

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

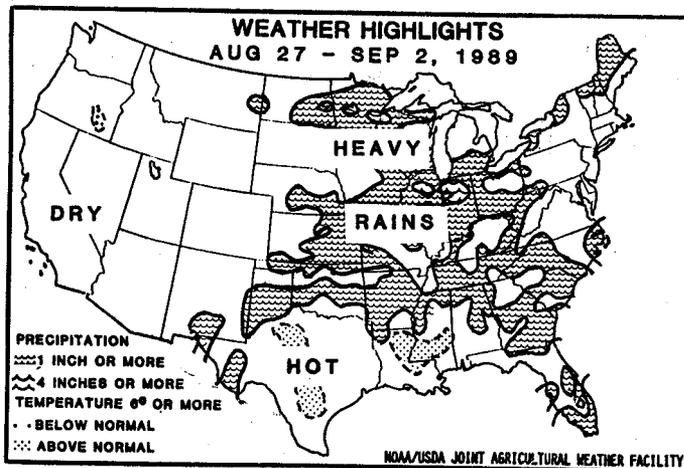
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Sept. 6, 1989

National Weather Summary

August 27 - September 2, 1989



U.S. MONTHLY MAPS AND SUMMARIES

WEDNESDAY: A slow-moving cold front produced heavy rain in the Tennessee Valley. Ahead of the front, warm and humid Gulf of Mexico air spawned scattered thunderstorms in the Southeast.

THURSDAY: A frontal system triggered thunderstorms over the upper Mississippi Valley, with reports of hail and locally heavy rain. Scattered thunderstorms continued in the Southeast.

FRIDAY: The frontal system moved into the Midwest, bringing widespread showers and thunderstorms. Portions of Illinois and Indiana received 2-4 inches of rain. Severe thunderstorms also popped up in Oklahoma and Arkansas.

SATURDAY: Scattered thunderstorms prevailed across the Gulf coast and the Northern Plains. High-temperature records were broken in several Southern cities.

HIGHLIGHTS: Abundant rainfall occurred in portions of the lower Missouri Valley and upper and middle Mississippi Valley. Some of this rain was associated with severe thunderstorms which produced hail and locally heavy rain. Scattered thunderstorms were common over the Southeast quarter of the Nation. Little or no rain fell in central and southern Texas. The Gulf Coast States were 3-6 degrees above normal, with daily high temperatures in the upper nineties and low hundreds.

SUNDAY: Widespread rain reached from the southern Rockies to the Great Lakes, with heavy amounts in the middle and lower Missouri Valley. Showers were scattered across the northern Rockies and northern Plains and along the eastern Gulf and southern Atlantic coasts. Evening thunderstorms dumped heavy rain in North Dakota, while heat and humidity continued across the South.

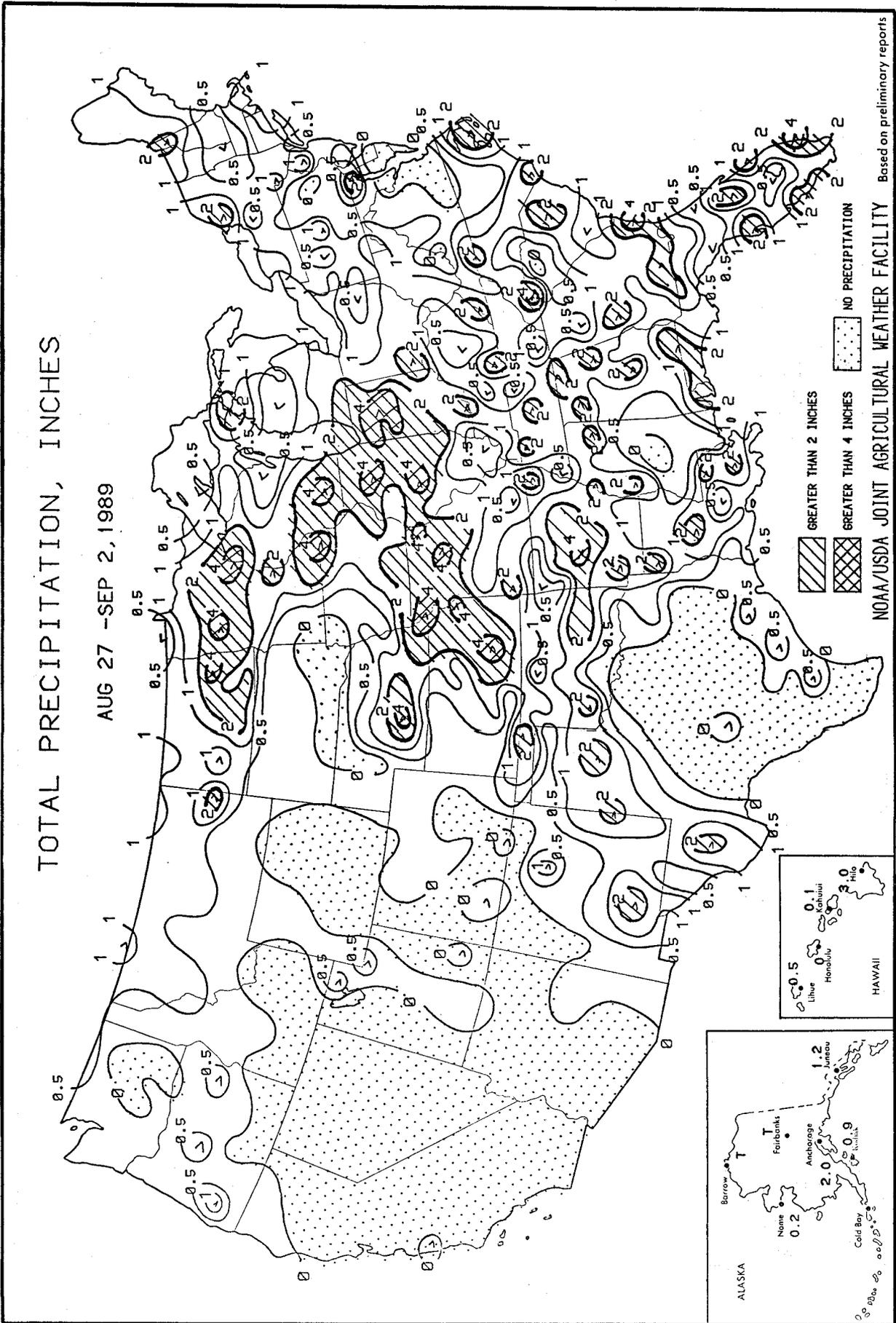
MONDAY: Showers and thunderstorms again spread from the southern Rockies to the Great Lakes, with continuing rain drenching eastern Kansas and western Missouri. Rain and scattered thunderstorms extended across the northern Rockies into the upper Mississippi Valley and along the Gulf and Atlantic coasts.

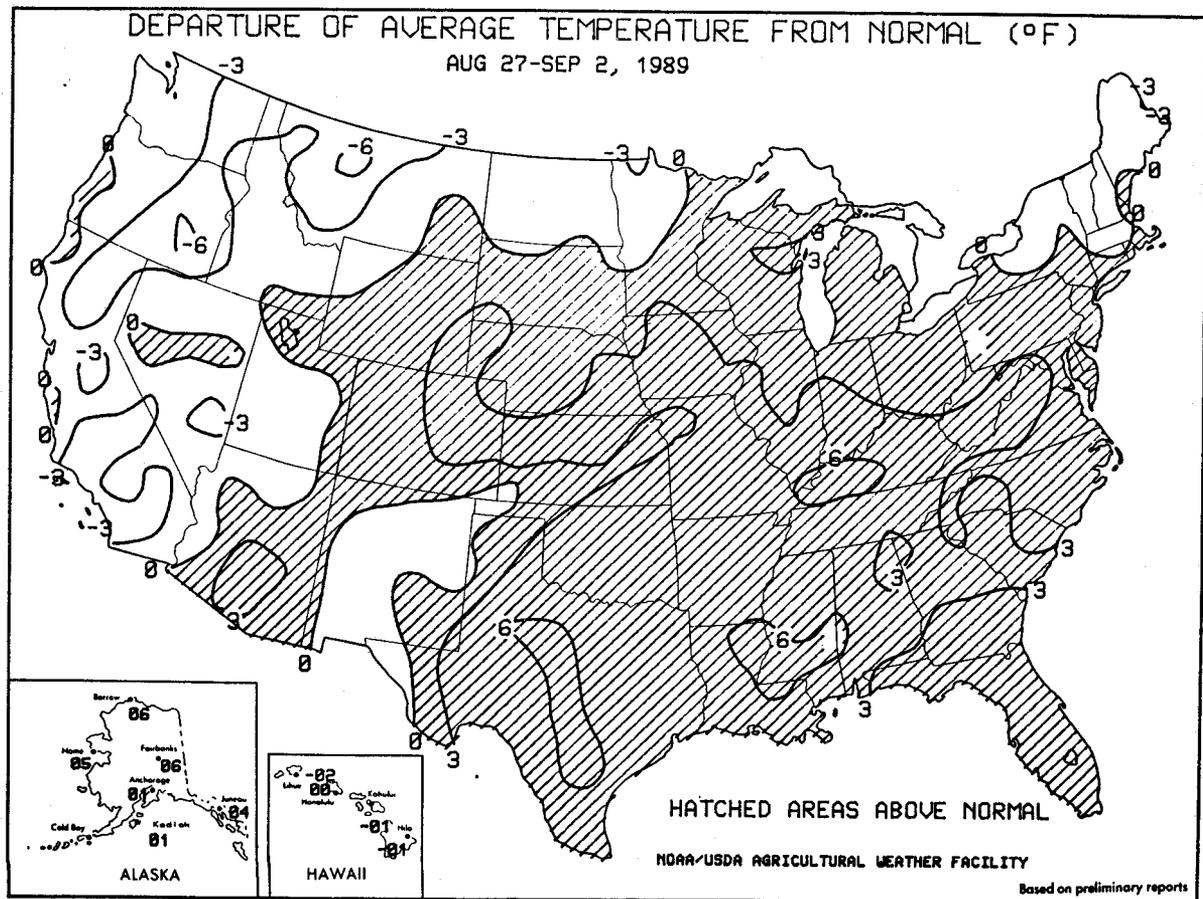
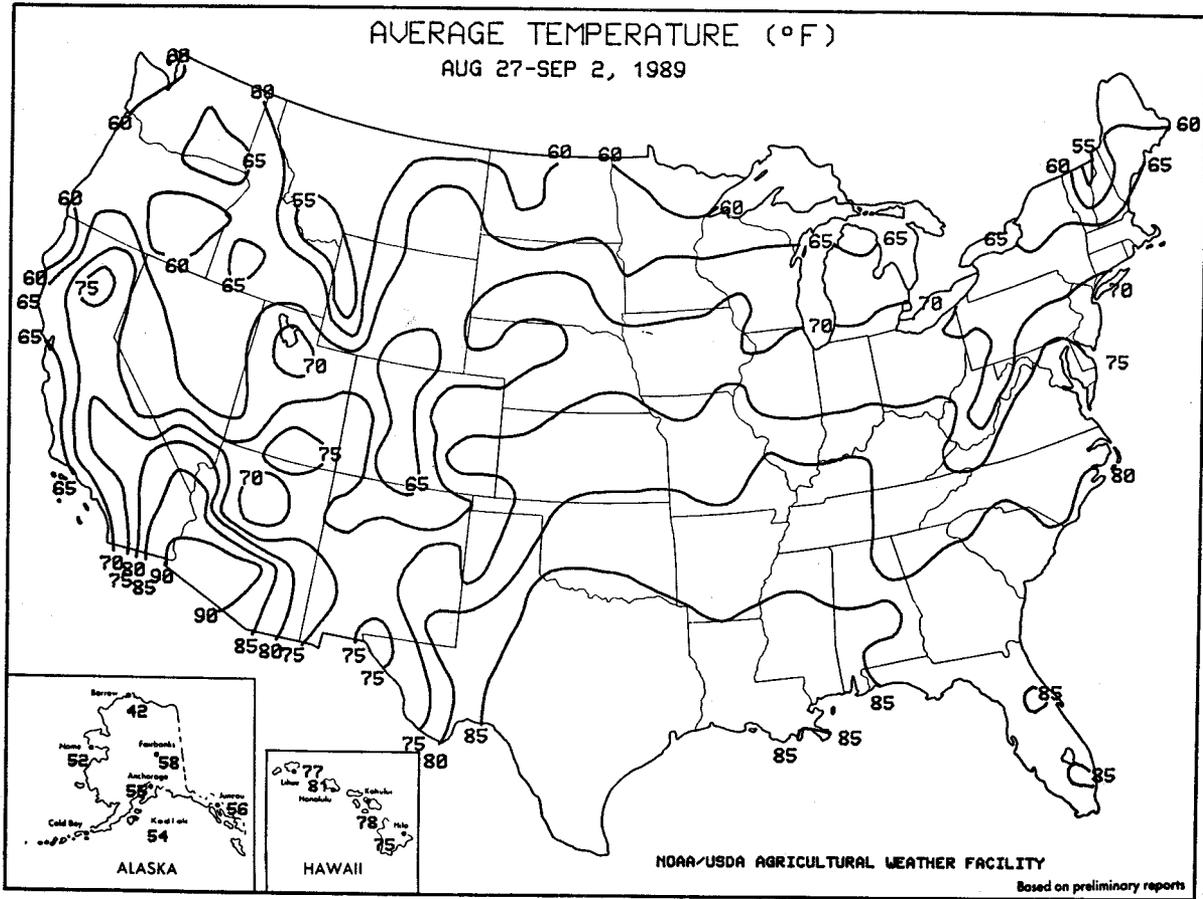
TUESDAY: Strong thunderstorms brought more soaking rain to the central Plains and middle Mississippi Valley and moved into the Ohio Valley. Widespread rain covered the Northeast and mid-Atlantic States, while isolated thunderstorms dotted the South. An approaching Pacific front brought rain into western Oregon.

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August "Weather in Historical Perspective" will be included in the next issue.

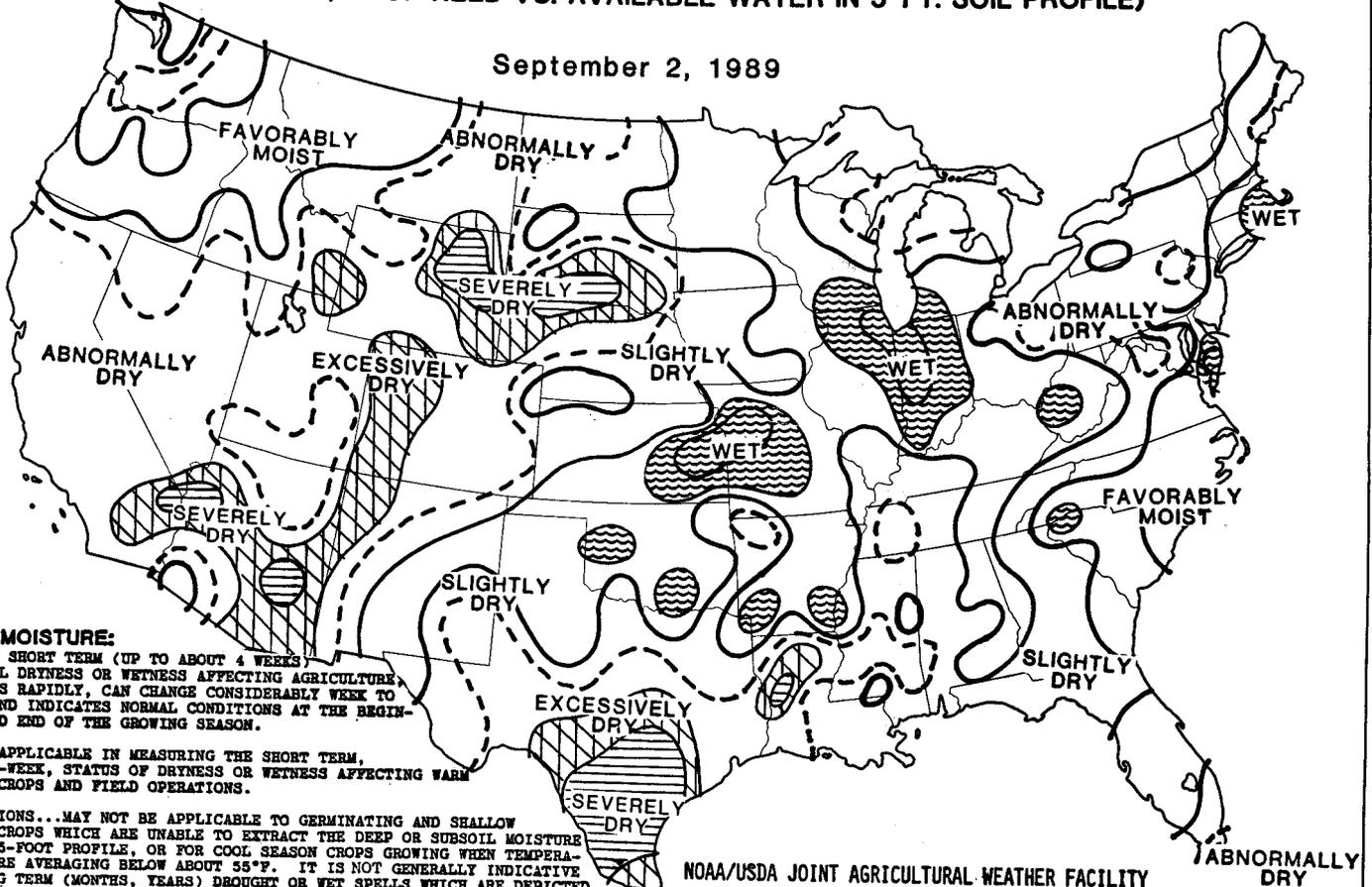




CROP MOISTURE

(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)

September 2, 1989



CROP MOISTURE:

DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE. RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

USES...APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.

LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

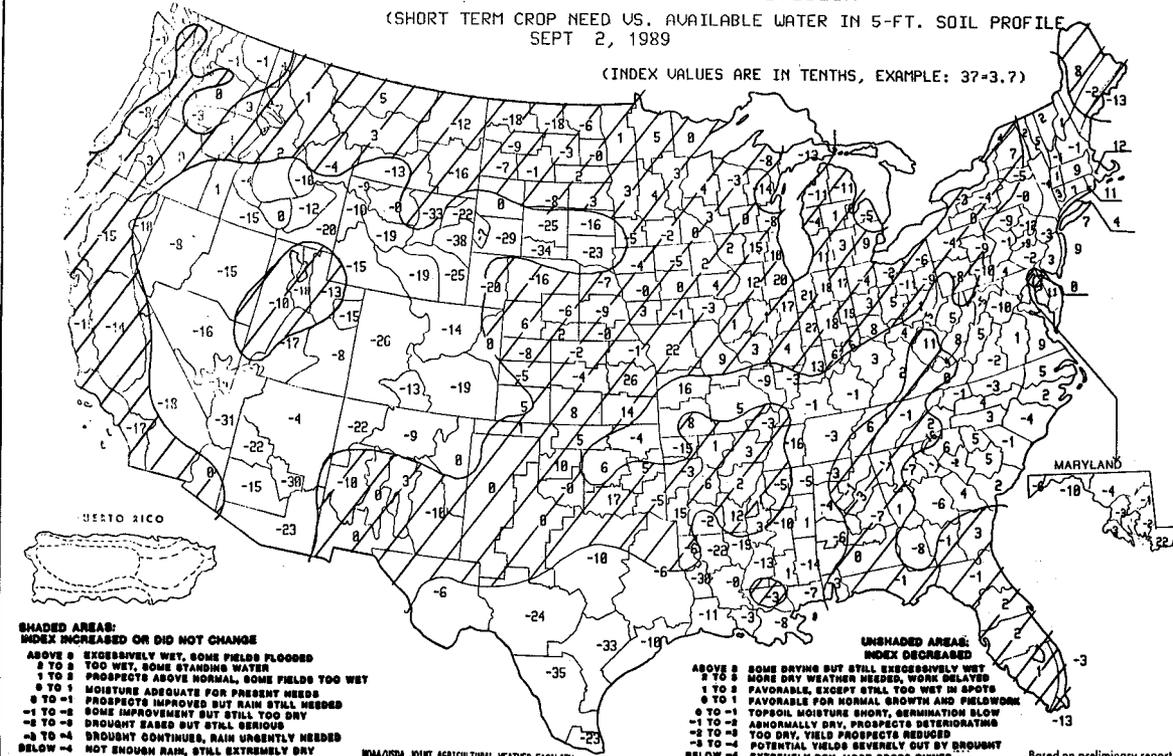
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

CROP MOISTURE INDEX BY DIVISION

(SHORT TERM CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
SEPT 2, 1989

(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)

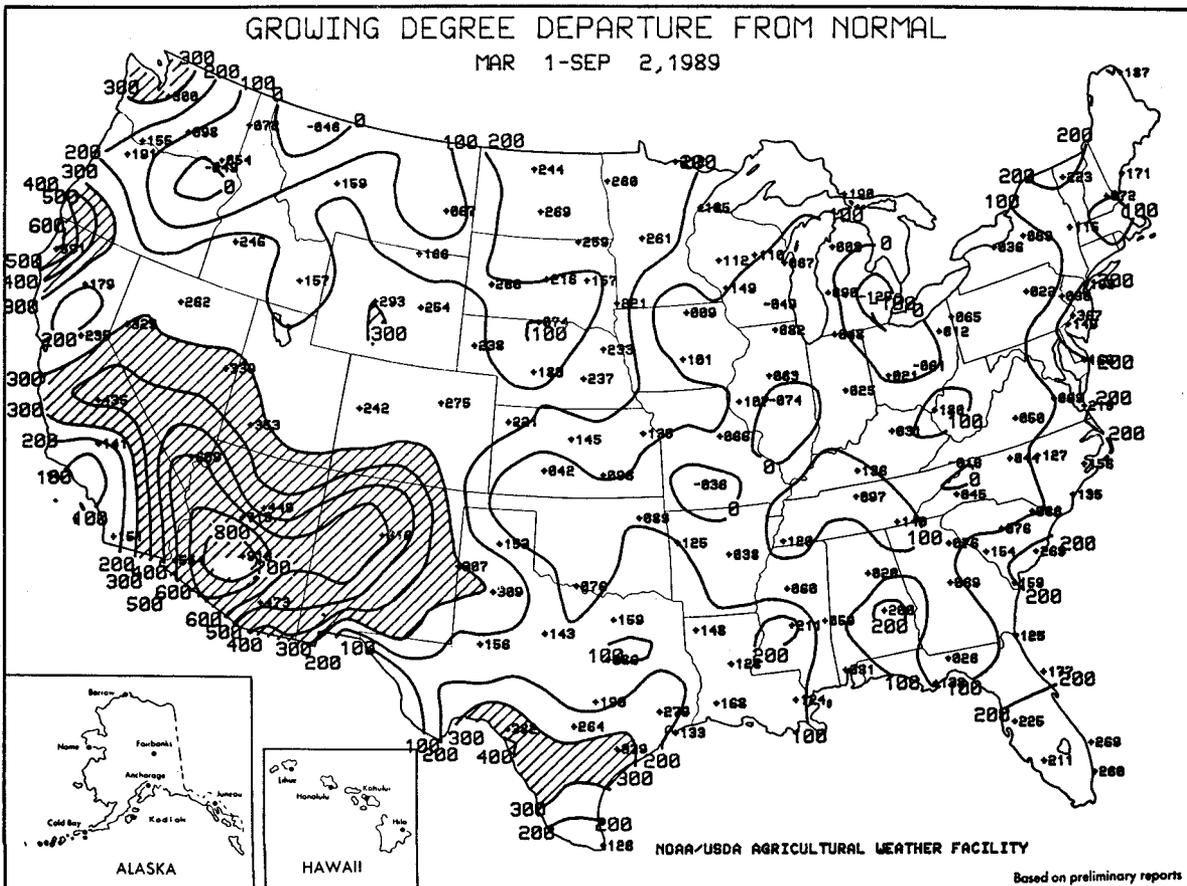
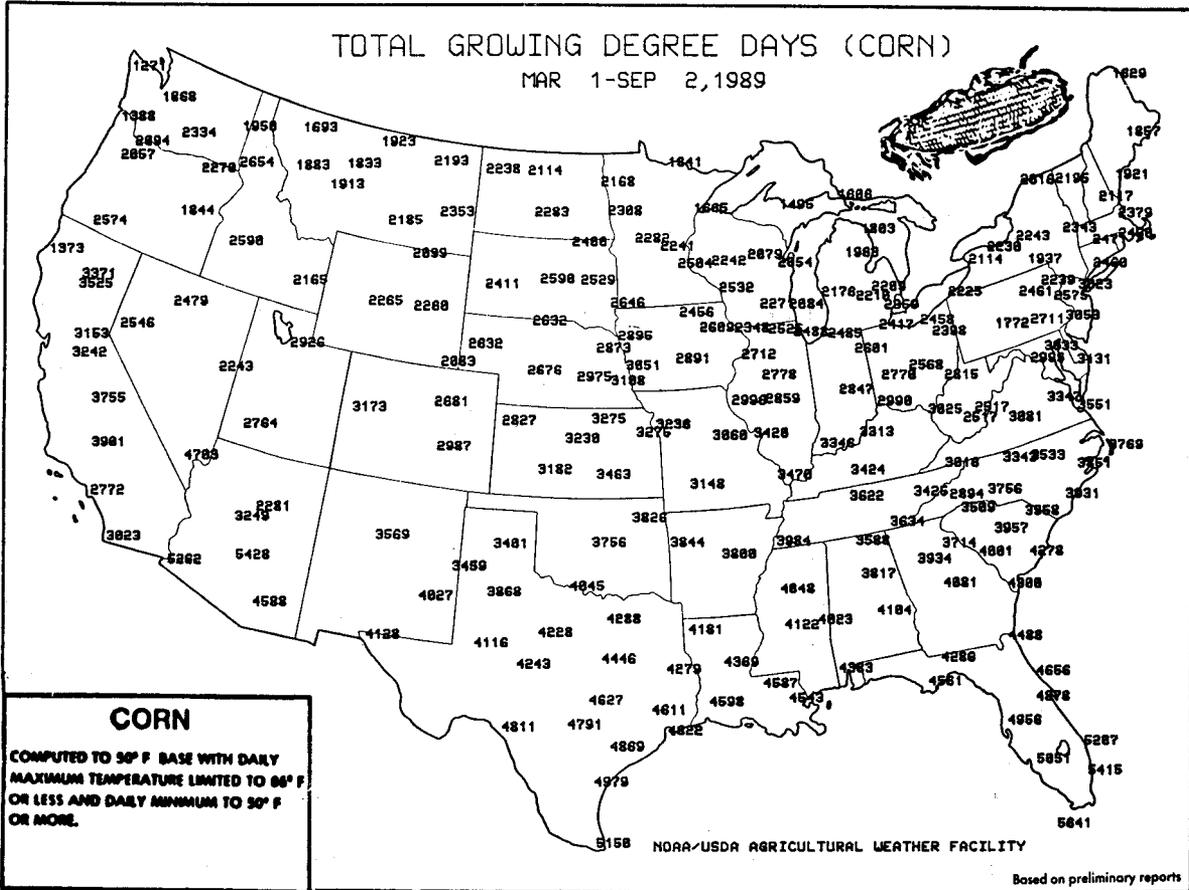


SHADED AREAS:
 INDEX INCREASED OR DID NOT CHANGE
 ABOVE 8 EXCESSIVELY WET, SOME FIELDS FLOODED
 8 TO 6 TOO WET, SOME STANDING WATER
 1 TO 8 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
 0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
 0 TO +1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
 -1 TO -8 SOME IMPROVEMENT BUT STILL TOO DRY
 -8 TO -6 DROUGHT EASED BUT STILL SERIOUS
 -6 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
 BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY

UNSHADED AREAS:
 INDEX DECREASED
 ABOVE 8 SOME DRYING BUT STILL EXCESSIVELY WET
 8 TO 6 MORE DRY WEATHER NEEDED, WORK DELAYED
 1 TO 8 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
 0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDSWORK
 0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
 -1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
 -2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
 -3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
 BELOW -4 EXTREMELY DRY, MOST CROPS RUNNED

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports



National Weather Data for Selected Cities

Weather Data for the Week Ending September 2, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F			
																90 AND ABOVE	82 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	92	72	95	70	82	4	.8	-.1	.8	.8	250	46.1	118	95	52	6	0	2	1
MOBILE	93	76	98	74	85	3	2.0	-.4	1.2	.4	71	40.3	86	97	54	6	0	3	1
MONTGOMERY	95	74	97	72	85	4	2.0	1.2	1.1	.9	297	51.5	149	100	53	7	0	3	2
AK ANCHORAGE	60	50	63	47	55	1	2.0	1.5	.7	.3	153	17.9	205	96	68	0	0	6	1
BARROW	45	39	55	35	42	6	T	-.2	T	T	0	6.2	203	99	86	0	0	1	0
FAIRBANKS	68	48	73	38	58	6	T	-.3	T	T	0	6.8	94	88	40	0	0	2	0
JUNEAU	65	48	72	44	56	4	1.8	-.5	1.5	.3	84	21.8	74	95	53	0	0	5	0
KODIAK	61	48	65	42	54	1	.9	-.3	.5	.5	129	30.7	84	99	74	0	0	2	1
NOME	57	47	61	43	52	5	.2	-.5	.5	.5	16	15.3	160	99	74	0	0	5	0
AZ PHOENIX	105	82	109	78	94	5	0	0	0	0	0	3.5	81	39	15	7	0	0	0
PRESCOTT	88	55	91	49	72	3	0	0	0	0	0	8.1	61	45	15	2	0	0	0
TUCSON	100	74	104	69	87	4	0	0	0	0	0	4.3	58	55	19	7	0	0	0
YUMA	105	77	110	72	91	0	0	0	0	0	0	6.8	471	75	26	7	0	0	0
AR FORT SMITH	95	73	100	71	84	4	0	0	0	0	0	4.3	58	55	19	7	0	0	0
LITTLE ROCK	92	73	97	70	83	4	.3	-.4	.3	.3	165	42.1	155	98	53	6	0	1	0
CA BAKERSFIELD	93	60	98	57	77	4	2.1	1.2	1.3	1.9	664	41.3	123	96	62	5	0	3	2
EUREKA	63	54	65	51	59	1	0	0	0	0	0	2.3	59	65	23	6	0	0	0
FRESNO	93	59	99	55	76	1	0	0	0	0	0	19.3	85	93	74	6	0	2	0
LOS ANGELES	71	60	74	57	65	5	0	0	0	0	0	4.8	69	72	19	0	0	0	0
REDDING	93	57	98	54	75	0	0	0	0	0	0	3.2	38	95	68	0	0	0	0
SACRAMENTO	89	54	94	51	72	0	0	0	0	0	0	19.9	78	71	18	5	0	0	0
SAN DIEGO	75	63	76	60	69	0	0	0	0	0	0	9.1	85	88	24	5	0	0	0
SAN FRANCISCO	72	53	76	51	63	0	0	0	0	0	0	2.0	30	89	62	0	0	0	0
CO DENVER	89	57	93	50	73	0	0	0	0	0	0	7.4	59	94	53	0	0	0	0
GRAND JUNCTION	91	58	93	55	75	2	0	0	0	0	0	12.2	104	76	19	3	0	0	0
PUEBLO	91	59	97	54	75	2	0	0	0	0	0	5.0	97	32	13	6	0	0	0
CT BRIDGEPORT	77	65	86	54	71	0	0	0	0	0	0	5.7	67	72	21	5	0	0	0
HARTFORD	79	57	87	46	68	0	0	0	0	0	0	33.5	122	81	55	0	0	1	1
DC WASHINGTON	88	70	92	67	79	3	1.0	0	.9	T	14	38.0	132	91	47	0	0	2	1
FL APALACHICOLA	91	76	95	75	83	2	.5	-1.4	.3	.2	34	34.5	92	95	62	5	0	0	0
DAYTONA BEACH	90	73	93	72	82	1	.1	-1.4	.1	.1	24	23.3	71	96	61	2	0	4	0
JACKSONVILLE	93	73	95	72	83	2	2.4	.6	2.3	T	0	31.8	84	98	56	7	0	3	1
KEY WEST	91	80	93	77	86	2	1.0	-.3	.6	.2	46	17.3	74	87	59	7	0	4	1
MIAMI	91	78	92	76	85	2	5.2	3.5	3.5	1.1	206	33.6	88	88	59	7	0	6	3
ORLANDO	94	75	95	74	84	2	2.3	.8	2.3	2.3	491	29.9	82	97	51	7	0	1	1
TALLAHASSEE	92	74	96	73	83	3	2.0	.4	.9	.2	49	46.7	98	98	58	6	0	4	2
TAMPA	92	75	95	73	84	2	3.9	2.2	1.4	1.8	366	30.7	89	96	57	6	0	5	4
WEST PALM BEACH	91	77	92	75	84	1	1.6	0	.8	.8	141	26.4	71	93	60	7	0	5	2
GA ATLANTA	91	72	93	70	81	3	.2	-.5	.1	0	0	41.5	117	97	53	5	0	2	0
AUGUSTA	92	72	96	70	82	3	1.3	.4	1.2	0	0	37.4	116	100	58	6	0	4	1
MACON	93	73	96	73	83	4	1.6	.8	1.4	0	0	34.9	105	99	52	7	0	3	1
SAVANNAH	90	74	95	72	82	2	1.5	0	1.3	T	2	27.6	72	96	61	3	0	4	1
HI HILO	82	69	83	66	75	0	3.0	1.0	1.1	2.1	424	138.3	164	96	63	0	0	5	2
HONOLULU	88	73	89	70	81	0	0	0	0	0	0	15.2	107	82	50	0	0	0	0
KAHULUI	86	69	88	65	78	-1	.1	0	.1	T	150	28.7	235	89	58	0	0	2	0
LIHUE	83	72	84	69	77	-2	.5	.1	.2	.5	427	41.6	159	80	66	0	0	4	0
ID BOISE	81	52	92	44	66	-2	T	-.1	T	T	0	7.3	96	72	20	1	0	0	0
LEWISTON	78	56	81	53	67	-2	.2	0	.2	.2	300	11.5	134	73	33	0	0	1	0
POCATELLO	81	47	91	38	64	-1	0	-.1	0	0	0	7.1	98	75	16	1	0	0	0
IL CHICAGO	82	62	86	55	72	3	3.3	2.4	2.3	2.3	803	23.8	100	94	57	0	0	4	2
MOLINE	82	63	88	57	72	2	3.4	2.6	2.1	.9	354	24.8	92	96	59	0	0	4	2
PEORIA	82	64	89	58	73	2	1.5	.7	.5	.5	213	16.8	67	100	62	0	0	4	2
QUINCY	86	66	92	61	76	4	1.7	.8	1.2	T	0	12.4	46	95	59	1	0	4	2
ROCKFORD	80	60	84	53	70	2	3.3	2.4	1.3	1.3	528	25.3	97	100	62	0	0	4	1
SPRINGFIELD	84	65	93	60	75	3	4.9	4.2	2.9	2.9	379	23.1	94	100	68	1	0	4	3
IN EVANSVILLE	89	69	91	63	79	5	.4	-.3	.3	.3	163	40.3	135	100	62	3	0	2	0
FORT WAYNE	81	61	87	53	71	2	1.4	.8	.7	.7	379	26.6	109	96	61	0	0	3	1
INDIANAPOLIS	82	65	88	60	74	3	3.4	2.7	2.0	2.0	0	36.9	133	98	63	0	0	3	3
SOUTH BEND	79	61	85	55	70	1	3.8	2.9	2.0	1.7	722	27.2	104	96	61	0	0	3	2
IA DES MOINES	83	64	87	57	73	3	1.5	.6	.7	T	0	20.7	90	95	59	0	0	4	1
SIOUX CITY	81	63	92	55	72	2	.1	-.6	.1	0	0	14.2	72	87	53	1	0	1	0
WATERLOO	81	60	85	50	71	3	1.4	.6	.7	.7	292	13.4	55	99	57	0	0	2	2
KS CONCORDIA	87	67	94	63	77	2	.7	0	.7	0	0	19.1	92	97	57	2	0	2	1
DODGE CITY	86	68	94	66	77	2	.6	.1	.6	0	0	18.0	111	96	53	3	0	1	1
GOODLAND	85	62	97	57	73	3	.2	-.2	.2	T	9	16.4	127	97	44	2	0	1	0
TOPEKA	86	67	92	60	76	2	3.1	2.3	1.9	0	0	26.0	107	99	64	3	0	4	2
WICHITA	87	71	96	69	79	2	3.4	2.7	1.6	.1	45	26.6	130	92	60	3	0	5	2
KY BOWLING GREEN	92	70	97	66	81	6	.3	-.4	.3	.3	141	48.8	140	98	56	5	0	1	0
LEXINGTON	86	67	90	63	77	4	.4	-.5	.4	.4	154	41.0	123	94	56	1	0	1	0
LOUISVILLE	89	70	92	64	79	5	.6	-.1	.6	.6	270	42.5	138	96	57	5	0	1	1
LA ALEXANDRIA	94	76	96	75	85	4	3.0	2.2	3.0	0	0	52.1	139	97	53	7	0	1	1
BATON ROUGE	96	77	98	74	87	6	.3	-.7	.3	0	0	60.8	152	98	54	7	0	3	0
LAKE CHARLES	94	76	97	75	85	4	.3	-.1	.2	0	0	53.3	149	97	55	7	0	2	0
NEW ORLEANS	95	75	99	74	85	4	.1	-1.3	.1	0	0	36.3	86	99	53	7	0	1	0

Based on 1951-80 normals

Weather Data for the Week Ending September 2 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	95	75	98	73	85	4	2.4	1.8	1.2	0	0	52.7	173	96	50	7	0	3	2
ME CARIBOU	68	47	80	39	58	-2	1.8	.9	1.3	1.6	624	23.0	97	91	57	0	0	3	1
PORTLAND	77	54	86	48	65	1	2.6	0	.6	275	26.6	98	93	45	0	0	3	1	
MD BALTIMORE	86	65	88	60	75	2	2.6	1.6	2.6	0	4	39.2	136	95	52	0	0	2	1
SALISBURY	85	66	88	61	75	2	0	0	0	0	0	36.1	115	93	52	0	0	0	0
MA BOSTON	78	60	87	54	69	0	.5	-.4	.5	T	0	27.1	95	85	46	0	0	2	0
CHATHAM	73	60	81	54	67	1	.9	0	.6	T	12	31.0	103	84	63	0	0	3	1
MI ALPENA	76	51	83	46	63	1	1.3	.5	1.2	1.2	527	15.2	77	99	54	0	0	4	1
DETROIT	80	62	84	55	71	2	1.9	1.2	1.1	.8	441	21.5	99	97	58	0	0	3	3
FLINT	78	58	83	50	68	2	.7	0	.4	.4	221	22.9	112	97	59	0	0	3	2
GRAND RAPIDS	78	58	84	50	68	1	.8	0	.6	.6	259	22.2	99	98	60	0	0	3	0
HOUGHTON LAKE	75	54	81	45	65	2	.2	-.5	.2	T	0	14.9	79	83	57	0	0	1	0
LANSING	79	58	83	48	68	2	1.1	.3	.6	.6	290	22.0	108	97	58	0	0	2	1
MARQUETTE	71	49	78	42	60	1	.5	-.4	.4	.6	0	19.0	76	95	55	0	0	2	0
MUSKEGON	77	60	81	47	68	2	.7	0	.6	.6	275	17.6	87	92	63	0	0	3	1
SAULT ST. MARIE	69	52	75	47	61	0	.8	0	.5	0	0	16.4	78	99	66	0	0	3	1
MN ALEXANDRIA	73	56	78	51	64	0	1.9	1.2	1.7	T	0	15.3	82	94	56	0	0	2	1
DULUTH	71	50	76	41	61	1	2.1	1.2	1.3	T	0	19.2	90	99	55	0	0	3	2
INT'L FALLS	69	49	75	41	59	0	1.4	.7	1.4	0	0	17.8	103	97	55	0	0	1	1
MINNEAPOLIS	76	59	81	53	68	1	1.1	.4	.6	.6	300	20.3	102	97	55	0	0	3	1
ROCHESTER	77	57	83	49	67	2	3.1	2.3	1.8	T	4	19.2	93	98	58	0	0	4	2
MS GREENWOOD	94	75	98	74	85	5	.6	-.1	.4	0	0	51.6	139	96	55	7	0	4	0
JACKSON	96	74	98	72	85	5	T	-.8	T	0	0	35.9	97	100	51	7	0	0	0
MERIDIAN	97	74	99	72	86	6	0	0	0	0	0	47.9	125	97	47	7	0	0	0
MO CAPE GIRARDEAU	89	73	95	70	81	—	T	-.8	T	T	0	42.5	136	97	55	4	0	2	0
COLUMBIA	86	68	92	62	77	3	2.7	1.8	1.5	.4	140	30.8	120	100	67	2	0	6	2
KANSAS CITY	85	67	91	59	76	1	3.5	2.6	2.4	0	0	25.3	99	98	62	2	0	3	3
SAINT LOUIS	88	71	94	67	80	5	.9	.4	.7	.7	382	25.4	105	92	54	4	0	3	1
SPRINGFIELD	87	70	94	68	79	4	1.3	.5	1.3	0	0	27.0	100	97	62	2	0	2	1
MT BILLINGS	79	50	84	46	64	-2	.3	0	.2	.2	200	10.9	100	83	25	0	0	2	0
GLASGOW	73	52	79	47	63	-2	.7	.4	.3	T	14	8.7	98	95	42	0	0	4	0
GREAT FALLS	69	46	78	42	58	-6	.5	.2	.4	T	0	18.2	155	97	43	0	0	3	0
HAVRE	69	50	79	45	59	-5	.7	.4	.3	0	0	9.1	99	74	43	0	0	4	0
HELENA	71	47	79	42	59	-3	.4	.1	.2	T	0	9.8	111	90	37	0	0	3	0
KALISPELL	69	46	76	41	57	-3	.8	.5	.3	.4	467	14.7	134	97	44	0	0	4	0
MILES CITY	82	56	88	48	69	1	.2	-.1	.1	0	0	12.4	112	81	31	0	0	3	0
MISSOULA	69	45	80	41	57	-5	.7	.5	.4	.2	286	11.0	118	97	44	0	0	4	0
NE GRAND ISLAND	82	65	93	59	73	2	2.1	1.5	2.1	0	0	14.1	77	96	62	1	0	1	1
LINCOLN	84	66	94	59	75	3	.5	-.2	.5	0	0	14.1	67	95	60	1	0	1	1
NORFOLK	83	62	93	52	73	3	.3	-.3	.3	T	0	11.8	62	96	52	1	0	1	0
NORTH PLATTE	81	60	92	54	70	2	.7	.3	.7	0	0	12.5	79	98	56	1	0	1	1
OMAHA	83	66	93	61	75	3	.4	-.5	.4	0	0	14.4	63	91	64	1	0	1	0
SCOTTSDUFF	90	57	97	52	73	5	.1	-.1	.1	T	0	6.9	59	94	28	4	0	1	0
VALENTINE	83	58	93	51	70	2	T	-.5	T	0	0	9.5	67	78	37	1	0	0	0
NV RLY	83	41	84	32	62	0	0	-.2	0	0	0	5.8	91	45	12	0	1	0	0
LAS VEGAS	100	69	102	62	85	-1	0	-.1	0	0	0	2.1	76	17	8	7	0	0	0
RENO	85	46	91	43	65	1	0	-.1	0	0	0	5.2	106	62	13	1	0	0	0
WINNEMUCCA	85	42	92	37	63	-2	0	-.1	0	0	0	3.2	61	46	12	2	0	0	0
NH CONCORD	77	50	86	37	64	0	.3	-.5	.2	.1	67	25.1	107	96	43	0	0	2	0
NJ ATLANTIC CITY	84	63	89	56	73	2	.1	-.9	0	T	0	35.6	124	95	56	0	0	2	0
NM ALBUQUERQUE	85	60	92	54	72	-2	.1	-.2	.1	0	0	3.4	63	83	31	1	0	1	0
CLOVIS	81	63	84	60	72	-2	1.4	.9	.8	.2	157	12.8	103	99	53	0	0	7	1
ROSWELL	88	67	92	64	77	2	.7	.2	.4	0	0	4.1	57	90	38	3	0	4	0
NY ALBANY	77	56	82	45	67	0	.2	-.6	.1	.1	59	28.8	122	93	48	0	0	3	0
BINGHAMTON	73	57	80	47	65	0	.8	0	.5	.3	113	27.7	112	96	52	0	0	2	0
BUFFALO	76	59	81	54	68	1	1.4	.5	1.3	1.3	536	28.5	117	90	44	0	0	3	1
NEW YORK	81	68	89	61	75	1	.2	-.7	.2	.1	19	40.5	141	84	52	0	0	3	0
ROCHESTER	77	56	83	49	67	0	.8	-.1	.8	.8	375	24.0	114	94	51	0	0	2	0
SYRACUSE	76	57	82	49	66	-1	.3	-.5	.3	.3	126	22.3	85	93	48	0	0	3	0
NC ASHEVILLE	83	64	86	58	74	3	.7	-.3	.4	.3	111	42.0	136	100	57	0	0	4	0
CHARLOTTE	89	71	90	67	80	3	.3	-.6	.2	0	0	31.7	103	94	54	2	0	3	0
GREENSBORO	84	66	90	62	75	1	.8	-.1	.4	0	0	33.1	111	98	60	1	0	2	0
HATTERAS	87	71	91	66	79	1	3.4	2.0	2.7	2.7	663	53.3	147	95	57	1	0	2	2
NEW BERN	90	70	93	65	80	3	2.1	.7	1.7	1.7	398	44.2	117	96	48	5	0	2	1
RALEIGH	87	68	92	62	77	2	T	-.9	T	T	0	39.8	133	97	56	1	0	1	0
WILMINGTON	89	70	93	68	80	1	.9	-.6	.6	.1	21	43.6	113	97	56	2	0	3	1
ND BISMARCK	72	51	78	45	62	-3	1.1	.8	.8	.1	60	9.0	75	93	55	0	0	5	1
FARGO	74	54	77	50	64	-1	2.8	2.3	1.9	0	0	15.3	102	95	51	0	0	4	1
GRAND FORKS	74	52	77	48	63	0	1.6	1.0	.6	0	0	10.1	73	92	45	0	0	4	2
WILLISTON	74	50	84	42	62	-2	1.0	.6	.5	.5	533	8.9	84	96	46	0	0	3	0
OH AKRON-CANTON	81	60	86	53	70	2	.8	-.1	.5	.3	152	29.3	115	92	48	0	0	2	1
CINCINNATI	84	67	88	63	75	3	2.7	2.1	1.6	1.1	525	39.5	138	96	59	0	0	3	2
CLEVELAND	82	62	88	56	72	3	1.1	.4	.9	.9	410	30.3	123	94	47	0	0	4	1
COLUMBUS	83	63	87	55	73	2	1.7	1.0	1.1	.6	250	35.3	130	96	51	0	0	3	2

Weather Data for the Week Ending September 2 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	82	64	88	55	73	2	2.0	1.3	1.8	1.8	978	38.4	152	100	58	0	0	3	1	
TOLEDO	81	61	85	54	71	3	1.3	.7	.8	.8	437	30.5	137	97	56	0	0	3	1	
YOUNGSTOWN	82	56	87	48	69	2	.9	.2	.6	.4	159	30.8	118	97	46	0	0	2	1	
OK OKLAHOMA CITY	94	72	100	69	83	4	.5	-.1	.5	.5	252	33.2	150	89	44	6	0	1	0	
TULSA	93	75	97	72	84	5	.6	-.2	.4	.2	77	23.4	87	89	52	5	0	3	0	
OR ASTORIA	66	54	70	51	60	0	T	-.4	T	T	20	35.4	92	95	71	0	0	2	0	
BURNS	74	40	80	32	57	-7	.1	-.1	.1	0	0	7.6	122	82	23	0	1	1	0	
MEDFORD	83	51	92	46	67	-2	.2	.1	.2	0	0	10.8	99	92	26	1	0	2	0	
PENDLETON	78	53	82	49	66	-3	T	-.1	T	T	0	10.0	134	71	29	0	0	0	0	
PORTLAND	73	57	81	56	65	-1	.3	0	.3	.3	367	19.5	92	99	60	0	0	1	0	
SALEM	75	51	82	49	63	-1	T	-.2	T	T	57	17.3	77	95	45	0	0	1	0	
PA ALLENTOWN	81	61	87	53	71	1	T	-1.0	T	T	0	31.6	106	93	51	0	0	0	0	
ERIE	78	62	83	58	70	3	.7	-.3	.5	.2	67	28.4	111	88	52	0	0	2	1	
HARRISBURG	83	63	86	55	73	1	.1	-.7	.1	.1	21	35.5	134	94	54	0	0	3	0	
PHILADELPHIA	85	66	89	61	76	2	T	-.9	T	0	0	37.2	131	90	51	0	0	1	0	
PITTSBURGH	83	61	87	55	72	3	.1	-.6	.1	T	20	31.9	121	94	45	0	0	2	0	
SCRANTON	78	59	83	49	68	1	.3	-.5	.2	T	0	25.8	110	96	50	0	0	2	0	
RI PROVIDENCE	79	59	87	50	69	0	.9	0	.9	T	0	36.8	125	92	50	0	0	1	1	
SC CHARLESTON	91	74	94	72	83	4	1.5	.1	1.3	.1	26	31.5	81	97	55	6	0	5	1	
COLUMBIA	93	72	95	70	83	4	.4	-.8	.2	.2	61	37.5	102	98	51	7	0	4	0	
FLORENCE	90	72	93	69	81	2	2.2	1.2	.8	.1	27	35.5	109	99	55	4	0	4	3	
GREENVILLE	88	69	90	64	78	2	T	-1.0	T	0	0	33.5	93	97	56	2	0	0	0	
SD ABERDEEN	79	55	89	47	67	1	.1	-.3	.1	T	0	14.8	104	96	48	0	0	1	0	
HURON	83	57	90	48	70	2	.1	-.3	.1	0	0	11.4	77	91	44	1	0	1	0	
RAPID CITY	86	53	100	45	70	2	.3	0	.3	T	0	7.7	58	89	28	2	0	2	0	
SIoux FALLS	80	58	90	49	69	1	T	-.7	T	0	0	11.1	61	95	55	1	0	0	0	
TN CHATTANOOGA	88	71	92	69	79	3	.4	-.4	.2	.2	86	49.9	137	98	60	3	0	2	0	
KNOXVILLE	89	70	92	68	79	4	1.2	.6	.8	.5	225	38.3	115	99	56	3	0	3	1	
MEMPHIS	93	75	98	72	84	5	.2	-.6	.2	.2	77	45.0	123	96	58	6	0	2	0	
NASHVILLE	90	72	94	70	81	4	.3	-.5	.2	.2	68	41.4	121	96	55	4	0	3	0	
TX ABILENE	98	76	101	74	87	6	0	-.6	0	0	0	22.2	140	70	30	7	0	0	0	
AMARILLO	88	65	90	63	76	2	1.1	.5	.5	0	0	16.5	111	93	43	1	0	3	1	
AUSTIN	99	76	102	75	88	5	0	-.7	0	0	0	22.0	108	97	38	7	0	0	0	
BEAUMONT	95	75	99	74	85	3	.3	-1.0	.3	0	0	57.5	154	97	53	7	0	2	0	
BROWNSVILLE	96	77	97	76	87	3	T	-.9	T	0	0	13.0	91	96	47	7	0	0	0	
CORPUS CHRISTI	96	77	97	76	86	3	.1	-1.1	.1	0	0	13.4	69	97	52	7	0	1	0	
DEL RIO	97	78	98	77	87	4	0	-.5	0	0	0	5.8	52	67	30	7	0	0	0	
EL PASO	86	67	92	65	76	-3	.6	-.3	.2	.1	78	6.5	131	98	44	2	0	6	0	
FORT WORTH	99	77	101	75	88	6	0	-.6	0	0	0	34.6	165	79	35	7	0	0	0	
GALVESTON	90	81	91	79	86	3	.1	-1.1	.1	0	0	34.2	134	88	66	7	0	1	0	
HOUSTON	96	74	99	73	85	4	0	-1.1	0	0	0	50.2	166	96	46	7	0	0	0	
LUBBOCK	93	68	97	66	81	5	1.1	.6	.5	.5	321	11.4	89	90	36	7	0	5	1	
MIDLAND	98	69	100	66	84	5	T	-.4	T	0	0	5.0	55	78	27	7	0	1	0	
SAN ANGELO	99	73	100	71	86	5	0	-.6	0	0	0	13.7	119	79	29	7	0	0	0	
SAN ANTONIO	100	79	102	78	89	7	T	-.8	T	0	0	12.5	66	89	34	7	0	0	0	
VICTORIA	96	77	98	76	87	4	.9	-.2	.5	0	0	16.4	70	94	47	7	0	3	1	
WACO	101	77	102	76	89	5	0	-.6	0	0	0	26.4	128	87	35	7	0	0	0	
WICHITA FALLS	99	74	103	70	86	5	T	-.6	T	0	0	28.7	159	83	33	7	0	0	0	
UT CEDAR CITY	85	51	87	48	68	-1	0	-.3	0	0	0	5.5	78	37	10	0	0	0	0	
SALT LAKE CITY	88	57	94	52	73	1	0	-.2	0	0	0	7.6	71	55	14	3	0	0	0	
VT BURLINGTON	74	54	81	42	64	0	1.1	.3	1.0	1.0	433	24.4	108	90	45	0	0	6	1	
VA NORFOLK	87	69	93	63	78	2	0	-1.1	0	0	0	41.6	132	89	49	1	0	0	0	
RICHMOND	87	67	89	62	77	2	T	-1.0	T	0	0	35.3	117	96	52	0	0	1	0	
ROANOKE	88	66	91	57	77	4	T	-.8	T	0	0	34.8	128	97	48	1	0	0	0	
WA QUILLAYUTE	66	51	77	49	59	0	T	-.9	T	0	0	49.8	84	98	64	0	0	1	0	
SEATTLE-TACOMA	72	55	77	54	64	1	T	-.3	T	T	20	20.3	96	93	55	0	0	1	0	
SPOKANE	73	49	79	44	61	-4	T	-.1	T	T	60	9.6	94	91	34	0	0	1	0	
YAKIMA	80	47	85	40	64	-2	T	-.1	T	0	0	3.9	82	88	29	0	0	0	0	
WV BECKLEY	80	60	83	56	70	3	.8	0	.5	T	4	30.7	102	98	56	0	0	3	0	
CHARLESTON	85	65	88	60	75	3	1.6	.8	1.4	.2	70	42.1	137	100	58	0	0	2	1	
HUNTINGTON	86	66	89	60	76	3	.6	-.1	.4	.4	178	45.1	152	98	56	0	0	2	0	
PARKERSBURG	83	64	87	58	74	2	1.6	.9	1.3	.3	152	39.3	143	99	55	0	0	2	1	
WI GREEN BAY	79	56	87	45	67	3	.1	-.6	.1	T	18	13.3	68	93	45	0	0	4	0	
LACROSSE	80	60	86	53	70	2	2.7	1.9	2.1	.1	36	16.6	75	99	53	0	0	3	2	
MADISON	80	57	85	48	68	2	4.1	3.3	2.3	.3	113	20.6	93	96	58	0	0	3	2	
MILWAUKEE	76	59	81	51	67	0	1.3	.6	.6	.3	150	22.4	102	98	66	0	0	3	1	
WAUSAU	76	57	84	50	67	3	.3	-.6	.2	T	7	16.3	72	98	51	0	0	4	0	
WY CASPER	86	48	91	41	67	2	0	-.1	0	0	0	8.7	102	70	12	1	0	0	0	
CHEYENNE	84	52	89	47	68	5	T	-.2	T	0	0	9.9	92	94	25	0	0	1	0	
LANDER	84	50	87	45	67	2	0	-.1	0	0	0	11.4	117	50	11	0	0	0	0	
SHERIDAN	84	46	96	43	65	1	0	-.3	0	0	0	8.8	73	21	2	0	0	0	0	
PR SAN JUAN	89	80	89	75	82	0	0	0	-1.4	0	0	8.9	27	88	70	0	0	0	0	

August Weather and Crop Summary

Weather

Crop Development

HIGHLIGHTS: The precipitation pattern contrasted sharply with the previous 2 months, as heavy rains fell in previously dry areas of the Plains States, while unusually dry weather took place in previously wet areas of the South. In parts of North Dakota, Minnesota, Illinois, Iowa, Missouri, and Nebraska, August rainfall totals which were more than twice normal relieved long-term drought but caused local flooding problems. August was the fourth consecutive month with above-normal rainfall for many spots along the east coast, with some localities recording more than 8 inches of rain. Rainfall, however, varied greatly over short distances. For parts of Ohio, Pennsylvania, Maryland, and Virginia, this was one of the driest Augusts, with less than 1 inch accumulating. In Anchorage, Alaska, the record 9.6 inches of rain was 467 percent of normal.

Monthly average temperatures were fairly close to normal for most of the country, but the averages hid some notable extremes during the month. The record books for the eastern half of the country were significantly altered as an unseasonably cold dome of air descended upon the country during August 6-12, tying or breaking more than 240 low-temperature records. The last third of the month, however, saw hot, muggy air entrenched across most of the South.

AUGUST 1-5: Hurricane Chantal slammed into the northern Texas coast, causing torrential rain before moisture from its remnants spread rain from north-central Texas, across the Great Lakes, and into the Northeast. Hot, dry weather plagued the northern Plains before a strong cold front brought isolated rain and much lower temperatures. The cold front moved across the Corn Belt at the period's end and ushered much cooler air into the North Central States.

AUGUST 6-12: The strong cold front raced southeastward across the eastern half of the Nation early in the week before becoming stationary off the eastern seaboard. Severe thunderstorms developed in the warm, humid air ahead of the front, while unusually cool air settled behind the front as numerous low-temperature records were reported daily. Scattered showers and thunderstorms persisted along the Atlantic coast and in the Rockies and Intermountain Plateau, where locally heavy rain caused flooding in the desert Southwest. Scattered rain moved across the Plains into the Great Lakes at week's end, while the western Corn Belt remained dry.

AUGUST 13-19: Scattered showers and thunderstorms reached from the Intermountain Plateau to the eastern seaboard throughout the week. A cold front crossed the Great Lakes and Corn Belt early in the week before becoming stationary along the mid-Atlantic coast. Slow-moving thunderstorms developed along the front and torrents of rain pounded an area from southeastern Virginia to Delaware. Severe thunderstorms also dumped heavy rain over Kansas at week's end. Parts of the Corn Belt remained dry, while cool air persisted over the central and southern Plains.

AUGUST 20-26: Scattered showers and thunderstorms continued over the Rockies to the Atlantic coast, with welcomed rain falling across the Corn Belt. Rain showers persisted behind a strong cold front which crossed the Northwest and moved into the Great Plains at week's end. Warm, humid air covered the Plains, Delta, Tennessee Valley, and the Southeast throughout most of the week.

AUGUST 27-31: Hot, muggy weather continued across the South, while widespread showers fell from the southern Rockies through the Plains States, the Ohio and Tennessee Valleys, and into the Northeast.

As August began, rain was needed in the western Corn Belt and the central and northern Great Plains, where soil moisture was mostly short to adequate. In mid-to-late August, rain improved crop conditions in the central Great Plains and western Corn Belt, but the northern Great Plains remained dry. Early in August, soil moisture was mostly adequate to surplus in the Delta. Excessive moisture hampered crop development. By the end of August, lack of moisture stressed crops in the Delta. In the West, soil moisture remained mostly short to adequate during August, but rain did improve pasture and range growth in a portion of the Pacific Northwest the last week of the month. Soil moisture was mostly adequate in the East during August.

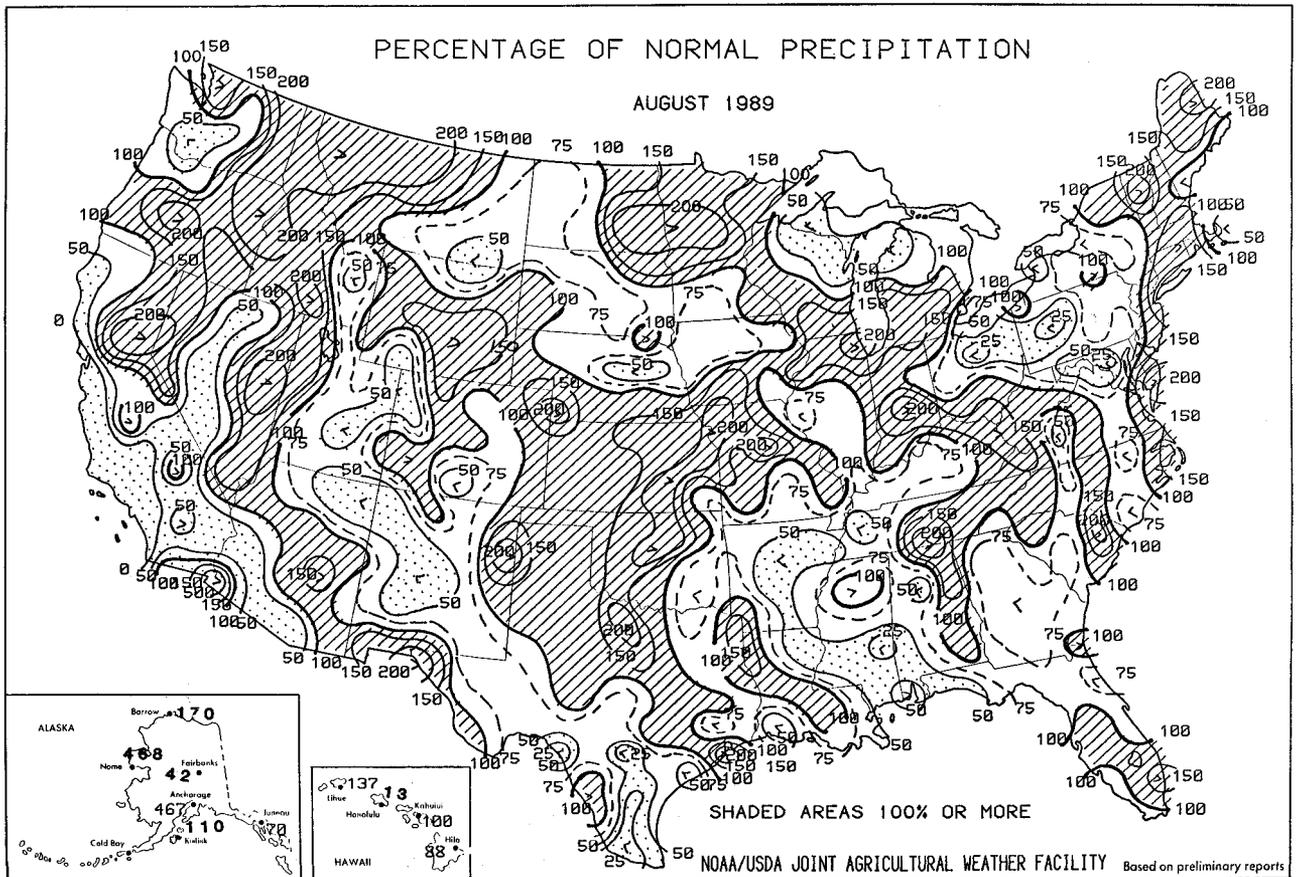
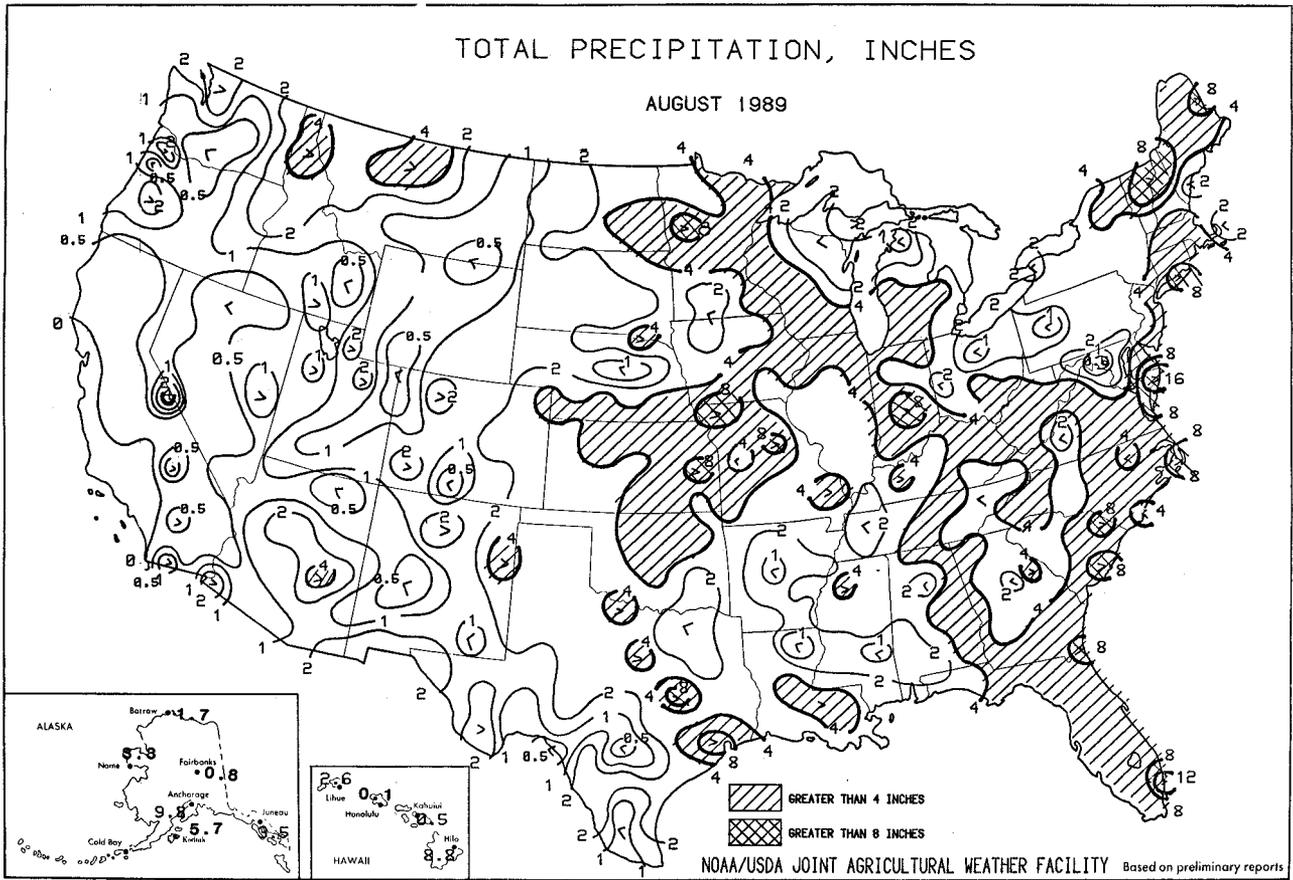
Corn was mostly good to fair during August. Lack of rain stressed corn in the central and northern Great Plains and western Corn Belt early in August. Late in August, rain relieved some stress in the central Great Plains and western Corn Belt. Crop development lagged behind normal in most of the major producing States during the entire month. By August 27, 41% of the acreage was in the dent stage or beyond, 15 points behind normal. In Ohio, only 11% of the acreage was dented, 43 points behind the 54% average. Harvest was underway in Georgia and Texas.

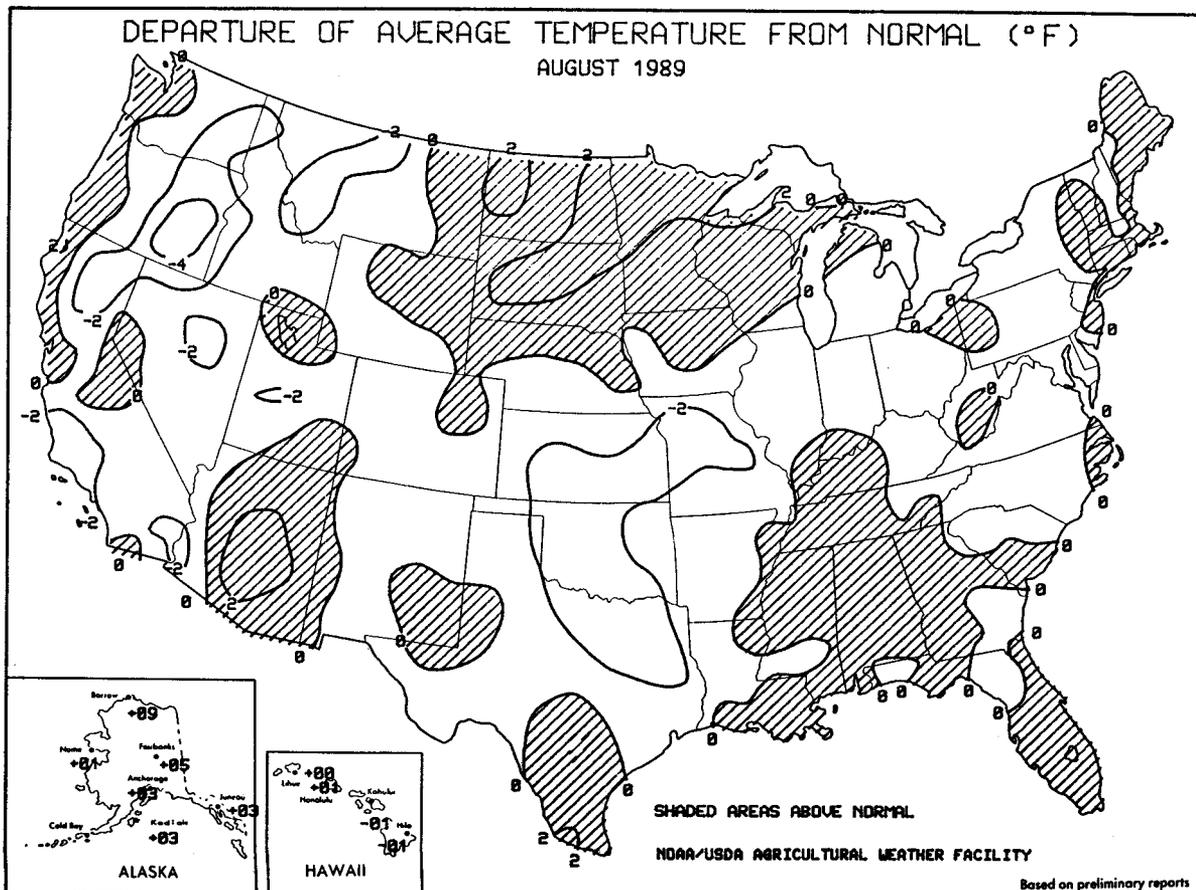
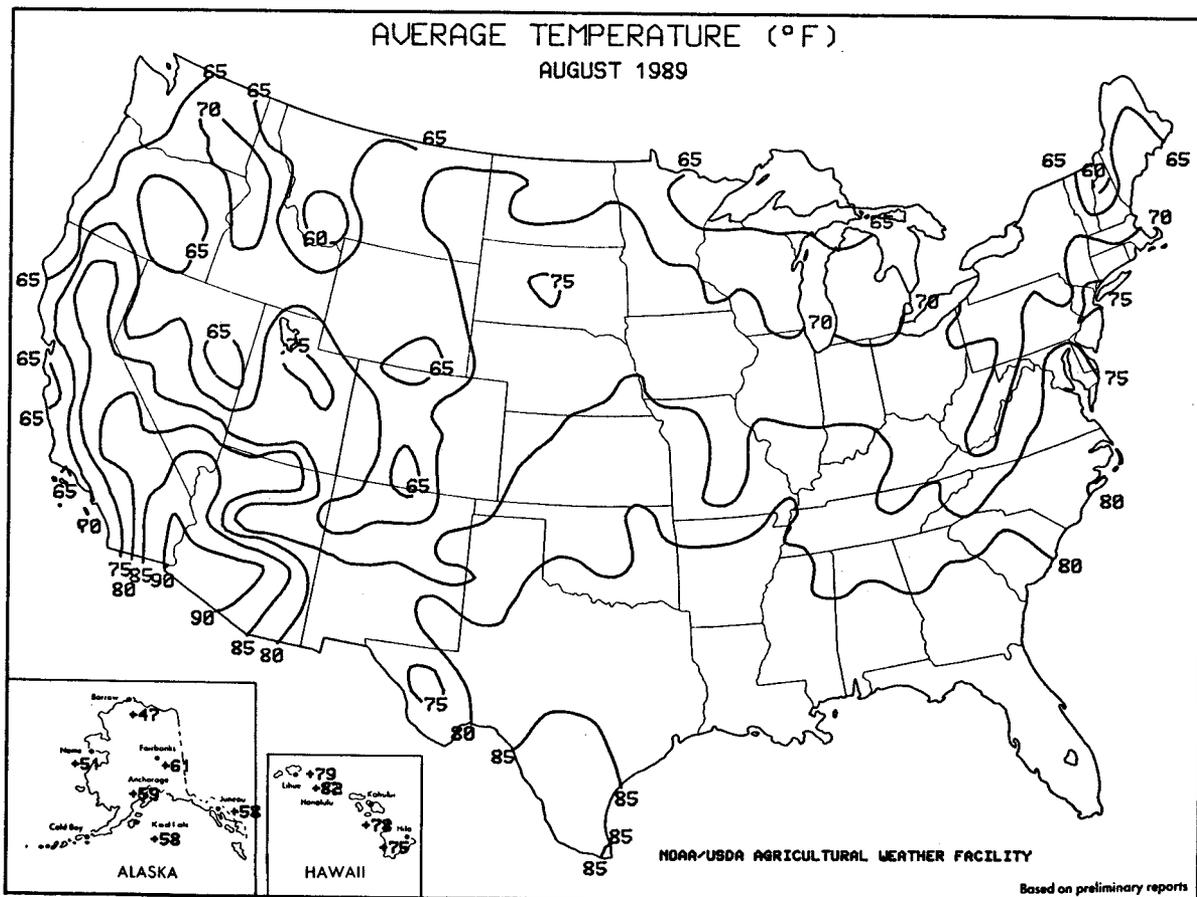
Soybeans were mostly good to fair during August. Lack of rain stressed soybeans in the central and northern Great Plains early in the month, while excess moisture stressed the crop in portions of the Delta. By the end of August, rain improved condition in the Corn Belt and central Great Plains, but lack of moisture lowered condition in the Delta. Crop development lagged somewhat behind normal in most of the major producing States during the month. By August 27, 85% of the acreage was setting pods, 4 points behind normal. In Ohio, the percentage of acres setting pods was 26 points behind normal.

Cotton was mostly fair to good during August. As the month began, harvest was underway in Texas. Excess moisture and cool temperatures slowed crop development in the Delta and the southern Great Plains during the first half of the month. At month's end, development was still behind normal, especially in the Delta. By August 27, 13% of the acreage was in the boll opening stage, 9 points behind normal in the 14 major producing States. Drier weather had improved crop condition in the Delta, but the percentage of acres opening bolls was still 20 or more points behind normal in Arkansas, Georgia, Louisiana, and Mississippi. By the end of August, harvest was underway in Arizona and was 10% complete in Texas.

Sorghum was mostly good to fair during August. Early in the month, lack of rain stressed sorghum in the central and northern Great Plains. Cinch bug infestations were heavy in the drier areas of Kansas and Nebraska. Harvest was underway in Texas. In late August, rain improved crop conditions in the central Great Plains. By the end of August, crop development lagged behind normal in most of the 11 major producing States. As of August 27, 34% of the acres was turning color, 11 points behind normal. Harvest was underway in Louisiana and Mississippi and was 52% complete in Texas.

At the beginning of August, winter wheat harvest was complete or nearly complete except in the Pacific Northwest, where it lagged behind normal. By August 27, winter wheat harvest was 98% complete. Harvest continued to lag behind normal in Montana and Washington. Winter wheat seeding was underway in the High Plains area of Texas. By the end of August, spring wheat harvest was 90% complete, 15 points ahead of normal. Harvest was complete in South Dakota and nearly complete in Minnesota and North Dakota.





Temperature and Precipitation Data for August 1989

Temperature and Precipitation Data for August 1989				Temperature and Precipitation Data for August 1989				Temperature and Precipitation Data for August 1989									
States and Stations		Temperature °F		Precipitation Inches		States and Stations		Temperature °F		Precipitation Inches		States and Stations		Temperature °F		Precipitation Inches	
Average	Departure	Total	Departure	Average	Departure	Total	Departure	Average	Departure	Total	Departure	Average	Departure	Total	Departure	Total	Departure
AL BIRMINGHAM	80	0	1.0	-2.9	LOUISVILLE	77	0	2.2	-1.1	DAYTON	72	-1	1.9	-1.2			
HUNTSVILLE	78	-1	6.8	3.7	PADUCAH	78	1	1.8	-1.4	MANSFIELD	70	-1	0.6	-2.6			
MOBILE	82	0	3.8	-2.9	LA ALEXANDRIA	81	-1	4.0	-0.2	TOLEDO	70	-1	3.6	0.5			
MONTGOMERY	81	0	4.1	1.0	BATON ROUGE	83	1	5.2	0.1	YOUNGSTOWN	69	0	1.7	-1.8			
AK ANCHORAGE	59	3	9.8	7.7	LAKE CHARLES	82	1	2.7	-2.7	OK OKLAHOMA CITY	78	-3	5.5	3.0			
BARROW	47	9	1.7	0.7	NEW ORLEANS	82	0	3.3	-2.7	TULSA	80	-1	6.7	3.7			
FAIRBANKS	61	4	0.8	-1.1	SHREVEPORT	81	-1	3.9	1.5	OR ASTORIA	61	0	0.8	-0.8			
JUNEAU	58	3	3.5	-1.5	ME CARIBOU	64	1	5.4	1.4	BURNS	61	-6	1.1	0.3			
KODIAK	57	3	5.7	0.8	PORTLAND	68	1	1.7	-1.1	EUGENE	67	1	1.2	0.2			
NCME	51	1	3.3	0.3	MD BALTIMORE	74	-1	3.4	-1.2	MEDFORD	71	0	0.4	0.0			
AZ FLAGSTAFF	64	0	3.4	0.8	MA BOSTON	72	0	5.9	2.3	PENDELTON	69	-3	1.3	0.7			
PHOENIX	94	4	1.1	0.1	CHATHAM	--	--	--	-2.4	PORTLAND	66	-1	0.4	-0.7			
PRESCOTT	73	2	2.1	-1.4	MI ALPENA	65	0	2.3	-0.8	PA SALEM	65	-1	0.5	-0.3			
TUCSON	87	3	0.9	-1.2	DETROIT	70	-1	2.1	-1.1	ALLENTOWN	71	-1	3.1	-1.4			
WINSLOW	74	-2	1.7	0.3	PLINT	68	-1	5.6	2.2	ERIE	70	1	4.0	0.0			
YUMA	91	-2	3.4	3.0	GRAND RAPIDS	68	-2	4.8	1.7	HARRISBURG	73	-1	3.0	-0.3			
AR FORT SMITH	80	-1	2.5	-0.5	HOUGHTON LAKE	65	0	2.6	-0.4	PHILADELPHIA	75	0	3.9	-0.2			
LITTLE ROCK	80	-1	1.0	-2.1	LANSING	68	0	4.9	1.9	PITTSBURGH	72	1	1.1	-2.2			
CA BAKERSFIELD	80	-3	0.0	0.0	MARQUETTE	62	0	2.6	-0.6	SCRANTON	68	-2	2.9	-0.5			
BISHOP	72	-3	T	-0.1	MUSKOGON	68	-1	4.9	1.8	WILLIAMSPORT	71	-0	2.9	-0.3			
EUREKA	59	2	0.1	-0.2	SAULT ST. MARIE	63	0	2.6	-0.8	RI PROVIDENCE	72	1	6.1	2.1			
FRESNO	79	0	T	0.0	MN ALEXANDRIA	70	2	6.6	3.0	SC CHARLESTON	81	1	9.2	2.7			
LOS ANGELES	68	-3	T	-0.1	DULUTH	65	2	5.0	0.9	COLUMBIA	80	0	3.2	-2.4			
REDDING	78	-4	0.2	-0.3	INT'L FALLS	65	2	4.8	1.9	FLORENCE	79	-1	6.3	1.6			
SACRAMENTO	74	-1	0.2	0.1	MINNEAPOLIS	71	0	2.9	-0.7	GREENVILLE	77	-1	4.7	0.7			
SAN DIEGO	71	0	T	-0.1	ROCHESTER	69	1	5.7	2.2	SD ABERDEEN	71	1	3.8	1.8			
SAN FRANCISCO	64	1	0.0	0.0	ST. CLOUD	69	2	4.4	0.1	HURON	73	1	1.3	-0.7			
SANTA MARIA	63	0	0.0	0.0	MS GREENWOOD	81	0	2.1	-0.7	RAPID CITY	73	2	1.7	0.3			
CO ALAMOSA	62	0	0.4	-0.7	JACKSON	81	0	1.7	-1.8	SIOUX FALLS	72	0	2.5	-0.7			
CO. SPRINGS	68	-1	2.6	0.0	MERIDIAN	81	0	0.7	-2.6	TN BRISTOL	73	-1	3.4	0.2			
DENVER	72	0	1.3	-0.2	TUPELO	80	-1	2.8	0.0	CHATTANOOGA	78	0	3.5	0.1			
GRAND JUNCTION	74	-1	1.0	0.1	MO COLUMBIA	74	-2	7.2	4.0	KNOXVILLE	77	0	3.2	0.2			
PUEBLO	74	0	1.0	-0.8	KANSAS CITY	76	-3	7.4	3.6	MEMPHIS	81	1	1.4	-2.3			
CT BRIDGEPORT	72	-1	6.6	2.9	SAINT LOUIS	78	1	3.0	0.5	NASHVILLE	78	-1	3.7	0.3			
HARTFORD	71	0	6.8	2.8	SPRINGFIELD	75	-1	3.9	1.1	ABILENE	82	-1	2.5	0.1			
DC WASHINGTON	77	-1	1.2	-3.2	MT BILLINGS	69	-1	0.8	-0.3	AMARILLO	76	-1	3.2	0.3			
FL APALACHICOLA	82	0	4.2	-3.4	GLASGOW	70	1	1.5	0.2	AUSTIN	85	0	2.7	0.5			
DAYTONA BEACH	82	1	4.5	-1.9	GRANT FALLS	64	-3	4.9	3.6	BEAUMONT	82	-1	5.0	-0.7			
FT. MYERS	83	0	7.1	-1.5	HAVRE	66	-2	4.5	3.3	BROWNSVILLE	84	0	1.3	-1.6			
JACKSONVILLE	82	0	9.2	1.3	HELENA	64	-1	1.6	0.4	CORPUS CHRISTI	85	0	2.4	-1.3			
KEY WEST	86	1	3.3	-1.4	KALISPELL	62	-1	3.5	2.1	DEL RIO	85	-1	0.2	-1.4			
MIAMI	84	1	12.8	5.8	MILES CITY	73	1	0.7	-0.6	EL PASO	79	-2	3.1	1.9			
ORLANDO	83	1	6.2	-0.3	MISSOULA	63	-2	2.1	1.2	FORT WORTH	82	-3	1.9	-0.1			
TALLAHASSEE	82	0	6.3	-1.0	NE GRAND ISLAND	74	-1	3.3	0.7	GALVESTON	83	0	7.0	2.6			
TAMPA	83	1	7.9	0.3	LINCOLN	75	0	4.0	0.6	HOUSTON	82	-1	2.7	-1.0			
WEST PALM BEACH	84	1	5.8	0.1	NORFOLK	74	0	0.9	-1.7	LAREDO	--	--	3.5	0.8			
GA ATHENS	79	0	3.6	-1.6	NORTH PLATTE	72	-1	2.4	0.5	LUBBOCK	79	1	3.1	0.9			
ATLANTA	79	1	2.1	-1.3	OMAHA	75	0	2.2	-1.9	MIDLAND	80	0	1.2	-0.4			
AUGUSTA	80	0	3.2	-0.8	SCOTTSBLUFF	73	1	1.1	0.2	SAN ANGELO	82	-1	2.8	1.0			
MACON	81	0	2.3	-1.3	VALENTINE	73	1	2.1	-0.2	SAN ANTONIO	86	2	0.5	-2.2			
SAVANNAH	81	0	6.3	-0.4	NV ELKO	66	-2	0.5	-0.1	VICTORIA	84	0	1.7	-1.6			
HI HILO	75	-1	8.8	-1.2	ELY	65	-1	1.3	0.7	WACO	84	-2	2.2	0.3			
HONOLULU	81	1	0.1	-0.5	LAS VEGAS	87	-1	0.8	0.3	WICHITA FALLS	81	-3	6.2	4.1			
KAHULUI	78	-1	0.5	0.0	RENO	68	1	0.8	0.6	UT CEDAR CITY	71	-1	0.6	-0.5			
KAHULUI	79	-1	2.6	0.7	WINNEMUCCA	67	-1	0.4	0.1	SALT LAKE CITY	75	0	0.9	0.0			
LIHUE	79	-1	3.0	2.2	NH CONCORD	68	0	3.6	0.3	VT BURLINGTON	68	0	7.3	3.5			
ID BOISE	70	-2	0.8	0.4	NJ ATLANTIC CITY	73	0	5.7	1.0	VA LYNCHBURG	74	-1	4.4	0.7			
LEWISTON	72	-1	3.0	2.2	NM ALBUQUERQUE	74	-2	0.5	-1.0	NORFOLK	78	0	7.5	2.2			
POCATELLO	67	-2	0.4	-0.2	CLOVIS	74	-2	4.7	2.2	RICHMOND	75	-2	4.9	-0.1			
IL CAIRO	--	--	4.0	0.0	NY ALBANY	70	0	2.9	-0.4	ROANOKE	74	-1	1.7	-2.2			
CHICAGO	71	0	7.3	3.8	BINGHAMTON	66	-2	3.4	0.0	COLVILLE	60	-7	2.7	1.5			
MOLINE	72	-1	6.2	2.4	BUFFALO	68	-1	1.8	-2.3	QUILLAYUTE	60	1	2.0	-0.9			
PEORIA	72	-1	2.9	-0.5	NEW YORK	75	0	7.2	2.9	SEATTLE-TACOMA	65	1	0.9	-0.4			
QUINCY	74	0	2.6	-1.3	ROCHESTER	68	-1	2.5	-0.7	SPOKANE	65	-3	1.6	0.9			
ROCKFORD	70	-1	6.2	2.5	SYRACUSE	68	-1	2.7	-1.1	WALLA WALLA	71	-3	1.5	0.8			
SPRINGFIELD	73	-1	2.6	-0.9	NC ASHEVILLE	72	-1	5.0	0.6	YAKIMA	67	-2	0.4	0.0			
IN EVANSVILLE	77	1	3.5	0.4	CHARLOTTE	78	0	3.0	-0.7	WV BECKLEY	69	0	4.5	0.8			
PORT WAYNE	71	-1	4.9	1.6	GREENSBORO	75	-2	2.3	-1.9	CHARLESTON	73	0	5.6	1.5			
INDIANAPOLIS	72	-1	8.1	4.6	HATTERAS	79	1	9.1	3.0	ELKINS	68	0	8.0	3.8			
SOUTH BEND	71	0	5.7	1.7	NEW BERN	79	0	6.5	0.1	HUNTINGTON	74	-1	6.9	3.1			
IA DES MOINES	73	-1	6.5	2.4	RALEIGH	76	-1	5.1	0.7	PARKERSBURG	72	-2	7.9	4.3			
DUBUQUE	68	-2	4.4	-0.1	WILMINGTON	79	-1	3.9	-2.7	GREEN BAY	69	1	1.1	-2.1			
SIOUX CITY	73	-1	2.0	-1.1	BISMARCK	70	1	1.6	-0.1	LA CROSSE	72	1	4.6	0.9			
WATERLOO	72	1	2.3	-1.3	FARGO	71	2	6.1	3.4	MADISON	69	0	6.5	2.7			
KS CONCORDIA	77	-1	5.8	2.4	GRAND FORKS	69	2	3.1	0.5	MILWAUKEE	69	-1	5.2	2.1			
DODGE CITY	75	-3	2.8	0.3	WILLISTON	70	2	1.0	-0.4	WAUSAU	68	1	2.4	-1.8			
GOODLAND	73	-1	2.8	0.9	OH AKRON-CANTON	70	0	1.1	-2.2	CASPER	69	0	1.0	0.4			
TOPEKA	75	-2	6.2	2.5	CINCINNATI	74	-1	5.3	2.4	CHEYENNE	67	0	1.8	0.4			
WICHITA	77	-3	5.7	2.9	CLEVELAND	71	0	1.1	-2.3	LANDER	68	-1	0.8	0.3			
WY BOWLING GREEN	78	1	2.5	-0.8	COLUMBUS	71	0	4.3	0.6	SHERIDAN	68	0	0.3	-0.7			
JACKSON	73	1	5.2	-1.6						PR SAN JUAN	82	0	7.9	2.0			
LEXINGTON	74	-1	4.0	0.0													

Based on 1951-80 normals.

National Agricultural Summary

August 28 - September 3, 1989

HIGHLIGHTS: Rain again improved soil moisture and crop conditions in portions of the Corn Belt and central Great Plains. Soil moisture was mostly adequate to short in those areas. Rain improved soil moisture in North Dakota and portions of Montana, but South Dakota and most of the West remained dry. Soil moisture was short to adequate in the West. Despite above-normal temperatures, crop development continued to lag behind normal in the Delta, where soil moisture was mostly adequate to short. In the East, soil moisture was mostly adequate to short.

Spring wheat harvest was 93 percent (%) complete, 8 percentage points ahead of the 5-year average. Corn was mostly good to fair with 92% of the acreage in the dough stage or beyond, 3 points behind normal. Sixty-two percent of the acres was dented, 12 points behind normal. Seventeen percent of the crop was mature, 10 points behind normal. Soybeans were mostly good to fair with 92% of the acreage setting pods, 2 points behind normal. Six percent was dropping leaves, 5 points behind normal. Cotton was mostly fair to good with 21% of the acres opening bolls, 14 points behind normal. Sorghum was mostly fair to good with heading 91% complete, 4 points behind normal. Forty-eight percent of the acreage was turning color, 10 points behind normal.

SMALL GRAIN: Winter wheat harvest continued in Idaho, Montana, Oregon, and Washington. Rain slowed harvest in Washington. Winter wheat planting was underway in the central and southern Great Plains and Idaho and Montana. Land preparation for fall planting continued in the Corn Belt.

Spring wheat harvest was 93% complete, 8 points ahead of normal. Harvest progress was ahead of normal except in Montana, where harvest was 13 points behind normal. Harvest was complete or nearly complete except in Idaho and Montana. Harvest advanced 24 points, reaching 80% completion in Idaho.

CORN: Corn was mostly good to fair. Rain improved condition in the western Corn Belt. In the 17 major producing States, 92% of the acreage was in the dough stage or beyond, 3 points behind normal. Sixty-two percent of the acreage was dented, 12 points behind normal. Seventeen percent was mature, 10 points behind normal. Crop maturity lagged behind normal in all the major producing States except Kansas. In Illinois, 18% was mature, 16 points behind normal. Percent mature was 8 points behind normal in Iowa and 4 points behind in Nebraska. High winds damaged some corn in Ohio. Harvest was underway in Georgia, Illinois, Kentucky, Missouri, North Carolina, and Texas. Harvest was also active in the Delta and Southeast.

SOYBEANS: Soybeans were mostly good to fair with 92% of the acreage setting pods, 2 points behind normal. Six percent of the acres was dropping leaves, 5 points behind normal. Rain improved soybean condition in Iowa, Minnesota, and Missouri. Soybeans were mostly fair to good in Iowa and Missouri and good to fair in Minnesota. In Illinois, soybeans were mostly good to fair. The percentage of acres dropping leaves lagged 11 and 12 points behind normal in Illinois and Indiana, respectively. Percentage dropping leaves was 9 points and 8 points behind normal in Minnesota and Ohio, respectively.

COTTON: Cotton was mostly fair to good with 21% of the acres opening bolls, 14 points behind normal. Crop development lagged behind normal except in Arizona, New Mexico, and Texas. Percentage of acres opening bolls lagged more than 25 points behind normal in Arkansas, Louisiana, Mississippi, and Missouri. Percentage of acres opening bolls was 52 points behind normal in Mississippi. Crop condition was fair to good in Mississippi and Texas and good in California. Rain improved cotton condition in the High Plains area of Texas, but moisture was needed in the Low Plains area. Harvest was 12% complete, equal to the average. Harvest started in the Blacklands and was virtually complete in the Coastal Bend area. Limited harvesting continued in early fields in Arizona. Defoliants were applied to early fields in California. Harvest was just beginning in Arkansas.

SORGHUM: Sorghum was mostly fair to good with heading 91% complete, 4 points behind normal. Forty-eight percent of the acreage was turning color, 10 points behind normal. Crop development lagged behind normal in the central and southern Great Plains. Sorghum was mostly good to fair in Kansas and Texas and fair to poor in Nebraska. Harvest was underway in the southern Great Plains and the Delta. In Texas, harvest was 55% complete, 2 points behind normal. Harvest was active in the Low Plains and Cross Timbers areas. Harvest was virtually complete in the Blacklands and southern areas.

OTHER FIELD CROPS: Rice was mostly good to fair with heading 95% complete, 1 point behind normal. Harvest was 24% complete, 5 points behind normal. Harvest had not started in California and Mississippi, but producers were draining early fields in preparation for harvest. Peanut digging was active in Alabama and Georgia. Peanuts were good to fair in North Carolina. In North Carolina, flue-cured tobacco harvest was 67% complete, 4 points ahead of normal. Burley tobacco harvest was 46% complete, 5 points behind normal in Kentucky.

FRUIT AND NUTS: In Florida, grapefruit and orange harvests were underway. Producers resumed irrigating in some areas. In North Carolina, apples were mostly good to fair with harvest 23% complete. In Texas, dry weather and insects continued to stress pecans. Lemon harvest continued in western Arizona. Table and wine grape harvests continued in California. Almond harvest was in full swing. Walnut and pistachio harvests were underway. Peach, plum, and nectarine harvests slowed seasonally. In Oregon, early apple harvest was underway in the Hood River Valley.

VEGETABLES: In Florida, fall vegetable planting increased seasonally. Plantings included snap beans, celery, eggplant, peppers, squash, and tomatoes. Watermelon harvest was nearly complete in South Carolina. In New York, harvest of tomatoes for processing was underway. Sweetpotato harvest was 21% complete, 16 points behind normal in Louisiana. Hot, dry winds stressed vegetables in the Rio Grand Valley of Texas. Planting of fall vegetable crops began in east Texas. In the High Plains, onion and potato harvests were nearly complete. Fall vegetable planting continued in Arizona. Fall watermelon harvest was active in the Coolidge and Hyder areas. Broccoli supplies were moderate and of generally good quality in the

(Continued to back cover)

Crop Progress

FOR WEEK ENDING SEPTEMBER 3, 1989

	CORN % DOUGH		
	1989	1988	AVG.
COLO	70	89	90
GA	100	100	100
ILL	96	97	100
IND	100	100	100
IOWA	95	100	95
KANS	95	99	95
KY	100	100	100
MICH	65	80	85
MINN	99	99	96
MO	99	100	99
NEBR	98	99	97
N C	98	99	98
OHIO	77	89	97
PA	47	69	82
S DAK	87	100	77
TEX	100	100	100
WIS	72	96	84
17 STATES	92	97	95

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

	CORN % DENT		
	1989	1988	AVG.
COLO	35	67	62
GA	99	100	100
ILL	76	90	87
IND	64	85	80
IOWA	70	98	77
KANS	65	85	70
KY	81	81	87
MICH	15	45	45
MINN	66	95	69
MO	90	94	95
NEBR	70	89	70
N C	82	93	93
OHIO	22	50	71
PA	10	26	37
S DAK	51	88	50
TEX	91	98	94
WIS	26	78	53
17 STATES	62	85	74

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

	CORN % MATURE		
	1989	1988	AVG.
COLO	10	34	14
GA	97	98	99
ILL	18	42	34
IND	10	27	33
IOWA	22	70	30
KANS	35	60	30
KY	23	23	37
MICH	0	3	4
MINN	4	37	15
MO	38	47	52
NEBR	10	35	14
N C	67	75	77
OHIO	4	6	16
PA	0	3	5
S DAK	11	36	14
TEX	67	71	72
WIS	4	18	13
17 STATES	17	41	27

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

	GRAIN SORGHUM % HEADED		
	1989	1988	AVG.
ARK	100	97	NA
ILL	100	100	NA
KANS	85	95	90
LA	100	99	100
MISS	99	99	100
MO	98	99	98
NEBR	100	100	100
OKLA	85	90	95
S DAK	85	93	94
TENN	100	100	100
TEX	94	98	97
11 STATES	91	97	NA

EXCL. STATES WITH NA 91 97 95

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

NA - NOT AVAILABLE.

	GRAIN SORGHUM % COLORING		
	1989	1988	AVG.
ARK	87	82	NA
ILL	64	64	NA
KANS	20	45	40
LA	93	78	94
MISS	74	79	90
MO	72	76	81
NEBR	60	81	60
OKLA	50	65	60
S DAK	55	73	49
TENN	88	76	85
TEX	70	74	77
11 STATES	49	64	NA

EXCL. STATES WITH NA 48 64 58

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

NA - NOT AVAILABLE.

	SOYBEANS % SETTING PODS		
	1989	1988	AVG.
ALA	67	69	79
ARK	75	71	78
GA	92	89	93
ILL	100	100	100
IND	100	100	100
IOWA	100	100	100
KANS	90	97	90
KY	68	74	80
LA	91	81	91
MICH	90	90	96
MINN	99	99	99
MISS	67	74	80
MO	96	95	95
NEBR	98	100	99
N C	66	65	69
OHIO	94	98	100
S C	65	69	70
S DAK	100	100	96
TENN	80	86	88
19 STATES	92	93	94

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

	SOYBEANS % DROPPING LEAVES		
	1989	1988	AVG.
ALA	8	7	3
ARK	1	0	2
GA	3	4	7
ILL	6	15	17
IND	5	15	17
IOWA	10	34	13
KANS	10	20	15
KY	7	9	10
LA	1	1	4
MICH	2	2	4
MINN	6	36	15
MISS	3	4	8
MO	4	4	4
NEBR	9	24	6
N C	0	0	0
OHIO	3	5	11
S C	0	2	0
S DAK	19	52	18
TENN	3	8	5
19 STATES	6	17	11

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

	COTTON % BOLLS OPENING		
	1989	1988	AVG.
ALA	20	42	36
ARIZ	76	80	74
ARK	2	38	44
CALIF	40	45	56
GA	15	36	39
LA	22	58	59
MISS	8	52	60
MO	12	35	41
N MEX	40	15	35
N C	18	40	40
OKLA	2	10	5
S C	12	22	36
TENN	10	27	33
TEX	20	21	20
14 STATES	21	33	35

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

	RICE % HEADED		
	1989	1988	AVG.
ARK	92	93	94
CALIF	90	90	92
LA	99	98	98
MISS	99	96	98
TEX	100	100	100
5 STATES	95	95	96

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

	RICE % HARVESTED		
	1989	1988	AVG.
ARK	2	3	9
CALIF	0	1	0
LA	63	49	64
MISS	0	5	17
TEX	82	87	86
5 STATES	24	23	29

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

	SPRING WHEAT % HARVESTED		
	1989	1988	AVG.
IDAHO	80	92	75
MINN	99	99	84
MONT	69	95	82
N DAK	97	99	85
S DAK	100	100	96
5 STATES	93	98	85

THESE 5 STATES PRODUCED 87% OF THE 1988 SPRING WHEAT CROP.

Crop Condition
PERCENT

FOR WEEK ENDING SEPTEMBER 3, 1989

GRAIN SORGHUM						
STATE	VP	P	F	G	EX	
ARK	0	2	15	75	8	
ILL	0	0	23	73	4	
KANS	1	30	18	33	18	
LA	0	7	52	41	0	
MISS	0	5	55	40	0	
MO	0	1	34	61	4	
NEBR	3	36	61	0	0	
OKLA	0	0	1	99	0	
S DAK	1	30	41	25	3	
TENN	2	1	32	64	1	
TEX	1	7	27	53	12	
11 STATE	1	21	29	39	10	
PREV WEEK	3	18	23	43	13	
PREV YEAR	1	14	43	36	6	

RICE						
STATE	VP	P	F	G	EX	
ARK	0	0	36	59	5	
CALIF	0	0	10	70	20	
LA	0	0	46	54	0	
MISS	0	0	30	60	10	
TEX	0	0	13	87	0	
5 STATE	0	0	30	64	6	
PREV WEEK	0	0	25	67	8	
PREV YEAR	0	0	28	66	6	

COTTON						
STATE	VP	P	F	G	EX	
ALA	0	5	57	38	0	
ARIZ	0	0	0	89	11	
ARK	0	8	71	21	0	
CALIF	0	0	5	85	10	
GA	0	1	31	65	3	
LA	0	4	58	38	0	
MISS	0	35	25	40	0	
MO	0	7	64	29	0	
N MEX	0	0	40	40	20	
N C	0	0	21	76	3	
OKLA	0	15	70	15	0	
S C	0	0	4	93	3	
TENN	4	3	77	16	0	
TEX	0	8	59	29	4	
14 STATE	0	9	47	40	4	
PREV WEEK	0	7	50	40	3	
PREV YEAR	1	4	32	60	3	

CORN						
STATE	VP	P	F	G	EX	
COLO	0	5	23	65	7	
GA	0	0	17	65	18	
ILL	0	4	16	67	13	
IND	0	1	9	71	19	
IOWA	3	14	48	33	2	
KANS	17	1	4	45	33	
KY	0	0	3	64	33	
MICH	0	5	20	45	30	
MINN	2	7	32	49	10	
MO	3	21	32	39	5	
NEBR	9	12	23	41	15	
N C	0	1	9	76	14	
OHIO	2	9	34	45	10	
PA	5	10	22	39	24	
S DAK	6	10	40	36	8	
TEX	0	3	10	46	41	
WISC	1	3	7	66	23	
17 STATE	3	8	25	50	14	
PREV WEEK	3	11	27	46	13	
PREV YEAR	10	36	37	14	3	

SOYBEANS						
STATE	VP	P	F	G	EX	
ALA	4	6	44	46	0	
ARK	0	13	77	10	0	
GA	0	4	21	66	9	
ILL	0	1	16	74	9	
IND	0	1	13	73	13	
IOWA	0	12	44	40	4	
KANS	6	11	28	19	36	
KY	0	0	19	71	10	
LA	2	12	56	30	0	
MICH	0	5	20	50	25	
MINN	1	6	42	42	9	
MISS	5	20	55	20	0	
MO	0	9	45	41	5	
NEBR	9	27	49	15	0	
N C	0	0	12	79	9	
OHIO	2	11	36	44	7	
S C	0	0	14	86	0	
S DAK	2	4	36	50	8	
TENN	0	13	59	28	0	
19 STATE	1	8	36	48	7	
PREV WEEK	2	9	42	41	6	
PREV YEAR	5	23	50	20	2	

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

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall 0.50 to 1.50 in. Temperatures 3 to 5° above normal.

Days suitable for fieldwork 5.9. Soil moisture 68% short, 32% adequate. Scattered showers midweek relieved some heat stress; more rain needed. Corn 86% mature, 92% 1988, 96% avg.; 50% harvested, 57% 1988, 52% avg.; 14% fair, 43% good, 43% excellent. Cotton 20% bolls opened, 42% 1988, 36% avg.; 5% poor, 57% fair, 38% good. Soybeans 83% blooming, 90% 1988, 94% avg.; 67% setting pods, 69% 1988, 79% avg.; 19% turning color, 15% 1988, 15% avg.; 8% dropping leaves, 7% 1988, 3% avg.; 4% very poor, 6% poor, 44% fair, 46% good. Peanuts 11% dug, 3% 1988, 6% avg.; 4% combined, 1% 1988, 1% avg.; 62% fair, 38% good. Sorghum 43% harvested, 32% 1988, 26% avg.; 33% fair, 58% good, 9% excellent. Livestock, pastures good to fair. Primary activities: Harvesting corn, sorghum, peanuts; cutting, baling hay; controlling insects in cotton; planting fall vegetables; preparing land for winter annuals; repairing harvest equipment, fences; monitoring catfish ponds; routine care of livestock, poultry.

ALASKA: Tanana Valley areas had a full week of superior dry harvesting weather while Matanuska Valley, Kenai Peninsula plagued with extremely wet, cool conditions. Highs 4° below normal to 6° above normal. Lows, 2 to 8° above normal. Seasonal precipitation 0.91 in. below normal at Clearwater to 9.96 in. above normal at Anchorage.

Days suitable for harvest 3.0. Topsoil 36% short, 22% adequate, 42% surplus. Subsoil 28% short, 28% adequate, 44% surplus. 2nd crop hay harvest 30% complete. Barley harvest 85% complete. Commercial potatoes harvest for early market, seed continuing.

ARIZONA: Temperatures 2° below to 6° above normal. Extremes 38°; 111°. Increased humidity, monsoon activity. Most rain fell White Mountains, southeast. Rainfall none to 0.50 in.

Cotton defoliation light to moderate; limited harvesting early fields; pink bollworm damage Pima cotton in west central. Alfalfa hay mostly good; harvesting moderate to active; weed problems rated moderate as summer grasses continued to invade fields. Corn, sorghum good; corn 85% mature. Lemon, fall watermelon harvested, vegetable planting, irrigation west. Harvest of fall watermelons began last week in Hyder area. Vegetable planting, irrigation fall lettuce, cauliflower, broccoli continued while ground preparation for winter vegetables is underway. Raisins shipped west, central; fall watermelons harvested in Coolidge. Apple harvest, packing; pistachios, green chilies, white corn harvested east. Lettuce planting underway. Ranges, pastures relieved, still mostly poor, providing below average feed; cattlemen forced to sell livestock; limited light growth of green feed, grasses. Stockwater short to adequate; soil moisture short; cattle, calves, sheep, lambs fair to good.

ARKANSAS: Weekend frontal passage lowered temperatures, brought scattered thunderstorms. Extremes 63°; 101°. Rainfall none to 3.40 in.

Days suitable for fieldwork 6.0. Soil moisture 67% short, 33% adequate. Rice 19% ripe, 30% 1988, 35% avg. Soybeans 87% blooming, 88% 1988, 93% avg.; yellowing, 5% 1988, 6% avg. Sorghum 46%

mature, 37% 1988. Main activities: Combining rice, sorghum; harvesting corn; irrigating soybeans; harvesting fruits; vegetables; cutting, baling hay; bush hogging pastures, field edges; preparing grounds for small grain planting. Cotton first bale picked, ginned by 26th. Red rice problems north central. Dryland soybeans moisture stressed stem canker, sudden death syndrome, southern blight east central. Soybean yields on Group III, IV very early varieties. Good sorghum yields continuing. Corn 50% harvested, 37% 1988, 55% avg.; good yields. Juice grape harvest hindered northwest. Rains helped pastures, hay. Broiler flock heat stress. Cattle good.

CALIFORNIA: High pressure produced nearly normal to slightly above normal temperatures most of week, temporarily weakened by cool low pressure trough midweek. System brought significant cooling to north, not southern portions. Responsible for only rainfall, 0.04 in. in Tulelake.

Open weather, good progress field activities entire week. Cotton good progress. Much of crop received final irrigation. Early fields Palo Verde Valley defoliant sprayed. Pink bollworm pressure continued desert areas. Early rice fields drained preparation harvest. Early dry bean, silage corn, safflower, sunflower seed, sugarbeet, alfalfa, clover seed harvests active. Early corn for grain harvest began. Alfalfa, Sudan grass harvests active. Field preparation fall seeded small grains increased. Granny Smith, Golden Delicious varieties picked as apple harvest continued. Avocado harvest declining. Fig harvest continued. Picking and packing of table grapes, main varieties Red Globe, Christmas Rose, Ruby, Thompson Seedless, Flame, Ribier. Raisin grapes laid to dry, volume increasing daily. Wine grape harvest continued. Volume of pack-out for Freestone peaches, plums, nectarines slowing as season nears completion. Late variety Clingstone peaches harvested. Harvesting of pomegranates continued. Prune harvest 60% complete, fair sizes. Navel orange making good progress. Almond harvest in full swing. Pistachio harvest underway, small crop. Orchard floors prepared, harvesting of Walnuts began. Broccoli moderate supply, generally good quality, Central coast. Carrot harvest occurring Cuyama Valley. Cauliflower moderate supplies, variable quality, Salinas. Transplanting fall crop broccoli, cauliflower continued Westside. Head lettuce supplies moderate. Fall melon fields beginning blossom Palo Verde. Harvest fall crop potatoes Siskiyou County begin soon. Sweet potato harvest continued. Strawberries moderate supply Salinas area. Processing market tomato harvest continued active. Livestock good statewide. Range, pasture conditions water supplies continued decline desert, most valley areas. Supplemental feeding necessary, poor feed conditions. Rangeland grasses northern counties benefited from cool weather. Livestock movement from summer grazing areas to feedlots heavy.

COLORADO: Weather not available.

Days suitable for fieldwork 6.4. Soil 28% very short, 50% short, 19% adequate, 3% surplus. Alfalfa 2nd cutting 83% complete, 3rd cutting 29% complete. Barley 92% harvested. Corn 35% dent,

10% mature, with silage 5% harvested. Oats 71% harvested, spring wheat 60% harvested. Onions 58% harvested, summer potatoes 45% harvested. Dry beans 11% cut and 7% threshed. Sorghum 87% headed, 23% turning color. Winter wheat 17% seeded. Livestock good, range, pasture fair to good.

FLORIDA: Hot, temperatures 3 to 4° above normal, Panhandle; 1 to 3° above elsewhere. Highest mid 90s common, few upper 90s; coolest mostly low, mid 70s. Extremes 67° Usher Tower, Mountain Lake; 98° Lakeland, Crestview. All areas received some rain; totals of 1.00 in. common with local amounts exceeding 3.00 in.

Soil moisture Panhandle short to adequate; Peninsula mostly adequate, some widely scattered areas short. Corn harvest, peanut digging active. Haying continued active, weather permitting. Cotton, sugarcane continued good progress. Sugarcane planting active. Panhandle pastures fair to good. Northern Peninsula grazing improved, good to excellent. Central Peninsula pastures variable fair to excellent; Southern Peninsula remained good to excellent. Cattle continued good to excellent. Citrus areas dry, hot. Scattered rains, irrigation. New crop grapefruit, oranges shipped. Trees continued new growth. Caretakers reduced cover crops, applied herbicides, sprays, fertilizers. Summerlike temperatures, with limited shower activity over vegetable producing areas. Planting increased seasonally. Crops planted include snap beans, celery, cukes, eggplant, peppers, squash, tomatoes.

GEORGIA: Temperatures 2 to 4° above normal. Extremes 58°; 99°. Rainfall under 1.00 in. north, 1.00 to 2.00 in. elsewhere. West central 3.00 to 4.00 in. Greatest total 7.28 in. Brunswick.

Days suitable for fieldwork 5.2. Soil moisture 3% very short, 25% short, 60% adequate, 12% surplus. Corn 56% harvested, 56% 1988, 66% avg. Cotton opening slow, rank growth. Sorghum 2% poor, 11% fair, 83% good, 4% excellent; 27% harvested, 24% 1988, 17% avg.; silage harvest beginning. Peanuts 16% fair, 80% good, 4% excellent; 9% dug, 3% 1988, 10% avg.; 3% threshed, 1% 1988, 4% avg. Soybeans 3% dropping leaves, 4% 1988, 7% avg.; insects increasing. Tobacco 98% harvested, 93% 1988, 95% avg. Apples 9% fair, 91% good; 35% harvested, 50% 1988, 51% avg. Pecans 9% poor, 40% fair, 50% good, 1% excellent. Hay baling active, hay, pastures mostly good to excellent. Cattle, hogs good.

HAWAII: Generally favorable weather for crop production; sunny skies, beneficial showers. Temperatures upper 60s to high 80s, variable winds up to 25 mph. Rainfall none to 4.10 in.

Days suitable for fieldwork 7.0. Papaya production active. Sugar, pineapple harvesting steady.

IDAHO: Temperatures normal, 5° below normal. Precipitation, north close to one-half inch, mostly above normal; elsewhere limited, below normal.

Days suitable for fieldwork 6.0. Soil moisture 4% very short, 14% short, 75% adequate, 7% surplus. Harvesting resumed after rain delays. Excessive moisture damaged grain, hay, seed crops. Winter wheat 87% harvested, 99% 1988, 91% avg. Spring wheat 80% harvested, 92% 1988, 75% avg. Spring barley 80% harvested, 91% 1988, 75% avg. Oats 70% harvested, 84% 1988, 76% avg. Potatoes 7% harvested, 1% 1988, 3% avg. Second cutting alfalfa hay, dry pea, mint harvests wrapping up. Third cutting alfalfa hay 35% harvested, 24% 1988, 14% avg. Lentils 67% harvested. Onions 14%

harvested, 21% avg. Dry beans 12% harvested, 29% 1988. Peaches 79% harvested. Plums 45% harvested. Hops 23% harvested, 33% 1988. Winter grain seedings underway. Cattle off rangeland earlier than normal, other cattle moved to late summer rangeland. Recent rains initiated regrowth in pastures. Fall calving underway.

ILLINOIS: Temperatures near normal central, north; 1 to 3° above normal south. Rainfall 1.20 to 3.30 in., small amounts extreme south.

Days suitable for fieldwork 3.50. Soil moisture 32% short, 56% adequate, 12% surplus. Corn harvested 1%, 2% 1988, 2% avg. Soybeans turning color 22%, 40% 1988, 39% avg. Grain Sorghum mature 11%, 25% 1988. Alfalfa 3rd crop cut 75%, 80% 1988, 80% avg.; 1% poor, 21% fair, 69% good, 9% excellent. Pasture 11% poor, 33% fair, 45% good, 11% excellent.

INDIANA: Temperatures none to 5° above normal. Lows upper 50s to mid 60s, highs 80 to upper 80s. Rainfall 1.50 to 3.50 in.

Days suitable for fieldwork 2.6. Topsoil 4% short, 48% adequate, 48% surplus. Subsoil 11% short, 64% adequate, 25% surplus. Corn, soybean good. Soybean 18% turning yellow, 41% 1988, 46% avg. Tobacco 18% harvested, 20% 1988, 33% avg. 1990 winter wheat cropland 30% plowed, 40% 1989, 33% avg. Pasture 2% poor, 14% fair, 70% good, 14% excellent. Heavy rains caused ponding, flooding of low level areas.

IOWA: Temperatures 1 to 4° above normal. Extremes 48°; 93°. Rainfall 0.39 to 5.39 in., average 1.72 in.

Days suitable for fieldwork 3.7. Topsoil 41% short, 57% adequate, 2% surplus. Subsoil 97% short, 3% adequate. Corn mostly fair to good. Soybean leaves turning color 30%, 65% 1988, 36% avg. Third crop alfalfa 80% harvested, 97% 1988, 75% avg. Hay 6% very poor, 30% poor, 39% fair, 22% good, 3% excellent. Livestock good. Pasture 19% very poor, 32% poor, 34% fair, 13% good, 2% excellent.

KANSAS: Temperatures low 76° northwest to high 79° central, southeast areas. Precipitation most areas, low 0.26 in. northwest, high 3.51 in. northeast, 1.57 in. overall.

Days suitable for fieldwork 3.0. Topsoil 10% short, 62% adequate, 28% surplus. Subsoil 37% short, 58% adequate, 5% surplus. Corn, sorghum, soybean development generally lags behind last year. Scattered showers provided much needed moisture for crops, livestock. Insects, disease problems generally light to moderate. Range, pasture adequate most areas. Seedbed preparation for winter wheat is major activity across State.

KENTUCKY: Hot, humid first part of week. Cooler, dryer weekend. Highs near 90° early in week, upper 70s lower 80s weekend. Temperatures 3 to 6° above normal, precipitation 0.50 to 1.00 in.

Days suitable fieldwork 4.7. Soil moisture 1% very short, 14% short, 76% adequate, 9% surplus. Corn good to excellent, 81% denting or beyond. Harvest just beginning. Soybeans mostly good, 68% podding or beyond, 7% shedding leaves. Tobacco fair to good. Burley cut 46%, 38% 1988, 49% avg. Dark tobacco 52% cut, 39% 1988, 48% avg. High humidity causing houseburn. Hay crops, pastures mostly good to excellent.

LOUISIANA: Temperatures 4 to 5° above normal. Extremes 67°; 100°. Rainfall 0.15 to 3.15 in.

Days suitable for fieldwork 6.1. Soil moisture 6% very short, 44% short, 50% adequate. Corn mature 100%, 99% 1988, 99% avg.; harvested 79%,

57% 1988, 75% avg. Cotton open bolls 22%, 58% 1988, 59% avg.; harvested 0%, 1% 1988, 2% avg.; 4% poor, 58% fair, 38% good. Cutting out has begun in some areas. Hay final cutting 51%, 28% 1988, 52% avg. Rice headed 99%, 98% 1988, 98% avg.; ripe 76%, 67% 1988, 78% avg.; harvested 63%, 49% 1988, 64% avg.; 46% fair, 54% good. Sorghum turning color 93%, 78% 1988, 94% avg.; ripe 69%, 52% 1988, 79% avg.; harvested 41%, 22% 1988, 56% avg.; 7% poor, 52% fair, 41% good. Soybeans blooming 99%, 95% 1988, 98% avg.; setting pods 91%, 81% 1988, 91% avg.; leaves turning 12%, 6% 1988, 15% avg. shedding leaves 1%, 1% 1988, 4% avg.; 2% very poor, 12% poor, 56% fair, 30% good. Sugarcane planted 32%, 14% 1988, 19% avg.; 17% fair, 71% good, 12% excellent. Sweet potatoes harvested 21%, 25% 1988, 37% avg.; 67% fair, 33% good. Vegetable 4% very poor, 11% poor, 63% fair, 22% good. Pasture 3% poor, 27% fair, 68% good, 2% excellent. Livestock 13% fair, 87% good.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.22 in. Temperature 75°, normal 72°. Extremes 48°; 92°.

Days suitable for fieldwork 6.5. Topsoil 7% very short, 53% short, 40% adequate. Subsoil 13% short, 74% adequate, 13% surplus. Field corn good; dough stage 89%, 91% 1988, 94% avg.; dent stage 67%, 68% 1988, 70% avg.; mature 17%, 24% 1988, 21% avg.; harvested for grain 2%, 0% 1988, 5% avg.; harvested for silage 16%, 24% 1988, 36% avg. Soybeans good; bloomed 91%, 91% 1988, 96% avg.; set pods 75%, 71% 1988, 81% avg.; turned 2%, 1% 1988, 11% avg. Tobacco fair; bloomed 90%, 97% 1988, 95% avg.; topped 63%, 79% 1988, 82% avg.; harvested 46%, 41% 1988, 51% avg. Pasture good.

DELAWARE: Precipitation 0.04 in. Temperature 74°, normal 72°. Extremes 56°; 88°.

Days suitable for fieldwork 6.8. Topsoil 71% short, 29% adequate. Subsoil 29% short, 71% adequate. Soybeans good; bloomed 90%, 98% 1988, 98% avg.; set pods 67%, 77% 1988, 82% avg. Field corn good; dough stage 93%, 92% 1988, 97% avg.; dent stage 66%, 77% 1988, 82% avg.; mature stage 18%, 12% 1988, 27% avg.; harvested for silage 10%, 41% 1988, 36% avg. Pasture good. All hay short to adequate.

MICHIGAN: Temperatures normal to 3° above normal. Extremes 36°; 88°. Precipitation 0.03 to 3.77 in. across State.

Days suitable for fieldwork 5.0. Soil moisture 22% short, 70% adequate, 8% surplus. Corn 65% dough, 80% 1988, 85% avg.; dent 15%, 45% 1988, 45% avg.; mature 0%, 3% 1988, 4% avg.; 5% poor, 20% fair, 45% good, 30% excellent. Soybeans 90% setting pods, 90% 1988, 96% avg.; dropping leaves 2%, 2% 1988, 4% avg.; 5% poor, 20% fair, 50% good, 25% excellent. Dry Beans 30% turning, 45% 1988, 65% avg.; 10% poor, 30% fair, 40% good, 20% excellent. Major activities: Seeding alfalfa, harvesting hay, baling straw, working ground for fall wheat, preparing equipment for fall harvest. Harvest of pears, peaches, plums, early apples continued. Vegetables being harvested.

MINNESOTA: Temperatures 1 to 3° above normal. Extremes 39°; 89°. Precipitation 0.70 to 2.40 in. Greatest weekly total 4.40 in.

Days suitable for fieldwork 4.5. Topsoil 9% very short, 29% short 57% adequate, 5% surplus. Corn 99% in dough, 99% 1988, 96% avg.; 66% denting, 95% 1988, 69% avg.; 4% mature, 37% 1988, 15% avg. Soybeans 99% setting pods, 99% 1988, 99% avg.; 6% dropping leaves, 36% 1988, 15% avg. Sweet corn 80% harvested, 90% 1988, 74% avg. Flax 32% harvested, 41% 1988, 39% avg. Potatoes 13% harvested, 20% 1988, 15% avg. Dry Edible Beans 12% harvested, 22% 1988, 18% avg. Winter Wheat

34% seeded, 44% 1988, 31% avg. Rye 31% seeded, 48% 1988, 31% avg. Hay, grain 54% tilled, 62% 1988, 46% avg. Corn 2% very poor, 7% poor, 32% fair, 49% good, 10% excellent. Soybean 1% very poor, 6% poor, 42% fair, 42% good, 9% excellent.

MISSISSIPPI: Hot, temperatures 4° above normal. Extremes 67°; 102°. Rainfall 0.66 in., 0.19 below normal.

Days suitable for fieldwork 5.7, 5.0 1989, 5.0 avg. Soil moisture 5% very short, 45% short, 50% adequate. Corn good; 21% harvested, 17% 1988, 33% avg.; silage 65% harvested, 76% 1988, 80% avg. Cotton fair; 8% open bolls, 52% 1988, 60% avg. Hay 78% harvested; 74% 1988, 79% avg. Rice good; 50% mature, 35% 1988, 53% avg. Sorghum fair; 16% harvested, 19% 1988, 31% avg.; 50% silage harvested, 60% avg. Soybeans fair; 16% turning color, 15% 1988, 22% avg. Sweet potatoes 15% harvested, 23% 1988, 24% avg. Pastures, livestock good. Activities: Insect control, hay, silage harvest, draining rice fields.

MISSOURI: Temperatures 3° above normal. Rain 4.00 in. northwest, 2.50 in. northeast, 1.00 in. elsewhere.

Days suitable for fieldwork 2.7. Topsoil 15% short, 74% adequate, 11% surplus. Subsoil 57% short, 41% adequate, 2% surplus. Soybeans, pastures improved by rains, particularly northern areas. Corn mature varies 22% northeast to 84% southeast, other districts less than 40%. Corn grain harvest mostly confined to southeast, silage harvest started all areas, slowed by muddy fields. Sorghum mature varies 7% northeast, central areas, 50% southeast. Alfalfa 3rd cutting 89%, 85% 1988, 87% avg. Pasture 1% very poor, 10% poor, 24% fair, 51% good, 14% excellent, best since 1985. Livestock water supply 4% critically short, 20% short, 76% adequate.

MONTANA: Precipitation variable from showers, thunderstorms. Amounts mostly under 0.75 in. Temperatures northeast, southeast near normal to 4° above. Elsewhere 2 to 5° below normal.

Days suitable for fieldwork 2.6. Topsoil 22% short, 56% adequate, 22% surplus. Subsoil 32% short, 60% adequate, 8% surplus. Spring wheat 3% very poor, 15% poor, 40% fair, 35% good, 7% excellent. Barley 3% very poor, 21% poor, 29% fair, 38% good, 9% excellent. Barley harvested 60%, 81% 1988, 76% avg. Oats 5% very poor, 16% poor, 35% fair, 38% good, 6% excellent. Oats harvested 65%, 94% 1988, 80% avg. Winter wheat harvested 87%, 100% 1988, 94% avg. Pasture, range feed 3% very poor, 8% poor, 24% fair, 47% good, 18% excellent. Second cutting alfalfa 72% harvested, 90% 1988, 81% avg. Rain damage to unharvested spring grains 40% none, 26% light, 17% moderate, 17% heavy. Percent of winter wheat seeded 2%, 3% 1988, 5% avg.

NEBRASKA: Temperatures 3 to 7° above normal. Extremes 49°; 101°. Precipitation traces north central to over 2.00 in. southeast.

Days suitable for fieldwork 4.6. Topsoil 46% short, 52% adequate, 2% surplus. Subsoil 98% short, 2% adequate. Soybeans 30% turning color, 59% 1988, 28% avg. Sorghum 2% mature, 22% 1988, 8% avg. Alfalfa hay 3% very poor, 22% poor, 46% fair, 29% good. 80% third cutting, 88% 1988, 77% avg. Progress slowed by heavy dew, high humidity. Winter wheat 4% sown, 5% 1988, 6% avg. Rain was too late to help much of the dryland row crops. Dry edible bean harvest just getting underway, about 2 weeks behind normal. Corn silage cutting becoming active. Farmers in Panhandle concerned about receiving the first frost before their late corn crop is ready, may cut for silage. Pasture, range feed 33% very short, 48% short, 19%

adequate. Hay, roughage 14% very short, 61% short, 25% adequate. All available hay was being cut. Main activities: cutting hay, silage: preparing machinery for harvest; picking up irrigation pipe; sowing wheat.

NEVADA: Temperatures a little above normal to a little below. Series storm fronts produced gusty winds, no precipitation. Extremes 28°; 105°.

Russet potato digging operation started on limited basis for processing only. Alfalfa seed combining full swing most areas. Ranges furnishing marginal grazing.

NEW ENGLAND: Precipitation 1.00 to 1.50 in. northern parts of Maine, New Hampshire, Vermont, 0.50 to 1.00 in. remainder. Temperatures upper 50s near Canadian border to upper 60s south coast. Temperatures near normal.

Days suitable for fieldwork 5.5. Fieldwork progress 1.0 days behind. Soil moisture north 6% short, 81% adequate, 13% surplus; south 88% adequate, 12% surplus. Grazing availability north 8% very short, 8% short, 84% adequate; south 80% adequate, 20% surplus. Maine potato good; 5% harvested. Maine oat good; 50% harvested, 78% 1988, 36% avg. Field corn 17% harvested, 7% 1988, 9% avg.; fair to good. Sweet corn 76% harvested, 86% 1988, 78% avg.; fair to excellent. Shade tobacco 90% harvested; good. Outdoor tobacco 95% harvested; poor to good. Second crop hay 78% cut, 84% 1988, 85% avg.; fair to excellent. Third crop hay 39% cut, 44% 1988, 44% avg.; fair to excellent. Apples 12% harvested; condition, color fair to good; medium to large size. Peaches 70% harvested; good to excellent. Pears 38% harvested; good to excellent. Blueberries 94% harvested; fair to good. Cranberries sizing well, good. Main farm activities: Vegetable harvest, potato harvest, haying, post harvest seedings, tillage.

NEW JERSEY: Temperatures above normal. Extremes 40°; 90°. Rainfall 0.14 in. north, 1.00 in. central, 0.27 in. south. Heaviest 24-hour total 2.58 in. on 29th, 30th. Estimated soil moisture percent field capacity averaged 69% north, 62% central, 48% south. Four inch soil temperatures averaged 67° north, 71° central, 73° south.

Active week with up to 7 days suitable. Soil moisture adequate, some growers irrigating. Summer vegetable harvest continued to decline. Irish potato digging advanced. Few sweet potatoes harvested. Late season peach harvest active. Fall apples continued to color, size. Third cutting alfalfa advanced. Corn silage making general. Preparation, planting of fall sown grain, cover crop underway. Pasture growth continued good.

NEW MEXICO: Rain fell statewide; temperatures near to slightly above normal.

Days suitable for fieldwork 5.6. Soil moisture 45% short, 55% adequate. Cotton setting bolls, 100%, 40% bolls open; 40% fair, 40% good, 20% excellent, unchanged from previous week. Cattle 60% fair, 30% good, 10% excellent. Sheep 60% fair, 30% good, 10% excellent. Ranges, pastures 15% poor, 60% fair, 20% good, 5% excellent.

NEW YORK: Temperatures below normal early week, near normal at midweek, again below normal at weekend. Precipitation scattered, fell mostly late in week. Most areas received below average amounts.

Days suitable for fieldwork 5.8. Soil moisture short to mostly adequate. Pastures fair to good.

Hay fair to good, corn fair to good. Second cutting alfalfa 87% complete, 92% 1988, 89% avg. Third cutting alfalfa 27% complete, 23% 1988, 28% avg. Oats 87% harvested, 84% 1988, 85% avg. Potato harvest reaching full swing. Tree fruit, grapes good as harvest approaches. Vegetable harvest reaching peak. Orange County onion harvest slightly behind normal. Processing tomato harvest underway. Fresh market tomatoes fair to good.

NORTH CAROLINA: Temperatures 2° above normal across State. Extremes 50°; 93°. Precipitation none to 2.47 in.

Days suitable for fieldwork 5.5. Soil moisture 7% short, 88% adequate, 5% surplus. Pasture 14% fair, 76% good, 10% excellent. Livestock feed from pasture 85%. Crop condition: tobacco 4% poor, 31% fair, 65% good; sweet potatoes 19% fair, 78% good, 3% excellent; apples 4% very poor, 12% poor, 28% fair, 52% good, 4% excellent; truck crops 2% poor, 29% fair, 64% good, 5% excellent; peanuts 29% fair, 68% good, 3% excellent; sorghum 9% fair, 83% good, 8% excellent; hay 12% fair, 79% good, 9% excellent. Hay second cutting 72% complete, third cutting 39% completed. Hay, roughage 82% adequate, 18% surplus. Harvesting completed: Flue-cured tobacco 67%, 63% 1988, 63% avg.; burley tobacco 19%, 18% 1988, 26% avg.; corn silage 37%, 49% 1988, 55% avg.; apples 23%, 17% 1988, 20% avg.; corn grain 8%, 11% 1988, 13% avg. Major activities: Harvesting tobacco; cutting hay. Other activities: Spraying crops; harvesting apples, truck crops, corn silage; marketing tobacco, vegetables; preparing land for small grain planting; tending livestock; general farm maintenance.

NORTH DAKOTA: Temperatures 2 to 3° below normal. Extremes 37° west central; 86° north central. Precipitation 0.49 in. northwest to 1.93 in. east central.

Days suitable for fieldwork 4.8. Topsoil near average; 11% very short, 43% short, 46% adequate. Subsoil well below average; 36% very short, 59% short, 5% adequate. Small grain harvest nearly completed. Spring wheat 97% combined, 99% 1988, 85% avg.; durum 91%, 97% 1988, 76% avg.; oats 99%, 100% 1988, 92% avg. Late season crops fair. Maturity, harvest lag normal. Sunflower 44% bracts turned yellow and beyond, 81% 1988, 45% avg.; soybeans 69% lower leaves yellowing and beyond, 88% 1988, 68% avg.; corn for grain 71% dented and beyond, 85% 1988, 67% avg.; potatoes 1% dug, 13% 1988, 10% avg.; flax 25% combined, 53% 1988, 28% avg.; dry beans 6% combined, 26% 1988, 13% avg. Pastures 8% very poor, 39% poor, 45% fair, 8% good.

OHIO: Precipitation 1.00 to 1.50 in.; few central areas 0.50 in. or less. Temperatures 1 to 2° above normal. Early week warm, weekend cool. Growing degree days 15 to 20 above normal.

Days suitable for fieldwork 4.6. Soil moisture 18% short, 64% adequate, 18% surplus. Farm activities: Mowing pastures, idle cropland, roadsides; preparing for winter wheat seedings; seeding grasses, legumes; harvesting vegetables, apples. Corn fair to good; 18 to 20 days later than average. Bean leaf beetle, Japanese beetle persistent problems. High winds damaged some crop stands, mostly corn. Hay, grassland good. Root diseases, spittle bugs reported. Cucumber harvest winding down. Tomato picking continued.

OKLAHOMA: Temperatures 2° above normal north central to 5° above normal southeast. Precipitation 0.31 in. northeast to 2.80 in. west central.

Days suitable for fieldwork 5.8. Topsoil 35% short, 55% adequate, 10% surplus. Subsoil 25% short, 75% adequate. Wheat 10% planted, 1% 1988, 3% avg. Cotton 15% poor, 70% fair, 15% good; 2% open bolls, 10% 1988, 5% avg. Hot temperatures helped development, moisture needed to reduce plant stress. Sorghum 1% fair, 99% good; 85% heading, 90% 1988, 95% avg.; 50% coloring, 65% 1988, 60% avg. Harvesting southern counties. Soybeans 70% setting pods, 55% 1988, 75% avg. Peanuts 90% setting pods, 90% 1988, 95% avg. Corn 15% harvested, 25% 1988, 25% avg. Pastures good. Cattle good; marketings stable, price down from previous week.

OREGON: Temperatures about normal entire State. South central, northeast regions below. Klamath Falls 5° below, Burns 4° below normal. Precipitation totals not significant. Redmond 0.69 in., Roseburg 0.57 in., Portland 0.36 in. of rain.

Soil moisture 21% short, 72% adequate, 7% surplus. Barley 70% harvested, 86% 1988, 87% avg. Reports of sprouting in late harvested wheat due to cool, wet weather in east. Fall fertilizing, tilling, seed treating, late hay harvest continues. Hop harvest continues Willamette Valley. Red clover seed harvest underway. Sugarbeet seed, mint harvest winding down. Hazelnut growers preparing for nut fall. Anjou pear harvest started; Bartlett nearly done Hood River Valley. Winter pear harvest continues Medford. Rains continue fruit rot damage to late canberries north Willamette Valley. Early apples Hood River Valley picked. Gala apple harvest complete Milton-Freewater; Golden, Red delicious started. Gravenstein apple harvest almost complete Willamette Valley. Cranberry harvest one month away Coos county; color, size good. Potato harvest east. Light frost Klamath Basin required local protection on spuds. Broccoli, sweet corn, snap bean harvest Willamette Valley. Milton-Freewater started lima bean harvest; continued spring seeded onions; preparing to seed Walla Walla sweet onions for next year. Livestock good to excellent. Some early calves weaned east. Range, pasture fair to good. Rains helped fall greenup, growth pastures, east. Hay supplies good for winter.

PENNSYLVANIA: Mild temperatures at beginning of week, cool by weekend, provided a near normal week. Precipitation below normal with extreme western into north central portions receiving greatest amount. Temperature 69°, 1° above normal. Extremes 36°; 89°. Precipitation 0.43 in., 0.41 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 49% short, 49% adequate, 2% surplus. Corn 90% silk, 97% 1988, 99% avg.; 47% dough, 69% 1988, 82% avg.; 10% dent, 26% 1988, 37% avg.; 0% mature, 3% 1988, 5% avg.; ensilage corn harvested 9% complete, 13% 1988. Corn 5% very poor, 10% poor, 22% fair, 39% good, 24% excellent. Soybean 1% very poor, 6% poor, 19% fair, 52% good, 22% excellent. Wheat planted 12% complete, 3% 1988. Oat harvest 95% complete, 98% 1988. Barley planted 14% complete, 2% 1988. Tobacco harvest 47% complete, 35% 1988. Potato harvest 33% complete, 29% 1988. Second cutting alfalfa 86% complete, 94% 1988. Third cutting alfalfa 42% complete, 67% 1988. Fourth cutting alfalfa 13% complete, 21% 1988. Second cutting clover-timothy 71% complete, 86% 1988. Quality of hay made good to fair. Feed from pastures average. Apple harvest 21% complete, 25% 1988. Peach harvest 73% complete, 69% 1988. Fall plowing 25% complete, 31% 1988. Activities: Harvesting hay, haylage, oats, potatoes, apples, peaches, vegetables, tobacco; fall plowing, planting; controlling weeds, insects; maintaining machinery.

PUERTO RICO: Rainfall 1.72 in. 0.10 in. below normal, 4.14 in. at Arecibo Observatory, 3.95 in. at Maunabo, 3.67 in. at Pico del Este-luquillo. San Juan WSFO mean temperature 82° plus 0.4 total rainfall 1.43 plus 1.23. Temperature 80 to 82° on Coast, 74 to 75° in Interior, Mean station temperature 65° at Cerro Maravilla to 85° at San Juan City. Extremes 52°; 95°.

SOUTH CAROLINA: Rainfall 0.75 in. across State. Temperatures 2 to 4° warmer than normal.

Days suitable for fieldwork 5.6. Soil moisture 29% short, 69% adequate, 2% surplus. Cotton 4% fair, 93% good, 3% excellent; 12% open bolls, 22% 1988, 36% avg. Soybeans 14% fair, 86% good; 86% blooming, 94% 1988, 94% avg.; 65% setting pods, 69% 1988, 70% avg.; 4% leaves turning, 5% 1988, 4% avg. Tobacco good, 80% harvested, 80% 1988, 88% avg.; 14% stalks destroyed, 13% 1988, 20% avg. Corn good, 88% matured, 92% 1988, 95% avg.; 28% harvested, 26% 1988, 39% avg. Sorghum good, 24% harvested, 15% 1988, 17% avg. Watermelons fair to good, 95% harvested, 96% 1988, 98% avg. Peanuts good, 6% harvested, 1% 1988, 2% avg. Hay, pasture fair.

SOUTH DAKOTA: Temperatures 1° below to 5° above normal. Extremes 32°; 102°. Growing season precipitation generally below normal; range 2.81 in. above normal to 6.90 in. below normal. Precipitation located mainly in the north; maximum 1.13 in.

Days suitable for fieldwork 5.6. Topsoil 46% critically short, 31% short, 22% adequate, 1% surplus. Subsoil 60% critically short, 30% short, 9% adequate, 1% surplus. Corn, sunflower good to fair, soybeans good, sorghum fair to poor. Major activities: Haying, cutting silage, working ground for fall seeding, moving cattle, fixing fence.

TENNESSEE: Temperatures slightly above normal, warmest west. Rain fell mainly at midweek, weekend. Precipitation above normal Plateau, northeast; below normal elsewhere.

Days suitable for fieldwork 4.3. Soil moisture 3% very short, 32% short, 62% adequate, 3% surplus. Corn 88% dented, 85% 1988, 91% avg.; 30% mature, 38% 1988, 47% avg.; 40% harvested silage, 36% 1988, 56% avg.; 4% harvested grain, 7% 1988, 8% avg.; 2% poor, 19% fair, 70% good, 9% excellent. Tobacco 92% topped, 86% 1988, 86% avg. Burley 48% harvested, 39% 1988, 48% avg. Dark fired 56% harvested, 33% 1988, 46% avg. Dark air-cured 54% harvested, 36% 1988, 45% avg. Tobacco, corn, sorghum harvests main activities.

TEXAS: High pressure dominated State weather, any significant rainfall limited to Panhandle, far west, backside of high pressure system. Thunderstorms coast result of sea breeze. Record breaking temperatures many parts south weekend. Most State above normal temperatures, southern high plains 1° below normal. Precipitation below normal. Above normal High Plains.

Crops: Corn excellent progress with recent rains. Silage cutting continued. Harvest good progress Blacklands, good yields. Harvest virtually complete south central, Upper coast. Corn 64% harvested, 66% 1988, 61% avg. Grain sorghum High Plains excellent progress Irrigation continued some fields, recent rainfall benefitted irrigated, dryland fields. Harvest Low Plains, Cross Timbers continued, good yields early planted crops. Fields planted later not doing as well. Harvest virtually complete Blacklands southward. Grain sorghum mature 65%, 59% 1988, 62% avg.; harvested 55%, 57% 1988, 57% avg. Cotton good

overall progress throughout State. Recent moisture beneficial to crop High Plains; hotter weather needed to speed crop maturity. Insect activity up High, Low Plains, spraying full swing. Cotton Low Plains needed moisture. Harvest Blacklands started, bolls opening under hot, dry weather. Pima cotton Trans-Pecos looking good, slight insect problems. Harvest virtually complete Coastal Bend, stalk destruction started. Cotton setting bolls 96%, 100% 1988, 99% avg.; harvest 12%, 14% 1988, 12% avg. Small grain planting underway many portions, High Plains making most progress. Dry conditions delayed seeding south, south central. Wheat planted 7%, 8% 1988, 6% avg. rice harvest good progress Upper Coast. Producers reporting few problems. Peanuts good progress, extreme heat caused some adverse effects. Harvest progressed well east, good yields. Irrigated fields south look good. Harvest early maturing soybeans continued northeast, above average yields. Fields High Plains good condition. Other crops: Peanuts harvested none, 2% 1988, 3% avg. Soybeans harvested 3%, 17% 1988, 8% avg. Sunflowers harvested 2%, 3% 1988, 2% avg. Oats planted 1%, 2% 1988, 2% avg.

Commercial Vegetables: Rio Grande Valley, peppers, tomatoes stress under hot, dry winds. Lettuce, celery planting continued. Eastern State, fall vegetables plantings started. Rain needed. High Plains, potato, onion harvest nearly complete. Harvest melons, carrots, cabbage continued. Trans-Pecos, melon harvest winding down. Land preparation onion planting started. Pecans plagued dry weather, insect infestations many portions. Dry weather caused premature nut drop.

Range and Livestock: Ranges, pastures improved High Plains, Trans-Pecos because recent rainfall. Pastures central, eastern portions fair, showing signs of moisture stress. Producers south, southwest provided supplemental feed because hot, dry weather stress pastures. Cattle fair to good shape most State.

UTAH: Precipitation mostly zero except occasional light shower. Temperatures 1° below normal.

Days suitable for fieldwork 7.0. Soil moisture 100% short. Dry weather continued. Alfalfa, small grain seeding full swing. Winter wheat 20% seeded, 9% 1988, 16% avg. Oats for grain 86% harvested, 86% 1988, 84% avg. Third cutting alfalfa hay 52% completed, 46% 1988, 31% avg. Salt Lake County growers into fourth cutting, rare fifth cutting possible. Corn in dough stage 75%, 82% 1988, 74% avg.; dent stage 28%, 38% 1988, 28% avg. Apple, pear harvest underway, peach harvest continued. Apples 14% picked, 4% 1988, 8% avg. Peaches 52% picked, 47% 1988, 47% avg. Storage onion harvest underway. Range feed very limited central, southern parts of State.

VIRGINIA: Temperatures near normal, 52 to 93°. Rainfall scarce, none to 1.50 in.

Days suitable for fieldwork 5.2. Topsoil 9% short, 81% adequate, 10% surplus. Corn 60% good, 40% excellent. Soybeans 9% fair, 63% good, 28% excellent. All tobacco 5% poor, 7% fair, 57% good, 31% excellent. Pastures 4% fair, 49% good, 47% excellent. Alfalfa 2% fair, 74% good, 24% excellent. Other hay 6% fair, 55% good, 39% excellent. Peanuts 12% fair, 88% good. Livestock 4% fair, 67% good, 29% excellent, graded feeder cattle sales in progress. Corn 70% dented, 53% 1988, 65% avg.; 42% mature, 26% 1988, 37% avg.; grain 6% harvested, 1% 1988, 5% avg.; silage 20% harvested, 11% 1988, 20% avg. Soybeans 94%

bloomed, 78% 1988, 91% avg.; 78% set pods, 54% 1988, 66% avg. Flue-cured tobacco 55% harvested, 30% 1988, 34% avg. Fire-cured 75% harvested, 42% 1988, 42% avg. Burley 21% harvested, 5% 1988, 14% avg., some blue mold. Sun-cured harvest in progress. Apple, sweet potato harvest in progress.

WASHINGTON: Temperatures normal to 7° below normal, east; 2° above normal to 2° below normal, west. Precipitation none to 0.70 in., east; none to 0.26 in., west.

Days suitable for fieldwork 5.2. Soil moisture 40% short, 57% adequate, 3% surplus. Range, pasture 25% short, 75% adequate. Hay, other roughage 5% short, 80% adequate, 15% surplus. Grain harvest neared completion. Fields were yet to be harvested, rain was hampering the final phases of the harvest. Farmers were preparing fields and planting fall cereal crops. Winter wheat harvested 90%, 99% 1988, 98% avg. Spring wheat harvested 88%, 98% 1988, 96% avg. Barley harvested 85%, 99% 1988, 98% avg. Other crops harvested: Potatoes 23%, 27% 1988, 25% avg; dry beans 5%, 12% 1988, 21% avg; corn silage 5%, 18% 1988, 15% avg; third cutting alfalfa hay 67%, 59% 1988, 64% avg. Major activities: Preparation for fall planting, seeding fall cereal crops, irrigation, cutting hay, harvest of peaches, nectarines, Bartlett pears, blueberries, early apples, vegetable seeds, carrots, leafy vegetables, sweet corn, dry peas, lentils, dry beans, hops, mint.

WEST VIRGINIA: Temperature 71°, 1 to 4° above normal. Extremes 48° Terra Alta; 90° Creston, Martinsburg. Precipitation 1.06 in.

Days suitable for fieldwork 3.8. Soil moisture 11% short, 57% adequate, 32% surplus. Corn good to excellent; 92% silked, 48% dough stage, 3% mature. Oats fair to good; 90% harvested. Tobacco fair; 79% topped, 12% harvested. Apples fair; harvest beginning. Peach harvest nearly complete. Hay good to fair; 1st cutting complete, 2nd cutting 48% complete. Farm activities: Topping, harvesting tobacco; harvesting hay, oats; clipping pastures; marketing cattle.

WISCONSIN: Temperature 67°, 2° above normal. Extremes 36°; 86°. Precipitation 0.30 to 2.30 in.

Days suitable for fieldwork 4.2. Soil moisture 38% short, 58% adequate, 4% surplus. Pasture 74% of normal, 45% 1988, 74% avg. General condition of crops 1% poor, 10% fair, 81% good, 8% excellent. Soybean 6% fair, 80% good, 14% excellent; 8% turned, 33% 1988, 0% avg. Corn 1% very poor, 3% poor, 7% fair, 66% good, 23% excellent; dent 26%, 78% 1988, 53% avg.; 4% mature, 18% 1988, 13% avg. Third cut hay 33% completed, 51% 1988, 41% avg. Early apple, tobacco harvests underway.

WYOMING: Temperatures above normal most of State, except extreme northwest. Precipitation below normal.

Days suitable for fieldwork 7.0. Topsoil 81% short, 19% adequate. Barley 15% mature, 5% 1988, 15% avg.; 85% harvested, 95% 1988, 85% avg. Spring wheat 10% mature, 0% 1988, 10% avg.; 90% harvested, 100% 1988, 90% avg. Oats 15% mature, 10% 1988, 15% avg.; 85% harvested, 90% 1988, 80% avg. Dry beans 75% leaves turning color, 90% 1988, 85% avg.; 10% windrowed, 50% 1988, 40% avg.; 0% combined, 25% 1988, 15% avg. Corn 20% milk, 15% 1988, 15% avg.; 55% dough, 45% 1988, 40% avg.; 25% dented, 35% 1988, 40% avg.; 0% mature, 5% 1988, 5% avg. Corn silage 10% harvested, 10% 1988, 10% avg. Potato 0% harvested, 10% 1988, 5%

International Weather and Crop Summary

August 1989

August 27 - September 2, 1989

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

HIGHLIGHTS

USSR ... In Western USSR, the first significant precipitation since early July over the southern Ukraine increases topsoil moisture for winter wheat planting and benefits immature crops. In the New Lands, weather conditions were mostly favorable for spring grain harvesting.

EUROPE ... Rain and cooler temperatures slow maturation of summer crops in the east. Scattered rain delays harvesting in the south.

SOUTH ASIA ... Widespread showers improve irrigation reserves across northern Pakistan and northern India.

EASTERN ASIA ... Widespread rain reduces dryness in southern China. Heavy rain causes flooding in sections of Japan and the Korean Peninsula.

SOUTHEAST ASIA ... Highly variable rainfall accompanies warmer-than-normal temperatures over Thailand.

SOUTH AMERICA ... In south-central Brazil, widespread rain favors wheat growth and coffee tree flowering. Dry weather returns to Argentina's wheat areas.

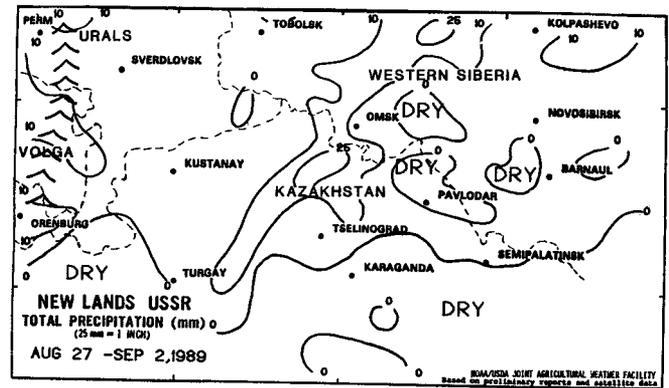
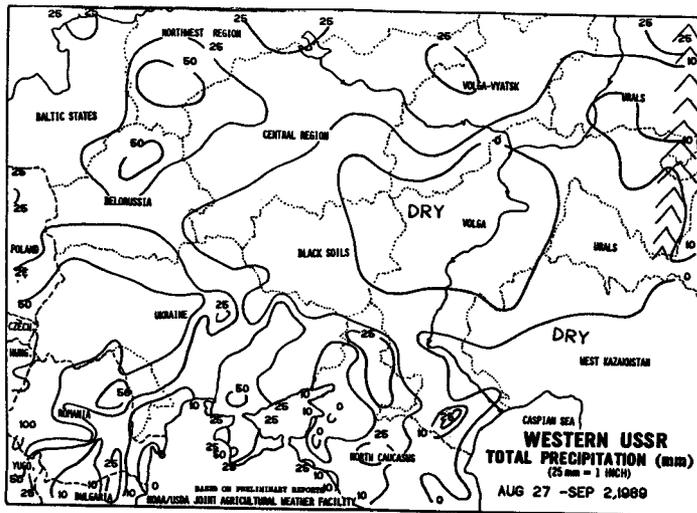
AUSTRALIA ... Moderate to heavy rain continues across the south. Cooler-than-normal temperatures cover most crop areas.

CANADA ... Showers sweep across the Prairies, hampering grain harvesting and possibly affecting grain quality.

MEXICO ... Substantial rain falls over the Southern Plateau corn belt and the northwest.

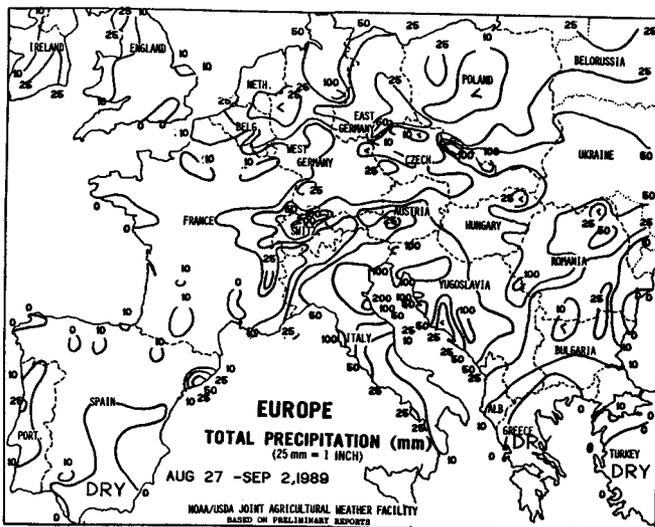
COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI	LO	AVG	DPART F/NRM	DPART F/NRM	
NORWAY	OSLO	18	10	22	4	14	0.0	110.9	12.7
SWEDEN	STOCKHOLM	20	11	27	4	16	-0.6	48.6	-22.2
FINLND	HELSINKI	19	10	26	4	14	-1.2	119.9	44.3
U KING	GLASGOW	18	11	23	4	15	-0.8	122.4	31.5
	EDINBURGH	19	11	25	3	15	0.8	88.1	14.1
	BIRMINGHAM	22	11	27	6	17	1.3	54.0	-18.1
	LONDON	24	11	28	6	18	1.7	28.6	-28.4
IRELND	DUBLIN	20	12	24	6	16	1.3	83.6	9.0
ICELND	REYKJAVIK	13	8	16	5	10	-0.4	70.5	15.2
DENMRK	COPENHAGEN	20	12	28	7	16	-1.1	123.2	57.2
LUXEMB	LUXEMBOURG	22	13	29	6	18	0.9	70.3	-3.2
SWITZL	ZURICH	23	14	31	6	18	1.6	128.6	-13.6
	GENEVA	27	14	35	7	21	2.4	26.6	-74.5
FRANCE	PARIS	25	13	31	7	19	1.3	42.2	-15.4
	STRASBOURG	26	14	34	6	20	1.8	29.4	-43.5
	BOURGES	26	14	32	8	20	1.1	56.4	-10.6
	BORDEAUX	28	16	31	8	22	2.4	50.4	-13.8
	TOULOUSE	29	17	34	8	23	2.4	52.3	4.7
	MARSEILLE	30	19	34	13	24	1.4	6.5	-19.1
SPAIN	VALLADOLID	31	15	36	10	23	2.2	34.0	24.1
	MADRID	34	17	41	13	26	1.9	6.3	-4.1
	SEVILLE	35	20	40	17	28	1.0	20.0	15.5
E GRMY	LEIPZIG	24	13	35	7	19	1.4	25.6	-33.8
	DRESDEN	24	13	34	6	19	0.8	62.0	-10.0
W GRMY	HAMBURG	22	12	30	7	17	0.6	109.1	25.2
	BERLIN	23	14	35	7	19	0.6	43.1	-22.0
	DUSSELDORF	25	15	33	8	20	1.5	27.6	-50.4
	STUTTGART	24	13	34	5	18	1.4	35.5	-63.1
	NURNBERG	24	13	34	4	19	1.5	52.2	-20.9
	MUNICH	23	12	32	4	18	1.1	71.8	-40.6
AUSTRI	VIENNA	24	15	32	11	20	0.3	69.5	7.5
	INNSBRUCK	24	13	32	4	18	1.3	75.1	-44.5
CZECH	PRAGUE	23	12	32	5	18	0.5	47.1	-18.7
POLAND	WARSAW	23	12	33	8	18	0.4	51.3	-4.4
	LODZ	24	13	35	7	18	1.6	32.0	-35.1
	KATOWICE	23	13	33	8	18	1.4	53.6	-37.3
	PRZEMYSL	22	14	31	8	18	0.7	106.7	28.8
HUNGAR	BUDAPEST	25	16	33	10	20	0.2	108.0	61.0
YUGOSL	SARAJEVO	26	12	32	5	19	1.5	91.7	14.7
ROMANI	BUCHAREST	30	16	35	10	23	1.1	20.2	-32.0
BULGAR	SOFIA	26	15	31	8	21	0.8	85.6	46.8
ITALY	MILAN	29	17	31	9	23	1.0	107.8	13.2
	VERONA	30	18	34	11	24	1.9	156.6	75.3
	VENICE	27	18	31	12	22	-0.2	117.4	41.1
	GENOA	28	22	32	16	25	0.8	119.4	65.6
	ROME	29	19	32	12	24	0.5	4.6	-22.6
	NAPLES	32	20	37	8	26	3.0	22.3	-34.8
GREECE	THESSALONIKA	32	19	34	13	25	-1.0	0.1	-19.9
	LARISSA	33	17	36	11	25	-1.8	8.7	-3.3
	ATHENS	32	23	35	18	27	-0.9	0.4	-4.9
TURKEY	ISTANBUL	29	20	33	16	25	1.4	9.7	-11.3
	ANKARA	31	14	34	11	22	-1.2	8.1	-28.9
CYPRUS	LARNACA	32	22	35	19	27	-0.9	0.1	-0.9
USSR	TALLINN	19	11	27	4	15	-0.4	117.9	48.5
	LENINGRAD	20	13	30	6	17	0.3	126.9	53.1
	KAUNAS	21	12	31	4	16	-0.2	66.0	2.9
	MINSK	20	12	30	7	16	-0.2	112.5	34.9
	KAZAN	21	12	27	3	16	-0.9	60.3	-3.6
	MOSCOW	21	12	29	3	17	-0.1	138.2	64.2
	SVERDLOVSK	18	10	24	1	14	-0.5	67.0	2.3
	OMSK	22	12	32	6	17	1.2	63.8	10.4
	KUSTANAY	24	13	30	1	18	0.6	30.1	-1.2
	KRASNOYARSK	22	9	31	3	16	0.6	31.8	-38.8
	NOVOSIBIRSK	23	12	29	6	17	0.9	5.4	-47.9
	BARNAUL	24	12	30	5	18	1.4	6.3	-46.3
	KHABAROVSK	27	17	34	11	22	2.8	43.5	-78.2
	VLADIVOSTOK	25	19	32	16	22	2.3	154.5	1.1
	KIEV	24	15	32	10	20	1.0	42.8	-28.2
	LVOV	23	12	31	0	18	0.6	82.6	-1.5
	KIROVOGRAD	29	16	34	12	22	2.0	15.0	-29.1

COUNTRY CITY		TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY CITY		TEMPERATURE (C)					PRECIPITATION (MM)		
August 1989		AVG	AVG	HI	LO	DPART	DPART			August 1989		AVG	AVG	HI	LO	DPART	DPART		
		MAX	MIN	MAX	MIN	AVG	F/NRM	TOTAL	F/NRM			MAX	MIN	MAX	MIN	AVG	F/NRM	TOTAL	F/NRM
USSR	ODESSA	27	19	32	13	23	1.8	4.0	-29.2	TANZAN	DAR ES SALAAM	28	18	30	6	23	-0.8	28.4	3.3
	YALTA	29	21	31	15	25	1.4	27.6	1.7	GABON	LIBREVILLE	28	21	28	18	25	0.1	14.7	8.2
	VORONEZH	25	12	31	6	19	0.0	61.1	2.4	TOGO	LOME	28	23	30	15	26	0.8	47.1	21.0
	SARATOV	24	15	30	7	20	0.4	23.2	-16.2	B FASO	OUAGADOUGOU	31	23	35	20	27	0.4	277.4	27.6
	KHARKOV	26	15	32	9	20	0.7	23.9	-59.4	IVRY C	ABIDJAN	28	22	30	14	25	0.7	26.7	-2.4
	VOLGOGRAD	27	16	33	12	22	-0.7	56.5	26.1	MOZAMB	MAPUTO	29	17	35	13	23	3.3	11.6	-4.6
	ROSTOV	29	18	33	14	24	1.4	0.4	-41.1	ZAMBIA	KABWE	26	12	31	8	19	0.3	0.1	0.1
	ASTRAKHAN	31	19	37	14	25	1.4	57.1	41.5	ZIMBAB	HARARE	23	11	28	7	17	1.1	9.7	7.7
	KRASNODAR	31	18	34	14	24	1.3	4.1	-51.8	S AFRI	PRETORIA	24	10	29	3	17	3.3	3.0	-2.5
	ORENBURG	26	13	34	3	19	-0.4	66.5	38.2	KROONSTAD		23	3	29	-4	13	1.8	4.1	-7.9
	TSELINOGRAD	26	13	37	2	19	1.7	15.9	-18.0	JOHANNESBURG		22	6	26	-2	14	1.5	1.0	-5.3
	KARAGANDA	26	12	36	6	19	1.9	28.7	-0.1	BETHAL		23	3	27	-8	13	1.3	10.1	0.1
	TBILISI	32	20	36	14	26	2.0	39.0	-6.0	DURBAN		25	14	33	8	20	2.2	7.4	-43.3
	TASHKENT	35	18	39	15	27	1.6	0.1	-2.9	CAPE TOWN		19	8	28	1	13	1.2	98.7	19.5
	ASHKhabAD	38	22	41	18	30	1.1	0.1	-0.7	CANADA	TORONTO	25	14	33	7	20	0.0	39.7	-37.1
SYRIA	DAMASCUS	37	16	39	12	27	-0.1	0.1	0.1	MONTREAL		25	14	31	5	20	-0.1	120.1	28.2
ISRAEL	JERUSALEM	29	18	34	14	23	-0.3	0.1	0.1	WINNIPEG		26	13	38	5	19	1.1	32.5	-42.7
PAKIST	KARACHI	31	26	35	23	29	-0.2	4.1	-49.5	REGINA		26	13	38	6	19	1.4	60.0	15.3
INDIA	AMRITSAR	34	24	36	20	29	-1.0	39.1	-144.9	SASKATOON		25	12	35	6	18	1.0	51.2	13.5
	NEW DELHI	34	27	38	24	31	1.0	116.2	-131.9	LETHBRIDGE		23	11	32	4	17	-0.6	92.2	45.0
	AHMEDABAD	31	25	34	23	28	-0.1	267.0	47.5	CALGARY		21	10	29	6	16	0.3	61.0	5.5
	INDORE	28	22	33	20	25	0.1	168.3	-122.5	EDMONTON		21	12	29	3	17	0.3	49.5	-28.4
	CALCUTTA	33	26	36	24	30	0.5	192.3	-95.8	VANCOUVER		21	13	25	11	17	0.1	63.8	22.7
	VERAVAL	30	26	31	23	28	0.5	47.0	-136.0	MEXICO	GUADALAJARA	25	17	29	15	21	0.4	514.4	303.1
	BOMBAY	30	25	31	23	27	0.2	660.5	0.0	MEXICO CITY		24	14	26	11	19	2.1	92.0	-11.4
	POONA	27	21	28	19	24	-0.4	85.6	-30.4	ACAPULCO		33	25	35	23	29	0.0	17.7	-254.3
	BEGAMPET	29	22	31	20	26	0.1	157.6	-8.6	BERMUD	ST. GEORGES	31	26	34	22	28	1.1	229.3	83.2
	MADRAS	35	26	38	23	31	1.1	53.8	-102.2	BAHAMA	NASSAU	33	24	34	22	28	0.5	116.6	-70.4
	MANGALORE	28	23	30	22	26	-0.5	1037.1	436.8	CUBA	HAVANA	31	25	33	21	28	0.5	151.1	51.8
H KONG	HONG KONG	32	27	34	25	29	1.2	200.4	-213.0	JAMAIC	KINGSTON	34	26	35	24	30	1.3	49.4	-47.1
N KREA	PYONGYANG	27	18	32	14	23	-1.7	157.6	-74.3	P RICO	SAN JUAN	**	27	**	24	**	**	200.2	150.3
S KREA	SEOUL	30	22	35	18	26	0.6	318.9	94.9	GUADEL	RAIZET	31	24	33	22	28	0.6	111.8	-32.5
JAPAN	SAPORO	27	20	33	16	24	2.2	147.6	13.0	MARTNQ	LAMENTIN	31	24	33	22	27	1.4	118.0	-125.8
	NAGOYA	33	24	35	21	28	1.5	80.5	-89.8	BARBAD	BRIDGETOWN	31	26	32	23	28	0.9	22.5	-125.7
	TOKYO	31	25	33	21	28	0.8	385.5	248.2	TRINID	PORT OF SPAIN	33	23	34	22	28	1.9	42.2	-191.8
	YOKOHAMA	30	24	33	22	27	0.9	401.7	269.5	COLOMB	BOGOTA	19	6	21	1	13	-0.3	52.0	14.5
	KYOTO	32	23	35	20	27	0.6	272.0	112.1	VENEZU	CARACAS	33	25	35	24	29	1.6	8.0	-42.9
	OSAKA	33	25	35	22	29	0.6	213.1	109.9	F GUIA	CAYENNE	32	22	33	20	27	1.0	55.5	-109.3
THAILN	PHETCHABUN	32	24	34	17	28	0.7	103.8	-92.1	BRAZIL	FORTALEZA	29	23	31	21	26	-0.2	58.4	28.1
	BANGKOK	33	25	38	23	29	0.9	182.0	-15.9	RECIFE		28	21	29	19	24	0.4	319.8	151.5
MALAYS	KUALA LUMPUR	32	24	34	23	28	1.6	140.6	-1.9	BELO HORIZONTE		25	16	28	13	20	0.2	27.7	17.9
VIETNM	HANOI	32	26	36	15	29	0.8	200.8	-142.1	CAMPO GRANDE		28	16	34	7	22	0.9	122.0	93.0
CHINA	HARBIN	28	15	35	8	21	-0.2	8.1	-89.1	FRANCA		25	13	30	7	19	-0.2	28.4	17.5
	HAMI	32	15	37	11	24	-1.6	6.6	3.1	RIO DE JANEIRO		24	19	30	16	22	-0.3	27.2	-23.4
	LANCHOW	27	16	32	12	21	0.4	46.4	-39.0	LONDRINA		24	12	29	6	18	-0.4	108.0	50.7
	BEIJING	30	21	34	15	25	0.9	104.2	-108.1	SANTA MARIA		22	11	31	2	16	0.9	128.0	2.0
	TIENTSIN	31	22	36	16	26	0.5	19.3	-143.1	PORTO ALEGRE		21	12	31	5	16	0.4	43.8	-70.2
	LHASA	21	10	25	5	15	-0.4	144.6	12.3	PERU	LIMA	19	15	21	14	17	0.7	1.5	-0.3
	KUNMING	25	16	29	12	20	1.0	118.7	-83.6	BOLIVI	LA PAZ	14	-2	17	-4	6	-1.9	11.0	-4.6
	CHENGCHOW	29	21	36	16	25	-1.1	55.1	-64.2	CHILE	SANTIAGO	16	5	25	-3	10	1.0	59.8	11.3
	YEHCHANG	30	23	36	20	27	-1.1	312.2	136.3	ARGENT	IGUAZU	23	12	32	4	18	**	234.9	**
	HANKOW	31	24	37	22	28	-0.9	165.1	45.6	FORMOSA		25	14	33	6	19	2.5	149.8	101.8
	CHIHKIANG	32	22	38	19	27	0.3	65.3	-58.2	CERES		23	9	33	2	16	2.3	24.5	0.4
	SHANGHAI	30	25	37	21	27	-0.3	222.8	96.8	CORDOBA		22	7	33	-2	15	2.6	0.1	-10.7
	NANCHANG	33	26	37	22	29	-0.1	42.3	-60.9	RIO CUARTO		19	7	29	1	13	2.3	0.5	-16.4
	TAIPEI	32	27	35	23	29	1.4	239.0	-46.0	ROSARIO		20	8	30	1	14	2.7	29.1	-9.5
	CANTON	34	26	40	22	30	1.7	124.7	-103.0	BUENOS AIRES		18	9	26	1	14	3.3	167.5	104.6
	NANNING	33	25	37	22	29	1.8	100.3	-115.3	SANTA ROSA		16	5	26	-2	11	1.5	56.2	39.6
CNRY I	LAS PALMAS	29	23	35	20	26	2.0	0.1	0.1	TRES ARROYOS		15	6	23	0	11	2.4	81.0	39.2
MOROCC	CASABLANCA	28	22	35	19	25	2.2	2.1	1.2	MIDW I	MIDWAY ISLAND	30	24	32	23	27	1.1	84.5	-81.2
	MARRAKECH	37	22	42	16	29	1.8	13.3	11.2	N CALD	NOUMEA	23	17	25	15	20	0.2	80.8	11.2
ALGERI	ALGER	34	23	42	18	28	3.3	0.9	-3.3	FIJI	NAUSORI	26	20	29	17	23	0.4	61.9	-136.5
	BATNA	34	19	39	13	26	2.4	8.0	-12.1	SAMOA	PAGO PAGO	29	24	31	19	27	0.7	9.1	-170.8
TUNISI	TUNIS	34	22	39	17	28	2.0	8.3	-0.2	TAHITI	PAPEETE	29	22	31	20	26	1.2	22.7	-22.4
NIGER	NIAMEY	33	24	37	21	28	0.8	229.2	31.0	N ZEAL	AUCKLAND	15	9	20	3	12	0.3	92.3	-32.6
MALI	TIMBUKTU	35	25	41	21	30	0.0	126.1	46.1	PA N G	PORT MORESBY	28	23	30	21	26	-0.4	55.8	28.1
	BAMAKO	31	22	34	21	26	0.6	339.7	36.0	AUSTRAL	DARWIN	30	20	32	17	25	-1.0	0.1	-2.8
MAURIT	NOUAKCHOTT	33	25	42	21	29	0.8	53.3	12.8	MOREE		16							

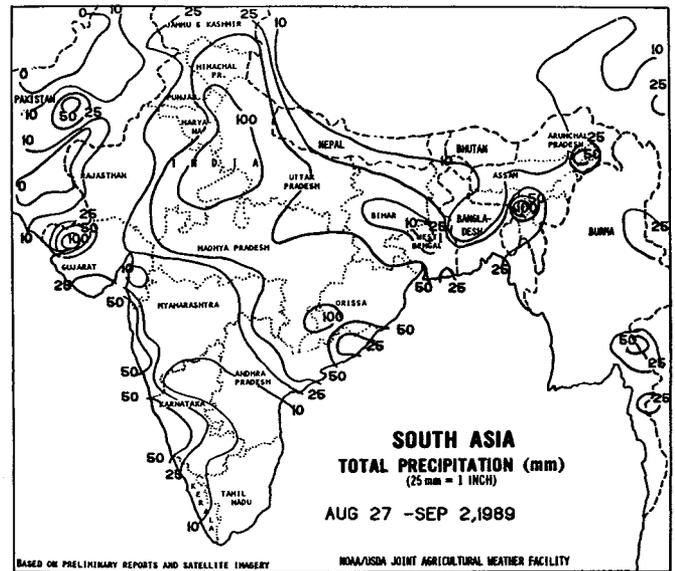
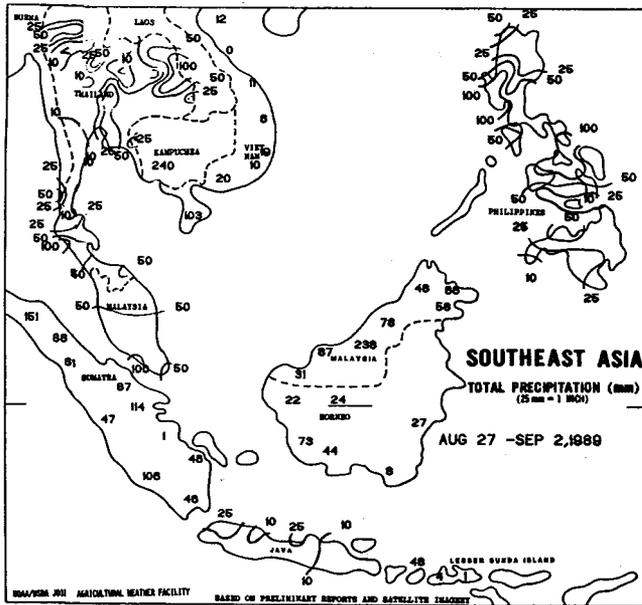


USSR ... In Western USSR, winter grain planting progressed southward while spring grain harvesting neared completion. September is the optimum month for planting winter grains in the Ukraine and the North Caucasus. The first significant precipitation since early July covered crop areas in the southern Ukraine. Rainfall amounts ranging from 20 to 61mm increased topsoil moisture for upcoming wheat planting and benefited immature crops. The rain likely came too late to benefit most corn and sunflowers which were maturing. Widespread rain covered the Baltic States, Belorussia, and the western Ukraine, delaying fieldwork. Rainfall amounts generally ranged from 14 to 46mm in the Baltic States and Belorussia, with moderate to heavy rain (50-96mm) covering the western Ukraine. Elsewhere, mostly dry weather in the southern portion of the Central Region, the Black Soils Region, and the Volga helped fieldwork.

In the New Lands, spring grain harvesting was well underway over much of the region. Reports indicated about 70 percent of grains and pulses (excluding corn) were harvested over all of USSR by August 28. The bulk of spring grains grown in the New Lands still remained to be harvested, however. Light, scattered precipitation (amounts generally less than 10mm) over the Urals, Kazakhstan, and West Siberia caused only brief harvest delays. Unseasonably warm, dry weather in extreme eastern areas helped to accelerate crop maturation. The first occurrence of widespread frost covered spring grains in the northern Urals and the western portion of West Siberia on September 2, about 1 week earlier than normal. Minimum temperatures ranging from -2 to 1 degree Celsius (C) had minimal effect on mature spring grains.

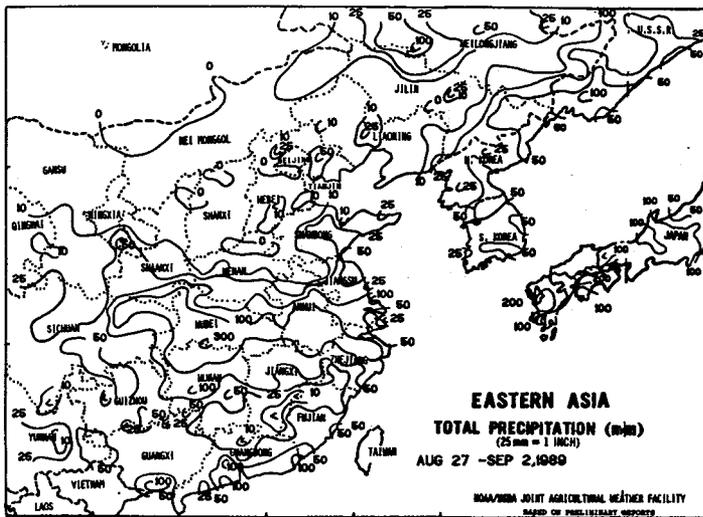


EUROPE ... A strong cool front brought widespread moderate to heavy rain (10-50mm, with scattered amounts in excess of 50mm) to sections of Benelux, West and East Germany, Czechoslovakia, Poland, Austria, and Hungary early in the week, increasing soil moisture to more normal levels but delaying late harvest of spring planted grains. Heavy rain (25-75mm, with isolated amounts up to 112mm) followed late in the week over much of the Balkans except for Greece, which remained dry. Cooler-than-normal temperatures (2-5 degrees below normal) over much of eastern Europe slowed maturation and drydown of maturing summer crops. In the west, scattered mostly light showers (less than 10mm) covered crop areas of Great Britain and France, while residual tropical moisture brought scattered rain (10-80mm, with isolated amounts up to 118mm), localized flooding, and summer crop harvest delays to sections of Spain and Italy.

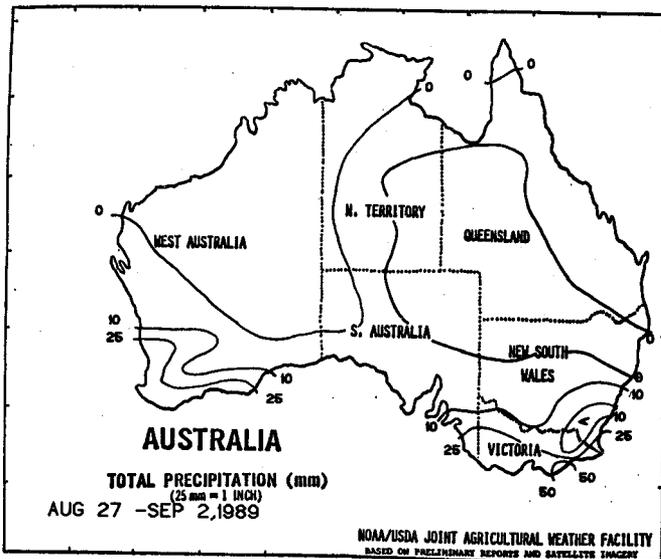


SOUTHEAST ASIA ... Scattered showers dotted Thailand's rainfed rice areas, producing highly variable rainfall amounts (3-50mm or more) across the primary crop regions. Moderate to heavy rain (40-100mm or more) occurred in the northeast and from the central corn belt southward to the Gulf of Thailand, benefiting immature crops and boosting irrigation reserves. Elsewhere, moderate to heavy accumulations were widely scattered, with most of the Northern Hills Region receiving less than 25mm. Temperatures across Thailand continued to average above normal. In the Philippines, moderate to heavy rain (50-100mm or more) continued over western and southern Luzon, northern Mindanao, and a large portion of the central islands. Dry, warm weather covered Luzon's northern grain regions, favoring maturing grains.

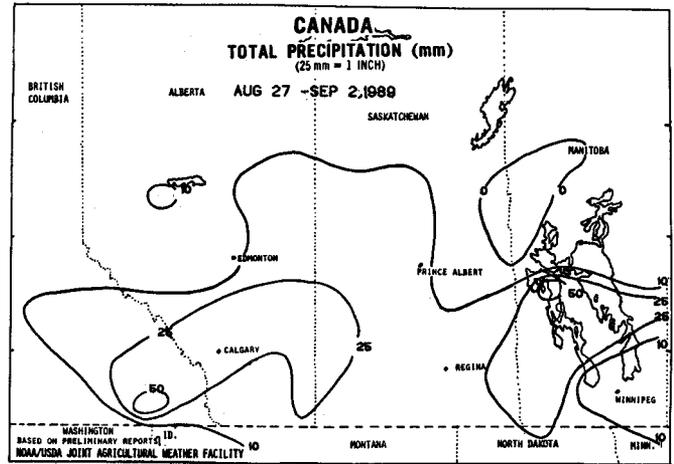
SOUTH ASIA ... Moderate to heavy rain (25-50mm or more) covered most northern growing regions of Pakistan and India, improving irrigation reserves. The heaviest rain (50-100mm or more) covered eastern Punjab and western Uttar Pradesh and extended southward to southwestern Madhya Pradesh, benefiting immature crops. The monsoon withdrawal usually begins during September in the northwest, but more rain will be needed for the remainder of the rainy season across the north for winter wheat planting. Light to moderate rain (15-45mm) covered most crop regions from Gujarat to central Maharashtra, but pockets of minimal rain continued further south. Hot weather persisted over the driest regions of the southeast coast. Seasonable rain (50-100mm or more) maintained favorable growing conditions from northern Andhra Pradesh and eastern Maharashtra to eastern Orissa. In contrast, rainfall continued below normal from West Bengal eastward, with only local areas of Assam and Bangladesh receiving more than 50mm.



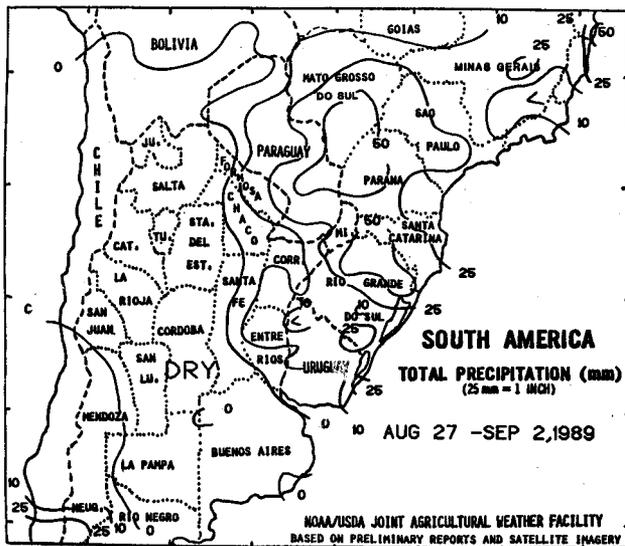
EASTERN ASIA ... Heavy rain (25-75mm, with scattered rainfall in excess of 125mm) covered much of southern China and the Yangtze Valley, helping to reduce dryness in interior southern crop areas but causing localized flooding and delays in early single crop rice harvest. Heavy rain (50-150mm, with isolated amounts greater than 150mm) also caused flooding and early harvest delays across much of Honshu and Hokkaido in Japan early in the week due to Tropical Storm Roger. A slow moving frontal system brought further heavy rain (25-75mm) and possible flooding to southern Japan and much of the Korean Peninsula late in the week. In Manchuria, scattered showers (10-40mm) caused early corn harvest delays in growing areas of Liaoning, Jilin, and Heilongjiang. Weekly mean temperatures were above normal in all but southern sections of Japan and South Korea, where they were below normal.



AUSTRALIA ... A frontal system brought moderate to heavy rain (10-35mm) to crop areas of Western Australia, southeastern South Australia, Victoria, and southern New South Wales and southern Queensland remained dry. Soil moisture for early vegetative growth of winter grains remained adequate to surplus in most crop areas. Cooler-than-normal temperatures (1-2 degrees C below normal) over much of Australia slowed winter crop growth rates and kept southeastern crops semidormant. In the northeast, scattered, light showers (less than 10mm) caused only minor delays in sugarcane harvest.



CANADA ... Light to moderate rain (10-25mm or more) covered nearly all Prairie growing areas, causing harvest delays and, in some areas, possible reductions in crop quality. Heaviest rain (25-57mm) fell early in the week over western Manitoba and much of southern and eastern Saskatchewan, including areas in northeastern Saskatchewan that received excessive rainfall late last week. Local thunderstorms and moderate winds accompanied the rain in the south, likely causing local damage. Only light rain (8-11mm) covered the Peace River Valley, following last week's unfavorably heavy rain. All Prairie crop regions need a return to dry weather, including northern areas where crops were in or nearing the maturity stage.



SOUTH AMERICA ... In south-central Brazil, two showery periods, early and again late in the week, produced widespread rain throughout the region. The heaviest rain (50-86mm) fell in northern Rio Grande do Sul, western Parana, and southern Mato Grosso do Sul and included bordering areas of southern Paraguay. The moisture soaked developing wheat and continued to improve soils for corn and soybean planting. Showers in the northern coffee areas also favored flowering trees. In Argentina, mostly dry weather prevailed throughout the wheat areas. Showers were confined to Entre Rios and extreme northeastern portions of the country. Temperatures averaged near to slightly below normal for the week, with lowest minimum temperatures falling 1-3 degrees C below freezing. Moisture is generally favorable for wheat growth and early summer crop land preparation, except for limited reserves in northwestern areas.

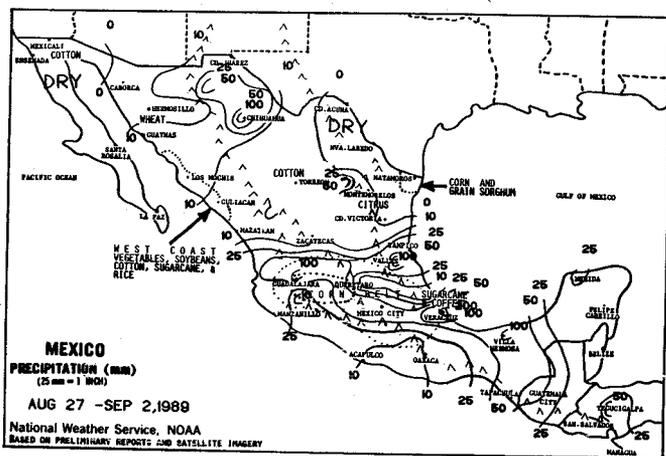
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Managing Editor Douglas Le Comte
Meteorologists Tom Heddinghaus
Vilhelm Bjerknes, Bob Stefanski, Wes Byrd,
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U.S. DEPARTMENT OF AGRICULTURE
Economics Management Staff
Editor Sharon Lee
National Agricultural Statistics Service
Agricultural Statistician . . . Tom Kurtz (202) 447-2157
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MEXICO ... Significant shower activity covered much of southern Mexico, including the Southern Plateau corn belt. In the Plateau, weekly rainfall averaged 25-60mm throughout most of the corn belt, with isolated heavier amounts ranging from 111mm in the west to 205mm at Veracruz on the east coast. A narrow area, stretching east to west, in northeastern portions of the Plateau missed the substantial moisture with weekly rainfall averaging less than 10mm. Locally heavy showers (76-138mm) fell in the northwest, benefiting irrigation reservoirs, while showers produced about 10-15mm of rain along the west coast farming region. Dry weather persisted in the drought-affected northeast.

(Continued from p. 14)

central coast area of California. Broccoli and cauliflower transplanting continued in the Westside area. Fall potato harvest was expected to begin soon in Siskiyou County. Onion and potato harvests were active in Idaho. In North Dakota, potato digging was 1% complete, 9 points behind normal. Summer potato harvest was 45% complete in Colorado.

PASTURES AND LIVESTOCK: Rain improved pasture condition in the western Corn Belt. Pastures were mostly good in the Delta and the East. Livestock was in good to excellent condition.

(Continued from p. 22)

avg. Sugarbeet harvest will start mid September. 1990 winter wheat 20% seeded, 15% 1988, 30% avg.; 5% emerged, small amount 1988, 5% avg. Alfalfa second-cutting 80% complete, 95% 1988, 85% avg.; third-cutting 5% complete, 45% 1988. Livestock fair to good. 90% livestock feed obtained from pastures. Hay, roughage supplies very short to short 60% State.

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