

WEEKLY WEATHER AND CROP BULLETIN

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

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

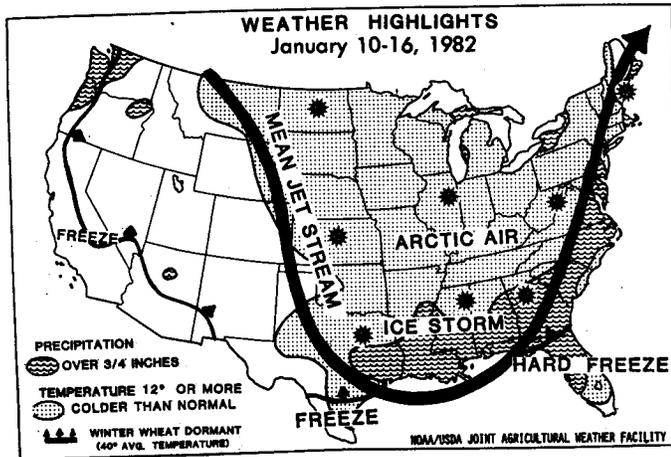
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Jan. 19, 1982

National Weather Summary

January 10-16, 1982



HIGHLIGHTS: Frigid arctic air spread over the eastern two-thirds of the Nation and caused some of the coldest weather of recent years in much of the East. The blast of cold air brought freezing temperatures to southern Texas and a hard freeze to most of Florida where damage to citrus and vegetables was severe. Colder than normal temperatures in California central valleys resulted in a slight freeze in that area. Ice storms and cold weather across the southern States caused property damage from central Texas to the Carolinas.

SUNDAY... A frigid arctic airmass enveloped all of the United States east of the Rockies. Freezing temperatures pushed well into the southern States and sub-zero weather reached into the central Plains, to the Appalachians, and through New England. Snow fell through, south, and east of the Great Lakes. In the West it rained along the Washington coast and showers covered southern California into Arizona. Freezing temperatures reached central California. Light snow fell through the Rockies and across the central Plains.

MONDAY... Record cold temperatures accompanied by brisk arctic winds spread deep into the South and East. Freezing temperatures reached into central Florida and southern Texas. Readings in the teens were reported all along the gulf coast and single digit temperatures covered most of Texas. Snow continued over the eastern Great Lakes and to the south and east of that region. Rain fell along the Pacific Northwest coast. Snow covered the central and northern Rockies and spread eastward through Nebraska and South Dakota. Late in the day, a developing winter storm in the southern Plains began to spread freezing rain or snow over central and eastern Texas.

TUESDAY... The frigid arctic air blew through Florida and a hard freeze reached into the central peninsula and freezing temperatures were measured deep into the Everglades. Damage to citrus and vegetables was severe. Freezing weather also covered southern Texas. The fully developed winter storm in central Texas gradually spread its shield of freezing rain or snow northward and eastward through the Plains and to the east coast. Heavy ice built up over the southern States. Snow covered the central and northern Plains, the mid-Mississippi and Ohio Valleys, the central Great Lakes, and the Southeast from Georgia into Virginia.

WEDNESDAY... The winter storm moved eastward through the southern States and then northeastward along the east coast. Freezing rain and sleet covered the gulf coast except for southern Texas and most of Florida where some heavy rain occurred. Snow covered the rest of the South and the East. Snow was heavy at times along the east coast. Light snow continued through the northern Plains and Great Lakes region. Severely cold weather continued throughout the Nation but some warming occurred ahead of the southern storm.

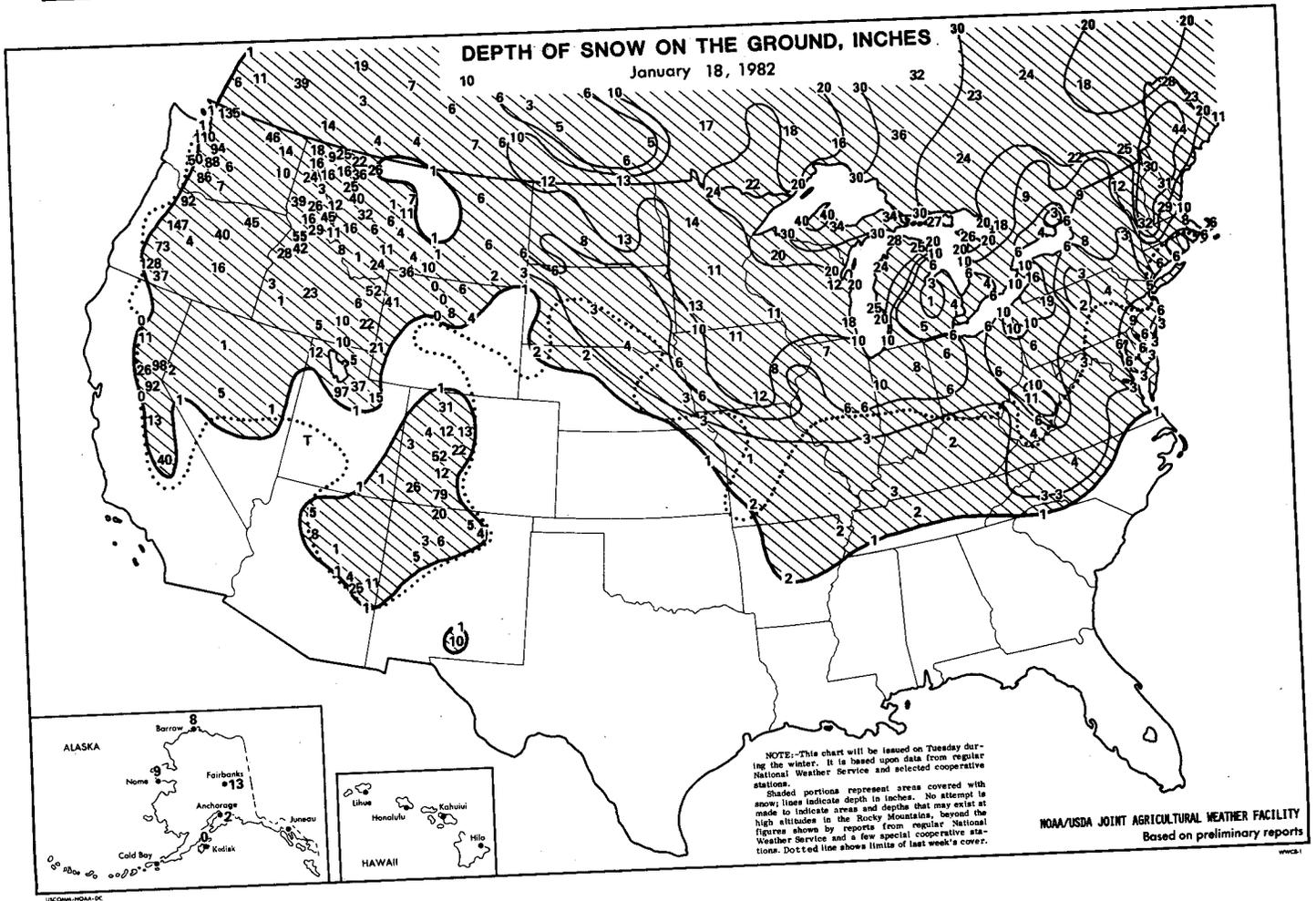
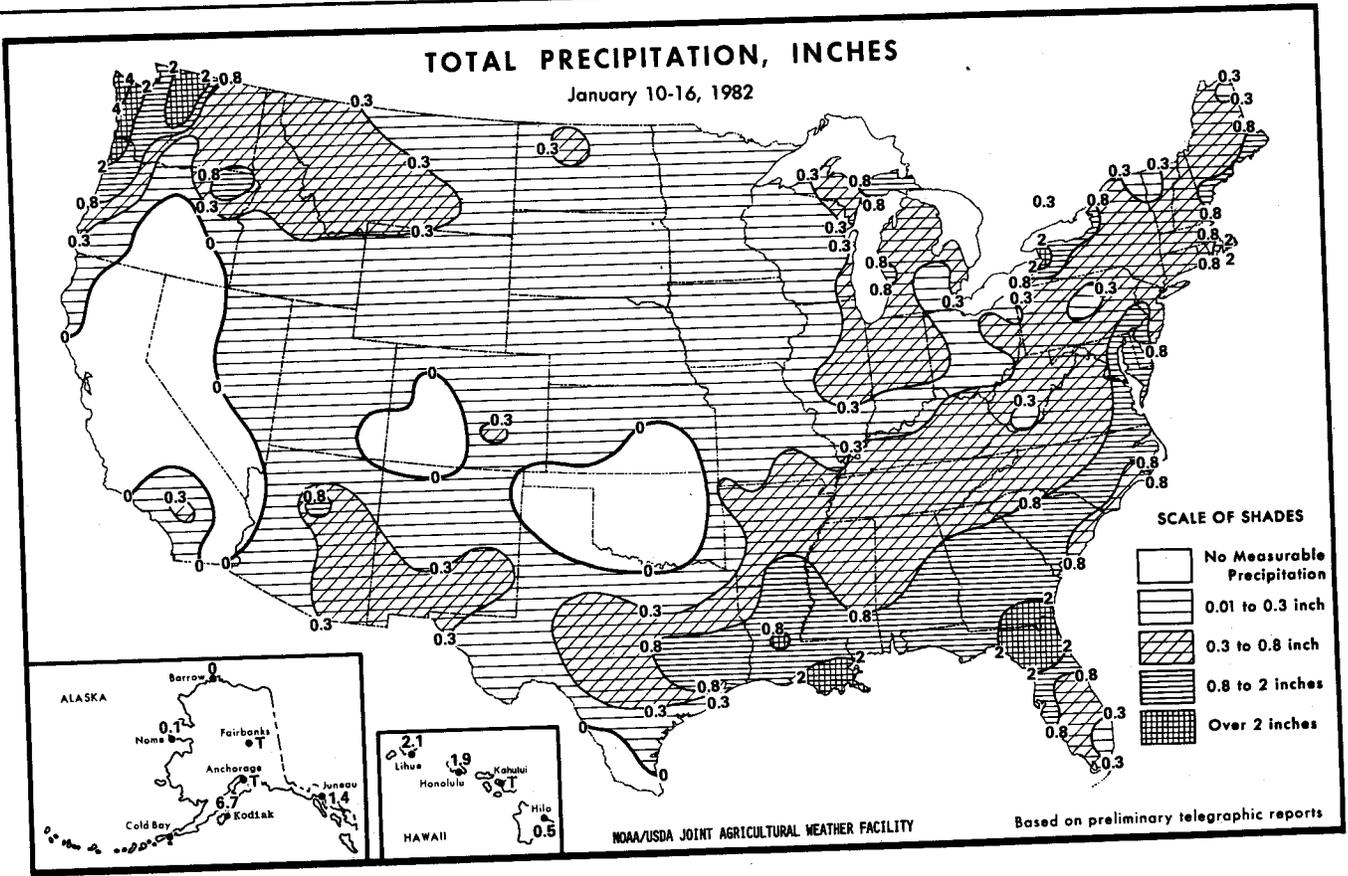
THURSDAY... The snow tapered off in the Southeast and the mid-Atlantic States but intensified in the northern Plains and Great Lakes to the northern Appalachians. Thunderstorms continued in Florida. Early morning temperatures dropped again in the South, west of Alabama, and another freeze covered the lower Rio Grande Valley. A warming trend began through the southern Plains during the day.

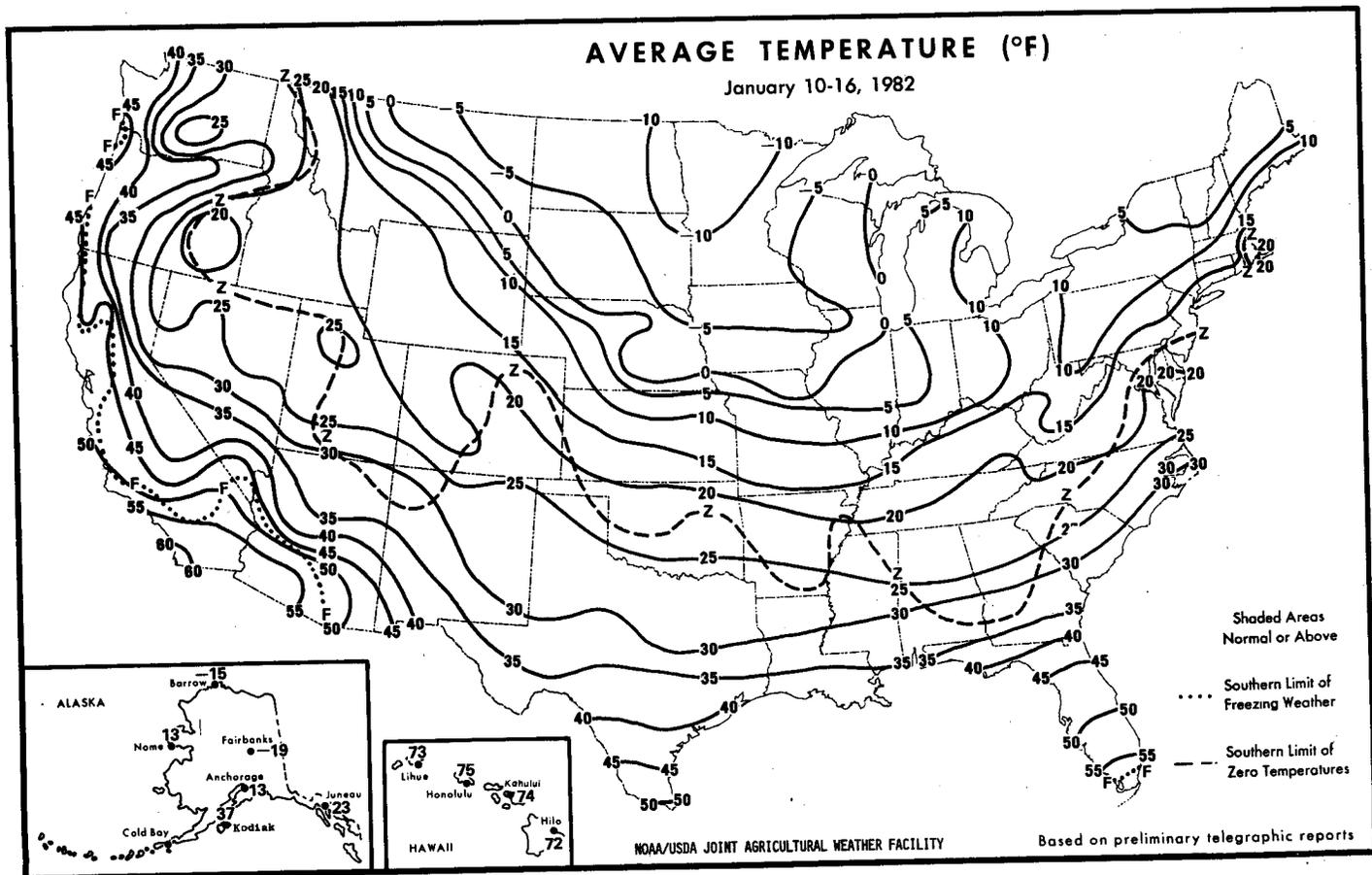
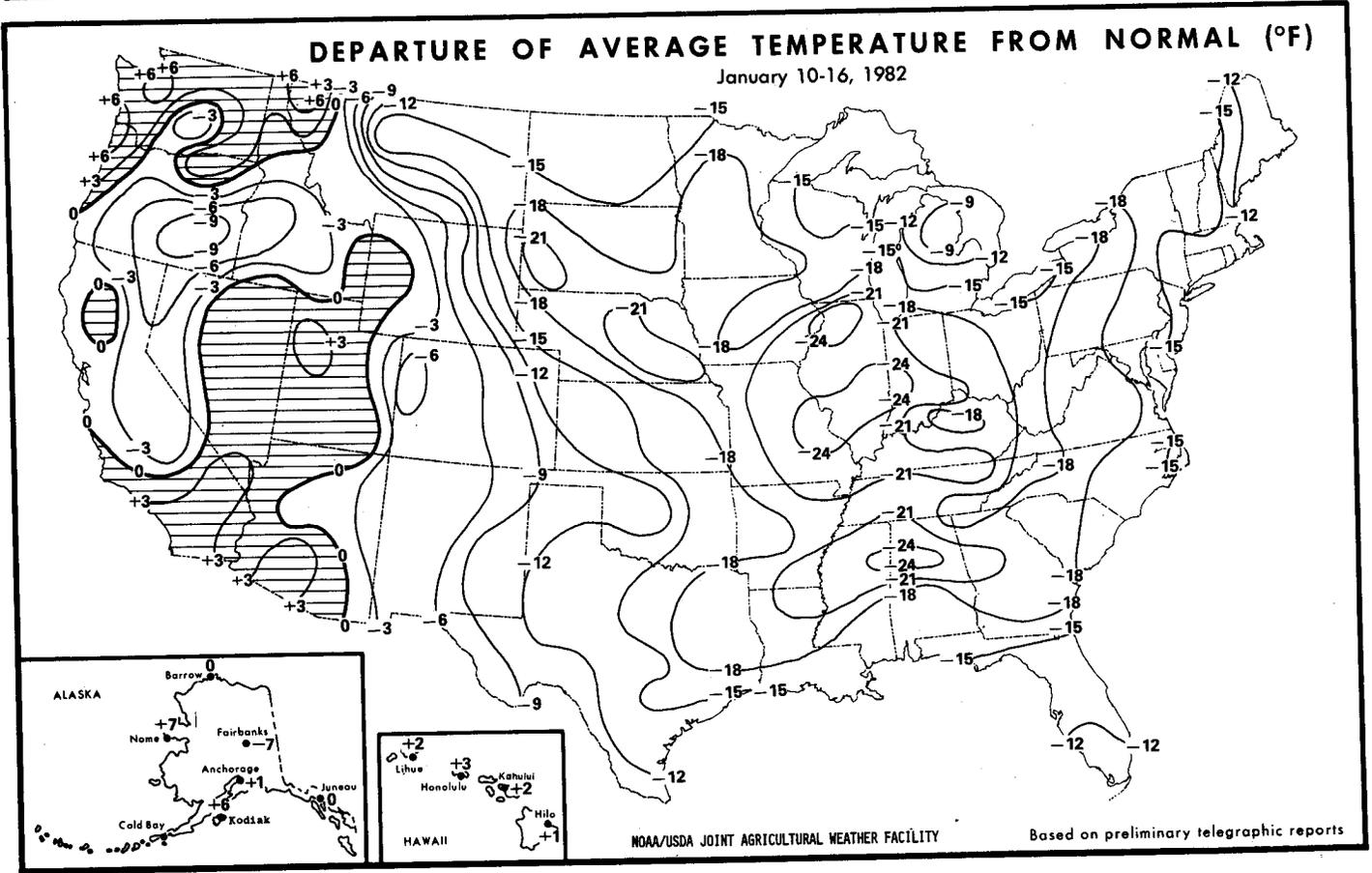
FRIDAY... Another blast of arctic air blew into the northern Plains and western Great Lakes and began spreading southward and eastward. Frigid temperatures continued over most of the Nation but it warmed to the 50's and 60's across the South and southern Plains before the new outbreak reached into the central Plains. Snowfall was light from the northern Plains to Illinois but was heavier

(Continued on page 14.)

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Weather Data for the Week Ending Jan. 16, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Nov. 29	PCT. NORMAL SINCE Nov. 29	TOTAL, IN., SINCE Jan. 3	PCT. NORMAL SINCE Jan. 3	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL BIRMINGHAM	34	12	46	-2	23	-21	.8	-.3	.6	10.5	133	3.5	167	83	52	0	7	3	1	
MOBILE	44	21	63	7	33	-18	1.9	.9	1.2	9.8	113	2.4	114	81	44	0	6	3	2	
MONTGOMERY	38	20	58	4	29	-18	1.1	.3	.6	12.0	167	3.4	200	85	53	0	7	3	1	
AK ANCHORAGE	19	7	26	-3	13	1	0	-.2	0	.3	19	0	81	56	0	7	0	0		
BARROW	-10	-19	-7	-23	-15	0	0	-.1	0	.3	75	.2	100	75	62	0	7	0		
FAIRBANKS	-9	-29	-2	-35	-19	-7	0	-.1	0	1.3	144	.7	350	72	46	0	7	0		
JUNEAU	28	19	36	5	23	0	0	-.1	0	4.6	66	1.9	106	75	60	0	7	4		
KODIAK	41	33	46	24	37	6	6.7	5.5	3.1	13.9	174	6.9	288	97	78	0	3	7		
NOME	20	7	28	-1	13	7	.1	-.1	.1	1.7	142	.5	125	91	69	0	7	2		
AZ PHOENIX	64	43	72	36	54	3	.1	-.1	0	1.1	79	.3	75	81	33	0	0	3		
PRESCOTT	50	25	56	19	38	1	.1	-.3	0	1.1	79	.2	25	86	41	0	6	2		
TUCSON	62	38	74	32	50	0	-.5	-.3	.4	1.7	121	.6	150	88	34	0	2	3		
YUMA	68	46	73	42	57	2	-.1	-.1	-.1	.2	33	.1	100	58	20	0	0	2		
AR FORT SMITH	34	8	55	0	21	-18	.1	-.5	0	2.5	57	.2	18	76	33	0	7	2		
LITTLE ROCK	37	10	72	-1	24	-17	.5	-.5	.5	2.3	35	.5	26	76	51	0	7	1		
CA BAKERSFIELD	53	37	67	33	45	-3	0	-.2	0	2.2	79	1.1	138	97	78	0	0	1		
EUREKA	53	39	60	35	46	-1	0	-.7	0	10.9	100	.5	15	96	68	0	2	1		
FRESNO	46	35	57	29	41	-5	0	-.4	0	2.2	79	1.1	138	97	78	0	0	1		
LOS ANGELES	66	50	71	45	58	4	0	-.6	0	2.8	90	.3	27	80	40	0	4	0		
RED BLUFF	60	35	68	31	48	2	0	-3.0	0	5.2	142	1.3	62	80	40	0	4	0		
SACRAMENTO	48	35	56	31	42	-4	0	-.9	0	4.3	239	4.3	239	97	63	0	3	0		
SAN DIEGO	67	52	70	47	60	4	.2	-.3	.1	2.8	93	.6	60	89	48	0	0	2		
SAN FRANCISCO	53	37	58	35	45	-3	0	-1.0	0	11.0	169	6.5	325	91	58	0	0	0		
CO DENVER	38	10	54	5	24	-6	.2	.1	.1	1.1	157	.2	100	76	38	0	7	3		
GRAND JUNCTION	30	7	34	4	19	-7	0	-.1	0	1.0	125	.1	33	90	59	0	7	0		
PUEBLO	33	8	48	-1	20	-10	.4	-.4	.3	1.0	200	.4	400	89	59	0	7	2		
CT BRIDGEPORT	23	9	38	0	16	-14	.7	-.1	.4	5.4	106	1.3	100	71	41	0	7	4		
HARTFORD	20	5	29	-4	13	-12	.6	-.1	.5	6.7	110	2.1	140	69	38	0	7	2		
DC WASHINGTON	27	12	45	2	20	-16	.6	0	.4	4.5	98	1.6	133	80	41	0	7	3		
FL APALACHICOLA	52	33	66	20	43	-11	1.4	.7	1.2	7.7	151	2.1	150	75	48	0	4	4		
DAYTONA BEACH	58	33	71	22	46	-13	1.2	.8	.8	5.6	187	1.4	156	80	40	0	3	2		
JACKSONVILLE	56	27	68	17	42	-13	2.5	1.8	1.3	6.2	151	2.8	215	86	43	0	6	4		
KEY WEST	69	57	78	50	63	-8	.4	0	.4	.4	16	.4	50	84	55	0	0	1		
MIAMI	69	45	82	33	57	-10	.1	-.4	.1	.2	7	.1	10	84	41	0	0	1		
ORLANDO	61	33	73	23	47	-13	.3	-.2	.3	3.3	106	.4	40	84	39	0	3	2		
TALLAHASSEE	50	24	66	14	37	-16	1.5	.6	.9	8.2	128	3.0	176	91	44	0	6	4		
TAMPA	59	34	69	24	47	-13	1.5	.9	.9	5.3	147	1.6	145	90	40	0	3	2		
WEST PALM BEACH	68	40	82	29	54	-11	.3	-.4	.3	3.8	97	1.1	92	80	38	0	2	1		
GA ATLANTA	31	9	48	-5	20	-22	.9	-.1	.5	11.1	163	3.3	165	90	58	0	7	4		
AUGUSTA	35	15	52	1	25	-21	.9	-.2	.5	10.9	206	1.8	129	84	56	0	7	3		
MACON	38	19	55	4	28	-20	1.0	-.3	.6	11.9	189	2.8	187	85	58	0	6	2		
SAVANNAH	44	24	61	12	34	-16	1.3	-.6	.7	6.3	126	3.1	221	74	39	0	6	2		
HI HILO	81	64	83	60	72	1	.5	-1.3	.4	21.7	102	.6	16	87	61	0	0	2		
HONOLULU	81	70	83	66	75	3	1.9	-.9	1.0	9.5	153	4.4	220	90	69	0	0	2		
KAHULUI	82	65	83	63	74	2	0	-.8	0	5.4	108	2.6	163	87	61	0	0	1		
LIHUE	81	65	84	64	73	2	2.1	.7	.9	12.6	125	3.6	129	99	70	0	0	7		
ID BOISE	33	13	42	-2	23	-6	.1	-.2	.1	3.1	129	.2	29	94	66	0	6	1		
LEWISTON	37	27	48	21	32	1	.8	-.3	.4	2.3	115	1.0	167	97	68	0	7	2		
POCATELLO	28	12	39	-4	20	-3	.2	-.1	.1	3.2	188	.8	133	94	74	0	7	2		
IL CHICAGO	10	-10	23	-26	0	-23	.4	0	.1	3.0	103	1.3	144	82	53	0	7	6		
MOLINE	7	-10	16	-23	-2	-23	.1	-.2	.1	2.0	74	.4	67	73	52	0	7	2		
PEORIA	11	-7	22	-18	2	-22	.2	-.3	.1	3.0	97	.9	90	70	47	0	7	3		
QUINCY	10	-5	31	-21	3	--	.1	--	.1	--	--	.3	--	69	45	0	7	3		
ROCKFORD	7	-14	16	-27	-4	-23	.2	-.2	.1	2.0	71	.7	88	80	58	0	7	3		
SPRINGFIELD	13	-5	29	-18	4	-23	.4	-.1	.2	4.4	157	.9	129	81	55	0	7	4		
IN EVANSVILLE	23	0	35	-17	11	-21	.3	-.5	.2	4.4	83	1.0	63	77	50	0	7	5		
FORT WAYNE	14	-5	25	-15	4	-21	.4	-.2	.1	4.6	124	1.2	100	88	61	0	7	6		
INDIANAPOLIS	17	-8	30	-16	4	-24	.4	-.3	.1	6.6	147	1.2	86	86	60	0	7	6		
SOUTH BEND	13	-4	20	-14	5	-19	.5	0	.2	3.6	92	1.4	140	88	56	0	7	2		
IA DES MOINES	5	-10	24	-22	-2	-21	.2	0	.2	2.4	150	.7	140	67	46	0	7	2		
SIoux CITY	6	-16	25	-22	-5	-23	.2	.1	.1	2.0	182	.4	133	84	55	0	7	3		
WATERLOO	0	-14	12	-26	-7	-23	.1	-.1	.1	2.2	157	.4	80	77	56	0	7	2		
KS CONCORDIA	20	-3	46	-16	9	-17	.1	0	.1	.7	100	.1	50	70	46	0	7	2		
DODGE CITY	31	4	58	-6	17	-14	0	-.1	0	.9	129	0	83	33	0	7	1			
GOODLAND	29	-2	51	-11	13	-14	.1	-.1	.1	1.2	67	-.1	100	73	44	0	7	1		
TOPEKA	21	-1	43	-15	10	-18	0	-.2	0	1.5	83	-.2	40	73	39	0	7	0		
WICHITA	28	2	54	-10	15	-16	0	-.1	0	--	--	0	0	72	29	0	7	0		
KY BOWLING GREEN	25	6	38	-9	15	-22	.5	-.8	.3	5.0	76	1.2	46	90	53	0	7	2		
LEXINGTON	21	4	36	-11	13	-21	.3	-.6	.1	5.7	100	1.7	94	85	57	0	7	5		
LOUISVILLE	25	6	39	-11	15	-18	.1	-.7	.1	--	--	.7	44	81	47	0	7	3		
LA ALEXANDRIA	40	22	61	12	31	--	.8	--	.7	6.3	--	1.0	--	77	47	0	7	1		
BATON ROUGE	45	23	63	10	34	-17	1.5	.5	1.0	5.0	60	2.3	115	79	43	0	7	2		
LAKE CHARLES	46	25	64	15	35	-17	1.1	.2	1.0	7.3	95	1.6	89	89	52	0	7	2		
NEW ORLEANS	48	26	67	15	37	-16	2.2	1.2	1.6	4.1	60	2.2	110	90	52	0	6	2		

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Jan. 16, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE NOV. 29	PCT. NORMAL SINCE NOV. 29	TOTAL, IN., SINCE JAN. 3	PCT. NORMAL SINCE JAN. 3	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	38	16	61	5	27	-20	.5	-.4	.4	--	--	1.2	63	89	49	0	7	2	0
ME CARIBOU	9	-7	21	-22	1	-9	.1	-.4	.8	5.5	141	.8	80	65	49	0	7	3	0
ME PORTLAND	18	1	27	-6	10	-11	1.0	.2	.8	8.2	134	2.7	180	82	44	0	7	4	1
MD BALTIMORE	24	9	37	2	17	-17	.8	.2	.7	4.9	98	1.2	100	72	42	0	7	2	1
MD SALISBURY	22	11	39	2	20	-18	1.2	.4	.7	--	--	2.7	169	88	50	0	7	2	2
MA BOSTON	28	11	35	3	17	-12	.6	-.2	.5	10.3	158	2.3	135	75	40	0	7	4	0
MA CHATHAM	28	12	43	4	20	--	2.1	--	1.0	11.5	--	2.9	--	80	51	0	7	6	2
MI ALPENA	19	-1	26	-21	9	-8	.4	0	.1	2.5	81	1.2	150	90	64	0	7	5	0
MI DETROIT	16	1	22	-10	9	-15	.4	0	.2	3.2	97	.9	100	89	58	0	7	7	0
MI FLINT	16	3	22	-10	10	-12	.3	-.1	.1	1.8	67	.6	86	94	64	0	7	7	0
MI GRAND RAPIDS	17	3	21	-9	10	-13	.6	.2	.3	3.3	94	1.9	211	87	60	0	7	7	0
MI HOUGHTON LAKE	16	1	24	-14	8	-9	.3	0	.1	2.4	89	1.3	217	80	58	0	7	5	0
MI LANSING	16	0	21	-10	8	-15	.3	-.2	.1	2.0	--	.9	100	92	64	0	7	5	0
MI MARQUETTE	12	-11	20	-24	1	-12	.8	.4	.3	7.0	212	2.1	263	96	64	0	7	6	0
MI MUSKEGON	17	1	22	-10	9	-15	1.3	.8	.9	5.1	131	2.6	236	90	71	0	7	6	1
MI SAULT STE. MARIE	13	-12	18	-36	1	-13	1.4	1.0	.6	5.9	159	2.9	322	89	49	0	7	5	2
MN ALEXANDRIA	-2	-21	7	-29	-11	-19	.2	-.1	.2	--	--	.2	100	74	30	0	7	1	0
MN DULUTH	1	-20	9	-31	-9	-17	.1	-.2	.1	1.4	70	.1	20	70	46	0	7	2	0
MN INT'L FALLS	-2	-26	7	-41	-14	-16	T	-.2	T	1.2	71	.1	20	74	53	0	7	2	0
MN MINNEAPOLIS	2	-14	10	-26	-6	-18	.1	-.1	.1	1.4	100	.1	25	78	44	0	7	2	0
MN ROCHESTER	3	-14	10	-28	-6	-18	T	-.1	T	1.3	118	.1	33	79	61	0	7	1	0
MS GREENWOOD	34	15	51	6	24	--	.5	--	.4	--	--	2.6	--	75	49	0	7	3	0
MS JACKSON	38	13	55	3	26	-21	1.3	.4	.8	8.0	105	1.8	95	91	55	0	7	3	2
MS MERIDIAN	40	17	56	5	28	-19	.4	-.5	.4	8.6	104	1.2	63	81	46	0	7	3	0
MO CAPE GIRARDEAU	24	1	37	-12	13	-23	.3	-.6	.3	--	--	.8	44	88	58	0	7	1	0
MO COLUMBIA	16	-1	31	-19	8	-21	.1	-.3	T	2.8	104	.7	88	76	40	0	7	2	0
MO KANSAS CITY	14	-4	36	-17	5	-22	T	-.3	T	3.3	143	.3	60	70	39	0	7	1	0
MO SAINT LOUIS	17	1	29	-15	9	-22	.2	-.2	.2	4.6	144	.7	88	86	55	0	7	4	0
MO SPRINGFIELD	24	0	44	-11	12	-21	.2	-.1	.2	5.7	168	.8	133	72	44	0	7	1	0
MT BILLINGS	26	1	46	-12	14	-8	.7	.5	.6	1.3	130	.8	200	74	49	0	7	3	1
MT GLASGOW	6	-16	39	-32	-5	-14	.2	-.1	.1	.5	83	.3	300	63	44	0	7	5	0
MT GREAT FALLS	20	-8	40	-16	6	-14	.4	.1	.2	1.1	85	.6	120	83	58	0	7	5	0
MT HAVRE	8	-15	38	-27	-3	-14	.1	-.1	.1	.3	38	.3	75	91	41	0	7	1	0
MT HELENA	24	6	43	-4	15	-3	.3	.2	.2	.6	86	.3	150	78	53	0	7	2	0
MT KALISPELL	28	16	41	-3	22	3	.7	.4	.4	3.2	123	1.0	143	92	73	0	7	5	0
MT MILES CITY	10	-13	41	-26	-1	-16	.2	.1	.1	.6	86	.3	150	80	43	0	7	4	0
MT MISSOULA	29	17	40	5	23	2	.6	.4	.2	2.8	165	.8	160	94	70	0	6	6	0
NE GRAND ISLAND	15	-8	42	-20	3	-19	.1	-.1	.1	2.8	330	.2	67	72	48	0	7	2	0
NE LINCOLN	11	-9	34	-18	1	-21	T	-.1	T	2.4	200	.1	33	79	44	0	7	2	0
NE NORFOLK	11	-12	33	-23	-1	-19	.1	-.1	.1	2.4	267	.2	67	75	43	0	7	2	0
NE NORTH PLATTE	23	-8	49	-17	8	-15	T	-.1	T	2.2	367	.6	300	81	48	0	7	1	0
NE OMAHA	9	-11	25	-22	0	-20	.1	.1	T	2.4	200	.2	50	70	54	0	6	2	0
NE SCOTTSBLUFF	24	0	45	-12	12	-14	.1	0	.1	1.5	375	.1	50	82	54	0	7	3	0
NE VALENTINE	11	-14	37	-26	-2	-22	T	0	T	.5	50	0	77	48	0	7	3	0	
NV ELY	42	8	48	0	25	2	T	-.1	T	.6	86	.6	300	83	45	0	7	1	0
NV LAS VEGAS	60	35	67	30	48	3	0	-.1	T	1.2	80	0	58	23	0	2	0	0	0
NV RENO	40	13	50	5	26	-6	0	-.3	0	--	--	.8	133	90	51	0	7	0	0
NV YINNEHUCCA	41	15	49	7	28	0	0	.3	0	1.8	113	.1	20	88	49	0	7	0	0
NH CONCORD	16	-5	23	-13	6	-14	.3	.3	.1	7.0	143	1.8	150	81	45	0	7	3	0
NH ATLANTIC CITY	26	7	40	1	17	-16	.7	-.1	.6	7.0	115	2.3	144	92	56	0	7	3	1
NM ALBUQUERQUE	44	20	51	17	32	-3	.2	.2	.2	.4	67	.2	200	85	41	0	7	3	0
NM CLOVIS	41	19	55	10	30	--	T	--	T	--	--	T	--	77	43	0	7	1	0
NM ROSWELL	35	12	46	-1	24	-16	.6	.5	.3	.7	100	.6	300	84	51	0	7	2	0
NY ALBANY	15	2	25	-6	8	-13	.4	0	.4	5.4	129	1.6	178	83	47	0	7	5	0
NY BINGHAMTON	14	-3	26	-15	5	-17	.4	-.1	.3	4.1	98	1.2	120	87	55	0	7	4	0
NY BUFFALO	15	-1	24	-11	7	-16	3.1	2.4	1.8	7.3	152	4.2	323	96	68	0	7	6	2
NY NEW YORK	23	12	35	4	18	-14	.5	-.1	.3	8.3	157	2.6	200	74	41	0	7	2	0
NY ROCHESTER	19	-2	28	-15	9	-16	1.0	.5	.5	4.8	130	1.8	180	98	71	0	7	4	0
NY SYRACUSE	15	-5	31	-25	5	-18	.3	-.3	.2	5.5	115	2.1	191	94	60	0	7	5	0
NC ASHEVILLE	31	8	44	-6	20	-18	.5	-.3	.2	8.0	143	2.7	169	92	60	0	7	3	0
NC CHARLOTTE	32	15	44	2	23	-19	.7	-.1	.3	9.4	171	2.7	169	88	56	0	7	3	0
NC GREENSBORO	30	10	46	-6	20	-19	.5	-.2	.3	8.7	174	1.9	136	85	50	0	7	2	0
NC HATTERAS	41	22	60	11	31	-14	1.6	.6	.8	10.9	156	3.7	195	83	55	0	7	3	0
NC NEW BERN	39	21	53	7	30	-16	.7	-.1	.6	--	--	4.3	269	82	48	0	7	2	1
NC RALEIGH	30	16	38	4	23	-18	.8	0	.5	7.1	142	2.2	147	87	54	0	7	2	0
NC WILMINGTON	41	21	55	9	31	-15	.7	0	.5	9.9	187	4.1	293	78	39	0	7	2	0
ND BISMARCK	6	-16	30	-24	-5	-12	.1	-.1	T	.8	100	.2	67	80	57	0	7	5	0
ND FARGO	-4	-21	6	-29	-13	-18	.2	-.1	.2	1.2	171	.2	100	69	55	0	7	2	0
ND GRAND FORKS	-1	-21	10	-28	-11	-15	.2	-.1	.2	--	--	.3	150	74	57	0	7	3	0
ND WILLISTON	6	-17	40	-35	-6	-13	.2	-.1	.1	1.0	125	.4	133	65	45	0	7	4	0
OH AKRON-CANTON	17	-1	30	-16	8	-18	.6	.2	.2	4.8	117	1.4	117	86	55	0	7	6	0
OH CINCINNATI	19	-1	34	-14	9	-22	.3	-.5	.1	3.9	83	.5	31	72	49	0	7	5	0
OH CLEVELAND	17	1	28	-13	9	-18	.4	-.2	.1	4.8	123	1.3	108	81	50	0	7	5	0
OH COLUMBUS	17	-2	31	-11	8	-21	.3	-.3	.2	4.0	105	1.0	83	84	54	0	7	6	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Jan. 16, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Nov. 29	PCT. NORMAL SINCE Nov. 29	TOTAL, IN., SINCE Jan. 3	PCT. NORMAL SINCE Jan. 3	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE OF		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	18	-1	31	-15	8	-20	.3	-.3	.1	4.9	126	1.1	85	88	60	0	7	6	0
TOLEDO	13	-2	23	-14	6	-19	.4	-.1	.2	4.0	111	1.0	100	86	62	0	7	7	0
YOUNGSTOWN	15	1	28	-14	8	-18	.3	-.4	.1	3.6	80	.7	57	83	59	0	7	5	0
OK OKLAHOMA CITY	35	10	62	0	23	-14	T	-.3	T	.9	45	.2	40	70	24	0	7	0	0
TULSA	32	10	56	-1	21	-16	T	-.3	T	1.0	38	0	0	71	33	0	7	0	0
OR ASTORIA	52	41	67	32	46	6	3.6	1.4	2.5	18.6	113	4.1	93	93	76	0	1	7	2
BURNS	24	3	34	-8	14	-11	T	-.4	T	3.9	139	.1	13	95	78	0	7	0	0
MEDFORD	33	30	35	29	31	-5	T	-.8	T	9.1	160	.5	29	100	94	0	7	1	0
PENDLETON	44	29	52	15	37	5	.7	-.4	.6	3.2	128	1.0	143	90	65	0	3	2	1
PORTLAND	45	38	50	29	41	3	1.7	-.4	1.2	11.8	123	2.4	89	100	88	0	1	4	1
SALEM	44	35	52	28	40	1	.9	-.6	.9	12.6	118	2.3	74	95	82	0	4	1	1
PA ALLENTOWN	21	5	36	-2	13	-15	.5	-.2	.4	5.5	98	2.2	157	72	46	0	7	3	0
ERIE	18	4	27	-9	11	-14	.5	-.1	.2	3.9	37	1.2	100	81	63	0	7	5	0
HARRISBURG	21	8	29	0	15	-15	.5	-.1	.4	4.5	96	1.8	150	75	43	0	7	2	0
PHILADELPHIA	23	9	32	1	16	-16	1.2	.6	.9	8.2	164	3.5	292	75	38	0	7	3	1
PITTSBURGH	16	0	31	-14	8	-20	.6	0	.3	4.6	110	1.5	125	69	49	0	7	7	0
SCRANTON	17	3	27	-4	10	-16	.5	-.1	.4	3.2	86	.6	75	76	52	0	7	3	0
RI PROVIDENCE	20	7	36	-4	13	-15	.7	-.1	.4	9.4	152	2.2	138	82	46	0	7	4	0
SC CHARLESTON	42	22	57	11	32	-17	.7	-.1	.4	7.4	151	1.5	125	77	43	0	6	2	0
COLUMBIA	36	18	50	6	27	-19	1.1	-.3	.7	11.8	215	2.5	156	87	53	0	7	2	1
FLORENCE	35	21	50	10	28	-18	1.3	.7	1.1	--	--	2.3	192	79	48	0	7	3	1
GREENVILLE	33	13	46	2	23	-19	.7	-.3	.3	9.5	146	1.1	58	80	49	0	7	3	0
SD ABERDEEN	0	-15	10	-26	-8	-17	T	-.1	T	--	--	0	0	66	51	0	7	0	0
JURON	5	-15	26	-23	-5	-17	.1	0	.1	1.8	300	.2	200	74	55	0	7	1	0
RAPID CITY	11	-13	39	-26	-1	-22	.1	0	.1	.6	86	.2	100	83	56	0	7	2	0
STOUX FALLS	6	-17	24	-26	-6	-19	.1	-.1	T	1.0	100	.1	33	69	48	0	7	4	0
TN CHATTANOOGA	31	11	43	1	21	-19	.5	-.8	.2	10.9	130	4.4	176	79	43	0	7	3	0
KNOXVILLE	28	9	39	-3	19	-22	.5	-.6	.2	8.5	116	3.3	150	84	52	0	7	3	0
MEMPHIS	29	10	45	2	20	-21	.5	-.6	.4	5.4	73	.9	41	85	49	0	7	2	0
NASHVILLE	26	5	38	-6	16	-22	.7	-.4	.4	11.5	160	2.6	118	78	49	0	7	3	0
TX ABILENE	43	17	64	5	30	-14	.5	-.2	.4	1.2	71	.5	100	73	34	0	6	2	0
AMARILLO	42	10	62	2	26	-10	T	-.1	T	.2	20	0	0	71	26	0	7	0	0
AUSTIN	47	23	65	11	35	-15	.5	-.1	.4	1.1	33	.5	71	74	42	0	6	2	0
BEAUMONT	48	25	67	16	37	-15	1.2	-.3	.7	5.7	78	1.5	83	90	54	0	7	2	1
BROWNSVILLE	65	32	82	25	49	-11	T	-.3	T	.7	33	0	0	96	44	0	4	0	0
CORPUS CHRISTI	57	27	74	19	42	-14	.1	-.3	.1	1.4	56	.1	14	81	39	0	6	1	0
DEL RIO	48	28	68	15	38	-13	.2	0	.1	.3	33	.2	67	62	39	0	5	2	0
EL PASO	50	23	58	19	37	-7	.3	.2	.2	.5	71	.3	150	92	34	0	7	3	0
FORT WORTH	40	16	65	7	28	-17	.1	-.3	.1	.9	31	.1	13	74	34	0	7	1	0
GALVESTON	50	31	62	20	41	-13	.2	-.4	.2	2.8	51	.2	15	94	57	0	4	2	0
HOUSTON	48	24	65	12	36	-16	.9	-.1	.8	6.6	108	.9	56	88	51	0	7	2	1
LUBBOCK	39	15	58	5	27	-12	.1	-.1	T	.8	39	.1	33	86	36	0	7	2	0
MIDLAND	43	17	63	5	30	-14	.1	0	.1	.2	25	.1	50	76	37	0	7	1	0
SAN ANGELO	44	18	63	5	31	-15	.7	-.4	.6	.7	58	.7	140	84	35	0	7	2	1
SAN ANTONIO	47	21	60	13	34	-17	.4	0	.2	1.3	57	.4	57	84	39	0	7	2	0
VICTORIA	51	24	66	14	38	-15	.2	-.2	.2	1.7	57	.3	38	86	44	0	6	1	0
WACO	39	16	58	6	27	-20	.3	-.2	.2	1.3	41	.3	33	81	42	0	7	2	0
WICHITA FALLS	40	15	69	3	27	-14	T	-.2	T	1.0	53	0	0	68	23	0	7	0	0
UT BLANDING	37	15	43	5	26	-1	T	-.2	T	.8	42	.3	60	80	58	0	7	0	0
CEDAR CITY	41	16	49	10	29	0	.1	-.1	.1	--	--	.8	200	70	42	0	7	1	0
SALT LAKE CITY	37	23	44	9	30	2	.1	-.2	T	2.4	109	.3	50	81	53	0	6	2	0
VT BURLINGTON	9	-6	23	-17	1	-15	.2	-.1	.1	3.7	112	1.3	186	84	44	0	7	6	0
VA NORFOLK	32	18	47	7	25	-16	1.8	1.0	1.2	8.0	157	2.4	150	70	45	0	7	2	2
RICHMOND	26	13	39	4	20	-18	.8	.2	.5	7.0	143	1.8	150	81	49	0	7	3	1
ROANOKE	25	9	40	-2	17	-19	.7	.1	.4	6.3	137	2.5	208	85	47	0	7	3	0
WA COLVILLE	30	24	36	18	27	4	.6	.1	.5	4.1	112	1.2	120	95	91	0	7	2	0
QUILLAYUTE	45	36	48	30	41	2	5.2	1.9	2.6	25.1	104	7.1	108	100	91	0	3	7	3
SEATTLE-TACOMA	46	41	50	35	43	5	1.6	.2	.8	7.7	82	2.0	71	92	74	0	0	6	1
SPOKANE	32	23	39	11	28	2	.6	.1	.5	3.3	85	.8	73	93	78	0	6	4	0
YAKIMA	33	15	49	9	24	-3	.2	-.1	.1	3.2	152	.3	43	91	72	0	7	2	0
WV BECKLEY	20	1	33	-13	11	-21	.3	-.5	.1	4.4	83	1.0	63	91	56	0	7	5	0
CHARLESTON	24	6	39	-8	15	-20	.4	-.4	.2	4.7	90	1.9	119	88	56	0	7	5	0
HUNTINGTON	22	4	36	-9	13	-21	.4	-.3	.2	4.4	86	1.5	100	80	51	0	7	6	0
PARKERSBURG	19	2	35	-12	11	-19	.2	-.6	.2	2.5	51	.7	41	70	48	0	7	3	0
WI GREEN BAY	11	-9	21	-27	1	-14	.1	-.2	.1	2.0	95	.6	100	89	54	0	7	3	0
LA CROSSE	5	-11	17	-25	-3	-19	.1	-.2	T	1.6	94	.2	40	83	61	0	7	2	0
MADISON	9	-9	18	-22	0	-16	.2	-.1	T	2.0	95	.9	150	88	62	0	7	5	0
MILWAUKEE	9	-7	21	-25	1	-18	.5	-.1	.2	3.2	114	1.6	200	84	54	0	7	6	0
WAUSAU	10	-11	22	-27	-1	-13	T	-.2	T	--	--	.3	60	90	63	0	7	1	0
WY CASPER	28	-2	38	-12	13	-10	.1	0	.1	.6	86	.2	67	85	51	0	7	4	0
CHEYENNE	33	4	48	-10	19	-8	.1	0	.1	.8	39	.1	50	86	42	0	7	2	0
LANDER	32	5	45	-3	19	0	.1	0	.1	.1	14	.1	14	84	46	0	7	3	0
SHERIDAN	28	1	47	-17	14	-7	.2	.1	.2	.9	82	.3	100	78	40	0	7	2	0
PR SAN JUAN	86	72	92	69	79	4	.2	-.6	.1	14.7	213	.7	41	90	59	1	0	3	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Heating Degree Days (Base 65° F.)

DECEMBER 1981

ALA. Birmingham . . .	682	MAINE, Caribou . . .	1292	OKLA. Okla. City . . .	797
Mobile . . .	463	Portland . . .	1102	Tulsa . . .	817
Montgomery . . .	562	MD. Baltimore . . .	940	OREG. Astoria . . .	604
ALASKA, Anchorage . .	--	MASS. Boston . . .	979	Burns . . .	1106
Barrow . . .	--	Chatham . . .	905	Medford . . .	682
Fairbanks . . .	2150	MICH. Alpena . . .	1194	Pendleton . . .	855
Juneau . . .	--	Detroit . . .	1144	Portland . . .	687
Nome . . .	--	Flint . . .	1199	Salem . . .	676
ARIZ. Flagstaff . . .	880	Grand Rapids . . .	1116	PA. Allentown . . .	1058
Phoenix . . .	196	Houghton Lake . . .	1222	Erie . . .	1034
Tucson . . .	304	Lansing . . .	1168	Harrisburg . . .	1022
Winslow . . .	798	Marquette . . .	1425	Philadelphia . . .	936
Yuma . . .	123	S. Ste. Marie . . .	1336	Pittsburgh . . .	1098
ARK. Fort Smith . . .	796	MINN. Duluth . . .	1549	Scranton . . .	1105
Little Rock . . .	745	Internatl Falls . . .	1685	R. I. Providence . . .	1044
CALIF. Bakersfield . .	418	Minneapolis . . .	1466	S. C. Charleston . . .	574
Eureka . . .	396	Rochester . . .	1503	Columbia . . .	665
Fresno . . .	530	St. Cloud . . .	1577	Greenville . . .	791
Los Angeles . . .	172	MISS. Jackson . . .	568	S. DAK. Aberdeen . . .	--
Red Bluff . . .	477	Meridian . . .	545	Huron . . .	1456
Stockton . . .	477	MO. Columbia . . .	1089	Rapid City . . .	1209
San Diego . . .	136	Kansas City . . .	1112	Sioux Falls . . .	1452
San Francisco . . .	389	St. Louis . . .	1048	TENN. Chattanooga . .	823
COLO. Denver . . .	898	Springfield . . .	949	Knoxville . . .	809
Grand Junction . . .	1039	MONT. Billings . . .	1124	Memphis . . .	739
Pueblo . . .	937	Glasgow . . .	1459	Nashville . . .	820
CONN. Bridgeport . . .	959	Great Falls . . .	1244	TEX. Abilene . . .	496
Hartford . . .	1048	Havre . . .	1477	Amarillo . . .	765
D. C. Washington . . .	818	Helena . . .	1227	Austin . . .	349
FLA. Apalachicola . .	366	Kalispell . . .	1342	Beaumont . . .	315
Ft. Myers . . .	103	Miles City . . .	--	Brownsville . . .	115
Jacksonville . . .	362	Missoula . . .	1266	Corpus Christi . . .	207
Key West . . .	25	NEBR. Grand Island . .	1245	Dallas . . .	--
Lakeland . . .	--	Lincoln . . .	1237	Del Rio . . .	319
Miami . . .	80	Norfolk . . .	1283	El Paso . . .	499
Orlando . . .	205	North Platte . . .	1179	Fort Worth . . .	541
W. Palm Beach . . .	116	Omaha . . .	1251	Galveston . . .	242
Tallahassee . . .	456	Valentine . . .	1274	Houston . . .	326
Tampa . . .	224	NEV. Ely . . .	960	Lubbock . . .	643
GA. Atlanta . . .	795	Las Vegas . . .	497	Midland . . .	527
Augusta . . .	730	Reno . . .	800	San Angelo . . .	496
Macon . . .	570	Winnemucca . . .	848	San Antonio . . .	368
Savannah . . .	514	N. H. Concord . . .	1222	Victoria . . .	284
IDAHO, Boise . . .	915	N. J. Atlantic City . .	940	Waco . . .	498
Lewiston . . .	869	Trenton . . .	--	Wichita Falls . . .	629
Pocatello . . .	1051	N. MEX. Albuquerque . .	754	UTAH, Milford . . .	976
ILL. Cairo . . .	848	Roswell . . .	603	Salt Lake City . . .	878
Chicago . . .	1236	N. Y. Albany . . .	1209	VT. Burlington . . .	1224
Moline . . .	1226	Binghamton . . .	1185	VA. Lynchburg . . .	954
Peoria . . .	1163	Buffalo . . .	1108	Norfolk . . .	739
Rockford . . .	1296	New York . . .	875	Richmond . . .	837
Springfield . . .	1169	Rochester . . .	1119	Roanoke . . .	991
IND. Evansville . . .	940	Syracuse . . .	1110	WASH. Colville . . .	--
Fort Wayne . . .	1185	N. C. Asheville . . .	897	Omak . . .	--
Indianapolis . . .	1146	Charlotte . . .	790	Quillayute . . .	739
South Bend . . .	1154	Greensboro . . .	878	Seattle-Tacoma . . .	715
IOWA, Burlington . . .	--	Hatteras . . .	630	Spokane . . .	1088
Des Moines . . .	1218	Raleigh . . .	776	Walla Walla . . .	828
Dubuque . . .	--	Wilmington . . .	628	Yakima . . .	1072
Sioux City . . .	1367	N. DAK. Bismarck . . .	1556	W. VA. Beckley . . .	1084
KANS. Concordia . . .	1055	Fargo . . .	1742	Charleston . . .	936
Dodge City . . .	954	Williston . . .	1509	Huntington . . .	947
Goodland . . .	958	OHIO, Akron-Canton . .	1058	Parkersburg . . .	976
Topeka . . .	1076	Cincinnati . . .	1107	WIS. Green Bay . . .	1301
Wichita . . .	990	Cleveland . . .	1059	Madison . . .	1327
KY. Lexington . . .	984	Columbus . . .	1061	Milwaukee . . .	1257
Louisville . . .	960	Dayton . . .	1089	WYO. Casper . . .	1161
LA. Baton Rouge . . .	410	Toledo . . .	1160	Cheyenne . . .	1058
Lake Charles . . .	378	Youngstown . . .	1101	Lander . . .	1171
New Orleans . . .	333			Sheridan . . .	1200
Shreveport . . .	554				

National Agricultural Summary

JANUARY 11-17, 1982

HIGHLIGHTS: Cold polar air masses pushed southward twice during the week, setting record-low temperatures across the eastern two-thirds of the Nation. Below-freezing temperatures plunged into Florida. Citrus groves experienced widespread icing which resulted in leaf curl. Tender vegetables were damaged. Total shipments declined 29% from the previous week.

Although Texas citrus groves escaped significant damage, vegetable crops were hurt by the freezing temperatures. Wheat fields had sufficient snowcover to protect stands from the record-low temperatures in most areas and the crop continued in fair to good condition. Dry conditions persisted in the Southwest, limiting growth of small grains. Most of the few remaining fields of cotton were harvested. Stored modules supplied most of the cotton for ginning. Extreme low temperatures slowed pasture growth and stressed livestock. Large amounts of feed were used to offset the reduced grazing. Calving and lambing remained active despite unfavorable weather conditions.

SMALL GRAINS: Winter wheat was generally in fair to good condition in major producing areas. Most fields in the eastern two-thirds of the Nation had sufficient snowcover to protect stands from record low temperatures and strong gusty winds. Dry conditions in the Southwest limited plant growth.

Kansas wheat had limited wind damage. The crop was in good to excellent condition, except in portions of the West Central and Southeast, where poor conditions existed. Cold weather kept greenbug infestations under control. Cold temperatures and poor soil moisture supplies limited wheat growth in Oklahoma. However, the States's crop was still in good condition. Snow and freezing temperatures slowed small grain growth in Texas. Many fields in the Low Plains and Blacklands suffered burn-off, but the extent of the freeze damage was not known. Late-planted wheat fields showed some frost damage but conditions remained mostly fair to good Statewide. Wind damage was light in Montana, since snowcover was good. High winds in North Dakota drifted snow and left some bare spots in fields. Planting of wheat and barley made good progress in Arizona with development of early plantings ranging from just emerged to jointing. New Mexico's dryland wheat was in fair to good condition. Additional moisture is needed.

OTHER CROPS: Cotton picking in Arizona neared completion. Most of the cotton for ginning came from stored modules. California harvest was nearing completion with clean-up operations underway. A few cotton fields in the High Plains of Texas remained for harvest. Ginning operations were active across the Plains. Snow and freezing temperatures brought field clean-up to a standstill.

Tobacco marketing across the South was slowed by icy roads. In Kentucky, burley sales were light at most markets. Several held their final sales. Snow and freezing temperatures halted tobacco bed preparation in most areas.

Harvest of Florida sugarcane moved ahead rapidly. Cold temperatures caused some damage to young sugarcane but losses were expected to be light. Colder weather slowed sugarbeet growth in Arizona but no frost damage occurred.

FRUITS AND NUTS: The Texas pecan harvest was 99% complete, 5 points ahead of last year and 1 point ahead of normal. In New Mexico, producers

finished gathering pecans and were pruning trees. Bitterly cold weather prevented maintenance of deciduous orchards throughout much of the Nation. Some producers were concerned about the possibility of damage to trees from the abnormally cold temperatures.

Florida's citrus groves experienced below freezing temperatures on the 12th and fruit icing was widespread. Ice was found in 84 percent of orange samples tested on January 12 and leaf curl appeared later in the week. Adverse conditions slowed the processing harvest.

Citrus groves in Arizona remained in mostly good condition. Picking increased and sales were active for Navels, sweets, tangerines, and grapefruit. The lemon harvest made steady progress. Valencia oranges and tangerines continued to size well and show good color. Harvest of California lemons moved slowly, due to a limited market. Frost occurred in several areas but no significant damage was reported. Harvests of Coachella Valley tangelos and tangerines were completed. Minneola tangelos moved from the lower San Joaquin Valley. Grapefruit and orange groves in Texas escaped significant freeze damage, although damage to leaves on young trees was apparent.

VEGETABLES: Tender vegetable crops in Florida were severely damaged by cold temperatures on the 12th. Shipments declined 29% from the previous week. Supplies of carrots remained steady and harvests of celery and greens were stepped up. The strawberry harvest continued active but volume was lower.

Cool weather affected crop development and vegetable harvests in California. Supplies of artichokes were light, with many showing the effects of frost. The asparagus harvest was slow in the Imperial-Coachella Valley. Broccoli supplies declined in the Salinas Valley but increased in the Imperial-Coachella Valley. Quality was generally good in both areas. The carrot harvest made good progress. Celery cutting declined in the Imperial Valley, while the lettuce harvest remained active. Quality and weight showed a wide variance.

Freezing temperatures plunged into Texas, damaging many vegetable crops. Most remaining cucumbers, green peppers, and tomatoes in the Rio Grande Valley were damaged. However, damage to winter vegetables appeared light. The condition of early-developing onions was unknown. Icing occurred throughout the San Antonio-Winter Garden area, causing damage to carrots and spinach. Losses of cabbage and lettuce were limited by the hardness of these crops. Crystal City spinach producers expect to lose a portion of the crop affected by the freeze. Cabbage harvest was virtually stopped and onion planting made little progress in the Trans-Pecos region.

Planting of potatoes and dry onions was complete in Arizona and the harvest of mixed vegetables made good progress. The lettuce harvest progressed rapidly in the Yuma area and was virtually complete in the Salt River Valley. Spring lettuce planting continued in New Mexico.

PASTURES AND LIVESTOCK: Extremely cold weather slowed pasture growth throughout the South. Livestock were fed large amounts of hay, forage, and grain to offset reduced grazing. Weight gains were limited. Record cold temperatures stressed livestock, especially newborn calves and lambs. Texas range and pasture conditions deteriorated due to dry conditions. Grazing of small grain fields and pastures was limited.

Recent moisture improved the prospects for winter and spring browse in Arizona and New Mexico but more precipitation would be beneficial. Ranges continued muddy in northern California. Calving and lambing remained active in many areas of the Nation.

State Summaries of Weather and Agriculture

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

ALABAMA: Temperatures 15 to 20° below normal. Ice and snow were received over most of the State with melted amounts measuring up to 2.00 in.

Fieldwork less than 1 day. Soil moisture adequate to surplus. Activities: Routine farm chores, winter maintenance, and repairs from damage done by severe cold. Plowing ranged from over 50% in some northern counties to less than 10% in the south with fieldwork progress behind schedule. Conditions: Pasture feed short; stored feed adequate; livestock fair; pastures poor to fair; wheat fair to good.

ARIZONA: One to 5 in. snow fell Grande Canton, Mogollon Rim, 5 to 15 in. White Mountains. Rainfall very light western third, mostly 0.10 to 0.75 in. remainder State. Sunshine, milder temperatures latter part week. Temperatures varied from 4° above normal to 8° below normal.

Intermittent, sometimes heavy rain fell during early part week, slowing, stopping field activities. Cotton harvest active, picking rapidly winding down. Most cotton being ginned coming from modules. Planting wheat, barley, reasonably good progress during week. Earlier plantings growing well, ranged just emergent to jointing. Alfalfa haying seasonally slow. Sugarbeets good progress, colder weather slowed growth but no frost damage. Lettuce harvest continued in volume Yuma area, Salt River Valley virtually complete. Mixed vegetable harvest, made reasonably good progress during week. Planting potatoes, dry onions winding down. Citrus groves remained mostly good condition. Recent freeze in Florida resulted increased picking, sales activity for Navel, Sweets, tangerines, grapefruit. Lemon harvest steady progress. Valencia oranges, tangerine-types later harvest continued size, color well. Ranges continued to improved following additional rain, snow. Rainfall still limited southwestern deserts. Recent moisture, prospects winter, spring browse improving. Livestock mostly fair to good condition.

ARKANSAS: Extremely cold week. Precipitation fell at most stations, the majority was in the frozen form. Highest normal 46°, lowest 36°. Highest mean 26°, lowest 16°. Highest temperatures, 58°, lowest minus 6°. All departures from normal ranged from minus 16 to minus 23°. Most rainfall 1.14 in., least 0.09 in.

Little farm activity. Much heating necessary in broiler and layer houses.

GEORGIA: Extreme cold early in week, moderating slightly during week, but colder late in week. Temperatures 15 to 20° below normal Statewide. Snow, sleet, and freezing rain northern two-thirds 12th and 14th totaled 0.50 to 1.00 in. water equivalent. Rainfall elsewhere during week averaged 1.50 to 2.00 in. Quite cold 16th and 17th especially northern one-third. Rainfall light, less than 0.10 in.

Soil moisture mostly surplus. Field activity

light due to cold and wet weather. Small grains fair to good. Difficulty in tobacco bed preparation due to adverse weather, tobacco plants fair. Pastures in fair condition. Cattle and hogs mostly fair to good.

HAWAII: Weather cool. Overcast skies and occasional showers kept some sections muddy, slowing farm activities. Several scheduled plantings were delayed. Spraying was frequent to control diseases and insects. Vegetable supplies light most crops. Rains of the previous weeks lowering yields. Spoilage heavy for some leafy crops. Banana production decreasing. Papaya production increasing. Pineapple harvest very light. Sugar field activities are down. Rains beneficial to pastures.

IDAHO: A high pressure system trapped cold air in many valleys and temperatures ranged from 15° below normal to 5° above normal. High of 48° in Lewiston, and low of 22° below zero in Fairfield. A few weak pacific storms moved into the State and brought precipitation to the north and southeast areas.

There was very little farm activity. Snow started to melt and feedlots and corrals were getting very muddy. Livestock is in good condition and feed supplies were abundant. Lambing in full swing.

ILLINOIS: Temperatures 18 to 23° below normal. Some record low temperatures set. Precipitation 0.25 to 0.45 in. over most of the State. Precipitation occurred as snow.

Activities: Livestock feeding and care, machinery repair.

INDIANA: Severe cold and blizzard conditions on 11th, 15th, and 16th. Lowest temperatures to negative teens. Snow cover from 2 in. south to 10 in. north. Temperatures 18° below normal. Precipitation 0.20 to 0.50 in.

Snow drifts clogged roads in north and central on weekend. Some electrical outages from cold. Activities severely curtailed. Some harvesting of remaining fields of corn on frozen ground. Livestock under stress and caring for livestock a major activity. Other activity: Removing snow, cutting wood, moving grain to market, ordering supplies and making plans for 1982 season, completing tobacco stripping, and usual chores.

IOWA: Very cold with moderate snowfall and a blizzard the 15th and 16th which closed most highways to travel. Temperatures varied from 7°, southwest to minus 5° northeast for a state average of 1° and a departure of about 18° below normal for the week. Frequent light snowfalls totaled 2 or 3 in. Considerable blowing snow was reported during early week and again late week. Snow cover varies from 3 or 4 in. southwestern-most counties and southeastern-most counties to 9 to 14 in. over the south central, central, north central and northeast districts. Colder readings which include minus 26° at Spencer and minus

23° at Ft. Dodge on 14th, is minus 23° at Cedar Rapids and Dubuque the 17th.

KANSAS: Coldest week winter season, temperatures ranging 13 to 15° northeast, 17° southeast and south central, 19 to 21° west. These were 6 to 10° below normal west, 13 to 14° below normal central and east. Precipitation little or none south, 0.10 in. north where 1 to 3 in. snows occurred extreme north.

Bitter cold required feeding, caring for livestock, thawing pipes. Heavy feeding to maintain livestock condition. Wheat good to excellent most areas except few counties west central, southeast areas poor condition. Most wheat dormant. Cold weather helping to keep light greenbug infestations in check. Wind damage light to nonexistent. Supplies feed grain, hay fodder adequate to surplus, range and pasture mostly adequate.

KENTUCKY: Below normal cold with most precipitation in the form of snow. Temperatures averaged 8 to 14° below normal. Precipitation amounts were almost all less than 0.50 in. The heaviest reported amounts were over the southwest.

Extreme cold again over the weekend continued to stress livestock. Concern that cold weather may have damaged fruit trees and strawberries. Burley sales became light at most markets, and several held final sales. Weather limited most farm activities except for caring and feeding of livestock.

CALIFORNIA: Except for a little precipitation beginning of week South Coast and southeast Interior the week was dry. Temperatures varied about the normal mean. Most Central Valley locations were below normal, as was the Central Coast. The southern portion of the State had weekly means warmer than normal. All divisions reported overnight temperatures at freezing or lower and the extreme northeast corner went down to single digit minimums.

Wheat, oats, and barley developing well. Some damage and yellowing in areas hit by storms. Small grain planting resumed in some areas. Broad leaf weed control active. Limited cotton and field corn remain in San Joaquin Valley. Cotton plowdown diminished. Almond dormancy breaking. Bacon, Zutano avocados continue. Lemon harvest continues slow because of limited export market. No freeze damage to Navels or Valencias seen. Coachella Valley tangelos and tangerines done early this year because of two warm winters. Minneola tangelos moving from lower San Joaquin. Cool weather continues to affect crop development and harvest activities. Frost noted in several areas but no significant damage reported. Artichokes in light supply, most showing frosted appearance. Asparagus harvest light in Imperial and Coachella Valleys. Broccoli supplies light in Salinas Valley but harvest active in Imperial-Coachella Valley; quality in both areas generally good. Carrot harvest light in Imperial Valley, moderate in Kern District, very active in Coachella Valley. Cauliflower harvest active on South Coast, South Bay area. Celery harvest light in Imperial Valley. Lettuce harvest active in Imperial Valley but showing wide range in quality and weight. Range grass growth slowed low temperatures. Ranges continue muddy most northern areas. Stock water supplies excellent most northern districts, short southern regions. Calving, lambing active.

COLORADO: Snow, heavy at times, continued to fall over most of the mountains throughout the week. Over the lower elevations cold arctic air and snow plagued much of the east the first and latter part of the week while the west continued

with partly cloudy skies along with a few scattered showers toward midweek. Gusty, westerly winds in excess of 50 m.p.h. were reported over much of the mountains and foothills during the middle and latter part of the week. Temperatures Statewide were a little below normal.

FLORIDA: Very cold with temperatures 8 to 12° below normal. Coldest morning was the 12th when temperatures dropped into the teens Panhandle, north; 20's central, south. Rainfall of 2.00 to 3.00 in. north, 1.00 to 2.00 in. central; under 1.00 in. south about midweek ahead of cold front. Very windy on the 14th.

Soil moisture adequate most areas but short in south. Recent cold caused some damage to sugarcane, but losses expected to be light. Sugarcane harvest continues active. Small grains slow growth. Farm work limited by cold, rain. Pastures that were greening up from warmer temperatures of recent weeks were severely set back by freezing on the 12th. Grazing conditions mostly poor to fair, but southern Peninsula areas very poor due to insufficient moisture, cold temperatures. Cattle condition continues mostly fair to good. Citrus experienced below freezing temperatures on the 12th. Ice found in majority of 137 orange samples. Considerable leaf curl later in week. Harvest slowed by adverse weather. Very cold weather prevailed in vegetable areas. Tender crops were damaged when temperatures dropped to the 20's on 12th. Another cold front at midweek brought strong, gusty winds and light to moderate rains. Light to moderate frosts occurred in the Immokalee area. Crop volume reduced by freeze damage on 12th. Total shipments decreased 29% from previous week. Harvest gained celery and greens. Supplies about steady carrots. All other vegetables declined. Strawberry harvest continues active but volume lower.

LOUISIANA: The State experienced its first winter storm. Temperatures ranged from 21 to 17° below normal. Freezing rain turning to snow. Snowfall ranged from 4 to 11 in. Precipitation was 1.00 to 2.00 in. Statewide with greatest weekly total 2.39 in.

Activities limited to caring for livestock and other necessary chores. Extremely low temperatures caused some damage to winter vegetables but full extent of the damage has yet to be assessed. Damage to strawberries is minimal. Most of the remaining citrus crop was lost.

MARYLAND AND DELAWARE: Temperatures averaged 17° below normal Statewide. Highs averaged in the mid 20's and lows averaged around 11°.

The greatest amount of precipitation was recorded at Snowhill with 1.60 in. The least amount reported was 0.05 in. The average for the remaining 12 stations was 0.72 in. Saturday was mostly cloudy and cold with rain and snowfall all day throughout the State. Sunday was mostly sunny with much colder temperatures. Some snowfall was received in northern and western Maryland and in southern Maryland's Eastern Shore.

MICHIGAN: Extremely cold temperatures, due in part to the second consecutive weekend of bitter arctic air. Temperatures averaged 8 to 16° below normals. New record low temperatures were recorded around the State. Precipitation amounts were about normal with the Upper Peninsula and the western portion of the Lower Peninsula again receiving heavier amounts.

The amounts combine with that of previous weeks to make January, so far, somewhat wetter than normal. The exceptions were the south central and southeast lower portions of the Lower Peninsula which were about normal.

MINNESOTA: Another extremely cold week. Temperatures averaged 16 to 20° below normal. Average temperatures ranged 5° below normal south to 16° below extreme north. Extreme was 24° at Grand Marais and minus 45° International Falls and Hibbing.

Precipitation above normal west and south central and below normal elsewhere, with totals generally 0.15 to 0.25 in. west and south central, except 0.39 in. at Lamberton and less than 0.15 in. elsewhere. Snowfall generally 2 to 4 in. except less than 2 in. north central and northeast. Snowdepth at weeks end 5 to 11 in. except 11 to 20 in. north central and northeast.

MISSISSIPPI: Snow, sleet, and bitterly cold temperatures occurred as the state experienced some of its worst winter weather in years. Two snow storms occurred on consecutive days dropping up to 5 in. of snow over the north on the 11th and up to 6 in. over central and the south on the 12th. In addition temperatures near or a little below zero were recorded over much of the State as readings ranged from 15° below normal along the coast to about 25° below normal over the rest of the State. Temperature extremes ranged from minus 5° at both University and Iuka to 65° at Biloxi.

Soil moisture adequate to surplus. Days suitable for fieldwork 0.1. Hay and roughage and feed grain supplies adequate. Wheat condition fair. Pasture condition poor to fair. Livestock condition fair.

MISSOURI: Bitterly cold air swept thru the State bringing temperatures 18 to 23° below normal. Precipitation was less than 0.50 in. but snowfall totals averaged around 4 in. in the south to a trace in the north.

No unusual livestock problems, however, the extreme low temperatures were requiring close watch and above normal attention to livestock.

MONTANA: Temperatures over Plains very cold first and last of week, mild temperatures for a day or two midweek. West and southwest had mild temperatures until 15th when arctic air covered those areas. Temperatures averaged 18° below normal in northeast and 4° above normal in southwest. Highest 47° at Roundup, lowest 34° below zero Cut Bank and Havre. Precipitation Statewide mostly moderate to heavy. Two stormy periods, 11th; 15th and 16th. Weekend storm slammed into the State with very strong winds and some areas of heavy snow.

Winter wheat condition fair to good. Snow cover fair to good, wind damage light. Livestock condition good. Grazing conditions difficult, most livestock receiving supplemental feed.

NEBRASKA: Bitterly cold week 10 to 20° below normal. Light snowfall widespread. Moisture accumulations trace to 0.20 in.

NEVADA: Cold weather continued for second week in row. Strong temperature inversions trapped cold air in lower valleys. Temperatures as much as 20° cooler than normal with daytime highs in 20's and lows frequently falling between 5 and 10° below zero at night. Precipitation during week light and confined largely to east.

Feeding livestock and thawing frozen water pipes main ranch activities. Cold weather not

favorable for newborn calves and lambs.

NEW ENGLAND: Melted precipitation averaged between 0.50 and 1.00 in. over much of New England except for most of Vermont and northern portions of New Hampshire and Maine where less fell. Highest amounts were over Cape Cod and the Islands: 2.17 in. at Chatham, MA. and 1.81 in. at Falmouth, MA. A snowstorm on the eve of the 13th left 5 to 10 in. of snow across southern and central regions with lesser amounts to the north. Then only 18 hours later, a second storm dumped 3 to 6 in. across eastern New England.

Temperatures below normal. Early week temperatures were 20 to 30° below zero north and zero to 10° below south. Temperatures moderated to near normal through the 14th to 17th with back to back snowstorms.

NEW JERSEY: Temperatures were 20° below normal averaging 10° north, 14° south, and 16° coastal. Extremes -16° at Neshanic Station and 40° at Pomona. Precipitation was near normal averaging 0.55 in. north, 0.84 in. south and 0.74 in. coastal. Heaviest 24-hour total reported 0.70 in. at Neshanic Station.

Farmers caring for livestock, plowing snow and tending to other normal winter chores.

NEW MEXICO: Temperatures continued below normal. Snowfall occurred over most of the State.

Soil moisture in short to adequate supply. Farm activities limited due to snow and cold temperatures. Winter wheat and barley in fair to good condition. However, dryland wheat in need of moisture. About 80% of the irrigated fields being grazed and 50% of the dryland fields. Spring lettuce planting continuing. Pecan harvest practically over as pruning of trees continues. Ranges in fair to good condition. Livestock good with supplemental feeding becoming more widespread.

NEW YORK: Temperatures well below normal. Sub-zero temperatures in most areas most of the week. One foot of snow in western areas beginning of week, southeast had 2 to 5 in. midweek. Otherwise, precipitation light except for down wind of Great Lakes.

NORTH CAROLINA: Temperatures were below normal across the State with the lowest being -27° at Grandfather Mountain. Precipitation: 0.24 in. at Mt. Airy to 1.49 in. at Cape Hatteras.

Soil moisture: 67% adequate and 33% surplus. Fieldwork: 0.6 days suitable. Major farm activities: Cutting firewood and tending livestock. Conditions: Wheat, oats, barley and rye fair to mostly good; pasture mostly fair. Supplies: Hay and roughage mostly adequate; feed grains mostly adequate.

NORTH DAKOTA: Weather continued unseasonably cold with above normal precipitation northwest and southeast and below normal elsewhere. Temperatures averaged 14° below normal across the State. Averages ranged from 17.3° below normal east central to 9.9° below normal northwest. Temperature extremes minus 34° southwest to 40° northwest. Precipitation 0.04 in. above normal ranging from 0.28 in. above normal southeast to 0.07 in. below normal north central.

Extremely cold weather with frigid wind chill factors continued to put heavy demands on livestock feed supplies. Travel was difficult to impossible at times because of blowing and drifting snow. Additional snowfall was generally light. Blowing snow left some bare spots in fields.

OHIO: After weekend when high temperatures re-

maintained below zero, slow warming trend developed that pushed high temperatures into upper 20's to around 30°. Temperatures fell again at end of week with highs near or below zero on 17th. Temperatures low as -20°. Precipitation generally less than normal. Total ranged from less than 0.20 to 0.50 in. Blowing snow produced near blizzard conditions.

Snow cover protected most winter wheat from subnormal temperatures and wind. Livestock stressed by harsh weather. Marketings slowed by cold, and slick roads.

OKLAHOMA: Temperatures averaged 7° below normal Panhandle to 17° below south central. Precipitation totaled 0.12 in. southeast and 0.02 in. east - central no measureable precipitation elsewhere.

Wheat in good condition. Cold temperatures and poor soil moisture supplies limited plant growth, damage to wheat minimal. Cattle good condition with supplemental feeding, Statewide. Cold temperatures limited weight gains.

OREGON: Northern coastal stations 2° warmer than normal with steady light rainfall amounting up to 1.20 in. Midweek drizzle produced 0.20 in. of precipitation in northern Willamette Valley where temperatures averaged 6° below normal. The Cascades and eastern section temperatures were down 16° from normal. Burns recorded -8° on the 11th. Heavy precipitation in the form of snow fell in the mountains and eastward with roadside snow measuring 147 in. at Santiam Pass in the central Cascades and 40 in. at Austin, in eastern region.

Soil moisture supply adequate to surplus. Winter wheat condition good in west, good to excellent in east. Slugs and weeds continue to concern growers. Pruning underway in berry fields and fruit trees. Too early to assess any damage from snow and ice. Harvest of carrots to finish up this week. Lambing well underway. Livestock condition fair to mostly good. Range and pasture condition fair to good. Ground very wet for livestock. Feed supply availability adequate to surplus.

PENNSYLVANIA: Back to back bitterly cold arctic outbreaks kept temperatures 15 to 21° below normal for the coldest week in 3 years Statewide. Daily highs mostly in teens and 20's and overnight lows 0 to 15° except weekends when maximum minus 10° to plus 10° and minimum minus 20° to minus 5° accompanied by strong gusty winds. Extremes 35° and minus 25°. Precipitation all snow throughout week totaled 0.10 in. north central to 1.00 in. melted extreme southeast with snow measurements 2 to 10 in.

PUERTO RICO: Island average rainfall 0.18 in. or 0.63 in. below normal. Highest weekly total 3.96 in. Temperatures averaged about 77° on Coasts and 72 to 71° Interior Divisions. Mean station temperatures ranged from 79.0° to 64.1°. Extremes 92 and 52°. Total rainfall 0.15.

SOUTH CAROLINA: Temperatures averaged well below normal, as many record low temperatures were established. Precipitation fell in the form of snow and sleet midweek. Snow fell on most of the State and ranged from around 2 in. in the central and northeast to over 10 in. in parts of the mountains.

Soil moisture adequate. Farming activity slowed due to adverse weather conditions. Farmers did continue with their routine chores. Pruning fruit trees, caring for livestock and repairing farm machinery were other activities.

SOUTH DAKOTA: Extreme cold. Temperatures averaged much below normal. Departures from normal ranged from 9 to 21° below normal. Extremes: -33 and 45°. Most areas received above normal precipitation. Highest amount reported was 0.42 in. of precipitation as 7 to 8 in. of snow, but most reported under 0.15 in. Most areas in the west have received above normal precipitation for the year while the east is near or slightly below normal.

TENNESSEE: Extremely cold temperatures prevailed with weekly averages about 20° below normal. Rain, snow and freezing rain occurred on 12th thru the 14th with record setting low temperatures recorded on the 16th. Precipitation amounts averaged about 0.50 in.

Farm activities were limited to caring for livestock and necessary farm chores.

TEXAS: Weather: Upper storm, frontal system moved across West Texas on 12th causing freezing rain, sleet over most State. Another upper storm moved through State on 12th leaving 4.00 to 8.00 in. 150 mile wide area Midland, San Angelo, Waco, Lufkin line. Late 15th arctic front moved through State. Left fair skies, extremely cold temperatures. Temperatures 7 to 15° below normal. Precipitation near normal over all but Edwards Plateau, High Plains.

Crops: Snow, sub-freezing temperatures across most State brought most field operations to standstill. Cold weather slowed growth many small grain fields. Cotton harvest virtually complete with few fields High Plains remaining harvest. Ginning operations active across High, Low Plains; modules moving to gins as weather permits. Snow, freezing temperatures halted clean-up operations. Snow, freezing temperatures slowed growth many small grain fields High Plains to South Central Texas. Many fields Low Plains, Blacklands burned off; extent of freeze damage not known. Late planted wheat fields damaged by snow, sub-freezing temperatures. Generally, growth slowed cold weather, dry conditions. South Central Texas some greenbug damage reported prior to freeze. Reported wheat condition across State was 74% of normal with 6% excellent; 45% good; 43% fair; and 6% poor. This compares 66% of normal last year. Cotton harvested 100%, 98% 1980, 99% average. Pecans harvested 99%, 94% 1980, 98% average.

Commercial vegetables: Rio Grand Valley freezing temperatures 10th, 11th caused damage to remaining cucumbers, green peppers, tomatoes. However, damage to winter quarter vegetables; cabbage, lettuce, carrots, broccoli, appears light. Onions, which have developed more rapidly, may suffer but damage not known at this time. Grapefruit, orange groves escaped significant damage, only reports of damage to leaves on younger trees. Another freeze was expected on 16th, did not do additional damage. San Antonio-Winter Garden area temperatures on 10th fell into teens causing damage to carrots, spinach. Icing occurred throughout area, possible scorching avoided as temperatures remained cold. Some losses expected for cabbage, lettuce but limited due to heartiness of crops. Temperatures fell into teens again on 16th but rose quickly. Possibility of additional damage exists. At Crystal City spinach producers expect to lose a portion of crop damaged by sub-freezing temperatures. Trans-Pecos region activities slowed by poor weather conditions. Cabbage harvest virtually stopped, onion planting made little pro-

Range and livestock: Range, pasture conditions continued to deteriorate, week of freezing temperatures stalled growth of grasses, small grains. Grazing limited although livestock remain on pastures, grain fields. Supplemental feeding heavy, livestock began to show effects of record low temperatures. Moisture supplies short, have attributed to lack of available grazing.

UTAH: Recurring periods snow first part week. Accumulated amounts moisture generally light to moderate. Rising trend temperatures during period but averages ranged from near normal to 17° below.

Sorting and marketing of apples, potatoes, and onions continued as orders arrived. Repair and upkeep of farm buildings and machinery in progress. Routine chores and care of livestock and poultry.

VIRGINIA: Extreme cold with precipitation in the form of snow covered the entire State. Temperatures averaged 15 to 20° below normal. Extremes: 47° above to 13° below zero. Snowfall 2 to 4 in. along the coast, increasing to 6 to 8 in. central and 12 in. or more in the mountains. Liquid equivalent; 0.58 to 1.25 in.

Farmers attempted to stay warm and dig themselves out of the snow making less than one day suitable for fieldwork. Topsoil moisture was 20% short, 43% adequate and 37% surplus. Winter grains and grazing crops rated 86% of normal; pasture 85% of normal. Dairy cattle getting 1% of forage requirements from grazing; beef cattle 8%; sheep 7%. Low temperatures caused some livestock loss north and west, primarily to newborn calves and lambs. Major activities included feeding and caring for livestock, snow removal, cutting firewood, tax preparation, soil sampling, attending farm meetings, and preparing sun-cured and fire-cured tobacco for market.

WASHINGTON: West: Generally 2 to 3° warmer than normal. Rainfall was mostly below, south interior 0.40 to 0.60 in. below, but the extreme north interior was 0.80 in. above normal. Widespread rain covered most parts of west on 17th. Tying and pruning of caneberries and harvest of forced rhubarb continued.

East: Central area average temperatures were near to slightly below normal. The remaining areas were 2 to 5° above normal. No significant precipi-

itation was reported in central areas, though other areas were mostly 0.20 to 0.40 in. below normals. Fall seeded grains have adequate snow-cover and stands are in average condition. Pruning of grapes and fruit continued as weather permitted. Early calving got underway.

WEST VIRGINIA: Temperatures averaged 16 to 20° below normal across the entire State. High 40°, low minus 18°. Precipitation averaged slightly below normal. Snow or snow flurries throughout the week across the State.

Freezing weather caused problems with water supplies. Soil moisture adequate. Days suitable for fieldwork averaged less than one day. Cold limited activities to feeding livestock. Hay, grain, and other feed supplies were adequate Statewide, but some concern for hay supplies in some counties was reported.

WISCONSIN: After a weekend which was bitter cold and very windy, the weather moderated through midweek. More arctic air hit the State on the 15th and persisted throughout the weekend. The State experienced its second consecutive weekend of bitter cold temperatures, in which many record low temperatures were recorded. Precipitation was fairly light across the State. Approximately 1 to 3 in. of snow fell across much of the State with the exceptions being the Lake Superior snowbelt region and a band along Lake Michigan which received 8 to 10 in. of new snow.

WYOMING: Temperatures below normal over most of State. Highest 53° while lowest 23° below zero. Precipitation also below normal, 0.40 in. the most.

Winter wheat mostly good condition, additional moisture needed for further development. Livestock mostly good condition. Supplemental feeding increasing due to colder weather; snow cover.

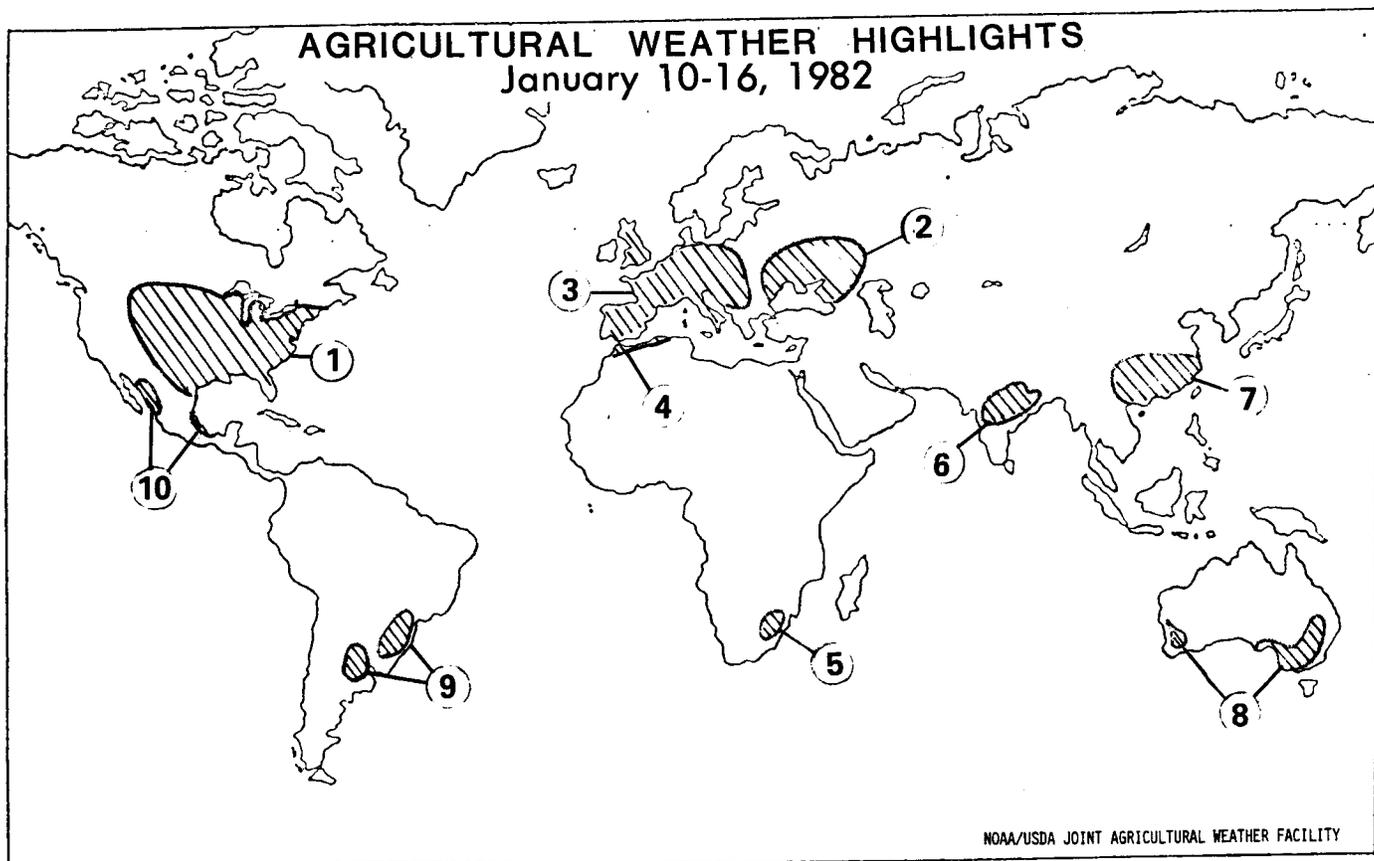
National Weather Summary

(Continued from page 1.)

from the central Great Lakes and northern Indiana to the Appalachians.

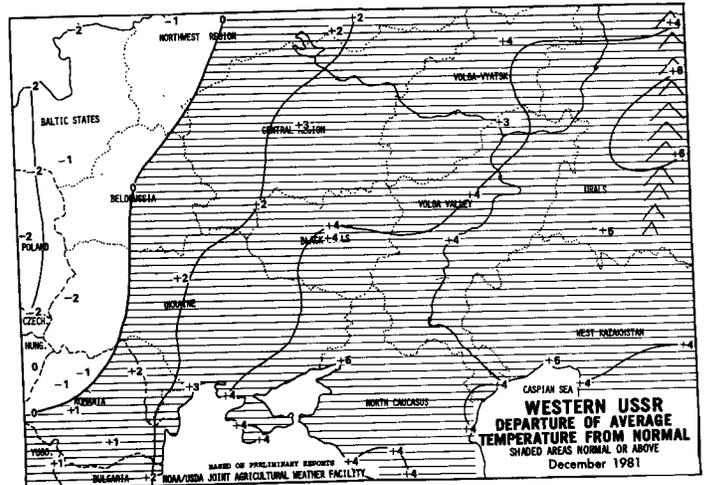
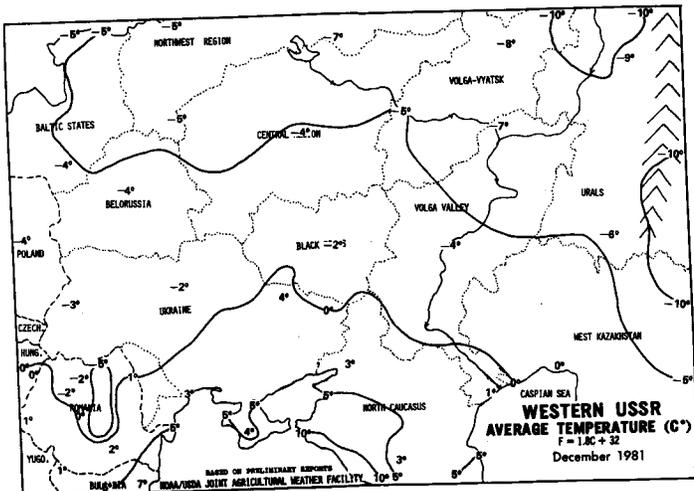
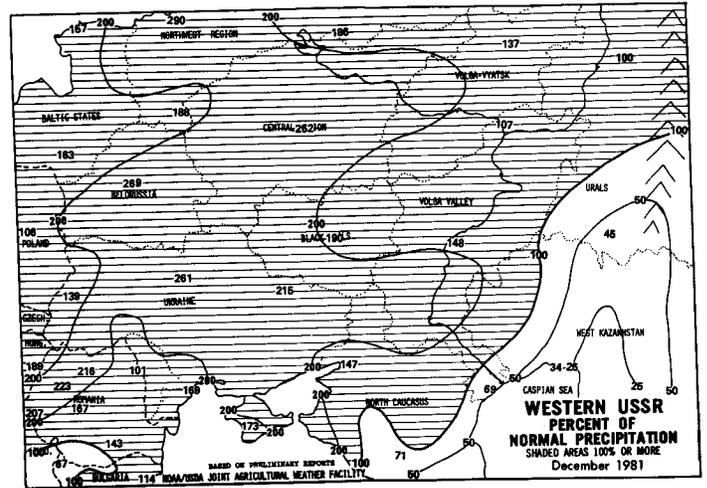
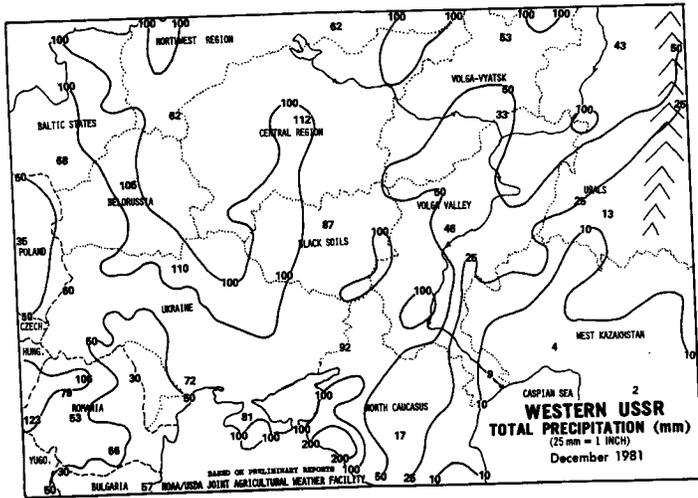
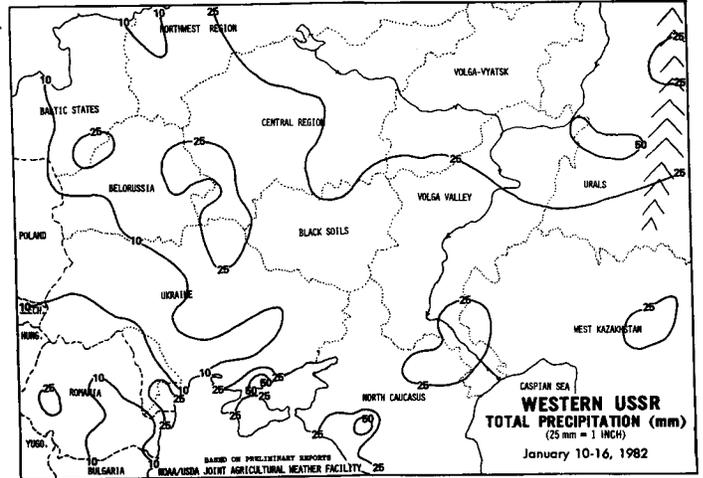
SATURDAY...The frigid arctic air moved through the East, into parts of the South, and the central Plains by the end of the day. It was still getting colder when many record low temperatures were set. It was -4° in the early morning at Chicago but by the end of the day it was -25°. Nashville, Tenn., dropped to -6° by midnight. Snowshowers accompanied the arctic front through and south of the Lakes, and through and east of the Appalachians. Some rainshowers fell in northern Florida and southern Georgia. In the West, a new Pacific storm brought heavy rain to the Pacific Northwest coast and snow to the Cascades, eastward through the northern Rockies.

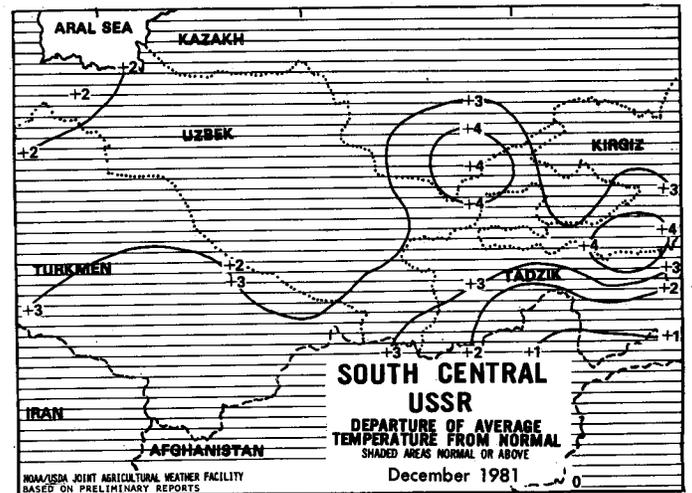
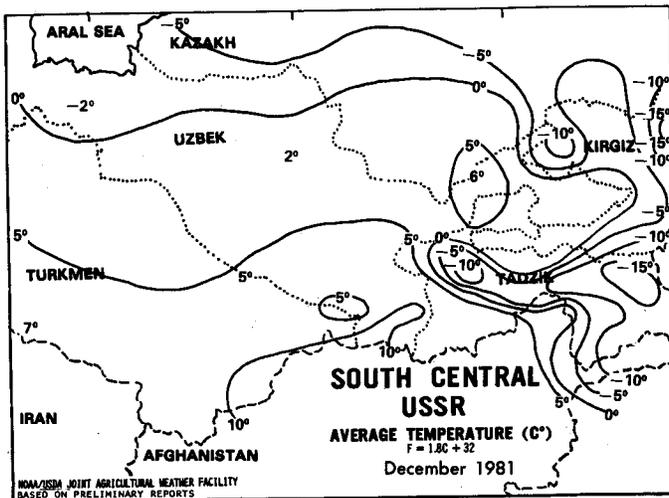
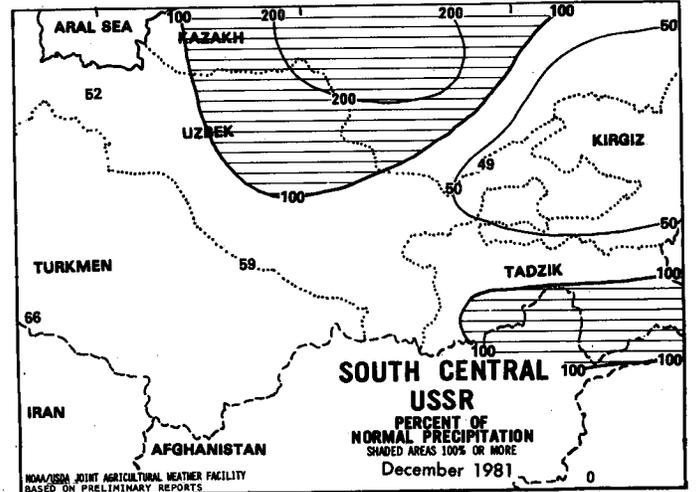
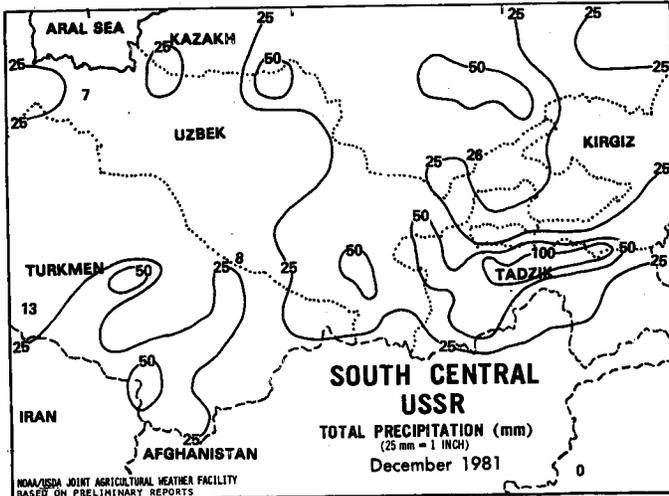
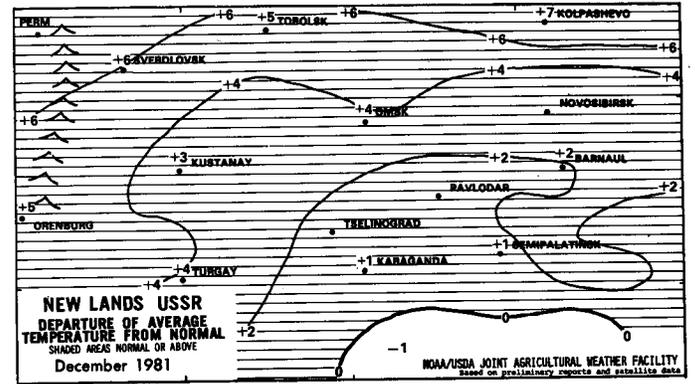
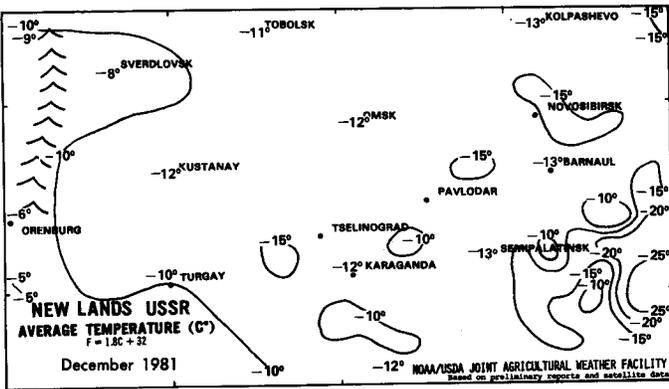
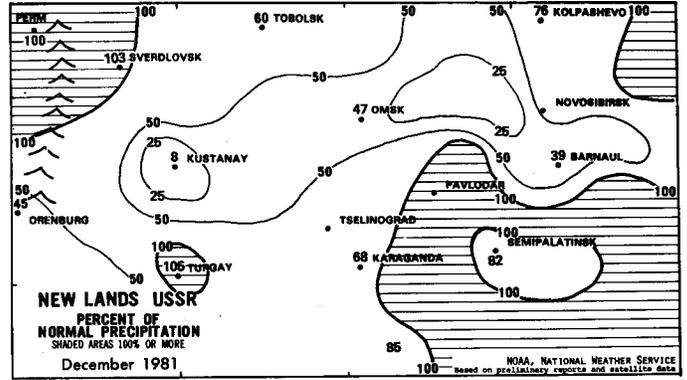
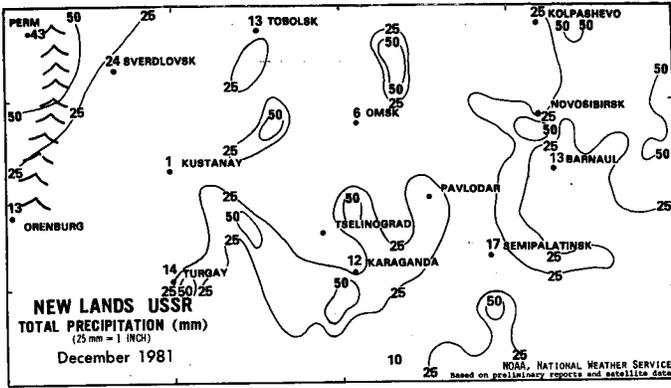
International Weather and Crop Summary



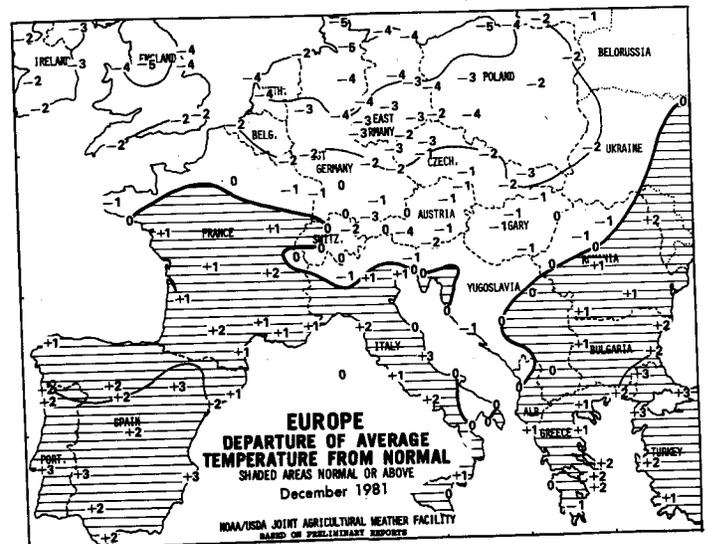
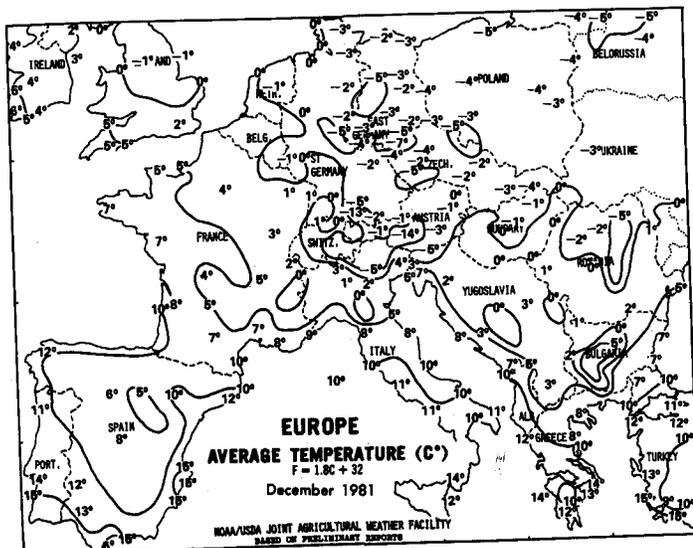
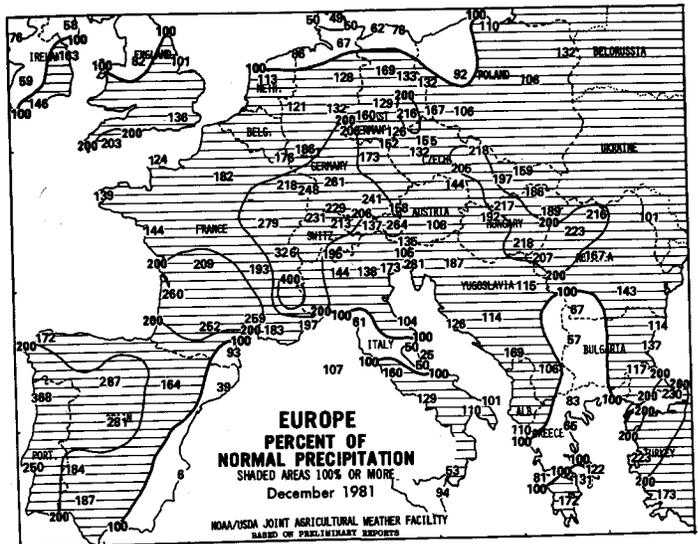
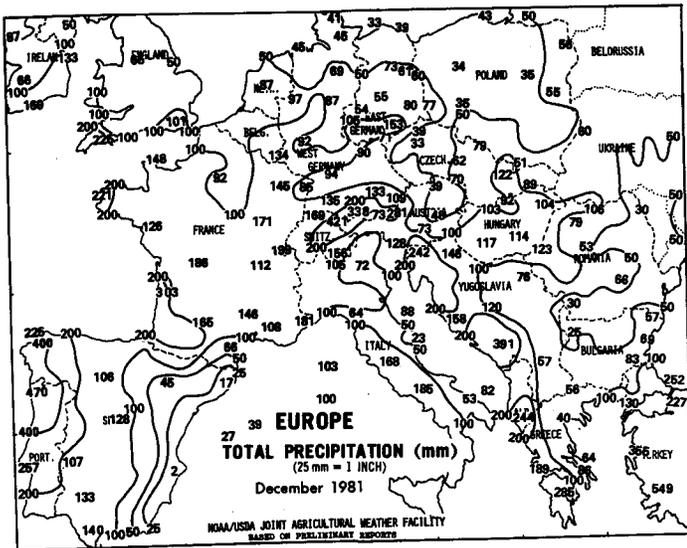
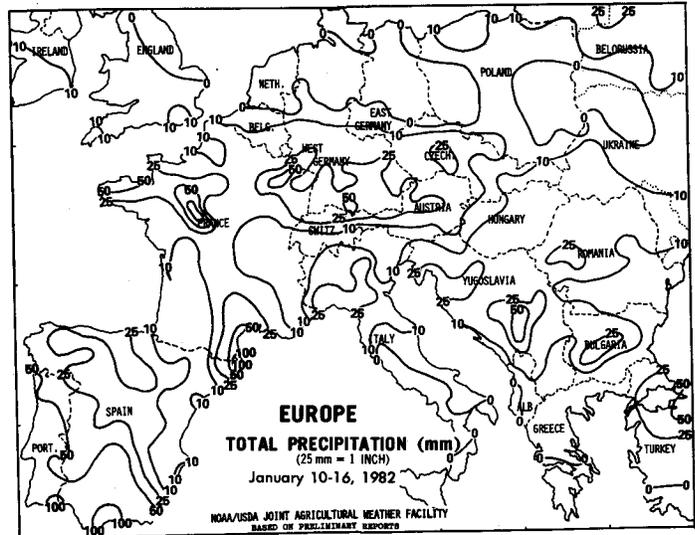
- 1 UNITED STATES Frigid air stresses livestock and fruit trees and limits field work east of the Rockies. Limited snow cover left some winter grains vulnerable to winterkill in central Plains.
- 2 WESTERN USSR: Heavy snows protect dormant wheat in the north; generally dry in the northwestern Ukraine.
- 3 EUROPE: Rains benefit winter grain areas of Spain; weather drier over northern Europe with wheat in dormancy.
- 4 NORTHWESTERN AFRICA: Beneficial rain for winter grains in Morocco and Tunisia; mostly dry in Algeria.
- 5 SOUTH AFRICA: Hot and dry weather stresses corn in some important growing areas.
- 6 SOUTH ASIA: Rain benefits winter grains in central India.
- 7 EASTERN ASIA: Continued light rain in southern China maintains favorable conditions for winter crops.
- 8 AUSTRALIA: Showers benefit summer crops in eastern Australia; weather favors late wheat harvest in southern areas.
- 9 SOUTH AMERICA: Moisture adequate for soybeans in Brazil but additional rain needed for corn and other summer crops in Argentina.
- 10 MEXICO: Mild, dry weather favors harvesting of eastern sugarcane and coffee and west coast vegetables.

WESTERN USSR: Above-normal precipitation increased the existing snowcover in northern winter wheat areas and improved the limited snowcover in the North Caucasus and southern Volga Valley. Satellite imagery and available data suggest only patchy snowcover still exists in the northwestern Ukraine, which received little precipitation this week. This area is more vulnerable to potential winterkill in the event of a cold air outbreak. In December, above-normal precipitation occurred over most of the region while temperatures remained below normal in the northwest and above normal in the south and east. Temperatures during this week were below normal over most of the region.

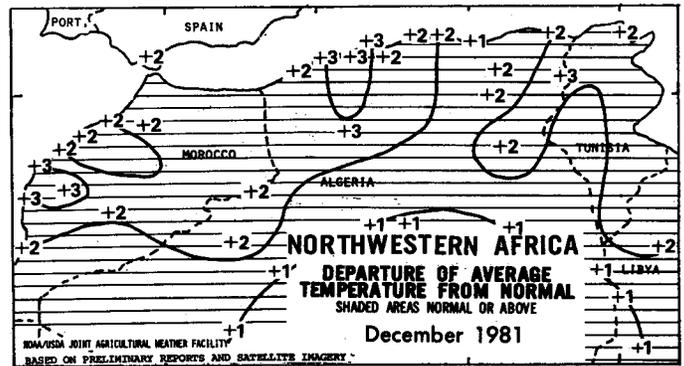
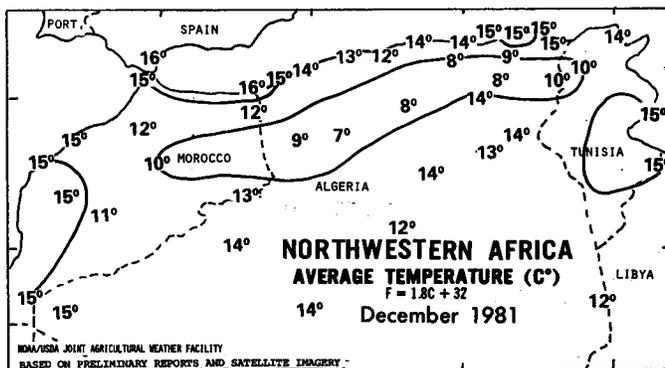
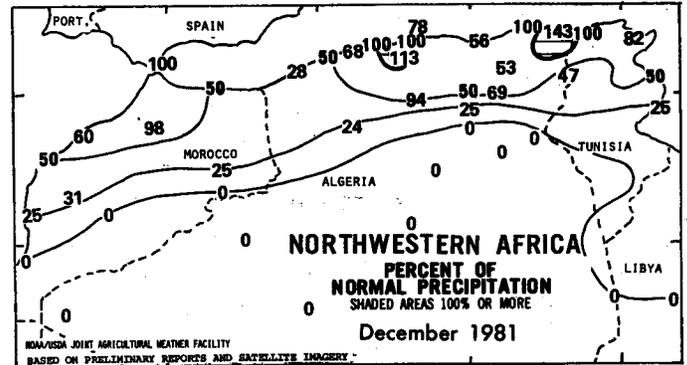
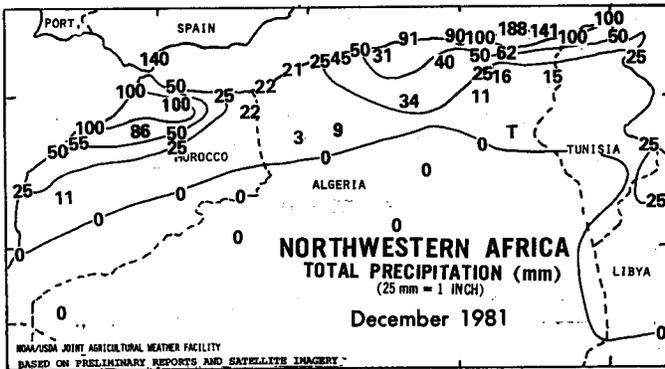
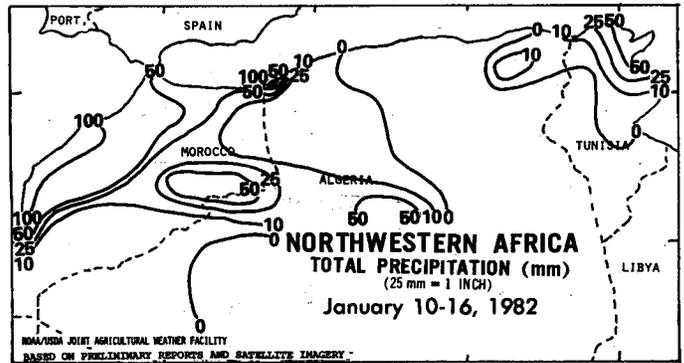




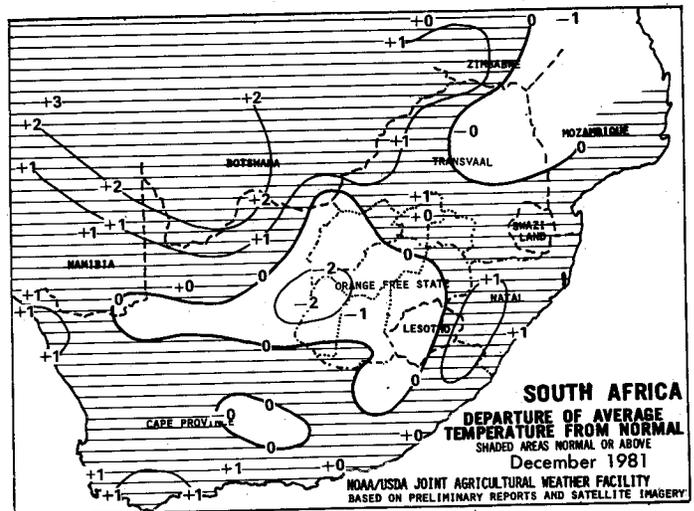
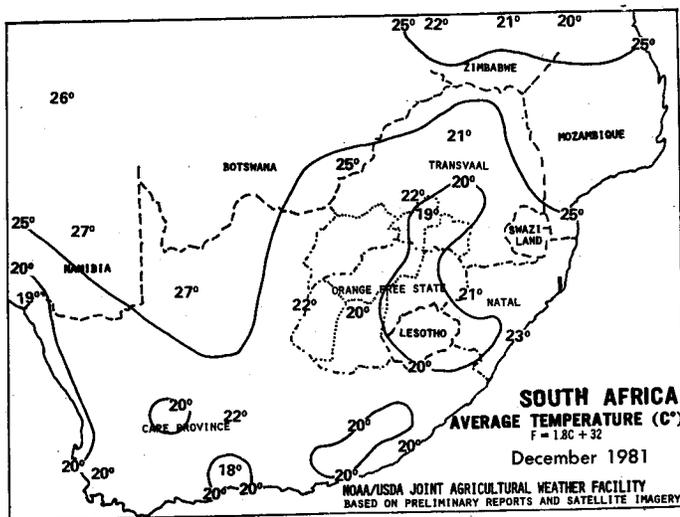
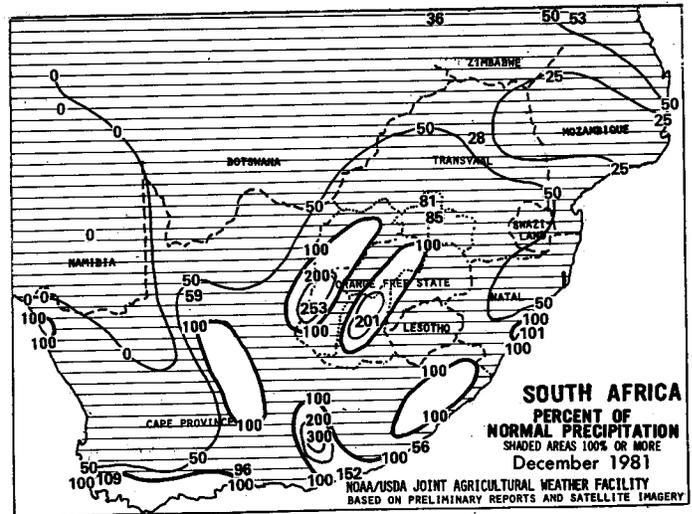
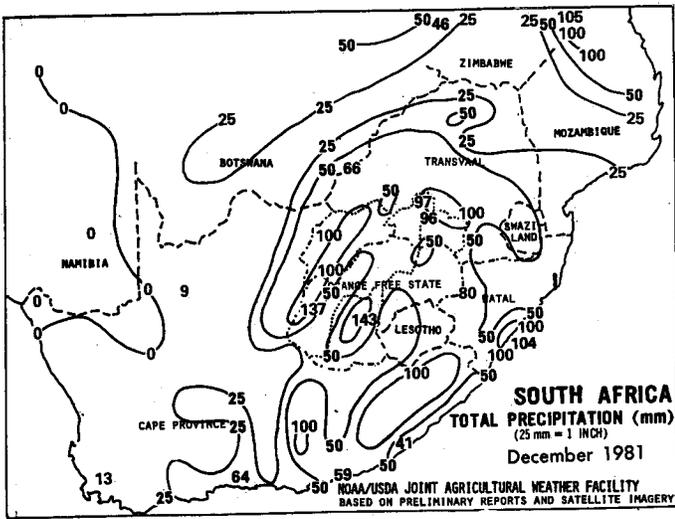
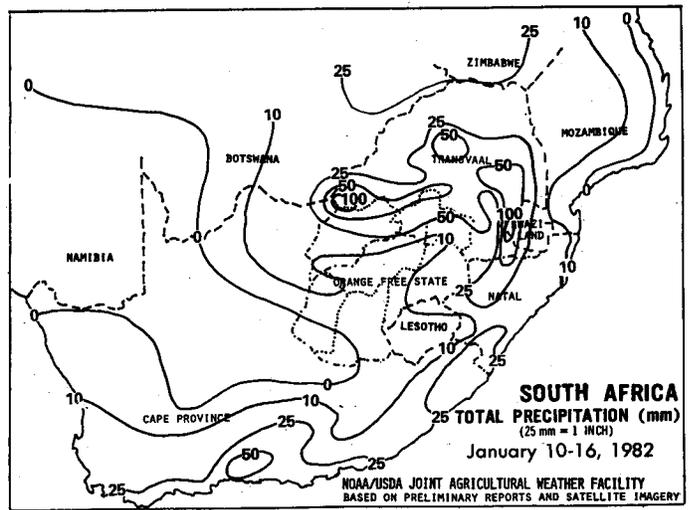
EUROPE: Rain continued over Portugal with highly beneficial precipitation returning to winter grain areas of Spain. Widespread precipitation during the last half of December allowed winter grain planting to begin in most previously dry areas. However, extreme eastern Spain continued to receive below-normal rainfall. In December, above-normal precipitation in France, northern Italy, and most of southeastern Europe, improved subsoil moisture conditions. Wet weather returned to these areas again this week. Drier weather benefited crop areas in northern Poland and gave England some relief from the abnormally cold and wet conditions in December. Temperatures this week followed December's pattern--below normal in the north and above normal in the west and south.



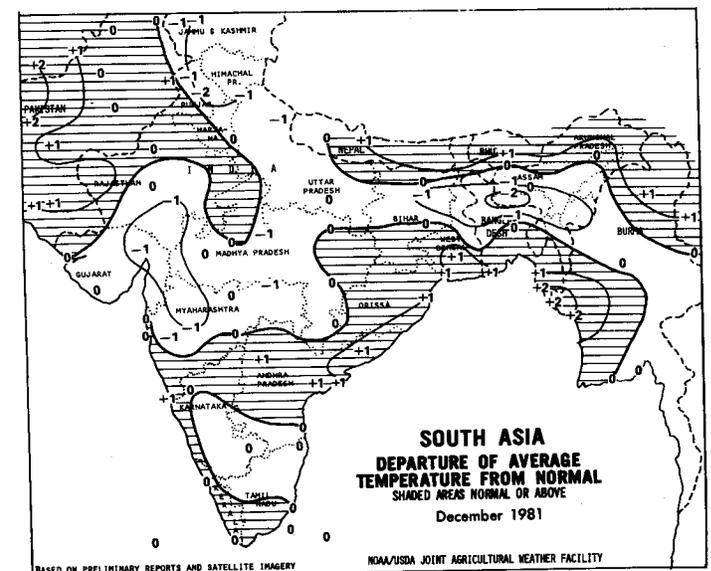
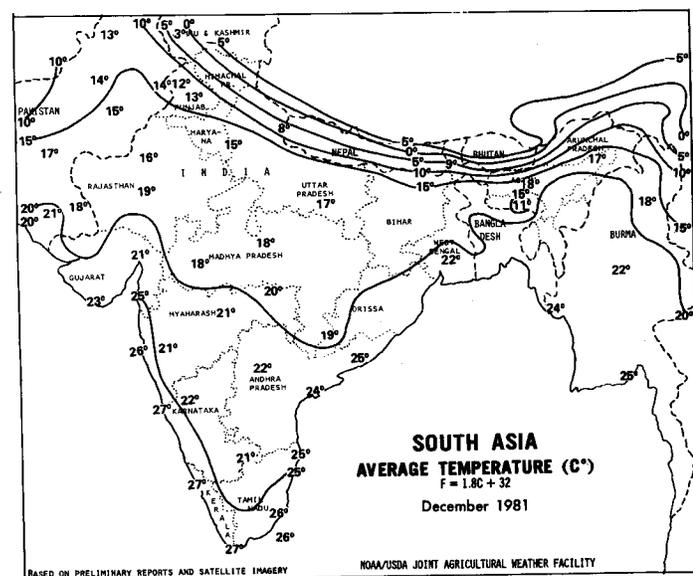
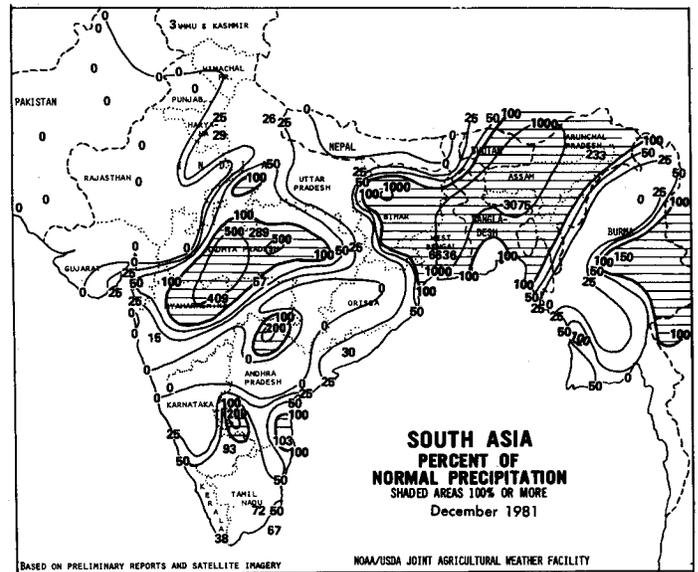
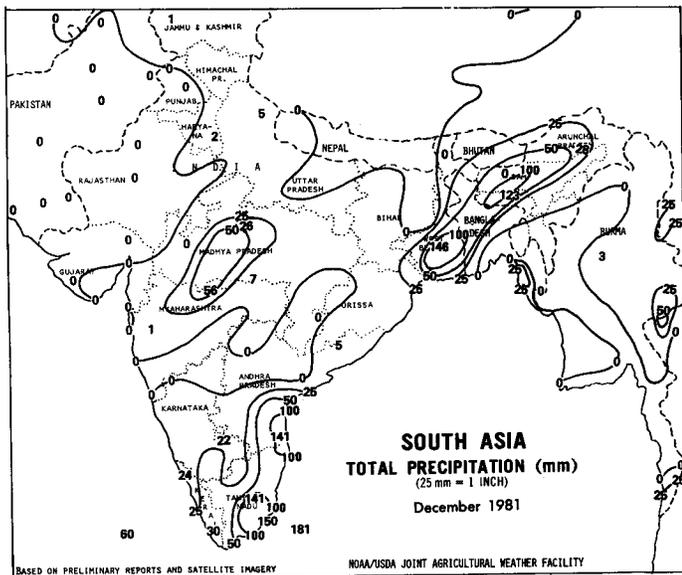
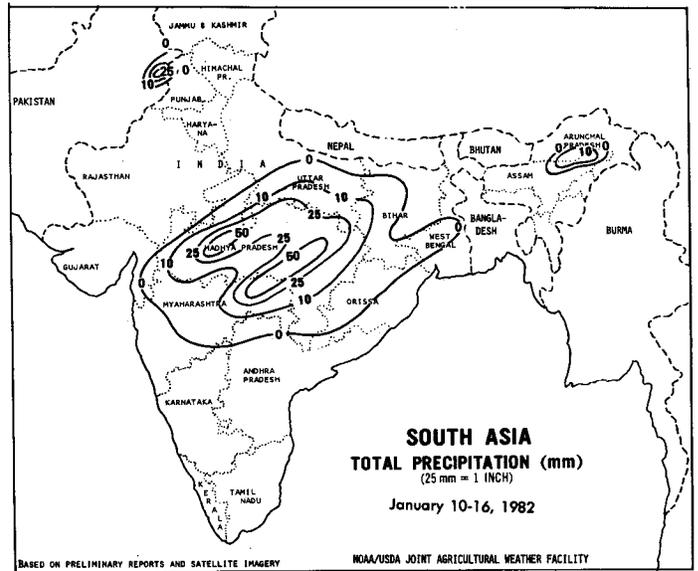
NORTHWESTERN AFRICA: Persistent rainfall last week improved growing conditions for winter grains in Morocco and Tunisia, but most crop areas in Algeria had continued dry weather. Increasing rainfall in northern Morocco during December yielded totals near normal, while below-normal rains in the south occurred at the end of the month. In spite of late sowing, Morocco's winter grain prospects are much better than a year ago. Likewise, conditions in Tunisia should be favorable. Above-normal rainfall in most winter grain areas during the week followed near-normal totals in December. A drying trend continued over much of Algeria. Substantial rain fell only in the extreme west where conditions in December were too dry for winter grain sowing and crop prospects remain poor. Central and eastern Algerian winter grains should still have adequate moisture. The weather has turned drier in January, following near-normal rains in most of these areas during December. Some localized areas could already be stressed.



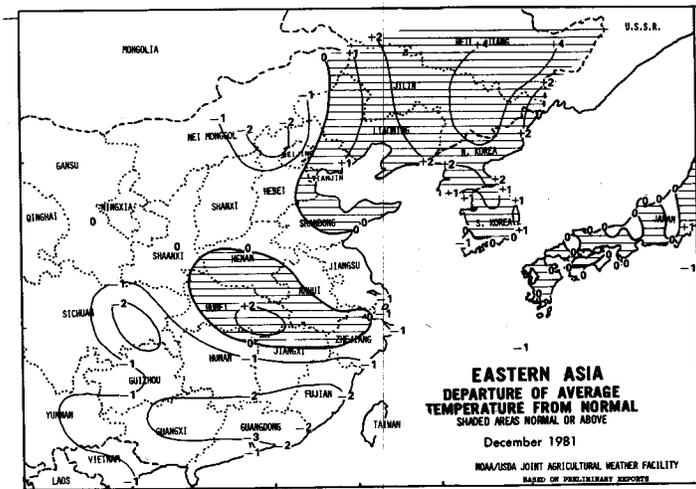
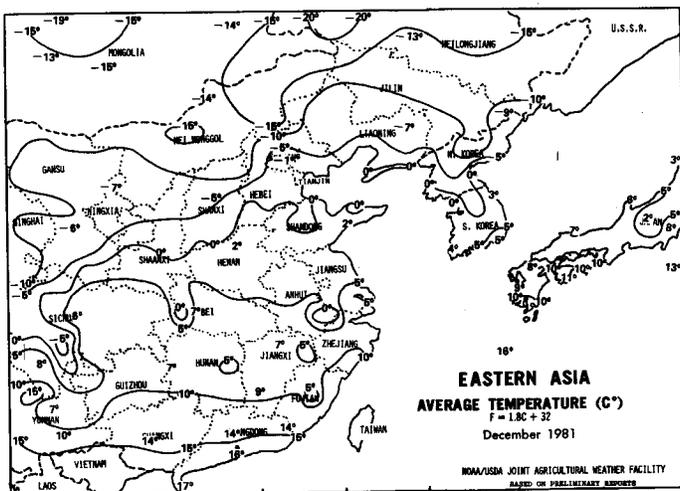
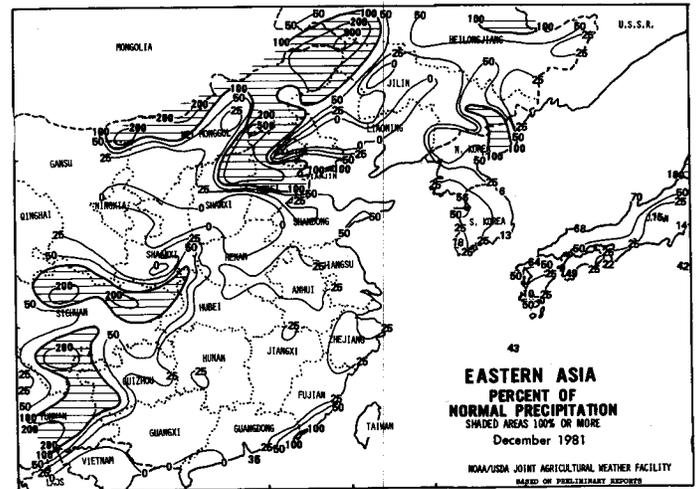
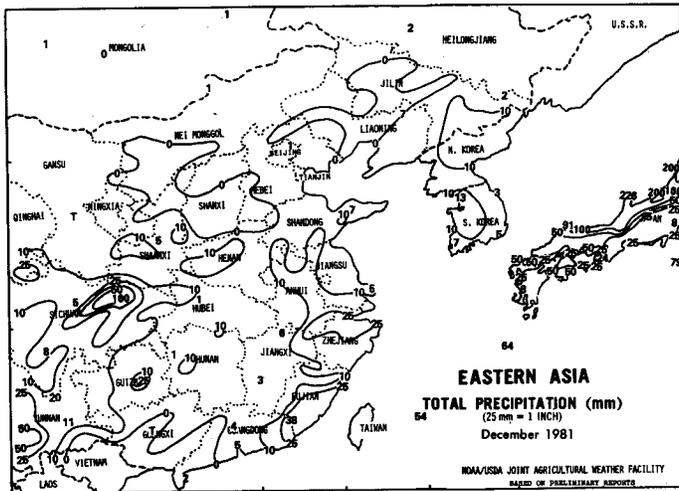
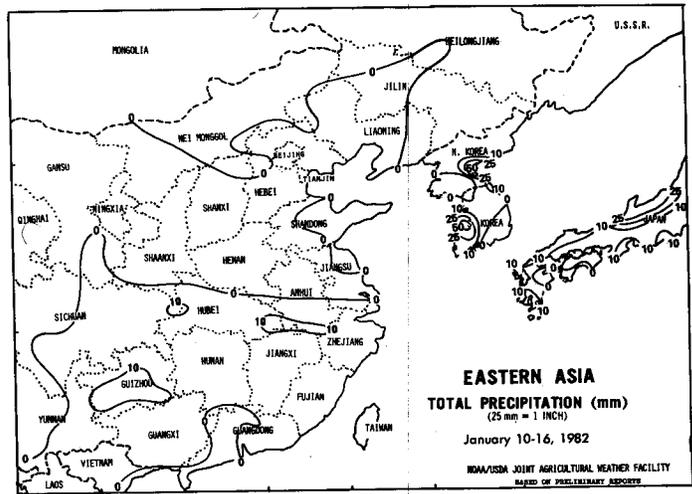
SOUTH AFRICA: Near-normal rainfall continued in northern and eastern corn areas and shifted a little further south and west. The pattern in recent weeks has been the reverse of that during December, when southwestern areas received above-normal rainfall and the rest of the area had somewhat below-normal totals. Dry conditions and above-normal temperatures are probably stressing corn in some important central areas as it enters the flowering stage. Serious yield losses should not be expected, but prospects are not as good as they were last year.



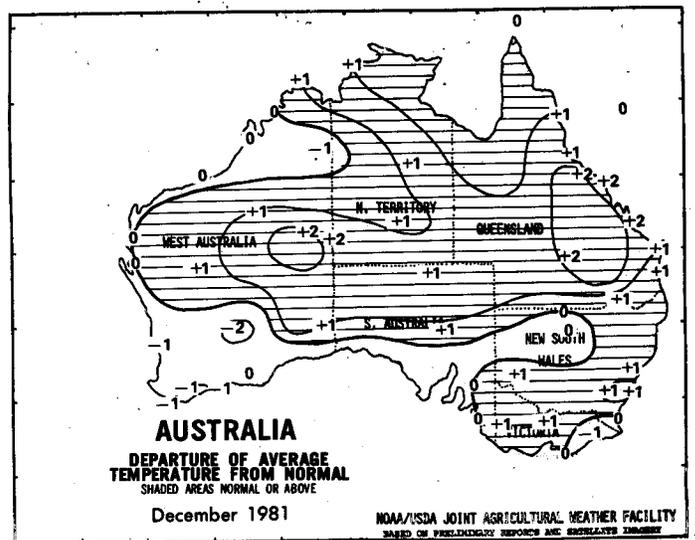
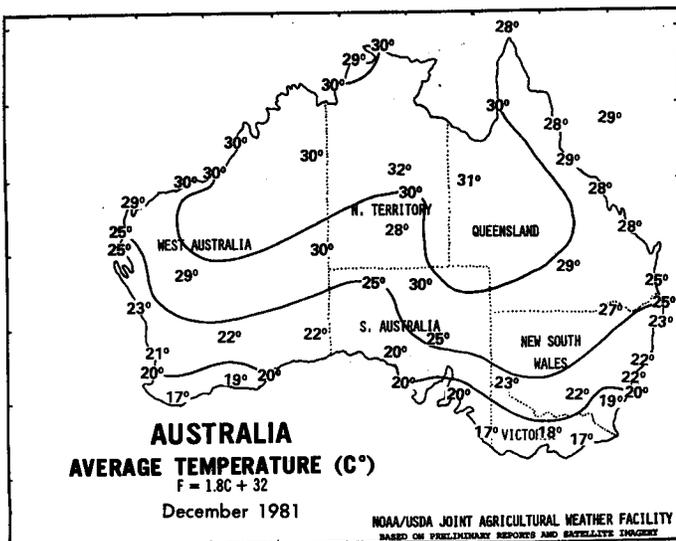
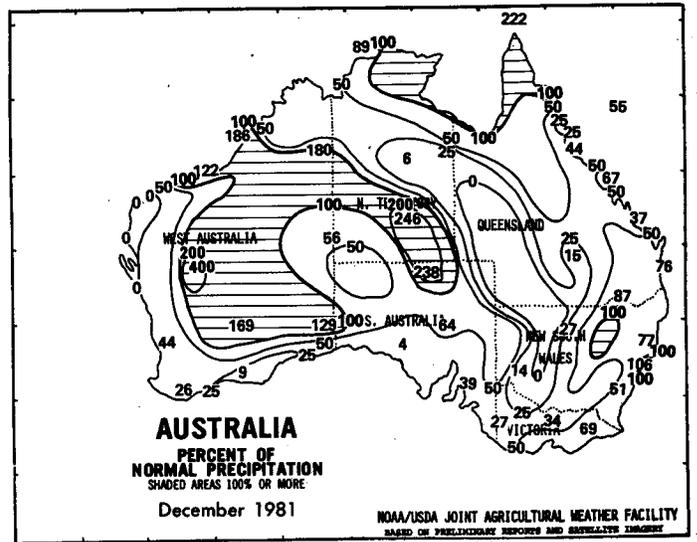
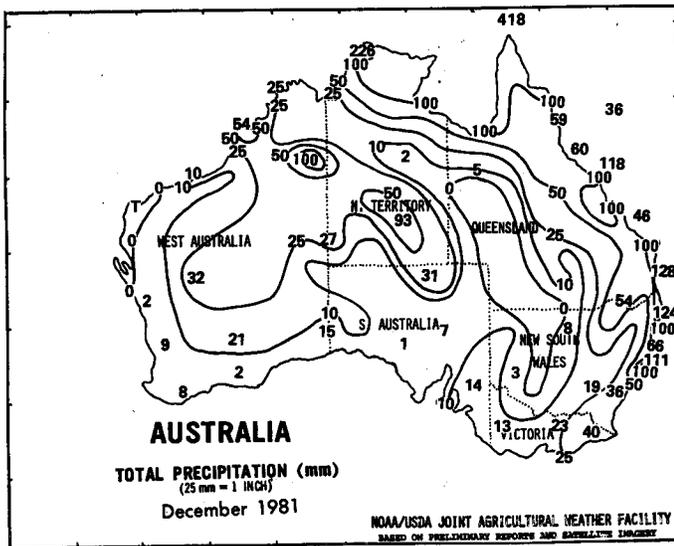
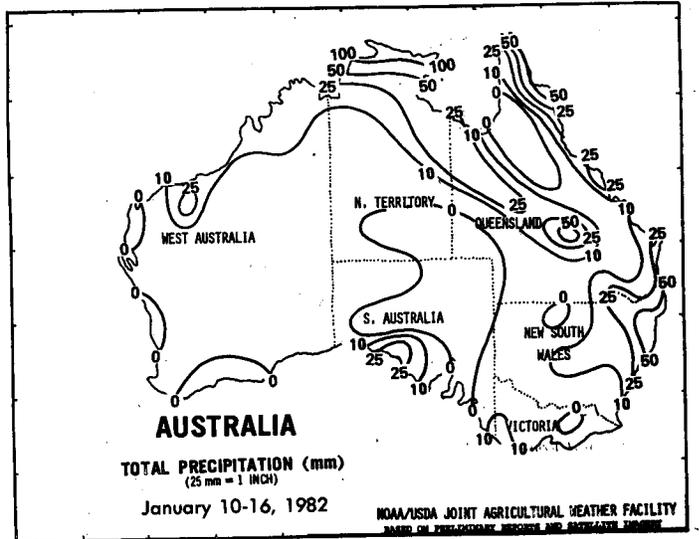
SOUTH ASIA: A storm moving across northcentral India at the beginning of the week produced generous rains over most of Madhya Pradesh. Amounts at numerous locations exceeded normal January totals. The moisture improved growing conditions for winter grains in this upland area where the crop is entering the heading stage and irrigation is minimal. This same area received above-normal rain in mid-December, and yield prospects should be relatively good. Above-normal December rainfall in Bangladesh and eastern India resulted from a late-season tropical storm early in the month. Most northern winter grain areas received little or no precipitation during December, but the generous rains of early November and early January have been sufficient for crop needs.

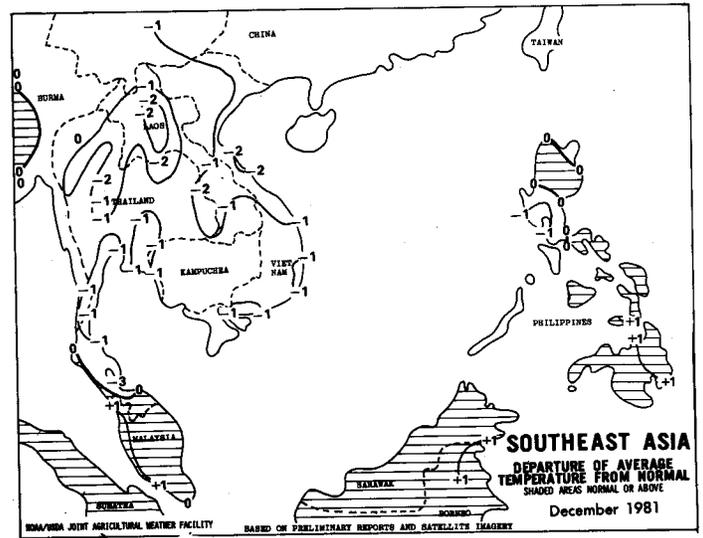
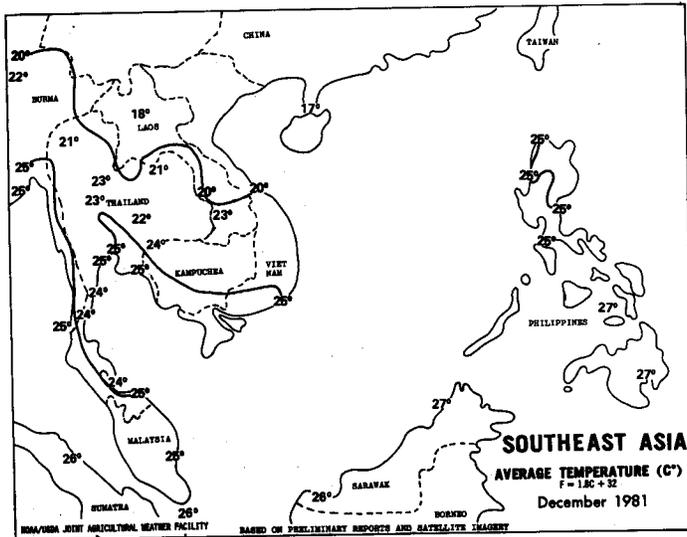
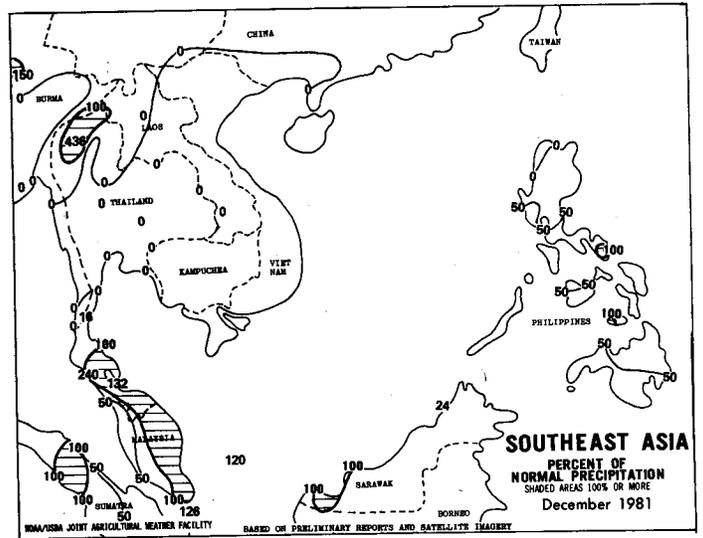
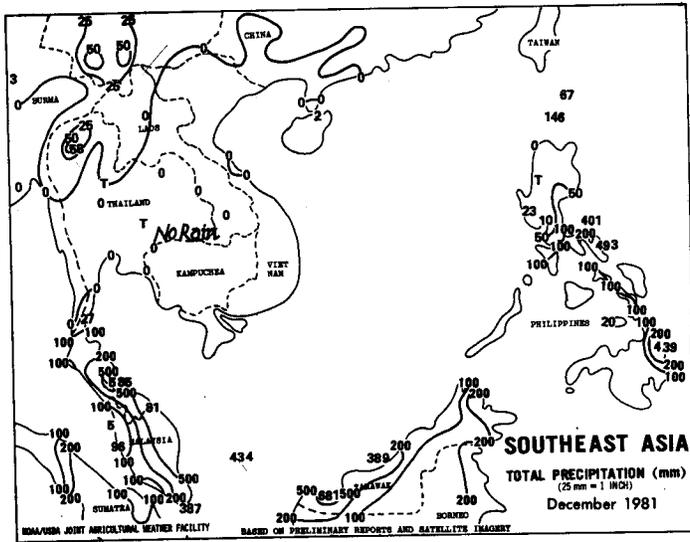


EASTERN ASIA: A weak storm system brought light rain to most of southern China, including southern winter grain areas near the Yangtze River. Most winter grain areas had continued dry weather. Light precipitation during December was generally below normal, but above normal near Beijing. However, conditions in nearly all winter grain areas were too cold for growth. Driest conditions appear to exist in northern Henan and southern Hebei. Timely precipitation there will be required as the crop breaks dormancy. In South Korea, above-normal precipitation occurred in some western areas, following a somewhat dry December. However, conditions remained cold enough to keep winter grains dormant through December to the present.

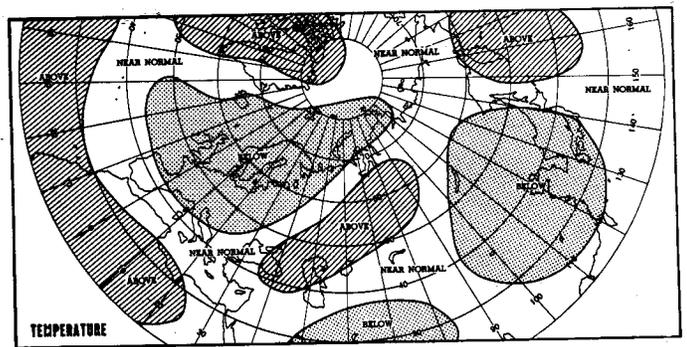
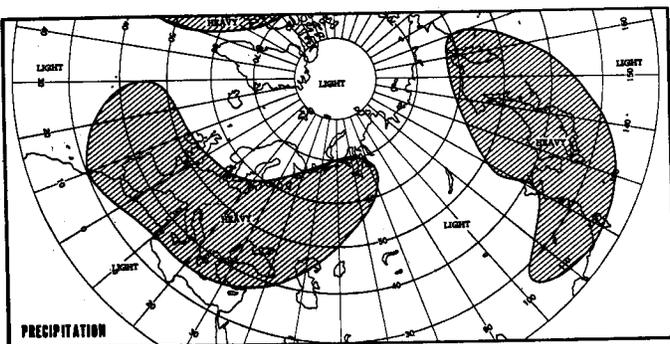


AUSTRALIA: Mostly warm, dry weather in southern portions of Australia aided the late harvest of winter grains. Showers in eastern Australia provided timely moisture for grazing areas and summer crops, which are advancing through reproductive stages. The wheat harvest is nearly complete; crop yields and quality of the crop both benefited from favorable weather conditions during the latter part of the growing season. As a result, latest crop estimates indicate that the 1981-82 total production will approach the second largest crop which was produced in 1979-80. Weekly weather summaries will be discontinued until the autumn planting season. Monthly maps will be presented during the interim period, however.

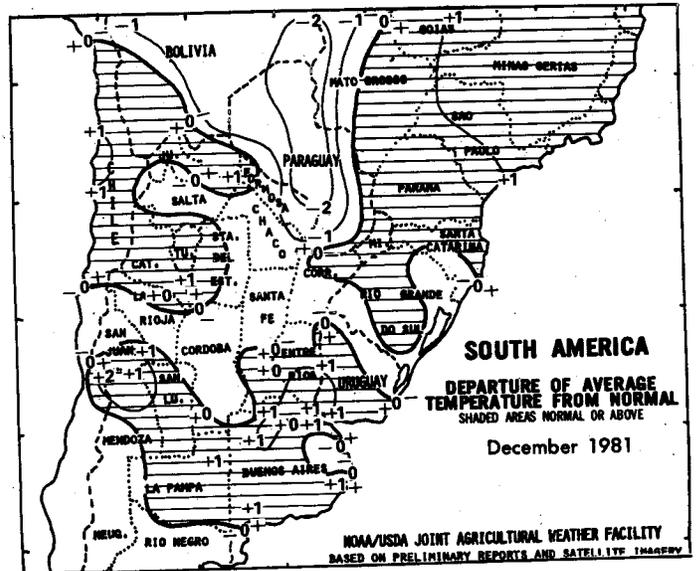
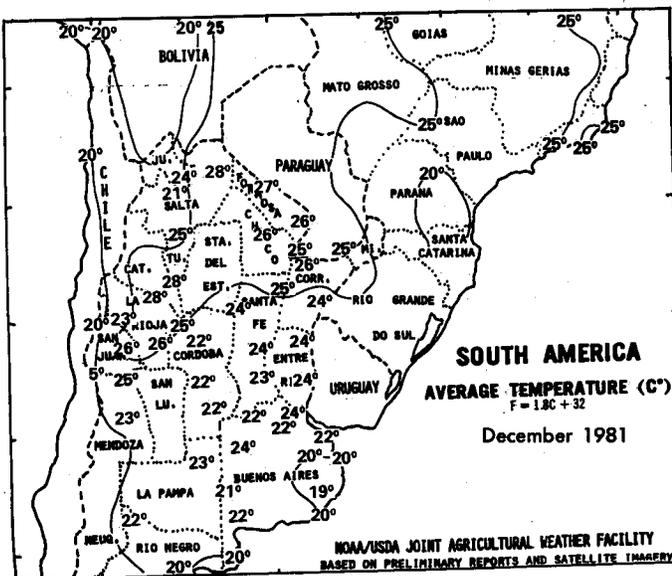
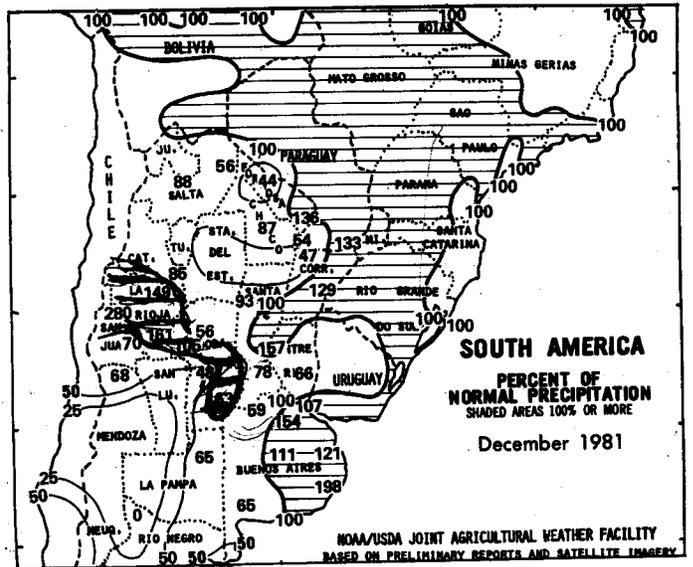
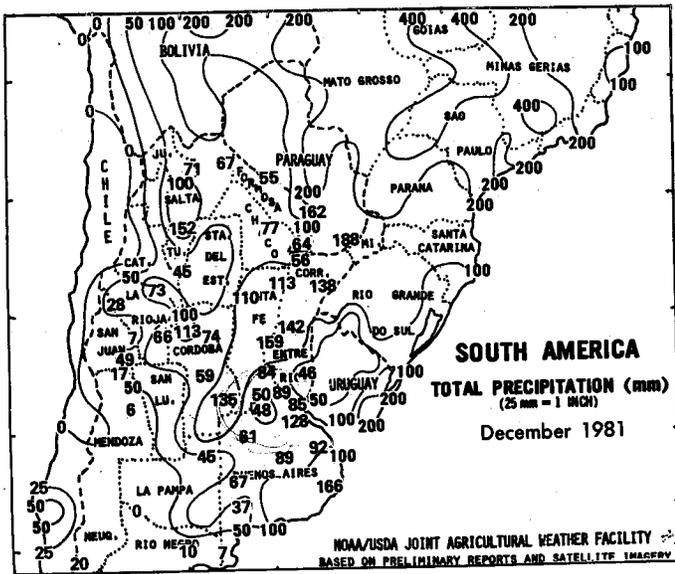
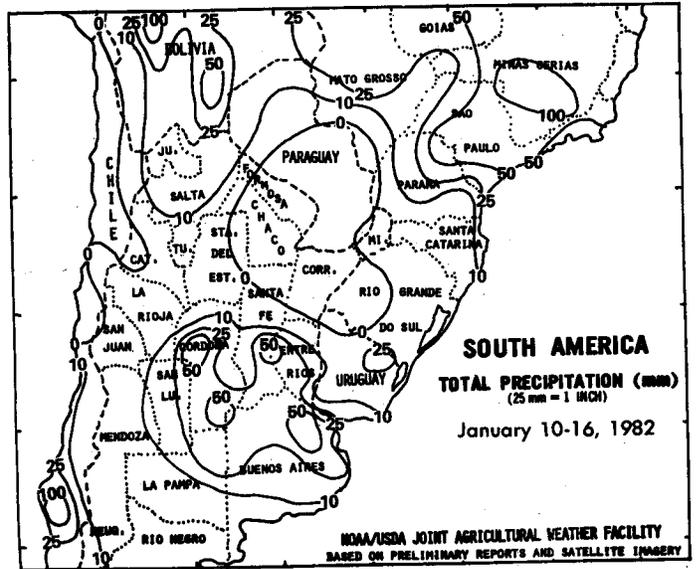




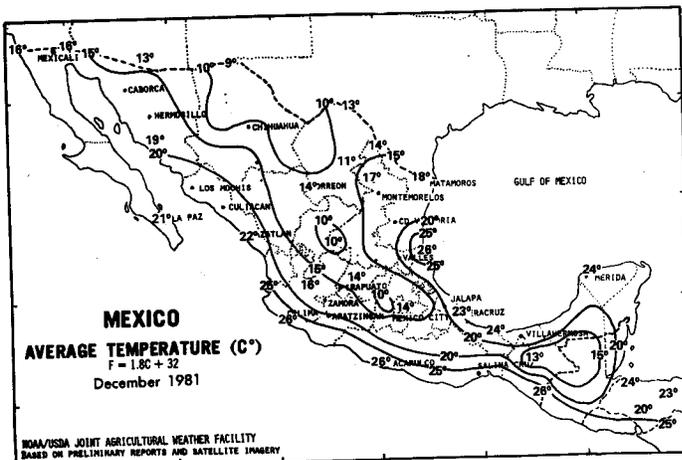
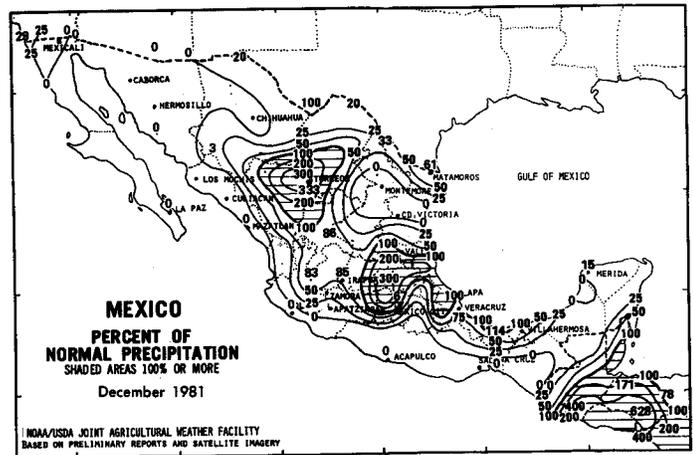
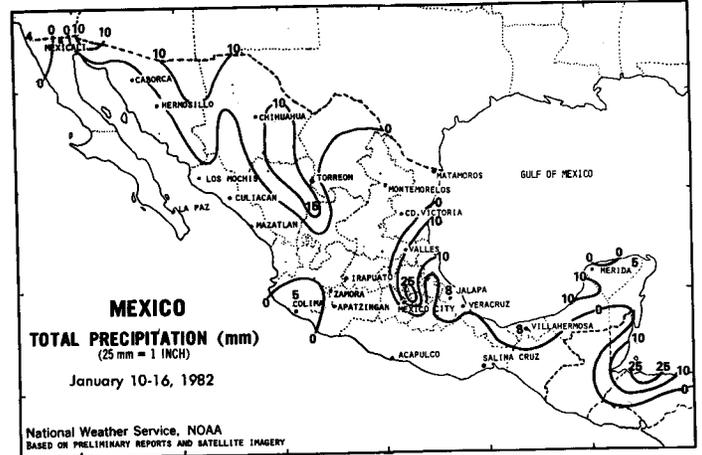
EURASIA OUTLOOK FOR MID-JANUARY TO MID-FEBRUARY

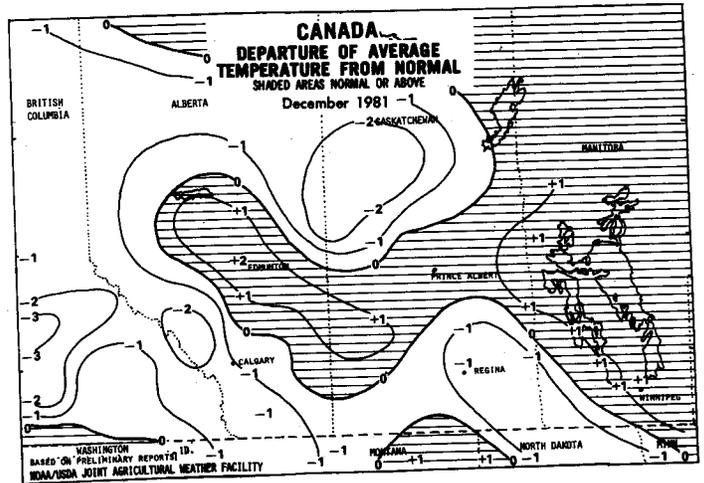
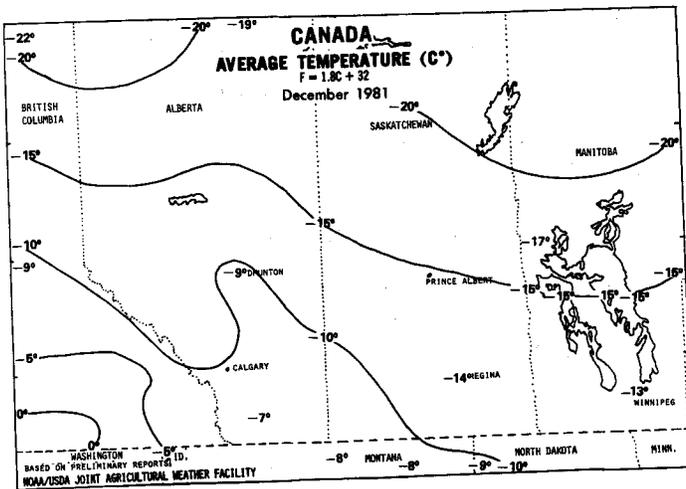
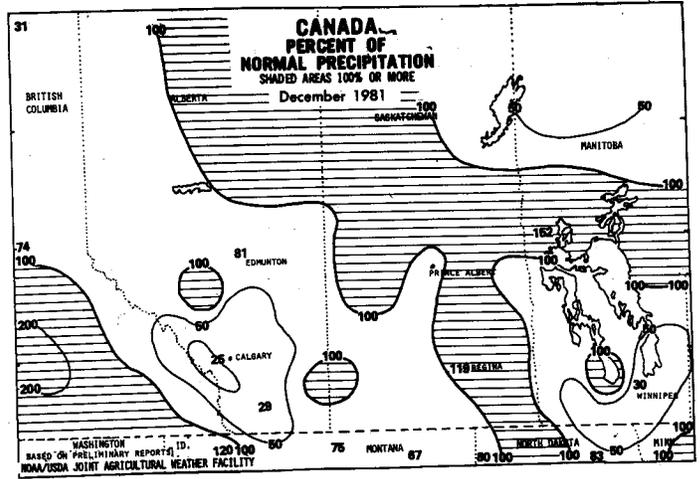
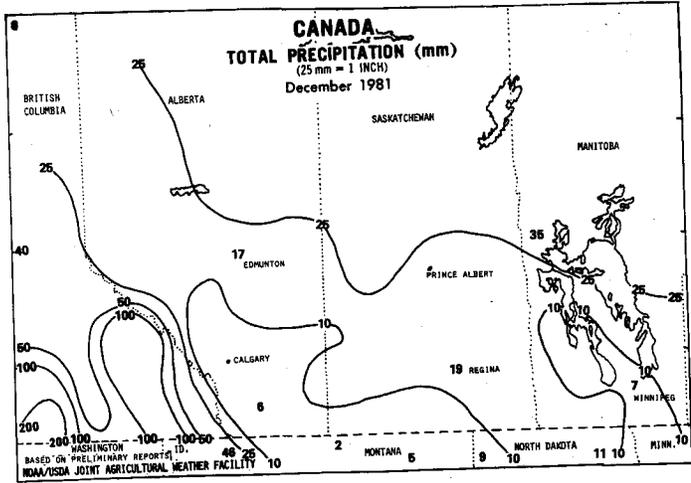


SOUTH AMERICA: Abundant weekly rainfall occurred over Sao Paulo and Minas Gerais while scattered showers produced beneficial moisture for crop growth in Argentina's major crop area. Frequent showers during the next few weeks will be essential for Argentina's corn and soybean crops as they advance through reproduction into the filling periods. December rainfall was below average, except over eastern Buenos Aires, and warm weather has increased crop moisture demands. Thus, timely moisture is needed to supplement low soil moisture reserves. In contrast, Brazil's moisture supplies are generally adequate for flowering and early pod-filling of soybeans due to abundant December rainfall. Corn is approaching maturity in northern crop areas. Additional showers within the next few weeks, especially in Rio Grande do Sul, would provide excellent moisture conditions for crop development.



MEXICO: Seasonal mild, dry weather continued over most crop areas, generally benefiting agriculture. This pattern favored harvesting of sugarcane and coffee along the east central coast, citrus in the northeast, and vegetables in the west coast. Winter wheatlands of the southern Plateau are slightly dry, and it has been a little too warm for ideal wheat conditions in parts of the northwest.





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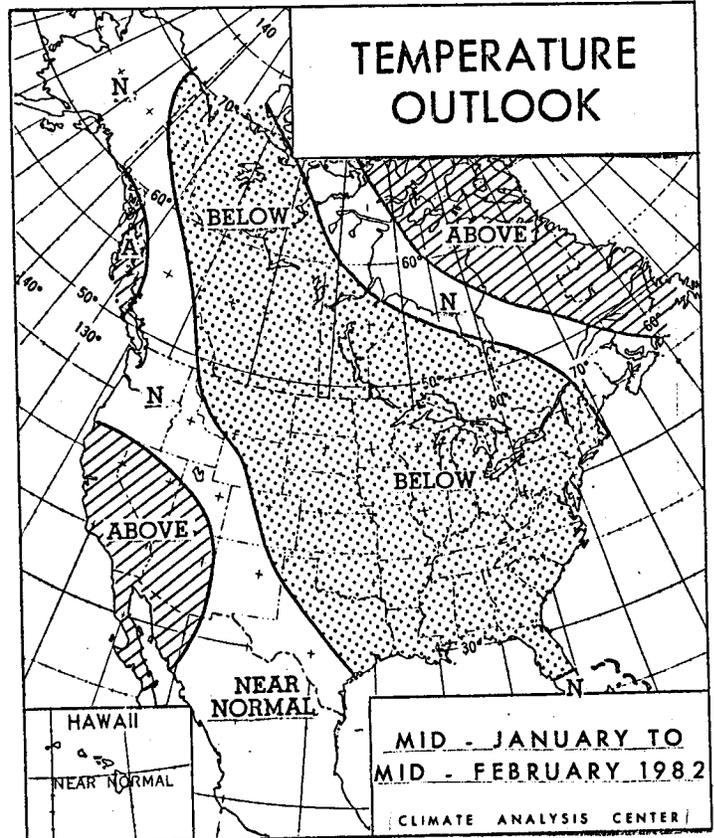
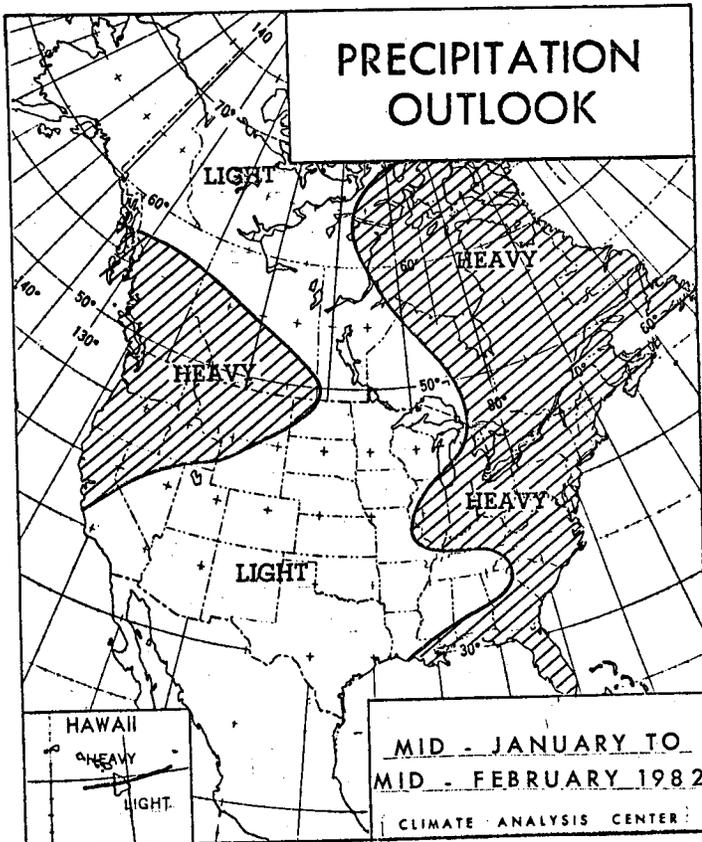
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Don't Overheat—Humidify

You can feel warmer and save energy and money by humidifying your home. NOAA is offering a guide to humidity with this advice.

It has prepared a table that shows the feeling of warmth obtainable at various combinations of temperatures and humidity.

The table was prepared by EDIS which notes that when cold, dry air puts a chill in the air, many people overheat to compensate.

EDIS, however, recommends that you increase humidity by using humidifiers, vaporizers, steam generators or by simply placing large pans of water around the room.

It also suggests purchasing a simple device called a hygrometer to measure the amount of moisture in the air.

The table shows that by setting your thermometer at 68 degrees Fahrenheit, you can make your home feel like 70 degrees by keeping humidity at 90 percent.

		RELATIVE HUMIDITY (%)										
		0	10	20	30	40	50	60	70	80	90	100
ROOM TEMPERATURE (°F)	75	68	69	71	72	74	75	76	76	77	78	79
	74	66	68	69	71	72	73	74	75	76	77	78
	73	65	67	68	70	71	72	73	74	75	76	77
	72	64	65	67	68	70	71	72	73	74	75	76
	71	63	64	66	67	68	70	71	72	73	74	75
	70	63	64	65	66	67	68	69	70	71	72	73
	69	62	63	64	65	66	67	68	69	70	71	72
	68	61	62	63	64	65	66	67	68	69	70	71
	67	60	61	62	63	64	65	66	67	68	68	69
	66	59	60	61	62	63	64	65	66	67	67	68
	65	59	60	61	61	62	63	64	65	65	66	67
	64	58	59	60	60	61	62	63	64	64	65	66
	63	57	58	59	59	60	61	62	62	63	64	64
62	56	57	58	58	59	60	61	61	62	63	63	
61	56	57	57	58	59	59	60	60	61	61	62	
60	55	56	56	57	58	58	59	59	60	60	61	

Apparent Temperature for Values of Room Temperature and Relative Humidity