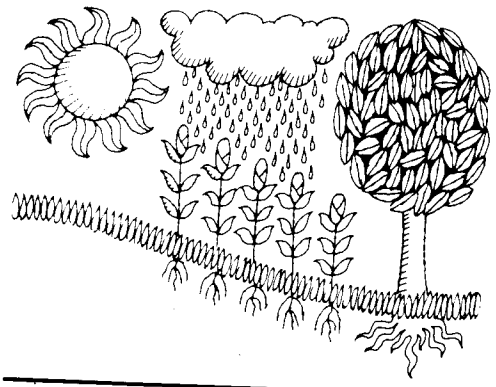

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service and World Agricultural Outlook Board

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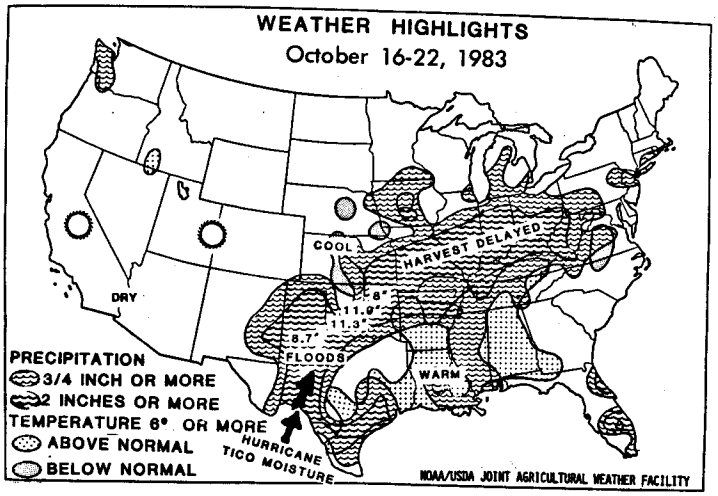
National Weather Summary

October 16 to 22



HIGHLIGHTS: Moisture from Hurricane Tico was propelled far northward before and after the storm made landfall on the west coast of Mexico and dissipated. The moisture moved through western Texas and into the circulation of a large low-pressure system in the central plains, which slowly moved northeastward. Heavy rain fell from western Texas through central and eastern Oklahoma, central Missouri, and into the Ohio Valley. Large areas in Texas, Oklahoma, and Missouri were flooded. Lighter showers or rain fell throughout most of the eastern United States. Average temperatures for the week were warmer than normal from southern Texas into Kentucky, but much cooler than normal in the central Plains and in the mid-Atlantic States.

SUNDAY...Showers and thunderstorms developed along a slow-moving cold front from the Texas Panhandle through Oklahoma and southeastern Kansas, Missouri and the middle Mississippi Valley, to lower Michigan. Showers were very heavy in parts of Missouri and Kansas and local flooding resulted. There were also severe thunderstorms along the southeastern coast of Texas and in Florida. Early morning temperatures dipped into the twenties in parts of the Rockies, and to the thirties in the upper Ohio Valley and New England.

MONDAY...Light showers and thunderstorms were scattered throughout the Gulf Coast States and the central Plains. Moderate to heavy showers and thunderstorms covered the area from Arkansas to the middle Ohio Valley. Heavy downpours in parts of these areas caused severe local flooding. Lighter showers spread from Kansas to northern Illinois and Ohio. Severe thunderstorms again spread over the southeastern coast of Texas and the east coast of Florida.

TUESDAY...Moisture from Hurricane Tico, off the Mexican coast, spread far northward and triggered heavy showers and thunderstorms through western Texas and eastern New Mexico, and spread northward through Oklahoma and eastern Kansas to central Minnesota. Lighter showers spread throughout the central and southern Plains and from Arkansas and Missouri to southern New England, and into the mid-Atlantic States.

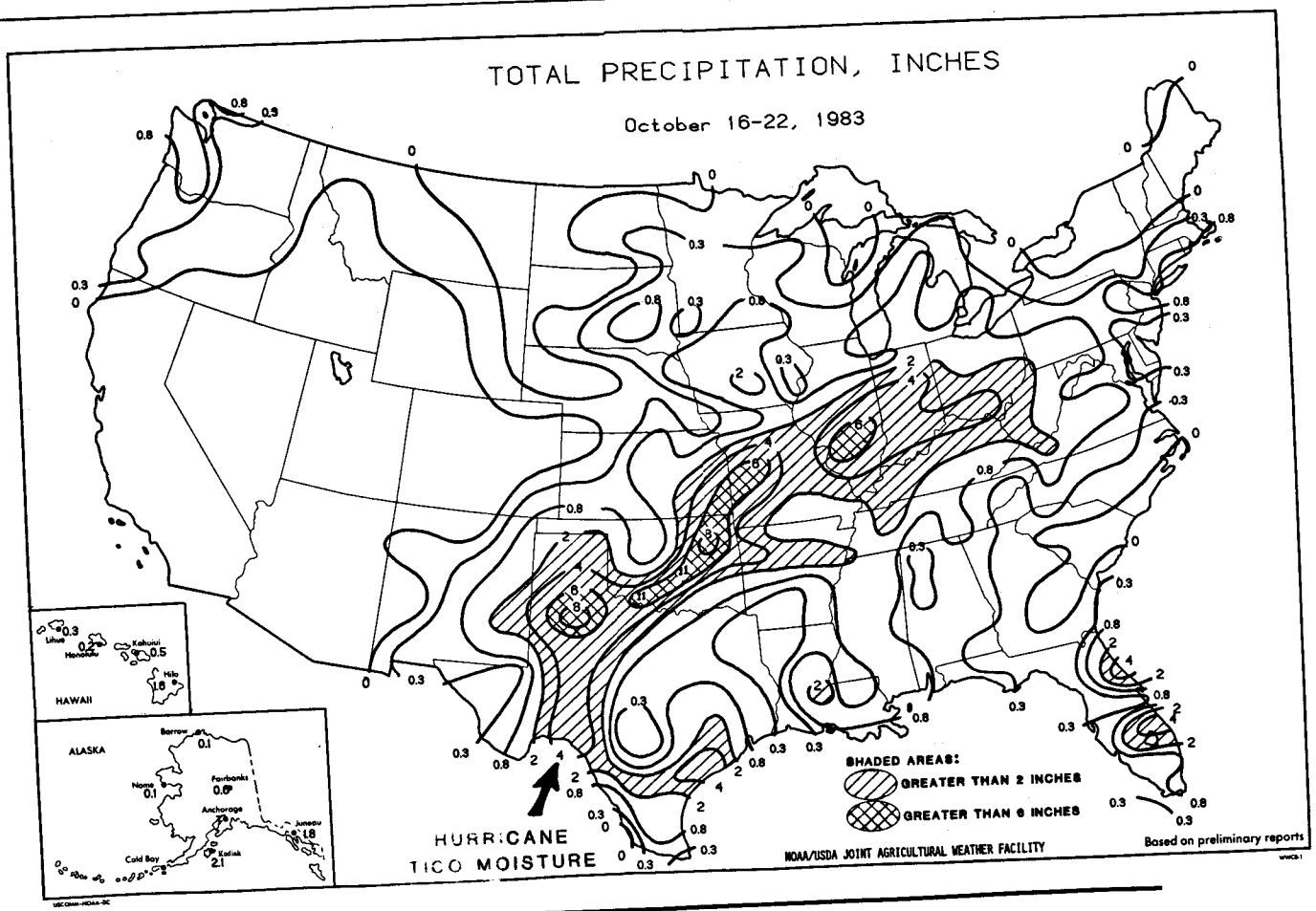
WEDNESDAY...Hurricane Tico went ashore in western Mexico and weakened rapidly, but moisture from the storm continued to pour northward and was enveloped into the circulation of a large low-pressure system in the central Plains. Torrential rains fell from western Texas through Oklahoma to southern Missouri. Lighter showers fell in New Mexico, throughout the Plains, the western Great Lakes, and through the Ohio Valley to the mid-Atlantic States.

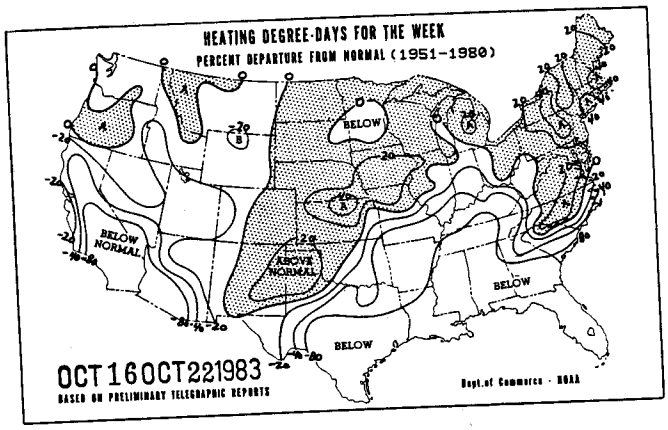
THURSDAY...Showers and thunderstorms continued in the southern Plains, the eastern portion of the central Plains, and across the Midwest to the mid-Atlantic States. Very heavy showers fell through central Texas and Oklahoma, southeastern Kansas, southern Missouri, and parts of the Ohio Valley. Several days of heavy rain in parts of Texas, Oklahoma, Kansas, and Missouri flooded large areas of land.

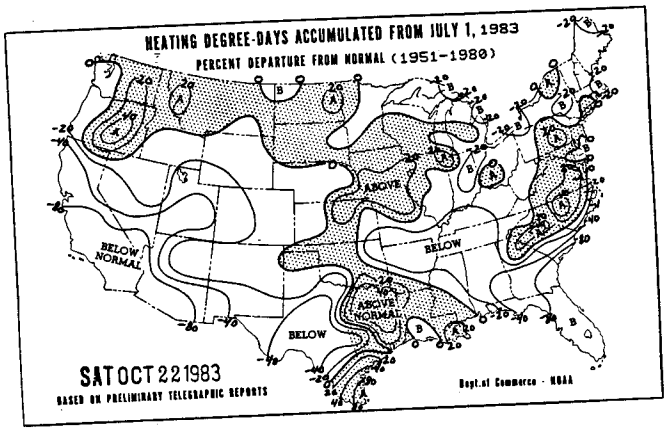
(continued on p. 16)

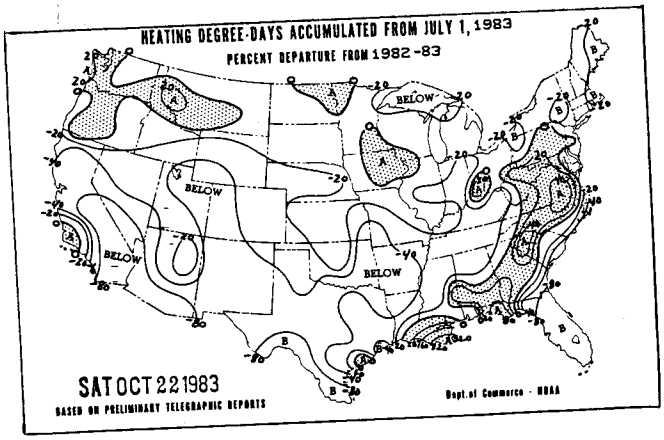
Contents

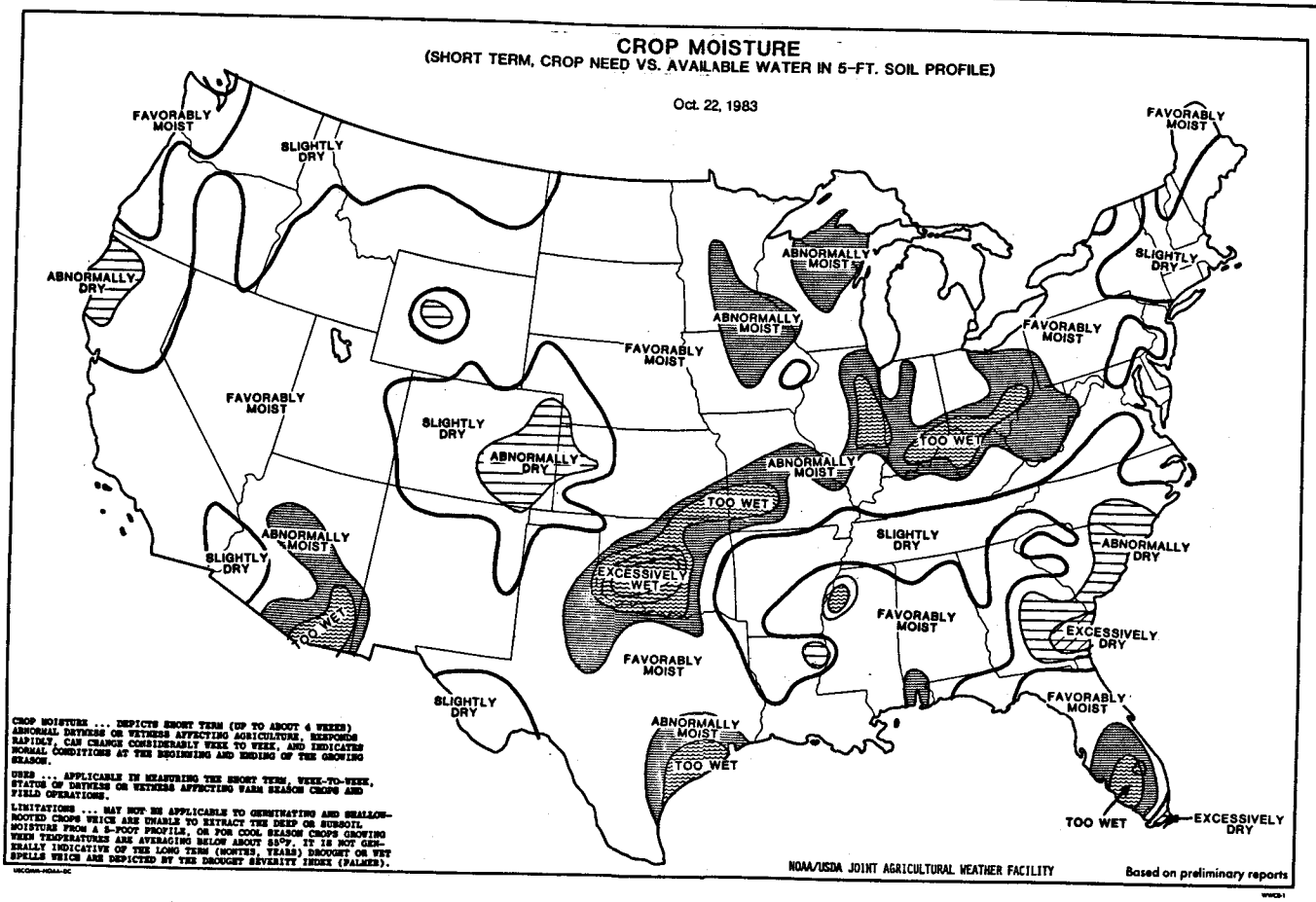
	Page
National Weather Summary	1
Precipitation & Heating Degree Days Maps	2
Crop Moisture & Crop Moisture Index	3
Average Temperature & Departure	4
Weather Data for Selected Cities	5
Heating Degree Days Table	8
National Agricultural Summary	9
Crop Progress Tables & State Summaries of Weather & Agriculture	10
International Weather & Crop Summary	17
Subscription & Mailing Permit Information & September Streamflow Map	20

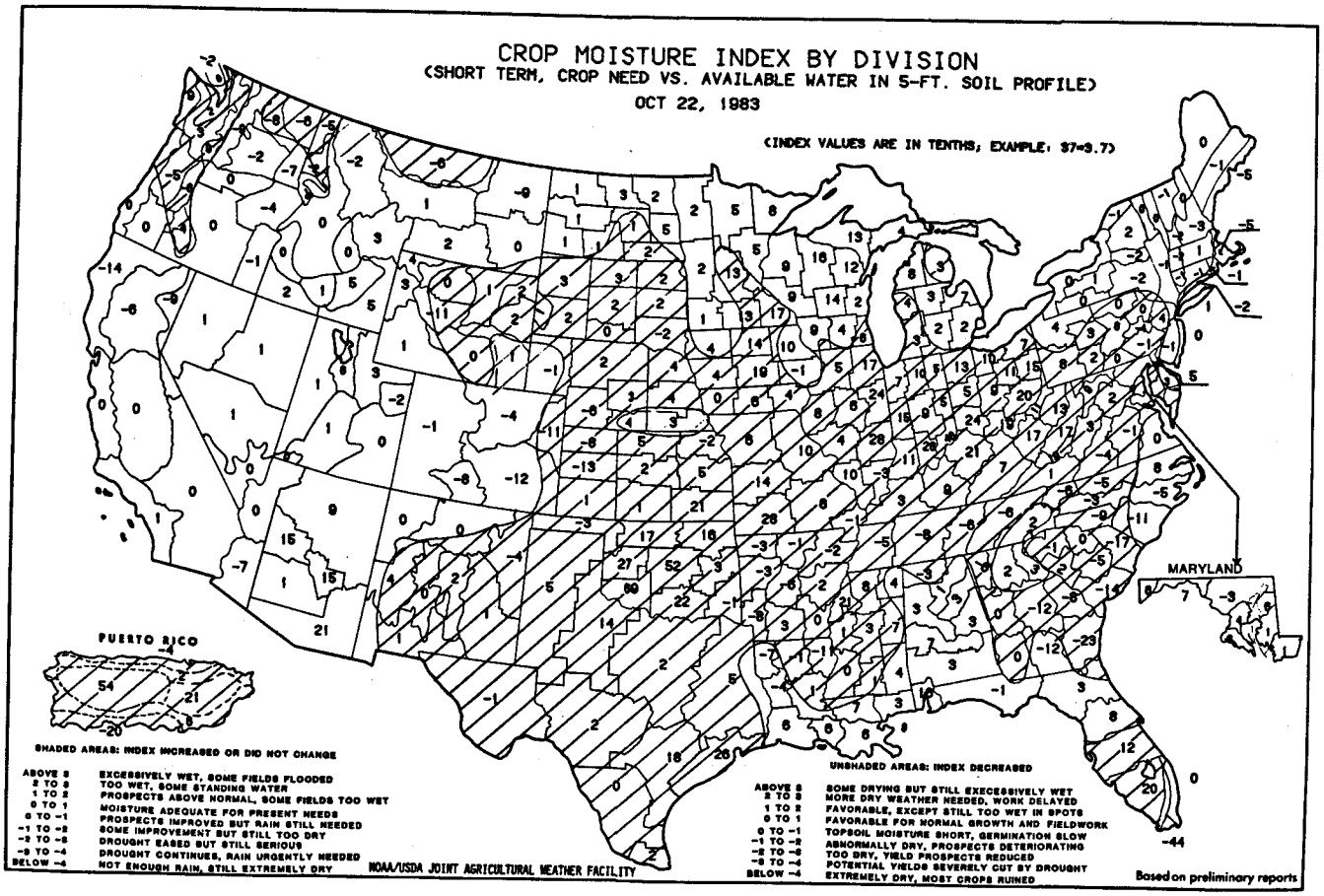

TOTAL PRECIPITATION, INCHES
October 16-22, 1983
HAWAII
ALASKA
SHADED AREAS:
GREATER THAN 2 INCHES
GREATER THAN 6 INCHES
HURRICANE
TICO MOISTURE
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

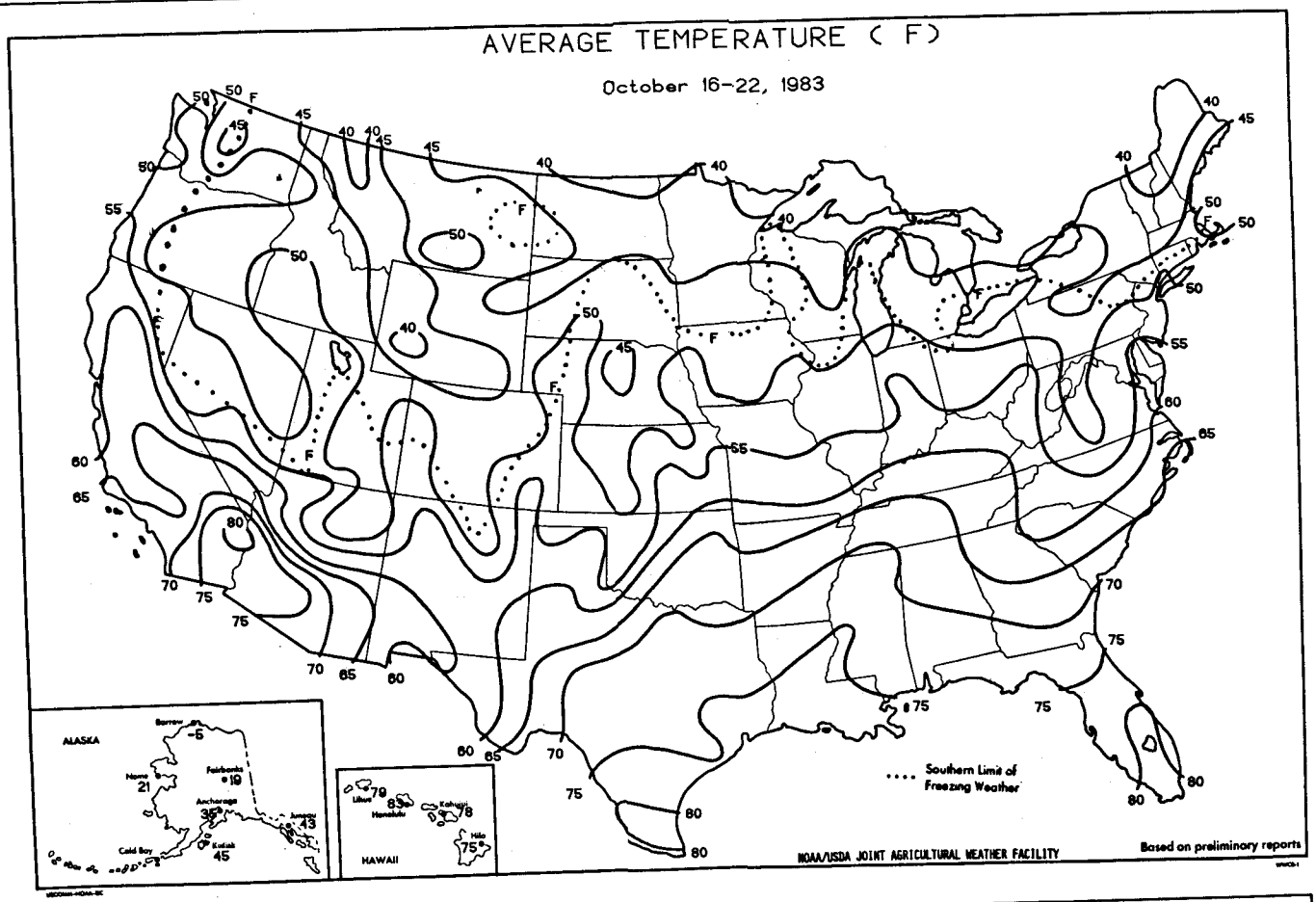

HEATING DEGREE-DAYS FOR THE WEEK
PERCENT DEPARTURE FROM NORMAL (1951-1980)
BELOW
BELOW NORMAL
ABOVE NORMAL
OCT 16 OCT 22 1983
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept. of Commerce - NOAA

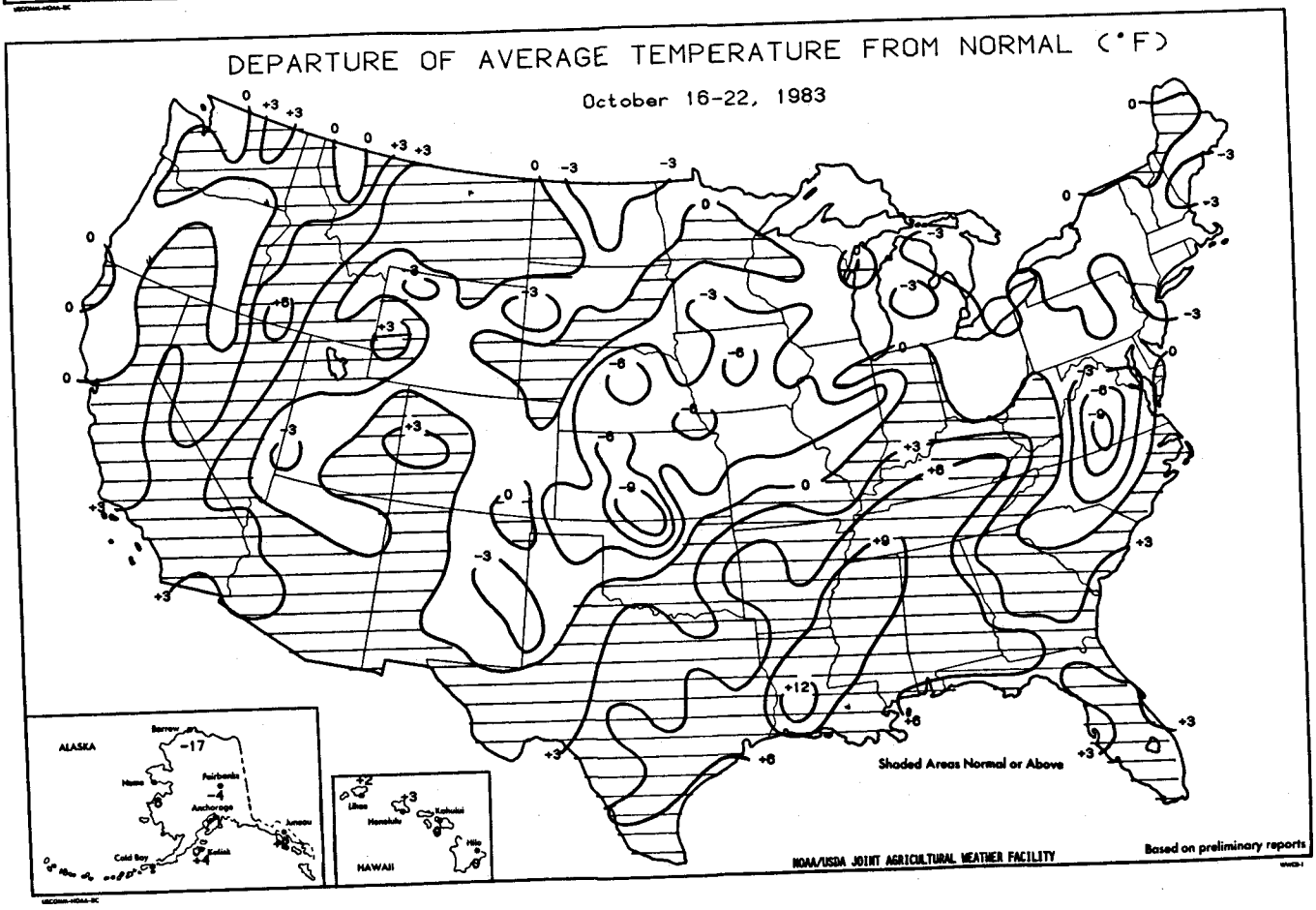

HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1983
PERCENT DEPARTURE FROM NORMAL (1951-1980)
ABOVE
BELOW
BELOW NORMAL
ABOVE NORMAL
SAT OCT 22 1983
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept. of Commerce - NOAA


HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1983
PERCENT DEPARTURE FROM 1982-83
BELOW
SAT OCT 22 1983
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept. of Commerce - NOAA


CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
Oct. 22, 1983
FAVORABLY MOIST
SLIGHTLY DRY
ABNORMALLY DRY
ABNORMALLY MOIST
TOO WET
EXCESSIVELY WET
EXCESSIVELY DRY
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 ENDING 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 (PALMER).
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


CROP MOISTURE INDEX BY DIVISION
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
OCT 22, 1983
(INDEX VALUES ARE IN TENTHS; EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
SHADED AREAS: INDEX INCREASED OR DID NOT CHANGE
ABOVE 8 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 8 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 8 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 8 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


AVERAGE TEMPERATURE (F)
October 16-22, 1983
ALASKA
HAWAII
.... Southern Limit of Freezing Weather
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
October 16-22, 1983
ALASKA
HAWAII
Shaded Areas Normal or Above
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

Weather Data for the Week Ending Oct. 22, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 AUG 28	PCT. NORMAL SINCE AUG 28	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	76	59	80	55	68	7	.7	.2	.7	6.8	99	50.0	107	91	53	0	0	1	1
MOBILE	83	64	84	62	73	6	1.0	.5	1.0	12.3	127	70.1	123	91	58	0	0	1	1
MONTGOMERY	82	60	87	57	71	7	.6	.2	.6	9.7	139	60.1	144	95	55	0	0	1	1
AK ANCHORAGE	40	29	47	26	35	1	T	- .3	T	4.0	103	10.7	86	84	62	0	7	2	0
BARROW	-1	-9	10	-22	-5	-17	.1	0	T	1.3	118	2.8	58	76	65	0	7	5	0
FAIRBANKS	24	14	36	6	19	-4	.1	- .1	T	3.6	200	9.1	100	74	51	0	7	3	0
JUNEAU	47	40	48	35	43	2	1.8	0	.5	9.0	69	37.6	87	100	80	0	0	6	1
KODIAK	49	41	53	32	45	4	2.1	- .2	.8	7.2	46	57.6	104	96	78	0	1	6	1
NOME	28	14	38	1	21	-5	.1	- .2	.1	4.5	118	11.5	79	68	38	0	6	1	0
AZ PHOENIX	88	67	92	65	77	5	T	- .1	T	3.2	291	11.3	192	67	28	2	0	1	0
PRESCOTT	70	42	75	38	56	2	0	- .3	0	10.2	352	18.3	116	87	36	0	0	0	0
TUCSON	82	57	85	56	70	0	T	- .2	T	9.4	409	19.7	195	75	27	0	0	1	0
YUMA	91	66	96	64	79	3	0	- .1	0	.3	50	2.2	100	59	24	3	0	0	0
AR FORT SMITH	72	59	83	53	65	4	4.5	3.8	1.7	7.2	122	28.4	83	93	69	0	0	5	3
LITTLE ROCK	70	60	80	53	65	3	2.0	1.4	1.9	4.2	68	30.8	78	95	81	0	0	3	1
CA BAKERSFIELD	80	54	83	51	67	0	0	- .1	0	.3	60	8.2	200	82	39	0	0	0	0
EUREKA	63	50	68	47	57	3	T	- .6	T	4.2	168	41.1	161	93	74	0	0	1	0
FRESNO	81	52	84	51	67	3	0	- .1	0	1.2	240	17.5	243	80	33	0	0	0	0
LOS ANGELES	74	61	82	59	67	1	0	- .1	0	2.8	700	24.6	289	84	58	0	0	0	0
RED BLUFF	78	50	82	46	64	0	T	- .3	T	1.4	117	31.0	221	79	30	0	0	0	0
SACRAMENTO	81	50	83	48	66	3	0	- .2	0	.7	88	24.5	221	87	29	0	0	0	0
SAN DIEGO	75	66	79	62	71	4	T	- .1	T	.4	133	15.0	231	84	61	0	0	1	0
SAN FRANCISCO	71	51	76	48	61	1	0	- .3	0	.6	75	26.0	205	88	52	0	0	0	0
CO DENVER	65	35	73	29	50	-1	T	- .2	T	.5	23	17.0	121	74	23	0	3	0	0
GRAND JUNCTION	71	44	74	39	57	3	T	- .2	T	1.5	100	11.1	163	57	21	0	0	0	0
PUEBLO	67	35	77	28	51	-2	0	- .2	0	.7	41	11.6	106	81	31	0	2	0	0
CT BRIDGEPORT	57	41	63	32	49	-6	.9	.1	.6	4.8	79	43.5	132	82	50	0	1	2	1
HARTFORD	57	35	65	24	46	-5	.4	- .4	.3	6.6	93	32.5	90	79	38	0	3	2	2
DC WASHINGTON	65	50	71	42	58	0	.9	.3	.3	6.5	112	38.9	118	86	57	0	0	4	0
FL APALACHICOLA	82	67	85	64	74	5	T	- .5	T	9.1	73	51.5	103	88	63	0	0	0	0
DAYTONA BEACH	81	71	84	69	76	3	5.1	4.1	2.9	18.7	167	59.6	136	91	69	0	0	5	3
JACKSONVILLE	79	68	83	64	73	5	1.0	.4	.7	8.0	74	51.0	104	95	71	0	0	4	1
KEY WEST	85	77	86	75	81	1	.1	- .9	.1	3.8	35	46.4	133	83	66	0	0	2	0
MIAMI	86	72	87	71	79	2	.8	- .8	.5	10.7	74	50.3	95	90	56	0	0	2	0
ORLANDO	84	71	88	70	78	4	.8	.3	.5	9.3	112	48.0	106	94	65	0	0	3	1
TALLAHASSEE	82	64	86	58	73	6	.1	- .5	.1	5.8	59	54.2	95	94	60	0	0	1	0
TAMPA	85	71	86	70	78	4	.4	0	.4	8.6	95	53.4	121	100	65	0	0	1	0
WEST PALM BEACH	82	72	84	70	77	0	2.8	1.1	1.0	14.3	88	68.0	125	94	73	0	0	5	2
GA ATLANTA	70	56	77	51	63	2	.1	- .5	.1	9.1	165	34.4	86	86	64	0	0	1	0
AUGUSTA	76	54	83	46	65	3	.1	- .4	.1	6.0	103	41.1	110	85	48	0	0	1	0
MACON	77	58	85	54	67	3	T	- .4	T	2.8	55	38.5	100	89	56	0	0	0	0
SAVANNAH	77	62	83	58	69	4	.1	- .3	.1	4.1	53	45.5	98	92	58	0	0	1	0
HI HILO	82	68	84	65	75	0	1.6	- .7	.4	17.5	124	58.8	60	90	69	0	0	5	0
HONOLULU	89	77	91	74	83	3	.2	- .3	.1	1.4	74	3.5	22	80	51	3	0	2	0
KAHULUI	85	72	91	66	78	0	.5	.3	.3	1.0	111	5.0	38	88	62	1	0	4	0
LIHUE	83	74	85	71	79	2	.3	- .8	.2	3.3	59	12.7	39	85	66	0	0	3	0
ID BOISE	67	41	74	36	54	3	T	- .2	T	1.0	111	12.7	146	71	28	0	0	0	0
LEWISTON	61	42	69	35	51	1	.4	.2	.3	1.6	114	11.1	114	92	49	0	0	2	0
POCATELLO	65	30	73	25	47	0	0	- .2	0	2.5	208	14.0	161	86	32	0	5	4	1
IL CHICAGO	59	44	72	34	51	-1	1.1	.6	.5	7.5	136	37.7	127	88	54	0	0	4	1
MOLINE	56	41	65	32	49	-4	1.0	.5	.5	7.7	126	28.3	85	95	65	0	1	4	1
PEORIA	58	47	71	43	53	0	1.5	.9	.5	8.1	131	33.8	106	95	73	0	0	4	1
QUINCY	57	47	66	40	52	-3	3.9	3.2	2.7	8.9	122	26.1	76	90	70	0	0	4	2
ROCKFORD	57	41	69	30	49	-2	.7	0	.4	6.0	94	27.3	81	99	66	0	1	3	0
SPRINGFIELD	59	48	68	44	54	-1	2.9	2.4	2.0	5.0	94	24.3	82	96	72	0	0	5	2
IN EVANSVILLE	67	54	76	42	60	4	2.8	2.2	1.1	6.9	141	39.7	112	93	73	0	0	6	2
FORT WAYNE	59	46	73	41	53	1	1.7	1.2	1.3	4.9	102	23.7	78	91	65	0	0	4	1
INDIANAPOLIS	62	50	75	45	56	2	1.6	1.1	.8	5.2	104	28.0	84	83	61	0	0	5	1
SOUTH BEND	59	46	63	40	52	0	.9	.2	.6	4.5	75	24.6	76	85	58	0	0	4	1
IA DES MOINES	55	43	61	34	49	-4	2.1	1.7	1.2	10.4	204	32.4	113	93	71	0	0	5	2
SIOUX CITY	55	44	65	35	50	-2	1.2	.8	.7	5.4	126	24.9	104	92	69	0	0	2	2
WATERLOO	53	40	60	30	47	-3	.9	.4	.4	7.7	135	31.6	103	97	64	0	2	4	0
KS CONCORDIA	56	46	63	42	51	-5	2.6	2.2	.9	4.4	92	22.0	86	96	76	0	0	4	3
DODGE CITY	61	49	68	40	55	-2	.5	.2	.3	4.6	148	22.2	114	95	67	0	0	3	0
GOODLAND	60	37	68	23	48	-3	T	- .2	T	1.2	50	15.8	101	93	46	0	1	0	0
TOPEKA	59	52	68	49	55	0	2.7	2.1	1.9	7.1	115	31.2	102	90	72	0	0	5	2
WICHITA	59	52	70	47	56	-2	1.8	1.3	.6	5.5	92	33.0	125	97	82	0	0	7	1
KY BOWLING GREEN	70	55	77	42	63	6	1.8	1.1	1.4	4.8	86	41.1	98	100	76	0	0	4	1
LEXINGTON	66	53	74	45	59	4	3.2	2.7	2.7	7.4	140	33.3	85	97	73	0	0	4	1
LOUISVILLE	65	53	75	43	59	3	3.4	2.8	2.7	7.8	134	38.3	102	90	68	0	0	4	2
LA ALEXANDRIA	82	66	86	58	74	7	1.1	.2	1.1	5.1	93	42.3	97	90	58	0	0	1	1
BATON ROUGE	83	67	86	59	75	8	.5	0	.5	5.9	84	63.4	134	99	62	0	0	1	1
LAKE CHARLES	85	69	87	59	77	8	.1	- .6	.1	8.9	105	48.6	107	91	60	0	0	2	0
NEW ORLEANS	83	67	85	63	75	7	.6	.1	.6	10.8	124	69.2	136	87	62	0	0	1	1

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending Oct. 22, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 AUG 28	PCT. NORMAL SINCE AUG 28	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
SHREVEPORT	81	63	86	52	72	6	.2	- .4	.2	3.9	71	37.7	104	95	60	0	0	1	0
ME CARIBOU	47	30	56	22	39	-4	T	- .7	T	4.9	79	33.0	110	83	45	0	4	1	0
PORTLAND	53	32	62	25	43	-5	0	- .9	0	4.7	72	43.1	129	85	42	0	3	0	0
MD BALTIMORE	62	46	71	40	54	-2	.4	- .3	.2	3.5	56	37.4	107	88	57	0	0	3	0
SALISBURY	67	49	75	44	58	2	T	- .8	T	7.7	107	40.1	103	95	59	0	0	1	0
MA BOSTON	56	41	68	34	48	-5	.3	- .5	.2	4.7	75	38.3	112	76	45	0	0	2	0
CHATHAM	54	46	64	40	50	-3	1.0	.2	.9	5.3	78	45.0	122	76	60	0	0	2	1
MI ALPENA	52	35	61	27	43	-3	.7	.3	.7	7.0	143	29.6	118	96	58	0	0	2	1
DETROIT	58	41	64	33	49	-1	.5	0	.5	5.8	141	29.6	112	85	50	0	0	1	1
FLINT	57	40	63	34	49	-1	.7	.2	.7	6.8	162	27.0	105	87	50	0	0	1	1
GRAND RAPIDS	57	40	66	31	49	-1	1.1	.5	1.1	7.3	135	31.1	108	84	52	0	0	1	1
HOUGHTON LAKE	53	35	61	27	44	-2	1.0	.5	1.0	7.8	159	25.6	108	95	56	0	0	2	1
LANSING	55	37	63	30	46	-4	.8	.4	.8	6.2	144	28.5	111	94	59	0	0	1	1
MARQUETTE	51	28	58	24	39	-4	T	- .7	T	11.7	175	37.5	119	94	52	0	0	1	1
MUSKEGON	55	40	62	32	48	-2	.8	.1	.7	9.4	174	26.0	98	88	59	0	0	1	0
SAULT STE. MARIE	52	31	59	23	42	-3	.1	- .6	.1	7.2	111	28.1	102	96	52	0	0	2	1
MN ALEXANDRIA	50	39	55	30	44	-1	.7	.3	.5	4.4	102	19.3	84	97	69	0	0	2	1
DULUTH	47	38	52	32	43	-1	.1	- .4	T	7.9	144	24.5	91	96	69	0	0	2	0
INT'L FALLS	48	32	57	21	40	-2	.2	- .2	.2	7.5	150	22.2	98	95	59	0	0	1	0
MINNEAPOLIS	54	41	57	31	48	-1	.5	.1	.3	6.5	155	32.4	135	90	55	0	0	2	0
ROCHESTER	51	39	58	31	45	-2	1.6	1.1	.8	8.5	163	30.4	116	90	61	0	0	3	0
MS GREENWOOD	83	65	88	57	74	11	1.4	.8	.8	3.4	61	47.7	111	88	52	0	0	4	1
JACKSON	84	61	87	58	73	9	1.1	.5	1.1	4.2	72	58.3	135	96	47	0	0	1	1
MERIDIAN	82	58	85	56	70	8	.5	- .1	.5	5.3	90	55.3	127	100	60	0	0	1	0
MO CAPE GIRARDEAU	68	55	80	46	62	--	2.5	2.0	1.3	6.4	107	34.3	92	99	78	0	0	4	2
COLUMBIA	58	49	69	43	53	-3	3.1	2.3	1.6	9.1	136	33.5	106	99	88	0	0	6	2
KANSAS CITY	56	49	67	44	52	-4	2.0	1.4	1.2	5.1	74	26.6	81	96	81	0	0	5	1
SAINT LOUIS	63	52	70	51	58	1	4.6	4.2	2.1	6.6	143	33.2	115	100	79	0	0	5	4
SPRINGFIELD	67	55	76	51	61	4	4.5	3.8	1.8	10.9	149	37.7	110	93	77	0	0	5	3
MT BILLINGS	60	40	77	37	50	2	.5	.2	.5	3.4	142	10.9	82	79	47	0	0	1	0
GLASGOW	57	34	74	31	46	0	0	- .1	0	1.2	92	7.1	66	86	47	0	0	0	0
GREAT FALLS	60	36	72	27	48	1	.1	- .1	.1	2.8	147	14.1	103	82	37	0	0	1	0
HAVRE	58	30	73	23	44	0	T	- .1	T	.6	50	11.2	106	97	46	0	0	1	0
HELENA	58	30	71	25	44	0	T	- .1	T	1.9	136	13.0	130	88	41	0	0	1	0
KALISPELL	49	29	54	24	39	-2	.2	0	.2	2.2	100	14.9	110	99	64	0	0	2	0
MILES CITY	60	38	75	33	49	2	0	- .2	0	1.6	80	7.5	58	89	41	0	0	1	0
MISSOULA	54	29	60	22	42	-1	T	- .2	T	1.7	100	13.6	128	97	50	0	0	0	0
NE GRAND ISLAND	56	43	65	35	50	-3	.7	.5	.4	3.7	100	24.3	110	92	69	0	0	2	0
LINCOLN	57	46	66	36	51	-1	.3	0	.3	4.3	93	25.0	100	98	73	0	0	3	0
NORFOLK	56	43	66	35	49	-1	1.0	.7	.9	2.7	77	24.0	105	92	65	0	0	2	0
NORTH PLATTE	57	38	66	29	48	-2	.1	- .1	.1	.7	27	17.1	92	88	54	0	0	2	0
OMAHA	55	44	65	40	49	-3	.7	.3	.4	4.8	89	26.4	93	96	79	0	0	4	0
SCOTTSBLUFF	66	34	73	27	50	1	T	- .1	T	1.0	59	13.2	98	84	27	0	0	0	0
VALENTINE	57	39	70	30	48	0	.6	.4	.2	2.6	100	23.2	133	86	54	0	0	4	0
NV ELY	68	27	72	24	48	3	0	- .1	0	1.1	92	12.2	165	82	25	0	0	0	0
LAS VEGAS	80	54	83	51	67	1	0	- .1	0	.7	140	4.5	125	48	21	0	0	0	0
RENO	74	33	79	30	53	4	0	- .1	0	1.0	167	8.4	158	85	21	0	0	0	0
WINNEMUCCA	70	25	75	20	48	0	0	- .1	0	.8	114	8.3	132	77	21	0	0	0	0
NH CONCORD	56	30	63	18	43	-4	0	- .7	0	4.5	78	34.6	117	90	38	0	0	1	0
NJ ATLANTIC CITY	60	43	70	39	52	-3	.2	- .5	.2	5.6	100	34.5	98	96	64	0	0	2	0
NM ALBUQUERQUE	66	45	75	41	56	-1	.3	.1	.3	2.1	131	6.9	95	89	42	0	0	2	0
CLOVIS	66	48	79	39	57	-1	2.1	1.7	.7	3.6	103	10.4	63	85	53	0	0	4	0
ROSWELL	68	49	82	43	59	-2	2.3	2.1	1.4	3.7	142	7.9	84	70	47	0	0	4	2
NY ALBANY	54	33	60	23	44	-6	T	- .6	T	3.8	67	35.6	123	93	47	0	0	4	0
BINGHAMTON	55	36	64	27	45	-3	.1	- .5	.1	4.4	76	32.7	108	79	40	0	0	4	1
BUFFALO	57	37	64	30	47	-4	T	- .6	T	6.1	105	26.2	86	85	39	0	0	3	1
NEW YORK	58	45	64	39	51	-5	.7	0	.5	7.9	130	46.0	131	81	51	0	0	2	2
ROCHESTER	56	38	65	29	47	-4	T	- .6	T	5.0	100	25.0	94	85	44	0	0	2	0
SYRACUSE	55	33	65	24	44	-6	0	- .7	0	4.9	83	26.0	80	96	46	0	0	4	0
NC ASHEVILLE	67	45	77	35	56	2	.4	- .3	.3	9.3	137	38.9	96	97	52	0	0	2	2
CHARLOTTE	67	48	79	43	58	-2	.2	- .3	.2	2.0	33	28.8	80	92	57	0	0	2	3
GREENSBORO	64	46	76	40	55	-2	.7	0	.5	4.7	71	34.5	94	87	58	0	0	3	1
HATTERAS	71	60	76	55	66	2	T	- 1.0	T	14.7	148	53.5	117	87	60	0	0	1	0
NEW BERN	75	56	80	49	65	3	T	- .7	T	4.3	47	43.1	92	90	50	0	0	1	0
RALEIGH	67	47	76	43	57	-2	.5	- .1	.5	4.0	70	35.0	98	94	63	0	0	0	0
WILMINGTON	73	54	80	49	64	0	T	- .6	T	6.0	67	47.9	101	94	59	0	0	2	0
ND BISMARCK	50	35	55	25	42	-3	.1	0	.1	1.8	86	12.0	82	93	59	0	0	1	1
FARGO	50	39	53	29	44	-1	.3	0	.2	5.0	156	17.8	96	84	62	0	0	2	1
GRAND FORKS	48	37	53	29	42	-2	.1	- .1	.1	5.3	161	20.2	120	90	64	0	0	2	1
WILLISTON	58	31	72	24	45	0	T	- .1	T	.8	35	8.0	62	84	99	0	0	5	0
OH AKRON-CANTON	56	44	70	39	50	-1	1.5	1.0	.9	6.5	130	30.7	99	83	55	0	0	3	0
CINCINNATI	60	49	71	43	54	0	5.2	4.6	2.5	10.6	208	35.4	103	94	73	0	0	3	0
CLEVELAND	56	43	68	37	50	-2	.6	.1	.5	7.3	149	30.7	101	82	56	0	0	5	2
COLUMBUS	58	45	72	39	52	-1	2.8	2.4	1.4	7.4	164	29.9	92	85	58	0	0	0	4

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending Oct. 22, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	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 AUG 28	PCT. NORMAL SINCE AUG 28	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	57	45	69	39	51	-2	2.2	1.8	1.0	6.7	160	30.9	102	91	63	0	0	4	3
TOLEDO	58	41	75	34	50	-1	1.1	.7	1.1	5.4	123	26.0	97	94	61	0	0	1	1
YOUNGSTOWN	55	40	68	36	48	-3	.7	.2	.5	8.5	160	30.6	105	84	53	0	0	2	0
OK OKLAHOMA CITY	66	56	80	50	61	0	11.5	11.0	5.1	13.8	234	36.3	128	94	75	0	0	5	3
TULSA	68	59	78	52	63	2	8.0	7.2	4.7	11.7	156	32.1	94	98	86	0	0	4	4
OR ASTORIA	59	42	62	33	51	-2	1.0	- .5	.3	4.0	55	52.0	117	100	74	0	0	6	0
BURNS	63	29	69	25	46	-1	.5	.3	.5	1.0	91	12.4	149	--	--	0	6	1	1
MEDFORD	65	37	68	33	51	-2	.4	0	.4	3.9	195	18.1	137	90	46	0	0	1	0
PENDLETON	61	41	67	34	51	0	.1	- .1	.1	1.1	100	9.7	117	84	44	0	0	1	0
PORTLAND	61	47	66	36	54	0	1.4	.7	.8	4.1	111	32.9	132	97	64	0	0	4	1
SALEM	62	42	65	31	52	0	.6	- .2	.5	3.0	77	38.1	144	91	62	0	1	3	1
PA ALLENTOWN	59	40	64	29	49	-3	1.0	.4	.6	4.0	59	36.1	100	81	48	0	1	2	1
ERIE	58	41	69	36	49	-1	.6	- .2	.5	8.6	126	35.2	109	80	48	0	0	2	1
HARRISBURG	57	41	62	32	49	-5	1.4	.8	.9	4.1	68	34.1	106	89	53	0	1	3	1
PHILADELPHIA	59	44	67	37	52	-4	.3	- .4	.3	6.4	107	38.8	114	90	57	0	0	1	0
PITTSBURGH	57	43	71	39	50	-1	1.1	.5	.6	6.7	131	32.1	101	88	52	0	0	3	1
SCRANTON	56	38	61	29	47	-3	1.1	.5	.9	4.9	86	32.8	112	88	52	0	0	2	1
RI PROVIDENCE	57	40	64	34	48	-4	.6	- .2	.4	5.2	80	46.6	131	79	43	0	0	2	0
SC CHARLESTON	75	60	81	57	68	3	T	- .6	T	4.3	53	44.9	95	94	61	0	0	1	0
COLUMBIA	73	50	80	41	61	-1	T	- .5	T	4.1	60	33.8	80	95	55	0	0	1	0
FLORENCE	74	53	82	48	63	1	T	- .5	T	2.6	41	39.6	104	98	56	0	0	1	0
GREENVILLE	67	49	75	43	58	-2	.4	- .4	.3	6.1	80	39.9	92	95	62	0	0	2	0
SD ABERDEEN	53	39	60	27	46	-1	.5	.2	.4	2.3	96	20.6	124	98	75	0	2	2	0
HURON	54	41	67	29	48	0	1.0	.7	.7	3.8	141	16.1	93	99	75	0	1	2	1
RAPID CITY	58	32	74	30	45	-4	.2	0	.1	2.1	111	13.9	90	88	50	0	3	2	0
SIOUX FALLS	55	40	65	27	47	-1	.3	0	.2	4.0	87	23.1	99	100	78	0	1	3	0
TN CHATTANOOGA	73	54	78	42	63	5	.8	.2	.8	4.1	59	34.5	79	94	55	0	0	1	1
KNOXVILLE	72	53	77	38	63	4	.3	- .3	.2	3.7	71	31.5	81	98	63	0	0	2	0
MEMPHIS	78	64	84	56	71	10	2.6	2.1	1.4	4.5	79	39.5	91	92	64	0	0	5	1
NASHVILLE	74	60	79	48	67	8	.8	.3	.8	3.4	56	36.9	90	85	61	0	0	3	1
TX ABILENE	78	60	83	48	69	4	1.8	1.3	1.7	2.8	53	15.5	72	88	52	0	0	3	1
AMARILLO	64	46	74	39	55	-4	3.1	2.8	1.4	3.7	112	14.2	77	97	63	0	0	5	3
AUSTIN	83	66	88	56	75	6	.8	0	.4	5.8	88	31.2	110	86	52	0	0	3	0
BEAUMONT	81	71	83	58	76	7	.3	- .4	.3	10.7	113	64.2	144	98	75	0	0	1	0
BROWNSVILLE	87	72	91	65	79	5	.3	- .4	.3	11.6	135	27.3	118	95	64	2	0	2	0
CORPUS CHRISTI	84	71	89	62	77	4	2.4	1.8	2.4	11.2	119	34.9	124	96	65	0	0	1	1
DEL RIO	80	65	85	56	73	3	T	- .5	T	2.4	50	8.7	53	89	51	0	0	1	0
EL PASO	74	51	86	45	63	0	3.9	3.7	3.5	5.7	259	10.3	141	88	47	0	0	3	1
FORT WORTH	78	62	84	52	70	3	.6	.1	.4	4.3	78	28.3	106	91	59	0	0	3	0
GALVESTON	82	74	84	64	78	6	.2	- .3	.2	11.9	142	46.5	134	95	68	0	0	3	0
HOUSTON	83	69	86	54	76	7	.9	.2	.9	8.6	105	46.1	119	93	64	0	0	2	1
LUBBOCK	68	49	82	45	59	-1	8.7	8.3	5.4	10.7	282	18.9	110	99	67	0	0	5	4
MIDLAND	75	55	84	48	65	2	3.1	2.8	2.8	4.7	138	7.7	59	91	54	0	0	4	1
SAN ANGELO	80	60	85	51	70	4	2.9	2.5	1.7	2.9	58	12.9	75	84	48	0	0	3	2
SAN ANTONIO	84	64	87	51	74	5	T	- .6	T	5.5	87	22.8	89	86	50	0	0	1	0
VICTORIA	83	68	87	58	76	4	5.7	5.1	2.7	11.9	124	39.0	117	100	69	0	0	5	3
WACO	83	63	88	52	73	5	.7	.1	.6	1.7	30	20.3	74	94	54	0	0	3	1
WICHITA FALLS	74	59	85	50	66	2	4.7	4.1	1.8	8.4	142	24.1	98	94	66	0	0	4	1
UT BLANDING	67	40	71	35	53	2	0	- .4	0	4.0	182	13.4	149	69	30	0	0	0	0
CEDAR CITY	70	33	74	30	52	1	0	- .2	0	1.1	73	12.0	138	68	20	0	3	0	0
SALT LAKE CITY	67	41	72	37	54	2	0	- .3	0	2.8	156	17.9	146	82	35	0	0	0	0
VT BURLINGTON	52	31	60	24	41	-6	0	- .6	0	7.5	134	37.5	132	82	42	0	5	0	0
VA NORFOLK	67	53	71	47	60	0	.4	- .4	.2	8.8	117	37.6	96	87	56	0	0	3	0
RICHMOND	63	46	71	41	54	-3	.9	0	.6	5.7	85	32.0	87	98	66	0	0	4	1
ROANOKE	63	46	75	39	55	-1	2.7	1.9	1.2	8.0	127	37.0	110	100	67	0	0	3	3
WA COLVILLE	52	38	60	24	45	0	.7	.4	.3	1.6	89	20.0	154	92	78	0	1	5	0
QUILLAYUTE	57	42	60	30	50	0	2.6	.1	1.4	10.8	85	81.0	115	99	73	0	1	6	1
SEATTLE-TACOMA	58	48	61	43	53	1	.9	.1	.4	4.6	105	27.8	109	91	61	0	0	5	0
SPOKANE	55	39	61	30	47	1	.5	.3	.3	1.3	87	14.6	118	86	55	0	2	2	0
YAKIMA	63	38	66	30	50	2	.1	0	.1	.8	100	8.2	158	82	39	0	2	2	0
WV BECKLEY	58	43	70	37	50	-1	2.2	1.7	.9	5.2	93	29.4	82	97	71	0	0	3	2
CHARLESTON	64	48	76	36	56	1	3.9	3.4	1.7	7.3	135	34.0	94	89	63	0	0	4	3
HUNTINGTON	63	48	74	35	55	0	4.1	3.6	1.5	5.9	113	30.5	88	94	68	0	0	4	3
PARKERSBURG	61	49	73	43	55	1	4.0	3.6	1.7	11.0	234	36.8	103	98	67	0	0	4	4
WI GREEN BAY	55	39	63	35	47	0	T	- .4	T	6.1	117	26.6	107	90	56	0	0	0	0
LA CROSSE	54	39	62	34	47	-3	.9	.5	.8	7.3	130	25.0	88	98	62	0	0	2	1
MADISON	53	38	63	28	45	-3	.6	.1	.2	5.7	112	26.1	94	98	67	0	2	4	0
MILWAUKEE	55	44	69	34	50	0	1.1	.6	.6	5.4	110	30.6	115	94	63	0	0	5	1
WAUSAU	53	38	59	35	45	-1	.1	- .4	.1	9.8	158	26.6	90	89	52	0	0	1	0
WY CASPER	65	30	73	24	48	1	.1	- .1	.1	.9	60	14.5	144	86	23	0	5	1	0
CHEYENNE	60	33	69	27	46	0	.2	.1	.2	1.2	75	17.9	144	85	32	0	4	1	0
LANDER	62	31	70	23	47	1	0	- .3	0	.7	35	11.3	97	70	26	0	4	0	0
SHERIDAN	66	34	76	28	50	4	.2	- .1	.2	2.0	87	7.0	51	83	36	0	3	1	0
PR SAN JUAN	89	77	90	76	83	2	.8	- .6	.4	4.5	40	31.1	69	89	67	1	0	4	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

HEATING DEGREE DAY DATA WEEKLY SUMMARY
CLIMATE ANALYSIS CENTER-NMC-NWS-NCAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 10-22-1983
ACCUMULATIONS ARE FROM JULY 1
**** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE CITY	CALL	WEEK TOTAL	WEEK DEV FRCM NORM	WEEK DEV FRCM L YR	CUM TOTAL	CUM DEV FRCM NORM	CUM DEV FRCM L YR	CUM DEV FRCM NORM PRCT	CUM DEV FRCM L YR PRCT
*									
AL BIRMINGHAM	BHM	4	-29	-35	60	-20	-15	****	****
AL MOBILE	MOB	0	-13	-16	19	-2	-6	****	****
AL MONTGOMERY	MGM	0	-21	-11	20	-21	-5	****	****
AK ANCHORAGE	ANC	211	-11	-36	1624	10	-156	0	-8
AK BARROW	BRW	486	117	106	4109	367	194	9	4
AK FAIRBANKS	FAI	318	23	42	1859	36	227	1	13
AK JUNEAU	JNU	150	-18	-32	1526	-39	110	-2	7
AK KODIAK	ADQ	141	-32	-25	1217	-407	-336	-25	-21
AK NOME	OME	307	37	75	2221	-151	225	-6	11
AZ FLAGSTAFF	FLG	125	-7	-11	653	-40	-186	-5	-22
AZ PHOENIX	PHX	0	-2	0	0	-2	-0	****	****
AZ TUCSON	TUS	0	-7	0	0	-8	-25	****	****
AZ WINSLOW	INW	56	-12	-88	138	-24	-33	-14	-19
AZ YUMA	YUM	0	-1	0	0	-1	0	****	****
AR FORT SMITH	FSM	12	-24	-51	66	-20	-58	****	****
AR LITTLE ROCK	LIT	13	-20	-47	60	-17	-44	****	****
CA BAKERSFIELD	BFL	0	-12	0	8	-17	0	****	****
CA EUREKA	EKA	58	-19	18	508	-488	-181	-48	-26
CA FRESNO	FAT	0	-22	-2	4	-38	-26	****	****
CA LOS ANGELES	LAX	0	-14	-2	0	-89	0	****	****
CA RED BLUFF	RBL	9	-14	-2	15	-28	-25	****	****
CA SAN DIEGO	SAN	0	-6	0	0	-22	0	****	****
CA SAN FRANCISCO	SFO	28	-6	14	91	-271	-189	-74	-67
CA STOCKTON	SCK	4	-13	0	8	-22	-17	****	****
CO DENVER	DEN	105	5	-7	342	-47	-159	-12	-31
CO GRAND JUNCTION	GJT	53	-26	-28	155	-97	-182	-38	-54
CO PUEBLO	PUB	96	11	-4	262	-28	-98	-9	-27
CT BRIDGEPORT	BDR	112	42	9	247	27	-46	12	-15
CT HARTFORD	BDL	131	35	13	331	-23	-45	-6	-11
DE WILMINGTON	ILG	87	17	-26	205	1	-11	0	-5
DC WASHINGTON	DCA	50	1	-28	103	-21	-13	-16	-11
FL APALACHICOLA	AQQ	0	-7	-1	2	-5	1	****	****
FL DAYTONA BEACH	DAB	0	0	-1	0	0	-1	****	****
FL FORT MEYER	FMY	0	0	0	0	0	0	****	****
FL JACKSONVILLE	JAX	0	-5	-2	0	-10	-2	****	****
FL KEY WEST	EYW	0	0	0	0	0	0	****	****
FL MIAMI	MIA	0	0	0	0	0	-1	****	****
FL ORLANDO	MCO	0	0	-1	0	0	0	****	****
FL TALLAHASSEE	TLH	0	-8	-5	4	-8	-5	****	****
FL TAMPA	TPA	0	0	0	0	0	0	****	****
FL WEST PALM BEACH	EBT	0	0	0	0	0	0	****	****
GA ATLANTA	ATL	20	-13	-31	83	7	3	****	****
GA AUGUSTA	AGS	11	-18	-20	45	-12	3	****	****
GA MACON	MCN	3	-18	-15	24	-18	1	****	****
GA SAVANNAH	SAV	0	-13	-11	3	-23	-10	****	****
HI HILO-HAWAII	ITO	0	0	0	0	0	0	****	****
HI HONOLULU-OAHU	HNL	0	0	0	0	0	0	****	****
HI KAHULUI-MAUI	OGG	0	0	0	0	0	0	****	****
HI LIHUE-KAUAI	LIH	0	0	0	0	0	0	****	****
ID BOISE	BOI	74	-25	-20	403	-2	-80	0	-16
ID LEWISTON	LWS	94	-7	-4	428	30	15	7	3
ID POCATELLO	PIH	123	-3	-16	533	-39	-140	-6	-20
IL CHICAGO	ORD	95	6	-39	369	63	-66	20	-15
IL MOLINE	MLI	114	25	-11	363	61	21	20	6
IL PEORIA	PIA	83	-5	-45	280	-7	-39	-2	-12
IL ROCKFORD	RFD	112	13	-20	411	26	-6	6	-1
IL SPRINGFIELD	SPI	78	-3	-49	229	0	-62	0	-21
IN EVANSVILLE	EVV	31	-32	-55	152	-34	-30	-18	-16
IN FORT WAYNE	FWA	84	-9	-42	262	-77	-97	-22	-27
IN INDIANAPOLIS	IND	62	-18	-57	198	-59	-109	-22	-35
IN SOUTH BEND	SBN	86	-2	-45	318	-27	-52	-7	-14
IA DES MOINES	DSM	112	23	-2	351	58	9	19	2
IA DUBUQUE	DBQ	117	4	-11	443	13	16	3	3
IA SIOUX CITY	SUX	106	10	-17	375	36	-39	10	-9
KS CONCORDIA	CNK	98	33	-10	280	60	-26	27	-8
KS DODGE CITY	DDC	71	8	-11	179	-2	-13	-1	-6
KS GOODLAND	GLD	114	18	17	318	-30	-13	-8	-18
KS TOPEKA	TOP	66	-4	-38	192	-35	-116	-15	-37
KS WICHITA	ICT	64	8	-20	180	22	-22	13	-10
KY LEXINGTON	LEX	38	-30	-66	152	-59	-73	-27	-32
KY LOUISVILLE	SDF	41	-20	-56	151	-26	-44	-14	-22
LA BATON ROUGE	BTR	0	-12	-9	20	1	2	****	****
LA LAKE CHARLES	LCH	0	-11	-9	17	-1	0	****	****
LA NEW ORLEANS	MSY	0	-9	-2	11	2	9	****	****
LA SHREVEPORT	SHV	4	-14	-37	41	7	-33	****	****
ME CARIBOU	CAR	183	22	36	784	-212	-195	-21	-20
ME PORTLAND	PWM	155	31	22	500	-112	-133	-18	-21
MD BALTIMORE	BWI	76	10	-30	195	16	-17	8	-8
MA BOSTON	BOS	115	36	17	216	-78	-94	-26	-30
MI ALPENA	APN	150	18	3	654	-102	-122	-13	-15
MI DETROIT	DTW	110	9	-20	385	-6	-43	-1	-10
MI FLINT	FNT	112	4	-16	392	-87	-88	-18	-18
MI GRAND RAPIDS	GRR	113	7	-13	442	5	29	1	7
MI HOUGHTON LAKE	HTL	144	7	-6	608	-127	-101	-17	-14
MI LANSING	LAN	131	22	-3	485	29	-34	6	-6
MI MARQUETTE	MQT	178	27	-14	820	-134	-252	-14	-23
MI MUSKEGON	MKG	118	8	-25	451	-2	-35	C	-6
MI SAULT ST MARIE	SSM	163	18	-3	709	-220	-363	-23	-33
MN DULUTH	DLH	156	4	-25	763	-170	-236	-18	-23
MN INT'L FALLS	INL	173	12	-9	878	-112	-106	-11	-10
MN MINNEAPOLIS	MSP	120	-1	-22	563	16	9	3	1
MN ROCHESTER	RST	135	8	-14	576	24	35	4	6
MN SAINT CLOUD	STC	133	-2	-14	618	-39	-54	-5	-8
MS JACKSON	JAN	0	-24	-39	48	0	-27	****	****
MS MERIDIAN	MEI	0	-59	-18	49	-17	13	****	****
MO COLUMBIA	COU	80	10	-33	250	43	-29	20	-10
MO KANSAS CITY	MCI	88	24	-23	232	44	-55	23	-20
MO SAINT LOUIS	STL	49	-16	-60	166	-25	-36	-13	-17
MO SPRINGFIELD	SGF	29	-29	-74	143	-37	-94	-20	-39
MT BILLINGS	BIL	102	-14	-9	560	6	35	1	6
MT GLASGOW	GGW	134	-4	-17	724	22	-21	3	-2
MT GREAT FALLS	GTF	115	-10	-28	783	85	-53	12	-6
MT HAVRE	HVR	144	3	-15	757	62	-19	8	-2
MT HELENA	HLN	146	0	-5	832	17	69	2	9
MT KALISPELL	FCA	179	14	3	1059	65	-7	6	0
MT MILES CITY	MLS	112	-11	-19	590	17	-38	2	-6
MT MISSOULA	MSO	162	8	13	1002	189	204	23	25
NE GRAND ISLAND	GRI	106	17	-12	320	-38	-123	-10	-27
NE LINCOLN	LNK	93	7	-21	279	-23	-71	-7	-20
NE NORFOLK	OFK	108	8	-21	392	-17	-48	-4	-10
NE NORTH PLATTE	LBF	121	10	-5	414	-37	-120	-8	-22
NE OMAHA	ONA	116	2	-14	349	14	-31	26	-8
NE VALENTINE	VTN	119	2	-13	505	30	-99	6	-16
NV ELY	ELY	120	-20	-31	620	-91	-237	-12	-27
NV LAS VEGAS	LAS	0	-16	-13	3	-19	-39	****	****
NV RENO	RNO	80	-30	-32	360	-178	-307	-33	-46
NV WINNEMUCCA	WMC	118	-4	-13	500	-56	-195	-10	-28
NH CONCORD	CON	154	28	14	509	-76	-109	-12	-17
NJ ATLANTIC CITY	ACY	92	17	-25	242	37	-24	18	-9
NM ALBUQUERQUE	ABQ	64	2	3	134	-7	-96	-4	-41
NM ROSWELL	RCW	46	10	-7	63	-18	-71	****	****
NY ALBANY	ALB	148	38	23	450	-5	-84	-1	-15
NY BINGHAMTON	BGM	135	16	-11	383	-56	-69	-12	-15
NY BUFFALO	BUF	126	23	1	180	1	-13	0	-6
NY NEW YORK	LGA	95	34	6	367	-61	-46	-14	-11
NY ROCHESTER	ROC	125	25	-3	458	21	-64	4	-12
NY SYRACUSE	SYR	147	42	9	217	-9	12	-3	5
NC ASHEVILLE	AVL	58	-13	-34	17	-19	-26	****	****
NC CAPE HATTERAS	HAT	5	-13	-23	121	19	20	18	19
NC CHARLOTTE	CLT	49	8	-13	201	62	40	44	24
NC GREENSBORO	GSO	67	11	-28	145	32	48	28	49
NC RALEIGH-DURHAM	RDU	55	9	-10	30	-18	-23	****	****
NC WILMINGTON	ILM	13	-12	-31	155	62	-84	-8	-10
ND BISMARCK	BIS	158	20	7	783	129	21	19	2
ND FARGO	FAR	144	6	-23	720	-24	-63	-3	-8
ND WILLISTON	ISN	141	-4	-12	307	-53	-50	-14	-14
OH AKRON-CANTON	CAK	101	4	-29	346	-11	-20	-3	-5
OH CLEVELAND	CLE	104	13	-13	281	-16	-25	-5	-8
OH COLUMBUS	CMH	92	5	-36	260	20	66	8	31
OH CINCINNATI	CVG	75	-2	-24	320	45	15	16	4
OH DAYTON	DAY	97	14	-35	376	-12	-64	-3	-14
OH TOLEDO	TOL	104	2	-29	394	-37	-32	-8	-7
OH YOUNGSTOWN	YNG	120	17	-2	94	7	-15	****	****
OK OKLAHOMA CITY	OKC	32	12	-23	66	-26	-50	****	****
OK TULSA	OUT	19	-16	-40	731	-13	122	-1	20
OR ASTORIA	AST	97	9	14	904	285	-4	46	9
OR BURNS	BNS	131	4	-27	312	-4	14	-1	4
OR MEDFORD	MFR	96	12	34	474	86	-10	22	2
OR PENDLETON	PDT	96	0	-22	350	-52	36	-12	11
OR PORTLAND	PDX	78	-4	-5	355	-31	-14	-8	-3
OR SALEM	SLE	89	-2	-11	286	-31	-33	-9	-10
PA ALLENTOWN	ABE	109	19	-7	284	-155	-115	-35	-28
PA ERIE	ERI	108	5	-5	308	56	21	22	7
PA HARRISBURG	CXY	112	33	-13	202	10	10	5	5
PA PHILADELPHIA	PHL	92	24	-13	346	-10	-6	-2	-1
PA PITTSBURGH	PIT	101	4	-30	364	-47	-66	-11	-15
PA SCRANTON	AVP	124	22	-4	233	-96	-102	-29	-30
RI PROVIDENCE	PVD	115	25	7	7	-30	-22	****	****
SC CHARLESTON	CHS	1	-16	-24	57	-9	-13	****	****
SC COLUMBIA	CAE	24	-9	-17	154	59	54	****	****
SC GREENVILLE	GSP	48	9	-8	526	31	-43	5	-6
SD ABERDEEN	ABR	131	3	-18	503	18	-32	-3	-5
SD HURON	HON	119	-2	-16	583	48	-67	8	-10
SD RAPID CITY	RAP	135	21	2	487	-1	-83	C	-14
SD SIOUX FALLS	FSD	124	6	-29	102	-13	-29	-11	-22
TN CHATTANOOGA	CHA	15	-31	-60	123	-3	-16	-2	-11
TN KNOXVILLE	TYS	20	-31	-58	57	-24	-29	****	****
TN MEMPHIS	MEM	2	-33	-47	85	-43	-47	-33	-35
TN NASHVILLE	BNA	4	-46	-70	27	-21	-52	****	****
TX ABILENE	ABI	10	-13	-32	146	0	-66	0	-31
TX AMARILLO	AMA	70	-16	-14	5	-9	-12	****	****
TX AUSTIN	AUS	0	-10	-8	0	0	0	****	****
TX BROWNSVILLE	BRO	0	0	0	0	0	0	****	****
TX CORPUS CHRISTI	CRP	0	-1	0	2	1	-9	****	****
TX DEL RIO	DRT	0	-5	-7	27	-13	-32	****	****
TX EL PASO	ELP	24	0	9	35	13	-12	****	****
TX FORT WORTH	DFW	9	-5	-27	2	0	-6	****	****
TX GALVESTON	GLS	0	-2	-6	15	3	-5	****	****
TX HOUSTON	IAH	0	-8	-12	82	-10	-56	****	****
TX LUBBOCK	LBB	49	11	-8	29	-22	-69	****	****
TX MIDLAND ODESSA	MAF	18	-6	-20	15	-16	-46	****	****
TX SAN ANGELO	SJT	0	-17	-32	14	-4	-8	****	****
TX SAN ANTONIO	SAT	0	-11	-7	8	2	0	****	****
TX VICTORIA	VCT	0	-4	-2	22	8	-13	****	****
TX WACO	ACT	2	-8	-20	40	-26	-34	****	****
TX WICHITA FALLS	SPS	16	-10	-27	225	-98	-256	-30	-53
UT SALT LAKE CITY	SLC	73	-19	-40	562	-114	-7	-18	-1
VT BURLINGTON	BTV	164	37	38	209	26	55	14	35
VA LYNCHBURG	LYH	68	5	-15	78	-10	-21	****	****
VA NORFOLK	ORF	35	-2	-30	207	54	82	35	65
VA RICHMOND	RIC	72	17	-10	228	31	19	15	9
VA ROANOKE	ROA	71	5	-33	962	29	51	3	9
WA QUILLAYUTE	UIL	105	-3	-14	564	-26	56	-4	9
WA SEATTLE-TACOMA	SEA	83	-11	-21	553	-35	-55	-5	-8
WA SPOKANE	GEG	123	-7	-19	362	69	10	23	2
WA WALLA WALLA	ALW	83	0	-24	518	3	-30	0	-5
WA YAKIMA	YKM	100	-13	-35	410	28	24	7	6
WV BECKLEY	BKW	99	1	-31	196	-37	-18	-15	-8
WV CHARLESTON	CRW	63	-11	-43	203	-35	-59	-14	-22
WV HUNTINGTON	HTS	67	-4	-41	210	-28	36	-11	20
WV PARKERSBURG	PKB	69	0	-27	550	-23	-96	-4	-14
WV GREEN BAY	GRB	123	13	-37	474	35	-27	7	-5
WI LACROSSE	LSE	126	13	-13	540	28	-42	7	-7
WI MADISON	MSN	136	13	-7	403	-31	-66	-7	-14
WI MILWAUKEE	MKE	107	-6	-27	543	-87	-179	-13	-23
WY CASPER	CPR	120	-11	-28	579	-61	-162	-9	-21
WY CHEYENNE	CYS	128	-1	-19	527	-124	-256	-19	-32
WY LANDER	LND	126	-9	-24	558	-129	-104	-18	-15
WY SHERIDAN	SHR	106	-26	-30					

National Agricultural Summary

OCTOBER 17 TO 23

HIGHLIGHTS: Heavy rain replenished soil moisture and stock water supplies from the southern Plains through the Corn Belt. Some fields were eroded and reseeding of winter wheat may be required in some areas. Widespread showers delayed combining of corn and soybeans late in the week across most of the eastern half of the Nation. Hail and torrential rains reduced yields and the quality of cotton on the Texas High Plains. Farmers had 5 to 7 days available for fieldwork in the West, 5 to 6 days in the Southeast, and 2 to 5 days elsewhere. Soil moisture was adequate to surplus in the eastern Corn Belt and adequate to short in all other regions. Winter wheat seeding reached 82% completion, and 62% of the acreage had emerged. Corn harvesting slowly advanced to 72% completion, 23 points ahead of normal. Soybeans were 60% harvested, 2 points ahead of the average. Cotton picking advanced to 35% completion, trailing the average of 37%. Sorghum was 96% mature and 75% harvested. Rice harvesting was 93% finished, slightly ahead of schedule. Fall apple and vegetable harvests began declining. Pastures and ranges were in fair condition. Livestock received supplemental feed and herds were culled.

SMALL GRAINS: Heavy rainfall eroded some winter wheat stands from West Texas northeastward into Missouri. However, the much needed precipitation aided germination and improved the general condition of the crop from the southern Plains through the Corn Belt. In the 15 major producing States, 82% of the 1984 winter wheat crop was seeded and 62% of the acreage had emerged. Normally, 85% is planted and 67% has emerged. Seeding was complete in Montana, Nebraska, and South Dakota and nearly finished in Colorado and Washington. Seeding gained momentum in California, reaching 10% completion. Some flooding and wash out occurred in southwest and south-central Oklahoma. Stands were in fair to good condition, with some reseeding necessary. In Texas, rainfall benefited winter wheat and will cause increased seeding. Irrigated fields were making good stands but dryland fields continued to show the effects of earlier dry conditions.

CORN: Corn harvesting moved ahead but was delayed by rain after midweek across most of the eastern half of the Nation. In the 17 major producing States, corn was 72% combined, ahead of last year's 38% and the average of 49%. Progress was ahead of normal in all States, except Kentucky and Pennsylvania. During the week farmers in Colorado harvested 28% of their acreage, while those in Indiana combined 20% of their acreage. In contrast, Georgia and Virginia producers combined 1% of their acreage during the week. Although showers delayed combining, harvesting was 38 percentage points ahead of average in Iowa, 36 points ahead in Minnesota, and 35 points ahead of normal in Nebraska. Harvesting advanced rapidly in the Southeast between light showers.

SOYBEANS: Soybeans were dropping leaves on 93% of the acreage in the 18 major producing States, slightly behind a year ago and the average. Harvesting was 60% complete, ahead of 1982's 49% and the 58% average for this date. Progress trailed the average in the south-central and southeastern States but was ahead of schedule across the Corn Belt. Harvesting was 27 percentage points ahead in Indiana and 20 points ahead in Michigan. In contrast, Louisiana producers were 12 points behind average and growers in Kentucky were 11 points behind schedule.

COTTON: In the 14 major producing States, bolls were opening on 92% of the acreage, 4 points ahead of the average. Picking was 35% complete, ahead of last year's 34% but behind the 37% average. Harvesting was just getting underway in Oklahoma and New Mexico. However, producers in Missouri, South Carolina, and Tennessee were past the three-quarters point. Cotton on the Texas High Plains was hit by hail and then heavy rains late in the week. Some fields were left in standing water. Yields and quality of the remaining stands were reduced. Heavy showers delayed picking from West Texas northeastward into Missouri.

SORGHUM: Sorghum was 96% mature in the 7 major producing States, 3 points ahead of the average. Harvesting reached 75% completion, compared with the average of 65%. Progress was equal to or ahead of schedule in all States except Texas where harvesting trailed the average by 1 percentage point. Producers in Nebraska were 30 percentage points ahead of schedule and Colorado growers were 29 points ahead of normal. Wet fields delayed harvesting in eastern Kansas and the southern Plains.

OTHER CROPS: Rice was 93% harvested in the 5 major producing States, equaling last year and 1 point ahead of the average. Harvesting was finished in Texas and near completion in Arkansas and Louisiana. The California harvest advanced rapidly and reached 75% completion, equal to the average for this date.

Tobacco producers continued stripping, grading, and marketing their crop. Kentucky burley growers had stripped 10% of their crop and Tennessee producers had stripped 20%.

Peanut digging and combining continued active. The Georgia crop was 94% dug and 86% threshed. North Carolina producers dug 38% of the crop and threshed 25%. The crop in Virginia was 50% dug and 34% combined.

VEGETABLES: Harvesting of fall vegetables began to decline in northern areas. Potato harvesting was complete in Maine and reached 92% completion in Idaho. Seeding and transplanting of vegetables increased in Florida as soil dried from previous showers. Harvesting increased for sweet corn, cucumbers, eggplant, radishes, squash, and tomatoes. Growers began harvesting snap beans, escarole, speciality lettuce, peppers, and peas. Texas producers continued land preparation and planting. In the Rio Grande Valley growers picked cucumbers while bell peppers and broccoli neared harvest. In California, moderate supplies of broccoli and cauliflower were cut in the Salinas-Watsonville area. Lettuce harvesting neared completion in the Salinas-Watsonville area, while celery supplies increased. Processing tomato harvesting was completed in the Sacramento Valley. Sweetpotato digging was in full swing.

FRUITS AND NUTS: Fall apple picking continued active in northern producing regions. Florida's citrus groves were in excellent condition. Early fruit showed good natural color. Picking was slow because of small size fruit and lagging maturity. Harvesting of early oranges continued in the Rio Grande Valley of Texas; grapefruit picking was just beginning. Citrus groves were in good condition in Arizona. Lemon and grapefruit harvesting continued. Navel orange picking is expected to begin soon. In California, producers picked apples, avocados, table and wine grapes, kiwifruit, olives, persimmons, pomegranates, grapefruit, lemons, Valencia oranges, and walnuts. The almond and pistachio harvests were completed.

(continued on p. 16)

CROP PROGRESS

FOR WEEK ENDING OCT 23

SOYBEANS
% DROPPING LEAVES

	1983	1982	AVG.
ALA	80	86	88
ARK	79	86	81
GA	84	89	83
ILL	100	100	100
IND	100	100	100
IOWA	100	100	100
KANS	95	95	95
KY	93	89	93
LA	88	82	87
MICH	100	100	100
MINN	100	100	100
MISS	100	100	100
MO	96	91	96
NEBR	100	99	100
N C	50	54	58
OHIO	100	100	100
S C	63	71	73
TENN	100	100	99
18 STATES	93	94	94

SOYBEANS
% HARVESTED

	1983	1982	AVG.
ALA	28	36	37
ARK	22	26	24
GA	13	20	22
ILL	93	90	89
IND	92	85	65
IOWA	87	47	78
KANS	60	50	60
KY	32	32	43
LA	41	40	53
MICH	65	70	45
MINN	62	32	69
MISS	30	31	37
MO	66	42	57
NEBR	85	50	80
N C	10	10	16
OHIO	80	85	70
S C	3	8	10
TENN	26	23	31
18 STATES	60	49	58

THESE 18 STATES PRODUCED 94% OF THE 1982 SOYBEAN CROP.

CORN
% HARVESTED

	1983	1982	AVG.
COLO	58	18	33
GA	94	98	94
ILL	83	64	61
IND	70	55	50
IOWA	85	24	47
KANS	80	65	70
KY	68	68	69
MICH	30	25	23
MINN	70	11	34
MO	87	63	63
NEBR	80	15	45
N C	91	93	90
OHIO	50	45	40
PA	29	28	34
S DAK	72	12	53
VA	71	70	70
WIS	30	13	28
17 STATES	72	38	49

THESE 17 STATES PRODUCED 93% OF THE 1982 CORN CROP.

SORGHUM
% MATURE

	1983	1982	AVG.
COLO	99	96	90
KANS	90	80	90
MO	100	89	89
NEBR	100	85	97
OKLA	95	90	90
S DAK	100	91	96
TEX	98	96	95
7 STATES	96	89	93

SORGHUM
% HARVESTED

	1983	1982	AVG.
COLO	58	30	29
KANS	65	25	50
MO	78	58	61
NEBR	85	10	55
OKLA	40	30	40
S DAK	77	14	62
TEX	82	80	83
7 STATES	75	49	65

THESE 7 STATES PRODUCED 90% OF THE 1982 SORGHUM CROP.

COTTON
% BOLLS OPENING

	1983	1982	AVG.
ALA	97	98	88
ARIZ	100	100	100
ARK	100	99	93
CALIF	95	100	100
GA	91	92	94
LA	100	100	96
MISS	100	100	100
MO	100	100	100
N MEX	94	100	95
N C	100	100	95
OKLA	85	80	90
S C	100	100	100
TENN	100	100	87
TEX	87	75	79
14 STATES	92	86	88

COTTON
% HARVESTED

	1983	1982	AVG.
ALA	60	55	55
ARIZ	15	25	23
ARK	71	67	53
CALIF	10	35	34
GA	29	47	56
LA	55	50	62
MISS	64	67	64
MO	85	79	62
N MEX	6	15	15
N C	63	46	46
OKLA	5	1	10
S C	79	63	66
TENN	85	72	46
TEX	28	19	27
14 STATES	35	34	37

THESE 14 STATES PRODUCED 99% OF THE 1982 COTTON CROP.

RICE
% HARVESTED

	1983	1982	AVG.
ARK	95	94	93
CALIF	75	80	75
LA	99	98	99
MISS	90	88	91
TEX	100	100	100
5 STATES	93	93	92

THESE 5 STATES PRODUCED 98% OF THE 1982 RICE CROP.

WINTER WHEAT
% EMERGED

	1983	1982	AVG.
CALIF	3	10	13
COLO	81	89	87
IDAHO	71	66	67
ILL	55	53	52
IND	65	65	40
KANS	65	75	80
MO	52	41	51
MONT	80	70	75
NEBR	98	97	96
OHIO	65	65	40
OKLA	60	40	55
OREG	40	37	50
S DAK	93	95	99
TEX	35	40	53
WASH	85	74	74
15 STATES	62	62	67

WINTER WHEAT
% PLANTED

	1983	1982	AVG.
CALIF	10	15	15
COLO	97	96	97
IDAHO	93	90	90
ILL	80	82	82
IND	90	85	75
KANS	85	95	90
MO	67	56	63
MONT	100	85	90
NEBR	100	100	100
OHIO	85	90	85
OKLA	80	75	85
OREG	72	81	81
S DAK	100	100	100
TEX	65	69	76
WASH	97	91	91
15 STATES	82	83	85

THESE 15 STATES PRODUCED 80% OF THE 1982 WINTER WHEAT CROP.

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 SRS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Temperatures above normal. Rainfall scattered, less than 0.50 in. in most areas. Soil moisture short to adequate. Fieldwork: 5.9 days. Soybeans: Dropping leaves 80%, 1982 86%, average 88%; mature 64%, 1982 66%, average 71%; harvested 28%, 1982 36%, average 37%. Cotton: Bolls open 97%, 1982 98%, average 88%; harvested 60%, 1982 55%, average 55%. Peanuts combined 87%. Sorghum harvested 77%, 1982 81%. Wheat seeded 29%, 1982 22%, average 47%. Conditions: Sorghum, pasture, and livestock fair; soybeans and cotton mostly fair.

ARIZONA: Showers midweek, heaviest rainfall in White Mountains, amount in 0.50 in. range. Highest total at Greer, 1.50 in. southeast, south central also had precipitation. Temperature range 2° below normal south rim Grand Canyon to 5° above normal Phoenix, Willcox.

Cotton harvest increased, 15% acreage harvested at least once, behind last year's 25%, average 23%. Harvest delayed by wet fields, trash in areas flooded first of October. Bolls open on 100% cotton acreage, same as last year, average. Defoliation active all areas. Corn harvest picking up Cochise County as fields dried out. Sorghum ready for harvest Cochise County, very little harvested. Corn, sorghum harvest continued Yuma County. Land preparation for small grains continued in Yuma County, getting underway other areas.

Alfalfa planting, renovation of established stands active. Some alfalfa stands killed by flood water, silt Pima County. Lettuce volume increased Cochise County, harvest chili peppers winding down. Honeydew harvest beginning Mohave Valley. Harvest of cantaloups, honeydews, watermelons active Yuma County. Increased volume of mixed vegetables picked Salt River Valley, included greens, green onions, broccoli, cabbage. Cantaloup, honeydew harvests active Salt River Valley. Planting lettuce, broccoli, seeding, transplanting cauliflower active. Established stands good progress, insect controls as needed. Lemon, grapefruit harvest continued Yuma County. Some lemons picked Salt River Valley. Navel orange harvest to start next week Salt River Valley. Citrus groves good condition.

ARKANSAS: Most of the week warm with widespeard showers. Temperatures up to 4° above normal. High 87°, low 44°. Rainfall at all stations, most 3.88 in.

Days suitable for fieldwork 4.0. Moisture adequate. Crop progress slow. Remaining cotton fair condition; harvested 71%, 67% 1982. 53% average; virtually all bolls open, same as 1982, 93% average. Rice harvested 95%, 94% 1982, 93% average. Soybeans, non-irrigated mostly poor, irrigated good; virtually all yellowing, same as 1982, 93% average; leaves shedding 79%, 86% 1982. 81% average; harvested 22%, 26% 1982, 24% average. Corn virtually harvested, same as 1982, 80% average. Sorghum harvested 94%, 93% 1982 and normal. Wheat good condition; planted 29%, 35% 1982 and average. Oats good; seeded 42%, 40% 1982 and average. Pastures below average but improving. Cattle fair.

CALIFORNIA: Weak low off the Baja California coast produced some very light precipitation along south coast border early in the period. The rest of the State was dry. Weekly mean temperatures were generally a few degrees above normal although scattered pockets of 1 or 2° below normal were noted. The State's northern interior border area was cooler than normal by 3° and morning minimums as low as the teens were reported.

Rice harvest raped 75% complete, 80% year ago, average 75%. Some growers applying desiccants to speed harvest. Stubble burning rapid progress. Cotton bolls 95% open, year ago 100%, average 100%. Harvest increasing 10% picked, 35% year ago, average 34%. Defoliant application approaching completion. Winter grain seeding increasing. Central Valley gorwers beginning to plant. Winter wheat 10% seeded, 15% year ago, and average. Now 3% emerged, 10% year ago, average 13%. Dry bean, corn and sorghum harvests rapid progress. Sugarbeet harvest winding down central valleys. Final alfalfa cutting near complete. Seeding new fields active. Apple, avocado, table grape, coastal area wine grape, kiwifruit, olive, persimmon, pomegranate, Desert area grapefruit, lemon, Valencia orange, and walnut harvests active. Almond, pistachio harvests complete. Weather conditions favorable. Broccoli harvest continues Salinas-Watsonville, moderate supply, good quality. Light supplies Santa-Maria area. Firebaugh area crop continues mature. Cantaloup harvest complete San Joaquin Valley gaining momentum Desert. Carrots moderate supply variable quality Salinas-Watsonville. Planting complete Desert. Cauliflower moderate supply with hollow butt, problem, reducing yields Salinas-Watsonville. Plantings San Joaquin Valley eastside good progress. Fairly light supply variable quality Santa Maria-Oceano. Celery supply increasing seasonally Salinas-Watsonville variable quality. Moderate supplies good quality Santa Maria Oceano. Horseradish harvested Tulelake. Lettuce light supply Salinas-Watsonville season almost over. Santa Maria supplies decreasing variable quality. Harvest gaining momentum daily Huron producing area good quality. Some replanting rain-damaged Desert. Bell peppers starting to decrease seasonally Salinas-Watsonville San Joaquin areas. Fall potato harvest peaked early week Tulelake-Butte Valley, continued Riverside. Spinach planted central San Joaquin. Sweetpotato harvest full swing. Market tomato harvest continues late fields, light supply. Harvest processing tomatoes complete Sacramento Valley late field harvest northern San Joaquin Valley. New grass foothills continues good development. More rain needed maintain growth. Sheep movement alfalfa fields continues. Calving, lambing active.

COLORADO: Tropical storm Tico brought light showers, fog, and cooler temperatures to the east on 19th and 20th and considerable cloudiness Statewide. Average temperatures were seasonal with below average precipitation.

Winter wheat in good condition: 97% seeded, 96% last year, 97% average; 81% emerged, 89% last year, 87% average. Corn in good condition: 98% mature, 90% last year, 92% average; 58% harvested, 18% last year, 33% average. Sorghum in fair condition: 99% mature, 96% last year, 90% average; 58% harvested, 30% last year, 29% average. Statewide 6.0 days suitable for fieldwork. Topsoil and subsoil very short southeast, adequate west, and short elsewhere. Pasture and range conditions fair east and good west.

FLORIDA: A stationary front prevailed over the south Peninsula early week; then another frontal system affected most areas by late week. The front in combination with a moist, easterly wind flow off the Atlantic caused scattered showers and thunderstorms Statewide. Heaviest rains occured along the east coast with amounts of 2.00 to 5.00 in. Elsewhere, rainfall totals were generally 0.25 to 0.75 in. Summerlike humidities continued with temperatures averaging 3 to 5° above normal.

Soil moisture mostly adequate, a little surplus along portions of east coast; a few dry areas in Panhandle. Soybean harvest increasing, yields poor to moderate. Peanut harvest nearing completion. Hay harvest declining. Cotton picking active. Sugarcane good condition. Cutting cane for sugar beginning, seeding small grains and winter forage active. Pastures mostly good to excellent, Peninsula but poor to fair, Panhandle. Winter planting well underway. Cattle mostly good condition. Citrus grove condition excellent. Moisture adequate; several days with rain. Good natural fruit color on early fruit. Harvest progressing slowly due to small sizes and lagging maturity. Light to moderate showers fell in vegetable areas during week. Soils dried somewhat from rains earlier. Seeding continues active snap beans, carrots, cucumbers, escarole, lettuce, radishes, squash. Sweet corn seeding underway Pompano. Transplanting increasing cabbage, celery, eggplant. Harvest gaining sweet corn, cucumbers, eggplant, radishes, squash, tomatoes. Harvest getting underway snap beans, escarole, specialty lettuce, peppers, peas. Most crops making good progress. Good volume expected November, December. Light harvest watermelons expected next week.

GEORGIA: A few showers southeast, otherwise fair and quite cool as weekend of 15th and 16th began, then moderating temperatures. Partly sunny to locally cloudy during the week with mild to warm

days and cool nights. Spotty rain mainly west central and southwest 17th. Temperatures 2 to 5° below normal.

A wet weekend on 22nd 23rd Statewide with near-normal temperatures. Average rainfall near 1.00 in. northeast, near 0.25 in. elsewhere.

Prior to weekend rains, soil moisture 13% very short, 34% short, 53% adequate. Average days suitable for fieldwork 5.4. A busy week of fall harvest, land preparation, and planting of small grains. Corn condition 30% poor, 47% fair, 19% good; 94% harvested, last year 98%, average 94%. Cotton 4% very poor, 15% poor, 53% fair, 26% good; 91% open bolls, last year 92%, average 94%; 29% harvested, last year 47%, average 56%. Peanuts 4% very poor, 19% poor, 63% fair, 10% good, and 4% excellent; 94% dug, last year 100%, average 98%; 86% threshed, last year 99%, average 96%. Soybeans 25% poor, 60% fair, 12% good; 84% dropping leaves, last year 89%, average 83%; 13% harvested, last year 20%, average 22%. Apples 96% harvested, last year 100%, average 96%. Pecans 4% very poor, 14% poor, 51% fair, and 30% excellent; 3% harvested, last year 16%, average 11%. Wheat 19% planted, last year 17%, average 22%. Rye 53% planted, last year 53%, average 41%. Other small grains 39% planted, 39% last year, 34% average. Pastures 11% poor, 46% fair, 41% good.

HAWAII: No report available.

IDAHO: Periodic weather disturbances increased clouds and produced scattered showers from the central mountains, north. Heavy rain fell in the southeast at the beginning of the week after which the southern half of the State remained dry. Most of the precipitation fell in the north. Some of the greater amounts were 0.52 in. at Sandpoint and 0.26 in. at Coeur D'alene. Rexburg, in the southeast part of the State, had the most rain with 0.68 in. Temperatures were near normal Statewide.

Farmers reported 6.0 days suitable for fieldwork. Winter wheat seeded stood at 93% complete compared to 90% last year and 90% average. Emergence advanced to 71% versus 66% a year ago and 67% average. Potatoes were 92% dug compared to 1982's 90% and the average of 88%. Sugarbeets were 46% harvested, the same level as last year and 8 points ahead of the average of 38%. Corn for grain advanced to 22% picked while apples climbed to 83% harvested. Cattle and sheep, removed from summer ranges, stood at 73% and 67%, respectively.

ILLINOIS: Temperatures 3° below normal to 3° above normal. Precipitation 0.62 to 7.48 in., heaviest amounts in southern areas.

Harvest stopped midweek by rain. Soil moisture 31% short, 48% adequate, 21% surplus. Days suitable fieldwork: 3.8. Corn 83% harvested, 1982 64%, average 61%. Soybeans 93% harvested, 1982 90%, average 89%. Wheat 80% planted, 1982 82%, average 82%; emerged 55%, 1982 53%, average 52%; condition 8% excellent, 59% good, 28% fair, 5% poor. Sorghum harvested for grain 79%, 1982 58%, average 61%. Fall plowing 39% complete, 1982 25%, average 27%. Pasture condition 4% excellent, 25% good, 53% fair, 15% poor, 3% failure. Livestock condition good.

INDIANA: Mostly cloudy week, high temperatures, in upper 50's. Averaged 4 to 8° below normal. Lows 5 to 10° above normal. Average in mid 40's to 50°. Rainfall ranged from 1.90 in. in northeast to 5.90 south with some stations over 8.00 in.

Soil temperatures in low to mid 50's. Fieldwork averaged 3.7 days. Topsoil moisture mostly adequate to surplus. Subsoil mositure short to adequate. Corn 70% harvested, 1982 55%, average 50%. Corn moisture 20%, 1982 20%. Soybeans 92% combined, 1982 85%, average 65%. Soybeans 12% moisture, 1982 13%. Soybeans 100% dropping leaves, 1982 100%, average 100%. Wheat 90% seeded, 1982 85%, average 75%. Wheat 65% emerged, 1982 65%, average 40%. Wheat stands fair to mostly good.

IOWA: A very wet, cloudy week with temperatures averaging slightly below normal. Rainfall totals for the week were generally between 1.00 and 2.00 in. Temperature extremes: 26 and 67°. Cloudy, cool, and moist conditions limited pan evaporation to an average of only 0.07 to 0.10 in. per day.

Days suitable, 3.0. Corn harvested 85%; 24% last year; 47% normal. Soybeans harvested 87%; 47% last year; 78% normal. Fall plowing completed 32%; 5% last year; 15% normal. Fertilizer applied 30%; 5% last year. Topsoil moisture 4% short; 62% adequate; 34% surplus. Subsoil moisture 28% short; 63% adequate; 9% surplus.

KANSAS: Precipitation averaged 0.10 to 0.50 in. west, 1.40 to 1.70 in. central, 2.00 in. northeast, 2.60 in. east central and 5.25 in. southeast. Temperatures averaged 56° southeast, 52 to 54° elsewhere - 1° above normal northwest around normal east central, 1 to 3° below normal elsewhere.

Sorghum 90% mature, 80% last year, 90% average; 65% harvested, 25% last year, 50% average. Soybeans 95% dropped leaves, 95% last year, 95% average; 60% harvested, 50% last year, 60% average. Corn 80% harvested, 65% last year, 70% average. Wheat 85% planted, 95% last year, 90% average; 65% emerged, 75% last year, 80% average. Wheat condition improved all districts, ranges from poor to excellent, mostly good. Pastures and range generally fair. Cattle coming off pastures, grazing corn and milo stubble. Soil moisture adequate Statewide. Days suitable for fieldwork: 3.5.

KENTUCKY: Week began warm and dry with highs near 80's. Intermittent showers early in week with substantial rainfall late. Average temperatures in lower 60's, 3 to 5° above normal. Precipitation mostly 2.00 to 4.00 in. with localized amounts over 7.00 in. in northeast.

Soil moisture 44% short, 53% adequate, 3% surplus. Rains last week limited fieldwork to 3.0 days. Soybean harvest 32% complete, same last year, average 43%. Yields variable, 93% shedding leaves or beyond, 89% last year, 93% average. Burley stripping 10% complete, 12% year ago, 11% average. Considerable green and off-color tobacco. Corn harvest 68% complete, same last year, average 69%. Remaining harvest slowed due to wet conditions. Wheat seeding 47% complete, same last year, average 53%. Pastures greening up.

LOUISIANA: Temperatures averaged 1 to 7° above normal. High 90°, low 52°. Rainfall ranged 0.10 to 1.63 in.

Soil moisture ranged very short to short northeast, adequate southeast, short elsewhere. Cotton open bolls 100%, 100% 1982, 96% average. Cotton harvested 55%, 50% 1982, 62% average. Condition poor to fair. Rice harvested 99%, 98% 1982, 99% average. Sorghum harvested 98%, 96% 1982. Soybeans leaves turning 97%, 95% 1982. Soybeans shedding 88%, 82% 1982, 87% average. Soybeans harvested 41%, 40% 1982, 53% average. Condition fair. Sugarcane planted 97%, 98% 1982, 96% average. Sugarcane harvested 12%, 15% 1982, 12% average. Condition good. Sweetpotatoes harvested 84%, 88% 1982, 87% average. Vegetables rated fair. Pecans rated fair to good. Harvest 8%, 5% 1982, 8% average. Hay final cutting 96%, 96% 1982. Wheat planted 33%, 11% 1982, 39% average; emerged 17%, 6% 1982; condition fair. Pastures rated fair. Livestock rated fair to good.

MARYLAND AND DELAWARE: Maryland: Light rains midweek slowed harvest of corn and soybeans and the seeding of small grain. Days suitable for fieldwork: 4.0. Topsoil moistures adequate, subsoil moisture short in west. Adequate elsewhere. Corn 75% harvested, 70% last year. All soybean turned, 1983 and 1982. Soybean acreage with shed leaves 80%, 85% last year. Soybean harvest 25%, 30% last year. Tobacco harvest complete except for a few fields, about 2 weeks behind last year. Sweet potatoes half dug. Apples 90% picked; 95% picked last year. Alfalfa hay 90% cut 4 times 100% last year. Barley 85% seeded 1983 and 1982. Wheat 60% seeded; 45% last year. Rye 80% seeded; 75% last year. Oats 65% planted 55% 1982.

Delaware: Precipitation at midweek slowed harvest of corn and soybeans and hampered seeding of small grain. Just over 3.0 days suitable for fieldwork. Topsoil moisture adequate; subsoil is short in northern areas. Grain corn harvest at 85% equal to last year. Soybean acreage nearly all turned, a few days behind last year. Soybeans shed 75% nearly complete last year. Soybeans harvested 20%, 50% last year. Apple harvest and 4th cutting of alfalfa hay complete. Barley seeding 75%; nearly 100% last year. Wheat 20% seeded; 30% last year. Rye 45% seeded; 60% last year.

MICHIGAN: A very typical fall week. Temperatures average just 1° below normal. Precipitation was light to moderate.

Harvest of fall crops progressed well but was stopped by weekend rains. Statewide 5.0 days were suitable for fieldwork. Dry beans 95% harvested, 99% last year, 93% average. Corn silage 95% harvested, 97% last year, 94% average. Corn for grain 30% harvested, 25% last year, 23% average. Soybeans dropping leaves 100%, 100% last year, and 100% average. Soybeans 65% harvested, 70% last year, 45% average. Sugarbeets 45% harvested, 85% last year, 52% average. Wheat 90% planted, 96% last year, 88% average. Harvest of fruit and vegetables beginning to wind down.

MINNESOTA: The week was cool, cloudy and rainy, temperatures averaged near normal to 2° below normal. High 64°, low 21°.

Precipitation averaged 0.16 to 0.44 in. below normal for northern third of State and normal to 0.77 in. above elsewhere. Greatest amount was 2.06 in.

Harvested: Field corn 70%, 1982 11%, normal 34%. Soybeans 62%, 1982 32%, normal 69%. Sugarbeets 74%, 1982 63%, normal 78%.

Land Plowed: Field corn 35%, 1982 5%, normal 13%. Soybeans 33%, 1982 8%, normal 36%.

Moisture Content: Field corn 22%, 1982 28%, normal 13%. Soybeans 15%, 1982 15%, normal 13%.

MISSISSIPPI: Temperatures 4 to 10° above normal. Extremes 51 and 89°. Greatest 24-hour rainfall 1.75 in.

Soil moisture adequate in the northern part of the State, short in the southern part. Fieldwork 5.2 days suitable, 4.9 1982, 4.6 average. Cotton fair; 100% open bolls 1983 and 1982, 94% average; 64% harvested 1983 and average, 67% 1982. Soybeans fair to poor; 100% dropping leaves 1983, 1982 and average; 30% harvested, 31% 1982, 37% average. Rice 90% harvested, 88% 1982, 91% average. Sorghum 92% harvested 1983 and average, 95% 1982. Corn 89% harvested 1983 and 1982, 87% average. Peanuts 77% harvested 85% 1982, 88% average. Sweetpotatoes 64% harvested. Pecans 11% harvested. Wheat 35% planted, 26% 1982, 40% average. Pasture condition fair.

MISSOURI: Temperatures remained slightly below normal across the north but warmed to an average of 7° above normal in the south. A warm front across the southern part of the State 19th and 20th caused a large temperature contrast and heavy rains over portions of the State. Rainfall averaged 4.00 to 6.00 in. in the southwest through east central sections. The northwest and southeast sections averaged about 2.00 in.

Days suitable for fieldwork: 1.9. Corn 87% harvested, 63% last year and normal. Grain sorghum 78% harvested, 58% last year and 61% normal. Soybeans 86% mature, 82% last year and 87% normal. Beans 66% harvested, 42% last year and 57% normal. Winter wheat 67% seeded, 56% last year and 63% normal. Plowing for spring crops 35% completed, 33% last year and 27% normal. Cotton 85% harvested, 79% last year and 62% normal. Pasture condition 24% poor, 66% fair, 10% good. Topsoil moisture supplies 27% short, 54% adequate and 19% surplus.

MONTANA: Temperatures very mild through week and near normal over all the State. Precipitation first of week with 0.10 to 0.40 in. over all areas except northeast which remained dry.

Soil moisture short to adequate. Fieldwork: 4.6 days suitable. Percent winter wheat planted this year, last year, average: 100, 85, 90. Percent emerged 80, 70, 75. Sugarbeets harvested 60, 30, 55. Potatoes harvested 95, 60, 75. Cattle moved from summer ranges 80, 65, 70. Sheep moved 80, 70, 75.

NEBRASKA: Temperatures 2° above normal northwest but 1 to 2° below normal elsewhere. Precipitation less than 0.10 in. northwest and southwest up to 1.50 in. northeast. Remainder 0.50 in.

Corn 80% harvested, 15% last year and 45% average. Sorghum harvested 85%, 10% and 55%. Soybeans harvested 85%, 50% and 80%. Winter wheat mostly good to fair, good improvement over one week ago. Topsoil moisture mostly adequate to short. Subsoil short to adequate. Pasture and range feed mostly adequate to short. Days suitable 4.0.

NEVADA: Entire State dry during week with skies mostly sunny and clear. Temperatures averaged slightly above normal extreme south. Coolest temperatures recorded beginning of week but thermometer rose under influence of high pressure system all areas. Winds light to moderate throughout period.

Harvesting activities light to minimal and in windup stages. Range, pasture good to excellent. Livestock sales increasing.

NEW ENGLAND: Temperatures averaged 5 to 8° below normal. Hard frost or freeze in all but southern coastal areas late in the week. Dry week for Maine, northern New Hampshire and Vermont. Southern New England averaged 0.01 to 0.80 in., with heaviest precipitation on 18th.

Maine potato harvest complete.

NEW JERSEY: Temperatures averaged 2° below normal. Extremes were 20° on the 22nd and 23rd, and 71° on the 19th. Weekly rainfall averaged 3.40 in. north, 2.19 in. central and 1.49 in. south. The heaviest 24-hour total 2.55 in. on the 23rd to 24th. Estimated soil moisture, in percent of field capacity, averaged 99% north, 95% central and 84% south. Four inch soil temperatures averaged 52° north, 55° central and 58° south.

Fieldwork: 4.4 days suitable. Weekend rain temporarily halting most fieldwork. Fall vegetable movement continues. Irish potato harvest nearing completion. Sweetpotato digging well advanced. Corn silage making complete. Apple and cranberry harvest well advanced. Pasture conditions improving. Some light frost

reported during the period. Growth of fall seeded grains and cover crops good. Better drying conditions needed for harvest of corn for grain. Soybean combining begun.

NEW MEXICO: Average temperatures near normal most areas. Minimum temperature 22°, northern mountains, maximum temperature 83°, southern Desert. Moisture from a decaying tropical storm produced substantial rainfall over southern half of State. Precipitation amounts between 1.00 and 2.00 in.

Hail damage to crops reportedly significant in one east side county. Soil moisture short-adequate. Cotton poor eastside, good elsewhere. Fields with open bolls: 94% current, 100% last year, 95% average. Fields harvested: 6% current, 15% last year, 15% average. Alfalfa rated good. Rains delayed harvest. Little progress on 5th and 6th cuts. Irrigated grain sorghum good, 50% harvested. Dryland harvest picked up, fields poor. Corn good to excellent, 70% harvested. Irrigated wheat, barley good stands. Dryland fields improving with moisture. Chile harvest continuing, Mesilla Valley. Fall lettuce harvest continues, some going to seed. Some moisture damage to peanuts, harvest continues. Ranges poor to fair, some improvement. Cattle, sheep good. Marketings continuing.

NEW YORK: Frost in nearly all areas ended the growing season. Good fall for harvesting. Corn silage harvest 84% complete, 84% 1982, 80% average. Grain corn harvest 21% complete, 15% 1982, 20% average. Third cutting alfalfa 95% done, 90% 1982, 91% average. Dry bean harvest well along. Apple harvesting active, will slow considerably by November 1. Concord grape harvest for processing nearly complete in Chautauqua-Erie area. Harvest of most major vegetable crops complete. Cabbage harvesting active.

NORTH CAROLINA: Temperatures near normal in mountains and coastal Plains, 2 to 3° below normal in Piedmont. Rainfall widespread.

Soil moisture: 7% very short, 35% short, 56% adequate, 2% surplus. Days suitable for field-work: 5.2. Condition: Cotton 34% poor, 63% fair, 3% good. Peanuts: 11% poor, 86% fair, 3% good. Soybeans: 27% poor, 66% fair, 7% good. Sorghum: 25% poor, 66% fair, 9% good. Apples: 7% poor, 46% fair, 47% good. Sweetpotatoes: 4% poor, 81% fair, 15% good. Phenological stages: Cotton opening bolls: 100%, 1982 100%, average 95%. Soybean leaf drop: 50%, 1982 54%, average 58%. Harvests: Corn for grain: 91%, 1982 93%, average 90%. Apples: 79%, 1982 100%, average 90%. Sorghum harvest: 61%, 1982 75%, average 72%. Sweetpotatoes: 61%, 1982 83%, average 80%. Peanuts dug: 38%, 1982 88%, average 84%. Peanuts threshed: 25%, 1982 78%, average 73%. Major farm activities: Sowing small grains, preparation of land for fall seeding, corn for grain harvest, sweetpotato harvest, marketing tobacco, soybean harvest, peanut digging, cotton harvests, planting cover crops, apple harvest, and equipment maintenance.

NORTH DAKOTA: Cloudy, cool weather prevailed. Temperatures averaged 1 to 6° below normal. High temperatures 50's, although western part recorded temperatures in 60's and low 70's. Extremes from 74 to 18°. Most of the State received below normal precipitation except south central and southeast where 0.30 to 0.75 in. recorded. Western portion again missed significant precipitation and since April 1 is running 3.00 to 5.50 in. below normal.

Harvest of row crops continued to equal or exceed the normal pace despite rain delays. Most fall tillage being completed. Pastures mostly poor condition. The percent harvested compared to last year and average: Sunflower 69, 20, 46; corn grain 81, 27, 50; flax 97, 89, 90; soybeans 79, 56, 78; dry beans 92, 85, 95; potatoes 92, 91, 96; and sugarbeets 85, 75, 85. Topsoil moisture near normal with 35% short or very short, 59% adequate, 6% surplus.

OHIO: Temperatures 1 to 2° above normal. Highs upper 50's, lows lower 40's. Percipitation from 0.80 in. north to 6.00 in. southwest; most 1.50 to 2.50 in.

Some harvesting delays due to rain. Corn grain moisture 22%, condition fair. Soybean oilseed quality fair to good. Emerged winter wheat good. Wheat planted 85% 1983, 90% 1982, 85% average; emerged 65% 1983, 65% 1982, 40% average. Soybeans dropping leaves 100% 1983, 100% 1982, 100% average; harvested 80% 1983, 85% 1982, 70% average. Corn harvested 50% 1983, 45% 1982, 40% average. Days favorable: 4.0. Pasture condition fair. Soil moisture 4% short, 63% adequate, 33% surplus.

OKLAHOMA: Average temperatures ranged from 4° subnormal Panhandle to 4° above normal east central. Excessive rainfall mainly southwest, central. Precipitation amounts over 10.00 in. common. Precipitation ranged from 1.29 in. Panhandle to 4.67 in. northeast to 9.78 in. southwest.

Heavy rainfall most of State. Crop flooding and wash out notable especially southwest, south central. Wheat pasture prospects good. Wheat fair to good condition. Some reseeding necessary. Pastures improved. Stock ponds replenished. Little or no harvest activity. Days suitable fieldwork 2.40. Livestock good to fair condition. Wheat planted: 80%; 75%, 1982; 85%, average; emerged: 60%; 40%, 1982; 55%, average. Sorghum mature: 95%; 90%, 1982; 90%, average; harvested: 40%; 30%, 1982; 40%, average. Cotton open bolls: 85%; 80%, 1982; 90%, average; harvested; 5%; 1%, 1982; 10%, average.

OREGON: Scattered showers along coast and interior valleys brought 0.50 in. of precipitation to northern areas and 0.20 to 0.30 in. to the mid-interior. Minimal rainfall reported along southern coast and east of Cascades. Temperatures were normal for week.

Winter wheat 72% seeded compared to 81% last year and average. Nearly 40% emerged versus 37% in 1982 and 50% average. Harvest of late potatoes about 90% complete. Onion harvest essentially complete. Filbert harvest near completion, yields poor due to brownstain. Walnut harvest just underway. Cranberries about half harvested. Most all vegetable and fruit crops harvested. Sugarbeet harvest underway in Malheur County. Soil moisture short to adequate. Range and pasture condition fair to good some improvement with recent rain. Livestock condition good to excellent, with many animals being pastured on crop aftermath.

PENNSYLVANIA: The week was cool with rainfall occurring mid and end of week. Average State temperature was 1° below the normal, with greatest departures in the Susquehanna Valley. Rainfall was plentiful across the State with amounts 1.00 or more except in the far northern counties were amounts were 0.50 to 0.75 in. State average 1.20 in.

Days suitable: 4.0. Moisture mostly adequate. Activities: Plowing, seeding barley, wheat and rye; making hay; spreading lime, manure and fertilizer; chopping corn stalks; baling fodder; and harvesting corn for grain, corn silage, soybeans, haylage, potatoes, tomatoes, apples and grapes. Soybeans 29% harvested, last year 34%. Potato harvest virtually complete, last year 94%. Corn silage harvest virtually complete, last year 93%. Corn for grain 29% harvested; last year 28%;

average 34%. Fall plowing 90% complete; last year 93%; average 92%. Barley planting virtually complete, 2 weeks later than last year. Wheat 87% planted, last year 94%. Fourth crop alfalfa 79% harvested, last year 66%. Quality of hay made fair to poor. Feed from pastures average to below average.

PUERTO RICO: Island average rainfall 2.46 in. or 0.67 below normal. Highest weekly total 6.80 in. Highest 24 hour total 2.40 in. Temperature averaged about 82 to 80° on coasts and 74° Interior Divisions. Mean station temperature ranged from 83.5 to 68.8°. Extremes 94 and 57.

SOUTH CAROLINA: Considerably warmer than usual became cooler over weekend. Dry weather until weekend general rains, some heavy.

Soil moisture reported short. Days available for fieldwork: 5.8.

Cotton bolls 100% open this year, last year, average; 79% harvested ahead of 63% last year, 66% average; yields lowered by drought, condition poor. Soybeans leaf drop at 63%, 71% year ago, 73% average; 16% mature, 31% last year, 37% average; 3% harvested, 8% last year, 10% average; condition poor to fair.

Pastures' condition poor, some require reseeding. Winter grazing 74% planted, 80% last year, 69% average; emergence 59% now and 1982, 69% average; condition fair. Livestock fair to good with supplemental feeding required. Wheat condition fair, 5% seeded, 14% last year, 17% average; 5% wheat emergence, 7% last year, 9% average.

SOUTH DAKOTA: Average temperatures 5° below to 1° above normal. Extremes: 75 and 17°. Precipitation widespread over State. Amounts ranged from less than 0.10 in. northwest and southwest corners to over 1.00 in. west central. Eastern half of State received 0.50 in. or more. Fall harvest progress only moderate due to wet field conditions. Rains helped winter grain stands, and should provide adequate moisture for completion of germination. Winter wheat stands very good northeast and north central. spotty but improved to the west. Farm activities included mending fences, cleaning pens and sheds, fixing farm buildings and equipment, cutting wood, and other preparations for winter. Days suitable for fieldwork: 3.5. Sorghum mature 100%, 1982 91%, average 96%. Sorghum harvested 77%, 1982 14%, average 62%. Corn harvested 72%, 1982 12%, average 53%. Soybeans harvested 76%, 1982 28%, average 79%. Sunflowers harvested 70%, 1982 22%, average 58%. Winter wheat planted 100%, 1982 100%, average 100%. Winter wheat emerged 93%, 1982 95%, average 99%.

TENNESSEE: Precipitation was reported in the state each day of the week with an average of 1.50 in. in the west, 0.75 in. central, and 0.58 in. in the east. Temperatures were warm early in the week becoming mild to cool by late week and ranged from 35 to 84°.

Soil moisture 41% adequate, 50% short, 9% critically short. Days available for fieldwork: 4.3. Pasture 56% poor, 41% fair, 3% good. Corn harvested 68%, 1982 62%, average 57%. Cotton harvested 85% 1982 72%, average 46%. Soybeans shedding leaves 100%, 1982 100%, average 99%; mature 73%, 1982 75%, average 75%; harvested 26%, 1982 23%, average 31%. Burley tobacco stripped 20%, 1982 32%, average 34%. Wheat sown 42%, 1982 42%, average 58%.

TEXAS: Beneficial rains across most of West Texas. Near midweek, moderate to heavy rain developed West Texas, drifted slowly northeast. Flash flood watch posted for large sections of North, West Texas, heaviest amounts recorded across the High, Low Plains. Temperatures across High, Rolling Plains averaged near normal, rest of State reporting above normal temperatures.

Crops: Week highlighted by hail, heavy rain, flooding Lubbock area during midweek, causing considerable damage to area's remaining cotton crop. Elsewhere, rains were widely scattered, varing amounts. Fieldwork interrupted by showers. Cotton High Plains, hit by hail late last week, heavy rains during midweek. Lubbock area record rainfall amounts recorded causing flooding, leaving some cotton standing in water. Yields, quality expected to be reduced, possibility of losing entire fields exist. Current condition is 52% of normal compared with 59% a year ago. About 2% excellent; 13% good; 53% fair; 32% poor. Sorghum harvest slowed by wet conditions. Limited progress early week. Producers awaiting dry conditions to continue harvesting. Corn harvest virtually complete. Yields, quality good. Small grains benefiting from recent rainfall. Seeding gaining momentum. Irrigated fields making good stands, dryland fields continue to show effects of dry start. Soybean yields High Plains expected to be reduced by hail, wind damage. Harvest expected to be delayed. Sugarbeet harvest met delays due to wet fields. Yields remain good, quality excellent. Peanut harvest moved slowly as rains caused delays. Yields generally fair to good.

Cotton open bolls 87%, 75% 1982, 79% average: harvested 28%, 19% 1982, 27% average. Sorghum mature 98%, 96% 1982, 95% average; harvested for grain 82%, 80% 1982, 83% average. Wheat planted all purposes 65%, 69% 1982, 76% average; emerged 35%, 40% 1982, 53% average. Corn harvested for grain 99%, 99% 1982, 95% average. Peanuts harvested 46%, 43% 1982, 54% average. Soybeans harvested 23%, 27% 1982, 34% average. Sugarbeets harvested 24%, 43% 1982, 23% average. Pecans harvested 5%, 7% 1982, 6% average. Sunflowers harvested 73%, 61% 1982, 62% average. Oats planted for all purposes 58%, 52% 1982, 68% average.

Commercial vegetables: Rio Grande Valley, planting of fall vegetables active. Cucumbers being harvested, bell peppers, broccoli nearing harvest. Onion seeding gaining momentum. Harvest of early oranges continues, grapefruit harvest beginning. San-Antonio Winter Garden area, planting active. Cabbage, cucumbers, peppers making excellent growth. East Texas, sweetpotato harvest continued. Land preparation continues, early planted fields beginning to emerge. Trans-Pecos region, bell peppers, cabbage making good growth. Shipments of peppers gaining momentum. Pecan harvest underway Rio Grande Valley, South Texas. Yields good, nuts exhibiting excellent quality.

Range and livestock: Range, pasture condition improved slightly. Grazing still short. Livestock condition remains good, supplemental feeding continues.

UTAH: Scattered showers 50% of stations. Accumulations generally light, few moderate. Temperatures near normal.

Winter wheat seeding continued, approaching 80%. Corn silage harvest winding down. Most livestock down from high mountain grazing. Apple, potato and onion harvest continued. Many farmers and ranchers taking a day off for hunting deer last of period.

VIRGINIA: Cooling during the period. Highs mainly in the 70's lowered to the 50's and 60's. Lows in the 30's and 40's rose into the 50's. Except for the first couple of days-it was a rainy period, with 2.00 to 4.00 in. raingall totals common across the State.

Cool temperatures and ample rainfall improved topsoil moisture to 23% short, 67% adequate, and

10% surplus with 3.7 days suitable for fieldwork. Corn harvest 71% complete, 70% last year, 70% average. Soybean harvest continued slowly with 9% complete compared with 18% last year, 18% average. Tobacco harvesting virtually complete. Marketing of flue-cured continues. Burley and fire-cured tobacco being prepared for market. Peanut harvest in full swing after a slow start. Peanut digging 50% complete, 98% last year, 83% average. Peanut combining 34% complete, compared with 94% last year and 72% average. Small grain seeding continued and seeding progress is running close to last year's level.

WASHINGTON: Weak begun with a front off coast that weakened as it moved inland on 15th. Except for coast, partly cloudy skies prevailed on 16th and 17th as high pressure dominated State's weather. Another front approached coast midweek and spread significant precipitation over most of State on 19th and 20th.

Some winter wheat seeding continues. Stripe rust reported from few locations Douglas County and wheat mosaic showing up. Field corn harvest progressing slowly. Silage corn harvest complete. Potato digging continues. Soil fumigation in progress for 1984 potato crop. Apple harvest continues, with only late-season varieties remaining. Red delicious apple quality good in comparison to 1982 crop. Grape harvest continues. Berry growers preparing fields for winter. Pruning of raspberries has started. Vegetable seed harvest complete. Winter cauliflower looks good. Digging fresh market carrots will continue through Christmas. Some squash and pumpkins remain to be harvested. Livestock in good condition and cattle still being moved from mountain areas to winter pastures. Ranges and pastures still in good condition for this time of year. Winter wheat planted 97%, 91% 1982, 91% average; emerged 85%, 74% 1982, 74% average.

WEST VIRGINIA: Temperatures averaged 2° above normal across the State. Low 25°, high 77°. Precipitation well above normal.

Soil moisture adequate to short for the first time since middle of the summer. Days suitable for fieldwork averaged 3.2. Main activities: Livestock work, corn harvesting, general maintenance. Fall seeding: Wheat 83% complete; barley 90% complete. Corn: 35% mature, 65% harvested. Pasture in fair to poor condition.

WISCONSIN: Small amounts of rain fell over north on 19th while rain fell over south late 19th through 23rd. One inch or more fell in southeast late 21st and 22nd. Highest temperature 68° at Iola on 18th; lowest 25° Lake Thompson on 21St.

Days suitable for fieldwork 3.0. Statewide soil moisture 55% surplus, 44% adequate, 1% short. Corn 30% harvested, 13% last year, average 28%. Silo filling 82% complete, 67% last year and 93% average. Soybean acreage harvested, 40% complete; ahead of last year's 32%, but the same as average. Fall plowing 27% done, 16% last year and 23% average. Pasture condition improved to 90%.

WYOMING: Temperatures on cool side. Reading well below normal except southwest. Precipitation above normal north central to northeast; near normal elsewhere.

Topsoil moisture adequate 68% State. Days suitable for fieldwork: 6.0. Winter wheat fair to mostly good condition. Sugarbeet harvest 70% complete, normally 85% complete. Potato harvest 95% complete which is normal. Dry bean harvest windup stages most areas. Corn for grain 40% harvested, normally 30% harvested. Livestock average to above average condition throughout State. Livestock being moved to winter pastures. Other activities include marketing, weaning, pregnancy testing.

National Weather Summary (continued from front cover)

FRIDAY...Flooding continued over much of the southern Plains as the heavier rain moved eastward to the lower and middle Mississippi Valley and over the Midwest. Light showers continued in the central Plains, the Tennessee and Ohio Valleys, and the mid-Atlantic States. Temperatures were rather mild over most of the Nation but early morning freezes covered much of the Rockies, the Plateau, and the Northeast.

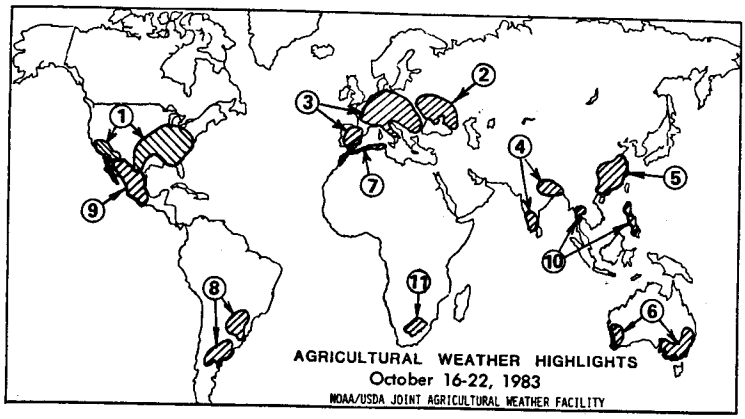
SATURDAY...The area of moderate to heavy rain moved eastward to the area along a line from southern Mississippi through Alabama, to the upper Ohio Valley, and to lower Michigan. Light rain or showers continued in the eastern part of the central Plains, and the Atlantic Coast States from western New York to Florida. Low temperatures were freezing over the Plateau, parts of the Rockies, the northern Plains and Lakes, and the central Appalachians.

(continued from p. 9)

PASTURES AND LIVESTOCK: Pastures and ranges were in mostly fair condition. Supplemental feeding continued to be necessary in many areas. Heavy rain replenished stock water supplies from West Texas to Missouri. In Texas, germination of dryland wheat pastures has been delayed and little grazing is available. Producers culled herds.

International Weather and Crop Summary

October 16 to 22



1. UNITED STATES ... Torrential rains from the remnants of Mexican Hurricane Tico help pastures and most winter wheat in the southern and central Plains, but some eroded fields will require replanting. Tico damages Texas and Oklahoma cotton, and slows corn and soybean harvesting into the Corn Belt. Open weather favors harvesting across most of the Southeast and Southwest.

2. WESTERN USSR ... Generally dry weather aids harvesting in southern and central wheat sections, but the dry and unseasonably warm weather is causing poor conditions for fall planted wheat in the southeastern districts.

3. EUROPE ... Showers provide ample moisture over most northwestern wheat areas, while unfavorable dryness prevails over some eastern sections and the Iberian Peninsula.

4. SOUTH ASIA ... Rains benefit late crops and winter rice in southern peninsular and northeastern India. Unfavorable dryness for emerging wheat continues from eastern Uttar Pradesh into Bihar.

5. EASTERN ASIA ... Heavy rains probably damage some unharvested cotton, corn, and soybeans in the Yangtze Valley. Moderate rains aid winter wheat while dryness favors corn and soybean harvesting in the north.

6. AUSTRALIA ... Light to locally moderate showers keep moisture adequate in nearly all areas for potentially very good wheat yields.

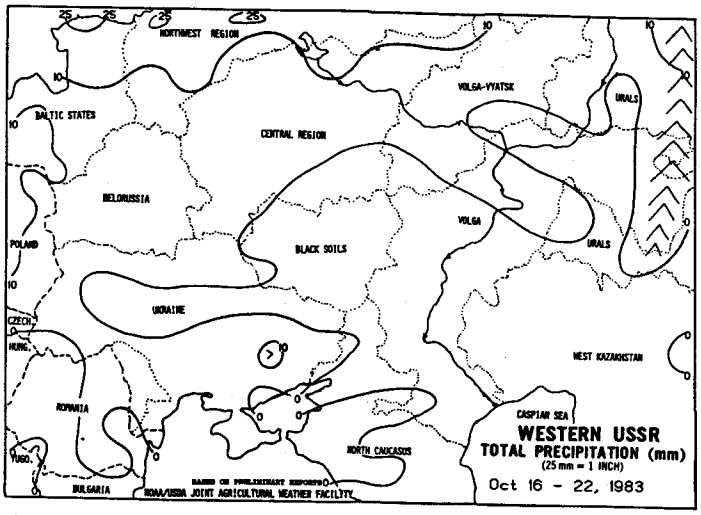
7. NORTHWESTERN AFRICA ... Dryness continues in wheat areas of Morocco and western Algeria while rains in eastern Algeria and Tunisia favor early winter grain planting.

8. SOUTH AMERICA ... Widespread moderate to heavy rains across Argentina's crop areas provide ample moisture for wheat development and planting of summer crops. Very heavy rains in parts of southern Brazil slow some wheat harvesting and planting of crops.

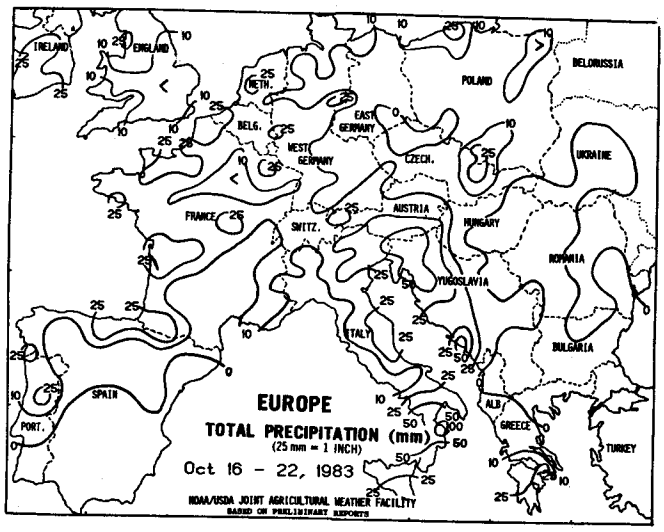
9. MEXICO ...Hurricane Tico slams into Mazatlan causing heavy damage to crops. Rains from the remains of Tico moving across central areas into northeastern Coahuila help ranges and wheat, while slowing the harvesting of mature crops.

10. SOUTHEAST ASIA ... Tropical Storm Kim's rains are unfavorable for mature rice in south-central Thailand. A second storm brings timely rains to the rice areas of Central Luzon in the Philippines.

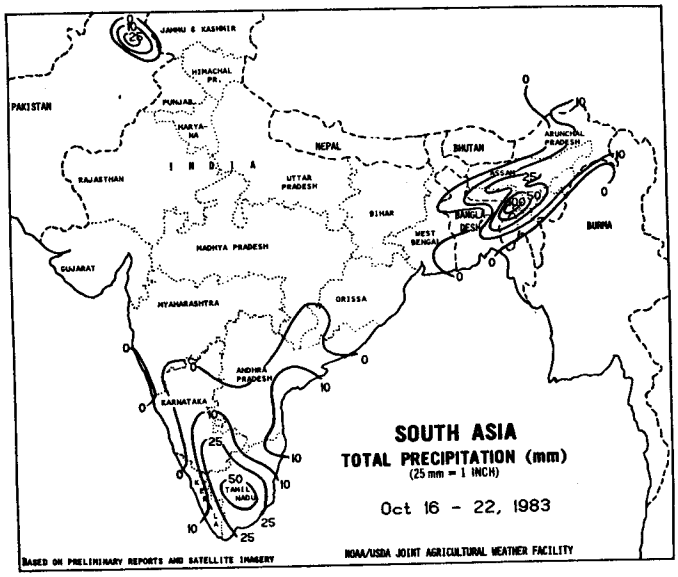
11. SOUTH AFRICA ... Rains over the eastern part of the corn region provide adequate topsoil moisture for emergence and early growth, but the western edge needs more moisture.



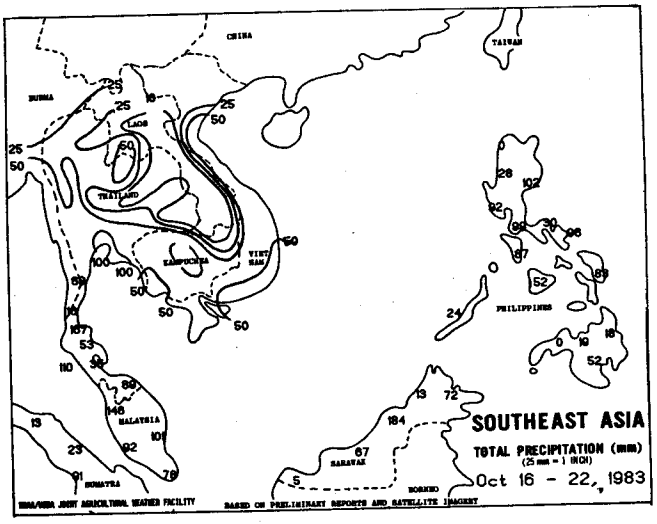
WESTERN USSR...Light precipitation, around 10 mm, covered winter grains in the extreme northern portion of the region. In contrast, generally dry weather covered crop areas in the Ukraine, Black Soils, Volga Valley, and North Caucasus aiding harvest activity. Cumulative precipitation since early August indicates that winter grains in the Baltic States, Belorussia, the Black Soils, the Northwest and Central Regions, the Volga Vyatsk, the western Ukraine, and most of the Volga Valley have had favorable weather for emergence and early plant growth. However, unseasonably warm and generally dry weather has created poor conditions for wheat in the eastern Ukraine, south-central Ukraine, and the North Caucasus. Uneven emergence is likely to be a problem in these areas. Weekly temperatures were generally above normal throughout the region.



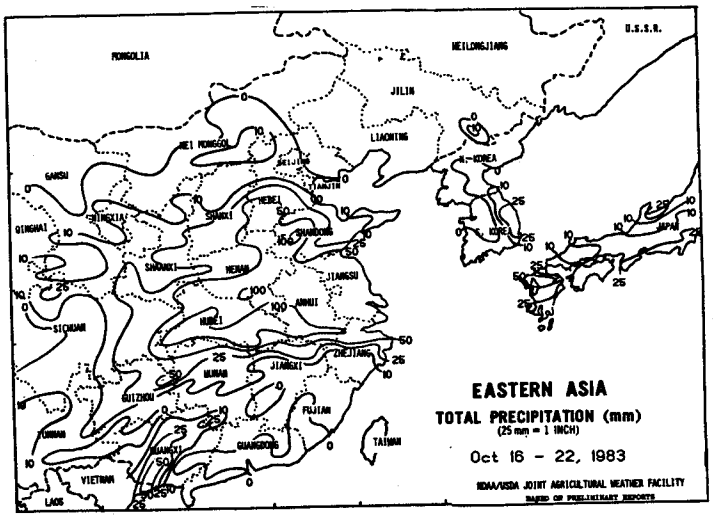
EUROPE...Showers continued to provide favorable moisture for winter grains over most of northern Europe, except for East Germany and western Poland which were generally dry. In the southeast, winter grain areas in Hungary, Romania, Bulgaria, and eastern Yugoslavia were mostly dry. Winter grains in parts of Romania need additional moisture to ensure that plants become well established before dormancy. Rain is also needed for winter grains in parts of northern Italy, but grain areas in central and southern Italy received significant showers. Elsewhere, early week showers created harvest delays in southern France while dry weather delayed winter grain planting in the Iberian Peninsula.



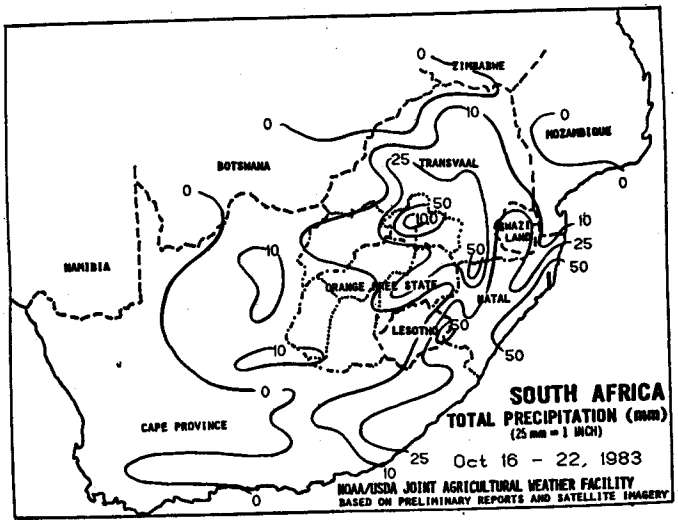
SOUTH ASIA...Precipitation was confined to southern peninsular and northeastern India this week. The remnants of a tropical storm brought moderate rain, with some locally heavy amounts, to Assam and Bandgladesh. Moderate rain also benefited late-planted crops in Tamil Nadu and southern Karnataka. Winter rice is in the filling stage and has had generally adequate moisture, except in of West Bengal and northern Bihar. Precipitation has retreated from northern India. However, previous final surges of monsoon rains have supplied adequate moisture to most winter wheat areas. Limited precipitation in eastern Uttar Pradesh and Bihar has created some unfavorably dry conditions for emerging wheat in nonirrigated areas.



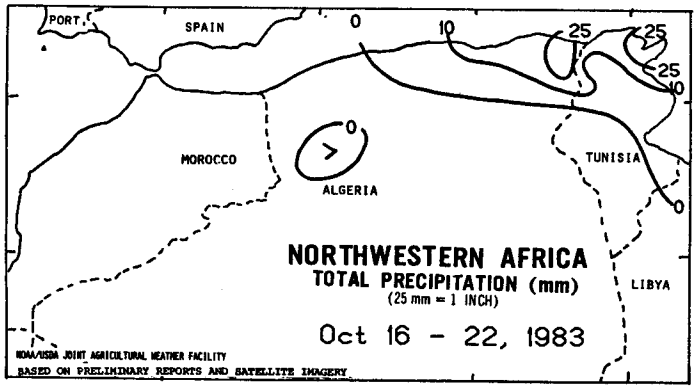
SOUTHEAST ASIA...Tropical Storm Kim traversed southern Indochina depositing moderate to heavy precipitation, the heaviest amounts fell in south-central Thailand. The rain was unfavorable for mature rice and flooding likely damaged some rice in south-central Thailand. Moderate rain fell in northern Thailand while the eastern areas were relatively dry. A second tropical storm developed over the northern Philippines and brought moderate rain to the northern islands. Precipitation accumulations are well-below normal in Central Luzon, but timely rains have kept the rice area moist. Temperatures have remained above normal in most of Indochina helping to dry some excessively wet areas.



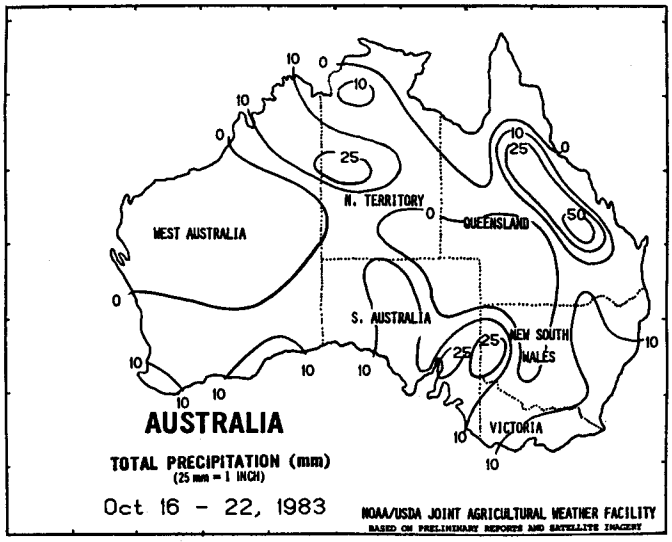
EASTERN ASIA...Heavy precipitation returned to central China this week. A narrow band of accumulations greater than 100 mm extended from Hubei through southern Henan and Anhui. This moisture likely damaged some mature cotton, corn, and soybeans awaiting harvest along the Yangtze Valley. Moderate rain spread northward covering nearly all of the winter wheat region. The precipitation continued to supply the area with beneficial moisture for emergence and early establishment. Hebei, in particular, was aided as only light rains had fallen previously. Little or no precipitation fell in the southern rice area. Late double-cropped rice is in the late-filling stage and has generally benefited from adequate moisture during the growing season. Temperatures remain above average in central and southern China. The warm weather is favorable for the rice crops which will mature later than usual because of early season planting delays. Mostly dry weather in the north favored the corn and soybean harvest.



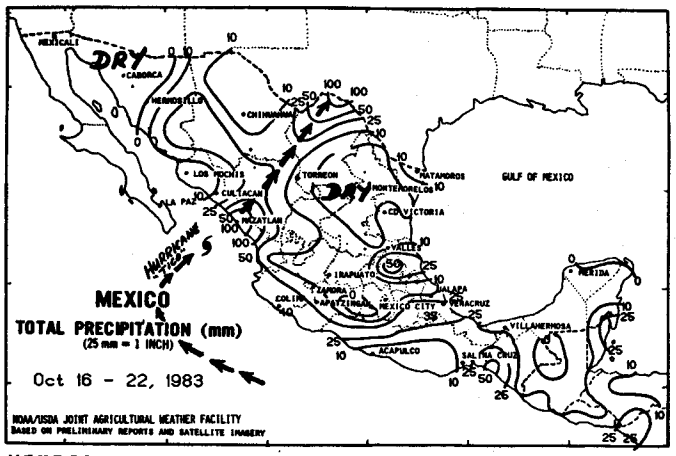
SOUTH AFRICA...Light to moderate precipitation, which was heaviest in the east, covered the Maize Triangle. The western edge of the corn region has generally received only light precipitation, less than 10 mm weekly. More rain is needed in this area to establish optimal planting conditions. The eastern corn area has adequate topsoil moisture for emergence and early growth, however, continued precipitation is needed to replenish depleted subsoil reserves.



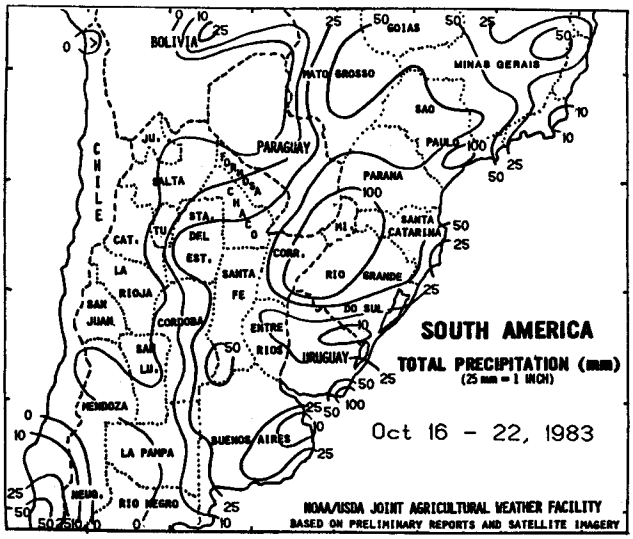
NORTHWESTERN AFRICA...Mostly dry weather continued to cover winter grain areas in Morocco and the western half of Algeria. In contrast, the grain belts in northeastern Algeria and northern Tunisia received substantial rains, in excess of 25 mm at some locations. The rains provided favorable topsoil moisture conditions which could promote early winter grain planting.



AUSTRALIA...Light showers early in the week covered all major wheat areas of southern Australia. Weekly rainfall totals were less than 10 mm, except along the south coast of Western Australia and most crop areas of South Australia. Southeast wheat areas of New South Wales also benefited from over 10 mm of rain. A band of showers also extended across central portions of the Northern Territory into central and eastern Queensland. Locally heavy showers were mostly north of Queensland's wheat area where the crop is maturing. Further south, wheat is advancing from the reproductive phase to early grain-filling stages, except in the extreme south where the crop is heading. Moisture supplies are adequate for crop development in nearly all areas, but recent rains have been light over much of Western Australia's wheat crop. Temperatures did not deviate significantly from the long-term average for the week. Crop conditions remain favorable for very good crop yields and for a substantial recovery from last year's drought-reduced crop output.



MEXICO...Hurricane Tico abruptly recurved northeastward and slammed into the Pacific Coast near Mazatlan. Its strong winds and heavy rains destroyed corn, soybeans, rice, beans, and other crops. Reports said government officials declared a state of emergency as Tico forced evacuation of 25,000 people and destroyed around a million acreas of crops which totaled about 200 million U.S. dollars of damage. Moisture from the remains of the storm raced northeastward across the country and into the Ciudad Acuna and Del Rio border city areas causing localized flooding. Much of the remainder of the country was generally sunny and dry which allowed harvesting and field operations.



SOUTH AMERICA...Widespread rain from two separate storms covered Argentina's crop areas, providing ample moisture for wheat growth and summer crop planting. Weekly rainfall in excess of 25 mm aided reproductive development and early grain-filling throughout the wheat areas, and moistened soils for emergence and early growth of newly planted corn, sorghum, and first-crop soybeans. Rain in cotton areas of Formosa and Chaco aided planting. Some hail accompanied the rain late in the week over Buenos Aires and may have caused localized crop damage. Heavy rain, in excess of 100 mm, fell over western soybean areas of Rio Grande do Sul, Santa Catarina, and Parana, while the remainder of Brazil's crop areas received substantial, although less, rainfall. The recent wet weather slowed both wheat harvesting in Rio Grande do Sul and planting of corn, cotton, and soybeans in Parana and vicinity. Despite relatively frequent showers, land preparation and early soybean planting are progressing at a good pace.

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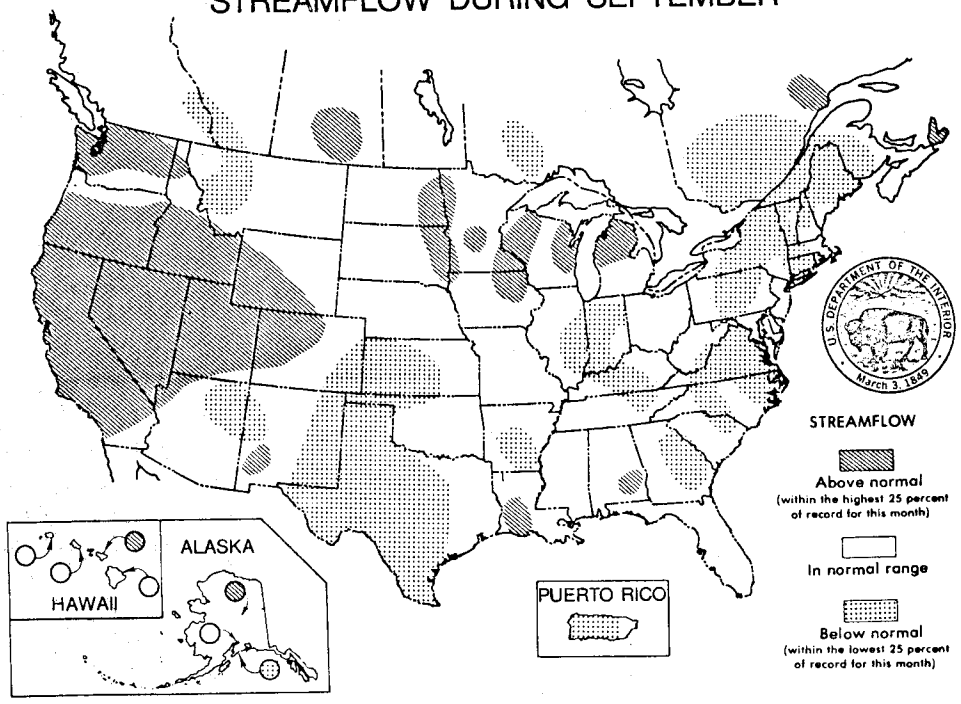

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