

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

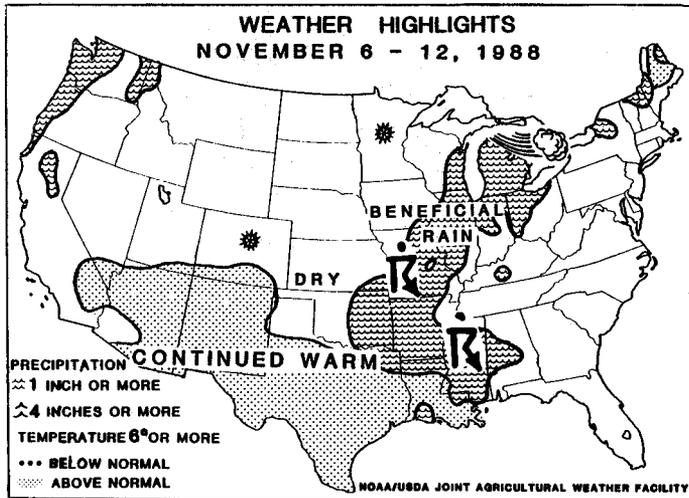
Volume 75, No. 46

Washington, D.C.

Nov. 15, 1988

National Weather Summary

November 6-12, 1988



WEDNESDAY...An intensifying low pressure system moved across the middle Mississippi Valley and produced widespread showers and severe thunderstorms from the southern Plains to the Great Lakes. Warm air surged northward ahead of the system. Another intense area of low pressure spread rain into the Pacific Northwest with snow in the higher elevations. Heavy snow fell over the Colorado Rockies.

THURSDAY...A cold front swept across the Eastern United States and produced showers and thunderstorms from the central Gulf coast to the Great Lakes and New England. Strong winds circulated around the deep low pressure system, which crossed the Great Lakes into southeastern Ontario. Another front raced through the Western States, causing widespread rain.

FRIDAY...High pressure and clear skies dominated the East. Blustery northwest winds blew across New England. Rain was scattered in the Northwest. A large weather system brought widespread rain to the central areas of the Nation in the evening. Heavy rain fell from central Oklahoma into Missouri.

SATURDAY...The large area of wet weather over the Great Plains moved into the Mississippi and Ohio Valleys and Great Lakes. Snow and sleet fell across the north-central States, while strong thunderstorms crossed the Delta into Alabama. Another weather system brought rain to the Pacific Northwest and snow to the northern Rockies.

HIGHLIGHTS: A couple of fast moving storm systems caused heavy rain from the southeastern Plains and central Gulf coast to the Great Lakes during the latter half of the week. Dry weather remained over much of the winter wheat areas in the Great Plains. Pacific storm systems brought widespread rain to the Northwest. Much-above-normal temperatures prevailed across the Southwest and southern Plains.

SUNDAY...A strong low pressure system crossed the Great Lakes causing high wind, rain, and snow. The eastern Corn Belt received its first snowfall of the season. Showers were scattered as a cold front raced across the northern Rockies and northern Plains. Sunshine prevailed over the southern half of the Nation.

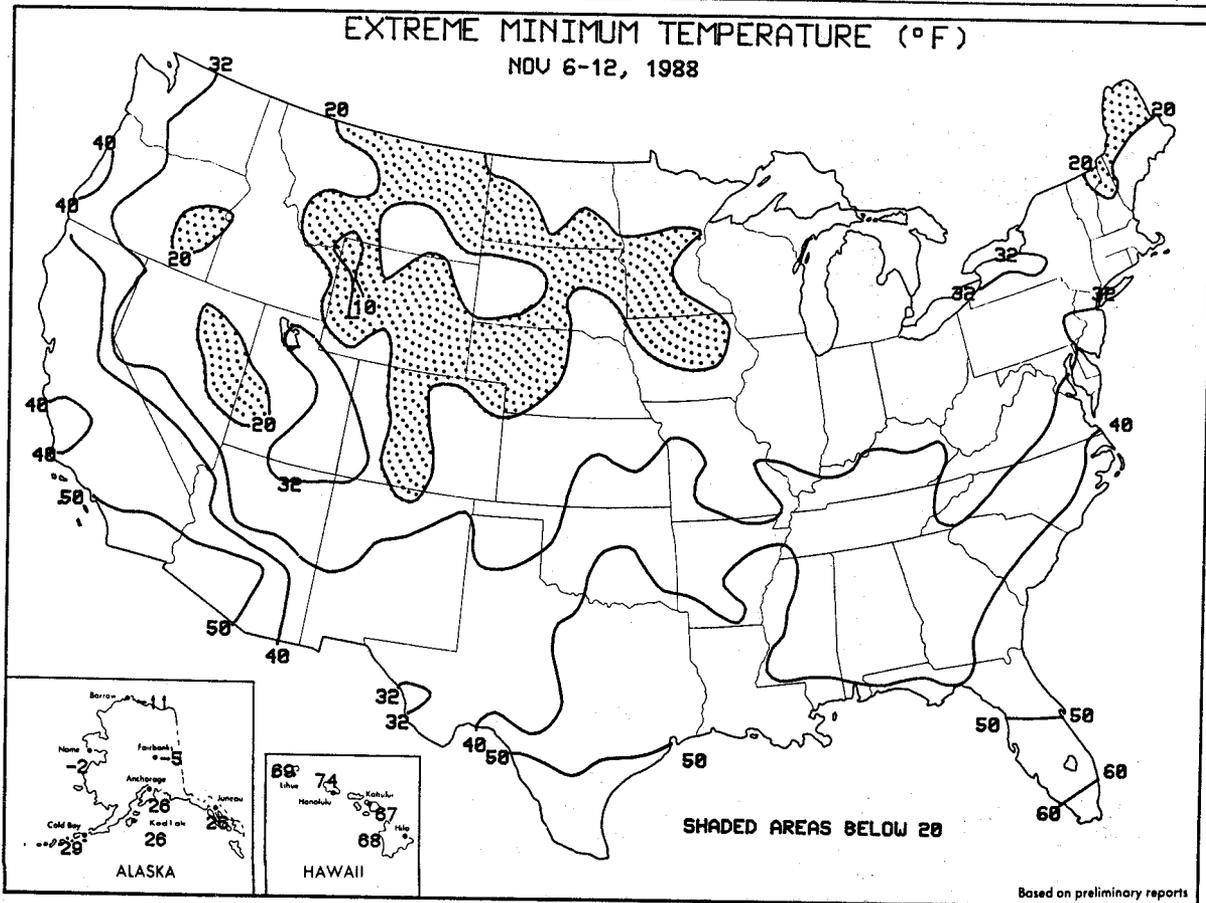
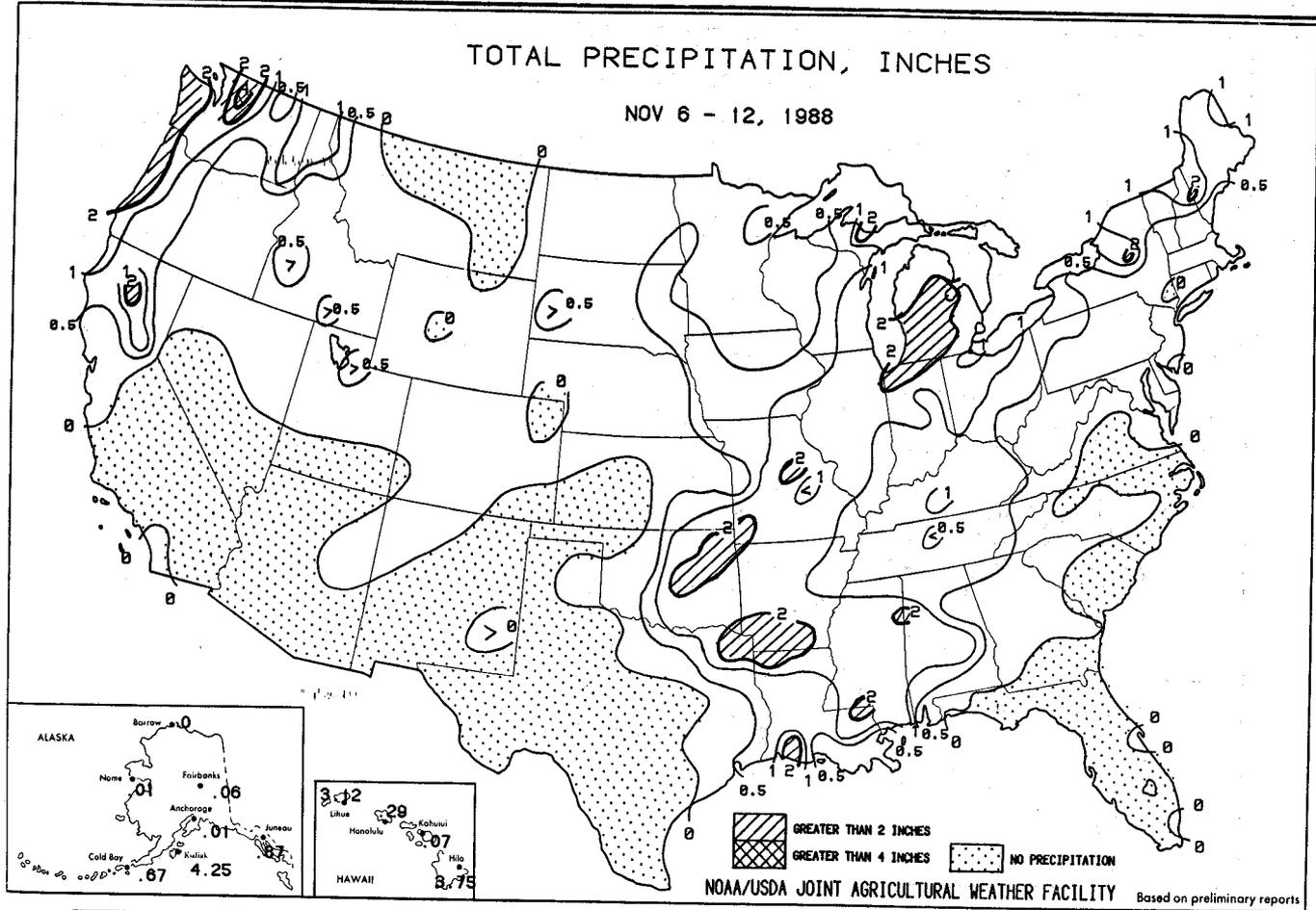
MONDAY...The swift moving cold front brought widely scattered showers to the Mississippi Valley. Snow and rain showers were widely scattered over the Great Lakes, New England, and the Northwest. High temperature records for the date were set across Texas and the Southwest.

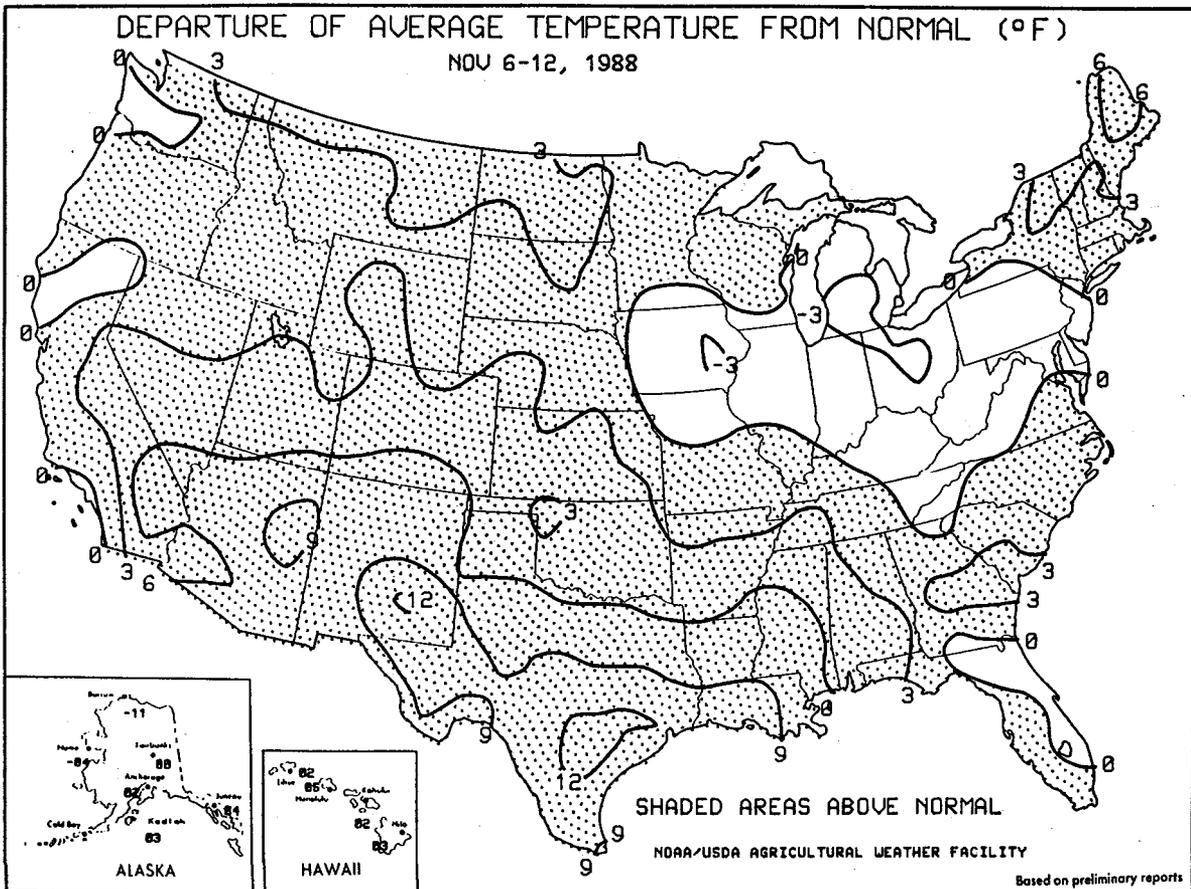
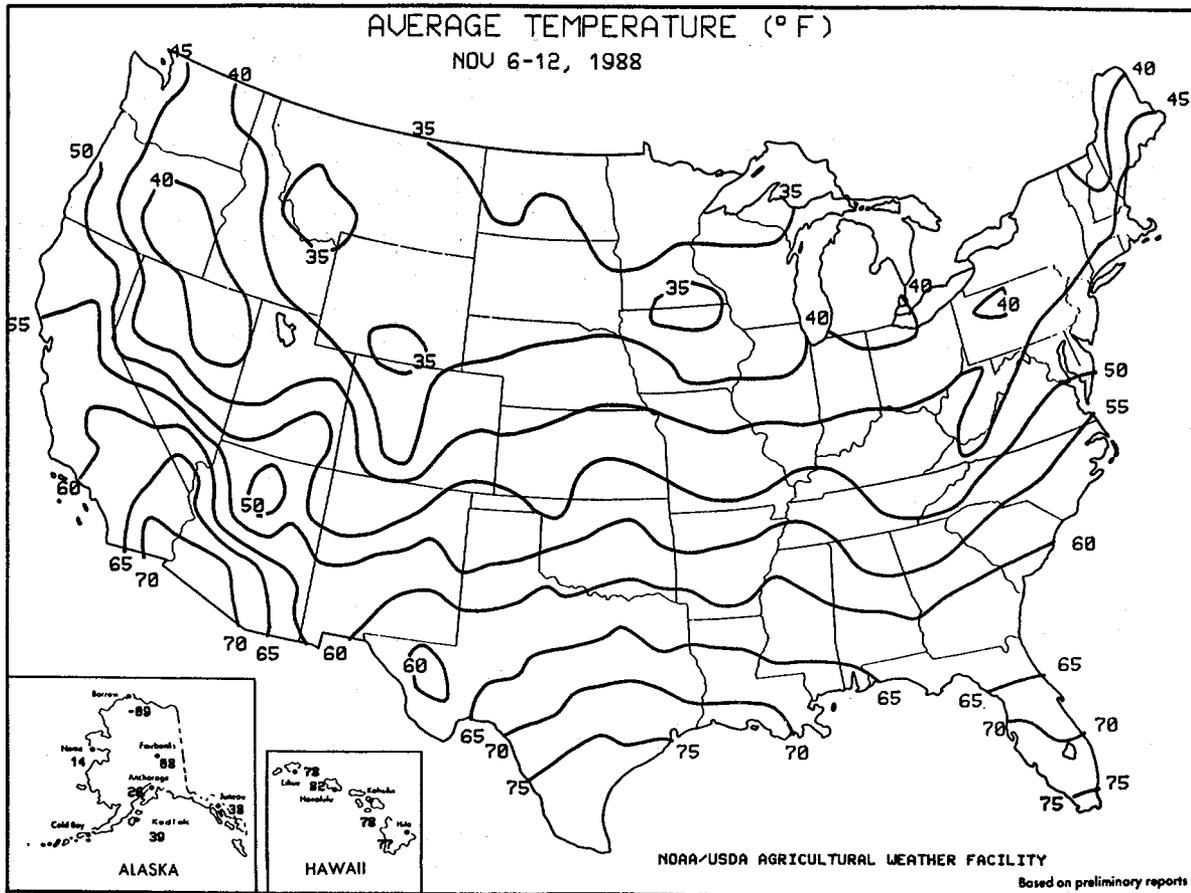
TUESDAY...Much of the Nation enjoyed fair weather on election day. Fast moving frontal systems brought scattered rain from the Northeast to the lower Mississippi Valley, to the central Rockies, and to the Northwest.

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PRICE INCREASE

Due to increased printing costs, the price of the Weekly Weather and Crop Bulletin will be increased to \$35 for domestic and \$50 for foreign subscriptions on December 1, 1988.





National Weather Data for Selected Cities

Weather Data for the Week Ending November 12, 1988

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 Sep 1	PCT. NORMAL SINCE Sep 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	
AL BIRMINGHAM	67	44	72	35	56	2	.7	-.1	.5	12.6	155	34.3	73	91	51	0	0	3	1	
MOBILE	76	54	81	41	65	5	.4	-.4	.4	16.9	168	59.2	105	91	47	0	0	1	0	
MONTGOMERY	47	82	34	61	5	5	1.2	-.6	.6	15.7	200	55.7	132	98	46	0	0	3	2	
AK ANCHORAGE	31	22	34	13	26	2	T	-.2	T	4.0	89	11.6	88	82	62	0	0	1	0	
BARROW	-5	-14	5	-18	-9	-11	T	-.1	T	.7	52	3.4	79	81	72	0	7	0	0	
FAIRBANKS	15	0	20	-5	8	0	-.1	-.1	0	1.9	91	9.4	101	79	56	0	7	0	0	
JUNEAU	41	34	44	26	38	4	-.9	-.4	.4	16.4	100	47.7	105	98	70	0	2	4	0	
KODIAK	43	35	46	26	39	3	4.3	2.9	1.9	21.2	136	70.0	135	95	79	0	3	5	3	
NOME	21	8	28	-2	14	-4	-.4	-.2	T	1.6	40	11.3	84	69	50	0	7	1	0	
AZ PHOENIX	83	62	90	57	73	10	T	-.1	T	2.4	169	6.3	109	58	28	1	0	0	0	
PRESCOTT	68	40	76	31	54	8	T	-.3	T	.5	16	13.2	81	70	28	0	1	0	0	
TUCSON	83	52	90	46	68	7	0	-.1	0	2.9	121	10.9	111	67	20	1	0	0	0	
YUMA	86	61	94	56	73	7	0	0	0	.5	86	2.8	138	65	26	2	0	0	0	
AR FORT SMITH	69	40	79	34	55	3	1.5	.6	1.3	8.6	110	29.3	84	93	38	0	0	3	1	
LITTLE ROCK	67	47	77	43	57	4	.8	-.2	-.7	3.8	43	30.7	73	66	40	0	0	3	1	
CA BAKERSFIELD	71	48	76	43	60	2	T	-.1	T	0	0	3.0	67	92	46	0	0	0	0	
EUREKA	60	49	61	45	54	2	1.2	-.1	-.3	4.1	70	20.0	70	90	67	0	0	6	0	
PRESNO	70	48	73	41	59	4	0	-.3	0	0	0	5.5	69	86	38	0	0	0	0	
LOS ANGELES	67	56	70	53	61	-1	0	-.3	0	.1	9	4.7	50	93	66	0	0	0	0	
REDDING	60	47	68	41	54	-2	2.4	1.2	1.4	3.4	66	20.3	67	95	60	0	0	5	2	
SACRAMENTO	66	49	72	44	57	2	.1	-.4	-.1	.3	17	7.2	57	91	50	0	0	3	0	
SAN DIEGO	67	57	69	54	62	0	T	-.2	T	4	6.7	90	93	66	0	0	1	0	0	
SAN FRANCISCO	64	51	66	47	58	2	.2	-.3	.1	.7	32	7.9	55	95	58	0	0	4	0	
CO DENVER	57	29	68	23	43	3	.2	0	.2	1.1	46	13.6	97	78	30	0	6	1	0	
GRAND JUNCTION	56	35	63	30	46	4	.6	-.5	.5	1.4	75	7.3	104	79	40	0	2	3	0	
PUEBLO	62	29	77	22	45	3	-.1	-.1	.1	1.9	104	10.7	104	79	30	0	5	1	0	
CT BRIDGEPORT	55	41	63	30	48	1	-.1	-.8	-.1	7.9	98	32.0	90	79	48	0	1	1	0	
HARTFORD	55	35	66	26	45	1	.1	-.9	.1	6.7	75	33.2	88	88	45	0	1	1	0	
DC WASHINGTON	60	42	66	34	51	0	.1	-.5	.1	4.6	65	26.1	77	81	45	0	0	1	0	
FL APALACHICOLA	76	53	80	47	64	2	0	-.6	0	13.0	102	58.9	118	97	56	0	0	0	0	
DAYTONA BEACH	78	51	81	45	65	5	0	-.7	0	8.9	72	34.1	76	98	45	0	0	0	0	
JACKSONVILLE	77	49	82	41	63	-2	0	0	0	20.3	187	56.8	118	97	43	0	0	0	0	
KEY WEST	83	72	86	65	77	1	0	-.4	0	4.3	34	35.6	99	87	59	0	0	0	0	
MIAMI	83	66	86	62	74	1	T	-.8	T	5.2	31	44.3	81	90	49	0	0	1	0	
ORLANDO	80	57	83	51	68	0	0	-.5	0	8.1	81	45.1	97	99	41	0	0	0	0	
TALLAHASSEE	77	43	82	33	60	0	0	-.7	0	7.4	70	44.3	77	99	39	0	0	0	0	
TAMPA	80	57	83	52	69	1	0	-.4	0	15.0	166	46.1	106	95	41	0	0	0	0	
WEST PALM BEACH	81	63	84	58	72	-1	0	-.9	0	8.5	46	62.3	112	93	52	0	0	0	0	
GA ATLANTA	65	47	71	40	56	2	.2	-.6	.1	13.3	193	41.7	99	86	47	0	0	2	0	
AUGUSTA	71	45	79	37	58	3	T	-.4	T	11.5	187	39.0	102	92	38	0	0	0	0	
SAVANNAH	74	51	80	44	62	3	T	-.4	T	13.3	166	46.6	102	91	41	0	0	1	0	
HI HILO	88	76	89	74	82	3	3.8	.3	.9	26.2	116	07.5	101	94	61	0	0	6	4	
HONOLULU	85	72	88	67	78	2	.3	-.4	.3	2.4	63	9.7	54	77	51	0	0	1	0	
KAHULUI	82	74	82	69	78	2	.1	-.4	0	2.9	148	15.8	112	88	60	0	0	2	0	
LIHUE	48	35	62	27	42	0	3.1	1.8	1.8	8.2	91	33.4	95	89	72	0	0	4	2	
ID BOISE	52	38	56	33	45	4	.8	.5	.3	1.8	99	8.7	92	96	55	0	1	5	0	
LEWISTON	47	32	57	26	39	2	.5	.2	.2	1.3	58	8.2	75	84	49	0	0	1	0	
POCATELLO	47	34	51	31	40	-2	1.9	1.4	1.3	12.3	181	28.0	92	95	63	0	5	5	0	
IL CHICAGO	46	32	57	24	39	-3	1.2	.7	.8	5.9	82	22.6	67	94	60	0	4	3	1	
MOLINE	48	32	57	27	40	-2	1.6	1.1	.9	6.0	87	17.9	56	93	57	0	5	3	2	
PEORIA	53	32	63	24	42	-2	1.6	1.1	.9	3.6	43	15.7	45	89	48	0	4	2	2	
QUINCY	44	32	52	27	38	-2	1.7	1.1	.9	6.5	86	20.9	62	95	67	0	5	5	2	
ROCKFORD	52	33	61	27	42	-2	1.8	1.4	1.0	6.4	98	19.6	64	93	54	0	4	2	2	
SPRINGFIELD	60	35	70	29	48	0	.5	-.3	.2	8.1	126	31.7	88	93	52	0	1	4	0	
IN EVANSVILLE	48	32	61	29	40	-2	1.2	.6	.5	6.4	105	29.3	96	93	69	0	5	6	0	
FORT WAYNE	54	34	65	30	44	0	1.2	.5	.5	7.0	109	27.2	80	89	58	0	2	5	1	
INDIANAPOLIS	47	33	56	31	40	-2	2.6	2.0	1.3	14.2	189	33.2	99	93	68	0	3	5	2	
IA DES MOINES	49	30	58	20	39	-2	.7	.3	.5	4.4	76	18.8	65	85	48	0	5	3	0	
SIOUX CITY	49	30	55	23	39	0	.6	.4	.3	6.0	130	21.4	88	81	45	0	4	2	0	
WATERLOO	44	27	56	16	36	-3	.5	.1	.5	3.0	47	16.6	54	97	62	0	5	2	0	
KS CONCORDIA	59	35	65	30	47	3	-.1	-.1	.1	1.2	24	13.5	52	82	32	0	3	2	0	
DODGE CITY	61	36	69	27	48	4	T	-.2	T	3.4	99	14.8	76	77	34	0	2	0	0	
GOODLAND	57	31	71	22	44	4	.2	0	.1	2.4	93	20.2	131	75	34	0	5	2	0	
TOPEKA	60	32	66	26	46	1	.3	-.2	.1	2.5	35	17.9	58	89	34	0	4	3	0	
WICHITA	65	38	69	33	52	5	1.1	-.3	.1	1.6	24	15.9	59	83	29	0	0	1	0	
KY BOWLING GREEN	60	36	70	33	48	0	1.2	.3	1.1	12.7	171	35.9	85	94	46	0	0	2	1	
LEXINGTON	55	37	67	32	46	-1	.7	0	.6	8.8	130	31.3	79	86	52	0	1	4	1	
LOUISVILLE	59	37	70	32	48	0	.6	-.2	.4	4.8	67	30.1	80	85	46	0	1	4	0	
LA ALEXANDRIA	77	57	85	47	67	8	.7	-.2	.7	8.2	110	37.7	84	93	54	0	0	1	1	
BATON ROUGE	80	59	85	45	69	9	1.3	.4	1.2	13.7	163	66.4	137	92	50	0	0	4	1	
LAKE CHARLES	81	61	85	48	71	9	3.4	2.4	3.1	13.5	124	53.6	116	92	57	0	0	2	1	
NEW ORLEANS	79	60	84	47	70	8	T	-.9	T	8.8	89	68.6	133	94	54	0	0	1	0	

Based on 1951-80 normals

Weather Data for the Week Ending November 12, 1988

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 Sep 1	PCT. NORMAL SINCE Sep 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
ME SHREVEPORT	76	53	84	45	64	7	2.1	1.2	1.3	8.1	110	28.3	75	91	48	0	0	3	2
ME CARIBOU	46	35	61	25	41	6	1.1	-.4	-.5	7.3	93	28.1	89	91	70	0	0	3	4
ME PORTLAND	55	36	63	26	45	4	.3	-.8	-.1	10.3	115	38.9	108	90	49	0	0	3	0
MD BALTIMORE	60	37	66	28	48	0	0	-.7	T	4.4	56	27.3	75	85	40	0	1	1	0
MD SALISBURY	61	37	68	32	49	0	.2	-.5	-.2	7.5	85	40.1	100	88	41	0	1	1	0
MA BOSTON	57	42	67	34	49	2	.3	-.7	-.3	5.1	61	29.4	80	84	43	0	0	2	0
MA CHATHAM	55	42	61	35	48	1	.2	-.8	-.1	9.0	98	32.2	82	83	50	0	0	4	0
MI ALPENA	43	28	49	22	35	-2	1.2	-.7	-.6	7.6	126	25.0	97	98	74	0	5	5	1
MI DETROIT	47	34	59	29	40	-1	1.3	-.8	-.5	10.1	194	23.5	87	91	65	0	4	6	0
MI FLINT	45	32	53	23	39	-2	1.8	1.3	-.7	9.1	171	24.7	96	93	70	0	3	6	1
MI GRAND RAPIDS	43	32	50	28	37	-4	2.2	1.6	-.7	16.2	231	33.0	113	96	70	0	4	6	2
MI HOUGHTON LAKE	39	31	45	25	35	-2	2.5	1.9	1.0	10.8	181	26.6	107	96	79	0	4	6	2
MI LANSING	44	31	52	28	38	-3	2.0	1.4	-.8	12.5	220	29.1	112	91	71	0	6	6	2
MI MARQUETTE	37	28	45	25	32	0	2.4	1.7	2.0	14.7	175	36.9	111	93	75	0	7	5	1
MI MUSKEGON	45	33	50	29	39	-3	2.3	1.7	-.8	14.7	215	30.7	113	97	65	0	4	6	2
MI SAULT ST. MARIE	42	31	50	29	36	1	.7	0	-.3	11.2	139	29.2	101	96	74	0	5	5	0
MN ALEXANDRIA	40	26	50	18	33	1	.3	0	-.3	5.0	108	21.2	91	92	63	0	6	1	0
MN DULUTH	38	26	45	17	32	1	.4	0	-.4	7.9	130	28.3	104	92	63	0	6	2	0
MN INT'L FALLS	37	26	40	21	32	3	.2	-.1	-.2	5.2	96	23.0	102	89	57	0	7	2	0
MN MINNEAPOLIS	43	30	52	23	37	1	.5	-.2	-.5	5.0	103	16.9	69	91	59	0	5	2	0
MN ROCHESTER	41	28	51	20	35	-2	.2	-.1	-.2	5.1	81	18.4	69	93	66	0	6	2	0
MS GREENWOOD	73	50	81	40	61	6	1.6	-.6	1.6	14.4	185	31.6	71	90	41	0	0	3	1
MS JACKSON	76	52	83	40	64	8	1.9	1.0	1.7	11.6	160	36.7	83	95	47	0	0	2	1
MS MERIDIAN	74	49	80	35	62	6	1.3	-.6	1.3	15.5	212	43.8	96	97	47	0	0	3	1
MO CAPE GIRARDEAU	62	39	70	34	50	1	.6	-.3	-.3	12.7	169	31.7	82	91	47	0	0	3	0
MO COLUMBIA	58	35	70	28	46	0	2.2	1.7	1.2	5.8	73	25.0	74	93	48	0	2	4	2
MO KANSAS CITY	57	35	64	31	46	-1	.5	-.1	-.3	9.2	111	21.9	65	89	42	0	3	3	0
MO SAINT LOUIS	58	37	67	32	47	1	1.5	-.9	-.7	6.1	101	26.3	87	83	40	0	1	2	2
MO SPRINGFIELD	61	37	72	31	49	2	1.7	1.0	-.8	8.8	102	41.6	118	90	44	0	1	3	1
MT BILLINGS	50	31	64	23	40	3	T	-.2	T	3.2	115	9.2	68	63	31	0	4	1	0
MT GLASGOW	48	24	59	13	36	4	T	-.1	T	1.1	72	7.0	67	79	37	0	6	0	0
MT GREAT FALLS	48	29	57	24	39	2	T	-.2	T	3.0	143	10.5	76	71	32	0	6	0	0
MT HAVRE	49	25	62	14	37	4	0	-.1	0	1.8	103	5.6	51	79	35	0	6	0	0
MT HELENA	45	27	56	21	36	2	.1	-.1	-.1	2.9	170	9.2	87	86	42	0	6	2	0
MT KALISPELL	42	29	50	24	36	3	.4	-.1	-.1	3.2	126	12.2	91	95	62	0	6	5	0
MT MILES CITY	49	27	55	20	38	4	T	-.1	T	1.9	87	4.3	33	61	29	0	6	0	0
MT MISSOULA	42	28	54	25	35	2	.1	-.1	-.1	1.2	57	9.9	87	95	64	0	6	4	0
NE GRAND ISLAND	55	30	61	25	42	2	.2	0	-.1	3.5	91	20.3	93	88	35	0	4	2	0
NE LINCOLN	55	32	62	26	44	3	.4	-.1	-.3	6.7	134	17.2	67	84	42	0	4	3	0
NE NORFOLK	51	31	59	24	41	2	.2	-.1	-.1	5.8	157	23.1	102	84	41	0	4	2	0
NE NORTH PLATTE	55	27	64	18	41	4	.1	-.1	-.1	1.7	63	18.5	100	87	32	0	5	3	0
NE OMAHA	50	34	57	28	42	0	.8	-.5	-.5	4.6	76	19.6	68	76	52	0	4	3	1
NE SCOTT'SBLUFF	55	24	65	13	39	1	.1	-.1	-.1	1.2	58	14.6	106	85	30	0	7	1	0
NE VALENTINE	53	25	62	14	39	3	.2	-.1	-.2	2.0	81	19.4	118	83	34	0	5	2	0
NV ELY	55	24	63	17	40	4	T	-.1	0	T	38	6.6	84	81	29	0	6	1	0
NV LAS VEGAS	76	52	85	45	64	8	0	-.1	0	T	0	2.2	64	43	21	0	0	0	0
NV RENO	56	33	63	25	45	3	T	-.1	T	.1	8	2.5	45	74	39	0	2	0	0
NV WINNEMUCCA	50	31	60	22	40	1	.4	-.2	-.2	.8	69	5.1	79	93	53	0	4	6	0
NH CONCORD	53	31	66	21	42	3	.2	-.7	-.1	5.3	69	29.7	96	93	45	0	5	3	0
NJ ATLANTIC CITY	58	33	65	24	45	-3	.2	-.7	-.2	7.1	96	29.4	82	91	48	0	6	1	0
NM ALBUQUERQUE	66	40	71	33	53	7	T	-.1	T	3.0	164	12.9	179	64	24	0	0	0	0
NM CLOVIS	70	38	77	33	54	6	T	-.1	T	2.7	70	19.4	119	77	23	0	0	0	0
NM ROSWELL	79	44	87	36	61	13	T	-.1	T	1.6	55	13.2	132	57	19	0	0	1	0
NY ALBANY	52	36	63	25	44	2	.2	-.5	-.1	5.0	68	26.0	85	87	52	0	1	4	0
NY BINGHAMTON	46	33	54	30	40	-1	.3	-.4	-.1	5.9	79	30.8	96	90	62	0	3	6	0
NY BUFFALO	48	37	62	32	43	0	.5	-.4	-.2	9.3	122	34.3	108	87	57	0	1	6	0
NY NEW YORK	56	45	63	38	51	1	T	-.8	T	7.7	95	33.6	92	79	48	0	0	1	0
NY ROCHESTER	48	38	56	34	43	0	.2	-.4	-.2	4.4	71	22.3	82	88	59	0	0	3	0
NY SYRACUSE	50	38	61	34	44	1	.8	-.1	-.4	8.2	105	31.3	93	88	58	0	0	5	0
NC ASHEVILLE	60	35	68	29	48	0	.1	-.7	-.1	6.7	83	22.5	58	94	42	0	4	1	0
NC HATTERAS	69	51	76	44	60	2	T	-.1	T	7.6	60	39.4	81	90	47	0	0	0	0
NC NEW BERN	70	44	79	39	57	1	0	-.7	0	5.4	52	45.4	95	92	40	0	0	0	0
NC RALEIGH	66	40	75	35	53	1	T	-.7	T	12.1	171	34.8	94	87	36	0	0	0	0
NC WILMINGTON	71	46	81	40	59	2	0	-.7	0	5.9	60	55.4	115	88	35	0	0	0	0
ND BISMARCK	45	26	52	20	36	4	.1	0	-.1	1.0	44	9.2	64	94	50	0	7	2	0
ND FARGO	42	26	51	23	34	2	.5	.3	.3	4.3	124	12.8	70	91	59	0	7	3	0
ND GRAND FORKS	43	24	48	20	34	4	T	-.2	T	2.3	67	11.3	66	95	55	0	7	1	0
ND WILLISTON	45	25	54	21	35	4	T	-.1	T	1.8	81	9.3	73	87	42	0	7	1	0
OH AKRON-CANTON	48	33	61	28	41	-2	.5	-.1	-.2	10.0	163	30.0	95	93	64	0	4	7	0
OH CINCINNATI	54	34	67	30	44	-1	1.0	.3	.7	7.2	108	34.7	99	89	51	0	2	5	1
OH CLEVELAND	49	35	60	28	42	-2	1.1	.4	.7	7.2	113	25.5	83	89	57	0	2	7	1
OH COLUMBUS	50	33	63	29	42	-3	.9	.3	.5	7.4	133	32.7	100	89	58	0	3	5	1

Weather Data for the Week Ending November 12, 1988

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 Sep 1	PCT. NORMAL SINCE Sep 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
DAYTON	51	33	64	31	42	-2	2.3	1.7	1.8	11.6	217	31.6	104	88	61	0	3	6	1
TOLEDO	47	31	60	26	39	-3	1.9	1.4	1.3	8.9	168	25.1	91	92	67	0	5	6	0
YOUNGSTOWN	47	32	59	24	40	-2	1.6	1.1	1.1	7.8	115	28.4	87	93	63	0	4	6	0
OK OKLAHOMA CITY	68	43	82	39	56	5	5	1.7	1.3	1.7	131	29.8	103	78	34	0	0	2	2
TULSA	67	44	80	38	55	4	4	2.2	1.5	1.1	101	29.2	82	81	35	0	0	2	2
OR ASTORIA	54	40	56	38	47	1	1	2.4	1.1	1.0	9.7	72	41.1	79	97	70	0	3	1
BURNS	45	25	55	18	35	-3	1.2	1.1	1.1	1.6	37	5.6	70	90	56	0	7	2	1
MEDFORD	54	39	57	32	47	1	1	1.2	1.1	1.3	1.6	45	8.4	58	98	62	0	3	0
PENDLETON	52	38	55	34	45	2	2	1.5	1.1	1.3	1.5	73	8.8	90	96	62	0	6	0
PORTLAND	54	42	56	39	48	1	1	1.2	1.2	1.5	5.3	81	24.8	93	83	52	0	4	0
SALEM	54	41	57	38	48	2	2	1.0	1.2	1.4	4.4	62	23.2	78	95	62	0	7	1
PA ALLENTOWN	53	36	63	29	45	0	0	1.1	1.1	1.1	6.0	72	34.1	89	89	51	0	2	0
ERIE	49	37	62	32	43	0	0	1.7	1.1	1.1	1.1	72	34.1	89	89	51	0	2	0
HARRISBURG	52	36	62	25	44	-2	1.1	1.1	1.1	12.8	141	34.6	100	87	56	0	1	5	0
PHILADELPHIA	58	40	66	33	49	1	1	1.1	1.1	5.6	74	30.7	90	87	51	0	1	2	0
PITTSBURGH	50	34	65	25	42	-2	1.1	1.1	1.1	5.8	78	33.3	93	87	44	0	1	1	0
SCRANTON	49	37	58	32	43	0	0	1.3	1.2	5.3	87	23.7	73	93	61	0	2	1	0
RI PROVIDENCE	57	38	66	29	47	0	0	1.2	1.1	4.6	64	27.8	91	89	55	0	1	4	0
SC CHARLESTON	73	49	79	43	61	3	3	1.2	1.1	6.9	78	32.5	85	88	44	0	1	1	0
COLUMBIA	71	46	80	36	58	3	3	1.0	1.1	11.0	129	41.3	88	92	42	0	0	0	0
FLORENCE	71	46	80	37	58	2	2	1.0	1.1	11.6	152	41.5	94	88	35	0	0	0	0
GREENVILLE	65	42	74	39	54	1	1	1.0	1.1	8.4	118	35.8	90	88	33	0	0	0	0
SD ABERDEEN	46	27	52	18	36	3	3	1.0	1.1	9.5	104	33.7	75	91	43	0	0	1	0
HURON	50	27	56	21	38	3	3	1.0	1.1	6.1	226	17.6	105	93	54	0	6	3	0
RAPID CITY	50	27	59	24	38	1	1	1.0	1.1	4.5	147	18.3	104	86	44	0	6	2	0
SIoux FALLS	47	27	53	20	37	1	1	1.0	1.1	1.8	91	10.1	66	83	41	0	7	3	0
TN CHATTANOOGA	63	42	67	32	52	2	2	1.0	1.1	5.4	116	17.7	78	90	48	0	6	2	1
KNOXVILLE	61	38	68	34	50	-1	1	1.0	1.1	11.3	130	38.2	85	92	48	0	4	1	0
MEMPHIS	68	47	76	41	58	4	4	1.0	1.1	5.9	84	27.7	69	95	54	0	1	4	0
NASHVILLE	65	40	70	34	53	2	2	1.0	1.1	9.2	124	34.7	79	89	39	0	0	2	1
TX ABILENE	78	50	88	40	64	2	2	1.0	1.1	5.3	71	23.3	56	89	40	0	0	3	0
AMARILLO	68	38	79	31	53	6	6	1.0	1.1	2.8	46	15.4	71	74	26	0	0	0	0
AUSTIN	84	61	89	50	72	12	12	1.0	1.1	3.9	118	24.3	134	69	26	0	1	1	0
BEAUMONT	81	61	86	41	71	9	9	1.0	1.1	2.1	27	17.7	63	88	38	0	0	0	0
BROWNSVILLE	86	68	87	53	77	8	8	1.0	1.1	12.6	119	43.8	92	96	58	0	0	2	1
CORPUS CHRISTI	86	66	91	53	76	10	10	1.0	1.1	9.3	99	22.9	98	97	56	0	0	0	0
DEL RIO	83	57	92	47	70	9	9	1.0	1.1	8.9	90	18.2	63	94	52	1	0	0	0
EL PASO	78	47	83	37	63	9	9	1.0	1.1	4.8	90	15.2	93	83	40	1	0	0	0
GALVESTON	80	71	82	56	76	11	11	1.0	1.1	2.1	96	10.4	147	56	18	0	0	0	0
HOUSTON	85	64	89	44	74	12	12	1.0	1.1	10.3	106	36.1	103	90	62	0	0	1	0
LUBBOCK	75	42	84	35	59	8	8	1.0	1.1	2.6	25	21.4	53	92	47	0	0	1	0
MIDLAND	80	46	89	38	63	9	9	1.0	1.1	2.3	56	12.3	73	64	23	0	0	1	0
SAN ANGELO	82	48	91	35	65	9	9	1.0	1.1	5.1	137	17.7	139	76	24	0	0	0	0
SAN ANTONIO	85	62	89	44	74	12	12	1.0	1.1	3.2	59	13.3	78	80	25	2	0	0	0
VICTORIA	86	66	90	49	76	12	12	1.0	1.1	1.5	19	18.3	70	86	39	0	0	0	0
WACO	82	53	92	43	67	8	8	1.0	1.1	3.5	34	13.5	40	92	46	1	0	0	0
WICHITA FALLS	74	44	89	38	59	5	5	1.0	1.1	6.5	91	20.9	76	84	36	1	0	0	0
UT CEDAR CITY	59	33	68	20	46	3	3	1.0	1.1	8.2	125	22.3	91	86	33	0	0	0	0
SALT LAKE CITY	53	37	60	34	45	3	3	1.0	1.1	1.0	37	11.0	121	80	35	0	2	0	0
VT BURLINGTON	50	36	62	26	43	4	4	1.0	1.1	1.0	42	7.5	57	85	41	0	3	0	0
VA NORFOLK	65	44	73	39	55	1	1	1.0	1.1	5.8	81	23.5	80	84	53	0	2	3	0
RICHMOND	64	38	73	31	51	0	0	1.0	1.1	7.3	73	35.8	89	88	40	0	0	0	0
ROANOKE	58	35	64	26	46	-2	2	1.0	1.1	6.6	77	34.2	89	92	39	0	1	1	0
WA QUILLAYUTE	50	39	52	36	45	0	0	1.0	1.1	5.5	72	27.5	80	87	45	0	2	0	0
SEATTLE-TACOMA	52	41	54	38	46	1	1	1.0	1.1	22.8	106	80.2	99	99	81	0	0	7	3
SPOKANE	43	32	54	27	38	1	1	1.0	1.1	8.4	111	25.5	89	95	66	0	0	5	1
YAKIMA	49	29	54	23	39	0	0	1.0	1.1	3.9	152	12.5	98	97	71	0	5	4	1
WV BECKLEY	53	32	64	26	43	-1	1	1.0	1.1	2.2	80	4.4	75	94	57	0	7	4	0
CHARLESTON	58	34	67	25	46	-1	1	1.0	1.1	9.0	122	29.8	80	89	47	0	3	4	0
HUNTINGTON	58	35	67	27	46	-2	2	1.0	1.1	6.6	99	25.1	67	95	45	0	3	3	0
PARKERSBURG	55	33	65	27	44	-3	3	1.0	1.1	6.1	96	29.0	81	88	43	0	3	3	0
WI GREEN BAY	42	32	49	29	37	0	0	1.0	1.1	7.3	117	27.5	82	91	44	0	3	3	0
LACROSSE	44	31	52	24	38	-1	1	1.0	1.1	8.6	146	21.3	84	99	68	0	3	3	0
MADISON	44	33	52	27	39	0	0	1.0	1.1	7.1	117	23.5	84	91	57	0	5	6	1
MILWAUKEE	45	35	49	31	40	0	0	1.0	1.1	6.4	106	20.8	74	94	61	0	3	5	0
WAUSAU	42	32	50	29	37	2	2	1.0	1.1	10.9	185	26.8	97	93	64	0	1	5	1
WY CASPER	49	24	64	15	37	2	2	1.0	1.1	6.8	99	20.4	69	97	66	0	6	5	0
CHEYENNE	50	27	62	20	39	2	2	1.0	1.1	1.9	48	5.6	54	84	32	0	6	1	0
LANDER	50	26	63	17	38	5	5	1.0	1.1	1.9	94	14.9	118	75	36	0	5	2	0
SHERIDAN	50	24	70	19	37	2	2	1.0	1.1	1.9	38	6.8	56	59	24	0	6	0	0
PR SAN JUAN	86	74	86	73	80	0	0	1.0	1.1	1.2	46	8.7	63	81	38	0	7	0	0

National Agricultural Summary

November 7-13, 1988

HIGHLIGHTS: Rain slowed harvest progress in the eastern Corn Belt and the Delta but provided needed moisture for fall seeded grains. Soil moisture was mostly adequate in the East but remained short in the Plains and the West. Rain benefited small grains in the Pacific Northwest. Suitable days for fieldwork ranged from an average of 2 in the eastern Corn Belt to over 6 in the West.

Winter wheat was mostly good to fair. Seeding was 96 percent (%) finished, 4 percentage points ahead of the 5-year average but the same as in 1987. Ninety-two percent of the crop was emerged, the same as in 1987 but 9 points ahead of the 83% normal. Corn harvest was 93% complete, 5 points behind last year but 7 points ahead of normal. Soybean harvest was 89% complete, 7 points behind 1987 but 5 points ahead of normal. Rain slowed both corn and soybean harvests in the eastern Corn Belt and the Delta. Sorghum harvest was 96% complete, 7 points and 9 points ahead of 1987 and the average, respectively. Cotton harvest was 64% complete, slightly ahead of last year's 61% and 6 points ahead of normal. Florida's citrus groves were mostly good.

SMALL GRAINS: Winter wheat seeding was 96% complete, slightly ahead of the 92% average but the same as 1987. Ninety-two percent of the crop was emerged, 9 points ahead of normal but equal to last year. Condition was mostly good to fair except in the Pacific Northwest and some Plains States, where it was mostly fair to good. Seeding was over 90% finished except in the Southeast, California, and Oregon. Georgia's seeding was 11 points behind the 38% average. Warm weather increased greenbug populations in southwest Kansas. Growers continued to battle Russian wheat aphids in Washington. Aphid activity has been slowed by cool, wet weather in Oregon. Strong winds damaged some of the crop in eastern Colorado. Dryland fields showed signs of moisture stress in most of Texas. Insect damage increased with continued warm weather. Many producers delayed pasturing wheat. Continued lack of moisture may lead to above-normal winter kill in South Dakota.

CORN: Corn harvest was 93% complete, 5 points behind 1987 but 7 points ahead of normal. Harvest was complete or nearing completion in most areas. Harvest in Michigan, Ohio, and Pennsylvania was behind both last year and normal. Pennsylvania's harvest was 12 points behind the 66% average. Rain slowed harvest in Michigan and Ohio. Both Michigan's and Ohio's harvests were 70% complete, 5 points behind the 75% normal. Harvest was complete in Georgia, Illinois, Iowa, Kansas, South Dakota, and Texas.

SOYBEANS: Soybean harvest was 89% complete, 7 points behind last year but 5 points ahead of normal. Harvest was complete in Illinois, Iowa, Nebraska, and South Dakota. Rain slowed harvest in the eastern Corn Belt and the Delta. Michigan's harvest was virtually stopped by rain. Harvest was 70% finished, the same as the previous week. Harvest was 25 points behind last year and 20 points behind the 90% average. Alabama's harvest was 12 points behind the 71% normal. Harvest was 52% finished, 10 points behind normal in Georgia.

SORGHUM: Sorghum harvest was 96% finished, 7 points and 9 points ahead of last year and normal, respectively. Harvest was over 90% finished in all the major producing States except Oklahoma. Oklahoma's harvest was 70% finished, 20 points

ahead of 1987 and slightly ahead of the 65% normal. Harvest was finished in Arkansas, Louisiana, Nebraska, South Dakota, and Tennessee. Texas' harvest was 94% complete, 8 points ahead of normal. Light frost was expected to drydown unharvested acreage.

COTTON: Cotton harvest advanced 7 points and was 64% complete. Last year at this time harvest was 61% complete and the average for this date is 58%. Harvest was ahead of normal in all the major producing States except Arizona, Georgia, and South Carolina. Arizona's harvest advanced 15 points and was 65% complete, 5 points behind the average. Georgia's harvest also advanced 15 points and was 76% complete, 4 points behind the average. South Carolina's harvest advanced 12 points, reaching 78% completion, 5 points behind normal. Many producers in Oklahoma and Texas were waiting for a killing freeze. California growers shredded and disced stubble to comply with pink bollworm quarantine.

OTHER FIELD CROPS: Rain nearly stopped rice stubble burning in California. Harvest of second crop rice continued in Louisiana and Texas.

Peanut harvest was virtually complete in Georgia. Texas' harvest was 10 points ahead of the 62% average. Harvest was 94% finished, slightly ahead of the 91% average in North Carolina.

Rain placed burley tobacco into proper case for stripping in Kentucky. Stripping was 35% complete, 7 points ahead of last year but normal. Growers were generally pleased with weight, color, and quality of the crop. Houseburn may be more than expected. Stripping was 68% complete, 13 points ahead of normal in Tennessee.

FRUIT AND NUTS: Florida's citrus groves remained in good condition. Lack of rain forced many producers to irrigate to maintain surface moisture. Fresh fruit harvest increased seasonally as the crops reached maturity. Harvest activities included early variety oranges, grapefruit, and tangerines. Arizona's citrus groves were in good condition. Lemon and grapefruit harvests were active in the west. Central harvest activities included lemons, grapefruit, navel oranges, and algerian tangerines. Honeydew and cantaloup melon harvests gained momentum. Desert grapefruit and tangerine harvests continued in California. Cool weather accelerated pecan harvest in Texas. Grapefruit and orange harvests were active in the Rio Grande Valley.

VEGETABLES: Florida's fall harvest activity included cucumbers, tomatoes, squash, and snapbeans. Dry weather made irrigation necessary in most areas. Warm weather accelerated crop maturity in Arizona. Harvest activities included lettuce, cauliflower, and broccoli. Disease and insect problems lowered lettuce yields in the Riverside area of California. Harvest activities included potatoes, broccoli, cauliflower, and celery. Processing tomato producers were preparing soils for next season's crop in the Kingsburg-Dinuba area. Winter crop plantings and fall harvests continued in the Rio Grande Valley of Texas. San Antonio-Winter Garden harvests of carrots and cabbage continued.

PASTURES AND LIVESTOCK: Pastures were fair to good but going dormant in northern areas. Crop residue grazing continued and supplemental feeding increased in many areas. Livestock was good. Water supplies were critically short in northern Missouri.



Agricultural Production Estimates

(Highlights)

CORN FOR GRAIN production is forecast at 4.67 billion bushels, up 3 percent from last month, but 34 percent below last year's crop.

SORGHUM GRAIN production is forecast at 546 million bushels, up 1 percent from October 1, but 26 percent less than in 1987.

SOYBEAN production is forecast at 1.51 billion bushels, up 1 percent from October 1, but 21 percent below last year.

ALL COTTON production is forecast at 14.8 million bales, 1 percent above the 1987 crop and the October 1 forecast.

PEANUT production is forecast at 4.12 billion pounds, 14 percent above last year, but down 3 percent from the October 1 forecast.

TOBACCO: Flue-cured production is expected to reach 796 million pounds, 15 percent above last year's total. Burley output will total 459 million pounds, an increase of 9 percent from last year.

FALL POTATO production is forecast at 310 million cwt, down 10 percent from last year, and 2 percent below the 1986 crop.

DRY BEAN production is forecast at 20.0 million cwt, down 24 percent from last year and 13 percent below two years ago.



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 NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall mostly under 0.50 in.; over 1.00 in. local areas central. Temperatures 2 to 7° above normal; 6 to 9° above normal central, south.

Days suitable for fieldwork 3.8. Soil moisture 10% short, 72% adequate, 18% surplus. Rains slowed all field activities; provided needed moisture for small grain development. Soybeans 95% dropping leaves, 100% 1987, 99% avg.; 83% mature, 98% 1987, 96% avg.; 59% harvested, 88% 1987, 71% avg.; 37% fair, 57% good, 6% excellent. Cotton 89% harvested, 98% 1987, 88% avg. Sorghum 95% harvested, 96% 1987, 94% avg. Winter wheat 59% seeded, 67% 1987, 59% avg. Livestock, pastures mostly good. Primary activities: Harvesting soybeans, cotton, sorghum, pecans, fall vegetables; seeding small grains, winter grazing crops; building fences, repairing harvest equipment; soil testing; routine care of livestock, poultry.

ARIZONA: Pacific weather disturbances moved across State 6th, 7th; sunny skies, variable high cloudiness. Afternoon temperatures upper 50s, lower 60s higher elevations; upper 80s, lower 90s lower deserts. Mostly cloudy, breezy, cooler conditions 8th, as fast moving Pacific storm system, associated cold front moved across State triggering light showers, thunderstorms southeast. Pacific low pressure system moved in State 10th; spread clouds, scattered showers north, central. Rainfall mostly 0.10 to 0.25 in. Light snow above 7,000 ft. Clear skies prevailed 11th, 12th. Temperatures 4 to 11° above normal.

Cotton harvest continued actively; 65% 1st picked, 75% 1987. Harvest progressed rapidly, selected fields successfully defoliated west, south central. Stalk shredding, disking, plowdown advanced west, south central, southeast. Better than anticipated yields southeast; yields south central less than expected. Alfalfa harvest slowing down. Warm weather southeast opportunity for additional cutting. Leaf hopper population pressures increased west. Sheeping off continued west, south central. New, renovated stands growing well. Wheat, barley seedbed preparation underway west, south central, southeast; planting limited. Lemon, grapefruit harvest active west. Citrus groves good. Broccoli, cauliflower, asparagus harvest limited west. Fall lettuce, honeydews, mixed melons harvested west. Warm weather accelerated vegetable plant development; prolonged whitefly, leafminer problem west. Harvest, packing lemons, grapefruit, navel oranges, algerian tangerines active central. Fall lettuce, honeydew, cantaloup, cauliflower harvest gained momentum central. Harvest of broccoli, greens, green onions, rapini, bok choy, cabbage, parsley active. Apple packing continued east. Fall lettuce, chilies, winter squash harvest continued east.

ARKANSAS: Warmer than normal with moderate to heavy rainfall latter part week. Temperature extremes 27°; 83°. Rainfall 0.48 to 2.81 in.

Days suitable for fieldwork 6.0. Soil moisture 43% short, 55% adequate, 2% surplus. Major farming activities: Soybean, cotton, hay harvest; wheat seeding; fertilizing pastures, small grains; preparing cattle for winter. Soybeans 94% shedding leaves, 99% 1987, 96% avg.; 87% mature, 97% 1987, 90% avg. Oats 85% planted, 83% 1987, 72% avg. Hay, roughage 4% very short, 62% short, 32% adequate, 2% surplus. Pasture, range 29% poor, 56% fair, 15% good. Livestock good, some acorn poisoning.

CALIFORNIA: Low pressure trough developed along west coast allowing one storm after another to move towards State. Most of these brought little precipitation except north, along coast helped cool temperatures to below normal.

General rain northern half nearly stopped field activities. Open weather southern half, good progress harvests, other field activities. Rain nearly stopped rice stubble burning. Cotton harvest full swing, rapidly shredding, discing stalks due pink boll worm quarantine. Seeding winter grains continued. Corn, dry bean harvests neared completion. Sugarbeet, alfalfa harvests normal. Grain sorghum harvest to began Sacramento Valley. Apple, avocado, date, table grape, olive, persimmon, pomegranate harvests active. New crop navel oranges picked; small sizes. Old crop valencia orange harvest winding down. Desert grapefruit, tangerine harvests continued. Pecan harvest active. Broccoli, cauliflower good supply variable quality Salinas, Santa Maria, growth good Merced-Atwater, harvest continued Kingsburg-Dinuba. Potato sheds full time moderate demand Tulelake-Butte Valley. Potato quality good, sizes below average due above average temperatures. Potato harvest steady Riverside, good demand. Celery heavy supply Salinas, Santa Maria. Lettuce harvest continued Westside, harvest completed Salinas, Santa Maria. Lettuce growers experiencing disease, insect problems, expect lower yields Riverside. Strawberries light volume Salinas due rain. Processing tomato growers Kingsburg-Dinuba prepared soils next season's crop, also harvesting cabbage, peppers, tomatoes, sweetpotatoes, sweet corn, squash, carrots, cucumbers. Livestock fair to good statewide. Rainfall improved range, pasture northern counties, most other areas dry, poor. Supplemental feeding increased northern area as temperatures dropped. Water supplies low most areas. Fall calving, lambing active.

COLORADO: Most precipitation night of 8th, morning of 9th as fairly strong system moved through State. Heavy snow warning issued for northern, central mountains; up to 17 in. of new snow parts of warning area. Weaker systems affected 10th, 12th but not much precipitation. Temperature mostly 2 to 4° above normal except San Luis Valley, mostly 4 to 7° above normal.

Days suitable for fieldwork 6.1. Soil moisture 32% very short, 56% short, 12% adequate. Corn 91% harvested. Sorghum 74% harvested. Winter wheat all planted, 96% emerged. Strong winds east doing some damage to wheat. Livestock mostly good to fair. Range, pasture remained mostly fair to good.

FLORIDA: Cool, dry area of high pressure settled over State, 7th. Ridging from high pressure system remained through 11th with gradually warming temperatures. Weak cold front, little cloudiness stalled over central, 12th, drifting northward 13th. Conditions mostly cool, dry, little or no rain.

Soil moisture generally short with only scattered areas adequate. Scattered rain helpful. Cotton, soybean, sugarcane harvests active. Morning fog delayed start of daily cotton, soybean harvests some areas. Peanut harvest nearly complete. Sugarcane planting complete. Late haymaking southern areas. Field preparation winter wheat underway. Scattered showers stimulated forage growth but more general rain needed many areas to aid establishing, promoting winter grazing crops. Pastures varied widely, Panhandle from poor to good

depending largely on moisture supplies. Conditions improved northern Peninsula to mostly good. Central Peninsula mostly fair, south generally good. Cattle good except only fair few drier areas where grazing reduced. Showers widely scattered over parts of citrus area. Irrigation continued some areas to maintain surface moisture. Harvest for fresh shipments increased seasonally as more crops reached size, maturity requirements. Harvest included navel, other early oranges, seedless grapefruit, robinson tangerines, k-earlys, tangelos. Winter preparation continued with young trees being protected where possible. Dry weather vegetable producing areas. Irrigation heavy most areas. Warm days, cool nights continued. Fall crop harvests increased. Volume leaders: Cucumbers, tomatoes, squash, peppers, snap beans, sweet corn. Lesser supplies available eggplant, radishes, endive, escarole, lettuce, cabbage, carrots, celery, cantaloupes.

GEORGIA: Temperatures 2 to 5° above normal north, 3° to 7° above normal central, south. Extreme lows 80s south, highs around 70s north. Extreme lows mostly mid, upper 30s north; low, mid 40s central and south. Rain 1 to 4 days northwest half, mostly dry southeast half. Rain totals mostly under 0.50 in. isolated areas around 0.75 in.

Days suitable for fieldwork 5.2. Soil moisture 25% short, 73% adequate, 2% surplus. Cotton harvest very active. Peanut harvest virtually complete. Rain north delayed soybean harvest. Rye, other small grains fair to good; seeding normal. Pecans fair to good; harvest slow, 28%, 39% avg. Pastures fair to good. Cattle, hogs fair to good.

HAWAII: Weather generally cloudy after rainstorm, brief sunny periods. Light to moderate showers. Gusty winds continued through week. Rainfall none to 5.10 in. Temperatures 70s to upper 80s.

Agricultural losses light to moderate. Crops fair to poor. Chinese cabbage production steady, moderate volume. Head cabbage production steady. Cucumber production declined. Tomato supplies increased in new fields. Banana production heavy, cavendish varieties. Papaya production heavy.

IDAHO: Temperatures, precipitation above normal most of State.

Winter wheat fair to good. Sugarbeet, grain corn harvest limited by wet weather. Rain, snow slowed fieldwork, including plowing stubble, disking. Seeding curtailed by rain. Russian wheat aphid spraying ceased. Other activities included hay hauling, shop work, equipment maintenance, attending seminars, meetings. Livestock good. Livestock activities included marketing calves, moving cattle. Hay, roughage adequate.

ILLINOIS: Temperatures close to normal. Precipitation 1.00 to 2.00 in. north, central; 0.50 to 0.75 in. south.

Winter wheat mostly good, benefiting from precipitation. Livestock mostly good.

INDIANA: Temperatures 1 to 2° above normal. Lows upper 20s to 40s, highs upper 50s to 70s. Precipitation 0.50 in. to more than 2.00 in.

Days suitable for fieldwork 1.8. Topsoil moisture 3% short, 70% adequate, 27% surplus. Subsoil moisture 65% short, 32% adequate, 3% surplus. Pastures 4% very poor, 29% poor, 45% fair, 22% good. Hay, roughage for feeding 39% short, 59% adequate, 2% surplus. Corn, soybean harvest slowed by rain and wet fields.

IOWA: Temperatures near normal, extremes morning low of 11° Ames on 11th to an afternoon high of 63° Lamoni, Ottumwa on 13th. Precipitation above

normal statewide, 0.37 in. Sibley in northwest to 1.30 in. at Ottumwa in southeast.

Topsoil received much needed moisture from rain, snow over weekend. Field activities winding down; major activity, fertilizer application. Livestock mostly good. Much open grazing of stalk, stubble fields. Weekend rains made sloppy feedlot conditions.

KANSAS: Temperatures 46° northwest to 53° southeast, 5° above average statewide. Precipitation 1.00 in. east central, southeast with high of 2.77 Pittsburgh. Northeast 0.25 while elsewhere little or no rain.

Days suitable for fieldwork 6.5. Topsoil moisture 90% short, 10% adequate. Subsoil moisture 80% short, 20% adequate. Corn harvest essentially complete with only scattered fields west central, northwest left to combine. Sorghum, soybean harvest rapidly drawing to close. Corn, sorghum stubble being grazed most areas. Wheat seeding still underway in eastern counties, most planted acreage emerged to good stands. Greenbug populations increased with warm weather, spraying underway southwest, farmers checking fields closely all areas. Feed grain, hay, forage generally adequate but pastures going dormant furnishing little grazing.

KENTUCKY: Near normal temperatures, precipitation. Lows upper 40s, 1 to 2° above normal. Highs 60s, 1 to 2° above normal. Rain fairly consistent, 0.50 to 0.75 in. Deficits 0.25 in.

Days suitable for fieldwork 3.6. Soil moisture 6% very short, 42% short, 49% adequate, 3% surplus. Moisture conditions showed continued improvement. Burley tobacco 35% stripped, 28% 1987, 35% avg. Rainy weather placed tobacco into case for stripping. Farmers generally pleased weight, quality, color. Houseburn may be more than expected. Stripped tobacco 16% fair, 70% good, 14% excellent. Markets open 21st. Wheat 86% seeded, 89% 1987, 77% avg.; germination, growth favorable; stands 19% fair, 72% good, 9% excellent. Pastures fair to good.

LOUISIANA: Temperatures 6 to 9° above normal. Temperature extremes 40°; 87°. Rainfall 0.02 to 3.35 in.

Days suitable for fieldwork 5.2. Soil moisture 11% short, 83% adequate, 6% surplus. Soybeans 100% dropping leaves. Sweetpotatoes 93% harvested, still slightly ahead of average. Sugarcane good; 99% planted, 48% harvested. Hay final cutting 100%. Hay, roughage 32% short, 68% adequate. Winter wheat fair to good; 47% planted, 29% emerged. Pecans 18% harvested, 20% below average. Livestock good. Pastures, vegetables fair to good. Rain, cloudy skies slowed harvest. Main activities: Harvesting cotton, hay, soybeans, sugarcane, sweetpotatoes, vegetables, 2nd crop rice; planting sugarcane, wheat, winter pastures.

MARYLAND & DELAWARE: Maryland: Precipitation 0.50 in. Temperature 51°, normal 49°. Temperature extremes 26°; 77°.

Days suitable for fieldwork 5.4. Topsoil moisture 5% short, 95% adequate. Subsoil moisture 20% short, 80% adequate. Corn grain 93% harvested, 94% avg. Soybeans 76% harvested, 65% avg. Apple harvest complete. Winter wheat 87% seeded, 91% avg. Barley 100% seeded, 99% avg. Rye 94% planted, 90% avg.

Delaware: Precipitation 0.35 in. Temperature 53°, normal 49°. Temperature extremes 30°, 73°.

Days suitable for fieldwork 5.5. Topsoil moisture adequate all areas. Subsoil moisture little short central, south. Hay 100% adequate. Corn grain 98% harvested, 97% avg. Soybean 65%

harvested, 66% avg. Apple 100% harvested, 100% avg. Winter wheat 88% seeded, 83% avg. Barley 100% seeded, 98% avg. Rye 100% planted, 82% avg.

MICHIGAN: Temperatures 1° above to 3° below normal. Temperature extremes 22°; 51°. Precipitation 0.74 to 2.66 in.

Days suitable for fieldwork 1.5. Soil moisture 10% adequate, 90% surplus. Corn 70% harvested, 95% 1987, 75% avg. Soybeans 70% harvested, 95% 1987, 90% avg. Winter wheat 98% planted, 100% 1987, 99% avg.; 90% emerged, 95% 1987, none avg.; 10% poor, 15% fair, 50% good, 25% excellent. Dry beans 80% harvested, 97% 1987, 99% avg. Major activities: Corn for grain, sugarbeet harvests, pruning, spraying orchards, vineyards, repairing, winterizing equipment.

MINNESOTA: Temperatures near normal to 3° above normal. Extremes 13°; 57°. Precipitation 0.36 to 0.59 in. Snowfall 3 to 5 in. Greatest weekly precipitation 1.02 in.

Corn 99% harvested, 99% 1987, 89% avg. Soybeans 99% harvested, 99% 1987, 97% avg. Snow covered much of State by weekend. Small acreages of corn, soybeans left to harvest. Fall tillage work stopped due to moisture, cold temperatures.

MISSISSIPPI: Temperatures 6° above normal. Extremes 31°; 87°. Severe weather on 12th with thunderstorms, hail, tornadoes. Precipitation 0.41 in. above normal.

Days suitable for fieldwork 4.2, 4.8 1987, 4.1 avg. Soil moisture 5% short, 70% adequate, 25% surplus. Row crop harvest nearly complete. Cotton 91% harvested, 99% 1987, 87% avg. Soybeans 62% harvested, 93% 1987, 66% avg. Wheat good; 64% planted, 61% 1987, 54% avg.; 52% emerged. Pecans good; 25% harvested, 26% 1987, 53% avg. Pastures good to fair. Livestock good. Hay, roughage 15% short, 75% adequate, 10% surplus. Activities: Soybean harvest, wheat planting.

MISSOURI: Temperatures near normal. Wide band of rain Springfield to St. Louis 1.50 to 2.50 in., elsewhere 0.50 in.

Days suitable for fieldwork 5.2, varying 3.3 days southeast to 6.2 northwest. Topsoil moisture 71% short, 18% adequate, 11% surplus; Bootheel 75% surplus. Subsoil moisture 83% short, 16% adequate, 1% surplus. Soybean harvest virtually complete north, less advanced south, wet ground Bootheel slowed progress. Winter wheat 90% seeded or more all areas, except 84% southwest. Tillage for spring crops 49% of ground worked at least once, 61% 1987, 42% avg. Pastures 13% very poor, 30% poor, 44% fair, 13% good. Livestock water 36% critically short, 35% short, 29% adequate, northern counties most critical shortage.

MONTANA: Western, south central area some precipitation, elsewhere dry. Temperatures 1 to 5° above normal.

Days suitable for fieldwork 6.4. Topsoil moisture 66% short, 34% adequate. Subsoil moisture 93% short, 7% adequate. Wind damage to winter wheat 12% none, 81% light, 7% moderate. Cattle, calves moved from summer ranges 95%. Sheep, lambs moved 97%. Cattle, calves receiving supplemental feed 31%; sheep, lambs 34%.

NEBRASKA: Cool early week replaced by warm temperatures weekend. Much of State received light precipitation, eastern portion recording up to 0.50 in. of rain. First snow northwest. Temperatures 2 to 4° above normal. Extremes 13°; 66°.

Days suitable for fieldwork 6.8. Topsoil moisture 93% short, 7% adequate. Subsoil moisture 75% short, 25% adequate. Corn 99% harvested, 97% 1987, 85% avg. Sorghum harvest complete. Winter

wheat 1% very poor, 3% poor, 32% fair, 62% good, 2% excellent. Any precipitation would greatly improve crop. Pasture, range feed 8% very short, 30% short, 62% adequate. Eastern third low hay supplies.

NEVADA: Indian Summer type weather vanished as temperatures dropped to more normal levels. Skies cloudy, overcast, some scattered snow showers higher elevation areas early. Winds accompanying cold fronts gusty at times. Series of fast moving storm fronts last half produced lower temperatures, cloudy skies, high winds, scattered rain, snow showers. Snow levels lowered to 5,500 ft. weekend.

Harvesting operations completed. All garlic, 75% winter grains planted for harvest. Marketing potatoes north gained momentum. Cattle mostly good. Movement cattle, calves to market, feedlots active. Prices holding steady.

NEW ENGLAND: Precipitation 0.25 to 0.50 in. north, less than 0.25 in. south. Scattered amounts 0.50 to 1.00 in. 13th during cold front. Temperatures near 40° near Canadian border to upper 40s south coast. Temperatures above normal.

Major farm activities: Fall clean-up, machinery repair.

NEW JERSEY: Temperatures below normal, 42° north, 45° south, 48° coastal. Extremes 22°; 65°. Precipitation below normal; 0.69 in. north, 0.40 in. south, 0.29 in. coastal. Heaviest 24-hour total 0.78 in. on 13th, 14th.

Soil moisture adequate to excessive. Hardy vegetables moved to market in light volume. Dryer weather needed for completion of soybean, corn for grain harvest. Fall sown grain, cover crops continued to make good growth. Cider making active. Fall crops moved from storages in preparation for Thanksgiving.

NEW MEXICO: Well above normal temperatures persist. Significant rainfall northwest, north, central portions; precipitation below normal elsewhere.

Days suitable for fieldwork 6.8. Soil moisture 75% short, 25% adequate. Some light to moderate freeze damage. Cotton 50% harvested; 50% fair, 50% good. Wheat 15% poor, 48% fair, 37% good; planting complete, but moisture needed. Cattle 22% fair, 78% good. Sheep 29% fair, 71% good. Range 44% fair, 56% good.

NEW YORK: Temperatures 1 to 5° above normal. Low near 20s to lower 30s. High mid 50s to mid 60s. Precipitation every day except for 12th. Southeast rainfall below normal, less than 0.25 in. West, parts of north, rainfall above average 0.75 to 1.50 in. Elsewhere below normal precipitation 0.25 to 0.50 in.

Apple harvest complete. Growers pruning trees, cleaning orchards. Vegetable harvest complete. Late season crops moved to storage.

NORTH CAROLINA: Temperatures normal statewide. Temperature extremes 24°; 81°. Precipitation none to 1.24 in.

Days suitable for fieldwork 5.1. Soil moisture 22% short, 73% adequate, 5% surplus. Pasture 1% very poor, 4% poor, 34% fair, 59% good, 3% excellent. Peanuts 99% dug, 99% 1987, 98% avg.; 94% threshed, 96% 1987, 91% avg. Sorghum for grain 88% harvested, 90% 1987, 84% avg. Oats 83% planted, 81% 1987, 77% avg.; 2% poor, 16% fair, 80% good, 2% excellent. Barley 89% planted, 88% 1987, 78% avg.; 21% fair, 77% good, 2% excellent. Rye 75% planted, 78% 1987, 74% avg.; 3% poor, 17% fair, 80% good. Wheat 61% planted, 63% 1987, 62% avg.; 21% fair, 76% good, 3% excellent. Major farm activities: Harvesting soybeans, seeding small

grains. Other activities: Harvesting corn, peanuts, cotton; tobacco plantbed preparation; grading tobacco; tagging, shearing Christmas trees; tending livestock, general farm maintenance.

NORTH DAKOTA: Temperatures near normal to 3° above normal. Extremes 8°; 54°. Mixture of rain snow statewide; 0.06 in. northwest to 0.37 in. southeast.

Soil moisture below average. Mostly adequate hay, feed supplies. Virtually no field activity. Calf weaning winding down. Working cattle, moving hay other activities.

OHIO: Lows mid to upper 30s. Highs upper 40s to mid 50s. Lows above normal, highs subnormal. Precipitation 1.00 to 2.00 in. central, north; 0.60 to 1.00 in. south; 0.20 to 0.70 in. above normal. Soil temperatures mid 40s.

Days suitable for fieldwork 2.8. Soil moisture 11% short, 73% adequate, 16% surplus. Harvest progress slow; rainy weather, wet soils. Some corn stands lodging. Moisture in harvested grain: Corn 23%, soybeans 15%. Winter wheat mostly good, slightly improved; adequate moisture in major production area. Pasture fair to good, improving.

OKLAHOMA: Temperatures 7° above normal southwest to normal north central. Precipitation none Panhandle to 2.20 in. central.

Days suitable for fieldwork 6.4. Topsoil moisture 70% short, 30% adequate. Subsoil moisture 45% short, 55% adequate. Wheat 45% fair, 50% good, 5% excellent; 99% planted, 99% 1987, 90% avg.; 90% emerged, 90% 1987, 70% avg. Cotton 35% harvested, 20% 1987, 20% avg. Growers await killing frost to defoliate plants. Sorghum 70% harvested, 50% 1987, 65% avg. Soybeans 55% harvested, 60% 1987, 50% avg. Peanuts 80% harvested, 90% 1987, 70% avg. Pastures fair. Cattle good; marketings average, prices up slightly.

OREGON: Considerable rainfall west, lesser amounts east. Precipitation 4.00 to 5.30 in. north Cascades, coast, high plateau; 1.70 to 2.10 in. western valleys; up to 0.50 in. east of Cascades. Temperatures 1 to 3° above normal all areas, except north central 3 to 5° above normal.

Soil moisture 35% short, 58% adequate, 7% surplus. Last of fall grains seeded statewide. Rain halted field activity some Willamette Valley. Russian wheat aphid activity slowed by cool, wet weather; little spraying continued Willamette Valley. Light snow halted fieldwork, except CRP planting Lake County. Enough precipitation received to allow herbicide applications on grain west. Crimson clover stressed by dryness has improved. Filbert, walnut, wine grape harvests wrapping up; caneberry pruning, training Willamette Valley. Cranberry harvest completed, good quality, large crop south coast. Dormant spraying in tree fruit orchards. Finishing carrot digging Willamette Valley. Livestock mostly good. Some calves still being weaned, many already sold. Cattle continued on aftermath, hay, grain stubble. Western pastures fair to good; rains started fall greenup. Eastern rangeland mostly poor to fair; some greenup on lower canyon ranges. Much hay feeding already used to supplement forage.

PENNSYLVANIA: Temperatures continued unseasonably cool, rather dry. Temperature 42°, 2° below normal. Temperature extremes 18°; 68°. Precipitation 0.41 in., 0.32 in. below normal.

Days suitable for fieldwork 4.0. Soil moisture 35% short, 46% adequate, 19% surplus. Corn 54% harvested, 74% 1987, 66% avg.; 14% very poor, 29% poor, 36% fair, 17% good, 4% excellent. Soybean 60% harvested, 81% 1987, 66% avg.; 8% very poor, 19% poor, 36% fair, 30% good, 7% excellent. Fall

plowing 98%, 97% 1987, 98% avg. Winter wheat 98% planted, 97% 1987, 100% avg. Fourth cutting alfalfa 91%, 89% 1987. Hay fair. Amount of feed being obtained from pastures average to below average. Apples 96% harvested, 98% 1987. Activities: Harvesting corn grain, corn silage, soybeans, hay, haylage, fruit, potatoes, other vegetables; planting wheat, rye; fall plowing; spreading manure, fertilizer; caring for livestock; maintaining machinery.

PUERTO RICO: Lack of data; San Juan WSFO temperature 80°. Total rainfall 1.06 in., 0.27 in. below normal.

SOUTH CAROLINA: Seasonal temperatures. Rainfall light none to 0.40 in.

Days suitable for fieldwork 5.8. Soil moisture 2% very short, 63% short, 35% adequate. Cotton 78% harvested, 96% 1987, 83% avg.; 1% very poor, 3% poor, 85% fair, 11% good. Soybeans 91% leaves shedding, 96% 1987, 94% avg.; 89% matured, 95% 1987, 83% avg.; 33% harvested, 44% 1987, 32% avg.; 4% poor, 46% fair, 44% good, 6% excellent. Tobacco stalks 95% destroyed, 100% 1987, 94% avg. Peanuts fair to good; 93% harvested, 96% 1987, 92% avg. Sweetpotatoes fair to good; 82% harvested, 85% 1987, 85% avg. Sorghum fair to good; 75% harvested, 86% 1987, 79% avg. Pastures fair to good. Livestock good. Winter wheat 39% planted, 40% 1987, 33% avg.; 25% emerged, 25% 1987, 21% avg.

SOUTH DAKOTA: Temperatures 1 to 6° above normal. Extremes 9°; 64°. Black Hills low 6°. Most of State precipitation except northwest. Totals under 0.09 in.

Winter wheat mostly good to fair. Insects not detected yet. Could be strongly susceptible to wind erosion, soil blowing dry areas. Some spotty stands. If wheat does not receive moisture going into winter there will be an above normal amount of winterkill. Livestock being grazed on stubble, failed crops. Water, feed very low in dry areas.

TENNESSEE: Series of rapidly moving cold fronts crossed State. Temperatures 3 to 4° above normal west, middle; normal east, 2° below normal Plateau. Precipitation 0.50 in. statewide.

Days suitable for fieldwork 4.1. Soil moisture 1% very short, 19% short, 75% adequate, 5% surplus. Pasture feed normal. Burley tobacco 68% stripped, 50% 1987, 55% avg. Wheat 90% seeded, 84% 1987, 69% avg. Main activities: Cotton, soybean harvests; seeding wheat; routine farm chores.

TEXAS: Fast westerly flow upper levels brought series of cool fronts through Lone Star State. Beneficial rains east, but more rain needed. First front affected northwest 7th, but no rain. Otherwise, warm temperatures prevailed 7th, 8th. Air unstable enough to trigger scattered showers east 9th. Second front entered Panhandle same day, brought cooler weather 10th. Next cool front caused showers 12th, mostly eastern counties. Weak ridge high pressure brought week to end on fair, dry note. Week ended unseasonably warm, 10° above normal. Northwest little warmer than average, Low Rolling Plains right around normal. Rest registered readings 5 to 10° above seasonal averages. South warmest area, rainfall light; far west, extreme south no rain. East got 0.50 in., rest very light totals.

Crops: Ideal harvesting conditions prevailed unseasonably warm days, nights continued. However, light frost occurred portions of northern High Plains. But most growers wait for overdue hard freeze. Growth of small grains limited as drought conditions continued to worsen. With warm temperatures, moisture stress continued to be more apparent for wheat, oats. Harvest defoliated

cotton, grain sorghum, peanuts, other crops advanced. With supplemental feeding, most livestock holding steady. Cotton harvest gained momentum across Plains defoliated fields. Most producers wait for killing freeze. Some producers continued to defoliate. Late season allowed bolls to mature, yield prospects improved. Harvested cotton very good; 97% open bolls, 83% 1987, 85% avg. Grain sorghum harvest continued good progress, yields remained very good. Light frost may help dry down moisture remaining acreage. Small grain planting continued eastern half State following recent moisture. Lack of moisture becoming more apparent. Some loss stands began to occur, grazing being delayed. With warm temperatures, moisture stress becomes more severe. Damage from insects increased. Irrigated fields progress well. Peanut harvest remained active. Yields quality dryland peanuts below average. Some acreage not harvested. Irrigated peanuts doing well. Soybean harvest active. Some High Plains counties neared completion. Good progress along Coast. Harvest of 2nd crop rice continued. Sugarbeet harvest active. Sugarcane harvest continued Rio Grande Valley. Other Field Crops: Peanuts 72% harvested, 64% 1987, 62% avg. Pecans 31% harvested, 33% 1987, 34% avg. Soybeans 82% harvested, 75% 1987, 64% avg. Sugarbeets 61% harvested, 50% 1987, 56% avg. Sunflowers 74% harvested, 81% 1987, 76% avg. Oats 78% planted, 88% 1987, 85% avg.

Commercial Vegetables: Rio Grande Valley harvest fall vegetables continued. Land preparation, planting also continued. Harvest grapefruit, oranges active. San Antonio-Winter Garden harvest carrots, cabbage continued. Some land preparation planting underway. High Plains limited supplies peppers, broccoli, cauliflower available. Pecan harvest expand. Droppage increased as cool fronts pushed through. Quality, yield good, but price low.

Range and Pasture: Supplemental feeding continued as forage from small grains, winter pastures been slow to develop. Hay supplies tight, high priced. Some movement off small grain occurred. Livestock prices remained strong. Condition held steady.

UTAH: Precipitation none to light. Temperatures 4 to 7° above normal.

Major farm activities: Care of livestock, marketing calves, lambs; cull cows, ewes; winterizing equipment, fence repairs, updating records, care of stored grain, cutting firewood.

VIRGINIA: Near normal rainfall, above normal temperatures. Rainfall varied none to 2.11 in. Temperature 28 to 75°. Temperatures 5° above normal.

Days suitable for fieldwork 5.5. Topsoil moisture 27% short, 67% adequate, 6% surplus. Grain corn 90% harvested, 94% 1987, 90% avg. Soybeans 56% harvested, 67% 1987, 53% avg. Stripped burley tobacco. Wheat 70% seeded, 83% 1987, 77% avg. Some hay cut. Marketed feeder cattle. Winter grains, grazing crops 15% poor, 62% fair, 23% good. Pasture 8% very poor, 49% poor, 25% fair, 16% good, 2% excellent.

WASHINGTON: Series of weather systems moved through State brought rainfall. Temperatures near or just slightly below normal.

Rain showers improved soil moisture conditions 60% short, 40% adequate. Showers relieved crops from moisture stress. Winter wheat 5% poor, 45% fair, 50% good. Growers continued to battle Russian wheat aphids, other pests. Corn grain harvest interrupted by showers, resumed after stalks dried out. Corn grain yields expected lower than 1987. Potato harvest completed. Apple harvest completed. Orchard clean-up underway. Pruning, tying canberries continued as weather permitted. Fresh market carrot harvest continued west.

WEST VIRGINIA: Temperature 45°, 1° above normal. Extremes 12° Greenbank; 72° Williamson. Precipitation 0.42 in., 0.02 to 0.32 in. below normal.

Days suitable for fieldwork 3.9. Soil moisture 50% short, 50% adequate. Corn fair to good; 85% harvested. Livestock good to fair. Feed 17% very short, 58% short, 25% adequate. Farm activities: Livestock care, general farm maintenance.

WISCONSIN: Temperatures 38°, 2° above normal. Extremes 17°; 59°. Precipitation 0.35 to 1.40 in. Most south, east. Snow 1 to 4 in. north, 12th.

Farm activities: Wood cutting, manure hauling, finishing harvest.

WYOMING: Temperatures near normal. Precipitation generally below normal.

Corn harvest continued. Winter wheat mostly fair to good. Additional moisture needed for good development. Livestock fair to mostly good. Movement to winter pastures, markets continued. Hay short many areas.

CORN
% HARVESTED

	1988	1987	AVG.
COLO	91	90	85
GA	100	100	99
ILL	100	100	92
IND	89	100	86
IOWA	100	100	89
KANS	100	99	95
KY	92	97	86
MICH	70	95	75
MINN	99	99	89
MO	99	100	87
NEBR	99	97	85
N C	96	97	96
OHIO	70	99	75
PA	54	74	66
S DAK	100	100	82
TEX	100	100	100
WIS	91	97	74
17 STATES	93	98	86

THESE 17 STATES PRODUCED 94% OF THE 1987 CORN CROP.

WINTER WHEAT
% PLANTED

	1988	1987	AVG.
ARK	75	87	66
CALIF	40	40	40
COLO	100	100	100
GA	27	27	38
IDAHO	100	100	100
ILL	100	100	89
IND	96	100	94
KANS	99	100	96
MICH	98	100	99
MO	93	99	76
MONT	100	100	100
NEBR	100	100	100
N MEX	100	100	NA
N C	61	63	62
OHIO	98	99	97
OKLA	99	99	90
OREG	91	85	92
S DAK	100	100	100
TEX	99	95	91
WASH	99	97	99
20 STATES	96	96	NA
EXCL. STATES WITH NA	96	96	92

THESE 20 STATES PRODUCED 91% OF THE 1987 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

1/ AVERAGES FOR THESE SUMMARIES ARE FOR THE YEARS 1983 - 1987.

Crop Progress 1/
FOR WEEK ENDING NOVEMBER 13, 1988

SOYBEANS
% HARVESTED

	1988	1987	AVG.
ALA	59	88	71
ARK	67	92	67
GA	52	81	62
ILL	100	100	93
IND	96	100	92
IOWA	100	100	96
KANS	98	98	80
KY	82	93	66
LA	80	96	78
MICH	70	95	90
MINN	99	99	97
MISS	62	93	66
MO	95	99	73
NEBR	100	100	96
N C	37	49	32
OHIO	93	100	91
S C	33	44	32
S DAK	100	100	98
TENN	84	94	65
19 STATES	89	96	84

THESE 19 STATES PRODUCED 96% OF THE 1987 SOYBEANS CROP.

WINTER WHEAT
% EMERGED

	1988	1987	AVG.
ARK	53	76	NA
CALIF	10	20	20
COLO	96	99	95
GA	19	14	24
IDAHO	96	88	92
ILL	99	100	81
IND	90	91	88
KANS	96	98	90
MICH	90	95	NA
MO	80	94	64
MONT	95	100	87
NEBR	100	100	100
N MEX	100	100	NA
N C	47	45	NA
OHIO	81	91	88
OKLA	90	90	70
OREG	78	50	77
S DAK	100	100	100
TEX	95	90	80
WASH	92	84	93
20 STATES	91	91	NA
EXCL. STATES WITH NA	92	92	83

THESE 20 STATES PRODUCED 91% OF THE 1987 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

COTTON
% HARVESTED

	1988	1987	AVG.
ALA	89	98	88
ARIZ	65	75	70
ARK	91	99	87
CALIF	85	90	81
GA	76	89	80
LA	93	100	87
MISS	91	99	87
MO	92	100	88
N MEX	50	35	38
N C	72	81	69
OKLA	35	20	20
S C	78	96	83
TENN	92	100	89
TEX	40	27	32
14 STATES	64	61	58

THESE 14 STATES PRODUCED 100% OF THE 1987 COTTON CROP.

GRAIN SORGHUM
% HARVESTED

	1988	1987	AVG.
ARK	100	100	98
ILL	99	100	86
KANS	97	90	85
LA	100	100	100
MISS	99	100	NA
MO	99	99	84
NEBR	100	99	94
OKLA	70	50	65
S DAK	100	100	92
TENN	100	100	100
TEX	94	82	86
11 STATES	96	89	NA

EXCL. STATES

WITH NA 96 89 87

THESE 11 STATES PRODUCED 96% OF THE 1987 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

Crop Condition
FOR WEEK ENDING NOVEMBER 13, 1988

WINTER WHEAT

STATE	VP	P	F	G	EX
ARK	0	0	20	65	15
CALIF	0	0	20	80	0
COLO	2	7	30	56	5
GA	0	3	38	58	1
IDAHO	2	3	30	50	15
ILL	0	0	17	75	8
IND	0	1	38	58	3
KANS	2	14	37	35	12
MICH	0	10	15	50	25
MO	3	8	60	27	2
MONT	2	6	45	43	4
NEB	1	3	32	62	2
N MEX	0	15	48	37	0
N C	0	0	21	76	3
OHIO	1	6	32	51	10
OKLA	0	0	45	50	5
OREG	0	35	19	46	0
S DAK	5	13	38	35	9
TEX	2	10	52	29	7
WASH	0	5	45	50	0
19 STATE	1	8	39	45	7

International Weather and Crop Summary

November 6-12, 1988

HIGHLIGHTS

WESTERN USSR ... Continued unseasonable cold weather causes winter grains in the south to enter dormancy 2-3 weeks earlier than usual. Snow cover increases over most of the region.

EUROPE ... Continuing cold weather causes winter grains to slip into dormancy across the east. Warmer-than-normal temperatures favor establishing winter crops in the west.

SOUTH ASIA ... Locally heavy rain causes flooding and some rice damage in southeastern India. Dry weather continues elsewhere.

EASTERN ASIA ... Dry, warmer-than-normal weather continues over most winter crop areas. Heavy rain causes continued harvest delays in the extreme south.

SOUTHEAST ASIA ... Typhoon Skip hits the central Philippines, causing more flooding and crop damage. Dry weather benefits maturing Thai crops, but Typhoon Tess causes local flooding in southeastern Vietnam.

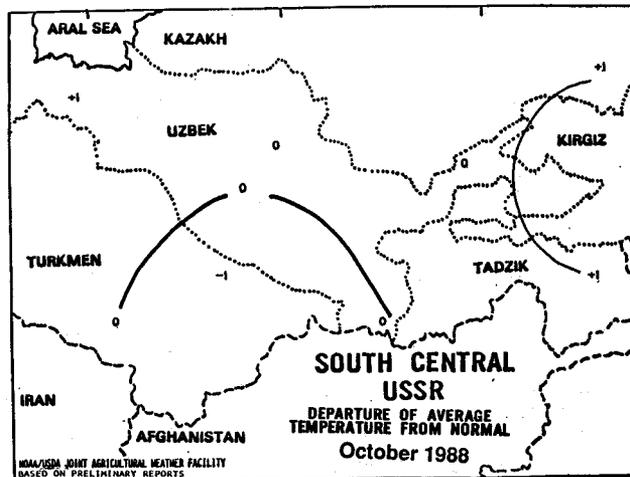
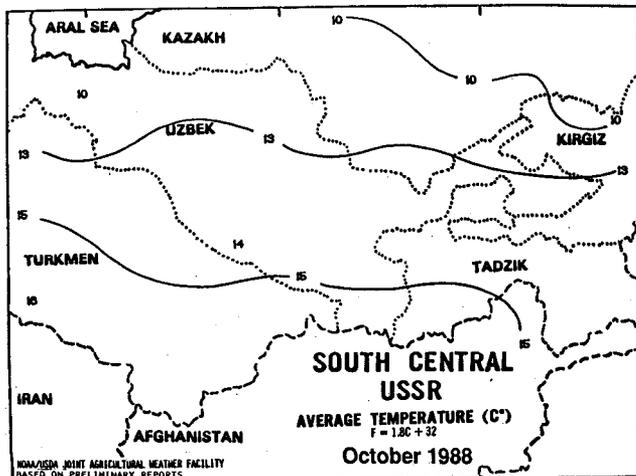
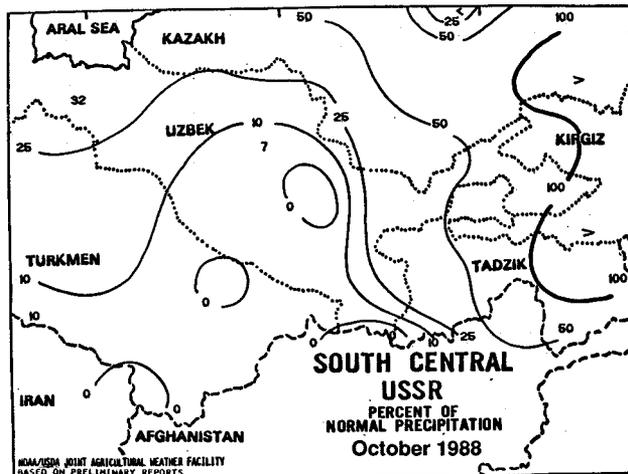
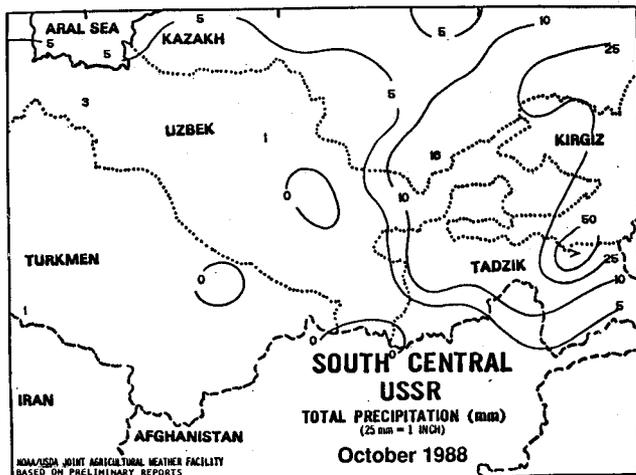
SOUTH AMERICA ... In Argentina, hot, dry weather hampers summer crop establishment, but some late-week rain falls in the east. In Brazil, rain favors emerging crops in Rio Grande do Sul, but hot, dry weather prevails in western soybean areas.

AUSTRALIA ... Warm, dry weather returns to eastern growing areas. Moderate to heavy rain falls in the southwest.

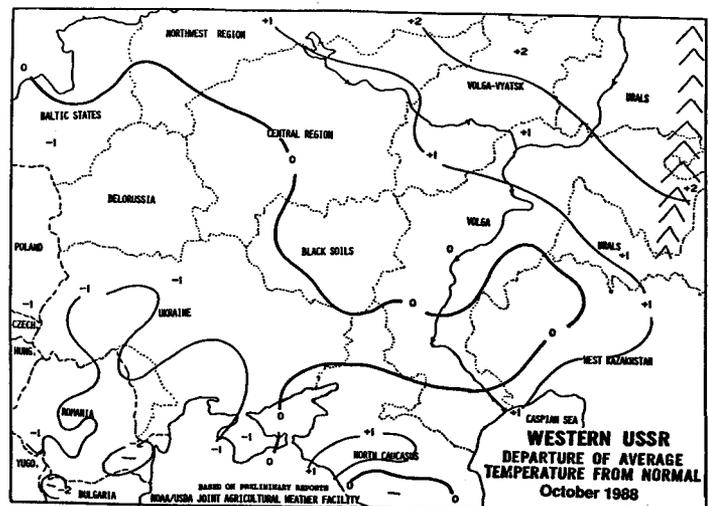
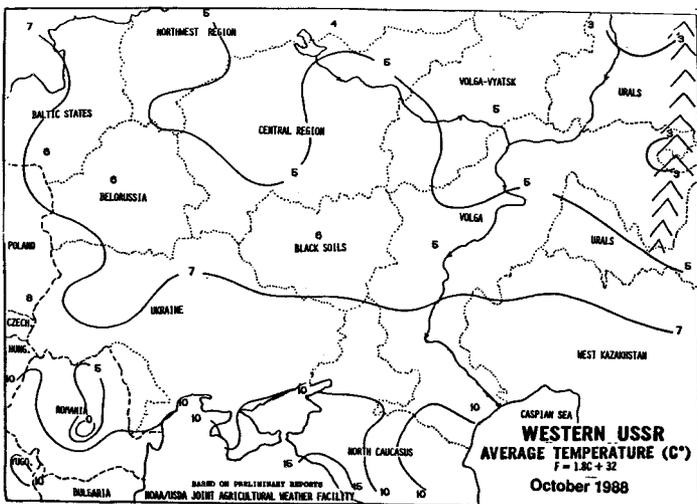
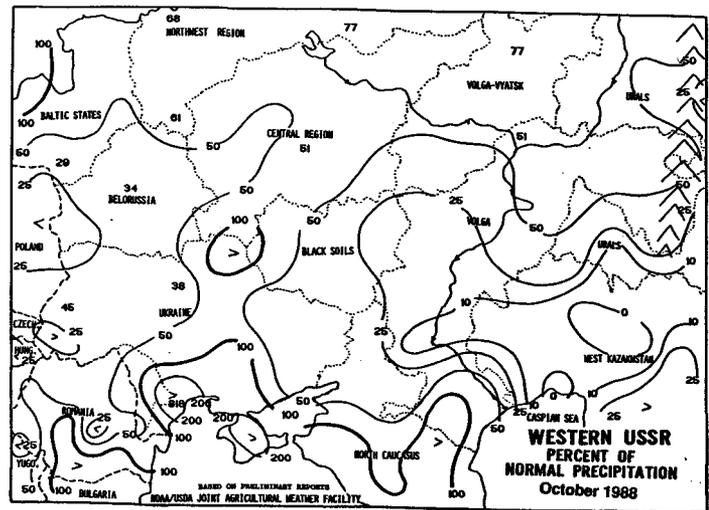
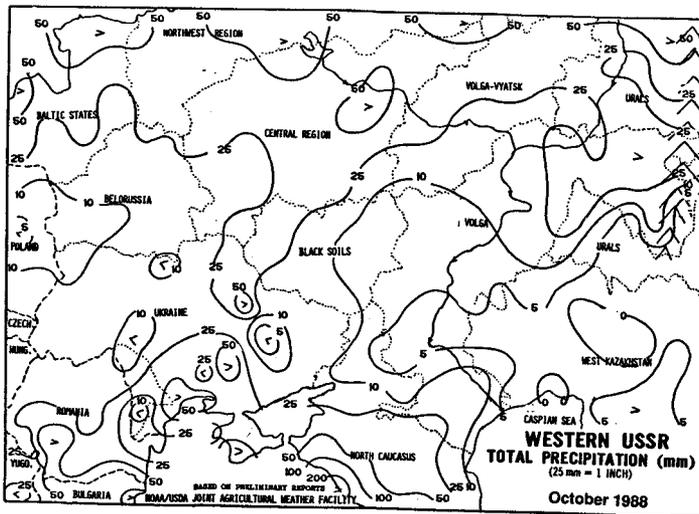
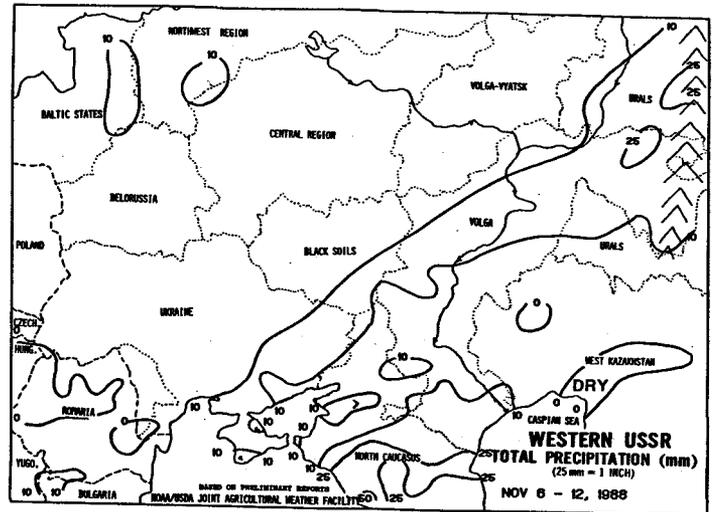
MEXICO ... Seasonably dry weather prevails throughout the nation, favoring corn harvesting and wheat planting.

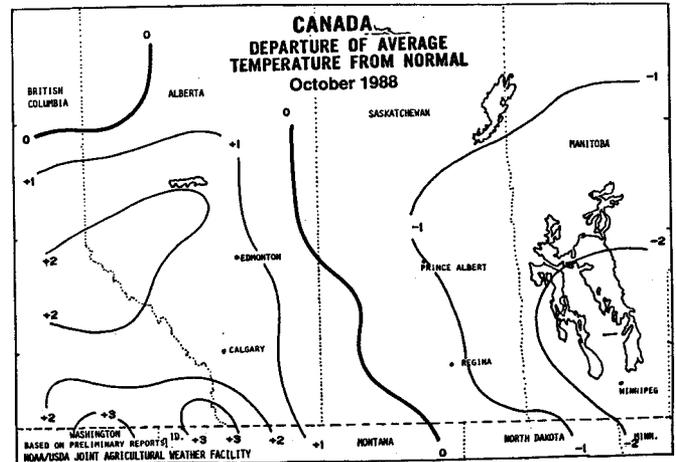
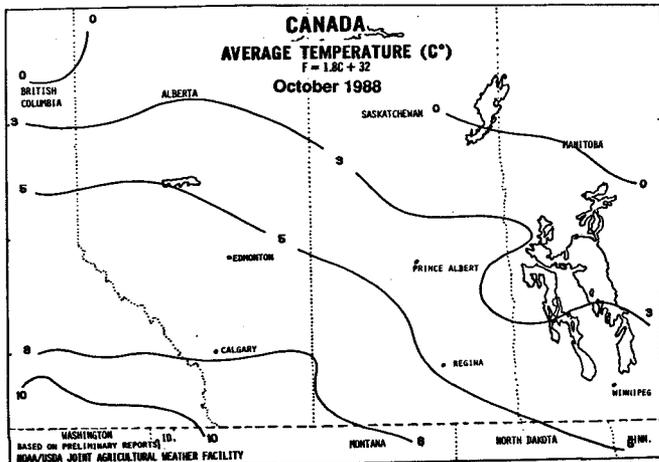
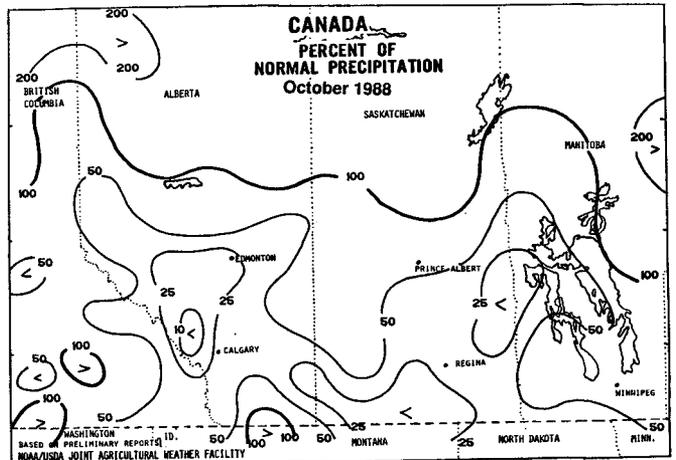
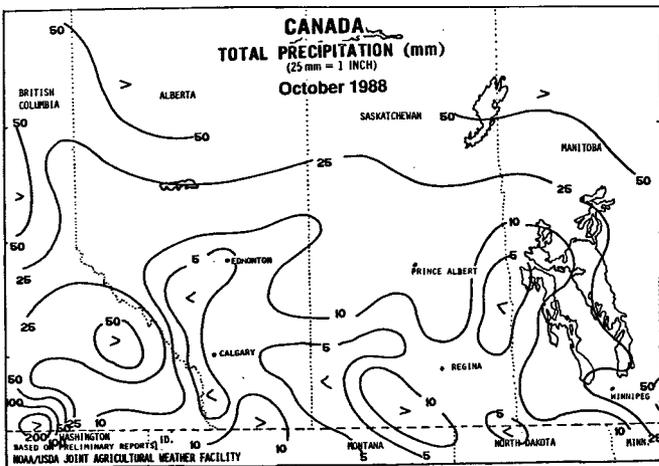
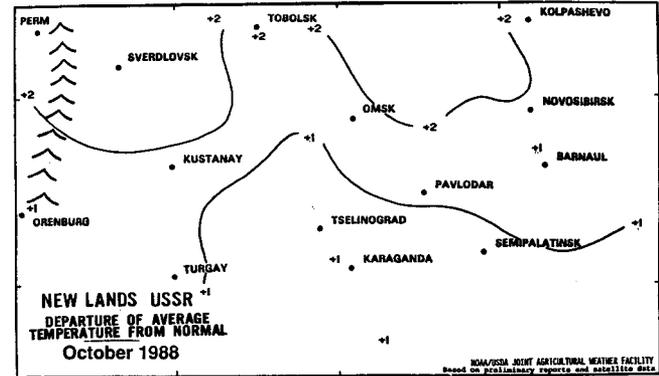
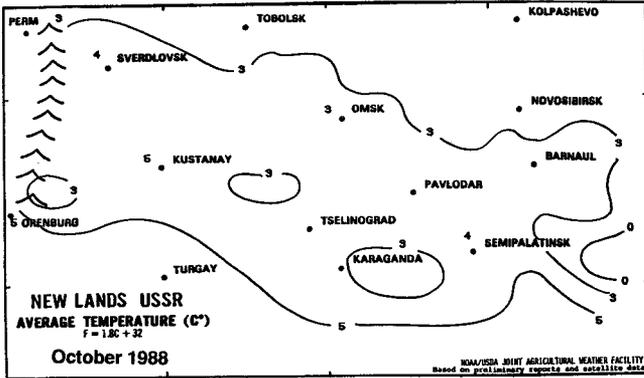
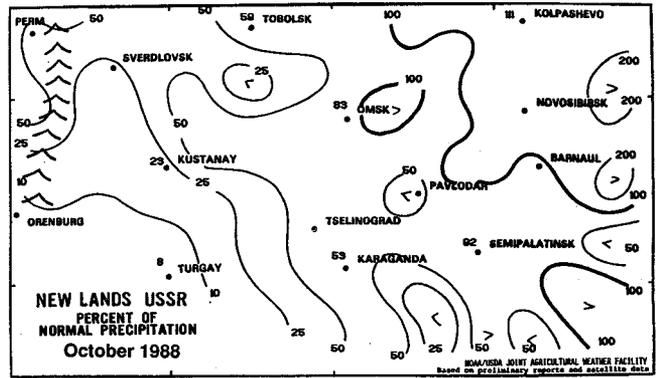
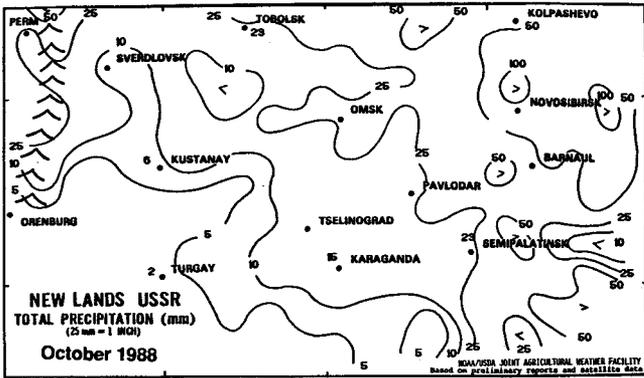
SOUTH AFRICA ... Dry periods favor corn planting in northern regions.

NORTHWESTERN AFRICA ... Substantial rain in Morocco promotes winter grain planting. Moisture conditions continue too dry for planting in Algeria and Tunisia.

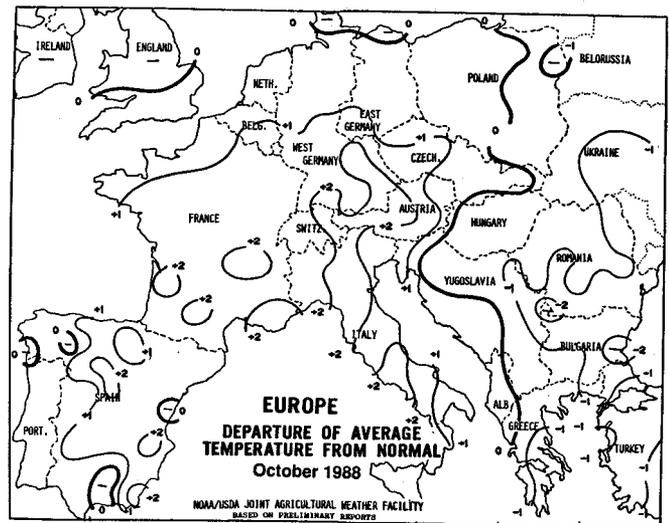
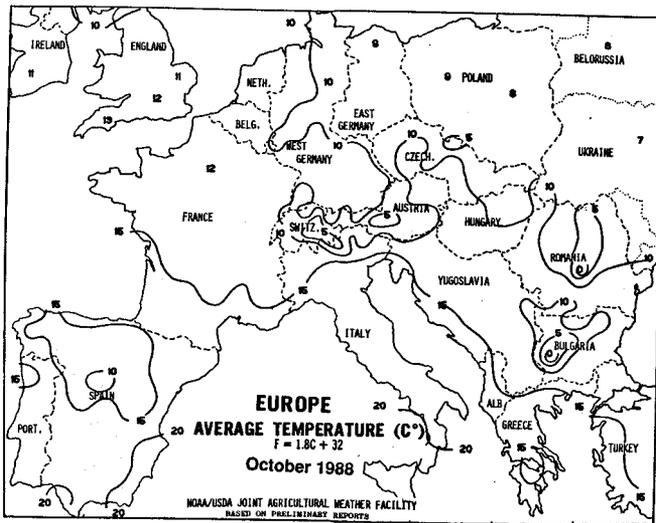
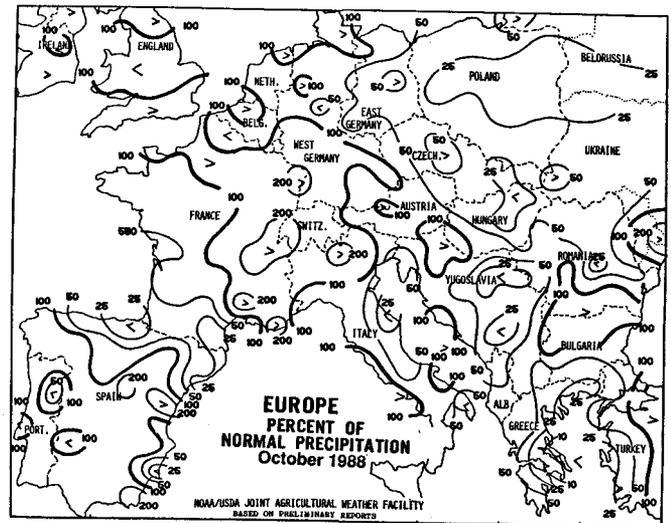
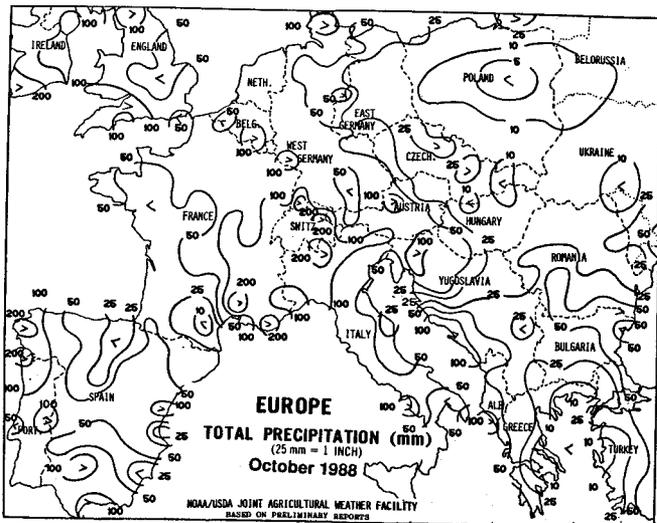
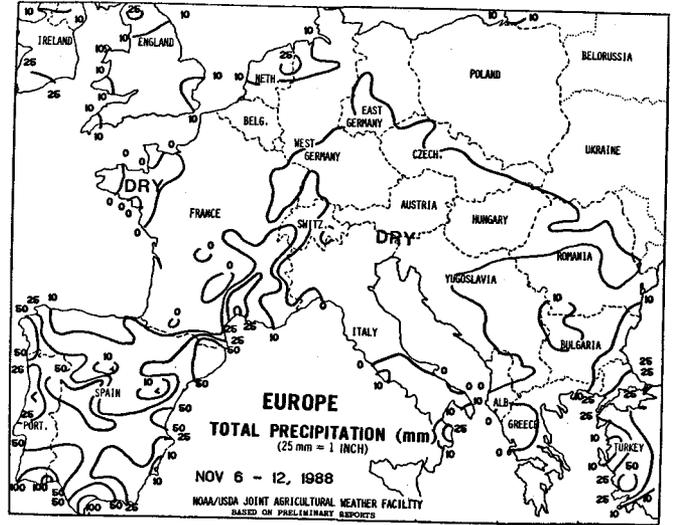


WESTERN USSR ... Unseasonable, cold weather continued over most of the region, causing winter grains in the Ukraine and North Caucasus to enter dormancy about 2-3 weeks earlier than usual. Light snow covered winter grains over the northern two-thirds of the region, with moderate snow falling on winter grains in the eastern Ukraine and the northern North Caucasus. Significant rain (14-35mm) covered dormant winter grains in the Crimea and the southern North Caucasus. Lowest temperatures during the week occurred on November 12, when minimum temperatures ranged from -20 to -26 degrees Celsius (C) in the Black Soils Region, the Volga Vyatsk Region, and the upper Volga. Minimum temperatures ranged from -10 to -15 degrees C over the remainder of the region. Although temperatures in the Black Soils Region exceeded the threshold for potential winterkill, the combination of shallow snow cover and the brief duration of the extreme cold minimized the threat of significant winterkill. In October, below-normal precipitation helped late-season harvesting, but limited moisture available for winter grain establishment, particularly in the southeast. Unseasonable, cold weather on October 21 spread southward and persisted through this past week.

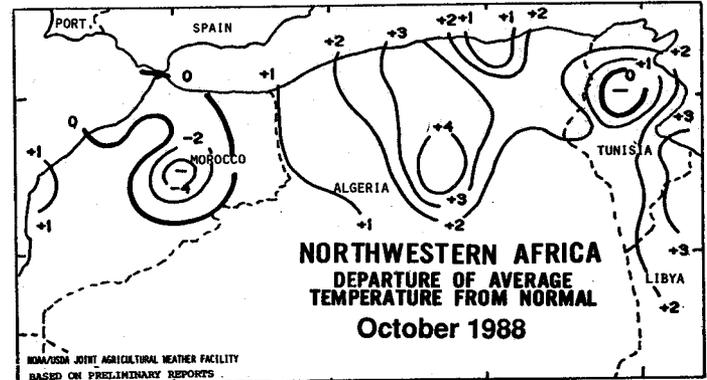
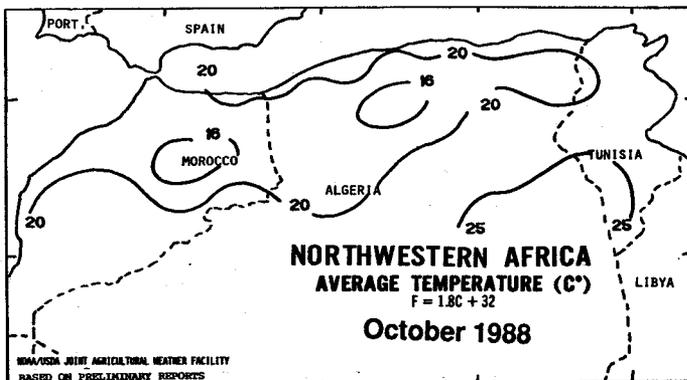
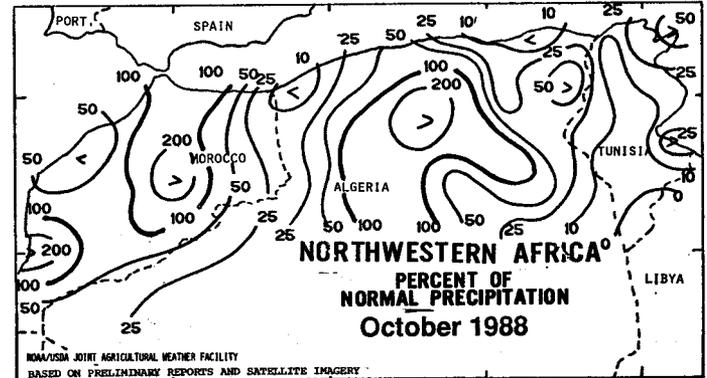
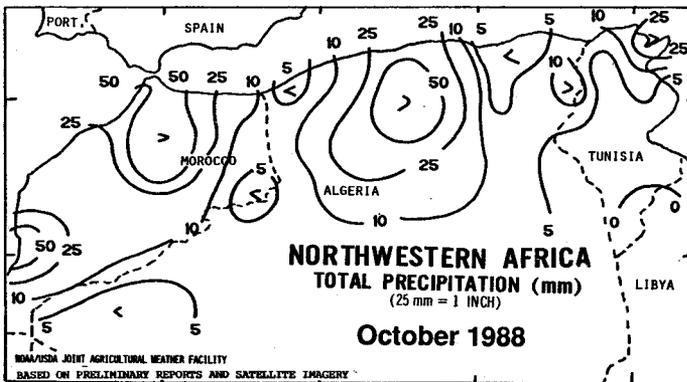
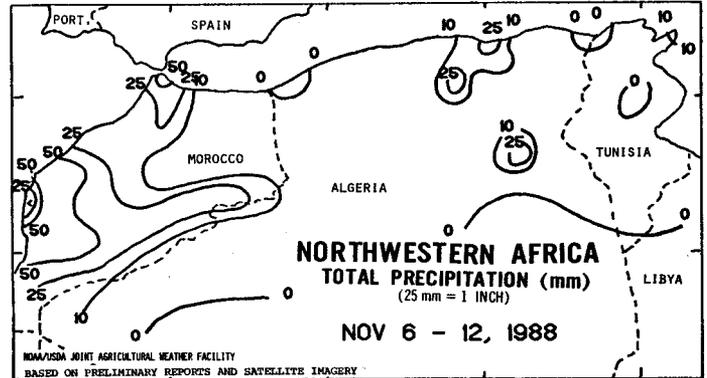




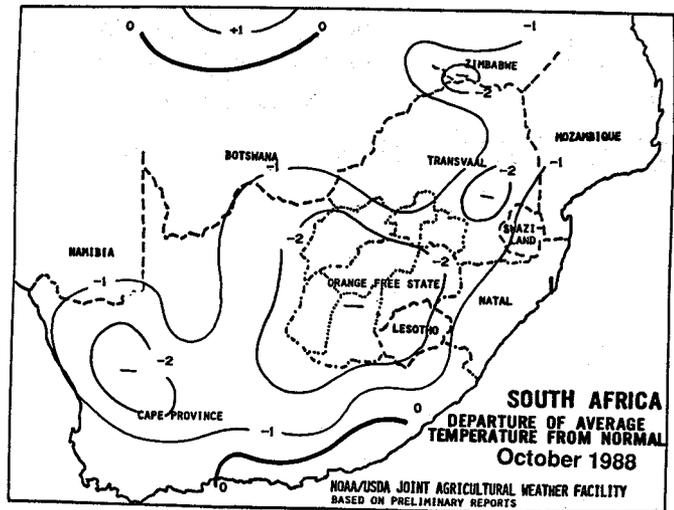
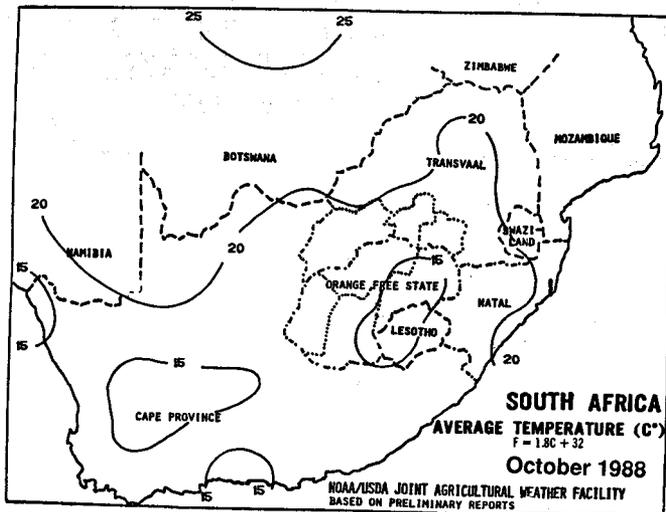
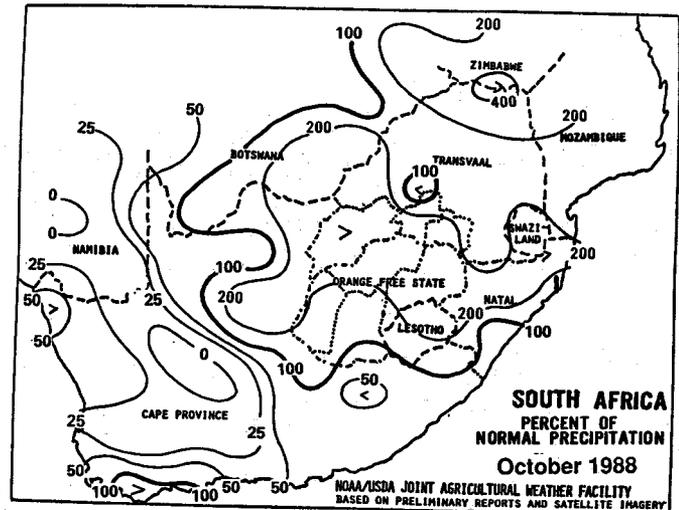
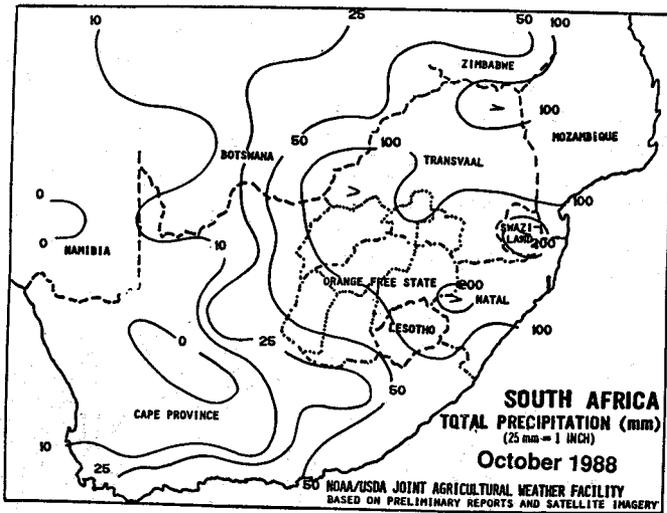
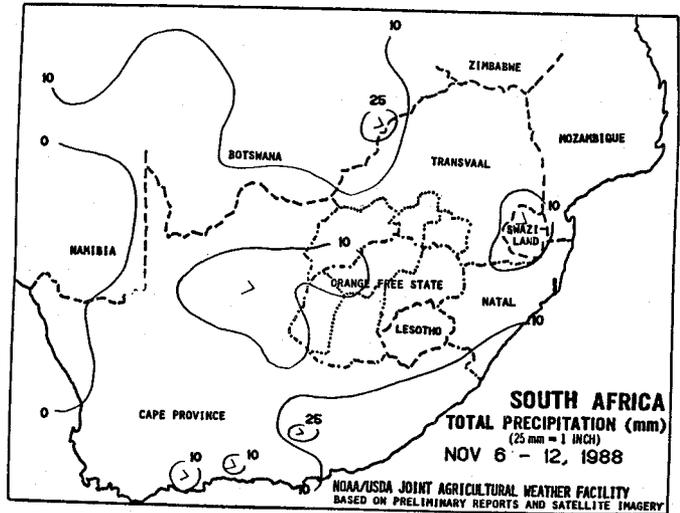
EUROPE ... Cold weather remained over eastern Europe, with scattered light snow and rain (less than 10mm) and mean weekly temperatures from 3-8 degrees C below normal across most growing areas. Persistent cold weather since late October has caused many eastern winter grains to slip into dormancy 1-3 weeks ahead of normal. In contrast, above-normal temperatures covered the western half of the continent, favoring winter grain establishment. Widespread rain (15-50mm, with scattered amounts greater than 50mm) benefited newly planted and establishing winter crops across the Iberian Peninsula and southern France. During October, above-normal precipitation fell across scattered areas of the southwestern two-thirds of the continent, while the northeast was drier than normal. Mean temperatures were normal to above normal in western and central areas, and below normal in the east.



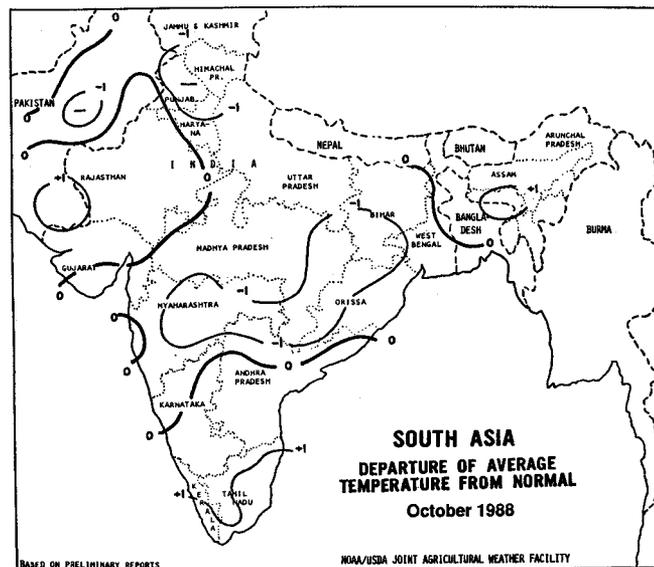
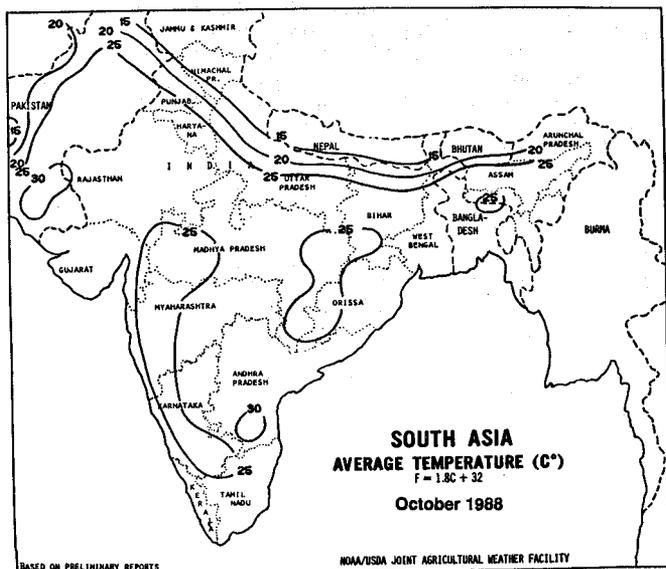
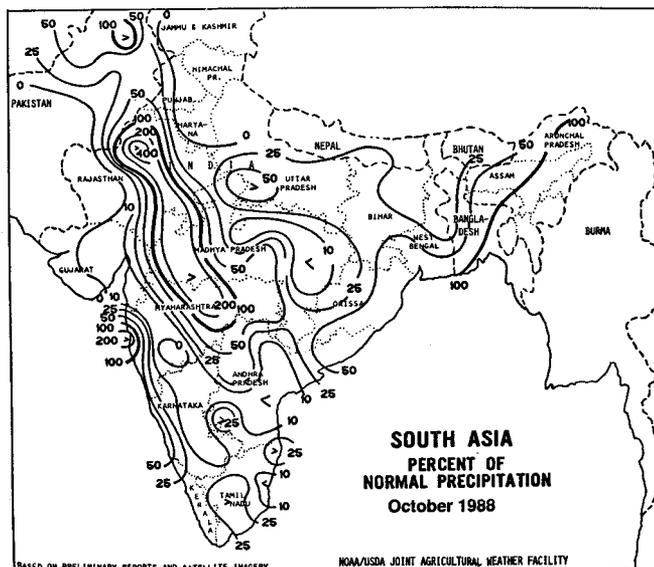
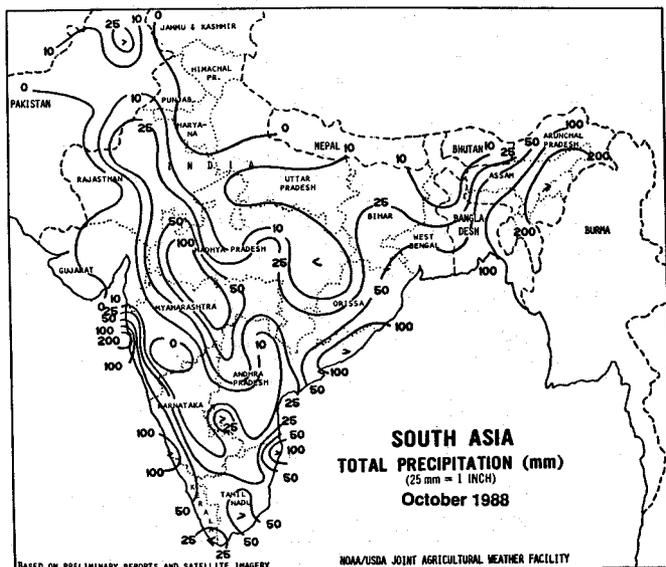
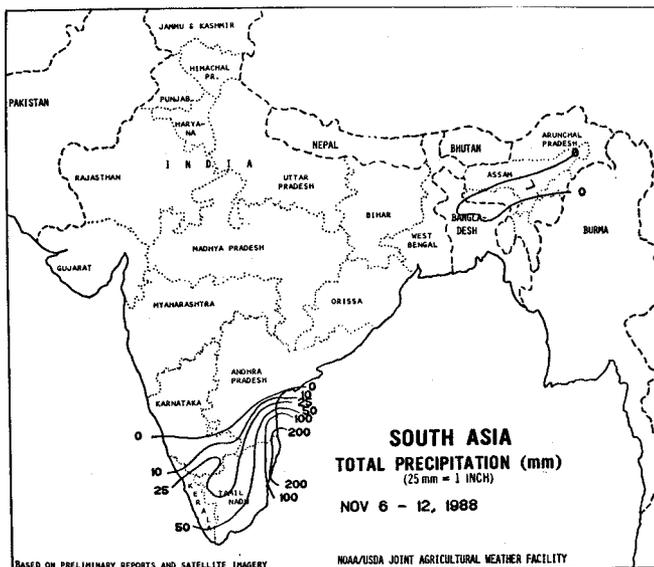
NORTHWESTERN AFRICA ... The first substantial rains of the autumn covered winter grain areas in Morocco on November 10 and 11. Rainfall amounts ranged from 10 to 25mm in northern Morocco and 28 to 72mm in the south. The rain reversed October's below-normal precipitation pattern in Morocco and will likely promote winter grain planting, particularly in southern crop areas where rainfall was the highest. In Algeria and Tunisia, mostly dry weather continued October's below-normal precipitation pattern, keeping topsoils too dry for uniform crop emergence. As a result, farmers continued to wait for the arrival of significant autumn rains before they can begin to plant winter grains.



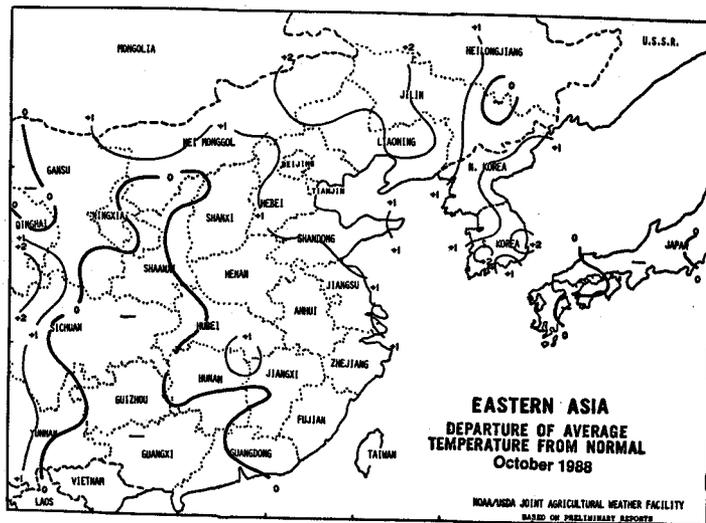
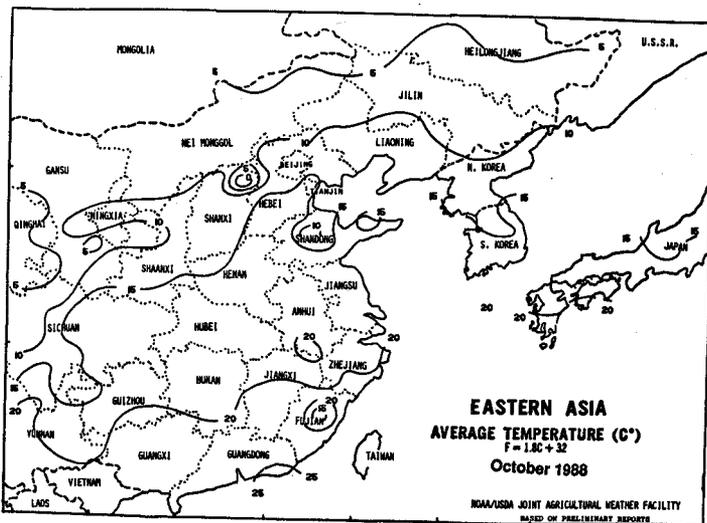
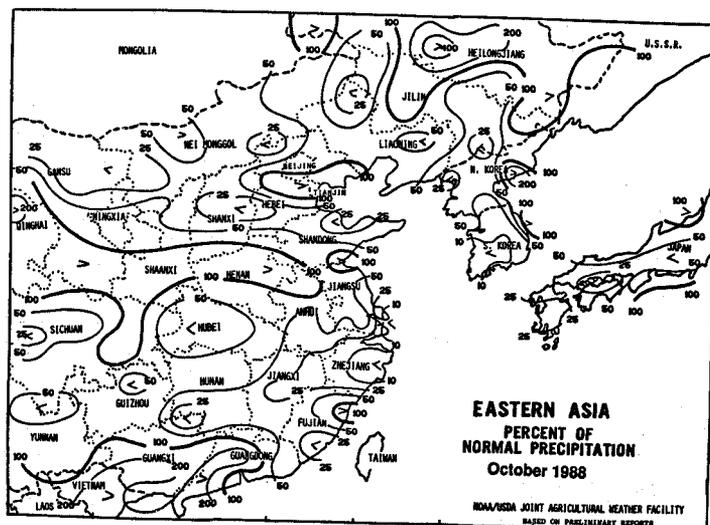
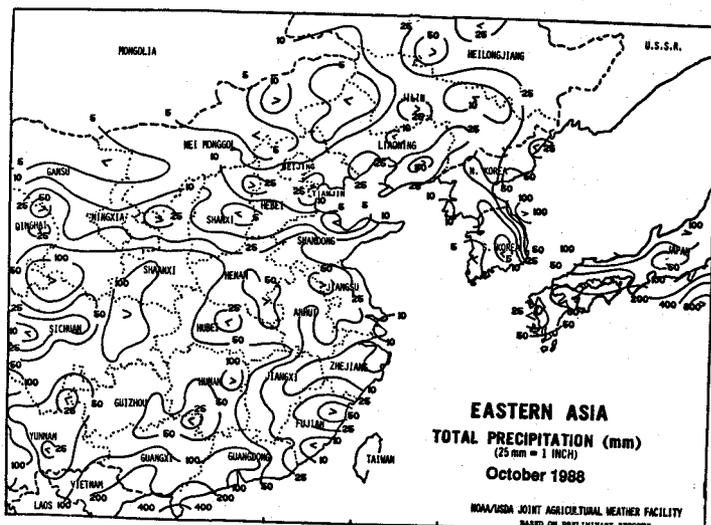
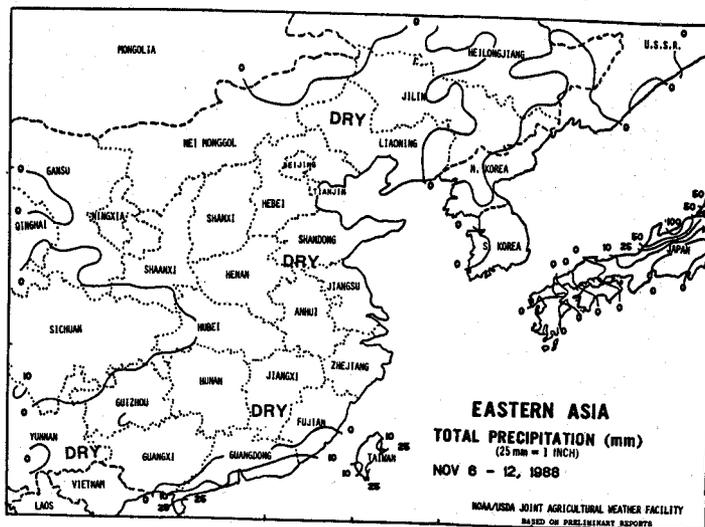
SOUTH AFRICA ... Much-needed drier weather provided favorable planting conditions across the northern half of the Maize Triangle. Rainfall averaged less than 10mm over most areas of the Triangle but due to last week's wet weather, portions of the south are still too wet for fieldwork. Moderate showers (15-30mm) fell from southern Natal to the southern Cape Province. In October, frequent moderate to heavy rainfall boosted subsoil moisture levels but left most areas too wet for fieldwork. Most areas of the Maize Triangle received more than 100mm of rainfall, which is near or above 200% of normal. Temperatures averaged as much as 2 degrees C below normal, reducing evaporation rates. Corn planting usually lasts until mid-December.



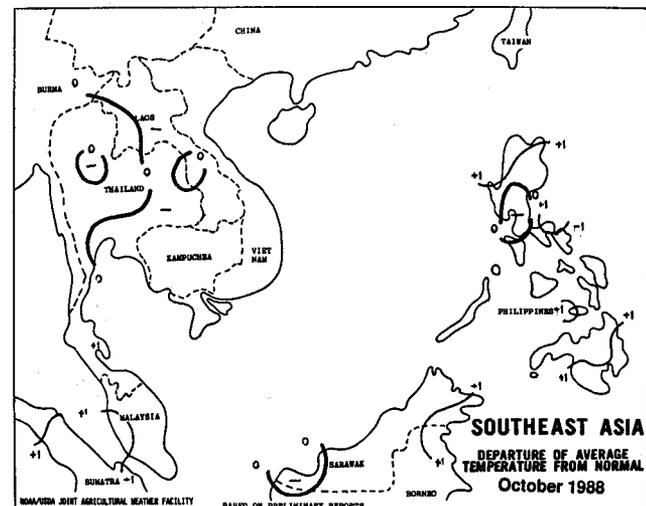
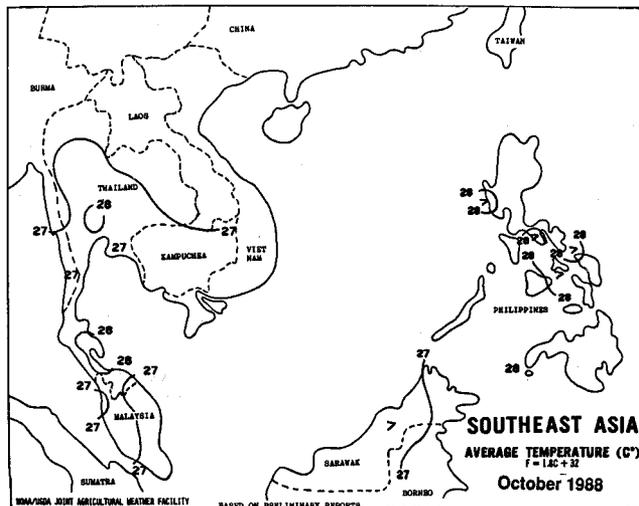
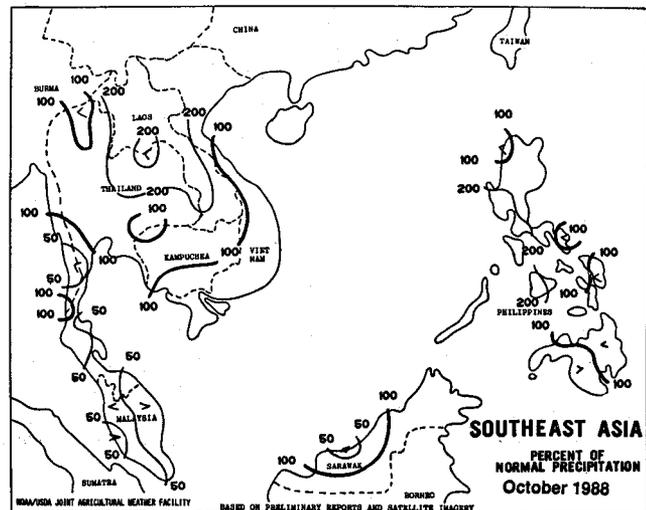
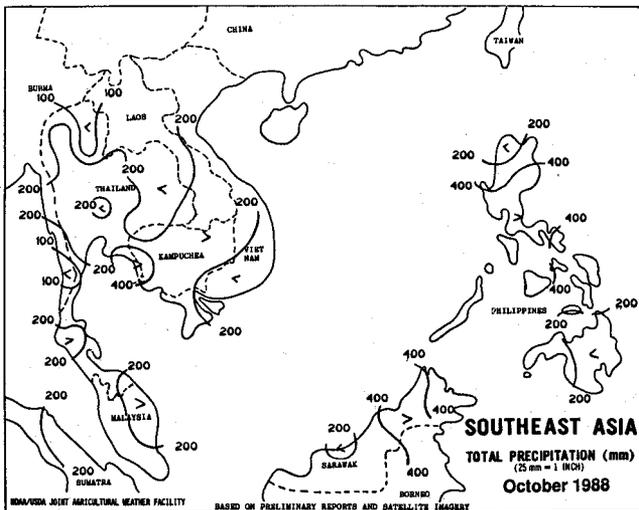
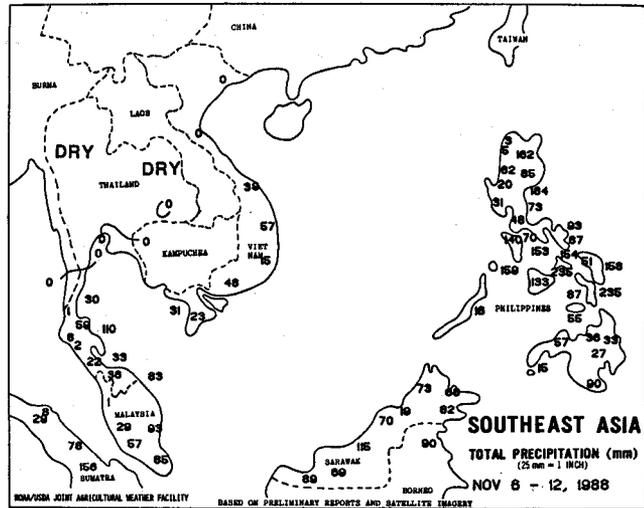
SOUTH ASIA ... Heavy showers (100-200mm or more) over southeast coastal areas from northern Tamil Nadu to southern Andhra Pradesh caused flooding and some damage to mature rice. Lighter rain (10-25mm or more) benefited immature crops in interior crop regions of Tamil Nadu, but further north, dry weather persisted over southern India's cotton regions. Dry weather continued across the north, favoring wheat planting. In October, dry weather set in ahead of normal over most regions of central and southern India, reducing moisture reserves for flowering to boll filling cotton. Locally heavy rain during the first week in October, however, likely caused local flooding in parts of western Madhya Pradesh and Maharashtra and in far eastern India. A tropical cyclone hit Bangladesh in mid-October, causing flooding and wind damage in coastal regions. The mostly dry weather across northern India favored winter wheat planting, but 2 months of below-normal rainfall from central Uttar Pradesh eastward may have kept irrigation supplies below normal levels.



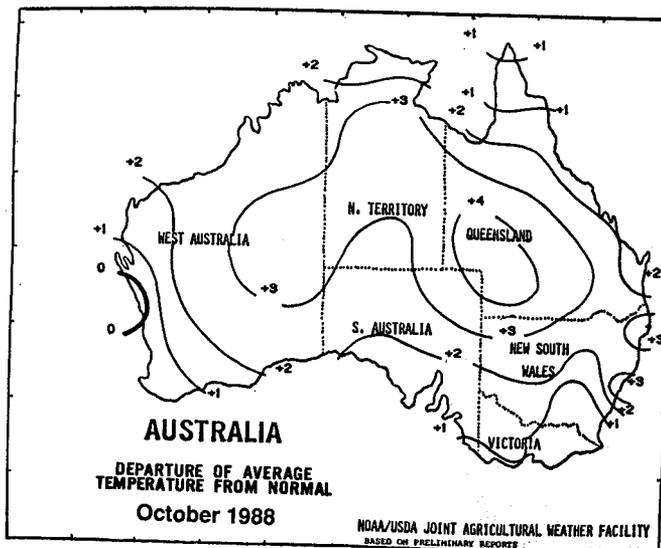
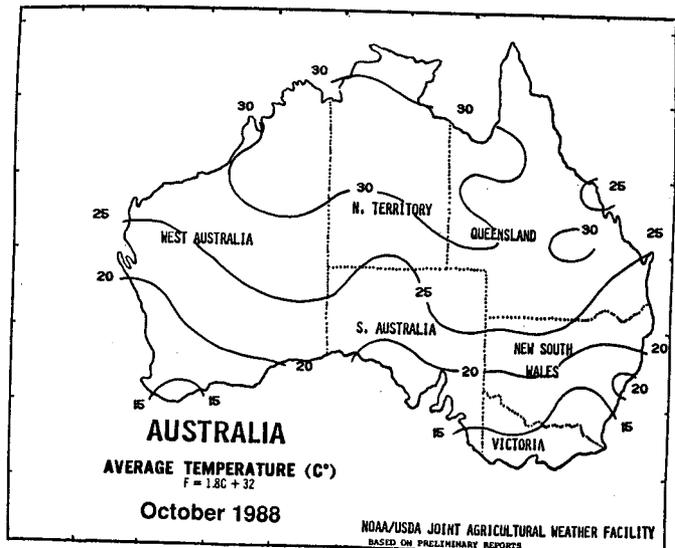
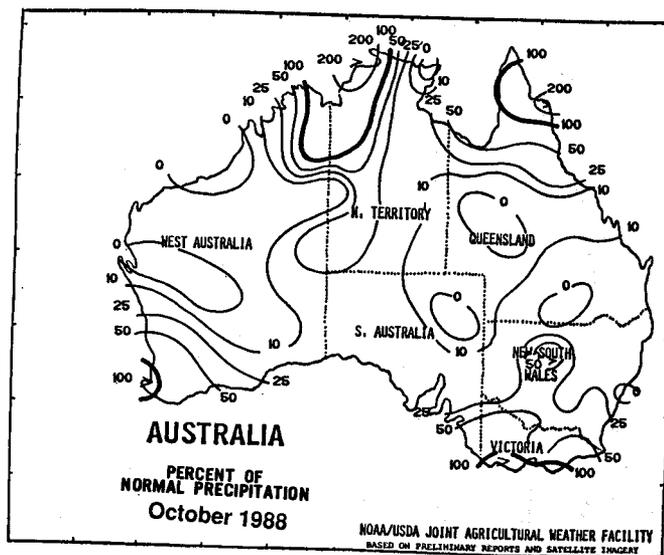
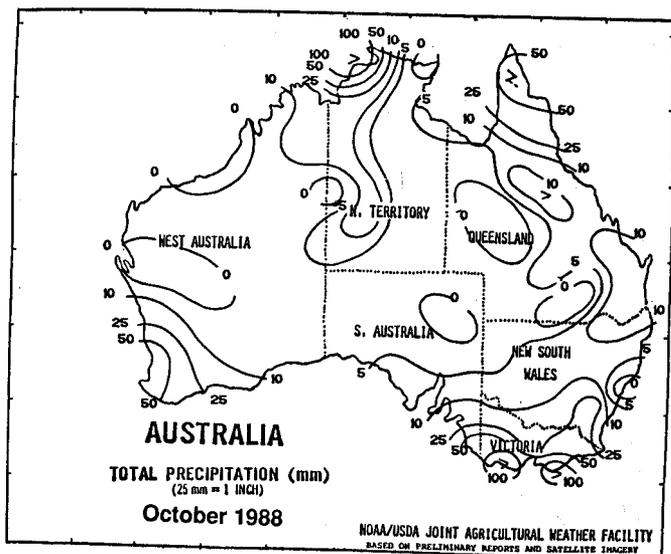
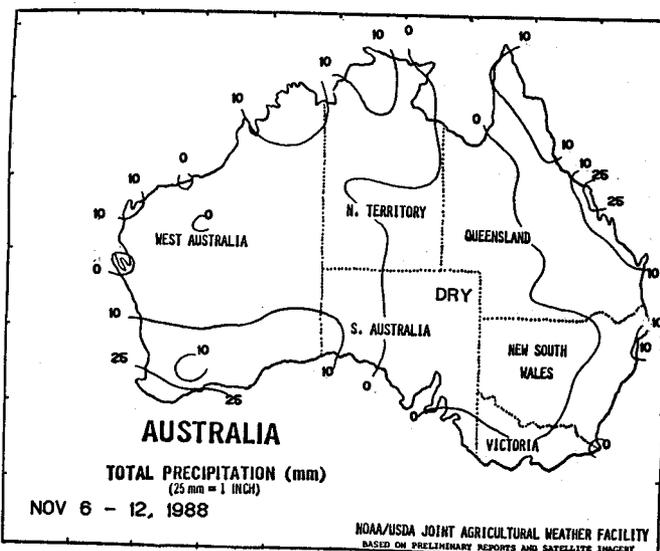
EASTERN ASIA ... Mostly dry and warmer-than-normal weather covered Chinese winter crop areas, continuing a trend that has persisted during much of the fall season. Below-normal rainfall during October and early November has likely resulted in unfavorably dry conditions for establishing winter crops in eastern portions of the North China Plain, especially Shandong. Scattered light rain and snow (less than 10mm) covered sections of Manchuria and the Korean Peninsula, while heavy rain (25-50mm, with isolated amounts greater than 100mm) continued fieldwork delays in northern Honshu and Hokkaido in Japan. In the south, moderate to heavy rain (15-50mm) from the remnants of Typhoon Skip caused further delays in late rice harvest in coastal areas of Guangxi and Guangdong, while interior areas remained dry. October precipitation was above normal over scattered areas of Manchuria, Japan, the eastern Korean Peninsula, and western Chinese crop areas, and below normal over the remainder of the region. Mean temperatures were above normal in all crop areas except for Japan and western China, where they were normal to below normal.



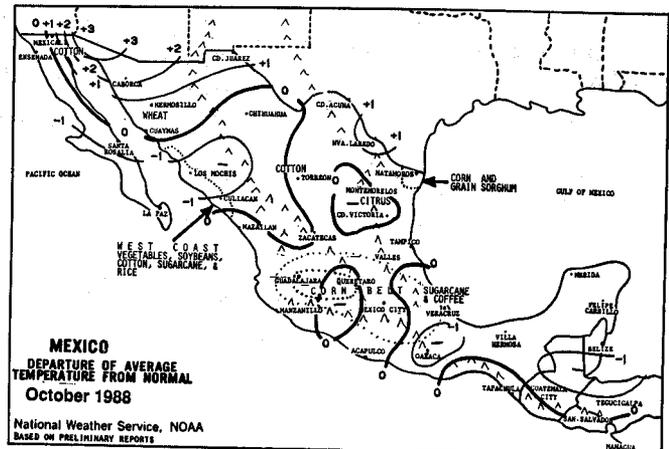
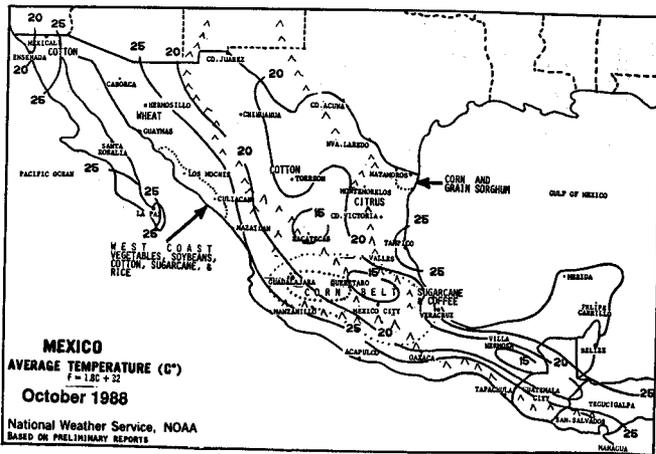
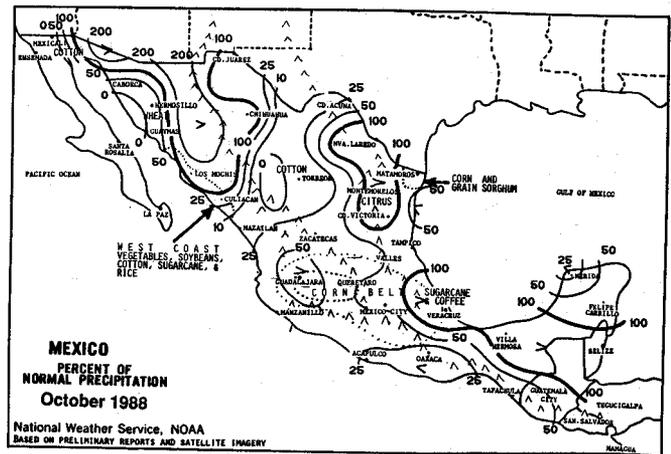
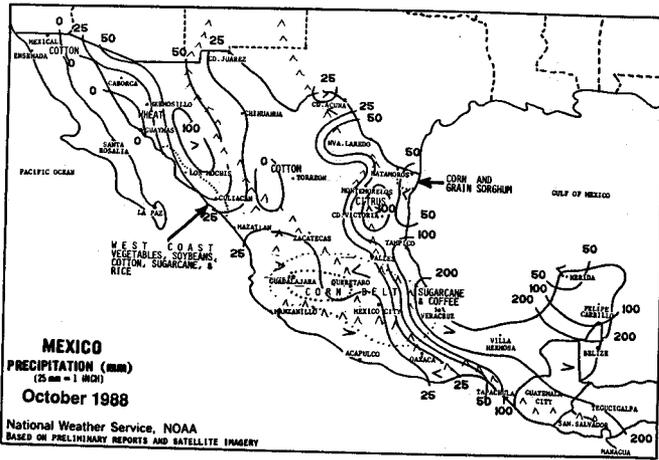
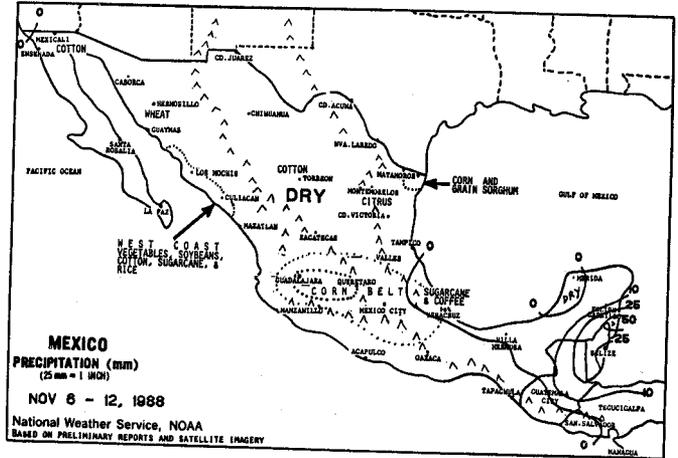
SOUTHEAST ASIA ... Typhoon Skip plowed through the central Philippines, bringing high winds and inundating rain (100-235mm) to grain, copra, and sugarcane producing regions. Skip was the fifth tropical system to pass over the Philippines since early October, the most severe being Typhoon Ruby which hit central regions the third week of the month. Flooding and crop damage from the storms was likely from central Luzon to western Mindanao. In Indochina, dry weather benefited maturing crops in Thailand and northern Vietnam, but locally heavy rain (50-100mm or more) from Typhoon Tess along Vietnam's southeastern coast caused flooding and crop damage. Moderate to heavy showers (30-100mm or more) covered Malaysia and most of Java. In October, persistent, above-normal rainfall caused flooding and some damage to mature crops from Bangkok to Thailand's Northern Hills region. The return to wetter weather in northeastern Thailand, however, benefited immature crops but delayed rice harvesting. Frequent tropical activity caused flooding along Vietnam's coast, with Tropical Storm Pat causing damage to soaked crops in mid-October. Periods of excessive rain caused flooding along the Malay Peninsula, but monthly totals in most areas were below normal.

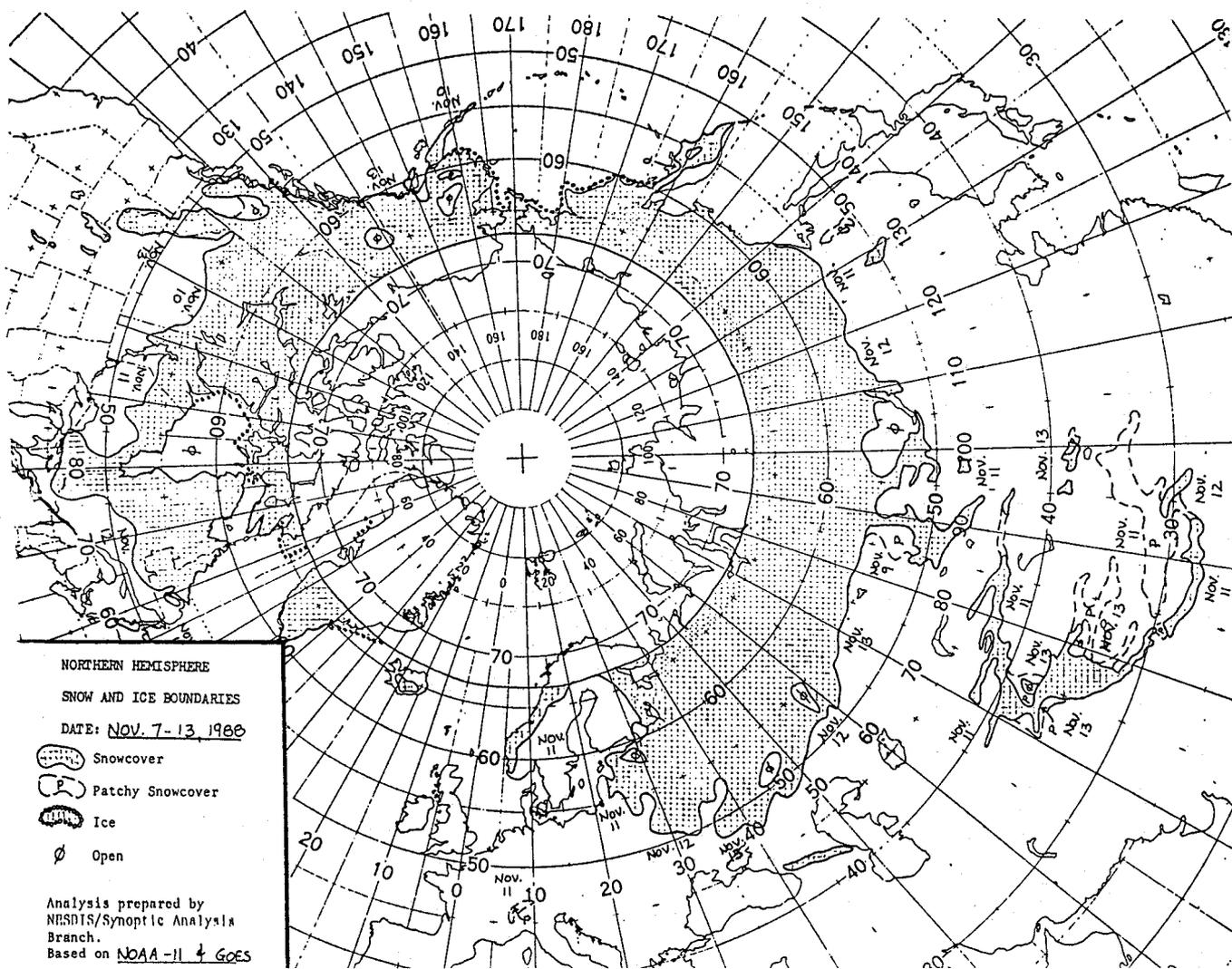


AUSTRALIA ... Dry and warmer-than-normal weather returned to crop areas in Queensland, New South Wales, Victoria, and South Australia, favoring winter grains harvest. Moderate to heavy showers (15-30mm) along Queensland's east coast caused delays in sugarcane harvest which is nearing completion in many areas. In Western Australia, moderate to heavy rain (15-40mm) benefited filling winter grains in southern crop areas, while causing early harvest delays in northern crop areas. Below-normal rainfall in October caused stress in filling winter grains across crop areas in southwestern New South Wales, northwestern Victoria, and South Australia, but favored drydown and early harvest of crops in southern Queensland and northern New South Wales. Above-normal mean temperatures covered all but extreme western growing areas, continuing a warmer-than-normal trend that has persisted as long as 6 months in some southeastern areas.



MEXICO ... Seasonably dry weather covered much of the country. Some cloudiness along the southeast coast produced very light rain (1mm). Heavier tropical showers (10-50mm) fell along the Caribbean coast from the southern Yucatan peninsula into Belize. October rainfall averaged near to above normal in the northwestern mountainous region, providing favorable moisture for irrigation reserves and wheat planting. Near-normal October rain also fell in the northeastern mountains and from Veracruz southeastward to the Yucatan. Below-normal rainfall favored the summer crop harvest across the Southern Plateau. Weekly summaries will be discontinued until the onset of the spring planting season. Monthly temperature and precipitation maps will continue as usual.





Recent cold weather has contributed to the snow cover being farther south than normal for this date in the USSR winter grain areas. Snow extended southward into the Ukraine.

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

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

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NOAA/USDA Joint Agricultural
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OFFICIAL BUSINESS
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WEEKLY NEWS BULLETIN
SECOND CLASS

SECOND CLASS MAIL
POSTAGE AND FEES PAID
NOAA PERMIT NO.

ISSN 0043 1974