

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

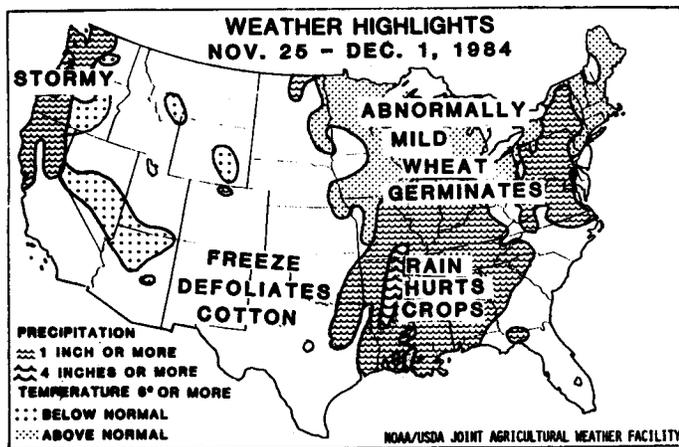
Volume 71, No. 48

WASHINGTON, D.C.

Dec. 4, 1984

National Weather Summary

November 25 to December 1



HIGHLIGHTS: Most of the Nation had some precipitation; only a small part of the central Plains and parts of the Southwest reported no precipitation. Heavy rain fell along the Northwest Coast, and snow fell nearly every day through the Cascades, the Sierras, the Plateau, and the Rockies. Snow also fell over the High Plains from western Oklahoma to Montana, and across the northern Plains and the Great Lakes region. Moderate to heavy showers fell from southern Louisiana into Missouri, and northeastward into the Tennessee Valley. Moderate to heavy rain fell in the central and northern Appalachians after midweek, changing to snow before ending. Average temperatures were cooler than normal west of the Plains and warmer to the East.

SUNDAY... Heavy snow fell in the northern Rockies. Lighter amounts spread over the Plains of Montana and into North Dakota. Light rain or snow fell throughout the Rockies and northern Plains, and rainshowers fell along the western side of the Mississippi River. Unseasonably mild temperatures pushed eastward into the Great Lakes and the East.

MONDAY... Snow covered the central Rockies and pushed over the High Plains from the Oklahoma Panhandle to North Dakota. Light rainshowers covered the rest of the Plains up to an area from Louisiana through Illinois, where moderate to heavy showers and thunderstorms occurred. The unseasonably mild temperatures pushed eastward into the Great Lakes and the East.

TUESDAY... The area of moderate to heavy showers and thunderstorms moved eastward to reach from

Mississippi into Georgia and northward through Michigan. Lighter showers covered the Mississippi Valley and the rest of the Southeast. Snow continued in the northern Plains and spread to the upper Mississippi Valley.

WEDNESDAY... Showers covered the west coast. Moderate to heavy snow fell from the Sierras and the central Plateau to the Cascades in Washington and the northern Rockies. In the East, the area of moderate to heavy showers, and a few thunderstorms, reached from the Carolinas into New York. Lighter showers fell throughout the East Coast States and the eastern Great Lakes region.

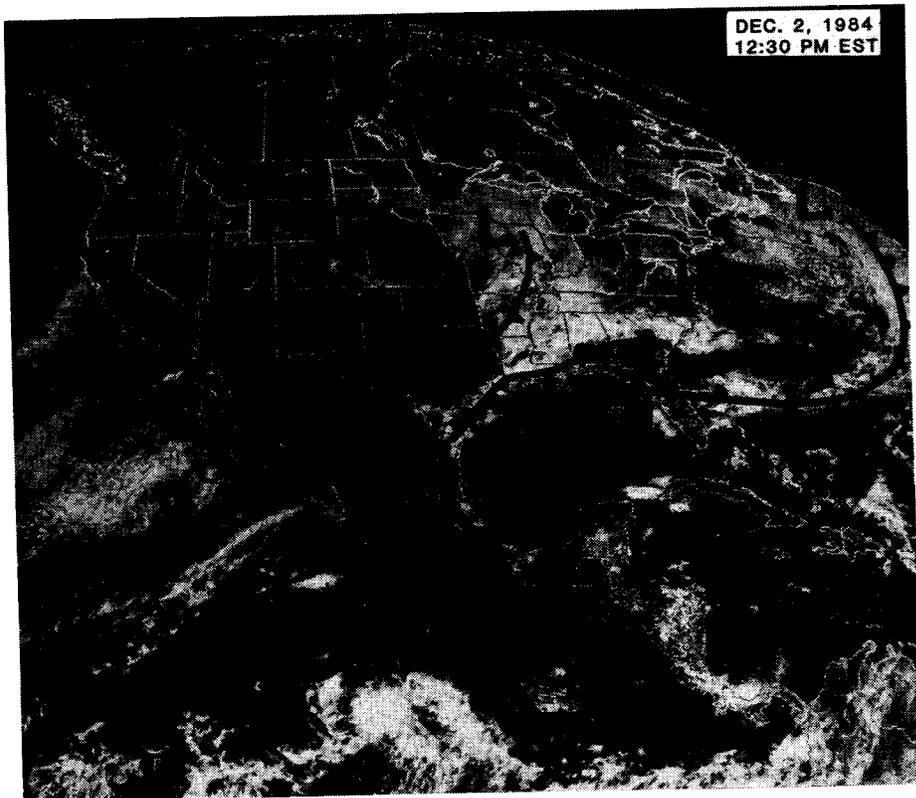
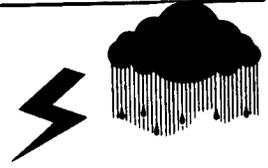
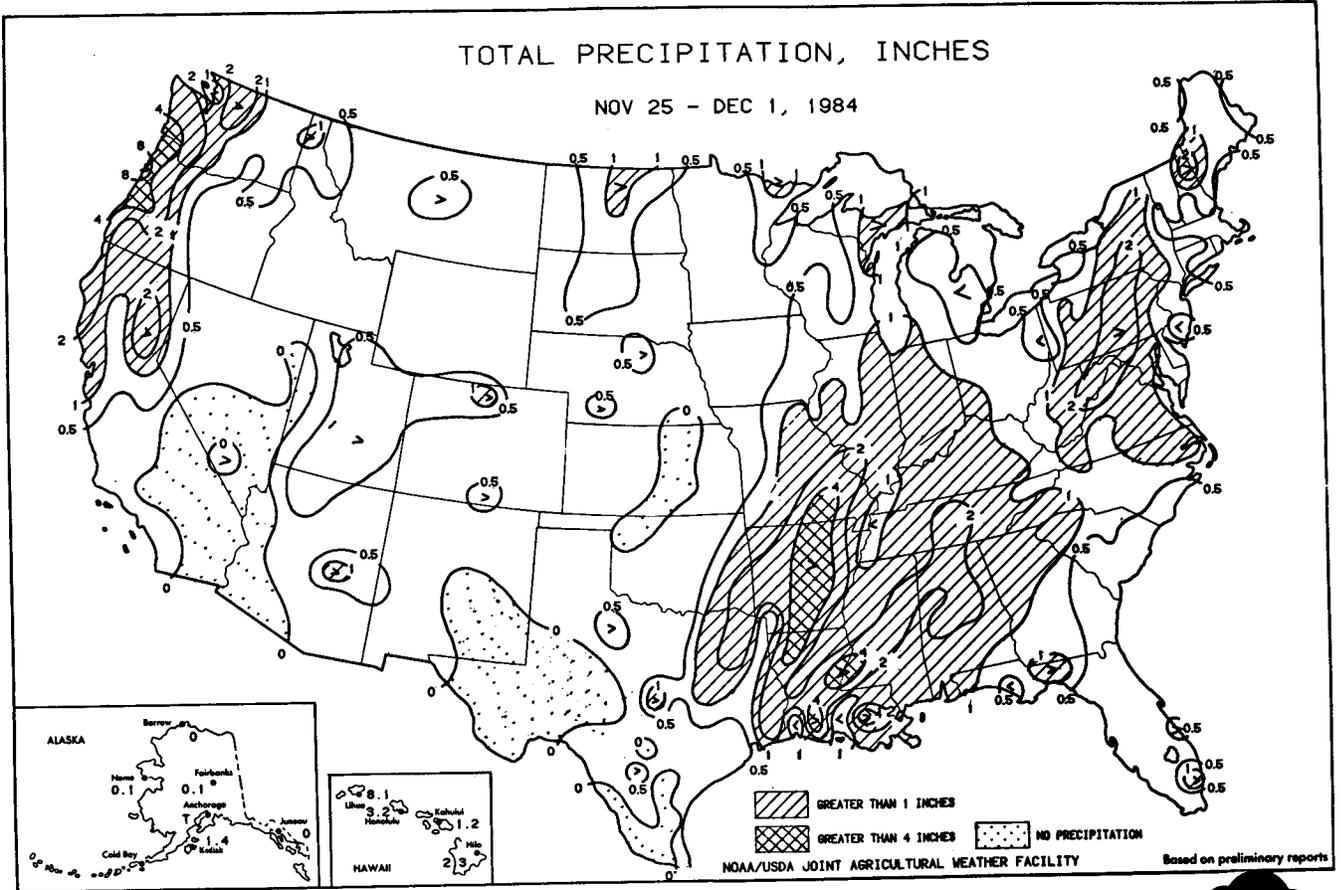
THURSDAY... Moderate to heavy showers fell along the Northwest Coast. Snow continued from the Cascades to the northern Rockies, and spread to the central Rockies and over the northern Plains. Light rain fell in the lower Mississippi Valley, and somewhat heavier amounts covered the Northeast.

FRIDAY... Light rainshowers continued along the Northwest coast from northern California through Washington. Snow fell eastward through the Rockies and Plains to the western Great Lakes. Showers and thunderstorms covered the lower Mississippi and Tennessee Valleys. Rain fell in the upper Ohio Valley and eastern Great Lakes region to New England.

SATURDAY... Snow persisted in the northern and central Rockies, across the northern Plains, and the upper Great Lakes. Rain scattered over New England, parts of Iowa and Illinois, and along the gulf coast. Very cold air covered the northern Plains and Lakes, while mild temperatures covered the South and the East Coast States.

Contents

	Page
National Weather Summary	1
Precipitation & North America Satellite Photo.	2
Snow Cover & Climatological Probabilities for A White Christmas	3
Drought Severity & Drought Severity Index	4
Precipitation Needed to End Drought & Extreme Minimum Temperature	5
Average Temperature & Departure	6
Weather Data for Selected Cities	7
Heating Degree Days Table	10
Heating Degree Days Maps	11
National Agricultural Summary	12
Crop Progress Tables	13
State Summaries of Weather & Agriculture	14
1984 Tropical Cyclone Season	19
Global Weather Satellite Photo	20
International Weather & Crop Summary	21
Subscription & Mailing Permit Information	24

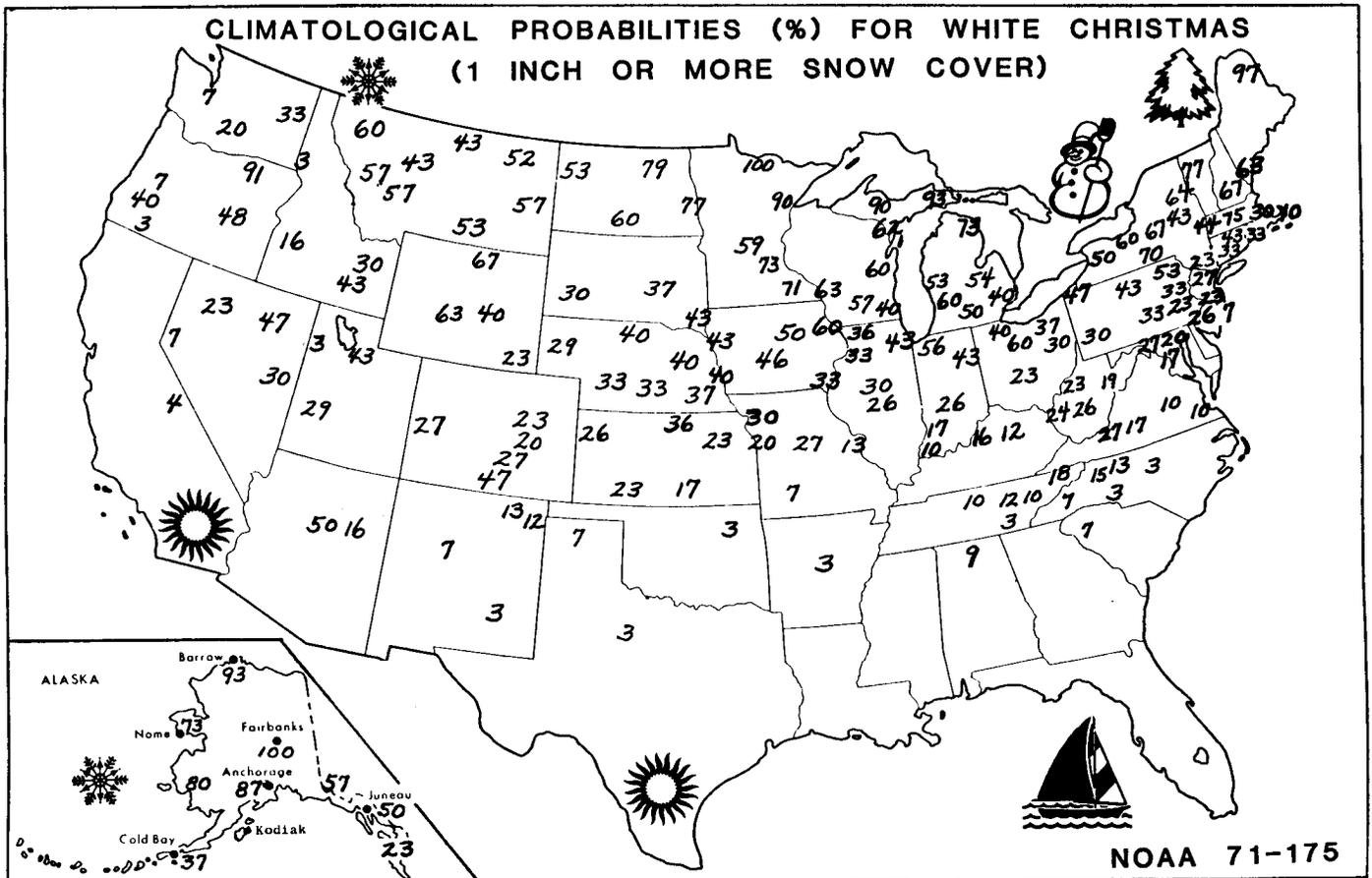
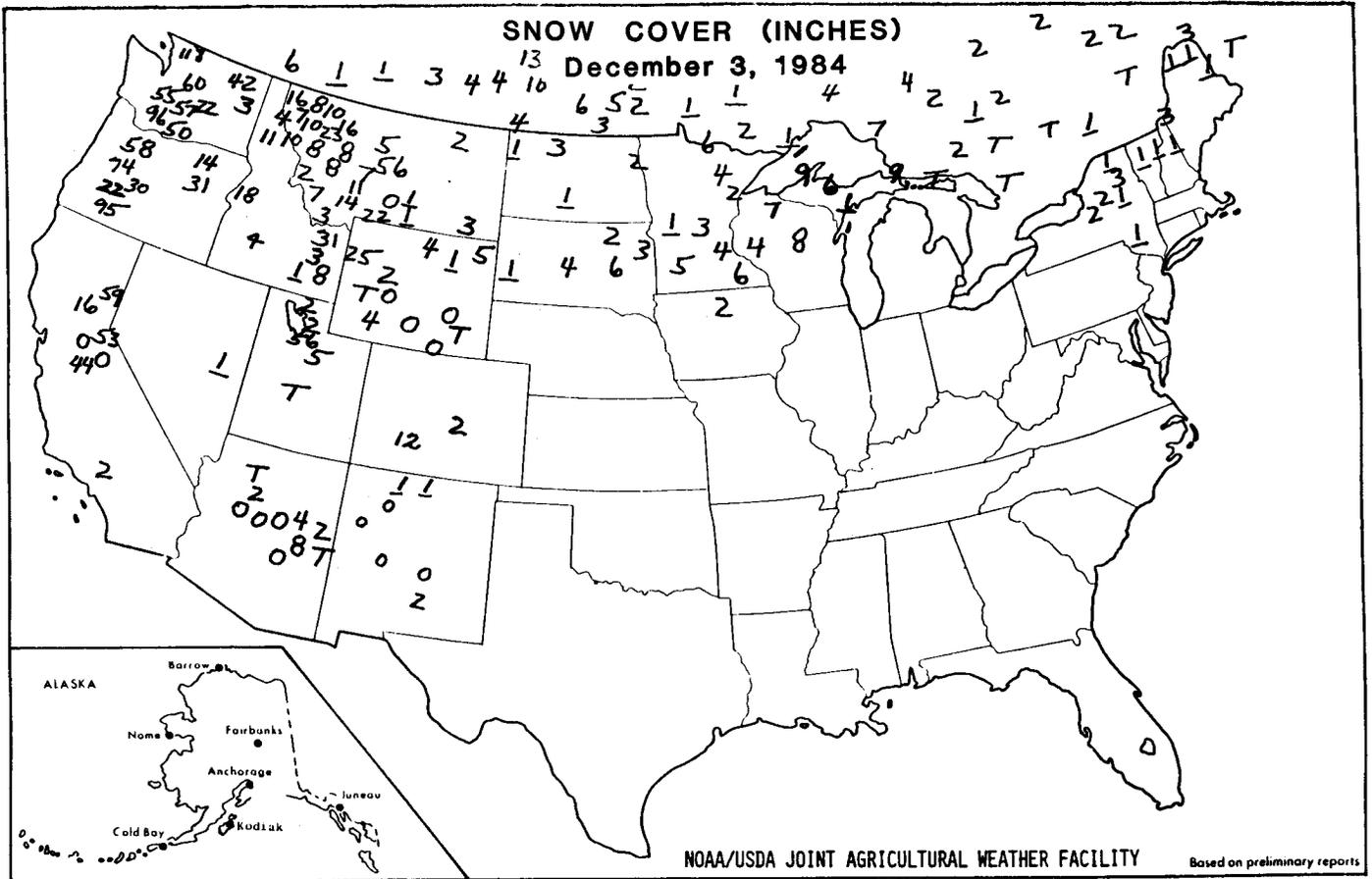


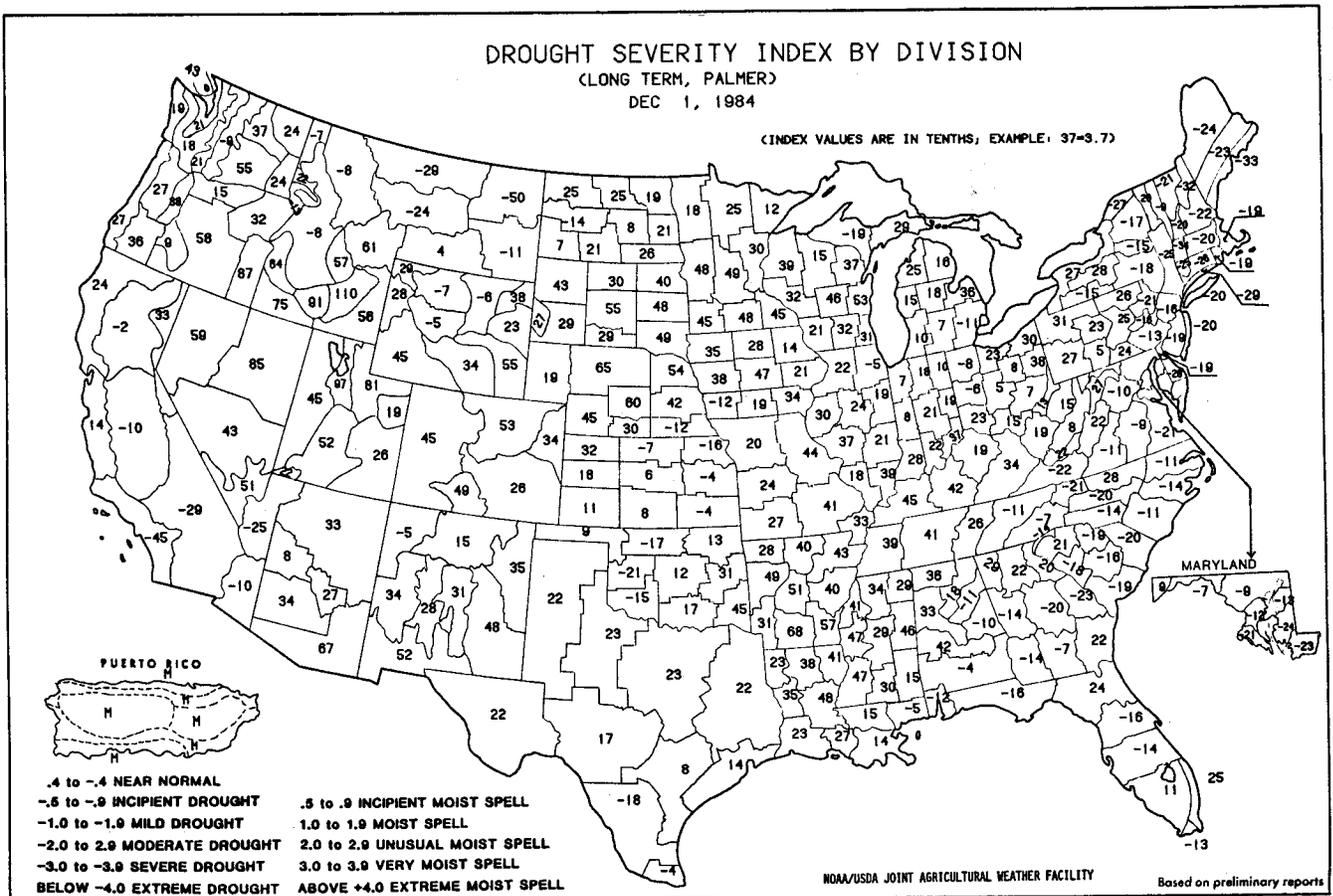
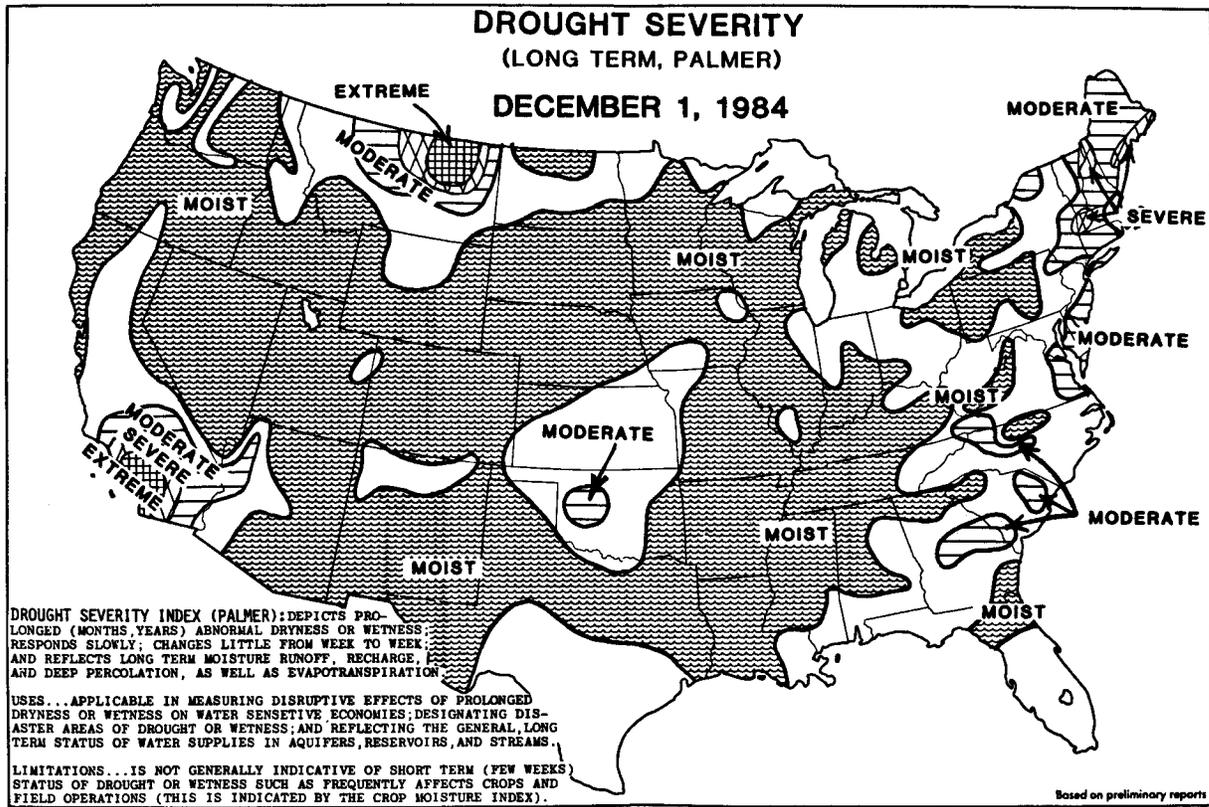
THUNDERSTORMS OCCUR ALONG THE COLD FRONT FROM OFF THE COAST OF TEXAS INTO SOUTHERN LOUISIANA, WHILE FRONTAL OVERRUNNING PRODUCES MODERATE RAIN IN NORTHERN ALABAMA.

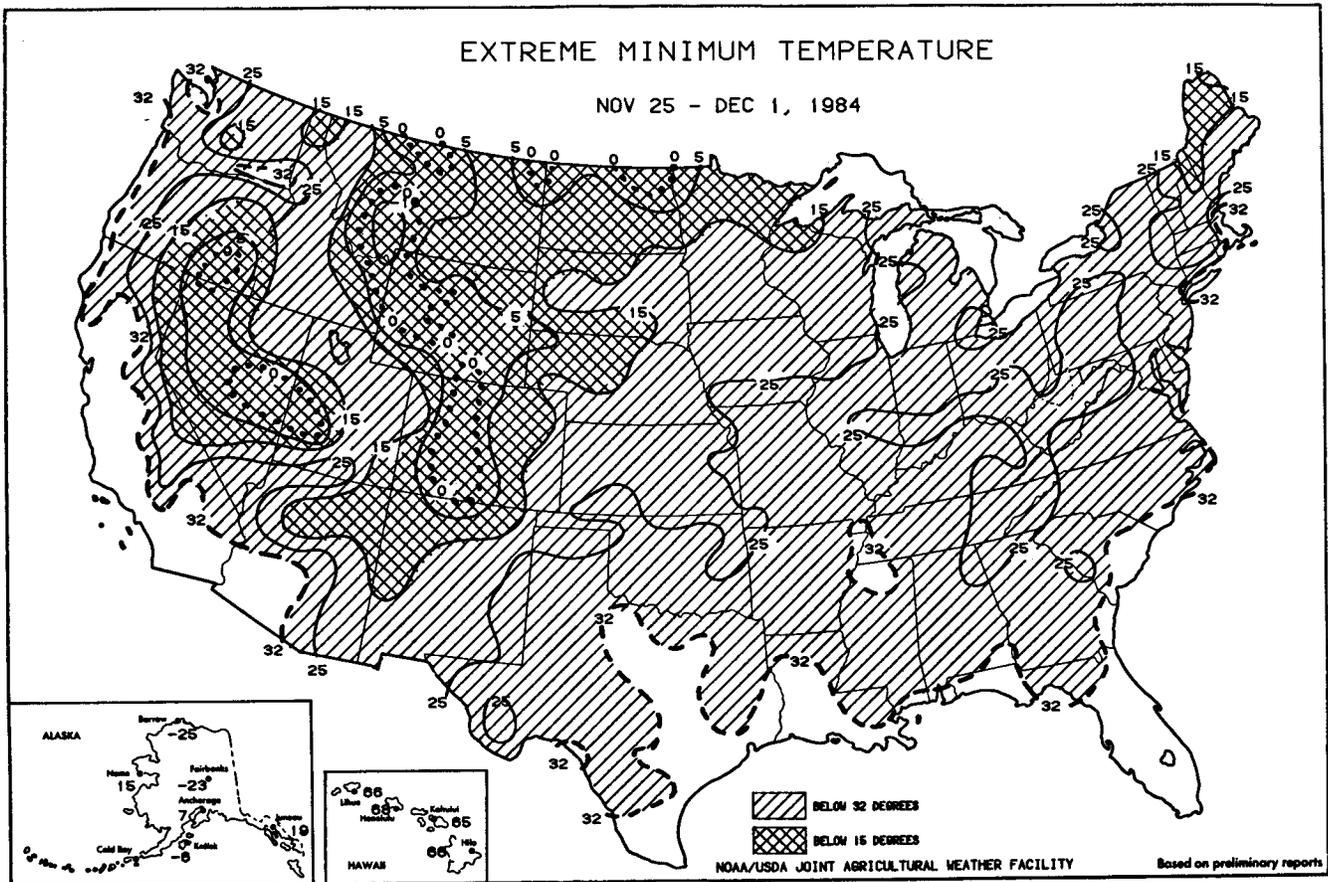
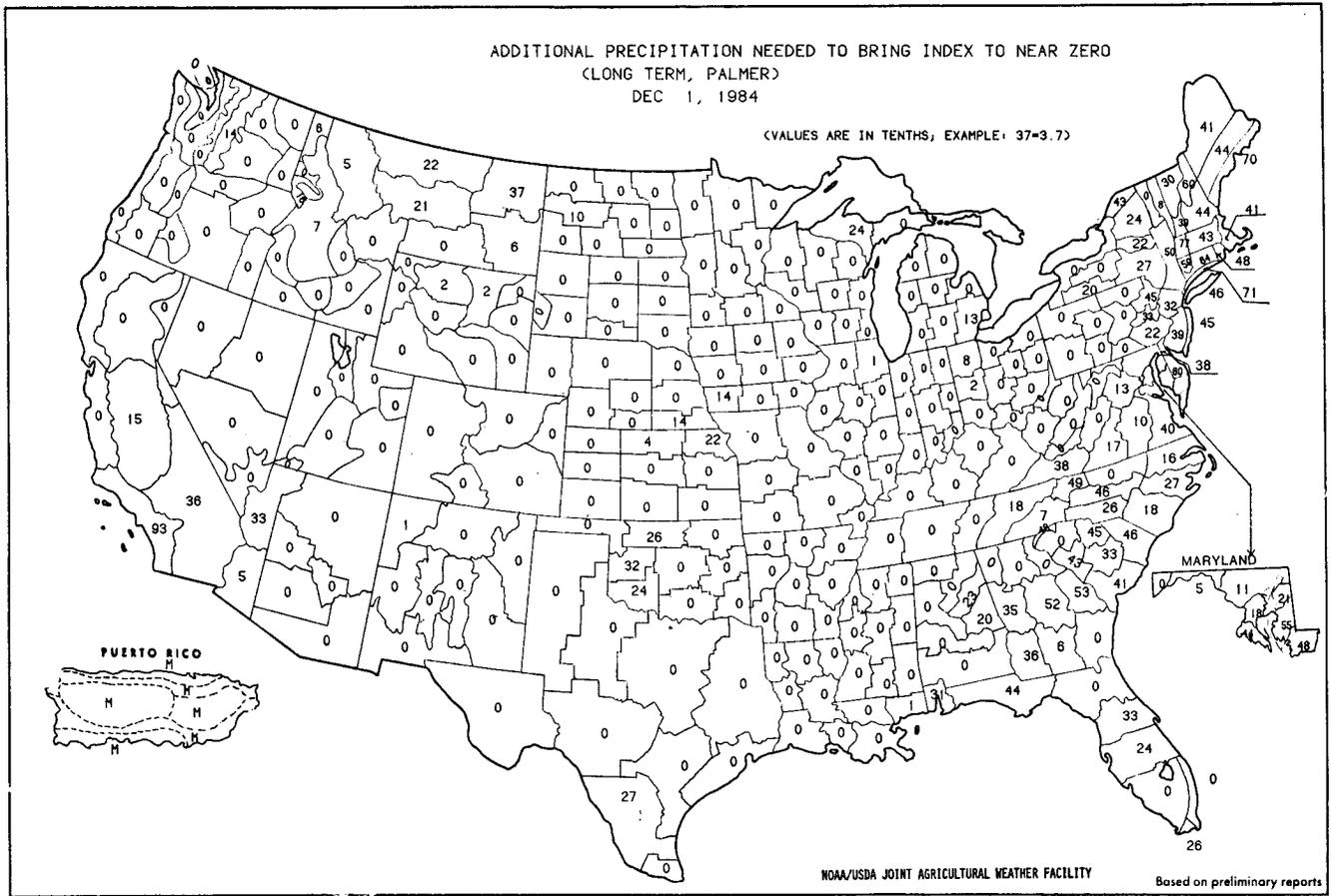


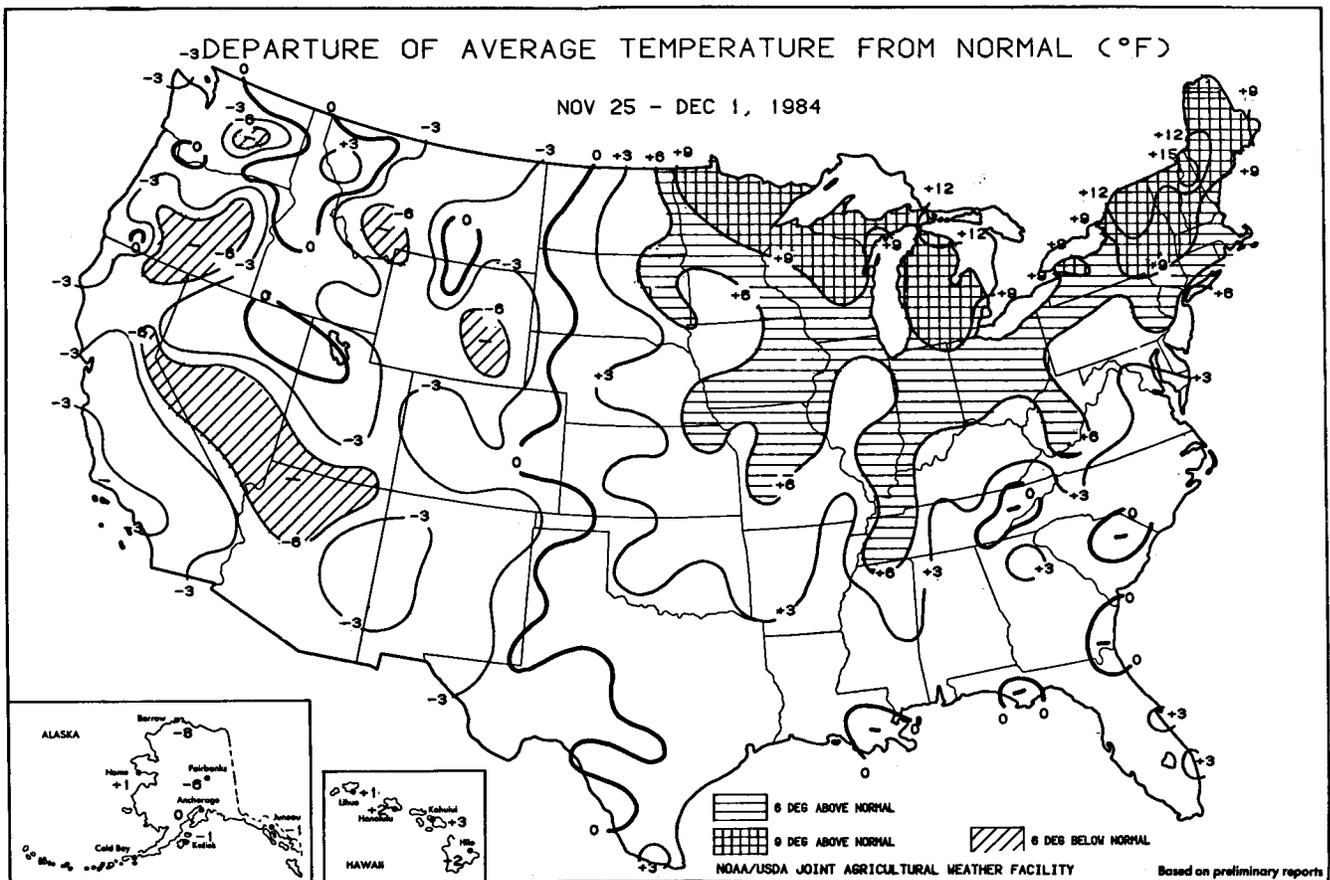
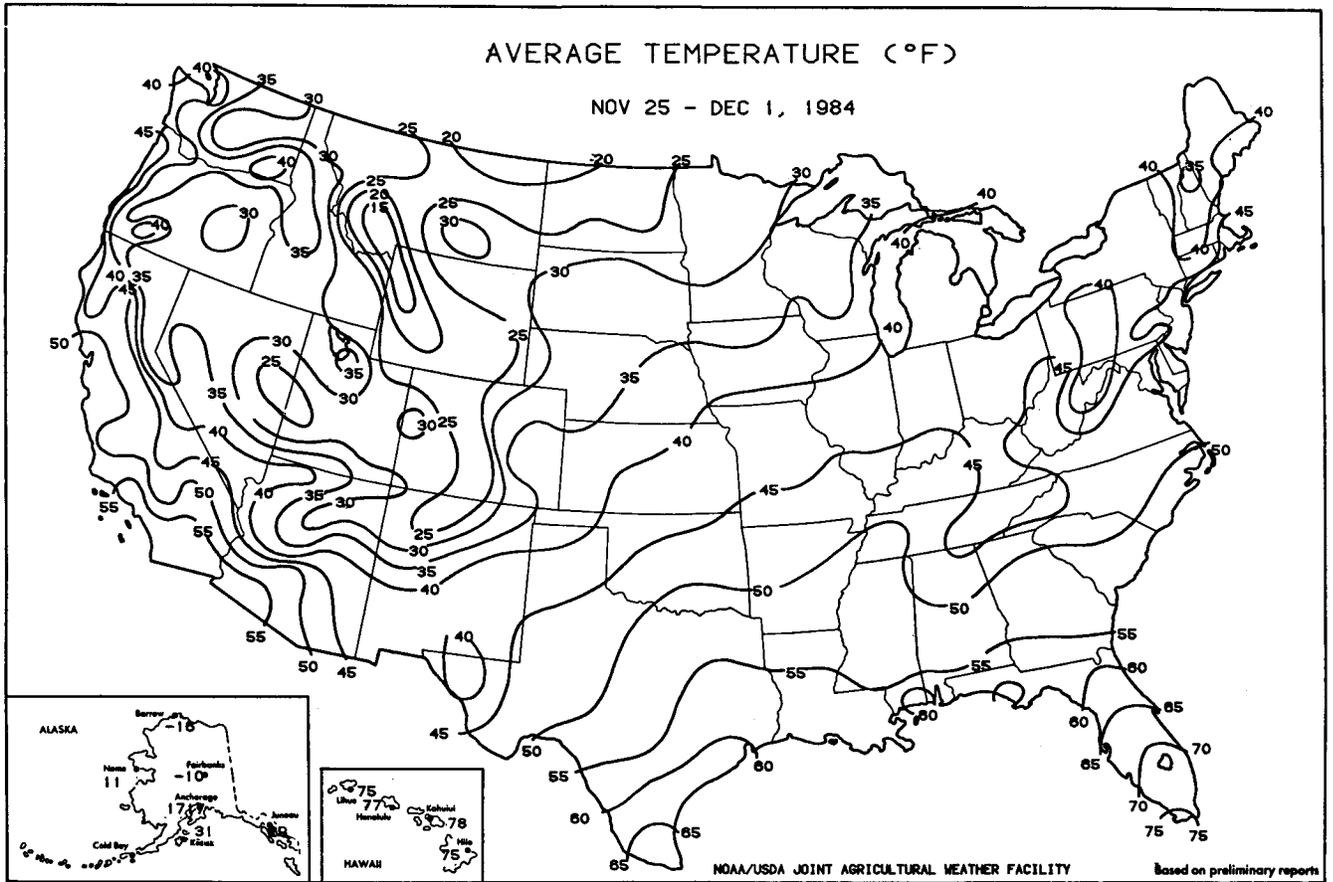
SNOW FALLS IN NORTHERN WISCONSIN AND SOUTHERN ONTARIO, CANADA, AND COVERS THE GROUND THROUGHOUT THE NORTHERN PLAINS AND SOUTHERN CANADA.











Weather Data for the Week Ending December 1, 1984

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	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	63	37	72	26	50	2	2.9	1.9	2.8	0	0	43.5	87	89	38	0	3	3	1
MOBILE	68	43	74	31	56		1.4	.3	1.4	0	0	51.6	87	87	52	1	1	1	1
MONTGOMERY	68	38	75	28	53	2	2.0	1.1	1.8	0	0	49.1	110	90	40	2	2	2	0
AK ANCHORAGE	22	12	29	7	17	T	T	-2	T	0	0	13.9	98	97	82	0	0	0	0
BARROW	-12	-20	-9	-25	-16	T	T	-1	T	0	0	3.9	85	83	69	0	0	0	0
FAIRBANKS	-2	-17	5	-23	-10	T	T	-1	T	0	0	9.1	94	85	69	0	0	0	0
JUNEAU	32	26	35	19	29	T	T	-1	T	0	0	45.0	93	100	84	0	0	0	0
KODIAK	38	23	41	15	31	T	T	0	T	0	0	62.7	92	91	68	0	0	0	0
NOME	16	5	25	-6	11	T	T	0	T	0	233	13.7	96	81	60	0	0	0	0
AZ PHOENIX	62	41	66	37	51	-5	.3	0	.1	0	0	12.0	190	82	29	0	0	0	0
PRESCOTT	44	24	50	16	34	-7	.1	0	.3	0	0	13.3	77	82	40	0	0	0	0
TUCSON	60	36	66	26	48	-1	.1	0	.1	0	0	12.2	118	71	26	0	0	0	0
YUMA	66	46	73	42	56	-3	0	-1	.1	0	0	4.8	208	62	25	0	0	0	0
AR FORT SMITH	62	36	72	26	49	4	1.3	.6	1.2	0	0	46.8	125	90	42	0	0	0	0
LITTLE ROCK	59	41	64	29	50	4	4.2	3.2	3.9	0	0	53.9	127	90	64	0	0	0	0
CA BAKERSFIELD	59	40	68	37	50	-2	T	-1	T	0	0	2.2	43	91	49	0	0	0	0
EUREKA	55	42	59	34	48	-2	2.4	-.9	1.5	0	0	34.7	106	95	68	0	0	0	0
FRESNO	56	41	62	34	49	-2	.2	-2	.1	0	0	4.8	53	88	57	0	0	0	0
LOS ANGELES	64	48	66	42	56	-3	.1	-3	.1	0	0	3.6	34	81	37	0	0	0	0
RED BLUFF	51	38	58	32	45	-5	.8	0	.7	0	0	13.4	74	97	63	0	0	0	0
SACRAMENTO	58	41	62	33	49	0	.4	-2	.4	T	0	7.6	53	97	62	0	0	0	0
SAN DIEGO	65	52	67	47	58	-1	T	-3	T	0	0	4.0	50	89	47	0	0	0	0
SAN FRANCISCO	58	45	62	41	52	0	1.1	.5	1.0	0	0	12.3	75	92	60	0	0	0	0
CO DENVER	44	21	54	12	33	-2	.2	.1	.2	0	0	16.1	109	78	30	0	0	0	0
GRAND JUNCTION	39	25	47	19	32	0	.1	0	.1	T	0	11.0	147	83	47	0	0	0	0
PUEBLO	51	22	60	11	36	-2	.2	.1	.2	0	0	15.6	147	91	29	0	0	0	0
CT BRIDGEPORT	55	37	63	31	46	6	.1	-.8	.1	0	0	40.1	106	91	59	0	0	0	0
HARTFORD	56	31	63	21	44	8	.6	-.4	.5	T	14	40.1	99	89	49	0	0	0	0
DC WASHINGTON	58	35	68	32	47	3	1.7	1.0	1.7	0	0	36.8	102	89	46	0	0	0	0
FL APALACHICOLA	68	45	73	34	57	-1	.5	-2	.3	.3	227	55.6	108	89	58	0	0	0	0
DAYTONA BEACH	75	53	80	39	64	2	.1	-5	0	0	0	46.6	100	85	52	0	0	0	0
JACKSONVILLE	70	42	78	31	56	-2	.2	-3	.2	0	0	48.8	97	97	52	0	0	0	0
KEY WEST	80	71	84	68	76	2	.1	-5	.1	0	0	39.3	104	82	66	0	0	0	0
MIAMI	80	66	83	61	73	2	1.4	1.0	1.3	.1	167	59.5	107	92	60	0	0	0	0
ORLANDO	75	55	80	46	65	1	.1	-4	0	T	50	44.1	96	97	51	0	0	0	0
TALLAHASSEE	72	42	79	29	57	2	1.6	-.7	1.0	1.0	700	56.0	93	94	46	0	0	0	0
TAMPA	75	52	83	41	64	0	T	-5	T	T	0	32.3	72	93	53	0	0	0	0
WEST PALM BEACH	77	67	80	64	72	3	.4	-2	.2	.1	63	69.0	120	85	61	0	0	0	0
GA ATLANTA	63	39	71	31	51	3	1.4	.5	.9	0	0	51.8	116	85	41	0	0	0	0
AUGUSTA	70	32	80	24	51	1	.3	-.3	.3	0	0	43.1	107	96	31	0	0	0	0
MACON	68	37	77	29	53	1	.7	-.1	.5	0	0	42.0	103	94	38	0	0	0	0
SAVANNAH	67	41	77	32	54	0	.4	-1	.4	0	0	50.3	107	90	46	0	0	0	0
HI HILO	81	68	85	66	75	2	2.3	-1.2	1.7	.1	20	87.2	75	90	65	0	0	0	0
HONOLULU	84	71	89	68	77	2	3.2	2.4	1.9	0	0	11.8	58	90	59	0	0	0	0
KAHULUI	86	69	88	65	78	3	1.2	.6	.6	0	0	8.0	46	88	57	0	0	0	0
LIHUE	80	70	83	66	75	1	8.1	6.8	3.2	.2	133	23.7	61	87	68	0	0	0	0
ID BOISE	38	27	40	18	33	-3	.4	-.1	-.2	0	0	12.4	118	86	53	0	0	0	0
LEWISTON	44	34	49	30	39	2	.1	-2	0	T	25	10.2	88	81	59	0	0	0	0
FOCATELLO	32	22	36	14	27	-3	.3	.1	.1	T	33	12.6	127	85	60	0	0	0	0
IL CHICAGO	48	31	64	23	40	6	1.2	.8	1.1	0	0	30.8	98	91	60	0	0	0	0
MOLINE	48	31	65	22	39	7	.8	.3	.5	0	0	35.9	101	87	54	0	0	0	0
PEORIA	49	32	61	24	40	7	.8	.3	.5	0	0	36.9	112	90	56	0	0	0	0
QUINCY	51	35	65	28	43	7	.7	.3	.5	T	0	36.3	101	91	58	0	0	0	0
ROCKFORD	46	29	66	24	37	5	.8	.4	.6	0	0	30.1	85	98	68	0	0	0	0
SPRINGFIELD	50	34	61	25	42	6	.4	.4	.5	0	0	37.3	117	92	57	0	0	0	0
IN EVANSVILLE	58	35	69	28	46	6	1.6	.8	1.6	0	0	43.7	114	82	43	0	0	0	0
FORT WAYNE	51	33	63	27	42	8	.6	0	.3	0	0	28.3	88	88	58	0	0	0	0
INDIANAPOLIS	54	34	70	30	44	8	1.4	.7	1.2	0	0	37.9	104	87	52	0	0	0	0
SOUTH BEND	49	34	62	27	42	7	1.1	.4	1.0	0	0	30.1	85	82	51	0	0	0	0
IA DES MOINES	46	30	61	22	38	6	.2	0	.2	T	25	38.9	130	87	53	0	0	0	0
SIoux CITY	41	28	54	21	35	5	.2	0	.1	0	0	32.6	132	90	60	0	0	0	0
WATERLOO	43	28	61	22	36	7	.3	-.1	.1	.1	140	32.4	102	90	64	0	0	0	0
KS CONCORDIA	50	29	57	22	39	4	T	-2	T	0	0	25.2	95	96	51	0	0	0	0
DODGE CITY	53	30	62	25	42	4	.1	-.1	.1	0	0	16.5	82	87	31	0	0	0	0
GOODLAND	44	25	58	18	35	1	.3	.1	.2	0	0	20.5	129	87	50	0	0	0	0
TOPEKA	54	32	61	21	43	6	T	-.3	T	0	0	35.8	111	85	46	0	0	0	0
WICHITA	54	32	59	23	43	4	T	-.3	T	0	0	24.0	87	88	47	0	0	0	0
KY BOWLING GREEN	58	33	70	27	46	4	1.4	.4	1.2	0	0	55.2	123	93	47	0	0	0	0
LEXINGTON	54	34	69	26	44	4	1.1	.2	.6	0	0	37.5	89	87	49	0	0	0	0
LOUISVILLE	58	36	70	28	47	5	1.4	.6	1.1	0	0	42.0	104	79	41	0	0	0	0
LA ALEXANDRIA	68	44	74	36	56	3	2.5	1.4	1.8	0	0	62.7	125	84	51	0	0	0	0
BATON ROUGE	69	43	75	31	56	0	.8	-.3	.6	0	0	47.4	93	91	52	0	0	0	0
LAKE CHARLES	69	46	77	33	57	1	.9	-.2	.6	0	0	57.9	120	96	56	0	0	0	0
NEW ORLEANS	68	44	76	31	56	-1	2.1	1.0	1.2	.1	59	49.6	91	92	59	0	0	0	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather tables published in Vol. 71 #46 dated November 20, 1984 and Vol. 71 #47 dated November 27, 1984 were in error. These preliminary data tables will not be reprinted.

Weather Data for the Week Ending December 1, 1984

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	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	67	42	73	31	54	3	1.1	.2	.5	0	0	45.5	113	93	45	0	1	3	1
ME CARIBOU	51	28	51	15	35	11	.5	-.3	.3	.1	64	32.2	96	94	73	0	6	3	0
PORTLAND	41	29	55	20	40	7	.4	-.7	.4	0	44.6	113	94	56	0	5	1	0	
MD BALTIMORE	58	31	66	27	45	3	1.5	.8	1.5	0	0	35.1	91	83	44	0	6	2	1
SALISBURY	61	32	71	27	46	3	.8	.1	.8	0	0	40.0	95	94	44	0	5	1	0
MA BOSTON	55	39	63	33	47	7	.3	-.7	.3	0	13	47.3	119	79	46	0	6	2	1
CHATHAM	52	40	55	34	46	6	.3	-.8	.3	0	0	46.1	110	—	—	0	0	1	0
ALPENA	50	32	59	25	41	11	.3	-.2	.1	0	0	28.3	105	98	59	0	5	3	0
DETROIT	52	32	61	24	42	8	.4	-.2	.4	0	0	23.7	83	82	49	0	4	3	0
FLINT	53	37	65	31	45	12	.4	-.1	.3	0	14	26.3	96	86	54	0	2	4	0
GRAND RAPIDS	51	35	63	29	43	10	.6	0	.5	0	0	24.3	76	89	55	0	3	3	1
HOUGHTON LAKE	46	33	58	25	39	10	.2	-.3	.1	.1	129	25.5	97	95	63	0	5	4	0
LANSING	51	35	62	28	43	10	.6	.1	.5	0	0	25.3	92	88	59	0	3	2	3
MARQUETTE	40	29	56	13	34	11	.8	.1	.6	0	33	29.8	86	95	73	0	4	2	3
MUSKEGON	49	35	63	30	42	8	.9	.3	.8	0	0	25.4	88	87	61	0	3	4	1
SAULT STE. MARIE	41	32	47	24	36	10	.7	0	.4	.1	70	29.8	96	99	78	0	4	4	1
MN ALEXANDRIA	33	26	49	19	29	8	.1	-.1	0	.1	133	31.1	130	94	73	0	3	3	0
DULUTH	33	26	46	14	30	9	.7	.3	.3	0	20	25.2	88	85	72	0	5	5	0
INT'L FALLS	32	23	53	-.5	27	11	.5	.2	.3	0	0	19.6	83	94	72	0	5	4	0
MINNEAPOLIS	38	28	52	23	33	7	.5	.2	.2	.2	567	34.7	135	80	60	0	5	3	0
ROCHESTER	37	27	52	23	32	6	.4	.1	.3	0	0	26.3	96	87	66	0	5	3	0
MS GREENWOOD	64	40	71	31	52	3	1.0	-.2	1.0	0	0	49.9	104	96	47	0	2	2	0
JACKSON	68	39	75	27	54	2	3.1	2.0	3.1	0	0	47.5	100	99	48	0	3	2	1
MERIDIAN	68	40	75	28	54	3	2.0	.9	1.9	0	0	49.9	104	93	45	0	3	2	0
CAPE GIRARDEAU	57	35	63	28	46	—	1.4	.5	.8	0	0	42.7	104	98	56	0	4	2	2
COLUMBIA	54	34	67	28	44	6	1.1	.7	1.0	0	0	45.7	134	92	50	0	4	3	0
KANSAS CITY	51	31	60	22	41	4	.3	-.1	.1	0	0	35.1	103	94	53	0	5	2	0
SAINT LOUIS	54	36	62	30	45	6	1.5	1.0	1.0	0	0	46.9	147	88	50	0	2	2	2
SPRINGFIELD	56	36	69	27	46	6	1.1	.4	1.0	0	0	38.7	104	82	49	0	4	3	0
MT BILLINGS	38	23	46	13	31	0	.4	.2	.3	0	150	9.6	67	75	51	0	7	2	0
GLASGOW	25	13	38	7	19	—	.1	.1	.1	0	0	6.1	54	94	75	0	7	1	0
GREAT FALLS	34	18	44	9	26	—	.3	.2	.2	.2	850	11.0	76	85	59	0	7	3	0
HAVRE	28	11	39	-.2	20	0	.2	0	.2	0	0	6.2	58	96	76	0	7	1	0
HELENA	33	14	41	-.3	24	—	.1	.1	.1	0	0	8.8	81	89	61	0	7	2	0
KALISPELL	33	23	38	19	28	—	.5	.1	.2	.1	140	15.0	104	91	62	0	7	4	0
MILES CITY	33	18	41	8	25	—	.1	0	.1	.1	250	7.9	58	94	64	0	7	5	0
MISSOULA	36	26	42	19	31	3	.2	0	.1	.1	167	12.6	104	86	58	0	7	4	0
NE GRAND ISLAND	46	28	52	19	37	5	.2	0	.1	0	0	30.3	133	83	47	0	6	2	0
LINCOLN	48	28	52	20	38	6	.1	-.1	.1	0	0	33.1	146	90	53	0	5	1	0
NORFOLK	43	27	55	19	35	5	.1	0	.1	0	0	32.7	141	89	53	0	6	3	0
NORTH PLATTE	44	22	52	14	33	3	.3	.2	.2	0	0	20.4	107	87	45	0	6	2	0
OMAHA	44	30	52	22	37	5	.2	0	.2	0	0	33.5	115	90	66	0	6	2	0
SCOTT'S BLUFF	42	17	52	9	30	—	.1	0	.1	0	0	12.4	88	75	37	0	6	2	0
VALENTINE	40	21	48	6	31	—	.1	0	.1	0	0	18.7	111	83	56	0	6	2	0
NV ELY	37	11	44	-.3	24	—	.6	.4	.6	0	0	14.6	176	90	53	0	7	1	0
LAS VEGAS	52	34	56	31	43	—	0	-.1	0	0	0	5.2	133	80	35	0	3	0	0
RENO	44	25	52	14	35	—	.7	.5	.4	0	0	4.2	67	93	50	0	6	2	0
WINNEMUCA	41	23	50	9	32	—	.1	-.1	0	0	0	12.3	173	78	42	0	5	4	0
NH CONCORD	53	25	63	18	39	8	.3	-.5	.3	0	0	39.6	119	99	51	0	4	2	0
NJ ATLANTIC CITY	58	33	64	27	45	5	.4	-.4	.2	0	0	37.8	98	84	47	0	6	1	0
NM ALBUQUERQUE	43	26	48	20	35	—	.1	-.1	.1	0	0	10.9	143	77	36	0	6	1	0
GLOVIS	52	30	63	26	41	—	.1	-.1	.1	0	0	23.9	143	75	32	0	6	1	0
ROSWELL	56	29	62	25	42	—	.3	0	-.1	0	0	17.4	185	82	25	0	7	0	0
NY ALBANY	54	32	66	24	43	10	.5	-.2	.3	.2	150	34.5	105	96	56	0	3	2	0
BINGHAMTON	51	34	61	28	42	10	2.3	1.6	1.1	.1	100	36.7	108	90	53	0	3	4	2
BUFFALO	53	33	67	30	43	8	.3	-.6	.1	.1	75	33.8	99	86	47	0	3	3	0
NEW YORK	58	40	64	37	49	7	.5	-.4	.5	.1	0	48.0	122	84	49	0	0	1	0
ROCHESTER	54	32	67	28	43	8	.5	-.2	.4	.1	100	30.5	106	87	47	0	4	3	0
SYRACUSE	51	31	63	24	41	6	1.8	1.0	.7	.3	245	33.6	93	98	59	0	5	4	2
NC ASHEVILLE	58	29	63	22	43	1	1.1	.3	1.0	0	0	44.4	100	94	40	0	6	2	1
CHARLOTTE	62	33	68	27	47	1	.7	0	.6	0	0	42.6	107	90	40	0	4	2	1
GREENSBORO	61	31	67	27	46	2	.9	.2	.9	0	0	48.5	123	86	36	0	5	2	1
HATTERAS	62	43	73	32	52	0	.8	-.3	.8	0	0	43.5	85	97	58	0	1	1	1
NEW BERN	66	35	75	30	51	0	.6	-.1	.6	0	0	58.1	117	87	44	0	4	1	1
RALEIGH	63	32	70	26	47	1	.8	.1	.8	0	0	43.9	113	90	39	0	5	1	1
WILMINGTON	68	40	76	34	54	2	.4	-.4	.4	0	0	56.3	112	86	41	0	6	1	0
ND BISMARCK	31	22	48	14	26	4	.7	.6	.5	.1	100	14.3	96	84	66	0	6	4	0
FARGO	33	24	57	8	28	8	.1	-.1	0	0	100	19.2	101	85	68	0	5	3	0
GRAND FORKS	33	23	51	1	28	9	.2	0	.1	0	0	19.5	110	87	68	0	5	2	0
WILLISTON	26	14	36	0	20	—	.3	.1	.2	0	300	10.3	77	90	68	0	7	2	0
OH AKRON-CANTON	53	34	67	29	43	7	.4	-.3	.3	0	0	32.7	98	83	49	0	3	2	0
CINCINNATI	55	35	69	26	45	6	1.2	.4	.6	0	0	37.6	101	81	48	0	3	2	2
CLEVELAND	54	33	69	26	44	7	1.0	.3	.5	0	0	37.9	116	80	45	0	4	2	1
COLUMBUS	54	33	67	24	43	6	.6	0	.5	0	0	30.5	88	81	45	0	4	3	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending December 1, 1984

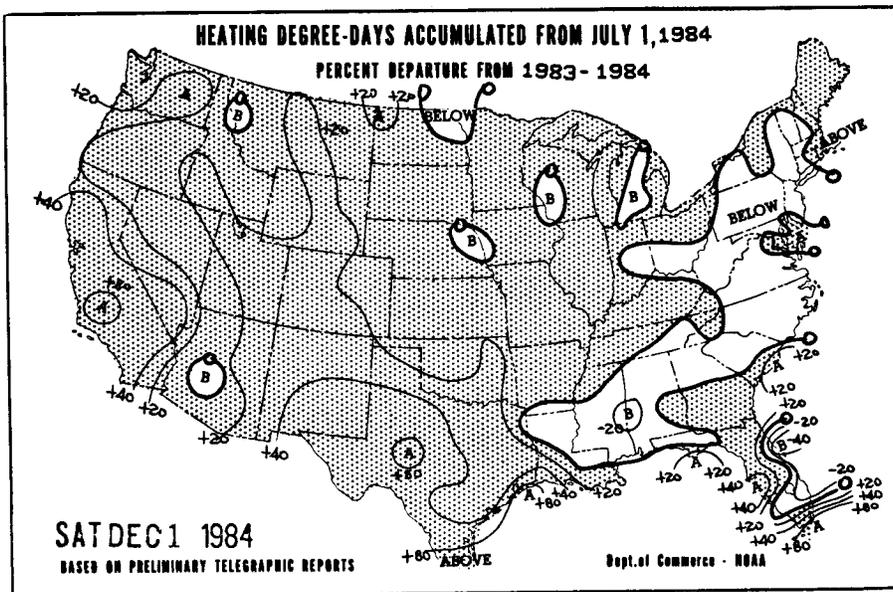
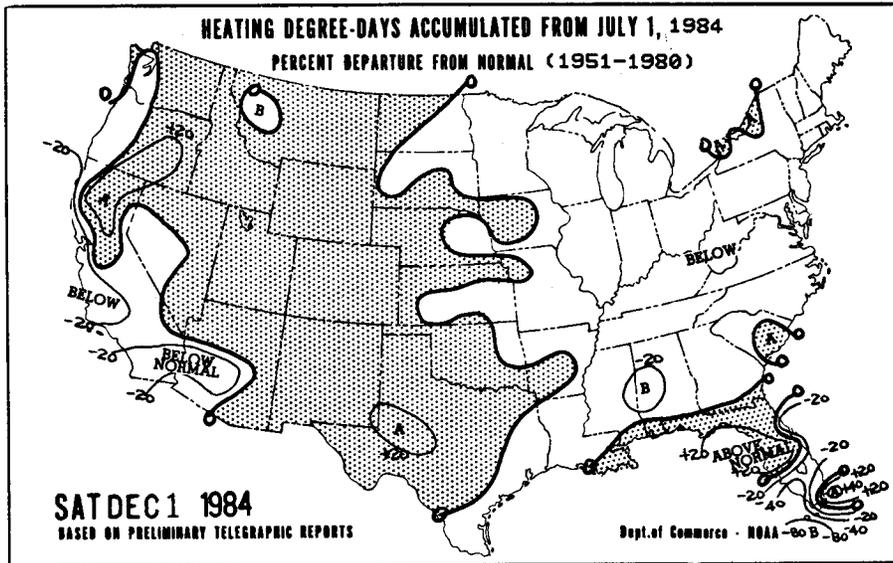
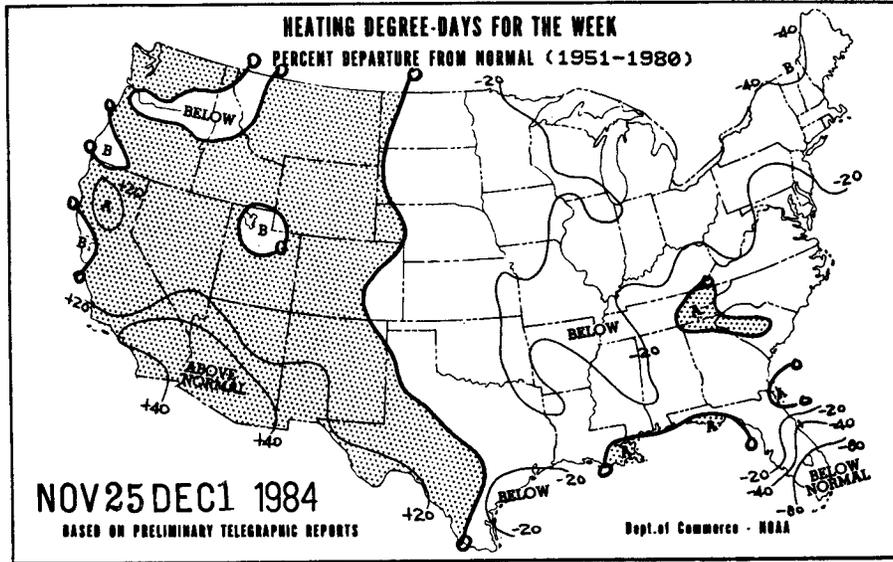
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE DEC. 1	PCT. NORMAL SINCE DEC. 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	52	34	65	27	43	6	1.0	.3	.5	0	0	31.9	99	81	47	0	3	3	1	
TOLEDO	52	32	65	22	42	8	.5	-.2	.4	0	0	28.0	95	93	50	0	4	3	0	
YOUNGSTOWN	52	33	65	27	42	7	.5	-.2	.3	0	0	34.5	100	83	52	0	3	2	0	
OK OKLAHOMA CITY	57	38	64	29	47	3	.3	0	.3	0	0	25.6	86	82	38	0	2	1	0	
TULSA	59	40	64	29	49	5	.1	-.4	1.1	0	0	40.0	108	83	39	0	1	1	0	
OR ASTORIA	49	37	53	31	43	-2	4.6	2.0	1.7	0	0	61.9	105	92	70	0	2	6	3	
BURNS	35	19	41	6	27	-4	.4	-.1	.3	0	0	10.8	157	—	—	0	7	3	0	
MEDFORD	46	36	51	31	41	1	1.6	-.8	-.9	0	0	16.5	99	95	65	0	1	6	1	
PENDLETON	45	35	52	29	40	2	.3	-.1	-.1	0	0	12.0	113	85	57	0	2	4	0	
PORTLAND	48	39	52	34	44	1	2.8	1.4	1.9	10	0	34.8	111	94	72	0	0	7	1	
SALEM	46	35	50	28	41	-2	3.9	2.4	2.2	0	0	41.5	123	97	80	0	2	6	2	
PA ALLENTOWN	57	33	66	26	45	8	.7	-.3	.4	0	0	49.3	121	87	44	0	2	2	0	
ERIE	53	36	65	32	44	9	.5	-.3	.3	8	8	33.6	92	85	49	0	4	3	0	
HARRISBURG	55	36	67	31	46	7	2.2	1.4	1.8	0	0	41.1	114	88	48	0	4	2	0	
PHILADELPHIA	57	32	67	28	45	4	.4	-.4	.4	0	0	41.4	108	87	45	0	4	2	0	
PITTSBURGH	54	30	65	25	42	6	.4	-.1	.3	0	0	32.3	95	87	49	0	5	5	0	
SCRANTON	54	33	64	26	44	8	1.6	-.9	1.3	0	0	36.4	111	91	51	0	4	2	1	
RI PROVIDENCE	57	32	64	25	45	6	.3	-.7	.3	0	0	45.5	111	93	45	0	4	1	0	
SC CHARLESTON	67	41	75	33	54	1	.1	-.5	-.1	0	0	45.5	93	95	50	0	4	2	0	
COLUMBIA	66	32	70	26	49	-2	.3	-.3	.3	0	0	42.8	93	95	36	0	4	1	0	
FLORENCE	65	36	73	28	50	-1	.5	-.1	.5	0	0	38.9	94	99	46	0	3	1	0	
GREENVILLE	62	34	69	27	48	1	1.3	.5	1.3	0	0	56.1	120	82	32	0	4	1	0	
SD ABERDEEN	35	25	52	17	30	7	.3	.1	.2	.2	.2	21.0	121	86	65	0	6	4	0	
HURON	37	26	52	18	32	6	.4	-.3	-.1	.3	.3	29.4	162	87	65	0	6	4	0	
RAPID CITY	41	24	52	15	32	2	.1	0	0	0	0	15.0	94	75	44	0	6	1	0	
STOIX FALLS	40	24	55	16	32	6	.1	-.2	0	0	0	27.8	118	84	54	0	6	0	0	
TN CHATTANOOGA	57	32	67	24	44	-1	1.4	.3	1.0	0	0	45.9	96	92	49	0	5	3	1	
KNOXVILLE	59	28	72	23	44	-1	1.0	0	.8	0	0	46.1	107	75	39	0	6	1	0	
MEMPHIS	64	42	71	34	53	3	.9	-.2	1.1	0	0	52.7	112	86	44	0	3	2	0	
NASHVILLE	59	36	71	26	48	3	2.0	1.1	1.9	0	0	54.2	123	88	42	0	3	1	0	
TX ABILENE	62	38	69	33	50	0	.5	.3	.5	0	0	19.3	86	67	30	0	3	1	0	
AMARILLO	55	29	65	25	42	1	T	-.1	T	0	0	18.2	98	81	36	0	6	1	0	
AUSTIN	68	44	74	33	56	1	T	-.5	T	0	0	23.1	78	88	36	0	0	0	0	
BEAUMONT	70	49	77	36	59	2	2.4	1.3	2.1	0	0	57.3	118	98	60	0	0	3	1	
BROWNSVILLE	79	53	84	39	66	1	T	-.3	T	0	0	38.4	157	97	48	0	0	1	0	
CORPUS CHRISTI	76	49	82	32	62	1	T	-.3	T	0	0	21.3	74	97	48	0	1	1	0	
DEL RIO	66	41	74	34	53	-2	T	-.1	T	0	0	12.8	77	87	34	0	0	0	0	
EL PASO	55	31	62	22	43	-4	.1	.1	-.1	0	0	15.6	208	86	27	0	4	2	0	
FORT WORTH	64	41	70	30	53	1	.5	.1	.5	0	0	27.3	98	82	35	0	1	2	0	
GALVESTON	67	53	72	42	60	1	.1	-.8	0	0	0	32.8	89	90	61	0	0	3	0	
HOUSTON	71	45	78	31	58	1	.3	-.6	.2	0	0	45.3	110	87	40	0	1	2	0	
LUBBOCK	59	32	68	27	45	1	T	-.1	T	0	0	13.4	77	84	28	0	5	2	0	
MIDLAND	60	33	67	28	47	-2	0	-.1	0	0	0	15.6	117	77	28	0	3	0	0	
SAN ANGELO	64	35	72	29	50	-1	T	-.2	T	0	0	15.5	88	88	31	0	3	0	0	
SAN ANTONIO	68	40	74	29	54	-2	T	-.5	T	0	0	22.5	81	89	35	0	0	0	0	
VICTORIA	74	48	79	37	61	2	.1	-.4	.1	0	0	30.0	86	94	46	0	1	2	0	
WACO	66	42	73	33	54	1	.5	0	.4	0	0	29.3	100	89	40	0	2	1	0	
WICHITA FALLS	60	38	66	30	49	2	.2	-.1	.2	0	0	20.2	79	83	40	0	0	0	0	
UT BLANDING	37	17	43	8	27	-6	.5	.3	.5	0	0	8.9	86	86	59	0	7	2	0	
CEDAR CITY	38	19	46	9	29	-6	.2	0	.2	0	0	11.9	124	88	50	0	7	1	0	
SALT LAKE CITY	40	29	46	23	35	0	.9	.6	.5	.2	.2	21.0	150	86	57	0	6	5	1	
VT BURLINGTON	53	35	65	27	44	13	.6	0	.6	.2	.2	33.3	106	85	49	0	3	1	0	
VA NORFOLK	59	36	73	31	48	0	.6	-.1	.5	0	0	42.6	101	87	53	0	2	1	1	
RICHMOND	63	32	72	27	47	3	1.7	.9	1.7	0	0	44.6	109	85	38	0	5	1	1	
ROANOKE	60	32	66	27	46	3	.9	.3	.9	0	0	41.8	115	79	34	0	5	2	1	
WA COLVILLE	35	30	38	25	32	2	1.0	-.4	.5	0	0	23.4	155	96	92	0	7	6	4	
QUILLAYUTE	45	34	47	31	39	-3	4.0	-.4	1.0	0	0	98.4	111	100	79	0	2	5	1	
SEATTLE-TACOMA	45	37	49	33	41	-2	1.7	.3	1.0	0	0	31.9	98	94	66	0	6	5	1	
SPOKANE	33	25	37	12	29	-9	.9	.3	.6	0	0	16.0	112	98	80	0	6	5	1	
YAKIMA	35	22	38	7	29	-6	.7	.6	.8	0	0	8.5	125	89	70	0	5	2	1	
WV BECKLEY	57	33	67	27	45	7	.9	-.2	.8	0	0	38.0	97	76	38	0	5	5	1	
CHARLESTON	63	32	73	24	47	6	1.0	-.3	.9	0	0	37.2	94	80	34	0	5	2	1	
HUNTINGTON	58	31	70	24	44	3	.8	-.1	.7	0	0	36.4	96	84	37	0	5	2	1	
PARKERSBURG	58	33	70	29	46	6	.8	-.1	.4	T	0	30.0	78	84	38	0	3	3	0	
WI GREEN BAY	44	30	61	18	37	10	1.0	.7	.7	T	0	34.9	131	92	65	0	5	3	0	
LA CROSSE	41	30	61	23	36	7	.6	.3	.3	T	0	30.5	105	91	62	0	6	3	0	
MADISON	42	28	60	20	35	6	.4	0	.3	T	0	31.0	105	91	63	0	6	3	0	
MILWAUKEE	47	31	64	22	39	8	.8	-.3	.7	T	0	36.0	125	89	63	0	5	2	1	
WAUSAU	40	28	53	19	34	9	.4	0	.4	T	0	38.5	126	92	69	0	6	3	0	
WY CASPER	32	15	42	2	23	-5	.4	-.3	.3	50	0	12.6	115	89	62	0	7	2	0	
CHEYENNE	35	16	46	6	26	-6	.1	0	.1	0	0	17.2	132	85	48	0	7	2	0	
LANDER	34	13	42	3	23	-3	.5	-.3	.4	0	0	12.9	102	83	46	0	7	2	0	
SHERIDAN	34	17	42	8	25	-3	.3	-.1	.2	0	0	13.6	95	89	55	0	7	2	0	
PR SAN JUAN	85	72	89	69	79	0	.1	-.1	.1	T	0	40.2	81	82	59	0	0	3	0	

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

HEATING DEGREE DAY DATA WEEKLY SUMMARY
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 12- 1-1984
ACCUMULATIONS ARE FROM JULY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

Table with columns: STATE CITY, CALL WEEK, WEEK WEEK, CUM CUM CUM CUM CUM, STATE CITY, CALL WEEK, WEEK WEEK, CUM CUM CUM CUM CUM. It lists heating degree day data for various states and cities, including Alabama, Arizona, California, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.



National Agricultural Summary

November 26 to December 2

HIGHLIGHTS: Winter wheat across the central and northern Plains received beneficial moisture from light snow. Muddy fields delayed the completion of Corn Belt corn and soybean harvests. Early-week, heavy rains saturated soils across the Delta States, slowing cotton and soybean harvesting. Heavy rain left soil moisture mostly adequate to surplus in the Nation's midsection. Elsewhere, moisture rated mostly adequate, with some short supplies in portions of the Southeast and northern Plains. Wet weather limited fieldwork to 3-4 days in the Delta States, eastern Corn Belt, and Pacific Northwest. Other regions had 4-6 days suitable for field activities.

Winter wheat stands were fair to mostly good, with adequate soil moisture. Seeding was 98% finished; plants emerged on 93% of the acreage. Corn combining was 96% complete, slightly behind schedule. Wet weather limited soybean harvesting to 91% completion, trailing the 96% average. Cotton was 70% picked, 9 points behind normal. Sorghum harvesting was 98% complete, equaling the average. Warmer than normal temperatures maintained pasture growth, and aided small grain germination northward into the southern Corn Belt. Pastures rated fair to mostly good across the South. Livestock were in fair to mostly good condition. Producers continued supplemental feeding in most regions. Feed supplies were generally adequate.

SMALL GRAINS: In the 15 major producing States, winter wheat seeding was 98% finished, equaling the average. Progress was 8 points behind schedule in Indiana and Missouri, and 3 points behind in Oregon. Ninety-three percent of the acreage emerged, equaling the average, but 2 points behind a year earlier. Emergence lagged normal by 17 points in Missouri, 10 points in California, and 9 points in both Illinois and Indiana. Mild Kansas weather allowed 6% of the acreage to emerge during the week. Soil moisture rated mostly adequate. Oklahoma wheat growth increased with warm temperatures. Stands were fair to mostly good. Wheat seeding neared completion in Texas. Stands showed excellent growth and rated fair to mostly good. Light snow provided moisture to northern Plains wheat stands, which were in mostly fair condition. Wind damage ranged from light to none. Warmer-than-normal temperatures allowed some germination of late-seeded fields in the Corn Belt. Cool, wet weather curtailed wheat growth in the Pacific Northwest. Excessive rain delayed completion of seeding in Oregon.

CORN: Combining was 96% finished in the 17 major producing States, compared to complete last year and the 97% average. Harvesting was 14 points slower than normal in Ohio and 12 points behind in Pennsylvania. During the week, Kentucky growers harvested 13% of their acreage, while Ohio producers combined 10%. Elsewhere, producers harvested between 1 and 6% of their acreage during the week.

SOYBEANS: In the 18 major producing States, harvesting was 91% complete, 4 points behind last year and 5 points slower than the average. Harvesting continued to lag in 10 producing States: as much as 22 points less than the average in Tennessee and 17 points less in Mississippi. Heavy rain saturated soils, hampering Delta States harvesting. Eastern Corn Belt producers were 6 points behind schedule; while in the South-central States, producers were 12 points slower than normal. During the week, producers combined 18-22%

of their acreage in Kentucky, North Carolina, South Carolina, and Tennessee.

COTTON: Rain delayed harvesting in the Delta States. Picking reached 70% completion in the 14 major producing States, compared with 85% in 1983 and the 79% average. Progress trailed normal in all States except Arizona, California, and Oklahoma. Picking lagged normal by 16 points in Mississippi and Texas, 14 points in Tennessee, and 10 points in Missouri. During the week, Arizona producers harvested 13% of their acreage, while New Mexico growers picked 10%. The Texas harvest slowly advanced because of wet fields. A heavy frost opened late maturing bolls. The Texas crop rated fair to mostly good.

OTHER CROPS: Sorghum harvesting was 98% complete, equal to last year and the average. Missouri and Texas were slightly behind normal. Oklahoma growers combined 5% of their acreage during the week, while Kansas and Missouri producers harvested 3%.

Tobacco stripping, marketing, and plant-bed preparation continued. Kentucky burley producers continued marketing a good quality crop. In Tennessee, 76% of the burley crop was stripped, 2 points behind normal. Marketing continued active in Virginia.

Peanut harvesting was 85% finished in Texas, trailing the 92% average. Wet conditions limited progress in most areas of the State.

FRUITS AND NUTS: Irrigation continued in Florida's citrus groves. New foliage growth slowed, but fruit color was good. Early orange picking for processing was active. Grapefruit movement was steady, while tangerine and tangelo picking rose. Arizona's citrus packing was in full swing. Growers picked grapefruit, lemons, oranges, and tangerines. Frosts initiated dormancy in many California deciduous fruit orchards. Naval orange picking gained momentum. Wet weather slowed the San Joaquin Valley orange harvest. Desert grapefruit, lemon, and tangerine harvests continued active.

The percentage of pecans harvested was: Georgia--71%, Louisiana--65%, Mississippi--66%, and Texas--64%.

VEGETABLES: Florida's vegetable harvest gained for most crops; rebounding after the holiday and adverse weather a week before. Growers actively harvested snap beans, celery, sweet corn, cucumbers, eggplant, escarole, lettuce, green peppers, radishes, squash, and tomatoes. Volumes gained for cabbage, Chinese cabbage, and cauliflower. Texas Rio Grande Valley growers harvested broccoli, cabbage, bell peppers, and tomatoes. Cabbage and spinach made good growth in the San Antonio-Winter Garden area. Lettuce, broccoli, and cauliflower were packed in Arizona's Yuma area. Salt River Valley producers harvested a variety of crops. Wet weather limited fieldwork in northern California. Growers harvested artichokes, desert cantaloupe, broccoli, carrots, cauliflower, celery, and lettuce. Tulalake-Butte Valley potato fields were too wet to continue harvesting; 8% of the acreage remains unharvested.

PASTURES AND LIVESTOCK: Pastures continued in fair to mostly good condition across the South. Warm temperatures stimulated grass growth in most areas. Livestock received supplemental feed in most regions, and rated in fair to mostly good condition. Feed supplies continued mostly adequate.

CROP PROGRESS

FOR WEEK ENDING DEC 2



winter wheat

	% PLANTED		
	1984	1983	AVG.
CALIF	55	60	55
COLO	100	100	100
IDAHO	100	100	100
ILL	100	100	100
IND	92	100	100
KANS	100	100	100
MO	88	97	96
MONT	100	100	100
NEBR	100	100	100
OHIO	100	100	100
OKLA	99	99	98
OREG	96	99	99
S DAK	100	100	100
TEX	99	97	97
WASH	100	100	100
15 STATES	98	99	98

THESE 15 STATES PRODUCED 84% OF THE 1983 WINTER WHEAT CROP.



winter wheat

	% EMERGED		
	1984	1983	AVG.
CALIF	35	50	45
COLO	95	95	95
IDAHO	100	100	100
ILL	90	100	99
IND	90	100	99
KANS	96	95	97
MO	71	88	88
MONT	100	100	100
NEBR	100	100	100
OHIO	99	100	100
OKLA	90	95	85
OREG	91	97	96
S DAK	100	100	100
TEX	91	90	88
WASH	100	100	100
15 STATES	93	95	93

THESE 15 STATES PRODUCED 84% OF THE 1983 WINTER WHEAT CROP.



sorghum

	% HARVESTED		
	1984	1983	AVG.
COLO	98	100	97
KANS	100	97	98
MO	93	97	94
NEBR	100	100	100
OKLA	95	85	90
S DAK	100	100	100
TEX	98	100	100
7 STATES	98	98	98

THESE 7 STATES PRODUCED 85% OF THE 1983 SORGHUM CROP.



cotton

	% HARVESTED		
	1984	1983	AVG.
ALA	92	97	97
ARIZ	94	96	85
ARK	88	99	96
CALIF	97	90	93
GA	93	90	94
LA	89	99	97
MISS	80	98	96
MO	90	100	100
N MEX	75	64	76
N C	85	98	90
OKLA	50	45	40
S C	96	100	100
TENN	78	98	92
TEX	52	78	68
14 STATES	70	85	79

THESE 14 STATES PRODUCED 99% OF THE 1983 COTTON CROP.



corn

	% HARVESTED		
	1984	1983	AVG.
COLO	98	99	98
GA	100	100	100
ILL	96	100	100
IND	90	100	97
IOWA	100	100	97
KANS	100	100	99
KY	93	99	98
MICH	98	100	95
MINN	99	99	94
MO	95	99	95
NEBR	99	99	96
N C	99	99	99
OHIO	85	99	99
PA	82	96	94
S DAK	100	100	98
VA	94	99	98
WIS	93	100	98
17 STATES	96	100	97

THESE 17 STATES PRODUCED 90% OF THE 1983 CORN CROP.



soybeans

	% HARVESTED		
	1984	1983	AVG.
ALA	91	90	94
ARK	82	95	94
GA	89	80	85
ILL	93	100	100
IND	95	100	100
IOWA	100	99	100
KANS	97	95	97
KY	83	96	97
LA	95	97	97
MICH	100	100	100
MINN	99	99	99
MISS	76	92	93
MO	90	94	95
NEBR	100	100	100
N C	81	72	72
OHIO	96	100	100
S C	76	58	65
TENN	72	94	94
18 STATES	91	95	96

THESE 18 STATES PRODUCED 93% OF THE 1983 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 Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Temperatures were about 1 to 30 above normal. Rainfall 0.84 to 5.30 in.

Fieldwork: 4.1 days. Soybeans harvested 91%, 90% 1983, 94% average. Cotton harvested 92%, 97% 1983, 97% average. Wheat seeded 83%, 85% 1983, 88% average. Activities: Harvesting cotton, soybeans, and fall vegetables; planting small grains and winter grazing; applying lime; and routine care of livestock and poultry. Conditions: Soybeans fair; cotton, wheat, and livestock fair to good; pastures fair.

ARIZONA: Precipitation on 2nd, snow level reached down to 5,000 ft. Moisture amounts mostly 0.10 to 0.50 in. Cold, partly cloudy remainder of week. Minimum temperatures below zero some locations in high country, teens and 20's at 5,000 ft., 30's in lower deserts. Averages varied from 1 to 11° below seasonal normals.

Cotton 94% picked, 96% last year, 85% average. Much of acreage picked only once, rood used to clean up top crop. Second pick well underway. Wheat, barley seedbed preparation active. Some acreage seeded. Lettuce packing at peak. Romaine, leaf, Boston lettuce, broccoli, cauliflower packed Yuma Area. Citrus packing full swing with grapefruit, lemons, oranges, tangerines picked. Pecan harvest full swing Marana-Eloy area. Mixed vegetable harvest active Salt River Valley. Ranges, pastures remained in good condition. Cattle good, sheep excellent condition. Stock water supplies, soil moisture normal. Feed supplied above average. Light insect damage.

ARKANSAS: Warm with a brief cool spell at midweek. Temperatures up to 5° above normal. High 74°, low 22°. Most precipitation 4.51 in., least 0.92 in.

Days favorable for fieldwork: 3.5. Crop growth slow to moderate. Soil moisture generally surplus. Cotton fair to poor; harvested 88%, 99% 1983, 96% average. Soybeans fair; harvested 82%, 95% 1983, 94% average. Wheat fair condition; planting 80%, 96% 1983, 97% average. Pastures average. Cattle good condition.

CALIFORNIA: The onslaught of Pacific storm activity into the State continues the trend of below normal temperatures and widespread precipitation. All of the districts recorded below normal temperature averages for the week. Temperature readings ranged from 72° at Imperial to a chilly 5° recorded in downtown Alturas. Rainfall was recorded throughout the State with the heaviest amounts occurring along the north coast and the western slopes of the Sierra.

Rain slowed fieldwork. Cotton harvesting weather permitting; 97% harvested, 90% last year, 93% average. Growers bringing fields to bollworm compliance. Small grains planting as conditions permit, fertilizer applied early planted. Winter wheat 55% planted, 60% last year, 55% average; 35% emerged, 50% last year, 45% average; dryland needs rain to complete planting. Early planted new sugarbeets thinned, weeded. Fall planted alfalfa emerging, weed control. Deglet Noor date harvest 75% complete in Coachella Valley. Remaining Emperor grapes going to wineries. Frosts have initiated dormancy in many deciduous orchards. Pruning,

dormant spraying in stone fruit orchards. Olive harvest for canning nearly complete. Navel orange harvest gains momentum. Wet weather hampering orange harvest in the San Joaquin Valley. Color, quality, and prices all good. Desert grapefruit, lemon, and tangerine harvests continue. Lemon harvest now in the San Joaquin Valley. Wet weather limiting fieldwork northern California. Artichoke harvest light. Chopping asparagus fern delta. Desert cantaloupe harvest near completion. Broccoli harvest moderate central coast, started desert, light San Joaquin Valley, south coast. Carrot harvest fairly light central California, increasing desert. Cauliflower harvest fairly light central California, starting desert. Celery harvest active central coast, increasing slowly south coast. Lettuce harvest light Santa Maria, Huron, active Firebaugh, increasing Palo Verde Valley. Potato fields still wet Tulelake-Butte Valley with possible frost damage. Estimated 8% unharvested. Foothill, valley, range, pasture making good growth result plentiful moisture. Stock ponds beginning fill. Supplemental feeding limited few areas. Calving, lambing continues.

COLORADO: A major winter storm on 25th and 26th dumped 1 foot of new snow in the mountains and up to 5 in. of snow across the lower elevations. Strong western to northwestern winds aloft from midweek through weekend brought continuous light snow to the mountains and scattered snow showers to the western valleys while the east remained dry. Temperatures were generally normal for the week.

Winter wheat 100% planted; 1983 and average, 100%. Plant emergence at 95%; 1983 and average, 95%. Corn 98% harvested; 1983 99%; average 98%. Sorghum harvest 99% complete; 1983 100%; average 97%.

FLORIDA: Showers midweek, weekend. Heaviest amounts Big Bend and lower east coast areas; elsewhere light. Near freezing temperatures north and central, mornings of 28th, 29th; temperatures averaged about normal south, below normal north.

Soil moisture mostly adequate; short few northern areas, surplus few central, east coast counties. Soybean harvest limited to late maturing fields. Sugarcane harvest full swing, condition good. Haymaking virtually complete. Planting winter wheat active, later than normal. Early planted small grains making slow progress due to dry conditions, cool temperatures. Cotton harvest about finished. Additional rain many areas very beneficial, especially in stimulating winter grazing crops delayed by lack of moisture earlier. Conditions mostly fair with grazing of fall seeded crops later than normal, just getting underway. Condition of cattle, calves remained fair to good. Citrus groves good condition. Rain needed in sandy locations. Irrigation continues. New foliage growth slowed. Good fruit color. Early orange harvest for processing active. Movement of grapefruit steady, picking of tangerines and tangelos increasing. A weak cold front passed through the vegetable area at midweek, bringing cooler temperatures. Daytime highs 70's and 80's; nighttime lows 50's and 60's. Rainfall generally light. Harvest gained for most crops,

rebounding after holidays and adverse weather previous week. Harvest active snap beans, celery, sweet corn, cucumbers, eggplant, escarole, lettuce, green peppers, radishes, squash, tomatoes; light but gaining for cabbage, carrots, Chinese cabbage, cauliflower. Quality generally good most crops. Blooms, fruit set abundant in strawberries; first harvest expected mid-December. Hillsborough-Manatee area. First light harvest Dade County tomatoes expected this week. Heavy volume available from Immokalee area.

GEORGIA: Rainfall totals averaged 2.00 to 4.00 in. north and west central, 1.00 in. central and near 0.50 south. Temperatures averaged mid 40's in mountains to upper 50's across south or near normal in extreme north to 5° warmer than normal over central and south. Clayton reported coldest temperature with 20° on morning of 30th. Most of central and south reported high temperatures in upper 70's afternoon of 2nd.

Soil moisture 3% surplus, 61% adequate, 26% short, 9% very short. Average days suitable for fieldwork: 4.8. Main activities harvesting cotton, soybeans and pecans; planting small grains. Cotton 93% harvested, 90% last year, average 94%; condition 5% excellent, 60% good, 33% fair. Soybeans 89% harvested, 80% last year, average 85%; condition 15% good, 49% fair, 26% poor, 10% very poor. Pecans 71% gathered, 62% last year, average 73%; condition 19% good, 55% fair, 22% poor, 3% very poor. Wheat 72% planted, 75% last year, average 82%. Rye 91% seeded, 94% last year, average 93%. Other small grains 86% planted, 91% last year and average. Grain sorghum condition 28% good, 53% fair, 18% poor. Pasture condition 25% good, 50% fair, 22% poor, 3% very poor. Cattle 42% good, 53% fair, 4% poor. Hogs 3% excellent, 60% good, 37% fair.

HAWAII: A low pressure system moved through the State bringing the first winter storm of the season. Heavy rains, locally gusty winds hampered field operations on Kauai and Oahu and caused some locally heavy flooding.

Overall the storm benefitted agriculture by filling irrigation reservoirs and replenishing soil moisture supplies. Overall damage was light and confined mostly to Hawaii, where some wind damage was reported on vegetables, papayas and bananas and where taro fields inundated by flood waters sustained minor damage. Elsewhere in the State, effects of the heavy rains were mixed. Oahu leafy vegetables benefitted from the same rains which increased the threat of disease to melon and onion crops. Waimea area, Hawaii Island, welcomed the rains which brought relief from a long dry spell.

IDAHO: A Pacific storm system moved through the State bringing moderate temperatures and above normal precipitation. Precipitation amounts ranged from 1.75 in. in the north to 0.10 in. in areas of the southeast. Temperatures were near normal statewide, ranging from 50 to 10° below zero.

Winter wheat in the form of snow and freezing temperatures limited fieldwork in most areas of the State. The majority of the fieldwork has been completed with farmers turning their attention toward livestock care and general maintenance. Livestock were reported in good condition with adequate supply of feed.

ILLINOIS: Temperatures 1 to 6° above normal. Precipitation 0.27 to 1.97 in. Corn harvested 96%, last year 100%, average 100%. Soybeans harvested 93%, last year 100%, average 100%. Winter wheat seeded 100%, last year 100%.

average 100%; emerged 90%, last year 100%, average 99%.

INDIANA: Average daily high temperatures in upper 40's to mid 50's. Average lows in low to mid 30's. Average 5 to 7° above normal. Soil temperatures moved into the lower 50's for maximum readings at the four in. depth before cooler air returned. Minimums fell back to the mid and upper 30's with the surge of cold air night of 2nd and early 3rd. Precipitation above normal. Totals 1.50 to 2.00 in. common. Snow flurries on 28th.

Fieldwork averaged 3.5 days. Topsoil moisture adequate to mostly surplus. Subsoil moisture mostly adequate to surplus. Corn 90% harvested, 1983 100%, average 97%. Corn moisture content 21%. Soybeans 95% combined, 1983 100%, average 100%. Soybean moisture 15%. Winter wheat 92% seeded, 1983 100%, average 100%. Wheat 90% emerged, 1983 100%, average 99%. Wheat stands 3% poor, 19% fair, 67% good, 11% excellent. Wheat condition 23% poor, 66% fair, 11% good. Spring cropland 42% tilled, average 53%. Tobacco 40% processed for sale.

IOWA: Temperatures averaged near normal in the west to 6° above normal in the east while precipitation varied from less than 0.10 in. in the west to near 1.00 in. in the extreme east.

Soybean harvest 100% complete; 99% last year; 100% normal. Corn harvest 100% complete; 100% last year; 97% normal.

KANSAS: Precipitation averaged less than 0.10 in. but ranged from none to a few totals of 0.25 in. Temperatures averaged 35° northwest, 43° southeast, ranging from normal southwest to 1 to 3° above normal elsewhere.

Sorghum harvested 100%, 97% last year, 98% average. Soybeans harvested 97%, 95% last year, 97% average. Corn harvested 100%, 100% last year, 99% average. Wheat planted 100%, 100% last year and average. Wheat emerged 96%, 95% last year, 97% average. Soil moisture mostly adequate. Pasture and rangeland fair to good. Days suitable for fieldwork: 5.0.

KENTUCKY: Near seasonable normals of rainfall and temperatures. Mean temperatures averaged from mid to upper 40's. Rainfall amounts averaged from about 1.50 in. west to a little over 1.00 in. in east.

Much delayed corn and soybean harvests made good progress. Corn harvest 93% complete, last year 99%, average 98%. Soybean harvest 83% complete, last year 96%, average 97%. Burley quality continues good, some of late tobacco may be of lesser quality. Wheat seeding continues but many areas will seed no more wheat. Less than intended wheat acreage will be seeded.

LOUISIANA: Rainfall amounts ranged from 0.61 to 5.83 in. Temperatures averaged between 1 to 4° above normal. High 78°; low 26°.

Soil moisture adequate southeast, and adequate to surplus elsewhere in the State. Days suitable for fieldwork: 3.4. Activities included harvesting cotton, soybeans, sugarcane, and pecans, and planting winter wheat. Cotton harvest 89% 1984, 99% 1983, 97% average. Soybean harvest 95% 1984, 97% 1983, 97% average. Winter wheat planting 68% 1984, 94% 1983, 90% average; emerged 57% 1984, 84% 1983, 79% average; condition fair to good. Sweetpotato harvest 98% 1984, 99% 1983, 99% average. Sugarcane harvested 65% 1984, 77% 1983, 74% average. Vegetable condition fair. Pecans harvested 68% 1984, 52% 1983, 65% average. Pasture condition fair. Pasture condition fair. Livestock condition fair to good.

MARYLAND AND DELAWARE: Maryland: The week was warm and wet. Temperatures averaged 2° above normal. Highs mostly in the mid 60's, lows in the mid 20's. Rainfall averaged 1.55 in. with totals ranging from 0.60 in. at Snow Hill to 2.65 in. at Hancock. Most of the rain fell in a 36-hour period on the 28th and the 29th. Nearly 2.50 in. of snow fell in west on the 29th.

Almost 6.0 days were suitable for fieldwork. Farmers had harvested 95% of their soybeans. Just a few scattered fields remain to be harvested in all areas of the State. Tobacco stripping continues. The tobacco crop 45% stripped, 10% more than the previous week. Soil moisture adequate in most areas of the State.

Delaware: The week was 3 to 4° above normal in north, normal in central areas and 1° below normal in southern areas. Rainfall averaged 0.71 in. ranging from 0.50 in. at Wilmington to 0.08 in. at Dover.

Days suitable for fieldwork: 5.5. Farmers completed harvesting soybeans and planting of wheat and rye during the week. Soil moisture remains adequate.

MICHIGAN: This was a warm late fall week with temperatures averaging 10° above normal. Moderate precipitation fell across the State for a few days.

Farmers harvesting the final fields of corn and soybeans. Corn for grain 98% harvested, 100% last year, 95% average. Soybeans 100% harvested, 100% last year, 100% average. Farmers also busy getting ready for winter.

MINNESOTA: Another week of above normal temperatures and the first significant snowfall of the season. Temperatures averaged 2 to 7° above normal. High: 59°, low: -9°. Precipitation averaged near normal to 0.45 in. above normal. Greatest weekly total: 1.14 in. Snowfall for the week averaged 1.00 in. for the northwest and 3 to 5 in. elsewhere. Snow depth at weeks end averaged a trace to 1 in. for the northwest and west central, 5 to 6 in. for the south central and southeast, and 3 to 4 in. elsewhere.

Corn harvested 99%, 1983 99%, normal 94%. Soybeans harvested 99%, 1983 99%, normal 99%.

MISSISSIPPI: Showers and thunderstorms moved across the State with very heavy rainfall in the east and central areas. Temperatures averaged above normal with extremes of 24 and 75°. Greatest weekly rainfall was 5.20 in.

Soil moisture surplus. Fieldwork: 2.1 days suitable, 2.4 1983, 3.1 average. Farmers still struggling to complete harvest and seed winter wheat in rain-drenched fields. Concern over reduced cotton and soybean quality. Soybeans 76% harvested, 92% 1983, 93% average. Cotton 80% harvested, 98% 1983, 96% average. Pecans poor to fair condition; 66% harvested, 61% 1983, 73% average. Wheat condition fair; 59% planted, 91% 1983 and average. Livestock and pasture in fair to good condition.

MISSOURI: Temperatures averaged 5° above normal. Precipitation ranged from 0.25 in. in the northern third to over 1.50 in. in the Bootheel.

Days suitable for fieldwork: 3.1. Soybeans harvested 90%, 94% last year, 95% normal. Corn harvested 95%, 99% last year, 95% normal. Grain sorghum harvested 93%, 97% last year, 94% normal. Cotton harvested 90%, 100% last year, and normal. Fall tillage for spring crops 54%, 54% last year, 57% normal. Winter wheat planted 88%, 97% last year, 96% normal. Winter wheat emerged 71%, 88% last year, 88% normal. Condition of pasture 5% excellent, 61% good, 30%

fair, 4% poor. Topsoil moisture supply 49% surplus, 49% adequate, 2% short.

MONTANA: Temperatures were mild first of week turning cooler with snow last of week. West of Divide temperatures averaged about 2° above normal. Temperatures were near normal in southeast and from 2 to 7° below normal over rest of State with coldest temperatures in southwest. Precipitation mostly moderate over all State with west and southwest receiving heaviest amounts, from 0.10 to near 2.00 in. in mountains.

Winter wheat condition mostly fair, wind damage none to light. Livestock in generally good condition, most receiving some supplemental feed.

NEBRASKA: Some light rainfall at beginning of week, remainder dry. Amounts ranged from traces to 0.20 in. Temperatures ranged from 2° above normal central to 5° below normal Panhandle.

Winter wheat 100% planted and emerged for all items. Condition 29% fair and 71% good. Sorghum harvested 100%, 100% last year, 100% average. Soybeans harvested 100%, 100% last year, 100% average. Corn harvested 99%, 99% last year, 96% average. Topsoil moisture 23% short, 77% adequate. Subsoil moisture 28% short, 72% adequate. Days suitable for fieldwork: 6.1.

NEVADA: Winterlike weather with significant precipitation early in period and again midweek. Heavy snow fell in Sierras during those periods with mostly rain at lower elevations. Temperatures averaged well below normal all areas. Extremes: 69 and 3° below zero.

Ranch and farm activities limited to feeding cattle and sheep. Grading and marketing potatoes continues.

NEW ENGLAND: Temperatures averaged 10° above normal throughout the region. Highest was 66° on the 29th at South Weymouth, MA; lowest was 12° on the 26th at Newport, VT. Most precipitation fell over extreme west and extreme north portions, with 0.50 in. or more. Greatest measurement was 1.30 in. at Montpelier, VT.

Northern Maine potato growing areas covered with 1 to 3 in. of snow. Livestock turned out to pasture for exercise in southern regions.

NEW JERSEY: Temperatures were above normal, averaging 41° north, 44° south and 45° coastal. Extremes were 18 and 68°. Precipitation this period was above normal north, and slightly below south and central, averaging 1.07 in. north, 0.64 in. south and 0.71 in. coastal. The heaviest 24-hour total reported was 1.37 in. on the 28th and 29th.

Fieldwork: 6.5 days suitable. Corn husking about complete and corn shelling is well advanced. Farmers cutting firewood, tending to winter chores.

NEW MEXICO: Average temperatures below seasonal norm. Minimum temperature: -13° northern mountains. Maximum temperature: 69° southeastern Plains. Scattered precipitation over west and north. Precipitation totals between none and 0.49 in.

Soil moisture supplies adequate. Alfalfa fair to excellent. Cotton poor to good; harvest continued. Corn good to excellent; harvest neared completion. Barley good to excellent. Irrigated wheat good to excellent, dryland fair to good. Irrigated grain sorghum good to excellent, dryland good; harvest neared completion. Pecans good to excellent harvest

continued. Peanuts fair; harvest virtually completed. Red chile good; harvest continued. Cattle fair to excellent; good gains for winter. Sheep fair to excellent; good wool cover. Range fair to excellent; mature grass headed. Cotton harvested 75%, last year 64%, average 76%.

NEW YORK: Temperature was above normal. Precipitation was heavy in central area with generally moderate amounts elsewhere. The week began dry with mild days. It turned cold and wet during the second half of the week.

The above normal temperatures allowed additional time for fruit farmers to finish pruning and cleaning orchards, vegetable farmers time to get in some late fieldwork and equipment maintenance and for grain farmers some additional time for fieldwork.

NORTH CAROLINA: Temperatures averaged 2 to 3° below normal across the State. Precipitation ranged from none to 2.87 in., with most areas receiving between 0.50 and 1.00 in.

Soil moisture: 2% very short, 26% short, 70% adequate, 2% surplus. Days suitable for fieldwork: 4.9. Condition: Pasture 6% poor, 50% fair, 44% good. Wheat 1% poor, 36% fair, 62% good, 1% excellent. Oats 2% poor, 25% fair, 72% good, 1% excellent. Barley 3% poor, 24% fair, 71% good, 2% excellent. Rye 33% fair, 65% good, 2% excellent. Harvest: Soybeans 81%, 1983 72%, average 72%. Cotton 85%, 1983 98%, average 90%. Farm feed supplies: Hay and roughage 92% adequate, 8% surplus. Feed grains 4% short, 89% adequate, 7% surplus. Major farm activities: Harvesting soybeans, seeding small grains, fall plowing, picking cotton, preparing tobacco plant beds, harvesting corn, grading burley tobacco, cutting Christmas trees, tending livestock, cutting firewood and general farm maintenance.

NORTH DAKOTA: Mild weather turned to cold temperatures by 27th. A low pressure system passed through the State on 25th and 26th. Temperatures averaged around normal for the west and central and 6 to 9° above normal in the east. Temperatures ranged from 60° on 25th to -10° on November 30th. Precipitation was above normal except for the southeast and east central. The north central was 0.74 in. above normal. Snow cover varied from a trace to 6 in.

Lack of snow cover on fall-seeded crops and alfalfa a concern to growers. State average snow depth 2 in. Snow cover judged sufficient to protect winter wheat in only 17% of State. Winter wheat rated good in 56% of State, fair in 44%. Rye, 2% excellent, 55% good, 43% fair. Insect problems have surfaced in grain storages some areas. Cattle and sheep started winter mostly good condition statewide. Supplies of hay and forage adequate in all but northwest and some west central counties, where supplies were short. Sales of cattle and calves normal except northwest and west, where drought forced ranchers to sell off calves and do extra culling of cows.

OHIO: Temperatures 4 to 9° above normal but ranged from 20's to 60's. Precipitation above normal; western areas totaled over 1.00 in. Soil temperatures at 4 in. averaged 30's to 40's.

Corn harvest 85% complete 1984, 99% 1983 and average. Soybean harvest 96% complete 1984, 100% 1983 and average. Winter wheat planted 100% 1984, 1983 and average; emerged 99% 1984, 100% 1983 and average. Condition of harvested corn and soybeans good. Winter wheat condition good. Most remaining harvest will be done after soils freeze sufficiently to support equipment.

OKLAHOMA: Temperatures averaged 1° above normal Panhandle to 4° above normal east. Precipitation averaged 0.01 in. Panhandle and west central to 1.23 in. southeast.

Mild weather stimulated wheat pasture growth. Row crop harvest advanced slightly as soils began to dry. Forage supplies short in 75% of reporting counties. Supplemental feeding active. Wheat and livestock good to fair; sorghum, cotton, and pastures fair condition. Wheat planted: 99%, 99% 1983, 98% average. Wheat emerged: 90%, 95% 1983, 85% average. Sorghum harvested: 95%, 85% 1983, 90% average. Cotton harvested: 50%, 45% 1983, 40% average.

OREGON: Steady rain pelted the west leaving heavy amounts of precipitation. Up to 8.00 in. fell at the coast and up to 5.00 in. fell in other western areas. East of the mountains received lesser rainfall amounts of 1.00 in. in north central areas and generally less than 0.50 in. elsewhere. Three in. of snow were reported at south central areas. Statewide, temperatures were 2° below normal.

Winter wheat 96% planted, 91% emerged; in 1983 99% planted, 97% emerged; average 99% planted, 96% emerged. Willamette Valley growers still haven't planted all intended winter wheat acres due to excess rain. Grain seeding and crop growth also behind normal in north central areas. In the Hood River Valley, pruning and Boran fertilizing started on fruit orchards. Some of the potato crop will not get dug in the central region and Klamath Basin. Rain interfering with harvest of carrots and cauliflower in west. Soil moisture, and snowpack in east, makes forage growth prospects for 1985 look good. Livestock in generally good condition. Supplemental feeding underway in many locations.

PENNSYLVANIA: Relatively warm and wet week. The statewide average temperature was 42°, 7° higher than normal. The average precipitation was 1.55 in., 0.82 in. more than normal. The heaviest amounts of rain fell in the lower and middle Susquehanna sections.

Moisture adequate to surplus. Activities: Harvesting grain corn and soybeans; baling corn fodder for bedding and feed. Soybeans 94% harvested, last year 94%. Corn for grain 82% harvested; last year 96%, average 94%. Feed from pasture mostly average.

PUERTO RICO: No report available.

SOUTH CAROLINA: Weather during week near normal, temperatures below to above normal. Coldest weather late in week. Rainfall less than normal.

Soil moisture short to adequate. Days available for fieldwork: 5.0. Soybean condition fair. Soybean yields continue to look good; 100% mature, 97% last year, 100% average, 76% harvested, 58% last year, 65% average. Cotton condition good. Quality excellent; 96% harvested, 100% last year, 100% average. Sorghum condition fair to good; 93% harvested, 95% last year, 94% average. Tobacco harvest complete; 96% stalks destroyed, 100% last year. Wheat condition fair to good, 76% planted, 70% last year, 85% average, 55% emerged, 60% last year, 74% average. Oats condition fair to good; 94% planted, 88% last year, 89% average, 80% emerged, 80% last year, 80% average. Rye condition fair to good; 96% planted, 85% last year, 91% average, 82% emerged, 77% last year, 84% average. Barley condition fair to good; 91% planted, 89% last year, 91% average, 78% emerged, 79% last year, 85% average.

SOUTH DAKOTA: Average temperatures ranged from normal to 10° above normal. Extremes: 55 and 10. Outside the Black Hills the low was 20. There were two precipitation events during the week. The first, early in the week, gave some rain and snow to the State. Later in the week 5 to 10 in. of snow fell across the northern two thirds of the State. The southern third was generally dry.

Sorghum harvested 100%, 1983 100%, average 100%. Corn harvested 100%, 1983 100%, average 98%. Winter wheat planted 100%, 1983 100%, average 100%. Winter wheat emerged 100%, 1983 100%, average 100%.

TENNESSEE: A cold front triggered substantial rainfall statewide on the 26th through the 27th. Another frontal system produced lighter rainfall amounts later in the week. Temperatures average near normal. Extremes were recorded at Knoxville 23° and Jackson 72°. Rainfall accumulations totaled generally between 0.50 and 1.00 in. over the State.

Farmers averaged 3.5 days suitable for fieldwork. Soil moisture levels: 63% surplus, 34% adequate, 3% short. Corn harvested: 90%, 1983 95%, average 100%. Cotton harvested: 78%, 1983 98%, average 92%. Soybeans harvested: 72%, 1983 94%, average 94%. Sorghum harvested: 87%. Burley tobacco stripped: 76%, 1983 69%, average 78%. Wheat sown: 53%, 1983 59%, average 92%. Pastures and livestock rated in fair to good condition.

TEXAS: Cold front on 26th triggered scattered thunderstorms. Cold Arctic air behind front, decreasing cloudiness, bringing clear skies. Another front on 2nd, bringing rain Southeast Texas. Temperatures normal Cross Timbers, Blacklands, South Texas. Above normal East Texas, coastal zone. Temperatures below normal High Plains, Edwards Plateau, Trans-Pecos. Rainfall above normal East Texas and normal Lower Valley. Remainder State below normal.

Crops: Light, heavy frost covered many areas State some time during week. Heavy frost Plains allowed slow maturing cotton bolls crack open. Ground conditions remain wet many areas, limited harvesting, planting activities. Warm season grasses hurt by recent frost, haying operations slowed. Livestock conditions fair to good, small grain pastures good grazing. Cotton harvest advanced slowly week because wet ground from recent rains. Heavy frost helped open remaining bolls that slow to mature. Some crop loss expected because weather conditions Plains, Trans-Pecos. Harvesting activities increase next week, since clear, dry conditions forecast. Statewide condition 63% of normal compared with 44% last year. Current reported conditions 45% good; 31% fair; 18% poor; and 6% failure. Grain sorghum harvest remaining fields little progress during week; harvesting virtually complete statewide. Yields later fields affected slightly by frost. Yields good. Peanut harvest progress South Texas; most areas too wet. Yields, grades low dryland fields. Drier weather advance harvest rapidly because lateness of season. Most late soybeans Upper Coast harvested; some remaining fields too wet to complete. Poor yields, result unfavorable weather, in later fields. Harvest resume High Plains as the soil dries out. Sugarbeets remaining in field hurt by recent cold weather. Yields remain good. Producers stockpile beets. Sugarcane harvest progressing Rio Grande Valley. Yields good. Seeding wheat, other small grains virtually completed, except fields going in behind late cotton. Excellent stands, growth statewide. Minor problems rust, greenbugs reported. Most fields provide good

grazing, increased numbers livestock moved to these fields. Statewide wheat condition 82% of normal. Current reported condition 10% excellent, 59% good, 23% fair, and 3% poor.

Cotton open bolls 95% 1984, 100% 1983, 100% average; harvested 52% 1984, 78% 1983, 68% average. Sorghum harvested for grain 98% 1984, 100% 1983, 100% average. Wheat planted all purposes 99% 1984, 97% 1983, 97% average; emerged 91% 1984, 90% 1983, 88% average. Peanuts harvested 85% 1984, 93% 1983, 92% average. Soybeans harvested 92% 1984, 90% 1983, 91% average. Sugarbeets harvested 96% 1984, 92% 1983, 90% average. Pecans harvested 64% 1984, 61% 1983, 56% average. Sunflowers harvested 82% 1984, 100% 1983, 96% average. Oats planted for grain 99% 1984, 98% 1983, 95% average.

Commercial Vegetables: Rio Grande Valley, harvest broccoli, cabbage, bell peppers, tomatoes. Good progress most vegetables. Some insect problems citrus groves; numbers light, treatment not necessary. San Antonio-Winter Garden, good progress cabbage. Spinach looks good, smaller sizes. Harvest continues carrots, beets. Trans-Pecos, harvest chili virtually complete. Frost several days slowed progress slightly.

Range and Livestock: Growth warm season grasses slowed, ceased many areas. Haying operations also slowed because recent frosts. Most winter grasses benefitted from recent rains, improving. Small grains good grazing statewide. Supplemental feeding increased many areas where grazing light. Livestock should go into winter generally good condition. Prices slight decrease during week. Market expected remain steady winter.

UTAH: Temperatures below normal in all divisions ranging from minus 7 to minus 2 below normal. Moderate to heavy precipitation throughout the week in all areas of the State.

Movement of apples and onions from storage and sorting sheds continued. Sorting and marketing of potatoes from pits as orders come in. Care and feeding of livestock major on farm activity.

VIRGINIA: Mild temperatures through week, temperatures averaging in mid 40's. Daytime highs in 40's and 50's. Nighttime lows in 20's and 30's. Precipitation moderate, averaging 1.00 in., but varying from none to 3.00 in. Most rain fell on 28th and 29th.

Topsoil moisture sufficient in all areas except southeast. Topsoil moisture ratings 13% short, 70% adequate, 17% surplus. Days suitable for fieldwork average 4.3. Corn for grain harvest 94% complete, 99% last year, 98% average. Soybean harvest 85% complete, 77% last year, 83% average. Sorghum harvest 88% complete, 84% last year, 81% average. Wheat seeding 94% complete, 94% last year, 92% average. Burley markets active. Pasture and livestock in excellent condition. Winter feedstocks adequate. Calving and lambing starting. Feed supplies excellent. Normal fall chores.

WASHINGTON: Rain west of the Cascades and snow east of the mountains dominated the weather picture midweek.

Very little field activity. Pruning fruit trees and canning raspberries continued, weather permitting. Soil moisture was good to excessive over most of the State. Livestock in good condition. Winter wheat seeded 100%, 100% 1983, 100% average. Winter wheat emerged 100%, 100% 1983, 100% average.

WEST VIRGINIA: Temperatures averaged 3 to 7° above normal. Between 1 to 3 in. of snow fell

across the mountains in North. High of 72° in Weston and Charleston, low of 11° at Green Bank. Precipitation averaged near 1.00 in. over the State, except in the northeast where rainfall was reported between 1.50 and 2.50 in.

Soil moisture adequate. Days worked averaged 3.0. Corn was in good to fair condition with 87% harvested. Pasture in good to fair condition. Main activity: Harvesting corn.

WISCONSIN: The week began on a mild note bringing record and near record temperatures. The mild weather persisted through most of the week then gave way to a winter storm late in the week. Precipitation occurred during much of the week, first as rain, then as rain and snow. The

week ended on a colder note, with a winter storm dropping from 2 to 10 in. in the north.

Soil moisture remained in the adequate to surplus range. Soft soils and precipitation slowed the remaining harvest. Corn for grain was 93% complete, 100% last year and an average of 98%.

WYOMING: Temperatures and precipitation near normal.

Winter wheat fair, mostly good condition. Soil moisture better than last year. Livestock mostly good condition. Hay supplies adequate most areas. Other activities: Marketing, general maintenance.

THE 1984 TROPICAL CYCLONE SEASON

There were 11 named Tropical Cyclones this season (June through November) in the Atlantic, the Caribbean Sea, and the Gulf of Mexico— including four hurricanes and seven Tropical Storms:



Subtropical Storm	Aug. 18-21
Tropical Storm Arthur	Aug. 28-Sept. 5
Tropical Storm Bertha	Aug. 30-Sept. 4
Tropical Storm Cesar	Aug. 31-Sept. 2
Hurricane Diane	Sept. 8-16
Tropical Storm Edouard	Sept. 14-15
Tropical Storm Fran	Sept. 15-20
Tropical Storm Gustav	Sept. 24-Oct. 2
Tropical Storm Isidore	Sept. 25-Oct. 1
Hurricane Josephine	Oct. 7-21
Hurricane Klaus	Nov. 6-13

Hurricane Diana made landfall on the North Carolina coast in mid-September as a minimal to moderate hurricane. But this was after threatening the same coastal area 30 hours earlier when it was much stronger and a potential killer. Diana caused three deaths and damage in the 50- to 100-million dollar range in the Cape Fear/Wilmington area.

Tropical Storm Isidore moved across Florida at the end of September, accompanied by periods of heavy rain and gale-force winds. One death was attributed to this storm.

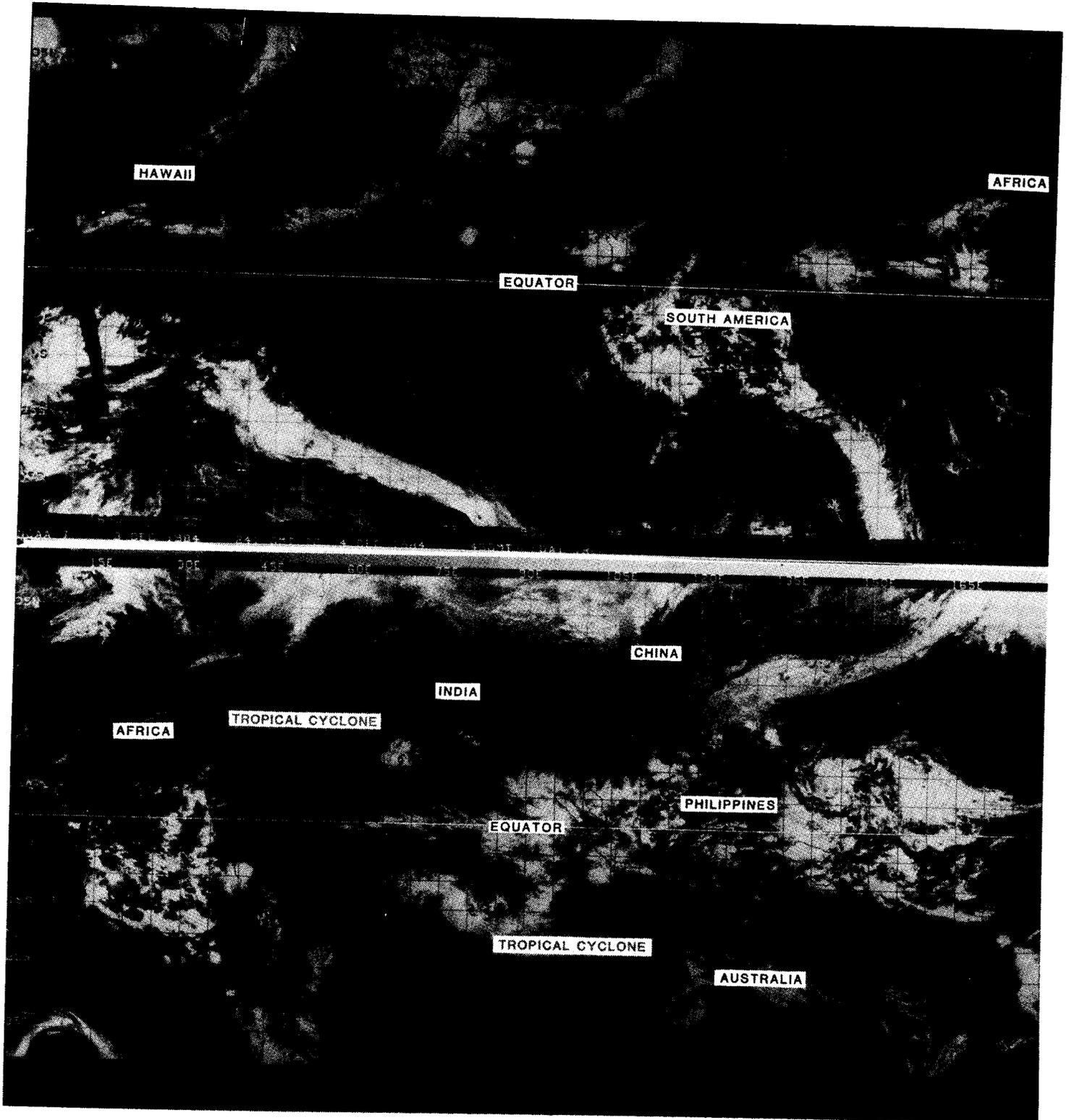
Hurricane Josephine menaced the North Atlantic shipping lanes for several days.

Hurricane Klaus, a late-season hurricane, formed in the eastern Caribbean and moved across the Leeward Islands, causing considerable ship damage, particularly in the vicinity of St. Maartin.

A November extra-Tropical Storm caused severe beach erosion along portions of the mid and upper Florida east coast.

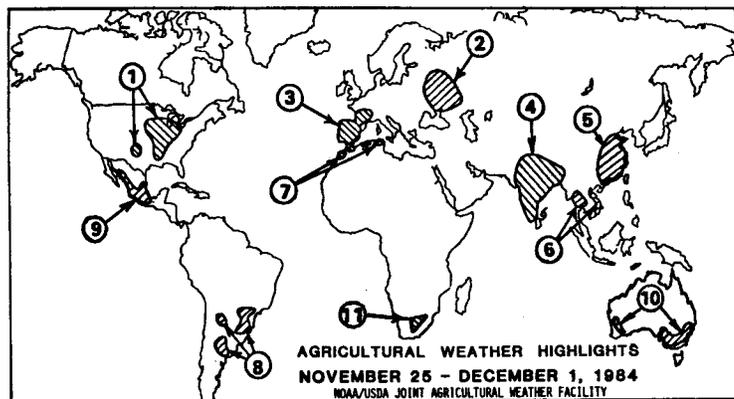
GLOBAL WEATHER SATELLITE PHOTO

Dec. 3 - 4



International Weather and Crop Summary

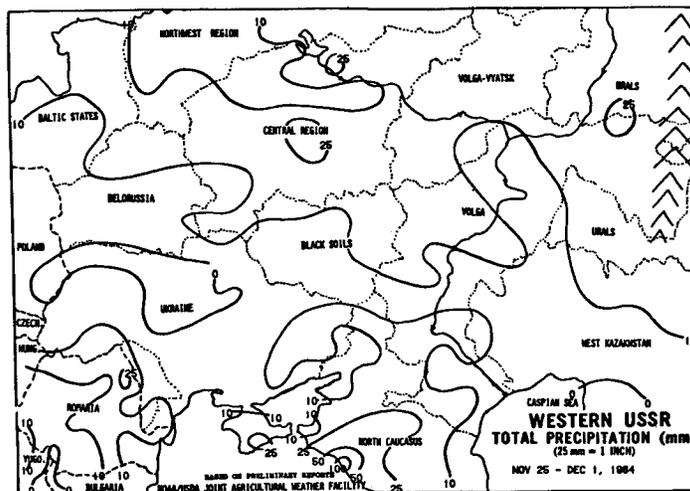
Nov. 26 - Dec. 1

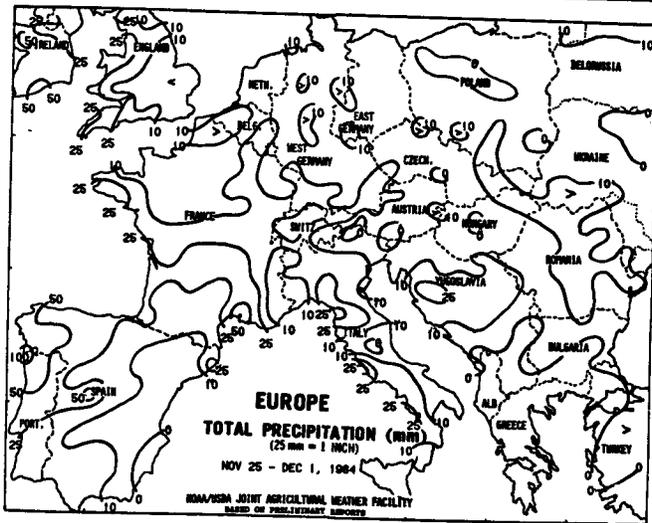


HIGHLIGHTS:

1. UNITED STATES ... Abnormal warmth aids wheat germination across the Corn Belt. Prolonged rains further damage Delta cotton and soybeans. A freeze defoliates West Texas cotton.
2. WESTERN USSR ... Bitter cold air returns to the previously warm and rainy eastern winter grain areas.
3. EUROPE ... Abundant moisture conditions exist for winter wheat planting in the Iberian Peninsula. Wet weather in southwestern France hampers late corn harvesting.
4. SOUTH ASIA ... Dry weather favors harvesting in most of the region.
5. EASTERN ASIA ... Winter wheat begins to enter dormancy with mostly favorable moisture conditions.
6. SOUTHEAST ASIA ... Dry weather benefits most Thai rice; but rain was unfavorable for maturing rice much of the region.
7. NORTHWESTERN AFRICA ... Topsoil moisture favors winter wheat emergence and early growth. In northern Morocco, moisture is limited.
8. SOUTH AMERICA ... Rain, following earlier dryness, improves soybean planting conditions in southern Brazil. Brazil's soybean planting lags behind the recent average pace at about 60 percent completion. In Argentina, early-week dry weather promotes summer crop planting; showers fall late in the week. Dry weather in southern wheat areas favors crop planting.
9. MEXICO ... Continued sunny, mild weather aids agriculture.
10. AUSTRALIA ... Mostly dry, warm weather promotes ripening and aids harvesting of wheat and barley. In southern crop areas, moisture is limited for late-planted wheat in the grain filling period.
11. SOUTH AFRICA ... Timely rain allows corn planting to continue in the west. Moisture is adequate for early growth in the east.

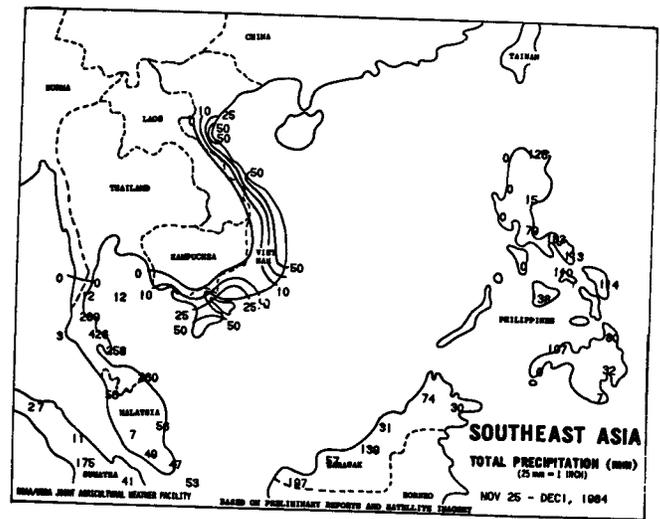
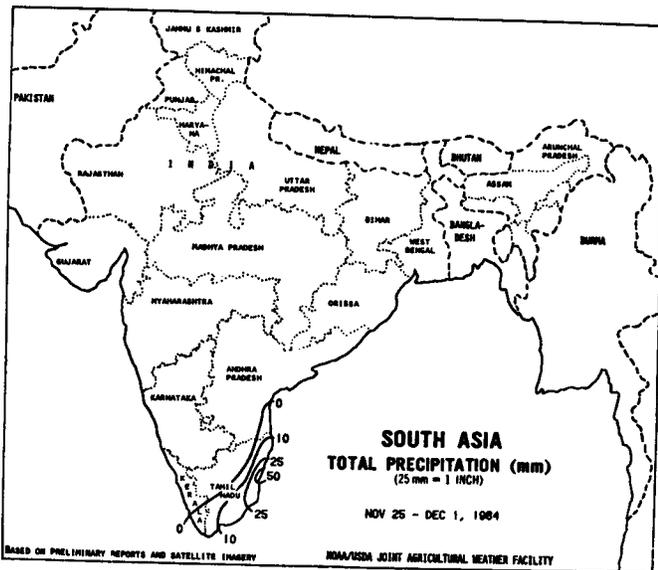
WESTERN USSR...A southward surge of bitter cold air followed early-week rain and above-normal temperatures. The coldest temperatures occurred on November 29, with minimum temperatures around -15°C as far south as the eastern Ukraine, northern North Caucasus, and lower Volga Valley. Minimum temperatures around -20°C covered the Black Soils and middle Volga Valley. Most of the wheat in these areas entered dormancy with minimal hardening, leaving the wheat vulnerable to extremely cold weather. Most crop areas still lack a protective snow cover. In South Central USSR cotton areas, rain, followed by cold weather, hampered late harvest efforts that were already delayed by previous wetness.





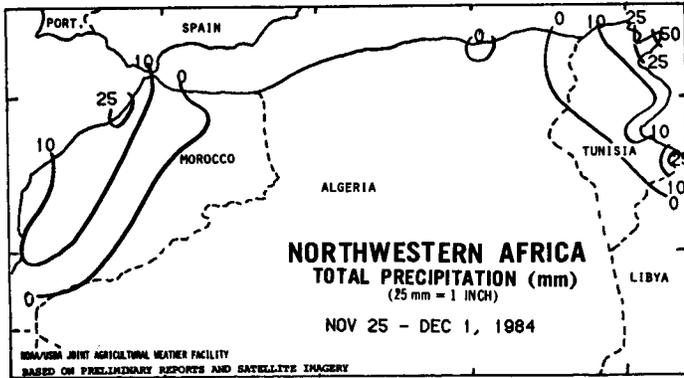
EUROPE... Dry weather covered most of the continent the first half of the week, as a high-pressure ridge formed along an axis from Iberia to Poland. The high-pressure system moved eastward during the latter half of the week, permitting showers to enter most crop areas, particularly those in the west. Generally dry weather covered northern Europe, allowing the sugar beet harvests to near completion. In contrast, southwestern France's wet weather hampered late corn harvesting. Showers (10-25 mm) in the Iberian peninsula continued providing abundant moisture for winter wheat planting. Weekly temperatures averaged above normal across the region, allowing winter grain growth in most western and southern areas.

EASTERN ASIA... Mostly favorable weather continued in China. A late-week warming trend caused above-normal temperatures to return to the North China Plain. However, temperatures were still cool enough in Hebei and Shandong for winter wheat to begin entering dormancy. Seasonably cooler temperatures, although above-normal, are hardening the remaining wheat region. Moisture conditions favored winter wheat establishment. Light showers (mostly less than 10 mm) spread across central China. Mostly dry weather prevailed in the north and south. Light showers also fell in Korea, where winter grains are entering dormancy.



SOUTH ASIA... Dry weather in Pakistan and most of India favored rice, cotton, and groundnut harvesting. Following a few weeks of above-normal temperatures, cooler weather favorably reduced evaporation rates in most of the wheat region. Wheat is the vegetative growth stage. A weak tropical cyclone moved across the southern tip of India. Light to moderate rain (10-70 mm) and moderate winds likely caused little or no crop damage.

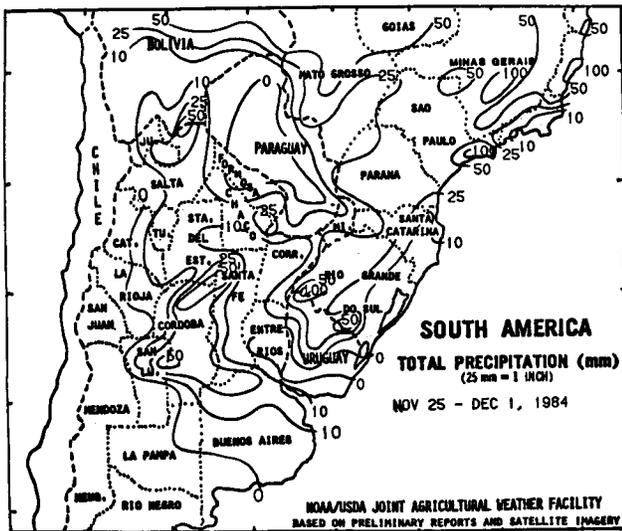
SOUTHEAST ASIA... Seasonably dry weather favored maturing rice in Thailand. Tropical activity was moderate to heavy in much of the region. Rain in Vietnam and the central Philippines was unfavorable for maturing rice. However, dry weather benefited maturing rice in central Luzon. Inundative rain in southern Thailand and Malaysia likely damaged maturing rice.



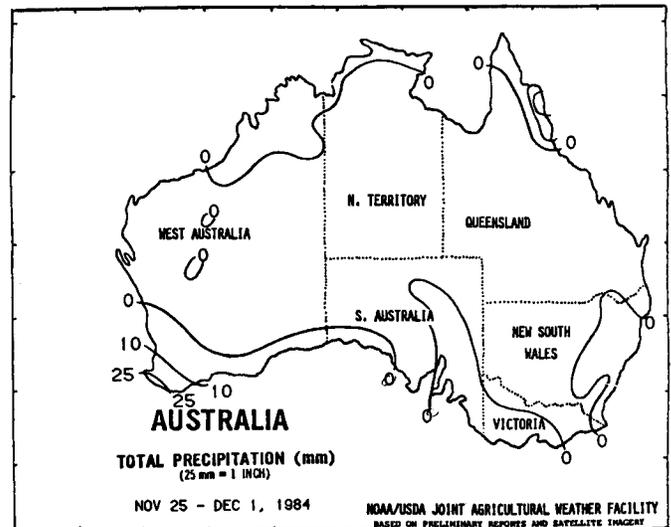
NORTHWESTERN AFRICA...Light showers in southern Morocco winter grain areas increased soil moisture for planting. In contrast, generally dry weather continued over northern Morocco, limiting topsoil moisture for planting. Elsewhere, mostly dry weather continued in northern Algeria and Tunisia, allowing planting to progress with few delays. Normally, winter grain planting is well underway across the region. Topsoil moisture favors emergence and early growth in most areas, except northern Morocco.



MEXICO...Sunny, mild weather over the principal crop areas favored agriculture. The northeast warmed some, while the west coast farming districts were 2-3° cooler than usual, slightly slowing winter vegetable development. A few sprinkles of rain dotted parts of the southern mountains and valleys, but it was too light to significantly hamper outdoor activities. Warm, mostly sunny weather prevailed across Central America.



SOUTH AMERICA...Rain fell over the previously dry soybean areas in Rio Grande do Sul, stimulating the planting that was halted by a 3-week dry spell. Showers covered most Brazilian soybean areas, keeping topsoils moist for planting and emergence. Brazil's soybean planting progress reached nearly 60 percent. The pace lagged behind last year and the recent 5-year average. Early growth conditions improved in the south, and are generally favorable throughout the remainder of the soybean belt. In Argentina, several days of dry weather aided summer crop planting before showers fell later in the week. Corn planting is nearly complete. Summer crop planting slowly advanced in recent weeks due to frequent showers. Adequate to abundant moisture favors early crop growth. Mostly dry weather over La Pampa, and central and southern Buenos Aires promoted wheat maturity as the harvest progressed southward.



AUSTRALIA...Mostly dry weather covered the wheat belt, with harvesting in full swing in most areas. The dryness, interrupted by only very light, scattered showers, aided maturing wheat and barley. Weather conditions favored significant harvest activity in Queensland, where the crop normally matures early. Moisture supplies are adequate for early summer crop growth in southeastern Queensland and northern New South Wales. Mild weather promoted grain ripening across the south and west. Moisture is limited for late planted wheat, still in the grain filling period in southern New South Wales, northern Victoria and South Australia. Above-average temperatures will hasten maturity and may limit the yield potential of the late crop. Favorable weather increased the west's harvest progress.

(continued to back cover)

The Weekly Weather and Crop Bulletin (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Chronicle. It is issued under general authority of the Act of January 12, 1895, (44-USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

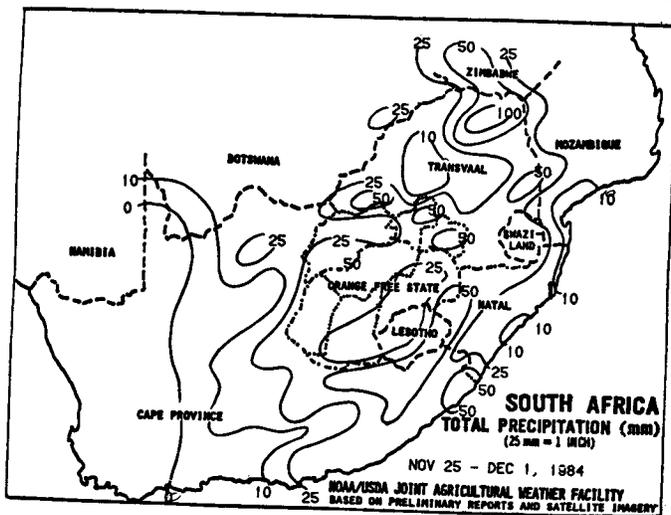
Annual subscriptions: domestic \$25, foreign \$33 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C., and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor Don Haddock
Meteorologists Lyle Denny,
Ray McInturff, Jim Williams, Wes Byrd,
and Mark Brusberg

Subscriptions (202) 447-7917 . . Cheryl Caleco

U.S. DEPARTMENT OF AGRICULTURE
Economics Management Staff
Editor Mary Maher
Statistical Reporting Service
Agricultural Statistician . . . Bill Brannen
World Agricultural Outlook Board
Agricultural Weather Analysts. . Ray Motha,
Tom Puterbaugh, and Ron Lundine

(continued from p. 23)



SOUTH AFRICA...Widespread rain covered the Maize Triangle, relieving unfavorable dryness in the west. Dry, hot weather during the past 2-3 weeks interrupted planting and stressed emerging corn in the western Transvaal and the western Orange Free State. The recent rain (20-60 mm) moistened topsoils and allowed planting to resume. Planting can continue in the west into mid-December without substantial yield loss. Cooler temperatures accompanied the rain lowering evaporation rates. Moderate rain also benefited eastern corn areas where planting has been completed. Moisture conditions have been more favorable in the east, but rainfall was slightly below normal the past few weeks.

NOAA/USDA Joint Agricultural
Weather Facility
Room 5844 USDA South Building
Washington, D.C. 20250

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE

210



OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

WEEKLY NEWS BULLETIN
SECOND CLASS