Appendix I

Summary of localities and genera employed here in Raup and Crick (1979) similarity index

Tested Localities:

[**A**] Tinduf Basin (Western Sahara)
[**B**] Anti-Atlas (Morocco)
[**C**] Ougarta Chains (Aulacogen) South Algeria
[**D**] Western Pyrenees
[**E**] Spain - Catalunya
[**F**] Eastern Pyrenees - Aquitaine
[**G**] Armorican Massif
[**H**] Montagne Noire
[**I**] Southwestern Sardinia
[**J**] Prague Basin (Czech republic)
[**K**] Carnic Alps
[**L**] Suva Planina Mts. - Eastern Serbia
[**M**] Bistra Mts. - West Macedonia
[**N**] Uppony(i) Mts. (Northeast Hungary)
[**O**] Ukraine - (former Podolia) continental platform

Tested Genera

1 **Orthoceras**
2 **Michelinoceras** (**M**.) + (**Sph**.)
3 **Kopaninoceras**
4 **Plagiostomoceras**
5 **Mimogeisonoceras**
6 **Akrosphaerorthoceras**
7 **Kionoceras** + **Protokionoceras**
8 **Calorthoceras**
9 **Parakionoceras**
10 **Vericeras**
11 **Dawsonoceras** + **Dawsonocerina**
12 **Temperoceras**
13 **Cycloceras** + **Pseudocycloceras**
14 **Orthocycloceras**
15 **Protobactrites**
16 **Metaspyroceras**
17 **Spyroceras**
18 **Columenoceras**
19 **Arionoceras**
20 **Geisonoceras**
21 **Murchisoniceras**
22 **Sphooceras**
23 **Phragmoceras** + **Protophragmoceras**
24 **Jovellania**
25 **Oonoceras** + **Oncoceras**
26 **Harrisoceras**

Tested Localities (see above)															Tested Genera list per each locality
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Matrix Presence, 1/Lack, 0 of genera per each locality
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1) *Orthoceras*
1	1	0	0	0	0	0	1	1	1	1	0	0	1	1	2) *Michelinoceras (M.) + (Sph.)*
0	1	0	0	0	0	1	1	1	1	1	0	0	1	0	3) *Kopaninoceras*
0	0	0	1	0	0	0	0	1	1	1	0	1	0	0	4) *Plagiostomoceras*
0	0	0	0	0	1	1	1	1	1	1	0	0	1	1	5) *Mimogeisonoceras*
0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	6) *Akrosphaerorthoceras*
0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	7) *Kionoceras + Protokionoceras*
0	0	1	0	0	0	1	0	1	1	1	0	0	0	0	8) *Calorthoceras*
0	0	0	1	0	1	1	1	1	1	1	1	0	0	1	9) *Parakionoceras*
0	0	0	0	1	0	0	1	1	1	1	0	0	0	0	10) *Vericeras*
1	1	1	0	0	0	0	1	1	1	1	0	1	1	1	11) *Dawsonoceras + Dawsonocerina*

0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	12) *Temperoceras*
0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	13) *Cycloceras + Pseudocycloceras*
0	0	0	1	1	1	0	1	1	1	1	1	0	0	0	14) *Orthocycloceras*
0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	15) *Protobactrites*
0	0	0	1	0	0	0	1	1	1	1	0	0	0	1	16) *Metaspyroceras*
0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	17) *Spyroceras*
0	0	0	1	1	0	0	0	1	1	1	0	0	1	0	18) *Columenoceras*
1	1	0	1	0	0	1	1	1	1	1	0	0	0	0	19) *Arionoceras*
0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	20) *Geisonoceras*
0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	21) *Murchisoniceras*
0	0	0	0	0	0	0	1	1	1	1	0	0	0	1	22) *Sphooceras*
0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	23) *Phragmoceras + Protophragmoceras*
0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	24) *Jovellania*
0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	25) *Oonoceras + Oncoceras*
0	1	0	0	0	0	1	0	1	1	0	0	0	0	1	26) *Harrisoceras*

PROBABLISTIC FAUNAL SIMILARITY ANALYSIS

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Number of Taxa = 26

Number of Localities = 15

Number of Sampling Iterations = 1000

Seed for Random Number Generator = 12345

Results of Comparisons Between Empirical Observations and Monte Carlo Simulations

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	% Occur. of Locality	Total Localities Taxon		% Occur. In Total	Species
1	[**A**] Tinduf Basin	11.54	1	**Orthoceras**	6.67
2	[**B**] Anti-Atlas	19.23	2	**Michelinoceras**	53.33
3	[**C**] Ougarta Aulacogen	7.69	3	**Kopaninoceras**	46.67
4	[**D**] W Pyrenees	26.92	4	**Plagiostomoceras**	33.33
5	[**E**] Catalunya	15.38	5	**Mimogeisonoceras**	53.33
6	[**F**] E Pyrenees	15.38	6	**Akrosphaerthoceras**	20.00
7	[**G**] Armorican Massif	46.15	7	**Kionoceras**	33.33
8	[**H**] Montagne Noire	46.15	8	**Calorthoceras**	33.33
9	[**I**] SW Sardinia	84.62	9	**Parakionoceras**	60.00
10	[**J**] Prague Basin	96.15	10	**Vericeras**	33.33
11	[**K**] Carnic Alps	69.23	11	**Dawsonoceras**	66.67
12	[**L**] Suva Planina Mts.	7.69	12	**Temperoceras**	20.00
13	[**M**] Bistra Mts.	11.54	13	**Cycloceras**	13.33

14	[**N**] Uppony Mts.	23.08
15	[**O**] Ukraine	42.31

14	**Orthocycloceras**	53.33
15	**Protobactrites**	26.67
16	**Metaspyroceras**	40.00
17	**Spyroceras**	20.00
18	**Columenoceras**	40.00
19	**Arionoceras**	53.33
20	**Geisonoceras**	40.00
21	**Murchisoniceras**	20.00
22	**Sphooceras**	33.33
23	**Phragmoceras**	20.00
24	**Jovellania**	26.67
25	**Oonoceras**	26.67
26	**Harrisoceras**	33.33

Simulated Comparison Between [**A**] Tinduf Basin and [**B**] Anti-Atlas

Observed no. of taxa in common = 3*
Raup and Crick (1979) Faunal Similarity Index: .999

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	457	45.70	45.70	.23
1	444	44.40	90.10	.68
2	96	9.60	99.70	.95
3	3	.30	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**C**] Ougarta

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .871

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	750	75.00	75.00	.38
1	240	24.00	99.00	.87
2	10	1.00	100.00	1.00
3	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**D**] W Pyrenees

Observed no. of taxa in common = 1

Raup and Crick (1979) Faunal Similarity Index: .553

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	319	31.90	31.90	.16
1	467	46.70	78.60	.55
2	185	18.50	97.10	.88
3	29	2.90	100.00	.99
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**E**] Catalunya

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .261

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	520	52.00	52.00	.26
1	403	40.30	92.30	.72
2	74	7.40	99.70	.96
3	3	.30	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**F**] E Pyrenees

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .280

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	560	56.00	56.00	.28
1	375	37.50	93.50	.75
2	60	6.00	99.50	.97
3	5	.50	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**G**] Armorican Massif

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .283

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	107	10.70	10.70	.05

1	351	35.10	45.80	.28
2	417	41.70	87.50	.67
3	125	12.50	100.00	.94
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**H**] Montagne Noire

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .942

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	109	10.90	10.90	.05
1	376	37.60	48.50	.30
2	399	39.90	88.40	.69
3	116	11.60	100.00	.94
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**I**] SW Sardinia

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .641

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	20	2.00	2.00	.01
2	260	26.00	28.00	.15
3	720	72.00	100.00	.64
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**J**] Prague Basin

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .531

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	61	6.10	6.10	.03
3	939	93.90	100.00	.53
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**K**] Carnic Alps

Observed no. of taxa in common = 3

Raup and Crick (1979) Faunal Similarity Index: .781

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	8	.80	.80	0.00
1	107	10.70	11.50	.06
2	446	44.60	56.10	.34
3	439	43.90	100.00	.78
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .379

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	757	75.70	75.70	.38
1	230	23.00	98.70	.87
2	13	1.30	100.00	.99
3	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**M**] Bistra Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .790

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	612	61.20	61.20	.31
1	356	35.60	96.80	.79
2	31	3.10	99.90	.98
3	1	.10	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**N**] Uppony Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .902

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	365	36.50	36.50	.18
1	452	45.20	81.70	.59
2	170	17.00	98.70	.90
3	13	1.30	100.00	.99

4	0	.00	100.00	1.00

Simulated Comparison Between [**A**] Tinduf Basin and [**O**] Ukraine

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .692

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	122	12.20	12.20	.06
1	382	38.20	50.40	.31
2	374	37.40	87.80	.69
3	122	12.20	100.00	.94
4	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**C**] Ougarta

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .776

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	589	58.90	58.90	.29
1	373	37.30	96.20	.78
2	38	3.80	100.00	.98
3	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**D**] W Pyrenees

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .319

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	131	13.10	13.10	.07
1	376	37.60	50.70	.32
2	357	35.70	86.40	.69
3	117	11.70	98.10	.92
4	19	1.90	100.00	.99
5	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**E**] Catalunya

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .171

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	342	34.20	34.20	.17
1	481	48.10	82.30	.58
2	154	15.40	97.70	.90
3	23	2.30	100.00	.99
4	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**F**] E Pyrenees

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .171

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	342	34.20	34.20	.17
1	468	46.80	81.00	.58
2	172	17.20	98.20	.90
3	17	1.70	99.90	.99
4	1	.10	100.00	1.00
5	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**G**] Armorican Massif

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .634

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	11	1.10	1.10	.01
1	124	12.40	13.50	.07
2	330	33.00	46.50	.30
3	337	33.70	80.20	.63
4	173	17.30	97.50	.89
5	25	2.50	100.00	.99
6	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**H**] Montagne Noire

Observed no. of taxa in common = 4
Raup and Crick (1979) Faunal Similarity Index: .882

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	12	1.20	1.20	.01
1	99	9.90	11.10	.06
2	314	31.40	42.50	.27
3	363	36.30	78.80	.61

4	188	18.80	97.60	.88
5	24	2.40	100.00	.99
6	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**I**] SW Sardinia

Observed no. of taxa in common = 5
Raup and Crick (1979) Faunal Similarity Index: .727

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	2	.20	.20	0.00
3	71	7.10	7.30	.04
4	380	38.00	45.30	.26
5	547	54.70	100.00	.73
6	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**J**] Prague Basin

Observed no. of taxa in common = 5
Raup and Crick (1979) Faunal Similarity Index: .549

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	97	9.70	9.70	.05
5	903	90.30	100.00	.55
6	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**K**] Carnic Alps

Observed no. of taxa in common = 4
Raup and Crick (1979) Faunal Similarity Index: .586

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	4	.40	.40	0.00
2	89	8.90	9.30	.05
3	282	28.20	37.50	.23
4	422	42.20	79.70	.59
5	203	20.30	100.00	.90
6	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .303

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	606	60.60	60.60	.30
1	353	35.30	95.90	.78
2	41	4.10	100.00	.98
3	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**M**] Bistra Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .665

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	442	44.20	44.20	.22
1	446	44.60	88.80	.67
2	106	10.60	99.40	.94
3	6	.60	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**N**] Uppony Mts.

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .946

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	174	17.40	17.40	.09
1	420	42.00	59.40	.38
2	304	30.40	89.80	.75
3	95	9.50	99.30	.95
4	7	.70	100.00	1.00
5	0	.00	100.00	1.00

Simulated Comparison Between [**B**] Anti-Atlas and [**O**] Ukraine

Observed no. of taxa in common = **3**
Raup and Crick (1979) Faunal Similarity Index: **.712**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	20	2.00	2.00	.01
1	185	18.50	20.50	.11
2	348	34.80	55.30	.38
3	317	31.70	87.00	.71
4	115	11.50	98.50	.93
5	15	1.50	100.00	.99
6	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**D**] W Pyrenees

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .237

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	474	47.40	47.40	.24
1	455	45.50	92.90	.70
2	71	7.10	100.00	.96
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**E**] Catalunya

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .335

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	668	66.80	66.80	.33
1	304	30.40	97.20	.82
2	28	2.80	100.00	.99
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**F**] E Pyrenees

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .342

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	683	68.30	68.30	.34
1	291	29.10	97.40	.83
2	26	2.60	100.00	.99
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**G**] Armorican Massif

Observed no. of taxa in common = 1

Raup and Crick (1979) Faunal Similarity Index: .487

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	226	22.60	22.60	.11
1	521	52.10	74.70	.49
2	253	25.30	100.00	.87
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**H**] Montagne Noire

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .460

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	208	20.80	20.80	.10
1	503	50.30	71.10	.46
2	289	28.90	100.00	.86
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**I**] SW Sardinia

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .587

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	173	17.30	17.30	.09
2	827	82.70	100.00	.59
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**J**] Prague Basin

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .516

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	31	3.10	3.10	.02
2	969	96.90	100.00	.52
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**K**] Carnic Alps

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .715

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	48	4.80	4.80	.02
1	382	38.20	43.00	.24
2	570	57.00	100.00	.72
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .421

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	842	84.20	84.20	.42
1	154	15.40	99.60	.92
2	4	.40	100.00	1.00
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**M**] Bistra Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .876

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	760	76.00	76.00	.38
1	231	23.10	99.10	.88
2	9	.90	100.00	1.00
3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**N**] Uppony Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .719

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	490	49.00	49.00	.25
1	457	45.70	94.70	.72
2	53	5.30	100.00	.97

3	0	.00	100.00	1.00

Simulated Comparison Between [**C**] Ougarta and [**O**] Ukraine

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .530

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	279	27.90	27.90	.14
1	501	50.10	78.00	.53
2	220	22.00	100.00	.89
3	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**E**] Catalunya

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .789

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	181	18.10	18.10	.09
1	465	46.50	64.60	.41
2	285	28.50	93.10	.79
3	67	6.70	99.80	.96
4	2	.20	100.00	1.00
5	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**F**] E Pyrenees

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .777

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	199	19.90	19.90	.10
1	440	44.00	63.90	.42
2	276	27.60	91.50	.78
3	77	7.70	99.20	.95
4	8	.80	100.00	1.00
5	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**G**] Armorican Massif

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .101

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	1	.10	.10	0.00
1	31	3.10	3.20	.02
2	138	13.80	17.00	.10
3	272	27.20	44.20	.31
4	344	34.40	78.60	.61
5	172	17.20	95.80	.87
6	40	4.00	99.80	.98
7	2	.20	100.00	1.00
8	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**H**] Montagne Noire

Observed no. of taxa in common = 5
Raup and Crick (1979) Faunal Similarity Index: .859

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	1	.10	.10	0.00
1	29	2.90	3.00	.02
2	134	13.40	16.40	.10
3	272	27.20	43.60	.30
4	328	32.80	76.40	.60
5	190	19.00	95.40	.86
6	44	4.40	99.80	.98
7	2	.20	100.00	1.00
8	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**I**] SW Sardinia

Observed no. of taxa in common = 6
Raup and Crick (1979) Faunal Similarity Index: .363

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	1	.10	.10	0.00
4	14	1.40	1.50	.01
5	129	12.90	14.40	.08
6	437	43.70	58.10	.36
7	419	41.90	100.00	.79
8	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**J**] Prague Basin

Observed no. of taxa in common = 7
Raup and Crick (1979) Faunal Similarity Index: .570

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	138	13.80	13.80	.07
7	862	86.20	100.00	.57
8	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**K**] Carnic Alps

Observed no. of taxa in common = 7
Raup and Crick (1979) Faunal Similarity Index: .956

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	2	.20	.20	0.00
3	42	4.20	4.40	.02
4	166	16.60	21.00	.13
5	366	36.60	57.60	.39
6	334	33.40	91.00	.74
7	90	9.00	100.00	.96
8	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .957

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	454	45.40	45.40	.23
1	460	46.00	91.40	.68
2	86	8.60	100.00	.96
3	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**M**] Bistra Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .539

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	300	30.00	30.00	.15
1	476	47.60	77.60	.54
2	203	20.30	97.90	.88
3	21	2.10	100.00	.99
4	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**N**] Uppony Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .228

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	79	7.90	7.90	.04
1	296	29.60	37.50	.23
2	392	39.20	76.70	.57
3	188	18.80	95.50	.86
4	41	4.10	99.60	.98
5	4	.40	100.00	1.00
6	0	.00	100.00	1.00

Simulated Comparison Between [**D**] W Pyrenees and [**O**] Ukraine

Observed no. of taxa in common = **2**
Raup and Crick (1979) Faunal Similarity Index: **.131**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	5	.50	.50	0.00
1	34	3.40	3.90	.02
2	183	18.30	22.20	.13
3	328	32.80	55.00	.39
4	292	29.20	84.20	.70
5	140	14.00	98.20	.91
6	18	1.80	100.00	.99
7	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**F**] E Pyrenees

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .638

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	421	42.10	42.10	.21
1	434	43.40	85.50	.64

2	134	13.40	98.90	.92
3	11	1.10	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [G] Armorican Massif

Observed no. of taxa in common = 0**
Raup and Crick (1979) Faunal Similarity Index: .020

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	38	3.80	3.80	.02
1	228	22.80	26.60	.15
2	413	41.30	67.90	.47
3	272	27.20	95.10	.82
4	49	4.90	100.00	.98
5	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**H**] Montagne Noire

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .472

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	39	3.90	3.90	.02
1	226	22.60	26.50	.15
2	412	41.20	67.70	.47
3	272	27.20	94.90	.81
4	51	5.10	100.00	.98
5	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**I**] SW Sardinia

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .212

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	4	.40	.40	0.00
2	35	3.50	3.90	.02
3	345	34.50	38.40	.21
4	616	61.60	100.00	.69
5	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**J**] Prague Basin

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .028

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	55	5.50	5.50	.03
4	945	94.50	100.00	.53
5	0	.00	100.00	1.00
4	945	94.50	100.00	.53
5	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**K**] Carnic Alps

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .480

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	2	.20	.20	0.00
1	34	3.40	3.60	.02
2	207	20.70	24.30	.14
3	473	47.30	71.60	.48
4	284	28.40	100.00	.86
5	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .823

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	675	67.50	67.50	.34
1	296	29.60	97.10	.82
2	29	2.90	100.00	.99
3	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**M**] Bistra Mts.

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .261

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability

0	521	52.10	52.10	.26
1	404	40.40	92.50	.72
2	74	7.40	99.90	.96
3	1	.10	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**N**] Uppony Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .497

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	263	26.30	26.30	.13
1	467	46.70	73.00	.50
2	225	22.50	95.50	.84
3	43	4.30	99.80	.98
4	2	.20	100.00	1.00
5	0	.00	100.00	1.00

Simulated Comparison Between [**E**] Catalunya and [**O**] Ukraine

Observed no. of taxa in common = **0**
Raup and Crick (1979) Faunal Similarity Index: **.043**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	85	8.50	8.50	.04
1	255	25.50	34.00	.21
2	403	40.30	74.30	.54
3	231	23.10	97.40	.86
4	26	2.60	100.00	.99
5	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**G**] Armorican Massif

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .472

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	41	4.10	4.10	.02
1	218	21.80	25.90	.15
2	424	42.40	68.30	.47
3	257	25.70	94.00	.81
4	60	6.00	100.00	.97
5	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**H**] Montagne Noire

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .803

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	40	4.00	4.00	.02
1	220	22.00	26.00	.15
2	407	40.70	66.70	.46
3	272	27.20	93.90	.80
4	61	6.10	100.00	.97
5	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**I**] SW Sardinia

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .219

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	1	.10	.10	0.00
2	42	4.20	4.30	.02
3	351	35.10	39.40	.22
4	606	60.60	100.00	.70
5	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**J**] Prague Basin

Observed no. of taxa in common = 4
Raup and Crick (1979) Faunal Similarity Index: .538

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	74	7.40	7.40	.04
4	926	92.60	100.00	.54
5	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**K**] Carnic Alps

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .475

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	36	3.60	3.60	.02
2	216	21.60	25.20	.14
3	445	44.50	69.70	.47
4	303	30.30	100.00	.85
5	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 2*
Raup and Crick (1979) Faunal Similarity Index: .989

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	677	67.70	67.70	.34
1	300	30.00	97.70	.83
2	23	2.30	100.00	.99
3	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**M**] Bistra Mts.

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .269

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	537	53.70	53.70	.27
1	387	38.70	92.40	.73
2	76	7.60	100.00	.96
3	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**N**] Uppony Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .485

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	263	26.30	26.30	.13
1	443	44.30	70.60	.49
2	242	24.20	94.80	.83
3	50	5.00	99.80	.97
4	2	.20	100.00	1.00
5	0	.00	100.00	1.00

Simulated Comparison Between [**F**] E Pyrenees and [**O**] Ukraine

Observed no. of taxa in common = **2**
Raup and Crick (1979) Faunal Similarity Index: **.529**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	57	5.70	5.70	.03
1	265	26.50	32.20	.19
2	412	41.20	73.40	.53
3	226	22.60	96.00	.85
4	40	4.00	100.00	.98
5	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**H**] Montagne Noire

Observed no. of taxa in common = 5
Raup and Crick (1979) Faunal Similarity Index: .209

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	1	.10	.10	0.00
2	1	.10	.20	0.00
3	13	1.30	1.50	.01
4	78	7.80	9.30	.05
5	231	23.10	32.40	.21
6	314	31.40	63.80	.48
7	224	22.40	86.20	.75
8	107	10.70	96.90	.92
9	27	2.70	99.60	.98
10	4	.40	100.00	1.00
11	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**I**] Sardinia

Observed no. of taxa in common = 11
Raup and Crick (1979) Faunal Similarity Index: .603

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00

7	0	.00	.00	.00
8	8	.80	.80	0.00
9	95	9.50	10.30	.06
10	285	28.50	38.80	.25
11	429	42.90	81.70	.60
12	183	18.30	100.00	.91
13	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**J**] Prague Basin

Observed no. of taxa in common = 12
Raup and Crick (1979) Faunal Similarity Index: .635

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	0	.00	.00	.00
8	0	.00	.00	.00
9	0	.00	.00	.00
10	0	.00	.00	.00
11	269	26.90	26.90	.14
12	731	73.10	100.00	.63
13	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**K**] Carnic Alps

Observed no. of taxa in common = 7
Raup and Crick (1979) Faunal Similarity Index: .053

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	1	.10	.10	0.00
6	13	1.30	1.40	.01
7	77	7.70	9.10	.05
8	234	23.40	32.50	.21
9	321	32.10	64.60	.49
10	272	27.20	91.80	.78
11	73	7.30	99.10	.95
12	9	.90	100.00	1.00
13	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .470

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	191	19.10	19.10	.10
1	556	55.60	74.70	.47
2	253	25.30	100.00	.87
3	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**M**] Bistra Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .283

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	108	10.80	10.80	.05
1	349	34.90	45.70	.28
2	405	40.50	86.20	.66
3	138	13.80	100.00	.93
4	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**N**] Uppony Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .168

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	3	.30	.30	0.00
1	51	5.10	5.40	.03
2	226	22.60	28.00	.17
3	362	36.20	64.20	.46
4	270	27.00	91.20	.78
5	86	8.60	99.80	.96
6	2	.20	100.00	1.00
7	0	.00	100.00	1.00

Simulated Comparison Between [**G**] Armorican Massif and [**O**] Ukraine

Observed no. of taxa in common = **5**
Raup and Crick (1979) Faunal Similarity Index: **.309**

Simulation Probability Table

		%	%	Median

Kexp	Freq.	Freq.	Cum. Freq.	Probability
0	1	.10	.10	0.00
1	1	.10	.20	0.00
2	6	.60	.80	.01
3	32	3.20	4.00	.02
4	124	12.40	16.40	.10
5	289	28.90	45.30	.31
6	278	27.80	73.10	.59
7	206	20.60	93.70	.83
8	55	5.50	99.20	.96
9	7	.70	99.90	1.00
10	1	.10	100.00	1.00
11	0	.00	100.00	1.00

Simulated Comparison Between [**H**] Montagne Noire and [**I**] SW Sardinia

Observed no. of taxa in common = 11
Raup and Crick (1979) Faunal Similarity Index: .625

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	0	.00	.00	.00
8	10	1.00	1.00	.01
9	87	8.70	9.70	.05
10	321	32.10	41.80	.26
11	413	41.30	83.10	.63
12	169	16.90	100.00	.92
13	0	.00	100.00	1.00

Simulated Comparison Between [**H**] Montagne Noire and [**J**] Prague Basin

Observed no. of taxa in common = 12
Raup and Crick (1979) Faunal Similarity Index: .629

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	0	.00	.00	.00
8	0	.00	.00	.00

9	0	.00	.00	.00
10	0	.00	.00	.00
11	258	25.80	25.80	.13
12	742	74.20	100.00	.63
13	0	.00	100.00	1.00

Simulated Comparison Between [**H**] Montagne Noire and [**K**] Carnic Alps

Observed no. of taxa in common = 12*
Raup and Crick (1979) Faunal Similarity Index: .997

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	3	.30	.30	0.00
6	12	1.20	1.50	.01
7	86	8.60	10.10	.06
8	231	23.10	33.20	.22
9	322	32.20	65.40	.49
10	237	23.70	89.10	.77
11	101	10.10	99.20	.94
12	8	.80	100.00	1.00
13	0	.00	100.00	1.00

Simulated Comparison Between [**H**] Montagne Noire and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .859

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	209	20.90	20.90	.10
1	509	50.90	71.80	.46
2	282	28.20	100.00	.86
3	0	.00	100.00	1.00

Simulated Comparison Between [**H**] Montagne Noire and [**M**] Bistra Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .688

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	100	10.00	10.00	.05
1	387	38.70	48.70	.29

2	402	40.20	88.90	.69
3	111	11.10	100.00	.94
4	0	.00	100.00	1.00

Simulated Comparison Between [**H**] Montagne Noire and [**N**] Uppony Mts.

Observed no. of taxa in common = 4
Raup and Crick (1979) Faunal Similarity Index: .776

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	4	.40	.40	0.00
1	52	5.20	5.60	.03
2	204	20.40	26.00	.16
3	386	38.60	64.60	.45
4	260	26.00	90.60	.78
5	83	8.30	98.90	.95
6	11	1.10	100.00	1.00
7	0	.00	100.00	1.00

Simulated Comparison Between [**H**] Montagne Noire and [**O**] Ukraine

Observed no. of taxa in common = **6**
Raup and Crick (1979) Faunal Similarity Index: **.619**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	11	1.10	1.10	.01
3	48	4.80	5.90	.04
4	118	11.80	17.70	.12
5	290	29.00	46.70	.32
6	304	30.40	77.10	.62
7	156	15.60	92.70	.85
8	62	6.20	98.90	.96
9	10	1.00	99.90	.99
10	1	.10	100.00	1.00
11	0	.00	100.00	1.00

Simulated Comparison Between [**I**] SW Sardinia and [**J**] Prague Basin

Observed no. of taxa in common = 22
Raup and Crick (1979) Faunal Similarity Index: .803

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00

2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	0	.00	.00	.00
8	0	.00	.00	.00
9	0	.00	.00	.00
10	0	.00	.00	.00
11	0	.00	.00	.00
12	0	.00	.00	.00
13	0	.00	.00	.00
14	0	.00	.00	.00
15	0	.00	.00	.00
16	0	.00	.00	.00
17	0	.00	.00	.00
18	0	.00	.00	.00
19	0	.00	.00	.00
20	0	.00	.00	.00
21	604	60.40	60.40	.30
22	396	39.60	100.00	.80
23	0	.00	100.00	1.00

Simulated Comparison Between [**I**] SW Sardinia and [**K**] Carnic Alps

Observed no. of taxa in common = 16
Raup and Crick (1979) Faunal Similarity Index: .576

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	0	.00	.00	.00
8	0	.00	.00	.00
9	0	.00	.00	.00
10	0	.00	.00	.00
11	0	.00	.00	.00
12	0	.00	.00	.00
13	0	.00	.00	.00
14	66	6.60	6.60	.03
15	296	29.60	36.20	.21
16	426	42.60	78.80	.58
17	187	18.70	97.50	.88
18	25	2.50	100.00	.99
19	0	.00	100.00	1.00

Simulated Comparison Between [**I**] SW Sardinia and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .604

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	11	1.10	1.10	.01
1	197	19.70	20.80	.11
2	792	79.20	100.00	.60
3	0	.00	100.00	1.00

Simulated Comparison Between [**I**] SW Sardinia and [**M**] Bistra Mts.

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .651

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	1	.10	.10	0.00
1	25	2.50	2.60	.01
2	275	27.50	30.10	.16
3	699	69.90	100.00	.65
4	0	.00	100.00	1.00

Simulated Comparison Between [**I**] SW Sardinia and [**N**] Uppony Mts.
Observed no. of taxa in common = 6
Raup and Crick (1979) Faunal Similarity Index: .766

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	8	.80	.80	0.00
4	101	10.10	10.90	.06
5	422	42.20	53.10	.32
6	469	46.90	100.00	.77
7	0	.00	100.00	1.00

Simulated Comparison Between [**I**] SW Sardinia and [**O**] Ukraine

Observed no. of taxa in common = **11**
Raup and Crick (1979) Faunal Similarity Index: **.892**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00

4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	5	.50	.50	0.00
8	72	7.20	7.70	.04
9	308	30.80	38.50	.23
10	398	39.80	78.30	.58
11	217	21.70	100.00	.89
12	0	.00	100.00	1.00

Simulated Comparison Between [**J**] Prague Basin and [**K**] Carnic Alps

Observed no. of taxa in common = 18
Raup and Crick (1979) Faunal Similarity Index: .712

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	0	.00	.00	.00
8	0	.00	.00	.00
9	0	.00	.00	.00
10	0	.00	.00	.00
11	0	.00	.00	.00
12	0	.00	.00	.00
13	0	.00	.00	.00
14	0	.00	.00	.00
15	0	.00	.00	.00
16	0	.00	.00	.00
17	424	42.40	42.40	.21
18	576	57.60	100.00	.71
19	0	.00	100.00	1.00

Simulated Comparison Between [**J**] Prague Basin and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .521

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	41	4.10	4.10	.02
2	959	95.90	100.00	.52
3	0	.00	100.00	1.00

Simulated Comparison Between [**J**] Prague Basin and [**M**] Bistra Mts.

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .530

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	58	5.80	5.80	.03
3	942	94.20	100.00	.53
4	0	.00	100.00	1.00

Simulated Comparison Between [**J**] Prague Basin and [**N**] Uppony Mts.

Observed no. of taxa in common = 6
Raup and Crick (1979) Faunal Similarity Index: .565

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	129	12.90	12.90	.06
6	871	87.10	100.00	.56
7	0	.00	100.00	1.00

Simulated Comparison Between [**J**] Prague Basin and [**O**] Ukraine

Observed no. of taxa in common = **11**
Raup and Crick (1979) Faunal Similarity Index: **.609**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	0	.00	.00	.00
6	0	.00	.00	.00
7	0	.00	.00	.00
8	0	.00	.00	.00
9	0	.00	.00	.00
10	216	21.60	21.60	.11
11	784	78.40	100.00	.61
12	0	.00	100.00	1.00

Simulated Comparison Between [**K**] Carnic Alps and [**L**] Suva Planina Mts.

Observed no. of taxa in common = 2
Raup and Crick (1979) Faunal Similarity Index: .711

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	50	5.00	5.00	.03
1	371	37.10	42.10	.24
2	579	57.90	100.00	.71
3	0	.00	100.00	1.00

Simulated Comparison Between [**K**] Carnic Alps and [**M**] Bistra Mts.

Observed no. of taxa in common = 3
Raup and Crick (1979) Faunal Similarity Index: .789

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	11	1.10	1.10	.01
1	128	12.80	13.90	.08
2	439	43.90	57.80	.36
3	422	42.20	100.00	.79
4	0	.00	100.00	1.00

Simulated Comparison Between [**K**] Carnic Alps and [**N**] Uppony Mts.

Observed no. of taxa in common = 6
Raup and Crick (1979) Faunal Similarity Index: .921

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	0	.00	.00	.00
1	1	.10	.10	0.00
2	20	2.00	2.10	.01
3	108	10.80	12.90	.08
4	333	33.30	46.20	.30
5	379	37.90	84.10	.65
6	159	15.90	100.00	.92
7	0	.00	100.00	1.00

Simulated Comparison Between [**K**] Carnic Alps and [**O**] Ukraine
Observed no. of taxa in common = **7**
Raup and Crick (1979) Faunal Similarity Index: **.149**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability

0	0	.00	.00	.00
1	0	.00	.00	.00
2	0	.00	.00	.00
3	0	.00	.00	.00
4	0	.00	.00	.00
5	4	.40	.40	0.00
6	46	4.60	5.00	.03
7	197	19.70	24.70	.15
8	341	34.10	58.80	.42
9	295	29.50	88.30	.74
10	108	10.80	99.10	.94
11	9	.90	100.00	1.00
12	0	.00	100.00	1.00

Simulated Comparison Between [**L**] Suva Planina MTS. and [**M**] Bistra Mts.

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .370

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	740	74.00	74.00	.37
1	244	24.40	98.40	.86
2	16	1.60	100.00	.99
3	0	.00	100.00	1.00

Simulated Comparison Between [**L**] Suva Planina Mts. and [**N**] Uppony Mts.

Observed no. of taxa in common = 0
Raup and Crick (1979) Faunal Similarity Index: .261

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	521	52.10	52.10	.26
1	413	41.30	93.40	.73
2	66	6.60	100.00	.97
3	0	.00	100.00	1.00

Simulated Comparison Between [**L**] Suva Planina Mts. and [**O**] Ukraine

Observed no. of taxa in common = **1**
Raup and Crick (1979) Faunal Similarity Index: **.520**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	256	25.60	25.60	.13
1	527	52.70	78.30	.52
2	217	21.70	100.00	.89
3	0	.00	100.00	1.00

Simulated Comparison Between [**M**] Bistra Mts. and [**N**] Uppony Mts.

Observed no. of taxa in common = 1
Raup and Crick (1979) Faunal Similarity Index: .621

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	402	40.20	40.20	.20
1	436	43.60	83.80	.62
2	151	15.10	98.90	.91
3	11	1.10	100.00	1.00
4	0	.00	100.00	1.00

Simulated Comparison Between [**M**] Bistra Mts. and [**O**] Ukraine

Observed no. of taxa in common = **1**
Raup and Crick (1979) Faunal Similarity Index: **.322**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	117	11.70	11.70	.06
1	409	40.90	52.60	.32
2	367	36.70	89.30	.71
3	107	10.70	100.00	.95
4	0	.00	100.00	1.00

Simulated Comparison Between [**N**] Uppony Mts. and [**O**] Ukraine

Observed no. of taxa in common = **4**
Raup and Crick (1979) Faunal Similarity Index: **.823**

Simulation Probability Table

Kexp	Freq.	% Freq.	% Cum. Freq.	Median Probability
0	9	.90	.90	0.00
1	87	8.70	9.60	.05
2	267	26.70	36.30	.23
3	351	35.10	71.40	.54
4	217	21.70	93.10	.82
5	63	6.30	99.40	.96
6	6	.60	100.00	1.00
7	0	.00	100.00	1.00

Summary Data Matrices

==========

Matrix of No. of Taxa in Common Between Localities

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	3	3	1	1	0	0	1	3	3	3	3	0	1	2	2
2	3	5	1	1	0	0	3	4	5	5	4	0	1	3	3
3	1	1	2	0	0	0	1	1	2	2	2	0	1	1	1
4	1	1	0	7	2	2	2	5	6	7	7	2	1	1	2
5	0	0	0	2	4	1	0	2	3	3	3	1	0	1	0
6	0	0	0	2	1	4	2	3	3	4	3	2	0	1	2
7	1	3	1	2	0	2	12	5	11	12	7	1	1	2	5
8	3	4	1	5	2	3	5	12	11	12	12	2	2	4	6
9	3	5	2	6	3	3	11	11	22	22	16	2	3	6	11
10	3	5	2	7	3	4	12	12	22	25	18	2	3	6	11
11	3	4	2	7	3	3	7	12	16	18	18	2	3	6	7
12	0	0	0	2	1	2	1	2	2	2	2	2	0	0	1
13	1	1	1	1	0	0	1	2	3	3	3	0	3	1	1
14	2	3	1	1	1	1	2	4	6	6	6	0	1	6	4
15	2	3	1	2	0	2	5	6	11	11	7	1	1	4	11

Summary of Faunal Simulations

==========

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .487
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .460
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .470

Average Faunal Index = .472 Standard Deviation = .014

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [2 & 12]

as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [2 & 12]
as well as the same number of taxa in common [1].

1 [**C**] Ougarta [3] [**G**] Armorican Massif [7] Est. faunal index = .472
2 [**C**] Ougarta [3] [**H**] Montagne Noire [8] Est. faunal index = .472
3 [**G**] Armorican Massif [7] [**L**] Suva Planina Mts.[12] Est. faunal index = .472

Average Faunal Index = .472 Standard Deviation = NaN

The following comparisons contain equivalent occurrence structures [4 & 18]
as well as the same number of taxa in common [3].

1 [**E**] Catalunya [5] [**K**] Carnic Alps [11] Est. faunal index = .480
2 [**F**] E Pyrenees [6] [**K**] Carnic Alps [11] Est. faunal index = .475

Average Faunal Index = .477 Standard Deviation = .004

The following comparisons contain equivalent occurrence structures [4 & 18]
as well as the same number of taxa in common [3].

1 [**E**] Catalunya [5] [**K**] Carnic Alps [11] Est. faunal index = .477
2 [**F**] E Pyrenees [6] [**K**] Carnic Alps [11] Est. faunal index = .477

Average Faunal Index = .477 Standard Deviation = .000

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1 [**E**] Catalunya [5] [**K**] Carnic Alps [11] Est. faunal index = .477
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Average Faunal Index = .477 Standard Deviation = .000

The following comparisons contain equivalent occurrence structures [4 & 18]
as well as the same number of taxa in common [3].

1 [**E**] Catalunya [5] [**K**] Carnic Alps [11] Est. faunal index = .477
2 [**F**] E Pyrenees [6] [**K**] Carnic Alps [11] Est. faunal index = .477

Average Faunal Index = .477 Standard Deviation = .000

The following comparisons contain equivalent occurrence structures [12 & 22]
as well as the same number of taxa in common [11].

1 [**G**] Armorican Massif [7] [**I**] Sardinia [9] Est. faunal index = .603
2 [**H**] Montagne Noire [8] [**I**] Sardinia [9] Est. faunal index = .625

Average Faunal Index = .614 Standard Deviation = .016

The following comparisons contain equivalent occurrence structures [12 & 25]
as well as the same number of taxa in common [12].

1 [**G**] Armorican Massif [7] [**J**] Prague Basin [10] Est. faunal index = .635
2 [**H**] Montagne Noire [8] [**J**] Prague Basin [10] Est. faunal index = .629

Average Faunal Index = .632 Standard Deviation = .004

Summary Matrix of Raup and Crick (1979) Faunal Similarity Values

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
1	1.000	.999	.871	.553	.261	.280	.283	.942	.641	.531	.781	.379	.790	.902	.692
2	.999	1.000	.776	.319	.171	.171	.634	.882	.727	.549	.586	.303	.665	.946	.712
3	.871	.776	1.000	.237	.335	.342	.472	.472	.587	.516	.715	.421	.876	.719	.530
4	.553	.319	.237	1.000	.789	.777	.101	.859	.363	.570	.956	.957	.539	.228	.131
5	.261	.171	.335	.789	1.000	.638	.020	472	.212	.028	.477	.823	.261	.497	.043
6	.280	.171	.342	.377	.638	1.000	.472	.303	.219	.538	.477	.089	.269	.485	.529
7	.283	.634	.472	.101	.020	.472	1.000	.209	.614	.632	.053	.472	.283	.168	.309
8	.942	.882	.472	.859	.472	.803	.209	1.000	.614	.632	.997	.859	.688	.776	.619
9	.641	.727	.587	.363	.212	.219	.614	.614	1.000	.803	.576	.604	.651	.766	.892
10	.531	.549	.516	.570	.028	.538	.632	.632	.803	1.000	.712	.521	.530	.565	.609
11	.781	.586	.415	.956	.477	.477	.053	.997	.576	.712	1.000	.711	.789	.921	.149
12	.379	.303	.421	.957	.823	.989	.472	.859	.604	.521	.711	1.000	.370	.261	.520
13	.790	.665	.876	.539	.261	.269	.283	.688	.651	.530	.789	.370	1.000	.621	.322
14	.902	.946	.719	.228	.497	.485	.168	.776	.766	.565	.921	.261	.621	1.000	.823
15	692	.712	.530	.131	.043	.529	.309	.619	.892	.409	.149	.520	.322	.823	1.000