

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

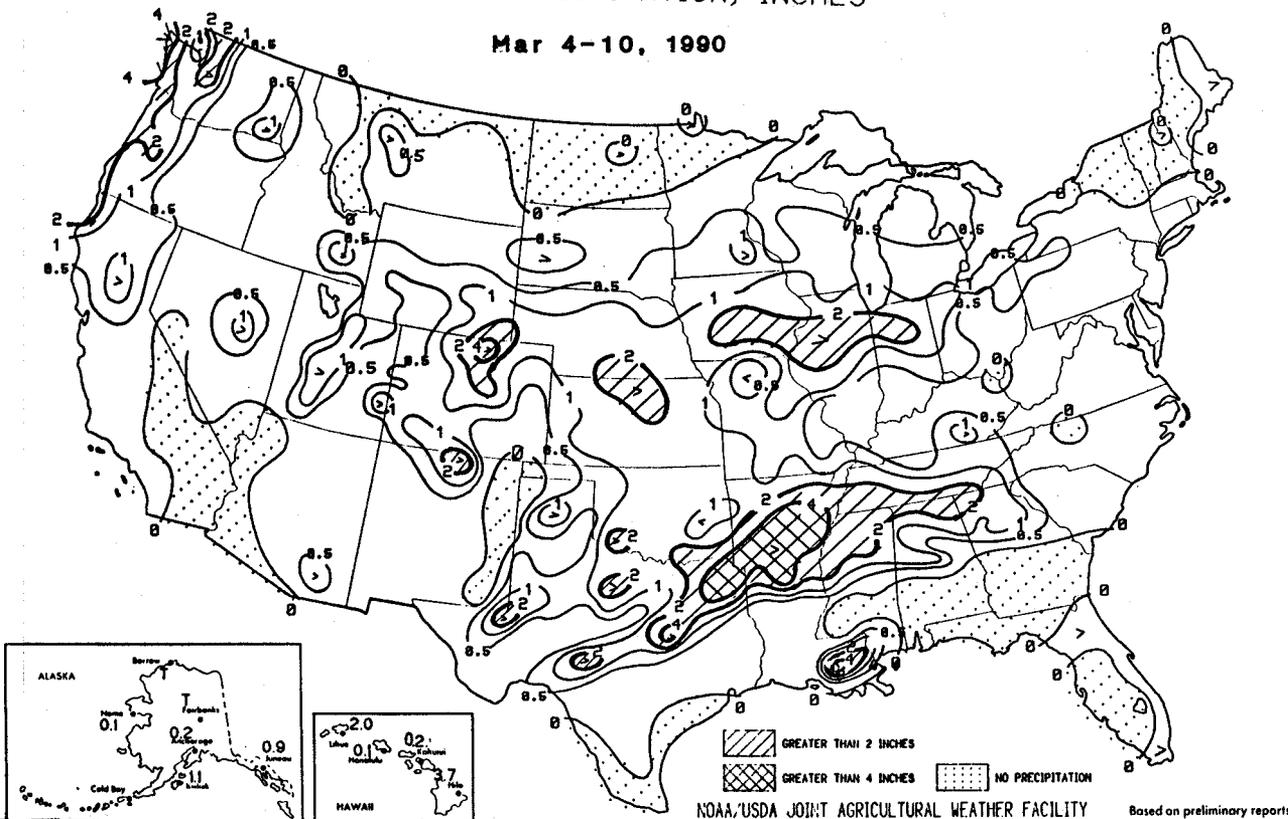
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Washington, D.C.

March 13, 1990

TOTAL PRECIPITATION, INCHES

Mar 4-10, 1990



HIGHLIGHTS

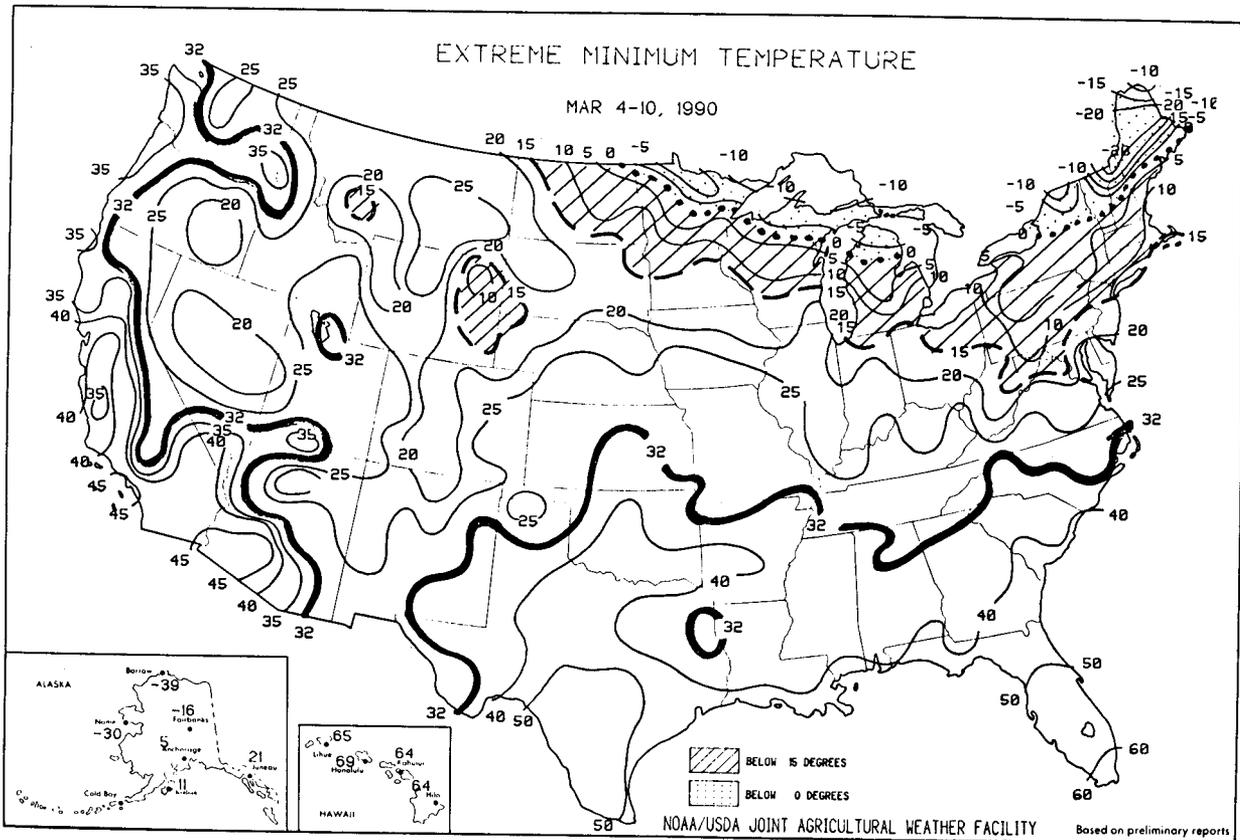
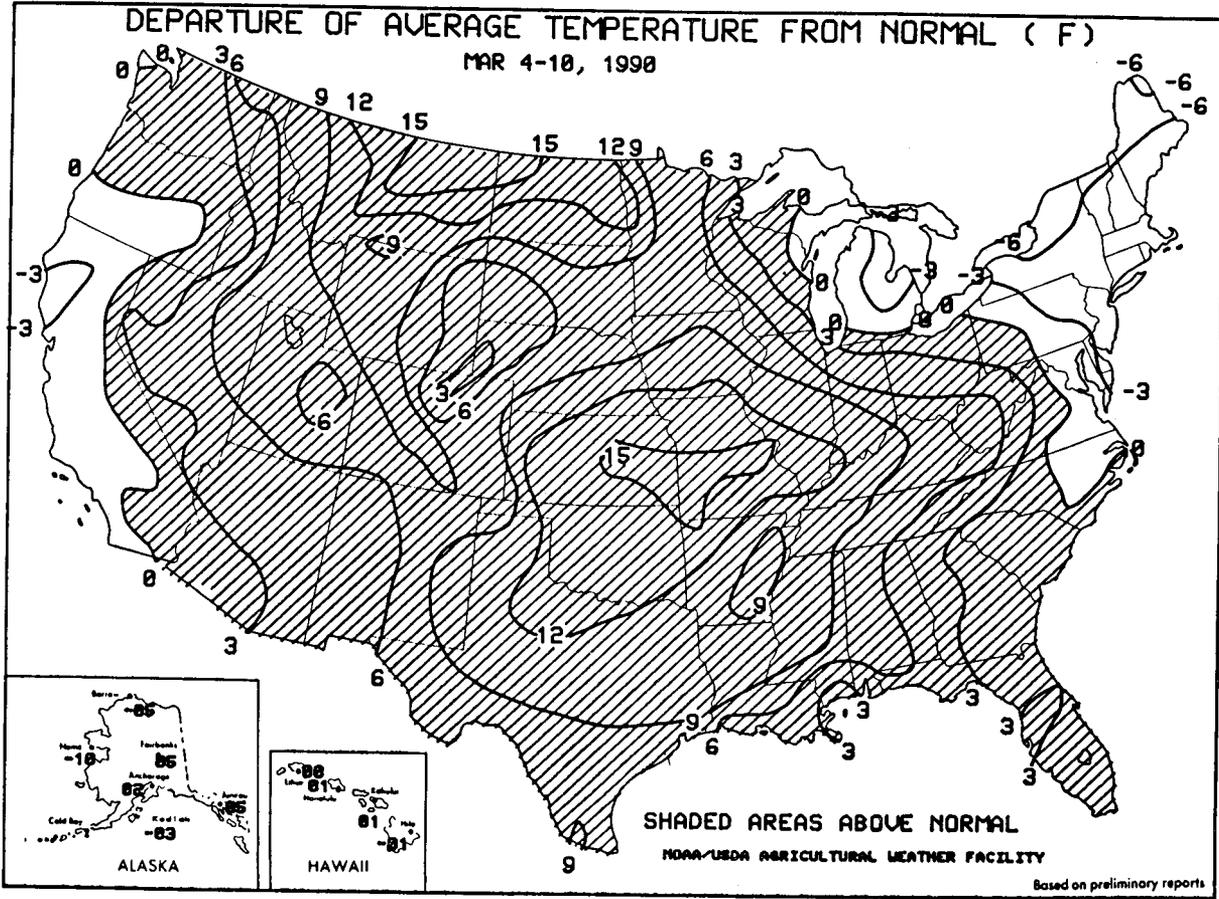
March 4-10, 1990

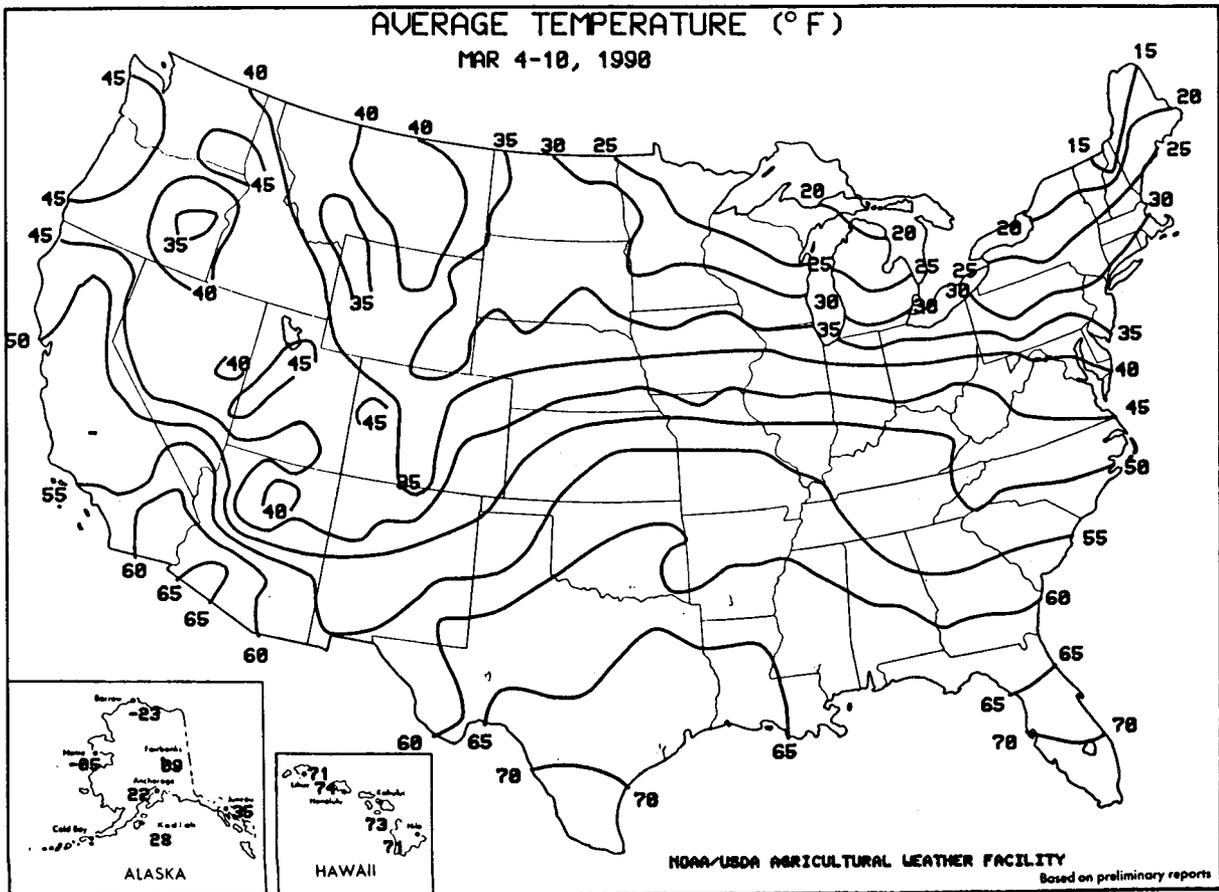
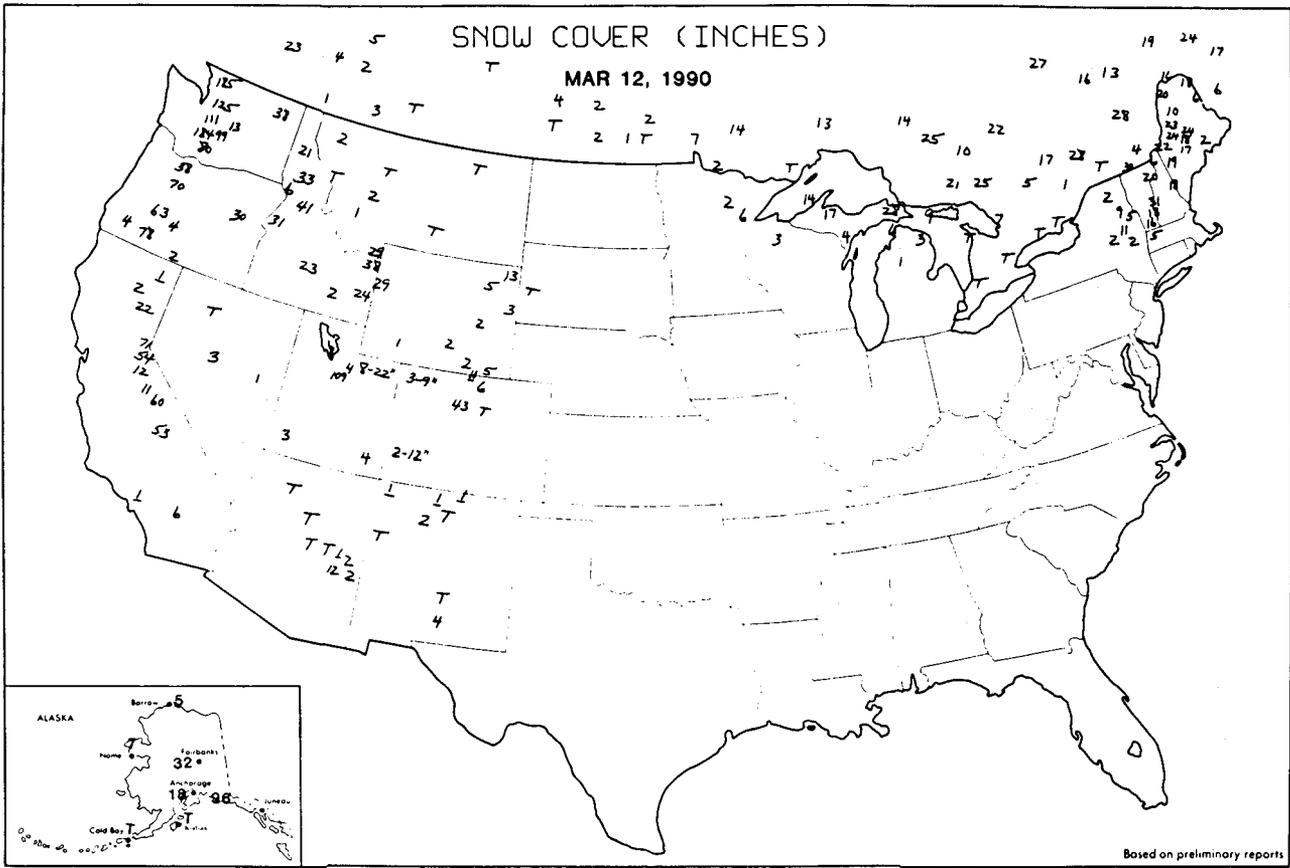
A storm system developed over the **Southwest** on the 5th and then drifted eastward during the remainder of the week, spreading abundant precipitation across the **central Rockies, central and southern Plains**, and into the **Mississippi, Ohio, and Tennessee Valleys**. The storm gave much needed rainfall of more than 2 inches to portions of the **central Plains** and **western Corn Belt** plagued by long-term drought. Severe thunderstorms dumped torrential rain across **Arkansas** and caused flooding, while heavy snow blanketed the **central Rockies** and **High Plains**. A band of freezing rain extended from **Nebraska** into the **upper Mississippi Valley**. In **Iowa**, the ice storm was described as the worst in a century, downing power lines and trees and closing businesses. At week's end, isolated thunderstorms brought heavy rain
(Continued to p. 15)

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National Weather Data for Selected Cities

Weather Data for the Week Ending March 10, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	70	44	82	31	57	6	.4	-1.1	.4	1.0	47	15.9	133	95	48	0	2	1	0		
MOBILE	72	51	76	39	62	4	T	-1.4	T	.3	16	15.8	138	94	50	0	0	0	0		
MONTGOMERY	74	45	83	33	59	5	0	-1.3	0	.7	36	18.5	175	89	36	0	0	0	0		
AK ANCHORAGE	29	16	35	5	23	2	.2	.1	.2	.4	183	3.3	177	88	52	0	7	3	0		
BARROW	-18	-29	-12	-39	-23	-5	T	0	T	T	100	.1	31	79	65	0	7	1	0		
FAIRBANKS	21	-3	29	-16	9	5	T	-1	T	T	13	1.2	110	90	57	0	7	1	0		
JUNEAU	39	30	42	21	35	5	1.0	.2	.5	1.5	135	9.6	113	92	56	0	4	4	1		
KODIAK	33	22	39	11	28	-3	1.1	.2	.7	1.4	104	11.0	90	84	52	0	7	4	1		
NOME	5	-15	19	-30	-5	-10	-1	0	-1	.1	81	1.5	108	88	69	0	7	2	1		
AZ PHOENIX	74	52	82	48	63	4	.2	0	.2	.2	61	1.7	107	51	18	0	0	0	0		
PRESCOTT	60	32	69	27	46	5	.1	-.3	0	.1	9	2.6	68	72	24	0	3	2	0		
TUCSON	75	45	85	37	60	4	.2	0	.2	.2	79	1.9	113	59	16	0	0	0	0		
YUMA	77	53	82	46	65	3	0	0	0	0	0	.1	21	46	16	0	0	0	0		
AR FORT SMITH	71	51	82	34	61	13	1.0	.2	.7	1.0	86	12.1	220	97	51	0	0	0	0		
LITTLE ROCK	67	51	74	37	59	10	5.5	4.5	3.5	5.6	401	15.2	167	82	61	0	0	0	0		
CA BAKERSFIELD	65	44	73	40	55	-1	.4	.2	.4	.4	127	2.2	97	96	46	0	0	0	0		
EUREKA	53	41	57	35	47	-1	2.2	1.0	1.0	2.6	153	14.4	104	90	65	0	0	0	0		
FRESNO	63	44	68	41	53	0	.4	.1	.2	.6	100	4.7	106	92	50	0	0	0	0		
LOS ANGELES	61	49	67	46	55	-2	T	-1	T	T	6	3.8	62	96	62	0	0	0	0		
REDDING	62	39	73	32	50	-3	.8	-.4	.5	2.2	126	11.7	71	90	43	0	1	0	0		
SACRAMENTO	62	41	67	36	52	-1	.7	.1	.4	.8	112	8.7	115	97	50	0	0	0	0		
SAN DIEGO	62	52	68	45	57	-1	T	-.4	T	T	3	3.6	84	79	43	0	0	0	0		
SAN FRANCISCO	58	44	64	42	51	-1	.4	-.3	.2	.7	75	6.1	69	93	59	0	0	0	0		
CO DENVER	53	28	62	23	41	5	1.9	1.7	1.4	1.9	588	3.1	211	88	46	0	5	5	1		
GRAND JUNCTION	57	38	66	32	47	8	.3	.1	.1	.3	118	1.4	99	83	37	0	1	1	0		
PUEBLO	59	32	68	27	45	7	.5	.3	.3	.5	265	1.7	264	91	41	0	4	2	0		
CT BRIDGEPORT	37	21	45	10	29	-6	.3	-.5	.3	.3	28	6.2	83	70	36	0	7	0	0		
HARTFORD	40	17	55	7	29	-5	.3	-.6	.3	.3	21	7.6	96	65	31	0	7	1	0		
DC WASHINGTON	53	31	70	22	42	0	T	-.8	T	.1	6	4.2	66	79	37	0	5	0	0		
FL APALACHICOLA	72	53	76	45	62	4	0	-.9	0	.2	18	6.6	77	93	53	0	0	0	0		
DAYTONA BEACH	75	56	80	49	66	3	T	-.7	T	T	4	7.0	108	94	53	0	0	0	0		
JACKSONVILLE	75	50	85	44	63	2	.1	-.7	.1	.1	12	6.0	79	97	46	0	0	0	0		
KEY WEST	78	69	80	65	73	0	.3	0	.2	.5	111	1.5	35	84	61	0	0	0	0		
MIAMI	78	64	82	60	71	0	.3	-.1	.1	.6	104	2.0	43	84	52	0	0	0	0		
ORLANDO	79	57	82	51	68	3	T	-.8	T	T	2	5.1	80	92	40	0	0	0	0		
TALLAHASSEE	78	47	84	37	63	5	0	-1.3	0	T	1	9.9	86	94	37	0	0	0	0		
TAMPA	80	57	83	51	68	4	0	-.8	0	T	0	5.1	81	93	41	0	0	0	0		
WEST PALM BEACH	78	63	80	56	71	2	.3	-.4	.2	.8	86	3.3	54	83	45	0	0	0	0		
CA ATLANTA	66	43	79	37	55	5	.7	-.6	.6	1.9	99	20.0	179	82	44	0	0	0	0		
AUGUSTA	67	43	83	40	55	2	.3	-.8	.3	.6	34	6.0	62	97	45	0	0	0	0		
MACON	71	43	83	35	57	3	T	-1.2	T	1.0	60	9.1	87	93	39	0	0	0	0		
SAVANNAH	69	47	84	43	58	2	T	-.9	T	T	0	7.1	95	88	43	0	0	0	0		
HI HILO	76	65	79	64	71	-1	3.7	-.6	1.9	8.2	186	43.6	160	93	73	0	0	0	0		
HONOLULU	79	69	83	69	74	1	.1	-.7	.1	.3	24	8.7	113	77	57	0	0	0	0		
KAHULUI	79	68	85	64	73	1	.2	-.5	.1	1.2	120	9.9	124	92	64	0	0	0	0		
LIHUE	75	68	78	65	72	0	2.0	1.0	1.4	2.4	169	12.9	114	86	71	0	0	0	0		
ID BOISE	54	30	60	25	42	2	.2	0	.2	.5	152	2.1	69	87	35	0	6	1	0		
LEWISTON	56	38	63	36	47	6	.6	.4	.5	.6	194	1.2	45	73	37	0	0	0	0		
POCATELLO	50	31	61	27	41	7	1.4	1.2	.7	1.6	571	2.4	108	87	47	0	4	3	2		
IL CHICAGO	44	30	62	23	37	4	1.7	1.2	1.4	1.7	252	6.2	180	88	63	0	4	3	1		
MOLINE	49	33	65	21	41	9	3.6	3.1	1.8	3.6	506	7.4	205	95	67	0	4	4	2		
PRORIA	50	35	68	22	42	9	2.8	2.3	1.6	2.8	374	8.2	216	93	67	0	4	4	2		
QUINCY	57	38	77	27	47	12	1.6	1.0	.7	1.6	183	6.5	177	93	64	0	4	5	2		
ROCKFORD	42	29	58	20	36	6	1.0	.5	.9	1.0	154	3.9	123	90	65	0	2	5	1		
SPRINGFIELD	56	37	77	26	47	11	2.0	1.4	1.1	2.0	239	8.3	204	94	65	0	4	3	1		
IN EVANSVILLE	62	43	82	24	53	11	.1	-.9	.1	.1	5	9.9	134	89	48	0	2	2	0		
FORT WAYNE	46	27	65	19	36	3	1.1	.5	.7	1.1	130	10.2	209	93	64	0	5	5	1		
INDIANAPOLIS	55	35	68	21	45	8	.8	.1	.7	.8	76	7.6	124	86	47	0	4	3	1		
SOUTH BEND	42	25	61	13	34	1	1.2	-.6	.6	1.2	139	7.3	139	90	59	0	5	4	1		
IA DES MOINES	52	32	72	25	42	11	3.1	2.7	2.1	3.1	549	5.5	206	90	65	0	4	5	2		
SIOUX CITY	46	30	62	23	38	8	.8	.5	.6	.8	169	1.4	69	89	68	0	4	2	1		
WATERLOO	46	29	63	20	38	10	1.1	-.7	.6	1.1	205	2.0	86	89	60	0	5	3	1		
KS CONCORDIA	61	40	71	30	50	13	2.2	1.9	2.0	2.2	431	2.9	149	96	61	0	1	4	1		
DODGE CITY	64	41	80	29	53	13	1.1	.8	.8	1.1	279	3.9	294	93	47	0	1	2	1		
GOODLAND	58	33	65	27	46	11	.9	.7	.8	.9	310	2.0	202	95	59	0	3	3	1		
TOPEKA	63	40	77	26	52	13	1.0	.6	.5	1.0	172	4.5	180	94	65	0	2	5	1		
WICHITA	63	45	78	34	54	13	1.1	.7	.9	1.1	193	5.0	243	95	68	0	0	3	1		
KY BOWLING GREEN	64	41	82	27	52	9	T	-1.2	T	T	.1	7	121	92	45	0	2	1	0		
LEXINGTON	59	38	69	23	49	8	T	-1.0	T	T	.1	7	93	84	48	0	3	2	0		
LOUISVILLE	62	41	73	26	52	10	.2	-.8	.2	.3	20	10.9	136	82	47	0	2	3	0		
LA ALEXANDRIA	77	60	85	39	68	12	T	-1.0	T	T	.9	57	173	76	48	0	0	1	0		
BATON ROUGE	76	55	82	37	65	7	.8	-.3	.7	2.5	168	20.9	190	95	53	0	0	2	1		
LAKE CHARLES	73	57	78	40	65	7	.1	-.6	.1	1.2	122	14.7	164	98	64	0	0	1	0		
NEW ORLEANS	75	53	80	39	64	5	.2	-.9	.2	1.2	78	20.3	173	97	56	0	0	1	0		

Based on 1951-80 normals

Weather Data for the Week Ending March 10, 1990

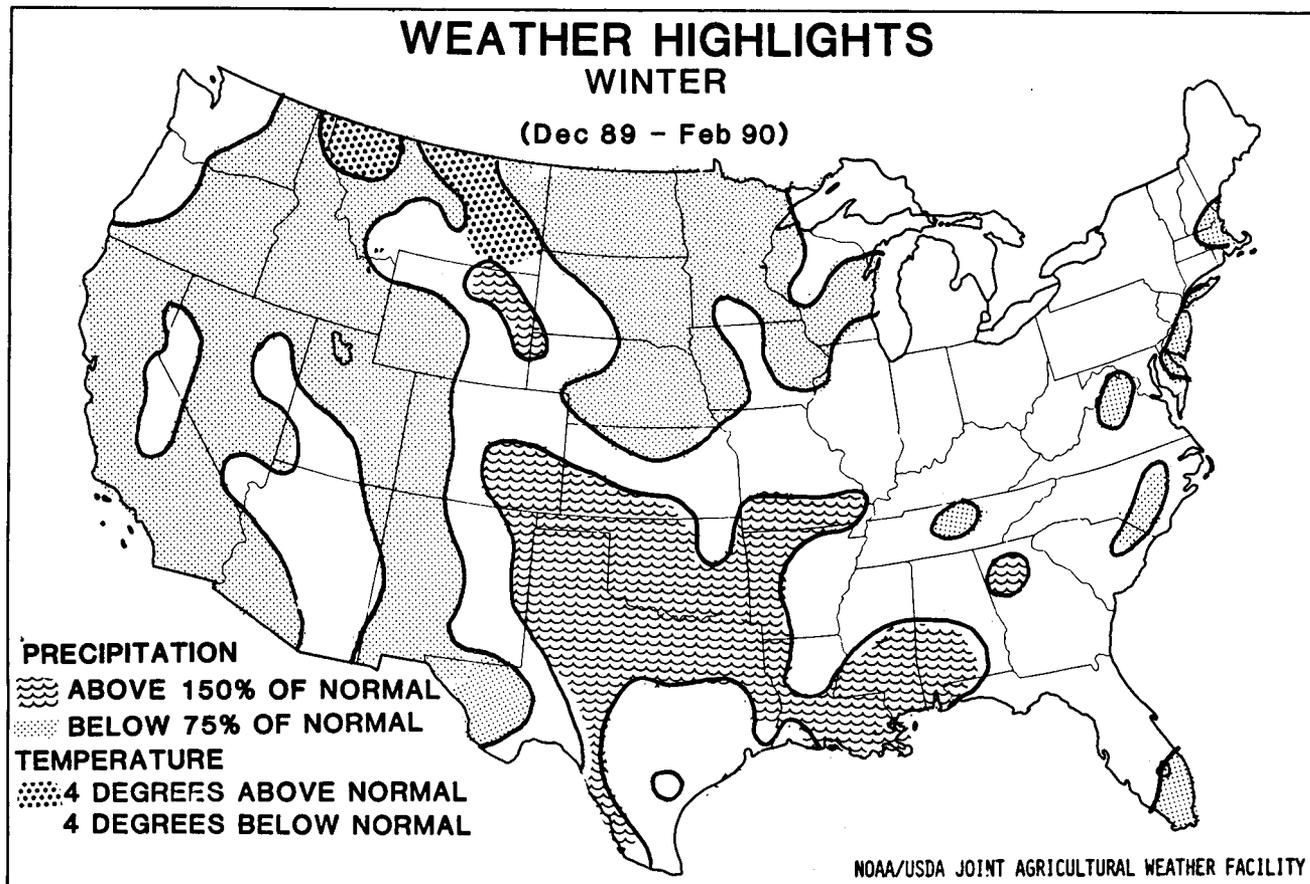
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW		.01 INCH OR MORE	.50 INCH OR MORE
																TEMP. °F	PRECIP.				
SHREVEPORT	74	54	84	34	64	10	.3	-1.5	.3	.7	57	17.6	204	93	51	0	0	0	0	0	0
ME CARIBOU	28	4	50	19	16	6	.4	-1.5	.4	.3	3	5.3	103	75	40	0	0	0	0	0	0
PORTLAND	37	15	50	10	26	6	.4	-1.9	.4	.1	1	5.7	70	27	0	0	0	0	0	0	0
MD BALTIMORE	49	27	62	18	38	3	.4	-1.9	.4	.1	1	4.9	69	27	0	0	0	0	0	0	0
SALISBURY	51	26	63	15	39	3	.2	-1.8	.2	.1	1	6.6	95	59	0	0	0	0	0	0	0
MA BOSTON	39	21	56	12	30	3	.1	-1.9	.1	.1	1	7.3	81	77	0	0	0	0	0	0	0
CHATHAM	36	25	44	20	31	4	.4	-1.5	.4	.4	4	9.8	100	80	46	0	0	0	0	0	0
MI ALPENA	32	6	47	-7	19	19	.1	-2.2	.1	.1	1	27	102	91	55	0	0	0	0	0	0
DETROIT	37	24	55	14	30	3	.9	-1.4	.9	.6	6	124	94	70	0	0	0	0	0	0	0
FLINT	35	19	49	9	27	2	.6	-1.9	.6	.6	6	98	134	89	58	0	0	0	0	0	0
GRAND RAPIDS	34	19	48	10	26	6	.7	-2.2	.7	.7	7	94	122	85	65	0	0	0	0	0	0
HOCHEMUN LAKE	34	10	44	-4	22	25	.1	-3.3	.1	.1	1	13	74	88	57	0	0	0	0	0	0
LANSING	36	15	54	4	25	19	.5	-1.1	.5	.5	5	80	119	90	57	0	0	0	0	0	0
MARQUETTE	31	7	49	-9	19	19	.1	-3.3	.1	.1	1	30	84	96	49	0	0	0	0	0	0
MUSKOGON	35	21	47	11	28	19	.8	-1.1	.8	.8	8	107	102	86	60	0	0	0	0	0	0
SAULT ST. MARIE	30	8	44	-3	19	19	.1	-3.3	.1	.1	1	18	104	90	48	0	0	0	0	0	0
MN ALEXANDRIA	37	21	51	10	29	9	.1	-1.1	.1	.1	1	30	31	91	64	0	0	0	0	0	0
DULUTH	30	17	54	7	24	4	.2	-1.1	.2	.2	2	47	1.3	97	59	0	0	0	0	0	0
IRVY L FALLS	36	12	50	-4	24	8	.2	-2.2	.2	.2	2	10	1.0	53	80	32	0	0	0	0	0
MINNEAPOLIS	37	25	42	18	31	6	.9	-1.5	.9	.9	9	183	1.8	83	82	58	0	0	0	0	0
ROCHESTER	38	26	47	18	32	7	.7	-1.4	.7	.7	7	160	2.0	101	92	65	0	0	0	0	0
MS GREENWOOD	71	53	83	34	62	10	2.0	-1.6	1.7	3.1	160	16.7	144	89	46	0	0	0	0	0	0
JACKSON	77	51	86	33	64	10	0	-1.2	0	2.1	122	22.5	207	95	39	0	0	0	0	0	0
MERIDIAN	75	50	85	34	63	9	.1	-1.4	.1	.9	45	27.9	240	94	39	0	0	0	0	0	0
MO CAPE GIRARDEAU	63	47	75	25	55	1	.6	-1.5	.3	.6	37	14.0	188	95	58	0	0	0	0	0	0
COLUMBIA	62	41	80	25	51	12	1.3	-1.6	1.3	1.3	138	7.0	153	93	58	0	0	0	0	0	0
KANSAS CITY	62	42	74	30	52	13	.6	0	.3	.6	78	3.9	123	91	66	0	0	0	0	0	0
SAINT LOUIS	64	45	84	30	54	15	.4	-1.3	.2	.4	44	5.4	112	85	49	0	0	0	0	0	0
SPRINGFIELD	64	47	77	30	56	14	1.2	-1.5	1.2	1.2	119	12.1	257	89	57	0	0	0	0	0	0
MT BILLINGS	53	32	69	27	42	11	.1	-1.1	.1	.1	31	.9	46	83	45	0	0	0	0	0	0
GLASGOW	53	27	66	22	40	16	.2	0	.2	.2	25	.4	60	82	41	0	0	0	0	0	0
GREAT FALLS	52	28	65	23	40	11	.5	-1.3	.5	.5	200	1.0	50	72	31	0	0	0	0	0	0
HAVRE	54	27	64	23	40	14	0	-1.1	0	0	0	.4	3	89	40	0	0	0	0	0	0
HELENA	52	26	65	20	39	10	.3	-1.1	.3	.3	137	.9	66	82	32	0	0	0	0	0	0
KALISPELL	46	29	53	25	38	8	.3	-1.1	.3	.3	93	2.9	99	91	46	0	0	0	0	0	0
MILES CITY	52	30	66	27	41	13	.1	-1.1	.1	.1	38	.2	14	84	44	0	0	0	0	0	0
MISSOULA	51	26	58	24	39	6	.2	-1.2	.2	.2	8	1.2	51	86	34	0	0	0	0	0	0
NE GRAND ISLAND	53	33	67	26	43	10	1.9	1.6	1.4	1.9	487	2.7	163	96	64	0	0	0	0	0	0
LINCOLN	56	33	71	25	45	12	1.1	-1.7	1.1	1.1	213	1.8	82	93	63	0	0	0	0	0	0
NORFOLK	47	30	61	23	38	8	1.0	-1.7	1.0	1.0	241	2.1	125	94	68	0	0	0	0	0	0
NORTH PLATTE	51	31	65	27	41	9	1.4	1.1	1.4	1.4	466	1.8	151	92	57	0	0	0	0	0	0
OMAHA	51	34	69	29	42	9	1.3	-1.9	1.3	1.3	258	2.3	111	90	70	0	0	0	0	0	0
SCOTTSBLUFF	47	26	62	18	36	3	1.6	1.4	1.2	1.6	623	2.9	269	91	56	0	0	0	0	0	0
VALENTINE	45	25	61	19	35	6	.9	-1.8	.9	.9	470	1.2	125	88	58	0	0	0	0	0	0
NV ELY	50	27	58	16	39	7	.3	-1.1	.3	.3	104	2.2	131	84	38	0	0	0	0	0	0
LAS VEGAS	69	46	75	41	58	4	.2	-1.1	.2	.2	0	1.6	145	48	18	0	0	0	0	0	0
RENO	59	29	66	24	44	5	.1	-1.1	.1	.1	19	1.9	80	83	24	0	0	0	0	0	0
WINNEMUCCA	55	27	61	21	41	4	.1	0	.1	.6	275	1.5	85	88	32	0	0	0	0	0	0
NH CONCORD	38	12	55	5	25	-3	.2	-1.6	.2	.2	0	5.5	89	74	24	0	0	0	0	0	0
NJ ATLANTIC CITY	46	21	59	13	33	-5	.2	-1.9	.2	.2	6	3.6	45	89	38	0	0	0	0	0	0
NM ALBUQUERQUE	60	36	67	29	48	4	.2	-1.1	.2	.2	144	1.0	104	78	27	0	0	0	0	0	0
CLOVIS	66	41	73	33	54	9	.2	-1.1	.2	.2	0	2.2	209	75	26	0	0	0	0	0	0
ROSWELL	72	43	81	32	58	9	.4	-1.4	.4	.4	338	1.2	123	52	17	0	0	0	0	0	0
NY ALBANY	38	14	56	6	26	-4	.2	-1.7	.2	.2	0	7.7	140	71	29	0	0	0	0	0	0
BINGHAMTON	34	14	53	1	24	-4	.1	-1.5	.1	.1	10	6.7	117	83	40	0	0	0	0	0	0
BUFFALO	34	17	49	7	26	-4	.2	-1.5	.2	.2	17	8.7	139	88	49	0	0	0	0	0	0
NEW YORK	41	26	52	14	33	-5	.3	-1.6	.3	.3	25	5.8	79	68	34	0	0	0	0	0	0
ROCHESTER	34	16	51	5	25	-5	.1	-1.5	.1	.1	10	5.5	101	88	50	0	0	0	0	0	0
SYRACUSE	35	13	50	2	24	-6	.2	-1.6	.2	.2	9	6.2	100	85	39	0	0	0	0	0	0
NC ASHEVILLE	59	36	72	31	48	4	.1	-1.0	.1	1.1	75	12.5	158	96	48	0	0	0	0	0	0
CHARLOTTE	61	41	75	36	51	3	.1	-1.0	.1	1.5	96	11.1	121	83	40	0	0	0	0	0	0
GREENSBORO	59	35	76	30	47	2	.2	-1.9	.2	.8	60	8.8	109	82	38	0	0	0	0	0	0
HATTERAS	57	42	65	39	49	0	.1	-1.8	.1	1.4	105	10.2	100	94	60	0	0	0	0	0	0
NEW BERN	62	38	76	32	50	0	.2	-1.9	.2	.9	69	6.3	68	93	40	0	0	0	0	0	0
RALEIGH	61	34	77	27	48	1	.1	-1.8	.1	.8	64	7.6	94	91	37	0	0	0	0	0	0
WILMINGTON	64	41	76	34	52	1	.1	-1.9	.1	.3	20	4.7	56	92	47	0	0	0	0	0	0
ND BISMARCK	44	22	57	14	33	11	.2	-1.1	.2	.2	0	.5	45	92	46	0	0	0	0	0	0
FARGO	41	22	56	11	32	12	.2	-1.1	.2	.2	0	.7	65	83	44	0	0	0	0	0	0
GRAND FORKS	40	20	54	8	30	13	.2	-1.1	.2	.2	0	.4	28	84	40	0	0	0	0	0	0
WILLISTON	49	25	59	20	37	15	.2	-1.1	.2	.2	0	.4	37	86	39	0	0	0	0	0	0
OR AKRON-CANTON	45	24	57	13	34	1	.5	-1.2	.5	.5	51	7.4	131	86	50	0	0	0	0	0	0
CINCINNATI	57	36	68	23	47	8	.7	-1.1	.7	.7	60	9.1	130	80	42	0	0	0	0	0	0
CLEVELAND	43	26	59	14	34	0	.3	-1.3	.3	.3	33	7.3	133	90	57	0	0	0	0	0	0
COLUMBUS	52	29	66	19	41	4	.3	-1.3	.3	.3	36	7.9	136	80	39	0	0	0	0	0	0

Based on 1951-80 normals

Weather Data for the Week Ending March 10, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	
																		.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	52	30	65	19	41	5	.8	.2	.7	.8	93	8.9	160	82	44	0	4	2	1
TOLEDO	41	26	61	16	33	1	1.3	.7	1.3	172	8.8	193	93	63	0	4	5	0	1
YOUNGSTOWN	43	22	57	11	32	1	1.5	.2	.4	54	7.3	124	85	50	0	5	5	0	0
OK OKLAHOMA CITY	68	52	79	40	60	14	1.4	1.0	1.4	234	7.9	275	93	55	0	5	5	0	0
TULSA	68	53	81	35	60	14	1.5	.8	1.3	170	8.5	214	92	56	0	0	0	0	0
OR ASTORIA	51	41	54	35	46	2	3.9	2.2	1.4	4.4	178	32.2	154	95	71	0	0	7	7
BURNS	46	24	55	17	35	-1	.2	0	.1	.5	158	1.4	48	97	54	0	0	7	2
MEDFORD	52	34	62	29	43	-1	.7	.2	.4	1.1	169	5.1	83	92	55	0	2	2	4
PENDLETON	53	36	59	34	45	2	.7	.5	.3	.8	240	1.9	59	82	44	0	0	0	0
PORTLAND	51	41	56	35	46	1	1.4	.6	.5	1.9	156	13.2	117	96	70	0	0	0	0
SALEM	52	38	56	34	45	1	1.6	.6	.6	1.9	126	15.7	120	94	64	0	0	0	0
PA ALLENTOWN	43	21	56	11	32	-3	.2	.2	.1	.2	16	7.1	95	77	35	0	0	0	0
ERIE	38	22	60	10	30	-1	.3	.2	.2	.3	41	8.2	155	86	51	0	5	2	4
HARRISBURG	46	25	63	14	35	-2	.1	.6	.1	.1	12	6.7	99	75	36	0	6	1	0
PHILADELPHIA	46	25	58	18	36	-3	.1	.7	.1	.1	8	5.5	77	73	37	0	6	2	0
PITTSBURGH	48	26	63	14	37	2	.2	.2	.2	.2	16	6.6	105	82	38	0	5	1	0
SCRANTON	38	17	56	2	27	-5	.3	.3	.1	.3	32	6.8	134	80	40	0	6	4	0
RI PROVIDENCE	40	19	52	10	30	-5	.1	.1	.1	.1	7	7.9	87	69	31	0	5	2	4
SC CHARLESTON	67	48	79	40	57	3	T	T	T	T	7	5.7	70	91	45	0	7	1	0
COLUMBIA	67	41	82	35	54	2	.1	.1	.1	.5	31	5.5	55	96	42	0	0	0	0
FLORENCE	65	41	79	36	53	1	T	T	T	.2	16	3.0	37	88	38	0	0	0	0
GREENVILLE	61	39	76	33	50	2	.2	.2	.1	1.6	81	11.3	107	91	44	0	0	0	0
SD ABERDEEN	42	25	55	17	33	10	.1	0	.1	.1	54	.7	48	95	52	0	0	0	0
HURON	42	26	54	18	34	9	.5	.2	.4	.5	139	1.1	74	92	58	0	7	2	0
RAPID CITY	43	25	57	20	34	4	1.0	.8	.9	1.0	388	1.6	126	92	60	0	0	1	0
SIoux FALLS	42	26	58	18	34	8	.5	.2	.3	.5	116	.9	48	93	59	0	7	3	3
TN CHATTANOOGA	64	40	71	31	52	5	2.4	1.0	1.4	4.3	216	21.5	181	97	49	0	0	2	0
KNOXVILLE	63	41	71	30	52	5	.9	.3	.5	1.9	109	14.8	140	89	50	0	2	3	3
MEMPHIS	70	49	76	34	59	11	2.5	1.3	1.3	2.5	155	15.5	147	91	50	0	0	2	0
NASHVILLE	66	44	77	29	55	9	.5	.8	.3	1.1	63	8.6	84	83	44	0	0	3	2
TX ABILENE	75	54	80	42	65	12	.4	.2	.3	.4	125	4.6	204	87	47	0	2	0	0
AMARILLO	67	40	77	28	53	10	1.2	1.0	1.2	1.2	469	4.1	312	91	40	0	1	3	3
AUSTIN	74	61	81	52	68	10	.3	.1	.2	.5	100	5.4	117	97	67	0	0	4	1
BEAUMONT	74	60	79	43	67	9	.1	.7	.1	1.5	148	17.6	188	95	65	0	0	0	0
BROWNSVILLE	81	65	85	49	73	6	T	T	T	.4	211	1.6	53	95	61	0	0	0	0
CORPUS CHRISTI	78	64	83	49	71	7	0	.2	0	.9	352	5.3	158	100	72	0	0	0	0
DEL RIO	75	60	79	53	68	7	.1	0	.1	.2	119	2.2	144	84	54	0	0	0	0
EL PASO	73	44	81	31	58	5	.3	.3	.3	.3	283	.8	83	50	17	0	0	5	0
FORT WORTH	73	56	81	38	64	10	.9	.4	.8	.9	135	10.1	241	52	61	0	1	1	0
GALVESTON	71	62	74	54	67	7	0	.5	0	.8	113	7.9	132	98	74	0	0	2	0
HOUSTON	76	60	81	41	68	9	.1	.5	.1	.9	102	9.3	122	96	59	0	0	2	0
LUBBOCK	73	46	81	34	60	12	.2	0	.2	.2	81	2.7	231	77	30	0	0	0	0
MIDLAND	76	49	82	37	63	10	.4	.2	.4	.4	219	1.7	156	81	29	0	0	3	0
SAN ANGELO	75	55	79	47	65	10	.1	0	.1	.1	70	3.4	204	89	50	0	0	0	0
SAN ANTONIO	73	61	78	54	67	8	.3	0	.2	.2	300	5.1	135	96	68	0	0	2	0
VICTORIA	74	63	79	50	69	7	T	T	T	1.0	229	4.8	106	98	70	0	0	0	0
WACO	74	58	81	40	66	10	3.2	2.8	3.2	3.2	582	8.7	206	94	60	0	0	4	1
WICHITA FALLS	74	53	82	43	64	13	1.1	.8	.8	1.1	234	8.4	356	93	52	0	0	3	1
UT CEDAR CITY	55	32	60	29	43	6	.3	0	.2	.3	81	3.1	174	87	36	0	4	2	0
SALT LAKE CITY	56	36	65	32	46	8	.4	0	.2	.4	90	1.4	43	86	39	0	1	2	0
VT BURLINGTON	31	9	53	1	20	-6	T	T	T	T	0	5.2	124	85	33	0	7	0	0
VA NORFOLK	54	34	69	27	44	-2	.1	.8	.1	.7	59	6.9	83	94	49	0	4	2	0
RICHMOND	58	30	75	22	44	0	T	T	T	.4	31	5.6	74	92	42	0	4	1	0
ROANOKE	60	33	77	25	46	3	T	T	T	.6	50	5.8	80	83	35	0	4	1	0
WA QUILLAYUTE	47	37	54	33	42	-1	6.0	3.1	2.5	6.4	155	39.2	128	99	74	0	4	1	3
SEATTLE-TACOMA	49	39	57	34	44	1	1.4	.5	.5	1.4	112	14.8	129	98	71	0	0	7	0
SPOKANE	48	32	54	27	40	5	.6	.3	.4	.6	134	4.0	89	94	51	0	0	3	0
YAKIMA	54	31	62	26	42	2	.1	0	.1	.1	70	1.7	74	91	45	0	4	3	0
WV BECKLEY	56	33	69	19	44	7	T	T	T	.5	40	8.2	104	86	38	0	4	2	0
CHARLESTON	63	36	76	24	50	8	T	T	T	.3	20	6.8	88	83	34	0	3	1	0
HUNTINGTON	61	37	73	25	49	7	T	T	T	.1	6	6.6	90	78	39	0	3	0	0
PARKERSBURG	56	32	72	19	45	4	.1	.7	.1	.1	8	6.5	100	77	36	0	4	2	0
WI GREEN BAY	31	19	40	7	25	0	.7	.3	.5	.7	140	1.9	71	94	67	0	5	2	1
LACROSSE	40	27	43	19	33	6	.5	.2	.3	.5	106	1.9	82	88	54	0	5	3	0
MADISON	38	26	44	19	32	4	.8	.4	.8	.8	142	3.4	127	91	65	0	5	2	1
MILWAUKEE	36	29	44	22	33	3	.8	.3	.7	.8	115	5.2	143	86	67	0	5	2	1
NAUSAU	32	19	48	8	26	3	.6	.2	.5	.6	110	2.1	88	91	64	0	5	2	0
WY CASPER	49	25	61	15	37	7	.8	.6	.7	.8	323	1.8	141	90	47	0	6	3	1
CHEYENNE	44	24	54	15	34	4	2.3	2.1	1.4	2.3	873	3.3	318	96	60	0	7	4	1
LANDER	49	30	60	25	39	10	.6	.4	.4	.6	238	.7	52	86	42	0	7	2	0
SHERIDAN	51	29	66	25	40	10	.3	.1	.3	.3	100	1.5	85	95	46	0	6	1	0

Based on 1951-80 normals



WINTER WEATHER REVIEW

December 1989 - February 1990

HIGHLIGHTS: December's record cold, followed by January and February's record warmth, highlighted the season's weather. The turnaround was dramatic. December's temperatures made it the fourth coldest December on record, while January's abrupt change to higher temperatures made it the warmest January since national records began in 1895. February's mildness was somewhat less pervasive, with the month ranking 15th nationally. The upshot was that most of the United States east of the Continental Divide averaged warmer-than-normal temperatures for the 3 months combined, while below-normal temperatures were mainly confined to California and the southern High Plains.

Ample precipitation in Kansas, Oklahoma, and Texas helped the hard red winter wheat region recover from the autumn drought, while excessive rains in the South triggered floods. Below-normal precipitation in the western Corn Belt and northern Plains' spring wheat region allowed long-term drought to persist in those farming regions. California had below-average precipitation for the fourth consecutive winter.

DECEMBER: Brutally cold weather east of the Rockies and extreme dryness in the West characterized the month. Temperatures 6-16° F. below normal gave eastern areas the coldest December of this century. The pre-Christmas cold

wave severely damaged winter crops in Texas and Florida, causing national citrus production to decline by 22 percent from year-ago levels. In California, precipitation was less than 10 percent of normal across nearly the entire State, once again raising concerns about water supplies.

JANUARY: Monthly temperatures averaged above normal across more than 90 percent of the country, with readings from 4 to 16° F above normal in all but the Southwest. This was the warmest January ever in the Nation. Frontal systems brought heavy precipitation from the lower Mississippi Valley to the middle and northern Atlantic coast. A series of winter storms pounded the northern Pacific coast with strong winds and drenching rain. These storms brought needed moisture into California and the Northwest. In addition, storms delivered needed precipitation to the winter wheat region in the central and southern Plains.

FEBRUARY: Storm systems again gave welcomed moisture to the central and southern Plains but severe weather to the Gulf Coast States. Dry weather persisted in the North Central States and southern Florida, which was in its third year of drought. Unseasonably mild weather prevailed over the eastern two-thirds of the Nation for the second month in a row, though blasts of arctic air invaded central areas in mid-December and the East at month's end.

Winter in Historical Perspective

Preliminary data for winter 1989-90 indicate that temperature averaged across the contiguous United States was well above the long-term mean and this winter ranks as the 20th warmest (fig. 1). The smooth line shows the longer term variations and indicates that the last decade averaged generally above the long-term mean, but other periods (from the 1920's to 1950's) had warm winters. The late 1970's had some of the coldest winter weather. The mean standardized national precipitation ranks winter 1989-90 as the 27th driest on record (fig. 2). Two of the three driest winters occurred in the last 15 years: 1976-77 ranks as the driest winter, 1930-31 as second driest, and 1980-81 as third driest.

The temperature and precipitation rankings for winter 1989-90 for the nine climatically homogeneous regions in the United States are listed in table 1. The nine regions are shown in figure 3. The South, Southeast, and Central regions were wet (above-median rankings), but dry conditions prevailed elsewhere. Temperatures averaged above normal in the Northwest and the two North Central regions, but temperatures were in the middle of the distribution everywhere else in the Nation.

Delaware, Idaho, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, North Dakota, Rhode Island, and Wyoming had the 10th driest or drier winter on record in 1989-90 (table 2). North Dakota had the driest winter on record. Alabama, Louisiana, Mississippi, and Oklahoma had the 10th wettest or wetter winter.

Figure 1

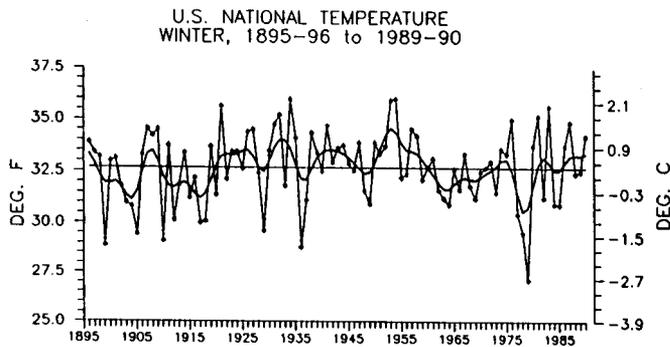


TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR DEC 1989-FEB 1990, BASED ON THE PERIOD 1895-96 TO 1989-90. 1 = DRIEST/COLDEST, 95 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	19	44
EAST NORTH CENTRAL	14	75
CENTRAL	59	64
SOUTHEAST	70	69
WEST NORTH CENTRAL	6	83
SOUTH	76	62
SOUTHWEST	18	55
NORTHWEST	14	80
WEST	11	43

Figure 2

U.S. NATIONAL MEAN PRECIP INDEX
WINTER, 1895-96 to 1989-90

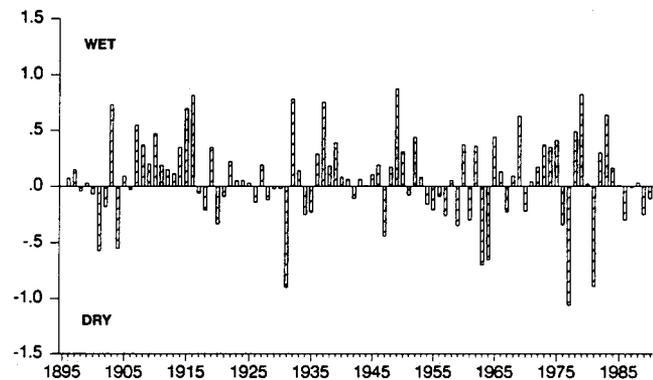
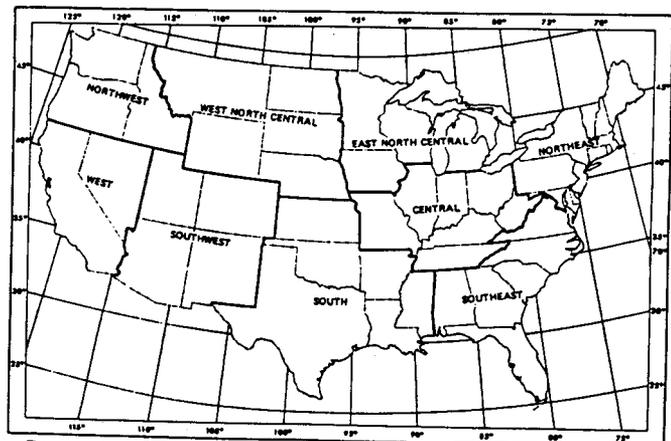


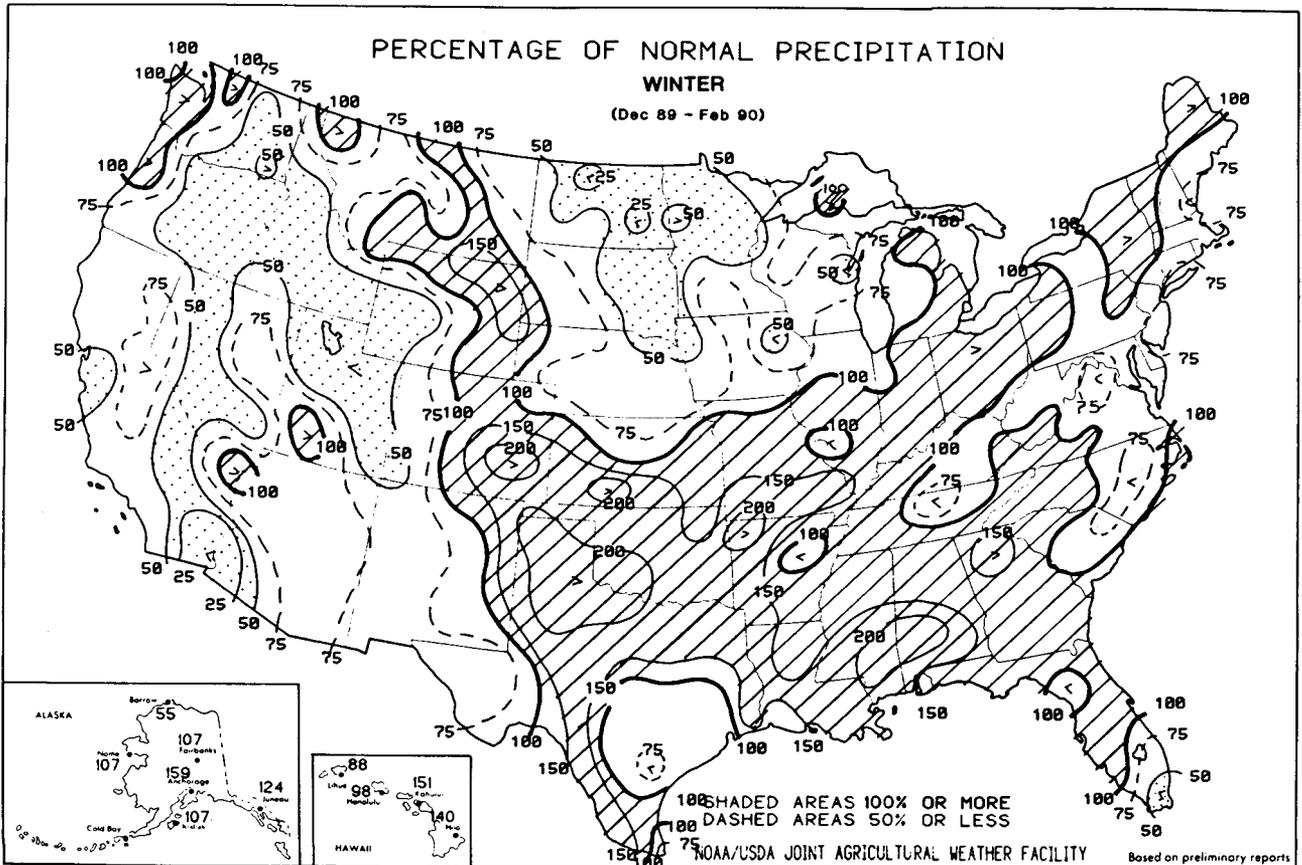
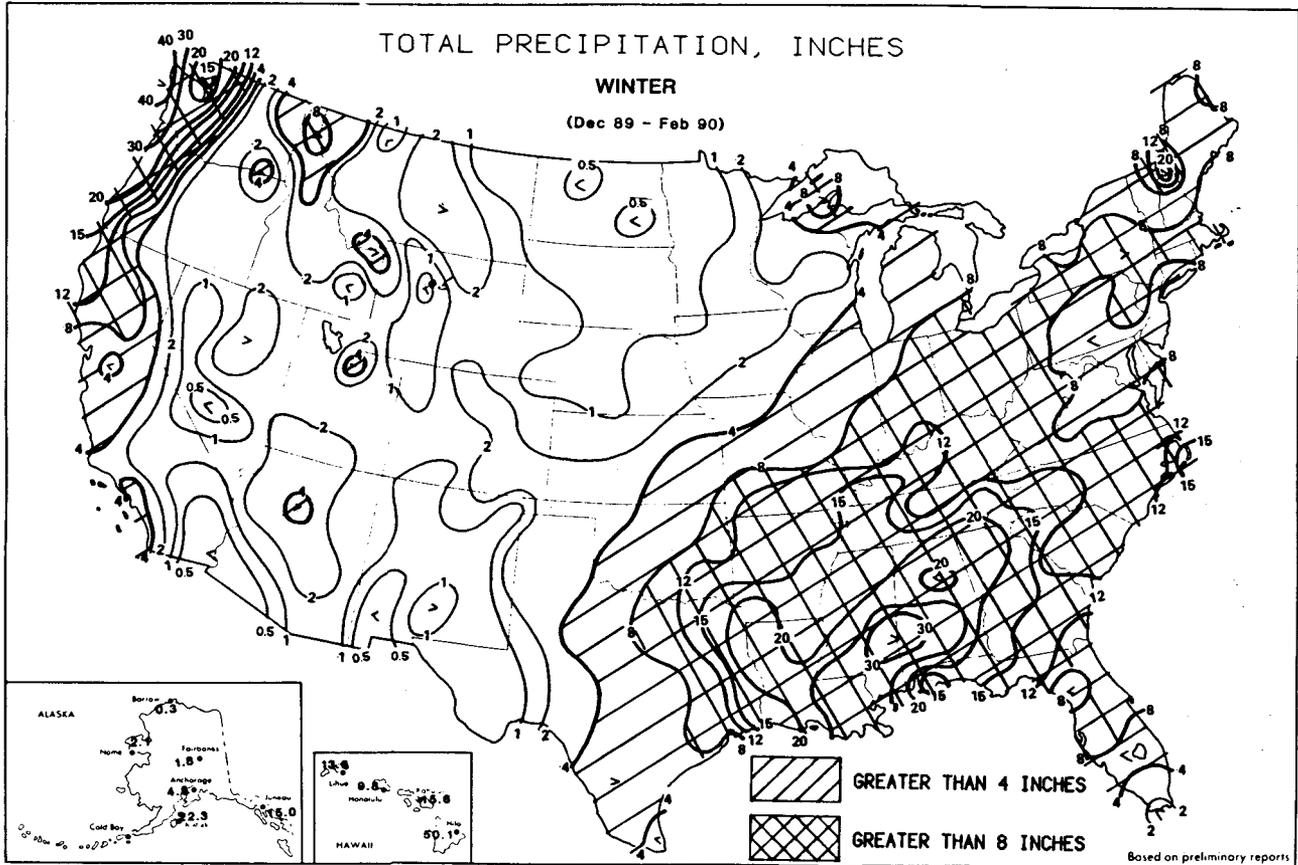
Figure 3

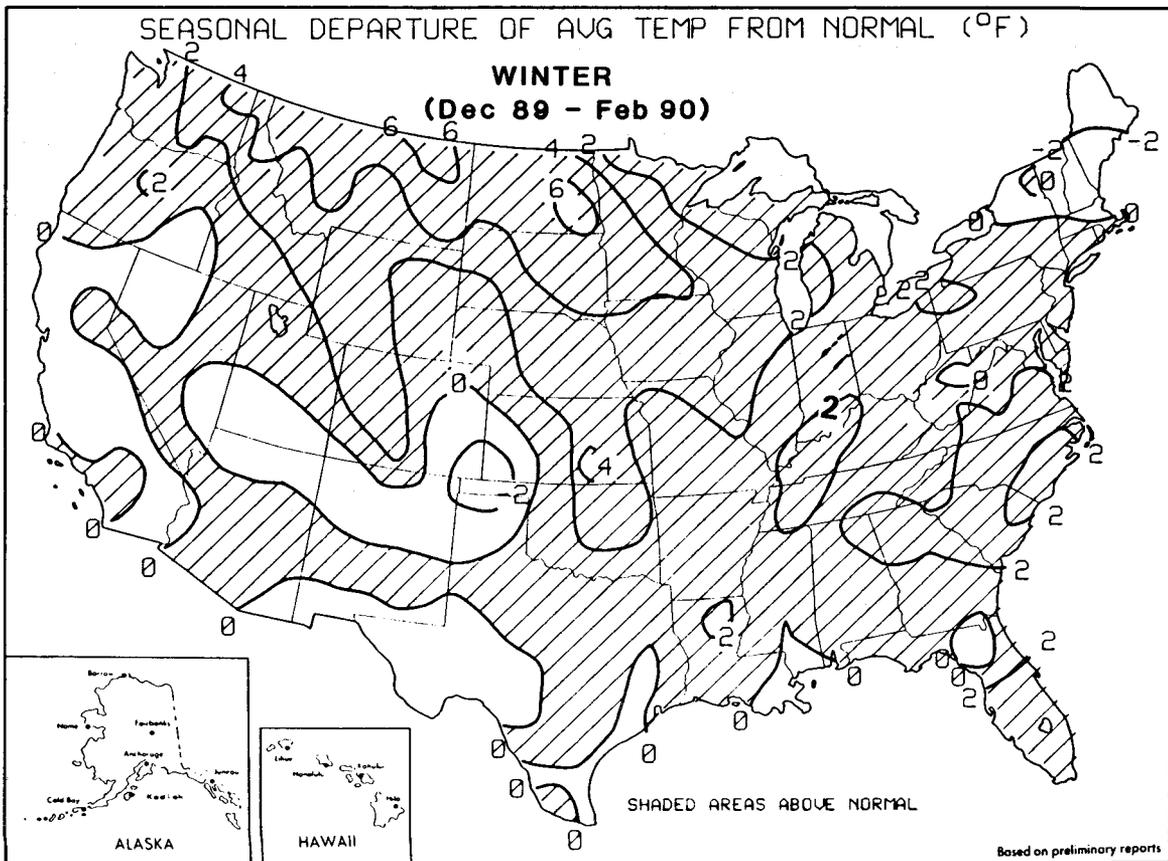
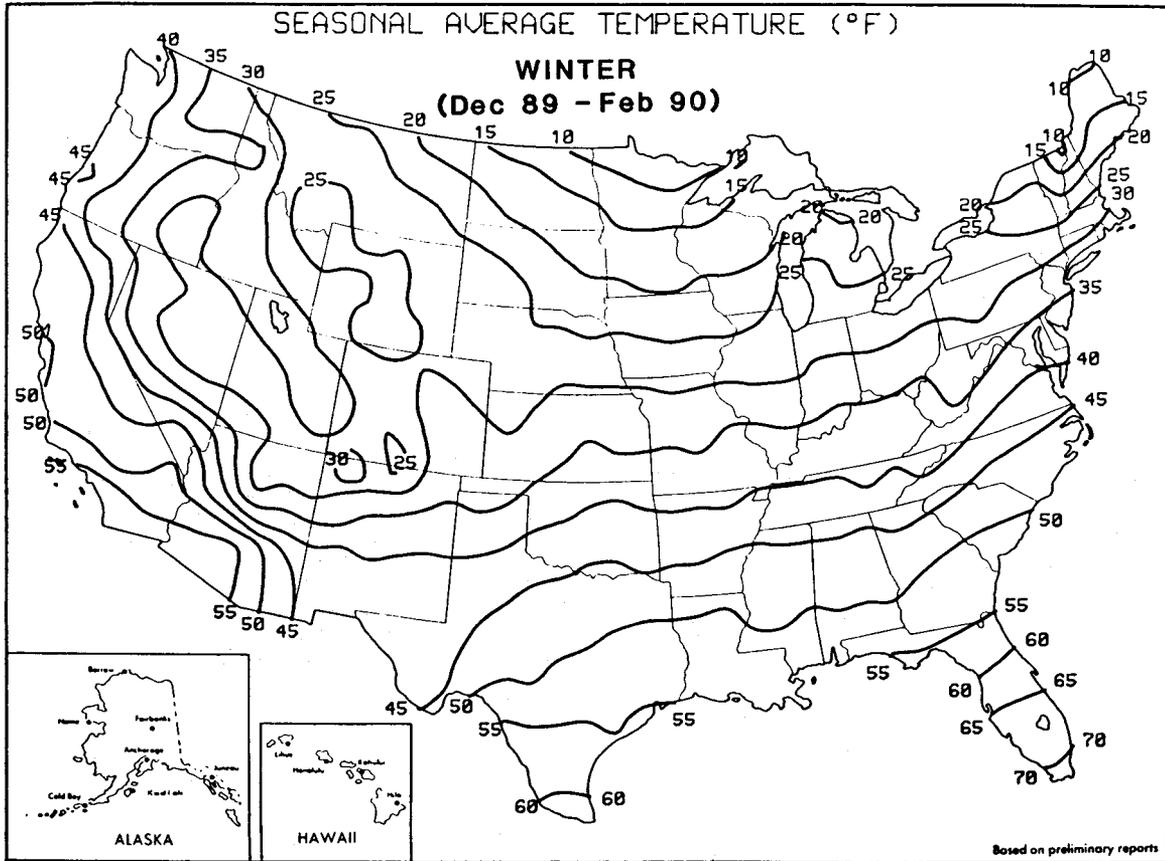


The nine regions of the contiguous United States as defined by the National Climatic Data Center (NCDC) and described within the U.S. monthly climate summary text and figures.

TABLE 2. PRECIPITATION RANKINGS FOR DEC 1989-FEB 1990, BASED ON THE PERIOD 1895-96 TO 1989-90. 1 = DRIEST, 95 = WETTEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	94	IA	12	NE	18	RI	7
AZ	17	KS	71	NV	12	SC	44
AR	61	KY	56	NH	6	SD	21
CA	12	LA	90	NJ	7	TN	41
CO	24	ME	23	NM	28	TX	44
CT	30	MD	10	NY	43	UT	16
DE	3	MA	5	NC	61	VT	14
FL	53	MI	28	ND	1	VA	21
GA	64	MN	5	OH	67	WA	33
ID	4	MS	91	OK	89	WV	27
IL	58	MO	73	OR	15	WI	16





National Agricultural Summary

March 5-11, 1990

HIGHLIGHTS: Rain increased soil moisture supplies in the western Corn Belt and portions of the northern Great Plains. Heavy rains caused some soil erosion problems in Iowa. Rain and warm weather again improved winter wheat prospects in the central and southern Great Plains. Rain and wet field conditions continued to slow fieldwork in portions of the Delta. Cotton planting was underway in California and Texas. Warm, dry weather dominated Florida's citrus and vegetable producing areas.

SMALL GRAIN: Precipitation improved winter wheat in portions of the northern Great Plains. Most of Nebraska and portions of South Dakota received needed moisture. In Montana, only small amounts of precipitation fell in the winter wheat growing areas. Crop condition was fair to good. Rain improved winter wheat in the central and portions of the southern Great Plains. Disease and insect problems continued to be light in Kansas. Spring small grain seeding was halted by rain late in the week. Oklahoma's winter wheat was good. Some winterkill was evident. Colorado's winter wheat was good to fair. Spring small grain seeding was underway. Small grains continued to improve in Texas. In Arkansas, excess moisture stressed some winter wheat fields in the southeast. In the Corn Belt, winter wheat was fair to good. Rain and warm weather reduced snow cover in Michigan, especially in the central and southern areas. Winter wheat was good to fair in the Southeast. California's small grains were good. In the Pacific Northwest, winter wheat was good to fair.

OTHER FIELD CROPS: Corn planting continued in the Delta and Southeast as weather permitted. Rain slowed corn and sorghum planting in Texas. Cotton planting was underway in Texas and California and continued in Arizona. Rice seeding began in Louisiana. Tobacco plant bed preparation and seeding continued in the Southeast. Tobacco transplanting began in Georgia. In Florida, sugarcane harvest was nearly complete.

FRUIT AND NUTS: Irrigation was active in Florida's citrus groves. Blooming was nearly complete. Early orange harvest was virtually complete. Valencia

orange harvest was active but grapefruit harvest slowed. Peach trees continued to bloom in Texas. Some fruit set occurred in the east. In Arizona, citrus harvests included Valencia oranges, grapefruit, and tangerines. Almonds were in full bloom in California. Deciduous blooming progressed seasonally. Avocado fruit drop caused by the February freeze continued. Desert grapefruit and Valencia orange harvests were active. Navel orange and lemon harvests continued. Orchard pruning continued in Oregon and Washington.

VEGETABLES: Good growing conditions prevailed over Florida's major vegetable producing areas. Spring crop planting increased in the northern areas and was nearly complete in the south. Harvest activity increased. Irish potato planting continued in North Carolina. Vegetable harvests were active in the Rio Grande Valley, Texas. Rain slowed harvest in the San Antonio-Winter Garden area. Tomato and pepper planting continued in east Texas as weather conditions permitted. Some onion planting occurred in the High Plains. In Arizona, spring lettuce harvest was underway in the Eloy-Picacho-Marana area. Artichoke and broccoli supplies were moderate and of variable quality in California. Asparagus harvest increased in the Delta area. Desert melon and tomato planting was active. Green peas and early potato planting was underway in the Hermiston-Boardman area of Oregon. Onion planting was active in Idaho and Oregon.

PASTURES AND LIVESTOCK: Pastures were fair to good in the Delta and East. Rain and warm weather improved pasture and range condition in the central and southern Great Plains. Lambing and calving were nearly complete in northern California.

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall 1.00 to 2.50 in. Tennessee Valley area; under 1.00 in. elsewhere north; under 0.10 in. central; mostly dry south. Temperatures 6 to 11° above normal.

Rains limited field activities north, excellent extreme south. Acreage intended for spring planting 18% prepared, 21% 1989, 24% avg. Fieldwork progress 76% behind normal, 24% on schedule. Corn planted 27%, 13% 1989, 19% avg. Winter wheat 7% poor, 55% fair, 38% good. Pastures 3% very poor, 8% poor, 41% fair, 44% good, 4% excellent. Livestock 45% fair, 55% good. Primary activities: Land preparation; planting corn, spring vegetable crops, as weather permitted; top dressing winter annuals; routine care of livestock, poultry, catfish.

ARIZONA: Winter storm emerged 5th; cold front brought strong winds, rain, snow; clear, cold 7th; cloudy again 8th, 9th; rain, snow central, east; precipitation none in west to 0.90 in southeast; temperatures 1° below to 7° above normal. Extremes 16°; 59° high elevations; 37°; 85° elsewhere.

Cotton field preparation continued; seedbed preparation, furling, pre plant pesticide applications, listing, pre irrigation; less than 5% planted. Wheat, barley 88% jointing, 72% 1989, 67% avg.; 20% heading, 7% 1989, 8% avg.; crops 67% good, 33% excellent. Alfalfa first cut continued west; sheep grazing light; crop condition 71% good, 29% fair. Citrus harvested included valencia oranges, grapefruit west, central; tangerines central; mixed vegetables harvested west, central; head lettuce picked, shipped west; harvest, packing spring lettuce began Eloy Picacho Marana area.

ARKANSAS: Temperatures well above average. Widespread rains latter part of week. Extremes 29°; 82°. Rainfall 0.87 to 6.14 in.

Soil moisture surplus. Flooding in southeast, wheat severely stressed, some fields drowned out. Fruit trees budding, severe damage could result from freezing temperatures. Fescue pastures growing rapidly. Livestock good.

CALIFORNIA: Pacific weather systems dropping down from Gulf of Alaska brought rain to much of State. Snow fell to lower elevations in Sierra Nevada Mountains. Short break in storms mid week, another storm brought more precipitation by weekend. Temperatures continued cool.

Rain early slowed field operations much of State. Small grains mostly good condition. Fertilization, weed control active, some irrigation. Ground preparations corn, beans, other spring crops active. Cotton seeding increased Imperial County. Cotton pre plant activities increased central areas in anticipation pink boll worm on the 20th, boll weevil host free planting date. New crop sugarbeets hoed, thinned. Alfalfa harvested desert areas. Sheep grazed some seed alfalfa fields, others mowed. Alfalfa weevil controls applied. Normal cultural activities ongoing. Almonds full bloom. Deciduous tree fruit bloom progressed. Avocado fruit drop from February freeze. Desert grapefruit, desert valencia orange, navel orange harvest continued. Lemon harvest active. Artichokes continued moderate supply, variable quality. Asparagus harvest in Delta increasing volume. Desert asparagus harvest strong. Broccoli moderate

supply central coast, variable quality. Harvest desert carrot crop active. Planting melons, tomatoes active, desert. Livestock good statewide. Range, pasture conditions improved as warm, sunny weather promoted grass, other forage growth. Grasses shorter than normal San Joaquin Valley. Supplemental feeding necessary most areas. Lambing, calving almost completed northern counties, continued some central valley areas.

COLORADO: Major snowstorm moved across eastern areas leaving up to 4.00 in. of moisture in its path. Storm left the State on 7th, warmer temperatures took over melting much of the snow. Precipitation trace to 4.03 in. Temperatures 4 to 7° above normal.

Soil moisture supplies 5% very short, 25% short, 61% adequate, 9% surplus. Winter wheat 2% very poor, 8% poor, 21% fair, 61% good, 8% excellent; crop greening up, starting to grow in most areas of the State. Some spring grain planting has begun. Calving, lambing progress average, death losses slightly below avg.

FLORIDA: Temperatures 3 to 6° above normal. Extremes 40°; 87°. Dry except along east coast. Vero Beach 0.55 in. of rain. Most other areas 0.10 in. or less.

Soil moisture Panhandle, northern Peninsula adequate; central, southern Peninsula short to adequate. Corn planting, tobacco transplanting active. Land preparation active, spring seeded crops. Sugarcane harvest about complete; most mills closed. Warm temperatures favored growth of pastures, forage crops; however, soil moisture shortages limited growth, kept pastures short, some Peninsula areas. Pastures generally fair from Panhandle through central area; fair to good southern Peninsula. Some drier Peninsula localities, however, continued poor. Cattle, calves remain fair to mostly good. Citrus groves dry; temperatures warm, irrigation continued. New growth abundant. Bloom almost complete. Early orange harvest all but over. Valencia movement very active. Grapefruit harvest slowing. Good growing conditions prevailed over major vegetable producing areas. Planting becoming active northern areas, winding down southern areas. Harvest gaining momentum. Volume leaders: Cabbage, tomatoes, strawberries, squash, celery, peppers, snap beans, cucumbers, radishes, lettuce. Also available: Carrots, sweet corn, eggplant, escarole, potatoes. Plant City strawberry volume at peak.

GEORGIA: Temperatures 4 to 8° above normal. Warmest on 10th, 11th. Highs upper 70s mountains, 80s elsewhere. Mid, upper 80s common southeast. Coldest 30s north, 40s elsewhere. Rain north half 1.00 to 3.00 in. No rain elsewhere.

Soil moisture adequate to mostly surplus. Increased field activities early part of week. First corn planting central, southeast, 20% complete southwest. Tobacco transplanting began, 4% complete. Plants fair to excellent. Small grains fair to excellent; mostly good. Onion disease a problem. Pastures fair. Livestock mostly good.

HAWAII: Variable weather. Gusty winds 15 to 30 mph. Light to moderate rainfall in windward, mountain areas. Leeward sectors with light

showers, sunny days. Temperatures high 60s to low 80s. Rainfall none to 11.08 in.

Days suitable for farm work 7.0. Papaya production remains low. Ginger root supplies heavy. Sugar harvesting expected to commence.

IDAHO: Temperatures warmer for the week up to 8° above normal. Precipitation was heaviest in the north, continued well below average in the southwest.

Main activities: Livestock care, preparing for new cropping season. Livestock good, calving, lambing continuing with few problems. Adequate supplies of hay, roughage. Fieldwork in several areas of State. Planting onions, grains southwest. Other activities: Movement grain, seed potatoes; spraying for weeds, disease; fertilizing; pruning fruit trees; shopwork.

ILLINOIS: Temperatures 8 to 10° above normal north, 13 to 15° above normal central, south. Precipitation 1.50 to 3.00 in. north, central; 0.40 to 0.60 in. south.

Livestock good to excellent.

INDIANA: Temperatures 10 to 15° above normal. Lows upper 30s to mid 40s. Highs upper 40s to mid 60s. Precipitation up to 4.00 in. Unseasonably warm levels weekend.

Plowing, tilling in a few fields. Other activities: Hauling manure, selling grain, top dressing wheat, spreading fertilizer, seeding grasses, repairing equipment, pruning trees, cleaning fence rows, purchasing supplies, soil testing, care of livestock. Hay supplies adequate. Livestock good. Wheat fair to good. Heavy rains weekend.

IOWA: Wettest week in 6 months. Precipitation 0.82 to 4.16 in., average 1.89 in. Very destructive ice storm central counties on 7th. Temperatures 9 to 15° above normal. Extremes 22°; 75°.

Livestock mostly good. Some farmers concerned over heavy rains eroding topsoil, many hoping for slow, steady showers.

KANSAS: Temperatures 14° above normal northwest to 18° above normal central, northeast, southeast. Rainfall all areas, averaged 0.65 to 1.20 in. west, 1.10 to 2.40 in. central, 1.25 to 1.65 in. east.

Days suitable for fieldwork 1.5. Topsoil 11% short, 57% adequate, 32% surplus. Subsurface 46% short, 47% adequate, 7% surplus. Wheat greening up, showing improved growth following rain, warm weather. Disease, insect problems light. General condition showing improvement, some thin stands noted. Oat, barley seeding good progress early in week, rain stopped fieldwork from 7th on. Lambing slowing down, calving near halfway mark, few problems. Ranges, pastures showing growth. Hay, feed, forage supplies adequate to surplus.

KENTUCKY: Temperatures above normal. Highs upper 70s, low 80s, low temperature around 30°. Highs 10 to 16° above normal. Precipitation well below normal, average 0.30 to 1.00 in. London greatest precipitation 1.29 in., average 0.90 in. below normal.

Soil moisture adequate. Field activities increased with warmer, drier weather. Top dressing wheat, crop showing new growth. Tobacco plant bed preparation, seeding active. Land preparation for row crops more widespread. Livestock satisfactory.

LOUISIANA: Temperatures 5 to 8° above normal. Extremes 31°; 85°. Rainfall 0.01 in. west central to 1.88 in. southeast.

Days suitable for fieldwork 2.5. Soil moisture supplies 36% adequate, 64% surplus. Spring Plowing 9%, 16% 1989, 17% avg. Corn planted 1%, 3% 1989, 9% avg. Wet fields continue to cause delay in planting. Rice planted 1%, 1% 1989, 1% avg. Sugarcane 31% very poor, 23% poor, 38% fair, 8% good. Shaving, off barring has begun in drier fields. Wheat headed 0%, 1% 1989, 1% avg., 16% poor, 52% fair, 32% good. Livestock 4% poor, 57% fair, 39% good. Pasture 30% poor, 45% fair, 25% good. Vegetable 24% very poor, 10% poor, 59% fair, 7% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.12 in. Temperature 38°, normal 40°. Extremes 10°; 66°.

DELAWARE: Precipitation 0.10 in. Temperature 36°, normal 40°. Extremes 12°; 60°.

MICHIGAN: Temperatures normal to 3° below normal. Extremes -9°; 61°. Precipitation 0.07 to 1.31 in. across State. Widespread rains, warmer temperatures, fog weekend significantly reduced snowcover. Much of southern, central districts have virtually no snowcover.

Major activities: Attending farm auctions, marketing hay, grain, caring for livestock, applying fertilizer to wheat fields, repairing machinery. Livestock good condition. Feed supplies abundant. Calving activity increasing. Spring hog farrowing underway.

MINNESOTA: Temperatures 7 to 15° above normal for State. Extremes 10°; 69°. Precipitation 0.09 to 1.79 in. Greatest weekly total 2.64 in. St Paul.

MISSISSIPPI: Temperatures 7° above normal. Extremes 27°; 86°. Wet north, dry central, south. Rainfall 1.01 in., 0.34 below normal.

Days suitable for fieldwork 1.6, 1.2 1989, 2.4 avg. Soil moisture 16% adequate, 41% surplus, 43% excessive. Wheat 1% very poor, 13% poor, 61% fair, 23% good, 2% excellent; 29% jointing. Aerial spraying of wheat approaching completion. Livestock 8% poor, 45% fair, 47% good. Pastures 3% very poor, 15% poor, 43% fair, 39% good. Hay supplies 33% short, 67% adequate. Feed supplies 20% short, 80% adequate. Corn 1% planted, watermelon 6% planted. Activities: Limited tillage north, central, shopwork statewide, wheat fertilizing slowish.

MISSOURI: Temperatures 8° above normal southeast to 14° above normal central, southwest. Rainfall 0.50 in. Bootheel, up to 2.00 in. northwest, most areas around 1.00 in.

fieldwork not started yet, most fields muddy. Pastures, wheat making good growth.

MONTANA: Temperatures 7 to 18° above normal. North central, northeast dry. Other areas had light precipitation. Southwest had up to 0.87 in.

Winter wheat fair to good. Snowcover generally lacking. Wind damage to winter wheat mostly none to light. Cattle mostly on supplemental feed. Grazing open. Calving over 40% done. Lambing nearly 20% complete.

NEBRASKA: Wet, mild. Temperatures 3° above normal in the Panhandle up to 9 to 14° above normal over the remainder of the State. Precipitation 0.20 in. northwest to almost 2.00 in. central portion. Extremes 18°; 71°.

NEVADA: Series Pacific storms produced snow showers mountains, rain showers valley floors. Strong, gusty winds common. Precipitation generally light all areas. Temperatures above normal most areas. Extremes 10°; 82°.

Scattered showers, gusty winds again delayed fieldwork extreme south. Snow showers, cold gusty winds not favorable calving, lambing operations. Movement potatoes to market delayed somewhat by inclement weather.

NEW ENGLAND: Precipitation (rainfall, water equivalent of snow) trace over Vermont, Massachusetts, New Hampshire, less than 0.25 in. south. Temperatures 15 to 20° north to upper 20s, south coast. Temperatures 10° below normal. Record lows morning of 7th.

Major farm activities: Repairing machinery, tending livestock, moving crops from storage, maple sugaring.

NEW JERSEY: Temperatures below normal. Extremes 3°; 71°. Rainfall 0.28 in. north, 0.12 in. central, 0.06 in. south. Heaviest 24 hour total 0.22 in. on 5th, 6th. Estimated soil moisture percent field capacity 100% north, 99% central, 97% south. Four inch soil temperatures 36° north, 37° central, 38° south.

Early soil preparation underway. Planting of peas, onions, spinach began limited basis. Fruit pruning advanced. Fertilizer, lime spreading increased.

NEW MEXICO: Temperatures varied widely over State; precipitation limited to scattered areas.

Days suitable for fieldwork 6.3. Soil moisture 73% short, 20% adequate, 7% surplus. Irrigated wheat poor to good; dryland wheat very poor to good. Cattle poor to good; sheep fair to good; range poor to good.

NEW YORK: Very cold early week, warming to above normal by weekend. Extremes -21° Newcomb; 60° Dansville. Precipitation light. Snow in southeastern areas on 6th.

Major activities: Tending livestock, repairing machinery, bookkeeping, attending meetings, moving crops from storage. Maple producers tapping trees, readying for upcoming maple syrup season. Warm temperatures conducive to early sap runs.

NORTH CAROLINA: Temperatures 1 to 4° above normal across the State. Extremes 22°; 80°. Precipitation none to 1.68 in.

Days suitable for fieldwork 3.8. Soil moisture 69% adequate, 31% surplus. Pasture 1% very poor, 7% poor, 34% fair, 57% good, 1% excellent. Livestock feed from pasture 36%. Crop condition: Wheat, 1% poor, 31% fair, 64% good, 4% excellent; oats 1% poor, 34% fair, 62% good, 3% excellent; barley 2% poor, 23% fair, 70% good, 5% excellent; rye 1% poor, 27% fair, 66% good, 6% excellent; tobacco plant beds 41% fair, 55% good, 4% excellent. Irish potatoes planted 30%; cabbage transplanted 39%. Hay, roughage supplies 3% short, 88% adequate, 9% surplus. Feed grain supplies 1% very short, 5% short, 94% adequate. Major activities: Top dressing small grains, land preparation, tobacco bed preparation, tending livestock. Other activities included: Fertilizing pastures, transplanting Christmas trees, planting potatoes, general farm maintenance.

NORTH DAKOTA: Mild, dry week. Temperatures 8° above normal southwest to 14° above normal northwest. Extremes -5° northeast 5th; 59° northwest 10th. Precipitation 0.12 to 0.16 in. below normal, mostly trace statewide.

Soil moisture below normal. Winter grains mostly poor to fair. Livestock good. Dry, mild weather provided ideal calving, lambing conditions. Hay supplies mostly adequate.

OHIO: Mild temperatures 5 to 15° above normal. Highs upper 40s to low 60s. Lows mid 30s to mid

40s, range teens to 70s. Precipitation subnormal 0.50 to 1.00 in. Soil temperatures 30s to upper 40s; 3 to 5° above normal.

Some farmers plowing where field conditions permit.

OKLAHOMA: Temperatures 13° above normal south central to 16° above normal east central. Precipitation 0.60 in. Panhandle to 4.21 in. west central.

Days suitable for fieldwork 3.2. Topsoil 1% short, 37% adequate, 62% surplus. Subsoil 2% short, 98% adequate. Wheat 14% fair, 70% good, 16% excellent. Rain soaked fields may not dry in time for top dressing. Good growth revealed effects of winter kill scattered counties. Producers removing cattle from wheat pasture. Pastures greening. Cattle good; marketings stable, prices up from preceding week. Lice building east.

OREGON: Temperatures near normal entire State. Precipitation 2.50 in. along coast, north Cascades; nearly 4.00 in. Astoria. Elsewhere in the west about 1.50 in. Willamette Valley, high plateau; 1.00 in. southwestern valleys. East 0.30 to 0.40 in.; Ukiah 1.00 in. Extreme eastern areas less than 0.10 in.

Soil moisture short to adequate Columbia Basin; mostly short southeast, central areas; mostly adequate western valleys; mostly surplus coast. Winter wheat fair to good east, mostly good west. Spring fieldwork started lower elevations east of Cascades, including herbicide applications on alfalfa, wheat. Some fruit tree pruning continued; orchards received sprays, fertilizer. Onions, green peas, earliest potatoes planted Hermiston Boardman district. Livestock mostly good. Calving, lambing continued eastern range country with few losses. Range, pastures fair to good.

PENNSYLVANIA: Keystone experienced normal temperatures, 32° below normal precipitation. Temperature 32° normal. Extremes -5°; 69°. Precipitation 0.30 in., 0.44 in. below normal.

Activities: Spreading manure, caring for livestock, maintaining machinery, fixing fence, cutting fire wood.

PUERTO RICO: Data not available.

SOUTH CAROLINA: Temperatures 1 to 3° hotter than usual. Precipitation 1.00 in. mountains to less than 0.10 in. along the coast.

SOUTH DAKOTA: Temperatures 2 to 11° above normal. Extremes 11°; 68°. Precipitation 0.50 to 1.5 in. southern part of State, a trace to 0.1 in. far north. Maximum 1.70 in. melted precipitation. Yearly precipitation generally below normal. Range 1.33 in. below normal to 1.58 in. above normal.

Snowcover only in protected areas of Black Hills.

TENNESSEE: High pressure pumped a combination of Atlantic, Gulf moisture into State, mostly at mid week. Temperatures 6° above normal over Cumberland Plateau to 16° above normal west. Highs 63° Bristol, 72° Memphis; lows 42° Plateau, 53° Memphis, Dyersburg. Precipitation 0.75 in. below normal Plateau, 0.96 above normal west.

Soil moisture adequate west; short middle, east. Land preparation, small grain top dressing continues. Wheat mostly good, some fertilization. Fruit mostly good. Primary activities: Routine care of livestock; equipment maintenance, repair; planting early crops; soil testing.

TEXAS: Northern, western areas focus of weather developments during week. Early week, surface low pressure system triggered good rains north central counties. Unstable air blanketed much State rest week, upper air disturbances caused heavy rains north central, northeastern areas mid week, some flooding. Late week, dryline, additional upper air impulses brought rains north, west, showers scant south. Temperatures much above normal across State. Precipitation above normal most western, northern areas, generally below normal south, southern east area.

Crops: Small grain conditions greatly improved many parts State last week. Fields responding favorably warmer temperatures, good moisture. Insect pressures light Blacklands; rust problems beginning some fields. Yield potential improved. Fields central look promising. Stands Hill Country, south still short, increased greening. Corn planting some progress, Coastal Bend, Valley. Producers central, Blacklands trying to get started; continued wet conditions limited progress many fields. Limited progress Upper Coast. Land preparations moved ahead High Plains. Corn 8% planted, 14% 1989, 23% avg. Grain sorghum planting moved ahead Coastal Bend, Valley. Other areas begin in earnest as fields dry, preparations completed. Sorghum 3% planted, 8% 1989, 13% avg. Cotton planting good progress Rio Grande Valley. Early stands varied. Cotton 3% planted, 1% 1989, 1% avg.

Commercial Vegetables: Rio Grande Valley, harvest carrots, cabbage, celery, some lettuce continued. Insect pressures heavy many fields. Tomato, pepper stands varied. Young citrus trees banked making good progress. San Antonio Winter Garden, another wet week limited harvest. Onions good progress. Eastern State tomatoes, peppers planted as conditions allowed. High Plains, some onion planting occurred. Land preparations continued for other vegetables. Trans Pecos preparations melons, peppers continued. Onion planting continued. Peach trees blooming across most areas, warmer temperatures continued. Some early fruit set east.

Range and Livestock: Ranges, pastures most areas improved last few weeks. Increased growth, greening occurred. Conditions Trans Pecos remained poor. Improvement wheat growth prompted some producers bring in more stockers. Livestock good weight gains many areas, some supplemental feeding continued. Additional rain needed bring tank levels up. Some shearing occurred Hill Country.

UTAH: Precipitation moderate northern half, light southern half. Maximum temperatures 4° above normal, minimums 10° above.

Spring land preparation underway in several counties in southern area. Recent showers improved soil conditions, more moisture is needed. Winter wheat just began sprouting in some areas

due to fall dryness. Range, pasture grasses remained dormant in most areas. Calving continued.

VIRGINIA: Started wet, seasonable. Mid week dry, cool. Weekend characterized by a warming trend with scattered rain, showers. Temperatures near normal, precipitation less than 0.50 in. over the State.

Days suitable for fieldwork 4.4. Topsoil 12% surplus, 81% adequate, 7% short. Pasture 8% excellent, 62% good, 27% fair, 3% poor. Alfalfa 5% excellent, 61% good, 19% fair, 10% poor, 5% very poor. Peach 10% good, 52% fair, 38% poor. Barley 1% excellent, 57% good, 41% fair, 1% poor. Wheat 2% excellent, 54% good, 41% fair, 3% poor. Oats 4% excellent, 48% good, 43% fair, 5% poor. Tobacco planted 61% good, 39% fair. Tobacco plantbeds seeded 77%. Activities included fertilizing pasture, hay, corn, soybean land, top dressing small grains, livestock care. Potato planting underway.

WASHINGTON: Temperatures 2 to 6° above normal east; 1 to 4° above normal west. Precipitation none to 0.51 in. east; 0.77 to 2.65 in., west.

Days suitable for fieldwork 2.5. Soil moisture 20% short, 79% adequate, 1% surplus. Range, pasture 65% short, 35% adequate. Hay, other roughage 15% very short, 35% short, 40% adequate, 10% surplus. Poor weather continued to slow field activity across the State. Field preparation, fertilizing, planting took place where it was dry. Many pastures, ranges were greening up. Trees, plants were beginning to come out of dormancy. Winter wheat 40% fair, 60% good. Pruning of caneberries, fruit trees continued. Calving and lambing, winter feeding programs continue.

WEST VIRGINIA: Temperature 46°, 4 to 10° above normal. Extremes 12°; 83°. Precipitation 0.25 in., 0.28 to 0.72 in. below normal.

Days suitable for fieldwork 3.8. Soil moisture 5% short, 95% adequate. Livestock good to excellent. Calving 46% complete; lambing 44% complete. Feed supplies adequate to surplus. Wheat, barley fair to good. Farm activities: Calving, lambing, soil preparation for spring planting.

WISCONSIN: Temperature 29°. Extremes -12°; 66°. Precipitation 0.40 to 0.90. Freezing rain, fog throughout week.

Frost depth 21.3 in. as of March 11; average 16.1. Snow depth 3.10 in.; average 7.90.

WYOMING: Temperatures above normal. Precipitation above normal. Major winter storm brought much needed moisture. Winter wheat fair to good. Livestock mostly good. Snowcover increased stress, supplemental feeding. Calving, lambing, shearing becoming more active.

(Continued from front cover)

and flooding to the **southern Delta**. Seasonably wet weather remained along the **northern Pacific coast**, while dry conditions again prevailed over much of the **North Central States and down the Atlantic seaboard**. Abnormally high temperatures dominated most of the United States except in the **Northeast**, where low-temperature records for the date were broken or tied on the 7th. A number of record-high temperatures were broken during the latter part of the week from the **central and northern Plains to the Piedmont and central Appalachians**.

International Weather and Crop Summary

HIGHLIGHTS

March 4-10, 1990

USSR ... Continued unseasonably warm weather causes winter grains in the extreme west and south to break dormancy 3-4 weeks earlier than usual.

EUROPE ... Drier-than-normal conditions persist in the south. Occasional rain favors winter grains in the northeast.

SOUTH ASIA ... Drier weather benefits filling to maturing wheat.

EASTERN ASIA ... Beneficial dry weather develops in the Yangtze Valley. Cooler-than-normal temperatures continue in the extreme south.

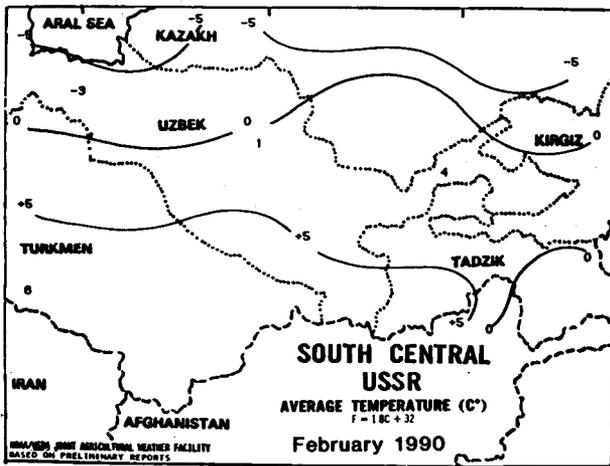
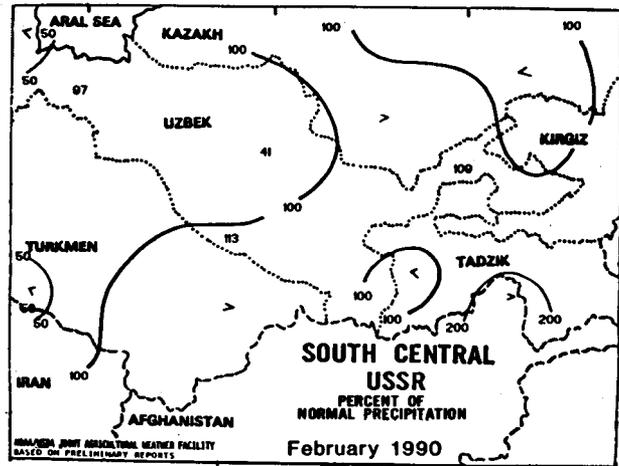
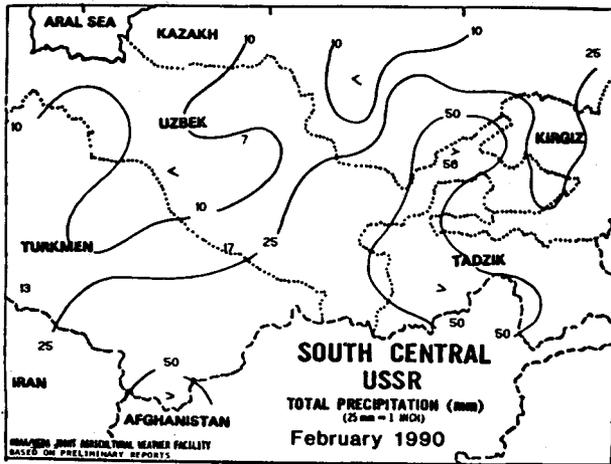
SOUTHEAST ASIA ... Scattered showers continue over Indochina. Rainfall tapers off over Indonesia.

SOUTH AFRICA ... Showers benefit immature corn and sugarcane.

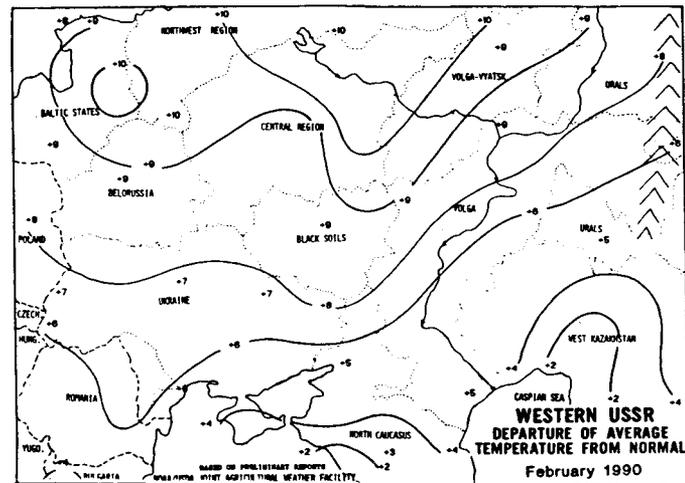
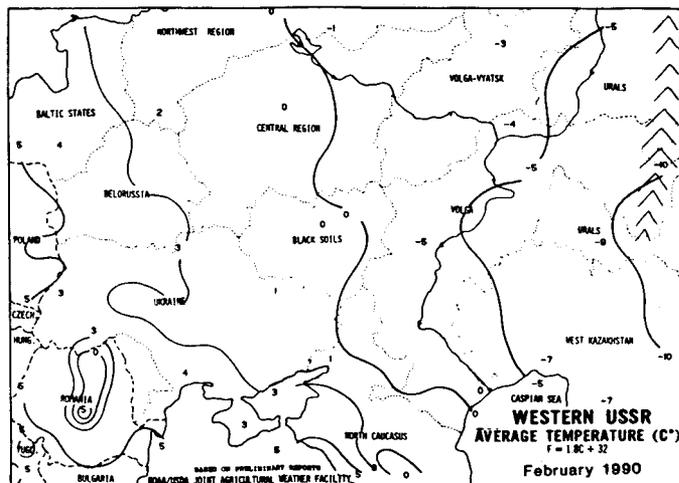
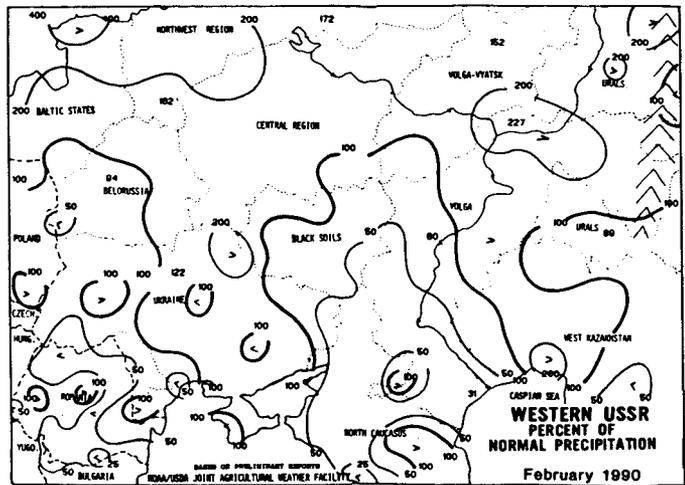
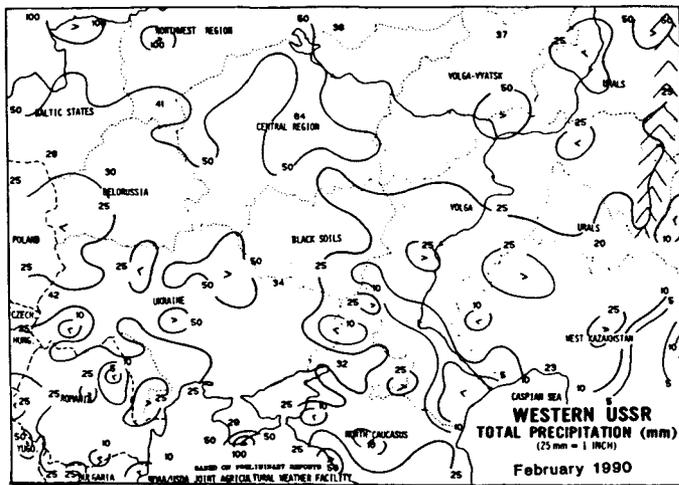
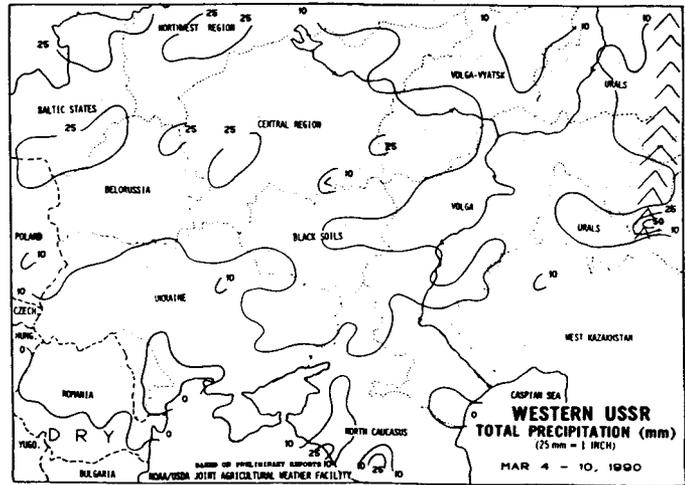
SOUTH AMERICA ... Widespread rain slows early harvesting but soaks immature crops in most of Argentina and south-central Brazil. Hot, dry weather prevails in Argentina's northern cotton areas.

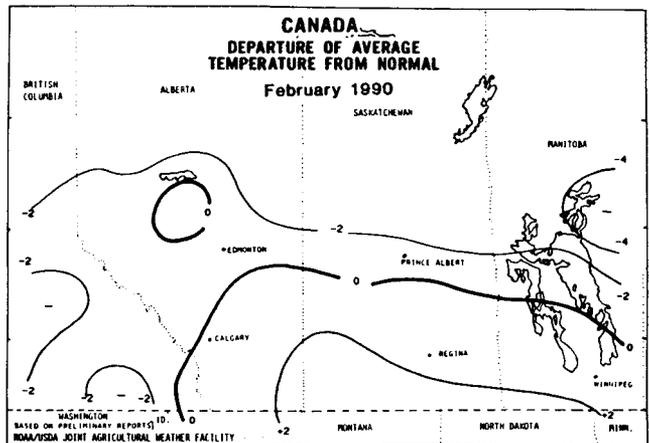
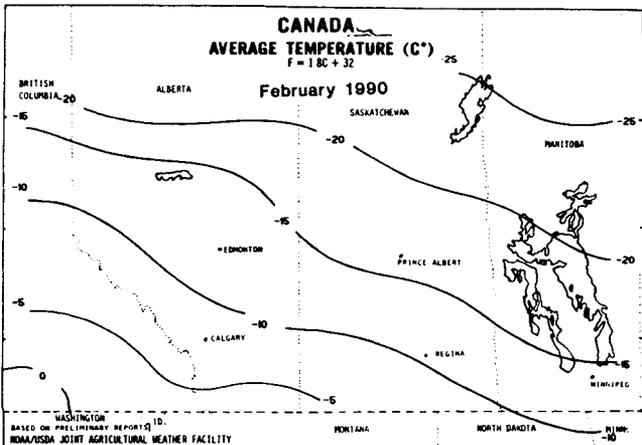
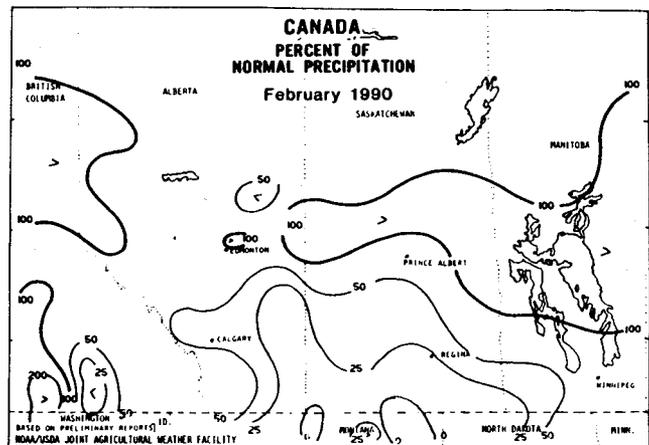
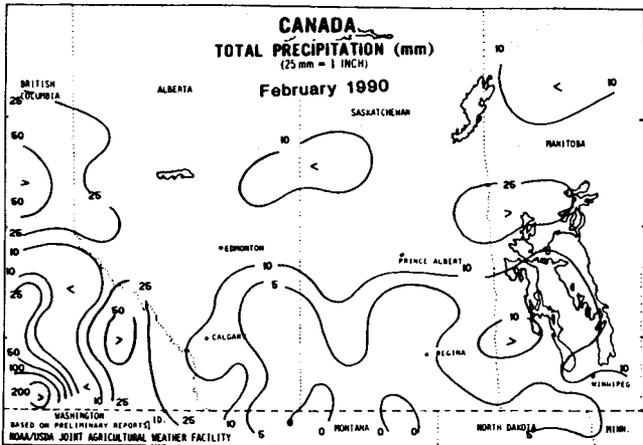
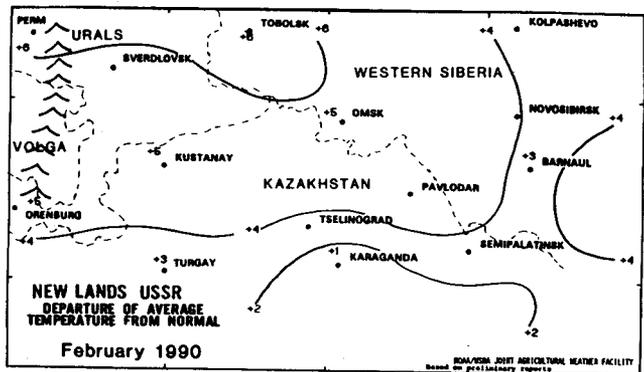
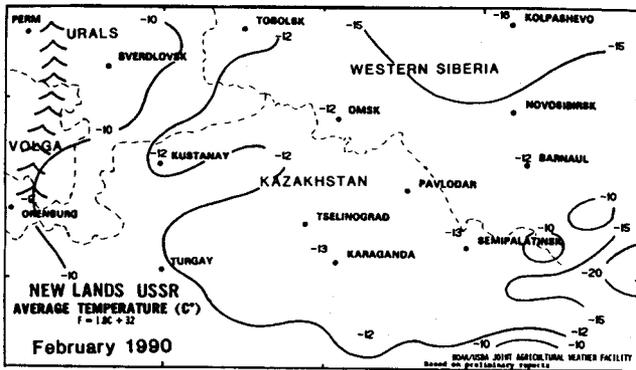
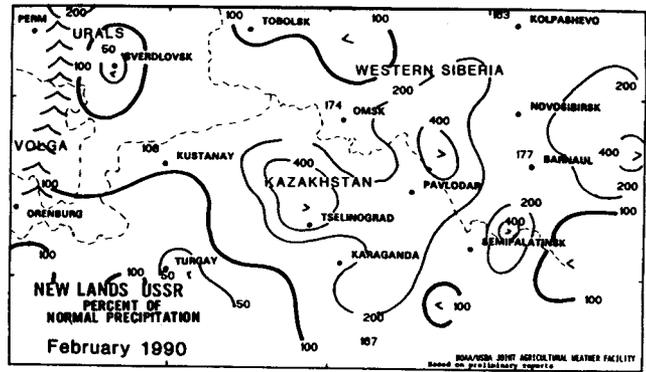
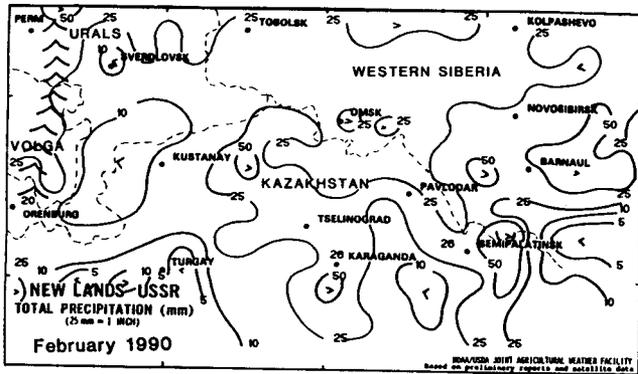
AUSTRALIA ... Beneficial rain continues in eastern coastal Queensland.

NORTHWESTERN AFRICA ... Significant rain in Morocco improves moisture conditions for winter grains. Continued mostly dry weather stresses crops in Algeria and Tunisia.

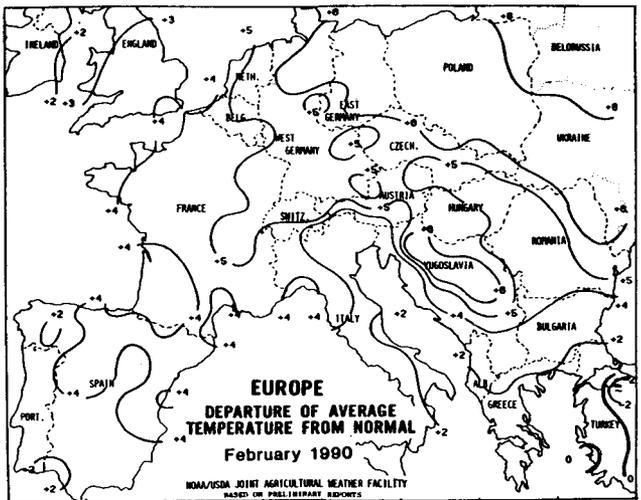
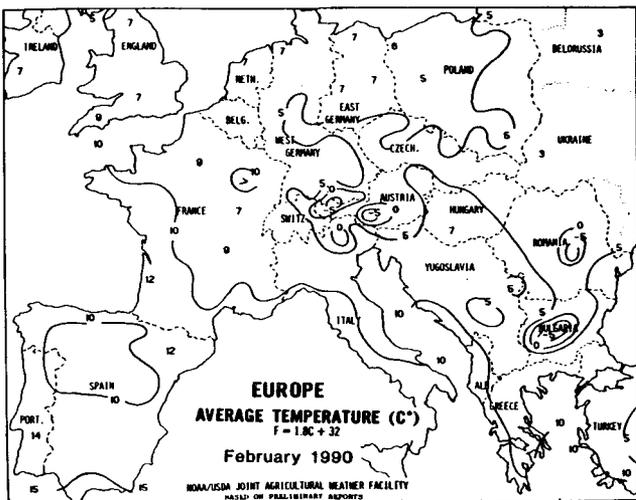
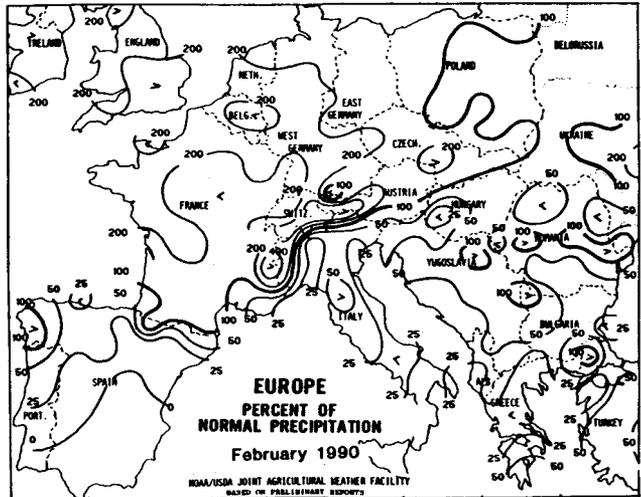
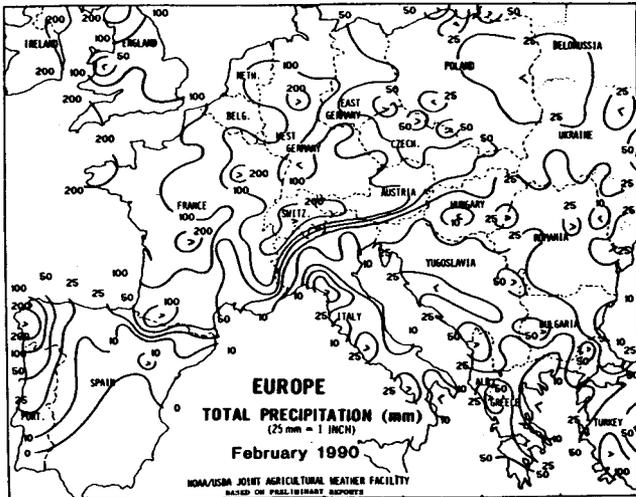
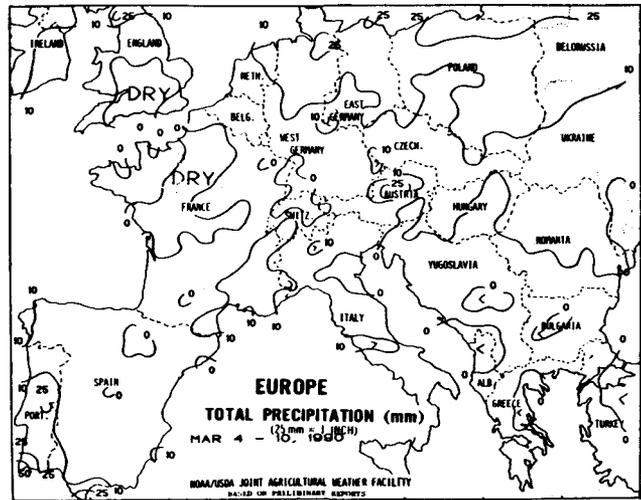


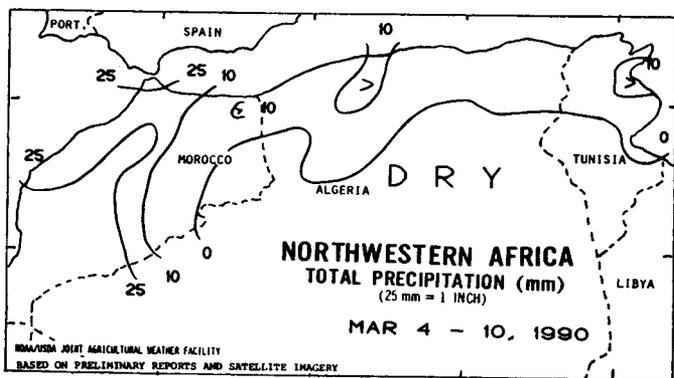
WESTERN USSR ... The ninth consecutive week of unseasonably warm weather persisted over the region. Weekly average temperatures ranged from 5 to 8 degrees Celsius (C) above normal. The continued unseasonably warm weather pattern has caused snow cover to retreat northward at earlier than usual dates. As of March 10, the southward extent of sustained snow cover had moved as far north as the Central Region, the Volga Vyatsk Region, and the upper Volga, which is about 4 weeks earlier than usual. Most of the major winter wheat areas in the west and south lacked a sustained snow cover during most of the winter. In addition, the warm weather caused winter grains in the extreme west and south to begin greening 3-4 weeks earlier than usual. Widespread precipitation (18-30mm) covered the northern half of the region, while light, scattered precipitation (1-10mm) fell over the south. In February, above-normal temperatures covered the region, providing favorable overwintering conditions for winter grains. February precipitation was above normal in the Baltic States, eastern Belorussia, the Central Region, Volga Vyatsk, and the central Ukraine. Below-normal February precipitation covered the eastern Black Soils Region, the middle Volga, and the North Caucasus.



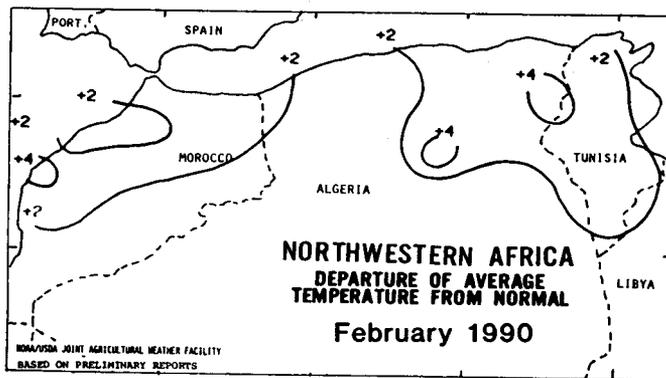
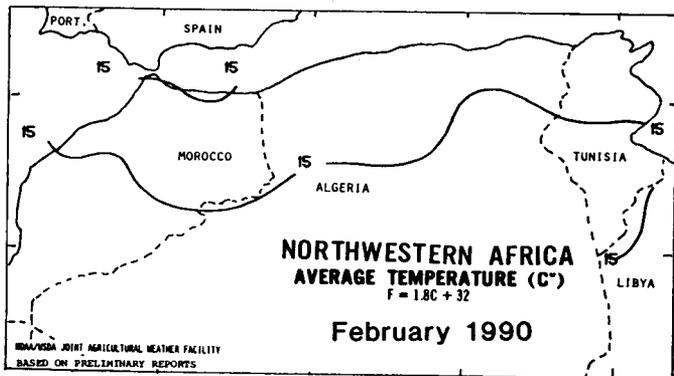
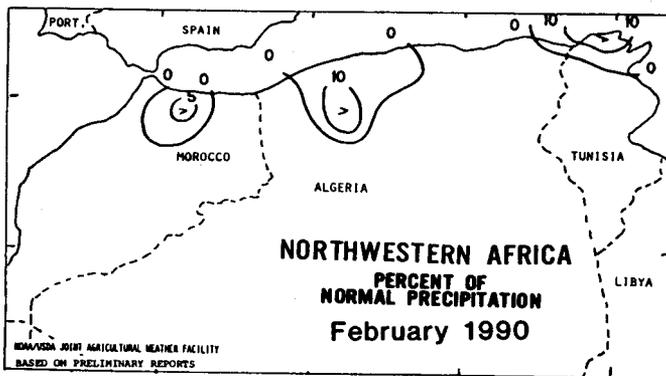
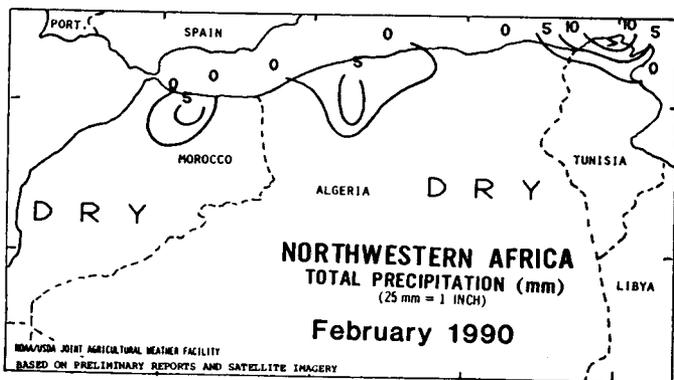


EUROPE ... Occasional rain (5-25mm, with scattered amounts in excess of 30mm) persisted across much of northeastern Europe, maintaining favorable soil moisture levels for winter grains. Northwestern Europe turned mostly dry following above-normal precipitation during the preceding week and much of February. Above-normal temperatures across the north during February and early March caused winter grains to break dormancy several weeks earlier than normal. In the south, scattered mostly light showers (less than 10mm) fell in the southwest and in Italy, while the Balkans remained mostly dry. Below-normal precipitation in Italy and the Balkans during February and much of the winter has left soil moisture at unfavorably low levels for vegetative winter grains.

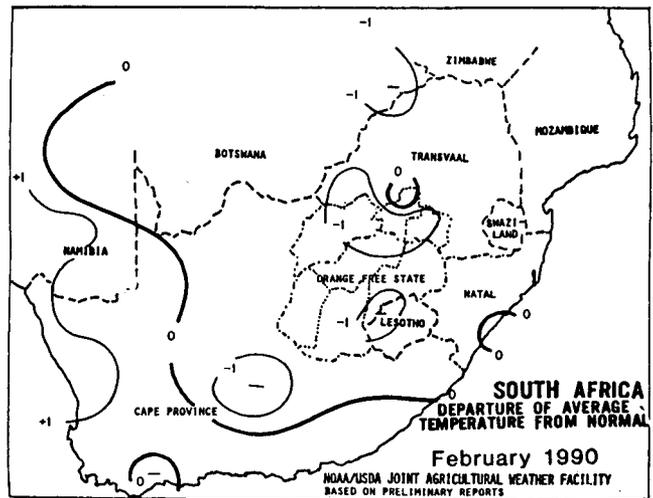
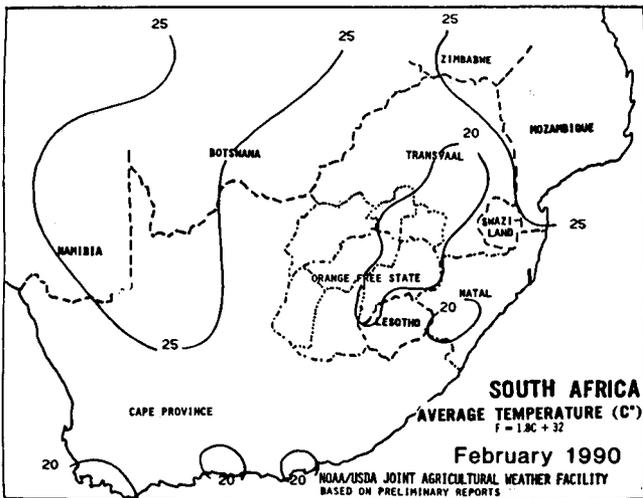
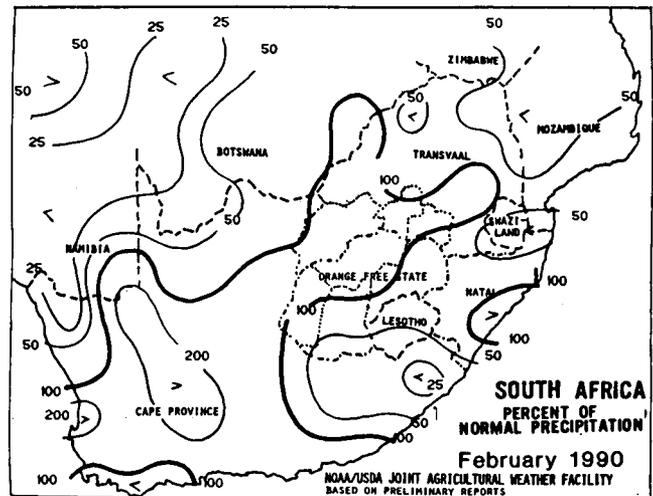
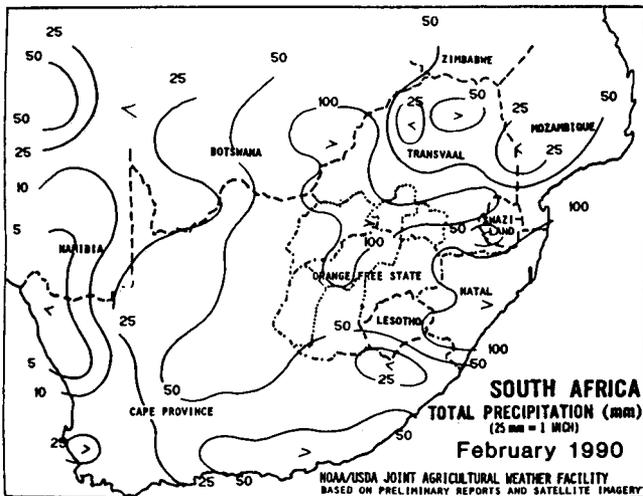
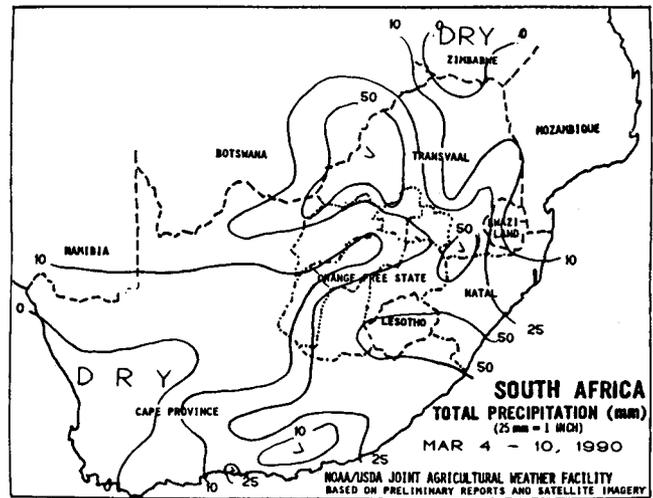




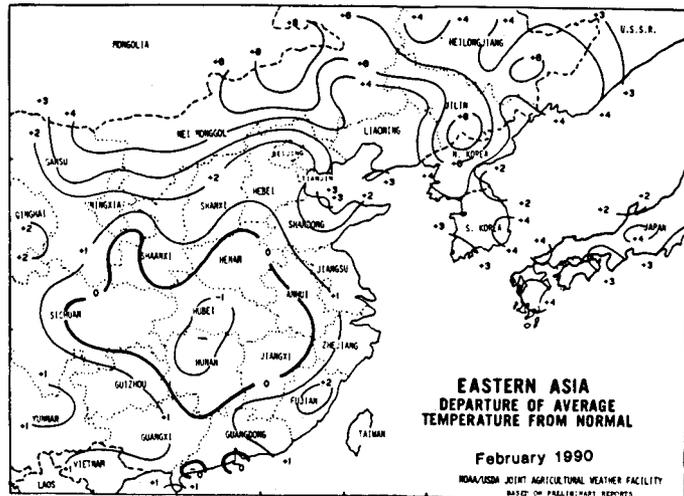
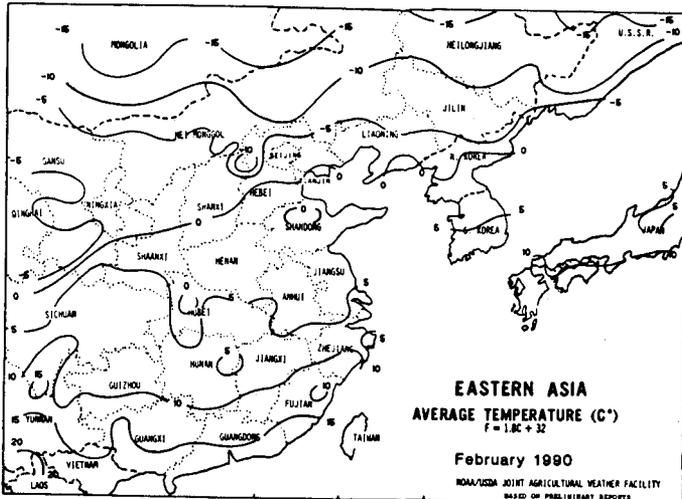
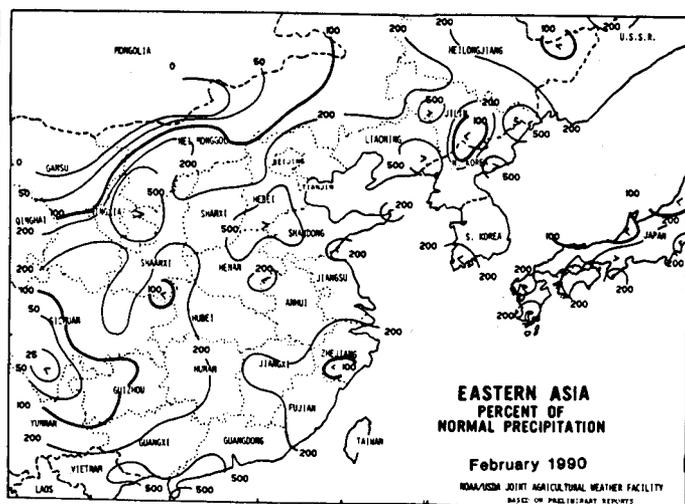
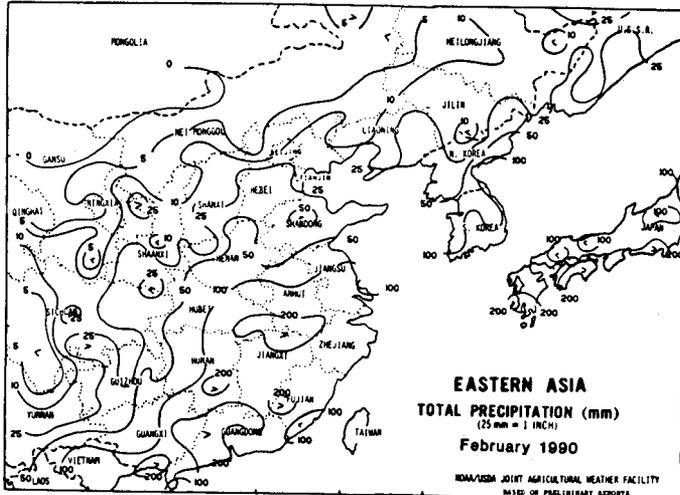
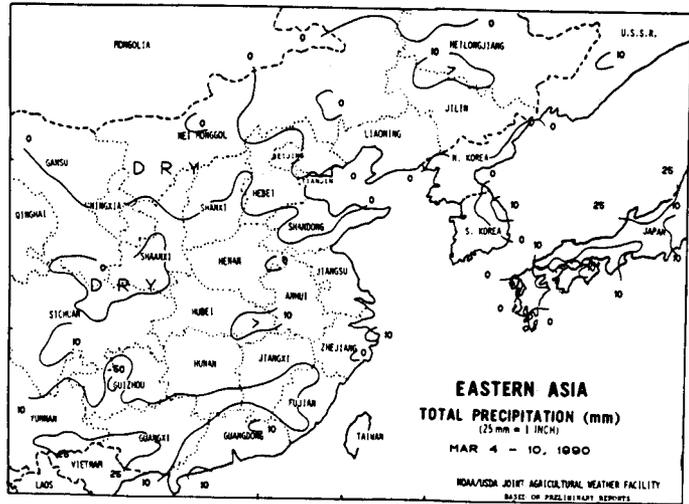
NORTHWESTERN AFRICA ... Significant rain (15-34mm) moistened Moroccan winter grain areas, reversing February's well-below-normal rainfall pattern. The rain helped to improve conditions for crops entering the reproductive phase of development. Minimal rain continued over winter grain areas in Algeria and Tunisia, continuing February's adverse dryness in these areas. Persistent dryness in Algeria has likely stunted vegetative growth and has reduced yield prospects. Soil moisture reserves remained unfavorably low over the entire region. As a result, yield prospects for the winter grain crop will be highly dependent on rain in upcoming weeks as the crop advances through the reproductive and filling stages of development.

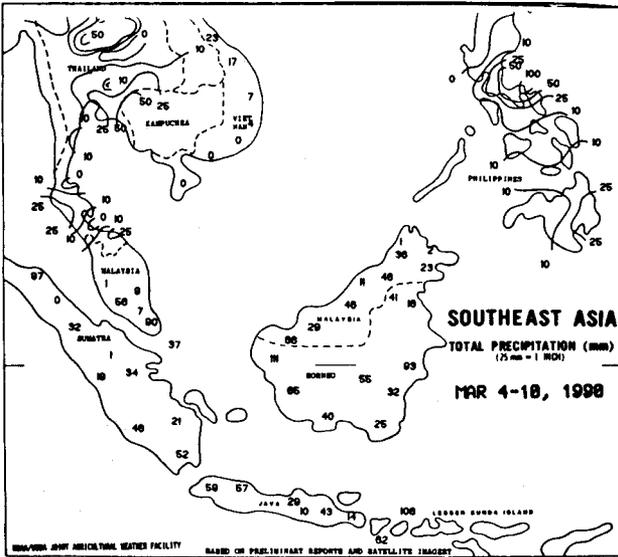


SOUTH AFRICA ... Light to moderate rain (7-25mm or more) swept across the Maize Triangle, with locally heavy amounts (45-70mm) dotting the northeast and southern tip of the Triangle. Moderate to heavy rain (25-50mm or more) also covered most crop areas of Natal and the eastern Cape Province. Weekly temperatures averaged near to as much as 3 degrees C below normal. Drier and warmer weather is now needed over the primary corn regions for crop maturation. In February, rainfall totaled near to above normal over most of the Maize Triangle, maintaining generally favorable conditions for late planted, immature crops. Amounts also totaled near to above normal over most of Natal's sugar region, but drier-than-normal weather dominated the eastern Cape Province. Temperatures averaged near to slightly below normal, reflecting this season's trend of seasonably mild weather.

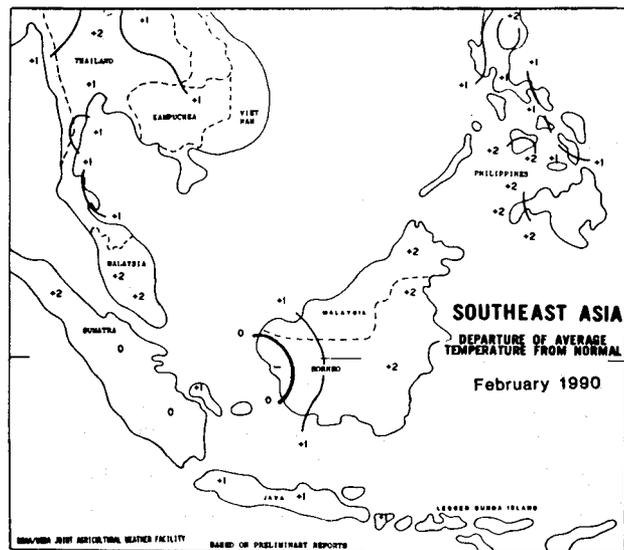
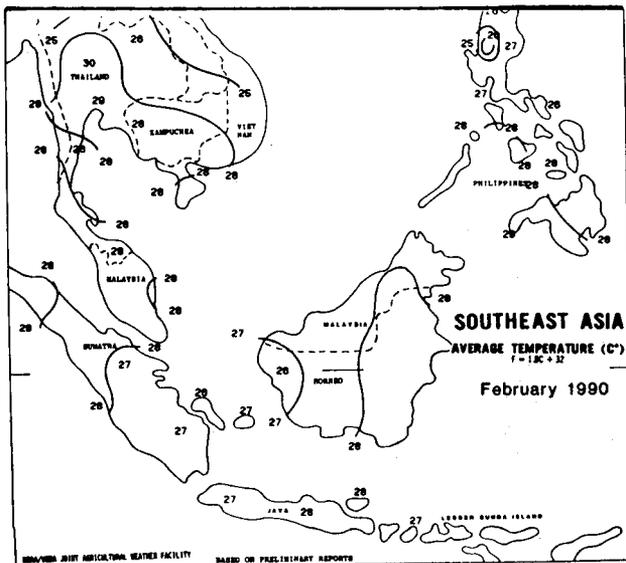
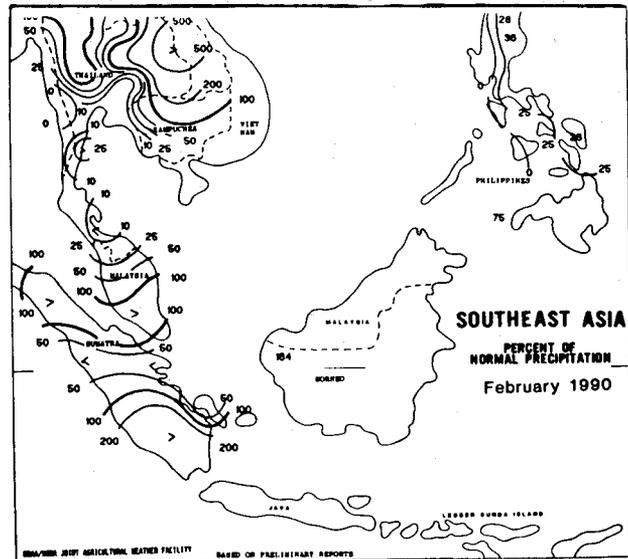
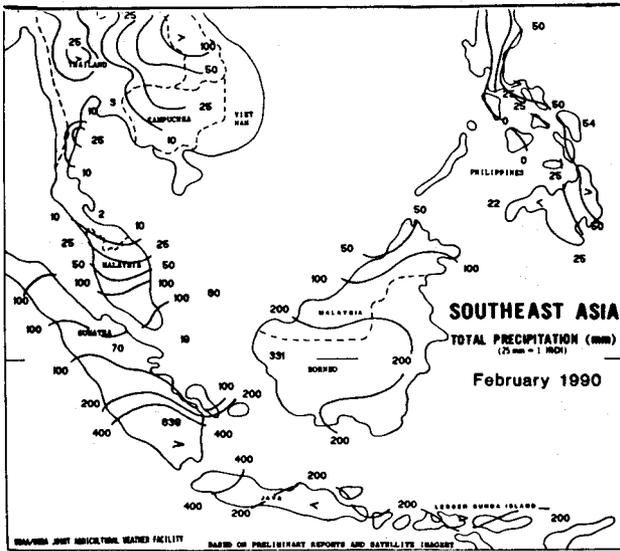


EASTERN ASIA ... Following lingering, early week light rain (generally less than 10mm), mostly dry weather returned to the Yangtze Valley after nearly 2 months of above-normal precipitation, localized flooding, and saturated soils. Moderate to heavy rain (15-45mm) continued delays in early rice planting in sections of Yunnan, Guizhou, and Guangxi. Below-normal temperatures (1-3 degrees C below normal) continued to slow early growth of recently planted rice across the extreme south. In the north, much-above-normal temperatures (5-10 degrees C above normal) reduced snow cover across much of Manchuria. During February, above-normal precipitation fell in all but extreme western and northwestern crop areas, leaving normal- to above-normal preseason soil moisture for most winter and spring planted crops.

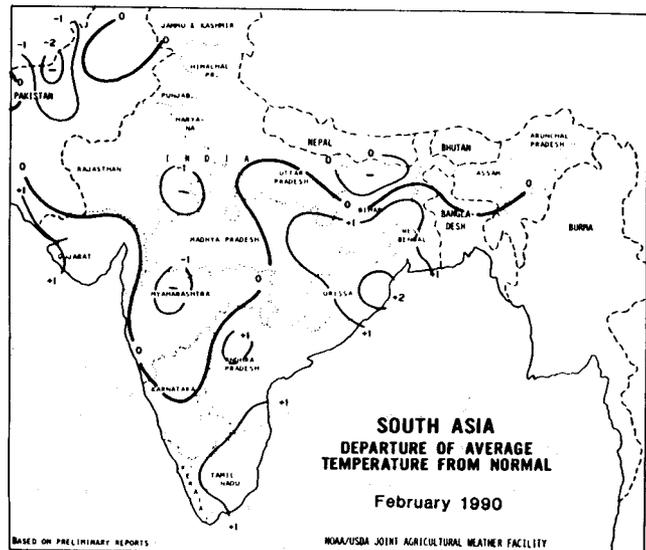
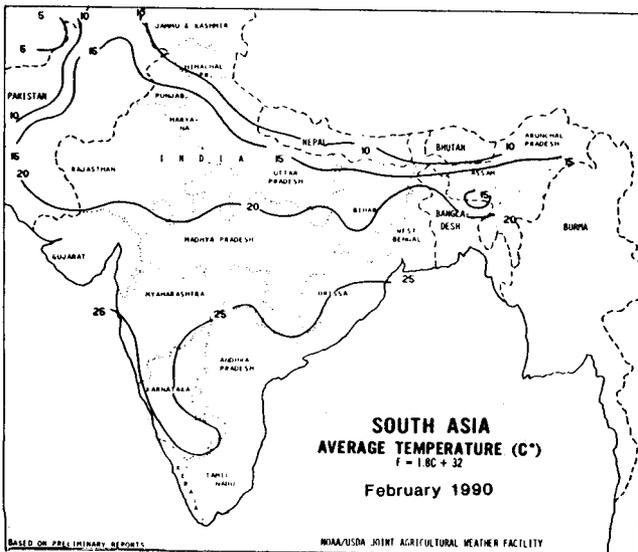
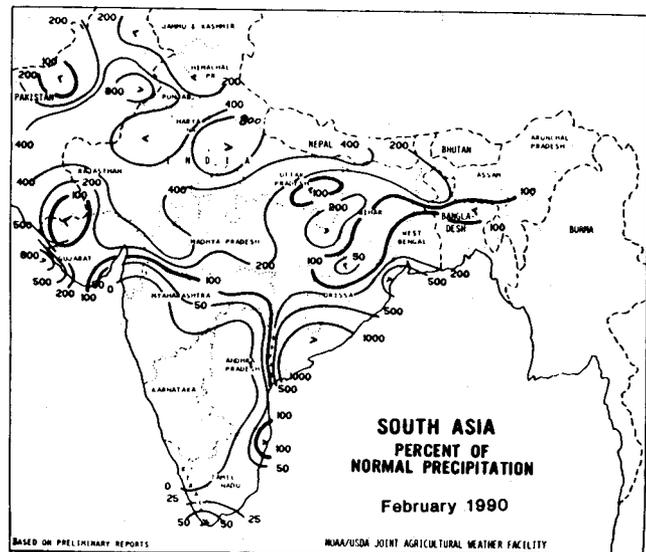
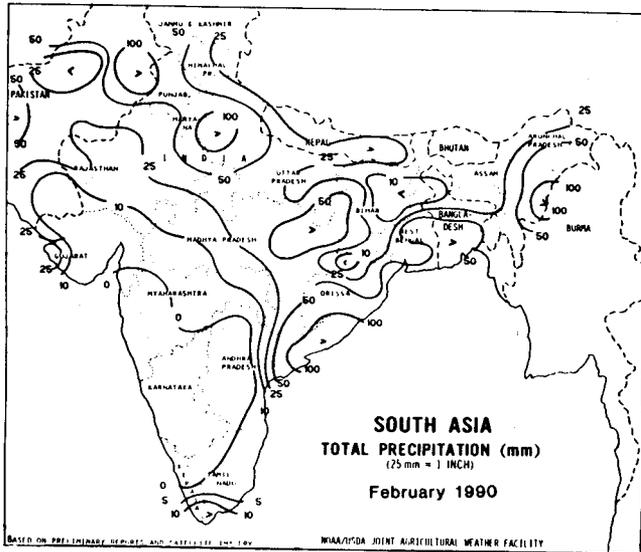
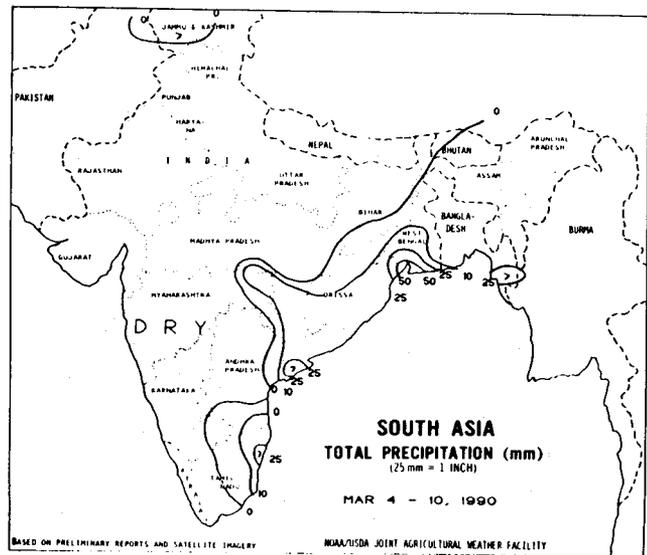


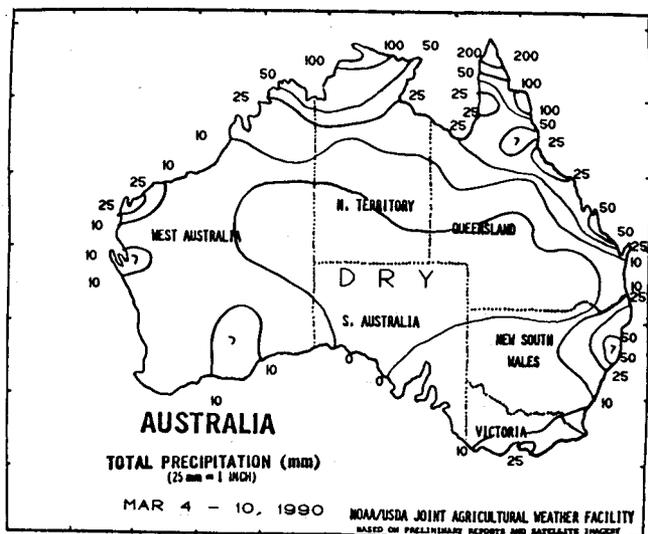


SOUTHEAST ASIA ... Scattered, variable showers (10-50mm or more) fell from central Thailand and western Kampuchea northeastward to Vietnam, further improving irrigation reserves for upcoming plantings. Temperatures averaged 1-5 degrees C below normal over the area, reducing evaporative losses. Scattered rain (9-40mm) also benefited the southern Thai peninsula. Further south, rainfall tapered off over Java, with amounts exceeding 50mm in only local areas. In the Philippines, moderate to heavy rain (25-50mm or more) covered local areas of southern Luzon and eastern Mindanao. In February, frequent, unseasonable rains fell from eastern Thailand to Vietnam, but warmer-than-normal weather maintained high evaporation rates. Drier-than-normal conditions prevailed over Peninsular Thailand and most of Malaysia, but rainfall continued above normal over southern Indonesia. Drier, warmer-than-normal weather dominated the Philippines, with all areas receiving less than 50 percent of normal rainfall.

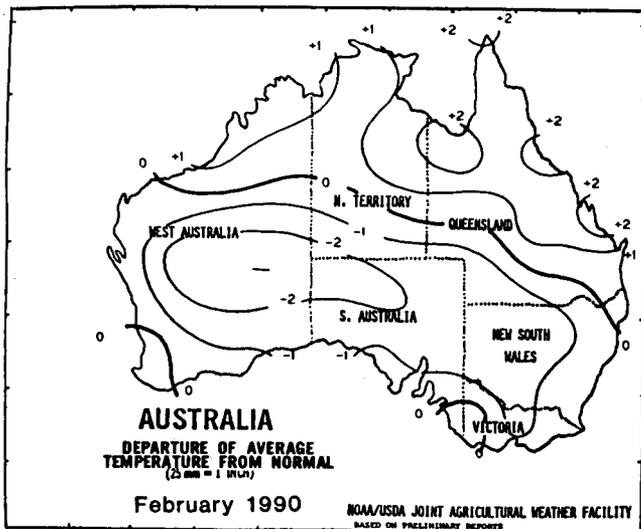
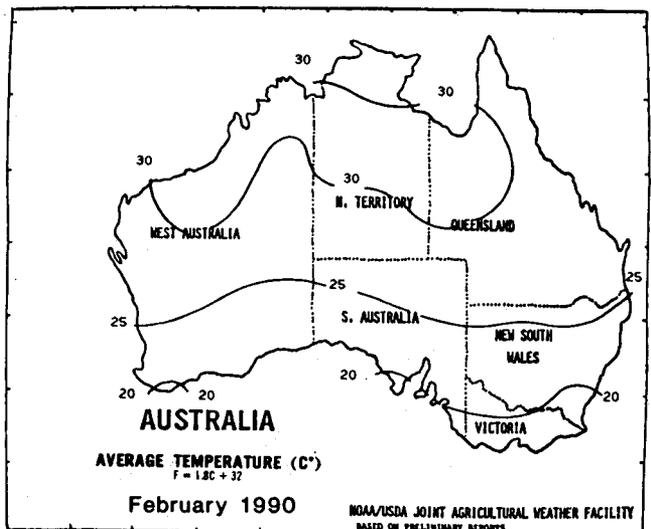
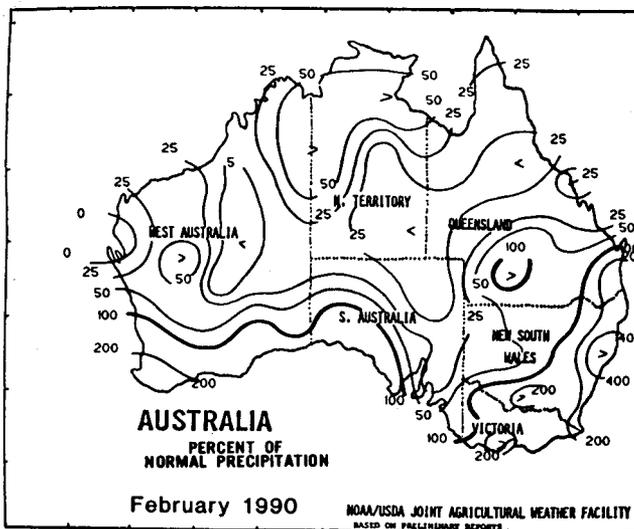
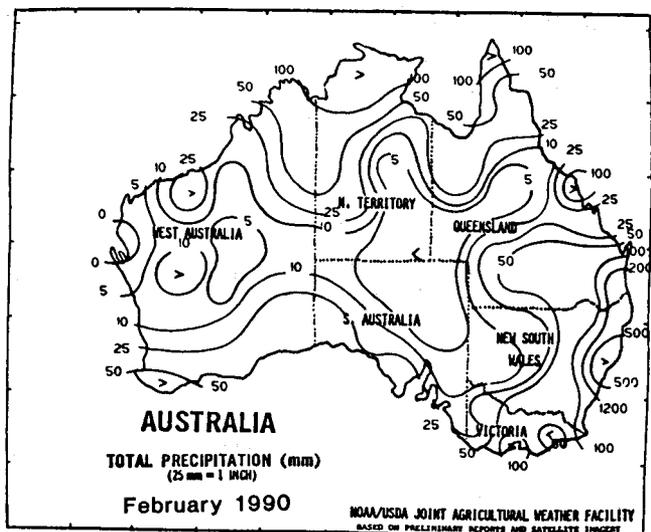


SOUTH ASIA ... Drier weather returned to most winter wheat areas of Pakistan and India, benefiting filling to maturing crops following recent weeks of heavy rain. Moderate to heavy rain (10-50mm or more) in the southeast from northeastern Tamil Nadu to West Bengal benefited immature rice. Weekly temperatures continued to average below normal over most of the region, the exception being southeastern India and northern Pakistan, which averaged 1-2 degrees C above normal. In February, unseasonably heavy rain (amounts ranging from 25 to 100mm or more) greatly improved irrigation reserves over most winter wheat and rice areas. Dry seasonably warm weather, however, benefited India's maturing cotton. Monthly temperatures averaged slightly above normal over much of eastern India and along the western coast and near to below normal elsewhere.

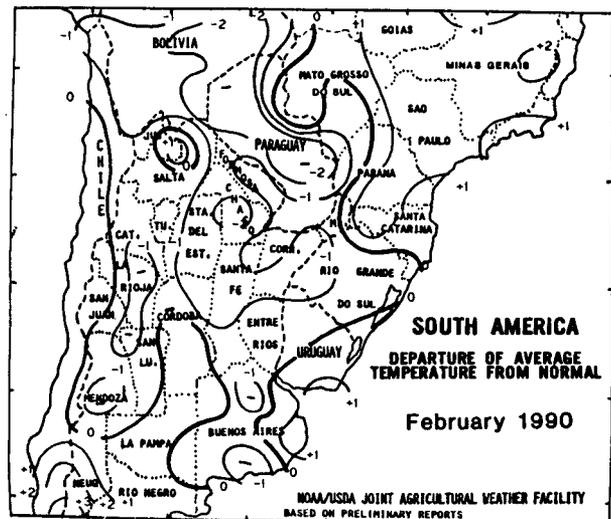
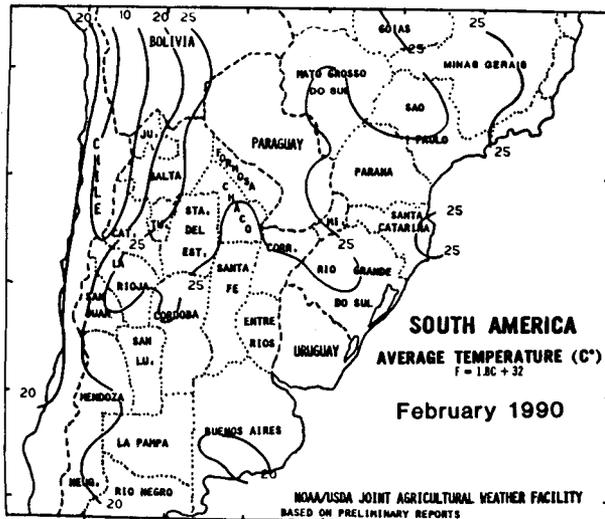
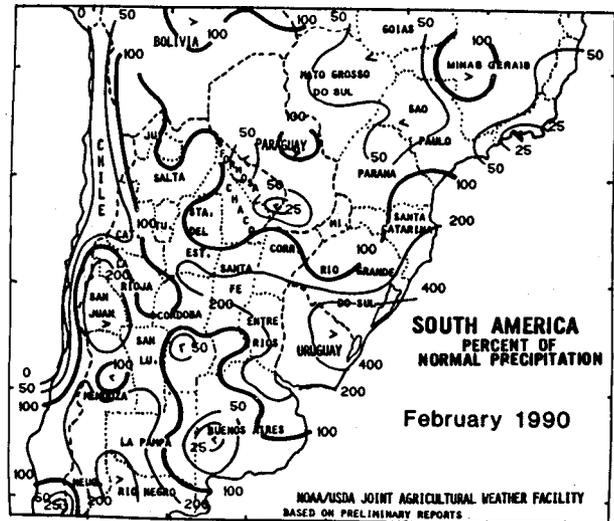
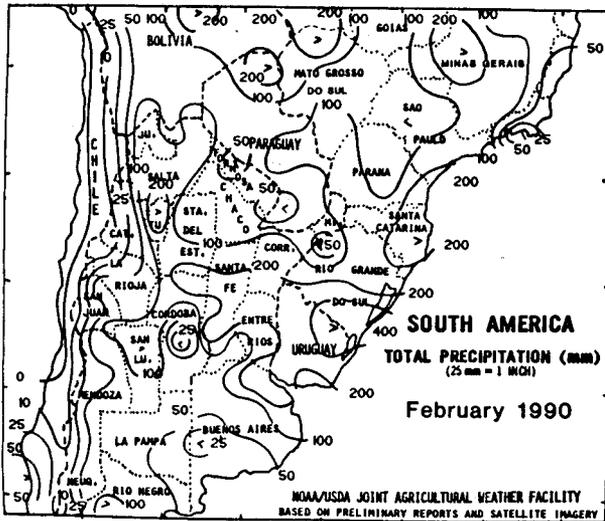
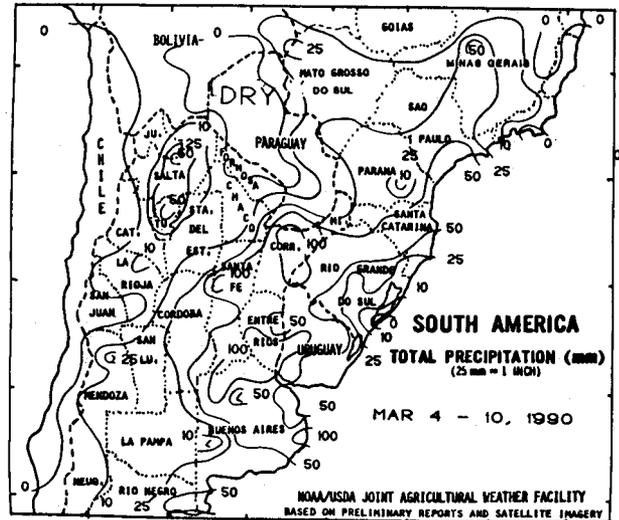


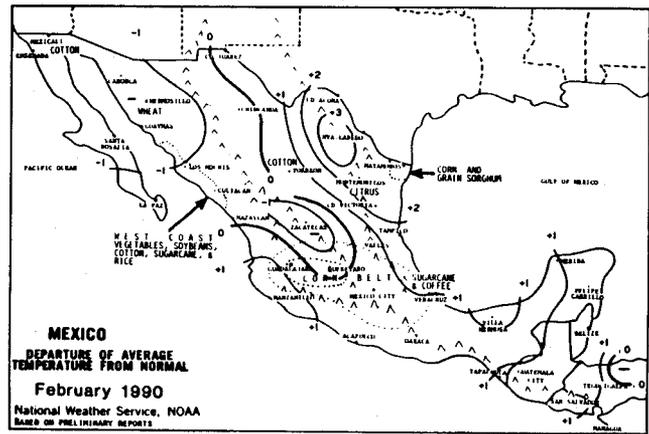
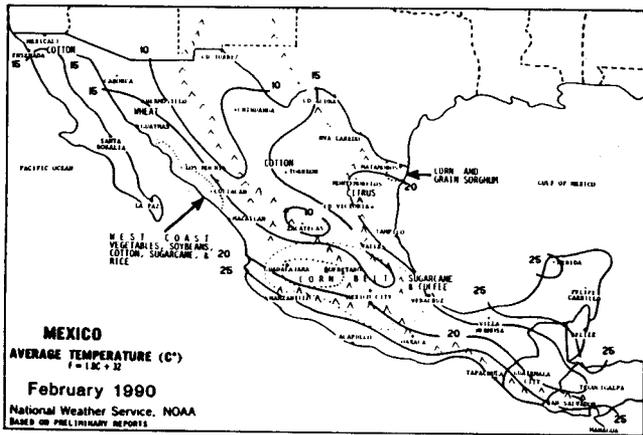
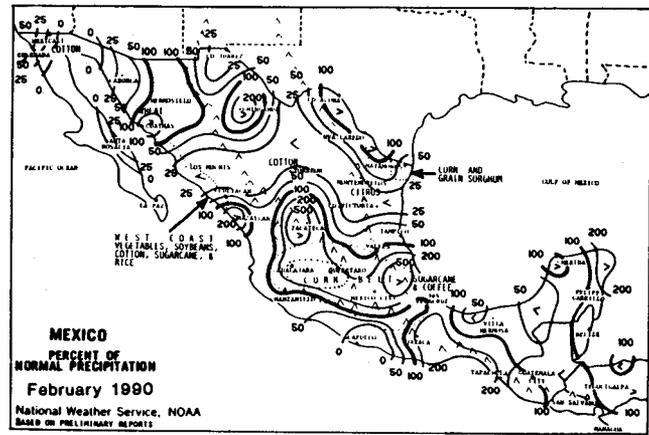
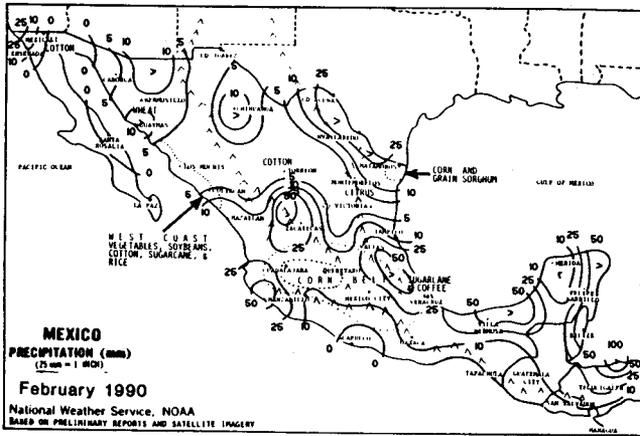


AUSTRALIA ... Scattered rain (10-70mm, with isolated amounts in excess of 100mm) continued across coastal eastern Queensland, favoring vegetative sugarcane. Further inland, scattered mostly light rain (less than 10mm) caused minor delays in early summer crop harvest in central New South Wales and central Queensland. Light rain (less than 10mm) also fell across crop areas of Western and South Australia, and Victoria. In February, much-below-normal precipitation and above-normal temperatures in northern and central Queensland stressed vegetative sugarcane along the coast and prevented summer sorghum planting in some central crop areas. Above-normal monthly precipitation across southern Australia increased pre-season soil moisture for winter grains.



SOUTH AMERICA ... Widespread rain fell over most crop areas of Argentina and south-central Brazil. Locally heavy rain (50-100mm, with scattered amounts in excess of 100mm) soaked northern Buenos Aires, Entre Rios, north-central Santa Fe, and extreme northeastern Argentina as well as bordering areas of western Rio Grande do Sul, Brazil, and much of Uruguay. The wetness delayed summer crop harvesting. Weekly rainfall averaged 10-50mm throughout all remaining crop areas except for Argentina's western cotton areas and Brazil's far northern soybean areas, where mostly dry weather prevailed. Unseasonably warm weather (weekly average temperature departures ranging 3-5 degrees C above normal) prevailed over Argentina's cotton and Brazil's west-central soybean areas. Growing conditions for Argentina's soybeans improved during February, although western crop areas still lagged normal rainfall. In Brazil, substantially drier weather during February, especially over Parana and Sao Paulo, and continued below-average rainfall in Mato Grosso do Sul reduced moisture supplies for pod setting soybeans.





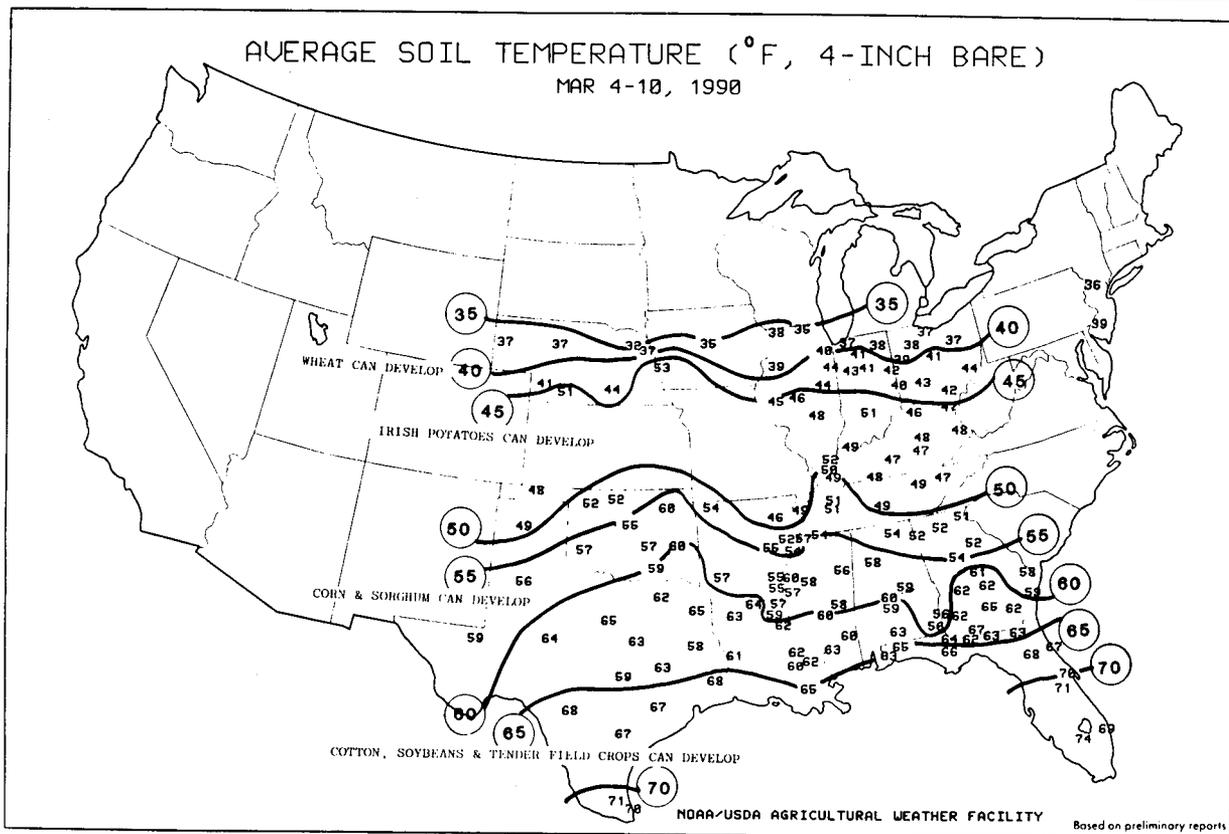
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