1	1.6	-.0	1.9	39	22.3	89	92	68	0	0	2	2			
FRESNO	80	53	86	45	67	2	1.2	-.1	2.2	44	7.5	103	78	27	0	0	1	1			
LOS ANGELES	74	63	78	58	68	0	1.0	-.1	1.0	0	5.1	59	85	55	0	0	0	0			
REDDING	74	50	85	47	63	-3	1.2	-.3	1.3	65	22.7	83	71	21	0	0	1	1			
SACRAMENTO	79	50	87	44	65	1	1.1	-.2	6	11.6	102	80	20	20	0	0	1	1			
SAN DIEGO	73	64	76	62	69	3	1.4	-.1	1.0	0	5.9	86	85	62	0	0	0	0			
SAN FRANCISCO	71	53	77	50	62	-2	1.2	-.2	2.2	28	8.1	62	87	45	0	0	0	0			
CO DENVER	66	34	82	29	50	-1	1.5	-.2	2.4	130	15.1	112	78	25	0	0	3	3			
GRAND JUNCTION	66	39	78	33	53	-2	1.6	-.4	2.2	171	6.8	107	58	20	0	0	1	1			
PUEBLO	70	32	83	26	51	-2	1.1	-.1	2.1	160	14.5	149	82	20	0	0	3	3			
CT BRIDGEPORT	70	51	80	39	61	5	1.8	-.0	6.0	111	36.8	113	85	41	0	0	1	1			
HARTFORD	70	46	80	36	58	5	1.6	-.2	106	6.5	106	41.3	119	91	40	0	0	1	1		
DC WASHINGTON	71	51	80	40	61	2	1.7	1.0	1.7	2.9	56	32.6	103	87	40	0	0	1	1		
FL APALACHICOLA	83	62	85	55	72	3	1.3	-.4	2.2	5.9	49	33.2	69	94	51	0	0	2	2		
DAYTONA BEACH	85	70	89	66	77	4	1.4	-.6	4.4	6.0	60	33.4	79	95	59	0	0	1	1		
JACKSONVILLE	85	61	90	55	73	3	1.4	-.8	5.6	61	26.5	57	96	51	1	1	1	1			
KEY WEST	88	77	88	72	82	3	1.6	-.5	10.3	107	32.1	98	86	61	0	0	1	1			
MIAMI	89	76	92	74	83	5	1.2	-.4	6.4	49	47.1	93	88	54	3	3	2	2			
ORLANDO	88	71	91	69	79	5	1.1	-.5	4.0	46	29.2	65	95	53	1	1	1	1			
TALLAHASSEE	86	58	90	51	72	4	1.8	-.2	6.9	80	40.3	73	95	39	2	2	0	0			
TAMPA	89	71	93	70	80	4	1.4	-.1	4.9	62	33.5	80	95	53	0	0	1	1			
WEST PALM BEACH	89	75	92	72	82	4	1.2	-.6	13.7	93	51.2	99	92	57	2	2	0	0			
GA ATLANTA	75	52	80	43	64	2	1.9	-.4	7.2	152	51.3	129	90	38	0	0	2	2			
AUGUSTA	81	51	86	41	66	3	1.2	-.3	13.7	280	33.9	92	98	42	0	0	1	1			
MACON	81	51	87	43	66	4	1.2	-.2	3.3	72	26.3	70	95	38	0	0	1	1			
SAVANNAH	82	60	87	50	71	4	1.1	-.4	13.0	189	37.7	85	91	48	0	0	0	0			
HI HILLO	83	71	85	69	77	2	10.3	8.0	4.6	33.4	269	129.5	135	97	72	0	0	7	7		
HONOLULU	89	73	91	71	81	2	1.1	-.3	1.1	1.1	67	11.5	73	80	49	2	2	1	1		
KAHULUI	87	71	91	69	79	1	1.3	-.1	1.8	117	16.6	129	89	59	2	2	1	1			
LIHUE	83	74	85	71	79	1	1.1	-.1	2.2	45	23.4	75	83	64	0	0	0	0			
ID BOISE	58	33	67	20	45	-6	1.2	-.0	1.1	7	74	10.3	120	81	30	0	0	3	3		
LEWISTON	56	42	63	34	49	-2	1.4	-.2	1.3	5	36	8.9	89	71	36	0	0	3	3		
POCATELLO	55	31	63	22	43	-4	1.2	-.1	1.1	6	46	8.0	95	80	33	0	0	2	2		
IL CHICAGO	63	40	78	28	52	-2	1.7	-.2	5.1	93	35.2	121	88	49	0	1	3	3			
MOLINE	63	38	77	26	51	-2	1.9	-.3	7	3.4	61	44.5	138	88	47	0	2	4	4		
PEORIA	64	39	75	29	52	-2	1.6	-.1	4.2	77	44.4	147	91	50	0	1	1	1			
QUINCY	67	40	76	30	54	-2	1.1	-.6	1.1	5.5	86	34.7	106	83	41	0	1	1	1		
ROCKFORD	61	38	77	26	50	-2	1.3	-.6	4.4	77	38.8	123	88	51	0	2	4	2	2		
SPRINGFIELD	66	42	75	32	54	-2	1.8	-.2	7	7.0	140	44.2	152	88	42	0	1	2	2		
IN EVANSVILLE	70	41	78	32	56	-1	1.1	-.4	1.1	6.6	157	41.4	123	93	38	0	1	2	2		
FORT WAYNE	65	42	77	35	53	1	1.8	-.3	6.7	161	43.5	153	91	44	0	0	1	1			
INDIANAPOLIS	66	40	79	29	53	-2	1.4	-.2	3.3	7.0	163	39.2	123	94	43	0	1	2	2		
SOUTH BEND	64	43	78	39	54	1	1.1	-.4	6	10.8	203	43.6	140	88	44	0	0	3	3		
IA DES MOINES	62	38	73	31	50	-4	1.4	-.1	4	3.2	70	39.2	143	89	44	0	2	2	2		
SIOUX CITY	63	36	74	29	50	-3	1.5	-.1	4	2.3	63	23.0	99	86	41	0	0	1	1		
WATERLOO	58	35	70	24	47	-5	1.5	-.0	2.2	2.8	55	38.8	133	93	54	0	3	3	3		
KS CONCORDIA	71	42	86	30	57	0	1.1	-.4	1.1	2.2	51	23.7	95	79	30	0	1	1	1		
DODGE CITY	73	40	88	26	57	-1	1.1	-.3	1.6	60	19.9	106	67	18	0	0	0	0	0		
GOODLAND	69	34	85	27	52	-1	1.3	-.3	1.5	2.3	115	17.8	120	73	22	0	3	3	3		
TOPEKA	71	40	83	35	56	-2	1.5	-.3	3.5	66	30.6	104	91	37	0	0	1	1	1		
WICHITA	73	45	86	34	59	0	1.7	-.6	2.6	51	16.6	65	80	28	0	0	0	0	0		
KY BOWLING GREEN	72	42	82	34	57	0	1.9	-.3	9.0	181	37.7	95	97	42	0	0	2	2	2		
LEXINGTON	67	44	77	34	56	-1	1.9	-.4	7	5.5	117	38.2	101	91	49	0	0	1	1		
LOUISVILLE	71	45	78	36	58	1	1.2	-.4	2	5.4	107	45.2	127	87	45	0	0	1	1		
LA ALEXANDRIA	81	50	86	38	65	-2	1.1	-.6	1	4.0	83	45.5	108	96	38	0	0	1	1		
BATON ROUGE	81	50	86	42	65	-2	1.1	-.5	5.7	92	56.0	122	95	36	0	0	1	1			
LAKE CHARLES	80	53	83	44	66	-3	1.3	-.5	3	10.1	124	45.1	104	99	50	0	0	2	2		
NEW ORLEANS	80	54	87	45	67	-2	1.6	-.0	5.4	71	46.7	95	100	42	0	0	1	1			

Based on 1951-80 normals

Weather Data for the Week Ending October 20, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE		
																		.01 INCH OR MORE	.50 INCH OR MORE	
SHREVEPORT	80	52	88	41	66	0	.2	-.4	1.2	4.6	93	50.3	143	57	38	0	0	1	0	
ME CARIBOU	58	40	66	31	49	0	1.5	1.1	1.1	8.9	162	33.0	114	54	64	0	0	1	1	
PORTLAND	67	42	78	32	54	0	1.6	1.1	1.1	7.3	131	34.1	104	54	45	0	0	1	1	
MD BALTIMORE	74	48	79	36	59	0	.6	1.1	1.1	2.3	43	33.6	99	40	40	0	0	1	1	
SALISBURY	74	47	84	36	61	0	2.1	1.2	2.1	5.1	79	33.0	88	43	43	0	0	1	1	
MA BOSTON	69	51	78	42	60	0	4.3	3.6	3.1	7.3	134	40.2	115	55	45	0	0	2	2	
CHATHAM	65	52	75	42	59	0	.7	1.1	1.1	3.2	53	34.8	97	48	60	0	0	1	1	
MI ALPENA	61	35	73	29	48	0	.7	1.1	1.1	4.5	102	26.4	110	54	44	0	0	1	1	
DETROIT	64	41	78	36	53	0	1.0	1.0	1.0	10.2	285	35.6	142	59	49	0	0	2	2	
FLINT	63	39	77	32	51	0	.6	1.1	1.1	6.9	188	26.1	109	59	49	0	0	1	1	
GRAND RAPIDS	63	41	78	34	52	0	1.4	1.1	1.1	9.3	188	32.5	120	50	50	0	0	3	3	
ROUGETON LAKE	57	38	74	30	47	0	.6	1.1	1.1	5.2	121	25.7	112	55	51	0	0	4	4	
LANSING	63	39	77	30	51	0	.7	1.1	1.1	9.5	228	29.4	121	51	48	0	0	3	3	
MARGUETTE	49	34	62	41	41	0	3.4	2.7	1.7	9.4	155	29.4	96	53	71	0	0	4	4	
MUSKOGON	61	41	74	34	51	0	1.7	1.7	1.7	8.1	172	29.2	118	55	66	0	0	4	4	
SAULT ST. MARIE	54	36	62	31	45	0	1.0	1.0	1.0	7.2	125	28.2	106	55	66	0	0	1	1	
MN ALEXANDRIA	50	32	57	25	45	0	1.1	1.1	1.1	3.1	87	20.4	82	52	56	0	0	3	3	
DULUTH	45	33	56	25	39	0	2.3	1.8	1.2	10.0	211	32.3	125	56	50	0	0	4	4	
INT'L FALLS	48	30	58	22	39	0	.5	1.1	1.1	2.4	54	18.1	85	53	51	0	0	2	2	
MINNEAPOLIS	55	36	61	30	45	0	.5	1.1	1.1	3.1	82	31.4	134	59	50	0	0	3	3	
ROCHESTER	56	34	65	25	45	0	1.0	1.1	1.1	3.1	62	41.8	163	52	56	0	0	1	1	
MS GREENWOOD	79	49	87	38	64	0	1.1	1.1	1.1	5.9	135	41.4	99	59	39	0	0	2	2	
JACKSON	81	48	89	37	64	0	1.1	1.1	1.1	5.7	114	43.9	105	59	35	0	0	0	0	
MERIDIAN	82	46	93	38	64	0	1.1	1.1	1.1	5.3	44	53.6	124	58	32	2	2	0	0	
MO CAPE GIRARDEAU	72	45	81	34	58	0	.6	1.1	1.1	2.3	67	41.8	115	54	38	0	0	1	1	
COLUMBIA	70	42	83	32	56	0	.2	1.1	1.1	5.8	47.2	150	50	37	0	0	1	1		
KANSAS CITY	70	43	83	35	57	0	.3	1.1	1.1	3.3	56	36.5	114	58	33	0	0	1	1	
SAINT LOUIS	71	46	82	37	59	0	.5	1.1	1.1	5.7	136	35.2	125	75	35	0	0	0	0	
SPRINGFIELD	70	43	80	34	57	0	.1	1.1	1.1	10.8	169	54.7	168	54	41	0	0	0	0	
MT BILLINGS	53	34	61	28	44	0	.4	1.1	1.1	1.1	56	10.4	81	82	34	0	0	2	2	
GLASGOW	53	29	71	22	41	0	.1	1.1	1.1	.3	20	5.9	58	78	29	0	0	0	0	
GREAT FALLS	53	30	65	23	42	0	.1	1.1	1.1	.2	10	12.6	52	80	27	0	0	0	0	
HAVRE	51	28	68	21	40	0	.1	1.1	1.1	.4	4	5.5	78	70	30	0	0	0	0	
HELENA	52	31	64	22	42	0	.1	1.1	1.1	.1	17	7.6	76	73	37	0	0	0	0	
KALISPELL	45	31	49	24	38	0	.9	1.1	1.1	1.2	71	17.0	136	90	57	0	0	1	1	
MILES CITY	53	34	58	24	44	0	.7	1.1	1.1	.9	55	8.2	65	92	47	2	2	1	1	
MISSOULA	50	31	57	25	45	0	.1	1.1	1.1	.3	32	11.2	104	79	37	0	0	0	0	
NE GRAND ISLAND	69	37	83	23	54	0	.3	1.1	1.1	1.6	47	25.0	117	80	31	0	0	0	0	
LINCOLN	70	38	85	32	54	0	.2	1.1	1.1	2.1	51	24.6	99	81	31	0	0	0	0	
NORFOLK	65	36	77	26	50	0	.4	1.1	1.1	2.5	83	25.1	115	87	39	0	0	0	0	
NORTH PLATTE	65	30	79	19	47	0	.3	1.1	1.1	1.8	77	14.8	82	89	29	0	0	1	1	
OMAHA	66	39	79	19	47	0	.3	1.1	1.1	2.8	57	22.1	80	78	40	0	0	3	3	
SCOTTSDUFF	63	30	82	22	46	0	.2	1.1	1.1	1.9	122	16.0	120	86	27	0	0	1	1	
VALENTINE	63	28	82	14	45	0	.2	1.1	1.1	1.2	58	16.2	100	83	30	0	0	0	0	
NV RLY	61	28	75	17	44	0	.2	1.1	1.1	1.3	120	8.0	109	69	22	0	0	2	2	
LAS VEGAS	80	56	88	30	68	0	.2	1.1	1.1	.4	78	3.7	114	48	15	0	0	1	1	
RENO	69	36	83	23	53	0	.2	1.1	1.1	.4	88	4.7	88	72	22	0	0	2	2	
WINNEMUCA	65	34	79	15	50	0	.1	1.1	1.1	.3	37	5.6	95	55	17	0	0	0	0	
NH CONCORD	68	40	76	28	54	0	.9	1.1	1.1	5.5	109	32.2	114	97	40	0	0	2	2	
NJ ATLANTIC CITY	72	45	83	35	58	0	1.0	1.1	1.1	3.5	73	30.1	91	55	45	0	0	1	1	
NM ALBUQUERQUE	74	45	80	42	60	0	.1	1.1	1.1	1.1	79	8.8	130	53	18	0	0	1	1	
CLOVIS	74	43	83	37	59	0	.0	1.1	1.1	4.4	138	11.6	75	65	22	0	0	0	0	
ROSWELL	81	49	88	45	65	0	.0	1.1	1.1	1.8	72	6.7	70	54	17	0	0	0	0	
NY ALBANY	65	41	74	31	53	0	1.1	1.1	1.1	3.8	74	36.2	127	92	42	0	0	1	1	
BINGHAMTON	59	41	68	32	50	0	.9	1.1	1.1	6.9	131	34.5	116	91	50	0	0	1	1	
BUFFALO	63	43	78	31	53	0	.9	1.1	1.1	7.4	143	38.8	133	84	43	0	0	3	3	
NEW YORK	70	55	79	45	63	0	.9	1.1	1.1	5.1	93	41.7	123	77	41	0	0	1	1	
ROCHESTER	63	40	79	31	52	0	.5	1.1	1.1	6.9	159	32.8	131	91	48	0	0	2	2	
SYRACUSE	62	43	76	34	52	0	.5	1.1	1.1	7.4	142	36.9	131	93	49	0	0	3	3	
NC ASHEVILLE	71	44	77	33	57	0	1.7	1.0	1.7	10.7	133	47.4	130	100	46	0	0	2	2	
CHARLOTTE	74	52	81	41	63	0	1.2	1.1	1.1	10.7	200	37.9	106	87	40	0	0	2	2	
GREENSBORO	72	48	79	39	60	0	.2	1.1	1.1	9.7	168	33.4	95	92	45	0	0	1	1	
HATTERAS	79	64	85	56	71	0	.9	1.1	1.1	1.5	17	35.7	80	84	49	0	0	1	1	
NEW BERN	80	58	86	47	69	0	.7	1.1	1.1	2.4	30	40.8	90	92	43	0	0	0	0	
RALEIGH	76	50	83	39	63	0	.3	1.1	1.1	2.6	51	29.6	85	93	43	0	0	1	1	
WILMINGTON	81	59	87	47	70	0	.3	1.1	1.1	3.5	45	43.6	95	90	43	0	0	0	0	
ND BISMARCK	50	27	59	19	38	0	.7	1.1	1.1	1.5	80	12.2	88	89	45	0	0	7	3	
FARGO	51	31	61	22	41	0	1.2	1.1	1.1	3.0	108	16.2	92	83	48	0	0	4	3	
GRAND FORKS	50	29	59	23	39	0	.3	1.1	1.1	2.2	77	15.4	93	84	45	0	0	6	2	
WILLISTON	53	28	59	20	40	0	.7	1.1	1.1	.4	22	8.8	71	86	32	0	0	5	2	
OH AKRON-CANTON	63	42	74	32	52	0	.7	1.1	1.1	15.3	349	56.0	189	90	49	0	0	1	1	
CINCINNATI	67	42	77	32	54	0	1.0	1.0	1.0	8.5	189	46.6	142	92	47	0	0	1	1	
CLEVELAND	64	42	76	33	53	0	.7	1.1	1.1	7.7	11.1	248	41.8	145	90	51	0	0	1	1
COLUMBUS	66	42	79	35	54	0	.6	1.1	1.1	9.5	242	43.4	141	92	44	0	0	2	2	

Based on 1951-80 normals

Weather Data for the Week Ending October 20, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	64	41	75	36	52	-2	1.2	.8	.7	8.0	220	46.7	163	92	49	0	0	2	1
TOLEDO	65	39	79	32	52	1	.5	.0	.4	4.3	114	30.4	118	94	46	0	0	2	0
YOUNGSTOWN	63	40	75	30	52	1	.4	.2	.4	9.0	189	37.6	123	92	48	0	0	2	0
OK OKLAHOMA CITY	74	50	83	41	62	0	.1	-.6	-.1	8.6	162	37.5	137	80	38	0	0	1	0
TULSA	74	51	84	42	62	0	.1	-.7	-.1	6.3	95	33.5	101	81	38	0	0	0	0
OR ASTORIA	58	42	59	37	50	-3	2.6	1.2	.9	5.9	87	53.0	117	97	66	0	0	7	2
BURNS	53	23	65	13	38	-9	.2	.0	.2	.2	25	4.1	57	86	31	0	6	2	0
MEDFORD	65	38	74	29	52	-2	.4	.0	.4	.5	32	10.0	79	92	34	0	2	2	0
PENDLETON	58	40	64	32	49	-3	.3	.1	-.1	.3	27	7.3	85	79	37	0	1	2	0
PORTLAND	60	45	65	39	52	-2	1.5	.8	.7	2.6	78	24.4	100	98	61	0	0	6	1
SALEM	59	40	67	36	50	-3	1.4	.6	1.0	2.4	70	24.5	95	97	58	0	0	5	1
PA ALLENTOWN	68	44	77	37	56	3	.8	.2	.8	3.6	61	33.6	94	93	47	0	0	1	1
ERIE	64	44	77	35	54	2	.8	.0	.8	11.4	181	41.7	132	85	49	0	0	2	1
HARRISBURG	68	45	75	34	57	2	.8	.2	.8	4.4	82	33.2	105	93	44	0	0	1	1
PHILADELPHIA	72	51	81	42	62	5	.7	.0	.7	2.9	55	30.3	91	95	44	0	0	1	1
PITTSBURGH	64	41	76	30	52	0	.8	.3	.8	8.8	203	41.0	134	89	46	0	1	1	1
SCRANTON	64	43	72	37	54	2	1.0	.4	1.0	6.1	121	37.2	131	87	45	0	0	1	1
RI PROVIDENCE	71	49	81	38	60	7	2.3	1.5	1.5	6.1	103	35.7	102	92	44	0	0	3	2
SC CHARLESTON	81	60	88	52	71	5	.1	-.5	.1	6.8	97	36.7	81	93	49	0	0	1	0
COLUMBIA	79	51	84	40	65	2	.4	-.2	.4	10.1	169	35.6	84	99	43	0	0	1	0
FLORENCE	79	56	85	46	68	4	.2	-.3	.2	9.4	164	27.4	72	90	45	0	0	1	0
GREENVILLE	74	48	80	36	61	0	.5	-.3	.5	8.4	121	41.1	96	95	42	0	0	1	1
SD ABERDEEN	52	31	61	19	41	-6	.3	.1	.3	3.5	158	20.4	125	86	50	0	5	2	0
HURON	54	30	66	20	42	-7	.6	.2	.4	1.9	81	22.6	134	87	46	0	5	3	0
RAPID CITY	54	30	66	22	42	-7	.1	-.1	.1	3.0	196	15.7	106	85	40	0	6	2	0
SIOUX FALLS	56	32	71	24	44	-5	.5	.1	.3	2.3	59	18.0	82	92	49	0	5	2	0
TN CHATTANOOGA	74	47	81	39	61	1	1.2	.5	1.0	6.6	107	53.0	125	98	39	0	0	2	1
KNOXVILLE	73	47	81	38	60	1	1.0	.4	.8	5.6	120	43.7	116	98	43	0	0	2	1
MEMPHIS	75	51	84	43	63	0	.1	-.4	.1	7.6	149	43.7	105	84	40	0	0	1	0
NASHVILLE	75	46	83	37	60	0	.8	.2	.4	5.0	93	30.5	78	95	39	0	0	2	0
TX ABILENE	80	53	85	41	67	1	T	-.5	T	6.2	134	28.0	137	75	33	0	0	0	0
AMARILLO	73	41	86	32	57	-1	.0	-.3	.0	3.2	119	16.8	96	64	25	0	1	0	0
AUSTIN	85	60	90	46	72	3	.4	-.4	.3	4.1	70	22.8	88	85	37	2	0	2	0
BEAUMONT	82	55	87	48	69	-1	2.1	1.3	1.5	8.7	111	56.2	126	99	47	0	0	2	2
BROWNSVILLE	89	67	92	60	78	3	T	-.8	T	4.0	51	15.7	72	94	52	4	0	0	0
CORPUS CHRISTI	87	64	93	54	75	2	.7	.1	.7	3.9	45	19.2	69	93	46	3	0	1	1
DEL RIO	84	60	90	52	72	1	.0	-.5	.0	7.7	178	24.2	160	66	33	2	0	0	0
EL PASO	82	52	84	47	67	3	.0	-.2	.0	4.1	212	11.2	167	59	18	0	0	0	0
FORT WORTH	82	56	92	44	69	2	.1	-.5	.1	3.8	70	39.9	152	82	37	1	0	1	0
GALVESTON	80	67	84	59	74	1	.4	-.1	.2	9.3	117	34.1	103	85	55	0	0	2	0
HOUSTON	83	57	89	46	70	0	1.8	.9	1.8	4.5	59	34.8	92	93	42	0	0	1	1
LUBBOCK	78	46	86	38	62	2	T	-.4	T	3.2	96	14.2	89	71	23	0	0	1	0
MIDLAND	82	48	87	38	65	1	T	-.3	T	4.3	141	12.7	105	79	27	0	0	0	0
SAN ANGELO	81	51	89	44	66	0	.4	.0	.4	8.1	180	25.5	161	85	33	0	0	1	0
SAN ANTONIO	85	57	91	43	71	1	.1	-.5	.1	6.6	116	34.2	141	90	35	2	0	2	0
VICTORIA	85	60	89	47	73	1	.3	-.4	.3	5.0	58	32.5	103	94	44	0	0	1	0
WACO	84	56	92	43	70	1	.9	.2	.9	9.9	190	32.4	126	93	41	3	0	1	1
WICHITA FALLS	80	52	87	42	66	1	.1	-.5	.1	3.0	58	34.3	148	86	32	0	0	1	0
UT CEDAR LAKE	64	37	75	27	51	-1	1.1	1.0	1.0	2.2	159	8.8	105	60	24	0	2	2	1
SALT LAKE CITY	62	36	75	30	49	-3	.7	.4	.6	1.3	81	8.9	73	76	29	0	1	3	1
VT BURLINGTON	62	40	75	31	51	3	1.6	.9	1.5	6.3	126	32.4	119	92	42	0	1	4	1
VA NORFOLK	75	55	83	47	65	4	.3	-.4	.3	2.2	34	38.7	102	90	48	0	0	1	0
RICHMOND	75	48	84	38	62	3	1.3	.5	1.3	3.8	64	35.6	99	91	41	0	0	1	1
ROANOKE	69	44	78	35	56	0	1.5	.7	1.5	9.0	166	36.0	112	99	49	0	0	1	1
WA QUILLAYUTE	52	40	54	34	46	-4	3.3	.9	1.4	10.9	88	72.5	101	100	69	0	0	7	2
SEATTLE-TACOMA	54	44	57	40	49	-3	1.7	.9	.7	3.2	80	27.9	111	95	62	0	0	6	1
SPOKANE	48	34	52	29	41	-6	1.6	1.4	.8	1.8	134	15.1	131	96	53	0	3	3	2
YAKIMA	57	30	67	23	44	-6	.1	.0	.1	.1	20	5.6	105	90	40	0	4	3	0
WV BECKLEY	65	42	74	35	54	2	1.2	.6	1.2	6.2	115	33.2	94	90	44	0	0	1	1
CHARLESTON	71	44	80	32	57	2	.4	-.2	.4	6.7	144	33.9	97	98	43	0	1	2	0
HUNTINGTON	70	43	80	33	56	0	.3	-.2	.3	7.5	167	40.1	118	95	41	0	0	1	0
PARKERSBURG	68	43	78	35	55	0	.6	.1	.6	6.4	145	40.8	128	95	44	0	0	1	1
WI GREEN BAY	59	39	73	29	49	1	1.0	.5	.5	7.2	157	32.6	136	93	52	0	2	4	1
LACROSSE	58	39	70	27	49	-2	.4	.0	.2	3.2	64	34.4	128	82	46	0	2	2	0
MADISON	60	40	74	26	50	0	.7	.2	.3	3.9	85	31.4	118	86	50	0	1	4	0
MILWAUKEE	61	43	79	32	52	1	.9	.4	.6	4.5	104	34.7	133	86	51	0	1	3	1
WAUSAU	55	36	66	25	45	-2	.8	.3	.3	7.2	131	32.1	115	95	55	0	2	5	0
WY CASPER	56	29	67	20	42	-4	.5	.3	.3	1.4	111	10.7	110	86	31	0	5	2	0
CHRYSTENNE	58	30	74	26	44	-3	.2	.0	.1	2.1	139	18.5	152	82	25	0	5	2	0
LANDER	53	29	64	21	41	-5	.3	.0	.2	2.2	134	8.8	78	88	35	0	6	3	0
SHERIDAN	52	29	65	24	41	-6	.3	.1	.2	1.8	91	11.7	90	95	43	0	6	2	0

Based on 1951-80 normals

## National Agricultural Summary

October 15-21, 1990

**HIGHLIGHTS:** Winter wheat was mostly good to fair with 79 percent (%) of the crop planted and 62% emerged, both 1 percentage point behind the 5-year average. Corn harvest was 47% complete, 11 points behind normal. Soybean harvest was 57% complete, 2 points behind normal. Forty-eight percent of the cotton was harvested, 7 points ahead of normal. Sorghum harvest was 64% complete, 6 points ahead of normal.

Dry weather allowed harvest to progress rapidly in the **Great Plains**. Rain or snow slowed fieldwork in the **eastern Corn Belt, Tennessee Valley, and the Northeast**. Soil moisture remained short in most areas of the **West, Southwest, and several areas of the Southeast**.

**SMALL GRAINS:** Winter wheat was mostly good to fair with 79% of the crop planted and 62% emerged, both 1 point behind normal. Planting was 100% complete in Nebraska and South Dakota and over 90% complete in Colorado, Idaho, Kansas, Montana, and Washington. High winds in Nebraska caused erosion in some winter wheat fields.

**CORN:** Corn harvest advanced 15 points from last week and was 47% complete, 11 points behind normal. In Georgia and North Carolina, harvest was 90% or more complete. Rain slowed harvest in the eastern Corn Belt, with Illinois and Indiana 41% and 21% harvested, respectively, both more than 30 points behind normal. Harvest progressed 20 or more points in Iowa, Minnesota, and Nebraska due to dry weather.

**SOYBEANS:** Soybean harvest was 57% complete, 2 points behind normal. Iowa, Minnesota, Nebraska, and South Dakota were more than 90% harvested. In Minnesota and South Dakota, harvest was over 20 points ahead of normal. Illinois, Indiana, and Ohio were more than 20 points behind normal. Harvest advanced more than 20 points in Arkansas, Kentucky, and South Carolina. Ohio harvest was delayed by rain with bean moisture about 14%.

**COTTON:** Forty-eight percent of the cotton was harvested, 7 points ahead of normal. Boles opening were 88%, 4 points ahead of normal. Alabama and Louisiana had over 87% harvested, 26 and 25 points, respectively, ahead of normal. Harvest in Missouri was 60% complete, 12 points behind normal. Early cotton yields were good in Texas, with harvest activity increasing in defoliated fields.

**SORGHUM:** Sorghum harvest was 64% complete, 6 points ahead of normal. Arkansas, Louisiana, and Mississippi had 90% or more harvested. Harvest was 15 points or more ahead of normal in Kansas, Nebraska, and South Dakota, with Kansas and Nebraska progressing 30 or more points from last week.

**OTHER FIELD CROPS:** Rice harvest was 90% complete, 4 points behind normal. Harvest was over 90% complete in all States, except Arkansas. Even though rain caused some lodging, Arkansas' rice harvest advanced 19 points and was 83% complete, 12 points behind normal. Idaho potato harvest was 97%

complete, 3 points ahead of normal. Alabama peanuts were 96% combined, 17 points ahead of normal. Georgia peanuts were mostly poor with 93% combined, 8 points ahead of normal. South Carolina peanuts were 63% harvested, same as normal. Louisiana sugarcane was mostly fair with 1% harvested, 13 points behind normal. Kentucky burley tobacco was good to excellent with 14% stripped. Mississippi sweetpotatoes were 87% harvested, 7 points ahead of normal. Sugarbeets in Montana were 92% harvested, 24 points ahead of normal. North Dakota sunflower harvest was 86% complete, 27 points ahead of average. Oregon barley was 46% planted, 9 points behind normal.

**FRUIT AND NUTS:** Florida citrus groves were good to excellent with active early fruit harvest. In western Arizona, lemon harvest continued and grapefruit harvest began. Late apple harvest in New York remained active. Pennsylvania apple and grape harvests were over 82% complete. Washington apple harvest continued with many areas nearing completion. Oregon cranberry harvest was active along the south coast, with good to excellent yields, size, and color. California wine grape and Valencia orange harvests were nearing completion. New crop navel orange harvest continued with low volume. Arkansas pecan prospects were very poor to poor.

**VEGETABLES:** Arizona fall watermelon, mixed melon, green onions, and mixed greens continued to be harvested in the central areas, while harvest of fall lettuce, pumpkins, and mixed vegetables continued in the eastern areas. Texas Rio Grande Valley's tomato and pepper planting continued with good crop progress. Texas High Plains' supplies of peppers, cabbages, carrots, and pumpkins were good, although frost hurt some fields. The Trans-Pecos area of Texas bell and chile pepper harvests continued with average yields. California fresh market tomato harvest continued. Onion and garlic planting continued.

**PASTURES AND LIVESTOCK:** Pasture and livestock were mostly good to fair. Some stocker cattle were moved to wheat fields on the Texas High Plains. Stockwater in North Dakota was short to adequate. California water supplies remained short. In Wyoming, hay stocks for wintering livestock were adequate or better.

## Crop Progress

FOR WEEK ENDING OCTOBER 21, 1990

WINTER WHEAT  
% PLANTED

	1990	1989	AVG.
AR	14	34	32
CA	5	10	13
CO	98	99	99
GA	6	6	14
ID	95	95	90
IL	42	83	76
IN	50	74	73
KS	95	95	90
MI	70	95	70
MO	49	65	55
MT	99	98	88
NE	100	100	100
NC	17	21	21
OH	45	66	70
OK	80	90	75
OR	85	87	69
SD	100	100	100
TX	76	83	79
WA	95	95	92

19 STATES 79 85 80

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

	1990	1989	AVG.
AL	89	78	79
AR	62	69	70
GA	94	86	91
IL	95	100	100
IN	99	100	100
IA	100	100	100
KS	99	96	96
KY	79	87	90
LA	65	95	84
MI	100	100	100
MN	100	100	100
MS	81	84	88
MO	88	96	97
NE	100	100	100
NC	76	62	54
OH	100	100	100
SC	62	53	56
SD	100	100	100
TN	78	88	93

19 STATES 92 94 94

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

	1990	1989	AVG.
AL	45	27	29
AR	16	19	30
GA	22	10	18
IL	57	87	83
IN	40	59	70
IA	93	95	76
KS	60	50	45
KY	15	16	28
LA	56	61	48
MI	20	70	40
MN	95	98	74
MS	42	28	34
MO	42	52	48
NE	90	83	73
NC	15	6	8
OH	40	40	63
SC	11	3	6
SD	97	100	67
TN	18	28	30

19 STATES 57 64 59

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

	1990	1989	AVG.
AR	7	19	17
CA	0	1	2
CO	89	90	91
GA	3	4	9
ID	58	67	60
IL	19	44	41
IN	33	42	47
KS	80	80	75
MI	65	75	55
MO	31	38	37
MT	79	75	65
NE	94	98	98
NC	12	11	NA
OH	28	31	38
OK	50	60	50
OR	61	45	37
SD	91	93	93
TX	52	58	63
WA	81	79	71

19 STATES 61 65 NA

EXCL. STATES  
WITH NA 62 66 63THESE 19 STATES PRODUCED 91%  
OF THE 1990 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

CORN  
% HARVESTED

	1990	1989	AVG.
CO	15	23	32
GA	97	98	97
IL	41	68	72
IN	21	34	53
IA	60	75	61
KS	85	75	75
KY	56	69	72
MI	10	30	25
MN	49	70	55
MO	67	82	74
NE	60	58	51
NC	90	83	83
OH	20	15	37
PA	9	20	26
SD	54	76	47
TX	99	96	96
WI	17	38	39

17 STATES 47 61 58

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

	1990	1989	AVG.
CO	97	95	97
GA	100	100	100
IL	100	100	100
IN	96	97	100
IA	100	100	100
KS	100	100	100
KY	95	97	99
MI	80	100	97
MN	99	99	98
MO	100	100	100
NE	100	100	100
NC	100	100	100
OH	87	87	96
PA	64	71	84
SD	100	100	100
TX	100	100	100
WI	90	100	100

17 STATES 97 98 99

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

RICE % HARVESTED			
	1990	1989	AVG.
AR	83	95	95
CA	90	75	81
LA	99	100	99
MS	90	94	97
TX	100	100	100
5 STATES	90	93	94
THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.			

GRAIN SORGHUM % MATURE			
	1990	1989	AVG.
AR	100	100	NA
CO	92	83	87
IL	84	100	NA
KS	98	70	90
LA	100	100	100
MS	100	100	100
MO	85	99	99
NE	100	100	100
NM	99	NA	NA
OK	85	75	85
SD	100	100	95
TX	98	89	91
12 STATES	97	NA	NA
EXCL. STATES WITH NA			
	97	84	92
THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.			

GRAIN SORGHUM % HARVESTED			
	1990	1989	AVG.
AR	90	95	95
CO	31	40	34
IL	13	66	71
KS	60	35	45
LA	95	100	100
MS	94	88	96
MO	45	74	70
NE	75	65	60
NM	35	NA	NA
OK	15	20	25
SD	85	85	55
TX	73	69	71
12 STATES	64	NA	NA
EXCL. STATES WITH NA			
	64	56	58
THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.			

NA - NOT AVAILABLE.

NA - NOT AVAILABLE.

COTTON % BOLLS OPENING			
	1990	1989	AVG.
AL	100	96	99
AZ	100	100	100
AR	98	94	98
CA	100	100	100
GA	97	89	93
LA	100	100	100
MS	100	97	98
MO	95	100	100
NM	98	100	95
NC	100	100	100
OK	90	67	80
SC	98	95	98
TN	100	100	100
TX	75	75	67
14 STATES	88	87	84
THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.			

COTTON % HARVESTED			
	1990	1989	AVG.
AL	88	35	62
AZ	50	34	32
AR	61	33	66
CA	35	40	32
GA	74	28	49
LA	93	67	80
MS	80	31	73
MO	60	63	72
NM	18	20	18
NC	47	22	32
OK	10	5	10
SC	67	29	52
TN	62	52	66
TX	28	23	21
14 STATES	48	32	41
THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.			

**Crop Condition**  
PERCENT

FOR WEEK ENDING OCTOBER 21, 1990

WINTER WHEAT						
STATE	VP	P	F	G	EX	
AR	0	0	23	76	1	
CA	NA					
CO	0	5	27	54	14	
GA	9	21	48	22	0	
ID	0	5	20	67	8	
IL	NA					
IN	NA					
KS	0	1	15	47	37	
MI	0	5	25	50	20	
MO	0	1	42	55	2	
MT	1	12	59	26	2	
NE	0	8	47	44	1	
NC	NA					
OH	0	2	29	61	8	
OK	0	10	80	10	0	
OR	0	0	0	100	0	
SD	2	11	39	42	6	
TX	NA					
WA	0	10	50	40	0	
19 STATE	0	6	39	41	14	
PREV WEEK	NA					
PREV YEAR	0	2	25	59	14	

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

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Rainfall 1.00 in. north; under 0.75 in. central, south; 1.00 to 2.00 in. local areas. Temperatures 2 to 6° above normal.

Days suitable for fieldwork 5.8. Soil moisture 21% very short, 57% short, 22% adequate. Rains mid week helped improve topsoil moisture, benefitted recently seeded small grains. Corn 98% harvested, 89% 1989, 93% avg. Sorghum 94% harvested, 82% 1989, 82% avg.; 23% very poor, 19% poor, 50% fair, 8% good. Cotton 88% harvested, 35% 1989, 62% avg.; 1% very poor, 15% poor, 82% fair, 2% good. Peanuts 99% dug, 99% 1989, 88% avg.; 96% combined, 95% 1989, 79% avg. Soybeans 96% turning color, 90% 1989, 94% avg.; 89% dropping leaves, 78% 1989, 79% avg.; 78% mature, 64% 1989, 62% avg.; 45% harvested, 27% 1989, 29% avg.; 33% very poor, 33% poor, 29% fair, 5% good. Winter wheat 30% seeded, 42% 1989, 35% avg. Pastures 32% very poor, 24% poor, 39% fair, 5% good. Livestock 11% poor, 54% fair, 35% good. Primary activities: Harvesting row crops, late vegetables; destroying cotton stalks; overseeding, fertilizing pastures; harvesting catfish; preparing land, seeding winter annuals; culling, marketing cattle; routine care of livestock, poultry, catfish.

**ARIZONA:** Sunny, mild statewide through 15th; high clouds statewide, small thunderstorms southeast 16th; colder, cloudy 18th, 19th, showers north central; gusty winds northwest, 50 mph to 75 mph, zero visibility; clear, cool 20th, 21st. Temperatures normal to 6° above. Extremes 49°; 97° deserts, 30°; 88° higher elevations; precipitation scattered, none to 0.36 in. north central.

Cotton harvested 50%, 34% 1989, 32% avg., defoliation active; crop rated 55% fair, 45% good. Alfalfa harvest moderate; high winds scattered cut hay west, losses minimal; good. Lemon harvest continued west; grapefruit, asparagus harvest began; fall vegetable planting, thinning, cultivating continued. Fall watermelon, mixed melon, green onions, mixed greens harvested central; apples, fall lettuce, pumpkins, mixed vegetables harvested east.

**ARKANSAS:** A cold front the first part of the week brought scattered showers, colder temperatures. Extremes 31°; 87°. Rainfall none to 1.00 in.

Days suitable for fieldwork 5.0. Soil 3% short, 78% adequate, 19% surplus. Main activities: Corn, soybean, grain sorghum, rice, and cotton harvest; bush hogging, disking cotton stalks, rice stubble; planting winter forages; working cattle. Rice 83% harvested, 95% 1989, 95% avg.; 99% ripe, 100% 1989, 100% avg.; 55% fair, 45% good. Cotton 61% harvested, 33% 1989, 66% avg.; 98% open bolls, 94% 1989, 98% avg.; 4% poor, 33% fair, 43% good, 11% excellent. Corn 98% harvested, 99% 1989, 99% avg.; 28% fair, 72% good. Sorghum 90% harvested, 95% 1989, 96% avg.; 100% mature, 100% 1989; 2% very poor, 6% poor, 75% fair, 17% good. Soybeans 16% harvested, 19% 1989, 30% avg.; 40% mature, 44% 1989, 51% avg.; 62% shedding, 69% 1989, 70% avg.; 28% poor, 51% fair, 21% good. Wheat 14% planted, 34% 1989, 32% avg.; 7% emerged, 19% 1989, 17% avg.; 23% fair, 76% good, 1% excellent. Oats 15% planted, 39% 1989, 34% avg. Pecan prospects very poor to poor. Pasture 18% poor, 72% fair, 10% good. Livestock good. Rain caused some lodging in rice fields, lowering of yields, grade of cotton.

Frost, colder temperatures will hasten soybean leaf drop, maturity rates.

**CALIFORNIA:** High pressure early week produced gusty north winds. A series of fronts brought clouds to the north end of the State, light rain in many areas on 18th.

Field activities progressed, open weather. Rice harvest continued active, despite light rain. Stubble fields burned as allowable. Cotton defoliation, harvest gained momentum. Fields shredded, disced after harvest, pink boll worm control. Corn, dry bean, sugarbeet, sunflower harvests progressed. New alfalfa seed fields seeded. Small grain field preparation continued; some fields seeded. Granny Smith apple harvest winding down; Fuji's active. Date harvest ongoing. Avocado harvest continued. Most of raisin crop picked, boxed. Several late season table grape varieties picked. Wine grape harvest nearing completion. Wonderful pomegranates, persimmons, kiwi fruit packed. Late almond varieties harvest continued. Pistachio harvest virtually complete. Walnut harvest winding down. Olive harvest continued. Valencia orange harvest winding down. Harvesting now crop navel oranges continued; low volume. Picking of desert lemons, Fairchild tangerines, grapefruit continued. Broccoli light supply, generally good quality. Cauliflower moderate supply, variable quality. Celery heavy supply, generally good quality. Iceberg head lettuce light supply, variable quality, harvest beginning Huron area. Fresh market tomato harvest continued. Potato harvest continued Hemet Perris, nearing completion Tulelake Butte Valley areas. Sweetpotato harvest continued. Onion, garlic planting continued westside. Livestock remained good condition Statewide feeding hay, supplements. Range conditions generally poor, fair. Water supplies remained short. Rain, snow received northern portion State. Fall calving underway most areas. Increased sheep grazing harvested fields Fresno area.

**COLORADO:** Cooler weather late during the week accompanied with snow resulted in accumulations of 2.00 to 6.00 in. Precipitation trace to 0.77 in. Temperatures were below average on the western slope, 1 to 5° above normal on the eastern Plains.

Days suitable for fieldwork 5.5. Soil 1% very short, 44% short, 54% adequate, 1% surplus. Alfalfa 3rd cutting 93% complete; 4th cutting 66% complete. Dry beans 96% threshed. Corn 15% harvested. Sorghum 31% harvested. Dry onion harvest 98% complete. Summer potato harvest 91% complete. Fall potato harvest 83% complete. Sugarbeets 34% harvested. Winter wheat 89% emerged; fair to good. Pasture, range feed 5% very poor, 9% poor, 35% fair, 43% good, 8% excellent. Livestock mostly good to excellent.

**FLORIDA:** Warm, temperatures 3 to 6° above normal most of State. Cooler weather, however, moved into northern areas at mid to late week with temperatures as low as the 40s, Panhandle; otherwise, coolest weekly readings mostly 50s extreme north, mid to upper 60s central, interior south to low; mid 70s lower southeast coast. All reporting stations had maximum temperatures upper 80s or low 90s. Rain locally exceeded 1.00 in., many areas 0.50 in. or less. Heaviest rain total,

6.45 in. Pensacola followed by 2.85 in., Melbourne Airport, 2.50 in. near Jay.

Soil moisture short Panhandle, many northern Peninsula areas; mostly adequate elsewhere. Cotton harvest active. Soybean, sugarcane harvest underway. Planting small grain, sugarcane active. Pastures 5% poor, 40% fair, 40% good, 15% excellent. Cattle mostly fair north, good to excellent south. Citrus groves, trees very good to excellent. Topsoil adequate; however, rain needed to build up reserves. Fruit drop not excessive. Early fruit harvest active, half of processing plants open. Caretakers cutting cover crops, spraying, preparing both new, old grove land. Hot weather vegetable producing areas. Planting resumed to normal. Fall harvest continued increase. Volume leaders: Cucumbers, sweet corn, squash, tomatoes, peppers, eggplant. First mini carrots dug, Belle Glade area.

**GEORGIA:** Seasonal temperatures, beneficial rains north. Temperatures 2 to 5° above normal. Warmest highs low, mid 70s northeast mountains to 90 south. Coolest low 30s northeast mountains to mid 40s central, around 50° extreme south. Rain totals 1.00 to 2.00 in. common northern half. Southwest most totals under 0.50 in., over 1.00 in. local areas. Southeast under 0.30 in. with 2.00 to 3.00 in. isolated locations.

Days suitable for fieldwork 4.3. Soil moisture 14% very short, 19% short, 55% adequate, 12% surplus. Cotton 19% very poor, 34% poor, 23% fair, 18% good, 6% excellent. Sorghum 7% very poor, 29% poor, 55% fair, 9% good; 82% harvested for grain, 80% 1989, 75% avg. Peanuts 22% very poor, 43% poor, 34% fair, 1% good; 97% dug, 98% 1989, 93% avg.; 93% threshed, 93% 1989, 85% avg. Soybeans 32% very poor, 45% poor, 22% fair, 1% good. Rye 4% very poor, 17% poor, 50% fair, 29% good; 34% planted, 53% 1989, 47% avg. Other small grains 23% planted, 25% 1989, 32% avg. Apples 98% harvested, 70% 1989, 92% avg. Pecans 12% very poor, 23% poor, 64% fair, 1% good; 9% harvested, 13% 1989, 10% avg. Hay 4% very poor, 27% poor, 48% fair, 21% good. Pasture 9% very poor, 22% poor, 34% fair, 35% good. Cattle, hogs fair to mostly good. Main activities: Harvesting hay, fall vegetables, overseeding pastures.

**HAWAII:** Variable weather prevailed over islands. Warm sunny days with scattered showers typified island weather. Winds variable 5 to 20 mph with temperatures high 60s to low 90s. Rainfall none to 9.30 in.

Days suitable for farm work 7.0. Papaya production continued decline. Sugar, pineapple harvest continuous. This seasons watermelon harvest finished. Coffee, macadamia nut harvesting full swing.

**IDAHO:** Temperatures cooler than normal, 1 to 6° below average. Heavy precipitation fell north, slightly below normal elsewhere.

Days suitable for fieldwork 5.0. Soil moisture 13% very short, 39% short, 44% adequate, 4% surplus. Winter wheat virtually planted; over half emerged; condition mostly good. Potato harvest winding down; 97% harvested, 95% 1989, 94% avg. Sugarbeets over half harvested; 55% harvested, 51% 1989, 51% avg. Onion harvest virtually complete; 97% harvested, 100% 1989, 96% avg. Corn for grain well behind; 17% harvested, 32% 1989, 37% avg. Corn for silage harvest nearly complete. Apples 82% harvested, 76% 1989, 83% avg. Rangeland, pasture 4% very poor, 24% poor, 41% fair, 29% good, 2% excellent. Hay, roughage adequate, surplus north.

**ILLINOIS:** Temperatures normal to 4° below normal. Precipitation generally 0.50 to 1.00 in.

Days suitable for fieldwork 4.75. Soil moisture 3% short, 62% adequate, 35% surplus. Sorghum 60%

good, 33% fair, 7% poor. Livestock roughage requirements from pasture 72%, 62% 1989, 61% avg. Pasture 16% fair, 78% good, 6% excellent.

**INDIANA:** Temperatures average to 4° below normal. Lows upper 30s to mid 40s, highs lower to upper 60s. Frost, freezing temperatures 19th morning, mid 20s to lower 30s. Precipitation 0.50 to 1.75 in.

Days suitable for fieldwork 4.0. Topsoil 39% adequate, 61% surplus. Subsoil 58% adequate, 42% surplus. Corn 1% poor, 29% fair, 66% good, 4% excellent. Soybean 35% fair, 60% good, 5% excellent. Corn 24% moisture content, soybeans 14% moisture content. Apples harvested 78%. Pasture 4% poor, 24% fair, 63% good, 9% excellent. Good harvesting progress early in period.

**IOWA:** Temperatures 1 to 5° below normal. Extremes 22°; 80°. Precipitation 0.07 to 1.26 in.; average 0.52 in.

Days suitable for fieldwork 6.0. Topsoil 18% short, 82% adequate. Subsoil 13% short, 87% adequate. Pasture 8% poor, 33% fair, 49% good, 10% excellent. Winter wheat 99% sown, 100% 1989, 86% avg. 1991 row crop acreage 15% tilled, 24% 1989, 21% avg. 1991 row crop acreage 12% fertilizer applied, 19% 1989, 16% avg. Livestock mostly good. Movement of cattle to stalk, stubble fields on the increase. Grain storage availability 2% short, 81% adequate, 17% surplus.

**KANSAS:** Temperatures near normal; precipitation light to non existent. Northwest 0.10 in.; none to 0.05 in. elsewhere.

Days suitable for fieldwork 6.5. Surface moisture 70% short, 30% adequate. Subsurface moisture 52% short, 48% adequate. Dry weather allowed harvest of corn, sorghum, soybeans to make rapid progress; stay ahead of schedule. Seeding winter wheat good progress; generally ahead of schedule. Emerged stands good growth, root development retarded by short surface moisture. Ranges, pastures good for time of year. Movement of livestock from native pastures to corn, sorghum stubble noted. Some early movement also noted onto volunteer wheat.

**KENTUCKY:** Temperatures near normal, highs upper 60s, lows lower 40s. Precipitation 0.50 to 1.00 in.; southeast 1.50 in. rain.

Days suitable fieldwork 4.2. Soil moisture 7% short, 81% adequate, 12% surplus. Light frosts over much of State. High moisture in corn hampered harvest. Light frosts promoted dry down. Most corn, soybeans safe from frost. Little frost damage expected. Burley tobacco 14% stripped. Weight, quality good to excellent. Houseburn a minor problem. Fall wheat 35% seeded, mostly cover crop, good. Hay crops good. Pastures 1% poor, 13% fair, 72% good, 14% excellent.

**LOUISIANA:** Temperatures 2° below normal. Extremes 36°; 89°. Rainfall 0.02 to 0.30 in.

Days suitable for fieldwork 6.5. Soil moisture 31% very short, 38% short, 31% adequate. Cotton harvested 93%, 67% 1989, 80% avg. Hay final cutting 95%, 98% 1989, 97% avg. Pecans harvested 3%, 4% 1989, 5% avg. 27% very poor, 46% poor, 27% fair. Rice harvested 99%, 100% 1989, 99% avg. Sorghum ripe 100%, 100% 1989, 100% avg.; harvested 95%, 100% 1989, 100% avg. Soybeans turning color 97%, 100% 1989, 96% avg.; shedding leaves 65%, 95% 1989, 84% avg.; harvested 56%, 61% 1989, 48% avg.; 25% poor, 15% fair, 60% good. Sugarcane planted 97%, 99% 1989, 97% avg.; harvested 1%, 19% 1989, 14% avg.; 10% poor, 50% fair, 40% good. Sweetpotatoes harvested 76%, 72% 1989, 83% avg. Wheat planted 7%, 14% 1989, 13% avg.; emerged 4%,

5% 1989, 6% avg. Livestock 48% fair, 52% good. Pasture 17% poor, 60% fair, 23% good. Vegetables 11% poor, 70% fair, 19% good.

**MARYLAND & DELAWARE:** MARYLAND: Precipitation 1.71 in. Temperature 65°, normal 57°. Extremes 31°; 86°.

Days suitable for fieldwork 4.9. Topsoil 85% adequate, 15% surplus. Subsoil 10% short, 80% adequate, 10% surplus. Corn good; grain 68% harvested, 58% 1989, 73% avg. Soybeans good; 86% shedding leaves, 70% 1989, 83% avg.; 33% harvested, 22% 1989, 26% avg. Wheat 29% seeded, 36% 1989, 51% avg. Oats 39% seeded, 11% 1989, 50% avg. Barley 80% seeded, 60% 1989, 74% avg. Rye 73% seeded, 53% 1989, 68% avg. Sweetpotatoes 94% harvested, 76% 1989, 80% avg. Hay adequate. Alfalfa hay fourth cut 92% complete, 75% 1989, 87% avg. Other hay third cut 83% complete, 66% 1989, NA% avg. Apples fair to good; 90% harvested, 96% 1989, 91% avg. Pasture good.

DELAWARE: Precipitation 1.58 in. Temperature 66°, normal 57°. Extremes 41°; 84°.

Days suitable for fieldwork 5.6. Topsoil 100% adequate. Subsoil moisture 43% short, 57% adequate. Corn good; grain 86% harvested, 83% 1989, 83% avg. Soybeans good; 82% shedding leaves, 70% 1989, 82% avg.; 28% harvested, 16% 1989, 23% avg. Wheat 30% seeded, 24% 1989, 28% avg. Barley 76% seeded, 47% 1989, 62% avg. Rye 53% seeded, 32% 1989, 40% avg. Hay adequate. Apples fair to good; 89% harvested, 95% 1989, 89% avg. Pasture good.

**MICHIGAN:** Temperatures 2 below to 3° above normal. Extremes 25°; 79°. Precipitation 0.26 to 3.35 in. across State.

Days suitable for fieldwork 2.5. Soil moisture 15% adequate, 85% surplus. Corn 85% mature, 100% 1989, 97% avg.; 10% harvested, 30% 1989, 25% avg. Soybeans 100% dropping leaves, 100% 1989, 100% avg.; 20% harvested, 70% 1989, 40% avg. Winter wheat 70% seeded, 95% 1989, 70% avg. Dry bean harvest 95% complete with excellent yield, quality. Recent rains have damaged unharvested beans. Major activities: Harvesting potatoes, soybeans, dry beans, sugarbeets, corn silage, hay, apples, vegetables, seeding winter wheat, rye, equipment repair, maintenance.

**MINNESOTA:** Temperatures 3 to 6° below normal. Extremes 17°; 70°. Precipitation 0.43 to 1.72 in., greatest weekly total 2.34 in.

Days suitable for fieldwork 5.2. Topsoil 16% very short, 22% short, 57% adequate, 5% surplus. Corn 49% combined, 70% 1989, 55% avg. Soybeans 95% combined, 98% 1989, 74% avg. Sugarbeets 94% harvested, 92% 1989, 62% avg. Sunflowers 99% harvested, 97% 1989, 93% avg. Field corn 19% plowed, tilled, 29% 1989, 28% avg. Soybeans 42% plowed, tilled, 56% 1989, 43% avg. Corn 22% moisture, 18% 1989, 22% avg. Soybeans 11% moisture, 11% 1989, 12% avg.

**MISSISSIPPI:** Temperatures 0.6° below normal. Extremes 31°; 97°. Mostly dry statewide, with scattered showers. Rainfall 0.19 in., 0.38 in. below normal. Soil temperatures 68°.

Days suitable for fieldwork 5.8, 2.9 1989, 3.7 avg. Soil moisture 23% very short, 23% short, 45% adequate, 9% surplus. Cotton 80% harvested, 31% 1989, 73% avg.; 2% very poor, 6% poor, 33% fair, 44% good, 15% excellent. Corn 91% harvested, 86% 1989, 92% avg.; 6% poor, 53% fair, 41% good. Rice 100% mature, 100% 1989, 100% avg.; 90% harvested, 94% 1989, 97% avg.; 4% poor, 46% fair, 33% good, 17% excellent. Soybeans 98% turning color, 97% 1989, 96% avg.; 81% shedding leaves, 84% 1989, 88% avg.; 42% harvested, 28% 1989, 34% avg.; 14% very poor, 16% poor, 31% fair, 37% good, 2% excellent. Sorghum 94% harvested, 88% 1989, 96% avg.; 5% poor,

53% fair, 30% good, 12% excellent. Hay 96% harvested, 95% 1989, 96% avg. Peanuts 95% harvested, 91% 1989, 93% avg. Sweetpotatoes 87% harvested, 72% 1989, 80% avg. Wheat 26% planted, 37% 1989, 28% avg., 16% emerged, 23% 1989, 28% avg.; 3% very poor, 8% poor, 44% fair, 43% good, 2% excellent. Pasture, livestock fair to good. Activities: Harvesting crops, planting wheat.

**MISSOURI:** Temperatures near normal. Rainfall none to less than 0.50 in. except over 0.50 in. east central, south central districts, nearly 1.00 in. southeast.

Days suitable for fieldwork 5.4. Topsoil 23% short, 65% adequate, 12% surplus, driest northwest at 67% short, wettest southeast at 55% surplus. Corn harvested varies 54% north central, northeast to 90% southeast. Soybean harvesting varies less than 20% southern districts to 62% northwest. Sorghum harvested ranges 15% southwest to 72% southeast. Wheat seeded varies 33% southeast to 69% northwest. Tillage for spring crops 15%, 19% 1989, 23% avg. Pasture 6% poor, 57% fair, 35% good, 2% excellent.

**MONTANA:** Temperature below normal. Precipitation in all divisions with west receiving most.

Days suitable for fieldwork 5.4. Topsoil 68% short, 32% adequate. Subsoil 79% short, 21% adequate. Dry beans 96% harvested, 100% 1989, 95% avg. Corn silage 99% harvested, 100% 1989, 96% avg. Potatoes 87% harvested, 91% 1989, 86% avg. Sugarbeets 92% harvested, 81% 1989, 68% avg.

**NEBRASKA:** Temperatures 1° below normal, central to 5° below normal northwest. Extremes 11°; 88°. Precipitation latter half of week, less than 0.10 in. northwest up to 0.50 in. northeast.

Days suitable for fieldwork 6.6. Topsoil 82% short, 18% adequate. Subsoil 78% short, 22% adequate. High winds damaged crops, caused erosion in winter wheat, harvested fields west. Wind knocked down sorghum, corn or caused ears to drop off, especially in fields with high corn borer damage. Corn growers allowing crop to dry down in fields, saving drying cost. Soybeans harvest about 10 days ahead of normal. Cool, dry weather has winter wheat crop at standstill, many areas of State. Rain, snow, wind kept many northern, western farmers out of fields for 1 or 2 days. Dry edible bean harvest complete, most counties. Sugarbeet harvest about one half complete, Panhandle. Fall tillage done by some eastern farmers who have completed harvest. Pasture, range 14% very poor, 30% poor, 41% fair, 14% good, 1% excellent. Cattle moving into harvested corn fields. Supplemental feeding required for many cattle still in pastures. Many western ranchers selling calves as prices were very good.

**NEVADA:** Light rainfall over almost entire State late in period. Cold front brought cooler temperatures. Record low 10° Elko on 20th, several other readings in single digits over northern areas.

Harvesting 1990 potato crop completed mid week. Quality good this year, prices not so good. Sunny weather favored all ranch, farm activities. Virtually all livestock on winter grazing areas. Supplemental feeding hay necessary some areas.

**NEW ENGLAND:** Precipitation 0.50 to 1.20 in. Maine 0.60 to 0.90 in. New Hampshire, Rhode Island, 0.50 to 1.55 in. Vermont, Massachusetts, Connecticut. Temperatures high 40s to high 50s north, low 50s to low 60s south; 4 to 9° above normal. Maximum temperatures low 60s to high 70s north, low 70s to high 80s south. Minimum

temperatures low 20s to high 30s north, high 20s to high 30s south.

Days suitable for fieldwork 5.0. Soil moisture north 38% adequate, 62% surplus; south 7% short, 80% adequate, 13% surplus. Grazing availability 8% short, 92% adequate. Pasture 35% fair, 65% good. Maine potatoes 85% harvested, 100% 1989, 99% avg.; good. Rhode Island potatoes 90% harvested; good. Connecticut River Valley potatoes 91% harvested, 99% 1989, 92% avg.; good. Field corn 86% harvested, 86% 1989, 87% avg.; good. Third crop hay 100% harvested; good. Apples 89% harvested, size medium to large; good. Pears 100% harvested; fair to good. Major farm activities: Cutting hay, picking apples, chopping corn, sowing winter cover crops, harvesting potatoes.

**NEW JERSEY:** Temperatures slightly above normal. Extremes 28°; 82°. Rainfall 1.09 in. north, 1.31 in. central, 1.96 in. south. Heaviest 24 hour 5.98 in. on 18th, 19th. Estimated soil moisture percent field capacity 95% north, 85% central, 71% south. Four inch soil temperatures 58° north, 61° central, 62° south. Storm on 18th brought heavy rain, strong wind to many areas.

Fall vegetable harvest declining. Corn silage making nearing completion. Harvest of soybeans, corn for grain active. Sweetpotato, apple, cranberry harvest also active. Pasture growth limited. Barley, wheat, rye good. Seeding continued.

**NEW MEXICO:** Temperatures generally above normal in southern half of State, below normal in northern half. Precipitation a trace at Roswell to 3.21 in. at Chama, mostly snow.

Days suitable for fieldwork 6.5. Soil moisture 21% short, 79% adequate. Light to moderate freeze across much of State. Growing season ending as temperatures dip into the twenties. Cattle, fair to excellent condition, sheep fair to good. Range 6% poor, 51% fair, 43% good.

**NEW YORK:** Week began warmer than normal with very little rainfall. Cooling trend set in on 15th, brought light rainfall. A strong cold surge moved through on 18th. Heavy rain, strong winds accompanied the front. Frost was widespread at the weekend. Extremes 23°; 80°. Rainfall 0.47 in. at Rochester, Syracuse to 1.89 in. at Stillwater.

Days suitable for fieldwork 3.7. Soil moisture adequate in western areas to excessive in eastern areas. Pastures 8% poor, 54% fair, 38% good. Corn mostly good condition. Silage corn harvest 68% finished, 75% 1989, 74% avg. Grain corn 15% harvested, 14% 1989, 15% avg. Many growers waiting for killing frost before beginning. Some hay was harvested, mostly for haylage. Late variety apple harvest remained active. Cider making in full swing. Orchard clean up underway. Vegetable growers continued harvesting late season crop.

**NORTH CAROLINA:** Temperatures 3 to 8° above normal across the State. Precipitation none to 3.47 in.

Days suitable for fieldwork 4.3. Soil moisture 10% very short, 17% short, 57% adequate, 16% surplus. Pasture 8% poor, 49% fair, 43% good. Livestock feed from pasture 75%. Harvested: Corn for grain 90%; sweetpotatoes 79%; apples 93%; sorghum 56%; soybeans 15%; peanuts dug 85%; peanuts threshed 70%. Soybeans dropping leaves 76%; wheat emerged 12%. Planted: wheat 17%; oats 33%; barley 38%; rye 35%. Crop condition: Cotton 5% poor, 33% fair, 57% good, 5% excellent; soybeans 1% very poor, 14% poor, 57% fair, 28% good; peanuts 46% fair, 54% good; sweetpotatoes, 3% poor, 31% fair, 63% good, 3% excellent. Major activities: Harvesting corn, cotton, peanuts, soybeans; planting small grains; land preparation. Other

activities included: Seeding pastures; harvesting tobacco, sorghum, apples, sweetpotatoes, vegetables; cutting corn silage, hay; tending livestock; general farm maintenance.

**NORTH DAKOTA:** Temperatures 5 to 7° below normal. Precipitation 0.16 in. north central to 0.76 in. southeast.

Days suitable for fieldwork 5.5. Topsoil 57% very short, 33% short, 10% adequate. Subsoil 63% very short, 37% short. Sunflower 86% harvested, 91% 1989, 59% avg. Corn for grain 54% harvested, 75% 1989, 57% avg. Soybeans 98% combined, 99% 1989, 87% avg. Sugarbeets 99% lifted, 97% 1989, 98% avg. Pastures 29% very poor, 50% poor, 21% fair. Stockwater 16% very short, 40% short, 44% adequate.

**OHIO:** High temperatures low to upper 60s. Low temperatures upper 30s to upper 40s. Most readings within 2° of normal. Extremes 27°; 84°. Soil temperatures at 4.00 in. under bare soil averaged mid 50s; reaching 60s on sunny days. Precipitation 0.50 to 1.50 in.

Days suitable for fieldwork 2.9. Soil moisture 42% adequate, 58% surplus. Major activities: Harvesting corn, soybeans; planting wheat. Corn harvest lagging; moisture content of grain 25%. Soybean harvest rain delayed; moisture in beans 14%. No frost hard enough to kill weeds. Winter wheat seeding slowed by rain, wet soils. Wheat good; weather mild, planted wheat growing well. Sugarbeet harvest 22% complete. Tobacco stripping underway.

**OKLAHOMA:** Temperatures 4° below normal northeast to 6° below normal south central. Precipitation none Panhandle to 0.39 in. south central.

Days suitable for fieldwork 5.7. Topsoil 5% short, 90% adequate, 5% surplus. Subsoil 5% short, 95% adequate. Wheat 10% fair, 80% good, 10% excellent; 80% planted, 90% 1989, 75% avg.; 50% emerged, 60% 1989, 50% avg. Wheat pasture grazing will begin soon. Cotton 90% open bolls, 67% 1989, 80% avg.; 10% harvested, 5% 1989, 10% avg. Sorghum 85% mature, 75% 1989, 85% avg.; 15% harvested, 20% 1989, 25% avg. Corn 90% harvested, 95% 1989, 98% avg. Soybeans 55% mature, 55% 1989, 75% avg.; 30% harvested, 30% 1989, 25% avg. Peanuts 90% mature, 97% 1989, 90% avg.; 30% harvested, 30% 1989, 35% avg. Pastures 40% fair, 58% good, 2% excellent. Cattle good; marketings average, prices down from preceding week.

**OREGON:** Temperatures near average. Willamette Valley, Columbia Basin; up 3° below normal coast; up to 12° below normal other eastern areas. Overnight lows below freezing much of east; coldest spot was Burns at 13°. Limited light frost west. Copious precipitation as much as half of average monthly rainfall recorded during week many Willamette Valley, coastal locations, 0.08 to 0.77 in. east of Cascades.

Soil moisture 69% short, 29% adequate, 2% surplus. Barley 46% planted, 68% 1990, 55% avg. Fall fieldwork fertilizing continued east. Sugarbeet harvest underway Klamath, Malheur Cos. Field preparation, fertilizing, seeding of winter wheat, perennial rye grass, other winter cover crops ongoing Willamette Valley. Hazelnut harvest finished south valley; delayed by rains north Willamette Valley. Tree fruit harvesting complete most major districts. Cranberry harvest active south coast; yield, size, color good to excellent. Potato harvest over two thirds complete Klamath Co.; near complete Baker Co. Carrot, cauliflower harvest continued Willamette Valley. Livestock good to excellent. Most cattle now off summer ranges east. Calve weaning continued. Range, pasture 16% poor, 61% fair, 23% good.

**PENNSYLVANIA:** Near normal temperatures, above normal precipitation. Temperature 53°, 1° above normal. Extremes 25°; 81°. Precipitation 1.04 in, 0.38 in. above normal.

Days suitable for fieldwork 3. Soil moisture 51% adequate, 49% surplus. Corn 100% dented, 100% 1989, 100% avg.; 64% mature, 71% 1989, 84% avg.; 9% harvested, 20% 1989, 26% avg. Ensilage corn 68% harvested, 79% 1989, 87% avg. Corn 5% poor, 21% fair, 46% good, 28% excellent. Soybean harvest 7% complete, 23% 1989, 25% avg. Soybean 5% poor, 21% fair, 51% good, 23% excellent. Potato harvest 78% complete, 89% 1989, 90% avg. Fall plowing 76% complete, 78% 1989, 88% avg. Winter wheat 73% planted, 82% 1989, 81% avg. Barley 90% planted, 93% 1989, 94% avg. Third cutting alfalfa 88% complete, 92% 1989. Fourth cutting alfalfa 57% complete, 57% 1989. Second cutting timothy clover 94% complete, 100% 1989. Quality of hay made during week mostly fair. Quality of feed being obtained from pasture 2% very poor, 9% poor, 51% fair, 38% good. Apple harvest 82% complete, 77% 1989. Grapes harvest 83% complete, 82% 1989. Activities: Harvesting hay, haylage, potatoes, corn, corn silage, soybeans, fruits, vegetables; fall plowing, planting; maintaining machinery; caring for livestock.

**PUERTO RICO:** Rainfall 5.20 in. was 3.41 in. above normal. The highest rainfall 8.83 in. at Coloso, 8.37 in. at Arecibo Ionospheric Observatory, 8.05 in. at Morovis. Highest 24 hour total 4.11 in. at Corozal Aes. Divisional temperatures 80° on the coast, 74 to 78° in the Interior with mean station temperature 68° at Pico Del Este Luquillo to 82° at San Juan WSFO, Trujillo Alto. Extremes 62°; 93°.

**SOUTH CAROLINA:** Temperatures 60° mountains to 70° near the coast. Rainfall 0.20 in. north central to 1.40 in. mountains.

Days suitable for fieldwork 3.8. Soil moisture 11% short, 71% adequate, 18% surplus. Cotton 2% very poor, 41% poor, 57% fair, 67% harvested, 29% 1989, 52% avg. Soybeans 4% very poor, 15% poor, 75% fair, 6% good, 90% leaves turning, 82% 1989, 86% avg.; 62% shedding leaves, 53% 1989, 56% avg.; 44% matured, 36% 1989, 37% avg.; 11% harvested, 3% 1989, 6% avg. Sorghum fair, 75% harvested, 51% 1989, 59% avg. Tobacco 89% stalks destroyed, 81% 1989, 86% avg. Peanuts poor to fair, 63% harvested, 69% 1989, 63% avg. Pastures 13% poor, 41% fair, 46% good.

**SOUTH DAKOTA:** Temperatures generally around 5° below normal. Extremes 13°; 81°. Precipitation widespread with generally 0.25 to 0.50 in., maximum 1.40 in. Snowfall less than 2.00 in. melted by weekend. Harvest season precipitation above normal northeast, southwest, Black Hills; below normal elsewhere. Range 1.75 in. below to 2.16 in. above normal.

Days suitable for fieldwork 4.5. Subsoil 32% critically short, 47% short, 20% adequate, 1% surplus. Topsoil 15% critically short, 45% short, 40% adequate. Range, pasture 7% very poor, 11% poor, 52% fair, 26% good, 4% excellent. Corn mostly good. Winter grains good to fair. Soybean harvest finishing, other row crop harvest continuing, slowed by weather end of week. Thistle problems reported. Major activities: Combining, fieldwork, fencing.

**TENNESSEE:** Frontal passage 17th, 18th produced rain most areas. Temperatures below normal Plateau, normal east, above normal middle, west. Precipitation below normal west, above normal elsewhere.

Days suitable for fieldwork 4.4. Soil moisture 7% short, 88% adequate, 5% surplus. Corn 72%

harvested for grain, 86% 1989, 84% avg. Cotton 62% harvested, 52% 1989, 66% avg. Sorghum 72% harvested, 100% 1989, 92% avg. Soybeans 78% shedding leaves, 88% 1989, 93% avg., 44% mature, 65% 1989, 72% avg.; 1% very poor, 15% poor, 72% fair, 12% good. Tobacco 28% stripped, 28% 1989, 28% avg. Pastures 35% fair, 61% good, 4% excellent. Cattle 24% fair, 73% good, 3% excellent. Fieldwork delayed by unfavorable weather.

**TEXAS:** Disturbance produced showers Hill Country, eastern half State in advance frontal system around mid week. Front pushed out wet weather late 18th, allowing cooler, drier weather cover State. Temperatures below freezing 18th morning Panhandle. Another front crossed State weekend, bringing showers southern, eastern portions. Rainfall none Trans Pecos, over 1.00 in. east, Upper Coast. Significant rains limited to south, east where average amounts greater than normal. Temperatures cooler than normal all areas.

**Crops:** Corn harvest winding down High Plains late week. Open conditions allowed producers make good progress. Yields good. High winds associated with cool fronts caused some lodging. Grain sorghum harvest increased last week Plains under open conditions. Producers hoping for few more weeks mild weather. Some harvest Hill Country, Cross Timbers. Cotton development slow Plains, producers increase use harvest aids. Harvest activities increased defoliated fields. Early yields good. Harvest operations winding down Blacklands. Defoliation, harvest increased Trans Pecos. Some Pima fields hurt by weather. Small grain progress improved some Plains with cooler weather, scattered showers, more rain needed. Irrigated fields good. Planting continuing Blacklands, central. Emergence been fair to good. Soybean harvest increased Plains. Harvest early beans winding down Blacklands. Later beans drying down. Later varieties look good along Upper Coast. Peanut harvest increased Cross Timbers, Hill Country, good yields, grades. Harvest continued south central few delays. Other field crops: Peanuts 41% harvested, 25% 1989, 34% avg. Pecans 8% harvested, 6% 1989, 10% avg. Soybeans harvested 53%, 63% 1989, 46% avg. Sugarbeets 7% harvested, 19% 1989, 19% avg. Sunflowers harvested 37%, 32% 1989, 44% avg. Oats planted 47%, 62% 1989, 63% avg.

**Commercial Vegetables:** Rio Grande Valley, tomatoes, peppers good progress. Planting operations continued. Concern growing with first trapping "killer bees." Vegetable growers could be affected if bees get out of control. San Antonio Winter Garden, cabbage, cucumbers, tomatoes, peppers harvested. Spinach, onion planting continued. Eastern areas, sweetpotato harvest continued. Harvest other fall vegetables continued. High Plains, supplies of peppers, cabbage, carrots, pumpkins good. Frost hurt some fields. Trans Pecos, bell peppers, chile harvest continued. Yields average. Pecan harvest increased many areas last week, scattered orchards south still too wet for much activity. Nuts cracking open Trans Pecos.

**Range and Livestock:** Cooler temperatures slowed growth parts east, pastures look good most areas. Haying operations slowed. Stockers being moved to wheat fields High Plains. Irrigated fields provide adequate grazing. Range, pasture 2% very poor, 9% poor, 41% fair, 36% good, 12% excellent.

**UTAH:** Precipitation light eastern, western thirds, moderate central third. Temperatures about normal.

Days suitable for fieldwork 6.6. Soil moisture 87% short, 13% adequate. Winter wheat 93% seeded. Fourth crop alfalfa 94% cut, 93% 1989. Corn for grain harvest 60% complete, 55% 1989. Apples 84%

picked, 95% 1989. Potatoes 95% harvested, 85% 1989. Movement of cattle, sheep from summer ranges nearing completion. Range, pasture 2% very poor, 47% poor, 51% fair. Fall farming activities winding down.

**VIRGINIA:** Temperatures above normal. Extremes 30°; 87°. Precipitation variable up to 6.00 in. western part of the State.

Days suitable for fieldwork 4.6. Topsoil 5% very short, 25% short, 51% adequate, 19% surplus. Corn for grain 71% harvested, 71% 1989, 67% avg. Corn silage 94% harvested, 93% 1989, 94% avg. Soybean 3% poor, 39% fair, 57% good, 1% excellent. Soybeans 14% harvested, 10% 1989, 7% avg. Peanuts 85% dug, 93% 1989, 77% avg. Peanuts 70% combined, 71% 1989, 60% avg. Wheat 26% seeded, 23% 1989, 19% avg. Barley 60% seeded, 51% 1989, 56% avg. Oats 69% seeded, 58% 1989, 59% avg. Apple, sweetpotato harvest continued. Pasture 9% poor, 45% fair, 38% good, 8% excellent. Livestock mostly good. Some hay cutting. Harvesting snap beans, cucumbers, peppers.

**WASHINGTON:** Temperatures 3 to 10° below normal east; 2 to 6° below normal west. Precipitation none to 1.14 in. east; 0.62 to 2.05 in. west.

Days suitable for fieldwork 5.2. Soil moisture 50% short, 50% adequate. Range, pasture 2% very poor, 28% poor, 20% fair, 50% good. Hay, other roughage 2% short, 97% adequate, 1% surplus. Winter wheat planted 95%, 95% 1989, 92% avg. Winter wheat emerged 81%, 79% 1989, 71% avg. Potatoes harvested 80%, 91% 1989, 82% avg. Dry beans harvested 96%, 95% 1989, 99% avg. Corn silage harvested 90%, 94% 1989, 95% avg. Corn grain harvested 21%, 20% 1989, 39% avg. The planting of fall crops was nearing completion. Rain received during the week improved soil moisture conditions, many areas of eastern areas remained dry. Some Russian wheat aphids, not at significant levels. The apple harvest continued with many areas nearing completion. Vegetables continued to be harvested in Franklin, King, Pierce

Counties. Frost has been received in most other areas. The grape harvest was nearing completion, the winterization of strawberry, raspberry fields continued. The fall cattle round up continued.

**WEST VIRGINIA:** Temperature 55°, 0 to 2° above normal. Extremes 25°; 82°. Precipitation 0.79 in.

Days suitable for fieldwork 4.3. Soil moisture 4% short, 83% adequate, 13% surplus. Pasture 16% fair, 80% good, 4% excellent. Cattle, sheep good. Corn 2% fair, 46% good, 52% excellent; 82% mature, 40% harvested. Hay 28% fair, 72% good; third cutting 85% complete. Wheat 85% planted. Farm activities: Hay, corn harvesting, livestock marketing, wheat seeding.

**WISCONSIN:** Temperature 46°, 1° below normal. Extremes 18°; 80°. Precipitation 0.60 to 1.90 in.

Days suitable for fieldwork 3.4. Soil moisture 1% short, 60% adequate, 39% surplus. Pasture 2% poor, 10% fair, 79% good, 9% excellent. General condition of crops 9% fair, 87% good, 4% excellent. Soybeans 30% harvested, 67% 1989, 49% avg. Corn 11% fair, 83% good, 6% excellent. Corn for grain 17% harvested, 38% 1989, 3% avg. Corn silo filling 80% complete, 95% 1989, 82% avg. Fall tillage 25% complete, 27% 1989, 27% avg. Rain, snow have kept all fieldwork to a minimum. Yields average to above average on soybeans, corn silage.

**WYOMING:** Temperatures below normal. Precipitation above normal northwest, below normal elsewhere.

Days suitable for fieldwork 5.0. Topsoil 23% short, 73% adequate, 4% surplus. 1991 winter wheat fair to good. Corn for grain 25% harvested, 30% 1989, 20% avg. Potatoes 95% harvested, 95% 1989, 85% avg. Sugarbeets 70% dug, 70% 1989, 65% avg. Sugar content 16.3%. Livestock mostly good. Ranges, pastures 5% very poor, 5% poor, 90% good. Hay supplies for wintering livestock adequate or better in 85%.

## CROP PRODUCTION HIGHLIGHTS



**CORN** for grain production, as of October 1, is forecast at 8.02 billion bushels, down 1 percent from last month but 7 percent above the 1989 crop. The U.S. average yield per acre is forecast at a record-high 120.3 bushels, down 1.4 bushels from the September 1 forecast, but 4.1 bushels above the 1989 yield.

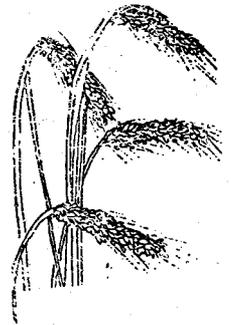
**SOYBEAN** production is forecast at 1.82 billion bushels, down 5 percent from 1989 and 1 percent below September 1. Yield is estimated at 32.3 bushels per acre, unchanged from last year, but down fractionally from the previous month.

**ALL WHEAT** production is estimated at 2.74 billion bushels, up 35 percent from 1989, but down slightly from September 1. Yields averaged a record-high 39.6 bushels per acre, up 6.9 bushels per acre from a year ago.

**SORGHUM** for grain production is forecast at 562 million bushels, down 2 percent from September 1 and down 9 percent from 1989. The U.S. average yield is forecast at 60.7 bushels per acre, a decline of 1.1 bushels from last month, but 5.3 bushels above last year.

**ALL COTTON** production is forecast at 14.5 million bales, down 1 percent from September, but up 19 percent from 1989. The Delta crop potential declined during the month. Mississippi's production had the largest decline of any State.

**ALL ORANGE** production is forecast at 231 million boxes, 24 percent above last season and 10 percent greater than the 1988-89 crop. This increase is due mostly to Florida's 50 percent increase from last season's freeze-damaged crop.



## International Weather and Crop Summary

### HIGHLIGHTS

October 14-20, 1990

**USSR** ... Unseasonably warm, dry weather helps summer crop harvests and favors winter grain establishment.

**NORTHWESTERN AFRICA** ... Widespread rain over Tunisia helps to condition soils, allowing some early season fieldwork in preparation for winter grain planting. The rainy season has not yet begun in Morocco and western Algeria.

**EUROPE** ... Rain benefits winter crops in the northwest. Warm, dry weather continues across the north and east.

**EASTERN ASIA** ... Moderate to heavy rain slows fall harvest but reduces dryness across sections of the Yangtze Valley. Dryness continues across sections of the North China Plain and southern Manchuria.

**SOUTH ASIA** ... Drier weather favors summer crop maturation and winter wheat planting. Rain over India's southern tip benefits fall crops.

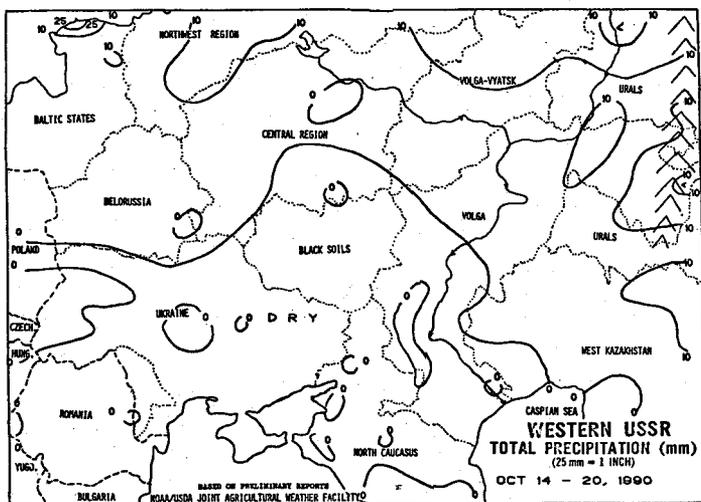
**SOUTHEAST ASIA** ... Tropical Storm Lola brings inundating rain to Vietnam. Showers over Thailand and the Philippines benefit fall crops but cause some flooding.

**SOUTH AFRICA** ... Mostly light rain covers primary wheat and corn areas. Heavy rain benefits coastal sugar regions.

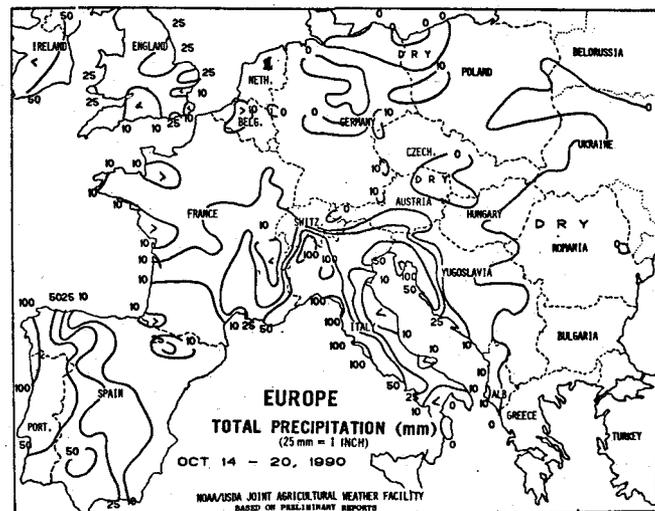
**SOUTH AMERICA** ... Drier weather favors crop plantings in Argentina. Locally heavy rain delays fieldwork in south-central Brazil.

**AUSTRALIA** ... Rain favors winter grains in the southeast.

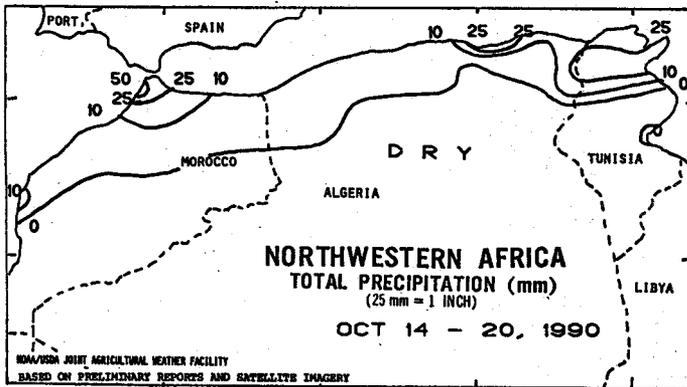
**MEXICO** ... Seasonably drier weather prevails in the north. Showers continue in the Southern Plateau.



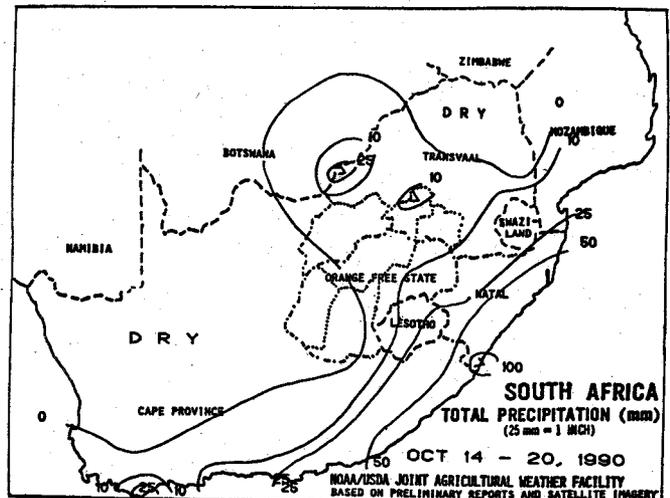
**WESTERN USSR** ... Unseasonably warm, dry weather covered most of the region, helping summer crop harvesting and late winter grain planting. By October 15, reports indicated the sunflower and sugarbeet harvests were 57 and 63 percent complete, respectively. The corn for grain harvest was about 40 percent complete. Weekly average temperatures ranging from 2 to 5 degrees Celsius (C) above normal promoted vegetative growth of winter grains. In addition, sunny days and clear, cool nights favored fall hardening. Winter grains usually enter dormancy in late October in the north and late November in the south. This past week's warm, dry weather was highly beneficial for winter grains in the north where persistent cool, wet weather since planting has limited plant establishment.



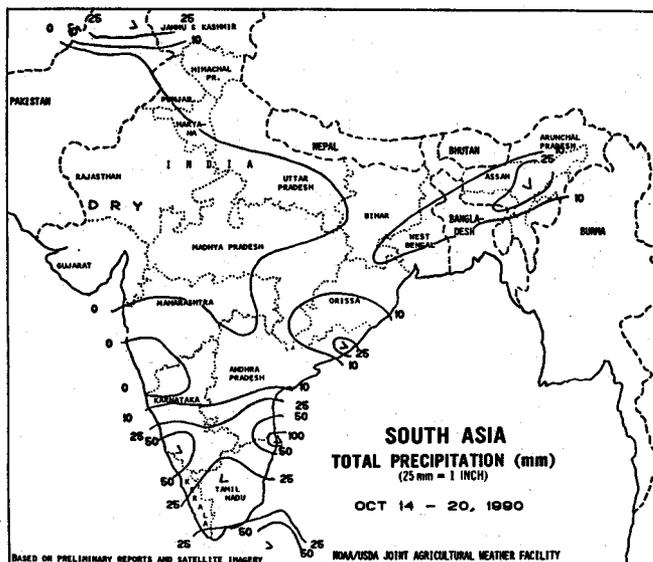
**EUROPE** ... Widespread rain (5-30mm, with scattered amounts greater than 30mm) covered Great Britain, Ireland, France, Spain, and Portugal, improving soil moisture for winter crops. Moderate to heavy rain (15-80mm, with isolated amounts in excess of 80mm) fell across much of Italy, replenishing irrigation reservoir levels depleted by long-term dryness. Localized very heavy rain (100-120mm) in northern and western Italy may have caused minor flooding. In the east, mostly dry weather continued to favor fall harvest but stressed early vegetative growth of winter crops. Much above-normal temperatures (4-8 degrees C above normal) covered northern and eastern crop areas, accelerating fall growth of winter crops and increasing sugar content of unharvested sugarbeets.



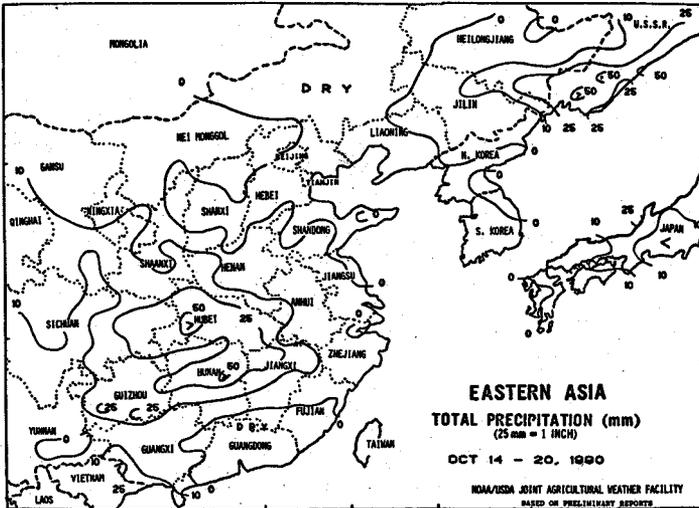
**NORTHWESTERN AFRICA** ... Fieldwork in preparation for winter grain planting usually begins in October, coinciding with the onset of the rainy season which reaches its peak during the winter months. The bulk of winter grains are usually planted from mid-November to mid-December. Widespread significant rain (14-36mm) over crop areas in Tunisia helped to condition soils, allowing some early season fieldwork. Dry weather covered Morocco and western Algeria where the rainy season has not yet begun. In September, below-normal precipitation covered most of the region except for a narrow band of above-normal precipitation which stretched eastward across southernmost crop areas in eastern Algeria and Tunisia.



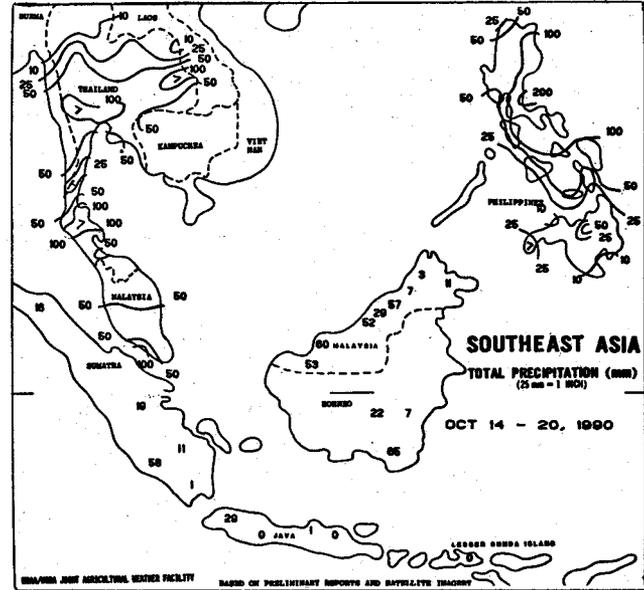
**SOUTH AFRICA** ... Following last week's beneficial rain, drier weather returned to primary grain regions of the Transvaal and Orange Free State. Rainfall at most locations was 10mm or less. Cooler weather (average temperatures 1-4 degrees C below normal) accompanied the dryness, with lowest minimum temperatures averaging 1 degree C across primary grain regions of the Orange Free State. Elsewhere, moderate rain (10-25mm or more) covered coastal areas of the southern Cape Province and most primary crop areas in the eastern Cape Province and Natal. Rainfall totaled 50-100mm or more over Natal's sugarcane areas.



**SOUTH ASIA** ... Mostly dry weather covered primary summer crop regions of central and eastern India, benefiting maturing crops. In the south, beneficial rain (10-25mm or more) over the southern tip, including chronically dry areas of southern Karnataka, improved conditions for fall planted crops. To the north, showers (10-33mm) lingered over northernmost Pakistan and India, increasing reservoir levels for winter wheat. Elsewhere, seasonably dry weather from Pakistan eastward to India's Bihar state benefited maturing cotton and rice and favored early wheat planting.

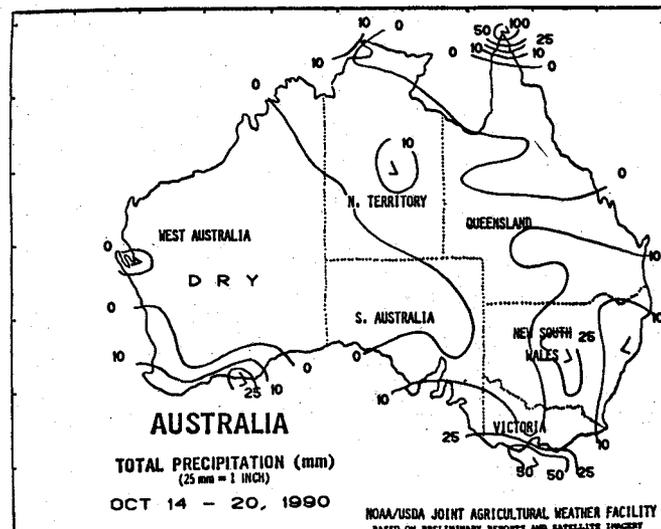


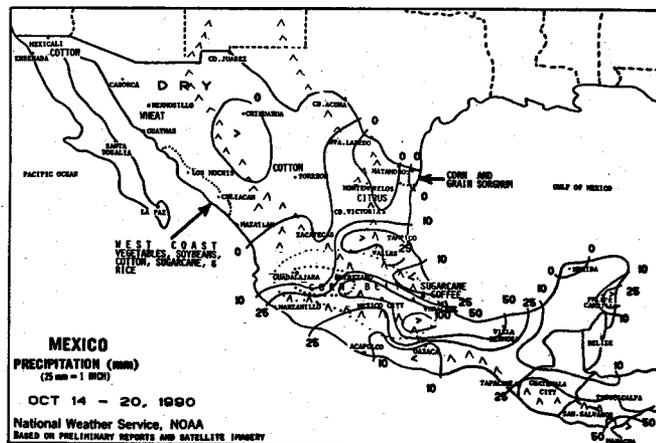
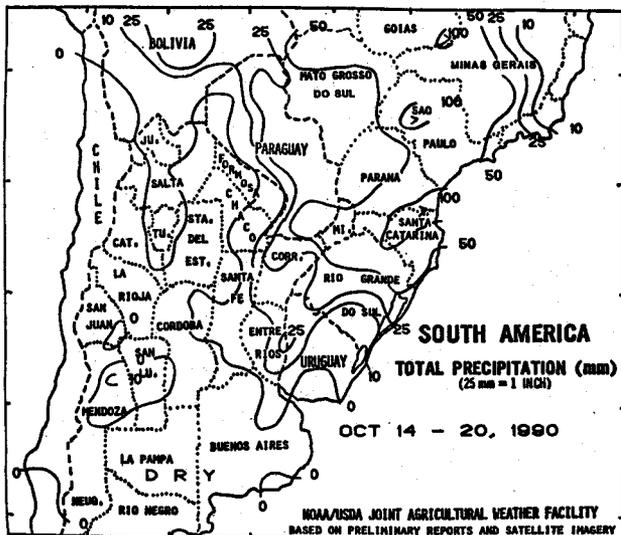
**EASTERN ASIA** ... Moderate to heavy rain (10-40mm, with isolated amounts greater than 40mm) fell over middle and upper sections of the Yangtze Valley, slowing harvest of fall crops but increasing soil moisture for winter crops, especially in Hubei, where drier-than-normal conditions had persisted since mid-August. Mostly dry and warm weather (mean temperatures 2-3 degrees C above normal) continued over western sections of the North China Plain and southern Manchuria, favoring late fall crop harvest. However, topsoils in sections of the North China Plain are becoming unfavorably dry for establishment of winter grains following 3-5 weeks of much below-normal rainfall. In Japan, heavy rain (25-70mm) delayed late fall harvest across most northern crop areas, while warmer and drier weather returned to the south.



**SOUTHEAST ASIA** ... Tropical Storm Lola hit the central coast of Vietnam on the 18th with sustained winds of about 35 knots. Combined rainfall from Lola and early week tropical showers totaled 100-300mm or more over coastal areas from south-central to northern Vietnam, causing flooding and some crop damage. Moderate to heavy showers (25-50mm or more) continued over primary rice areas of central and eastern Thailand with rainfall exceeding 100mm near Bangkok. Heavier showers (50-100mm or more) returned to peninsular Thailand. In the Philippines, heavy rain (50-100mm or more) covered the northern half of the islands, increasing reservoir levels but causing some flooding of fall planted crops, especially in southern Luzon where rainfall totaled 100-300mm or more.

**AUSTRALIA** ... Light to moderate rain (5-20mm, with isolated amounts greater than 20mm) fell across crop areas of Queensland, New South Wales, Victoria, and eastern South Australia, benefiting reproductive to filling winter grains, but delaying winter grains harvest in Queensland. The rain also increased preplanting soil moisture for summer crops in the east. In Western Australia, rain (5-25mm) covered most crop areas, favoring filling winter grains and continuing a wetter-than-normal pattern during the last 3 weeks. Mean temperatures were near normal to below normal in most crop areas.





**SOUTH AMERICA** ... In Argentina, dry weather prevailed over the primary corn growing areas of Buenos Aires, southern Cordoba, and southern Santa Fe, following last week's beneficial rain. While the dryness favored summer crop planting, the improved topsoil moisture conditions promoted wheat development and emergence of newly sown corn. Near- to slightly above-normal weekly temperatures also helped growth. Mostly light showers (less than 5mm) fell in northern cotton areas. In south-central Brazil, wetness persisted in the south and locally heavy rain spread into northern soybean and coffee areas. Weekly rainfall generally averaged 35-100mm, with isolated heavier amounts scattered throughout the major growing areas. Moisture is ample for crop growth, but wet field conditions delayed planting, especially in the southern corn and soybean state of Rio Grande do Sul.

**MEXICO** ... Mostly dry weather continued across northern portions, typical of this time of year as the summer wet season retreats to the south. Significant shower activity persisted across the Southern Plateau corn belt, where 25-50mm of weekly rainfall was common in the southern half. Heavier rain (50-118mm) fell in the Plateau's southeast, while variable amounts (2-40mm) were scattered across northern portions. Beneficial rain (10-65mm) helped immature corn in the southeast, but showers diminished over the Yucatan peninsula where rainfall has been trending below average.

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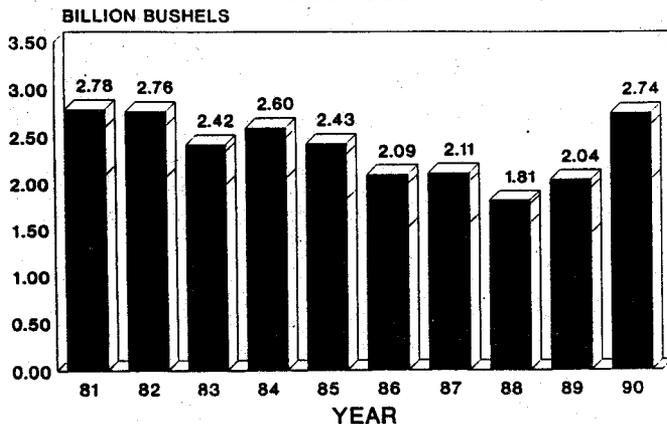
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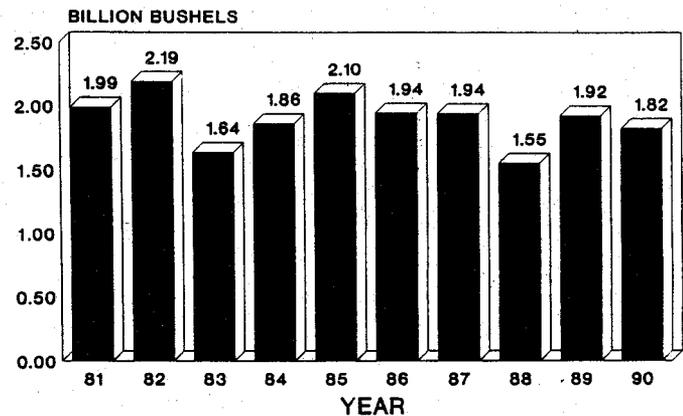
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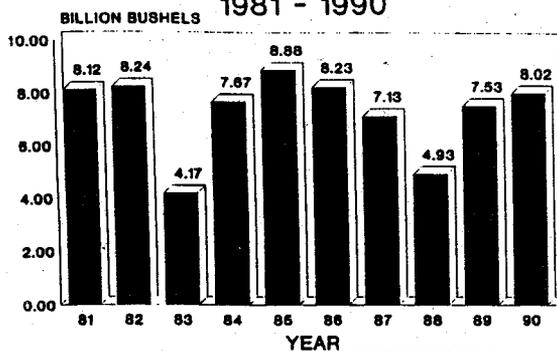
**U.S. ALL WHEAT PRODUCTION  
1981-1990**



**U.S. SOYBEAN PRODUCTION  
1981 - 1990**



**U.S. CORN PRODUCTION  
1981 - 1990**



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