Volumetric Properties of Mixed Electrolyte Aqueous Solutions at Elevated Temperatures and Pressures. The System KCl-NaCl-H_2O to 523.15 K, 40 MPa, and Ionic Strength from (0.1 to 5.8) mol·kg^{-1}.

Denis Zezin, Thomas Driesner, Carmen Sanchez-Valle*

Institute of Geochemistry and Petrology, ETH Zurich, Clausiusstrasse 25, 8092 Zurich, Switzerland

Supporting Information

Table 1S. The mean apparent molar volume of aqueous KCl-NaCl mixtures, partial molar volumes of components and limiting partial molar volumes of solutes in ionic media calculated from the obtained experimental data.

T /K	p /MPa	m_{NaCl} /mol·kg^{-1}	m_{KCl} /mol·kg^{-1}	V^{ϕ}_{mean} /cm^3·mol^{-1}	$\bar{V}_{NaCl}$ /cm^3·mol^{-1}	$\bar{V}_{KCl}$ /cm^3·mol^{-1}	$\bar{V}^0_{NaCl}$ /cm^3·mol^{-1}	$\bar{V}^0_{KCl}$ /cm^3·mol^{-1}
25.05	0.1	0.10395	2.06402	29.37	28.93	31.22	20.06	27.85
25.00	0.1	0.10518	0.00000	16.99	17.24	16.99		27.85
25.01	0.1	0.10676	1.02732	28.10	27.27	29.94	18.93	27.86
25.06	0.1	0.10696	0.65057	26.63	25.43	28.60	18.42	27.86
24.98	0.1	0.10756	0.11055	22.71	20.25	25.53	17.30	27.86
24.99	0.1	0.10807	3.58389	30.31	30.05	32.06	21.33	27.86
25.00	0.1	0.49988	0.00000	17.71	18.38	17.71		28.73
24.99	0.1	0.99975	0.33135	21.22	20.17	23.40	17.86	29.44

25.03	0.1	0.99991	0.65012	22.89	21.20	25.85	18.41	29.44
25.04	0.1	1.00019	1.03055	24.37	22.47	27.70	18.93	29.44
25.06	0.1	1.00035	0.11100	19.33	19.38	20.34	17.31	29.45
25.02	0.1	1.00090	1.03979	24.47	22.57	27.81	18.94	29.44
25.00	0.1	1.00092	0.00000	18.42	19.46	18.42		29.44
25.02	0.1	1.00099	2.23856	27.34	25.63	30.81	20.22	29.44
25.01	0.1	1.15326	3.57740	28.68	27.25	31.92	21.32	29.63
25.00	0.1	2.99981	0.00000	19.96	21.59	19.96		31.44
25.03	0.1	3.53342	1.02020	22.92	22.51	25.14	18.92	31.87
25.04	0.1	3.58016	0.10571	20.55	21.82	20.88	17.29	31.90
25.02	0.1	3.58072	2.23660	25.23	23.92	28.50	20.22	31.90
25.00	0.1	3.58228	0.33082	21.27	21.99	22.20	17.86	31.90
25.09	0.1	3.58557	0.64398	22.10	22.23	23.70	18.41	31.91
25.03	2	0.10395	2.06402	29.44	29.00	31.28	20.13	27.90
25.01	2	0.10676	1.02732	28.16	27.32	29.99	19.00	27.90
25.05	2	0.10696	0.65057	26.60	25.41	28.57	18.49	27.91
24.95	2	0.10756	0.11055	22.84	20.38	25.64	17.38	27.90
24.99	2	0.10807	3.58389	30.35	30.09	32.10	21.39	27.91
25.00	2	0.99975	0.33135	21.26	20.20	23.44	17.94	29.49
25.00	2	0.99991	0.65012	22.97	21.27	25.92	18.49	29.49
25.04	2	1.00019	1.03055	24.42	22.51	27.74	19.01	29.49
25.05	2	1.00035	0.11100	19.40	19.44	20.41	17.39	29.49
25.01	2	1.00090	1.03979	24.54	22.63	27.87	19.02	29.49
25.03	2	1.00099	2.23856	27.37	25.66	30.82	20.29	29.49
25.00	2	1.15326	3.57740	28.72	27.29	31.95	21.39	29.67

25.03	2	3.53342	1.02020	22.96	22.56	25.18	19.00	31.92
25.04	2	3.58016	0.10571	20.61	21.88	20.94	17.37	31.96
25.01	2	3.58072	2.23660	25.27	23.98	28.54	20.29	31.96
24.99	2	3.58228	0.33082	21.32	22.05	22.25	17.94	31.96
25.09	2	3.58557	0.64398	22.15	22.29	23.74	18.49	31.97
25.03	5	0.10395	2.06402	29.49	29.06	31.34	20.24	27.96
25.00	5	0.10518	0.00000	17.41	17.65	17.41		27.96
25.00	5	0.10676	1.02732	28.22	27.39	30.05	19.12	27.97
25.05	5	0.10696	0.65057	26.62	25.43	28.58	18.62	27.97
24.95	5	0.10756	0.11055	22.56	20.12	25.35	17.51	27.97
24.98	5	0.10807	3.58389	30.42	30.16	32.15	21.49	27.97
25.00	5	0.49988	0.00000	17.94	18.58	17.94		28.84
25.01	5	0.99975	0.33135	21.36	20.29	23.53	18.07	29.56
24.99	5	0.99991	0.65012	23.09	21.38	26.03	18.61	29.55
25.03	5	1.00019	1.03055	24.52	22.61	27.83	19.13	29.56
25.03	5	1.00035	0.11100	19.57	19.58	20.57	17.52	29.56
25.07	5	1.00090	1.03979	24.59	22.67	27.90	19.15	29.56
25.00	5	1.00092	0.00000	18.65	19.63	18.65		29.56
25.03	5	1.00099	2.23856	27.42	25.70	30.86	20.40	29.56
24.99	5	1.15326	3.57740	28.77	27.33	31.97	21.48	29.74
25.00	5	2.99981	0.00000	20.10	21.70	20.10		31.57
25.02	5	3.53342	1.02020	23.03	22.64	25.25	19.12	32.01
25.02	5	3.58016	0.10571	20.69	21.97	21.02	17.50	32.05
25.01	5	3.58072	2.23660	25.32	24.05	28.58	20.40	32.05
24.98	5	3.58228	0.33082	21.40	22.13	22.33	18.07	32.05

25.09	5	3.58557	0.64398	22.22	22.36	23.81	18.61	32.06
25.02	10	0.10395	2.06402	29.60	29.16	31.44	20.42	28.07
25.00	10	0.10518	0.00000	17.41	17.65	17.41		28.07
25.00	10	0.10676	1.02732	28.35	27.53	30.18	19.32	28.08
25.04	10	0.10696	0.65057	26.73	25.55	28.68	18.82	28.08
25.01	10	0.10756	0.11055	22.17	19.75	24.94	17.73	28.08
24.97	10	0.10807	3.58389	30.53	30.27	32.24	21.64	28.08
25.00	10	0.49988	0.00000	18.11	18.72	18.11		28.95
25.00	10	0.99975	0.33135	21.53	20.44	23.69	18.28	29.67
25.01	10	0.99991	0.65012	23.21	21.49	26.14	18.82	29.67
24.99	10	1.00019	1.03055	24.69	22.77	27.98	19.32	29.67
25.01	10	1.00035	0.11100	19.77	19.76	20.77	17.74	29.67
24.99	10	1.00090	1.03979	24.79	22.86	28.08	19.33	29.67
25.00	10	1.00092	0.00000	18.85	19.79	18.85		29.67
25.02	10	1.00099	2.23856	27.53	25.80	30.95	20.58	29.67
24.97	10	1.15326	3.57740	28.88	27.42	32.05	21.64	29.86
25.00	10	2.99981	0.00000	20.26	21.83	20.26		31.71
25.01	10	3.53342	1.02020	23.15	22.78	25.37	19.31	32.16
25.02	10	3.58016	0.10571	20.82	22.10	21.14	17.72	32.19
25.00	10	3.58072	2.23660	25.43	24.20	28.68	20.57	32.19
25.00	10	3.58228	0.33082	21.53	22.27	22.46	18.28	32.19
25.09	10	3.58557	0.64398	22.34	22.50	23.93	18.81	32.20
25.02	20	0.10395	2.06402	29.85	29.41	31.68	20.76	28.27
25.00	20	0.10518	0.00000	17.84	18.07	17.84		28.27
24.99	20	0.10676	1.02732	28.67	27.85	30.48	19.70	28.28

25.04	20	0.10696	0.65057	27.13	25.96	29.06	19.21	28.28
25.04	20	0.10756	0.11055	22.51	20.13	25.22	18.15	28.28
24.97	20	0.10807	3.58389	30.72	30.46	32.39	21.95	28.28
25.00	20	0.49988	0.00000	18.59	19.15	18.59		29.15
25.00	20	0.99975	0.33135	21.82	20.70	23.95	18.68	29.87
25.01	20	0.99991	0.65012	23.48	21.74	26.37	19.21	29.88
24.94	20	1.00019	1.03055	25.00	23.06	28.25	19.70	29.87
25.00	20	1.00035	0.11100	20.05	19.97	21.03	18.15	29.88
24.97	20	1.00090	1.03979	25.10	23.16	28.35	19.71	29.87
25.00	20	1.00092	0.00000	19.22	20.08	19.22		29.88
25.00	20	1.00099	2.23856	27.79	26.05	31.18	20.92	29.88
24.97	20	1.15326	3.57740	29.07	27.60	32.17	21.95	30.07
25.00	20	2.99981	0.00000	20.56	22.08	20.56		31.97
25.00	20	3.53342	1.02020	23.38	23.07	25.60	19.69	32.43
25.02	20	3.58016	0.10571	21.08	22.38	21.41	18.13	32.47
24.98	20	3.58072	2.23660	25.63	24.48	28.87	20.91	32.47
25.01	20	3.58228	0.33082	21.79	22.56	22.71	18.68	32.47
25.09	20	3.58557	0.64398	22.58	22.78	24.17	19.20	32.48
24.98	30	0.10676	1.02732	28.92	28.12	30.73	20.05	28.45
25.02	30	0.10696	0.65057	27.60	26.46	29.51	19.58	28.46
25.02	30	0.10756	0.11055	23.35	21.02	26.01	18.54	28.46
24.96	30	0.10807	3.58389	30.94	30.67	32.56	22.24	28.45
25.00	30	0.99975	0.33135	22.12	20.95	24.21	19.06	30.06
25.00	30	0.99991	0.65012	23.78	22.02	26.63	19.57	30.06
25.04	30	1.00019	1.03055	25.20	23.24	28.41	20.06	30.07

24.99	30	1.00035	0.11100	20.40	20.26	21.37	18.54	30.06
24.97	30	1.00090	1.03979	25.37	23.41	28.59	20.06	30.06
25.00	30	1.00099	2.23856	28.02	26.27	31.37	21.24	30.06
25.02	30	1.15326	3.57740	29.27	27.78	32.30	22.24	30.26
24.99	30	3.53342	1.02020	23.62	23.36	25.82	20.04	32.69
25.00	30	3.58016	0.10571	21.35	22.67	21.67	18.53	32.73
25.01	30	3.58072	2.23660	25.81	24.76	29.03	21.24	32.73
25.00	30	3.58228	0.33082	22.03	22.84	22.95	19.06	32.73
25.08	30	3.58557	0.64398	22.81	23.07	24.40	19.57	32.74
25.00	40	0.10518	0.00000	18.57	18.77	18.57		28.60
24.95	40	0.10676	1.02732	29.23	28.44	31.03	20.39	28.61
25.01	40	0.10696	0.65057	27.94	26.81	29.83	19.92	28.61
25.00	40	0.10756	0.11055	24.02	21.73	26.62	18.92	28.61
24.96	40	0.10807	3.58389	31.11	30.85	32.69	22.52	28.61
25.00	40	0.49988	0.00000	19.26	19.72	19.26		29.48
25.01	40	0.99975	0.33135	22.39	21.19	24.46	19.42	30.23
25.00	40	0.99991	0.65012	24.05	22.27	26.87	19.92	30.23
25.04	40	1.00019	1.03055	25.43	23.47	28.61	20.39	30.23
24.98	40	1.00035	0.11100	20.70	20.50	21.65	18.92	30.23
25.05	40	1.00090	1.03979	25.59	23.63	28.78	20.40	30.24
25.00	40	1.00092	0.00000	19.87	20.57	19.87		30.23
24.98	40	1.00099	2.23856	28.25	26.49	31.57	21.54	30.23
25.04	40	1.15326	3.57740	29.43	27.92	32.39	22.52	30.43
25.00	40	2.99981	0.00000	21.09	22.54	21.09		32.44
24.98	40	3.53342	1.02020	23.83	23.65	26.04	20.38	32.93

25.00	40	3.58016	0.10571	21.59	22.94	21.91	18.90	32.98
25.01	40	3.58072	2.23660	25.99	25.05	29.19	21.54	32.98
25.00	40	3.58228	0.33082	22.26	23.12	23.18	19.42	32.98
25.08	40	3.58557	0.64398	23.03	23.35	24.62	19.92	32.99
100.00	2	0.10039	3.58061	30.97	30.73	33.74	21.80	26.83
100.00	2	0.10678	2.23885	29.53	29.18	31.91	21.66	26.87
100.00	2	0.10696	0.65057	27.15	26.22	29.15	20.15	26.87
100.00	2	0.10713	0.11257	21.39	19.49	23.80	18.52	26.87
100.00	2	0.10729	1.04510	28.04	27.39	30.05	20.75	26.87
100.00	2	0.10731	0.65049	27.10	26.17	29.10	20.15	26.87
100.00	2	0.99975	0.33135	21.69	20.41	23.75	19.41	29.78
100.00	2	1.00017	1.03075	24.78	22.86	27.96	20.73	29.78
100.00	2	1.00034	0.11086	20.04	19.65	20.99	18.51	29.78
100.00	2	1.00035	0.11100	20.06	19.66	21.01	18.51	29.78
100.00	2	1.00070	3.58334	29.32	27.76	32.80	21.80	29.78
100.00	2	1.00495	0.00000	19.12	19.53	19.12		29.79
100.00	2	1.01161	2.24089	27.38	25.62	30.85	21.66	29.81
100.00	2	3.53342	1.02020	23.46	24.86	25.70	20.71	33.38
100.00	2	3.58129	0.64988	22.59	24.63	24.26	20.15	33.43
100.00	2	3.58159	0.11084	21.28	24.48	21.65	18.51	33.43
100.00	2	3.58170	0.00000	21.01	24.53	21.01		33.43
100.00	2	3.58228	0.33082	21.82	24.48	22.81	19.41	33.43
100.00	2	3.58470	2.24416	25.85	26.34	28.92	21.66	33.43
100.00	5	0.09977	0.00000	17.89	18.17	17.89		27.19
100.00	5	0.10039	3.58061	31.04	30.81	34.15	22.25	27.19

100.00	5	0.10678	2.23885	29.60	29.26	31.89	21.98	27.24
100.00	5	0.10696	0.65057	27.20	26.26	29.10	20.34	27.24
100.00	5	0.10713	0.11257	21.51	19.55	23.95	18.68	27.24
100.00	5	0.10729	1.04510	28.10	27.45	29.96	20.96	27.24
100.00	5	0.10731	0.65049	27.18	26.23	29.08	20.34	27.24
100.00	5	0.49956	0.00000	18.80	19.14	18.80		28.84
100.00	5	0.99975	0.33135	21.81	20.47	23.87	19.58	30.03
100.00	5	1.00017	1.03075	24.87	22.91	27.98	20.94	30.03
100.00	5	1.00034	0.11086	20.15	19.71	21.10	18.67	30.03
100.00	5	1.00035	0.11100	20.15	19.71	21.11	18.67	30.03
100.00	5	1.00070	3.58334	29.39	27.88	33.28	22.25	30.03
100.00	5	1.00092	0.00000	19.35	19.74	19.35		30.03
100.00	5	1.01161	2.24089	27.44	25.70	30.91	21.98	30.06
100.00	5	2.99981	0.00000	20.72	23.08	20.72		32.87
100.00	5	3.53342	1.02020	23.53	24.95	25.76	20.93	33.38
100.00	5	3.58129	0.64988	22.65	24.70	24.30	20.33	33.42
100.00	5	3.58159	0.11084	21.37	24.58	21.73	18.67	33.42
100.00	5	3.58170	0.00000	21.10	24.63	21.10		33.42
100.00	5	3.58228	0.33082	21.90	24.57	22.88	19.57	33.42
100.00	5	3.58470	2.24416	25.91	26.48	29.10	21.98	33.42
100.00	10	0.09977	0.00000	18.49	18.76	18.49		27.79
100.00	10	0.10039	3.58061	31.15	30.93	34.82	22.98	27.80
100.01	10	0.10678	2.23885	29.75	29.40	31.89	22.50	27.84
100.00	10	0.10696	0.65057	27.48	26.50	29.19	20.64	27.84
100.00	10	0.10713	0.11257	21.90	19.84	24.39	18.93	27.84

100.00	10	0.10729	1.04510	28.26	27.59	29.86	21.32	27.84
100.00	10	0.10731	0.65049	27.39	26.41	29.11	20.64	27.84
100.00	10	0.49956	0.00000	18.87	19.17	18.87		29.35
100.00	10	0.99975	0.33135	22.00	20.57	24.05	19.85	30.44
100.00	10	1.00017	1.03075	25.03	23.02	28.02	21.29	30.44
100.00	10	1.00034	0.11086	20.29	19.78	21.26	18.92	30.44
100.00	10	1.00035	0.11100	20.33	19.82	21.29	18.92	30.44
100.00	10	1.00070	3.58334	29.49	28.07	34.06	22.98	30.45
100.00	10	1.00092	0.00000	19.53	19.88	19.53		30.45
100.00	10	1.01161	2.24089	27.57	25.86	31.03	22.50	30.47
100.00	10	2.99981	0.00000	20.87	23.24	20.87		32.93
100.00	10	3.53342	1.02020	23.66	25.12	25.86	21.28	33.36
100.00	10	3.58129	0.64988	22.77	24.84	24.39	20.64	33.39
100.00	10	3.58159	0.11084	21.49	24.72	21.85	18.92	33.39
100.00	10	3.58170	0.00000	21.23	24.81	21.23		33.39
100.00	10	3.58228	0.33082	22.04	24.72	23.00	19.85	33.39
100.01	10	3.58470	2.24416	26.01	26.71	29.41	22.50	33.40
100.00	20	0.09977	0.00000	18.66	18.90	18.66		28.98
100.00	20	0.10039	3.58061	31.35	31.16	36.15	24.42	28.98
100.00	20	0.10678	2.23885	30.01	29.68	31.86	23.51	29.02
100.00	20	0.10696	0.65057	27.78	26.74	29.14	21.23	29.02
100.00	20	0.10713	0.11257	22.10	19.85	24.69	19.42	29.02
100.00	20	0.10729	1.04510	28.56	27.86	29.65	22.00	29.02
99.99	20	0.10731	0.65049	27.69	26.65	29.06	21.23	29.02
100.01	20	0.49956	0.00000	19.27	19.52	19.27		30.35

99.99	20	0.99975	0.33135	22.32	20.71	24.36	20.37	31.24
100.00	20	1.00017	1.03075	25.32	23.20	28.08	21.97	31.24
100.00	20	1.00034	0.11086	20.65	20.00	21.63	19.41	31.24
100.00	20	1.00035	0.11100	20.66	20.01	21.65	19.41	31.24
100.00	20	1.00070	3.58334	29.69	28.45	35.63	24.42	31.24
100.00	20	1.00092	0.00000	19.90	20.17	19.90		31.24
99.99	20	1.01161	2.24089	27.83	26.17	31.28	23.51	31.26
100.00	20	2.99981	0.00000	21.17	23.54	21.17		33.05
100.00	20	3.53342	1.02020	23.88	25.41	26.03	21.96	33.31
100.00	20	3.58129	0.64988	23.03	25.15	24.58	21.23	33.33
100.00	20	3.58159	0.11084	21.75	25.05	22.10	19.41	33.33
99.99	20	3.58170	0.00000	21.51	25.15	21.51		33.33
100.01	20	3.58228	0.33082	22.27	24.99	23.19	20.37	33.33
100.00	20	3.58470	2.24416	26.21	27.19	30.03	23.52	33.33
100.00	30	0.10039	3.58061	31.56	31.40	37.49	25.83	30.13
99.99	30	0.10678	2.23885	30.25	29.94	31.83	24.50	30.16
99.99	30	0.10696	0.65057	28.13	27.03	29.15	21.79	30.17
100.00	30	0.10713	0.11257	22.48	20.05	25.18	19.87	30.17
100.00	30	0.10729	1.04510	28.85	28.13	29.44	22.65	30.17
100.00	30	0.10731	0.65049	28.00	26.89	29.02	21.78	30.17
99.99	30	0.99975	0.33135	22.65	20.87	24.68	20.85	32.01
100.00	30	1.00017	1.03075	25.57	23.35	28.11	22.62	32.01
100.00	30	1.00034	0.11086	21.00	20.22	22.01	19.86	32.01
99.99	30	1.00035	0.11100	21.00	20.21	22.01	19.86	32.01
100.00	30	1.00070	3.58334	29.88	28.82	37.19	25.84	32.01

100.00	30	1.01161	2.24089	28.06	26.46	31.49	24.50	32.03
100.00	30	3.53342	1.02020	24.10	25.71	26.19	22.60	33.23
100.00	30	3.58129	0.64988	23.25	25.43	24.75	21.78	33.23
100.00	30	3.58159	0.11084	22.00	25.36	22.34	19.86	33.23
100.00	30	3.58170	0.00000	21.73	25.46	21.73		33.23
100.00	30	3.58228	0.33082	22.53	25.30	23.41	20.85	33.23
100.00	30	3.58470	2.24416	26.39	27.66	30.63	24.51	33.24
100.00	40	0.09977	0.00000	19.38	19.59	19.38		31.24
100.00	40	0.10039	3.58061	31.74	31.60	38.79	27.23	31.25
100.00	40	0.10678	2.23885	30.47	30.17	31.77	25.47	31.28
100.00	40	0.10696	0.65057	28.34	27.18	29.01	22.31	31.28
100.00	40	0.10713	0.11257	22.91	20.29	25.71	20.29	31.28
100.00	40	0.10729	1.04510	29.10	28.35	29.19	23.28	31.28
100.00	40	0.10731	0.65049	28.27	27.11	28.94	22.31	31.28
100.00	40	0.49956	0.00000	20.01	20.15	20.01		32.25
100.00	40	0.99975	0.33135	22.88	20.92	24.89	21.31	32.75
100.00	40	1.00017	1.03075	25.85	23.52	28.16	23.25	32.75
100.00	40	1.00034	0.11086	21.31	20.39	22.34	20.28	32.75
100.00	40	1.00035	0.11100	21.32	20.39	22.35	20.28	32.75
100.00	40	1.00070	3.58334	30.05	29.17	38.73	27.23	32.75
100.00	40	1.00092	0.00000	20.53	20.65	20.53		32.75
100.00	40	1.01161	2.24089	28.26	26.72	31.69	25.47	32.76
100.00	40	2.99981	0.00000	21.66	24.04	21.66		33.19
100.00	40	3.53342	1.02020	24.30	26.00	26.34	23.22	33.13
100.00	40	3.58129	0.64988	23.46	25.70	24.90	22.31	33.12

100.00	40	3.58159	0.11084	22.23	25.66	22.55	20.28	33.12
99.99	40	3.58170	0.00000	21.98	25.79	21.98		33.12
100.00	40	3.58228	0.33082	22.74	25.57	23.59	21.31	33.12
100.00	40	3.58470	2.24416	26.56	28.12	31.23	25.47	33.12
150.00	2	0.10678	2.23885	27.13	26.83	30.34	20.08	22.64
150.00	2	0.10807	3.58389	28.49	28.26	32.53	20.19	22.65
150.00	2	0.99991	0.65012	20.62	19.19	23.69	17.54	27.18
150.00	2	1.00070	3.58334	27.48	26.04	31.90	20.19	27.19
150.00	2	1.09150	0.65123	20.68	19.32	23.69	17.55	27.46
150.00	2	3.53342	1.02020	21.50	24.14	23.94	18.52	32.13
149.99	2	3.58159	0.11084	19.08	23.77	19.49	14.63	32.19
150.00	2	3.58170	0.00000	18.81	23.87	18.81		32.19
149.98	2	3.58268	0.11074	19.06	23.75	19.46	14.63	32.20
150.00	5	0.09977	0.00000	13.90	14.43	13.90		23.03
150.00	5	0.10678	2.23885	27.28	26.97	30.38	20.43	23.11
150.00	5	0.10713	0.11257	17.63	15.92	20.19	14.93	23.11
149.98	5	0.10729	1.04510	25.25	24.68	27.65	18.87	23.12
150.00	5	0.10731	0.65049	23.88	23.05	26.22	17.82	23.11
150.00	5	0.10807	3.58389	28.62	28.39	32.95	20.61	23.12
150.01	5	0.50071	0.00000	15.15	15.85	15.15		25.73
149.98	5	0.83000	0.08421	16.53	16.50	17.46	14.60	27.00
150.01	5	0.99991	0.65012	20.74	19.24	23.77	17.82	27.54
149.98	5	1.00017	1.03075	22.45	20.79	25.90	18.84	27.54
150.00	5	1.00034	0.11086	17.08	17.03	18.11	14.91	27.54
150.00	5	1.00070	3.58334	27.57	26.16	32.35	20.61	27.54

150.00	5	1.00090	1.03979	22.47	20.81	25.93	18.85	27.54
150.01	5	1.00495	0.00000	16.06	16.86	16.06		27.55
149.98	5	1.01161	2.24089	25.47	23.93	29.50	20.43	27.57
150.01	5	1.09150	0.65123	20.81	19.38	23.79	17.83	27.80
150.00	5	2.99853	0.00000	18.44	21.94	18.44		31.54
150.01	5	3.53342	1.02020	21.63	24.32	24.06	18.81	32.24
149.98	5	3.58129	0.64988	20.87	24.30	22.67	17.82	32.30
150.00	5	3.58159	0.11084	19.18	23.92	19.58	14.91	32.30
150.00	5	3.58170	0.00000	18.96	24.06	18.96		32.30
149.99	5	3.58268	0.11074	19.19	23.93	19.59	14.91	32.30
149.99	5	3.58470	2.24416	24.47	26.12	27.93	20.43	32.31
150.00	10	0.09977	0.00000	14.02	14.52	14.02		23.80
150.00	10	0.10678	2.23885	27.51	27.21	30.45	21.00	23.88
149.99	10	0.10713	0.11257	18.32	16.52	20.92	15.38	23.88
149.99	10	0.10729	1.04510	25.51	24.93	27.66	19.34	23.89
149.99	10	0.10731	0.65049	24.27	23.41	26.43	18.28	23.89
150.00	10	0.10807	3.58389	28.84	28.62	33.67	21.30	23.89
150.00	10	0.49988	0.00000	15.49	16.12	15.49		26.40
149.99	10	0.83000	0.08421	16.82	16.68	17.76	15.05	27.61
150.00	10	0.99991	0.65012	21.05	19.43	24.02	18.28	28.11
149.97	10	1.00017	1.03075	22.75	21.00	26.08	19.31	28.12
150.00	10	1.00034	0.11086	17.34	17.17	18.38	15.36	28.11
150.01	10	1.00070	3.58334	27.75	26.40	33.13	21.30	28.11
150.00	10	1.00090	1.03979	22.74	20.99	26.08	19.33	28.12
150.00	10	1.00495	0.00000	16.43	17.13	16.43		28.13

149.98	10	1.01161	2.24089	25.69	24.14	29.68	21.00	28.15
150.00	10	1.09150	0.65123	21.10	19.55	24.02	18.28	28.36
150.00	10	2.99853	0.00000	18.66	22.16	18.66		31.80
150.00	10	3.53342	1.02020	21.85	24.62	24.24	19.29	32.42
149.97	10	3.58129	0.64988	21.09	24.60	22.86	18.28	32.47
150.01	10	3.58159	0.11084	19.39	24.21	19.78	15.36	32.47
150.00	10	3.58170	0.00000	19.18	24.38	19.18		32.47
150.00	10	3.58268	0.11074	19.40	24.23	19.79	15.36	32.47
149.99	10	3.58470	2.24416	24.63	26.46	28.26	21.00	32.48
150.00	20	0.09977	0.00000	14.71	15.17	14.71		25.29
149.99	20	0.10678	2.23885	27.98	27.69	30.60	22.10	25.37
150.00	20	0.10713	0.11257	19.17	17.17	21.85	16.23	25.37
150.01	20	0.10729	1.04510	26.02	25.40	27.64	20.25	25.37
150.01	20	0.10731	0.65049	24.71	23.79	26.50	19.13	25.37
150.00	20	0.10807	3.58389	29.22	29.02	35.05	22.64	25.38
150.00	20	0.50071	0.00000	16.12	16.61	16.12		27.69
150.00	20	0.83000	0.08421	17.41	17.03	18.37	15.91	28.77
150.00	20	0.99991	0.65012	21.57	19.72	24.42	19.13	29.22
150.00	20	1.00017	1.03075	23.20	21.28	26.30	20.21	29.22
150.00	20	1.00034	0.11086	17.95	17.54	19.01	16.22	29.22
150.01	20	1.00070	3.58334	28.10	26.85	34.67	22.64	29.22
150.02	20	1.00090	1.03979	23.20	21.27	26.30	20.24	29.22
150.00	20	1.00495	0.00000	17.03	17.54	17.03		29.23
150.00	20	1.01161	2.24089	26.09	24.54	30.01	22.10	29.25
150.00	20	1.09150	0.65123	21.61	19.81	24.41	19.14	29.44

150.00	20	2.99853	0.00000	19.13	22.66	19.13		32.29
150.00	20	3.53342	1.02020	22.23	25.18	24.58	20.19	32.75
149.99	20	3.58129	0.64988	21.45	25.14	23.18	19.13	32.78
150.01	20	3.58159	0.11084	19.82	24.84	20.21	16.21	32.78
150.00	20	3.58170	0.00000	19.60	25.02	19.60		32.78
150.00	20	3.58268	0.11074	19.83	24.86	20.22	16.21	32.79
150.00	20	3.58470	2.24416	24.93	27.14	28.91	22.10	32.79
150.00	30	0.10678	2.23885	28.32	28.04	30.63	23.15	26.78
150.00	30	0.10713	0.11257	19.81	17.62	22.56	17.02	26.78
150.00	30	0.10729	1.04510	26.52	25.88	27.63	21.10	26.79
150.00	30	0.10731	0.65049	25.37	24.39	26.80	19.93	26.79
150.00	30	0.10807	3.58389	29.56	29.38	36.40	23.94	26.79
150.01	30	0.83000	0.08421	17.94	17.35	18.93	16.70	29.88
150.00	30	0.99991	0.65012	22.05	19.96	24.77	19.93	30.27
150.00	30	1.00017	1.03075	23.60	21.51	26.47	21.06	30.27
150.00	30	1.00034	0.11086	18.47	17.83	19.55	17.00	30.27
150.00	30	1.00070	3.58334	28.40	27.27	36.19	23.94	30.27
150.00	30	1.00090	1.03979	23.66	21.58	26.54	21.09	30.27
150.01	30	1.01161	2.24089	26.45	24.90	30.32	23.16	30.29
150.01	30	1.09150	0.65123	22.04	20.01	24.73	19.93	30.46
150.00	30	3.53342	1.02020	22.57	25.74	24.87	21.04	33.04
150.01	30	3.58129	0.64988	21.77	25.67	23.46	19.93	33.06
150.01	30	3.58159	0.11084	20.19	25.44	20.57	17.00	33.06
150.00	30	3.58170	0.00000	20.00	25.65	20.00		33.06
150.00	30	3.58268	0.11074	20.20	25.45	20.58	17.00	33.06

150.00	30	3.58470	2.24416	25.22	27.84	29.56	23.16	33.06
150.00	40	0.09977	0.00000	16.19	16.55	16.19		28.07
150.01	40	0.10678	2.23885	28.69	28.41	30.68	24.17	28.13
150.01	40	0.10713	0.11257	20.24	17.86	23.08	17.73	28.14
150.00	40	0.10729	1.04510	26.96	26.29	27.56	21.90	28.14
150.00	40	0.10731	0.65049	25.84	24.80	26.91	20.67	28.14
150.00	40	0.10807	3.58389	29.85	29.69	37.71	25.22	28.14
150.00	40	0.49988	0.00000	17.28	17.52	17.28		30.08
150.01	40	0.83000	0.08421	18.41	17.61	19.43	17.43	30.93
150.00	40	0.99991	0.65012	22.47	20.16	25.07	20.67	31.27
150.00	40	1.00017	1.03075	24.01	21.75	26.65	21.86	31.27
150.00	40	1.00034	0.11086	18.91	18.04	20.01	17.72	31.27
150.00	40	1.00090	1.03979	24.05	21.81	26.70	21.89	31.27
150.00	40	1.00495	0.00000	18.03	18.18	18.03		31.28
150.01	40	1.01161	2.24089	26.77	25.23	30.59	24.17	31.29
150.01	40	1.09150	0.65123	22.45	20.20	25.04	20.68	31.43
150.00	40	2.99853	0.00000	19.90	23.55	19.90		33.15
150.00	40	3.53342	1.02020	22.86	26.29	25.13	21.83	33.30
150.02	40	3.58129	0.64988	22.10	26.24	23.74	20.67	33.31
149.99	40	3.58159	0.11084	20.55	26.05	20.92	17.72	33.31
150.00	40	3.58170	0.00000	20.33	26.26	20.33		33.31
150.00	40	3.58268	0.11074	20.53	26.04	20.91	17.72	33.31
150.00	40	3.58470	2.24416	25.47	28.54	30.18	24.18	33.31
199.99	1.97	0.01064	0.64745	16.76	16.65	19.17	11.13	11.77
200.00	1.97	0.01065	1.04555	19.34	19.27	22.11	13.20	11.77

200.01	1.97	0.01065	1.72360	21.35	21.31	24.95	15.58	11.77
200.00	1.97	0.01065	0.33261	14.30	14.07	16.42	8.63	11.77
200.03	1.97	0.01066	2.23970	22.29	22.26	26.76	16.88	11.76
199.99	1.97	0.01071	0.10055	11.34	10.60	13.39	5.25	11.78
199.98	1.97	0.01075	0.64855	17.83	17.72	20.24	11.14	11.79
199.99	1.97	0.01094	0.32983	14.90	14.66	17.03	8.61	11.80
200.02	1.97	0.01186	3.58435	25.95	25.93	33.84	19.12	11.87
200.02	1.97	0.01279	1.16224	19.71	19.64	22.62	13.69	11.94
200.02	1.97	0.10654	3.58550	24.75	24.60	32.81	19.12	15.30
200.11	1.97	0.10663	0.33076	13.83	12.49	17.21	8.59	15.28
200.05	1.97	0.10670	1.72359	20.73	20.39	24.70	15.58	15.30
200.00	1.97	0.10674	0.65159	16.67	15.82	19.92	11.15	15.31
200.02	1.97	0.10678	1.04578	18.62	18.05	21.96	13.20	15.30
200.07	1.97	0.10685	2.24084	21.85	21.59	26.60	16.87	15.29
199.99	1.97	0.10756	0.11055	9.26	7.53	12.62	5.47	15.33
200.00	1.97	0.11411	0.11184	8.25	6.55	11.61	5.49	15.46
200.01	1.97	0.11452	3.57565	25.27	25.10	33.31	19.11	15.47
200.00	1.97	0.78390	0.76820	15.38	14.08	19.53	11.84	21.65
199.95	1.97	0.97791	0.30643	12.84	12.64	15.51	8.37	22.62
200.00	1.97	0.99975	0.33135	11.88	11.63	14.65	8.62	22.71
200.00	1.97	0.99991	0.65012	14.19	13.24	18.00	11.14	22.71
200.00	1.97	1.00035	0.11100	9.75	10.71	11.02	5.47	22.72
200.07	1.97	1.01002	1.04505	17.44	16.27	21.90	13.19	22.75
200.09	1.97	1.01027	2.24076	23.27	22.31	29.30	16.87	22.75
199.99	1.97	1.01033	0.65054	14.66	13.72	18.46	11.15	22.76

200.05	1.97	1.01060	0.03171	9.83	11.54	10.24	3.07	22.76
200.02	1.97	1.09150	0.65123	14.24	13.42	17.99	11.15	23.11
200.01	1.97	1.15332	3.57746	23.54	22.98	32.75	19.11	23.37
200.01	1.97	2.28490	2.23930	20.53	21.30	26.88	16.88	27.14
199.99	1.97	3.58159	0.11084	14.36	21.78	14.87	5.47	30.63
200.00	1.97	3.58228	0.33082	15.09	21.88	16.47	8.62	30.63
200.00	1.97	3.58268	0.11074	14.30	21.73	14.81	5.47	30.64
200.01	1.97	3.58481	1.12327	18.43	23.96	22.11	13.53	30.64
200.01	1.97	3.58647	1.04538	18.19	23.81	21.68	13.20	30.65
200.11	1.97	3.58656	2.24390	22.54	27.54	28.83	16.88	30.64
200.00	2	0.10518	0.00000	2.20	3.39	2.20		15.28
200.00	2	1.00495	0.00000	8.58	10.64	8.58		22.74
200.00	2	3.58170	0.00000	14.00	21.81	14.00		30.64
200.00	5	0.01064	0.64745	17.40	17.29	19.76	11.59	12.32
200.01	5	0.01071	0.10055	12.04	11.32	14.06	5.83	12.32
200.01	5	0.01094	0.32983	15.37	15.13	17.46	9.12	12.34
200.00	5	0.09977	0.00000	3.57	4.71	3.57		15.63
200.00	5	0.49988	0.00000	6.79	8.46	6.79		20.30
200.01	5	0.99975	0.33135	12.31	11.98	15.06	9.13	23.11
200.01	5	0.99991	0.65012	14.56	13.55	18.35	11.60	23.11
200.00	5	1.00495	0.00000	8.98	10.94	8.98		23.13
200.00	5	2.99853	0.00000	13.04	18.73	13.04		29.43
200.00	5	3.58170	0.00000	14.30	22.13	14.30		30.93
200.02	5	3.58228	0.33082	15.38	22.19	16.76	9.13	30.93
200.00	5.84	0.01065	1.04555	19.86	19.80	22.58	13.72	12.47

199.99	5.84	0.01065	1.72360	21.88	21.84	25.41	16.00	12.47
200.04	5.84	0.01065	0.33261	14.93	14.70	17.00	9.28	12.46
200.03	5.84	0.01066	2.23970	22.68	22.65	27.07	17.20	12.46
199.99	5.84	0.01075	0.64855	18.23	18.11	20.58	11.72	12.48
200.02	5.84	0.01186	3.58435	26.28	26.26	34.00	19.18	12.56
200.01	5.84	0.01280	1.16220	20.29	20.22	23.14	14.19	12.64
200.04	5.84	0.10654	3.58550	25.08	24.92	32.96	19.18	15.90
200.11	5.84	0.10663	0.33076	14.41	13.07	17.73	9.25	15.89
200.04	5.84	0.10670	1.72359	21.23	20.89	25.12	15.99	15.90
200.00	5.84	0.10674	0.65159	17.19	16.35	20.37	11.74	15.91
200.03	5.84	0.10678	1.04578	19.09	18.53	22.37	13.72	15.91
200.06	5.84	0.10685	2.24084	22.31	22.04	26.97	17.20	15.90
199.99	5.84	0.10756	0.11055	10.08	8.35	13.38	6.21	15.93
200.01	5.84	0.11452	3.57565	25.63	25.46	33.49	19.17	16.07
200.00	5.84	0.78390	0.76820	15.84	14.49	19.94	12.40	22.17
200.01	5.84	1.00035	0.11100	10.29	11.14	11.55	6.22	23.22
200.05	5.84	1.01002	1.04505	17.88	16.64	22.28	13.71	23.26
200.09	5.84	1.01027	2.24076	21.73	20.71	27.63	17.20	23.25
199.99	5.84	1.01033	0.65054	15.14	14.12	18.91	11.73	23.27
200.01	5.84	1.09150	0.65123	14.76	13.86	18.47	11.73	23.62
200.01	5.84	1.15332	3.57746	23.86	23.20	32.79	19.17	23.87
200.01	5.84	2.28490	2.23930	20.86	21.50	27.04	17.21	27.61
200.00	5.84	3.58159	0.11084	14.73	22.17	15.23	6.21	31.01
200.01	5.84	3.58268	0.11074	14.67	22.12	15.18	6.21	31.01
200.00	5.84	3.58481	1.12327	18.76	24.27	22.37	14.04	31.02

200.00	5.84	3.58647	1.04538	18.49	24.10	21.92	13.72	31.02
200.10	5.84	3.58656	2.24390	21.78	26.71	27.87	17.21	31.02
200.02	10	0.01064	0.64745	17.98	17.87	20.27	12.31	13.17
200.03	10	0.01065	1.04555	20.47	20.41	23.13	14.24	13.16
200.00	10	0.01065	1.72360	22.48	22.44	25.93	16.41	13.17
200.08	10	0.01065	0.33261	15.30	15.07	17.32	9.94	13.15
200.02	10	0.01066	2.23970	23.22	23.19	27.51	17.54	13.17
200.02	10	0.01071	0.10055	12.59	11.88	14.55	6.75	13.17
200.01	10	0.01075	0.64855	18.82	18.70	21.11	12.31	13.18
200.01	10	0.01094	0.32983	16.16	15.92	18.18	9.93	13.19
200.02	10	0.01186	3.58435	26.61	26.59	34.14	19.22	13.26
200.03	10	0.01279	1.16224	20.94	20.87	23.73	14.69	13.33
200.00	10	0.09977	0.00000	4.44	5.52	4.44		16.38
200.03	10	0.10654	3.58550	25.42	25.25	33.10	19.22	16.52
200.10	10	0.10663	0.33076	15.05	13.73	18.30	9.92	16.50
200.02	10	0.10670	1.72359	21.93	21.58	25.73	16.41	16.52
200.01	10	0.10674	0.65159	18.13	17.29	21.25	12.33	16.52
200.02	10	0.10678	1.04578	19.83	19.27	23.04	14.25	16.52
200.02	10	0.10685	2.24084	22.90	22.64	27.46	17.54	16.53
200.00	10	0.10756	0.11055	10.68	8.97	13.93	6.97	16.54
200.03	10	0.11452	3.57565	25.95	25.76	33.61	19.22	16.68
200.00	10	0.49988	0.00000	7.65	9.19	7.65		20.95
200.01	10	0.78390	0.76820	16.40	14.99	20.44	12.98	22.68
200.00	10	0.99975	0.33135	13.00	12.55	15.72	9.95	23.73
200.00	10	0.99991	0.65012	15.23	14.12	18.95	12.33	23.73

200.00	10	1.00035	0.11100	10.88	11.59	12.13	6.98	23.73
200.00	10	1.00495	0.00000	9.69	11.47	9.69		23.75
200.07	10	1.01002	1.04505	18.34	17.03	22.67	14.24	23.77
200.07	10	1.01027	2.24076	22.13	21.03	27.88	17.53	23.77
199.97	10	1.01033	0.65054	15.69	14.59	19.41	12.33	23.78
200.01	10	1.09150	0.65123	15.28	14.29	18.95	12.33	24.13
200.04	10	1.15332	3.57746	24.14	23.37	32.78	19.22	24.38
200.02	10	2.28490	2.23930	21.14	21.65	27.15	17.54	28.09
200.00	10	2.99853	0.00000	13.53	19.15	13.53		29.96
200.00	10	3.58159	0.11084	15.12	22.59	15.62	6.97	31.40
200.00	10	3.58170	0.00000	14.77	22.64	14.77		31.40
200.02	10	3.58228	0.33082	15.84	22.67	17.20	9.94	31.40
200.00	10	3.58268	0.11074	15.06	22.54	15.56	6.97	31.40
200.00	10	3.58481	1.12327	19.07	24.57	22.61	14.55	31.40
199.99	10	3.58647	1.04538	18.83	24.42	22.19	14.25	31.41
200.05	10	3.58656	2.24390	22.12	26.97	27.99	17.54	31.41
200.00	20	0.01064	0.64745	19.43	19.33	21.61	13.63	14.69
200.07	20	0.01065	1.04555	21.48	21.42	24.02	15.40	14.67
200.07	20	0.01065	1.72360	23.31	23.28	26.62	17.32	14.67
200.10	20	0.01065	0.33261	16.51	16.29	18.42	11.42	14.67
200.07	20	0.01066	2.23970	24.09	24.06	28.18	18.24	14.68
200.02	20	0.01071	0.10055	14.47	13.78	16.32	8.44	14.69
200.02	20	0.01075	0.64855	20.00	19.89	22.18	13.63	14.69
200.02	20	0.01094	0.32983	17.62	17.39	19.53	11.41	14.71
200.05	20	0.01186	3.58435	27.37	27.35	34.48	19.26	14.77

200.08	20	0.01279	1.16224	21.91	21.84	24.57	15.81	14.83
200.00	20	0.09977	0.00000	6.08	7.05	6.08		17.71
200.04	20	0.10654	3.58550	26.28	26.09	33.50	19.26	17.84
200.12	20	0.10663	0.33076	16.29	15.00	19.40	11.40	17.82
200.09	20	0.10670	1.72359	22.73	22.38	26.36	17.32	17.83
200.07	20	0.10674	0.65159	19.10	18.28	22.08	13.64	17.83
200.08	20	0.10678	1.04578	20.80	20.25	23.87	15.40	17.83
200.08	20	0.10685	2.24084	23.72	23.45	28.06	18.24	17.83
200.01	20	0.10756	0.11055	11.85	10.16	14.96	8.64	17.86
200.07	20	0.11452	3.57565	26.69	26.49	33.90	19.26	17.98
200.00	20	0.49988	0.00000	9.14	10.43	9.14		22.11
200.07	20	0.78390	0.76820	17.32	15.79	21.24	14.24	23.81
200.01	20	0.99975	0.33135	14.18	13.50	16.84	11.42	24.85
200.00	20	0.99991	0.65012	16.32	15.03	19.95	13.64	24.85
200.00	20	1.00035	0.11100	12.07	12.50	13.30	8.65	24.85
200.00	20	1.00495	0.00000	10.96	12.41	10.96		24.88
200.12	20	1.01002	1.04505	19.19	17.74	23.39	15.39	24.88
200.05	20	1.01027	2.24076	23.01	21.76	28.44	18.24	24.89
200.01	20	1.01033	0.65054	16.76	15.48	20.39	13.64	24.90
200.00	20	1.09150	0.65123	16.33	15.15	19.91	13.65	25.25
200.07	20	1.15332	3.57746	24.84	23.83	32.79	19.26	25.50
200.05	20	2.28490	2.23930	21.86	22.08	27.46	18.24	29.16
200.00	20	2.99853	0.00000	14.46	20.00	14.46		30.95
200.00	20	3.58159	0.11084	15.95	23.55	16.45	8.65	32.26
200.00	20	3.58170	0.00000	15.62	23.63	15.62		32.26

200.02	20	3.58228	0.33082	16.66	23.60	18.01	11.42	32.26
200.00	20	3.58268	0.11074	15.90	23.50	16.40	8.65	32.26
200.04	20	3.58481	1.12327	19.75	25.26	23.13	15.68	32.26
200.06	20	3.58647	1.04538	19.57	25.19	22.80	15.40	32.27
200.11	20	3.58656	2.24390	22.68	27.40	28.03	18.24	32.26
200.00	30	0.01064	0.64745	20.65	20.55	22.74	14.79	16.00
200.07	30	0.01065	1.04555	22.46	22.40	24.90	16.43	15.98
200.09	30	0.01065	1.72360	24.14	24.11	27.33	18.12	15.98
200.15	30	0.01065	0.33261	17.66	17.45	19.48	12.72	15.96
200.09	30	0.01066	2.23970	24.83	24.80	28.76	18.84	15.98
200.02	30	0.01071	0.10055	16.06	15.40	17.82	9.94	16.00
200.05	30	0.01075	0.64855	21.11	21.01	23.20	14.79	15.99
200.02	30	0.01094	0.32983	18.95	18.73	20.77	12.72	16.01
200.06	30	0.01186	3.58435	28.02	27.99	34.73	19.22	16.07
200.10	30	0.01279	1.16224	22.88	22.81	25.44	16.80	16.12
200.08	30	0.10654	3.58550	26.86	26.65	33.66	19.22	18.96
200.14	30	0.10663	0.33076	17.57	16.32	20.55	12.71	18.95
200.11	30	0.10670	1.72359	23.57	23.23	27.06	18.12	18.96
200.07	30	0.10674	0.65159	20.12	19.33	22.98	14.81	18.97
200.10	30	0.10678	1.04578	21.73	21.19	24.68	16.43	18.96
200.13	30	0.10685	2.24084	24.44	24.16	28.58	18.84	18.96
200.01	30	0.10756	0.11055	13.25	11.59	16.23	10.13	18.99
200.08	30	0.11452	3.57565	27.34	27.13	34.13	19.23	19.11
200.08	30	0.78390	0.76820	18.34	16.70	22.15	15.36	24.79
200.01	30	0.99975	0.33135	15.24	14.36	17.86	12.73	25.84

200.01	30	0.99991	0.65012	17.29	15.84	20.84	14.81	25.84
200.00	30	1.00035	0.11100	13.09	13.26	14.31	10.14	25.84
200.15	30	1.01002	1.04505	20.10	18.51	24.17	16.42	25.86
200.12	30	1.01027	2.24076	23.60	22.21	28.73	18.84	25.87
200.05	30	1.01033	0.65054	17.65	16.21	21.20	14.80	25.88
200.00	30	1.09150	0.65123	17.27	15.91	20.77	14.81	26.24
200.08	30	1.15332	3.57746	25.43	24.19	32.72	19.23	26.48
200.07	30	2.28490	2.23930	22.49	22.46	27.72	18.85	30.12
200.01	30	3.58159	0.11084	16.66	24.44	17.15	10.13	33.04
200.00	30	3.58170	0.00000	16.35	24.55	16.35		33.04
200.01	30	3.58228	0.33082	17.39	24.48	18.72	12.73	33.04
200.00	30	3.58268	0.11074	16.61	24.39	17.10	10.13	33.04
200.06	30	3.58481	1.12327	20.38	25.97	23.62	16.68	33.04
200.08	30	3.58647	1.04538	20.15	25.85	23.24	16.43	33.04
200.12	30	3.58656	2.24390	23.22	27.86	28.08	18.85	33.04
200.07	39.85	0.01065	1.04555	23.26	23.20	25.62	17.33	17.09
200.09	39.85	0.01065	1.72360	24.82	24.78	27.90	18.81	17.08
200.14	39.85	0.01065	0.33261	19.29	19.08	21.02	13.88	17.07
200.09	39.85	0.01066	2.23970	25.49	25.46	29.27	19.35	17.08
200.04	39.85	0.01075	0.64855	22.13	22.02	24.13	15.82	17.10
200.06	39.85	0.01186	3.58435	28.55	28.52	34.89	19.12	17.17
200.12	39.85	0.01279	1.16224	23.58	23.52	26.06	17.66	17.21
200.10	39.85	0.10654	3.58550	27.34	27.13	33.75	19.12	19.91
200.21	39.85	0.10663	0.33076	18.40	17.18	21.25	13.85	19.89
200.14	39.85	0.10670	1.72359	24.17	23.83	27.53	18.81	19.91

200.07	39.85	0.10674	0.65159	20.90	20.13	23.65	15.83	19.92
200.09	39.85	0.10678	1.04578	22.51	21.98	25.35	17.33	19.92
200.14	39.85	0.10685	2.24084	25.07	24.79	29.04	19.35	19.91
200.08	39.85	0.11452	3.57565	27.86	27.63	34.25	19.13	20.06
200.08	39.85	0.78390	0.76820	19.12	17.39	22.84	16.34	25.64
200.15	39.85	1.01002	1.04505	20.84	19.13	24.80	17.32	26.72
200.15	39.85	1.01027	2.24076	24.21	22.69	29.06	19.35	26.72
200.09	39.85	1.15332	3.57746	25.90	24.46	32.57	19.13	27.34
200.07	39.85	2.28490	2.23930	23.00	22.75	27.86	19.35	30.98
200.06	39.85	3.58481	1.12327	20.89	26.60	23.99	17.56	33.75
200.08	39.85	3.58647	1.04538	20.68	26.51	23.65	17.33	33.75
200.15	39.85	3.58656	2.24390	23.66	28.28	28.07	19.35	33.74
200.00	40	0.01064	0.64745	21.56	21.46	23.57	15.83	17.12
200.02	40	0.01071	0.10055	17.05	16.41	18.71	11.28	17.12
200.02	40	0.01094	0.32983	19.94	19.73	21.67	13.89	17.13
200.00	40	0.09977	0.00000	8.72	9.49	8.72		19.82
200.01	40	0.10756	0.11055	14.43	12.81	17.29	11.45	19.96
200.00	40	0.49988	0.00000	11.34	12.18	11.34		23.98
200.02	40	0.99975	0.33135	16.06	14.99	18.63	13.90	26.71
200.01	40	0.99991	0.65012	18.10	16.50	21.57	15.84	26.71
200.01	40	1.00035	0.11100	14.05	13.97	15.24	11.46	26.71
200.00	40	1.00495	0.00000	12.98	13.83	12.98		26.73
200.01	40	1.09150	0.65123	18.07	16.55	21.50	15.85	27.11
200.00	40	2.99853	0.00000	15.91	21.41	15.91		32.65
200.01	40	3.58159	0.11084	17.28	25.29	17.78	11.46	33.76

200.00	40	3.58170	0.00000	16.99	25.43	16.99		33.76
200.01	40	3.58228	0.33082	18.00	25.30	19.32	13.90	33.76
200.00	40	3.58268	0.11074	17.24	25.26	17.74	11.46	33.76
249.90	5	0.01075	0.64855	1.05	0.99	5.57	-0.49	-11.59
249.97	5	0.01186	3.58429	16.56	16.56	32.44	16.35	-11.43
250.00	5	0.09977	0.00000	-20.60	-17.98	-20.60		-3.86
250.01	5	0.10395	2.06402	9.72	9.70	17.40	11.91	-3.65
249.98	5	0.10654	3.58550	15.70	15.69	31.49	16.36	-3.50
250.01	5	0.10676	1.02732	3.81	3.63	9.24	4.23	-3.51
250.00	5	0.10678	2.23885	10.04	10.03	18.36	12.75	-3.50
250.00	5	0.10713	0.11257	-12.48	-13.42	-7.89	-13.86	-3.48
249.98	5	0.10729	1.04510	4.09	3.92	9.54	4.43	-3.46
249.99	5	0.10731	0.65049	-1.64	-2.01	3.54	-0.50	-3.46
249.99	5	0.10756	0.11055	-11.75	-12.68	-7.18	-13.95	-3.45
250.01	5	0.10807	3.58389	14.74	14.73	30.52	16.35	-3.44
249.97	5	0.11451	3.57558	15.54	15.52	31.25	16.35	-3.09
250.00	5	0.49988	0.00000	-12.33	-8.55	-12.33		7.49
250.00	5	0.99991	0.65012	0.84	1.24	6.16	-0.51	14.37
249.99	5	1.00035	0.11100	-5.65	-2.74	-3.80	-13.93	14.38
250.00	5	1.00070	3.58334	15.10	14.97	30.19	16.35	14.38
249.97	5	1.00090	1.03979	4.95	5.00	11.02	4.37	14.39
250.01	5	1.00099	2.23856	10.72	10.72	19.30	12.75	14.38
249.99	5	1.00495	0.00000	-7.29	-2.93	-7.29		14.43
249.98	5	1.01161	2.24089	11.24	11.24	19.83	12.76	14.50
250.00	5	2.99853	0.00000	2.51	15.24	2.51		26.90

250.00	5	3.58159	0.11084	5.06	21.94	5.78	-13.94	28.67
250.01	5	3.58170	0.00000	4.37	21.98	4.37		28.67
250.00	5	3.58464	1.12325	10.13	23.00	14.55	5.21	28.68
249.99	5	3.58470	2.24416	14.76	25.64	22.03	12.78	28.68
250.03	5	3.58557	0.64398	7.62	21.95	10.70	-0.61	28.68
249.91	10	0.01075	0.64855	3.45	3.40	7.83	1.04	-9.17
249.96	10	0.01186	3.58429	17.76	17.76	32.56	16.38	-9.00
250.00	10	0.09977	0.00000	-17.51	-15.06	-17.51		-1.88
250.01	10	0.10395	2.06402	11.18	11.14	18.60	12.49	-1.68
250.00	10	0.10654	3.58550	16.85	16.81	31.57	16.38	-1.55
250.00	10	0.10676	1.02732	5.65	5.46	10.95	5.43	-1.54
250.01	10	0.10678	2.23885	11.43	11.40	19.43	13.25	-1.54
250.00	10	0.10729	1.04510	5.82	5.64	11.14	5.60	-1.51
249.99	10	0.10731	0.65049	0.15	-0.23	5.18	1.03	-1.50
250.00	10	0.10756	0.11055	-9.38	-10.30	-5.01	-11.55	-1.50
250.01	10	0.10807	3.58389	15.91	15.87	30.62	16.38	-1.48
249.98	10	0.11451	3.57558	16.73	16.69	31.38	16.37	-1.16
250.01	10	0.49988	0.00000	-9.96	-6.44	-9.96		8.85
250.01	10	0.99991	0.65012	2.48	2.75	7.63	1.02	15.38
250.00	10	1.00035	0.11100	-3.74	-1.08	-1.97	-11.53	15.39
250.01	10	1.00070	3.58334	16.12	15.85	30.17	16.38	15.39
249.97	10	1.00090	1.03979	6.41	6.34	12.32	5.56	15.41
250.00	10	1.00099	2.23856	11.97	11.84	20.21	13.25	15.40
250.00	10	1.00495	0.00000	-5.31	-1.27	-5.31		15.44
250.02	10	1.01161	2.24089	12.43	12.30	20.68	13.25	15.50

250.00	10	2.99853	0.00000	3.82	15.89	3.82		27.47
250.00	10	3.58159	0.11084	6.23	22.29	6.92	-11.54	29.23
250.00	10	3.58170	0.00000	5.58	22.35	5.58		29.23
250.00	10	3.58464	1.12325	11.14	23.39	15.45	6.33	29.23
250.02	10	3.58470	2.24416	15.64	25.96	22.58	13.27	29.23
250.00	10	3.58557	0.64398	8.75	22.39	11.75	0.94	29.24
250.00	20	0.01075	0.64855	6.67	6.61	10.87	3.59	-5.16
250.01	20	0.01186	3.58429	19.71	19.70	32.49	16.22	-4.99
250.00	20	0.09977	0.00000	-12.36	-10.19	-12.36		1.41
250.01	20	0.10395	2.06402	13.73	13.65	20.71	13.33	1.59
250.02	20	0.10654	3.58550	18.81	18.73	31.52	16.22	1.69
250.01	20	0.10676	1.02732	8.80	8.58	13.93	7.40	1.71
250.01	20	0.10678	2.23885	13.92	13.85	21.38	13.94	1.71
250.05	20	0.10713	0.11257	-5.83	-6.72	-1.83	-7.35	1.70
250.00	20	0.10729	1.04510	9.05	8.83	14.19	7.55	1.74
250.00	20	0.10731	0.65049	4.36	3.96	9.14	3.61	1.74
250.02	20	0.10756	0.11055	-4.79	-5.67	-0.81	-7.42	1.74
250.01	20	0.10807	3.58389	17.91	17.83	30.61	16.22	1.76
250.02	20	0.11451	3.57558	18.69	18.61	31.34	16.22	2.03
250.00	20	0.49988	0.00000	-6.06	-2.99	-6.06		11.05
250.01	20	0.99991	0.65012	5.38	5.45	10.24	3.61	16.99
250.02	20	1.00035	0.11100	-0.50	1.76	1.14	-7.40	16.99
250.01	20	1.00070	3.58334	17.86	17.36	29.95	16.22	17.00
250.01	20	1.00090	1.03979	9.00	8.75	14.64	7.51	17.00
250.01	20	1.00099	2.23856	14.11	13.76	21.76	13.94	17.00

250.01	20	1.00495	0.00000	-2.02	1.48	-2.02		17.04
250.02	20	1.01161	2.24089	14.53	14.18	22.18	13.95	17.10
250.01	20	2.99853	0.00000	6.10	16.99	6.10		28.35
250.01	20	3.58159	0.11084	8.24	22.85	8.90	-7.40	30.12
250.00	20	3.58170	0.00000	7.65	22.90	7.65		30.13
250.04	20	3.58464	1.12325	12.86	23.99	16.98	8.17	30.13
250.04	20	3.58470	2.24416	17.10	26.42	23.44	13.95	30.13
250.01	20	3.58557	0.64398	10.63	23.04	13.51	3.53	30.14
249.99	30	0.01075	0.64855	9.76	9.71	13.88	5.65	-1.95
250.03	30	0.01186	3.58429	21.25	21.24	32.16	15.85	-1.81
250.01	30	0.10395	2.06402	15.78	15.67	22.46	13.84	4.11
250.03	30	0.10654	3.58550	20.38	20.27	31.22	15.85	4.21
250.02	30	0.10676	1.02732	11.32	11.08	16.37	8.92	4.22
250.01	30	0.10678	2.23885	15.90	15.79	22.94	14.32	4.22
250.05	30	0.10713	0.11257	-0.81	-1.62	2.84	-3.95	4.22
250.05	30	0.10729	1.04510	11.53	11.30	16.60	9.04	4.23
250.01	30	0.10731	0.65049	7.39	7.00	12.02	5.67	4.24
250.01	30	0.10756	0.11055	-1.14	-1.94	2.49	-4.01	4.25
250.01	30	0.10807	3.58389	19.53	19.41	30.36	15.85	4.27
250.04	30	0.11451	3.57558	20.23	20.10	31.03	15.85	4.50
250.02	30	0.99991	0.65012	7.69	7.64	12.32	5.66	18.14
250.02	30	1.00035	0.11100	2.13	4.09	3.64	-4.00	18.14
250.01	30	1.00070	3.58334	19.31	18.61	29.55	15.85	18.14
250.02	30	1.00090	1.03979	11.13	10.77	16.57	9.01	18.14
250.01	30	1.00099	2.23856	15.86	15.33	23.02	14.32	18.15

250.04	30	1.01161	2.24089	16.24	15.72	23.41	14.32	18.23
250.00	30	3.58159	0.11084	9.91	23.23	10.54	-3.99	30.81
250.01	30	3.58170	0.00000	9.34	23.24	9.34		30.81
250.07	30	3.58464	1.12325	14.26	24.43	18.23	9.57	30.81
250.02	30	3.58470	2.24416	18.32	26.77	24.12	14.33	30.82
250.01	30	3.58557	0.64398	12.18	23.53	14.97	5.60	30.82
250.00	40	0.01075	0.64855	12.20	12.15	16.31	7.29	0.56
250.05	40	0.01186	3.58429	22.51	22.49	31.66	15.30	0.68
250.00	40	0.09977	0.00000	-5.02	-3.29	-5.02		5.90
250.02	40	0.10395	2.06402	17.46	17.32	23.94	14.09	6.05
250.03	40	0.10654	3.58550	21.69	21.54	30.77	15.30	6.13
250.02	40	0.10676	1.02732	13.41	13.17	18.47	10.08	6.15
250.01	40	0.10678	2.23885	17.54	17.40	24.28	14.45	6.15
250.06	40	0.10729	1.04510	13.56	13.32	18.64	10.18	6.15
250.01	40	0.10731	0.65049	9.82	9.45	14.37	7.31	6.17
250.01	40	0.10756	0.11055	1.64	0.94	4.95	-1.18	6.18
250.02	40	0.10807	3.58389	20.85	20.71	29.94	15.31	6.19
250.04	40	0.11451	3.57558	21.51	21.36	30.58	15.31	6.40
250.00	40	0.49988	0.00000	-0.31	2.11	-0.31		13.87
250.02	40	0.99991	0.65012	9.59	9.50	14.03	7.30	18.92
250.01	40	1.00035	0.11100	4.35	6.10	5.74	-1.17	18.93
250.00	40	1.00070	3.58334	20.49	19.64	29.00	15.31	18.93
250.04	40	1.00090	1.03979	12.81	12.38	18.10	10.15	18.93
250.01	40	1.00099	2.23856	17.29	16.63	24.04	14.45	18.93
250.01	40	1.00495	0.00000	2.95	5.69	2.95		18.96

250.05	40	1.01161	2.24089	17.62	16.97	24.38	14.45	19.01
250.01	40	2.99853	0.00000	9.47	18.44	9.47		29.41
250.01	40	3.58159	0.11084	11.26	23.45	11.86	-1.17	31.32
250.00	40	3.58170	0.00000	10.74	23.43	10.74		31.32
250.06	40	3.58464	1.12325	15.41	24.74	19.27	10.62	31.33
250.04	40	3.58470	2.24416	19.31	27.03	24.64	14.46	31.33
250.01	40	3.58557	0.64398	13.47	23.88	16.18	7.25	31.33

m_i is the molality of solute *i;* V_{mean}^{ϕ} is the mean apparent molar volume of solutes in a solution; $\bar{V}_i$ is the partial molar volume of a component *i* in the mixture; $\bar{V}_i^0$ is a limiting partial molar volume of a component *i* in ionic media.