

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

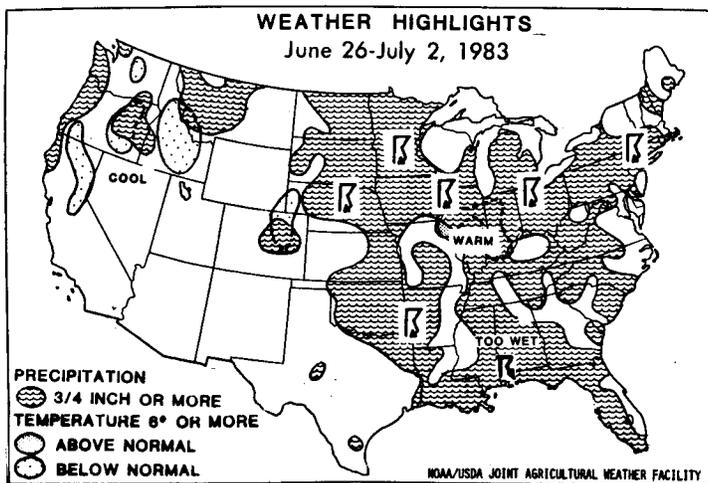
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July 6, 1983

National Weather Summary

June 26 to July 2



HIGHLIGHTS: Thunderstorms triggered tornadoes, hail, and heavy rain in the central Rockies and central Plains at the beginning of the week and then spread eastward to cover nearly all of Eastern United States. Some of the heaviest rain and most severe weather was along a line from central Nebraska eastward to southern New England. The greatest accumulation of rain in the South was along the central gulf coast, although some rain fell nearly every day from Louisiana to Florida. Average temperatures were generally warmer than normal east of the Great Plains and cooler to the west. Average temperatures over the central Corn Belt were 6° above normal.

SUNDAY...Thunderstorms covered the central Plains, becoming severe with heavy rain through Nebraska, northern Iowa, and into Wisconsin. Lighter showers and thunderstorms covered the northern and central Rockies, the lower Mississippi Valley, and the gulf coast from eastern Texas to Florida. Heavy downpours caused local flooding in the northern Mississippi Valley and more widespread floods in the lower Valley.

MONDAY...Heavy thunderstorms broke out from Nebraska eastward through the lower Great Lakes to southern New England. Other heavy storms covered the eastern part of the central Plains, the central gulf coast, and the southern Appalachian Mountains. Lighter storms again covered the northern and central Rockies, the South from central Texas to Florida, the central and lower Mississippi Valley, the Ohio Valley, and the rest of the Northeast. Warm weather covered the East, and cooler temperatures pushed into the northern Rockies and Plains.

TUESDAY...Severe weather continued to ravage the eastern portion of the Plains from western Arkansas and eastern Oklahoma northward to eastern South Dakota and southern Minnesota. Behind the line of severe storms, cooler weather set low temperature records as far south as western Texas. Heavy showers covered western Montana, and light showers fell in the central Rockies. Nearly all of the East had showers and thunderstorms, but the heaviest reached from the upper Ohio Valley to southern New England and along the central gulf coast.

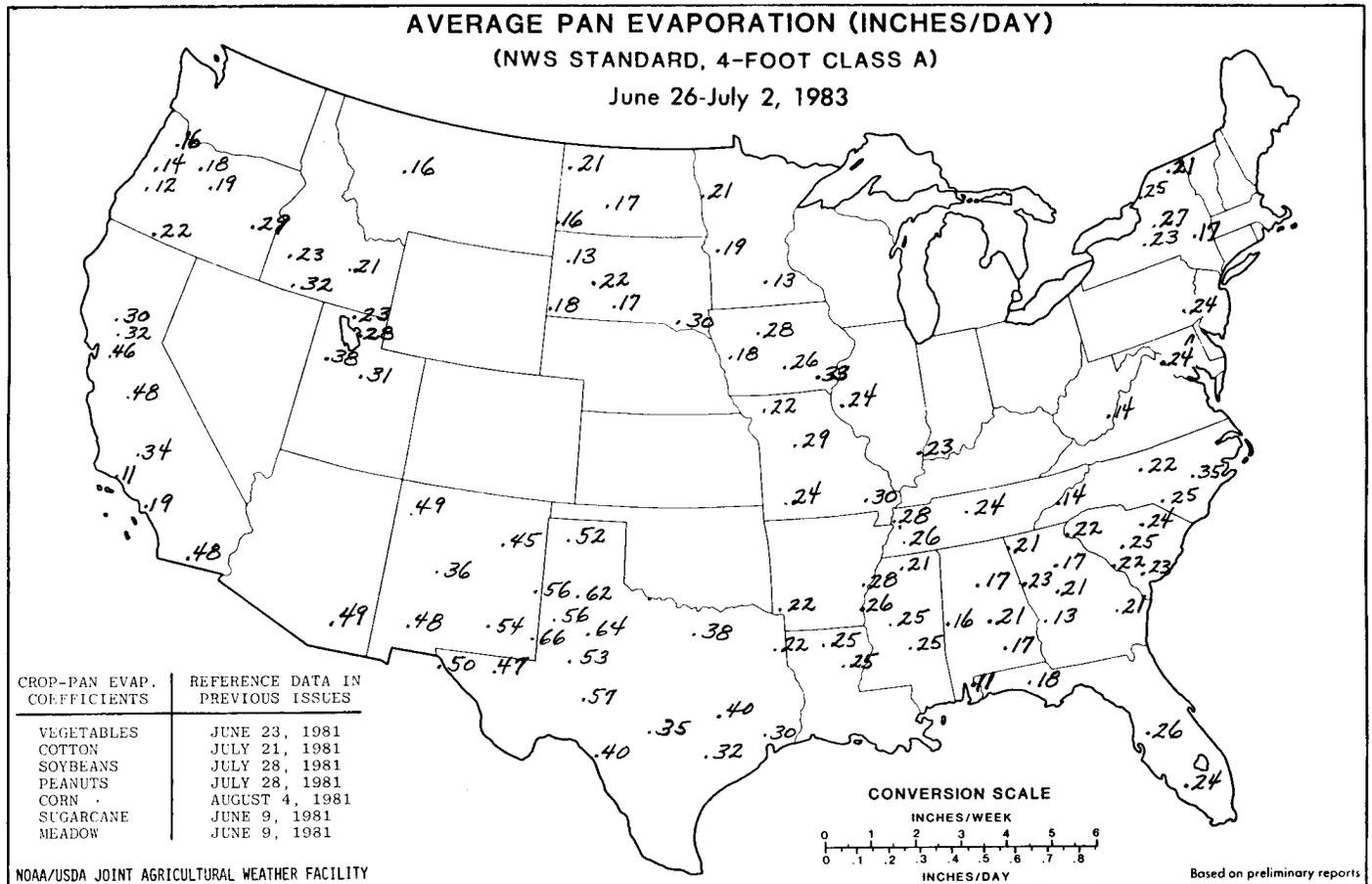
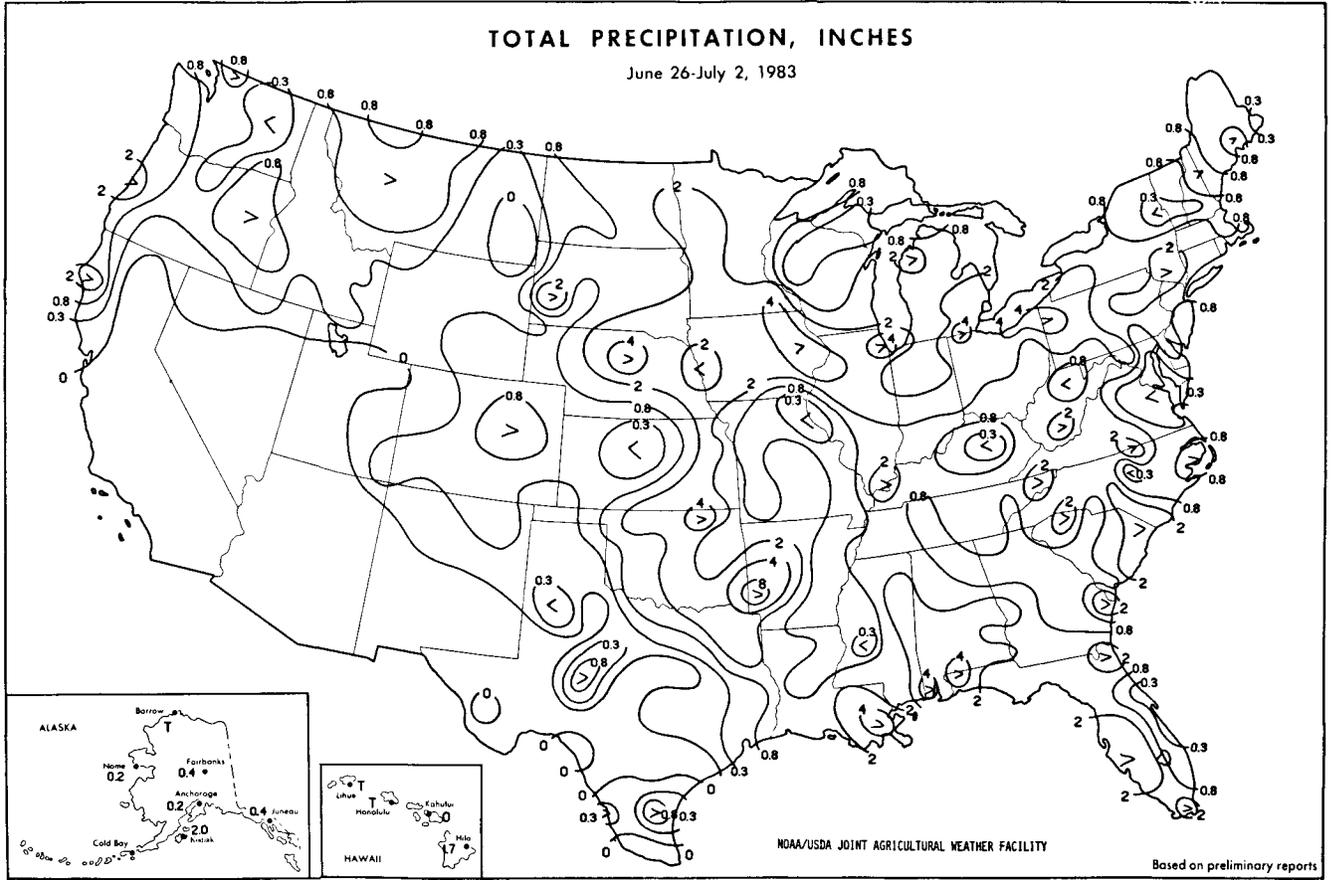
WEDNESDAY...The area of severe weather moved to the central Mississippi Valley and northward through Minnesota. Thunderstorms spread over the South from Louisiana to Florida and in the Southeast to the mid-Atlantic States. Showers and thunderstorms covered the Pacific Northwest and were especially heavy in western Montana.

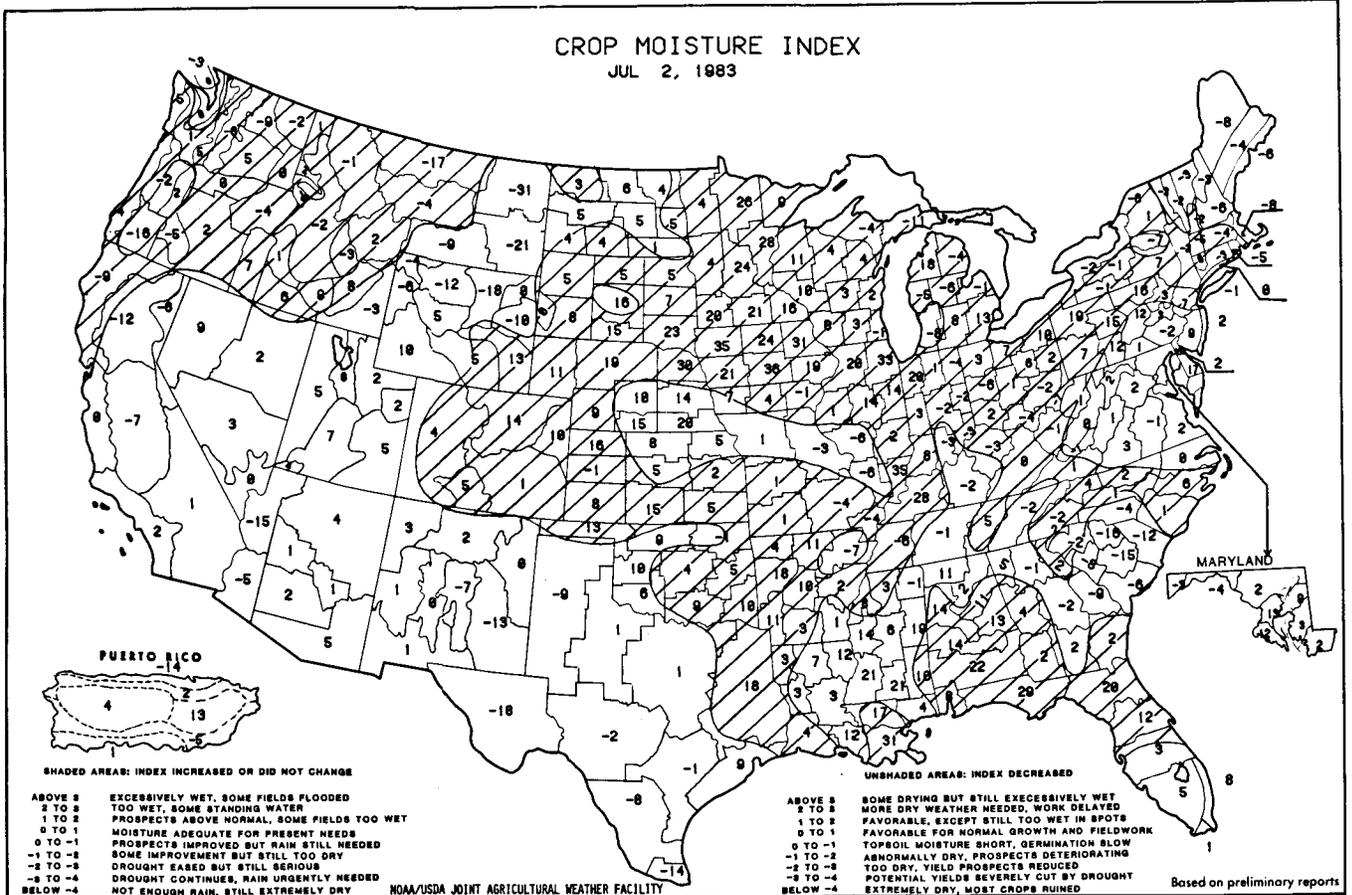
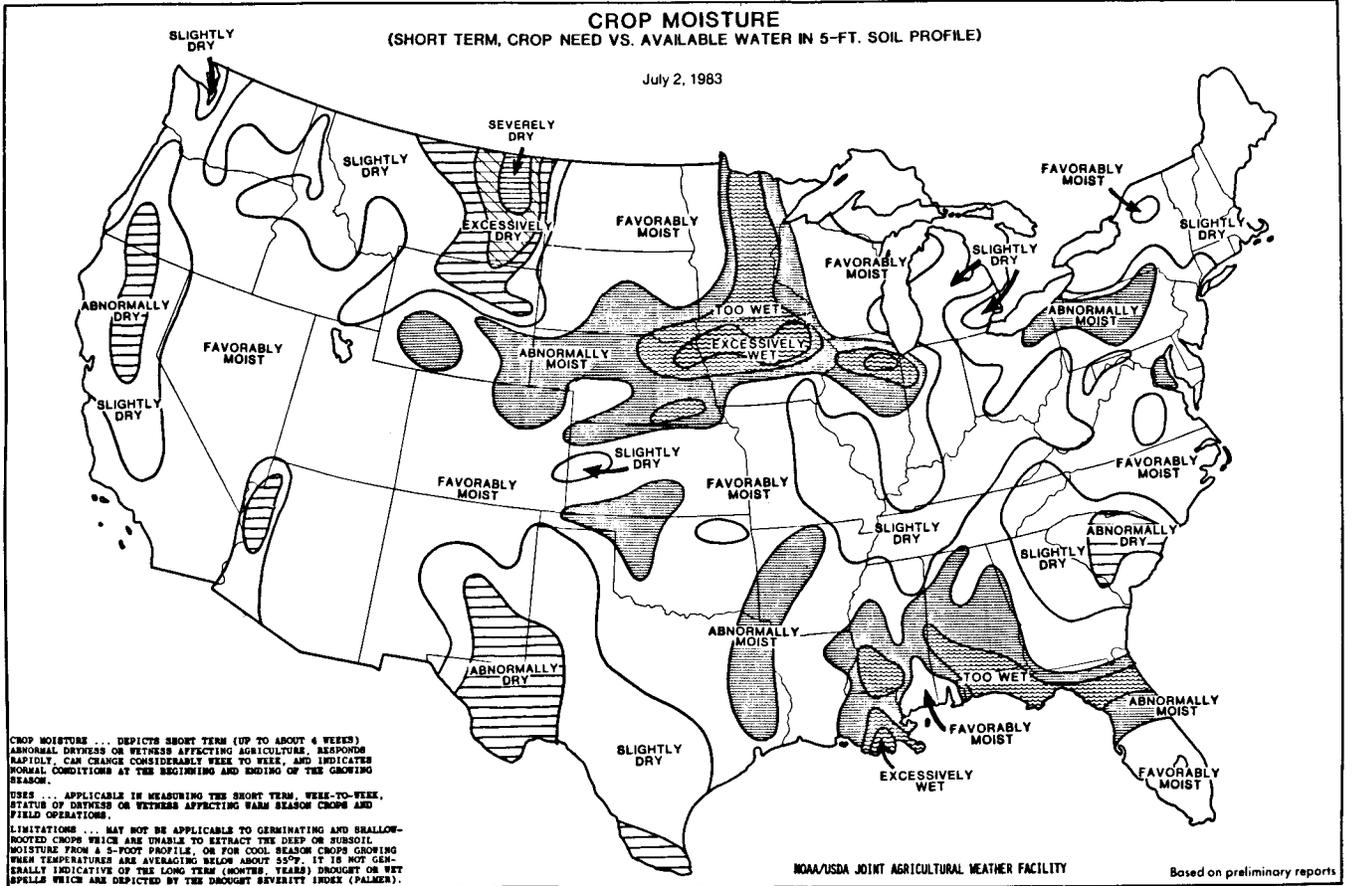
THURSDAY...Heavy thunderstorms rumbled from southern South Dakota through the Great Lakes region and covered most of Ohio and western Pennsylvania. Showers and thunderstorms were light to moderate along the gulf coast, the Southeast and through the Tennessee Valley. Showers were light in the Pacific Northwest. Morning temperatures were cool over the northern States and most of the West, but afternoon temperatures warmed through the South.

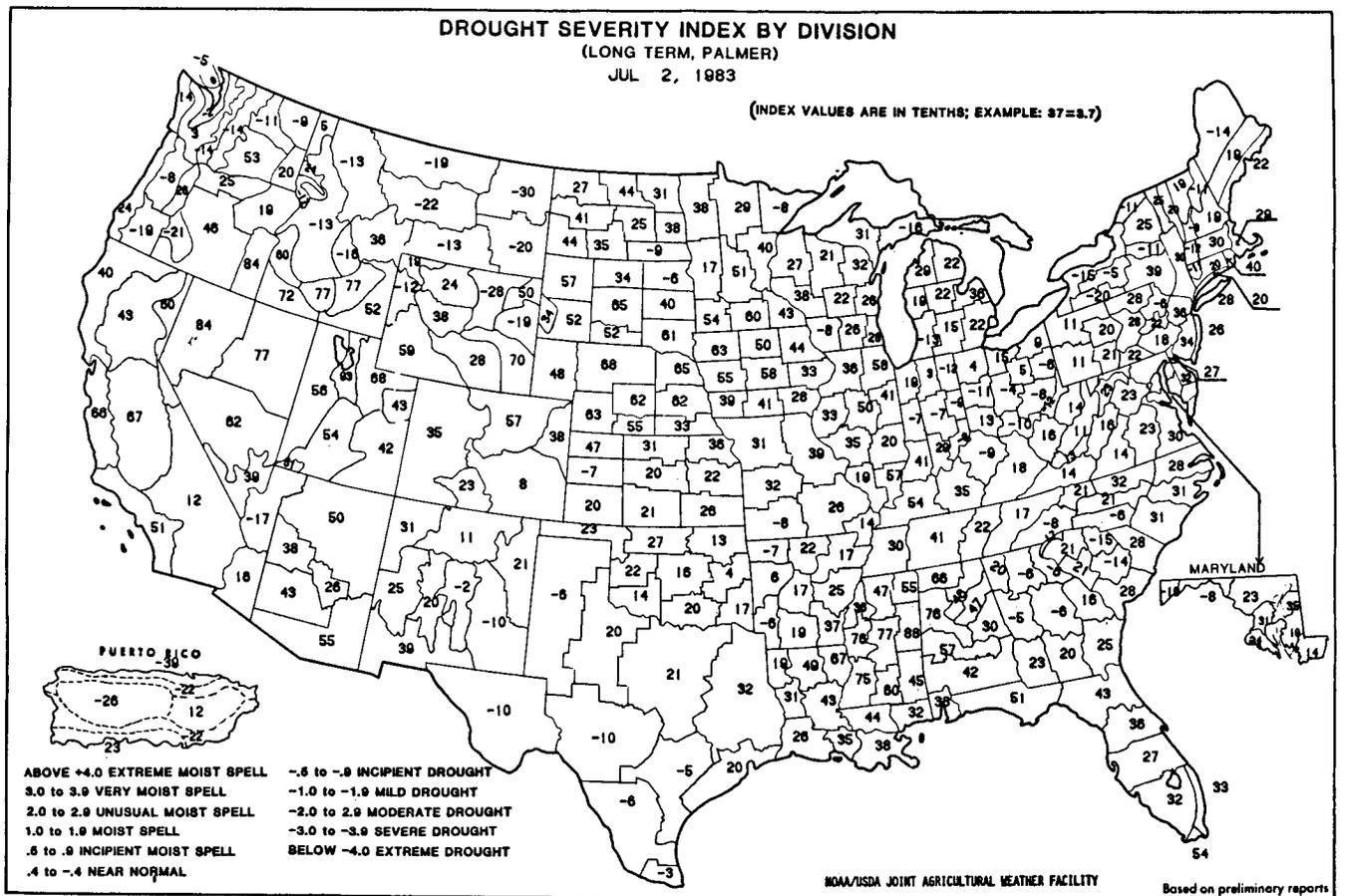
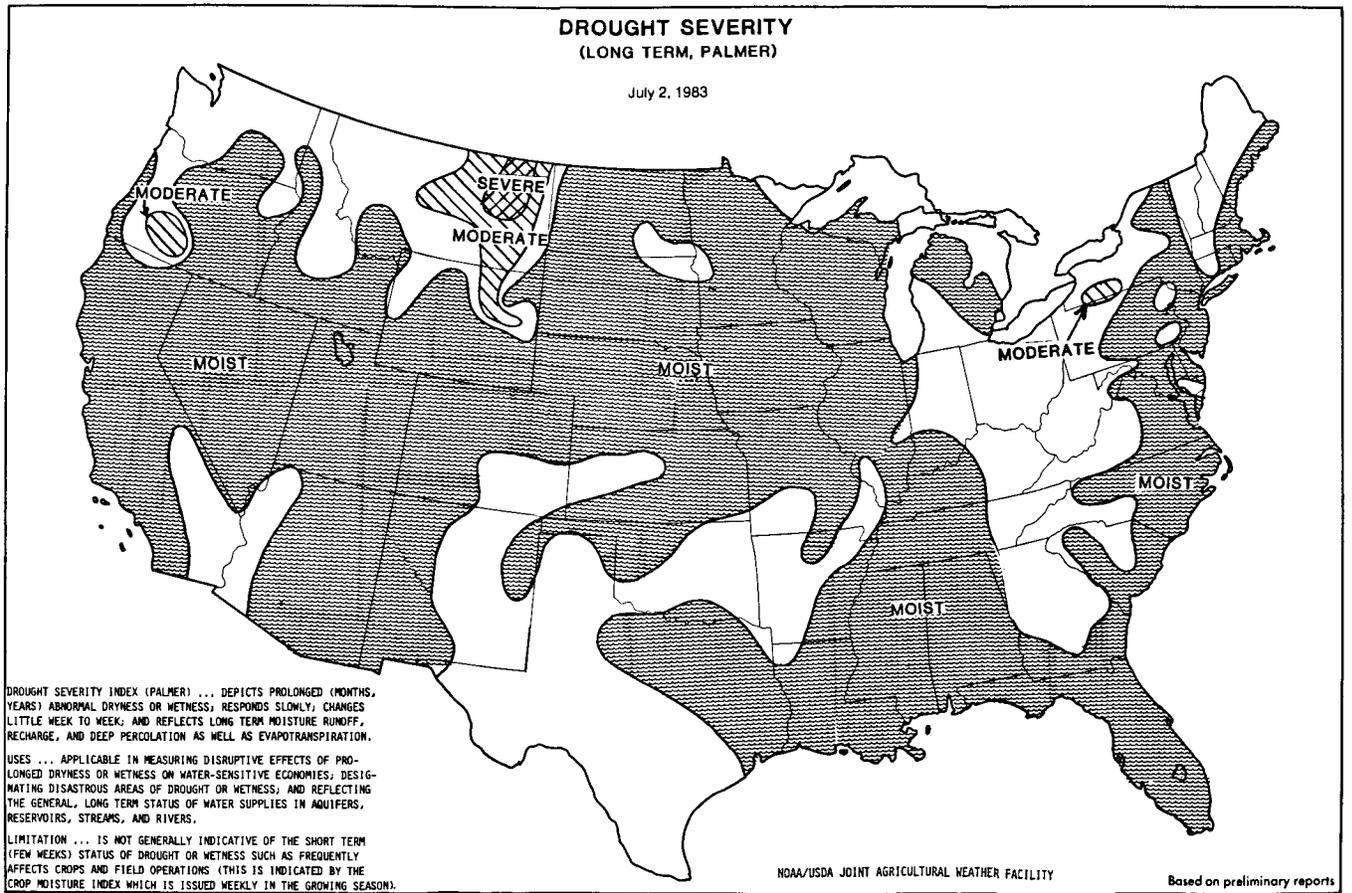
FRIDAY...Cool morning temperatures continued to cover the Northeast, the northern tier of States, and most of the West, but were warming in most areas during the day. Some heavy thunderstorms lingered from southern Iowa to northern Ohio.

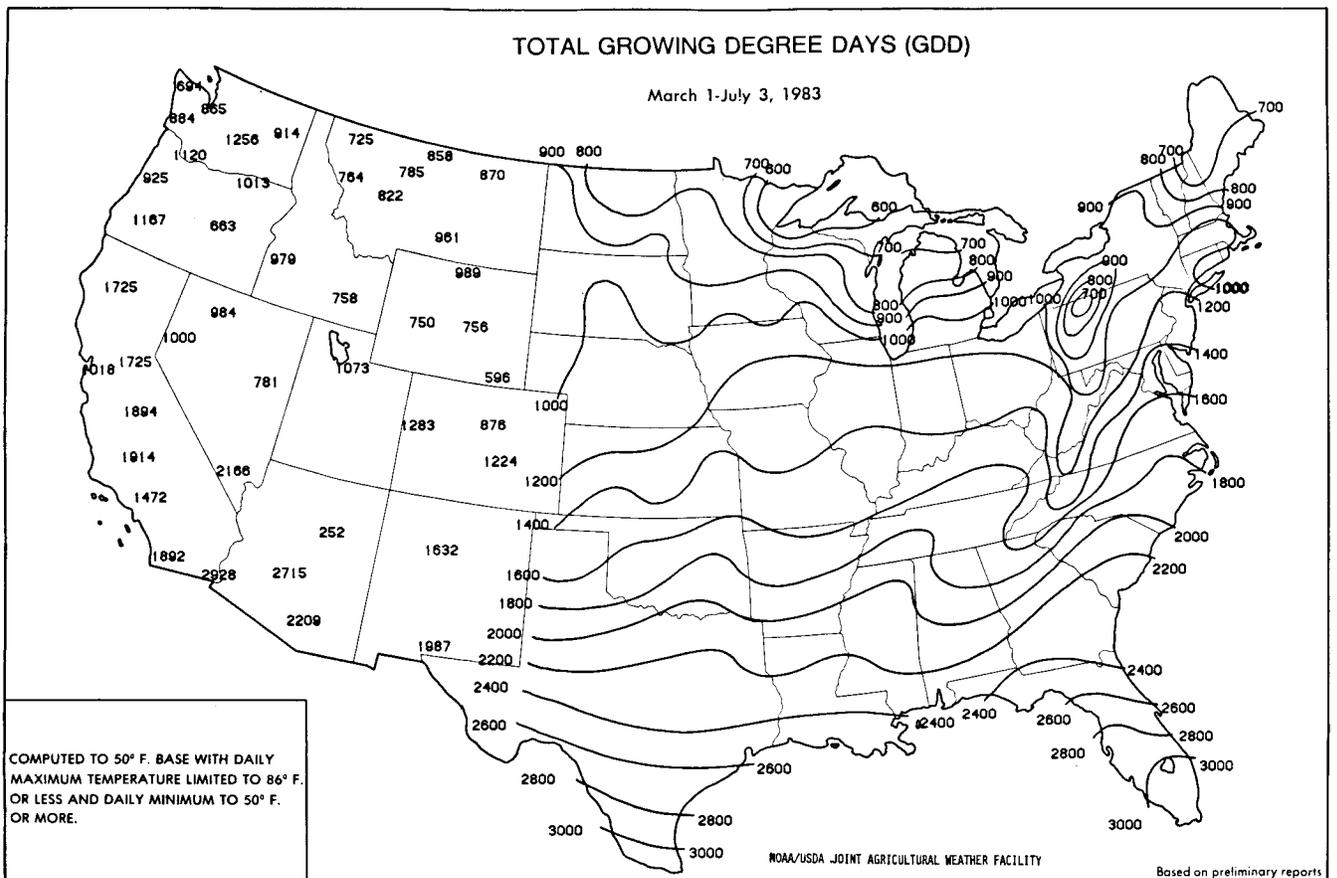
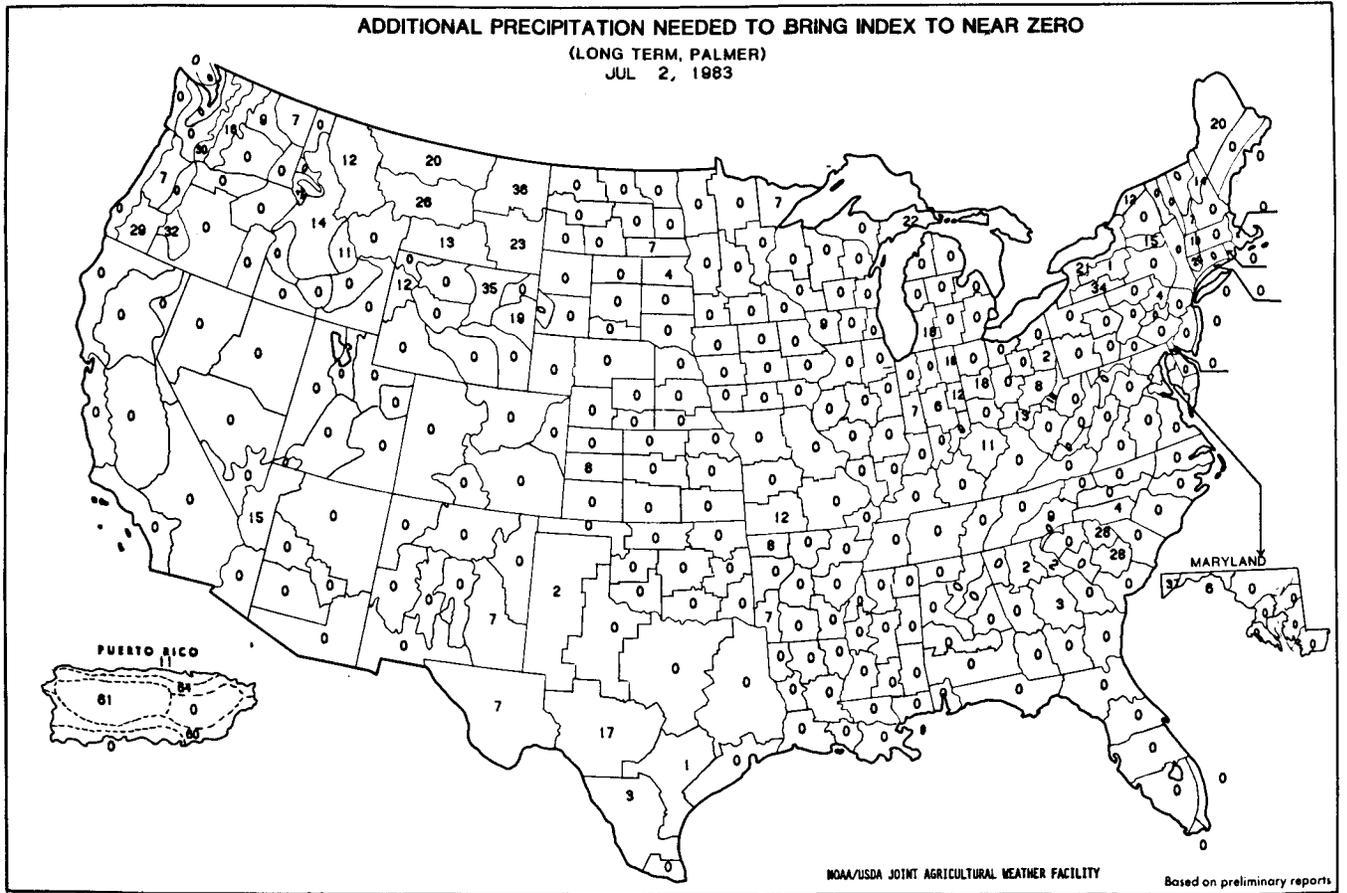
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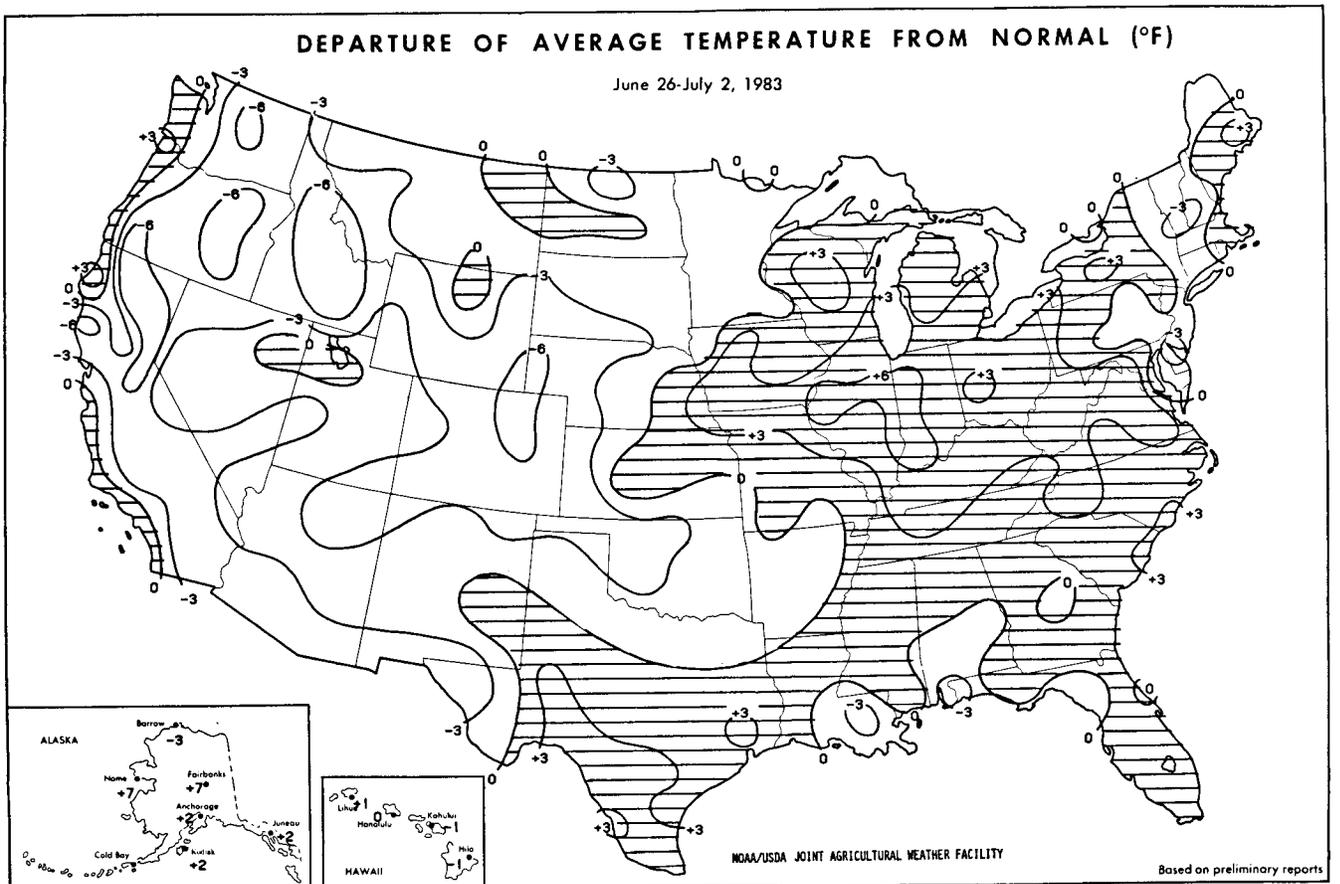
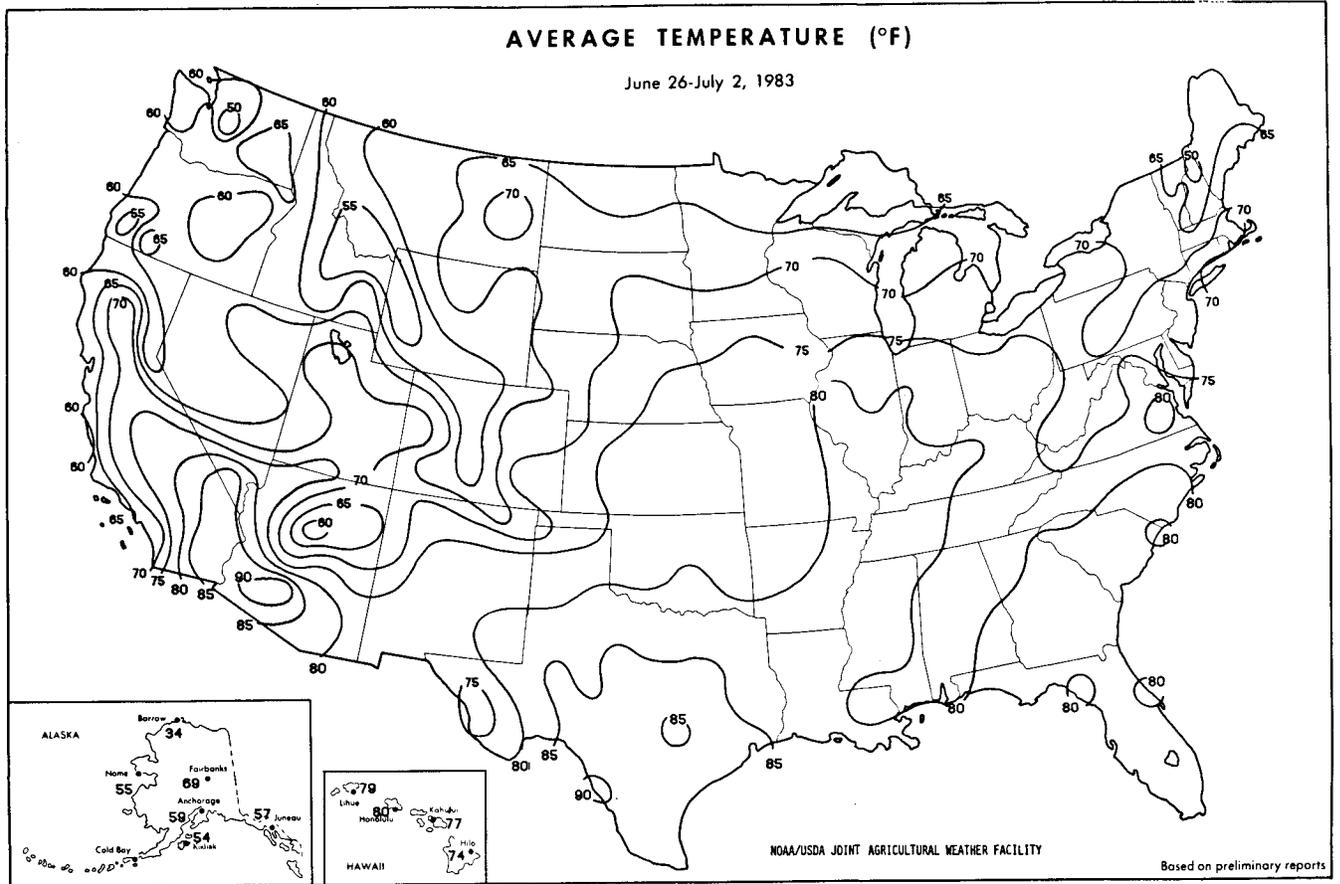


LONG-TERM MEAN GROWING DEGREE DAYS (ADJUSTED 50° BASE):
ACCUMULATED WEEKLY MARCH 1 TO INDICATED DATES

Station	Mar. 8	Mar. 15	Mar. 22	Mar. 29	Apr. 5	Apr. 12	Apr. 19	Apr. 26	May 3	May 10	May 17	May 24	May 31	June 7	June 14	June 21	June 28	July 5	July 12	July 19	
West:																					
Phoenix, Ariz.	76	160	252	352	458	579	710	839	974	1123	1274	1442	1614	1794	1976	2172	2378	2593	2817	3045	
Fresno, Calif.	50	102	164	232	309	391	481	570	663	767	877	1008	1139	1276	1411	1569	1732	1895	2066	2243	
Denver, Colo.	13	30	52	83	117	152	199	255	311	378	447	524	613	709	819	937	1068	1212	1360	1510	
Pocatello, Idaho	1	7	15	30	51	77	113	148	188	247	305	378	456	540	630	734	846	965	1101	1244	
Glasgow, Mont.	1	7	15	30	51	77	113	148	188	247	305	378	456	540	630	734	846	965	1101	1244	
Portland, Ore.	8	20	41	66	99	142	187	231	281	345	418	504	592	698	795	913	1033	1159	1303	1460	
North Central:																					
Des Moines, Iowa	5	14	23	41	67	94	138	184	259	340	428	525	629	753	897	1046	1201	1369	1535	1705	
Minneapolis, Minn.	0	1	4	11	25	40	71	108	162	224	295	374	458	565	691	822	954	1103	1252	1409	
North Platte, Nebr.	10	24	39	67	100	133	190	236	316	405	502	607	722	854	1007	1165	1327	1504	1677	1855	
Omaha, Nebr.	6	20	35	58	91	127	186	234	316	405	502	607	722	854	1007	1165	1327	1504	1677	1855	
Fargo, N. Dak.	0	0	2	8	17	30	54	85	134	186	250	325	404	503	612	724	839	968	1108	1253	
Huron, S. Dak.	2	5	12	26	46	70	108	154	210	272	345	425	514	621	743	870	1001	1150	1305	1462	
Green Bay, Wis.	0	1	3	7	17	28	55	85	125	176	234	302	374	466	573	683	797	923	1050	1185	
Madison, Wis.	1	3	8	17	33	53	89	132	186	255	325	406	491	597	719	845	977	1119	1258	1406	
South Central:																					
Fort Smith, Ark.	41	87	131	191	269	348	437	551	684	794	929	1081	1240	1406	1589	1774	1954	2159	2356	2553	
Bodge City, Kans.	20	46	76	121	172	222	286	365	442	537	654	741	867	1006	1168	1333	1503	1685	1862	2042	
Topeka, Kans.	18	42	63	101	148	204	264	338	414	502	611	711	822	946	1084	1237	1396	1561	1732	1906	
Richita, Kans.	22	50	77	121	177	238	307	386	474	572	691	816	952	1100	1271	1447	1628	1819	2010	2186	
Shreveport, La.	61	132	203	282	384	488	593	728	866	1020	1178	1348	1525	1706	1892	2100	2300	2504	2712	2916	
Columbia, Mo.	18	39	58	93	137	184	245	330	417	519	622	741	864	1003	1168	1330	1501	1681	1857	2039	
St. Louis, Mo.	41	80	119	174	246	324	416	519	636	770	929	1100	1284	1481	1692	1918	2159	2406	2659	2919	
Oklahoma City, Okla.	35	76	119	174	246	324	416	519	636	770	929	1100	1284	1481	1692	1918	2159	2406	2659	2919	
Amarillo, Tex.	33	78	123	180	244	308	385	474	560	667	770	889	1019	1156	1311	1478	1649	1830	2010	2187	
Corpus Christi, Tex.	95	210	324	445	587	728	878	1049	1229	1411	1600	1794	1998	2200	2412	2626	2840	3055	3270	3487	
Fort Worth, Tex.	57	122	191	271	369	470	578	710	838	988	1140	1308	1486	1670	1871	2072	2278	2488	2702	2916	
Midland, Tex.	57	128	200	282	376	473	573	700	822	964	1110	1283	1461	1653	1858	2076	2298	2524	2754	2984	
Midwest:																					
Chicago, Ill.	5	10	18	35	56	81	124	177	238	313	391	481	579	701	843	984	1142	1310	1470	1639	
Indianapolis, Ind.	8	16	25	46	74	105	155	212	284	367	454	554	660	788	938	1085	1245	1415	1576	1746	
Louisville, Ky.	12	26	39	64	95	135	192	250	324	411	509	620	743	882	1032	1193	1363	1542	1720	1908	
Flint, Mich.	2	5	9	19	35	53	87	127	175	239	302	375	455	555	676	795	924	1064	1197	1338	
Grand Rapids, Mich.	1	5	10	20	37	55	89	131	185	252	321	398	482	588	717	841	976	1121	1259	1408	
Columbus, Ohio	12	26	38	64	95	129	176	246	320	404	490	593	697	818	964	1104	1260	1424	1581	1749	
Northeast:																					
Portland, Maine	0	1	1	4	12	24	41	65	94	135	181	237	304	386	470	563	668	787	903	1032	
Albany, N.Y.	1	4	6	16	33	51	86	130	179	244	313	393	478	586	702	820	963	1110	1248	1402	
Binghamton, N.Y.	1	3	5	14	28	41	83	126	174	236	300	373	459	559	677	794	930	1075	1212	1360	
Syracuse, N.Y.	2	5	8	19	36	54	93	136	184	250	324	411	509	620	743	882	1032	1193	1360	1542	
Harrisburg, Pa.	8	17	28	52	83	116	163	228	295	377	463	567	667	792	936	1075	1239	1410	1573	1748	
Philadelphia, Pa.	8	20	31	57	91	125	175	238	307	384	475	576	681	811	955	1094	1262	1436	1604	1785	
Pittsburgh, Pa.	10	21	32	55	82	111	154	217	287	364	442	533	625	736	869	994	1140	1295	1458	1632	
Williamsport, Pa.	10	21	32	55	82	111	154	217	287	364	442	533	625	736	869	994	1140	1295	1458	1632	
Richmond, Va.	29	61	89	137	194	254	327	425	517	620	733	858	984	1120	1279	1450	1608	1786	1962	2147	
Southeast:																					
Macon, Ga.	58	127	195	278	375	471	580	715	868	998	1149	1314	1484	1656	1842	2029	2225	2421	2616	2814	
Raleigh, N.C.	39	82	118	174	240	311	389	476	576	686	818	976	1113	1255	1420	1579	1757	1936	2113	2298	
Memphis, Tenn.	39	85	127	183	258	337	422	529	646	783	935	1094	1257	1427	1618	1804	1999	2198	2398	2599	
Nashville, Tenn.	35	74	109	158	222	288	363	474	585	705	831	974	1120	1276	1454	1626	1810	1998	2184	2376	

LONG-TERM MEAN GROWING DEGREE DAYS (ADJUSTED 50° BASE):
ACCUMULATED WEEKLY MARCH 1 TO INDICATED DATES

Station	July 26	Aug. 2	Aug. 9	Aug. 16	Aug. 23	Aug. 30	Sept. 6	Sept. 13	Sept. 20	Sept. 27	Oct. 4	Oct. 11	Oct. 18	Oct. 25	Nov. 1	Nov. 8	Nov. 15	Nov. 22	Nov. 29	Dec. 6	
West:																					
Phoenix, Ariz.	3274	3499	3721	3943	4161	4373	4582	4792	4986	5168	5347	5511	5664	5802	5930	6040	6141	6218	6297	6372	6441
Fresno, Calif.	2422	2603	2773	2946	3115	3274	3436	3592	3734	3878	4016	4137	4250	4352	4446	4526	4596	4643	4683	4716	4750
Denver, Colo.	1663	1818	1971	2118	2266	2394	2512	2610	2700	2781	2852	2911	2958	3000	3033	3059	3079	3094	3106	3115	3121
Pocatello, Idaho	1389	1535	1677	1815	1943	2062	2172	2263	2332	2400	2452	2498	2532	2558	2579	2596	2610	2620	2628	2633	2635
Glasgow, Mont.	1366	1511	1658	1794	1925	2037	2135	2229	2300	2366	2427	2479	2529	2563	2591	2606	2615	2620	2623	2624	2624
Pendleton, Ore.	1611	1768	1919	2071	2214	2337	2465	2584	2685	2785	2863	2926	2981	3026	3057	3074	3087	3097	3109	3115	3115
North Central:																					
Des Moines, Iowa	1890	2057	2228	2384	2535	2688	2822	2942	3044	3133	3218	3289	3371	3427	3467	3489	3512	3527	3534	3539	3539
Green Bay, Wis.	1572	1702	1828	1948	2063	2174	2278	2368	2446	2511	2566	2611	2648	2673	2689	2697	2702	2705	2707	2708	2708
Madison, Wis.	1557	1708	1853	1986	2117	2249	2368	2471	2560	2633	2703	2759	2823	2863	2890	2907	2920	2929	2931	2934	2934
South Central:																					
Fort Smith, Ark.	2754	2958	3157	3349	3540	3726	3905	4070	4229	4378	4508	4628	4747	4843	4925	4981	5045	5097	5138	5169	5169
Dodge City, Kans.	2211	2358	2507	2651	2791	2929	3063	3194	3322	3451	3571	3687	3801	3911	4010	4099	4144	4172	4195	4213	4213
Wichita, Kans.	2392	2590	2788	2979	3166	3350	3529	3704	3878	4051	4214	4375	4534	4690	4843	4991	5134	5272	5405	5533	5533
Shreveport, La.	3124	3333	3542	3747	3951	4150	4345	4529	4709	4881	5034	5173	5309	5422	5521	5595	5674	5751	5814	5864	5864
East:																					
Columbia, Mo.	2226	2414	2598	2769	2937	3107	3263	3404	3535	3661	3756	3847	3944	4014	4059	4103	4144	4173	4192	4207	4207
St. Louis, Mo.	2313	2507	2696	2872	3046	3220	3381	3527	3661	3784	3892	3984	4071	4151	4205	4239	4278	4308	4326	4340	4340
Oklahoma City, Okla.	2629	2831	3032	3226	3415	3603	3779	3941	4095	4241	4367	4482	4597	4685	4759	4808	4865	4908	4942	4971	4971
Amarillo, Tex.	2368	2552	2736	2911	3080	3250	3407	3553	3690	3813	3926	4029	4127	4205	4273	4317	4372	4414	4451	4484	4484
Corpus Christi, Tex.	3704	3922	4138	4356	4573	4784	4988	5206	5411	5614	5798	5978	6154	6312	6452	6573	6691	6811	6917	7012	7012
South:																					
Fort Worth, Tex.	3132	3350	3567	3781	3990	4196	4397	4584	4766	4940	5094	5234	5376	5493	5592	5665	5746	5817	5877	5926	5926
Midland, Tex.	2950	3149	3347	3541	3734	3920	4101	4270	4456	4593	4733	4864	4990	5093	5182	5246	5319	5381	5437	5483	5483
Midwest:																					
Chicago, Ill.	1814	1989	2158	2316	2473	2631	2778	2905	3023	3123	3211	3283	3363	3415	3451	3473	3494	3512	3519	3524	3524
Wolverine, Ill.	1654	1803	1952	2098	2243	2388	2527	2661	2790	2908	3016	3114	3203	3282	3351	3411	3461	3501	3508	3513	3513
Peoria, Ill.	1922	2098	2266	2421	2574	2730	2896	3041	3161	3269	3366	3454	3533	3603	3663	3714	3759	3799	3834	3863	3863
Indianapolis, Ind.	1987	2142	2308	2464	2618	2770	2915	3041	3161	3269	3366	3454	3533	3603	3663	3714	3759	3799	3834	3863	3863
Louisville, Ky.	2301	2489	2673	2845	3018	3186	3353	3497	3630	3751	3859	3947	4041	4113	4166	4201	4241	4276	4298	4310	4310
North:																					
Flint, Mich.	1483	1628	1765	1893	2016	2145	2263	2364	2452	2527	2595	2652	2710	2752	2778	2796	2808	2820	2825	2828	2828
Grand Rapids, Mich.	1560	1712	1858	1993	2125	2260	2387	2494	2590	2668	2740	2799	2862	2903	2931	2946	2961	2974	2979	2983	2983
Columbus, Ohio	1917	2085	2247	2399	2553	2703	2849	2973	3087	3193	3282	3357	3436	3495	3533	3561	3585	3608	3620	3627	3627
Northeast:																					
Portland, Maine	1164	1293	1411	1532	1646	1755	1856	1945	2018	2087	2145	2192	2236	2271	2293	2308	2315	2324	2328	2330	2330
Portland, N.Y.	1554	1674	1791	1904	2013	2122	2227	2321	2404	2478	2544	2601	2650	2691	2724	2750	2769	2782	2790	2793	2793
Buffalo, N.Y.	1334	1473	1611	1750	1888	2024	2159	2284	2400	2508	2608	2699	2782	2858	2924	2981	3029	3070	3105	3134	3134
Syracuse, N.Y.	1511	1662	1805	1943	2082	2219	2353	2482	2607	2728	2844	2955	3061	3163	3252	3330	3399	3459	3511	3556	3556
Harrisburg, Pa.	1925	2105	2270	2433	2593	2747	2902	3031	3148	3256	3356	3452	3545	3624	3693	3753	3803	3848	3888	3923	3923
Southwest:																					
Philadelphia, Pa.	1969	2154	2323	2493	2660	2820	2985	3144	3298	3444	3584	3719	3849	3969	4080	4181	4271	4350	4419	4478	4478
Pittsburgh, Pa.	1756	1917	2068	2214	2356	2497	2635	2769	2898	3021	3139	3252	3360	3454	3534	3603	3662	3711	3750	3789	3789
Williamsport, Pa.	1697	1858	2006	2152	2294	2432	2569	2693	2806	2916	3014	3101	3178	3246	3305	3355	3400	3440	3475	3505	3505
Richmond, Va.	2335	2521	2701	2881	3056	3224	3394	3559	3715	3861	3991	4115	4224	4318	4400	4472	4538	4597	4648	4693	4693
Southeast:																					
Macon, Ga.	3014	3214	3415	3612	3808	3997	4185	4363	4532	4692	4839	4972	5095	5203	5292	5370	5441	5517	5574	5617	5617
Raleigh, N.C.	2489	2678	2867	3054	3227	3399	3562	3718	3868	3997	4114	4217	4314	4395	4460	4518	4568	4623	4683	4736	4736
Memphis, Tenn.	2804	3011	3214	3411	3604	3792	3974	4143	4303	4452	4584	4701	4816	4907	4981	5035	5093	5148	5217	5271	5271
Nashville, Tenn.	2373	2770	3165	3558	3942	4318	4685	5042	5390	5728	6057	6377	6688	6990	7283	7568	7844	8111	8369	8618	8618



Weather Data for the Week Ending July 2, 1983

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 May 29	PCT. NORMAL SINCE May 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	88	70	94	68	79	0	1.0	0	.4	2.9	69	37.2	122	93	59	2	0	6	3
MOBILE	86	71	91	68	79	-3	4.8	3.3	2.5	8.7	145	47.4	144	92	64	1	0	4	1
MONTGOMERY	88	70	94	69	79	-2	2.4	1.5	1.9	6.5	163	44.1	165	93	59	3	0	4	1
AK ANCHORAGE	65	52	69	51	59	2	.2	-.1	.2	1.0	91	3.5	80	87	48	0	0	3	0
BARROW	38	31	44	28	34	-3	.2	-.1	.1	.1	25	.4	24	92	77	0	0	1	0
FAIRBANKS	77	60	86	57	69	7	.4	-.1	.2	.7	47	1.5	41	74	37	0	0	3	0
JUNEAU	63	50	68	47	57	2	.4	-.4	.3	2.5	72	16.4	79	99	70	0	0	4	0
KODIAK	59	48	68	44	54	2	2.0	1.4	1.0	9.5	232	47.5	158	98	73	0	0	5	2
NOME	63	47	72	39	55	7	.2	-.2	.1	.7	47	2.5	48	77	52	0	0	3	0
AZ PHOENIX	104	76	107	74	90	0	0	-.1	0	0	0	5.2	173	29	8	7	0	0	0
PRESOTT	83	55	85	51	69	-2	0	-.4	0	0	0	4.9	80	51	18	0	0	0	0
TUCSON	100	65	103	62	83	-3	0	-.2	0	0	0	4.2	135	25	6	7	0	0	0
YUMA	101	75	105	72	88	-3	0	0	0	0	+100	1.3	144	43	15	7	0	0	0
AR FORT SMITH	87	68	92	66	78	-3	3.9	3.2	2.2	5.9	137	18.8	85	92	56	2	0	5	2
LITTLE ROCK	89	67	94	55	78	-3	1.9	1.2	1.3	3.2	82	25.1	92	91	63	3	0	5	1
CA BAKERSFIELD	86	58	93	52	72	-10	0	0	0	0	+100	6.9	192	75	29	1	0	0	0
EUREKA	66	55	69	54	61	5	1.1	1.0	1.0	1.6	200	36.7	167	93	70	0	0	0	1
FRESNO	89	61	97	57	75	-4	0	0	0	0	+100	16.3	243	70	20	2	0	0	0
LOS ANGELES	72	63	73	61	67	0	T	0	T	0	+100	20.6	261	81	63	0	0	0	0
RED BLUFF	87	62	96	58	74	-6	T	-.1	T	.2	40	29.3	234	71	25	1	0	0	0
SACRAMENTO	82	56	91	53	69	-5	0	0	0	.4	400	23.7	230	86	30	1	0	0	0
SAN DIEGO	73	66	75	65	70	2	0	0	0	0	+100	14.2	233	77	60	0	0	0	0
SAN FRANCISCO	67	55	70	53	61	-1	T	0	T	0	0	25.4	213	81	58	0	0	1	0
CO DENVER	76	55	88	50	66	-5	1.4	1.1	1.4	3.4	179	13.3	158	81	40	0	0	3	1
GRAND JUNCTION	88	61	94	58	75	-1	.1	0	.1	1.8	360	7.0	175	73	28	4	0	1	0
PUEBLO	86	57	95	53	72	-4	-.6	.3	.4	2.5	192	8.0	154	83	31	4	0	3	0
CT BRIDGEPORT	78	60	88	55	69	-2	1.4	.7	1.4	4.2	120	33.9	173	95	56	0	0	2	1
HARTFORD	83	57	97	49	70	-2	1.8	1.0	1.6	3.8	97	32.7	151	84	47	2	0	2	1
DC WASHINGTON	85	69	93	64	77	-1	2.4	1.6	1.3	7.9	203	28.3	151	85	57	2	0	2	1
FL APALACHICOLA	88	74	90	72	81	0	1.9	.5	1.3	8.0	143	35.1	156	94	66	1	0	2	2
DAYTONA BEACH	87	70	90	68	79	-2	T	-1.5	T	9.8	134	32.5	158	95	64	2	0	1	0
JACKSONVILLE	90	70	92	69	80	-1	3.5	2.2	1.4	8.8	142	34.1	143	98	62	3	0	0	0
KEY WEST	87	80	89	77	84	0	T	-1.0	T	6.1	105	35.7	235	80	64	0	0	2	0
MIAMI	90	78	93	76	84	2	.3	-1.6	.3	10.4	99	28.6	113	88	56	4	0	3	0
ORLANDO	91	74	93	73	83	1	1.5	-.4	1.4	9.4	112	28.6	126	93	55	6	0	2	1
TALLAHASSEE	90	71	93	70	81	0	1.3	-.5	.9	9.5	123	44.2	143	97	59	4	0	6	1
TAMPA	89	74	90	73	82	0	2.8	1.3	1.9	11.7	189	30.8	154	96	63	3	0	4	1
WEST PALM BEACH	90	76	91	74	83	2	-.4	-1.4	.4	13.3	143	40.9	158	88	57	6	0	1	0
GA ATLANTA	88	70	92	67	79	1	.6	-.3	.6	2.4	60	23.1	87	95	52	3	0	1	0
AUGUSTA	91	70	95	67	80	1	.7	-.3	.3	5.0	109	28.8	125	82	53	5	0	4	0
MACON	91	72	97	69	81	0	.5	-.5	.3	6.4	145	31.1	124	94	58	4	0	4	0
SAVANNAH	92	73	96	72	82	2	3.3	1.7	3.1	6.0	90	32.4	134	89	51	6	0	4	1
HI HILO	81	67	83	65	74	-1	1.7	-.1	.7	5.3	71	28.5	44	90	62	0	0	6	1
HONOLULU	88	72	89	70	80	0	T	-.1	T	.2	33	1.7	13	82	44	0	0	1	0
KAHULUI	85	69	86	66	77	-1	0	0	.1	.3	33	2.9	26	70	55	0	0	0	0
LIHUE	84	74	84	73	79	1	T	-.3	T	.8	42	5.6	24	74	52	0	0	1	0
ID BOISE	75	53	87	48	64	-6	.9	.7	.7	1.0	91	11.1	152	86	33	0	0	3	1
LEWISTON	74	55	85	51	65	-6	.6	.3	.3	1.7	100	7.9	113	96	43	0	0	3	0
POCATELLO	75	49	85	44	62	-5	.2	0	.1	1.3	100	8.8	135	87	37	0	0	4	0
IL CHICAGO	84	66	99	63	75	3	4.0	3.1	1.7	7.1	154	26.5	156	90	60	1	0	5	3
MOLINE	86	68	95	64	77	3	5.3	4.3	3.7	6.9	138	18.5	99	95	61	3	0	5	3
PEORIA	89	71	94	68	80	6	2.4	1.5	1.7	4.7	102	22.6	126	88	55	3	0	3	2
QUINCY	91	71	96	67	81	5	T	-1.0	T	1.1	24	15.4	82	86	50	3	0	0	0
ROCKFORD	83	68	95	64	75	4	2.6	1.5	1.2	3.7	70	16.9	89	88	60	1	0	4	3
SPRINGFIELD	91	71	96	69	81	5	1.7	.3	.7	2.6	60	17.1	97	95	57	4	0	3	1
IN EVANSVILLE	93	73	97	70	83	6	1.1	.3	.5	4.6	112	30.8	131	84	44	6	0	4	1
FORT WAYNE	87	68	95	64	77	5	1.9	1.0	1.3	3.9	91	16.2	87	93	60	3	0	4	1
INDIANAPOLIS	88	70	92	67	79	5	2.3	1.3	1.5	4.8	104	18.9	92	92	59	3	0	4	2
SOUTH BEND	85	69	96	64	77	5	1.9	1.0	.5	3.6	82	17.3	94	89	97	2	0	6	2
IA DES MOINES	85	70	91	65	77	3	2.5	1.7	1.0	4.6	96	19.1	118	88	64	3	0	6	3
SIOUX CITY	80	65	88	60	73	-1	1.1	-.2	.7	4.6	102	17.2	131	86	64	0	0	4	1
WATERLOO	82	65	90	63	73	2	4.5	3.5	1.7	6.7	131	20.5	124	89	63	1	0	5	4
KS CONCORDIA	88	67	98	62	78	1	.2	-.7	.2	3.4	72	14.8	106	91	50	3	0	1	0
DODGE CITY	90	65	102	60	78	0	.4	-.3	.4	5.6	156	15.7	147	82	42	3	0	2	0
GOODLAND	84	57	98	49	70	-4	.7	-.2	.7	2.6	81	10.0	114	84	33	3	0	2	1
TOPEKA	86	71	92	68	78	2	2.7	1.6	1.6	6.0	103	23.0	139	89	64	2	0	4	2
WICHITA	89	67	96	62	78	-2	2.2	1.3	1.6	7.3	152	27.2	157	93	51	3	0	3	1
KY BOWLING GREEN	89	70	95	66	80	3	1.2	-.1	.6	3.5	66	31.6	110	96	59	3	0	4	1
LEXINGTON	89	71	93	68	80	5	.1	-1.0	.1	3.1	62	23.2	94	82	47	3	0	1	0
LOUISVILLE	89	72	92	69	81	4	.7	-.1	.7	4.5	105	26.5	109	87	55	3	0	3	1
LA ALEXANDRIA	91	75	95	74	83	0	.5	-.4	.4</										

Weather Data for the Week Ending July 2, 1983

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 May 29	PCT. NORMAL SINCE May 29	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
ME SHREVEPORT	91	75	94	70	83	1	1.6	.8	1.2	7.0	167	31.0	126	92	60	6	0	3	1
	76	50	84	40	63	-1	.4	.4	.2	2.0	54	18.0	115	79	36	0	0	2	0
	74	54	85	47	67	1	1.5	.8	1.3	4.0	111	33.8	161	92	46	0	0	2	1
MD BALTIMORE	85	63	94	55	74	-1	.1	.7	.1	5.9	137	31.1	156	91	51	2	0	2	0
	83	62	90	51	73	-2	.7	.2	.5	5.0	119	27.0	126	100	67	1	0	2	0
MA BOSTON	84	63	94	57	74	2	.4	.2	.4	1.8	55	30.3	142	86	49	2	0	3	0
	74	59	88	55	67	2	1.4	.9	1.4	3.1	97	33.9	149	86	73	0	0	2	1
MI ALPENA	80	54	98	42	67	3	1.1	.4	.7	3.3	89	18.8	136	98	53	1	0	4	1
	84	64	95	58	74	4	3.9	3.1	2.0	5.7	146	18.5	116	89	46	1	0	4	3
MI DETROIT	82	63	93	53	73	4	3.1	2.4	1.4	4.3	113	15.9	105	91	58	1	0	4	3
	87	63	93	55	72	2	1.0	.1	.9	2.7	60	17.6	105	84	67	1	0	4	1
MI GRAND RAPIDS	79	57	91	43	68	2	1.0	.3	.6	2.3	64	13.7	106	86	56	1	0	3	1
	83	63	94	50	73	3	3.7	2.9	2.0	4.7	121	17.4	114	93	56	1	0	4	3
MI LANSING	74	48	87	37	61	-2	.2	.6	.1	5.4	120	22.0	122	96	49	0	0	4	0
	81	62	90	56	72	3	1.0	.4	.8	2.7	87	13.5	88	90	59	1	0	3	1
MI MUSKEGON	79	52	89	46	66	4	.5	.3	.3	3.6	92	15.2	106	95	48	0	0	2	0
	76	59	82	51	67	-1	2.0	1.2	1.8	4.8	104	8.8	73	92	57	0	0	3	1
MN ALEXANDRIA	70	52	80	46	61	-2	1.0	.1	.4	2.4	53	10.4	79	94	55	0	0	5	0
	74	53	81	43	64	-1	1.1	.2	.6	5.5	131	9.3	86	97	54	0	0	2	1
MN INT'L FALLS	80	64	89	59	72	0	1.0	.1	.3	5.5	117	20.3	162	91	59	0	0	5	0
	76	61	88	57	68	-1	4.7	3.7	2.0	5.9	120	16.1	119	98	76	0	0	4	0
MS GREENWOOD	90	76	93	74	83	1	.3	.6	.2	6.9	168	41.7	139	94	65	3	0	3	0
	90	74	93	73	82	1	.2	.6	.1	3.2	89	48.6	168	95	61	4	0	3	0
MS JACKSON	88	69	91	68	79	-1	3.1	2.0	2.5	6.9	164	45.3	155	100	67	3	0	3	0
	90	73	97	70	81	-1	1.6	.8	.9	2.6	62	26.2	110	95	54	4	0	5	1
MO CAPE GIRARDEAU	86	68	92	66	77	1	1.2	.3	.6	3.9	89	21.3	115	97	62	1	0	3	1
	85	69	92	64	77	0	.7	.3	.3	4.9	92	20.5	116	95	62	2	0	3	0
MO KANSAS CITY	92	74	97	72	83	5	.3	.6	.2	4.4	98	23.1	127	90	43	6	0	3	0
	87	68	95	64	78	1	.5	.5	.4	2.2	42	20.2	99	88	53	2	0	2	0
MO SAINT LOUIS	81	54	86	50	67	-1	.2	.2	.1	1.0	40	5.0	56	79	28	0	0	2	0
	80	55	84	48	68	1	.3	.2	.2	.9	31	3.4	52	76	30	0	0	2	0
MO SPRINGFIELD	72	52	78	40	62	-4	1.3	.8	.6	3.1	97	6.7	71	86	44	0	0	5	2
	77	52	88	43	64	-2	.4	0	.3	1.5	63	6.0	90	93	34	0	0	4	0
MT BILLINGS	71	54	79	51	63	-1	.9	.6	.4	2.6	113	5.3	85	82	41	0	0	6	0
	69	52	80	43	61	-1	1.3	.9	.5	3.5	140	19.1	119	96	54	0	0	6	1
MT KALISPELL	84	56	89	51	70	-1	T	.5	T	1.6	50	4.1	50	79	23	0	0	0	0
	68	50	83	42	59	-5	1.5	1.2	.5	2.7	123	8.8	122	94	57	0	0	6	0
NE GRAND ISLAND	85	67	98	64	76	1	1.3	.5	1.0	6.5	144	16.8	129	87	58	2	0	2	1
	88	70	95	66	79	4	3.1	2.2	1.5	7.7	171	19.2	140	93	56	3	0	4	3
NE LINCOLN	84	67	94	63	75	1	2.3	1.3	.7	7.2	144	17.7	132	89	59	2	0	5	3
	81	60	94	57	70	-1	1.3	.5	.8	3.3	77	10.6	95	90	53	2	0	3	1
NE NORFOLK	84	69	89	65	77	2	.8	.1	.7	5.0	102	19.4	129	91	64	0	0	4	1
	78	54	91	50	66	-6	.7	.1	.5	2.0	57	10.5	119	90	46	1	0	3	1
NE NORTH PLATF	78	54	91	50	66	-6	2.4	1.8	1.2	6.6	194	14.3	149	89	52	1	0	5	3
	78	59	91	55	68	-4	T	.2	T	2.3	230	8.6	160	63	19	0	0	0	0
NV VALENTINE	82	44	84	38	63	0	T	.2	T	0	0	2.4	126	26	11	7	0	0	0
	98	73	101	70	86	-2	0	.1	0	.5	100	6.7	163	65	17	0	0	0	0
NV LAS VEGAS	83	46	88	40	64	-2	0	.1	0	.5	100	6.7	163	65	17	0	0	1	0
	82	49	86	41	65	-3	T	.1	T	1.2	120	6.0	120	63	17	0	0	1	0
NV RENO	82	49	86	41	65	-3	T	.1	T	1.2	120	6.0	120	63	17	0	0	1	0
	80	51	88	43	66	-2	.1	.6	.1	3.9	111	26.8	156	93	48	0	0	2	0
NH WINNEMUCCA	85	60	93	51	72	0	.5	.2	.3	3.8	115	27.1	131	91	45	3	0	2	0
	92	61	96	59	77	-1	T	.2	T	1.3	186	4.9	143	46	13	5	0	1	0
NJ ATLANTIC CITY	94	63	99	55	78	2	.2	.4	.2	2.4	80	5.5	75	80	17	5	0	1	0
	97	65	102	61	81	0	0	.2	0	.9	82	2.9	94	69	13	6	0	0	0
NM ALBUQUERQUE	79	55	90	48	67	-3	.9	.1	.8	2.6	67	27.3	162	98	58	1	0	2	1
	80	59	90	49	69	2	1.8	1.0	1.4	4.9	120	23.6	135	88	49	1	0	2	1
NY BINGHAMTON	82	60	88	48	71	2	1.7	1.1	.9	3.5	117	14.8	86	86	48	0	0	4	2
	82	64	95	60	73	-1	.9	.2	.9	3.1	84	32.5	158	84	50	2	0	1	1
NY BUFFALO	82	60	89	50	71	1	.5	.1	.4	2.9	91	14.5	94	87	48	0	0	3	0
	82	58	88	49	70	1	1.0	.1	.8	2.4	57	16.6	88	94	51	0	0	3	1
NY SYRACUSE	85	66	88	64	75	3	1.7	.7	.6	3.9	78	28.0	115	100	65	0	0	5	2
	88	72	92	70	80	3	.4	.4	.4	3.8	93	22.7	101	91	55	3	0	1	0
NC CHARLOTTE	86	69	90	67	78	2	1.9	1.0	.7	6.6	140	26.1	121	90	56	1	0	4	3
	84	70	86	62	77	1	1.0	.1	1.0	4.9	98	36.1	150	91	59	0	0	1	1
NC GREENSBORO	89	71	96	66	80	2	1.1	.3	.8	5.1	84	31.1	128	90	49	3	0	2	1
	88	68	93	66	78	2	.3	.7	.3	3.2	71	28.2	134	93	57	3	0	1	0
NC HATTERAS	89	75	92	73	82	3	1.9	.4	1.5	7.3	112	32.0	133	91	60	5	0	3	1
	76	56	82	53	66	-1	.7	.1	.6	3.0	88	7.3	83	92	47	0	0	3	1
NC NEW BERN	77	57	83	47	67	-1	2.4	1.6	1.4	4.0	111	9.1	99	93	55	0	0	3	2
	74	55	82	50	65	-2	2.3	1.6	1.0	5.2	163	9.6	117	86	61	0	0	3	3
NC RALEIGH	79	53	84	45	66	-1	.6	0	.5	1.5	50	4.8	66	86	44	0	0	2	0
	85	64	93	59	74	4	1.6	.8	.9	2.7	69	18.9	101	90	58	2	0	3	1
ND BISMARCK	89	70	92	63	79	5	1.1	.1	.5	2.2	48	20.6	93	88	55	4	0	3	1
	87	65	96	60	76	6	4.3	3.5	1.9	5.5	134	18.9	103	89	54	2	0	5	3
OH AKRON-CANTON	89	70	92	63	79	5	1.1	.1	.5	2.2	48	20.6	93	88	55	4	0	3	1
	87	65	96	60	76	6	4.3	3.5	1.9	5.5	134	18.9	103	89	54	2	0	5	3
OH CINCINNATI	89	70	92	63	79	5	1.1	.1	.5	2.2	48	20.6	93	88	55	4	0	3	1
	87	65	96	60	76	6	4.3	3.5	1.9	5.5	134	18.9	103	89	54	2	0	5	3
OH CLEVELAND	89	70	92	63	79	5	1.1	.1	.5	2.2	48	20.6	93	88	55	4	0	3	1
	87	65	96	60	76	6	4.3	3.5	1.9	5.5	134	18.							

Weather Data for the Week Ending July 2, 1983

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 May 29	PCT. NORMAL SINCE May 29	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	85	66	90	61	76	2	2.8	2.0	2.0	6.1	136	19.8	102	85	56	1	0	3	1
TOLDO	84	65	95	61	75	4	3.2	2.4	1.8	4.6	112	15.7	98	90	60	2	0	4	2
YOUNGSTOWN	84	63	92	50	73	4	5.0	4.1	3.1	6.0	140	19.7	103	92	57	2	0	5	3
OK OKLAHOMA CITY	89	68	93	63	79	-1	2.0	1.2	1.2	4.6	98	19.4	113	92	51	3	0	2	2
TULSA	89	70	95	67	80	-1	.9	.1	.6	1.9	35	19.4	97	96	61	3	0	4	1
OR ASTORIA	67	55	72	51	61	3	1.4	1.0	.6	5.8	200	44.2	128	90	66	0	0	0	1
BURNS	69	44	75	40	56	-9	1.0	.8	.8	1.8	180	10.6	183	84	42	0	0	5	0
MEDFORD	77	55	84	52	66	-3	.2	.1	.2	.8	114	12.5	123	85	41	0	0	2	0
PENDLETON	73	54	82	49	63	-7	1.1	1.0	.4	1.5	214	8.1	129	88	40	0	0	5	0
PORTLAND	71	58	78	56	64	-1	1.0	.8	.3	2.5	156	26.5	137	89	57	0	0	6	0
SALEM	72	53	79	48	63	-1	1.2	1.0	.6	3.2	229	32.6	152	86	53	0	0	5	1
PA ALLENTOWN	83	61	91	51	72	-1	1.1	.2	1.1	5.5	134	28.1	134	86	48	2	0	1	1
ERIE	83	63	89	54	73	5	2.6	1.7	1.6	4.4	100	16.9	93	84	51	0	0	4	1
HARRISBURG	83	60	90	51	72	-3	.5	.4	.4	3.3	77	26.7	138	89	47	2	0	2	0
PHILADELPHIA	83	62	91	55	72	-2	.9	0	.9	2.6	57	30.4	150	94	49	2	0	1	1
PITTSBURGH	84	62	90	53	73	2	3.2	2.4	1.6	6.2	159	21.6	112	78	48	1	0	3	3
SCRANTON	80	59	90	45	70	-1	1.7	.9	1.7	5.4	135	33.6	143	85	49	1	0	3	1
RI PROVIDENCE	83	61	94	56	72	1	.9	.3	.7	4.2	127	37.3	170	82	42	2	0	3	1
SC CHARLESTON	90	74	96	72	82	3	2.4	.7	1.4	3.4	45	30.2	171	94	52	4	0	3	1
COLUMBIA	92	70	97	67	81	1	.8	.4	.8	2.9	55	25.7	106	93	49	5	0	1	1
FLORENCE	89	72	93	70	81	2	1.6	.4	1.0	6.5	120	30.6	145	94	62	5	0	3	1
GREENVILLE	87	70	90	69	79	2	2.3	1.2	1.0	4.8	86	29.5	106	96	60	2	0	4	0
SD ABERDEEN	77	59	83	53	68	-1	1.4	.7	.5	4.9	129	10.2	107	96	58	0	0	6	0
HURON	78	63	89	57	71	-1	1.7	1.1	1.0	4.7	124	9.7	95	97	65	0	0	4	2
RAPID CITY	75	54	84	46	65	-5	2.2	1.5	1.6	3.0	77	7.5	76	90	52	0	0	4	1
SIoux FALLS	77	63	86	59	70	-2	2.4	1.6	.8	6.9	160	16.8	131	99	77	0	0	5	2
TN CHATTANOOGA	88	70	92	66	79	2	1.8	.9	.8	4.4	110	27.9	88	88	51	2	0	3	2
KNOXVILLE	88	67	89	65	78	1	.8	.2	.4	3.3	73	21.2	90	97	57	0	0	2	0
MEMPHIS	90	74	92	73	82	1	1.6	.8	1.2	3.7	86	30.7	103	95	61	4	0	5	1
NASHVILLE	90	71	93	67	81	2	1.0	.2	.6	4.3	100	30.7	113	92	59	3	0	3	1
TX ABILENE	97	71	102	63	84	1	.8	.3	.8	4.8	155	10.1	89	77	28	7	0	1	1
AMARILLO	94	62	102	55	78	0	.1	.7	T	2.2	54	9.5	101	80	23	6	0	3	0
AUSTIN	94	75	95	70	84	1	T	.5	T	4.0	111	20.3	117	89	47	7	0	1	1
BEADMONT	88	78	90	76	83	0	1.1	.1	.7	8.5	181	34.3	142	97	73	1	0	3	0
BROWNSVILLE	97	79	98	77	88	4	0	.5	0	2.6	87	7.5	76	86	49	.7	0	0	0
CORPUS CHRISTI	95	76	97	70	86	2	.6	0	.6	2.5	66	12.4	94	92	51	7	0	1	1
DEL RIO	101	76	105	69	88	3	-1	.4	.1	1.1	52	5.1	63	79	35	7	0	1	0
EL PASO	98	61	102	54	80	-3	0	.3	0	.2	25	3.1	141	34	7	7	0	0	0
FORT WORTH	95	73	98	69	84	-1	.4	.1	.3	3.4	106	16.9	97	83	43	7	0	2	0
GALVESTON	88	81	89	77	85	2	.3	.6	.2	3.4	81	15.8	88	88	73	0	0	2	0
HOUSTON	93	77	95	73	85	3	.6	.3	.6	5.8	118	23.0	98	92	56	6	0	2	1
LUBBOCK	98	63	103	57	81	1	.5	.1	.5	1.8	56	7.4	86	79	20	6	0	1	0
MIDLAND	102	68	104	61	85	4	0	.4	0	.5	28	2.6	42	62	15	7	0	0	0
SAN ANGELO	96	71	99	64	84	0	.8	.5	.8	4.1	186	8.8	99	90	32	7	0	1	1
SAN ANTONIO	97	77	98	67	87	3	T	.6	T	1.4	39	12.8	89	81	35	7	0	0	0
VICTORIA	94	77	96	72	86	2	T	.9	T	3.0	56	14.7	83	94	54	7	0	0	0
WACO	97	75	99	70	86	2	T	.4	T	2.4	77	12.5	69	84	41	7	0	0	0
WICHITA FALLS	94	69	98	64	81	-2	.9	.3	.6	5.4	154	15.3	105	86	43	6	0	2	1
UT BLANDING	82	51	86	48	66	-5	.4	.2	.3	1.0	200	6.8	158	67	30	0	0	2	0
CEDAR CITY	86	55	88	52	70	0	0	.1	0	.5	83	7.4	154	39	13	0	0	0	0
SALT LAKE CITY	84	63	91	57	74	0	.5	.2	T	1.0	83	11.6	132	63	25	2	0	0	0
VT BURLINGTON	76	56	85	47	66	-2	T	.3	.3	2.3	55	22.0	145	84	44	0	0	2	0
VA NORFOLK	87	69	94	64	78	1	.4	.6	.2	4.1	95	26.6	127	90	55	3	0	2	0
RICHMOND	89	71	97	66	80	4	.2	.7	.2	5.6	133	24.9	127	86	58	4	0	2	0
ROANOKE	85	65	93	60	75	1	1.4	.6	.7	3.2	82	26.1	132	95	57	2	0	4	2
WA COLVILLE	70	52	81	46	61	-3	.7	.5	.2	3.2	200	15.2	165	90	57	0	0	5	0
QUILLAYUTE	66	48	69	41	57	0	1.4	.8	.8	5.4	150	59.7	113	98	62	0	0	4	1
SEATTLE-TACOMA	69	54	75	50	61	-1	.4	.2	.4	2.3	135	20.9	109	90	56	0	0	3	0
SPOKANE	71	54	82	50	63	-3	.5	.3	.3	2.3	177	10.0	105	88	48	0	0	2	0
YAKIMA	76	54	82	44	65	-3	.6	.4	.3	.8	133	7.2	185	79	36	0	0	4	0
WV BFCLEY	80	63	87	55	72	3	2.4	1.4	1.7	7.3	166	18.2	81	91	58	0	0	3	2
CHARLESTON	90	67	95	57	78	5	1.4	.4	.8	3.3	85	20.0	94	95	49	4	0	3	1
HUNTINGTON	89	69	94	60	79	5	1.5	.6	.7	3.0	73	19.0	89	88	50	3	0	4	1
PARKERSBURG	86	68	90	60	77	4	1.0	.1	.7	2.5	48	21.1	92	86	49	2	0	3	1
WI GREEN BAY	79	60	92	52	69	2	1.0	.2	.8	2.1	57	11.9	91	91	55	1	0	3	1
LA CROSSE	80	63	91	57	72	0	1.6	.7	.6	2.2	47	11.8	79	98	63	1	0	7	1
MADISON	80	63	92	57	71	2	1.6	.7	.5	2.7	59	14.1	94	93	63	1	0	6	1
MILWAUKEE	80	65	96	59	73	4	1.1	.2	.6	2.2	54	19.3	130	86	58	1	0	4	1
WAUSAU	81	61	98	52	71	3	.4	.5	.3	1.7	36	10.6	70	89	47	1	0	3	0
WY CASPER	75	52	86	49	64	-4	.3	.1	.3	3.8	253	10.3	149	87	35	0	0	3	0
CHEYENNE	71	49	83	45	60	-6	.5	.1	.4	3.3	143	12.4	170	91	51	0	0	3	0
LANDER	78	51	83	46	64	-3	.2	.1	.1	1.5	83	10.3	118	75	29	0	0	2	0
SHERIDAN	82	53	87	48	67	1	T	.4	T	.5	19	4.0	43	77	30	0	0	1	0
PR SAN JUAN	92	79	95	78	86	3	1.8	.8	1.5	3.4	64	17.9	80	84	58	6	0	5	1

BASED ON PRELIMINARY RFPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Crop Acreage Highlights

CORN planted for all purposes is estimated at 60.1 million acres, down 27 percent from last year but up 2 percent from the April intentions. Growers expect to harvest 52.5 million acres for grain, down 28 percent from 1982.

SORGHUM planted for all purposes is estimated at 11.6 million acres, a decline of 28 percent from both 1982 and 1981 and the lowest acreage planted since 1949.

FEED GRAIN planted acreage (corn, sorghum, oats and barley) totaled 103 million acres, down 16 percent from 1982. Acreage intended for grain is placed at 81.6 million acres, down 24 percent from a year earlier.

ALL WHEAT acreage seeded is estimated to be 76.6 million acres, down 12 percent from last year. Durum wheat seeded acreage, at 2.55 million acres, is 41 percent less than last year. Other spring

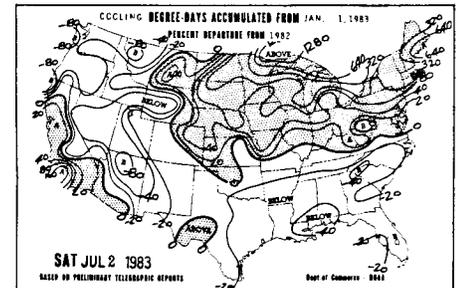
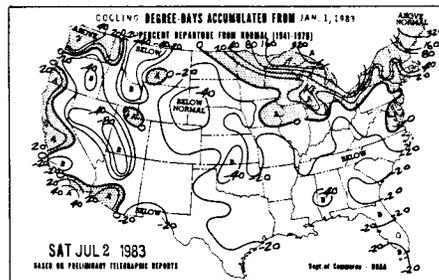
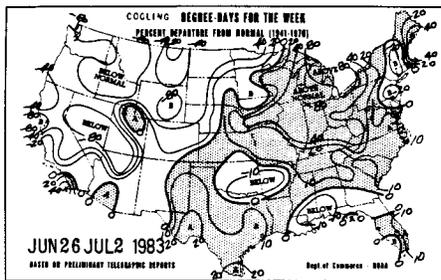
wheat, at 11.6 million acres, is 30 percent below 1982. Winter wheat acreage for harvest, at 47.7 million acres, is down 18 percent from last year.

FOOD GRAIN seeded acreage (wheat, rice and rye), at 81.7 million acres is 12 percent below 1982. Acreage harvested and to be harvested for grain is placed at 64.5 million acres, down 22 percent from 1982.

COTTON acreage planted is estimated at 8.30 million acres, 27 percent below last year and 42 less than 1981.

SOYBEAN area planted is estimated at 63.3 million acres down 12 percent from a year earlier and 7 percent less than 1981.

OILSEEDS planted acreage (cotton, flaxseed, peanuts, soybeans and sunflower) totals 76.7 million acres, 15 percent less than planted in 1982.



Use of Growing Degree Units in Corn Production

For years, the practice has been to label corn maturity in days. A 135 day variety would presumably reach maturity 135 days after it was planted. This system does not take into account the complicated physiological processes that control the growth and development of corn. The number of days required to reach maturity depends on the location of the planting, and the weather that the plant is subjected to in a particular growing season. In most years, the period will be more or less than 135 days. It is hard to decide which maturity to plant to achieve maximum production. A delayed planting might not provide the required number of days for your variety to mature.

Each day does not contribute equally to the growth of plants. Growth is faster during the warm season than it is in cold weather. On the other hand, summer temperature can be too high for optimum growth. Although other factors than temperature enter into determining the rate of growth,

there is a growing acceptance among seed producers to use the temperature based Growing Degree Units (GDU) concept to express maturity. There have been many of these "heat-unit" systems devised over the years. The one currently in use for corn is that proposed by the National Oceanic and Atmospheric Administration (Formerly U.S. Weather Bureau).¹

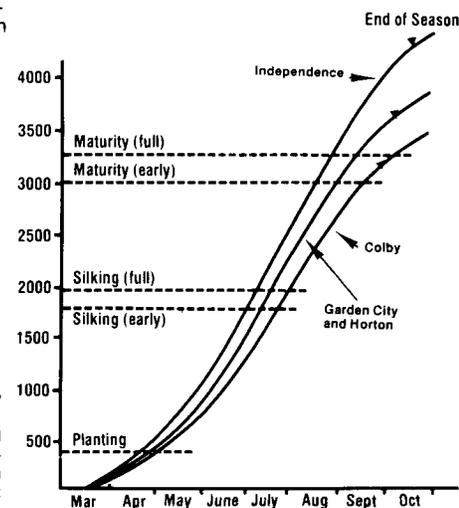
¹ In this system, Growing Degree Units are calculated by subtracting a base temperature of 50° (F) from the average of the maximum and minimum temperatures for the day. Corn doesn't grow much at temperatures below 50°. As the temperature rises, corn grows faster if moisture is plentiful. However, at a temperature higher than 86° the roots have increasing difficulty taking in water fast enough to keep the plant growing at full speed. GDU are calculated by the following equation.

$$GDU = \frac{Max\ Temp. + Min\ Temp. - 50^\circ}{2}$$

NOTE: Minimum temperatures below 50° are counted as 50° and temperatures above 86° are counted as 86°.

For example a day with temperature extremes of 82° and 60° would have contributed 21 GDU. A day with a high temperature of 90° and a low of 48°, will be considered as one with temperatures of 86° and 50° for purposes of calculation. That day would have had 18 GDU.

GDU's Required to Reach:		
Silking Maturity		
Early Season Variety	1390	2610
Full Season Variety	1560	2830



National Agricultural Summary

June 27 to July 3

HIGHLIGHTS: Heavy rainfall throughout most of the eastern half of the Nation limited fieldwork but helped relieve dry conditions. However, excessive rain in portions of the Great Plains and through the Corn Belt caused flash flooding and resulted in damage to some crops. Timely rains across the northern Plains improved pastures, ranges, and growing crops. However, eastern Montana needs additional rain. Soil moisture supplies were rated adequate to surplus except from Kentucky eastward to Virginia and North Carolina where some shortages were reported. Portions of Texas and the Southwest also showed some short moisture levels. Most farmers had less than 5 days available for fieldwork except in the Northeast and Southwest where 5 to 7 days were suitable. Corn was silking as far north as Virginia. In southern areas, many fields were in the dough stage with some early-planted fields in the dent stage. Soybean seeding reached 94% complete. Planting in the Southeast has been slow because many producers are waiting to plant double-cropped soybeans after completing the late small grain harvest. Winter wheat harvesting was 21% finished in the 15 major producing States, well behind the average progress of 43%. Spring wheat was 47% headed. In the 14 major cotton producing States, 33% of the acreage was squaring; 7% was setting bolls. Grain sorghum seeding was 95% finished. Tobacco harvesting continued in the Southeast. Rice was 8% headed, half the average pace. Pastures were in fair to good condition except in portions of the Southwest and Texas where conditions were poor to fair.

SMALL GRAINS: Winter wheat continued in fair to mostly good condition. Combining in the 15 major producing States was 21% complete, trailing last year's 25% and the 43% average. Harvesting was underway in the Corn Belt and as far north as Kansas on the Great Plains. Scattered showers slowed progress across most of the eastern half of the Nation. Severe thunderstorms caused minimal lodging across portions of the northern Plains. Hot temperatures in Texas aided maturity on the Plains and promoted rapid harvesting. Combining reached 69% finished in that State.

Spring wheat was 47% headed, 5 points ahead of average. Showers replenished soil moisture supplies across the five major producing States leaving the crop in mostly good condition.

CORN: Corn was silking as far north as Virginia where 12% of the acreage was in the silk stage. In Georgia, 79% of the acreage was silking, 34% was in the dough stage, and 13% was in the dent stage. Warmer weather and mostly adequate soil moisture improved prospects for the crop in all regions. Average height of plants in Indiana was 25 inches and in Illinois, 32 inches; normal height for this date is 34 and 41 inches, respectively.

SOYBEANS: Soybean planting in the 18 major producing States was 94% complete, 1 point behind last year. Planting was virtually complete in the Corn Belt. However, producers in Mississippi lagged normal by 17 percentage points; Kentucky and Alabama farmers trailed the average by 14 and 10 points, respectively. Most of the remaining acreage in other areas will be planted with double-cropped soybeans as the late small-grain harvest is complete. Stands were in fair to mostly good condition with 2% of the crop blooming.

SORGHUM: Sorghum planting was 95% complete in the seven major producing States, behind the 97% average. Oklahoma producers were 13 points slower

than average, and Kansas growers trailed the average by 5 points. Nebraska and South Dakota were the only States to finish planting. In Texas, 98% of the acreage was planted, 59% was heading, 34% was turning color, and 9% was mature. Harvesting was underway in the Lower Rio Grande Valley of Texas.

COTTON: In the 14 major producing States, 33% of the cotton acreage was squaring, compared with 1982's 46%. Progress ranged from none in Oklahoma to 95% squared in Arizona. Plants bloomed and started to set bolls on 7% of the acreage, mainly in the extreme South. Texas producers finished planting, but replanting of some hail-damaged fields will be necessary. Hot temperatures stimulated crop development in the southern half of the State.

OTHER CROPS: Tobacco transplanting was virtually complete in the major producing areas. Growers began topping the crop in the Southeast. Blue mold was reported in scattered areas, but damage was limited. Harvesting advanced to 9% complete in Georgia, well behind the 20% average.

Peanuts were in fair to good condition. In Alabama, 48% of the acreage was pegging and, in Georgia, 83% was blooming and 50% was pegging. Texas peanuts were 89% planted. The application of fungicides was active.

Rice was 27% headed in Texas, 38 points behind the average. In Louisiana, heading reached 21%, 6 points behind that of a year ago. The crop generally rated fair to good.

Frequent showers across most of the eastern half of the Nation delayed hay cutting. Wet conditions lowered the quality of cut hay in many areas.

FRUITS AND NUTS: The peach harvest crept northward. Picking in Georgia was 68% finished, and in South Carolina, the harvest was 30% complete. Warmer weather has benefited northern fruit crops. Sweet cherry picking began in New York and tart cherry growers were preparing to start harvesting in Michigan.

Florida's citrus areas had ideal growing conditions and very little irrigation was needed. Valencia oranges were holding well, but supplies were running low. The Texas pecan crop continued to develop normally. Arizona's citrus groves remained in good condition, Valencia orange picking was limited. The Thompson seedless grape harvest was in full swing. California growers harvested apricots, avocados, figs, grapes, nectarines, peaches, plums and oranges. Almonds and walnuts sized well.

VEGETABLES: Northern farmers harvested a variety of early summer vegetables. Warmer temperature and improved moisture conditions aided development in most regions. Florida's vegetable shipments declined 15% from the previous week. Volumes were unchanged for sweet corn, and increased for watermelons. All other crops registered declines. California and Texas growers continued harvesting a variety of crops. Tomato picking for fresh market and processing continued very active in California.

PASTURES AND LIVESTOCK: Pastures and ranges were in fair to good condition, except in portions of the Southwest and Texas where dry conditions resulted in poor to fair conditions. Stockwater supplies were becoming short in some of these dry areas. Snow and muddy conditions limited the return of livestock to higher elevation ranges in the West.

CROP PROGRESS

FOR WEEK ENDING JULY 3, 1983

WINTER WHEAT % HARVESTED				COTTON % SQUARING			SOYBEANS % PLANTED			SOYBEANS % BLOOMING					
	1983	1982	AVG.	1983	1982	AVG.	1983	1982	AVG.	1983	1982	AVG.			
CALIF	65	65	73	ALA	40	80	66	ALA	90	100	100	ALA	7	6	7
COLO	0	0	0	ARIZ	95	90	90	ARK	89	91	91	ARK	0	0	2
IDAHO	0	0	0	ARK	50	90	81	GA	93	91	93	GA	5	9	10
ILL	12	41	41	CALIF	45	50	66	ILL	100	100	99	ILL	6	20	9
IND	5	20	15	GA	78	87	88	IND	100	100	100	IND	0	10	5
KANS	5	15	50	LA	35	86	66	IOWA	100	100	100	IOWA	0	0	2
MO	29	28	39	MISS	60	92	80	KANS	95	60	90	KANS	1	1	5
MONT	0	0	0	MO	26	86	64	KY	76	91	90	KY	0	0	0
NEBR	0	1	15	N MEX	27	70	78	LA	90	93	96	LA	8	7	8
OHIO	0	2	2	N C	23	80	59	MICH	100	100	100	MICH	0	0	0
OKLA	50	55	90	OKLA	0	1	5	MINN	100	100	100	MINN	1	0	1
OREG	0	0	0	S C	45	94	89	MISS	78	95	95	MISS	0	0	0
S DAK	0	0	1	TENN	19	74	56	MO	91	85	91	MO	0	0	3
TEX	69	62	78	TEX	19	22	34	NEBR	100	100	100	NEBR	0	0	2
WASH	0	0	0					N C	94	84	93	N C	0	0	0
								OHIO	100	100	100	OHIO	0	0	0
								S C	91	91	94	S C	0	0	0
								TENN	85	92	89	TENN	0	3	2
15 STATES	21	25	43	14 STATES	33	46	51	18 STATES	94	95	96	18 STATES	2	5	4

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

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

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

SPRING WHEAT % HEADED			
	1983	1982	AVG.
IDAHO	48	58	58
MINN	57	44	57
MONT	40	2	15
N D	37	20	31
S DAK	74	67	81
5 STATES	47	30	42

THESE 5 STATES PRODUCED 96% OF THE 1982 SPRING WHEAT CROP.

COTTON % SETTING BOLLS			
	1983	1982	AVG.
ALA	5	6	6
ARIZ	60	40	45
ARK	0	6	5
CALIF	3	5	8
GA	19	34	49
LA	4	7	16
MISS	0	7	8
MO	0	0	0
N MEX	0	0	3
N C	7	8	10
OKLA	0	0	0
S C	0	39	34
TENN	0	5	1
TEX	7	11	15
14 STATES	7	10	14

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

RICE % HEADED			
	1983	1982	AVG.
ARK	0	0	0
CALIF	0	0	0
LA	21	27	34
MISS	0	0	1
TEX	27	67	65
5 STATES	8	15	16

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

SORGHUM % PLANTED			
	1983	1982	AVG.
COLO	93	93	94
KANS	90	70	95
MO	94	86	87
NEBR	100	100	100
OKLA	85	75	98
S DAK	100	95	100
TEX	98	98	99
7 STATES	95	89	97

THESE 7 STATES PRODUCED 90% OF THE 1982 SORGHUM 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 Offices in cooperation with the National Weather Service.

ALABAMA: Variable rainfall. Air temperatures near normal.

Soil moisture adequate to surplus. Field-work: 2.6 days. Soybeans planted 90%, 1982 100%, average 100%. Soybeans blooming 7%, 1982 6%, average 7%. Wheat harvested 65%, 1982 94%. Corn silked 50%, 1982 81%, average 66%. Cotton squaring 40%, 1982 80%, average 86%. Cotton setting bolls 5%, 1982 6%, average 6%. Peanuts pegging 48%, 1982 38%, average 30%. Activities: Planting soybeans; cultivating field crops; controlling pests on fruit, vegetables, and crops; and harvesting wheat, vegetables, and peaches. Conditions: Cotton fair to good; corn, soybeans, and sorghum mostly good; peanuts, pasture and live-stock good.

ALASKA: Temperatures averaged few degrees above normal. Kodiak was wet, while Tanana Valley had moderate rainfall. Rainfall light over Matanuska Valley. Seasonal totals below normal except for Kodiak.

Hot, dry weather hastened crop development throughout Railbet. Welcomed rains fell late

week. Growers had 4 to 6 days suitable making hay. Seventy five percent first cutting harvested. Small grains made moderate to rapid growth. Average heights ranged 12 to 20 in. compared to 4 to 15 in. year ago. Barley condition mostly good, 10% preboot stage development, 90% in boot stage or beyond. Last year, 30% had reached boot stage. Early seeded fields starting head out. Potato heights ranged 9 to 12 in. Topsoil moisture mostly short to adequate.

ARIZONA: Sunny skies dominated weather patterns over State, windy conditions occurred northern areas last half week. Northern areas experienced warm days, cool nights, hot days, warm nights prevalent southern areas. Temperatures ranged normal to 6° below normal. Warm temperatures throughout State June drying feed supplies. Range, pasture conditions normal, livestock good condition. Summer rains would be welcome all areas as tank water supplies short to adequate. Soil moisture short. No significant insect damage reported. Here-to-fore cool nights slowed down cotton growth rate, caused cotton to be behind. However hot days,

warm nights last week June boosted plant growth, fruit set. Approximately 95% cotton squaring compared 90% both last year, average. Approximately 60% cotton setting bolls, compared to 40% last year, average 45%. Cotton planted behind wheat Yuma area. News reports of flood damage to cotton fields Yuma count due to water released down Colorado River. Extent flooding considered minimal. Insecticides, herbicides applied as needed. Small grain harvest mostly complete western, central areas, only few late planted fields remaining. Barley harvest winding down southeastern counties. Growers there beginning combine wheat on increasing scale. Alfalfa haying activities seasonally active Statewide. Corn, sorghum made good progress, growth various stages. Safflower harvest began Yuma county. Warmer nighttime temperatures increased growth of cantaloups, watermelons, honeydew melons allowing them ripen faster rate. Melon harvest nearing peak Yuma, La Pax, Mohave Counties. Cantaloups, watermelons picked increasing scale Maricopa County. Dry onion harvest complete. Growers digging chipper potatoes steady rate. Growers picking Thompson seedless grapes. Grapefruit harvest complete Statewide, limited Valencia orange harvest. Citrus groves remained good condition, favorable new crop prospects.

ARKANSAS: Warm and humid with near normal temperatures. Highest 99°, lowest 60°. Rain heaviest south and west, light elsewhere. Amounts 0.19 to 4.40 in.

Days favorable for fieldwork: 4.7. Crop progress moderate. Soil moisture generally adequate, short northeast. Cotton fair, squaring 50%, 90% 1982, 81% average; no boll setting, 6% 1982, 5% average. Rice good condition. Soybeans good condition, fair northeast; planted 89%, 91% 1982 average; no blooming this year and 1982, 2% average. Wheat harvest 94%, 96% 1982, 99% average. Oat harvest virtually finished, same as 1982 and average. Corn and sorghum good. Sorghum virtually planted, same as 1982 and average. Pastures average. Cattle good condition. Tomato and peach harvests underway.

CALIFORNIA: A bizarre ending to a season with abnormal precipitation. Some rainfall scattered on either side of the old season and the new season - just before the end of the week. Three localities reported rain for the new season - right on the first of July. While Statewide mean temperatures were generally cooler than normal the South Coast with a mixed bag of warmer and cooler averages averaged out at with a normal mean temperature.

Favorable weather assisting in crop development. Cotton progressing satisfactorily as more fields squaring and beginning to bloom, 45% squared, 50% last year and 66% average. Setting bolls in 3%, 5% last year and 8% average. Treating for lygus and other practice ongoing. Rice progressing satisfactorily. Treating for weeds. Dry bean planting winding down. Some corn planting still ongoing, cutting alfalfa for hay continues. Apricot, avocado, fig, Desert Table grape, stonefruit, grapefruit, Valencia orange harvest active. Almonds, walnuts sizing well. Harvest snap beans continued. Broccoli harvest moderate Salinas-Watsonville area, light Santa Maria-Oceano area and South Coast. Cantaloup harvest winding down Imperial Valley but active Palo Verde Valley. Carrot harvest finished Desert. Celery harvest active South Coast light harvest Central Coast. Sweet corn harvest finished Coachella Valley active South Coast, southern San Joaquin, lettuce harvest moderate Salinas-Watsonville, heavy Santa Maria. Harvest spring potatoes continued

active Kern district. Fall potato growers sprinkling fields prevent frost in Tulelake area. Strawberry harvest active. Sweetpotatoes good progress. Harvest market tomatoes completed Desert, increasing Huron, Cutlerrosi districts. Processing tomato harvest slowing Imperial Valley, increasing Palo Verde Valley. Westside fields treated prevent sunburn. Watermelon harvest slowing Desert. Low foothill ranges, pastures dry, fire danger increasing. Summer pastures providing good to excellent feed. Grasshoppers continue problem foothill districts. Stock water supplies ample.

COLORADO: Light rains and cool early part of week; improving to normal toward the end. Average temperatures 10 to 15° below normal; 0.10 to 1.00 in. of rainfall. Most along east Foothills.

Winter wheat in very good condition; 95% headed, 100% last year and average; 43% turning color, 73% last year, 77% average; 2% ripe, 16% last year, 9% average. Corn in good condition; 98% emerged, normal; height 15 in., 16 in. last year, 18 in. average. Sorghum in good condition: 93% planted, same as last year and average. Barley, oats and spring wheat in very good condition. Barley 46% headed, 68% last year; 10% turning color, 27% last year. Statewide 4.5 days suitable for fieldwork. Topsoil and subsoil moisture adequate. Range and pasture conditions very good.

FLORIDA: Typical summer weather continued throughout the week. A very warm, moist and unsettled tropical air mass over the Peninsula produced daily scattered, mainly afternoon, evening thunderstorms. Rainfall on a day to day basis varied greatly from none to light to spotty downpours of 1.00 to 2.00 in. or more, some areas. A few stations reported 24-hour amounts exceeding 3.00 in. lower east coast relatively dry with rains of less than 0.33 in. Temperatures averaged near normal.

Soil moisture surplus in west, south, some areas north, adequate central, parts of north. Corn very good condition, older fields maturing. Soybean, peanuts mostly good condition, some fields grassy. Tobacco harvest active. Silage being made, haymaking hindered by wet conditions. Sugarcane very good condition. Small grain harvest complete. Pastures good to excellent. Cattle mostly good condition. Citrus condition excellent, hot temperatures, afternoon thunderstorms most areas. Very little irrigation, ideal growing conditions. Current Valencias holding well; harvest slowing as supplies running low. Normal summer weather in vegetable areas with hot days, warm nights, scattered afternoon and evening thunderstorms. Rainfall variable on a daily basis. Total shipments decreased 15% from previous week season complete or nearing completion for most vegetables. No shipments for parsley and radishes. Volume about unchanged sweet corn, increase for watermelons. Shipments declined for all other vegetables. Watermelon harvest at peak volume.

GEORGIA: Near normal temperatures Statewide. Rainfall from daily showers averaged around 1.00 in., but amounts were highly variable. Hot and humid over the 2nd and 3rd with widely scattered rainfall. Temperatures near normal.

Soil moisture variable: 14% short, 57% adequate, 27% surplus. Average days suitable for fieldwork 3.2. Rain limited farm activities. Corn silked 79%, 93% last year, 91% average; dough 34%, 70% last year, 64% average; dent 13%, 36% last year, 34% average; mature 2%, 6% last year, 7% average; condition 3% poor, 31% fair, 53% good, 13% excellent. Cotton squaring 78%, last year 87%, average 88%; setting bolls 19%, last year 34%, average 49%; condition

9% poor, 28% fair, 59% good, 4% excellent. Boll weevils reported in cotton. Peanuts blooming 83%, 90% last year and average; pegging 50%, 60% last year, 65% average; condition 4% poor, 21% fair, 65% good, 10% excellent. Applying sprays and landplaster. Soybeans planted 93%, last year 91%, average 93%; blooming 5%, last year 9%, average 10%; condition 3% poor, 22% fair, 66% good, 7% excellent. Continuing weed and insect control on soybeans. Tobacco harvested 9%, last year 29%, average 20%; condition 5% poor, 34% fair, 58% good, 3% excellent. Watermelons 12% harvested, last year 43%, 36% average; condition 2% very poor, 2% poor, 33% fair, 61% good, 2% excellent. Peaches 68% picked, last year 62%, average 60%; condition 32% very poor, 11% poor, 25% fair, 30% good, 2% excellent. Apple condition 21% very poor, 23% poor, 35% fair, 21% good. Grain sorghum 85%, 86% last year, 84% average; condition 38% fair, 57% good, 4% excellent. Wheat harvested 95%, 94% last year, 96% average. Hay 10% poor, 33% fair, 50% good, 7% excellent. Pastures 5% poor, 21% fair, 66% good, 8% excellent.

HAWAII: Weather generally sunny with some weekend showers. Heavy spray programs continued to control insects and diseases. Banana supplies light. Papaya production decreasing. Watermelon supplies will continue heavy. Vegetable supplies adequate. Sugarcane harvesting ahead of normal. Pineapple harvest reaching peak period.

IDAHO: Below normal temperatures and above normal precipitation dominated State weather during the week. Departures were as great as 5° below normal in the north and southwest while readings 2 to 4° below average were common elsewhere. Precipitation was above normal except in the southwest and southeast where rainfall was near normal. Departures ranged from 0.19 in. below normal at Malad to 0.44 in. above normal at Dubois.

Cool, wet conditions continued but 5.7 days were suitable for fieldwork. Winter wheat reached 90% headed compared with 94% last year and 88% average. Nearly 48% of the spring wheat and 50% of the barley was headed compared to 58% and 60% headed, respectively, last year. The potato crop had 20% closed rows, equal to last year and first cutting alfalfa hay reached 65% complete. Cherry harvest was 35% complete compared with 26% last year. Ranges and pastures were in excellent condition though the abundant vegetation increased the risk of range fires.

ILLINOIS: Temperatures 2 to 6° above normal. Precipitation 0.14 to 8.26 in. Lightest in the west.

Soil moisture 17% short, 69% adequate, 14% surplus. Days suitable fieldwork: 4.3. Corn average height 32 in., 1982 47 in.; average 41 in.; height most advanced fields 49 in., 1982 66 in., average 58 in.; condition 14% excellent, 76% good, 10% fair. Soybeans 6% blooming, 1982 20%, average 9%; condition 7% excellent, 71% good, 22% fair. Sorghum 95% planted, 1982 100%, average 97%. Winter wheat 98% turning yellow, 1982 100%, average 98%; 70% ripe, 1982 86%; 12% harvested, 1982 41%, average 41%. Oats 75% filled, 1982 81%, average 82%; 35% turning yellow, 1982 29%, average 34%; 5% ripe, 1982 5%, average 8%; condition 10% excellent, 57% good, 32% fair, 1% poor. Alfalfa hay 2nd crop 25% cut, 1982 29%, average 34%; condition 11% excellent, 71% good, 18% fair. Clover hay 94% cut, 1982 84%, average 91%; condition 14% excellent, 71% good, 15% fair. Pasture condition 14% excellent, 63% good, 21% fair, 2% poor. Livestock condition satisfactory.

INDIANA: Hot and dry week. Temperatures 3 to 6° above normal north 4 to 8° above central and 3 to 6° above south. Highs mid 90's south and low to mid 90's central through north. Rainfall 2.00 to 4.00 in. north 1.00 to 2.00 in. central and near 1.00 to 1.80 in. south. Coverage 50 to 60% throughout State.

Growing degree days highest of season at 170 to 211. Soil temperatures upper 70's low 80's. Crops began showing some heat and moisture stress by end of week. Fieldwork averaged 4.1 days. Both topsoil and subsoil moisture adequate. Wheat 5% combined, 1982 20%, average 15%. Wheat 30% ripe, 1982 60%, average 55%. Rye 5% combined, 1982 15%, average 20%. Corn 25 in. tall, 1982 48 in., average 34 in. Soybeans 100% planted, 1982 100%, average 100%. Soybeans 100% emerged. Soybeans 0% blooming, 1982 10%, average 5%. Soybeans 7 in. tall, 1982 11 in., average 8 in. Corn and soybean condition fair to mostly good. Alfalfa hay 20% cut 2nd time, 1982 20%, average 30%. Clover hay 87% cut, 1982 87%, average 90%. Pastures fair to good.

IOWA: A wet week. Temperatures were cool to seasonable early week becoming hot during late week. Precipitation averaged over 4.00 in. Considerable flooding and standing water was reported plus numerous damaging storms including tornadoes during the week.

Days suitable 2.6. Corn cultivated 1st time 82%; 76% last year; 75% normal. Soybeans cultivated 1st time 55%, 38% last year; na normal. First crop alfalfa hay harvested 90%, 95% last year; 99% normal. First crop clover hay harvested 66%, 73% last year; 82% normal. Oats headed 75%; 93% last year; 96% normal; oats turning color 5%. Topsoil moisture 4% short; 30% adequate; 66% surplus. Subsoil moisture 44% adequate; 56% surplus.

KANSAS: Average rainfall 0.33 in. north central, 1.80 in. southeast and south central and 0.60 in. to 1.30 in. elsewhere. Temperatures averaged 80 to 82° central and northeast and 75 to 79° elsewhere. These averages were 3 to 4° above normal north central and central districts and just normal to 2° above normal elsewhere.

Wheat harvested 5%, last year 15%, average 50%. Rains have slowed progress. Sorghum acreage planted 90%, last year 70%, average 95%. Soybean acreage planted 95%, last year 60%, average 90%. Soybeans blooming 1%, last year 1%, average 5%. Row crops and pasture condition good to excellent. Total of 3.5 days suitable for fieldwork.

KENTUCKY: Temperatures 3 to 6° above normal. Highs ranged from upper 80's to mid 90's. Rainfall varied from 0.10 in. central to over 8.00 in. far west.

Soil moisture 35% short, 59% adequate, 6% surplus. Days suitable for fieldwork: 4.8. Corn fair, poor stands and weed control reported. Soybeans 76% planted, 91% last year, average 90%. Emerged plants about 6 in. tall. Tobacco fair to good, 25% of plants over one foot tall. Blue mold reports limited. Wheat harvest 42% complete, 86% last year, average 80%. Early yields disappointing. Sorghum fair to good. Pastures good.

LOUISIANA: Rainfall averaged 0.60 in. to 3.50 in. Statewide. Temperatures averaged 2° above to 2° below. High 97°, low 67°.

Soil moisture adequate to surplus. Days suitable 2.5. Corn silked 83%, 92% 1982, 88% average. Dough 35%, 65% 1982; mature 5%, 16% 1982. Condition good. Cotton squaring 35%, 86% 1982, 66% average. Setting bolls 4%, 7% 1982, 16% average. Condition fair. Rice headed 21%, 27% 1982, 34% average. Condition fair. Sorghum planted 98%, 98% 1982, 97% average.

Emerged 97%, 95% 1982, 91% average. Headed 23%, 46% 1982, condition fair to good. Soybean planted 90%, 93% 1982, 96% average. Emerged 86%, 92% 1982, 91% average. Blooming 8%, 7% 1982, 8% average. Condition fair to good. Sweet-potatoes transplanted 92%, 98% 1982, 96% average. Condition fair to good. Sugarcane condition good. Wheat harvested 97%, 99% 1982, 94% average. Hay first cutting 89%, 95% 1982. Pecans rated good. Peaches harvested 39%, 57% 1982. Condition good. Vegetables rated fair. Pasture and livestock rated good.

MARYLAND AND DELAWARE: Warm, sunny week with some precipitation. High temperatures in the high 80's to mid 90's. Lows in the low 50's to mid 60's. Temperatures averaged near normal to 3° above. Days suitable for fieldwork: 5 to 6 days.

Maryland: Soybeans 77% planted; last year 90%, and average 92%. Tobacco 90% transplanted, last year 94%, 95% average. Oats 80% turned, last year 90%; 25% harvested, 15% last year. Wheat 98% turned, 92% last year, 26% harvested, 35% last year. Barley 86% harvested, 82% last year. Rye 63% harvested, 47% last year. Peas harvested 75%, 67% last year. Snap beans 20% harvested, last year 15%. Cucumbers 5% harvested, last year 20%. First cutting of alfalfa hay 100%, last year 98%. Other hays 89%, last year 95%. Second cutting of alfalfa 16%, last year 32%. Other hays 10%, last year 25%. Soil moisture adequate Statewide.

Delaware: Days suitable for fieldwork: 6.0. Soybeans 80% planted, last year 94%, average 93%. Wheat turned 100%, last year 100%. Barley harvested 99%, last year 100%. Rye harvested 40%, last year 13%. Wheat harvested 30%, last year 40%. Peas 55% harvested, last year 90%. First cutting of alfalfa and other hays 100%, last year both were 100%. Topsoil and subsoil moisture was adequate throughout the State.

MICHIGAN: Almost Gulf Coast conditions prevailed across most of the State. Hot temperatures accompanied by moderate to heavy amounts of precipitation from thunderstorms were the rule. The heaviest amounts of precipitation fell over the south central lower and southeast lower sections with 2.6 and 2.0 in. respectively.

Fieldwork slowed significantly. Statewide 3.5 days were suitable for fieldwork. Soil moisture supplies improved for most of the State. Soybean planting 100% complete, 100% last year, 100% average. Soybean 0% blossomed, 0% last year, 0% average. Dry bean planting 95% complete, 98% last year, 100% average. Winter wheat 20% yellowing, 60% last year, 60% average. Oats 35% headed, 65% last year, 65% average. All hay, first cutting 80% complete, 80% last year, 82% average. Strawberries 55% picked, 80% last year, 79% average. Warm weather and moisture has been beneficial to fruit crops. Tart cherry harvest expected to start July 10 in the southwest. Vegetable crops progressing well with improved moisture conditions.

MINNESOTA: Slow moving system with clouds and frequent showers early in week, followed by hot, humid weather with violent storms and heavy precipitation late in week. Temperatures averaged near normal to 4° below normal. High: 92°. Low: 37°. Precipitation averaged 0.60 to 2.80 in. above normal. Greatest reported weekly total: 7.69 in. Least 0.36 in.

Rainy weather kept farmers out of fields. Only 2.4 days were suitable for fieldwork. More crop damage was expected in areas where standing water from earlier storms replenished by additional rainfall. Flash flood, hail, wind and tornado damage in various localities. Pastures in good condition. Crops grew well.

Haying weather poor. Weeds were getting ahead of farmers unable to get into wet fields. Topsoil moisture: 38% adequate, 62% surplus. Height in inches: Corn 18, 1982 18, normal 23; soybeans 8, 1982 7, normal 9; sunflowers 10, 1982 8, normal 13. Jointing: Spring wheat 92%, 1982 85%, normal 87%; oats 95%, 1982 90%, normal 91%; barley 95%, 1982 85%, normal 88%. Heading: Spring wheat 57%, 1984 44%, normal 57%; oats 63%, 1982 54%, normal 65%; barley 68%, 1982 49%, normal 63%.

MISSISSIPPI: Temperatures near normal. Extremes 64 and 97°. Above normal rainfall most locations. Greatest 24-hour 2.95 in. Greatest weekly total 3.41 in.

Soil moisture surplus to excessive. Fieldwork 2.0 days suitable, 3.0 last year, 5.0 average. Soybeans 78% planted, 95% last year and average; 0% blooming, 0% last year; condition fair. Cotton 60% squaring, 92% last year, 80% average; 0% setting bolls, 7% last year, 8% average; condition fair to poor. Rice 0% headed, 0% last year, 1% average; condition fair. Sorghum 94% planted, 96% last year, 94% average. Corn 38% silked; 12% in dough stage; condition good to fair. Winter wheat 63% harvested, 98% last year and average. Hay 48% harvested. Peaches 32% harvested. Pasture condition good.

MISSOURI: Temperatures were slightly above normal, ranging from 1° below normal in the southwest to 6° above normal in the northeast. Around 1.00 in. of rain fell throughout the State, and some flooding occurred in the western part of the State.

Days suitable for fieldwork: 4.4. Soybeans 99% planted, 89% last year and 89% normal. Double-crop soybeans 49% planted, 59% last year. Grain sorghum 94% planted, 86% last year and 87% normal. Winter wheat 29% harvested, 28% last year and 39% normal. Oats 5% harvested, 9% last year and 15% normal. Second cutting alfalfa hay 29% harvested, 28% last year and 33% normal. Other hay 75% harvested, 56% last year. Cotton 26% squared, 86% last year and 64% normal. Cotton condition 80% fair and 20% poor. Corn condition 7% excellent, 71% good, 22% fair. Pasture condition 4% excellent, 72% good, 23% fair and 1% poor. Topsoil moisture supplies 7% surplus, 69% adequate and 24% short.

MONTANA: Wet week in west, southwest, north central and central, 1.00 to 2.00 in. of rain were common in daily showers. Continued very dry in northeast and southeast. Temperatures were 2 to 5° below normal in western half of State and near normal in eastern half.

Topsoil moisture improved except southern and eastern districts. Crops fair to good. Winter wheat 80% headed, 35% last year, 65% average, 10% winter wheat turning. Spring wheat 40% headed, none last year, 15% average. Alfalfa 45% cut, 10% last year, 30% average.

NEBRASKA: Precipitation averaged 0.70 in. southwest and south central to 2.00 to 3.00 in. over north central, northeast and southeast. Temperatures 3 to 4° above normal.

Corn mostly good. Heavy corn borer infestation in many eastern counties. Cultivating and hilling delayed by wet fields. Sorghum and soybean condition mostly good. Wheat mostly good. Turning color 60%, last year and normal 90%. Ripe 5%, a year ago 10%, normal 45%. Harvested 0%, last year 1%, normal 15%. Second cutting alfalfa hay 5% complete, 5% a year ago, 25% normal. Pasture and range feed mostly adequate to surplus. Topsoil and subsoil supplies adequate to surplus. Days suitable for fieldwork 3.1.

NEVADA: A few scattered showers and thunder-showers reported during week. Shower activity confined mainly across far northern areas with dry conditions elsewhere. Temperatures during period averaged from near normal to as much as 5° below normal. Extremes: 32 and 104°.

First cuttings alfalfa hay more than three-fourths completed. High daytime temperatures ideal for curing and baling hay. Range feed prospects remained at relatively high levels.

NEW ENGLAND: Hot, normal to dry week, temperatures above normal. Northern New England rainfall averaged 0.50 in., southern New England rainfall averaged 0.75 to 1.50 in.

Good growing conditions, soil moisture adequate to short. Days suitable for fieldwork: 6.0. Progress 3 days behind schedule. First cut hay, 80% harvested. Potato emergence, 97% still 1 to 2 weeks behind schedule. Field corn emergence, 95%. First of shade tobacco harvest underway.

NEW JERSEY: Temperatures averaged 2° above normal. Extremes were 47° on the 30th and 99° on the 4th. Weekly rainfall averaged 1.78 in. north, 1.00 in. central and 0.86 in. south. The heaviest 24-hour total was 2.38 in. on the 28th to 29th. Estimated soil moisture, in percent of field capacity, averaged 84% north, 72% central and 71% south. Four inch soil temperatures averaged 74° north, 79° central and 80° south.

Fieldwork: 5.5 days suitable. Main farm activities: Planting of mid-season vegetables, combining barley and wheat, applying pesticides, cultivating and harvesting early summer vegetable crops.

NEW MEXICO: Average temperatures slightly above normal north and east; slightly below normal southwest. Minimum temperature 34°, central highlands. Maximum temperature 105° southeastern Plains. Widely scattered showers most areas. Little or no accumulations.

Cotton fair to good, 2 to 3 weeks behind. Fields showing squares: 27%, 70% last year, 78% average. Alfalfa rated good. First cutting nearly complete. Second and third cuttings begun. Irrigated wheat over 50% cut. Dryland wheat 70% cut. Barley, 65% harvested. Grain sorghum 100% planted, good condition. Corn very good condition. Chile, 2 to 3 weeks behind normal; in bloom stage. Peanuts 100% planted, good condition. Pecan trees, average sets. Onions being harvested. Cattle, sheep good condition. Ranges fair to good.

NEW YORK: Cool temperatures gave way to hot by weekend. Rainfall mostly above normal, especially in south. Good crop growing conditions in most areas. Corn planting done, growth good. Wheat turning. First cutting alfalfa hay 87% done, 30% 1982, 53% average. Clover-timothy hay 67% done, 20% 1982, 37% average. Grass silage 86% cut, 42% 1982, 62% average. Fruit crops in good condition. Sweet cherry picking underway. Potatoes up in all areas, condition good. Early spinach, pea harvests underway. Some vegetable areas in need of rain.

NORTH CAROLINA: Temperature near normal in east, 2 to 4° above in the west. Precipitation spotty, heaviest over the mountains.

Soil moisture: 40% short, 60% adequate. Days suitable for fieldwork: 5.2. Condition: Irish potatoes: 33% fair, and 67% good. Peaches 44% poor, 31% fair and 25% good. Tobacco: 65% fair, 35% good. Corn 35% fair, 55% good and 10% excellent. Cotton: 38% fair and 62% good. Peanuts: 32% fair and 68% good. Soybeans 25% fair, 71% good and 4% excellent. Apples:

13% poor, 27% fair, and 60% good. Planting progress: Sweetpotatoes 98%, 1982 98%, 100% average. Sorghum 93%, 1982 97%, 97% average. Soybeans 94%, 1982 84%, 93% average. Burley tobacco 100%, 1982 100%, 100% average. Phenological stages: Cotton squared: 23%, 1982 80%, 59% average. Cotton setting bolls: 7%, 1982 8%, 10% average. Corn silked: 18%, 1982 78%, 53% average. Harvests: Irish potatoes 41%, 1982 60%, average 61%; wheat 78%, 1982 82%, average 85%; oats 89%, 1982 86%, average 90%; barley 92%, 1982 90%, average 93%; rye 83%, 1982 85%, average 90%. Major farm activities: Soybean planting, small grain and hay harvest, cultivation of tobacco, corn and peanuts, topping tobacco and spraying for weed and sucker control.

NORTH DAKOTA: Rain throughout the week. Excessive rain in some areas with high winds and hail. Temperatures averaged from near normal in the southeast and east central districts to 4° below normal in the north central. Extremes from 92 to 40°. Precipitation above normal.

Crops mostly good to excellent condition. Small grain maturity ahead of last year and normal except for durum which lags last year. Row crop development slightly ahead of last year and normal for most crops. Percent heading or beyond compared to last year and average for hard red spring wheat 37, 20, 31, durum 16, 11, 23; and barley 43, 32, 40. Topsoil moisture conditions better than last year and average. Specifically, 13% short, 80% adequate and 7% surplus. Normally, 38% is short, 60% adequate and 2% surplus. Farmers haying, spraying, summerfallowing and cultivating row crops. Moist conditions promoting leaf disease development. Cutworms, sunflower beetles, grasshoppers continue to be a problem.

OHIO: Temperatures from 3 to 8° above normal. Average maximums in mid to upper 80's. Precipitation totals from 1.00 to 4.00 in. from scatter thunderstorms with 60% coverage Statewide. Humidity above normal. Second cutting hay underway. Wheat damaged from heavy rains, winds. Tobacco transplanting complete. Corn 8 leaves fully emerged, same as 1981. Soybeans planted 100%, 1982 100%, average 100%; soybeans blooming 0%, 1982 0%, average 0%. Winter wheat ripe 20%, 1982 20%, 20% average; winter wheat harvested 0%, 1982 2%, average 2%. Oats headed and beyond 85%, 85% 1982, 90% average. Alfalfa, first cut 98%, 1982 95%, average 95%. Other hay, first cut 90%, 85% 1982, 85% average. Days favorable 4.0. Pasture condition good. Soil moisture 10% short, 60% adequate, 30% surplus.

OKLAHOMA: Temperatures averaged near normal across State. Range from 1° above normal southwest to 3° below normal north central and west central divisions. Rainfall in all divisions and ranged from 0.76 in. west central to 2.20 in. southeast.

Cattle and ranges in very good condition. Wheat harvested: 50%; 55% 1982: 90% average. Sorghum planted: 85%, 75% 1982, 98% average. Cotton squaring: 0%, 1% 1982, 5% average. Cotton setting bolls: 0%, 0% 1982, 0% average.

OREGON: Rainfall during the week left 0.50 to 1.50 in. west of Cascades; up to 0.50 in. in central region; up to 0.80 in. in eastern regions. Rainfall minimal in southern area. Maximum temperatures 70 to 85° beginning of week; 60 to 70° latter half. Some lows down to freezing in extreme northeastern region.

Winter wheat turning; 0% harvested, 0% 1982, 0% average. Barley harvest in full swing in the early regions. Harvest of crimson clover and grass seed in the Willamette Valley has

been slowed by rains. Rain damaged some second hay cuttings. Bartlett pear crop looks excellent in Hood River Valley. Cherry harvest winding down in Wasco County; full swing elsewhere. Peach orchards good. Strawberry harvest near complete. Raspberry picking hampered by rains; causing mold. Blueberry picking underway; harvest of boysenberries to start this week. Filberts appear lighter than last year. Harvesting of potatoes expected to start next week in Umatilla County. Green pea harvest is continuing, better quality and yields expected in later fields. Livestock good. Pasture and range good to excellent.

PENNSYLVANIA: The bulk of the rainfall fell on the 28th and 29th. Rainfall was heaviest through the central portion of the State, with 5.44 in. falling in Franklin and unofficially 6.00 in. falling in the Lockhaven area. Temperatures for averaged 2° above normal. Extremes were 95° on the 28th at Reading and 40° on the 30th at Emporium.

Days suitable: 4.0. Moisture, surplus to adequate. Activities: Double cropping soybeans in barley stubble; making hay and haylage; cultivating, side-dressing, and spraying corn, picking strawberries; spraying fruit trees; harvesting barley and wheat; baling straw; and trimming pastures. Soybeans 91% planted, last year 93% complete. Barley 11% headed, 34% turning yellow, 28% ripe and 20% harvested, last year 10% headed, 46% turning yellow, 29% ripe and 12% harvested. Wheat 37% headed, 46% turning yellow, 12% ripe and less than 5% harvested, last year 26% headed, 63% turning yellow, 9% ripe and less than 5% harvested. Oats 49% headed and 11% turning yellow, last year 77% headed and 6% turning yellow. Average corn height 16 in., last year 25 in. First cutting alfalfa 87% complete, last year 81% complete. Second cutting alfalfa 10% complete, same as last year. First cutting clo-tim 76% complete, last year 69% complete. Quality of hay made good to fair. Feed from pastures mostly average.

PUERTO RICO: Island average rainfall 0.83 in. or 0.36 in. below normal. Highest weekly total 2.77 in. Highest 24-hour total 2.00 in. Temperature averaged about 84 to 82° on coasts and 76 to 75° Interior Divisions. Mean station temperature ranged from 86.8 to 67.5°. Extremes 97 and 54°.

SOUTH CAROLINA: Temperatures 1 to 2° above normal. Frequent thunderstorms during the week. Rainfall localized.

Days suitable for fieldwork: 5.3. Corn fair. Cotton fair to good; 45% squaring, 94% year ago, 89% average. No cotton setting bolls, 39% year ago, 34% average. Soybeans 91% planted, 91% year ago, 94% average. Tobacco fair to good. Wheat 92% harvested, 92% year ago, 95% average. Peaches 30% harvested, 38% year ago, 32% average; condition fair. Tomatoes 47% harvested, 85% year ago, 78% average; condition fair to good.

SOUTH DAKOTA: Average temperatures ranged from 2° above to 4° below normal. Extremes: 96 and 41° Rainfall above normal for the week; 1.00 to 4.00 in. Statewide.

Flooding and crop damage southeast, many fields under water. Strong wind and heavy rain lodged winter wheat fields throughout central, southern and eastern regions of State; fields should recover before harvest. Days suitable for fieldwork; 2.0. Crop development generally a week behind normal. Winter wheat harvested 0%, 1982 0%, average 1%. Winter wheat headed 98%, 1982 100%, average 100%. Sorghum planted 100%, 1982 95%, average 100%. Spring wheat

headed 74%, 1982 67%, average 81%. Corn height 13 in., 1982 13 in., average 22 in.

TENNESSEE: Scattered thundershowers occurred across the State during the week. Temperatures averaged near normal. Highs were in the middle 80's to low 90's. Lows ranged from middle 60's to low and mid 70's.

Days suitable for fieldwork: 4.7. Soil moisture levels: 24% short, 65% adequate, 11% surplus. Corn tasseling 7%, 1982 25%, average 21%. Cotton squaring 19%, 1982 74%, average 56%; setting bolls 0%, 1982 5%, average 1%. Soybeans planted 85%, 1982 92%, average 89%; blooming 0%, 1982 3%, average 2%. Wheat ripe 98%, 1982 99%, average 99%; harvested 60%, 1982 86%, average 96%. Alfalfa hay 2nd cuttings 52%, 1982 82%, average 73%.

TEXAS: Early week, moist unstable air over State combined with a nearly stationary cold front across North Texas to trigger heavy thunderstorms with locally heavy rainfall amounts. Some storms reached severe limits over North Central Texas where high winds were noted. The stormy weather continued into early weekend over portions of East, West Texas, no significant precipitation amounts. Temperatures were near normal over East Texas while remainder of State was 2 to 4° below normal.

Crops: Except for scattered showers, the week was dry and hot. Hot, dry weather aided maturity and harvest small grains. Hot weather also benefitted cotton, sorghum and corn. Some areas remain in a drought. Cotton planting was virtually completed during week. Scattered showers beneficial portions of Plains, however, some hail required replanting. Hot temperatures stimulated fruiting in southern half of State. Sorghum planting moved ahead during week. Grain sorghum heading Low Plains and turning color in South Texas. Corn crop continues to look good most areas. Small grain harvest made large advances with hot, open weather. Hot temperatures aided maturity on Plains and promoted rapid harvest. Peanut planting active Cross-Timbers area. Rice continues to make good growth although slightly behind normal. Soybean planting active during week.

Cotton planted 100%, 1982 100%, average 100%; cotton squaring 19%, 1982 22%, average 34%; cotton setting bolls 7%, 1982 11%, average 15%; cotton open bolls 0%, 1982 0%, average 2%. Rice headed 27%, 1982 67%, average 65%; rice turning color 1%, 1982 3%, average 7%. Sorghum planted all purposes 98%, 1982 98%, average 99%; sorghum headed 59%, 1982 59%, average 60%; sorghum turning color 34%, 1982 44%, average 43%; sorghum mature 9%, 1982 16%, average 19%; sorghum harvested for grain 3%, 1982 3%, average 7%. Wheat turning color 98%, 1982 99%, average 100%; wheat harvested for grain 69%, 1982 74%, average 78%. Oats harvested for grain 86%, 1982 74%, average 92%. Peanuts planted 89%, 1982 90%, average 93%. Soybeans planted 94%, 1982 76%, average 88%. Sunflowers planted 90%, 1982 70%, average 87%.

Commercial vegetables: Rio Grande Valley, harvest of vegetables and melons remained active but supplies beginning to taper off. Citrus trees continue to be sprayed and irrigated. San Antonio-Winter Garden area, harvest of most vegetables remains active. East Texas, vegetables maturing and movements increasing. Trans-Pecos region, onion harvest continued. Plains growth of onions and potatoes continued. Harvest of some of the early maturing varieties continued to expand and supplies increasing. Peach harvest continued to expand northward as fruit matured. Pecans continued to make normal development.

Range and livestock: Range, pasture conditions holding steady as scattered showers benefitted some areas. Most areas hot temperatures, promoted rapid growth weeds, grasses where adequate moisture was available. Some areas continued dry, conditions deteriorated.

UTAH: Scattered thunderstorm shower southeast early part week Unita Basin midweek. Accumulations light to heavy. Temperatures below normal south, above north, ranging 4° below to 4° above.

Flood damage continued to mount. Current worries include unserviceable irrigation systems and inaccessible grazing land. Some high mountain ranges still snow covered or muddy. Very little feed growth so far. Grain crops made good development during warm, dry week. Winter wheat 84% headed, barley 48%, and spring wheat 46%. Winter wheat condition rated good, other small grains fair to good. Corn rated only fair. First crop hay 79% cut. Yield and quality only fair.

VIRGINIA: Hot and humid at the beginning and end of week with a day or two of relief midweek. The temperatures averaged slightly above the norm with extremes in the low 60's to upper 90's. Rainfall was produced from scattered showers and thunderstorms throughout the week with isolated spots in the north and west receiving over 2.00 in. of rain. Amounts were light over the east, central and south.

Light, scattered showers dropped topsoil moisture to 3% surplus, 65% adequate and 32% short. Days suitable for fieldwork increased to 4.5. Corn was rated in good to excellent condition with 12% of the crop in silk compared to last year's 33% and the average of 19%. Minor infestation of the European corn borer in north and cereal leaf beetle in the east. Soybeans were rated good to excellent with good stands. Seeding was 83% complete, 84% last year and 86% for average. Cultivating and herbicide application continued active. Mexican bean beetle present but spraying as yet unnecessary. Peanuts were rated in excellent condition with the application of land plaster and fungicides active. Flue-cured harvest was expected to start in 2 to 3 weeks. Topping flue-cured in the southeast began. Spraying for the bud worm began in the south central and southwestern areas. Blue mold was reported in a few fields in several counties.

WASHINGTON: Some rain reported on the north coast. A high pressure ridge kept the State relatively dry and temperatures mild through 27th. An active frontal system brought some clouds and rain to the State on 28th and 29th. But a second and more extensive frontal band produced significantly more precipitation on 30th and in the following unstable air on 1st. Temperatures continued cool for this time of the year with reported afternoon highs of less than 90° through the week.

Winter wheat and barley continued good. Spring seeded crops average to slightly below average. Barley harvest started. Preparations made for wheat harvest. First cutting

timothy hay in full swing. First cutting alfalfa hay nearly finished and some second cutting started. Rain hurt first cutting hay some areas. Cherry harvest mostly complete. Peach harvest in a week. West of Cascades, strawberry nearly finished, Raspberry in full swing, preparation for blueberry harvest underway. Broccoli, cauliflower harvesting underway. Green pea, carrot harvest started. Harvesting lettuce, other leafy vegetables continues. Harvesting onion and turnip seed crops beginning. Walla Walla sweet onion harvest underway, excellent quality. Livestock good condition due to good range and pasture conditions. West-side pastures holding up well. Dairymen green-chopping and making silage.

WEST VIRGINIA: Temperatures averaged above normal across the State. Low 38°, high 98°. Precipitation near normal with some isolated heavy downpours. Heaviest rain in southwest portion. Range 0.13 to 2.40 in.

Soil moisture adequate to surplus in central and eastern part of State, adequate to short along western border. Days suitable for fieldwork averaged 3.6. Main activities were hay harvesting and gardening. Small grain crops in good to fair condition. Corn in good to fair condition. Wheat was 48% headed, 45% ripe and 7% harvested; 52%, 37% and 11% in 1982. Barley was 11% headed, 56% ripe and 33% harvested; 26%, 39%, 35% in 1982. Oats were 24% pre-headed, 69% headed, 5% ripe, 2% harvested; 12%, 74%, 9% and 5% in 1982. Corn was 99% planted and 98% emerged; 98% and 95% in 1982. Tobacco was in good to fair condition with 98% set; 97% in 1982. Pasture and hay were in good to fair condition. The first cutting hay was 80% complete; 69% in 1982. Second cutting was 8% complete; 11% in 1982. Fruit was in fair condition.

WISCONSIN: The week started off mild with highs in 60's and 70's, gradually warming into the 80's by 30th and continuing very warm and humid thru 3rd. The week was typified by scattered showers across the State each day and occasional thunderstorms. Severe thunderstorms developed 30th, 1st, and 3rd. Storms on 30th and 3rd produced numerous funnel clouds. Damage was reported from several of these tornadoes. Days suitable for fieldwork: 4.0. Soil moisture: 26% short, 71% adequate and 3% surplus.

WYOMING: Cooler than normal week except few sites in extreme southwest and northern quarter. Nearly all stations received at least a little rain. Most significant amounts over upper and lower Platte drainages.

Topsoil moisture adequate 60% State. Days suitable for fieldwork: 6.0. Crops developing quickly, but still behind normal. All crops rated fair to good condition. Winter wheat headed 65%. Normally, all is headed. Barley headed 40%. Normally, 65% headed. Spring wheat headed 15%. Normally, 52% headed. Oats headed 5%. Normally, 45% headed. First cutting alfalfa complete 35%. Other hay harvest 10%. Normally, 51%. Alfalfa first cutting completed and 17% other hay harvested. Sugarbeet acreage thinned 84%. Alfalfa weevils caused considerable damage to some areas in central areas.

National Weather Summary (continued from front cover)

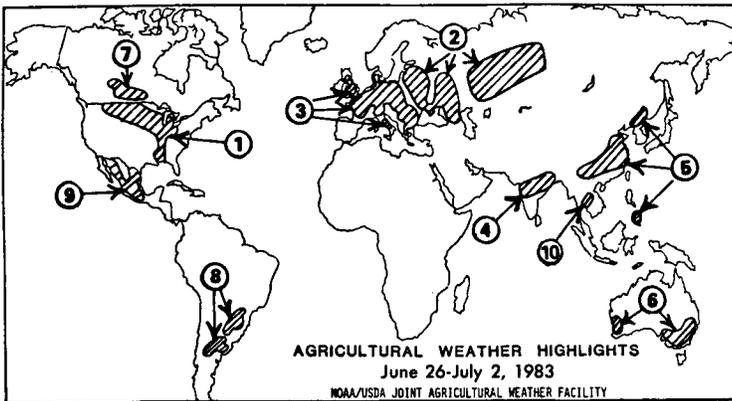
Light to moderate showers and thunderstorms continued in the Southeast, and some very heavy storms broke out in southwestern Arkansas. Showers covered the Pacific Northwest and spread into the northern Plains.

SATURDAY...Light, occasionally moderate showers continued over the Pacific Northwest. Heavy showers

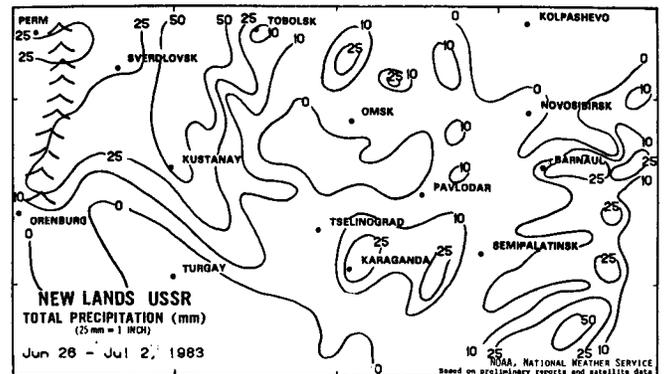
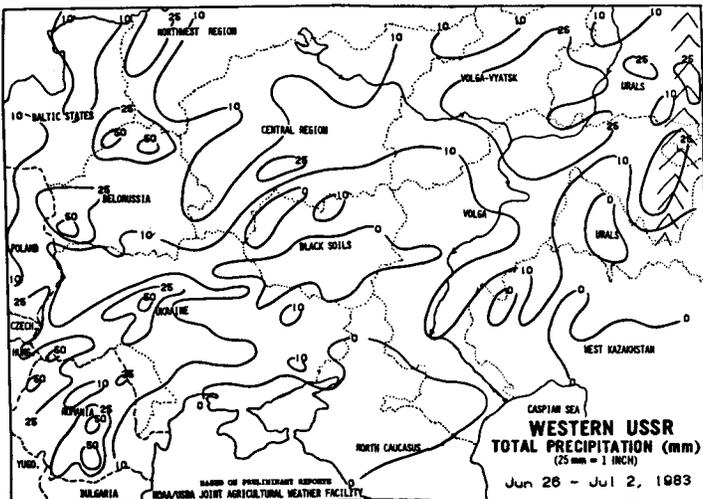
and thunderstorms broke out from eastern North Dakota to northern Wisconsin and spread southward into Iowa and northern Illinois. Widely scattered showers and thunderstorms covered the Mississippi Valley and most of the East. Temperatures of 100° reached northward through the Plains to Nebraska.

International Weather and Crop Summary

June 26 to July 2

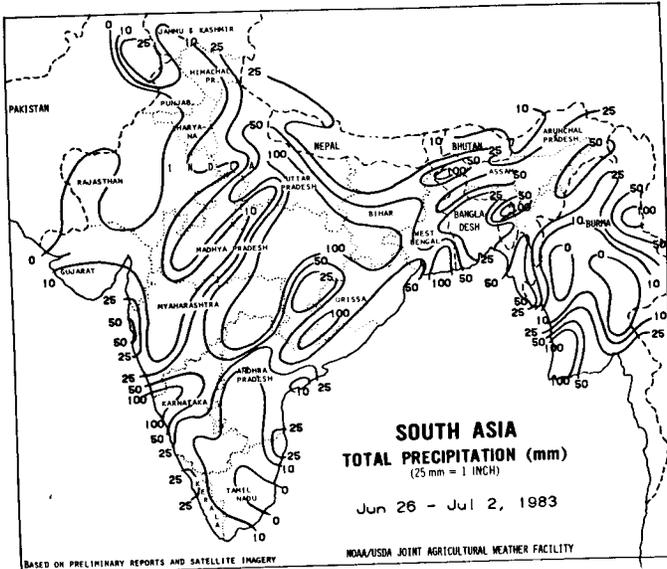


1. UNITED STATES ... Generally excellent weather covers the Corn Belt with rains and warm temperatures. Rains further delay soybean planting in the eastern Delta States but benefit spring wheat over most of northern Plains; eastern Montana remains dry.
2. USSR ... Wet weather benefits crops in West European USSR, but conditions are becoming too dry for summer crops grown in the southeast. In the New Lands, wet weather continues to benefit crops in the northwest, but hot, dry conditions continue stressing spring grains in central crop areas.
3. EUROPE ... Widespread showers benefit crops over most of the region, except Spain which is generally dry.
4. SOUTH ASIA ... Monsoon rains in northern India are favorable for rice planting. Dry conditions in the south slow cotton and groundnut planting.
5. EASTERN ASIA ... Persistent rains hamper planting and development of rice crops. Moderate rains benefit summer crops in the North China Plain and Manchuria.
6. AUSTRALIA ... Beneficial showers in West aid wheat planting and emergence, while some southern wheat areas are drying out. Conditions are favorably dry in the east following rain-delayed planting season.
7. CANADA ... Showery, cool weather covers the Prairie grain belt, aiding crops in southwestern areas which were becoming too dry, and maintaining adequate moisture for vegetative growth elsewhere.
8. SOUTH AMERICA ... Showers cause only temporary delays of coffee harvest in Brazil. Drier weather aids Brazil's wheat but reduces topsoil moisture for Argentina's wheat.
9. MEXICO ... Rains benefit crops in southern Plateau corn belt while northern regions remain hot and dry. Nonirrigated, immature crops suffer heavily from dryness in the Northeast.
10. SOUTHEAST ASIA ... Moderate to heavy rain in Thailand keeps moisture conditions favorable for corn and rice in the vegetative stage. Rain continues to relieve drought in southern Philippines.

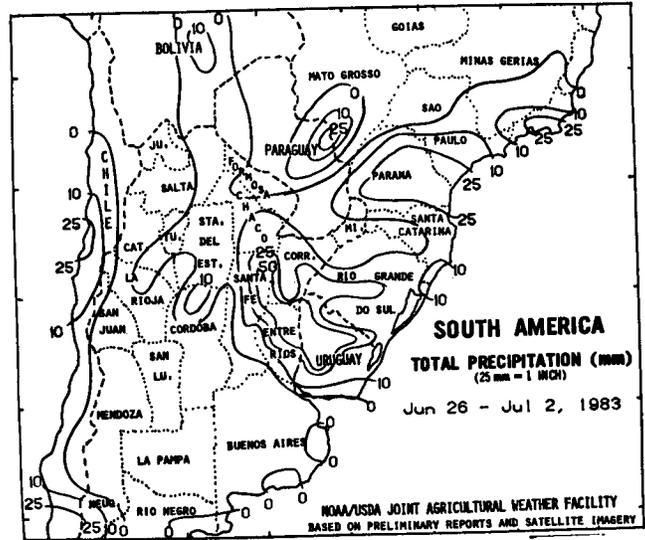


USSR...Wet weather covered the Baltic States, Belorussia, and the western Ukraine, benefiting spring grains in the reproductive stage and summer crops in the late vegetative stage. In contrast, spotty, light showers covered the eastern Ukraine, Black Soils, southern Volga, and North Caucasus, late in the week. Rainfall amounts in these areas were not sufficient enough to meet crop moisture needs, especially for corn; however, the below-normal precipitation aided maturing winter grains. Elsewhere, showers continued to benefit crops in the Volga Vyatsk, the northern Volga Valley, and the Urals.

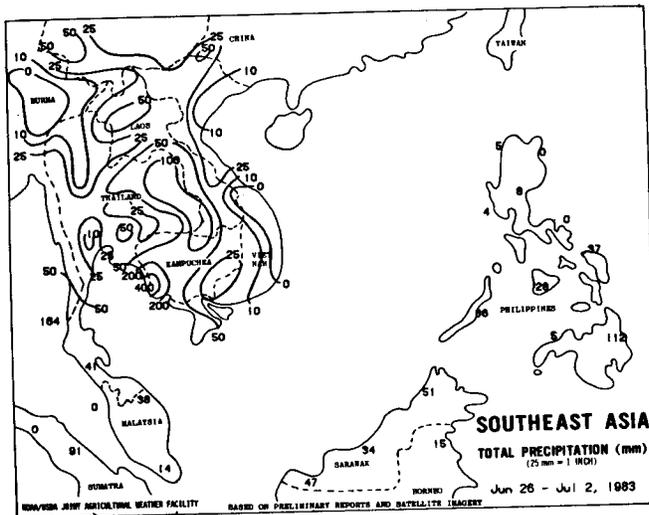
In the New Lands, wet weather continued in northwest spring wheat areas. In contrast, mostly dry, hot weather covered central crop areas, but localized thunderstorms did provide limited relief from the potential stress conditions. Further east, light rains benefited spring wheat areas around Barnaul and Semipalatinsk. Weekly temperatures, although cooler than last week, continued above normal over most of the region, keeping evaporation rates high. Spring wheat should be in the late vegetative stage in the south and the middle vegetative stage in the north. Soil moisture conditions are favorable for growth in the west and east but patchy dryness over some central locations, particularly those around Omsk, is producing crop stress.



SOUTH ASIA... Monsoon rains are working their way northward in India. Heavy rains, mostly early in the week, fell from eastern Myaharashtra to Uttar Pradesh and Bihar. This was the first significant rain in the northern area this season, benefiting autumn and winter rice which are normally planted in June and July. Unseasonably dry weather in the cotton and groundnut areas is slowing planting progress which usually continues through July. Seasonal precipitation accumulations are well below normal on the southwest coast where autumn rice is normally planted in June. The late and infrequent monsoon rains have caused 1-3 week summer crop planting delays in peninsular India. Much more rain is needed for adequate growing conditions.



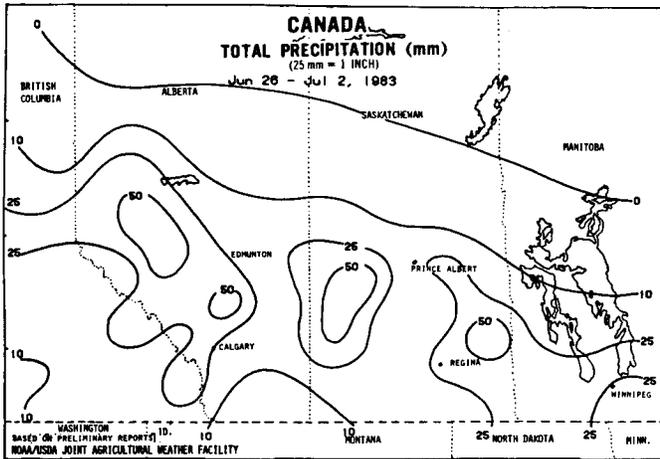
SOUTH AMERICA... Locally heavy rain was confined mostly to Uruguay and the immediate vicinities of Argentina and Brazil. Showers also extended northward to the southern coffee areas of southern Mato Grosso do Sul, Parana, and eastern Sao Paulo. The rain likely caused only temporary interruptions in the coffee harvest. Rainfall was highly variable over Brazil's wheat area. Wheat is in early vegetative growth in Parana, while the rain-soaked crop in Rio Grande do Sul ranges from recently planted to early vegetative growth. Mostly dry weather covered Argentina's wheat areas where the crop is also in early growth stages. Seasonal showers will be needed to sustain good crop development. Temperatures averaged near normal in Argentina, slightly below normal in southern Brazil, and above normal in Brazil's coffee area.



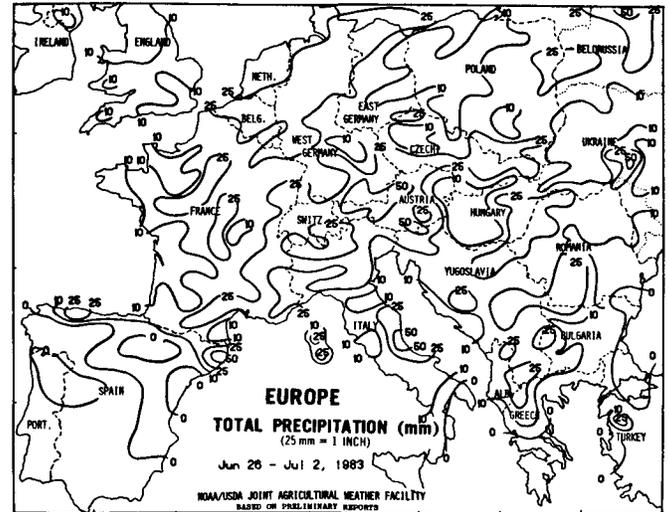
SOUTHEAST ASIA... Heavy precipitation fell early in the week in eastern Thailand and extremely heavy amounts (up to 400 mm) fell in southeastern Thailand and Kampuchea. Moderate precipitation benefited the remaining rice and corn areas in Thailand as monsoon activity decreased later in the week. The corn in central Thailand is usually entering the reproductive stage in July; however, planting delays have pushed back crop development by a few weeks. The western coast of Malaysia remained dry while moderate rain fell in the east. Light scattered showers fell in the northern Philippines while beneficial widespread rains covered the southern islands as the Intertropical Convergence Zone moves northward.



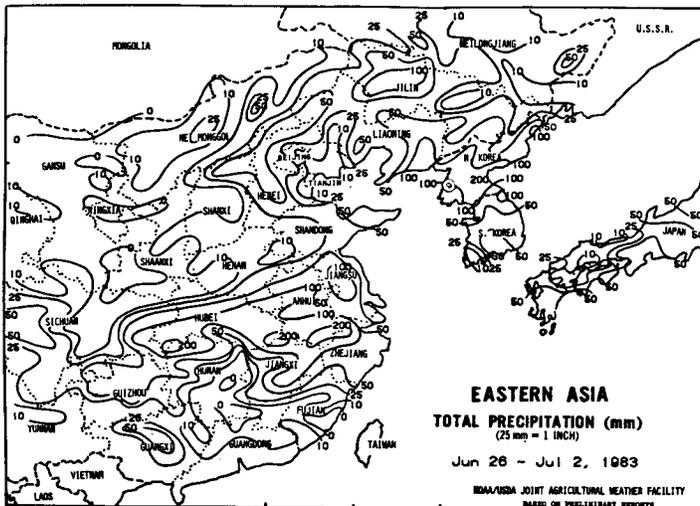
MEXICO... Rains falling across the southern Plateau corn belt benefited crops which were probably planted later than usual this year because of late onset of the rainy season. Rainfall was rather variable, ranging from about 10 mm in the northeastern districts to over 50 mm in extreme eastern and western sections. Dry weather continued over most of the rest of the country, especially the northern regions. And in the Northeast, much of the rangeland vegetation, orchards, immature crops and livestock are heavily stressed by the lack of moisture.



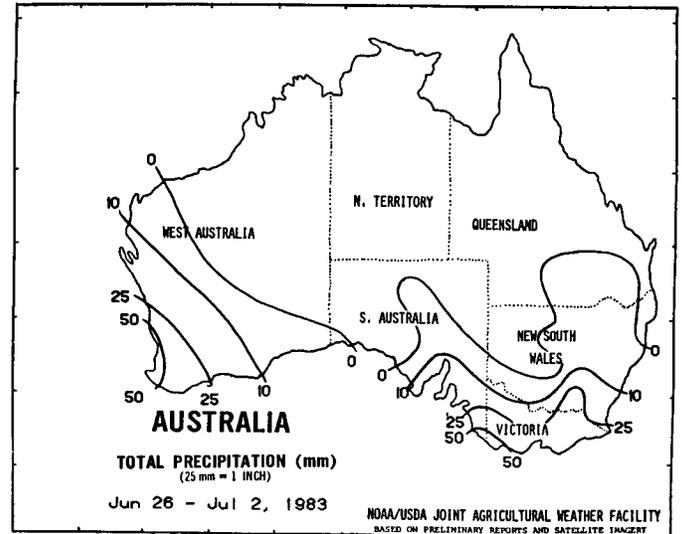
CANADA... Showers and cool weather covered the entire Canadian Prairie Provinces. The moisture especially benefited crops in southwestern portions of the grain belt where soils were becoming too dry for vigorous growth. The seasonal to slightly below-average temperatures also favored crops in southwestern Saskatchewan and southern Alberta by reducing the crop's demand for moisture. Lack of sufficient moisture had stressed crops in these areas. The heaviest rain tended to fall in areas which already had adequate moisture, however. Locally heavy rain (greater than 50 mm) was scattered across the northern half of the grain belt, while substantial showers fell over northwestern Saskatchewan and the eastern third of the Prairies. Abundant moisture is available for vegetative growth in these areas. Early-seeded grain and oilseed crops in western areas have reached the reproductive cycle. Additional rain is needed in the southwest.



EUROPE... Widespread showers benefited crops over most of the region during the week except those in Spain, which received generally dry weather. Intermittent moisture fell on England, France, West Germany, and Italy during the week, providing ideal growing conditions for crops in these areas. However, below-normal temperatures may have slowed crop development. Further east, crops in East Germany and Poland also received beneficial precipitation. In the southeast, late-week rains in parts of Yugoslavia, Romania, and Bulgaria may have caused some delays in the winter grain harvest but summer crops benefited from the moisture. In addition, weekly temperatures were above normal in the southeast.



EASTERN ASIA... Precipitation covered most of China's crop areas this week. Heavy rains in the Yangtze Valley continued to slow planting and development of late rice. The southern coast remained relatively dry again this week favoring the rice crops. Rains extended farther into the North China Plain this week as moderate amounts in Shandong benefited cotton in the reproductive stage. Drier weather covered Shanxi, Shaanxi, and Henan, where summer crops are in the reproductive stage, following soaking rains the previous week. Variable precipitation fell in northern and northeastern China. Locally heavy rain, greater than 100 mm, fell in eastern Liaoning and North Korea, while moderate amounts benefited corn and soybeans which are normally entering the reproductive stage in July.



AUSTRALIA... Showers during the first half of the week benefited the wheat areas of Western Australia and portions of South Australia and Victoria. In the west, near-normal rainfall improved soil conditions for planting and emergence of winter wheat. The storm system brushed the southern coast, producing significant rain in southernmost crop areas, but wheat areas of western South Australia, northern Victoria, and southern New South Wales received only light rainfall. Wheat is in vegetative growth in these areas which have been relatively dry in recent weeks. Timely rains are needed to replenish moisture reserves for later phases of crop development. Mostly dry weather over the remainder of New South Wales and Queensland aided fieldwork which has been delayed by reoccurring heavy rains during the planting season.

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