Table 4B — Annular Eclipse of 2023 October 14: Partial Eclipse from USA

City/State	Eclipse Begins	Maximum Eclipse	Eclipse Ends	Sun Altitude	Sun Azimuth	Eclipse Magnitude	Eclipse Obscuration
Albany, NY	12:10	13:21	14:31	38	193	0.321	0.204
Atlanta, GA	11:43	13:12	14:45	48	176	0.620	0.519
Austin, TX	10:24	11:54	13:33	47	149	0.930	0.886
Baltimore, MD	12:01	13:19	14:38	42	189	0.406	0.286
Baton Rouge, LA	10:33	12:05	13:44	50	162	0.803	0.737
Billings, MT	09:14	10:31	11:55	27	138	0.756	0.678
Birmingham, AL	10:39	12:08	13:43	48	171	0.667	0.574
Bismarck, ND	10:21	11:39	13:01	30	148	0.638	0.539
Boise, ID	09:08	10:24	11:48	23	128	0.897	0.846
Boston, MA	12:18	13:26	14:34	38	198	0.287	0.173
Charleston, SC	11:54	13:22	14:53	49	186	0.555	0.445
Charleston, WV	11:49	13:11	14:37	43	180	0.500	0.384
Charlotte, NC	11:51	13:17	14:45	47	183	0.534	0.421
Chicago, IL	10:37	11:58	13:23	39	168	0.541	0.429
Cincinnati, OH	11:43	13:06	14:32	42	174	0.533	0.421
Columbia, SC	11:51	13:18	14:48	48	183	0.556	0.446
Columbus, OH	11:46	13:07	14:31	42	176	0.497	0.382
Concord, NH	12:17	13:24	14:31	37	196	0.284	0.171
Dallas, TX	10:24	11:53	13:30	45	151	0.862	0.807
Denver, CO	09:14	10:36	12:06	33	140	0.846	0.787
Des Moines, IA	10:28	11:50	13:17	38	158	0.637	0.539
Detroit, MI	11:47	13:05	14:26	39	176	0.462	0.344
El Paso, TX	09:15	10:40	12:14	39	136	0.897	0.848
Fargo, ND	10:26	11:43	13:05	31	154	0.584	0.478
Harrisburg, PA	12:01	13:18	14:36	41	188	0.397	0.277
Hartford, CT	12:13	13:24	14:34	39	195	0.316	0.200
Houston, TX	10:27	11:59	13:38	49	154	0.896	0.848
Jackson, MS	10:33	12:04	13:41	48	164	0.751	0.674
Kansas City, MO	10:25	11:50	13:21	40	156	0.700	0.612
Knoxville, TN	11:44	13:10	14:40	46	176	0.576	0.468
Las Vegas, NV	08:08	09:27	10:54	29	127	0.875	0.821
Lincoln, NE	10:23	11:46	13:15	37	153	0.700	0.612
Little Rock, AR	10:29	11:58	13:33	45	160	0.744	0.665
Los Angeles, CA	08:08	09:25	10:50	28	123	0.781	0.708
Louisville, KY	11:40	13:04	14:33	43	172	0.569	0.461
Madison, WI	10:35	11:55	13:19	38	165	0.547	0.436
Memphis, TN	10:32	12:01	13:35	45	164	0.697	0.609
Miami, FL	11:57	13:34	15:12	55	192	0.670	0.577
Milwaukee, WI	10:37	11:57	13:20	38	167	0.525	0.412
Nashville, TN	10:38	12:05	13:36	45	170	0.622	0.521
New Orleans, LA	10:35	12:08	13:46	51	165	0.792	0.723
New York, NY	12:09	13:22	14:36	40	193	0.348	0.230
Oklahoma City, OK	10:22	11:49	13:24	42	151	0.820	0.756
Omaha, NE	10:24	11:47	13:15	37	154	0.680	0.588
Philadelphia, PA	12:06	13:21	14:38	41	191	0.375	0.255
Phoenix, AZ	08:11	09:32	11:02	33	130	0.850	0.791
Portland, ME	12:21	13:26	14:30	36	198	0.262	0.152
Portland, OR	08:06	09:19	10:40	18	123	0.914	0.864
Providence, RI	12:17	13:26	14:35	38	197	0.297	0.183
Raleigh, NC	11:56	13:20	14:46	46	187	0.488	0.372
Richmond, VA	11:59	13:20	14:42	44	188	0.443	0.324
Salem, OR	08:06	09:19	10:40	18	122	0.933	0.882
Salt Lake City, UT	09:09	10:28	11:55	28	132	0.915	0.867
San Francisco, CA	08:05	09:20	10:42	22	120	0.828	0.765
Seattle, WA	08:08	09:20	10:40	17	124	0.858	0.799
Springfield, IL	10:33	11:57	13:25	41	164	0.607	0.504
Washington, DC	12:00	13:19	14:39	43	188	0.418	0.298

All Times are Local Times.

F. Espenak,"Eclipses During 2023", 2023 Observer's Handbook, Royal Astronomical Society Of Canada.