

**8** **Table 2.** Summary of 1993 precipitation and 30-year averages for January–September for 10 weather-station locations in the upper Mississippi River Basin  
 [Averages are for the 30-year period 1961–90. Data from National Oceanic and Atmospheric Administration, 1992 and 1993]

Summary of Floods in the United States, January 1992 Through September 1993

	Bismarck, ND	Sioux Falls, SD	Minneapolis, MN	Des Moines, IA	Cedar Rapids, IA	Madison, WI	Peoria, IL	Manhattan, KS	Kansas City, MO	St. Louis, MO
January										
1993, inches	0.29	0.70	1.25	1.59	1.18	1.60	3.55	0.98	1.96	3.54
Average, inches	.45	.51	.95	.96	1.01	1.07	1.51	.81	1.09	1.81
1993, percent	64	137	132	166	117	150	235	121	180	196
February										
1993, inches	.33	.81	.39	1.52	1.11	1.18	1.68	1.12	1.28	2.75
Average, inches	.43	.64	.88	1.11	1.02	1.08	1.42	.93	1.10	2.12
1993, percent	77	127	44	137	109	109	118	120	116	130
March										
1993, inches	.38	2.04	1.25	3.22	3.63	3.29	4.08	3.46	2.15	3.31
Average, inches	.77	1.64	1.94	2.33	2.32	2.17	2.91	2.36	2.51	3.58
1993, percent	49	124	64	138	156	152	140	147	88	92
April										
1993, inches	1.26	2.61	1.99	2.96	3.86	5.33	4.89	1.88	5.59	6.16
Average, inches	1.67	2.52	2.42	3.36	3.19	2.86	3.77	2.95	3.12	3.50
1993, percent	75	104	82	88	121	186	130	64	179	176
May										
1993, inches	2.36	8.26	4.02	7.51	5.43	3.81	3.25	10.99	7.30	3.94
Average, inches	2.18	3.03	3.39	3.66	3.71	3.14	3.70	4.56	5.04	3.97
1993, percent	108	273	119	205	146	121	88	241	145	99

**Table 2.** Summary of 1993 precipitation and 30-year averages for January–September for 10 weather-station locations in the upper Mississippi River Basin—Continued

	Bismarck, ND	Sioux Falls, SD	Minneapolis, MN	Des Moines, IA	Cedar Rapids, IA	Madison, WI	Peoria, IL	Manhattan, KS	Kansas City, MO	St. Louis, MO
June										
1993, inches	4.57	6.43	6.28	7.68	8.79	6.67	5.70	6.83	5.67	7.12
Average, inches	2.72	3.40	4.05	4.46	4.55	3.66	3.99	5.54	4.72	3.72
1993, percent	168	189	155	172	193	182	143	123	120	191
July										
1993, inches	13.75	7.86	5.58	9.75	17.03	9.34	10.15	17.56	10.90	5.06
Average, inches	2.14	2.68	3.53	3.78	4.11	3.39	4.20	3.28	4.38	3.85
1993, percent	643	293	158	258	414	276	242	535	249	131
7 months (Jan.–July)										
1993, inches	22.94	28.71	20.76	34.23	41.03	31.22	33.30	42.82	34.91	31.88
Average, inches	10.36	14.42	17.16	19.66	19.91	17.37	21.50	20.43	21.96	22.55
1993, percent	221	199	121	174	206	180	155	210	159	141
August										
1993, inches	1.89	3.10	6.45	12.24	13.09	5.57	7.38	6.61	3.98	4.78
Average, inches	1.72	2.85	3.62	4.20	4.01	4.04	3.10	3.32	4.01	2.85
1993, percent	110	109	178	291	326	138	238	199	99	168
September										
1993, inches	.26	1.88	2.04	5.79	3.88	3.74	7.56	3.99	7.63	9.16
Average, inches	1.49	3.02	2.72	3.53	3.90	3.37	3.87	4.13	4.86	3.12
1993, percent	17	62	75	164	99	111	195	97	157	294
9 months (Jan.–Sept.)										
1993, inches	25.09	33.69	29.25	52.26	58.00	40.53	48.24	53.42	46.52	45.82
Average, inches	13.57	20.29	23.50	27.39	27.82	24.78	28.47	27.88	30.83	28.52
1993, percent	185	166	124	191	208	164	169	192	151	161
Annual average, inches	15.47	23.86	28.32	33.12	33.72	30.88	36.25	33.82	37.62	37.51