



J. Serb. Chem. Soc. **00(0)** S1-S7 (2024)

Journal of
the Serbian
Chemical Society

JSCS-info@shd.org.rs • www.shd.org.rs/JSCS
Supplementary material

SUPPLEMENTARY MATERIAL TO
**Monte Carlo optimization based QSAR modeling of the cytotoxicity of
acrylic acid-based dental monomers**

MIRJANA BOŠKOVIĆ¹, SAŠA STANKOVIĆ¹, JELENA V. ŽIVKOVIĆ², ALEKSANDAR
M. VESELINOVIĆ^{2*}

¹*Department for Prosthetic Dentistry, Faculty of Medicine, University of Niš, Bulevar Dr Zorana
Đinđića 81, 18000 Niš, Serbia, and* ²*Department of Chemistry, Faculty of Medicine, University
of Niš, Bulevar Dr Zorana Đinđića 81, 18000 Niš, Serbia.*

*Corresponding authors. E-mail: aveselinovic@medfak.ni.ac.rs

Table S1. The SMILES notation of the studied molecules, calculated values for the DCW, experimental data (Ac) – Expr, the values of Ac calculated with the application of CORAL software – Calc, the difference between Expr and Calc – Diff for the built QSPR model.

	SMILES notation	Expr	Split 1				Split 2				Split 3			
			DCW	Calc	Diff.	Set	DCW	Calc	Diff.	Set	DCW	Calc	Diff.	Set
1	<chem>OC(COC(=O)C(=C)C)COc1ccc(cc1)C(c1ccc(cc1)OCC(COC(=O)C(=C)C)O)(C)C</chem>	4.523	153.6227	4.6717	-0.1487	Tr	131.3798	4.5272	-0.0042	Tr	101.8029	4.6189	-0.0959	Tr
2	<chem>O=C(OCCOC(=O)C(=C)C)NCCCCCNC(=O)OC(C(OC(=O)C(=C)C)(C)C)C</chem>	4.046	135.7561	4.1632	-0.1172	Tr	120.7312	4.0288	0.0172	Tr	93.9162	4.1786	-0.1326	Tr
3	<chem>CCCCCCCCCCCCOC(=O)C=C</chem>	4	127.3104	3.9229	0.0771	Tr	119.513	3.9718	0.0282	Tr	96.78843	4.339	-0.339	Tr
4	<chem>OCCOC(=O)C=C</chem>	3.721	85.8679	2.7434	0.9776	Tr	103.3123	3.2134	0.5076	Ts	75.13836	3.1303	0.5907	Tr
5	<chem>CCC(COC(=O)C(=C)C)CC</chem>	3.481	98.29383	3.097	0.384	Tr	102.7258	3.186	0.295	Tr	68.51583	2.7605	0.7205	Tr
6	<chem>CC(=C)C(=O)OCC1CO1</chem>	3.432	80.86003	2.6008	0.8312	Tr	101.5913	3.1329	0.2991	Tr	73.62916	3.046	0.386	Tr
7	<chem>O=C(C(=C)C)OCCOc1cccc1</chem>	3.319	107.3223	3.354	-0.035	Tr	101.8979	3.1472	0.1718	Tr	78.05005	3.2928	0.0262	Tr
8	<chem>CC(COC(=O)C=C)O</chem>	3.237	99.58373	3.1337	0.1033	Ts	107.8482	3.4257	-0.1887	Tr	72.10373	2.9608	0.2762	Tr
9	<chem>O=C(C(=C)C)OCc1cccc1</chem>	3.194	93.18357	2.9516	0.2424	Tr	101.2897	3.1187	0.0753	Tr	77.69698	3.2731	-0.0791	Ts
10	<chem>O=C(C(=C)C)OCC(COC(=O)C(=C)C)(C)C</chem>	3.187	106.4787	3.33	-0.143	Tr	102.3464	3.1682	0.0188	Tr	82.20556	3.5248	-0.3378	Tr
11	<chem>CCCCCCCCCCCCOC(=O)C(=C)C</chem>	3.174	97.531	3.0753	0.0987	Ts	99.81803	3.0499	0.1241	Tr	73.98246	3.0657	0.1083	Tr
12	<chem>CCCCOCCOC(=O)C(=C)C</chem>	3.125	92.20183	2.9236	0.2014	Ts	101.7043	3.1381	-0.0131	Tr	71.97876	2.9539	0.1711	Tr
13	<chem>O=C(C(=C)C)OCCOC(=O)C(=C)C</chem>	2.975	75.04993	2.4355	0.5395	Tr	94.44037	2.7981	0.1769	Ts	60.70989	2.3247	0.6503	Tr
14	<chem>CCCCOC(=O)C=C</chem>	2.955	104.3175	3.2685	-0.3135	Tr	106.9926	3.3857	-0.4307	Ts	80.88324	3.451	-0.496	Tr
15	<chem>O=C(C(=C)C)OCCOCCOC(=O)C(=C)C</chem>	2.873	87.5084	2.7901	0.0829	Tr	95.66482	2.8554	0.0176	Tr	68.07138	2.7357	0.1373	Ts
16	<chem>C=CC(=O)OCC(C)C</chem>	2.87	106.2149	3.3225	-0.4525	Tr	94.80212	2.8151	0.0549	Tr	72.58719	2.9878	-0.1178	Ts
17	<chem>OC(COC(=O)C(=C)C)COC(=O)C(=C)C</chem>	2.827	80.71603	2.5967	0.2303	Tr	98.43524	2.9851	-0.1581	Ts	67.13854	2.6836	0.1434	Tr
18	<chem>O=C(C(=C)C)OCCOCCOCCOC(=O)C(=C)C</chem>	2.824	84.61243	2.7076	0.1164	Tr	95.2272	2.835	-0.011	Tr	67.82279	2.7218	0.1022	Tr
19	<chem>O=C(C(=C)C)OCCOCCOCCOCCOCCOCCOCCOCCOC(=O)C(=C)C</chem>	2.788	81.14627	2.609	0.179	Ts	92.60148	2.7121	0.0759	Tr	66.32961	2.6385	0.1495	Tr
20	<chem>O=C(C(=C)C)OCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOC(=O)C(=C)C</chem>	2.772	78.2578	2.5268	0.2452	Tr	90.41339	2.6096	0.1624	Tr	65.08669	2.5691	0.2029	Tr
21	<chem>CC(OC(=O)C(=C)C)CCOC(=O)C(=C)C</chem>	2.77	73.47979	2.3908	0.3792	Tr	92.54971	2.7096	0.0604	Tr	68.52136	2.7608	0.0092	Tr
22	<chem>CCOC(=O)C=C</chem>	2.759	81.24828	2.6119	0.1471	Ts	100.0274	3.0597	-0.3007	Tr	67.80606	2.7209	0.0381	Tr
23	<chem>O=C(C(=C)C)OCCOCCOCCOCCOC(=O)C(=C)C</chem>	2.706	83.50628	2.6762	0.0298	Tr	94.78958	2.8145	-0.1085	Tr	67.57421	2.708	-0.002	Ts
24	<chem>COC(=O)C=C</chem>	2.6	67.60376	2.2236	0.3764	Ts	90.17226	2.5983	0.0017	Ts	64.39926	2.5307	0.0693	Ts
25	<chem>CCCCOC(=O)C(=C)C</chem>	2.567	83.64036	2.68	-0.113	Tr	88.79469	2.5339	0.0331	Tr	63.37059	2.4733	0.0937	Tr
26	<chem>CCOCCOC(=O)C(=C)C</chem>	2.565	75.55814	2.4499	0.1151	Ts	86.2699	2.4157	0.1493	Tr	61.63122	2.3762	0.1888	Tr
27	<chem>CC(COC(=O)C(=C)C)C</chem>	2.532	77.15368	2.4954	0.0366	Tr	82.63017	2.2453	0.2867	Tr	62.84333	2.4438	0.0882	Ts

Table S2. The statistical quality of QSAR models developed with the Monte Carlo optimization method for predicting the cytotoxicity of acrylic acid-based dental monomers

	Run	Training set							Test set						
		r ²	CCC	IIC	q ²	RMSE	MAE	F	r ²	CCC	IIC	q ²	RMSE	MAE	F
Split 1	1	0.6442	0.7836	0.5665	0.5936	0.468	0.354	49	0.8815	0.9387	0.5747	0.8203	0.206	0.159	59
	2	0.6663	0.7997	0.5762	0.6137	0.453	0.340	54	0.8936	0.9282	0.5775	0.8419	0.245	0.190	67
	3	0.6439	0.7834	0.7489	0.5879	0.468	0.337	49	0.8815	0.9253	0.6957	0.8285	0.246	0.196	60
	Av	0.6515	0.7889	0.6305	0.5984	0.463	0.344	51	0.8855	0.9307	0.6160	0.8302	0.232	0.182	62
Split 2	1	0.8855	0.9393	0.8646	0.8751	0.247	0.180	209	0.8069	0.8819	0.8977	0.7072	0.272	0.215	33
	2	0.8686	0.9297	0.8698	0.8554	0.265	0.193	178	0.8038	0.8834	0.8964	0.7483	0.278	0.227	33
	3	0.8671	0.9288	0.8691	0.8512	0.267	0.202	176	0.8023	0.8806	0.8957	0.7041	0.278	0.230	32
	Av	0.8737	0.9326	0.8678	0.8606	0.260	0.192	188	0.8043	0.8820	0.8966	0.7199	0.276	0.224	33
Split 3	1	0.8102	0.8952	0.7314	0.7852	0.301	0.227	115	0.8027	0.7968	0.8958	0.6967	0.437	0.374	33
	2	0.7998	0.8888	0.7465	0.7753	0.309	0.235	108	0.7880	0.8098	0.8877	0.6682	0.424	0.336	30
	3	0.7985	0.8880	0.7260	0.7685	0.310	0.227	107	0.7831	0.7920	0.8847	0.6676	0.426	0.336	29
	Av	0.8028	0.8907	0.7346	0.7763	0.301	0.229	110	0.7913	0.7995	0.8894	0.6775	0.429	0.349	31

r² – Correlation coefficient; CCC – Concordance correlation coefficient IIC – Index of ideality of correlation q² – Cross-validated correlation coefficient
 RMSE – Root-mean-square deviation; MAE – Mean absolute error F – Fischer ratio ; Av – Average value for statistical parameters obtained from three independent Monte Carlo optimization runs

SUPPLEMENTARY MATERIAL

Table S3. Y-randomization of the best QSAR model (best optimization run) for three independent splits

Run	Split 1		Split 2		Split 3	
	Training	Test	Training	Test	Training	Test
0	0.7779	0.9025	0.9222	0.8107	0.8481	0.856
1	0.0004	0.1169	0.0824	0.0308	0	0.1555
2	0.0002	0.0035	0.021	0.0536	0.0401	0.0423
3	0.0005	0.3662	0.0008	0.0552	0.0113	0.0533
4	0.014	0.1484	0.0412	0.177	0.0079	0.0129
5	0.0001	0.0024	0.0376	0.1078	0.0511	0.0294
6	0.0279	0.0496	0.0001	0.0006	0.0581	0.008
7	0	0.0748	0.0376	0.0631	0.0018	0.0511
8	0.0162	0.1267	0.2047	0.0599	0.033	0.0068
9	0.0367	0.2484	0.0032	0.3614	0.0026	0.2574
10	0.0159	0.2321	0.0114	0.0379	0.009	0.0733
R _r 2	0.0112	0.1369	0.044	0.0947	0.0215	0.069
cRp2	0.7723	0.8312	0.9	0.7619	0.8373	0.8208
$cR_p^2 = R \times (R^2 - R_r^2)^{1/2}$ should be > 0.5						

S6

BOŠKOVIĆ *et al.*

Table S4 The list of SAKs together with their correlation weights for the three runs of the Monte Carlo optimization obtained from QSAR model for cytotoxicity of acrylic acid-based dental monomers

SAk(CW)	CW			SAk(CW)	CW			SAk(CW)	CW			SAk(CW)	CW		
	Run 1	Run 2	Run 3		Run 1	Run 2	Run 3		Run 1	Run 2	Run 3		Run 1	Run 2	Run 3
10001000000	2.04072	1.64329	2.17548	EC0-C...2...	-0.57805	2.13528	0.26973	P4E0C...0-..	0.19057	-0.42875	-0.64271	S2E0O...6-..	2.64238	1.68778	-0.65004
10011000000	-0.68648	-0.89667	-1.64588	EC0-C...3...	0.60777	-0.64754	0.09522	P4E0C...1-..	1.15094	0.14607	0.35132	S2E0O...7-..	2.59459	-1.3961	0.82873
(...(...	1.86481	2.36047	1.83992	EC0-C...4...	-1.08495	2.88662	4.42322	P4E0C...10-	-0.30488	-0.88076	2.07319	S3E0C...0-..	2.6031	2.80396	3.19456
(...(...	2.38315	0.01164	0.48356	EC0-N...2...	0.71245	1.41515	-0.46103	P4E0C...11-	0.78769	0.2757	0.1774	S3E0C...1-..	3.26508	1.7543	2.38114
(...C...(...	0.59231	0.23821	0.75957	EC0-N...3...	-0.05248	-0.67878	-0.79341	P4E0C...12-	2.09153	-0.41509	-0.75097	S3E0C...10-	1.41755	-0.98002	1.14167
(...O...(...	-1.76475	-0.02351	3.13201	EC0-O...1...	-0.73709	2.01317	-0.78123	P4E0C...2-..	1.45036	1.456	-0.17449	S3E0C...11-	-1.11642	1.76198	0.61019
+++N--B2==	-0.66841	-0.9578	-0.02689	EC0-O...2...	0.43285	-0.67693	-0.95118	P4E0C...3-..	-0.93113	-0.42538	0.24947	S3E0C...2-..	0.02929	-0.50083	0.31047
+++N--O===	-0.0466	-0.51999	-0.59267	Cmax.0.....	0.07451	-0.90299	-0.78808	P4E0C...4-..	0.08828	0.17332	0.85628	S3E0C...3-..	0.63614	2.14929	-0.42529
+++O--B2==	2.93892	2.29353	4.26808	Cmax.1.....	0.62707	-0.98917	-0.35355	P4E0C...6-..	-0.90566	-0.64323	-0.86677	S3E0C...4-..	-0.86744	2.18077	0.12449
1...(...	-0.55378	-1.23046	-0.99908	Cmax.2.....	2.15876	2.21378	1.33399	P4E0C...7-..	-0.20717	0.38263	-0.73385	S3E0C...5-..	-0.57557	1.25306	2.41236
1.....	1.72756	3.4168	1.46401	HALO00000000	3.10012	5.12254	0.67608	P4E0C...9-..	1.99289	0.80198	3.80959	S3E0C...6-..	1.32358	-1.46925	-1.79261
1...c...(...	2.01002	-0.86826	-0.95821	N...(...	-1.54125	-0.74101	-0.71144	P4E0N...0-..	1.63655	2.41321	-0.63807	S3E0C...7-..	-0.86923	3.47435	-0.01045
2.....	-0.69637	2.4027	-0.58136	N...(C...	-1.47049	-0.96695	-0.76188	P4E0N...2-..	-0.52122	1.13736	-0.98008	S3E0C...8-..	0.09488	3.10096	-1.50905
2...c...(...	0.47004	1.4202	-0.47823	N.....	-1.12924	-1.38708	-0.81376	P4E0O...0-..	-0.30012	0.0685	-0.65479	S3E0C...9-..	-0.48167	-1.05033	-0.85821
=...(...	-0.73963	-1.82271	-0.56441	N...C...(...	2.89675	-0.07344	-0.63735	P4E0O...1-..	3.0397	1.28555	2.0656	S3E0N...1-..	-0.67174	-1.14393	-0.65369
=.....	-0.0911	-0.84168	0.02385	N...C.....	-0.66218	-1.12418	-1.09708	P4E0O...11-	-0.55104	1.60997	-0.09848	S3E0N...2-..	0.32892	-1.68074	0.33572
=...2.....	-0.07831	-0.53642	0.64225	N...C...C...	0.35577	1.32927	0.17781	P4E0O...2-..	-4.96228	-5.71882	-2.52658	S3E0N...3-..	-1.91307	1.03169	1.05043
=...C...(...	2.12334	-0.15232	1.48761	O...(C...	-1.60948	-0.33487	-1.10797	P4E0O...3-..	-0.50319	0.47694	-0.31965	S3E0O...0-..	2.70025	-0.53862	-0.69574
=...O...(...	-0.47436	-0.7329	0.07426	O...(.....	-0.67315	-0.21132	-0.69041	P4E0O...4-..	-0.63363	-0.88632	-1.97634	S3E0O...1-..	0.27918	2.34591	0.23796
C...(C...	-4.48737	-2.88755	-1.87188	O...(1...	-1.55361	2.71448	3.41292	P4E0O...6-..	0.84905	2.26782	1.14724	S3E0O...2-..	0.55713	-0.98591	-0.81886
C...(.....	0.85977	0.7236	0.43071	O...(C...	2.11584	4.06705	2.38901	P4E0O...8-..	2.70512	0.55054	-0.38219	S3E0O...3-..	-1.37363	-1.83098	0.23636
C...(1...	-0.43911	-1.79311	-0.79008	O...(O...	-2.33768	-1.1146	-0.78522	NNE0C...100-	-0.49194	-1.60235	-0.5722	S3E0O...4-..	4.46801	4.21327	2.10524
C...(=...	-0.91602	-0.83295	-0.25098	O.....	-0.53045	-0.64042	-0.79137	NNE0C...109-	0.23401	2.63775	2.20755	S3E0O...5-..	-1.4588	0.24585	0.0096
C...(C...	-1.41874	-0.16738	-0.75001	O...1.....	2.28796	4.46072	-0.75215	NNE0C...209-	0.12554	0.46501	0.33865	S3E0O...7-..	2.32898	-0.69626	2.68917
C.....	-0.85829	-0.91601	-0.30648	O...=...(...	-0.55988	-1.18035	-0.17877	NNE0C...218-	1.18373	-0.25966	-1.31109	S3E0O...8-..	0.51323	-0.7615	2.23785
C...1.....	2.36179	1.07117	2.38854	O...=.....	-0.96694	-0.80896	-0.23906	NNE0C...300-	1.71752	1.90165	2.03515	Nmax.0.....	1.8318	1.89273	-0.1544
C...1...C...	2.03818	2.30487	0.44927	O...=...2...	4.11841	2.14122	-0.83664	NNE0C...309-	-1.12492	-0.98457	-0.38732	Nmax.1.....	-0.27836	-0.67618	-0.66019
C...2.....	-0.11522	4.24878	0.45511	O...=...C...	2.40021	0.9572	2.39268	NNE0C...318-	-0.73448	-1.45937	0.39744	Nmax.2.....	-1.79641	1.64042	-1.95179
C...2...=...	1.27096	-0.6899	0.82935	O...C...(...	1.09343	1.18595	-0.74038	NNE0C...327-	0.2283	0.95106	-0.58411	Omax.1.....	1.38989	1.37447	2.17207

SUPPLEMENTARY MATERIAL

S7

C...=(...	-0.95726	-0.11894	-0.48055	O...C.....	0.92199	0.50283	0.05931	NNE0C...427-	2.96874	-0.50624	-0.17058	Omax.2.....	-1.51955	-1.87402	-1.92046
C...=.....	4.22321	1.85861	2.46372	O...C...1...	3.25323	3.99833	4.43099	NNE0C...436-	-2.10898	0.76726	1.8355	Omax.3.....	4.26554	2.09267	2.37161
C...=...C...	2.8012	3.20602	1.43809	O...C...2...	-1.1112	0.87075	1.79825	NNE0N...218-	-1.15669	-1.42372	-0.98128	Omax.4.....	0.72815	4.33725	-1.10246
C...C...(...	1.33519	0.6716	0.91631	O...C...C...	0.31427	0.27734	0.32731	NNE0N...327-	0.41046	-0.85664	-0.70549	Omax.6.....	2.46839	2.34804	2.34852
C...C.....	1.22831	0.44223	2.02694	O...c...1...	4.08137	-1.50835	0.20516	NNE0O...109-	-0.20716	1.50682	2.11827	Omax.7.....	2.66992	2.6593	2.31455
C...C...1...	-1.92915	1.26609	-1.55957	P2E0C...0-..	0.24879	0.46539	0.2662	NNE0O...218-	0.58391	0.00576	-0.91952	Omax.8.....	-0.85145	1.52513	-0.63281
C...C...=...	0.76893	0.77539	0.81123	P2E0C...1-..	0.4909	-0.23989	0.30203	NOSP1000000	1.99412	1.31782	2.3857	Smax.0.....	2.35774	4.91929	1.30464
C...C...C...	0.82138	0.9339	0.92997	P2E0C...2-..	0.69635	-1.18758	0.05557	NOSP11000000	-0.38648	-0.62676	-0.51823	c...(.....	-1.1569	-0.55175	-0.60163
C...N...(...	-1.03468	-0.9504	-0.73638	P2E0N...1-..	-0.00182	3.08929	1.52438	S2E0C...0-..	0.52342	0.00279	1.01559	c...(...C...	-0.77989	-0.45582	-0.09065
C...N...C...	1.91526	1.30654	1.68492	P2E0N...2-..	-1.82858	1.14379	2.27136	S2E0C...1-..	0.25801	1.20806	0.81339	c...(...O...	2.23292	-0.89815	-0.58278
C...O...(...	-0.85745	-1.81488	-0.68961	P2E0O...0-..	0.47633	-0.73191	1.03036	S2E0C...2-..	0.04606	0.00094	0.20543	c...(...c...	-1.12445	3.08107	1.33856
C...O...1...	-1.0489	1.51674	2.21203	P2E0O...1-..	-0.36896	-0.74227	0.00983	S2E0C...3-..	-0.52242	-0.0755	-0.65247	c.....	0.13081	1.0173	0.06026
C...O...C...	-0.65933	0.6882	-0.72869	P2E0O...2-..	-0.97739	-0.65778	-0.59931	S2E0C...4-..	0.74275	-2.71042	-0.52924	c...1...(...	-0.55346	-0.71309	-1.28325
C...c...1...	0.34836	-1.96338	2.04929	P2E0O...3-..	-1.65077	-1.82568	-1.67783	S2E0C...5-..	2.17321	-0.2486	0.30416	c...1.....	-0.47171	-0.95229	1.79985
C3.....0...	-0.72705	-1.88642	-0.59877	P3E0C...0-..	-0.07245	0.22551	-0.20371	S2E0C...6-..	-0.89218	-1.31795	0.42055	c...1...c...	1.32654	1.66162	0.07356
C3....H.1...	2.99293	2.31551	2.51151	P3E0C...1-..	1.06332	1.94457	-0.66478	S2E0C...7-..	-0.68778	0.39354	2.26095	c...2.....	-0.77289	4.49669	2.04563
C4.....0...	0.67212	-1.22272	2.18393	P3E0C...2-..	1.44811	0.01957	0.46843	S2E0C...8-..	2.30477	4.43347	-1.74675	c...2...c...	0.60447	3.31636	-0.54616
C5.....0...	4.3235	4.16548	4.3648	P3E0C...3-..	-1.5109	-1.56784	-1.43801	S2E0C...9-..	-0.74215	-0.64691	0.90498	c...C.....	1.89214	0.8456	1.92529
C5....H.1...	-1.78297	-4.67514	-1.47067	P3E0C...4-..	0.49952	0.42785	-0.53465	S2E0N...1-..	-1.03619	-0.66219	-0.68997	c...C...O...	2.35666	1.88731	0.22163
C5...AH.1...	1.35155	-0.46432	-0.52543	P3E0C...5-..	2.3124	3.31191	0.02562	S2E0N...3-..	-0.66226	2.2539	1.04249	c...O.....	0.53269	0.01469	2.60098
C6.....0...	2.27699	1.28413	-0.68345	P3E0N...0-..	1.12737	-1.34512	2.37152	S2E0O...0-..	-0.01955	-0.84339	1.13238	c...O...C...	1.50841	-2.82109	-1.96518
C6...A...1...	0.78966	-0.22067	1.00799	P3E0N...2-..	-0.95411	-0.74931	-0.96078	S2E0O...1-..	2.26042	4.4307	2.44092	c...c...(...	-0.42576	0.9723	-0.59307
C6...A...2...	3.48234	0.93083	-1.05247	P3E0O...0-..	0.64866	-0.92118	0.26571	S2E0O...2-..	0.19888	0.74327	-0.03641	c...c.....	2.06053	0.31807	1.86427
C7.....0...	0.69561	4.4304	2.06093	P3E0O...1-..	2.01562	-0.73381	0.74247	S2E0O...3-..	2.25665	3.43735	1.17877	c...c...1...	-0.83299	-0.7083	-0.116
BOND10000000	1.41096	0.83037	0.01221	P3E0O...2-..	-0.63439	-1.50608	0.57711	S2E0O...4-..	-0.52118	0.29808	-0.89888	c...c...2...	-0.42429	2.28212	0.83626
EC0-C...1...	-0.60445	-1.14516	-0.42115	P3E0O...3-..	-1.90308	0.5397	0.75782	S2E0O...5-..	2.41122	2.44651	2.32521	c...c...c...	-0.05854	2.36627	0.60061