

# 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

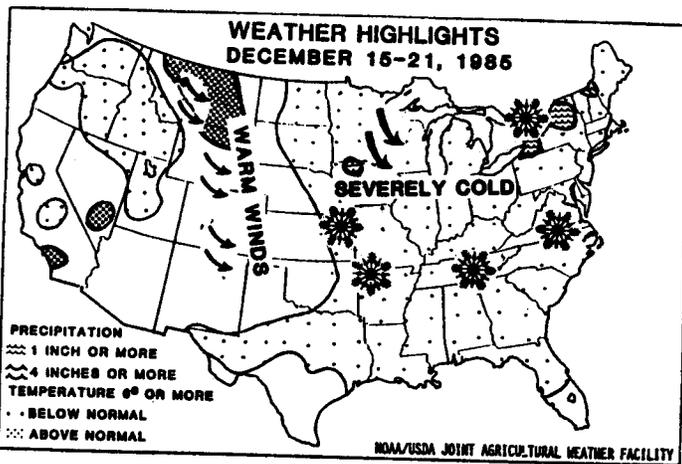
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Dec. 24, 1985

## National Weather Summary

December 15 to 21, 1985



**HIGHLIGHTS:** Frigid, arctic air pushed into the upper Mississippi Valley early in the week and spread to the central Plains, the southeastern gulf coast and through the East. Light snow fell in the northern and central Plains, from the Great Lakes to the Tennessee Valley, and through the Atlantic Coast States to North Carolina. Strong winds flowing down the eastern slopes of the Rockies kept warmer temperatures through the High Plains. Temperatures were colder than normal in the Nation except the Southwest, the eastern Rockies, and the northern and central High Plains.

**SUNDAY...**Light snow fell from the northern Rockies to the Great Lakes, and heavier amounts fell in squalls on the leeward side of the Lakes. Strong winds, blowing down the eastern slopes of the Rockies warmed the High Plains from Colorado through Montana. Freezing temperatures reached into northern Florida and through western Texas.

**MONDAY...**Snow squalls continued through the Great Lakes region and southward almost to the Ohio Valley and eastward through New England. The squalls were heavy at times in western New York. A new surge of Arctic air into the upper Mississippi Valley triggered snow from the Dakotas through Iowa. Subzero temperatures spread into North Dakota and Minnesota.

**TUESDAY...**Frigid, arctic air swept southward into the central Plains and middle Mississippi Valley bringing snow, wind, and bone chilling temperatures. Light snow squalls from the Great Lakes continued to the Ohio Valley and through the Northeast. Rainshowers developed along the southern Texas gulf coast and in southeastern Florida.

**WEDNESDAY...**Lake effect snow was heavy at times east of the Great Lakes. The latest surge of very cold air pushed into the Great Lakes and to the Ohio Valley. Light snow fell in the northern and central Plains. Strong winds down the eastern slope of the Rockies continued to warm the western High Plains adjoining the very cold air.

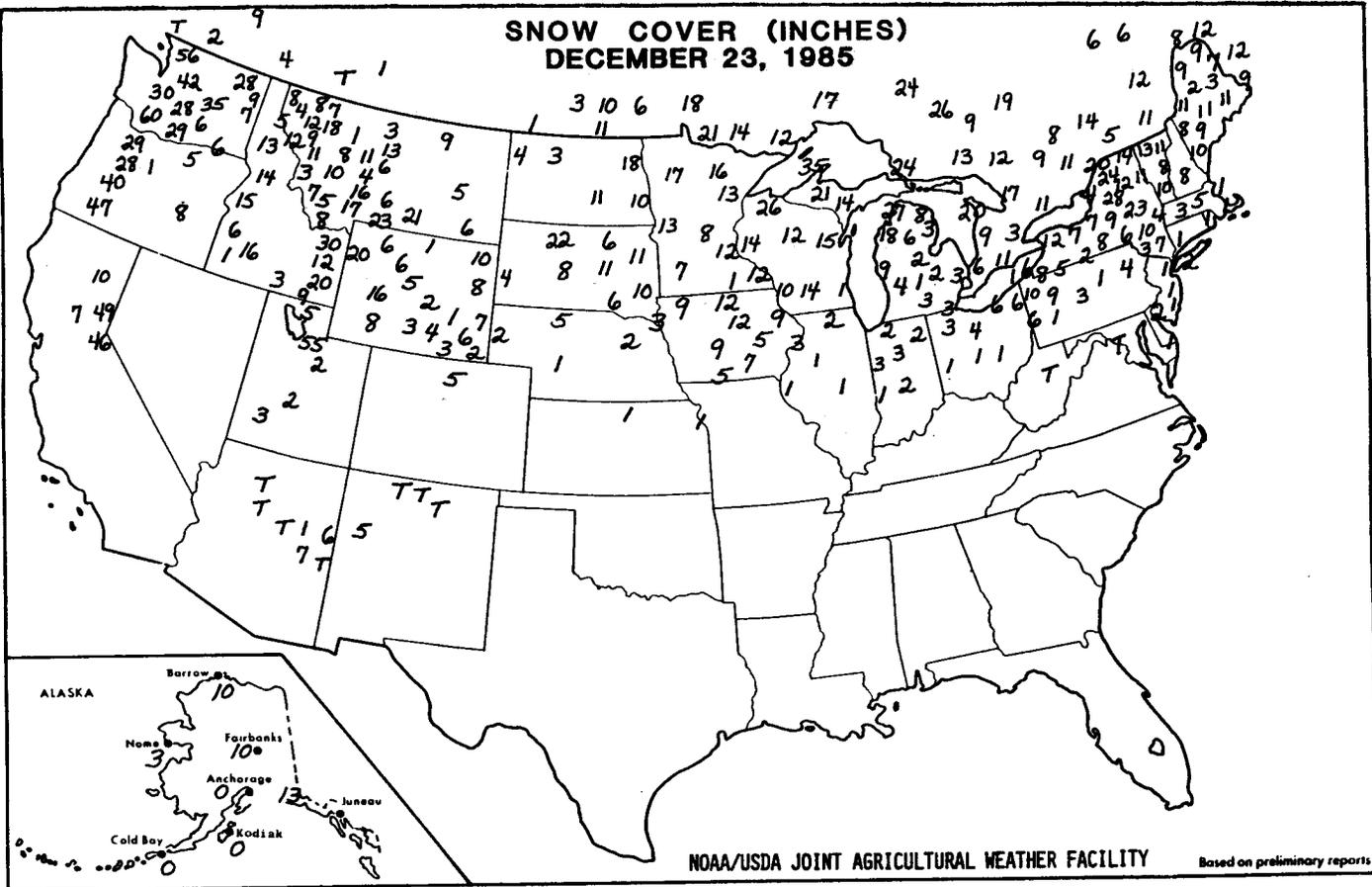
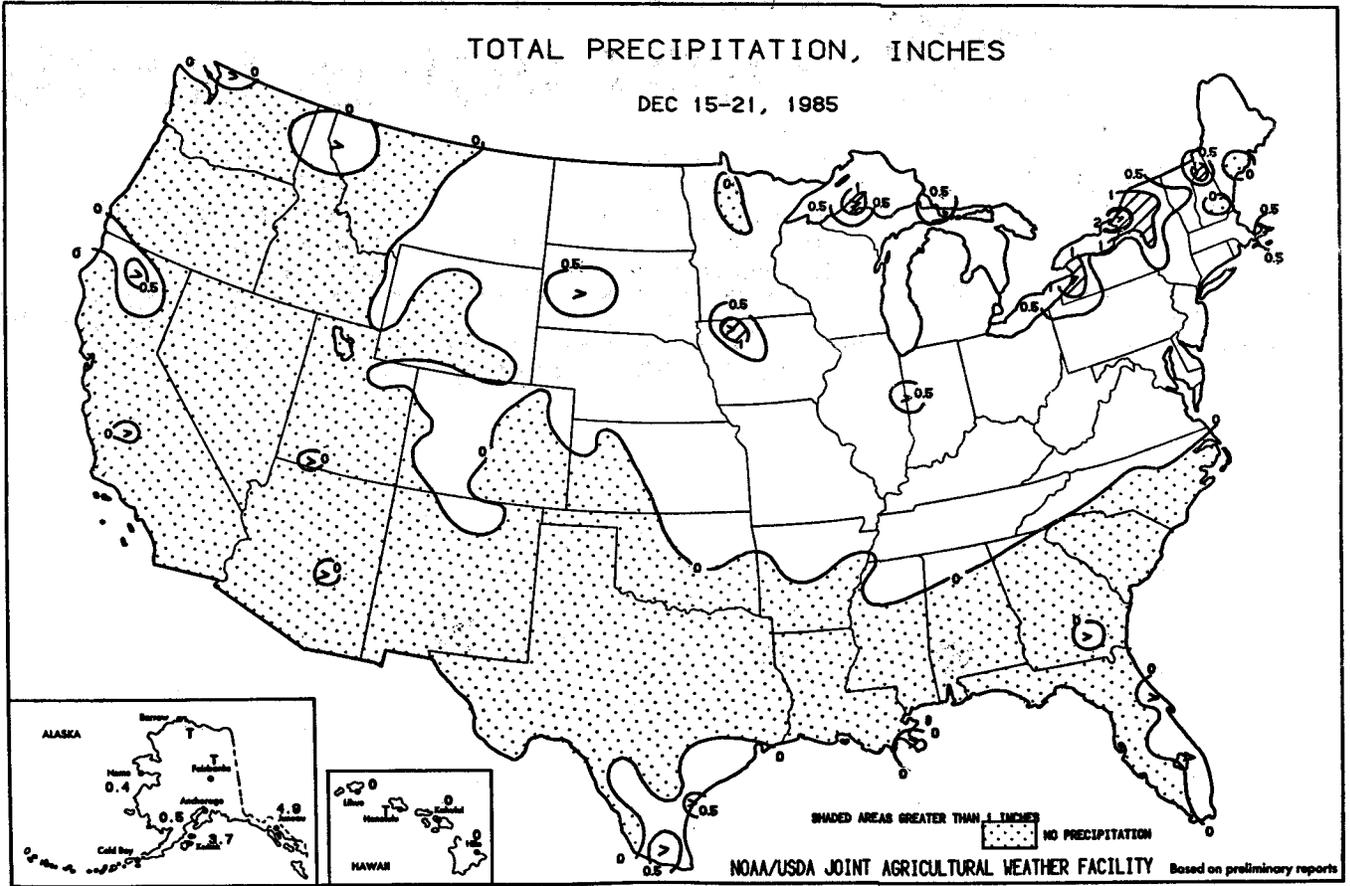
**THURSDAY...**The cold air, accompanied by light to moderate snow, pushed to the Tennessee Valley and to the central and northern Appalachians. Light to moderate snow also fell behind the cold air from Missouri to eastern Montana and western Dakotas. The lake effect snow tapered off to traces except for pockets of heavy snow in western New York.

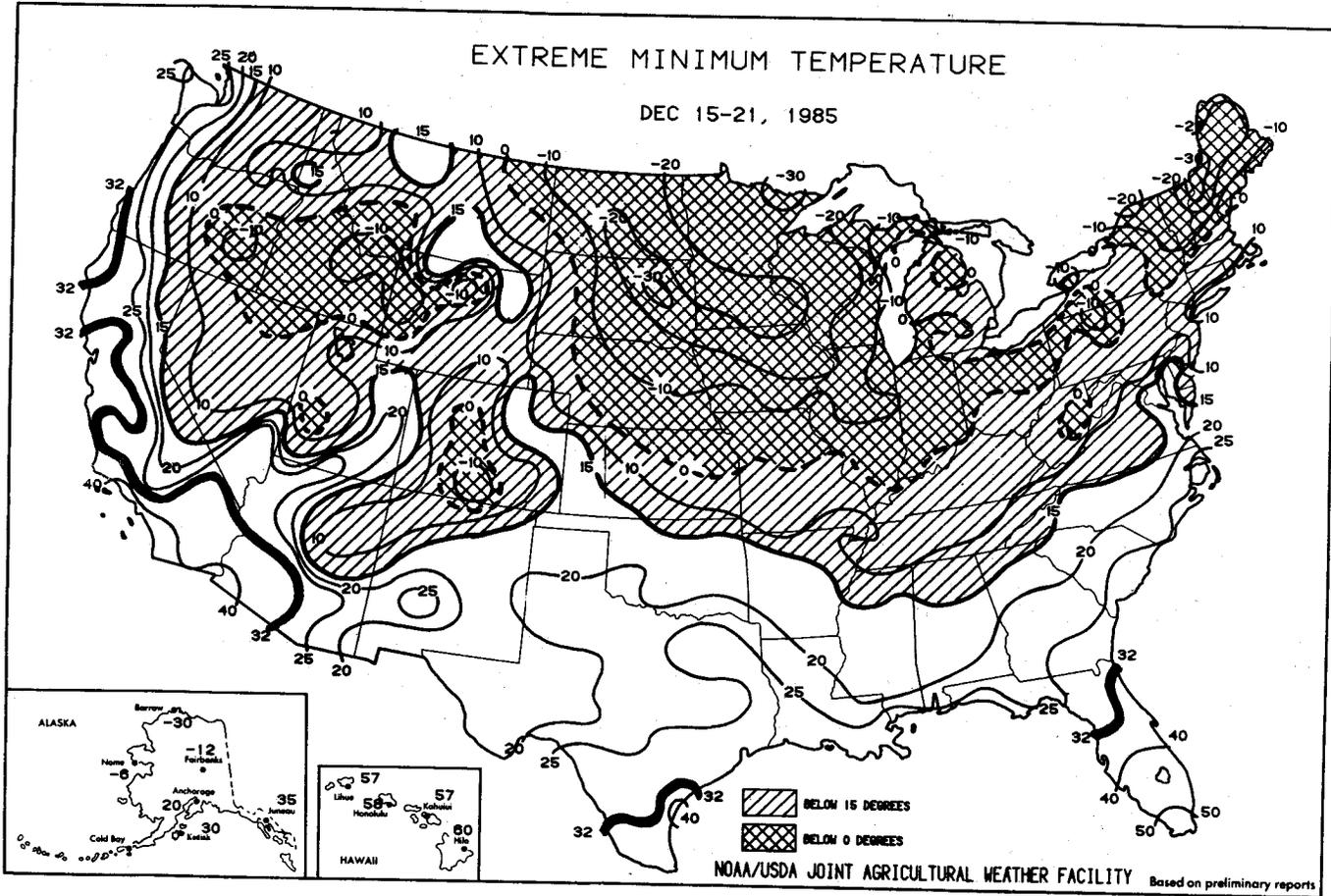
**FRIDAY...**Record cold temperatures reached to parts of the mid-Atlantic States and from Iowa to Ohio. Light snow fell through the Ohio and Tennessee Valleys and eastward to southern New England and into North Carolina. Freezing weather reached to northern Florida and through the Mississippi Delta, but it was warmer in the Rockies.

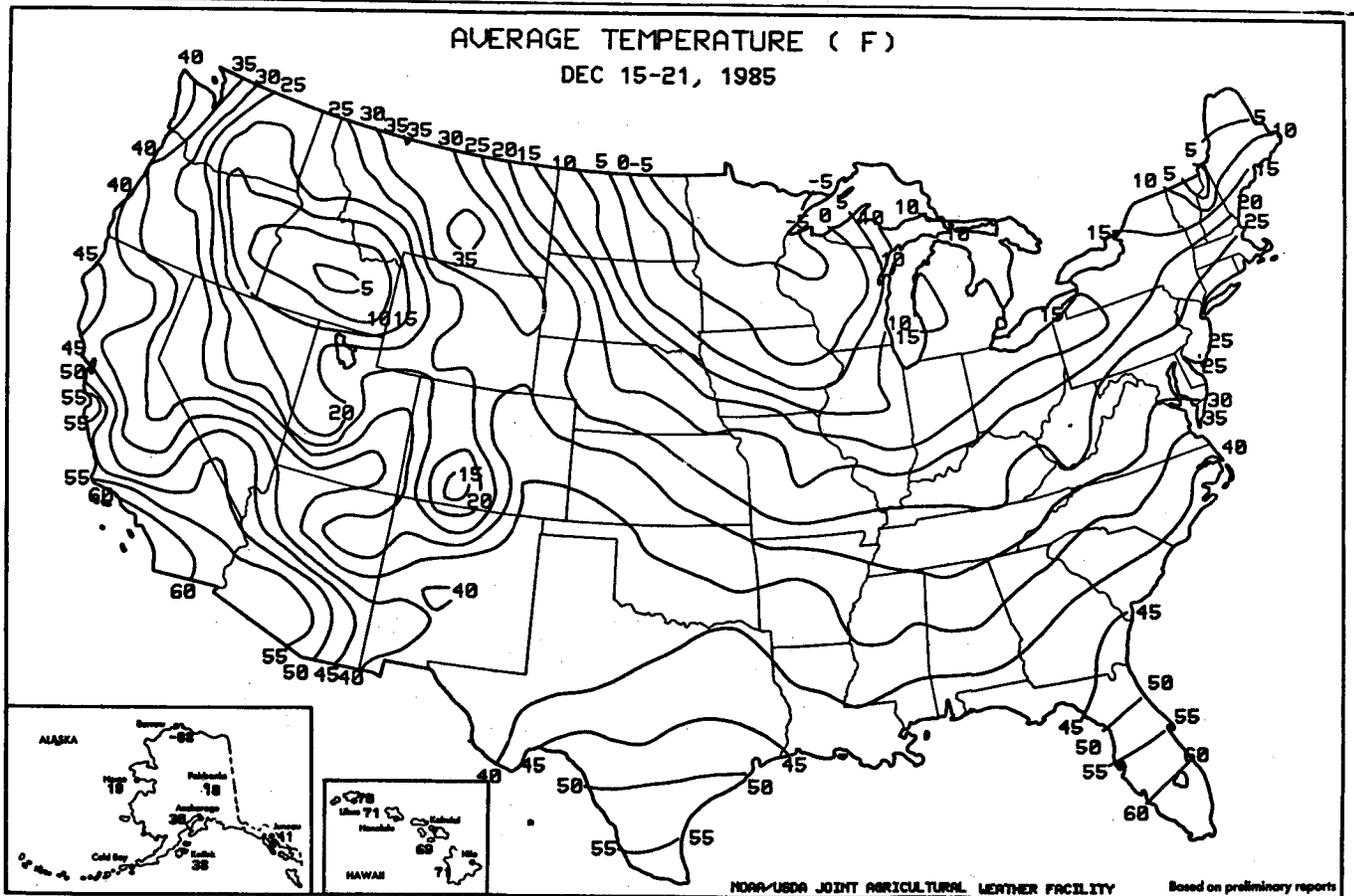
**SATURDAY...**Light snow was confined to the Great Lakes region and the Northeast. The cold air covered the area east of the Plains except most of Florida. Warming continued through the Rockies, but cold air persisted over the northern Plateau.

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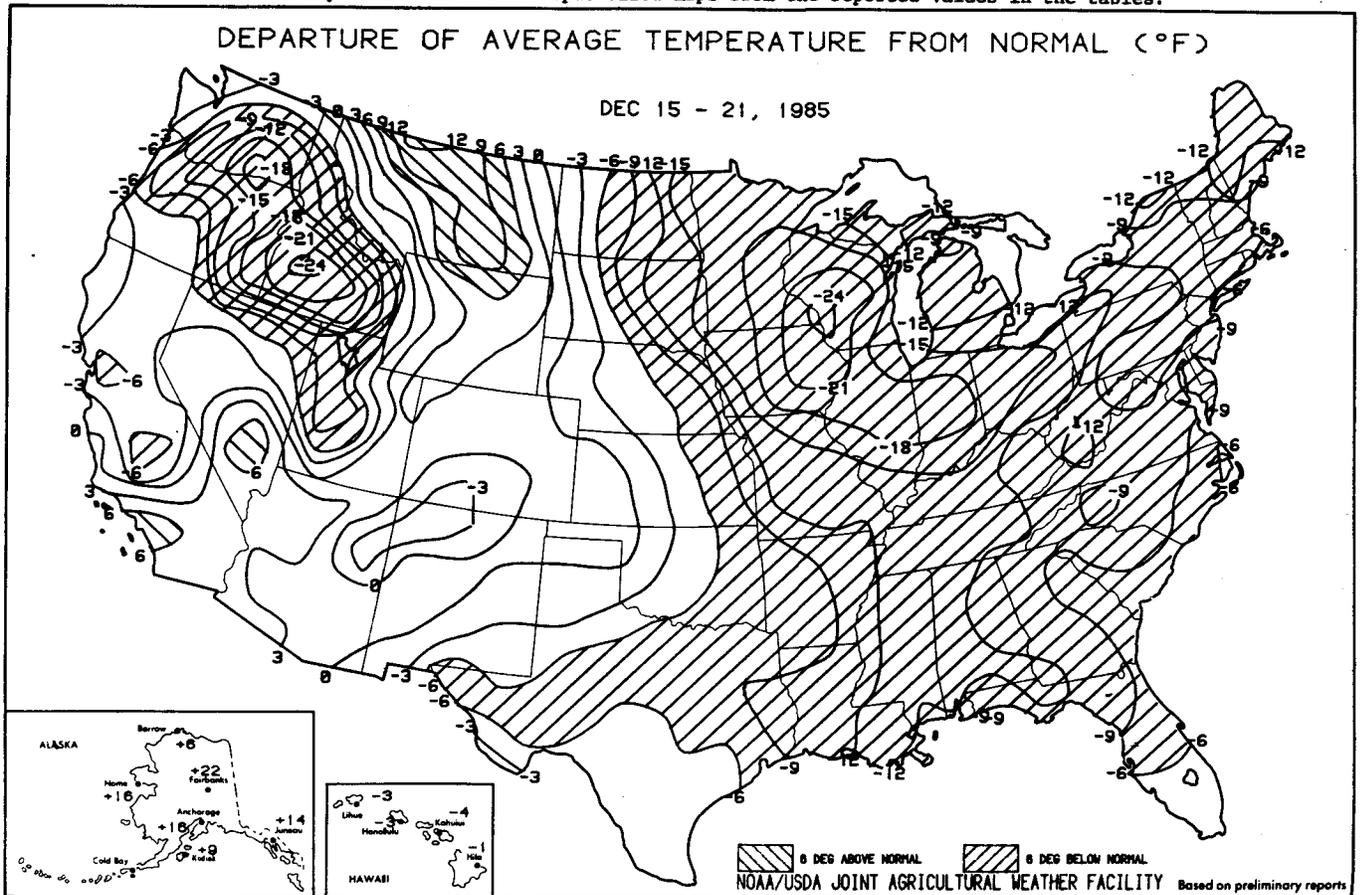
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Point values may differ on these computerized maps from the reported values in the tables.



Weather Data for the Week Ending December 21, 1985

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.	TOTAL, IN. SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE		TEMPERATURE °F		PRECIPITATION	
														MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	45	20	55	14	33	-13	0	-1.1	0	2.0	62	49.1	93	85	33	0	7	0	0
MOBILE	53	28	59	22	41	-12	0	-1.3	0	2.9	78	68.5	109	90	32	0	6	0	0
MONTGOMERY	49	23	54	17	36	-13	0	-1.1	0	3.1	97	45.9	96	92	34	0	7	0	0
AK ANCHORAGE	35	25	44	20	30	16	0	0	0	0	111	15.0	101	98	82	0	5	0	0
BARROW	-3	-13	7	-30	30	6	0	0	0	0	100	3.7	79	83	75	0	7	0	0
FAIRBANKS	20	-1	41	-12	10	22	0	0	0	0	2	11.6	114	92	75	0	7	0	0
JUNEAU	44	38	50	35	41	14	4.9	0	1.1	0	2	11.6	114	92	75	0	7	0	0
KODIAK	42	34	44	30	38	9	3.7	0	1.8	6.5	198	39.4	78	91	71	0	0	0	0
NOME	26	11	40	-6	19	16	0	0	1.9	16.2	399	77.9	108	98	79	0	2	0	0
AZ PHOENIX	72	43	77	38	57	4	0	0	0	0	158	20.7	142	94	66	0	7	0	0
PRESCOTT	59	23	62	20	41	4	0	0	0	0	153	7.8	115	74	20	0	0	0	0
TUCSON	72	35	77	28	54	4	0	0	0	0	2	15.1	83	72	22	0	7	0	0
YUMA	73	47	76	42	60	4	0	0	0	0	24	12.9	119	64	12	0	7	0	0
AR FORT SMITH	44	22	52	17	33	-8	0	0	0	0	105	2.7	108	46	19	0	0	0	0
LITTLE ROCK	45	25	56	17	35	-7	0	0	0	0	19	50.1	128	93	50	0	7	0	0
CA BAKERSFIELD	44	32	51	26	38	-10	0	0	0	0	128	51.0	114	83	53	0	6	0	0
EUREKA	55	39	59	36	47	-1	0	0	0	0	50	4.2	76	100	81	0	3	0	0
FRESNO	46	35	51	33	43	-4	0	0	0	0	65	23.0	63	90	73	0	0	0	0
LOS ANGELES	78	50	83	47	64	7	0	0	0	0	53	8.2	82	97	78	0	0	0	0
RED BLUFF	57	30	71	25	43	-3	0	0	0	0	44	9.3	81	52	16	0	0	0	0
SACRAMENTO	39	34	41	31	37	-3	0	0	0	0	91	13.8	68	98	53	0	5	0	0
SAN DIEGO	75	47	78	44	61	4	0	0	0	0	74	10.5	66	100	92	0	1	0	0
SAN FRANCISCO	54	39	62	37	46	-3	0	0	0	0	126	8.8	100	67	20	0	0	0	0
CO DENVER	48	22	60	16	35	3	0	0	0	0	40	11.8	64	99	59	0	0	0	0
GRAND JUNCTION	41	19	47	15	30	3	0	0	0	0	155	16.4	108	67	34	0	7	0	0
PUEBLO	44	19	56	16	30	3	0	0	0	0	5	12.0	154	90	45	0	7	0	0
CT BRIDGEPORT	32	14	39	7	29	-3	0	0	0	0	114	13.2	122	93	46	0	7	0	0
HARTFORD	30	17	38	3	22	-6	0	0	0	0	45	35.9	89	68	42	0	7	0	0
DC WASHINGTON	37	22	46	15	29	-9	0	0	0	0	36	36.6	85	77	42	0	7	0	0
FL APALACHICOLA	57	33	62	28	45	-10	0	0	0	0	26	35.8	94	79	38	0	6	0	0
DAYTONA BEACH	62	40	65	35	51	-8	0	0	0	0	112	67.1	125	90	34	0	3	0	0
JACKSONVILLE	58	33	62	29	45	-9	0	0	0	0	114	44.9	94	86	41	0	1	0	0
KEY WEST	69	62	71	58	66	-5	0	0	0	0	193	58.2	112	96	33	0	4	0	0
MIAMI	71	55	76	48	63	-5	0	0	0	0	90	41.0	105	87	61	0	0	0	0
ORLANDO	64	45	69	37	55	-7	0	0	0	0	206	55.2	97	85	58	0	0	0	0
TALLAHASSEE	55	25	62	19	40	-12	0	0	0	0	240	46.8	99	82	41	0	0	0	0
TAMPA	63	42	68	35	53	-8	0	0	0	0	201	62.1	98	97	29	0	7	0	0
WEST PALM BEACH	71	54	74	45	63	-4	0	0	0	0	37	44.1	96	83	36	0	0	0	0
GA ATLANTA	46	23	54	17	35	-9	0	0	0	0	58	47.3	80	88	57	0	0	0	0
AUGUSTIA	52	25	58	22	39	-8	0	0	0	0	58	49.2	104	72	30	0	7	0	0
MACON	52	25	58	20	39	-10	0	0	0	0	93	38.5	92	79	29	0	0	0	0
SAVANNAH	56	30	62	26	43	-7	0	0	0	0	85	35.3	81	85	28	0	6	0	0
HI HILO	79	63	82	60	71	-1	0	0	0	0	108	38.9	80	80	31	0	5	0	0
HONOLULU	81	61	83	58	71	-3	0	0	0	0	21	111.3	89	88	62	0	0	0	0
KAHULUI	79	58	84	57	69	-4	0	0	0	0	3	16.8	75	89	53	0	0	0	0
LIHUE	79	61	82	57	70	-3	0	0	0	0	41	15.6	84	96	57	0	0	0	0
ID BOISE	15	-3	18	-5	6	-25	0	0	0	0	0	25.7	61	89	57	0	0	0	0
LEWISTON	27	19	34	18	23	-12	0	0	0	0	144	11.2	100	90	72	0	7	0	0
POCATELLO	16	-5	21	-8	6	-20	0	0	0	0	30	9.6	78	98	78	0	7	0	0
IL CHICAGO	18	0	29	-9	9	-18	0	0	0	0	186	11.8	112	92	76	0	0	0	0
MOLINE	15	-7	26	-18	4	-21	0	0	0	0	130	39.9	122	74	41	0	7	0	0
PEORIA	18	-2	31	-13	8	-19	0	0	0	0	162	41.1	112	84	57	0	0	0	0
QUINCY	24	3	32	-7	14	-16	0	0	0	0	2.2	43.8	128	89	57	0	7	0	0
ROCKFORD	15	-3	28	-12	6	-18	0	0	0	0	193	43.1	116	90	63	0	7	0	0
SPRINGFIELD	22	-1	35	-10	11	-19	0	0	0	0	1.9	39.7	110	86	57	0	7	0	0
IN EVANSVILLE	29	10	41	-2	20	-15	0	0	0	0	2.4	38.9	117	88	55	0	7	0	0
FORT WAYNE	18	2	31	-5	10	-18	0	0	0	0	71	46.0	114	88	60	0	7	0	0
INDIANAPOLIS	22	2	35	-6	12	-19	0	0	0	0	136	35.7	106	86	61	0	7	0	0
SOUTH BEND	18	5	29	-3	12	-17	0	0	0	0	150	46.8	123	82	55	0	7	0	0
IA DES MOINES	17	-4	30	-16	7	-19	0	0	0	0	1.8	38.5	103	87	60	0	7	0	0
SIOUX CITY	18	-2	32	-18	8	-14	0	0	0	0	175	28.5	93	81	59	0	7	0	0
WATERLOO	13	-13	31	-25	0	-21	0	0	0	0	93	23.4	93	89	69	0	7	0	0
KS CONCORDIA	33	13	44	-5	23	-7	0	0	0	0	145	30.0	92	86	64	0	7	0	0
DODGE CITY	45	22	60	13	33	0	0	0	0	0	84	25.7	96	87	63	0	7	0	0
GOODLAND	41	21	56	16	31	1	0	0	0	0	19	22.6	110	89	48	0	7	0	0
TOPEKA	32	14	41	-3	23	-8	0	0	0	0	103	22.0	136	89	59	0	7	0	0
WICHITA	38	20	46	7	29	-5	0	0	0	0	76	44.6	135	85	56	0	7	0	0
KY BOWLING GREEN	35	14	46	6	25	-13	0	0	0	0	6	33.6	119	90	57	0	7	0	0
LEXINGTON	30	12	43	1	21	-15	0	0	0	0	56	40.4	85	84	52	0	7	0	0
LOUISVILLE	30	14	43	1	21	-15	0	0	0	0	42	37.7	85	81	49	0	7	0	0
LA ALEXANDRIA	52	30	61	25	41	-10	0	0	0	0	40	37.8	89	80	50	0	7	0	0
BATON ROUGE	54	28	61	23	41	-12	0	0	0	0	5.2	66.1	124	73	37	0	6	0	0
LAKE CHARLES	55	32	58	26	44	-10	0	0	0	0	94	58.8	108	87	29	0	5	0	0
NEW ORLEANS	53	31	59	25	42	-12	0	0	0	0	64	51.3	100	94	39	0	5	0	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending December 21, 1985

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	53	26	57	21	40	-9	0	-8	0	3.4	128	51.2	120	92	35	0	7	0	0
ME CARIBOU	11	-8	18	-19	2	-13	.2	-5	.1	1.5	68	28.4	80	83	54	0	7	3	0
PORTLAND	26	9	33	-4	17	-7	.2	-1.0	.1	2.2	70	33.8	80	79	42	0	7	1	0
MD BALTIMORE	36	17	46	8	26	-9	.2	-7	.1	2.7	32	36.6	90	83	38	0	7	1	0
SALISBURY	38	17	47	11	27	-11	.2	-7	.2	2.2	32	37.5	85	90	40	0	7	1	0
MA BOSTON	31	19	37	7	25	-8	.1	-9	0	1.2	37	36.4	86	80	42	0	7	3	0
CHATHAM	37	21	40	14	29	-6	.6	-6	.3	1.5	44	42.5	94	88	59	0	7	3	0
MI ALPENA	20	5	23	-7	13	-10	.1	-3	0	2.0	1.1	33.2	118	88	59	0	7	2	0
DETROIT	21	5	31	0	13	-15	.2	-3	.1	1.1	63	39.6	131	86	64	0	7	5	0
FLINT	20	5	25	-1	13	-14	.1	-3	.1	1.0	68	40.1	140	91	67	0	7	3	0
GRAND RAPIDS	21	9	28	15	11	-11	.3	-3	.2	1.4	78	40.4	120	90	68	0	7	7	0
HOUGHTON LAKE	17	4	19	-2	11	-11	.1	-3	.1	1.3	100	32.9	121	88	67	0	7	3	0
LANSING	20	6	25	0	13	-13	.1	-4	.1	.8	48	33.4	116	92	69	0	7	2	0
MARQUETTE	14	-9	20	-14	2	-15	.1	-5	0	3.2	185	51.1	140	97	67	0	7	5	0
MUSKEGON	23	13	29	6	18	-9	.4	-2	.1	1.5	85	40.8	133	90	66	0	7	6	0
SAULT STE. MARIE	16	-4	20	-20	6	-12	.8	-3	.4	2.4	132	38.3	117	91	68	0	7	7	0
MI ALEXANDRIA	7	-15	32	-21	-4	-18	.1	0	.1	1.2	238	25.9	106	87	74	0	7	2	0
DULUTH	4	-13	12	-21	-5	-18	.1	-3	.1	.4	45	31.5	108	88	61	0	7	1	0
INT'L FALLS	2	-17	22	-26	-7	-15	.2	-2	.1	.1	22	29.9	124	89	70	0	7	1	0
MINNEAPOLIS	10	-12	27	-17	-1	-20	.1	-1	.1	1.0	159	31.5	121	86	64	0	7	2	0
ROCHESTER	9	-13	26	-19	-2	-20	.2	-2	.1	.8	131	27.4	98	87	70	0	7	1	0
MS GREENWOOD	44	23	55	16	34	-2	.2	-1.3	.1	3.4	93	38.2	74	84	42	0	7	0	0
JACKSON	49	23	56	17	36	-12	0	-1.3	0	3.0	81	46.8	92	92	35	0	7	0	0
MERIDIAN	49	23	57	16	36	-12	0	-1.3	0	2.9	77	50.8	99	92	33	0	7	0	0
MO CAPE GIRARDEAU	34	12	45	8	23	-	.2	-8	.1	1.7	63	47.3	109	87	57	0	7	1	0
COLUMBIA	26	8	35	-4	17	-15	.2	-3	.2	3.5	259	55.9	157	92	65	0	7	2	0
KANSAS CITY	28	9	38	-6	19	-13	.2	-1	.1	1.2	127	52.7	151	83	57	0	7	2	0
SAINT LOUIS	28	12	38	.1	20	-14	.1	-4	.1	3.7	232	50.7	152	89	57	0	7	2	0
SPRINGFIELD	34	13	40	.3	23	-12	.2	-4	.1	3.1	166	56.5	146	91	56	0	7	4	0
MT BILLINGS	44	29	50	19	37	10	.2	-2	.1	.2	38	12.8	86	76	49	0	4	1	0
GLASGOW	33	12	38	0	22	6	.4	-3	.2	.4	200	12.8	112	94	76	0	4	4	0
GREAT FALLS	41	26	43	20	33	8	0	-2	0	.4	86	17.0	114	82	59	0	7	0	0
HAVRE	37	22	42	15	30	12	0	-1	.1	.1	13	11.1	101	92	70	0	7	0	0
HELENA	33	19	41	3	26	3	0	-1	0	.4	88	9.2	82	87	65	0	6	0	0
KALISPELL	31	18	35	5	24	0	.2	-3	.1	.4	42	14.4	94	99	88	0	7	1	0
MILES CITY	37	16	41	4	27	6	.4	-3	.2	.4	102	12.2	88	92	68	0	7	3	0
MISSOULA	28	16	41	11	22	-3	.2	-3	.1	.4	51	12.5	97	97	86	0	7	0	0
NE GRAND ISLAND	33	8	43	-9	20	-6	.1	0	.1	.3	57	28.7	124	90	64	0	7	2	0
LINCOLN	30	7	41	-9	19	-7	.1	0	.1	.4	82	30.9	116	84	62	0	7	2	0
NORFOLK	27	4	40	-12	16	-8	.2	0	.1	.5	107	25.8	109	89	63	0	7	2	0
NORTH PLATTE	33	9	42	-5	21	-4	.2	.1	.1	.8	239	19.4	100	90	64	0	7	3	0
OMAHA	23	4	39	-12	14	-11	.2	0	.1	.4	63	22.3	75	73	51	0	7	2	0
SCOTTSBLUFF	38	18	42	7	28	1	.1	-1	0	.9	229	11.6	80	89	62	0	7	2	0
VALENTINE	33	5	39	-14	19	-5	.2	-1	.1	.3	117	15.0	88	82	64	0	7	3	0
NV ELY	40	6	48	2	23	-3	0	-2	0	.5	92	9.7	110	84	45	0	7	0	0
LAS VEGAS	64	34	66	31	49	4	0	-1	0	.1	5	1.3	32	51	19	0	2	0	0
RENO	45	16	48	13	31	-1	0	-3	0	.3	42	4.8	68	95	42	0	7	0	0
WINNEMUCCA	42	10	44	8	26	-4	0	-2	0	.2	39	6.4	84	97	52	0	7	0	0
NH CONCORD	27	3	34	-8	15	-8	.2	-8	.1	1.5	60	30.7	86	91	46	0	7	0	0
NJ ATLANTIC CITY	34	14	45	7	24	-11	.2	-6	.2	.8	32	29.8	73	87	38	0	7	1	0
NM ALBUQUERQUE	50	22	54	18	36	-1	0	-1	0	.1	27	10.7	135	70	27	0	7	0	0
CLOVIS	50	25	58	22	37	-1	0	-1	0	.2	40	27.8	164	69	39	0	7	0	0
ROSWELL	56	22	63	16	39	-3	0	-1	0	.1	37	12.5	130	71	24	0	7	0	0
NY ALBANY	28	10	35	-1	19	-6	.1	-7	0	1.7	79	29.4	84	92	52	0	7	2	0
BINGHAMTON	21	10	29	3	15	-10	.2	-5	.1	1.8	87	33.2	92	98	63	0	7	4	0
BUFFALO	22	13	29	8	18	-10	1.5	-7	.5	3.3	137	44.4	122	91	58	0	7	1	0
NEW YORK	35	23	41	15	29	-7	.2	-8	.1	.7	25	36.9	88	68	38	0	7	1	0
ROCHESTER	23	11	30	7	17	-11	.1	-5	0	.9	53	29.4	96	88	57	0	7	2	0
SYRACUSE	26	15	33	9	20	-7	.2	-5	.1	1.5	68	32.2	84	91	59	0	7	4	0
NC ASHEVILLE	40	18	53	11	29	-10	.3	-5	.3	1.0	42	36.5	78	82	31	0	7	2	0
CHARLOTTE	45	23	54	18	34	-8	0	-7	0	.7	33	49.2	117	77	31	0	7	0	0
GREENSBORO	41	22	52	15	32	-8	.2	-7	.1	1.2	54	37.0	90	75	35	0	7	1	0
HATTERAS	49	38	55	30	43	-5	.2	-1.0	.1	.6	18	67.0	123	76	50	0	1	0	0
NEW BERN	49	28	58	24	38	-8	0	-8	0	.5	19	53.2	103	83	31	0	5	0	0
RALEIGH	43	21	54	15	32	-10	0	-7	.1	.7	34	38.2	94	75	32	0	7	0	0
WILMINGTON	51	28	60	23	40	-8	0	-8	0	1.1	49	43.7	84	77	30	0	5	0	0
ND BISMARCK	19	-7	42	-25	6	-9	.2	-2	.1	.3	90	17.8	117	90	70	0	7	3	0
FARGO	6	-14	37	-21	-4	-17	.1	-1	.1	.4	100	18.9	97	82	68	0	7	1	0
GRAND FORKS	4	-20	39	-30	-8	-19	.1	-1	.1	.1	28	17.0	94	84	66	0	7	1	0
WILLISTON	25	2	38	-14	13	-1	.4	-2	.2	.4	120	12.4	91	92	71	0	7	4	0
OH AKRON-CANTON	21	7	32	-1	14	-15	.2	-4	.1	2.5	136	38.6	110	87	65	0	7	5	0
CINCINNATI	27	7	39	-3	17	-16	.1	-5	.1	1.5	73	44.1	113	85	54	0	7	2	0
CLEVELAND	21	7	32	1	14	-17	.3	-3	.1	2.2	117	40.8	118	88	63	0	7	4	0
COLUMBUS	24	9	36	1	17	-15	.1	-4	.1	1.7	97	38.5	107	80	54	0	7	2	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending December 21, 1985

STATES AND STATIONS	TEMPERATURE °F							PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec. 1	PCT. NORMAL SINCE Dec. 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE		
DAYTON	22	5	36	-3	13	-18	.1	-.4	.1	2.1	124	35.7	105	86	60	0	7	2	0	0	
TOLEDO	20	6	31	1	13	-14	.1	-.5	.1	1.3	72	38.0	123	94	72	7	7	3	0	0	
YOUNGSTOWN	22	6	30	0	14	-15	.2	-.5	.1	1.8	96	39.4	108	88	62	0	7	0	0	0	
OK OKLAHOMA CITY	48	23	58	19	35	-.4	T	-.3	T	.3	31	44.3	145	84	44	0	7	1	0	0	
TULSA	43	24	50	17	34	-.6	T	-.4	T	1.4	105	51.3	134	86	48	0	7	1	0	0	
OR ASTORIA	52	30	55	25	41	-.2	0	-.2	0	2.4	31	41.2	63	97	65	0	5	0	0	0	
BURNS	19	-5	26	-10	7	-20	0	-.2	0	.7	116	8.6	115	11	1	0	7	0	0	0	
MEDFORD	42	23	47	22	33	-.5	T	-.8	T	.8	35	10.7	57	99	75	0	7	0	0	0	
PENDLETON	19	14	23	11	17	-19	T	-.4	T	1.0	92	11.0	95	98	87	0	7	0	0	0	
PORTLAND	39	25	42	21	32	-.9	T	-.5	T	2.2	51	22.4	63	90	59	0	7	0	0	0	
SALEM	42	21	43	17	31	-.9	0	-.6	0	2.2	46	23.3	61	96	59	0	7	0	0	0	
PA ALLENTOWN	31	15	38	7	23	-.7	T	-.8	T	1.4	55	46.5	108	85	52	0	7	0	0	0	
ERIE	24	12	31	8	18	-11	-.7	-.2	.2	2.1	89	44.7	116	89	57	0	7	1	6	0	0
HARRISBURG	32	18	40	12	25	-.8	-.1	-.1	.1	1.2	54	34.1	90	72	39	0	7	1	1	0	0
PHILADELPHIA	34	17	45	12	26	-.9	-.1	-.7	-.1	.9	39	35.2	87	85	39	0	7	1	1	0	0
PITTSBURGH	26	9	33	0	18	-13	-.2	-.3	.1	2.0	118	38.3	108	79	55	0	7	5	4	0	0
SCRANTON	25	12	33	1	19	-10	-.2	-.3	.1	1.8	102	40.1	117	86	52	0	7	4	2	0	0
RI PROVIDENCE	32	16	39	9	24	-.7	0	-.7	T	1.6	50	40.9	93	80	40	0	7	2	0	0	0
SC CHARLESTON	54	30	61	27	42	-.7	0	-.7	0	1.0	47	50.1	99	88	32	0	5	0	0	0	0
COLUMBIA	51	22	59	19	37	-.9	0	-.8	0	.8	35	47.7	100	90	26	0	7	0	0	0	0
FLORENCE	50	26	58	22	38	-.8	0	-.7	0	.9	44	33.7	79	80	27	0	6	0	0	0	0
GREENVILLE	46	22	56	16	34	-.9	0	-.9	0	.9	34	44.5	90	77	28	0	7	0	0	0	0
SD ABERDEEN	13	-10	40	-22	2	-14	.1	.2	.1	.5	141	18.7	106	90	73	0	7	0	0	0	0
HURON	16	-9	39	-30	4	-15	-.4	.6	.2	.6	148	25.0	134	86	57	0	7	2	5	0	0
RAPID CITY	39	15	49	4	27	1	-.6	.5	.3	.6	169	13.4	83	91	67	0	6	2	5	0	0
STOUX FALLS	16	-9	34	-23	3	-16	-.2	.1	.2	.4	85	27.1	113	90	70	0	7	2	2	0	0
TN CHATTANOOGA	42	19	54	14	30	-11	T	-.2	T	1.6	47	38.7	76	84	34	0	7	1	1	0	0
KNOXVILLE	39	17	51	12	28	-12	T	-.1	T	1.4	45	35.5	78	85	40	0	7	0	0	0	0
MEMPHIS	41	21	54	12	31	-12	T	-.1	T	2.0	60	46.4	93	81	44	0	7	0	0	0	0
NASHVILLE	39	15	55	7	27	-14	T	-.1	T	.9	28	30.7	65	85	38	0	7	0	0	0	0
TX ABILENE	53	25	66	20	39	-.7	0	-.2	0	T	5	22.2	97	83	40	0	6	0	0	0	0
AMARILLO	50	24	62	19	37	-.1	0	-.1	0	.3	79	22.4	119	89	40	0	7	0	0	0	0
AUSTIN	59	34	66	25	47	-.5	0	-.5	0	1.1	72	32.6	106	89	42	0	3	0	0	0	0
BEAUMONT	57	34	62	26	45	-.9	0	-.1	0	2.1	68	67.5	131	95	41	0	3	0	0	0	0
BROWNSVILLE	66	48	72	37	57	-.5	.4	.1	.3	.4	46	32.8	131	98	67	0	0	0	0	0	0
CORPUS CHRISTI	62	44	67	34	53	-.6	.5	.2	.4	1.6	179	36.7	124	94	61	0	0	0	0	0	0
DEL RIO	60	34	65	27	47	-.5	T	-.1	T	2	17.4	102	83	38	0	3	0	0	0	0	0
EL PASO	58	19	62	15	38	-.6	0	-.1	0	.1	18	8.2	106	73	22	0	7	0	0	0	0
FORT WORTH	52	26	59	22	39	-.8	0	-.4	0	.6	50	30.6	106	88	41	0	7	0	0	0	0
GALVESTON	55	43	60	36	49	-.8	.1	-.7	.1	1.9	77	40.7	104	88	59	0	0	1	0	0	0
HOUSTON	58	37	64	27	48	-.6	T	-.8	T	3.8	150	49.0	112	86	47	0	0	1	0	0	0
LUBBOCK	51	25	63	22	38	-.3	0	-.1	0	.2	56	23.1	131	89	40	0	7	0	0	0	0
MIDLAND	56	22	64	19	39	-.9	0	-.1	0	.1	14	16.4	121	90	31	0	7	0	0	0	0
SAN ANGELO	57	24	64	20	41	0	0	-.1	0	T	2	21.9	122	90	36	0	7	0	0	0	0
SAN ANTONIO	62	33	69	23	48	-.5	0	-.3	0	.1	9	41.3	144	88	39	0	3	0	0	0	0
VICTORIA	60	40	67	30	50	-.6	.2	-.3	.2	2.4	159	40.0	110	92	54	0	2	1	0	0	0
WAGO	55	28	65	24	42	-.7	0	-.4	0	2.0	151	32.9	108	94	43	0	7	0	0	0	0
WICHITA FALLS	51	23	62	20	37	-.7	0	-.3	0	.1	13	30.6	116	83	41	0	7	0	0	0	0
UT BLANDING	47	20	52	17	34	-.3	0	-.3	0	T	3	15.9	142	83	35	0	7	0	0	0	0
CEDAR CITY	42	12	44	10	27	-.3	0	-.1	0	.3	60	9.7	97	90	53	0	7	0	0	0	0
SALT LAKE CITY	29	21	35	14	25	-.5	T	-.4	T	1.2	128	16.8	113	85	71	0	7	0	0	0	0
VT BURLINGTON	23	4	29	-15	14	-.8	.1	-.5	0	1.4	81	33.0	100	84	55	0	7	2	1	0	0
VA NORFOLK	43	29	52	24	36	-.7	.1	-.6	.1	.7	31	44.7	101	79	36	0	6	1	1	0	0
RICHMOND	40	20	50	13	30	-.9	.1	-.7	.1	.5	19	49.1	114	78	33	0	6	1	1	0	0
ROANOKE	38	19	50	12	29	-.9	.1	-.6	.1	.7	35	49.7	130	64	35	0	7	0	0	0	0
WA COLVILLE	30	19	34	6	25	-.3	0	-.6	0	.7	42	13.4	80	94	89	0	7	1	0	0	0
QUILLAYUTE	53	28	56	23	41	0	0	-.3	0	3.0	27	59.4	60	100	61	0	6	0	0	0	0
SEATTLE-TACOMA	41	31	48	26	36	-.5	0	-.4	0	1.8	41	25.1	69	98	84	0	5	0	0	0	0
SPOKANE	26	12	29	3	19	-.9	T	-.5	T	.6	36	11.1	70	97	87	0	7	1	0	0	0
YAKIMA	20	13	23	6	16	-15	T	-.3	T	1.0	121	5.8	77	97	87	0	7	0	0	0	0
WV BECKLEY	30	12	41	1	21	-12	T	-.7	T	1.4	67	35.9	88	81	42	0	7	1	1	0	0
CHARLESTON	36	17	46	6	26	-10	.2	-.6	.1	2.3	104	40.6	98	72	38	0	6	2	1	0	0
HUNTINGTON	34	17	45	5	26	-11	.1	-.6	.1	1.9	90	44.4	112	75	44	0	7	1	1	0	0
PARKERSBURG	29	13	40	3	21	-13	.4	-.2	.4	1.8	98	35.2	87	85	54	0	7	2	0	0	0
WI GREEN BAY	8	-11	15	-18	-2	-22	T	-.3	T	1.4	134	38.0	138	82	58	0	7	1	1	0	0
LA CROSSE	8	-13	14	-19	-3	-24	.1	-.1	.1	1.0	132	28.7	96	81	58	0	7	1	1	0	0
MADISON	12	-8	25	-16	2	-20	.1	-.2	.1	2.1	188	38.5	127	86	56	0	7	2	1	0	0
MILWAUKEE	15	-1	25	-9	7	-17	.1	-.4	.1	2.1	148	36.6	121	78	48	0	7	2	1	0	0
WAUSAU	7	-13	14	-23	-3	-21	T	-.2	T	1.0	111	34.0	109	78	45	0	7	2	2	0	0
WY CASPER	35	22	40	13	29	3	T	-.1	T	1.1	259	11.7	104	79	59	0	7	2	1	0	0
CHEYENNE	39	24	49	18	32	3	T	-.1	T	.8	285	19.7	149	79	49	0	7	1	1	0	0
LANDER	36	12	42	8	24	1	0	-.1	0	1.6	390	10.6	82	85	50	0	7	0	0	0	0
SHERIDAN	43	26	47	13	35	10	.1	0	.1	.3	71	11.2	76	91	54	0	7	2	4	0	0
PR SAN JUAN	83	71	84	68	77	-.1	-.3	-.7	-.2	1.5	46	43.9	83	97	66	0	0	0	0	0	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 12-21-1985  
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, DEV DEV DEV DEV DEV, FROM FROM FROM FROM FROM, NORM L YR NORM L YR NORM L YR NORM L YR, PRCT PRCT PRCT PRCT PRCT. Lists weather data for various cities including Birmingham, Mobile, Montgomery, Anchorage, Barrow, Fairbanks, Juneau, Kodiak, Nome, Flagstaff, Phoenix, Prescott, Tucson, Winslow, Yuma, Fort Smith, Little Rock, Bakersfield, Eureka, Fresno, Los Angeles, Red Bluff, Sacramento, San Diego, San Francisco, Stockton, Denver, Grand Junction, Pueblo, Bridgeport, Hartford, Wilmington, Washington, Appalachicola, Daytona Beach, Fort Meyer, Jacksonville, Key West, Miami, Orlando, Tallahassee, Tampa, West Palm Beach, Atlanta, Augusta, Macon, Savannah, Hilo-Hawaii, Honolulu-Oahu, Kahului-Haui, Lihue-Kauai, Boise, Lewiston, Pocatello, Chicago, Moline, Peoria, Quincy, Rockford, Springfield, Evansville, Fort Wayne, Indianapolis, South Bend, Des Moines, Dubuque, Sioux City, Waterloo, Concordia, Dodge City, Goodland, Topeka, Wichita, Bowling Green, Lexington, Louisville, Alexandria, Baton Rouge, Lake Charles, New Orleans, Shreveport, Caribou, Portland, Baltimore, Salisbury, Boston, Gatham, Alpena, Detroit, Flint, Grand Rapids, Houghton Lake, Lansing, Marquette, Muskegon, Sault St Marie, Alexandria, Duluth, Int'l Falls, Minneapolis, Rochester, Saint Cloud, Greenwood, Jackson, Meridian, Cape Girardeau, Columbia, Kansas City, Saint Louis, Springfield, Billings, Glasgow, Great Falls, Raabe, Helena, Mt Kallispell, Missoula, Grand Island, Lincoln, Norfolk, North Platte, Omaha, Scottsbluff, Valentine, Ely, Las Vegas, Reno, Winnemucca, Concord, Atlantic City, Albuquerque, Clovis, Roswell, Albany, Binghamton, Buffalo, New York, Rochester, Syracuse, Asheville, Cape Hatteras, Charlotte, Greensboro, New Bern, Raleigh Durham, Wilmington, Bismark, Fargo, Grand Forks, Williston, Akron-Canton, Cleveland, Columbus, Cincinnati, Dayton, Toledo, Youngstown, Oklahoma City, Tulsa, Astoria, Burns, Medford, Pendleton, Portland, Salem, Alentown, Erie, Harrisburg, Philadelphia, Pittsburgh, Scranton, Providence, Charleston, Columbia, Florence, Greenville, Aberdeen, Huron, Rapid City, Sioux Falls, Chattanooga, Knoxville, Memphis, Nashville, Asheville, Amarillo, Austin, Brownsville, Corpus Christi, Del Rio, El Paso, Fort Worth, Galveston, Houston, Lubbock, Midland Odessa, Beaumont, San Angelo, San Antonio, Victoria, Waco, Wichita Falls, Blanding, Cedar City, Salt Lake City, Burlington, Lynchburg, Norfolk, Richmond, Roanoke, Coville, Quillayute, Seattle-Tacoma, Spokane, Walla Walla, Yakima, Beckley, Charleston, Huntington, Parkersburg, Green Bay, LaCrosse, Madison, Milwaukee, Wausau, Casper, Cheyenne, Lander, Sheridan.

## National Agricultural Summary

December 15-21, 1985

**HIGHLIGHTS:** Snow fell across the upper two-thirds of the Nation except for the Northwest, helping protect fall seeded crops from low temperatures. Row crop harvest was slowed by the adverse weather conditions, but some progress was made in most areas. The West and South had almost no precipitation except along the Gulf Coast of Texas and Louisiana, and Florida's Atlantic shoreline. Temperatures were below normal over most of the Nation except Southern California and parts of Arizona, Nevada, and the Rocky Mountain States.

Winter wheat was fair to good and was mostly protected from low temperatures by snow cover. Corn and soybean harvests continued to be hampered by adverse weather conditions. Harvest progress continued but was well behind normal. Cotton harvest continued at a near normal pace. Vegetable, citrus, and nut harvests made fair to good progress. Pastures were fair to good. Supplemental feeding increased because of lower temperatures, and hay and roughage shortages continued in some northern areas.

**SMALL GRAINS:** Winter wheat plantings continued in the Southeast and Southwest. Georgia and Alabama planting progress was behind normal with the emerged fields in fair to mostly good condition. Winter wheat was fair to good with most wheat in the major producing areas protected by snow cover from the low temperatures. Montana's winter wheat had some light wind damage and in Oklahoma there was some winter kill. In western Oregon frost heaving has damaged some fall seed grains.

**CORN:** Harvest activities for corn continue to lag behind normal. Only 4 of the 17 major producing corn States completed their harvest compared with 13 States normally finished with harvest by this time. Snow cover in the corn belt limited harvest progress, but frozen soils allowed some farmers to begin combining where snow cover is light. Michigan showed progress for the first time in several weeks combining 10 percent (%) of their crop. Indiana combined 4% increasing their percentage to 94% harvested. South Dakota, at 85% harvested, was up 6 percentage points. Wisconsin only has 77% combined compared with an average of 95%. Most corn remaining in the field was standing fairly well.

**SOYBEANS:** Soybean harvest made some progress during the week but was still behind normal because of unfavorable weather conditions. As fields started to dry, South Carolina and North Carolina made significant harvest gains, up 17 and 14 percentage points, respectively, from last week. There was some progress in the Midwest, but snow cover continued to hamper harvest activities. Michigan finally showed some harvest progress, up 5 percentage points, to 95% complete. In many areas soybean quality was hurt because of excessive moisture and continues to deteriorate under snow cover.

**COTTON:** Harvest activities continue to progress at a near normal pace. In the southeast, Georgia and North Carolina harvests increased 4 percentage points to 97 and 94%, respectively. The Delta's harvest is nearly complete with only a few fields remaining to be picked. In the southwest, Oklahoma farmers picked almost 20% of their crop last week while the Texas harvest was 85% complete. Harvest activities in the West showed progress as California's crop was mostly picked. Arizona and New Mexico harvests were 96 and 90% complete, respectively.

**OTHER CROPS:** Peanut harvest in Texas was 92% complete with some damage reported from cold weather.

Burley marketings were closed for the traditional Christmas shut down.

Florida's sugarcane harvest continued to be active and Louisiana harvest was 96% complete.

The sunflower harvest in Texas was nearly finished with 95% of the crop combined.

**VEGETABLES:** Florida's vegetable area was hit with cool temperatures. A light frost occurred in the central and northern areas, but no significant damage was expected. Snap beans, celery, sweet corn, cucumbers, eggplant, peppers, radishes, squash, and tomato harvests were the most active vegetable crops. Cabbage, carrots, cauliflower, escarole, and lettuce were just coming into production.

In Texas, broccoli, cabbage, and carrot harvests continued in the Rio Grande Valley. Cold temperatures ended the harvest for most bell peppers and tomatoes. Celery planting was continuing. In the San Antonio-Winter Garden area, spinach, carrots, and cabbage were harvested, but cold weather was having an adverse effect on most vegetables. Lettuce harvest continued and chili harvest was virtually complete in the Trans-Pecos areas. Onions were up but need warmer weather for improved growth.

Arizona lettuce and mixed vegetable harvests were continuing in the West and in the Salt River Valley. Vegetable harvest in Harquahala and Aguila were completed. Lettuce movement from the Casa Grande-Eloy-Marana district was finished. California broccoli harvest was moderate along the central coast, continued in the San Joaquin Valley and South coast, while increasing in the desert. Artichoke harvest was fairly light while asparagus fern cutting was active. Carrot harvest was fairly light along the central coast, moderate in the San Joaquin Valley, and light but increasing in the desert. Celery harvest was fairly light along the central coast and increasing along the south coast. In the Palo Verde Valley lettuce harvest was active while just starting in the Imperial Valley.

**FRUIT AND NUTS:** In Florida, the citrus crop was generally free of damage from the cold temperatures. Scattered frost may have burned some tender foliage and cold temperatures have reduced tree growth rates. Early orange harvest for processing is increasing. Movement of grapefruit has been good. Tangerine and tangelo harvests have been active. Cold temperatures in Texas only nipped the leaves of the citrus trees. Grapefruit and early orange harvests were winding down. In Arizona, lemons, grapefruit, tangerines, and Navel oranges were being picked. Frost damage was insignificant to the citrus crop. California citrus had no frost damage in the major producing areas. Central valley lemon harvest started with the desert harvest 80% complete. Navel orange harvest slowed due to fog. Pruning, grafting, weed control, and dormant spraying were the major activities in vineyards and deciduous orchards. The date harvest in the Coachella Valley was producing good-size fruit and yields.

Bacon, Fuerte, Hass, and Zutano avacados were being harvested. Pecan harvest across the Nation continues to progress. Georgia's pecans were 94% harvested with the condition of the crop fair to poor. Louisiana and Mississippi harvested 96 and

(Continued to back cover)

## 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:** Rainfall totals averaged under 0.10 in. Tennessee Valley; none elsewhere. Temperatures averaged 10° below normal over State.

Fieldwork 6.0 days. Soil moisture 82% adequate, 18% surplus. Soybeans harvested 98%, 100% 1984, 99% avg. Cotton harvested 100%, 100% 1984, 100% avg. Winter wheat planted 96%, 100% 1984, 98% avg.; 35% fair, 60% good, 5% excellent. Pasture 10% poor, 40% fair, 50% good. Livestock 35% fair, 65% good. Activities: Applying lime and soil testing; routine care of livestock and poultry.

**ARIZONA:** Mostly sunny, mild days and clear, cool nights. Afternoon temperatures mid and upper 70s lower deserts, 60s at 5,000 ft. level, 50s in higher elevations. No precipitation reported. Average temperatures varied from 3° below to 5° above seasonal normals.

Cotton harvested 96%, 98% 1984, 92% avg. Southeast, harvest slowed because of wet fields. Stalk shredding, plowdown active. Wheat, barley 40% seeded. Seedbed preparation moved forward, except in southeast. Alfalfa fair to good condition. Cutting continued in west, but hay not curing well due to cool weather. Corn west progressing. Lemons, grapefruit, tangerines, Navel oranges picked. Frost damage not a problem. Pecan harvest continued. Lettuce, mixed vegetables shipped at seasonal rates in west, Salt River Valley. Vegetable harvests in Harquahala, Aguila completed. Lettuce movement from Casa Grande-Eloy-Marana district finished.

**ARKANSAS:** Very cold, dry week as cold Arctic air repeatedly moved over State. Precipitation in form of light snow. Temperature extremes 40, 72°. Precipitation none to 0.30 in.

Soybean harvest made slight progress.

**CALIFORNIA:** Strong high pressure remained over State entire week. As a result, only rain recorded was some light drizzle in Woodland and Porterville. Persistent fog plagued many of State's valley while skies were clear elsewhere. Fog persistent areas were below normal for temperatures with other areas near to above normal. Individual temperatures for week ranged from 90° Alturas to 85° Los Angeles. Cotton harvest mostly complete. Plowdown continued, weather allowing. Some second-picking. Small grains planted. Early planted progress slowed from cold temperatures. Fog hampered herbicide application. Some corn unharvested; late harvested fields showed good yields. Herbicide activity alfalfa, sheepling off continued. No frost damage to citrus major areas. Pruning, grafting, weed-control and dormant spraying vineyards and deciduous orchards. Good sizes and yields in Coachella Valley date harvest. Bacon, Fuerte, Hass, and Zutano avacodos harvested. Central valley lemon harvest started, desert harvest 80% complete. Navel orange harvest slowed due fog. Dormant spraying almond orchards. Artichoke supplies fairly light. Cutting asparagus fern active. Broccoli harvest moderate central coast. Harvest continued San Joaquin Valley, south coast, increased desert. Carrot harvest fairly light central coast, moderate San Joaquin Valley. Desert harvest light but increasing. Cauliflower moderate supply Santa Maria. Harvest continued San Joaquin Valley, south coast, increased desert. Celery harvest fairly light central coast, increased south coast. Lettuce harvest active Palo Verde Valley,

started Imperial Valley. Fumigation of pepper hotbeds finishing San Joaquin Valley. Light harvest winter potatoes continued west Riverside County. Fall potato movement active Tulelake-Butte Valley. Sweetpotato packing active. Hotbed fumigation about complete. Cold temperatures northern north central districts continued hold back grass growth. Southern grazing areas experienced good growth result warm sunny conditions. Calving, lambing continued active. Bee hive movement San Joaquin Valley continued.

**COLORADO:** Light snow on 17th, mostly in northern mountains. Small amount of snow eastern part of State on 19th. Both instances precipitation was less than 0.10 in. Remainder of week was dry statewide. Temperatures were mostly 2 to 5° below normal east of Continental Divide. West of Divide, near normal temperatures were rule.

Corn harvest 96%, 97% 1984, 96% avg.

**FLORIDA:** Colder air invaded north, central, 14th, south area 15th. Remaining week remained cold. Freezing temperatures, frost north 15th to 17th, 20th. Patchy frost colder spots north on 15th, 20th. Widespread light rain ended most areas on 14th. Temperatures averaged 5 to 10° below normal north, 1 to 5° below normal south. Cold weather continued into weekend. Hard freeze occurred north 21st, 22nd. Light freeze, scattered frost prevailed central area and northern Everglades. Patchy frost occurred as far as Homestead on 23rd.

Soil moisture field crops area mostly adequate. Few wet areas Panhandle. Some dry counties central, northeast. Sugarcane harvest active. Soybean harvest mostly complete. Small grains fair condition. Wheat seeding delayed by wet fields. Land preparation underway for spring crops. Grazing most permanent pastures north and Panhandle localities ended due to heavy frosts. Pastures rated mostly good to excellent lower Peninsula, fair to good elsewhere. Cattle on south generally good condition, fair to good elsewhere. No damage from cold temperatures 21st to 22nd, scattered frost may have burned some tender foliage. Cold weather reduced tree growth rate, early orange harvest for processing increasing. Grapefruit movement good, tangerine and tangelo harvest active. Cool temperatures prevailed vegetable area. Light frost occurred central, north areas. No significant damage expected, harvest active most crops. Snapbeans, celery, sweet corn, cucumbers, eggplant, peppers, radishes, squash, tomatoes constitute volume crops being shipped. Cabbage, carrots, cauliflower, escarole, lettuce coming into production seasonally. Strawberry harvest gaining, size medium to large.

**GEORGIA:** Cold, dry week. Temperatures 5 to 10° below normal. Range 10° Blairsville to 64° Claxton. No precipitation recorded most locations.

Days suitable for fieldwork 4.3. Soil moisture 4% short, 71% adequate, 25% surplus. Main activities: Planting small grains and harvesting cotton, soybeans and pecans as weather and field conditions permitted. Cotton 97% harvested; 16% very poor, 38% poor, 27% fair, 16% good, 3% excellent. Grain sorghum 97% harvested; 11% very poor, 26% poor, 44% fair, 19% good. Soybeans 83% harvested; 28% very poor, 42% poor, 26% fair, 4% good. Wheat 84% planted; 71% emerged; 2% very

poor, 5% poor, 38% fair, 54% good, 1% excellent. Rye 97% planted; 3% very poor, 7% poor, 36% fair, 53% good, 1% excellent. Other small grains 94% planted. Pecans 94% harvested; 4% very poor, 30% poor, 59% fair, 7% good. Pastures 3% very poor, 13% poor, 43% fair, 40% good, 1% excellent. Cattle 33% fair, 66% good, 1% excellent. Hogs 28% fair, 69% good, 3% excellent.

**HAWAII:** Crops made fair progress under mostly sunny skies. Variable winds 5 to 15 mph. Harvesting activity still slow on some islands due to weather delayed plantings in November, wind damage in December and slower growth due to cooler temperatures. Papaya harvesting at a low level but expected to pick-up in a few weeks. Banana orchards fair condition. Pineapple harvesting continues for fresh fruit sales.

**IDAHO:** High pressure dominated weather over State. Both temperatures and precipitation below normal. Winds light allowing cold stagnant air to remain trapped in most valleys.

Minimal farm activity due to weather. Primarily livestock care, feeding, and marketing. Potato frost damage being monitored. Livestock good with adequate feed supplies. Early lambing continues.

**ILLINOIS:** Temperatures were 18 to 20° below normal northwest and northeast; 15 to 17° below normal for remainder of State. Precipitation below normal for entire State. Precipitation totaled none to 0.30 in.

**INDIANA:** Below normal precipitation mostly less than 0.10 in. as snow. Below normal temperatures. Sub-zero temperatures in much of State until 22nd.

Frozen soil permitted some harvesting activity but snowcover set limits on amount. Corn 94% harvested, 97% 1984, 100% avg. Soybeans 97% combined, 97% 1984, 100% avg. Other activities: Hauling manure, thawing water supplies, repairing equipment, caring for livestock and usual chores.

**IOWA:** Cold week averaging 15 to 20° subnormal. Low -28° 19th. Many daily record lows during week. Snowfalls 16 to 17th, 19th to 20th. New snow 1 to 6 in. southwest two-thirds, tapering off to little or none northeast. Snowcover from 2 in. southwest to 10 to 15 in. northeast.

Little crop harvesting progress due to snowcover. Livestock good condition. Hay supplies adequate.

**KANSAS:** Temperatures averaged mid 20s north central, northeast and east central, mid 30s western third of State. Eastern third 6 to 7° below normal, central third 2 to 4° below normal, near or slightly above normal western third. Precipitation averaged 0.10 to 0.15 in. north central and eastern third of State, 0.60 in. or less elsewhere.

Some late soybean harvesting and caring for livestock. Wheat mostly dormant stage, moisture conditions favorable. Livestock receiving winter rations, feed supplies ample.

**KENTUCKY:** Dry early with seasonal temperatures. By mid-week an Arctic outbreak brought coldest readings of season. Temperatures dipped into single digits. Several record lows morning 19th. Lows averaging in teens; high's in 30s. Cold outbreak followed by first significant snowfall, most locations between 1 to 3 in. Snow was very dry, water equivalency of less than 0.21 in.

Minimal amounts fieldwork, but some corn, soybeans and sorghum still in field. Burley markets closed for holiday break on 19th, over 80% of expected marketings sold. Livestock relying primarily on supplemental feed.

**LOUISIANA:** Temperatures averaged 80 to 130 below normal. Temperature extremes 200; 630. No rain.

Days suitable for fieldwork 4.4. Soil moisture 69% adequate, 31% surplus. Cotton 100% harvested, 97% 1984, 99% avg. Soybeans 99% harvested, 99% 1984, 99% avg. Pecans 96% harvested, 89% 1984, 94% avg. Sweetpotatoes 99% harvested, 100% 1984, 100% avg. Vegetables fair. Sugarcane 96% harvested, 98% 1984, 96% avg. Winter wheat fair; 95% planted, 98% 1984, 97% avg.; 90% emerged, 96% 1984, 95% avg. Pasture fair; livestock fair to good.

**MARYLAND & DELAWARE:** Maryland: Temperatures mostly 6 to 10° below normal; lows mostly 10 to 15°, highs in lows to mid 40s. Precipitation averaged 0.15 in.; mostly as snow on 20th.

Fieldwork 4.6 days suitable. Topsoil and subsoil moisture adequate. Soybean harvest 95% complete, 100% 1984, 100% avg. Soybean harvest should be complete soon if soil remains frozen. Small grain growth has slowed now with colder temperatures but remains in good condition. Tobacco stripping continues.

Delaware: Temperatures 8 to 11° below normal; lows in low teens, highs in mid 40s. Precipitation average 0.10 in. ranging from 0.06 to 0.20 in.

Fieldwork 3.3 days suitable. Topsoil moisture surplus, subsoil moisture adequate. Fieldwork was concentrated on soybean harvest which is now more than a month behind normal pace. Soybean harvest 96% complete, 100% 1984, 100% avg. With soils now frozen, soybean harvest can be completed.

**MICHIGAN:** Temperatures across State averaged 11° below normal. Precipitation light lower Peninsula to moderate upper Peninsula. Temperatures ranged from a high of 34° to a minimum of 20° below zero.

Corn 90% harvested, 100% 1984, 100% avg. Soybeans 95% harvested, 100% 1984, 100% avg. Winter wheat 5% poor, 20% fair, 55% good, 20% excellent. Cold and dry weather helped farmers harvest corn and soybeans.

**MINNESOTA:** Another bitterly cold week with precipitation below normal. Temperatures averaged 11 to 21° below normal. Temperature extremes -27°; 41°. Precipitation averaged 0.07 in. above normal southwest 0.06 to 0.24 in. Below normal elsewhere. Snow depths, weeks end averaged 8 to 18 in.

Corn remaining in fields still standing well; harvest activity continuing slowly, mostly southern portion. Livestock condition generally good. Producers with unconfined livestock busy plowing access roads and hauling feed. Hay marketing becoming very active. Activity at elevators slow.

**MISSISSIPPI:** Average temperatures 10° below normal, extremes 70; 64°. One to 3 in. snow northern counties.

Fieldwork 2.9 days suitable, 4.0 1984, 2.2 avg. Soil moisture adequate. Main activities: Planning for '86 and following farm bill progress. Soybeans 98% harvested, 94% 1984, 98% avg. Wheat 98% planted, 90% 1984, 98% avg. Pecan harvest 89% completed. Feed and hay supplies adequate. Pasture and livestock condition fair.

**MISSOURI:** Cold air retained its grip on State averaging 13° below normal, ranging from 12° below Bootheel to 15° below northeast. Warmer weekend temperatures melted snow from roads and fields over most areas. Precipitation averaged around 0.10 in. in form of snow. One to 4 in. fell latter part of week.

No appreciable fieldwork accomplished. Main activities were livestock oriented.

**MONTANA:** Moderating temperatures during week. Cold air west, southwest valleys with very foggy conditions. Temperatures in these areas slightly below normal. Mostly windy days along Continental Divide and central areas kept temperatures from 8 to 14° above normal. Modified Arctic air and frequent snow over northeast and southeast resulted in temperatures near normal to 7° above normal. Precipitation confined to northeast and southeast. Amounts ranged from 0.33 to 0.66 in.

Winter wheat condition 5% poor, 60% fair, 30% good, 5% excellent. Snowcover protection 5% poor, 20% fair, 70% good, 5% excellent. Wind damage to winter wheat 10% none, 90% light. About 95% sheep and cattle receiving supplemental feed. Hay and roughage supplies 75% short, 25% adequate. Grazing on pastures and ranges 5% poor, 60% difficult, 35% closed. Warmer weather opened up some grazing helping to conserve scarce hay.

**NEBRASKA:** Temperatures warmed during week. Panhandle 3° above normal, central and east 4 to 8° below normal as cold air moved out late week. Precipitation averaged 0.10 to 0.20 in. across State.

Warming trend over weekend beneficial to reducing snow depth and drying standing grain. Increased harvesting activity should follow. Limited corn harvesting progress past week. Winter wheat condition mostly good to excellent. Heavy snowcover in Panhandle and southwest districts providing protection against freezing temperatures. Ground froze very little, blowing snow minimal.

**NEVADA:** High pressure at surface and aloft locked in place throughout period. Resulted in cold air being trapped many valleys with warmer air at higher elevations. Light to heavy morning fog reported several valleys. Smoke, haze, and smog filled to more populated western valleys. Temperatures averaged below normal. Mountain sites warmer and generally free of fog. Extremes 20; 75°.

Freezing fog hard on newborn lambs and calves. Some chopping ice reported due to freezing night temperatures.

**NEW ENGLAND:** Precipitation evenly distributed across region during week ranging from 0.05 to 0.15 in. Average temperatures were below normal ranging from single digits over northern Maine to teens over central New England to mid 20s over southern coastal areas.

Normal winter activities. Shipping potatoes, apples and milk.

**NEW JERSEY:** Temperatures below normal, averaging 21° north, 24° south, 28° coastal. Extremes 20; 46°. Precipitation below normal, averaging 0.05 in. north, 0.15 in. south, 0.14 in. coastal. Heaviest 24-hour total 0.29 in. on 20th and 21st. Snowfall averaged 4.20 in. on 20th and 21st. Depth of snow on ground was 1 in. Trace amounts in other north and south locations.

Soil moisture adequate to excessive. Most fall sown grains good condition. Farmers caring for livestock, pruning fruit trees, selling Christmas trees and tending to other normal winter chores.

**NEW MEXICO:** Average temperatures 1 to 5° above normal. Temperatures -7° northern mountains to 70° southeastern Plains. No precipitation reported statewide.

Days suitable for fieldwork 6.4. Soil moisture 52% short, 48% adequate. Cotton 22% poor, 22% fair, 56% good; 90% harvested, 85% 1984, 94% avg. Barley 40% fair, 60% good. Irrigated wheat 33%

fair, 67% good. Dryland wheat 14% poor, 43% fair, 43% good. Irrigated grain sorghum 60% fair, 30% good, 10% excellent. Dryland grain sorghum 20% poor, 40% fair, 20% good, 20% excellent. Pecans 43% fair, 57% good. Chile 67% fair, 33% good. Cattle 41% fair, 59% good. Sheep 33% fair, 67% good. Range 5% very poor, 18% poor, 54% fair, 18% good, 5% excellent.

**NEW YORK:** Temperatures averaged 5 to 10° below normal, ranging from 13 to 20° across State. Extremes during week were -23° Massena and +41° New York City. Precipitation in form of snow in most areas was below normal, less than 5 in., except in areas around Lake Erie and Lake Ontario, where snow squalls deposited about 10 to 20 in. Watertown area received about 26.5 in. during week. Cold Canadian Arctic air was dominant with snow squalls throughout week.

Farm activities during week included caring for livestock, grading and packing late season storage crops and preparing for arrival of more cold weather.

**NORTH CAROLINA:** Temperatures averaged 7 to 10° below normal statewide. Rainfall ranged from none to 0.47 in. across State. Soil moisture 1% very short, 3% short, 81% adequate, 15% surplus.

Days suitable for fieldwork 4.7. Condition: Pasture 10% poor, 32% fair, 57% good, 1% excellent. Wheat 21% fair, 77% good, 2% excellent. Oats 20% fair, 78% good, 2% excellent. Barley 2% poor, 17% fair, 81% good. Rye 19% fair, 80% good, 1% excellent. Rye 19% fair, 80% good, 1% excellent. Harvest: Soybeans 77%, 96% 1984, 92% avg. Cotton 94%, 97% 1984, 97% avg. Farm feed supplies: Hay and roughage 2% short, 94% adequate, 4% surplus. Feed grains 5% short, 88% adequate, 7% surplus. Major farm activities: Harvesting soybeans, picking cotton, seeding small grains, fall plowing, preparing tobacco plant beds, tending livestock, conservation work, pruning apple trees, mowing ditches, cutting firewood and general farm maintenance.

**NORTH DAKOTA:** Cold, snowy weather prevailed. Temperatures averaged 3 to 8° below normal west and 13 to 16° below normal east. Lowest temperature reported -32° northeast, 20th. Warm air swept State late week. South central reported 45° on 21st. Cold air moving in again. Most State received above normal precipitation. Several light snowfalls occurred. West received heaviest amounts. Southwest received 0.59 in. of water equivalent for week.

Snowcover statewide, generally sufficient to protect fall seeded crops and alfalfa. Coverage limiting any grazing.

**OHIO:** Highs averaged low to mid 30s, lows from -5 to 5°; averages 12 to 15° below normal. Precipitation widespread, mostly as snow; water equivalent from 0.05 to 0.40 in.; snowcover from traces to 1 in. south to 3 to 6 in. north. Four inch bare soil temperatures 30s.

Corn and soybean harvest remain unfinished. Combining continued; moisture high on recently harvested corn and soybeans. Snowcover adequate for winter wheat.

**OKLAHOMA:** Temperatures averaged 7° below normal northeast third to 2° above normal Panhandle. Precipitation averaged none western and southern third to 0.04 in. northeast.

Mild late-week temperatures, dry weather accelerated cotton harvest, nearly 75% harvested. Warm weather caused wheat to break dormancy. Some green appearing in wheat but only limited growth. Recent harsh weather caused some winterkill. No disease or insect problems. Cattle good condition

but sudden temperature fluctuations worry producers. Wheat pasture, pastureland supplying good forage for grazing.

**OREGON:** Temperatures at or just above normal along coast, up to 110 colder than normal western interior, 2 to 220 colder than normal east of Cascade range. Precipitation statewide well below normal with just traces falling at some inland locations west side and north central areas. Soil moisture 100% adequate. Snow covers entire State east of Cascades. West, frost heaving has caused some damage in fall seeded grain, clover and grass seed fields. Dormant spraying of fruit trees progressing west. Pruning underway some orchards all growing areas. Still no indication of caneberry damage due to cold snap of later November in Willamette Valley. Potatoes storing well northeast; concerns about freeze damage other areas are unconfined. All cattle on winter feeding grounds and hay. Grass is dormant in west; eastern rangeland snow covered. Livestock condition fair to good. Calving proceeding normally.

**PENNSYLVANIA:** Cold dry week across State. Average temperatures 190, 100 below normal, coldest since February. Precipitation averaged 0.20 in., 0.49 in. below normal. Snow belt areas and most mountain sections received daily snow. By week's end northern areas near Lake Erie had 1.5 feet of snow, mountain areas 1 to 5 in., only a trace on ground southern areas. Days suitable 4.0. Corn for grain 95% harvested, 100% 1984, 100% avg. Activities included harvesting corn, hauling manure, cutting firewood.

**PUERTO RICO:** Island average rainfall 0.43 or 0.55 in. below normal. Highest weekly total 2.75 in. Highest 24-hour total 1.00 in. Temperature averaged about 77 to 76° on coasts and 71° interior divisions. Mean station temperature ranged from 77.5 to 63.4°. Extremes 91°; 50°.

**SOUTH CAROLINA:** Weather colder than usual. Early morning temperatures well below freezing over most of State. No significant precipitation fell during week. Soybean harvest active in drier fields, 73% harvested, 95% 1984, 92% avg. Quality of beans poor. Cotton harvest virtually complete some scrapping continued. Some late small grain planting continued as soils dried out.

**SOUTH DAKOTA:** Unseasonably cold. temperatures ranged from 150 below east and central to near normal west. Extremes -30° Huron; 50° Spearfish. Snowfall averaged above normal. Snowcover depth ranges from 5 to 30 in. Corn harvest progressing slowly. Corn 85% harvested, 100% 1984, 100% avg. Livestock good condition. Feed supplies short west, adequate elsewhere.

**TENNESSEE:** Temperatures averaged 9 to 120 below normal. Precipitation fell late week providing 1 in. snowcover throughout State. Soybeans 100% harvested, 97% 1984, 100% avg. Cotton 100% harvested, 97% 1984, 100% avg.

**TEXAS:** Most State fair with cool to mild temperatures. Couple weak fronts slipped into region, producing northerly breezes short time. Showers, light rain developed Lower Valley, no heavy amounts. Precipitation below normal all areas, except Lower Valley above normal. Temperatures below normal most areas. Lower Valley above normal.

**Crops:** Cotton 85% harvested, 69% 1984, 85% avg. Condition 75% normal, 64% 1984. Cotton 1% failure, 1% poor, 49% fair, 45% good, 4% excellent. Harvesting some progress last week as snow from previous week began melting Plains. Early morning frost kept producers out of fields until mid-day. Many producers entering final stages harvesting. Another week or two open weather allow most producers Plains, Cross-Timbers finished harvesting. Cotton stringing out some areas because snowfall. Producers Trans-Pecos winding down harvest for season. Sorghum 99% harvested, 100% 1984, 100% avg. Harvest virtually completed for season. Later fields some damage from snow, ice two weeks ago across Plains. Wheat 98% planted, 100% 1984, 100% avg.; 93% emerged, 99% 1984, 98% avg. Condition 83% normal, 83% 1984. Wheat 3% poor, 33% fair, 51% good, 13% excellent. Small grains most of State continued slow growth because cold temperatures. Across Plains, snow melt provided some needed moisture. Some rust still showing scattered fields. Cross-Timbers, Blacklands, wet ground delayed final planting wheat, oats. Many producers may not plant, normal planting season now over. Some oats these areas burned by freezing temperatures. Small spraying Blacklands for greenbugs, rust. Most fields central, east providing good grazing. Many fields still too boggy to graze. Good rain would improve growth these areas. Peanuts 92% harvested, 96% 1984, 98% avg. Harvesting progress last week, virtually completed Cross-Timbers. Many fields damage from cold weather. Harvesting increased south, producers tried harvest quickly to reduce further damage from cold weather. Soybeans 85% harvested, 99% 1984, 98% avg. Harvest resumed upper coast, reduced yields, quality because excessive moisture. **Other Field Crops:** Sugarbeets 91% harvested, 100% 1984, 99% avg. Pecans 73% harvested, 90% 1984, 85% avg. Sunflowers 95% harvested, 98% 1984, 97% avg. Oats 91% planted, 100% 1984, 99% avg.

**Commercial Vegetables:** Rio Grande Valley harvest broccoli, cabbage, other greens continued. Harvest carrots increased. Cold temperatures ended most remaining tomatoes, bell peppers. Celery planting continued. Cold temperatures only nipped leaves of citrus trees. Production grapefruit, early oranges winding down. San Antonio-Winter Garden harvest spinach, carrots, cabbage continued. Cold weather adverse effect most vegetables. Good volumes reported. Trans-Pecos, lettuce harvest continued. Chili harvest virtually complete. Onions up, but need warmer temperatures. Pecan harvest good progress, nearly complete some areas south, central. Quality down. Wet fields continue delay harvest east.

**Range and Livestock:** Ranges, pastures suffered from recent cold weather; continue to provide adequate grazing. Small grains provided less grazing because slow growth, excessive wetness some areas. Livestock conditions holding steady because supplemental feeding. Fall calving, lambing continuing. Some shrinkage body condition resulted from cold temperatures across Plains.

UTAH: Temperatures all divisions were below normal except southeast, normal. North central coldest, 10° below normal. Week dry all divisions except 3 stations reported 0.01 and 2 reported trace.

Fog prevailed all week northwestern valley. No field activities possible. Livestock marketings slow during holiday season. Considerable dairy quality hay moving to California.

VIRGINIA: Cold, dry most of period. Light snow on 20th. Temperatures averaged 8° below normal. Range from low to 20° mountains to high of 53° south central.

Days suitable for fieldwork 3.2. Topsoil moisture ratings 73% adequate, 27% surplus. Soybean harvest 82% complete, 97% 1984, 93% avg. Few fields still wet. Burley, fire-cured, sun-cured markets close end of week until after Christmas. Pasture land, winter grains mostly excellent. Beginning to prune orchards. Lambing and calving active. Slaughtering hogs. Cold weather requiring more care and feeding of livestock. Feed supplies adequate or better. Other activities: Fencing, equipment repair, forage, and soil sampling, meetings, normal fall/winter chores.

WASHINGTON: Strong high pressure aloft held moist, cold layer near surface across State. Clear on coast. Areas of freezing drizzle, few snow flurries east.

Days suitable for fieldwork less than 1. Soil moisture 11% short, 89% adequate. Range and pasture 73% short, 27% adequate. Hay supplies 45%

short, 55% adequate. Winter wheat 100% emerged, 100% 1984, 100% avg. Snowcover still adequate on fall crops, although snow-packing is occurring some areas. Pruning continues, orchards with some reports of bud damage to cherries and grapes.

WEST VIRGINIA: Temperatures averaged 7 to 15° below normal. Low -10° Lewisburg; high 51° Williamson. Statewide average temperature 22°. Snowfall average 1 to 4 in. Some areas in higher mountains received 6 plus in. Precipitation totals below normal Tarra Alta. Heaviest of 0.48 in, least a trace, Williamson and Martinsburg. Statewide average 0.13 in.

Days worked averaged 3.5. Soil moisture adequate to surplus. Feed supplies adequate to short.

WISCONSIN: Bitter cold temperatures averaged 15 to 30° below normal most week. No significant new snow. Snow depths from 1 to 6 in. southeast to 36 in. north average depth 14 in.

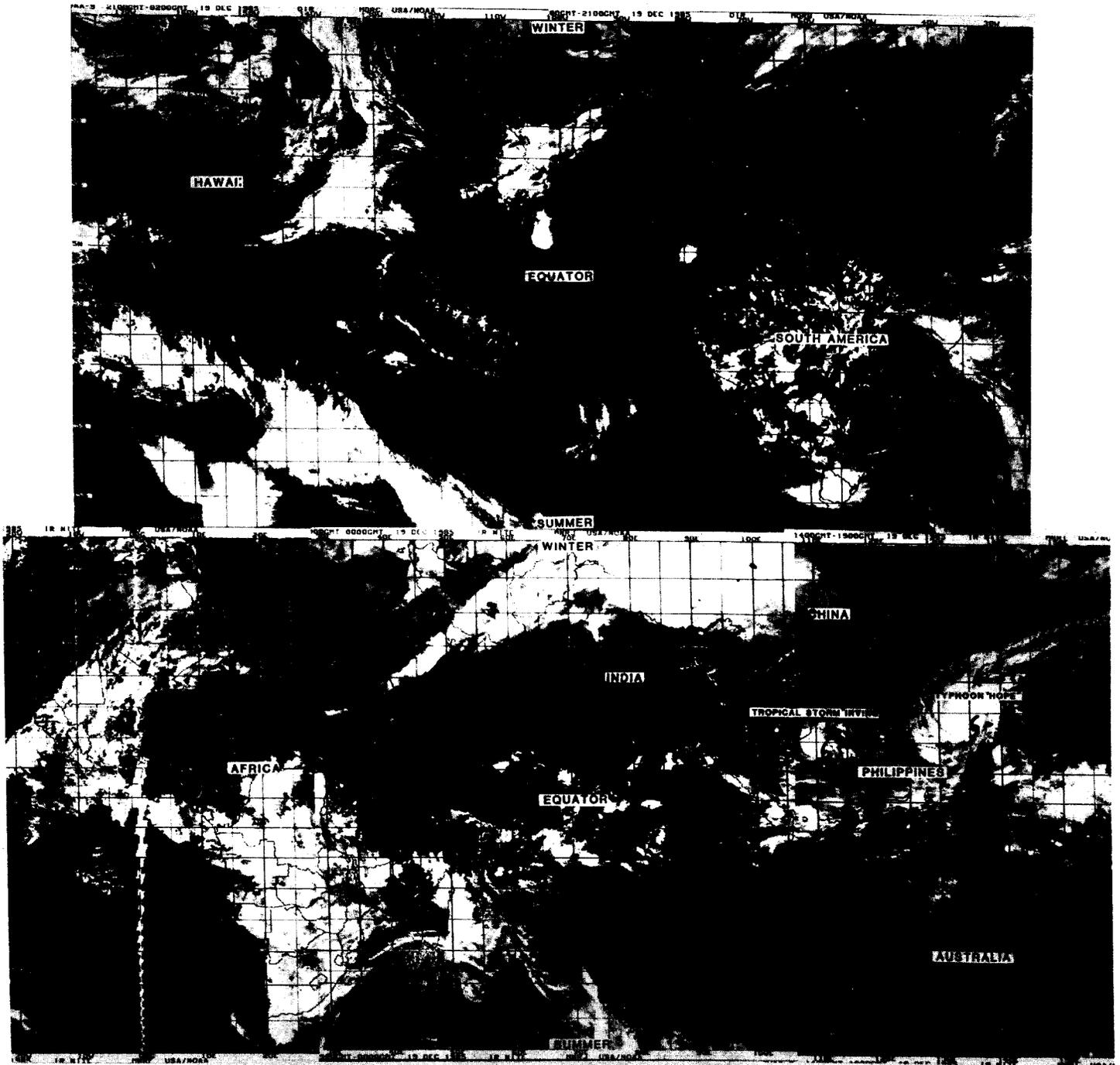
Corn harvested 77%, 100% 1984, 95% avg.; corn standing well in fields. Soybeans harvested 78%, 100% 1984, 96% avg.; quality in field deteriorating under snowcover.

WYOMING: Temperatures below normal northwest, above normal northeast. Dry over most of State, except extreme northeast which received an inch of moisture. Snowcover melting late in week.

Winter wheat snow covered, mostly good condition. Livestock fair to good condition. Supplemental feeding continues, hay supplies remain short some areas.

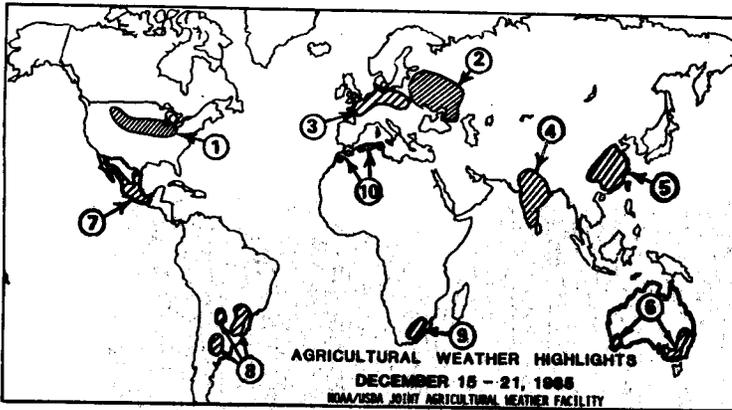
# GLOBAL WEATHER SATELLITE IMAGE

December 19, 1985



International Weather and Crop Summary

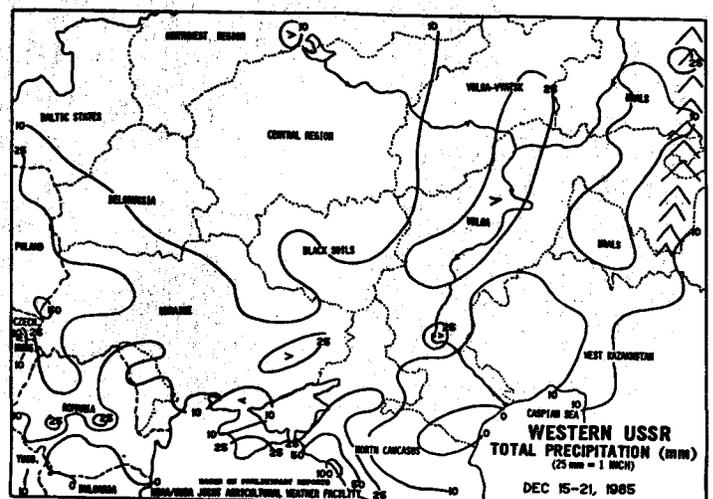
December 15-21, 1985

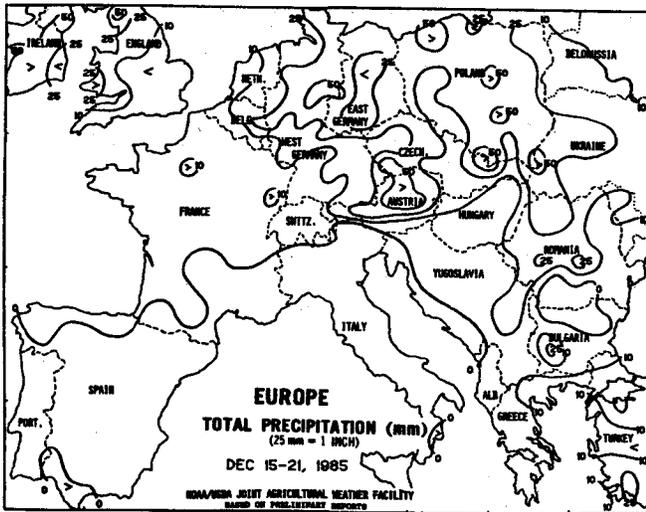


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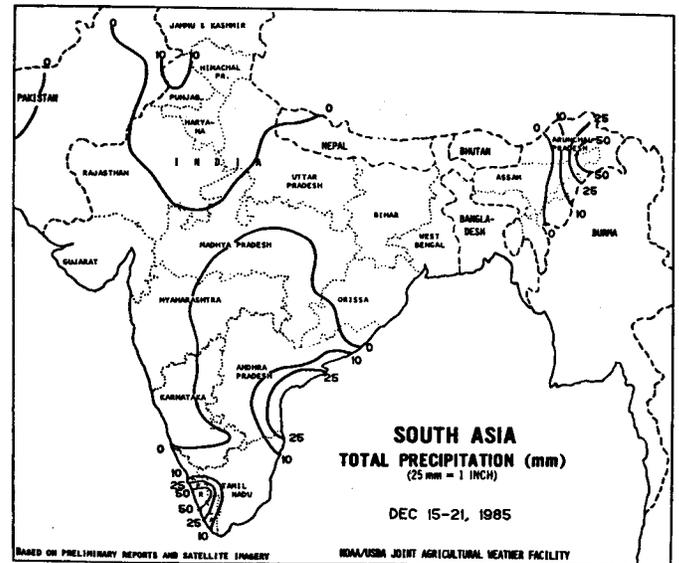
1. **UNITED STATES** ... Adverse weather slows late harvest as some progress is made. Most of fall seeded grains are protected by adequate snow cover.
2. **WESTERN USSR** ... Moderate precipitation covers the southern grain belt. Snow cover protects most areas from cold weather.
3. **EUROPE** ... Moderate to heavy precipitation increases moisture supplies across northern grain areas.
4. **SOUTH ASIA** ... Light showers benefit wheat nearing the heading stage.
5. **EASTERN ASIA** ... Below-normal temperatures cover nearly all crop areas. Winter wheat remains dormant.
6. **AUSTRALIA** ... Relatively dry and warm weather favors wheat harvesting.
7. **MEXICO** ... Light showers benefit wheat but slow some vegetable harvesting.
8. **SOUTH AMERICA** ... Relatively dry and hot weather is unfavorable for soybeans in southern Brazil. Wet weather in Argentina delays wheat harvesting and soybean planting.
9. **SOUTH AFRICA** ... Rain and moderate temperatures favor the Maize Triangle.
10. **NORTHWESTERN AFRICA** ... Light showers favor Algeria, but dryness possibly stresses emerging crops in southern Morocco.

**WESTERN USSR**...Moderate precipitation covered most of the southern grain region. Rain fell early in the week in the Ukraine, turning to snow as temperatures dropped. Some snow cover likely protected most winter grains in Belorussia, and the western Ukraine from very cold weather (lows near -20C) on December 19 and 20. Moderate precipitation (10-25mm) increased the snow cover in the Black Soils and Volga Valley. Light to moderate precipitation increased soil moisture in the North Caucasus.

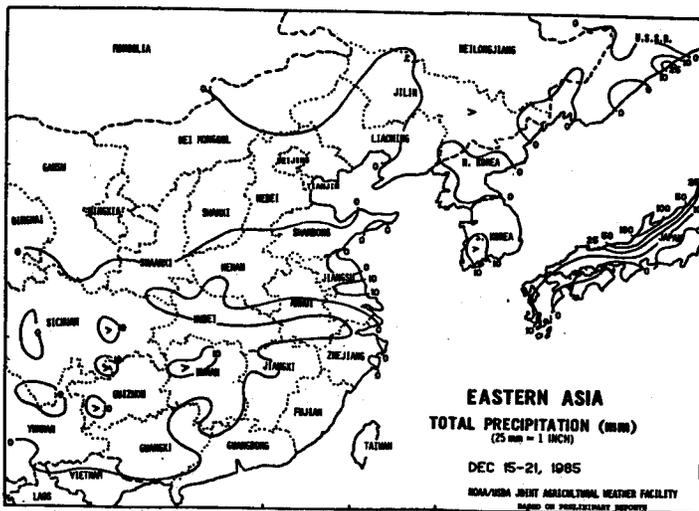




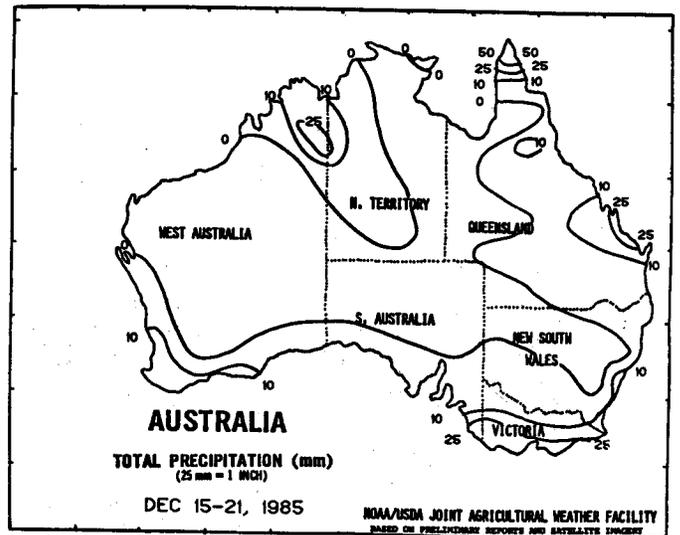
**EUROPE...**Substantial precipitation occurred across northern Europe. As much as 25-50mm of precipitation fell from West Germany through Poland, increasing the soil moisture supply for winter grains. Light showers (1-10mm) fell in northern France. Temperatures averaged above normal in northern France and Germany. Mostly dry weather covered southern France and Italy. Dry weather covered nearly all of Spain, where moisture is needed for germination of winter grains.



**SOUTH ASIA...**Light showers fell in the northern wheat areas for the second week. As much as 10-18mm of rain fell in Punjab, India. The moisture will benefit wheat nearing the heading stage and will also supplement irrigation supplies. Moderate rain, around 25mm, fell early in the week in coastal Andhra Pradesh from the remnants of a tropical storm.



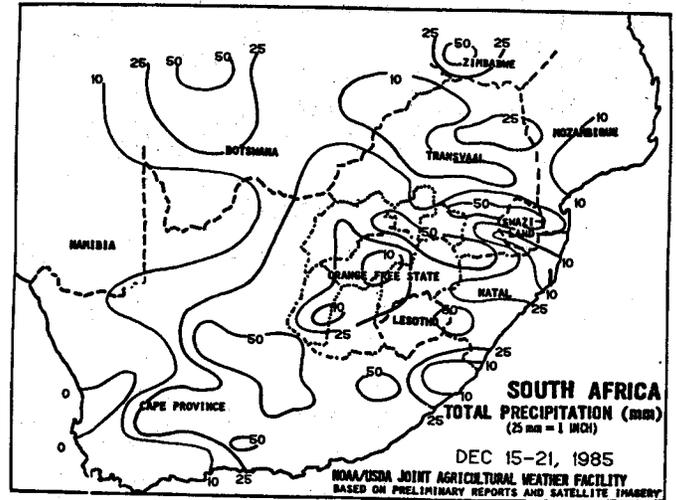
**EASTERN ASIA...**Light precipitation (1-3mm) fell in the southern North China Plain, but a large area of high pressure dominated the region most of the week. Below-normal temperatures continued in the winter wheat region, keeping the crop dormant. Temperatures were not low enough to cause winterkill. Light precipitation fell in the southwest while dry weather covered Guangdong, Fujian, Jiangxi, and Zhejiang. Light precipitation covered winter grains in South Korea.



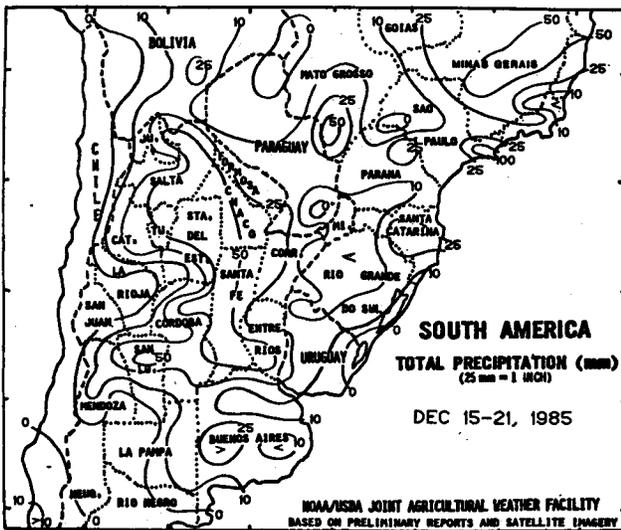
**AUSTRALIA...**Favorable drier weather occurred in much of the eastern wheat belt. Mostly dry weather and above-normal temperatures covered northern New South Wales and southeastern Queensland, helping to dry fields and speed harvesting. Light showers and cool temperatures occurred in southern New South Wales, Victoria, and South Australia maintaining slightly moist conditions. Summer crops in the east have favorable moisture. Light showers fell in western wheat areas, possibly interrupting harvesting.

MAP NOT AVAILABLE

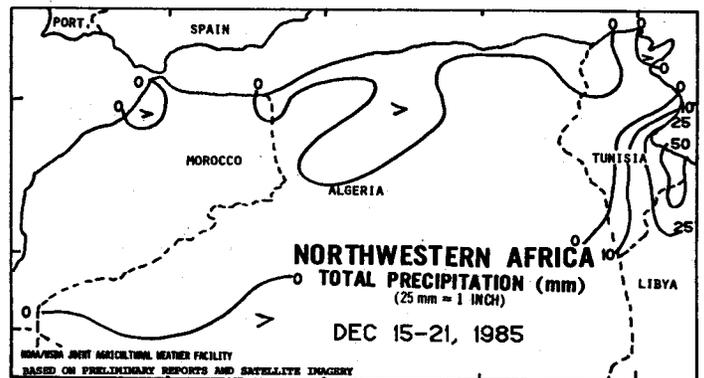
**MEXICO...** Satellite data indicate light showers benefited the northwestern wheat areas. Light rain possibly interrupted harvesting in the west coast vegetable region. Dry weather favored harvesting in most of the corn belt, but showers may have interrupted harvesting in the northwest corn areas.



**SOUTH AFRICA...** Scattered showers fell in much of the region this week. Moderate to heavy rain (25-50mm) benefited corn across the southern Transvaal while lighter showers extended further north. Relatively drier weather occurred in most of the Orange Free State, but as much as 70mm of rain favored corn in the Northeast Orange Free State. Temperatures remained moderate in most of the Maize Triangle. Moisture is adequate for much of the region while the earlier planted corn nears the reproductive stage.



**SOUTH AMERICA...** Relatively dry weather occurred in southern Brazil. Soybean planting likely progressed following last week's showers but hot weather, as high as 40C, is rapidly evaporating the limited moisture. Scattered showers benefited soybeans in parts of Parana, Sao Paulo, and Mato Grosso. Wet weather continued in much of Argentina. Heavy rain (25-95mm) in southern Santa Fe delayed winter wheat harvesting and soybean planting. Moderate rain interrupted wheat harvesting in southern Buenos Aires.



**NORTHWESTERN AFRICA...** Light showers fell across the eastern grain areas. Mostly dry weather occurred in Morocco, possibly stressing emerging crops in the south. Much of northern Algeria received 1-5mm of rain, maintaining adequate topsoil moisture for planting. Light showers in northern Tunisia moistened topsoils, but moisture is limited for winter grain planting. Temperatures averaged below normal in the west and above normal in the east. Planting normally continues through December.



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(Continued from p. 9)

89% of their crop, respectively. In Texas the pecan crop was 73% harvested, 8 points behind the average with quality expected to be below normal.

**PASTURES AND LIVESTOCK:** Pastures were mostly fair to good. Below-normal temperatures limited growth across most of the Nation. Livestock were in mostly good to fair condition, but supplemental feeding continues to increase as winter weather becomes more severe. Feed and hay supplies were generally adequate except for some shortages in northern areas.

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