

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

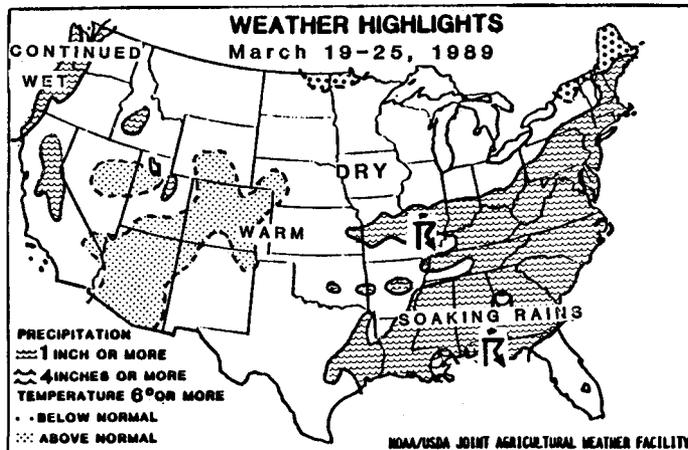
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National Weather Summary

March 19-25, 1989



HIGHLIGHTS: During the first half of the week, a frontal system spread soaking rain from the middle Mississippi Valley and Gulf Coast States to the mid-Atlantic coast and into the Northeast. During the latter half of the week, a low pressure system moved up the eastern seaboard, bringing more soaking rains, while a Pacific system spread moisture across the Western States. Generally dry weather remained in the Great Plains and western Corn Belt. Abnormally warm weather in the West spread across the Nation by week's end, as much of the heavy snow cover melted in the upper Mississippi Valley.

SUNDAY: Morning showers were scattered across the Northwest as snow and freezing rain fell over the Northeast. Later in the day, precipitation was widespread across the central Rockies, and a cold front dropped into the northern Plains. Record-low temperatures for the date in the upper Great Lakes contrasted with record-high temperatures in Florida.

MONDAY: On the first day of spring, the cold front moved rapidly southeastward, extending from the Great Lakes into the southern Plains. Cold Canadian air flowed across the Central States into western Texas, ending the warm spell of the last several weeks. Snow fell across the northern Plains into the Great Lakes and blanketed the central and southern High Plains. Thunderstorms ahead of the front brought heavy rain from the middle Mississippi and Ohio Valleys to the central and western Gulf coast. Damaging wind and hail resulted from severe thunderstorms in the Deep South. An approaching Pacific frontal system spread rain into the Northwest.

TUESDAY: The front continued southeastward, bringing snow to the Northeast and rain into the middle and southern Atlantic and Gulf Coast States. Thunderstorms caused heavy rain along the central Gulf coast. The Pacific front brought scattered precipitation into the Northwest.

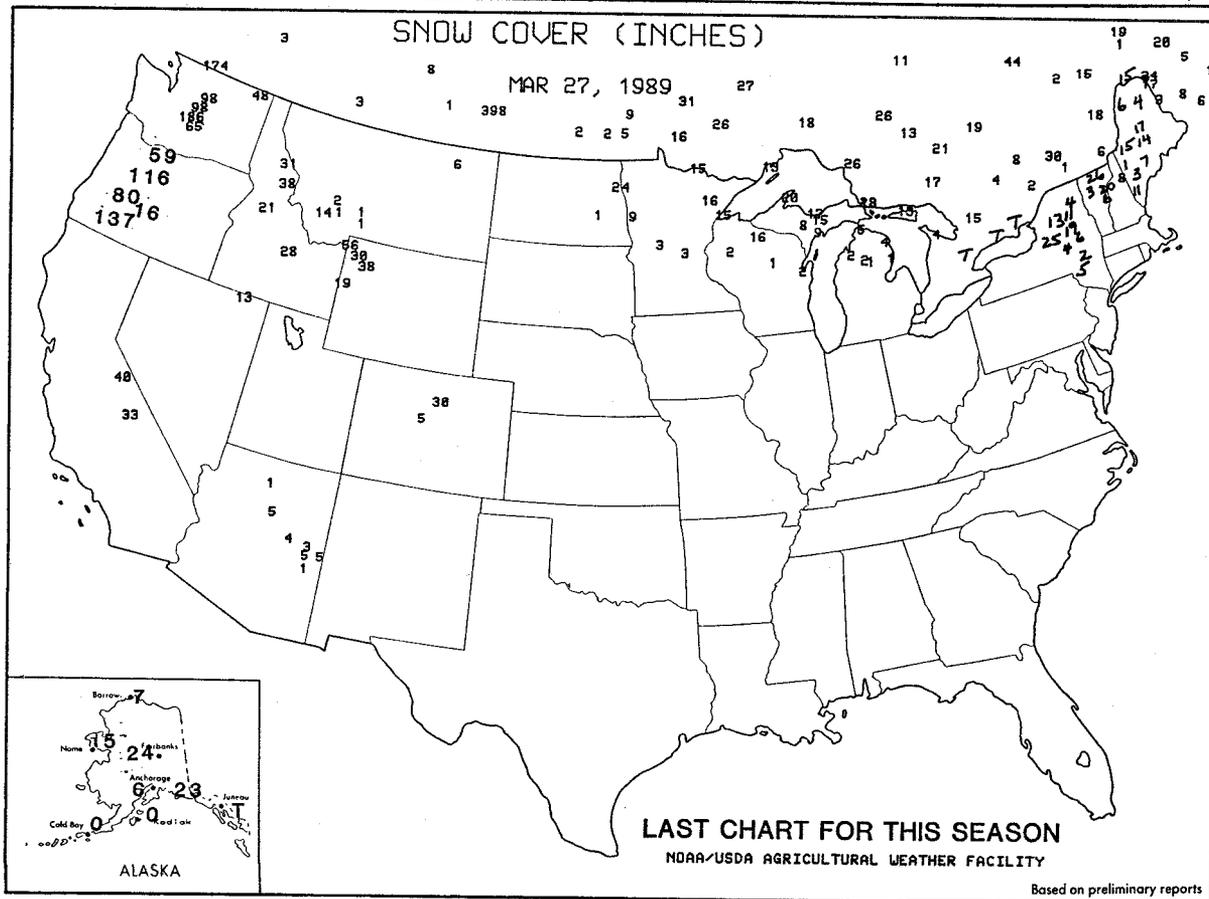
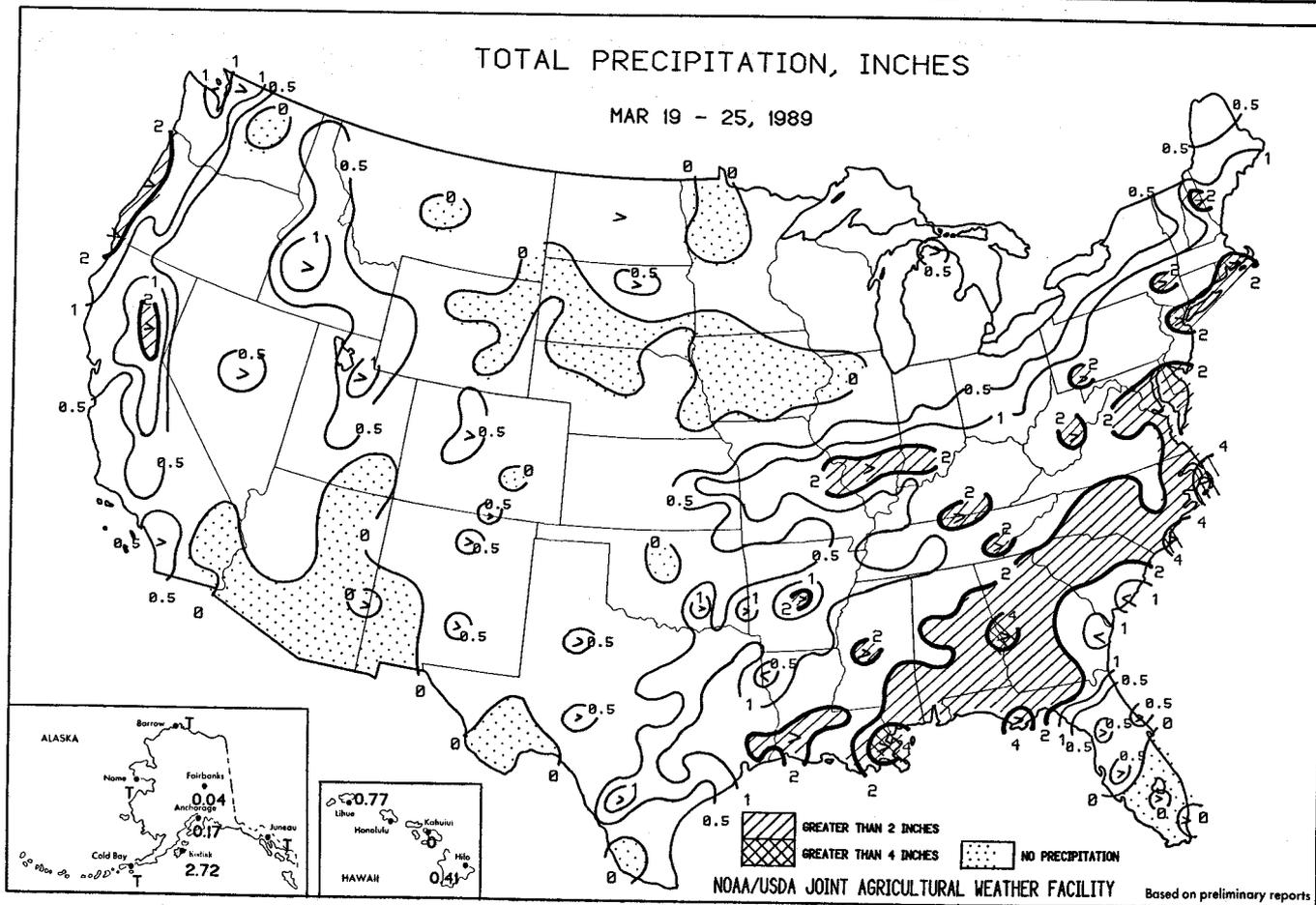
WEDNESDAY: Rain remained over the Southeast. Rainfall was heavy along the stationary front across the eastern Gulf coast. A cold front trekked eastward across the northern Plains and spread rain and snow. The remainder of the Nation enjoyed dry and pleasant weather.

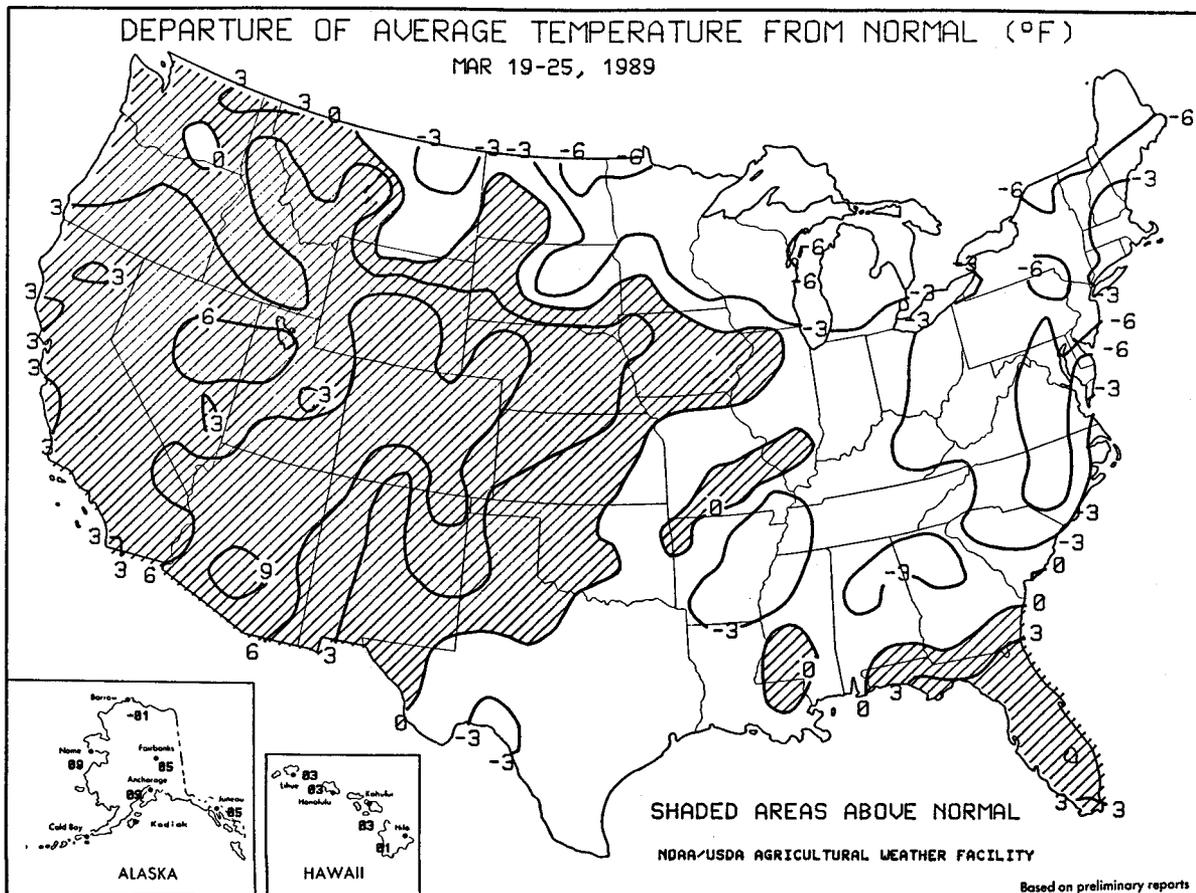
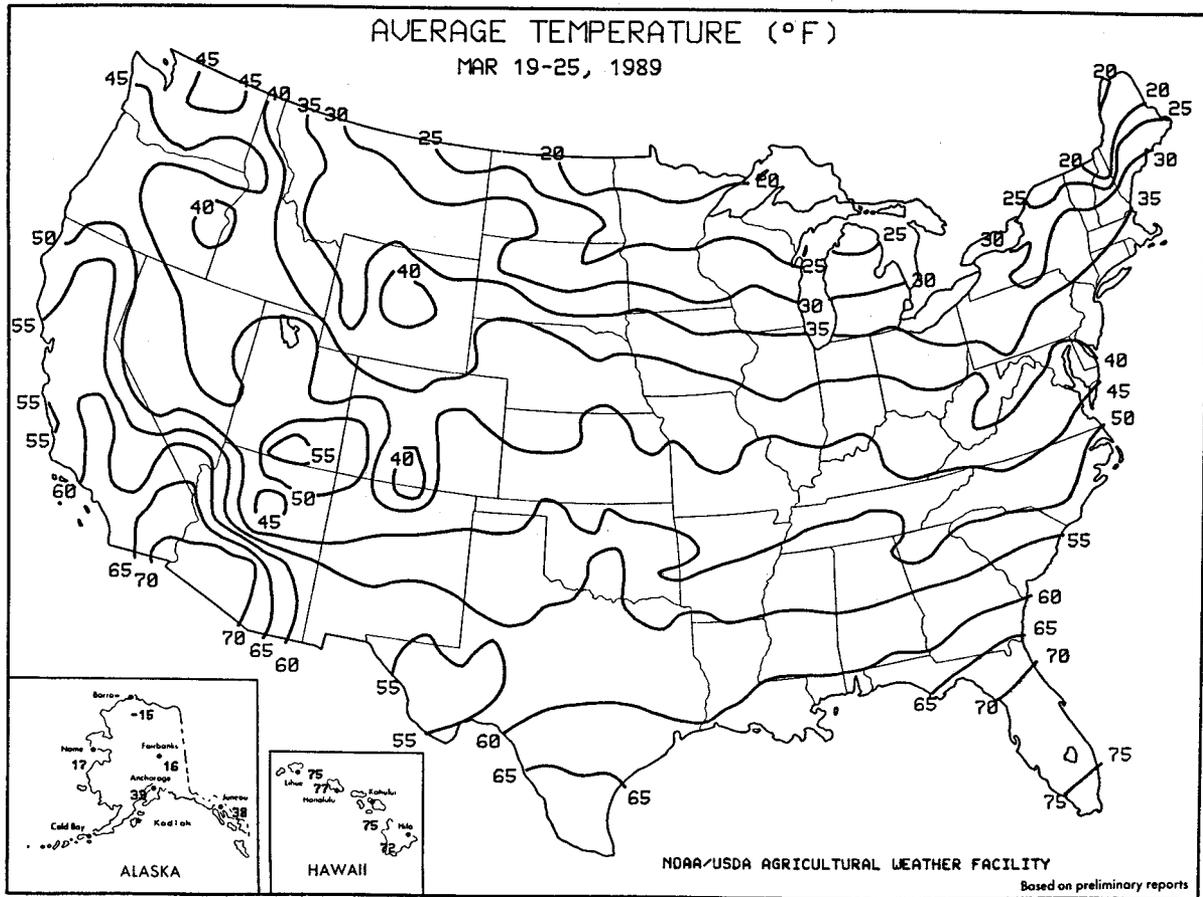
THURSDAY: Widespread rain soaked the Southern and middle Atlantic Coast States as a low pressure system moved over the Florida Panhandle. The cold front continued across the northern Plains, causing scattered rain and snow. Rain moved into northern California.

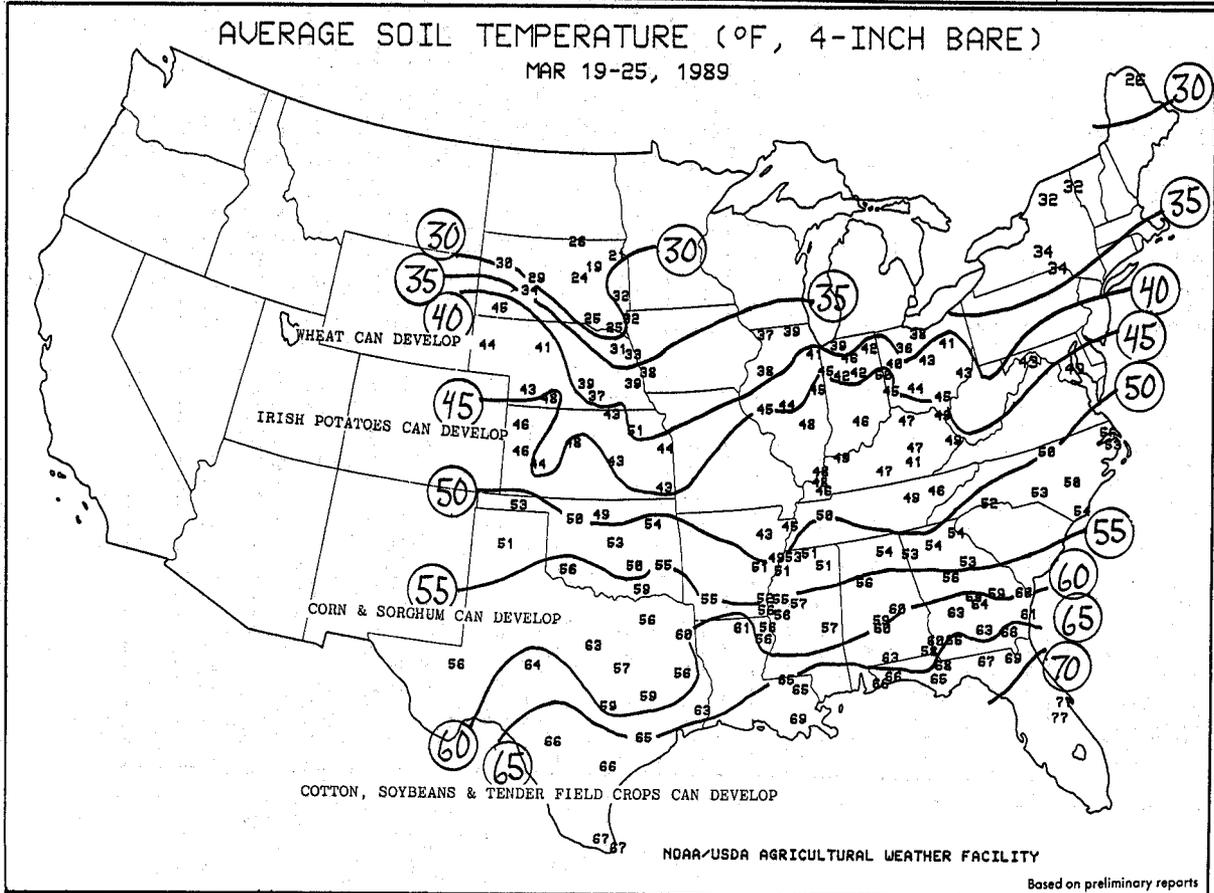
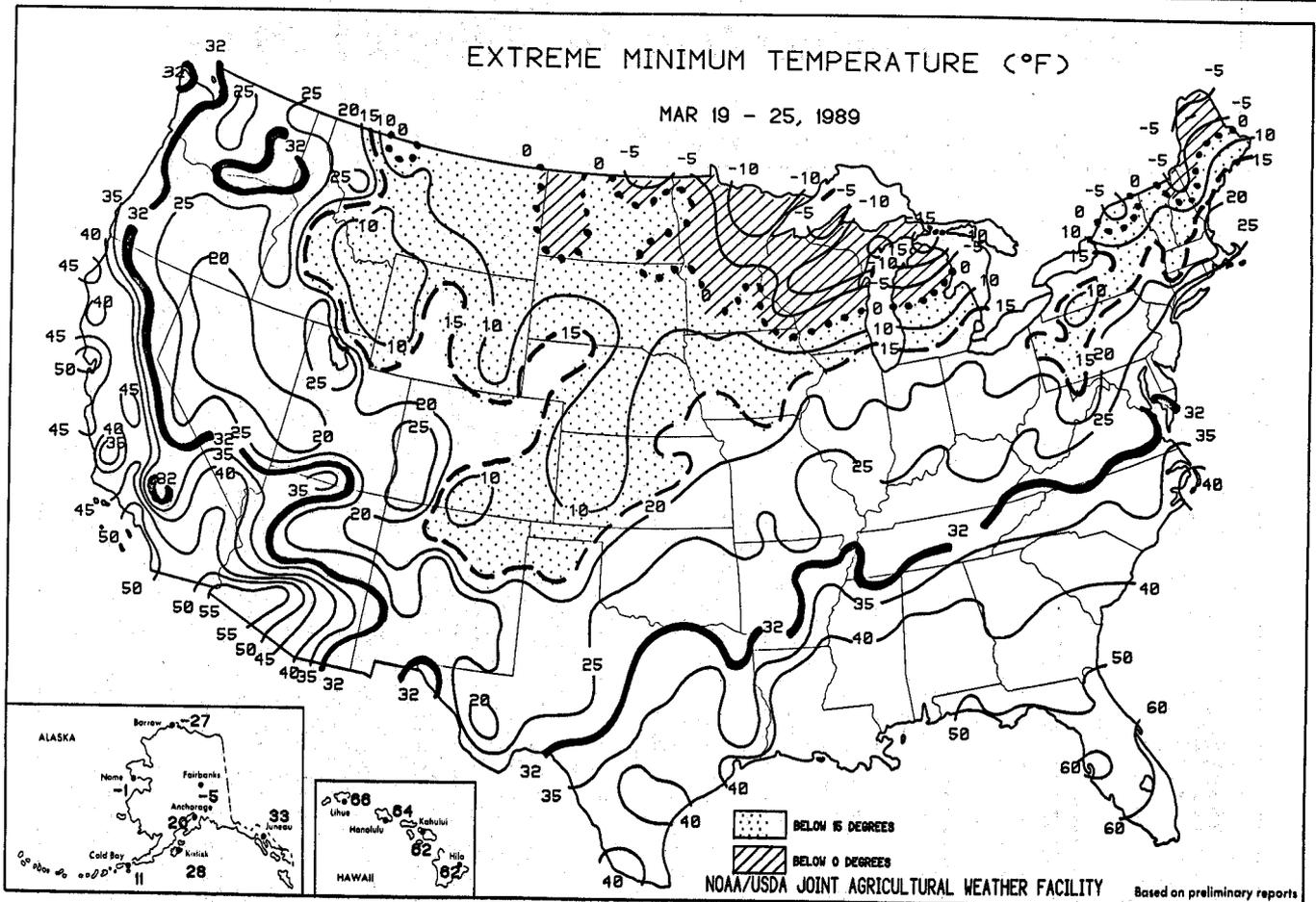
FRIDAY: Soaking rains continued to fall as the low pressure system moved up the Atlantic coast. Rain, sleet, and snow spread from the Carolinas to the Northeast. The steady rain swelled rivers and streams along the mid-Atlantic coast, while heavy snow blanketed the northern Appalachians. Scattered rain and snow showers fell over the Dakotas. A moist Pacific weather system brought rain to the West Coast States. Mild air spread across the central portion of the Nation and melted much of the snow over the upper Mississippi Valley.

SATURDAY: Rain and snow continued over the Northeast as the low pressure system moved into the Atlantic. Rain showers were scattered over the Great Lakes, and the Pacific frontal system continued to spread precipitation across the Western States. Sunshine prevailed over most of the remainder of the Nation.

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National Weather Data for Selected Cities

Weather Data for the Week Ending March 25, 1989

STATES AND STATIONS	TEMPERATURE °F					PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	62	44	79	39	53	-3	1.2	-.4	.4	3.2	59	11.4	75	93	59	0	0	4	0
MOBILE	69	51	82	46	60	-2	3.2	2.3	2.7	5.1	98	8.7	59	99	69	0	0	4	2
MONTGOMERY	64	48	80	42	56	-2	2.6	1.2	1.1	5.2	107	10.1	75	94	63	0	0	4	2
AK ANCHORAGE	40	27	44	20	33	8	.2	0	.1	.3	49	.7	32	89	57	0	0	3	0
BARROW	-7	-23	-5	-27	-15	-1	.2	0	.2	.2	180	.5	98	82	70	0	0	0	0
FAIRBANKS	29	4	36	-5	16	5	.2	0	.1	.39	1.6	124	75	40	0	0	7	0	
JUNEAU	42	33	45	33	38	5	.2	0	.1	.4	16	7.3	72	97	65	0	0	2	0
KODIAK	40	32	43	28	36	4	2.7	1.9	.8	2.7	84	6.7	47	98	79	0	0	5	0
NOME	24	10	31	-1	17	9	.2	0	.1	.3	79	3.3	192	74	55	0	0	7	0
AZ PHOENIX	85	59	90	56	72	10	.4	0	.4	.4	3	1.2	62	29	13	1	0	0	0
PRESCOTT	68	35	72	26	52	8	.4	0	.4	.4	32	2.1	46	53	15	0	0	2	0
TUCSON	83	48	88	43	66	7	0	0	0	0	0	1.2	60	33	10	0	0	0	0
YUMA	85	59	89	56	72	7	.7	0	.7	.6	0	.6	81	42	15	0	0	0	0
AR FORT SMITH	67	38	82	29	53	0	.3	0	.2	.2	95	12.9	175	92	38	0	0	1	0
LITTLE ROCK	61	39	77	30	50	-4	2.5	1.4	2.1	4.8	130	16.6	146	82	48	0	1	2	1
CA BAKERSFIELD	76	50	81	46	63	5	.6	.4	.3	.9	120	1.8	66	87	36	0	0	3	0
EUREKA	58	48	63	45	53	5	1.5	.4	.6	5.9	141	13.5	83	88	67	0	0	5	1
FRESNO	72	50	77	46	61	6	1.1	.8	1.0	2.3	172	3.9	75	98	51	0	0	2	1
LOS ANGELES	70	54	82	51	62	4	.5	.1	.5	.8	52	3.1	44	91	48	0	0	2	0
REDDING	66	47	74	44	57	2	1.9	.8	.8	9.7	235	13.0	69	91	43	0	0	3	2
SACRAMENTO	68	49	73	46	59	5	1.6	1.2	.7	5.6	329	7.6	89	96	55	0	0	4	2
SAN DIEGO	69	55	82	50	62	3	.5	.2	.5	.6	42	1.7	33	89	49	0	0	1	1
SAN FRANCISCO	64	50	72	46	57	4	.7	.1	.3	4.0	183	6.5	65	96	60	0	0	3	2
CO DENVER	61	29	74	18	45	4	.1	0	.1	.4	47	2.2	108	91	28	0	4	1	0
GRAND JUNCTION	62	38	70	26	50	7	.1	0	.1	.4	62	2.7	155	62	22	0	4	2	0
PUEBLO	70	25	79	11	48	6	.2	0	.2	.4	0	1.1	111	77	17	0	0	1	0
CT BRIDGEPORT	44	31	58	26	37	-3	1.1	.2	1.1	1.8	57	5.6	60	74	45	0	6	0	1
HARTFORD	46	25	57	19	35	-4	1.2	.2	1.0	1.5	47	4.3	43	81	31	0	6	4	1
DC WASHINGTON	49	35	66	32	42	2	2.2	1.4	1.1	3.8	135	9.1	112	84	47	0	1	4	2
FL APALACHICOLA	75	57	79	52	66	4	4.6	3.7	2.8	5.6	171	8.8	84	98	64	0	0	1	2
DAYTONA BEACH	82	61	88	55	71	6	.5	0	.5	1.7	67	9.1	115	98	49	0	0	3	0
JACKSONVILLE	80	57	85	50	68	5	1.0	.3	.7	1.9	66	5.4	57	98	52	0	0	2	0
KEY WEST	81	71	83	68	76	1	.1	0	.1	1.1	104	1.8	39	87	63	0	0	1	0
MIAMI	84	68	88	63	76	3	.2	0	.2	.5	37	1.9	35	88	48	0	0	1	0
ORLANDO	84	61	89	58	73	3	.1	0	.1	1.1	42	5.1	64	98	41	0	0	2	0
TALLAHASSEE	75	53	87	45	64	2	3.3	2.1	1.6	4.0	88	7.4	52	97	57	0	0	3	3
TAMPA	82	63	89	59	72	2	.3	0	.3	1.7	60	3.6	45	94	52	0	0	1	0
WEST PALM BEACH	83	66	85	62	74	3	.3	0	0	1.6	69	3.5	47	91	55	0	0	0	0
GA ATLANTA	61	42	74	39	51	-3	2.7	1.3	1.3	3.4	71	10.3	73	94	57	0	0	4	2
AUGUSTA	66	44	78	38	55	-2	1.6	.5	1.2	3.5	88	8.3	69	95	58	0	0	4	1
MACON	66	47	80	40	57	-2	2.1	1.0	1.1	4.5	106	11.0	84	93	63	0	0	3	2
SAVANNAH	69	50	81	42	59	-1	.7	0	.5	1.3	41	2.4	25	96	61	0	0	2	0
HI HILO	81	63	83	62	72	1	.4	0	.2	5.9	54	39.9	118	93	59	0	0	2	0
HONOLULU	84	69	86	64	77	3	.2	0	.2	2.6	91	11.2	120	84	53	0	0	0	0
KAHULUI	84	66	87	62	75	3	.8	0	.8	2.5	110	9.5	103	87	54	0	0	0	0
LIHUE	80	70	80	66	75	3	.8	0	.8	8.7	239	27.1	200	91	71	0	0	1	1
ID BOISE	52	36	57	25	44	2	1.3	1.0	.5	2.7	331	4.9	142	91	45	0	2	4	0
LEWISTON	57	40	61	34	48	4	.4	.1	.3	1.3	156	3.1	99	77	44	0	0	3	0
POCATELLO	48	29	55	9	39	2	.9	.7	.4	2.7	374	4.7	176	94	57	0	3	4	0
IL CHICAGO	48	25	64	15	37	-3	.1	0	.1	1.2	57	2.8	57	84	41	0	6	2	0
MOLINE	51	26	70	16	39	0	.2	0	.2	.9	43	3.3	67	88	40	0	6	0	0
PEORIA	51	27	69	17	39	-1	.1	0	.1	.7	30	2.8	54	86	39	0	5	0	0
QUINCY	52	29	72	21	41	-1	.4	0	.4	.8	33	2.1	40	91	44	0	5	1	0
ROCKFORD	47	25	63	15	36	0	.7	0	.7	.8	41	2.2	50	88	50	0	6	0	0
SPRINGFIELD	51	30	70	20	40	0	.7	0	.7	1.5	63	3.6	65	92	46	0	5	2	1
IN EVANSVILLE	57	33	70	25	45	-2	.8	0	.8	3.4	92	13.7	142	89	40	0	5	1	1
FORT WAYNE	47	27	70	19	37	-2	.2	0	.2	1.1	48	4.2	66	87	46	0	6	1	0
INDIANAPOLIS	51	31	71	23	41	-1	1.0	.1	1.0	2.7	96	5.8	73	83	39	0	4	1	1
SOUTH BEND	47	24	64	17	36	-3	.2	0	.2	1.3	55	3.9	58	87	39	0	6	2	0
IA DES MOINES	53	26	71	13	40	2	.0	0	.0	.3	16	2.6	70	80	33	0	5	0	0
SIOUX CITY	52	27	68	13	39	3	.0	0	.0	.7	51	2.0	69	83	39	0	4	0	0
WATERLOO	48	24	63	11	36	1	.2	0	.2	.7	44	2.1	62	89	45	0	4	0	0
KS CONCORDIA	61	30	76	16	46	4	.2	0	.2	.2	14	1.3	45	74	32	0	4	1	0
DODGE CITY	66	27	81	9	46	2	.2	0	.2	.7	1	.5	26	77	27	0	5	1	0
GOODLAND	61	24	72	8	43	4	.1	0	.1	.2	23	.6	37	85	28	0	6	1	0
TOPEKA	59	28	76	18	44	4	.3	0	.3	.4	22	2.5	68	79	34	0	5	1	0
WICHITA	63	32	81	20	47	1	.3	0	.3	.3	16	1.4	46	78	30	0	5	1	0
KY BOWLING GREEN	57	35	70	26	46	-2	1.4	.1	1.1	4.4	98	21.5	165	91	51	0	3	2	1
LEXINGTON	53	34	66	24	43	-3	1.2	.1	1.1	4.4	113	18.5	172	83	48	0	4	2	1
LOUISVILLE	55	34	70	26	45	-3	1.2	.1	1.2	3.7	98	16.4	158	79	40	0	4	1	1
LA ALEXANDRIA	67	49	76	42	58	-2	1.0	0	.7	2.4	62	16.7	128	89	60	0	4	3	1
BATON ROUGE	73	52	84	45	62	0	1.6	.6	1.5	2.5	68	8.0	61	96	61	0	0	2	1
LAKE CHARLES	70	51	78	42	60	-2	2.0	1.3	1.0	2.7	107	7.9	75	98	64	0	0	2	2
NEW ORLEANS	71	54	82	48	63	0	5.0	4.0	3.1	5.7	149	8.4	60	98	67	0	0	3	2

Based on 1951-80 normals

Weather Data for the Week Ending March 25, 1989

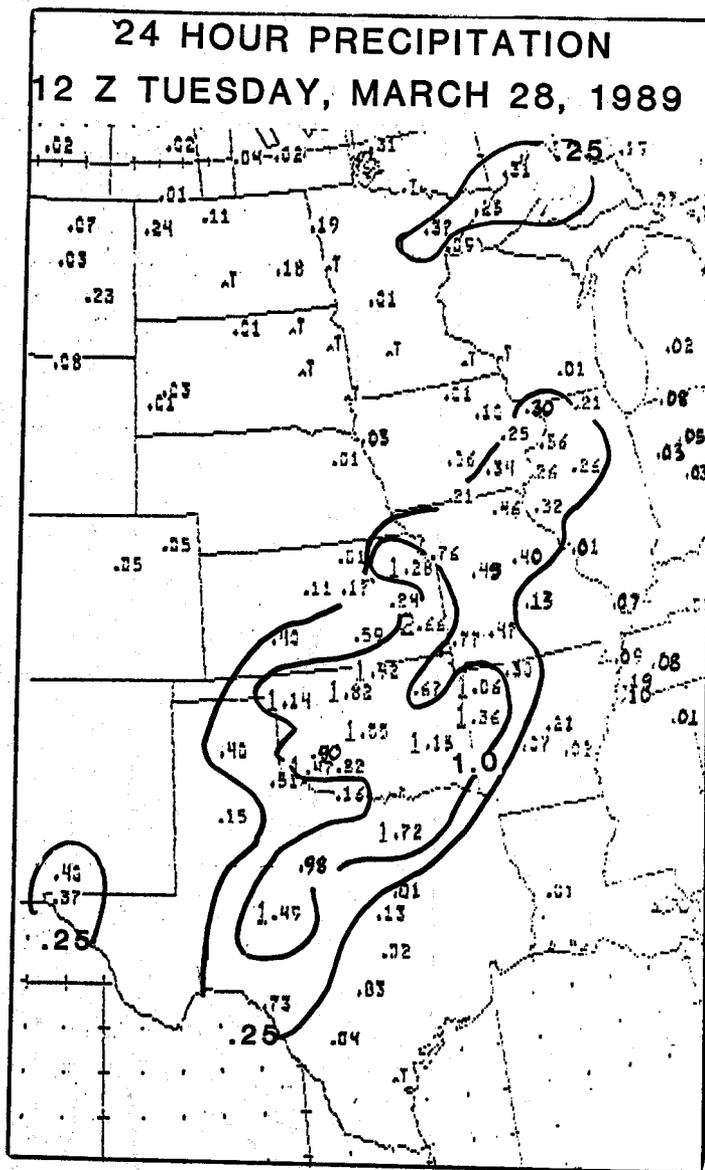
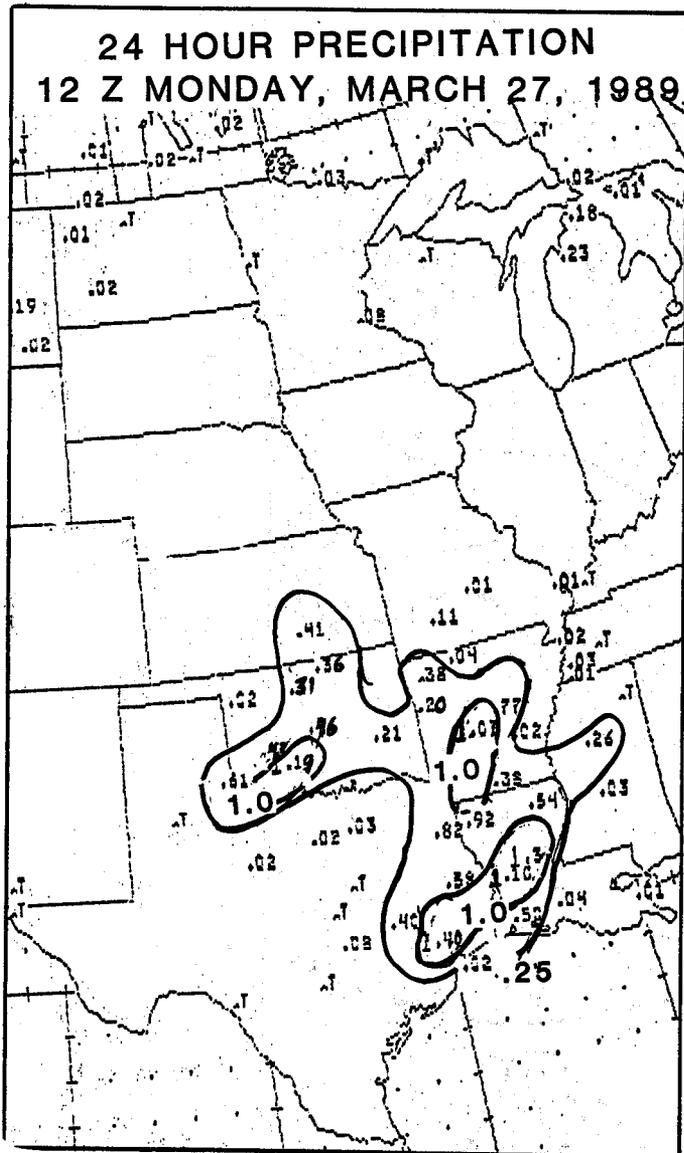
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	52 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME SHREVEPORT	69	44	81	35	57	-2	.4	-.5	.4	1.2	42	12.5	119	93	47	0	0	2	0
ME CARIBOU	32	7	42	-5	19	-8	2.2	-.4	.2	.8	40	4.1	64	84	46	0	7	1	0
ME PORTLAND	41	22	49	15	32	-2	1.2	.3	.6	1.5	47	5.0	48	90	44	0	7	4	1
MD BALTIMORE	49	32	65	26	40	-5	2.0	1.2	1.1	3.8	128	10.2	115	89	50	0	4	4	1
MD SALISBURY	51	33	61	24	42	-4	2.8	1.8	1.6	5.2	157	9.8	97	92	52	0	4	4	3
MA BOSTON	44	30	55	25	37	-3	1.4	1.4	.6	2.1	62	5.2	47	87	43	0	6	5	1
MA CHATHAM	41	31	46	26	36	-2	1.9	1.0	1.2	3.8	117	9.0	76	88	62	0	4	5	1
MI ALPENA	38	10	49	-9	24	-6	.3	-.1	.2	2.4	169	4.5	100	89	41	0	7	2	0
MI DETROIT	44	25	68	17	35	-3	1.1	-.5	.1	1.4	71	3.5	64	91	50	0	6	1	0
MI FLINT	42	20	61	10	31	-4	.2	-.3	.2	1.7	105	3.5	76	87	47	0	6	1	0
MI GRAND RAPIDS	43	21	62	10	32	-4	.1	-.5	.1	1.8	93	3.8	70	89	49	0	6	1	0
MI HOUGHTON LAKE	40	11	55	-11	25	-4	.2	-.3	.1	2.5	172	4.2	99	83	39	0	6	2	0
MI LANSING	43	21	61	10	32	-4	1.1	-.5	.1	1.2	63	3.0	62	89	49	0	6	1	0
MI MARQUETTE	33	8	48	-17	21	-5	1.1	-.6	0	2.9	131	6.3	103	91	49	0	6	2	0
MI MUSKEGON	43	19	62	5	31	-4	.2	-.5	.2	1.6	82	4.2	71	90	45	0	6	2	0
MI SAULT ST. MARIE	32	10	41	-9	21	-5	.4	-.1	.2	1.9	118	6.0	110	91	54	0	7	4	0
MN ALEXANDRIA	35	15	46	-2	25	-2	.2	-.1	.2	.7	78	1.6	66	91	63	0	7	1	0
MN DULUTH	34	12	47	-5	23	-3	1.1	-.3	.1	.7	47	2.9	83	89	49	0	7	1	0
MN INT'L FALLS	32	6	43	-11	19	-5	1.1	-.2	.1	.3	32	2.0	83	90	49	0	7	2	0
MN MINNEAPOLIS	37	19	49	0	28	-4	.2	-.2	.2	2.1	158	3.6	123	87	52	0	6	3	0
MN ROCHESTER	39	16	54	-5	27	-5	1.1	-.4	.1	1.6	117	2.4	84	90	62	0	6	1	0
MS GREENWOOD	63	44	79	36	54	-3	1.1	-.3	1.0	1.5	30	15.2	104	90	53	0	6	3	1
MS JACKSON	67	48	81	41	58	0	1.3	0	.9	3.2	71	10.0	74	97	63	0	0	3	1
MS MERIDIAN	64	47	81	42	56	-2	2.5	1.0	1.1	5.4	102	12.4	83	96	63	0	0	4	2
MO CAPE GIRARDEAU	57	34	71	28	46	-1	.6	-.6	.6	3.7	93	17.6	177	90	47	0	4	2	1
MO COLUMBIA	56	31	76	22	44	-1	1.5	.7	1.3	2.2	86	5.1	82	83	40	0	5	2	1
MO KANSAS CITY	58	29	74	17	43	-1	.5	-.2	.5	.5	25	2.1	46	74	33	0	4	1	0
MO SAINT LOUIS	56	35	76	26	45	0	2.3	1.5	2.0	3.7	146	7.8	121	80	40	0	3	2	1
MO SPRINGFIELD	59	33	79	25	46	0	.6	-.2	.6	3.7	135	7.2	112	81	40	0	4	1	1
MT BILLINGS	44	25	58	12	35	0	.2	-.1	.1	1.7	218	3.5	144	84	46	0	6	3	0
MT GLASGOW	35	15	45	2	25	-5	1.1	0	.1	.2	83	1.4	164	94	72	0	7	1	0
MT GREAT FALLS	48	24	62	12	36	3	T	-.2	T	1.4	196	3.5	146	84	45	0	6	1	0
MT HAVRE	40	19	60	1	29	-2	T	-.1	T	.1	21	.9	62	91	60	0	7	1	0
MT HELENA	44	23	54	13	33	0	T	-.2	T	1.3	245	3.5	215	95	54	0	7	1	0
MT KALISPELL	43	29	45	24	36	2	.1	-.1	.1	1.2	174	3.9	116	96	56	0	7	2	0
MT MILES CITY	42	21	62	3	31	-2	.1	-.1	.1	.5	120	1.8	114	76	49	0	6	1	0
MT MISSOULA	47	29	53	26	38	2	.2	0	.1	1.8	280	3.0	107	95	51	0	6	4	0
NE GRAND ISLAND	57	26	71	12	42	3	T	-.4	T	.4	36	1.8	72	83	32	0	6	1	0
NE LINCOLN	58	26	75	12	42	3	T	-.5	T	.1	5	2.0	64	83	29	0	5	0	0
NE NORFOLK	53	26	66	12	40	3	T	-.4	T	.8	71	2.6	107	81	37	0	4	1	0
NE NORTH PLATTE	58	25	69	8	42	5	.1	-.2	.1	.3	40	1.6	94	87	32	0	5	1	0
NE OMAHA	54	28	71	13	41	1	T	-.5	T	.3	22	1.8	60	75	36	0	4	0	0
NE SCOTTSBLUFF	58	27	75	16	43	6	.4	.1	.2	.7	100	1.8	113	88	31	0	4	2	0
NE VALENTINE	56	23	70	15	40	5	T	-.2	T	.4	70	1.2	92	88	32	0	7	0	0
NV ELY	57	29	63	20	43	8	.2	0	.1	.5	66	1.4	68	81	29	0	5	3	0
NV LAS VEGAS	75	51	82	41	63	7	.1	0	.1	.1	15	.6	50	37	18	0	0	1	0
NV RENO	59	35	67	27	47	6	.1	0	.1	.5	75	1.5	53	78	24	0	2	4	0
NV WINNEMUCCA	57	32	63	19	45	5	.2	.1	.1	.7	138	1.6	78	88	34	0	4	2	0
NH CONCORD	43	20	53	12	31	-3	1.0	.3	.5	1.1	47	3.9	52	92	36	0	7	4	1
NJ ATLANTIC CITY	47	28	61	18	38	-6	1.4	.5	.8	3.4	103	9.3	92	89	50	0	4	4	1
NM ALBUQUERQUE	67	35	75	25	51	3	.4	.3	.3	.4	110	1.4	117	68	19	0	3	2	0
NM CLOVIS	70	34	80	24	52	4	.1	0	.1	.2	49	.9	69	71	18	0	3	2	0
NM ROSWELL	75	37	85	28	56	3	.1	.1	.1	.2	74	1.0	93	70	15	0	3	2	0
NY ALBANY	44	23	54	15	33	-3	.9	.2	.7	1.2	48	3.2	46	90	34	0	6	4	1
NY BINGHAMTON	35	21	46	14	28	-6	1.3	.7	1.1	1.9	81	5.3	75	91	51	0	6	4	1
NY BUFFALO	41	24	54	19	33	-3	.2	-.5	.2	1.2	49	5.5	71	92	49	0	6	3	0
NY NEW YORK	46	34	62	30	40	-3	2.1	1.1	1.6	3.0	92	8.4	89	82	39	0	3	4	1
NY ROCHESTER	39	22	58	15	31	-5	.3	-.3	.2	2.0	99	4.7	71	95	52	0	5	3	0
NY SYRACUSE	40	22	52	16	31	-5	.4	-.3	.2	1.4	59	4.2	55	92	45	0	7	4	0
NC ASHEVILLE	55	37	76	33	46	-2	1.7	.6	1.1	2.9	74	9.1	89	96	54	0	0	5	1
NC CHARLOTTE	58	40	76	35	49	-3	3.6	2.5	2.3	4.9	124	11.2	97	93	53	0	0	5	1
NC GREENSBORO	54	36	74	32	45	-5	2.2	1.4	1.3	5.3	168	10.7	107	93	54	0	1	5	1
NC HATTERAS	62	43	72	40	53	0	7.2	6.3	4.6	9.9	306	16.4	135	94	66	0	0	4	3
NC NEW BERN	62	41	80	37	52	-3	3.4	2.6	1.3	4.9	166	11.5	105	97	59	0	0	4	3
NC RALEIGH	55	36	75	33	46	-6	2.5	1.7	2.0	4.9	162	12.7	127	97	52	0	0	5	1
NC WILMINGTON	63	41	77	36	52	-4	4.2	3.3	2.1	6.3	191	10.5	101	97	62	0	0	3	2
ND BISMARK	41	18	52	5	30	-1	.1	-.1	0	.3	58	1.1	77	95	51	0	7	3	0
ND FARGO	31	15	38	0	23	-4	T	-.2	T	.8	131	2.8	187	93	67	0	7	0	0
ND GRAND FORKS	29	11	36	0	20	-5	T	-.2	T	.3	47	2.0	110	89	67	0	7	1	0
ND WILLISTON	38	19	56	-1	29	0	.2	.1	.2	.3	61	1.6	121	95	63	0	7	2	0
OH AKRON-CANTON	43	26	62	17	35	-4	.5	-.3	.5	1.8	68	6.1	83	92	49	0	5	3	0
OH CINCINNATI	52	33	69	24	42	-2	1.4	.5	1.4	3.3	104	11.2	125	83	39	0	4	1	1
OH CLEVELAND	44	26	65	16	35	-4	.3	-.5	.2	1.0	44	4.8	69	91	49	0	5	2	0
OH COLUMBUS	48	29	62	19	39	-4	.7	-.1	.7	1.9	76	7.0	94	90	45	0	5	1	1

Weather Data for the Week Ending March 25, 1989

STATES AND STATIONS	TEMPERATURE °F					PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE 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		
DAYTON	49	31	69	22	40	2	.8	.2	3.2	132	8.6	121	87	44	0	5	1	1	0		
TOLEDO	46	24	70	16	35	2	.2	2	1.4	68	3.9	68	91	43	0	6	1	0	0		
YOUNGSTOWN	42	23	56	14	32	1	.3	1	1.2	46	5.0	67	94	52	0	5	1	0	0		
OK OKLAHOMA CITY	65	39	80	27	52	T	T	T	.6	36	4.0	102	77	36	0	2	0	0	0		
TULSA	62	37	78	27	50	2	2	T	1.5	63	6.7	122	76	39	0	2	1	0	0		
OR ASTORIA	53	38	61	32	46	1	2.0	.4	8.7	147	23.6	97	97	59	0	4	6	2	2		
BURNS	51	31	58	22	41	4	.1	1	1.2	165	1.8	54	81	39	0	4	2	0	0		
MEDFORD	60	40	66	31	50	4	.5	1	3.6	238	6.5	93	92	41	0	1	4	0	0		
PENDLETON	54	38	61	34	46	1	.2	0	1.6	178	4.9	131	81	47	0	0	3	0	0		
PORTLAND	57	40	63	31	48	2	1.5	.7	5.9	201	12.1	93	95	47	0	1	4	1	0		
SALEM	57	39	59	29	48	3	1.0	1	5.7	161	12.1	80	94	44	0	1	3	0	0		
PA ALLENTOWN	45	26	60	20	36	5	1.7	.8	1.3	2.9	6.8	73	86	38	0	5	3	1	0		
ERIE	42	25	61	17	34	2	.3	3	1.8	78	6.7	100	88	46	0	5	2	0	0		
HARRISBURG	46	28	66	23	37	4	1.4	.6	3.0	107	7.2	85	85	42	0	5	3	1	0		
PHILADELPHIA	48	32	61	26	40	4	1.7	.8	1.2	99	8.7	97	82	44	0	4	4	1	0		
PITTSBURGH	45	27	64	19	36	5	1.3	.5	3.3	114	8.7	107	88	47	0	5	4	1	0		
SCRANTON	40	25	53	19	33	6	1.2	.6	1.1	77	4.3	69	85	41	0	5	3	1	0		
RI PROVIDENCE	46	29	57	23	37	2	2.2	1.3	1.5	3.3	7.1	63	92	39	0	5	5	1	0		
SC CHARLESTON	68	48	83	40	58	0	.8	2	2.7	75	5.9	57	95	62	0	0	3	1	0		
COLUMBIA	62	43	79	36	53	4	3.0	1.8	2.4	4.9	116	10.0	95	61	0	0	3	2	0		
FLORENCE	62	43	76	37	53	4	2.4	1.5	1.7	4.6	136	9.1	89	95	57	0	0	5	1	0	
GREENVILLE	57	40	76	35	49	4	3.3	1.9	2.1	4.3	88	10.7	97	60	0	0	5	3	0	0	
SD ABERDEEN	35	14	43	-1	24	6	.3	0	.2	1.2	170	2.1	115	93	67	0	7	2	0	0	
HURON	41	20	54	5	31	2	.1	0	2.0	216	3.0	147	93	66	0	6	1	0	0		
RAPID CITY	51	23	72	11	37	3	T	T	.9	124	1.3	74	94	42	0	7	1	0	0		
STOUX FALLS	46	24	56	10	35	2	.1	3	1.1	86	1.8	68	89	52	0	6	2	0	0		
TN CHATTANOOGA	57	43	73	35	50	2	1.9	.5	.9	5.1	100	17.6	117	95	66	0	0	5	2	0	
KNOXVILLE	57	41	70	33	49	2	1.1	1	1.9	43	13.1	99	92	57	0	0	3	1	0		
MEMPHIS	62	39	75	32	50	3	.7	6	2.2	52	20.6	156	92	52	0	1	2	0	0		
NASHVILLE	60	39	73	28	49	2	.9	4	4.4	99	18.3	141	88	49	0	2	2	1	0		
TX ABILENE	72	42	86	23	57	0	T	2	4.6	75	4.2	152	76	32	0	2	1	0	0		
AMARILLO	71	29	83	12	50	2	.4	2	.4	63	1.2	67	69	19	0	4	2	0	0		
AUSTIN	72	48	85	38	60	2	.8	4	1.2	89	5.8	109	89	52	0	0	2	0	0		
BEAUMONT	68	50	76	39	59	2	1.1	4	1.9	77	8.9	82	96	65	0	0	3	1	0		
BROWNSVILLE	79	55	85	38	67	3	.1	1	1.2	46	2.2	70	94	52	0	0	1	0	0		
CORPUS CHRISTI	76	54	84	41	65	2	.2	0	.2	34	3.1	85	95	56	0	0	1	0	0		
DEL RIO	73	48	89	33	61	4	.1	0	.1	32	2.1	116	75	36	0	0	1	0	0		
EL PASO	74	43	84	33	59	2	.3	2	.3	96	1.1	101	62	17	0	0	2	0	0		
FORT WORTH	69	43	86	31	56	2	.5	1	.5	7	6.9	129	85	43	0	1	1	0	0		
GALVESTON	67	54	75	44	61	2	1.2	7	1.2	37	7.7	109	94	67	0	0	3	1	0		
HOUSTON	71	49	80	35	60	3	1.0	4	1.9	92	7.7	86	99	66	0	0	3	1	0		
LUBBOCK	73	35	85	22	54	2	.3	1	.3	5	7.8	2.1	68	20	0	3	1	0	0		
MIDLAND	74	37	85	22	55	1	.1	0	1	2	1.7	130	80	22	0	2	1	0	0		
SAN ANGELO	74	40	87	24	57	2	.3	1	2	4	7.9	4.1	202	86	31	0	2	0	0	0	
SAN ANTONIO	74	49	86	37	61	2	.3	0	2	3	3.6	81	89	46	0	0	4	0	0	0	
VICTORIA	74	52	81	40	63	2	.7	4	.8	73	5.1	100	95	54	0	0	3	0	0	0	
WACO	70	46	86	34	58	2	.3	2	.3	9	5.6	108	91	51	0	0	1	0	0	0	
WICHITA FALLS	70	40	87	26	55	0	.3	1	.3	1.3	93	5.8	177	87	34	0	2	1	0	0	
UT CEDAR CITY	61	31	65	16	46	6	.2	1	.2	.7	87	2.0	88	64	22	0	3	1	0	0	
SALT LAKE CITY	59	39	68	31	49	7	.7	3	.6	1.5	116	3.6	90	85	36	0	1	2	1	0	
VT BURLINGTON	39	17	46	7	28	4	.5	1	1.7	100	2.8	54	90	42	0	7	4	0	0	0	
VA NORFOLK	58	38	66	31	48	2	3.2	2.3	1.4	7.7	247	16.8	167	93	54	0	1	4	3	0	
RICHMOND	50	34	67	29	42	7	1.6	.8	.7	4.3	148	10.5	114	93	57	0	3	4	2	0	
ROANOKE	51	34	76	29	43	5	1.3	.5	.7	2.9	98	6.3	70	92	47	0	3	4	1	0	
WA QUILLAYUTE	53	36	61	30	44	1	1.3	4	7.6	77	29.4	81	99	60	0	2	5	0	0	0	
SEATTLE-TACOMA	53	39	62	32	46	1	1.0	2	4	5.0	169	11.2	85	98	59	0	1	5	0	0	
SPOKANE	48	32	52	26	40	1	.5	2	.3	2.8	249	4.9	95	98	52	0	5	3	0	0	
YAKIMA	56	30	62	25	43	0	.1	0	1	1.0	210	1.9	72	90	38	0	4	3	0	0	
WV BECKLEY	48	30	69	23	39	4	1.1	2	.5	2.5	79	8.8	89	93	54	0	5	4	0	0	
CHARLESTON	53	32	71	25	43	4	1.6	.7	1.0	4.9	155	13.9	142	91	47	0	5	4	1	0	
HUNTINGTON	53	33	65	25	43	5	1.6	.7	1.1	5.0	155	17.3	186	86	45	0	4	3	1	0	
PARKERSBURG	50	30	69	22	40	5	.6	2	.5	3.4	120	11.5	139	93	49	0	5	3	0	0	
WI GREEN BAY	36	14	49	-5	25	6	.2	3	1	2.9	199	3.6	100	87	52	0	6	3	0	0	
LACROSSE	43	19	60	-4	31	3	T	4	T	1.9	134	2.7	85	87	44	0	5	2	0	0	
MADISON	43	19	60	3	31	3	.1	5	0	1.4	88	2.6	69	89	50	0	7	2	0	0	
MILWAUKEE	40	22	52	10	31	4	.2	5	1	2.2	110	3.7	76	88	53	0	6	2	0	0	
WAUSAU	39	13	54	-11	26	3	.2	3	1	1.9	131	3.2	95	86	44	0	5	3	0	0	
WY CASPER	55	25	66	12	40	7	T	2	T	.3	38	1.8	103	80	25	0	6	1	0	0	
CHEYENNE	51	25	64	12	38	5	.3	1	.2	.4	53	1.9	126	93	38	0	5	2	0	0	
LANDER	53	27	65	19	40	7	.1	2	1	1	16	.9	84	29	0	6	1	0	0	0	
SHERIDAN	44	19	63	10	32	2	.3	0	.3	.9	108	1.7	73	91	52	0	7	1	0	0	
PR SAN JUAN	83	70	84	68	76	1	.2	3	1	2.6	155	7.0	104	88	64	0	0	5	0	0	0

Thunderstorms Strike Kansas Drought Region

Heavy thunderstorms moved northeastward across Kansas on March 27-28, bringing drought relief to many critically dry areas. Precipitation totaled over 1 inch from Wichita to Topeka and areas to the east. The totals diminished toward the northwest, with north-central areas generally receiving less than one-fourth of an inch and extreme western areas picking up negligible amounts. These appear to be the most significant totals in several months, though more rain will be needed in coming months to end the long-term drought, especially in north-central and western areas of the State.

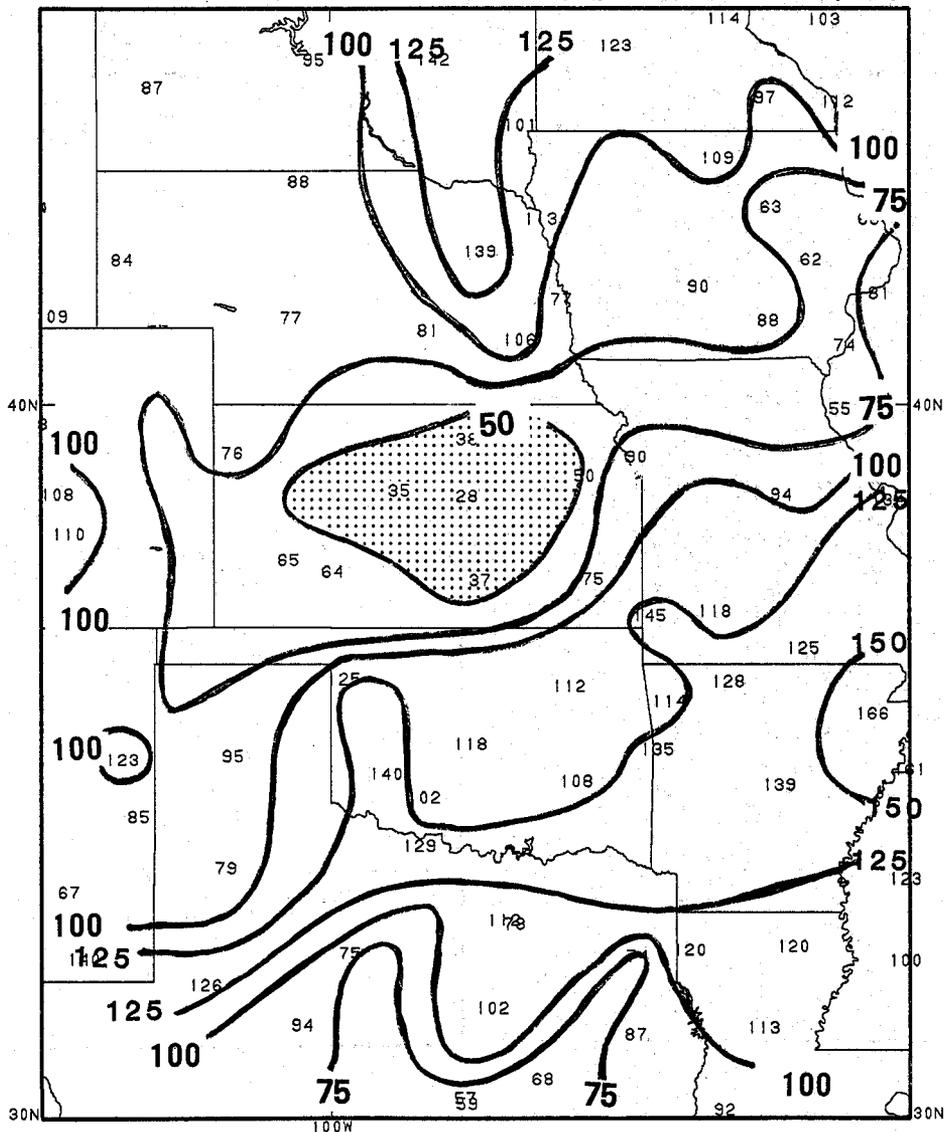


Great Plains Rainfall, Sept. 1, 1988-Mar. 25, 1989

This map illustrates the severity and extent of the drought that has plagued the Kansas wheat crop throughout its growing season. A large part of the State has received less than half of its normal precipitation since last September. The most severe dryness is found in Kansas, but unusually dry conditions (less than 75 percent of normal precipitation) extend eastward into northern Missouri, eastern Iowa, and northwestern Illinois. Dryness has also affected the Oklahoma Panhandle, extreme eastern Colorado, and parts of Texas. In contrast, cumulative precipitation has been near or above normal in the northern Plains, indicating that moisture for spring planting is much better in 1989 than in 1988 in this region.

This map does not include the totals from the widespread showers which fell on March 27 and 28. In addition to benefiting southern and eastern Kansas, these rains improved conditions in dry areas of Iowa, Illinois, and Missouri.

Great Plains percentage of normal precipitation, Sept. 1, 1988 - Mar. 25, 1989



National Agricultural Summary

March 20-26, 1989

HIGHLIGHTS: Winter wheat was mostly very poor to poor in Kansas. Moisture was needed to sustain growth. Winter wheat was mostly fair to good in Oklahoma. Small grain conditions continued to improve in portions of Texas. Winter wheat was mostly fair to good in the northern Great Plains. Warmer temperatures reduced snow cover. Small grains were mostly fair to good in the Delta and Southeast. Cotton planting continued in Arizona, California, and Texas. Rain slowed corn planting in the Delta and Southeast. Rice planting was underway in Louisiana, Mississippi, and Texas. Florida's citrus and vegetable producing areas remained dry. Citrus harvest was nearly complete in Texas. Deciduous orchards were blooming and leafing out in California. Livestock was in mostly good condition.

SMALL GRAINS: In Kansas, winter wheat was mostly very poor to poor. Earlier freeze damage was becoming evident as warm weather pushed stands out of dormancy. Moisture was needed to sustain growth. Winter wheat was mostly fair to good in Oklahoma. Winter grain mites were present in some fields in the western area. In Texas, freezing temperatures early in the week may have damaged some small grain fields in the High Plains. Small grains in the Low Plains and Cross Timbers areas continued to improve. Small grain growth was good in the Blacklands. Fields were heading in the Coastal Bend and Upper Coast areas. Warmer temperatures reduced snow cover in the northern Great Plains. Winter wheat was mostly fair to good in Colorado, Montana, and Wyoming. In Colorado, barley and oats seedings progressed rapidly. Spring wheat seeding began. In Washington, wheat seeding and reseeded was underway in Benton County. Russian wheat aphids were present. Small grains were mostly good in Arizona and California. Winter wheat was mostly good to fair in Illinois. Winter wheat was mostly fair to good in the Delta and Southeast. Powdery mildew and Hessian fly infestations were a problem in portions of Alabama and Georgia. Small grain growth was good in Arkansas and Kentucky.

OTHER FIELD CROPS: Desert cotton planting continued in California. Planting began in the San Joaquin Valley. Many producers were waiting for warmer soil temperatures before beginning. Cotton planting was 20 percent (%) complete, 5 percentage points behind the 5-year average in Arizona. Planting was active in the central and western areas. Planting continued in the Rio Grande Valley and Coastal Bend areas of Texas. Planting was expected to begin soon in the Blacklands. Producers prewatered fields in the Trans-Pecos. Cotton seedbed preparation was ahead of normal in Oklahoma.

Corn planting continued in the Delta and Southeast as weather permitted. In Texas, planting was 50% finished, 1 point ahead of normal. Planting was nearly complete in the Blacklands. Planting was 46% complete in Alabama, 18 points ahead of the average. Planting lagged

behind normal in Georgia, Louisiana, and Mississippi.

In Texas, sorghum planting was 30% complete, 8 points behind normal. Seedbed preparation was ahead of normal in Oklahoma.

Rice planting was underway in Louisiana, Mississippi, and Texas. Tobacco beds were mostly good to fair in Georgia and North Carolina. Rain slowed tobacco transplanting in Georgia. Tobacco bed preparation was active in Kentucky and Tennessee. Flue-cured tobacco plantbeds were over 90% seeded in Virginia.

FRUIT AND NUTS: Florida's citrus producing areas remained dry. Irrigation was active in all areas. Valencia orange harvest activity increased, and grapefruit movement was strong in all areas. Temple orange harvest slowed. Apple and peach trees were blooming in Georgia. Citrus harvest was nearly complete in Texas. Peach trees continued to bloom. Cold weather may have damaged peaches in portions of the Plains area. Valencia oranges and some grapefruit were harvested in central and western Arizona. Kinnow tangerine harvest was complete in the central area. Almond bloom was complete in California. Thompson seedless grapes were leafing out. Deciduous orchards were blooming and leafing out. Lemon and orange harvests were active. In the Willamette Valley of Oregon, berry crops showed signs of damage from cold temperatures in February. Blackberry and raspberry freeze damage was lighter than expected in Washington.

VEGETABLES: In Florida, spring planting neared completion for most vegetable crops. Irrigation was active in all areas. Winter crop harvests continued. Volume leaders were tomatoes, potatoes, peppers, cabbage, strawberries, celery, cucumbers, and lettuce. Watermelon planting was underway in Georgia, Mississippi, and South Carolina. Irish potato planting continued in North Carolina. Cool temperatures slowed vegetable growth in Texas. Some melon fields were setting fruit in the Rio Grande Valley. Onion planting continued in the High Plains. Harvest and shipment of cauliflower increased in western Arizona. Lettuce and other mixed vegetable harvests were active in the western and central areas. Asparagus harvest continued in the Delta region of California. Broccoli harvest was active in the Salinas-Watsonville and Merced-Atwater areas. Summer vegetable plantings continued in the Kingsburg-Dinuba area. Processing spinach harvest was underway in the Cutler-Orosi area. Strawberry harvest increased seasonally in the Santa Maria area. In western Oregon, rain slowed field preparation for planting vegetable crops. February's cold temperatures resulted in a total loss of cauliflower and cabbage seed crops in Skagit County, Washington.

PASTURES & LIVESTOCK: Livestock was in mostly good condition. Pastures were mostly good to fair in the Delta and Southeast. Seasonally warmer temperatures reduced livestock stress in most areas.

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall mostly 1.00 to 3.00 in.; under 0.50 in. extreme northwest. Temperatures 2 to 5° below normal.

Days suitable for fieldwork 2.4. Soil moisture 49% adequate, 51% surplus. Fieldwork progress 45% behind schedule, 52% on schedule, 2% ahead of schedule. Spring planting 38% prepared, 45% 1988, 46% avg. Corn 46% planted, 42% 1988, 28% avg. Winter wheat 23% headed, 8% 1988, 6% avg.; Hessian fly, powdery mildew extreme south. Livestock, pastures good to fair. Pasture feed 39% short, 56% adequate, 5% surplus. Primary activities: Planting corn, spring vegetables, pine trees, as weather permitted; repairing machinery, equipment; spraying fruit trees; monitoring catfish ponds, providing aeration when necessary; general care livestock, poultry.

ARIZONA: Considerable sunshine, warm 19th. Sunshine, gusty winds 20th. Warm, sunny 21st to 24th. Increased cloudiness, precipitation 25th. Temperatures 2 to 10° above normal.

Cotton planting continued active western, central areas. Favorable soil conditions encouraged emergence, normal progression of stands west. Cotton 20% planted statewide, 13% 1988, 25% avg. Wheat, barley good statewide. Jointing stage 96%; heading stage, 35%. Last year's respective progress 88%, 25%. Irrigation continued as needed. Corn planting progressed west. Second cuttings alfalfa underway La Paz County. First cuttings continued Yuma, Maricopa Counties; curing favorable. Excellent crop conditions Graham, La Paz Counties. Citrus harvest western areas included valencia oranges, few grapefruit. Harvest, shipping of cauliflower increased. Packing, shipping head lettuce high volume of activity. Leaf, romaine lettuce, Boston lettuce, cabbage, kale, napa, escarole, bok choy, endive, anise harvest continued. Lettuce, artichoke harvested Poston. Central harvest valencia oranges, grapefruit. Kinnow tangerine harvest completed. Mixed vegetables including greens, leaf lettuce, cabbage, bok choy, rapini, green onions, parsley, beets, turnips, spinach, leeks, and carrots harvested from Salt River Valley. Packing, shipping of broccoli, cauliflower continued on small scale.

ARKANSAS: Warm north, west areas; cool south, east. Temperatures slightly below normal. Temperature extremes 19°; 85°. Light to moderate rain early week. Rainfall 0.04 to 2.53 in.

Soil moisture adequate. Wheat showed good progress. Land preparation advanced slowly. Meadows, pastures made good growth, fertilizer being applied. Fruit outlook remained good. Livestock good.

CALIFORNIA: Pacific storm brought rain, snow northern area 18th. Entire State experienced fair, dry weather most week until another system brought rain, snow 24th.

Rain, wet soils slowed fieldwork northern half all week, rest late week. Small grain growth good. Early fields boot. Some oats heading. More early fields green-chopped. Fertilization, irrigation active. Some aphid controls. Cotton seeding began San Joaquin Valley. Many growers waiting warmer soil. Spring seeded sugarbeets thinned, weeded. Harvest over wintered sugarbeets gained momentum. Some late safflower seeded. Alfalfa hay harvest increased. Pest controls applied. Irrigation,

herbicide application active. Almond bloom complete. Thompson seedless grapes leafing out. Deciduous orchards bloomed, leafed. Nectarines treated for thrip control. Lemon, orange harvests active. Broccoli Salinas-Watsonville, Santa Maria good supply, good quality. Harvest in Merced-Atwater ongoing. Asparagus harvest continued Delta. Other field activities included fertilizing, ground preparation. Lettuce plantings in Kingsburg-Dinuba irrigated, fertilized. Sweetpotato fields being fumigated for planting. Potatoes continued to move to market. Shipments remained behind last year's. Growers in Merced-Atwater continued plant processing tomatoes. Fields Kingsburg-Dinuba cultivated, fertilized. Spinach harvest processing purposes underway Cutler-Orosi area. Spinach Salinas-Watsonville light, variable quality. Artichoke supply heavy, generally good quality. Strawberries Santa Maria seasonally increased supplies, good quality. Sweet corn, cantaloups, honeydew melons, summer vegetable plantings continued Kingsburg-Dinuba. Livestock good statewide. Range, pasture grasses growing very well with recent rains. Pasture feed still not adequate to sustain livestock few northern areas. Stock ponds, reservoirs filling due to runoff. Supplemental feeding light. Hay supplies being depleted. Livestock movement active some areas. Spring calving continued.

COLORADO: Light snow, cooler temperatures early part week. Midweek warm up lasted into weekend. Week precipitation less than 0.25 in. Temperatures normal to 8° above normal.

Days suitable for fieldwork 5.1. Soil moisture 16% very short, 38% short, 40% adequate, 6% surplus. Winter wheat 4% very poor, 18% poor, 39% fair, 35% good, 4% excellent; crop beginning to grow, will need moisture soon to maintain development. Barley, oats seeding progressed rapidly, crops beginning to emerge. Planting started for sugarbeets, spring wheat. Livestock mostly good. Range, pasture mostly fair to good. Calving, lambing over 50%. Livestock death losses average. Stored feed adequate.

FLORIDA: Rains 1.00 to 4.00 in. common over Panhandle extreme north. Rains Peninsula generally under 0.50 in.; several areas less than 0.25 in. Temperatures 3 to 6° warmer than normal, except Panhandle near to slightly below normal.

Soil moisture short to adequate. Many areas Panhandle, north received much needed rain. Corn planting, tobacco transplanting active. Farmers continued working ground for other spring sown crops. Pecans blooming. Good rains Panhandle, upper northern Peninsula very beneficial to forage growth. Scattered showers helpful remainder of Peninsula where more rain needed. Permanent pastures continued greening, more time needed for recovery. Pastures south central, lower Peninsula poor to fair. North central Peninsula very poor to fair; elsewhere mostly fair to good. Cattle continued generally fair to good. Very little rain citrus areas; moisture continued short. Irrigation all areas. New growth, bloom continued. Valencia harvest increased. Grapefruit movement strong. Temple harvest slowed. Caretakers active spring grove care. Continued warm weather vegetable producing areas benefited most crops. Irrigation active; precipitation limited. Spring planting winding down. Harvest active. Volume leaders: Tomatoes, potatoes, peppers, cabbage, strawberries,

celery, cucumbers, lettuce. Also available: Squash, sweet corn, radishes, snap beans, carrots, eggplant, escarole, endive. Very light harvest belle glade sweet corn.

GEORGIA: Wet, rain 1.00 to 3.00 in. except southeast under 1.00 in. Temperatures cool. Extreme north, south normal, elsewhere 1 to 6° below normal. Extreme lows mid, upper 30s mountains, around 40° central, low mid 40° south. Extreme highs upper 70s, low 80s, mid 80s extreme south.

Days suitable for fieldwork 2.7. Soil moisture 11% short, 55% adequate, 34% surplus. Corn 25% fair, 68% good, 7% excellent; 37% planted, 34% 1988, 47% avg. Rain delayed planting, good progress early week. Corn planting neared completion extreme south, just starting north. Tobacco 35% fair, 49% good, 16% excellent; 27% transplanted, 9% 1988, 21% avg. Transplanting stopped by rain, very active early. Watermelons fair to good; 45% planted, near avg. Wheat 3% very poor, 24% poor, 56% fair, 15% good, 2% excellent; 89% jointing, 64% 1988, 69% avg.; 49% boot, 8% 1988, 21% avg. Powdery mildew, Hessian fly infestation heavy. Cold damage early plantings. Apples mostly good; 10% blooming, 16% avg. Peaches 49% fair, 51% good; 89% blooming, 96% 1988, 93% avg. Pasture 4% poor, 29% fair, 62% good, 5% excellent. Rain helped growth. Cattle, hogs mostly good.

HAWAII: Weather continued favorable. Mostly sunny periods, some occasional light rain showers. Trade winds 10 to 20 mph early part week, changed easterly 5 to 15 mph weekend. Volcanic fumes still over east island because of light winds. Temperatures low 60s to mid 80s. Daily rainfall none to 1.30 in. Winds variable 5 to 20 mph.

Days suitable for fieldwork 7.0. Crops made good progress. Major vegetable adequate, good quality. Ban lifted on sugarcane field burning, aided harvesting operations eastern coast. Papaya and banana harvesting continued seasonally light. Weather benefited orchards, fruit development.

IDAHO: Temperatures remained fairly close to normal, while precipitation continued to be well above normal.

Cool, wet conditions allowed minimal fieldwork in lighter soils. Some sugarbeet planting underway, otherwise some plowing, fertilizing. Other crop activities involved sorting, moving seed potatoes, shopwork. Livestock activities involved feeding, general care of livestock, on going calving, lambing. Most livestock good. Scours, pneumonia few areas. Hay, roughage mostly adequate; some areas very short to short.

ILLINOIS: Temperature lows normal to 6° above normal northern two-thirds, normal to 3° above south. Highs 2° below to 6° above normal central, north, normal 3° above south. Precipitation 0.25 in. or less north, west central, 0.40 to 1.75 in. east central, south.

Winter wheat mostly good to fair. Livestock good to excellent.

INDIANA: Temperatures none to 3° above normal. Lows mid teens to upper 20s, highs 50s to upper 70s. Precipitation 0.50 in. to 1.00 in. south.

Soggy soils limited field activities. Activities included: Plowing, tilling, seeding grasses, hauling manure, hauling grain, machinery repair, purchasing supplies, mending fences, cleaning seed, spreading fertilizer, care of livestock. Livestock good. Hay short to adequate.

IOWA: Temperatures 6 to 7° above normal; extremes 6° Sibley 21st; 84° Iowa City 26th. Precipitation negligible; maximum 0.01 in.

Farmers getting into fields applying fertilizer, seeding oats. Livestock mostly good.

KANSAS: Temperature 37° northwest to 44° southwest, generally 7 to 10° above normal. Thunderstorms eastern area middle of week brought light to moderate amount rainfall including 1.17 in. Anderson, 1.27 in. Linn. East central 0.75 in., southeast 0.30 in., rest of State generally less than 0.10 in.

Days suitable for fieldwork 4.5. Topsoil moisture 79% short, 17% adequate, 4% surplus. Subsurface moisture 88% short, 12% adequate. Wheat continued to deteriorate; 48% very poor, 30% poor, 16% fair, 4% good, 2% excellent. Freeze damage becoming evident as warm weather pushes stands out of dormancy. Some green-up but moisture not adequate to sustain growth. Lack of cover, short moisture has virtually entire State extremely susceptible to wind damage.

KENTUCKY: Temperatures began cool but weekend readings well above normal. Highs reached 70s, lower 80s. Highs upper 50s, lower 60s, lows 30s. Rain 19th, 20th ranging 0.50 to 1.50 in.

Soil moisture mostly adequate to surplus. Fall seeded grains green, new growth. Field activities picking up on better drained soils. Tobacco bed preparation, topdressing wheat active. Livestock wintered well, many newborn calves.

LOUISIANA: Temperatures 2 to 3° below normal. Extremes 31°; 85°. Rainfall 0.50 to 1.50 in. north; 1.50 to 5.00 in. south.

Days suitable for fieldwork 3.0. Soil moisture 4% short, 41% adequate, 55% surplus. Spring plowing 40%, 27% 1988, 36% avg. Corn 29% planted, 15% 1988, 33% avg.; 13% emerged, 5% 1988, 18% avg. Rice 10% planted, 4% 1988, 10% avg.; 5% emerged, 2% 1988, 5% avg. Wheat 12% headed, 4% 1988, 11% avg. Wheat growing well; septoria blight, rust identified southwest but treatment not necessary yet most cases. Cultivating, applying herbicides, fertilizing sugarcane. Crawfish harvesting. Spraying for mites, disease, harvesting strawberries. Fertilizing pastures.

MARYLAND & DELAWARE: MARYLAND: Precipitation 2.38 in. Temperature 43°, normal 45°. Temperature extremes 16°; 82°.

Main farm activities caring for livestock, maintaining machinery.

DELAWARE: Precipitation 2.90 in. Temperature 43°, normal 45°. Temperature extremes 23°; 78°.

Main farm activities were caring for livestock, maintaining machinery.

MICHIGAN: Temperatures 1 to 5° below normal. Temperature extremes -9°; 70°. Precipitation none to 0.36 in.

Activities: Muddy fields down State limited fieldwork, fields snow covered upstate. Livestock good. Lambing activity near normal. Feed short to adequate. Marketing livestock, crops, pruning fruit trees.

MINNESOTA: Temperatures near normal to 2° normal. Extremes 12°; 69°. Precipitation 0.07 to 0.44 in. below normal. Precipitation 0.03 to 0.13 in. Greatest weekly total 0.33 in. Snowfall trace to 1 in. Snow depth weekend 10 to 18 in. northern one-third, none to 4 in. elsewhere. Temperature 7° above normal across State. Western area up to 0.02 in. While remainder only received trace amounts. Extremes 8°; 87°.

MISSISSIPPI: Rainy changing to fair. Temperatures 54°, 3° below normal. Extremes

30°; 85°. Rainfall 1.74 in., 0.35 in. above normal. Maximum weekly rainfall 4.03 in.

Days suitable for fieldwork 1.5, 4.4 1988, 3.7 avg. Soil moisture 25% adequate, 70% surplus, 5% excessive. Wheat 65% jointing, 44% 1988, 55% avg.; fair to good. Corn 15% planted, 16% 1988, 20% avg.; 6% very poor, 31% poor, 17% fair, 46% good. Watermelons 10% planted, 12% 1988, 13% avg. Rice planting just underway. Hay, roughage adequate to short. Livestock good to fair. Activities: Paper work, shopwork, feeding cattle, some tillage.

MISSOURI: Temperatures near normal except Bootheel 5° below normal. Less than 0.25 in. precipitation northern third, 1.00 in. west central to 2.00 in. east central, 0.50 in. southern third.

Fieldwork very limited. Some light tillage north, almost none central, south. Warmer weather helping wheat, pastures. Moisture still very short north.

MONTANA: Temperatures normal to 5° above. Trace or more precipitation. West, south central up to 0.63 in.

Topsoil moisture shortages helped by melting snow. Subsoil moisture mostly short. Winter wheat mostly fair to good. Grazing closed. Hay short. Warmer days helped calving, lambing.

NEBRASKA: Temperatures 7° above normal. Western areas received up to 0.02 in. of precipitation while remainder only received trace amounts. Extremes 8°; 87°.

NEVADA: Second consecutive week with wide temperature fluctuations. Light rain scattered across valleys, several inches snow in mountains. Even some rain south. Temperatures 2 to 12° above normal.

Fieldwork delayed by scattered showers, gusty winds. Winter grains starting to show growth.

NEW ENGLAND: Precipitation (rainfall, water equivalent of snow) 2.00 to 2.50 in. west, 1.50 to 2.00 in. remainder Massachusetts, Rhode Island, Connecticut, 1.00 to 1.50 in. southern and coastal Maine, southern New Hampshire, 0.50 to 1.00 in. remainder Maine, New Hampshire, Vermont. Temperatures teens near Canadian border to near 40° south coast. Temperatures below normal north, near normal south.

Major farm activities: Moving crops from storage, tending livestock, maple sugaring.

NEW JERSEY: Temperatures below normal. Extremes 13°; 67°. Rainfall 1.82 in. north, 1.88 in. central, 2.07 in. south. Heaviest 24-hour total 1.43 in. on 24th, 25th. Estimated soil moisture percent field capacity 100% north, 99% central, 99% south. Four inch soil temperatures 35° north, 42° central, 43° south.

Soil preparation, planting of oats, Irish potatoes, early vegetables began on light soils. Rain 24th temporarily halted fieldwork. Fruit pruning progressed. Fruit buds began swelling, pastures began greening.

NEW MEXICO: Winter storm early week; temperatures above normal remainder week. Moderate snowfall northern, eastern areas.

Days suitable for fieldwork 6.1. Soil moisture 86% short, 14% adequate. Irrigated wheat 6% very poor, 29% poor, 47% fair, 18% good; dryland wheat 22% very poor, 67% poor, 11% fair. Moisture needed. Cattle 14% poor, 45% fair, 41% good. Sheep 50% fair, 50% good. Range 4% very poor, 22% poor, 70% fair, 4% good.

NEW YORK: Temperatures slightly below normal. Cold early week, highs 20s, 30s, reaching 40s from

Hudson Valley to Long Island. Low teens, 20s but readings fell below zero north of Mohawk, Hudson Valleys. By weekend temperatures warmed into 50s, low 60s. Lows in 30s, low 40s. Precipitation varied. Heaviest amounts, generally between 1.50 to 3.00 in. occurred southeast from Susquehanna, Catskills to lower Hudson Valley, Long Island. Most occurred during snow, sleet, rain storm 24th. Amounts 0.25 to 0.50 in.

Maple syrup season well underway although weather has been less than ideal for good sap runs. Farmers tending livestock, spreading manure. Outside activities increased. Spring plowing underway on limited basis. Fields need to dry for plowing to pick up momentum.

NORTH CAROLINA: Temperatures 3 to 6° below normal. Temperature extremes 22°; 82°. Precipitation 1.40 to 6.98 in.

Days suitable for fieldwork 1.1. Soil moisture 36% adequate, 64% surplus. Pasture 1% very poor, 7% poor, 27% fair, 62% good, 3% excellent. Oats 3% poor, 23% fair, 73% good, 1% excellent. Barley 2% poor, 16% fair, 81% good, 1% excellent. Rye 3% poor, 20% fair, 76% good, 1% excellent. Wheat 3% poor, 24% fair, 72% good, 1% excellent. Tobacco plantbeds 1% very poor, 3% poor, 45% fair, 51% good. Feed grains 8% short, 92% adequate. Hay, roughage 4% short, 93% adequate, 3% surplus. Irish potatoes 30% planted, 84% 1988, 73% avg.; 16% poor, 32% fair, 52% good. Cabbage 42% transplanted, 51% 1988. Major farm activities: General maintenance; equipment repair, tending livestock. Other activities: Preparing land for planting; pruning fruit trees; planting potatoes, cabbage; tending tobacco plantbeds; topdressing small grains.

NORTH DAKOTA: Warm front brought mild temperatures, scattered precipitation late week. Temperatures 6° below normal to normal. Extremes -12° northeast, 64° southwest. Precipitation 0.04 in. southwest to 0.16 in. northwest.

Soil moisture below normal. Snow cover reduced. Hay, feed mostly adequate. Calving, lambing progressed without major problems. Some farmers have heavier calves as result of feeding larger amounts of grain concentrates. Other activities included grain marketing, spring planning.

OHIO: Air temperatures normal. Lows upper 20s to upper 30s, highs upper 40s to mid 50s. Lows upper 20s to upper 30s. Extremes mid teens to 70s. Precipitation 0.75 to 1.50 in. south; 0.50 in. north. Snow 20th north.

Soil moisture adequate. Soil temperatures highs upper 40s; lows mid 30s. Some plowing.

OKLAHOMA: Temperatures 2° above normal south central to 7° above normal Panhandle. Precipitation 0.01 in. northeast to 0.80 in. southwest.

Days suitable for fieldwork 5.0. Topsoil moisture 35% short, 60% adequate, 5% surplus. Subsoil moisture 20% short, 80% adequate. Wheat 10% poor, 60% fair, 25% good, 5% excellent; 20% jointing, 15% 1988, 25% avg. Dryness reduced prospects major producing areas. Winter grain mites infecting west. Sorghum 40% seedbed prepared, 10% 1988, 25% avg. Cotton 50% seedbed prepared, 30% 1988, 25% avg. Cattle good; marketing average, prices slightly lower than last week.

OREGON: Warmer than normal temperatures. Most areas 1 to 3° above normal, except south central 4° above normal. Rainfall 2.00 in. along coast, north Cascades; up to 1.50 in. other western areas. East of Cascades, 3.70 in. of precipitation; other eastern areas had less than 0.10 in.

Soil moisture adequate to surplus west, mostly adequate east. Winter grains, grasses starting to

grow. Fertilizer, herbicide spraying continued when rains allowed. Delayed dormant sprays applied to pear orchards lower Hood River Valley; some pruning, fertilizing, tree planting continued. Willamette Valley berries show some damage from February cold; buds beginning to swell. Field preparation for vegetables west slowed by rains. Livestock fair to good; range, pasture mostly fair. Some over grazing damage shows western pastures. Nearly all hay committed in eastern areas. Season long water supplies continued to improve.

PENNSYLVANIA: Cool, wet. Temperature 34°, 30° below normal. Temperature extremes 90°; 66°. Precipitation 1.26 in., 0.45 in. above normal.

Activities: Hauling manure; caring for livestock; maintaining machinery; fixing fences; grading potatoes; early spring activities.

PUERTO RICO: Island rainfall 1.02 in., 0.42 in. above normal. Highest weekly total rainfall 2.88 in. Juncos, 2.04 in. Pico Del Este-Luquillo, 1.96 in. Arecibo Observatory. Highest 24-hour total 1.96 in. Arecibo Observatory. Rainfall since January 1st 11.10 in., 52% above normal. San Juan WSFO temperature 76°, 2° below normal. Total rainfall 0.44 in., 0.10 in. below normal. Divisional temperatures 75 to 76° on coast, 68 to 70° interior, station temperature 76° San Juan City to 62° Pico Del Este-Luquillo. Lowest minimum temperature 56° Pico Del Este-Luquillo. Highest maximum temperature 85° several areas.

SOUTH CAROLINA: Temperatures 3 to 4° below normal, much cooler during week to well above over weekend. Rainfall more than 3.00 in. across northwestern part State to less than 1.00 in. along south coast.

Days suitable for fieldwork 2.9. Soil moisture: 13% short, 76% adequate, 11% surplus. Corn good; 4% planted, 22% 1988. Watermelons fair to good; 17% planted, 31% 1988. Cantaloupes fair to good; 3% planted, 9% 1988. Spring cukes fair to good; 7% planted, 11% 1988. Tomatoes 9% planted, 37% 1988. Peaches fair to good.

SOUTH DAKOTA: Temperatures 10° below to 6° above normal. Extremes -8°; 75°. Heaviest precipitation north, west, lesser amounts south. Snow cover 1 to 2 in. spotty areas north to traces other northern areas.

Winter wheat appears good. Little winterkill. Few north central counties with dry soils last fall have slight damage.

TENNESSEE: Rainfall early week. Rain Plateau, east midweek. Precipitation 1.00 in. west to 2.00 in. east. Temperatures above normal west, middle; below normal east. Low temperatures lower 40s, highs 50s to mid 60s. Extremes 29°; 80°.

Main farm work topdressing wheat, tobacco plantbed preparation, limited row crop land tillage, seeding, fertilizing pastures. Livestock good, adequate feed.

TEXAS: Surge of cold air brought lower temperatures, showers early week. Rain covered most north, west with some thunderstorms southern areas. Cold, cloudy, breezy weather prevailed much State. Rapid warming 23rd, 24th. East 1.25 in. above normal, Upper Coast over 0.50 in. above normal. High Plains slightly above normal, rest of State at or below normal.

Crops: Small grains High Plains suffered from constant changes in weather. Early week freeze may have caused additional losses some dryland fields. Aphids continued to increase. Fields Low Plains, Cross-Timbers looking better. Most small grain fields Blacklands good progress. Some fields

frozen out replanted to spring crops. Topdressing occurred as conditions improved. Fields central look better with recent moisture. Fields Coastal Bend, Upper Coast continued head out. Wheat 1% headed, none 1988, 1% avg. Corn planting slowed early part week; midweek activity increased as fields dried. Planting winding down Blacklands. Moisture many areas should help emergence. Most land preparations completed Plains. Good rain would help preplant moisture conditions. Corn 50% planted, 59% 1988, 49% avg. Grain sorghum planting increased fields dried out. Rain should help recently planted fields emerge. Much Valley remained dry, emergence slow. Rainfall Plains help preplant conditions, high winds continued deplete available moisture. Sorghum 30% planted, 42% 1988, 38% avg. Cotton planting continued Valley, Coastal Bend, many fields slow to emerge. Planting begin Blacklands, central as fields dry out. Most fields Trans-Pecos prewatered. Cotton 7% planted, 9% 1988, 6% avg. Rice planting underway Upper Coast. Rice 3% planted, 6% 1988, 12% avg. Other field crops: Sugarbeets none planted, none 1988, 2% avg.

Commercial Vegetables: Rio Grande Valley some melon fields progressed slowly, others setting fruit. Onion harvest slow because weak demand. Other vegetable harvest continued. Fruit set most citrus groves good. Harvest wind down this season's crop. San Antonio-Winter Garden limited harvest continued. Onions making normal progress. East, some replanting occurred. Planted fields showed slow progress because weather changes. High Plains onion plants set out after weather conditions opened up. Other planting to begin soon. Trans-Pecos onions up, doing well. Most cabbage planted. Peaches continued to bloom Hill Country. Fruit sizes varied Valley. Recent freezing weather may have caused heavy damage portions Plains, trees beginning to bloom. Trees also continued bloom east.

Range and Livestock: Ranges, pastures continued green-up, rapid weather changes slowed progress. Forage fair many areas. Portions east better than most areas. Producers east fertilized some pastures. Livestock remained fair to good, producers continued to feed hay.

UTAH: Precipitation moderate to heavy north mountains, light rest of State. Temperatures 5 to 6° above normal.

Livestock fair, to good. Calving, lambing continue. Scattered supplemental feeding on range. Major farm activities: Hauling manure, repairing equipment, purchasing seed, supplies, livestock chores, farm tax records.

VIRGINIA: Wet, cloudy, cool. Precipitation 2.50 in. east, 1.50 in. central, 1.00 in. west. Temperatures below normal, 40s or 50s daytime. Range 19 to 80°.

Days suitable for fieldwork 1.1. Topsoil moisture 3% short, 40% adequate, 57% surplus. 1.1. Rain severely limited fieldwork. Some small grain topdressing with nitrogen, overseeding pastures. Pastures 4% poor, 38% fair, 54% good, 4% excellent. Wheat 25% fair, 71% good, 4% excellent. Apples 16% fair, 67% good, 17% excellent. Tobacco plantbeds 13% very poor, 13% poor, 37% fair, 37% good. Flue-cured tobacco plantbeds over 90% seeded. Rain, cool weather slowed seeding, germination. Potato seeding less than 5%, 80% 1988.

WASHINGTON: Temperatures none to 1° above normal, west; -3° to 3° above normal east. Precipitation 0.69 to 1.29 in. west; none to 0.30 in. east.

Days suitable for fieldwork 2.0. Soil moisture 30% short, 60% adequate, 10% surplus. Range, pasture 34% short, 66% adequate. Hay, other roughage 20% short, 40% adequate, 40% surplus. Fieldwork limited due to wet fields. Seeding,

reseeding of wheat underway Benton County. Russian wheat aphids active. Garfield, Klickitat Counties minimal winterkill of wheat. Soil erosion moderate to severe Douglas County. Skagit County loss of cauliflower, cabbage seed crops due to earlier freeze. Blackberry, raspberry freeze damage lighter than expected King, Pierce Counties. Some apricot bud damage Klickitat County; most other fruit survived cold well. Calving neared completion.

WEST VIRGINIA: Temperature 42°, 1 to 7° below normal. Extremes 14° Greenbank, Terra Alta; 82° Creston. Precipitation 1.45 in., above normal for all areas except Bluefield. Heaviest precipitation 2.20 in., Belington.

Days suitable for fieldwork 2.7. Soil moisture 83% adequate, 17% surplus. Wheat and barley mostly good. Livestock good. Feed 4% very short, 23% short, 69% adequate, 4% surplus. Farm activities: General farm maintenance, livestock care, manure spreading, plowing, tobacco bed preparation, planting.

WISCONSIN: Temperatures 33° warmer after 22nd. Extremes -23°; 77°. Precipitation none to 0.10 in. On 24th frost depth 28 in., normal 10 in. Snow cover 10 in., normal 4 in. Snow melt mostly run off due to frost.

Frost, topsoil moisture prevent fieldwork.

WYOMING: Temperatures below normal northeast, elsewhere above normal. Precipitation below normal except extreme west, southeast.

Days suitable for fieldwork 3.0. Topsoil moisture 32% short, 57% adequate, 11% surplus. Subsoil moisture 63% short, 31% adequate, 6% surplus. Spring wheat small amount planted, 5% avg. Oats none planted, 5% avg. Barley 5% planted, 15% 1988, 15% avg. Winter wheat 20% poor, 40% fair, 40% good. Light to moderate wind, freeze damage. Livestock mostly good. Spring calves born 45%, 45% 1988, 40% avg. Death losses light to normal. Farm flock: Ewes lambed 45%, 55% 1988, 45% avg.; shorn 40%, 50% 1988, 45% avg. Range flock: Ewes lambed 25%, 25% 1988, 15% avg.; shorn 15%, 30% 1988, 20% avg. Death losses light to normal. Range, pasture poor to fair. Supplemental feeding continued as needed.

International Weather and Crop Summary

March 19-25, 1989

HIGHLIGHTS

WESTERN USSR ... Continued unseasonable, warm, dry weather causes southern winter grains to break dormancy earlier than usual and prompts early spring fieldwork.

EUROPE ... Scattered rain benefits winter grains in sections of the south and east. Moderate to heavy rain continues in the northwest.

SOUTH ASIA ... Showers and mild weather benefit immature wheat in Pakistan and India. Hot, dry weather stresses reproductive Indian rice.

EASTERN ASIA ... Heavy rain continues in the southeast.

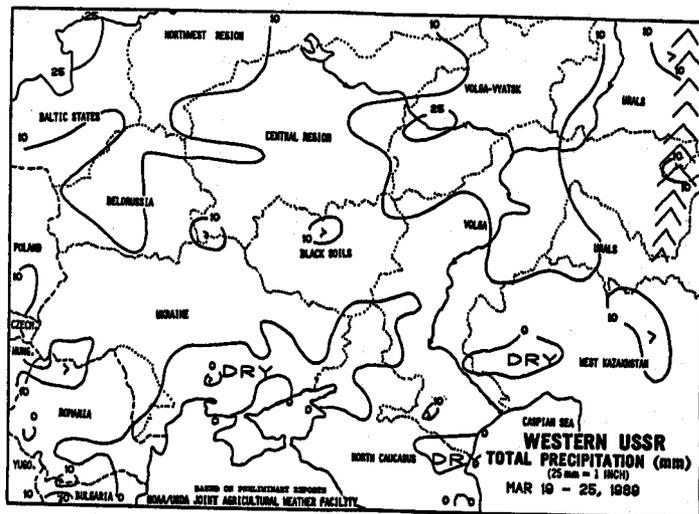
SOUTHEAST ASIA ... Moderate to heavy showers return to Indonesia and Malaysia. Unseasonable rains linger over northeastern Thailand.

SOUTH AMERICA ... In Argentina, several days of dry weather help early harvest activities. In south-central Brazil, widespread rain in Rio Grande do Sul benefits immature crops.

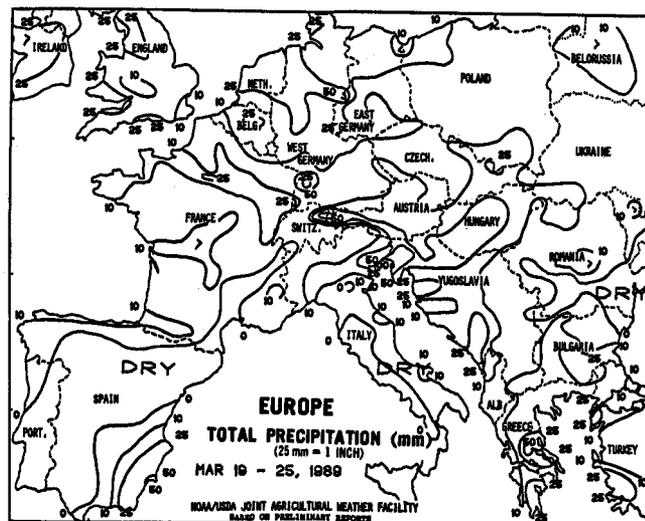
AUSTRALIA ... Abnormally heavy rain continues from the northwest to southeast. Scattered rain causes some harvest delays in the east.

SOUTH AFRICA ... Rain and mild weather continue, benefiting late planted, immature corn.

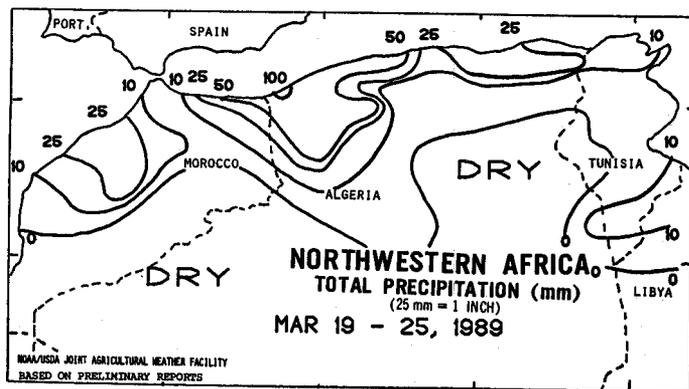
NORTHWESTERN AFRICA ... Widespread precipitation covers winter grains advancing through reproduction.



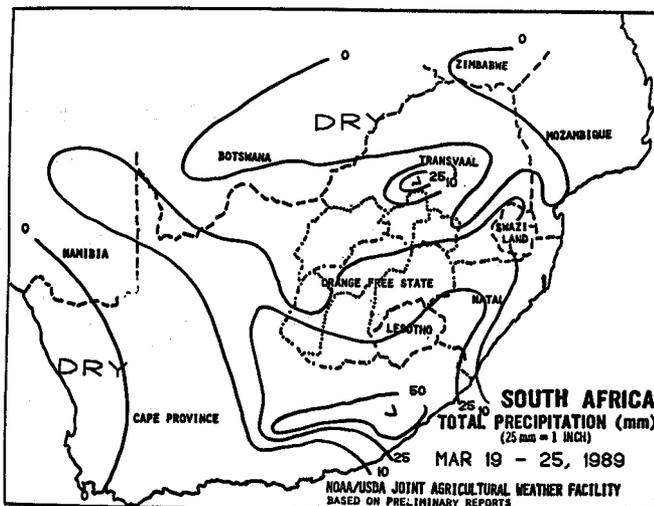
WESTERN USSR ... The fourteenth consecutive week of unseasonably warm weather covered winter grain areas. Weekly average temperatures ranged from 4 to 7 degrees Celsius (C) above normal over most of the region. Winter grains were breaking dormancy as far north as southern Belorussia, the northern Ukraine, and the northern North Caucasus, which was about 3 weeks earlier than usual. Reports indicate the continued warm weather had prompted sugar beet planting about 3 weeks earlier than usual in the Ukraine, with spring grain planting occurring as far north as the northern Ukraine and the southern Black Soils Region. Dry weather continued over the Ukraine and North Caucasus, helping spring fieldwork. Rain is needed in the southwestern Ukraine, the southern Black Soils Region, and the lower Volga where topsoils are becoming unfavorably dry. Light precipitation (10-25mm) continued over the northern half of the region.



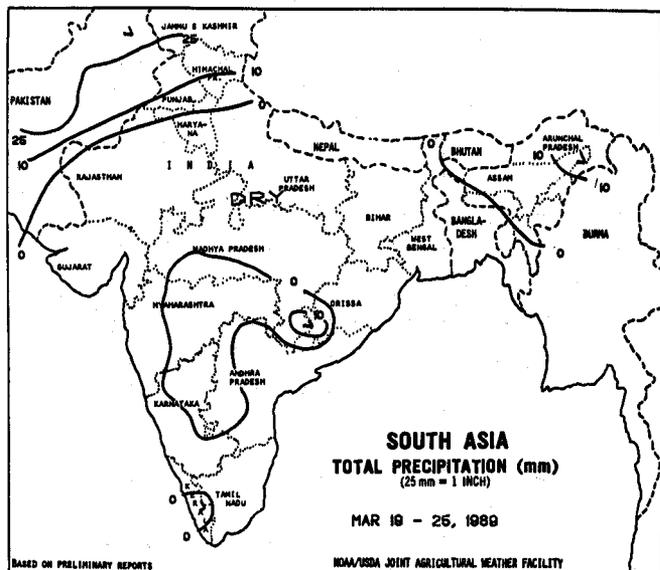
EUROPE ... Scattered moderate to heavy rain (15-40mm) fell over sections of northern Italy, Austria, Hungary, Yugoslavia, and Bulgaria, helping to further relieve dryness in vegetative winter grains. Scattered, mostly light rain (less than 10mm) covered the remainder of southern Europe. In the north, moderate to heavy rain (20-40mm) continued over much of the United Kingdom, Benelux, and northern West Germany, while widespread mostly light rain (less than 10mm) caused only minor delays in spring fieldwork and planting in the northeast. Above-normal precipitation since early February in the northwest has left soils with adequate to surplus moisture levels for vegetative winter grains. Mean temperatures ranged from near normal in the northwest to much above normal in the east.



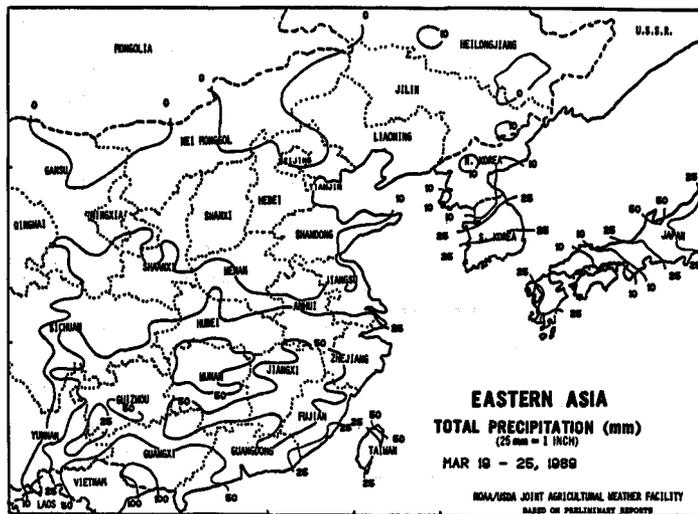
NORTHWESTERN AFRICA ... Widespread, significant precipitation began over Moroccan winter grain areas at the beginning of the week, and then spread eastward across crop areas in Algeria and Tunisia as the week progressed. Precipitation amounts in Morocco ranged from 10 to 36mm, benefiting winter grains in the reproductive phase of development. Moderate to heavy rains in western Algeria produced the greatest weekly amounts of precipitation thus far this season. Precipitation amounts averaged 50mm, with locally heavy downpours producing rainfall ranging from 86 to 100mm. Some localized flooding may have occurred. In central and eastern Algeria and Tunisia, precipitation generally ranged from 10 to 50mm, but the extreme southern fringe of the crop area received minimal rain (amounts less than 5mm). This week's precipitation helped to stabilize conditions for winter grains in western and central Algeria, southern Morocco, and Tunisia and improved conditions for crops in northern Morocco and eastern Algeria.



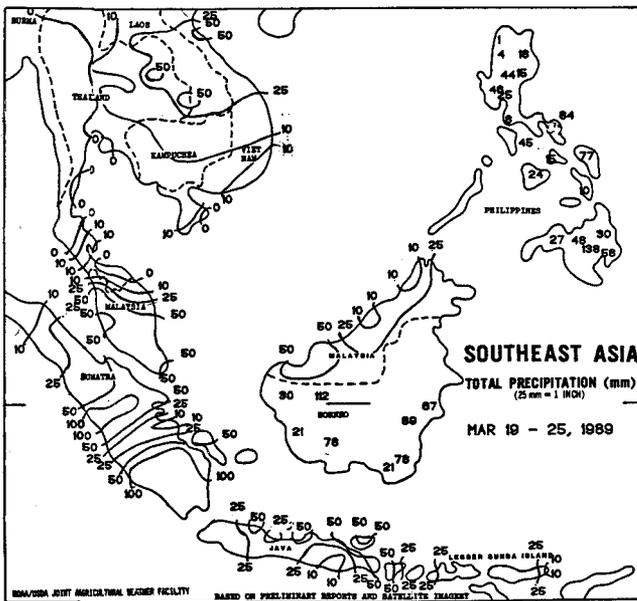
SOUTH AFRICA ... Moderate showers (10-38mm) covered central and southern areas of the Maize Triangle as only light rain (1-13mm) fell over the northern one-third of the Triangle. The rain maintained favorable moisture conditions for late planted, immature corn, but drier weather is needed for the bulk of the crop that is filling to maturing. Temperatures continued mild across the region, with high maximum temperatures in the Maize Triangle ranging from 27 to 31 degrees C. Elsewhere, variable showers (10-50mm or more) covered crop areas of the eastern Cape Province as light rain (less than 7mm) returned to the southern Cape. Moderate rain (14-27mm) covered grain regions of western Natal as light rain (less than 10mm) continued over coastal sugarcane regions.



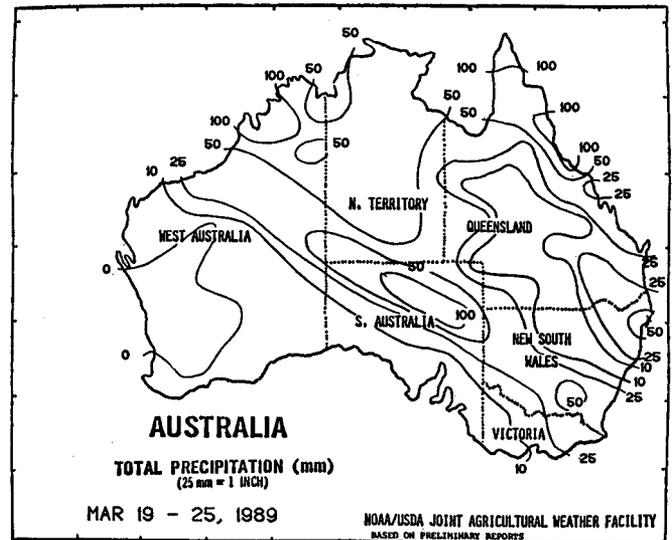
SOUTH ASIA ... Moderate showers (10-35mm or more) covered most growing areas of Pakistan, benefiting immature winter wheat. Dry, seasonably warm weather covered most Indian winter wheat areas, favoring crop maturation and harvesting. Light to moderate rain (1-25mm) and cooler-than-normal weather, however, benefited immature wheat in northernmost crop regions. Light rain (1-12mm) returned to India's southern interior, but dry, warmer-than-normal weather covered most coastal rice regions, increasing evaporative losses. Maximum temperatures ranged from 35 to 42 degrees from Tamil Nadu to Bangladesh, stressing rice in or nearing reproduction.



EASTERN ASIA ... Heavy rain (25-75mm, with scattered amounts in excess of 75mm) continued across much of southeastern China and Taiwan, favoring recently planted early rice. Very heavy rain (100-165mm) may have caused flooding in southern sections of Guangxi and Guangdong. Heavy rain (25-75mm) also fell across much of the Yangtze Valley, southern South Korea, and Japan. The rain caused delays in preplanting activity for single crop rice in the Yangtze Valley, which normally begins by the beginning of April. In the north, scattered light rain and snow (less than 10mm) fell over the North China Plain, Manchuria, and North Korea. Mean temperatures ranged from above normal in the northeast to normal and below normal elsewhere.

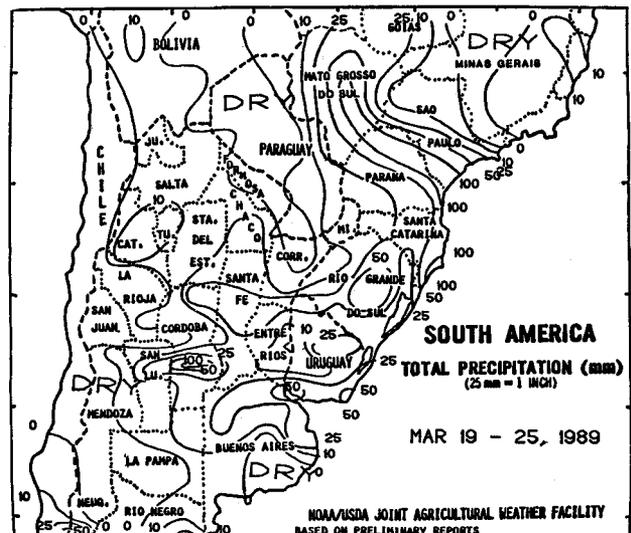


SOUTHEAST ASIA ... Moderate to heavy showers (25-50mm or more) returned to most growing regions of Malaysia and Indonesia with heaviest rainfall (100mm or more) over southern Sumatra and a small area of central Java. The rainfall maintained favorable irrigation reserves for vegetative to filling rice. Scattered, light rain (4-21mm) covered peninsular Thailand and rice areas near Bangkok, but unseasonably heavy showers (25-50mm or more) lingered over rainfed rice areas of eastern Thailand. Seasonably warm temperatures, however, maintained high evaporation rates. In the Philippines, widespread showers (25-50mm or more) continued from central Luzon through the eastern islands to Mindanao, benefiting immature, second season grains and improving conditions for early main season grain planting.



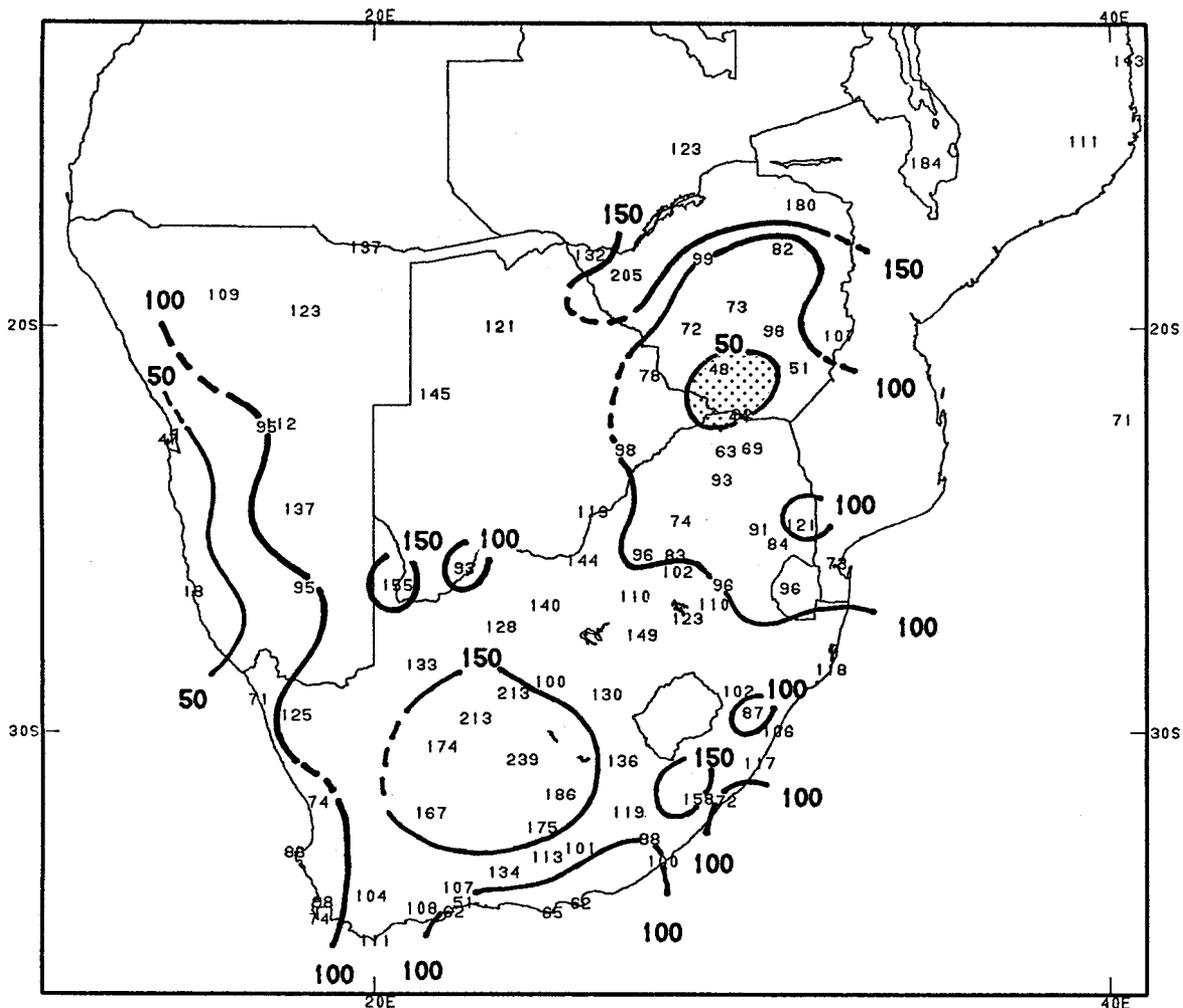
AUSTRALIA ... Abnormally heavy rain (20-100mm, with isolated amounts in excess of 100mm) continued across northwestern, central, and southeastern sections of Australia, causing flooding in central interior areas. It was the third consecutive week of heavy rain in the northwest and central sections, and second consecutive week in the southeast. Scattered rain (10-55mm) also fell across eastern summer crop areas of Queensland and New South Wales, delaying early harvest and slowing drydown of maturing crops. In the northeast, beneficial scattered rain (15-85mm, with isolated amounts greater than 100mm) continued mostly favorable conditions for vegetative sugarcane. Crop areas in southern Western Australia remained mostly dry.

SOUTH AMERICA ... In Argentina, early harvesting of corn, sorghum, and sunflowers progressed during the first 5 days of the week, helped by mostly dry weather. However, widespread rain (10-40mm) by week's end likely halted further harvest activities. In addition, a localized heavy shower in central Cordoba (104mm) may have produced some flooding. In south-central Brazil, early harvests of corn and soybeans were underway. The harvest season lags normal in Parana resulting from the late start of the growing season. Weekly rainfall averaged 25mm in Rio Grande do Sul, benefiting immature crops, and increasing topsoil moisture for wheat planting which usually begins in April. Early-week, moderate to heavy rain (25-100mm) in Parana and Mato Grosso do Sul delayed early harvesting. However, dry weather returned to these areas on March 22 and continued until week's end, allowing a resumption in harvest activities.



Growing Season Rainfall in Southern Africa

With the rainy season winding down in southern Africa, this is a good time to look at the cumulative rainfall totals across the region. This map shows the total rainfall since last October as a percentage of the long-term mean. Essentially, there were three rainfall regimes this season. Above-normal rainfall across the major corn growing areas of the Republic of South Africa is expected to result in the largest corn crop since the record year of 1981. Just to the north, however, drought affected agriculture in central and southern Zimbabwe, South Africa's northern Transvaal, southern Mozambique, and northeast Botswana. The drought was centered in southern Zimbabwe, where rainfall totaled half of normal. Excessively wet weather was the rule in the zone north of the drought, with Zambia, Malawi, northern Mozambique, and northern Zimbabwe measuring rainfall more than 150 percent of normal. Major flooding was reported in central and southern Malawi, and crops in flood-prone areas were likely affected throughout this region.



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