

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

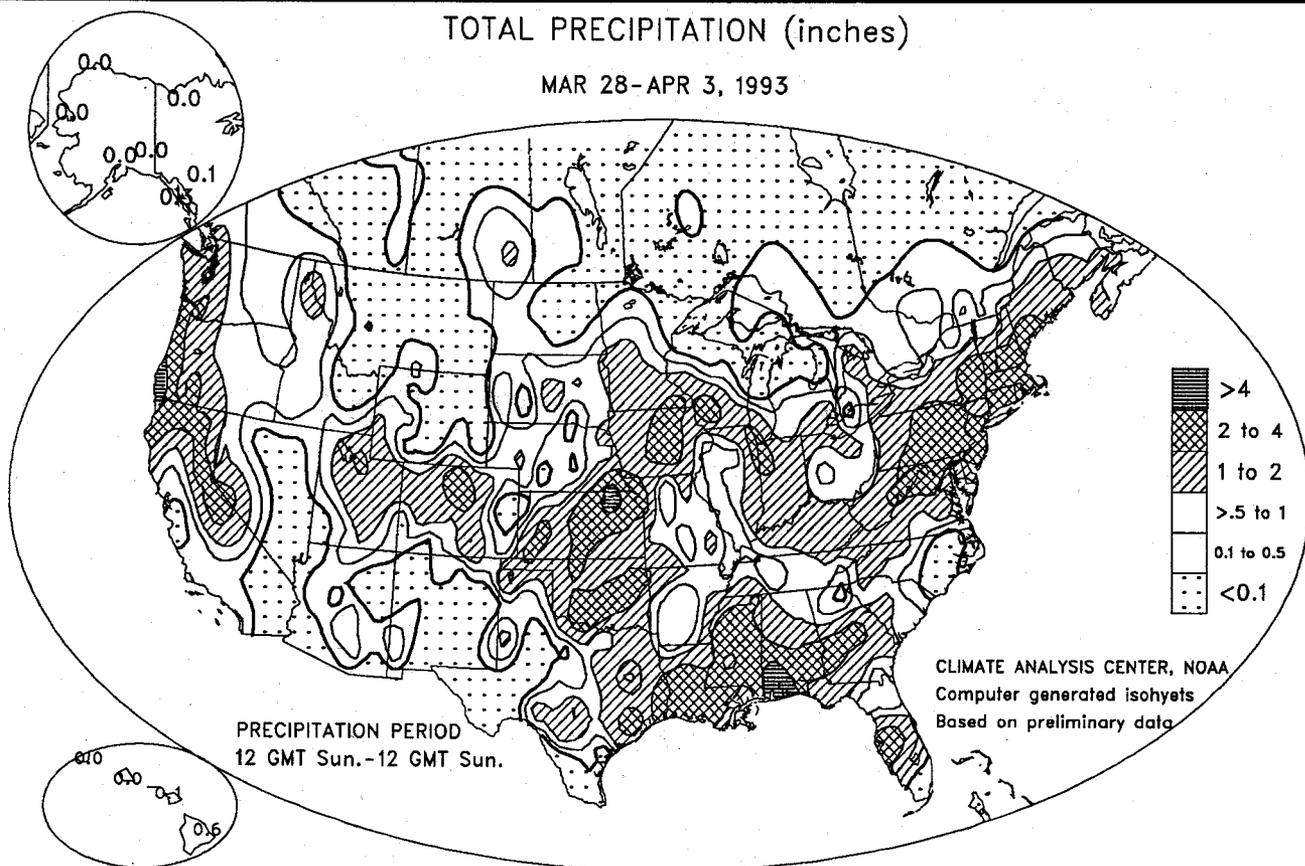
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Washington, D.C.

April 6, 1993

TOTAL PRECIPITATION (inches)

MAR 28-APR 3, 1993



HIGHLIGHTS

March 28 - April 3, 1993

A large storm system crept across the Nation, compounding flooding problems in the Northeast, and producing a 5-day outbreak of severe thunderstorms from the central and southern Plains eastward. On Sunday and Monday, last week's pesky storm lingered over the Northeast, dumping another round of heavy rain. More than 2 inches pelted Portsmouth, NH, and Atlantic City, NJ. The combination of heavy rain and a melting snowpack engendered or worsened flooding from the Middle Atlantic region northward. Meanwhile, a new storm progressed from California to Oklahoma. As much as 14 inches of snow fell in western Wyoming, while up to 6 inches blanketed northern New Mexico. Farther east, severe thunderstorms fired from Kansas southward into Texas. At least 10 tornadoes thrashed the Clinton, OK, area on Tuesday. By midweek,

(Continued to p. 23)

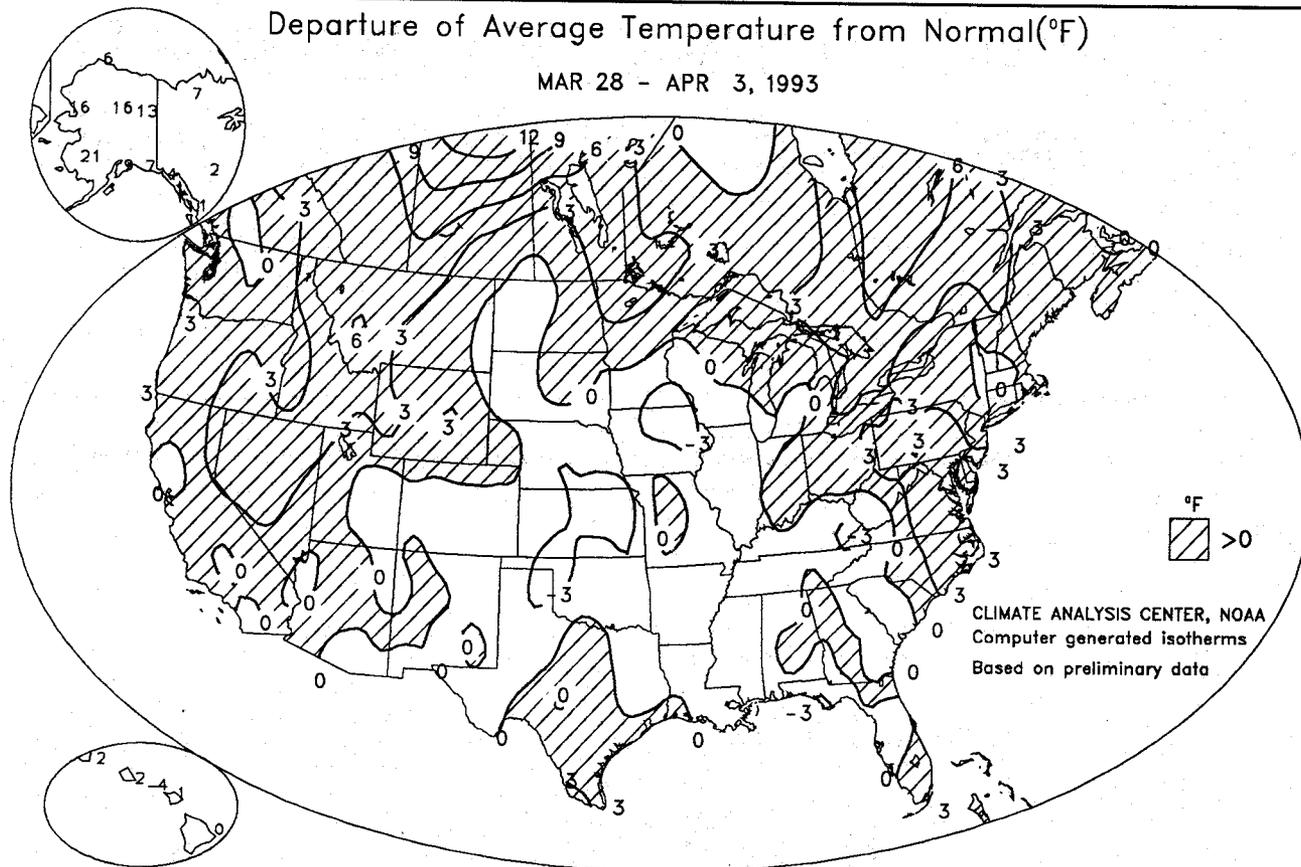
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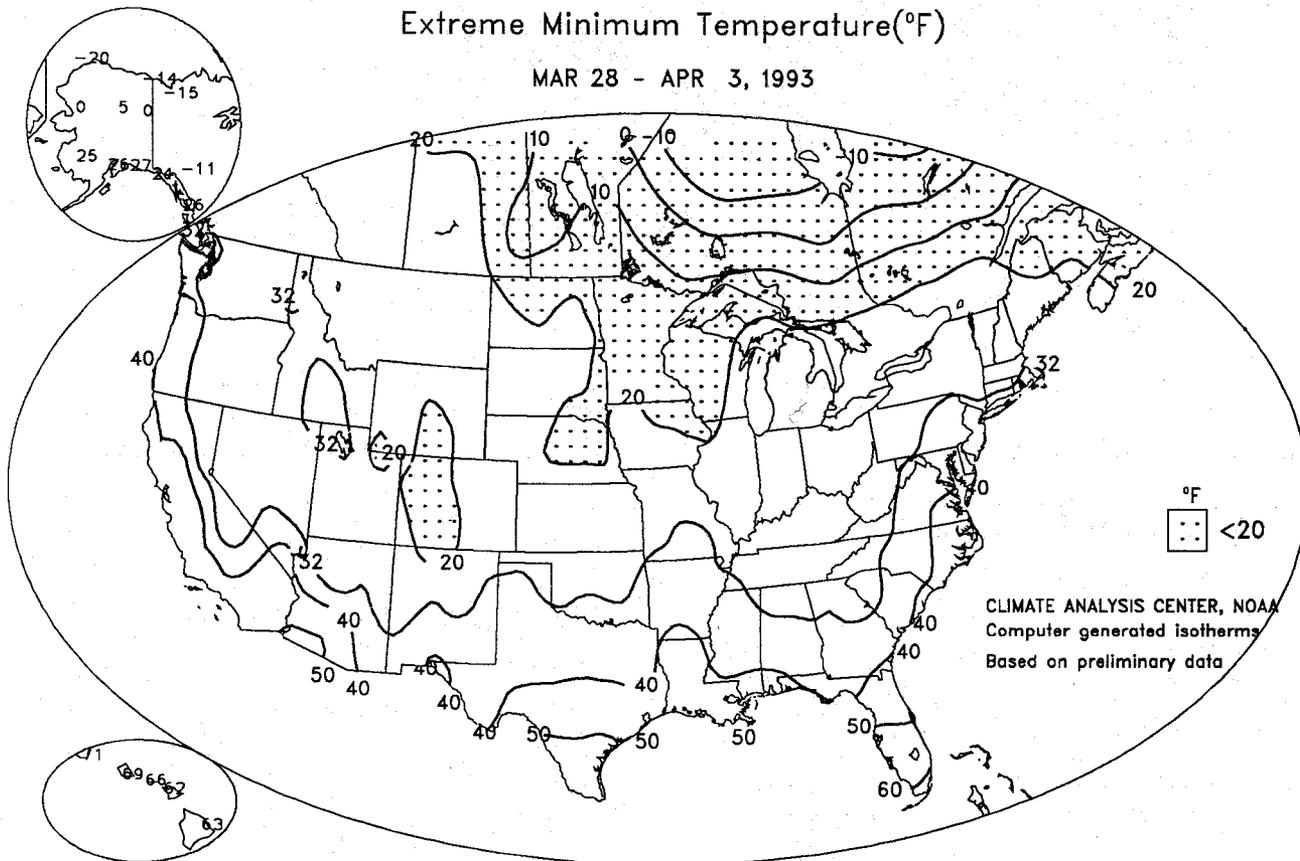
Departure of Average Temperature from Normal(°F)

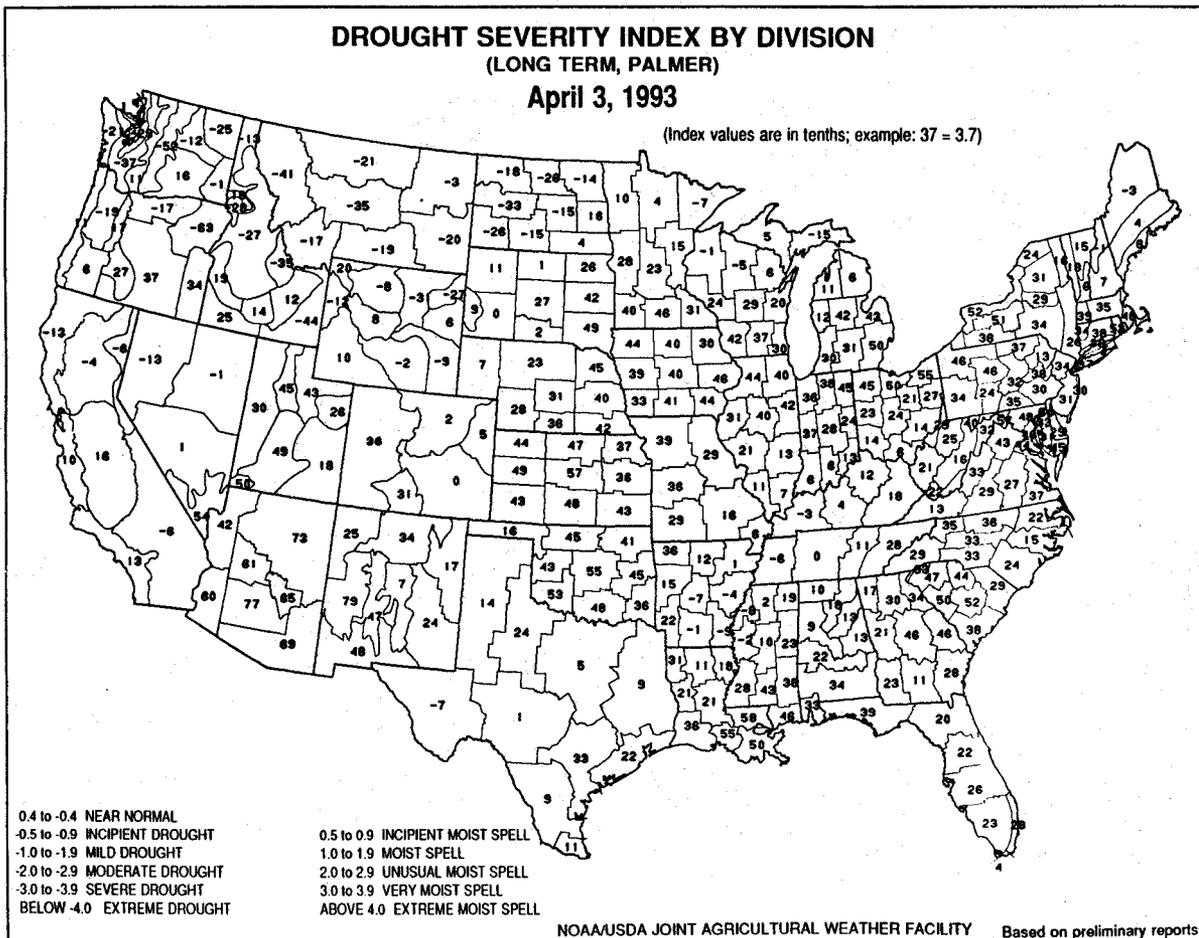
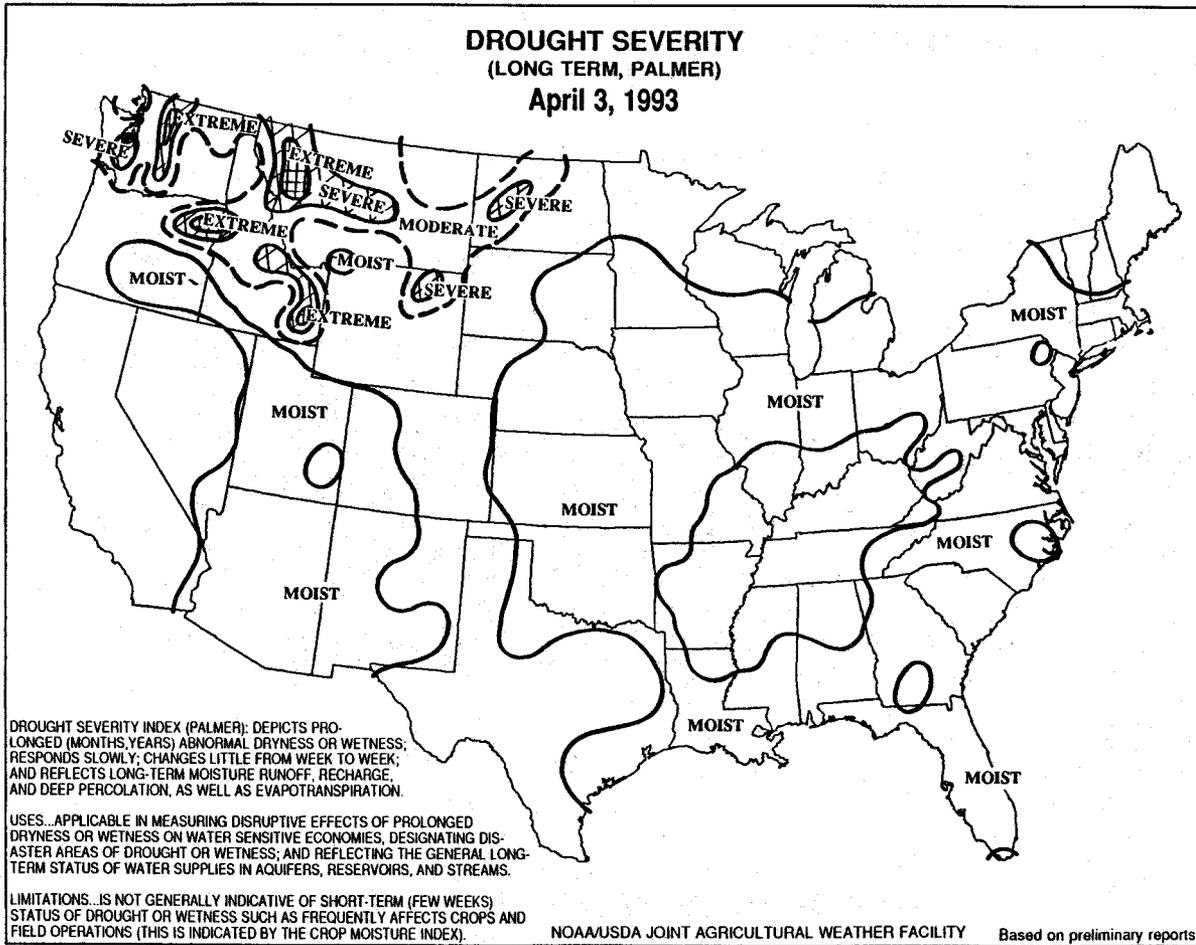
MAR 28 - APR 3, 1993

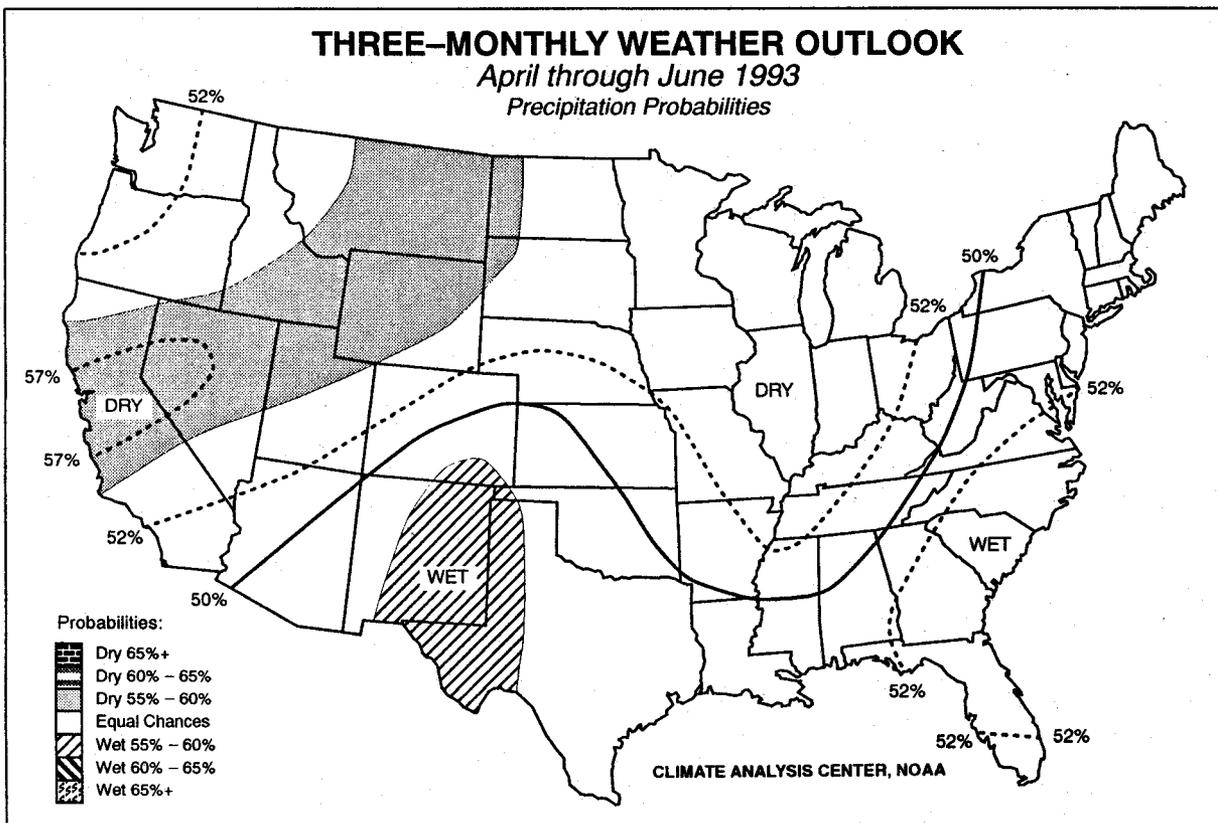
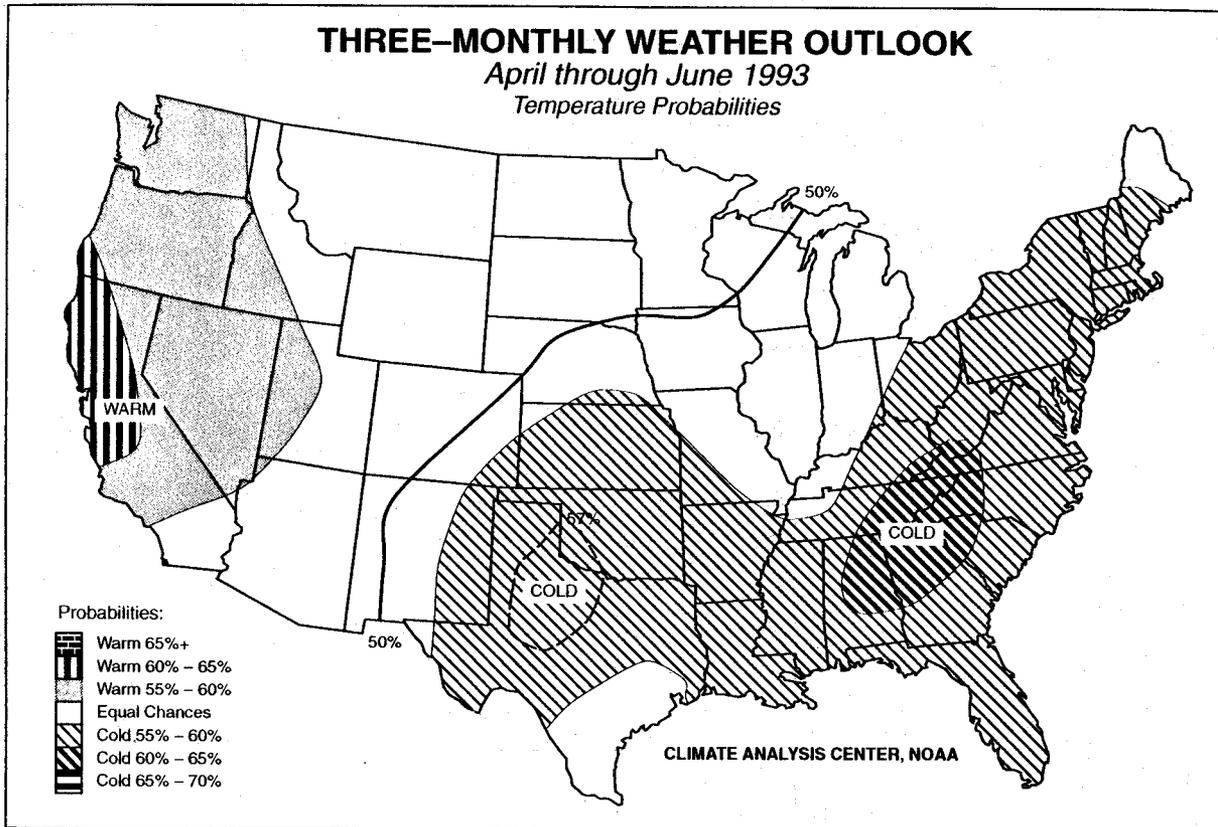


Extreme Minimum Temperature(°F)

MAR 28 - APR 3, 1993







For information on the techniques that the Climate Analysis Center's Prediction Branch uses to prepare the long-range outlooks, see the article by A. J. Wagner entitled "Medium- and Long-Range Forecasting," published by the American Meteorological Society in its journal, *Weather and Forecasting*, Sept. 1989, pp. 413-426. For information on subscribing to their 30- and 90-day outlooks, write to: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

National Weather Data for Selected Cities

Weather Data for the Week Ending April 3, 1993

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	
AL BIRMINGHAM	71	43	84	31	57	-1	.9	-.4	.8	4.4	65	12.7	77	85	39	0	1	0	0	0	
MOBILE	74	50	83	43	62	-2	4.1	2.9	3.5	10.5	152	23.0	134	93	44	0	1	0	0	0	
MONTGOMERY	75	46	84	33	61	1	1.6	1.3	1.1	7.7	114	17.3	102	88	36	0	0	0	0	0	
AK ANCHORAGE	44	29	50	25	37	6	.6	.3	.3	3.9	2.4	103	90	53	0	0	6	0	0	0	
BARROW	2	-10	5	-21	-4	6	.4	.1	.1	.6	.7	182	81	75	0	0	0	0	0	0	
FAIRBANKS	50	18	53	9	34	14	.0	.1	.3	65	3.0	227	90	36	0	0	7	7	0	0	0
JUNEAU	48	31	53	25	40	4	.4	.1	.1	3.7	102	21.8	184	97	59	0	4	4	0	0	0
KODIAK	42	36	45	31	39	4	2.5	1.5	1.5	9.0	178	19.3	109	97	78	0	1	7	0	0	0
NOME	38	25	45	15	32	20	.1	.1	.1	1.7	286	4.0	199	88	63	0	0	7	0	0	0
AZ PHOENIX	77	54	84	49	66	6	.4	.3	.3	1.6	172	8.6	373	82	29	0	0	0	0	0	0
PRESCOTT	61	36	68	32	49	3	.1	.1	.1	2.5	127	10.9	217	84	34	0	1	1	1	0	0
TUCSON	76	46	85	41	61	-1	.3	.2	.3	.5	65	6.8	296	83	22	0	0	0	0	0	0
YUMA	83	58	90	52	70	3	.0	.0	.4	141	3.3	396	52	19	1	1	0	0	0	0	0
AR FORT SMITH	67	46	86	36	56	6	.1	.1	.1	2.0	46	9.1	103	80	43	0	0	0	0	0	0
LITTLE ROCK	66	48	83	38	57	-1	.1	-1.0	.1	3.3	62	10.3	86	69	50	0	0	0	0	0	0
CA BAKERSFIELD	68	48	77	44	58	-2	.4	.2	.4	1.8	157	6.1	201	68	39	0	0	0	0	0	0
EUREKA	59	47	67	44	53	3	2.1	1.1	.8	6.2	109	19.3	117	85	65	0	0	0	0	0	0
FRESNO	67	49	74	46	58	0	.2	.2	.1	1.8	90	9.4	164	91	50	0	0	0	0	0	0
LOS ANGELES	67	52	79	48	59	1	.5	.2	.5	1.8	87	17.7	253	89	61	0	0	0	0	0	0
REDDING	64	47	72	41	56	4	.4	-.4	.3	6.5	138	24.4	161	95	55	0	0	0	0	0	0
SACRAMENTO	66	46	69	41	56	0	.3	-.2	.2	2.5	90	16.1	173	99	64	0	0	0	0	0	0
SAN DIEGO	67	53	75	49	60	-1	.3	.3	.3	1.2	65	15.0	287	86	62	0	0	0	0	0	0
SAN FRANCISCO	63	50	66	48	57	2	.2	.3	.2	2.3	72	18.3	169	87	65	0	0	0	0	0	0
CO DENVER	52	33	65	29	43	0	1.1	.7	.4	1.4	97	2.7	108	92	39	0	2	2	6	0	0
GRAND JUNCTION	55	34	63	31	45	-4	.3	.1	.2	1.7	148	4.2	187	87	40	0	1	1	0	0	0
PUEBLO	58	34	69	31	46	-1	.8	.6	.4	1.9	223	2.5	170	94	38	0	0	3	5	0	0
CT BRIDGEPORT	50	41	57	36	46	2	1.9	1.0	1.3	8.1	195	13.3	128	91	65	0	0	0	0	0	0
HARTFORD	49	38	64	33	43	0	1.7	.8	.8	7.4	185	13.0	122	95	71	0	0	0	0	0	0
DC WASHINGTON	61	47	69	38	54	2	.8	.1	.3	7.2	210	12.4	139	93	70	0	0	0	0	0	0
FL APALACHICOLA	73	54	81	45	63	-1	1.7	.9	1.5	3.8	84	14.2	116	92	41	0	0	0	0	0	0
DAYTONA BEACH	79	55	86	46	67	0	.6	.0	.6	5.6	178	12.9	143	92	41	0	0	0	0	0	0
JACKSONVILLE	78	53	87	40	66	0	.8	.2	.8	6.0	153	12.7	116	88	40	0	0	0	0	0	0
KEY WEST	82	70	84	65	76	0	.1	.2	.1	1.6	84	9.8	173	87	66	0	0	0	0	0	0
MIAMI	85	67	89	60	76	3	.3	.5	.5	6.0	228	13.2	196	85	45	0	0	0	0	0	0
ORLANDO	81	57	87	50	69	0	1.1	.5	.6	6.8	199	13.2	151	91	43	0	0	0	0	0	0
TALLAHASSEE	76	49	85	35	63	-1	1.4	.2	.9	6.9	103	21.0	123	91	40	0	0	0	0	0	0
TAMPA	77	57	82	50	67	-2	1.1	.7	.7	4.3	137	10.2	125	92	56	0	0	0	0	0	0
WEST PALM BEACH	83	62	86	54	72	0	.2	-.4	.2	11.1	349	21.1	247	89	46	0	0	0	0	0	0
GA ATLANTA	71	47	83	33	59	1	.3	-.9	.3	5.7	92	14.1	89	85	42	0	0	0	0	0	0
AUGUSTA	73	46	85	32	59	0	1.2	.2	1.2	7.6	151	16.8	126	85	39	0	1	1	1	1	0
MACON	73	47	84	31	60	-1	2.0	1.0	2.0	10.3	200	20.0	138	86	40	0	1	1	1	1	0
SAVANNAH	73	51	84	37	62	0	1.5	.7	1.5	8.0	194	16.8	154	85	40	0	0	0	0	0	0
HI HILO	81	65	82	63	73	1	.6	-3.0	.3	12.1	78	16.9	47	85	60	0	0	0	0	0	0
HONOLULU	84	71	85	69	77	2	.0	-.4	.0	.2	1.1	14	72	46	0	0	0	0	0	0	0
KAHULUI	83	67	84	62	75	1	.1	-.5	.1	1.2	42	3.6	36	76	55	0	0	0	0	0	0
LIHUE	81	72	81	71	76	3	.3	-.9	.3	.3	7	1.5	11	74	58	0	0	0	0	0	0
ID BOISE	58	36	63	29	47	2	.3	.0	.2	2.8	192	5.4	136	86	41	0	2	2	0	0	0
LEWISTON	59	40	67	36	50	3	.3	.1	.2	1.5	125	2.9	87	80	43	0	0	0	0	0	0
POCATELLO	54	35	62	30	44	4	.3	.0	.2	2.0	143	6.3	189	86	44	0	0	3	3	0	0
IL CHICAGO	50	30	66	22	40	-3	2.1	1.4	1.7	5.0	164	9.6	162	93	46	0	0	4	2	1	0
MOLINE	55	30	72	18	42	-2	.3	-.5	.1	5.0	149	7.9	129	90	43	0	0	5	3	0	0
PEORIA	56	32	74	24	44	-1	.8	.0	.6	4.3	130	9.5	152	91	41	0	0	4	3	1	0
QUINCY	56	38	74	29	47	0	.4	-.4	.4	2.0	57	5.3	84	80	57	0	0	2	3	0	0
ROCKFORD	52	28	68	21	40	-2	1.3	.6	1.2	4.0	144	7.3	140	96	51	0	0	7	2	1	0
SPRINGFIELD	58	34	75	26	46	-1	.2	-.6	.2	2.6	71	8.0	116	89	44	0	0	3	3	0	0
IN EVANSVILLE	61	39	79	28	50	-3	.9	-.2	.8	3.4	62	9.5	81	85	42	0	0	2	2	1	0
FORT WAYNE	54	36	67	26	45	1	1.2	.5	.8	4.1	127	11.1	159	92	51	0	0	3	4	1	0
INDIANAPOLIS	57	38	72	28	48	1	1.0	.1	.9	3.8	91	9.4	105	90	49	0	0	2	2	1	0
SOUTH BEND	52	33	68	26	43	0	.7	-.1	.6	2.7	79	8.3	108	90	43	0	0	3	2	1	0
IA DES MOINES	53	34	71	21	43	-1	1.6	.9	1.3	3.3	131	6.4	143	89	46	0	0	2	4	1	0
SIoux CITY	50	33	67	20	42	-1	.6	.1	.5	.9	39	3.6	107	93	56	0	0	4	3	0	0
WATERLOO	48	30	62	21	39	-3	1.8	1.2	1.3	4.1	158	6.0	134	94	62	0	0	5	3	1	0
KS CONCORDIA	52	37	69	25	44	-3	2.2	1.6	1.2	3.2	134	5.8	155	95	66	0	0	3	4	2	0
DODGE CITY	56	36	68	28	46	-3	1.3	.9	.7	2.2	127	6.0	212	93	48	0	0	3	4	1	0
GOODLAND	53	33	62	27	43	-1	.3	-.2	.3	.8	65	2.2	108	91	55	0	0	3	1	0	0
TOPEKA	54	37	72	23	46	-4	3.1	2.4	1.4	4.0	145	7.5	158	95	59	0	0	2	4	3	0
WICHITA	57	40	75	25	49	-3	1.1	.5	.5	1.9	66	4.8	98	90	56	0	0	2	5	0	0
KY BOWLING GREEN	62	40	79	27	51	-1	.9	-.2	.8	4.1	73	9.9	73	91	50	0	0	2	3	1	0
LEXINGTON	58	40	74	32	49	-1	.5	-.5	.5	3.8	79	10.4	95	91	51	0	0	1	3	0	0
LOUISVILLE	62	41	79	31	52	0	.8	-.3	.7	5.2	103	12.9	115	90	43	0	0	1	2	1	0
LA BATON ROUGE	76	53	87	41	64	-1	2.1	.9	2.1	7.4	139	23.6	149	92	45	0	0	0	0	0	0
LAKE CHARLES	75	55	81	44	65	1	2.3	1.6	2.3	7.0	195	18.1	155	90	48	0	0	0	1	1	0
NEW ORLEANS	76	53	83	46	65	0	.1	-1.0	.0	5.7	106	14.2	86	88	50	0	0	0	3	0	0
SHREVEPORT	72	49	84	44	60	-1	.4	-.5	.4	6.0	136	15.4	121	82	48	0	0	0	0	0	0

Based on 1961-90 normals.

Weather Data for the Week Ending April 3, 1993

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		
ME CARIBOU	44	24	64	12	34	3	.7	.1	.4	2.4	.89	6.6	94	89	45	0	7	5	3	0	
PORTLAND	45	32	58	28	38	0	2.3	1.4	1.0	7.2	177	13.8	127	94	52	0	5	2	0	0	
MD BALTIMORE	59	45	67	35	52	3	1.2	.4	.4	8.8	237	14.3	145	93	64	0	0	0	0	0	
SALISBURY	61	44	74	38	53	4	.5	-.3	.4	7.4	163	13.8	119	99	69	0	0	0	0	0	
MA BOSTON	47	38	52	34	43	-1	3.3	2.5	1.3	9.1	226	16.2	144	94	68	0	0	0	0	0	
CHATHAM	45	38	47	34	42	1	1.5	-.7	.9	7.1	170	13.2	111	97	53	0	0	0	0	0	
MI ALPENA	46	26	62	22	36	1	.5	-.1	.3	.8	34	2.9	56	92	52	0	7	2	2	2	
DETROIT	51	37	67	27	44	3	1.1	.4	.9	3.1	108	8.2	130	85	52	0	3	3	3	1	
FLINT	50	32	67	22	41	1	.8	.2	.8	2.0	83	6.0	118	90	47	0	3	3	3	1	
GRAND RAPIDS	48	31	64	26	39	-1	.6	-.2	.4	2.7	93	8.1	130	91	51	0	4	2	2	2	
HOUGHTON LAKE	48	26	66	22	37	2	.2	-.3	.1	.8	36	3.4	70	90	51	0	7	4	0	0	
LANSING	49	31	67	23	40	1	.5	-.1	.4	2.1	85	6.5	126	93	58	0	7	2	2	2	
MARQUETTE	41	24	57	18	32	2	.6	-.1	.3	1.5	48	4.5	65	88	53	0	7	2	2	2	
MUSKOGON	50	30	69	24	40	1	.5	-.2	.3	2.0	71	5.4	82	90	43	0	5	2	2	2	
SAULT ST. MARIE	44	25	60	19	35	4	.2	-.4	.2	.6	22	3.0	44	85	39	0	7	2	2	2	
MN ALEXANDRIA	46	27	57	19	36	2	1.0	.6	.9	1.6	100	2.6	82	89	50	0	5	2	2	2	
DULUTH	40	22	51	13	31	0	.1	-.4	.1	.4	21	2.7	64	84	40	0	7	2	2	2	
INT'L FALLS	46	23	60	15	35	4	.1	-.2	.0	.3	27	1.1	41	84	29	0	7	2	2	2	
MINNEAPOLIS	49	26	62	18	38	-1	.7	.2	.5	1.3	58	2.9	73	91	34	0	6	2	2	2	
ROCHESTER	43	24	53	14	33	-4	2.4	1.8	1.8	2.9	145	4.9	139	92	52	0	6	2	2	2	
MS GREENWOOD	68	47	84	37	57	-3	2.4	1.1	2.3	4.2	67	9.9	63	91	53	0	0	0	0	2	
JACKSON	70	46	86	35	58	-2	.9	-.5	.8	3.9	59	12.0	71	90	52	0	0	0	3	3	
MERIDIAN	72	46	85	36	59	-1	1.9	.4	1.8	7.4	100	21.9	122	90	43	0	0	3	3	1	
MO CAPE GIRARDEAU	63	40	78	31	51	-1	.3	-.8	.1	3.5	64	12.2	104	91	53	0	1	3	3	0	
COLUMBIA	60	41	80	30	50	2	.5	-.3	.2	2.4	71	6.8	101	90	45	0	2	4	4	3	
KANSAS CITY	55	38	76	23	46	-2	2.6	2.0	1.2	3.4	122	6.7	134	91	54	0	2	6	6	3	
SAINT LOUIS	59	41	76	31	50	-1	.6	-.2	.3	3.5	89	9.8	124	83	45	0	2	4	4	0	
SPRINGFIELD	60	43	81	32	52	1	.6	-.3	.3	2.9	68	8.4	106	83	48	0	1	4	4	0	
MT BILLINGS	51	33	63	28	42	2	.2	-.2	.1	.5	38	1.3	45	80	39	0	2	2	2	0	
GLASGOW	48	31	61	29	40	3	1.1	.0	.1	.8	182	1.4	126	89	42	0	4	1	1	0	
GREAT FALLS	52	32	60	26	42	4	T	-.3	T	.9	72	2.7	101	84	39	0	4	1	1	0	
HAVRE	51	31	62	28	41	4	T	-.2	T	.2	22	.8	49	91	40	0	4	0	0	0	
HELENA	56	32	63	27	44	6	.3	.2	.3	.9	111	2.7	146	82	36	0	3	2	2	0	
KALISPELL	55	33	65	30	44	6	.2	.0	.2	.8	74	3.1	83	87	39	0	2	2	2	0	
MILES CITY	49	31	63	25	40	1	T	-.2	T	.8	107	1.7	99	94	52	0	3	0	0	0	
MISSOULA	55	33	61	28	44	4	.5	-.3	.4	1.1	105	2.6	85	89	37	0	2	4	4	0	
NE GRAND ISLAND	49	35	66	20	42	-2	.2	-.3	.2	1.0	49	3.7	111	91	59	0	3	1	0	0	
LINCOLN	51	35	72	19	43	-2	1.2	.7	.6	1.9	82	3.1	88	93	59	0	2	4	2	2	
NORFOLK	48	33	60	20	41	-2	.8	.3	.3	1.1	55	4.1	124	89	53	0	4	4	4	0	
NORTH PLATTE	49	33	57	20	41	-1	.2	-.2	.2	.6	45	2.7	127	89	51	0	3	1	0	0	
OMAHA	50	35	74	22	42	-2	1.7	1.1	.9	2.5	107	4.4	115	85	56	0	3	3	3	2	
SCOTTSBLUFF	51	34	62	26	42	2	.8	.5	.4	1.7	142	3.8	176	94	57	0	3	4	4	0	
VALENTINE	47	32	63	22	39	-3	.6	.2	.6	1.0	64	2.2	85	88	62	0	4	3	1	0	
NV ELY	54	27	62	22	40	3	.5	.3	.5	1.2	112	4.7	192	86	43	0	6	2	2	2	
LAS VEGAS	72	51	77	43	61	2	.1	.0	.1	.1	31	4.3	310	71	29	0	0	1	0	0	
RENO	60	37	68	30	49	3	.2	.0	.2	.6	73	4.3	150	82	36	0	1	1	0	0	
WINNEMUCCA	58	36	65	29	47	4	.1	-.1	.1	1.4	166	4.0	177	88	36	0	3	1	0	0	
NE CONCORD	47	31	61	28	39	1	1.2	.5	.5	3.6	119	6.7	83	97	60	0	6	6	6	0	
NJ ATLANTIC CITY	54	43	60	36	49	3	3.1	2.2	1.7	9.7	243	14.7	140	98	74	0	0	6	2	0	
NM ALBUQUERQUE	65	37	72	33	51	0	.1	.0	.1	T	0	2.8	183	66	19	0	0	1	0	0	
CLOVIS	64	36	72	33	50	-2	.1	.0	.1	.4	52	1.2	80	75	27	0	0	2	0	0	
ROSWELL	72	41	79	33	56	0	T	-.1	T	T	8	1.0	79	61	17	0	0	0	0	0	
NY ALBANY	47	34	55	29	40	0	2.5	1.8	1.4	5.9	183	10.9	139	96	58	0	1	6	1	0	
BINGHAMTON	47	35	60	29	41	3	1.2	.5	.4	4.3	138	9.1	116	95	60	0	3	6	0	0	
BUFFALO	48	34	59	30	41	1	1.0	.3	.5	3.6	123	9.9	124	93	50	0	2	6	1	0	
NEW YORK	50	42	64	37	46	0	2.5	1.6	1.9	8.4	210	14.7	149	95	67	0	0	4	2	2	
ROCHESTER	45	33	57	31	39	-1	1.5	1.0	.7	3.7	147	7.6	113	99	67	0	2	5	2	2	
SYRACUSE	48	34	57	29	41	1	1.1	.4	.5	4.7	151	10.2	134	90	51	0	2	5	0	0	
NC ASHEVILLE	60	41	73	30	51	-1	.2	-.9	.2	6.2	101	12.0	83	90	45	0	2	2	0	0	
CHARLOTTE	67	45	79	34	56	1	.6	-.3	.4	7.7	162	16.6	135	85	44	0	0	3	0	0	
GREENSBORO	66	45	77	33	55	2	1.1	.4	.7	8.3	208	15.4	146	84	50	0	0	3	1	0	
HATTERAS	66	50	71	41	58	3	.2	-.8	.2	6.7	143	17.7	126	91	61	0	0	1	0	0	
NEW BERN	71	50	79	42	60	3	.1	-.7	.1	6.9	163	15.8	124	88	44	0	0	2	0	0	
RALEIGH	67	45	77	35	56	2	.1	-.7	.1	6.2	151	12.9	114	88	47	0	0	2	0	0	
WILMINGTON	71	49	77	41	60	3	.3	-.6	.3	6.3	133	15.1	109	91	48	0	0	4	2	0	
ND BISMARCK	43	28	50	18	36	0	.2	-.1	.2	.4	42	1.0	56	92	59	0	4	4	0	0	
FARGO	46	30	54	21	38	4	.4	.1	.3	.8	69	1.8	77	90	42	0	4	3	0	0	
GRAND FORKS	43	27	48	19	35	3	T	-.3	T	.3	31	.7	32	91	54	0	4	1	0	0	
WILLISTON	42	30	55	22	36	1	.3	.1	.3	.9	113	1.4	77	88	55	0	5	3	0	0	
OH AKRON-CANTON	54	39	70	27	47	3	1.0	.2	.5	4.7	129	10.6	132	97	60	0	2	4	1	1	
CINCINNATI	57	41	69	31	49	1	.7	-.2	.6	3.7	80	11.0	111	89	52	0	2	4	1	0	
CLEVELAND	50	35	72	30	43	0	.9	.2	.4	4.3	134	11.4	153	97	55	0	2	6	0	0	
COLUMBUS	53	40	66	29	47	3	.6	-.2	.4	3.7	105	9.6	125	96	60	0	1	3	0	0	
DAYTON	54	39	63	29	46	0	.6	-.2	.3	4.1	109	10.8	134	91	58	0	2	3	0	0	

Based on 1961-90 normals.

Weather Data for the Week Ending April 3, 1993

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	MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE
															.50 INCH OR MORE					OR MORE
TOLEDO	51	37	63	26	44	2	1.0	.3	.5	4.0	133	8.8	137	93	61	0	0	3	4	0
YOUNGSTOWN	55	39	69	29	47	5	.6	-.3	.3	4.5	132	10.2	134	97	66	0	2	2	5	0
OK OKLAHOMA CITY	63	46	79	31	55	-1	.8	-.3	.5	2.8	96	7.4	131	84	49	0	1	1	2	0
TULSA	61	44	77	28	53	-1	.7	-.1	.7	2.8	74	7.7	106	84	51	0	1	2	1	1
OR ASTORIA	54	42	60	35	48	1	2.4	1.0	.9	8.4	110	16.0	63	99	65	0	0	0	7	1
BURNS	53	33	61	27	43	4	.7	.5	.4	2.0	183	4.4	154	83	45	0	3	2	2	0
MEDFORD	61	42	68	36	51	3	.5	-.3	.3	1.6	82	5.6	85	95	58	0	0	0	4	0
PENDLETON	59	40	68	35	50	2	.5	-.3	.3	2.0	153	4.6	116	81	48	0	0	0	4	0
PORTLAND	57	42	62	37	49	1	1.9	1.2	.7	6.1	158	9.8	75	96	63	0	0	0	6	2
SALEM	60	42	64	33	51	4	1.2	.4	.5	6.0	133	12.4	83	90	57	0	0	0	6	0
PA ALLENTOWN	53	43	67	37	48	3	2.6	1.8	1.6	8.4	232	13.2	135	92	68	0	0	0	6	2
ERIE	48	35	61	31	41	0	1.0	-.3	.4	3.9	116	9.2	118	99	71	0	2	5	0	0
HARRISBURG	56	46	69	39	51	4	.4	-.7	.4	3.2	89	7.1	76	89	67	0	0	0	0	0
PHILADELPHIA	56	46	68	40	51	5	1.6	.8	1.0	7.6	197	12.6	121	93	74	0	0	0	6	1
PITTSBURGH	58	42	70	30	50	5	.6	-.1	.3	4.5	120	10.4	120	96	56	0	1	4	0	0
SCRANTON	52	40	67	34	46	4	1.4	.7	1.0	5.2	185	8.2	116	90	64	0	0	0	7	1
RI PROVIDENCE	49	39	62	34	44	2	2.4	1.5	1.4	8.6	193	16.1	135	96	62	0	0	0	4	2
SC CHARLESTON	72	51	80	39	61	0	.5	-.3	.5	5.8	125	17.8	157	86	45	0	0	0	1	1
COLUMBIA	69	45	81	31	57	-2	.5	-.5	.4	6.0	116	16.8	122	93	45	0	1	2	2	0
FLORENCE	71	49	79	39	60	0	.4	-.4	.3	2.8	62	11.8	106	87	37	0	0	2	0	0
GREENVILLE	66	42	80	27	54	-2	.9	-.2	.9	10.3	176	21.0	147	88	43	0	1	2	1	1
SD ABERDEEN	49	32	67	22	40	4	.3	-.1	.1	.4	33	1.5	62	93	49	0	3	3	3	0
HURON	48	31	68	22	40	1	.8	-.3	.6	1.6	85	2.4	84	94	47	0	3	3	1	1
RAPID CITY	44	31	51	24	38	-1	.7	-.4	.4	.8	69	2.1	103	98	52	0	5	4	0	0
SIoux FALLS	47	30	62	19	39	-1	.8	-.4	.4	2.0	110	3.6	119	90	46	0	4	3	0	0
TN CHATTANOOGA	68	44	83	33	56	2	.4	-.8	.4	7.4	114	16.3	100	85	44	0	0	2	0	0
KNOXVILLE	63	43	76	35	53	-1	1.3	.3	1.2	6.3	113	12.6	91	90	52	0	0	3	1	1
MEMPHIS	66	46	83	34	56	-2	1.2	-.1	1.1	3.2	53	9.2	66	85	46	0	0	2	1	1
NASHVILLE	65	42	81	30	53	-1	.3	-.8	.2	5.6	106	11.5	90	88	42	0	1	2	0	0
TX ABILENE	73	48	82	38	61	0	.2	-.1	.2	1.0	68	3.2	86	83	32	0	0	2	0	0
AMARILLO	63	36	72	33	49	-3	.2	.0	.1	1.3	125	2.4	113	86	36	0	0	2	0	0
AUSTIN	76	56	83	44	66	0	.4	-.1	.3	2.4	117	9.0	151	81	44	0	0	3	0	0
BEAUMONT	76	56	81	45	66	1	2.6	1.9	2.6	8.2	229	22.2	189	91	53	0	0	1	1	1
BROWNSVILLE	82	64	89	56	73	1	.7	-.2	.7	1.7	263	6.3	194	93	61	0	0	0	0	0
CORPUS CHRISTI	78	61	85	54	70	0	.2	-.1	.2	2.8	270	5.0	105	89	54	0	0	1	0	0
DEL RIO	84	57	90	50	71	4	.3	-.1	.3	.5	37	1.8	49	74	37	1	0	1	0	0
EL PASO	73	48	80	46	61	2	.7	-.1	.7	.3	3	1.7	148	50	19	0	0	1	0	0
FORT WORTH	70	53	81	39	62	2	.9	-.1	.5	3.5	104	11.0	145	80	46	0	0	2	0	0
GALVESTON	72	61	78	52	67	1	.3	-.2	.3	5.2	214	18.2	229	83	60	0	0	1	0	0
HOUSTON	76	54	84	44	65	1	3.1	2.4	3.1	9.5	276	18.0	166	86	48	0	0	2	1	1
LUBBOCK	70	39	78	34	54	-2	.2	.0	.1	.4	40	1.8	90	76	25	0	0	3	0	0
MIDLAND	75	42	87	36	58	-2	.1	.0	.1	.4	69	2.5	158	71	21	0	0	1	0	0
SAN ANGELO	78	49	85	39	63	1	.1	-.2	.0	.3	28	2.1	71	80	29	0	0	3	0	0
SAN ANTONIO	77	56	84	47	67	1	1.1	.7	.8	2.3	136	7.4	141	83	41	0	0	4	1	0
VICTORIA	79	57	88	49	68	2	.2	-.3	.2	3.0	121	9.8	114	90	50	0	0	1	0	0
WACO	73	52	83	38	63	0	.6	.0	.6	4.9	189	11.2	177	83	48	0	0	2	1	1
WICHITA FALLS	71	48	84	33	59	1	.9	-.3	.5	3.2	117	7.7	128	85	45	0	0	2	0	0
UT CEDAR CITY	57	31	64	26	44	1	.7	-.3	.7	.9	63	5.3	172	88	37	0	5	0	0	0
SALT LAKE CITY	56	38	66	33	47	1	.9	.4	.3	1.8	83	6.3	141	85	48	0	0	5	0	0
VT BURLINGTON	42	31	57	28	37	-1	.6	-.1	.3	2.2	88	6.2	105	92	53	0	5	3	0	0
VA NORFOLK	65	49	80	41	57	4	.6	-.2	.3	6.2	154	13.5	120	92	61	0	0	3	0	0
RICHMOND	67	48	79	41	58	5	1.1	.4	.5	7.8	200	15.2	147	94	57	0	0	5	1	1
ROANOKE	61	43	71	35	52	1	.5	-.2	.3	8.2	214	15.4	163	84	55	0	0	3	0	0
WA QUILLAYUTE	54	40	59	32	47	2	1.2	-1.1	.3	11.5	93	20.3	51	98	54	0	1	6	0	0
SEATTLE-TACOMA	57	42	64	36	49	2	1.2	.5	.4	5.6	146	10.0	76	88	51	0	0	5	0	0
SPOKANE	53	35	59	30	44	2	.4	-.1	.3	1.5	94	3.8	75	93	50	0	3	3	0	0
YAKIMA	60	35	63	30	47	1	.3	.0	.1	.9	119	2.5	92	86	36	0	3	3	0	0
WV BECKLEY	51	39	59	28	45	-2	.8	.0	.4	6.6	177	11.0	115	93	72	0	2	4	0	0
CHARLESTON	55	42	67	33	48	-2	.9	-.1	.4	6.8	173	11.7	118	96	68	0	0	5	0	0
HUNTINGTON	55	42	64	34	49	0	.9	-.1	.7	5.6	145	11.6	116	96	68	0	0	5	1	1
PARKERSBURG	57	42	69	30	49	1	.6	-.3	.4	8.3	199	12.8	125	97	63	0	1	5	0	0
WI GREEN BAY	46	27	62	22	37	0	.3	-.3	.3	.8	34	2.5	57	91	45	0	5	2	0	0
LACROSSE	49	25	63	19	37	-3	1.5	.9	.8	2.5	112	4.9	120	90	42	0	6	2	2	2
MADISON	49	26	65	18	38	-2	2.0	1.4	1.5	3.8	155	6.6	141	95	45	0	7	2	1	1
MILWAUKEE	46	30	56	25	38	-1	1.6	.8	1.3	3.5	115	7.1	117	91	49	0	5	2	1	1
WAUSAU	51	24	64	17	37	1	.1	-.4	.1	.5	23	2.3	58	94	42	0	7	1	0	0
WY CASPER	50	33	60	27	42	4	.2	-.1	.1	.5	50	2.2	102	87	42	0	2	4	0	0
CHEYENNE	47	30	56	22	38	1	.5	.3	.3	.9	80	2.1	109	90	41	0	5	4	0	0
LANDER	49	33	58	29	41	2	1.1	.8	.9	1.6	122	3.0	124	92	52	0	2	3	1	1
SHERIDAN	51	30	61	25	41	2	.1	-.2	.1	.8	72	1.7	66	92	43	0	4	2	0	0

Based on 1961-90 normals.

March Weather and Crop Summary

Weather

March lived up to its reputation as a transitional month, featuring strong, slow-moving storm systems and wild temperature fluctuations. But in the East, a monstrous storm (March 12-13) and a subsequent arctic outbreak (March 14-15) overshadowed other weather events. The record-setting storm, however, was the last in a month-long series of significant snowstorms in the Northeast, and was followed by several heavy rainfall events, resulting in substantial flooding.

Temperatures averaged as much as 6°F above normal in the Southwest, where stretches of warm, dry weather allowed the region to recover from its wettest winter on record. The Northwest welcomed near-normal temperatures after a harsh winter. East of the Rockies, temperatures ranged from much above normal in the northern High Plains to below normal elsewhere.

The latest Palmer indices (see page 3) show that more of the Nation is facing wetness-related problems than drought. The areal coverage of severe to extreme drought has fallen to its lowest level since early 1987. However, a stripe of dryness remains from Washington State eastward across the northern Rockies and northern Plains. In the Pacific Northwest, summer water supplies are largely dependent upon reservoirs, which in some areas are quite low due to a seventh consecutive season of sub-normal precipitation. But farther south, California nears the end of its wet season with its best water supply prospects in a decade. Farther east, locations that are battling excessive wetness include the central Plains, the Corn Belt, and the East from New York southward into Georgia. Pockets of wetness also exist along the central Gulf coast.

Early in the month, a powerful storm rode up the east coast, sending Middle Atlantic rivers out of their banks, hurling gale force easterlies, and dumping heavy mountain snows. But less than 10 days later, the early-month system was dwarfed by a storm whose central pressure fell explosively from about 1,000 millibars (29.54 inches of mercury) on the morning of March 12 in the western Gulf of Mexico, to 960 millibars (28.35 inches of mercury) over the Chesapeake Bay during the evening of March 13. The strength, size, and late-season nature of the storm led to the demolition of dozens of all-time barometric, monthly snowfall, and daily minimum temperature records from the Gulf coast to New England.

Warm, dry weather became established over the Southwest early in the month, and moved erratically eastward. By March 7, warmth spread into the northern Plains, as Bakersfield, CA, reached 83°F, and Billings, MT, attained 65°F. Spring-like conditions were temporarily pushed west of the Rockies by an arctic high pressure system at mid-month. Farther east,

temperatures fell to 21°F in Mobile, AL, and 2°F in Birmingham, AL, on March 14. In southern Georgia, peach blooms were subjected to more than 20 hours of sub-freezing temperatures over a 2-night span. Ground crops in the Southeast also sustained damage, especially where strong winds blew off protective coverings.

Although warm weather returned to the northern Plains after mid-month, winter clung stubbornly in the East. On March 19, Burlington, VT, notched its latest -10°F reading on record. Late in the month, a ribbon of record-setting warmth stretched through the High Plains, while storm systems affected the East and the West. Between March 24 and 26, temperatures soared into the low 80's as far north as Montana.

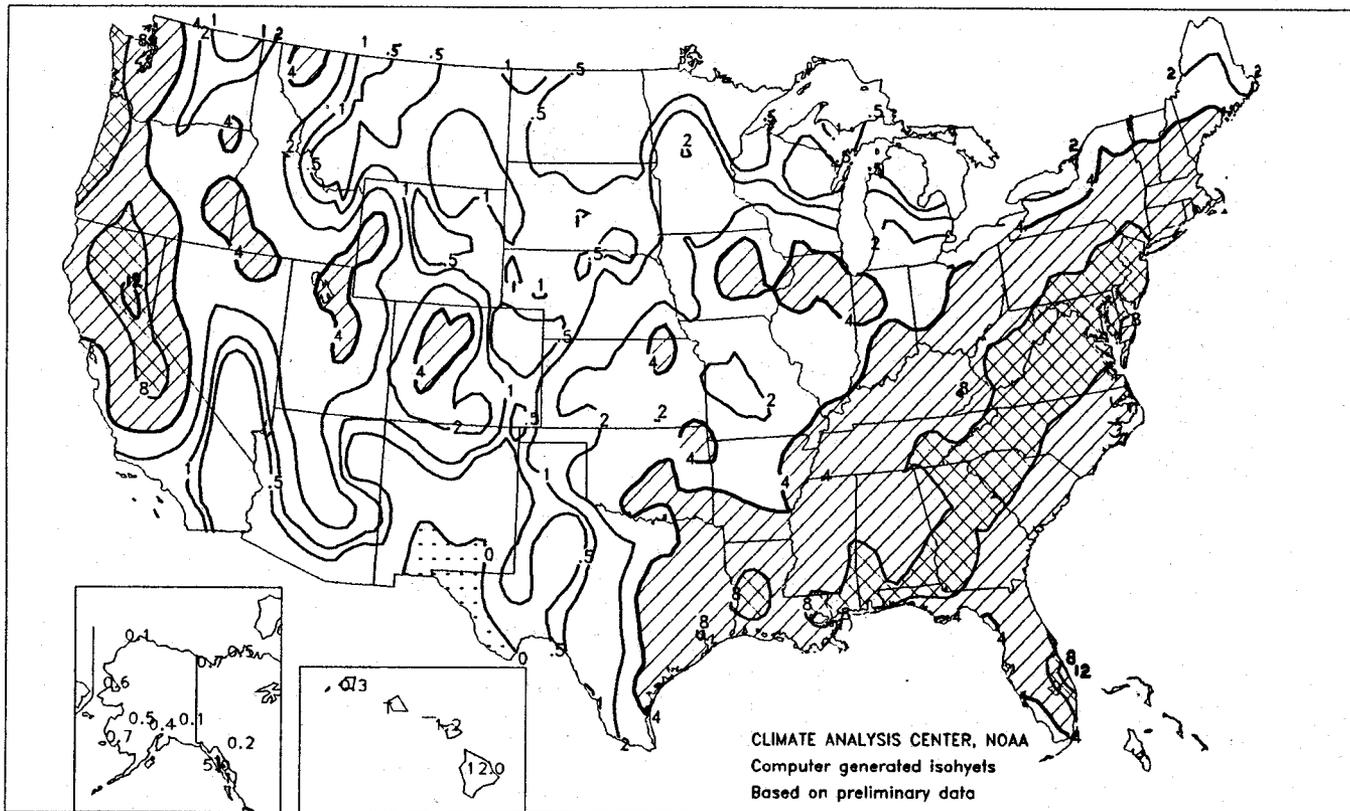
Late-month rainfall in the East not only caused flooding, but broke monthly records as well. Atlantic City, NJ, recorded a monthly total of 8.80 inches, and Dulles Airport, VA, noted 7.65 inches. But on the bright side, the typically gloomy northern Great Lakes region completed another pleasant month. In Sault Sainte Marie, MI, 2-month (February and March) precipitation totaled 0.56 inches and snowfall was 4.7 inches.

Fieldwork

Favorable weather conditions in early March allowed the citrus harvests in California, Florida, Arizona, and Texas to advance. Cold weather and high winds the middle of the month caused some damage to the Florida orange and grapefruit crops. The end of the period saw favorable harvesting conditions return to California, Arizona, Florida, and Texas. The California navel orange harvest was more than two-thirds completed by the end of month. Warm weather, the early part of March, melted some snow cover on winter wheat in the northern and central Great Plains. Snow the middle of the month replenished the snow cover. By the end of the month, the snow cover had melted due to higher temperatures. Although the crop could use more sunshine and drier weather, it survived the month in good condition. Cotton planting activities began in southern Texas at the beginning of March. Land preparation and planting spread to Arizona and California as the month continued. Wet and cool weather hampered progress. Corn and sorghum planting also began in southern Texas in early March. Field and planting preparations began in other areas of the South as the month continued. Excessively wet conditions delayed progress. In mid-March, one of the largest winter storms on record brought low temperatures and snow from Alabama to Maine. The storm caused damage to early varieties of peaches in Georgia and South Carolina, as well as damage to the Georgia onion crop. Early-planted vegetables in Georgia and northern Florida also suffered damage.

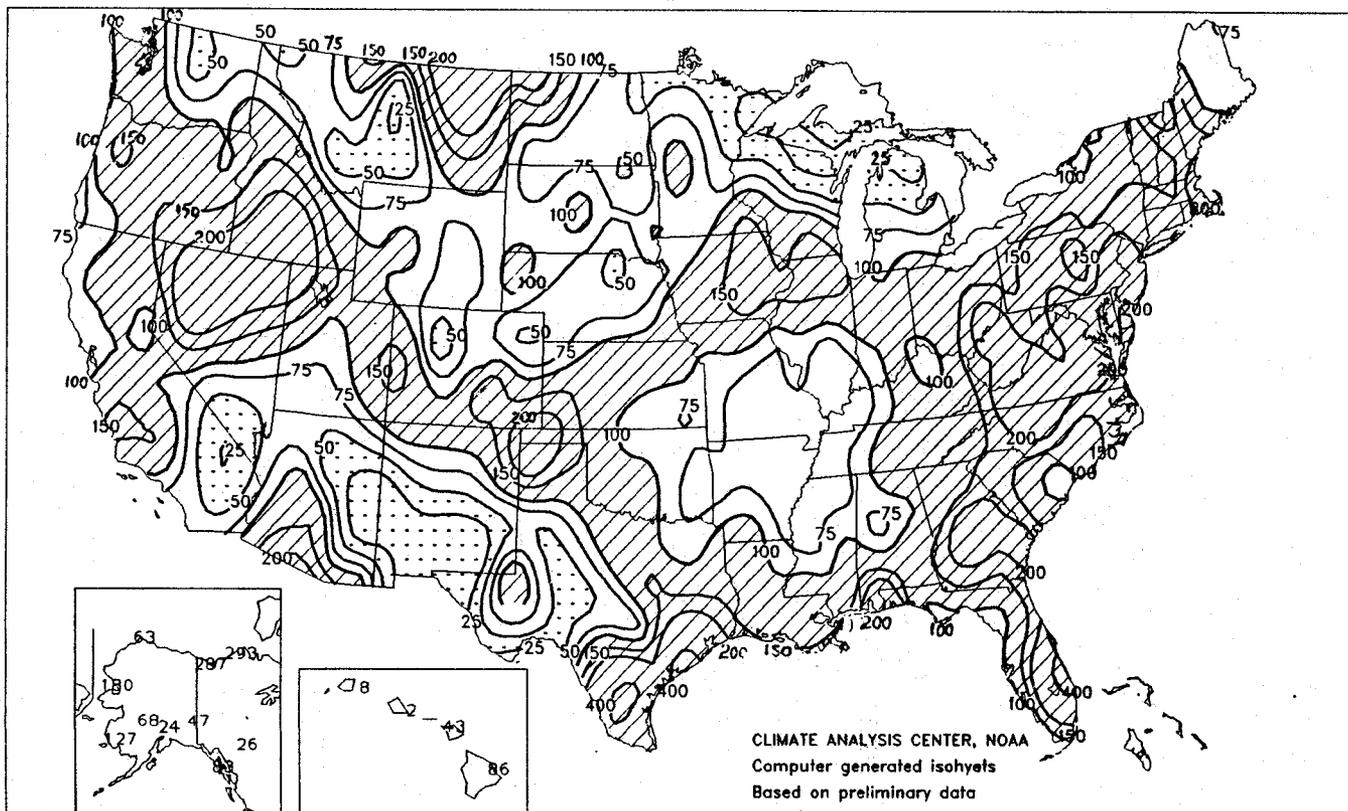
TOTAL PRECIPITATION (inches)

MAR 1993



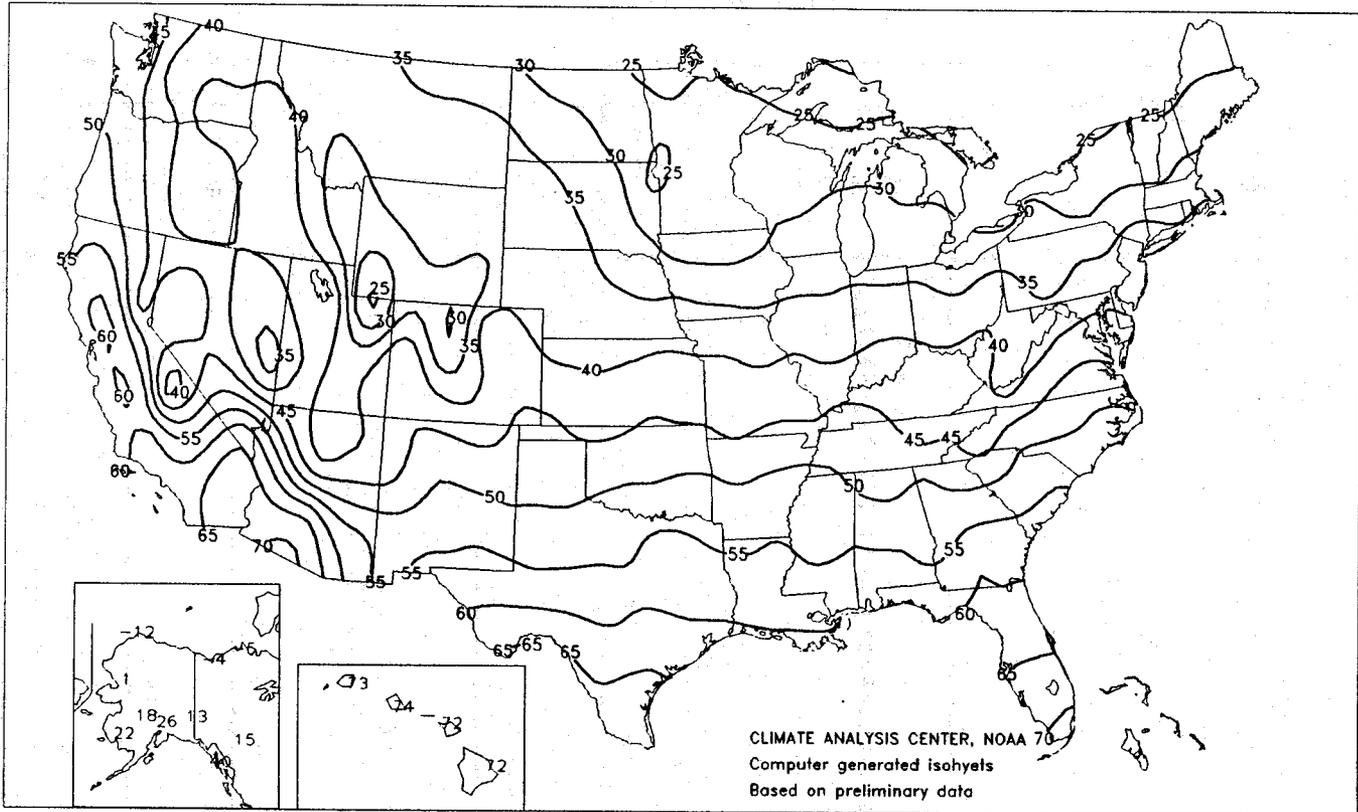
PERCENT OF NORMAL PRECIPITATION

MAR 1993



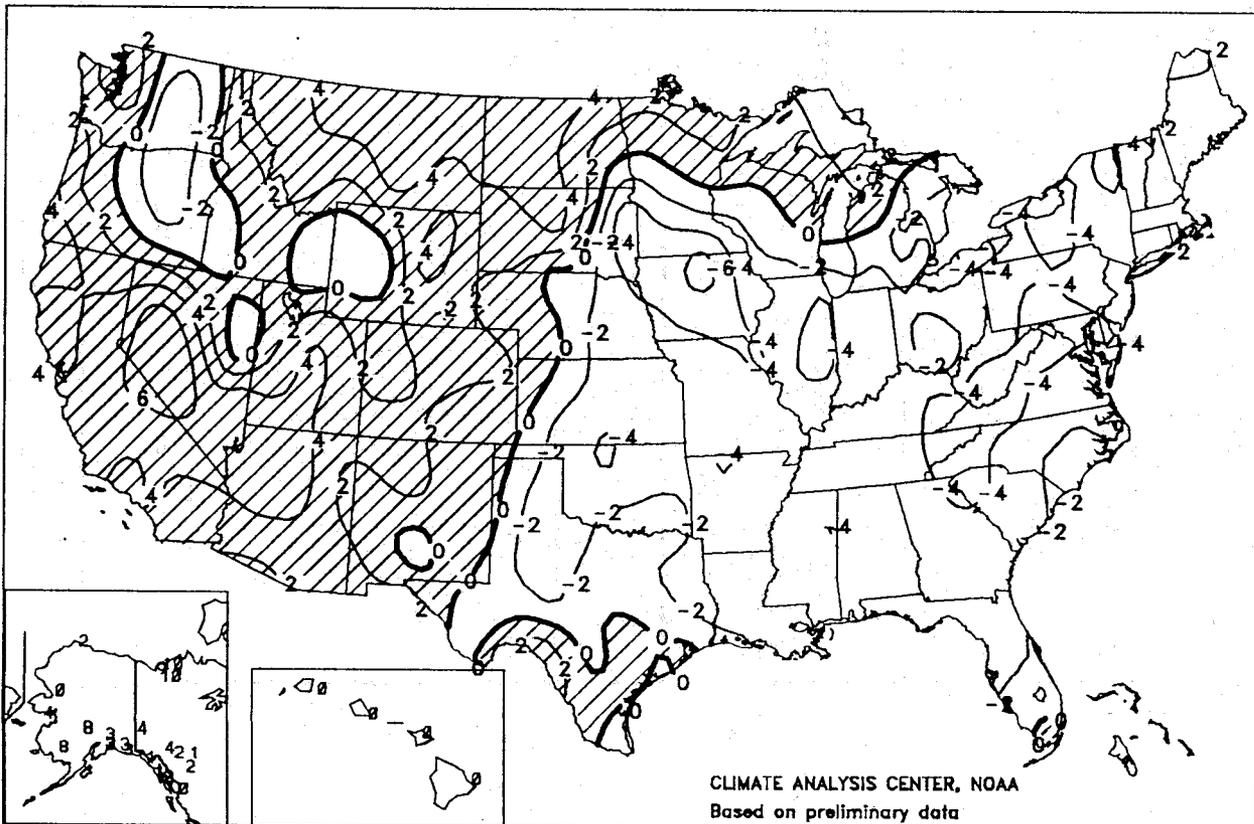
AVERAGE TEMPERATURE(°F)

MAR 1993



Departure of Average Temperature from Normal(°F)

MAR 1993



TEMPERATURE AND PRECIPITATION SUMMARY March 1993

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	50	-4	4.4	-1.8	LA BATON ROUGE	59	-2	5.4	0.6	OK YOUNGSTOWN	34	-2	4.3	1.2
AL HUNTSVILLE	49	-2	7.9	1.5	LA LAKE CHARLES	60	-1	4.7	1.4	OK OKLAHOMA CITY	48	-2	2.8	0.1
AL MOBILE	57	-3	10.5	4.0	LA NEW ORLEANS	59	-3	5.7	0.8	OK TULSA	47	-4	2.8	-0.7
AK MONTGOMERY	54	-2	7.7	1.5	ME SHREVEPORT	55	-2	5.9	1.9	OR ASTORIA	47	2	6.9	-0.1
AK ANCHORAGE	29	3	0.3	-0.4	ME CARIBOU	23	-1	1.7	-0.7	OR BURNS	34	-3	1.3	0.3
AK BARROW	-12	3	0.1	-0.1	ME PORTLAND	30	-3	6.3	2.6	OR MEDFORD	51	5	1.3	-0.6
AK FAIRBANKS	17	6	0.3	-0.1	MD BALTIMORE	39	-5	8.1	4.7	OR PENDLETON	42	-3	1.5	0.3
AK JUNEAU	36	3	3.1	-0.2	MD SALISBURY	42	-4	6.9	2.7	OR PORTLAND	48	1	4.4	0.8
AK KODIAK	35	3	7.9	3.2	MA BOSTON	36	-2	7.7	4.0	OR SALEM	49	4	5.1	0.9
AZ NOME	14	5	1.7	1.2	MA CHATHAM	36	-1	6.0	2.2	PA ALLENTOWN	35	-4	6.6	3.3
AZ FLAGSTAFF	40	5	1.5	-0.6	MI ALPENA	27	-2	0.3	-1.8	PA ERIE	32	-4	3.6	0.6
AZ PHOENIX	66	3	1.6	0.7	MI DETROIT	35	-1	2.1	-0.4	PA HARRISBURG	37	-5	6.3	3.0
AZ PRESCOTT	48	6	2.5	0.7	MI FLINT	32	-2	1.2	-1.0	PA PHILADELPHIA	40	-3	6.6	3.2
AZ TUCSON	61	3	0.5	-0.2	MI GRAND RAPIDS	32	-2	2.3	-0.3	PA PITTSBURGH	38	-2	4.1	0.7
AZ WINSLOW	47	2	0.6	0.1	MI HOUGHTON LAKE	29	1	0.6	-1.4	PA SCRANTON	33	-4	4.1	1.5
AR YUMA	69	6	0.4	0.2	MI LANSING	32	0	1.7	-0.5	PA WILLIAMSPORT	35	-3	4.3	1.1
AR FORT SMITH	50	-2	1.9	-2.1	MI MARQUETTE	25	2	1.0	-1.8	RI PROVIDENCE	36	-2	7.0	2.9
CA LITTLE ROCK	51	-2	3.3	-1.6	MI MUSKEGON	33	0	1.7	-0.9	SC CHARLESTON	56	-2	5.8	1.5
CA BAKERSFIELD	61	4	1.8	0.7	MI SAULT ST. MARIE	26	2	0.4	-2.0	SC COLUMBIA	51	-4	6.0	1.2
CA BISHOP	--	--	1.2	0.8	MN ALEXANDRIA	26	-1	1.6	0.2	SC FLORENCE	54	-2	2.8	-1.4
CA EUREKA	53	4	4.7	-0.6	MN DULUTH	27	3	0.4	-1.5	SC GREENVILLE	47	-5	10.3	4.9
CA FRESNO	60	5	1.8	-0.1	MN INT'L FALLS	25	3	0.3	-0.7	SD ABERDEEN	31	2	0.4	-0.7
CA LOS ANGELES	60	3	1.8	-0.2	MN MINNEAPOLIS	29	-1	1.3	-0.7	SD HURON	31	0	1.6	-0.1
CA REDDING	57	5	6.3	2.0	MN ROCHESTER	26	-4	2.9	1.1	SD RAPID CITY	38	4	0.8	-0.2
CA SACRAMENTO	58	4	2.4	-0.2	MN ST. CLOUD	26	0	1.2	-0.2	SD SIOUX FALLS	29	-4	2.0	0.4
CA SAN DIEGO	61	2	1.2	-0.6	MS GREENWOOD	53	-3	4.2	-1.6	TN BRISTOL	44	-2	5.5	1.2
CA SAN FRANCISCO	58	4	2.3	-0.7	MS JACKSON	54	-1	3.8	-2.1	TN CHATTANOOGA	49	-2	7.4	1.4
CA STOCKTON	59	5	3.2	1.4	MS MERIDIAN	53	-3	7.3	0.6	TN KNOXVILLE	46	-3	6.2	1.1
CO ALAMOSA	34	2	0.7	-0.7	MS TUPELO	51	-3	4.1	-2.0	TN MEMPHIS	51	-2	3.2	-2.3
CO CO. SPRINGS	40	3	0.7	-0.1	MO CAPE GIRARDEAU	44	-3	3.4	-1.6	TN NASHVILLE	47	-3	5.5	0.7
CO DENVER	43	4	0.9	-0.4	MO COLUMBIA	40	-2	2.1	-0.9	TX ABILENE	55	-1	1.0	-0.3
CO GRAND JUNCTION	46	1	1.7	0.6	MO KANSAS CITY	40	-3	2.2	-0.3	TX AMARILLO	46	-1	1.3	0.3
CO PUEBLO	42	1	1.7	0.9	MO SAINT LOUIS	42	-4	3.3	-0.3	TX AUSTIN	61	-1	2.1	0.2
CT BRIDGEPORT	37	-2	6.8	3.0	MT SPRINGFIELD	43	-2	2.6	-1.2	TX BEAUMONT	61	0	5.6	2.3
CT HARTFORD	35	-3	6.7	3.0	MT BILLINGS	41	5	0.5	-0.7	TX BROWNSVILLE	69	0	1.7	1.9
DC WASHINGTON	42	-5	6.8	3.7	MT GLASGOW	34	5	0.8	0.4	TX CORPUS CHRISTI	65	0	2.8	1.9
FL APALACHICOLA	60	-1	3.8	-0.4	MT GREAT FALLS	38	4	0.9	-0.2	TX DEL RIO	65	3	0.5	-0.6
FL DAYTONA BEACH	63	-1	5.6	2.7	MT HAVRE	36	4	0.2	-0.5	TX EL PASO	58	3	T	-0.3
FL FT. MYERS	68	-1	3.6	0.7	MT HELENA	36	3	0.6	-0.2	TX FORT WORTH	56	1	3.0	0.0
FL JACKSONVILLE	60	-2	6.0	2.4	MT KALISPELL	35	2	0.6	-0.4	TX GALVESTON	62	1	4.9	2.7
FL KEY WEST	72	-2	1.4	-0.3	MT MILES CITY	37	4	0.8	0.2	TX HOUSTON	61	0	6.4	3.3
FL MIAMI	71	0	6.0	3.6	NE MISSOULA	38	3	0.7	-0.3	TX LAREDO	--	--	--	--
FL ORLANDO	65	-2	6.3	3.1	NE GRAND ISLAND	36	-2	1.0	-0.9	TX LUBBOCK	51	0	0.4	-0.5
FL TALLAHASSEE	60	-1	6.9	0.7	NE LINCOLN	36	-3	1.9	-0.2	TX MIDLAND	55	-1	0.3	-0.2
FL TAMPA	64	-2	3.9	0.9	NE NORFOLK	34	-2	1.1	-0.7	TX SAN ANGELO	57	-1	0.3	-0.6
GA WEST PALM BEACH	69	-2	11.1	8.1	NE NORTH PLATTE	37	0	0.6	-0.6	TX SAN ANTONIO	62	0	1.6	0.0
GA ATHENS	50	-2	7.4	1.6	NE OMAHA	35	-3	2.5	0.4	TX VICTORIA	64	2	2.8	0.6
GA ATLANTA	52	-2	5.7	-0.0	NE SCOTTSBLUFF	38	2	1.4	0.3	TX WACO	57	-1	4.3	2.0
GA AUGUSTA	54	-2	7.6	2.9	NV VALENTINE	36	0	1.0	-0.4	UT WICHITA FALLS	53	-1	2.8	0.4
GA MACON	54	-3	10.3	5.5	NV ELKO	36	0	0.7	-0.2	UT BLANDING	--	--	0.7	-0.1
GA SAVANNAH	57	-2	8.0	4.2	NV ELY	35	1	1.1	0.2	UT CEDAR CITY	44	4	0.9	-0.4
HI HILO	72	0	12.0	-2.0	NV LAS VEGAS	61	5	0.1	-0.3	UT SALT LAKE CITY	46	4	1.4	-0.5
HI HONOLULU	74	0	T	-2.2	NV RENO	49	6	0.6	0.2	VT BURLINGTON	27	-3	1.5	-0.7
HI KAHULUI	72	-1	1.2	-1.6	NV WINNEMUCCA	47	7	1.3	0.5	VA LYNCHBURG	44	-2	7.0	3.3
HI LIHUE	73	0	0.3	-3.9	NH CONCORD	31	-2	3.0	0.3	VA NORFOLK	47	-2	5.9	2.2
ID BOISE	42	-1	2.5	1.2	NJ ATLANTIC CITY	39	-3	8.8	5.2	VA RICHMOND	46	-2	7.2	3.6
ID LEWISTON	46	3	1.2	0.1	NM ALBUQUERQUE	49	2	0.2	-0.3	VA ROANOKE	42	-5	7.9	4.4
ID POCATELLO	36	0	1.7	0.4	NM CLOVIS	49	1	0.4	-0.2	WA COLVILLE	--	--	--	--
IL CAIRO	--	--	--	--	NM ROSWELL	54	2	T	-0.3	WA QUILLAUITE	45	2	11.0	-0.5
IL CHICAGO	34	-3	4.5	1.8	NY ALBANY	31	-3	5.1	2.2	WA SEATTLE-TACOMA	48	3	4.8	1.3
IL MOLINE	35	-3	4.9	1.9	NY BINGHAMTON	29	-4	3.7	0.9	WA SPOKANE	38	-1	1.1	-0.4
IL PEORIA	36	-3	4.1	1.2	NY BUFFALO	31	-3	3.0	0.3	WA WALLA WALLA	--	--	--	--
IL QUINCY	37	-4	2.0	-1.2	NY NEW YORK	38	-4	6.5	2.9	WA YAKIMA	41	-2	0.6	-0.1
IL ROCKFORD	33	-2	3.9	1.4	NY ROCHESTER	30	-4	2.4	0.2	WV BECKLEY	38	-4	6.4	3.0
IL SPRINGFIELD	39	-2	2.5	-0.8	NY SYRACUSE	30	-4	3.8	1.0	WV CHARLESTON	42	-4	6.7	3.1
IN EVANSVILLE	43	-4	3.2	-1.7	NC ASHEVILLE	43	-5	6.2	0.5	WV ELKINS	35	-4	6.3	2.5
IN FORT WAYNE	35	-2	3.6	0.7	NC CHARLOTTE	40	-1	7.6	3.2	WV HUNTINGTON	42	-2	5.5	2.0
IN INDIANAPOLIS	39	-2	3.7	-0.1	NC GREENSBORO	45	-4	7.6	3.9	WV PARKERSBURG	40	-2	8.3	4.5
IN SOUTH BEND	35	-3	2.6	-0.5	NC HATTERAS	51	-1	6.7	2.4	WI GREEN BAY	30	0	0.8	-1.3
IA DES MOINES	34	-3	3.2	1.0	NC NEW BERN	51	-2	6.9	3.0	WI LACROSSE	31	-2	2.5	0.5
IA DUBUQUE	32	0	3.1	0.2	NC RALEIGH	48	-3	6.2	2.4	WI MADISON	31	-2	3.3	1.1
IA SIOUX CITY	32	-4	0.9	-1.1	NC WILMINGTON	53	0	6.3	1.9	WI MILWAUKEE	33	-1	3.2	0.5
IA WATERLOO	31	-4	4.0	1.7	ND BISMARCK	32	0	0.4	-0.4	WI WAUSAU	29	0	0.5	-1.5
KS CONCORDIA	39	-3	2.6	0.4	ND FARGO	26	0	0.8	-0.2	WI CASPER	38	5	0.5	-0.4
KS DODGE CITY	41	-2	1.5	-0.0	ND GRAND FORKS	26	2	0.3	-0.6	WI CHEYENNE	37	4	0.6	-0.4
KS GOODLAND	40	1	0.8	-0.4	ND WILLISTON	33	5	0.9	0.2	WI LANDER	33	-1	1.5	0.3
KS TOPEKA	41	-3	2.6	0.1	OH AKRON-CANTON	35	-3	4.0	0.7	WI SHERIDAN	38	4	0.8	-0.2
KS WICHITA	43	-3	1.8	-0.9	OH CINCINNATI	40	-3	3.6	-0.6					
KY BOWLING GREEN	44	-3	3.9	-1.2	OH CLEVELAND	34	-4	3.9	0.9					
KY JACKSON	43	-1	5.3	0.7	OH COLUMBUS	39	0	3.5	0.3					
KY LEXINGTON	42	-3	3.8	-0.6	OH DAYTON	38	-3	3.9	0.4					
KY LOUISVILLE	44	-2	5.2	0.5	OH MANSFIELD	34	-4	5.7	2.4					
KY PADUCAH	47	-1	3.0	-1.9	OH TOLEDO	34	-2	3.5	0.8					

Based on 1961-90 normals.

HEATING DEGREE DAYS (Base 65° F) March 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL BIRMINGHAM	452	84	SHREVEPORT	307	25	DAYTON	837	46
MOBILE	260	69	ME CARIBOU	1284	22	TOLEDO	943	25
MONTGOMERY	339	55	PORTLAND	1084	64	YOUNGSTOWN	950	29
AK ANCHORAGE	1113	-167	MD BALTIMORE	787	114	OK OKLAHOMA CITY	525	19
BARROW	2372	-136	MA BOSTON	718	73	TULSA	556	56
FAIRBANKS	1478	-274	MI ALPENA	884	59	OR ASTORIA	541	-98
JUNEAU	899	-149	CHATHAM	904	30	BURNS	967	83
KODIAK	906	-95	MI DETROIT	1178	-6	MEDFORD	411	-194
NOME	1580	-230	FLINT	931	1	PENDLETON	709	55
AZ FLAGSTAFF	761	-185	GRAND RAPIDS	1007	-13	PORTLAND	522	-70
PHOENIX	61	-126	HOUGHTON LAKE	1004	15	SALEM	486	-140
PRESCOTT	510	-178	LANSING	1119	-47	PA ALLENTOWN	909	87
TUCSON	129	-117	MARQUETTE	1003	11	ERIE	1025	48
WINSLOW	538	-85	MUSKEGON	1215	-81	HARRISBURG	842	86
YUMA	26	-78	SAULT ST MARIE	977	-21	PHILADELPHIA	773	54
AR FORT SMITH	479	18	MN ALEXANDRIA	1187	-87	PITTSBURGH	841	19
LITTLE ROCK	439	22	DULUTH	1211	-54	SCRANTON	975	79
CA BAKERSFIELD	128	-127	INT'L FALLS	1171	-134	RI PROVIDENCE	901	45
EUREKA	353	-165	MINNEAPOLIS	1221	-159	SC CHARLESTON	279	-7
FRESNO	145	-191	ROCHESTER	1096	-14	COLUMBIA	422	76
LOS ANGELES	147	-93	SAINT CLOUD	1211	64	FLORENCE	344	1
REDDING	242	-121	MS GREENWOOD	1198	-20	GREENVILLE	555	113
SACRAMENTO	212	-154	JACKSON	381	36	SD ABERDEEN	1043	-113
SAN DIEGO	111	-82	MERIDIAN	327	24	HURON	1037	-67
SAN FRANCISCO	225	-153	MO CAPE GIRARDEAU	353	41	RAPID CITY	841	-163
STOCKTON	179	-171	COLUMBIA	629	30	SIOUX FALLS	1109	36
CO DENVER	686	-151	KANSAS CITY	775	53	TN CHATTANOOGA	496	18
GRAND JCT.	597	-119	SAINT LOUIS	775	46	KNOXVILLE	592	109
PUEBLO	703	-53	SPRINGFIELD	726	50	MEMPHIS	433	0
CT BRIDGEPORT	863	32	MT BILLINGS	681	41	NASHVILLE	552	42
HARTFORD	935	61	GLASGOW	751	-216	TX ABILENE	328	7
DE WILMINGTON	794	75	GREAT FALLS	940	-263	AMARILLO	573	-4
DC WASHINGTON	700	105	HAVRE	841	-201	AUSTIN	163	-40
FL APALACHICOLA	181	13	HELENA	898	-237	BEAUMONT	152	-15
DAYTONA BEACH	107	-9	KALISPELL	879	-156	BROWNSVILLE	48	-5
FORT MYERS	33	-5	MILES CITY	909	-117	CORPUS CHRISTI	83	-14
JACKSONVILLE	185	19	MISSOULA	869	-176	DEL RIO	102	-43
KEY WEST	12	5	NE GRAND ISLAND	910	-148	EL PASO	222	-96
MIAMI	21	7	LINCOLN	889	-13	FORT WORTH	290	-1
ORLANDO	80	12	NORFOLK	891	4	GALVESTON	105	-55
TALLAHASSEE	199	8	NORTH PLATTE	962	-15	HOUSTON	157	-18
TAMPA	84	-3	OMAHA	862	-77	LUBBOCK	421	-49
W. PALM BEACH	28	9	SCOTTSBLUFF	927	68	MIDLAND-ODESSA	322	-7
GA ATLANTA	417	17	VALENTINE	841	-70	SAN ANGELO	273	-1
AUGUSTA	348	16	NV ELY	892	-137	SAN ANTONIO	147	-31
MACON	351	64	LAS VEGAS	941	-39	VICTORIA	101	-39
SAVANNAH	254	11	RENO	143	-170	WACO	262	5
ID BOISE	715	-17	WINNEMUCCA	503	-253	WICHITA FALLS	394	6
LEWISTON	568	-117	NH CONCORD	567	-248	UT BLANDING	566	-243
POCATELLO	890	-25	NJ ATLANTIC CITY	1062	42	CEDAR CITY	649	-151
IL CHICAGO	948	49	NM ALBUQUERQUE	806	62	SALT LAKE CITY	596	-157
MOLINE	936	28	CLOVIS	496	-87	VT BURLINGTON	1159	49
PEORIA	878	19	ROSWELL	495	-66	VA LYNCHBURG	653	55
QUINCY	868	59	NY ALBANY	338	-48	NORFOLK	555	43
ROCKFORD	977	10	BINGHAMTON	1034	61	RICHMOND	585	33
SPRINGFIELD	813	26	BUFFALO	1126	84	ROANOKE	698	112
IN EVANSVILLE	671	31	NEW YORK	1053	61	WA COLVILLE	838	-21
FORT WAYNE	914	34	ROCHESTER	828	84	QUILLAYUTE	598	-109
INDIANAPOLIS	796	21	SYRACUSE	1077	94	SEATTLE-TACOMA	518	-127
SOUTH BEND	925	26	NC ASHEVILLE	1074	91	SPOKANE	834	-15
IA DES MOINES	953	26	CAPE HATTERAS	677	100	YAKIMA	742	26
DUBUQUE	1024	1	CHARLOTTE	442	5	WV BECKLEY	833	89
SIOUX CITY	1032	65	GREENSBORO	469	10	CHARLESTON	713	87
WATERLOO	1060	18	NEW BERN	600	67	HUNTINGTON	714	97
KS CONCORDIA	809	31	RALEIGH-DURHAM	423	18	PARKERSBURG	757	78
DODGE CITY	732	22	WILMINGTON	527	31	WI GREEN BAY	1071	-57
GOODLAND	774	-88	ND BISMARCK	378	28	LA CROSSE	1057	0
TOPEKA	743	24	FARGO	1004	-205	MADISON	1032	-16
WICHITA	670	14	GRAND FORKS	1214	-57	MILWAUKEE	1004	-16
KY BOWLING GREEN	619	30	WILLISTON	1186	-144	WAUSAU	1109	-69
LEXINGTON	705	44	OH AKRON-CANTON	973	-258	WY CASPER	821	-205
LOUISVILLE	644	20	CLEVELAND	914	37	CHEYENNE	856	-164
LA BATON ROUGE	214	27	COLUMBUS	967	87	LANDER	976	-44
LAKE CHARLES	191	7	CINCINNATI	811	36	SHERIDAN	844	-182
NEW ORLEANS	209	38		762	43			

Based on 1961-90 normals.

National Agricultural Summary

March 29 - April 4, 1993

HIGHLIGHTS: Heavy rains fell across the Nation this past week. The excessive moisture delayed land preparation and planting activities across the country. Flooding occurred from northern Virginia to southern Maine. Pastures and feedlots remained muddy, causing problems for livestock. Temperatures were mild, promoting growth in pastures and small grains.

SMALL GRAINS: Winter wheat condition rated mostly good in the 19 major producing States. More than 30 percent (%) of the wheat rated excellent in California, Oregon, South Dakota, and Kansas. More than 10% of the wheat rated poor to very poor in Georgia, Ohio, and Michigan. Heading of the winter wheat crop at 1%, compared with 1% last year and the 5-year average. The crop looked good across the Midwest. Wheat jointing in the Southern States appeared delayed. Cold weather further delayed the crop in Kansas. Some mold and rust problems were reported on wheat in Idaho and Texas. The Spring wheat planting had just started in the five major producing States, with less than 1% of the crop planted, compared with 11% last year and 4% average. Planting had just begun in Idaho, Montana, and South Dakota. Wet conditions continued to delay planting of oats, barley, and rye.

CORN: Corn planting was 1% complete in the 17 major corn producing States compared with 2% last year and average. Excessive moisture held planting progress back in Georgia, Texas, and North Carolina. Some corn fields in the Texas Blacklands had cut worm problems. In Iowa and Wisconsin, 1% and 7% of the 1992 crop acreage, respectively, remained in the field.

COTTON: Cotton planting was 8% completed, compared with 5% last year and 6% average. Planting progress was ahead of normal in Texas and California, but rain delayed progress in Arizona. Land preparation and planting were active in the Cross Timbers and plains regions of Texas. Some replanting occurred in the Coastal Bend of Texas, and may be needed in some sections of California. Seedbed preparation in Oklahoma was ahead of last year and average.

SORGHUM: Wet conditions delayed sorghum plantings. Planting progress reached 14%, compared with 16% last year and average. Excessive rainfall slowed germination of planted sorghum in the Blacklands of Texas. Cool weather slowed early-planted sorghum in the Upper Coast of Texas. Seedbed preparation continued in Oklahoma, but progress was behind normal.

RICE: Rice planting in the five major States, reached 5% complete, compared with 10% last year and 9% average. Planting progress started slowly in Texas, with only 4% of the acreage planted, compared with 29% last year and average. In Louisiana, planting progress reached 20%, compared with 25% last year and 22% average.

OTHER FIELD CROPS: Favorable weather conditions allowed the maple syrup harvest in New England and New York to advance. Onions were harvested in the Rio Grande Valley of

Texas. Onion planting advanced in the Texan plains and in Idaho. Colorado onion planting, at 24%, lagged last year's pace but equaled the average. In Georgia, wet conditions delayed spraying for disease control in onions. Onions in New Mexico rated mostly fair. Rain delayed peanut planting in Florida. In Oklahoma, peanut seedbed preparation advanced to 46% complete, compared with 38% last year and 32% average. The potato harvest remained active in Florida. Summer potato planting continued in the San Jacinto Valley of California. Potato planting also occurred in North Carolina, Texas, and Oregon. A shortage of early variety seed potatoes was reported in the Klamath Valley of Oregon. In Kentucky, producers prepared seedbeds and seeded tobacco. Tobacco land preparation and plant bed maintenance occurred in North Carolina. Tobacco planting progress was behind last year in Tennessee and South Carolina. Scattered blue mold was reported in some tobacco beds in Georgia.

FRUIT AND NUTS: Citrus groves, trees, and fruit were in very good condition in Florida. Moisture in the citrus areas was adequate to surplus. New growth and blooms were abundant in most Florida citrus areas. Cool weather has prolonged the bloom cycle. In Arizona, the citrus harvest slowed in the central and western areas. In California orchards, weed control and fungicide spraying continued. Almonds had dropped jackets. Grapevines were treated for mildew. Apple trees bloomed. Brown rot was discovered in some prune orchards. The Georgia peach crop was in mostly good condition. Peaches in most areas of Texas were almost through blooming. Spraying to control scab and brown rot occurred in the Blacklands and Hill Country of Texas.

VEGETABLES: In Florida, fields damaged by the frost of March 13 were replanted. Spring crop planting in central and northern Florida continued. Sweet corn picking increased in the Everglades. Harvest of tomatoes, peppers, cabbage, and celery advanced. The Arizona vegetable harvest remained active in the western and central areas. Broccoli, cauliflower, lettuce, and spinach harvests were active. In California, broccoli, cauliflower, and lettuce harvests advanced. Wet conditions hampered the asparagus harvest in the San Joaquin Delta. Bell pepper and tomato planting continued. Wet conditions delayed tomato planting in some California locations. In Texas, land preparation for carrot and cabbage planting had begun. Vegetable fields damaged by frost were replanted. New Jersey vegetable planting remained 2 weeks behind schedule.

PASTURE AND LIVESTOCK: Nationally, livestock are in good condition. Mud caused problems for livestock producers in Kansas and Iowa. Wet conditions have delayed top dressing of pastures in the Southeast. Pasture prospects in the West rated good with adequate moisture. Feed supplies were reported as adequate.

Crop Progress

for the Week Ending April 4, 1993

COTTON
(Percent Planted)

	Current	Last Wk	1992	Avg.
AL	1	NA	0	0
AZ	15	NA	20	29
AR	0	NA	0	0
CA	30	NA	10	20
GA	0	NA	0	0
LA	0	NA	0	0
MS	0	NA	0	0
MO	0	NA	0	0
NM	1	NA	1	4
NC	0	NA	0	0
OK	0	NA	0	1
SC	0	NA	0	0
TN	0	NA	0	0
TX	12	NA	9	9
14 States	8	NA	5	6

These 14 States produced 99% of the 1992 cotton crop.

GRAIN SORGHUM
(Percent Planted)

	Current	Last Wk	1992	Avg.
AR	4	NA	5	2
CO	0	NA	0	0
IL	0	NA	0	0
KS	0	NA	0	0
LA	1	NA	3	8
MS	2	NA	2	8
MO	0	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	NA
OK	0	NA	1	1
SD	0	NA	0	0
TX	36	NA	43	43
12 States	13	NA	16	NA
Excl. States with NA	14	NA	16	16

These 12 States produced 99% of the 1992 grain sorghum crop.

RICE
(Percent Planted)

	Current	Last Wk	1992	Avg.
AR	1	NA	3	1
CA	0	NA	0	0
LA	20	NA	25	22
MS	1	NA	4	3
TX	4	NA	29	29
5 States	5	NA	10	9

These 5 States produced 97% of the 1992 rice crop.

WINTER WHEAT
(Percent Headed)

	Current	Last Wk	1992	Avg.
AR	3	NA	3	1
CA	20	NA	15	30
CO	0	NA	0	0
GA	4	NA	8	18
ID	0	NA	0	0
IL	0	NA	0	0
IN	0	NA	0	0
KS	0	NA	0	0
MI	0	NA	0	0
MO	0	NA	0	0
MT	0	NA	0	0
NE	0	NA	0	0
NC	0	NA	1	2
OH	0	NA	0	0
OK	0	NA	0	0
OR	0	NA	0	0
SD	0	NA	0	0
TX	2	NA	5	3
WA	0	NA	0	0
19 States	1	NA	1	1

These 19 States produced 90% of the 1992 winter wheat crop.

CORN
(Percent Planted)

	Current	Last Wk	1992	Avg.
CO	0	NA	0	0
GA	28	NA	56	62
IL	0	NA	1	0
IN	0	NA	0	0
IA	0	NA	0	0
KS	0	NA	3	2
KY	0	NA	0	0
MI	0	NA	0	0
MN	0	NA	0	0
MO	0	NA	1	2
NE	0	NA	0	0
NC	2	NA	6	11
OH	0	NA	0	0
PA	0	NA	0	0
SD	0	NA	0	0
TX	37	NA	42	54
WI	0	NA	0	0
17 States	1	NA	2	2

These 17 States produced 94% of the 1992 corn crop.

SPRING WHEAT
(Percent Planted)

	Current	Last Wk	1992	Avg.
ID	2	NA	47	23
MN	0	NA	1	1
MT	1	NA	13	6
ND	0	NA	2	1
SD	1	NA	41	12
5 States	0	NA	11	4

These 5 States produced 96% of the 1992 spring wheat crop.

(Continued to the back cover)

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall 0.44 to 2.26 in. north; 1.02 to 2.88 in. central; 1.23 to 4.63 in. south. Temperatures 1 to 6° below normal north; 0 to 5° below normal central; 2 to 5° below normal south. Lows 24 to 35° north; 26 to 38° central; 33 to 43° south. Highs 79 to 84° north; 80 to 87° central; 81 to 85° south.

Primary activities: Harvesting timber; land preparation; planting corn, cotton, spring vegetables; applying fertilizer; spraying fruit; marketing cattle; ordering seed, other supplies; land-use planning, management; repairing damage from winter storm; general care of livestock, poultry, catfish.

ARIZONA: Rain 28th, west 29th; statewide. Scattered showers 2nd, east, sunny, warm rest of period statewide. Temperatures 4°

below to 4° above normal. Extremes 22°; 82°, higher elevations; 32°; 90° deserts.

Cotton field preparations continued, delayed by rain first of week. Planting continued 15%, 20% 1992, 29% avg. Activities included: Pre-irrigation, laser leveling, listing. Alfalfa condition good. Harvest activities light to moderate, all areas except southeastern where activities were light. Weed, insect infestations moderate to heavy; disease light. Small grains jointing 94%, 92% 1992, 96% avg. Heading 53%, 59% 1992, 56% avg. Fields in good to excellent condition. Vegetable harvest active. broccoli, cauliflower, lettuce, kale, spinach, available western, central areas. Also available west: Anise, artichokes, asparagus, broccoflower. Beets, cabbage, carrots, cilantro, dill, fava beans, mixed greens, kohlrabi, leeks, green onions, parsley,

rapini, rutabagas, turnips available, central. Citrus harvest continued slow central, western areas. Valencia oranges, lemons, grapefruit, tangerines, tangelos available both areas. Pasture, range conditions 101% normal. Cattle, calves good north, southeast, mostly good central. Stockwater, soil moisture mostly adequate, north; adequate, central; adequate to surplus southeast. Range, feed supplies average north, average to above average central, southeast. Insect damage light.

ARKANSAS: Cool week, temperatures a little above normal. Scattered showers throughout week, heaviest showers in northwest region of State. Extremes 30°; 87°. Rainfall none to 2.17 in.

Four days were suitable for fieldwork. Soil moisture supplies adequate to surplus. Wheat condition fair to good, needs sunshine, dry weather. Farmers continued to fertilize wheat with nitrogen, some wheat turning yellow due to water saturation. Land preparation for planting continued. Peach crop in full bloom. Bangs vaccination programs began in some areas. Livestock good condition, signs of lice reported in some areas. Producers feeding hay, supplies adequate. Cold weather hindered growth of fescue, pastures good condition.

CALIFORNIA: Weak system moved through early in the week and brought generally light precipitation to the entire State. Another system moved in near the end of the week with the same effect.

Field activities interspersed between rains. Warmer temperatures benefitted small grain growth, conditions improved, heading progressed. Cotton planting continued, some replanting may be necessary. Some growers waiting for warmer soil temperatures. Cotton emerged, good condition. Alfalfa seeding in many areas, established fields treated to combat weevils. Central and northern areas continued ground preparation for safflower, emergence in southern areas. Early seeded corn continued to emerge and garbanzo beans blooming, good condition. Some areas were too wet to harvest alfalfa hay, other areas alfalfa and winter forage cut for hay, green chop. Orchard floor work, weed control, fungicide spraying active. Almonds dropping jackets; post bloom fungicides applied. Grapevines treated for mildew. Apple trees bloomed. Stone fruit thinned. Kiwifruit leafed out. Prune orchards reported brown rot. Navel, Valencia orange harvests active. Lemon picking active. Broccoli harvest central coast increasing, variable to good quality. Harvest San Joaquin Valley, westside, Riverside desert areas continued. Westside spring head lettuce harvest continued, good quality, light volume. Head-leaf lettuce harvest continued Palo Verde, Coachella Valleys. Harvest head lettuce, Huron; leaf lettuce Salinas, seasonally increasing. Lettuce harvest light, variable quality, Santa Maria. Asparagus harvest hampered, wet conditions, San Joaquin Delta. Harvest continued westside, Yuba County. Cauliflower harvest moderately active, variable quality Santa Maria, Salinas-Watsonville. Fall potato movement out of storage increasing Tulelake area; summer potato planting continued San Jacinto district. Bell pepper planting continued westside, Merced, Modesto. Tomato planting progressed westside, northern valley, wet conditions delayed planting some locations. Other crops harvested included turnips, processing spinach, carrots, green onions, sweet potatoes, oriental vegetables. Range, pasture conditions good to excellent, warmer weather benefitted growth. Water supplies very good, promising for the summer. Cattle, sheep good condition, grazing in foothills. Market movement near normal.

COLORADO: A series of upper level weather systems moved across the State, each accompanied by abundant moisture. Average precipitation nearly a third of an inch for each Basin. Colorado River Basin received the most precipitation, with an average of over 0.75 in. Temperatures 2 to 4° above the normals for each River Basin.

Days suitable for fieldwork 3.6. Soil moisture 11% short, 68% adequate, 21% surplus. Spring barley seeded 24%, 25% 1992, 22% avg. Oats seeded 18%, 37% 1992, 24% avg. Spring wheat seeded 6%, 6% 1992, 5% avg. Sugarbeets planted 18%, 4% 1992, 12% avg. Dry onions planted 24%, 37% 1992, 24% avg. Winter wheat 1% poor, 12% fair, 65% good, 22% excellent. Cows calved 69%, 67% 1992, 61% avg.; ewes lambed 74%, 74% 1992, 65% avg. Livestock mostly good. Pasture, range feed condition good.

FLORIDA: Temperatures 3 to 5° below normal Panhandle, near normal remainder, except 2 to 4° above normal lower southeast coast. Lows; 3rd morning, mid, upper 30s Panhandle, Big Bend, upper 30s to mid 40s northeast, north central, upper 40s to low 50s central, interior south, mid 50s to low 60s southeast. Highs, mostly mid 80s, few upper 80s, interior Peninsula. Rainfall 0.50 to 2.00 in. except western Panhandle 4.00 to 5.00 in. Rain 1 to 3 days.

Soil moisture adequate to surplus, Panhandle, northern Peninsula, mostly adequate, central, southern Peninsula. Corn for grain planting, tobacco transplanting winding down. Silage corn, sorghum planting active. Rain delayed peanut planting. Making preparations for cotton planting. Older wheat showing some damage from mid March freeze. Sugarcane harvest complete. Citrus groves, trees, fruit very good condition. New growth, bloom buds abundant most areas. Cool weather prolonging bloom cycle. Moisture adequate to surplus. Early, mid orange harvest almost complete. Valencia harvest increasing. Grapefruit movement active lower east coast. Tangelo harvest complete. Temple, Honey tangerine harvest slows as supplies are running low. Caretakers cutting cover crops, hedging, topping harvested groves; post bloom, nutritional spraying. Normal springtime growing weather for major vegetable growing areas. Growers active planting spring crops central, north. Most newly planted fields hurt by March 13th to 14th frost, replanted. Harvest activity winding down, south. Sweet corn picking increasing Everglades. Volume leaders: Tomatoes, potatoes, peppers, cabbage, celery. Also available: snap beans, carrots, chinese cabbage, sweet corn, cucumbers, eggplant, escarole, romaine lettuce, specialty lettuces, radishes, squash, strawberries, cherry tomatoes. State's pastures fair to excellent. Pasture 35% fair, 60% good, 5% excellent. State's cattle herds mostly good condition.

GEORGIA: Temperatures 2 to 5° below normal. Highs upper 70s northeast mountains, middle to upper 80s central, south. Lows middle 20s mountains 3rd, 4th, lower 30s central, middle 30s south, around 40 along the coast. Rain 2 to 4 days. Totals mostly between 1.00 to 2.00 in., some local areas under 0.75 in., isolated spots close to 3.00 in.

Days suitable for fieldwork 2.1. Soil moisture 19% adequate, 81% surplus. Corn 11% poor, 64% fair, 25% good. Peanuts 0% planted, 0% 1992, 0% avg. Tobacco 7% poor, 63% fair, 30% good; 11% transplanted, 33% 1992, 47% avg.; scattered reports blue mold in tobacco beds. Wheat 78% jointing, 90% 1992, 92% avg.; 23% boot, 41% 1992, 52% avg.; condition some improved, some disease south, more freeze damage reported early wheat varieties central. Other small grains 10% poor, 64% fair, 25% good, 1% excellent; freeze damage reported central. Onions 0% harvested, 0% 1992, isolated fields bacterial soft rot, wet fields slowing spraying for disease control. Watermelons 45% poor, 43% fair, 12% good; 38% planted, 41% 1992, 63% avg. Other vegetables 12% poor, 69% fair, 19% good; planting active south in fields that supported machinery, all spring crops late. Apples 18% fair, 82% good; 3% blooming, 41% 1992, 33% avg. Peaches 3% very poor, 10% poor, 29% fair, 58% good; 90% blooming, 96% 1992, 96% avg. Pasture fair to good, fertilization well behind normal due to wet conditions. Cattle, hogs good.

HAWAII: Sunny weather with some passing showers, trade winds typified weather. Light scattered showers fell over windward, higher elevations. Concern of new El Niño weather pattern means dry year ahead for Hawaiian chain. Temperatures low 60 to mid 80s. Rainfall none to 1.20 in.

In some areas, low soil moisture levels adversely affecting non-irrigated orchards, pastures. Irrigation remained essential for crop development many areas. Banana, papaya production continued at normal levels. State's 2nd largest sugar plantation ceased operations 4/1.

IDAHO: Temperatures 0 to 6° above normal throughout State. Precipitation across the State with Grangeville receiving 0.67 in.

Days suitable for fieldwork 2. Soil moisture 0% very short, 4% short, 77% adequate, 19% surplus. Winter wheat mostly good, some snow mold reported. Spring barley planted 2%, 39% 1992, 20% avg. Irrigation water supplies 2% very poor, 3% poor, 20% fair, 59% good, 16% excellent. Hay, roughage supplies 0% very short, 15% short, 84% adequate, 1% surplus. Activities: Planting, fertilizing, cultivating, irrigation systems repair, weed, pest control, pruning fruit trees, shipping seed potatoes. Above normal mice infestation reported in

many counties. Pasture, range condition 75% of normal. Calving completed 98%. Lambing completed 85%. Livestock mostly good.

ILLINOIS: Temperatures 1 to 6° below normal. Highs lower 50s; lower 60s. Lows upper 20s; lower 40s. Extremes mid 60s; lower 70s north, mid to upper 70s south. Precipitation water equivalent, 0.25 to over 2.00 in.; below normal south, wetter than normal far north.

Days suitable for fieldwork 0.5. Soil moisture 19% adequate, 81% surplus. Oats planted 3%, 37% 1992, 25% avg. Alfalfa 1% excellent, 61% good, 37% fair, 1% poor. Farm activities included machinery preparation, applying fertilizer, hauling grain, manure, tending livestock under muddy conditions. Pasture condition 86% of normal.

INDIANA: Temperatures 1 to 4° below normal in the south, 3 to 6° below normal in the north. Highs 50s north to the upper 50s south. Lows were between 30 to 44°. Precipitation 0.75 to 1.25 in. with heaviest amounts of 1.50 in. across portions of the northern third.

Very little accomplished past week. Soil moisture level still quite high. Compaction is becoming a problem with manure spreading. Livestock have suffered from latest cold, wet weather. Pastures only 79% of normal. Feedlots still muddy. Wheat crop looking better than in recent years. Topsoil rated 12% adequate, 88% surplus. Subsoil moisture 1% short, 36% adequate, 63% surplus. Oats seeded 2%, 28% 92, 28% avg. Spring tillage 36%, 65% 92, 65% avg.

IOWA: Temperatures 1 to 2° above normal. Extremes 13°; 77°. Precipitation 0.38 in. east central to 3.62 in. central; average 1.15 in. (normal 0.56 in.). Major flooding throughout week due to early week heavy rains, snow melt in north, central to east.

Farmers had no suitable days for fieldwork. One percent of last years corn crop is left unharvested. Topsoil 30% adequate, 70% surplus. Subsoil 11% adequate, 89% surplus. Fertilizer application 21%, 36% 1992, 41% normal. Primary seedbed preparation completed 22%, 34% 1992, 47% normal. Oats sown 0%, 32% 1992, 26% normal. Winter wheat 3% very poor, 5% poor, 49% fair, 43% good. Wet, muddy conditions causing increased calf losses, low gain rate.

KANSAS: Temperatures near normal or above. Temperatures 1° below normal to 5° above. Precipitation received over most State, majority coming late in week.

Days suitable for fieldwork 1. Colder temperatures, precipitation returned resaturating fields that were just beginning dry out. Fieldwork progress behind normal. Little spring seedbed preparation completed because wet field conditions. State topsoil moisture 1% short, 27% adequate, 72% surplus. Subsurface moisture 62% adequate, 38% surplus. Wheat 97% good to excellent, 2% fair, 1% poor. Colder temperatures impeded wheat growth. Wheat progress behind normal. Only 2% wheat acreage jointed compared avg 35%. Planting oats, spring barley behind normal. Oats 30% planted compared to avg. 90%. Stockmen again had contend colder temperatures. Some northern areas State, snow fell late week. Mud remains big problem for stockmen. Some shortages hay because high usage.

KENTUCKY: Cool with below normal precipitation. High temperatures 60°, lows 40°. Warmest readings first of week, highs 70s. Coolest temperatures 2nd, most locations highs in 30s. Precipitation 0.60 to 0.90 in., 0.25 to 0.50 in. below normal.

Days suitable for fieldwork 1.9. Soil moisture 29% adequate, 71% surplus. Land preparation minimal as soils too wet. Primary field activities fertilizing small grain, preparing to seeding tobacco beds. Winters loss wheat, barley minimal. Wheat 5% poor 15% fair, 65% good, 15% excellent. Alfalfa, red clover winter loss 4%. Ponding could be causing more problems to fall grains, legumes than winter temperatures. Pastures fair to good condition, need sunshine, warmer temperatures. Hay supplies have been mostly adequate.

LOUISIANA: Temperatures 0.4 to 2.5° below normal. Extremes 31°; 87°. Rainfall 0.54 in. northwest to 3.41 in. south central.

Days suitable for fieldwork 3.9. Soil moisture 4% short, 64% adequate, 32% surplus. Corn 50% planted, 72% 1992, 57% avg.; 23% emerged, 51% 1992, 37% avg. Planting made good progress in south. Rice 20% planted, 25% 1992, 22% avg.; 9% emerged, 14% 1992, 12% avg. Rice planting off to a good start. Sorghum 1%

planted, 3% 1992, 8% avg.; 0% emerged, 0% 1992, 3% avg. Wheat 12% very poor, 23% poor, 55% fair, 10% good; 31% headed, 45% 1992, 43% avg. Wheat fair to poor. Spring plowing 45% plowed, 52% 1992, 46% avg. Sugarcane 2% poor, 60% fair, 28% good, 10% excellent. Fertilization underway. Livestock 49% fair, 51% good. Spring deworming, vaccinations underway. Pastures 14% very poor, 3% poor, 9% fair, 70% good, 4% excellent. Pastures turning green due to warm weather. Vegetables 5% very poor, 24% poor, 60% fair, 11% good. Spring planting continued.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.63 in. Temperature 52.3°, normal 49.8°. Extremes 32°; 69°.

Hay supplies adequate. Feeding hay, caring for livestock. Small grains making good growth in continued cool, wet conditions. Making plans for spring planting. Final week of tobacco auction sales.

DELAWARE: Precipitation 1.40 in. Temperature 49.7°, normal 49.3°. Extremes 37°; 64°.

Hay supplies adequate. Pastures, livestock beginning spring growth. Small grains good condition. Making plans for spring planting. Waiting for fields to dry, warm.

MICHIGAN: Extremes 17°; 69°. Precipitation none to 1.06 in. Sunny skies, mild temperatures early in the week were followed by a short stint of winter, complete with snow, freezing temperatures.

Livestock were in good condition. Calving, lambing were going well. Feed supplies remained adequate to short. Major activities included: Caring for livestock, preparing taxes, repairing equipment.

MINNESOTA: Temperatures above normal in the northwest to below normal in the south. Extremes 9°; 64°. Precipitation none to 1.50 in. Snowfall 3 to 6 in. southeast, a trace in other areas.

Farmers are looking for mild, dry conditions to allow seedbed preparation, seeding of small grains.

MISSISSIPPI: Temperatures 58°, 1.4 below normal. Extremes 26°; 86°. Rainfall slightly above normal, heaviest in the southeast. Rainfall 1.58 in., 0.29 in. above normal. Soil temperatures 60°.

Days suitable for fieldwork 1.5, 4.5 1992, 2.9 avg. Soil moisture 13% adequate, 65% surplus, 22% excessive. Corn 17% planted, 33% 1992, 34% avg.; 6% emerged, 18% 1992, 20% avg.; 13% poor, 73% fair, 14% good. Rice 1% planted, 4% 1992, 3% avg. Sorghum 2% planted, 2% 1992, 8% avg. Watermelons 8% planted, 30% 1992, 32% avg. Wheat 62% jointing, 84% 1992, 84% avg.; 1% heading, 18% 1992, 17% avg.; 18% poor, 51% fair, 31% good. Livestock 1% poor, 48% fair, 47% good, 4% excellent. Pasture 84% of normal. Activities: Machinery preparation.

MISSOURI: Temperatures near normal. Rainfall 1.19 in., ranging from 0.44 in. southeastern district to 2.11 in. northwest.

Days suitable for fieldwork 0.6. Topsoil moisture 14% adequate, 86% surplus. Continued damp weather, muddy fields preventing fieldwork in most areas. Oats sown 8%, 53% 1992, 54% avg. Ground for spring crops worked at least once 31%, 50% 1992, 52% avg. Wheat 1% very poor, 5% poor, 52% fair, 39% good, 3% excellent. Pasture 6% very poor, 22% poor, 48% fair, 22% good, 2% excellent.

MONTANA: Temperatures well above normal. Precipitation west, southwest with amounts up to 0.49 and 0.32 in. respectively.

Days suitable for fieldwork 1.6. Topsoil moisture 8% short, 72% adequate, 20% surplus. Subsoil moisture 31% short, 62% adequate, 7% surplus. Field tillage work progress 89% none, 5% just started, 6% well underway. Winter wheat 38% still dormant, 60% greening, 2% green, growing. Barley planted 2%, 19% 1992, 7% avg. Oats planted 1%, 10% 1992, 4% avg. Sugarbeets planted 0%, 0% 1992, 5% avg. More than 92% of livestock receiving supplemental feed. Calving 67% complete, lambing 56% complete.

NEBRASKA: Temperatures 4° below normal, except in the northwest where temperatures were near normal. Precipitation occurred the first half of the week varying from traces west to over 1.50 in. east.

Days suitable for fieldwork 1.0. Topsoil moisture 51% adequate, 49% surplus. Subsoil moisture 75% adequate, 25% surplus. Wheat 22% fair, 68% good, 10% excellent. Pasture, range condition 98% of

normal. Spring calving 68% complete. Monitoring, working with farm stored grain.

NEVADA: Low pressure system brought showers, cool weather on 28th, 29th. High pressure system followed that brought dry, warmer conditions. A new low pressure system moved across northern, central areas on the 1st, 2nd bringing cooler, moist conditions. Most of State received some precipitation during week. Temperatures above seasonal normals everywhere. Extremes 27°; 82°.

Winter wheat greening up, some oats, barley already planted. First cutting alfalfa hay about complete extreme south. Getting ready to move cattle to summer pastures.

NEW ENGLAND: Precipitation 0.95 to 1.69 in. New Hampshire; 1.43 to 2.60 in. Massachusetts; 0.43 to 2.43 in. elsewhere. Temperatures low 30s to mid 40s. Maximum temperatures mid 50s to high 60s. Minimum temperatures low teens to high 20s north; mid 20s to mid 30s south.

Major farm activities: General repairs, maintenance, tending livestock, moving crops from storage. Maple sugaring still behind last year, current weather conditions are ideal.

NEW JERSEY: Temperatures below normal. Extremes 25°; 70°. Rainfall 1.49 in. north, 2.00 in. central; 1.36 in. south. Heaviest 24 hour total 1.58 in. on 31st, 1st. Estimated soil moisture, in percent field capacity, averaged 100% north, 100% central, 99% south. Four inch soil temperatures averaged 35° north, 43° central, 46° south.

Limited planting of spring lettuce, cabbage in some areas of southern areas. Planting of other early vegetables at 1 to 2 weeks behind due to wet ground conditions. Ground preparation, also delayed at least 2 weeks. Warmer, dryer weather needed.

NEW MEXICO: Temperatures within a couple of degrees of normal. Extremes 17° northern mountains; 81° southwest. Two weather features produced scattered showers, thunderstorms. Higher totals in the north while rainfall was spotty, light farther south.

Days suitable for fieldwork 6.1. Soil moisture 48% short, 51% adequate, 1% surplus. Several reports of light wind, freeze damage. Crop conditions: Alfalfa 3% poor, 38% fair, 56% good, 3% excellent. Irrigated wheat 31% fair, 65% good, 4% excellent. Dryland wheat 8% very poor, 33% poor, 50% fair, 9% good. Winter wheat headed; zero. Chile 43% fair, 57% good. Onions 14% fair, 72% good, 14% excellent. Lettuce 10% fair, 75% good, 15% excellent. Cattle, sheep fair to excellent condition. Range, pasture 80% of normal.

NEW YORK: Precipitation occurred almost every day. Heavy rains beginning, end of week combined with snow melt to bring rivers to bankfull or flood levels. North of Mohawk River, precipitation fell as snow on 1st, 2nd. Temperatures started week above normal, after 1st returned to normal. Extremes 21°; 66°.

Major activities: Caring for livestock, maintenance work, spreading manure, getting ready for spring fieldwork. Many fields continue very wet or flooded. Maple producers collecting, boiling sap. Warm days, cool nights returned enabling sap to begin to flow again.

NORTH CAROLINA: Temperatures 1 to 5° above normal. Precipitation 1.90 in. at Tuxedo to 0.40 in. at Aurora.

Days suitable for fieldwork 1.8. Soil moisture 17% adequate, 83% surplus. Crop condition: Pasture 6% poor, 43% fair, 51% good; Winter wheat 32% fair, 66% good, 2% excellent. Oats 34% fair, 66% good. Barley 33% fair, 67% good. Rye 38% fair, 61% good, 1% excellent. Tobacco plant beds 4% poor, 37% fair, 55% good, 4% excellent. Irish potatoes 14% poor, 50% fair, 36% good. Peaches 36% fair, 57% good, 7% excellent. Truck crops 11% poor, 47% fair, 42% good. Hay, roughage supplies 5% very short, 17% short, 77% adequate, 1% surplus. Tobacco plant bed supply 7% short, 90% adequate, 3% surplus. Feed grain supplies 6% short, 94% adequate; Irish potatoes planted 60%, 92% 1992, 79% avg. Cabbage transplanted 67%, 81% 1992, 69% avg. Major activities: Tobacco plant bed maintenance and land preparation for planting. Other activities: planting potatoes, cabbage; topdressing small grains; tending livestock; general farm maintenance.

NORTH DAKOTA: Precipitation, temperatures slightly below normal. Temperatures 3° below normal northeast, north central to normal southeast. Extremes 13° south central; 67° southeast. Precipitation averaged 0.01 in. north central to 0.41 in. southeast.

Topsoil none very short, 8% short, 87% adequate, 5% surplus. Subsoil 7% very short, 49% short, 42% adequate, 2% surplus. Expected starting date for fieldwork 16th, average 15th. Winter wheat condition none very poor or poor, 38% fair, 62% good, none excellent; 78% dormant, 22% green. Livestock condition mostly good, nearly all received supplemental feed. Calving 58% complete, lambing 70%, shearing 80%. Pasture condition 83% of normal, 97% still dormant. Hay, forage supplies 11% short, 87% adequate, 2% surplus.

OHIO: Winter returned after spring-like weather early in the week. Highs upper 40s to mid 50s, 1 to 5° colder than normal central, north, 2 to 7° colder than normal south. Lows mid to upper 30s in the north to the mid 30s to lower 40s in the central, south. Lows were 1 to 5° above normal. Warmest readings reached the mid 60s to near 70° early in the period. Precipitation totals (water equivalent) 0.40 to 0.80 in. over the central, south to 0.40 to 1.00 in. north. Soil temperatures at the 4 in. depth under bare ground averaged mostly in the 40s.

Most of the winter wheat is in good condition. Ponding has limited top dressing in some northern areas. In the south, ponding has not been a big problem, so much of the crop has been top dressed and looks much better than last year. Most of the wheat across the State has broken dormancy; there has been little winter kill.

OKLAHOMA: Temperatures 1 to 5° below normal. Precipitation 0.64 in west-central to 1.78 in northeast.

Days suitable for fieldwork 3.5. Topsoil 2% short, 36% adequate, 62% surplus. Subsoil 100% adequate. Wheat 30% fair, 70% good; 60% jointing, 88% 1992, 47% avg. Oats 12% jointing, 60% 1992, 29% avg. Barley 17% jointing, 48% 1992, 31% avg. Corn 68% seedbed prepared, 80% 1992, 77% avg.; 12% planted, 11% 1992, 11% avg.; 4% up-to stand, 4% 1992, 1% avg. Sorghum 11% seedbed prepared, 36% 1992, 30% avg. Soybeans 16% seedbed prepared, 41% 1992, 28% avg. Peanuts 46% seedbed prepared, 38% 1992, 32% avg. Cotton 53% seedbed prepared, 38% 1992, 37% avg. Pastures 90% of normal. Livestock 1% poor, 41% fair, 53% good, 5% excellent. Prices for feeder steers, heifers steady to \$1.00 per cwt. higher. Marketings were average.

OREGON: Above normal temperatures statewide; western portions 2 to 4° above normal, eastern portions 1 to 2° above normal. Precipitation plentiful statewide; coastal areas 2.00 to 6.25 in., Willamette Valley 1.00 to 2.75 in., southwestern valleys 0.50 to 1.50 in., eastern areas 0.50 in. or less.

Soil moisture 71% adequate, 29% surplus. Winter wheat condition 4% fair, 63% good, 33% excellent. Fertilizers, herbicides continue to be applied, wet conditions delayed field preparation, spring seedings, chemical applications. Fall grain crop growth slowed, cool weather, eastern areas. Strawberry cultivation continues, Willamette Valley. Some freeze damage reported in Marionberries. Cranberries from white bud to roughneck stage, ponds at 100% capacity; southern coast. Sweet cherries, peaches, pears in bloom in lower elevations; higher elevated apples, pears, cherries generally in bud stage. Producers applying fungicides, delay dormant sprays to fruit trees. Onion, snap pea, carrot, potato seedings underway where field conditions permit, statewide; early variety potato seed in short supply, Klamath Basin. Livestock good. Calving about two-thirds complete. Western pasture regrowth excellent. Eastern pasture growth just beginning, excellent prospects with adequate soil moisture, stockwater. Range, pasture condition 91% of normal.

PENNSYLVANIA: Above normal temperatures, precipitation. Fields are very wet; water standing in many fields. Temperature 50°, 10° above normal. Extremes: 26°; 70°. Precipitation 1.44 in., 0.63 in. above normal.

Days suitable for fieldwork 0. Soil moisture 0% short, 4% adequate, 96% surplus. Plowing 1% complete, 13% 1992, 9% avg. Corn 0% planted, 0% 1992, 0% avg. Soybeans 0% planted, 0% 1992, 0% avg. Oats 0% planted, 1% 1992, 8% avg. Potatoes 0% planted, 0% 1992, 2% avg. Tobacco beds 1% planted, 4% 1992, 20% avg. Barley 100% pre-boot, 100% 1992, 100% avg.; 0% boot, 0% 1992, 0% avg.;

heading or headed, 0% 1992, 0% avg. Wheat 100% pre-boot, 100% 1992, 100% avg.; 0% boot, 0% 1992, 0% avg.; 0% heading or headed, 0% 1992, 0% avg. Wheat crop condition 1% very poor, 10% poor, 32% fair, 46% good, 11% excellent. Hay stands mostly fair to good. Feed from pastures are starting to get green, but are too wet to use. Peaches 100% pre-pink, 100% 1992, 100% avg.; 0% pink, 0% 1992, 7% avg.; 0% full bloom or past, 0% 1992, 1% avg. Cherries 100% pre-pink, 100% 1992, 100% avg.; 0% pink, 3% 1992, 4% avg. Apples 100% pre-pink, 100% 1992, 100% avg.; 0% pink, 2% 1992, 1% avg. Activities: Hauling manure; maintaining machinery; fixing fence; caring for livestock.

PUERTO RICO: Island rainfall 0.50 in., 0.25 in. below normal. Highest weekly rainfall 3.10 in. at Borinquen Airport. Highest 24 hour total 1.55 in. at Borinquen Airport on 2nd. Mean station temperatures ranged from 81.4° at San Juan WSFO to 62.6° at Pico Del Este Luquillo. Extremes 53°; 92°.

SOUTH CAROLINA: Temperatures 2° below normal. Average precipitation 0.60 in.

Days suitable for fieldwork 3.5. Soil moisture 57% adequate, 43% surplus. Tobacco fair; 2% planted, 8% 1992, 11% avg. Corn fair; 30% planted, 49% 1992, 45% avg. Cantaloupes fair to good; 12% planted, 24% 1992, 26% avg. Watermelons fair; 24% planted, 36% 1992, 43% avg. Cucumbers fair to good; 26% planted, 36% 1992, 37% avg. Snapbeans fair; 36% planted, 23% 1992, 20% avg. Tomatoes fair to good; 48% planted, 35% 1992, 58% avg. Oats fair to good; 4% headed, 5% 1992, 7% avg. Wheat fair to good; 0% headed, 2% 1992, 7% avg. Peaches fair. Pastures fair.

SOUTH DAKOTA: Temperatures slightly below normal, averaging mid 30s to around 40°. Extremes 16°; 68°. Precipitation 0.25 to 0.75 in. except northeast which had over an inch. Maximum 1.60 in.

Days suitable for fieldwork 0.1. Topsoil moisture 3% short, 59% adequate, 38% surplus. Subsoil moisture 3% very short, 11% short, 62% adequate, 24% surplus. Rye 4% very poor, 0% poor, 9% fair, 62% good, 25% excellent. Wet conditions have kept farmers out of the fields. Livestock 1% very poor, 1% poor, 8% fair, 80% good, 10% excellent. The cool wet weather has caused calving problems and scours. Lambing was 55% complete, calving was 36% complete. Feed, water supplies were mostly adequate last week. Pasture conditions 89% of normal.

TENNESSEE: Temperatures near or slightly below normal for the week. The exception was Crossville which 6° below normal. The warmest was 84° at Jackson on the 30th, the coldest was 27° at Crossville on the 3rd. Precipitation below normal, except at Knoxville, which totaled rainfall of 1.33 in.

Days suitable for fieldwork 1.4. Soil moisture 29% adequate, 71% surplus. Corn 0% planted, 2% 1992, 2% avg. Tobacco 66% seeded, 85% 1992, 88% avg.; 20% plants up, 41% 1992, 42% avg. Wheat 15% jointed, 27% 1992, 33% avg.; 1% poor, 18% fair, 81% good. Apples 52% budding or beyond, 68% 1992, 61% avg.; 6% blooming or beyond, 22% 1992, 25% avg. Peaches 81% budding or beyond, 87% 1992, 76% avg.; 62% blooming or beyond, 72% 1992, 63% avg. Pastures 10% poor, 42% fair, 40% good, 8% excellent. Cattle 2% poor, 27% fair, 66% good, 5% excellent. Very little fieldwork took place as fields are still to wet.

TEXAS: Two weather disturbances, one beginning, other over weekend, dropped some rainfall. Between systems Texas under dry northwest flow with cool, mild temperatures. Temperatures were near normal most districts, exceptions were Plains where readings were slightly below. Precipitation generally above normal southeastern, near or below normal elsewhere.

Crops: Corn planting began Plains. Cut worms problem in fields Blacklands. Central Texas damaged fields replanted. Blacklands, planted sorghum slow germinate due excessive rainfall. Some replanting fields occurred in Central Texas, along Upper Coast, early planted fields slowed by cool temperatures. Land preparation cotton planting well underway Plains, Cross Timbers. Planting began Blacklands, some replanting occurred Coastal Bend. Rice planting getting off slow start most areas. Upper Coast a few fields were

planted. Small grains responded well warmer, windy conditions. High Plains, greenbug activity on rise. Rust increasing problem Hill Country, Blacklands and becoming problem Central Texas, Upper Coast. Statewide wheat condition 79% normal, 86% 1992.

Commercial Vegetables: Rio Grande Valley, carrots, onions, cabbage being harvested. Citrus harvest continued. High Plains, onions, potatoes being planted. Land preparation carrot, cabbage planting underway. East Texas, some watermelons planted. Several areas replanting vegetables killed by freeze few weeks ago. Trans Pecos, chile pepper planting continued. Preparation other vegetable planting underway. Peaches almost through blooming most areas State. Assessments of damage from earlier freeze continued favorable. Most areas experienced mild, moderate damage early varieties. Producers have better outlook than few weeks ago. Spraying to control scab, brown rot occurred Blacklands, Hill Country.

Range and Livestock: Supplemental feeding minimal most areas. Pastures green, providing forage. Low Plains, some bloating in cattle on small grain pastures. East Texas, Upper Coast, bloating problem where native pastures extremely lush. Lice infestations again on rise Blacklands. Overall livestock condition remained fair to good.

UTAH: Temperature maximums 1° below normal, minimums were 6° above normal. Precipitation was heavy for all areas.

Days suitable for fieldwork 3.8. Soil moisture 39% adequate, 61% surplus. Winter wheat freeze damage 31% moderate, 58% light, 11% none. Winter wheat 15% good, 85% adequate. Fall barley freeze damage 22% moderate, 56% light, 22% none. Fall barley condition 27% good, 71% adequate, 2% poor. Spring wheat planted 7%, 79% 1992, 54% avg. Barley planted 10%, 66% 1992. Oats planted 6%, 35% 1992. Cows calved 62%, 69% 1992. Ewes lambed on farm 67%, 68% 1992. Ewes lambed on range 19%, 23% 1992. Sheep sheared on farm 44%, 57% 1992. Sheep sheared on range 22%, 34% 1992. Pasture, range conditions good to excellent.

VIRGINIA: Temperatures above normal. Extremes 30°; 82°. Precipitation above normal with most localities receiving an inch of rain. Precipitation 0.48 in. at Charlottesville to 3.34 in. at Glasgow.

Days suitable for fieldwork 0.4. Topsoil 10% adequate, 90% surplus. Pasture 9% poor, 42% fair, 43% good, 6% excellent. Alfalfa 6% poor, 58% fair, 36% good. Wheat 7% poor, 65% fair, 25% good, 3% excellent. Barley 4% poor, 65% fair, 27% good, 4% excellent. Peach 38% fair, 54% good, 8% excellent. Apple 39% fair, 46% good, 15% excellent. Tobacco planted condition 31% poor, 55% fair, 14% good. Tobacco plantbeds 87% seeded. Potato planting continued. Tobacco plantbed sowing, topdressing small grains, land preparation very limited due to continued wet field conditions. Overseeding pastures. Some calf losses reported in western areas.

WASHINGTON: Temperatures 3 to 5° above normal west; 8 to 12° above normal east. Precipitation 0.20 to 0.97 in. west; 0.02 to 1.43 in. east.

Days suitable for fieldwork 5.1. Soil moisture 21% short, 79% adequate. Irrigation water supply 42% short, 58% adequate. Hay, other roughage 17% very short, 47% short, 36% adequate. Range, pasture 13% very poor, 30% poor, 19% fair, 38% good. Winter wheat dryland 20% fair, 80% good; irrigated 100% good. Spring wheat dryland 8% fair, 92% good; irrigated 5% fair, 95% good. Barley dryland 25% fair, 75% good; irrigated 5% fair, 95% good. Warm weather continued. Wet soils east of the Cascades continued to delay bed preparation, seeding activities. Earliest fertilizer, herbicide applications to winter wheat began; crop looks good. Spring spray programs in orchards continued; pruning essentially complete. Calving/lambing winding down; livestock beginning to graze pastures/rangeland.

WEST VIRGINIA: Temperature 48°. Extremes 24°; 73°. Precipitation 0.79 in.

Hay feed supplies adequate. Other feed supplies adequate. Cattle good. Sheep good. Wheat condition fair. Barley condition fair. Soil preparation 2 to 3 weeks behind schedule. Farm activities: General maintenance, feeding livestock, calving, lambing, bookkeeping.

(Continued to p. 23)

March 1993

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
*** = DATA NOT AVAILABLE

International Weather and Crop Summary
HIGHLIGHTS

March 28 - April 3, 1993

FSU-WESTERN: Unseasonably mild weather continued to diminish snow cover in the north and promoted winter grain greening in the south.

EUROPE: Cool, showery weather boosted topsoil moisture for summer crop planting but slowed winter wheat development.

NORTHWESTERN AFRICA: Dry weather continued to cover drought-stressed winter grains in Morocco and western Algeria.

SOUTH AFRICA: Rain increased topsoil moisture for winter wheat planting.

SOUTH ASIA: Winter grain and oilseed harvests progressed.

SOUTHEAST ASIA: Rain benefited Java's second rice crop, and returned to oil palm and rice areas of western Malaysia and southern Philippines.

EASTERN ASIA: Scattered rains benefited northern Chinese grains.

AUSTRALIA: Summer crop harvesting progressed across eastern Australia.

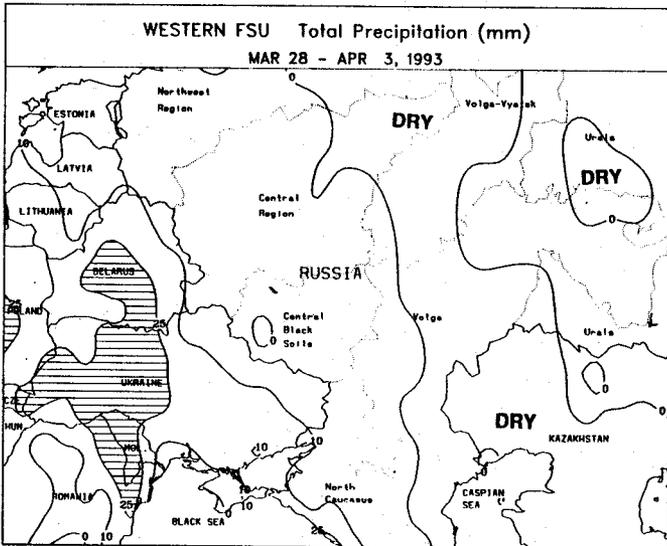
SOUTH AMERICA: In Argentina, rains benefited late-season filling soybeans, but slowed summer grain harvesting. Across southern Brazil, scattered rainfall caused harvest delays.

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI	LO	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	4	-5	10	-20	-1	1.5	7	-46
SWEDEN	STOCKHOLM	5	-1	13	-8	2	2.0	20	-7
FINLAND	HELSINKI	2	-4	12	-14	-1	2.1	31	-2
U KING	GLASGOW	9	4	15	-6	6	0.4	92	21
	EDINBURGH	9	3	15	-4	6	1.0	25	-27
	BIRMINGHAM	10	3	18	-5	7	1.1	14	-37
	LONDON	11	2	18	-5	6	0.4	25	-36
IRELAND	DUBLIN	10	5	16	1	8	1.1	26	-28
ICELAND	REYKJAVIK	3	0	9	-8	2	1.1	94	13
DENMRK	COPENHAGEN	6	0	12	-4	3	1.1	7	-25
LUXEMB	LUXEMBOURG	10	2	18	-7	6	1.2	9	-59
SWITZL	ZURICH	9	1	20	-9	5	0.6	43	-29
	GENEVA	11	1	20	-5	6	0.7	9	-69
FRANCE	PARIS/ORLY	13	3	22	-2	8	***	4	**
	STRASBOURG	11	1	21	-6	6	0.5	8	-28
	BOURGES	13	2	24	-4	8	1.0	4	-56
	BORDEAUX	16	5	26	-2	10	1.7	12	-64
	TOULOUSE	14	4	23	-3	9	1.0	14	-44
	MARSEILLE	15	6	22	-2	10	0.5	18	-26
SPAIN	VALLADOLID	15	3	23	-5	9	0.7	15	-18
	MADRID	17	3	24	-4	10	0.2	21	-26
	SEVILLE	22	9	27	-2	15	0.4	38	-55
PORTUG	LISBON	18	10	22	3	14	0.4	49	-50
GERMNY	HAMBURG	8	1	17	-5	4	0.6	30	-27
	BERLIN	8	1	16	-6	4	0.1	16	-22
	DUSSELDORF	11	2	18	-6	6	0.1	7	-33
	LEIPZIG	8	0	17	-5	4	0.6	11	-23
	DRESDEN	7	0	16	-8	4	0.4	14	-23
	STUTTGART	9	-1	18	-7	4	-0.3	11	-30
	NURNBERG	9	-1	16	-7	4	0.0	18	-28
	MUNICH	9	**	20	-7	**	***	26	-22
AUSTRI	VIENNA	9	0	22	-7	4	-0.6	14	-17
	INNSBRUCK	9	-2	22	-9	4	-0.9	108	59
CZECH	PRAGUE	7	-2	17	-13	3	-0.3	8	-20
POLAND	WARSAW	5	-2	16	-13	1	-1.0	26	-2
	LODZ	4	-3	17	-18	1	-1.0	41	5
	KATOWICE	5	-2	18	-15	2	-0.6	40	2
	PRZEMYSL	5	-2	17	-14	1	-1.1	25	-9
HUNGAR	BUDAPEST	9	1	21	-8	5	-0.8	21	-7
F YUGO	BELGRADE	9	2	25	-7	5	-1.7	75	23
ROMANI	BUCHAREST	8	-2	25	-10	3	-0.9	87	54
BULGAR	SOFIA	9	0	23	-10	4	-0.6	31	-10
ITALY	MILAN	14	3	25	-3	8	0.4	56	-22
	VERONA	13	3	23	-3	8	-0.1	35	-21
	VENICE	11	4	18	-2	7	-0.4	27	-30
	GENOA	14	7	18	2	10	-1.2	30	-57
	ROME	14	4	18	-2	9	-1.8	60	-4
	NAPLES	15	6	22	2	10	-0.4	91	7
GREECE	THESSALONIKA	13	4	22	-3	9	-1.1	36	-11
	LARISSA	16	2	25	-4	9	-0.4	19	-18
	ATHENS	15	8	22	2	12	-0.9	4	-31
TURKEY	ISTANBUL	11	4	25	-2	7	0.7	31	-32
	ANKARA	10	-2	23	-8	4	-0.9	26	-1
CYPRUS	LARNACA	18	7	24	4	13	-0.8	68	29
ESTONI	TALLINN	3	-3	20	-15	0	2.1	47	19
FSU	LENINGRAD	2	-4	8	-14	-1	0.8	27	-5
LITHUA	KAUNAS	3	-4	13	-17	-1	-0.2	44	12
FSU	MINSK	3	-4	12	-16	-1	0.8	49	9
	KAZAN	-3	-10	7	-21	-7	-1.3	23	-2
	MOSCOW	1	-5	8	-18	-2	0.3	24	-10
	SVERDLOVSK	-2	-14	4	-29	-8	-4.0	7	-8
	OMSK	-4	-12	2	-21	-8	0.1	39	25
	KUSTANAY	-5	-14	2	-27	-9	-1.4	21	6
	KRASNOYARSK	2	-8	10	-20	-3	3.2	4	-10
	NOVOSIBIRSK	-3	-10	5	-21	-7	4.9	7	-9
	BARNAUL	-2	-9	6	-20	-6	1.8	16	-3
	KHABAROVSK	1	-11	14	-20	-5	1.8	6	-11
	VLADIVOSTOK	3	-4	12	-10	0	1.9	1	-23
	KIEV	5	-2	18	-16	1	0.5	53	16
	LVOV	4	-4	16	-19	0	-0.8	63	22

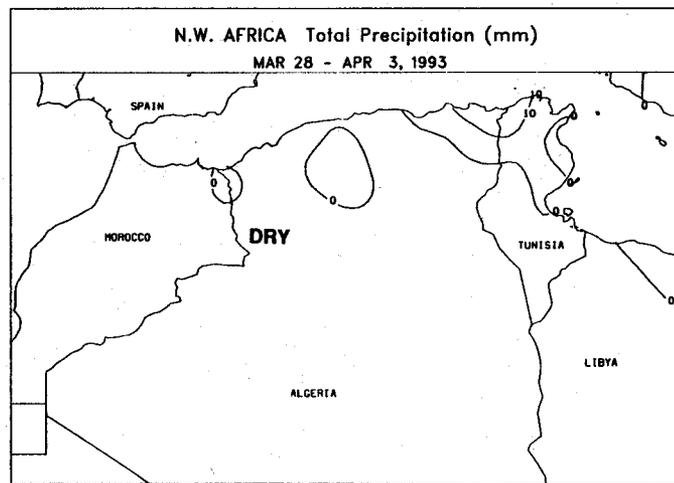
Based on Preliminary Reports

March 1993

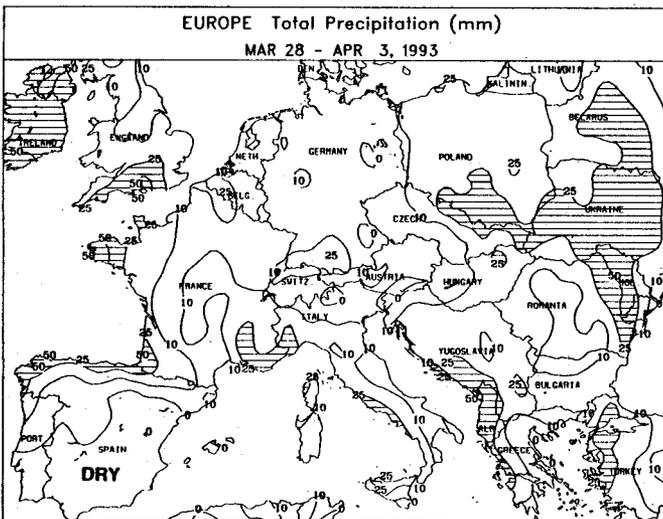
COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			
		AVG	AVG	HI	LO	DPART	F/NRM	TOTAL	F/NRM			AVG	AVG	HI	LO	DPART	F/NRM	TOTAL	F/NRM	
		MAX	MIN	MAX	MIN	AVG	F/NRM	TOTAL	F/NRM			MAX	MIN	AVG	F/NRM	TOTAL	F/NRM			
FSU	KIROVOGRAD	3	-5	19	-19	-1	-0.3	44	20	ETHIOP	ADDIS ABABA	**	**	29	2	**	***	***	**	
	ODESSA	5	-1	15	-7	2	-0.7	43	14	KENYA	NAIROBI	**	**	29	9	**	***	***	15	-54
	YALTA	10	4	21	-1	7	0.5	30	-12	TANZAN	DAR ES SALAAM	**	**	32	21	**	***	***	**	
	VORONEZH	1	-5	8	-21	-2	0.0	49	18	GABON	LIBREVILLE	30	24	32	20	27	-0.2	217	-189	
	SARATOV	-2	-6	6	-16	-4	0.4	40	20	TOGO	LOME	**	**	39	21	**	***	***	95	25
	KHARKOV	2	-4	12	-13	-1	-0.3	37	8	B FASO	OJAGADOUGOU	39	24	42	19	31	0.7	17	11	
	VOLGOGRAD	1	-5	12	-16	-2	1.0	21	-10	IVRY C	ABIDJAN	31	24	33	23	**	***	***	227	127
	ROSTOV	6	-1	17	-9	2	0.3	40	2	MOZAMB	MAPUTO	30	22	34	19	26	0.2	113	23	
	ASTRAKHAN	6	-3	20	-11	2	0.1	7	-8	ZAMBIA	LUSAKA	**	**	28	14	**	***	***	**	
	KRASNODAR	11	1	27	-9	6	2.3	8	-48	ZIMBAB	HARARE	26	16	29	13	21	1.3	34	-64	
	ORENBURG	-3	-11	3	-23	-7	-1.5	29	6	S AFRI	PRETORIA	27	17	31	14	22	1.0	91	12	
	TSELINOGRAD	-5	-12	2	-28	-8	2.3	35	26		JOHANNESBURG	24	13	27	9	18	0.1	137	47	
	KARAGANDA	-3	-10	5	-25	-7	-0.5	48	30		BETHAL	24	11	29	6	18	-0.1	118	31	
	TBILISI	14	2	25	-4	8	0.8	9	-20		DURBAN	29	20	34	17	24	0.7	39	-89	
	TASHKENT	12	4	20	-3	8	-0.5	94	24		CAPE TOWN	26	16	31	10	21	1.7	4	-18	
	ASHKABAD	15	4	26	-2	10	0.1	20	-23	CANADA	TORONTO	3	-7	17	-19	-2	-1.3	31	-25	
SYRIA	DAMASCUS	18	3	27	-3	10	-1.0	32	12		MONTREAL	1	-9	14	-24	-4	-1.8	70	3	
ISRAEL	JERUSALEM	16	6	26	1	11	-1.0	50	-41		WINNIPEG	-1	-10	8	-25	-5	1.5	10	-13	
PAKIST	KARACHI	32	18	37	15	25	0.8	0	-13		REGINA	3	-8	22	-28	-2	3.6	34	18	
INDIA	AMRITSAR	25	10	30	1	17	-1.6	34	-8		SASKATOON	3	-6	19	-20	-1	5.6	16	1	
	NEW DELHI	28	14	31	10	21	-1.4	12	-4		LETHBRIDGE	8	-4	18	-28	2	2.9	21	-5	
	AHMEDABAD	35	19	39	14	27	-0.3	0	0		CALGARY	5	-6	18	-25	0	2.0	18	4	
	INDORE	33	15	38	9	24	-1.1	3	0		EDMONTON	4	-5	13	-20	-1	2.8	16	-1	
	CALCUTTA	33	20	37	16	26	-1.2	50	28	MEXICO	VANCOUVER	11	4	16	-1	7	1.1	116	7	
	VERAVAL	32	21	38	16	27	1.6	0	0		GUADALAJARA	28	8	32	-1	18	-1.3	0	-6	
	BOMBAY	32	21	39	16	27	0.4	0	0		MEXICO CITY	**	**	29	7	**	***	***	**	
	POONA	35	15	37	11	25	-0.9	1	-2		ACAPULCO	32	21	35	19	27	0.7	0	-4	
	BEGAMPET	35	22	38	19	29	0.4	1	-14		BERMUD ST. GEORGES	22	17	24	13	20	1.4	102	-11	
	VISHAKHAPATNAM	31	25	32	21	28	***	0	**		BAHAMA NASSAU	26	17	30	11	22	-0.4	52	12	
	MADRAS	34	24	38	22	29	0.7	0	-5		CUBA HAVANA	27	20	32	15	23	0.0	53	9	
	MANGALORE	33	23	37	21	28	0.1	33	24		JAMAIC KINGSTON	31	23	32	21	27	1.0	16	-5	
H KONG	KINGS PEAK	22	17	28	11	20	***	51	**		P RICO SAN JUAN	30	22	33	19	26	0.8	16	-44	
N KREA	PYONGYANG	8	-3	16	-15	3	0.2	16	-35		GUADEL RAIZET	30	21	32	18	26	1.1	10	-35	
S KREA	SEOUL	11	2	17	-6	6	2.6	29	-27		MARTINQ LAMENTIN	28	23	29	19	26	0.9	129	54	
JAPAN	SAPPORO	5	-2	11	-7	1	1.4	48	-34		BARBAD BRIDGETOWN	30	23	31	20	27	0.7	20	-16	
	NAGOYA	14	4	20	0	9	1.0	66	-44		TRINID PORT OF SPAIN	32	22	33	20	27	1.7	10	-21	
	TOKYO	12	6	18	2	9	0.5	63	-37		COLOMB BOGOTA	20	8	22	2	14	0.1	64	5	
	YOKOHAMA	12	5	19	2	9	0.6	79	-40		VENEZU CARACAS	31	22	33	16	26	1.4	1	-22	
	KYOTO	13	4	20	-1	8	0.6	67	-42		F GUIA CAYENNE	29	23	30	19	26	0.2	323	-38	
	OSAKA	13	6	20	1	9	0.5	83	-19		BRAZIL FORTALEZA	30	24	31	23	27	0.4	212	-129	
THAILN	PHETCHABUN	36	23	39	20	30	1.3	27	-19		RECIFE	29	24	30	21	27	0.0	63	-195	
	BANGKOK	34	25	35	21	29	0.0	78	51		BELO HORIZONTE	30	20	32	18	25	1.4	104	-52	
MALAYS	KUALA LUMPUR	33	24	36	23	28	1.2	167	-48		CAMPO GRANDE	31	21	34	18	26	0.9	136	-11	
VIETNM	HANOI	24	18	32	12	21	1.0	62	24		FRANCA	28	19	31	17	23	1.9	211	24	
CHINA	HARBIN	5	-8	16	-15	-2	4.9	3	-7		LONDRINA	**	**	30	17	**	***	***	**	
	HAMI	15	0	21	-10	7	3.0	0	-1		SANTA MARIA	**	19	33	14	**	***	***	108	-1
	LANCHOW	13	2	21	-5	8	2.7	6	-3		PORTO ALEGRE	28	19	33	12	23	0.0	115	26	
	BEIJING	13	3	20	-6	8	2.7	0	-8		PERU LIMA	28	20	30	19	24	1.7	0	0	
	TIENTSIN	14	2	19	-5	8	2.0	0	-8		BOLIVI LA PAZ	14	3	17	0	8	-0.4	61	-17	
	LHASA	12	-2	18	-6	5	0.4	1	1		CHILE SANTIAGO	29	11	33	8	20	2.1	0	-2	
	KUNMING	22	7	26	4	15	1.8	1	-15		ARGENT IGUAZU	31	19	35	16	25	***	200	**	
	CHENGCHOW	14	3	25	-3	9	1.0	19	-6		FORMOSA	32	22	38	17	27	1.6	131	-31	
	YEHCHANG	14	8	24	3	11	0.4	74	17		CERES	29	18	38	12	23	0.8	113	-22	
	HANKOW	14	7	23	1	11	0.6	130	46		CORDOBA	28	17	37	12	23	2.6	52	-65	
	CHUNGKING	17	11	27	6	14	***	88	**		RIO CUARTO	27	17	33	13	22	2.2	143	24	
	CHIHKIANG	14	8	25	1	11	1.0	69	-4		ROSARIO	29	17	33	11	23	2.1	71	-95	
	WU HU	13	6	23	0	10	***	194	**		BUENOS AIRES	28	16	33	9	22	2.1	77	-29	
	SHANGHAI	12	6	21	-1	9	***	118	**		SANTA ROSA	28	16	35	8	22	2.6	133	46	
	NANCHANG	15	9	24	4	12	1.5	117	-34		TRES ARROYOS	28	14	35	6	21	2.7	26	-57	
	TAIPEI	21	16	31	12	18	1.2	189	15	N CALD	NOUMEA	29	23	36	21	26	0.6	222	87	
	CANTON	22	16	29	9	19	1.4	75	-10	FIJI	NAUSORI	29	24	33	22	27	0.5	474	62	
	NANNING	22	16	34	9	19	0.8	27	-21	SAMOA	PAGO PAGO	30	25	32	23	28	0.2	442	147	
CNRY I	LAS PALMAS	22	15	27	11	18	0.0	18	7	TAHITI	PAPEETE	32	25	35	24	29	1.7	20	-175	
MOROCC	CASABLANCA	20	12	27	7	16	1.6	39	-10	N ZEAL	AUCKLAND	22	14	25	7	18	-0.6	39	-42	
	MARRAKECH	23	11	32	7	17	1.2	20	-12		WELLINGTON	18	12	25	7	15	***	120	**	
ALGERI	ALGER	19	6	28	0	13	-0.3	63	5	PA N G	PORT MORESBY	31	23	32	22	27	-0.2	26	-206	
	BATNA	14	**	22	-1	**	***	20	-23	AUSTRL	DARWIN	32	25	34	22	28	0.3	147	-191	
TUNISI	TUNIS	**	**	27	2	**	***	53	8		MOREE	30	16	34	10	23	-1.0	49	-2	
NIGER	NIAMEY	39	24	42	19	31	0.8	0	-4		BRISBANE	27	19	35	14	23	-1.0	116	-28	
MALI	TIMBUKTU	37	20	41	14	29	1.3	0	0		PERTH	27	16	36	8	21	-1.7	5	-10	
	BAMAKO	38	25	40	20	31	0.9	3	0		CEDUNA	25	13	37	6	19	-0.5	2	-18	
MAURIT	NOUAKHOTT	33	18	42	11	26	1.4	7	7		ADELAIDE	24	14	34	8	19	-0.8	13	-8	
SENEGL	DAKAR	25	1																	



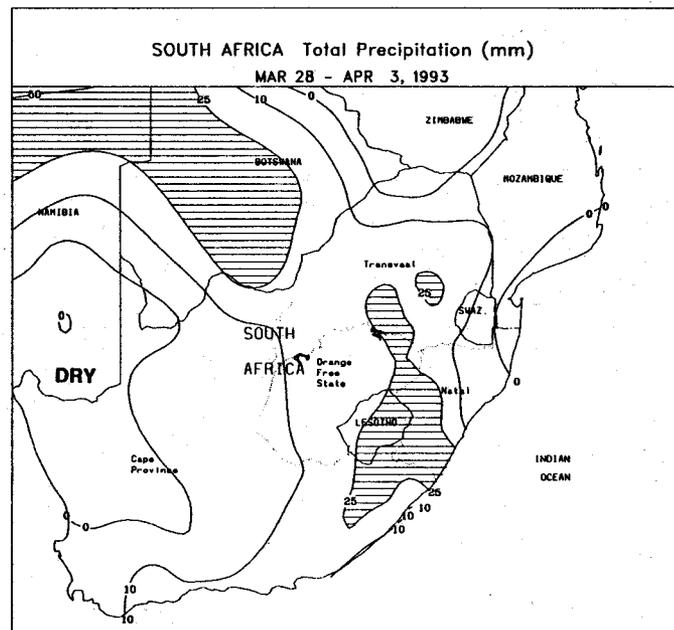
FSU-WESTERN: The third consecutive week of unseasonably warm weather continued to diminish snow cover in the north and promoted greening of winter grains in the south. Mild weather (weekly average temperatures ranging from 6 to 12 degrees Celsius (C)) and rain showers over winter grain areas in southern and eastern Ukraine, and North Caucasus caused crops to begin greening about 1 week earlier than usual. In addition, soil temperatures were high enough to allow early-season fieldwork in preparation for spring grain planting in Ukraine and North Caucasus. Generous amounts of precipitation (6-25 mm) in the Baltic States, Belarus, Ukraine, and North Caucasus helped to boost topsoil moisture for early-spring growth.



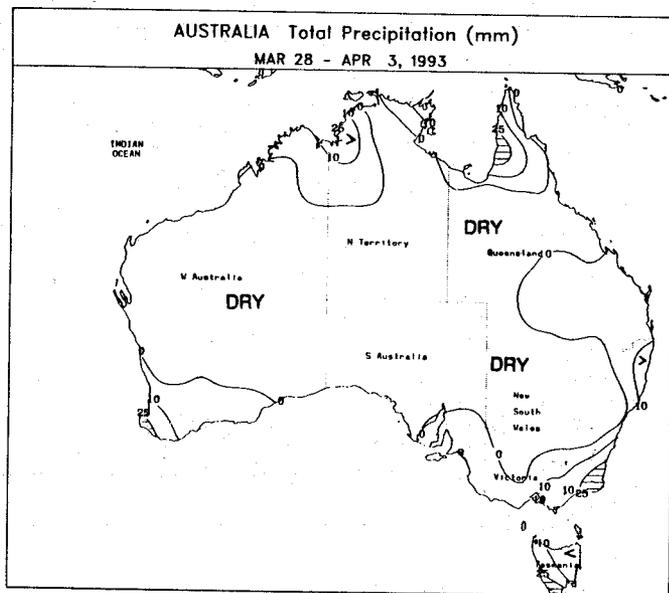
NORTHWESTERN AFRICA: Dry weather covered winter grain areas in Morocco and western Algeria. This past week's dry weather continued an insufficient rainfall pattern which has covered winter grain areas since the beginning of the growing season, causing a significant reduction in yield prospects. In eastern Algeria and Tunisia, light, scattered showers (4-22 mm) fell over coastal winter grain areas, where crops were in the reproductive phase of development. In contrast, dry weather covered interior crop areas, where winter grains were also in or nearing reproduction. Average temperatures were near normal in Morocco, 1-2 degrees C above normal in western Algeria, and 2-3 degrees C below normal in eastern Algeria and Tunisia.



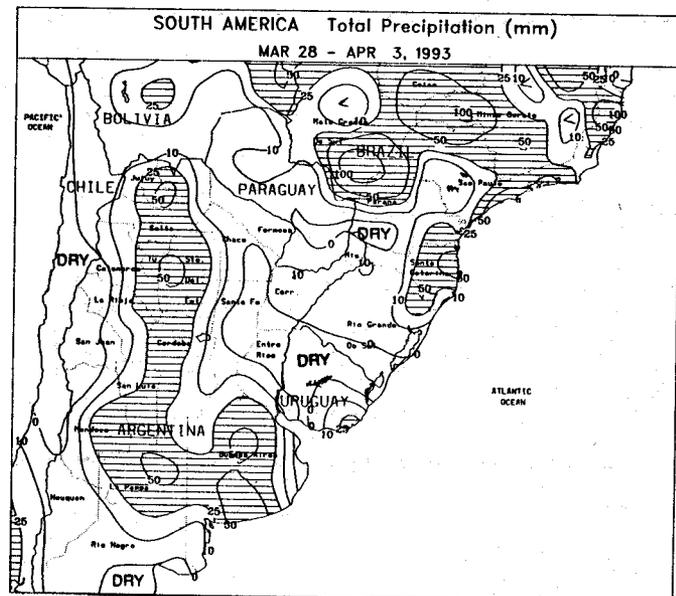
EUROPE: Across France and the United Kingdom, scattered showers (5-25 mm or more, with amounts of 25-50 mm over coastal areas) and slightly below normal temperatures increased topsoil moisture for summer grain planting, but slowed winter wheat greening. Freezing temperatures occurred again from southern England to northern Spain. The drought intensified over Spain as rainfall was limited to the Atlantic Coast. Precipitation was mostly light (10 mm or less) over Benelux and Germany, but in eastern Europe, light to moderate precipitation (10-35 mm) covered most crop areas from Poland to Bulgaria. The moisture improved spring planting prospects but slowed growth of winter wheat in the southeast that had begun to break dormancy. Variable showers (5-42 mm) continued over Italy, improving crop prospects, while in Greece, moderate precipitation (10-34 mm) was limited to west-coastal areas. Temperatures averaged 2-4 degrees C below normal across the northern Mediterranean.



SOUTH AFRICA: Moderate showers (10-33 mm) covered most primary grain areas, boosting topsoil moisture for winter wheat planting. The showers helped late-planted immature corn but continued to miss most of Natal's drought-stricken sugarcane. Rainfall continued to be mostly light (1-24 mm) over crop areas of the southern Cape Provinces, which accounts for about 25 percent of the total wheat crop.



AUSTRALIA: Little or no rain fell across the eastern summer crop areas, allowing cotton and sorghum harvesting to progress. Rainfall continued to be sparse across northeastern Queensland, limiting sugarcane growth. Temperatures averaged 2-3 degrees C below normal across the eastern summer crop region.



SOUTH AMERICA: Dry weather prevailed across central Argentina early in the week, allowing corn, sorghum, and sunflowerseed harvesting. However, a late-week cold front brought moderate to heavy showers (14-64 mm), delaying harvesting, but aiding late-season filling soybeans. Dryness across northern Argentina favored cotton harvesting. Maximum temperatures averaged 29-31 degrees C early in the week, and after the frontal passage, averaged 12-16 degrees C. Weekly temperatures averaged 2-4 degrees above normal in central Argentina, due to the early-week warm weather. Across southern Brazil, light rain (6-18 mm) slowed harvesting in Rio Grande do Sul, western Santa Catarina, and southern Parana. However, to the north, scattered moderate to heavy showers (25-65 mm) delayed corn, soybean, and cotton harvesting. Isolated heavier amounts (greater than 100 mm) were reported in southern Mato Grosso do Sul and western Minas Gerais, possibly causing flooding. Temperatures averaged near normal across most of southern Brazil.

(Continued from front cover)

thunderstorms shifted their fury eastward, while heavy rain and wet snow developed across the **upper Midwest** and **Great Lakes** regions. Rainfall topped 2 inches in **Rochester, MN**, and **Chicago, IL**. Snowfall included 9 inches in **Eau Claire, WI**, and 6 inches at **Red Wing, MN**. By Thursday, severe weather and heavy precipitation reached the **East**. Once again, saturated soils from the **Middle Atlantic States** northward were unable to absorb rainfall that totaled as much as 2 inches, causing additional flooding. On the northern fringe of the precipitation shield, **Presque Isle, ME**, garnered 11 inches of snow, while **Portland, ME**, added 7 inches. Elsewhere, cold air poured deep into the **Southeast** in the storm's wake, while a new storm center traversed the **Northwest** en route to the **southern Plains**. On Saturday morning, sub-freezing temperatures reached the northern portions of **Alabama** and **Georgia**. Lows included 31°F in both **Birmingham, AL**, and **Macon, GA**. Farther west, the **Pacific Northwest** was drenched with heavy rain, while higher elevations from the **Cascades** and **Sierra Nevada** to the **central Rockies** collected heavy snow. **Brookings, OR**, reported more than 5 inches of rain, and **Cuchara, CO**, was buried under 31 inches of new snow. By late Saturday, heavy rain streaked out across the **central Plains**, while intense thunderstorms fired along the **Gulf coast**. Rainfall included 1.30 inches in **Topeka, KS**, and more than 3 inches in **Houston, TX**, and **Lafayette, LA**.

(Continued from p. 18)

WISCONSIN: Temperature 36°, 1° below normal. Extremes 2°, 70°. Heavy snow developed in parts of the south, west on the 31st. The greatest amount occurred at Eau Claire with 9 in. Other areas of the State received up to 6 in. Most of this snow was melted by the 4th.

Days suitable for fieldwork 0.2. Soil moisture 59% adequate, 41% surplus. Intended spring tillage 5% complete, 1% in 1992, 1% avg. Oats 0% planted, 0% in 1992, 1% avg. 1992 corn for grain crop 93% harvested. Early April frost depth 7.2 in. Snow depth 1.7 in. Data relates to 2nd.

WYOMING: It was a warm week with all areas 1 to 8° above normal. Precipitation was above normal with the exception of the northeast corner.

Days suitable for fieldwork 2.6. Topsoil moisture 3% short, 82% adequate, 15% surplus. Subsoil moisture, 8% short, 92% adequate. Spring wheat 5% planted, 32% 1991, 9% avg. Oats 3% planted, 17% 1991, 4% avg. Barley 15% planted, 54% 1991, 24% avg. Winter wheat 1% fair, 99% good. Wind/freeze damage mostly light. Alfalfa prospects fair to good. Livestock fair to good. Spring calves born 64%, 62% 1991, 51% avg. Calf death losses varied light to heavy. Farm flock: ewes lambed 68%, 72% 1991, 59% avg.; shorn 64%, 80% 1991, 58% avg. Range flock: ewes lambed 12%, 30% 1991, 22% avg.; shorn 18%, 60% 1991, 34% avg. Lamb death losses light to normal.

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(Continued from p. 14)

Crop Condition (Percent)

for the Week Ending April 4, 1993

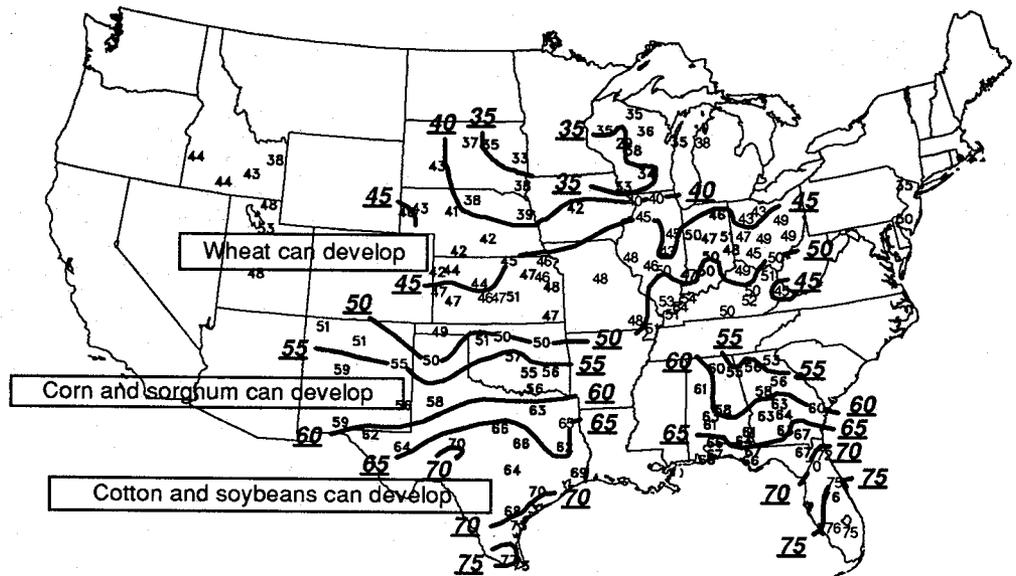
WINTER WHEAT

State	VP	P	F	G	EX
AR	0	1	30	59	10
CA	0	0	0	50	50
CO	0	1	12	65	22
GA	0	13	56	26	5
ID	1	2	20	69	8
IL	0	0	17	78	5
IN	0	3	27	67	3
KS	0	1	2	47	50
MI	3	20	45	30	2
MO	1	5	52	39	3
MT	0	1	24	63	12
NE	0	0	22	68	10
NC	0	0	32	66	2
OH	5	10	15	54	16
OK	0	0	30	70	0
OR	0	0	4	63	33
SD	0	1	16	49	34
TX	0	4	34	53	9
WA	0	0	17	83	0
19 State	0	2	20	58	20
Prev Week	N/A	N/A	N/A	N/A	N/A
Prev Year	3	8	39	44	6

VP - Very Poor P - Poor F - Fair
 G - Good EX - Excellent

Average Soil Temperature(°F 4-Inch Bare)

Mar 28-Apr 3, 1993



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
 Based on preliminary data

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