

WEEKLY WEATHER AND CROP BULLETIN

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

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

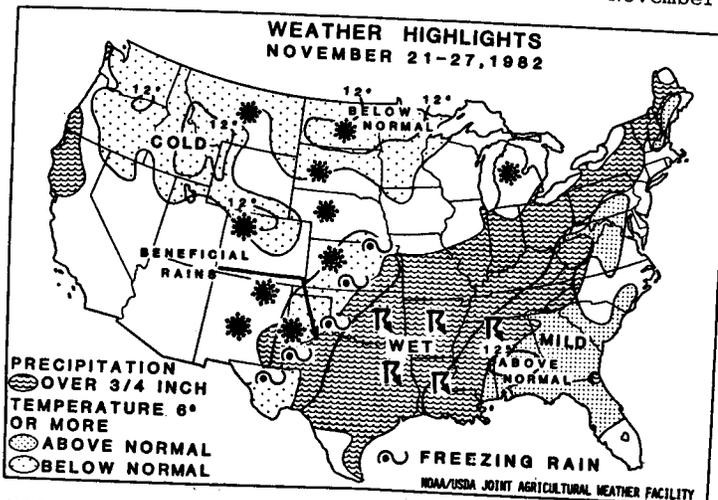
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Nov. 30, 1982

National Weather Summary

November 21 to 27



afternoon readings in the teens. Light snow fell from the central Rockies to the western Great Lakes. Precipitation continued across northern California and spread southward into the lower third of the State.

TUESDAY ... The front stalled from New England to the southern Plains, separating humid, mild conditions to the southeast and bitterly cold weather to the northwest. The heaviest rains fell from East Texas into Tennessee. Low pressure off the central Pacific coast brought light rains across most of California. Dangerous Hurricane Iwa, packing wind gusts to 110 mph, was approaching the western Hawaiian Islands. Winds at Honolulu gusted to 48 mph late in the afternoon, and waves were 8 feet higher than normal at the beaches.

WEDNESDAY ... The rejuvenated cold front pushed through the east coast area and very cold air settled over the central and southern Plains. Precipitation triggered by the front was not as widespread across the east as in previous days. However, some light amounts finally fell over the Texas High Plains and Oklahoma where soil moisture is critically short for winter wheat. For the first time in several days, temperatures warmed into the thirties in the northern Plains. Hurricane Iwa produced heavy rains and damaging winds over the western Hawaiian Islands, blowing over sugarcane, bananas, and many trees, buildings, and boats.

THURSDAY ... Precipitation fell from Texas to the Great Lakes region and in northeastern Florida. Heavy amounts of rain were concentrated along a line from south-central Texas to southwestern Missouri. Snow covered some of the mountains in New Mexico and reached over to the Texas High Plains during the early morning. Freezing weather covered the Northeast and reached into the South.

FRIDAY ... Moist air from a storm system in the Gulf of Mexico spread over the southern Plains and Rockies and then streamed eastward through the Ohio Valley. Early morning snow whitened

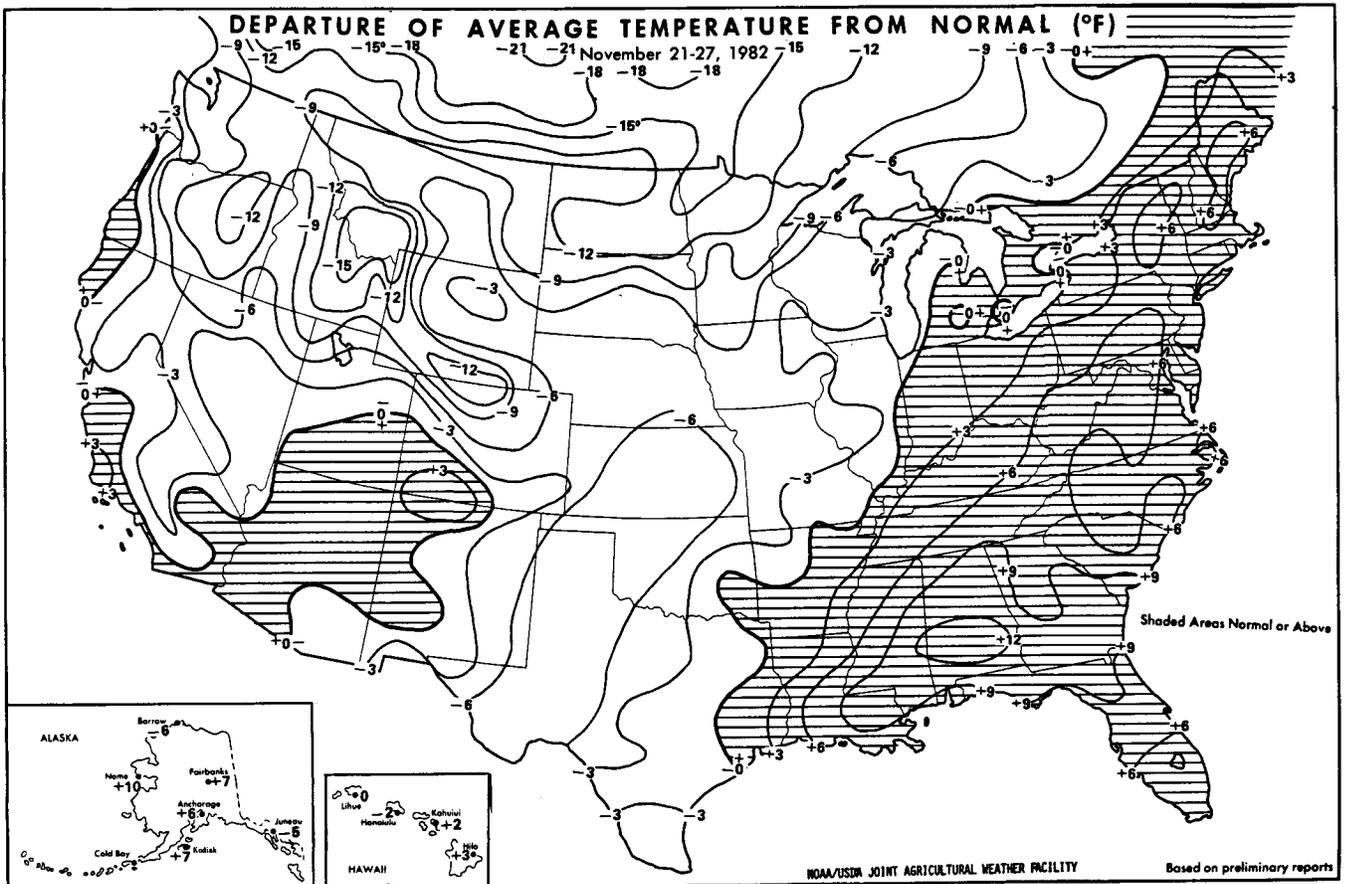
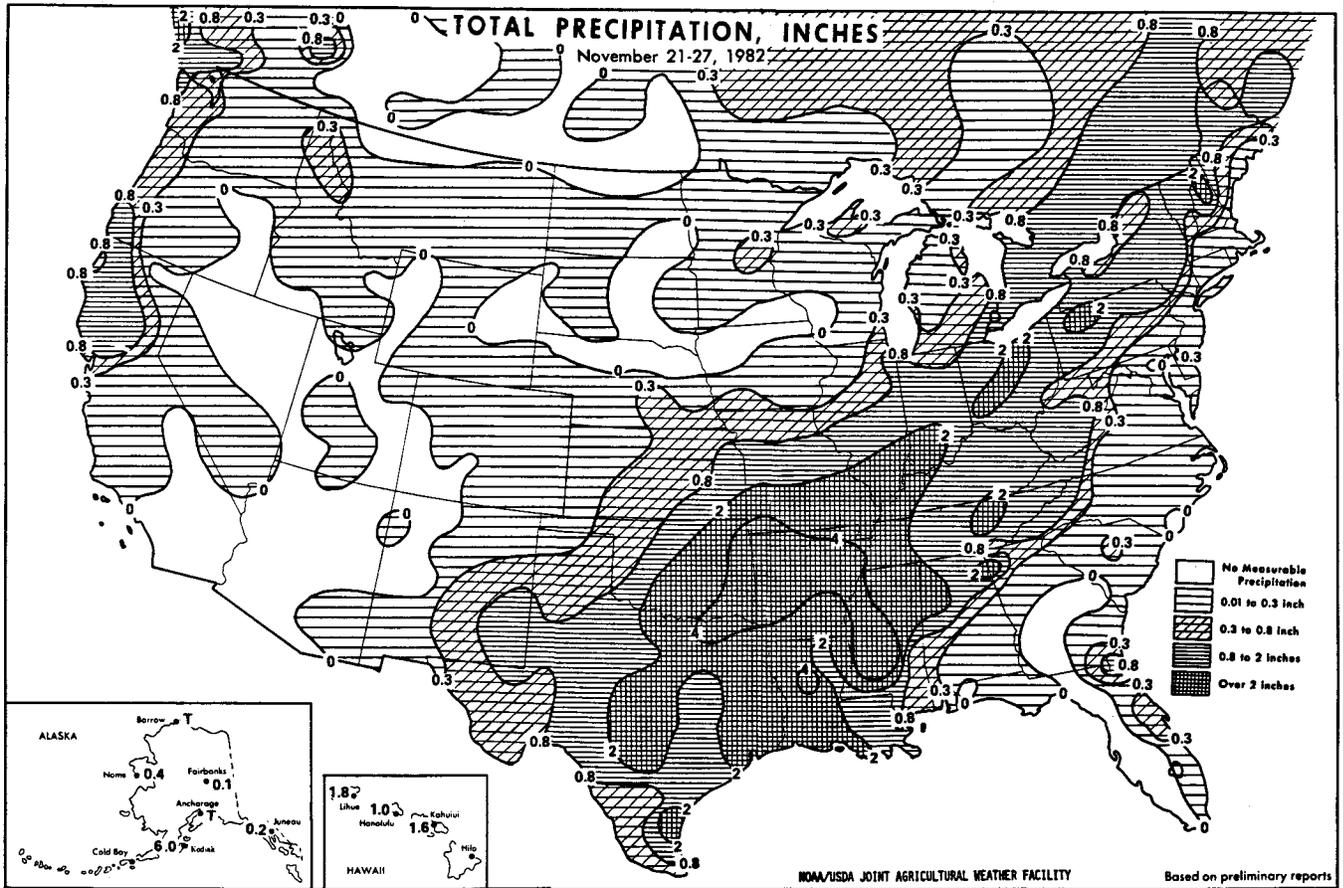
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HIGHLIGHTS ... Early in the week a slow-moving cold front edged through the eastern United States and triggered rainshowers along and ahead of the front and snow in the northern Plains. Severe weather developed in Oklahoma and Arkansas as the front passed. Later, a storm in the Gulf of Mexico caused precipitation from New Mexico to New England. Light to moderate precipitation fell in the very dry areas in West Texas and Oklahoma, while heavy rain fell in parts of the lower Mississippi Valley. Most of the precipitation was rain, but snow or freezing rain fell from New Mexico to southeastern Nebraska late in the week. Precipitation dampened the Pacific Northwest from central California to Idaho and westward to the coast both early in the week and late in the week. However, about four days of dry weather was unusual in Washington and Oregon for this time of year. Hurricane Iwa seriously damaged crops and property in the western Hawaiian Islands.

SUNDAY ... Wet, unseasonably warm weather covered most of the eastern third of the Nation ahead of an eastward-moving cold front from the Great Lakes to Texas. Afternoon temperatures ranged from the mid-eighties in South Texas to the fifties in Maine. Meanwhile, very cold air with light snow moved through the northern Plains. A low-pressure storm system brought precipitation to the Pacific Northwest, while most of the Southwest had sunny, pleasant weather.

MONDAY ... High winds, hail, heavy rain, and a few tornadoes, marked a band of severe weather stretching from northeastern Texas into Arkansas. The severe weather developed ahead of the slow-moving, rainy cold front from New England to the southern Plains. Winter weather continued over the northern Plains with morning lows near zero and



Weather Data for the Week Ending Nov. 27, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE AUG. 29	PCT. NORMAL SINCE AUG. 29	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPI-TATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL BIRMINGHAM	67	50	73	30	59	9	1.4	.4	.7	7.9	71	58.1	125	93	61	0	0	0	0	
AL MOBILE	71	57	77	40	64	8	1.4	.5	.4	9.2	64	65.4	111	88	64	0	1	2	1	
AL MONTGOMERY	74	53	79	36	64	11	.2	.8	.1	10.3	93	55.7	129	87	54	0	0	3	0	
AK ANCHORAGE	29	20	32	15	24	6	T	.2	T	10.0	169	16.9	124	94	75	0	7	0	0	
AK BARROW	-8	-14	1	-17	-11	-6	T	.1	T	1.3	59	4.6	92	80	67	0	7	0	0	
AK FAIRBANKS	11	-2	19	-20	4	7	T	.1	T	1.3	59	4.6	92	80	67	0	7	0	0	
AK JUNEAU	31	20	38	8	26	-5	.2	1.0	.2	14.9	136	12.1	115	84	61	0	7	3	0	
AK KODIAK	43	38	45	32	41	7	.2	1.0	.2	14.9	136	12.1	115	84	61	0	7	3	0	
AK NOME	29	15	32	8	22	10	6.0	4.8	1.8	20.4	61	41.5	85	96	77	0	7	1	0	
AZ PHOENIX	68	50	71	47	59	2	.4	.1	.2	8.3	141	56.9	113	96	80	0	2	7	0	
AZ PRESCOTT	56	31	59	28	43	0	0	.1	0	2.0	111	18.1	115	76	54	0	7	4	0	
AZ TUCSON	64	45	73	43	55	-1	0	.1	0	1.8	45	11.9	73	74	30	0	0	0	0	
AZ YUMA	71	52	74	48	62	1	.1	.1	.1	2.7	93	11.4	116	74	36	0	5	0	0	
AR FORT SMITH	52	38	67	27	45	-2	4.1	3.4	0	.2	18	3.0	125	50	27	0	0	2	0	
AR LITTLE ROCK	55	41	72	26	48	-1	5.5	4.6	1.7	9.7	83	41.8	109	92	63	0	1	4	3	
CA BAKERSFIELD	67	41	62	33	49	-4	.1	.2	1.7	13.0	110	53.6	129	89	71	0	2	5	5	
CA EUREKA	50	46	63	42	53	2	.7	.7	.1	2.2	220	6.7	143	98	68	0	0	1	0	
CA FRESNO	58	42	69	37	50	-1	.1	.7	.3	10.5	105	35.3	112	89	69	0	0	1	0	
CA LOS ANGELES	70	50	77	49	60	6	T	.3	T	4.3	215	12.9	159	98	67	0	0	4	0	
CA RED BLUFF	55	41	63	33	48	-3	1.0	.2	T	3.3	157	11.9	124	77	36	0	0	3	0	
CA SACRAMENTO	52	39	57	32	46	-4	.8	.3	.5	6.4	145	20.0	116	96	63	0	0	3	0	
CA SAN DIEGO	70	51	75	50	61	1	0	.4	0	1.9	191	24.4	166	99	80	0	1	4	1	
CA SAN FRANCISCO	57	45	60	39	51	-3	.7	0	.5	6.5	119	10.9	151	77	40	0	0	0	0	
CO DENVER	42	17	51	11	30	-7	.1	.1	.1	3.4	89	12.1	85	83	36	0	7	1	0	
CO GRAND JUNCTION	45	31	50	27	38	2	T	.1	T	4.0	129	8.0	104	86	47	0	4	0	0	
CO PUEBLO	47	18	58	13	33	-5	T	.1	T	2.1	84	14.8	130	94	41	0	7	1	0	
CT BRIDGEPORT	53	40	60	24	46	4	T	.9	T	4.3	41	40.2	117	81	54	0	2	1	0	
CT HARTFORD	51	34	63	15	43	5	T	1.0	T	8.3	67	46.2	123	85	49	0	4	1	0	
DC WASHINGTON	59	42	67	29	51	6	T	.7	T	4.8	48	32.4	92	79	49	0	1	1	0	
FL APALACHICOLA	73	57	78	50	65	6	T	.7	T	23.9	139	65.9	125	94	76	0	1	1	0	
FL DAYTONA BEACH	78	61	82	55	69	6	.4	0	.4	8.6	47	47.7	101	92	64	0	0	1	0	
FL JACKSONVILLE	77	56	80	51	67	8	1.7	1.3	1.5	15.4	88	49.6	97	100	67	0	0	2	1	
FL KEY WEST	79	72	80	71	76	2	0	.5	0	9.8	52	36.2	96	80	60	0	0	0	0	
FL MIAMI	81	68	82	65	75	4	T	.4	T	22.8	93	66.1	115	89	57	0	0	2	0	
FL ORLANDO	82	62	83	59	72	7	T	.3	T	8.3	53	50.6	104	97	55	0	0	1	0	
FL TALLAHASSEE	77	55	81	50	66	10	T	.7	T	9.9	68	54.4	97	94	62	0	0	1	0	
FL TAMPA	81	64	82	58	72	7	T	.4	0	14.3	113	54.5	118	100	56	0	0	1	0	
FL WEST PALM BEACH	81	69	83	63	75	6	T	.3	T	25.7	98	79.0	134	82	58	0	0	1	0	
GA ATLANTA	64	48	74	37	56	8	T	.8	T	11.2	107	49.0	114	93	62	0	0	2	0	
GA AUGUSTA	70	50	79	40	60	9	T	.6	T	7.5	83	35.6	92	87	50	0	0	2	0	
GA MACON	71	52	80	40	61	9	T	.7	T	6.8	74	40.8	105	96	60	0	0	0	0	
GA SAVANNAH	73	56	79	50	64	10	.1	.4	.1	5.1	41	48.5	102	87	55	0	0	1	0	
HI HILO	81	70	85	67	76	3	.7	2.8	.6	25.4	70	162.7	143	86	61	0	0	2	1	
HI HONOLULU	79	69	81	65	74	-2	1.0	.2	.6	8.3	154	32.0	174	91	67	0	0	1	0	
HI KAHULUI	82	71	86	69	76	2	1.6	1.0	1.2	4.9	129	28.0	189	80	58	0	0	3	1	
HI LIHUE	79	70	82	67	75	0	1.8	.4	1.0	18.1	147	70.3	196	93	69	0	0	5	2	
ID BOISE	38	20	43	16	29	-8	.1	.3	.1	4.0	143	11.5	112	85	54	0	7	1	0	
ID LEWISTON	38	24	47	17	31	-7	T	.3	T	2.7	75	11.6	102	93	58	0	7	1	0	
ID POCATELLO	33	6	40	-3	20	-13	.2	.1	.2	5.5	239	15.3	161	88	51	0	7	1	0	
IL CHICAGO	40	23	52	14	32	-4	1.2	.7	.7	9.5	106	36.2	122	91	57	0	7	1	0	
IL MOLINE	41	23	54	15	32	-3	.2	.2	.1	8.4	83	38.2	118	78	52	0	7	3	1	
IL PEORIA	41	26	56	16	34	-2	.6	.2	.2	7.2	73	39.0	120	87	60	0	7	3	0	
IL QUINCY	40	26	56	13	33	-5	.7	.3	.3	9.5	86	39.7	--	88	66	0	5	4	0	
IL ROCKFORD	40	22	52	13	31	-2	.1	.4	.1	8.8	81	39.3	116	87	53	0	7	2	0	
IL SPRINGFIELD	42	27	56	17	34	-4	1.0	.5	.4	10.5	103	34.8	110	95	72	0	5	5	0	
IN EVANSVILLE	50	38	65	24	44	3	2.1	1.3	.8	12.5	128	44.0	117	93	68	0	2	5	2	
IN FORT WAYNE	44	32	61	21	38	1	.9	.3	.5	7.9	83	38.0	116	94	69	0	4	3	0	
IN INDIANAPOLIS	45	32	60	15	38	0	1.3	.6	.7	5.8	60	35.5	103	94	71	0	4	4	1	
IN SOUTH BEND	43	30	55	21	36	1	.5	.2	.4	7.2	68	36.2	111	92	61	0	3	4	0	
IA DES MOINES	39	22	50	13	30	-3	.2	.1	.1	10.4	135	40.8	143	78	48	0	3	4	0	
IA SIOUX CITY	37	17	49	9	27	-5	T	.2	T	9.9	160	28.0	113	86	52	0	7	2	0	
IA WATERLOO	39	19	45	12	29	-1	T	.3	T	9.2	98	31.3	100	86	53	0	7	0	0	
KS CONCORDIA	38	20	57	9	29	-8	.4	.3	.4	3.9	56	35.4	136	88	54	0	6	3	0	
KS DODGE CITY	41	25	55	12	33	-6	.4	.3	.4	2.5	51	18.4	96	73	39	0	6	1	0	
KS GOODLAND	43	18	54	8	30	-5	.2	.1	.1	4.6	121	25.0	157	82	38	0	7	3	0	
KS TOPEKA	41	26	61	13	33	-6	1.0	.7	.6	4.6	52	34.6	107	93	64	0	5	5	1	
KS WICHITA	42	27	63	13	34	-7	.7	.5	.4	3.1	34	25.5	89	94	65	0	5	4	0	
KY BOWLING GREEN	55	39	69	22	47	2	1.2	.2	.6	11.7	116	42.9	102	98	64	0	3	4	1	
KY LEXINGTON	53	39	66	19	46	5	1.2	.3	.4	8.4	97	33.7	86	96	68	0	2	5	0	
KY LOUISVILLE	52	38	67	22	45	3	1.7	.9	.7	10.3	110	39.7	103	84	64	0	2	5	2	
LA ALEXANDRIA	69	54	80	40	62	7	2.9	1.8	2.7	18.0	135	50.3	--	81	60	0	0	2	1	
LA BATON ROUGE	74	57	81	41	65	9	1.0	0	1.0	7.1	62	40.7	85	92	58	0	0	2	2	
LA LAKE CHARLES	71	55	80	41	63	5	3.8	2.8	2.7	19.9	153	48.7	101	93	69	0	0	5	2	
LA NEW ORLEANS	73	59	79	47	66	8	1.5	.5	1.4	14.5	108	54.8	109	92	68	0	0	2	1	

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending Nov. 27, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Aug. 29	PCT. NORMAL SINCE Aug. 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
ME SHREVEPORT	61	48	78	33	54	1	2.2	1.3	1.4	12.3	115	34.6	89	93	66	0	0	4	1	
ME CARIBOU	37	25	49	6	31	4	.5	.3	.2	9.6	79	33.5	102	89	73	0	3	4	0	
ME PORTLAND	47	33	56	11	40	5	.3	.9	.1	7.3	60	38.2	108	90	60	0	4	4	0	
MD BALTIMORE	56	39	63	23	48	5	T	T	T	7.9	77	32.6	91	87	50	0	2	0	0	
MD SALISBURY	59	36	70	25	48	2	.2	.5	.2	8.4	68	36.6	91	97	52	0	3	2	0	
MA BOSTON	52	40	60	27	46	4	T	1.1	T	7.8	63	42.8	114	82	52	0	2	1	0	
MA CHATHAM	51	39	58	26	45	1	.2	1	.1	16.8	1	45.2	1	87	71	0	2	2	0	
MI ALPENA	38	21	58	12	30	-1	.4	.2	.2	7.3	82	23.4	94	90	55	0	7	2	0	
MI DETROIT	43	30	59	18	37	0	1.0	.5	.5	8.6	108	30.2	106	88	57	0	4	4	0	
MI FLINT	43	29	61	17	36	2	.5	.1	.4	8.0	98	25.3	94	91	58	0	4	3	0	
MI GRAND RAPIDS	42	28	55	21	35	0	.1	.6	T	8.3	84	29.7	103	81	53	0	6	3	0	
MI HOUGHTON LAKE	38	24	50	16	31	0	.2	.4	.1	7.8	80	27.9	109	90	60	0	6	4	0	
MI LANSING	42	27	61	18	34	0	.4	.1	.4	7.9	95	24.2	88	95	64	0	5	2	0	
MI MARQUETTE	31	15	44	-1	23	-2	.1	.7	T	12.2	104	34.3	106	90	55	0	7	3	0	
MI MUSKOGON	41	28	52	23	35	-1	.4	.3	.3	9.4	92	31.2	111	87	61	0	7	4	0	
MI SAULT STE. MARIE	33	18	46	8	26	-3	.1	.6	.1	12.7	111	32.5	115	90	59	0	7	3	0	
MN ALEXANDRIA	24	7	34	2	16	-8	.1	.2	T	7.4	123	26.5	113	80	44	0	7	2	0	
MN DULUTH	21	4	28	-4	13	-11	.2	.2	.2	12.3	146	32.6	117	79	50	0	7	1	0	
MN INT'L FALLS	17	-5	29	-10	6	-13	.1	.2	.1	9.1	120	24.5	100	85	55	0	7	1	0	
MN MINNEAPOLIS	31	14	36	5	23	-5	.1	.2	.1	9.9	141	23.8	98	82	50	0	7	1	0	
MN ROCHESTER	34	17	40	9	26	-2	T	.2	T	11.0	157	33.7	129	79	49	0	7	0	0	
MS GREENWOOD	65	49	75	35	57	7	4.6	3.4	3.3	15.2	135	50.4	115	89	65	0	0	3	3	
MS JACKSON	70	51	80	33	61	8	5.1	4.1	4.5	15.6	156	58.3	138	92	60	0	0	3	2	
MS MERIDIAN	73	55	80	39	64	12	.9	.1	.6	9.0	93	50.5	115	87	58	0	0	4	1	
MO CAPE GIRARDEAU	49	37	64	23	43	0	3.0	2.1	1.5	8.3	68	44.7	113	98	84	0	3	5	3	
MO COLUMBIA	43	29	56	15	36	-4	1.1	.8	.5	10.0	85	41.2	120	97	68	0	5	5	0	
MO KANSAS CITY	40	25	57	14	33	-6	1.1	.8	.7	6.9	62	43.2	125	94	62	0	5	5	1	
MO SAINT LOUIS	45	31	56	19	38	-3	1.9	1.4	.8	11.5	125	47.0	145	98	72	0	3	6	2	
MO SPRINGFIELD	46	34	58	17	40	-2	3.4	2.9	1.6	8.6	74	38.9	108	89	68	0	3	5	3	
MT BILLINGS	37	18	57	9	27	-5	T	.1	T	3.0	91	17.1	132	76	44	0	7	1	0	
MT GLASGOW	25	7	40	-5	16	-9	T	0	T	2.2	100	11.1	112	77	48	0	7	1	0	
MT GREAT FALLS	35	15	52	-6	25	-6	.1	.1	.1	3.9	130	16.8	121	65	38	0	7	2	0	
MT HAVRE	29	4	50	-10	17	-9	T	.1	T	1.8	62	14.4	130	92	50	0	7	0	0	
MT HELENA	29	10	35	5	20	-9	T	.1	T	3.6	144	12.9	126	82	52	0	7	1	0	
MT KALISPELL	25	17	30	7	21	-7	T	.3	T	3.7	90	17.6	128	80	64	0	7	0	0	
MT MILES CITY	26	9	39	2	17	-11	.1	0	.1	4.0	143	14.6	115	87	59	0	7	1	0	
MT MISSOULA	28	12	34	5	20	-10	.1	.2	T	3.1	91	14.3	125	97	66	0	7	2	0	
NE GRAND ISLAND	39	18	57	10	28	-6	.3	.2	.3	5.9	116	34.2	155	85	44	0	7	2	0	
NE LINCOLN	39	18	58	10	29	-6	.2	0	.2	5.3	79	36.2	139	73	43	0	7	1	0	
NE NORFOLK	39	19	52	10	29	-3	T	.1	T	8.9	168	28.9	126	84	46	0	7	0	0	
NE NORTH PLATTE	42	14	54	7	28	-5	.1	0	.1	4.6	107	18.9	101	90	43	0	7	2	0	
NE OMAHA	38	21	54	12	29	-4	.1	.1	.1	7.7	107	32.3	116	85	60	0	6	1	0	
NE SCOTTSBLUFF	42	13	49	-2	28	-5	.1	.1	.1	3.5	140	21.2	158	79	34	0	7	1	0	
NE VALENTINE	41	14	52	3	28	-3	T	.1	T	4.5	122	22.9	135	74	37	0	7	1	0	
NV ELY	42	16	50	12	29	-2	T	.2	T	6.5	361	14.5	191	87	48	0	7	0	0	
NV LAS VEGAS	58	39	62	36	49	-1	T	.1	T	1.0	10	2.7	71	65	33	0	0	1	0	
NV RENO	40	26	52	16	33	-5	.3	.1	.3	5.0	357	9.3	158	95	61	0	7	1	0	
NV WINNEMUCCA	42	13	44	7	27	-7	0	.3	0	2.6	130	7.3	99	82	39	0	7	0	0	
NH CONCORD	48	32	58	10	40	6	.4	.6	.2	5.9	55	33.4	104	87	57	0	4	4	0	
NJ ATLANTIC CITY	56	36	65	18	46	3	T	1.0	T	4.7	39	28.1	70	94	57	0	4	1	0	
NM ALBUQUERQUE	47	30	60	27	39	-3	.1	0	.1	2.1	91	6.5	88	87	45	0	6	2	0	
NM CLOVIS	45	29	66	21	37	-6	.8	.7	.5	2.9	56	15.1	91	55	0	5	3	0		
NM ROSWELL	47	32	70	25	39	-4	.9	.8	.7	3.0	71	7.4	63	73	47	0	4	3	1	
NY ALBANY	47	32	60	13	40	4	1.0	.3	.6	6.0	61	30.4	104	94	62	0	4	5	1	
NY BINGHAMTON	46	33	55	16	39	5	1.2	.5	.6	6.6	63	32.9	99	91	67	0	4	5	1	
NY BUFFALO	44	34	58	22	39	2	1.2	.3	.5	11.8	105	37.4	118	93	61	0	4	4	0	
NY NEW YORK	53	40	60	28	46	2	T	.9	T	4.4	40	31.6	87	81	56	0	3	1	0	
NY ROCHESTER	45	33	60	18	39	2	.7	.1	.3	9.1	101	29.3	103	87	61	0	4	5	0	
NY SYRACUSE	48	34	61	19	41	4	1.6	.9	.9	9.0	86	32.1	99	93	69	0	4	5	1	
NC ASHEVILLE	60	42	67	24	51	7	.9	.2	.7	8.8	77	46.1	114	99	70	0	1	3	1	
NC CHARLOTTE	61	45	69	32	53	5	T	.7	T	7.2	69	37.0	99	92	62	0	1	1	0	
NC GREENSBORO	59	40	70	26	50	4	.1	.6	.1	7.7	73	41.0	111	92	57	0	1	1	0	
NC HATTERAS	64	51	72	46	58	4	.1	.9	.1	10.8	62	52.1	105	94	67	0	0	1	0	
NC NEW BERN	68	45	75	38	56	5	.2	.6	.2	10.3	72	41.2	81	96	57	0	0	1	0	
NC RALEIGH	63	42	74	28	52	5	T	.7	T	7.3	67	39.8	104	94	54	0	1	1	0	
NC WILMINGTON	70	46	77	37	58	5	T	.7	T	11.0	76	50.9	102	88	49	0	0	0	0	
ND BISMARCK	21	-2	35	-7	10	-15	.1	.1	.1	5.7	173	17.7	116	96	66	0	7	1	0	
ND FARGO	18	0	31	-7	9	-15	T	.1	T	9.1	207	20.0	107	85	58	0	7	0	0	
ND GRAND FORKS	17	-5	31	-9	6	-15	.1	.1	.1	7.0	146	20.5	113	76	53	0	7	1	0	
ND WILLISTON	24	1	45	-5	12	-11	T	.1	T	4.7	168	15.7	115	86	53	0	7	1	0	
OH AKRON-CANTON	46	35	60	22	40	3	1.6	1.0	.4	7.8	87	30.3	95	87	65	0	3	5	0	
OH CINCINNATI	50	37	64	20	44	4	1.8	1.1	.9	6.9	80	40.1	114	86	66	0	2	5	2	
OH CLEVELAND	46	35	61	23	41	3	2.0	1.4	.8	10.2	113	32.5	104	81	57	0	3	5	2	
OH COLUMBUS	47	34	62	20	41	2	2.2	1.6	1.2	9.4	118	34.4	102	92	68	0	4	5	1	

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

National Weather Summary (continued from front cover)

most of New Mexico and parts of the Texas High Plains, and rain was moderate to heavy in other parts of Texas, Oklahoma, Arkansas, and Louisiana. Most of the dry areas in Texas and Oklahoma received moderate rain, but western Oklahoma had only light amounts. The rain, or snow, spread

northward and hit the East Coast States from the Carolinas to New England.

SATURDAY ... The precipitation tapered off over Texas but spread northward into the much colder air over Kansas and southeastern Nebraska. The

Weather Data for the Week Ending Nov. 27, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Aug. 29	PCT. NORMAL SINCE Aug. 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	45	32	60	18	39	1	1.9	1.2	1.2	6.4	81	38.4	121	93	71	0	4	5	1
TOLEDO	43	30	59	21	37	1	.8	.3	.4	9.3	118	27.3	96	95	70	0	4	4	1
YOUNGSTOWN	47	35	60	22	41	4	1.5	.8	.5	6.8	67	29.9	87	88	65	0	3	5	0
OK OKLAHOMA CITY	50	32	78	20	41	-5	2.4	2.1	1.8	6.7	73	34.2	118	91	61	0	4	4	0
TULSA	49	35	66	22	42	-4	3.8	3.4	1.6	8.8	80	31.9	94	91	67	0	2	6	3
OR ASTORIA	50	38	57	32	44	-1	.7	1.7	.4	18.6	89	59.9	113	72	49	0	1	3	0
BURNS	33	8	42	2	21	-12	.1	.3	T	3.3	122	10.0	103	--	--	0	7	3	0
MEDFORD	51	32	58	27	41	0	.1	.7	.1	3.8	63	12.8	78	97	63	0	3	2	0
PENDLETON	30	25	40	23	27	-12	T	.3	T	4.0	114	10.5	101	90	66	0	7	2	0
PORTLAND	44	33	48	24	38	-5	.3	1.1	.3	11.2	100	33.9	115	79	51	0	4	1	0
SALEM	46	28	54	23	37	-7	.5	1.1	.4	8.3	67	29.7	90	89	56	0	6	2	0
PA ALLENTOWN	52	36	61	20	44	6	.1	.9	T	5.5	50	41.0	108	85	56	0	4	2	0
ERIE	45	35	60	24	40	4	1.4	.5	.8	10.9	91	38.0	112	78	57	0	4	5	1
HARRISBURG	53	40	60	27	47	6	.3	.5	.2	7.2	76	37.5	103	89	61	0	2	2	0
PHILADELPHIA	56	38	66	26	47	4	.1	.7	.1	7.2	70	37.4	107	86	46	0	3	1	0
PITTSBURGH	47	35	61	20	41	3	.9	.3	.3	5.7	64	28.6	88	84	60	0	4	5	0
SCRANTON	49	36	58	19	42	5	.9	.2	.7	5.2	54	33.7	108	90	70	0	4	1	0
RI PROVIDENCE	52	39	63	25	45	5	.1	1.1	.1	10.5	85	46.7	127	84	54	0	2	1	0
SC CHARLESTON	72	54	79	45	63	9	T	.5	T	7.3	58	42.5	89	92	56	0	0	2	0
COLUMBIA	69	47	78	38	58	7	.1	.5	.1	6.6	60	45.8	109	92	49	0	0	1	0
FLORENCE	68	47	77	38	57	6	T	.5	T	5.5	54	36.1	91	95	55	0	0	2	0
GREENVILLE	62	48	70	35	55	7	.1	.7	T	6.8	57	49.1	116	88	55	0	0	2	0
SD ABERDEEN	26	3	41	-2	15	-11	T	.1	T	--	--	--	84	54	0	0	4	0	0
HURON	33	11	44	3	22	-6	.1	.1	.1	8.6	172	24.7	134	85	48	0	7	0	0
RAPID CITY	38	14	58	6	26	-6	T	0	T	6.7	223	25.6	157	84	48	0	7	1	0
SIoux FALLS	33	14	41	9	24	-5	.1	.1	.1	15.7	242	30.9	130	93	56	0	7	1	0
TN CHATTANOOGA	61	48	70	34	55	9	.6	.4	.4	8.1	69	47.1	104	90	64	0	0	4	0
KNOXVILLE	61	46	69	32	54	8	1.2	.3	.6	9.6	94	48.9	120	96	72	0	1	5	1
MEMPHIS	60	46	73	31	53	5	3.9	2.9	2.1	13.6	127	55.1	128	92	68	0	1	4	2
TX ABILENE	53	38	81	29	46	-5	1.7	1.5	.7	8.8	91	42.4	107	95	69	0	2	5	1
AMARILLO	46	28	73	19	37	-6	.6	.5	1.0	3.6	47	20.1	90	85	54	0	2	3	2
AUSTIN	59	47	81	36	53	-3	2.0	1.5	.4	2.8	54	17.7	95	83	46	0	5	3	0
BEAUMONT	70	54	82	44	62	4	2.7	1.7	1.3	8.4	80	24.6	84	91	63	0	0	6	1
BROWNSVILLE	69	55	87	42	62	-4	2.7	1.7	2.0	11.1	72	52.4	106	94	73	0	0	5	1
CORPUS CHRISTI	66	53	85	44	60	-3	2.6	2.2	2.1	6.7	60	21.9	84	91	67	0	0	3	1
DEL RIO	61	45	80	33	53	-4	1.3	1.2	.8	2.7	39	10.9	68	96	59	0	0	3	1
EL PASO	57	38	72	31	47	-1	.2	.1	.2	5.5	212	8.4	115	73	43	0	2	3	0
FORT WORTH	59	42	82	32	50	-3	2.1	1.7	1.8	8.2	88	38.0	131	86	52	0	1	3	1
GALVESTON	68	56	77	45	62	1	3.9	3.1	1.5	8.9	66	27.6	74	99	79	0	0	5	3
HOUSTON	68	53	82	44	60	2	2.7	1.7	1.9	15.7	109	37.2	87	94	65	0	0	4	1
LUBBOCK	49	32	74	23	40	-6	.8	.7	.6	3.0	48	19.2	108	74	47	0	4	3	1
MIDLAND	53	35	78	27	44	-7	.6	.5	.4	3.1	74	13.3	105	87	52	0	2	4	0
SAN ANGELO	54	37	82	29	46	-7	1.1	.9	.6	2.6	37	17.4	104	94	58	0	3	3	1
SAN ANTONIO	60	47	81	37	54	-3	2.7	2.4	1.9	8.2	84	20.6	82	90	63	0	0	5	1
VICTORIA	65	53	83	43	59	-2	.8	.3	.7	13.9	109	31.7	100	93	70	0	0	3	1
WACO	60	46	84	36	53	-2	1.8	1.3	1.6	5.2	57	27.0	96	93	64	0	0	5	1
WICHITA FALLS	52	35	82	27	43	-6	2.5	2.2	1.4	6.8	79	37.2	149	93	58	0	3	4	2
UT BLANDING	44	27	52	25	36	1	0	.2	0	4.8	126	14.1	127	90	61	0	7	0	0
CEDAR CITY	46	25	54	21	36	0	T	.2	T	4.5	150	14.6	160	78	44	0	7	0	0
SALT LAKE CITY	42	22	47	18	32	-4	T	.3	T	9.5	250	20.5	155	83	45	0	7	0	0
VT BURLINGTON	47	31	58	11	39	6	.8	.2	.4	7.6	76	30.3	101	83	56	0	4	6	0
VA NORFOLK	60	44	71	37	52	3	.2	.5	1.1	10.8	91	44.4	110	91	65	0	0	2	0
RICHMOND	63	40	71	28	52	5	.1	.7	.1	7.6	67	42.6	109	96	53	0	2	2	0
ROANOKE	60	38	69	24	49	5	.2	.4	.1	9.2	86	40.9	117	93	57	0	3	4	0
WA COLVILLE	30	16	37	7	23	-8	.1	.4	.1	4.3	93	15.9	113	92	80	0	7	1	0
QUILLAYUTE	45	32	51	22	39	-4	1.6	1.7	.7	28.5	85	94.6	111	92	62	0	5	4	2
SEATTLE-TACOMA	47	34	50	30	40	-3	.4	1.1	.3	9.8	78	31.3	100	85	47	0	4	2	0
SPOKANE	27	12	36	4	20	-13	.3	.3	.3	4.4	92	13.8	95	98	84	0	7	2	0
YAKIMA	36	23	43	13	29	-6	T	.2	T	3.4	170	8.6	134	79	57	0	7	1	0
WV BECKLEY	53	36	63	18	45	6	1.0	.3	.5	7.6	75	39.5	103	94	63	0	4	6	1
CHARLESTON	57	39	69	21	48	5	1.6	.9	.7	8.6	89	39.7	108	93	61	0	3	6	1
HUNTINGTON	54	41	66	22	48	5	1.2	.5	.4	8.2	95	39.3	112	85	58	0	3	6	0
PARKERSBURG	52	40	67	23	46	5	.8	.1	.3	7.1	81	33.4	88	98	69	0	4	5	0
WI GREEN BAY	34	18	43	5	26	-4	.1	.3	.1	7.3	92	26.1	106	83	57	0	7	2	0
LA CROSSE	38	16	47	9	27	-3	T	.3	T	8.0	95	22.3	80	78	45	0	7	0	0
MADISON	37	18	43	9	27	-4	T	.4	T	7.9	88	27.6	98	91	52	0	7	1	0
MILWAUKEE	40	24	52	16	32	-1	.3	.2	.2	8.7	105	32.5	121	84	54	0	7	3	0
WAUSAU	34	17	45	8	25	-1	T	.4	T	12.6	129	36.8	123	87	52	0	7	3	0
WY CASPER	38	16	49	6	27	-4	T	.1	T	5.1	189	16.8	162	75	33	0	7	0	0
CHEYENNE	38	12	43	-2	25	-8	.2	0	.2	4.3	139	18.5	135	90	46	0	7	2	0
LANDER	33	13	40	6	23	-5	T	.2	T	4.5	118	11.6	90	78	37	0	7	1	0
SHERIDAN	39	11	55	4	25	-5	.1	.2	.1	3.5	79	13.4	89	82	42	0	7	1	0
PR SAN JUAN	86	74	88	72	80	2	.4	.9	.2	8.3	41	38.6	73	84	64	0	0	5	0

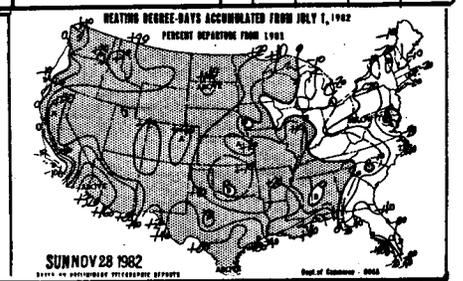
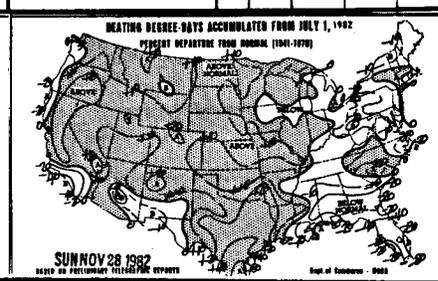
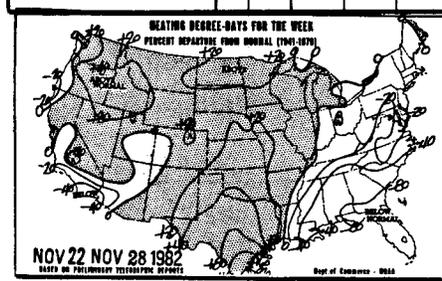
BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

precipitation continued eastward through the lower Great Lakes States, the Ohio Valley, and the East Coast States from the Carolinas to Maryland. Heavy rain and some severe weather plagued the lower Mississippi Valley as the Gulf storm moved north-

ward and eastward. Rain changed to freezing rain in Kansas, western Oklahoma, and southeastern Nebraska and then to snow before ending late in the day. A storm off the Pacific Coast brought rain, or snow in the mountains, from the coast to a line from central California to Idaho.

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING NOV. 28, 1982.
BASED ON 1941-70 NORMALS. +ACCUMULATION FROM JULY 1, 1982

Table with 12 columns: STATES AND STATIONS, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION +, STATES AND STATIONS, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION +, STATES AND STATIONS, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION +. Rows list various states and stations with their respective heating degree day values.



National Agricultural Summary

November 22-28

HIGHLIGHTS...Much-needed rain fell on winter wheat areas in the central and southern Plains. Wetness continued to hamper fieldwork in northern areas. Wet weather again slowed California's vegetable harvest. Hurricane Iwa struck parts of the Hawaiian chain and caused extensive damage. Soil moisture supplies were adequate to surplus in much of the West North Central region and in the Delta area. Short to mostly adequate supplies were reported elsewhere. Fieldwork was generally limited to less than 5 days. In the Delta and most of the Southeast, less than 3 days were suitable due to wet conditions. Corn harvest slowly moved to 92% completion, 4 points behind average. Combining continued to lag by a considerable amount in the western and northern Corn Belt. Soybean harvest was 95% finished, 1 point ahead of average. Combining of double-cropped beans picked up. Cotton was 71% picked, 4 points behind average. Harvest resumed in the Southwest after being delayed by rains. Winter wheat had emerged on 90% of the acreage. Conditions improved on the central and southern Plains as much-needed moisture fell. Pastures rated good in the South. Supplemental feeding increased as the pasture season ended in northern areas.

SMALL GRAINS...Winter wheat seeding in the 15 major producing States was virtually complete, except in California, where the crop is normally planted later. Wheat had emerged on 90% of the acreage, only slightly behind usual. The only States with significant acreage yet to emerge were California, Oklahoma, and Texas. Dry weather on the southern Plains slowed planting and delayed emergence. Montana's winter wheat was in good condition with only light wind damage reported. General showers from Kansas southward into Texas improved the condition of stands, but more rain was needed for good growth and development. Kansas winter wheat remained in good to excellent condition in all areas except the southwestern and south-central regions, where dryness resulted in poor to fair conditions. Condition of the Texas crop ranged from poor to good. Showers improved prospects, but some areas were still dry. Some fields which failed to germinate were replanted following the rainfall. Some frost damage and wind burn was reported in portions of central Texas and on the Low Plains.

CORN...Harvest in the 17 major producing States slowly moved to 92% complete, 4 points behind last year and average. Harvest was lagging in 8 of the 17 States. Progress was as much as 22 points behind average in South Dakota and Wisconsin and 10 points behind in Minnesota and Nebraska. During the week, farmers in Nebraska were able to harvest 15% of their acreage, while those in South Dakota harvested 12%. Even though soil moisture was surplus, frozen fields allowed limited harvesting to continue in northern areas. Grain moisture was high and required mechanical drying.

SOYBEANS...Harvest was 95% completed in the 18 major producing States, compared with 96% a year

ago and the average of 94%. Combining lagged in only 5 of the 18 States. Farmers in South Carolina harvested 20% of their acreage during the week, while those in North Carolina harvested 12%. Harvesting of double-cropped soybeans reached full swing.

COTTON...In the 14 major producing States, 71% of the acreage had been harvested, compared with 70% in 1981 and the average of 75%. Progress was behind normal in half of the States. Rain slowed picking in Oklahoma where progress fell 30 points behind average. Harvest was underway in Arizona after being delayed by rain. Heavy dew and fog contributed to boll rot. Freezing temperatures in Texas helped defoliate cotton. Some stands had not fully matured. Stripping operations made good progress early in the week, but wetness delayed activities at midweek.

OTHER CROPS...Sorghum harvest neared completion. In South Dakota, 91% of the acreage was harvested. Normally, growers would have finished by now.

Tobacco growers continued stripping and marketing crops. Virginia producers graded and marketed burley tobacco and stripped sun-cured tobacco. Stripping and marketing continued active in Tennessee. Growers in South Carolina began preparing plant beds.

FRUITS AND NUTS...Florida's citrus groves were in very good condition. Many growers irrigated to replenish soil moisture. Harvest was slow due to the holiday. Many processing plants opened this week. Citrus groves in Arizona were in good condition. The Navel orange harvest continued. Tangerines, tangelos, lemons, and grapefruit were picked on a limited bases. The Desert sweet orange harvest was underway. Citrus harvest was active in the Lower Rio Grande Valley of Texas with gift-fruit volume increasing. California's Desert lemon, date, and grapefruit harvests continued. Slow-maturing Navel oranges were still a problem to growers and packers in the San Joaquin Valley. Lemon picking started in the central district. Seasonal orchard work continued as weather permitted.

VEGETABLES...Mild weather prevailed in Florida's vegetable growing areas. Irrigation was active in some regions. Total shipments decreased 23% from the previous week. Volume declined for nearly all crops except cabbage and cauliflower which registered increases. Harvesting in Arizona hit full swing after nearly 2 weeks of wet conditions. Lettuce harvest was at peak. Vegetable harvests remained active in Texas, although dryness slowed fieldwork in some areas. Wet weather continued to slow harvesting in California.

PASTURE AND LIVESTOCK...Pastures showed fair to good condition in the South. Supplemental feeding was high in northern areas as the weather became colder. Winter wheat pastures in the central and southern Plains received much-needed rainfall.

CROP PROGRESS

FOR WEEK ENDING NOV 28

WINTER WHEAT % EMERGED				SOYBEANS % HARVESTED				CORN % HARVESTED				COTTON % HARVESTED				
	1982	1981	AVG.		1982	1981	AVG.		1982	1981	AVG.		1982	1981	AVG.	
CALIF	45	35	NA	ALA	91	93	87	COLO	95	90	98	ALA	99	99	94	
COLO	99	97	99	ARK	95	96	90	GA	100	99	98	ARIZ	65	85	78	
IDAHO	100	100	100	GA	81	84	78	ILL	98	98	97	ARK	95	95	94	
ILL	98	93	98	ILL	100	100	100	IND	98	90	95	CALIF	90	92	91	
IND	100	95	95	IND	100	100	100	IOWA	93	100	97	GA	89	93	89	
KANS	98	99	NA	IOWA	100	100	100	KANS	98	95	98	LA	95	96	97	
MO	95	91	87	KANS	99	85	97	KY	98	98	98	MISS	94	99	96	
MONT	100	100	100	KY	96	96	96	MICH	98	95	90	MO	100	90	94	
NEBR	100	100	100	LA	93	95	97	MINN	84	99	94	N MEX	75	79	63	
OHIO	100	95	100	MICH	100	97	96	MO	92	92	92	N C	86	94	90	
OKLA	70	95	90	MINN	97	99	99	NEBR	85	90	95	OKLA	25	25	55	
OREG	92	96	93	MISS	86	98	91	N C	99	100	100	S C	96	99	94	
S DAK	100	100	100	MO	95	93	89	OHIO	100	95	100	TENN	100	90	85	
TEX	79	89	86	NEBR	100	100	100	PA	90	94	92	TEX	58	53	63	
WASH	99	95	97	N C	63	83	68	S DAK	75	100	97					
				OHIO	100	100	100	VA	95	93	93	14 STATES	71	70	75	
15 STATES	90	94	NA	S C	65	85	70	WIS	75	92	97					
EXCL. STATES WITH NA	89	95	93	TENN	98	95	88	17 STATES	92	96	96	THESE 14 STATES PRODUCED 99% OF THE 1981 COTTON CROP.				
THESE 15 STATES PRODUCED 88% OF THE 1981 WINTER WHEAT CROP.				18 STATES	95	96	94	THESE 17 STATES PRODUCED 93% OF THE 1981 CORN CROP.								
NA - NOT AVAILABLE				THESE 18 STATES PRODUCED 95% OF THE 1981 SOYBEAN CROP.												

State Summaries of Weather and Agriculture

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

ALABAMA: Temperatures averaged above normal. Rainfall ranged from less than 1.00 in. to 4.00 in.

Fieldwork: 2.0 days. Soil moisture adequate to surplus. Soybeans harvested 91%, 93% 1981, 87% average. Wheat seeded 84%, 86% 1981. Conditions: Pastures, livestock and wheat fair to good.

ARIZONA: Slow moving storm system spread precipitation over eastern third 24th through 26th. Snow level lowered to 6,000 feet. One to seven in. snow White Mountains, mountains of southeastern. Moisture amounts mostly under 0.50 in. except locally over 1.00 in. White Mountains. Partly cloudy skies over western two-thirds. Average temperatures varied 4° below normal to 3° above.

Vegetable harvest full swing after two weeks scattered heavy rain storms. Lettuce harvest full swing Central Valley, Parker area. Yuma County lettuce reached full volume harvest. Lettuce picked as wet fields permitted Pima County. Picking mixed greens, cauliflower, broccoli, green onions, cabbage full swing Maricopa County. Early cauliflower fields picked Yuma County. Remainder cauliflower, cabbage, broccoli made normal seasonal progress. Citrus activities resumed past week. Navel orange harvest continued Maricopa, Yuma Counties. Early varieties tangerines, tangelos, grapefruit picked on limited scale. Lemons also harvested on limited scale. Desert sweet orange harvest underway Yuma County. Citrus groves good condition. Cotton harvest back underway some areas after recent rains. Still not resumed to full swing. Yuma, Maricopa, Pinal Counties picking again on large scale as field conditions permitted. Heavy dew, fog conditions contributed to some boll rot Yuma County. Pima, Cochise, Graham County cotton growers' continued to be delayed by rains.

Little picking activities occurred those areas. Farmers harvested 65% cotton acreage once. Still considerably behind 85% last year, average 78%. Wheat, barley land preparations, planting activities back underway as fields dried out. Pima, Cochise, Graham Counties began land preparations. Planting expected underway about two weeks. Maricopa, Pinal Counties planting on limited scale. Yuma County had well established stands on early planted small grains. Continuing land preparations, plantings on relatively large scale. Sorghum harvest winding down. Alfalfa made normal seasonal progress. Some rain damage to cut hay.

ARKANSAS: Cold, wet week. Highest temperature 72°, lowest 19°. All departures ranged from -7 to +1°. Most rainfall 7.47 in., least 1.71 in.

Four days suitable for fieldwork. Soil moisture adequate. Soybeans fair condition, harvest virtually complete, same 1981, 90% average. Cotton good condition, harvest virtually complete, same 1981, 94% average. Wheat good condition, planted 92%, 95% 1981, 93% average. Oats good condition. Pastures improved, average. Cattle good condition.

CALIFORNIA: Early last week an upper level disturbance slipped south along the coast. It brought more rain and snow to all of the State except the southeast interior. Again, mean temperatures were as much as several degrees below normal; greatest departures were in the Sacramento Valley and the Sierra-Cascade areas. Precipitation totals were largest over the North Coast and the Sacramento Valley. Snow depths in the Sierra around the Tahoe Basin ranged 2 to 3 ft.

Wet fields, poor weather continued hamper most activities Sacramento, San Joaquin Valleys. Cotton harvest 90%, 92% last year, 91% average. Some

rice fields remain to be harvested. Small grain plantings slowed; 50% of winter wheat planted, 45% emerged, 35% emerged last year. Good moisture conditions exist for recent plantings. Harvest of grain sorghum and field corn remain slow. More of remaining dry bean fields abandoned due to continued wet conditions. Zutano variety avocado picking increasing in volume. Fuerte variety in smaller quantity. Desert lemon, date and grapefruit harvest continued. Table grapes from storage moving to domestic and export markets in good volume. Slow maturing Navel oranges continuing problem to growers and packers in San Joaquin Valley. Lemon harvest started in central districts. Seasonal orchard work continued as weather permitted. Wet weather continues to slow vegetable harvest. Artichoke harvest light, quality good, Salinas Valley. San Joaquin Valley plantings doing well. Cantaloup desert harvest slowing, sizes still running smaller. Cauliflower supplies light, quality good, Santa Maria area. San Joaquin Valley harvest progressing well. Carrot harvest light, Salinas Valley. Wet fields sharply curtailing harvest. Imperial-Coachella Valley harvest very light. Celery supplies light, Salinas Valley, due mainly to holiday schedule. Quality good. Lettuce supplies light, central San Joaquin. Most shippers done for season. Quality, weight, variable. Palo Verde Valley harvest active. Imperial Valley harvest begins December 6. Market tomato harvest continues, South Coast, San Joaquin Valley. Range conditions good to excellent result timely rains. Cool weather slowing grass growth. Lambing decreasing San Joaquin Valley. Sheep grazing alfalfa fields. Calving continues active. Bee colonies moving into valley from out-of-State.

COLORADO: A cold front pushed into north on 22nd and into south early 23rd. Temperatures were colder than normal 23rd ranging from sub-teens to 20's at lower elevations. Temperatures averaged 5° below normal. Scattered snow fell in the mountains early in the week.

FLORIDA: Mild weather with temperatures 3 to 9° above seasonal norm. A few showers with light rainfall amounts East Coast and some heavier thunderstorm, Panhandle, 28th--otherwise no significant rain. Soil moisture generally adequate Panhandle, Gulf Coast areas and South; mostly short North and Central areas. Soybean harvest good progress, nearing completion many areas, yields variable. Cotton harvest continues. Sugarcane harvest very active, ahead of normal, yields very good. Winter grazing good growth; seeding continues. Pasture condition good to excellent southern Peninsula, poor to fair, north, across Panhandle. Cattle mostly good condition. Calving increasing, citrus trees, fruit condition very good. Subsurface moisture adequate, but many growers irrigating to replenish dry surface areas. Excellent early fruit color. Harvest slow due to Thanksgiving holiday. Many processing plants to open this week. Mild weather continued in vegetable areas with temperatures above normal. Skies mostly sunny with very little to no rainfall. Winds light to calm. Irrigation active in some areas. Total vegetable shipments down 23% from previous week. Volume of most crops decreased. Harvest gained cabbage and cauliflower. Supplies about steady celery, lettuce and radishes. Volume declined all other vegetables. Limited supply of fall watermelons continues available. Quality, size good.

GEORGIA: Variable clouds with light rainfall. Precipitation from 0.25 to 0.75 in. in north to less than 0.25 in. elsewhere. Average temperatures from 6 to 10° above normal. Weekend of 27th and

over 1.00 in. in North and less than 0.50 in. in South.

Soil moisture: 3% very short, 18% short, 59% adequate, 20% surplus. Three days suitable for fieldwork. Major activities: Harvesting soybeans and pecans and planting small grains. Conditions: Cotton 5% poor, 39% fair, 44% good, 12% excellent; soybeans 4% poor, 45% fair, 47% good, 4% excellent; pecans 7% poor, 57% fair, 30% good, 4% excellent; wheat 27% fair, 70% good; rye 23% fair, 74% good; other small grains 24% fair, 70% good; pastures 12% poor, 42% fair, 46% good; cattle mostly good; hogs good. Cotton 89% harvested this year and average, 93% last year. Soybeans 81% harvested, 84% last year, 78% average, some lodging reported. Wheat 66% planted, 74% last year and average. Rye 90% seeded, 89% last year, 83% average. Other small grains 83% planted, 88% last year, 81% average. Pecans 69% picked this year and last, 63% average.

HAWAII: Hurricane Iwa packing a wind velocity of 90 mph. with gusts of 110 mph. struck parts of the Hawaiian Chain on 23rd. Center of storm passed through the Islands of Niihau and Kauai during the early evening hours and scooted along the northwest sections of Oahu. Extensive damage to properties and agriculture these Islands. Sugar fields were flattened and heavily wind-whipped. Fields hardest hit on Kauai where about 20% of State's sugar acreage located. Some future reduction in yield in the range of 5% expected. Banana and papaya orchards were toppled. However, State's major papaya orchards on Hawaii Island were relatively unaffected. Flowers and nursery products sustained heavy losses. Vegetable crops were twisted or battered and will cause yield reduction. Many immature Guava and Passion fruit fell to ground. Structural damage to livestock and poultry houses and sheds were reported. Salvaging underway. Other Islands escaped the storm with minor damage. Vegetables: Most of the crops grown on Islands of Maui and Hawaii adequate. Snap beans very light. Green onions and mustard cabbage plantings heavily damaged. Bananas: Orchards toppled and heavily damaged. Production to drop sharply after damaged fruits salvaged. Papayas: Orchards battered heavily. Production forecast to be down by 80 to 90% from damaged areas. However, the major growing areas on the Island of Hawaii escaped the storm. Pineapples: Slow. Very minor damage to crop. Some windburn to leaves. Sugar: Rains caused slowdown harvesting. Pastures: Generally fair to good.

IDAHO: Wet weather prevailed over the State the first part of week with fair but cold weather dominating the remainder of period. Precipitation amounts were generally light, however, most mountain areas received copious amounts of snow. Temperatures averaged near normal at the beginning of week but fell to 10 to 15° below normal during remainder of week.

There was a minimal amount of fieldwork. Routine chores and winterizing farm machinery were main activities. Livestock in good condition, some fall calving was reported. A few trips were being made to pick up stragglers on range.

ILLINOIS: Temperatures normal to 4° below normal north; 1 to 3° above normal south. Precipitation: 0.10 to 0.30 northwest; 0.70 to 2.50 other areas. Corn 98% harvested; 98% 1981, 97% average.

INDIANA: Fieldwork averaged 2 days. Topsoil moisture mostly adequate. Corn 98% harvested, 1981 90%, average 95%. Corn moisture content 18%. Soybeans 100% harvested, 1981 100%, average 100%. Wheat 100% emerged, 1981 95%, average 95%. Spring cropland 55% plowed, 1981 45%, average 50%. To-

IOWA: Cool, cloudy wet week.

Topsoil moisture: 39% surplus, 61% adequate. Subsoil moisture: 26% surplus, 74% adequate. Corn harvested: 93%, last year 100%, normal 97%. Sorghum harvested: 96%, last year 100%, normal 99%. Fertilizer application complete: 32%. Total plowing completed: 34%. Fieldwork: 5.2 days suitable. Livestock in good condition.

KANSAS: Winter storms beginning and end of week produced local serious glazing, and narrow band heavy snow west. Precipitation averaged zero to 0.15 in. west and central, 0.24 to 0.85 in. east--locally to over 1.50 in. southeast. Temperatures averaged 36° southeast, 30 to 34° elsewhere--3 to 5° below normal northwest and west central, 6 to 8° below normal elsewhere.

Sorghum 97% harvested, 85% last year, 98% average. Soybeans 99% harvested, 85% last year, 97% average. Corn 98% harvested, 95% last year, 98% average. Wheat 100% seeded, 99% last year, 100% average; 98% emerged, 99% last year; 10% pastured, 10% last year and average. Wheat condition poor to fair southwest and south central, good to excellent elsewhere. Pasture and range good to excellent except southwest and south central. Topsoil moisture short four southwestern districts; short to adequate northwest, east central, southeast; adequate north central, northeast. Subsoil moisture short southwest and south central, adequate north, short to adequate elsewhere. Five days suitable for fieldwork.

KENTUCKY: Abundant rainfall and above normal temperatures. High temperatures generally in 60's averaged near normal to 5° above normal. Rainfall 1.00 in. to almost 3.00 in.

Damp weather favorable for burley stripping. Soil moisture replenished by recent rains, surplus number of areas. Corn and soybean harvest limited by wet soils. Most farmers finished or nearly finished. Corn harvest 98% complete, same year ago and average. Soybean harvest 96% complete, same year ago and average. Rain beneficial for fall seeding grains, standing water could be a problem in low fields.

LOUISIANA: Rainfall averaged 1.30 to 5.50 in. Temperatures 3 to 9° above normal.

Soil moisture surplus. Days suitable: 2.3. Cotton harvested 95%, 96% 1981, 97% average. Soybeans harvested 93%, 95% 1981, 97% average. Sugarcane harvested 63%, 68% 1981, 67% average. Wheat seeded 74%, 77% 1981, 91% average; emerged 60%, 58% 1981; condition good. Pecans harvested 64%, 49% 1981, 67% average. Vegetables rated fair to good. Planting of strawberries near completion. Pasture and livestock rated fair to good.

MARYLAND AND DELAWARE: Harvest of soybeans and stripping of tobacco main activities.

Temperatures averaged 7 to 10° above normal. In western Maryland, temperatures were 9 to 10° above normal while elsewhere temperatures were mostly 7° above normal. Western Maryland received 0.33 to 0.75 in. of rain while the remainder of the State and Delaware received a trace to 0.11 in. Weekend weather was mostly cloudy. On 28th, high temperatures were in the upper 40's and lows were in the mid 30's. On 29th, highs were in the low to mid 40's and lows were in the upper 20's.

MICHIGAN: Mild above normal temperatures predominated again this week. Moderate amounts of rainfall fell across southern areas. Light amounts were reported across the rest of the State. The heaviest amount was reported over the southeast corner of the Lower Peninsula where 1.20 in. fell.

Corn 98% harvest. Above last years 95% and 90% average. Soybean harvest complete. With

harvest nearly complete farm activities now center on caring for livestock and preparing for winter.

MINNESOTA: Cold temperatures and light precipitation until freezing rain occurred in the south portion 28th. Temperatures averaged from 10° north to the mid 20's south and were from 10 to 14° below normal in the north and 3 to 9° below normal in the south. The highest reported temperature was 44° at Winoma and the coolest was -16° at Crookston. Precipitation was below 0.25 in. in the north. Freezing rain occurred in the southern portions 28th with the heaviest amounts near 0.50 in. in the southwest.

MISSISSIPPI: Temperatures 5 to 10° above normal. Extremes: 28 and 82°. Scattered thundershowers early in week, clear about midweek and heavy rains late in week. Greatest 24-hour rainfall 4.84 in., greatest weekly rainfall 5.31 in.

Soil moisture surplus. Fieldwork: 1.3 days suitable. Cotton 94% harvested, 99% last year, 96% average. Soybeans 86% harvested, 98% last year, 91% average. Pecans 76% harvested. Winter wheat 80% seeded, 93% last year and average; condition fair to good. Hay and roughage and grain supplies adequate. Pasture condition fair to good. Livestock condition good to fair.

MISSOURI: Temperatures were 2 to 5° below normal. Except in the Bootheel where the average was 6° above normal. Rainfall in the northern half of the State averaged over 1.00 in., and in the southern half of the State, rain averaged over 3.00 in.

Fieldwork: 2 days suitable. Corn 92% harvested, last year 92%, normal 92%. Grain sorghum 92% harvested, last year 89%, normal 93%. Soybeans 95% harvested, last year 93%, normal 89%. Winter wheat seeding 95% completed, last year 91%, normal 87%. Winter wheat condition 2% excellent, 52% good, 46% fair. Fall plowing 59% completed, last year 55%, normal 56%. Pasture condition 2% excellent, 53% good, 44% fair and 2% poor. Topsoil moisture supply 28% surplus, 71% adequate, 1% short.

MONTANA: Temperatures 18° below normal some of southwest area and mostly 7 to 10° below elsewhere. West Yellowstone average temperature 2° above zero. Highest 57° at Billings. Lowest 28° below zero West Yellowstone. Precipitation mostly light and came first of week.

Soil moisture adequate. Winter wheat condition good, wind damage none to light. Range cattle on supplemental feed 30%, sheep 50%. Stock water supplies adequate.

NEBRASKA: Precipitation: Light amounts except for parts of the east where up to 0.50 in. was received. Temperatures: 3 to 7° below normal.

Corn harvested 85%, 90% last year and 95% normal. Sorghum 95% combined, 96% last year and 99% normal. Winter wheat good. Pasture and range feed supplies adequate. Topsoil and subsoil moisture adequate. Days suitable for fieldwork: 5.7.

NEVADA: Snow continued widespread early in period changing to periodic rain showers and midweek. Mild but cloudy and windy remainder of period. Temperatures averaged above normal most areas.

Grading and marketing potatoes slow but steady. Feeding requirements livestock minimal due to warm weather and melting snow. Livestock mostly good condition.

NEW ENGLAND: Mostly cloudy with cool to mild conditions. A cold frontal passage on the 25th made it much colder the last three days. Highest temperature for the week was 64° at Groton, CT. on the 24th while lowest reading was zero at Houlton, ME. early on the 25th. Northern New England experienced pre-

precipitation much of the week, least toward the end. Southern New England had much less with most during the day and evening of the 28th. Snow early to midweek with rain toward week's end.

NEW JERSEY: Temperatures near normal, averaging 40° north, 43° south and 45° coastal areas. Extremes 12° at Newton and Toms River and 68° at Glassboro, Hammonton and Cape May. Precipitation above normal north, and well above normal south and coastal, averaging 1.10 in. north, 1.52 in. south and 1.66 in. coastal sections. The heaviest 24-hour total reported 1.99 in. on 28th to 29th at Pomona.

Field corn and soybean harvest in clean-up stage. Fruit tree pruning active. Cider and fall crop marketing active for the Thanksgiving holiday.

NEW MEXICO: Winter storm midweek. Heavy snows in southern, northeastern mountains. Temperatures below normal.

Some light freeze damage to fall seeded grains. Milo harvest nearly complete. Pecan picking continues. Cotton harvested 75% this year, 79% last year, 63% average.

NEW YORK: Average temperatures from mid 30's in Adirondacks to mid 40's in southeast. Mild temperatures early in week, cold by weekend. Low: 6° at Newcomb. Precipitation under 1.00 in. most areas, 1.00 to 2.00 in. in Adirondacks, very light in southeast and Long Island.

NORTH CAROLINA: Temperatures: 4 to 6° above normal Statewide. Precipitation: Heavy in mountain region. Fieldwork: 4.4 days suitable. Soil moisture: 7% short, 80% adequate, and 13% surplus. Conditions: Wheat, oats, barley, and rye mostly good. Harvest: Cotton 86%, 1981 94%, average 90%; sorghum 95%, 1981 95%, average 94%; soybeans 63%, 1981 83%, average 68%; corn for grain 99%, 1981 100%, average 100%. Fuel supplies: Mostly adequate. Major farm activities: Soybean and cotton harvest, seeding of small grains, land preparation, cutting of firewood, and machine repair.

NORTH DAKOTA: Very cold temperatures most of week. Temperatures 9 to 15° below normal. Averages ranged from 8 to 14°. Extremes 48° southwest to -15° south central. Precipitation ranged from 0.10 in. above normal east central district, below normal elsewhere in State.

Favorable weather end of week allowed some harvest progress, but harvest of late season crops still less normal. Sunflower acreage 88% harvested. Corn and soybean harvest nearly complete. Harvest complete in 10 days - 2 weeks with good weather. Scattered reports of grain storage problems. Biggest harvest headache high moisture content of sunflower and corn. Almost all crops being mechanically dried. Yields of late sunflower variable. Low yield, test and oil content of flowers hit by August frost, especially northern areas. Fall seeded crops rated generally good. Snow cover light, not adequate to protect winter wheat, rye and alfalfa most areas. Snow cover ranges zero to 4.00 in., average 1.00 in. Livestock good to excellent condition. Adequate feed supplies. Livestock marketing generally slow. Cattle 79%, 84% sheep receiving supplemental feeding. Pastures 68% open for grazing.

OHIO: Temperatures averaged above normal. Readings in south warmest, generally 2 to 4° above normal. Elsewhere 1 to 3° above seasonal levels. Mid-day highs cooler than usual. Overnight lows well above normal. Precipitation widespread, 2.00 in. common north. Central, south averaged 1.00 to

2.00 in. Four inch bare soil temperatures dropped into 40's.

Rains at beginning of week brought fall plowing and fertilizer applications to a halt. Farm activities focused on machinery repair and maintenance, general farm upkeep, hauling manure, and delivering grain to elevators. Livestock in good condition. Soybeans harvested 100%, 100% 1981, 100% average. Corn harvested 100%, 95% 1981, 100% average. Winter wheat emerged 100%, 95% 1981, 100% average. Tobacco stripped 45%.

OKLAHOMA: Temperatures averaged 2 to 7° below normal. Rainfall ranged from 0.43 in. Panhandle to 4.21 in. southeast.

General showers greatly improved wheat stands but delayed cotton harvest. Although northwestern areas reported good rainfall amounts, additional rainfall still needed. Wheat emerged: 70%, 95% 1981, 90% average. Sorghum harvested: 90%, 95% 1981, 90% average. Cotton harvested: 25%, 25% 1981, 55% average. Days suitable for fieldwork: 5.7.

OREGON: Steady rainfall through 22nd brought up to 1.70 in. of precipitation along coast; 1.00 in. at inland valleys and high plateau; less than 0.50 in. elsewhere. Rest of week was dry. Average weekly temperatures dropped to 9° below normal eastward and 5° below normal west of the Cascades. Enterprise recorded -2° for overnight low on the 22nd. Weekend brought warmer temperatures and rain. Winter wheat condition good. Emergence 32%; 96% last year; 93% average. Some spraying on grain and seed crops as weather permits. Fruit trees going into dormancy; waiting for colder weather for pruning. Root and cole crop vegetable harvest slowing down. Livestock condition good. Winter ranges and pastures in good shape.

PENNSYLVANIA: Unsettled but mild conditions through 23rd. Seasonable and lower temperatures remainder of period. Average 2 to 8° above normal with extremes 71 and 3°. Coldest reading of season on 29th. Precipitation first 4 days and again totalled near 1.00 to 2.00 in. west decreasing to less than 0.25 in. southeast, 1.00 to 3.00 in. snow fall on 27th northern and mountain areas.

Four days suitable. Moisture adequate to short. Activities: Spreading manure, lime and fertilizer, chopping corn stalks, baling fodder, and harvesting soybeans and grain corn. Soybeans 93% harvested. Corn 90% harvested, last year 94%, average 92%. Feed from pastures average to below average.

PUERTO RICO: Island average rainfall 1.64 in. or 0.31 in. above normal. Highest weekly total 3.35 in. Temperatures averaged about 78 to 77° on Coasts and 74 to 69° Interior Divisions. Extremes: 92 and 59°.

SOUTH CAROLINA: Warm until 25th; considerable cloudiness and scattered light rainfall during weekend.

Cotton 96% harvested compared to 99 last year and 94 average. Soybean acreage harvested at 65%; 85 last year. Seeding small grains continue, some behind soybeans. Preparation of tobacco plant beds active.

SOUTH DAKOTA: Temperatures averaged 4 to 12° below normal. Extremes: 63 and -9°. Precipitation up to 0.22 in. Mostly less than 0.05 in.

Topsoil moisture supplies surplus over most of southeast and east central and parts of central, south central and west central. Adequate elsewhere except small area rated short in west central.

Reports 59% adequate, 41% surplus. Four days suitable. Frozen fields allowed at least limited harvesting to continue. Grain moisture still high. Corn harvest later than any year in past 20 years. Corn for grain harvested 75%, 1981 100%, average 97%. Soybeans harvested 97%, 1981 100%, average 100%. Sorghum for grain harvested 91%, 1981 100%, average 100%. Sunflowers harvested 96%, 1981 100%, average 100%.

TENNESSEE: High pressure had control of the weather for a short period in the week as frontal systems affected the State early and late in the week and over the weekend. Temperatures averaged 2 to 8° above normal. Precipitation was above normal with readings ranging from just below 2.00 in. to under 4.00 in.

Cotton harvested 100%, 1981 90%, average 85%. Soybeans harvested 98%, 1981 95%, average 88%. Wheat seeding nearing completion. Tobacco being stripped and marketing continues.

TEXAS: Arctic cold front moved into State early part of week. Upper air disturbances, coupled with overrunning Gulf moisture over Arctic dome, resulted widespread rain. Temperatures below normal over all State except Edwards Plateau, where normal readings found. Precipitation amounts were above normal.

Crops: Harvest most crops standstill midweek, rains and cold weather covered State. Freezing temperatures Plains help cotton defoliation, some stands not fully matured. Small grain fields benefit from recent moisture, replanting activities underway some areas. Cold, wet conditions late week interrupted cotton harvest many areas. Stripping operations Plains good progress during first part week, sleet and light snow brought many operations standstill midweek. Freezing temperatures increase defoliation activities Panhandle. Light showers delayed harvest Trans-Pecos, yields below average. Condition across the State was 62% of normal with 2% excellent, 26% good, 56% fair, and 16% poor. This compares with 82% of normal last year. Sorghum harvest complete High Plains. Both yield and quality good. The recent showers improve small grain prospects most areas. Producers still welcome good soaking rain. However, some areas Panhandle still dry, many non-irrigated wheat pastures poor condition and furnishing limited grazing. Blacklands some early wheat fields, which failed to germinate, replanted following showers. Some frost damage and wind burn reported portions Central Texas and Low Plains. Showers revived many oat fields South Central Texas, open, sunny weather needed for additional growth. Leaf rust problem some Cross-Timbers wheat stands. Oat fields South Texas heavy armyworm infestations. Wheat condition across the State was 58% of normal with 5% excellent, 23% good, 44% fair, 26% poor, and 2% failure. This compares with 87% of normal last year. Peanut harvest good progress early week, but midweek, cold, wet weather interrupted operations many areas. Harvest winding down some portions Cross-Timbers; however, some dryland fields not be harvested because poor crop prospects. South Texas many fields baled for hay following harvest. Wet conditions delayed soybean harvest along coast. Harvesting operations winding down High Plains and Blacklands. Sunflower harvest steady progress Panhandle, although lodging problem some areas. Sugarcane harvest continues Lower Rio Grande Valley. Cotton open bolls 99%, 97% 1981, 98% average. Cotton harvested 58%, 53% 1981, 63% average. Wheat planted 97%, 93% 1981, 97% average. Wheat emerged 79%, 89% 1981, 86% average. Peanuts harvested 88%, 86% 1981, 92% average. Soybeans harvested 88%, 85% 1981, 90% average. Sugarbeets harvested 90%, 95% 1981, 86% average. Pecans harvested 55%,

54% 1981, 51% average. Sunflowers harvested 97%, 96% 1981, 95% average. Oats planted 90%, 95% 1981, 96% average.

Commercial vegetables: Lower Rio Grande Valley, citrus harvest active with gift fruit volume increasing. Bell peppers, squash, cucumbers, broccoli and tomatoes move to market. Most winter vegetables good progress. Coastal Bend, cucumber harvest slowed by inadequate moisture and poor crop development. San Antonio-Winter Garden, cabbage, carrot and bell pepper harvest remained active. Spinach good progress with some late fields being planted. East Texas, cool, wet conditions slowed development most vegetables. Trans-Pecos, light supplies cabbage moving to market. Freezing temperatures slowed vegetable progress some areas. Pecan harvest remained active. Some counties, harvest complete because short crop. Quality Trans-Pecos crop good.

Range and pasture: Winter ranges improve following recent showers. Central and South Central Texas, runoff helped replenish stock tanks, soaking rains welcome relief from prolonged dry weather. Dryland wheat pastures poor condition over High Plains, many stands providing little grazing. Supplemental feeding operations active, some areas hay feeding all-day job. Producers continue cull herds to reduce grazing requirements most pastures. Livestock fair condition, cold, rainy weather hard many herds.

UTAH: Precipitation over northern part of State forepart of week, moderate to heavy over mountains. Precipitation southern part of State latter part of week, moderate to heavy in southwest. Average temperatures ranged from normal to 15° below normal.

Some corn still to be harvested, sorting, marketing of potatoes, onions and apples continue as orders arrive. Daily care of livestock.

VIRGINIA: Mild first part of period then cooled latter part. Highs: 60's and 70's beginning of period, 40's and 50's end of period. Lows: 40's and 50's cooled generally to 20's and 30's. Precipitation was light until weekend then more widespread with up to 1.50 in. reported in scattered areas. Some freezing rain western portions during weekend.

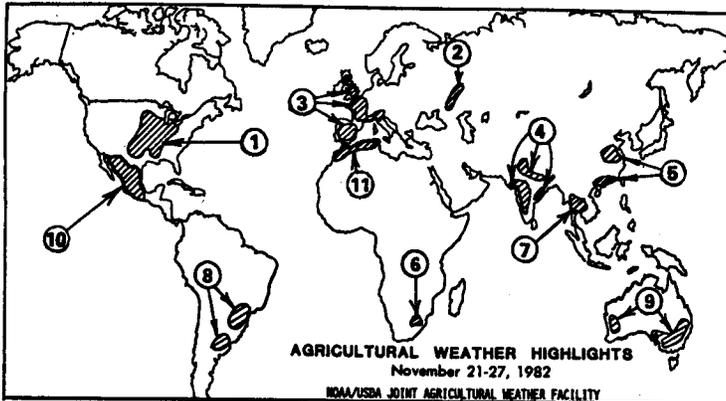
Cool, damp conditions over most of the State during the last half of the week slowed most activities. Topsoil moisture improved slightly with 9% short, 85% adequate and 6% surplus. Days suitable for fieldwork decreased to 4.1. Major activities: Corn and soybean harvests, seeding small grains. Corn 95% harvested, 93% in 1981 and 93% average. Soybeans 82% harvested, 73% 1981 and 76% average. Moist conditions, in the central and eastern areas, slowed harvest this week. Wheat seeding 90% complete, 88% in 1981, 85% average. Sorghum 73% harvested, 79% last year and 74% average. Winter grains and grazing crops are in excellent condition with pastures only a few points behind. Northern pastures substantially behind rest of State. Other activities: Repairs to buildings and fences, feeding livestock, liming and fertilizing, preparing and marketing dark tobacco, stripping sun-cured, grading and marketing of burley and killing hogs.

WASHINGTON: A cold high pressure system building and moving south from the Yukon Territory of Canada slowly pushed the years first Arctic front through on 27th and 28th. Most of the precipitation as well as the warmest temperatures occurred during the weekend. Cold air was well entrenched over the State by mid morning on 22nd and the Arctic high dominated the weather until late in the week. Minimum temperatures occurred on 24th and 25th with lows mostly in the 20's to the west

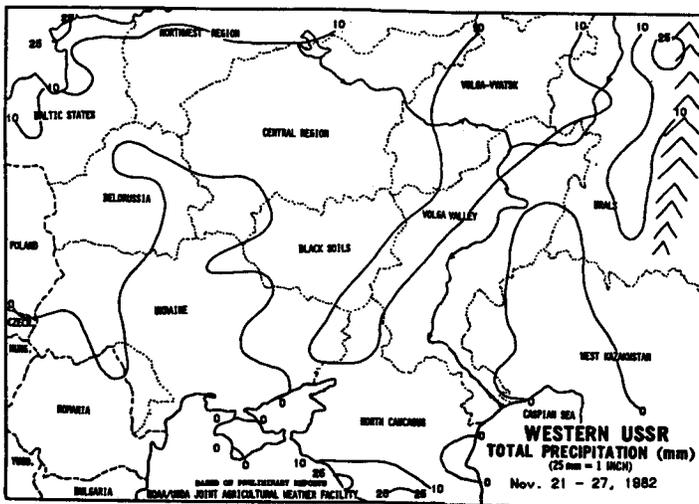
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International Weather and Crop Summary

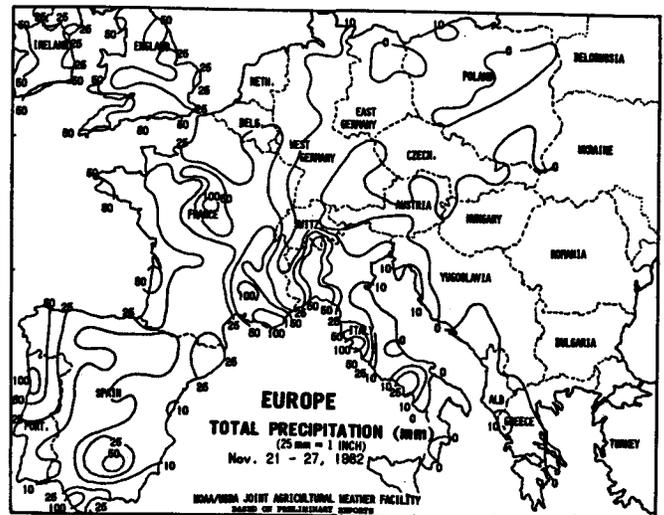
November 21 to 27



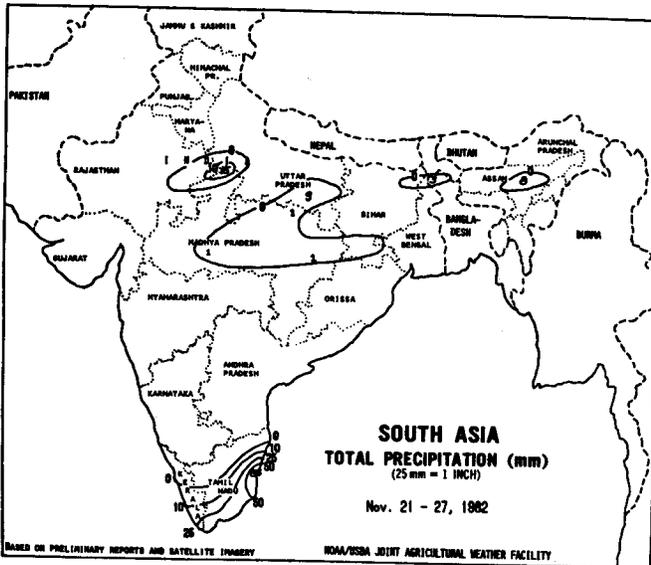
1. **UNITED STATES** ... Rains greatly benefit winter wheat but slow cotton harvest in the southern Plains. Wetness also delays harvesting of vegetables in California and the remaining cotton in the Delta and corn in northern areas. Hurricane Iwa extensively damages bananas, sugarcane, and property in the western Hawaiian Islands.
2. **WESTERN USSR** ... Widely scattered showers in some winter grain areas. Grains dormant in most areas.
3. **EUROPE** ... Wet weather continues to cover England, France, and northern Italy. Showers provide favorable topsoil moisture for winter grain planting in the Iberian Peninsula.
4. **SOUTH ASIA** ... Generally dry weather aids the harvest but stresses early growth of winter grains in northern India.
5. **EASTERN ASIA** ... Showers benefit nondormant winter grains in the North China Plains and Korea. Heavy rains continue to delay late rice harvest in southern China.
6. **SOUTH AFRICA** ... Light showers cover most of the Maize Triangle. Topsoil moisture remains adequate, but more rain needed.
7. **SOUTHEAST ASIA** ... Generally dry weather aids rice harvesting in Thailand. Generous rains improve soil moisture for rice in Malaysia.
8. **SOUTH AMERICA** ... Persistent heavy rains halt wheat harvesting and soybean planting in Parana. Drier weather benefits crops in Rio Grande do Sul. More rain needed in Buenos Aires for summer crops.
9. **AUSTRALIA** ... Showers, locally heavy in some areas, cover wheat areas in Western Australia. Limited irrigation and above-normal temperatures produce unfavorable growing conditions for summer crops in eastern Australia.
10. **MEXICO** ... Rains over western and central areas generally favor agriculture, while dryness aids harvesting in the east. Localized heavy rains in Colima may have hurt some fruits and vegetables.
11. **NORTHWESTERN AFRICA** ... Favorable topsoil moisture in most areas for winter grain planting.



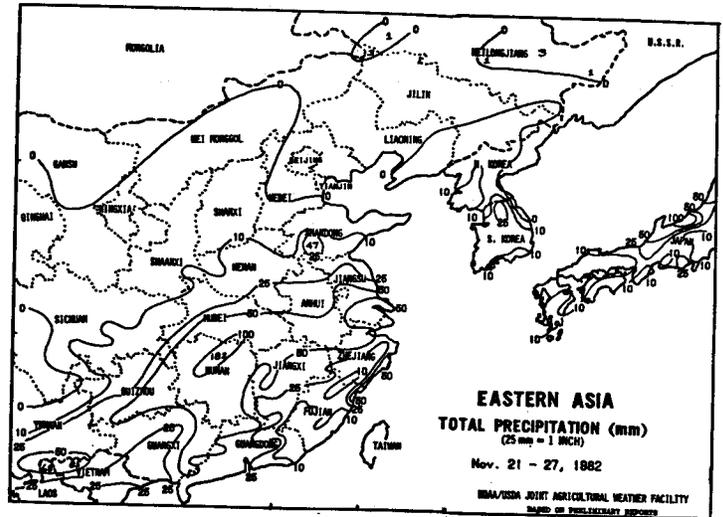
WESTERN USSR... Showers fell in a band stretching northeastward from the northern North Caucasus through the central Volga Valley and into the Volga Vyatsk. Precipitation ranged from 10 to 20 mm, falling mostly as rain in the south and rain and snow in the north. Elsewhere, very light precipitation, if any, covered winter grain areas. Temperatures were well above normal in the north and slightly above normal in the south. Winter grains have entered dormancy in most areas except in the vicinity of the Black Sea, where limited growth continues.



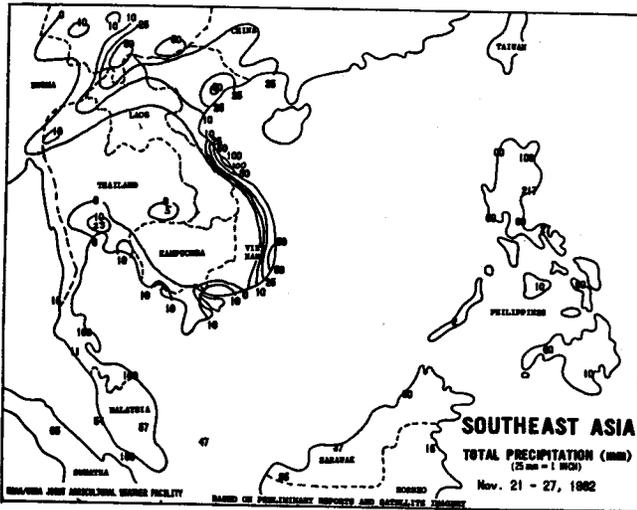
EUROPE... Wet weather continued to cover England, France, and most of northern Italy. Generous rains provided favorable topsoil moisture for winter grain planting in the Iberian Peninsula. Dry weather returned to East Germany, Poland, and the southeast. Temperatures were above normal in France, near normal in Spain, and below normal over the remainder of the region. Winter grains continued to grow in England, France, and parts of northern Europe. However, cold weather in the southeast likely induced winter grains into dormancy.



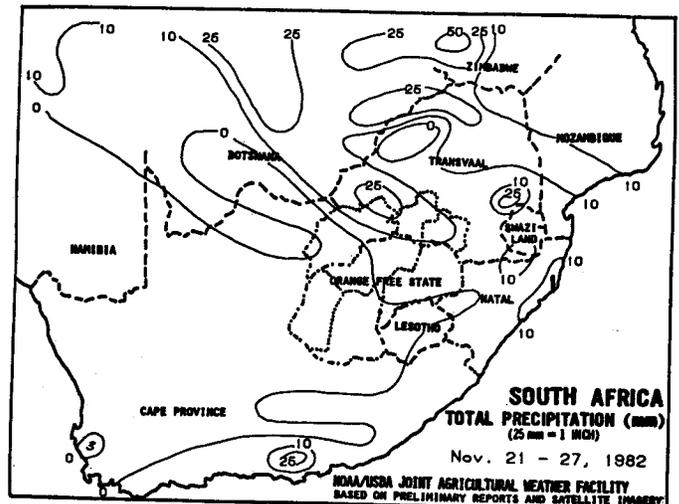
SOUTH ASIA...Light, spotty showers fell on winter grain areas in Uttar Pradesh, but dry weather covered most of the region. Elsewhere, dry weather spanned Pakistan, Burma, and the rest of India except for showers in Tamil Nadu. Continued dry weather in most winter grain areas of northern India is reducing the emergence potential and stressing early plant growth. However, over half of the winter grain is irrigated, and irrigation supplies are believed to be adequate; therefore, the crop outlook is generally favorable. The harvest of groundnuts, cotton, and winter rice are well underway in many areas; and dry weather this week allowed the harvest to progress with few delays.



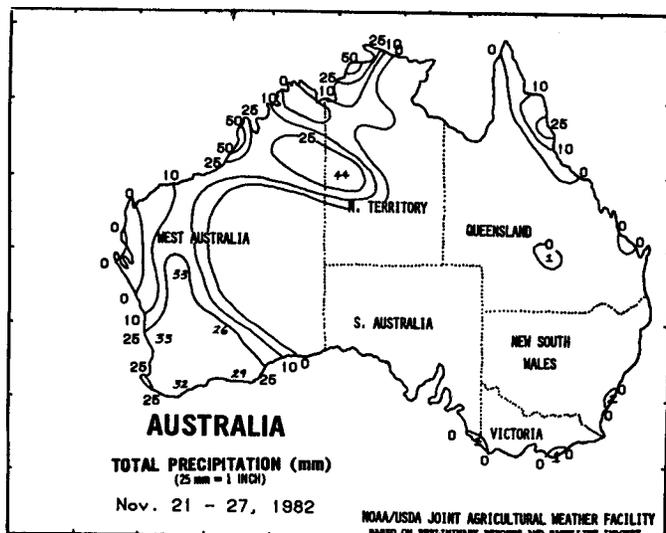
EASTERN ASIA...Mostly dry weather continued in winter grain areas of Shanxi, Hebei, and Beijing. Further south, widespread precipitation covered winter grain areas of Henan, Shandong, Anhui, and Jiangsu. The moisture benefited nondormant winter grains. Heavy rains, which fell on late rice areas south of the Yangtze River, continued to delay the rice harvest. In Korea, light showers benefited winter grains in the early vegetative stage. Temperatures were near normal in the north and above normal in the south.



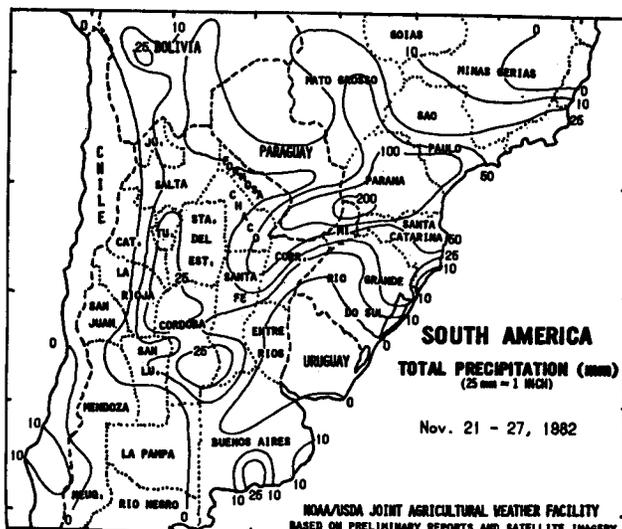
SOUTHEAST ASIA...Dry weather covered most of Thailand, southern Laos, and Kampuchea, aiding the rice harvest. Further south, generous rains fell on Malaysia, while rainfall was sporadic in Indonesia. The rain improved moisture conditions for planting and early vegetative growth of rice.



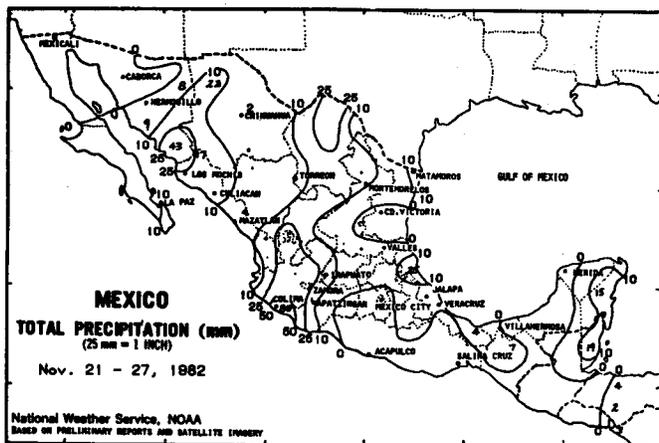
SOUTH AFRICA...Showers, mostly early in the week, were confined to the north-central and northeast portions of the major corn-producing region. Generally adequate topsoil moisture provided mostly favorable planting conditions over the central and western corn crop areas in spite of below-normal rainfall. Temperatures favored early crop growth, but timely rains will be needed to ensure its continuation.



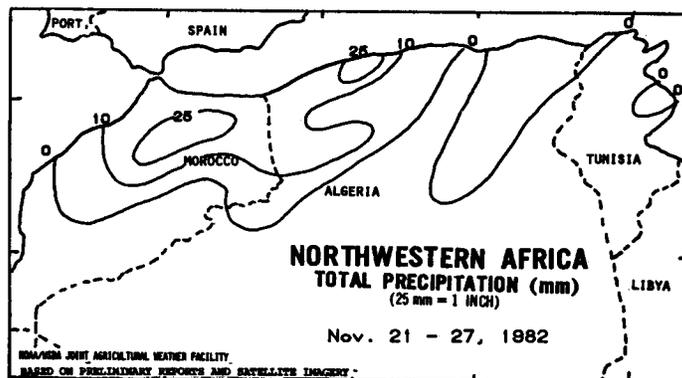
AUSTRALIA...Shower intensity increased in western areas but remained light and widely scattered in the drought-damaged areas of the east. Storms accompanied by hail, late in the week, interrupted the wheat harvest, causing some damage to the excellent crops in Western Australia. Assessment of the crop losses will be difficult because the hail, heavy rain, and high winds were localized. Dry weather aided the harvest in the eastern areas where yields have been sharply reduced by the prolonged drought. Cotton, corn, soybeans, and other summer crops in eastern areas have had limited irrigation supplies for early crop growth, and high temperatures are stressing these crops.



SOUTH AMERICA...Persistent heavy showers halted harvesting of late wheat and planting of soybeans in Parana, but drier weather over most of Rio Grande do Sul helped efforts to complete the rain-delayed fieldwork. Light showers and above-normal temperatures provided generally favorable conditions for crop growth in Mato Grosso, Minas Geras, and Sao Paulo. In Argentina, light showers in the cotton regions and moderate to locally heavy showers in the corn and soybean regions of Cordoba benefited early crop development. The wheat harvest in the south proceeded with only limited interruptions from showers over southern Buenos Aires.



MEXICO...Rains increased over the country, generally benefiting agriculture. A band of heavy showers over Colima, extending northward across Coahuila, generally helped rangeland and immature crops. Very heavy showers near Colima may have flooded some fruit and vegetable fields. Light rains fell over the Culiacan Valley's vegetables, while locally heavy amounts over southern Sonora improved soil moisture for winter wheat. The higher than usual humidity over west coast vegetable fields could result in a need for additional fungicides for disease control. In the northeast, light rains benefited some of the dryland citrus around Montemorelos and Jalapa, while orchards near Ciudad Victoria received no rain.



NORTHWESTERN AFRICA...Showers covered most crop areas in Morocco and western Algeria, improving topsoil moisture for winter grain planting. In contrast, dry weather returned to winter grain areas of northeastern Algeria and Tunisia where soil moisture is adequate. Sowing progressed at a normal rate in nearly all areas. Timely rains will be required throughout the remainder of the growing season as the moisture requirements of crops increase, reaching their peak during the reproductive period.



State Summaries (continued from p. 12)

and from 5 to 15° to the east of the Cascades. Temperatures began to modify by 26th but the week was drier and considerably colder than normal.

West: Christmas tree activity will be stepping up for the next three weeks. Grape vineyards being pruned. Raspberries being caned and tied. Blueberries being pruned. Caneberry growers cleaning and pruning fields. Carrots still being harvested for fresh market. Winter cabbage and winter cauliflower look good. Livestock in good condition and on winter feed. Pastures declining. Hay supplies mostly adequate. Ranchers preparing calving and lambing.

East: Winter wheat plantings in average condition. Snow cover scattered with freezing temperatures in some areas. Corn for grain harvest continues. Nursery stock mostly dug. Potatoes still being moved from storage to processors. Vineyards and orchards being pruned, along with rodent control and fertilization. Livestock in good condition. Range and pasture conditions remain good for grazing, but will soon be limited by cold weather. Hay supplies are mostly adequate. Winter wheat emerged 99%, last year 95%, average 97%.

WEST VIRGINIA: Temperatures averaged 6° above normal. High 69°, low 12°. Precipitation averaged well above normal except in the northeast where precipitation was well below normal.

Soil moisture adequate. Days worked averaged 3. Pasture conditions were fair to poor.

WISCONSIN: Temperatures averaged 1° below normal and ranged from a pleasant 54° Iola (Waupaca County) on 22nd to a much cooler -7° in Harrison (Lincoln County) on 27th. Some snow fell in northern areas on Thanksgiving day. Weather cleared by late week and gave way to colder temperatures. On 29th, freezing rain and drizzle covered much of the State. Weekly precipitation totals were variable, generally averaged 3.00 in. or less.

Fieldwork: 4 days suitable. Corn grain 75% complete, 92% 1981, 97% average. Poor field conditions continued to plague farmers in northern areas. Topsoil moisture supplies rated 30% adequate, 70% surplus. Many reporters indicated a hard frost was needed so fields could support harvesting equipment. Soybeans 94% combined, 98% 1981, 100% average. Fall plowing is behind schedule at 44% complete, 76% 1981, 66% average. Feed supplies adequate. Because of frequent rains, high quality hay is not abundant.

WYOMING: Temperatures cool and below normal. Several stations reported highs of 55° with lows below zero. Precipitation averaged below normal.

Winter wheat mostly good. Soil moisture much better than last year. Livestock mostly good condition. Little supplemental feeding thus far.

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

Subscriptions (202) 447-7917 Cheryl Caleco

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