

# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
National Agricultural Statistics Service and World Agricultural Outlook Board

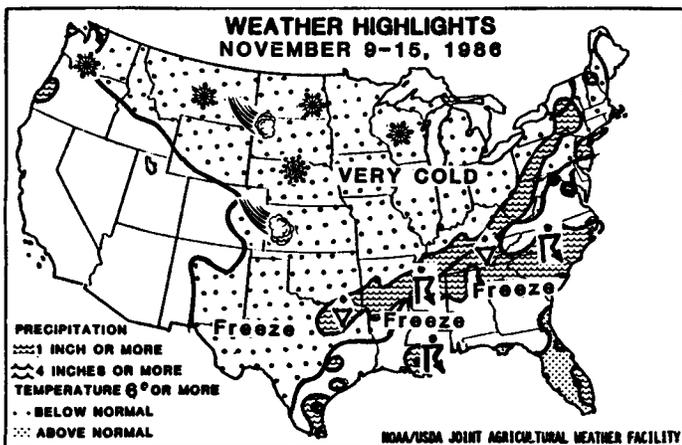
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## National Weather Summary

November 9 to 15, 1986



**HIGHLIGHTS:** Record-cold weather covered the Nation from the northern and central Rockies to the lower Appalachians and the Northeast. Freezing temperatures covered the Nation except for the gulf coast and the Pacific coast south of central Oregon. Low temperatures were as much as 25 degrees colder than normal in parts of the northern Plains. Gusty winds accompanied much of the cold air as it moved across the Nation. Rain reached from eastern Texas to the central Appalachians and east coast. Light snow was almost continuous across the northern Great Plains and through the Great Lakes but came with the cold air in the central Appalachians and the Northeast.

**SUNDAY...** Heavy showers fell along the southeastern Texas coast, and lighter amounts extended through the lower Appalachians and through the Northeast. Rain fell along the Northwest coast, but snow covered most of the Northwest and the northern Plains. Subzero temperatures pushed into parts of Montana, and record-warm weather covered the Southeast.

**MONDAY...** The subzero weather spread over the northern Plains and very cold air covered the central Plains and Midwest. Snow fell in the central Plains, the upper Mississippi Valley, and the Great Lakes region. Rain or rainshowers covered most of the rest of Eastern United States. The unusually warm weather was over southern Georgia and Florida.

**TUESDAY...** Subzero temperatures continued in the northern Plains and spread to the upper Mississippi Valley while the very cold air reached to the southern Plains. Warmer weather pushed up through the Ohio Valley. Light snow fell from the northern and central Rockies through the Great Lakes to parts of New England. Rain covered the rest of Eastern United States.

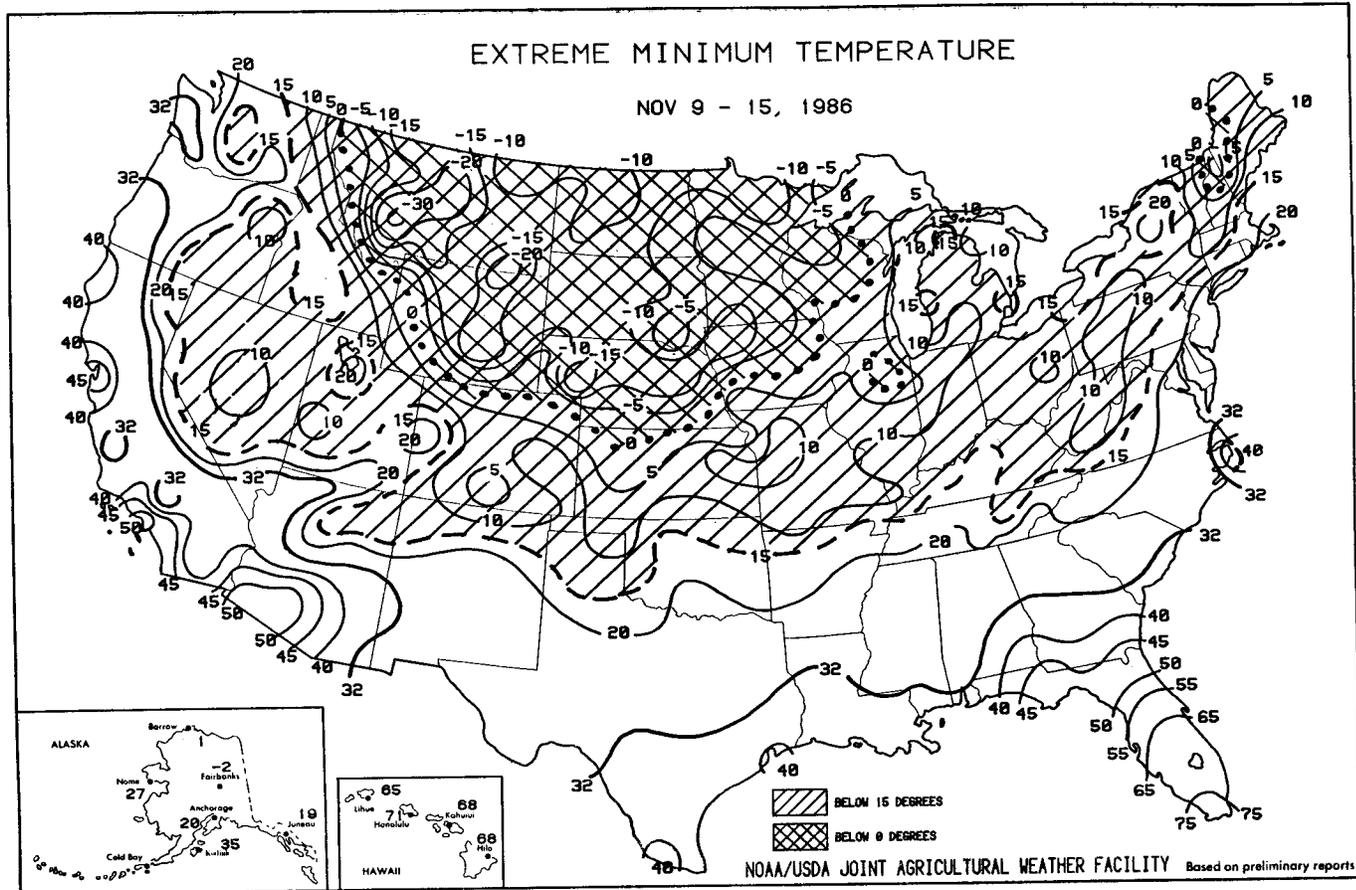
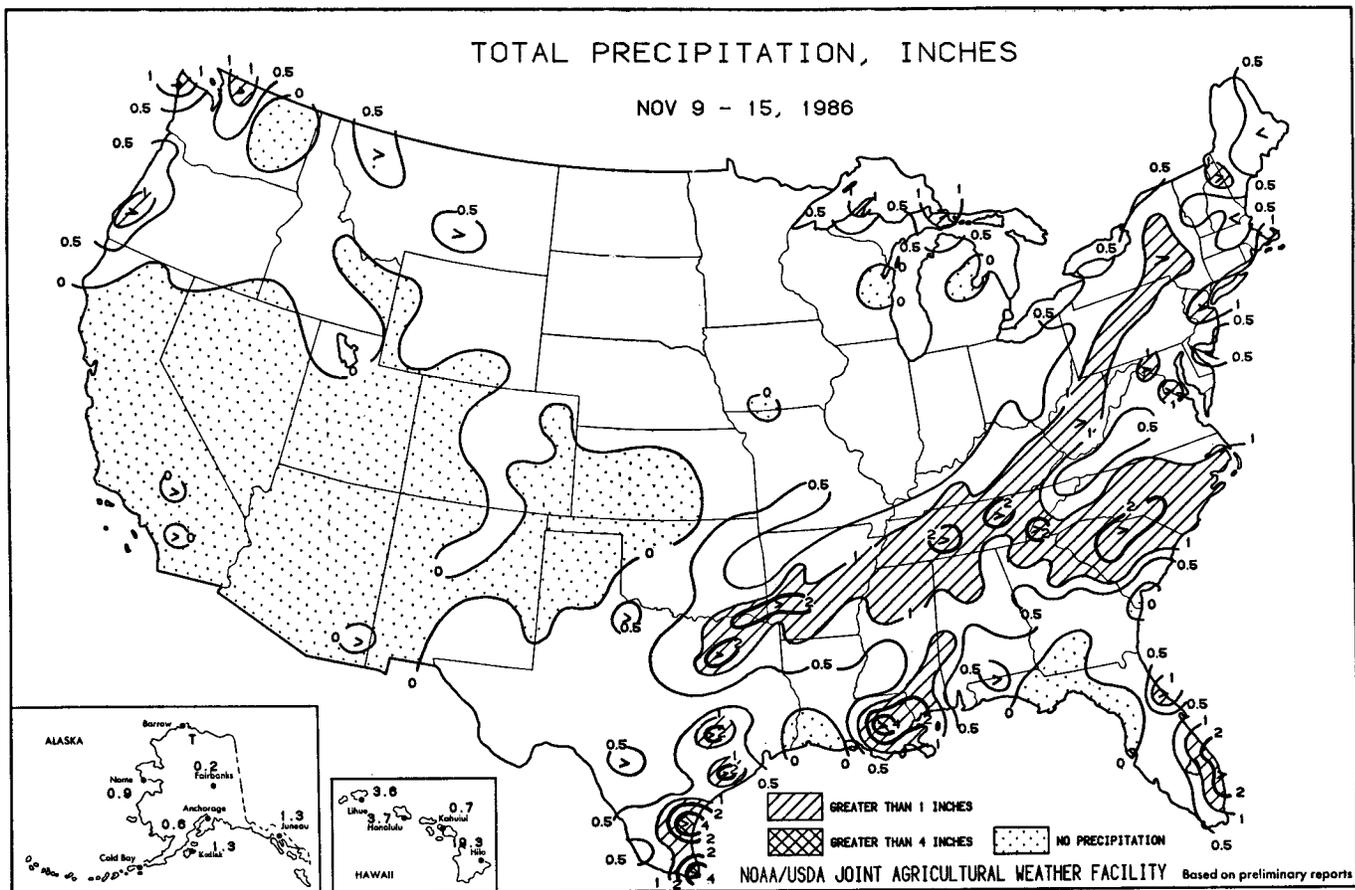
**WEDNESDAY...** Another surge of arctic air pushed into the northern Plains as freezing temperatures reached to Oklahoma and through the Northeast. Light snow continued from the central Plains to the Great Lakes and New England. Rainshowers covered most of Texas and across the South to the Carolinas.

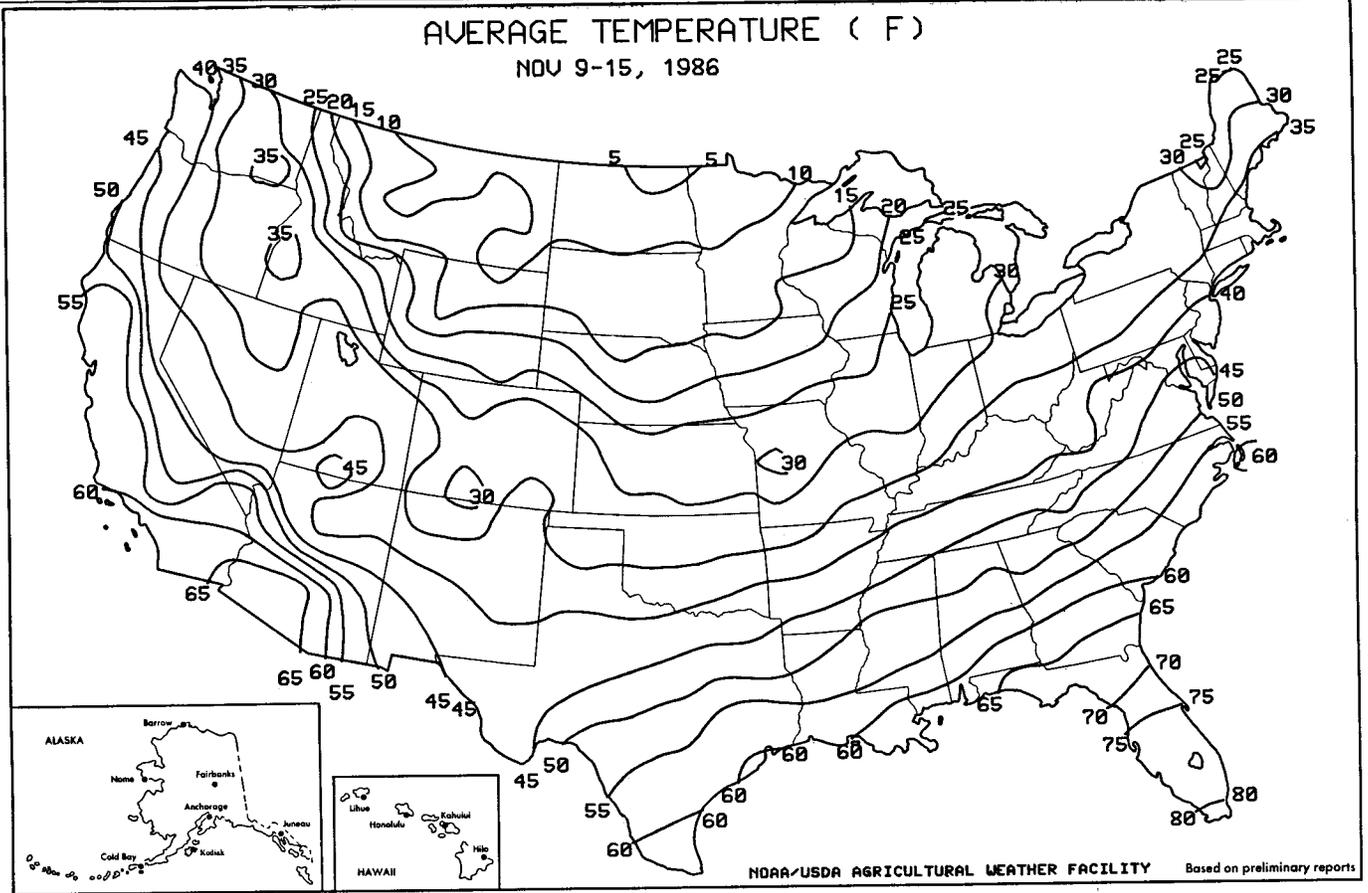
**THURSDAY...** Record-cold weather reached from the northern and central Plains to the Ohio Valley. Freezing temperatures reached well into Texas, to the lower Appalachians, and through the Northeast. Chilling wind covered most of the area. Snow fell in Texas and New Mexico and from the Great Lakes into the Northeast. Light rainshowers covered the Southeast.

**FRIDAY...** Record-cold weather covered the Midwest, Northeast, and both sides of the Appalachians while freezing temperatures covered all but the gulf coast and the Pacific Coast States. Rainshowers preceded the cold air in the Southeast, and light snow fell in the northern Plains.

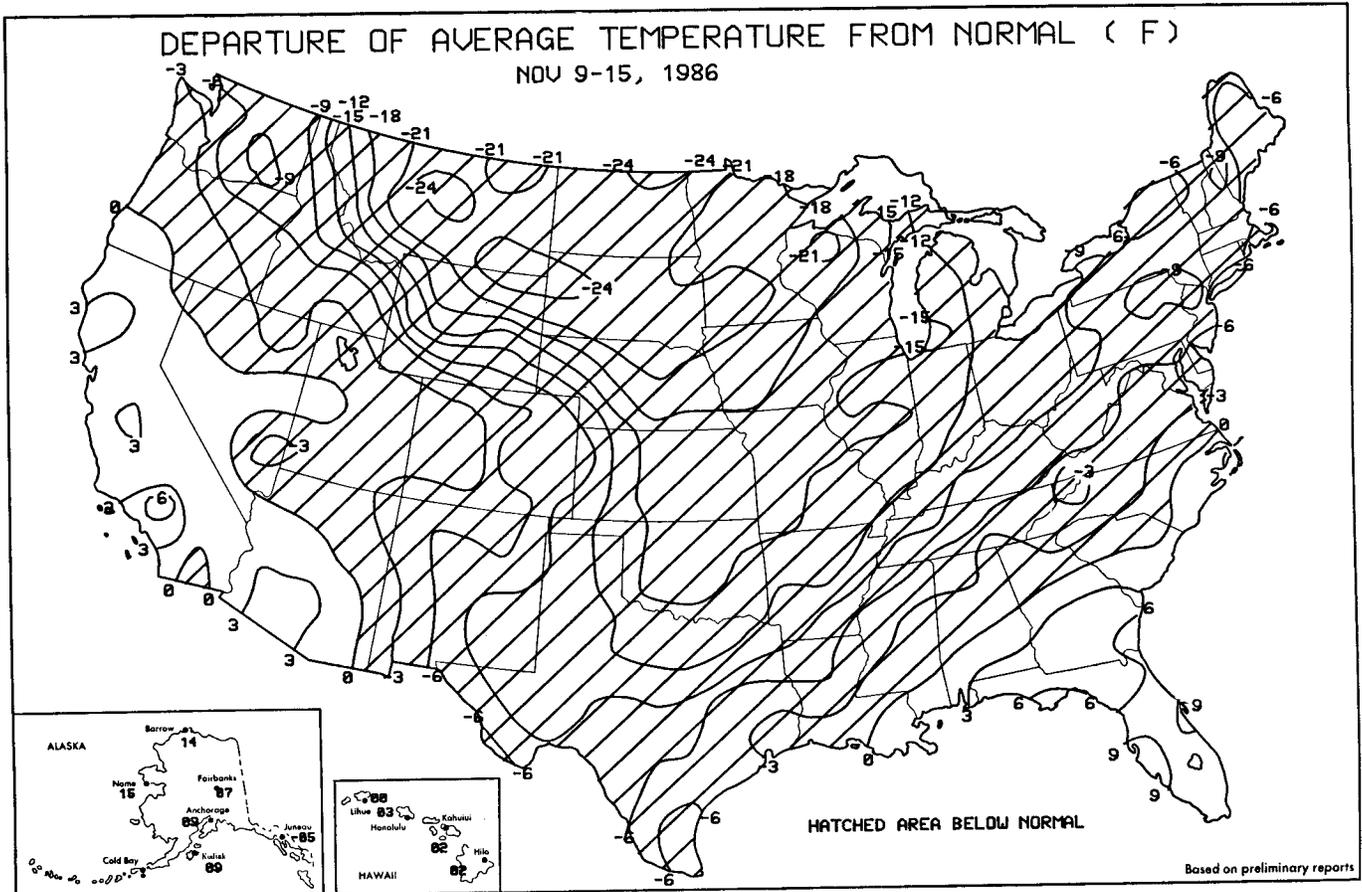
**SATURDAY...** Temperatures rose rapidly in the South and Midwest, and rainshowers fell from eastern Texas, through the Ohio Valley, to northern Georgia and the Carolinas, and along the east coast to southern New England. Very cold weather continued in the northern Plains.

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



Heating Degree Day Summary Table

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

LAST DATE OF DATA COLLECTION PERIOD IS 11-15-1986 ACCUMULATIONS ARE FROM JULY 1 \*\* = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

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

# National Weather Data for Selected Cities

Weather Data for the Week Ending November 15, 1986

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	59	40	75	24	50	-4	1.4	.5	1.0	11.3	132	32.9	69	94	55	0	2	4	1
MOBILE	68	51	83	32	60	0	.2	.6	.2	10.5	99	48.5	85	92	64	0	1	3	0
MONTGOMERY	65	48	83	32	56	0	.6	.1	.4	9.3	113	40.0	94	89	58	0	1	2	0
AK ANCHORAGE	35	29	41	20	32	9	.6	.3	.4	7.9	165	17.2	126	96	80	0	6	4	0
BARROW	21	8	25	1	15	14	T	.1	T	2.0	154	4.0	91	95	86	0	7	2	0
FAIRBANKS	20	6	28	-2	13	8	.2	.1	.1	2.7	126	9.3	100	96	82	0	7	2	0
JUNEAU	33	24	34	19	28	-5	1.3	.1	.8	26.6	157	60.9	132	99	77	0	7	6	1
KODIAK	49	41	54	35	45	9	1.3	.3	.8	17.9	84	65.2	100	93	70	0	0	1	1
NOME	35	30	37	27	33	15	.9	.7	.2	8.9	216	16.4	120	98	77	0	5	5	0
AZ PHOENIX	79	53	85	47	66	5	0	.1	0	.9	58	6.2	103	46	18	0	0	0	0
PRESCOTT	65	28	69	22	46	1	0	.3	0	3.1	94	11.2	68	58	20	0	6	0	0
TUCSON	76	49	81	41	62	3	0	.1	0	1.1	43	10.4	105	61	24	0	0	0	0
YUMA	81	54	87	50	67	3	T	0	0	.4	59	1.5	68	44	16	0	0	0	0
AR FORT SMITH	46	30	65	17	38	-13	.4	.4	.4	8.0	97	36.0	102	89	48	0	4	0	0
LITTLE ROCK	47	32	63	19	40	-13	.7	.3	.6	11.5	136	39.0	99	83	59	0	3	1	1
CA BAKERSFIELD	74	43	85	38	58	1	T	.1	.1	.1	8	4.3	91	70	26	0	0	0	0
EUREKA	59	46	68	43	53	1	.1	.3	.1	4.8	75	32.1	110	94	77	0	0	1	0
FRESNO	74	41	84	39	58	3	0	.3	0	.4	34	10.1	123	73	28	0	0	0	0
LOS ANGELES	78	54	85	51	66	4	0	.4	0	1.5	143	14.5	151	79	35	0	0	0	0
REDDING	72	44	79	35	58	-	0	0	0	3.0	0	3.0	74	31	0	0	0	0	0
SACRAMENTO	71	40	74	36	56	2	0	.5	0	.7	32	17.0	131	87	32	0	0	0	0
SAN DIEGO	76	52	82	50	64	1	0	.3	0	2.4	238	10.1	136	71	31	0	0	0	0
SAN FRANCISCO	68	48	74	45	58	3	0	.5	0	.5	21	19.1	129	94	43	0	0	0	0
CO DENVER	48	17	65	7	33	-7	T	.2	0	2.8	105	11.2	78	81	32	0	7	1	0
GRAND JUNCTION	51	27	56	24	39	-2	0	.1	0	3.3	173	7.8	110	80	31	0	7	0	0
PUEBLO	50	16	69	8	33	-8	T	.1	0	1.5	78	9.9	95	84	30	0	6	0	0
CT BRIDGEPORT	47	32	65	20	40	-8	.6	.3	.5	4.6	54	25.9	73	83	47	0	5	2	1
HARTFORD	45	25	69	15	35	-8	.6	.4	.6	5.4	57	35.2	92	85	50	0	6	2	0
DC WASHINGTON	51	36	77	21	44	-7	.8	.1	.8	5.6	75	25.4	74	82	43	0	3	1	1
FL APALACHICOLA	76	60	83	49	68	6	0	.6	0	18.6	142	51.9	104	93	64	0	0	0	0
DAYTONA BEACH	81	66	85	57	73	7	1.4	.8	.9	9.3	73	41.9	93	100	70	0	0	4	1
JACKSONVILLE	77	59	88	46	68	6	.1	.3	.1	3.9	34	36.8	75	98	60	0	0	0	0
KEY WEST	85	77	86	76	81	5	.3	.6	.2	7.5	57	29.1	80	91	69	0	0	3	2
MIAMI	85	74	87	73	80	6	2.9	2.3	1.4	12.0	71	62.7	115	95	64	0	0	2	0
ORLANDO	84	68	87	62	76	8	T	.4	T	11.1	118	45.5	101	99	60	0	0	0	0
TALLAHASSEE	77	56	87	47	66	7	0	.7	0	6.3	57	55.4	95	93	49	0	0	0	0
TAMPA	86	68	89	62	77	9	0	.4	0	10.1	107	38.0	87	95	56	0	0	0	0
WEST PALM BEACH	84	74	86	72	79	7	2.9	2.1	1.2	15.9	83	55.9	100	90	64	0	0	6	3
GA ATLANTA	59	44	77	29	51	-2	.9	.1	.4	9.9	136	32.4	76	91	58	0	2	6	0
AUGUSTA	63	48	84	29	56	1	1.3	.9	.8	6.1	94	36.1	93	94	60	0	1	3	2
MACON	66	50	84	32	58	2	.1	.4	.1	7.9	126	28.2	71	91	54	0	1	1	0
SAVANNAH	72	54	86	35	63	4	T	.4	T	2.5	30	36.4	79	92	59	0	0	0	0
HI HILO	81	70	83	68	76	2	19.3	15.8	9.7	54.9	230	157.5	146	99	77	0	0	7	5
HONOLULU	86	73	91	71	80	3	3.7	2.9	2.3	7.2	176	12.4	67	90	58	0	0	2	0
KAHULUI	85	72	90	68	78	2	.7	.2	.4	1.8	80	12.5	80	88	54	0	1	1	0
LIHUE	81	71	83	65	76	0	3.6	2.3	3.0	9.4	98	24.0	67	94	66	0	0	4	1
ID BOISE	44	28	52	14	36	-5	T	.3	T	3.6	189	13.6	140	90	55	0	7	1	0
LEWISTON	37	29	43	14	33	-8	.1	.2	.1	1.9	82	9.4	87	87	62	0	5	2	0
POCATELLO	40	23	54	13	32	-5	T	.2	T	2.3	114	11.9	125	86	55	0	6	1	0
IL CHICAGO	34	17	42	6	26	-16	T	.5	T	11.0	166	29.4	97	78	39	0	7	1	0
MOLINE	33	15	45	5	24	-17	.1	.4	.1	10.1	134	37.9	110	83	47	0	7	2	0
PEORIA	36	19	45	5	27	-14	T	.4	T	11.2	156	33.6	105	86	43	0	7	1	0
QUINCY	37	18	46	6	28	-15	T	.5	T	16.0	186	38.7	111	83	47	0	7	1	0
ROCKFORD	32	15	42	3	23	-16	T	.5	T	12.4	159	32.6	96	80	42	0	7	1	0
SPRINGFIELD	36	20	45	7	28	-15	.1	.3	.1	12.9	196	33.0	107	89	51	0	7	3	0
IN EVANSVILLE	41	26	54	11	33	-13	.3	.5	.2	8.3	124	34.5	95	95	54	0	4	3	0
PORT WAYNE	36	21	47	11	29	-13	.1	.5	.1	8.2	129	39.5	129	92	54	0	6	2	0
INDIANAPOLIS	37	22	48	10	30	-13	.2	.5	.2	14.1	210	42.9	124	93	53	0	6	2	0
SOUTH BEND	34	21	44	10	27	-14	.2	.5	.1	8.4	107	32.7	97	85	51	0	7	3	0
IA DES MOINES	31	11	44	0	21	-19	.1	.3	.1	10.5	173	40.8	140	84	52	0	7	1	0
SIOUX CITY	28	6	36	-8	17	-21	.2	.1	.2	8.4	176	31.7	131	86	58	0	7	1	0
WATERLOO	29	8	43	-1	19	-18	T	.4	T	8.3	124	34.3	110	88	53	0	7	1	0
KS CONCORDIA	38	13	58	2	26	-17	T	.3	T	10.5	194	38.8	149	84	44	0	7	1	0
DODGE CITY	44	15	72	5	30	-14	T	.2	T	2.8	77	19.3	97	87	36	0	7	0	0
GOODLAND	47	14	71	5	31	-8	T	.1	T	3.2	122	15.1	97	80	35	0	7	1	0
TOPEKA	38	16	54	4	27	-17	.1	.3	.1	10.3	142	36.1	115	85	46	0	7	1	0
WICHITA	39	18	50	7	29	-17	T	.4	T	8.0	118	30.0	111	86	41	0	7	0	1
KY BOWLING GREEN	47	31	61	15	39	-8	1.0	.2	.9	12.9	166	32.0	76	92	56	0	3	3	1
LEXINGTON	44	29	58	15	36	-10	.8	0	.6	9.2	131	29.1	73	89	56	0	3	3	0
LOUISVILLE	45	30	59	15	37	-10	.5	.4	.2	8.5	110	32.8	86	87	51	0	3	4	0
LA ALEXANDRIA	60	45	78	33	52	-6	.2	.9	.1	9.2	103	35.5	75	78	50	0	0	2	1
BATON ROUGE	67	49	80	33	58	-1	1.4	.6	1.3	9.6	109	43.9	90	87	56	0	0	0	0
LAKE CHARLES	66	49	81	35	58	-3	T	.8	T	13.8	133	43.1	94	94	55	0	0	0	0
NEW ORLEANS	68	56	83	39	62	1	2.8	1.9	2.8	7.4	72	38.0	73	92	68	0	0	3	1

Based on 1951-80 normals.

Weather Data for the Week Ending November 15, 1986

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 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	54	41	76	30	48	-9	.8	-.1	.4	14.7	190	48.8	128	95	62	0	2	4	0
ME CARIBOU	34	19	51	4	27	-7	.3	-.5	.2	5.5	67	29.3	92	90	61	0	6	2	0
PORTLAND	44	27	59	12	35	-5	.5	-.6	.3	6.6	70	35.2	96	82	43	0	6	2	0
MD BALTIMORE	50	33	76	18	41	-6	.7	0	.7	6.1	75	25.7	70	90	44	0	3	1	0
SALISBURY	52	35	80	22	44	-5	.6	-.1	.4	4.8	52	24.9	62	94	52	0	3	4	0
MA BOSTON	47	31	72	19	39	-8	.3	-.6	.3	6.7	76	34.3	92	82	41	0	4	2	0
CHATHAM	49	36	62	22	43	-4	1.9	-.9	1.6	10.3	108	43.5	110	86	64	0	4	1	0
MI ALPENA	34	18	47	9	26	-11	T	T	T	10.2	170	29.2	114	83	49	0	7	4	0
DETROIT	37	22	51	13	30	-11	T	T	T	11.1	201	33.9	124	85	47	0	6	2	0
FLINT	36	20	51	12	28	-12	T	T	T	13.0	230	35.2	135	87	45	0	7	2	0
GRAND RAPIDS	33	21	46	10	27	-13	T	T	T	14.8	197	45.9	151	83	53	0	7	1	0
HOUGHTON LAKE	30	19	37	11	24	-12	T	T	T	11.4	184	32.7	131	83	54	0	7	1	0
LANSING	35	19	48	9	27	-13	T	T	T	11.1	192	35.2	135	82	49	0	7	1	0
MARQUETTE	23	7	28	-5	15	-16	.3	-.4	.1	7.9	91	29.3	88	93	58	0	7	4	0
MUSKEGON	36	24	47	16	30	-10	.1	-.6	0	16.0	223	33.2	121	78	53	0	6	3	0
SAULT STE. MARIE	31	16	46	4	24	-11	1.1	-.4	.3	9.8	117	34.3	117	90	48	0	7	6	0
MN ALEXANDRIA	17	4	26	-3	10	-20	.1	-.2	.1	5.0	103	32.8	141	88	59	0	7	2	0
DULUTH	19	3	27	-7	11	-19	.1	-.3	.1	8.7	137	35.7	129	83	55	0	7	3	0
INT'L FALLS	15	-1	22	-12	7	-20	T	T	T	4.0	72	17.7	78	85	57	0	7	1	0
MINNEAPOLIS	23	8	32	-1	15	-19	.1	-.3	.1	8.9	177	35.9	144	82	55	0	7	1	0
ROCHESTER	23	4	31	-6	13	-21	.1	-.3	.1	14.3	242	39.1	146	90	62	0	7	1	0
MS GREENWOOD	59	40	77	27	50	-4	1.3	-.2	.9	12.6	154	32.7	73	90	49	0	2	1	0
JACKSON	62	44	77	29	53	-3	.3	-.7	.3	10.8	135	38.9	86	88	52	0	2	4	0
MERIDIAN	62	44	80	28	53	-2	.6	-.1	.6	10.1	133	37.7	83	89	55	0	2	3	0
MO CAPE GIRARDEAU	43	27	59	13	35	-5	.1	-.7	.1	6.9	88	37.0	96	93	59	0	4	3	0
COLUMBIA	37	20	50	7	29	-16	.2	-.3	.2	14.4	178	36.0	108	89	52	0	7	2	0
KANSAS CITY	38	16	53	3	27	-18	.2	-.2	.2	14.2	175	37.5	114	86	48	0	7	2	0
SAINT LOUIS	38	24	48	10	31	-15	.1	-.5	0	14.3	228	33.2	109	84	49	0	6	2	0
SPRINGFIELD	38	21	52	5	29	-17	.6	-.2	.6	17.9	202	38.2	108	95	53	0	7	2	1
MT BILLINGS	23	2	42	-12	13	-23	.6	-.4	.4	2.9	99	14.2	102	81	54	0	7	3	0
GLASGOW	22	0	39	-6	11	-20	.1	0	.1	5.0	309	13.0	118	84	55	0	7	1	0
GREAT FALLS	27	-2	40	-14	13	-23	.3	-.1	.3	2.8	123	13.6	96	80	52	0	7	2	0
HAVRE	24	-8	42	-18	8	-22	.1	0	.1	6.5	381	17.0	163	92	46	0	7	2	0
HELENA	20	-5	44	-24	8	-24	.3	-.1	.1	2.9	163	11.5	110	89	59	0	7	3	0
KALISPELL	23	8	37	-8	15	-17	.7	-.4	.5	4.3	158	16.1	118	96	69	0	7	3	1
MILES CITY	21	-1	33	-13	10	-23	.2	-.1	.1	3.9	172	15.4	117	81	53	0	7	3	0
MISSOULA	25	11	40	-4	18	-15	.3	-.1	.2	4.4	192	15.4	133	86	59	0	7	3	0
NE GRAND ISLAND	33	5	42	-8	19	-19	.1	-.1	.1	7.2	182	24.6	111	84	48	0	7	1	0
LINCOLN	34	10	45	-1	22	-17	.1	-.2	.1	11.8	230	38.1	148	83	49	0	7	1	0
NORFOLK	29	3	37	-13	16	-21	.2	0	.2	6.4	166	30.2	132	89	55	0	7	1	0
NORTH PLATTE	37	4	55	-8	21	-16	.1	-.1	0	2.8	97	16.7	89	88	48	0	7	3	0
OMAHA	30	9	38	-3	19	-20	.1	-.2	.1	12.2	200	36.3	126	84	57	0	7	1	0
SCOTTSDUFF	40	8	60	-1	24	-13	.2	0	.1	3.6	168	20.9	150	88	42	0	7	4	0
VALENTINE	26	0	43	-12	13	-23	.1	0	.1	5.1	202	20.5	123	80	53	0	7	1	0
NV ELY	53	20	59	11	37	2	0	-.1	0	2.7	170	8.3	104	79	26	0	7	0	0
LAS VEGAS	70	41	74	34	55	0	0	-.1	0	.1	15	1.4	38	40	17	0	0	0	0
RENO	62	24	68	18	43	2	0	-.1	0	.3	39	8.8	149	80	23	0	6	0	0
WINNEMUCCA	56	20	64	14	38	-1	0	-.1	0	1.6	130	5.4	82	87	30	0	7	0	0
NH CONCORD	43	24	60	7	33	-6	.5	-.4	.3	5.8	73	33.3	97	88	51	0	6	2	0
NJ ATLANTIC CITY	51	29	76	15	40	-7	.4	-.4	.3	8.6	111	33.2	101	94	52	0	3	3	0
NM ALBUQUERQUE	48	27	54	23	38	-8	.1	0	0	3.0	155	12.3	164	84	37	0	6	2	0
CLOVIS	49	24	60	18	37	-11	T	T	T	7.6	189	19.5	118	81	40	0	6	0	0
ROSWELL	50	28	61	24	39	-11	.1	-.1	.1	11.2	393	23.1	251	90	50	0	6	1	0
NY ALBANY	41	26	59	12	34	-8	.7	0	.5	6.9	90	37.6	121	93	53	0	6	2	0
BINGHAMTON	38	24	57	12	31	-8	1.2	-.5	.6	8.4	108	38.9	120	80	49	0	6	3	2
BUFFALO	39	26	59	15	32	-9	.9	-.1	.5	9.8	121	34.1	106	88	52	0	7	6	0
NEW YORK	49	36	72	24	42	-6	1.0	-.2	.8	5.9	69	30.0	81	84	47	0	3	2	1
ROCHESTER	41	25	61	14	33	-9	.4	-.2	.3	9.4	144	31.5	115	85	51	0	6	4	0
SYRACUSE	41	27	63	19	34	-8	.7	-.1	.3	10.4	128	37.4	109	87	45	0	6	5	0
NC ASHEVILLE	53	35	75	16	44	-3	.6	-.2	.4	9.0	101	26.7	63	92	63	0	3	4	0
CHARLOTTE	55	42	81	22	48	-4	1.3	-.7	.5	6.3	82	22.2	58	91	55	0	2	5	1
GREENSBORO	52	39	80	19	46	-4	1.2	-.6	.9	6.8	84	25.1	66	90	56	0	3	3	1
HATTERAS	66	54	79	43	60	3	1.1	0	.8	4.9	38	40.6	83	94	63	0	0	2	1
NEW BERN	64	47	83	28	55	0	1.6	-.9	1.0	4.9	46	39.8	84	95	63	0	1	3	2
RALEIGH	55	42	83	22	48	-3	1.8	1.1	1.0	4.3	58	33.2	89	87	52	0	2	3	2
WILMINGTON	66	48	83	28	57	0	1.6	-.9	1.3	6.9	67	51.5	107	95	61	0	1	3	1
ND BISMARCK	17	-2	29	-17	8	-22	.2	-.1	.1	6.6	266	24.0	164	85	64	0	7	4	0
FARGO	15	2	23	-5	9	-21	.1	-.1	.1	5.1	142	23.2	125	83	65	0	7	2	0
GRAND FORKS	14	1	21	-7	7	-21	T	T	T	4.1	114	15.4	89	84	65	0	7	1	0
WILLISTON	20	-5	32	-11	7	-22	.1	0	0	4.6	196	21.3	163	85	60	0	7	2	0
OH AKRON-CANTON	39	25	54	11	32	-11	.4	-.2	.4	7.6	119	26.1	82	89	46	0	6	3	0
CINCINNATI	42	27	55	12	34	-10	.3	-.4	.3	8.3	119	28.9	81	85	46	0	4	1	0
CLEVELAND	40	27	53	13	33	-10	.3	-.3	.2	9.8	147	35.5	114	86	50	0	6	2	0
COLUMBUS	41	26	55	12	34	-10	.4	-.3	.4	8.8	147	30.4	92	87	45	0	6	1	0

Based on 1951-80 normals.

Weather Data for the Week Ending November 15, 1986

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEPT. 1	PCT. NORMAL SINCE SEPT. 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	39	24	51	11	32	-12	.3	-.4	.3	10.4	183	38.0	123	89	50	0	5	2	0
TOLEDO	37	21	50	11	29	-12	.1	-.5	.1	9.7	174	33.9	122	89	51	0	6	2	0
YOUNGSTOWN	40	26	59	12	33	-9	.3	-.4	.3	9.7	136	40.6	123	92	52	0	6	1	0
OK OKLAHOMA CITY	42	25	55	14	34	-16	-.4	-.1	.4	20.2	290	42.0	145	83	47	0	6	1	0
TULSA	41	25	55	13	33	-18	-.6	-.6	.6	15.8	173	40.8	114	86	48	0	6	1	0
OR ASTORIA	51	37	56	31	44	-3	-.4	-1.8	.2	10.1	73	45.8	87	97	69	0	2	4	0
BURNS	49	22	73	13	35	-1	.1	-1.1	.1	2.3	119	9.8	151	91	71	0	7	1	0
MEDFORD	49	26	57	35	45	0	.1	-.5	.1	4.2	111	14.3	97	99	80	0	0	0	0
PENDLETON	40	28	47	16	34	-8	-.3	0	.3	2.7	118	10.2	104	90	66	0	0	0	0
PORTLAND	49	38	53	32	44	-2	-.4	-1.8	.2	7.2	103	25.4	90	93	57	0	1	3	0
SALEM	50	37	57	29	44	-2	-.3	-1.0	.2	6.5	86	29.0	96	91	61	0	2	2	0
PA ALLENTOWN	45	27	68	17	36	-8	-.7	-2.7	.7	7.6	85	35.1	91	90	45	0	6	6	1
ERIE	39	28	53	20	34	-8	-.7	-2.2	.3	13.8	152	41.0	120	88	51	0	6	4	0
HARRISBURG	44	30	62	17	37	-8	-.6	-1.1	.6	6.0	76	35.2	103	89	45	0	4	2	1
PHILADELPHIA	48	31	72	19	40	-7	-.8	-.1	.8	7.8	100	31.5	87	90	51	0	3	3	1
PITTSBURGH	41	26	58	10	34	-10	-.3	-.3	.3	7.2	112	32.0	98	80	43	0	5	3	0
SCRANTON	40	26	60	14	33	-9	-.6	-.1	.3	7.1	93	39.7	128	88	47	0	6	2	0
RI PROVIDENCE	47	29	67	17	38	-7	-.8	-.2	.7	5.8	62	34.5	89	87	49	0	6	2	1
SC CHARLESTON	66	51	84	32	58	1	-.4	-.1	.2	8.1	91	39.6	84	96	64	0	1	2	0
COLUMBIA	61	47	83	29	54	-1	3.7	2.6	1.0	10.5	132	29.4	66	91	61	0	1	4	0
FLORENCE	63	47	83	27	55	-1	1.8	1.3	1.3	7.5	100	26.9	68	92	55	0	2	2	2
GREENVILLE	53	41	78	23	47	-5	1.1	-.3	.4	11.2	119	32.3	72	96	64	0	3	7	0
SD ABERDEEN	20	3	30	-8	12	-20	T	-.1	T	3.6	127	25.6	151	87	62	0	7	2	0
HURON	21	2	34	-10	12	-22	.1	-.1	.1	4.6	146	27.0	152	93	58	0	7	1	0
RAPID CITY	23	1	37	-13	12	-24	-.3	-.1	.1	6.0	279	21.3	137	90	64	0	7	4	0
SIoux FALLS	24	4	32	-6	14	-21	.1	-.2	.1	10.9	225	30.0	130	87	58	0	7	4	0
TN CHATTANOOGA	56	39	71	24	48	-2	-.7	-.3	.3	14.1	155	31.6	70	88	50	0	2	4	0
KNOXVILLE	54	37	74	20	45	-4	1.0	.2	.5	8.9	120	26.2	64	94	60	0	2	6	0
MEMPHIS	49	35	66	20	42	-11	1.1	.1	.6	9.4	120	30.7	69	89	55	0	2	3	1
NASHVILLE	49	34	64	18	41	-8	1.1	-.3	.7	9.3	119	25.8	62	90	55	0	2	4	1
TX ABILENE	53	31	68	21	42	-12	-.1	-.2	.1	10.3	167	27.7	127	79	47	0	4	3	0
AMARILLO	49	20	66	11	35	-12	-.1	-.1	T	5.0	144	24.4	133	88	41	0	6	0	0
AUSTIN	61	44	75	31	52	-7	-.1	-.4	T	13.4	165	28.1	99	92	57	0	1	2	0
BEAUMONT	67	51	82	36	59	-3	T	-1.0	T	14.5	123	49.4	108	93	55	0	0	0	0
BROWNSVILLE	68	52	88	38	60	-8	5.9	5.6	4.1	12.5	130	23.8	100	98	74	0	0	5	3
CORPUS CHRISTI	67	51	85	36	59	-7	3.3	2.9	2.2	10.1	100	27.1	96	95	68	0	0	3	2
DEL RIO	63	44	77	32	53	-7	-.1	-.1	.1	9.4	171	22.6	138	58	52	0	1	1	0
EL PASO	55	35	69	29	45	-7	T	-.1	T	2.4	105	10.7	147	87	47	0	1	1	0
FORT WORTH	51	35	68	24	43	-13	.8	-.4	.7	7.8	117	28.1	104	87	55	0	3	2	1
GALVESTON	67	55	77	40	61	-3	T	-.7	T	13.2	134	28.6	82	91	64	0	0	1	0
HOUSTON	66	50	82	36	58	-3	T	-.8	T	11.4	111	33.5	85	91	55	0	0	0	0
LUBBOCK	53	27	67	17	40	-10	T	-.1	T	11.3	264	25.0	146	90	49	0	5	1	0
MIDLAND	53	31	65	23	42	-11	.1	-.1	.1	15.9	414	28.7	221	87	52	0	4	1	0
SAN ANGELO	58	34	77	25	46	-10	T	-.2	T	14.5	257	29.8	174	89	48	0	3	1	0
SAN ANTONIO	62	46	78	34	54	-6	-.2	-.4	.1	10.0	127	34.4	129	88	56	0	0	2	0
VICTORIA	65	49	84	34	57	-6	-.6	.1	.4	11.2	105	33.0	98	95	68	0	0	3	0
WACO	57	40	74	27	48	-10	-.5	0	-.3	11.2	151	30.9	110	92	64	0	2	4	0
WICHITA FALLS	49	29	66	19	39	-14	-.1	-.3	.1	12.6	184	32.0	129	86	48	0	5	1	0
UT Blanding	50	23	55	15	37	-3	0	0	0	4.8	170	14.4	144	77	43	0	7	0	0
CEDAR CITY	55	24	60	13	39	-1	0	0	0	2.3	109	10.4	113	75	24	0	5	0	0
SALT LAKE CITY	49	29	61	23	39	-2	T	-.2	T	3.8	144	18.8	141	90	40	0	6	2	0
VT BURLINGTON	41	26	60	15	33	-5	-.6	-.1	.5	8.7	117	37.3	125	79	45	0	6	3	0
VA NORFOLK	57	46	83	32	52	-1	-.6	-.1	.2	2.7	29	22.2	55	90	50	0	1	4	1
RICHMOND	53	38	81	21	46	-4	-.7	-.1	.6	4.4	49	30.2	77	91	50	0	3	3	0
ROANOKE	51	33	72	13	42	-6	-.2	-.4	.1	8.1	102	26.9	77	84	42	0	3	2	0
WA COLVILLE	36	20	41	9	28	-7	T	-.5	T	4.3	144	19.2	137	91	66	0	7	0	0
QUILLAYUTE	49	36	55	30	42	-2	1.5	-1.7	1.1	10.9	49	76.1	94	99	73	0	5	1	0
SEATTLE-TACOMA	47	38	50	31	43	-3	-.3	-1.0	.2	7.0	87	27.6	94	92	54	0	1	0	0
SPOKANE	32	20	37	11	26	-10	T	-.5	T	2.6	97	12.8	98	89	59	0	7	0	0
YAKIMA	39	23	45	13	31	-8	T	-.2	T	2.5	203	7.9	130	88	47	0	7	1	0
WV BECKLEY	48	26	67	8	37	-6	1.5	-.9	.9	10.0	138	34.3	92	92	47	0	4	5	1
CHARLESTON	47	30	61	13	38	-8	1.3	.7	.8	10.0	142	39.2	104	92	49	0	3	3	2
HUNTINGTON	45	30	61	13	38	-9	-.8	.1	.6	10.6	155	34.1	94	90	47	0	2	3	1
PARKERSBURG	44	27	59	11	36	-10	-.7	.1	.5	9.9	159	33.1	89	92	41	0	4	2	1
WI GREEN BAY	28	12	38	2	20	-16	T	-.4	T	9.5	154	29.6	115	81	45	0	7	0	0
LA CROSSE	26	11	35	2	19	-18	T	-.4	T	11.9	188	31.1	109	81	51	0	7	0	0
MADISON	30	13	42	2	22	-15	T	-.4	T	8.8	141	30.2	106	83	41	0	7	2	0
MILWAUKEE	32	17	40	5	24	-14	.1	-.4	.1	9.7	160	40.0	143	73	41	0	7	2	0
WAUSAU	22	8	31	-3	15	-19	T	-.4	T	13.1	186	30.2	102	79	51	0	7	1	0
WY CASPER	33	5	48	-14	19	-15	-.2	0	.1	5.0	248	15.4	145	83	54	0	5	4	0
CHEYENNE	39	14	53	-4	27	-9	-.1	0	.1	4.7	231	14.1	111	77	41	0	7	2	0
LANDER	27	3	49	-9	15	-17	-.1	-.1	.1	3.9	156	11.5	93	84	54	0	7	4	0
SHERIDAN	19	-3	38	-20	8	-25	-.2	-.1	.1	4.7	169	15.1	109	91	65	0	7	2	0
PR SAN JUAN	84	73	85	72	79	-1	-.9	-.4	.4	13.7	95	48.3	104	97	73	0	0	7	0

Based on 1951-80 normals.

## National Agricultural Summary

November 10 to 16, 1986

**HIGHLIGHTS:** Extremely cold temperatures hastened crop maturity, especially cotton in southern Great Plains and soybeans in the Delta and Appalachian States. The low temperatures slowed wheat growth with damage limited to mostly leaf burn. Rain hampered harvest and winter wheat seeding in the Southwest, the Delta, and southern Great Plains. Soil moisture was mostly adequate, but additional moisture is needed in some Atlantic Coast States. Farmers were able to work 4 to 5 days in most Corn Belt States. Fieldwork averaged 3 days or less in the Delta, Southeast, and Appalachian States.

Winter wheat was 92 percent (%) seeded, 1 percentage point below the 5-year average. Crop condition was mostly good in most areas. Corn was 86% harvested, equaling the average but 8 points ahead of last year. The open weather boosted harvest in the Corn Belt. Soybean harvest lagged 2 points behind the 85% average. Rain caused harvest delays in the Delta, the Southeast, and in the Appalachian States. Cotton harvest dropped 5 points below normal to 56% completion. Wetness and immaturity have caused long delays in Oklahoma and Texas. Sorghum was 84% harvested, compared with 90% last year and average. Pastures were mostly good. The cold temperatures halted growth in most areas. Livestock was mostly good.

**SMALL GRAINS:** Winter wheat crept 3 points closer to completion with 92% of the acreage seeded, compared with 92% last year and 93% average. Rain and cold weather slowed seeding in the Southeast, the Delta, and central Plains. Eighty-six percent of wheat was emerged, slightly ahead of last year and the average. Michigan's producers finished seeding the remaining 20% of their acreage this week. Seeding was finished in Idaho, Montana, Nebraska, New Mexico, South Dakota, and Washington and was nearing completion in Colorado, Illinois, Indiana, Kansas, Ohio, Oregon, and Texas. Seeding was unchanged from the previous week in Oklahoma and lagged 10 points behind normal. Only 60% of Missouri acreage was seeded compared with the 81% average. Wheat was excellent to good in Kansas. Seeding and emergence was on schedule. Snowcover protection was fair in Montana. The colder temperatures slowed growth in most areas of Texas.

**CORN:** In the 17 major producing States, corn was 86% harvested, equaling the average. Nine percent of the acreage was harvested despite rain delays in the Southeast, Texas, and in the Appalachian States. Harvest was behind normal in Colorado, Michigan, Missouri, and South Dakota. Michigan's producers lowered their departure from normal to 5 points by combining 20% of their acreage in 1 week. South Dakota's harvest trailed 16 points behind the average. Slightly more than two-thirds of Colorado's corn was harvested compared with 86% last year and the 87% average. Harvest was 90% or more finished in Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, North Carolina, and Texas. High winds broke stalks causing some crop loss in Minnesota. In Nebraska, high moisture hindered harvest progress.

**SOYBEANS:** Soybean harvest slid 2 points behind the 85% average mostly because of the push to harvest corn in the Corn Belt and rain in the Southeast, Delta, and central Plains. Harvest was at least 90% finished in the Corn Belt and central and northern Plains with a few exceptions.

Normally, 85% of Kansas soybeans would be harvested, but only 65% was harvested by November 16. In Missouri harvest was 62% finished, 16 points below average. The extremely cold weather aided dry-drown, harvest, and halted growth in most areas.

**COTTON:** Cotton harvest fell 5 points behind normal because of the slow harvest pace in New Mexico, Oklahoma, South Carolina, and Texas. Normally 61% of the cotton would have been picked by now. In Oklahoma, cotton harvest was nearly a month behind average as fields remain too wet and most have unopened bolls. The cold weather encouraged harvest of mature cotton but damaged some unopened bolls. Single-digit temperatures ended the need to apply defoliant in Texas. The colder weather aided boll maturity but slowed harvest progress. Cotton harvest progressed rapidly in California.

**OTHER CROPS:** Sorghum was 84% harvested, compared with 90% last year and average. Harvest was behind normal in 6 of the 11 major producing States, ranging from 1 point in Nebraska to 15 points behind normal in both Oklahoma and Texas. Most of the delay in harvest was caused by slow maturity and continued wetness. Harvest was complete or nearing completion in all States except Kansas, Missouri, Oklahoma, and Texas.

Peanut harvest was virtually complete in the Southeast. In Texas, 68% of the crop was harvested, equaling the average. Cold weather damaged some peanut dug in Cross Timber and the Low Plains.

Burley tobacco producers stripped and prepared their crop for markets. Markets are scheduled to open November 24.

**FRUIT AND NUTS:** Rain is needed in Florida's citrus areas. Many growers irrigated, and warm temperatures forced new growth. Early orange harvest was very active and grapefruit movement increased in all areas. In Texas, citrus harvest increased as weather permitted. The cooler temperatures should help sweeten fruit on trees. In California pruning, irrigation, fertilization, and fumigation were the main orchard activities. A few emperor table grapes were packed. Sugar and color restraints slowed navel orange harvest. Some lots failed minimum maturity requirements. Pecan harvest was active in the Southeast.

**VEGETABLES:** Florida's vegetable crops were mostly good in all areas. Fall harvest activity increased. The first iceberg lettuce was harvested in the Everglades. Wet fields hampered vegetable harvest in the San Antonio-Winter Garden area. Most fall vegetables were harvested in the High Plains. Tomato and bell pepper harvests continued in the Rio Grande Valley. Broccoli, cauliflower, and cabbage harvests got underway. In Arizona, lettuce volume was strong in the West but light to moderate elsewhere. Mixed vegetable planting advanced. California vegetable harvest consisted mostly of artichokes, broccoli, cauliflower, carrots, sweet corn, cabbage, and lettuce.

**PASTURES AND LIVESTOCK:** Pastures were mostly good, but low temperatures halted growth in most areas. Livestock was mostly good. The cold weather caused stress and weight loss in some areas.

### CROP PROGRESS

FOR WEEK ENDING NOVEMBER 16, 1986

#### SOYBEANS % HARVESTED

	1986	1985	AVG.
ALA	77	65	76
ARK	65	67	70
GA	55	54	54
ILL	96	94	95
IND	94	92	95
IOWA	96	93	97
KANS	65	80	85
KY	70	60	68
LA	84	68	80
MICH	90	85	90
MINN	99	98	97
MISS	73	70	70
MO	62	61	78
NEBR	94	97	99
N C	33	26	41
OHIO	95	90	92
S C	41	34	37
S DAK	97	98	99
TENN	60	65	70

19 STATES 83 81 85

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

#### GRAIN SORGHUM % HARVESTED

	1986	1985	AVG.
ARK	100	100	98
ILL	94	78	84
KANS	80	90	85
LA	100	100	100
MISS	100	100	100
MO	80	74	83
NEBR	90	95	91
OKLA	55	90	70
S DAK	91	87	94
TENN	97	100	NA
TEX	79	90	94

11 STATES 84 90 NA

EXCL. STATES  
WITH NA 84 90 90

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

NA - NOT AVAILABLE.

#### CORN % HARVESTED

	1986	1985	AVG.
COLO	68	86	87
GA	100	99	98
ILL	94	87	92
IND	91	80	87
IOWA	90	76	88
KANS	95	95	95
KY	93	84	87
MICH	75	65	80
MINN	85	80	85
MO	80	78	86
NEBR	80	75	80
N C	99	99	99
OHIO	84	70	78
PA	72	68	71
S DAK	71	63	87
TEX	100	100	100
WIS	75	54	69

17 STATES 86 78 86

THESE 17 STATES PRODUCED 93%  
OF THE 1985 CORN CROP.

#### WINTER WHEAT % PLANTED

	1986	1985	AVG.
ARK	71	72	66
CALIF	45	45	39
COLO	99	99	100
GA	43	38	36
IDAHO	100	100	100
ILL	95	95	90
IND	97	98	96
KANS	95	95	98
MICH	100	99	100
MO	60	73	81
MONT	100	100	100
NEBR	100	100	100
N MEX	100	NA	NA
N C	71	56	68
OHIO	97	98	99
OKLA	85	97	95
OREG	98	96	97
S DAK	100	100	100
TEX	96	84	90
WASH	100	100	99

20 STATES 92 NA NA

EXCL. STATES  
WITH NA 92 92 93

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

NA - NOT AVAILABLE.

#### WINTER WHEAT % EMERGED

	1986	1985	AVG.
ARK	56	52	NA
CALIF	20	25	22
COLO	94	97	94
GA	30	29	NA
IDAHO	100	100	100
ILL	85	86	83
IND	90	93	90
KANS	90	85	90
MICH	65	90	NA
MO	48	63	68
MONT	75	80	88
NEBR	100	100	100
N MEX	100	NA	NA
N C	55	NA	NA
OHIO	82	94	93
OKLA	75	85	75
OREG	93	89	90
S DAK	100	100	100
TEX	89	71	76
WASH	99	94	95

20 STATES 84 NA NA

EXCL. STATES  
WITH NA 86 84 85

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

NA - NOT AVAILABLE.

COTTON				COTTON				CROP CONDITION PERCENT					
% BOLLS OPENING				% HARVESTED				FOR WEEK ENDING NOVEMBER 16, 1986					
	1986	1985	AVG.		1986	1985	AVG.	WINTER WHEAT					
STATE	VP	P	F	G	EX								
ALA	100	100	100	ALA	94	90	89	STATE	VP	P	F	G	EX
ARIZ	100	100	100	ARIZ	80	60	70	ARK	0	0	4	71	25
ARK	100	100	100	ARK	95	90	85	COLO	1	3	24	62	10
CALIF	100	100	100	CALIF	85	80	78	GA	0	2	41	53	4
GA	100	100	98	GA	74	83	77	ILL	0	3	31	58	8
LA	100	100	100	LA	99	92	86	IND	0	1	27	68	4
MISS	100	100	100	MISS	99	92	86	KANS	6	1	14	34	45
MO	100	100	100	MO	97	88	86	MICH	7	18	40	30	5
N MEX	100	100	100	N MEX	42	45	67	MO	2	11	61	25	1
N C	100	100	100	N C	80	62	76	MONT	0	0	47	53	0
OKLA	85	98	98	OKLA	3	45	25	NEBR	0	0	18	64	18
S C	100	100	100	S C	70	92	90	N MEX	0	0	43	57	0
TENN	100	100	100	TENN	90	81	85	N C	0	0	37	62	1
TEX	72	91	93	TEX	22	37	41	OHIO	0	0	29	66	5
14 STATES	86	96	97	14 STATES	56	61	61	OKLA	0	1	40	59	0
THESE 14 STATES PRODUCED 100% OF THE 1985 COTTON CROP.				THESE 14 STATES PRODUCED 100% OF THE 1985 COTTON CROP.				OREG	0	0	20	50	30
								S DAK	0	0	23	65	12
								TEX	0	2	19	57	22
								WASH	0	5	15	80	0

VP - VERY POOR P - POOR F - FAIR  
G - GOOD EX - EXCELLENT

### State Summaries of Weather and Agriculture

**ALABAMA:** Temperatures averaged 3 to 7° below normal. Rainfall totals averaged 0.50 in. north and south; 2.00 to 3.00 in. central.

Days suitable for fieldwork 4.3. Soil moisture 29% short, 60% adequate, 11% surplus. Virtually all peanuts dug, 96% combined. Harvesting sorghum, cotton, soybeans, pecans, late fall vegetables; planting small grains, winter grazing crops; routine care of livestock, poultry.

**ARIZONA:** Mostly sunny skies, seasonal temperatures dominated. Fifteen to 20° drop in maximum temperatures southeast on 13th. Increased cloudiness 15th. Very light precipitation over White Mountains, southeast. Average temperatures varied from 2° below normal to 4° above.

Cotton picking, stalk shredding active. Short staple harvest well along, long staple crop approaching mid-point. Ground preparation for small grains gained momentum. Alfalfa harvest light most areas. Stand renovation, planting winding down. New stands good. Sheep grazing light to moderate. Corn, sorghum harvests nearing completion. Peanuts, sesame harvested. Lettuce, broccoli, cauliflower, many mixed vegetables shipped west, central. Lettuce volume strong west, light to moderate elsewhere. Very light cantaloup, honeydew, mixed melon volume. Mixed vegetable planting advanced. Citrus packing continued. Valencia oranges maturing, citrus groves good. Apple shipping advanced. Pecans harvested.

**ARKANSAS:** Two arctic cold fronts swept through State bringing record low temperatures. Precipitation all sections, light to moderate. Some freezing rain. Temperature extremes 90°; 79°. Rainfall 0.19 to 1.78 in.

Days suitable for fieldwork 3.0. Soil moisture 2% short, 51% adequate, 47% surplus. Crop growth slow. Major activities: Seeding wheat, oats, fall forages; harvesting soybeans, pecans; scraping cotton; cutting hay, silage; fall land preparation continued; fertilizing winter annuals; winterizing machinery; herd health practices; building, repairing fences; weaning, marketing fall calf crop; pruning grapes. Cold, wet weather slowed

harvest, seeding operations. Killing frost sped soybean maturing.

**CALIFORNIA:** Another relatively dry week. Weak storm system brushed northern third State 14th, producing small amounts precipitation. Weak surge subtropical moistures combined with system light rainfall 14th, Los Angeles area. Temperatures near, slightly above normal most State, Sierra Nevada, southeast interior near, slightly below normal.

Excellent weather conditions fieldwork. Preparation, planting fields winter seedings continued, farmers waiting rain to plant. Lack rain slowed germination seeded fields. Burning, discing rice stubble continued. Harvesting cotton continued rapid pace. Some growers pick second time. Overwintered sugarbeet plantings continued. Harvesting corn, dry beans, alfalfa hay continued. Dry weather causing problems; additional irrigations, herbicides ineffective without rainfall. Pruning, irrigation, fertilization, fumigation main activities orchards. Few lots Emperor table grapes packed. Persimmon harvest completed soon, excellent fruit quality. Citrus activity slow. Sugar, color restraints slowed Navel harvest. Some lots failed minimum maturity requirements. Desert grapefruit, desert lemon, Fairchild tangerine, Fuerte avocado harvests continued, good quality. Artichokes moderate supply variable quality; Salinas area. Broccoli moderate supply Salinas; fairly light Santa Maria area, quality good. Cauliflower moderate fairly light supply, quality good. Harvest broccoli, cauliflower desert area Clovis, Huron, Firebaugh. Carrots fairly heavy supply quality good Salinas. Cabbage shipped Merced area. Harvest sweet corn limited mostly stand use. Melon harvest slowing Imperial Valley. Fall potato harvest complete Tulelake-Butte Valley, sheds operating full-time. Demand moderate, prices good. Lettuce packing Huron, Firebaugh districts very active, season winds down. Lettuce harvest Palo Verde area quality good, carton weight light. Ranges, pastures remained dry. Rain needed stimulate growth, reduce extreme fire danger. Supplemental

feeding increased over most State. Calving, lambing continued active. Movement livestock remained heavy many areas.

**COLORADO:** Temperatures averaged 1 to 19° below normal. Precipitation averaged trace to 0.40 in.

Days suitable for fieldwork 3.2. Soil moisture 2% very short, 22% short, 54% adequate, 22% surplus. Sorghum harvested for grain 62%, 95% 1985, 90% avg. Livestock good; range, pasture fair to good.

**FLORIDA:** Very warm, dry air turned cool, north late week but 10° or more above normal elsewhere. Rainfall up to 3.00 in. mainly middle, lower east coast with only spotty, light showers elsewhere.

Soil moisture adequate Panhandle, south; short central, north. Soybean harvest rapid progress, yields fair to good. Peanut harvest near completion. Cotton harvest well advanced. Hay harvest virtually completed. Sugarcane harvest active. Small grain planting continued; early plantings fair to good. Most Panhandle, northern, central Peninsula pastures fair; elsewhere, mostly good; all need rain; near freezing temperatures stopped some warm season grass growth, northern Peninsula, Panhandle; warm temperatures extreme south stimulated growth; winter plantings small grains, rye grass for grazing need rain. Cattle fair to good, Panhandle, northern central Peninsula; elsewhere, mostly good. Cool temperatures north increased milk production. Marketing of calves active. Rain needed citrus areas. Many growers irrigating. New growth showing from warm temperatures. Fruit loss from splitting not problem. Good color on early fruit. Early orange harvest very active. Grapefruit movement increased all areas. Vegetable crops continued mostly good all production areas. Fall harvest activity increased. First iceberg lettuce harvested Everglades. Vegetables leading in volume: Tomatoes, cucumbers, peppers, squash, corn, beans. Supplies carrots, radishes, eggplant, escarole, lettuce, cauliflower also available.

**GEORGIA:** Temperatures 2 to 4° below normal north, 3 to 6° above normal south. First significant freeze over northern half of State on morning of 14th. Coldest report 15° Blairsville. Maximum temperatures 85 to 90° over south. Most of State received 0.50 in. rain with local totals exceeding 2.00 in. Wayne County 5.00 in. for 24-hour period ending morning of 17th.

Days suitable for fieldwork 4.9. Soil moisture 5% very short, 53% short, 41% adequate, 1% surplus. Cotton 8% very poor, 12% poor, 58% fair, 22% good. Sorghum grain 3% very poor, 20% poor, 65% fair, 12% good; 90% harvested, 87% 1985. Peanuts 4% very poor, 7% poor, 68% fair, 21% good; 99% dug, 100% 1985, 100% avg.; 94% threshed, 100% 1985, 100% avg. Soybeans 11% very poor, 19% poor, 67% fair, 3% good. Rye 3% poor, 36% fair, 59% good, 2% excellent; 72% planted, 77% 1985, 72% avg. Other small grains 69% planted, 63% 1985, 61% avg. Apples 6% very poor, 12% poor, 44% fair, 38% good; 100% harvested, 100% 1985, 99% avg. Pecans 4% very poor, 7% poor, 53% fair, 34% good, 2% excellent; 40% harvested, 47% 1985, 37% avg. Pasture 3% very poor, 18% poor, 51% fair, 28% good. Hay 4% very poor, 22% poor, 52% fair, 22% good. Cattle 4% poor, 45% fair, 51% good. Hogs 2% poor, 24% fair, 73% good, 1% excellent. Main activities: Harvesting, seeding small grains.

**HAWAII:** Weather unfavorable. Shower band, associated thunder showers passed through islands. Rainfall, heavy at times, most areas. Winds averaged 10 to 20 mph, higher gusts. Temperatures ranged mid 60s to low 90s. Rainfall ranged 0.10 to 16.20 in.

Days suitable for fieldwork 6.0. Weather mostly unfavorable for crop development. Flooding low lying areas; agricultural crops minor damage. Field operations slowed many areas. Banana, papaya orchards fair. Leafy vegetables fair. Pineapple, sugarcane harvesting continued.

**IDAHO:** Cold northerly flow brought first cold snap. Temperatures 5 to 10° below normal. Panhandle up to 15° below normal. Light precipitation, light snow.

Farm activities include fieldwork, fall plowing, fertilizing, marketing calves, feeding cattle, culling cows. Livestock good. Hay, roughage supplies adequate to surplus.

**ILLINOIS:** Temperatures averaged 9 to 15° below normal. Precipitation none to 0.36 in.

Days suitable for fieldwork 5.0. Soil moisture 60% adequate, 40% surplus. Pasture 3% poor, 39% fair, 49% good, 9% excellent. Major farm activities: Harvesting corn, soybeans, sorghum, seeding wheat.

**INDIANA:** Average temperatures 10 to 14° below normal. Lows from single digits to lower teens. Highs upper 40s, lower 50s. Precipitation well below normal. Amounts from 0.20 in. north to 0.40 in. south. Four inch soil temperatures mid 30s to lower 40s.

Fieldwork averaged 5.1 days. Topsoil moisture 85% adequate, 15% surplus. Subsoil moisture 3% short, 90% adequate, 7% surplus. Corn 18% moisture content, soybeans 15% moisture content. Spring cropland 35% tilled, 30% 1985, 45% avg. Wheat stands fair to mostly good. Pastures mostly fair to good.

**IOWA:** Cold, dry week. Snowfall 1 to 2 in. north; 1 in. or less south. Temperatures 16 to 17° below normal.

Days suitable for fieldwork 5.0. Topsoil moisture 67% adequate, 33% surplus; subsoil moisture 65% adequate, 35% surplus. Corn harvest nearing completion; corn lodging 3% none, 60% light, 34% moderate, 3% heavy; ear droppage 3% none, 68% light, 28% moderate, 1% heavy. Soybean harvest nearing completion. Fall tillage 22%, 19% 1985, 42% avg.; fall fertilizer application 13%, 15% 1985, 37% avg. Livestock mostly good; cold weather causing stress, some pneumonia. Corn stalk grazing limited to moderate.

**KANSAS:** Precipitation traces west and south central, 0.20 in. southeast, 0.10 in. or less elsewhere. Temperatures averaged 28 to 33°; 7 to 10° below normal west, 12 to 16° below normal central and east.

Days suitable for fieldwork 3.5. Soil moisture 67% adequate, 33% surplus. Record cold helped dry sorghum, soybeans. Frozen ground allowed some combining, most activity restricted four-wheel drive equipment. Wheat seeding, emergence on schedule, nearing completion. Wheat acreage pastured 10%. Wheat 6% very poor, 1% poor, 14% fair, 34% good, 45% excellent. Pastures fair west, good to excellent elsewhere; growth restricted by cold weather.

**KENTUCKY:** Temperatures averaged 7 to 12° below normal. Record breaking arctic air prevailed second half of week. Early week temperatures around normal. High temperatures upper 40s to 60s, lows teens or below. Precipitation 0.33 in. west, over 1.00 in. some southeast locations. Most rain early, about 0.10 in. late week.

Days suitable for fieldwork 1.9. Soil moisture 5% short, 71% adequate, 24% surplus. Burley stripping 53% complete, 55% 1985, 42% avg. Quality good, houseburn minimal. Market opens November

24th. Corn harvest virtually finished commercial areas. Killing freeze should assist late soybean harvest, some popping out of beans. Sorghum grain 90% harvested. Wheat 88% seeded, emerged wheat mostly good. Pasture 2% poor, 32% fair, 57% good, 9% excellent.

**LOUISIANA:** Temperature normal to 7° below normal. Temperature extremes 28°; 67°. Rainfall averaged none to 1.80 in.

Days suitable for fieldwork 3.3. Soil moisture 58% adequate, 42% surplus. Soybeans 100% shedding leaves, 100% 1985, 99% avg. Rice 2nd cutting 50% harvested. Sugarcane good; 48% harvested, 37% 1985, 46% avg. Sweetpotatoes 98% harvested, 82% 1985, 93% avg. Pecans 53% harvested, 48% 1985, 40% avg. Wheat 57% planted, 25% 1985, 49% avg.; 47% emerged, 18% 1985, 33% avg. Vegetables fair; pasture, livestock fair to good. Main activities: Harvesting pecans, 2nd crop rice, soybeans, sugarcane; planting wheat; topdressing winter pastures.

**MARYLAND & DELAWARE:** **Maryland:** Temperatures averaged 1° below normal over State; lowest temperature 40° Oakland; highest temperature 52° Snow Hill. Precipitation averaged 1.07 in., ranging from 0.50 in. Snow Hill to 1.82 in. Frederick.

Days suitable for fieldwork 4.0. Topsoil moisture adequate. Subsoil moisture short. Corn poor to fair; 93% harvested, 93% 1985, 97% avg. Soybeans mostly fair; 60% harvested, 60% 1985, 75% avg. Tobacco 20% stripped. Small grains good; wheat 93% planted, 90% 1985, 94% avg. Barley 97% planted, 100% 1985, 100% avg. Pasture mostly fair to good. Hay supplies short.

**Delaware:** Temperatures normal over State; lowest temperature 44° Wilmington; highest temperature 51° Dover. Precipitation averaged 1.04 in., ranging from 0.83 in. Milford to 1.32 in. Middletown.

Days suitable for fieldwork 4.0. Topsoil moisture adequate. Subsoil moisture mostly short. Corn fair; 96% harvested, 96% 1985. Soybeans fair to good; 70% harvested, 60% 1985, 80% avg. Small grains fair to good. Wheat 80% planted, 95% 1985, 90% avg. Barley 99% planted; 96% 1985, 99% avg. Pasture fair. Hay supplies short to adequate.

**MICHIGAN:** Temperatures ranged 10 to 15° below normal. Temperature extremes -5°; 48°. Precipitation ranged from none to 0.60 in. across State.

Days suitable for fieldwork 5.0. Soil moisture 65% adequate, 35% surplus. Corn 75% harvested, 65% 1985, 80% avg. Soybeans 90% harvested, 85% 1985, 90% avg. Winter wheat 100% planted, 99% 1985, 100% avg.; 65% emerged, 90% 1985; 7% very poor, 18% poor, 40% fair, 30% good, 5% excellent. Major activities: Corn, soybean harvesting, fertilizer spreading. Potato, sugarbeet, hay, corn silage and dry bean harvest virtually complete. Three to 10 in. of snow along Lake Michigan.

**MINNESOTA:** Temperatures averaged 16 to 21° below normal for State. Temperature extremes -17°; 48°. Precipitation averaged 0.13 to 0.32 in. below normal for State. Greatest weekly total 0.13 in. Snowfall averaged trace to 1 in. for State.

Topsoil moisture 1% short, 79% adequate, 20% surplus. Big chill hit State past week sending frost into ground all areas except those protected by enough snow cover. Many regular fall field activities completed before cold snap; otherwise will wait until spring. Corn harvest needs another 1 to 2 good weeks to complete. High winds broke weaker corn stalks caused some crop loss. Field corn 85% harvested, 80% 1985, 85% avg.; 22% moisture content of grain, 22% 1985, 21% avg.; 50% stubble plowed, 37% 1985, 54% avg.

**MISSISSIPPI:** Temperatures 4° below normal, extremes 17°; 81°. Greatest 24-hour total rainfall 4.00 in.

Days suitable for fieldwork 2.2, 5.0 1985, 4.4 avg. Soil moisture 4% short, 57% adequate, 32% surplus, 7% excessive. Wheat 58% planted, 54% 1985, 61% avg.; 2% poor, 61% fair, 35% good, 2% excellent. Pecans 54% harvested, 40% 1985, 43% avg.; 12% very poor, 4% poor, 44% fair, 32% good, 8% excellent.

**MISSOURI:** Record low temperatures averaging 17° below normal. Scattered light precipitation, averaging about 0.50 in. southern half, 0.25 in. northern half.

Days suitable for fieldwork 2.7. Soil moisture 33% adequate, 67% surplus. Frozen ground allowed some muddy areas to be harvested. Field preparation for spring planting 26%, 40% 1985, 44% avg. Pasture 3% poor, 28% fair, 64% good, 5% excellent.

**MONTANA:** Record cold temperatures first, moderating later. Temperatures averaged 15 to 20° below normal west of divide, 20 to 25° below normal east. Heavy snow parts of southwest, south central, moderate elsewhere.

Topsoil moisture supply 88% adequate, 12% surplus. Subsoil moisture supply 82% adequate, 18% surplus. Winter wheat snow cover protection 19% poor, 62% fair, 18% good, 1% excellent. Wind damage winter wheat 37% none, 63% light. Livestock receiving supplemental feed 50%. Grazing conditions 46% open, 54% difficult. Hay, roughage supplies 3% short, 39% adequate, 58% surplus.

**NEBRASKA:** Rainfall averaged up to 0.20 in. Temperatures ranged from 9 to 20° below normal. Temperature extremes -20°; 64°.

Days suitable for fieldwork 4.8. Topsoil moisture 58% adequate, 42% surplus. Subsoil moisture 2% short, 80% adequate, 18% surplus. Wheat mostly good. High corn moisture remains hindrance to harvest progress. Soybean harvest nearing completion across State, except southeast. Pasture, range feed supplies mostly adequate. Cold temperatures slowed gains, stressed livestock. Some supplement feeding of cattle.

**NEVADA:** High pressure ridge controlled weather all areas beginning of period. Jet stream moved closer last half week producing light precipitation northern border. Most precipitation Wildhorse Reservoir form of 1 in. snow. Temperatures all areas near normal. Temperature extremes 9°; 83°.

Grading, marketing potatoes active north, sales encouraging. Mild, open weather made livestock feeding operations easy.

**NEW ENGLAND:** Cold week. Temperatures 3 to 5° below normal north, 5 to 8° below normal south. Precipitation (snowfall liquid equivalent) 0.50 to 0.75 in. southern areas, central Maine. Elsewhere, 0.01 to 0.20 in.

Major farm activities: Mending fences, preparing for winter.

**NEW JERSEY:** Temperatures averaged much below normal, averaging 34° north, 37° south, 41° coastal. Extremes 11°; 57°. Precipitation slightly below normal, averaging 0.75 in. north, 0.80 in. south, 0.71 in. coastal. Heaviest 24-hour total 1.30 in. on 11th, 12th.

Dryer conditions aided harvest of soybeans, corn for grain. Apples, potatoes, squash, sweetpotatoes moved from storages. Cider making active. Some cabbage, cauliflower, spinach, greens marketed.

**NEW MEXICO:** Weekly average temperatures to near 8° below normal statewide. Precipitation from none northwest plateau to near 0.10 in. southeast plains.

Days suitable for fieldwork 4.0. Soil moisture 17% short, 17% adequate, 66% surplus. Freeze damage 66% light, 17% moderate, 17% severe. Alfalfa 50% poor, 17% fair, 33% good. Cotton 14% poor, 29% fair, 57% good. Corn 50% fair, 50% good. Barley 20% fair, 80% good. Irrigated grain sorghum 14% poor, 29% fair, 57% good. Dryland grain sorghum 25% poor, 25% fair, 50% good. Pecans 25% fair, 75% good. Chile 20% fair, 80% good. Cattle 22% fair, 78% good. Sheep 20% fair, 80% good. Range 56% fair, 44% good.

NEW YORK: Mild temperatures, rain early in week yielded to snow, record lows mid to late week. Most areas reporting lows in teens, highs in 50s. Precipitation statewide average 0.50 in. with 4 to 8 in. of snow in Catskills, 6 in. near Lakes.

Days suitable for fieldwork 5.5. Soil moisture surplus. Corn silage harvest 96% complete. Grain corn harvest 61% complete. Pasture fair. Fruit harvest complete.

NORTH CAROLINA: Temperature extremes 90°; 84°. Precipitation ranged from 0.19 to 2.32 in.

Days suitable for fieldwork 3.2. Soil moisture 5% very short, 35% short, 55% adequate, 5% surplus. Corn grain harvest virtually complete. Cotton fair to good, harvest average. Soybeans mostly fair, harvest slightly behind average. Wheat planting ahead average. Oats planted 80%, 73% 1985, 80% avg. Barley planted 84%, 74% 1985, 78% avg. Rye planted 75%, 73% 1985, 77% avg. Sorghum harvested 80%, 86% 1985, 88% avg. Sweetpotatoes harvested 95%, 95% 1985, 97% avg. Pasture 4% very poor, 11% poor, 53% fair, 32% good. Major farm activities: Seeding small grains, pastures; harvesting corn, soybeans, peanuts, cotton, sorghum, sweetpotatoes, hay, fall vegetables; grading, stripping burley tobacco; marketing tobacco; land preparation; cutting firewood, Christmas trees; tending livestock; pruning fruit trees; conservation work; spreading lime; mowing; general farm maintenance.

NORTH DAKOTA: Snow received from first winter storm 15 to 25 in. central, northeast. Cold high pressure brought average temperatures to 15 to 19° below normal. Extremes -19° northeast, 11th; 34° southwest, 15th.

Some sunflower, small amount of corn yet to be harvested. Harvest continued in areas without large amount of snow. Some sunflower may be left until spring. Most cattle west on ranges, remainder being fed hay.

OHIO: Temperatures averaged 8 to 13° subnormal. Precipitation widespread ranging from 0.10 in. north to 0.50 in. south.

Days suitable for fieldwork 3.9. Soil moisture 1% short, 69% adequate, 30% surplus. Low temperatures froze soils enough to permit harvest wetter areas. Harvest progress exceeds last year, average. Winter wheat planting almost complete; no damage to crop from low temperatures except leaf burn. Wheat good.

OKLAHOMA: Temperatures averaged 18° below normal north central to 12° below normal Panhandle. Precipitation none Panhandle, north central to 1.06 in. southeast.

Days suitable for fieldwork 3.4. Topsoil moisture 70% adequate, 30% surplus. Subsoil moisture 100% adequate. Temperatures dipped into single digits northern counties first time since last winter. Wheat 1% poor, 40% fair, 59% good; 85% planted, 97% 1985, 95% avg.; 75% emerged, 85% 1985, 75% avg.; 20% grazing, 20% 1985, 10% avg. Sorghum 55% harvested, 90% 1985, 70% avg. Cotton 65% fair, 35% good; 3% harvested, 45% 1985, 25% avg. Cotton harvest lagging nearly month behind average as fields remain too wet and most fields have unopened bolls. Some unopened bolls damaged

by freeze. Cold weather encouraged harvest of mature cotton, reduced grain sorghum moisture content. Pastures entered dormancy. Cattle marketings heavy south, central localities; prices steady.

OREGON: Temperatures slightly below normal west of Cascades, slightly above southwest interior. Warmest readings 6° above normal extreme south coast. Temperatures east of Cascades 2 to 9° below normal. Precipitation west of Cascades ranged from 0.40 to 1.00 in. except lower elevations of southwest interior received 0.10 in. East of Cascades precipitation ranged from 0.10 to 0.50 in.

Soil moisture 20% short, 70% adequate, 10% surplus. Majority of fall grain seeding completed. Emerged grain crops in good shape for winter. Peppermint planting central area. Fall activities winding down all areas. Filbert harvest complete, good nut quality. Harvest of cole crops wrapped up. Livestock mostly good. Ranges, pastures fair to good. Cattle off high elevation range onto winter pastures east. Some over grazing occurred western pastures.

PENNSYLVANIA: Week started warm and wet, ended cold and dry. Record breaking cold on 14th. All sections received some snow. Average temperature 34°, 8° below normal. Temperature extremes 6°; 72°. Average precipitation 0.52 in., 0.24 in. below normal.

Days suitable for fieldwork 4.0. Soil moisture 5% short, 76% adequate, 19% surplus. Corn harvest 72% complete, 68% 1985, 71% avg. Corn 1% very poor, 7% poor, 27% fair, 52% good, 13% excellent. Soybean harvest 70% complete, 64% 1985, 69% avg. Soybeans 1% very poor, 7% poor, 18% fair, 56% good, 18% excellent. Amount of feed being obtained from pastures average to above average. Activities: Harvesting soybeans, corn grain, corn silage; spreading fertilizer, manure.

PUERTO RICO: NO DATA AVAILABLE

SOUTH CAROLINA: Seasonal temperatures early week, cold, arctic air midweek. First hard freeze in many areas. Seasonal temperatures late week. Widespread rainfall across State throughout week.

Days available for fieldwork 3.8. Soil moisture 9% very short, 36% short, 50% adequate, 5% surplus. Cotton open bolls 100%; 70% harvested, 92% 1985, 90% avg.; 25% very poor, 56% poor, 19% fair. Soybeans leaves turning 100%; 94% shedding leaves, 100% 1985; 97% avg.; 91% mature, 94% 1985, 88% avg.; 41% harvested, 34% 1985, 37% avg.; 7% very poor, 44% poor, 49% fair. Tobacco harvested 100%; 92% stalks destroyed, 100% 1985, 100% avg. Peanuts fair, 86% harvested, 94% 1985, 96% avg. Sweetpotatoes fair; 83% harvested, 88% 1985, 93% avg. Barley, oats, rye, wheat fair to good. Pastures, hay fair. Winter grazing, livestock fair to good. Rains helped growth, germination of small grains; hampered cotton harvesting.

SOUTH DAKOTA: Average temperatures ranged 18 to 25° below normal. Extremes -18°; 47°. Black Hills low -29°. Temperatures near record low. Precipitation in form of snow near normal, statewide.

Days suitable for fieldwork 3.2. Topsoil moisture surplus east central, adequate elsewhere; 2% short, 89% adequate, 9% surplus. Soybean, sorghum harvest nearing completion. Corn harvest 2 weeks behind normal. High grain moisture content remains problem. Livestock good to excellent. Supplemental feeding beginning. Feed, stockwater adequate. Cattle moved to winter pastures.

TENNESSEE: First hard freeze. Temperatures 4 to 13° below normal. Precipitation general across State. Amounts 3.00 in. or more common.

Days suitable for fieldwork 1.8. Soil moisture 9% short, 65% adequate, 26% surplus. Corn 92% harvested, 90% 1985, 88% avg. Burley tobacco 65% stripped, 70% 1985, 65% avg. Wheat 70% seeded, 75% 1985, 70% avg. Pastures good. No cotton harvested. Harvest limited for other crops.

**TEXAS:** Two surges arctic air brought first major cold wave of season. Cold, freezing rain problem central State. Snow common High Plains. Lower Valley significant showers as front pushed through area. Arctic air mass lingered eastern half State, caused clouds, drizzle. West ended week warming trend carried into weekend. Far south above normal rainfall, all other areas below normal. Below normal temperatures all areas.

**Crops:** Virtually all fields corn harvested High Plains. Grain sorghum harvest another slow week. Cold, damp conditions hampered field activities. Colder temperatures aid final drying down most fields. Yields continued good. Some lodging because high winds. Mature 97%, 100% 1985, 100% avg. Cotton producers received killing freeze many hoping for. Temperatures single digits, ended need to apply defoliant. Plains. Colder temperatures aid boll maturing. Harvest operations slow; some progress late week. Yields, grades continued poor. Harvest some progress Trans-Pecos. Continued open weather aid harvesting. Small grains slow growth most areas because colder temperatures. Planted fields continued good stands, adequate grazing. Planting wheat, oats slow across State. Cold weather reduce greenbug activity, beginning Blacklands. Sunshine, open weather needed. Peanut harvest slow last week many areas. Yields, grades continued good. Some fields dug, on ground received some cold weather damage Cross-Timbers, Low Plains. Harvested 68%, 53% 1985, 68% avg. Soybean harvest resumed Plains. Yields fair to good. Upper Coast, harvest stalled by wet weather. Yields, quality continued poor. Drier weather needed to improve conditions. Harvested 73%, 39% 1985, 65% avg. Sugarbeet harvest good progress High Plains. Sugarcane harvest slight delays from wet weather. Cane yields good. Other crops harvested: Sunflowers 69%, 78% 1985, 83% avg. Sugarbeets 43%, 48% 1985, 71% avg. Pecans 54%, 25% 1985, 36% avg. Other crops planted: Oats 89%, 76% 1985, 86% avg.

**Commercial Vegetables:** Rio Grande Valley, harvest continued tomatoes, bell peppers. Harvest began broccoli, cauliflower, cabbage. Early carrots nearing maturity, later fields being planted. Onion planting continued. Harvest citrus increased weather permitted. Sizes, quality continued good. Recent cooler temperatures should help sweeten fruit on trees. San Antonio-Winter Garden, wet fields hampering harvest cabbage, cauliflower, squash. Carrots, spinach good stands. Cold weather aid spinach. High Plains, most fall vegetable harvest completed with limited volumes carrots left. Trans-Pecos, harvest lettuce slow. Most bell pepper harvest over because cold temperatures. Pecan harvest some progress last week despite cold, damp conditions areas. Quality good, quantity down. Sprouting continued problem Trans-Pecos.

**Range and Livestock:** Growth warm season grasses virtually over; winter pastures, ranges

good. Small grains continued provide good grazing. Livestock prices lowered some what, allowing more stocker purchases. Cattle increasing small grains many areas. Livestock suffered some from cold weather. Supplemental feeding underway. Early lambing continued Hill Country. Sheep prices remain good.

**UTAH:** Precipitation none south, elsewhere light to moderate. Temperatures 4 to 5° below normal.

Major farm activities: Winterizing, livestock chores, marketing livestock range feed adequate, livestock generally good. Movement from summer range complete.

**VIRGINIA:** Cloudy, warm, wet beginning period. Extreme cold last half period. Heavy frost most areas. Coldest 8°. Temperatures averaged 1 to 2° below normal. Precipitation averaged 0.75 in.

Days suitable for fieldwork 2.5. Topsoil moisture 17% short, 77% adequate, 6% surplus. Rain, cold limited fieldwork. Livestock care, winter chores main activities. Grain corn harvest 89% complete, 87% 1985, 91% avg. Soybean harvest 48% complete, 43% 1985, 61% avg. Wheat 76% seeded, 71% 1985, 80% avg. Small grains good. Pastures improved, mostly good, fair north. Livestock good to excellent. Calving active. Some cattle sales.

**WASHINGTON:** Below normal temperatures, precipitation; statewide. Warm, rain showers; west. Cool, clear; east.

Days suitable for fieldwork 5.0. Soil moisture 30% short, 70% adequate. Winter wheat 100% seeded, 1985 100%, 99% avg. Winter wheat emerged 99%, 1985 94%, 95% avg. Onion harvest in progress. Christmas tree cutting full-swing.

**WEST VIRGINIA:** Temperatures 7 to 11° below normal. Temperature extremes 2° Greenbank; 60° Williamson. Average temperature 35°. Precipitation ranged from 0.06 in. below normal to 0.05 in. above except northwest 0.27 in. above. Average precipitation 0.63 in.

Days suitable for fieldwork 1.0. Soil moisture 6% short, 63% adequate, 31% surplus.

**WISCONSIN:** Bitter cold temperatures averaged 20°, 13° below normal; low -10°, high 52°. Precipitation none to 0.20 in. Snowfall 1 to 2 in. north, less rest of State. Dry weather, frozen ground aided harvest low lying fields.

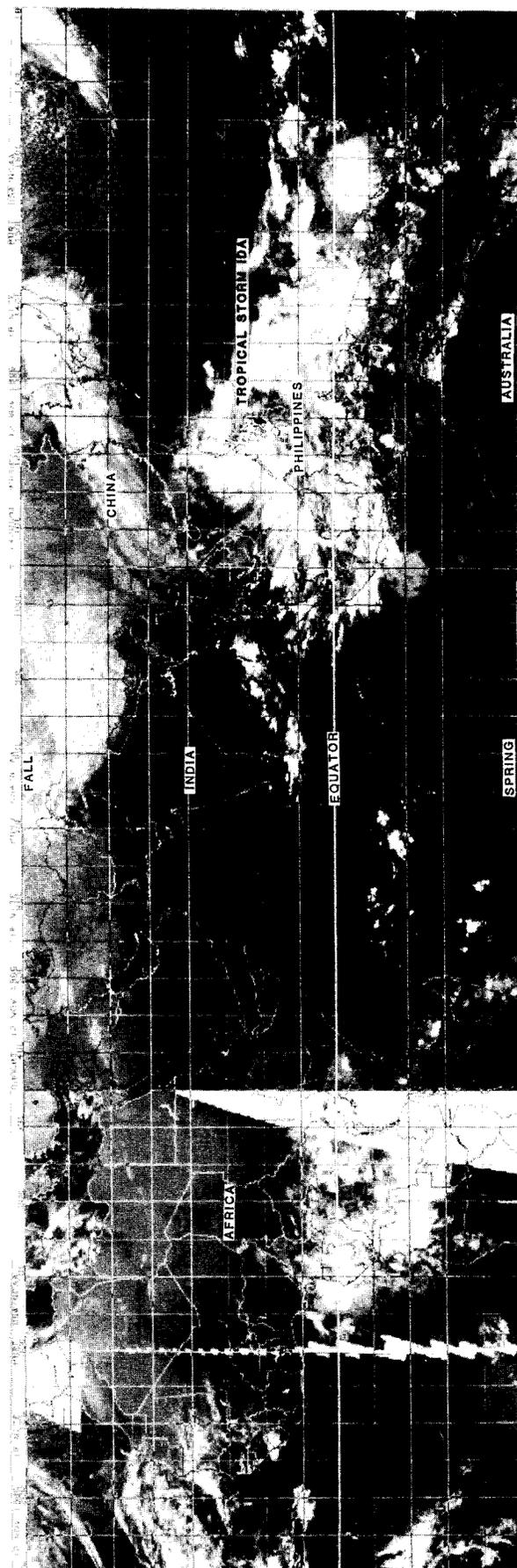
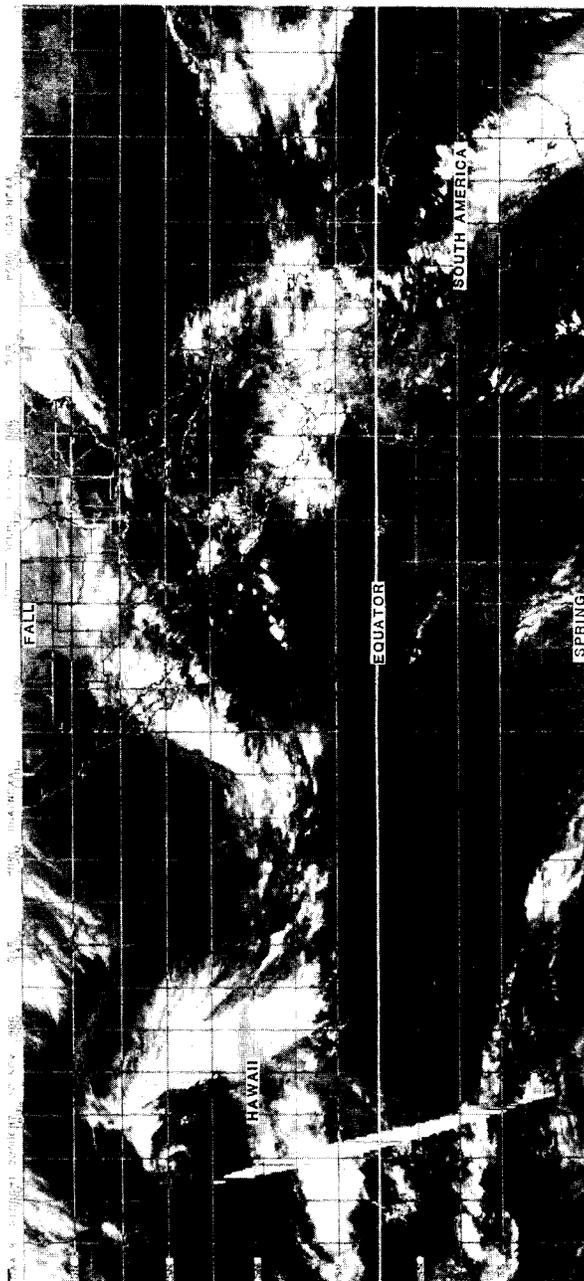
Days suitable for fieldwork 5.7. Soil moisture 62% adequate, 38% surplus. Corn harvest 75% complete, 54% 1985, 69% avg. Yields excellent. Winds caused some lodging. Soybean harvest 84% complete, 68% 1985, 81% avg. Problems with mold. Hay, winter wheat fields generally good, poorer east central. Fall plowing 43% complete, 36% 1985, 48% avg.

**WYOMING:** Very cold, temperatures much below normal. Precipitation generally below normal.

Corn, sugarbeet harvest continued. Winter wheat mostly good. Livestock movement from summer ranges nearing completion. Supplemental feeding began some areas. Cold temperatures, snow affecting young livestock.

# Global Weather Satellite Image

November 12, 1986



# International Weather and Crop Summary

November 9 - 15, 1986

## HIGHLIGHTS:

**UNITED STATES** ... Extremely cold temperatures hasten crop maturity, especially cotton in the southern Great Plains and soybeans in the Delta and Appalachian States. The low temperatures slow wheat growth, with damage limited to mostly leaf burn.

**WESTERN U.S.S.R.** ... Dry weather covers southern winter grain areas, where unseasonable cold weather induces plants into dormancy.

**EUROPE** ... Widespread rain and mild weather in England, France, and Spain favors winter grain emergence and plant establishment. Continued unseasonable cold, dry weather in Hungary, western Romania, and eastern Yugoslavia reduces emergence prospects and limits early growth.

**SOUTH ASIA** ... Scattered showers benefit grain-filling to maturing rice in eastern India and Bangladesh. Showers in southern India are mostly confined to coastal areas.

**EASTERN ASIA** ... Dry weather over the North China Plain helps cotton harvesting.

**MEXICO** ... Showers benefit immature crops in the east but slow sugar cane harvesting.

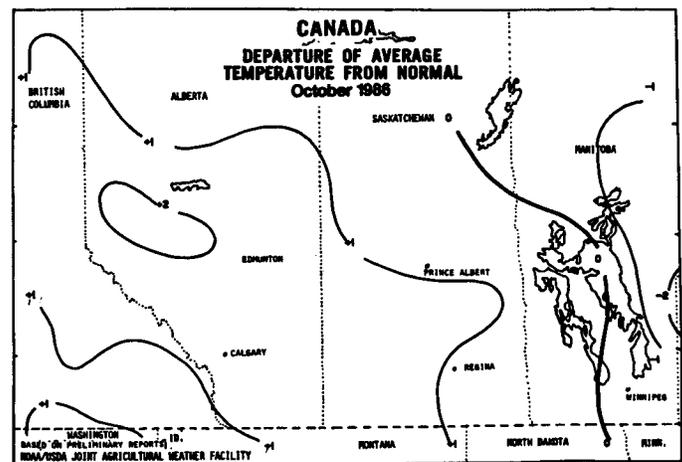
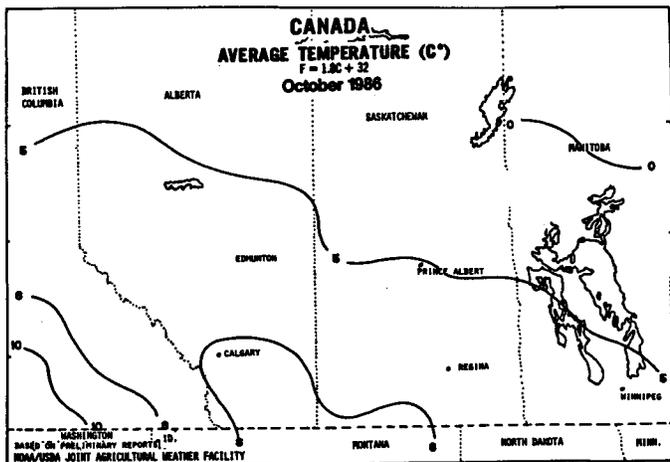
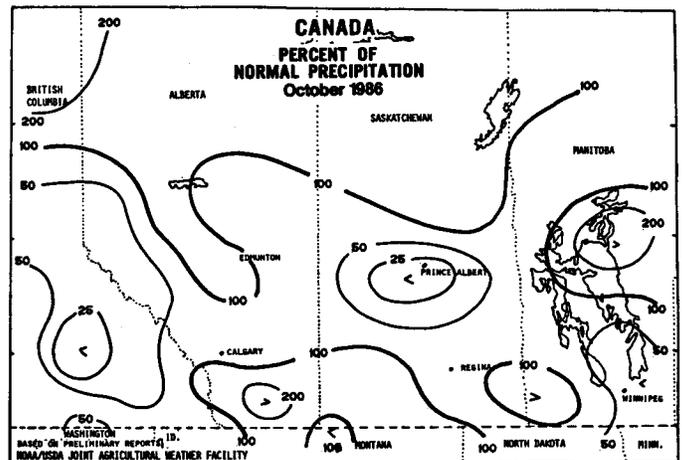
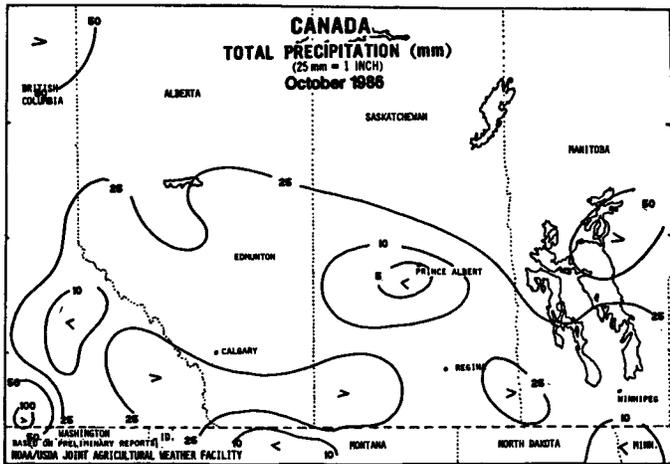
**SOUTHEAST ASIA** ... Light, scattered showers fall in Thailand's upland rice areas. Moderate to heavy tropical showers fall in Malaysia and the Philippines.

**SOUTH AMERICA** ... Summer crop planting advances in Argentina with mostly favorable weather. Rain in south-central Brazil slows fieldwork.

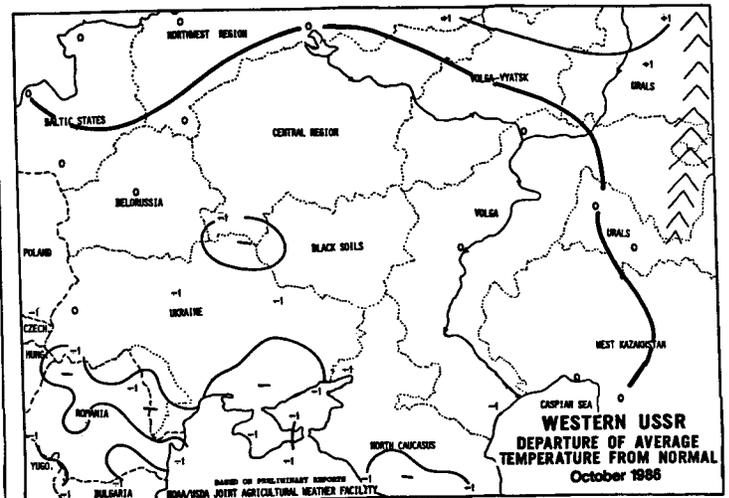
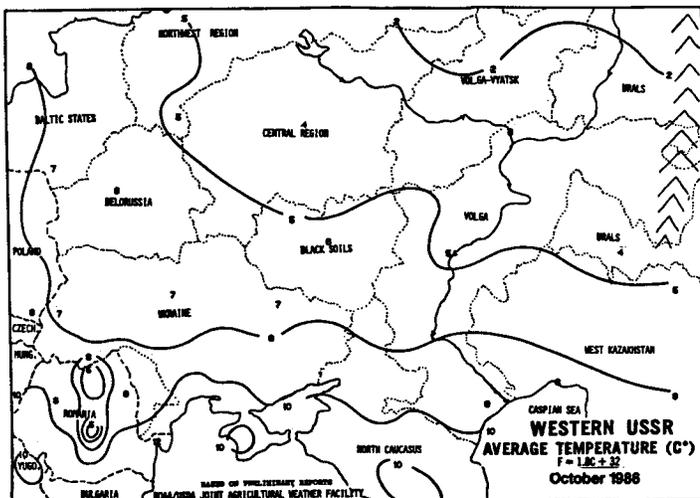
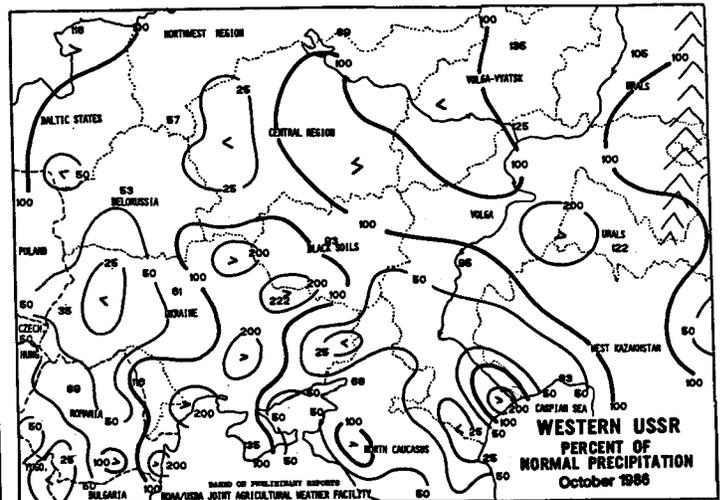
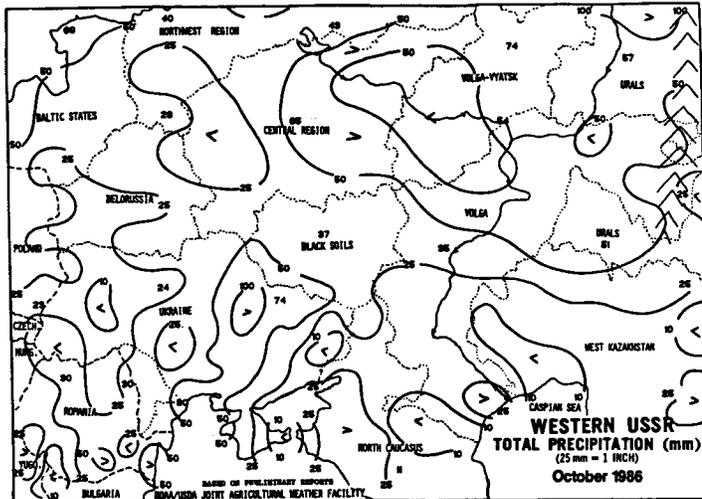
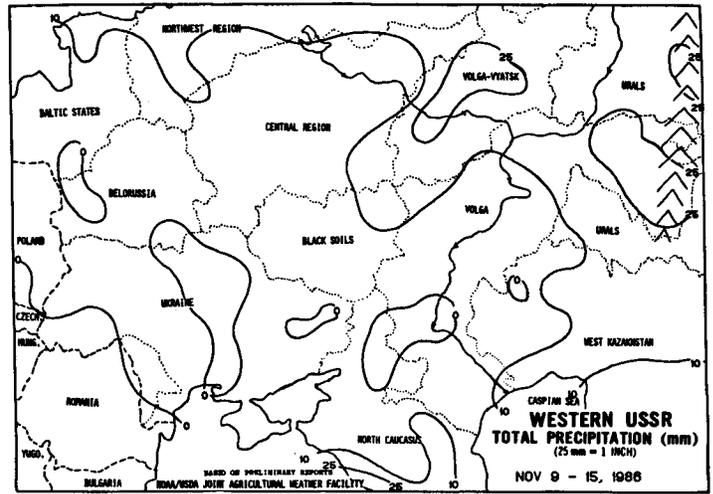
**AUSTRALIA** ... Heavy showers in eastern grain areas promote establishment of summer crops but slow wheat harvesting. Light, scattered showers benefit grain-filling wheat in the west and south.

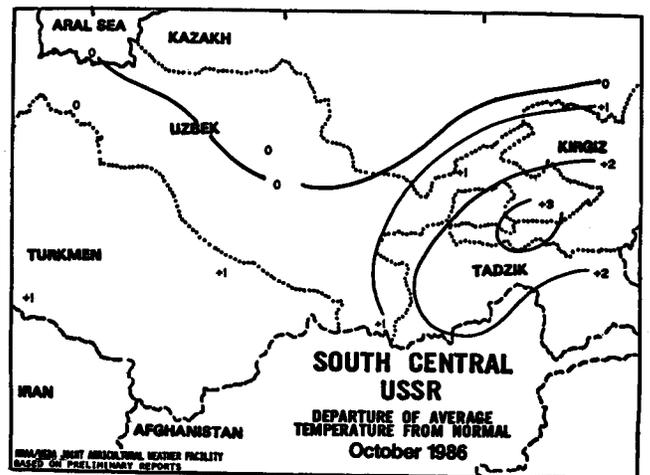
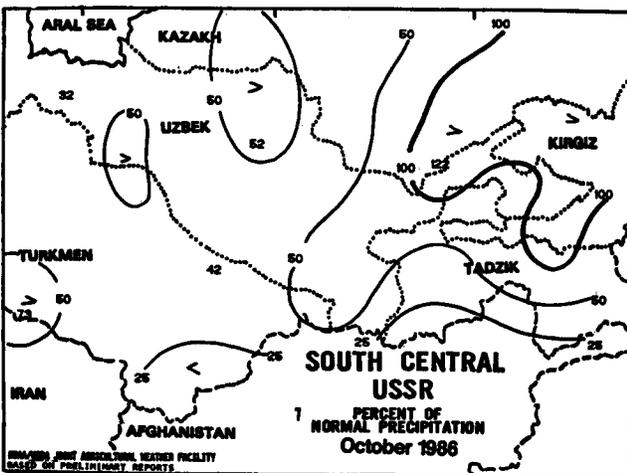
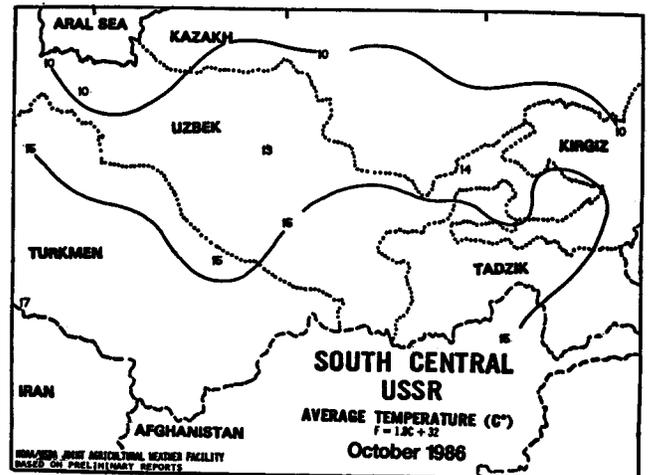
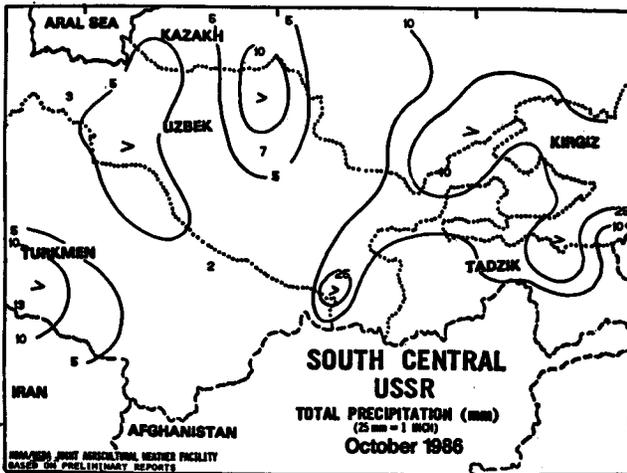
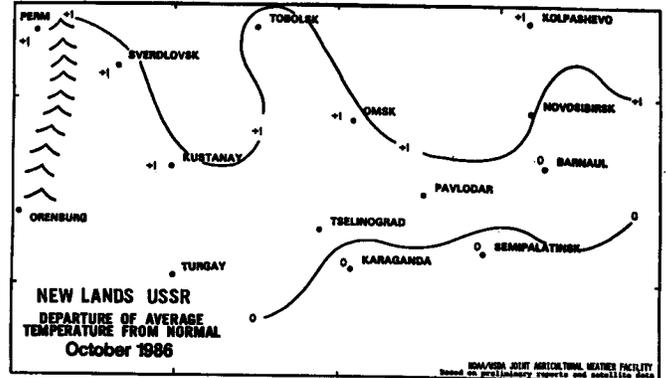
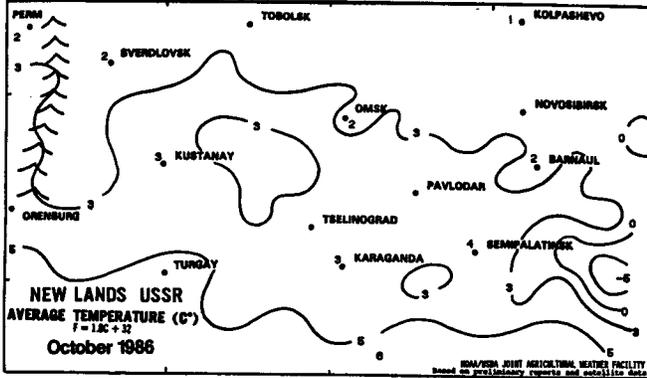
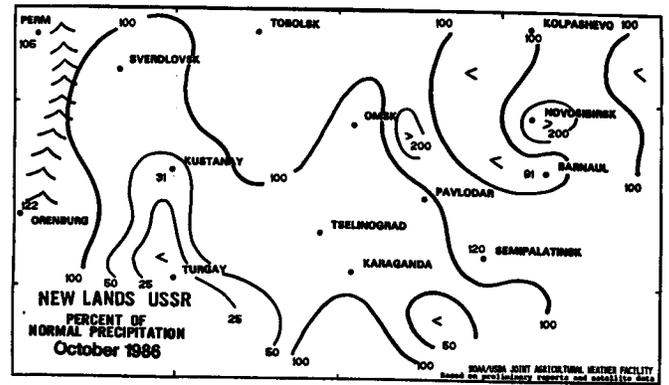
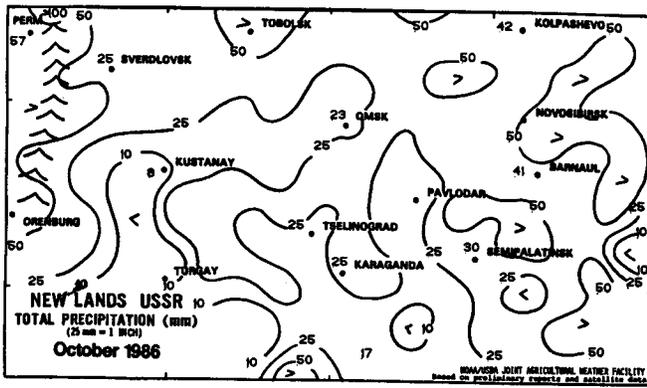
**SOUTH AFRICA** ... Scattered, light to moderate showers cover South Africa's grain areas. Periods of dry weather allow corn planting to begin in some previously wet areas.

**NORTHWESTERN AFRICA** ... Soaking rain over Morocco provides favorable soil moisture for winter grain planting.

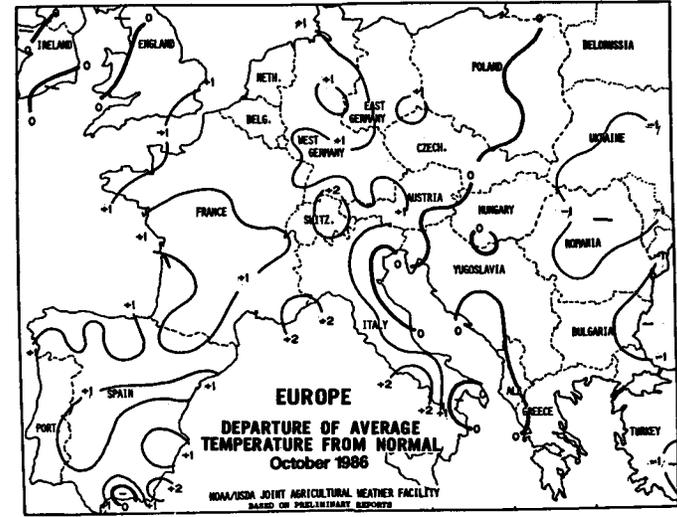
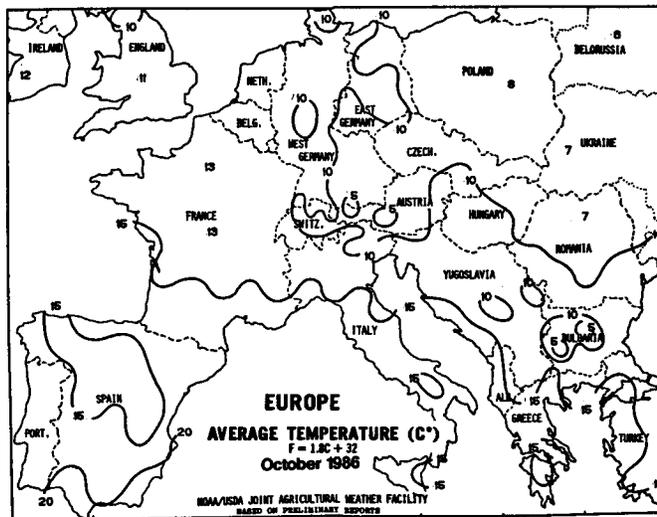
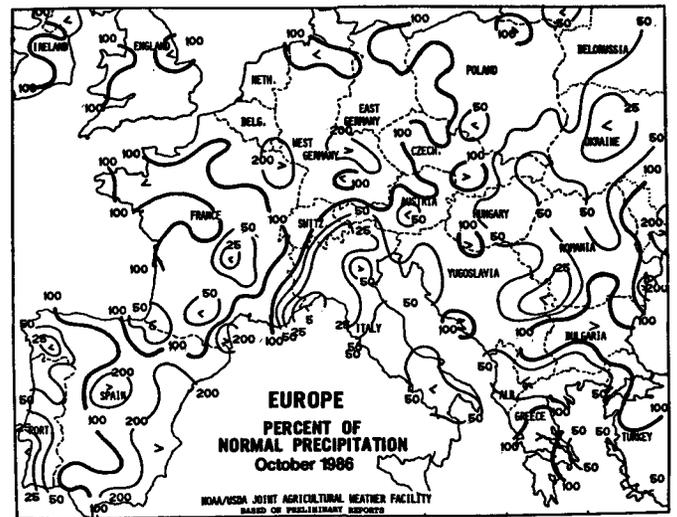
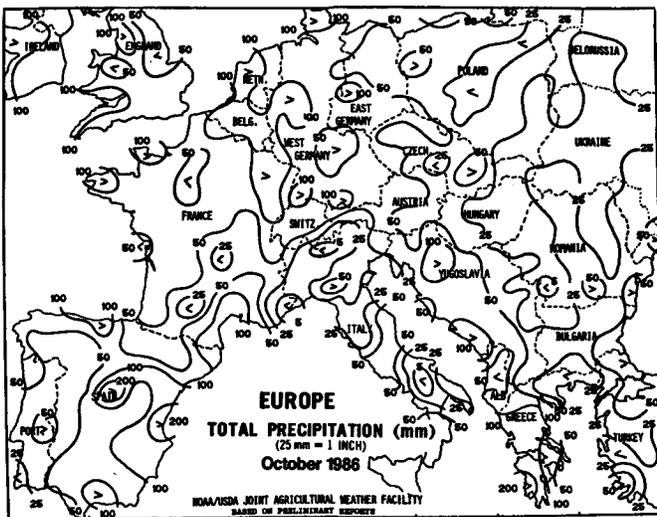
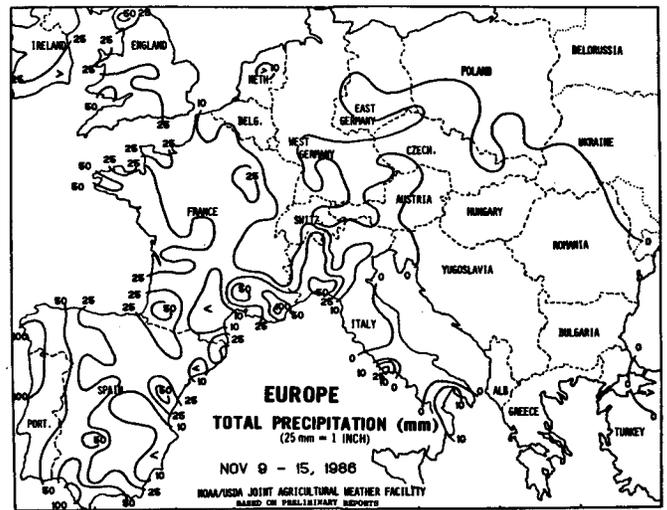


**WESTERN U.S.S.R.** ... Below-normal October precipitation in the western and extreme eastern Ukraine, parts of the North Caucasus, and the lower Volga continued to create unfavorable conditions for winter grain emergence and early growth. Significant showers from October 20-26 in the southern and eastern Ukraine, and the western North Caucasus improved prospects for winter grain emergence. However, unseasonable cold weather followed the rain, limiting plant establishment. In northern winter grain areas, October precipitation was generally below normal. However, moisture conditions were adequate for winter grains. Below-normal early October temperatures in the Central Region, Volga Vyatsk, and the Upper Volga were replaced by above-normal temperatures on October 13, a pattern that continued until month's end. This past week, mostly dry weather covered southern winter grain areas and below-normal temperatures induced plants into dormancy. Winter grains in the north remained dormant.

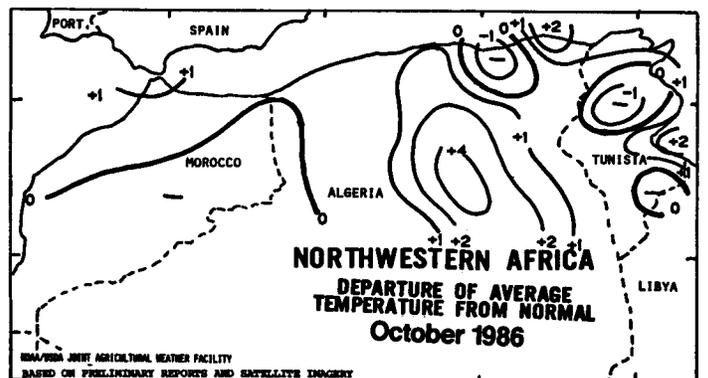
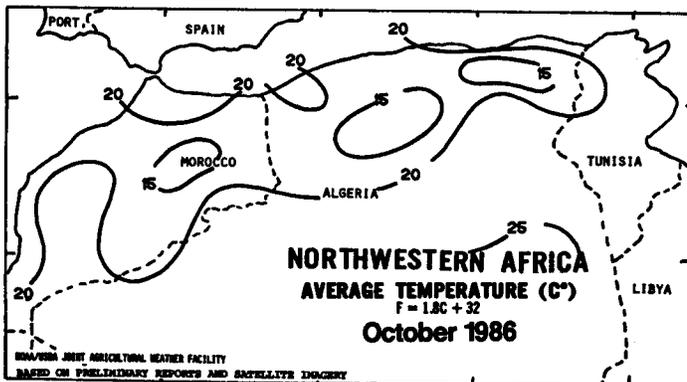
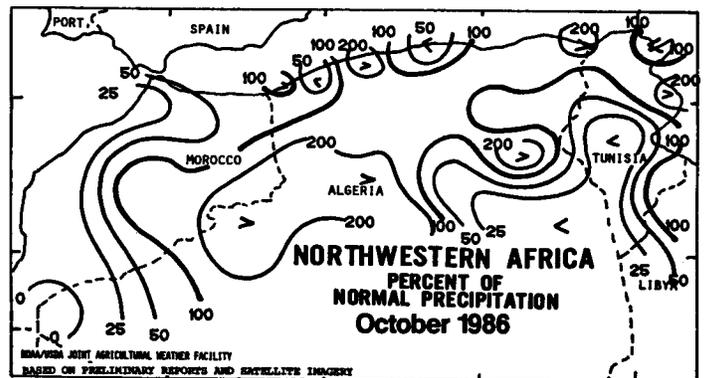
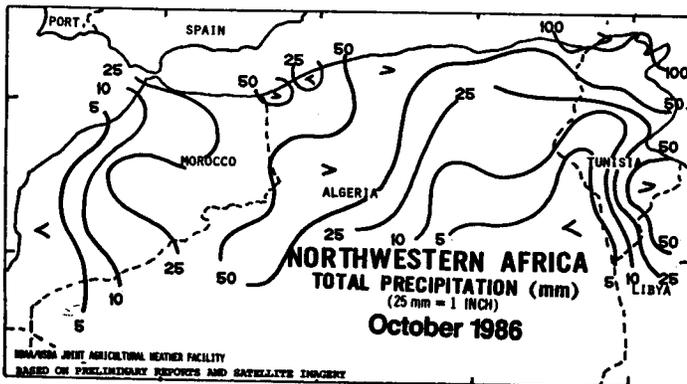
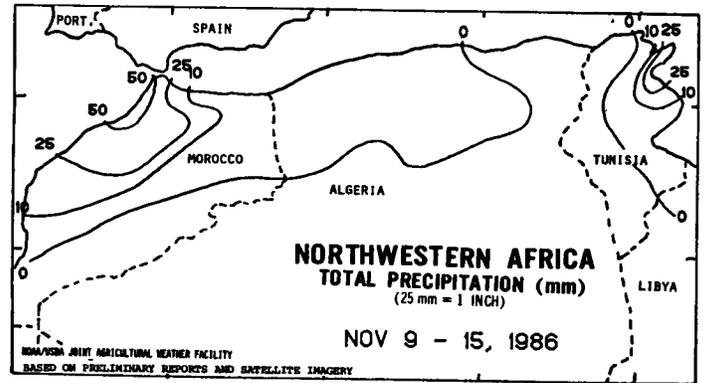




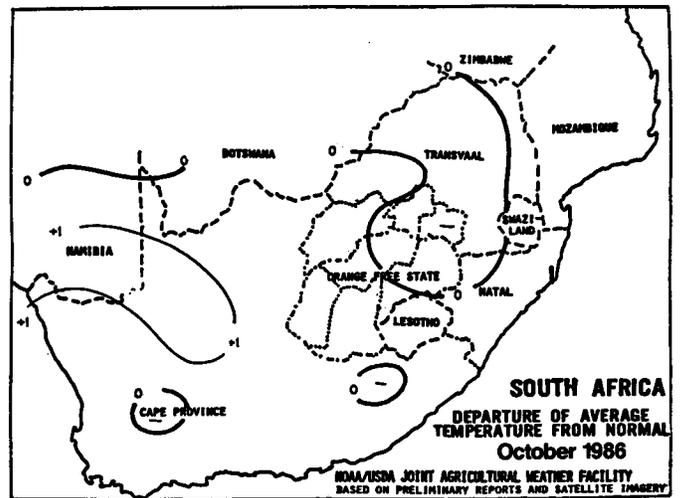
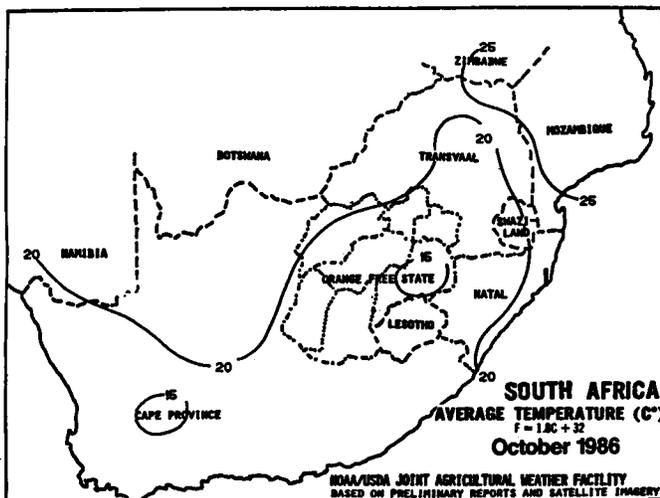
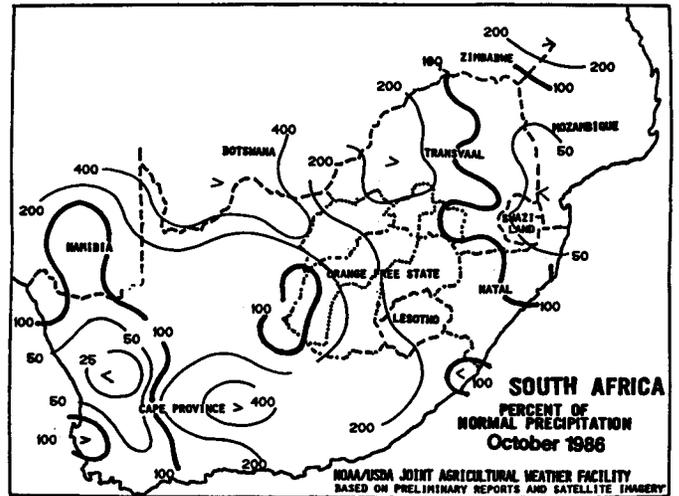
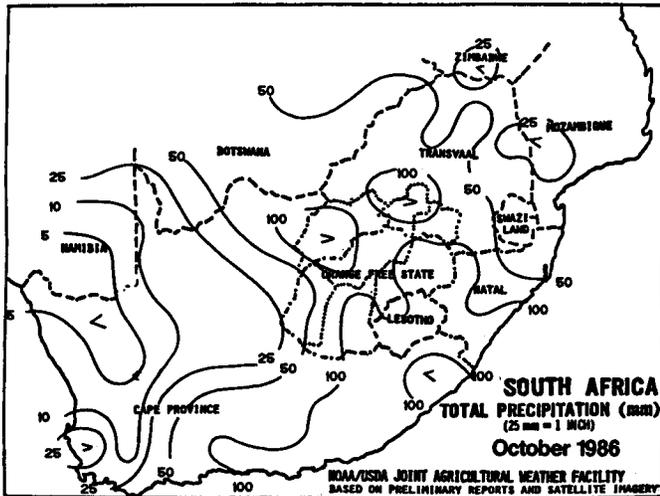
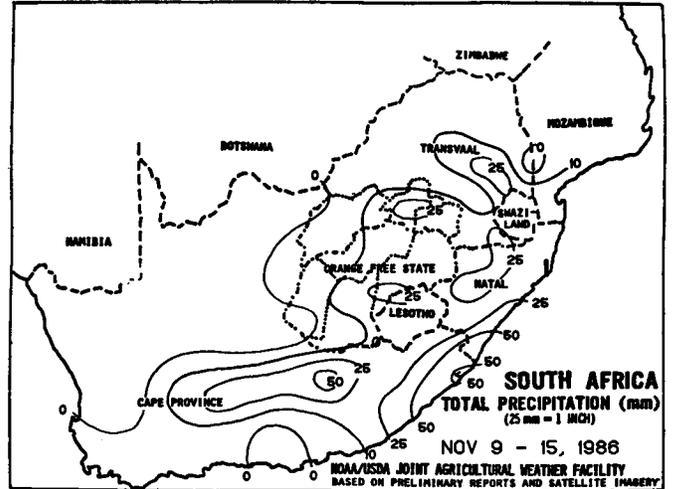
**EUROPE** ... Widespread showers (10 to 25mm) covered England, France, Spain, and northern Italy. The rain in southwestern France likely caused some delays in corn harvest. Mostly dry weather covered the remainder of the region. In October, above-normal precipitation and mild weather over Spain, northern France, England, the Netherlands, Belgium, West Germany, and East Germany provided favorable conditions for winter grain emergence and plant establishment. Winter grain areas in Hungary, eastern Yugoslavia, and western Romania were unfavorably dry, creating the potential for spotty emergence and poor plant establishment. Showers in mid-October in southern Romania improved moisture conditions for winter grains, but unseasonable cold weather followed the rain, limiting plant establishment. Temperatures in southeastern Europe this past week remained below normal.



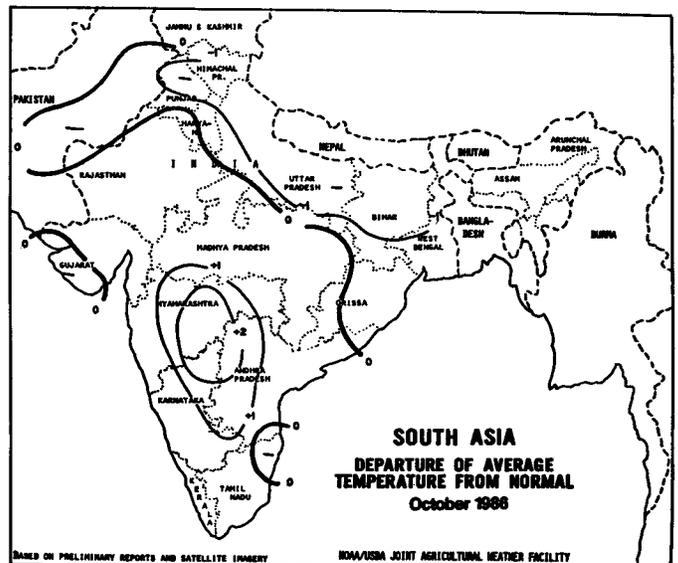
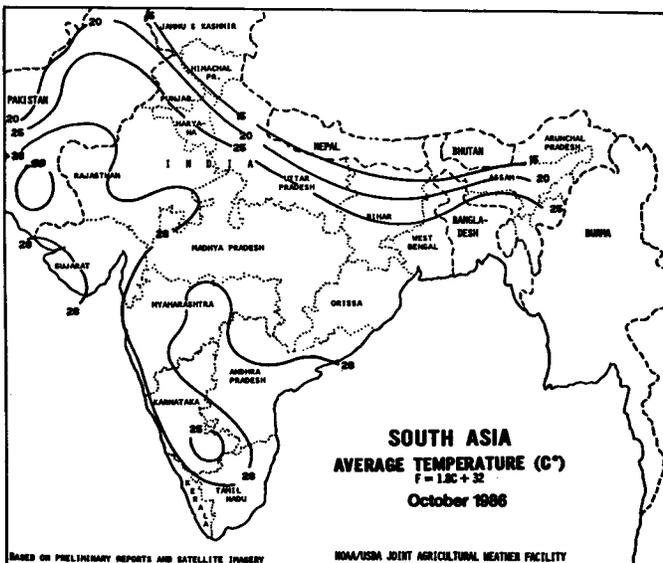
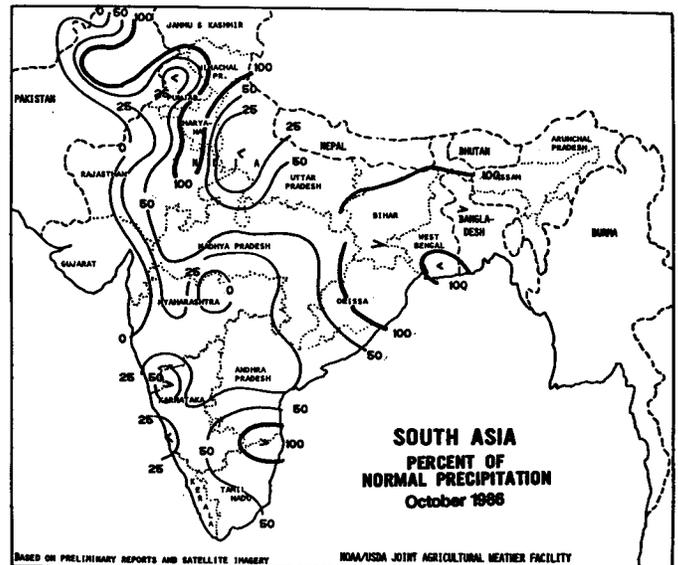
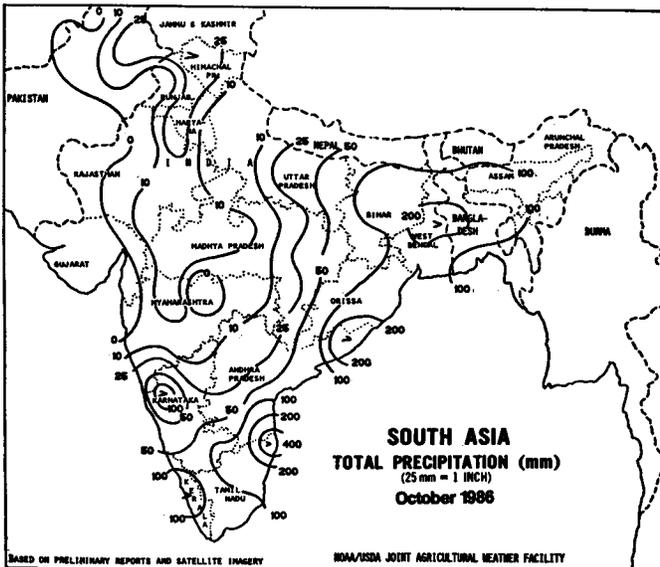
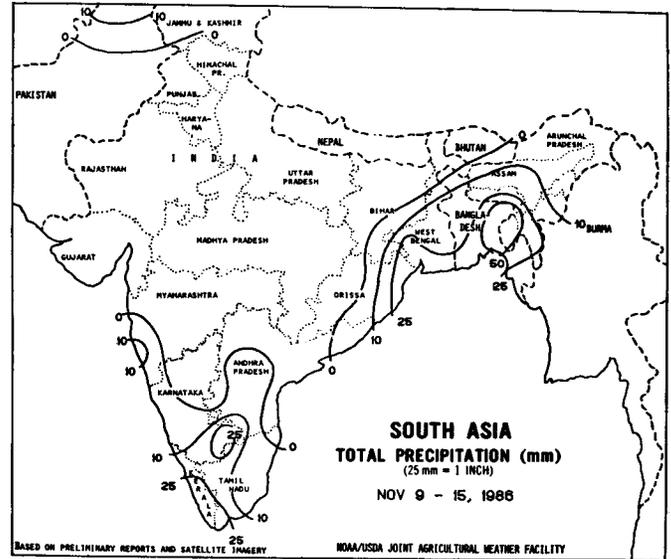
**NORTHWESTERN AFRICA** ... Mostly dry weather covered winter grains in Algeria and Tunisia, reversing October's above normal precipitation. October's rainfall in these areas provided sufficient topsoil moisture for early winter grain planting. In contrast, dry weather covered Moroccan winter grain areas during October. However, widespread soaking rains (25 to 50mm) covered Morocco this past week, providing abundant soil moisture for planting.



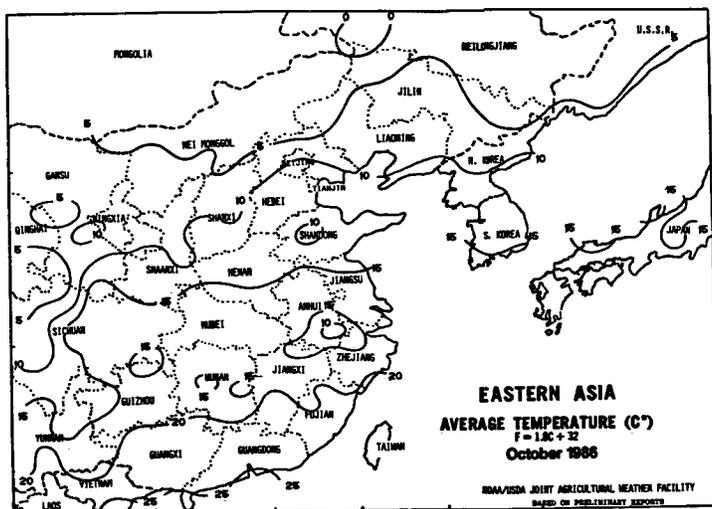
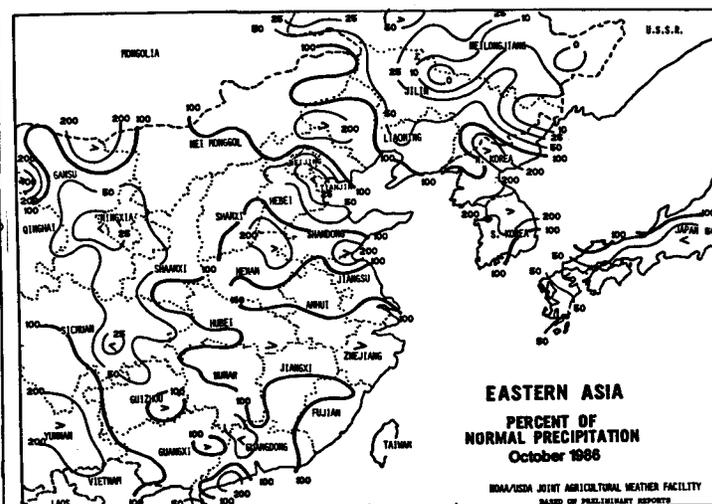
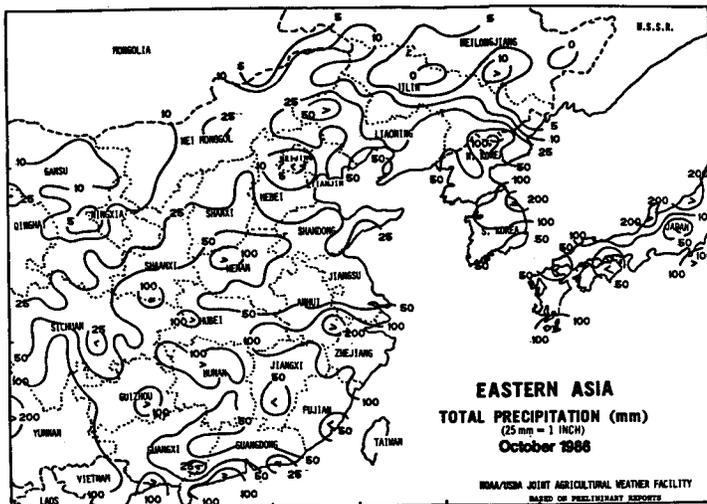
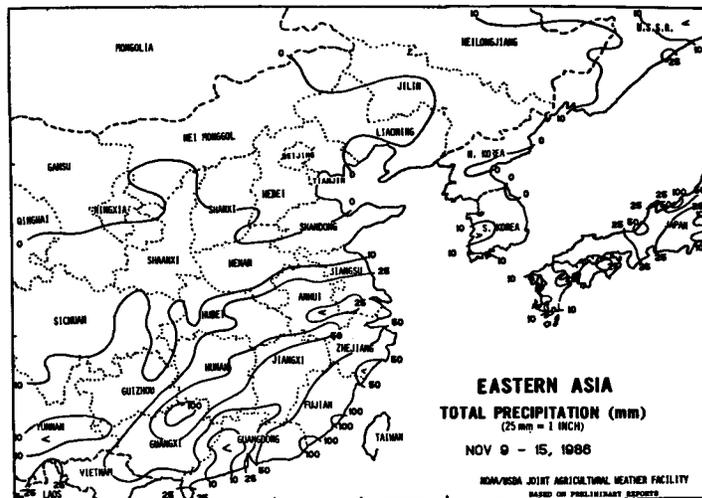
**SOUTH AFRICA ...** Light to moderate showers (3 to more than 25mm) fell throughout South Africa's major grain areas. However, periods of dry weather within the week promoted corn planting in some previously wet areas of the Maize Triangle. Planting normally takes place from October through December and is likely underway in all areas in response to this season's early favorable weather. All areas have received beneficial rain since late October, with showers beginning as early as late-August in parts of the Triangle.



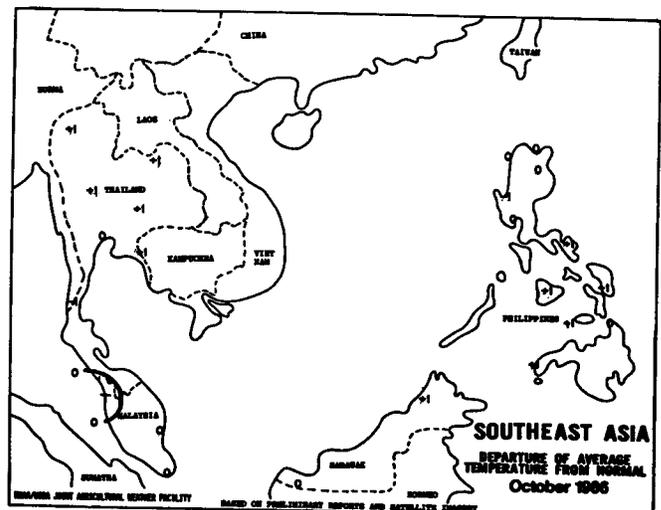
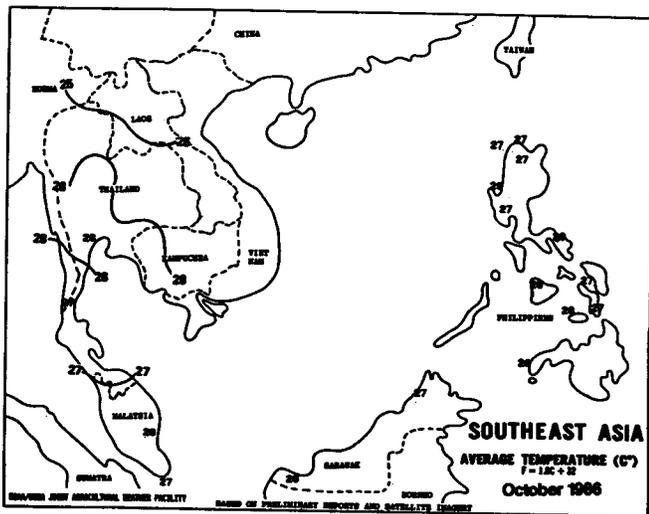
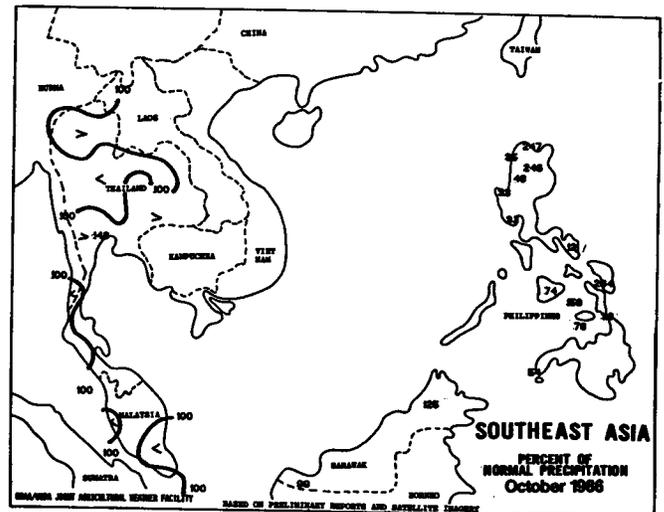
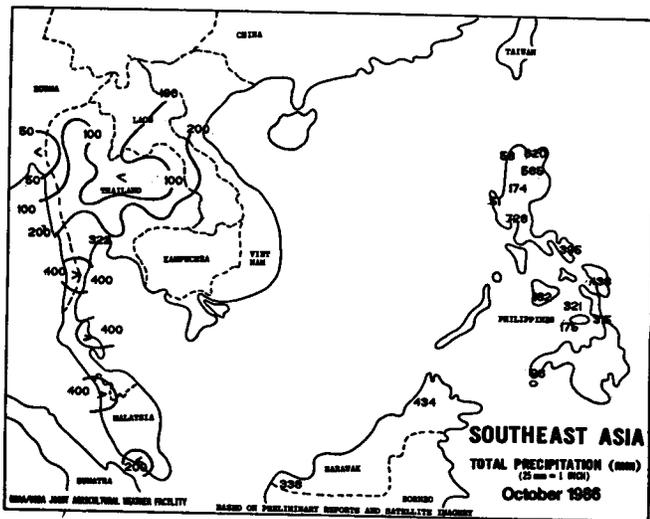
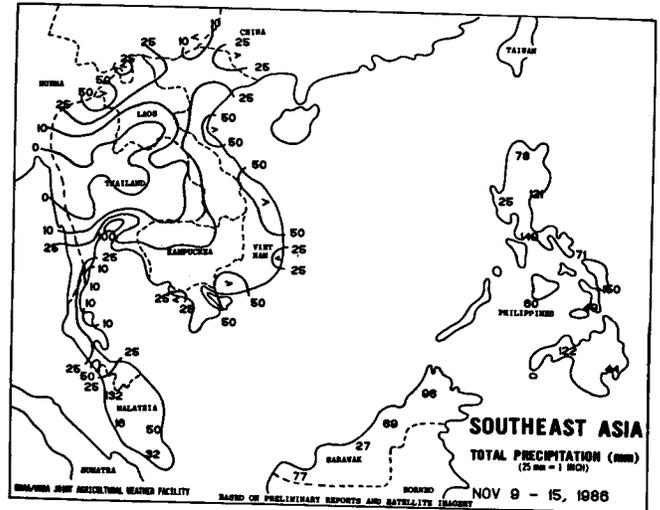
**SOUTH ASIA ...** Moderate showers (10 to more than 50mm) fell in eastern India from Orissa through Bangladesh to Assam, benefiting grain-filling rice. Mostly light showers (less than 10mm) fell in southern India's cotton areas with heavier rain (greater than 25mm) falling along the southern coast. Throughout India cotton was in the boll forming to maturing stages of development. Dry weather persisted to the north from northern Karnataka and Andhra Pradesh to the northern states, with light rain (less than 10mm) falling in northern Pakistan. During October, rainfall was near to above normal only in southern and eastern India and northern Pakistan. Heavy showers during October caused flooding in eastern coastal areas from Andhra Pradesh to Bangladesh.



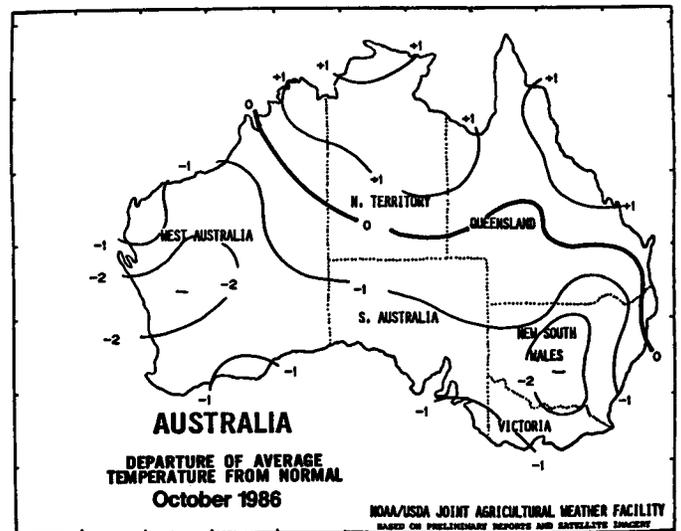
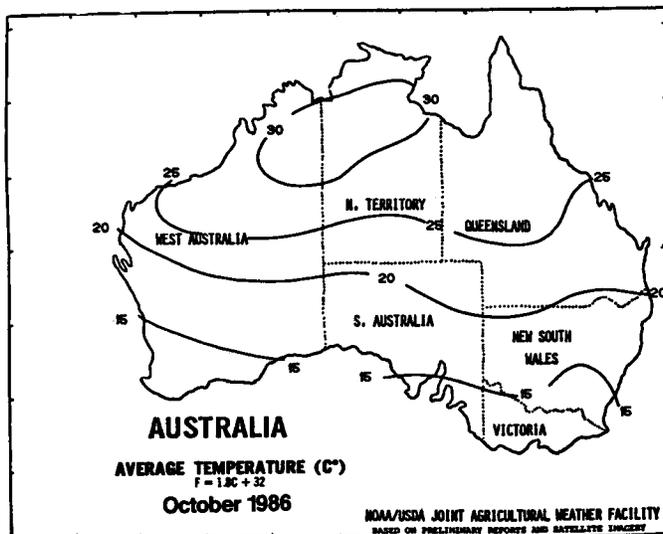
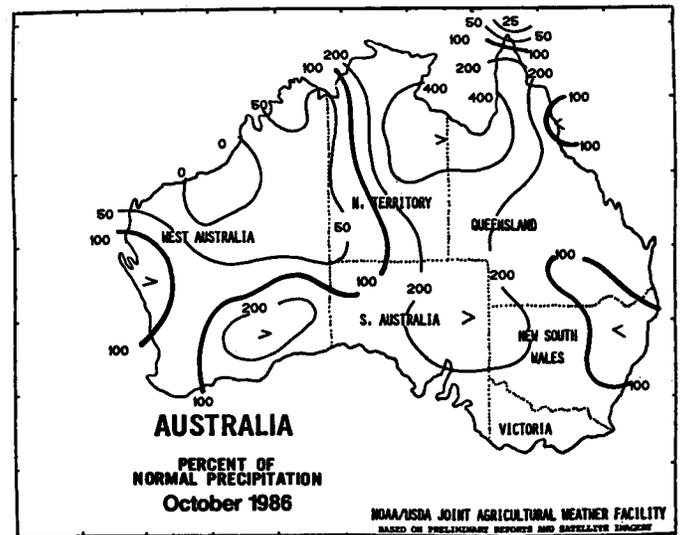
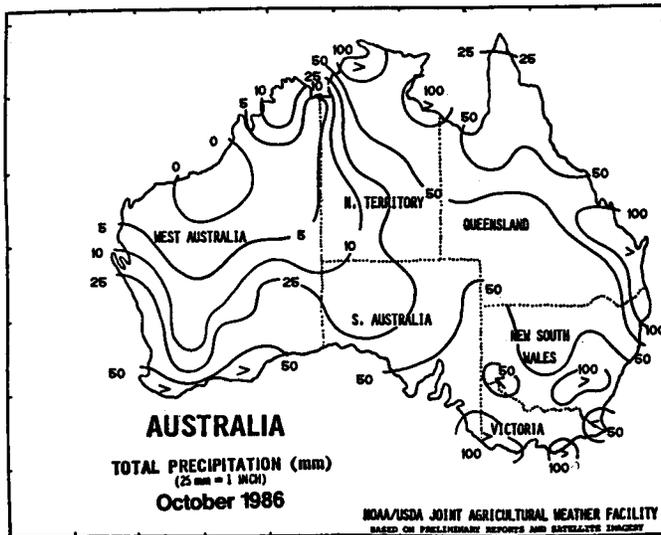
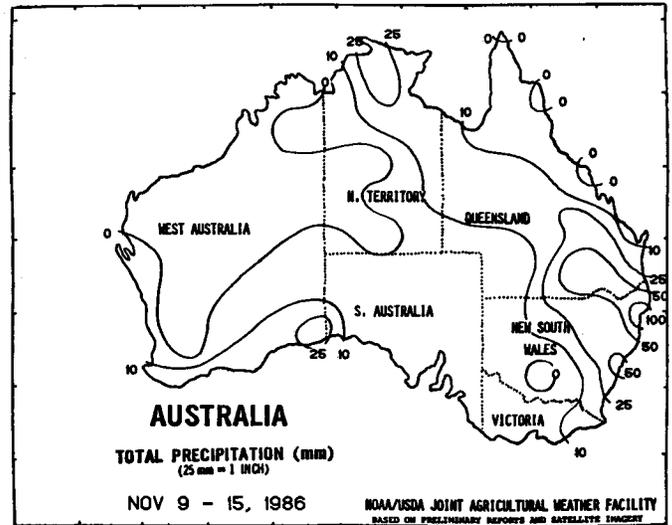
**EASTERN ASIA** ... Dry weather continued over the North China Plain, helping cotton harvesting. October weather was mostly favorable for cotton harvest except for some midmonth delays, when widespread showers covered southern areas. The mid-October rains over southern winter wheat areas of the North China Plain provided sufficient moisture for crop emergence and early growth. Persistent dryness in northern Shanxi, Hebei, and parts of Shandong created unfavorable conditions for winter wheat emergence, requiring the need for irrigation. Above-normal October precipitation in the Yangtze Valley continued this past week, slowing rice maturation and harvest.



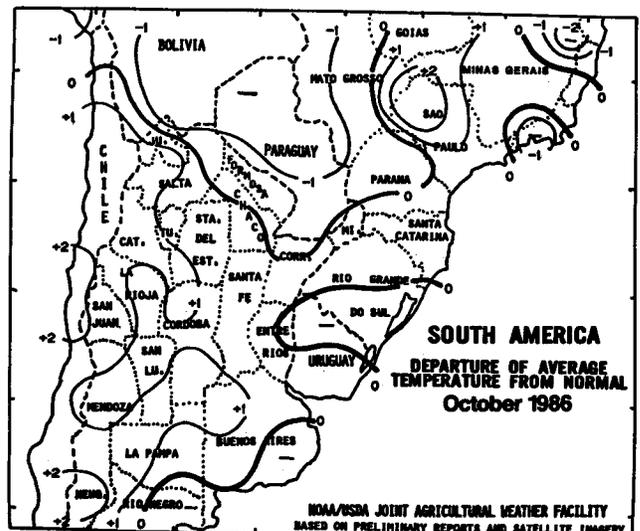
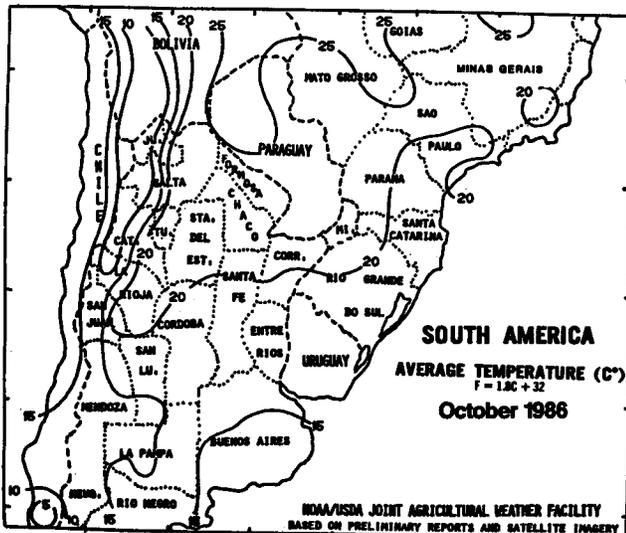
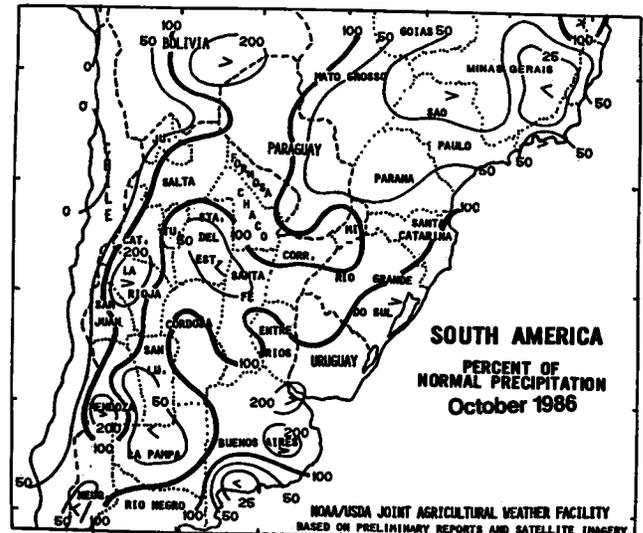
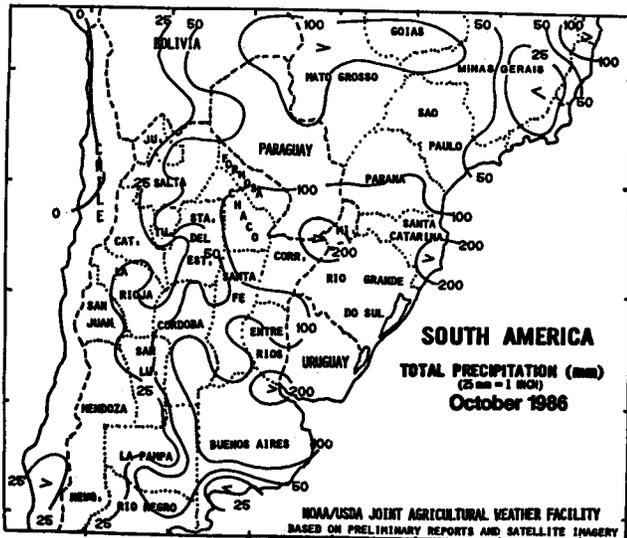
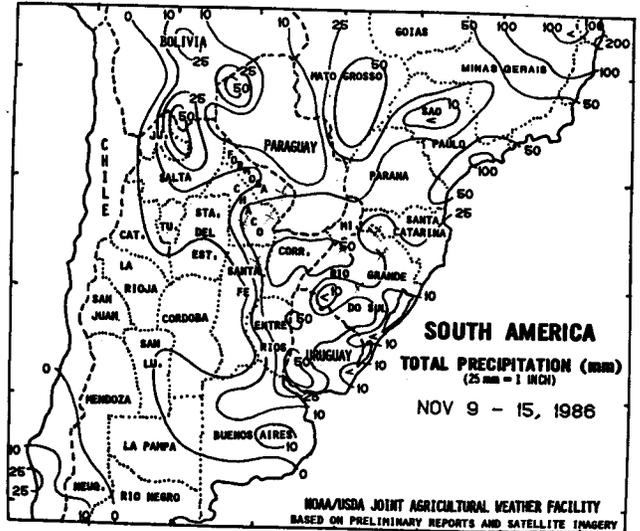
**SOUTHEAST ASIA** ... Scattered, light rain (less than 10mm) fell in Thailand's upland crop areas, reflecting October's dry weather pattern. Moderate to heavy showers (25 to more than 90mm) generated by Tropical Storm Herbert fell from southern Vietnam northward through northern Kampuchea and Laos. Moderate to heavy tropical showers (25 to more than 100mm) continued from southern Kampuchea through the Malay Peninsula, reflecting the wet October rain pattern. Mostly heavy rainfall (50 to more than 130mm) from Tropical Storm Ida covered the Philippines. October rainfall was near to above normal throughout the Philippines, due in part to the passage of Tropical Storm Ellen early in the month.



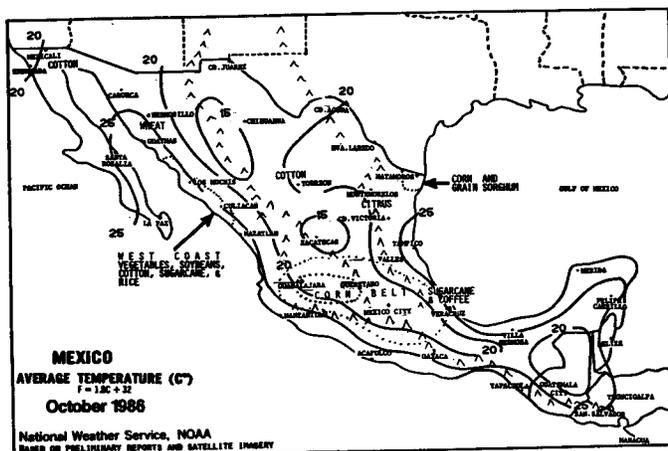
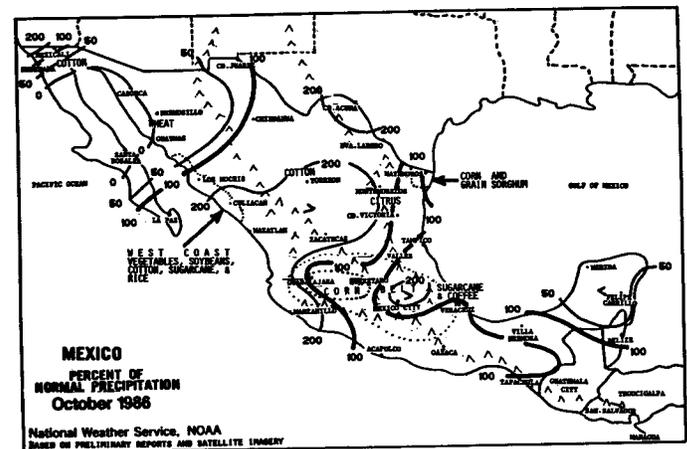
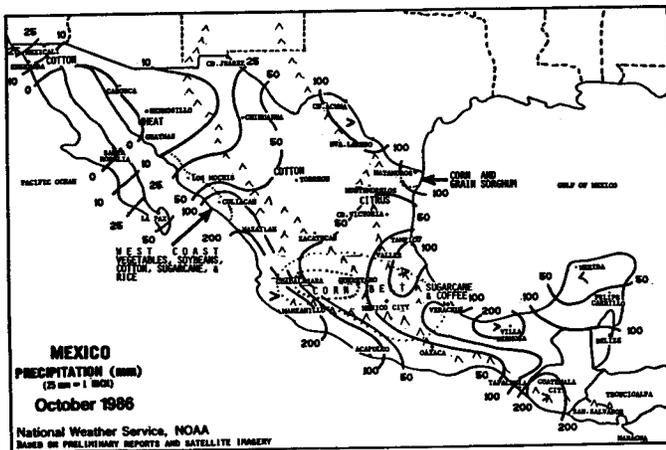
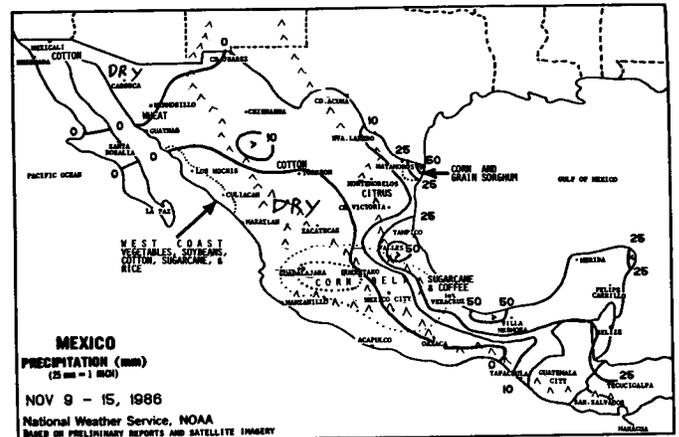
**AUSTRALIA** ... Heavy showers (34 to more than 50mm) covered crop areas in northern New South Wales and southeast Queensland, promoting summer crop establishment but slowing the wheat harvest. Scattered showers benefited pastures in western Queensland. Light, scattered showers (less than 10mm) fell from South Australia to southern New South Wales and in Western Australia, with heavier rainfall in coastal areas. Wheat is mostly grain filling to maturing in the south and west. Rainfall was well distributed during October, ranging from near to above normal in all grain areas. Recent temperatures were below normal, averaging 21 to 24 degrees C in the east and 17 to 19 degrees C in the west. October temperatures were 1 to 2 degrees C below normal in all grain areas.



**SOUTH AMERICA** ... Mostly light showers fell in Argentina's major crop areas, except in the extreme east where 10 to 55mm fell. Corn planting advanced to about 90 percent complete and soybean planting increased to about 20 percent. October rainfall was near to above average, providing favorable topsoil moisture for summer crop establishment and winter wheat development. Early harvesting of wheat has begun in central Santa Fe and Cordoba provinces while the major portion of the crop is maturing. In Brazil, widespread showers fell throughout the center-south. Locally heavy rain (50 to 65mm) in southwestern Rio Grande do Sul and southern Mato Grosso do Sul delayed fieldwork. Weekly rainfall in excess of 100mm fell in Minas Gerais improving moisture conditions for summer crops and coffee trees, but locally drenching rain may have been detrimental to newly emerged coffee flowers. Moisture supplies have recently improved for planting and emergence of soybeans, following below average October rainfall over most crop areas.



**MEXICO** ... Showers fell along the east coast, generally producing 25 to 50mm from Tampico to the Yucatan Peninsula. The moisture benefited immature corn in the south but slowed early sugar cane harvesting. Mostly dry weather covered the western half of the country, favoring corn harvesting and winter wheat planting. October rainfall was above normal throughout most of the country. The much above average rainfall over the west central region was largely due to the remnants of two tropical storms--Paine in early October and Roslyn later in the month. Rainfall was below normal in the northwest winter wheat area where planting extends into January. Recent rains in the Yucatan have been extremely beneficial for corn development following a relatively dry October.



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