

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

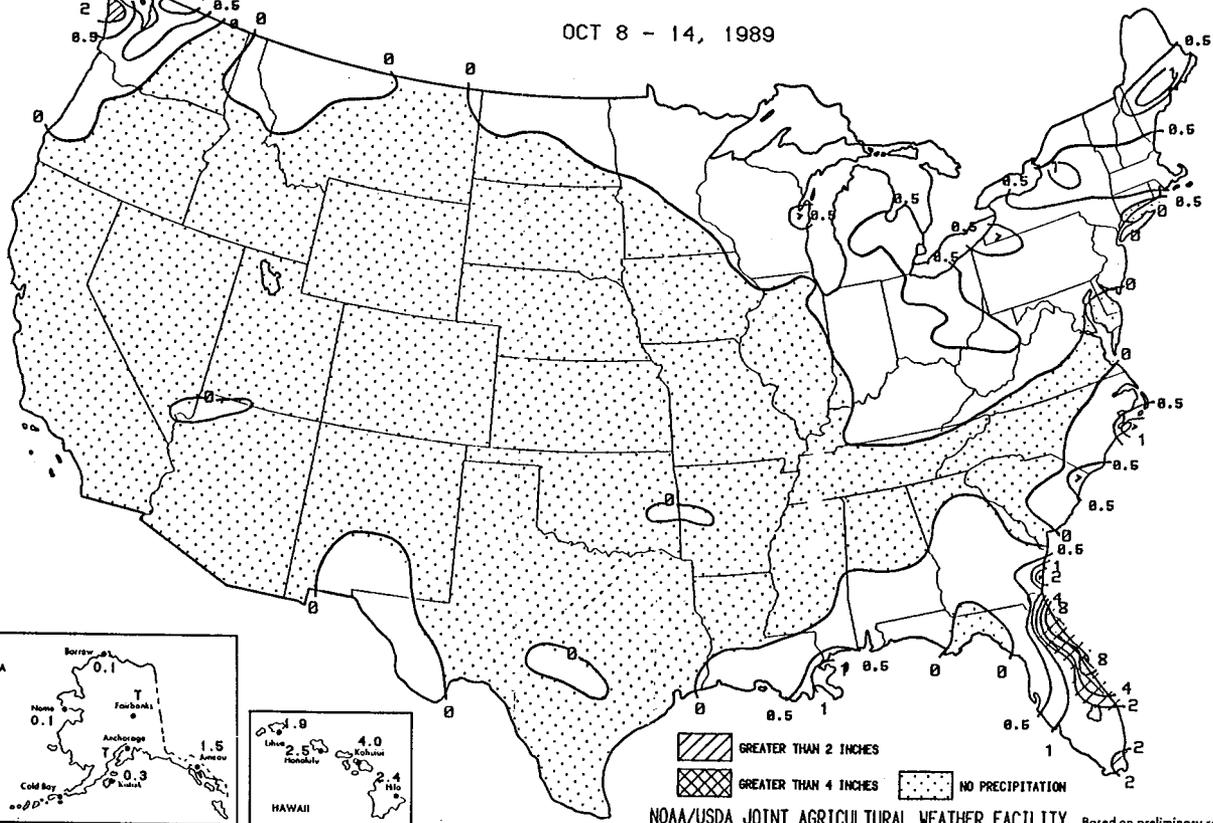
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October 17, 1989

TOTAL PRECIPITATION, INCHES

OCT 8 - 14, 1989



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

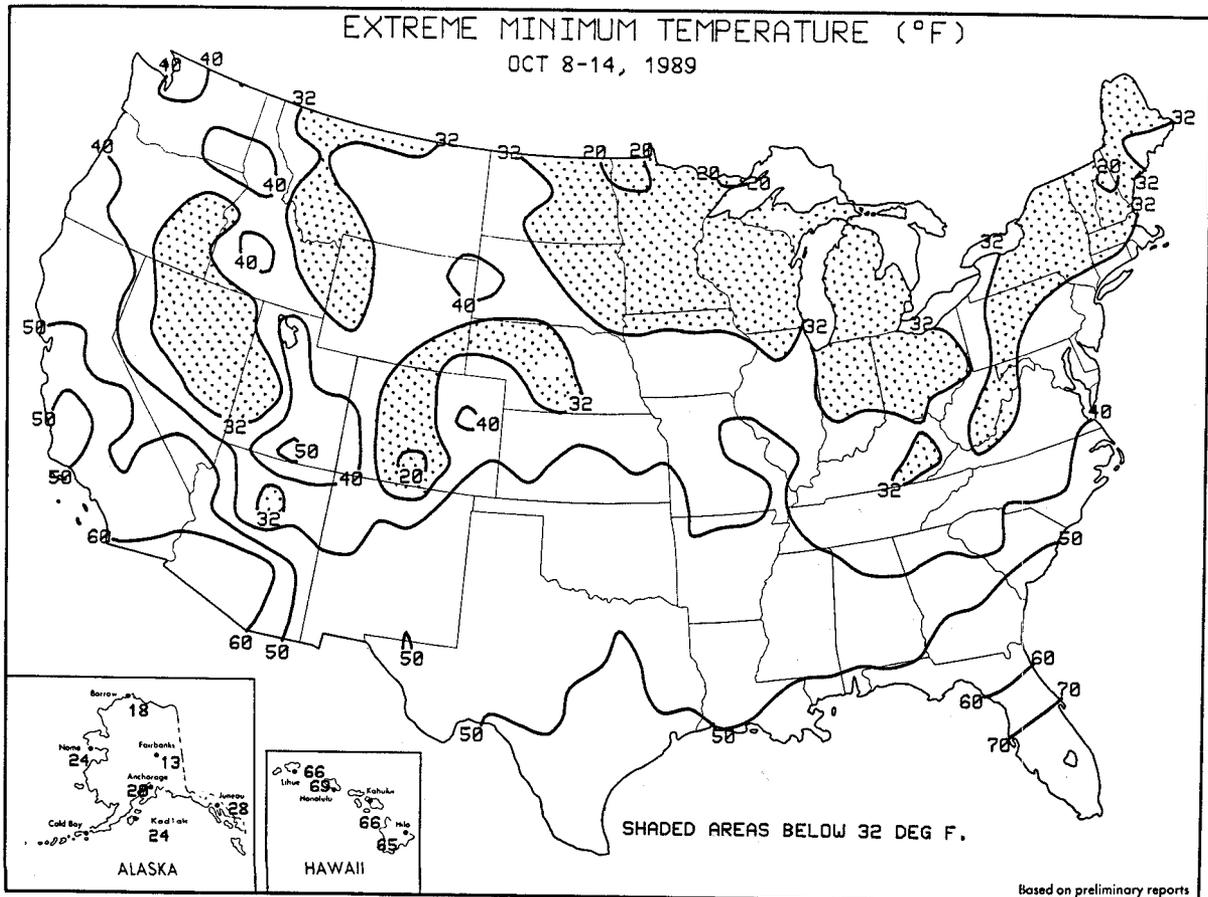
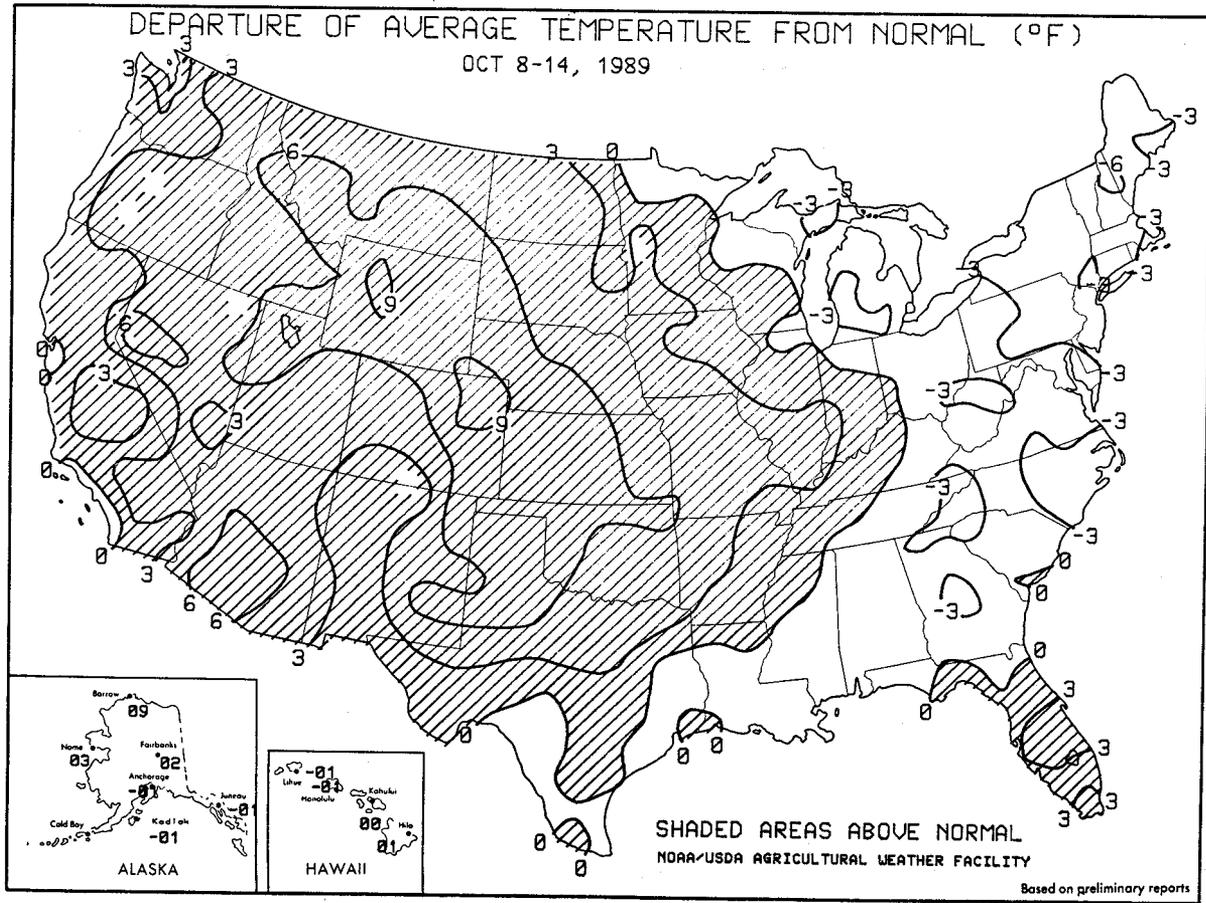
HIGHLIGHTS

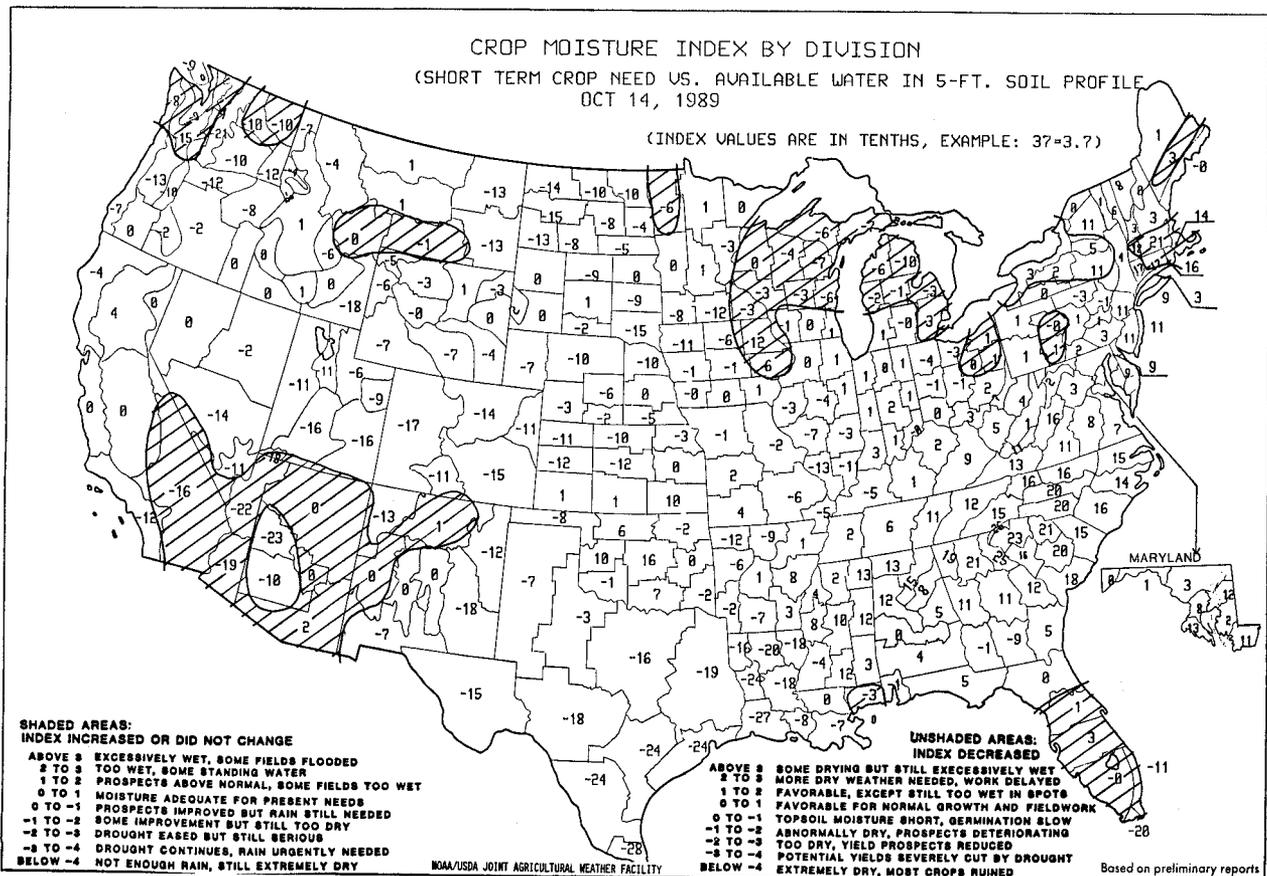
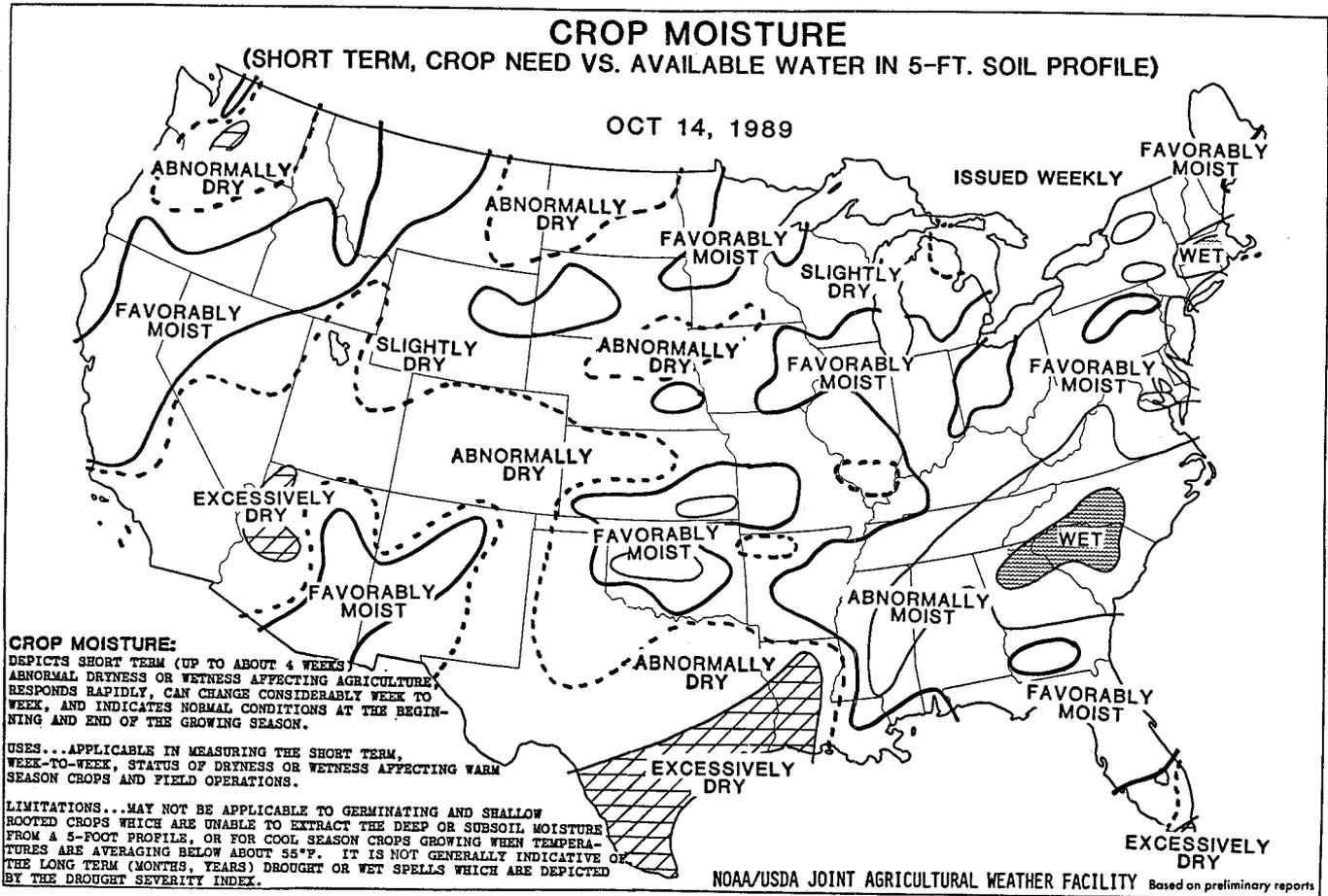
October 8-14, 1989

Harvest conditions prevailed as warm and dry weather covered the western two-thirds of the Nation. The unseasonably high temperatures spread across the East with record-low temperatures early in the week being replaced by an Indian summer. A stationary front across Florida during the first of the week caused torrential rain along the southern Atlantic coast. Over a foot of rain inundated St. Augustine, FL, on Monday night and Tuesday morning. A tropical depression in the Gulf of Mexico intensified to become Hurricane Jerry and was approaching Galveston, TX, at week's end.

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National Weather Data for Selected Cities

Weather Data for the Week Ending October 14, 1989

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	TEMPERA- TURE °F		PRECIPI- TATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	77	48	84	41	62	-2	0	-6	0	6.3	112	51.6	116	95	40	0	0	0	0
MOBILE	77	56	82	50	67	-4	.3	-3	.3	5.1	64	45.0	83	92	48	0	0	0	0
MONTGOMERY	79	51	84	45	65	-2	.3	-3	.3	5.1	64	45.0	83	92	48	0	0	0	0
AK ANCHORAGE	42	30	49	20	36	-1	T	-4	T	4.7	143	22.4	188	83	45	0	6	1	0
BARROW	29	23	31	18	26	9	.1	-1	.1	.8	95	7.0	182	97	73	0	7	3	0
FAIRBANKS	37	23	43	13	30	2	T	-1	T	1.0	70	7.8	91	90	54	0	7	1	0
JUNEAU	46	38	51	28	42	-1	1.5	-3	.6	12.1	122	32.9	84	99	76	0	0	0	0
KODIAK	50	31	54	24	41	-1	.4	-2	.3	11.2	118	41.4	91	94	49	0	5	3	0
NOME	38	28	40	24	33	3	.1	-2	.1	3.0	99	18.2	147	88	57	0	6	0	0
AZ PHOENIX	100	70	101	69	85	9	0	-1	0	.6	62	4.1	78	42	16	7	0	0	0
PRESCOTT	83	45	85	40	64	4	0	-3	0	.8	40	9.0	59	50	13	0	0	0	0
TUCSON	94	61	97	60	78	5	0	-2	0	1.5	85	5.8	64	60	14	0	0	0	0
YUMA	99	68	103	66	84	5	0	-1	0	.1	26	6.9	389	52	14	7	0	0	0
AR FORT SMITH	88	48	94	39	68	4	T	-7	T	3.8	82	45.6	145	98	25	4	0	0	0
LITTLE ROCK	80	56	85	46	68	3	0	-6	0	5.2	95	44.7	115	75	43	0	0	0	0
CA BAKERSFIELD	88	57	93	52	73	3	0	-1	0	.5	223	2.8	68	66	26	5	0	0	0
EUREKA	61	50	70	46	56	1	T	-5	T	.9	50	20.2	83	95	80	0	0	0	0
FRESNO	87	55	91	53	71	4	0	-1	0	1.1	396	6.0	82	81	28	2	0	0	0
LOS ANGELES	71	61	77	57	66	-1	0	0	0	.3	200	3.5	41	91	65	0	0	0	0
REDDING	83	48	85	47	66	-3	0	-4	0	4.8	289	24.7	92	94	32	0	0	0	0
SACRAMENTO	84	51	90	49	68	2	0	-2	0	3.3	647	12.4	111	96	32	1	0	0	0
SAN DIEGO	71	63	74	62	67	0	0	-1	0	.2	92	2.2	32	89	67	0	0	0	0
SAN FRANCISCO	71	53	86	49	62	0	T	-2	T	1.2	243	8.6	67	96	53	0	0	0	0
CO DENVER	80	46	84	40	63	9	0	-2	0	1.5	92	13.7	104	46	13	0	0	0	0
GRAND JUNCTION	79	46	81	41	62	5	0	-2	0	.3	28	5.3	86	34	12	0	0	0	0
PUEBLO	84	40	89	32	62	6	0	-2	0	1.0	87	6.8	70	49	9	0	1	0	0
CT BRIDGEPORT	63	43	74	36	53	-5	0	-7	0	3.7	79	39.9	125	69	42	0	0	0	0
HARTFORD	63	38	76	29	51	-4	.7	-1	.4	6.2	113	44.2	130	89	36	0	1	3	0
DC WASHINGTON	70	48	83	42	59	-2	T	-7	T	8.5	188	42.2	135	94	45	0	0	0	0
FL APALACHICOLA	80	65	84	59	72	1	T	-8	T	11.3	107	45.6	96	90	59	0	0	0	0
DAYTONA BEACH	83	70	89	66	77	2	9.0	7.9	6.8	14.3	157	37.4	90	92	65	0	0	5	2
JACKSONVILLE	80	62	87	54	71	0	.7	-3	.7	15.3	179	47.0	103	95	65	0	0	2	1
KEY WEST	89	78	90	75	84	3	1.0	-2	.5	5.2	59	22.3	70	89	63	2	0	5	0
MIAMI	90	75	92	73	82	3	1.6	-1	1.1	8.3	71	40.8	83	95	60	4	0	3	1
ORLANDO	87	71	91	70	79	3	.1	-7	.1	11.5	143	39.2	89	96	55	2	0	3	0
TALLAHASSEE	80	63	84	55	71	1	T	-7	T	6.6	82	53.1	96	92	50	0	0	0	0
TAMPA	86	72	92	70	79	3	.4	-2	.3	6.6	87	35.5	85	93	60	2	0	3	0
WEST PALM BEACH	89	74	90	72	81	3	1.6	-3	.3	6.0	45	31.7	63	97	62	1	0	3	2
GA ATLANTA	75	52	82	44	64	0	.1	-5	.1	13.3	312	54.8	139	87	37	0	0	1	0
AUGUSTA	78	51	84	42	65	-1	T	-5	T	5.3	116	42.6	116	96	44	0	0	0	0
MACON	76	52	81	47	64	-3	T	-4	T	4.2	97	39.1	105	92	45	0	0	2	0
SAVANNAH	76	59	84	56	68	-1	T	-6	T	10.8	167	38.3	87	93	48	0	0	0	0
HI HILO	84	68	87	65	76	1	2.4	.4	1.8	15.5	148	151.7	161	95	64	0	0	3	2
HONOLULU	85	72	87	69	79	-1	2.5	2.2	1.1	4.6	367	19.8	128	93	65	0	0	3	2
KAHULUI	87	68	89	66	78	0	4.0	3.8	3.3	4.2	813	32.9	259	94	59	0	0	2	2
LIHUE	83	70	84	66	76	-1	1.9	.9	1.4	3.7	92	44.8	149	95	68	0	0	5	1
ID BOISE	74	43	83	41	59	5	0	-2	0	1.4	169	8.8	104	76	28	0	0	0	0
LEWISTON	70	49	79	47	60	6	0	-2	0	.6	53	12.0	123	67	35	0	0	0	0
POCATELLO	72	38	79	31	55	5	0	-2	0	.7	70	7.8	95	64	20	0	1	0	0
IL CHICAGO	70	41	85	32	56	0	T	-5	T	4.2	81	25.6	89	90	32	0	1	1	0
MOLINE	73	42	84	35	58	2	0	-6	0	6.1	120	29.9	94	91	35	0	0	0	0
PHORIA	72	44	84	36	58	2	T	-6	T	3.3	67	19.6	66	88	39	0	0	0	0
QUINCY	77	48	86	39	63	5	0	-8	0	3.2	55	15.5	48	80	34	0	0	0	0
ROCKFORD	68	38	80	28	53	-1	0	-7	0	2.3	44	24.3	79	96	37	0	2	0	0
SPRINGFIELD	75	46	86	35	61	3	0	-6	0	5.7	128	25.8	90	86	37	0	0	0	0
IN EVANSVILLE	79	45	91	37	62	3	0	-5	0	2.3	61	42.3	127	97	30	1	0	0	0
FORT WAYNE	70	39	84	26	54	-1	.2	-4	.2	4.4	119	30.3	108	89	32	0	2	1	0
INDIANAPOLIS	72	45	84	30	58	2	.1	-5	.1	8.1	213	43.0	137	93	36	0	1	1	0
SOUTH BEND	68	40	86	27	54	-1	T	-7	T	3.9	83	29.4	97	88	32	0	2	2	0
IA DES MOINES	74	46	84	37	60	4	0	-5	0	6.1	147	26.8	99	80	37	0	2	0	0
SIOUX CITY	76	41	85	33	59	4	0	-4	0	4.4	130	18.5	81	74	26	0	0	0	0
WATERLOO	71	39	81	33	55	2	0	-6	0	3.7	81	16.4	57	87	36	0	0	0	0
KS CONCORDIA	84	49	92	37	66	7	0	-5	0	4.3	108	23.2	95	75	26	1	0	0	0
DOUGLASS CITY	86	49	94	42	68	7	0	-3	0	2.4	96	20.1	109	71	19	3	0	0	0
GOODLAND	84	43	91	39	64	9	0	-2	0	1.3	68	17.7	120	70	16	1	0	0	0
TOPEKA	83	46	90	33	64	4	0	-7	0	8.7	179	34.3	119	92	27	1	0	0	0
WICHITA	85	51	92	42	68	6	0	-6	0	7.4	159	33.9	136	83	26	1	0	0	0
KY BOWLING GREEN	77	46	86	36	61	1	T	-6	T	3.6	81	52.0	133	92	39	0	0	1	0
LEXINGTON	71	47	84	33	59	0	.3	-3	.3	5.5	127	46.1	123	91	44	0	0	1	0
LOUISVILLE	75	47	87	36	61	1	.2	-4	.1	2.8	63	44.7	128	96	43	0	0	2	0
LA ALEXANDRIA	83	51	87	44	67	-2	T	-6	T	.4	10	52.5	126	92	31	0	0	0	0
BATON ROUGE	81	57	86	49	69	-1	.4	-2	.4	4.9	87	65.7	145	96	48	0	0	1	0
LAKE CHARLES	85	56	90	48	71	0	T	-8	T	.5	6	53.7	125	95	35	1	0	0	0
NEW ORLEANS	77	60	84	56	69	-2	.3	-3	.3	4.8	67	41.2	84	97	56	0	0	2	0

Based on 1951-80 normals

Weather Data for the Week Ending October 14, 1989

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			
SHREVEPORT	85	52	90	46	69	0	0	-6	0	1.4	31	54.1	156	95	32	1	0	0	0			
ME CARIBOU	50	33	60	26	42	-3	.1	-6	-1	4.3	88	25.8	91	90	52	0	4	2	0			
PORTLAND	58	35	72	27	47	-3	.3	-6	.3	5.4	112	31.5	99	90	43	0	4	1	0			
MD BALTIMORE	69	44	82	36	56	0	.1	-6	0	4.9	100	44.1	132	96	49	0	0	2	0			
SALISBURY	70	43	82	33	57	-3	0	-9	0	9.0	159	45.1	123	97	40	0	0	0	0			
MA BOSTON	61	45	73	38	53	-3	.8	0	.6	6.0	124	33.1	100	81	37	0	0	2	1			
CHATHAM	60	45	67	38	53	-3	.7	-1	.4	5.5	102	36.3	103	86	62	0	0	2	0			
MI ALPENA	57	37	71	27	47	-2	.2	-3	.1	2.4	59	16.4	69	91	43	0	2	3	0			
DETROIT	65	40	83	28	53	-1	.6	-1	.6	3.7	116	24.4	98	94	44	0	1	1	1			
FLINT	63	38	82	25	51	-2	.6	-1	.6	5.0	154	26.4	112	89	40	0	2	2	1			
GRAND RAPIDS	64	36	80	23	50	-3	.5	-1	.3	5.7	128	27.4	103	93	40	0	2	3	0			
HOUGHTON LAKE	58	37	74	22	48	-1	.3	-2	.3	1.5	38	16.4	72	92	45	0	2	1	0			
LANSING	65	36	83	23	51	-1	.2	-2	.2	3.9	101	25.3	106	91	38	0	2	2	0			
MARQUETTE	56	31	69	20	44	-3	.1	-6	.1	1.8	34	20.8	69	91	38	0	3	2	0			
MUSKEGON	62	37	73	24	49	-4	.2	-4	.1	3.2	77	20.4	84	96	45	0	2	2	0			
SAULT ST. MARIE	54	35	64	28	45	-3	.1	-6	.1	2.1	41	18.5	71	93	45	0	4	2	0			
MN ALEXANDRIA	67	37	73	27	52	3	.3	-5	T	3.5	111	18.8	87	83	30	0	1	0	0			
DULUTH	60	34	71	24	47	0	.2	-3	T	4.9	113	24.1	95	90	36	0	3	2	0			
INT'L FALLS	55	34	64	22	45	-1	.1	-3	.1	2.6	64	19.0	90	88	43	0	3	1	0			
MINNEAPOLIS	68	38	76	27	53	1	T	-4	T	1.4	42	21.2	92	80	30	0	2	0	0			
ROCHESTER	68	38	80	26	53	2	T	-6	T	1.2	26	20.3	82	88	40	0	2	0	0			
MS GREENWOOD	81	53	87	45	67	1	T	0	-6	0	7.3	161	58.9	142	92	39	0	0	0	0		
JACKSON	81	50	86	42	65	0	-2	0	-5	0	5.4	118	41.3	100	97	38	0	0	0	0		
MERIDIAN	79	48	86	40	64	-2	0	0	-6	0	7.1	148	55.0	129	100	40	0	0	0	0		
MO CAPE GIRARDEAU	81	48	92	41	65	0	-1	0	-5	0	2.9	59	45.4	127	95	30	2	0	0	0		
COLUMBIA	78	48	86	41	63	3	0	0	-8	0	2.6	48	33.1	107	87	38	0	0	0	0		
KANSAS CITY	80	50	88	37	65	4	0	0	-8	0	8.9	148	34.2	109	82	34	0	0	0	0		
SAINT LOUIS	79	55	89	45	67	7	0	0	-5	T	2.2	59	26.9	97	74	32	0	0	0	0		
SPRINGFIELD	80	49	86	37	64	4	0	0	-8	0	3.0	52	30.0	93	84	34	0	0	0	0		
MT BILLINGS	69	45	79	38	57	6	0	0	-3	0	2.1	113	12.8	101	68	29	0	0	0	0		
GLASGOW	67	39	83	35	53	4	T	-1	T	.8	66	9.5	95	75	27	0	0	0	0	0		
GREAT FALLS	64	42	76	34	53	3	T	-2	T	2.3	163	20.5	157	74	35	0	0	0	0	0		
HAVRE	64	40	80	30	52	3	.2	-1	.2	1.2	90	10.3	99	63	33	0	1	2	0	0		
HELENA	68	40	80	33	54	7	T	-2	T	1.5	131	11.3	114	75	25	0	0	0	0	0		
KALISPELL	61	38	72	30	50	5	.2	0	.2	1.9	127	16.2	131	92	44	0	2	3	0	0		
MILES CITY	71	42	83	36	56	6	T	-2	T	.3	19	12.7	102	68	24	0	0	0	0	0		
MISSOULA	63	41	76	32	52	6	T	-2	T	1.1	79	11.9	112	88	37	0	1	1	0	0		
NE GRAND ISLAND	82	41	90	34	62	6	0	0	-3	0	6.8	220	20.8	99	83	23	2	0	0	0	0	
LINCOLN	80	41	89	34	61	5	0	0	-4	0	8.6	224	22.7	92	89	29	0	0	0	0	0	
NORFOLK	78	40	88	33	59	5	0	0	-3	0	3.8	136	15.6	72	87	25	0	0	0	0	0	
NORTH PLATTE	83	35	91	30	59	6	0	0	-2	0	1.1	53	13.7	76	88	15	1	2	0	0	0	
OMAHA	76	47	85	37	62	5	0	0	-5	0	6.7	147	21.1	78	72	43	0	0	0	0	0	
SCOTT'SBLUFF	82	39	86	31	60	8	0	0	-2	0	1.6	114	8.6	65	68	12	0	2	0	0	0	
VALENTINE	77	37	84	32	57	8	0	0	-2	0	2.1	110	11.5	73	71	23	0	1	0	0	0	
NV ELY	76	32	79	24	54	6	0	0	-1	0	.5	52	6.3	86	52	13	0	4	0	0	0	
LAS VEGAS	90	58	92	56	74	4	T	-1	T	0	2.2	70	70	23	12	4	0	0	0	0	0	
RENO	79	37	82	34	58	6	0	0	-1	0	1.6	454	6.8	130	79	15	0	0	0	0	0	
WINNEMUCCA	78	33	83	27	56	5	0	0	-1	0	.9	160	4.1	71	59	12	0	4	0	0	0	
NH CONCORD	59	31	73	23	45	-5	.5	-2	.4	5.3	119	30.3	109	96	40	0	5	2	0	0	0	
NJ ATLANTIC CITY	67	39	81	30	53	3	.2	-5	.2	7.4	178	43.1	132	96	42	0	2	1	0	0	0	
NM ALBUQUERQUE	78	48	81	45	63	3	0	0	-2	0	1.2	102	4.7	71	64	21	0	0	0	0	0	
CLOVIS	82	47	86	46	65	4	0	0	-5	0	1.5	53	14.1	93	67	18	0	0	0	0	0	
ROSWELL	88	51	92	49	69	7	0	0	-3	0	2.1	89	6.1	65	55	16	4	0	0	0	0	0
NY ALBANY	61	36	74	29	48	-4	.5	-1	.4	4.0	89	32.7	117	96	44	0	2	4	0	0	0	
BINGHAMTON	57	36	70	28	47	-4	.2	-5	.2	4.8	101	32.3	111	94	49	0	2	1	0	0	0	
BUFFALO	59	41	70	36	50	-3	.3	-4	.3	4.4	95	31.6	110	88	46	0	0	0	1	0	0	
NEW YORK	64	50	78	44	57	-2	.1	-6	.1	6.5	133	47.0	141	78	39	0	0	2	0	0	0	
ROCHESTER	60	38	71	31	49	-4	.8	-2	.7	4.2	111	27.5	111	94	45	0	1	2	1	0	0	
SYRACUSE	59	37	71	31	48	-5	.7	0	.6	7.0	151	29.0	95	96	48	0	2	4	1	0	0	
NC ASHEVILLE	71	39	82	31	55	-3	0	0	-7	0	8.9	169	50.6	141	99	37	0	2	0	0	0	0
CHARLOTTE	75	49	86	41	62	0	T	-6	T	9.5	197	41.2	117	87	36	0	0	0	0	0	0	
GREENSBORO	72	44	83	34	58	-2	0	0	-7	0	8.8	172	41.9	121	89	39	0	0	0	0	0	0
HATTERAS	72	55	78	52	63	-4	.4	-7	.4	22.6	282	73.2	167	94	52	0	0	0	1	0	0	
NEW BERN	72	49	82	44	61	-5	.4	-4	.4	11.5	153	54.0	121	97	50	0	0	0	1	0	0	
RALEIGH	73	46	83	37	59	-2	0	0	-6	0	5.7	127	45.1	132	93	42	0	0	0	0	0	0
WILMINGTON	74	51	84	45	63	-3	.2	-5	.2	11.4	157	54.9	121	96	50	0	0	0	1	0	0	0
ND BISMARCK	70	35	80	28	52	4	0	0	-2	0	1.3	75	10.3	75	74	23	0	3	0	0	0	0
FARGO	67	35	78	22	51	2	.1	-2	.1	2.3	91	17.6	102	77	27	0	1	1	0	0	0	0
GRAND FORKS	64	34	76	19	49	2	.1	-2	.1	.9	34	11.0	68	28	0	3	1	0	0	0	0	0
WILLISTON	68	39	79	36	54	5	.1	-1	.1	.7	40	9.1	75	26	0	0	0	1	0	0	0	0
OH AKRON-CANTON	63	42	80	31	52	-2	.4	-1	.4	4.9	123	33.8	116	8	0	1	1	0	0	0	0	0
CINCINNATI	72	45	84	33	58	1	.2	-4	.2	3.8	93	42.2	130	0	0	0	2	0	0	0	0	0
CLEVELAND	65	43	84	32	54	-1	.5	0	.5	5.6	139	35.0	123	0	0	1	2	0	0	0	0	0
COLUMBUS	69	41	85	29	55	-1	.4	0	.4	2.7	75	37.4	123	0	0	1	1	0	0	0	0	0

Weather Data for the Week Ending October 14, 1989

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	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE			
																90 AND ABOVE	52 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	69	44	83	30	57	0	.2	-.3	.2	6.0	183	42.6	151	93	40	0	1	1	0
TOLEDO	68	37	85	25	52	-1	.4	0	.4	3.7	110	33.4	131	94	32	0	2	1	0
YOUNGSTOWN	63	42	80	32	52	-2	.2	-.4	.2	7.3	171	37.7	125	93	47	0	1	2	0
OK OKLAHOMA CITY	84	55	90	48	70	5	0	0	0	6.3	132	39.0	146	82	29	1	0	0	0
TULSA	86	55	92	45	71	6	0	0	0	4.5	75	27.7	85	83	31	2	0	0	0
OR ASTORIA	63	48	71	39	56	2	.3	-1.0	.2	1.0	18	36.3	83	97	66	0	0	3	0
BURNS	72	32	78	30	52	2	0	0	0	.6	75	8.5	122	73	18	0	5	0	0
MEDFORD	79	44	85	40	62	5	0	0	0	1.9	146	12.8	104	91	30	0	0	0	0
PENDELTON	69	47	80	41	58	4	0	0	0	.1	13	10.1	121	61	34	0	0	0	0
PORTLAND	66	49	78	42	58	2	.1	-.6	.1	1.6	57	21.3	90	97	59	0	0	2	0
SALEM	70	44	77	36	57	3	T	-.7	T	1.1	39	18.4	73	97	50	0	0	0	0
PA ALLENTOWN	65	38	78	32	51	-4	.1	-.5	.1	6.7	124	38.2	109	95	41	0	1	1	0
ERIE	62	45	77	38	54	-1	.5	-.3	.4	4.6	82	32.9	106	85	48	0	0	3	0
HARRISBURG	66	40	78	35	53	-4	.1	-.6	.1	3.4	70	38.9	125	96	43	0	0	1	0
PHILADELPHIA	67	44	80	37	56	-3	T	-.6	T	6.1	130	43.4	132	93	42	0	0	1	0
PITTSBURGH	64	42	81	32	53	-2	.2	-.3	.2	5.4	139	37.2	124	93	47	0	1	2	0
SCRANTON	61	38	74	30	49	-4	.2	-.4	.1	4.4	97	30.1	109	96	44	0	2	2	0
R1 PROVIDENCE	63	40	74	32	51	-3	.6	-.2	.4	6.4	124	43.2	126	90	40	0	1	2	0
SC CHARLESTON	77	59	84	54	68	1	.2	-.5	.2	16.0	249	47.4	106	92	47	0	0	2	0
COLUMBIA	78	50	87	38	64	-2	T	-.6	T	6.8	124	44.1	105	93	40	0	0	1	0
FLORENCE	75	52	84	45	63	-2	T	-.6	T	8.7	165	44.1	117	91	43	0	0	0	0
GREENVILLE	75	44	85	35	60	-3	0	0	0	7.8	124	41.3	98	90	36	0	0	0	0
SD ABERDEEN	71	35	80	27	53	3	0	0	0	.2	117	17.1	107	84	26	0	3	0	0
HURON	76	34	82	24	55	3	0	0	0	1.3	81	13.0	78	79	21	0	2	0	0
RAPID CITY	75	37	85	28	56	4	0	0	0	3.3	235	11.1	75	72	25	0	0	0	0
SIOUX FALLS	75	37	85	28	56	4	0	0	0	1.6	81	13.0	78	79	21	0	2	0	0
TN CHATTANOOGA	76	47	83	40	62	-1	0	0	0	12.4	219	62.1	149	97	38	0	1	0	0
KNOXVILLE	74	44	83	36	59	-2	0	0	0	9.5	231	47.4	127	100	43	0	0	0	0
MEMPHIS	80	54	87	46	67	2	0	0	0	6.1	131	50.9	124	87	40	0	0	0	0
NASHVILLE	78	47	86	37	63	0	0	0	0	6.6	135	47.8	123	95	38	0	0	0	0
TX ABILENE	87	58	91	46	73	5	0	0	0	4.2	99	26.4	132	58	22	2	0	0	0
AMARILLO	87	51	91	47	69	8	0	0	0	2.5	105	19.0	111	64	16	2	0	0	0
AUSTIN	89	59	93	56	74	2	U	-.8	0	1.1	21	23.1	91	88	27	4	0	0	0
BEAUMONT	85	59	88	51	72	1	T	-.8	T	1.2	17	58.7	133	92	35	0	0	1	0
BROWNSVILLE	87	63	89	55	75	-2	T	-.9	T	2.5	36	15.5	74	95	46	0	0	0	0
CORPUS CHRISTI	87	62	89	55	74	-1	0	0	0	2.1	26	15.5	57	93	39	0	0	0	0
DEL RIO	84	59	89	53	72	-1	0	0	0	1.4	36	7.2	49	67	28	0	0	0	0
EL PASO	85	48	90	44	67	1	.2	0	.2	.7	37	7.1	107	80	21	2	0	1	0
FORT WORTH	89	56	95	48	73	3	0	0	0	2.4	49	37.0	144	78	26	3	0	0	0
GALVESTON	81	67	83	63	74	0	0	0	0	1.3	18	36.3	111	92	48	0	0	0	0
HOUSTON	87	55	90	47	71	-1	T	-.9	T	2.8	40	53.0	143	94	29	1	0	0	0
LUBBOCK	88	53	92	45	71	7	0	0	0	3.7	127	14.7	94	58	17	4	0	0	0
MIDLAND	87	53	92	48	70	4	0	0	0	2.8	99	7.8	86	68	24	3	0	0	0
SAN ANGELO	89	52	94	47	71	2	0	0	0	2.8	69	16.5	107	73	19	4	0	0	0
SAN ANTONIO	88	57	92	53	72	0	0	0	0	4.7	91	17.1	72	89	27	3	0	0	0
VICTORIA	88	59	92	53	74	0	0	0	0	2.8	34	19.2	62	93	29	3	0	0	0
WACO	90	56	97	51	73	2	0	0	0	.5	10	26.9	107	82	25	5	0	0	0
WICHITA FALLS	89	53	94	45	71	3	0	0	0	5.3	113	34.1	150	81	23	3	0	0	0
UT CEDAR CITY	78	39	81	34	59	5	T	-.2	T	.2	17	5.7	69	44	13	0	0	0	0
SALT LAKE CITY	76	45	80	40	61	6	0	0	0	.5	35	8.0	67	65	21	0	0	0	0
VT BURLINGTON	56	37	70	27	47	-3	-.1	-.5	.1	6.5	146	29.8	111	88	42	0	1	2	0
VA NORFOLK	71	49	83	39	60	-3	T	-.8	T	6.1	102	47.9	129	92	42	0	0	0	0
RICHMOND	72	46	83	39	59	-1	T	-.9	T	6.6	127	41.9	119	94	41	0	0	0	0
ROANOKE	72	42	85	32	57	-1	T	-.8	T	10.8	229	45.6	144	98	39	0	1	1	0
WA QUILLYUTE	61	48	66	36	54	3	2.1	-.1	1.1	3.0	29	52.9	76	99	71	0	0	5	2
SEATTLE-TACOMA	63	49	71	44	56	2	.6	-.1	.2	1.2	36	21.5	88	96	57	0	0	5	0
SPOKANE	64	42	75	34	53	3	.2	-.1	.1	.3	31	9.9	88	90	41	0	0	2	0
YAKIMA	70	37	77	28	53	2	T	-.1	T	.4	4	3.9	73	91	37	0	1	0	0
WV BECKLEY	86	41	81	29	53	0	.2	-.4	.2	4.3	87	34.8	100	99	54	0	2	2	0
CHARLESTON	69	44	83	37	57	-1	.4	-.2	.2	8.5	204	50.4	146	98	50	0	0	2	0
HUNTINGTON	70	44	84	33	57	-2	.3	-.2	.3	7.5	183	52.1	156	95	44	0	0	2	0
PARKERSBURG	66	43	82	32	55	-3	.5	-.1	.2	8.7	220	47.6	152	100	60	0	1	2	0
WI GREEN BAY	64	37	76	26	51	0	.5	-.1	.5	1.5	35	14.7	63	88	36	0	2	1	1
LACROSSE	69	39	83	28	54	1	.2	-.3	.2	3.0	67	19.5	74	94	34	0	2	1	0
MADISON	68	37	79	25	52	0	.1	-.5	.1	1.7	41	22.0	84	91	37	0	2	1	0
MILWAUKEE	65	43	79	34	54	1	.2	-.4	.2	3.8	98	26.1	102	92	38	0	0	1	0
WAUSAU	62	38	77	24	50	0	.2	-.3	.2	1.6	31	17.8	65	89	37	0	2	1	0
WY CASPER	74	40	78	36	57	8	0	0	0	3.2	287	11.9	125	58	15	0	0	0	0
CHEYENNE	76	44	80	37	60	10	0	0	0	1.6	115	11.5	95	51	14	0	0	0	0
LANDER	73	45	78	39	59	9	0	0	0	2.3	163	13.6	123	45	16	0	0	0	0
SHERIDAN	73	40	83	37	56	7	0	0	0	1.4	82	10.2	79	79	26	0	0	0	0

National Agricultural Summary

OCTOBER 9-15, 1989

HIGHLIGHTS: Dry weather allowed row crop harvests to progress well. Rain was needed in the **Great Plains** to promote winter wheat emergence and development. Soil moisture was short to adequate in the **Great Plains** and most of the **West** and adequate in the **East**. Soil moisture was adequate to short in the **Delta**.

Winter wheat planting was 81 percent (%) complete, 9 percentage points ahead of the 5-year average. Fifty-seven percent of the crop was emerged, 6 points ahead of normal. Corn harvest advanced 18 points and was 46% complete, 2 points ahead of normal. Ninety-six percent of the crop was mature, 2 points behind normal. Soybean harvest advanced 17 points and was 55% complete, 8 points ahead of normal. Eighty-nine percent of the acres was dropping leaves, 2 points behind normal. Cotton harvest was 23% complete, 9 points behind normal. Eighty-one percent of the acres was opening bolls, 1 point ahead of normal. Sorghum harvest was 48% complete, 2 points behind normal. Eighty percent of the acres was mature, 10 points behind normal.

SMALL GRAIN: Winter wheat planting was 81% complete, 9 points ahead of normal. Fifty-seven percent of the crop was emerged, 6 points ahead of normal. Planting advanced 20 or more points in Illinois, Indiana, Missouri, and Oregon. Planting was complete in Nebraska and South Dakota and nearly complete in Colorado and Kansas. Rain was needed to ensure good crop emergence and development in the Great Plains. Some producers delayed planting because of lack of moisture in Texas. Moisture was also needed in Oregon and Washington.

CORN: Corn harvest advanced 18 points and was 46% complete, 2 points ahead of normal. Ninety-six percent of the crop was mature, 2 points behind normal. Harvest progressed well, advancing 15 or more points in 11 of the 17 major producing States. Harvest advanced 24 or more points in Iowa, Minnesota, and South Dakota. Harvest was nearly complete in Georgia and Texas. In Iowa, harvest was 55% complete, 11 points ahead of normal. Harvest was 50% complete, 7 points behind normal in Illinois. In Ohio, crop maturity lagged 38 points behind the 96% average. Harvest was 19 points behind normal.

SOYBEANS: Soybean harvest advanced 17 points and was 55% complete, 8 points ahead of normal. Eighty-nine percent of the acres was dropping leaves, 2 points behind normal. Harvest advanced 30 or more points in Illinois, Michigan, and Nebraska. Harvest was nearly complete in Minnesota and South Dakota. Harvest was more than 25 points ahead of normal in Iowa, Michigan, Minnesota, and South Dakota. In Ohio, harvest lagged 30 points behind the 54% average. Frost accelerated crop maturity in Ohio.

COTTON: Cotton harvest was 23% complete, 9 points behind normal. Eighty-one percent of the acres was opening bolls, 1 point ahead of normal. Harvest continued to lag behind normal in the Delta and Southeast. Harvest lagged 30 or more points behind normal in Alabama, Arkansas, and Mississippi. Harvest lagged 48 points behind normal in Mississippi. Harvest was 20% complete in Texas and California.

SORGHUM: Sorghum harvest was 48% complete, 2 points behind normal. Eighty percent of the acres was mature, 10 points behind normal. Producers harvested a third of their crop in Illinois and South Dakota. In Kansas, harvest was 25% complete, 10 points behind normal. Harvest was 45% complete, 3 points ahead of normal in Nebraska. Harvest was 69% complete, equal to the average in Texas.

OTHER FIELD CROPS: Rice harvest was 88% complete, 2 points behind normal. Harvest progressed well in California but still lagged 22 points behind normal. Peanut harvest was ahead of normal in Georgia but lagged behind normal in Alabama, North Carolina, and Texas. Dry bean harvest was nearly complete in Idaho and Michigan. Burley tobacco stripping continued in Kentucky and Tennessee. Condition of the stored crop was good in Kentucky.

FRUIT AND NUTS: Florida citrus groves were in near excellent condition with adequate moisture. Early variety fresh market harvests continued active. Pecan harvest was underway in Georgia, Louisiana, Mississippi, and Texas. Apple harvest continued in Georgia and North Carolina. Apple and grape harvests were active in Michigan. Early orange harvest was underway in the Rio Grande Valley, Texas. Grapefruit and lemon harvests continued in western Arizona. Wine grape harvest neared completion in California. Tangerine harvest was underway. In Oregon, winter pear harvest was nearly complete in the Hood River Valley.

VEGETABLES: In Florida, winter crop plantings continued. Fall crop harvests included snap beans, sweet corn, eggplant, peppers, and squash. Carrot and radish digging began. In Louisiana, harvest of sweetpotatoes for fresh market slowed due to lack of moisture. Sweetpotato harvest lagged behind normal in North Carolina. Vegetable harvests progressed well in the High Plains area of Texas. Pepper and cucumber harvests continued in the Trans-Pecos area. Vegetable harvests continued in Arizona. In California, fall melon harvest was complete in the central valley and at its peak in the desert area. Pepper harvest was nearly complete. In Oregon, potato harvest was nearly complete in the Hermiston-Boardman area. Potato harvest continued in Idaho, Colorado, and Washington. Dry onion harvests were active in Colorado and Idaho.

PASTURES AND LIVESTOCK: Pastures were good to fair except in the northern Great Plains and portions of the West where rain was needed. Livestock was in good condition.

Crop Progress

FOR WEEK ENDING OCTOBER 15, 1989

	CORN % MATURE		
	1989	1988	AVG.
COLO	88	89	94
GA	100	100	100
ILL	100	100	100
IND	96	99	99
IOWA	100	100	100
KANS	100	100	99
KY	97	94	97
MICH	100	90	95
MINN	99	99	96
MO	100	100	100
NEBR	100	100	100
N C	100	100	100
OHIO	58	83	96
PA	61	55	77
S DAK	100	100	100
TEX	100	100	100
WIS	100	100	99
17 STATES	96	97	98

THESE 17 STATES PRODUCED 94% OF THE 1988 CORN CROP.

	CORN % HARVESTED		
	1989	1988	AVG.
COLO	16	17	22
GA	95	93	96
ILL	50	78	57
IND	28	41	40
IOWA	55	83	44
KANS	65	75	65
KY	67	55	61
MICH	20	15	15
MINN	46	79	35
MO	73	85	65
NEBR	40	60	36
N C	75	71	78
OHIO	9	14	28
PA	11	16	18
S DAK	47	60	31
TEX	94	97	93
WIS	26	51	27
17 STATES	46	65	44

THESE 17 STATES PRODUCED 94% OF THE 1988 CORN CROP.

	SOYBEANS % DROPPING LEAVES		
	1989	1988	AVG.
ALA	69	60	71
ARK	45	45	55
GA	72	72	85
ILL	99	100	100
IND	98	99	99
IOWA	100	100	100
KANS	90	97	90
KY	61	82	80
LA	87	67	73
MICH	100	100	99
MINN	99	99	99
MISS	73	69	82
MO	91	93	91
NEBR	100	100	100
N C	45	34	37
OHIO	96	100	100
S C	39	32	43
S DAK	100	100	100
TENN	76	87	85
19 STATES	89	89	91

THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.

	SOYBEANS % HARVESTED		
	1989	1988	AVG.
ALA	19	17	21
ARK	5	9	18
GA	9	7	13
ILL	81	87	70
IND	41	60	58
IOWA	90	90	62
KANS	30	55	35
KY	8	22	20
LA	47	29	34
MICH	60	30	25
MINN	95	94	62
MISS	19	15	25
MO	36	46	34
NEBR	70	80	52
N C	3	5	5
OHIO	24	52	54
S C	1	2	3
S DAK	98	86	56
TENN	16	15	16
19 STATES	55	60	47

THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.

	GRAIN SORGHUM % MATURE		
	1989	1988	AVG.
ARK	99	98	NA
ILL	94	100	NA
KANS	60	90	85
LA	100	100	100
MISS	95	99	100
MO	94	96	95
NEBR	100	100	99
OKLA	75	45	90
S DAK	100	100	91
TENN	100	100	100
TEX	87	92	89
11 STATES	80	92	NA

EXCL. STATES WITH NA THESE 11 STATES PRODUCED 96% OF THE 1988 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	GRAIN SORGHUM % HARVESTED		
	1989	1988	AVG.
ARK	93	91	92
ILL	58	71	56
KANS	25	40	35
LA	100	95	99
MISS	86	90	93
MO	62	69	60
NEBR	45	75	42
OKLA	25	15	25
S DAK	78	70	39
TENN	92	85	77
TEX	69	71	69
11 STATES	48	59	50

THESE 11 STATES PRODUCED 96% OF THE 1988 GRAIN SORGHUM CROP.

	RICE % HARVESTED		
	1989	1988	AVG.
ARK	92	83	88
CALLIF	50	75	72
LA	99	96	98
MISS	88	89	96
TEX	100	100	100
5 STATES	88	87	90

THESE 5 STATES PRODUCED 97% OF THE 1988 RICE CROP.

	COTTON % BOLLS OPENING		
	1989	1988	AVG.
ALA	91	100	97
ARIZ	100	100	100
ARK	90	94	97
CALLIF	100	100	100
GA	81	87	91
LA	100	100	99
MISS	95	96	100
MO	98	93	97
N MEX	94	85	89
N C	97	96	99
OKLA	65	80	70
S C	93	90	96
TENN	94	99	100
TEX	66	67	59
14 STATES	81	83	80

THESE 14 STATES PRODUCED 99% OF THE 1988 COTTON CROP.

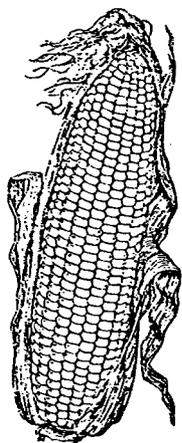
	COTTON % HARVESTED		
	1989	1988	AVG.
ALA	22	57	57
ARIZ	26	24	27
ARK	26	44	56
CALLIF	20	10	16
GA	17	34	40
LA	54	65	68
MISS	17	60	65
MO	60	52	60
N MEX	10	14	8
N C	17	12	25
OKLA	1	15	5
S C	20	26	43
TENN	38	46	53
TEX	20	24	20
14 STATES	23	31	32

THESE 14 STATES PRODUCED 99% OF THE 1988 COTTON CROP.

WINTER WHEAT % EMERGED				WINTER WHEAT % PLANTED			
	1989	1988	AVG.		1989	1988	AVG.
ARK	10	5	NA	ARK	20	12	19
CALIF	0	0	1	CALIF	5	5	9
COLO	79	84	86	COLO	98	97	98
GA	2	5	7	GA	4	10	12
IDAHO	58	48	48	IDAHO	91	85	82
ILL	26	27	22	ILL	70	77	55
IND	23	37	36	IND	55	73	52
KANS	70	60	55	KANS	95	85	80
MICH	60	55	40	MICH	90	80	60
MO	20	31	25	MO	50	56	42
MONT	66	52	48	MONT	93	97	86
NEBR	99	92	91	NEBR	100	100	100
N C	7	9	NA	N C	12	19	16
OHIO	20	30	26	OHIO	50	70	58
OKLA	45	50	40	OKLA	85	80	70
OREG	33	28	20	OREG	73	52	48
S DAK	94	81	89	S DAK	100	97	100
TEX	51	59	50	TEX	79	84	72
WASH	70	64	64	WASH	93	91	92
19 STATES	55	54	NA	19 STATES	81	79	72
EXCL. STATES WITH NA	57	56	51	THESE 19 STATES PRODUCED 87% OF THE 1989 WINTER WHEAT CROP.			

THESE 19 STATES PRODUCED 87% OF THE 1989 WINTER WHEAT CROP.

NA - NOT AVAILABLE.



Crop Production Highlights

CORN FOR GRAIN production as of October 1 is forecast at 7.45 billion bushels, up 2 percent from last month and 51 percent above the drought reduced crop of 1988.

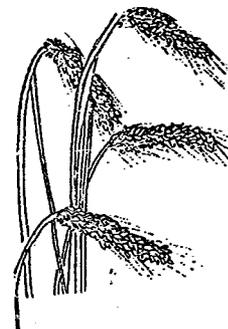
SOYBEAN production is forecast at 1.93 billion bushels, up 2 percent from the September 1 forecast and 24 percent above 1988. Favorable weather during September in Illinois, Minnesota, and Iowa improved yield prospects in those States. In the Southeast, Hurricane Hugo reduced yield potential in the Carolinas. Dry weather and insect problems during September reduced prospects in Alabama, Louisiana, and Georgia.

ALL WHEAT production for 1989 is estimated at 2.04 billion bushels, down 1 percent from the September 1 forecast but up 13 percent from 1988.

SORGHUM FOR GRAIN production is forecast at 657 million bushels, down fractionally from September 1 but up 14 percent from 1988.

COTTON production is forecast at 12.0 million bales, down 22 percent from last year's production and down 2 percent from September 1.

ALL ORANGE production is forecast at 194 million boxes, 6 percent below last season and 3 percent less than the 1987-88 crop. This decline is due mostly to Florida's 11-percent decrease from last year. Freezing weather in Florida during late February killed most of the open bloom and damaged new growth.



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 0.50 in. or less south; 1.00 in. local areas. Temperatures 3° above normal north, 1 to 2° above normal east central, near to slightly below normal elsewhere.

Days suitable for fieldwork 6.3. Soil moisture 21% short, 71% adequate, 8% surplus. Favorable conditions boosted all field activities. Corn 84% harvested, 90% 1988, 91% avg. Cotton 91% bolls opened, 100% 1988, 97% avg.; 22% harvested, 57% 1988, 57% avg.; 1% poor, 40% fair, 59% good. Soybeans 83% turning color, 81% 1988, 90% avg.; 69% dropping leaves, 60% 1988, 71% avg.; 54% mature, 35% 1988, 47% avg.; 19% harvested, 17% 1988, 21% avg.; 10% poor, 43% fair, 47% good. Peanuts 97% dug, 79% 1988, 80% avg.; 86% combined, 63% 1988, 70% avg. Sorghum 80% harvested, 72% 1988, 77% avg. Winter wheat 31% seeded, 29% 1988, 24% avg. Livestock, pastures mostly good to fair. Primary activities: Harvesting row crops, sweet potatoes, fall vegetables; overseeding pastures, planting winter annuals; cutting, baling hay; defoliating, harvesting cotton; repairing harvest equipment; general care of livestock, poultry, catfish.

ARIZONA: Temperatures 2 to 9° above normal. Extremes 29°; 102°. Mostly dry, unseasonably warm; clear skies; recorded rainfall none.

Cotton: Insects moderate to light, whitefly activity later planted fields, controls ineffective central; weeds light to moderate; crop good condition. Alfalfa harvest continued, light weeds, insects. Renovation, re-seeding continued; new stand establishment normal, crop good condition; hay, roughage supplies adequate. Field corn, grain sorghum good. Grapefruit, lemon harvest, packing continued west. Planting, thinning winter vegetables; lettuce stands excellent; whitefly pressure increasing. Lemon harvest progressed central. Apple harvest, packing continued east; fall lettuce, pumpkins, green chilies, winter squash, bell peppers harvested.

ARKANSAS: Temperatures above normal. Extremes 34°; 95°. Rainfall none to 0.06 in.

Days suitable for fieldwork 7.0. Soil moisture 37% short, 63% adequate. Rice 99% ripe, 98% 1988, 98% avg. Soybeans 77% yellowing, 72% 1988, 79% avg.; mature 21%, 26% 1988, 36% avg.; 75% fair, 25% good. Cotton 71% fair, 29% good. Oats 24% planted, 15% 1988, 20% avg. Corn 98% harvested, 96% 1988, 95% avg. Main activities: Harvesting of corn, cotton, rice, sorghum, soybeans; cotton defoliation; disking rice stubble; preparing land for planting small grains; planting wheat, oats; fertilizing small grains, pastures; fall forage seeding; cutting, baling hay; livestock health activities. Crop growth was moderate. Some gins were getting backlogged. Diseases were reducing some soybean yields. Harvest of cabbage was beginning. Hay, pastures good. Livestock good.

CALIFORNIA: Building high pressure brought warming, drying trend to much of State. Temperatures warmed to near or above normal by end week.

Field activities good progress, open weather all week. Rice harvest full swing, weekend. Cotton harvest full swing: shredding, disking followed rapidly. Ground preparations fall-seeded grains active. Corn, dry bean harvests increased.

Sugarbeet harvest seasonal. Alfalfa, Sudan grass harvests normal. Sheep grazing harvested alfalfa seed fields. Picking late varieties apples continued. Avocado, soft date harvests continued. Raisin reconditioning continued. Table grape harvest continued. Wine grape harvest winding down. Packing of persimmons, pomegranates continued. Kiwi harvest continued. Almond, walnut harvests continued; some grass problems, extra drying needed. Pistachio harvest winding down. Old crop valencia orange harvest winding down. Olive harvest continued. Some new crop navel oranges harvested. Desert grapefruit, lemon harvests ongoing. Tangerine harvest started. Asparagus supplies from Delta light, good quality. Desert area asparagus harvest continued. Broccoli supplies reduced, good quality, Santa Maria area, and heavy supply, variable quality, Salinas area. Carrot harvest continued active, Kern district. Cauliflower light to moderate supply, variable quality central coast. Celery supplies remained heavy, good quality central coast. Head lettuce supplies continued moderate, variable quality Salinas-Santa Maria area; head lettuce harvest, westside area gained. Fall melon harvest completed, central valley; at peak harvest desert area, supplies continued light, variable quality, due to infectious yellow virus. Dehydrated onion harvest continued, Tulalake area. Potato harvest continued strong Tulalake, Riverside areas. Sweet potato harvest for winter storage continued. Strawberry harvest continued, good supply, wide range of quality. Market tomato harvest continued, good quality. Processing tomato harvest winding down, few late fields remaining. Pepper harvest nearly concluded. Other vegetables harvested included eggplant, green leafy vegetables, squash, cucumbers, Oriental vegetables, etc. Cattle good, movement from summer ranges. Winter ranges growing well north, poor to fair central, southern areas. Some supplemental feeding. Movement to feedlots increased. Water supplies near adequate north, central; short supplies south.

COLORADO: Unseasonably warm, dry. Isolated showers with snow on 15th. Temperatures 3 to 5° above normal. Precipitation trace over the eastern Plains.

Days suitable for fieldwork 6.6. Soil moisture 29% very short, 54% short, 17% adequate. Alfalfa 3rd cutting 83% complete, 4th cutting 37% complete. Corn 88% mature, 98% silage harvested, 16% grain harvested. Dry onions 90% harvested. Dry beans 90% threshed. Summer potatoes 90% harvested. Fall potatoes 85% harvested. Sorghum 78% mature, 32% harvested. Sugarbeets 12% harvested. Winter wheat 98% seeded, 79% emerged; fair to good. Livestock mostly good; range, pasture mostly fair to good.

FLORIDA: rains 1.00 in. or more confined mainly to east, south. Local rains 5.00 to 10.00 in. along east central Atlantic Coast. Elsewhere, rain totals for week mostly under 0.50 in. Warm week; temperatures 3 to 5° above normal, except northwest only slightly above normal. Extremes 48°; 95°.

Panhandle soil moisture mostly adequate; northern, central Peninsula adequate to surplus. Northern, central east coast excessively wet, some flooding. Southern Peninsula topsoil moisture short to adequate. Peanut harvest nearing

completion. Soybean harvest started. Cotton harvest, haying active. Sugarcane good progress; planting continued; mills preparing to open. Land preparation fall seeded crops continued. Panhandle pastures continued fair to good; Peninsula generally good to excellent. Cattle continued good to excellent. Citrus groves near excellent. Moisture adequate. New growth slowing. New crop fruit good progress. Early oranges, grapefruit, tangerines, K-early moving to fresh markets in good volume. Caretakers busy all areas preparing for upcoming winter season. Daytime temperatures continued mostly low 90s over major vegetable producing areas. Rainfall limited. Planting winter crops continued active. First southwest winter potatoes planted. Fall harvest snap beans, sweet corn, cucumbers, eggplant, peppers, squash. First carrots, radishes dug.

GEORGIA: Rain 0.50 in. or less. Rain 1 to 2 days. Rainfall 3.05 in. Brunswick. Temperatures within a degree of normal. Extremes 31°; 87°.

Days suitable for fieldwork 5.7. Soil moisture 1% very short, 11% short, 84% adequate, 4% surplus. Cotton 9% fair, 89% good, 2% excellent. Sorghum grain 1% poor, 22% fair, 77% good; 66% harvested, 64% 1988, 70% avg. Peanuts 1% very poor, 3% poor, 40% fair, 53% good, 3% excellent; 95% dug, 81% 1988, 86% avg.; 87% threshed, 66% 1988, 77% avg.; harvest active. Soybeans 4% poor, 35% fair, 60% good, 1% excellent. Wheat 16% fair, 84% good. Rye 1% poor, 25% fair, 71% good, 3% excellent. Apples 6% poor, 58% fair, 36% good; 69% harvested, 97% 1988, 93% avg. Pecans 8% poor, 54% fair, 38% good; 4% harvested, 3% 1988, 5% avg. Pastures, hay fair to mostly good. Cattle, hogs good.

HAWAII: Generally wet weather continued over islands. Hot, humid, moderate to heavy rains hampered crop progress. Temperatures high 60s to upper 80s with variable winds up to 20 mph. Rainfall 0.03 to 4.90 in.

Days suitable for farm work 7.0. Papaya orchards in fair to good. Sugar, pineapple harvesting continuous; weather permitting.

IDAHO: Temperatures 2 to 7° above normal. Very little precipitation fell in State with slight amounts north only.

Days suitable for fieldwork 7.0. Soil moisture 4% very short, 18% short, 75% adequate, 3% surplus. Harvest continued as the state enjoyed excellent harvest weather. No aphids on newly emerged winter crops. Winter wheat 91% planted; 85% 1988; 82% avg.; 58% emerged; 48% 1988; 48% avg. Potatoes 84% harvested; 90% 1988; 82% avg. Sugarbeets 29% harvested; 32% 1988; 36% avg. Third cutting alfalfa hay 99% harvested; 99% 1988; 94% avg. Dry beans 97% harvested. Onions 92% harvested; 99% 1988. Apples 73% harvested. Corn for grain 24% harvested. All cuttings of alfalfa hay ending. Idaho livestock good to excellent going into the colder winter months. Extreme southeast very dry.

ILLINOIS: Temperatures 6 to 10° above normal. Rainfall generally none, trace northwest corner.

Days suitable for fieldwork 7.0. Soil moisture 56% short, 44% adequate. Pasture 2% poor, 39% fair, 57% good, 2% excellent. Livestock roughage requirements from pasture 67%.

INDIANA: Temperatures 3 to 8° above normal. Lows low to mid 30s, highs mid 80s to low 90s. Precipitation up to 0.25 in.

Days suitable for fieldwork 6.7. Topsoil 31% short, 69% adequate. Subsoil 8% short, 91% adequate, 1% surplus. Corn 24% moisture content,

soybeans 14% moisture content. Soybean 85% mature, 96% 1988, 95% avg. Tobacco 100% harvested, 100% 1988, 100% avg. Pasture 5% poor, 30% fair, 56% good, 9% excellent. Ideal weather conditions for harvesting corn, soybeans this past week.

IOWA: Temperatures 4 to 8° above normal. Extremes 28°; 86°. Rainfall none to 1.88 in., average 0.33 in.

Days suitable for fieldwork 6.9. Topsoil 70% short, 30% adequate. Subsoil 89% short, 11% adequate. Corn mostly good. Soybeans mostly good. Winter wheat 95% seeded, 95% 1988, 75% avg. Row crop acreage fall tilled 15%, 28% 1988, 13% avg. Row crop acreage with fall fertilizer applied 12%, 18% 1988, 10% avg. Livestock mostly good. Pasture 6% very poor, 22% poor, 46% fair, 23% good, 3% excellent.

KANSAS: Temperatures 6 to 9° above normal. Precipitation light to non-existent. Northwest 0.07 in., southeast 0.28 in. Zero to trace elsewhere.

Days suitable for fieldwork 6.5. Topsoil 73% short, 26% adequate, 1% surplus. Subsoil 26% short, 74% adequate. Corn, sorghum, soybean good harvest progress during warm dry weather, crops generally late, progress behind schedule. Wheat seeding good progress, nearing completion ahead schedule. Emergence good, some spotty stands caused by short moisture. Range, pasture fair to good, livestock moving to stubble fields following harvest corn, sorghum. No wheat pasture available yet.

KENTUCKY: Very cool start of week. Highs 60s, lows 30s, 40s. Last of week warmer than normal. Highs 80s, lows 50s. Precipitation early in week in central, east receiving 0.20 to 0.40 in.

Days suitable for fieldwork 5.3. Soil moisture 4% very short, 16% short, 78% adequate, 2% surplus. Corn harvest progressed rapidly with dry conditions. Slight frost damage to scattered late crop soybeans. Harvest slowly beginning. Less than 5% soybeans still green. Burley stripping 10% complete. Some houseburn, mold; condition generally good. Winter wheat seeding 39% complete, 34% 1988, 37% avg. Pastures good to excellent. Winter hay supplies adequate to surplus.

LOUISIANA: Temperatures 2 to 5° below normal. Extremes 41°; 91°. Rainfall none to 0.22 in.

Days suitable for fieldwork 6.7. Soil moisture 37% very short, 35% short, 28% adequate. Cotton open bolls 100%, 100% 1988, 99% avg.; harvested 54%, 65% 1988, 68% avg.; 4% poor, 52% fair, 44% good. Hay final cutting 96%, 90% 1988, 94% avg. Pecans harvested 1%, 1% 1988, 3% avg. Rice harvested 99%, 96% 1988, 98% avg. Few second crop rice fields have been harvested. Sorghum harvested 100%, 95% 1988, 99% avg. Soybeans leaves turning 100%, 84% 1988, 91% avg. shedding leaves 87%, 67% 1988, 73% avg.; harvested 47%, 29% 1988, 34% avg.; 19% poor, 55% fair, 21% good, 5% excellent. Sugarcane planted 98%, 92% 1988, 94% avg.; harvested 9%, 8% 1988, 5% avg.; 19% fair, 69% good, 12% excellent. Sweet potatoes harvested 71%, 76% 1988, 82% avg.; 47% fair, 53% good. Harvest for fresh market at a near standstill due to lack of soil moisture. Wheat planted 7%, 7% 1988, 9% avg.; emerged 1%, 3% 1988, 4% avg. Planting delayed until rain is received. Livestock 27% fair, 70% good, 3% excellent. Pasture 15% poor, 50% fair, 33% good, 2% excellent. Fields are drying up. Vegetable 2% very poor, 12% poor, 61% fair, 23% good, 2% excellent.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.09 in. Temperature 55°, normal 59°. Extremes 25°; 84°.

Days suitable for fieldwork 6.5. Topsoil 7% short, 86% adequate, 7% surplus. Subsoil 7% short, 80% adequate, 13% surplus. Field corn good; harvested for grain 59%, 67% 1988, 68% avg.; harvested for silage 93%, 97% 1988, 97% avg. Soybeans good; 90% turned, 93% 1988, 91% avg.; 64% shedding leaves, 77% 1988, 75% avg.; 13% harvested, 16% 1988, 17% avg. Apples 93% harvested, 82% 1988, 84% avg. Pasture good. All hay supplies adequate. Wheat 19% seeded, 36% 1988, 39% avg. Barley 42% seeded, 66% 1988, 65% avg. Rye 38% seeded, 57% 1988, 60% avg. Oats 9% seeded, 23% 1988, 36% avg.

DELAWARE: Precipitation 0.06 in. Temperature 55°, normal 60°. Extremes 32°; 81°.

Days suitable for fieldwork 6.9. Topsoil 14% short, 86% adequate. Subsoil 100% adequate. Field corn good; harvested for grain 78%, 73% 1988, 75% avg. Soybeans good; 73% turned, 91% 1988, 92% avg.; 47% shedding leaves, 58% 1988, 74% avg.; 8% harvested, 8% 1988, 12% avg. Apples 92% harvested, 67% 1988, 67% avg. Pasture good. All hay supplies adequate. Wheat 12% seeded, 20% 1988, 15% avg. Barley 31% seeded, 49% 1988, 39% avg. Rye 24% seeded, 30% 1988, 28% avg.

MICHIGAN: Temperatures 1 to 4° below normal. Extremes 18°; 86°. Precipitation none to 1.22 in. across State.

Days suitable for fieldwork 6.5. Soil moisture 35% short, 65% adequate. Corn 100% mature, 90% 1988, 95% avg.; harvested 20%, 15% 1988, 15% avg. Soybeans 100% shedding, 100% 1988, 99% avg.; harvested 60%, 30% 1988, 25% avg. Dry beans harvested 95%, 45% 1988, 60% avg. Winter wheat 90% planted, 80% 1988, 60% avg.; 60% emerged, 55% 1988, 40% avg. Major activities: Corn silage chopping, corn, soybean, dry bean harvest, wheat planting. Grape, apple harvest continued. Vegetable harvest mostly done for the season.

MINNESOTA: Temperatures 1 to 5° above normal. Extremes 22°; 84°. Precipitation none to 0.29 in. Greatest weekly total 0.35 in.

Days suitable for fieldwork 6.5. Topsoil 31% very short, 48% short, 21% adequate, 0% surplus. Corn 46% harvested, 79% 1988, 35% avg. Soybeans 95% harvested, 94% 1988, 62% avg. Sugarbeets 56% harvested, 84% 1988, 71% avg. Dry Beans 99% harvested, 96% 1988, 87% avg. Potatoes 94% harvested, 95% 1988, 92% avg. Sunflowers 77% harvested, 86% 1988, 39% avg. Field Corn 98% cut for silage, 99% 1988, 88% avg. Corn 20% moisture, 18% 1988, 24% avg. Soybeans 11% moisture, 11% 1988, 13% avg. Corn 14% land plowed, 42% 1988, 16% avg. Soybeans 43% land plowed, 56% 1988, 31% avg.

MISSISSIPPI: Cool, dry. Temperatures 2° below normal. Extremes 37°; 87°. Weekly rain 0.09 in., 0.50 below normal. Only coastal areas received rain. 1.18 in. maximum.

Days suitable for fieldwork 6.0, 5.8 1988, 4.3 avg. Soil moisture 20% short, 80% adequate. Corn 81% harvested, 75% 1988, 88% avg. Cotton fair; 17% harvested, 60% 1988, 65% avg. Hay 92% harvested, 93% 1988, 95% avg. Rice 88% harvested, 89% 1988, 96% avg. Sorghum 86% harvested, 90% 1988, 93% avg. Soybeans fair; 19% harvested, 15% 1988, 25% avg. Sweet potatoes 71% harvested, 68% 1988, 72% avg. Wheat 21% planted, 27% 1988, 19% avg. Pecans 15% very poor, 10% poor, 65% fair, 5% good, 5% excellent. Harvest beginning. Pasture, livestock good. Activities: Defoliating cotton, harvesting row crops.

MISSOURI: Temperatures 2 to 5° above normal. Dry, no precipitation most areas.

Days suitable for fieldwork 6.6. Topsoil 56% short, 44% adequate. Corn harvest varies 57% north central to 100% southeast. Soybean harvest 12% southwest to 55% northeast. Sorghum harvested less than 45% all districts except northwest 54%, southeast 92%. Fall tillage for spring crops 14%, 17% 1988, 19% avg. Pasture 10% poor, 43% fair, 44% good, 3% excellent.

MONTANA: Temperatures 4 to 8° above normal. Northwest, north central areas some moisture, elsewhere dry.

Days suitable for fieldwork 6.2. Topsoil 34% short, 61% adequate, 5% surplus. Subsoil 40% short, 58% adequate, 2% surplus. Eastern third of State critically short of soil moisture. Pasture, range feed 3% very poor, 9% poor, 27% fair, 53% good, 8% excellent. Corn silage harvested 97%, 100% 1988, 93% avg. Sugarbeets harvested 51%, 90% 1988, 68% avg. Potatoes harvested 82%, 98% 1988, 85% avg. Dry beans 96% harvested, 98% 1988, 89% avg. Winter wheat condition on emerged stands 3% poor, 23% fair, 57% good, 17% excellent. Cattle, calves moved from summer ranges 50%, 85% 1988, 68% avg. Sheep, lambs moved 57%, 90% 1988, 75% avg.

NEBRASKA: Temperatures 5 to 8° above normal. Extremes 31°; 91°. Rain 15th produced up to 0.50 in. southeast, remainder of week was dry.

Days suitable for fieldwork 6.7. Topsoil 74% short, 26% adequate. Subsoil 83% short, 17% adequate. Winter wheat 2% poor, 33% fair, 47% good, 18% excellent. Replanted wheat has emerged in Panhandle. Many areas becoming dry, need rain for crop to develop normally. Some corn lodged, by high winds last month, in central counties. Some light corn harvested in West due to last months frost. Soybean harvest 10 days ahead of average. Pasture, range feed 14% very short, 58% short, 28% adequate. Hay, roughage 6% very short, 62% short, 32% adequate. Many cattle moved to crop residue. West, most cattle still on pasture, some making excellent weight gains. Calves being worked sold.

NEVADA: High pressure system dominated, sunny weather. Storm front weekend produced trace precipitation extreme south. Temperatures 5° above normal most areas. Extremes 20°; 96°.

Potato harvest windup stage. Hay harvest virtually over. Livestock good despite drought like conditions. Early hay feeding common.

NEW ENGLAND: Northern areas: Precipitation 0.25 in. northern Vermont, New Hampshire, 0.50 to 0.75 in. Temperatures low to mid 40s; normal. Southern areas: Precipitation 0.60 in. northwest Connecticut, 1.00 to 1.50 in. Temperatures mid 40s to lower 50s; normal.

Field corn, apple harvest both winding down. Cranberries 75% harvested; condition good. Maine potato harvest winding down. Other limited activity included winding up small vegetable harvest, haying.

NEW JERSEY: Temperatures near normal. Extremes 27°; 84°. Rainfall 0.23 in. north, 0.06 in. central, 0.11 in. south. Heaviest 24-hour total 0.36 in. on 10th, 11th. Estimated soil moisture percent field capacity averaged 94% north, 88% central, 81% south. Four inch soil temperatures averaged 50° north, 53° central, 55° south.

Soil moisture generally adequate, fall vegetables irrigated few areas. Harvest hardy fall vegetables active. Irish potato harvest about complete. Sweet potato digging 75% complete. Apple, cranberry harvest very active. Corn silage making about complete. Harvest of corn for grain, soybeans active, some fields not mature yet. Barley, rye, wheat seeding active,

early plantings growing well. Limited pasture growth continued.

NEW MEXICO: Temperatures near to above normal most areas.

Days suitable for fieldwork 6.4. Soil moisture 70% short, 30% adequate. Cotton bolls open 94%, 10% harvested. Wheat planted 98%, 95% emerged. Cattle 11% poor, 22% fair, 67% good. Sheep 43% fair, 57% good. Ranges, pastures 25% poor, 62% fair, 13% good.

NEW YORK: Below normal temperatures early week. Warming trend during the week. Unreasonably mild by last week. Light showers widespread early week. Thunderstorms at weekend in upstate areas brought significant rain.

Days suitable for fieldwork 5.8. Soil moisture adequate. Corn, hay, pastures fair to good. Corn for grain 11% harvested, 14% 1988, 10% avg. Silage corn 57% harvested, 71% 1988, 59% avg. Concord, Catawba grape harvest well underway. Finger Lakes area the major wine grape varieties are harvested. Vegetable harvest virtually finished.

NORTH CAROLINA: Temperatures 1 to 3° below normal across State. Extremes 27°; 87°. Precipitation none to 0.52 in.

Days suitable for fieldwork 5.8. Soil moisture 87% adequate, 13% surplus. Pasture 16% fair, 69% good, 15% excellent. Livestock feed from pasture 82%. Crop condition: Sweet potatoes 4% poor, 23% fair, 65% good, 8% excellent; peanuts 45% fair, 45% good, 10% excellent; sorghum fair to good; cotton 5% poor, 20% fair, 65% good, 10% excellent; soybeans 4% poor, 28% fair, 61% good, 7% excellent; Hay third cutting 68% completed. Hay, roughage 5% short, 87% adequate, 8% surplus. Harvesting completed: Corn silage 92%, 99% 1988, 99% avg.; apples 80%, 88% 1988, 82% avg.; sorghum 56%, 65% 1988, 57% avg.; sweet potatoes 58%, 58% 1988, 67% avg.; peanuts dug 63%, 49% 1988, 66% avg.; peanuts threshed 30%, 35% 1988, 49% avg. Plantings completed: wheat 12%, 19% 1988, 16% avg.; oats 31%, 29% 1988, 29% avg.; barley 32%, 35% 1988, 28% avg.; rye 32%, 44% 1988, 31% avg. Major activities: Harvest of corn grain. Other activities: Harvesting apples, corn silage, peanuts, cotton, soybeans, sorghum; marketing tobacco; small grain planting; tending livestock; general farm maintenance.

NORTH DAKOTA: Temperatures 2 to 5° above normal. Extremes 18°; 82°. Little or no precipitation across State.

Days suitable for fieldwork 6.9. Topsoil 34% very short, 58% short, 8% adequate. Subsoil 47% very short, 51% short, 2% adequate. Harvest ahead of average. Sunflower 75% harvested, 77% 1988, 34% avg.; corn 52%, 77% 1988, 40% avg.; soybeans 95%, 97% 1988, 74% avg.; dry edible beans 97%, 98% 1988, 85% avg.; flax 98%, 96% 1988, 84% avg.; potatoes 97% dug, 99% 1988, 95% avg.; sugarbeets 85% lifted, 86% 1988, 78% avg. Pasture 12% very poor, 57% poor, 28% fair 3% good; furnished 78% percent roughage requirements.

OHIO: Rain early in period 0.25 to 0.50 in.; less than half normal. Temperatures 2 to 7° above normal, mid to upper 20s to over 80°. Soil temperatures mid to upper 50s.

Days suitable for fieldwork 5.1. Soil moisture 13% short, 77% adequate, 10% surplus. Field activities: Harvesting corn, soybeans; planting wheat. Corn fair to good; moisture in harvested grain 26 to 34%. Soybeans fair to good. Frosts hastened dry down of late stands. Moisture in harvested beans 11 to 18%. Winter wheat needs more rain to assure quick germination, emergence. Hay, pasture fair to good.

OKLAHOMA: Temperatures 6° below normal northeast to 2° below normal south central.

Days suitable for fieldwork 6.1. Topsoil 45% short, 50% adequate, 5% surplus. Subsoil 7% short, 93% adequate. Wheat 7% fair, 92% good, 1% excellent; 85% planted, 80% 1988, 70% avg.; 45% emerged, 50% 1988, 40% avg. Cotton 2% poor, 75% fair, 23% good; 65% open bolls, 80% 1988, 70% avg.; 1% harvested, 15% 1988, 5% avg. Sorghum 90% good, 10% excellent; 75% coloring, 45% 1988, 90% avg.; 25% harvested, 15% 1988, 25% avg. Soybeans 30% harvested, 5% 1988, 20% avg. Peanuts 20% harvested, 20% 1988, 25% avg. Corn 95% harvested, 95% 1988, 95% avg. Pastures good. Cattle good; marketings stable, feeder prices down slightly from preceding week.

OREGON: Temperatures well above normal statewide. Maximum temperatures in 80s south western valleys, many areas east of Cascades. Minimum temperatures below freezing most of east. Light rainfall confined to coast, Willamette Valley. Coastal precipitation 0.10 to 0.30 in.; interior locations less than 0.10 in.

Soil moisture 68% short, 30% adequate, 2% surplus. Barley 36% planted 27% 1988, 35% avg. Russian wheat aphid now in wheat, no spraying yet Columbia Basin counties. Final alfalfa cutting, spring grain harvest Klamath Basin, southeast desert. Sugarbeets, dry beans harvested Malheur County. Field corn harvest started Hermiston. Silage corn harvested Washington County. Grass seed plantings mostly done, except ryegrass seeding in full swing Willamette Valley; fertilizing, herbicide applications continued. Winter pear picking almost completed Hood River, post harvest boron, copper sprays applied. Apple harvest continued Milton-Freewater, Hood River, Willamette Valley, Wasco county. Wine grapes 70% harvested Willamette Valley, yield good, favorable harvest weather. Hazelnuts 85% harvested, poor yield. Walnuts dropping. Cranberry harvest continued south coast; yield, color good. Potato harvest winding down, storage near capacity Hermiston-Boardman. Digging also neared completion Baker county. Potato harvest continued Malheur County, central area, Klamath county, west. Onion harvest continued Treasure Valley, Willamette Valley. Sweet corn harvest neared completion west. Pumpkin harvest underway. Livestock mostly good. Ranges, pastures poor to good; quite variable west, dry Columbia Basin, good feed supplies northeast mountains. Cattle moving onto grain stubble, turnip fields Hermiston area. Some calves weaned, seasonal yearling movement nearly completed eastern range country. Hay supplies look good for winter.

PENNSYLVANIA: Week started cool, ended with spell of Indian summer. Cold front early in week provided scattered showers. Temperature 51°, 4° below normal. Extremes 23°; 83°. Precipitation 0.27 in., 0.41 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 20% short, 80% adequate. Corn 61% mature, 55% 1988, 77% avg.; 11% harvested, 16% 1988, 18% avg. Ensilage corn 67% harvested, 73% 1988, 80% avg. Corn 1% very poor, 10% poor, 23% fair, 43% good, 23% excellent. Soybean harvest 20% complete, 15% 1988, 19% avg.; 1% very poor, 6% poor, 26% fair, 50% good, 17% excellent. Potato harvest 83% complete, 82% 1988, 86% avg. Fall plowing 71% complete, 79% 1988, 85% avg. Winter wheat 72% planted, 70% 1988, 73% avg. Barley 85% planted, 87% 1988, 89% avg. Third cutting alfalfa 89% complete, 95% 1988. Fourth cutting alfalfa 52% complete, 69% 1988. Quality of hay made during week fair to good. Amount of feed being obtained from pastures average. Apple harvest 73% complete, 67% 1988. Grape harvest 72% complete,

83% 1988. Activities: Harvesting hay, haylage, potatoes, grapes, vegetables, corn, corn silage, fall plowing, planting; maintaining machinery, caring for livestock.

SOUTH CAROLINA: Rainfall light, a few scattered showers. Temperatures averaged slightly warmer than normal.

Days suitable for fieldwork 5.7. Soil moisture 12% short, 88% adequate. Cotton 11% very poor, 40% poor, 35% fair, 14% good, 93% open bolls, 90% 1988, 96% avg.; 20% harvested, 26% 1988, 43% avg. Soybeans 25% poor, 45% fair, 30% good, 67% leaves turning, 70% 1988, 77% avg.; 39% shedding leaves, 32% 1988, 43% avg.; 17% matured, 18% 1988, 25% avg.; 1% harvested, 2% 1988, 3% avg. Tobacco 74% stalks destroyed, 76% 1988, 83% avg. Corn fair, 88% harvested, 88% 1988, 95% avg. Sorghum fair to good, 48% harvested, 52% 1988, 58% avg. Peanuts fair to good, 54% harvested, 48% 1988, 53% avg. Pasture, livestock good. Hay fair to good.

SOUTH DAKOTA: Temperatures 3 to 6° above normal. Extremes 21°; 90°. Fall season precipitation mostly above normal, 3.53 in. above normal to 1.55 in. below normal.

Days suitable for fieldwork 6.3. Topsoil 21% critically short, 48% short, 31% adequate. Subsoil 35% critically short, 48% short, 17% adequate. Row crop good to fair. Winter grain good to fair. Major activities: Row crop combining, drying, moving, selling cattle, fencing.

TENNESSEE: Dry conditions statewide. Temperatures slightly below normal east half, slightly above normal west half.

Days suitable for fieldwork 5.8. Soil moisture 1% very short, 5% short, 94% adequate. Corn 80% harvested grain, 79% 1988, 69% avg. Burley tobacco 20% stripped, 19% 1988, 18% avg. Wheat 28% seeded, 30% 1988, 28% avg. Harvest regained momentum. Seeding, re-seeding activity progressed.

TEXAS: Unusually strong, persistent ridge high pressure upper atmosphere dominated States. Surface high pressure system made afternoon temperatures warm, cool mornings kept averages down. Tropical disturbance blew into a full-fledged hurricane 15th, hit Upper Coast. Temperatures below normal south. North, northwest temperatures above normal. Trans-Pecos below normal. Most areas dry. Upper Coast received rain from Hurricane Jerry.

Crops: Corn harvest remained active Plains, all fields mature. Irrigated yields very good, dryland yields average. Grain sorghum harvest more active Plains with open weather. Warmer days benefitted later fields. Crop maturing increasing. Good yields. Sorghum 99% turning color, 100% 1988, 100% avg. Cotton producers Plains enjoyed warm days, harvest increased. Bolls opening moderate rate later fields. Defoliating increased Plains. Harvest moved ahead Blacklands, good yields. Pima fields Trans-Pecos yielding good crop. Small grain fields emerge Plains under warm, open conditions. Producers soon need rain for later planted fields. Some early fields ready for grazing soon. Planting operations underway more areas Blacklands, central. Some places too dry to begin. Producers south waiting for rain to begin planting. Peanut harvest early Spanish varieties continued many areas. Many fields could use rain to benefit harvest activities. Yields early fields good Low Plains, Cross Timbers, central average yields. Many fields south not harvested because dry conditions during growing season.

Soybean harvest increased Plains. Yields average to above average. Overall yields good northeast. Upper Coast yields later varieties lower than yields on early varieties. Other crops: Peanuts harvested 20%, 39% 1988, 31% avg. Pecans 3%, 5% 1988, 7% avg. Soybeans harvested 52%, 53% 1988, 37% avg. Sugarbeets 7%, 7% 1988, 18% avg. Sunflowers harvested 21%, 43% 1988, 41% avg. Oats planted 56%, 55% 1988, 58% avg.

Commercial Vegetables: Rio Grande Valley, planting, harvesting continued without delay. Irrigation steady. Harvest early oranges slow. San Antonio-Winter Garden, harvest operations increasing. Eastern area, harvest wind down. High Plains, all harvest activities good progress. Trans-Pecos, harvest peppers, cucumbers continued. Onion planting increased Presidio area. Harvest early variety pecans increased south, east. Harvest picking up Blacklands, Cross Timbers.

Range and Livestock: Ranges, pastures hold steady north, Plains; good rain needed soon. Grasses continued dry down portions east, central. Hay shipments east very welcomed by producers south. Small grain pastures could be ready for grazing soon High Plains. Supplemental feeding continued good portion of State.

UTAH: Temperatures 3° above normal.

Days suitable for fieldwork 7.0. Soil moisture 100% short. Fall fieldwork nearing completion. Winter wheat 93% seeded, 92% 1988, 89% avg. Alfalfa hay fourth crop cutting nearing completion. Apple harvest 74% completed, 82% 1988, 73% avg. Potato crop 70% harvested, 96% 1988, 84% avg. Cattle moved from summer range 70%, 74% 1988, 67% avg. Sheep moved from summer range 83%, 85% 1988, 70% avg. Irrigation, stockwater supplies mostly short, very short. Range, pasture poor, very poor.

VIRGINIA: Temperatures cool first half week with scattered frost. Weekend warm. Temperatures 5° below normal, 50s to 60s. Extremes 27°; 84°. Rainfall 0.20 in. one area.

Days suitable for fieldwork 6.1. Topsoil 90% adequate, 10% short. Corn for grain 64% harvested, 52% 1988, 61% avg. Corn silage 88% harvested, 79% 1988, 91% avg. Soybean harvest 6% complete, 1% 1988, 2% avg. Peanuts dug 85% complete, 35% 1988, 60% avg. Peanuts combined 62% complete, 22% 1988, 46% avg. Winter wheat seeding 13% complete, 6% 1988, 11% avg. Barley seeding 34% complete, 23% 1988, 34% avg. Winter oats seeding 54% complete, 23% 1988, 49% avg. Apple, sweet potato harvest continued.

WASHINGTON: Temperatures 6° above to 1° below normal, east; normal to 3° above normal, west. Precipitation none to 0.15 in., east; 0.10 to 1.12 in., west.

Days suitable for fieldwork 6.5. Soil moisture 50% short, 50% adequate. Range, pasture 55% short, 45% adequate. Hay, other roughage 5% very short, 5% short, 80% adequate, 10% surplus. Good weather allowed fall activity to continue. Some areas very dry, stopped seeding fall crops. Majority of fall seeding has been completed. Emerged winter wheat looks good in Adams, Lincoln, Spokane counties. Winter wheat planted 93%, 85% 1988, 87% avg.; emerged 70%, 64% 1988, 64% avg. Progress of other crop harvests: Potatoes 84%, 73% 1988, 71% avg.; dry beans 90%, 98% 1988, 96% avg.; corn silage 88%, 89% 1988, 87% avg.; corn grain 18%, 24% 1988, 32% avg.; third cutting alfalfa hay 100%, 100% 1988, 100% avg. Harvests of apples, carrots, onions, squash, pumpkins continued. Livestock being moved off ranges. Pastures, feed supplies in short supply in Okanogan County.

WEST VIRGINIA: Temperature 57^o, 1 to 7^o above normal. Extremes 24^o; 88^o. Precipitation 0.23 in.; well below normal.

Days suitable for fieldwork 4.4. Soil moisture 12% short, 73% adequate, 15% surplus. Wheat 44% seeded. Corn excellent to good; 94% mature, 46% harvested. Apples fair; harvest continues. Hay good to fair, 3rd cut 67% complete. Cattle, calves good. Sheep, lambs good to fair. Farm activities: Harvesting hay, corn silage, planting wheat, cover crops, marketing cattle.

WISCONSIN: Mild, dry week. Temperature 53^o, 3^o above normal. Extremes 15^o; 83^o. Precipitation 0.10 to 0.40 in.

Days suitable for fieldwork 6.5. Soil moisture 67% short, 33% adequate. Pasture 64% of normal,

56% 1988, 81% avg. Rapid harvest progress. Corn grain 26% harvested, 51% 1988, 27% avg. Corn silo filling 91% complete, 93% 1988, 72% avg. Soybeans 46% harvested, 47% 1988, 30% avg. Fall plowing 20% complete, 31% 1988, 21% avg.

WYOMING: Temperatures above normal. Rainfall almost non-existent.

Days suitable for fieldwork 7.0. Topsoil 56% short, 44% adequate. Subsoil 63% short, 37% adequate. 1990 winter wheat crop 90% emerged, 80% 1988, mostly good. Corn for grain 20% harvested, 20% 1988, 25% avg. Dry beans 80% combined, 95% 1988, 95% avg. Potatoes 90% harvested, 90% 1988, 85% avg. Sugarbeets 55% dug, 60% 1988, 65% avg. Sugar content 17.0%. Livestock average for this time of year. Producers continue culling, marketing.

International Weather and Crop Summary

October 8-14, 1989

HIGHLIGHTS

USSR ... In Western USSR, wet weather causes further delays in corn, sunflower, and sugarbeet harvests. In the New Lands, light showers and seasonably cool weather cause only minor delays in final spring grain harvest efforts.

EUROPE ... Heavy rain causes harvest delays in the north and possible flooding in the southeast. Mostly dry weather favors fall fieldwork in the west.

SOUTH ASIA ... Rainfall is limited to eastern and southernmost growing areas.

EASTERN ASIA ... Heavy rain and rice harvest delays continue in Japan. Typhoons Angela and Dan bring heavy rain to extreme southern China.

SOUTHEAST ASIA ... Typhoon Dan crosses the central Philippines and eventually hits Vietnam. Typhoon Angela hits Vietnam earlier in the week.

SOUTH AFRICA ... Scattered rain improves local planting conditions in the primary corn areas.

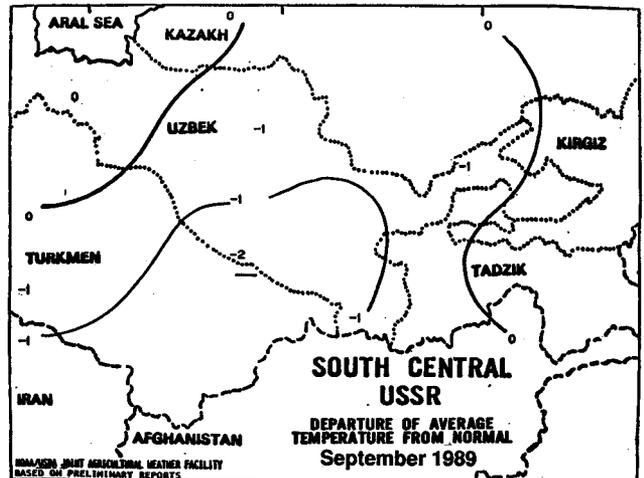
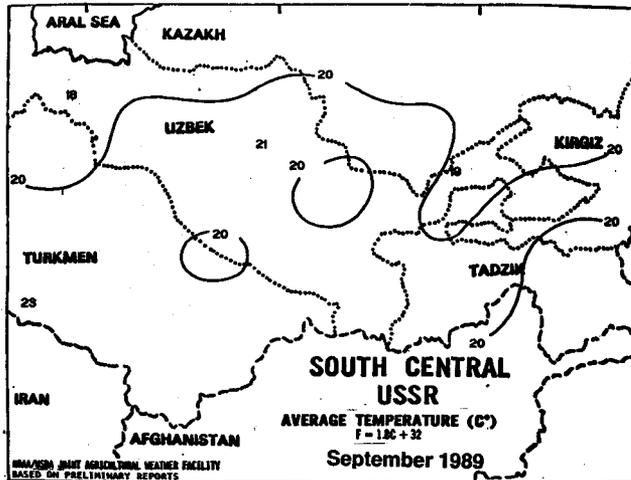
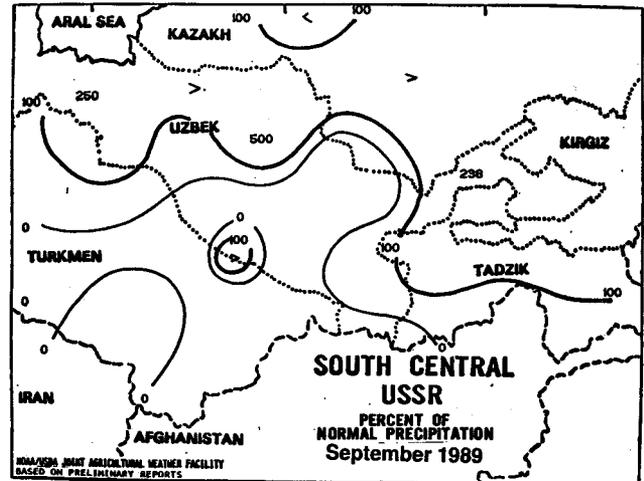
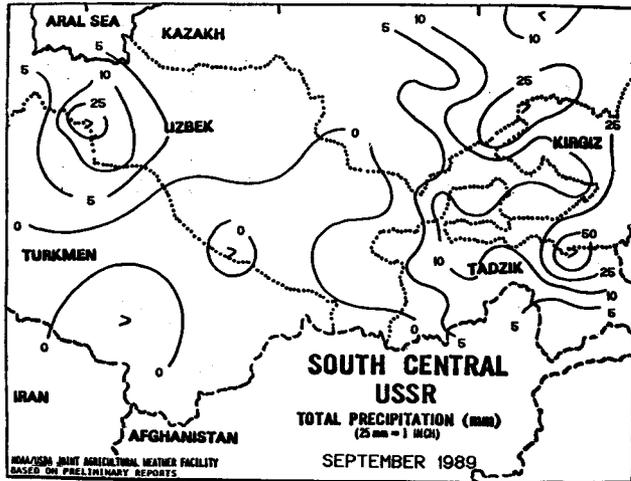
SOUTH AMERICA ... Spotty rain helps early corn planting in Argentina, but more planting rains are needed. Dry weather benefits soaked Rio Grande do Sul, while more rain falls in Parana.

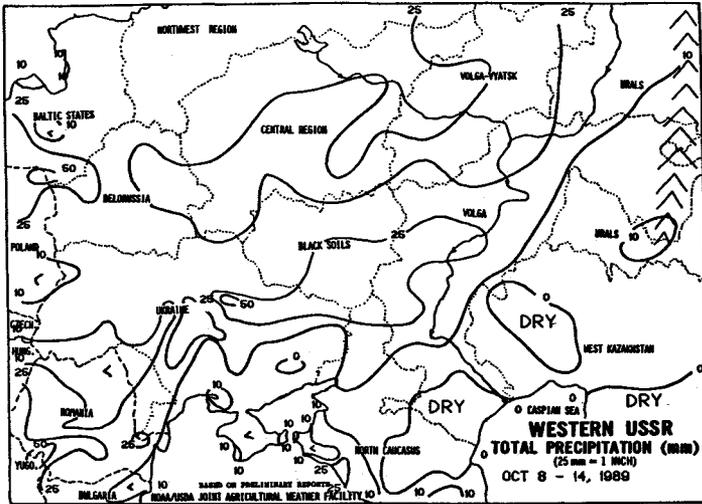
AUSTRALIA ... Light to moderate rain favors winter grains in the south. Unfavorable dryness continues in the east.

CANADA ... Harvests are virtually complete.

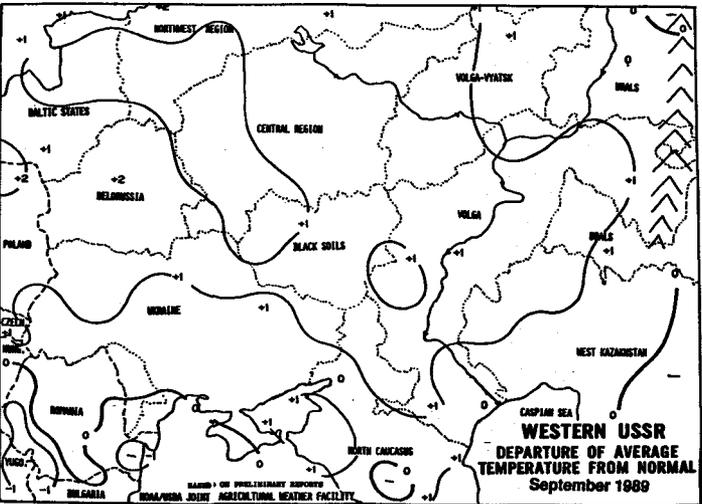
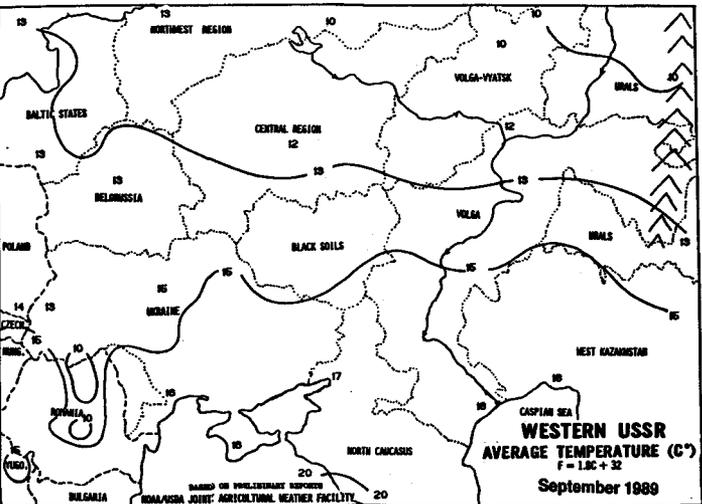
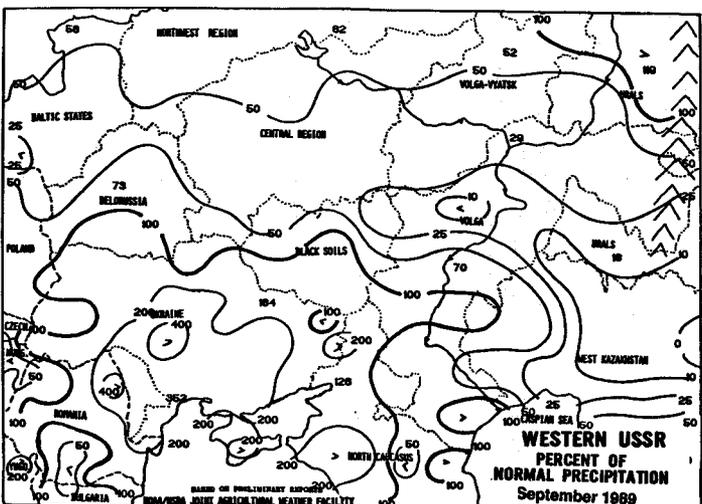
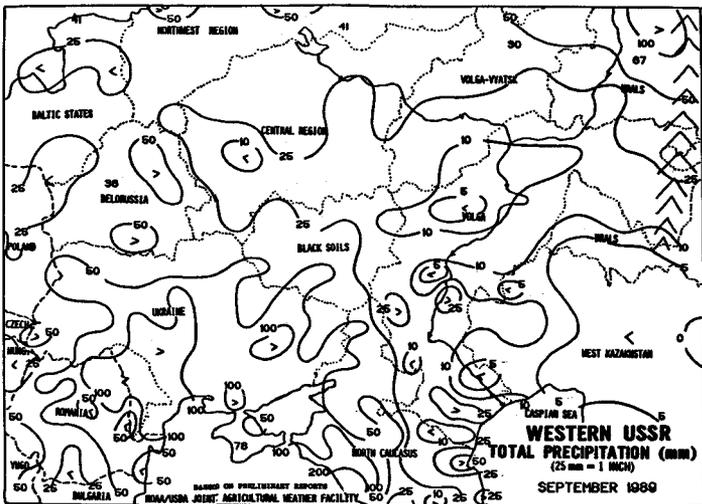
MEXICO ... Dryness returns to northwestern wheat areas, while Tropical Storm Jerry soaks the Yucatan peninsula.

NORTHWESTERN AFRICA ... Widespread showers in eastern Algeria and Tunisia help to condition soils and increase preplanting moisture for winter grains. Farmers in Morocco await the onset of significant autumn rains before fieldwork can begin.

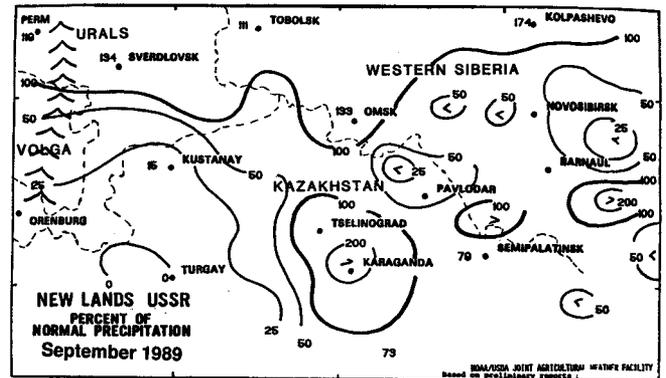
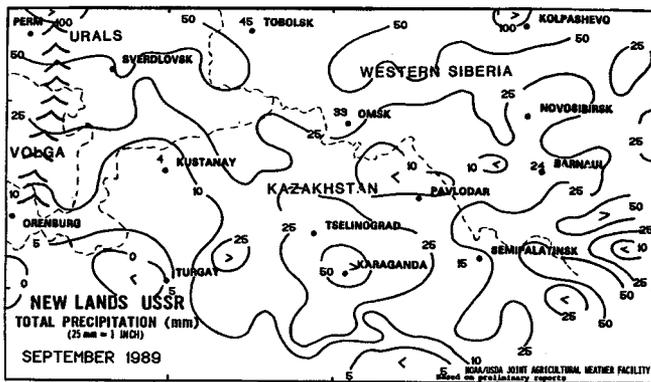
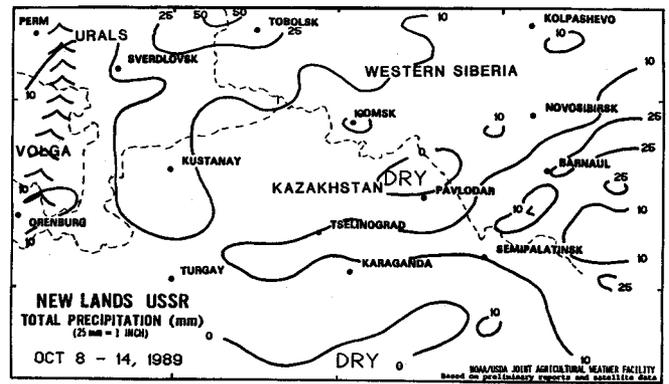


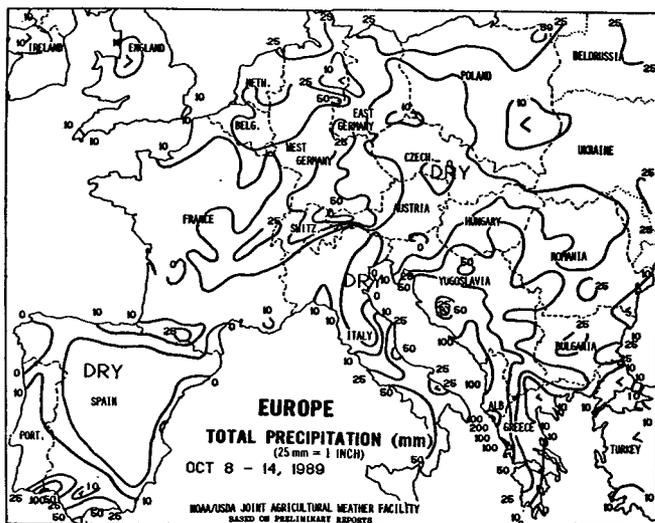


WESTERN USSR ... A gradual warming trend accompanied widespread precipitation. Frequent precipitation (11-30mm, with scattered amounts in excess of 40mm) over southern Belorussia, the northern two-thirds of the Ukraine, the Black Soils Region, the northern tip of the North Caucasus, and the lower Volga continued last week's wet weather pattern, causing further delays in summer crop harvests. In contrast, unseasonably warm, dry weather in the southern Ukraine and the central North Caucasus helped harvesting. The second consecutive week of significant precipitation (20-42mm) over the southern portion of the Central Region, the Volga Vyatsk, and the western Volga Valley reversed September's unfavorably dry weather pattern in these areas. In September, summer crop harvesting was well underway, while winter grain planting advanced southward. In the Ukraine and most of the North Caucasus, moderate to locally heavy rain in early September produced above-normal precipitation and increased topsoil moisture for winter grain planting. Dry weather over these areas from September 13 to 26 helped fieldwork for summer crop harvests and winter grain planting.

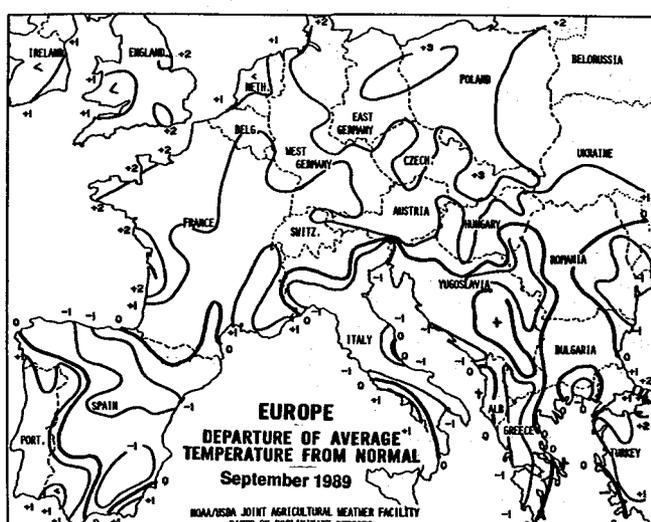
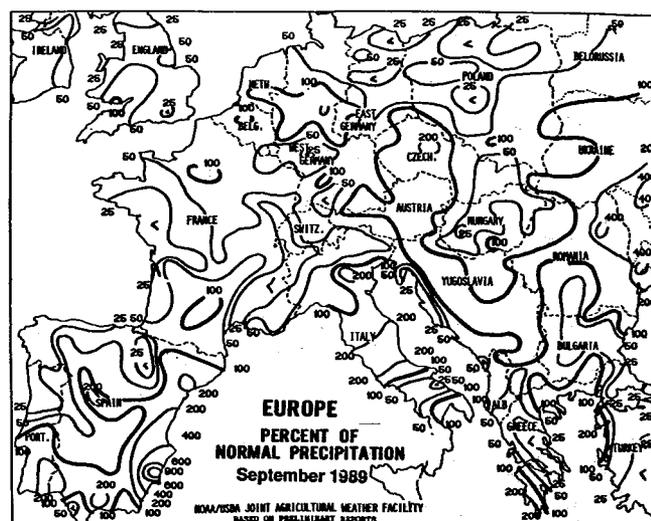
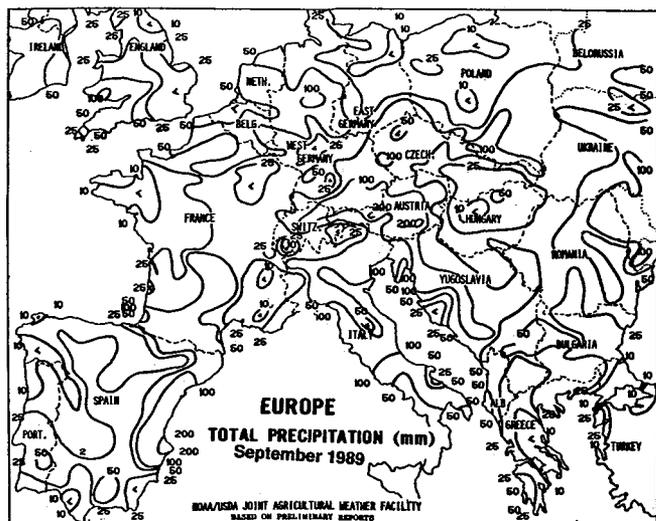


NEW LANDS ... Well-below-normal September precipitation covered most of the southern Urals, Kazakhstan, West Siberia, and East Siberia, creating excellent conditions for spring grain harvesting. Some harvest delays may have occurred, however, in extreme northern crop areas, where periodic showers produced above-normal rainfall. This past week, light showers and seasonably cool weather covered most of the region, causing only minor delays in final harvest efforts. Coverage of the New Lands will be suspended until the beginning of next year's growing season.

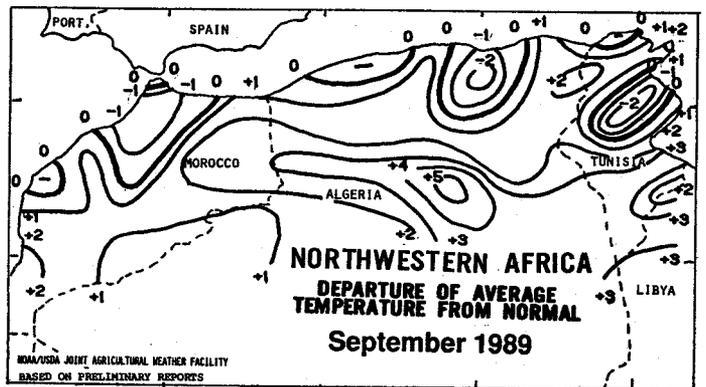
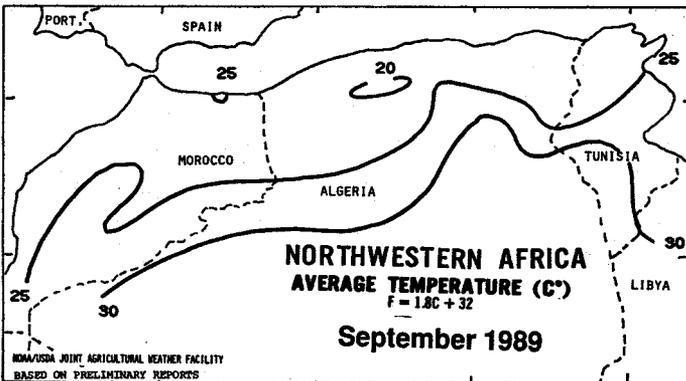
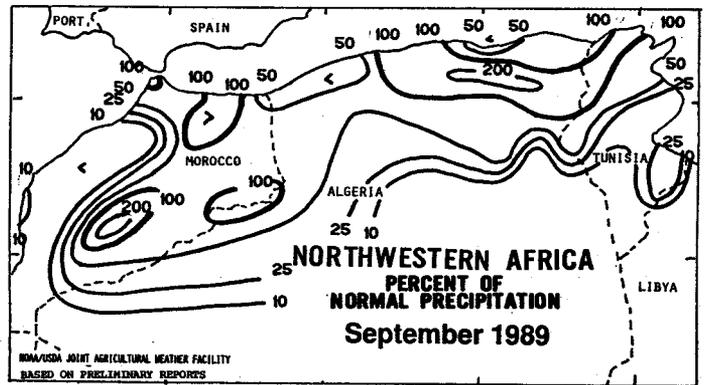
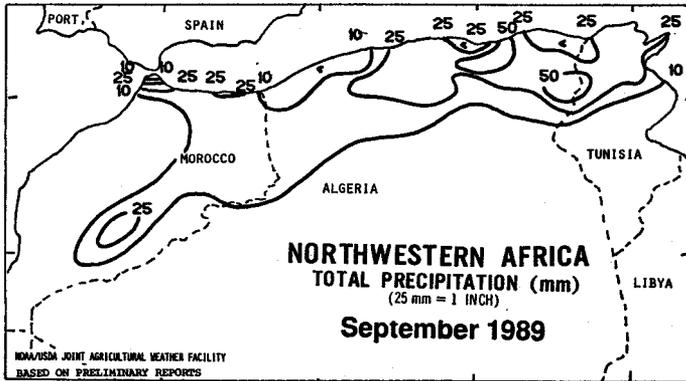
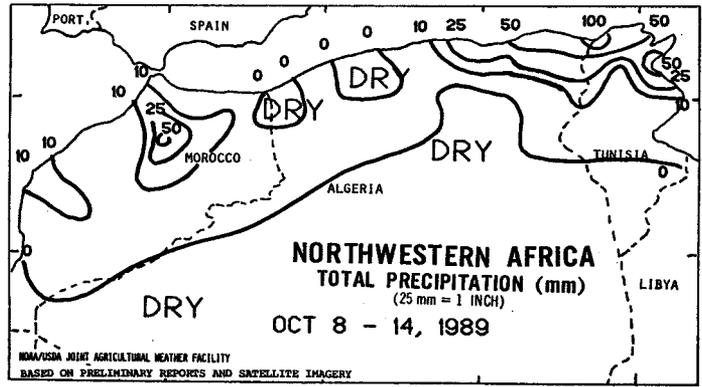




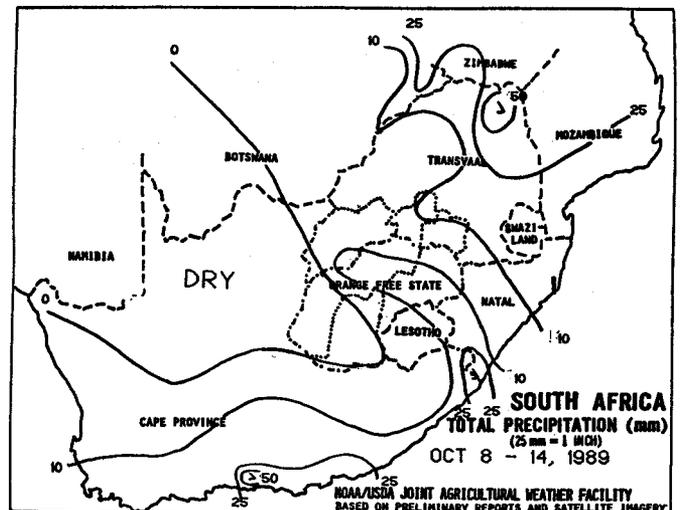
EUROPE ... A strong center of low pressure brought moderate to heavy rain (25-50mm) to much of southeastern Europe early in the week, causing delays in summer crop harvest. Very heavy rain (50-184mm) in sections of eastern Italy and Yugoslavia may have caused localized flooding. In the north, widespread rain (25-62mm) persisted for much of the week from Benelux eastward to Poland, delaying sugarbeet harvesting but benefiting winter grains establishment. Mostly dry weather continued in the west, favoring fall fieldwork. Below-normal rainfall in September and early October has caused some topsoils to become unfavorably dry for winter grains establishment in the northwest. Above-normal precipitation fell in scattered areas of southern Spain, central West Germany, Italy, and eastern Europe. Weekly temperatures generally averaged below normal, especially in the southeast where departures from normal ranged 3-5 degrees below average.

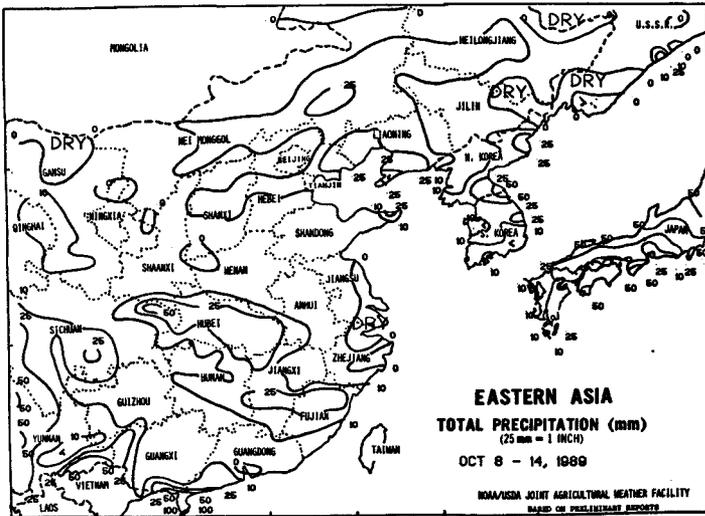


NORTHWESTERN AFRICA ... Fieldwork in preparation for winter grain planting usually begins in October, coinciding with the onset of the rainy season which reaches its peak during the winter months. The bulk of winter grains are usually planted from mid-November to mid-December. Widespread showers (10-25mm, with scattered amounts in excess of 50mm) over the eastern half of Algeria and northern Tunisia helped to condition soils, allowing early fieldwork in preparation for winter grain planting. Farmers in Morocco and western Algeria await the onset of significant autumn rains before fieldwork can begin. In September, below-normal precipitation covered most of the region except for a narrow band of above-normal rainfall which stretched eastward from central Algeria through southern areas in eastern Algeria into Tunisia.

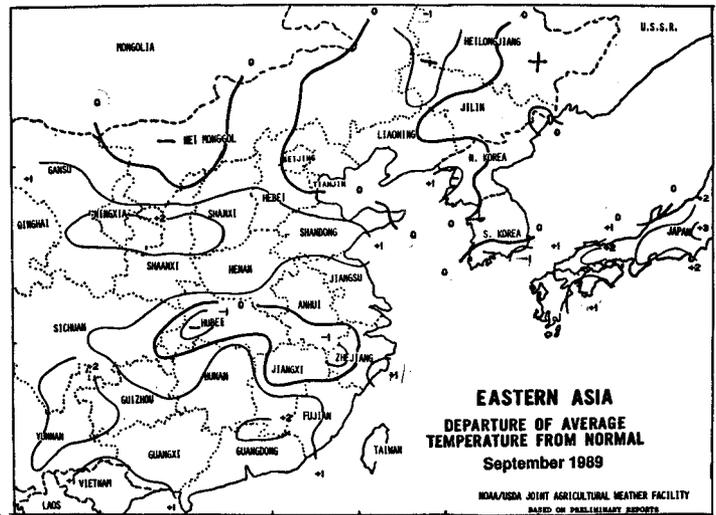
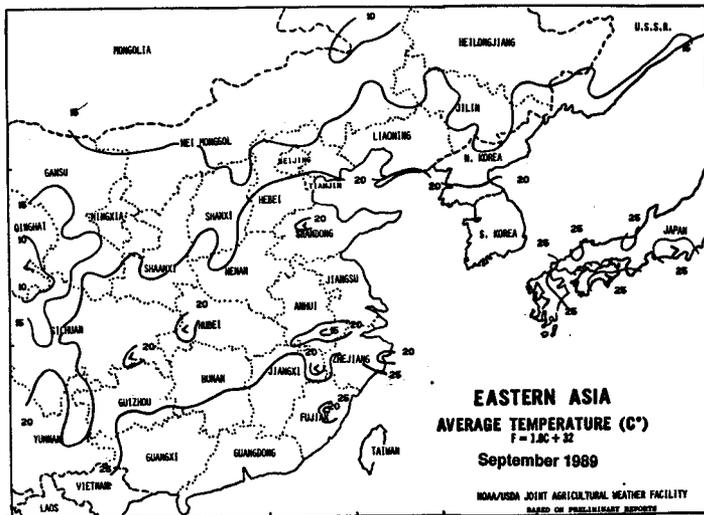
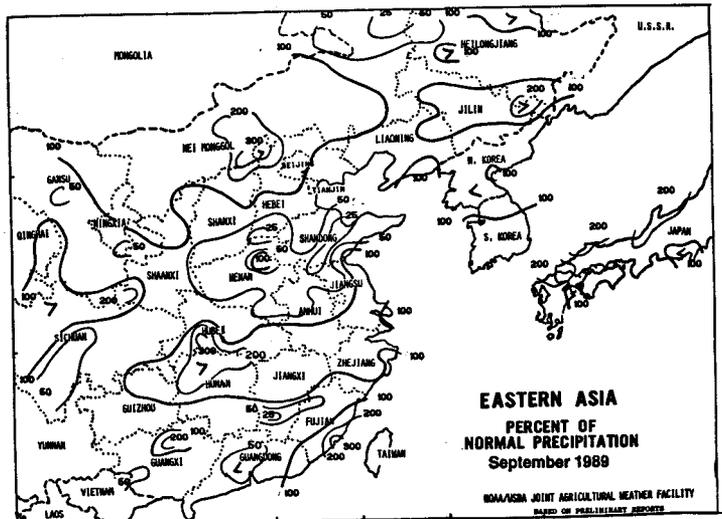
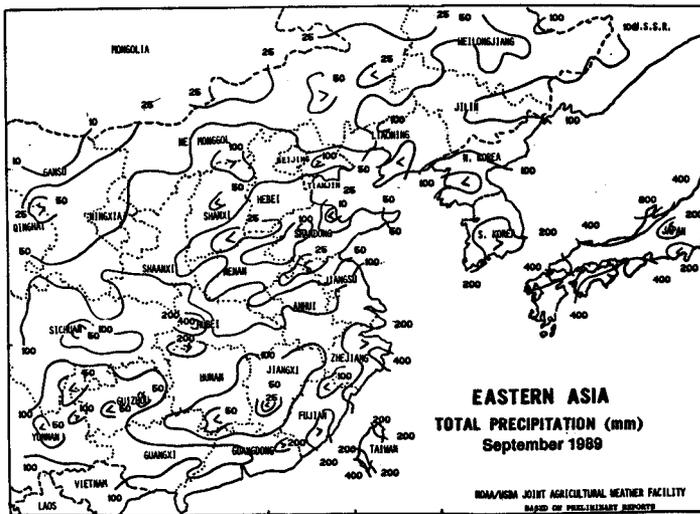


SOUTH AFRICA ... Scattered showers (1-25mm) covered the primary corn producing regions of the southern Transvaal, Orange Free State, Natal, and eastern Cape Province, improving topsoil conditions for planting. Rainfall accumulations since mid-August have been below normal over most of the Maize Triangle, South Africa's major corn producing region which spans most of the southwestern Transvaal and Orange Free State. Accumulations have exceeded 50mm, however, over the northeastern portion of the Triangle, favoring early field preparations. Planting is usually in full swing by mid-November. Moderate rain (10-25mm or more) covered wheat regions of the southern Cape Province, benefiting immature winter grains.

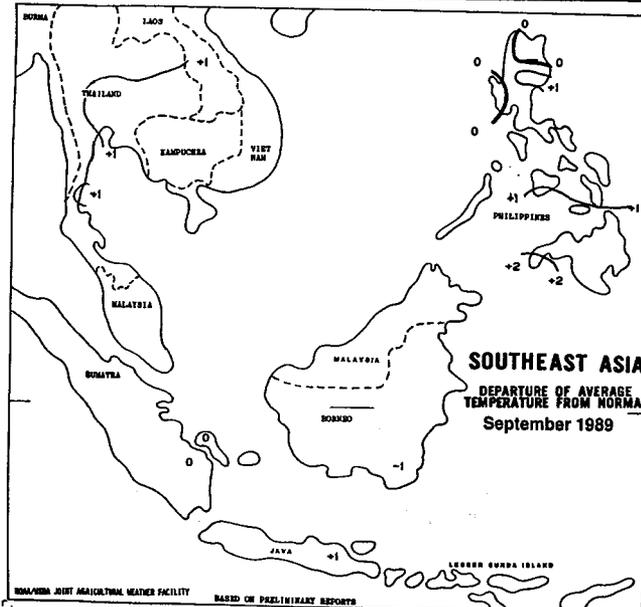
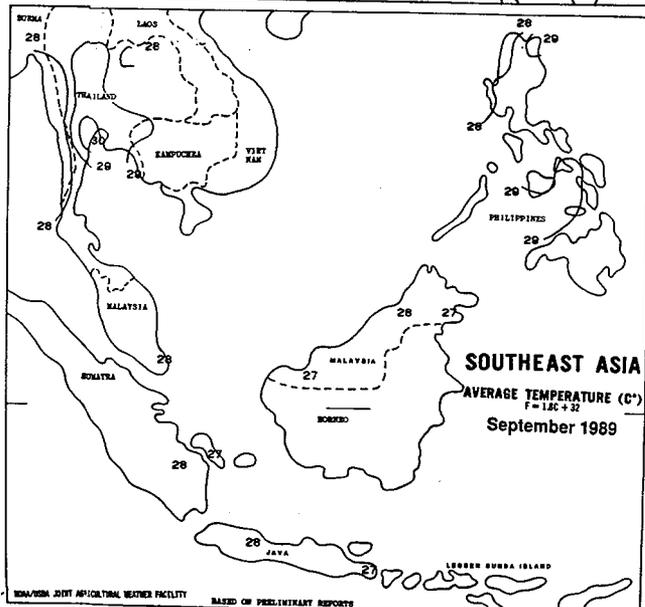
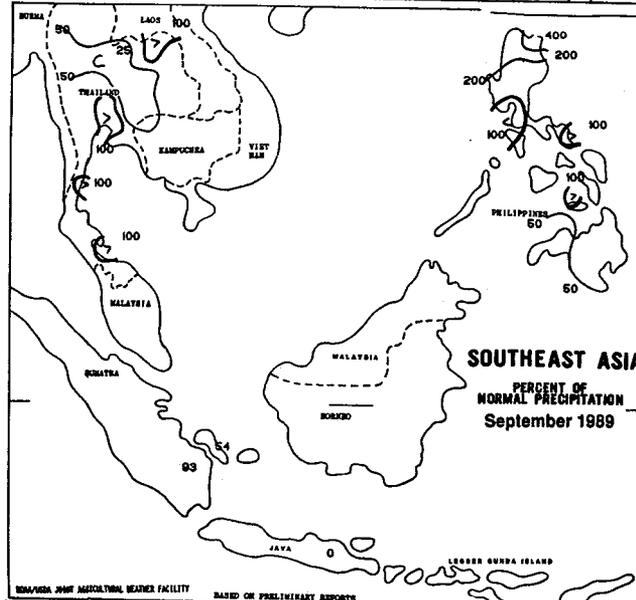
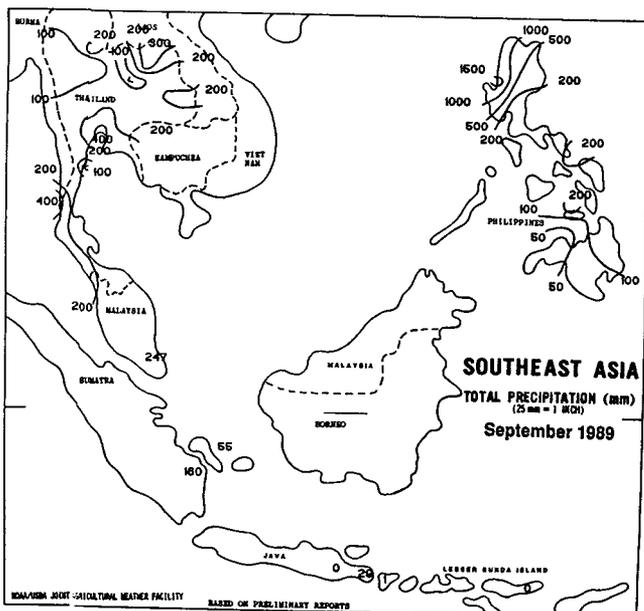
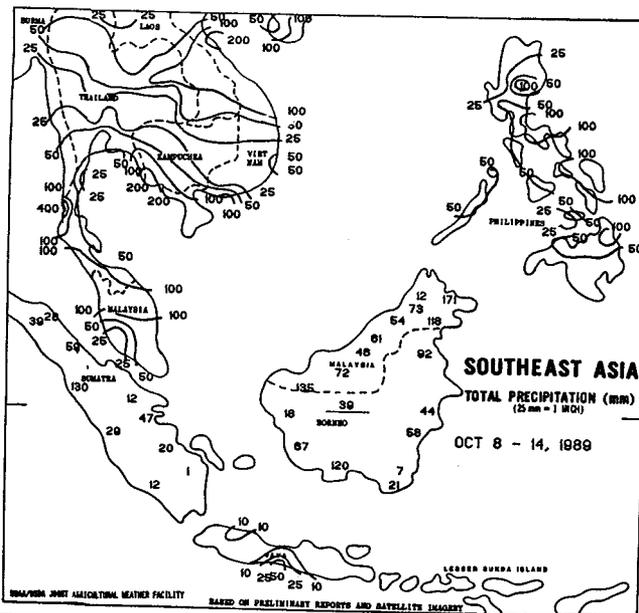


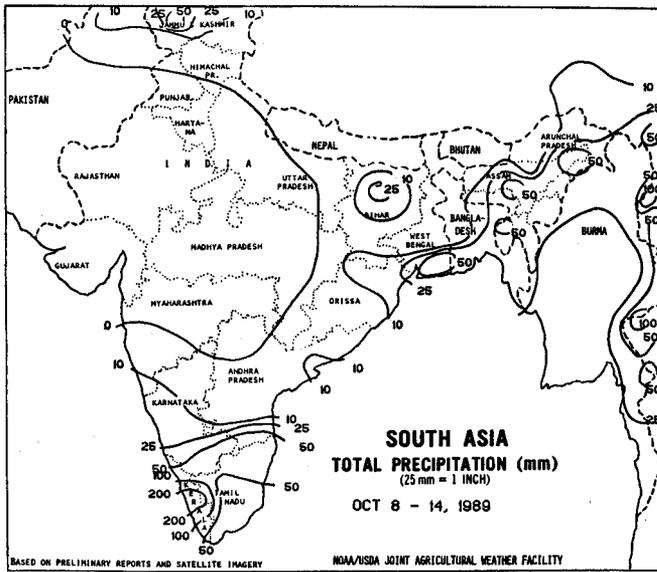


EASTERN ASIA ... In China, moderate to heavy showers (25-53mm) fell over numerous crop areas from Yunnan and Sichuan in the southwest to Hubei in the Yangtze Valley to southern Jiangxi and Fujian in the southeast. The rain delayed summer crop harvesting and winter crop planting. Elsewhere, mostly light rain (10mm or less) fell from Guizhou to Guangdong in the southeast, and much of the North China Plain. Heavier showers (10-42mm) fell along a narrow band from Shanxi through Hebei into Liaoning and western Jilin in the northeast. Heavy rain continued over much of Japan and western portions of the Korean peninsula, delaying rice harvesting. In the far south, Typhoons Angela and Dan struck southern Hainan with high winds, heavy rain, and flooding. September rainfall was above normal in the Yangtze Valley, much of southern China, southern South Korea, and Japan. In contrast, a drying trend during September in the North China Plain favored maturing and harvesting of summer crops but stressed late maturing double crop corn and soybeans, and left topsoil moisture unfavorably low for winter crop establishment.

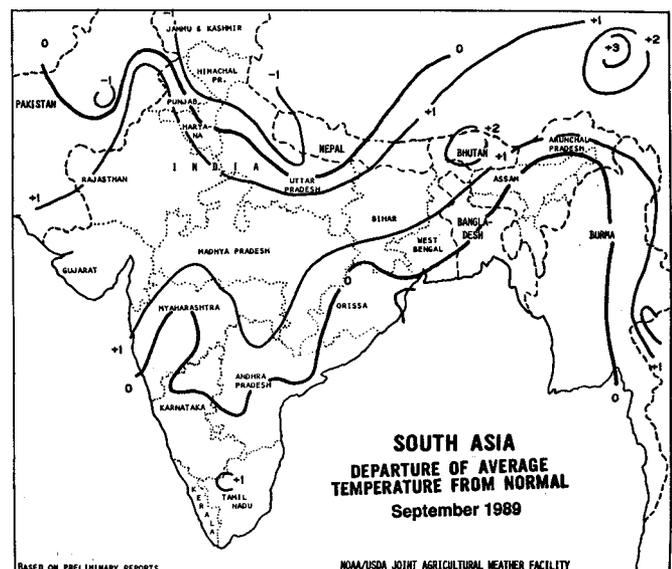
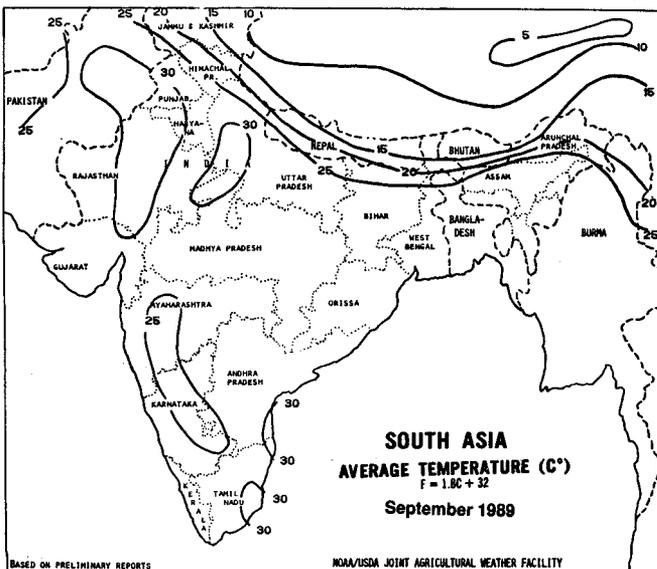
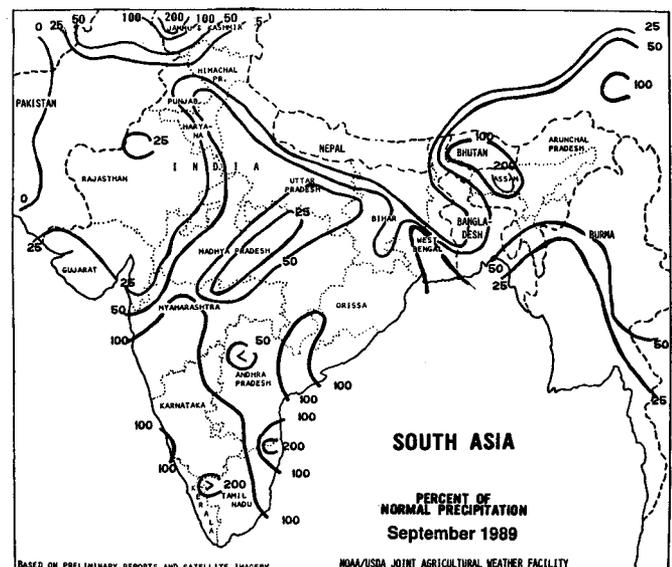
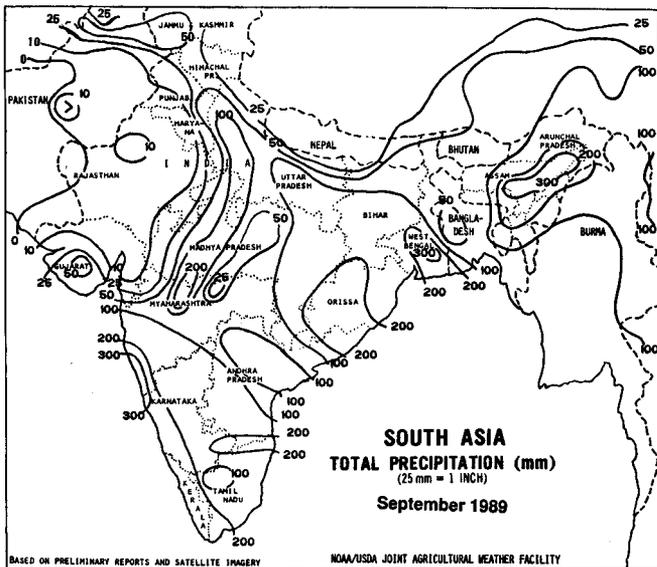


SOUTHEAST ASIA ... Typhoon Dan crossed the central Philippines from October 10 to 11 with maximum sustained winds of 70 knots, causing local wind damage and flooding. Heaviest rain (100-179mm) and highest winds hit copra, sugarcane, and rice regions of the east-central islands and southern Luzon. Dan hit northern Vietnam on the 13th with sustained winds of 65 knots. On the 10th, Typhoon Angela hit the same vicinity with sustained winds of about 85 knots. Excessive rain (100-200mm or more) and winds from the storms caused flooding and crop damage. Moderate to heavy rain (50-100mm or more), due partly to the storm remnants, covered much of Thailand and caused local flooding in the northeast. In September, an erratic rainfall pattern brought below-normal accumulations to most Thai rainfed grain regions, reducing moisture for immature crops. Frequent showers in the south near Bangkok, however, boosted irrigation for secondary crops. Tropical storm activity throughout September resulted in excessively wet conditions for mature grains in the northern Philippines.

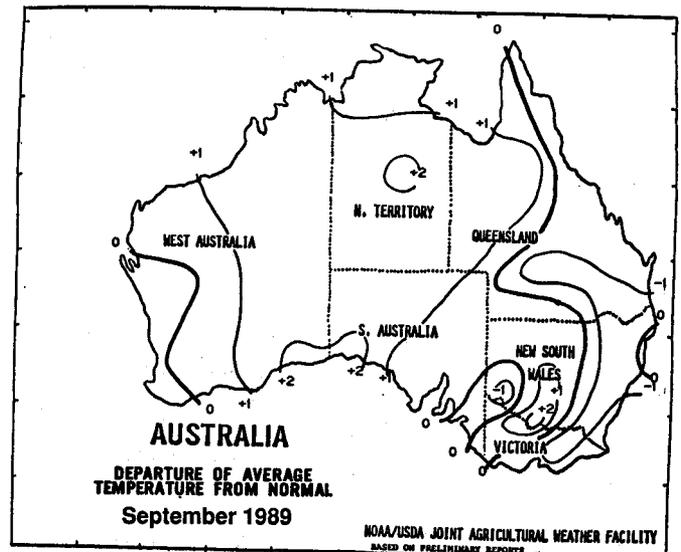
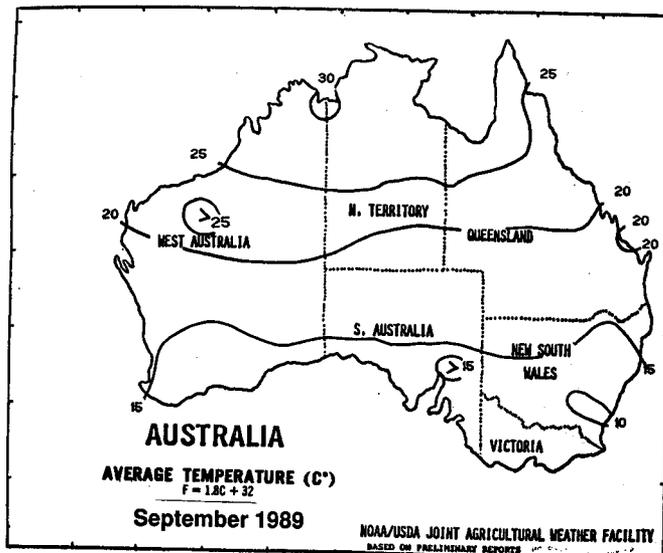
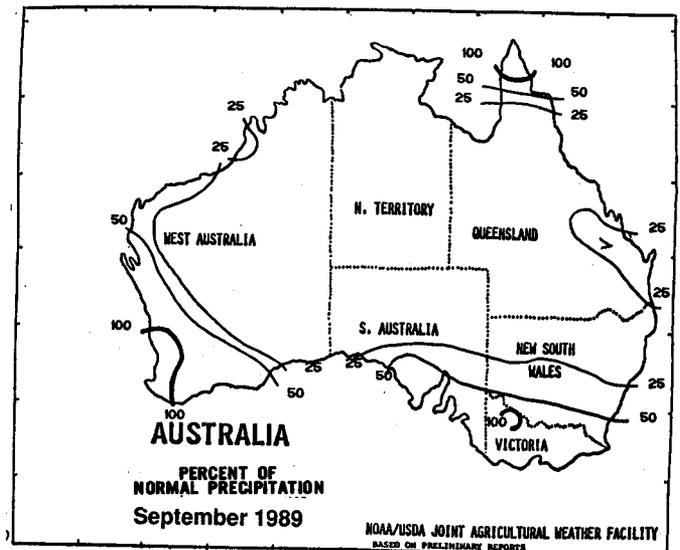
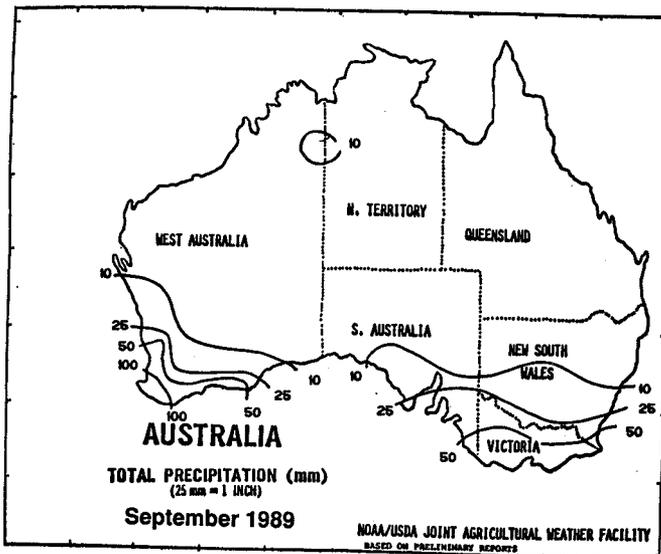
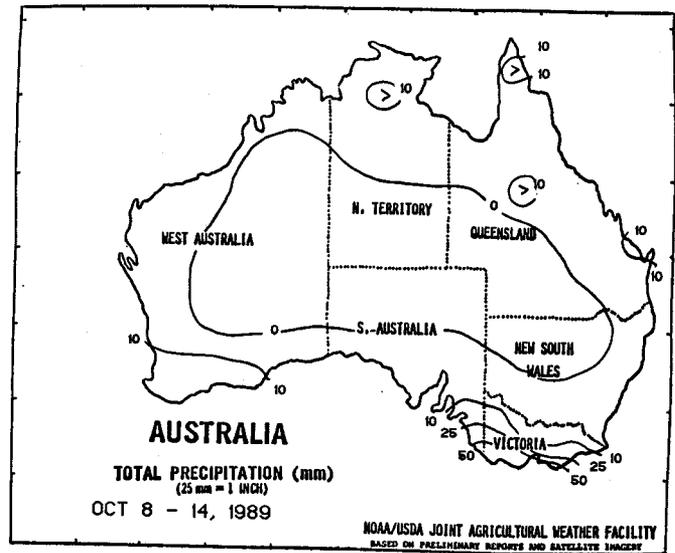




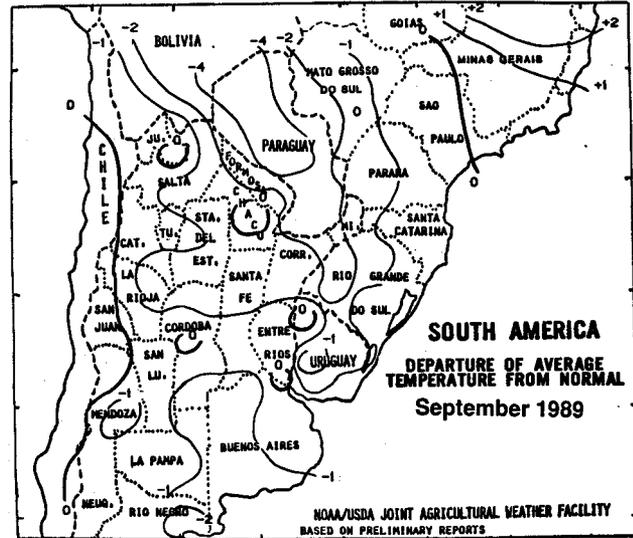
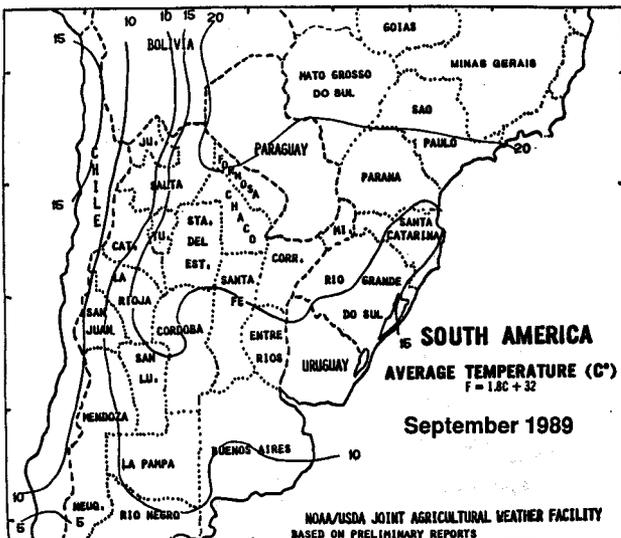
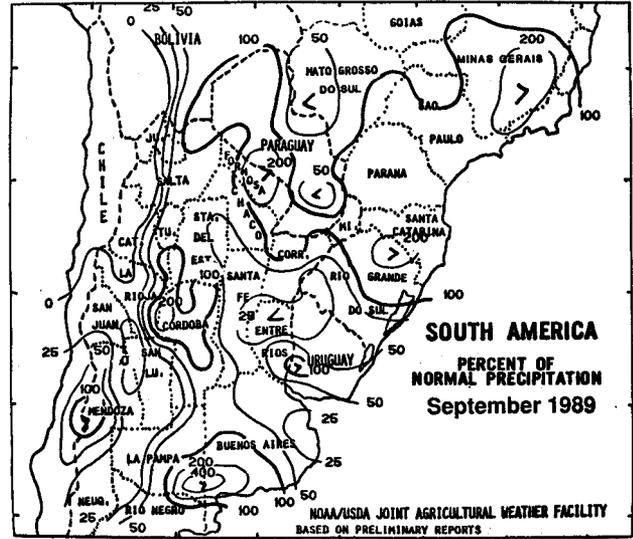
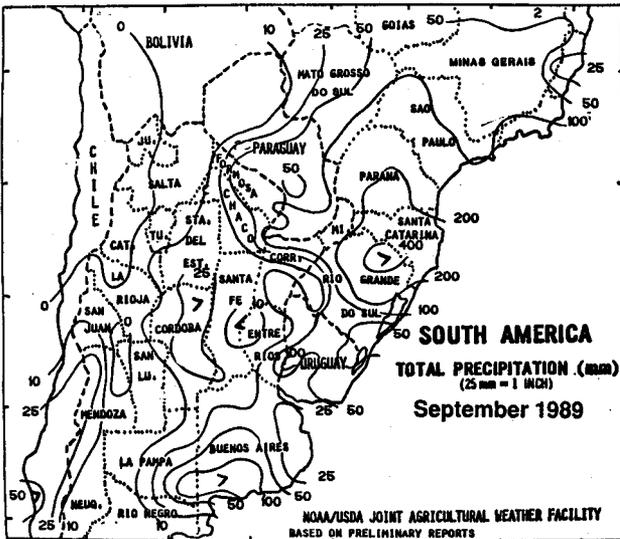
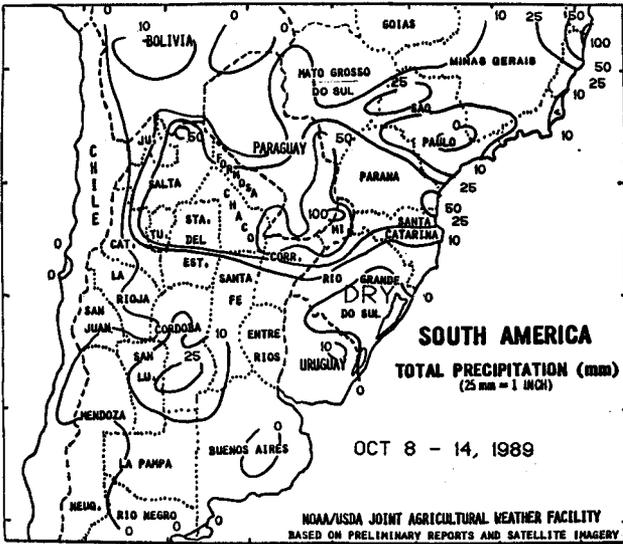
SOUTH ASIA ... Moderate to heavy rain (25-50mm or more) was limited to India's southern tip and eastern growing regions from Bihar and eastern Orissa eastward. Dry, warm weather dominated elsewhere, with high temperatures again reaching the middle to upper 30's C daily in India's southern cotton regions. Central India's main season cotton crop ranges from the flowering to boll filling stages of development. The southwest monsoon is usually withdrawn from central India by mid-October. In September, rainfall was near to above normal over most summer crop regions of southern India and local areas from Orissa eastward. Local showers in eastern Uttar Pradesh boosted irrigation reserves for wheat planting. Elsewhere, however, only local areas received near-normal rainfall, with much of the northwest and portions of central India receiving less than 25 percent of normal rainfall. Temperatures were generally above normal in central and northern growing regions, favoring summer crop maturation.



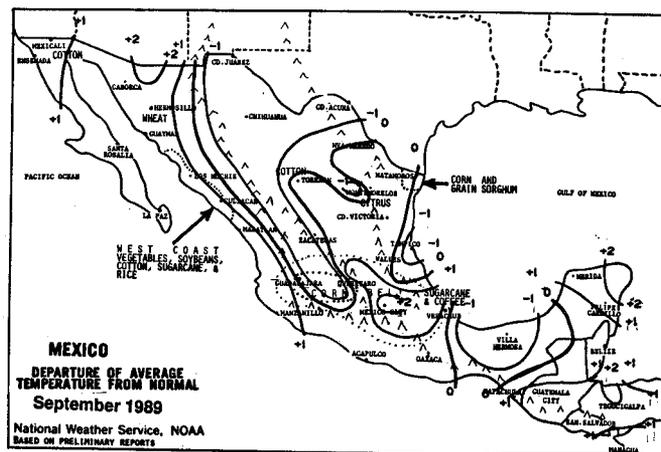
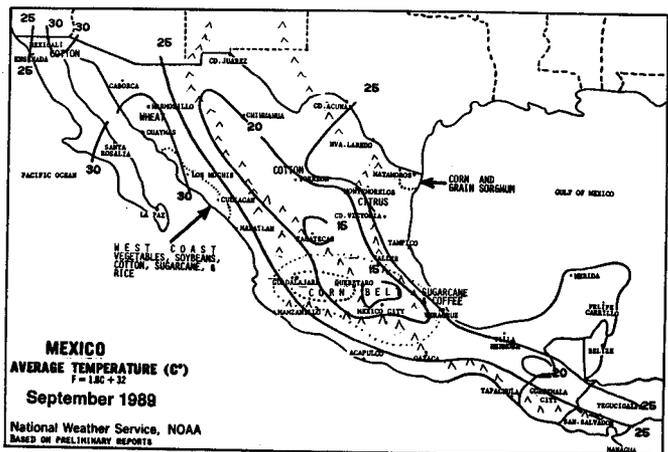
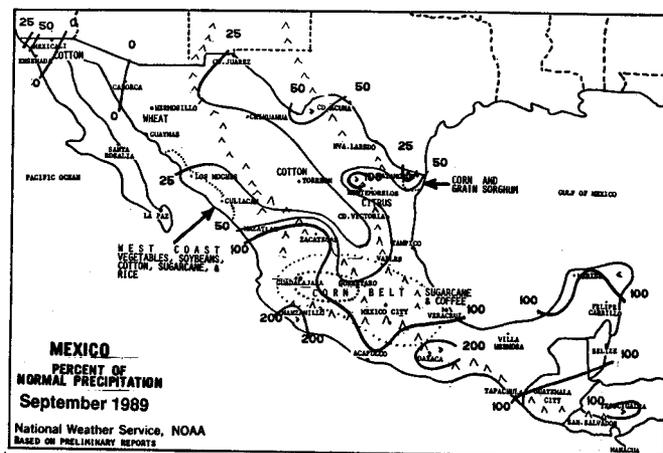
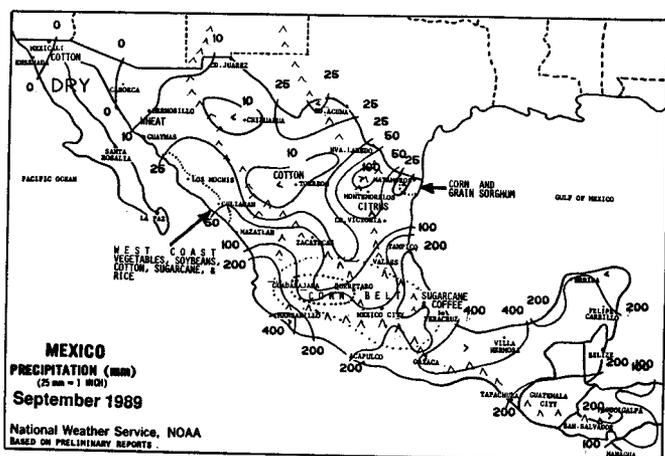
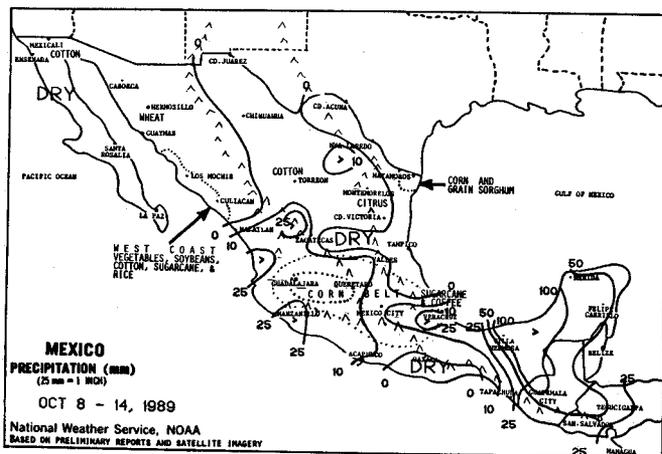
AUSTRALIA ... A frontal system brought light rain (less than 10mm) to the northern half of Western Australia's crop area, and light to moderate showers (10-26mm) to the south. While minimal rain fell in western crop areas of South Australia, the passage of the frontal system brought 10-35mm of weekly rainfall to the east, including much of Victoria as well. The moisture benefited vegetative to reproductive winter grains. In the east, mostly dry weather continued over crop areas of Queensland and New South Wales, stressing heading to filling winter grains. Below-normal precipitation fell over all but extreme southern Australia in September, creating abnormally dry soils for winter grains entering the sensitive reproductive stages and recently planted summer crops in the east. Below-normal September temperatures reduced the effect of moisture stress somewhat but also slowed development of winter crops. Mostly dry weather favored sugarcane harvesting in northeastern Queensland.

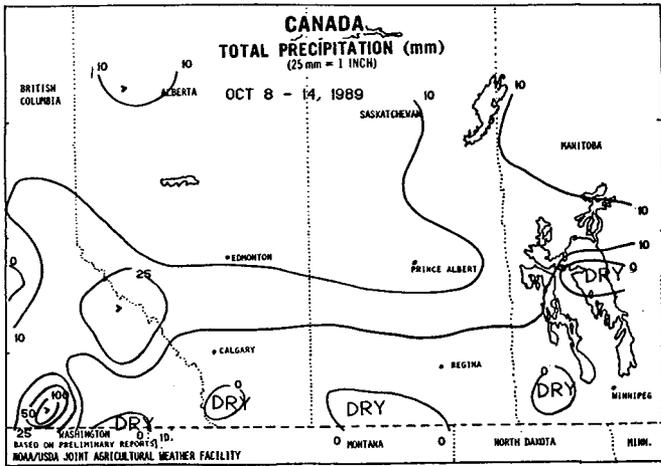


SOUTH AMERICA ... In Argentina, welcomed showers produced 10-34mm of weekly rainfall in southern Cordoba, southwestern Santa Fe, and extreme northwestern Buenos Aires, improving topsoils for summer crop planting. Light rain (3-9mm), however, provided minimal topsoil moisture over the remainder of Santa Fe and northern Buenos Aires. September rainfall averaged well below normal throughout the primary summer crop areas, except in northern cotton areas where near normal amounts benefited early plantings. The deficient topsoil moisture has hampered early corn and sorghum planting. In south-central Brazil, weekly rainfall diminished in Rio Grande do Sul, favoring field conditions following a very wet September and early October. Widespread rain this past week in Parana slowed early soybean planting. Ample September rainfall provided plentiful topsoil moisture. Above-average September rain also benefited coffee areas of Sao Paulo and Minas Gerais.

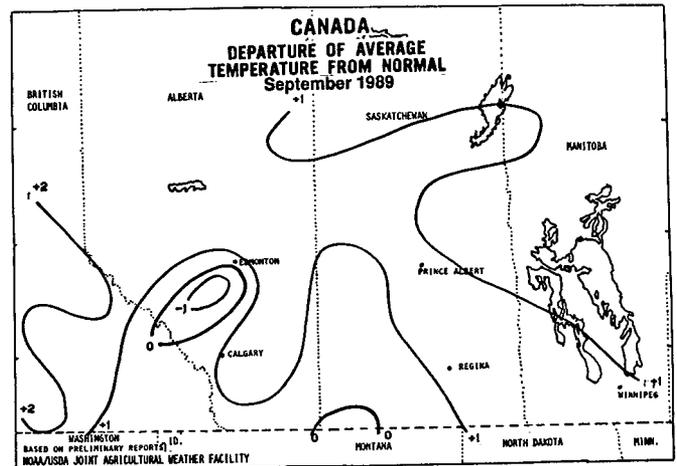
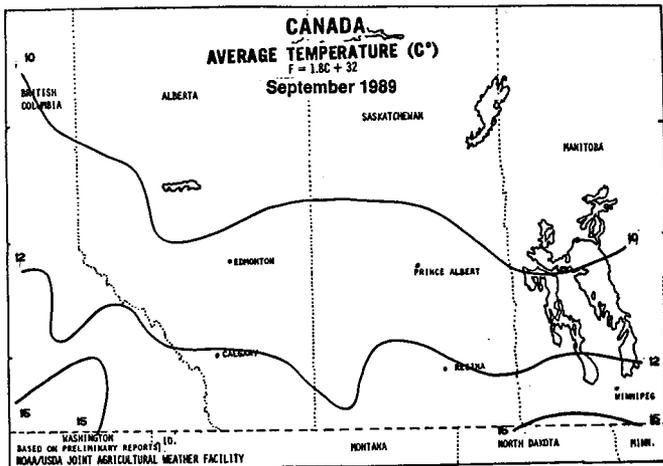
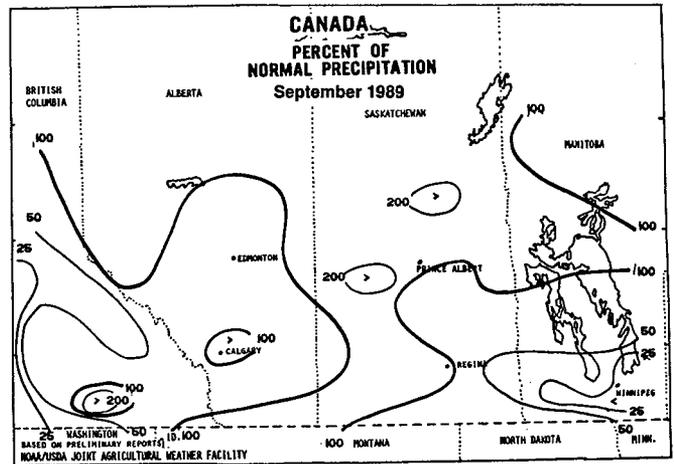
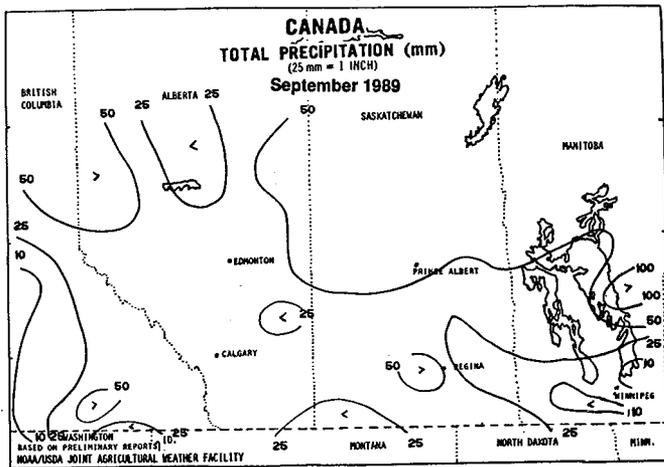


MEXICO ... Dry weather returned to the northwest, following last week's beneficial rain for wheat planting. Moisture is low across much of northern Mexico, with September rainfall averaging well below normal extending as far south as the major west coast farming region and the eastern two-thirds of the Southern Plateau corn belt. Near-normal September rain helped immature crops in the western Corn Belt. Tropical storms, however, produced torrential downpours and flooding from the southwest coast to the Yucatan peninsula. Tropical storm Jerry developed this past week over the Bay of Campeche, causing more heavy rain (50-155mm) over the Yucatan peninsula.





CANADA ... Scattered showers (1-19mm) covered the Prairies, but harvests were reported to be virtually complete. In September, unfavorably wet conditions occurred early in the month, continuing August's trend of excessive rainfall that caused harvest delays and reductions in crop quality. Generally drier and warmer weather the remainder of the month helped harvests to resume, although periodic wet and cold weather the latter half of the month likely affected crop quality in local areas. This is the last weekly summary of the season. Coverage will resume next spring coinciding with spring crop planting.



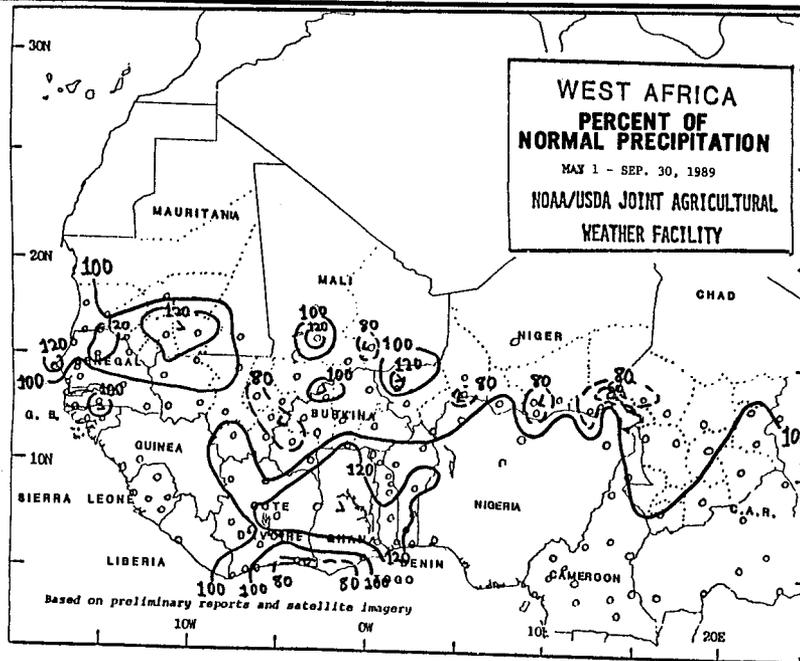
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West African Rainfall Summary

For the second consecutive year, abundant rains resulted in a successful growing season across West Africa. Most areas received close to 100 percent of the long-term mean (1951-80) precipitation. A few areas, including parts of Ghana, Senegal, and Mauritania, recorded over 120 percent of their "normal" rainfall. Driest growing areas were in Niger; rainfall totaled under 80 percent of "normal" in several

regions, especially in the east. For the Sahel countries, this year has been one of the three wettest since 1970. The past two seasons represent the first back-to-back years with normal or above normal rainfall since the 1960's. This offers hope that the 1990's may see a return to the wetter climate which prevailed before the drought-plagued years of the 1970's and 1980's.

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