

WEEKLY WEATHER AND CROP BULLETIN

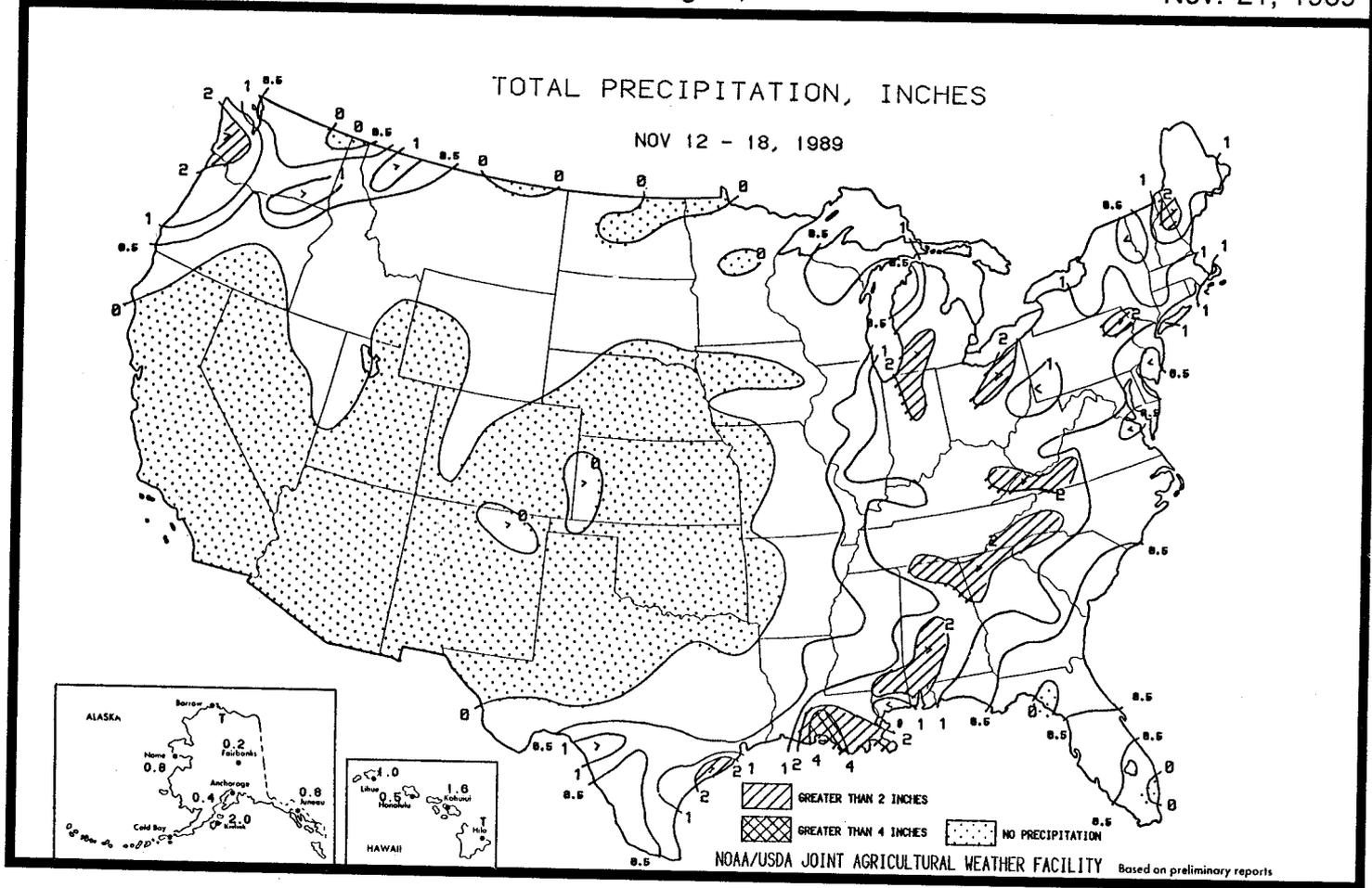
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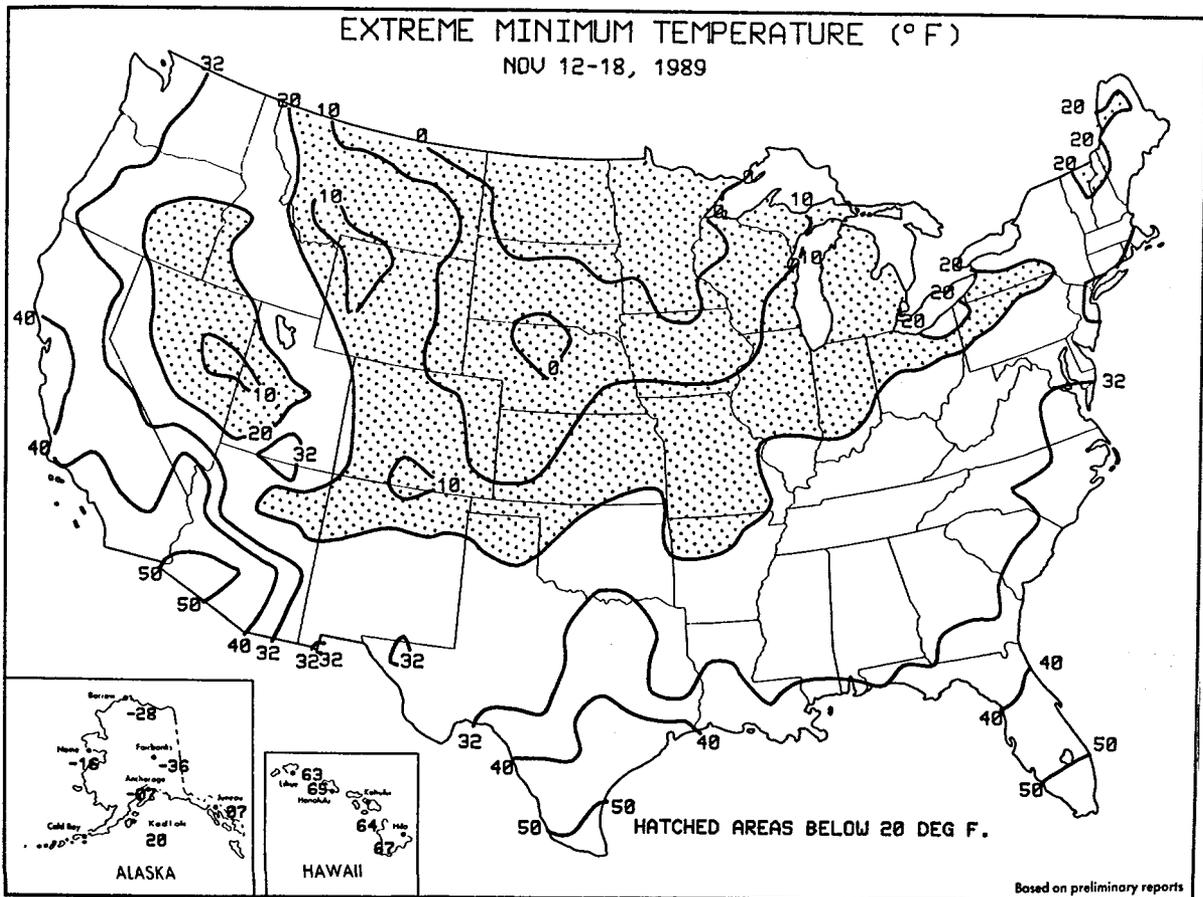
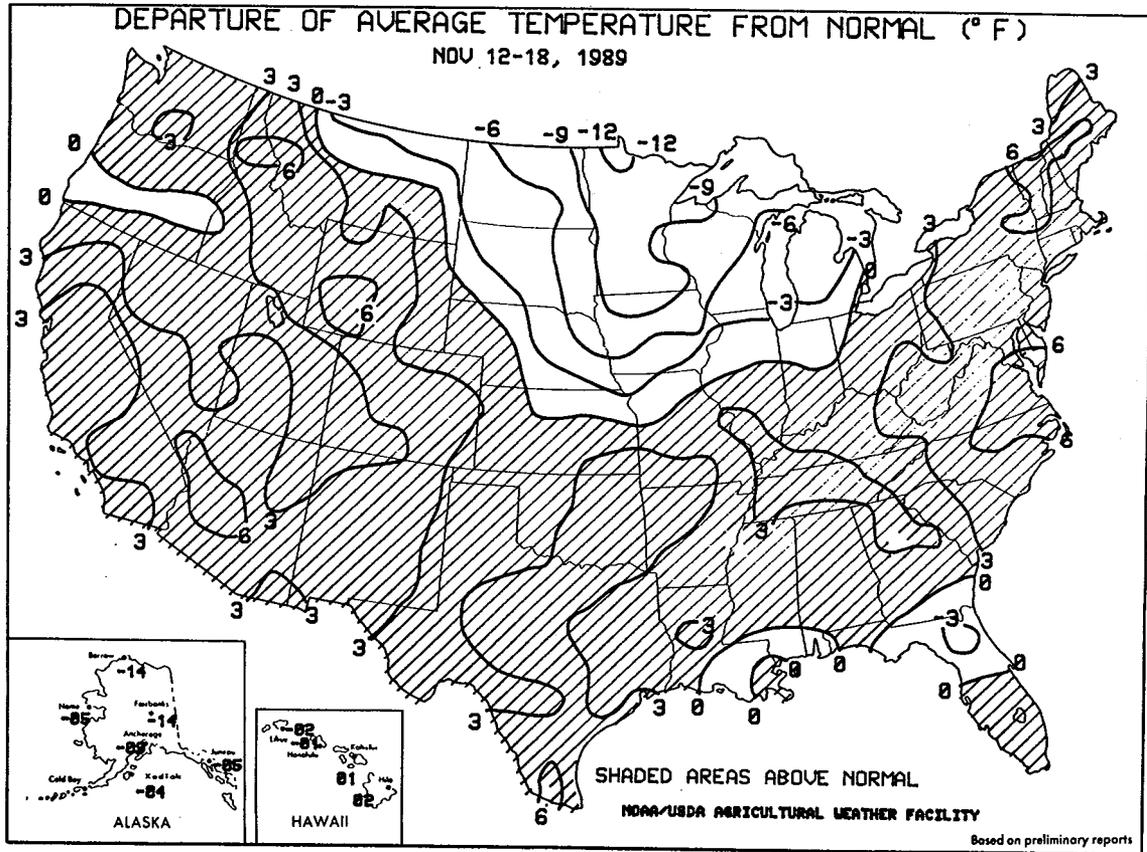
HIGHLIGHTS

November 12-18, 1989

Early in the week, warm and dry conditions prevailed across much of the **Nation**. Fifty-nine stations from the **southern Rockies** to the **middle and southern Atlantic Coast** reported record-high temperatures on either the 12th or 13th. At midweek, a strong frontal system brought bitter arctic air into the **North Central States** and heavy rain and severe weather from the **Gulf Coast States** into the **Northeast**. A number of tornadoes struck the **Southeast** and **middle Atlantic Coast States**. The system also left heavy snow across the **Great Lakes** and **northern portions of the eastern Corn Belt**. Dry weather continued to plague the winter wheat regions in the **central and southern Plains**, as warm and dry conditions returned to most of the country at week's end.

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National Weather Data for Selected Cities

Weather Data for the Week Ending November 18, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE °F		PRECIPI- TATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL BIRMINGHAM	65	40	79	24	53	0	.7	-.2	.4	9.9	111	55.3	116	87	44	0	3	2	0	
MOBILE	69	48	80	31	58	0	2.2	1.4	1.2	15.2	137	55.1	96	89	49	0	1	2	2	
MONTGOMERY	70	42	82	27	56	1	.9	.3	.8	13.4	157	64.0	150	94	43	0	1	2	1	
AK ANCHORAGE	18	9	33	-7	13	-9	-1.4	.1	1.1	8.3	174	28.0	194	88	64	0	7	4	4	
BARROW	-11	-18	-7	-28	-15	-14	0	.1	0	.9	69	7.1	164	82	74	0	7	0	0	
FAIRBANKS	-18	10	-36	-9	-9	-14	.2	.1	.1	2.7	120	9.5	101	82	66	0	7	3	0	
JUNEAU	32	24	43	7	28	-5	1.1	-.1	.5	23.2	133	44.0	95	97	79	0	5	7	1	
KODIAK	37	25	41	20	31	-4	2.0	.7	1.4	16.1	96	46.4	88	93	67	0	6	4	2	
Nome	19	4	31	-16	11	-5	.8	.5	.3	4.5	109	19.8	146	96	81	0	7	6	0	
AZ PHOENIX	82	53	87	50	68	7	0	0	0	.9	61	4.5	76	39	15	0	0	0	0	
PRESCOTT	68	32	73	28	50	6	0	-.3	0	1.3	36	9.4	56	51	16	0	4	0	0	
TUCSON	80	46	84	41	63	4	0	-.1	0	1.9	74	6.2	63	40	10	0	0	0	0	
YUMA	83	55	89	53	69	5	0	0	0	.4	59	7.2	355	55	16	0	0	0	0	
AR FORT SMITH	69	37	82	20	53	3	T	-.8	T	4.3	50	46.1	130	90	30	0	3	0	0	
LITTLE ROCK	65	45	78	26	55	3	-.1	-1.0	.1	7.4	77	46.8	109	76	41	0	2	2	0	
CA BAKERSFIELD	70	43	80	40	57	1	0	-.2	0	.5	68	2.8	61	92	46	0	0	0	0	
EUREKA	60	45	67	41	53	1	.1	-1.3	.1	3.9	56	23.2	78	93	73	0	0	2	0	
FRESNO	68	41	76	38	55	1	0	-.3	0	1.5	124	6.4	78	99	54	0	0	0	0	
LOS ANGELES	76	55	88	50	65	4	0	-.4	0	.6	50	3.8	40	90	38	0	0	0	0	
REDDING	72	43	76	37	57	3	0	-1.3	0	8.5	140	28.4	90	88	33	0	0	0	0	
SACRAMENTO	69	41	73	36	55	2	0	-.5	0	4.6	199	13.7	105	99	46	0	0	0	0	
SAN DIEGO	73	55	83	50	64	2	0	-.2	0	.7	62	2.7	35	85	42	0	0	0	0	
SAN FRANCISCO	67	49	73	45	58	3	T	-.5	T	2.6	107	10.0	67	96	49	0	0	0	0	
CO DENVER	58	26	76	12	42	4	0	-.2	0	2.5	94	14.7	103	69	23	0	5	0	0	
GRAND JUNCTION	56	26	65	18	41	1	0	-.1	0	.5	24	5.5	78	52	20	0	6	0	0	
PUEBLO	64	24	82	14	44	4	T	-.1	T	1.1	59	6.9	66	63	13	0	6	0	0	
CT BRIDGEPORT	56	42	67	34	49	3	1.1	-.2	.8	12.2	139	48.4	134	76	54	0	0	2	1	
HARTFORD	57	37	72	29	47	5	.8	-.1	.8	14.2	145	52.1	136	81	43	0	3	1	1	
DC WASHINGTON	64	43	76	31	54	5	1.3	.6	1.2	14.2	184	47.9	139	84	41	0	1	3	1	
FL APALACHICOLA	69	51	79	36	60	-1	.2	-.4	.2	15.9	119	50.3	100	90	55	0	0	3	0	
DAYTONA BEACH	76	52	84	42	64	-1	.2	-.4	.2	17.0	131	40.1	89	91	50	0	0	1	0	
JACKSONVILLE	74	46	84	35	60	-2	T	-.4	T	15.9	140	47.6	98	93	37	0	0	0	0	
KEY WEST	81	72	85	64	76	1	-.1	-.7	.1	5.9	44	23.0	63	84	66	0	0	2	0	
MIAMI	83	67	89	54	75	2	0	-.6	0	8.6	50	41.1	75	85	53	0	0	0	0	
ORLANDO	79	56	86	46	67	0	.8	-.3	.8	12.8	121	40.4	87	93	43	0	0	1	1	
TALLAHASSEE	71	44	82	32	58	-1	.3	-.5	.2	10.5	93	57.0	98	87	44	0	1	2	0	
TAMPA	79	56	87	44	68	1	T	-.4	T	8.7	90	37.5	86	87	43	0	0	1	0	
WEST PALM BEACH	82	64	87	50	73	1	T	-.8	T	10.2	53	35.9	64	85	53	0	0	1	0	
GA ATLANTA	67	44	80	28	56	3	1.5	.7	1.5	16.2	214	57.7	135	82	40	0	2	2	1	
AUGUSTA	72	41	85	30	57	3	.5	0	.4	6.6	99	43.9	113	92	36	0	1	3	0	
MACON	71	42	83	28	56	1	.1	.5	.5	6.5	100	41.4	105	91	37	0	1	2	1	
SAVANNAH	72	45	83	33	59	1	.4	-.1	.3	13.1	154	40.7	88	89	36	0	0	3	0	
HI HILO	83	68	85	67	76	2	T	-.5	T	24.0	95	60.2	147	88	62	0	0	0	0	
HONOLULU	82	69	87	65	76	-1	.5	-.3	.4	6.3	147	21.5	117	87	58	0	0	3	0	
KAHULUI	83	69	87	64	76	1	1.6	1.1	1.1	6.4	276	35.1	242	89	60	0	0	2	1	
LIHUE	78	69	82	63	73	-2	1.0	-.3	.5	11.4	114	52.5	145	90	66	0	0	3	0	
ID BOISE	49	30	53	21	39	0	.2	-.1	.2	2.7	133	10.0	104	92	47	0	4	3	0	
LEWISTON	51	40	58	35	46	6	.5	.3	.3	1.8	74	13.2	120	77	53	0	0	3	0	
POCATELLO	49	31	65	22	40	5	T	-.2	T	1.3	62	8.4	90	76	36	0	6	0	0	
IL CHICAGO	46	29	73	15	38	-3	1.1	.6	.5	7.2	99	28.6	93	83	57	0	4	4	1	
MOLINE	47	28	76	11	37	-2	-.1	-.3	.1	7.2	95	31.0	91	86	49	0	5	1	0	
PEORIA	50	31	76	13	40	0	.9	-.4	.6	5.4	73	21.7	87	87	55	0	3	2	1	
QUINCY	53	31	77	14	42	0	.3	-.1	.2	5.2	60	17.6	50	85	48	0	4	3	0	
ROCKFORD	44	25	73	11	35	-3	.2	-.3	.1	3.3	41	25.4	75	91	57	0	4	4	0	
SPRINGFIELD	54	33	75	15	43	1	.4	-.1	.3	7.3	105	27.5	88	83	52	0	3	2	0	
IN EVANSVILLE	56	37	73	23	47	1	.8	0	.6	6.0	84	45.9	125	87	55	0	3	2	1	
FORT WAYNE	49	31	71	18	40	0	1.5	.9	1.0	8.0	120	33.9	109	92	60	0	4	4	1	
INDIANAPOLIS	51	32	72	16	42	0	1.6	.9	1.3	13.6	194	48.5	140	87	58	0	3	3	1	
SOUTH BEND	48	30	72	13	39	-2	2.0	1.4	1.0	8.5	105	34.0	100	91	58	0	4	5	1	
IA DES MOINES	45	22	66	8	33	-5	T	-.3	T	7.7	125	28.4	98	79	43	0	6	1	0	
SIOUX CITY	40	17	54	4	28	-8	T	-.2	T	4.5	93	18.6	77	85	42	0	7	0	0	
WATERLOO	39	18	63	5	28	-7	T	-.4	T	6.6	96	19.2	62	86	49	0	6	1	0	
KS CONCORDIA	54	26	72	11	40	-2	T	-.2	T	5.3	97	24.3	93	73	36	0	5	0	0	
DODGE CITY	61	26	81	11	44	1	T	-.2	T	2.4	67	20.2	103	81	25	0	5	0	0	
GOODLAND	57	25	78	8	41	3	T	-.1	T	1.4	53	17.8	115	83	29	0	5	1	0	
TOPEKA	55	31	76	16	43	0	T	-.4	T	12.1	163	37.8	120	72	42	0	4	0	0	
WICHITA	60	33	76	18	47	2	0	-.3	0	7.7	113	34.2	126	72	35	0	4	0	0	
KY BOWLING GREEN	60	38	77	22	49	3	.4	-.5	.3	7.7	94	56.2	131	83	49	0	3	2	0	
LEXINGTON	56	37	72	20	46	1	.9	.2	.7	10.4	141	51.0	126	85	48	0	3	3	1	
LOUISVILLE	57	38	73	23	48	1	1.2	.4	1.1	7.5	94	49.4	128	86	47	0	3	3	1	
LA ALEXANDRIA	72	49	82	34	60	3	.2	-.8	.2	1.8	22	54.0	118	76	37	0	0	1	0	
BATON ROUGE	69	48	82	31	59	0	1.9	1.0	.9	18.0	195	78.8	161	93	54	0	1	3	2	
LAKE CHARLES	71	50	82	36	61	1	.7	-.3	.4	3.1	27	56.4	120	95	49	0	0	4	0	
NEW ORLEANS	71	52	84	36	61	2	2.7	1.8	1.0	22.6	211	58.9	112	89	54	0	0	4	3	

Based on 1951-80 normals

Weather Data for the Week Ending November 18, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	69	44	85	29	57	1	.1	-.8	.1	2.7	33	55.4	145	85	33	0	2	2	0
ME CARIBOU	39	28	63	19	34	2	1.0	-.2	.4	7.5	88	28.9	91	92	65	0	6	6	0
PORTLAND	53	33	66	24	43	4	.4	-.7	.3	11.6	119	37.7	102	84	46	0	0	2	0
MD BALTIMORE	62	40	77	27	51	4	.5	-.2	.5	9.8	117	49.0	132	85	42	0	2	2	0
SALISBURY	65	43	75	30	54	6	.7	0	.5	13.8	146	49.9	123	89	44	0	1	2	1
MA BOSTON	57	41	71	33	49	4	1.2	.2	1.0	13.9	152	41.0	110	78	47	0	0	2	1
CHATHAM	54	45	62	33	49	3	.4	-.6	.3	12.1	121	42.9	108	87	63	0	0	3	0
MI ALPENA	36	23	53	7	30	-6	1.2	.6	.7	5.6	86	19.6	75	92	68	0	6	4	1
DETROIT	48	31	70	19	40	0	1.3	.7	.9	7.0	123	27.7	102	95	66	0	4	4	1
FLINT	45	27	71	12	36	-3	1.6	1.0	.7	8.3	143	29.6	114	91	64	0	5	4	1
GRAND RAPIDS	44	27	70	18	36	-4	2.7	2.0	1.8	10.9	144	32.6	109	89	64	0	6	5	1
HOUGHTON LAKE	35	26	55	15	30	-5	.9	.4	.5	3.4	53	18.3	73	90	69	0	5	2	0
LANSING	42	24	68	9	33	-6	1.7	1.2	1.0	7.4	119	28.8	110	95	67	0	6	4	1
MARQUETTE	28	18	41	5	23	-7	1.3	.6	.8	7.1	79	26.1	78	93	74	0	7	3	1
MUSKEGON	42	30	62	21	36	-4	1.3	.6	.9	6.4	86	23.5	85	90	60	0	4	3	1
SAULT ST. MARIE	32	24	40	14	28	-5	1.4	.6	.7	6.6	76	23.0	78	90	62	0	5	5	1
MN ALEXANDRIA	27	13	41	-1	20	-9	.1	-.2	.1	5.1	105	20.4	87	88	63	0	7	2	0
DULUTH	26	13	42	0	20	-9	.2	-.2	.1	6.4	98	25.5	93	89	58	0	7	3	0
INT'L FALLS	24	11	34	-6	17	-8	.1	-.2	.1	3.7	65	20.1	88	89	61	0	7	1	0
MINNEAPOLIS	32	18	45	1	25	-8	.2	-.1	.1	2.7	52	22.4	90	84	57	0	7	3	0
ROCHESTER	33	14	50	-4	24	-10	.1	-.2	0	3.0	45	22.1	82	88	62	0	7	4	0
MS GREENWOOD	67	44	80	25	56	2	.1	-1.0	.1	8.5	97	60.1	132	88	43	0	2	1	0
JACKSON	69	43	80	27	56	1	.8	-.1	.8	11.0	137	46.9	105	94	41	0	2	1	1
MERIDIAN	69	41	81	27	55	1	.5	-.3	.3	14.6	182	62.5	136	96	43	0	2	3	0
MO CAPE GIRARDEAU	60	39	74	21	49	-	.3	-.5	.3	5.7	69	48.2	123	85	53	0	3	2	0
COLUMBIA	57	33	78	16	45	1	.4	-.1	.4	3.4	40	33.9	100	77	44	0	4	3	0
KANSAS CITY	53	31	74	15	42	-3	T	-.4	T	11.7	135	37.1	109	71	42	0	4	0	0
SAINT LOUIS	58	38	79	20	48	3	.4	-.1	.4	3.2	50	27.9	91	74	46	0	4	0	0
SPRINGFIELD	61	36	77	16	48	3	T	-.7	T	3.5	38	30.5	85	78	38	0	3	2	0
MT BILLINGS	47	29	66	19	38	3	.2	0	.2	3.0	103	13.8	100	83	47	0	5	3	0
GLASGOW	35	16	54	3	26	-3	T	0	T	1.2	76	9.9	95	92	62	0	7	3	0
GREAT FALLS	42	24	57	12	33	-1	.3	.1	.3	2.9	128	21.1	152	86	55	0	6	2	0
HAVRE	36	20	54	10	28	-3	.1	0	.1	1.5	79	10.6	96	94	72	0	6	1	0
HELENA	46	27	56	15	37	5	.1	-.1	.1	2.0	110	11.8	111	82	41	0	6	2	0
KALISPELL	39	29	47	19	34	3	1.1	.8	1.0	5.0	179	19.2	141	95	69	0	6	4	1
MILES CITY	41	24	58	13	33	1	.2	.1	.2	1.3	54	13.7	103	87	58	0	7	1	0
MISSOULA	45	30	56	20	38	6	.3	.2	.3	2.0	85	12.8	111	95	56	0	5	4	0
NE GRAND ISLAND	48	20	62	7	34	-3	T	-.2	T	7.4	184	21.5	97	76	36	0	7	0	0
LINCOLN	49	21	61	12	35	-4	T	-.2	T	9.1	174	23.2	89	73	35	0	7	0	0
NORFOLK	43	15	59	6	29	-7	T	-.2	T	3.9	101	15.8	69	79	40	0	7	0	0
NORTH PLATTE	53	16	67	1	34	-1	T	-.1	T	1.2	41	13.7	74	87	36	0	7	0	0
OMAHA	44	20	60	8	32	-8	T	-.3	T	7.4	115	21.8	75	74	43	0	6	0	0
SCOTTSBLUFF	53	21	80	8	37	1	T	-.1	T	2.4	111	9.3	67	89	34	0	7	2	0
VALENTINE	47	17	76	-5	32	-2	T	-.1	T	2.6	102	12.0	72	65	33	0	7	0	0
NV ELY	55	18	66	9	37	3	T	-.1	T	.8	46	6.5	82	72	17	0	7	0	0
LAS VEGAS	74	45	78	40	59	6	0	-.1	0	T	1	2.2	62	33	14	0	0	0	0
RENO	62	25	70	23	43	3	0	-.1	0	1.6	194	6.8	120	80	24	0	7	0	0
WINNEMUCCA	57	21	68	14	39	1	0	-.2	0	1.5	113	4.7	72	76	25	0	7	0	0
NH CONCORD	55	30	71	21	42	5	.8	-.1	.7	11.7	139	36.6	115	89	43	0	5	2	1
NJ ATLANTIC CITY	61	40	75	27	51	4	.7	-.2	.4	12.6	156	48.2	132	87	48	0	3	2	0
NM ALBUQUERQUE	62	35	70	31	49	5	0	-.1	0	1.3	68	4.7	65	41	14	0	2	0	0
CLOVIS	62	32	76	25	47	1	0	-.1	0	1.5	37	14.1	86	49	17	0	4	0	0
ROSWELL	68	35	80	28	52	5	0	-.1	0	2.2	71	6.2	62	42	15	0	3	0	0
NY ALBANY	56	37	69	28	47	7	.5	-.3	.4	9.8	123	38.5	123	80	46	0	4	2	0
BINGHAMTON	51	34	66	19	42	4	.9	.1	.9	9.2	112	36.7	112	79	48	0	5	2	1
BUFFALO	52	36	68	20	44	3	1.6	.7	.9	10.7	128	37.9	117	89	50	0	3	5	1
NEW YORK	58	44	69	34	51	3	.7	-.2	.7	12.5	140	53.0	142	76	48	0	0	2	1
ROCHESTER	54	37	69	22	45	4	.5	-.1	.4	7.3	107	30.5	110	85	48	0	3	2	0
SYRACUSE	55	36	71	25	46	5	.9	.1	.9	11.9	141	33.9	99	82	47	0	4	4	1
NC ASHEVILLE	62	36	75	24	49	2	2.3	1.6	2.1	14.3	163	56.1	142	93	44	0	3	3	1
CHARLOTTE	68	43	81	30	56	4	1.5	.9	1.1	13.3	168	45.0	117	87	42	0	2	3	1
GREENSBORO	67	42	79	27	54	6	1.7	1.1	1.5	13.1	158	46.2	122	89	43	0	2	3	1
HATTERAS	70	56	79	41	63	7	1.9	.8	.8	31.8	235	82.4	167	86	51	0	0	3	2
NEW BERN	71	47	83	33	59	5	.5	-.3	.3	15.1	138	57.6	120	93	41	0	0	3	0
RALEIGH	68	45	79	29	57	7	.8	-.1	.5	10.2	133	49.6	133	89	42	0	2	3	1
WILMINGTON	72	48	85	34	60	7	.5	-.2	.5	15.4	146	58.9	121	93	43	0	0	2	0
ND BISMARCK	36	12	51	-8	24	-5	.2	.1	.2	1.9	76	10.9	75	87	59	0	7	2	0
FARGO	27	11	41	-3	19	-10	.1	-.1	.1	2.8	77	18.2	98	87	64	0	7	4	0
GRAND FORKS	26	8	37	-6	17	-10	T	-.2	T	1.2	33	11.3	65	88	61	0	7	1	0
WILLISTON	34	14	45	-1	24	-4	.1	0	0	2.5	106	10.9	85	89	61	0	7	4	0
OH AKRON-CANTON	52	35	70	19	44	2	1.2	.6	.9	7.9	119	36.9	115	87	53	0	3	4	1
CINCINNATI	54	37	72	21	46	2	1.9	1.2	1.9	9.0	125	47.5	133	85	49	0	3	3	1
CLEVELAND	54	35	72	19	45	3	2.2	1.5	1.4	12.0	173	41.5	133	82	53	0	3	3	1
COLUMBUS	53	34	71	20	44	1	1.6	.9	1.4	7.0	113	41.7	126	86	50	0	3	4	1

Weather Data for the Week Ending November 18, 1989

STATES AND STATIONS	TEMPERATURE °F					PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	52	33	70	19	43	0	1.6	1.0	1.4	10.3	174	46.9	152	90	58	0	3	3	1
TOLEDO	49	31	72	19	40	0	1.5	1.0	1.0	6.5	111	36.1	130	89	59	0	5	4	1
YOUNGSTOWN	53	34	71	20	44	3	1.2	.5	1.0	10.9	148	41.2	124	83	52	0	5	3	1
OK OKLAHOMA CITY	63	41	78	27	52	3	0	-.4	0	7.9	110	40.5	139	78	35	0	2	0	0
TULSA	65	41	80	26	53	4	0	-.6	0	6.1	85	29.3	82	72	33	0	3	0	0
OR ASTORIA	55	43	58	38	49	2	2.3	-.1	1.0	11.0	72	46.3	86	96	68	0	0	0	2
BURNS	48	21	52	15	35	-1	T	-.2	T	1.1	56	9.0	111	94	46	0	7	4	0
MEDFORD	55	32	58	26	43	0	T	-.6	T	2.7	67	13.5	91	97	53	0	5	1	0
PENDLETON	49	35	58	29	42	1	1.2	-.9	-.6	2.2	93	12.2	125	87	59	0	2	3	1
PORTLAND	54	41	59	37	47	2	1.3	-.1	-.9	4.9	66	24.7	87	96	66	0	0	5	1
SALEM	52	40	57	33	46	1	1.2	-.2	-.9	5.1	63	22.4	73	98	73	0	0	4	1
PA ALLENTOWN	59	36	72	23	47	4	1.5	-.4	.4	11.3	123	42.9	111	85	47	0	3	2	0
ERIE	53	37	71	25	45	3	1.3	.5	.7	9.7	99	38.0	108	88	52	0	4	5	1
HARRISBURG	59	36	74	25	48	4	.8	0	.8	9.4	114	44.8	130	86	40	0	2	1	1
PHILADELPHIA	61	40	72	30	51	5	.2	-.6	.1	9.7	119	46.9	129	93	57	0	1	2	0
PITTSBURGH	55	35	73	20	45	3	.7	-.2	.5	7.9	120	39.8	121	85	46	0	4	4	1
SCRANTON	55	35	71	25	45	4	2.2	1.5	2.2	11.8	152	37.6	121	82	45	0	3	1	1
RI PROVIDENCE	57	41	68	28	49	5	1.6	-.7	1.0	16.7	172	53.5	138	83	50	0	2	2	2
SC CHARLESTON	73	48	84	35	61	4	.3	-.2	.2	18.5	204	49.9	105	91	42	0	0	2	0
COLUMBIA	72	42	86	31	57	3	.8	-.2	.4	8.8	107	46.1	104	97	43	0	2	2	0
FLORENCE	71	45	85	29	58	3	.6	-.1	.5	10.5	136	45.9	115	91	41	0	1	2	0
GREENVILLE	67	40	81	24	53	2	1.5	-.8	1.4	10.8	109	44.3	97	90	41	0	3	3	1
SD ABERDEEN	32	14	46	0	23	-7	T	0	.1	3.2	111	18.0	106	85	54	0	7	2	0
HURON	36	14	52	2	25	-7	T	-.1	T	2.5	79	13.9	78	81	45	0	7	1	0
RAPID CITY	47	19	76	2	33	-2	T	-.1	T	4.7	221	12.4	80	88	46	0	7	1	0
SIoux FALLS	35	13	50	4	24	-9	.1	-.2	.1	4.2	86	15.3	67	86	48	0	7	2	0
TN CHATTANOOGA	63	40	81	29	52	3	1.3	.4	.7	16.9	176	66.5	146	93	47	0	3	3	2
KNOXVILLE	62	39	77	26	50	2	1.7	-.9	1.3	14.4	184	52.2	128	91	52	0	2	3	1
MEMPHIS	66	43	80	25	55	3	.6	-.4	.6	11.4	138	56.2	126	84	42	0	2	1	1
NASHVILLE	64	42	82	24	53	4	1.1	-.3	.6	12.8	156	54.0	128	82	43	0	2	3	1
TX ABILENE	69	46	84	29	58	4	0	-.3	0	5.1	81	27.3	124	80	32	0	3	0	0
AMARILLO	65	30	81	18	47	2	0	-.1	0	2.5	73	19.0	104	60	16	0	1	0	0
AUSTIN	71	54	87	42	62	4	.2	-.4	.1	2.6	32	24.7	87	88	49	0	4	0	0
BEAUMONT	72	53	84	39	62	2	.6	-.4	.3	3.9	34	61.4	127	90	47	0	0	3	0
BROWNSVILLE	79	62	90	54	71	3	.8	-.4	.4	6.3	65	19.3	82	95	57	1	0	2	0
CORPUS CHRISTI	79	60	91	46	70	4	1.7	1.4	1.1	3.9	38	17.3	59	93	49	2	0	2	2
DEL RIO	69	53	78	39	61	2	.7	.6	.7	2.5	45	8.2	50	81	46	0	0	1	1
EL PASO	62	39	77	27	55	4	0	-.1	0	.7	31	7.1	100	42	15	0	2	0	0
FORT WORTH	69	49	89	35	59	4	T	-.5	T	4.4	57	39.0	137	78	33	0	0	1	0
GALVESTON	72	62	80	52	67	4	.6	-.2	.3	4.7	45	39.7	112	86	57	0	0	3	0
HOUSTON	72	53	87	37	62	2	.4	-.5	.2	5.6	50	55.7	136	88	46	0	0	4	0
LUBBOCK	67	34	80	26	51	2	0	-.1	0	3.8	88	14.7	86	67	18	0	3	0	0
MIDLAND	71	38	84	26	54	2	0	-.1	0	3.0	76	7.9	62	71	20	0	2	0	0
SAN ANGELO	72	44	88	27	58	3	0	-.2	0	3.2	56	16.9	99	86	35	0	1	0	0
SAN ANTONIO	70	53	83	38	61	2	.6	-.1	.6	8.0	99	20.5	77	89	54	0	0	4	1
VICTORIA	76	56	88	43	66	3	1.0	.5	.6	7.4	68	23.8	70	94	48	0	0	2	1
WACO	70	48	91	34	59	2	.1	-.4	.1	1.3	17	27.7	99	84	37	1	0	1	0
WICHITA FALLS	68	42	85	30	55	3	0	-.3	0	7.6	110	36.3	146	81	32	0	3	0	0
UT CEDAR CITY	58	26	68	17	42	3	0	-.2	0	.7	32	6.2	67	72	24	0	6	0	0
SALT LAKE CITY	54	31	69	26	42	3	0	-.3	0	2.3	85	9.9	74	83	35	0	5	0	0
VT BURLINGTON	54	35	73	24	44	7	.2	-.5	.1	10.7	139	34.0	113	81	46	0	4	2	0
VA NORFOLK	69	49	79	38	59	7	.3	-.4	.2	9.8	104	51.7	127	85	41	0	0	2	0
RICHMOND	68	45	76	32	56	7	.3	-.5	.3	10.9	119	46.2	118	83	41	0	0	2	0
ROANOKE	63	38	75	28	50	3	3.2	2.6	2.8	16.4	201	51.1	146	85	45	0	2	2	1
WA QUILLYUTE	50	40	54	34	45	1	1.2	-.8	.6	22.3	93	72.2	87	99	77	0	0	5	1
SEATTLE-TACOMA	50	41	54	38	45	1	1.5	.2	.7	8.0	93	28.3	96	96	71	0	0	4	1
SPOKANE	41	30	49	23	36	1	.6	.2	.5	2.7	93	12.3	94	98	69	0	4	4	1
YAKIMA	50	33	61	27	42	3	.5	.3	.3	1.2	89	5.0	83	95	58	0	4	3	0
WV BECKLEY	56	39	73	22	48	5	.8	.2	.5	10.0	126	40.6	107	79	47	0	3	3	1
CHARLESTON	63	40	80	27	52	6	1.1	.5	.7	13.7	188	55.6	147	81	39	0	3	3	1
HUNTINGTON	61	40	78	25	51	4	1.3	.6	1.0	12.4	178	57.1	157	82	38	0	3	3	1
PARKERSBURG	58	37	74	21	48	3	.9	-.3	.6	12.2	182	51.2	150	88	43	0	3	4	1
WI GREEN BAY	35	23	49	10	29	-6	T	-.4	T	5.7	90	18.9	74	81	51	0	6	0	0
LACROSSE	36	21	50	7	28	-8	.1	-.3	.1	5.2	81	21.7	77	86	53	0	7	1	0
MADISON	39	24	67	13	31	-4	T	-.4	T	3.2	49	23.5	83	86	58	0	5	0	0
MILWAUKEE	41	28	69	14	35	-3	.4	-.1	.3	7.1	112	29.3	105	86	59	0	5	4	0
WAUSAU	33	19	53	6	26	-6	.5	-.1	.5	5.2	72	21.5	72	87	56	0	7	2	0
WY CASPER	48	26	64	13	37	4	.1	-.1	.1	4.5	226	13.2	126	79	42	0	5	2	0
CHEYENNE	50	22	70	7	36	1	T	-.1	T	2.1	102	12.0	94	86	34	0	5	1	0
LANDER	51	25	65	13	38	7	T	-.2	T	3.4	134	14.8	121	72	30	0	6	0	0
SHERIDAN	49	24	73	12	36	4	.1	-.1	.1	3.7	130	12.5	89	91	44	0	7	1	0
PR SAN JUAN	87	77	87	72	80	1	.4	-.1	.2	2.9	19	11.8	25	90	68	0	0	3	0

National Agricultural Summary

NOVEMBER 13-19, 1989

HIGHLIGHTS: Lack of moisture with high winds lowered winter wheat condition in the **Great Plains**. Rain and snow slowed corn and soybean harvests in the **eastern Corn Belt**. Soil moisture was short to adequate in the **Great Plains** and adequate to surplus in most of the **East**. The number of days suitable for fieldwork averaged 3-4 in the **East** and 6-7 in the **Great Plains** and the **West**.

Winter wheat was mostly fair to good with 92 percent (%) of the acres emerged, 4 percentage points ahead of the 5-year average. Corn harvest was 97% complete, 5 points ahead of normal. Soybean harvest was 95% complete, 7 points ahead of normal. Cotton harvest was 76% complete, 13 points ahead of normal.

SMALL GRAIN: Winter wheat was mostly fair to good with 92% of the acres emerged, 4 points ahead of normal. High winds and lack of soil moisture caused condition to decline in the Great Plains, especially in Nebraska. In Kansas, Oklahoma, and Texas, poor secondary root development forced producers to limit grazing. Condition was mostly fair in Nebraska and Texas, fair to good in Kansas, and good to fair in Oklahoma. In Montana and Colorado, winter wheat was good to fair. In the Pacific Northwest, condition was fair to good in Oregon, good to fair in Washington, and good in Idaho. Winter wheat was good to fair in the Corn Belt.

CORN: Corn harvest was 97% complete, 5 points ahead of normal. Harvest was nearly complete except in the eastern Corn Belt. Rain and snow slowed harvest at midweek in Indiana, Ohio, and Pennsylvania. Harvest progressed rapidly early in the week in Ohio and Pennsylvania, advancing 21 and 17 points, respectively. Ohio's harvest was 80% complete and Pennsylvania's was 65% complete.

SOYBEANS: Soybean harvest was 95% complete, 7 points ahead of normal. Harvest was nearly complete except in the Southeast. Harvest lagged behind normal in Alabama, Georgia, and South Carolina. Harvest progressed well, advancing 10-15 points in the Southeast.

COTTON: Cotton harvest was 76% complete, 13 points ahead of normal. Harvest progressed well, advancing 15 or more points in New Mexico, North Carolina, Oklahoma, and Texas. Harvest advanced 45 points in Oklahoma, reaching 60% completion, 35 points ahead

of normal. Harvest was nearly complete in Arkansas, California, Louisiana, Missouri, and Tennessee. In Georgia, freezing temperatures damaged some late cotton.

OTHER FIELD CROPS: Oklahoma's sorghum harvest was 85% complete, 10 points ahead of normal. In Texas, sorghum harvest was 95% complete, 5 points ahead of normal. Peanut harvest was ahead of normal in both Texas and Oklahoma. In Texas, freezing temperatures lowered the quality of later variety peanuts. Burley tobacco stripping continued in Kentucky and Tennessee. In Kentucky, houseburn lowered the quality on early harvested tobacco.

FRUIT AND NUTS: Florida's citrus groves were in good condition, but rain was needed. Irrigation was active in all areas. Trees had very little new growth, but early fruit sizes were good. Fruit droppage was minimal. Grapefruit harvest was active in the East Coast area. Pecan harvest was over half finished in Georgia and Louisiana. Harvest continued in Alabama, Arkansas, and Mississippi. In Texas, pecan harvest was 36% complete, 7 points behind normal. In the Rio Grande Valley, citrus harvest continued. Volume of fruit harvested was below last year but quality was good. In Arizona, lemon and grapefruit harvests continued. Pecan harvest and packing was active in the central area. In California, date harvest was nearly complete. Grapefruit and tangerine harvests continued with good yields and quality.

VEGETABLES: In Florida, fall vegetable harvest was nearly complete in the northern area but continued in the central and southern areas. Cabbage harvest began in the Palmetto Ruskin area. In Texas, vegetable planting and harvest continued in the Rio Grande Valley. Insect and disease problems were minimal in the San Antonio-Winter Garden area. Onion planting continued in the Trans-Pecos area. Desert cauliflower harvest began in California. In the central coast area, broccoli supplies were heavy and of good quality. Fall potato harvest continued in Riverside County.

PASTURES AND LIVESTOCK: Pasture condition was good to fair in the East. Lack of moisture limited winter wheat grazing in the central and southern Great Plains. In Iowa, variable temperatures caused some respiratory problems in livestock. In Texas, dusty conditions caused respiratory problems in the Plains area.



Crop Progress

FOR WEEK ENDING NOVEMBER 19, 1989

SOYBEANS % HARVESTED			
	1989	1988	AVG.
ALA	75	73	78
ARK	93	76	75
GA	63	75	73
ILL	100	100	95
IND	98	98	94
IOWA	100	100	98
KANS	98	98	80
KY	87	85	75
LA	99	87	86
MICH	100	75	85
MINN	100	99	99
MISS	88	70	76
MO	99	99	80
NEBR	100	100	100
N C	45	45	43
OHIO	97	92	96
S C	39	46	45
S DAK	100	100	99
TENN	92	91	75
19 STATES	95	92	88

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

CORN % HARVESTED			
	1989	1988	AVG.
COLO	93	98	92
GA	100	100	100
ILL	100	100	95
IND	91	93	89
IOWA	100	100	96
KANS	99	100	97
KY	95	93	91
MICH	98	80	80
MINN	99	99	93
MO	99	100	90
NEBR	98	99	90
N C	96	97	98
OHIO	80	80	80
PA	65	66	72
S DAK	100	96	97
TEX	100	100	100
WIS	93	95	83
17 STATES	97	96	92

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

COTTON % HARVESTED			
	1989	1988	AVG.
ALA	88	92	92
ARIZ	77	74	77
ARK	95	94	90
CALIF	97	95	90
GA	80	84	87
LA	99	95	92
MISS	90	94	91
MO	99	99	92
N MEX	68	65	50
N C	77	78	75
OKLA	60	60	25
S C	81	86	87
TENN	96	94	90
TEX	60	50	38
14 STATES	76	72	63

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

Crop Condition

PERCENT

FOR WEEK ENDING NOVEMBER 19, 1989

WINTER WHEAT % EMERGED			
	1989	1988	AVG.
ARK	80	63	NA
CALIF	30	20	26
COLO	100	100	100
GA	16	23	28
IDAHO	99	99	99
ILL	97	100	86
IND	94	94	91
KANS	98	95	90
MICH	100	95	90
MO	91	89	77
MONT	94	95	92
NEBR	100	100	100
N C	46	55	NA
OHIO	92	90	92
OKLA	90	92	80
OREG	95	86	86
S DAK	100	100	100
TEX	80	98	88
WASH	99	95	96
19 STATES	91	92	NA
EXCL. STATES WITH NA	92	93	88

THESE 19 STATES PRODUCED 87% OF THE 1989 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

WINTER WHEAT					
STATE	VP	P	F	G	EX
ARK	0	1	27	54	18
CALIF	NA				
COLO	2	5	28	62	3
GA	0	1	26	72	1
IDAHO	0	3	9	70	18
ILL	0	0	6	77	17
IND	0	0	13	78	9
KANS	0	9	44	42	5
MICH	0	3	12	60	25
MO	1	9	48	42	0
MONT	2	6	30	57	5
NEB	0	19	70	11	0
N C	2	13	72	13	0
OHIO	0	2	25	59	14
OKLA	0	8	37	55	0
OREG	0	20	30	50	0
S DAK	0	7	25	54	14
TEX	3	26	52	18	1
WASH	0	0	45	55	0
19 STATE	1	10	39	45	5
PREV WEEK	0	10	33	50	7
PREV YEAR	1	8	37	47	7

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

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall 1.00 in.; 2.00 in. north. Temperatures within a degree of normal.

Days suitable for fieldwork 3.0. Soil moisture 54% adequate, 46% surplus. Wet conditions continued; excessive moisture affected some remaining soybeans. Cotton 88% harvested, 92% 1988, 92% avg. Soybeans 98% mature, 92% 1988, 98% avg.; 75% harvested, 73% 1988, 78% avg. Sorghum 97% harvested, 96% 1988, 96% avg. Winter wheat 68% seeded, 67% 1988, 66% avg. Livestock good to fair; pastures mostly fair. Primary activities: Preparing land, planting winter annuals; harvesting cotton, soybeans, pecans; shredding cotton stalks; providing supplemental feed to cattle; constructing fish ponds, marketing catfish; general care of livestock, poultry.

ARIZONA: Clear skies, unseasonably warm temperatures. Third consecutive week no rain. Temperatures 2 to 8° above normal.

Cotton harvest continued 77% of acreage first picked, 75% 1988. Stalk shredding, plow down activities light to moderate. Alfalfa harvest neared completion. Light to active cutting, curing continued statewide; except east where harvest was complete. New, renovated stands progressing normally. Sheeping off light to moderate statewide. Seedbed preparation, planting for wheat, barley crops progressed, limited scale. Western areas, lemon grapefruit, tangerine harvest, packing continued. Fall lettuce harvest active, Yuma, Parker Poston areas. Other vegetable crops harvested in Yuma included romaine, leaf, boston lettuce, broccoli, cauliflower, asparagus. Lemons, grapefruit, navel oranges harvested, packed central areas. Pecan harvest, packing progressed. Fall lettuce harvest very active in Aguila, Marana Eloy areas. Other vegetables harvested, Salt River Valley, included broccoli, cauliflower, napa, leeks, mixed greens, bok choy, beets, spinach, green onions, rapini, cabbage, parsley. East, apple packing continued. Fall lettuce harvest tapered off.

ARKANSAS: Record low temperatures 17th morning, temperatures generally above normal. Relatively dry, scattered light showers first of week. Extremes 8°; 82°. Rainfall none to 1.02 in.

Days suitable for fieldwork 6.0. Soil moisture 63% short, 33% adequate, 4% surplus. Soybeans 100% shedding, 96% 1988, 98% avg.; mature 99%, 91% 1988, 94% avg.; 88% fair, 12% good. Cotton 83% fair, 17% good. Wheat 92% planted, 81% 1988, 72% avg. Oats 92% planted, 89% 1988, 80% avg. Main activities: Cotton, soybean harvest; fertilizing, seeding wheat, oats; disking, bush hogging cotton stalks; disking rice, soybean stubbles; soil testing; repairing fences; performing livestock management chores. Soybean yields highly variable. Wheat seed supplies selected varieties getting short. Pecan harvest rapid pace, fair yields, good quality. Hay supplies good. Unseasonably cold temperatures lowered milk production. Livestock good.

CALIFORNIA: Third consecutive dry week.

Field activities progressed, open weather all week. Harvest late rice good progress. Stubble burned as air quality regulations allowed. Preparations seeding small grains active. Cotton harvest approached completion. Shredding, disking followed rapidly, pink bollworm quarantine.

Seeding alfalfa, sugarbeets active. Corn, dry bean, sugarbeet, grain sorghum harvests active. Alfalfa harvest normal. Granny Smith harvest nearly complete. Date harvest moved towards completion. Avocado harvest slow. Emperor table grapes harvested, packed. Persimmons, kiwi, figs harvested. Stone fruit growers applying herbicides, pruning, fertilizing orchards. Pecan harvest active. Few old crop valencia oranges harvested, Clovis district. Navel orange picking progressed. Lemons, Satsuma mandarins packed. Grapefruit, tangerine harvest continued, good yields, quality. Broccoli fairly heavy supply, good quality central coast. Cauliflower heavy supply Salinas area, moderate supply Santa Maria area. Desert cauliflower harvest began. Celery supply continued seasonally heavy, moderate supply, variable quality, Huron district. Fall potato harvest continued steady Riverside County, some loss cold weather. Sweet corn, picking continue through 22nd. Livestock generally good. Range, pasture conditions, water supplies valley, foothill areas dry, lack of rain, snow. Supplemental feeding most areas.

COLORADO: Precipitation on 15th, 16th, when a cold front moved through the State, leaving 3.00 to 6.00 in. new snow at some ski areas, only traces at lower elevation. Temperatures dropped 10 to 20° as the front moved through, rebounded quickly to record highs for the date at some locations over the weekend. Temperatures for the period 3 to 6° above normal.

FLORIDA: Rain many areas, most amounts very light, mostly under 0.30 in., isolated locations Peninsula, extreme northwest Panhandle had over 1.00 in. Temperatures 1 to 4° below normal except extreme south 1 to 5° above normal. Maximum up to low 80s Panhandle to low, mid 80s Big Bend, northeast to mid to upper 80s central, south. Lows fell into upper 20s Panhandle to around freezing, Big Bend, upper 30s, low 40s central, southern interior, low 50s southeast coast.

Panhandle soil moisture mostly adequate; Peninsula short to adequate. Cotton, soybean, sugarcane harvests active. Winter wheat land preparation becoming active. Panhandle, northern Peninsula pastures continued fair to good until late week frost browned grasses, lowering grazing quality, quantity. Central Peninsula grazing generally fair to good; lower southern Peninsula good to excellent. Cattle good. Citrus groves, trees good. Rain needed; irrigation in use all areas. Very little new growth. Early bloom fruit sizes good. Loss from droppage not excessive. Early harvest increased. Grapefruit movement strong east Coast groves. Caretakers prepared groves for winter. Temperatures continued warm, early week over major vegetable producing areas, cooled late week. Limited precipitation. Fall harvest nearly complete most crops northern area; active central, southern areas. Volume leaders: Tomatoes, cucumbers, squash, peppers, sweet corn, snap beans, radishes, eggplant, celery. Also available: Carrots, escarole, specialty lettuce. First cabbage cut Palmetto Ruskin area.

GEORGIA: Rain 1.00 to 2.00 in. north, 1.00 in. or less elsewhere. Amounts lightest extreme south, less than 0.25 in. Greatest total 3.78 in. Fannin County. Temperatures 2° below normal most locations. Extremes 21°; 86°.

Days suitable for fieldwork 4.4. Soil moisture 8% short, 76% adequate, 16% surplus. Minor frost damage late cotton. Sorghum grain 95% harvested, 95% 1988, 94% avg. Wheat 1% poor, 26% fair, 72% good, 1% excellent. Rye, other small grains good, seeding ahead last year. Apple harvest complete. Pecans 4% very poor, 25% poor, 54% fair, 16% good, 1% excellent; 55% harvested, 45% 1988, 54% avg. Pasture 5% poor, 32% fair, 63% good. Cattle, hogs good.

HAWAII: Variable conditions dominated State. Shower band moved southeast throughout island chain bringing moderate to heavy rainfall, gusty winds, cool temperatures. Volcanic haze lingered in the skies during week. Winds variable 5 to 15 mph changing to northerly 10 to 25 mph with temperatures high 60s to mid 80s. Rainfall 0.02 to 4.60 in.

Days suitable for farm work 7.0. Papaya production active. Sugar, pineapple harvesting continuous. Ginger root harvesting on upswing. Coffee, macadamia nut harvesting very active.

IDAHO: Temperatures mostly above normal. Precipitation above normal, north; below normal southwest, east; varied south central.

Winter wheat good, nearly all emerged. Sugarbeet, grain corn harvests wrapping up. Other fieldwork included plowing, fertilizing. Livestock good, on fall pasture, supplemented with hay. Other farm activities: Livestock marketing, repair machinery, farm facilities, attend meetings. Hay, roughage supplies mostly adequate, short in far north.

ILLINOIS: Temperatures 1 to 4° below normal north, normal to 2° above normal south. Rainfall 1.00 in. or less, scattered areas 2.00 in. or more.

Soil moisture 53% short, 40% adequate, 7% surplus. Livestock mostly good to excellent.

INDIANA: Temperatures none to 2° above normal. Lows teens to low 20s, highs 60s to low 70s. Precipitation 1.00 to 2.00 in.

Days suitable for fieldwork 3.2. Topsoil 51% adequate, 49% surplus. Subsoil 3% short, 80% adequate, 17% surplus. Corn 19% moisture content, soybeans 13% moisture content. Winter wheat 99% seeded, 97% 1988, 96% avg. Spring cropland 47% plowed, 48% 1988, 41% avg. Pasture 3% very poor, 12% poor, 49% fair, 34% good, 2% excellent. Corn, soybean harvest halted by mid week showers, snow.

IOWA: Record highs on 13th, 19th; temperatures 1 to 8° below normal. Extremes 0°; 76°. Precipitation only a trace, 0.35 in.

Some fall tillage still going on. Harvest activities winding down, as most of the crops are harvested. Farmers are putting equipment in the machine sheds. Livestock mostly good. Variable temperatures causing some respiratory problems in livestock.

KANSAS: Temperatures mid 40s, 1 to 4° above normal. Precipitation 0.01 in. northwest, north central districts. No significant precipitation other districts.

Days suitable for fieldwork 6.5. Topsoil 80% short, 20% adequate. Subsoil 33% short, 67% adequate. Harvest corn, sorghum, soybeans drawing to close. Wheat grazing underway, there remains concern about poor secondary root growth. Supplies hay, forage, feed grains are adequate across State. Cattle continue to be moved off grass to corn, sorghum fields. 5% wheat acreage being pastured, compared to normal 10%.

KENTUCKY: Warm early, afternoon highs rising to upper 70s. Cold front moved across 15th, unseasonably cold the second half week. Temperatures 46 to 48°, normal mid November. Rainfall widespread middle week, with precipitation 1.25 in.

Days suitable for fieldwork 3.0. Soil moisture 2% short, 79% adequate, 19% surplus. Most remaining corn for harvest eastern areas. Soybean harvesting active, many finished. Burley tobacco stripping 42% complete, 43% 1988, 45% avg. Quality fair to good. Houseburn on early tobacco reduced weight, later cut tobacco expected to have better weight. Winter wheat 92% seeded, 92% 1988, 84% avg. Early wheat very good. Pastures good to excellent. Winter feed supplies expected to be ample.

LOUISIANA: Temperatures 10° above normal for the first half of week, 15° below normal for second half. Extremes 24°; 85°. Rainfall 0.12 to 3.05 in.

Days suitable for fieldwork 4.3. Soil moisture 5% very short, 36% short, 21% adequate, 38% surplus. Cotton harvested 99%, 95% 1988, 92% avg. Pecans harvested 58%, 38% 1988, 52% avg. Soybeans harvested 99%, 87% 1988, 86% avg. Sugarcane harvested 61%, 56% 1988, 52% avg. Heavy rains, lodging are making harvest difficult. Sweet potatoes harvested 94%, 96% 1988, 94% avg. Wheat planted 83%, 63% 1988, 55% avg.; emerged 59%, 47% 1988, 41% avg. Stands are improving due to the rain. Livestock 2% poor, 34% fair, 64% good. Pasture 2% very poor, 21% poor, 47% fair, 30% good. Vegetables 7% very poor, 12% poor, 62% fair, 19% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.77 in. Temperature 53°, normal 47°. Extremes 20°; 78°.

Days suitable for fieldwork 3.9. Topsoil 60% adequate, 40% surplus. Subsoil 70% adequate, 30% surplus. Field corn harvested for grain 90%, 96% 1988, 96% avg. Soybeans good; 70% harvested, 76% 1988, 72% avg. Pasture good. All hay supplies adequate. Wheat 86% seeded, 87% 1988, 93% avg. Rye 87% seeded, 96% 1988, 97% avg. Oats 60% seeded, 100% 1988, 99% avg.

DELAWARE: Precipitation 0.66 in. Temperature 55°, normal 46°. Extremes 31°; 76°.

Days suitable for fieldwork 4.1. Topsoil 100% adequate. Subsoil 100% adequate. Soybeans good; 55% harvested, NA 1988, 72% avg. Pasture good. All hay supplies adequate. Wheat 79% seeded, NA 1988, 90% avg. Rye 96% seeded, 81% 1988, 85% avg.

MICHIGAN: Temperatures normal to 7° below normal. Extremes 7°; 72°. Precipitation 0.52 to 2.68 in. across State. Good snow cover protected winter wheat from below normal temperatures.

Corn 98% harvested, 80% 1988, 80% avg. Soybeans 100% harvested, 75% 1988, 85% avg. Winter wheat 100% emerged, 95% 1988, 90% avg.; 3% poor, 12% fair, 60% good, 25% excellent. Major activities: Finishing corn harvest, fall tillage, pruning orchards, repairing, winterizing machinery. Heavy rains, snow mid week brought most fieldwork to standstill. Livestock good. Feed supplies adequate.

MINNESOTA: Temperatures 6 to 9° below normal. Extremes -8°; 64°. Precipitation 0.04 to 0.14 in. Greatest weekly total 0.29 in.

Corn 99% harvested, 99% 1988, 93% avg. Soybeans 100% harvested, 99% 1988, 99% avg.

MISSISSIPPI: Warm, dry. Temperatures 1° above normal. Extremes 19°; 83°. Rainfall 0.91 in., 0.10 in. below normal. Hailstorms on 17th.

Days suitable for fieldwork 2.9, 2.7 1988, 3.3 avg. Soil moisture 5% short, 45% adequate, 45% surplus, 5% excessive. Cotton 90% harvested, 94% 1988, 91% avg. Pecans 42% harvested, 34% 1988, 45% avg. Soybeans 88% harvested, 70% 1988, 76% avg. Wheat good; 84% planted, 69% 1988, 62% avg. Corn, sorghum, hay, rice harvest complete. Activities: Row crop harvest, wheat planting, fall tillage.

MISSOURI: Temperatures 2° below normal north, 5° above normal south. Rainfall light, under 0.50 in.

Good weather for fieldwork. Harvesting virtually complete all areas. Pastures, wheat need rain.

MONTANA: Strong winds several days in central divisions. Temperatures 3° below normal in north central, northeast to 7° above normal in western, southwest. Some of the coldest temperatures mid week east of Continental Divide.

Days suitable for fieldwork 5.0. Topsoil 25% short, 75% adequate. Subsoil 40% short, 60% adequate. Windy days drying soils in spite of widespread light rains. Eastern third of State remains very dry. Most livestock moved from summer ranges. Fall grazing remains good.

NEBRASKA: Temperatures near normal except east which 4° below normal. Extreme -5°; 76°. Only trace amounts of precipitation occurred.

Days suitable for fieldwork 6.9. Topsoil 98% short, 2% adequate. Subsoil 86% short, 14% adequate. Southwestern winter wheat had sufficient stooing, high winds damaged crop in sandy soil. Wheat needs rain statewide. High winds caused soil erosion in many areas, made worse by recent dry conditions, overgrazing this summer. Light snow in parts in of Panhandle, north. Main activities: Disking stalks; applying fertilizer; repair fences; moving hay in from fields; equipment repair; storage. Pasture, range feeds supplies 22% very short, 57% short, 21% adequate. Hay, roughage supplies 18% very short, 31% short, 51% adequate. Cattle grazing stalks statewide, some northern cattle shipped to other areas to winter in corn stalks. Some cattle moved to winter pastures. Cooler weather helped with calf sickness problems. Feedlots, weaning pens dry, dusty. Excellent fall weather beneficial to hog producers.

NEVADA: Ridge of high pressure persisted throughout week which allowed some high clouds to drift over most areas, generally dry weather prevailed. One storm system poked across northeast with small accumulations precipitation. Temperature well above normal all areas except east. Afternoons mild, nights chilly with mostly clear skies.

Mild temperatures easy on newborn calves, lambs. Potatoes continued to move. Market demand mostly strong.

NEW ENGLAND: Weather data not available.

Major farm activities: Machinery maintenance, fall clean up, general maintenance.

NEW JERSEY: Temperatures above normal; 45° north, 48° south, 51° coastal. Extremes 20°; 75°. Precipitation below normal north, south, near normal coastal; 0.49 in. north, 0.48 in. south, 0.79 in. coastal. Heaviest 24-hour total 0.66 in. on 14th, 15th.

Very limited harvest of hardy vegetables continued. Rain again interrupted harvest of soybeans, corn for grain. Apples, squash, sweet potatoes, turnips moving from storage. Cider making active. Fall sown grains, cover crops showing good growth.

NEW MEXICO: Temperatures above normal most areas; no measurable precipitation.

Days suitable for fieldwork 7.0. Soil moisture 94% short, 6% adequate. Cotton 68% harvested; 13% poor, 50% fair, 37% good. Wheat 100% emerged, grazing activity high. Cattle 60% fair, 35% good, 5% excellent. Sheep 57% fair, 43% good. Ranges, pastures 56% poor, 44% fair.

NEW YORK: Week started cold, warmed 13th, 14th. Some areas topped 70°. Rain developed on 14th continued into 15th. Major storm on 16th brought heavy rain, high winds. Heaviest 1.00 to 2.00 in. Mohawk Valley north. Very cold air moved in late on 16th. Scattered snow fell on 17th, 18th. Local heavy lake effects snow fell in central, western areas.

Average amounts corn yet to be harvested. Growers waiting for fields to freeze before moving equipment onto them. Fruit growers grading, packing products.

NORTH CAROLINA: Temperatures 1 to 10° above normal across State. Extremes 15°; 85°. Precipitation 0.12 to 2.86 in.

Days suitable for fieldwork 4.0. Soil moisture 72% adequate, 28% surplus. Pasture 1% very poor, 17% poor, 71% fair, 11% good. Livestock feed from pasture 75%. Crop condition: Wheat 2% very poor, 13% poor, 72% fair, 13% good; oats 10% poor, 75% fair, 15% good; barley 9% poor, 79% fair, 12% good; rye 13% poor, 78% fair, 9% good; Hay, roughage supplies 1% short, 91% adequate, 8% surplus. Feed grain supplies 97% adequate, 3% surplus. Harvesting completed: sorghum 81%, 91% 1988, 88% avg. Plantings completed: wheat 61%, 68% 1988, 70% avg.; oats 80%, 86% 1988, 84% avg.; barley 84%, 92% 1988, 86% avg.; rye 70%, 83% 1988, 81% avg. Major activities: Planting small grains, cover crops; soybean harvest, Christmas tree harvest. Other activities included: Digging sweet potatoes; harvesting cotton, corn; cutting hay; tending livestock, general farm maintenance.

NORTH DAKOTA: Cold, dry week. Temperatures 5 to 10° below normal. Precipitation in form of rain, snow 0.05 to 0.13 in.

Soil moisture short. No available snow cover for adequate protection of fall seeded crops, alfalfa. Hay supplies adequate. Main activities: Attending association meetings, marketing livestock.

OHIO: Temperatures 1 to 3° above normal. Highs in 60s to 70s early week; 30s later. Lows down to 20s. Frontal passages brought rain, snow with water equivalent more than 1.00 in. Soil temperatures under bare grounds upper 30s to low 40s.

Days suitable for fieldwork 3.8. Soil moisture 1% short, 65% adequate, 34% surplus. Farmers very busy harvesting, fall tilling until rains stopped most activity. Corn harvest caught up to normal schedule. Soybean harvest almost complete. Winter wheat good. Rain improved growing conditions. Pasture fair to good.

OKLAHOMA: Temperatures 5° below normal north central to 4° above normal southwest. No precipitation.

Days suitable for fieldwork 6.7. Topsoil 90% short, 10% adequate. Subsoil 40% short, 60% adequate. Wheat 8% poor, 37% fair, 55% good; 90% emerged, 92% 1988, 80% avg. Moisture needed to improve root system to support cattle grazing. Cotton 60% harvested, 60% 1988, 25% avg. Sorghum 85% harvested, 80% 1988, 75% avg. Soybeans 80% harvested, 70% 1988, 55% avg. Peanuts 90% harvested, 85% 1988, 85% avg. Pastures good to fair. Cattle good; marketings, prices up slightly from preceding week.

OREGON: Above normal temperatures, measurable precipitation statewide. Temperatures 70s at Brookings late in week to mid teens at several areas east of Cascades. Rainfall 1.00 to 2.00 in. or more common along coast; western interior received over 1.00 in. north to less than 0.20 in. south. East: Hermiston received 1.55 in. well above normal for entire month of November, Heppner 1.29 in. compared to normal of 1.58 in. for the month, only a trace of precipitation received at Burns.

Soil moisture adequate west, short east. Little spraying for Russian wheat aphid, only a small percentage of acres, Columbia Basin. Last of grain planting awaits clear weather Willamette Valley. Plowing some alfalfa fields for rotations southeast. Root crops, cole crops harvested, season nearly complete west. Livestock mostly good. Weaning, shipping calves; some movement of herds to wintering grounds east. Ranges, pastures fair to good.

PENNSYLVANIA: Unseasonable warm temperatures occurred during mid week period. Active cold front moved through on 16th causing showers, severe thunderstorms. Result was above normal temperature, precipitation. Temperature 44°, 2° above normal. Extremes 9°; 75°. Precipitation 0.96 in., 0.20 in. above normal.

Days suitable for fieldwork 4. Soil moisture 6% short, 71% adequate, 23% surplus. Corn 96% mature, 99% 1988, 100% avg.; 65% harvested, 66% 1988, 72% avg.; 1% very poor, 8% poor, 23% fair, 44% good, 24% excellent. Soybean harvest 65% complete, 67% 1988, 74% avg.; 1% very poor, 7% poor, 30% fair, 51% good, 11% excellent. Fourth cutting alfalfa 86% complete, 93% 1988. Quality of hay made during week fair to poor. Amount of feed being obtained from pastures average. Activities: Harvesting hay, haylage, corn, corn silage, soybeans; fall plowing; maintaining machinery, spreading manure, caring for livestock.

SOUTH CAROLINA: Temperatures near normal. Rainfall 0.25 in. along south coast to over 2.0 in. in mountains.

Days suitable for fieldwork 4.6. Soil moisture 18% short, 80% adequate, 2% surplus. Cotton 1% very poor, 4% poor, 67% fair, 28% good, 81% harvested, 86% 1988, 87% avg. Soybeans 3% poor, 68% fair, 29% good, 98% shedding leaves, 94% 1988, 97% avg.; 97% matured, 94% 1988, 94% avg.; 39% harvested, 46% 1988, 45% avg. Tobacco 95% stalks destroyed, 98% 1988, 97% avg. Sorghum fair to good, 71% harvested, 78% 1988, 81% avg. Peanuts fair to good, 97% harvested, 94% 1988, 95% avg. Pasture, livestock good. Hay fair to good.

SOUTH DAKOTA: Temperatures 4 to 9° below normal most of State, normal to 3° above normal extreme northwest. Extremes -9°; 73°. Precipitation for the year below normal, generally, above normal parts of northwest, northeast. Range 3.57 in. above normal to 8.15 in. below normal. Some light snow past week. Weekly precipitation generally less than 0.10 in., maximum 0.52 in.

TENNESSEE: High pressure early week with abnormally warm temperatures. Vigorous cold front swept across State 15th bringing much colder temperatures. Overall, temperatures slightly warmer than normal west, middle. Slightly cooler than normal east, Plateau. Precipitation unevenly distributed, averaged slightly above normal most areas.

Days suitable for fieldwork 2.9. Soil moisture 1% short, 66% adequate, 33% surplus. Burley tobacco 74% stripped, 76% 1988, 67% avg. Wheat 92% seeded, 94% 1988, 75% avg. Harvest made good

progress early week, slowed by wet, cold mid week through late week. Pasture growth slowed by cold. Cattle mostly good.

TEXAS: Strong warming trend early week brought record high temperatures central mid week. Cold front moved in, cooling off temperatures statewide. Temperatures moderated west late week, remained cool eastern two thirds. Large upper air system triggered rain, showers, thunderstorms. Temperatures near to below normal, except slightly above normal south central. Rainfall below normal, except near to above normal southern, southeastern areas.

Crops: Grain sorghum harvest active Plains with open weather. Many operations winding down for season. Irrigated yields very good, dryland yields varied. Sorghum 100% mature, 100% 1988, 99% avg.; 95%, 97% 1988, 90% avg. Cotton harvest full swing High Plains, Cross Timbers. Producers expect to abandon some acreage because prolonged weather problems. Yields vary widely. Harvest Upland cotton active Trans Pecos. Most Pima harvested. Harvest winding down Edwards Plateau. Cotton 99% open bolls, 99% 1988, 90% avg. Small grain seeding wind down many areas Blacklands, central. Stands vary; scattered rain last week could help. Dryland fields across the High Plains need rain badly. Root development poor many fields. Aphids beginning some areas. Irrigated fields good progress with milder weather, providing some grazing. Wheat 97% planted, 100% 1988, 95% avg. Peanut harvest beginning wind down parts Low Plains, Cross Timbers. Recent freeze cut yields, grades later runner varieties. Yields, grades average Blacklands. Most harvest operations this area completed. Central, south yields good, grades varied. Soybean yields good Plains, fair to poor Upper Coast. Sugarbeet yields, sugar content remained good High Plains. Sugarcane harvest very active Rio Grande Valley. Other crops: Peanuts harvested 74%, 83% 1988, 71% avg. Pecans 36%, 45% 1988, 43% avg. Soybeans harvested 84%, 90% 1988, 75% avg. Sugarbeets 77%, 67% 1988, 66% avg. Sunflowers harvested 65%, 86% 1988, 81% avg. Oats planted 89%, 85% 1988, 88% avg.

Commercial Vegetables: Rio Grande Valley, harvesting, planting continued without delay. Winter crops good progress. Citrus harvest continued. Volumes down from last year, quality good. San Antonio Winter Garden, all crops making good progress, especially spinach. Insects, disease low. Trans Pecos, some chile harvest continued. Onion planting continued. Pecan harvest increased. Weather, insect problems holding yields down. West crop looks good.

Range and Livestock: Ranges, pastures continued need moisture. Limited rainfall last week brought some relief. Stockers in Plains having problems with dusty conditions. Irrigated wheat providing some grazing. Supplemental feeding steady most State.

UTAH: Temperatures 6° above normal, precipitation none most areas.

Harvest of most crops completed. Winterization of sprinkler systems, equipment underway. Fall grain looks good, however, Russian Wheat aphids presented problems in some areas. Winter ranges mostly short. Some cattle in good flesh, others thin. Farm activities included: Fall plowing, livestock sales, soil preparation.

VIRGINIA: Warm week. Extremes 20°; 80°. End of week, strong winds, tornado watch. Heavy precipitation.

Days suitable for fieldwork 3.6. Topsoil 37% surplus, 63% adequate. Grain corn 93% harvested, 90% 1988, 88% avg. Soybeans 52% harvested, 49%

1988, 51% avg. Wheat 74% seeded, 59% 1988, 72% avg. Winter grains, grazing crops 17% excellent, 56% good, 25% fair, 2% poor. Pastures 32% excellent, 56% good, 12% fair. Forage from pastures, winter grazing crops dairy cattle 27%, beef cattle 87%, sheep 89%. Stripped, graded flue, burley tobacco, marketed cattle, building fence repair, seeding small grains.

WASHINGTON: Temperatures 7° above normal to 2° below normal, east; 2° above normal to 2° below normal, west. Precipitation 0.11 to 1.21 in., east; 0.66 to 3.38 in., west.

Days suitable for fieldwork 3.3. Soil moisture 19% short, 80% adequate, 1% surplus. Range, pasture 55% short, 45% adequate. Hay, other roughage 5% short, 90% adequate, 5% surplus. Fieldwork has been completed for year most areas. Some late planted winter wheat might winter kill due to poor plant development. Winter wheat emerged 99%, 95% 1988, 96% avg.; 45% fair, 55% good. Rains slowed activity. Some farmers applying herbicides, rodenticide. Orchard clean up, raspberry cane pruning, planting fruit trees, grapes, pruning orchards, moving, working livestock were the other major activities. Corn

for grain harvest was still behind normal at 55%, 75% 1988, 85% avg.

WEST VIRGINIA: Temperature 44°, 1 to 4° above normal. Extremes 12°; 80°. Precipitation 1.29 in., well above normal.

Days suitable for fieldwork 3.5. Soil moisture 4% short, 77% adequate, 19% surplus. Corn good to excellent; 80% harvested. Wheat seeding 85% complete. Hay good to fair; 3rd cut 90% complete. Pasture good to fair. Cattle, calves, sheep, lambs good. Farm activities: Corn, hay harvest; seeding small grains, marketing cattle, moving cattle to winter feeding areas, stripping tobacco.

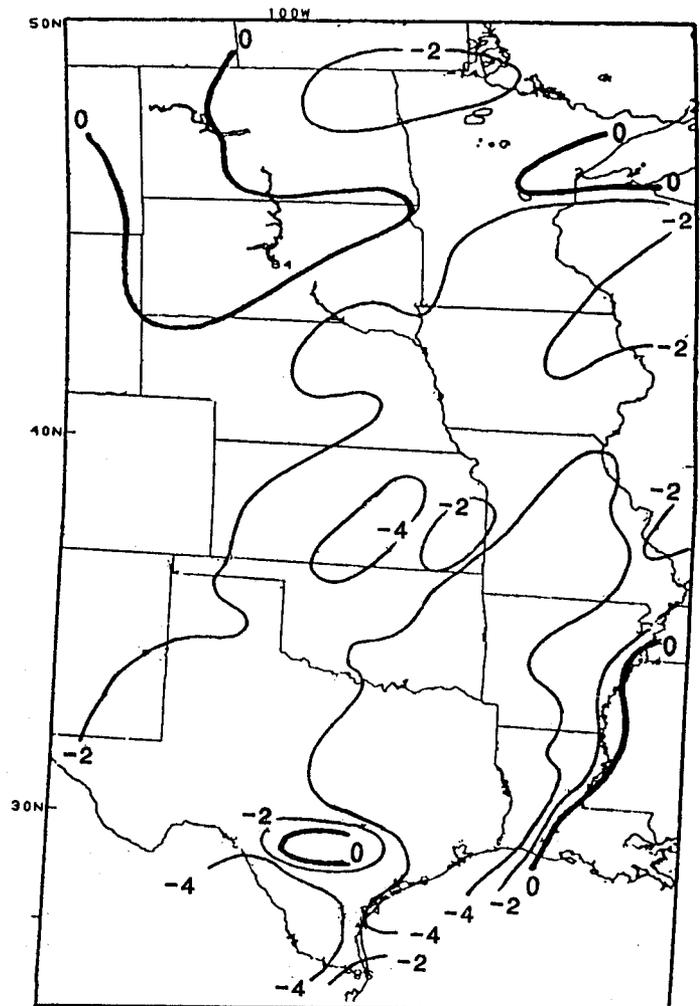
WISCONSIN: Temperature 28°. Extremes -3°; 74°. Precipitation 0.10 to 0.60 in.

Corn grain 93% harvested, 95% 1988, 83% avg. Most farmers getting ready for winter, hauling manure, spreading lime, cutting firewood.

WYOMING: Temperatures 2 to 9° above normal. Precipitation below normal.

Corn for grain mostly harvested. Winter wheat fair to good. Additional moisture needed for good development. Livestock mostly good. Movement to winter pastures, market continues.

Departure from Normal Precipitation (inches) Sept. 17 - Nov. 18, 1989



DRYNESS CONTINUES IN THE PLAINS

Winter wheat farmers in the central and southern Plains States are once again becoming concerned over the lack of autumn precipitation. In Kansas, the country's most important wheat State, cumulative precipitation since mid-September is 2-4 inches below normal (see map), and precipitation so far in November has been negligible. Similar deficits exist in important wheat growing areas of Oklahoma, Nebraska, and west Texas. As a consequence, 80 percent of the topsoils in Kansas are reportedly short moisture. Oklahoma topsoils are 90 percent short. In Nebraska, where topsoils are 98 percent short, the condition of the wheat crop reflects the dryness. Nineteen percent of the wheat crop is reported to be in poor condition there, up from 11 percent the previous week.

International Weather and Crop Summary

November 12-18, 1989

HIGHLIGHTS

USSR ... Winter grains continue to enter dormancy as far south as the northern and eastern Ukraine. Light snow covers most of the region.

NORTHWESTERN AFRICA ... Soaking rain covers Moroccan winter grain areas. Unfavorable dryness slows planting in Algeria and Tunisia.

EUROPE ... Widespread rain improves soil moisture for winter crops in the southwest but causes possible localized flooding. Cold temperatures induce rapid hardening of winter grains in the east.

SOUTH ASIA ... The remnants of Tropical Cyclone Gay bring flooding and likely cause local damage to maturing rice.

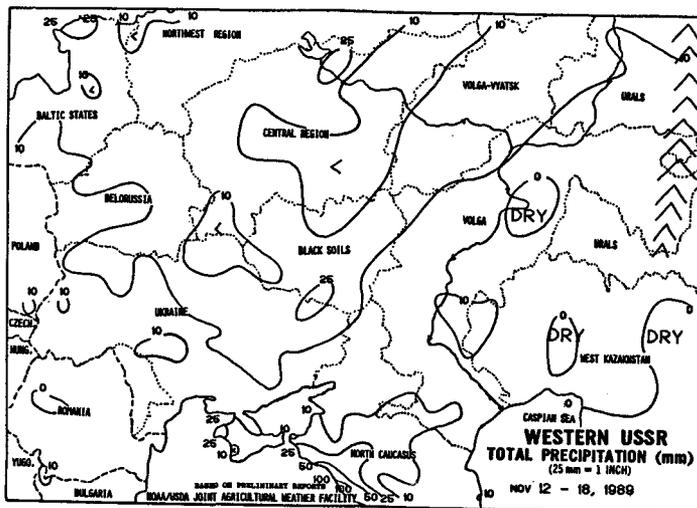
EASTERN ASIA ... Beneficial drier weather develops following early week rain in the Yangtze Valley. Freezing temperatures halt growth of winter crops in the North China Plain.

SOUTHEAST ASIA ... Moderate to heavy showers continue across Malaysia and Indonesia.

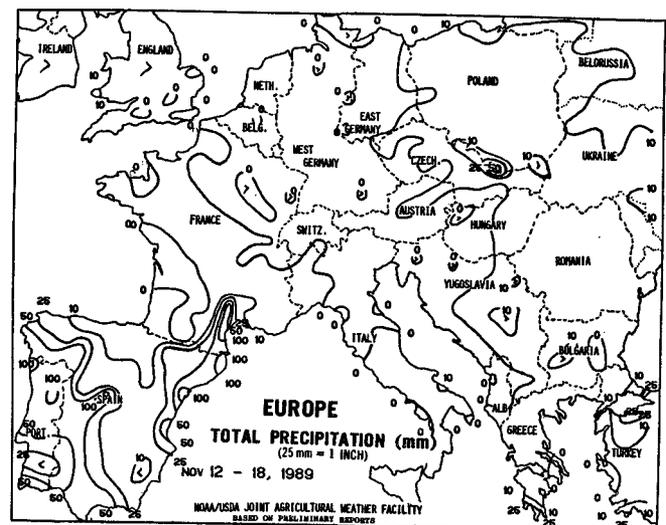
SOUTH AFRICA ... Widespread, locally heavy rain continues across the region, benefiting corn emergence and establishment.

SOUTH AMERICA ... In Argentina, improved topsoil moisture favors crop planting. Rain in south-central Brazil promotes summer crop growth.

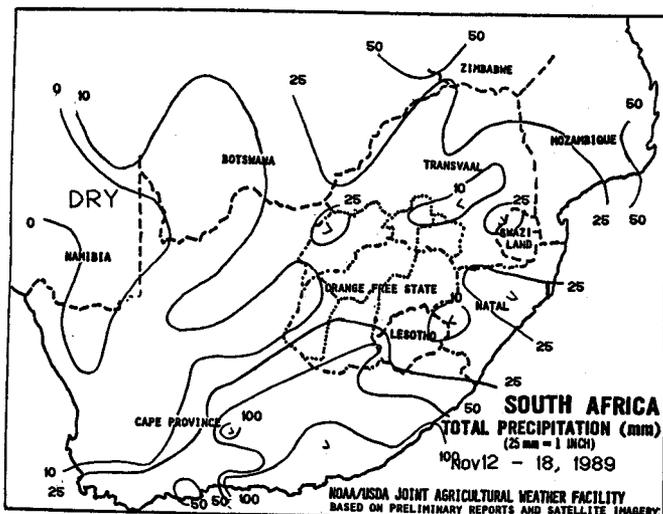
AUSTRALIA ... Rain continues fieldwork delays in the east.



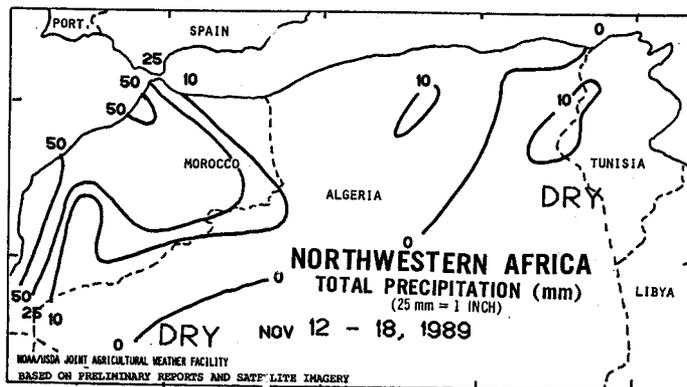
WESTERN USSR ... Widespread, light precipitation covered winter grains over most of the region. Rainfall amounts generally ranged from 5 to 20mm, with isolated locations receiving rainfall in excess of 25mm. The precipitation fell mostly as snow in the north, while light rain turned to snow in the south. Weekly average temperatures were 1-3 degrees Celsius (C) below normal in the Ukraine and 1-3 degrees C above normal over the remainder of the region. Winter grains continued to enter dormancy as far south as the northern and eastern Ukraine. Winter grains in the western Baltic States, the western and southern Ukraine, and the central North Caucasus continued the hardening process prior to dormancy.



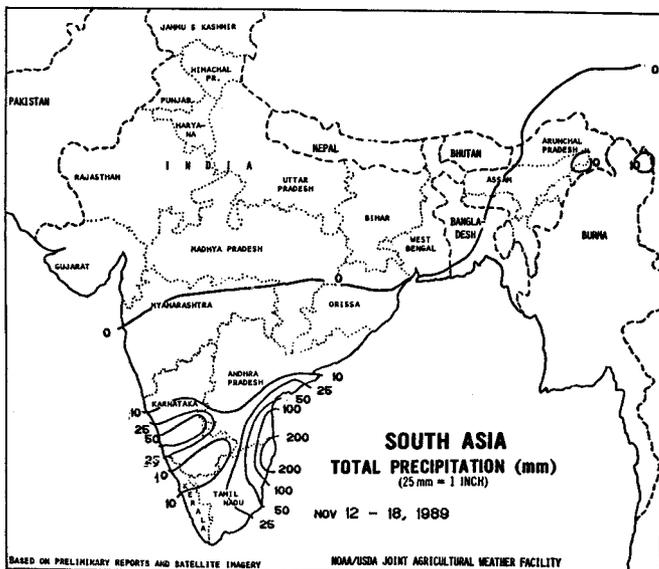
EUROPE ... A slow moving area of low pressure brought moderate to heavy rain (15-75mm, with scattered rainfall greater than 75mm) to much of the Iberian Peninsula and sections of south-central France, improving soil moisture for establishment of winter crops. Scattered, very heavy rain (100-155mm) in sections of northern Portugal, central and northeastern Spain, and south-central France may have caused localized flooding. Elsewhere, light rain and snow (mostly less than 10mm) fell across eastern Europe, while northwestern and north-central crop areas remained mostly dry. Cold temperatures (1-4 degrees C below normal) persisted for much of the week across the east, inducing rapid hardening of winter grains. In contrast, above-normal temperatures (1-5 degrees above normal) in the west accelerated vegetative growth and development of winter crops.



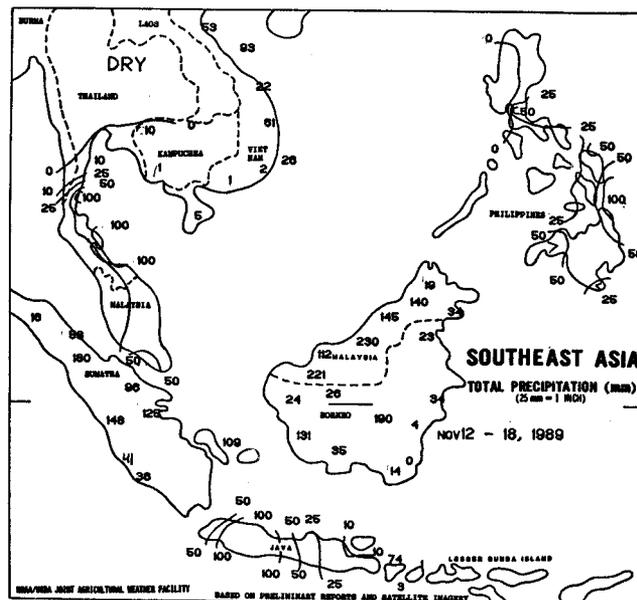
SOUTH AFRICA ... Variable showers (10-50mm or more) swept across South Africa, with light to moderate rain (10-25mm or more) covering most of the Maize Triangle. The rainfall maintained mostly favorable conditions for corn planting and early vegetative growth. Light to moderate rain (10-25mm or more) also covered primary corn areas of Natal and the eastern Cape Province. Heavier rain (25-100mm or more), however, fell across the southern Cape Province, slowing late winter wheat harvests and causing local flooding.



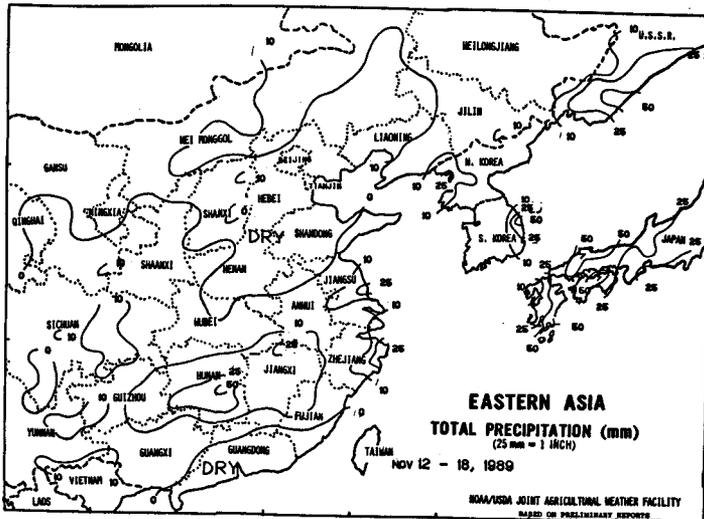
NORTHWESTERN AFRICA ... Soaking rain covered Moroccan winter grain areas. Precipitation amounts generally ranged from 29 to 50mm, with isolated locations in southern Morocco receiving rainfall in excess of 50mm. This past week's rain over Morocco saturated topsoils and will likely prompt widespread planting. In contrast, minimal rain (precipitation less than 7mm) over crop areas in Algeria and Tunisia kept topsoils too dry for widespread planting.



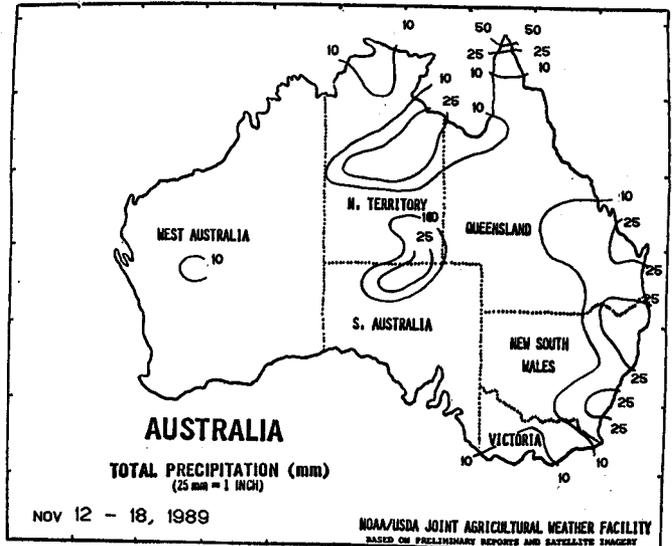
SOUTH ASIA ... Moderate to heavy showers (50-100mm or more), due mainly to the remnants of Tropical Cyclone Gay, fell across much of India's southern tip, causing some harvest delays and flooding. The heaviest rain (100-285mm) covered rice areas of southeastern Andhra Pradesh and northeastern Tamil Nadu, causing flooding and likely damaging crops in or nearing maturity. A local heavy shower (59mm) fell in southern Karnataka, but rainfall was light (10mm or less) elsewhere over the southern interior, including the primary cotton regions. Dry, warm weather again dominated crop regions elsewhere in South Asia, favoring summer crop harvests and fall plantings.



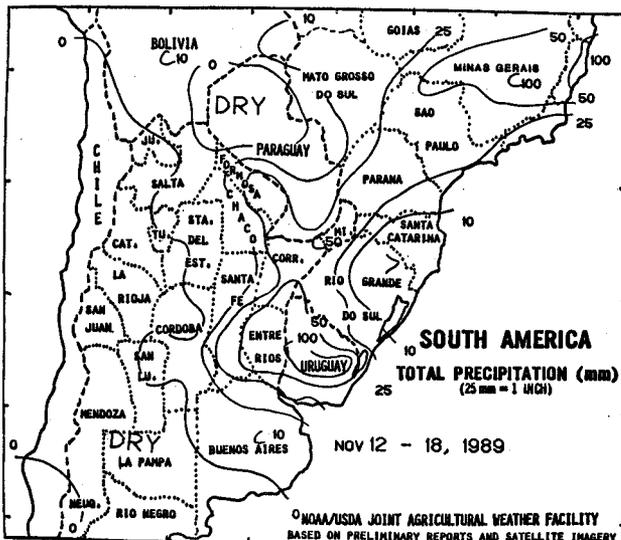
SOUTHEAST ASIA ... Scattered, moderate to heavy showers (25-50mm or more) continued across Indonesia and Malaysia, improving irrigation reserves for main season crop planting and establishment but causing local flooding. Heaviest rain (100-200mm or more) covered much of central Java, Sumatra, eastern Malaysia, and the east coast of peninsular Thailand. Further north, seasonably dry, warm weather benefited mature crops across northern Thailand. In the Philippines, moderate to heavy showers (25-50mm or more) continued over southern Luzon, the east-central islands, and Mindanao as drier weather continued to dominate the north and west. Some local flooding from continued, excessive rain (100mm or more) was likely in northeastern Mindanao and some east-central areas.



EASTERN ASIA ... Moderate to heavy rain (15-30mm, with isolated amounts greater than 30mm) continued early in the week across central and upper sections of the Yangtze Valley, although beneficial drier weather developed by week's end. Up to 4 weeks of heavier-than-normal rainfall have caused extensive fall fieldwork delays across much of the region. Heavy rain (25-50mm, with scattered amounts in excess of 50mm) also fell over much of Japan. Mostly light snow (less than 10mm) fell over northern sections of Manchuria, while the North China Plain remained mostly dry. Freezing or subfreezing temperatures over much of the North China Plain halted vegetative growth and induced hardening of winter crops. Mean weekly temperatures were below normal over all but Japanese crop areas, where they were above normal.



AUSTRALIA ... Moderate to heavy rain (10-30mm, with isolated amounts greater than 30mm) continued for the fourth consecutive week across sections of southeastern Queensland and eastern New South Wales. The rain delayed winter grain harvest, summer crop planting, and sugarcane harvest in coastal crop areas. Mostly light rain (less than 10mm) fell over southern crop areas, benefiting winter grains in the southeast where they are still filling. Temperatures for the week were near to above normal in most all but southeastern crop areas, where they were below normal.



SOUTH AMERICA ... In Argentina, drier weather returned to western and southern crop areas, while rain fell in eastern and northern areas as the storm system moved across the region. Topsoil moisture has improved summer crop planting conditions in Cordoba, Santa Fe, and northern Buenos Aires. Northern cotton areas have also benefited from the recent rain. Brief episodes of unusually low temperatures in eastern Buenos Aires may have some adverse effects, but the coldest weather was mostly on the fringe of the major crop areas. Early wheat harvesting is underway in far northern areas. Locally heavy rain (75-123mm) fell in Uruguay, while generally favorable rain moistened soybean areas of southern Paraguay and south-central Brazil. Heavier rain (50-129mm) fell in Minas Gerais. The moisture benefited not only summer crops throughout the region but also coffee trees in the north which are flowering.

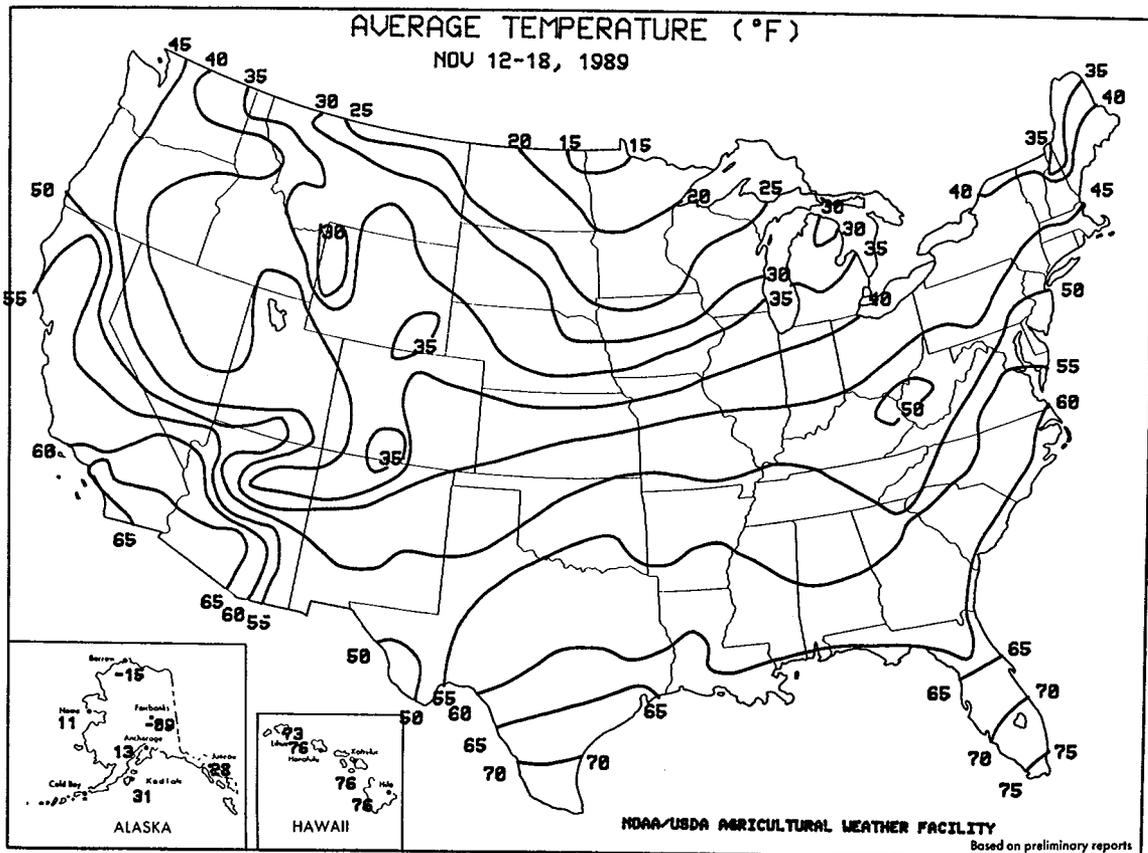
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