

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

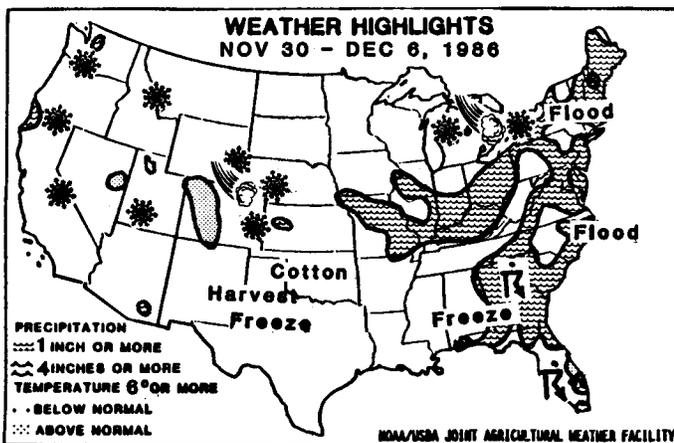
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National Weather Summary

November 30 to December 6, 1986



and upper Mississippi Valley to the East coast, and over the Southeast. Moderate showers from the mid-Atlantic States to southern New England caused coastal flooding at high tide. Snow fell in the high elevations of the Northeast and through the Great Lakes.

WEDNESDAY...Heavy rain continued over eastern New England but diminished in early afternoon. Light rain showers lingered from the Tennessee Valley through the eastern Great Lakes region. Snow and gusty wind covered the western Lakes region. Colder air pushed through the Great Plains and eastward.

THURSDAY...Snow, whipped by blustery winds, fell on the lee side of the Great Lakes. Otherwise, fair weather dominated most of the Nation. Another Pacific storm spread cold rain along the coast to central California and snow in the Cascades, northern Sierras, and northern Rockies. Freezing temperatures pushed to the Appalachians and into the upper Mississippi Delta.

FRIDAY...Rain fell along the West coast, and snow fell in most of the mountainous areas west of the Continental Divide. A few thunderstorms developed in southern Texas and Florida. The cold air continued to pour into the East, but it was somewhat warmer in the southern Plains.

SATURDAY...A storm moved out of the Southwest, through the central Great Plains, and to the Midwest. Rain showers, with snow at higher elevations, covered the Southwest, the southern and central Plains, and the eastern Great Lakes region. Freezing rain fell in parts of the central Plains and snow covered most of the Rockies. Freezing weather pushed deep into the South, but it warmed from Texas to Missouri.

HIGHLIGHTS: Two storm systems affected the Nation at about the same time. One moved from the central Rockies through New England and the other from the Gulf of Mexico through New England. The week began with heavy snow in eastern Colorado, Wyoming, and the adjacent High Plains. Moderate rain fell from Missouri northeastward. Meanwhile, the storm out of the Gulf spread moderate to heavy rain through the East Coast States. The rain combined with unusually high tides to cause extensive coastal flooding. Snow fell through the Great Lakes region and at high elevations in the Northeast. Late in the week, rain fell all along the west coast, and snow covered most of the mountainous areas of the West. Freezing temperatures reached into the Carolinas and almost to the gulf coast.

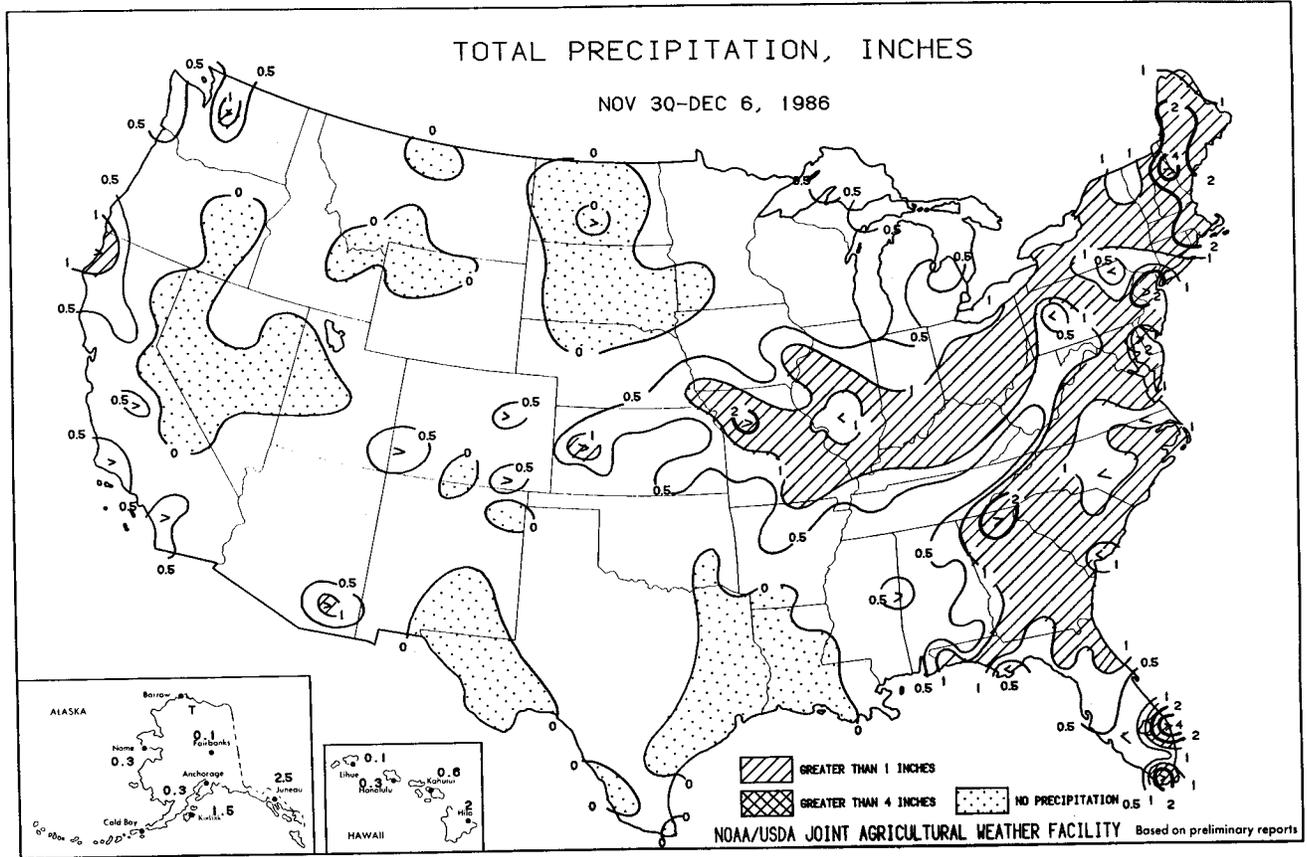
SUNDAY...A storm system, moving out of the central Rockies, dumped heavy snow through eastern Colorado and Wyoming. Lighter snow and strong, gusty winds covered the High Plains from Kansas into South Dakota. Rain showers reached from Missouri into the Southeast. Thundershowers covered Georgia and northern Florida. Mild weather stretched over most of the Nation except for the upper Mississippi Valley where it was quite cold.

MONDAY...The storm out of the Rockies moved to Missouri, while a complex disturbance in the Gulf of Mexico spawned a low pressure system off the Southeast coast. Moderate to heavy rain fell from Missouri through the Ohio Valley, posing the threat of flooding. Freezing rain fell in the lower Great Lakes region, while showers covered the Southeast.

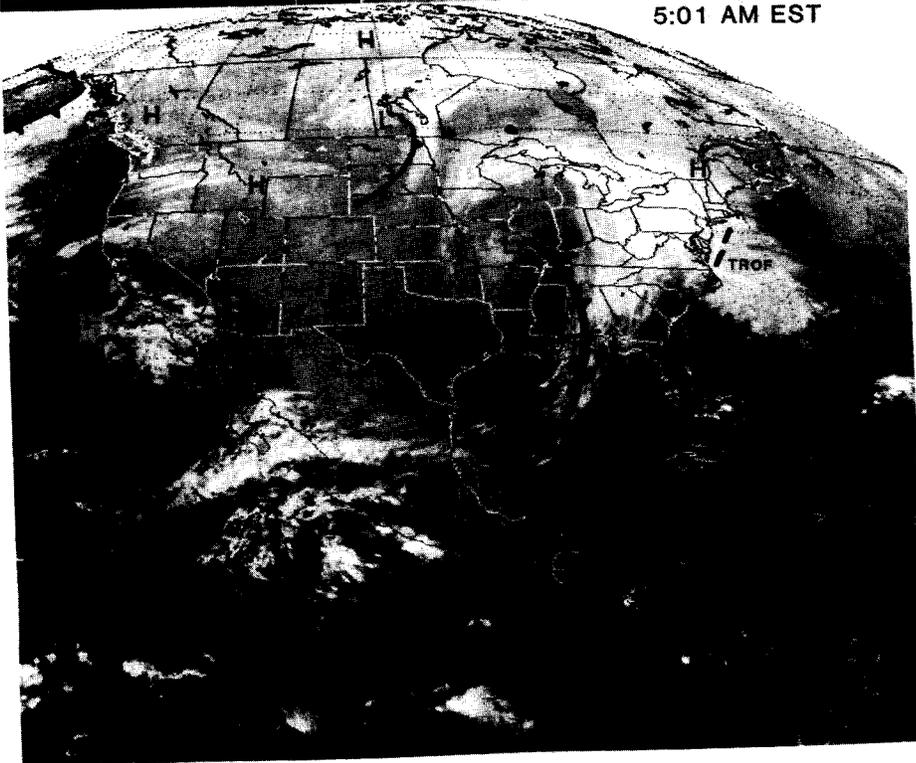
TUESDAY...A storm system moving through the Midwest and another moving northward from the Southeast combined to produce precipitation from the middle

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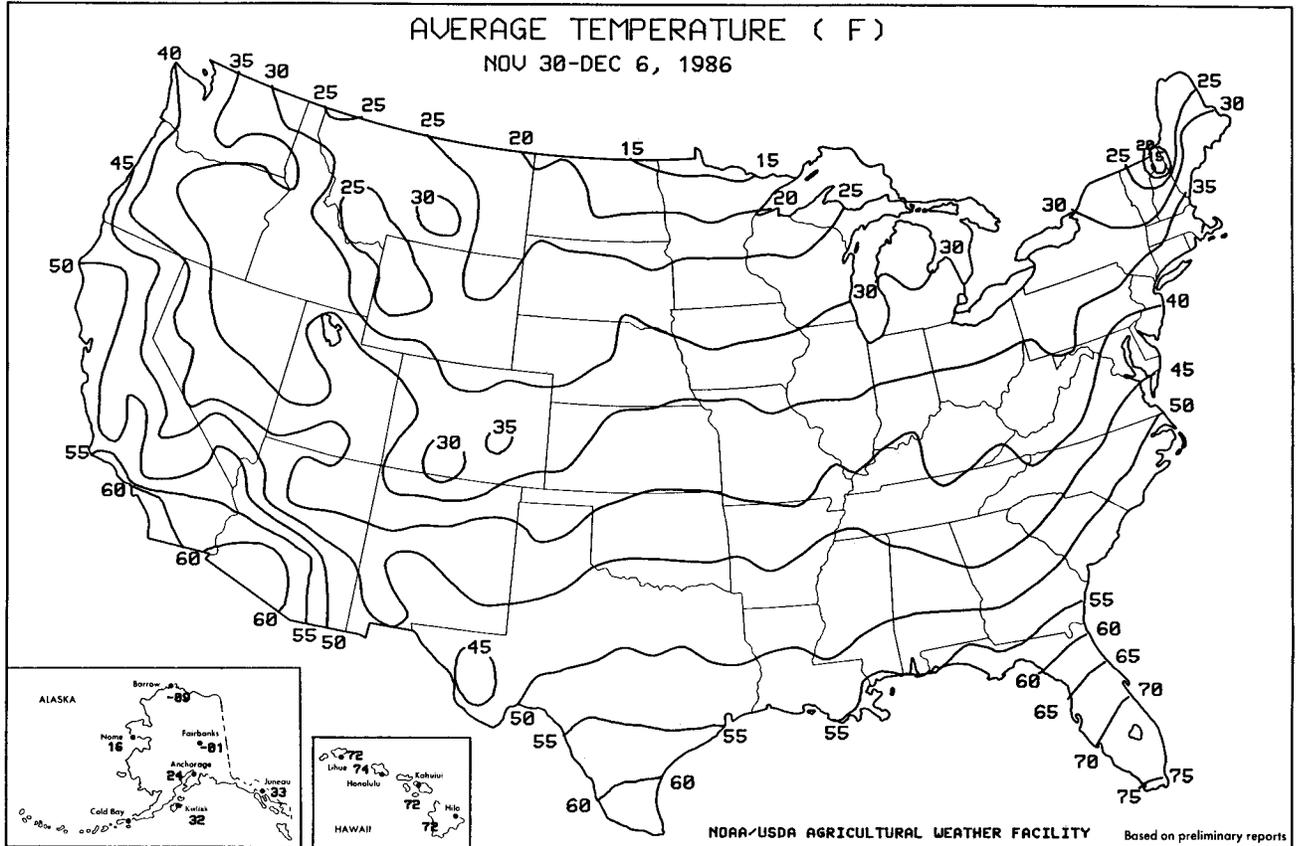
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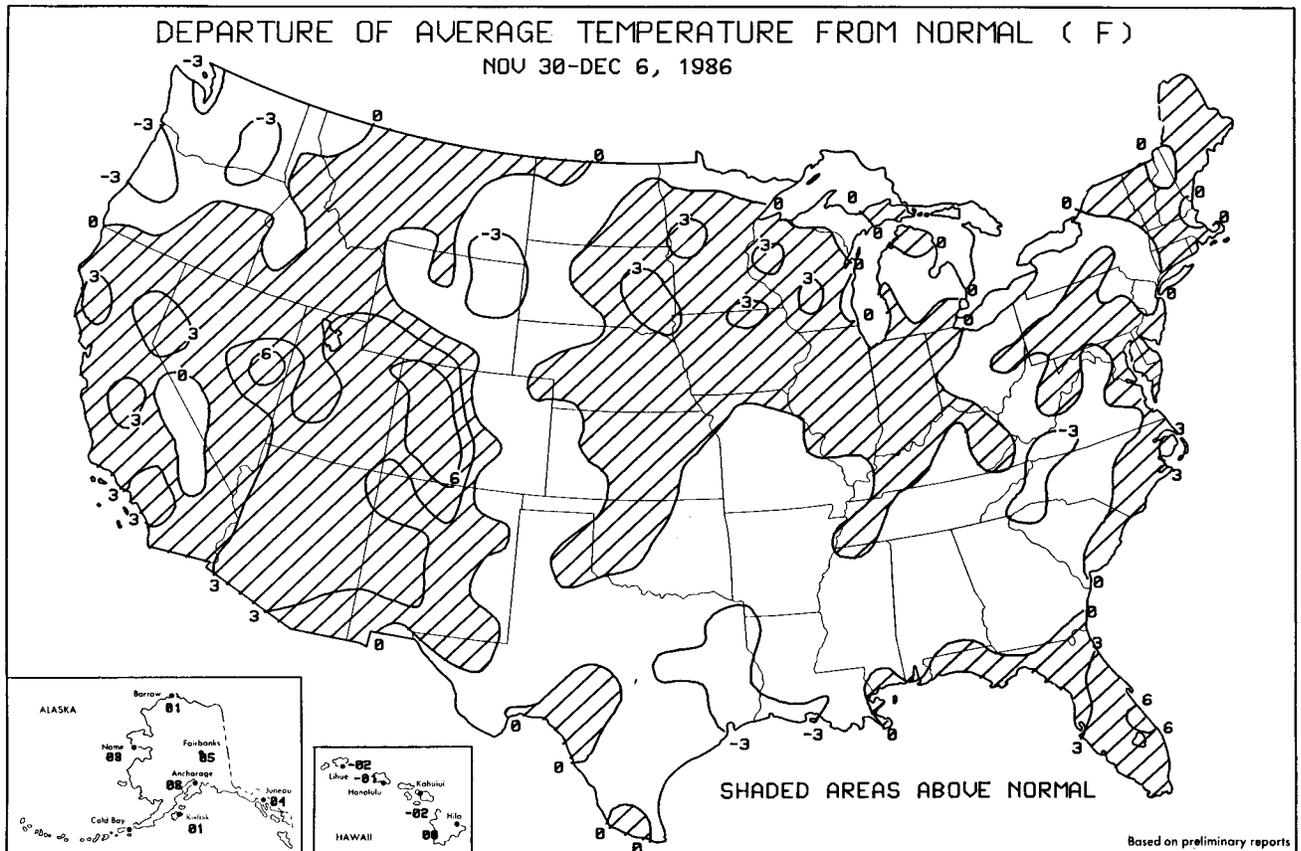
STORM SYSTEMS CENTERED OVER MISSOURI AND ALONG THE CAROLINA COAST PRODUCE PRECIPITATION OVER MUCH OF THE EASTERN THIRD OF THE COUNTRY. SNOW FALLS IN THE GREAT LAKES REGION, AND RAIN FALLS IN THE OHIO VALLEY AND SOUTHERN AND CENTRAL APALACHIANS. MODERATE SHOWERS, HIGH TIDE, AND ON-SHORE WINDS CAUSE COASTAL FLOODING FROM THE CAROLINAS TO SOUTHERN NEW ENGLAND.

A SNOW STORM MOVES THROUGH SOUTHERN MANITOBA.

HIGH PRESSURE OVER THE REMAINDER OF THE NATION BRINGS FAIR BUT COLD WEATHER.



Point values may differ on these computerized maps from the reported values in the tables.



National Weather Data for Selected Cities

Weather Data for the Week Ending December 6, 1986

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 DEC. 1	PCT. NORMAL SINCE DEC. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	52 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	54	37	60	24	46	-2	.6	-.5	.5	.1	10	38.2	76	97	53	0	3	2	0
MOBILE	61	45	64	32	53	-2	.1	-1.1	0	T	2	55.7	93	91	51	0	1	2	0
AK ANCHORAGE	58	40	63	27	49	-2	.4	-.6	.2	.2	23	49.6	110	92	54	0	1	4	0
BARROW	29	20	31	10	24	8	.3	0	.2	.3	108	17.8	124	94	75	0	7	3	0
FAIRBANKS	-15	24	-28	-9	5	0	.1	0	T	T	33	4.1	89	83	73	0	7	2	0
JUNEAU	-8	13	-22	-1	1	5	.1	-.1	.1	.1	57	9.6	98	94	84	0	7	3	0
KODIAK	36	30	41	21	33	4	2.5	1.4	1.2	2.4	253	57.4	116	95	79	0	3	5	2
NOME	38	25	42	19	32	9	1.5	.2	.9	1.5	133	67.7	98	90	58	0	6	3	1
AZ PHOENIX	25	8	33	-9	16	8	.3	.1	.1	.3	207	16.7	117	88	69	0	7	5	0
PRESCOTT	72	48	75	44	60	5	.3	.2	.3	.3	87	11.6	66	63	23	0	0	0	0
TUCSON	59	30	66	23	44	5	.3	-.1	.3	.3	87	11.6	66	63	23	0	1	1	1
YUMA	70	41	78	29	56	2	.8	.6	.8	.8	450	11.3	109	53	20	0	1	1	0
AR FORT SMITH	72	52	75	47	62	3	.2	0	T	T	67	1.6	67	49	23	0	0	1	0
LITTLE ROCK	54	33	66	25	44	-1	.1	-.8	.1	.1	2	36.5	97	91	44	0	1	1	0
CA BAKERSFIELD	52	37	59	32	45	-1	.2	-.8	.1	.1	13	40.6	96	75	49	0	2	2	0
EUREKA	62	39	67	34	51	0	.2	.1	.2	.2	167	5.1	98	94	49	0	0	1	0
FRESNO	57	42	64	36	50	0	1.5	.1	1.1	1.5	125	35.2	105	96	70	0	2	2	1
LOS ANGELES	63	40	69	33	52	4	.5	.2	.5	.5	170	10.6	115	85	45	0	1	0	0
REDDING	72	52	79	47	62	4	.3	-.1	.3	.3	100	15.9	147	84	38	0	2	1	0
SACRAMENTO	63	38	70	28	50	***	.4	***	.3	.4	***	***	***	***	92	39	0	2	0
SAN DIEGO	61	37	62	32	49	1	.2	-.3	.2	.2	48	17.4	118	98	48	0	3	1	0
SAN FRANCISCO	71	51	76	45	61	2	.6	-.3	.6	.6	258	11.9	145	88	36	0	2	2	0
CO DENVER	62	45	64	40	54	3	.3	-.4	.2	.3	48	19.4	115	98	54	0	0	1	0
GRAND JUNCTION	40	21	58	16	31	-4	.5	.2	.4	.4	8	11.7	79	90	50	0	7	2	0
PUEBLO	46	28	51	22	37	5	.4	.2	.4	.4	360	8.6	115	86	44	0	6	1	0
CT BRIDGEPORT	48	23	65	17	36	0	.9	-.1	.6	.9	17	10.2	96	92	41	0	7	2	1
HARTFORD	45	32	56	22	39	0	.9	0	0	.9	115	30.2	78	77	45	0	5	2	0
DC WASHINGTON	44	26	53	18	35	1	1.8	.8	1.3	1.8	217	40.2	98	78	40	0	6	2	1
FL APALACHICOLA	49	34	62	26	42	-1	1.1	-.4	1.1	1.1	182	28.7	79	83	48	0	3	2	0
DAYTONA BEACH	67	52	74	40	60	3	.3	-.5	.2	.2	23	57.2	110	83	56	0	0	2	0
JACKSONVILLE	74	57	80	46	66	4	1.5	-.9	.9	.6	131	45.3	97	96	68	0	0	1	0
KEY WEST	66	50	74	40	58	1	1.5	1.0	1.4	.2	41	39.7	78	96	68	0	3	0	0
MIAMI	79	71	84	69	75	2	.1	-.4	.1	T	9	29.7	78	89	68	0	4	1	0
ORLANDO	80	67	84	62	74	4	-.5	-.1	-.4	-.4	122	64.3	115	93	65	0	0	0	0
TALLAHASSEE	76	59	82	49	68	4	.7	-.3	.5	.2	53	46.3	100	93	59	0	3	1	1
TAMPA	64	46	71	35	55	0	1.1	-.2	.9	.2	27	64.8	106	94	56	0	2	1	1
WEST PALM BEACH	75	59	82	48	67	4	.9	-.4	.8	.1	12	39.4	88	90	59	0	4	2	0
GA ATLANTA	80	66	84	59	73	5	5.8	5.2	4.0	4.2	920	63.3	109	94	60	0	0	4	2
AUGUSTA	52	38	56	32	45	-3	1.7	.8	1.4	.3	35	37.8	84	86	55	0	1	3	1
MACON	55	38	60	27	47	-2	1.7	1.1	1.0	.7	124	40.3	100	95	57	0	2	3	1
SAVANNAH	55	38	57	26	47	-4	1.6	.8	1.0	.6	84	35.4	85	95	57	0	3	3	2
HI HILO	59	45	61	34	52	-1	1.4	.8	.7	1.5	150	41.5	88	93	59	0	0	5	1
HONOLULU	77	66	83	63	72	-1	2.0	-.4	1.0	1.8	63	165.3	140	93	59	0	0	3	0
KAHULUI	80	67	83	62	74	-1	.3	-.5	.1	.2	29	12.7	79	86	49	0	0	3	0
LIHUE	79	65	84	55	72	-2	.6	0	.3	.6	119	13.7	79	81	53	0	0	3	0
ID BOISE	78	67	82	57	72	-2	.1	-.1	.1	.1	8	25.0	63	93	51	0	7	1	0
LEWISTON	43	22	45	18	33	-2	T	-.3	T	T	12	14.2	134	89	68	0	3	2	0
POCATELLO	40	33	46	29	36	0	.2	-.1	.2	.2	96	10.5	91	89	46	0	7	1	0
IL CHICAGO	42	20	51	14	31	2	.2	0	.2	.2	100	12.4	123	90	66	0	4	2	0
MOLINE	40	29	55	16	34	2	.3	-.2	.2	.3	71	30.9	97	91	62	0	3	2	1
PEORIA	37	28	41	14	33	1	1.1	.7	1.0	1.1	273	39.9	112	92	65	0	4	3	1
QUINCY	38	28	46	15	33	1	1.7	1.2	1.1	1.7	405	36.5	110	94	67	0	4	3	1
ROCKFORD	39	29	42	19	34	0	.9	.5	.7	.9	242	40.4	111	91	66	0	4	3	1
SPRINGFIELD	36	26	40	12	31	2	.2	-.3	.2	.2	38	33.8	96	90	63	0	5	2	0
IN EVANSVILLE	47	30	52	18	35	0	1.0	.5	.6	1.0	232	35.2	110	92	66	0	4	3	1
FORT WAYNE	41	32	51	20	39	0	1.1	.3	1.1	1.1	158	36.8	95	97	58	0	3	2	0
INDIANAPOLIS	38	28	44	24	33	0	.5	0	.4	.5	110	41.4	128	93	66	0	6	2	0
SOUTH BEND	41	29	48	19	35	0	.6	-.1	.6	.6	97	45.2	123	92	63	0	4	2	1
IA DES MOINES	38	29	43	24	33	0	.5	-.2	.3	.5	81	35.6	99	90	64	0	6	4	0
SIoux CITY	36	27	39	13	31	1	.4	.1	.4	T	163	42.0	140	91	63	0	6	1	0
WATERLOO	37	25	43	14	31	3	T	-.2	T	T	11	32.1	129	91	57	0	6	1	0
KS CONCORDIA	33	24	36	9	28	2	.5	.1	.5	.5	170	35.8	111	94	73	0	7	1	0
DODGE CITY	41	29	56	21	35	1	.7	.5	.6	.7	389	39.5	148	88	58	0	5	2	1
GOODLAND	44	28	51	23	36	0	.6	-.5	-.4	.6	492	19.9	98	92	62	0	6	2	0
TOPEKA	39	24	50	19	31	-1	.2	0	.1	.1	42	15.3	96	95	61	0	3	0	0
WICHITA	44	30	49	16	37	1	.4	.1	.3	.4	137	36.5	113	92	60	0	3	2	0
KY BOWLING GREEN	46	31	56	25	39	1	.6	-.3	.4	.6	229	30.6	110	91	59	0	4	3	1
LEXINGTON	50	32	57	20	41	0	1.1	.1	.9	1.1	127	34.8	77	96	59	0	5	3	1
LOUISVILLE	46	29	53	20	37	-2	1.3	-.4	.8	1.3	171	32.8	77	92	58	0	3	2	1
LA ALEXANDRIA	68	33	54	22	40	0	1.3	-.5	1.1	1.3	181	36.2	89	91	52	0	3	2	1
BATON ROUGE	41	40	67	34	51	-2	T	-.1	T	T	0	42.6	84	80	43	0	0	0	0
LAKE CHARLES	62	42	66	33	52	-3	T	-.1	T	T	0	49.2	95	87	48	0	0	0	0
NEW ORLEANS	63	43	68	38	53	-3	0	-.1	0	0	0	48.8	100	92	46	0	0	0	0
	60	48	65	37	54	-3	.1	-.1	0	T	2	42.9	77	92	57	0	0	0	0

Based on 1951-80 normals.

Weather Data for the Week Ending December 6, 1986

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 DEC. 1	PCT. NORMAL SINCE DEC. 1	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	59	35	63	31	47	-4	0	-9	0	0	0	53.5	131	98	43	0	3	0	0
ME CARIBOU	28	14	43	-4	21	0	0.6	-2	0.6	0.6	85	33.3	98	83	58	0	7	2	1
ME PORTLAND	42	24	55	16	33	0	1.9	.8	1.7	1.9	198	40.4	101	77	41	0	6	2	1
MD BALTIMORE	49	31	61	22	40	0	1.1	.3	1.0	1.1	165	29.2	75	86	47	0	5	2	1
MD SALISBURY	53	34	64	23	43	1	1.6	.8	1.3	1.6	235	28.0	66	89	50	0	3	2	1
MA BOSTON	45	29	64	20	37	-1	2.1	1.0	1.7	2.1	229	40.0	100	78	45	0	5	2	1
MA CHATHAM	46	34	58	28	40	1	1.3	.1	1.1	1.3	131	48.0	112	74	56	0	3	2	1
MI ALPENA	35	24	38	13	30	2	.3	-2	.2	.3	67	29.9	110	90	61	0	6	3	1
MI DETROIT	38	28	42	22	33	1	.9	.3	.6	.9	182	36.2	125	96	66	0	7	4	1
MI FLINT	35	26	39	22	30	-1	.5	0	.3	.5	114	36.5	132	91	68	0	6	4	0
MI GRAND RAPIDS	35	26	40	20	31	-1	.4	-2	.1	.4	76	47.1	146	95	71	0	7	5	0
MI HOUGHTON LAKE	31	23	35	14	27	0	.2	-3	.1	.2	38	33.1	125	89	70	0	7	3	0
MI LANSING	35	26	39	19	30	-1	.6	.1	.4	.6	131	36.9	133	95	71	0	7	4	0
MI MARQUETTE	29	16	33	10	23	0	.4	-3	.2	.4	65	30.2	86	95	72	0	7	2	0
MI MUSKEGON	37	28	42	25	33	0	.3	-3	.2	.3	59	34.0	116	90	64	0	7	4	0
MI SAULT STE. MARIE	32	19	36	7	25	0	1.2	.5	.5	1.2	212	36.6	116	91	70	0	7	5	1
MN ALEXANDRIA	29	16	35	5	23	3	.3	T	T	T	17	32.9	138	86	64	0	7	2	0
MN DULUTH	27	13	33	0	20	1	.2	-2	.2	.2	66	36.1	126	89	64	0	7	2	0
MN INT'L FALLS	24	4	35	-7	14	0	.1	-1	.1	.1	50	18.0	76	90	62	0	7	2	0
MN MINNEAPOLIS	32	21	36	10	27	2	.2	-1	.2	.2	89	36.4	142	92	67	0	7	1	0
MN ROCHESTER	31	21	34	8	26	2	.2	0	.1	.2	105	39.8	144	92	72	0	7	3	0
MS GREENWOOD	57	38	61	29	48	-1	T	-1.2	T	T	2	38.0	78	97	49	0	3	1	0
MS JACKSON	58	39	63	27	49	-2	.1	-1.1	.1	.1	8	45.3	94	96	51	0	3	1	0
MS MERIDIAN	58	40	62	26	49	-1	T	-1.1	T	T	1	45.4	93	96	52	0	3	2	0
MO CAPE GIRARDEAU	49	31	53	22	40	-1	1.5	.5	1.2	1.3	165	39.9	96	97	62	0	5	3	1
MO COLUMBIA	41	31	43	22	36	-1	1.2	.7	.8	1.2	319	38.8	112	93	63	0	3	3	0
MO KANSAS CITY	42	30	49	18	36	0	.6	.3	.3	.3	110	38.3	112	88	61	0	4	4	0
MO SAINT LOUIS	45	32	52	22	39	1	.7	.2	.7	.7	148	34.5	107	87	58	0	5	2	0
MO SPRINGFIELD	47	30	58	14	39	-1	.4	-2	.2	.3	60	39.1	104	90	54	0	3	1	0
MT BILLINGS	40	23	47	16	31	1	.1	-1	.1	.1	67	14.3	99	82	42	0	7	0	0
MT GLASGOW	30	15	43	8	23	1	T	0	T	T	33	13.3	119	91	65	0	7	0	0
MT GREAT FALLS	40	19	53	9	30	1	.1	0	.1	.1	92	13.8	95	83	44	0	7	1	0
MT HAVRE	35	17	53	7	26	3	T	-1	T	T	0	17.3	162	91	57	0	7	0	0
MT HELENA	36	18	53	7	27	1	.4	-2	.3	.4	360	12.0	110	89	57	0	7	2	0
MT KALISPELL	32	21	41	19	27	0	.2	-2	.2	.2	67	17.2	118	99	77	0	7	1	0
MT MILES CITY	33	14	37	2	23	-2	.1	0	.1	.1	0	15.6	115	87	62	0	7	1	0
MT MISSOULA	34	24	43	21	29	2	.5	.3	.4	.5	247	16.5	134	92	65	0	7	3	0
NE GRAND ISLAND	40	24	46	16	32	1	.2	0	.1	.2	88	24.8	109	90	53	0	6	2	0
NE LINCOLN	40	27	48	14	33	2	.8	.7	.8	.8	513	38.9	147	89	61	0	6	2	1
NE NORFOLK	37	23	45	13	30	2	T	-1	T	T	17	30.4	130	93	59	0	6	2	0
NE NORTH PLATTE	38	21	47	11	30	1	T	-1	T	T	17	16.7	87	93	56	0	7	2	0
NE OMAHA	37	26	43	18	31	1	.3	.1	.3	.3	167	36.8	125	87	67	0	6	1	0
NE SCOTTSBLUFF	38	19	54	9	29	-2	.2	.1	.2	.1	75	21.4	151	93	54	0	7	2	0
NE VALENTINE	35	18	48	9	27	-1	T	-1	T	T	0	20.8	123	81	52	0	7	0	0
NV ELY	50	18	60	10	34	6	T	-1	T	T	0	8.4	100	78	31	0	7	0	0
NV LAS VEGAS	60	39	63	33	49	2	.1	0	.1	.1	71	2.2	56	57	24	0	0	1	0
NV RENO	54	25	64	14	40	5	T	-2	T	T	0	8.8	135	80	29	0	6	0	0
NV WINNEMUCCA	49	16	56	3	33	0	.1	-1	.1	.1	50	5.5	77	81	33	0	7	1	0
NH CONCORD	41	22	50	12	31	2	1.5	.6	1.1	1.5	203	37.4	111	81	43	0	6	2	1
NJ ATLANTIC CITY	49	31	60	18	40	1	1.2	.4	1.0	1.2	168	37.1	95	87	43	0	5	2	1
NM ALBUQUERQUE	52	29	55	24	41	3	.3	.2	.3	.3	500	12.9	168	73	29	0	6	1	0
NM CLOVIS	51	30	59	25	40	-1	.1	0	.1	.1	108	19.7	117	86	45	0	4	1	0
NM ROSWELL	56	31	66	23	43	-1	T	-1	T	T	0	23.2	247	87	40	0	4	0	0
NY ALBANY	39	23	45	15	31	0	1.3	.6	.8	1.3	210	41.3	124	93	54	0	6	2	1
NY BINGHAMTON	38	24	46	12	31	0	.6	-1	.4	.6	98	42.5	123	82	43	0	6	2	0
NY BUFFALO	37	26	44	20	31	-2	1.8	.9	1.5	1.8	246	37.4	107	89	53	0	7	3	1
NY NEW YORK	47	34	60	24	41	0	2.1	1.2	1.3	2.1	265	35.7	89	72	46	0	3	2	1
NY ROCHESTER	36	24	44	18	30	-3	2.0	1.3	1.5	2.0	361	34.7	119	94	56	0	7	3	1
NY SYRACUSE	36	24	45	12	30	-3	1.7	.9	1.1	1.7	252	41.2	113	90	54	0	6	3	2
NC ASHEVILLE	48	31	53	17	39	-2	1.3	.6	.8	1.2	179	31.6	70	92	49	0	3	3	1
NC CHARLOTTE	51	36	56	30	43	-2	1.0	.3	.5	.8	131	24.6	61	87	51	0	3	3	0
NC GREENSBORO	49	33	54	24	41	-2	.7	0	.5	.7	110	26.8	68	90	51	0	3	2	0
NC HATTERAS	60	52	70	45	56	5	1.3	.2	.9	1.0	111	43.2	83	86	62	0	0	3	1
NC NEW BERN	58	41	75	28	50	0	1.4	.6	1.0	1.1	159	41.8	84	97	57	0	2	3	1
NC RALEIGH	52	36	62	25	44	0	1.0	.3	.5	.7	118	34.6	88	88	51	0	3	3	0
NC WILMINGTON	60	44	76	31	52	1	1.4	.6	1.0	1.3	191	54.4	108	94	53	0	7	3	1
ND BISMARCK	27	12	36	-1	20	-1	T	-1	T	T	17	24.2	162	88	70	0	1	1	0
ND FARGO	27	13	34	2	20	2	T	-1	T	T	31	23.3	122	90	71	0	7	1	0
ND GRAND FORKS	25	10	33	-1	18	1	.1	-1	0	.1	38	15.6	88	92	74	0	7	2	0
ND WILLISTON	28	12	38	1	20	0	T	-1	T	T	0	21.7	162	90	70	0	7	0	0
OH AKRON-CANTON	38	27	44	22	33	-2	1.7	1.0	1.0	1.7	306	30.3	90	92	59	0	6	3	1
OH CINCINNATI	44	29	49	20	37	0	1.7	1.0	1.1	1.7	280	32.7	87	91	58	0	4	3	2
OH CLEVELAND	38	29	45	25	34	-2	.8	.2	.4	.8	154	38.7	117	88	55	0	6	4	0
OH COLUMBUS	41	29	50	25	35	-1	1.8	1.1	1.0	1.8	324	34.0	97	89	56	0	6	3	2

Based on 1951-80 normals.

Weather Data for the Week Ending December 6, 1986

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 DEC. 1	PCT. NORMAL SINCE DEC. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMPERATURE °F		PRECIPITATION	
																		°F	°F	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	41	29	48	21	35	-1	1.4	.8	.8	1.4	280	41.4	127	93	62	0	4	3	2	1	
TOLEDO	38	29	44	24	34	2	.8	.2	.6	.8	148	36.2	122	92	62	0	4	4	1	1	
YOUNGSTOWN	38	27	44	22	32	-1	1.7	1.1	1.5	1.7	322	44.5	127	91	58	0	4	3	1	1	
OK OKLAHOMA CITY	51	35	58	28	43	0	.4	.1	.4	.4	158	44.4	148	88	51	0	3	2	0	0	
TULSA	51	33	58	26	42	-1	.1	.4	.1	.1	17	41.9	112	86	44	0	0	0	0	0	
OR ASTORIA	49	36	51	33	42	-2	.5	-2.0	.2	.5	23	56.7	94	94	66	0	0	3	0	0	
BURNS	42	20	47	11	31	1	T	-2	T	T	0	9.9	139	99	99	0	0	5	0	0	
MEDFORD	44	33	60	29	39	-1	.1	-6	.1	.1	21	16.5	97	99	79	0	0	4	2	0	
PENDLETON	37	30	49	29	34	-4	.4	0	.4	.4	130	12.1	112	97	82	0	0	2	2	0	
PORTLAND	46	35	51	30	41	-2	.4	-1.0	.3	.4	32	31.1	97	94	66	0	0	2	3	0	
SALEM	46	32	49	27	39	-3	.2	-1.3	.1	.2	15	35.7	103	97	70	0	0	3	3	0	
PA ALLENTOWN	44	27	54	20	36	0	1.0	.1	.8	1.0	126	39.7	96	83	44	0	0	6	2	1	
ERIE	39	27	45	20	33	-1	1.3	.5	.8	1.3	183	44.3	120	91	58	0	0	6	5	1	
HARRISBURG	44	29	53	21	37	0	1.6	.9	1.6	1.6	245	39.4	108	81	43	0	0	5	2	1	
PHILADELPHIA	48	32	60	24	40	1	1.9	1.0	1.5	1.9	266	36.4	94	86	45	0	0	5	2	1	
PITTSBURGH	41	28	48	20	35	0	1.7	1.2	1.4	1.7	358	35.6	104	77	45	0	0	6	3	1	
SCRANTON	40	25	49	15	32	-1	.4	-2	.2	.4	81	42.6	129	83	46	0	0	6	2	0	
RI PROVIDENCE	46	28	62	20	37	1	3.8	2.7	3.1	3.8	421	41.7	100	78	44	0	0	6	2	2	
SC CHARLESTON	60	45	70	35	53	0	1.0	.4	.4	.7	123	43.8	89	91	56	0	0	3	0	1	
COLUMBIA	34	38	59	24	46	-3	1.3	.6	.5	.8	125	32.5	70	99	56	0	0	3	3	0	
FLORENCE	56	41	61	29	49	-1	.7	.1	.4	.5	100	28.8	69	96	52	0	0	3	3	0	
GREENVILLE	51	34	57	26	43	-3	1.4	.6	.5	.9	129	36.1	76	90	54	0	0	2	7	1	
SD ABERDEEN	30	17	37	7	24	2	T	-1	T	T	0	25.7	148	92	68	0	0	2	3	1	
HURON	35	20	47	13	28	4	T	-1	T	T	0	27.4	150	91	58	0	0	7	0	0	
RAPID CITY	35	18	44	10	27	-3	.1	-1	.1	.1	T	0	21.5	135	91	58	0	0	7	1	
SIoux FALLS	35	20	45	12	27	3	T	-2	T	T	0	30.5	129	89	58	0	0	7	0	0	
TN CHATTANOOGA	52	35	64	23	44	0	.8	-4	.6	.7	74	38.3	79	97	53	0	0	4	4	1	
KNOXVILLE	52	32	62	19	42	-2	.2	-8	.1	.2	18	28.6	66	98	52	0	0	4	3	0	
MEMPHIS	54	38	58	26	46	-1	.1	-1.0	.1	T	3	34.9	73	86	50	0	0	3	2	0	
NASHVILLE	51	33	56	21	42	-2	.4	-6	.3	.4	45	28.6	64	93	52	0	0	4	2	0	
TX ABILENE	56	38	71	29	47	-2	.2	0	-2	.2	111	30.1	133	87	49	0	0	2	2	0	
AMARILLO	50	29	57	23	40	-1	.1	0	.1	.1	100	24.6	132	88	47	0	0	5	1	0	
AUSTIN	64	42	72	35	53	-1	.1	-4	.1	.1	21	29.3	98	85	41	0	0	1	0	0	
BEAUMONT	63	43	69	39	53	-4	0	-1.1	0	0	0	54.7	111	92	49	0	0	0	0	0	
BROWNSVILLE	74	52	76	41	63	-1	T	-3	T	T	0	25.3	103	96	49	0	0	0	0	0	
CORPUS CHRISTI	71	48	76	38	59	-2	T	-3	T	T	0	27.6	95	95	47	0	0	0	0	0	
DEL RIO	65	44	75	35	55	0	.2	0	.2	.2	142	23.0	137	76	47	0	0	0	2	0	
EL PASO	61	31	64	20	46	0	T	-1	T	T	0	10.9	145	69	24	0	0	4	0	0	
FORT WORTH	59	38	68	33	48	-2	.1	-3	.1	.1	19	30.1	107	85	42	0	0	0	1	0	
GALVESTON	62	50	65	45	56	-3	0	-8	0	0	0	31.4	84	94	60	0	0	0	0	0	
HOUSTON	64	41	70	36	53	-4	0	-8	0	0	0	39.2	94	90	45	0	0	0	0	0	
LUBBOCK	54	34	63	27	44	0	T	-1	T	T	17	25.2	145	89	54	0	0	4	1	0	
MIDLAND	58	37	69	30	48	0	T	-1	T	T	8	28.7	214	86	45	0	0	3	1	0	
SAN ANGELO	62	37	76	29	49	-1	.1	-1	.1	.1	57	30.4	172	87	43	0	0	2	1	0	
SAN ANTONIO	66	42	73	34	54	-1	.2	-2	.2	.2	48	35.8	127	87	39	0	0	0	1	0	
VICTORIA	68	43	73	38	56	-2	0	-5	0	0	0	35.0	99	92	46	0	0	0	0	0	
WACO	60	37	70	32	49	-3	.1	-4	.1	.1	33	32.3	109	94	48	0	0	2	1	0	
WICHITA FALLS	56	36	67	29	46	-1	.1	-1	.1	.1	58	33.8	131	89	47	0	0	2	1	0	
UT BLANDING	48	26	52	19	37	4	.6	.4	.6	.6	305	15.9	150	84	54	0	0	7	1	1	
CEDAR CITY	51	25	58	18	38	5	.4	-3	.4	.4	293	11.4	116	82	32	0	0	6	1	0	
SALT LAKE CITY	46	27	59	21	37	4	T	-3	T	T	17	19.4	137	87	50	0	0	6	1	0	
VT BURLINGTON	36	22	46	14	29	1	.6	-1	.4	.6	107	39.5	124	86	47	0	0	5	3	0	
VA NORFOLK	54	41	66	29	48	0	.9	.2	.9	.9	154	23.6	55	90	57	0	1	2	1	1	
RICHMOND	52	35	63	24	43	0	1.1	.3	1.1	1.1	167	32.5	79	87	47	0	0	3	1	1	
ROANOKE	47	31	51	19	39	-2	1.9	1.3	1.5	1.9	352	30.2	82	87	49	0	0	2	2	1	
WA COLVILLE	34	23	41	17	29	-1	.2	-4	.2	.2	44	20.5	131	96	86	0	0	6	1	0	
QUILLAYUTE	48	32	51	26	40	-2	.5	-3.1	.5	.5	15	88.1	96	96	65	0	0	5	2	0	
SEATTLE-TACOMA	44	35	48	31	40	-3	.2	-1.2	.1	.2	14	34.9	104	92	62	0	0	3	1	0	
SPOKANE	33	25	41	17	29	-2	.4	-2	.4	.4	75	14.8	101	98	80	0	0	7	1	0	
YAKIMA	39	26	46	19	32	-2	.3	0	.2	.3	113	8.7	126	95	66	0	0	7	2	0	
WV BECKLEY	43	28	54	15	36	-1	.3	-4	.2	.3	43	35.9	91	87	50	0	0	5	3	0	
CHARLESTON	46	30	60	18	38	-2	.6	-1	.2	.6	95	42.4	107	93	48	0	0	4	3	0	
HUNTINGTON	46	30	55	19	38	-2	1.3	.6	.7	1.3	220	37.2	97	94	55	0	0	3	3	2	
PARKERSBURG	44	31	54	20	37	-1	1.6	1.0	1.0	1.6	329	36.7	94	90	52	0	0	4	3	1	
WI GREEN BAY	32	23	35	10	27	2	.2	-1	.2	.2	70	30.9	115	91	67	0	0	7	1	0	
LA CROSSE	34	23	37	10	29	2	.3	0	.2	.3	117	32.0	109	89	64	0	0	6	2	0	
MADISON	34	25	37	12	30	3	.2	-2	.1	.2	71	31.4	106	91	66	0	0	7	3	0	
MILWAUKEE	36	22	40	8	29	-1	.2	-3	.1	.2	55	41.0	140	87	61	0	0	6	3	0	
WAUSAU	31	19	35	5	25	-2	.4	0	.3	.4	120	31.0	101	85	63	0	0	7	2	0	
WY CASPER	34	16	45	11	25	-3	.2	.1	.1	.1	100	15.9	145	91	64	0	0	7	1	0	
CHEYENNE	37	19	50	10	28	-3	.2	.1	.2	T	0	14.3	109	87	55	0	0	7	1	0	
LANDER	30	16	35	9	23	-2	.1	-1	.1	T	17	11.9	93	92	70	0	0	7	2	0	
SHERIDAN	34	16	38	9	25	-2	T	-2	T	T	0	16.0	111	95	64	0	0	7	0	0	
PR SAN JUAN	86	72	87	71	79	1	.4	-8	.2	.4	35	51.3	102	96	66	0	0	0	3	0	

Based on 1951-80 normals.

Heating Degree Day Summary Table

CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 12-6-1986

ACCUMLATIONS ARE FROM JULY
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL, WEEK TOTAL, WEEK DEV FROM NORM, WEEK DEV FROM L YR, CUM TOTAL, CUM DEV FROM NORM, CUM DEV FROM L YR, CUM DEV FROM L YR PRCT. Lists 100+ cities and their heating degree day data.

November Weather Summary

Row Crop Harvest

HIGHLIGHTS: Precipitation accumulated to 8 or more inches from the lower Mississippi Valley to eastern Kentucky. Rain was heavy throughout the South and the Northeast, but parts of the mid-Atlantic States had less than normal rainfall. Drought conditions, that had persisted all Spring and Summer in the Southeast, was ended in that area but persisted in the dry parts of the mid-Atlantic. Precipitation was above normal from the southern Rockies through most of Texas, Oklahoma, and in central Missouri. Pacific storms brought heavy rains to the Northwest coast, but seasonal rains were less than normal in the Intermountain region and the far Southwest. Precipitation was in the form of snow in the Cascades, the northern and central Rockies, and across the northern Great Plains. A blizzard dumped heavy snow in North Dakota and Minnesota, early in the month. Average temperatures were warmer-than-normal in the Southeast, near normal in most of the West, but much cooler than normal in the Northern Plains, upper Mississippi Valley, and Northeast.

FIRST WEEK...Moderate showers covered most of Oklahoma where soils were already too wet. Showers also covered northern Texas and eastern New Mexico, and from the lower Mississippi Valley to New England. Heavy showers fell from southeastern Arkansas to eastern Kentucky. An intense winter storm moved northeastward out of the central Rockies and dumped heavy snow in North Dakota and Minnesota before moving into Canada. High wind, low temperatures, and heavy snow created blizzard conditions that closed most roads and isolated many communities. Record-warm weather dominated the Southeast.

SECOND WEEK...Record-cold weather covered the Nation from the northern and central Rockies to the lower Appalachians and the Northeast. Freezing temperatures pushed through the Northwest, Plains, and most of the South. Low temperatures were as much as 25 degrees colder than normal in parts of the northern Plains. Gusty winds accompanied the cold air as it moved across the Nation. Rain reached from eastern Texas to the central Appalachians and to the east coast. Light snow was almost continuous across the northern Plains and Great Lakes but came with the cold air in the central Appalachians and the Northeast.

THIRD WEEK...Heavy snow fell from northeastern Iowa and southern Minnesota, through southern Wisconsin, and in the western parts of the Northeast. Moderate to heavy rain reached from the mid-Atlantic States to eastern New England. Thunderstorms produced moderate to heavy showers from northern Louisiana to central Georgia. In the Northwest, moderate rain fell along the coast, and snow was confined to the Cascade Mountains. Another storm spread showers across southern California. The weather was colder than normal in the upper Mississippi Valley and the Northeast.

FOURTH WEEK...A storm system developed in eastern Texas and moved northeastward through New England, spreading showers and thunderstorms along its path. Heavy showers fell from southeastern Texas to Alabama, causing local flooding. Moderate rain and melting snow also caused flooding from the upper Ohio Valley into New York. A series of Pacific storms spread heavy rain along the northwest coast, with snow confined to the Cascades. Later, cold air spread over the Northwest, and snowshowers were widespread from the Great Basin to the Rockies. Temperatures were warmer than normal in most of the Nation, but cooler weather reached from the southern Plains to the central Mississippi Valley.

As rain tapered off, row crop harvest flourished in the central and northern Great Plains and in the Corn Belt during the first week of November. The second and third weeks, freezing temperatures and drier weather continued pushing harvest towards completion in the central and northern Great Plains and the Corn Belt. Rain hampered row crop harvest in the Southeast, Delta, and southern Great Plains during most of November.

Corn harvest started out the month 3 points behind normal but equaled the 5-year average of 95 percent, as the month ended. Harvest was finished in the Southeast and neared completion in most other States. The exception was in Pennsylvania, Colorado, and Missouri where harvest reached 83, 85, and 86 percent completion, respectively. Harvest was 7 points behind normal in Pennsylvania and 6 points behind normal in both Colorado and Missouri, as the month ended.

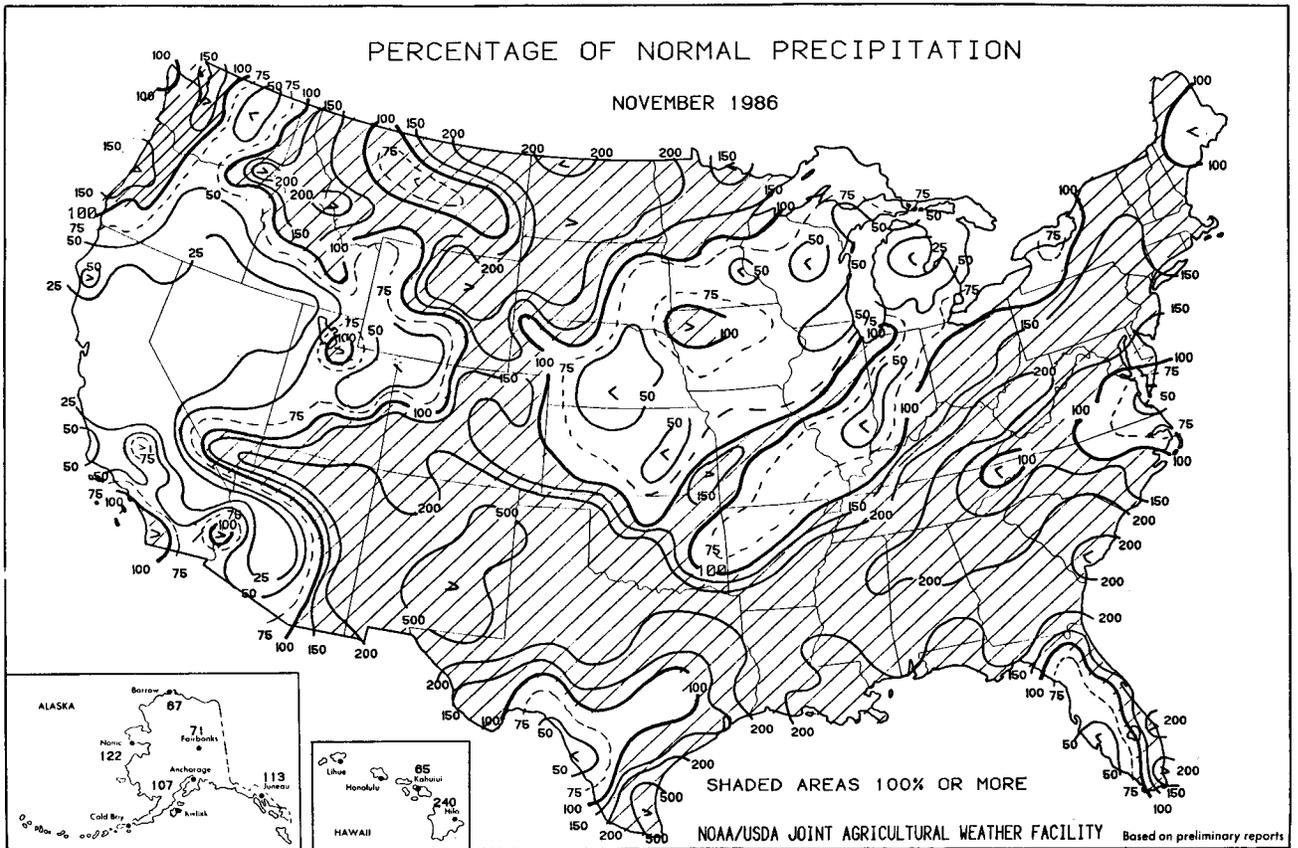
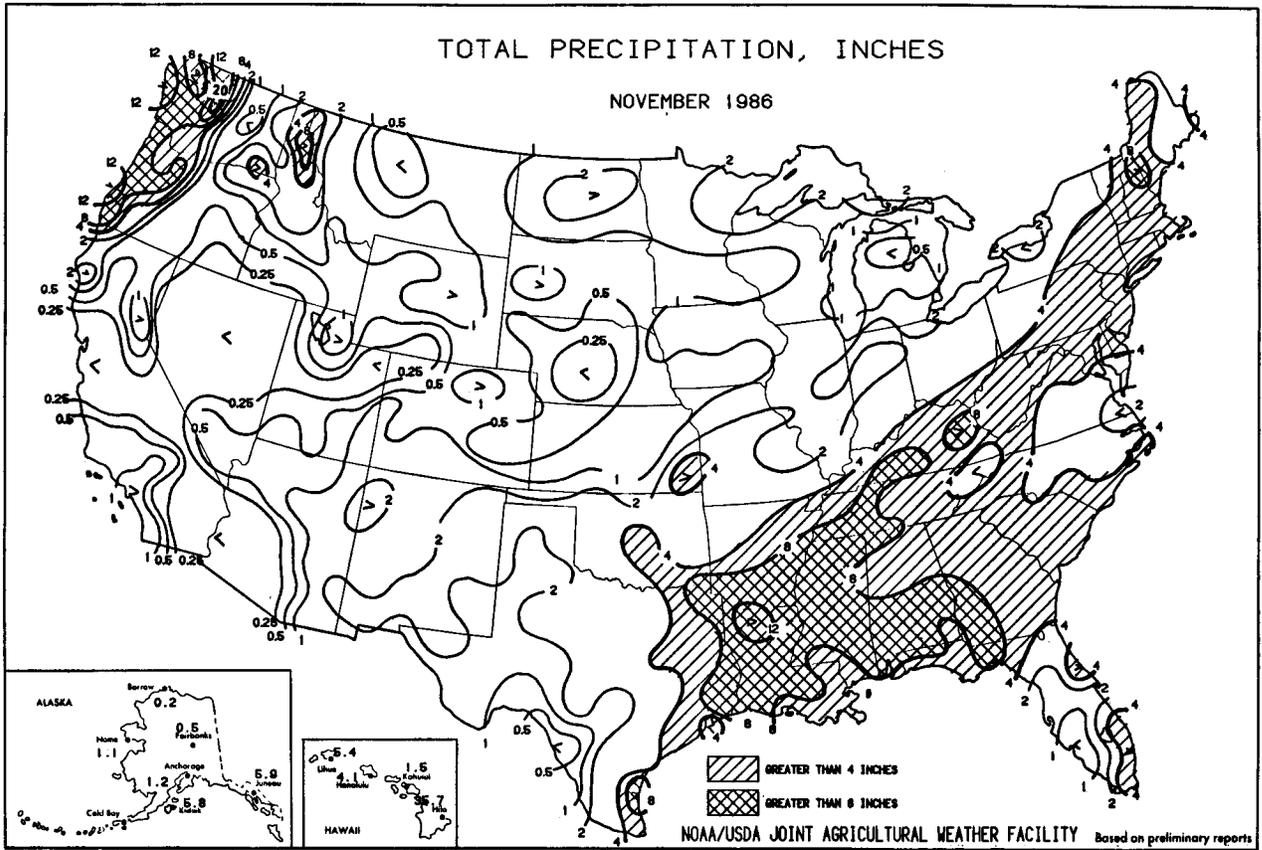
In the 19 major producing States, soybeans were 89 percent combined on November 30 compared with 87 percent last year and the 93 percent average. Harvest was progressing normally at the beginning of the month but slid behind normal as farmers encountered rain in the Delta and Southeast, and farmers in the Corn Belt turned their attention to completing corn harvest. As the month closed, harvest was behind normal in 12 of the 19 major producing States. Harvest was 21 points behind normal in North Carolina, 18 points in Tennessee, 16 points in Kansas, 15 points in Missouri, and 12 points in Arkansas. Harvest neared completion in the Corn Belt and northern Great Plains on November 30.

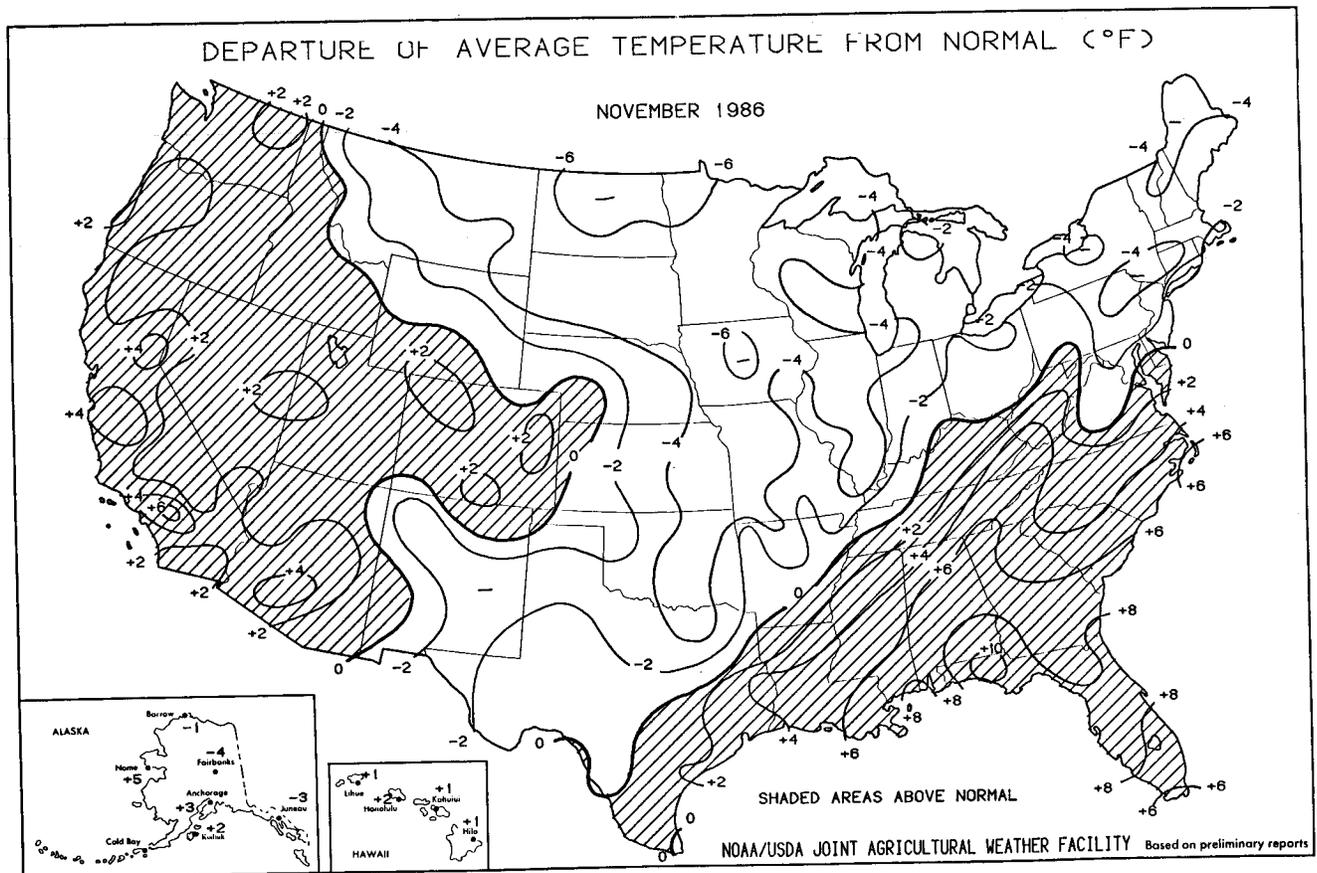
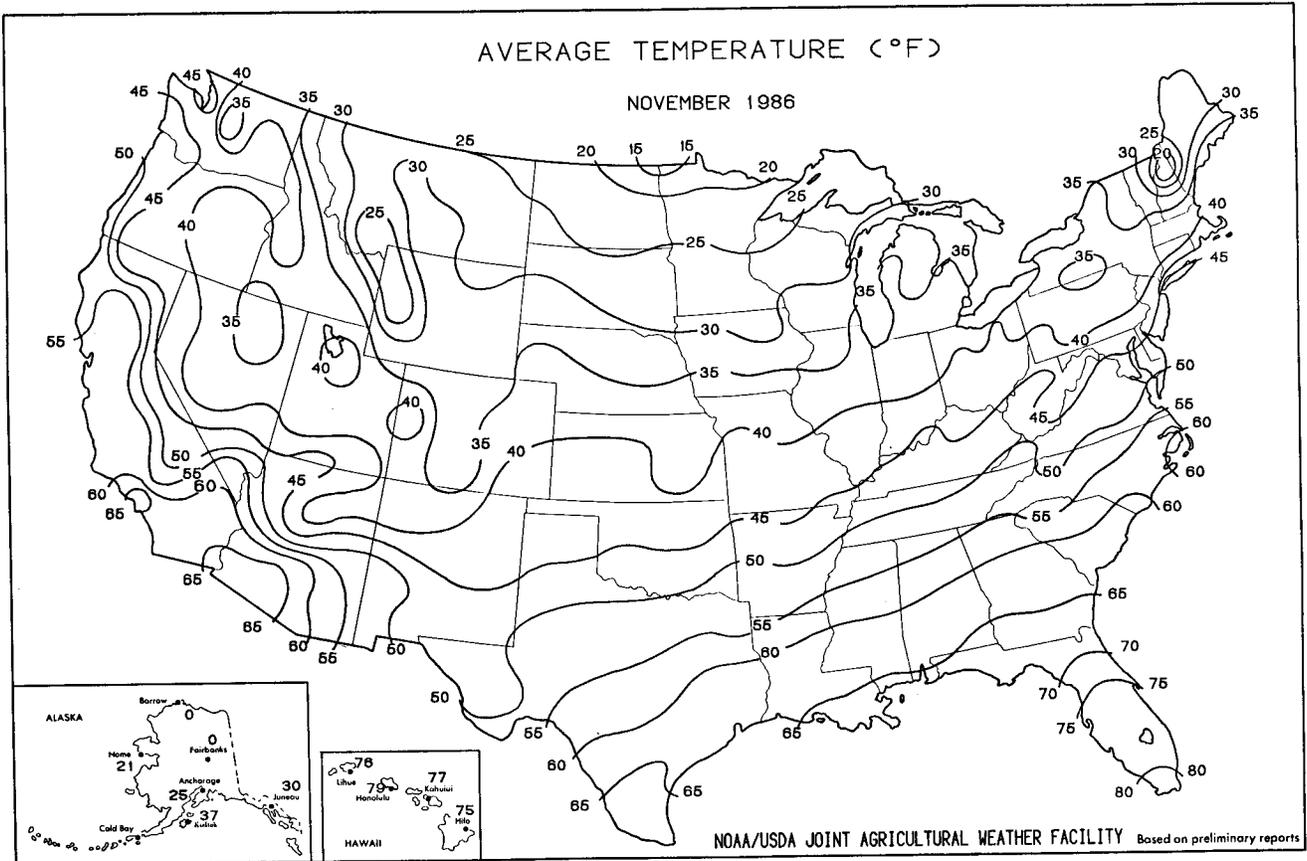
In the 14 major producing States, 65 percent of the cotton acreage was picked by the end of November. Wetness slowed cotton harvest during the month, going from 1 point ahead of normal on November 2 to 10 points below normal on November 30. In Texas, harvest moved at a very slow pace during the month. Oklahoma's, harvest was 1 percent finished at the beginning of November and only 9 percent of the acreage was picked the rest of the month. Texas cotton producers picked only 15 percent of their acreage during November. On November 30, Texas and Oklahoma harvests were 35 and 10 percent complete--23 and 30 points behind schedule, respectively. South Carolina's cotton harvest was 78 percent finished, 20 points slower than the average. Harvest was finished or nearly finished, in the Delta and Southwest, except in New Mexico where harvest lagged 30 points behind normal.

Sorghum was 93 percent harvested on November 30 compared with 97 percent normally. With the exception of Texas, Oklahoma, and Missouri, harvest was nearly finished.

Winter Wheat Seeding

Rain delayed winter seeding during most of November but most of the acreage was seeded by the end of the month except in the Southeast, Southwest, and in Missouri. In the 20 major producing States, winter wheat was 96 percent seeded and 91 percent emerged at the end of the month. Normally, 97 percent would be seeded and 91 percent would be emerged by this date. Missouri's seedings were 75 percent complete on November 30, 19 points behind normal. Most of the remaining acreage was not expected to be seeded. Fifty-five percent of California's acreage was seeded, 3 points ahead of normal. Planting was 4 points ahead of normal in Georgia. As the month ended, less than half of the wheat in North Dakota had sufficient snow cover.





Temperature and Precipitation Data for November 1986

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
AL BIRMINGHAM	57	5	6.6	3.0	LA ALEXANDRIA	60	3	9.1	4.3	OK COLUMBUS	41	-1	3.0	0.3
MOBILE	64	8.5	4.8		BATON ROUGE	64	6	8.5	4.5	DAYTON	40	-2	2.9	0.3
AK MONTGOMERY	62	7	10.2	7.2	LAKE CHARLES	64	4	8.2	4.5	TOLEDO	37	-2	1.7	-0.7
ANCHORAGE	25	3	1.2	0.1	NEW ORLEANS	66	6	8.0	3.9	YOUNGSTOWN	39	-1	2.8	0.0
BARROW	0	-1	0.2	-0.1	SHREVEPORT	56	0	9.2	5.4	OK OKLAHOMA CITY	45	-4	4.6	3.1
FAIRBANKS	0	-4	0.5	-0.2	ME GARIBOU	26	-5	4.0	0.8	TULSA	44	-6	3.0	0.4
JUNEAU	31	-2	5.9	0.7	PORTLAND	36	-2	5.2	0.5	OR ASTORIA	47	1	11.4	1.5
KODIAK	37	2	5.8	-0.9	MD BALTIMORE	45	-2	6.0	2.9	BURNS	38	1	0.3	-0.9
NOME	21	5	1.0	0.1	MA SALISBURY	48	1	2.6	-0.4	MEDFORD	45	2	2.5	-0.4
AZ FLAGSTAFF	38	2	1.7	0.0	MI ALPENA	42	-3	6.0	1.8	PENDLETON	42	1	2.1	0.6
PHOENIX	65	4	T	-0.5	CHATHAM	44	-1	6.4	1.9	PORTLAND	48	2	6.3	1.1
PRESCOTT	46	2	0.1	-1.2	DETROIT	33	-2	0.6	-1.6	SALEM	46	2	7.2	1.5
TUCSON	60	1	0.4	-0.2	FLINT	37	-2	1.9	-0.5	PA ALLENTOWN	39	-3	6.3	2.6
WINSLON	45	2	1.2	0.8	GRAND RAPIDS	35	-4	1.0	-2.0	ERIE	39	-1	3.0	-0.8
YUMA	66	3	0.1	-0.1	Houghton Lake	32	-3	0.5	-1.8	HARRISBURG	41	-3	4.6	1.4
AR FORT SMITH	48	-2	2.4	-1.1	LANSING	35	-4	1.2	-1.1	PHILADELPHIA	44	-2	6.3	3.0
LITTLE ROCK	49	-2	5.7	1.6	MARQUETTE	25	-5	1.0	-1.9	PITTSBURGH	40	-1	3.9	1.6
CA BAKERSFIELD	57	0	0.6	-0.1	MUSKOGON	36	-3	0.6	-2.2	SCRANTON	37	-4	3.9	1.0
EUREKA	54	2	1.8	-4.1	SAULT STE. MARI	30	-3	2.5	-0.7	RI PROVIDENCE	41	-2	5.8	1.5
FRESNO	57	4	T	-1.2	MN ALEXANDRIA	25	-5	0.6	-0.5	SC CHARLESTON	63	6	4.0	1.8
LOS ANGELES	65	4	1.1	-0.4	DULUTH	24	-4	2.0	0.3	COLUMBIA	59	5	6.2	3.7
REDDING	55	1	0.4	-5.2	INT'L FALLS	20	-5	1.2	0.0	FLORENCE	59	5	4.1	1.9
SACRAMENTO	56	3	0.1	-2.1	MINNEAPOLIS	28	-5	0.6	-0.7	GREENVILLE	53	2	5.4	2.2
SAN DIEGO	63	1	1.2	0.1	ROCHESTER	26	-6	0.8	-0.6	SD ABERDEEN	26	-4	0.8	0.2
SAN FRANCISCO	57	3	0.1	-2.3	ST. CLOUD	26	-4	1.1	-0.2	HURON	28	-4	0.5	-0.2
STOCKTON	56	3	T	-1.8	MS GREENWOOD	57	3	10.3	5.7	RAPID CITY	31	-4	1.4	0.9
CO DENVER	39	1	1.1	0.2	JACKSON	60	5	9.4	5.2	SIoux FALLS	29	-4	0.9	0.0
GRAND JUNCTION	41	1	1.1	0.5	MERIDIAN	59	5	10.2	6.8	TN CHATTANOOGA	55	4	7.6	3.4
PUEBLO	40	0	0.5	0.0	MO COLUMBIA	39	-4	2.4	0.3	KNOXVILLE	52	4	3.8	0.1
CT BRIDGEPORT	43	-3	4.9	1.1	KANSAS CITY	38	-5	1.1	-0.5	MEMPHIS	51	0	8.7	4.5
HARTFORD	38	-4	5.6	1.5	SAINT LOUIS	41	-3	1.6	-1.0	NASHVILLE	50	1	7.4	3.9
DC WASHINGTON	46	-2	5.2	2.4	SPRINGFIELD	42	-4	2.7	-0.2	TX ABILENE	51	-2	3.2	1.9
FL APALACHICOLA	69	8	5.1	2.3	MT BILLINGS	32	-3	1.3	0.5	AMARILLO	43	-3	1.8	1.2
DAYTONA BEACH	73	7	5.0	2.5	GLASGOW	25	-4	0.6	0.2	AUSTIN	59	3	1.8	-0.4
FT. MYERS	78	8	0.6	-0.8	GREAT FALLS	32	-2	0.4	-0.4	BEAUMONT	64	-1	9.0	4.7
JACKSONVILLE	69	8	2.9	0.9	HAVRE	25	-4	0.6	0.2	BROWNSVILLE	67	0	7.6	6.2
KEY WEST	81	5	0.9	-2.3	HELENA	29	-2	0.5	0.0	CORPUS CHRISTI	65	3	3.7	2.2
MIAMI	79	7	4.7	2.0	KALISPELL	29	-2	1.6	0.3	DEL RIO	59	0	0.3	-0.6
ORLANDO	76	8	1.6	-0.2	MILES CITY	29	-3	0.5	-0.1	EL PASO	50	-2	1.4	1.1
TALLAHASSEE	67	8	8.4	5.1	MISSOULA	32	0	1.1	0.2	FORT WORTH	52	-3	3.1	1.3
TAMPA	76	10	1.3	-0.5	NE GRAND ISLAND	35	-2	0.3	-0.5	GALVESTON	65	2	4.0	0.8
WEST PALM BEACH	78	7	6.8	3.4	LINCOLN	36	-3	0.9	-0.1	HOUSTON	62	2	6.7	3.3
GA ATLANTA	58	6	6.2	2.8	NORFOLK	33	-3	0.5	-0.2	LUBBOCK	47	-2	1.7	1.1
AUGUSTA	61	7	4.9	2.9	NORTH PLATTE	36	1	0.2	-0.4	MIDLAND	51	-2	1.5	0.9
MACON	62	6	6.7	4.4	OMAHA	34	-4	0.6	-0.6	SAN ANGELO	53	-2	1.8	0.9
SAVANNAH	65	7	4.4	2.5	SCOTT'S BLUFF	35	-1	0.8	0.3	SAN ANTONIO	59	0	1.8	-0.5
HI HILO	75	2	35.7	20.8	VALENTINE	32	-2	0.6	0.2	VICTORIA	63	0	2.9	0.6
HONOLULU	79	3	4.1	0.9	NV ELKO	34	-1	0.1	-0.7	WACO	55	-2	3.5	1.3
KAHULUI	77	2	1.5	-0.8	ELY	36	2	0.2	-0.4	WICHITA FALLS	49	-3	3.0	1.6
LIHUE	76	1	5.4	-0.1	LAS VEGAS	56	2	0.8	0.3	UT BLANDING	39	1	1.4	0.6
ID BOISE	40	1	1.0	-0.3	RENO	43	4	T	-0.6	CEDAR CITY	40	0	0.8	-0.1
LEWISTON	41	1	1.5	0.4	WINNEMUCCA	39	1	0.1	-0.7	MILFORD	38	1	0.4	-0.3
POCATELLO	36	1	0.9	0.0	NH CONCORD	34	-3	4.5	0.8	SALT LAKE CITY	41	1	1.2	0.0
IL CAIRO	45	-4	3.4	-0.6	NJ ATLANTIC CITY	45	-1	5.1	1.4	VT BURLINGTON	34	-2	2.9	0.1
CHICAGO	36	-4	1.4	-0.7	NM ALBUQUERQUE	42	-2	1.3	0.9	VA NORFOLK	55	3	1.2	-1.7
MOLINE	35	-4	1.1	-0.8	CLOVIS	44	-3	2.3	1.8	RICHMOND	49	0	2.5	-0.8
PEORIA	36	-4	1.3	-0.6	ROSWELL	46	-3	1.9	1.6	ROANOKE	47	0	3.7	1.1
QUINCY	37	-4	1.3	-0.7	NY ALBANY	36	-4	4.6	1.6	WA COLVILLE	37	3	1.4	-0.7
ROCKFORD	33	-4	1.1	-1.2	BINGHAMTON	35	-3	5.8	2.8	QUILLAYUTE	45	1	13.3	-0.6
SPRINGFIELD	38	-4	2.0	0.0	BUFFALO	38	-3	3.1	-0.5	SEATTLE-TACOMA	45	1	8.0	2.4
IN EVANSVILLE	44	-1	2.4	-1.0	NEW YORK	46	-1	5.8	2.0	SPOKANE	35	0	2.2	0.2
FORT WAYNE	37	-3	1.5	-1.1	ROCHESTER	37	-4	2.0	-0.7	WALLA WALLA	44	1	4.2	2.3
INDIANAPOLIS	40	-2	2.3	-0.7	SYRACUSE	37	-4	3.7	0.3	YAKIMA	39	0	0.6	-0.3
SOUTH BEND	36	-4	2.8	0.0	NC ASHEVILLE	51	4	5.3	2.0	WV BECKLEY	45	3	4.5	1.7
IA DES MOINES	33	-5	1.0	-0.5	CHARLOTTE	53	2	3.5	0.7	CHARLESTON	46	1	6.9	4.0
DUBUQUE	31	-5	1.6	-0.9	GREENSBORO	51	2	3.5	0.9	ELKINS	43	2	5.7	3.0
SIoux CITY	32	-5	1.2	0.2	HATTERAS	62	6	4.3	-0.6	HUNTINGTON	46	0	6.7	3.9
WATERLOO	29	-6	1.3	-0.4	NEW BERN	58	4	2.9	-0.2	PARKERSBURG	43	-1	5.0	2.4
KS CONCORDIA	39	-3	0.7	-0.3	RALEIGH	53	3	2.8	-0.1	WI GREEN BAY	30	-5	1.3	-0.5
DODGE CITY	41	-2	0.6	-0.1	WILMINGTON	60	4	4.4	1.2	LA CROSSE	30	-5	0.9	-0.6
GOODLAND	39	1	0.5	-0.1	ND BISMARCK	23	-5	2.1	1.6	MADISON	31	-4	1.1	-0.8
TOPEKA	38	-4	0.8	-0.9	FARGO	23	-5	1.4	0.6	MILWAUKEE	35	-2	0.9	-1.1
WICHITA	40	-4	0.6	-0.9	GRAND FORKS	20	-6	1.5	0.7	WAUSAU	28	-4	0.6	-1.2
KY BOWLING GREEN	47	0	8.3	4.4	WILLISTON	23	-5	1.2	0.7	WY CASPER	32	-1	1.5	0.8
JACKSON	47	4	9.3	6.1	OH AKRON-CANTON	39	-2	3.4	0.9	CHEYENNE	35	0	0.7	0.2
LEXINGTON	45	0	6.5	3.2	CINCINNATI	43	0	3.8	0.6	LANDER	31	0	1.1	0.3
LOUISVILLE	46	0	4.7	1.2	CLEVELAND	40	-2	3.0	0.3	SHERIDAN	29	-4	1.9	1.1
PADUCAH	45	-2	3.6	-0.5					FR SAN JUAN	79	-1	5.9	0.3	

BASED ON 1951-80 NORMALS.

Heating Degree Days (Base 65° F.)

November 1986

ALA. Birmingham	249	MAINE, Caribou	1166	OKLA. Okla. City	599
Mobile	105	Portland	855	Tulsa	632
Montgomery	152	MD. Baltimore	598	OREG. Astoria	507
ALASKA, Anchorage	1198	MASS. Boston	674	Burns	845
Barrow	1941	Chatham	620	Medford	602
Fairbanks	1944	MICH. Alpena	945	Pendleton	675
Nome	1310	Detroit	824	Portland	510
ARIZ. Flagstaff	816	Flint	881	Salem	542
Phoenix	43	Grand Rapids	894	PA. Allentown	759
Tucson	154	Houghton Lake	975	Erie	742
Winslow	599	Lansing	895	Harrisburg	706
Yuma	27	Marquette	1185	Philadelphia	609
ARK. Fort Smith	501	S. Ste. Marie	1036	Pittsburgh	733
Little Rock	471	MINN. Duluth	1224	Scranton	823
CALIF. Bakersfield	249	Internatl Falls	1346	R.I. Providence	697
Eureka	341	Minneapolis	1096	S.C. Charleston	127
Fresno	242	Rochester	1153	Columbia	207
Los Angeles	34	St. Cloud	1170	Greenville	361
Reading	309	MISS. Jackson	183	S. DAK. Aberdeen	1152
Stockton	272	Meridian	196	Huron	1091
San Diego	66	MO. Columbia	765	Rapid City	1025
San Francisco	228	Kansas City	805	Sioux Falls	1032
COLO. Denver	775	St. Louis	699	TENN. Chattanooga	306
Grand Junction	718	Springfield	692	Knoxville	377
Pueblo	741	MONT. Billings	982	Memphis	413
CONN. Bridgeport	673	Glasgow	1192	Nashville	447
Hartford	793	Great Falls	987	TEX. Abilene	413
D.C. Washington	548	Havre	1183	Amarillo	665
FLA. Apalachicola	34	Helena	1077	Austin	214
Ft. Myers	--	Kalispell	1061	Beaumont	140
Jacksonville	41	Miles City	1086	Brownsville	117
Key West	0	Missoula	993	Corpus Christi	139
Miami	0	NEBR. Grand Island	882	Del Rio	205
Orlando	0	Lincoln	874	El Paso	460
W. Palm Beach	0	Norfolk	943	Fort Worth	376
Tallahassee	62	North Platte	878	Galveston	116
Tampa	0	Omaha	917	Houston	175
GA. Atlanta	243	Valentine	1013	Lubbock	535
Augusta	170	NEV. Ely	869	Midland	423
Macon	162	Las Vegas	268	San Angelo	354
Savannah	101	Reno	654	San Antonio	204
IDAHO, Boise	733	Winnemucca	792	Victoria	162
Lewiston	729	N.H. Concord	919	Waco	305
Pocatello	864	N.J. Atlantic City	600	Wichita Falls	472
ILL. Cairo	607	N. MEX. Albuquerque	680	UTAH, Milford	797
Chicago	863	N.Y. Albany	872	Salt Lake City	720
Moline	898	Binghamton	880	VT. Burlington	906
Peoria	858	Buffalo	811	VA. Lynchburg	520
Rockford	942	New York	561	Norfolk	311
Springfield	807	Rochester	840	Richmond	476
IND. Evansville	632	Syracuse	838	Roanoke	523
Fort Wayne	826	N.C. Asheville	419	WASH. Colville	852
Indianapolis	750	Charlotte	357	Quillayute	608
South Bend	858	Greensboro	426	Seattle-Tacoma	586
IOWA, Des Moines	941	Hatteras	116	Spokane	902
Dubuque	1013	Raleigh	370	Walla Walla	613
Souix City	984	Wilmington	199	Yakima	791
KANS. Concordia	784	N. DAK. Bismarck	1237	W. VA. Beckley	598
Dodge City	722	Fargo	1251	Charleston	550
Goodland	773	Williston	1266	Huntington	567
Topeka	792	OHIO. Akron-Canton	770	Madison	1052
Wichita	747	Cincinnati	664	WIS. Green Bay	i007
KY. Lexington	595	Cleveland	736	Milwaukee	891
Louisville	570	Columbus	702	WYO. Casper	986
LA. Baton Rouge	118	Dayton	732	Cheyenne	914
Lake Charles	128	Toledo	828	Lander	1007
New Orleans	85	Youngstown	772	Sheridan	1069
Shreveport	298				

BASED ON 1951-80 NORMALS.

National Agricultural Summary

December 1 to 7, 1986

HIGHLIGHTS: Fall row crop harvest slowly crept towards completion. Rain continued hampering harvest in the central Great Plains, Southeast, Corn Belt, and some Delta States. Dry weather boosted cotton harvest in the southern Great Plains. Soil moisture was adequate to surplus in the eastern half of the Nation. Some areas along the west coast were a little dry. Fieldwork averaged less than 3 days in the Corn Belt, Delta, and Southeast. Livestock was mostly good. Supplemental feeding increased as needed.

Winter wheat was mostly good to fair. Rain continued hampering seeding in the Southeast. Emergence was 93 percent (%) finished, 1 percentage point behind the 5-year average. Most of the wheat and small grains lacked snow cover in the northern producing areas, but damage has been minimal thus far. A few acres of corn remain to be harvested in the Corn Belt and northern producing States. Soybeans were 91% harvested, compared with 90% last year and the 95% average. In the Corn Belt, harvest was on the edge of completion but was held nearly motionless because of rain. Harvest was behind normal in 12 of the 19 major producing States, ranging from 1 point behind normal in both Indiana and Iowa to 25 points behind normal in North Carolina. Cotton harvest surged 10 points from the previous week, mostly because of the favorable harvesting conditions in New Mexico, Oklahoma, and Texas. Harvest reached 75% completion but was still 7 points below average. Grain sorghum harvest was mostly finished except in Missouri. Tobacco bed preparation was underway in the Southeast.

SMALL GRAINS: Winter wheat was mostly good to fair. Much of the wheat in the northern producing areas lacked snow cover, but temperatures have not been severe enough to cause much damage thus far. Stands were emerged on 93% of the acreage, compared with 93% last year and the 93% average. Seeding progressed in the Southeast and Delta as weather permitted. In Georgia, seeding reached 70% completion, 4 points ahead of the previous week but 3 points below normal. Winter wheat seeding was finished in western Kansas but await completion of harvest in the east. Emergence was virtually at a standstill. North Carolina's wheat seeding was slightly ahead of average. Wheat was good to fair in Oklahoma. All acreages were seeded except in wet, unworkable fields. Dry weather slowed germination in California. In Texas, small grains progressed well, even though colder temperatures slowed growth. Late planted fields were emerging slowly in the Plains and may require replanting. Rust developed in early planted wheat.

SOYBEANS: Rain hampered harvest in the Corn Belt, Southeast, Delta, and central Plains, during most of the week. Freezing temperatures and dry weather are badly needed in these areas to complete harvest. In the 19 major producing States, harvest increased 2 points closer to completion but was still 4 points below the 95% average. In Kansas, harvest was 14 points behind normal at 85% completion. Forty-nine percent of North Carolina's soybeans were combined, compared with 74% normally. Twenty-four percent of Missouri's acreage remained to be harvested, normally only 10% would be left. Harvest was 9 and 10 points behind normal in Georgia and Arkansas, respectively.

COTTON: Wetness curtailed harvest in the Southeast, but producers made significant progress in New Mexico, Oklahoma, and Texas. Harvest gained 10 points from the previous week in the 14 major producing States but was still 7 points below average. Seventy-five percent of the area was harvested to date. Harvest surged 20 points from the previous week in Texas, ending the week 55% finished but was still 15 points slower than average. Some insured acreage was plowed under. Oklahoma producers harvested 15% of their crop in 1 week but still faced a 30-point deficit. Harvest progressed well early in the week but was slowed by rain. Arizona's cotton harvest ended. Stalk shredding and plowdown were moderate to active. Harvest neared completion in California. Farmers were busy shredding and discing in stalks.

OTHER CROPS: Sorghum harvest advanced to 97% completion, 1 point behind the average. All States were at least 95% finished except Missouri where 87% of the crop was combined.

Burley tobacco marketing was in full swing. Tobacco bed preparation was underway in the Southeast.

Sugarcane harvest was active in Texas, Louisiana, and Florida. Sugar content was lower than normal in Texas.

Peanut harvest was winding down in the High Plains and at Cross-Timbers. Yields were good. Wet fields delayed harvest in some areas.

FRUIT AND NUTS: In Florida, rain in most citrus areas halted irrigation. Cool weather slowed tree growth. Fruit droppage was excessive in a few groves. Most juice plants were open, and harvest was very active in all areas. Texas orange and grapefruit harvests increased. Cooler temperatures increased sugar content, and size was good. Dry weather allowed pruning of nut and fruit orchards in California. Herbicides were applied to control vineyard and orchard weeds. Irrigation and fertilization were active. Navel orange size continued small, but quality was good. Lemons, tangerines, and grapefruit were harvested in the desert. Citrus harvest advanced in Arizona. The Valencia orange crop looked good.

VEGETABLES: Local heavy rains in Florida's lower east coast vegetable area did very little damage. Harvest was active with the volume leaders of tomatoes, green peppers, cucumbers, celery, squash, snap beans, and sweet corn. The first strawberries of the season were harvested. Tomatoes, cucumbers, broccoli, and peppers were harvested in the Rio Grande Valley. In the San Antonio-Winter Garden area, carrot, spinach, and cabbage harvests continued. Harvesting fall and planting winter vegetables progressed in Los Angeles and Orange County, California. Celery was moderate in Salinas, fairly light in Santa Maria, but quality was good. Broccoli, carrot, and cauliflower volume was light in Salinas. Fall potatoes moved from storage in the Tulalake-Butte Valley on a limited basis.

PASTURES AND LIVESTOCK: Pastures were fair to good in most southern areas of the Nation. Rain is needed in some western areas to induce growth. Livestock was mostly good to fair. Supplemental feeding increased as needed.

CROP PROGRESS

FOR WEEK ENDING DECEMBER 7, 1986

	COTTON		
	% HARVESTED		
	1986	1985	AVG.
ALA	98	98	99
ARIZ	94	85	90
ARK	99	100	97
CALIF	97	92	94
GA	85	90	92
LA	100	99	96
MISS	100	98	95
MO	99	96	97
N MEX	65	85	89
N C	92	83	92
OKLA	25	50	55
S C	87	98	100
TENN	98	95	94
TEX	55	69	70

14 STATES 75 81 82

THESE 14 STATES PRODUCED 100% OF THE 1985 COTTON CROP.

	SOYBEANS		
	% HARVESTED		
	1986	1985	AVG.
ALA	89	91	94
ARK	84	89	94
GA	72	66	81
ILL	99	97	99
IND	99	96	100
IOWA	99	99	100
KANS	85	90	99
KY	90	85	93
LA	95	96	96
MICH	99	90	98
MINN	99	99	99
MISS	88	92	92
MO	76	67	90
NEBR	100	100	100
N C	49	46	74
OHIO	99	94	99
S C	64	40	64
S DAK	100	100	100
TENN	80	96	95

19 STATES 91 90 95

THESE 19 STATES PRODUCED 96% OF THE 1985 SOYBEANS CROP.

	WINTER WHEAT		
	% EMERGED		
	1986	1985	AVG.
ARK	81	NA	NA
CALIF	40	50	45
COLO	97	98	95
GA	60	52	NA
IDAHO	100	100	100
ILL	99	100	99
IND	99	100	98
KANS	96	95	98
MICH	95	100	NA
MO	75	91	91
MONT	80	80	88
NEBR	100	100	100
N MEX	100	NA	NA
N C	80	NA	NA
OHIO	100	100	100
OKLA	85	95	90
OREG	98	92	96
S DAK	100	100	100
TEX	96	86	91
WASH	100	100	100

20 STATES 92 NA NA

EXCL. STATES WITH NA 93 93 94

THESE 20 STATES PRODUCED 91% OF THE 1985 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

	GRAIN SORGHUM		
	% HARVESTED		
	1986	1985	AVG.
ARK	100	100	99
ILL	99	99	98
KANS	97	98	99
LA	100	100	100
MISS	100	100	100
MO	87	81	93
NEBR	100	100	100
OKLA	95	97	95
S DAK	100	100	100
TENN	99	100	NA
TEX	97	96	99

11 STATES 97 97 NA

EXCL. STATES WITH NA 97 96 98

THESE 11 STATES PRODUCED 94% OF THE 1985 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

Crop Condition Percent

FOR WEEK ENDING DECEMBER 7, 1986

STATE	WINTER WHEAT				
	VP	P	F	G	EX
ARK	0	0	0	67	33
COLO	1	3	24	65	7
GA	0	1	36	63	0
MICH	5	20	40	30	5
MO	3	15	53	29	0
MONT	0	0	70	30	0
N MEX	0	0	43	57	0
N C	0	1	18	78	3
OKLA	0	0	45	55	0
OREG	0	0	10	60	30
S DAK	0	0	14	72	14
TEX	0	1	21	58	20
WASH	0	0	5	95	0

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: Temperatures averaged 2 to 4° below normal. Rainfall totals averaged under 0.50 in.

Days suitable for fieldwork 2.4. Soil moisture 48% adequate, 52% surplus. Cotton harvest winding down. Harvesting soybeans, pecans; planting small grains, winter grazing crops; routine care of livestock, poultry.

ARIZONA: Sunny, mild weather 1st through 3rd. Precipitation from sub-tropical storm began 5th, continued into 7th. Snow level at 6,500 ft., 2 to 10 ins. over Grand Canyon, Mogollon Rim, White Mountains. Moisture amounts mostly between 0.25 and 1.00 in., except 2.00 ins. White Mountains. Average temperatures varied from normal to 5° above.

Wet sub-tropical storm slowed fieldwork, harvests. Cotton harvested. Stalk shredding, plow down moderate to active. Small grain seedbed preparation, planting advanced. Wheat, barley 20% planted, 20% 1985. Alfalfa hay cutting slowed by rain. Green chopping continued. Harvest mostly light. Sheeping off increasing. New stands good. Late corn combined. Peanut, sesame harvests winding down. Citrus harvests advanced. Valencia orange crop good, all citrus groves good. Pecan harvest moved ahead. Apple shipping continued. Vegetable harvests very active until interrupted by rain. Lettuce, broccoli, cauliflower, asparagus, mixed vegetables shipped. Vegetable planting took place, established stands good.

ARKANSAS: Temperatures slightly below normal with light rain first part of week. Temperature extremes 15°; 62°. Rainfall 0.01 to 0.41 in.

Days suitable for field work 4.0. Soil moisture 67% adequate, 33% surplus. Major activities: Harvest soybeans, cotton; plant wheat; fed cattle, market calves; and repair equipment, fences.

CALIFORNIA: Ridge high pressure kept skies fair, temperatures slightly above normal. Week's end, Pacific storm brought precipitation entire State, particularly northern coast, southern coast. Storm weakened rapidly, bringing only few inches snow Sierra Nevada, limited rainfall southern deserts. High pressure rebuilding week's end.

Small grains being planted. Dry weather slowing germination. Cotton harvest continued; shredding, discing fields. Sugarbeets, alfalfa planted. Seed alfalfa treated herbicides. Rice stubble burned. Dry weather allowed pruning nut, fruit orchards. Herbicides applied vineyards, orchards; weed control. Irrigation, fertilization active. Avocados harvested; Hass, Fuerte, Zutano. Dates harvested, good quality. Persimmons harvested, low demand. Navel oranges harvested; small, good quality. Desert grapefruit, lemons, tangerines harvested. Artichokes moderate, variable quality, Salinas. Light amounts produced, Santa Cruz-San Mateo coast. Asparagus fern cut, burned; Los Angeles-Orange County, Coachella Valley. Strawberry fields, Los Angeles-Orange County, normal growth. Broccoli moderate, Salinas; fairly light, Santa Maria; good quality. Packing continued; Westside, desert; very good quality, reduced volume low demand. Carrot fairly light, Salinas, good quality. Digging active, Kings. Cauliflower very light, Salinas; fairly light, Santa Maria; good quality. Harvest continued; San Joaquin Valley, desert; very good quality, reduced pack, low demand. Celery moderate, Salinas; fairly light, Santa Maria; good quality. Harvesting fall crop,

planting winter crop progressed, Los Angeles-Orange County. Sweet corn harvest finished, Kern-Tulare, continued Fresno. Fall lettuce harvest; Huron, Firebaugh; nearly completed; quality very good. Harvest, Palo Verde Valley, continued, fair quality, good demand. Onions for fresh market next spring, transplanted, Westside. Earlier fields progressing well. Movement fall potatoes from storages, Tulelake-Butte Valley, continued, limited basis. Harvesting red, white varieties active, Hemet. Sweetpotato hotbed preparation continued, Merced-Atwater. Packing market tomatoes active, south coast. Ranges deteriorated, lack rainfall. Supplemental feeding increased, shortage new grass. Stock ponds empty, critically low most areas. Calving, lambing continue active.

COLORADO: Temperatures averaged 1 to 9° above normal. Precipitation averaged none to 1.20 in.

Harvest of corn, sorghum slowed by last weekend's snow storm, temperatures continued cool throughout week with clear to partly cloudy skies.

FLORIDA: Well above normal temperatures, only spotty rain prevailed. Season's first significant cold front moved in midweek. Near freezing extreme north; elsewhere, readings dipped below normal for first time this season. Late week temperatures began climbing; weekend registered well above normal. Some areas, lower east coast, over 4.00 in. downpour as major upper air feature slowly moved over.

Topsoil moisture generally adequate; few shortages along west coast, upper east coast. Rains early week, cold front midweek delayed harvest few late fields peanuts, cotton, late crop soybeans. Small grains good progress. Sugarcane harvest very active. Unseasonably warm temperatures early, late week, with frost-free nights, mostly adequate moisture favored forage growth central, southern Peninsula. Some winter pasture seeding resumed central areas following earlier rains. Winter pastures good progress Panhandle, extreme northern Peninsula. Lower Peninsula grazing good to excellent; upper Peninsula mostly fair, elsewhere fair to good. Cattle mostly good or above lower Peninsula; fair to good elsewhere. Rain most citrus areas early week; irrigation generally stopped. Cool weather helped slow tree growth. Few groves excessive droppage--not widespread. Most juice plants open. Harvest very active all areas. Temperatures at or above normal over vegetable producing areas except below normal midweek. Precipitation limited except locally heavy rains, lower east coast. No major damage. Harvest active; volume leaders: tomatoes, green peppers, cucumbers, celery, squash, snap beans, sweet corn. Also available in good quantity: eggplant, cabbage, radishes, lettuce, both specialty, iceberg, escarole-endive, carrots. First strawberries harvested.

GEORGIA: First half of week cool, mostly light rain; while last half warmer, mostly dry. Rainfall under 0.50 in. except over 1.00 in. northeast mountains. Temperatures 2 to 6° below normal. Warmest temperatures mid to upper 50s north, near 70s extreme south, southeast. Lowest temperatures teens north to mid 30s extreme south, southeast.

Days suitable for fieldwork 2.3. Soil moisture 5% short, 55% adequate, 40% surplus. Cotton 8% very poor, 28% poor, 54% fair, 10% good. Sorghum grain 95% harvested, 93% 1985. Peanuts 99% threshed, 100% 1985, 100% avg. Soybeans 8% very

poor, 43% poor, 44% fair, 5% good. Wheat 70% planted, 62% 1985, 73% avg. Rye 1% poor, 28% fair, 67% good, 4% excellent; 91% planted, 87% 1985, 90% avg. Other small grains 89% planted, 81% 1985, 87% avg. Pecans 2% very poor, 13% poor, 62% fair, 23% good; 66% harvested, 79% 1985, 72% avg. Pasture 2% very poor, 10% poor, 55% fair, 31% good, 2% excellent. Cattle 1% poor, 39% fair, 57% good, 3% excellent. Hogs 1% poor, 21% fair, 73% good, 5% excellent. Fieldwork limited due to rain.

HAWAII: Conditions poor to fair. Winds 15 to 30 mph, gusts to 50 mph. Passing showers, heavy some areas. Temperatures ranged upper 50s to lower 80s. Rainfall ranged 0.10 to 8.50 in.

Days suitable for fieldwork 7.0. Soil moisture adequate. Cool temperatures, wet conditions slowed progress many crops. Some areas field operations, planting schedules, disrupted. Light wind damage vine crops. Banana, papaya orchards, minor wind damage. Excess moisture some areas adversely affecting leafy vegetables.

IDAHO: North 2 to 5° below normal, near normal south. Precipitation slightly below normal statewide.

Limited farm activity includes fall plowing, shop work. Livestock condition good, care, feeding, no calving or lambing. Hay, roughage supplies adequate to surplus.

ILLINOIS: Temperatures averaged 1° below normal to 2° above normal. Precipitation 0.52 to 2.66 in. Heaviest amounts central.

Major farm activities: Fall tillage, spreading fertilizer, tending livestock.

INDIANA: Low temperatures ranged from upper 20s north to around freezing south. Highs from mid 30s north to mid 40s south, 2 to 5° below normal. Precipitation above normal ranging from 0.40 to 2.15 in.

Wet field conditions continued to limit fieldwork. Activities included considering government programs, hauling grain, caring for livestock, usual chores.

IOWA: Near normal temperatures; precipitation 1st and 2nd, again at weekend. Precipitation near normal northwest to above normal elsewhere; snow northwest, rain southeastward to rain southeast. Snow melted during midweek.

Remaining harvest activities slow; few corn, soybean acres left. Limited farm activities include fall tillage, fertilizer application, general livestock care.

KANSAS: Precipitation averaged 0.25 to 0.50 in. Snow west and north central, rain or drizzle east and south. Temperatures averaged 32 to 34° west and north central, 36 to 39° elsewhere; normal to 2° below normal west, south and north central, 1 to 3° above normal elsewhere.

Late crop harvest some progress. Sorghum harvest virtually complete all districts except south central, east central and southeast. Soybean harvest proceeding eastern three districts, complete west. Corn harvest winding up northeast, east central districts. Wheat seeding waiting for harvest windup east, complete west. Emergence virtually at standstill.

KENTUCKY: Mild and wet early, but dry middle, late. High temperatures 50s, lows teens and lower 20s. High temperatures averaged near normal to 5° below normal. Average lows normal to 6° above normal. Rainfall ranged less 0.50 in. Parts southeast between 1.00 to 2.00 in. west, north.

Soil moisture ample. Bright, dry weather late week permitted soybean harvest; however, considerable double crop beans remain unharvested

some counties. Wheat mostly good. Pastures continued to supply portion of roughage needs. Livestock good.

LOUISIANA: Temperature 1 to 3° below normal. Temperature extremes 29°; 70°. Rainfall averaged none to 0.09 in.

Days suitable for fieldwork 3.3. Soil moisture 55% adequate, 45% surplus. Sugarcane fair to good; 81% harvested, 75% 1985, 79% avg. Sweetpotatoes 100% harvested, 96% 1985, 98% avg. Pecans 87% harvested, 86% 1985, 73% avg. Wheat fair; 85% planted, 79% 1985, 86% avg.; 76% emerged, 64% 1985, 76% avg. Vegetables fair; pasture, livestock fair to good. Main activities: Harvesting pecans, soybeans, sugarcane; planting wheat; topdressing winter pastures; caring for livestock.

MARYLAND & DELAWARE: **Maryland:** Temperatures averaged 2° above normal over State; lowest temperature 21° Oakland; highest temperature 62° Washington National, Patuxent, Salisbury. Precipitation averaged 1.22 in., ranging from 0.41 in. Hagerstown to 1.79 in. Bel Air.

Days suitable for fieldwork 3.5. Topsoil moisture adequate. Subsoil moisture adequate. Soybeans harvested 90%. Corn harvest virtually complete. Farmers finishing small grain plantings, soybean harvest.

Delaware: Temperatures averaged 2° above normal over State; lowest temperature 25° Georgetown; highest temperature 65° Georgetown. Precipitation averaged 1.53 in., ranging from 1.46 in. Georgetown to 1.60 in. Wilmington.

Days suitable for fieldwork 3.5. Topsoil moisture adequate. Subsoil moisture adequate. Soybeans harvested 85%. Corn harvest virtually complete. Farmers finishing small grain plantings, soybean harvest.

MICHIGAN: Temperatures ranged 1 to 3° above normal. Temperature extremes 10°; 42°. Precipitation ranged from 0.20 to 1.20 in. across State.

Days suitable for fieldwork 3.5. Soil moisture 50% adequate, 50% surplus. Soybeans 99% harvested, 90% 1985, 98% avg. Winter wheat 95% emerged, 100% 1985; 5% very poor, 20% poor, 40% fair, 30% good, 5% excellent. Corn 95% harvested, 75% 1985, 95% avg. Activities: Corn harvesting, fall tillage, fertilizer and manure spreading, fruit pruning.

MINNESOTA: Temperatures averaged near normal to 2° above normal for State. Temperature extremes 8°; 44°. Precipitation averaged 0.06 to 0.17 in. below normal for State. Snow averaged trace to 2 in. for State. Snow depth weeks end averaged normal to 2 in. for State.

Very little activity due to cold weather, frozen ground. Little remaining corn harvested during week. Lack of snow cover may hamper winter wheat, rye.

MISSISSIPPI: Temperatures 3° below normal; extremes 18°; 69°. Cold front on 1st, brought rain to State. Greatest 24-hour total rainfall 0.85 in. Gholson.

Days suitable for fieldwork 1.5, 3.8 1985, 2.8 avg. Soil moisture adequate to surplus. Wheat 84% planted, 82% 1985, 84% avg.; fair to good. Pecans 82% harvested, 80% 1985, 78% avg.

MISSOURI: Temperatures near normal except 3° below normal Southeast. Precipitation averaged 1.00 in. except southwest 0.20 in.

Days suitable for fieldwork 1.5. Soil moisture 25% adequate, 75% surplus. Wet weather continued to delay harvest. Hard freeze needed to get over muddy fields. Pasture 2% very poor, 4% poor, 39% fair, 51% good, 4% excellent.

MONTANA: Above normal temperatures first 4 to 5 days, below normal last few days. Temperatures averaged near to slightly above normal western half, near normal east. Most precipitation last few days 0.10 to 0.20 in. Locally 0.30 to 0.50 in. west.

Topsoil moisture supply 8% short, 92% adequate. Subsoil moisture 3% short, 97% adequate. Winter wheat snow cover protection 73% poor, 23% fair, 4% good. Wind damage to winter wheat 10% none, 75% light, 15% moderate. Cattle, calves received supplemental feed 58%, sheep and lambs 68%. Grazing conditions 91% open, 6% difficult, 3% closed. Stockwater supplies adequate 100%.

NEBRASKA: Temperatures ranged 3° above normal east to 2° below normal west. Rainfall averaged 0.20 to 0.30 in. Temperature extremes 9°; 54°.

Usual winter activities with livestock care, grain handling, machinery repair.

NEVADA: High pressure system dominated weather first half week. Skies mostly clear with warming trend peaked midweek. Gusty winds developed last half period as cold front moved through all areas. Precipitation generally light with snow high elevations. Winds peaked 75 mph Washoe Valley.

Major ranch, farm activities confined largely to caring and feeding livestock. Movement potatoes to market slowed by low temperatures last half period.

NEW ENGLAND: Precipitation 0.50 to 1.00 in. northern Maine, northern New Hampshire, western Vermont. Northeastern Vermont, western Massachusetts, northwest Connecticut 1.00 to 1.50 in. South and coastal 1.50 to 2.00 in. Elsewhere 2.00 to 3.00 in. Temperatures from 20° near Canadian border to upper 30s along southern coast, near normal.

Major farm activities: Machinery repair, tending livestock, moving crops from storage.

NEW JERSEY: Temperatures slightly above normal, averaging 35° north, 39° south, 42° coastal. Extremes 11°; 61°. Precipitation above normal, averaging 1.48 in. north, 1.78 in. south, 1.34 in. coastal. Heaviest 24-hour total 2.40 in. on 2nd, 3rd.

Wet conditions continued to delay late harvest of soybeans, corn for grain. Some fall seeded small grain acreage will not be planted due to wet conditions. Farmers caring for livestock, pruning fruit. Cutting, digging Christmas trees active.

NEW MEXICO: Weekly average temperatures near or a little above normal central and western areas, near normal eastern plains. Weather disturbance over weekend brought rain to lower elevations, snow to mountains. Precipitation none some parts of southeastern plains to 0.88 in. central highlands.

Days suitable for fieldwork 6.9. Soil moisture 75% adequate, 25% surplus. Freeze damage 43% light, 57% moderate. Cotton 14% poor, 14% fair, 72% good. Barley 25% fair, 75% good. Irrigated grain sorghum 17% poor, 17% fair, 49% good, 17% excellent. Dryland grain sorghum 50% fair, 50% good. Pecans 100% good. Chile 25% fair, 75% good. Cattle 33% fair, 67% good. Sheep 17% fair, 83% good. Range 56% fair, 44% good.

NEW YORK: Temperatures, precipitation variable statewide. Snow 3rd in central part of State while rain southern areas. Temperatures warmed later in week, skies remained dry.

Growers continued to harvest corn during breaks in weather. General farm maintenance occupied most producers time.

NORTH CAROLINA: Temperatures averaged 3° below normal, Mountain region; 1 to 2° below Piedmont

Region; 2° above Coastal Plain Region. Temperature extremes 17°; 76°. Precipitation ranged from 0.35 to 2.88 in.

Days suitable for fieldwork 2.3. Soil moisture 18% short, 65% adequate, 17% surplus. Cotton harvest average. Soybean harvest well behind average, wet conditions. Wheat planting slightly ahead of average. Small grains fair to mostly good. Oats planted 94%, 91% 1985, 93% avg. Barley planted 96%, 86% 1985, 94% avg. Rye planted 91%, 89% 1985, 90% avg. Sorghum harvested 90%, 95% 1985, 96% avg. Pasture 2% very poor, 10% poor, 45% fair, 42% good, 1% excellent. Major farm activities: Harvesting soybeans, cotton, sorghum; grading, stripping, marketing burley tobacco; cutting firewood; cutting, shipping Christmas trees; seeding small grains; tending livestock; preparing tobacco beds; repairing equipment; conservation work; general farm maintenance.

NORTH DAKOTA: Temperatures averaged 1° below normal to 4° above normal. Extremes 10° below northeast 6th to 42° west central 1st. Precipitation light; most locations received trace. Southwest received 0.10 in. water equivalent from snow on 30th.

Snow cover light but temperatures mild enough so far so there is no current threat to over-wintering crops. Livestock remains in generally good condition. Feed supplies good. Potatoes moving to market ahead of normal. Farmers busy with winter information meetings.

OHIO: Temperatures near normal. Precipitation widespread ranging from 1.00 to 2.00 in. Some snow Lake Erie snow belt. Bare soil temperatures average mid 30s.

Corn, soybean harvests almost complete. Wettest areas remain to be harvested. Freeze to harden topsoils necessary for some fields. Tobacco marketing in progress.

OKLAHOMA: Temperatures averaged 2° below normal Panhandle, central, south central to 1° above normal northeast. Precipitation averaged 0.13 in. Panhandle to 0.64 in. southeast.

Wheat 45% fair, 55% good; 85% emerged, 95% 1985, 90% avg. All land seeded except wet, unworkable fields. Sorghum 85% harvested, 97% 1985, 95% avg. Cotton 25% harvested, 50% 1985, 55% avg. Harvest picked up early week, slowed by rains. Pastures good. Livestock good; cattle movement sluggish, prices steady to firm.

OREGON: Temperatures below normal statewide. Departures averaged 1 to 6° below normal. Rainfall sparse first 5 days of week. Some rain reported on 5th and 6th. Brookings, extreme south coast, 1.05 in. of rain, highest in State. Precipitation east of Cascades averaged slightly higher than western sections.

Soil moisture 70% adequate, 30% surplus. Mild fall weather allowed good field crop growth. Eastern grain crops adequate development to carry through winter. Little hay movement to date. Training caneberrries, pruning filberts Willamette Valley. Root vegetable harvest continued as weather permitted west. Livestock, range, pasture mostly good. Cattle off highest elevation rangeland east, on winter grazing ground.

PENNSYLVANIA: Week started out wet with heavy rain falling across State on 2nd, 3rd. Very cold air moved in on 5th, 6th. Average temperature 34°, 1° below normal. Temperature extremes 10°; 60°. Average precipitation 1.06 in., 0.33 in. above normal.

Activities: Harvesting corn, soybeans; grading potatoes; hauling manure; cutting firewood; machinery maintenance; caring for livestock.

PUERTO RICO: NO DATA AVAILABLE.

SOUTH CAROLINA: Weather warmer than usual early, colder than normal late week. Temperatures averaged 41° northwest, 48° near coast. Rainfall heavy early, 1.00 to 2.00 in. No rainfall last 5 days.

Cotton 87% harvested, 98% 1985, 100% avg. Condition of unharvested crop very poor to fair. Soybeans mature 100%; 64% harvested, 40% 1985, 64% avg. Harvest very active late week. Condition very poor to fair. Seeding small grains continued, condition fair to good. Tobacco planted preparation active. Pasture fair to good.

SOUTH DAKOTA: Average temperatures ranged 4° below to 6° above normal. Extremes -4°; 51°. Black Hills low -7°. Weekly precipitation below normal except northwest, north central; up to 5.00 in. snow.

Days suitable for fieldwork 4.9. Topsoil moisture short northwest, surplus portions east central, adequate elsewhere; 6% short, 83% adequate, 11% surplus. Corn harvest nearing completion. Mild weather, dry conditions helped progress. Livestock good to excellent. Supplemental feeding when needed. Feed, stock water adequate.

TENNESSEE: General rainfall early week from 0.25 to 1.00 in. Average temperatures near normal in 40s. Low 18°, High 58°.

Cotton 98% harvested, 95% 1985, 94% avg. Soybeans 80% harvested, 96% 1985, 95% avg.

TEXAS: Dry weather mostly cool north, west; mild south extended through midweek because high pressure at surface. Rain widespread weekend stronger upper air system approached State. Precipitation near normal Plains, Trans-Pecos; below normal elsewhere. Temperatures below normal Plains, Upper Coast, Coastal Bend; near to above normal elsewhere.

Crops: Grain sorghum harvest good progress Plains most week. Late week high winds, colder temperatures, damp conditions slowed activity. High winds knock down some remaining fields. Cotton harvest good pace during early, midweek Plains, Cross-Timbers. Damp conditions slowed progress late week. Harvest progressed well Low Plains, Cross-Timbers, some producers High Plains winding down harvest. Yields ranged very good to very bad. Many insured acres plowed up. Harvest good progress Trans-Pecos, Hill Country. Open bolls 92%, 98% 1985, 99% avg. Small grains continued show good progress even though colder temperatures across State slowed growth somewhat. Later planted fields Plains slow to emerge, some fields may require replanting. Early planted fields showed some rust; continued provide good grazing. Planting continued Blacklands, field conditions allowed. Oats good growth, some minor yellowing excessive rains. East oat pastures grazed heavily. Wheat planted 99%, 95% 1985, 98% avg. Good weather most week allowed peanut harvest proceed most areas. Harvest winding down Plains, Cross-Timbers. Yields continued good. Harvest continued some fields central, south. Wet fields late week delayed harvest operations. Harvested 97%, 76% 1985, 90% avg. Soybean harvest continued wind down Plains; along Upper Coast wet fields delayed harvest. Fields left poor quality. Harvested 93%, 72% 1985, 91% avg. Sugarbeet, sugarcane harvests continued with good yields. Sugar content sugarbeets lower than normal.

Other crops harvested: Sunflowers 94%, 88% 1985, 95% avg. Sugarbeets 66%, 81% 1985, 94% avg. Pecans 85%, 53% 1985, 66% avg. Other crops planted: Oats 95%, 84% 1985, 95% avg.

Commercial Vegetables: Rio Grande Valley, good harvest peppers, tomatoes, cucumbers, broccoli. Onions, cabbage good progress. Orange, grapefruit harvest increased. Cooler temperatures increased sugar content. Sizes continued good. San Antonio-Winter Garden harvest continued carrots, cabbage, spinach. Some white rust spinach. Cucumbers for pickles harvested. Trans-Pecos, green chilies harvested. Pecan harvest good progress throughout week. Quality, prices remained good. Harvest winding down south.

Range and Pasture: Increased growth cool season grasses occurred many areas. East couple nights frost last week, caused remaining warm season grasses to go dormant. Small grains, most native pastures good grazing. Supplemental feeding increased some areas range cattle. Livestock body conditions good, weight gains increased with milder temperatures through early week.

UTAH: Precipitation light. Temperatures 2 to 6° above normal.

Fall grazing continued. Winter ranges mostly good. Livestock generally good. Major farm activities: Livestock chores, marketing livestock, hauling manure, equipment repair.

VIRGINIA: Temperatures averaged slightly above normal, ranged well above and below normal. Range 15 to 67°. Precipitation range 0.50 to 1.34 in.

Days suitable for fieldwork 1.7. Topsoil moisture 70% adequate, 30% surplus. Continued rain delayed fieldwork. Soybean harvest slow, 68% complete, 64% 1985, 84% avg. Some late planting of wheat. Marketing burley, fire-cured tobacco. Pasture land, winter grains good to excellent. Feeding livestock. Feed short some areas. Other activities: Hunting, cutting firewood, meetings, maintaining equipment. and buildings.

WASHINGTON: Below normal temperatures statewide. Light rain western areas, 2 in. snow eastern areas.

Days suitable for fieldwork 6.0. Soil moisture 5% short, 75% adequate, 20% surplus. Fruit pruning continued. Rodent control active in orchards. Cattlemen begin to feed hay. Some calves moving to market. Other activities, bookkeeping, machinery repair, meetings.

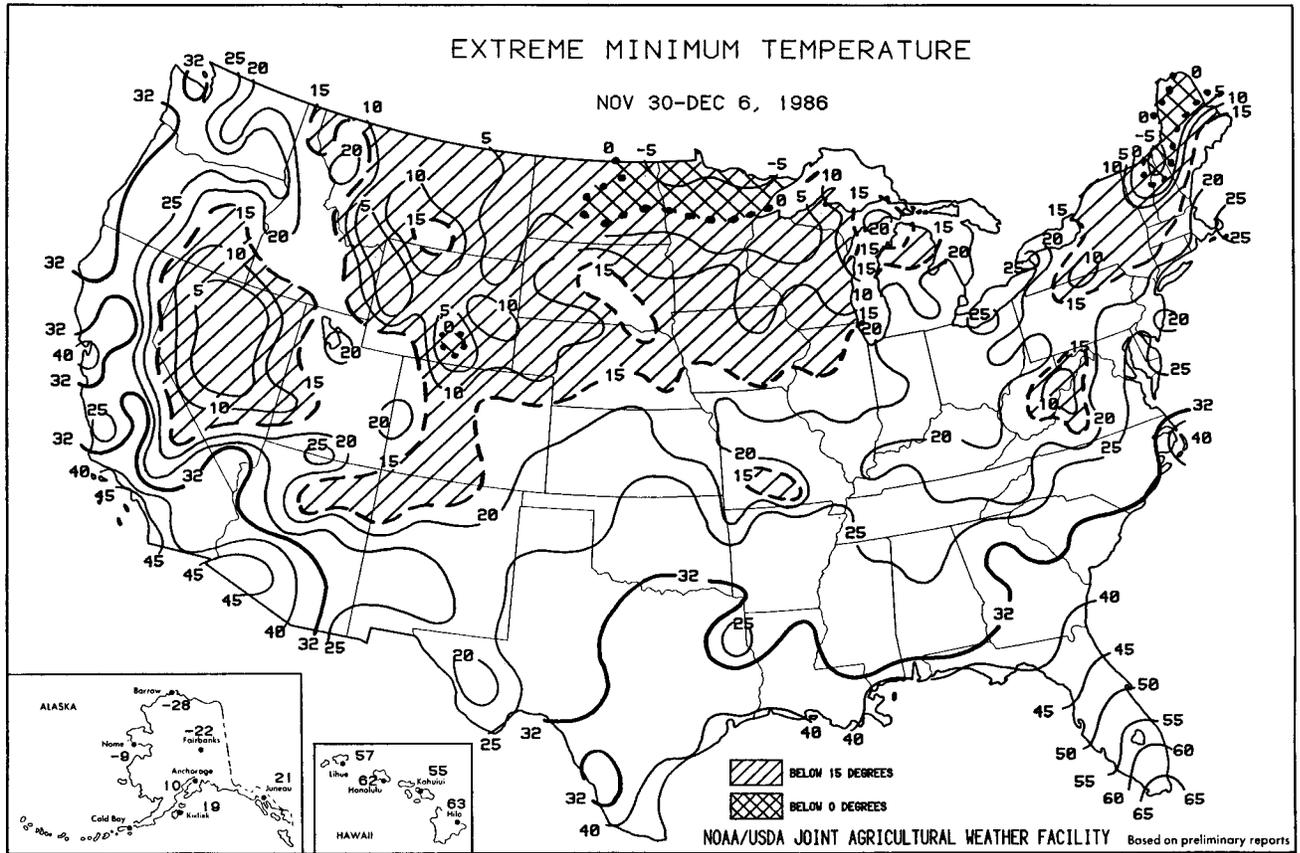
WEST VIRGINIA: Temperatures normal to slightly below normal. Extremes 6° Greenbank; 57° Williamson. Average 36°. Precipitation above normal southwest, northeast, northwest. Below normal elsewhere. Average 0.75 in.

Days suitable for fieldwork 1.2. Soil moisture 42% adequate, 58% surplus. Corn 92% harvested, 93% of normal.

WISCONSIN: Temperatures near normal; low -7°, high 41°. Precipitation 0.25 in. or less. Snow up to 9 in. north, less central. Rain, sleet, snow south. Average snow depth 2 in. Frost depth averaged 2 in., less than mid-November during record cold spell.

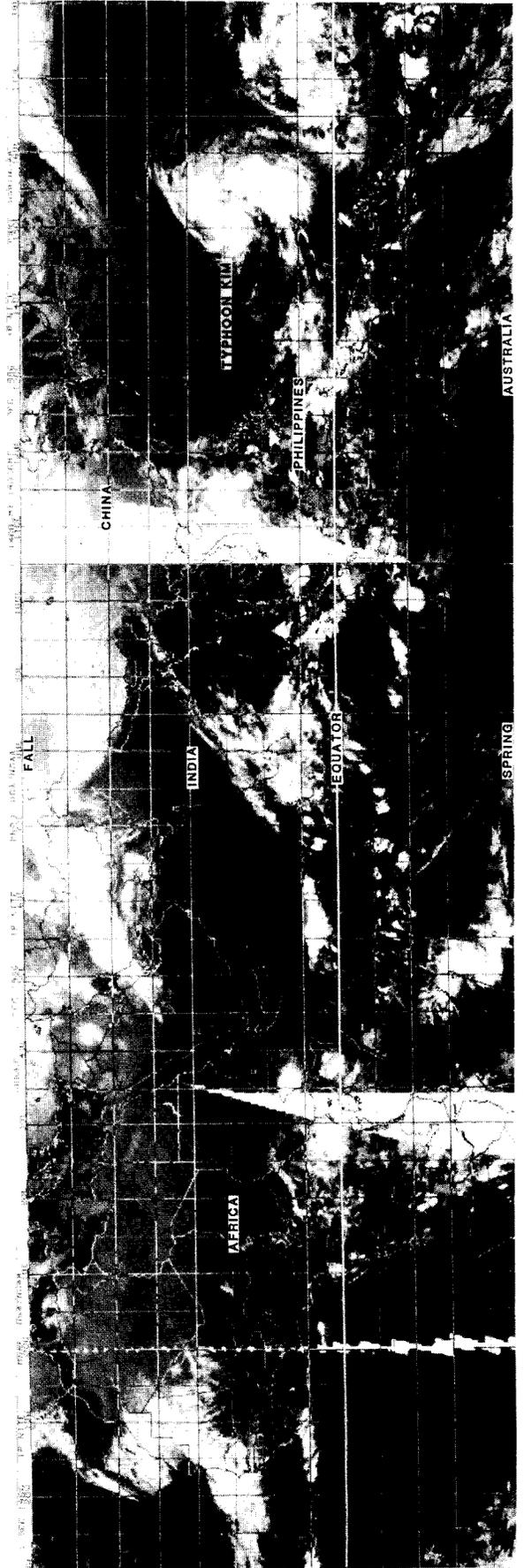
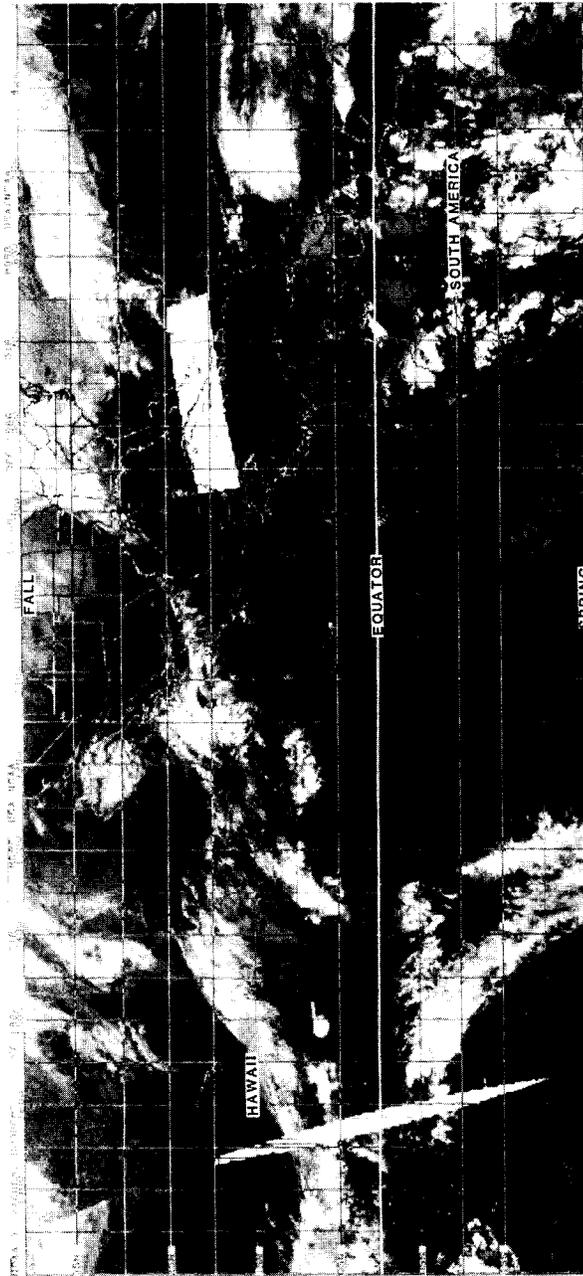
WYOMING: Temperatures below normal. Precipitation near normal.

Corn harvest continued as weather permitted. Winter wheat mostly good. Livestock mostly good. Supplemental feeding in areas with snow cover.



Global Weather Satellite Image

DECEMBER 1, 1986



International Weather and Crop Summary

November 30 - December 6, 1986

HIGHLIGHTS:

UNITED STATES ... Rain continues to hamper harvest in the central Great Plains, Southeast, Corn Belt, and some Delta States. Dry weather boosts cotton harvest in the southern Great Plains.

WESTERN U.S.S.R. ... Winter grains remain dormant. Winter wheat areas in the west and south lack a protective snow cover.

EUROPE ... Ample sunshine and cold nights in most areas provide favorable hardening conditions for winter grains.

SOUTH ASIA ... Dry weather throughout most of India promotes the maturation and harvest of cotton and rice.

EASTERN ASIA ... Dry weather covers dormant winter grains in the North China Plain.

MEXICO ... Seasonal dry weather prevails over most of the country. Variable showers fall along the east coast.

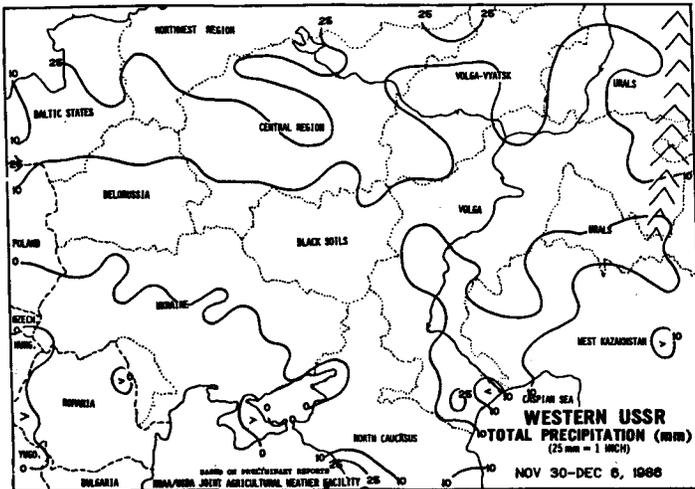
SOUTHEAST ASIA ... Heavy rain continues in the Malay Peninsula and coastal Vietnam.

SOUTH AMERICA ... Widespread rain alleviates early season dryness in Brazil's northern soybean area but slows planting in Argentina.

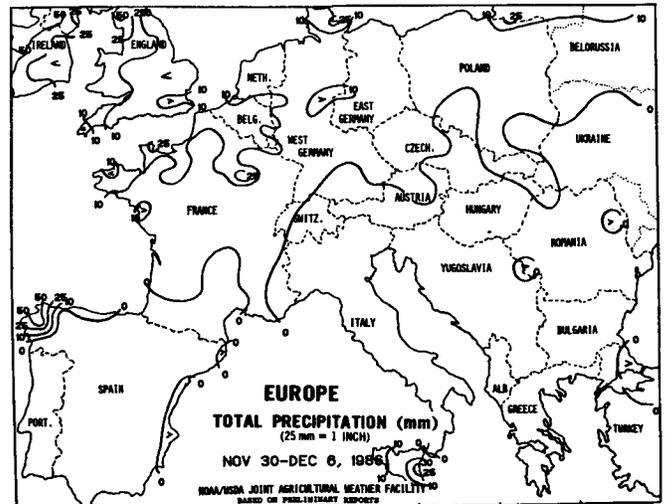
AUSTRALIA ... Light rain and mild temperatures promote early growth of summer grains and cotton. Wheat harvesting continues across the winter grain belt.

SOUTH AFRICA ... Showers throughout South Africa's major corn producing regions favor early vegetative growth.

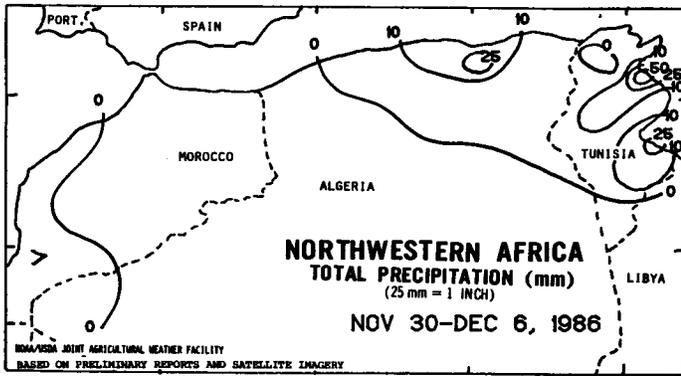
NORTHWESTERN AFRICA ... Dry weather continues over Moroccan winter grain areas. Showers diminish over Tunisia, but moisture supplies are abundant for early crop growth.



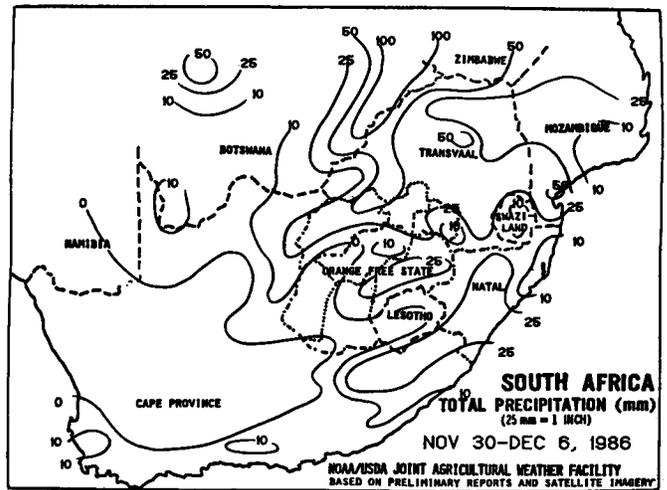
WESTERN U.S.S.R. ... Temperatures rose to above normal by week's end. However, the weather was cold enough to keep winter grains dormant. Light precipitation (10 to 25mm) fell over northern and eastern crop areas. Most of the Ukraine and North Caucasus experienced dry weather. Snow cover increased in the Central Region and the eastern Black Soils Region. Above-freezing temperatures by week's end in the eastern Ukraine, North Caucasus, and the lower Volga diminished snow cover.



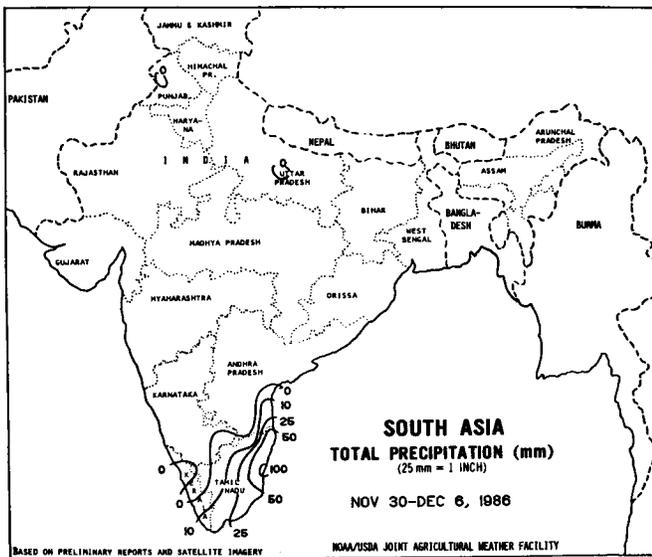
EUROPE ... High pressure kept most areas dry during the week. Clear days and cold nights throughout much of Europe provided ideal hardening conditions for winter grains. Winter grains in Eastern Europe likely entered dormancy. Conditions for autumn plant establishment prior to dormancy were mixed in Eastern Europe. Winter grains in Poland and Czechoslovakia had mostly adequate moisture conditions for plant establishment. In contrast, unseasonable cold, dry weather in Hungary, eastern Yugoslavia, and Romania caused spotty emergence and limited plant establishment, making the crop more susceptible to potential winterkill.



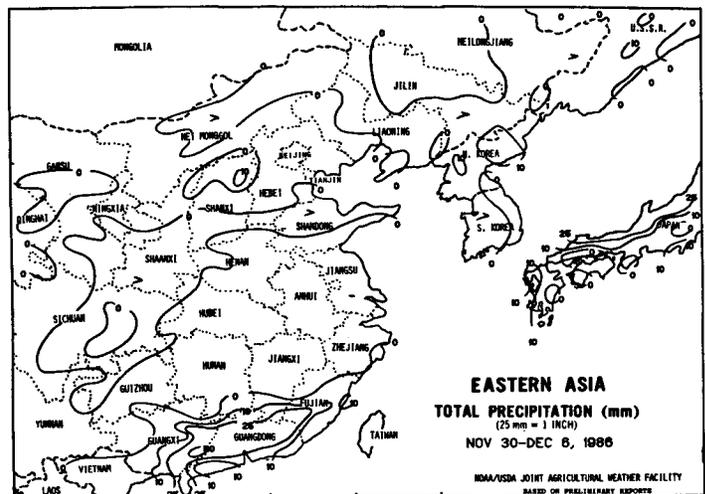
NORTHWESTERN AFRICA ... Winter grain planting was in the final stages in Tunisia, while planting was well underway in Morocco and Algeria. Dry weather continued over winter grain areas in Morocco. Although moisture conditions were adequate for crop emergence and early growth, soil moisture reserves were limited and additional showers were needed. In Algeria, significant showers (10 to 25mm) covered central winter grain areas, while dry weather covered crop areas in the west and east. In Tunisia, most of the rain fell south of the major winter grain areas. Moisture supplies in Tunisia were abundant for winter grain emergence and early plant establishment.



SOUTH AFRICA ... Moderate showers and warm temperatures throughout South Africa's major corn producing areas favored early vegetative growth and maintained favorable soil moisture conditions. Rainfall ranged from 10 to more than 50mm in the grain areas of the Transvaal, northeastern Orange Free State, Natal, and southeastern Cape Province. Drier weather (less than 10mm) stretched from southeastern Orange Free State to the southwestern Cape Province. The dry weather in the Cape Province aided in the maturation of winter grains.



SOUTH ASIA ... Dry weather continued in India from Karnataka and Gujarat through central India to the eastern states, promoting maturation and harvesting of cotton and rice. Scattered, light rain (less than 6mm) fell in northern grain areas, but the area of coverage diminished somewhat from last week. Dry weather returned to Pakistan. Light to moderate showers (less than 10 to more than 50mm) continued in the southeast tip of India from southern Kerala to southern Andhra Pradesh, with heaviest rainfall confined to coastal areas.



EASTERN ASIA ... Near-to-above-normal temperatures accompanied dry weather over the North China Plain. Winter wheat was dormant in most areas except for southernmost crop areas where the crop was semidormant. Wet weather (25 to 50mm) in eastern Guangxi, Guangdong, and eastern Fujian may have caused some delays in final late rice harvesting.

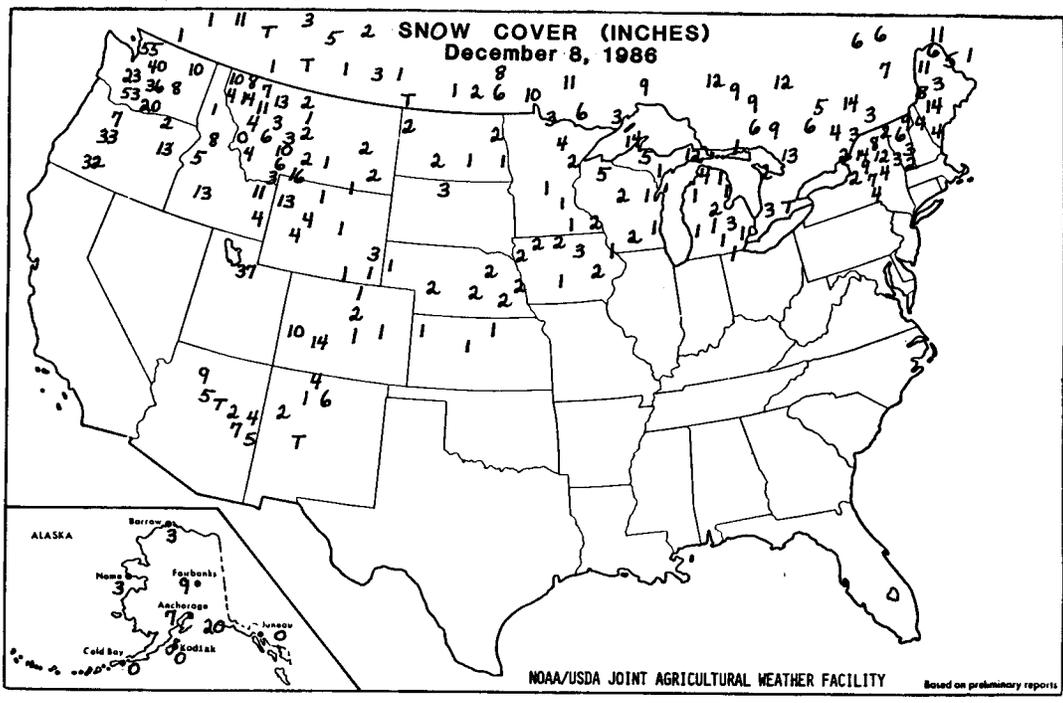
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