

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

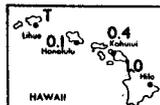
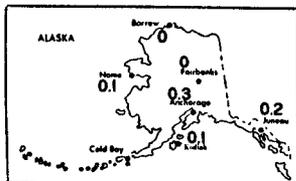
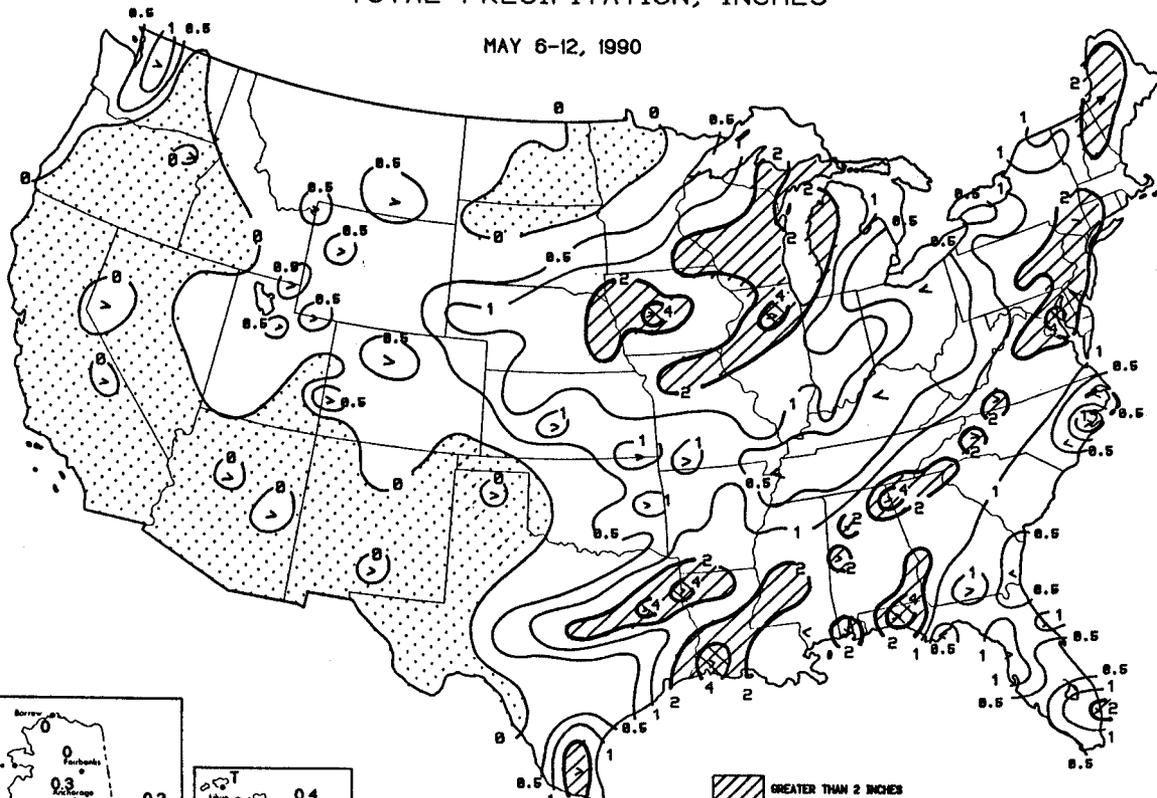
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Washington, D.C.

May 15, 1990

TOTAL PRECIPITATION, INCHES

MAY 6-12, 1990



GREATER THAN 2 INCHES
 GREATER THAN 4 INCHES
 NO PRECIPITATION
 NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

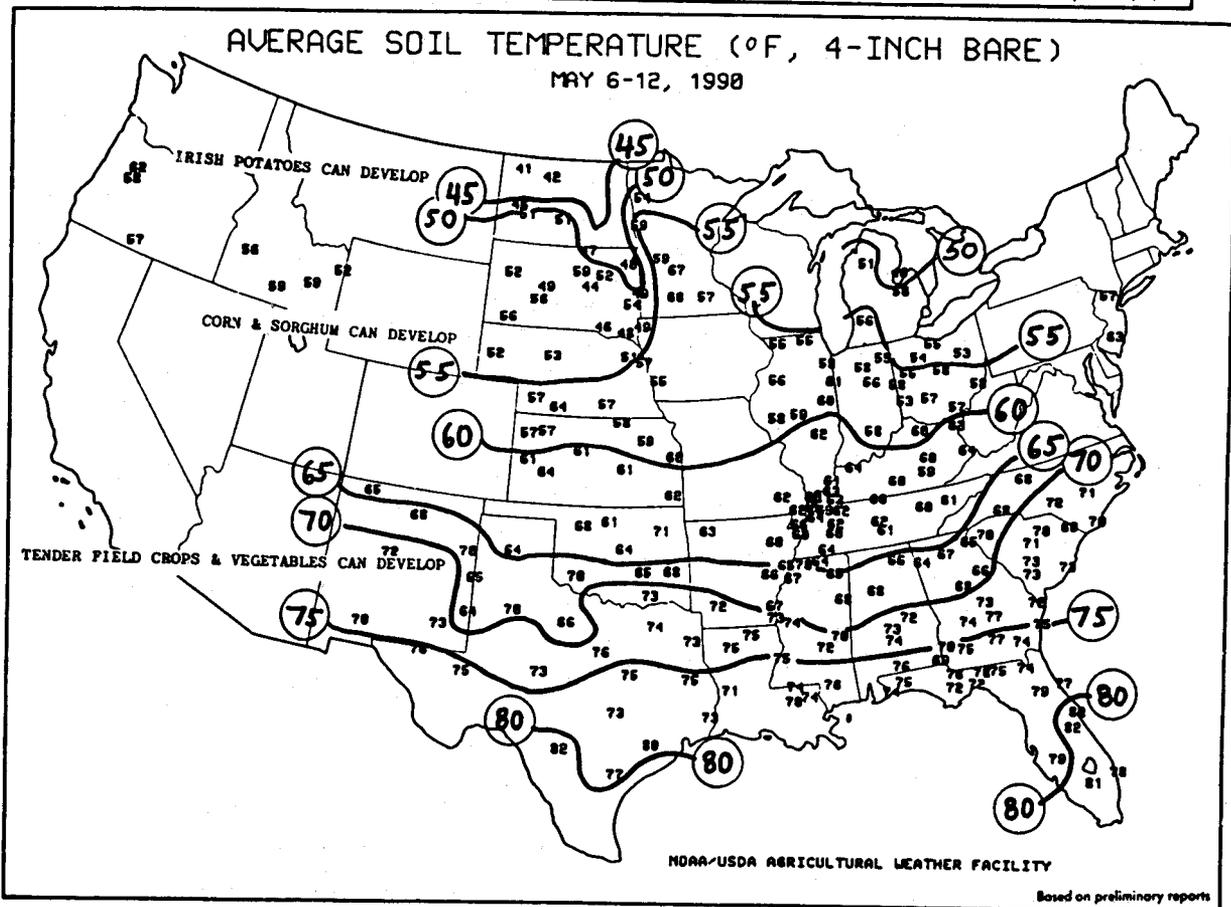
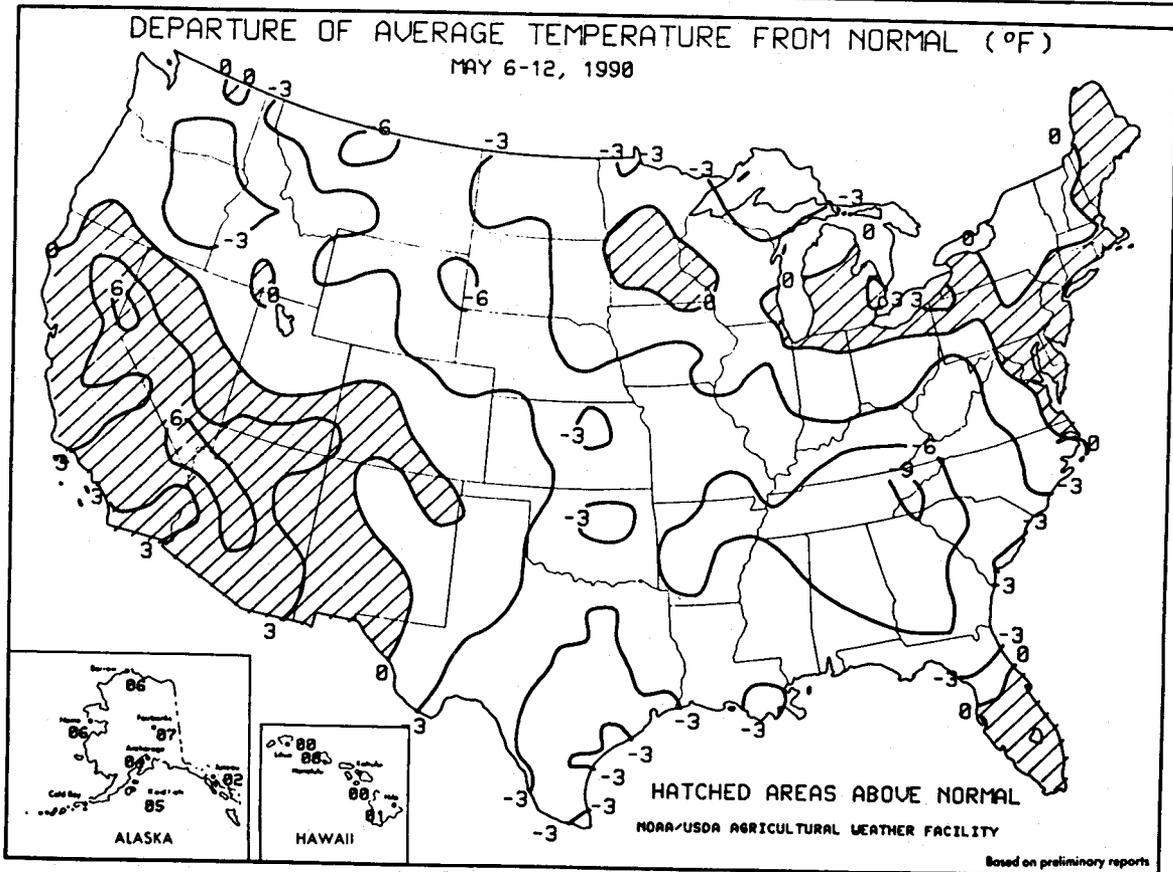
HIGHLIGHTS May 6-12, 1990

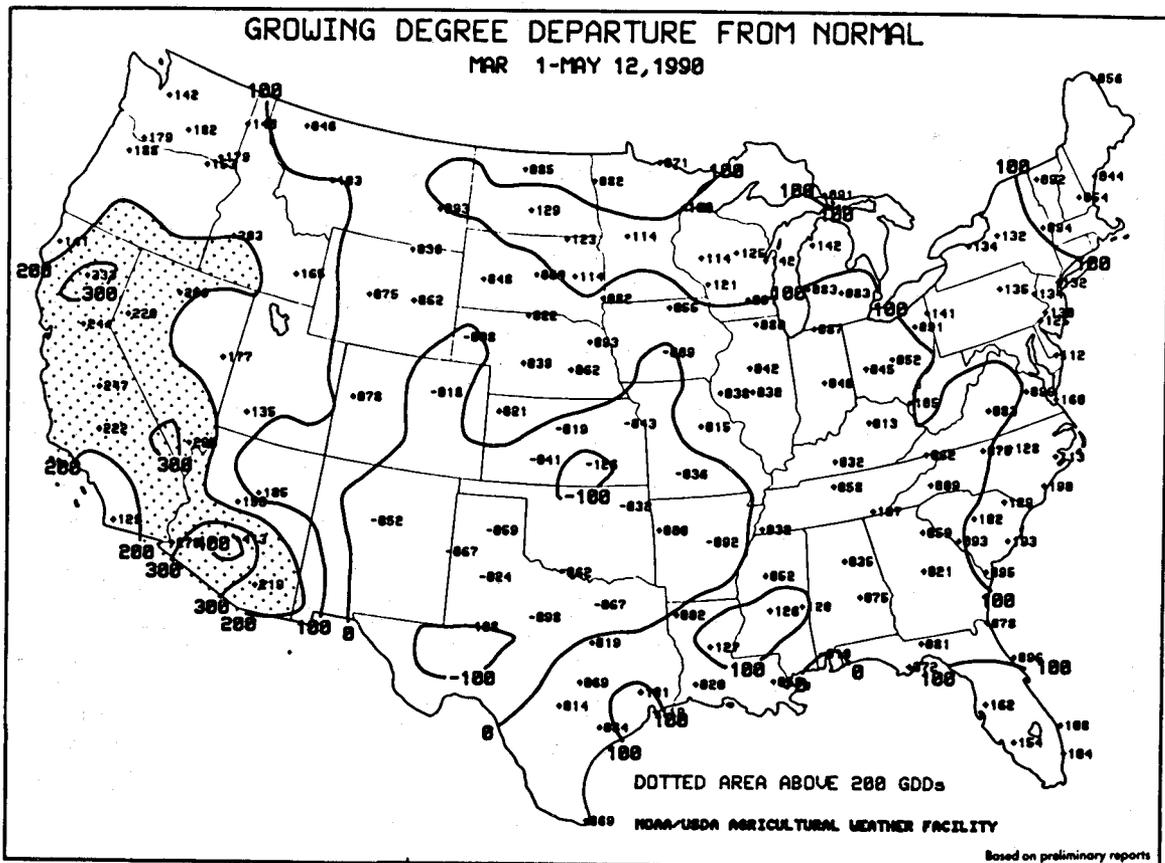
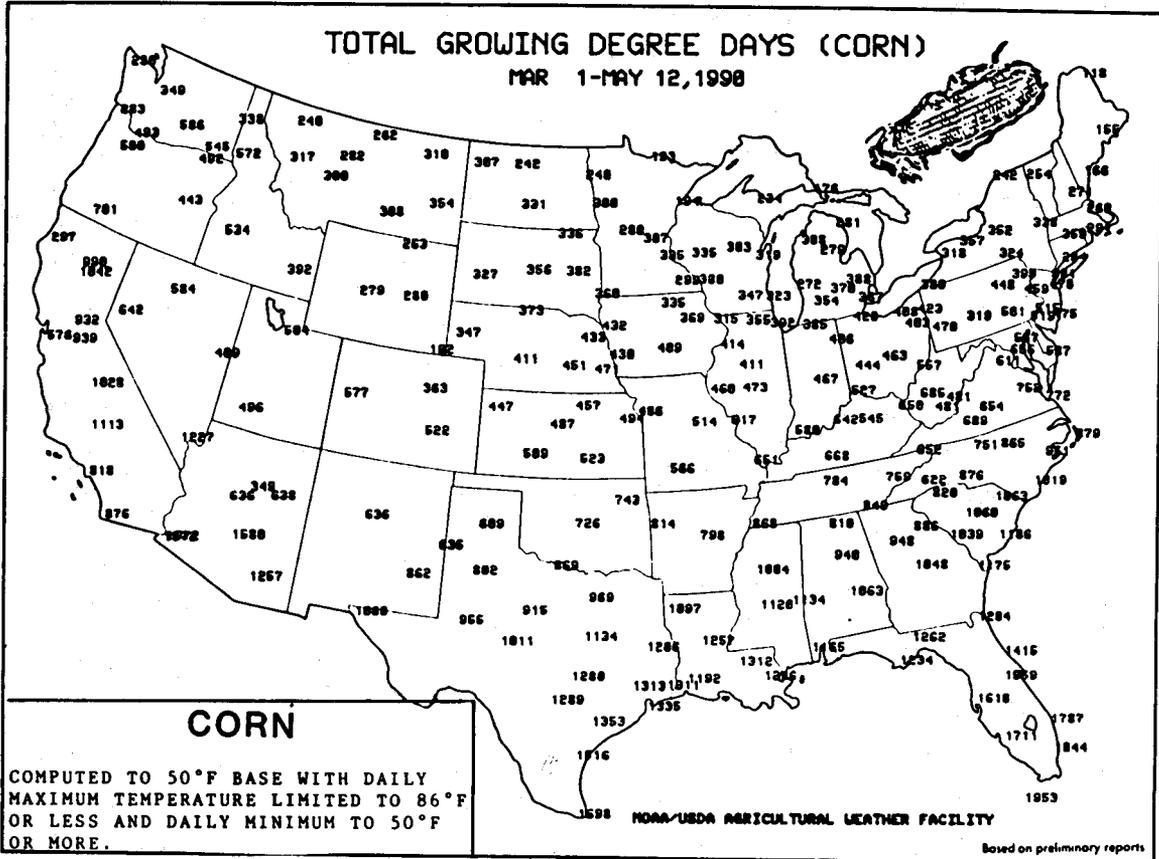
At the start of the week, dry and tranquil weather dominated much of the Nation as severe flooding from the torrential rains of the previous week continued in the **South Central States**. The flooding in the **Dallas-Fort Worth** area was the worst in at least 30 years. A late-season winter storm system formed in the **Rockies** and moved across the **northern Plains** and **upper Great Lakes region**, generating heavy snow in the Big Horn Mountains of **Wyoming** early in the week, and up to a foot of snow across **upper Michigan** on May 10-11. Several inches of heavy, wet snow hugged the ground as far south as **Madison, WI**. The system brought beneficially moderate to heavy rains across the **middle Missouri Valley**, while an upper level trough caused more drenching rain along

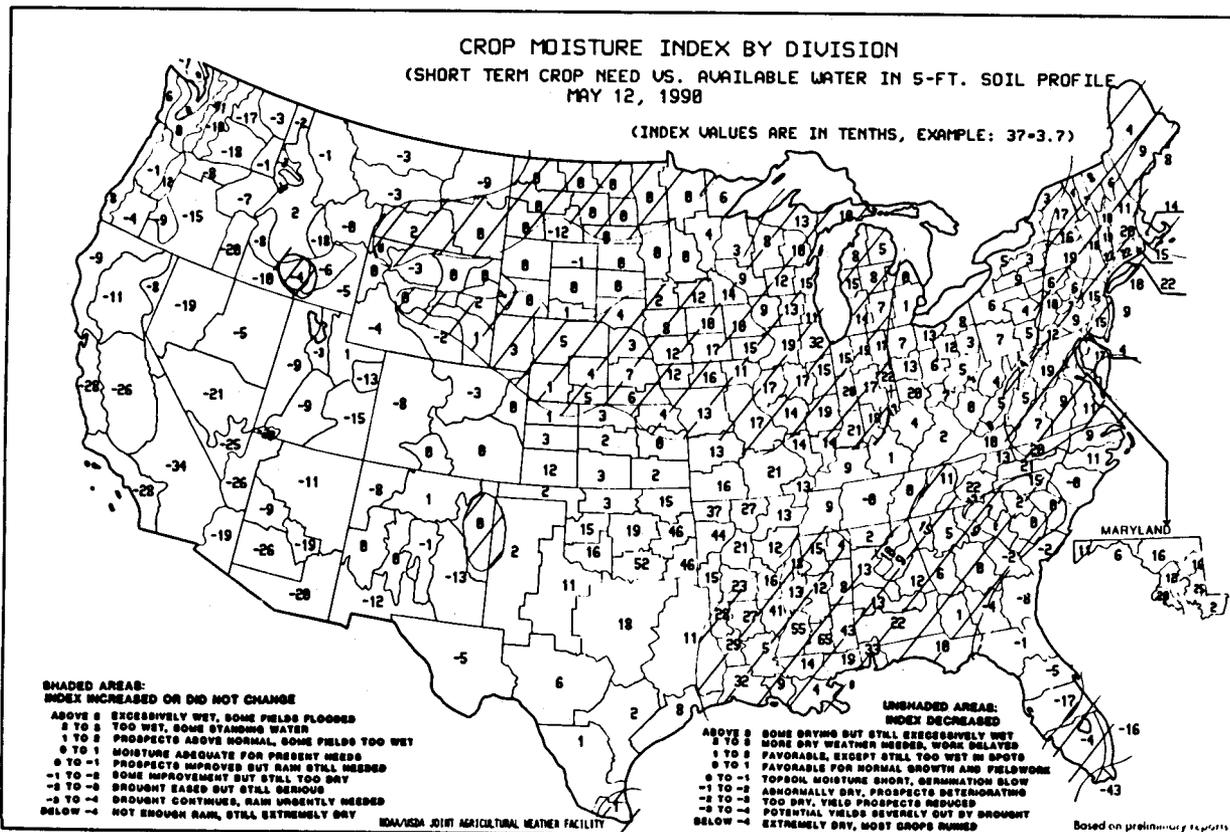
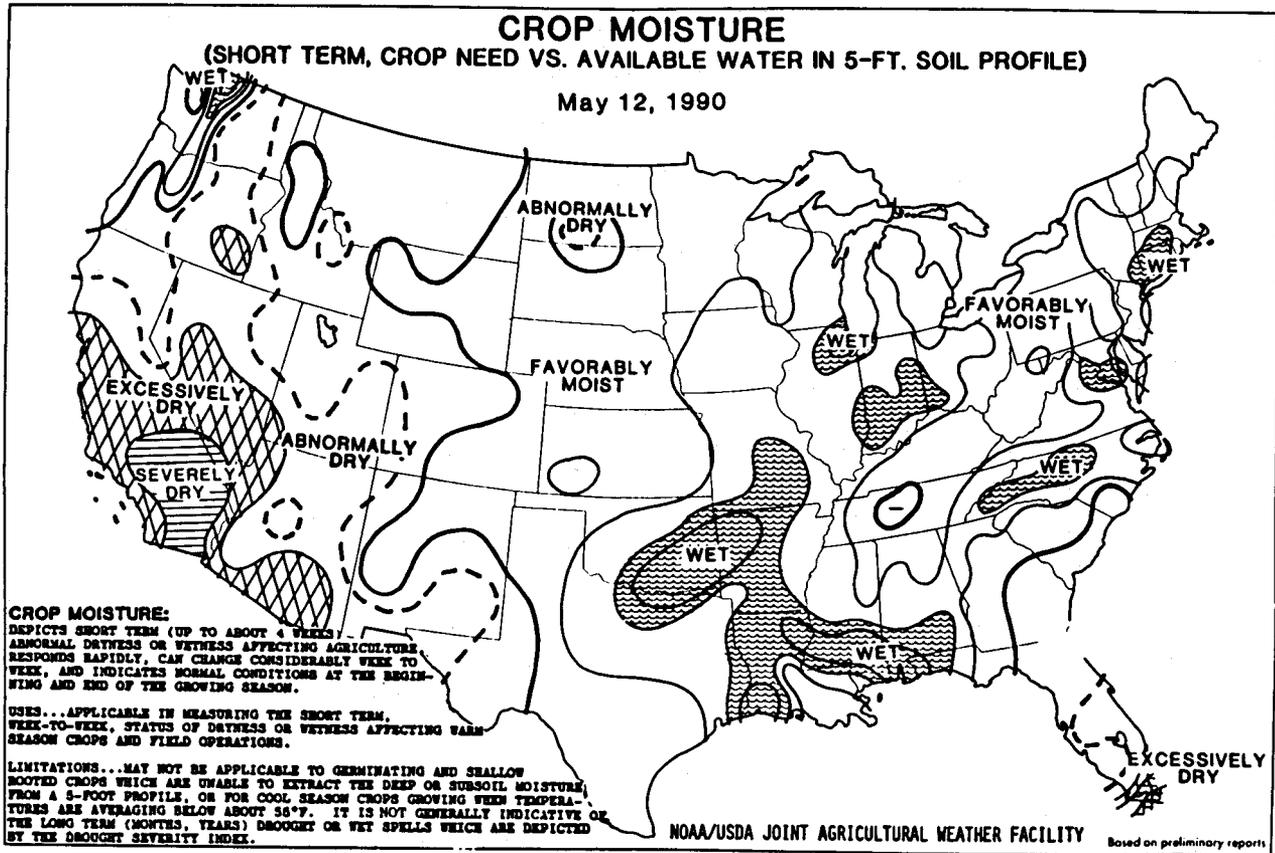
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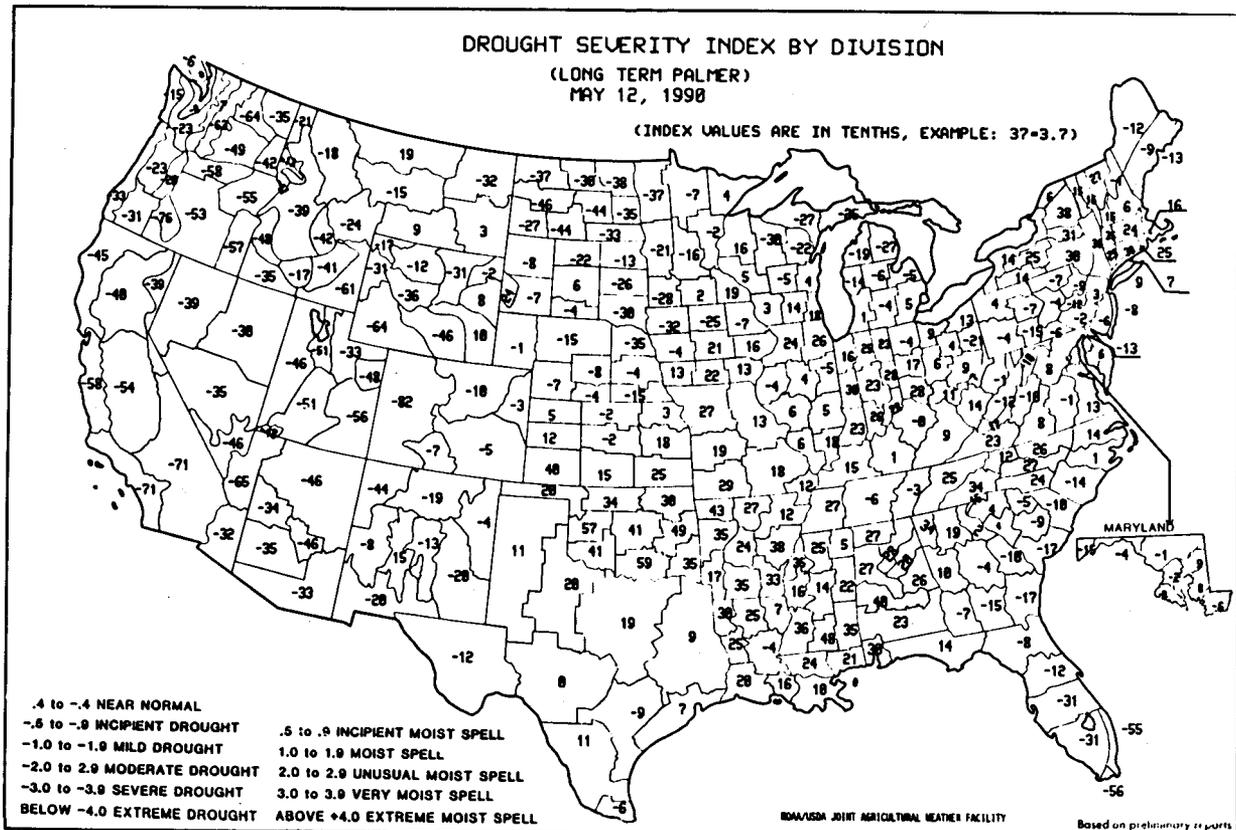
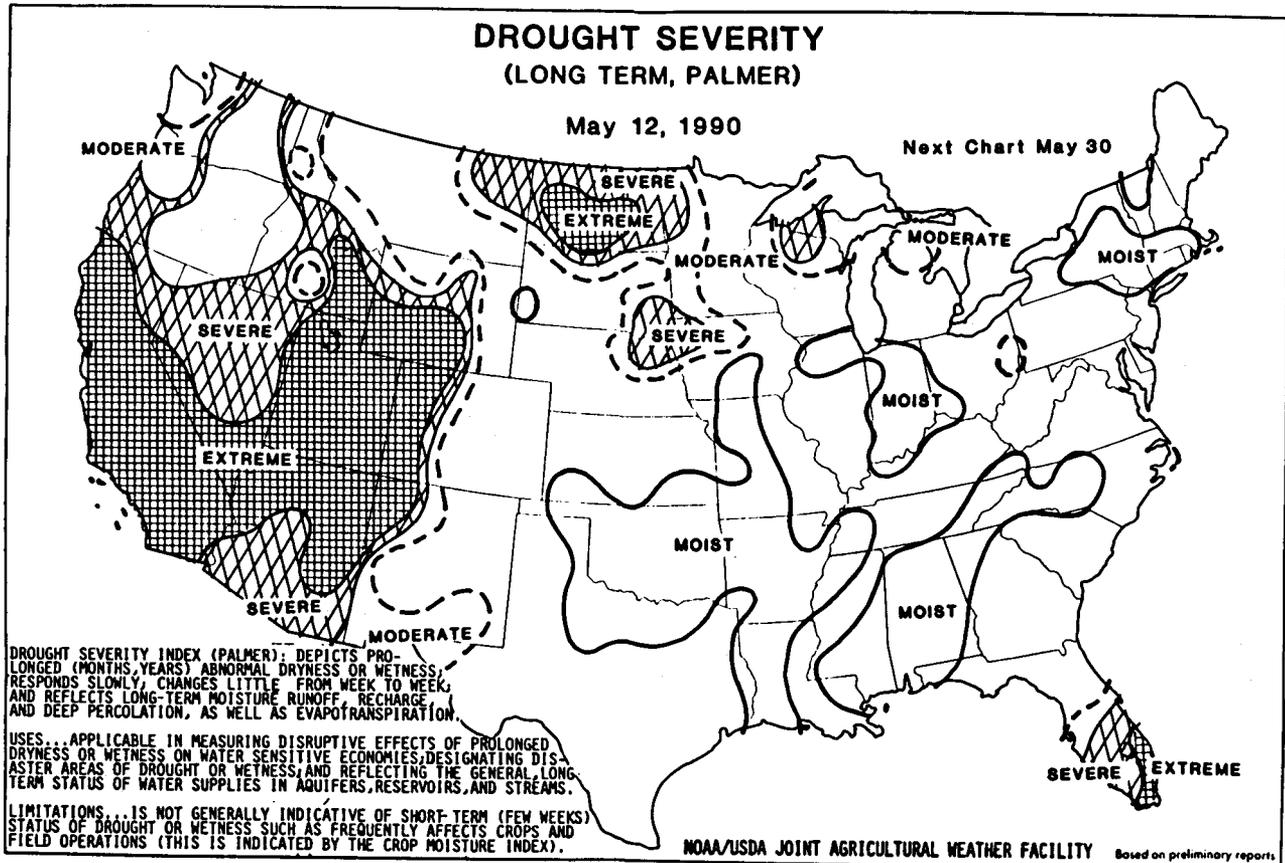
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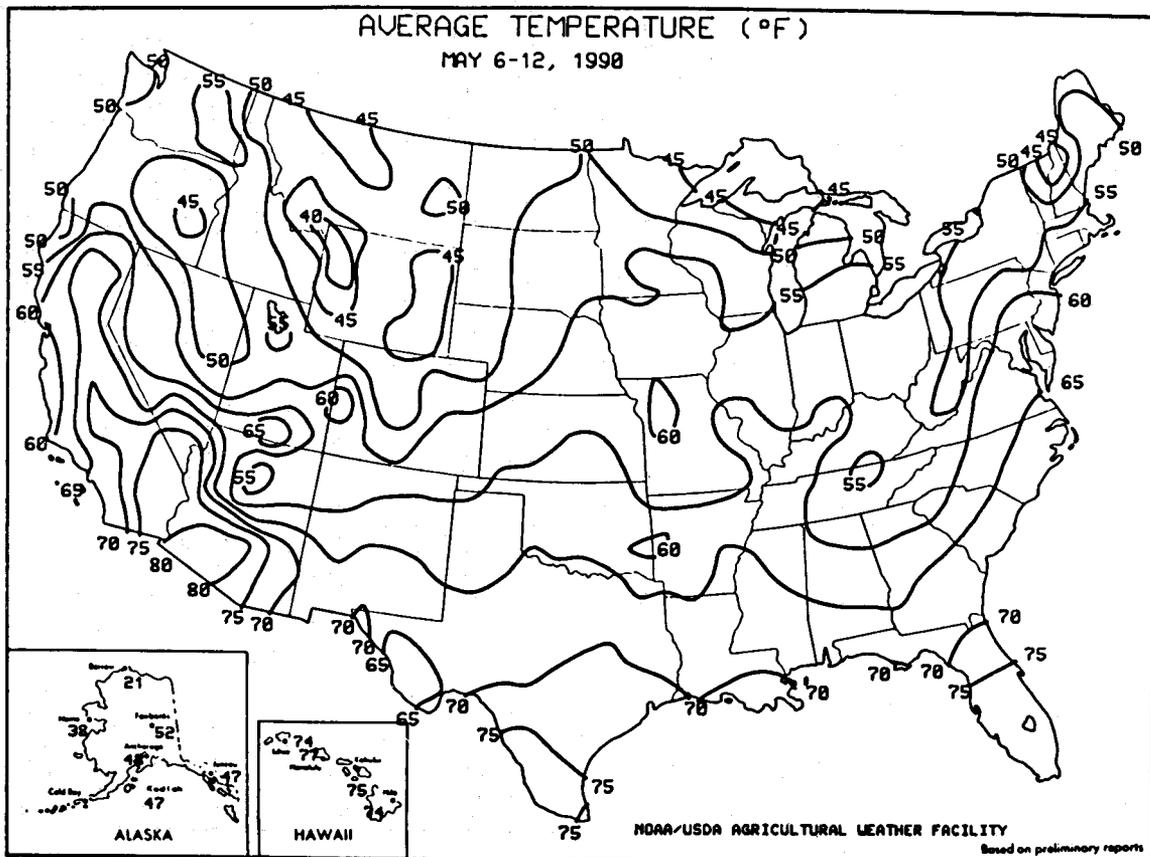
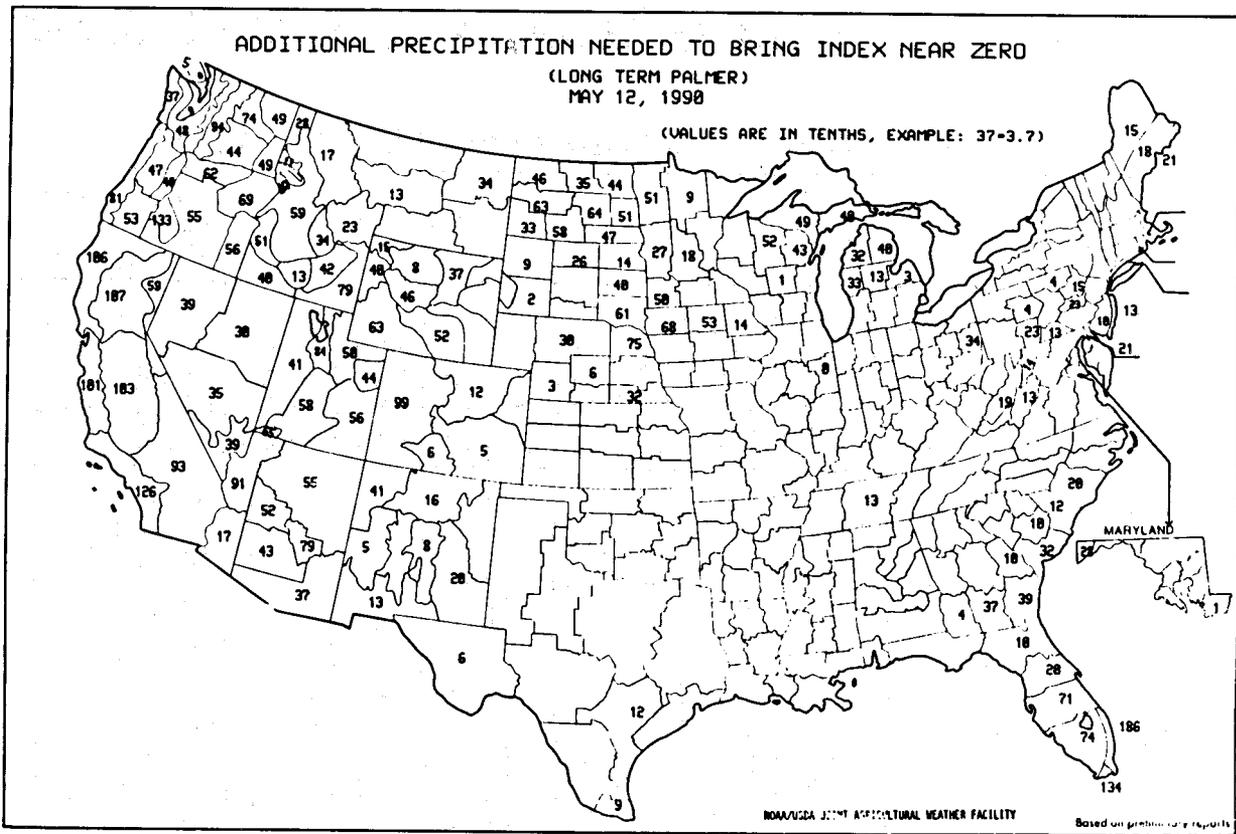
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National Weather Data for Selected Cities

Weather Data for the Week Ending May 12, 1990

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	74	50	79	44	62	-6	1.3	.2	.7	11.6	86	25.8	111	92	43	0	0	0	0	2	2
MOBILE	79	58	82	52	69	-5	2.5	1.2	2.4	19.5	140	35.0	150	90	46	0	0	0	0	2	1
MONTGOMERY	77	51	84	45	64	-6	1.8	.9	1.0	17.9	151	35.7	174	93	42	0	0	0	0	2	2
AK ANCHORAGE	55	40	61	32	48	4	.3	.2	.1	1.1	72	3.9	127	91	54	0	0	0	0	0	0
BARROW	28	15	34	1	22	7	.7	0	0	.2	56	.3	42	100	89	0	0	0	0	4	0
FAIRBANKS	64	40	70	32	52	7	.7	0	0	.2	23	1.4	79	76	29	0	0	0	0	0	0
JUNEAU	55	41	62	37	48	3	.2	0	0	6.6	87	14.8	99	97	55	0	0	0	0	0	0
KODIAK	53	41	57	36	47	6	.2	0	0	12.5	131	22.0	108	92	64	0	0	0	0	0	0
NOME	44	33	51	27	39	6	.1	0	0	2.1	155	3.5	133	97	71	0	0	0	0	0	0
AZ PHOENIX	94	70	99	65	82	7	0	0	0	.5	49	2.0	85	27	11	0	0	0	0	0	0
PRESCOTT	76	45	79	42	61	5	0	0	0	1.8	73	4.4	76	41	12	0	0	0	0	0	0
TUCSON	91	59	95	51	75	4	0	0	0	.5	48	2.2	88	33	9	0	0	0	0	0	0
YUMA	94	67	103	60	81	4	0	0	0	.2	76	.4	40	34	13	0	0	0	0	0	0
AR FORT SMITH	76	51	86	46	64	-4	.7	0	0	5.5	22.2	224	33.3	234	95	45	0	0	0	0	1
LITTLE ROCK	72	55	80	48	63	-5	1.5	.2	1.3	20.2	165	29.8	150	82	52	0	0	0	0	3	1
CA BAKERSFIELD	86	56	100	52	71	2	0	0	0	.6	38	2.4	64	62	24	0	0	0	0	4	1
EUREKA	57	46	60	41	51	2	0	0	0	4.7	55	16.4	79	86	61	0	0	0	0	0	0
FRESNO	85	55	98	51	70	4	0	0	0	1.6	55	5.7	84	65	22	0	0	0	0	0	0
LOS ANGELES	70	59	83	57	65	3	0	0	0	.5	17	4.3	51	80	52	0	0	0	0	0	0
REDDING	83	55	91	49	69	2	0	0	0	3.1	36	12.4	54	57	18	0	0	0	0	0	0
SACRAMENTO	80	51	86	48	65	2	0	0	0	1.6	45	9.4	91	80	30	0	0	0	0	0	0
SAN DIEGO	70	59	87	58	65	2	0	0	0	1.0	36	4.6	71	80	54	0	0	0	0	0	0
SAN FRANCISCO	66	50	73	48	58	1	0	0	0	1.0	23	6.3	52	86	45	0	0	0	0	0	0
CO DENVER	66	39	81	32	53	-2	.1	0	0	4.2	108	5.6	109	87	45	0	0	0	0	0	0
GRAND JUNCTION	75	44	83	33	60	0	.1	0	0	1.8	104	2.9	101	71	26	0	0	0	0	4	0
PUEBLO	75	38	83	34	56	-2	.1	0	0	4.3	192	5.6	205	80	22	0	0	0	0	0	0
CT BRIDGEPORT	65	48	72	40	57	0	1.8	1.0	1.7	9.9	109	15.7	103	83	45	0	0	0	0	2	0
HARTFORD	67	45	78	36	56	-1	1.6	.8	1.3	9.4	100	16.8	104	83	42	0	0	0	0	1	1
DC WASHINGTON	73	52	81	48	63	-1	1.5	.8	1.3	9.0	118	13.3	102	90	38	0	0	0	0	3	1
FL APALACHICOLA	78	62	85	55	70	-3	.3	0	0	6.7	81	13.1	84	90	55	0	0	0	0	2	1
DAYTONA BEACH	82	65	91	58	74	0	1.1	.5	.5	4.6	73	11.6	99	88	48	0	0	0	0	1	0
JACKSONVILLE	81	56	90	48	69	-5	.7	0	0	2.9	37	8.8	61	91	47	0	0	0	0	3	1
KEY WEST	86	75	89	72	81	1	1	0	0	2.1	57	3.2	43	84	61	0	0	0	0	1	0
MIAMI	86	72	90	69	79	2	1.5	.2	1.4	10.7	149	12.1	108	84	55	0	0	0	0	0	0
ORLANDO	86	65	90	61	76	-1	.1	0	0	3.8	57	8.1	68	89	41	0	0	0	0	2	1
TALLAHASSEE	81	55	89	47	68	-4	.7	0	0	7.9	68	18.3	87	93	42	0	0	0	0	2	0
TAMPA	87	67	91	64	77	1	.3	0	0	3.6	56	8.7	76	87	44	0	0	0	0	1	1
WEST PALM BEACH	86	72	93	68	79	2	.9	0	0	5.6	72	8.2	62	85	54	0	0	0	0	2	0
GA ATLANTA	73	52	82	47	63	-5	1.2	.3	1.0	13.1	110	31.3	147	84	39	0	0	0	0	3	1
AUGUSTA	79	51	86	44	65	-5	.6	0	0	4.1	43	9.5	54	94	39	0	0	0	0	2	1
MACON	77	51	85	46	64	-7	1.1	.2	1.0	8.3	82	16.4	87	92	38	0	0	0	0	2	1
SAVANNAH	80	56	89	50	68	-4	.3	0	0	5.8	67	12.8	86	85	37	0	0	0	0	1	0
HI HILO	80	67	82	64	74	0	.9	0	0	16.9	55	61.3	114	90	61	0	0	0	0	5	0
HONOLULU	85	69	87	66	77	1	.1	0	0	1.3	24	9.7	81	76	44	0	0	0	0	1	0
KAHULUI	83	67	86	65	75	0	.4	0	0	3.3	2.2	2.2	54	119	91	0	0	0	0	2	0
LIHUE	79	70	80	66	75	0	0	0	0	6.4	71	17.1	90	81	65	0	0	0	0	1	0
ID BOISE	66	39	74	31	52	-3	.3	0	0	2.9	110	3.5	85	71	21	0	0	0	0	1	0
LEWISTON	67	44	75	39	56	-1	.1	0	0	3.1	118	3.8	77	64	31	0	0	0	0	0	0
POCATELLO	64	34	81	28	49	-3	.1	0	0	3.8	151	4.6	103	75	22	0	0	0	3	1	0
IL CHICAGO	66	46	81	36	56	-1	3.7	3.0	3.1	10.3	133	14.5	138	91	45	0	0	0	0	3	1
MOLINE	66	46	80	37	56	-3	1.9	1.0	.9	15.4	186	19.1	171	90	52	0	0	0	0	4	2
PEORIA	67	45	80	39	56	-3	1.9	1.0	1.2	9.4	115	14.8	132	94	49	0	0	0	0	2	2
QUINCY	68	47	78	39	58	-3	2.0	1.0	1.5	7.7	88	12.5	109	90	53	0	0	0	0	2	1
ROCKFORD	64	42	79	31	53	-3	1.6	.8	.6	8.9	108	11.9	110	93	50	0	0	0	0	1	4
SPRINGFIELD	70	47	79	38	59	-3	2.1	1.3	1.9	8.3	98	14.6	125	89	44	0	0	0	0	4	1
IN EVANSVILLE	71	49	80	40	60	-4	1.4	.4	.4	9.3	89	19.1	117	88	45	0	0	0	0	3	1
FORT WAYNE	68	46	78	38	57	-1	1.2	.4	.9	8.4	106	17.4	146	84	44	0	0	0	0	3	1
INDIANAPOLIS	68	47	77	36	57	-3	2.5	1.7	2.0	8.4	98	15.3	111	91	46	0	0	0	0	4	1
SOUTH BEND	66	46	80	36	56	-1	2.2	1.5	1.0	8.4	103	14.4	115	88	40	0	0	0	0	3	2
IA DES MOINES	67	44	82	37	56	-4	.8	0	.4	11.2	164	13.5	152	83	48	0	0	0	0	3	0
SIoux CITY	69	44	90	38	56	-3	2.0	1.3	1.6	5.8	111	6.4	95	81	40	0	0	0	0	3	1
WATERLOO	67	44	82	32	55	-1	1.8	.9	1.1	9.3	127	10.2	113	88	44	0	0	0	0	4	1
KS CONCORDIA	69	46	81	36	58	-4	1.1	.2	.7	7.7	139	8.3	120	90	50	0	0	0	0	3	1
DODGE CITY	72	45	82	35	58	-3	1	0	0	7.4	167	10.2	190	88	41	0	0	0	0	1	0
GOODLAND	70	41	86	32	55	-1	.4	0	0	3.6	114	4.8	123	91	37	0	0	0	0	2	0
TOPEKA	69	47	83	39	58	-4	1.6	.8	.8	6.5	98	10.1	117	93	52	0	0	0	0	3	2
WICHITA	71	48	79	41	59	-4	.2	0	0	4.1	70	8.0	109	89	45	0	0	0	0	2	0
KY BOWLING GREEN	71	46	81	37	59	-6	.5	0	0	6.1	54	18.5	93	98	52	0	0	0	0	4	0
LEXINGTON	67	48	76	40	58	-5	.6	0	0	6.3	61	13.9	81	90	45	0	0	0	0	4	0
LOUISVILLE	71	51	80	42	61	-3	.7	0	0	8.2	78	18.9	111	87	41	0	0	0	0	4	0
LA ALEXANDRIA	80	61	84	54	71	-2	1.8	.6	1.5	11.2	89	28.7	133	84	48	0	0	0	0	3	1
BATON ROUGE	81	61	85	53	71	-2	1.3	.1	1.3	9.8	80	29.1	134	91	47	0	0	0	0	2	1
LAKE CHARLES	78	62	81	56	70	-3	3.0	1.7	3.0	12.1	132	26.1	153	95	57	0	0	0	0	2	1
NEW ORLEANS	80	64	85	55	72	-2	1.8	.6	1.6	12.3	111	34.8	163	89	51	0	0	0	0	2	1

Based on 1951-80 normals

Weather Data for the Week Ending May 12, 1990

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE		
SHREVEPORT	78	57	84	51	68	4	4.0	2.9	3.9	13.5	130	30.4	170	94	55	0	0	0	0	1	0
MR CARIBOU	60	39	71	32	50	2	1.7	0	1.4	4.4	72	9.6	91	82	41	0	1	0	3	1	0
PORTLAND	62	42	70	35	52	2	1.3	0	1.0	8.3	91	14.0	85	91	46	0	0	0	5	1	1
MD BALTIMORE	72	49	82	43	61	-1	1.0	0	0.9	8.4	101	13.6	95	81	38	0	0	0	2	1	1
SALISBURY	71	52	80	45	61	0	1.4	0	0.8	8.2	96	14.2	93	93	41	0	0	0	1	1	0
MA BOSTON	66	48	81	42	57	1	1.8	0	0.8	8.2	106	16.6	98	86	38	0	0	0	2	1	1
CHATHAM	58	46	62	42	52	1	1.4	0	0.6	9.2	97	18.7	104	88	57	0	0	0	5	1	0
MI ALPENA	63	36	86	29	49	0	0.3	-0.3	0.2	5.5	101	9.0	107	95	38	0	0	2	3	1	0
DETROIT	67	45	80	37	56	0	0.2	-0.4	0.2	5.5	88	12.8	125	87	47	0	0	0	2	2	0
FLINT	67	44	81	35	56	2	1.1	0	0.4	6.1	69	8.7	95	85	40	0	0	0	4	0	0
GRAND RAPIDS	65	45	81	35	55	0	1.1	0	0.4	6.1	69	8.7	95	85	40	0	0	0	4	0	0
HOUGHTON LAKE	62	38	78	30	50	-1	1.1	0	0.3	3.7	67	10.6	99	81	41	0	0	0	3	3	0
LANSING	67	43	80	34	55	1	1.4	0	0.4	5.4	89	9.6	77	83	43	0	0	3	2	0	0
MARQUETTE	56	31	76	23	44	-4	2.9	2.0	1.9	7.2	90	10.8	91	87	54	0	0	0	3	3	0
MUSKOGON	62	44	75	35	53	-1	2.8	2.2	2.1	6.1	84	10.6	99	81	41	0	0	0	5	3	2
SAULT ST. MARIE	55	35	62	31	45	-2	1.4	0	0.7	8.1	122	12.2	114	80	41	0	0	0	4	2	1
MN ALEXANDRIA	68	42	89	31	55	2	1.1	0	0.4	5.6	104	10.2	110	92	51	0	0	3	5	2	0
DULUTH	60	34	71	28	47	-1	1.1	0	0.1	4.4	100	4.9	82	79	28	0	1	1	1	1	0
INT' L FALLS	61	34	75	29	47	-1	1.1	0	0.1	7.2	145	8.3	117	84	30	0	0	3	2	0	0
MINNEAPOLIS	68	44	90	33	56	0	0.5	-0.2	0.3	8.0	167	8.9	138	81	33	1	0	5	0	0	0
ROCHESTER	65	42	85	32	54	-1	2.0	1.2	1.7	12.0	217	13.2	189	85	42	0	0	0	3	1	0
MS GREENWOOD	77	55	84	46	66	-5	0.3	-0.9	0.3	9.9	72	23.5	100	94	44	0	0	1	2	0	0
JACKSON	78	54	85	48	66	-5	3.1	1.9	2.7	10.3	77	30.8	136	99	45	0	0	0	3	1	0
MERIDIAN	79	52	84	46	65	-5	2.9	1.9	1.4	14.5	105	41.7	178	96	43	0	0	0	3	2	1
MO CAPE GIRARDEAU	72	51	78	41	61	-1	1.8	0	1.3	13.7	92	23.8	137	92	50	0	0	0	3	2	1
COLUMBIA	70	46	78	37	58	-5	1.6	0	1.0	13.7	153	19.6	155	91	49	0	0	0	3	2	1
KANSAS CITY	68	48	81	41	58	-6	1.9	0	1.0	9.0	119	12.4	123	86	51	0	0	0	3	2	1
SAINT LOUIS	73	52	82	46	62	-1	1.7	0	1.2	8.7	106	13.6	113	85	42	0	0	0	4	1	1
SPRINGFIELD	69	48	78	42	59	-4	1.1	0	0.7	14.4	158	25.3	197	93	49	0	0	0	2	1	1
MT BILLINGS	60	39	84	32	49	-3	1.1	0	0.6	4.9	127	5.7	104	82	34	0	0	1	5	1	0
GLASGOW	62	35	85	30	48	-4	0.3	-1.1	0.2	1.3	83	1.7	77	76	28	0	0	3	3	0	0
GREAT FALLS	57	33	77	24	45	-6	0.1	-0.5	0	2.6	81	3.1	63	77	34	0	0	3	3	0	0
HAVRE	57	35	80	31	46	-7	0.2	-0.2	0.1	1.5	67	2.2	47	82	37	0	0	3	2	0	0
HELENA	60	35	79	25	48	-3	0.1	-0.2	0.1	1.6	69	2.2	65	71	28	0	0	2	1	0	0
KALISPELL	58	36	64	28	47	-3	0.4	-0.4	0	3.1	126	5.8	113	87	38	0	0	2	3	0	0
MILES CITY	63	39	89	34	51	-3	0.1	-0.4	0	3.1	111	3.2	81	78	31	0	0	3	0	0	0
MISSOULA	59	36	65	30	47	-3	0.1	-0.2	0.1	2.4	103	3.6	79	83	31	0	0	3	2	0	0
NE GRAND ISLAND	67	44	86	35	55	-3	1.3	0	0.8	5.5	99	6.3	92	90	48	0	0	0	4	1	1
LINCOLN	67	46	85	37	57	-3	2.4	1.5	2.0	6.9	112	7.6	97	86	46	0	0	0	3	1	1
NORFOLK	68	42	90	34	55	-3	1.8	1.0	1.3	4.8	96	5.9	94	89	41	1	0	0	4	1	1
NORTH PLATTE	67	37	88	27	52	-4	0.9	0	0.8	4.2	104	4.7	94	95	41	0	0	1	3	1	1
OMAHA	67	47	85	37	57	-4	1.6	0	0.7	6.2	96	7.2	90	77	47	0	0	0	4	1	1
SCOTTSBLUFF	62	36	85	27	49	-5	1.0	0	0.4	5.4	164	6.7	163	91	41	0	0	2	4	1	1
VALENTINE	63	38	85	24	51	-4	0.6	-0.1	0.3	3.2	87	3.8	84	92	43	0	1	3	0	0	0
NV ELY	68	31	79	18	49	1	0	0	0.2	2.2	97	4.1	112	66	15	0	0	4	1	0	0
LAS VEGAS	90	63	96	56	76	6	0	-0.1	0	2	26	1.7	108	23	9	3	0	0	0	0	0
RENO	73	43	81	38	58	5	0	0	0	4	28	3.0	83	54	15	0	0	1	0	0	0
WINNEMUCCA	70	37	83	30	54	1	0	-0.2	0	1.9	111	2.8	87	48	13	0	0	4	0	0	0
NH CONCORD	66	40	83	32	53	1	1.3	0	1.1	6.5	91	12.0	97	94	35	0	0	2	4	1	1
NJ ATLANTIC CITY	70	48	82	34	59	1	1.0	0	0.3	8.3	98	12.0	79	89	40	0	0	0	2	1	1
NM ALBUQUERQUE	76	48	83	43	62	0	0	0	0	2.6	245	3.2	180	39	11	0	0	0	0	0	0
CLOVIS	76	46	85	40	61	-2	0	0	0	1.5	72	3.6	125	68	17	0	0	0	0	0	0
ROSWELL	83	52	89	44	67	0	0	0	0	1.8	172	2.4	131	42	11	0	0	0	0	0	0
NY ALBANY	65	43	80	33	54	-1	1.2	0	0.8	9.8	137	17.6	150	91	44	0	0	0	4	1	1
BINGHAMTON	60	42	76	33	51	-2	0.9	0	0.6	6.7	94	13.3	111	91	45	0	0	0	4	1	1
BUFFALO	63	44	76	36	54	0	0.4	-0.3	0.3	8.3	116	16.9	135	85	44	0	0	0	3	0	0
NEW YORK	67	50	82	46	59	-1	1.4	0	1.4	10.4	113	16.0	105	85	40	0	0	0	2	1	1
ROCHESTER	65	43	79	33	54	-1	0.5	-0.1	0.2	6.6	108	12.1	113	91	42	0	0	0	4	0	0
SYRACUSE	64	41	80	34	53	-2	0.9	0	0.4	9.6	126	15.6	122	97	43	0	0	0	4	0	0
NC ASHEVILLE	69	45	76	39	57	-5	1.3	0	1.1	10.6	108	21.9	136	94	39	0	0	0	3	1	1
CHARLOTTE	74	52	80	46	63	-4	0.8	0	0.5	7.0	75	16.5	97	88	35	0	0	0	3	0	0
GREENSBORO	73	48	79	42	61	-4	1.1	0	0.4	9.0	109	17.1	113	91	41	0	0	0	3	1	1
HATTERAS	74	55	78	46	65	-1	0.3	-0.6	0.3	12.8	148	21.6	123	95	49	0	0	0	1	0	0
NEW BERN	77	53	82	48	65	-3	1.5	0	1.5	12.9	158	18.3	113	94	40	0	0	0	1	1	1
RALEIGH	76	49	83	42	63	-3	1.4	0	1.4	11.0	139	17.9	120	92	39	0	0	0	4	1	1
WILMINGTON	78	53	83	47	66	-4	0.2	-0.6	0.2	8.7	102	13.3	85	93	38	0	0	0	1	0	0
ND BISMARCK	67	37	85	24	50	-2	0	0	0	0.9	32	1.4	37	69	21	0	0	3	0	0	0
FARGO	68	37	84	22	52	-1	0	-0.5	0	3.3	95	3.9	88	70	28	0	0	2	0	0	0
GRAND FORKS	66	35	81	25	51	-1	0	-0.4	0	4.0	143	4.4	109	72	28	0	0	3	0	0	0
WILLISTON	64	35	88	30	49	-3	0.2	-0.1	0.2	1.4	59	1.8	54	85	26	0	0	3	3	0	0
OH AKRON-CANTON	66	45	76	40	55	-1	0.7	-0.1	0.5	8.5	107	15.6	124	84	39	0	0	0	2	0	0
CINCINNATI	69	49	77	39	59	-2	1.2	0	0.7	8.9	100	17.3	117	87	42	0	0	0	3	1	1
CLEVELAND	67	45	78	39	56	0	0.4	-0.3	0.3	7.6	101	14.7	120	83	37	0	0	0	2	0	0
COLUMBUS	68	46	78	37	57	-2	0.6	-0.2	0.5	6.5	81	14.1	109	91	43	0	0	0	2	0	0

Weather Data for the Week Ending May 12, 1990

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1		PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.
													90 AND ABOVE				32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	67	47	75	39	57	-3	1.6	.7	1.4	10.8	137	18.8	150	86	45	0	0	2	1
TOLEDO	68	46	80	37	57	-1	.7	.1	.6	7.4	110	14.9	142	83	39	0	0	3	1
YOUNGSTOWN	68	43	78	31	54	-1	.4	.3	.3	5.3	66	11.9	93	84	38	0	1	2	0
OK OKLAHOMA CITY	75	54	81	47	64	-2	.1	-1.1	.1	13.0	187	19.5	211	87	39	0	0	1	0
TULSA	74	55	81	49	64	-3	.3	.9	.3	15.0	163	22.0	180	85	40	0	0	1	0
OR ASTORIA	58	43	66	34	51	-1	.1	.6	.1	9.8	74	37.7	119	93	61	0	0	4	0
BURNS	62	30	69	20	46	-4	0	0	.8	4.3	1.5	4.3	80	20	0	4	0	0	
MEDFORD	73	40	85	31	56	0	0	.3	2.3	69	6.3	71	79	22	0	0	0	0	
PENDLETON	64	42	73	35	53	-3	.4	.4	2.7	110	3.7	71	61	26	0	0	0	0	
PORTLAND	63	44	76	38	53	-2	.1	.3	.1	5.0	75	16.4	98	88	48	0	4	0	
SALEM	64	40	77	31	52	-2	.4	.5	.4	4.1	54	17.8	93	89	46	0	0	0	
PA ALLENTOWN	69	45	79	35	57	0	1.4	.6	1.4	6.0	66	13.0	84	88	40	0	0	1	0
ERIE	66	47	80	36	56	0	.6	.1	.3	7.4	98	15.4	128	79	42	0	0	3	1
HARRISBURG	70	47	80	37	59	-1	.8	0	.8	6.4	79	13.4	97	85	41	0	0	2	1
PHILADELPHIA	71	51	82	45	61	0	1.2	.6	1.2	8.0	94	13.5	94	81	40	0	0	3	1
PITTSBURGH	66	44	77	38	55	-2	.6	.2	.4	6.4	77	13.0	96	86	36	0	0	4	0
SCRANTON	66	44	78	33	55	-2	1.2	.6	1.2	6.3	93	12.9	116	89	41	0	0	2	1
RI PROVIDENCE	66	48	74	42	57	1	1.5	.7	1.2	10.0	104	17.9	103	91	43	0	0	3	1
SC CHARLESTON	79	57	87	52	68	-2	1.0	.1	.9	9.3	111	14.9	100	85	39	0	0	2	1
COLUMBIA	79	52	84	45	65	-5	.5	.3	.4	6.1	60	11.1	60	92	37	0	0	2	0
FLORENCE	79	53	87	45	66	-4	.4	.3	.3	5.4	66	8.2	54	90	36	0	0	2	0
SD GREENVILLE	73	47	79	39	60	-7	1.2	.4	1.0	10.7	91	21.1	103	91	40	0	0	3	1
ABERDEEN	67	36	79	26	52	-2	.4	.5	.4	2.7	71	3.2	66	79	30	0	3	0	0
HURON	67	40	81	28	53	-1	.3	.2	.3	3.6	86	4.2	80	83	32	0	2	2	0
RAPID CITY	60	34	82	24	47	-6	.4	.2	.2	2.5	65	3.1	64	83	37	0	2	0	0
TN STOUK FALLS	66	43	88	32	54	-1	1.1	.4	.6	4.5	90	4.9	76	84	40	0	1	3	1
CHATTANOOGA	72	48	80	41	60	-6	2.1	1.2	1.5	16.4	131	33.6	150	99	40	0	0	4	1
KNOXVILLE	70	47	81	40	58	-7	.9	.1	.8	10.8	100	23.5	120	95	44	0	0	3	1
MEMPHIS	74	54	79	47	64	-6	.6	.7	.3	14.1	106	27.1	122	85	49	0	0	3	0
NASHVILLE	73	47	81	39	60	-6	.4	.7	.2	5.8	49	13.3	66	88	40	0	0	4	0
TX ABILENE	80	56	86	47	68	-3	.2	.5	.2	12.1	258	16.4	247	82	34	0	0	1	0
AMARILLO	77	45	88	37	61	-2	0	.6	0	4.7	167	7.5	196	71	20	0	0	0	0
AUSTIN	86	63	98	57	75	1	.2	.8	.2	7.6	119	12.4	119	88	35	2	0	1	0
BEAUMONT	80	64	84	58	72	-2	2.4	1.3	2.4	17.6	193	33.7	194	91	56	0	0	1	1
BROWNSVILLE	84	68	93	57	76	-2	1.1	.6	.5	3.9	140	5.0	91	97	63	2	0	3	1
CORPUS CHRISTI	83	67	89	60	75	-2	.7	0	.4	7.6	201	12.0	174	98	61	0	0	2	0
DEL RIO	84	63	96	53	73	-3	0	.5	0	8.8	268	10.6	227	75	32	2	0	0	0
EL PASO	85	59	89	46	72	2	0	.1	0	.8	138	1.2	88	33	13	0	0	0	0
FORT WORTH	80	58	86	50	69	-2	.7	.4	.7	19.2	233	28.4	241	92	45	0	0	1	1
GALVESTON	78	69	82	65	73	-1	2.0	1.2	2.0	10.9	182	18.1	160	86	60	0	0	1	1
HOUSTON	82	63	87	56	72	-2	.4	.6	.4	13.0	159	21.6	144	90	52	0	0	2	0
LUBBOCK	80	50	91	44	65	-2	0	.5	0	3.3	116	5.8	155	67	15	1	0	0	0
MIDLAND	84	52	94	42	68	-2	0	.5	0	3.1	151	4.4	146	82	18	2	0	0	0
SAN ANGELO	83	53	91	44	68	-4	.7	.1	.7	6.7	195	10.0	203	89	32	2	0	2	1
SAN ANTONIO	86	63	97	55	75	1	.1	.8	.1	11.9	219	15.7	179	88	39	2	0	1	0
VICTORIA	83	65	91	58	74	-2	.4	.6	.2	7.3	132	11.1	115	94	54	1	0	3	0
WACO	84	58	90	51	71	-2	2.7	1.6	1.8	13.9	182	19.5	171	91	41	1	0	2	2
WICHITA FALLS	79	54	85	46	67	-3	.4	1.0	.4	16.7	260	23.6	283	86	38	0	0	1	0
UT CEDAR CITY	72	41	79	28	57	3	.1	.1	.1	2.7	110	5.4	141	54	13	0	1	1	0
SALT LAKE CITY	70	42	86	33	56	-1	.4	.3	.3	3.3	73	4.3	59	62	19	0	0	1	0
VT BURLINGTON	62	40	78	32	51	-2	.8	.2	.3	5.9	99	11.1	116	94	47	0	1	6	0
VA NORFOLK	75	56	83	51	66	1	.4	.5	.4	8.1	100	14.3	95	85	43	0	0	1	0
RICHMOND	76	50	83	45	63	-1	1.4	.6	1.4	6.9	89	12.2	86	78	37	0	0	2	1
ROANOKE	72	47	81	43	59	-4	.6	.2	.4	6.6	82	11.7	83	89	36	0	0	2	0
WA QUILLAYUTE	56	42	62	35	49	-1	.4	.9	.3	14.9	70	47.9	100	95	57	0	0	4	0
SEATTLE-TACOMA	61	44	70	39	53	-1	.4	0	.4	5.6	85	18.9	112	91	47	0	0	1	0
SPOKANE	61	38	69	31	49	-3	.2	.1	.1	2.4	83	5.9	85	85	37	0	2	2	0
YAKIMA	67	38	75	30	52	-3	.4	.1	.4	3.2	2.0	5.9	77	26	0	1	0	0	0
WV BECKLEY	64	43	73	36	54	-5	.4	.4	.2	6.4	73	14.1	92	89	40	0	0	4	0
CHARLESTON	72	46	82	41	59	-3	.3	.5	.2	5.8	65	12.4	80	94	37	0	0	3	0
HUNTINGTON	70	47	79	43	59	-4	.4	.5	.2	7.0	77	13.5	90	90	40	0	0	3	0
PARKERSBURG	68	46	79	42	57	-4	.2	.5	.1	6.3	77	12.8	93	90	42	0	0	3	0
WI GREEN BAY	63	39	81	30	51	-2	1.7	1.0	1.0	6.2	108	7.4	94	83	45	0	1	2	2
LACROSSE	68	45	86	33	57	0	1.6	.8	1.4	7.4	119	8.9	111	84	36	0	0	2	1
MADISON	64	42	77	29	53	-2	2.2	1.4	1.2	8.8	137	11.4	134	87	45	0	1	3	2
MILWAUKEE	63	44	81	33	54	1	3.5	2.9	1.9	10.5	151	14.9	151	87	48	0	0	4	2
WAUSAU	63	41	80	30	52	-1	2.0	1.2	1.7	6.4	104	7.9	99	84	38	0	2	2	1
WY CASPER	61	32	81	20	46	-4	.3	.2	.2	3.0	92	4.0	93	89	29	0	4	5	0
CHEYENNE	58	32	77	22	45	-5	.5	0	.3	6.0	196	7.1	184	90	45	0	3	4	0
LANDER	61	36	81	24	49	-2	.3	.3	.2	3.7	85	3.9	70	79	27	0	3	2	0
SHERIDAN	58	35	82	26	47	-4	.5	0	.2	3.9	98	5.3	96	90	42	0	2	3	0

Based on 1951-80 normals

National Agricultural Summary

May 7-13, 1990

HIGHLIGHTS: Rain and wet field conditions slowed fieldwork in the central Great Plains, Delta, most of the Corn Belt, and the East. Flooding damaged some winter wheat fields in portions of Arkansas, Oklahoma, and Texas. Portions of the northern Great Plains and western Corn Belt received needed rain, but soil moisture was still mostly short to adequate in North Dakota. Soil moisture was adequate or adequate to surplus in the central and southern Great Plains, Delta, and most of the East. Most of the West remained dry and soil moisture was mostly short to adequate.

SMALL GRAINS: Winter wheat was mostly good to fair with 41 percent (%) of the acreage headed, 6 percentage points behind the 5-year average. Heading lagged behind normal in the central Great Plains and western Corn Belt. Winter wheat was good to excellent in Kansas. Crop condition was good in Oklahoma and good to fair in Texas. Flooding damaged some fields in southeastern Oklahoma and northeastern Texas. Harvest was underway in the Texas Blacklands and continued in the south. Armyworms were a problem in the Blacklands and Cross Timbers areas. In Arkansas, flooding was a problem along the Arkansas, Black, and Red Rivers. Crop condition was good to fair in Missouri, but the wet weather was causing some disease problems. Winter wheat was good to fair in Nebraska, South Dakota, and Montana and mostly good in Colorado. Hail and freezing temperatures damaged some fields in Colorado. Russian wheat aphids were a continuing problem in western Nebraska. Frost damage was minor. Winter wheat was mostly good to fair in the Corn Belt and Southeast. Harvest was underway in southern Georgia. Winter wheat was good to fair in the Pacific Northwest and good in California. Harvest activity increased in southern California. Russian wheat aphid populations were increasing in Idaho.

Spring wheat seeding was 90% complete, 11 points ahead of normal in the five major producing States. Sixty-one percent of the crop was emerged, 10 points ahead of normal. Seeding was complete in South Dakota and nearly complete in Idaho and Montana. North Dakota's seeding was 85% complete, 8 points ahead of normal.

CORN: Corn planting was 69% complete, 6 points behind normal. Rain slowed planting in portions of the Corn Belt and Delta late in the week. Planting lagged 20 or more points behind normal in Illinois, Kentucky, and Missouri. In Missouri, planting lagged 48 points behind the 88% average. Producers in Kansas, Michigan, Minnesota, Nebraska, South Dakota, and Wisconsin planted one-fourth or more of their acreage during the week. Cool temperatures slowed germination and growth in Nebraska and South Dakota. Some frost damage occurred in portions of South Dakota. Planting was over 90% complete in Georgia, North Carolina, and Texas.

SOYBEANS: Soybean planting was 12% complete, 11 points behind normal. Planting lagged behind normal in most of the Corn Belt, especially in Illinois and Missouri. In Illinois, planting was 11% complete, 30 points behind normal.

COTTON: Cotton planting was 54% complete, 3 points behind normal. Rain slowed planting in the Delta. In Missouri and Tennessee, planting lagged 55 and 56 points behind normal, respectively. Planting was nearly complete in Arizona and California and was 93% complete in Louisiana. In Texas, planting was 35% complete, 2 points ahead of normal. Cool weather slowed growth in the Plains area of Texas. Arizona's crop was in mostly good condition.

SORGHUM: Sorghum planting was 25% complete, 6 points behind normal. Planting lagged 42 and 31 points behind normal in Arkansas and Missouri, respectively. In Colorado, planting was just beginning and was 3% complete, 9 points behind normal. In Texas, planting was 67% complete, 1 point ahead of normal. Fields were beginning to head in the Rio Grande Valley and the Coastal Bend area.

OTHER FIELD CROPS: Rice seeding was 57% complete, 22 points behind normal. Thirty-one percent of the crop was emerged, 24 points behind normal. Seeding lagged behind normal in Arkansas and Mississippi. In Georgia, peanuts were good to fair and planting was 79% complete. Alabama's peanuts were mostly good. Peanut planting lagged behind normal in Texas and Oklahoma. Planting was underway in the Cross Timbers and Hill Country areas of Texas. Tobacco transplanting continued in Kentucky and Tennessee. In North Carolina, tobacco was good to fair and transplanting was 86% complete. Louisiana's sugarcane was mostly fair to poor.

FRUIT AND NUTS: Scattered rain fell in Florida's citrus producing areas. New growth was abundant on young trees. In Georgia, peaches were good to fair and harvest was 12% complete. Peach harvest was underway in Mississippi. Peach size and quality were good in Arkansas. Early peach harvest continued in Texas. In Arizona, Valencia orange and grapefruit harvests continued. In California, high winds damaged almond trees in the northern Sacramento Valley. Cherry harvest began in the San Joaquin Valley. Navel orange harvest was 90% complete. Tangelo harvest was complete. Fruit tree bloom was complete in Washington. In Michigan, fruit pollination was hampered by high winds and cold temperatures. In New York, apple trees were blooming.

VEGETABLES: Rainfall was limited in Florida's vegetable-producing areas except in the north. Harvest was active in the central area and gained momentum in the north. Lettuce harvest was complete in the Belle Glade area. Watermelon condition was good to fair in Georgia and good in South Carolina. Onion harvest was 80% complete in Georgia. Louisiana's vegetables were mostly good to fair. Sweet potato planting lagged behind normal. In Texas, onion harvest was nearly complete in the Rio Grande Valley. Continued wet weather stressed vegetable crops in east Texas. Onion harvest began in central Arizona. In California, cool weather delayed the cantaloupe harvest in the Imperial Valley. Red onion harvest was underway in the Fresno area. Onion planting was complete in Oregon. Potato planting was underway in Klamath County. Potato planting continued in Idaho, Montana, and Colorado.

PASTURES AND LIVESTOCK: Pastures were in mostly good to fair condition except in North Dakota and portions of the West. In North Dakota, poor pasture conditions have forced some producers to liquidate entire cattle herds. Stock water supplies were still short in California and portions of Oregon. In south Texas, hot, humid weather stressed livestock.

(Continued from front cover)

the Central Gulf Coast States. The frontal system subsequently spread soaking rain across the Corn Belt and eastern third of the country. Meanwhile, 9 inches of snow fell at Valdez, AK, making this the winter of heaviest snowfall on record with 560.2 inches. At week's end, another frontal system brought severe weather and more soaking rains to the central Plains, Corn Belt, and South Central States. Major flooding continued in Texas, Oklahoma, and Arkansas, while many rivers in the middle Mississippi Valley overflowed their banks.

The Southwest remained unseasonably hot, while cool weather prevailed over much of the remainder of the United States. Record-low temperatures for the date progressed from the Pacific Northwest at the first of the week into the Central States toward the end of the week.

Crop Progress
FOR WEEK ENDING MAY 13, 1990

GRAIN SORGHUM
% PLANTED

	1990	1989	AVG.
ARK	31	71	73
COLO	3	10	12
ILL	2	14	24
KANS	5	10	10
LA	77	71	73
MISS	58	56	61
MO	6	38	37
NEBR	5	13	15
N MEX	17	NA	NA
OKLA	3	10	10
S DAK	7	3	5
TEX	67	66	66
12 STATES	25	NA	NA

EXCL. STATES WITH NA 25 31 31
THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.
NA - NOT AVAILABLE.

CORN
% PLANTED

	1990	1989	AVG.
COLO	63	82	82
GA	98	97	98
ILL	65	80	89
IND	60	42	72
IOWA	80	81	85
KANS	75	80	65
KY	43	61	74
MICH	60	65	65
MINN	74	55	67
MO	40	91	88
NEBR	85	80	76
N C	94	53	84
OHIO	80	13	69
PA	43	17	41
S DAK	50	51	38
TEX	95	97	97
WIS	50	40	55
17 STATES	69	66	75

THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.

SOYBEANS
% PLANTED

	1990	1989	AVG.
ALA	20	22	16
ARK	1	7	9
GA	14	11	17
ILL	11	22	41
IND	11	9	29
IOWA	15	16	25
KANS	10	15	10
KY	2	10	12
LA	20	7	15
MICH	10	10	10
MINN	27	15	26
MISS	10	9	11
MO	2	20	22
NEBR	10	17	16
N C	13	5	10
OHIO	24	2	32
S C	13	3	5
S DAK	6	9	10
TENN	2	9	12
19 STATES	12	13	23

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

RICE
% PLANTED

	1990	1989	AVG.
ARK	35	80	78
CALIF	55	50	54
LA	90	82	88
MISS	55	87	89
TEX	88	98	96
5 STATES	57	79	79

THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.

RICE
% EMERGED

	1990	1989	AVG.
ARK	12	41	47
CALIF	10	10	17
LA	74	71	79
MISS	27	61	67
TEX	63	94	88
5 STATES	31	50	55

THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.

SPRING WHEAT
% PLANTED

	1990	1989	AVG.
IDAHO	99	93	88
MINN	95	83	80
MONT	89	62	78
N DAK	85	71	77
S DAK	100	92	87
5 STATES	90	75	79

THESE 5 STATES PRODUCED 89% OF THE 1989 SPRING WHEAT CROP.

SPRING WHEAT
% EMERGED

	1990	1989	AVG.
IDAHO	81	68	68
MINN	86	39	55
MONT	52	13	48
N DAK	45	27	43
S DAK	98	67	71
5 STATES	61	33	51

THESE 5 STATES PRODUCED 89% OF THE 1989 SPRING WHEAT CROP.

COTTON
% PLANTED

	1990	1989	AVG.
ALA	77	88	84
ARIZ	98	97	95
ARK	48	56	70
CALIF	99	98	98
GA	66	51	63
LA	93	66	75
MISS	71	61	73
MO	20	71	75
N MEX	85	95	84
N C	68	22	60
OKLA	5	22	15
S C	71	36	72
TENN	22	74	78
TEX	35	30	33
14 STATES	54	52	57

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

Crop Condition

PERCENT
FOR WEEK ENDING MAY 13, 1990

WINTER WHEAT
% HEADED

	1990	1989	AVG.
ARK	97	97	96
CALIF	97	97	97
COLO	5	3	14
GA	100	100	99
IDAHO	0	0	0
ILL	31	23	48
IND	13	10	21
KANS	35	65	50
MICH	0	0	0
MO	34	56	65
MONT	0	0	0
NEBR	0	12	13
N C	97	92	NA
OHIO	0	0	0
OKLA	85	95	80
OREG	20	6	6
S DAK	0	0	2
TEX	76	77	77
WASH	8	3	1
19 STATES	42	52	NA

EXCL. STATES WITH NA 41 51 47
THESE 19 STATES PRODUCED 88% OF THE 1989 WINTER WHEAT CROP.

WINTER WHEAT

STATE	VP	P	F	G	EX
ARK	0	4	63	33	0
CALIF	0	0	15	75	10
COLO	0	3	15	58	24
GA	2	5	47	45	1
IDAHO	0	1	14	66	19
ILL	0	0	21	73	6
IND	0	1	19	73	7
KANS	0	0	16	51	33
MICH	0	5	15	50	30
MO	0	4	42	53	1
MONT	2	5	22	58	13
NEB	0	0	50	42	8
N C	0	2	22	71	5
OHIO	0	4	22	60	14
OKLA	0	1	4	87	8
OREG	0	0	72	27	1
S DAK	0	8	40	48	4
TEX	2	7	33	51	7
WASH	0	0	37	58	5
19 STATE	0	2	24	59	15
PREV WEEK	0	3	25	57	15
PREV YEAR	24	20	31	22	3

NA - NOT AVAILABLE.

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

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 1.00 to 3.00 in.; 4.00 to 8.00 in. southwest; 0.50 or less extreme northwest. Temperatures 3 to 6° below normal.

Days suitable for fieldwork 4.4. Soil moisture 88% adequate, 12% surplus. Acreage intended for spring planting 89% prepared, 90% 1989, 93% avg. Fieldwork progress 29% behind schedule, 69% on schedule, 2% ahead of schedule. Rains slowed most field activities; provided beneficial moisture all crops. Corn 97% planted, 93% 1989, 95% avg.; 8% fair, 68% good, 24% excellent. Sorghum 59% planted, 44% 1989, 34% avg.; 14% fair, 82% good, 4% excellent. Cotton 77% planted, 88% 1989, 84% avg.; 66% fair, 34% good. Peanuts 76% planted, 66% 1989, 59% avg.; 100% good. Soybeans 20% planted, 22% 1989, 16% avg. Winter wheat 98% headed, 95% 1989, 95% avg.; 65% turning color, 58% 1989, 47% avg.; few fields harvested; 1% poor, 51% fair, 48% good. First hay 35% harvested, 23% 1989, 20% avg. Pastures 19% fair, 76% good, 5% excellent. Livestock 12% fair, 78% good, 10% excellent. Primary activities: Preparing land, planting spring crops; applying fertilizers, lime, herbicides to cropland; cultivating row crops, vegetables; cutting, baling hay; monitoring fish ponds; general care of livestock, poultry.

ALASKA: Warm temperatures dominated throughout railbelt. Some areas received intermittent rain showers. Highs 1 to 9° above normal. Lows 3 to 9° above normal. Seasonal precipitation 0.20 in. below normal at Clearwater to 0.89 in. above normal at Kenai.

Days suitable for harvest 6.0. Topsoil 2% short, 90% adequate, 8% surplus. Subsoil 1% short, 85% adequate, 14% surplus. Small grains seeding active, 55% oats complete, 10% barley. Commercial potato, hardy vegetable seeding, transplanting underway. Livestock good.

ARIZONA: Mostly sunny, warm; gusty afternoon winds prevailed through the 9th; cooler 10th, 11th. No precipitation. Temperatures 1 to 7° above normal. Extremes 52°; 103° deserts: 30°; 89° mountains.

Cotton planted 98%, 97% 1989, 95% avg.; 100% good. Small grains heading 100%, 100% 1989, avg.; turning color 86%, 73% 1989, 67% avg.; harvest underway central, western areas 8%, 3% 1989, 6% avg.; small grains good; lodging central, west. Alfalfa hay harvest continued active; 71% good, 18% excellent, 11% fair. Artichoke harvest continued west; dry onion harvest began central; red potatoes, chippers harvested central. Valencia orange, grapefruit harvests continued.

ARKANSAS: Cool week. Temperatures 2 to 8° below normal. Scattered thunderstorms latter part of week, heaviest south. Extremes 39°; 86°. Rainfall 0.32 to 3.71 in.

Days suitable for fieldwork 5.0. Soil moisture 2% short, 38% adequate, 60% surplus. Main activities: Planting cotton, corn, rice, sorghum; surveying flood damage; repairing flood damaged fences, roads, livestock facilities; spraying fruit; controlling weeds. Corn 80% planted, 97% 1989, 94% avg.; 60% fair, 40% good. Oats 90% headed, 94% 1989, 90% avg.; 56% fair, 44% good. Cotton 26% emerged, 30% 1989, 39% avg.; 13% poor, 48% fair, 31% good, 8% excellent. Sorghum 15% emerged, 49% 1989, 52% avg.; 86% fair, 11% good, 3% excellent. Many wheat acres underwater along

the Arkansas, Black, Red Rivers. Growers were constructing levees, levee gates in rice fields. Tomatoes good. Peach size, quality good. Livestock good.

CALIFORNIA: Strong high pressure over west, along with generally off shore air flow, allowed temperatures to warm to much above normal over weekend. By weekend, low pressure formed off coast, bringing cooler temperatures to most of State. Rainfall, shower activity over Sierra mountains.

Open weather, good progress field activities entire week. Grain maturation continued. Many wheat fields final irrigation, harvest southern areas increased. Grain hay harvest active. Cotton emerging good stands central areas. Rice seeding full swing, some heavy wind interference; controls weeds, shrimp, active. Corn, dry bean seeding continued. Overwintered sugarbeets harvested. Alfalfa harvest active. Insect, weed control, thinning, irrigation continued. High winds, northern Sacramento Valley, caused some older almond trees to topple. Apple bloom neared completion. Katy apricots harvested, Fresno. Cherry harvest began, central San Joaquin Valley, low supplies. Perlette grapes harvested, Coachella Valley. Gibberellic acid applied Thompson Seedless grapes. Marsh White grapefruit packed, export primarily Japan. Navel orange harvest ninety percent complete. Valencia oranges picked all districts. Varying degrees frost damage, navel, valencia oranges. Early peaches, nectarines harvested. Prune set light. Tangelo harvest complete. Artichokes fairly heavy supply variable quality. Broccoli moderate supply. Iceberg head lettuce heavy supply, variable quality, central coast. Harvest Imperial Valley cantaloupe delayed due to cool temperatures. Desert sweet corn harvest increased. Red onion harvest underway Fresno area. Harvest spring potato crop increased. Strawberries heavy supply, variable quality, central coast. Sweet potato planting continued. Livestock mostly good, heavy movement to summer pastures. Light supplemental feeding. Pastures, rangeland adequate northern third, drying quickly elsewhere. Water supplies remain marginally sufficient drought conditions in many areas causing concern about upcoming summer water supplies.

COLORADO: Cold front moved through State causing temperatures to drop below freezing, little damage. Precipitation less than 0.10 in. the major river basins to 0.71 in. the eastern plains. Temperatures near average on west slope, San Luis Valley, mostly 2° to 4° below normal on eastern plains.

Days suitable for fieldwork 4.7. Soil moisture 6% very short, 21% short, 69% adequate, 4% surplus. Cool soil temperatures have delayed planting of row crops, most small grains are near 100% seeded with over 50% emerged. Winter wheat mostly good to excellent with some minor freeze, hail damage. Dry onions 90% planted. Summer potatoes 75% planted, 52% emerged. Fall potatoes 38% planted. Sorghum planting just underway 3%. Range, pasture mostly fair to good. Livestock mostly good.

FLORIDA: Temperatures 3 to 6° below normal west, north; 2 to 4° above, central, south. Extremes 45°; 94°. Rainfall 1.00 to 5.00 in.

west, 0.50 in. north, up to 1.00 in. central, 1.00 to 3.00 in. south. Greatest weekly total 5.07 in. Crestview. Rain fell 2 to 4 days.

Soil moisture Panhandle adequate to surplus; Peninsula mostly short. Planting peanuts winding down. Cotton planting active. Planting soybeans underway. Winter wheat harvest ready to start. Corn, sugarcane, tobacco good progress. Pastures dry; except most Panhandle pastures fair to good; Peninsula poor to good. Cattle declined somewhat; varied poor to good. Scattered rain most citrus areas. Abundant new growth on young trees. New crop fruit good progress. Valencia harvest slowing. Grapefruit movement almost over for season. Temperatures cooled to near normal over major vegetable producing areas. Rainfall continued limited except north. Harvest active central, gaining north, declining south. Volume leaders: Potatoes, tomatoes, watermelons, sweet corn, peppers, cucumbers, celery. Also available snap beans, squash, cabbage, radishes, carrots, eggplant. Bell Glade lettuce season complete.

GEORGIA: Nearly all State rain. Rainfall 1.00 to 2.00 in. common northwest, local near 4.00 in. Southeast 0.50 in. or less. Temperatures 3 to 6° below normal except 1 to 3° below normal southeast. Warmest temperatures upper 70s mountains, upper 80s southeast. Coolest temperatures mostly in 40s, mid to upper 30s mountains, low, mid 50s near coast.

Days suitable for fieldwork 4.8. Soil moisture 3% very short, 19% short, 73% adequate, 5% surplus. Corn 1% poor, 18% fair, 77% good, 4% excellent; planting nearly complete, most remaining acreage for silage. Cotton 30% fair, 70% good. Sorghum 15% fair, 82% good, 3% excellent; 42% planted, 26% 1989, 38% avg. Peanuts 3% poor, 16% fair, 74% good, 7% excellent; 79% planted, 72% 1989, 71% avg.; showers slowed planting, moisture helpful. Soybeans 26% fair, 74% good; planting slowed by showers. Tobacco 35% fair, 60% good, 5% excellent. Watermelons 7% poor, 10% fair, 81% good, 2% excellent; 96% planted, 97% 1989, 97% avg. Wheat harvest for grain underway south, silage harvest north nearing completion. Rye, other small grains fair to good. Apples 4% poor, 56% fair, 37% good, 3% excellent. Peaches 2% very poor, 15% poor, 14% fair, 69% good; 12% harvested, 0% 1989, 3% avg. Onions 51% fair, 14% good, 35% excellent; 80% harvested. Hay harvest active, pastures good. Cattle, hogs good. Main activities: Planting peanuts, soybeans, cotton, preparing land for planting, weed control, harvesting small grains.

IDAHO: Temperatures below normal statewide. Precipitation fell across north, east, remained dry southwest, south central.

Days suitable for fieldwork 6.0. Soil moisture 8% very short, 23% short, 60% adequate, 9% surplus. Winter wheat good; 21% not yet jointed, 68% jointed, 11% boot. Spring wheat planted 99%, 93% 1989, 88% avg.; emerged 81%, 68% 1989, 68% avg. Spring barley planted 98%, 92% 1989, 82% avg.; emerged 85%, 66% 1989, 60% avg. Sugarbeets emerged 94%, 78% 1989, 80% avg. Oats planted 88%, 83% 1989, 74% avg.; emerged 65%, 55% 1989, 51% avg. Potatoes planted 76%, 66% 1989, 57% avg.; emerged 8%, 6% 1989, 4% avg. Dry peas planted 96%, 91% 1989, 81% avg.; emerged 79%, 44% 1989, 45% avg. Lentils planted 99%, 90% 1989, 82% avg.; emerged 86%, 42% 1989, 44% avg. Field corn planted 57%, 55% 1989, 67% avg. Dry beans planted 4%, 3% 1989, 4% avg. South central, east cold, frost several days. Sugarbeets frost damage, replanted; slight damage alfalfa, small grains, fruit trees south central, east. Russian wheat aphid population increased, sprayed. Weed

control, fertilizing, seeding. Hay, roughage supply adequate, short south central, east. Range, pasture good to fair, few areas poor south central, east. Move sheep, cattle to range. Activities: Feeding, branding, fencing.

ILLINOIS: Temperatures 1 to 3° below normal across State. Precipitation generally 0.75 to 2.75 south, 1.00 to 3.50 in. central, north.

Days suitable for fieldwork 2.25. Soil moisture 2% short, 51% adequate, 47% surplus. Corn 2% poor, 26% fair, 69% good, 3% excellent. Wheat filled 1%, 3% 1989, 8% avg. Oats 10% fair, 80% good, 10% excellent. Alfalfa 6% poor, 23% fair, 59% good, 12% excellent. Alfalfa hay first cutting 3%, 7% 1989, 11% avg. Red clover 1% poor, 24% fair, 67% good, 8% excellent. Pasture 8% fair, 78% good, 14% excellent.

INDIANA: Temperatures 1 to 3° below normal. Lows mid 40s to low 50s, highs mid to upper 60s. Precipitation 1.00 to 3.00 in.

Days suitable for fieldwork 2.8. Topsoil 2% short, 61% adequate, 37% surplus. Subsoil 1% short, 79% adequate, 20% surplus. Spring cropland 90% tilled, 89% 1989, 94% avg. Corn 26% emerged, 17% 1989, 41% avg. Wheat 17 in. high, 17 in. 1989, 17 in. avg. Oats 96% seeded, 89% 1989, 96% avg.; 5 in. high, 5 in. 1989, 6 in. avg. Pasture 1% poor, 18% fair, 70% good, 11% excellent. Clover seeding is virtually complete. Southern third of the State continues to lag behind in tillage, plantings due to wet field conditions.

IOWA: Temperatures 1 to 4° below normal. Extremes 29°; 91°. Precipitation 0.82 to 5.22 in.; average 1.69 in.

Days suitable for fieldwork 3.3. Topsoil 84% adequate, 16% surplus. Subsoil 43% short, 57% adequate. Winter wheat 22% fair, 65% good, 13% excellent. Hay 1% poor, 23% fair, 62% good, 14% excellent. Pasture 3% poor, 25% fair, 60% good, 12% excellent. Oats 17% fair, 63% good, 20% excellent; 99% emerged, 97% 1989, 96% avg. Corn 20% emerged, 20% 1989, 37% avg. Seed bed preparation 96% completed. Fertilizer application 99% completed, 100% 1989, 97% avg. Livestock good to excellent. Muddy feedlots, variable temperatures caused some stress in cattle, some pneumonia in hogs.

KANSAS: Temperature 4 to 5° below normal central, eastern; 1 to 2° below normal elsewhere. Rainfall all areas; averaged 0.13 in. southwest to 1.02 in. north central.

Days suitable for fieldwork 3.0. Topsoil 8% short, 74% adequate, 18% surplus. Subsoil 25% short, 72% adequate, 3% surplus. Wheat good to excellent. Jointing is essentially complete except for a few fields in west central, northeast. Wheat heading 35%, 65% 1989, 50% avg. Insect, disease problems light to severe across State. Corn planting good progress; behind 1989, ahead of average. Sorghum, soybean planting underway, behind 1989. Virtually no planting in western, central areas due to rain, wet fields. Range, pastures good growth. Cutting of alfalfa hay underway central, eastern areas of State.

KENTUCKY: Mean temperatures near 60°. Daytime highs near 70°, about 5° below normal. Daytime lows near 50°, about 3° below normal. Extremes 35°; 80°. Precipitation variable, averaging 1.00 in. west, 0.60 in. central, 0.30 in. east.

Days suitable for fieldwork 3.4. Soil moisture 4% short, 67% adequate, 29% surplus. Corn planting behind 1989, average. Burley setting 3% complete, plant supply generally adequate; 25% tobacco plants greater than 4 in. height. Winter wheat 80% headed; 11% poor, 57% fair, 32% good. Alfalfa

harvest underway; weevils, April freezes reduced yield. Pasture 25% fair, 63% good, 12% excellent. Feed supplies are ample.

LOUISIANA: Temperatures 3 to 5° below normal. Extremes 46°; 87°. Rainfall 1.41 to 4.97 in.

Days suitable for fieldwork 4.9. Soil moisture 3% short, 72% adequate, 25% surplus. Spring plowing 88%, 94% 1989, 97% avg. Corn 100% planted, 99% 1989, 99% avg.; emerged 99%, 97% 1989, 96% avg.; 27% fair, 68% good, 5% excellent. Cotton 93% planted, 66% 1989, 75% avg.; emerged 87%, 51% 1989, 59% avg.; 31% fair, 61% good, 8% excellent. Hay first cutting 21%, 19% 1989, 27% avg. Rice 90% planted, 82% 1989, 88% avg.; emerged 74%, 71% 1989, 79% avg. Cutworms were problem some fields in central, southwest. Sorghum 77% planted, 71% 1989, 73% avg.; emerged 67%, 57% 1989, 59% avg.; 60% fair, 40% good. Soybeans 20% planted, 7% 1989, 15% avg.; emerged 7%, 3% 1989, 6% avg. Planting interrupted by heavy rains. Sweet potatoes 11% planted, 14% 1989, 28% avg. Sugarcane 33% very poor, 8% poor, 42% fair, 17% good. Wheat 100% headed, 100% 1989, 99% avg.; 84% turning color, 65% 1989, 74% avg.; harvested 1%, 4% 1989, 4% avg.; 46% fair, 45% good. Livestock 3% poor, 30% fair, 65% good, 2% excellent. Pasture 2% poor, 33% fair, 63% good, 2% excellent. Vegetable 3% poor, 28% fair, 69% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 2.05 in. Temperature 63°, normal 60°. Extremes 35°; 84°.

Days suitable for fieldwork 3.3. Topsoil 27% adequate, 73% surplus. Subsoil 73% adequate, 27% surplus. Acreage prepared for planting 86%, 63% 1989, 82% avg. Field corn 63% planted, 36% 1989, 62% avg. Snap beans planted 44%, 30% 1989, 42% avg. Oats 97%, 87% 1989, 94% avg. Small grains good. Wheat 59% headed, 40% 1989, 41% avg. Barley 92% headed, 82% 1989, 90% avg. Rye 93% headed, 94% 1989, 94% avg.

DELAWARE: Precipitation 3.29 in. Temperature 63°, normal 61°. Extremes 44°; 82°.

Days suitable for fieldwork 4.5. Topsoil 20% adequate, 80% surplus. Subsoil 40% adequate, 60% surplus. Acreage prepared for planting 87%, 64% 1989, 84% avg. Field corn 75% planted; 33% 1989, 73% avg. Sweet corn 54% planted, 45% 1989, 63% avg. Small grains fair to good. Wheat 51% headed, 73% 1989, 54% avg. Barley 93% headed, 92% 1989, 90% avg. Rye 83% headed, 97% 1989, 77% avg.

MICHIGAN: Temperatures 2° above to 4° below normal. Extremes 32°; 68°. Precipitation 0.32 to 3.13 in. across the State.

Days suitable for fieldwork 4.5. Soil moisture 10% short, 75% adequate, 15% surplus. Corn 60% planted, 65% 1989, 65% avg. Oats 95% planted, 95% 1989, 95% avg. Potatoes 60% planted, 40% 1989, 45% avg. Soybeans 10% planted, 10% 1989, 10% avg. Wheat 5% poor, 15% fair, 50% good, 30% excellent. Major activities: Spring planting, tillage, fertilizer, herbicide application, vegetable planting. Fruit pollination hampered by high winds, cold temperatures. Vegetable planting continued at normal pace. Asparagus harvest 30% complete.

MINNESOTA: Temperatures 1 to 2° below normal. Extremes 21°; 95°. Precipitation none to 0.20 in. for northern two thirds of the State. Southern third 0.90 to 1.50 in. Greatest weekly total 2.46 in.

Days suitable for fieldwork 4.7. Topsoil 10% very short, 26% short, 52% adequate, 12% surplus. Subsoil 33% very short, 40% short, 25% adequate, 2% surplus. Spring wheat 95% acres planted, 83% 1989, 80% avg.; 86% emerged, 39% 1989, 55% avg. Oats 95% planted, 88% 1989, 87% avg.; 80% emerged,

59% 1989, 68% avg. Barley 90% planted, 74% 1989, 76% avg.; 52% emerged, 23% 1989, 47% avg. Corn 90% land prepared, 78% 1989, 81% avg.; 74% planted, 55% 1989, 67% avg. Soybeans 52% land prepared, 36% 1989, 50% avg.; 27% planted, 15% 1989, 26% avg. Sugarbeets 97% planted, 82% 1989, 82% avg. Dry beans 18% planted, 11% 1989, 23% avg. Potatoes 39% planted, 33% 1989, 46% avg. Flax 28% planted, 10% 1989, 27% avg. Sunflowers 10% planted, 10% 1989, 24% avg. Sweet corn 40% planted, 27% 1989, 38% avg. Green peas 81% planted, 66% 1989, 74% avg. Winter freeze damage compared to normal; Alfalfa 3% none, 29% light, 31% moderate, 37% severe, Winter wheat 8% none, 33% light, 44% moderate, 15% severe. Rye 13% none, 50% light, 28% moderate, 9% severe.

MISSISSIPPI: Temperatures 6° below normal. Extremes 40°; 86°. Wet statewide. Rainfall 2.75 in., 1.57 in. above normal. Soil temperature 70°.

Days suitable for fieldwork 4.6, 2.3 1989, 4.2 avg. Soil moisture 81% adequate, 16% surplus, 3% excessive. Wheat 99% heading, 97% 1989, 97% avg.; 9% very poor, 17% poor, 56% fair, 18% good; 21% mature, 8% 1989, 11% avg. Cotton 71% planted, 61% 1989, 73% avg.; 49% emerged, 37% 1989, 49% avg. Corn 84% planted, 86% 1989, 91% avg.; 71% emerged, 74% 1989, 79% avg.; 7% poor, 34% fair, 59% good. Rice 55% planted, 87% 1989, 89% avg.; 27% emerged, 61% 1989, 67% avg. Soybeans 10% planted, 9% 1989, 11% avg.; 4% emerged, 6% 1989, 5% avg. Sorghum 58% planted, 56% 1989, 61% avg.; 40% emerged, 44% 1989, 45% avg. Peanuts 27% planted, 36% 1989, 47% avg. Sweet potatoes 16% planted, 24% 1989, 37% avg. Watermelons 82% planted, 82% 1989, 76% avg. Peaches 4% harvested; 11% very poor, 31% poor, 28% fair, 30% good. Hay 12% harvested, 11% 1989, 15% avg. Pasture, livestock fair to good. Activities: Planting fields crops, cultivating cotton, cutting hay.

MISSOURI: Temperatures 4° below normal. Precipitation less than 1.00 in. southwestern, southeastern districts to 2.00 in. northwestern, northeastern, east central.

Days suitable for fieldwork 1.8. Topsoil 46% adequate, 54% surplus. Ground worked at least once for spring crops 75%, 93% 1989, 91% avg. Corn planting ranges 21% complete west central, south central to 65% southeast, most areas over 2 weeks behind normal. Sorghum planting barely started most districts to 11% south central, southeast, over 2 weeks behind normal. Rice 8% planted. Wet weather causing disease problems in wheat, many farmers spraying fungicide. Alfalfa first cutting 3%, 23% 1989, 18% avg. Pastures 1% very poor, 1% poor, 20% fair, 70% good, 8% excellent.

MONTANA: Rain or snow across entire State. Portions of south central received over 1.00 in. Most locations under 0.25 in. Temperatures very warm early, average 1 to 5° below normal.

Days suitable for fieldwork 5.4. Topsoil 27% short, 66% adequate, 7% surplus. Subsoil 35% short, 59% adequate, 6% surplus. Barley 84% planted, 61% 1989, 79% avg.; emerged 43%, 17% 1989, 47% avg. Corn planted 41%, 31% 1989, 48% avg. Dry beans 41% planted, 30% 1989, 47% avg. Oats 81% planted, 49% 1989, 71% avg. Potatoes 18% planted, 18% 1989, 19% avg. Sugarbeets 100% planted, 75% 1989, 87% avg. Pasture, range feed 4% very poor, 8% poor, 37% fair, 46% good, 5% excellent. Cattle, calves moved to summer pastures 41%, 37% 1989, 42% avg. Sheep, lambs moved 40%, 39% 1989, 57% avg.

NEBRASKA: Temperatures 7° below normal, Panhandle, 4° below normal remainder of the State. Extremes 23°; 90°. Precipitation mid week 0.40 to over 2.00 in.

Days suitable for fieldwork 4.0. Topsoil 3% short, 90% adequate, 7% surplus. Subsoil 85% short, 15% adequate. Winter wheat 93% jointed, 75% 1989, 79% avg. Crop beginning to head, east. Russian wheat aphid, continue causing damage, western counties; spraying in many counties. Spraying for weeds, Panhandle. Some southeastern fields being treated for powdery mildew, chinch bugs some eastern fields. Corn 20% emerged, 28% 1989, 29% avg. Cold weather slowed germination. White grub sightings, seedcorn beetles or larva damage, central area. Alfalfa 2% poor, 39% fair, 59% good. Some new alfalfa may have been frozen, damage not yet evident. Moderate to heavy infestations clover leaf, alfalfa weevils, east, northeast, some spraying. Wild hay 11% poor, 70% fair, 19% good, much improved. Pasture, range feed 61% short, 39% adequate. Pastures improving, needing warmer weather to promote growth. Cattle moving to summer pastures. Main activities: Planting corn, sorghum, soybeans; preparing seedbeds; applying chemicals. Freeze on 9th, several areas, very little damage evident, thus far.

NEVADA: Cold front early brought lower temperatures, gusty winds north, central areas, little precipitation. Cool, dry continued thru mid week. Precipitation light, intermittent remainder of period. Week high pressure system brought warming temperatures, clearing skies, weekend.

Planting spring crops delayed slightly by rainy, windy, cool weather. Range areas improved slightly.

NEW ENGLAND: Precipitation 1.00 to 3.00 in. Temperatures mid 50s. Temperatures above normal.

Days suitable for fieldwork 4.0. Soil moisture north 70% adequate, 30% surplus; south 35% adequate, 65% surplus. Grazing availability 3% very short, 6% short, 81% adequate, 10% surplus. Fieldwork progress on schedule. Maine potatoes 22% planted, 1% 1989, 19% avg.; good. Rhode Island potatoes 55% planted, 68% 1989, 67% avg.; good. Connecticut River Valley potatoes 63% planted, 55% 1989; 58% avg.; good. Field corn 20% planted, 10% 1989, 21% avg.; 5% emerged, 5% 1989, 8% avg.; fair to good. Sweet corn 35% planted, 15% 1989, 28% avg.; 15% emerged, 8% 1989, 18% avg.; fair to good. Maine oats 50% planted, 8% 1989, 38% avg.; good. Hay good. Fruit trees, blueberries, strawberries early to full bloom. Major farm activities: Soil preparation, planting, manure, fertilizer spreading, fence building, spraying orchards.

NEW JERSEY: Temperatures below normal. Extremes 32°; 85°. Rainfall 2.49 in. north, 2.30 in. central, 2.23 in. south. Heaviest 24 hour total 3.06 in. on 10th, 11th. Estimated soil moisture percent field capacity averaged 96% north, 95% central, 90% south. Four inch soil temperatures 57° north, 59° central; 61° south.

Soil moisture adequate to excessive. Harvest of spring crops increased. Planting continued on schedule. Fruit crops continued good early development. Field corn planting continued as field conditions permitted. Preparation active for soybeans. Hay growth improved; frequent rain hampered early cutting. Pasture growth rate normal.

NEW MEXICO: Temperatures slightly below normal. No measurable precipitation. Hail, wind damage.

Days suitable for fieldwork 6.7. Soil moisture 64% short, 36% adequate. Cotton planted 85%; milo planted 17% complete. Cattle poor to good; sheep fair to good; range poor to good.

NEW YORK: Temperatures near or slightly below normal. Temperatures 80° on 9th at many places, dipped into the 20s on 12th resulting in a good deal of frost. Precipitation well above normal. Most areas received 1.00 to 2.00 in. Heaviest in southeast 3.98 in. fell, lightest in north, west.

Days suitable for fieldwork 3.8. Soil moisture mostly adequate. Pastures, hay good; wheat fair to mostly good. Warmer weather, recent rainfall was beneficial. Corn 19% planted, 13% 1989, 21% avg. Some early planted fields are up, looking good. Oats 76% seeded, 73% 1989, 65% avg. Rapid progress was made despite rain early, late in the week. In the Lake Ontario region, Golden Delicious apples were in full bloom, Romes in early bloom. Peaches nearing shuck split, pears reached petal fall stage. Hudson Valley apples show good fruit set. Pears exhibit good set. Sweet corn planting continued active. Tomato, pepper transplanting gaining momentum. Orange County strawberries in blossom. Onion planting in Orange County virtually finished as is the first lettuce planting.

NORTH CAROLINA: Temperatures 1 to 3° below normal across State. Precipitation 0.11 to 3.57 in.

Days suitable for fieldwork 3.9. Soil moisture 2% short, 67% adequate, 31% surplus. Pasture 9% fair, 79% good, 12% excellent. Livestock feed from pasture 78%. Hay first cutting 20%. Corn planted 96%; cotton planted 73%; sorghum planted 32%; soybeans planted 16%; peanuts planted 4%. Sweet potatoes transplanted 19%. Flue cured tobacco transplanted 86%. Tobacco plant bed supplies 5% short, 82% adequate, 13% surplus. Wheat headed 97%. Crop condition: Wheat, 2% poor, 22% fair, 71% good, 5% excellent; oats, 28% fair, 69% good, 3% excellent; barley 31% fair, 67% good, 2% excellent; rye 26% fair, 70% good, 4% excellent; corn 23% fair, 71% good, 6% excellent; flue cured tobacco 1% poor, 27% fair, 69% good, 3% excellent; Irish potatoes 15% fair, 77% good, 8% excellent; peaches 9% very poor, 27% poor, 30% fair, 31% good, 3% excellent; truck crops 2% poor, 28% fair, 67% good, 3% excellent; hay 17% fair, 75% good, 8% excellent. Major activities: Planting corn, land preparation, transplanting tobacco, planting sorghum, cotton, soybeans, peanuts. Other activities included: Planting truck crops, tending tobacco beds, fertilizing, cultivating tobacco, hay harvesting, tending livestock, transplanting sweet potatoes, spraying, cultivating corn, general farm maintenance.

NORTH DAKOTA: Mild, dry statewide. Temperatures 1 to 3° below normal. Scattered, light precipitation none to 0.08 in. Season precipitation 1.18 in. below normal northeast to 2.02 in. below normal south central.

Days suitable for fieldwork 6.8. Topsoil 29% very short, 48% short, 23% adequate. Subsoil 70% very short, 25% short, 5% adequate. Poor soil moisture slowed crop emergence. Hard red spring wheat 45% emerged and beyond, 27% 1989, 43% avg.; durum wheat 21%, 14% 1989, 27% avg.; oats 43%, 20% 1989, 40% avg.; barley 45%, 27% 1989, 42% avg.; corn 31% planted, 21% 1989, 32% avg.; flax 15%, 10% 1989, 24% avg.; potatoes 20%, 35% 1989, 39% avg.; soybeans 11%, 4% 1989, 14% avg.; dry beans 4%, 2% 1989, 6% avg.; sunflower 3%, 2% 1989, 5% avg.; sugarbeets 99%, 93% 1989, 86% avg. Winter wheat 6% jointing and beyond, 11% 1989, 32% avg. Pastures 49% very poor, 34% poor, 14% fair, 3% good; furnished 43% roughage requirements. Poor pasture conditions have forced ranchers to liquidate whole herds. Stockwater supplies 17% very short, 49% short, 34% adequate.

OHIO: Warm early in period, cold late. Temperatures 1 to 2° subnormal. Rain mid week, again weekend 1.00 to 2.00 in. Soil temperatures dropped; highs in upper 50s to mid 60s, lows in upper 40s to low 50s.

Days suitable for fieldwork 3.4. Soil moisture 1% short, 76% adequate, 23% surplus. Very windy mid period; some concern for damage to tender transplants, seedlings. Cool weather slowed germination, emergence of spring planted crops. Wet soils slowed planting activity. Some farmers rotary hoed to break crust which formed when soils dried following rain 4th to 5th. Winter wheat mostly good; some powdery mildew, few fields sprayed. Alfalfa weevil prevalent; some stands cut early, others sprayed to control. Grass, hay stands fair to good. Strawberries blooming, at least week early. Grape shoots 4 in. long in Lake Erie area. Planting tomatoes for processing.

OKLAHOMA: Temperatures normal southwest to 3° below normal north central. Precipitation none Panhandle, west central to 0.78 in. east central.

Days suitable for fieldwork 3.3. Topsoil 40% adequate, 60% surplus. Subsoil 100% adequate. Wheat 1% poor, 4% fair, 87% good, 8% excellent; 85% heading, 95% 1989, 80% avg.; 5% soft dough, 20% 1989, 25% avg. Severe flood damage southeast. Leaf disease increasing north central. Eastern, southern thirds of State entering soft dough stage. Cotton 5% planted, 22% 1989, 15% avg. Sorghum 3% planted, 10% 1989, 10% avg. Soybeans 3% planted, 30% 1989, 15% avg. Peanuts 5% planted, 10% 1989, 15% avg. Cool soil temperatures made row crop plantings over one week behind 5 year average. Corn 60% up to stand, 80% 1989, 60% avg. Pastures good. Cattle good; marketings stable, prices up slightly from preceding week.

OREGON: Temperatures below normal due to extensive cloud cover. Most significant departures 5° below normal east of Cascades. Elsewhere differences 1 to 2° below normal. Heaviest precipitation, 0.10 to 0.20 in., at coast, northeast. Portland 0.10 in. Rest of State less than 0.10 in.

Soil moisture 67% short, 33% adequate. Barley 91% seeded, 91% 1989, 97% avg. Crimson clover in full bloom, mint flaming winding down Willamette Valley. Other activities included hay cutting; wheat spraying for weeds, Russian wheat aphid; fertilizing. Frost on 7th, 8th most fruit districts. Apples, peaches, pears thinned Hood River, Willamette Valleys. Apples sprayed for codling moth Milton Freewater. Cherries look good The Dalles, sizing nicely Willamette Valley. Good bloom on berries west. Frost damage to blueberries Lane County. Strawberries irrigated to protect from frost, development ahead of normal despite cool nights slowing growth. Cranberries mostly in hook stage, a few blossoms showing south coast. Aphid, leafroller sprays applied to hazelnuts. Planting snap beans, sweet corn, cauliflower, broccoli, squash. Green pea planting nearly completed, some starting to bloom. Potato planting underway Klamath County, about finished other areas. Onion planting finished. Livestock excellent. Range, pasture good west, fair east. Grass production reduced Douglas County. Cattle movement to summer pasture Klamath, Lake counties. Stockwater supplies a problem southeast.

PENNSYLVANIA: Wet week with above normal temperatures, across State. Temperature 55°; 1° above normal. Extremes 27°; 83°. Precipitation 1.13 in., 0.31 in. above normal.

Days suitable for fieldwork 4.0. Soil moisture 9% short, 79% adequate, 12% surplus. Plowing 84% complete, 72% 1989, 83% avg. Corn 43% planted, 17%

1989, 41% avg. Soybeans 7% planted, 3% 1989, 16% avg. Oats 92% planted, 80% 1989, 91% avg. Potatoes 60% planted, 52% 1989, 70% avg. Tobacco beds 100% planted, 100% 1989, 100% avg. Barley 45% pre boot, 52% 1989, 42% avg.; 25% boot, 25% 1989, 27% avg.; 30% heading or headed, 23% 1989, 31% avg. Wheat 66% pre boot, 79% 1989, 72% avg.; 29% boot, 21% 1989, 24% avg. 5% heading or headed, 0% 1989, 4% avg. Wheat 2% very poor, 2% poor, 19% fair, 54% good, 23% excellent. Oats 2% very poor, 2% poor, 20% fair, 50% good, 26% excellent. Hay stands mostly fair to good. Feed from pastures mostly fair. Peaches 14% pre pink, 14% 1989, 6% avg.; 8% pink, 13% 1989, 10% avg.; 78% full bloom or past, 73% 1989, 84% avg. Cherries 11% pre pink, 16% 1989, 5% avg.; 5% pink, 16% 1989, 9% avg.; 84% full bloom or past, 68% 1989, 86% avg. Apples 13% pre pink, 29% 1989, 11% avg.; 14% pink, 28% 1989, 17% avg.; 73% full bloom or past, 43% 1989, 72% avg. Activities: Spring plowing; planting corn, oats, soybeans, potatoes, hay, vegetables, fruit trees; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

PUERTO RICO: Rainfall 1.32 in., 0.19 in. below normal. Rainfall 8.75 in. Lares, 4.93 in. at Isabela Aes, 3.04 in. Pico Del Este Luquillo. Highest 24 hour 4.05 in. at Lares. Temperatures 79° Coasts; 74 to 76° in Interior, Mean station; 65° Pico Del Este Luquillo to 82° at Mayaguez Pnc. Extremes 58°; 93°.

SOUTH CAROLINA: Temperatures 4° cooler than usual in the northwest to 1° below normal near the coast. Rainfall 0.50 in. near the coast to 2.10 in. in the mountains.

Days suitable for fieldwork 5.2. Soil moisture 5% very short, 41% short, 54% adequate. Cotton 71% planted, 36% 1989, 72% avg. Soybeans 13% planted, 3% 1989, 5% avg. Corn good. Tobacco fair to good. Watermelons good; 88% planted, 89% 1989, 89% avg. Cantaloupes good; 82% planted, 83% 1989, 82% avg. Peaches fair. Tomatoes good. Oats good; 98% headed, 100% 1989, 93% avg.; 57% turning color, 32% 1989, 37% avg.; 12% ripe, 4% 1989, 8% avg. Wheat good; 62% turning color, 28% 1989, 35% avg.; 11% ripe, 0% 1989, 0% avg.

SOUTH DAKOTA: Temperatures 0 to 5° below normal. Extremes 17°; 91°. Frost, except extreme southeast areas. No weekly precipitation north, 0.50 in. to almost 2.00 in. other areas. Growing season precipitation generally 1.00 to 1.50 in. below normal north, 0.50 in. below to 0.50 in. above normal elsewhere. Growing degree days generally above normal.

Days suitable for fieldwork 4.9. Subsoil 34% critically short, 52% short, 14% adequate. Topsoil 8% critically short, 41% short, 51% adequate. Corn planting rapidly progressing, cool weather slowing crop progress, frost damage occurring. Winter wheat good to fair, spring wheat good to fair, other spring grains fair to good. Major activities: Planting corn, field work, spraying, working cattle, fencing.

TENNESSEE: High pressure 7th, 8th followed by low pressure 9th, cold front 10th. Rain 10th, again weekend. Temperatures below normal statewide. Precipitation below normal most areas except east. Rain east 1.18 in., Middle 0.37 in.

Days suitable for fieldwork 3.0. Soil moisture 2% short, 57% adequate, 41% surplus. Corn 50% planted, 77% 1989, 81% avg.; 1% very poor, 9% poor, 46% fair, 41% good, 3% excellent. Cotton 22% planted, 74% 1989, 78% avg.; 5% very poor, 47% poor, 47% fair, 1% good. Sorghum 12% planted, 22% 1989, 43% avg.; 1% very poor, 18% poor, 53% fair, 28% good. Soybeans 2% planted, 9% 1989, 12% avg.

Tobacco 12% transplanted, 5% 1989, 13% avg.; 4% poor, 36% fair, 60% good. Wheat 90% headed, 86% 1989, 90% avg., 4% turning color, 2% 1989, 8% avg.; 4% poor, 56% fair, 39% good, 1% excellent. Alfalfa 14% 1st cutting, 25% 1989, 45% avg. Insects, diseases, weeds continue to cause problems. Cattle mostly good. Some frost damage strawberries, grapes.

TEXAS: South received good rains beginning week, especially Lower Rio Grande Valley. More rain fell eastern part State, aggravated already extreme wet conditions. Summer like conditions took hold south, few locations over 100° mark. Wet areas caused humidities to rise along with heat, causing some concerns for livestock heat stress southern, southwestern portions State. Rains were right on schedule with usual May peak. Departures slightly negative all but southern portion of State. Temperature departures within couple of degrees of normal through most State.

Crops: Small grain harvest expanded southern Blacklands, open conditions prevailed. Yields average to good most central, southern areas. Armyworms continued damage fields Blacklands, Cross Timbers. Producers spray when open weather returned. Flood losses increased along Red, Trinity rivers. Losses mainly northern, northeastern counties, losses also parts Blacklands, Cross Timbers. Prolonged wetness caused lodging. Producers High Plains spraying as weather permitted. Most fields look good. Heading increasing. Wheat 1% harvested, none 1989, 1% avg. Corn producers Plains good planting progress, many finishing. Rains benefit planted fields, warmer weather needed for good emergence, growth. Cultivating active central, south fields. Fields making excellent progress. Corn 1% silked, 1% 1989, 7% avg. Grain sorghum planting increased with open conditions Plains. Cultivating parts Blacklands, central. Some fields yellowing from too much water. Losses occurring along flooded rivers. Fields beginning to head Coastal Bend, Rio Grande Valley. Some armyworm problems Blacklands. Planting resumed slowly along Upper Coast. Sorghum 2% headed, 4% 1989, 5% avg. Cotton planting resumed parts Blacklands, conditions dried up. Some fields still too wet. Planting increased Plains. Early planted fields up to stands, growth slowed by cooler temperatures late week. Development good Coastal Bend, few fields suffering from too much water. Progress good Valley. Planting winding down Trans-Pecos. Cotton 7% squaring, 3% 1989, 4% avg. Soybean planting suffered further delays north, northeast. Early planted fields up to stands, continued wet weather could hurt fields. Planting increased Upper Coast, fields dried. Rice planting increasing slowly Upper Coast. Too much rain may cause replanting. Weeds continued problem. Peanut planting underway parts Cross Timbers, Hill Country. Planting continued south. Planting delays continued northeast. Other Field Crops: Peanuts planted 5%, 5% 1989, 12% avg. Sugarbeets planted 100%, 99% 1989, 99% avg. Sunflowers 19% planted, 2% 1989, 8% avg. Oats harvested none, none 1989, 4% avg.

Commercial Vegetables: Rio Grande Valley, onion harvest almost over. Rain slowed harvest early week. Cucumber, cabbage, melon harvest also slowed. San Antonio Winter Garden, cucumbers, peppers good progress. Onion harvest increasing. Eastern State, insects, diseases, prolonged wetness hurting many crops. High Plains, all vegetables doing well. Trans Pecos, chilies coming on. Onions sizing well. Harvest early

peaches continued, good quality. Later varieties good sizes. Leaf curl causing problems some groves. Spraying operations continued. Pecan crop looks good most areas. Casebearer spraying continued central, southern areas. Zinc spraying continued.

Range and Livestock: Ranges, pastures continued improve most areas; flooding problems caused losses grazing land, livestock. Haying operations beginning parts of State. Sheep producers catching up on shearing, wet weather had caused delays.

UTAH: Temperatures about normal in northern half, 2° above normal in southern half; light precipitation at few stations in northern half.

Days suitable for fieldwork 6.6. Soil moisture 82% short, 18% adequate. Weed spraying, irrigation continued. Emergence spring wheat, barley crops completed, except in latest areas. Planting, emergence of corn, potatoes delayed by cold, wet weather. Corn 52% planted, 76% 1989, 64% avg.; 40% emerged, 54% 1989, 44% avg. Potato acreage 42% planted, 53% 1989, 52% avg. Oat emergence 72% completed, 74% 1989, 69% avg. Winter wheat height 12 in.; 54% jointed, 35% boot stage. Alfalfa hay height 15 in., first cutting underway early areas. Alfalfa hay damaged by frost some areas. Assessment of frost damage to fruit crops ongoing, most severe damage occurred in soft fruits located south of Spanish Fork. Apple, pear crops prospects remain good. Movement of cattle, sheep to spring ranges continued. Range conditions short several areas.

VIRGINIA: Temperatures near normal, precipitation was above normal for the week. Greatest amount of rain recorded was 3.09 in. at Warsaw. A strong cold front moving through the State sparked off severe thunderstorms producing heavy rains, strong winds, some hail. Extremes 32°; 88°.

Days suitable for fieldwork 4.0. Topsoil 33% surplus, 63% adequate, 4% short. Corn planted 64% completed, 39% 1989, 57% avg. Corn 6% excellent, 67% good, 22% fair, 5% poor. Soybeans planted 10% complete, 1% 1989, 5% avg. Peanuts planted 83% complete, 1% 1989, 37% avg. Cotton planting nearly completed. Flue tobacco planting 52% completed, 4% 1989, 10% avg. Fire tobacco 16% completed, 0% 1989, 7% avg. Sun cured tobacco 5% planted, 0% 1989, 1% avg. Burley just getting started. Barley, wheat mostly good. Cereal leaf beetle reported in many areas. Pasture condition 29% excellent, 62% good, 9% fair. Alfalfa 13% excellent, 67% good, 18% fair, 2% poor. Some harvesting. Other hay 19% excellent, 61% good, 20% fair. Potatoes 98% good, 2% fair. Peaches mostly very poor. Apples mostly fair to poor. Planting commercial vegetables, picking strawberries. Cutting hay, shearing sheep, caring for livestock.

WASHINGTON: Temperatures normal to 3° below normal, east; 2° above normal to 1° below normal west. Precipitation none to 0.20 east, 0.02 to 0.52 in. west.

Day suitable for fieldwork 6.5. Soil moisture 58% short, 42% adequate. Range, pasture 55% short, 45% adequate. Hay, other roughage 5% very short, 40% short, 50% adequate, 5% surplus. Crop development continued ahead of normal, although cool nights during the week slowed growth. Spring wheat 99% planted, 100% 1989, 98% avg.; 95% emerged, 92% 1989, 89% avg. Barley 99% planted, 96% 1989, 96% avg.; emerged 92%, 84% 1989, 86% avg. Potatoes 92% planted, 89% 1989, 91% avg. Fruit tree bloom is over. Caneberries are in bloom, developing nicely. Asparagus harvest

(Continued to back cover)

International Weather and Crop Summary

May 6-12, 1990

HIGHLIGHTS

USSR ... Favorable moisture in the southern Ukraine and the central North Caucasus benefits winter grains entering the heading stage. Spring grain planting begins in crop areas east of the Urals, where recent rain increases topsoil moisture.

EUROPE ... Widespread rain helps reduce dryness across the north.

SOUTH ASIA ... A tropical cyclone brings heavy rain, flooding, and some crop damage to southeastern India.

EASTERN ASIA ... Dryness returns to the lower Yangtze Valley. Widespread rain favors crops in southern China, Manchuria, and the Korean Peninsula.

SOUTHEAST ASIA ... Highly beneficial showers cover Thailand.

SOUTH AMERICA ... Favorable harvest weather prevails in Argentina. Early-week dryness helps Brazil's soybean harvest.

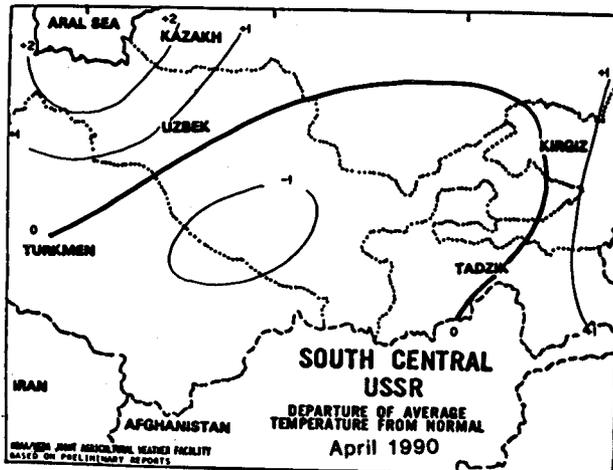
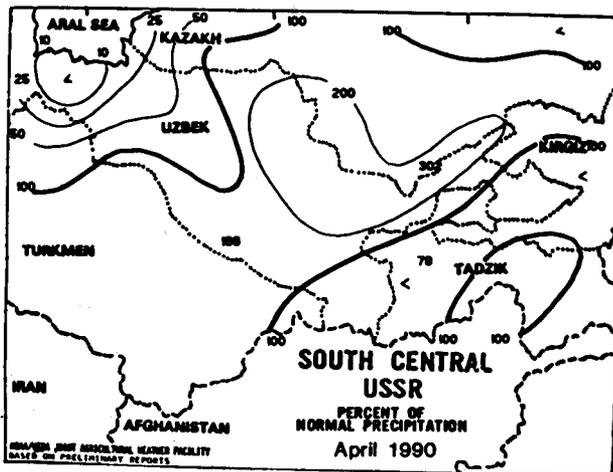
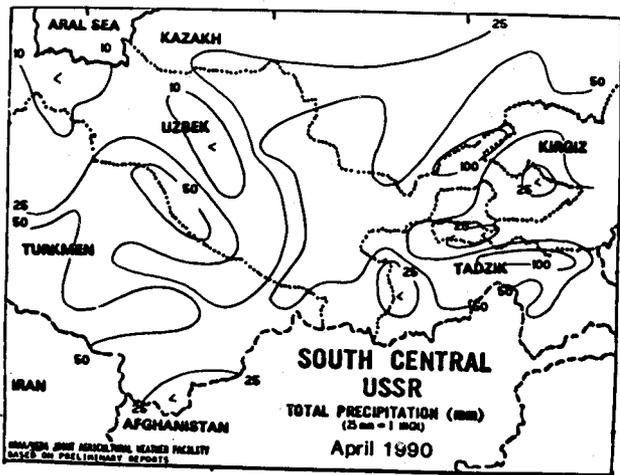
SOUTH AFRICA ... Warm, mostly drier weather benefits mature corn. Wheat planting delays continue.

AUSTRALIA ... Dryness continues to favor harvest and winter grains planting in the east.

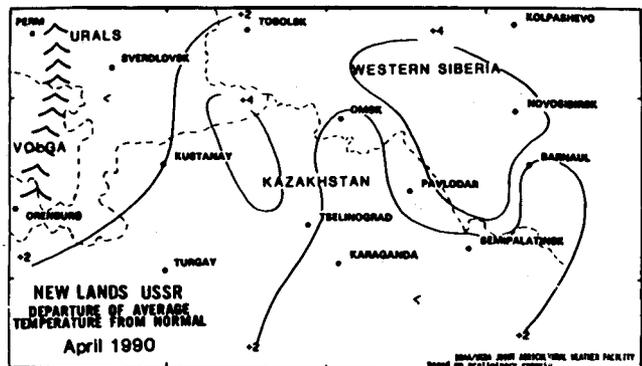
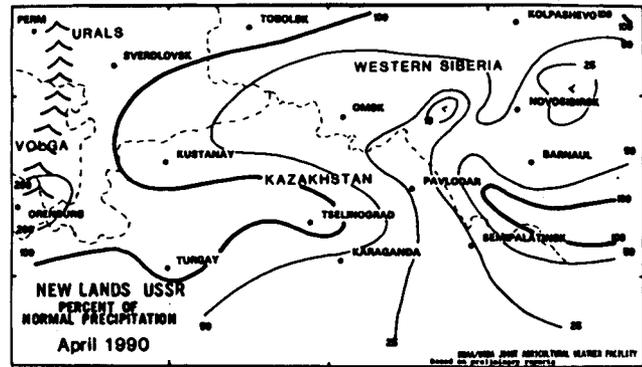
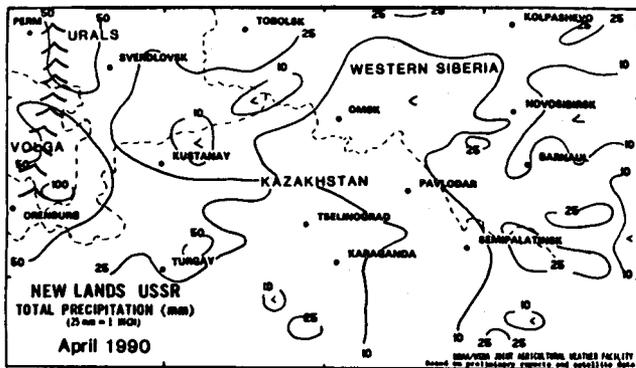
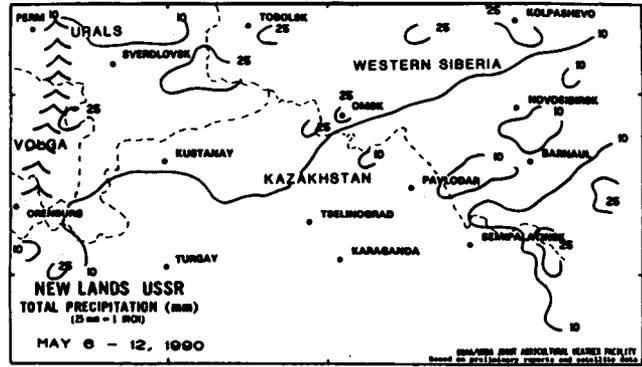
NORTHWESTERN AFRICA ... Unseasonably cool weather accompanies late-week rain, slowing winter grain maturation and early harvest.

MEXICO ... Widespread showers favor corn planting and emergence in the Southern Plateau.

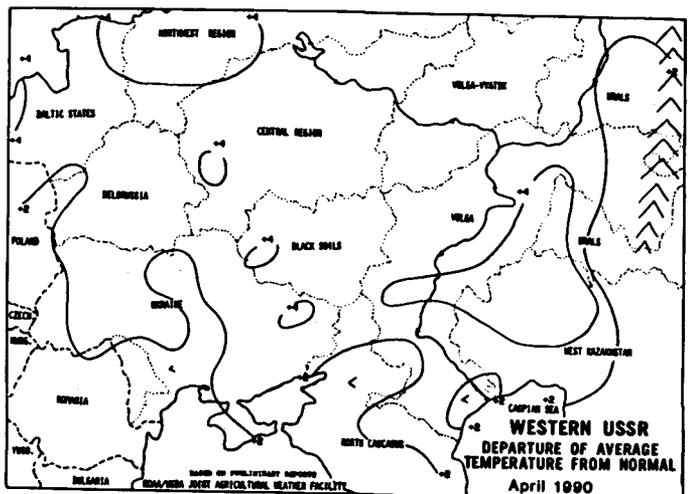
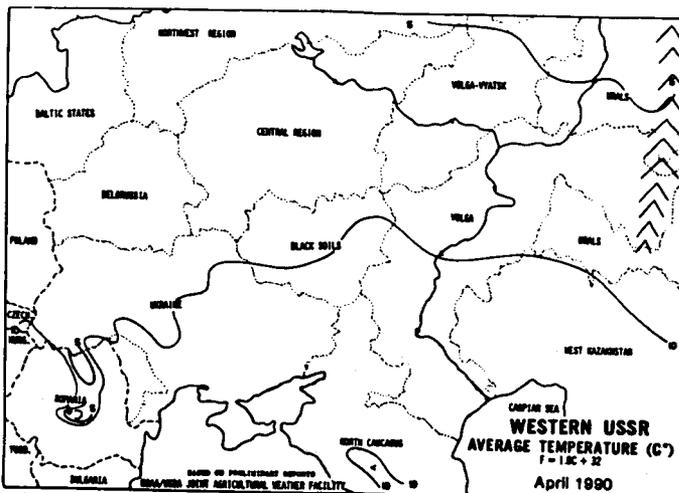
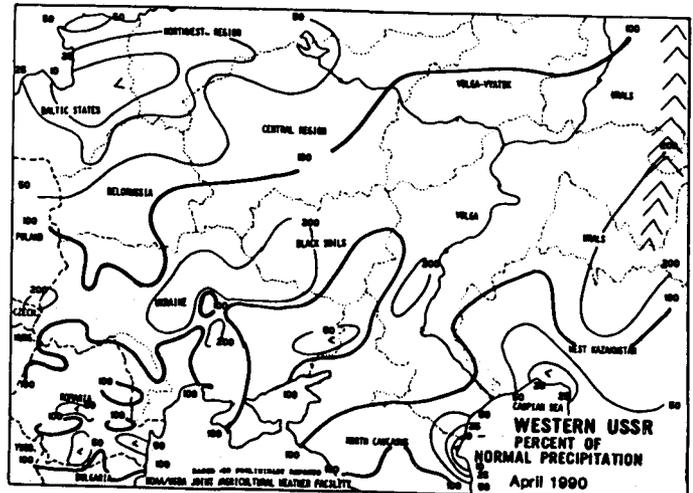
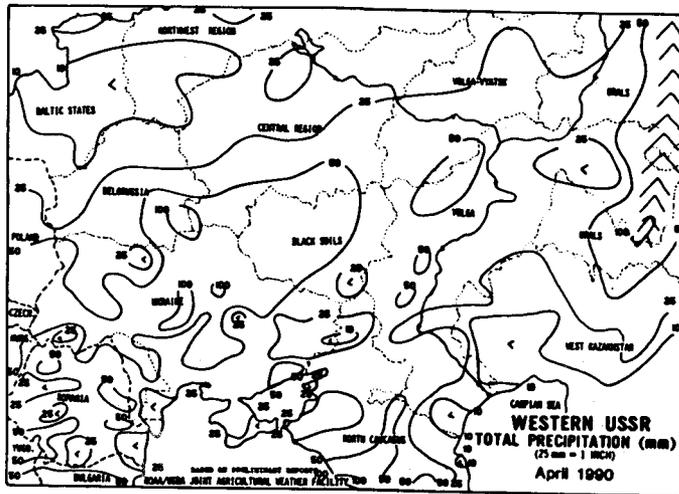
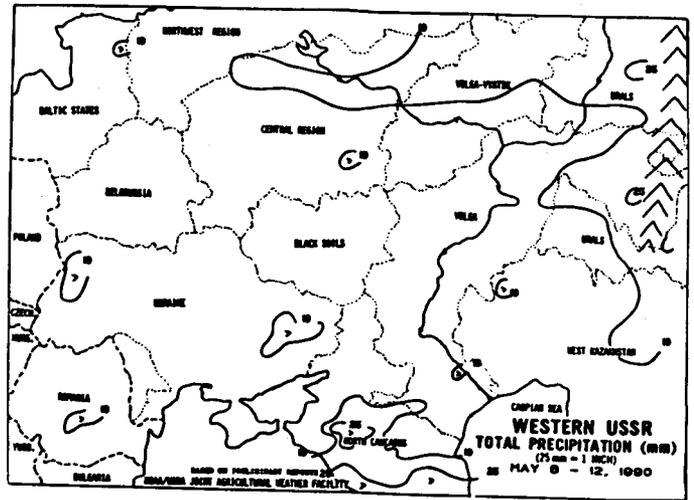
CANADA ... Variable rain covers the Prairie spring wheat areas.

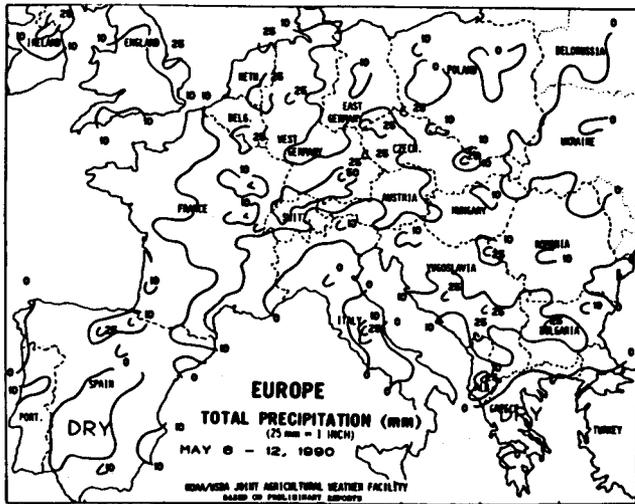


NEW LANDS ... Spring grain planting usually begins in mid-May. Widespread rain (10-25mm, with local amounts in excess of 25mm) covered spring grain areas in the Urals, continuing April's above-normal precipitation pattern. Although the rain was mostly beneficial, increasing soil moisture reserves for the upcoming growing season, it continued to exacerbate flooding in Bashkir Autonomous Republic and Chelyabinsk Oblast brought on by melting snow and heavy rain in April. Light precipitation (8-20mm) covered spring grains over West Siberia and Kazakhstan, increasing topsoil moisture needed for emergence and early plant establishment. Although April precipitation was mostly below normal in these areas, above-normal winter precipitation provided abundant subsoil moisture.

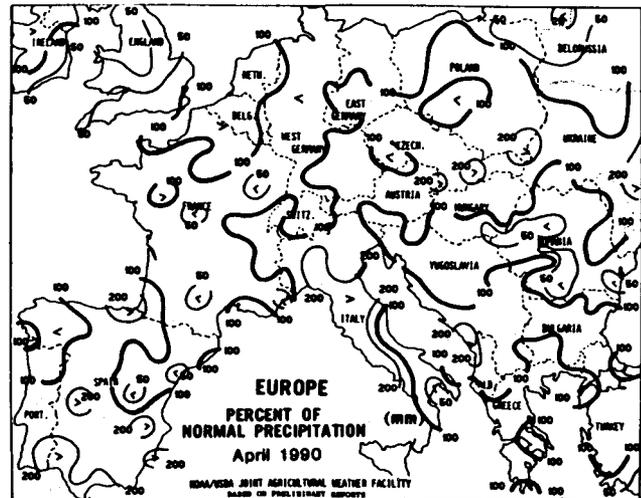
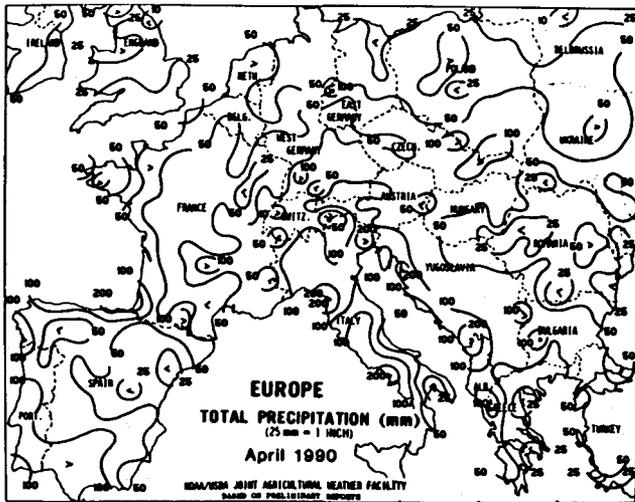


WESTERN USSR ... Light, widespread precipitation (around 10mm) covered most areas except over crop areas in the western and southern North Caucasus, where rainfall ranged from 18 to 37mm. Winter grains were entering the heading stage in the extreme south and were in the jointing stage over the remainder of the region. Spring grain crop progress ranged from early jointing in the extreme south to planting and early emergence in the north. In April, the weather continued unusually mild, accelerating winter grains growth and development. On April 10, a brief cold snap over Moldavia and the western Ukraine dropped minimum temperatures to as low as -4 degrees Celsius (C). Temperatures were not low enough to significantly damage winter grains in the early jointing stage. Above-normal precipitation over the northern Ukraine, the Black Soils Region, the Volga Vyatsk, Volga, and the northern North Caucasus benefited winter grains. Although below-normal precipitation covered the Baltic States and Belorussia, it helped spring grain planting. Near-normal precipitation in Moldavia and the southern Ukraine reversed persistent dryness, improving moisture conditions for crops.

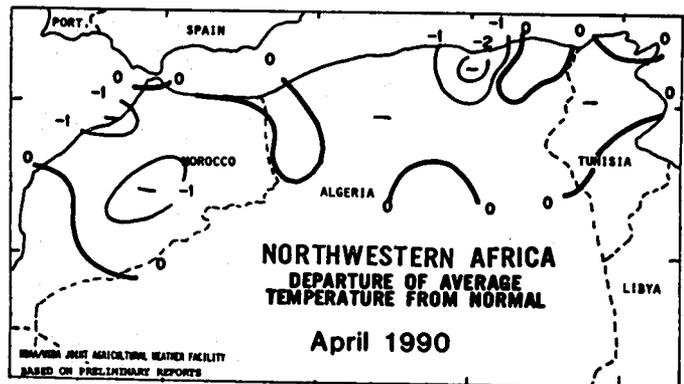
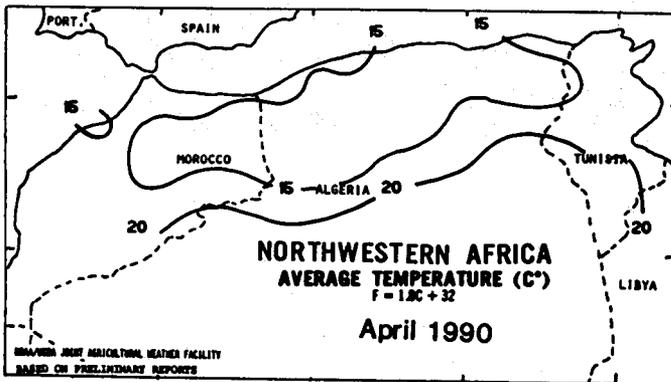
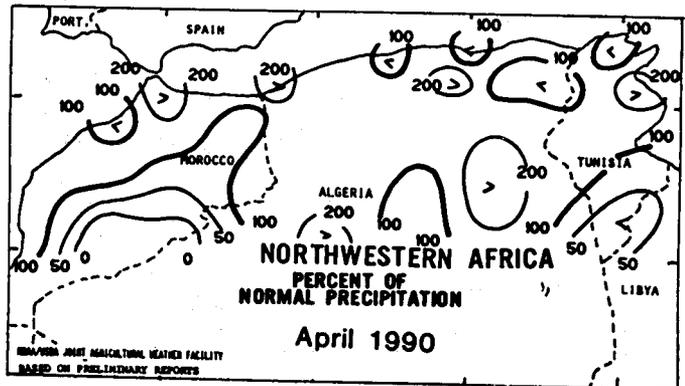
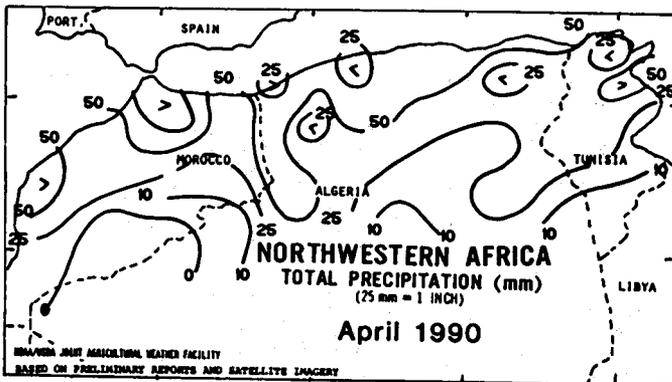
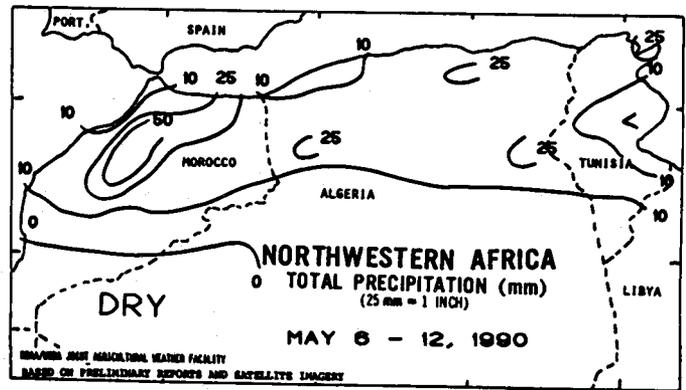


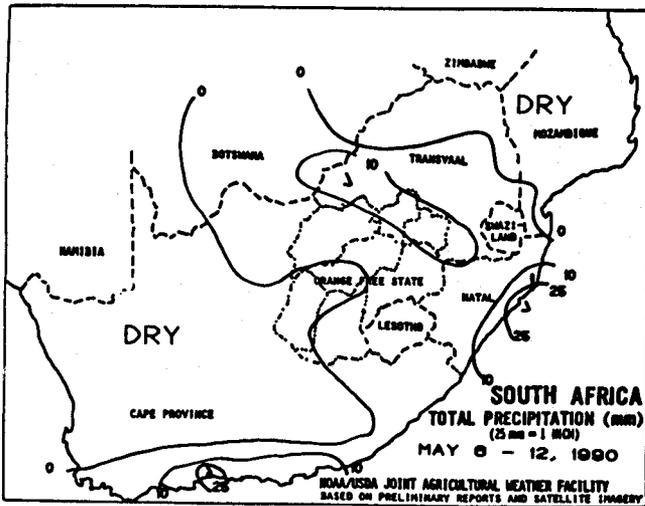


EUROPE ... A fast-moving cool front brought widespread rain (5-30mm, with isolated amounts greater than 30mm) to much of northern Europe, helping to reduce topsoil dryness and ending 2 consecutive weeks of unseasonably warm temperatures (mean weekly temperatures 3-8 degrees C above normal). Following beneficial normal to above-normal winter precipitation and much above-normal temperatures during the winter, drier-than-normal conditions have persisted in sections of northwestern Europe since mid-March, stressing spring-planted crops and causing jointing to heading winter grains to rely on subsoil reserves. In contrast, above-normal April rainfall greatly benefited winter grains in previously dry sections of Italy and Yugoslavia, although long-term moisture deficits persist in most areas. Mean temperatures during April ranged from slightly above normal in the east to below normal in the west.

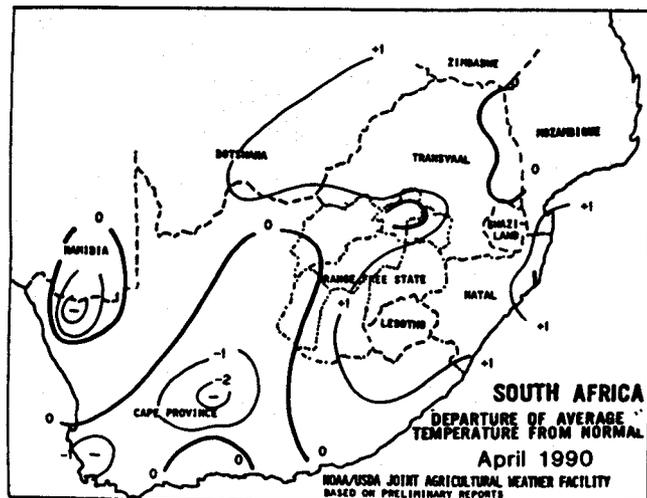
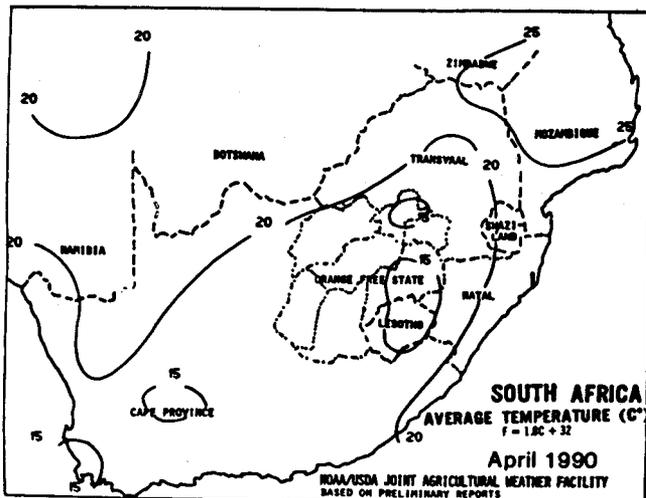
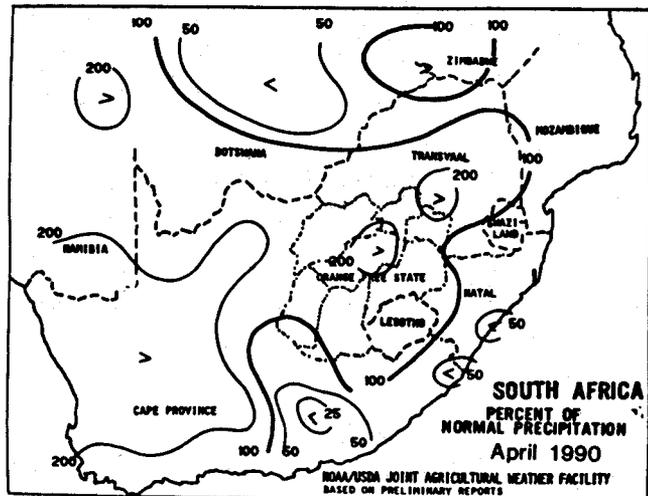
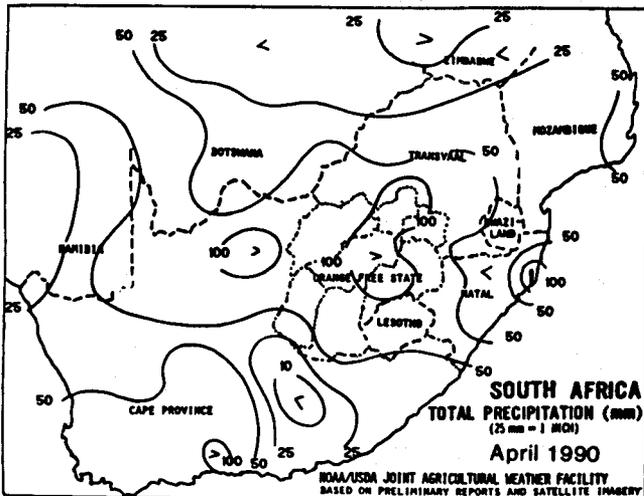


NORTHWESTERN AFRICA ... Winter grains were maturing over the region. Following mostly dry weather early in the week, widespread showers began over Morocco on May 9, and spread eastward over crop areas in Algeria and Tunisia during the remainder of the week. Greatest amounts of precipitation (10-50mm, with local amounts in excess of 50mm) covered Moroccan winter grains, while lesser amounts of rain (10-25mm) fell over winter grain areas in Algeria and Tunisia. The rain was accompanied by unseasonably cool weather, slowing crop maturation and early harvest activities. In April, near- to above-normal precipitation covered winter grain areas in Morocco, Algeria, and Tunisia. Although the rain benefited those winter grains which remained in the filling stage, it came too late to significantly improve yield prospects in Algeria and Tunisia, where crops were stressed by prolonged dryness during most of the growing season.

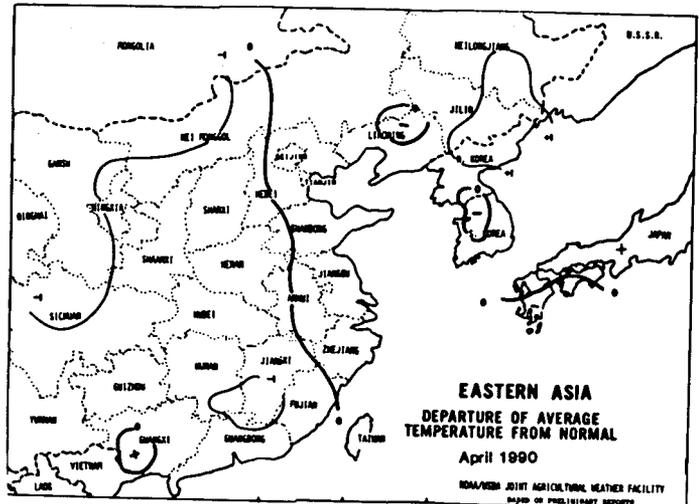
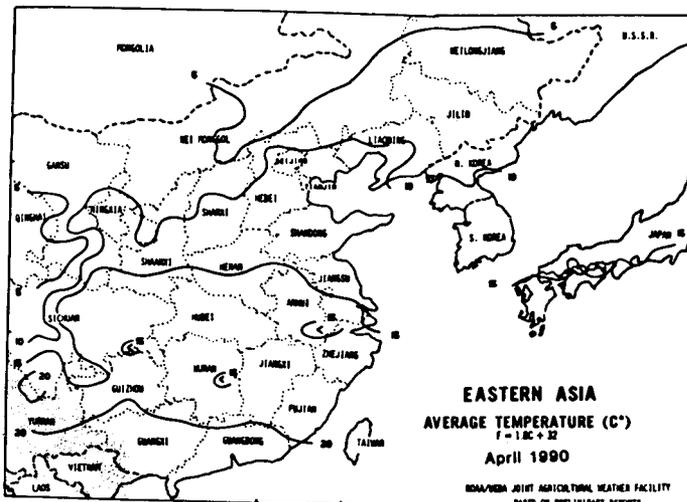
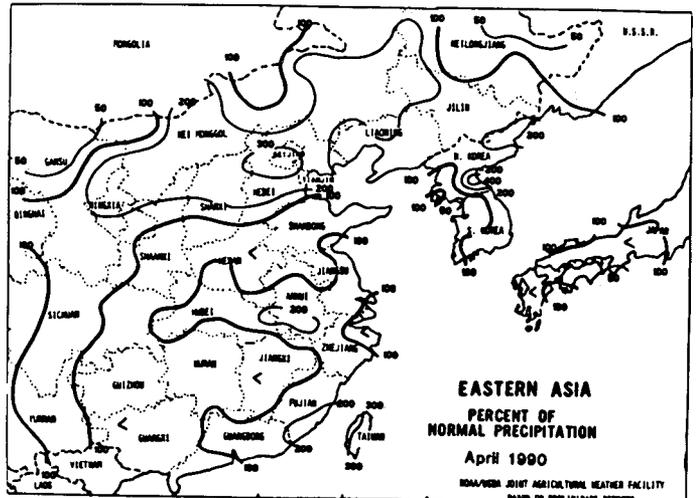
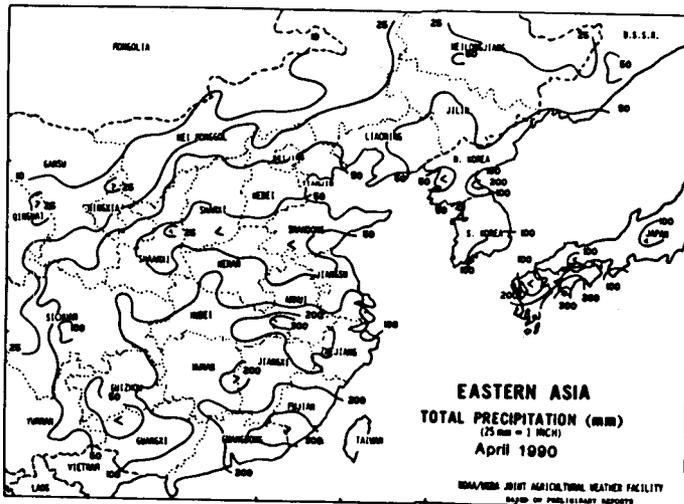
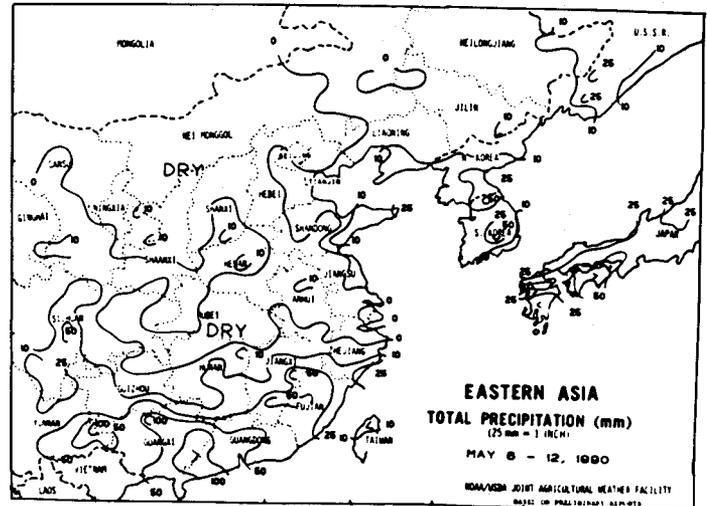


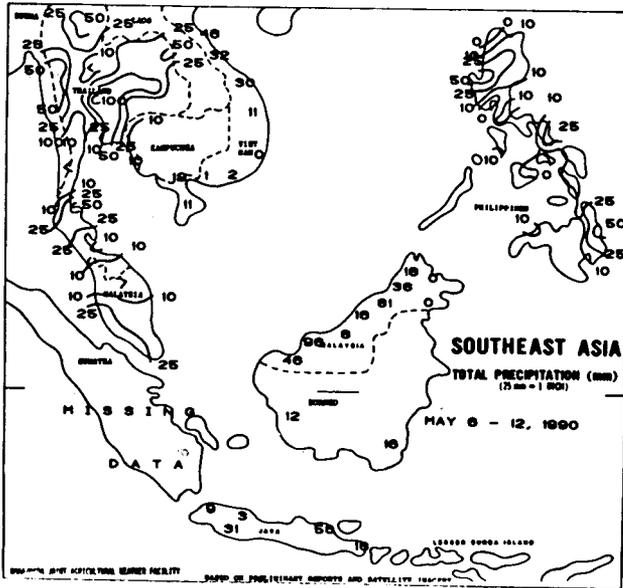


SOUTH AFRICA ... Generally warmer-than-normal weather, accompanied by only scattered, light rain (2-8mm), covered all but the eastern tip of the Maize Triangle, benefiting maturing corn. Light to moderate rain (10-30mm) in the eastern tip of the Triangle and portions of the southern Cape Province, although lighter than last week, kept topsoils too wet for winter wheat planting. In April, wetter-than-normal weather for the second consecutive month dominated the Maize Triangle, slowing crop maturation and hampering early harvests in the west. However, the rainfall in the eastern half of the Triangle, as well as the southern Cape Province, provided timely planting moisture for winter wheat. Drier-than-normal conditions prevailed over Natal's sugarcane areas. This is the final summary for the season. Coverage will resume in October, corresponding with corn planting.

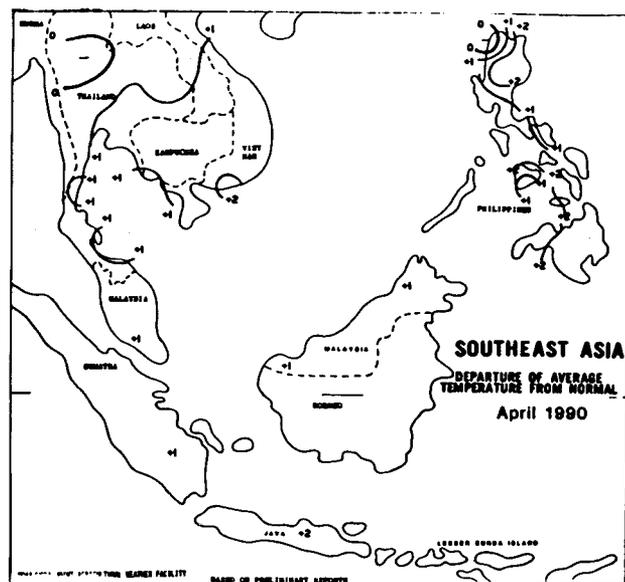
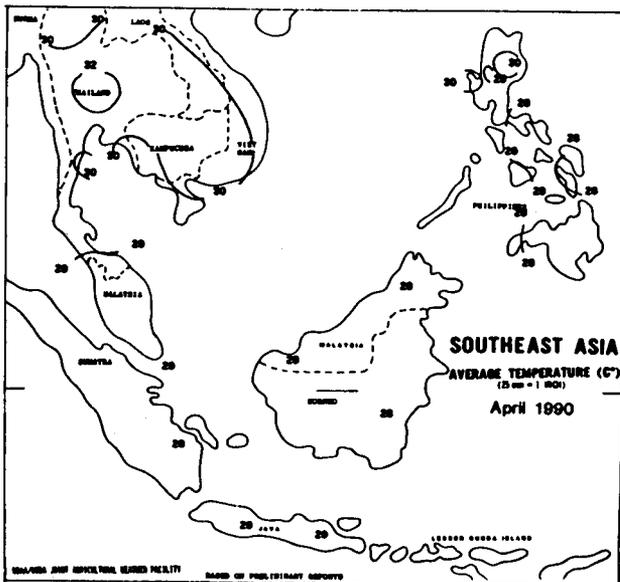
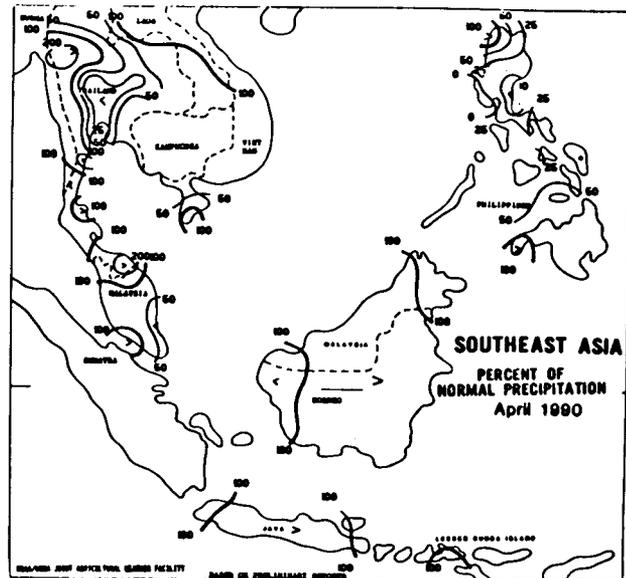
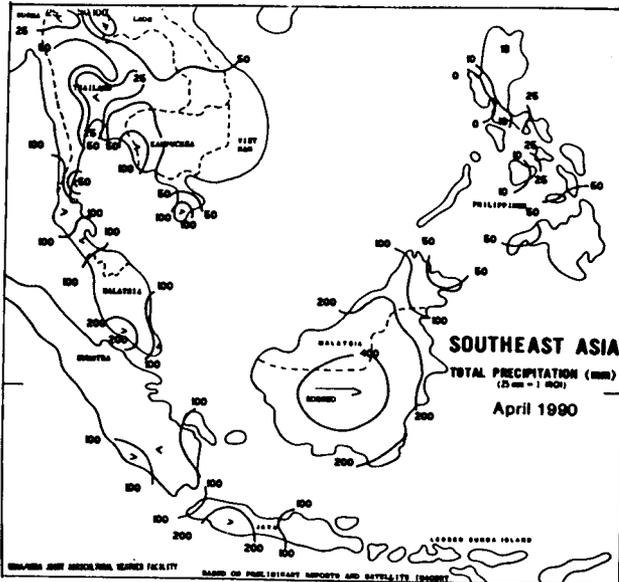


EASTERN ASIA ... Mostly dry weather returned to lower sections of the Yangtze Valley, allowing soils to dry and a resumption of spring planting. Widespread rain (10-60mm, with scattered amounts in excess of 60mm) fell across much of southern China, benefiting early and single crop rice. In the North China Plain, scattered, light to moderate rain (5-20mm, with isolated amounts greater than 20mm) caused minor delays in spring planting. Widespread rain (5-30mm) and above-normal temperatures (1-4 degrees C above normal) in Manchuria and the Korean Peninsula favored early growth of spring-planted crops. Mostly dry weather in Hokkaido and northern Japan allowed rapid progress of spring fieldwork and early planting. During April, near-normal to above-normal precipitation fell across all of the region except sections of interior south-central China and the central North China Plain, which were below normal.

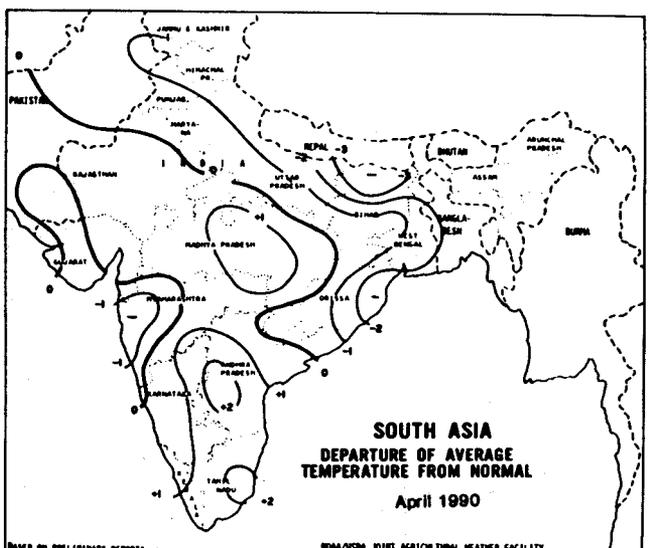
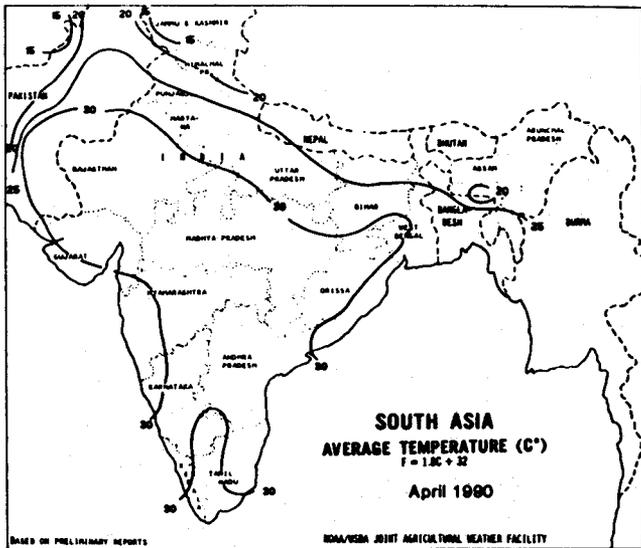
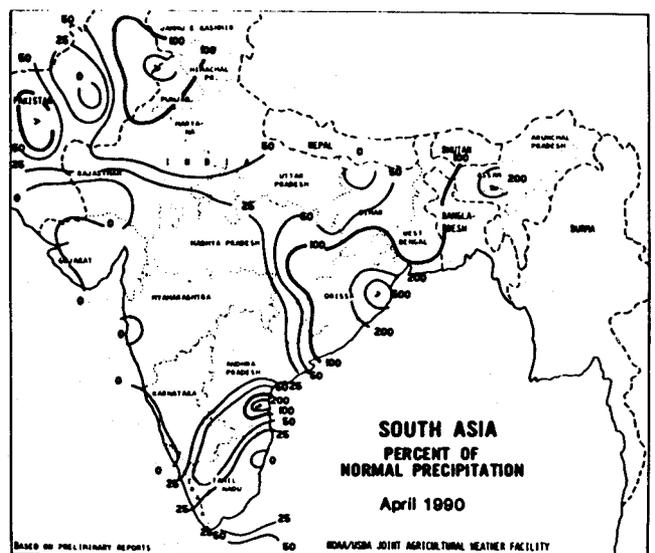
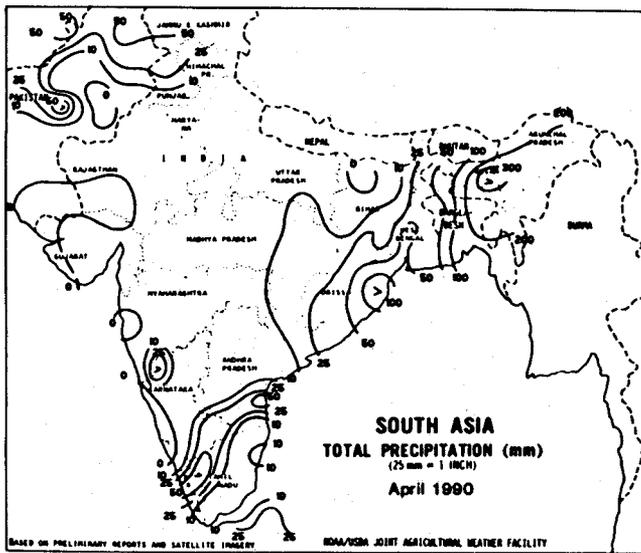
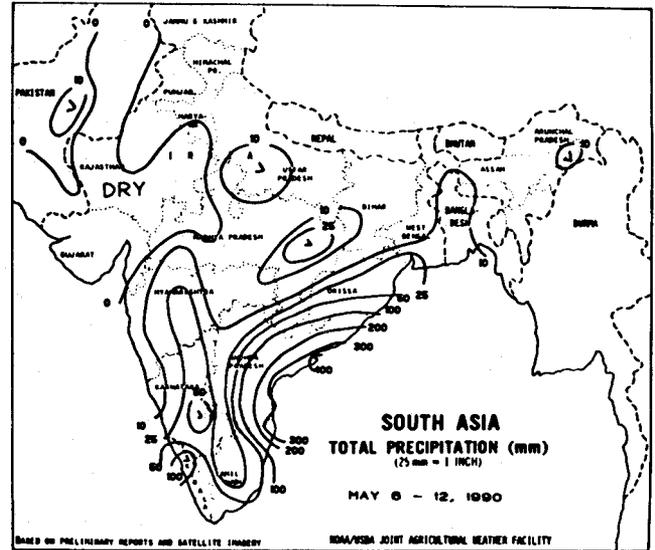


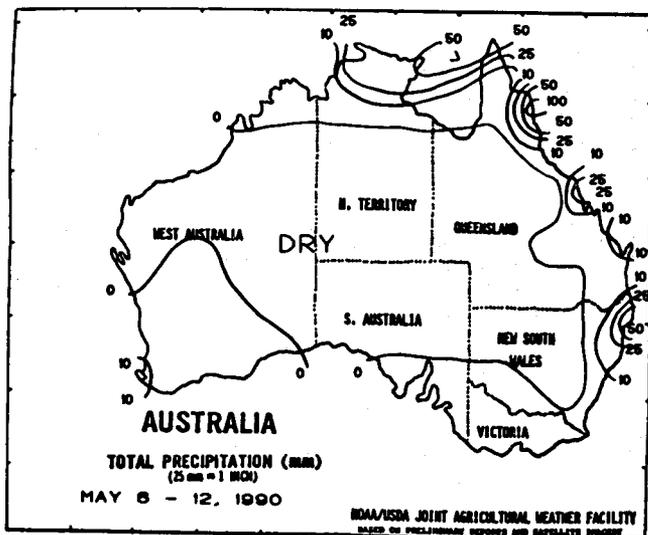


SOUTHEAST ASIA ... Moderate to heavy showers (20-50mm or more) and seasonable temperatures covered most primary grain areas from Thailand to northern Vietnam, improving moisture levels for planting and vegetative growth. In the Philippines, light to moderate showers (10-25mm or more) dotted the islands, with beneficial rain (20-71mm) in western Luzon for the first time this season. Temperatures, however, continued to be above normal, increasing evaporative losses. Further south, seasonably drier weather continued over southern Indonesia. In April, sporadic rain and warmer-than-normal temperatures reduced available moisture for newly planted Thai grains. In the Philippines, warm, drier-than-normal weather also persisted, but late-month showers in the southeast were timely for planting. Rainfall was near to above normal over Malaysia and Indonesia, although seasonal drying took place by month's end in the south.

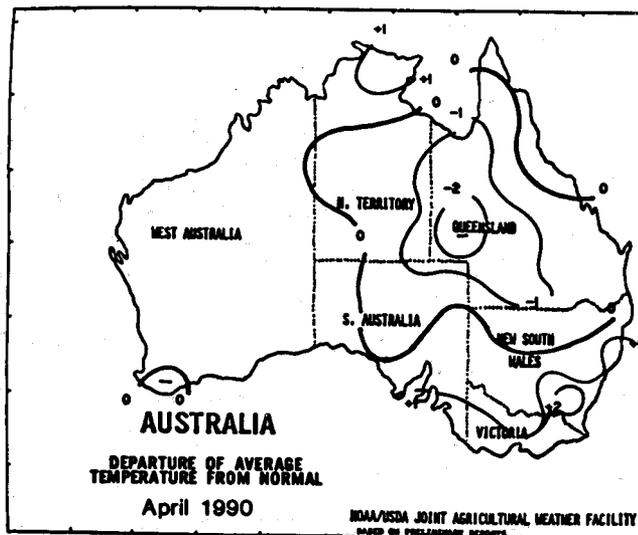
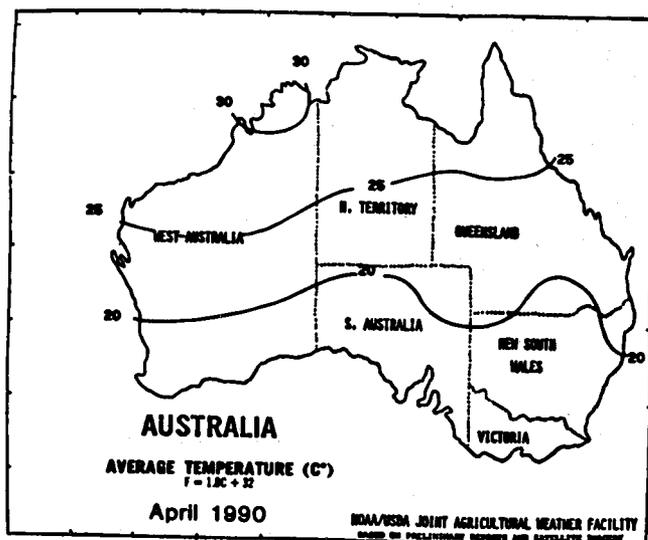
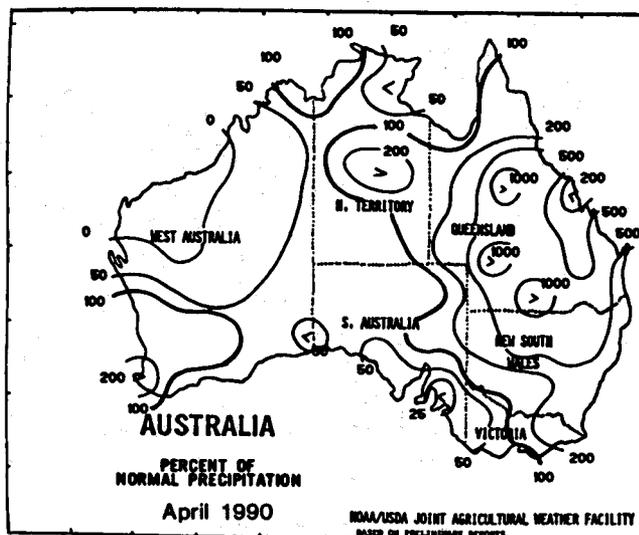
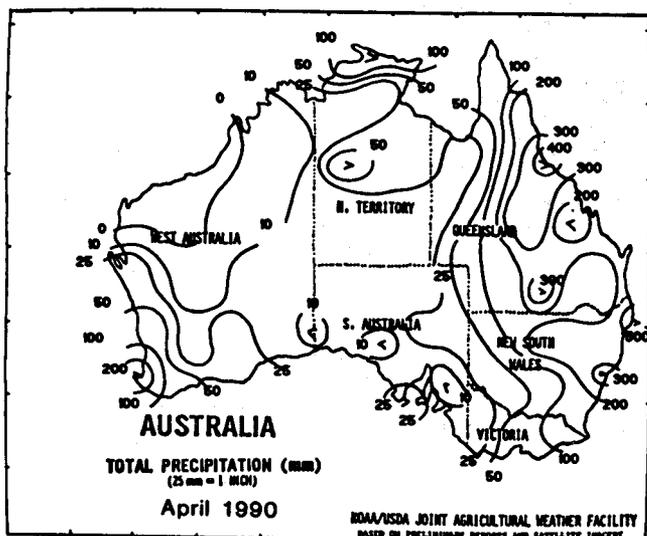


SOUTH ASIA ... A tropical cyclone with maximum sustained winds of about 100 knots struck southeastern India's Andhra Pradesh state, bringing heavy rain (100-300mm or more), flooding, and some wind damage to coastal areas. Harvesting of secondary rice in the hardest hit areas is generally completed by the end of April. The storm produced variable rainfall (10-50mm or more) over southern and central India as it moved inland, but elsewhere, only light rain (10mm or less) fell. In April, frequent showers (10-50mm or more total accumulation) and cooler-than-normal weather in northern Pakistan and north-central India slowed winter wheat maturation. In the east, seasonable rain from Orissa eastward benefited immature rice and boosted irrigation reserves for upcoming plantings. Elsewhere, except for local areas of India's southern tip, dry, warm weather dominated.

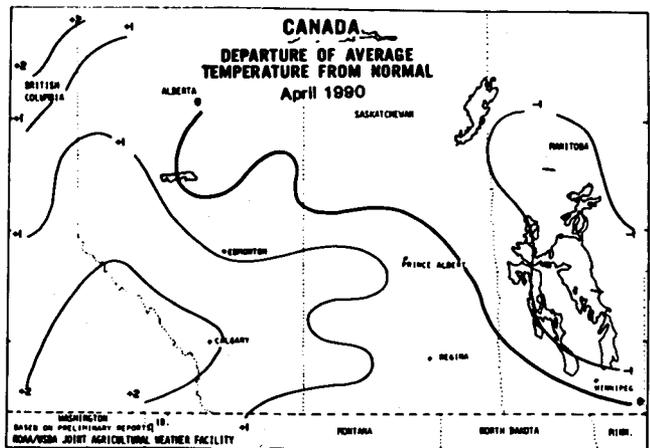
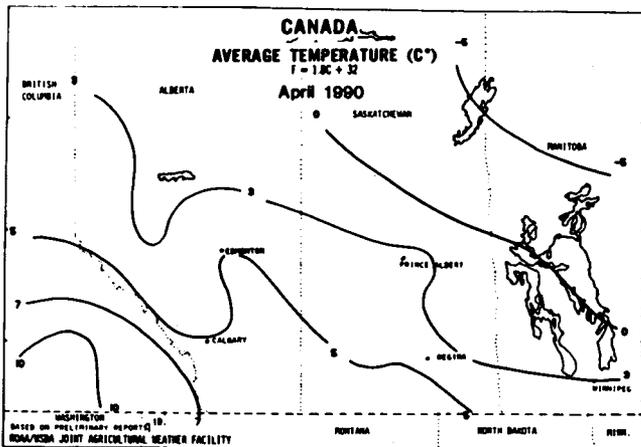
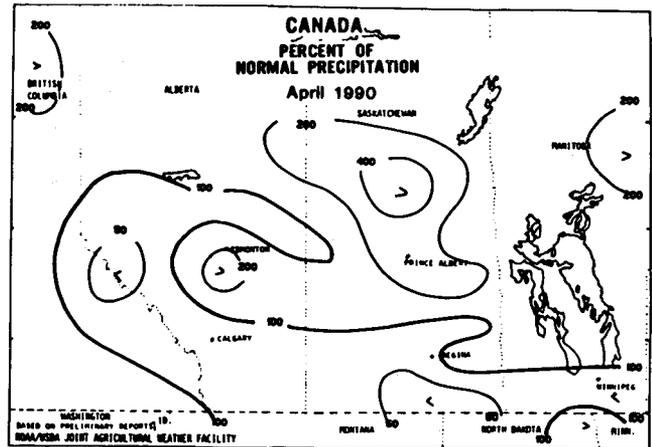
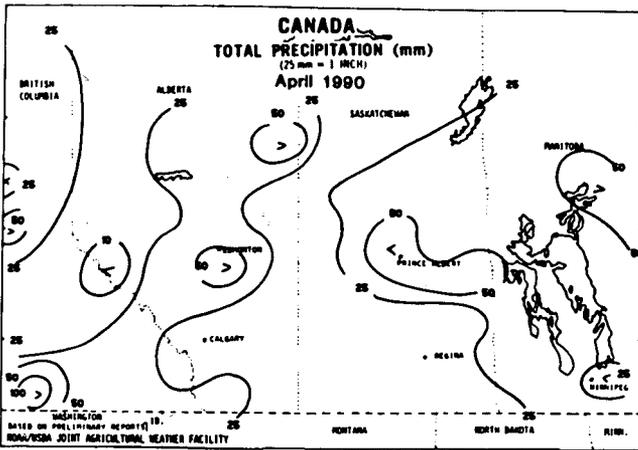
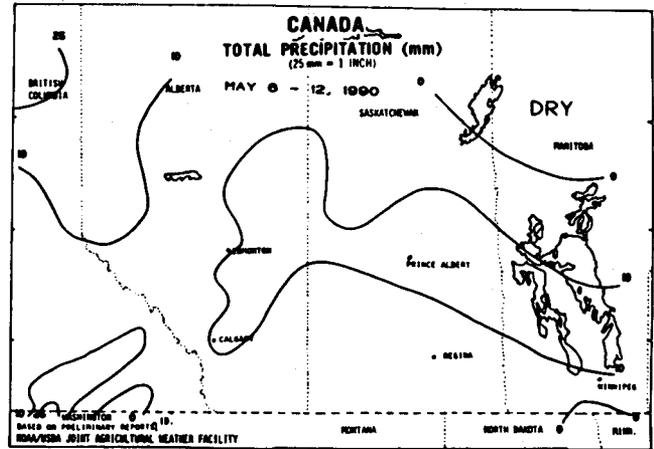


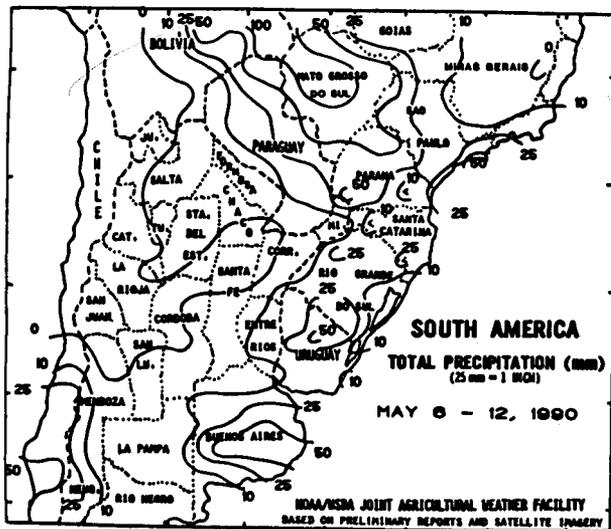


AUSTRALIA ... Mostly dry weather continued for the third consecutive week across crop areas of Queensland and New South Wales, allowing rapid progress of late summer crop harvest and winter grain planting. Scattered rain (15-60mm, with isolated amounts greater than 60mm) kept sugar content of sugarcane at lower-than-normal levels in northeastern coastal Queensland. In the south, scattered, mostly light rain (less than 10mm) caused only minor delays in fall fieldwork and early planting in sections of Victoria and Western Australia. South Australia remained mostly dry. Much above-normal rainfall (as much as 1,000 percent of normal) during April caused widespread flooding and harvest delays across much of eastern Australia but left abundant soil moisture for winter grains. Above-normal precipitation also fell in western crop areas of Western Australia, while southern Western Australia, South Australia, and western Victoria were drier than normal.

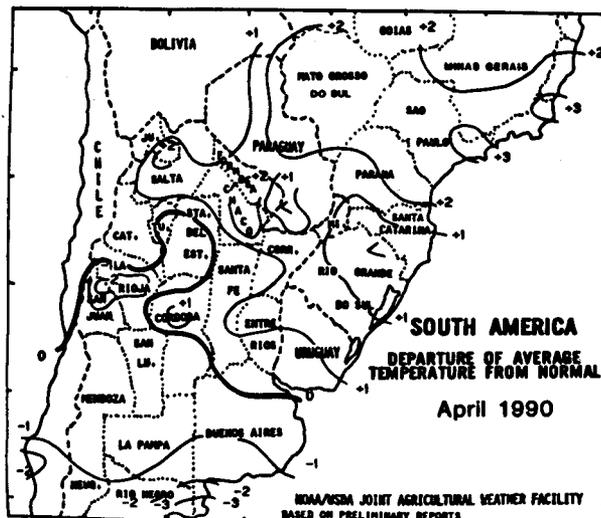
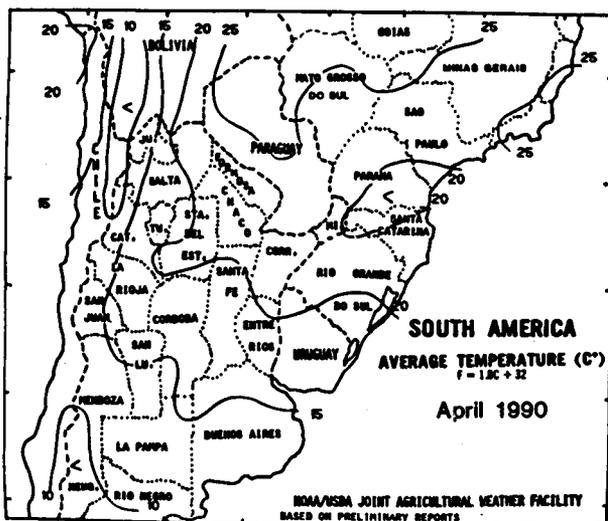
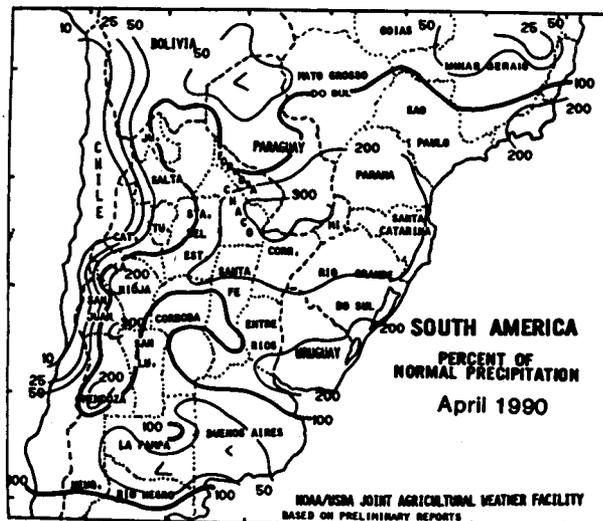
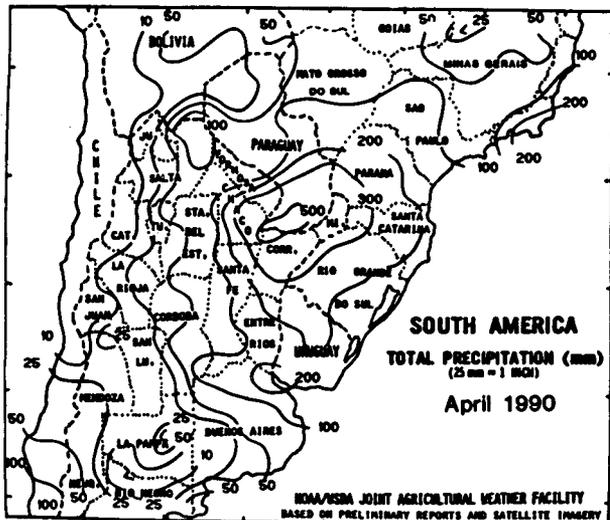


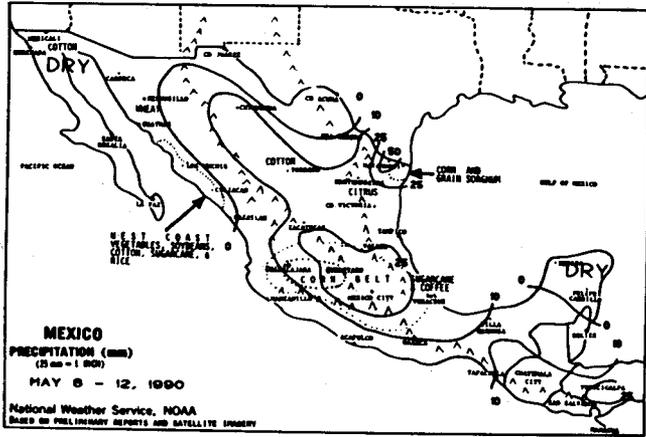
CANADA ... Rainfall ranged from 10 to 22mm across the northern spring wheat areas of Alberta, Saskatchewan, and Manitoba, reflecting April's wetter-than-normal pattern in those areas. Lighter rain (1-9mm) covered the southern Prairie crop regions, where April rainfall was near to below normal. Fall and winter precipitation was near to above normal in most areas, the exception being central Alberta and parts of southeastern Saskatchewan and Manitoba which recently received beneficial moisture. However, despite improved topsoil conditions since last fall, subsoil moisture shortages continue in most areas due to recent years of chronic, drier- and warmer-than-normal weather. Spring wheat planting usually occurs throughout May, but delays are reportedly occurring due to cool, wet field conditions.



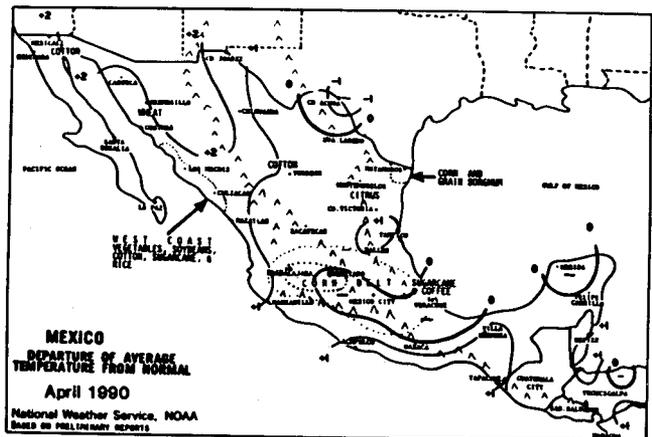
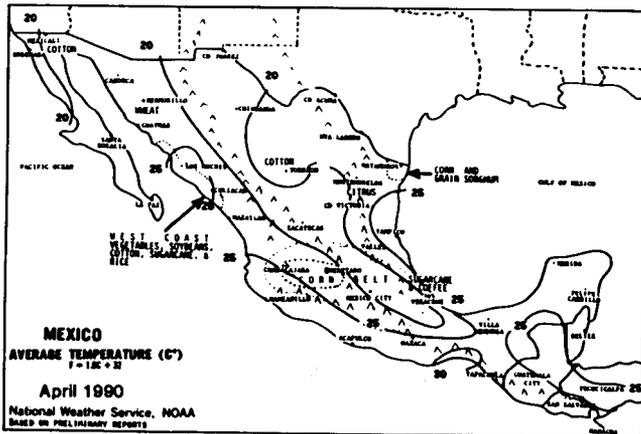
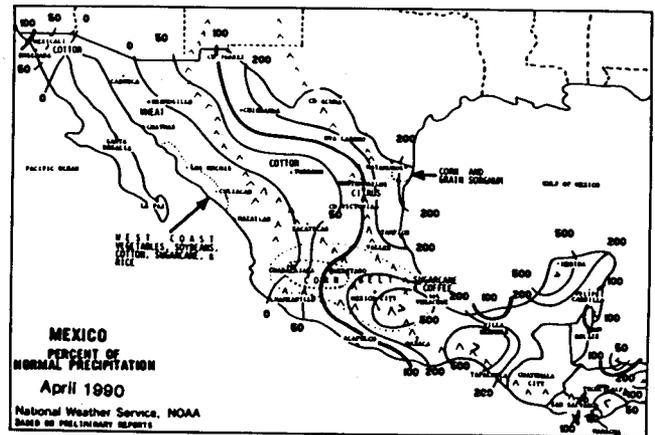
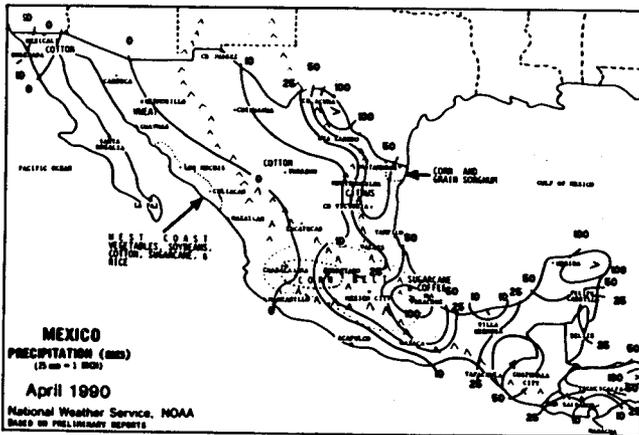


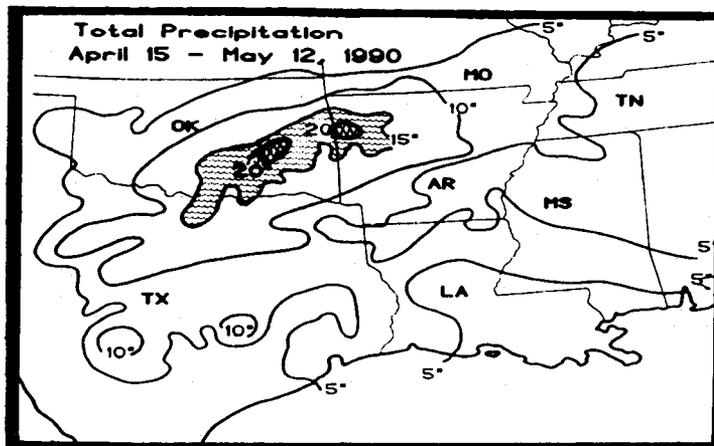
SOUTH AMERICA ... In Argentina, mostly light showers (less than 10mm) in the primary corn and soybean areas of northern Buenos Aires, southern Santa Fe, and southern Cordoba promoted rapid harvesting. Dryness in northern cotton areas also favored harvesting. Harvest delays, caused by above-average April rainfall in these areas, kept progress behind the pace of both last year and the 5-year average. In contrast, well below-average April rainfall in southern Buenos Aires and La Pampa reduced soil moisture for the upcoming wheat planting season to begin in late May. Recent beneficial rain in this area improved moisture supplies. In south-central Brazil, widespread showers covered most soybean areas, with locally heavy amounts (50-100mm or more) in northern crop areas. Several days of dryness permitted significant harvest progress, especially in southern soybean areas. Well above-average April rainfall in these southern soybean areas had caused extensive harvest delays.





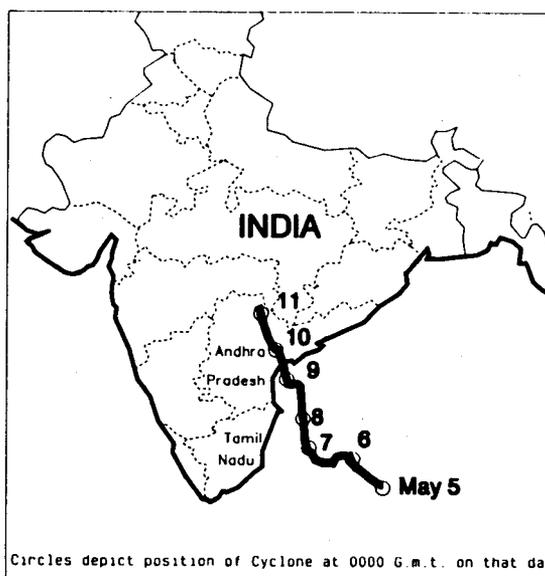
MEXICO ... Widespread showers covered most of the Southern Plateau corn belt, producing weekly rainfall of 10-41mm in most areas. Substantial rain (10-28mm) also fell in the extreme northeast grain and vegetable areas. Light, variable showers (less than 10mm) fell elsewhere, except for dryness along the entire extent of the west coast, over the Yucatan peninsula, and in the extreme north. Near-to above-average April rainfall provided a good start to the wet season throughout eastern and southern Mexico. Well above-average April rains in the eastern half of the Southern Plateau provided ample moisture for corn planting.





EXTENSIVE U.S. FLOODING CONTINUES

Precipitation since mid-April over Texas, Arkansas, Louisiana, and Oklahoma (see map above) has resulted in continued extensive flooding over parts of these States, particularly along the Red and Trinity Rivers. The highest levels in 40 years are likely as the crest proceeds down the Red River through Louisiana. In addition, heavy rainfall over the past weekend caused flooding in southern Mississippi, mainly along the Pearl River and its tributaries.



Circles depict position of Cyclone at 0000 G.m.t. on that day

TROPICAL CYCLONE LASHES SOUTHEAST INDIA

A fierce tropical cyclone lashed southeastern India last week with high winds and torrential rains. The cyclone, which was the second of the season in the Bay of Bengal and unnamed, spent 2 days (May 7th and 8th) off the coast threatening the Indian states of Tamil Nadu and Andhra Pradesh with winds between 185-225 kph (115-140 mph). The storm hit near the mouth of the Krishna River in Andhra Pradesh at about 1400 Greenwich mean time (G.m.t.) (7 p.m. local time), Wednesday, May 9. Maximum sustained winds at landfall were estimated at about 190 kph (120 mph) with gusts up to 240 kph (150 mph). The storm still had sustained winds above 80 kph (50 mph) until 1200 G.m.t., Thursday, May 10.

Heavy rains between 100-300 mm (4-12 inches) were reported along the coastal regions of the Indian states of Tamil Nadu and Andhra Pradesh, with a few isolated amounts up to 600 mm. Additionally, tidal surges between 10-15 feet occurred along the coast near landfall causing extensive flooding. The storm reportedly killed nearly 300 people. Crop damage has not yet been assessed in the hardest hit areas, which produce plantation crops and rice. However, rice harvesting is usually completed by the end of April.

Bob Stefanski

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(Continued from p.17)

continued. Many vegetables being planted. Pasture growth is good on west side; short on east side of State.

WEST VIRGINIA: Temperature 57^o, 1 to 2^o below normal. Extremes 32^o; 86^o. Precipitation 0.77 in.

Days suitable for fieldwork 3.4. Soil moisture 10% short, 76% adequate, 14% surplus. Cattle, sheep good to fair. Calving complete; lambing complete. Feed supplies adequate to surplus. Wheat, barley fair to good. Oats fair to good; 95% planted, 64% emerged. Corn fair to good; planting 56% complete, 31% emerged. Tobacco beds poor to good; 97% emerged. Hay good to fair. Apples, peaches poor. Farm activities: Corn, oats planting, fertilizing, plowing, fencing, livestock care.

WISCONSIN: Temperature 53^o, 3^o below normal. Extremes 21^o; 89^o. Precipitation 0.80 to 3.10 in. Snowfall on 10th, 2.00 to 7.00 in., eastern part of State.

Days suitable for fieldwork 2.3. Soil moisture 23% short, 68% adequate, 9% surplus. Oats planted 94%, 87% 1989, 92% avg. Corn planted 50%, 40% 1989, 55% avg. Soybeans planted 6%, 4% 1989, 10%

avg. Spring tillage 76% complete, 75% 1989, 82% avg.

WYOMING: Temperatures below normal. Precipitation below normal.

Days suitable for fieldwork 5.0. Topsoil 24% short, 75% adequate, 1% surplus. Subsoil 50% short, 49% adequate, 1% surplus. Spring wheat planted 90%, 75% 1989, 75% avg.; emerged 50%, 40% 1989, 40% avg. Oats planted 70%, 70% 1989, 65% avg.; emerged 40%, 35% 1989, 35% avg. Barley planted 95%, 90% 1989, 80% avg.; emerged 75%, 65% 1989, 55% avg. Sugarbeets planted 95%, 95% avg.; emerged 40%, 50% 1989, 40% avg. Corn planted 40%, 45% 1989, 40% avg.; small amount emerged, 5% 1989, small amount avg. Potatoes planted 40%, 60% 1989, 30% avg.; emerged 15%, 15% 1989. Dry beans planted small amount, 5% 1989, 10% avg. Winter wheat mostly good. Spraying russian aphids underway. Livestock mostly good. Spring calves born 90%, 95% 1989, 90% avg. Farm flock: Ewes lambed 95%, 95% 1989, 95% avg.; shorn 95%, 95% 1989, 85% avg. Range sheep: Ewes lambed 60%, 65% 1989, 65% avg.; shorn 80%, 80% 1989, 75% avg. Calf, lamb losses light to normal. Ranges, pastures mostly good. Spring grazing prospects mostly good. Stockwater short 30%, adequate 70% State.

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