

Supplementary Material (B) - Testing the Circumplex Structure of the Soundscape Survey

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1. Setup

2. Calculate the SEM fit score

	Language	Model Type	Score	passing
33	ita	Equal comm.	5	Pass
5	arb	Equal comm.	5	Pass
45	nld	Equal comm.	5	Pass
41	kor	Equal comm.	5	Pass
65	vie	Equal comm.	5	Pass
17	ell	Equal comm.	5	Pass
9	cmn	Equal comm.	5	Pass
25	hrv	Equal comm.	4	Tentative
29	ind	Equal comm.	4	Tentative
13	deu	Equal comm.	4	Tentative
53	spa	Equal comm.	4	Tentative
57	swe	Equal comm.	4	Tentative
61	tur	Equal comm.	4	Tentative
1	eng	Equal comm.	4	Tentative
21	fra	Equal comm.	3	Fail
49	por	Equal comm.	3	Fail

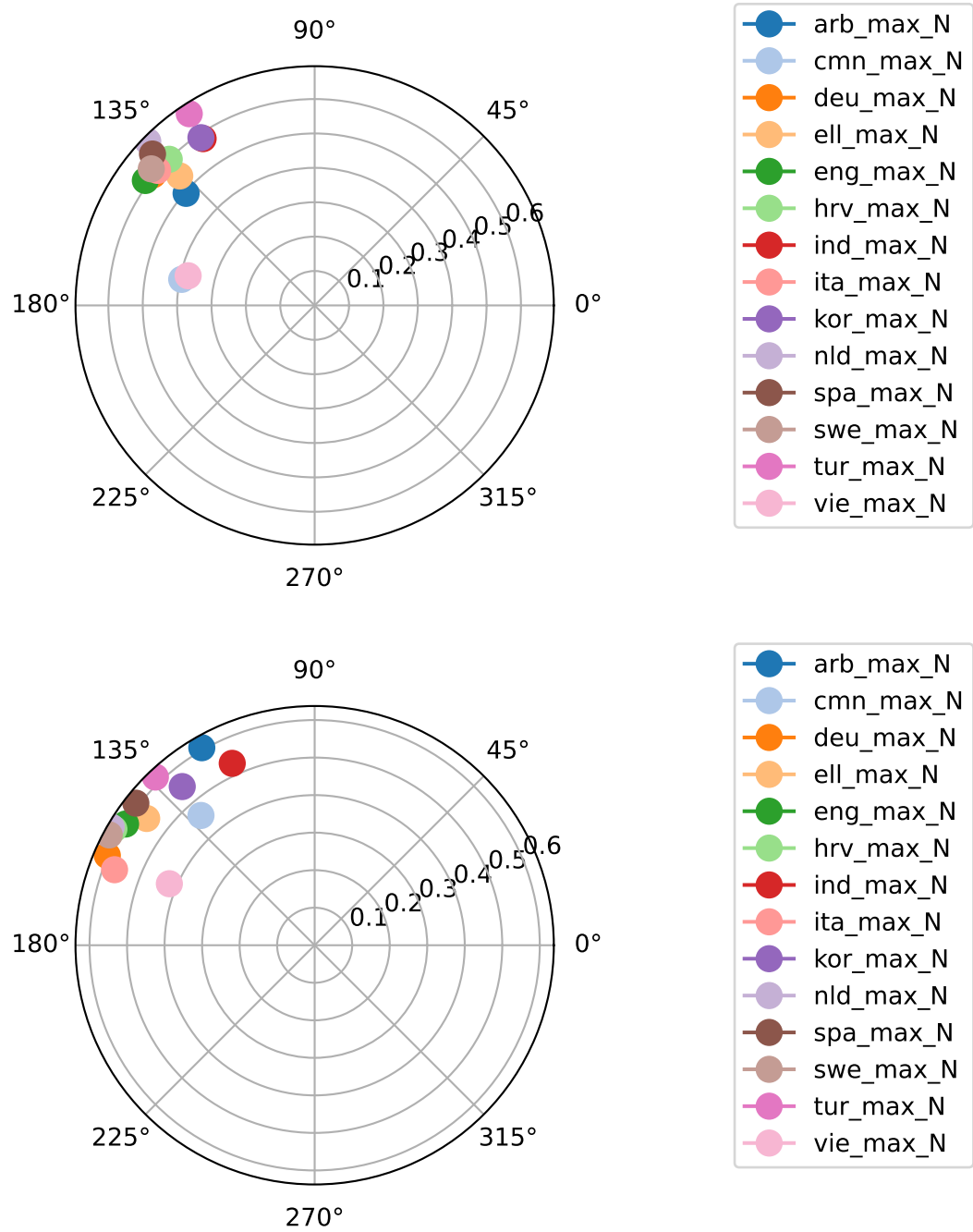
*Corresponding author

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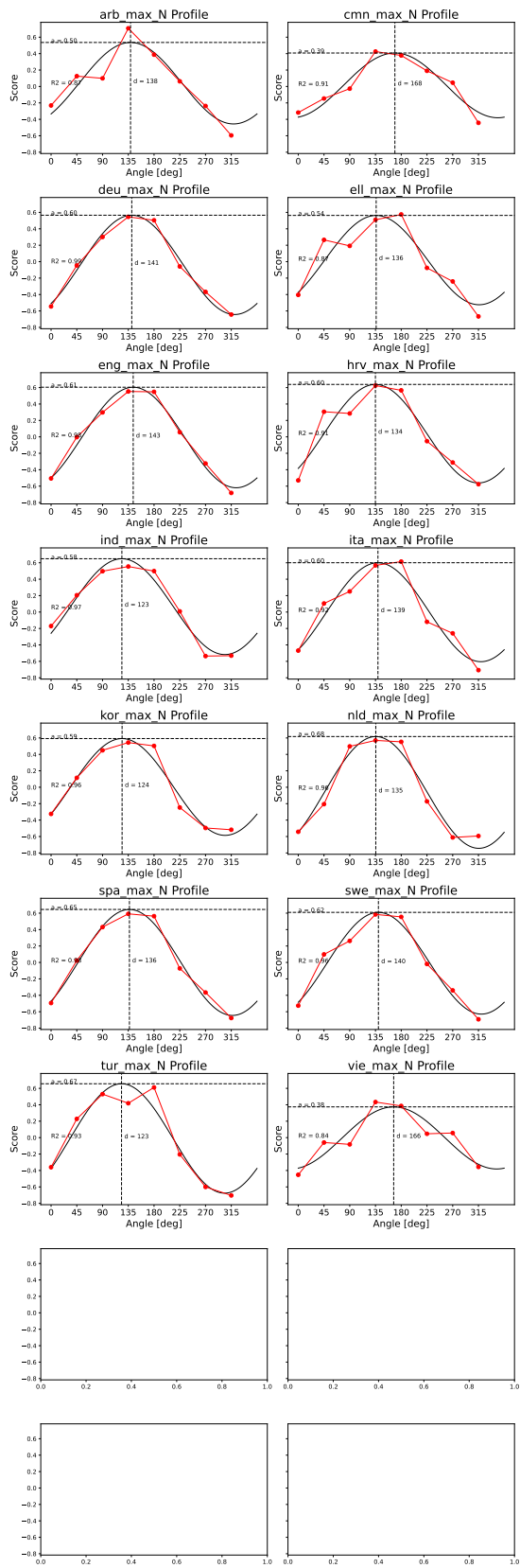
	Language	Model Type	Score	passing
37	jpn	Equal comm.	2	Fail

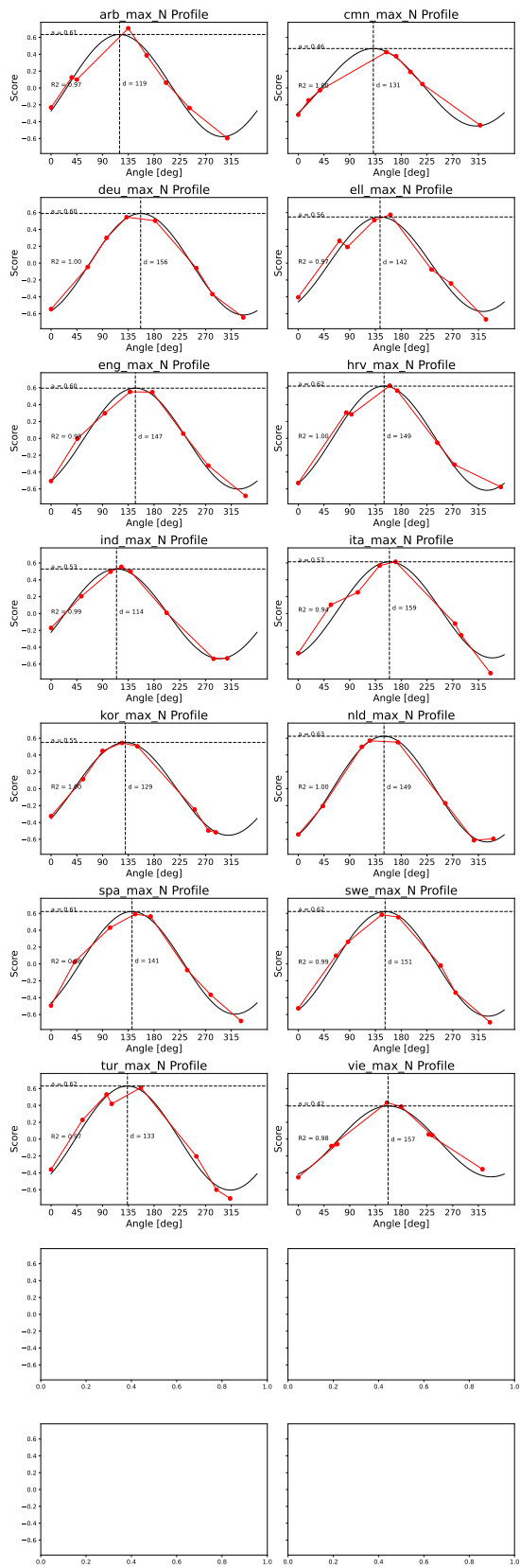
3. Structural Summary Method Analysis

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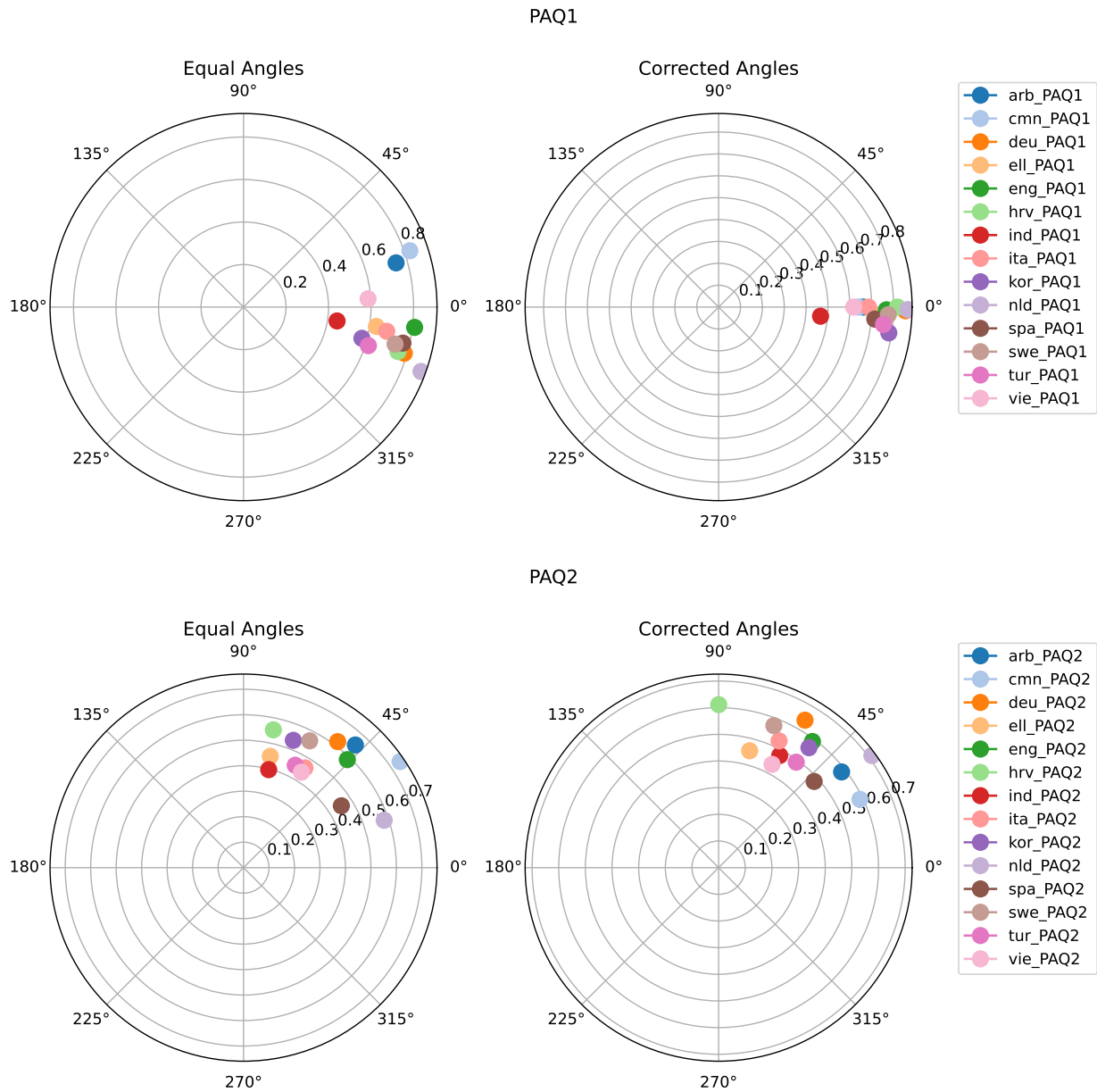


	label	group	measure	elevation	xval	yval	amplitude	displacement	r2	PAQ1
0	arb_max_N	arb	max_N	0.039877	-0.373980	0.325830	0.496010	138.935974	0.868454	0.0
14	arb_max_N	arb	max_N	0.028652	-0.300776	0.526289	0.606173	119.748102	0.973883	0.0
1	cmn_max_N	cmn	max_N	0.013304	-0.386767	0.075731	0.394111	168.921404	0.914363	0.0
15	cmn_max_N	cmn	max_N	0.008257	-0.302994	0.345729	0.459710	131.231028	0.997280	0.0
2	deu_max_N	deu	max_N	-0.038871	-0.470273	0.379643	0.604388	141.086697	0.985716	0.0
16	deu_max_N	deu	max_N	-0.012336	-0.552609	0.239104	0.602119	156.602687	0.997791	0.0
3	ell_max_N	ell	max_N	0.019303	-0.392457	0.376413	0.543792	136.195463	0.865822	0.0
17	ell_max_N	ell	max_N	-0.012408	-0.447707	0.337784	0.560838	142.966368	0.965840	0.0
4	eng_max_N	eng	max_N	-0.007631	-0.492460	0.363272	0.611951	143.584998	0.982702	0.0
18	eng_max_N	eng	max_N	-0.002989	-0.503990	0.322928	0.598572	147.350541	0.980108	0.0
5	hrv_max_N	hrv	max_N	0.038885	-0.423038	0.424883	0.599572	134.875379	0.906281	0.0
19	hrv_max_N	hrv	max_N	0.001776	-0.535124	0.309361	0.618112	149.967353	0.995544	0.0
6	ind_max_N	ind	max_N	0.065714	-0.324460	0.484945	0.583478	123.785093	0.966319	0.0
20	ind_max_N	ind	max_N	-0.003039	-0.219705	0.484667	0.532140	114.385256	0.994985	0.0
21	ita_max_N	ita	max_N	0.043825	-0.533336	0.201253	0.570044	159.326103	0.944581	0.0
7	ita_max_N	ita	max_N	-0.001906	-0.456831	0.392617	0.602364	139.323087	0.920940	0.0
8	kor_max_N	kor	max_N	0.003372	-0.330771	0.487729	0.589312	124.144557	0.962188	0.0
22	kor_max_N	kor	max_N	-0.001199	-0.352948	0.422768	0.550731	129.856771	0.995467	0.0
23	nld_max_N	nld	max_N	-0.004002	-0.542282	0.314914	0.627089	149.855424	0.998637	0.0
9	nld_max_N	nld	max_N	-0.063067	-0.485426	0.476910	0.680501	135.507011	0.955705	0.0
24	spa_max_N	spa	max_N	0.013359	-0.476590	0.378525	0.608621	141.542150	0.979561	0.0
10	spa_max_N	spa	max_N	-0.000127	-0.471657	0.440156	0.645134	136.978653	0.982702	0.0
25	swe_max_N	swe	max_N	0.001115	-0.547474	0.293851	0.621350	151.775732	0.991721	0.0
11	swe_max_N	swe	max_N	-0.009718	-0.475225	0.397112	0.619303	140.116863	0.959252	0.0
26	tur_max_N	tur	max_N	0.012860	-0.424515	0.448116	0.617269	133.450768	0.971465	0.0
12	tur_max_N	tur	max_N	-0.010102	-0.364721	0.557398	0.666119	123.197809	0.930390	0.0
13	vie_max_N	vie	max_N	-0.003637	-0.367998	0.086214	0.377963	166.814604	0.835385	0.0
27	vie_max_N	vie	max_N	-0.027039	-0.387283	0.163897	0.420536	157.062077	0.978702	0.0

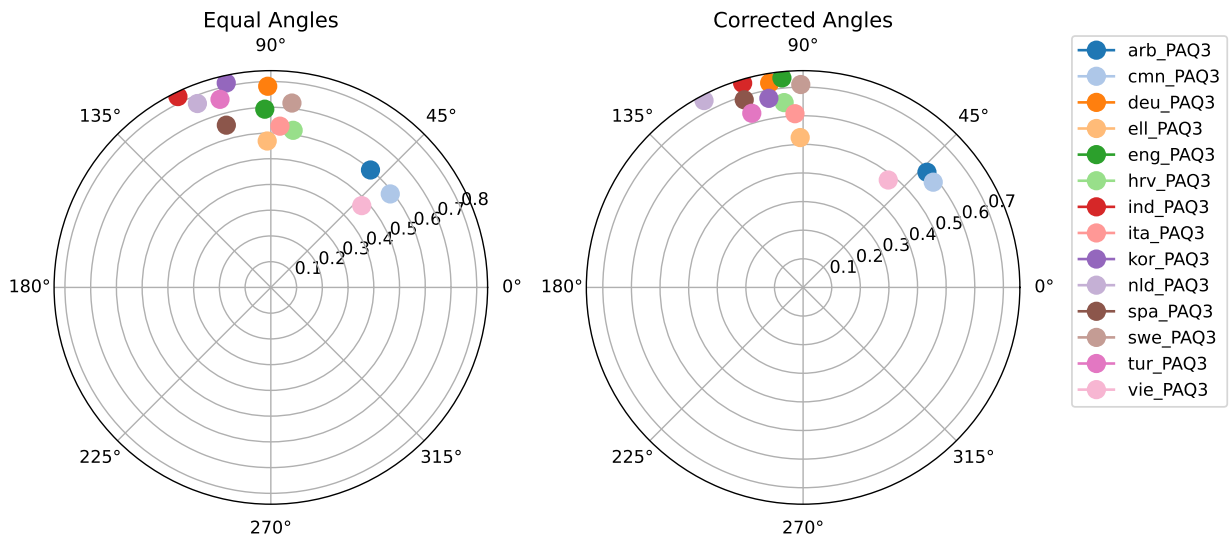




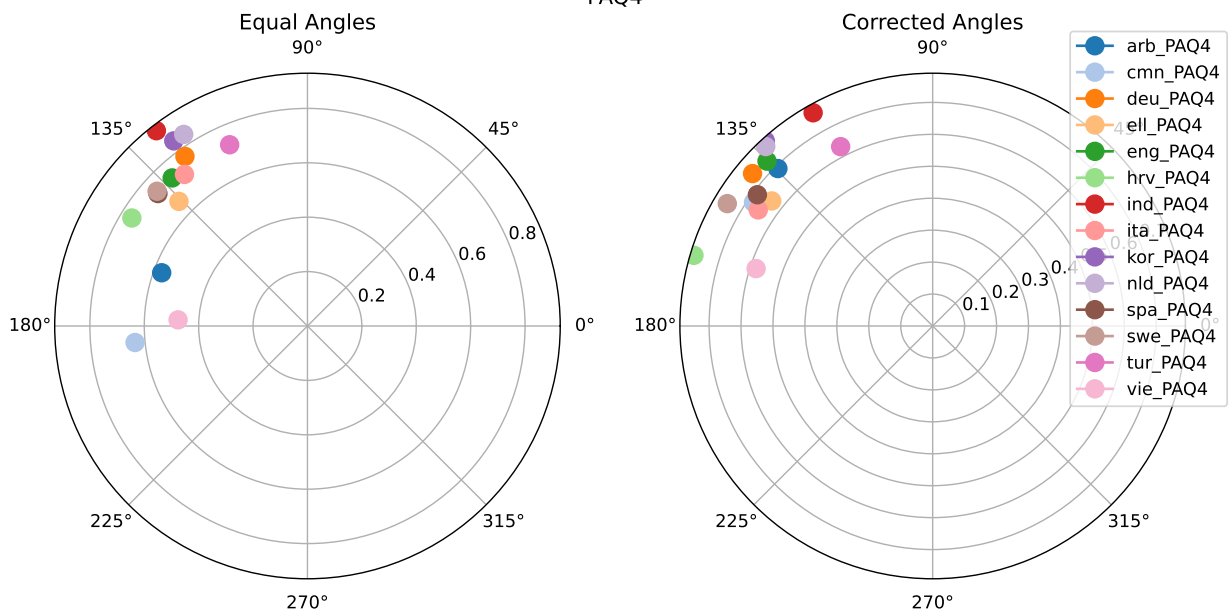
4. Placing circumplex items in the circumplex

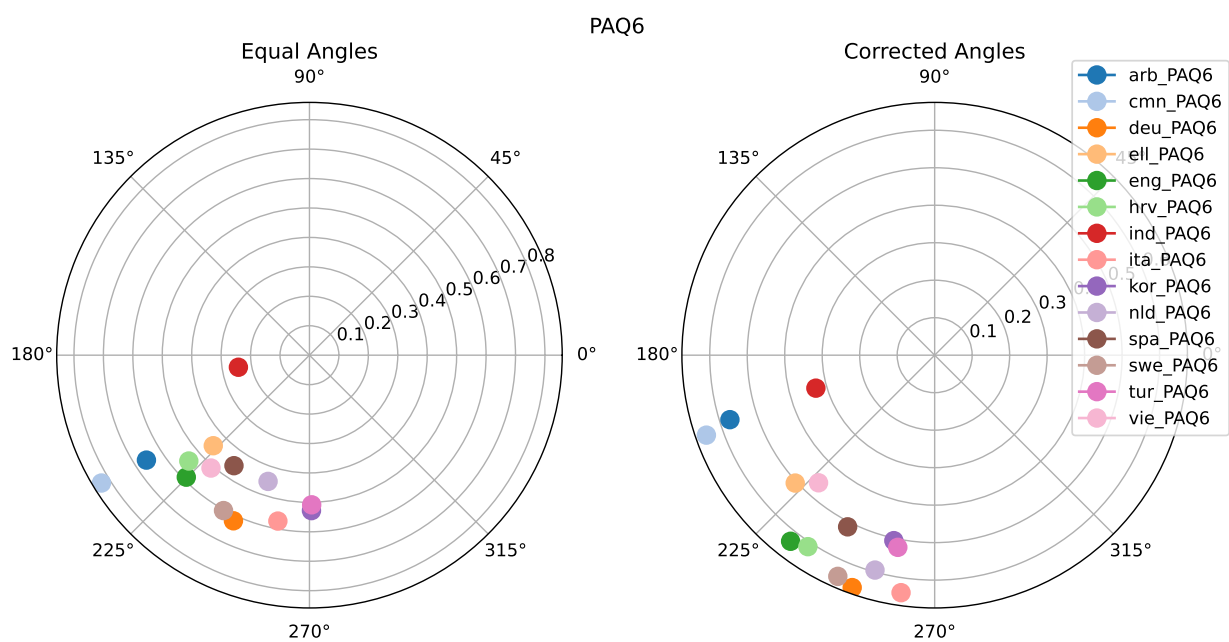
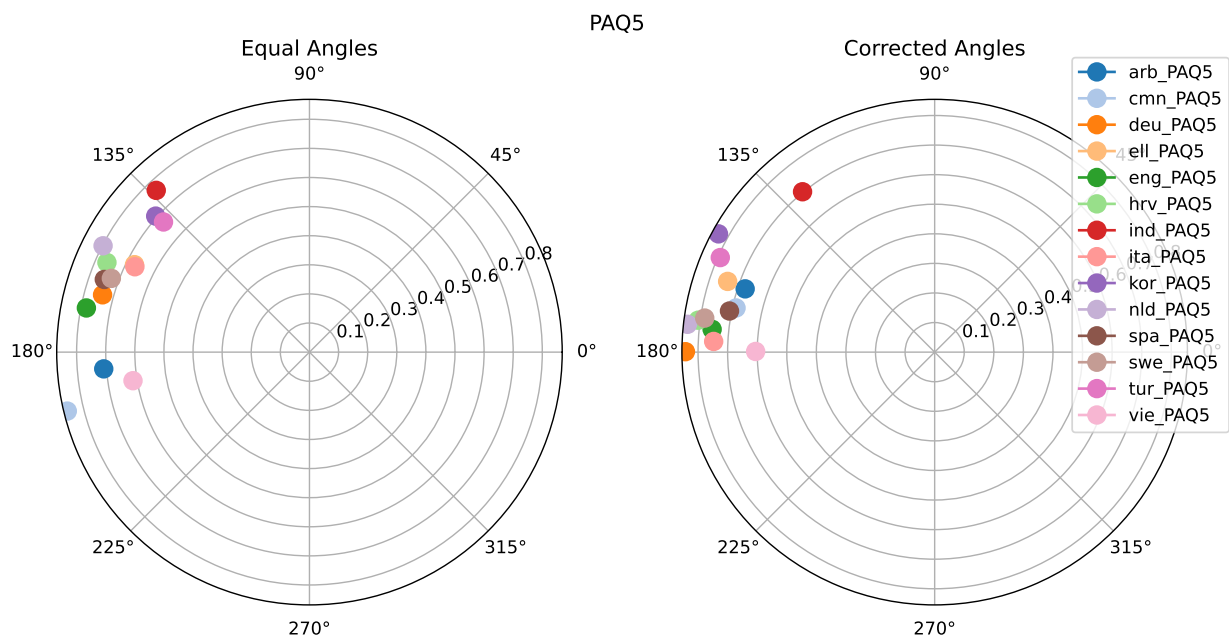


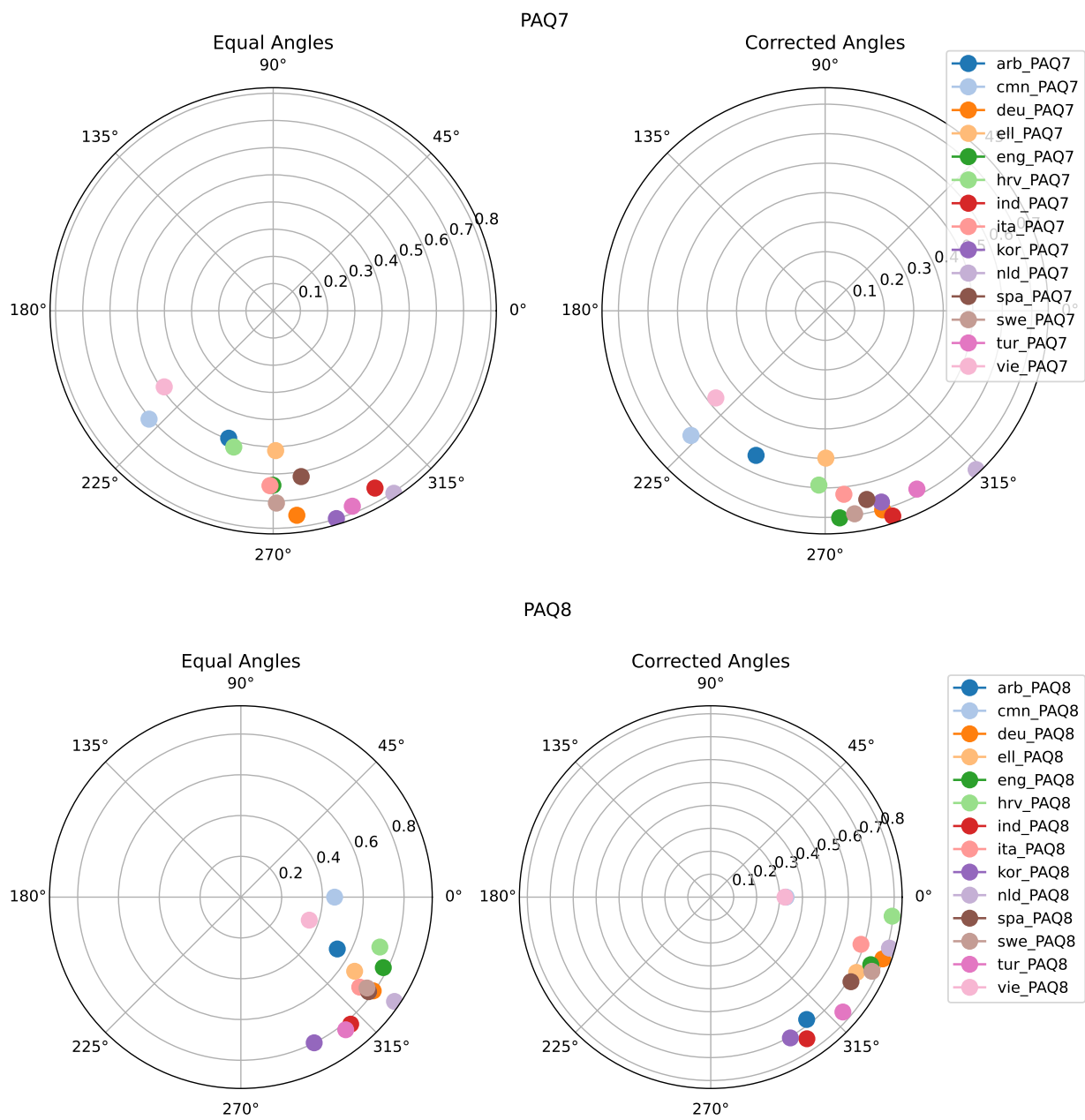
PAQ3



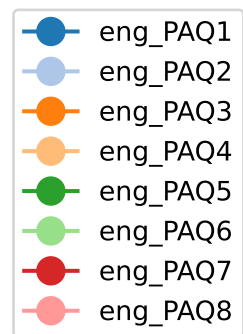
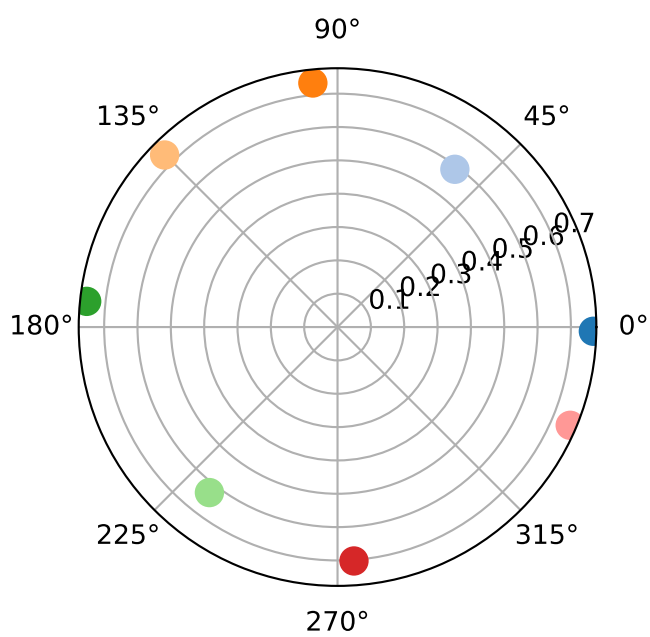
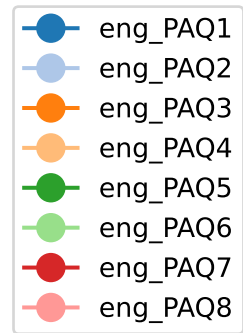
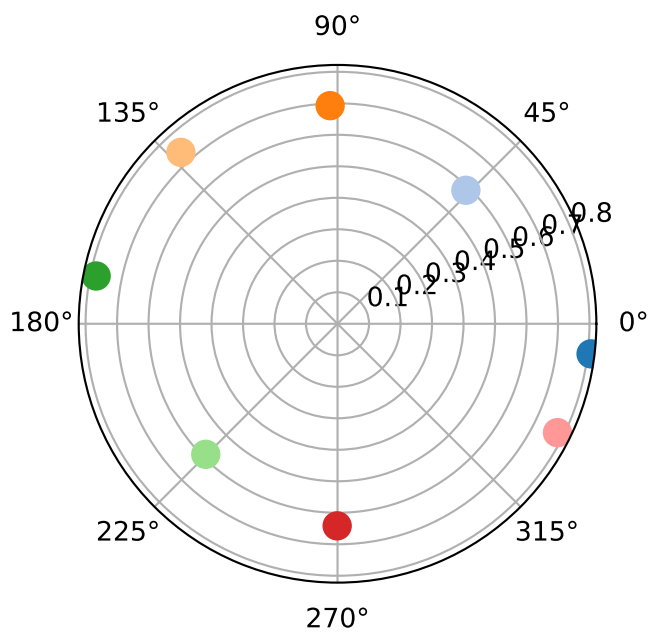
PAQ4







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```
=====
eng
Equal Angles:      0.983
Corrected Angles:  0.985
=====

arb
Equal Angles:      0.88
Corrected Angles:  0.934
```

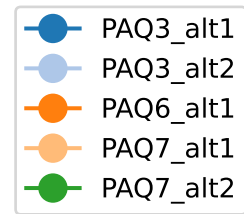
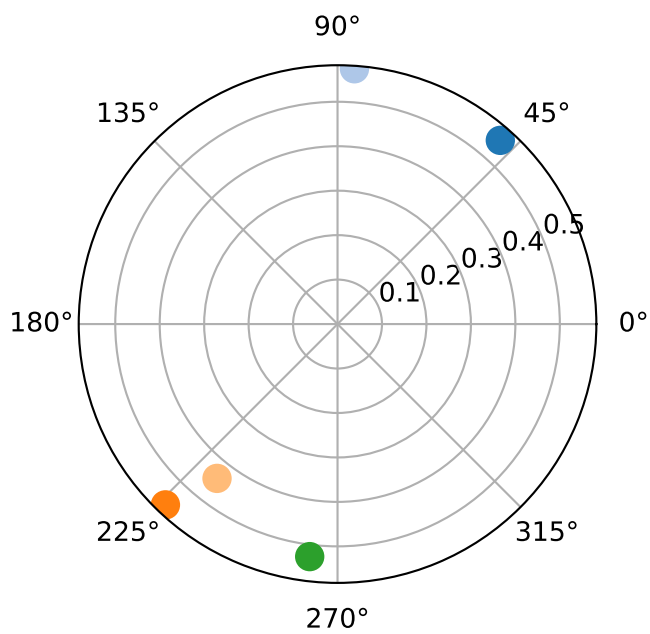
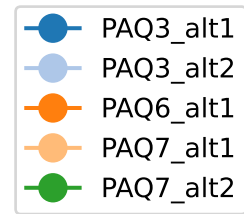
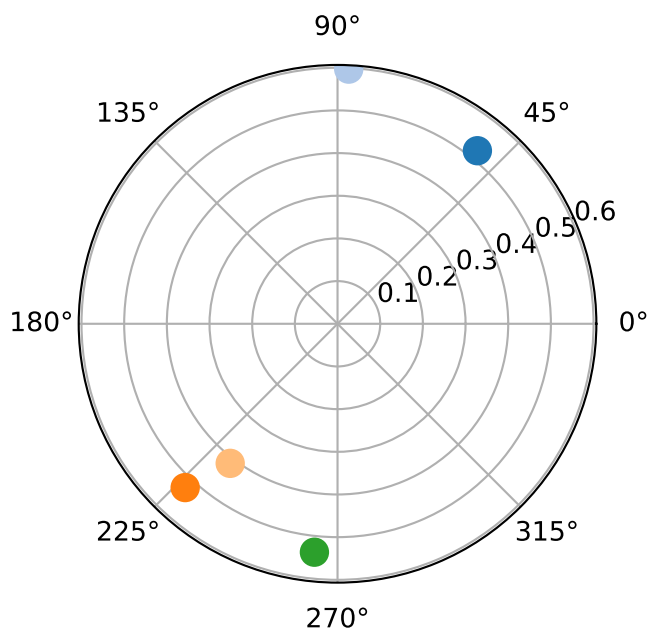
```

=====
cmn
Equal Angles:      0.658
Corrected Angles:  0.776
=====
deu
Equal Angles:      0.959
Corrected Angles:  0.976
=====
ell
Equal Angles:      0.939
Corrected Angles:  0.953
=====
hrv
Equal Angles:      0.899
Corrected Angles:  0.907
=====
ind
Equal Angles:      0.818
Corrected Angles:  0.874
=====
ita
Equal Angles:      0.926
Corrected Angles:  0.952
=====
kor
Equal Angles:      0.816
Corrected Angles:  0.907
=====
nld
Equal Angles:      0.86
Corrected Angles:  0.909
=====
spa
Equal Angles:      0.955
Corrected Angles:  0.968
=====
swe
Equal Angles:      0.953
Corrected Angles:  0.963
=====
tur
Equal Angles:      0.818
Corrected Angles:  0.908
=====
vie
Equal Angles:      0.73
Corrected Angles:  0.762

```

5. German locations

(<Figure size 1650x1050 with 1 Axes>, <PolarAxes: >)



0.921

0.92

===== arb =====

Congruence eq angles: 0.983

Congruence corr angles: 0.919

===== cmn =====

Congruence eq angles: 0.99

Congruence corr angles: 0.853

```

===== deu =====
Congruence eq angles: 0.985
Congruence corr angles: 0.981
===== ell =====
Congruence eq angles: 0.982
Congruence corr angles: 0.978
===== eng =====
Congruence eq angles: 0.984
Congruence corr angles: 0.984
===== hrv =====
Congruence eq angles: 0.986
Congruence corr angles: 0.96
===== ind =====
Congruence eq angles: 0.983
Congruence corr angles: 0.946
===== ita =====
Congruence eq angles: 0.977
Congruence corr angles: 0.957
===== kor =====
Congruence eq angles: 0.982
Congruence corr angles: 0.924
===== nld =====
Congruence eq angles: 0.981
Congruence corr angles: 0.951
===== spa =====
Congruence eq angles: 0.98
Congruence corr angles: 0.985
===== swe =====
Congruence eq angles: 0.98
Congruence corr angles: 0.987
===== tur =====
Congruence eq angles: 0.984
Congruence corr angles: 0.934
===== vie =====
Congruence eq angles: 0.959
Congruence corr angles: 0.854

```

