Test Results

Table 1: Test Results.

Channels No.	Try	Selected Channels	Baseline	30 Subjects			40 Subjects			50 Subjects		
				B.C.	Train	Test	B.C.	Train	Test	B.C.	Train	Test
1	Case 1	–	–	T8 (+)	0.956	0.835	Oz (+)	0.967	0.852	Oz (+)	0.957	0.812
		–	–	P8 (+)	0.975	0.853	Oz (+)	0.967	0.852	F8 (+)	0.896	0.823
	Case 2	–	T10	Cz (+)	0.945	0.782	Cz (+)	0.951	0.837	Oz (+)	0.948	0.769
		–	T10	P8 (+)	0.940	0.854	P8 (+)	0.931	0.838	C4 (+)	0.939	0.858
2	Case 3	Oz	–	T8 (+)	0.995	0.917	P8 (+)	0.994	0.909	Pz (+)	0.991	0.957
		Oz	–	Fz (+)	0.992	0.945	T8 (+)	0.991	0.950	Pz (+)	0.991	0.957
	Reduced	Oz	–	×	×	×	×	×	×	P4(+)	0.965	0.941
	Augmentation	Oz	–	×	×	×	×	×	×	O1(+)	0.957	0.941
	Case 4	Oz	T10	T8 (+)	0.995	0.896	F4 (+)	0.992	0.921	Fz (+)	0.991	0.946
		Oz	T10	F4 (+)	0.989	0.932	Pz (+)	0.990	0.929	Fz (+)	0.991	0.946
	Reduced	Oz	T10	×	×	×	×	×	×	O1(+)	0.964	0.939
	Augmentation	Oz	110	×	×	×	×	×	×	O1(+)	0.964	0.939
3	Case 5	Oz, F4	–	O1 (+)	0.997	0.952	P7 (+)	0.997	0.956	P7 (+)	0.996	0.950
		Oz, F4	–	T8 (+)	0.996	0.955	P8 (+)	0.996	0.966	F7 (+)	0.995	0.966
	Case 6	Oz, F4	T10	C4 (+)	0.998	0.939	F8 (+)	0.997	0.902	Not Avaibale		
		Oz, F4	T10	F8 (+)	0.997	0.959	Cz (+)	0.996	0.972	Not Avaibale		

Description:

B.C. : Best Channel

Blue color: Best Channel according to the train accuracy.

Red color: Best Channel according to the test accuracy.

+: Link to the figures.

No. of Channels: 1

Previous Selected Channels: –

No. of Subjects: 30

Baseline Channel: –

Task: REO
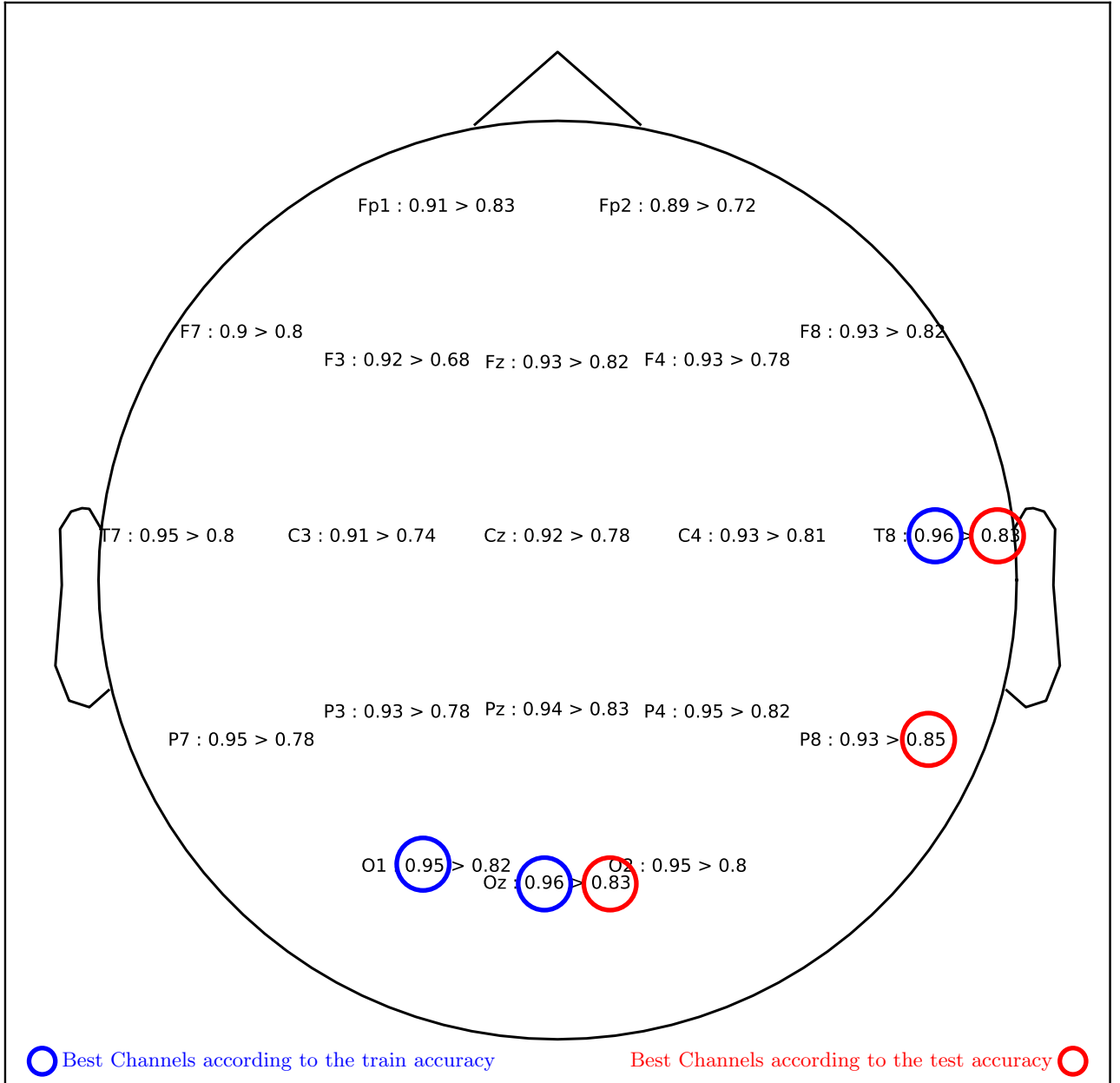

Figure 1: Search for the first best channel with 30 subjects.

No. of Channels: 1

Previous Selected Channels: –

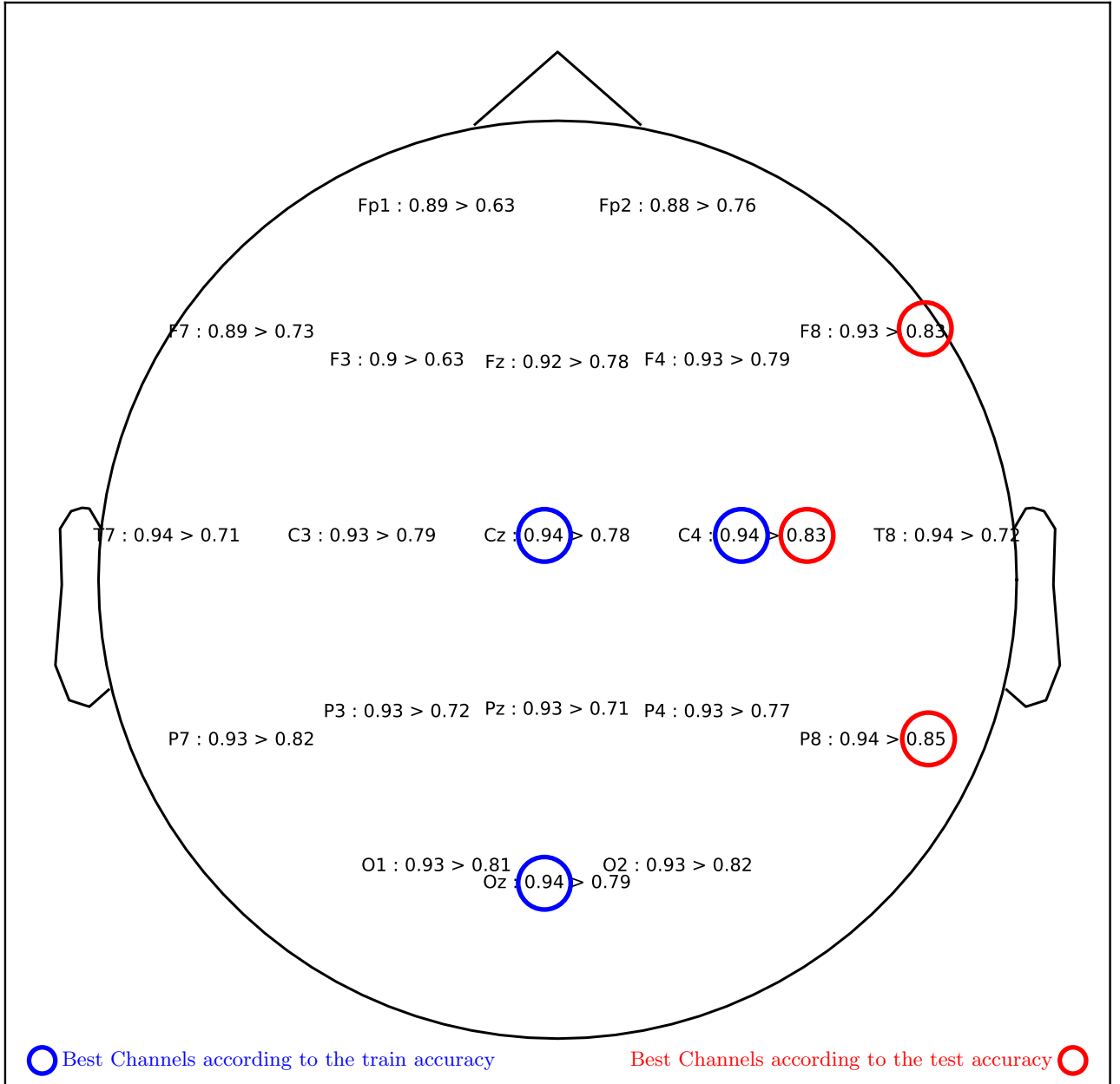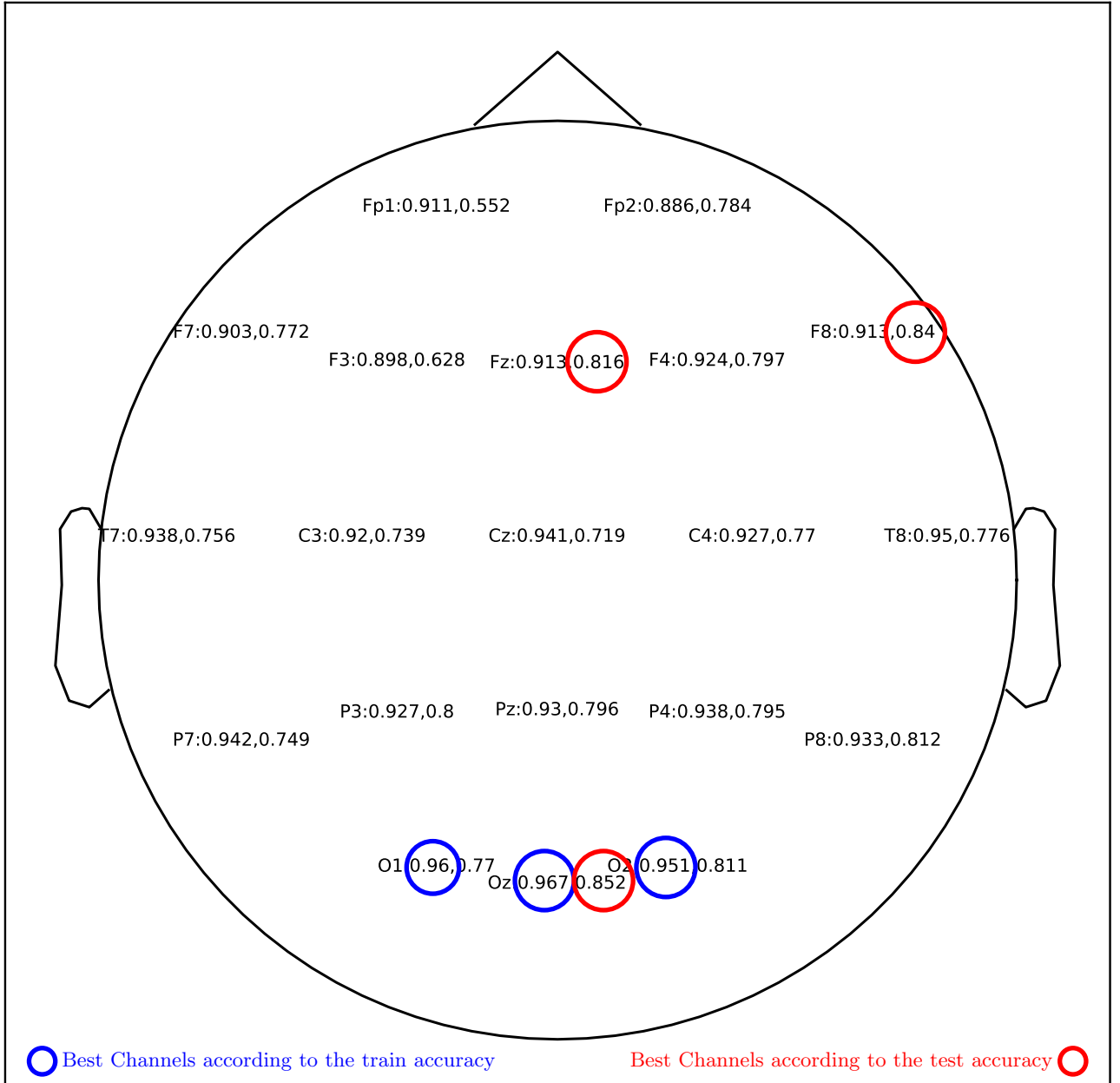No. of Subjects: 30

Baseline Channel: T10

Task: REO

Figure 2: Search for the first best channel with 30 subjects, T10 is removed as baseline.

No. of Channels: 1

Previous Selected Channels: –

No. of Subjects: 40

Baseline Channel: –

Task: REO

Figure 3: Search for the first best channel with 40 subjects, no baseline is removed.

No. of Channels: 1

Previous Selected Channels: –

No. of Subjects: 40

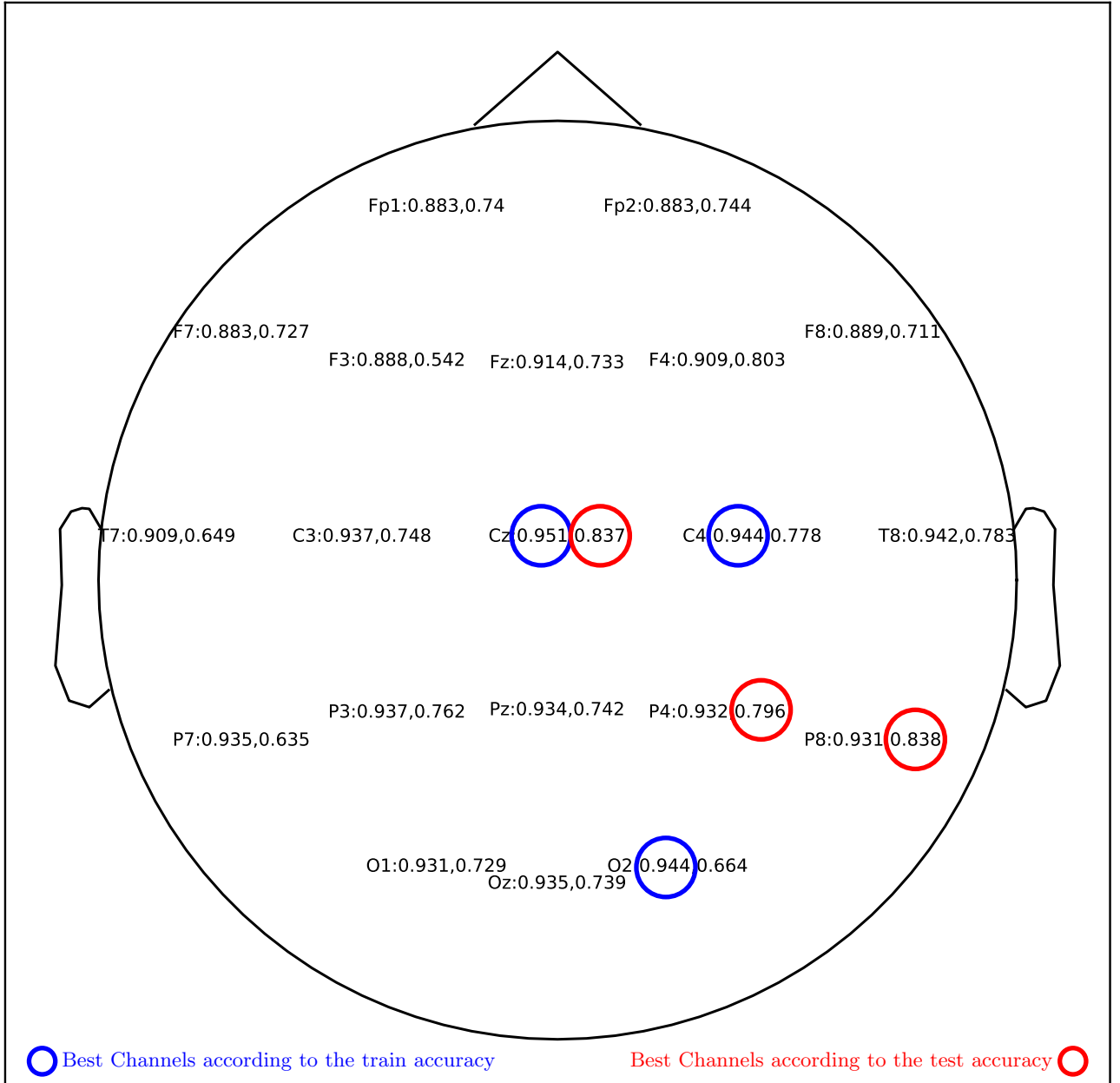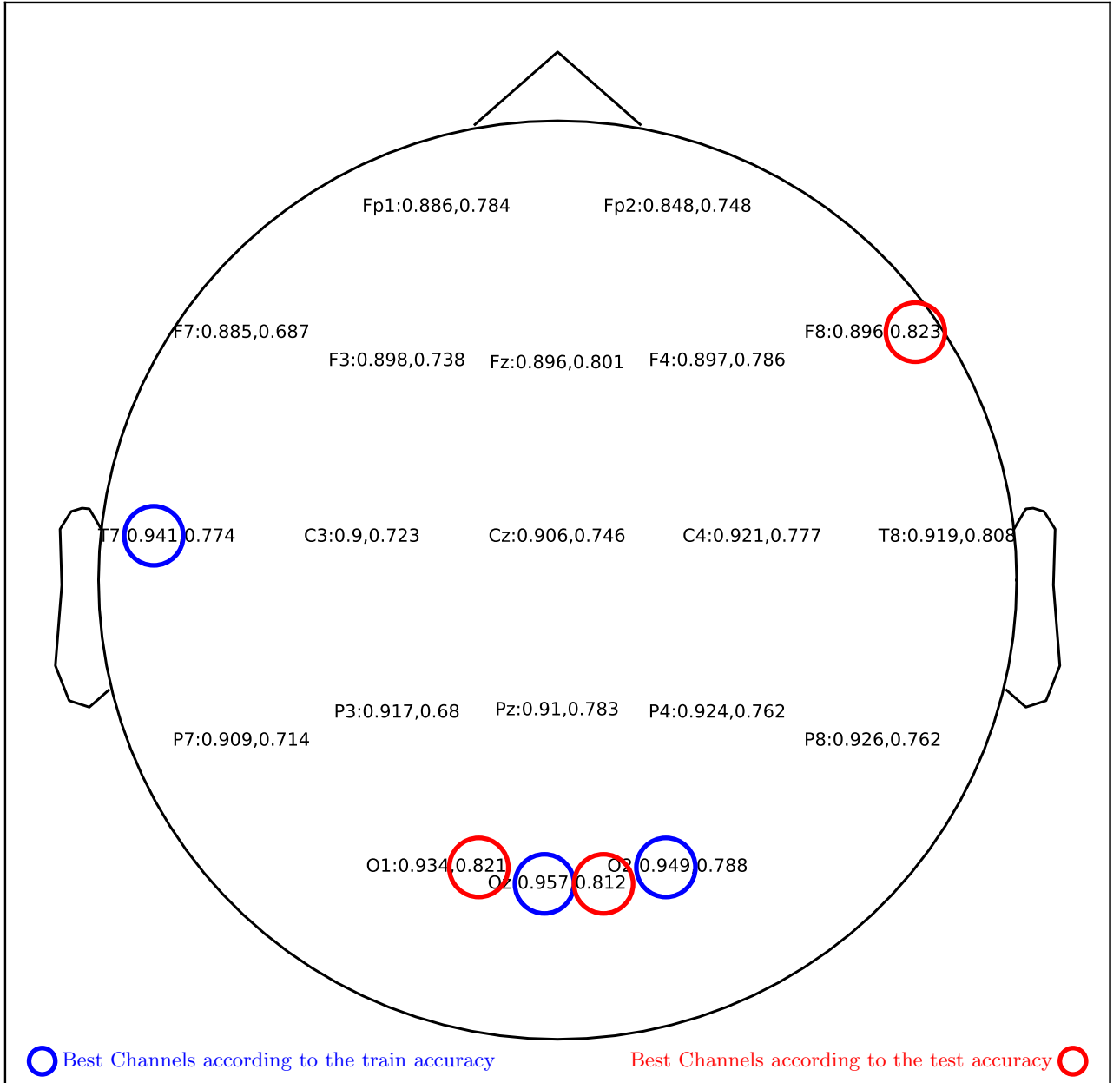Baseline Channel: T10

Task: REO

Figure 4: Search for the first best channel with 40 subjects, T10 is removed as baseline.

No. of Channels: 1

Previous Selected Channels: –

No. of Subjects: 50

Baseline Channel: –

Task: REO

Figure 5: Search for the first best channel with 30 subjects, no baseline removed.

No. of Channels: 1

Previous Selected Channels: —

No. of Subjects: 50
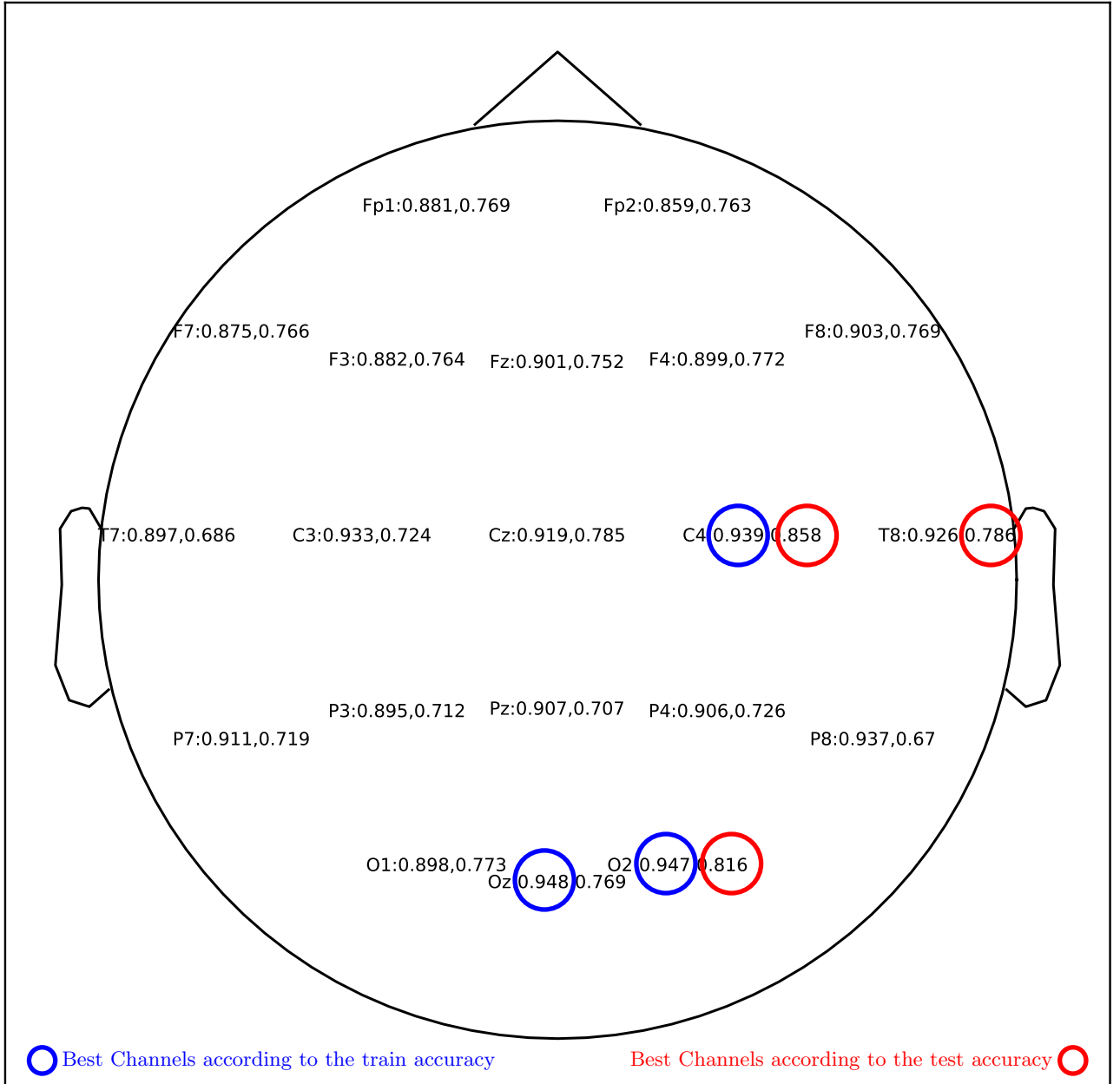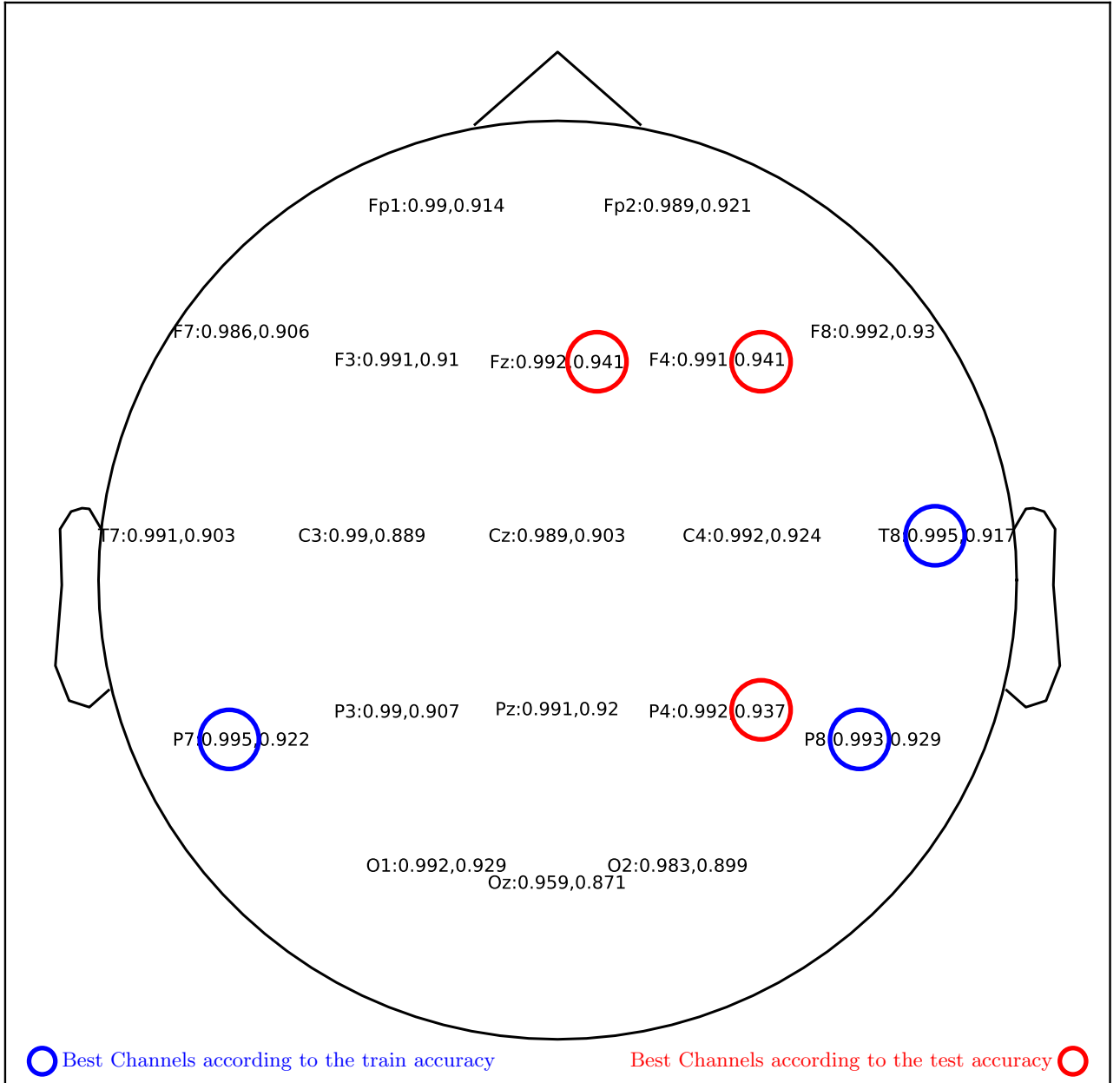
Baseline Channel: T10

Task: REO

Figure 6: Search for the first best channel with 50 subjects, T10 is removed as baseline.

No. of Channels: 2

Previous Selected Channels: Oz

No. of Subjects: 30

Baseline Channel: –
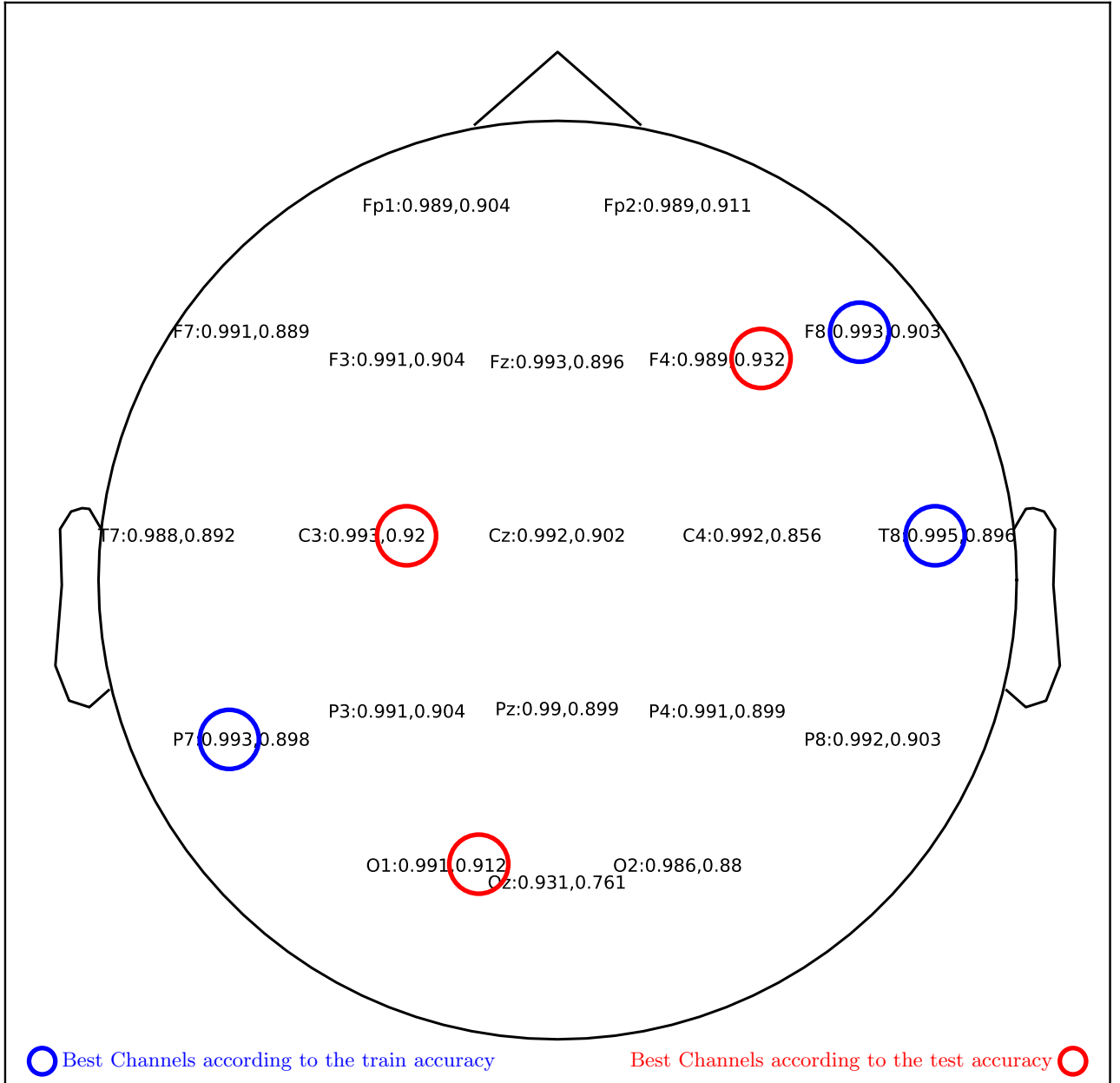
Task: REO

Figure 7: Search for the second best channel with 30 subjects, no baseline removed.

No. of Channels: 2

Previous Selected Channels: Oz

No. of Subjects: 30

Baseline Channel: T10

Task: REO

Figure 8: Search for the second best channel with 30 subjects, T10 is removed as baseline.

No. of Channels: 2

Previous Selected Channels: Oz

No. of Subjects: 40
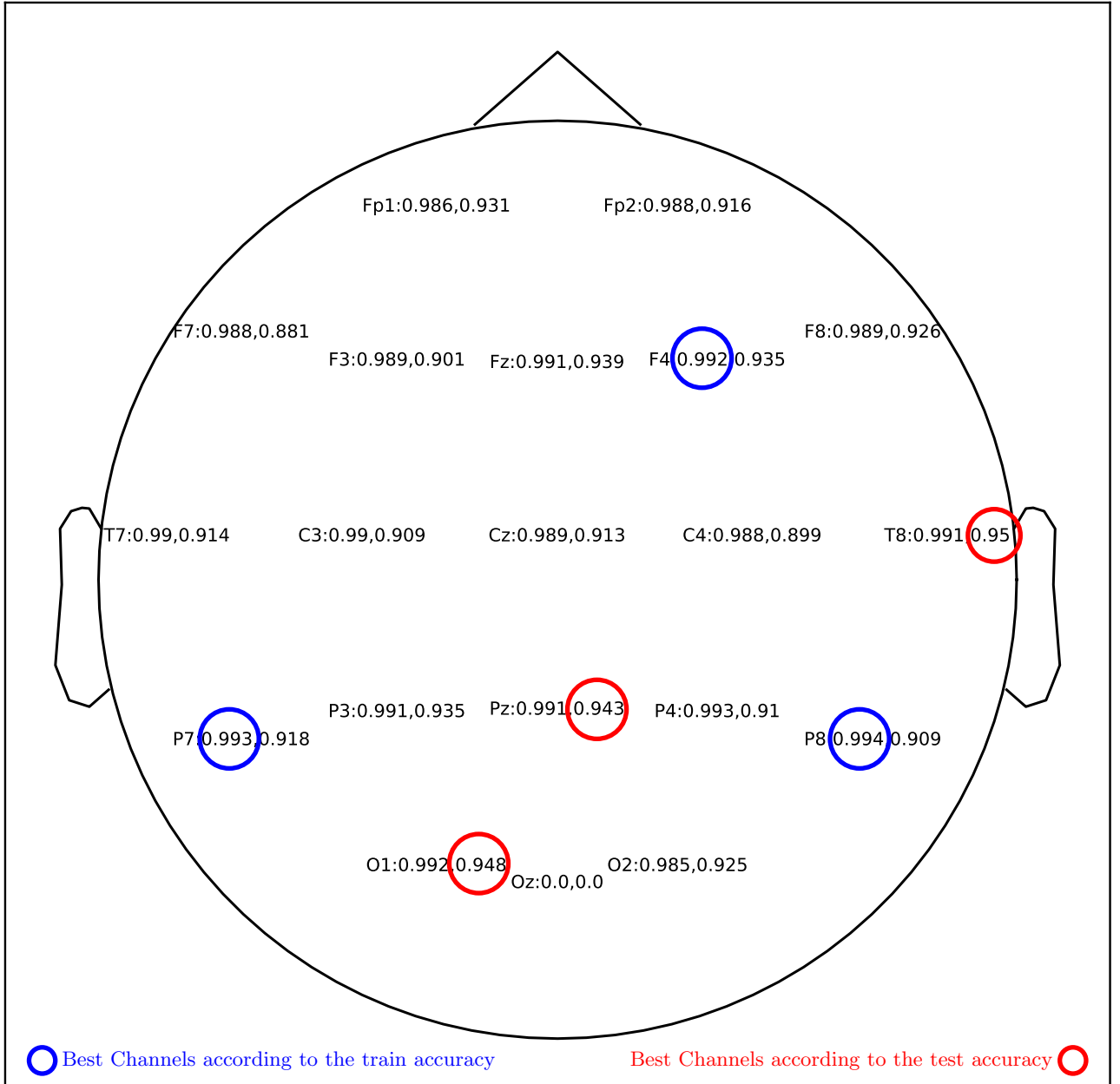
Baseline Channel: –

Task: REO

Figure 9: Search for the second best channel with 40 subjects, no baseline is removed.

No. of Channels: 2

Previous Selected Channels: Oz

No. of Subjects: 40

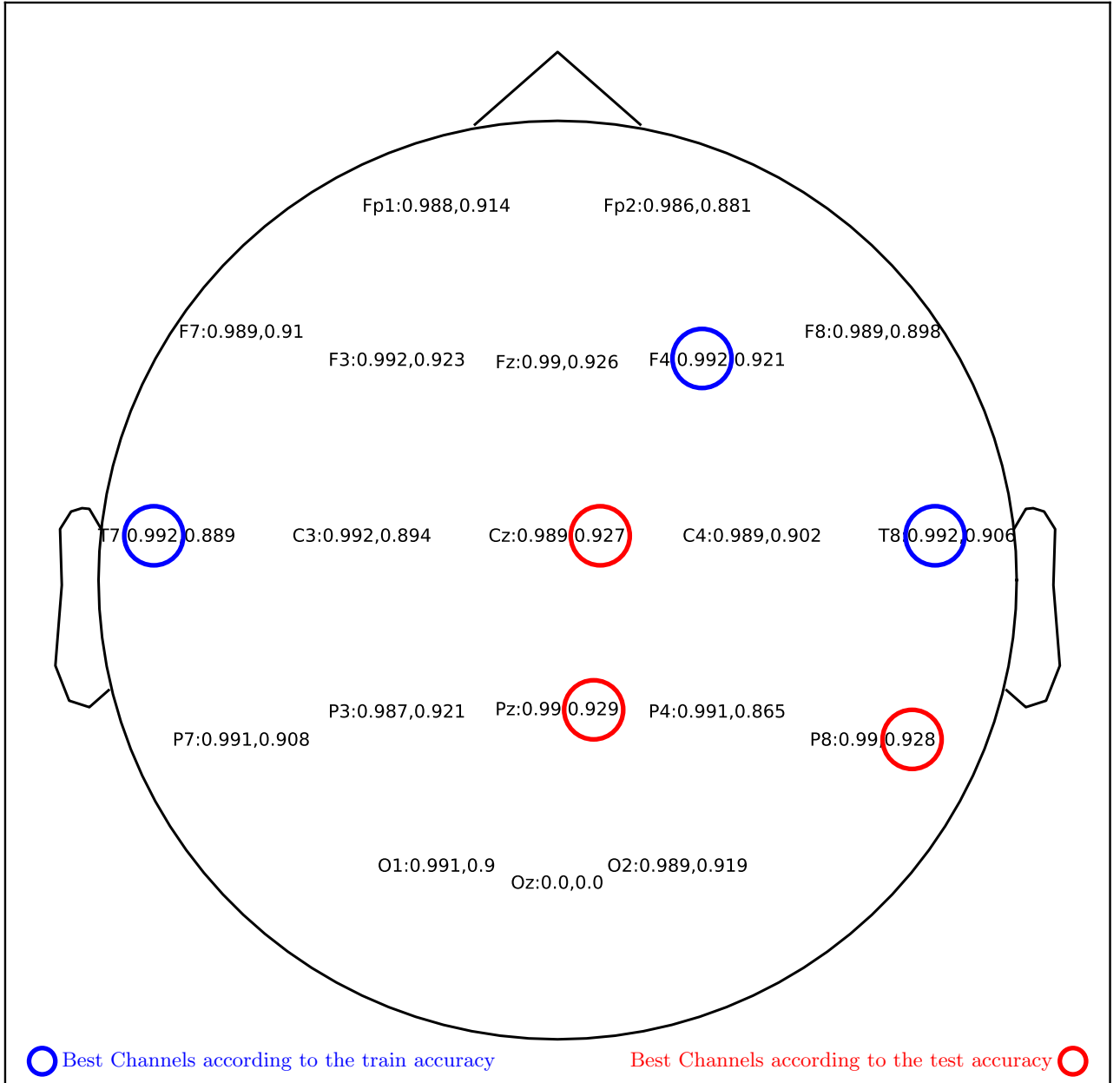Baseline Channel: T10

Task: REO

Figure 10: Search for the second best channel with 40 subjects, T10 is removed as baseline.

No. of Channels: 2

Previous Selected Channels: Oz

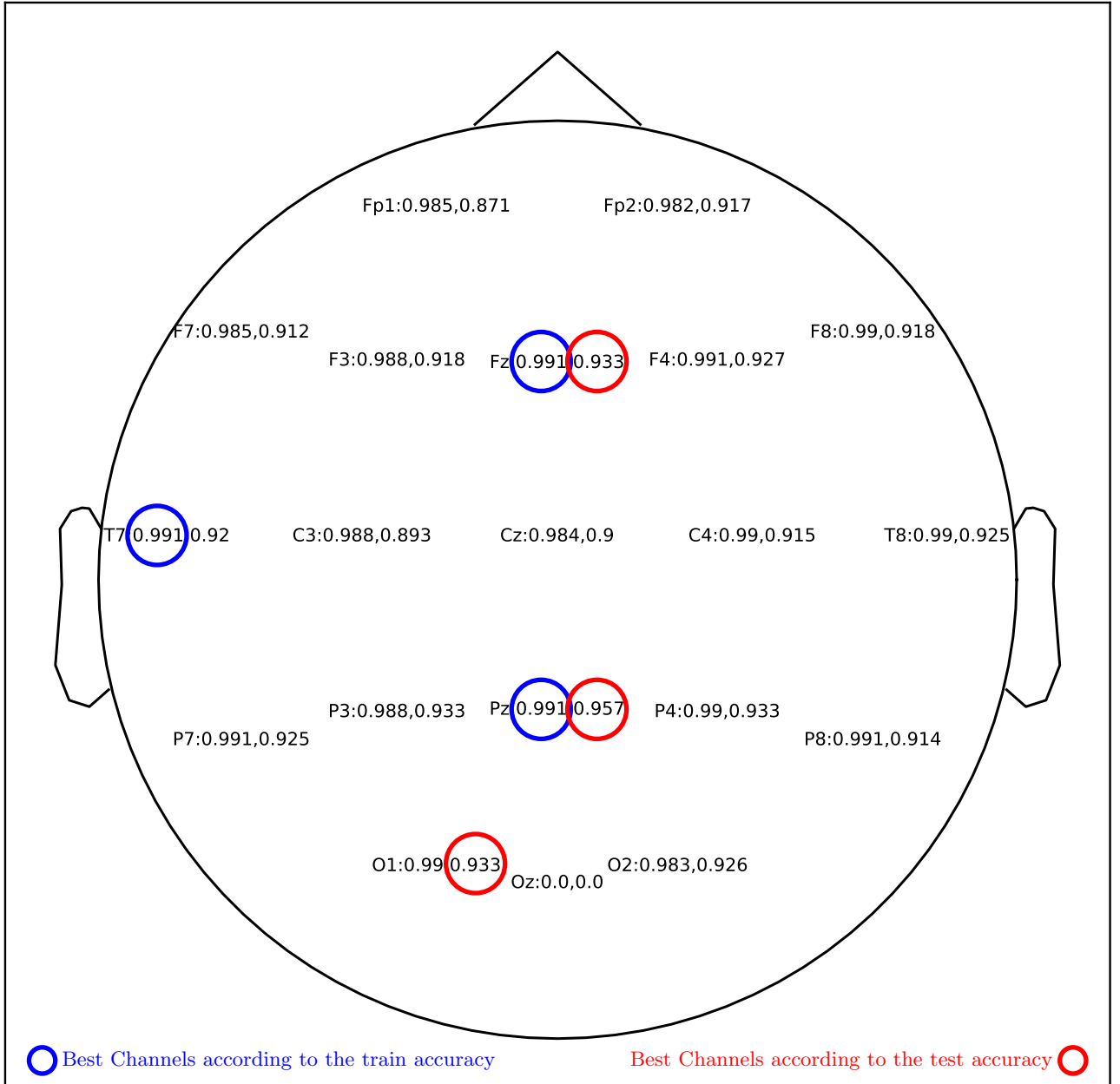No. of Subjects: 50

Baseline Channel: –

Task: REO

Figure 11: Search for the second best channel with 40 subjects, no baseline is removed.

Comparison of normal and reduced augmentation.

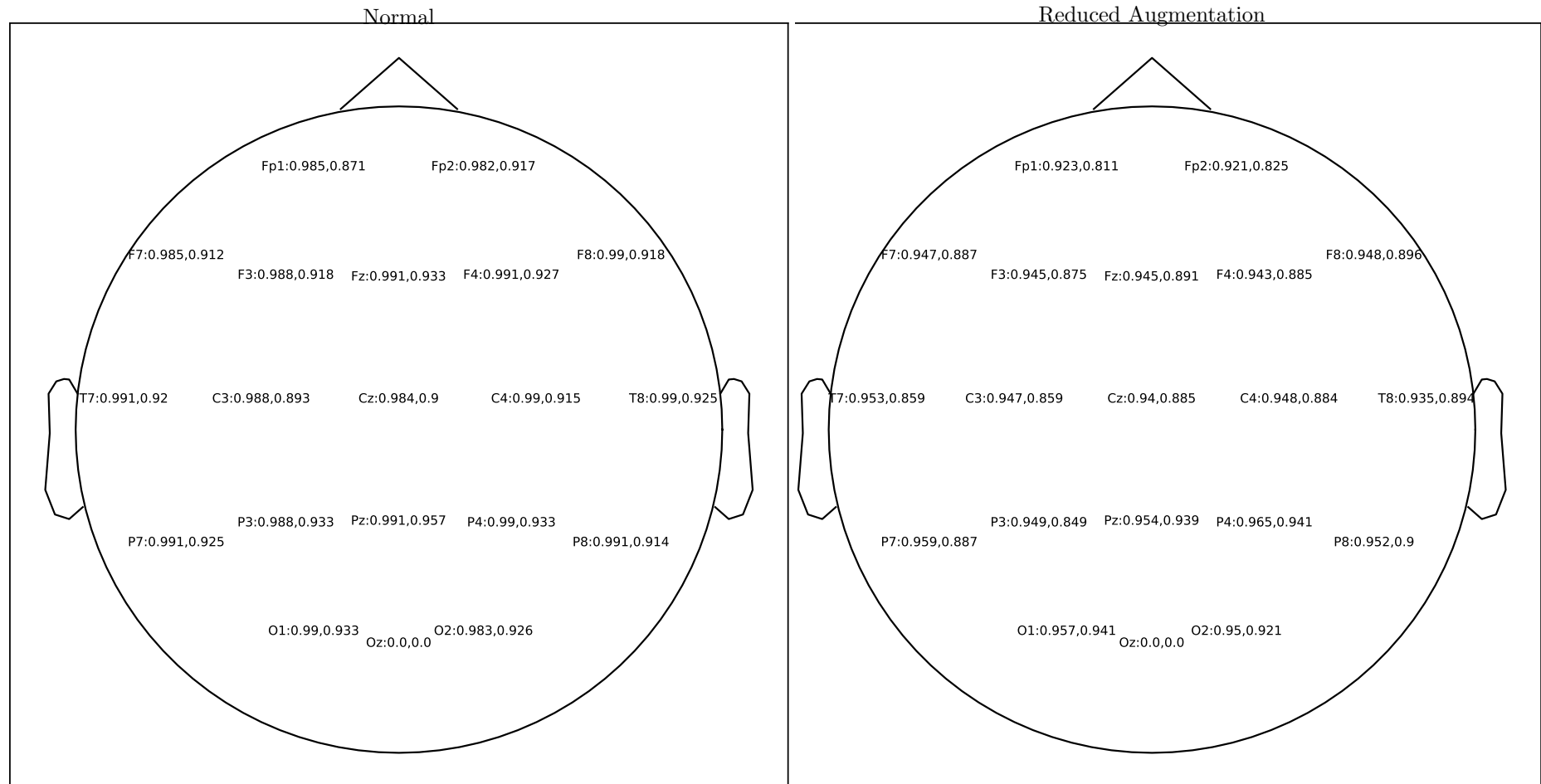|	
No. of Channels:	2
Previous Selected Channels:	Oz
No. of Subjects:	50
Baseline Channel:	–
In/Out Shift:	4, 20

Figure 12: Comparison for the second best channel with 50 subjects, no baseline is removed.

No. of Channels: 2

Previous Selected Channels: Oz

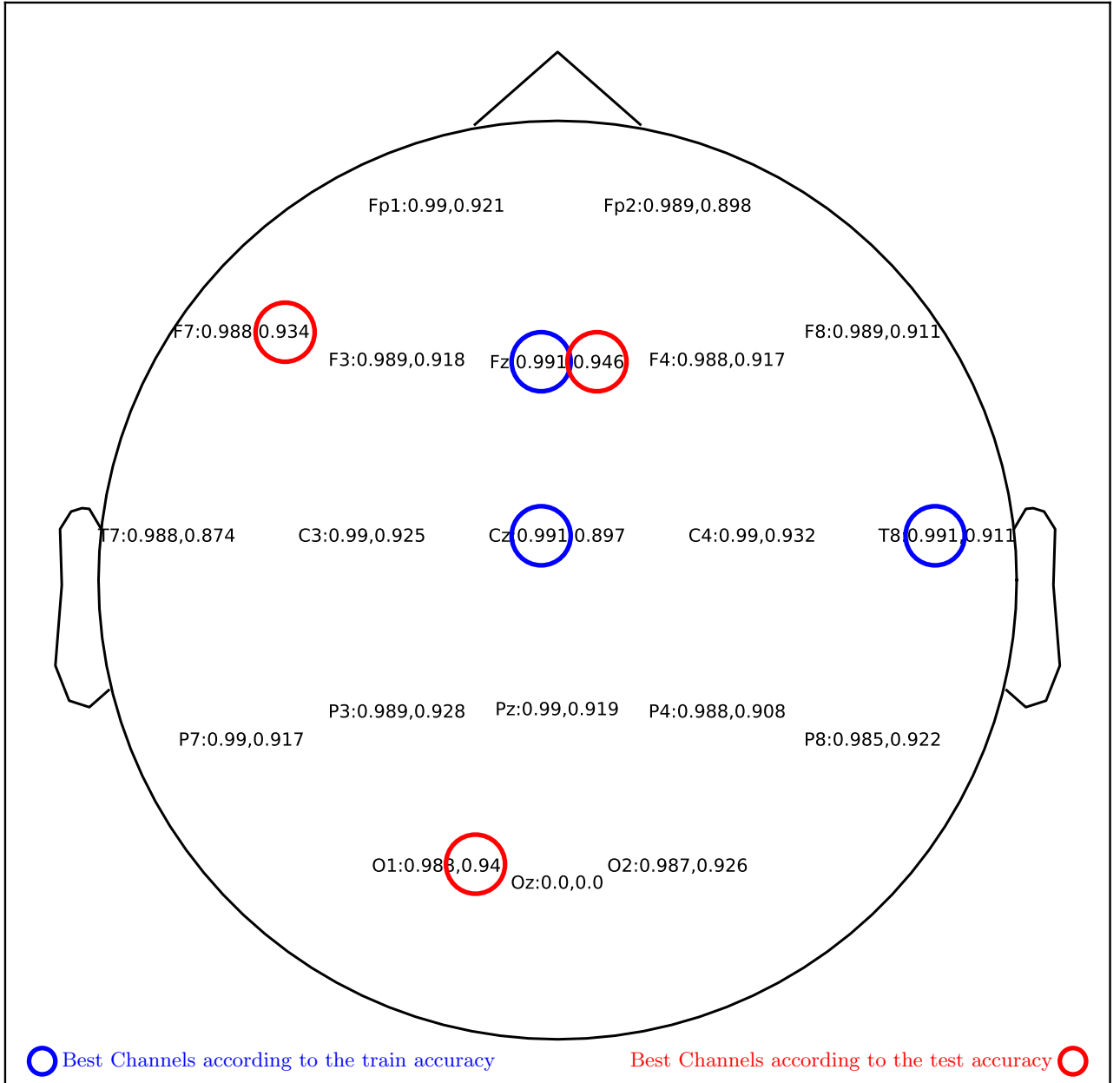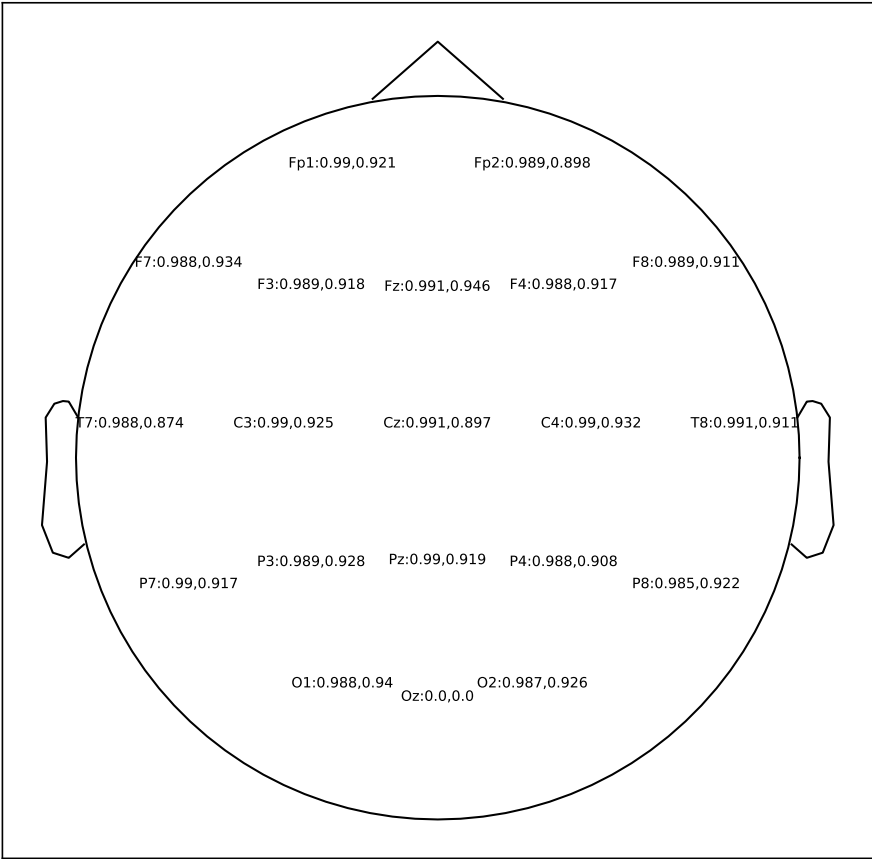No. of Subjects: 50

Baseline Channel: T10

Task: REO

Figure 13: Search for the second best channel with 40 subjects, T10 is removed as baseline.

Comparison of normal and reduced augmentation.

No. of Channels:	2
Previous Selected Channels:	Oz
No. of Subjects:	50
Baseline Channel:	T10
In/Out Shift:	4, 20

Normal

Reduced Augmentation

Fp1:0.99,0.921   Fp2:0.989,0.898

F7:0.988,0.934   F8:0.989,0.911
F3:0.989,0.918   Fz:0.991,0.946   F4:0.988,0.917

T7:0.988,0.874   C3:0.99,0.925   Cz:0.991,0.897   C4:0.99,0.932   T8:0.991,0.911

P3:0.989,0.928   Pz:0.99,0.919   P4:0.988,0.908
P7:0.99,0.917   P8:0.985,0.922

O1:0.988,0.94   O2:0.987,0.926
Oz:0.0,0.0

Fp1:0.934,0.869   Fp2:0.937,0.886

F7:0.942,0.876   F8:0.927,0.885
F3:0.945,0.892   Fz:0.946,0.853   F4:0.942,0.872

T7:0.948,0.862   C3:0.942,0.816   Cz:0.943,0.875   C4:0.947,0.873   T8:0.955,0.906

P3:0.941,0.895   Pz:0.96,0.918   P4:0.956,0.857
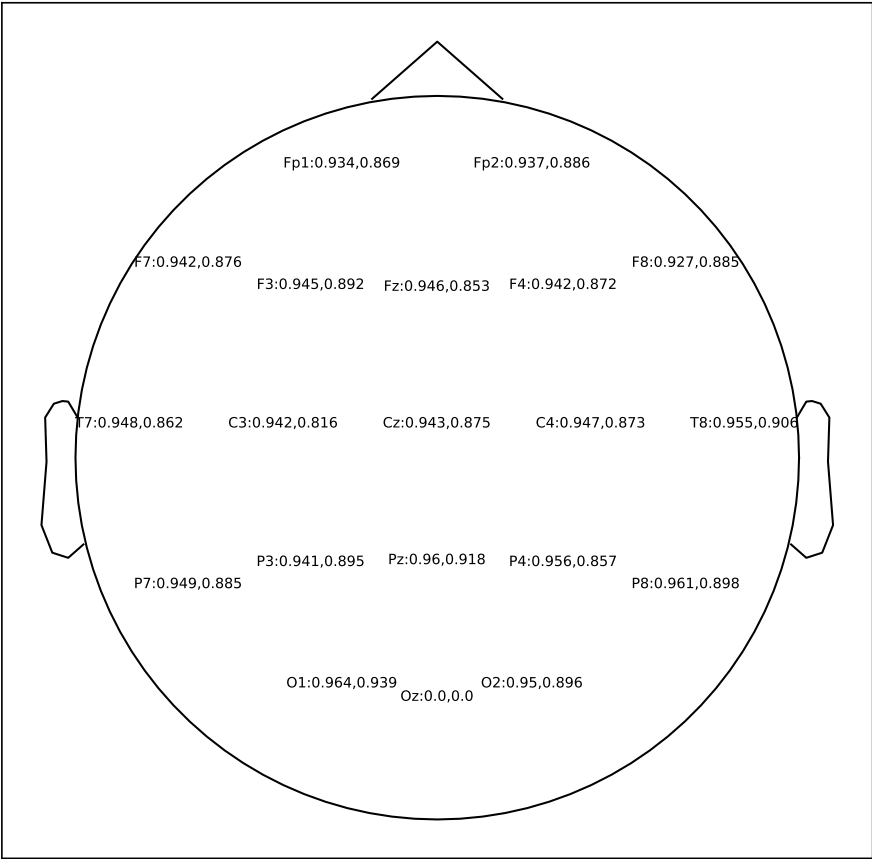P7:0.949,0.885   P8:0.961,0.898

O1:0.964,0.939   O2:0.95,0.896
Oz:0.0,0.0

Figure 14: Comparison for the second best channel with 50 subjects, T10 is removed as baseline.

No. of Channels: 3

Previous Selected Channels: Oz, F4

No. of Subjects: 30

Baseline Channel: –

Task: REO
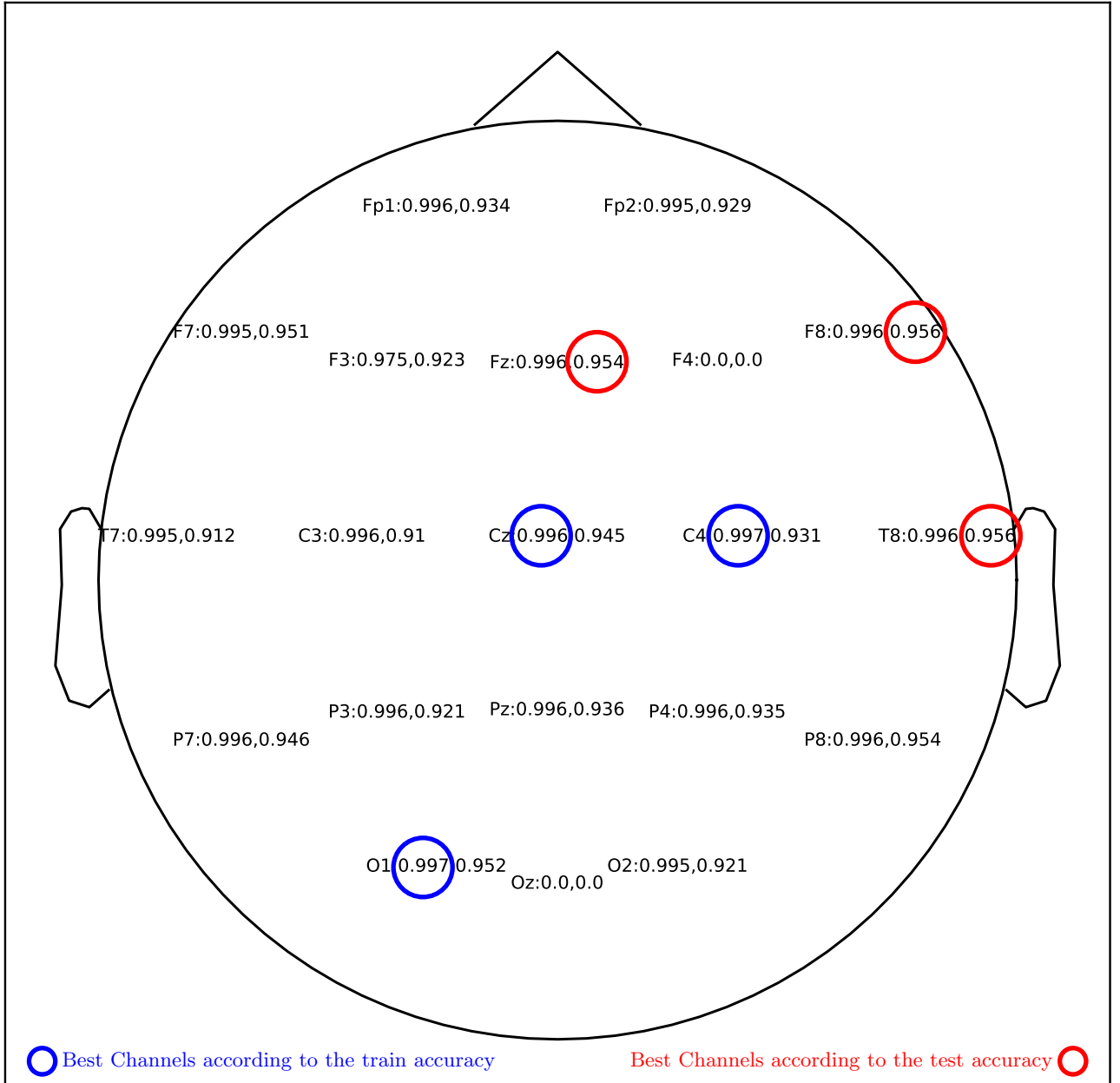

Figure 15: Search for the third best channel with 30 subjects, no baseline is removed.

No. of Channels: 3

Previous Selected Channels: Oz, F4

No. of Subjects: 30

Baseline Channel: T10

Task: REO
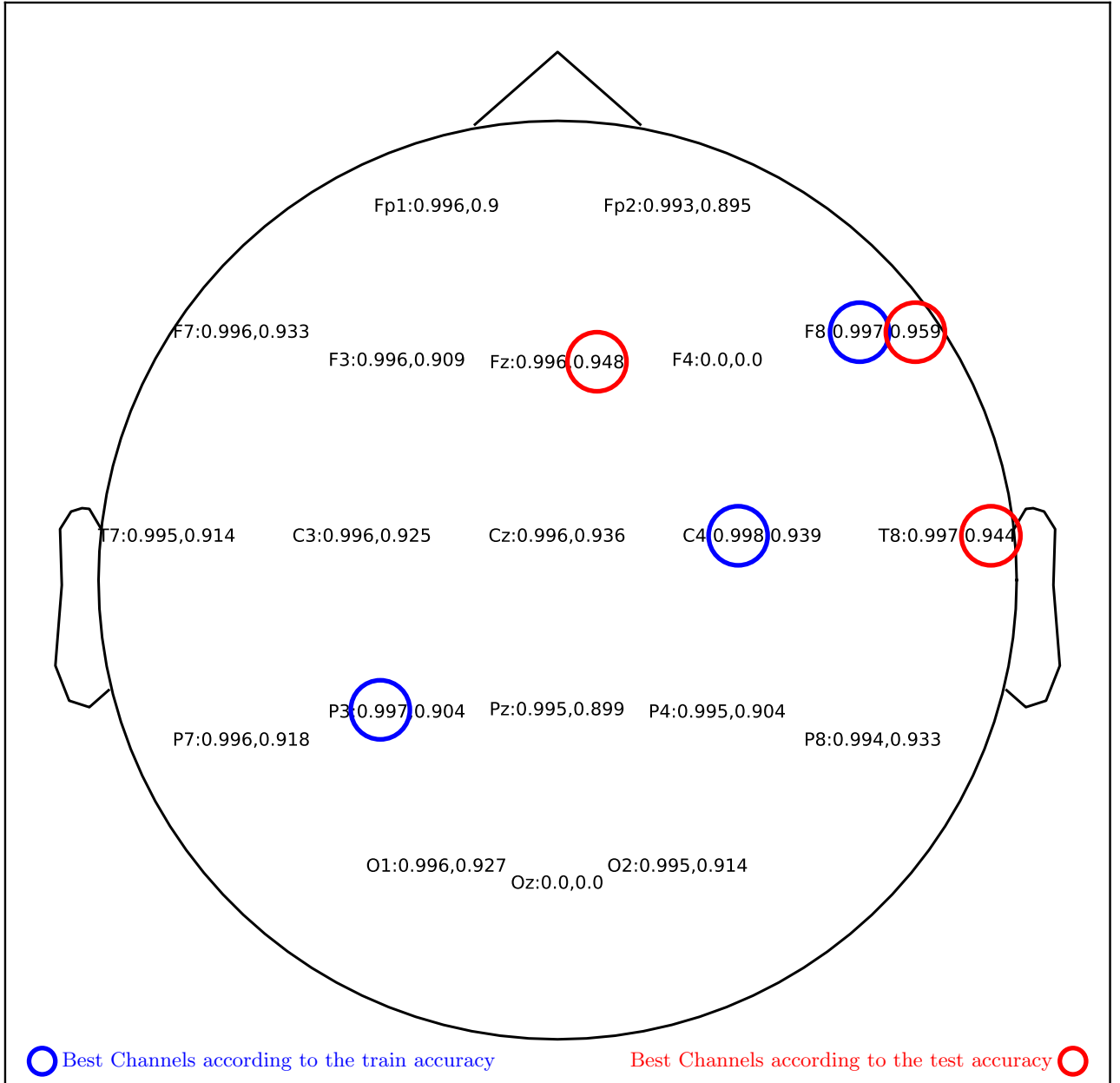

Figure 16: Search for the third best channel with 30 subjects, T10 is removed as baseline.

No. of Channels: 3

Previous Selected Channels: Oz, F4

No. of Subjects: 40
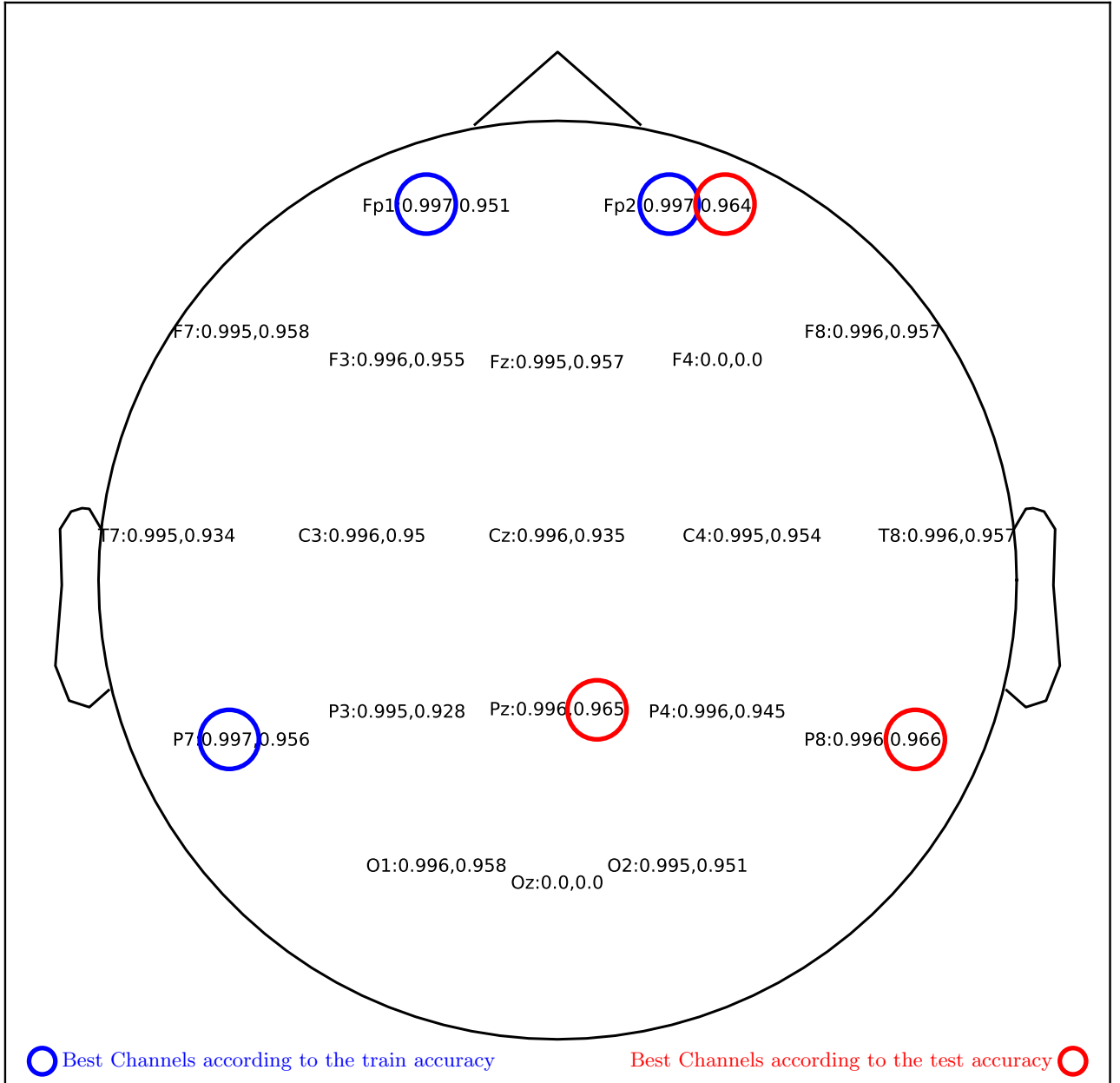
Baseline Channel: –

Task: REO

Figure 17: Search for the third best channel with 40 subjects, no baseline is removed.

No. of Channels: 3

Previous Selected Channels: Oz, F4

No. of Subjects: 40

Baseline Channel: T10
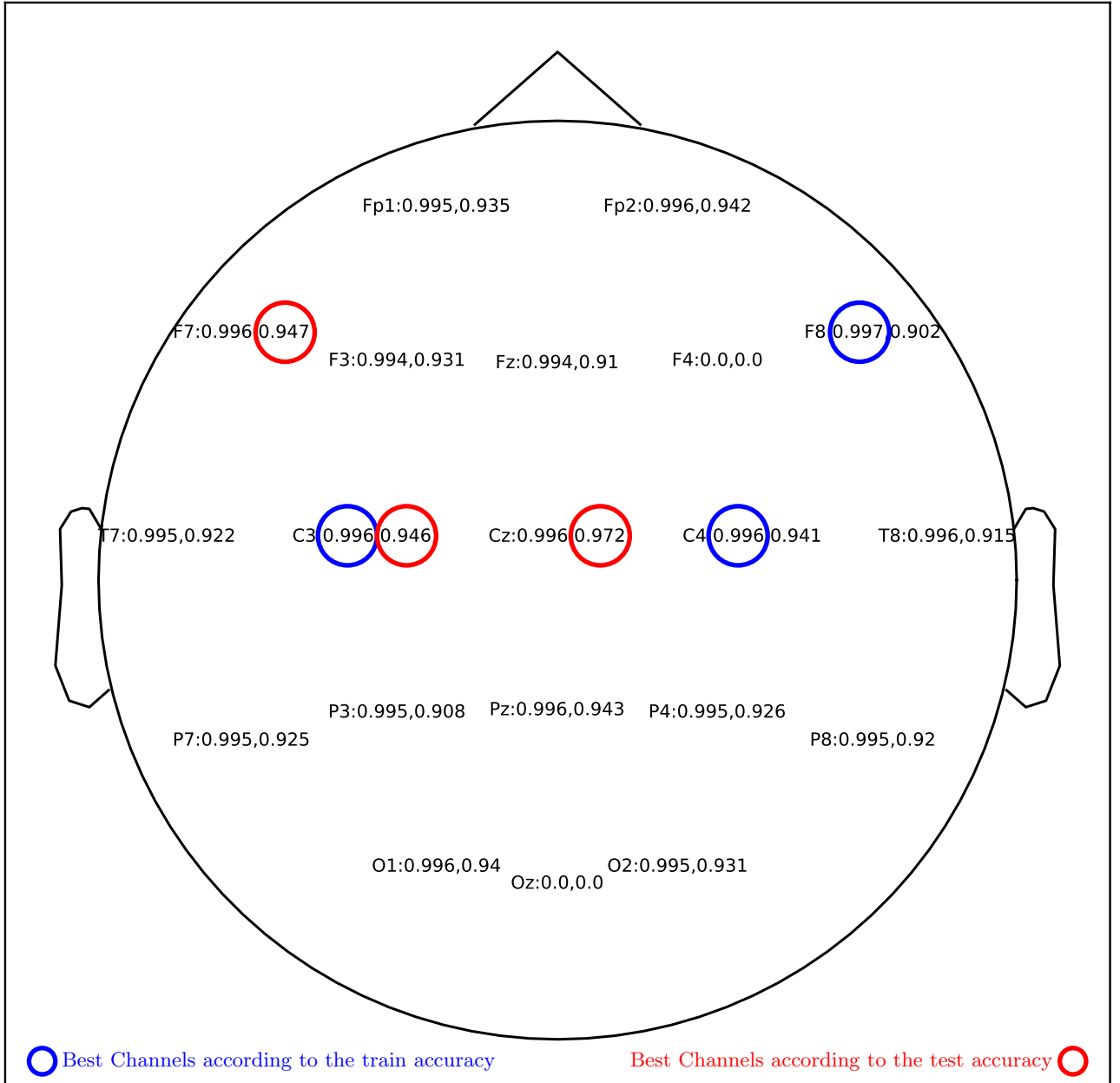
Task: REO

Figure 18: Search for the third best channel with 40 subjects, T10 is removed as baseline.

No. of Channels: 3

Previous Selected Channels: Oz, F4

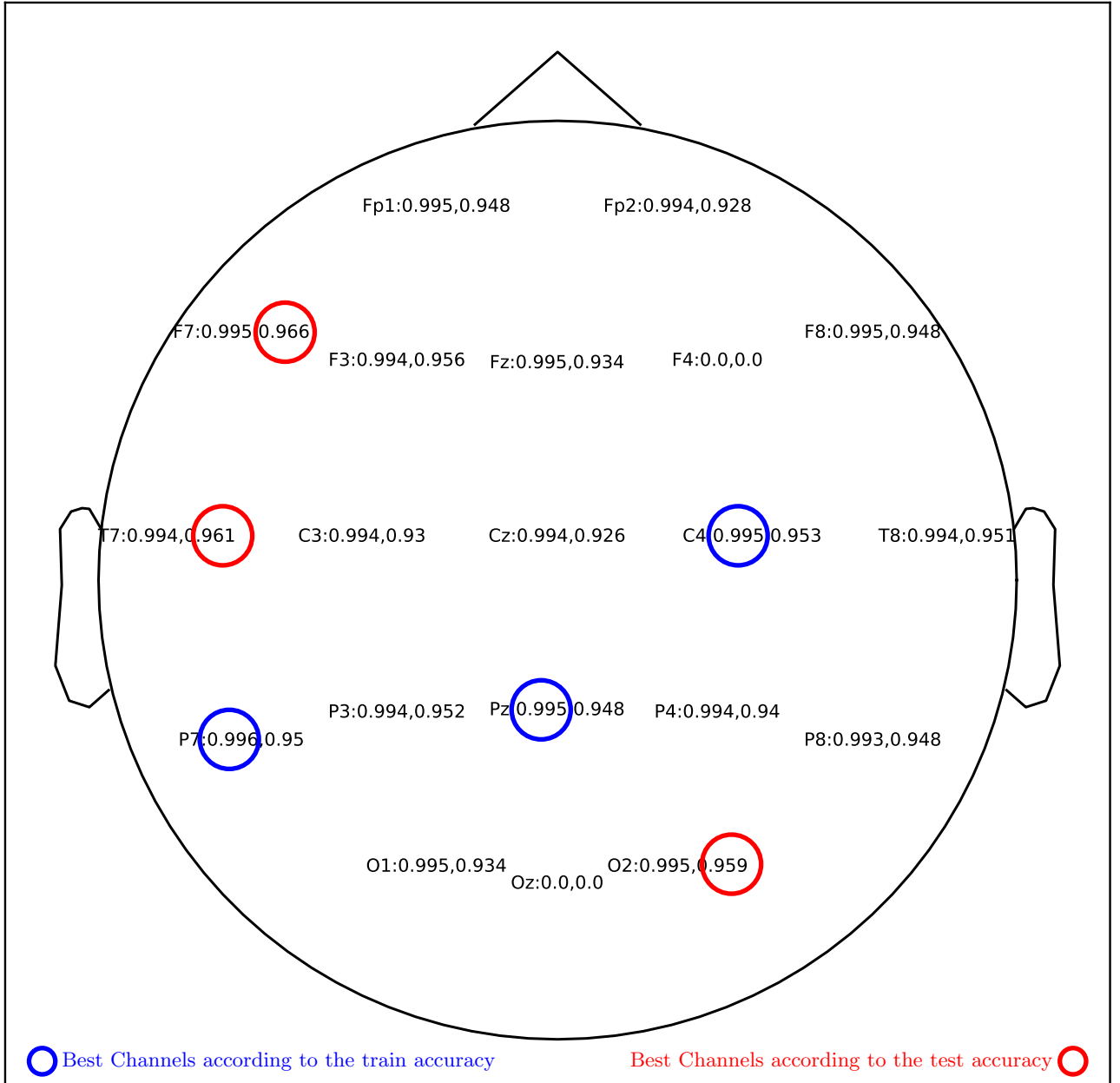No. of Subjects: 50

Baseline Channel: –

Task: REO

Figure 19: Search for the third best channel with 50 subjects, no baseline is removed.