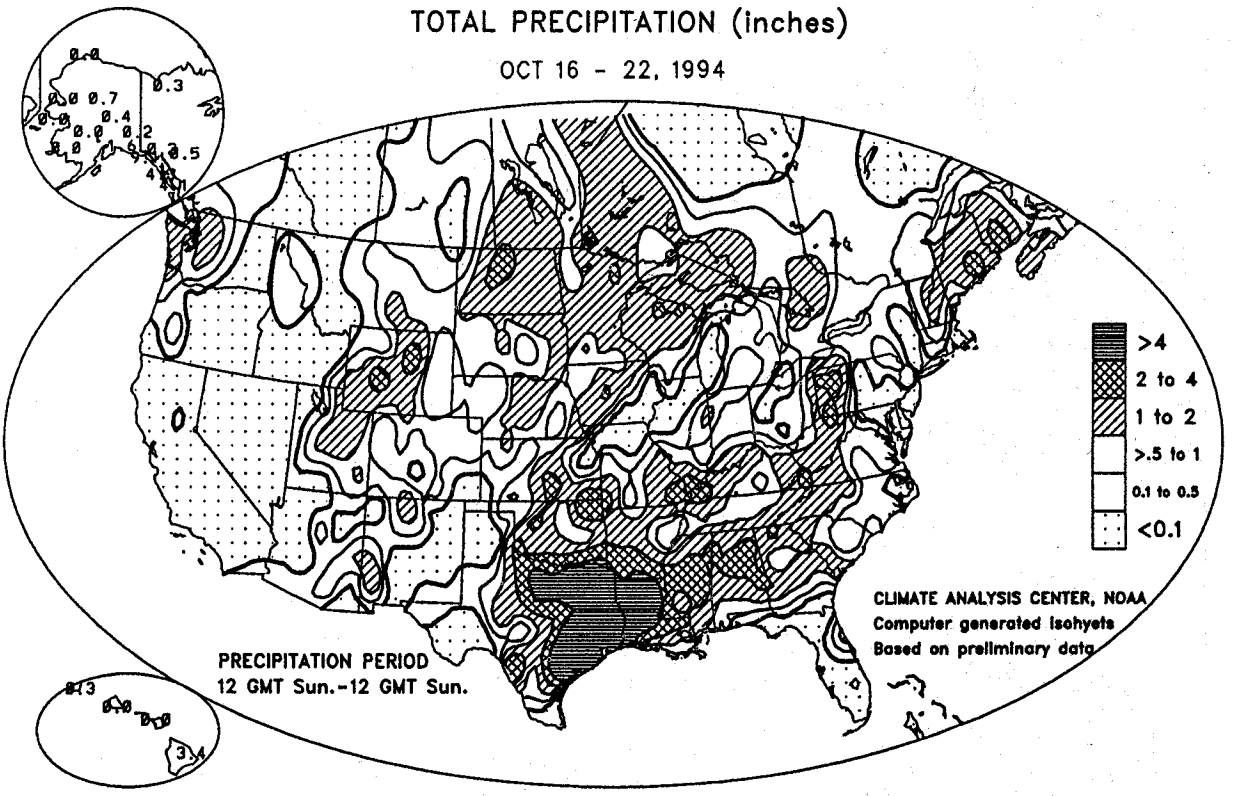
WEEKLY WEATHER AND CROP BULLETIN

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

Volume 81, No. 43 | Washington, D.C. | October 25, 1994



HIGHLIGHTS

October 16 - 22, 1994

Inundating rainfall, with local storm totals in excess of 20 inches, persisted in **southeastern Texas** through Tuesday, causing major flooding in the **San Jacinto and Trinity River basins**. One of the flood-event mechanisms--a strong storm over the **central Rockies**--lifted slowly northeastward, reaching **northern Minnesota** by midweek. Snowfall diminished across the **Rockies** early in the week, while showers overspread the **central Plains**, favoring winter wheat establishment. Locally heavy rain drenched the **North Central States** during the storm's traversal. East of the storm center, a strong surge of unusually warm air pushed temperatures to 12°F above normal in the **upper Midwest**. In contrast, weekly temperatures averaged up to 8°F below normal in the **Southwest**. After midweek, additional tropical energy crossed the **South Central States**, producing heavy rains from **northeastern Texas**

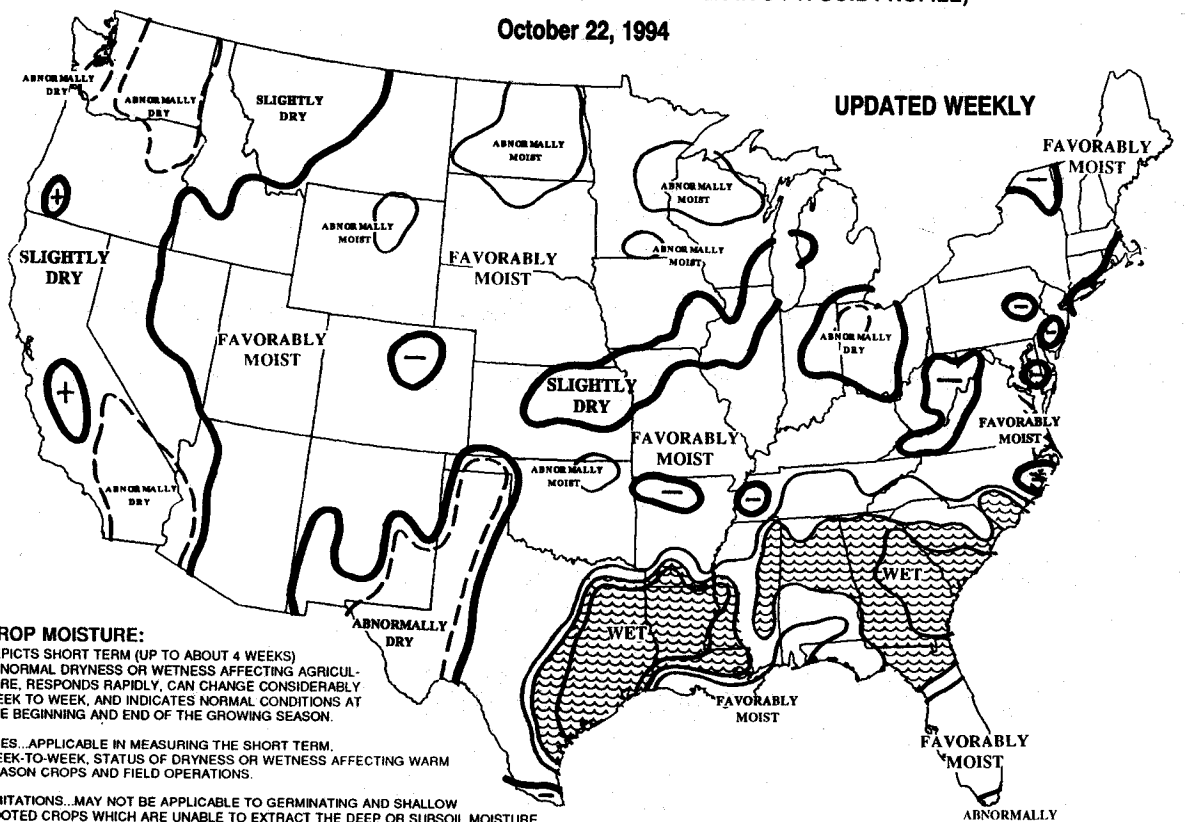
(Continued to p. 8)

Contents

	Page
Highlights & Total Precipitation Map	1
Crop Moisture Maps	2
Temperature Departure & Extreme Minimum Temperature Maps	3
A Day-by-Day Analysis of Texas Rainfall	**4**
National Weather Data for Selected Cities	5
National Agricultural Summary	8
Crop Progress and Condition Tables	9
State Summaries of Weather and Agriculture	10
International Weather and Crop Summary	15
Sahelian Rainy Season Summary	**19**
Subscription and Mailing Permit Information & **USDA Weather and Crop Handbook Published**	20

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

October 22, 1994



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.

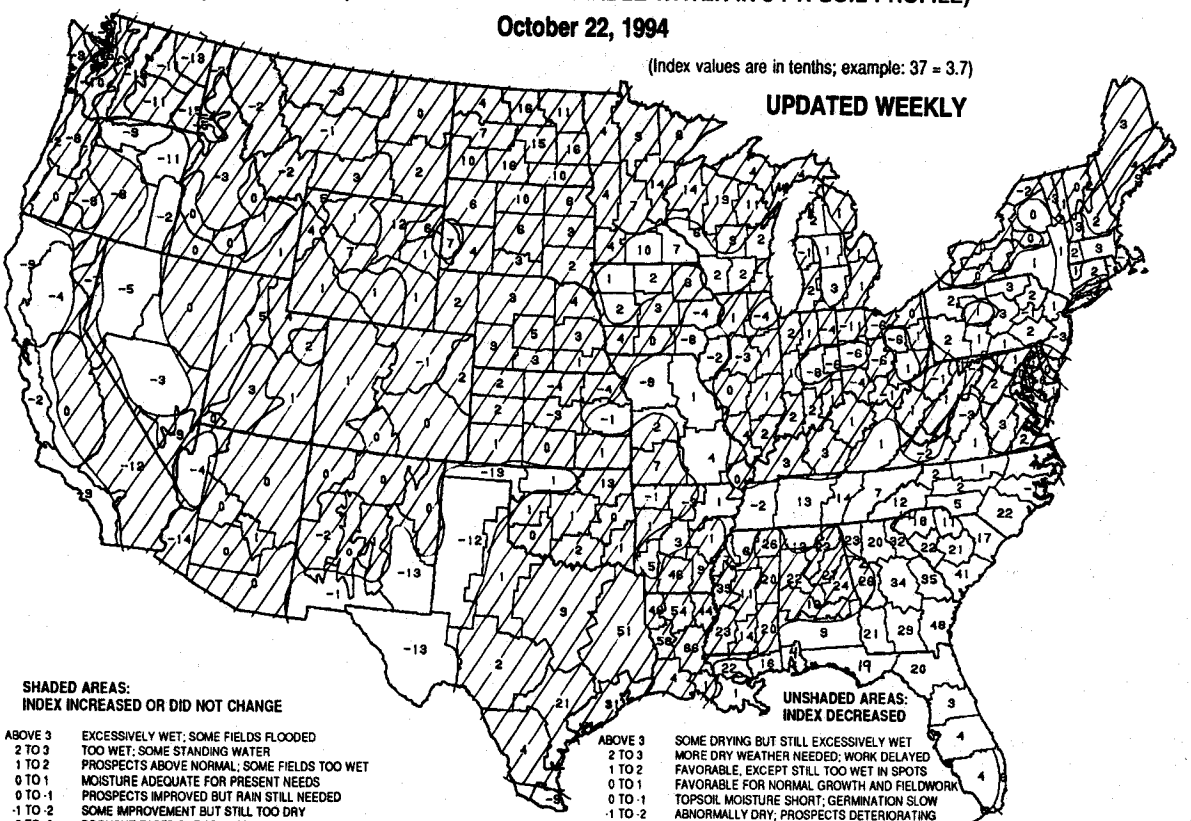
LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) 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
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)

October 22, 1994

(Index values are in tenths; example: 37 = 3.7)



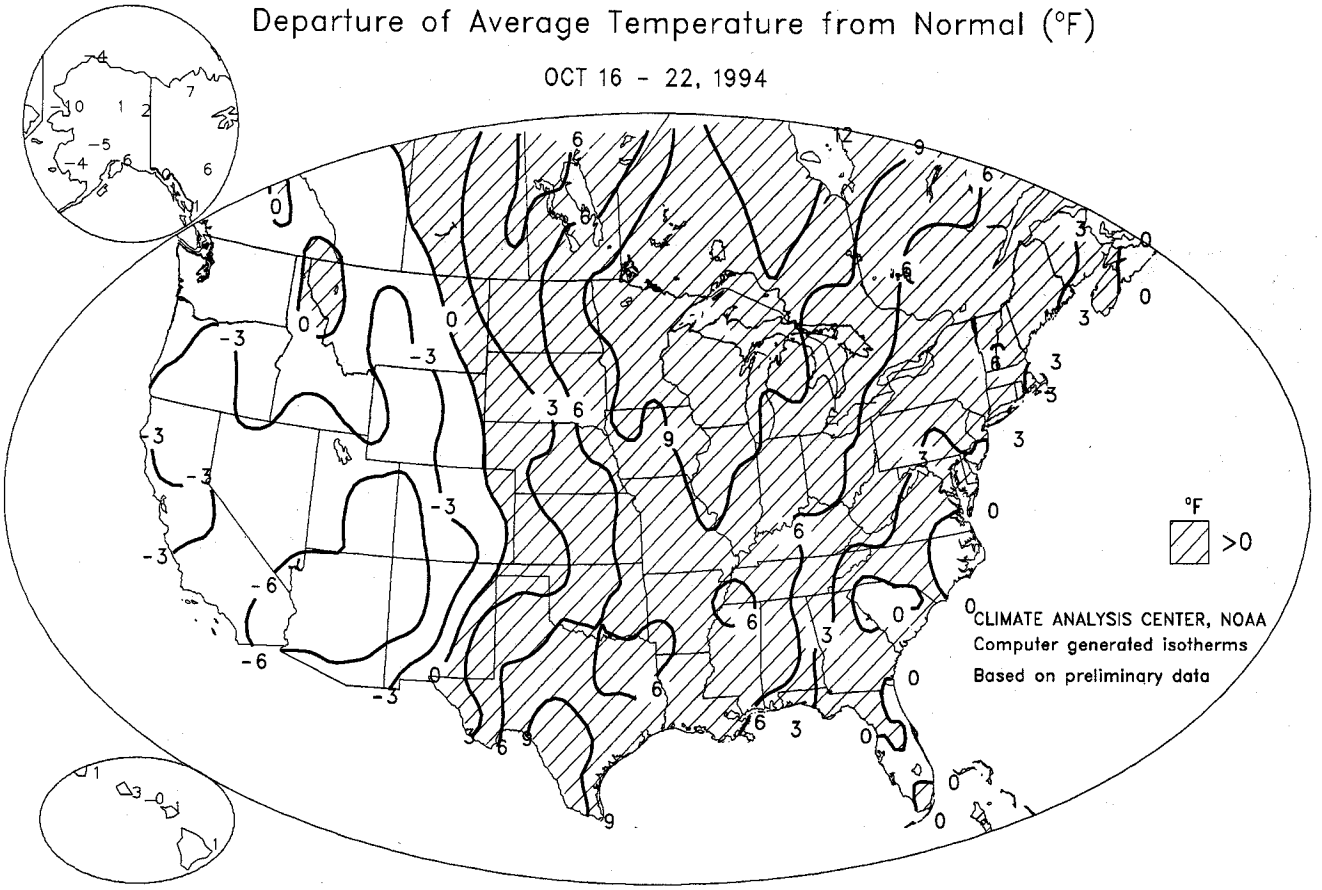
SHADED AREAS:
INDEX INCREASED OR DID NOT CHANGE

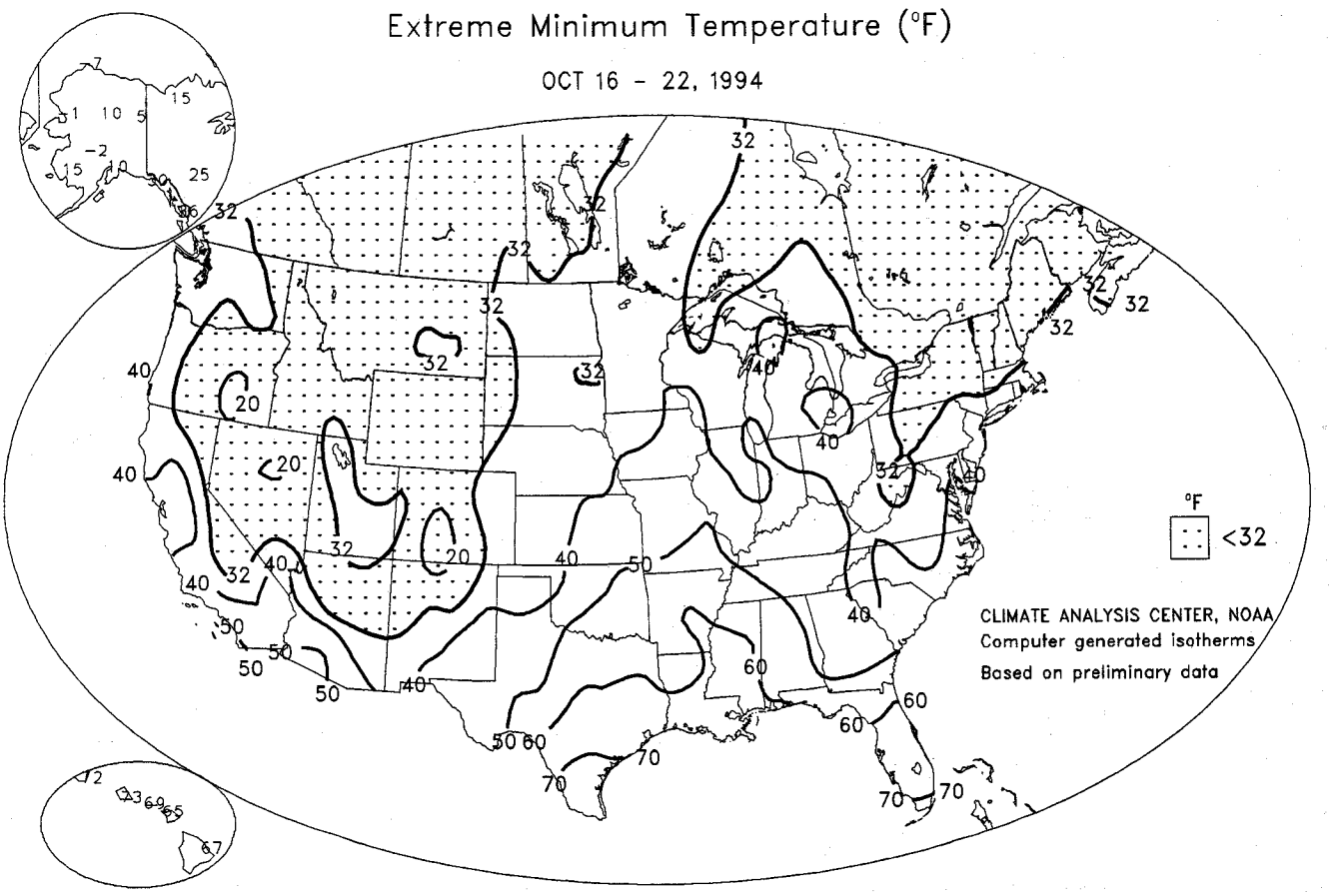
ABOVE 3	EXCESSIVELY WET; SOME FIELDS FLOODED
2 TO 3	TOO WET; SOME STANDING WATER
1 TO 2	PROSPECTS ABOVE NORMAL; SOME FIELDS TOO WET
0 TO 1	MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1	PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2	SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3	DROUGHT EASED BUT STILL SERIOUS
-3 TO -4	DROUGHT CONTINUES; RAIN URGENTLY NEEDED
BELOW -4	NOT ENOUGH RAIN; STILL EXTREMELY DRY

UNSHADED AREAS:
INDEX DECREASED

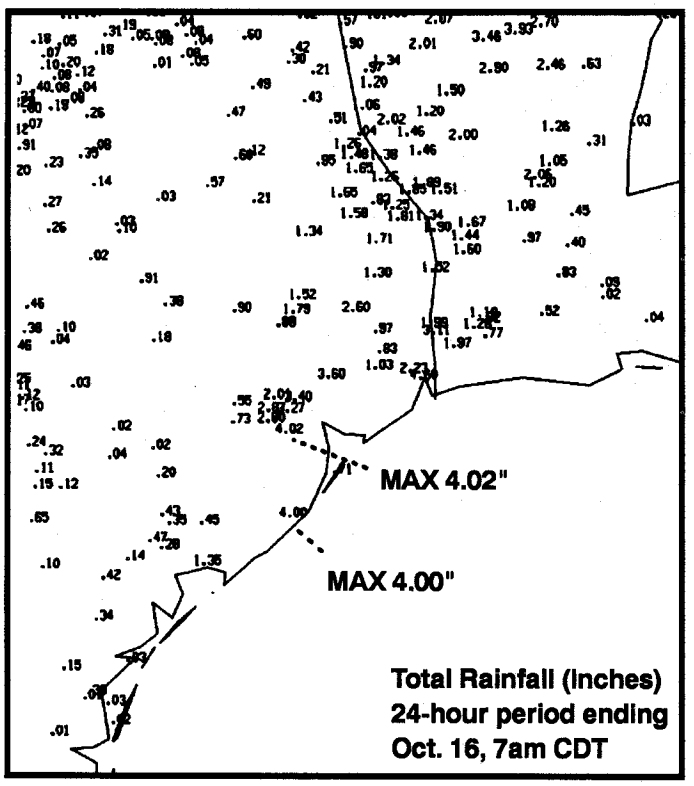
ABOVE 3	SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3	MORE DRY WEATHER NEEDED; WORK DELAYED
1 TO 2	FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1	FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1	TOPSOIL MOISTURE SHORT; GERMINATION SLOW
-1 TO -2	ABNORMALLY DRY; PROSPECTS DETERIORATING
-2 TO -3	TOO DRY;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

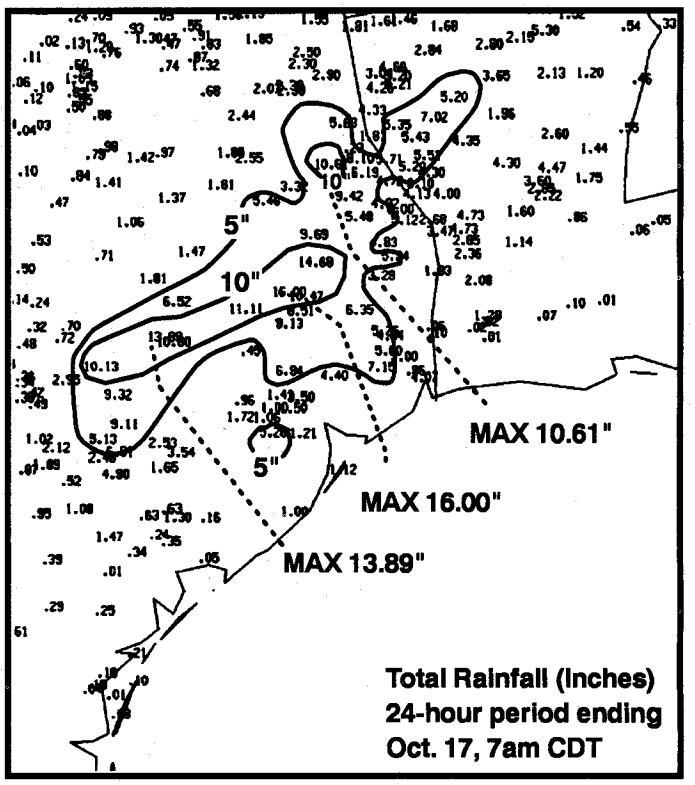
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY — Based on preliminary reports

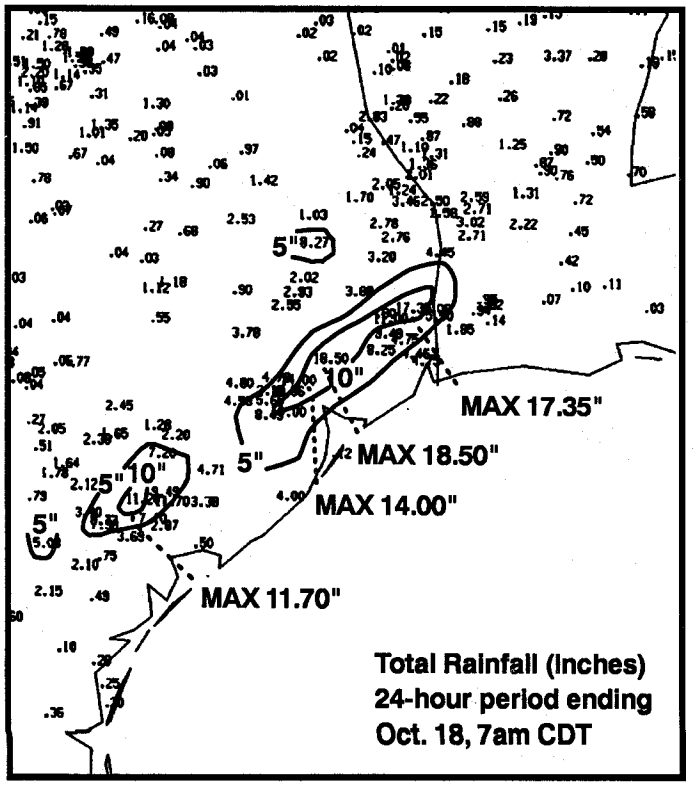

Departure of Average Temperature from Normal (°F)
OCT 16 - 22, 1994
°F
>0
CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

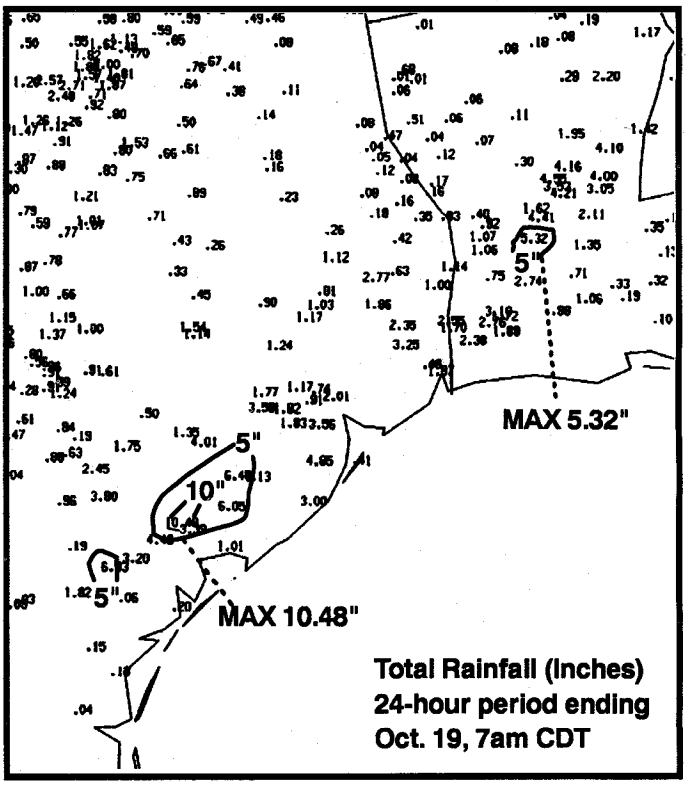

Extreme Minimum Temperature (°F)
OCT 16 - 22, 1994
°F
<32
CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

A Day-by-Day Analysis of Texas Rainfall









National Weather Data for Selected Cities

Weather Data for the Week Ending October 22, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	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	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	75	61	81	53	68	6	2.1	1.5	1.2	10.8	183	53.1	120	93	60	0	0	4	2
MOBILE	81	64	86	59	73	5	.8	.2	.7	7.6	94	47.7	89	93	52	0	0	3	1
MONTGOMERY	79	60	85	52	69	6	1.9	1.3	1.8	10.4	185	50.8	112	91	57	0	0	2	1
AK ANCHORAGE	33	20	39	10	27	-6	.6	.1	.6	2.6	62	8.8	67	82	56	0	7	2	1
BARROW	13	2	22	-7	8	-4	T	-.1	T	.8	81	4.0	104	92	84	0	7	0	0
FAIRBANKS	21	9	24	-2	15	-8	.4	.2	.2	1.3	81	7.4	83	91	75	0	7	5	0
JUNEAU	46	40	51	36	43	2	2.1	.4	.7	14.6	117	41.0	96	99	80	0	0	6	2
KODIAK	41	30	46	21	36	-4	2.8	1.2	1.9	17.6	144	71.5	135	86	49	0	5	5	2
NOME	25	10	30	4	18	-9	T	-.3	T	2.9	82	14.5	114	88	61	0	7	0	0
AZ PHOENIX	77	54	84	48	66	-7	T	-.1	T	2.3	171	5.1	86	74	30	0	0	0	0
PRESCOTT	63	33	71	28	48	-6	.0	-.3	.0	2.2	79	11.0	68	83	58	0	2	0	0
TUCSON	78	49	86	42	64	-5	.5	.3	.5	2.2	90	6.1	61	84	28	0	0	1	1
YUMA	83	57	88	52	70	-5	.0	-.1	.0	1.4	290	2.1	89	60	17	0	0	0	0
AR FORT SMITH	77	61	81	58	69	8	.8	.0	.4	3.2	56	42.3	129	99	67	0	0	4	0
LITTLE ROCK	74	63	83	61	69	7	.5	-.4	.4	4.7	65	45.3	117	96	55	0	0	4	0
CA BAKERSFIELD	78	47	79	42	62	-4	.0	-.1	.0	.1	26	4.3	101	57	22	0	0	0	0
EUREKA	59	44	62	39	52	-3	.0	-.7	.0	.3	12	19.7	82	92	71	0	0	0	0
FRESNO	77	46	79	45	62	-2	.0	-.1	.0	1.0	180	7.3	97	76	24	0	0	0	0
LOS ANGELES	72	55	74	53	64	-3	.0	-.1	.0	.1	29	6.4	76	77	35	0	0	0	0
REDDING	76	43	82	39	60	-3	.0	-.5	.0	.2	10	15.2	70	72	23	0	0	0	0
SACRAMENTO	75	45	79	43	60	-3	.0	-.3	.0	T	0	6.7	57	83	26	0	0	0	0
SAN DIEGO	72	56	74	54	64	-3	.0	-.1	.0	T	2	8.2	122	82	45	0	0	0	0
SAN FRANCISCO	68	47	74	46	58	-3	.0	-.3	.0	.5	50	11.1	84	91	45	0	0	0	0
CO DENVER	61	38	68	36	49	-1	.4	.2	.4	1.9	95	9.3	69	91	42	0	0	1	0
GRAND JUNCTION	58	38	67	35	48	-7	.2	-.1	.2	2.1	109	5.7	67	86	45	0	0	2	0
PUEBLO	66	34	72	28	50	-2	.4	.3	.4	1.8	134	14.5	143	89	24	0	2	1	0
CT BRIDGEPORT	67	50	71	35	58	4	.2	-.5	.2	5.0	95	33.6	100	77	45	0	0	2	0
HARTFORD	68	44	72	31	56	5	.6	-.2	.5	6.2	98	42.3	120	86	43	0	1	3	1
DC WASHINGTON	72	49	73	44	61	2	T	-.7	T	3.2	58	32.8	104	87	42	0	0	1	0
FL PANAMA CITY	79	63	81	59	71	4	.0	-.8	.0	12.3	150	47.1	85	96	68	0	0	0	0
DAYTONA BEACH	82	64	86	60	73	0	1.0	.1	1.0	9.3	99	49.7	120	95	54	0	0	1	1
JACKSONVILLE	80	60	84	55	70	-1	T	-.8	T	19.1	191	58.9	136	99	61	0	0	0	0
KEY WEST	84	75	85	73	79	0	.4	-.6	.4	17.0	185	38.7	115	79	59	0	0	1	0
MIAMI	85	73	86	71	79	1	.1	-1.2	.0	17.1	143	59.8	119	77	49	0	0	2	0
ORLANDO	83	65	86	63	74	0	.4	-.1	.4	10.2	128	54.7	127	96	50	0	0	1	0
TALLAHASSEE	82	59	86	56	71	3	.1	-.5	.1	21.5	278	82.7	148	96	51	0	0	1	0
TAMPA	85	64	86	63	74	0	.0	-.4	.0	9.6	126	43.6	110	97	54	0	0	0	0
WEST PALM BEACH	83	69	85	65	76	-2	T	-1.7	T	13.8	107	60.0	117	86	52	0	0	1	0
GA ATLANTA	75	58	82	51	67	6	.6	-.1	.3	10.1	182	54.9	132	87	52	0	0	2	0
AUGUSTA	77	49	81	39	63	0	1.3	.7	1.3	8.5	168	41.1	108	97	52	0	0	1	1
MACON	76	53	79	43	64	0	1.4	.9	1.2	8.3	193	54.3	147	99	56	0	0	3	1
SAVANNAH	79	57	84	49	68	2	1.1	.6	1.1	26.1	417	61.0	140	96	49	0	0	1	1
HI HILO	85	70	86	67	77	2	3.4	1.2	1.2	29.4	197	137.3	138	93	73	0	0	6	4
HONOLULU	89	76	90	73	82	3	T	-.6	T	1.1	50	13.1	91	75	55	1	0	0	0
KAHULUI	88	71	92	65	79	1	.0	-.3	.0	1.1	103	10.6	73	73	52	1	0	0	0
LIHUE	83	75	84	72	79	2	.4	-.7	.4	5.0	95	25.3	82	80	67	0	0	1	0
ID BOISE	63	35	69	28	49	-2	.0	-.2	.0	.7	53	5.7	63	83	32	0	1	0	0
LEWISTON	60	42	63	36	51	0	T	-.2	T	.5	37	6.8	69	74	38	0	0	1	0
POCATELLO	56	35	62	32	46	-1	.1	-.1	.1	1.8	120	6.9	72	92	48	0	3	1	0
IL CHICAGO	72	52	78	41	62	11	.2	-.4	.1	2.0	36	22.3	75	86	40	0	0	2	0
MOLINE	74	52	79	40	63	11	.1	-.6	.0	1.9	31	24.5	73	89	44	0	0	2	0
PEORIA	74	52	78	40	63	10	.2	-.4	.1	2.8	48	17.8	58	88	48	0	0	3	0
QUINCY	72	54	74	45	63	9	.1	-.6	.0	1.8	25	16.0	48	82	50	0	0	2	0
ROCKFORD	71	50	77	37	61	10	T	-.6	T	6.5	109	30.3	98	97	54	0	0	1	0
SPRINGFIELD	74	53	77	44	64	9	.2	-.4	.2	2.0	39	28.8	98	88	43	0	0	1	0
IN EVANSVILLE	75	52	79	46	64	6	1.6	.9	1.2	5.0	97	27.4	74	94	47	0	0	4	1
FORT WAYNE	71	46	81	37	59	7	.5	-.1	.4	2.2	50	23.7	84	95	48	0	0	2	0
INDIANAPOLIS	72	51	79	42	61	8	.3	-.3	.2	2.9	61	26.4	81	87	46	0	0	2	0
SOUTH BEND	70	48	79	39	59	8	.7	.0	.7	6.4	110	29.1	92	94	50	0	0	2	1
IA DES MOINES	70	52	75	43	61	9	.6	-.1	.4	4.1	70	24.1	80	93	51	0	0	2	0
SIOUX CITY	69	49	75	37	59	8	.3	-.1	.2	6.6	151	22.9	98	92	53	0	0	3	0
WATERLOO	68	51	76	40	59	10	1.3	.7	1.1	5.6	102	31.6	106	92	51	0	0	3	1
KS CONCORDIA	71	47	75	43	59	4	.1	-.3	.1	2.1	47	15.3	58	92	47	0	0	2	0
DODGE CITY	72	45	76	39	58	2	.4	.1	.2	2.3	81	16.0	81	89	39	0	0	3	0
GOODLAND	67	37	73	35	52	1	.4	.2	.4	2.1	92	13.4	80	91	43	0	0	1	0
TOPEKA	72	51	77	43	61	6	.1	-.6	.1	2.0	33	21.5	69	96	47	0	0	2	0
WICHITA	72	53	77	47	63	4	2.0	1.4	1.3	3.5	57	19.3	63	96	59	0	0	2	2
KY BOWLING GREEN	75	51	79	44	63	7	.2	-.5	.2	3.3	56	45.3	112	98	53	0	0	1	0
LEXINGTON	71	51	78	43	61	6	.9	.4	.8	3.2	64	38.8	107	88	52	0	0	3	1
LOUISVILLE	72	52	80	45	62	6	1.2	.5	.7	4.8	96	28.9	80	94	52	0	0	2	1
LA BATON ROUGE	81	68	85	63	75	7	1.1	.4	.7	9.2	125	55.0	110	100	72	0	0	3	1
LAKE CHARLES	83	70	87	65	77	8	2.2	1.4	1.9	6.6	77	35.6	80	98	75	0	0	4	1
NEW ORLEANS	83	69	87	65	76	8	.4	-.2	.2	7.9	103	46.0	90	94	60	0	0	3	0
SHREVEPORT	78	64	85	59	71	7	4.5	3.7	2.9	8.6	133	43.5	111	98	71	0	0	6	2

Based on 1961-90 normals.

Weather Data for the Week Ending October 22, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	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	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	55	37	63	29	46	4	.7	.0	.4	3.9	70	31.5	109	89	50	0	2	3	0
PORTLAND	60	44	63	27	52	4	.5	-.4	.3	7.2	125	34.2	102	88	59	0	1	3	0
MD BALTIMORE	72	46	75	40	59	4	T	-.7	T	4.2	77	37.9	114	90	44	0	0	0	0
SALISBURY	72	42	74	34	57	0	.0	-.8	.0	3.7	60	33.4	89	95	41	0	0	0	0
MA BOSTON	63	50	68	40	56	2	.1	-.7	.0	4.8	89	37.7	117	81	56	0	0	4	0
CHATHAM	58	48	60	40	53	0	T	-.9	T	2.4	38	35.1	100	86	65	0	0	0	0
MI ALPENA	65	45	72	35	55	9	.4	-.1	.3	2.7	59	26.2	109	96	61	0	0	2	0
DETROIT	68	48	76	43	58	8	.4	-.1	.3	3.3	76	25.5	96	93	55	0	0	2	0
FLINT	67	47	75	40	57	8	.3	-.1	.2	4.5	88	27.4	110	95	58	0	0	2	0
GRAND RAPIDS	68	48	77	38	58	10	.4	-.2	.4	4.1	65	38.4	132	93	52	0	0	2	0
HOUGHTON LAKE	65	48	69	38	57	11	.2	-.3	.1	2.5	51	24.2	103	90	57	0	0	3	0
LANSING	66	46	76	40	56	8	.6	.0	.4	4.3	73	28.7	110	99	59	0	0	2	0
MARQUETTE	61	46	68	35	54	11	1.3	.5	.7	4.3	64	21.4	74	96	65	0	0	4	1
MUSKEGON	66	48	73	37	57	8	.1	-.5	.1	4.0	67	27.0	106	94	60	0	0	2	0
SAULT ST. MARIE	58	47	66	40	53	8	1.0	.3	.8	3.2	53	23.9	89	99	50	0	0	5	1
MN ALEXANDRIA	61	47	68	37	54	9	2.0	1.5	.9	6.0	137	18.0	78	99	65	0	0	4	2
DULUTH	57	47	68	38	52	10	1.4	.9	.5	7.8	137	27.6	105	89	60	0	0	5	0
INT'L FALLS	61	46	69	38	54	12	1.6	1.2	.7	5.4	116	21.3	97	95	65	0	0	6	1
MINNEAPOLIS	64	52	70	43	58	10	2.2	1.7	1.0	9.3	214	27.6	110	93	56	0	0	4	2
ROCHESTER	63	49	72	40	56	9	.6	.1	.4	5.2	100	28.9	109	94	61	0	0	3	0
MS GREENWOOD	77	63	81	61	70	7	1.5	.7	.7	7.1	122	39.8	94	98	69	0	0	3	2
JACKSON	78	65	85	61	71	9	1.1	.3	.7	6.4	122	49.8	116	95	68	0	0	5	1
MERIDIAN	79	65	86	61	72	9	2.3	1.6	1.4	7.0	125	55.7	123	88	60	0	0	3	2
MO CAPE GIRARDEAU	73	55	78	47	64	7	2.2	1.5	1.7	6.4	113	35.4	96	96	50	0	0	3	1
COLUMBIA	71	54	74	45	63	8	.6	-.2	.2	3.7	58	30.4	95	96	62	0	0	3	0
KANSAS CITY	71	52	77	47	62	6	T	-.7	T	3.2	44	22.7	68	93	55	0	0	2	0
SAINT LOUIS	75	59	78	52	67	9	.9	.3	.8	3.3	66	27.6	91	91	47	0	0	3	1
SPRINGFIELD	72	57	78	49	65	8	.9	.1	.5	6.2	83	40.0	111	93	46	0	0	4	1
MT BILLINGS	55	40	65	37	48	-1	1.0	.8	1.0	3.4	152	12.3	93	80	48	0	0	2	1
GLASGOW	53	37	62	27	45	0	.4	.3	.3	1.9	129	9.4	93	95	68	0	2	2	0
GREAT FALLS	49	34	58	29	42	-5	.4	.2	.3	1.5	81	9.3	68	87	53	0	3	2	0
HAVRE	53	32	61	27	42	-3	.3	.2	.3	.9	58	6.6	65	93	60	0	4	1	0
HELENA	53	36	62	29	44	0	.2	.0	.1	1.2	74	6.8	66	90	48	0	1	2	0
KALISPELL	50	30	53	22	40	-1	.1	-.1	.1	1.4	72	8.4	64	92	57	0	5	3	0
MILES CITY	56	40	66	34	48	1	.7	.5	.3	2.7	139	9.0	71	95	59	0	0	3	0
MISSOULA	54	36	58	25	45	2	.3	.1	.3	1.1	64	9.8	87	88	50	0	2	3	0
NE GRAND ISLAND	70	44	76	36	57	6	.5	.2	.4	2.9	75	20.2	88	95	52	0	0	2	0
LINCOLN	70	45	75	35	58	5	.2	-.3	.1	1.3	26	17.3	67	99	52	0	0	2	0
NORFOLK	70	46	77	37	58	8	.3	-.1	.2	3.7	99	26.4	115	94	44	0	0	2	0
NORTH PLATTE	67	39	73	34	53	5	1.2	1.0	.7	3.2	139	17.5	97	94	40	0	0	2	2
OMAHA	70	49	77	39	60	7	.8	.3	.5	6.3	115	27.2	101	97	60	0	0	2	1
SCOTTSBLUFF	59	35	69	31	47	-1	.4	.2	.4	3.2	192	14.2	102	94	45	0	1	2	0
VALENTINE	64	38	73	31	51	0	.2	.0	.2	.7	22	16.5	80	86	42	0	1	2	0
NV ELY	56	27	65	24	41	-3	T	-.2	T	1.4	85	7.5	87	87	34	0	7	1	0
LAS VEGAS	75	49	80	44	62	-5	.0	-.1	.0	.4	85	1.2	37	46	18	0	0	0	0
RENO	67	31	74	27	49	0	.0	-.1	.0	.4	64	3.6	64	78	22	0	4	0	0
WINNEMUCCA	61	25	68	22	43	-5	.0	-.1	.0	.6	78	5.4	86	90	30	0	7	0	0
NH CONCORD	65	40	67	22	52	6	.8	.1	.8	4.4	88	29.3	102	96	43	0	3	3	1
NJ ATLANTIC CITY	71	41	76	33	56	2	.0	-.6	.0	3.9	80	36.5	112	93	39	0	0	0	0
NM ALBUQUERQUE	63	40	71	35	51	-4	.4	.2	.4	2.3	139	8.7	114	81	37	0	0	2	0
CLOVIS	75	48	80	42	62	5	T	-.3	T	1.1	34	9.7	61	67	18	0	0	0	0
ROSWELL	79	50	84	46	64	3	.0	-.2	.0	1.7	61	7.2	63	69	23	0	0	0	0
NY ALBANY	66	42	69	29	54	5	.1	-.5	.1	2.9	58	30.5	105	95	45	0	2	3	0
BINGHAMTON	61	43	67	33	53	5	.4	-.2	.4	3.3	61	36.3	122	90	52	0	0	1	0
BUFFALO	65	45	73	31	55	5	.4	-.3	.2	3.9	69	28.9	96	90	44	0	1	3	0
NEW YORK	69	54	73	45	61	5	.3	-.3	.3	3.3	61	36.4	107	71	43	0	0	2	0
ROCHESTER	65	43	69	31	54	4	.4	-.2	.2	3.3	70	23.3	91	90	46	0	2	2	0
SYRACUSE	63	43	68	28	53	3	.4	-.3	.3	3.2	52	32.2	104	94	54	0	2	3	0
NC ASHEVILLE	69	42	72	37	55	0	.8	-.2	.6	9.5	125	51.2	111	99	53	0	0	3	1
CHARLOTTE	73	49	79	44	61	1	1.3	.6	1.0	4.5	77	32.4	91	89	44	0	0	3	1
GREENSBORO	72	44	77	39	58	1	.2	-.6	.2	2.3	37	30.9	87	96	45	0	0	2	0
HATTERAS	72	56	78	49	64	-1	.3	-.9	.3	18.9	214	58.1	129	91	47	0	0	1	0
NEW BERN	76	49	79	43	63	0	.2	-.4	.2	6.1	83	32.3	69	95	41	0	0	1	0
RALEIGH	73	45	76	37	59	0	.2	-.5	.2	6.5	125	33.7	98	95	41	0	0	1	0
WILMINGTON	76	50	79	42	63	0	.1	-.6	.1	15.2	163	50.8	104	98	42	0	0	1	0
ND BISMARCK	59	41	69	32	50	6	1.3	1.2	1.2	8.4	384	17.1	120	93	67	0	1	3	1
FARGO	63	47	69	34	55	10	1.3	.9	.8	5.2	159	22.0	124	92	65	0	0	4	1
GRAND FORKS	61	46	65	37	54	10	1.6	1.3	.7	4.6	141	21.0	125	95	62	0	0	5	2
WILLISTON	57	41	65	33	49	5	.2	.0	.1	2.4	124	14.6	117	94	64	0	0	4	0
OH AKRON-CANTON	68	47	75	40	57	6	.4	-.1	.4	2.4	47	33.9	113	88	42	0	0	1	0
CINCINNATI	72	50	80	42	61	7	.8	.1	.5	2.0	42	32.5	96	90	51	0	0	3	1
CLEVELAND	70	47	79	36	59	7	.1	-.5	.1	2.6	50	23.9	81	93	48	0	0	1	0
COLUMBUS	71	46	78	40	59	8	.5	.0	.5	2.3	48	26.2	85	96	45	0	0	2	0
DAYTON	72	48	79	42	60	7	.1	-.4	.1	1.6	38	28.2	94	87	45	0	0	1	0

Based on 1961-90 normals.

Weather Data for the Week Ending October 22, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTRME 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	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	72	45	80	38	59	9	.2	-.3	.2	1.4	33	23.0	86	98	47	0	0	2	0
YOUNGSTOWN	68	42	75	31	55	5	.2	-.4	.2	4.6	87	31.9	104	94	43	0	1	1	0
OK OKLAHOMA CITY	75	58	81	50	66	6	.4	-.3	.3	3.7	58	20.4	70	99	63	0	0	4	0
TULSA	74	59	82	52	67	6	1.2	.4	.9	7.0	95	40.8	119	100	69	0	0	3	1
OR ASTORIA	57	40	60	34	49	-3	1.1	-.3	.9	4.4	68	40.6	93	97	69	0	0	3	1
BURNS	60	22	66	15	41	-3	T	-.2	T	.3	25	3.2	43	80	28	0	7	0	0
MEDFORD	67	36	71	31	51	-2	.0	-.4	.0	1.0	58	6.1	52	94	34	0	1	0	0
PENDLETON	61	41	65	37	51	0	T	-.2	T	.8	66	8.7	102	80	39	0	0	2	0
PORTLAND	61	43	64	38	52	-2	.2	-.5	.1	1.5	45	16.2	68	95	47	0	0	2	0
SALEM	61	39	66	34	50	-1	.3	-.4	.3	2.3	68	18.3	73	95	49	0	0	2	0
PA ALLENTOWN	71	42	75	32	56	4	.1	-.5	.1	3.2	53	40.7	115	95	44	0	1	1	0
ERIE	66	49	76	40	57	5	.3	-.5	.3	4.9	69	33.3	101	88	50	0	0	2	0
HARRISBURG	68	42	71	36	55	2	.2	-.5	.2	2.9	52	38.5	118	93	44	0	0	1	0
PHILADELPHIA	71	49	73	44	60	7	T	-.7	T	1.8	28	39.0	105	82	40	0	0	0	0
PITTSBURGH	69	45	76	35	57	6	.2	-.3	.1	4.1	89	35.4	117	82	39	0	0	2	0
SCRANTON	65	42	67	34	54	3	.1	-.6	.1	5.9	112	35.3	118	96	47	0	0	2	0
RI PROVIDENCE	66	49	70	38	58	5	T	-.8	T	4.2	70	34.5	97	82	47	0	0	2	0
SC CHARLESTON	77	55	81	47	66	0	.3	-.3	.3	19.2	278	60.1	133	94	48	0	0	2	0
COLUMBIA	77	46	81	39	62	0	.3	-.4	.3	7.0	119	42.1	99	94	37	0	0	2	0
FLORENCE	77	48	82	42	63	0	.1	-.5	.1	6.8	129	35.7	95	96	44	0	0	1	0
GREENVILLE	71	46	77	39	59	-1	.9	.0	.7	5.9	86	44.6	105	94	49	0	0	2	1
SD ABERDEEN	63	42	70	30	52	6	1.5	1.2	1.0	4.9	160	19.5	100	94	56	0	1	3	1
HURON	65	43	72	33	54	7	.6	.3	.4	3.8	134	19.5	105	94	51	0	0	2	0
RAPID CITY	60	39	69	31	49	2	.8	.6	.6	3.1	150	9.5	62	86	50	0	1	3	1
SIOUX FALLS	67	47	74	36	57	9	1.6	1.3	1.4	4.7	108	21.5	99	96	57	0	0	3	1
TN CHATTANOOGA	73	53	77	47	63	4	.8	.1	.5	7.9	124	66.0	154	98	49	0	0	3	0
KNOXVILLE	71	50	75	44	60	3	.8	.1	.4	3.4	68	58.2	153	99	50	0	0	2	0
MEMPHIS	74	62	81	57	68	6	.5	-.1	.3	4.1	74	39.0	97	95	62	0	0	3	0
NASHVILLE	75	54	77	49	65	5	.6	.0	.5	7.4	140	53.3	141	92	44	0	0	3	0
TX ABILENE	84	61	85	53	72	7	1.0	.5	.5	5.7	111	22.8	107	98	51	0	0	3	0
AMARILLO	76	46	81	39	61	3	.0	-.3	.0	2.5	82	16.5	91	73	22	0	0	0	0
AUSTIN	84	71	90	67	78	7	1.4	.6	.9	11.9	204	32.0	120	96	72	1	0	3	1
BEAUMONT	83	69	87	64	76	7	6.7	5.7	5.4	18.0	192	62.9	136	100	81	0	0	5	2
BROWNSVILLE	89	76	89	72	82	7	T	-.5	T	7.0	85	20.1	86	99	65	0	0	1	0
CORPUS CHRISTI	88	75	93	71	82	8	.1	-.5	.1	12.5	158	29.1	109	96	66	1	0	2	0
DEL RIO	87	70	91	65	78	9	.2	-.5	.2	2.6	51	17.8	83	93	60	1	0	2	0
EL PASO	78	51	83	45	65	2	T	-.1	T	.4	16	3.3	43	66	27	0	0	1	0
FORT WORTH	78	65	84	58	71	7	4.8	3.9	2.7	8.2	105	33.6	106	99	77	0	0	4	3
GALVESTON	83	74	85	69	79	7	1.0	.4	.4	6.3	78	22.7	65	95	78	0	0	4	0
HOUSTON	84	70	89	67	77	9	7.5	6.5	4.3	11.7	132	36.6	86	98	77	0	0	5	3
LUBBOCK	80	51	83	41	66	5	.2	-.2	.1	1.8	43	12.3	73	98	28	0	0	3	0
MIDLAND	84	58	86	52	71	7	T	-.2	T	.8	19	8.4	61	99	35	0	0	1	0
SAN ANGELO	84	60	89	50	72	7	2.3	1.8	1.7	6.8	128	15.7	87	98	57	0	0	2	2
SAN ANTONIO	88	72	90	67	80	11	2.1	1.4	2.0	12.6	220	33.8	130	93	63	3	0	2	1
VICTORIA	85	71	90	68	78	8	8.8	7.8	6.5	13.3	139	38.3	102	98	69	1	0	4	2
WACO	81	65	85	59	73	6	1.0	.3	1.0	3.6	60	23.4	87	98	75	0	0	3	1
WICHITA FALLS	81	62	87	55	72	9	1.5	.8	.9	4.5	69	11.1	40	97	59	0	0	5	1
UT CEDAR CITY	59	32	69	29	46	-5	T	-.2	T	2.3	140	7.0	74	86	36	0	3	2	0
SALT LAKE CITY	58	40	67	37	49	-3	.4	.0	.3	2.6	110	10.9	83	89	55	0	0	3	0
VT BURLINGTON	60	42	65	26	51	4	.2	-.4	.1	2.5	46	30.2	108	92	56	0	2	3	0
VA NORFOLK	73	50	77	45	61	1	.6	-.1	.5	3.8	61	45.2	120	88	41	0	0	2	1
RICHMOND	72	44	76	39	58	1	.2	-.6	.2	5.2	88	37.4	105	93	27	0	0	1	0
ROANOKE	72	44	79	38	58	3	.2	-.6	.2	1.7	26	37.8	112	94	36	0	0	2	0
WA QUILLAYUTE	55	40	57	34	47	-2	2.6	.1	1.5	7.7	65	63.6	89	99	75	0	0	5	1
SEATTLE-TACOMA	56	45	59	43	51	-1	.2	-.5	.1	2.3	59	18.0	74	92	65	0	0	4	0
SPOKANE	54	34	59	29	44	-2	.1	-.1	.1	1.3	100	7.6	66	95	52	0	2	2	0
YAKIMA	63	33	67	28	48	-1	.0	-.1	.0	.1	13	4.4	81	93	45	0	4	0	0
WV BECKLEY	67	45	75	42	56	5	.7	.1	.4	2.4	44	43.5	128	86	42	0	0	3	0
CHARLESTON	71	43	78	35	57	2	.9	.3	.7	3.1	60	44.9	130	99	43	0	0	3	1
HUNTINGTON	71	46	78	38	59	6	.6	.0	.5	3.4	64	40.6	115	99	40	0	0	3	1
PARKERSBURG	70	44	77	34	57	3	.5	-.1	.5	2.7	55	42.1	123	97	43	0	0	2	0
WI GREEN BAY	66	49	72	37	58	11	.6	.2	.5	3.2	62	26.0	106	95	65	0	0	3	0
LACROSSE	69	53	78	45	61	12	T	-.5	T	6.5	119	30.4	112	89	55	0	0	0	0
MADISON	70	50	74	36	60	11	.3	-.2	.1	6.8	123	29.7	107	91	49	0	0	3	0
MILWAUKEE	72	54	78	44	63	14	.1	-.5	.0	2.3	44	22.7	83	88	52	0	0	2	0
WAUSAU	64	47	70	34	55	9	1.3	.7	.7	5.1	81	19.8	69	91	58	0	0	2	2
WY CASPER	52	34	62	30	43	-2	1.1	.9	1.0	4.7	286	11.3	105	94	56	0	1	2	1
CHEYENNE	54	35	62	30	45	-1	.3	.2	.2	2.0	107	12.6	95	93	44	0	1	3	0
LANDER	49	31	63	28	40	-6	2.5	2.3	1.4	5.4	279	10.6	93	89	53	0	5	2	2
SHERIDAN	55	36	67	33	45	-1	.6	.4	.4	3.9	175	13.8	109	84	53	0	0	2	0

Based on 1961-90 normals.

National Agricultural Summary

October 17 - 23, 1994

HIGHLIGHTS: Warm, dry weather provided ideal conditions for harvest activity in the Corn Belt. An increasing problem of a shortage of grain storage space was caused by the rapid pace of the corn and soybean harvest. Showers across the central Great Plains improved the condition of winter wheat stands. Heavy rains and flooding in eastern Texas and the lower Mississippi Valley slowed harvest activity and winter wheat planting. Some soybeans were lost in coastal Texas due to the heavy rains and flooding. Cotton was defoliated by spraying from aircraft in the Delta region where lingering showers prompted reports of a decline in the quality of cotton. Cooler weather and scattered precipitation in the Pacific Northwest helped lessen drought stress for winter wheat. Some producers in the Northwest are still waiting for rain before planting winter wheat. Isolated hail damage to sorghum in parts of Colorado was caused by a storm system that moved across the High Plains to the Dakotas. Saturated fields in the Dakotas hampered harvest activity.

Winter wheat planted at 84 percent (%) was up 6 percentage points from the previous week, and was 2 points behind the 5-year average. Winter wheat planted in Kansas was up 5 points from the previous week and equalled the average, while wheat planted in Washington was up 4 points from last week but was 7 points behind the average. Winter wheat for the 19 major producing States was 66% emerged, 1 point ahead of the average, while wheat emerged in Washington was 23 points behind the average. Precipitation in Kansas improved the wheat stands where wheat emerged was at 80%, up 15 points from last week. Winter wheat condition rated as good to excellent was 64%, compared to 74% a year ago.

Corn harvest for the 17 major producing States advanced 12 points from last week to 52%, and was 1 point behind the average. Warm, dry weather favored corn harvesting in the Midwest where producers reported corn harvested was in the 15% to 25% moisture range. Corn harvested in Illinois was up 18 points from the previous week, while Iowa increased corn harvested by 17 points from last week.

Cotton condition was down from last week for the 14 major producing States, with 55% of the cotton crop rated as good to excellent. Most of the decline in condition was in Texas and Mississippi where soaked fields lowered the cotton quality. Cotton bolls opening were 95% complete, up from last week and ahead of the average by 6 points. Georgia reported bolls opening at 89%, up 5 points from last week but 4 points behind the average. Cotton harvested in the 14 major producing States at 48% was up 7 points from last week and 1 point ahead of the average. In California, the cotton harvest increased 25 points from last week to 45% harvested.

Sorghum harvested at 77% was up 9 points from last week and 15 points ahead of the average. Sorghum in Kansas reached 80% harvested, 30 points ahead of the average. A rain and snow storm, with scattered hail, held sorghum harvested in Colorado to only a 4 point increase from last week.

Soybeans harvested at 74% was up 10 points from a week ago and was 4 points ahead of the average for the 19 major producing States. Indiana soybean producers harvested 90% of the crop, up 10 points from last week. Harvest was up 12 points from last week in Iowa but at 93% complete was 2 points behind the average. Heavy rains and high water in the Texas coastal area resulted in the loss of some soybeans. Harvested soybeans were reported at 11% moisture in the Ohio Valley, where the harvest is well ahead of the average.

(Continued from front cover)
into the **Delta region**, but sparing the **Houston** area. Elsewhere, storminess increased in the **Pacific Northwest** and in **coastal New England**.

Texas endured its worst flood since December 1991, when 6 days of rain (December 17-22) pushed many of the State's rivers beyond bankfull. This year's event, while smaller in areal coverage, proved locally devastating. Levee failures occurred near **Liberty**, where a midweek crest pushed the **Trinity River** about 6½ feet above flood stage. On the **San Jacinto River**, a crest of about 12 feet above flood stage was reported north of **Houston** on Monday night. According to press reports, flooding claimed the lives of 19 people, and resulted in 35 counties being made eligible for federal disaster relief.

During the 24-hour period ending at 7 a.m. CST on October 17, rainfall in **Texas** included 14.51 inches in **College Station** and 9.69 inches in **Lufkin**. Rainfall of 10 inches or more, with a maximum of 16.00 inches, covered the entire band between the two locations. During the ensuing 24-hour period, torrential rainfall shifted eastward, with 10.00- to 18.50-inch totals deluging areas from near **Houston** to north of **Beaumont**. **Houston** (Hobby Airport) netted 9.80 inches. Local rainfall also topped 10 inches near **Victoria**. Rainfall increased in coverage but decreased in intensity during the 24 hours ending on Wednesday morning. Areas near **Victoria** received additional rainfall of 5 to 10 inches, but previously hard-hit areas escaped with mostly 1- to 3-inch amounts.

Farther west, precipitation abated early in the week, but cool weather persisted. Before ending on Monday, snow accumulated to a depth of as much as 1 to 2 feet on peaks in **Colorado** and **Wyoming**. Highs on Sunday struggled only to 40°F in **Richfield, UT** and 63°F in **Phoenix, AZ**. **Tucson, AZ** tied a daily-record low with 42°F on Monday. Cool air also blanketed the **Northeast**, where daily-record lows were noted on Sunday in **Buffalo, NY** (31°F) and **Bridgeport, CT** (35°F). A day later, **Elkins, WV** tied a daily record with 22°F. In contrast, warm air streamed northward through the middle third of the Nation. Lows on Monday dropped only to 77°F in **San Antonio, TX** and 63°F in **Moline, IL**. Farther north, temperatures remained above freezing through week's end at **Fargo, ND**, breaking their record for the latest date of a first freeze.

Although the **Pacific Northwest** and **California** remained critically dry in terms of both crop moisture and long-term water storage, significant relief has graced the **interior West** this month. In **Wyoming, Lander** joined **Casper** as having a wettest October on record. During the first 22 days of October, **Lander** measured 4.90 inches of precipitation. Late-week precipitation in the **Pacific Northwest** fell primarily from the **Cascades** westward. **Quillayute, WA** collected 2.56 inches. Meanwhile in **Alaska**, harsh early-winter conditions continued. On Saturday morning, **Bettles** had a 20-inch snow depth, an October record.

Crop Progress

for the Week Ending October 23, 1994

COTTON BOLLS OPENING

	Current	Last Wk	1993	Avg.
AL	85	80	95	95
AZ	100	100	100	100
AR	97	92	97	97
CA	100	100	100	100
GA	89	84	94	93
LA	100	99	100	100
MS	100	100	100	99
MO	99	97	96	97
NM	98	95	100	97
NC	100	100	100	100
OK	100	96	92	78
SC	92	87	100	97
TN	100	100	100	100
TX	91	80	92	77
14 States	95	89	96	89

These 14 States produced 99% of the 1993 cotton crop.

COTTON HARVESTED

	Current	Last Wk	1993	Avg.
AL	33	22	67	62
AZ	67	48	68	56
AR	60	54	54	57
CA	45	20	55	46
GA	18	10	65	48
LA	64	63	76	82
MS	51	48	63	67
MO	63	56	70	67
NM	33	10	14	8
NC	44	33	53	45
OK	51	48	29	17
SC	29	23	58	46
TN	53	48	64	62
TX	46	41	47	32
14 States	48	41	55	47

These 14 States produced 99% of the 1993 cotton crop.

GRAIN SORGHUM HARVESTED

	Current	Last Wk	1993	Avg.
AR	97	96	91	94
CO	38	34	17	34
IL	62	49	36	52
KS	80	70	35	50
LA	99	99	98	98
MS	99	98	95	96
MO	68	56	54	65
NE	67	54	18	56
NM	39	13	28	34
OK	38	20	33	22
SD	45	40	34	71
TX	88	83	86	78
12 States	77	68	53	62

These 12 States produced 98% of the 1993 grain sorghum crop.

WINTER WHEAT PLANTED

	Current	Last Wk	1993	Avg.
AR	39	29	21	30
CA	5	1	7	6
CO	100	99	100	100
GA	9	5	7	7
ID	83	74	86	90
IL	84	69	58	75
IN	82	70	72	74
KS	95	90	95	95
MI	90	75	85	85
MO	59	48	41	58
MT	79	56	83	94
NE	100	100	100	100
NC	40	35	23	24
OH	88	74	84	73
OK	91	85	95	91
OR	56	44	88	85
SD	100	100	100	100
TX	74	68	80	79
WA	88	84	96	95
19 States	84	78	85	86

These 19 States produced 92% of the 1993 winter wheat crop.

WINTER WHEAT EMERGED

	Current	Last Wk	1993	Avg.
AR	25	14	14	17
CA	0	0	3	1
CO	92	86	95	91
GA	5	3	5	4
ID	47	34	51	61
IL	61	25	28	42
IN	58	30	43	45
KS	80	65	80	75
MI	65	45	55	70
MO	42	25	23	34
MT	46	33	45	67
NE	99	97	97	97
NC	12	6	9	14
OH	50	26	51	44
OK	68	25	76	61
OR	22	14	59	52
SD	94	91	95	94
TX	60	50	65	58
WA	58	55	79	81
19 States	66	49	67	65

These 19 States produced 92% of the 1993 winter wheat crop.

CORN HARVESTED

	Current	Last Wk	1993	Avg.
CO	65	55	21	27
GA	97	95	98	98
IL	60	42	37	59
IN	40	24	29	42
IA	57	40	19	52
KS	95	85	70	80
KY	75	62	75	71
MI	20	15	15	25
MN	29	23	22	50
MO	70	63	48	69
NE	56	45	24	54
NC	88	84	90	87
OH	32	15	33	33
PA	26	15	24	24
SD	35	28	11	53
TX	98	95	99	97
WI	29	18	9	28
17 States	52	40	32	53

These 17 States produced 91% of the 1993 corn crop.

SOYBEANS HARVESTED

	Current	Last Wk	1993	Avg.
AL	15	10	42	36
AR	41	32	24	29
GA	11	9	17	16
IL	90	83	81	84
IN	90	80	78	73
IA	93	81	80	91
KS	65	60	60	70
KY	27	21	28	30
LA	49	46	67	62
MI	70	45	50	55
MN	80	67	87	93
MS	50	47	41	44
MO	53	45	45	58
NE	90	82	88	91
NC	12	8	10	11
OH	95	79	82	68
SC	3	1	7	8
SD	77	70	73	90
TN	24	17	27	26
19 States	74	64	67	70

These 19 States produced 95% of the 1993 soybean crop.

Crop Condition

for the Week Ending Oct. 23, 1994

COTTON

State	VP	P	F	G	EX
AL	0	0	26	71	3
AZ	0	0	10	80	10
AR	0	0	18	55	27
CA	0	0	10	75	15
GA	0	0	22	68	10
LA	0	0	23	77	0
MS	1	8	48	41	2
MO	0	0	20	70	10
NM	0	0	33	56	11
NC	0	0	3	83	14
OK	0	5	59	26	10
SC	0	0	20	74	6
TN	0	0	1	99	0
TX	0	18	57	24	1
14 State	0	8	37	49	6
Prev Week	0	4	39	51	6
Prev Year	NA	NA	NA	NA	NA

WINTER WHEAT

State	VP	P	F	G	EX
AR	0	1	3	88	8
CA	NA	NA	NA	NA	NA
CO	0	2	23	64	11
GA	0	0	26	72	2
ID	1	4	28	60	7
IL	0	0	10	67	23
IN	1	1	25	64	9
KS	2	7	26	62	3
MI	1	4	20	50	25
MO	0	0	30	66	4
MT	4	14	37	44	1
NE	0	1	24	68	7
NC	0	1	22	71	6
OH	1	10	50	38	1
OK	0	0	23	77	0
OR	0	0	94	6	0
SD	0	0	8	71	21
TX	0	3	50	45	2
WA	4	43	36	9	8
19 State	1	6	29	59	5
Prev Week	NA	NA	NA	NA	NA
Prev Year	0	3	23	56	18

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 0.66 to 2.95 in. north; 0.41 to 3.09 in. central; 0.22 to 2.61 in. south. Temperatures 2 to 8° above normal statewide. Lows 37 to 48° north; 42 to 55° central; 46 to 61° south. Highs 76 to 82° north; 75 to 85° central; 83 to 87° south.

Days suitable for fieldwork 3.9. Soil moisture 5% short, 65% adequate, 30% surplus. Corn harvested 90%, 95% 1993, 95% avg. Sorghum harvested 51%, 59% 1993, 79% avg.; 41% fair, 48% good, 11% excellent. Peanuts dug 91%, 90% 1993, 95% avg.; combined 86%, 86% 1993, 92% avg. Wheat planted 35%, 40% 1993, 36% avg. Pasture feed 2% poor, 28% fair, 60% good, 10% excellent. Livestock 9% fair, 82% good, 9% excellent. Seasonal activities: Harvesting row crops, vegetables; defoliating cotton fields, seeding small grains, ground preparation for fall planting.

ALASKA: Weather and crop reporting discontinued for the season.

ARIZONA: Temperatures 1 to 8° below normal. Extremes 13°; 82° higher elevations; 34°; 89° deserts. Precipitation ranged trace to 0.85 in.

Harvesting cotton active last week, condition continues mostly good; opening bolls 100%, 100% 1993, 100% avg. Weed, insect, disease infestations light. Alfalfa good to excellent. Harvest mostly active. Weed, insect, disease infestations light to moderate. Lemon, grapefruit harvest progressed western, central areas. Apple harvest eastern groves. Raisin grape harvest continues declining central, western vineyards. Cantaloupe, honeydew harvested central, western areas. Watermelons available from all areas. Head lettuce, pumpkin, squash available eastern areas. Mixed green, sweet corn available central areas.

ARKANSAS: Temperatures above normal with showers statewide. Extremes 42°; 85°. Precipitation 0.10 to 4.72 in.

Days suitable for fieldwork 3. Soil moisture 15% short, 49% adequate, 36% surplus. Rainfall has slowed fieldwork. Rice, grain sorghum, soybean, cotton harvests in progress. Craighead, Lafayette counties reported cotton quality has decreased due to rain. Producers fertilizing, liming pastures. Pecans in good condition. Pasture feed 2% very poor, 22% poor, 45% fair, 28% good, 3% excellent. Livestock good condition.

CALIFORNIA: Strong low pressure system exited State beginning week. As system moved east, few lingering showers covered southern areas. Temperatures below normal despite significant warming by mid week. Weak systems brushed far northern sections end week, light showers Eureka.

Warm, dry weather permitted good progress field activities. Rice harvest active. Stubble burning followed where conditions, air quality regulations permitted. Cotton harvest full swing all growing areas. Shredding, discing for pink bollworm control followed harvest. Defoliation neared completion most areas. Grain corn, silage corn, dry beans, sorghum, sugarbeets harvested. Sugarbeets sprayed worms. Alfalfa cut hay, greenchopped. Winter forages, new alfalfa seeded. Ground preparation fall-planted small grains picked up speed. Winter wheat seeding ongoing, limited areas. Table grape harvest complete. Raisin growers continued raisins reconditioning. Five percent raisin vineyards open trays, 5% remained rolled, 90% picked boxed. Kiwifruit, persimmons, pomegranate, quince harvest. Apple harvest continued. Stone fruit harvest complete. Almond, walnut harvest winding down. Pistachio harvest complete. Olive harvest 80% complete. Valencia orange harvest continued. Early varieties Navel oranges began develop color. Satsuma tangerine harvest began. Medfly control efforts successful. Broccoli harvest took place central coast. Fall broccoli, cauliflower progressed normally San Joaquin Valley. Carrots Kern County harvested. Celery harvested central coast. Sweet corn harvest central valleys wound down. Fall head, leaf lettuce fields irrigated San Joaquin Valley. Head lettuce harvested central coast, central valleys. Whiteflies Palo Verde Valley damaged fall melons. Onion harvest wound down central coast. Pepper harvest continued San Joaquin Valley. Harvest fall potatoes Tulelake-Butte Valley wound down. Yields above average, quality good. Sweet potato harvest Merced, Stanislaus Counties continued. Spinach planting underway Tulare County. Fresh market tomatoes continued harvested San Joaquin Valley. Harvest processing tomatoes wound down central valleys. Vine seed harvested Sutter County, good quantity, quality. Other crops harvested: squash, cucumbers, green beans, green onions, okra, eggplant, gourds, pumpkins, herbs, spices, oriental vegetables. Range, pasture conditions fair to poor. Recent rains turning rangeland grasses green some areas. More rain needed soon to sustain new growth. Feed, water conditions poor many areas, very limited rainfall. Supplemental feeding necessary most ranches. Few reports water hauled to livestock. Fall calving continued. Sheep grazing melon fields some places. Cattle, sheep in good condition.

COLORADO: A large Pacific storm system started week with plenty of snow in the mountains, a rain/snow mix at lower elevations. Temperatures 5 to 20° below normal. High pressure, dry air returned to the State on the 19th through the 23nd with mostly clear days, near normal temperatures.

Days suitable for fieldwork 4.2. Soil moisture 3% very short, 35% short, 60% adequate, 2% surplus. Dry bean harvest virtually complete. Sorghum 1% very poor, 2% poor, 27% fair, 52% good, 18% excellent. Hail in Baca County damaged some sorghum crops. Sugarbeets 53% harvested, 44% 1993, 47% avg. Fall potato harvest complete. Rains earlier in week helped winter wheat stands. Winter wheat 2% poor, 23% fair, 64% good, 11% excellent. Harvest activities slowed due to rain, snow. Livestock mostly in good condition. Pasture, range feed poor to fair.

FLORIDA: Temperature 5 to 7° above normal Panhandle, 1 to 2° below normal south. Highs upper 80's° statewide. Lows middle 50's° Panhandle, Big Bend, around 60° central, low 60's° south. Rainfall limited to showers, amounts generally under 0.25 in., 0.50 to 0.75 in. local areas.

Soil moisture adequate to surplus throughout State. Dry weather enabled farmers to resume harvest most areas. Peanut harvest winding down. Cotton, soybean harvest active. First sugarcane mills open. Starting last cutting of hay. Dry weather welcomed. Some citrus groves still wet. Some droppage continues on early fruit from wet conditions. Good on-tree fruit color, ideal picking weather. Harvest active for all early fruit. Caretakers cutting cover crops, deep plowing to aerate wet soils. Few sprays, herbicides being applied. Dry weather, near normal temperatures speeded harvest of fall vegetable crops. Tomato harvest began in Palmetto-Ruskin, southwest, east coast. Pepper picking started, southwest. Snap bean picking underway, east Coast. Pasture feed 10% poor, 15% fair, 70% good, 5% excellent. Cattle mostly good.

GEORGIA: Showers, thunderstorms north, central areas 21st, 22nd. Rainfall 1.00 to 2.00 in. common. Showers less numerous extreme south areas, totals generally under 0.50 in. Rain 3 days north, cental areas, 1 or 2 days south. Warmer than normal 3 to 6° above normal. Warmest mid 70's° mountains, upper 70's° to low 80's° north, central, mid 80's° south. Coolest mid to upper 30's° colder mountain locations, upper 30's° low 40's° east central, mid 40's° to mid 50's° elsewhere.

Days suitable for fieldwork 3.8. Soil moisture 1% short, 54% adequate, 45% surplus. Cotton defoliating by air. Sorghum 24% fair, 76% good; 74% harvested for grain, 88% 1993, 80% avg. Peanuts 3% very poor, 16% poor, 30% fair, 48% good, 3% excellent; 94% dug, 95% 1993, 97% avg.; 85% threshed, 89% 1993, 91% avg. Soybeans 25% fair, 70% good, 5% excellent; 94% dropping leaves, 95% 1993, 93% avg. Rye 51% planted, 43% 1993, 47% avg.; some aerial seeding of rye. Other small grains 24% fair, 75% good, 1% excellent; 40% planted, 28% 1993, 28% avg. Onions 30% planted, NA 1993, NA avg. Other vegetable 26% poor, 39% fair, 32% good, 3% excellent. Apples 8% very poor, 2% fair, 90% good; 99% harvested, 81% 1993, 86% avg. Pecans 7% poor, 60% fair, 33% good; 12% harvested, 8% 1993, 11% avg. Hay 4% poor, 27% fair, 65% good, 4% excellent. Pasture feed 2% poor, 18% fair, 72% good, 8% excellent, Activities: pasture renovation in wildlife food plots, aerial spraying, seeding, soil sampling, routine care of livestock, poultry.

HAWAII: Weather variable, sunny days mixed with moderate to heavy rains. Brisk trade winds at mid week weakened by weekend.

Temperatures ranged from mid 60's° to low 90's°. Rainfall ranged from none to 5.20 in.

Spraying to control insects, disease active. Banana production heavy. Sugarcane harvest slowing. Macadamia nut, coffee harvest full swing.

IDAHO: Temperatures 6° below to 2° above normal. Precipitation 0.03 to 0.42 in. north, none southwest, none to 0.07 in. south central, none to 0.69 in. southeast. Extremes 24°; 77°.

Days suitable for fieldwork 6. Soil moisture 17% very short, 45% short, 36% adequate, 2% surplus. Potatoes harvested 89%, 93% 1993, 95% avg.; 1% poor, 17% fair, 62% good, 20% excellent. Range, pasture feed 59%. Winter wheat 1% very poor, 4% poor, 28% fair, 60% good, 7% excellent. Sugarbeets harvested 48%, 57% 1993, 58% avg. Alfalfa hay harvested (3rd cutting) 96%, 94% 1993, 97% avg. Apples harvested 84%, 70% 1993, 76% avg. Field corn for grain harvested 32%, 41% 1993, 33% avg.; silage harvested 93%, 84% 1993, 94% avg. Onions harvested 99%, 97% 1993, 98% avg. Dry beans harvested 99%, 94% 1993, 98% avg. Irrigation water supplies 39% very poor, 17% poor, 20% fair, 22% good, 2% excellent. Activities: Harvesting potatoes, sugarbeets, field corn, moving, sorting livestock, planting winter wheat, preparing machinery, irrigation equipment for the winter.

ILLINOIS: Drier, warmer than normal fall weather occurred this past week across much of State. High temperatures upper 60's°, lower 70's° in the north to the low to mid 70's° in the south. Lows mostly in the 40's° in the central, north, mid 40's° to mid 50's° in the south. Rainfall 0.40 in. west central, northwest to 1.00 to 2.50 in. far south.

Days suitable for fieldwork 5.75. Soil moisture 30% short, 70% adequate. Pasture feed 84% of normal. Farm activities included: Corn, soybean, sorghum harvest, seeding winter wheat, fall tillage, applying fertilizer, hauling grain, tending livestock.

INDIANA: Unseasonably warm, generally dry conditions the first of the week gave way to some moisture around the 19th with dry conditions thereafter favoring more fieldwork. Temperatures well above normal with mean readings varying from the mid 50's° to low 60's°. Reading 5 to 9° above normal. Maximum temperatures varied mid 60's° to mid 70's° with mean lows from the low 40's° to low 50's°. Precipitation light in the north to moderate in the far south with isolated heavy amounts reported. Rainfall average between 0.25 to 0.50 in. with the least amounts through the central, east central areas in State.

Days suitable for fieldwork 5.5. Corn, soybean harvest continues to make good progress. Other activities: Fall tillage, chopping stalks, spreading fertilizer, lime, seeding winter wheat, cutting corn silage, hay baling, tobacco harvest, care of livestock. Pastures feed 73% of normal, 70% last week. Topsoil 36% short, 64% adequate. Subsoil moisture 52% short, 48% adequate. Tobacco processed for sale 6%.

IOWA: Temperatures 7 to 9° above normal; 79° (southeast, 17th, 21st), 32° (northwest, 20th). Nearly all precipitation fell on Monday (17th). Rain trace (east central) to 2.30 in. (southwest); average 0.45 in. (normal 0.52 in.).

Days suitable for fieldwork 4.3. Topsoil 17% short, 69% adequate, 14% surplus. Subsoil 22% short, 73% adequate, 5% surplus. Winter wheat acreage seeded 82%, 82% 1993, 91% avg. 1995 row crop acreage fall tilled 13%, 12% 1993, 17% avg. 1995 row crop acreage fall fertilizer applied 11%, 9% 1993, 13% avg. Percent moisture of field corn 20%. Percent moisture of field corn being harvested 18%. Corn lodging 8% none, 79% light, 13% moderate. Corn ear droppage 12% none, 82% light, 6% moderate. Pasture feed 1% very poor, 3% poor, 34% fair, 52% good, 10% excellent. Grain storage availability 58% adequate, 42% surplus. Lack of grain storage space is becoming more of a problem, especially in the east central, central, southern one third of the State. State's livestock herds mostly good, with the exception of colds being reported in both weaned, unweaned calves. Reports indicated heavy hog movement.

KANSAS: Temperatures 4° below normal over all but the northeastern portion of the State where readings were as low as 7° below normal. District rainfall 0.50 in. plus in all but the east central district. South central areas had the highest average at 1.34 in.

Days suitable for fieldwork 4.0. Surface soil moisture 33% short to very short, 64% adequate, 3% surplus. Subsurface moisture 49% short to very short, 51% adequate. Wheat seeding nearing completion. Showers across the State helped improve condition of wheat stands, particularly in the central, south central districts. Corn harvest has progressed rapidly, also is nearing completion. Sorghum harvest continues well ahead of normal progress. Soybeans are shedding leaves all across the State. Fall crop harvest, seeding wheat major activities. Pastures are in fair condition, but supplemental feeding of livestock is necessary in many areas.

KENTUCKY: Warm, adequately moist conditions. Maximum temperatures 3 to 6° above normal, minimum temperature 6 to 9° above normal. Precipitation varied less than 0.50 in. eastern, southern areas to between 0.75 to 1.25 in. northern, western areas.

Days suitable for fieldwork 3.6. Soil moisture 6% very short, 32% short, 56% adequate, 6% surplus. Almost all soybeans safe from frost. Burley 14% stripped, 16% 1993, 16% avg. Condition of stripped 10% fair, 73% good, 17% excellent. Heavy crop with good quality, color. Winter wheat 54% seeded, 51% 93, 51% avg. Emerged wheat mostly good.

LOUISIANA: Temperatures 5.4 to 8.7° above normal. Extremes 55°; 88°. Rainfall 0.52 in south east to 8.11 in. central.

Days suitable for fieldwork 3.6. Soil moisture supplies 31% adequate, 69% surplus. Cotton: excessive, prolonged rains hurting quality. Hay 97% final cutting, 97% 1993, 97% avg. Pecans 8% harvested, 15% 1993, 12% avg. Rice 98% harvested, 98% 1993, 99% avg. Soybeans 9% poor, 55% fair, 34% good, 2% excellent; 98% turning color, 99% 1993, 96% avg.; 92% shedding leaves, 94% 1993, 85% avg.; excessive, prolonged rains hurting quality. Sugarcane 26% fair, 74% good; 99% planted, 100% 1993, 98% avg.; 18% harvested, 19% 1993, 17% avg. Sweet potatoes 72% harvested, 73% 1993, 76% avg. Wheat 13% planted, 16% 1993, 13% avg.; 11% emerged, 10% 1993, 5% avg. Livestock 12% poor, 47% fair, 41% good. Pasture feed 1% very poor, 9% poor, 11% fair, 78% good, 1% excellent. Vegetables 3% poor, 38% fair, 57% good, 2% excellent.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.04 in., normal 0.71 in. Temperature 57.5°, normal 56.7°. Extremes 25°; 79°.

Days suitable for fieldwork 5.9. Topsoil 31% short, 69% adequate. Subsoil 14% short, 86% adequate. Pasture feed good. Wheat fair to good; 46% planted, 49% 1993, 40% avg. Barley fair to mostly good; 78% planted, 87% 1993, 76% avg. Rye good; 63% planted, 65% 1993, 59% avg. Corn 99% mature, 99% 1993, 97% avg.; 65% grain harvested, 79% 1993, 66% avg.; 98% silage harvested, 98% 1993, 96% avg. Soybeans 99% turned, 98% 1993, 98% avg.; 98% shedding leaves, 86% 1993, 85% avg.; 28% harvested, 32% 1993, 32% avg. Sorghum 100% turned, 98% 1993, 100% avg.; 97% mature, 85% 1993, 97% avg.; 34% harvested, 23% 1993, 58% avg. Tobacco 5% stripped, 4% 1993, 6% avg. Other hay 95% third cut, 96% 1993, 80% avg.; 67% fourth cut, 51% 1993, 40% avg. Alfalfa hay 66% fifth cutting, 34% 1993, 31% avg. Hay supplies adequate. Apples 92% harvested, 83% 1993, 86% avg.

DELAWARE: Precipitation trace, normal 0.77 in. Temperature 56.0°, normal 57.3°. Extremes 35°; 75°.

Days suitable for fieldwork 6.3. Topsoil 33% short, 56% adequate, 11% surplus. Subsoil 43% short, 43% adequate, 14% surplus. Wheat good; 31% planted, 33% 1993, 31% avg. Barley good; 74% planted, 80% 1993, 64% avg. Corn 80% grain harvested, 84% 1993, 82% avg.;soybeans 97% turned, 97% 1993, 97% avg.; 88% shedding leaves, 81% 1993, 85% avg.; 33% harvested, 24% 1993, 25% avg. Sorghum 99% turned, 96% 1993, 93% avg.; 86% mature, 84% 1993, 93% avg.; 21% harvested, 11% 1993, 53% avg. Other hay 92% fourth cutting, 0% 1993, 34% avg. Alfalfa hay 63% fifth cutting, 32% 1993, 39% avg. Hay supplies adequate to surplus; pasture feed good. Apples 98% harvested, 94% 1993, 91% avg.

MICHIGAN: Extremes 32°; 79°. Precipitation 0.09 to 1.95 in. across State.

Days suitable for fieldwork 5.5. Soil moisture 5% short, 90% adequate, 5% surplus. Dry beans 95% harvested, 95% 1993, 95% avg.; 10% very poor, 15% poor, 35% fair, 30% good, 10% excellent. Corn for grain 95% mature; 100% 1993, 90% avg.; 20% harvested, 15% 1993, 25% avg.; silage 95% harvested, 85% 1993, 85% avg. Potatoes 95% harvested, 85% 1993, 95% avg. Soybeans 95% mature, 100% 1993, 96% avg.; 70% harvested, 50% 1993, 55% avg. Hay 65% fourth cutting, 55% 1993; 1% very poor, 4% poor, 20% fair, 55% good, 20% excellent. Pasture feed 85% of normal. Major activities included: Cutting hay, planting wheat, harvesting of corn for grain, silage, soybeans, drybeans, potatoes.

MINNESOTA: Temperatures 8 to 12° above normal for the State. Extreme 31°; 80°. Precipitation 0.25 in. above normal in the northwest district to 1.00 in. above normal in the east central district. Greatest weekly total 2.46 in.

Days suitable for fieldwork 2.4. Topsoil 38% adequate, 62% surplus. Corn 29% harvested, 22% 1993, 50% avg.; moisture content 23%, 29% 1993, 24% avg.; stalks worked 10%, 12% 1993, 22% avg. Soybeans 80% harvested, 87% 1993, 93% avg.; moisture content 13%, 14% 1993, 12% avg.; stubble worked 30%, 46% 1993, 48% avg. Sugarbeets 79% harvested, 98% 1993, 95% avg. Sunflowers 81% harvested, 50% 1993, 77% avg.

MISSISSIPPI: Temperatures 6.5° above normal. Extremes 51°; 86°. Soil temperature 69°. Precipitation 1.65 in., 0.93 in. above normal. Rainfall 0.88 in. at the north central, east central districts to 2.81 in. at the lower Delta. Greatest weekly precipitation occurred at Yazoo City with 3.81 in. Rainfall delayed harvest for second week.

Days suitable for fieldwork 1.7. Soil moisture 3% short, 23% adequate, 74% surplus. Corn 97% harvested, 93% 1993, 92% avg. Cotton 51% harvested, 63% 1993, 67% avg.; 1% very poor, 8% poor, 48% fair, 41% good, 2% excellent. Rice 97% harvested, 85% 1993, 92% avg. Soybeans 94% shedding leaves, 82% 1993, 88% avg.; 50% harvested, 41% 1993, 44% avg.; 21% fair, 60% good, 19% excellent. Wheat 29% planted, 40% 1994, 44% avg.; 20% emerged, 24% 1993, 24% avg.; 14% poor, 53% fair, 23% good, 10% excellent. Sweet potatoes 82% harvested, 77% 1993, 82% avg. Pecans 18% harvested, 14% 1993, 14% avg.; 15% very poor, 25% poor, 50% fair, 10% good. Livestock 13% fair, 76% good, 11% excellent. Pasture feed 83% normal. Activities: Most fieldwork, harvest activities delayed due to wet weather.

MISSOURI: Temperatures 6 to 9° above normal across State. Rainfall 0.77 in., varying from less than 0.25 in., northern third of State to over 1.60 in., southwest, southeast.

Days suitable for fieldwork 3.8. Topsoil 20% short, 76% adequate, 4% surplus. Corn harvest by district ranges 56% central to 100% southeast. Soybeans dropping leaves by district ranges 77% southwest to 100%, northern third of State. Soybeans harvested by district ranges 22% southeast to around 80% north central, northeast. Sorghum harvest by district ranges 32% central to 92% southeast. Wheat seeded by district ranges 35% west central to 80% northeast. Wheat emerged by district ranges 24% west central to 55% northeast, 62% southwest. Pasture feed 1% very poor, 9% poor, 38% fair, 46% good, 6% excellent.

MONTANA: Temperatures below normal, precipitation above normal.

Days suitable for fieldwork 2.0. Topsoil 17% short, 82% adequate, 1% surplus. Subsoil 64% short, 36% adequate. Potatoes 91% harvested, 89% 1993, 89% avg. Sugarbeets 63% harvested, 36% 1993, 75% avg. Pasture, range feed 80% of normal. Cattle, calves moved from summer ranges, 62%. Sheep, lambs moved from summer ranges, 73%.

NEBRASKA: Temperatures near normal northwest while remainder of State 3 to 7° above normal. Precipitation occurred first two days varying from 0.02 in. northwest to 2.00 in. central.

Days suitable for fieldwork 2.9. Topsoil 5% short, 79% adequate, 16% surplus. Subsoil 19% short, 79% adequate, 2% surplus. Corn 56% harvested, 24% 1993, 54% avg. Sorghum 67% harvested, 18% 1993, 56% avg. Soybeans 90% harvested, 88% 1993, 91% avg. Winter wheat 99% emerged, 97% 1993, 97% avg.; 1% poor, 24% fair, 68% good, 7% excellent. Pasture, range feed 89% of normal.

NEVADA: Week began with the State under the influence of a very cold low pressure system, which was replaced by a high pressure system early in the week. Precipitation was received only in the northeast, south; measurable amounts were rare. Greatest precipitation amount was received at Mount Charleston 0.08 in. Temperatures 3 to 5° below normal at all climatic divisions. Extremes 9°; 89°.

Hay cutting winding down. Potato harvest continued. Seeding of fall-planted small grains underway. Movement of livestock to pastures, market active. Main farm, ranch activities: Marketing, feeding, moving livestock, fall planting, late harvests.

NEW ENGLAND: Precipitation 0.03 to 2.13 in. regionwide. Temperatures 46 to 54° north; 50 to 59° south. Temperatures 5° above normal regionwide. Maximum temperatures 61 to 72° north; 64 to 74° south. Minimum temperatures 19 to 39° north; 25 to 40° south.

Days suitable for fieldwork 5. Soil moisture 14% short, 86% adequate. Available grazing 6% very short, 18% short, 70% adequate, 6% surplus. Fieldwork on schedule. Maine potatoes 99% harvested, 95% avg.; good to fair. Rhode Island potatoes 99% harvested; good to fair. Connecticut River Valley potatoes 99% harvested, 100% 1993, 99% avg.; good. Maine oats 99% harvested; good to fair. Field corn 90% harvested, 85% 1993, 90% avg.; good. Second crop hay 99% harvested, 99% avg.; good. Third crop hay 90% harvested, 99% avg.; good. Sweet corn 99% harvested, 100% 1993, 100% avg.; good. Apples 99% harvested; size medium, good, color good. Pears 100% harvested; size medium, good. Cranberries 80% harvested; size medium/large, excellent. Major farm activities: Chopping silage corn, harvesting fruits, disking down harvested fields, planting cover crops.

NEW JERSEY: No weather data available.

NEW MEXICO: Temperatures during the first part of the week were below normal due to a winter storm traversing the State over the weekend. Temperatures climbed to near or above normal over most of the State by mid week through the weekend. Precipitation carried over to 17th in most locations due to the weekend winter storm, giving the first part of the week above normal precipitation with drying occurring later in the week.

Days suitable for fieldwork 6.2. Soil moisture 78% short, 22% adequate. Cropland conditions: Alfalfa 5% poor 15% fair, 75% good, 5% excellent. Chile 7% fair, 86% good, 7% excellent. Corn 7% poor, 20% fair, 73% good. Irrigated sorghum 8% poor, 17% fair, 67% good, 8% excellent. Dryland sorghum 25% very poor, 75% poor. Cotton 33% fair, 56% good, 11% excellent. Pecan 50% fair, 50% good. Apples 18% poor, 9% fair, 73% good. Cattle, sheep conditions varied across the State poor to fair condition. Range feed condition is 54% of normal.

NEW YORK: Precipitation light. Rainfall varied from zero to 0.67 in. Extremes 23°; 76°. Freezing temperatures covered nearly all of State.

Days suitable for fieldwork 6.5. Soil moisture adequate. Pasture feed 95% of normal. Corn mostly good to excellent. Grain corn 15% harvested, 16% 1993, 19% avg. Silage 86% harvested, 85% 1993, 79% avg. Dry bean, potato harvests continued. Apple harvest in full swing. Cider making active. Grape harvest continued. Onions being moved into storage. Cabbage harvest continued. Pumpkins moving to market.

NORTH CAROLINA: Mean temperature 58° at Greensboro to 65° at Asheville. Rainfall 0.10 in. at Wilmington to 1.34 in. at Charlotte.

Days suitable for fieldwork 4.9. Soil 1% very short, 10% short, 80% adequate, 9% surplus. Crop conditions: Pasture 2% poor, 23% fair, 68% good, 7% excellent; corn 15% poor, 26% fair, 56% good, 3% excellent; cotton 3% fair, 83% good, 14% excellent; peanuts 9% fair, 76% good, 15% excellent; soybeans 17% fair, 77% good, 6% excellent; sweet potatoes 7% poor, 7% fair, 76% good, 10% excellent; sorghum 8% fair, 79% good, 13% excellent; hay, roughage supplies 5% short, 81% adequate, 14% surplus; corn for grain harvested 88%, 90% 1993, 87% avg.; sorghum 78%, 65% 1993, 80% avg.; sweetpotatoes harvested 77%, 67% 1993, 70% avg.; cotton harvested 44%, 53% 1993, 45% avg.; peanuts dug 90%, 79% 1993, 82% avg.; peanuts threshed 74%, 58% 1993, 64% avg.; soybeans harvested 12%, 10% 1993, 11% avg.; wheat planted 40%, 23% 1993, 24% avg.; oats planted 49%, 40% 1993, 41% avg.; barley planted 58%, 40% 1993, 45% avg.; rye planted 65%, 48% 1993, 41% avg.; soybeans leaf drop 77%, 74% 1993, 73% avg.; wheat emerged 12%, 9% 1993, 14% avg. Activities included: Harvesting corn, cotton, peanuts, soybeans; marketing tobacco; planting small grain, preparing land. Other activities included: harvesting hay, sweetpotatoes; tending livestock; equipment repair, general farm maintenance.

NORTH DAKOTA: First snow flurries mixed with light rain occurred this week in the northwest. Precipitation 1.01 in. northwest to 2.64 in. north central. Temperatures 7° above normal northwest, west central, southwest to 11° above normal east central. Extremes 21° south central; 72° south central.

Days suitable for fieldwork 2.5. Soil moisture above average. Topsoil 3% short, 70% adequate, 27% surplus. Subsoil 1% very short, 8% short, 67% adequate, 24% surplus. Nearly all late season crops behind last year's slow pace, well behind average as saturated field conditions continued to

hamper harvest efforts. Flaxseed 89% combined, 95% 1993, 98% avg.; corn for grain 34% harvested, 30% 1993, 62% avg.; corn for silage 92% cut, 99% 1993, 100% avg.; dry edible beans 89% combined, 94% 1993, 98% avg.; soybeans 76% combined, 95% 1993, 98% avg.; sunflower 23% harvested, 24% 1993, 70% avg.; sugarbeets 82% lifted, 98% 1993, 100% avg. Range, pasture feed 86% of normal. Stockwater supplies mostly adequate.

OHIO: Unseasonably warm, dry conditions during the first of the week gave way to moisture around the 20th with dry conditions thereafter favoring fieldwork. Temperatures well above normal with mean readings varying from the mid to upper 50's°. This was 6 to 9° above normal. Maximums varied from the upper 60's° to around 70° with mean lows from 40° to the upper 40's°. Precipitation varied from light in the north to moderate in the far south. Rainfall 0.10 in. north to 0.50 to 0.75 in. far south.

Days suitable for fieldwork 5.9. Soil moisture 64% short, 36% adequate. With ideal harvest conditions, fall harvest is ahead of normal. Soil moisture is the shortest it has been in 17 weeks. Corn moisture 21%. Soybean moisture 11%. Sugarbeet harvest 19% complete. Hay 1% very poor, 7% poor, 40% fair, 41% good, 11% very good. Pasture feed 3% very poor, 17% poor, 40% fair, 34% good, 6% excellent.

OKLAHOMA: Temperatures .5° below normal Panhandle to 6.0° above normal south central. Precipitation none Panhandle district to 2.89 in. south central.

Days suitable for fieldwork 4.3. Topsoil 21% short, 61% adequate, 18% surplus. Subsoil 31% short, 69% adequate. Soybeans 81% mature, 85% 1993, 65% avg.; 62% harvested, 32% 1993, 29% avg. Peanuts 8% fair, 90% good, 2% excellent; 92% mature, 76% 1993, 91% avg.; 63% dug, 30% 1993, 43% avg.; 45% combined, NA 1993, NA avg. Cotton 5% poor, 59% fair, 26% good, 10% excellent; 51% harvested, 29% 1993, 17% avg. Wheat 23% fair, 77% good; 91% planted, 95% 1993, 91% avg.; 68% up to stand, 76% 1993, 61% avg. Pasture feed 89% normal. Feeder steers were firm to $2 per cwt. higher, feeder heifers were steady to $1 per cwt. higher than previous week.

OREGON: Precipitation northwestern valleys 0.20 in., northern coast, northern Coastal range 0.50 to 1.00 in., southeastern section dry, elsewhere up to 0.10 in. Temperatures below normal coast, southwestern valleys, elsewhere near normal.

Soil moisture 79% short, 21% adequate. 1995 winter wheat crop 56% planted, 22% emerged. 1995 barley crop 34% planted. Winter wheat 94% fair, 6% good. Many growers waiting for rain before planting. Corn silage harvest continued, ryegrass seeding continued, western sections. Eastern sections: Emerged wheat spotty, very little dryland canola planted this fall due to lack of soil moisture; potato, onion harvest continued, carrot, lima bean harvest mostly complete. Willamette Valley: tomato, squash, late sweet corn, pumpkin, cabbage, other cole crop harvest continued, onions, potato harvest mostly finished; berry training, pruning completed, some late fresh market strawberry, raspberry, blackberry, blueberry harvest continued; apple, grape harvest continued; hazelnut harvest progressed with second passes; walnut harvest continued. Pear harvest completed in Rogue River Valley, Hood River Valley. Hood River Valley apple harvest winding down. Southern coast: Cranberry harvest continued. Livestock good. Rangeland, pastures continued extremely dry statewide. Supplemental feeding, water hauling continued statewide. Calf weanings, fall work continued. Range, pasture feed 57% of normal.

PENNSYLVANIA: Temperature 58°, 6° above normal. Extremes 20°; 80°. Precipitation 0.24 in., 0.42 in. below normal.

Days suitable for fieldwork 5. Soil moisture 20% short, 78% adequate, 2% surplus. Ensilage corn harvested 91% complete, 91% 1993. Soybean harvest 40% complete, 29% 1993. Potato harvest 91% complete, 91% 1993. Fall plowing 87% complete, 81% 1993. Wheat planted 83% complete, 83% 1993. Barley planted 94% complete, 95% 1993. Fourth cutting alfalfa 78% complete, 72% 1993. Quality of hay made 55% fair, 45% good. Feed from pastures good to excellent. Apple harvest 88% complete, 82% 1993. Grapes harvest 83% complete, 95% 1993. Activities: Making hay; harvesting potatoes, soybeans, corn grain, corn silage; plowing; planting winter small grains; cleaning, repairing equipment; fixing fences; hauling manure; caring for livestock.

PUERTO RICO: Average weekly rainfall of 2.11 in. was 0.32 in. above normal, with the greatest weekly total of 5.01 in. reported at Morovis. The mean weekly temperature at San Juan was 83.1°, 1.1° above normal.

SOUTH CAROLINA: Rainfall 0.70 in. Temperatures 1 to 3° above normal.

Days suitable for fieldwork 4.2. Soil 79% adequate, 21% surplus. Tobacco 95% stalks destroyed, 91% 1993, 90% avg. Corn fair to good; 96% harvested, 100% 1993, 98% avg. Cotton 20% fair, 74% good, 6% excellent; 92% open bolls, 100% 1993, 97% avg.; 29% harvested, 58% 1993, 46% avg. Soybeans 14% fair, 77% good, 9% excellent; 82% leaves turning, 88% 1993, 89% avg. 45% dropping leaves, 57% 1993, 56% avg.; 19% mature, 39% 1993, 40% avg. Apples good; 90% harvested, 91% 1993, 93% avg. Barley 20% planted, 38% 1993, 25% avg; Barley 11% emerged, 16% 1993, 15% avg. Oats 29% planted, 43% 1993, 34% avg.; 17% emerged, 27% 1993, 20% avg. Peanuts 64% harvested, 63% 1993, 69% avg. Rye 30% planted, 51% 1993, 39% avg., 21% emerged, 35% 1993, 25% avg. Sweet potatoes 41% harvested, 61% 1993, 67% avg. Winter wheat 11% planted, 9% 1993, 6% avg.; 6% emerged, 5% 1993, 3% avg. Sorghum fair to good; 54% harvested, 65% 1993, 68% avg. Fall hay good; 87% harvested, 81% 1993, 87% avg. Pasture feed 27% fair, 61% good, 12% excellent.

SOUTH DAKOTA: Rainy, above normal temperatures. Widespread precipitation, heaviest in northern, eastern parts with 0.75 to 1.00 in. Extremes 21°; 77°.

Days suitable for fieldwork 2.7. Topsoil 1% very short, 8% short, 70% adequate, 21% surplus. Subsoil 1% very short, 26% short, 58% adequate, 15% surplus. Winter rye 6% fair, 62% good, 32% excellent; 98% emerged, 94% 1993, 98% avg. Livestock 82% good, 18% excellent. Feed supply 2% short, 83% adequate, 15% surplus. Pasture feed 84% of normal. Stockwater supply 3% short, 81% adequate, 16% surplus.

TENNESSEE: Temperatures near or slightly below normal along the Cumberland Plateau, upper Northeast, to about 5° above normal elsewhere across the State. Rainfall light to moderate for the week, mostly between 0.50 to 1.50 in. across State.

Days suitable for fieldwork 3.5. Soil moisture 6% short, 73% adequate, 21% surplus. Corn 82% grain harvest, 82% 1993, 82% avg.; cotton 53% harvested, 64% 1993, 62% avg. Burley 33% stripped, 28% 1993, 31% avg. Sorghum 96% grain harvest, 97% 1993, 86% avg. Soybeans 89% shedding, 94% 1993, 90% avg.; 66% mature, 71% 1993, 64% avg.; 24% harvested, 27% 1993, 26% avg. Wheat 33% seeded, 38% 1993, 37% avg.

TEXAS: Heavy rains, flooding covered a large part of east Texas, while most of west Texas remained nearly dry. A tropical air mass covered most of the eastern half of the State. Numerous showers, thunderstorms developed, moved over the same areas, resulting in considerable flood, flash flooding. Heaviest rains were located in southeast early in week, but shifted northward towards the metroplex by late in week. Several districts reported rainfall averages in excess of three inches with the Upper Coast reporting an average over 4.50 in. Many individual stations reported more than 6.00 in. a few unofficial reports placed rainfall totals between 20.00 to 30.00 in. However, most of deep south Texas, the west reported little to no rainfall. The Northern and Southern High Plains and the Lower Valley averaged less than a tenth of an inch and were the only districts reporting below normal rain. Other western districts reported near normal rainfall while eastern districts recorded much above rainfall. The tropical air mass kept overnight temperatures much warmer than normal and resulted in weekly average temperatures ranging generally between 3 to 7° above normal. One exception was the South Central district in which several cities recorded record high minimum temperatures. Temperature in that district soared to 11° above normal. The only below normal district was the Southern High Plains which averaged one degree below normal.

Crops: Corn: under cool, dry conditions, corn harvest neared completion in the Plains. Cotton harvest continued at a good pace throughout the Plains. In the Low Plains, some delays occurred early in week due to light showers; harvest resumed by week's end. Harvest activities in Edwards Plateau continued at slow pace, with light rain causing more delays. Cotton 61% normal, 72% 1993. Peanuts: across the Plains, peanut harvest continued to push forward. Heavy rain in Cross Timbers delayed harvest activities. In South Central Texas, some fields were damaged due to heavy rain. Peanuts 75% normal, 70% 1993; 32%

harvested, 32% 1993. Sorghum harvest continued in High Plains with harvest nearing completion in a few areas. 100% turning color, 100% 1993. 96% mature, 97% 1993. Soybeans: harvest made good progress. Some beans were lost due to high water along Upper Coast. 72% harvested, 77% 1993. Small grains: winter wheat planting continued on a limited basis across Plains. Irrigation got underway in some fields in Northern High Plains. Planting delays occurred in Cross Timbers due to wet fields, and planting was halted in areas receiving heavy rains. Most planted fields continued to emerge to good stands. Planting of oats proceeded in areas where weather conditions allowed. Wheat 73% normal, 72% 1993. 58% oats planted, 50% 1993. Sugarbeets 11% harvested, 34% 1993. Sunflowers 59% harvested, 62% 1993.

Commercial Vegetables: Rio Grande Valley: clear, warm weather allowed harvest of oranges and grapefruits to continue. Cucumber harvest was active. Planting of onions got underway, lettuce planting continued. San Antonio-Winter Garden: cabbage, cucumber harvest was active. Planting of onions began. East Texas: wet weather conditions delayed completion of sweet potato harvest. Some fall vegetables were damaged due to high water. High Plains- pumpkin harvest was completed and pepper harvest was winding down. Pecans on the ground in parts of South Central Texas, along Upper Coast were damaged due to heavy rain and flooding conditions. Harvest of early variety pecans continued to push forward in Edwards Plateau and Cross Timbers. 13% harvested, 18% 1993.

Range and Livestock: Range, pasture conditions continued to improve due to recent rain across most areas. In Plains Trans-Pecos, pastures remained dry and short, supplemental feeding of livestock increased. Some hay, livestock were lost due to floods throughout southeastern part of State. Floods also caused damage to some fences. Most livestock remained in fair to good condition.

UTAH: Temperature maximums 10° below normal; minimums normal. Precipitation heavy across the entire State except for Dixie division where precipitation was moderate.

Days suitable for fieldwork 4.6. Soil moisture 6% short, 79% adequate, 15% surplus. Winter wheat planted for 1995 crop 88%; emerged for 1995 crop 56%, 87% 1993, 74% avg. Corn harvested for grain 60% completed, 23% 1993. Alfalfa 4th cutting 95%, 87% 1993. Apples harvested 72%, 66% 1993. Potatoes harvested 95%, 84% 1993. Dry beans harvested 99%. Sheep moved from summer range 96%, 94% 1993. Pasture, range feed good to excellent. Major farm activities were fall tillage, plowing, planting winter wheat, harvesting remaining crops, moving sheep from summer pastures.

VIRGINIA: Temperatures below normal. Extremes 30°; 80°. Precipitation below normal.

Days suitable for fieldwork 5.5. Topsoil 9% very short, 44% short, 44% adequate, 3% surplus. Pasture feed 4% very poor, 17% poor, 43% fair, 36% good. Corn for grain harvest 80%, 79% 1993, 77% avg. Corn for silage harvested 99%, 99% 1993, 98% avg. Soybean 37% fair, 62% good, 1% excellent. Soybeans harvested 25%, 17% 1993, 22% avg. Peanuts dug 98%, 76% 1993, 91% avg.; combined 91%, 55% 1993, 82% avg. Cotton harvested 35%, 50% 1993, 31% avg. Flue tobacco harvested 100%, 100% 1993, 100% avg. Fall apples harvested 94%, 93% 1993, NA avg. Winter apples harvested 90%, NA 1993, NA avg. Wheat seeded 30%, 38% 1993, 32% avg. Oats seeded 93%, 68% 1993, 73% avg. Barley seeded 78%, 73% 1993, 69% avg. Sweetpotato harvest nearly 80% completed. Producers continued corn and soybean harvesting. Fall plowing began while small grain land preparation and seeding was active, eventhough dry weather has been a problem in some areas. The rains helped to ease the dry period some.

WASHINGTON: Temperatures 4° below normal to normal west; 5° below normal to 1° below normal east. Precipitation 0.21 to 1.53 in. west; none to 0.18 in. east. Temperatures below normal across entire State. Precipitation heavy in the west, scattered in the east.

Days suitable for fieldwork 6.2. Soil moisture 91% short, 9% adequate. Hay, other roughage supplies 2% very short, 12% short, 86% adequate. Range, pasture feed 43% very poor, 46% poor, 9% fair, 2% good. Winter wheat, dryland 4% very poor, 48% poor, 39% fair, 9% good; irrigated, 8% fair, 12% good, 80% excellent. Potatoes 8% fair, 92% good. Corn 6% fair, 94% good. Winter wheat 88% planted, 96% 1993, 95% avg; 58% emerged, 79% 1993, 81% avg. Potatoes 93% harvested, 83% 1993, 84% avg. Corn silage 98% harvested, 90% 1993, 94% avg. Corn grain 50% harvested, 24% 1993, 29% avg. Dry beans 100% harvested, 96% 1993, 96% avg. Winter wheat seeding progressed, many areas winding down or finished. Sugarbeet harvest underway in the Columbia Basin. Concord grape harvest completed; late wine grape harvest continued. Apple harvest finished except for Fuji and Granny Smith varieties. Western pastures improved with recent rains; some seeding underway. Eastern pastures continued poor with supplemental feeding of livestock.

WEST VIRGINIA: Temperature 56°. Extremes 22°; 82°. Precipitation 0.69 in.

Days suitable for fieldwork, 5.2. Soil moisture 6% very short, 67% short, 27% adequate. Hay third cutting 95%, 100% 1993, 91% avg. Corn mature 100%, 100% 1993, 96% avg; harvested 65%, 75% 1993, 65% avg. Soybeans dropping leaves 95%, 100% 1993; harvested 45%, 50% 1993. Wheat sown 55%, 35% 1993, 50% avg. Barley sown 60%, 90% 1993. Apples 100% good. Pastures 7% poor, 54% fair, 39% good; 86% of normal. Cattle 100% good. Sheep 100% good. Farm activities: Cutting hay; sowing barley, wheat; harvesting corn, silage, soybeans, apples; equipment maintenance.

WISCONSIN: Temperature 56°, 11° above normal. Extremes 25°; 78°. Precipitation 0.10 to 1.60 in.

Days suitable for fieldwork 5.2. Soil moisture: 6% short, 73% adequate, 21% surplus. Pasture feed 82%, 77% 1993, 74% avg. Corn harvested for grain 29%, 9% 1993, 28% avg. Corn silage harvested 90%, 81% 1993, 86% avg. Soybeans harvested 60%, 71% 1993, 59% avg. Fall tillage 24%, 27% 1993, 29% avg. Warmer than normal weather pushed soybean and corn harvested percentages past their five year averages. Even with the rain that was received early in the week, most farmers were able to get into the fields to combine soybeans and corn. The warm weather has helped dry down corn during the week. Farmers noted that most of the corn is at 15 to 25% moisture. A lot of farmers are harvesting their corn and having it dried. Harvesting of high moisture corn is coming to an end as the corn dries down. Most reports are of excellent yields. Soybean harvest progressed considerably over the week. Yields have been reported as average to good. Hay harvest has been slowed because most farmers are working on getting their corn and soybean crops off. Of the hay being put up, the quality ranged from average to good. Fall tillage also slowed this week with emphasis put on combining.

WYOMING: Temperatures below normal except for a few isolated areas. Colony averaged the warmest at 3° above normal while Riverton only averaged 6° below normal. Precipitation was above normal Statewide. The mountains and mountain valleys received the most precipitation with amounts from 1.50 to over 3.00 inches. Lower elevations had from 0.50 to 2.00 in. Kaycee received the largest amount of precipitation at 4.42 in. Much of this precipitation fell as snow.

Days suitable for fieldwork 3.7. Topsoil 16% short, 75% adequate, 9% surplus. Subsoil 47% short, 53% adequate. Sugarbeets 66% harvested, 63% 1993, 72% avg. Corn 55% harvested, 45% 1993, 39% avg. Cattle 15% fair, 85% good. Calf condition 22% fair, 78% good. Sheep 25% fair, 75% good. Lamb condition 37% fair, 63% good. Cattle, calves moved from summer ranges 93%, 80% 1993. Sheep, lambs moved from summer ranges 93%, 78% 1993.

International Weather and Crop Summary

HIGHLIGHTS

October 16 - 22, 1994

FSU-WESTERN: Prolonged dryness with unusually cold weather over Ukraine and southern Russia adversely affected winter wheat development.

NORTHWESTERN AFRICA: Light to moderate showers increased topsoil moisture for winter wheat planting.

EUROPE: Mostly dry weather favored winter grain planting across the north, but wetness delayed fieldwork in the south.

SOUTH ASIA: Seasonable showers over southern India benefited secondary grains, oilseeds, and cotton.

SOUTHEAST ASIA: Additional heavy rain and flooding plagued northern Vietnam.

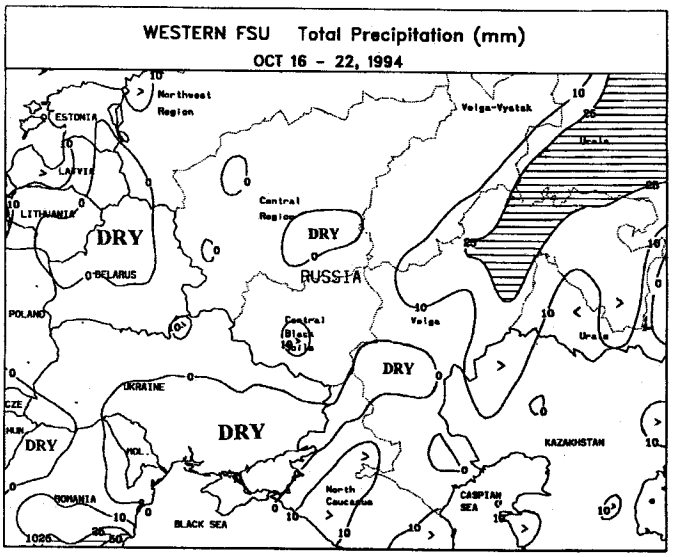
SOUTH AFRICA: Dry weather favored maturing winter wheat but reduced topsoil moisture needed for corn planting.

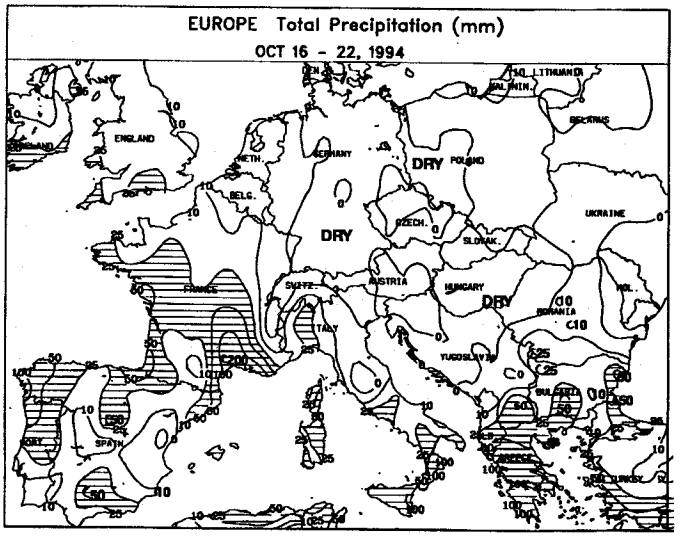
EASTERN ASIA: Rain favored rainfed winter wheat across the North China Plain and central China.

AUSTRALIA: Drought continued to stress eastern and southern wheat.

SOUTH AMERICA: Rain boosted soil moisture for summer crop planting and citrus and coffee flowering in southern Brazil.

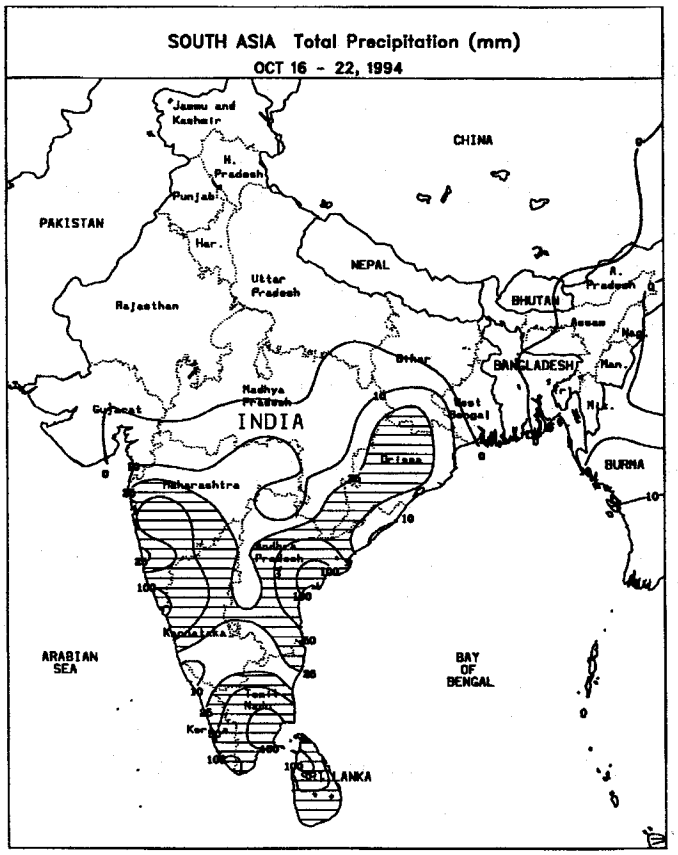
MEXICO: Seasonal rains diminished across the main corn belt, favoring maturing summer crops.



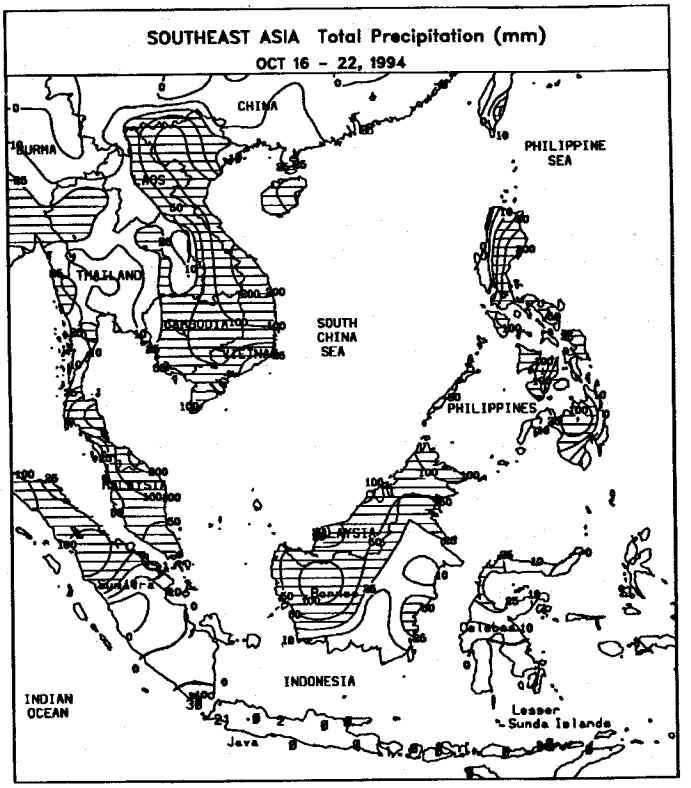


FSU-WESTERN: The first hard freeze of the season was widespread, covering Russia, Ukraine, Moldova, Belarus, and the Baltic States. Lowest temperatures in these areas ranged from -3 to -12 degrees Celsius (C), ending the 1994 growing season. Little, if any, (mostly less than 10 mm) precipitation fell over most of the region, with greater amounts of moisture (10-25 mm) falling over the upper Volga Valley and western North Caucasus regions in Russia. The moisture that fell over the western part of North Caucasus brought only temporary relief from prolonged dryness that has covered the area since mid-June. Elsewhere, dry weather persisted over eastern Ukraine and most of southern Russia, benefiting corn and sunflower harvesting. The dryness in these areas, however, along with this past week's unusually cold weather, continued to adversely affect winter wheat development. Weekly average temperatures were 2-5 degrees C below normal over most of the region, and temperatures were low enough to prompt hardening in winter grains as far south as the Black Sea coast.

EUROPE: Mostly dry weather favored planting of winter grains and oilseeds in northern Europe, where moisture is generally adequate for crop establishment. Sugarbeet harvesting also progressed favorably in the north, with showers producing 10 mm or less from the Benelux countries east to Poland and south to Romania. Rainfall amounts increased across southern Europe, slowing final corn harvesting in France. Rainfall averaged 20-50 mm, with scattered 50-100 mm, over southern France and the western two-thirds of the Iberian Peninsula. Beneficially drier weather (less than 10 mm) eased excessive wetness in eastern Spain. While dry weather prevailed over most of the Balkans, a late-week storm produced 50-100 mm or more in Greece and extreme southern Italy, disrupting fieldwork and likely causing some agricultural flooding. Weekly temperatures averaged near to slightly above normal in western Europe, and 2 to 4 degrees C below normal over eastern Europe as the first winter cold air mass pushed into the region.

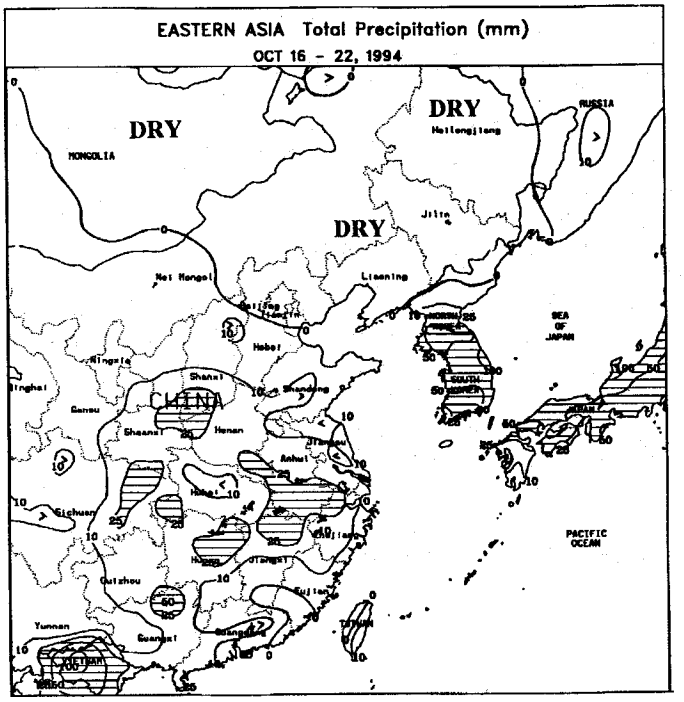


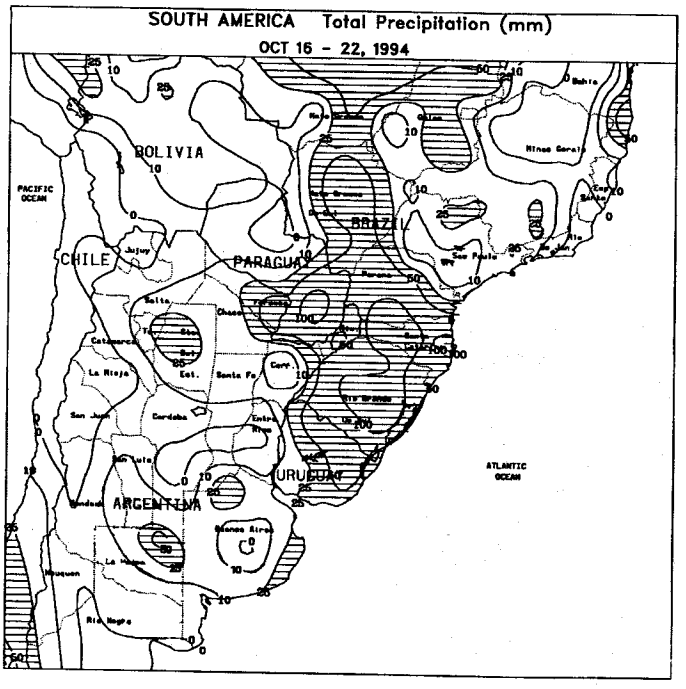
SOUTH ASIA: Rain (20-50 mm or more, with a few locations reporting over 100 mm) continued throughout southern India, benefiting second-crop grain, oilseeds, and cotton. Seasonably drier weather covered eastern rice areas, favoring main-season harvesting. Dry season rice planting usually begins in the east in November and December. Elsewhere in India and Pakistan, dryness aided summer crop harvesting and early winter crop planting.



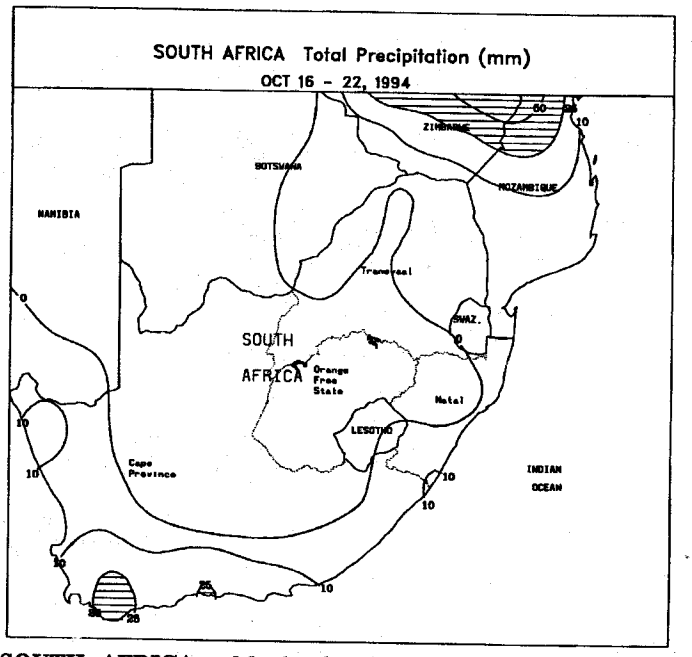
SOUTHEAST ASIA: Heavy rain (100-200 mm or more) fell over a broad area from central to northern Vietnam, boosting moisture reserves for dry-season (winter-spring) rice. The rains, however, hampered main-season (10th month) rice harvesting and caused additional flooding. While October and November are two of central Vietnam's wettest months, rains in northern Vietnam should diminish as the monsoon withdraws from Indochina. Scattered showers (25-50 mm or more) lingered elsewhere in Indochina, boosting reservoir levels. The beneficial rain extended southward through Malaysia, but rainfall continued unfavorably light over western Java, with little or no rain falling in the east. In the Philippines, moderate to heavy rain (50-100 mm or more), caused in part by Typhoon Teresa, boosted moisture for secondary grains but caused some localized flooding.

EASTERN ASIA: Widespread light to moderate rain (5-35 mm) fell across the North China Plain, and through central and southern China, boosting topsoil moisture for rainfed wheat planting and establishment. However, the rains slowed summer crop harvesting. Freezing temperatures (-2 to -5 degrees C) were reported across Manchuria, ending the growing season later than usual. The freeze, along with dry weather, allowed summer crop harvesting to progress rapidly. Moderate to heavy rains (30-100 mm) across South Korea and Japan slowed rice harvesting but increased reservoir levels. Temperatures averaged 1-3 degrees C below normal across most of eastern China.

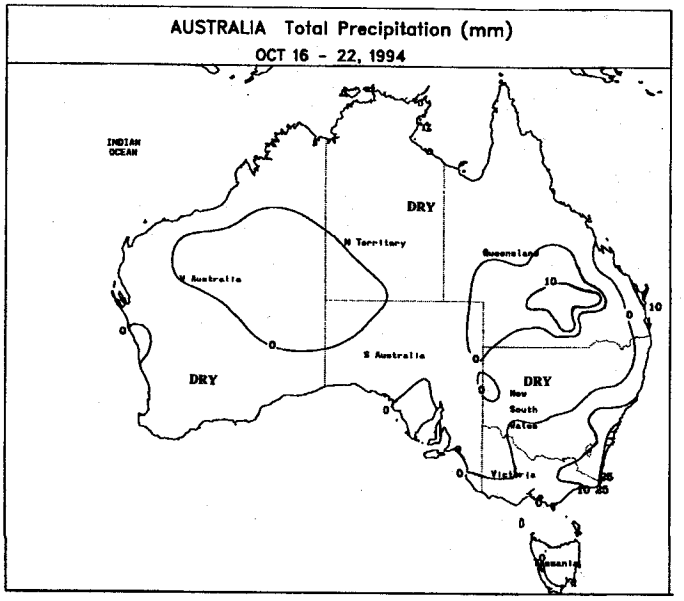




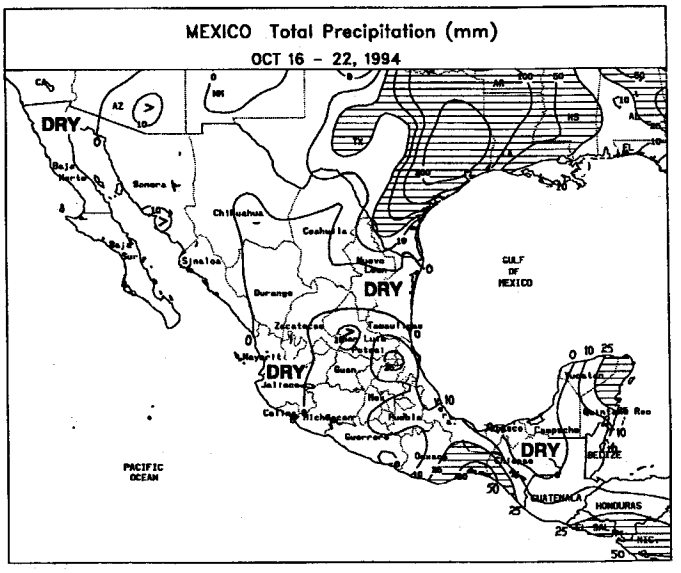
SOUTH AMERICA: Widespread showers (15-60 mm) fell across the major crop areas of southern Brazil, increasing soil moisture for summer crop planting. Sao Paulo and southern Minas Gerais received 15-40 mm of rain, aiding coffee and citrus flowering. The rainy season had been slow to start across this region. The rain was especially helpful since warm weather (temperatures 2-5 degrees above normal) increased evaporation rates. Heavier showers (60-170 mm) fell across Rio Grande do Sul, Santa Catarina, Parana, and southern Paraguay, slowing summer crop planting and winter wheat harvesting and possibly causing some local flooding. Typically, soybean planting is just underway by mid-October. In Argentina, light to moderate rain (5-20 mm, with isolated amounts greater 50 mm) benefited reproductive winter wheat across Buenos Aires and northeastern La Pampa. Further north, little or rain fell across the southern half Santa Fe and Cordoba. Moderate showers (15-25 mm) boosted soil moisture for cotton planting across northern Argentina. Temperatures averaged 1-2 degrees C below normal in Argentina.

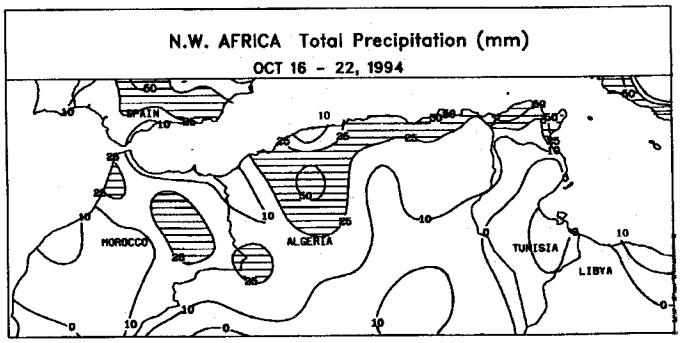


SOUTH AFRICA: Mostly dry, warm weather (temperatures averaged about 2 degrees C above normal in major grain areas) covered the region. The dryness favored maturing wheat. Except for sections of the eastern corn belt that received rain last week, topsoils are generally too dry for corn germination. Widespread rain will be needed in the next few weeks to avoid planting delays. Dry weather also covered Natal's sugarcane regions.



AUSTRALIA: Little or no rain fell across the southern and eastern wheat areas, as the drought continued to reduce wheat yield potentials. Maximum temperatures ranged from 33-37 degrees C (2-3 degrees C above normal) in the east, further stressing the crop. Additional rain will not aid winter wheat in southern Queensland as it is already maturing. Light rain (8-15 mm) fell across portions of south-central Queensland, increasing soil moisture for pastures and sorghum and cotton planting. More widespread rain is needed for summer crop planting to make significant progress. Dry, warm weather prevailed across the western wheat areas after last week's timely rain. Continued rainfall is still needed as maximum temperatures ranged from 30-35 degrees C (2-3 degrees C above normal), increasing evaporation rates.





MEXICO: Seasonal rains (less than 10 mm) began to diminish across the main corn belt, aiding summer crop maturation and harvesting. Typically, the seasonal rains end by late October. Light rain (5-15 mm) fell across northwestern irrigated crop areas, providing some moisture for wheat and vegetable planting. Scattered showers (15-45 mm) favored vegetative to reproductive corn across southeastern Mexico and the Yucatan Peninsula. Temperatures averaged 4-6 degrees C above normal across the northeast, 2-4 degrees C above normal across east-central and southeast Mexico, and 1-3 degrees C below normal across the northwest.

NORTHWESTERN AFRICA: Preparations for winter grain planting continued over most of the region. Light to moderate showers (10-25 mm, with local amounts in excess of 50 mm) helped to increase topsoil moisture for planting. Winter grain planting can begin as early as late-October if soil moisture is sufficient. Most of the crop, however, is usually planted from mid-November to mid-December when autumn rains become more consistent.

The 1994 Sahelian Rainy Season-- The Wettest Since 1964

The 1994 rainy season was the wettest since 1964 across the Sahel, based on preliminary May through September data (Figure 1). Using the 1951-80 period as the baseline "normal," 1994 is only the second year since 1967 to record above-normal rainfall for the season. Although the heavy rains brought damaging floods to some areas, the longer-term impacts are primarily beneficial, with water supplies ample and agricultural prospects among the best in years.

Rainfall Totals

The total rainfall and percent of normal rainfall maps for the season (Figures 2a and 2b) illustrate the large areal extent of the heavy rains across Africa, with cumulative totals exceeding 120 percent (%) of the 1961-90 mean across large sections of Senegal, Mauritania, and Mali, as well as most of Niger's crop area, southwestern Chad, northern Sudan, and eastern Ethiopia. Over 1000 mm fell on the Ethiopian highlands and most areas from 11°N southward to the Equator, except from central and western Burkina Faso southward across central and eastern Cote d'Ivoire and western and southern Ghana.

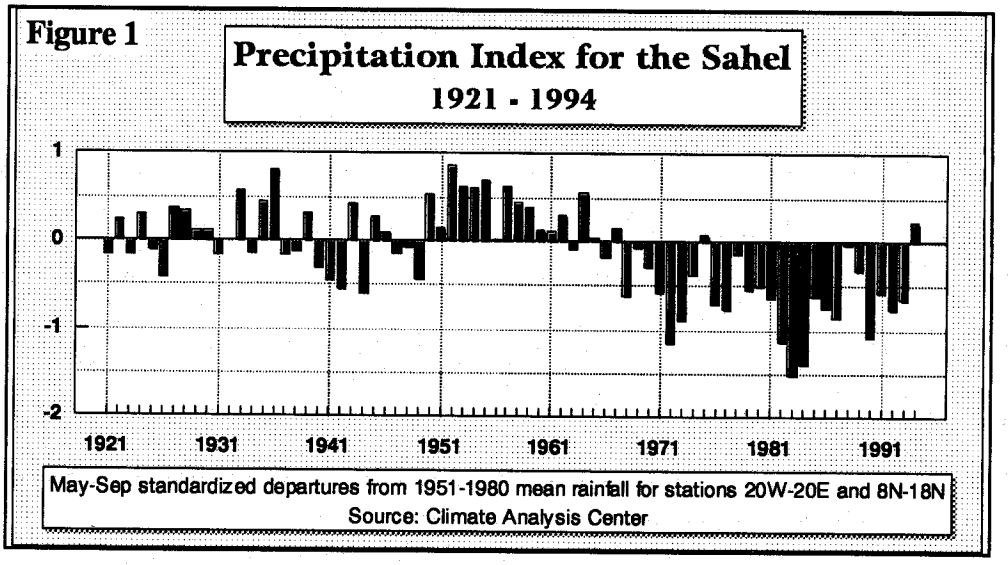
Damage frequently resulted from heavy rains and was especially pronounced in Sudan, Ethiopia, and Niger, according to press reports. In August, the Niger River Basin Authority reported that the Niger River contained its highest volume since 1950.

There were few areas with below-normal rainfall. The most significant dryness stretched along the Gulf of Guinea coast from Cote d'Ivoire eastward to the immediate coast of Togo and Benin. Less than 80% of normal seasonal rains fell from extreme eastern Liberia eastward across central and southern sections of Cote d'Ivoire, Ghana, Togo, and Benin and only about half of normal was measured along the extreme southern tier of Cote d'Ivoire.

Monthly Highlights

The season began with fears of a developing famine across East Africa, with weather problems only one among other contributing factors. Below-normal rainfall during May ensured a poor minor season ("belg") crop for much of Ethiopia. There were also food supply concerns in Kenya, Sudan, Somalia, and Eritrea due to earlier poor harvests.

June brought near or above normal rains to much of the Sahel as most areas south of 12°N recorded over 200 mm of rain, with the exception of the Gulf of Guinea coastline from extreme eastern Guinea eastward to Benin. Less than half of normal rain fell on these areas, as well as parts of Chad and the Ethiopian lowlands. Other areas, however, received ample rainfall, with well above-normal amounts in northern Nigeria and central and southern Sudan. Plentiful rains also alleviated food shortage concerns in Somalia and Kenya.



In July, the main rainy season got under way in Ethiopia, but its delay in some central and eastern areas posed a potential problem for the autumn harvests. When the rains arrived, however, they were impressive. Farther west, abundant rains fell on much of the Sahel and sub-Saharan Africa, with significant showers reaching exceptionally far north (past 20°N) in both Mali and Sudan. Well above-normal July rains also soaked southeastern Niger and parts of central and northern Chad. Farther south, less than 25 mm fell on most areas from eastern Liberia to southwestern Ghana.

August was also unusually wet, with heavy rains (100-400 mm) drenching most areas from Senegal and southern Mali eastward to western Sudan as well as central and northwestern Ethiopia, northern Cameroon, and northwestern Zaire. Totals were well above normal (greater than 150%) in a swath from north-central Mauritania southeastward to central Chad.

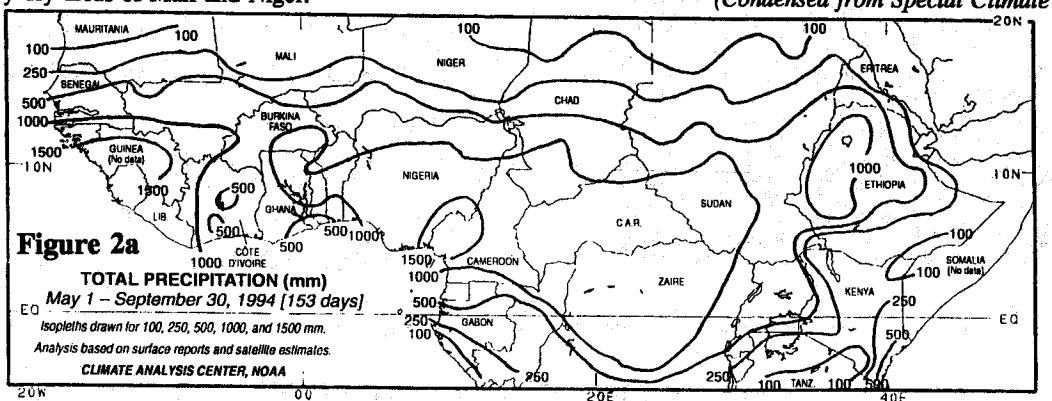
The widespread wetness continued through September, with exceptionally heavy rains (100-400 mm) falling from central Senegal southward through Liberia and eastward to central Ethiopia. Convective complexes continued to track unusually far north into typically dry areas of Mali and Niger.

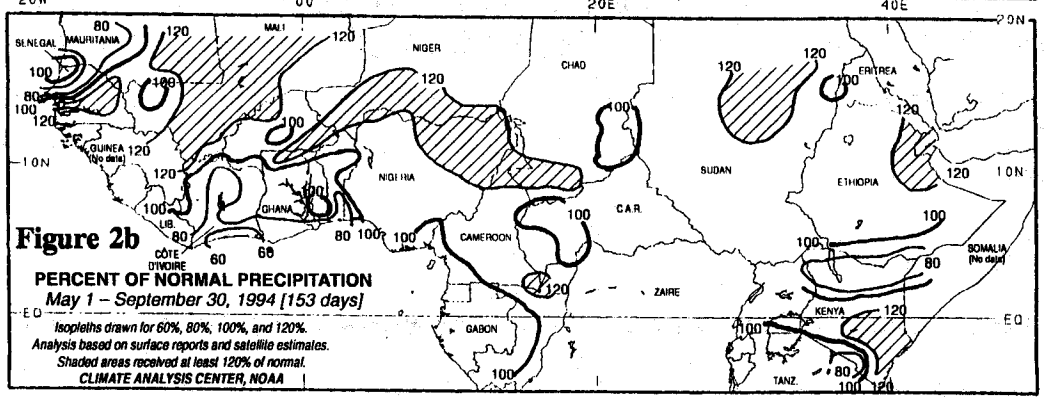
October saw drier conditions finally beginning to cover the Sahel, but occasional heavy rains still fell unseasonably far north, with new October records established in southeastern Mauritania. Farther south, above-normal rains erased lingering dryness in Cote d'Ivoire and along the Guinea coast.

Impacts

Despite localized crop damage from excessive rainfall and flooding, production prospects for the crops currently being harvested are mainly favorable. There are some areas of concern because of either a late start to the rainy season (Senegal's northern groundnut basin, eastern Ethiopian crop areas) or dry periods within the growing season (central and southwestern Burkina Faso, western Mali, western Niger south of the Mali border), but the abundant moisture in most areas should lead to a positive outcome across the region from Mauritania eastward to Sudan and Eritrea.

--Climate Analysis Center, October 1994
(Condensed from Special Climate Summary 94/2)





The Weekly Weather and Crop Bulletin is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic first class **$45**, foreign **$55** (in U.S. funds by international money order or check drawn on U.S. bank) payable to **U.S. Department of Commerce, NOAA.** POSTMASTER: Send address changes to **Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250.** Order subscriptions from the office and address listed above. First class postage paid at Washington, DC, and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor (acting) . . ***David Miskus*** (202) 720-7919
Editor . . . . . ***Brad Rippey*** (202) 720-1444
Meteorologists: ***David Secora, Jeff Savadel, Jeff Linhardt***

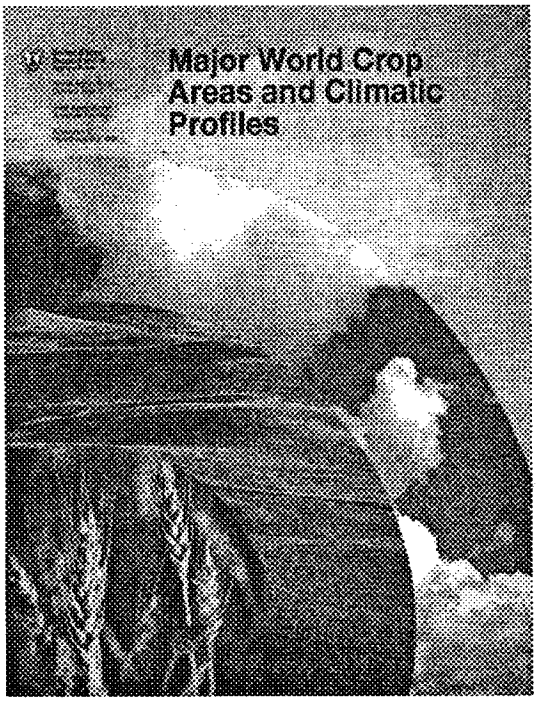
Subscriptions . . . . . ***Joyce Houston*** (202) 720-7917

U.S. DEPARTMENT OF AGRICULTURE
Economic Research Service
E.R.S. Editor . . . . . ***Sharon Lee***
National Agricultural Statistics Service
Agricultural Statistician . . ***Greg Preston*** (202) 720-7621
State Summaries Editor . . . ***Klara Haskins*** (202) 720-8033
World Agricultural Outlook Board
Agricultural Weather Analysts: ***Ray Motha*** (202) 720-9805
Tom Puterbaugh, Mark Brusberg, Bob Stefanski

Update Announcement:

Major World Crop Areas and Climatic Profiles

(Agricultural Handbook no. 664)



Nearly 300 pages of crop and climate information for the world's major producing areas, including historical production data and climate statistics.

TO ORDER: Call 1-800-999-6779
(Toll free in U.S. & Canada)

OR: Send a check or purchase order of US $20 (at time of publication; non-U.S. addresses add 25 percent) payable to ERS-NASS, to:

ERS-NASS
341 Victory Drive
Herndon,VA 22070

NOAA/USDA Joint Agricultural Weather Facility
USDA South Building, Room 5844
Washington, DC 20250

WEEKLY NEWS BULLETIN
FIRST CLASS

FIRST CLASS MAIL
POSTAGE & FEES PAID
NOAA
PERMIT NO. G-19

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300