

APPENDIX B: PARALLAX BASED DISTANCES

Here we present distances derived through the Reid et al. (2016) parallax based technique, together with derived properties.

Table B1. Table of distances derived using the technique of Reid et al. (2016). Following the technique the last two columns are the probability of the arm allocations and the allocations themselves with: UA, un-associated; Out, Outer arm; Per, Perseus arm; Loc, Local Arm; SgN, Sagittarius arm (near portion); SgF, Sagittarius arm (far portion); ScN, Scutum arm (near portion); ScF, Scutum arm (far portion); Nor, Norma arm; 3kN, near 3-kpc arm; 3kF, far 3-kpc arm; AqS, Aquila Spur; LoS, Local Spur. V_p is the velocity of the peak emission feature.

6668-MHz methanol maser l b ($^{\circ}$ $^{\circ}$)	V_p (kms^{-1})	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
188.794+1.031	−5.5	2.0	0.3	0.91	Per
188.946+0.886	10.8	2.1	0.1	0.95	Per
189.030+0.783	8.9	2.1	0.1	0.94	Per
189.471−1.216	18.8	2.0	0.1	0.86	Per
189.778+0.345	5.5	2.0	0.1	0.81	Per
192.600−0.048	4.6	1.6	0.1	0.73	Per
196.454−1.677	15.2	2.2	0.4	0.90	Per
206.542−16.355	12.3	0.4	0.1	1.00	Loc
208.996−19.386	7.3	0.8	0.0	1.00	UA
209.016−19.398	−1.5	0.8	0.0	1.00	UA
212.067−0.750	43.3	2.8	0.4	0.84	Per
213.705−12.597	10.7	0.8	0.1	1.00	UA
232.620+0.996	22.9	1.7	0.1	0.73	UA
254.880+0.451	30.1	3.0	0.7	1.00	UA
259.939−0.041	−1.0	1.1	0.8	1.00	UA
263.250+0.514	12.3	2.1	0.8	1.00	UA
264.140+2.018	8.1	1.6	0.8	1.00	UA
264.289+1.469	8.7	1.8	0.8	1.00	UA
269.153−1.128	16.0	3.0	0.9	1.00	UA
269.456−1.467	56.1	6.7	0.7	1.00	UA
269.658−1.270	16.2	3.1	0.9	1.00	UA
270.255+0.835	3.9	2.0	1.0	1.00	UA
281.710−1.104	0.9	3.0	1.5	1.00	UA
284.352−0.419	3.9	4.4	1.1	1.00	UA
284.694−0.361	13.3	5.6	0.8	1.00	UA
285.337−0.002	0.7	4.3	1.2	1.00	UA
286.383−1.834	9.6	1.2	0.9	0.58	UA
287.371+0.644	−1.9	4.3	1.5	1.00	UA
290.374+1.661	−24.2	2.0	0.8	1.00	UA
290.411−2.915	−16.0	1.1	0.5	1.00	UA
291.270−0.719	−31.2	3.2	1.3	1.00	UA
291.274−0.709	−29.7	3.2	1.2	1.00	UA
291.579−0.431	15.2	7.4	0.7	1.00	UA
291.582−0.435	10.4	7.0	0.7	1.00	UA
291.642−0.546	12.1	7.2	0.7	1.00	UA
291.879−0.810	33.5	9.1	0.7	1.00	UA
292.074−1.131	−19.1	2.6	1.1	1.00	UA
292.468+0.168	10.9	7.2	0.7	1.00	UA
293.723−1.742	24.2	9.1	0.7	0.74	UA
293.827−0.746	37.0	9.8	0.7	1.00	UA
293.942−0.874	41.1	10.2	0.7	1.00	UA
294.337−1.706	−11.7	1.4	0.7	1.00	UA
294.511−1.621	−11.9	1.4	0.7	1.00	UA
294.977−1.734	−5.3	1.0	0.6	1.00	UA
294.990−1.719	−12.3	1.4	0.6	1.00	UA
296.893−1.305	22.2	9.6	0.6	0.89	UA
297.406−0.622	27.8	9.9	0.7	1.00	UA
298.177−0.795	23.5	9.8	0.6	1.00	UA
298.213−0.343	33.3	10.4	0.7	1.00	UA
298.262+0.739	−30.1	3.7	1.3	1.00	UA
298.632−0.362	37.2	10.9	0.7	1.00	UA
298.723−0.086	23.5	9.8	0.7	1.00	UA
299.013+0.128	18.3	9.4	0.7	1.00	UA
299.772−0.005	−6.8	7.7	0.6	0.91	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
300.504−0.176	7.5	9.0	0.7	1.00	UA
300.969+1.148	−37.2	3.3	1.0	1.00	UA
301.136−0.226	−39.6	4.7	1.3	1.00	UA
302.032−0.061	−35.7	5.0	1.5	1.00	UA
302.034+0.625	−39.1	4.3	1.3	1.00	UA
302.455−0.741	32.6	11.5	0.7	1.00	UA
303.507−0.721	14.2	10.4	0.6	1.00	UA
303.846−0.363	24.8	11.1	0.6	1.00	UA
303.869+0.194	−36.9	5.3	1.7	1.00	UA
304.367−0.336	32.7	11.8	0.7	1.00	UA
304.887+0.635	−35.1	3.1	0.9	0.56	UA
305.200+0.019	−33.1	7.0	0.9	0.66	UA
305.199+0.005	−42.8	5.4	1.5	1.00	UA
305.202+0.208	−44.0	5.2	1.5	1.00	UA
305.208+0.206	−38.3	6.4	0.9	0.61	UA
305.248+0.245	−32.1	7.0	0.9	0.63	UA
305.362+0.150	−36.5	6.7	0.9	0.62	UA
305.366+0.184	−33.7	6.9	0.9	0.64	UA
305.475−0.096	−35.3	6.8	0.9	0.64	UA
305.563+0.013	−37.3	6.7	0.9	0.63	UA
305.573−0.342	−51.0	5.0	1.2	1.00	UA
305.615−0.344	−34.9	6.8	0.9	0.58	UA
305.634+1.645	−54.8	2.5	1.1	1.00	UA
305.646+1.589	−58.1	2.5	1.2	1.00	UA
305.799−0.245	−39.3	6.5	0.9	0.60	UA
305.822−0.115	−42.2	5.5	1.7	1.00	UA
305.887+0.017	−34.2	7.1	0.9	0.66	UA
305.940−0.164	−50.9	5.2	1.3	1.00	UA
306.322−0.334	−24.7	8.0	0.7	0.70	UA
307.132−0.476	−34.0	7.3	0.9	0.51	UA
307.133−0.477	−38.7	6.7	1.0	0.50	UA
308.056−0.396	−11.8	9.5	0.7	0.78	UA
308.075−0.411	−7.5	9.9	0.7	0.83	UA
308.651−0.507	3.2	10.8	0.5	0.93	UA
308.686+0.530	−53.1	5.1	1.3	1.00	UA
308.715−0.216	−12.5	9.6	0.6	0.89	UA
308.754+0.549	−45.3	3.7	0.9	0.54	UA
308.918+0.123	−54.8	5.6	1.3	1.00	UA
309.384−0.135	−49.6	6.7	0.9	0.61	UA
309.901+0.231	−54.6	5.7	1.5	1.00	UA
309.921+0.479	−59.7	5.3	1.2	1.00	UA
310.144+0.760	−55.7	4.7	1.2	1.00	UA
310.180−0.122	3.6	10.9	0.6	1.00	UA
311.230−0.032	24.8	12.7	0.7	1.00	UA
311.551−0.055	−56.3	6.8	0.9	0.62	UA
311.628+0.266	−57.8	5.8	1.6	1.00	UA
311.643−0.380	32.6	13.5	0.7	1.00	UA
311.729−0.735	30.9	13.5	0.7	1.00	UA
311.947+0.142	−44.0	8.1	0.7	0.69	UA
312.071+0.082	−34.8	8.9	0.6	0.79	UA
312.108+0.262	−49.9	7.5	0.8	0.58	UA
312.307+0.661	−12.3	1.1	0.5	0.76	UA
312.501−0.084	21.8	12.8	0.7	1.00	UA
312.597+0.045	−59.8	6.1	1.6	1.00	UA
312.598+0.045	−67.9	5.9	1.2	1.00	UA
312.698+0.126	29.5	13.4	0.7	1.00	UA
312.702−0.087	−58.2	7.0	0.9	0.60	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
313.469+0.190	-9.3	10.9	0.5	0.93	UA
313.577+0.325	-47.8	8.2	0.7	0.58	UA
313.705-0.190	-41.5	8.8	0.6	0.72	UA
313.767-0.863	-56.3	3.9	0.8	1.00	UA
313.774-0.863	-44.8	3.0	0.6	1.00	UA
313.994-0.084	-4.9	11.2	0.5	1.00	UA
314.221+0.273	-61.6	7.1	0.9	0.55	UA
314.320+0.112	-43.5	8.8	0.6	0.74	UA
315.803-0.575	8.2	12.8	0.5	1.00	UA
316.359-0.362	3.4	12.4	0.5	1.00	UA
316.381-0.379	-0.5	12.2	0.5	0.94	UA
316.412-0.308	-5.6	11.8	0.6	0.91	UA
316.484-0.310	-11.5	11.4	0.6	0.85	UA
316.640-0.087	-20.4	10.8	0.5	0.90	UA
316.811-0.057	-45.8	9.3	0.6	0.77	UA
317.029+0.361	-47.9	9.1	0.6	0.55	UA
317.061+0.256	-43.8	9.4	0.5	0.68	UA
317.466-0.402	-37.7	9.9	0.5	0.50	UA
317.701+0.110	-42.3	9.7	0.5	0.78	UA
318.044-1.404	46.3	16.8	0.9	1.00	UA
318.050+0.087	-51.8	9.2	0.6	0.73	UA
318.472-0.214	-19.1	11.3	0.5	0.86	UA
318.948-0.196	-34.6	10.4	0.5	0.78	UA
319.163-0.421	-21.1	1.5	0.5	0.44	UA
319.836-0.197	-9.2	12.1	0.5	0.93	UA
320.123-0.504	-10.1	12.7	0.9	0.49	UA
320.231-0.284	-62.5	8.9	0.6	0.58	UA
320.244-0.562	-49.7	3.1	0.5	0.81	UA
320.285-0.308	-69.0	8.4	0.7	0.54	UA
320.414+0.109	-13.4	12.0	0.5	0.93	UA
320.424+0.089	-8.0	12.3	0.5	0.96	UA
320.625+0.098	-7.6	12.4	0.5	0.96	UA
320.780+0.248	-5.1	12.6	0.6	0.94	UA
321.030-0.485	-66.5	4.2	0.6	0.64	UA
321.033-0.483	-61.2	3.8	0.6	0.66	UA
321.148-0.529	-66.1	4.1	0.6	0.70	UA
321.704+1.168	-44.3	2.7	0.5	1.00	UA
322.158+0.636	-64.0	3.9	0.5	0.87	UA
322.705-0.331	-21.6	11.9	0.5	0.68	UA
323.459-0.079	-66.9	9.4	0.5	0.70	UA
323.740-0.263	-50.5	10.4	0.5	0.65	UA
323.766-1.370	46.6	18.4	1.1	1.00	UA
323.793-0.397	-22.7	1.6	0.5	0.45	UA
323.799+0.017	-56.2	10.1	0.5	0.76	UA
324.716+0.342	-45.9	10.8	0.5	0.54	UA
324.789-0.378	11.8	14.6	0.6	1.00	UA
324.915+0.158	-2.3	13.5	0.6	1.00	UA
324.923-0.568	-78.3	4.7	0.6	0.73	UA
325.659-0.022	29.4	16.2	0.9	1.00	UA
326.323-0.393	-69.4	4.2	0.5	0.57	UA
326.448-0.748	-68.6	4.0	0.5	1.00	UA
326.475+0.703	-38.5	2.4	0.5	1.00	UA
326.476+0.695	-43.6	2.7	0.5	1.00	UA
326.608+0.799	-45.2	2.8	0.5	1.00	UA
326.641+0.611	-42.6	2.7	0.5	0.96	UA
326.662+0.520	-38.6	2.5	0.5	0.86	UA
326.859-0.677	-58.1	3.5	0.5	1.00	UA
326.986-0.031	-60.7	10.4	0.5	0.75	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
327.120+0.511	-87.1	5.2	0.6	0.63	UA
327.282-0.469	-0.0	14.5	0.6	0.86	UA
327.291-0.578	-37.0	2.4	0.5	0.95	UA
327.392+0.199	-84.5	9.0	0.6	0.59	UA
327.395+0.197	-89.5	8.6	0.7	0.56	UA
327.402+0.445	-82.6	4.9	0.6	0.62	UA
327.566-0.850	-29.0	1.9	0.5	1.00	UA
327.590-0.094	-86.3	8.9	0.6	0.62	UA
327.618-0.111	-98.0	8.1	0.7	0.56	UA
327.710-0.394	-78.0	4.6	0.5	0.57	UA
327.808-0.634	-42.3	2.7	0.5	1.00	UA
327.863+0.098	-46.3	11.3	0.5	0.79	UA
327.945-0.115	-51.6	11.0	0.5	0.77	UA
328.140-0.432	-39.2	2.5	0.5	0.69	UA
328.164+0.587	-91.9	5.5	0.6	0.67	UA
328.237-0.547	-44.7	2.8	0.4	0.90	UA
328.254-0.532	-37.5	2.4	0.5	0.90	UA
328.385+0.131	29.0	16.8	1.0	1.00	UA
328.808+0.633	-44.0	2.8	0.4	1.00	UA
328.809+0.633	-44.4	2.8	0.4	1.00	UA
328.819+1.704	-86.2	2.2	1.2	0.80	UA
328.940+0.558	-98.8	5.9	0.7	0.62	UA
328.942+0.565	-90.9	5.4	0.6	0.69	UA
329.029-0.205	-37.1	11.9	0.5	0.76	UA
329.031-0.198	-45.8	11.5	0.5	0.73	UA
329.066-0.308	-43.8	11.5	0.5	0.58	UA
329.183-0.314	-55.6	10.9	0.4	0.54	UA
329.272+0.115	-72.0	10.1	0.5	0.69	UA
329.339+0.148	-106.4	7.3	1.1	1.00	UA
329.341-0.644	-81.4	4.7	0.5	0.89	UA
329.405-0.459	-70.5	4.2	0.4	0.70	UA
329.407-0.459	-66.8	4.0	0.4	0.71	UA
329.469+0.503	-72.0	4.3	0.5	0.77	UA
329.526+0.216	-92.8	8.8	0.6	0.55	UA
329.556+0.181	-106.5	7.3	1.1	1.00	UA
329.610+0.114	-60.1	10.8	0.4	0.73	UA
329.622+0.138	-85.0	9.4	0.5	0.63	UA
329.719+1.164	-75.8	4.3	0.5	1.00	UA
330.070+1.064	-41.8	2.6	0.4	1.00	UA
330.226+0.290	-90.5	9.1	0.6	0.52	UA
330.283+0.493	-88.9	5.2	0.5	0.68	UA
330.875-0.383	-69.8	4.2	0.4	0.59	UA
330.878-0.367	-59.2	3.6	0.4	0.57	UA
330.953-0.182	-87.5	9.5	0.5	0.60	UA
330.998+0.093	-28.6	12.7	0.5	0.87	UA
331.059+0.375	-82.5	4.9	0.5	0.57	UA
331.120-0.118	-93.0	9.2	0.6	0.60	UA
331.132-0.244	-84.1	9.7	0.5	0.57	UA
331.134+0.156	-72.1	10.4	0.4	0.67	UA
331.278-0.188	-78.0	10.1	0.4	0.63	UA
331.342-0.346	-65.0	3.9	0.4	0.53	UA
331.425+0.264	-88.7	9.5	0.5	0.55	UA
331.437-0.304	-89.9	9.4	0.5	0.51	UA
331.442-0.187	-87.8	9.5	0.5	0.60	UA
331.542-0.066	-86.0	9.7	0.5	0.66	UA
331.543-0.066	-84.0	9.8	0.5	0.66	UA
331.556-0.121	-97.0	9.0	0.6	0.58	UA
331.710+0.603	-73.2	4.3	0.4	0.91	UA
331.900-1.186	-46.2	2.9	0.4	1.00	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
332.094−0.421	−58.5	3.6	0.4	0.68	UA
332.295−0.094	−42.6	12.0	0.5	0.81	UA
332.296−0.094	−46.6	11.8	0.5	0.79	UA
332.295+2.280	−24.0	1.5	0.5	1.00	UA
332.351−0.436	−52.9	3.4	0.4	0.73	UA
332.352−0.117	−44.6	11.9	0.5	0.79	UA
332.364+0.607	−48.4	3.1	0.4	1.00	UA
332.560−0.148	−54.9	11.4	0.4	0.73	UA
332.583+0.147	−40.0	12.2	0.5	0.79	UA
332.604−0.168	−49.9	11.7	0.4	0.74	UA
332.653−0.621	−50.6	3.2	0.4	1.00	UA
332.701−0.588	−62.7	3.8	0.4	0.93	UA
332.726−0.621	−47.4	3.1	0.4	1.00	UA
332.813−0.701	−53.1	3.3	0.4	1.00	UA
332.826−0.549	−61.8	3.8	0.4	0.90	UA
332.854+0.817	−49.0	3.1	0.4	1.00	UA
332.942−0.686	−52.0	3.3	0.4	1.00	UA
332.960+0.135	−54.1	11.5	0.4	0.74	UA
332.963−0.679	−45.9	3.0	0.4	1.00	UA
332.975+0.773	−51.0	3.2	0.4	1.00	UA
332.987−0.487	−55.8	3.5	0.4	0.82	UA
333.029−0.015	−54.1	11.5	0.4	0.78	UA
333.029−0.063	−40.2	12.2	0.5	0.83	UA
333.068−0.447	−54.4	3.5	0.4	0.75	UA
333.109−0.500	−61.0	3.8	0.4	0.83	UA
333.121−0.434	−48.4	3.2	0.4	0.74	UA
333.126−0.440	−42.5	2.8	0.4	0.76	UA
333.128−0.440	−45.9	3.0	0.4	0.75	UA
333.135−0.431	−52.5	3.4	0.4	0.72	UA
333.128−0.560	−52.7	3.4	0.4	0.93	UA
333.130−0.560	−56.8	3.6	0.4	0.92	UA
333.163−0.101	−95.2	9.3	0.5	0.61	UA
333.184−0.091	−81.9	10.1	0.4	0.67	UA
333.234−0.060	−85.3	9.9	0.4	0.66	UA
333.234−0.062	−91.9	9.5	0.5	0.64	UA
333.315+0.105	−41.2	12.2	0.5	0.81	UA
333.387+0.032	−73.9	10.5	0.4	0.71	UA
333.466−0.164	−42.3	12.1	0.5	0.77	UA
333.562−0.025	−35.3	12.6	0.5	0.85	UA
333.646+0.058	−87.3	9.9	0.5	0.66	UA
333.683−0.437	−5.6	15.3	0.7	0.65	UA
333.761−0.226	−55.2	11.5	0.4	0.66	UA
333.851+0.527	−40.2	2.7	0.5	0.92	UA
333.900−0.099	−59.3	11.3	0.4	0.74	UA
333.931−0.135	−36.9	12.5	0.5	0.81	UA
334.138−0.023	−31.1	12.9	0.5	0.87	UA
334.307−0.079	−36.8	12.5	0.5	0.84	UA
334.635−0.015	−30.0	13.0	0.5	0.88	UA
334.933−0.307	−102.8	6.1	0.6	0.50	UA
334.935−0.098	−21.0	13.6	0.6	0.90	UA
335.060−0.427	−47.0	3.2	0.4	0.74	UA
335.426−0.240	−50.5	11.8	0.4	0.64	UA
335.556−0.307	−116.2	6.9	0.6	0.50	UA
335.585−0.285	−48.6	11.9	0.4	0.58	UA
335.585−0.289	−51.3	11.8	0.4	0.56	UA
335.585−0.290	−47.3	12.0	0.4	0.57	UA
335.726+0.191	−44.4	12.2	0.5	0.73	UA
335.789+0.174	−47.5	12.0	0.5	0.73	UA
335.824−0.177	−26.1	13.3	0.5	0.82	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
336.018−0.827	−53.1	3.5	0.4	1.00	UA
336.358−0.137	−73.5	10.8	0.4	0.67	UA
336.409−0.257	−85.9	10.2	0.4	0.55	UA
336.433−0.262	−93.0	9.8	0.4	0.54	UA
336.464−0.157	−85.9	10.2	0.4	0.63	UA
336.496−0.271	−24.0	13.4	0.5	0.46	UA
336.526−0.156	−94.9	9.7	0.5	0.60	UA
336.703−0.099	−35.6	12.8	0.5	0.83	UA
336.809+0.119	−84.4	10.3	0.4	0.65	UA
336.822+0.028	−76.8	10.6	0.4	0.70	UA
336.825+0.139	−88.4	10.1	0.4	0.63	UA
336.830−0.375	−22.8	1.9	0.5	0.55	UA
336.864+0.005	−76.1	10.7	0.4	0.70	UA
336.881+0.008	−68.1	11.1	0.4	0.73	UA
336.916−0.024	−127.3	7.8	0.8	1.00	3kN?
336.941−0.156	−67.2	11.1	0.4	0.68	UA
336.957−0.225	−68.0	11.1	0.4	0.62	UA
336.958−0.977	−49.2	3.3	0.4	1.00	UA
336.983−0.183	−80.6	10.5	0.4	0.62	UA
336.994−0.027	−125.8	7.8	0.8	1.00	3kN?
337.052−0.226	−77.6	10.6	0.4	0.59	UA
337.097−0.929	−40.3	2.8	0.5	1.00	UA
337.132−0.068	−60.6	11.5	0.4	0.75	UA
337.153−0.395	−49.5	3.4	0.4	0.67	UA
337.176−0.032	−64.9	11.2	0.4	0.74	UA
337.201+0.114	−57.5	11.6	0.4	0.74	UA
337.202−0.094	−67.7	11.1	0.4	0.71	UA
337.258−0.101	−69.2	11.0	0.4	0.70	UA
337.263−0.070	−39.5	12.6	0.5	0.82	UA
337.300−0.874	−87.8	5.2	0.4	1.00	UA
337.388−0.210	−56.0	11.7	0.4	0.74	UA
337.404−0.402	−39.7	12.5	0.5	0.54	UA
337.517−0.348	9.4	16.4	0.9	1.00	UA
337.613−0.060	−41.6	12.5	0.5	0.82	UA
337.632−0.079	−57.0	11.7	0.4	0.77	UA
337.686+0.137	−75.0	10.8	0.4	0.60	UA
337.703−0.053	−44.0	12.4	0.5	0.81	UA
337.705−0.053	−54.6	11.8	0.4	0.77	UA
337.710+0.089	−72.7	10.9	0.4	0.65	UA
337.720+0.065	−63.9	11.3	0.4	0.69	UA
337.844−0.375	−38.6	12.6	0.5	0.60	UA
337.920−0.456	−37.8	2.8	0.5	0.59	UA
337.966−0.169	−59.5	11.5	0.4	0.75	UA
337.997+0.136	−32.3	13.0	0.5	0.71	UA
338.069+0.011	−39.1	12.6	0.5	0.81	UA
338.075+0.012	−43.9	12.4	0.5	0.79	UA
338.075+0.009	−41.6	12.5	0.5	0.80	UA
338.140+0.178	−34.5	12.9	0.5	0.62	UA
338.160−0.064	−66.1	11.2	0.4	0.73	UA
338.280+0.542	−56.9	3.8	0.4	1.00	UA
338.287+0.120	−40.0	12.6	0.5	0.70	UA
338.325−0.409	−25.7	13.5	0.5	0.58	UA
338.388+0.162	−32.8	13.0	0.5	0.66	UA
338.392−0.403	−33.5	13.0	0.5	0.56	UA
338.396−0.007	−48.9	12.1	0.5	0.78	UA
338.432+0.058	−30.2	13.2	0.5	0.81	UA
338.461−0.245	−51.8	12.0	0.4	0.73	UA
338.472+0.289	−29.3	2.4	0.5	0.67	UA
338.497+0.207	−28.1	13.3	0.5	0.57	UA
338.561+0.218	−39.1	12.6	0.5	0.52	UA
338.566+0.110	−74.7	10.8	0.4	0.62	UA

Table B1. cont.

6668-MHz methanol maser l b ($^{\circ}$ $^{\circ}$)	V_p (kms^{-1})	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
338.850+0.409	−55.8	3.8	0.4	0.87	UA
338.875−0.084	−41.3	12.6	0.5	0.82	UA
338.902+0.394	−26.0	2.2	0.5	0.93	UA
338.920+0.550	−61.3	4.1	0.4	1.00	UA
338.925+0.557	−65.6	4.3	0.4	1.00	UA
338.925+0.634	−60.9	4.1	0.4	1.00	UA
338.926+0.634	−64.5	4.2	0.4	1.00	UA
338.935−0.062	−41.9	12.5	0.5	0.82	UA
339.053−0.315	−111.7	8.8	0.6	0.52	UA
339.064+0.152	−87.5	10.2	0.4	0.56	UA
339.204−0.018	−14.2	14.4	0.7	0.93	UA
339.282+0.136	−70.1	11.0	0.4	0.61	UA
339.294+0.139	−74.6	10.8	0.4	0.61	UA
339.476+0.185	−87.5	10.2	0.4	0.55	UA
339.477+0.043	−9.6	14.8	0.7	0.94	UA
339.582−0.127	−30.4	13.3	0.6	0.86	UA
339.622−0.121	−32.9	13.1	0.5	0.84	UA
339.681−1.208	−21.4	1.8	0.5	1.00	UA
339.682−1.207	−34.4	2.6	0.5	1.00	UA
339.762+0.054	−51.0	12.0	0.5	0.76	UA
339.884−1.259	−38.7	2.8	0.5	1.00	UA
339.909+0.240	−12.2	15.0	1.2	0.52	UA
339.949−0.539	−97.9	5.9	0.4	0.73	UA
339.980−0.538	−89.2	5.5	0.4	0.78	UA
339.986−0.425	−89.4	5.5	0.4	0.63	UA
340.034−1.110	−27.5	2.2	0.5	1.00	UA
340.054−0.244	−59.4	11.6	0.4	0.51	UA
340.118−0.021	−123.3	7.9	0.8	1.00	3kN
340.182−0.047	−131.1	7.9	0.8	1.00	3kN
340.249−0.046	−126.2	7.9	0.7	1.00	3kN
340.249−0.372	−51.2	3.7	0.4	0.77	UA
340.518−0.152	−48.2	12.2	0.5	0.66	UA
340.543−0.162	−51.7	12.0	0.4	0.64	UA
340.655−0.235	−21.7	13.8	0.5	0.40	UA
340.785−0.096	−108.1	9.1	0.5	0.55	UA
340.970−1.022	−31.4	2.5	0.5	1.00	UA
341.124−0.361	−37.2	3.0	0.5	0.78	UA
341.218−0.212	−37.9	12.7	0.5	0.58	UA
341.238−0.270	−51.4	3.8	0.4	0.56	UA
341.276+0.062	−70.5	11.1	0.4	0.71	UA
341.367+0.336	−80.5	10.6	0.4	0.53	UA
341.973+0.233	−12.0	14.7	0.7	0.91	UA
341.990−0.103	−37.0	12.8	0.5	0.74	UA
342.251+0.308	−122.7	7.9	0.8	1.00	3kN
342.338+0.305	−112.0	7.0	0.6	0.50	3kN
342.368+0.140	−7.1	15.2	0.8	0.95	UA
342.446−0.072	−20.2	14.1	0.7	0.88	UA
342.484+0.183	−42.2	12.5	0.5	0.73	UA
342.954−0.019	−3.0	15.5	0.8	1.00	UA
343.354−0.067	−117.8	8.6	0.6	0.57	UA
343.502−0.472	−39.0	3.3	0.5	0.95	UA
343.756−0.163	−30.7	13.2	0.6	0.52	UA
343.929+0.125	14.4	17.9	1.7	1.00	UA
344.227−0.569	−19.8	2.1	0.6	1.00	UA
344.419+0.044	−63.2	4.8	0.4	0.72	UA
344.421+0.045	−71.5	5.2	0.4	0.68	UA
344.581−0.024	1.4	17.8	1.1	0.65	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
345.003−0.223	−23.1	2.5	0.6	1.00	UA
345.003−0.224	−26.2	2.7	0.6	1.00	UA
345.010+1.792	−21.0	1.9	0.6	1.00	UA
345.012+1.797	−12.2	1.4	0.6	1.00	UA
345.131−0.174	−28.9	2.9	0.6	0.57	UA
345.198−0.030	−0.5	16.8	1.5	0.48	UA
345.205+0.317	−63.5	11.3	0.4	0.70	UA
345.407−0.952	−14.3	1.4	0.1	1.00	UA
345.424−0.951	−13.2	1.4	0.1	1.00	UA
345.441+0.205	0.9	16.2	1.1	0.82	UA
345.487+0.314	−22.6	13.8	0.7	0.73	UA
345.505+0.348	−17.8	14.3	0.7	0.75	UA
345.498+1.467	−14.2	1.4	0.1	1.00	UA
345.576−0.225	−126.8	7.9	0.7	1.00	UA
345.807−0.044	−2.0	1.3	0.1	0.84	UA
345.824+0.044	−10.3	1.4	0.1	1.00	UA
345.949−0.268	−21.9	13.9	0.7	0.75	UA
345.985−0.020	−83.2	10.2	0.4	0.68	UA
346.036+0.048	−6.4	1.3	0.1	0.88	UA
346.231+0.119	−95.0	9.6	0.4	0.59	UA
346.480+0.221	−18.9	1.4	0.1	0.53	UA
346.481+0.132	−5.5	1.3	0.1	0.87	UA
346.517+0.117	−1.7	1.3	0.1	0.76	UA
346.522+0.085	5.7	18.1	1.1	0.61	UA
347.230+0.016	−68.9	10.8	0.4	0.76	UA
347.583+0.213	−102.3	9.1	0.5	0.59	UA
347.628+0.149	−96.5	9.4	0.4	0.65	UA
347.631+0.211	−91.9	9.6	0.4	0.64	UA
347.817+0.018	−24.1	3.3	0.3	0.52	UA
347.863+0.019	−34.7	12.6	0.5	0.71	UA
347.902+0.052	−27.4	3.3	0.3	0.59	UA
348.027+0.106	−121.2	8.2	0.6	1.00	UA
348.195+0.768	−0.8	1.3	0.1	0.86	UA
348.550−0.979	−10.6	1.4	0.2	0.55	UA
348.550−0.979	−20.0	3.2	0.3	0.76	UA
348.579−0.920	−15.1	3.2	0.3	0.37	UA
348.617−1.162	−11.4	1.4	0.2	0.62	UA
348.654+0.244	16.9	21.2	2.4	1.00	UA
348.703−1.043	−3.5	1.3	0.2	0.49	UA
348.723−0.078	11.5	18.5	2.3	0.98	UA
348.727−1.037	−7.4	1.4	0.2	0.60	UA
348.884+0.096	−74.5	10.3	0.4	0.65	UA
348.892−0.180	1.5	16.2	1.1	0.94	UA
349.067−0.017	11.6	18.4	2.5	0.98	UA
349.092+0.105	−76.6	10.1	0.4	0.58	UA
349.092+0.106	−81.5	9.9	0.4	0.57	UA
349.151+0.021	14.6	19.6	2.9	1.00	UA
349.579−0.679	−25.0	3.3	0.3	0.86	UA
349.799+0.108	−64.7	10.6	0.4	0.65	UA
349.884+0.231	16.2	21.0	2.9	1.00	UA
350.011−1.342	−25.8	3.2	0.3	0.53	UA
350.015+0.433	−30.3	3.8	0.7	0.55	Nor
350.104+0.084	−68.1	10.4	0.4	0.73	UA
350.105+0.083	−74.1	10.1	0.4	0.72	UA
350.116+0.084	−68.0	10.4	0.4	0.73	UA
350.116+0.220	4.2	17.9	1.5	0.65	UA
350.189+0.003	−62.4	10.7	0.5	0.70	UA
350.299+0.122	−62.1	10.6	0.4	0.73	UA
350.340+0.141	−58.4	10.8	0.5	0.73	UA
350.344+0.116	−65.4	10.5	0.4	0.72	UA
350.356−0.068	−67.6	10.4	0.4	0.64	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
350.470+0.029	-6.3	15.3	1.0	0.76	UA
350.520-0.350	-24.6	3.4	0.5	0.58	UA
350.686-0.491	-13.7	1.4	0.1	0.57	UA
350.776+0.138	38.7	16.5	3.7	0.60	UA?
351.161+0.697	-5.2	1.4	0.1	0.83	UA
351.242+0.670	2.5	18.5	1.4	0.61	UA
351.251+0.652	-7.1	1.4	0.1	0.88	UA
351.382-0.181	-59.7	6.0	0.5	0.74	3kN
351.417+0.645	-10.4	1.4	0.1	0.66	UA
351.417+0.646	-11.1	1.4	0.1	0.64	UA
351.445+0.660	-7.1	1.4	0.1	0.90	UA
351.581-0.353	-94.2	7.7	0.4	0.70	UA
351.611+0.172	-43.7	11.4	0.6	0.69	UA
351.688+0.171	-36.1	12.0	0.7	0.73	UA
351.775-0.536	1.3	1.3	0.1	0.56	UA
352.083+0.167	-66.0	10.0	0.4	0.61	UA
352.111+0.176	-54.8	10.6	0.5	0.65	UA
352.133-0.944	-7.7	1.4	0.1	1.00	UA
352.517-0.155	-51.2	5.9	0.5	0.51	3kN
352.525-0.158	-53.0	6.0	0.5	0.51	3kN
352.584-0.185	-85.7	7.7	0.4	0.51	UA
352.604-0.225	-81.7	7.5	0.4	0.53	UA
352.624-1.077	5.8	22.4	2.4	0.58	UA
352.630-1.067	-2.9	1.3	0.1	1.00	UA
352.855-0.201	-51.3	6.0	0.5	0.51	3kN
353.216-0.249	-22.9	13.0	1.0	0.67	UA
353.273+0.641	-4.4	1.4	0.1	1.00	UA
353.363-0.166	-79.0	9.0	0.4	0.55	UA
353.370-0.091	-44.7	10.8	0.6	0.69	UA
353.378+0.438	-15.7	3.2	1.0	0.57	UA
353.410-0.360	-20.3	3.7	0.8	0.33	Nor
353.429-0.090	-61.8	9.8	0.4	0.62	UA
353.464+0.562	-50.3	6.2	0.5	0.88	3kN
353.537-0.091	-56.6	10.0	0.5	0.64	UA
354.206-0.038	-37.1	11.0	0.7	0.71	UA
354.308-0.110	18.8	16.7	3.1	0.58	UA?
354.496+0.083	27.0	12.9	2.1	1.00	UA?
354.615+0.472	-24.4	4.8	0.9	0.84	UA
354.701+0.299	102.8	22.0	5.1	0.47	UA
354.724+0.300	93.9	22.0	5.2	0.49	UA
355.184-0.419	-1.4	18.1	1.6	0.58	UA
355.343+0.148	5.8	19.4	3.3	0.78	UA
355.344+0.147	19.9	13.8	2.2	1.00	UA?
355.346+0.149	10.5	19.7	2.9	0.87	UA?
355.538-0.105	3.8	16.4	1.9	0.86	UA
355.545-0.103	-28.2	11.3	0.9	0.71	UA
355.642+0.398	-7.9	1.4	0.1	0.55	UA
355.666+0.374	-3.3	1.4	0.1	0.70	UA
356.054-0.095	16.7	2.9	1.9	0.58	UA?
356.662-0.263	-53.8	8.9	0.3	0.60	UA
357.558-0.321	-3.9	15.5	2.0	0.81	UA
357.559-0.321	16.2	17.5	3.1	0.83	UA
357.922-0.337	-4.6	15.8	3.1	0.81	UA
357.924-0.337	-2.1	16.5	2.7	0.62	UA
357.965-0.164	-8.6	12.0	1.4	0.68	UA
357.967-0.163	-3.1	12.6	1.4	0.51	UA
358.263-2.061	5.0	1.1	0.7	0.53	UA?
358.371-0.468	1.3	19.5	2.5	0.53	UA
358.386-0.483	-6.0	4.7	1.3	0.57	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
358.460−0.391	1.3	18.1	2.2	0.53	UA
358.460−0.393	−7.3	5.1	1.3	0.43	UA
358.721−0.126	10.6	16.1	2.8	0.77	UA
358.809−0.085	−56.2	13.7	2.2	0.56	UA
358.841−0.737	−20.7	5.4	2.3	0.65	UA
358.906+0.106	−18.2	9.4	0.9	0.72	UA
358.931−0.030	−15.9	9.9	1.3	0.77	UA
358.980+0.084	6.2	16.3	1.2	0.67	UA?
359.138+0.031	−3.9	14.5	1.8	1.00	UA
359.436−0.104	−46.8	5.2	0.2	0.52	3kN
359.436−0.102	−53.4	5.2	0.2	0.77	3kN
359.615−0.243	19.3	14.6	9.6	0.82	UA
359.938+0.170	−0.5	13.0	5.3	0.54	UA
359.970−0.457	23.1	5.5	4.5	0.42	UA
0.092−0.663	23.8	3.3	0.1	0.65	ScN
0.167−0.446	13.8	3.3	0.1	0.55	ScN
0.212−0.001	49.5	10.9	0.2	0.75	3kF
0.315−0.201	19.4	3.3	0.1	0.34	ScN
0.316−0.201	21.1	3.3	0.1	0.34	ScN
0.376+0.040	37.1	12.9	3.7	0.62	UA
0.409−0.504	25.4	3.3	0.1	0.70	ScN
0.475−0.010	28.8	14.5	0.3	0.44	Per
0.496+0.188	0.9	3.3	0.1	0.33	ScN
0.546−0.852	11.8	3.3	0.1	0.42	ScN
0.645−0.042	49.5	10.8	0.2	0.77	3kF
0.647−0.055	51.0	10.8	0.2	0.78	3kF
0.651−0.049	48.3	10.8	0.2	0.71	3kF
0.657−0.041	49.9	10.8	0.2	0.77	3kF
0.665−0.036	60.4	10.8	0.2	0.77	3kF
0.666−0.029	70.5	10.8	0.3	0.59	3kF
0.667−0.034	55.0	10.8	0.2	0.77	3kF
0.672−0.031	58.2	10.8	0.2	0.76	3kF
0.673−0.029	66.0	10.8	0.2	0.76	3kF
0.677−0.025	73.3	11.5	4.4	0.45	UA
0.695−0.038	68.6	10.8	0.2	0.70	3kF
0.836+0.184	3.5	3.3	0.1	0.33	ScN
1.008−0.237	1.6	3.3	0.1	0.31	ScN
1.147−0.124	−15.3	15.2	2.1	0.47	Out
1.329+0.150	−12.2	4.2	0.2	0.42	Nor
1.719−0.088	−8.1	15.9	0.4	0.35	Out??
2.143+0.009	62.7	10.6	0.2	0.85	3kF
2.521−0.220	−6.1	16.0	0.5	0.25	Out??
2.536+0.198	3.1	3.3	0.1	0.32	ScN
2.591−0.029	−8.3	16.0	0.4	0.44	Out??
2.615+0.134	94.1	11.9	8.3	0.84	UA
2.703+0.040	93.5	12.8	4.2	0.85	UA
3.253+0.018	2.2	2.9	0.2	0.38	ScN
3.312−0.399	0.4	2.9	0.2	0.88	ScN
3.442−0.348	−35.2	5.1	0.2	0.46	3kN
3.502−0.200	43.9	10.9	0.2	0.39	ScF
3.910+0.001	17.8	3.0	0.2	0.33	ScN
4.393+0.079	1.9	2.9	0.2	0.43	ScN
4.434+0.129	−1.0	2.9	0.2	0.49	ScN
4.569−0.079	9.5	2.9	0.2	0.46	ScN
4.586+0.028	26.1	10.9	0.2	0.60	ScF
4.676+0.276	4.5	2.9	0.2	0.86	ScN
4.866−0.171	5.4	2.9	0.2	0.52	ScN
5.618−0.082	−27.1	16.3	1.4	0.60	UA?
5.630−0.294	10.5	2.9	0.2	0.84	ScN
5.657+0.416	20.0	3.0	0.2	0.79	ScN
5.677−0.027	−11.7	16.1	0.5	0.64	Out

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
5.885−0.393	6.7	2.9	0.2	0.87	ScN
5.900−0.430	10.4	2.9	0.2	0.90	ScN
6.189−0.358	−30.2	5.0	0.3	0.70	3kN??
6.368−0.052	144.1	14.3	1.7	0.52	UA
6.539−0.108	13.1	3.0	0.2	0.51	ScN
6.588−0.192	5.1	2.9	0.2	0.45	ScN
6.610−0.082	0.8	16.0	0.4	0.47	Out
6.795−0.257	16.3	3.0	0.2	0.75	ScN
6.881+0.093	−2.3	16.1	0.5	0.55	Out
7.166+0.131	85.7	9.9	0.2	0.71	3kF
7.601−0.139	154.6	11.1	4.2	0.67	UA
7.632−0.109	157.0	11.5	4.2	0.71	UA
8.139+0.226	19.9	3.0	0.2	0.40	ScN
8.317−0.096	47.6	10.9	0.2	1.00	ScF
8.669−0.356	39.2	4.5	0.2	0.66	Nor
8.683−0.368	43.2	4.5	0.3	0.53	Nor
8.832−0.028	−3.8	16.1	0.4	0.80	Out
8.872−0.493	23.3	3.1	0.3	0.69	ScN
9.215−0.202	45.5	10.9	0.2	0.80	ScF
9.621+0.196	1.3	16.6	1.4	0.37	Out
9.619+0.193	5.5	15.7	1.5	0.29	Out
9.986−0.028	42.2	4.5	0.2	0.31	Nor
10.205−0.345	6.6	1.3	0.1	0.30	SgN
10.287−0.125	4.6	16.0	0.4	0.49	Out
10.299−0.146	19.9	13.5	0.3	0.43	SgF
10.320−0.259	39.0	4.4	0.2	0.49	Nor
10.323−0.160	11.5	14.6	0.3	0.28	Per
10.342−0.142	15.4	13.6	0.3	0.32	SgF
10.356−0.148	49.9	10.9	0.2	0.86	ScF
10.444−0.018	73.3	9.7	0.2	0.49	3kF
10.472+0.027	75.0	9.8	0.3	0.95	3kF
10.480+0.033	59.5	10.8	0.2	1.00	ScF
10.627−0.384	4.6	1.3	0.1	0.34	SgN
10.629−0.333	−0.2	16.4	0.6	0.55	Out
10.724−0.334	−2.2	16.5	0.6	0.62	Out
10.822−0.103	72.0	10.6	0.3	0.56	ScF
10.886+0.123	17.1	14.5	0.3	0.35	Per
10.958+0.022	24.5	13.5	0.3	0.44	SgF
11.034+0.062	20.5	13.5	0.3	0.34	SgF
11.109−0.114	24.0	13.4	0.3	0.48	SgF
11.497−1.485	6.6	1.3	0.1	0.80	SgN
11.904−0.141	42.9	4.5	0.2	0.44	Nor
11.903−0.102	33.9	3.1	0.3	0.53	ScN
11.936−0.150	48.5	4.6	0.2	0.47	Nor
11.936−0.616	32.3	3.0	0.3	0.91	ScN
11.992−0.272	59.8	10.8	0.2	0.86	ScF
12.025−0.031	108.3	9.3	0.2	1.00	3kF
12.112−0.126	39.9	3.1	0.4	0.38	ScN
12.181−0.123	29.7	3.0	0.3	0.53	ScN
12.199−0.033	49.3	4.6	0.2	0.43	Nor
12.202−0.120	26.4	2.9	0.3	0.49	ScN
12.203−0.107	20.5	13.5	0.3	0.41	SgF
12.209−0.102	19.8	13.5	0.3	0.39	SgF
12.265−0.051	68.5	10.6	0.2	1.00	ScF
12.526+0.016	42.6	4.5	0.2	0.37	Nor
12.625−0.017	21.6	13.5	0.3	0.37	SgF
12.681−0.182	57.5	10.7	0.2	0.74	ScF
12.776+0.128	32.8	3.0	0.3	0.72	ScN
12.889+0.489	39.3	3.0	0.3	0.87	ScN
12.904−0.031	59.1	10.7	0.2	0.86	ScF
12.909−0.260	39.9	3.1	0.4	0.53	ScN

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
13.179+0.061	46.5	4.5	0.2	0.58	Nor
13.657−0.599	51.2	4.6	0.2	0.83	Nor
13.696−0.156	99.3	9.4	0.2	0.93	3kF
13.713−0.083	43.6	4.5	0.3	0.39	Nor
14.101+0.087	15.4	14.5	0.3	0.44	Per
14.230−0.509	25.3	2.9	0.3	0.67	ScN
14.390−0.020	26.9	13.3	0.3	0.49	SgF
14.457−0.143	43.2	3.4	0.5	0.45	ScN
14.490+0.014	20.2	14.4	0.3	0.40	Per
14.521+0.155	4.1	1.3	0.1	0.43	SgN
14.604+0.017	24.6	13.3	0.3	0.37	SgF
14.631−0.577	25.2	2.9	0.3	0.54	ScN
14.991−0.121	46.0	3.6	0.4	0.39	ScN
15.034−0.677	21.3	1.9	0.1	0.64	SgN
15.094+0.192	25.7	1.9	0.1	0.34	SgN
15.607−0.255	65.9	4.9	0.2	0.59	Nor
15.665−0.499	−2.9	1.3	0.1	0.44	SgN
16.112−0.303	34.5	3.1	0.3	0.66	ScN
16.302−0.196	51.9	3.5	0.2	0.56	ScN
16.403−0.181	39.2	3.3	0.2	0.58	ScN
16.585−0.051	62.1	4.8	0.3	0.50	Nor
16.662−0.331	43.0	3.4	0.2	0.93	ScN
16.831+0.079	58.7	4.7	0.3	0.44	Nor
16.855+0.641	24.2	1.9	0.1	0.81	SgN
16.864−2.159	15.0	1.2	0.1	0.51	SgN
16.976−0.005	6.5	15.7	0.4	0.56	Out
17.021−2.403	23.6	1.8	0.4	0.48	SgN
17.029−0.071	91.4	10.1	0.3	0.73	ScF?
17.638+0.157	20.8	14.3	0.3	0.46	Per
17.862+0.074	110.6	9.1	0.5	0.60	UA
18.073+0.077	55.6	3.5	0.2	0.74	ScN
18.159+0.094	58.4	3.5	0.2	0.64	ScN
18.262−0.244	74.3	5.1	0.2	0.64	Nor
18.341+1.768	28.0	1.8	0.2	1.00	SgN
18.440+0.045	61.8	3.6	0.3	0.46	ScN
18.460−0.004	49.4	3.4	0.2	0.91	ScN
18.661+0.034	79.0	10.2	0.2	0.77	ScF
18.667+0.025	76.6	10.2	0.3	0.68	ScF
18.733−0.224	45.8	3.4	0.2	0.94	ScN
18.735−0.227	37.9	3.3	0.2	0.84	ScN
18.834−0.300	41.3	3.3	0.2	0.96	ScN
18.874+0.053	38.7	3.3	0.2	0.75	ScN
18.888−0.475	56.5	3.5	0.2	0.87	ScN
18.999−0.239	69.4	5.0	0.3	0.78	Nor
19.009−0.029	55.4	3.4	0.2	0.78	ScN
19.249+0.267	19.9	1.8	0.2	0.74	SgN
19.267+0.349	16.2	1.8	0.2	0.94	SgN
19.365−0.030	25.3	14.1	0.3	0.44	Per
19.4720.170n	21.7	14.1	0.3	0.55	Per
19.472+0.170	13.8	14.3	0.3	0.51	Per
19.486+0.151	20.6	14.2	0.3	0.58	Per
19.496+0.115	121.2	8.1	0.9	1.00	UA
19.609−0.234	40.2	3.3	0.2	0.86	ScN
19.612−0.120	53.1	3.4	0.2	0.92	ScN
19.612−0.134	56.5	3.5	0.2	0.84	ScN
19.614+0.011	32.8	12.9	0.3	0.45	SgF
19.667+0.117	14.2	14.3	0.3	0.62	Per
19.701−0.267	43.9	3.3	0.2	0.95	ScN
19.755−0.128	123.1	7.8	0.8	1.00	UA
19.884−0.534	46.8	3.4	0.2	1.00	ScN

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
20.081−0.135	43.5	3.3	0.2	0.80	ScN
20.237+0.065	71.9	5.2	0.3	0.51	Nor
20.239+0.065	70.4	5.2	0.4	0.51	Nor
20.364−0.013	55.9	3.5	0.2	0.91	ScN
20.733−0.059	60.7	3.7	0.3	0.41	ScN
20.926−0.050	27.4	13.9	0.3	0.36	Per
20.963−0.075	34.6	12.8	0.3	0.55	SgF
21.023−0.063	31.1	12.8	0.3	0.47	SgF
21.407−0.254	89.0	5.5	0.3	0.87	Nor
21.562−0.033	117.2	7.6	1.1	0.84	UA
21.848−0.240	81.9	5.3	0.3	0.85	Nor
21.880+0.014	20.3	14.0	0.3	0.54	Per
22.039+0.222	53.2	3.6	0.3	0.86	ScN
22.335−0.155	35.6	12.6	0.3	0.71	SgF
22.356+0.066	80.1	5.2	0.5	0.68	Nor
22.435−0.169	29.6	1.9	0.2	0.75	SgN
23.003+0.124	110.5	6.0	0.3	1.00	Nor
23.010−0.410	74.4	4.4	0.5	0.75	ScN
23.126+0.395	13.8	1.7	0.3	0.61	SgN
23.207−0.377	77.0	4.7	0.6	0.78	UA
23.257−0.241	63.9	3.9	0.3	0.84	ScN
23.365−0.291	82.5	5.5	0.5	0.93	Nor
23.389+0.185	75.4	4.5	0.5	0.42	ScN
23.437−0.184	102.9	5.9	0.2	1.00	Nor
23.440−0.182	96.6	5.8	0.3	0.96	Nor
23.484+0.097	87.0	5.6	0.4	0.53	Nor
23.657−0.127	82.4	5.8	0.3	0.47	Nor
23.706−0.198	78.7	4.7	0.8	0.59	UA
23.885+0.060	45.0	12.3	0.3	0.85	SgF
23.901+0.077	35.7	12.5	0.3	0.72	SgF
23.966−0.109	70.9	4.1	0.4	0.73	ScN
23.986−0.089	65.1	3.9	0.3	0.82	ScN
23.996−0.100	68.2	4.0	0.4	0.79	ScN
24.148−0.009	17.4	13.9	0.5	0.55	Per
24.329+0.144	110.3	6.1	0.2	0.87	Nor
24.461+0.198	125.5	7.7	0.8	1.00	UA
24.493−0.039	115.2	7.2	1.1	0.66	UA
24.541+0.312	106.5	6.0	0.2	0.72	Nor
24.634−0.324	35.6	12.3	0.2	0.53	SgF
24.676−0.150	116.1	7.0	1.0	0.80	UA
24.790+0.083a	113.3	6.1	0.3	1.00	Nor
24.790+0.083b	110.4	6.1	0.2	0.77	Nor
24.790+0.084	102.4	9.0	0.3	0.53	ScF
24.791+0.082	105.8	6.0	0.2	0.68	Nor
24.850+0.087	110.0	6.1	0.2	0.74	Nor
24.920+0.088	53.3	12.0	0.3	0.50	SgF
24.943+0.074	46.6	12.1	0.3	0.87	SgF
25.226+0.288	42.0	12.1	0.2	0.49	SgF
25.270−0.434	65.9	3.8	0.3	1.00	ScN
25.382−0.182	58.2	3.8	0.3	0.76	ScN
25.407−0.170	60.8	3.8	0.3	0.82	ScN
25.411+0.105	97.1	9.0	0.3	1.00	ScF
25.494+0.062	103.8	8.8	0.3	0.96	ScF
25.613+0.226	110.1	8.7	0.3	0.69	ScF
25.650+1.049	41.7	2.1	0.4	0.66	SgN
25.710+0.044	95.6	8.9	0.3	1.00	ScF
25.826−0.178	91.7	8.8	0.4	0.93	ScF
25.838−0.378	−1.6	15.4	0.3	0.99	Out
25.920−0.141	114.8	7.5	0.9	1.00	UA
26.422+1.685	31.0	1.9	0.3	1.00	SgN
26.545+0.423	82.5	4.4	0.4	0.48	ScN

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
26.527−0.267	104.2	8.6	0.3	0.71	ScF
26.598−0.024	24.9	13.5	0.3	0.84	Per
26.601−0.221	103.4	8.6	0.3	0.78	ScF
26.648+0.018	109.4	8.5	0.3	0.59	ScF
27.011−0.039	−18.3	15.6	0.4	1.00	Out
27.221+0.136	118.6	7.5	1.0	1.00	UA
27.220+0.261	9.2	13.7	0.3	0.55	Per
27.286+0.151	34.8	13.4	0.4	0.35	Per
27.365−0.166	99.8	8.4	0.4	0.83	ScF
27.500+0.107	87.3	8.4	0.4	0.44	ScF
27.757+0.050	99.2	8.3	0.4	0.85	ScF
27.783−0.259	98.3	8.3	0.4	0.72	ScF
27.784+0.057	111.8	8.1	0.4	1.00	ScF
27.869−0.235	20.1	13.4	0.3	0.67	Per
28.011−0.426	16.9	1.9	0.3	0.81	SgN
28.146−0.005	101.2	8.2	0.4	0.82	ScF
28.201−0.049	97.3	8.2	0.4	0.80	ScF
28.282−0.359	40.9	11.9	0.3	0.44	SgF
28.305−0.387	81.8	4.5	0.3	1.00	ScN
28.321−0.011	104.8	8.1	0.4	0.80	ScF
28.397+0.081	71.5	4.3	0.3	1.00	ScN
28.523+0.127	39.6	11.8	0.3	0.84	SgF
28.532+0.129	27.0	13.2	0.3	0.75	Per
28.608+0.018	106.4	7.9	0.4	1.00	ScF
28.687−0.283	92.3	4.9	0.5	0.56	ScN
28.700+0.406	94.2	8.1	0.4	0.37	ScF
28.817+0.365	90.6	4.9	0.4	0.77	ScN
28.832−0.253	83.6	4.6	0.3	1.00	ScN
28.842+0.493	83.2	4.6	0.3	1.00	ScN
28.848−0.228	102.8	7.8	0.4	1.00	ScF
28.861+0.065	105.3	7.9	0.4	1.00	ScF
29.320−0.162	48.9	11.5	0.3	1.00	SgF
29.603−0.625	80.5	4.5	0.3	1.00	ScN
29.863−0.044	101.4	7.7	0.5	0.66	ScF
29.955−0.016	96.0	6.8	1.1	0.50	ScF
29.978−0.047	96.9	6.9	1.3	0.65	ScF
29.993−0.282	103.2	7.5	0.6	1.00	ScF
30.010−0.273	106.1	7.4	0.5	1.00	ScF
30.198−0.169	108.2	7.3	0.5	1.00	ScF
30.225−0.180	113.2	7.3	0.6	1.00	ScF
30.317+0.070	36.2	11.7	0.4	0.37	SgF
30.370+0.482	12.4	13.4	0.3	1.00	Per
30.400−0.296	98.3	6.7	1.1	0.73	ScF
30.419−0.232	102.9	7.2	0.7	1.00	ScF
30.423+0.466	7.5	13.4	0.3	0.99	Per
30.542+0.011	53.1	11.3	0.3	1.00	SgF
30.580−0.140	115.5	7.2	0.7	1.00	ScF?
30.589−0.043	43.0	11.4	0.3	0.89	SgF
30.703−0.068	88.2	4.9	0.4	0.92	ScN
30.760−0.052	91.7	5.0	0.5	0.39	ScN
30.771−0.804	74.4	4.3	0.3	1.00	ScN
30.774+0.078	98.4	6.7	0.9	0.43	ScF
30.780+0.230	48.9	11.3	0.3	1.00	SgF
30.788+0.204	84.5	4.8	0.4	1.00	ScN
30.818−0.057	101.3	6.9	0.8	1.00	ScF
30.818+0.273	104.8	6.8	0.7	1.00	ScF
30.822−0.053	93.2	5.3	0.7	0.53	ScN
30.851+0.123	27.5	2.0	0.1	0.93	SgN
30.898+0.161	101.8	6.8	0.8	1.00	ScF
30.960+0.086	40.1	11.5	0.3	0.52	SgF

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
30.972−0.142	77.8	4.5	0.3	1.00	ScN
30.973+0.562	19.9	13.1	0.3	0.92	Per
30.980+0.216	111.0	7.0	0.6	1.00	ScF
31.047+0.356	83.0	4.8	0.4	1.00	ScN
31.059+0.093	16.5	1.9	0.3	0.52	SgN
31.076+0.457	25.5	2.0	0.1	0.78	SgN
31.122+0.063	48.0	11.3	0.3	1.00	SgF
31.158+0.046	41.1	11.4	0.3	0.66	SgF
31.182−0.148	46.3	11.3	0.2	0.96	SgF
31.281+0.061	110.3	6.9	0.6	1.00	ScF
31.412+0.307	95.8	6.0	0.8	0.79	ScF
31.581+0.077	98.9	6.4	0.9	0.79	ScF
31.594−0.192	48.3	11.2	0.2	0.96	SgF
32.045+0.059	92.8	5.3	0.3	1.00	ScN
32.082+0.078	92.9	5.3	0.3	1.00	ScN
32.516+0.323	52.5	10.9	0.3	0.92	SgF
32.744−0.075	38.5	2.2	0.1	0.93	SgN
32.802+0.193	27.2	2.1	0.2	0.81	SgN
32.825−0.328	82.4	5.2	0.3	1.00	ScN
32.914−0.096	103.5	6.6	0.5	1.00	ScF
32.963−0.340	46.7	2.2	0.2	0.80	SgN
32.992+0.034	91.9	6.1	0.7	0.69	ScF
33.093−0.073	103.9	6.6	0.5	1.00	ScF
33.133−0.092	73.2	4.6	0.3	0.44	AqS
33.317−0.360	31.2	2.2	0.2	1.00	SgN
33.393+0.010	105.2	6.5	0.5	1.00	ScF
33.486+0.040	121.7	7.2	1.4	0.85	UA
33.641−0.228	60.3	10.5	0.3	0.83	SgF
33.634−0.021	103.1	6.5	0.5	1.00	ScF
33.725−0.120	54.1	10.7	0.3	1.00	SgF
33.852+0.018	61.0	10.5	0.3	1.00	SgF
33.980−0.019	59.0	10.5	0.3	1.00	SgF
34.096+0.018	56.1	10.6	0.3	1.00	SgF
34.244+0.133	54.9	10.6	0.3	1.00	SgF
34.257+0.153	57.6	10.6	0.3	1.00	SgF
34.267−0.210	54.5	10.6	0.3	1.00	SgF
34.396+0.222	55.7	10.6	0.3	1.00	SgF
34.751−0.093	53.2	10.5	0.3	1.00	SgF
34.757+0.025	76.5	4.7	0.4	1.00	AqS
34.791−1.387	46.9	2.2	0.1	0.87	SgN?
34.820+0.350	59.8	10.4	0.3	0.78	SgF
35.025+0.350	44.4	2.2	0.2	0.75	SgN
35.132−0.744	35.4	2.2	0.1	1.00	SgN
35.197−0.743	28.6	2.2	0.2	1.00	SgN
35.197-0.743n	29.9	2.2	0.2	1.00	SgN
35.200−1.736	44.5	2.2	0.1	1.00	SgN?
35.247−0.237	72.4	4.5	0.4	1.00	AqS
35.397+0.025	89.2	5.2	0.4	1.00	AqS
35.588+0.060	44.1	10.6	0.3	0.57	SgF
35.793−0.175	60.7	10.1	0.3	0.73	SgF
36.115+0.552	73.1	4.6	0.4	1.00	AqS
36.634−0.203	77.4	4.7	0.4	1.00	AqS
36.705+0.096	53.1	10.2	0.3	0.87	SgF
36.839−0.022	61.6	9.9	0.3	0.65	SgF
36.918+0.483	−35.9	14.8	0.5	1.00	Out
37.030−0.038	78.6	4.7	0.4	1.00	AqS
37.043−0.035	80.2	4.8	0.4	1.00	AqS
37.430+1.518	41.2	1.9	0.1	0.55	SgN
37.479−0.105	62.5	9.8	0.3	0.69	SgF
37.546−0.112	52.5	10.0	0.3	1.00	SgF
37.554+0.201	83.7	4.8	0.4	1.00	AqS

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
37.598+0.425	87.0	4.8	0.5	1.00	AqS
37.735-0.112	50.3	10.1	0.3	0.90	SgF
37.753-0.189	54.6	9.9	0.3	1.00	SgF
37.767-0.214	69.0	4.3	0.4	0.76	AqS
38.037-0.300	58.2	9.7	0.3	0.92	SgF
38.119-0.229	70.3	4.3	0.5	0.57	AqS
38.203-0.067	84.2	4.9	0.5	0.55	AqS
38.255-0.200	73.1	4.5	0.5	0.56	AqS
38.258-0.074	15.5	12.1	0.4	0.70	Per
38.565+0.538	-28.8	14.7	0.4	1.00	Out
38.598-0.212	62.5	9.5	0.4	0.61	SgF
38.653+0.088	-31.4	14.6	0.4	1.00	Out
38.916-0.353	32.0	1.9	0.1	0.66	UA
39.100+0.491	15.9	12.2	0.3	0.60	Per
39.388-0.141	60.5	9.4	0.3	0.62	SgF
40.282-0.219	74.0	3.4	0.1	0.48	AqS
40.425+0.700	15.6	0.7	0.2	0.66	AqR
40.597-0.719	76.2	3.4	0.1	0.56	AqS
40.622-0.138	31.1	1.9	0.1	0.64	UA
40.934-0.041	36.6	1.9	0.1	0.49	UA
41.075-0.125	57.6	9.1	0.4	0.58	SgF
41.121-0.107	36.6	2.5	0.4	0.54	SgN
41.123-0.220	63.4	3.4	0.1	0.46	AqS
41.156-0.201	56.0	9.1	0.4	0.75	SgF
41.226-0.197	57.3	9.0	0.4	0.69	SgF
41.348-0.136	11.8	11.7	0.3	0.87	Per
42.034+0.190	12.9	11.6	0.3	1.00	Per
42.130+0.520	-33.3	14.2	0.5	1.00	Out
42.304-0.299	28.2	2.5	0.4	0.61	SgN
42.435-0.260	66.8	3.4	0.1	0.44	AqS
42.698-0.147	-42.8	15.5	0.9	0.63	UA
43.038-0.453	54.8	8.6	0.4	0.92	SgF
43.074-0.077	10.2	11.4	0.4	0.93	Per
43.149+0.013	13.2	11.3	0.3	1.00	Per
43.165+0.013	9.3	11.4	0.3	0.98	Per
43.167-0.004	-1.2	11.7	0.6	0.91	Per
43.171+0.005	18.9	11.2	0.3	1.00	Per
43.175-0.015	12.6	11.3	0.3	0.97	Per
43.180-0.518	58.9	8.5	0.4	0.98	SgF
43.795-0.127	39.7	2.8	0.4	0.72	SgN
43.890-0.784	51.9	3.3	0.5	0.59	SgN
44.310+0.041	55.8	8.1	0.3	0.92	SgF
44.644-0.516	49.6	8.2	0.3	0.72	SgF
45.071+0.132	57.7	8.0	0.3	1.00	SgF
45.380-0.594	53.3	8.0	0.3	0.68	SgF
45.445+0.069	49.8	8.2	0.4	0.75	SgF
45.467+0.053	56.0	7.9	0.4	0.93	SgF
45.473+0.134	65.7	7.7	0.4	0.63	SgF
45.493+0.126	57.1	7.9	0.4	0.91	SgF
45.804-0.356	59.9	7.7	0.4	0.73	SgF
46.066+0.220	23.5	10.4	0.6	0.73	Per
46.115+0.387	58.3	4.3	0.6	0.49	SgN
48.902-0.273	71.8	5.4	0.3	1.00	SgF
48.990-0.299	71.5	5.5	0.4	1.00	SgF
49.043-1.079	36.6	3.1	0.4	0.55	SgN
49.265+0.311	-4.7	10.8	0.4	1.00	Per
49.349+0.413	68.0	5.3	0.4	1.00	SgN
49.416+0.326	-12.0	11.4	0.7	1.00	Per?
49.417+0.324	-26.6	12.6	0.7	1.00	UA

Table B1. cont.

6668-MHz methanol maser l b (° °)	V_p (kms ⁻¹)	Dist. (kpc)	Error (kpc)	Probability	Arm Allocation
49.470−0.371	63.8	5.8	0.6	1.00	SgF
49.471−0.369	73.5	5.4	0.3	1.00	SgF?
49.482−0.402	51.8	5.1	0.6	0.34	SgN
49.489−0.369	56.2	5.7	0.9	0.93	SgF
49.490−0.388	59.2	5.8	0.8	1.00	SgF
49.599−0.249	63.1	5.8	0.6	1.00	SgF
49.617−0.360	50.4	5.0	0.9	0.64	SgN
50.035+0.582	−5.1	10.7	0.4	1.00	Per
50.315+0.676	30.1	3.4	0.6	0.72	SgN
50.779+0.152	49.1	4.8	0.4	0.40	SgN
51.679+0.719	7.3	10.1	0.4	1.00	Per
51.818+1.250	46.5	3.7	0.5	1.00	SgN
52.199+0.723	3.7	10.1	0.4	1.00	Per
52.663−1.092	65.9	3.1	1.2	1.00	UA
52.922+0.414	39.1	4.0	0.3	1.00	LoS
53.036+0.113	10.2	9.6	0.4	1.00	Per
53.142+0.071	24.6	4.0	0.4	0.41	LoS
53.618+0.035	19.0	8.4	0.7	0.72	UA
56.963−0.235	29.9	3.7	0.4	0.59	LoS
57.610+0.025	38.9	3.8	0.4	0.95	LoS
58.775+0.644	33.3	3.6	0.3	0.98	LoS
59.634−0.192	29.6	3.5	0.3	0.96	LoS
59.783+0.065	27.0	3.5	0.3	0.91	LoS
59.833+0.672	38.2	3.6	0.3	1.00	LoS

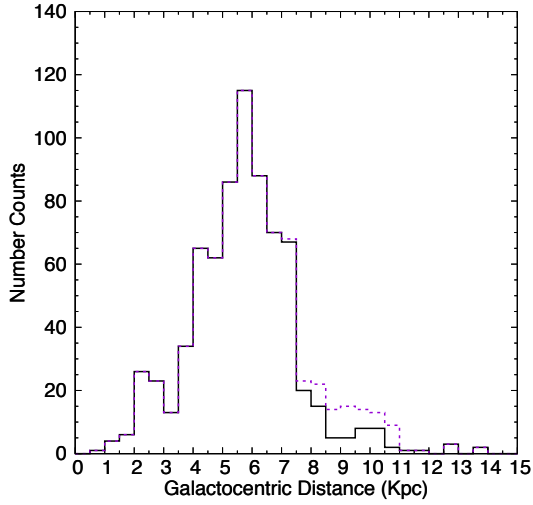


Figure B1. Galactocentric distribution using Reid et al. (2016) distances for sources within $\pm 60^\circ$ longitude (solid black) in 0.5 kpc bins. Dashed purple shows the additional sources that exist in the -60° to -180° longitude range (all in excess of 7.5 kpc). Beyond $R = 12$ kpc there are only five sources, with Galactocentric radii of 12.6, 12.7, 12.9, and two with 13.6 kpc.

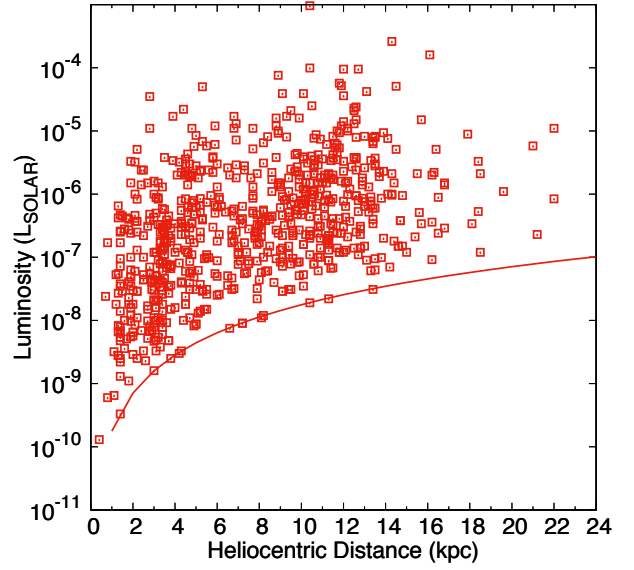


Figure B3. Luminosity versus heliocentric distance for the Reid et al. (2016) distances. Solid line represents the $3\text{-}\sigma$ sensitivity of the MMB.

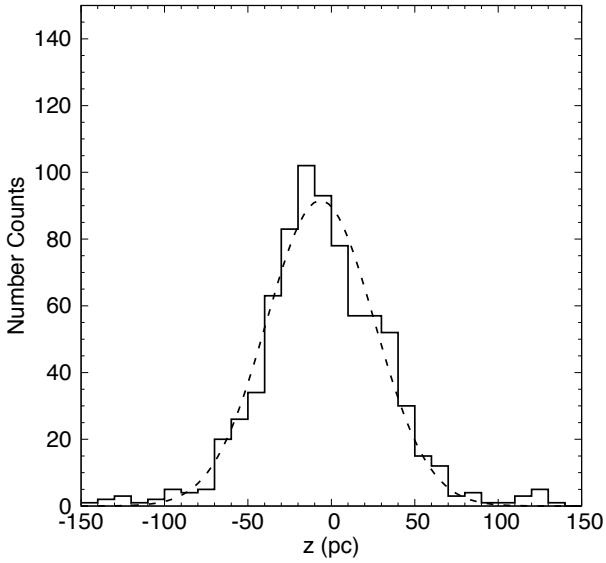


Figure B2. Distribution of height from the Galactic plane with a Gaussian fit, using Reid et al. (2016) distances. FWHM is $75.9 \text{ pc} \pm 2.9 \text{ pc}$.