

S22-2005 data set: Results with infinite non-bonded cut-offs

	MM2*	MM2* (LP)	MM3*	AMBER*	AMBER+1012	OPLS*	OPLSAA	MMFF94	MMFF94s	DFT (Lit)
H-bonding										
ME	-7.32	-6.89	-9.18	-3.63	-3.81	-3.33	-3.97	-3.16	-3.08	4.79
MUE	7.32	6.89	9.78	4.64	4.84	4.12	4.45	3.61	3.53	4.79
RMSE	8.41	8.42	11.22	5.66	5.82	5.08	5.19	4.33	4.23	5.18
Stacking										
ME	-0.76	-0.77	-1.74	-0.11	-0.12	-0.92	-0.63	0.02	0.02	-0.13
MUE	1.29	1.30	1.84	0.98	0.99	1.20	1.07	0.73	0.72	0.70
RMSE	2.37	2.37	2.87	1.19	1.20	1.53	1.44	0.93	0.93	0.78
Mixed										
ME	-2.16	-2.03	-1.67	0.66	0.67	0.20	-0.10	-0.37	-0.37	1.07
MUE	2.16	2.03	1.67	0.89	0.88	0.73	0.56	0.60	0.60	1.07
RMSE	2.40	2.27	2.13	1.14	1.14	0.91	0.62	0.68	0.68	1.25
Total										
MUE	3.49	3.31	4.31	2.12	2.18	1.98	1.98	1.61	1.58	2.10
RMSE	5.14	5.12	6.67	3.33	3.42	3.05	3.07	2.54	2.48	3.04

S22-2005 data set: Results with default (vdW 7 Å, electrostatic 12 Å) non-bonded cut-offs

	MM2*	MM2* (LP)	MM3*	AMBER*	AMBER+1012	OPLS*	OPLSAA	MMFF94	MMFF94s	DFT (Lit)
H-bonding										
ME	-7.32	-6.89	-9.18	-3.63	-3.70	-3.33	-3.97	-3.16	-3.08	4.79
MUE	7.32	6.89	9.78	4.64	4.73	4.12	4.45	3.61	3.53	4.79
RMSE	8.41	8.42	11.22	5.66	5.70	5.08	5.19	4.33	4.23	5.18
Stacking										
ME	-0.76	-0.77	-1.74	-0.11	-0.13	-0.92	-0.63	0.02	0.02	-0.13
MUE	1.29	1.30	1.84	0.98	0.99	1.20	1.07	0.73	0.72	0.70
RMSE	2.37	2.37	2.87	1.19	1.20	1.53	1.44	0.93	0.93	0.78
Mixed										
ME	-2.16	-2.03	-1.67	0.66	0.65	0.20	-0.10	-0.37	-0.37	1.07
MUE	2.16	2.03	1.67	0.89	0.88	0.73	0.56	0.60	0.60	1.07
RMSE	2.40	2.27	2.13	1.14	1.13	0.91	0.62	0.68	0.68	1.25
Total										
MUE	3.49	3.31	4.31	2.12	2.14	1.98	1.98	1.61	1.58	2.10
RMSE	5.14	5.12	6.67	3.33	3.35	3.05	3.07	2.54	2.48	3.04

J SCH-2005 data set: Results with default bond dipole cut-offs

	MM2*	MM2* (LP)	MM3*	AMBER*	AMBER+1012	OPLS*	OPLSAA	MMFF94	MMFF94s	DFT (Lit)
H-bonding										
ME	-7.34	-6.89	-9.21	-3.66	-3.84	-3.36	-4.00	-3.16	-3.08	4.79
MUE	7.34	6.89	9.80	4.67	4.87	4.15	4.48	3.61	3.54	4.79
RMSE	8.45	8.42	11.26	5.69	5.85	5.12	5.23	4.34	4.23	5.18
Stacking										
ME	-0.77	-0.77	-1.75	-0.12	-0.13	-0.93	-0.64	0.02	0.02	-0.13
MUE	1.30	1.30	1.84	0.98	0.99	1.20	1.07	0.73	0.72	0.70
RMSE	2.37	2.37	2.87	1.19	1.20	1.53	1.44	0.93	0.92	0.78
Mixed										
ME	-2.17	-2.03	-1.68	0.64	0.65	0.18	-0.12	-0.37	-0.37	1.07
MUE	2.17	2.03	1.68	0.89	0.88	0.72	0.55	0.60	0.60	1.07
RMSE	2.41	2.27	2.15	1.14	1.13	0.89	0.62	0.68	0.68	1.25
Total										
MUE	3.50	3.31	4.32	2.13	2.19	1.99	1.99	1.61	1.58	2.10
RMSE	5.16	5.12	6.69	3.35	3.44	3.08	3.10	2.54	2.48	3.04