

# 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

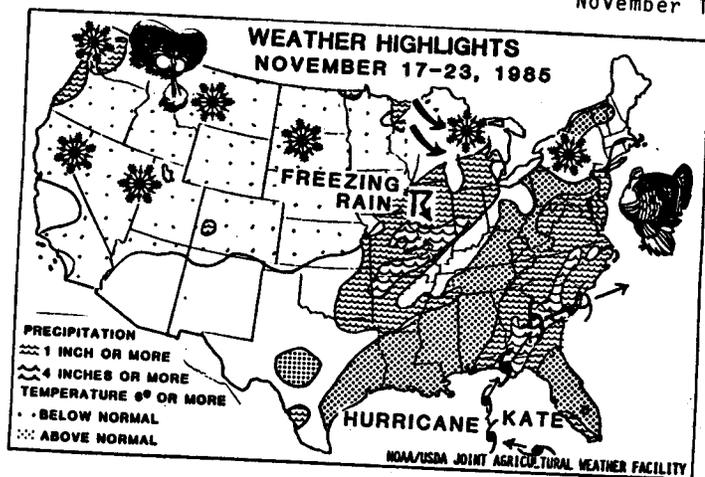
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## National Weather Summary

November 17 to 23, 1985



**TUESDAY...** Sub-zero temperatures reached through Montana into Wyoming. Record cold temperatures were in much of the Northwest, and later, record warm temperatures were measured in the East. Snow showers and thunderstorms reached from eastern Texas and Louisiana northeastward to the eastern Great Lakes region. Hurricane Kate pounded the northern coast of Cuba and moved into the Gulf of Mexico on a more northwesterly track.

**WEDNESDAY...** The colder air mass moved southward and eastward. Freezing temperatures reached into northern Texas, the lower Ohio Valley, and the central Great Lakes. The cold front moved into the East Coast States and triggered showers from Florida to western New England. Record warm weather covered the east coast area. Hurricane Kate was still in the Gulf of Mexico and on a more northerly course. The dangerous storm was packing winds up to 115 mph and heading toward the Florida Panhandle.

**THURSDAY...** Hurricane Kate hit the coast near Panama City, Florida. The highest winds over the land areas were 75 mph, and tornadoes and deluges of rain spread across the Florida Panhandle as the storm weakened and moved northeastward. Moisture from the storm spread northward and triggered heavy rain and thunderstorms into Virginia. Lighter rain reached into New York. Elsewhere, snow fell from Washington and Oregon eastward through Michigan and Ohio. Strong, gusty winds blew through the northern Plains and Great Lakes region.

**FRIDAY...** Rain or rainshowers, spawned by the remnants of Hurricane Kate, spread through much of the East. A combination of rain, snow, or freezing rain covered the Northeast from New York through New England. Snow continued to fall through the Northwest, the northern Plains, and the Great Lakes region. Severely cold weather covered much of the West and the northern Plains.

(Continued to p. 5)

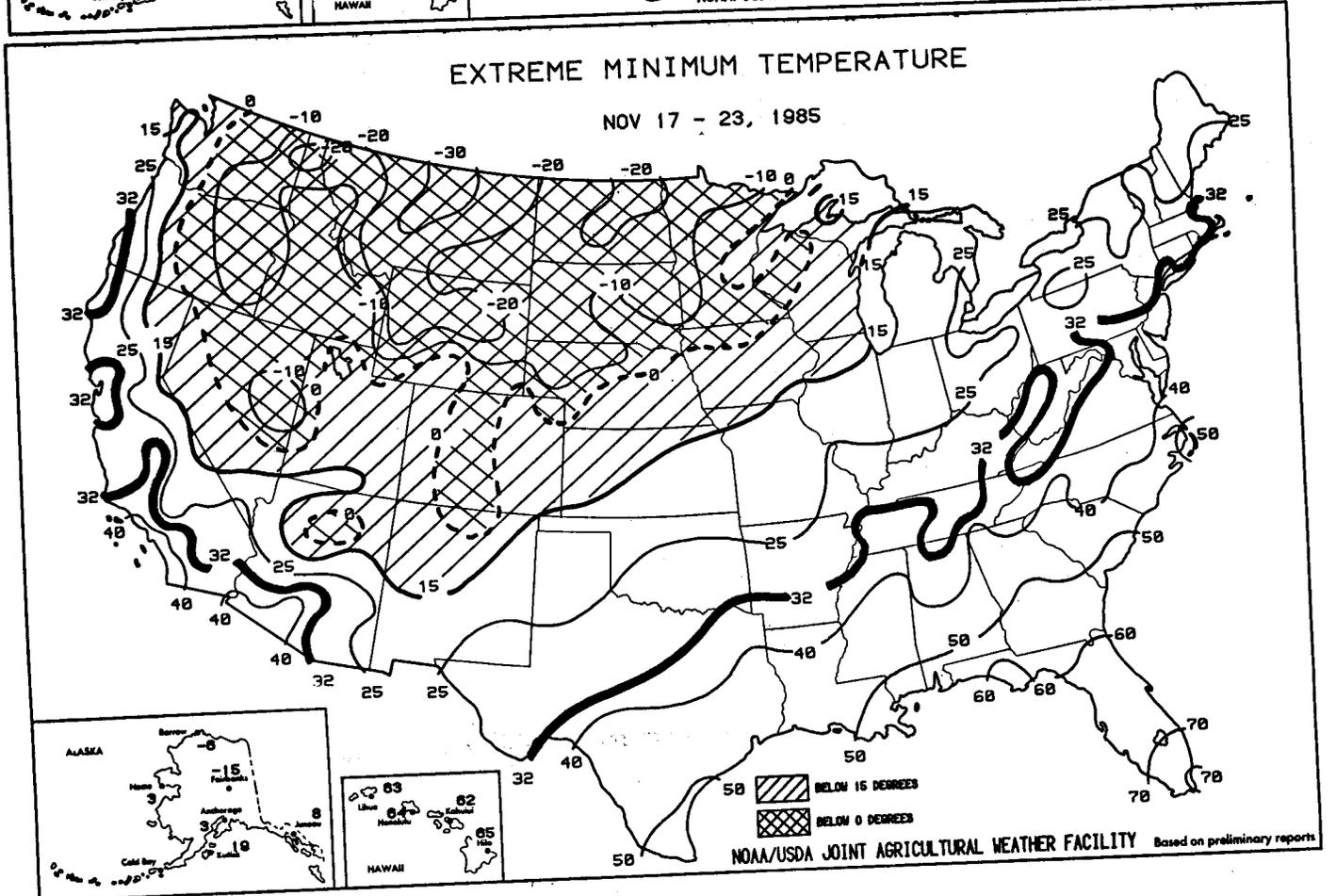
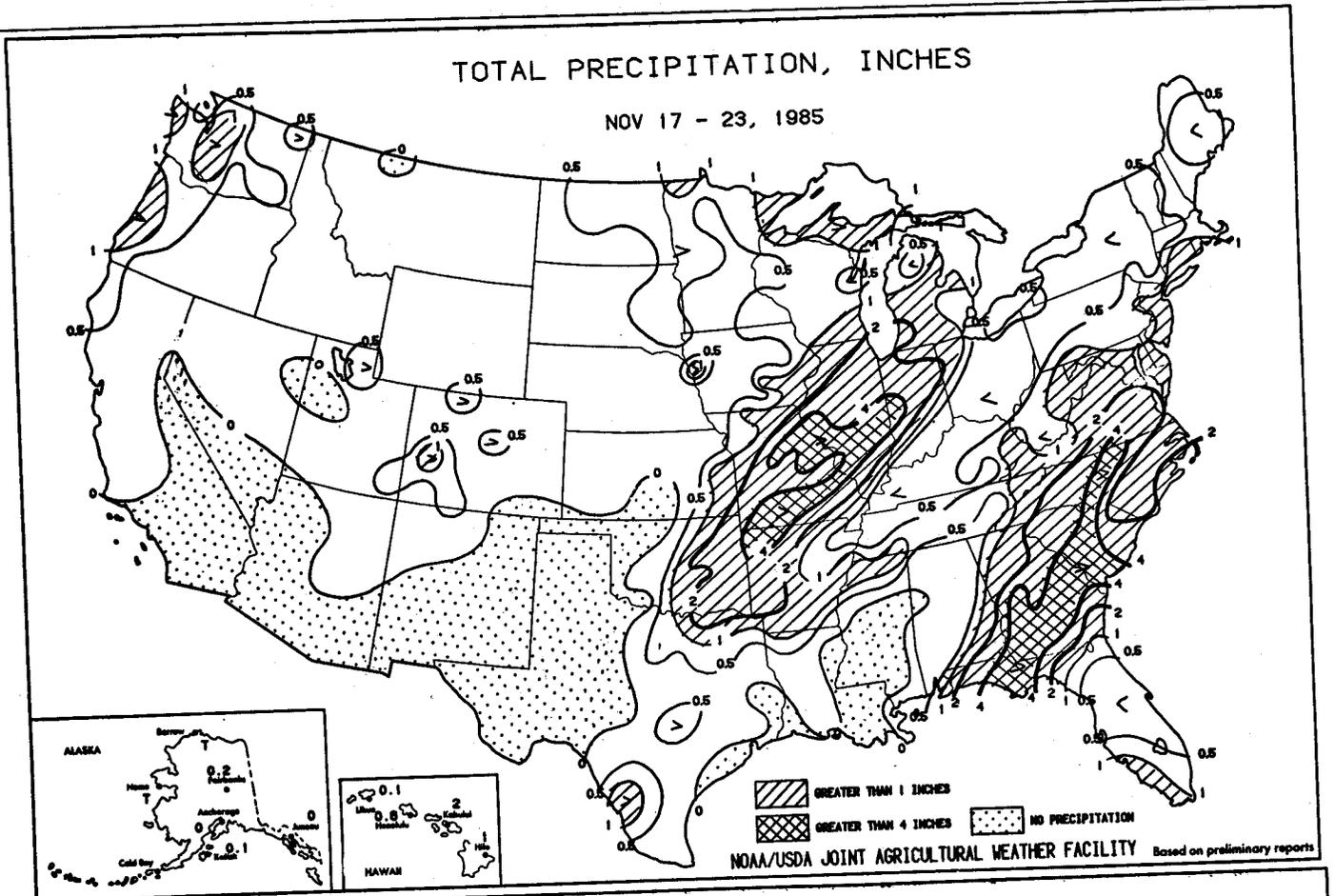
**HIGHLIGHTS:** Severely cold weather covered the Northwest from eastern Washington and Oregon into the northern Plains where average temperatures were from 20 to 38 degrees colder than normal. Below normal temperatures covered an area west of Texas to Michigan. Precipitation covered all of the Nation except the Southwest. Snow fell through the Northwest, the northern and central Plains, and through the Great Lakes to New England. Showers and thunderstorms developed ahead of the cold air from eastern Texas to the lower Lakes States. Hurricane Kate, an unusually late season storm, hit the Florida Panhandle after mid-week and brought hurricane winds, tornadoes, and deluges of rain to Florida and southern Georgia. Moisture from the dying storm triggered heavy rain through the southeastern States to southern Pennsylvania.

**SUNDAY...** Rain continued along the west coast to central California, and snow fell to the east through the Rockies and northern Plains to the western Great Lakes. Showers and thunderstorms were from eastern Texas and Louisiana to the lower Great Lakes region. Light snow continued in New York and New England. Hurricane Kate formed in the Caribbean northwest of Puerto Rico and was moving westward.

**MONDAY...** Another surge of very cold air pushed into Montana reinforcing the already cold air in the West. Snow fell through the mountains and in the northern Plains. Moderate to heavy thunderstorms occurred from eastern Oklahoma to Iowa and Ohio while heavy snow fell in the upper Great Lakes. Record warm weather covered the Southeast. Hurricane Kate was along the northern coast of Cuba still moving in a westerly direction.

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## Continuation of State Summaries

(Continued from p. 14)

harvested, 84% 1984, 90% avg. Cotton 87%  
 harvested, 70% 1984, 88% avg. Burley tobacco 77%  
 stripped, 70% 1984, 70% avg. Soybeans 77%  
 harvested, 52% 1984, 80% avg. Wheat 85% sown, 40%  
 1984, 75% avg. Pasture good to excellent.  
 Livestock continued in good condition.

**TEXAS:** Few showers developed along, in advance of Pacific frontal system moved across State early week. Modified Arctic air spilled into region behind front producing first freeze some areas Rolling Plains. Another weak front moved into Panhandle 22nd, triggered very heavy rains, some flash flooding over Brazos Valley, southeast. Temperatures below normal High Plains, Rolling Plains, above normal elsewhere. Precipitation above normal most eastern half of State, except Upper Coast, Lower Valley. All west, north reported normal rainfall.

**Crops:** Cotton 95% open bolls, 93% 1984, 97% avg.; 46% harvested, 45% 1984, 55% avg. Cotton 2% poor, 49% fair, 45% good, 4% excellent. Harvesting increased Plains with drier conditions. Producers reporting good yields, medium grades. Gins reporting good volumes, most gins have enough backlog to run 24-hours. Harvesting continued good pace Trans-Pecos, good yields. Another light to moderate freeze last week should increase harvesting operations. First freeze Cross-Timbers, increasing field operations. Sorghum 93% harvested, 95% 1984, 98% avg. Harvest good progress last week Plains. Producers expect complete operations soon, open weather remains. Damp morning conditions delayed start time each day; noon harvest usually progressing well. Wheat 89% planted, 97% 1984, 94% avg.; 76% emerged, 88% 1984, 85% avg. Small grains continue look good nearly statewide. Cooler weather Plains slowed growth. Later planted fields have not emerged, delayed by cooler weather. Most earlier planted wheat fields continue provided good grazing. Cooler weather help decrease armyworms, grubs. Some scattered fields continue rust infestations. Peanuts 60% harvested, 75% 1984, 80% avg. Harvesting resumed Cross-Timbers, yields, quality continue low many dryland fields. Harvesting some progress Edwards Plateau despite high humidity. Soybeans 49% harvested, 85% 1984, 82% avg. Harvest able to resume Plains. Yields reduced by prolonged wetness. Harvest slowed along Upper Coast by wet weather. Wet weather also hurting yields quality Upper Coast. **Other Field Crops:** Sugarbeets 63% harvested, 89% 1984, 81% avg. Harvest good progress last week, still remains behind schedule. Sugar content, quality remain high. Pecans 35% harvested, 51% 1984, 46% avg. Sunflower 84% harvested, 78% 1984, 88% avg. Oats 79% planted, 98% 1984, 93% avg. Sugarcane harvest continued Rio Grande Valley, excellent cane quality reported.

**Commercial Vegetables:** Rio Grande Valley harvest continued bell peppers, cabbage. Harvest began broccoli, tomatoes. Onion planting continued. Harvest oranges, grapefruit continued slow pace because limited movement. Sugar content higher than normal. San Antonio-Winter Garden, broccoli, cucumbers, cabbage harvest continued weather permitted. Spinach movement some progress. East fall vegetable outlook good. Most sweetpotatoes harvested, shipments continuing. High Plains, most vegetable harvesting final stages. Trans-Pecos chile harvest continued. Bell pepper harvest winding down. Onion planting continued. Pecan harvesting good progress Plains, Cross-Timbers, Trans-Pecos, good yields. Many other areas too wet for mechanical harvesting.

**Range and Livestock:** Ranges, pastures continue

improve most areas. Many stocker cattle moved onto wheat pastures Plains. Growth warm season grasses ended in areas where freeze occurred. Cool season grass growth increased. Cattle, sheep good condition, market improving.

**UTAH:** Cold week in State with maximums 10 to 14° below normal and minimums 4 to 8° below normal. Uinta Basin minimums 10° below normal. Precipitation moderate to heavy throughout State except light in Uinta Basin.

Taking care of farm chores and attending farm organization meetings major activities. Recent snow halting hay sales, as growers with livestock insuring adequate feed for winter.

**VIRGINIA:** Unseasonably warm, temperatures averaged 10° above normal. High of 80° on 20th. Cooling late in period with scattered frost. Scattered rain beginning period. Widespread moderated rain 21st, 22nd averaged 2.25 in. Most rain fell east of mountains. Days suitable for fieldwork averaged 2.9. Topsoil moisture 25% adequate, 75% surplus. More wet weather limited most fieldwork. Grain corn 91% harvested, 91% 1984, 94% avg. Soybeans 55% harvested, 80% 1984, 76% avg. Soybean quality and yield reduced by wet weather. Wheat 77% seeded, 89% 1984, 88% avg. Some wheat may not be planted due to wet weather. Grading, curing burley, sun-cured, dark fire-cured tobacco. Livestock, pastures mostly excellent. Calving, lambing active. Continuing flood cleanup, general fall chores.

**WASHINGTON:** Record low temperatures midweek. Snow statewide.

Days suitable for fieldwork less than 1.0. Soil moisture 10% short, 90% adequate. Range and pasture 42% short, 58% adequate. Hay supplies 17% short, 83% adequate. Winter wheat 96% emerged, 100% 1984, 100% avg. Potato harvest virtually complete. Corn grain harvest halted by snow. Fruit tree pruning underway. Cattle on winter rations.

**WEST VIRGINIA:** Temperatures averaged from 6 to 10° above normal. High 84° at Creston; low 24° at Greenbank. Precipitation averaged below normal northwest, north central and southwest divisions; above normal in central, southern and northeast divisions. Greatest total for week 1.26 in. at Greenbank.

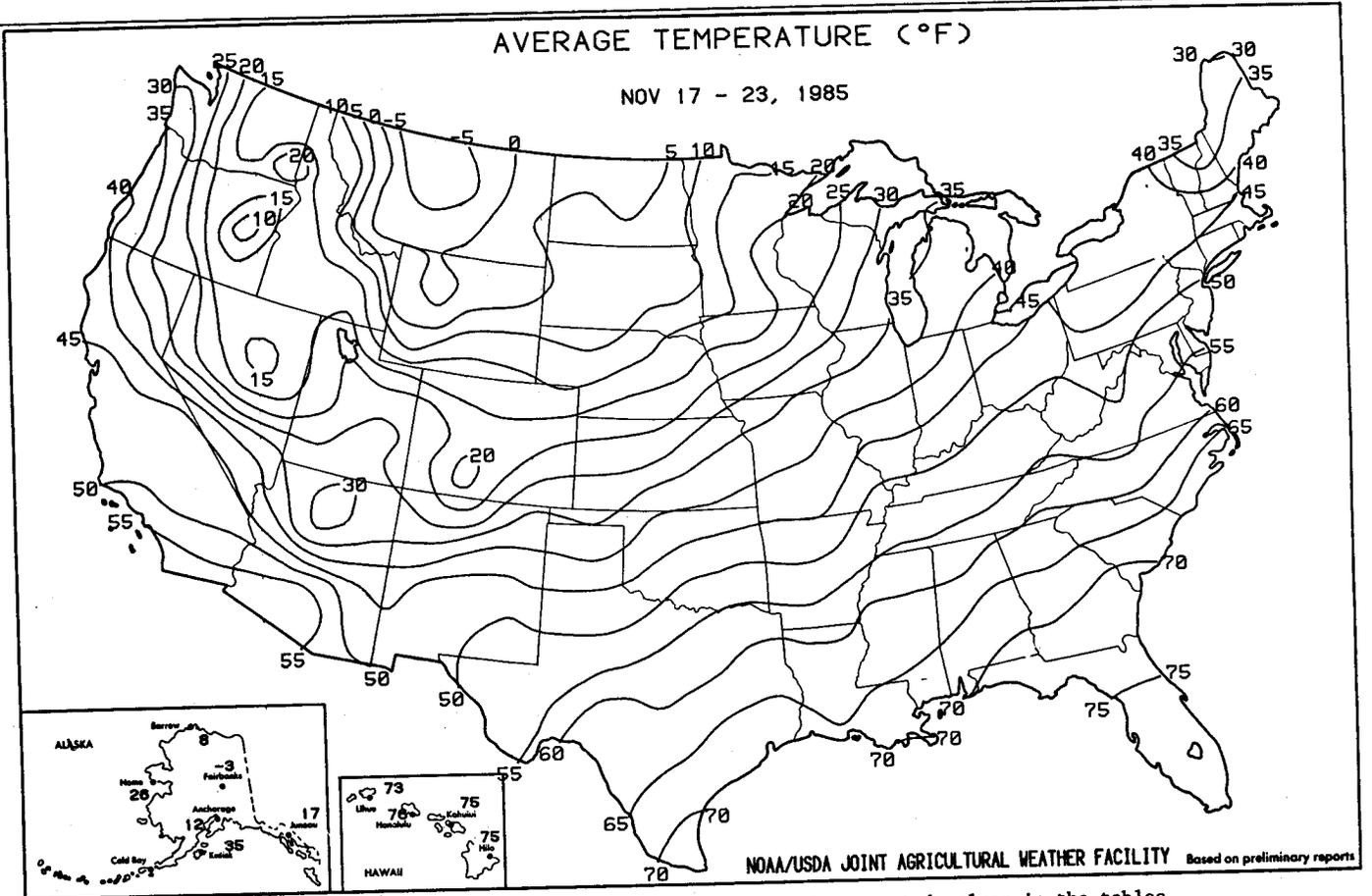
Days worked averaged 3.4. Soil moisture surplus to adequate. Corn 90% harvested, 96% avg. Feed supplies adequate.

**WISCONSIN:** Average temperatures below normal. Precipitation 0.60 to 0.80 in. north, 0.50 to 0.90 in. central, 0.90 to 1.20 in. south. Light to moderate snow 19th to 23rd, 1 to 4 in. across State.

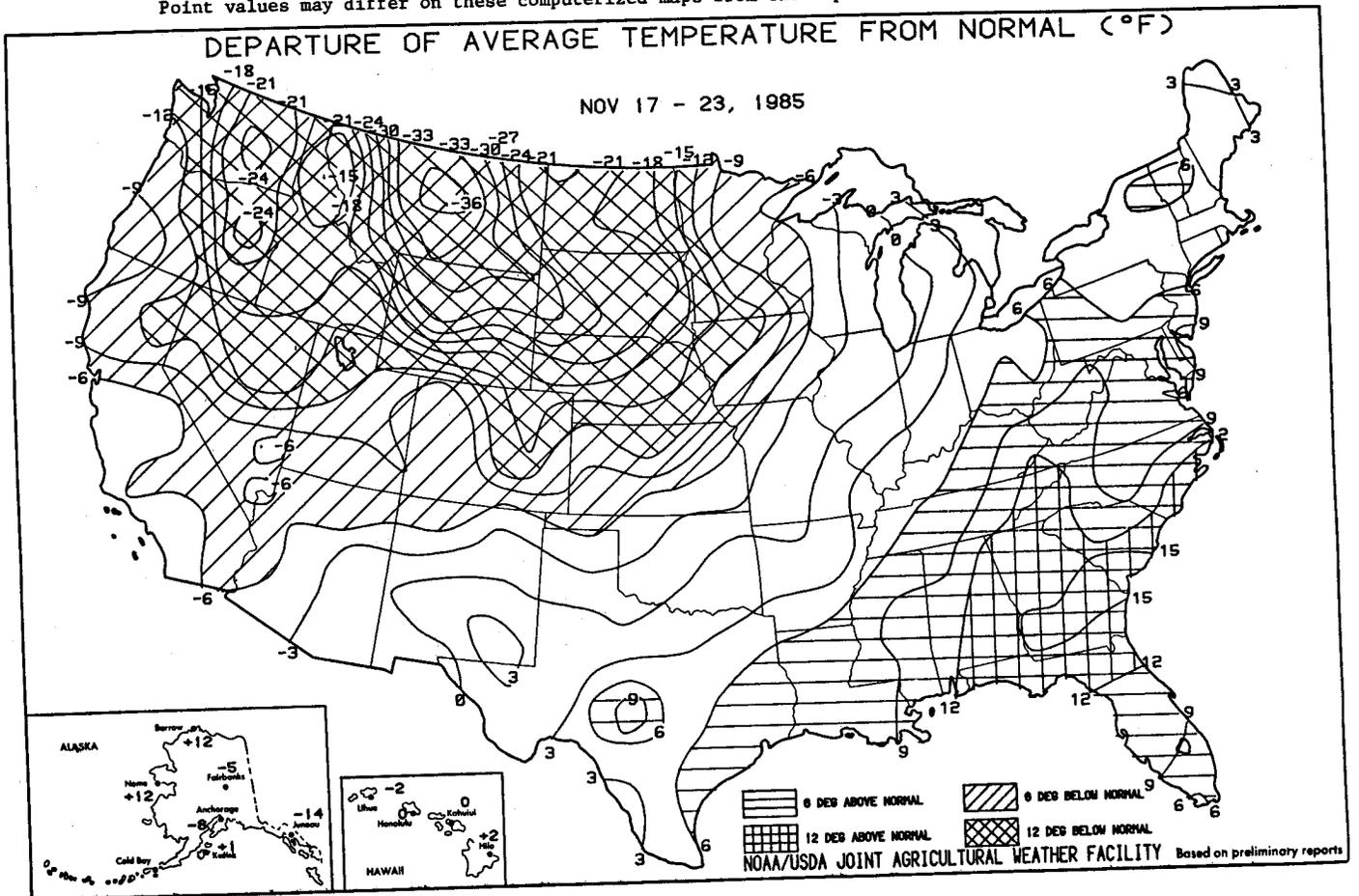
Days suitable for fieldwork 1.7. Soil moisture 7% adequate, 93% surplus; field conditions snowy, muddy, some frozen. Corn harvested 62%, 89% 1984, 80% avg. Soybeans harvested 73%, 94% 1984, 90% avg. Snowcover welcome for hay and wheat fields, problems for harvest. Fall plowing 45%, 67% 1984, 60% avg.

**WYOMING:** Temperatures below normal. Highs 20s to mid 40s. Lows 5 to -22°. Precipitation above normal north, below normal elsewhere.

Winter wheat mostly good. Corn for grain harvest slowed by cold, snowy weather. Livestock fair to good condition. Colder weather, snowcover increasing need for supplemental feeding. Hay supplies short some areas.



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



Weather Data for the Week Ending November 23, 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 SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE OF		PRECIPI- TATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	71	51	80	37	61	11													
MOBILE	75	60	82	51	68	10													
MONTGOMERY	77	58	85	48	67	14													
AK ANCHORAGE	18	5	20	3	12	-8													
BARROW	15	1	22	-6	8	12													
FAIRBANKS	4	-10	13	-15	3	17													
JUNEAU	24	10	27	19	35	57													
KODIAK	40	30	42	19	37	14													
NOME	32	20	40	3	26	12													
AZ PHOENIX	68	45	77	39	57	-2													
PRESCOTT	53	27	63	15	40	3													
TUCSON	70	38	78	31	54	-3													
YUMA	69	47	76	43	58	-3													
AR FORT SMITH	60	41	78	27	51	3													
LITTLE ROCK	60	42	77	29	51	2													
CA BAKERSFIELD	56	39	57	34	47	-7													
BUREKA	50	39	52	36	44	-7													
FRESNO	56	39	58	32	48	-4													
LOS ANGELES	65	50	68	45	57	-3													
RED BLUFF	52	29	57	24	40	-11													
SACRAMENTO	53	35	62	29	44	-7													
SAN DIEGO	65	52	68	47	58	-3													
SAN FRANCISCO	54	42	57	37	48	-6													
CO DENVER	29	11	40	1	20	-17													
GRAND JUNCTION	37	21	43	8	29	-8													
PUEBLO	34	9	47	3	22	-17													
CT BRIDGEPORT	54	41	67	35	48	4													
HARTFORD	55	35	73	28	45	5													
DC WASHINGTON	62	46	76	37	54	7													
FL APALACHICOLA	78	67	82	62	72	13													
DAYTONA BEACH	81	70	84	69	76	11													
JACKSONVILLE	79	66	82	59	73	13													
KEY WEST	82	75	84	71	79	4													
MIAMI	83	73	86	62	78	6													
ORLANDO	83	70	86	62	77	10													
TALLAHASSEE	80	62	84	53	71	14													
TAMPA	83	69	85	61	76	11													
WEST PALM BEACH	83	74	85	70	79	8													
GA ATLANTA	73	56	81	43	64	14													
AUGUSTA	76	59	83	48	68	15													
MACON	76	60	83	51	68	14													
SAVANNAH	79	63	83	54	71	15													
HI HILO	82	68	90	65	75	12													
HONOLULU	83	68	85	64	76	10													
KAHULUI	83	68	85	62	75	0													
LIHUE	81	65	83	63	73	-2													
ID BOISE	28	8	35	-3	18	-20													
LEWISTON	28	17	38	-1	23	-16													
POCATELLO	24	11	30	-5	18	-16													
IL CHICAGO	44	24	63	13	34	-4													
MOLINE	44	24	63	14	34	-3													
PEORIA	46	26	62	15	36	-2													
QUINCY	48	29	63	18	38	-1													
ROCKFORD	43	23	60	14	33	-4													
SPRINGFIELD	49	30	68	21	40	0													
IN EVANSVILLE	57	36	76	26	47	3													
FORT WAYNE	48	32	67	20	40	2													
INDIANAPOLIS	53	33	72	23	43	3													
SOUTH BEND	46	31	67	22	39	0													
IA DES MOINES	38	17	65	8	27	-9													
SIoux CITY	27	13	43	2	20	-14													
WATERLOO	36	15	63	1	25	-7													
KS CONCORDIA	37	19	61	8	28	-11													
DODGE CITY	42	23	61	16	32	-8													
GOODLAND	34	15	47	8	25	-11													
TOPEKA	44	23	72	17	34	-7													
WICHITA	46	27	69	18	37	-5													
KY BOWLING GREEN	62	40	76	30	51	7													
LEXINGTON	60	40	75	27	50	7													
LOUISVILLE	60	40	77	28	50	6													
LA ALEXANDRIA	73	55	82	44	64	8													
BATON ROUGE	76	57	84	48	66	8													
LAKE CHARLES	75	57	82	46	66	8													
NEW ORLEANS	76	60	83	52	68	9													

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

(Continued from front cover)

SATURDAY...Sub-zero temperatures reached through Washington and Oregon east of the Cascades and over the northern Plains into Minnesota. A storm off the coast of California brought moderate to heavy showers to parts of central California. Heavy snow

developed over the northern Sierra Nevada mountains. Showers and thunderstorms were scattered from southern and eastern Texas into parts of the lower Mississippi Valley. Snow continued in the upper Mississippi Valley and the Great Lakes region.

Weather Data for the Week Ending November 23, 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 SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
ME SHREVEPORT	71	51	83	39	61	7	.5	-.4	.4	15.3	175	44.7	114	90	59	0	0	3	0	
ME CARIBOU	35	25	44	19	30	1	-.6	-.2	.3	6.9	78	26.6	82	93	73	0	0	5	1	
ME PORTLAND	52	31	67	26	42	5	-.9	-.2	.6	13.2	124	31.5	83	89	47	0	0	2	1	
MD BALTIMORE	61	42	77	33	52	7	1.3	.5	1.3	11.6	131	34.1	90	90	49	0	0	3	2	
MD SALISBURY	65	46	75	33	55	9	1.3	.6	.7	10.5	105	34.4	85	99	64	0	0	2	0	
MA BOSTON	56	40	73	33	48	4	.7	-.3	-.4	9.7	98	34.0	89	90	50	0	0	0	0	
MA CHATHAM	52	44	59	35	48	4	.8	-.3	-.4	8.0	74	40.2	99	1	1	0	0	0	0	
MI ALPENA	45	29	64	23	37	4	1.0	-.4	-.4	8.2	124	30.2	115	93	67	0	0	3	3	
MI DETROIT	49	34	68	25	42	4	.6	.1	.3	11.1	180	37.6	135	82	61	0	0	4	4	
MI FLINT	47	32	67	22	40	3	.9	.3	-.4	14.4	230	38.7	145	93	65	0	0	3	3	
MI GRAND RAPIDS	44	30	64	24	37	0	1.9	1.2	1.0	14.0	169	38.6	124	99	72	0	0	2	2	
MI HOUGHTON LAKE	38	28	61	20	33	0	.5	0	.3	10.1	151	30.3	119	89	72	0	0	2	2	
MI LANSING	45	30	66	23	38	1	1.3	.7	-.6	9.3	144	32.3	121	92	75	0	0	6	3	
MI MARQUETTE	33	20	48	9	27	-1	1.9	.7	-.5	16.5	174	47.2	138	96	75	0	0	3	3	
MI MUSKEGON	44	30	62	24	37	0	1.9	1.2	-.9	14.7	185	39.0	138	87	66	0	0	6	4	
MI SAULT STE. MARIE	40	26	56	15	33	3	.7	0	.3	9.0	98	35.1	116	94	66	0	0	4	0	
MN ALEXANDRIA	22	8	35	-8	15	-11	.8	.6	-.4	6.5	128	23.7	100	92	76	0	0	4	5	
MN DULUTH	25	14	37	1	20	-7	1.0	.6	-.6	9.6	141	30.6	109	95	70	0	0	7	1	
MN INT'L FALLS	22	7	34	-13	15	-7	.8	.6	.1	6.2	104	29.4	127	96	78	0	0	6	5	
MN MINNEAPOLIS	30	15	53	0	23	-8	.4	.5	.5	8.9	166	29.7	118	87	66	0	0	3	3	
MN ROCHESTER	29	11	57	-3	20	-10	.8	.5	.5	9.9	158	26.0	96	93	76	0	0	5	0	
MS GREENWOOD	70	52	80	40	61	9	0	0	0	11.6	126	43.7	94	98	58	0	0	0	0	
MS JACKSON	72	53	83	41	63	9	-1.1	-1.1	0	15.1	151	47.2	101	98	61	0	0	0	1	
MS MERIDIAN	72	53	81	44	63	10	0	-.9	0	13.0	126	43.7	110	95	62	0	0	2	5	
MO CAPE GIRARDEAU	61	38	76	26	50	1	1.2	.3	1.2	9.2	104	43.7	110	93	63	0	0	3	2	
MO COLUMBIA	50	29	68	19	40	-2	3.4	3.0	2.5	10.8	126	47.9	142	95	63	0	0	4	2	
MO KANSAS CITY	43	25	69	16	34	-7	.5	.2	.5	20.0	234	50.8	152	91	57	0	0	5	4	
MO SAINT LOUIS	52	34	73	25	43	0	4.6	3.9	3.2	10.8	154	45.4	146	91	57	0	0	4	1	
MO SPRINGFIELD	52	34	68	21	43	0	5.1	4.4	4.3	16.7	172	51.2	141	85	58	0	0	4	4	
MT BILLINGS	8	-9	35	-18	-1	-34	.5	.3	.2	3.7	119	12.1	106	85	72	0	0	7	5	
MT GLASGOW	6	-9	30	-26	-2	-35	3.3	.2	.2	2.0	117	12.1	89	85	70	0	0	7	6	
MT GREAT FALLS	5	-10	26	-25	-2	-35	.2	.4	.3	5.3	215	16.3	114	89	70	0	0	7	4	
MT HAVRE	4	-15	25	-30	-5	-34	.2	.3	.3	4.1	228	10.2	97	81	60	0	0	7	4	
MT HELENA	6	-12	31	-27	-3	-33	.4	.3	.3	3.4	180	8.5	80	95	62	0	0	7	5	
MT KALISPELL	15	1	31	-15	8	-21	.2	-.1	.1	6.4	210	13.7	98	84	58	0	0	7	2	
MT MILES CITY	9	-6	30	-19	2	-28	.2	-.1	.2	2.4	98	11.5	87	90	67	0	0	7	1	
MT MISSOULA	21	7	32	-8	14	-16	0	-.2	0	4.7	186	11.9	100	87	50	0	0	7	0	
NE GRAND ISLAND	27	12	40	5	19	-16	.1	.1	.1	8.2	194	28.3	126	91	62	0	0	7	3	
NE LINCOLN	33	11	60	1	22	-15	.4	.2	.2	6.3	117	30.4	116	91	57	0	0	7	4	
NE NORFOLK	25	11	43	0	18	-16	.2	-.1	0	6.3	156	25.1	109	91	61	0	0	7	1	
NE NORTH PLATTE	35	10	41	1	18	-15	0	-.1	0	5.2	170	18.3	97	82	53	0	0	7	3	
NE OMAHA	25	14	64	4	24	-11	.2	0	.1	5.3	82	21.5	74	79	57	0	0	7	2	
NE SCOTTSBLUFF	25	1	38	-9	13	-21	.2	0	.1	4.6	205	10.6	87	83	61	0	0	7	2	
NE VALENTINE	19	-2	38	-16	9	-23	.1	0	.1	4.0	157	14.5	87	88	53	0	0	7	2	
NV ELY	33	2	41	-15	18	-15	0	-.1	0	4.4	249	8.9	110	88	61	0	0	7	0	
NV LAS VEGAS	55	31	61	24	43	-9	0	-.1	0	.2	26	1.0	26	51	22	0	0	4	0	
NV RENO	40	20	49	11	30	-8	0	-.1	0	2.2	207	4.2	69	87	41	0	0	7	4	
NV WINNEMUCA	32	9	37	-4	20	-16	.5	.3	.4	1.9	128	4.8	71	94	53	0	0	7	3	
NH CONCORD	52	29	74	25	40	5	.8	-.1	-.5	11.5	127	28.8	89	97	51	0	0	4	3	
NH ATLANTIC CITY	62	46	75	32	54	10	1.1	.2	1.0	5.8	65	27.7	74	94	56	0	0	1	1	
NM ALBUQUERQUE	53	26	65	14	40	-3	0	-.1	0	3.8	189	10.5	140	69	19	0	0	6	0	
NM CLOVIS	60	27	70	17	44	-1	0	-.1	0	7.7	187	27.6	168	63	20	0	0	6	0	
NY ROSWELL	67	33	77	25	50	3	0	-.1	0	2.9	98	12.4	132	50	13	0	0	4	2	
NY ALBANY	50	32	70	28	41	4	.3	-.4	.3	8.6	102	26.4	83	96	63	0	0	4	2	
NY BINGHAMTON	48	34	65	26	41	5	.1	-.6	.1	10.0	116	29.6	89	93	62	0	0	3	2	
NY BUFFALO	51	37	70	28	44	5	.2	-.7	.2	13.6	149	40.0	120	88	59	0	0	4	1	
NY NEW YORK	60	46	75	38	53	7	.8	-.1	.7	10.2	107	34.1	89	85	49	0	0	2	1	
NY ROCHESTER	50	36	71	29	43	4	.3	-.3	.3	10.8	149	27.5	98	85	63	0	0	3	3	
NY SYRACUSE	51	36	71	29	44	5	.3	-.5	.2	11.7	129	29.9	85	90	69	0	0	2	3	
NC ASHEVILLE	69	51	75	38	60	15	1.8	1.1	1.5	8.1	83	34.0	78	96	72	0	0	0	1	
NC CHARLOTTE	67	50	75	35	55	8	3.9	3.2	3.3	12.2	144	46.0	118	96	78	0	0	3	1	
NC GREENSBORO	63	48	74	34	55	7	2.5	1.9	2.1	8.7	99	34.2	89	99	78	0	0	4	2	
NC HATTERAS	74	62	80	54	68	13	2.4	1.3	1.5	35.3	246	66.4	133	100	76	0	0	0	3	
NC NEW BERN	76	56	83	41	66	13	3.7	2.9	3.3	22.4	195	52.2	107	100	66	0	0	3	2	
NC RALEIGH	65	47	74	35	56	7	4.0	3.3	2.0	8.3	101	36.0	95	92	73	0	0	3	1	
NC WILMINGTON	77	58	83	46	68	13	1.9	1.1	1.7	11.3	101	41.9	85	100	73	0	0	2	7	
ND BISMARCK	14	-4	38	-21	5	-21	.4	.3	.2	3.1	3.1	118	17.1	116	88	70	0	0	7	1
ND FARGO	19	1	34	-15	10	-15	.7	.6	.5	3.3	86	18.2	97	91	73	0	0	7	7	
ND GRAND FORKS	17	-2	29	-19	8	-16	.9	.7	.3	3.5	93	16.4	94	94	74	0	0	7	7	
ND WILLISTON	11	-4	32	-19	4	-16	.3	.2	.2	3.3	133	11.8	89	88	65	0	0	7	3	
OH AKRON-CANTON	54	36	72	23	45	5	.1	-.6	.1	10.1	142	34.6	106	90	59	0	0	4	0	
OH CINCINNATI	58	37	73	24	48	6	.6	-.1	-.5	11.9	152	40.5	111	87	58	0	0	4	1	
OH CLEVELAND	54	37	71	28	45	5	.6	-.1	-.5	12.8	171	37.1	116	86	59	0	0	4	2	
OH COLUMBUS	56	37	73	25	47	6	.6	-.1	0	11.4	170	34.4	102	78	55	0	0	3	3	

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending November 23, 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 SEPT. 1	PCT. NORMAL SINCE SEPT. 1	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		
DAYTON	56	36	72	22	46	6								88	59	0	0	3	4	0	1
TOLEDO	51	34	68	25	42	5	1.2	-0.6	0	9.0	141	31.1	98	88	59	0	0	3	4	0	1
YOUNGSTOWN	54	35	73	27	45	6	1.1	-0.7	0	10.0	159	35.2	123	91	60	0	0	3	4	0	1
OK OKLAHOMA CITY	57	36	73	27	45	6	1.1	-0.7	0	11.6	147	36.2	107	88	58	0	0	3	4	0	1
TULSA	55	38	70	25	46	-1	1.7	0.0	0	13.2	179	43.6	148	88	59	0	0	3	4	0	1
OR ASTORIA	41	28	46	21	35	-1	1.7	1.1	1.3	15.1	154	49.1	135	88	58	0	0	3	4	0	1
BURNS	23	-1	31	-12	11	-23	1.5	-1.5	1.3	16.9	101	38.5	69	88	58	0	0	3	4	0	1
MEDFORD	41	30	45	27	35	-7	1.1	-1.1	1.1	3.1	146	7.6	113	97	68	0	0	3	4	0	1
PENDLETON	26	11	39	-12	19	-21	1.2	-1.5	1.1	4.1	91	8.9	57	94	63	0	0	3	4	0	1
PORTLAND	38	27	45	17	33	-11	1.4	-1.1	1.3	4.8	181	9.8	96	86	63	0	0	3	4	0	1
SALEM	39	26	46	16	33	-11	1.0	-1.5	1.3	9.3	109	9.8	68	86	63	0	0	3	4	0	1
PA ALLENTOWN	56	38	75	30	47	6	1.0	-0.4	1.0	9.0	98	20.1	68	95	63	0	0	3	4	0	1
ERIE	54	38	74	30	47	6	1.0	-0.4	1.0	9.0	98	20.8	65	93	68	0	0	3	4	0	1
HARRISBURG	55	40	72	34	48	7	1.0	-0.9	1.0	16.1	163	42.8	108	92	51	0	0	3	4	0	1
PHILADELPHIA	55	40	72	34	48	7	1.0	-0.9	1.0	16.1	163	42.8	108	92	51	0	0	3	4	0	1
PITTSBURGH	61	42	76	34	52	7	1.0	-0.9	1.0	9.3	106	30.9	88	87	57	0	0	3	4	0	1
SCRANTON	55	37	72	28	46	6	1.0	-0.9	1.0	11.0	126	31.8	86	90	51	0	0	3	4	0	1
RI PROVIDENCE	57	39	69	29	45	6	1.4	-0.4	1.1	11.6	164	34.2	103	82	51	0	0	3	4	0	1
SC CHARLESTON	78	62	81	52	70	15	1.4	-0.4	1.1	12.7	151	36.8	116	89	57	0	0	3	4	0	1
COLUMBIA	73	55	80	44	64	11	3.6	3.1	3.1	9.8	93	38.4	96	91	47	0	0	3	4	0	1
FLORENCE	74	56	82	46	65	12	2.9	2.3	2.0	12.3	130	48.9	102	98	66	0	0	3	4	0	1
GREENVILLE	70	52	76	43	61	11	1.9	1.4	1.4	12.9	149	45.4	101	100	71	0	0	3	4	0	1
SD ABERDEEN	76	52	82	43	61	11	2.9	2.1	1.9	8.6	106	32.2	80	95	68	0	0	3	4	0	1
HURON	18	-2	36	-14	7	-20	1.1	-1.9	1.1	11.9	116	41.7	91	92	71	0	0	3	4	0	1
RAPID CITY	13	-1	29	-19	8	-22	1.1	-1.9	1.1	4.5	153	17.5	102	99	70	0	0	3	4	0	1
SIoux FALLS	22	4	36	-10	13	-17	1.1	-1.9	1.1	6.4	193	23.9	133	91	73	0	0	3	4	0	1
TN CHATTANOOGA	68	51	79	40	60	12	1.1	-0.7	1.1	4.4	191	12.4	78	89	68	0	0	3	4	0	1
KNOXVILLE	68	47	83	36	58	12	1.1	-0.7	1.1	7.1	116	26.5	114	91	67	0	0	3	4	0	1
MEMPHIS	63	44	79	32	54	7	1.1	-0.7	1.1	6.9	69	35.1	76	96	61	0	0	3	4	0	1
NASHVILLE	64	44	80	32	54	7	1.1	-0.7	1.1	7.3	73	31.5	76	96	60	0	0	3	4	0	1
TX ABILENE	65	44	80	32	54	7	1.1	-0.7	1.1	9.1	100	42.2	93	85	50	0	0	3	4	0	1
AMARILLO	55	24	70	17	40	0	1.1	-0.7	1.1	5.8	66	27.8	65	83	60	0	0	3	4	0	1
AUSTIN	69	55	82	42	62	7	1.1	-0.7	1.1	4.4	68	21.3	96	84	41	0	0	3	4	0	1
BEAUMONT	76	58	82	46	67	5	1.1	-0.7	1.1	8.2	229	21.9	118	84	28	0	0	3	4	0	1
BROWNSVILLE	80	63	86	51	72	7	1.1	-0.7	1.1	11.9	137	28.8	99	89	69	0	0	3	4	0	1
CORPUS CHRISTI	76	61	83	50	69	5	1.1	-0.7	1.1	20.9	161	63.5	135	95	60	0	0	3	4	0	1
DEL RIO	68	53	84	45	61	3	1.1	-0.7	1.1	10.4	105	31.7	132	95	62	0	0	3	4	0	1
EL PASO	66	52	84	45	61	3	1.1	-0.7	1.1	12.8	121	34.4	121	92	65	0	0	3	4	0	1
FORT WORTH	66	47	78	32	57	3	1.1	-0.7	1.1	4.3	76	17.2	104	84	48	0	0	3	4	0	1
GALVESTON	74	62	80	50	68	6	1.1	-0.7	1.1	3.3	139	8.1	109	58	15	0	0	3	4	0	1
HOUSTON	78	59	85	46	68	10	1.1	-0.7	1.1	9.1	128	28.9	105	87	28	0	0	3	4	0	1
LUBBOCK	63	33	73	24	48	8	1.1	-0.7	1.1	7.2	67	37.3	104	90	66	0	0	3	4	0	1
MIDLAND	67	35	75	27	51	1	1.1	-0.7	1.1	11.4	114	41.9	104	87	55	0	0	3	4	0	1
SAN ANGELO	69	47	80	31	58	0	1.1	-0.7	1.1	8.4	191	22.7	131	78	23	0	0	3	4	0	1
SAN ANTONIO	69	56	80	44	67	5	1.1	-0.7	1.1	9.1	228	16.3	123	87	28	0	0	3	4	0	1
VICTORIA	76	59	83	49	67	3	1.1	-0.7	1.1	8.8	150	21.7	125	87	37	0	0	3	4	0	1
WACO	67	52	78	37	60	4	1.1	-0.7	1.1	12.7	127	38.2	140	86	65	0	0	3	4	0	1
WICHITA FALLS	60	39	80	28	50	0	1.1	-0.7	1.1	6.4	56	36.9	108	92	63	0	0	3	4	0	1
UT BLANDING	38	17	48	5	27	-9	1.1	-0.7	1.1	11.2	140	28.4	100	92	67	0	0	3	4	0	1
CEDAR CITY	38	19	46	2	29	-9	1.1	-0.7	1.1	5.8	80	30.0	119	85	50	0	0	3	4	0	1
SALT LAKE CITY	32	17	36	8	25	-9	1.1	-0.7	1.1	2.6	186	14.4	141	88	60	0	0	3	4	0	1
VT BURLINGTON	49	34	66	27	41	7	1.1	-0.7	1.1	10.8	108	9.1	97	83	40	0	0	3	4	0	1
VA NORFOLK	68	49	80	39	58	8	1.1	-0.7	1.1	5.8	197	15.2	112	83	54	0	0	3	4	0	1
RICHMOND	64	46	76	34	55	7	1.4	-0.8	1.2	10.2	124	31.5	103	86	53	0	0	3	4	0	1
ROANOKE	66	45	78	35	55	7	2.5	1.7	1.8	13.3	133	41.3	100	93	67	0	0	3	4	0	1
WA COLVILLE	20	6	33	-14	13	-19	1.0	-0.4	1.0	16.0	163	47.6	119	98	63	0	0	3	4	0	1
QUILLAYUTE	35	20	43	5	28	-16	1.0	-0.4	1.0	15.9	185	47.5	133	99	60	0	0	3	4	0	1
SEATTLE-TACOMA	33	24	40	10	28	-15	1.3	-2.1	1.7	5.6	159	12.7	88	84	67	0	0	3	4	0	1
SPOKANE	19	2	33	-21	11	-23	1.5	-1.1	1.5	26.9	103	56.0	66	97	68	0	0	3	4	0	1
YAKIMA	26	2	39	-13	14	-23	1.5	-1.1	1.5	11.3	117	22.7	73	94	62	0	0	3	4	0	1
WV BECKLEY	62	41	73	32	51	11	1.0	-0.3	1.0	5.2	157	10.4	76	94	78	0	0	3	4	0	1
CHARLESTON	65	44	83	32	55	11	1.0	-0.3	1.0	2.4	164	4.8	75	94	62	0	0	3	4	0	1
HUNTINGTON	61	41	79	29	51	7	1.0	-0.3	1.0	6.5	80	32.5	85	94	57	0	0	3	4	0	1
PARKERSBURG	59	38	78	26	48	6	1.0	-0.3	1.0	10.2	130	35.7	93	79	42	0	0	3	4	0	1
WI GREEN BAY	38	25	57	11	31	-1	1.0	-0.6	1.0	10.5	138	40.1	109	88	51	0	0	3	4	0	1
LA CROSSE	34	19	59	4	26	-5	1.0	-0.6	1.0	11.2	161	31.4	83	93	69	0	0	3	4	0	1
MADISON	39	23	59	7	31	-8	1.0	-0.6	1.0	10.9	164	36.2	138	90	43	0	0	3	4	0	1
MILWAUKEE	42	26	60	14	34	-8	1.0	-0.6	1.0	9.3	139	26.5	92	86	67	0	0	3	4	0	1
WAUSAU	33	19	54	9	26	-12	1.0	-0.6	1.0	14.4	214	36.2	125	91	64	0	0	3	4	0	1
WY CASPER	33	19	54	9	26	-12	1.0	-0.6	1.0	15.4	232	34.0	120	91	65	0	0	3	4	0	1
CHEYENNE	22	-4	29	-21	9	-22	1.0	-0.6	1.0	12.2	162	32.4	108	87	68	0	0	3	4	0	1
LANDER	26	9	36	3	17	-16	1.0	-0.6	1.0	2.7	126	10.2	94	85	60	0	0	3	4	0	1
SHERIDAN	11	-8	20	-18	2	-27	1.0	-0.6	1.0	3.4	154	18.8	146	93	51	0	0	3	4	0	1



## National Agricultural Summary

NOVEMBER 18 to 24, 1985

**HIGHLIGHTS:** Rain over the eastern third of the Nation delayed corn and soybean harvest and winter wheat seeding. In some areas harvest was held at a virtual standstill. Temperatures plunged below normal from the Great Plains westward, but most wheat in these areas was under protective snow cover. Snow and wintry weather nearly ended fieldwork in the northern Great Plain States and in the northern Rockies. Fieldwork averaged 3 days or less in most other areas except in a few Southeastern States and in the Southwest where fieldwork averaged more than 3 days. Soil moisture was generally adequate except in the Corn Belt, and in the Southeast soil moisture was mostly surplus.

Winter wheat seeding inched forward to 95 percent (%) completion but remained 1 point behind the average. Stands were in mostly good condition. Corn harvest was 11 points behind normal and 9 points slower than last year. In some areas of the northern Great Plains, corn may remain in the field until the snow melts next spring. Soybeans were 85% harvested, equaling 1984 but 7 points below average. Harvest was behind in all major producing States except Minnesota and South Dakota. Cotton picking advanced 8 points from last week to 68% finished. Normally 71% would be harvested and last year 64% was harvested. Pastures were mostly good to fair. Cooler temperatures slowed pasture growth in the South. Livestock was mostly good and supplemental feeding increased in most areas.

**SMALL GRAINS:** In the 18 major producing States, winter wheat was 95% seeded, just slightly behind normal. Wetness slowed seeding in most areas, especially in the Southeastern States. Emergence was a little behind normal. In Idaho, Nebraska, and South Dakota the emergence process was complete. Wheat stands were mostly good but cooler-than-normal temperatures slowed growth in some areas. In Kansas, wheat was 97% seeded and 90% emerged in excellent to good condition. Nebraska's wheat was mostly good. In Oklahoma, nitrogen deficiency began showing in the north, and cool weather restricted growth. However, the wheat was mostly good. Georgia's seeding progress lags 25 points behind normal.

**CORN:** Corn was 83% harvested compared with 92% in 1984 and 94% normally. All States trailed the normal harvesting pace except Colorado, Georgia, and Texas. Some corn in the northern Rockies and northern Great Plains may remain in the field until snow melts next spring. South Dakota's corn harvest was 27 points below normal, and Michigan's producers trailed the normal harvesting pace by 23 points. Harvesting progress moved forward 1 point or less from last week in Georgia, Kansas, Missouri, and North Carolina. In several other States harvest increased only 2 points from the previous week. Stalk rot and lodging were continually becoming a problem in some areas.

**SOYBEANS:** Soybean harvest equaled last year but was 7 points below normal. Harvest was 85% complete up only 4 points from last week. Harvest trailed the normal pace in all States except Minnesota and North Dakota. In the Corn Belt, harvest almost stood still. Kentucky producers harvested 12% of their acreage but were still 18 points behind normal. North Carolina and Missouri were 26 and 27 points behind normal, respectively.

**COTTON:** Cotton picking advanced 8 points from last week to 68% finished 4 points ahead of 1984 but 3 points below normal. Precipitation hampered harvest progress in the Southeast. Most States in the Southeast and Delta were nearing completion except North Carolina. Harvest jumped 10 points in Texas in 1 week but trailed the normal pace by 9 points. Freezes in Texas should soon increase harvesting progress. Forty-five percent of New Mexico's cotton was harvested, 27 points below normal.

**OTHER CROPS:** Sorghum harvest slowly climbed to 93% completion, 1 point behind the average. During the week, rain limited harvest progress in most areas. Missouri ended the week 16 points below normal while Oklahoma producers increased their harvest progress to 10 points ahead of normal.

Peanut harvest was 20 points below the average in Texas. Harvest resumed in the Cross-Timbers areas, but yield and quality was lower than anticipated.

Tobacco producers spent the week grading and sorting burley and other air-cured tobaccos. Stripping was ahead of normal in both Kentucky and Tennessee.

**VEGETABLES:** Hurricane Kate brought strong winds and heavy rainfall to Florida's vegetable areas. Other than local flooding in low lying areas the storm caused very little damage to vegetables. Snap beans, celery, cucumbers, sweet corn, tomatoes, eggplant, peppers, squash, and radishes accounted for most of the volume. Vegetable harvest continued in Texas as the weather permitted. The fall vegetable outlook is good in east Texas. Arizona's lettuce harvest was in full swing. Movement of other vegetables was seasonally active. In California, broccoli supplies were fairly heavy in Salinas but remained light in Santa Maria. Cauliflower shipments were light in most areas. Lettuce harvest increased in the Palo Verde Valley. Cantaloup harvest was nearly finished in the Imperial and Palo Verde Valleys.

**FRUIT AND NUTS:** Texas pecan harvest made good progress in the Plains, in Cross-Timbers, and in Trans Pecos areas. Most other areas were too wet for mechanical harvesting. Wetness slowed pecan harvest in the Southeast. Florida's orange harvest increased with good maturity ratios. Rainfall was light and many growers were irrigating in the high Sandhills. In Texas, orange and grapefruit harvest continued at a slow pace. Lemons, grapefruit, tangerines, and Navel and sweet oranges were picked in Arizona. California's Naval orange harvest continued, but demand slowed. Desert lemon harvest was about 60% complete. Date harvest progressed in the Coachella Valley. Late Emperor table grapes and kiwifruit were harvested. Damage to fruit and nuts from the cold temperatures was insignificant.

**PASTURES AND LIVESTOCK:** Pastures were mostly good. Cooler-than-normal temperatures slowed growth. Livestock was mostly good and supplemental feeding increased in most areas.

**CROP PROGRESS**

FOR WEEK ENDING NOV 24, 1985

	CORN % HARVESTED		
	1985	1984	AVG.
COLO	88	90	87
GA	99	100	99
ILL	90	93	98
IND	83	82	95
IOWA	85	97	98
KANS	96	99	97
KY	88	82	94
MICH	70	95	93
MINN	84	99	94
MO	79	91	93
NEBR	80	95	91
N C	99	100	100
OHIO	80	75	90
PA	74	74	88
S DAK	68	99	95
TEX	100	100	100
WIS	62	89	80
17 STATES	83	92	94

THESE 17 STATES PRODUCED 93% OF THE 1984 CORN CROP.

	SOYBEANS % HARVESTED		
	1985	1984	AVG.
ALA	78	79	87
ARK	82	69	84
GA	60	81	78
ILL	95	90	98
IND	94	85	100
IOWA	95	98	99
KANS	85	95	95
KY	72	59	90
LA	86	91	92
MICH	85	97	98
MINN	99	99	99
MISS	85	70	87
MO	63	83	90
NEBR	98	97	100
N C	34	59	60
OHIO	96	90	98
S C	36	58	53
S DAK	100	100	100
TENN	77	52	80
19 STATES	85	85	92

THESE 19 STATES PRODUCED 94% OF THE 1984 SOYBEAN CROP.

	COTTON % HARVESTED		
	1985	1984	AVG.
ALA	93	84	91
ARIZ	70	75	70
ARK	94	78	92
CALIF	90	95	90
GA	88	91	90
LA	98	82	93
MISS	95	76	92
MO	89	84	94
N MEX	45	55	72
N C	67	80	87
OKLA	45	45	35
S C	94	93	98
TENN	87	70	88
TEX	46	45	55
14 STATES	68	64	71

THESE 14 STATES PRODUCED 100% OF THE 1984 COTTON CROP.

	WINTER WHEAT % PLANTED		
	1985	1984	AVG.
ARK	85	42	79
CALIF	55	50	52
COLO	99	99	99
GA	43	61	68
IDAHO	100	100	100
ILL	98	74	94
IND	100	90	100
KANS	97	99	99
MICH	100	100	100
MO	91	84	92
MONT	100	100	100
NEBR	100	100	100
OHIO	100	99	100
OKLA	98	95	95
OREG	96	96	98
S DAK	100	100	100
TEX	89	97	94
WASH	100	100	100
18 STATES	95	94	96

THESE 18 STATES PRODUCED 88% OF THE 1984 WINTER WHEAT CROP.

	SORGHUM % HARVESTED		
	1985	1984	AVG.
ARK	99	95	99
KANS	95	97	90
MO	76	89	92
NEBR	98	98	98
OKLA	95	95	85
S DAK	93	100	98
TEX	93	95	98
7 STATES	93	96	94

THESE 7 STATES PRODUCED 83% OF THE 1984 SORGHUM CROP.

	WINTER WHEAT % EMERGED		
	1985	1984	AVG.
ARK	67	NA	NA
CALIF	45	25	42
COLO	98	95	94
GA	32	NA	NA
IDAHO	100	100	100
ILL	90	63	91
IND	98	78	97
KANS	90	90	95
MICH	95	NA	NA
MO	80	63	82
MONT	80	100	100
NEBR	100	100	100
OHIO	98	95	99
OKLA	85	75	80
OREG	90	90	94
S DAK	100	100	100
TEX	76	88	85
WASH	96	100	100
18 STATES	87	NA	NA
EXCL. STATES WITH NA	88	87	91

THESE 18 STATES PRODUCED 88% OF THE 1984 WINTER WHEAT CROP.

NA - NOT AVAILABLE

## 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 mostly under 0.50 in. Rain totals 1.00 to 2.00 in. over southeast. Temperatures averaged 5 to 100 above normal over extreme north, 10 to 150 above normal elsewhere. Fieldwork 4.7 days. Soil moisture 8% short, 77% adequate, 15% surplus. Soybeans harvested 78%, 79% 1984, 87% avg. Cotton harvested 93%, 84% 1984, 91% avg. Winter wheat planted 68%, 71% 1984, 83% avg.; 41% fair, 55% good, 4% excellent. Pastures 4% poor, 46% fair, 46% good, 4% excellent. Livestock 33% fair, 63% good, 4% excellent. Primary activities: Harvesting cotton, soybeans, pecans, fall garden vegetables; fertilizing winter grazing crops; soil testing; planting winter wheat; general care of livestock, poultry.

**ARIZONA:** Partly cloudy skies 18th with snow flurries over higher elevations; clear skies, colder air 19th to 20th. Minimum temperatures below zero high country, teens central basins, 30s lower deserts. Warming trend pushed daytime readings above normal by 24th. Averages varied from normal at Douglas to 100 below at Kingman. Cotton harvested 70%, 75% 1984, 70% avg. Stalk shredding, plowdown active to moderate. Cotton quality west appears good. Seedbed preparation for wheat, barley crops progressed. Planting underway, 6% seeded statewide. Alfalfa good condition. Sheep grazing light to moderate. Corn harvest virtually complete, sorghum combining continued. Lemons, grapefruit, tangerines, Navel and sweet oranges picked. Groves good condition. Apple shipping continued. Pecans harvested. Pistachio harvest concluded. Lettuce harvest west full swing. Movement of other vegetables seasonally active. Yuma, Parker-Poston, cauliflower, broccoli, Romaine and Leaf lettuce, napa, bok choy, cantaloups, honeydews harvested. Aguila-Harquana-Salt River Valley, lettuce, melons, mixed vegetables harvested. Lettuce, rapini packed in Casa Grande-Eloy-Marana. Kobocma, red chili available Willcox.

**ARKANSAS:** Temperatures normal to 60 above normal. Coldest air of season brought freezing or below to all but southern portion State. Rain in all sections. Temperature extremes 210; 820. Precipitation 0.09 to 6.32 in. Days suitable for fieldwork 3.0. Soil moisture 47% adequate, 53% surplus. Cotton 94% harvested, 78% 1984, 92% avg. Winter wheat 85% planted, 42% 1984, 79% avg.; 67% emerged. Winter wheat 10% fair, 79% good, 11% excellent. Sorghum 99% harvested, 95% 1984, 99% avg. Soybeans 82% harvested, 89% 1984, 84% avg.

**CALIFORNIA:** Temperatures continued well below normal throughout much of State while rainfall scattered, mostly light. Huntington Lake received almost 1.00 in. liquid precipitation in contrast to dry conditions in all southern areas. Temperatures across State ranged from a high of 770 at Thermal to a low of -30 at Alturas. Wet conditions reduced field activity. Seeding small grains, alfalfa, safflower. Cotton 90% harvested, 95% 1984, 90% avg.; condition good. Shredding, discing active, weather permitting. Winter wheat 55% seeded, 50% 1984, 52% avg. Winter wheat emerged 45%, 25% 1984, 42% avg.; condition good. Corn, grain sorghum, sugarbeet harvests progressed. Cold, wet weather slowed fieldwork. Date harvest progressed Coachella Valley, good quality and yields. Late Emperor table grapes, kiwifruit harvested. Exports of

these commodities increased recently. No significant frost damage to citrus groves. Desert lemon harvest 60% complete. Navel orange harvest continued, slow demand. Volume packed, sugar content of Navel oranges, and prices received all up last week. Fairchild tangerine harvest continued. Artichoke moderate quality, improving central coast. Broccoli, Salinas fairly heavy but fairly light Santa Maria, variable quality. Cantaloup, Imperial Valley - Palo Verde Valley nearly over. Volume light, small sizes, mostly fair, quality. Honeydew shipments light good quality. Carrots fairly light, variable quality Salinas area. Cauliflower light and very light Salinas, Santa Maria respectively, quality variable. Celery fairly heavy Salinas, variable quality as few shippers finished. Santa Maria celery fairly heavy, variable quality. Lettuce very light varying quality Salinas, Santa Maria. Harvest picked up Palo Verde Valley. Green pepper harvesting ended Salinas very light variable quality Santa Maria mostly choice sizes. Sweetpotato virtually complete. Frosts ended season late market tomatoes San Joaquin Valley. Rains improved soil moisture expect northeastern districts. Grass growth slow due cold temperatures supplemental feeding heavy most northern districts. Reservoirs, stock ponds low. Calving, lambing continued. Sheep grazing alfalfa fields.

**COLORADO:** Strong storm systems moved into mountains and west on 19th bringing 2.00 in. of new moisture to southwest. Area west of Continental Divide received an average of over 1.00 in. of precipitation with 0.10 to 0.20 in. of new moisture reported northeast; while Arkansas Valley, San Luis Valley generally 0.10 in. Record lows noted many areas on 20th. Average temperatures 10 to 150 below normal most areas. Winter wheat 99% planted, 99% 1984, 99% avg.; 98% emerged, 95% 1984, 94% avg. Corn harvested 88%, 90% 1984, 87% avg.

**FLORIDA:** Very warm, windy under influence of Hurricane Kate. Rainfall generally light, around 1.00 in. south, 0.25 to 0.75 in. elsewhere except 3.00 to 6.00 in. in storms path across Panhandle. Temperatures nearly 100 above normal. Rain from Hurricane Kate improved soil moisture most areas. Surplus moisture northwest coastal, scattered low areas elsewhere. Soybean harvest delayed, quality lowered. Cotton quality, yield reduced unharvested fields. Cotton harvest winding down. Small grain planting continued; most early planted acreage progressing favorably. Sugarcane harvest increasing seasonally. Rains from hurricane mostly beneficial to pastures; but fields in low coastal areas, Panhandle, upper east coast surplus water. Central, Peninsula pastures generally need more rain with condition rated mostly fair; elsewhere condition good to excellent, south and ranges from fair to good other areas. Cattle varies from fair to good, few northern localities but mostly good elsewhere. Citrus groves good condition; no damage to citrus from Hurricane Kate. Rainfall light; many growers irrigating on high Sandhills. Orange harvest increasing with good maturity ratios. Hurricane Kate brought strong winds. Locally heavy rainfall to vegetable areas. Rainfall amounts varied, some flooding in low areas. Storm caused very little overall damage to vegetables. Temperatures remained warm with daytime highs mid 80s, nighttime lows upper 60s, lows 70s. Volume lowered for some

crops but expected to return to normal soon. Leading crops continued to be: Snap beans, celery, cucumbers, sweet corn, tomatoes, eggplant, peppers, squash, radishes. Harvest other crops seasonally active.

**GEORGIA:** Rainfall totals less than 0.05 in. extreme northwest, 1.00 in. range over north, between 2.00 to 4.00 in. across central and south. Amounts of 5.00 to 7.00 in. common near path of Hurricane Kate. Temperature extremes from 85° at Albany, Blakely to 36° Calhoun. Temperatures about 14° above normal.

Days suitable for fieldwork 3.5. Soil moisture 2% very short, 10% short, 47% adequate, 41% surplus. Main activities: Haying, harvesting, planting as weather permitted and cleaning up assessing damage from Hurricane Kate. Corn 99% harvested, 100% 1984, 99% avg. Cotton 88% harvested, 91% 1984, 90% avg.; 8% poor, 39% fair, 45% good, 8% excellent. Grain sorghum 92% harvested; 5% poor, 60% fair, 35% good. Soybeans 100% dropping leaves, 100% 1984, 100% avg.; 60% harvested, 81% 1984, 78% avg.; 14% poor, 57% fair, 28% good, 1% excellent. Wheat 43% planted, 61% 1984, 68% avg.; 32% emerged; 2% poor, 24% fair, 72% good, 2% excellent. Rye 82% planted, 85% 1984, 88% avg.; 4% poor, 27% fair, 66% good, 3% excellent. Other small grains 71% planted, 78% 1984, 84% avg. Pecans 66% harvested, 63% 1984, 62% avg.; 9% poor, 58% fair, 33% good. Pastures 8% poor, 40% fair, 51% good, 1% excellent. Hay 1% very poor, 14% poor, 45% fair, 39% good, 1% excellent. Cattle 28% fair, 71% good, 1% excellent. Hogs 24% fair, 75% good, 1% excellent.

**HAWAII:** Crops made fair progress under variable weather conditions. Frontal band passed across islands resulting in showers, at times heavy, beginning of week. Winds variable blowing from the southwest on 18th then shifted to westerly pattern at midweek. Trade winds returned at end of week. Harvesting of bananas active. Banana, papaya orchards in fair to good condition. Vegetable supplies low to moderate. Sugarcane harvesting active. Pineapple harvesting for fresh sales only.

**IDAHO:** Temperatures remained below normal as Arctic air continued to spill into State. Many record low temperatures set during week and snow fell across State as wintery weather came early. Precipitation amounts above normal most locations.

All wheat planted, emerged. Livestock care, movement into feedlots, marketing primary activities. Frozen spuds hauled from eastern cellars. Livestock feeding underway in nearly all areas with spotty hay shortages in far north and east. Fall calving underway in many areas.

**ILLINOIS:** Temperatures near normal to 10° below normal; coolest northern third. Precipitation 0.05 to 4.64 in., heaviest central. Corn harvest for grain 90%, 93% 1984, 98% avg. Soybeans harvested 95%, 90% 1984, 98% avg. Winter wheat planted 98%, 74% 1984, 94% avg.; emerged 90%, 63% 1984, 91% avg.

**INDIANA:** Temperatures 1 to 30° below normal north to 1 to 30° above normal south. High mid 70s south to lows in lower teens northwest. Rainfall mostly 2.00 in. north, 3.00 to 4.00 in. central, 0.50 in. or less south. Amounts 1.00 in. above normal north, 2.50 to 3.00 in. above normal central, 0.50 in. below normal south.

Fieldwork averaged 0.6 days. Topsoil moisture 4% adequate, 96% surplus. Subsoil moisture 2% short, 28% adequate, 70% surplus. Corn 83% harvested, 82% 1984, 95% avg. Corn moisture content 20%, 22% 1984. Soybeans 94% combined, 85% 1984, 100% avg. Soybean moisture content 14%, 15% 1984. Wheat 100% seeded, 90% 1984, 100% avg.; 98%

emerged, 78% 1984, 97% avg. Wheat stands 2% poor, 14% fair, 66% good, 18% excellent. Wheat condition 2% poor, 17% fair, 66% good, 15% excellent. Spring cropland 37% tilled, 35% 1984, 51% avg.

**IOWA:** Cold, cloudy, wet week. Precipitation 19th to 20th rain southeast; snow northwest from southwest to east central; northeast. Snow 1 to 5 in. Temperatures 17° northwest to 7° southeast subnormal. Low -10 21st.

Days suitable for fieldwork 3.3. Topsoil moisture 1% short, 34% adequate, 65% surplus. Subsoil moisture 3% short, 69% adequate, 28% surplus. Corn harvested 85%, 97% 1984, 98% avg. Soybeans harvested 95%, 98% 1984, 99% avg. Fall tillage completed 20%. Fertilizer application completed 15%. Livestock good condition.

**KANSAS:** Precipitation averaged less than 0.10 in. west and south central, 1.50 in. extreme southeast, 0.10 to 0.20 in. elsewhere. Temperatures averaged 24 to 29° west and north central, 32 to 38° east and south central. Temperatures 5 to 8° below normal east, 10 to 13° below normal central and west.

Days suitable for fieldwork 2.5. Topsoil moisture 7% short, 58% adequate, 35% surplus. Wheat 97% seeded, 99% 1984, 99% avg. Wheat 97% emerged, 90% 1984, 95% avg. Wheat 6% poor, 9% fair, 32% good, 53% excellent. Wheat 10% pastured, 10% 1984, 5% excellent. Sorghum 95% harvested, 97% 1984, 90% avg.; wet fields eastern areas. Soybeans only 85% harvested, 95% 1984, 95% avg. Corn 96% harvested, 99% 1984, 97% avg. Pasture good. Feed grain, hay and forage supplies adequate to surplus. Livestock grazing corn and sorghum stubble.

**KENTUCKY:** Warm early, by 23rd cold front dropped temperatures around normal. Temperatures averaged slightly above normal. Precipitation totals between 0.25 to 0.50 in. soil temperatures at depth 4 in. averaged in 50s.

Soil moisture 37% adequate, 63% surplus. Corn 88% harvested, 82% 1984, 94% avg. Most remaining corn standing well, but lodging and wind loss increasing. Soybeans 72% harvested, 59% 1984, 90% avg. Burley 66% stripped, 42% 1984, 52% avg. Burley markets opened November 25th. Wheat 85% seeded, some wheat won't be seeded. Pastures good to excellent.

**LOUISIANA:** Temperatures averaged 7 to 12° above normal. Temperature extremes 36°; 84°. Rain totals averaged none to 1.20 in.

Days suitable for fieldwork 5.5. Soil moisture 7% short, 66% adequate, 27% surplus. Cotton 98% harvested, 82% 1984, 93% avg. Soybeans 86% harvested, 91% 1984, 92% avg. Pecans 66% harvested, 57% 1984, 51% avg. Sweetpotatoes 91% harvested, 95% 1984, 98% avg. Vegetables fair. Sugarcane 98% planted, 100% 1984, 100% avg.; 52% harvested, 53% 1984, 59% avg. Winter wheat 45% planted, 53% 1984, 74% avg.; 30% emerged, 40% 1984, 57% avg. Pastures fair, livestock fair to good.

**MARYLAND & DELAWARE:** Maryland: Temperatures mostly 8 to 10° above normal; highs mid to upper 70s, lows mid to upper 30s. Precipitation averaged 1.60 in., ranging from 0.85 to 2.35 in.

Fieldwork 3.3 days. Topsoil moisture adequate on shore, adequate to surplus west of bay. Corn for grain 96% harvested, 100% 1984, 100% avg. Soybeans fair to good. Soybeans 70% harvested, 85% 1984, 100% avg. Small grains good condition. Wheat 97% seeded, 100% 1984, 100% avg. Rye 99% seeded, 100% 1984, 100% avg. Oats 99% seeded, 100% 1984, 100% avg.

Delaware: Temperatures 9 to 10° above normal;

highs mid 70s lows upper 30s. Precipitation averaged 1.44 in., ranging from 1.08 in. south to 1.66 in. central and north.

Fieldwork 5.0 days suitable. Topsoil, subsoil moisture adequate. Soybeans 65% harvested, 95% 1984, 90% avg. Corn for grain 100% seeded, 100% 1984, 100% avg.

**MICHIGAN:** Average temperatures ranged from 20 above normal in lower Peninsula to 20 below normal in upper Peninsula. Precipitation moderate across State.

Days suitable for fieldwork 1.4. Soil moisture supplies 4% adequate, 96% surplus. Intermittent rain, snow stall fieldwork. Corn 70% harvested, 95% 1984, 93% avg. Soybeans 85% harvested, 97% 1984, 98% avg. Winter wheat 100% planted, 100% 1984, 100% avg.; 95% emerged. Winter wheat 5% poor, 20% fair, 45% good, 30% excellent. Fruit, vegetable farmers continue machinery repair. Fruit tree, grape vine pruning underway.

**MINNESOTA:** Very cold, snowy. Temperatures averaged 9 to 170 below normal. Temperature extremes -240; 570. Precipitation averaged near normal, east central; 0.21 to 0.68 in. above normal elsewhere. Greatest weekly total 1.15 in. Snow depth, weeks end averaged 7 to 12 in., northern third; 2 to 5 in., elsewhere.

Days suitable for fieldwork 2.7. Topsoil moisture 61% adequate, 39% surplus. Field corn 84% harvested, 99% 1984, 94% avg. Sunflowers 94% harvested, 96% 1984, 95% avg.

**MISSISSIPPI:** Rainfall below 0.50 in. north, none south. Temperatures 110 above normal.

Fieldwork 4.8 days suitable, 3.3 1984, 2.6 avg. Soil moisture 5% excessive, 28% surplus, 65% adequate, 2% short. Wheat seeding and crop harvest advanced during week. Soybeans 85% harvested, 70% 1984, 87% avg. Cotton 95% harvested, 76% 1984, 92% avg. Sweetpotatoes 98% harvested. Pecans 65% harvested, 57% 1984, 58% avg. Winter wheat 63% planted, 53% 1984, 77% avg. Pasture 36% fair, 58% good, 6% excellent. Livestock 15% fair, 79% good, 6% excellent.

**MISSOURI:** Rainfall of 3.00 to 5.00 in. from southwest to east central. Northeast recorded near 1.00 in. Southeast, northwest recorded 0.50 in. Temperatures averaged 2 to 60 below normal across most of State. Southeast 60 above normal.

Days suitable for fieldwork 0.9. Topsoil moisture 6% adequate, 94% surplus. Corn harvested 79%, 91% 1984, 93% avg. Soybeans harvested, 63%, 83% 1984, 90% avg. Grain sorghum harvested 76%, 89% 1984, 92% avg. Cotton harvested 89%, 84% 1984, 94% avg. Winter wheat 5% poor, 45% fair, 49% good, 1% excellent. Winter wheat seedings 91%, 84% 1984, 92% avg.; emerged 80%, 63% 1984, 82% avg. Pasture 3% poor, 27% fair, 61% good, 9% excellent. Fall tillage for spring crops 41% completed.

**MONTANA:** Extreme cold week. Temperatures 15 to 250 below normal west of Divide, 25 to 350 below east of Divide. Subzero temperatures many days with record cold temperatures. Coldest 350 below zero Harlem. Precipitation generally above normal. Heaviest snow early in week with lesser amounts rest of week; 2 to 4 in. of snow covered State at end of week.

Topsoil moisture supplies 9% short, 91% adequate. Subsoil moisture supplies 34% short, 66% adequate. Winter wheat 87% fair, 13% good. Winter wheat 100% seeded, 100% 1984, 100% avg. Winter wheat 80% emerged, 100% 1984, 100% avg.; snowcover good. About 90% livestock receiving supplemental feed. Hay and roughage for winter feed supplies 75% short, 25% adequate.

**NEBRASKA:** Temperatures averaged 20 below normal Panhandle and north, 170 below normal remainder. Precipitation ranged from 0.25 in. east to less than 0.10 in. rest of State.

Fieldwork days 3.7. Topsoil moisture 77% adequate, 23% surplus. Subsoil moisture 6% short, 84% adequate, 10% surplus. Winter wheat 27% fair, 56% good, 17% excellent. Wheat planted 100%, 100% 1984, 100% avg. Wheat emerged 100%, 100% 1984, 100% avg. Corn harvest 80%, 95% 1984, 91% avg. Shelled corn still being dried. Sorghum harvest 98%, 98% 1984, 98% avg. Corn, sorghum harvest slow and difficult with delays due to weather. Soybean harvest 98%, 97% 1984, 100% avg. Soybean harvest temporarily at standstill. Pasture, range feed supplies mostly adequate to short. Cattle moved to stalk. Working, weaning calves. Hay usage up as supplemental feeding continued in areas with heavy snowcover.

**NEVADA:** Cold, northerly air continued to keep temperatures 8 to 160 below normal. Precipitation fell mainly as snow in north and east, as a mixture of snow, rain, and freezing rain west. Extreme south dry. Temperature lows varied from 150 below zero east to 240 south. Rain, snow, sleet continued to hamper livestock care and feeding operations. Trucking potatoes to market slowed by extremely cold weather.

**NEW ENGLAND:** Precipitation averaged 0.25 in. most areas. Southern Connecticut and southeastern Massachusetts averaged 0.50 in. Mean temperatures near 400, 5 to 100 above normal for northern areas, near normal for southern areas. Cutting firewood, repairing machinery, winterizing barns, moving apples and potatoes from storage, tending livestock.

**NEW JERSEY:** Temperatures above normal averaging 440, 490 south, 520 coastal. Extremes 240; 800. Precipitation near normal, averaging 0.78 in. north, 1.02 in. south, 0.85 in. coastal. Heaviest 24-hour total 1.13 in. on 22nd, 23rd.

Above normal temperatures, adequate soil moisture promoting good growth of fall sown grains, cover crops. Harvest of hardy vegetables continued on limited basis. Combining of soybeans, corn for grain well advanced. Fruit tree pruning becoming general. Crops moving from storages, cider making, preparing turkeys for market for Thanksgiving.

**NEW MEXICO:** Temperatures 40 below normal north, near normal southwest. Little above normal southeast. Temperatures 10 northern mountains to 780 southeast plains. Precipitation none to 1.29 in., northern mountains.

Days suitable for fieldwork 6.6. Soil moisture 24% short, 71% adequate, 5% surplus. Freeze damage 20% none, 30% light, 30% moderate, 20% heavy. Alfalfa 7% very poor, 43% fair, 43% good, 7% excellent. Cotton 40% fair, 60% good; 45% harvested, 55% 1984, 72% avg. Corn 29% fair, 71% good. Barley 20% fair, 80% good. Irrigated wheat 8% fair, 92% good. Dryland wheat 20% fair, 80% good. Irrigated grain sorghum 22% fair, 78% good. Dryland grain sorghum 60% fair, 40% good. Pecan 100% good. Chile 33% fair, 67% good. Cattle 24% fair, 71% good, 5% excellent. Sheep 13% fair, 87% good. Range 5% very poor, 40% fair, 55% good.

**NEW YORK:** Weather quite changeable. Precipitation relatively light, except in southeastern State. Generally, upstate areas picked up less than 0.50 in., amounts at New York City, Long Island ranged from 0.50 to 1.00 in. some residual precipitation associated with a departing cold front fell on 17th. Heaviest precipitation on

22nd, it started as snow, sleet or freezing rain in most areas then changed to rain and drizzle. Rainfall from remains of Hurricane Kate probably contributed to the totals in southeastern State. Temperatures also quite variable. New record of 70° set at Buffalo on 19th. New records also set at Albany, New York City on 20th. Coolest part of week on 22nd, when highs in 40s in southeastern areas, in 20s and 30s elsewhere.

Grain corn harvest continued. Moisture picked up from rains of previous 2 weeks. Winds, rain caused some lodging. Other farming activities for week included fall plowing, tending livestock, general farm chores.

**NORTH CAROLINA:** Temperatures 15° above normal Mountain and Coastal Plain Regions, 9° to 15° above normal Piedmont Region. Rainfall ranged from 1.00 to 5.75 in. across State.

Days suitable for fieldwork 3.2. Soil moisture 6% short, 40% adequate, 54% surplus. Corn harvested for grain 99%, 100% 1984, 100% avg. Cotton harvested 67%, 80% 1984, 87% avg. Soybeans harvested 34%, 59% 1984, 60% avg. Grain sorghum harvested 89%, 92% 1984, 92% avg. Sweetpotatoes harvested 98%, 100% 1984, 100% avg. Pasture 2% poor, 27% fair, 66% good, 5% excellent. Wheat planted 63%, 86% 1984, 82% avg. Farm feed supplies: Hay, roughage 1% short, 92% adequate, 7% surplus. Feed grains 4% short, 90% adequate, 6% surplus. Major farm activities: Grading burley tobacco; finishing corn harvest, harvesting sorghum, fall vegetables, soybeans and cotton; digging sweetpotatoes; preparing plant beds, fall plowing; and preparation for cover crops; fall seeding of small grains; cutting firewood and Christmas trees, conservation work; mowing, general farm maintenance, and machinery repair.

**NORTH DAKOTA:** Cold, snowy last week. Temperatures averaged 11° to 17° below normal. Below zero temperatures common. Low of -20° east central, high of 52° west central. Precipitation above normal across State. Snow storm on 18th, 19th deposited 5 to 10 in. across State. Light snow fell across portions remainder of week.

More snow at week's end, still falling. Still some corn and sunflower to be harvested but it will be virtually impossible to get before spring.

**OHIO:** Temperatures averaged 3° to 5° above normal, extremes wide-from highs in upper 70s to lows in lower 20s. Precipitation widespread. Soils remain saturated most areas. Four inch bare soil temperatures averaging 40s.

Days suitable for fieldwork 2.0. Topsoil moisture 10% adequate, 90% surplus. Corn 80% harvested, 75% 1984, 90% avg.; some lodging reported; stalks continue to rot. Soybeans 96% harvested, 90% 1984, 98% avg.; some beans molding, sprouting in pods. Winter wheat 8% fair, 76% good, 16% excellent; 100% planted, 99% 1984, 100% avg.; emerged 98%, 95% 1984, 99% avg.; concern over excess growth remains; standing water may drown out crop several areas.

**OKLAHOMA:** Temperatures averaged 6° below normal Panhandle to 5° above normal southeast. Precipitation averaged trace Panhandle to 3.75 in. east central.

Days suitable for fieldwork 2.5. Topsoil moisture 60% adequate, 40% surplus. Subsoil moisture 100% adequate. Wheat 15% fair, 70% good, 15% excellent. Wheat 98% planted, 95% 1984, 95% avg.; 85% emerged, 75% 1984, 80% avg. Nitrogen deficiency north. Cool weather restrict growth. Some Panhandle cattlemen face wheat pasture shortage. Sorghum 95% harvested, 95% 1984, 85% avg. Cotton 45% harvested, 45% 1984, 35% avg. Cold, damp weather interrupt harvest. Frost

received but little damage reported. Colder weather limits parasite activities.

**OREGON:** Record breaking cold hit all of State late in week. Temperatures 7° to 12° below normal in west, up to 24° below normal in southeast. Many record minimum and low maximum temperatures set at end of week. Entire State recorded precipitation; greatest amounts at coast and in coast range. North Cascades about 4.5 times normal snowpack of this date; most since 1973.

Soil moisture 92% adequate, 8% surplus. Winter wheat 96% planted, 96% 1984, 98% avg.; 90% emerged, 90% 1984, 94% avg. Snow, cold halted all field activity statewide. Eastern areas have protective snowcover for grains. Livestock condition mostly good. Weather severely increased supplemental feed requirements.

**PENNSYLVANIA:** Mild week. Average temperatures 45°, 7° above normal. Highest temperatures 78° at Lancaster, coldest 21° at Wellsboro. Average precipitation 0.45 in., 0.31 in. below normal.

Days suitable for fieldwork 3.0. Moisture mostly surplus to adequate. Activities: Harvesting limited quantities of corn for grain, soybeans; grading potatoes; machinery maintenance; chopping corn fodder; hauling manure. Corn for grain 74% harvested, 74% 1984, 88% avg. Soybeans 75% harvested, 87% 1984, 92% avg. Feed obtained from pastures mostly average to below average.

**PUERTO RICO:** Island average rainfall 2.57 in., 1.25 in. above normal. Highest weekly total 4.91 in. Highest 24-hour total 2.66 in. Temperature averaged about 76° to 78° on coast, 72° to 73° Interior divisions. Mean station temperature ranged from 63° to 80°. Extremes 56°; 91°. Total rainfall 0.50 in. minus 0.83 in.

**SOUTH CAROLINA:** Warm and wet weather with temperatures 10° to 15° above normal early week. Temperatures dropped following passage of Kate late week; but weather still warmer than normal. Rainfall ranged from 1.00 to over 4.00 in. throughout State.

Days available for fieldwork 1.6. Soil moisture 36% adequate, 64% surplus. Soybeans 8% very poor, 13% poor, 70% fair, 3% good, 6% excellent; 98% mature, 96% 1984, 91% avg.; 36% harvested, 58% 1984, 53% avg. Cotton 40% poor, 39% fair, 15% good, 6% excellent; 94% harvested, 93% 1984, 98% avg. Barley, oats, rye, livestock good. Wheat, pastures, winter grazing, hay fair to good.

**SOUTH DAKOTA:** Average temperatures ranged 14° to 27° below normal. Extremes -24°; 54°. Melted precipitation 0.25 to 1.00 in. east central in form of snow; 2 to 10 in. new snow.

Days suitable for fieldwork 1.0. Topsoil moisture adequate to surplus eastern two-thirds, short west; 6% critically short, 17% short, 61% adequate, 16% surplus. Corn 1% very poor, 3% poor, 24% fair, 63% good, 9% excellent. Corn 68% harvested, 99% 1984, 95% avg. Winter wheat 12% fair, 76% good, 12% excellent. Winter wheat 100% seeded, 100% 1984, 100% avg.; 100% emerged, 100% 1984, 100% avg. Sorghum 1% very poor, 9% poor, 39% fair, 41% good, 10% excellent. Sorghum 93% harvested, 100% 1984, 98% avg. Soybeans 100% harvested, 100% 1984, 100% avg. Full feeding of livestock beginning.

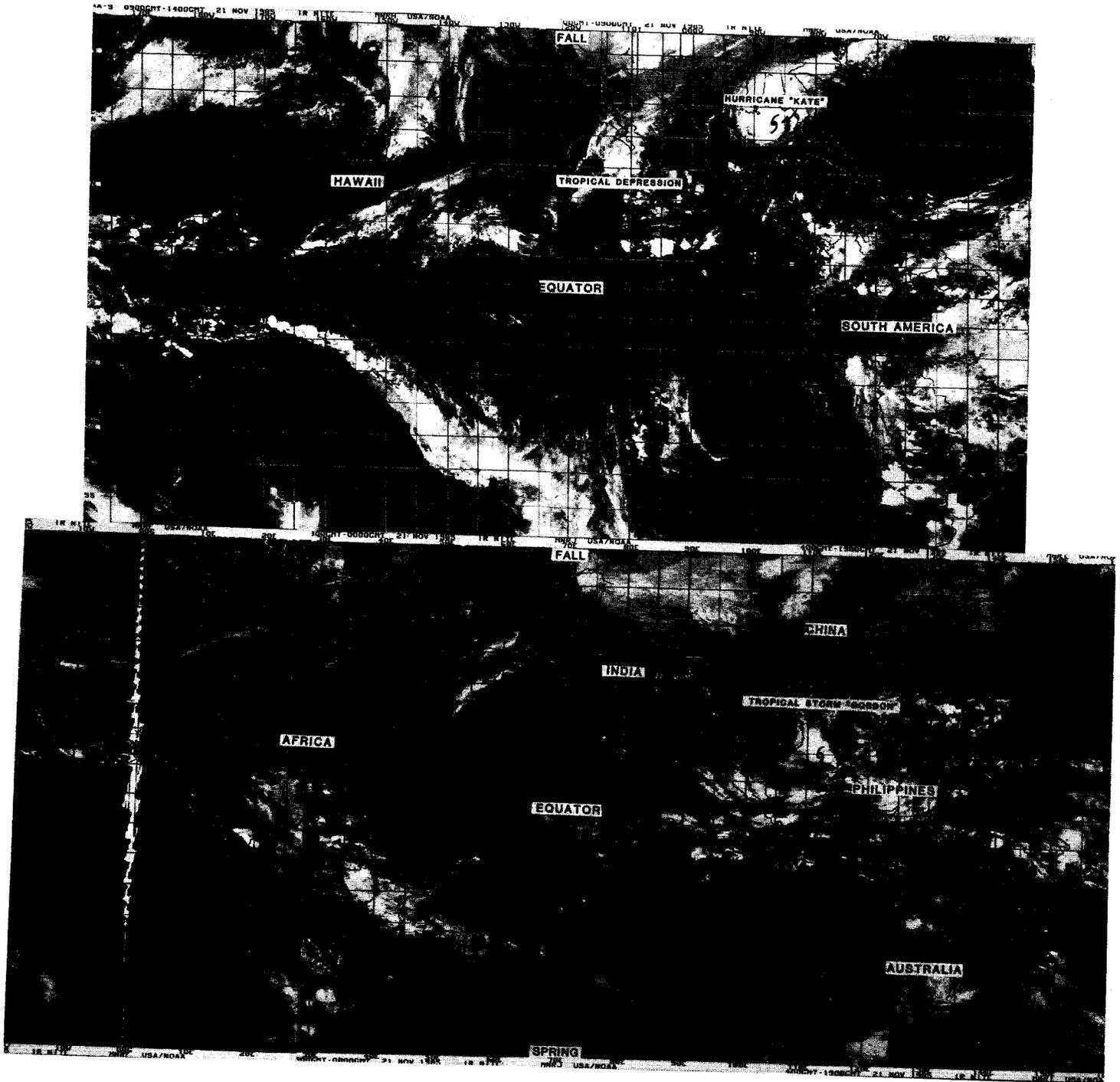
**TENNESSEE:** Light rainfall daily; amounts less than normal. Temperatures averaged 7° to 13° above normal.

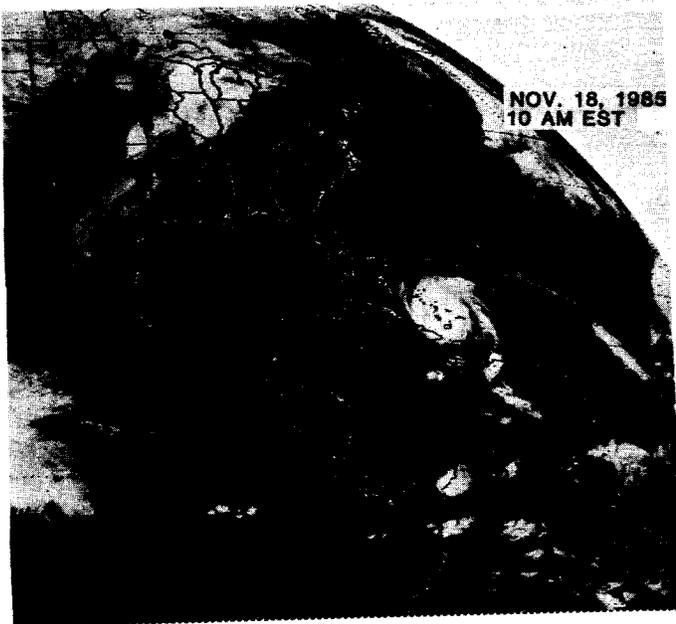
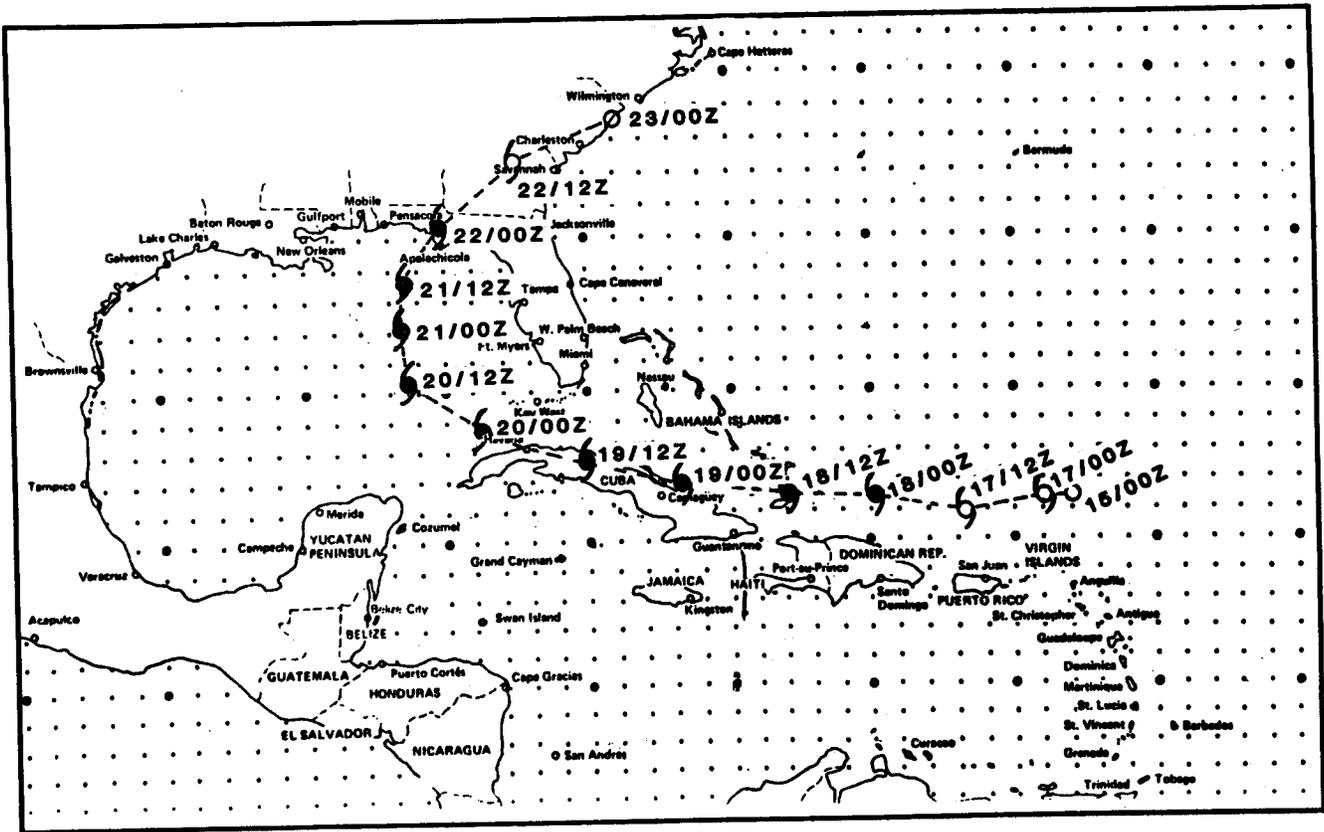
Farmers averaged 3.4 days suitable for fieldwork. Soil moisture 6% short, 66% adequate, 28% surplus. Harvest on schedule. Corn 93%

(Continued to p. 3)

# GLOBAL WEATHER SATELLITE IMAGE

NOVEMBER 21, 1985





**HURRICANE KATE STRIKES CUBA AND MOVES INTO SOUTHEASTERN UNITED STATES**

Kate, an unusually late season hurricane, formed from an easterly wave northeast of Puerto Rico on November 15, intensified as it moved west, and crossed the northcentral coast of Cuba on November 19. The center of the hurricane passed over Havana before entering the Gulf of Mexico.

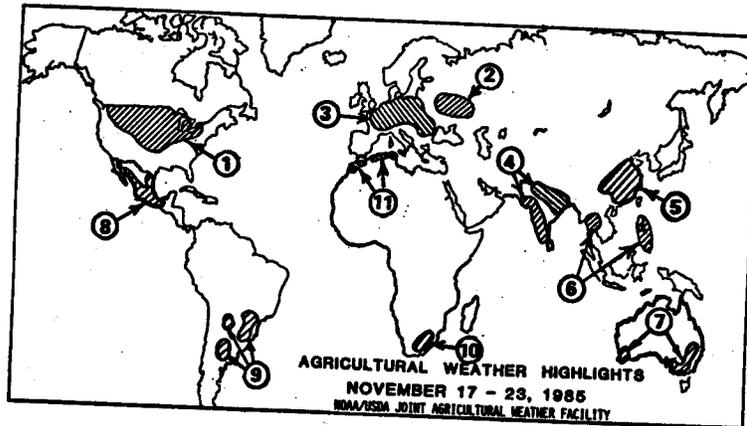
The sustained winds were estimated at 110 mph as the storm hit Cuba, before diminishing to 85 mph as it passed over the island to the northwest coast. The heavy rain and high wind damaged Cuba's maturing and unharvested sugar crop along the northern coast. Harvesting, which normally begins in early November, will be hampered, but the moisture will be beneficial in alleviating dryness in Cuba.

Kate is only the second hurricane to have hit Cuba this late in November in the 100 years that records have been kept. The last November hurricane to hit Cuba was Katrina which occurred early in the month in 1981 (see Weekly Weather and Crop Bulletin, Vol. 68, No. 45, Nov. 10, 1981).

Hurricane Kate reintensified as it moved into the Gulf, curved to the north, and struck the Florida coast at Panama City on November 22. Wind damage was confined to areas near the coast as the storm intensity weakened and moved inland. However, heavy rain fell through much of the southeast.

# International Weather and Crop Summary

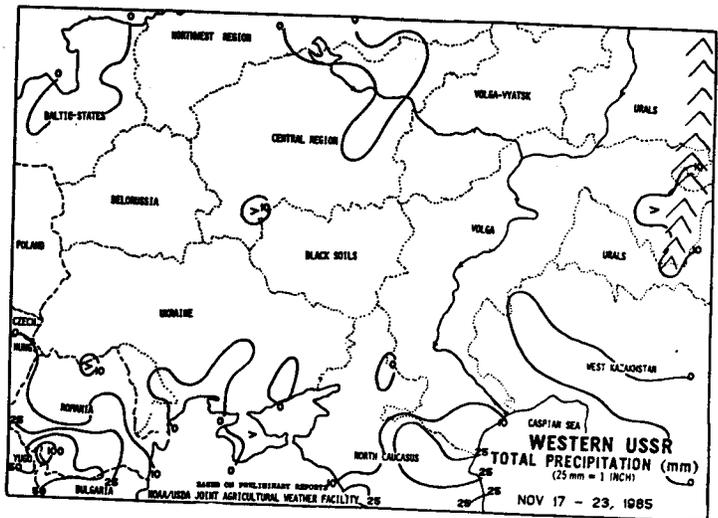
## November 17-23, 1985

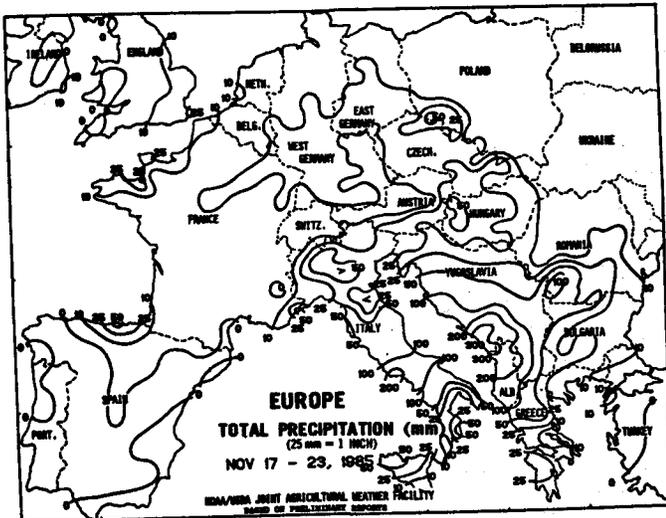


**HIGHLIGHTS:**

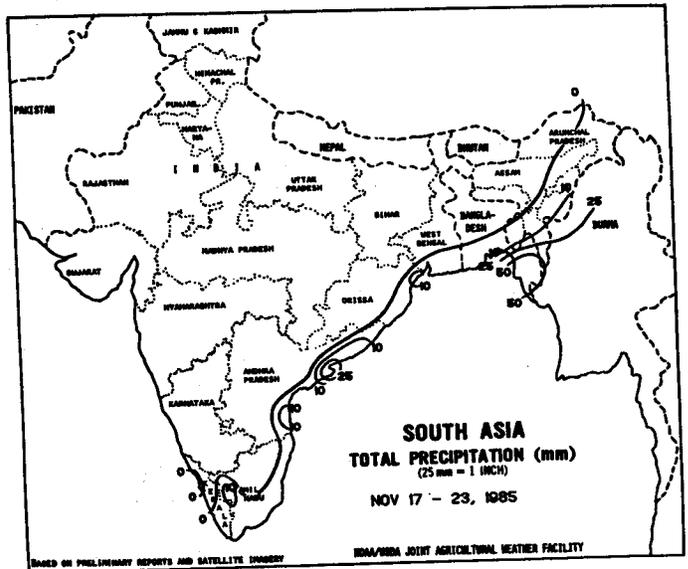
1. **UNITED STATES** ... Rain over the eastern third of the Nation delays corn and soybean harvest and winter wheat seeding. Snow cover protects wheat from the bitter cold temperatures in the Great Plains and Northern Rockies.
2. **WESTERN USSR** ... Extremely cold weather covers most winter grain areas. Although minimum temperatures approached the threshold for winterkill in some areas, snow cover was probably sufficient to protect winter grains.
3. **EUROPE** ... Average weekly temperatures were below freezing in the north and east, causing winter grains to enter dormancy earlier than usual, limiting crop establishment in some areas.
4. **SOUTH ASIA** ... Dry weather in the south allows flooding to recede. Moisture is adequate for early growth of wheat.
5. **EASTERN ASIA** ... Warmer weather favors establishment of late planted winter wheat. Heavy rain interrupts rice harvesting.
6. **SOUTHEAST ASIA** ... Unfavorable rain continues in northern Thailand while rice is maturing. Heavy rain may have damaged rice in the Philippines.
7. **AUSTRALIA** ... Dry weather favors maturing grains in the southeast. Moderate showers benefit summer crops.
8. **MEXICO** ... Scattered showers slow harvesting of corn and tropical crops along the east coast, while mostly dry weather prevails elsewhere.
9. **SOUTH AMERICA** ... Showers and cooler weather bring some relief to Brazil's southwestern and northern soybean areas, while drier weather benefits Argentina's western crop area.
10. **SOUTH AFRICA** ... Hot, dry weather stresses early growth of western corn.
11. **NORTHWESTERN AFRICA** ... Showers in northern Morocco and Algeria provide favorable moisture for winter grain planting. Dry weather continues in southern Morocco and Tunisia.

**WESTERN USSR**... Unseasonably cold, dry weather covered the region during the week. Weekly average temperatures ranged from -6C to -10C in the north and -3C to -5C in the extreme south. Nighttime lows around -15C occurred late in the week over winter wheat areas in southern Belorussia, the southern portion of the Central Region, Black Soils, the northcentral Ukraine, and the lower Volga. Sufficient snow cover likely protected winter grains from extreme cold in these areas. Hardening conditions for winter grains were mixed. In the north, a uniform decrease in temperatures allowed winter grains to become well hardened before dormancy. However, in the southern Ukraine and North Caucasus, this past weeks sudden drop in temperatures induced winter grains into dormancy with minimal hardening, making the crop more vulnerable to extremely cold weather.

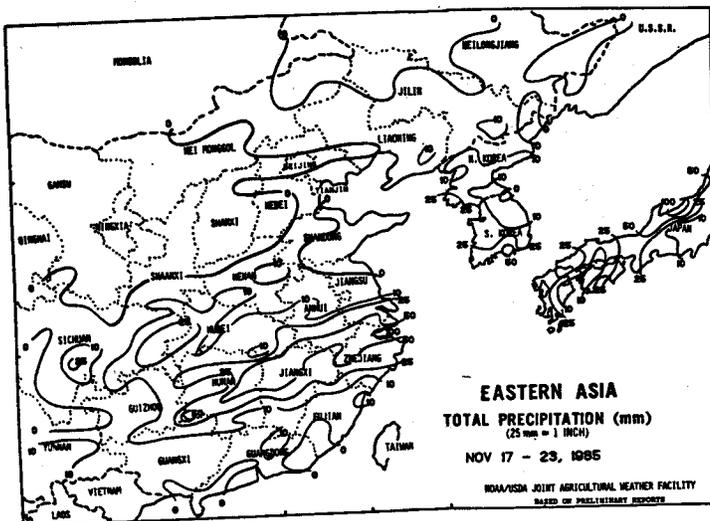




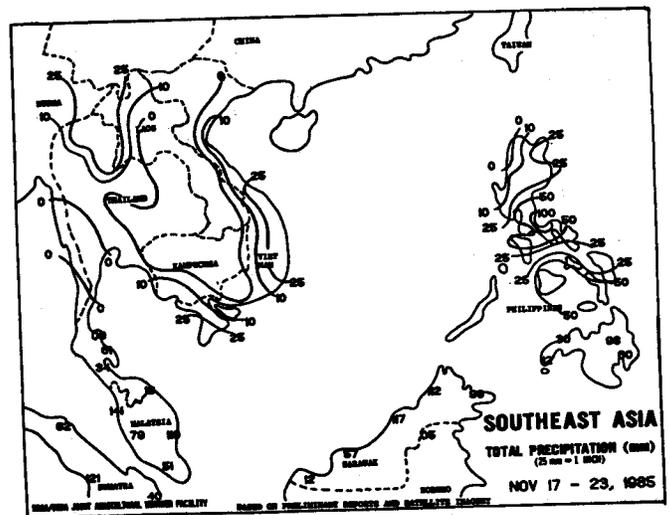
**EUROPE**...Unseasonably cold weather continued over most of the region. Weekly temperatures were 5C to 7C below normal from France across most of northern Europe. Weekly temperatures in England, Spain, Italy, and Romania were 2C to 5C below normal. Europe's cold weather halted winter grain growth in most areas, inducing winter grains into dormancy at earlier than normal dates, particularly in France, England, and Italy's Po Valley, where the crop usually enters dormancy in early December. The unusual cold in these areas has likely limited crop establishment, making winter grains more susceptible to potential winterkill. Moisture conditions improved in some areas, with northern Italy, Romania, southern Yugoslavia, and Bulgaria receiving moderate amounts of precipitation (30-60mm). Heavy rain in central Italy and eastern Yugoslavia (100-200) likely caused some flooding.



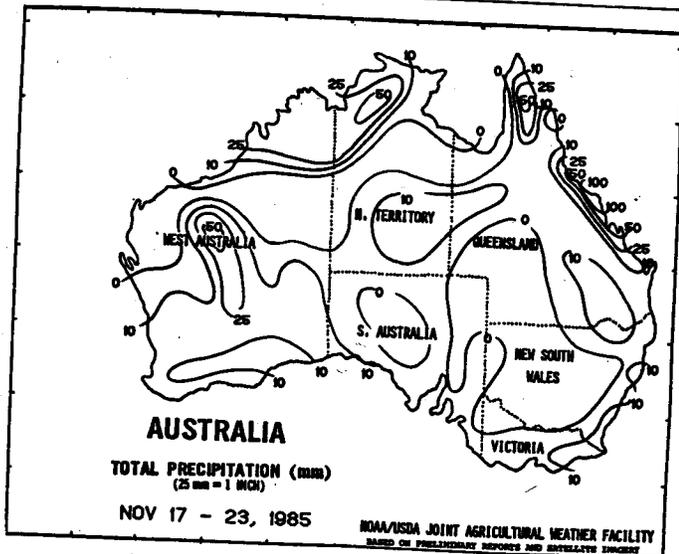
**SOUTH ASIA**...Last week's tropical storm redeveloped and moved up India's eastern coast. Light to moderate rain fell along the coast but the much drier weather allowed the severe flooding from 2 weeks of very heavy rain to recede. The storm drifted across the Bay of Bengal in the middle of the week and produced heavy rain in southeastern Bangladesh and Burma. The rain was not heavy enough to damage maturing winter rice in Orissa or West Bengal. Dry weather covered the rest of India, favoring harvesting. Moisture is adequate for early wheat growth in the north.



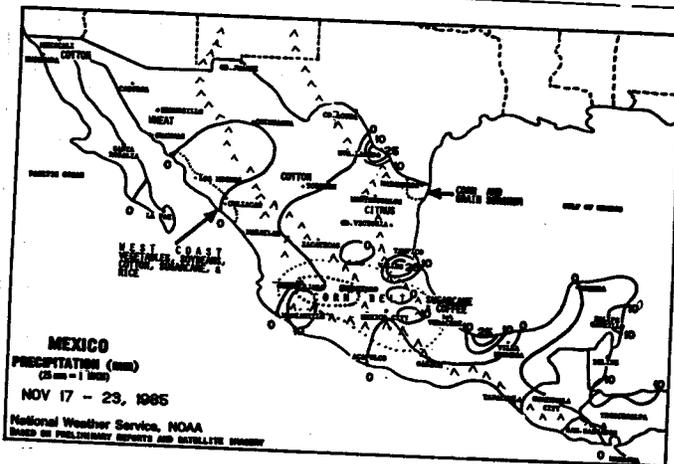
**EASTERN ASIA**...Light showers fell in the North China Plain while temperatures averaged above normal. The warmer weather was beneficial for the establishment of late planted winter wheat. Heavy rain (25-75mm) fell along and south of the Yangtze River. The wet weather was unfavorable for rice harvesting. Relatively drier weather was favorable for rice harvesting in Guangxi, Guangdong, and Fujian. Moderate rain in Korea added to the favorable moisture supply for winter grains.



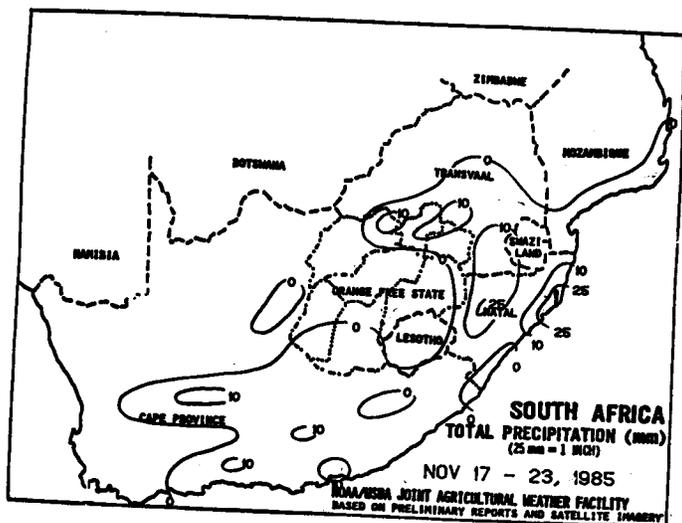
**SOUTHEAST ASIA**...Moderate rain (25-40mm) in northern Thailand was unfavorable for maturing rice following last week's heavy rain. Drier weather benefited maturing rice in eastern and south central Thailand. Tropical Storm Gordon developed in the South China Sea at midweek. Gordon remained nearly stationary, to the southeast of southern Vietnam. Moderate rain and wind in the Mekong Delta likely did not damage maturing rice. Tropical activity produced moderate to heavy rain (25-100mm) throughout the Philippines. Localized flooding may have damaged maturing rice in Luzon and Mindanao.



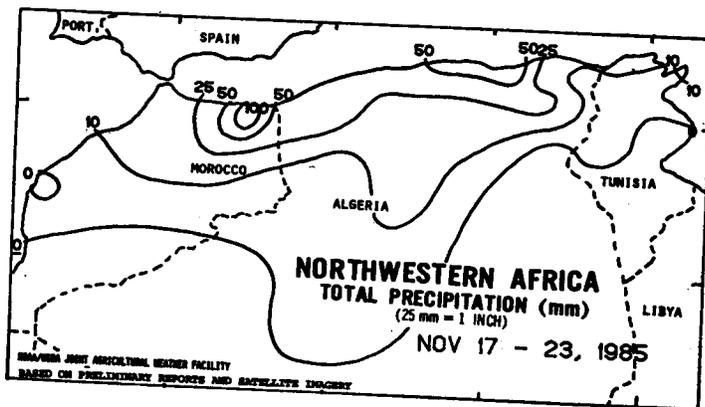
**AUSTRALIA**...Moderate rain (10-20mm) briefly interrupted wheat harvesting in Queensland, but the moisture benefited early growth of summer crops. Mostly dry weather was favorable for maturing grains in New South Wales, Victoria, and South Australia. Heavy rain (95mm) fell in Western Australia, but only 10-20mm fell in the southern crop area. The moisture may have benefited some wheat in the late grain filling stage, but most of the crop is beginning to mature. Temperatures averaged cooler than normal across the south.



**MEXICO**...Scattered showers fell over the Southern Plateau corn belt, and the east coast sugarcane and coffee areas. Weekly rainfall totals were generally less than 5mm, except for isolated amounts of 10 to 48mm scattered across the region. Those locally heavier showers, mostly along the east coast, caused some delays in the corn and tropical crop harvest. A tropical depression off Mexico's Pacific Coast dissipated before producing any significant moisture over the West Coast farming area. Cool weather dipped into extreme northwestern Mexico, but generally reasonable temperatures prevailed over the remainder of the country.



**SOUTH AFRICA**...Dry weather continued in the western Maize Triangle. A weak frontal system moved through the region, briefly lowering the temperatures but producing very little rain. Temperatures averaged above normal, reaching 35C early in the week and again late in the week. Topsoils are becoming dry in the west as evaporation rates remain high. Corn can withstand some stress during the vegetative stage, but rain is needed soon to prevent severe stress. Light showers and moderate temperatures in the east maintained adequate moisture for corn in eastern Transvaal and Natal.



**NORTHWESTERN AFRICA**...Periodic showers covered winter grains in northern Morocco and northern Algeria, providing favorable moisture for winter grain planting. Generally dry weather continued over winter grain areas in southern Morocco, and rain is needed before planting can begin. In northern Tunisia, dry weather continued to limit moisture conditions for planting.

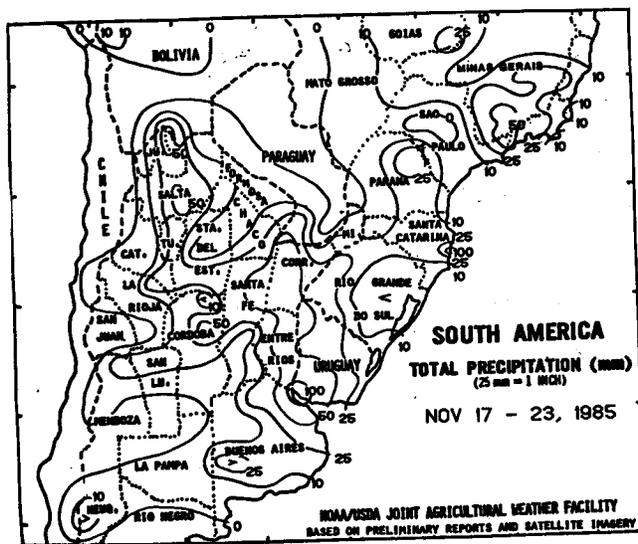
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**SOUTH AMERICA**...Some relief from the unfavorable weather developed over the crop areas of Brazil and Argentina. Showers and cooler weather over western Rio Grande do Sul brought a respite from the dry, hot spell which delayed soybean planting in southern Brazil. Soybean planting has fallen significantly behind schedule. Some rain extended into the eastern half of Parana, and, an additional area of rain occurred in Goias and southern Minas Gerais. Mostly dry weather continued in western Parana, Mato Grosso do Sul, and Sao Paulo. Drier weather in western crop areas of Argentina was extremely beneficial for maturing wheat and summer crop planting (and some replanting), following persistent wetness. Some rain fell over eastern crop areas of Buenos Aires and extreme northeastern crop areas, but the heavier thunderstorms occurred mostly over Uruguay. In general, weather conditions showed some improvement from previous weeks in most crop areas.

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