

Table 4 - Local Circumstances for the Hybrid Solar Eclipse of 2013 November 03

Location	Eclipse Begins	Max. Eclipse	Eclipse Ends	Sun Alt	Sun Azm	Eclip. Mag.	Eclip. Obs.
	h m	h m	h m	°	°		
Canada Halifax, NS		11:16	12:15	3	114	0.541	0.437
Hamilton, ON	— r	11:59r	12:11	0	111	0.175	0.086
Montréal, QC	— r	11:39r	12:12	0	111	0.438	0.324
North York, ON	— r	11:58r	12:11	0	111	0.187	0.094
Ottawa, ON	— r	11:47r	12:12	0	111	0.343	0.228
Québec, QC	— r	11:32r	12:13	0	112	0.475	0.364
Saint John's, NF	10:32	11:24	12:19	9	124	0.382	0.266
Toronto, ON	— r	11:58r	12:11	0	111	0.192	0.098
USA Akron, OH	— r	12:01r	12:10	0	110	0.131	0.056
Albany, NY	— r	11:33r	12:12	0	110	0.525	0.419
Allentown, PA	— r	11:36r	12:11	0	110	0.504	0.396
Baltimore, MD	— r	11:38r	12:10	0	109	0.480	0.369
Boston, MA	— r	11:22r	12:12	0	110	0.626	0.535
Charleston, WV	— r	11:57r	12:09	0	109	0.189	0.096
Columbia, SC	— r	11:47r	12:07	0	108	0.318	0.205
Harrisburg, PA	— r	11:41r	12:10	0	110	0.436	0.322
Miami, FL	— r	11:32r	12:02	0	107	0.476	0.365
New Haven, CT	— r	11:27r	12:12	0	110	0.603	0.508
New York, NY	— r	11:31r	12:11	0	110	0.575	0.476
Norfolk, VA	— r	11:33r	12:09	0	109	0.566	0.465
Philadelphia, PA	— r	11:34r	12:11	0	110	0.542	0.438
Providence, RI	— r	11:22r	12:12	0	110	0.635	0.546
Raleigh, NC	— r	11:40r	12:08	0	108	0.442	0.328
Richmond, VA	— r	11:39r	12:09	0	109	0.475	0.364
Washington, DC	— r	11:39r	12:10	0	109	0.466	0.353
Algeria Algiers	12:15	12:56	13:36	34	205	0.102	0.038
Angola Luanda	12:34	14:02	15:18	43	257	0.740	0.676
Cameroon Yaoundé	12:17	13:53	15:15	43	245	0.879	0.849
Chad Ndjamena	12:26	13:54	15:09	35	241	0.648	0.562
Congo Brazzaville	12:34	14:05	15:21	39	254	0.877	0.847
Egypt Cairo	13:07	13:58	14:45	13	244	0.257	0.150
Ethiopia Addis Abeba	13:14	14:24	— s	8	253	0.860	0.823
Ghana Accra	11:37	13:21	14:54	58	229	0.852	0.816
Israel Jerusalem	13:12	14:00	14:43	9	246	0.239	0.135
Ivory Coast Abidjan	11:25	13:09	14:47	63	220	0.883	0.855
Kenya Nairobi	13:16	14:27	— s	12	255	0.847	0.807
Kuwait Kuwait City	13:19	13:59s	— s	0	253	0.353	0.238
Libya Tripoli	12:38	13:25	14:10	29	224	0.150	0.068
Madag. Antananarivo	13:48	14:27	— s	6	256	0.223	0.122
Mali Bamako	11:09	12:48	14:26	61	196	0.717	0.647
Morocco Casablanca	11:30	12:30	13:30	41	185	0.227	0.126
Mozambique Maputo	13:47	14:19	14:50	23	264	0.113	0.045
Saudi Arabia Riyadh	13:18	14:11s	— s	0	253	0.481	0.370
Senegal Dakar	10:43	12:16	13:57	59	163	0.778	0.723
South Africa Durban	14:11	14:16	14:21	26	267	0.002	0.000
Johannesburg	13:40	14:16	14:50	28	266	0.129	0.055
Pretoria	13:39	14:16	14:52	28	266	0.144	0.064
Tanzania Dar-es-Salaam	13:24	14:28	— s	11	256	0.658	0.574
Uganda Kampala	13:09	14:24	15:28	17	254	0.928	0.910
Zambia Lusaka	13:17	14:21	15:17	25	260	0.465	0.354
Zimbabwe Harare	13:25	14:22	15:13	23	261	0.373	0.258

All times are Universal Time.

'r' indicates eclipse in progress at sunrise.

's' indicates eclipse in progress at sunset.