

MTO 11.2 Examples: Samplaski, Pitch-Class Set Similarity Measures

(Note: audio, video, and other interactive examples are only available online)
<http://www.mtosmt.org/issues/mto.05.11.2/mto.05.11.2.samplaski.php>

Figure 1. Four equivalent geometries involving rotation and reflection about axes

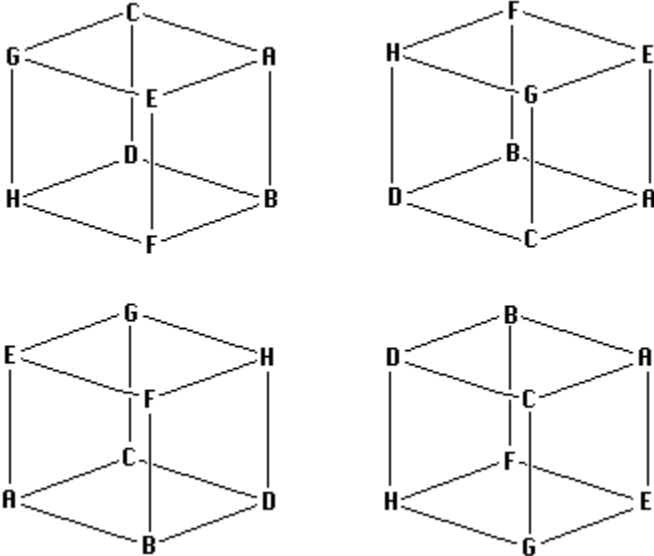


Table 1. (Very rough) estimated distances in miles between cities in New York State

	NYC	Alb	Pla	Wat	Syr	Roc	Buf	Jam	Bng	Ith	Ctl	Utc	Pkp	Ogd	Lib	Cng	Osw
New York City	0																
Albany	183	0															
Plattsburgh	336	143	0														
Watertown	320	160	171	0													
Syracuse	235	143	200	69	0												
Rochester	330	227	301	130	84	0											
Buffalo	334	311	375	204	158	74	0										
Jamestown	305	335	415	220	190	120	55	0									
Binghamton	180	120	240	143	74	140	194	180	0								
Ithaca	230	175	260	130	60	90	160	180	55	0							
Cortland	232	140	230	101	32	96	150	212	42	30	0						
Utica	230	84	150	81	54	138	204	244	85	100	70	0					
Poughkeepsie	80	83	256	230	150	240	300	330	126	176	180	150	0				
Ogdensburg	340	200	140	100	160	220	300	360	234	230	201	130	270	0			
Liberty	90	80	210	210	130	214	270	289	74	124	110	120	70	240	0		
Corning	250	190	220	160	100	75	118	120	76	50	80	150	200	250	150	0	
Oswego	270	170	230	50	37	90	164	195	110	75	60	75	170	150	165	130	0

Figure 2a. Map of NY cities listed in Table 1

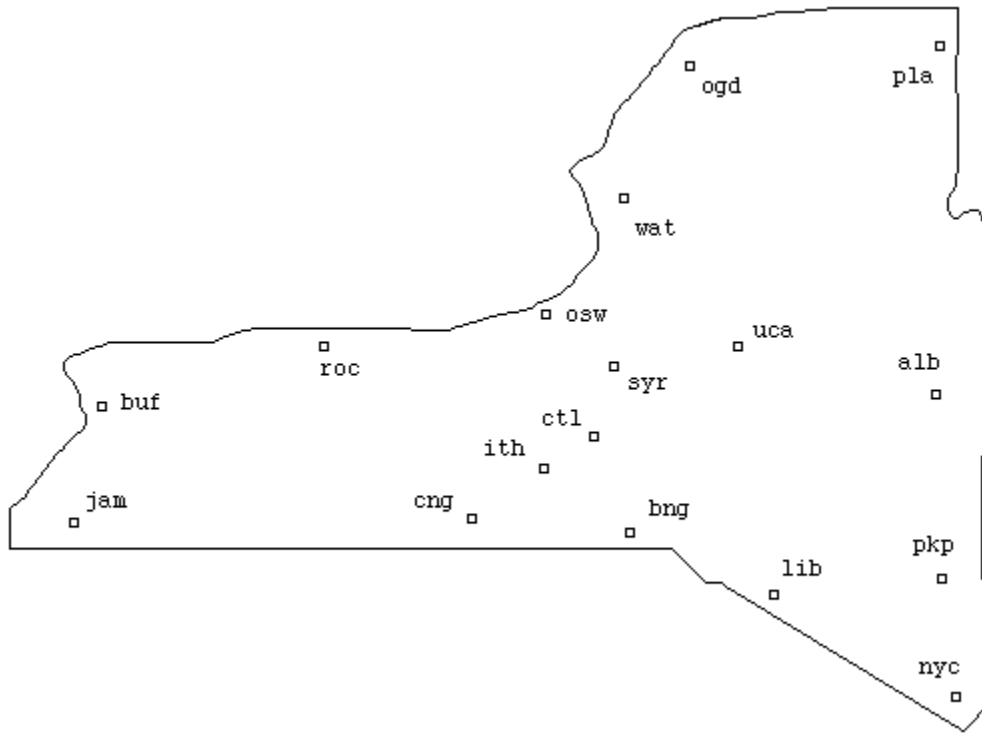


Figure 2b. Derived MDS configuration from data in Table 1

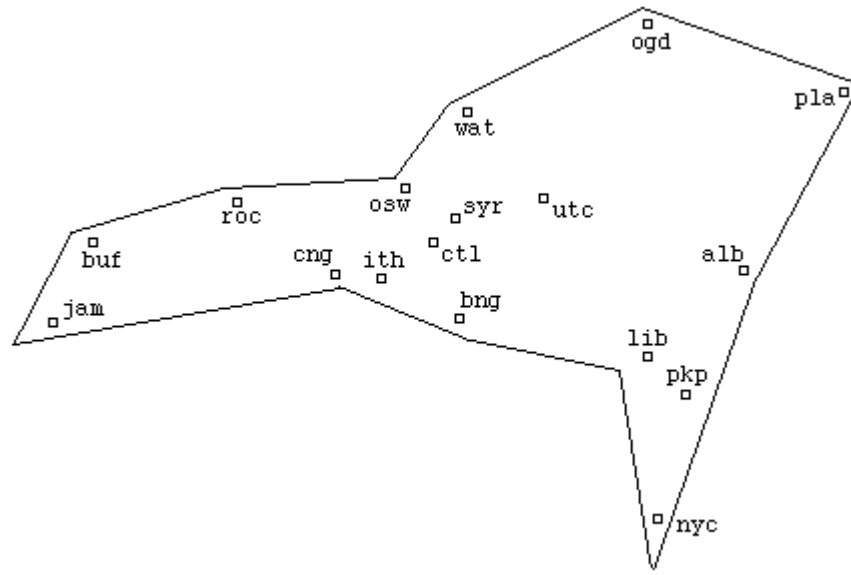


Figure 3. Hypothetical stress/ r^2 plots as functions of dimensionality

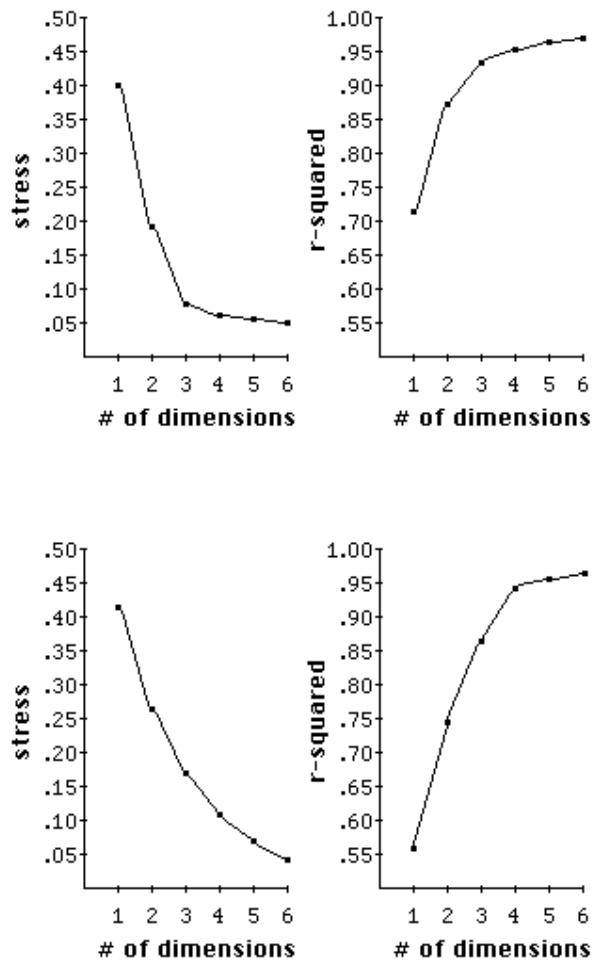


Figure 4. Poor fit for a cluster analysis due to addition of privileged nodes

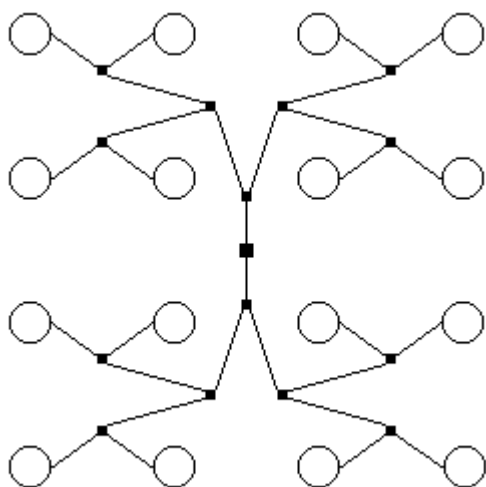


Figure 5. Different distance estimates for probabilistic MDS, PROSCAL model

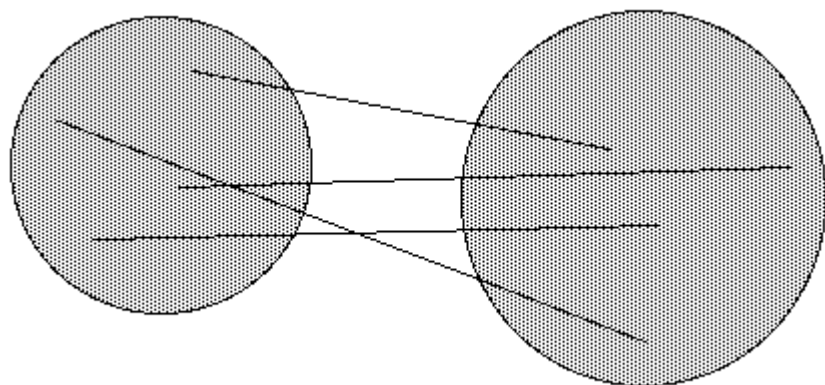


Table 2. Correlations of raw data values among functions for all trichords through pentachords

	ATMEMB	AMEMB2	RECREL	ANGLE	IcVSIM
AMEMB2	.904				
RECREL	-.938	-.890			
ANGLE	-.919	-.884	.964		
IcVSIM	-.648	-.501	.719	.754	
ISIM2	-.828	-.758	.845	.878	.874

N=3160; $p < .001$ for all results.

Table 3. Stress and r^2 values by function, 3x5 dataset

dims

	AMEMB2		ATMEMB		RECREL	
	Stress	r-sq.	Stress	r-sq.	Stress	r-sq.
6	.0347	.9922	.0599	.9594	.0441	.9814
5	.0506	.9845	.0995	.9060	.0644	.9660
4	.1077	.9426	.1506	.8181	.1131	.9144
3	.1726	.8794	.2100	.7330	.1762	.8459
2	.2606	.7844	.2983	.6169	.2591	.7614
1	.3963	.6621	.4749	.4594	.3913	.6583

	ANGLE		IcVSIM		ISIM2	
	Stress	r-sq.	Stress	r-sq.	Stress	r-sq.
6	.0029	.9999	.0002	1.0000	.0002	1.0000
5	.0137	.9983	.0002	1.0000	.0002	1.0000
4	.0626	.9698	.0720	.9625	.0941	.9351
3	.1711	.8298	.1641	.8514	.1596	.8492
2	.2658	.7092	.2640	.7335	.2594	.7104
1	.4354	.5257	.4291	.5755	.4380	.5271

Figure 6a. Stress/ r^2 plots for 3x5 dataset for subset-based functions

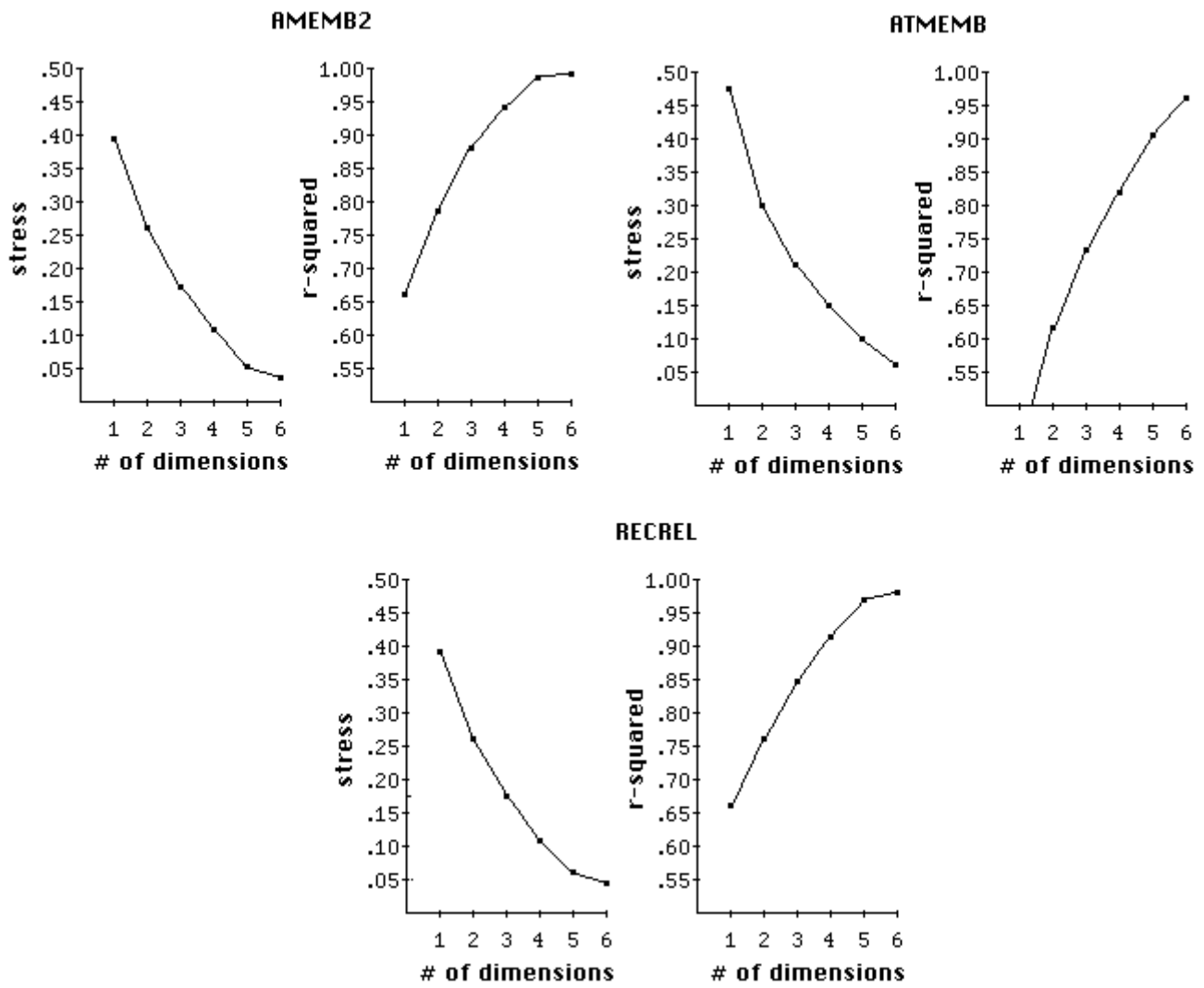


Figure 6b. Stress/ r^2 plots for 3x5 dataset for icv-based functions

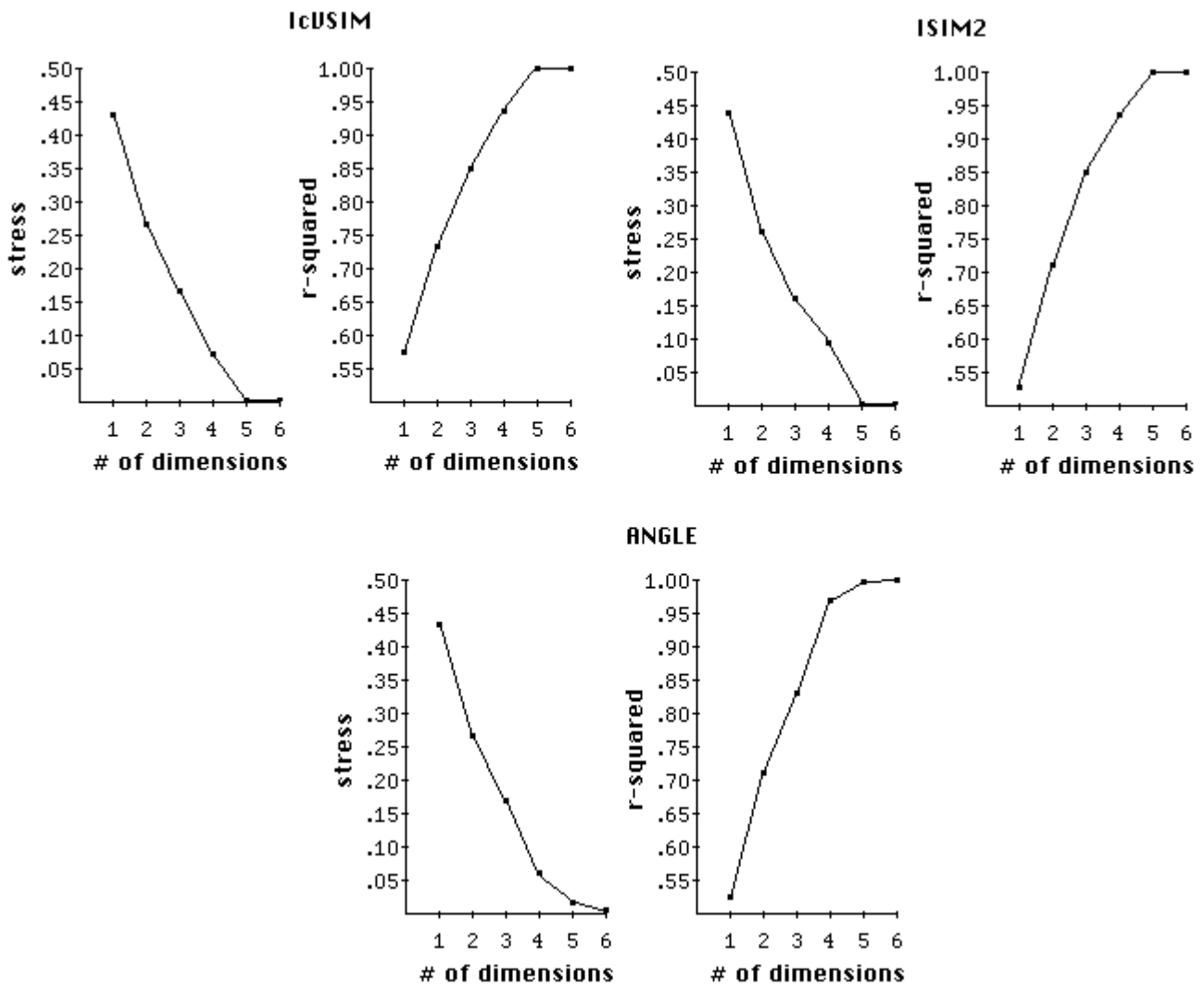


Figure 7. Coordinate values and histogram for ANGLE ic1 vs. ic5 dimension, 3x5 dataset

3-01	012	210000	-2.6007
4-01	0123	321000	-2.1621
5-01	01234	432100	-1.9238
4-03	0134	212100	-1.6864
4-02	0124	221100	-1.6537
3-03	014	101100	-1.5533
3-02	013	111000	-1.5315
5-03	01245	322210	-1.1844
5-04	01236	322111	-1.0979
5-08	02346	232201	-1.0830
5-02	01235	332110	-1.0766
4-04	0125	211110	-.9894
4-12	0236	112101	-.9574
4-05	0126	210111	-.9239
4-07	0145	201210	-.8618
5-16	01347	213211	-.5805
5-06	01256	311221	-.5751
5-13	01248	221311	-.5709
5-09	01246	231211	-.5448
5-05	01237	321121	-.5403
5-10	01346	223111	-.5387
3-05	016	100011	-.0168
4-09	0167	200022	-.0142
4-06	0127	210021	-.0136
3-04	015	100110	-.0108

4-08	0156	200121	-.0102
5-07	01267	310132	-.0093
5-15	01268	220222	-.0049
3-06	024	020100	-.0032
5-Z36	01247	222121	-.0023
4-11	0135	121110	-.0019
5-Z12	01356	222121	-.0017
4-Z15	0146	111111	-.0011
5-19	01367	212122	-.0010
3-08	026	010101	-.0005
4-10	0235	122010	-.0003
5-11	02347	222220	.0001
4-13	0136	112011	.0005
5-Z38	01258	212221	.0006
4-Z29	0137	111111	.0010
5-Z18	01457	212221	.0012
4-21	0246	030201	.0031
5-Z37	03458	212320	.0033
5-Z17	01348	212320	.0035
5-22	01478	202321	.0039
5-28	02368	122212	.0046
5-33	02468	040402	.0046
4-18	0147	102111	.0048
4-19	0148	101310	.0051
5-21	01458	202420	.0055
4-25	0268	020202	.0056

5-26	02458	122311	.0058
4-17	0347	102210	.0068
5-31	01369	114112	.0076
4-24	0248	020301	.0081
3-12	048	000300	.0120
3-10	036	002001	.0139
4-28	0369	004002	.0142
5-14	01257	221131	.5292
5-24	01357	131221	.5428
5-25	02358	123121	.5438
5-20	01568	211231	.5694
5-30	01468	121321	.5741
5-32	01469	113221	.5910
4-20	0158	101220	.8615
4-16	0157	110121	.9066
4-27	0258	012111	.9730
4-14	0237	111120	.9807
5-23	02357	132130	1.0735
5-34	02469	032221	1.0893
5-29	01368	122131	1.0956
5-27	01358	122230	1.1856
3-07	025	011010	1.5301
3-11	037	001110	1.5649
4-22	0247	021120	1.6532
4-26	0358	012120	1.6955
5-35	02479	032140	1.9207

4-23	0257	021030	2.1510
3-09	027	010020	2.5805

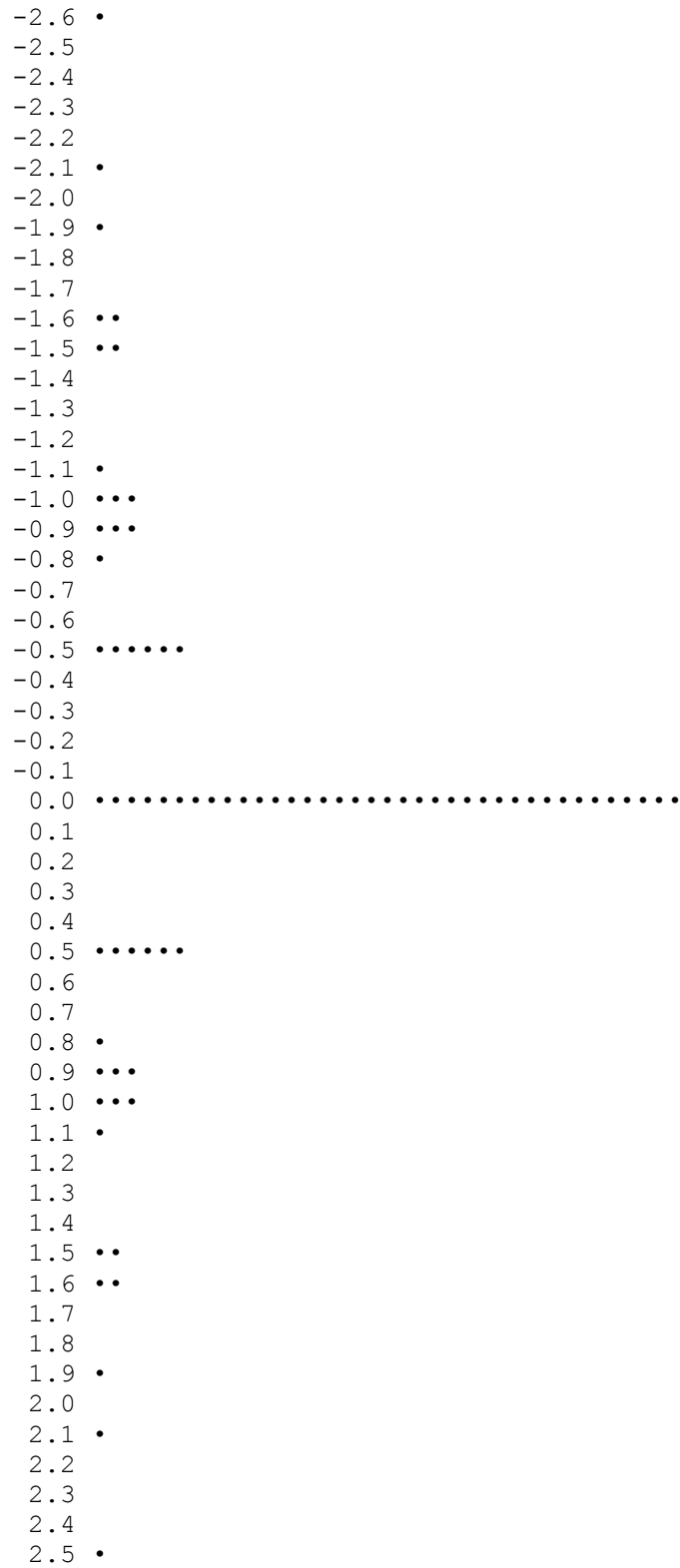


Figure 8. Coordinate values and histogram for ANGLE 016 vs. ic3 dimension, 3x5 dataset

3-05	016	100011	-1.9521
4-09	0167	200022	-1.9488
5-07	01267	310132	-1.9038
4-06	0127	210021	-1.8957
4-08	0156	200121	-1.8555
3-04	015	100110	-1.7520
4-16	0157	110121	-1.6269
4-05	0126	210111	-1.6168
5-15	01268	220222	-1.5330
3-09	027	010020	-1.4657
3-01	012	210000	-1.4435
5-14	01257	221131	-.9326
5-05	01237	321121	-.9272
5-20	01568	211231	-.9073
5-06	01256	311221	-.9015
4-14	0237	111120	-.4959
4-04	0125	211110	-.4851
4-23	0257	021030	-.4760
4-01	0123	321000	-.4540
5-24	01357	131221	-.4164
5-09	01246	231211	-.4108
4-20	0158	101220	-.3950
5-30	01468	121321	-.3868
4-07	0145	201210	-.3867
5-13	01248	221311	-.3808

4-25	0268	020202	-.2500
3-08	026	010101	-.2459
4-21	0246	030201	-.1855
5-33	02468	040402	-.1800
3-06	024	020100	-.1705
4-24	0248	020301	-.1293
4-22	0247	021120	-.0823
4-02	0124	221100	-.0634
4-11	0135	121110	-.0536
4-19	0148	101310	-.0361
3-12	048	000300	-.0334
4-Z15	0146	111111	-.0054
5-35	02479	032140	-.0050
5-11	02347	222220	-.0021
4-Z29	0137	111111	.0001
5-Z36	01247	222121	.0028
5-Z12	01356	222121	.0035
5-27	01358	122230	.0063
5-01	01234	432100	.0147
5-03	01245	322210	.0190
5-Z38	01258	212221	.0396
5-Z18	01457	212221	.0400
5-29	01368	122131	.0475
5-Z37	03458	212320	.0495
5-Z17	01348	212320	.0498
5-23	02357	132130	.0513

5-21	01458	202420	.0561
5-04	01236	322111	.0593
5-02	01235	332110	.0626
5-22	01478	202321	.0687
5-19	01367	212122	.0980
5-34	02469	032221	.5218
5-08	02346	232201	.5331
5-26	02458	122311	.6059
5-28	02368	122212	.7753
4-10	0235	122010	.8904
3-07	025	011010	.8972
3-02	013	111000	.9122
3-11	037	001110	.9410
5-25	02358	123121	.9447
5-10	01346	223111	.9503
3-03	014	101100	.9524
4-26	0358	012120	.9558
5-32	01469	113221	.9694
4-03	0134	212100	.9743
5-16	01347	213211	.9754
4-17	0347	102210	.9925
4-13	0136	112011	1.0547
4-18	0147	102111	1.0995
4-27	0258	012111	1.5609
4-12	0236	112101	1.5713
5-31	01369	114112	1.9403

4-28 0369 004002 3.3523

3-10 036 002001 3.3529

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Figure 9. Coordinate values and histogram for ANGLE whole-tone vs. anti-wholetone dimension, 3x5 dataset

4-24	0248	020301	-2.8731
3-12	048	000300	-2.8525
3-08	026	010101	-2.7457
5-33	02468	040402	-2.7427
4-25	0268	020202	-2.7401
4-21	0246	030201	-2.5718
3-06	024	020100	-2.5005
4-19	0148	101310	-1.0734
5-26	02458	122311	-1.0379
5-13	01248	221311	-1.0069
5-30	01468	121321	-1.0038
5-08	02346	232201	-.8028
5-34	02469	032221	-.7985
5-09	01246	231211	-.7778
5-24	01357	131221	-.7751
5-28	02368	122212	-.6942
5-15	01268	220222	-.5468
4-11	0135	121110	-.4648
4-02	0124	221100	-.4315
4-22	0247	021120	-.4205
5-21	01458	202420	-.3784
5-Z37	03458	212320	-.1693
5-Z17	01348	212320	-.1688
4-27	0258	012111	-.0860
4-12	0236	112101	-.0853

4-Z29	0137	111111	.0468
4-05	0126	210111	.0480
4-Z15	0146	111111	.0516
5-03	01245	322210	.0540
4-16	0157	110121	.0556
3-03	014	101100	.0562
5-27	01358	122230	.0600
3-11	037	001110	.0638
4-17	0347	102210	.0772
5-11	02347	222220	.0836
5-22	01478	202321	.0901
4-07	0145	201210	.1279
4-20	0158	101220	.1342
3-04	015	100110	.1816
5-01	01234	432100	.2271
5-35	02479	032140	.2343
5-16	01347	213211	.2982
5-02	01235	332110	.2983
5-32	01469	113221	.3011
5-23	02357	132130	.3035
4-03	0134	212100	.3222
4-26	0358	012120	.3280
5-06	01256	311221	.3980
5-20	01568	211231	.4011
5-Z38	01258	212221	.4154
5-Z18	01457	212221	.4164

5-10	01346	223111	.5356
5-25	02358	123121	.5382
5-04	01236	322111	.5856
5-29	01368	122131	.5912
4-04	0125	211110	.6120
4-14	0237	111120	.6197
4-01	0123	321000	.6310
5-05	01237	321121	.6344
5-14	01257	221131	.6373
4-23	0257	021030	.6435
3-02	013	111000	.6512
3-01	012	210000	.6557
3-07	025	011010	.6623
3-09	027	010020	.6692
5-Z36	01247	222121	.6762
5-Z12	01356	222121	.6773
5-31	01369	114112	.7331
4-10	0235	122010	.7404
5-07	01267	310132	.8797
4-08	0156	200121	.9733
4-18	0147	102111	1.0023
5-19	01367	212122	1.1438
4-28	0369	004002	1.1975
3-10	036	002001	1.2044
4-06	0127	210021	1.2901
4-13	0136	112011	1.3417

4-09 0167 200022 2.0728

3-05 016 100011 2.0748

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Figure 10. Coordinate values and histogram for ANGLE hexatonic vs. ic2 dimension, 3x5 dataset

3-06	024	020100	-1.8958
4-10	0235	122010	-1.5902
3-07	025	011010	-1.4467
3-02	013	111000	-1.4407
4-23	0257	021030	-1.3732
4-01	0123	321000	-1.3671
4-21	0246	030201	-1.2920
4-11	0135	121110	-1.1382
5-23	02357	132130	-1.0827
5-02	01235	332110	-1.0795
3-09	027	010020	-1.0253
3-01	012	210000	-1.0107
5-35	02479	032140	-.9624
5-01	01234	432100	-.9559
4-22	0247	021120	-.9027
4-02	0124	221100	-.8986
4-13	0136	112011	-.7762
5-24	01357	131221	-.7581
5-09	01246	231211	-.7564
5-34	02469	032221	-.6810
5-08	02346	232201	-.6775
4-06	0127	210021	-.5986
3-08	026	010101	-.5281
5-25	02358	123121	-.5234
5-33	02468	040402	-.5229

4-25	0268	020202	-.5228
5-10	01346	223111	-.5217
5-29	01368	122131	-.4741
5-04	01236	322111	-.4709
5-14	01257	221131	-.4695
5-05	01237	321121	-.4678
5-Z36	01247	222121	-.4620
5-Z12	01356	222121	-.4614
5-28	02368	122212	-.2146
5-15	01268	220222	-.1138
4-27	0258	012111	-.0645
4-12	0236	112101	-.0592
4-Z29	0137	111111	-.0177
4-Z15	0146	111111	-.0171
4-16	0157	110121	.0149
4-05	0126	210111	.0175
5-11	02347	222220	.0238
5-27	01358	122230	.0278
5-03	01245	322210	.0310
5-31	01369	114112	.0349
4-26	0358	012120	.1032
4-03	0134	212100	.1100
3-10	036	002001	.1384
4-14	0237	111120	.1396
4-28	0369	004002	.1402
4-04	0125	211110	.1434

5-19	01367	212122	.1656
5-07	01267	310132	.1687
4-24	0248	020301	.2096
5-26	02458	122311	.3212
5-30	01468	121321	.3620
5-13	01248	221311	.3633
3-05	016	100011	.4202
4-09	0167	200022	.4209
5-32	01469	113221	.5850
5-16	01347	213211	.5864
5-Z18	01457	212221	.6378
5-Z38	01258	212221	.6382
5-20	01568	211231	.6610
5-06	01256	311221	.6627
4-08	0156	200121	1.0931
4-18	0147	102111	1.1292
5-Z17	01348	212320	1.1678
5-Z37	03458	212320	1.1678
3-11	037	001110	1.5399
3-03	014	101100	1.5461
5-22	01478	202321	1.6043
3-04	015	100110	1.6116
4-17	0347	102210	1.6748
4-20	0158	101220	1.7092
4-07	0145	201210	1.7114
5-21	01458	202420	1.9634

4-19 0148 101310 2.1154

3-12 048 000300 2.4602

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Figure 11. Coordinate values and histogram for RECREL 012 vs. 027 dimension, 3x5 dataset

3-09	027	010020	-2.3618
4-23	0257	021030	-1.9260
5-35	02479	032140	-1.7633
3-11	037	001110	-1.6752
4-22	0247	021120	-1.5546
4-26	0358	012120	-1.5532
3-07	025	011010	-1.3560
5-29	01368	122131	-1.1807
5-34	02469	032221	-1.1476
5-27	01358	122230	-1.0614
4-27	0258	012111	-.9798
4-16	0157	110121	-.9622
4-20	0158	101220	-.9302
5-23	02357	132130	-.9054
5-30	01468	121321	-.7984
4-14	0237	111120	-.7339
5-24	01357	131221	-.6911
5-20	01568	211231	-.6552
5-25	02358	123121	-.6292
5-32	01469	113221	-.6257
5-14	01257	221131	-.4936
4-Z29	0137	111111	-.0667
5-Z38	01258	212221	-.0414
5-Z37	03458	212320	-.0292
4-19	0148	101310	-.0114

3-12	048	000300	-.0108
4-17	0347	102210	-.0107
5-21	01458	202420	-.0086
5-11	02347	222220	-.0061
5-22	01478	202321	-.0042
3-04	015	100110	-.0040
4-18	0147	102111	-.0027
4-11	0135	121110	-.0023
5-26	02458	122311	-.0019
4-10	0235	122010	-.0007
5-Z12	01356	222121	-.0007
4-08	0156	200121	.0007
5-Z36	01247	222121	.0010
5-31	01369	114112	.0022
5-19	01367	212122	.0025
3-06	024	020100	.0028
4-24	0248	020301	.0039
5-28	02368	122212	.0040
4-13	0136	112011	.0041
5-07	01267	310132	.0051
3-10	036	002001	.0055
4-28	0369	004002	.0057
5-15	01268	220222	.0058
5-33	02468	040402	.0074
4-21	0246	030201	.0083
4-06	0127	210021	.0089

4-09	0167	200022	.0093
4-25	0268	020202	.0096
3-05	016	100011	.0107
5-Z17	01348	212320	.0133
3-08	026	010101	.0135
5-Z18	01457	212221	.0357
4-Z15	0146	111111	.0733
5-05	01237	321121	.4969
5-16	01347	213211	.6204
5-10	01346	223111	.6299
5-06	01256	311221	.6526
5-09	01246	231211	.6955
4-04	0125	211110	.7241
5-13	01248	221311	.7973
5-02	01235	332110	.9009
4-07	0145	201210	.9131
4-05	0126	210111	.9746
4-12	0236	112101	.9823
5-03	01245	322210	1.0509
5-08	02346	232201	1.1497
5-04	01236	322111	1.1834
3-02	013	111000	1.3603
4-03	0134	212100	1.5410
4-02	0124	221100	1.5519
3-03	014	101100	1.6576
5-01	01234	432100	1.7603

4-01 0123 321000 1.9320
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Figure 12. Correspondence of set-class orderings between RECREL and ANGLE diatonic/chromatic dimensions, 3x5 dataset

	RECREL		ANGLE
	3-09 -2.3618	3-09	2.5805
	4-23 -1.9260	4-23	2.1510
	5-35 -1.7633	5-35	1.9207
	3-11 -1.6752	4-26	1.6955
	4-22 -1.5546	4-22	1.6532
	4-26 -1.5532	3-11	1.5649
	3-07 -1.3560	3-07	1.5301
	5-29 -1.1807	5-27	1.1856
	5-34 -1.1476	5-29	1.0956
	5-27 -1.0614	5-34	1.0893
	4-27 -.9798	5-23	1.0735
	4-16 -.9622	4-14	.9807
	4-20 -.9302	4-27	.9730
	5-23 -.9054	4-16	.9066
	5-30 -.7984	4-20	.8615
	4-14 -.7339	5-32	.5910
	5-24 -.6911	5-30	.5741
	5-20 -.6552	5-20	.5694
	5-25 -.6292	5-25	.5438

5-32	-.6257	5-24	.5428
5-14	-.4936	5-14	.5292
4-Z29	-.0667	4-28	.0142
5-Z38	-.0414	3-10	.0139
5-Z37	-.0292	3-12	.0120
4-19	-.0114	4-24	.0081
3-12	-.0108	5-31	.0076
4-17	-.0107	4-17	.0068
5-21	-.0086	5-26	.0058
5-11	-.0061	4-25	.0056
5-22	-.0042	5-21	.0055
3-04	-.0040	4-19	.0051
4-18	-.0027	4-18	.0048
4-11	-.0023	5-28	.0046
5-26	-.0019	5-33	.0046
4-10	-.0007	5-22	.0039
5-Z12	-.0007	5-Z17	.0035
4-08	.0007	5-Z37	.0033
5-Z36	.0010	4-21	.0031
5-31	.0022	5-Z18	.0012
5-19	.0025	4-Z29	.0010
3-06	.0028	5-Z38	.0006
4-24	.0039	4-13	.0005
5-28	.0040	5-11	.0001
4-13	.0041	4-10	-.0003

5-07	.0051	3-08	-.0005
3-10	.0055	5-19	-.0010
4-28	.0057	4-Z15	-.0011
5-15	.0058	5-Z12	-.0017
5-33	.0074	4-11	-.0019
4-21	.0083	5-Z36	-.0023
4-06	.0089	3-06	-.0032
4-09	.0093	5-15	-.0049
4-25	.0096	5-07	-.0093
3-05	.0107	4-08	-.0102
5-Z17	.0133	3-04	-.0108
3-08	.0135	4-06	-.0136
5-Z18	.0357	4-09	-.0142
4-Z15	.0733	3-05	-.0168
5-05	.4969	5-10	-.5387
5-16	.6204	5-05	-.5403
5-10	.6299	5-09	-.5448
5-06	.6526	5-13	-.5709
5-09	.6955	5-06	-.5751
4-04	.7241	5-16	-.5805
5-13	.7973	4-07	-.8618
5-02	.9009	4-05	-.9239
4-07	.9131	4-12	-.9574
4-05	.9746	4-04	-.9894
4-12	.9823	5-02	-1.0766

5-03	1.0509	5-08	-1.0830
5-08	1.1497	5-04	-1.0979
5-04	1.1834	5-03	-1.1844
3-02	1.3603	3-02	-1.5315
4-03	1.5410	3-03	-1.5533
4-02	1.5519	4-02	-1.6537
3-03	1.6576	4-03	-1.6864
5-01	1.7603	5-01	-1.9238
4-01	1.9320	4-01	-2.1621
3-01	2.3783	3-01	-2.6007

Figure 13. Coordinate values and histogram for RECREL 024 vs. 016/036 dimension, 3x5 dataset

3-05	016	100011	-2.0086
4-09	0167	200022	-1.9964
4-13	0136	112011	-1.5170
4-18	0147	102111	-1.4290
5-19	01367	212122	-1.2580
4-08	0156	200121	-1.2201
3-10	036	002001	-1.1400
4-28	0369	004002	-1.1291
4-06	0127	210021	-1.1189
5-31	01369	114112	-.9192
5-Z12	01356	222121	-.9030
5-07	01267	310132	-.8944
5-Z36	01247	222121	-.8049
5-Z18	01457	212221	-.7348
5-Z38	01258	212221	-.7346
5-22	01478	202321	-.7289
4-04	0125	211110	-.6549
4-14	0237	111120	-.6536
5-10	01346	223111	-.6148
5-25	02358	123121	-.6138
5-16	01347	213211	-.5777
5-32	01469	113221	-.5768
5-04	01236	322111	-.5638
5-29	01368	122131	-.5618
5-06	01256	311221	-.5579

5-20	01568	211231	-.5572
5-05	01237	321121	-.5489
5-14	01257	221131	-.5482
4-07	0145	201210	-.5457
4-20	0158	101220	-.5450
4-10	0235	122010	-.5302
4-03	0134	212100	-.5263
4-26	0358	012120	-.5226
4-17	0347	102210	-.4954
4-Z15	0146	111111	-.4128
4-Z29	0137	111111	-.4100
3-02	013	111000	-.4045
3-07	025	011010	-.4017
3-03	014	101100	-.3656
3-11	037	001110	-.3617
3-04	015	100110	-.2848
5-21	01458	202420	-.2195
5-Z37	03458	212320	-.1404
5-Z17	01348	212320	-.1393
4-16	0157	110121	-.0841
4-05	0126	210111	-.0839
4-12	0236	112101	-.0286
4-27	0258	012111	-.0255
5-03	01245	322210	-.0027
5-27	01358	122230	-.0018
5-11	02347	222220	.0199

4-01	0123	321000	.0223
4-23	0257	021030	.0234
5-02	01235	332110	.0560
5-23	02357	132130	.0574
4-19	0148	101310	.2135
5-01	01234	432100	.3213
5-35	02479	032140	.3238
5-28	02368	122212	.4173
5-15	01268	220222	.4307
4-11	0135	121110	.5982
3-01	012	210000	.7045
3-09	027	010020	.7087
4-02	0124	221100	.8639
4-22	0247	021120	.8645
5-13	01248	221311	.8734
5-30	01468	121321	.8740
5-26	02458	122311	.9301
5-09	01246	231211	.9376
5-24	01357	131221	.9385
5-08	02346	232201	1.0106
5-34	02469	032221	1.0124
4-25	0268	020202	2.3023
3-08	026	010101	2.3117
5-33	02468	040402	2.7933
4-21	0246	030201	2.9384
4-24	0248	020301	2.9965

3-12 048 000300 3.0172
3-06 024 020100 3.5372

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Figure 14. Coordinate values and histogram for RECREL 04/014 vs. 012/027 dimension, 3x5 dataset

3-12	048	000300	-3.4626
4-19	0148	101310	-1.9712
4-17	0347	102210	-1.6528
5-21	01458	202420	-1.6354
3-03	014	101100	-1.5644
5-22	01478	202321	-1.5590
3-11	037	001110	-1.5553
4-28	0369	004002	-1.4076
3-10	036	002001	-1.3955
4-18	0147	102111	-1.3388
4-07	0145	201210	-1.0831
4-20	0158	101220	-1.0781
5-16	01347	213211	-.9334
5-32	01469	113221	-.9300
5-26	02458	122311	-.9062
5-Z17	01348	212320	-.7437
5-Z37	03458	212320	-.7431
5-Z18	01457	212221	-.6994
5-Z38	01258	212221	-.6984
5-31	01369	114112	-.6975
4-12	0236	112101	-.6150
4-27	0258	012111	-.6095
4-24	0248	020301	-.5812
3-04	015	100110	-.5098
5-13	01248	221311	-.4871

5-30	01468	121321	-.4818
5-28	02368	122212	-.4113
4-08	0156	200121	-.3855
5-33	02468	040402	-.2653
5-06	01256	311221	-.2157
5-20	01568	211231	-.2121
4-Z29	0137	111111	-.1964
4-03	0134	212100	-.1959
5-19	01367	212122	-.1958
4-Z15	0146	111111	-.1954
4-26	0358	012120	-.1876
3-08	026	010101	-.1273
4-25	0268	020202	-.1190
5-03	01245	322210	.0797
5-27	01358	122230	.0852
4-21	0246	030201	.1097
5-08	02346	232201	.1106
5-34	02469	032221	.1176
5-11	02347	222220	.1584
5-10	01346	223111	.2123
5-25	02358	123121	.2157
4-09	0167	200022	.2520
5-15	01268	220222	.2537
3-05	016	100011	.2940
4-05	0126	210111	.3385
4-16	0157	110121	.3444

3-06	024	020100	.3649
4-04	0125	211110	.3822
4-14	0237	111120	.3860
4-13	0136	112011	.4206
5-09	01246	231211	.5274
5-24	01357	131221	.5314
5-07	01267	310132	.5359
5-04	01236	322111	.6040
5-29	01368	122131	.6101
5-Z12	01356	222121	.6278
4-11	0135	121110	.7484
4-02	0124	221100	.7716
5-Z36	01247	222121	.7723
4-22	0247	021120	.7801
5-05	01237	321121	1.0188
5-14	01257	221131	1.0211
5-01	01234	432100	1.0614
5-35	02479	032140	1.0698
5-02	01235	332110	1.1190
5-23	02357	132130	1.1231
4-10	0235	122010	1.2216
3-02	013	111000	1.3211
3-07	025	011010	1.3302
4-06	0127	210021	1.7171
4-01	0123	321000	2.0356
4-23	0257	021030	2.0460

3-01	012	210000	2.6566
3-09	027	010020	2.6711

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Figure 15. Coordinate values and histogram for RECREL 015/04 vs. 036 dimension, 3x5 dataset

3-04	015	100110	-2.5167
4-08	0156	200121	-1.7716
3-12	048	000300	-1.4376
4-07	0145	201210	-1.3548
4-20	0158	101220	-1.3521
4-19	0148	101310	-1.1737
5-07	01267	310132	-1.1229
5-06	01256	311221	-1.0520
5-20	01568	211231	-1.0498
5-21	01458	202420	-1.0137
4-06	0127	210021	-.9775
4-05	0126	210111	-.9739
4-16	0157	110121	-.9723
3-05	016	100011	-.9518
4-09	0167	200022	-.9494
4-04	0125	211110	-.8412
4-14	0237	111120	-.8393
5-Z17	01348	212320	-.7846
5-Z37	03458	212320	-.7839
5-15	01268	220222	-.7310
3-01	012	210000	-.6450
3-09	027	010020	-.6385
5-22	01478	202321	-.6157
5-05	01237	321121	-.6099
5-14	01257	221131	-.6086

5-13	01248	221311	-.5727
5-30	01468	121321	-.5708
5-11	02347	222220	-.4589
5-03	01245	322210	-.4213
5-27	01358	122230	-.4177
5-Z38	01258	212221	-.3471
5-Z18	01457	212221	-.3469
4-11	0135	121110	-.2385
3-06	024	020100	-.1620
5-09	01246	231211	-.1341
5-24	01357	131221	-.1321
4-02	0124	221100	-.0688
4-22	0247	021120	-.0660
4-17	0347	102210	-.0515
3-03	014	101100	-.0489
3-11	037	001110	-.0410
5-02	01235	332110	.0605
5-23	02357	132130	.0637
5-Z12	01356	222121	.0919
4-Z15	0146	111111	.1266
4-Z29	0137	111111	.1330
4-24	0248	020301	.1634
5-01	01234	432100	.2627
5-35	02479	032140	.2680
5-04	01236	322111	.2866
5-29	01368	122131	.2885

5-Z36	01247	222121	.3230
5-19	01367	212122	.3280
4-01	0123	321000	.3558
4-23	0257	021030	.3605
4-03	0134	212100	.3958
4-26	0358	012120	.4006
5-33	02468	040402	.4293
4-21	0246	030201	.4652
4-18	0147	102111	.5032
5-26	02458	122311	.5199
5-16	01347	213211	.6004
5-32	01469	113221	.6017
3-08	026	010101	.7576
4-25	0268	020202	.7700
5-08	02346	232201	.7995
5-34	02469	032221	.8025
5-28	02368	122212	.9962
4-10	0235	122010	1.0476
5-10	01346	223111	1.0725
5-25	02358	123121	1.0735
3-02	013	111000	1.1212
3-07	025	011010	1.1258
4-13	0136	112011	1.2685
4-12	0236	112101	1.5025
4-27	0258	012111	1.5049
5-31	01369	114112	1.8148

4-28 0369 004002 3.5767

3-10 036 002001 3.5839

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Figure 16. Coordinate values and histogram for RECREL 016/026 vs. anti-ic6 dimension, 3x5 dataset

4-17	0347	102210	-1.3059
4-10	0235	122010	-1.3026
4-03	0134	212100	-1.2412
4-26	0358	012120	-1.2273
3-02	013	111000	-1.1132
5-11	02347	222220	-1.1120
3-07	025	011010	-1.1036
5-Z37	03458	212320	-1.0656
5-Z17	01348	212320	-1.0655
3-03	014	101100	-1.0551
4-11	0135	121110	-1.0431
3-11	037	001110	-1.0415
5-03	01245	322210	-.9407
5-02	01235	332110	-.9338
5-27	01358	122230	-.9313
5-23	02357	132130	-.9268
4-19	0148	101310	-.8642
5-01	01234	432100	-.8637
5-35	02479	032140	-.8486
4-02	0124	221100	-.8436
5-21	01458	202420	-.8408
4-04	0125	211110	-.8389
4-14	0237	111120	-.8328
4-22	0247	021120	-.8301
3-06	024	020100	-.7564

4-01	0123	321000	-.6754
4-23	0257	021030	-.6591
4-07	0145	201210	-.6341
4-20	0158	101220	-.6261
5-26	02458	122311	-.3556
5-16	01347	213211	-.3087
5-32	01469	113221	-.3033
5-10	01346	223111	-.3031
5-25	02358	123121	-.2980
5-08	02346	232201	-.2256
5-34	02469	032221	-.2149
5-Z12	01356	222121	-.0910
3-12	048	000300	-.0453
5-Z36	01247	222121	-.0447
3-04	015	100110	-.0211
4-12	0236	112101	.0671
4-27	0258	012111	.0756
5-Z18	01457	212221	.1018
5-Z38	01258	212221	.1018
5-22	01478	202321	.1182
4-18	0147	102111	.1340
4-13	0136	112011	.1529
5-04	01236	322111	.1651
5-29	01368	122131	.1760
3-01	012	210000	.1795
3-09	027	010020	.1997

5-09	01246	231211	.2831
5-24	01357	131221	.2895
5-13	01248	221311	.3488
5-30	01468	121321	.3566
5-31	01369	114112	.4448
5-06	01256	311221	.4457
5-20	01568	211231	.4521
5-05	01237	321121	.5283
5-14	01257	221131	.5327
5-28	02368	122212	.7203
4-Z15	0146	111111	.7660
4-Z29	0137	111111	.7661
5-19	01367	212122	.7919
4-24	0248	020301	.8792
4-21	0246	030201	.9221
5-33	02468	040402	1.1091
4-08	0156	200121	1.1495
3-10	036	002001	1.2452
4-28	0369	004002	1.2502
4-05	0126	210111	1.3038
4-16	0157	110121	1.3129
4-06	0127	210021	1.3385
5-15	01268	220222	1.5323
5-07	01267	310132	1.6009
3-08	026	010101	1.7034
4-25	0268	020202	1.7321

3-05 016 100011 2.2108

4-09 0167 200022 2.2461

-1.3 ..
-1.2 ..
-1.1 ...
-1.0
-0.9
-0.8
-0.7 .
-0.6
-0.5
-0.4
-0.3
-0.2 ...
-0.1
0.0
0.1
0.2 ..
0.3 ..
0.4 ...
0.5 ..
0.6
0.7
0.8 .
0.9 .
1.0
1.1 ..
1.2 ..
1.3 ...
1.4
1.5 .
1.6 .
1.7 ..
1.8
1.9
2.0
2.1
2.2 ..

Table 4. Correlations between dimensions of icv-based functions and between dimensions of subset-based functions for 3x5 dataset

Significance values along main diagonals are all $p < .001$;
 except where noted, significance values elsewhere are all $p \gg .05$ (N=79).

IcVSIM

dim.1 dim.2 dim.3 dim.4

dim.1	.940	.014	.008	.000
ANGLE dim.2	.016	.948	.004	.000
dim.3	.008	.004	.932	.000
dim.4	.000	.000	.000	.925

ISIM2

dim.1 dim.2 dim.3 dim.4

dim.1	.919	.108	.141	.005
ANGLE dim.2	.156	.563	-.290	-.021
dim.3	.134	-.237	.745	-.014
dim.4	.005	-.011	-.007	.971

ANGLE dim.3/ISIM2 dim.2: $p=0.035$

ANGLE dim.2/ISIM2 dim.3: $p=0.009$

ISIM2

dim.1 dim.2 dim.3 dim.4

dim.1	.906	.144	.177	.006
lcVSIM dim.2	.176	.534	-.299	-.021
dim.3	.166	-.217	.734	-.013
dim.4	.006	-.015	-.009	.936

lcVSIM dim.3/ISIM2 dim.2: $p=0.055$

lcVSIM dim.2/ISIM2 dim.3: $p=0.007$

AMEMB2

dim.1 dim.2 dim.3 dim.4 dim.5

dim.1	.950	-.021	.004	.035	.000
dim.2	-.021	.961	.019	.016	.001
RECREL dim.3	.005	.019	.965	-.018	.000
dim.4	.031	.010	-.014	.975	.001
dim.5	.000	.001	.000	.001	.959

ATMEMB

dim.1 dim.2 dim.3 dim.4 dim.5

dim.1	.897	-.055	.088	.077	.003
dim.2	.048	.945	.065	.048	.002
RECREL dim.3	.095	.072	.883	-.087	-.003
dim.4	.097	.064	-.110	.897	-.003
dim.5	.003	.002	-.003	-.002	.988

ATMEMB

dim.1 dim.2 dim.3 dim.4 dim.5

dim.1	.895	-.048	.102	.101	.002
dim.2	-.061	.937	.081	.073	.002
AMEMB2 dim.3	.123	.087	.877	.092	-.002
dim.4	.141	.076	-.101	.930	-.001
dim.5	.003	.002	-.003	-.001	.970

Table 5. Non-robust dimensions for ISIM2, by cardinality

Notes:

- Upper figures in matrices show correlation values; lower figures are significance values.
- Interpretations of dimensions are for "base" datasets (3x3, 4x4, or 5x5).
- Coordinate values are given first for the base dataset, then for datasets correlated with it at $p < .05$, then for any remaining datasets--titles for the last category are given in bold.

For cardinality-3 sets:

dimension 2 (anti-ic3 vs. anti-ic2)

3x3 3x4

3x4 .981

.000

3x5 .542 .501

.069 .097

3x3 dataset

3x4 dataset

3x5 dataset

3-06 024 020100 -1.4499	3-01 012 210000 -1.512	3-08 026 010101 -2.296
3-01 012 210000 -1.1097	3-09 027 010020 -1.502	3-06 024 020100 -1.489
3-09 027 010020 -1.0736	3-06 024 020100 -1.450	3-12 048 000300 -1.176
3-08 026 010101 -.7197	3-08 026 010101 -.436	3-05 016 100011 -.557
3-04 015 100110 -.4335	3-04 015 100110 -.286	3-01 012 210000 -.327
3-02 013 111000 -.0255	3-12 048 000300 -.154	3-09 027 010020 -.318
3-07 025 011010 .0069	3-02 013 111000 .041	3-04 015 100110 .065

3-12	048	000300	.0167	3-07	025	011010	.045	3-10	036	002001	.260
3-05	016	100011	.6014	3-05	016	100011	.560	3-07	025	011010	.691
3-03	014	101100	.9773	3-11	037	001110	.978	3-02	013	111000	.706
3-11	037	001110	1.0198	3-03	014	101100	.983	3-03	014	101100	.846
3-10	036	002001	2.1899	3-10	036	002001	1.952	3-11	037	001110	.867

dimension 4 (ic1 vs. ic5)

3x3 3x4

3x4 .025

.938

3x5 .994 .001

.000 .997

3x3 dataset

3x5 dataset

3x4 dataset

3-09	027	010020	-1.5384	3-09	027	010020	-2.149	3-08	026	010101	-1.453
3-11	037	001110	-1.2043	3-11	037	001110	-1.390	3-05	016	100011	-1.313
3-07	025	011010	-1.1239	3-07	025	011010	-1.295	3-10	036	002001	-.761
3-08	026	010101	-.0295	3-06	024	020100	-.047	3-09	027	010020	-.352
3-06	024	020100	-.0169	3-04	015	100110	-.001	3-01	012	210000	-.317
3-05	016	100011	-.0077	3-08	026	010101	.011	3-06	024	020100	-.177
3-12	048	000300	.0143	3-05	016	100011	.013	3-12	048	000300	-.148
3-10	036	002001	.0153	3-12	048	000300	.055	3-04	015	100110	.064

3-04	015	100110	.0192	3-10	036	002001	.104	3-07	025	011010	.514
3-02	013	111000	1.1128	3-02	013	111000	1.220	3-02	013	111000	.530
3-03	014	101100	1.2697	3-03	014	101100	1.416	3-11	037	001110	.660
3-01	012	210000	1.4895	3-01	012	210000	2.109	3-03	014	101100	.680

For cardinality-4 sets:

dimension 3 (high ic3/ic6 vs. ic2/ic3 and no ic6)

4x4 3x4 4x5

3x4 .997

.000

4x5 .754 .758

.000 .000

3x5 .112 .118 -.331

.564 .544 .078

4x4 dataset

3x4 dataset

4x5 dataset

3x5 dataset

4-	0369	004002	-	4-	0369	004002	-3.131	4-	0369	004002	-3.344	4-	0123	321000	-2.284
28			3.1021	28				28				01			

4-	0147	102111	-	4-	0147	102111	-1.430	4-	0147	102111	-1.540	4-	0134	212100	-1.578
18			1.3358	18				18				03			

4-12	0236	112101	-	4-12	0236	112101	-1.134	4-27	0258	012111	-1.317	4-02	0124	221100	-1.558
			1.0927												
4-27	0258	012111	-	4-27	0258	012111	-1.121	4-19	0148	101310	-1.284	4-12	0236	112101	-1.493
			1.0742												
4-13	0136	112011	-0.7976	4-13	0136	112011	-0.804	4-17	0347	102210	-1.065	4-05	0126	210111	-0.550
4-09	0167	200022	-0.6958	4-09	0167	200022	-0.692	4-20	0158	101220	-1.030	4-28	0369	004002	-0.541
4-17	0347	102210	-0.5648	4-17	0347	102210	-0.528	4-26	0358	012120	-0.710	4-07	0145	201210	-0.432
4-Z15	0146	111111	-0.4266	4-Z15	0146	111111	-0.358	4-24	0248	020301	-0.625	4-04	0125	211110	-0.408
4-Z29	0137	111111	-0.4189	4-Z29	0137	111111	-0.352	4-08	0156	200121	-0.495	4-09	0167	200022	-0.339
4-25	0268	020202	-0.2495	4-25	0268	020202	-0.264	4-07	0145	201210	-0.474	4-06	0127	210021	-0.238
4-19	0148	101310	-0.2189	4-08	0156	200121	-0.153	4-25	0268	020202	-0.455	4-13	0136	112011	-0.228
4-08	0156	200121	-0.0874	4-19	0148	101310	-0.136	4-Z29	0137	111111	-0.233	4-18	0147	102111	-0.225
4-26	0358	012120	-0.0473	4-20	0158	101220	-0.040	4-22	0247	021120	-0.214	4-08	0156	200121	-0.129
4-03	0134	212100	-0.0401	4-07	0145	201210	-0.038	4-Z15	0146	111111	-0.213	4-Z15	0146	111111	-0.056
4-07	0145	201210	-0.0325	4-03	0134	212100	.121	4-12	0236	112101	-0.154	4-Z29	0137	111111	-0.051
4-20	0158	101220	-0.0296	4-26	0358	012120	.126	4-09	0167	200022	-0.093	4-10	0235	122010	-0.038
4-24	0248	020301	.1973	4-24	0248	020301	.218	4-21	0246	030201	-0.056	4-17	0347	102210	.043
4-10	0235	122010	.2727	4-21	0246	030201	.432	4-16	0157	110121	.177	4-25	0268	020202	.048
4-21	0246	030201	.5292	4-10	0235	122010	.438	4-14	0237	111120	.315	4-19	0148	101310	.115

4- 16	0157 110121 .5741	4- 16	0157 110121 .558	4- 23	0257 021030 .406	4- 11	0135 121110 .153
4- 05	0126 210111 .5862	4- 05	0126 210111 .570	4- 05	0126 210111 .617	4- 21	0246 030201 .160
4- 06	0127 210021 .6601	4- 06	0127 210021 .649	4- 04	0125 211110 .720	4- 24	0248 020301 .185
4- 14	0237 111120 .8569	4- 14	0237 111120 .851	4- 03	0134 212100 .766	4- 16	0157 110121 .494
4- 04	0125 211110 .8621	4- 04	0125 211110 .857	4- 11	0135 121110 .806	4- 20	0158 101220 .551
4- 11	0135 121110 1.0175	4- 11	0135 121110 1.050	4- 13	0136 112011 .964	4- 14	0237 111120 .601
4- 02	0124 221100 1.1170	4- 02	0124 221100 1.075	4- 06	0127 210021 1.191	4- 27	0258 012111 1.400
4- 22	0247 021120 1.1218	4- 22	0247 021120 1.100	4- 02	0124 221100 1.273	4- 26	0358 012120 1.766
4- 23	0257 021030 1.2087	4- 01	0123 321000 1.126	4- 10	0235 122010 1.437	4- 22	0247 021120 1.841
4- 01	0123 321000 1.2100	4- 23	0257 021030 1.142	4- 01	0123 321000 2.422	4- 23	0257 021030 2.208

dimension 4 (hexatonic vs. ic2)

4x4 3x4 4x5

3x4 .998

.000

4x5 .357 .358

.057 .056

3x5 .846 .857 .290
 .000 .000 .126

4x4 dataset				3x4 dataset				3x5 dataset				4x5 dataset			
4-23	0257	021030	-1.8618	4-23	0257	021030	-1.887	4-28	0369	004002	-3.566	4-23	0257	021030	-2.712
4-01	0123	321000	-1.8540	4-01	0123	321000	-1.869	4-13	0136	112011	-1.896	4-22	0247	021120	-1.825
4-13	0136	112011	-1.3257	4-13	0136	112011	-1.421	4-06	0127	210021	-1.485	4-26	0358	012120	-1.487
4-06	0127	210021	-1.3251	4-06	0127	210021	-1.392	4-23	0257	021030	-1.342	4-13	0136	112011	-1.384
4-10	0235	122010	-1.3166	4-10	0235	122010	-1.379	4-10	0235	122010	-1.304	4-27	0258	012111	-.998
4-28	0369	004002	-1.0187	4-28	0369	004002	-1.124	4-09	0167	200022	-1.222	4-10	0235	122010	-.792
4-09	0167	200022	-.9416	4-09	0167	200022	-.986	4-27	0258	012111	-.875	4-06	0127	210021	-.742
4-Z15	0146	111111	-.1795	4-Z15	0146	111111	-.167	4-01	0123	321000	-.810	4-16	0157	110121	-.683
4-Z29	0137	111111	-.1699	4-Z29	0137	111111	-.158	4-12	0236	112101	-.482	4-14	0237	111120	-.560
4-12	0236	112101	-.1080	4-12	0236	112101	-.113	4-18	0147	102111	-.400	4-11	0135	121110	-.283
4-27	0258	012111	-.0822	4-27	0258	012111	-.092	4-Z29	0137	111111	-.289	4-09	0167	200022	-.166
4-16	0157	110121	.0324	4-11	0135	121110	.086	4-Z15	0146	111111	-.282	4-21	0246	030201	-.079
4-05	0126	210111	.0325	4-16	0157	110121	.103	4-26	0358	012120	.005	4-Z29	0137	111111	.030

4-11	0135	121110	.0604	4-05	0126	210111	.106	4-25	0268	020202	.106	4-215	0146	111111	.031
4-18	0147	102111	.1746	4-14	0237	111120	.280	4-16	0157	110121	.138	4-20	0158	101220	.059
4-21	0246	030201	.2187	4-18	0147	102111	.281	4-22	0247	021120	.142	4-25	0268	020202	.065
4-04	0125	211110	.3039	4-04	0125	211110	.284	4-05	0126	210111	.277	4-24	0248	020301	.248
4-14	0237	111120	.3068	4-25	0268	020202	.372	4-08	0156	200121	.378	4-08	0156	200121	.279
4-25	0268	020202	.3587	4-21	0246	030201	.397	4-03	0134	212100	.434	4-05	0126	210111	.293
4-02	0124	221100	.4010	4-02	0124	221100	.450	4-11	0135	121110	.447	4-04	0125	211110	.337
4-22	0247	021120	.4309	4-03	0134	212100	.467	4-14	0237	111120	.474	4-18	0147	102111	.682
4-03	0134	212100	.4646	4-22	0247	021120	.474	4-21	0246	030201	.549	4-17	0347	102210	.745
4-26	0358	012120	.4887	4-26	0358	012120	.492	4-02	0124	221100	.578	4-28	0369	004002	.902
4-08	0156	200121	.6295	4-08	0156	200121	.669	4-04	0125	211110	.617	4-19	0148	101310	.960
4-17	0347	102210	.9167	4-17	0347	102210	1.024	4-24	0248	020301	.976	4-07	0145	201210	1.164
4-07	0145	201210	1.1384	4-24	0248	020301	1.084	4-17	0347	102210	1.077	4-01	0123	321000	1.321
4-20	0158	101220	1.1411	4-20	0158	101220	1.164	4-20	0158	101220	1.177	4-02	0124	221100	1.360
4-24	0248	020301	1.2567	4-07	0145	201210	1.168	4-07	0145	201210	1.307	4-12	0236	112101	1.498
4-19	0148	101310	1.8278	4-19	0148	101310	1.787	4-19	0148	101310	1.744	4-03	0134	212100	1.587

For cardinality-5 sets:

dimension 4 (016 vs. ic3)

5x5 4x5

4x5 .904

.000

3x5 .433 .044

.007 .794

5x5 dataset

4x5 dataset

3x5 dataset

5-07	01267	310132	-1.6956	5-07	01267	310132	-1.542	5-33	02468	040402	-1.784
5-15	01268	220222	-1.6162	5-15	01268	220222	-1.178	5-21	01458	202420	-1.432
5-02	01235	332110	-.8471	5-05	01237	321121	-.915	5-15	01268	220222	-.932
5-05	01237	321121	-.8373	5-02	01235	332110	-.904	5-Z37	03458	212320	-.922
5-14	01257	221131	-.8167	5-14	01257	221131	-.865	5-Z17	01348	212320	-.915
5-23	02357	132130	-.7938	5-23	02357	132130	-.820	5-13	01248	221311	-.684
5-11	02347	222220	-.6917	5-11	02347	222220	-.462	5-30	01468	121321	-.675
5-03	01245	322210	-.6578	5-01	01234	432100	-.455	5-22	01478	202321	-.592
5-27	01358	122230	-.6111	5-Z12	01356	222121	-.398	5-11	02347	222220	-.515
5-01	01234	432100	-.4762	5-03	01245	322210	-.394	5-03	01245	322210	-.513
5-Z37	03458	212320	-.4721	5-Z36	01247	222121	-.383	5-27	01358	122230	-.488
5-09	01246	231211	-.4712	5-04	01236	322111	-.365	5-26	02458	122311	-.458

5-Z17	01348	212320	-.4607	5-09	01246	231211	-.364	5-07	01267	310132	-.317
5-24	01357	131221	-.4435	5-06	01256	311221	-.352	5-06	01256	311221	-.280
5-06	01256	311221	-.4051	5-27	01358	122230	-.323	5-20	01568	211231	-.269
5-20	01568	211231	-.3872	5-24	01357	131221	-.322	5-09	01246	231211	-.265
5-35	02479	032140	-.3384	5-20	01568	211231	-.319	5-24	01357	131221	-.257
5-13	01248	221311	-.3030	5-29	01368	122131	-.230	5-01	01234	432100	-.036
5-30	01468	121321	-.2743	5-35	02479	032140	-.190	5-08	02346	232201	-.024
5-Z12	01356	222121	.0767	5-Z37	03458	212320	.029	5-Z38	01258	212221	-.021
5-Z36	01247	222121	.0826	5-Z17	01348	212320	.032	5-Z18	01457	212221	-.013
5-04	01236	322111	.1283	5-13	01248	221311	.033	5-34	02469	032221	.024
5-29	01368	122131	.1871	5-30	01468	121321	.098	5-35	02479	032140	.027
5-33	02468	040402	.2486	5-19	01367	212122	.112	5-02	01235	332110	.099
5-Z38	01258	212221	.2907	5-Z18	01457	212221	.167	5-23	02357	132130	.116
5-Z18	01457	212221	.2915	5-Z38	01258	212221	.171	5-28	02368	122212	.199
5-21	01458	202420	.3553	5-10	01346	223111	.174	5-16	01347	213211	.263
5-08	02346	232201	.7119	5-25	02358	123121	.232	5-32	01469	113221	.288
5-26	02458	122311	.7345	5-28	02368	122212	.620	5-05	01237	321121	.316
5-19	01367	212122	.7887	5-08	02346	232201	.657	5-14	01257	221131	.324
5-34	02469	032221	.8101	5-26	02458	122311	.723	5-04	01236	322111	.543
5-10	01346	223111	.8346	5-16	01347	213211	.725	5-Z36	01247	222121	.549
5-25	02358	123121	.8689	5-33	02468	040402	.752	5-29	01368	122131	.559
5-28	02368	122212	.9052	5-32	01469	113221	.769	5-Z12	01356	222121	.564
5-16	01347	213211	.9853	5-34	02469	032221	.855	5-10	01346	223111	.759
5-32	01469	113221	1.0100	5-21	01458	202420	.916	5-19	01367	212122	.759
5-22	01478	202321	1.0788	5-22	01478	202321	1.101	5-25	02358	123121	.770
5-31	01369	114112	2.2102	5-31	01369	114112	1.641	5-31	01369	114112	1.601

Table 6. Taxonomic families of trichords and tetrachords in Quinn (1997)

I. Diminished	[036], [0369]
II. Augmented	[048]
III. Whole-Tone	[024], [026], [0246], [0248], [0268]
IV. IC-1/6 Dominated	[016], [0126], [0127], [0156], [0157], [0167]
V. IC-4 Dominated	[037], [0145], [0347], [0148], [0158]
VI. All-Interval	[0136], [0137], [0146], [0236]
VII. Diatonic	[025], [027], [0247], [0257], [0358]
VIII. Chromatic	[012], [013], [0123], [0124]
IV/V.	[015]
V/VI.	[014], [0147]
V/VII.	[0237]
V/VI/VII.	[0125]
VI/VIII.	[0134]
VI/VII/VIII.	[0235]
VII/VIII.	[0258]
III/V/VI/VII/VIII.	[0135]

Table 7. Set-classes with near-zero coordinate values along two or more dimensions in ANGLE/RECREL configurations, 3x5 dataset

ANGLE			RECREL		
2 dims:					
3-03 [014]	4-05 [0126]	5-12 [01356]	3-04 [015]	4-12 [0236]	5-02 [01235]
3-06 [024]	4-11 [0135]	5-15 [01268]	3-06 [024]	4-13 [0136]	5-03 [01245]
3-10 [036]	4-12 [0236]	5-18 [01457]	3-08 [026]	4-17 [0347]	5-17 [01348]
3-11 [037]	4-16 [0157]	5-21 [01458]	3-12 [048]	4-18 [0147]	5-18 [01457]
3-12 [048]	4-17 [0347]	5-31 [01369]		4-21 [0246]	5-19 [01367]
	4-19 [0148]	5-33 [02468]		4-24 [0248]	5-22 [01478]
	4-21 [0246]	5-36 [01247]		4-25 [0268]	5-23 [02357]
	4-24 [0248]	5-38 [01258]		4-27 [0258]	5-27 [01358]
	4-27 [0258]				5-36 [01247]
	4-28 [0369]				5-37 [03458]
					5-38 [01258]
3 dims:					
3-04 [015]		5-03 [01245]		4-15 [0146]	5-11 [02347]
		5-07 [01267]		4-29 [0137]	5-12 [01356]
		5-17 [01348]			
		5-19 [01367]			
		5-22 [01478]			
		5-27 [01358]			
		5-37 [03458]			
4 dims:					
	4-15 [0146]	5-11 [02347]			
	4-29 [0137]				