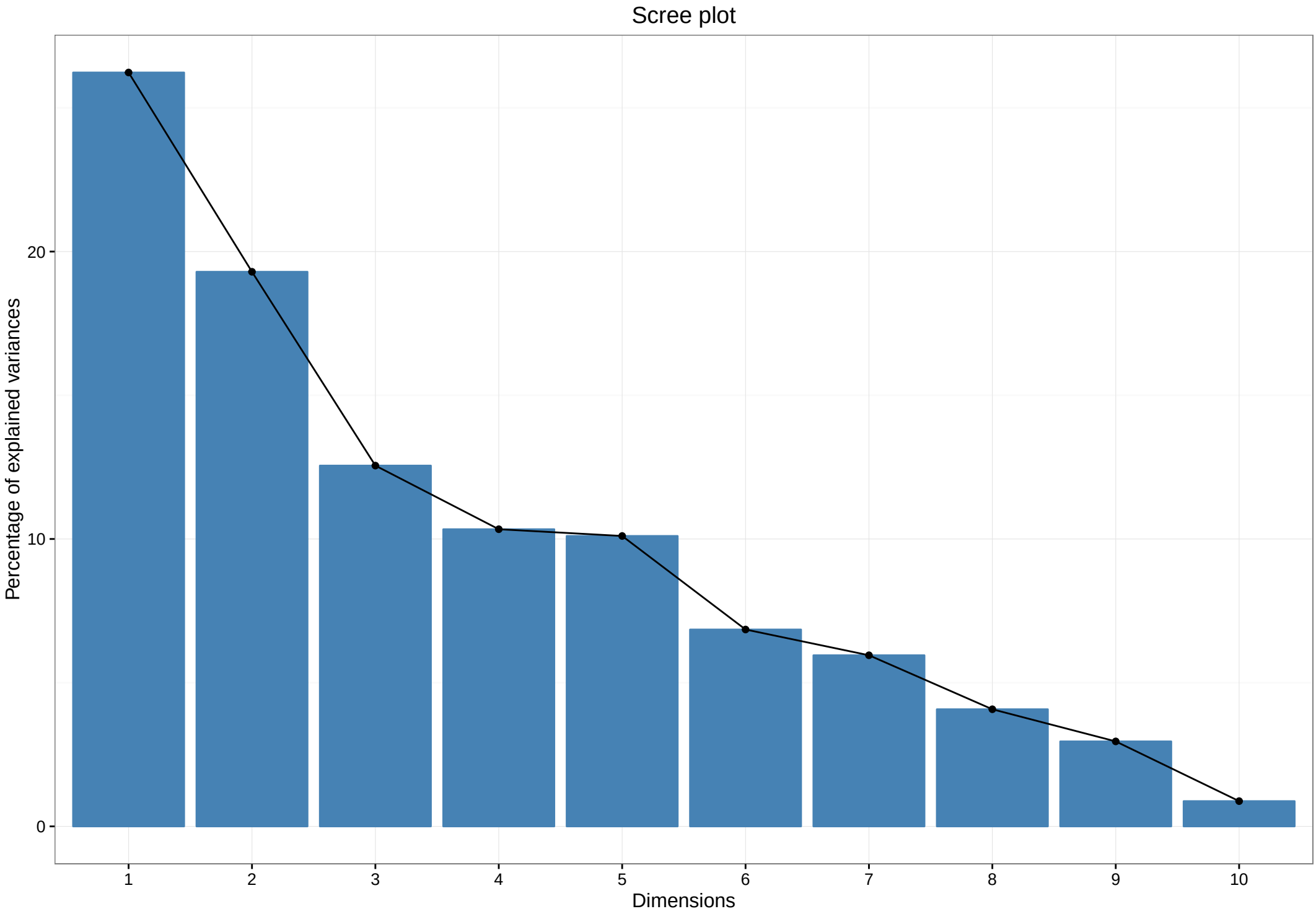
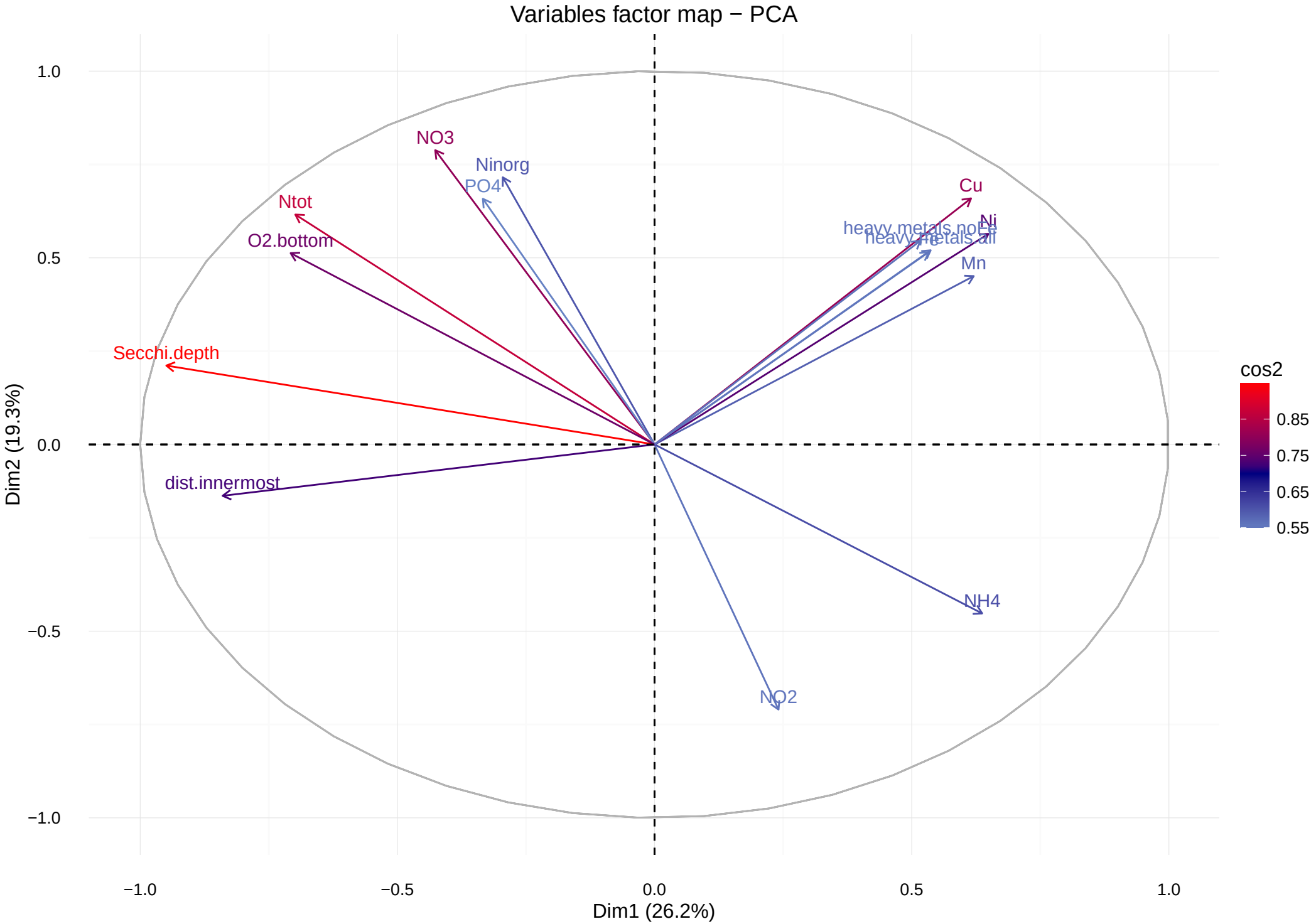
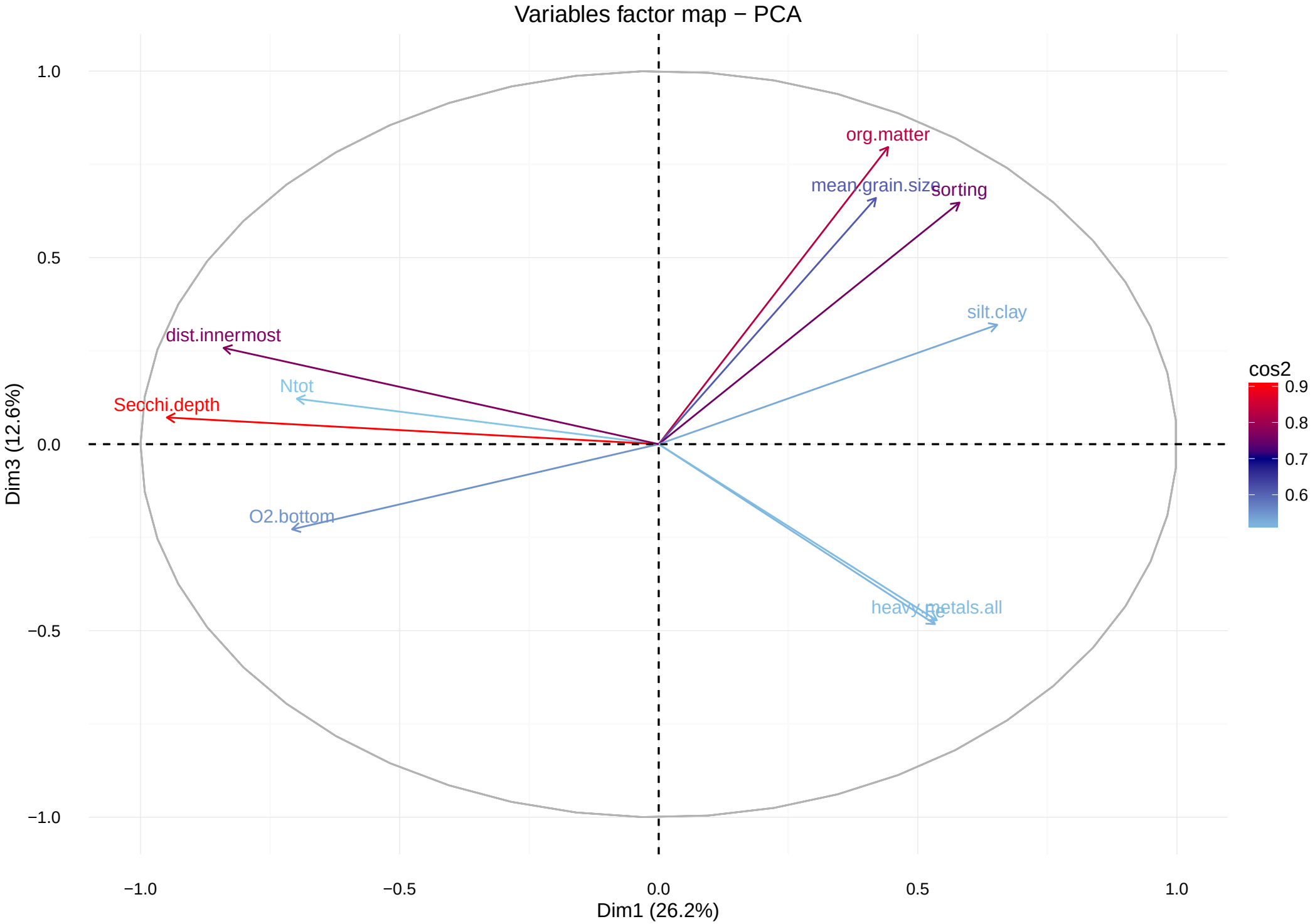
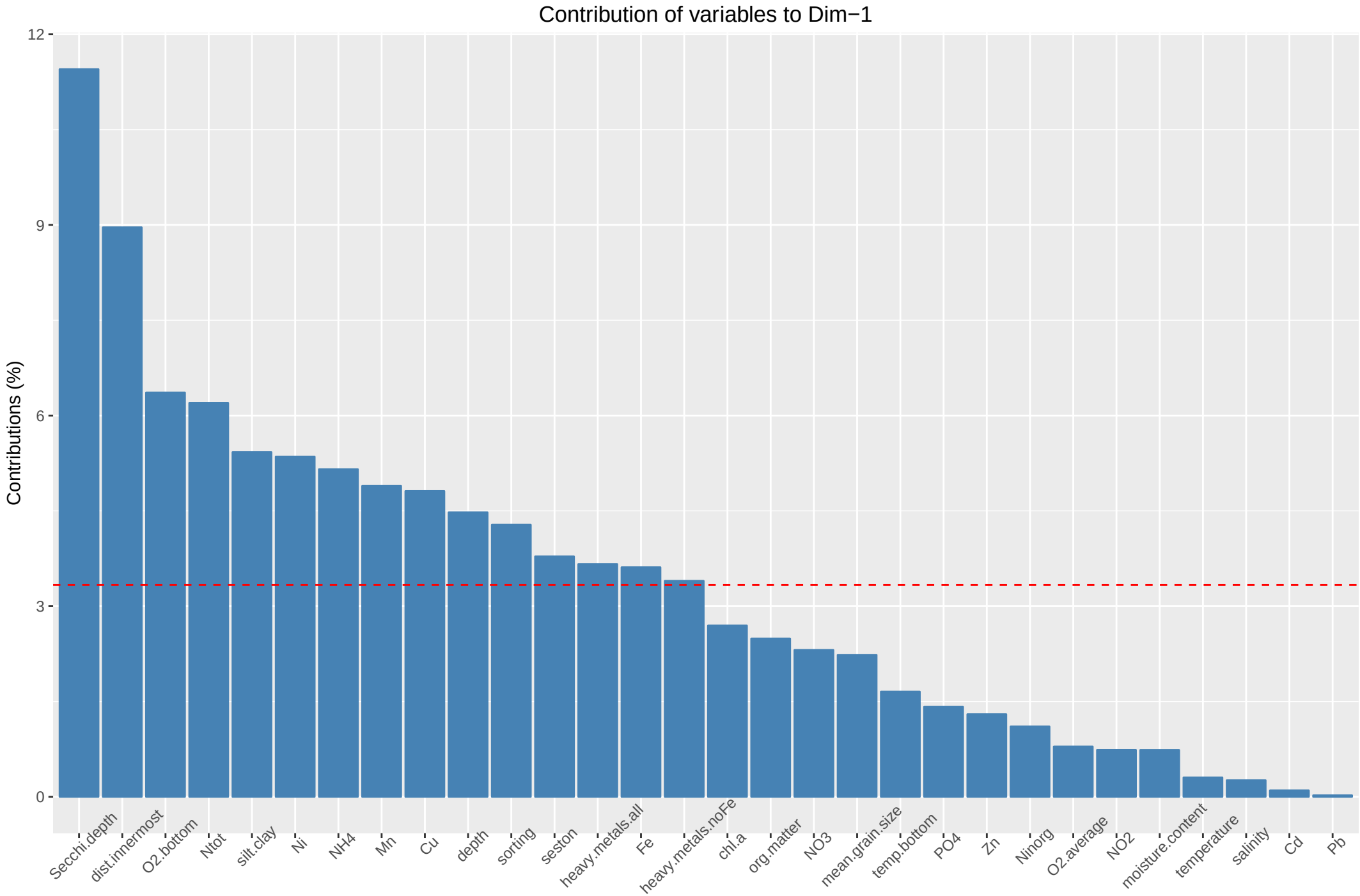
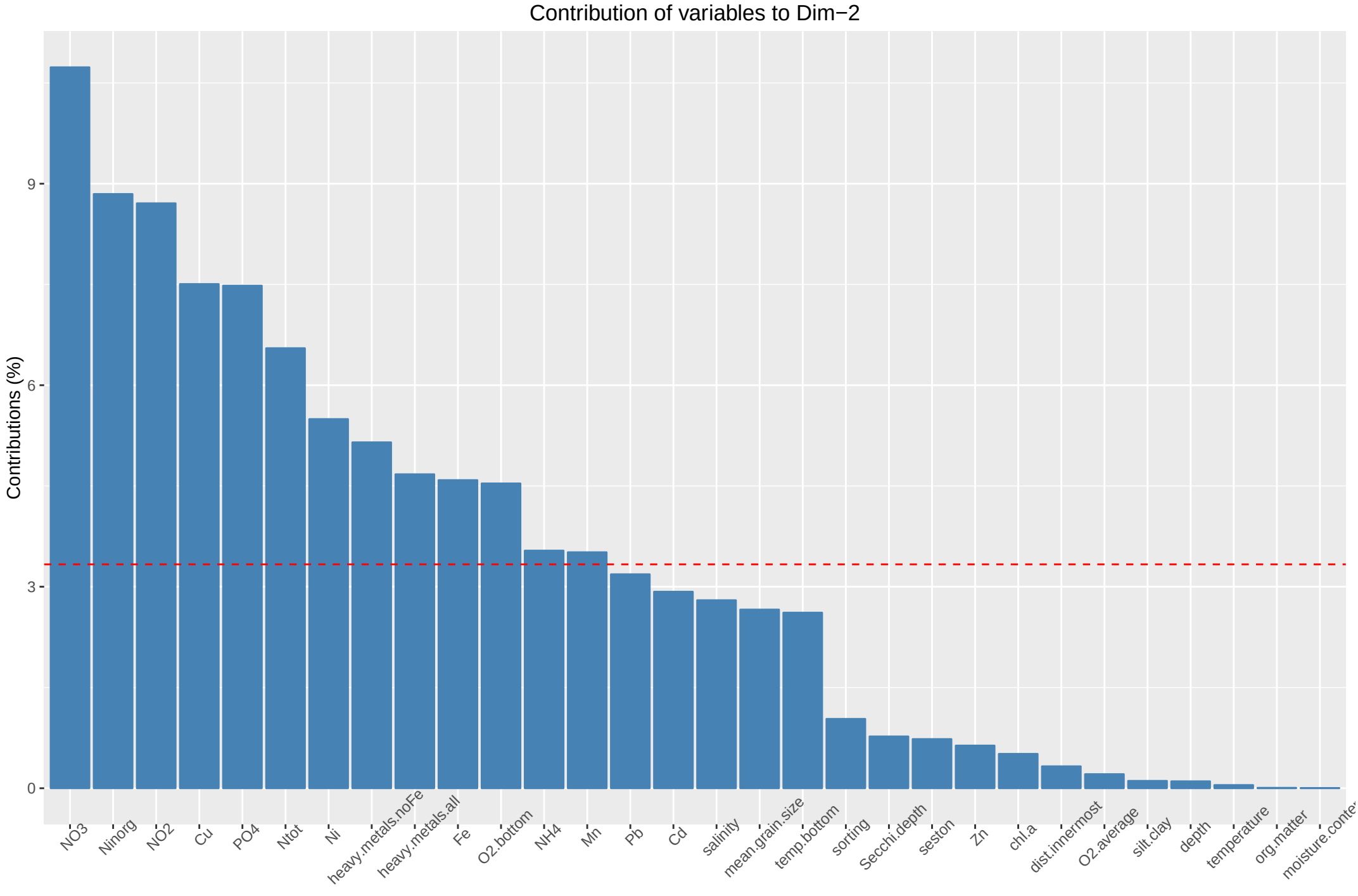
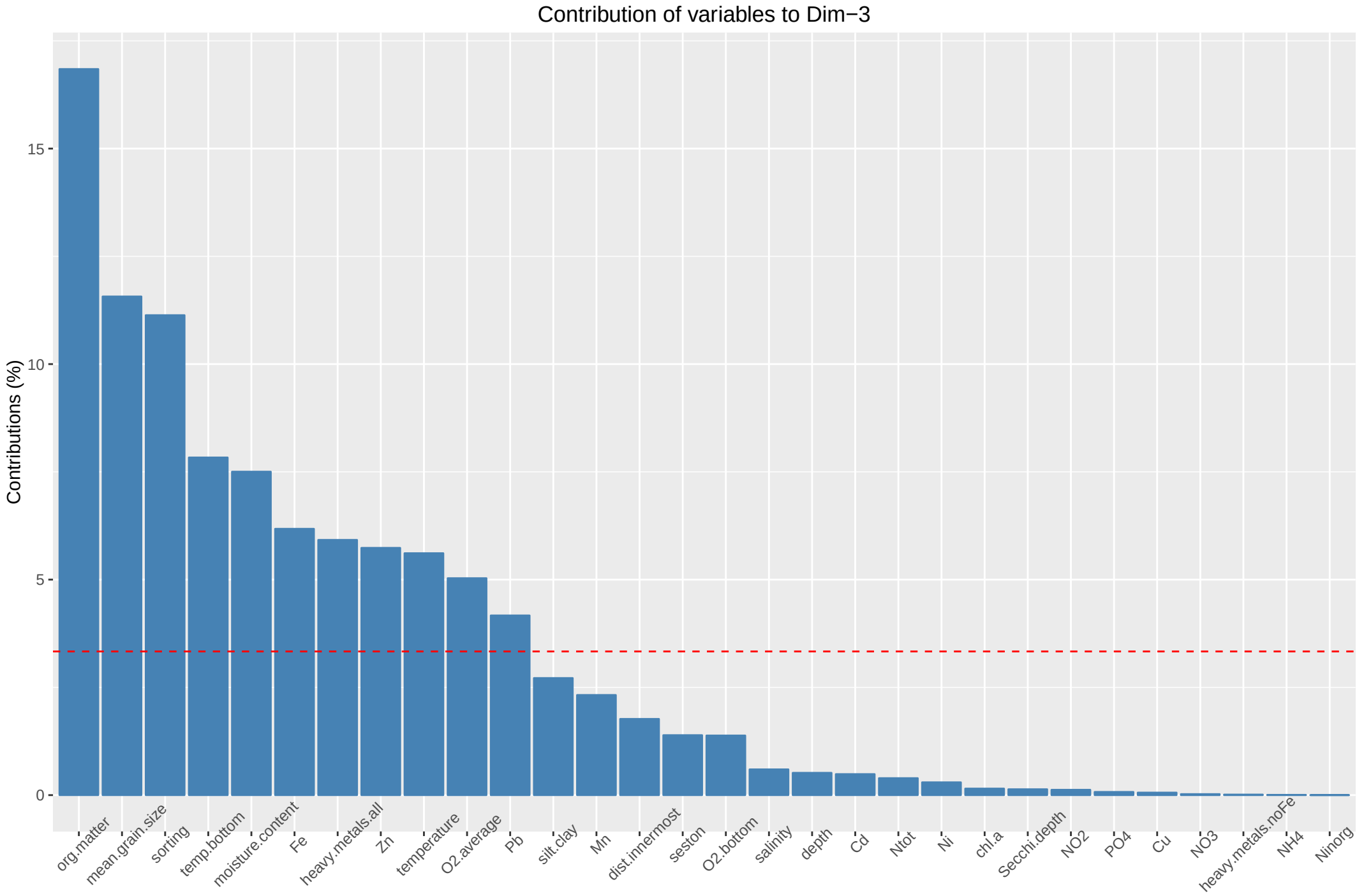

Scree plot
Percentage of explained variances
20
10
0
1
2
3
4
5
6
7
8
9
10
Dimensions

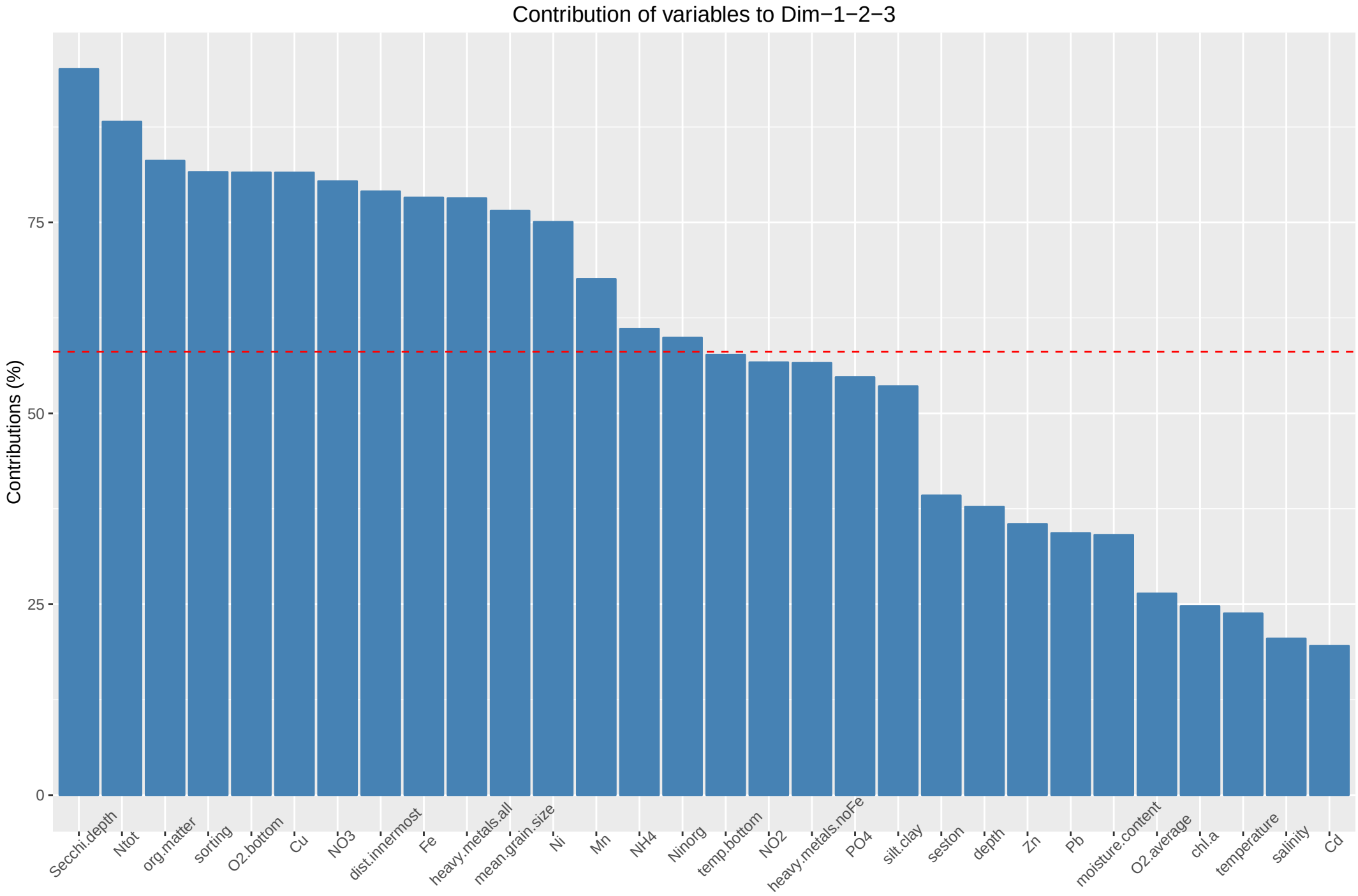

Variables factor map − PCA
NO3
Ninorg
PO4
Ntot
O2.bottom
Secchi.depth
dist.innermost
Cu
Ni
heavy.metals.noFe
heavy.metals.all
Mn
NH4
NO2
cos2
0.85
0.75
0.65
0.55
1.0
0.5
0.0
−0.5
−1.0
Dim2 (19.3%)
Dim1 (26.2%)

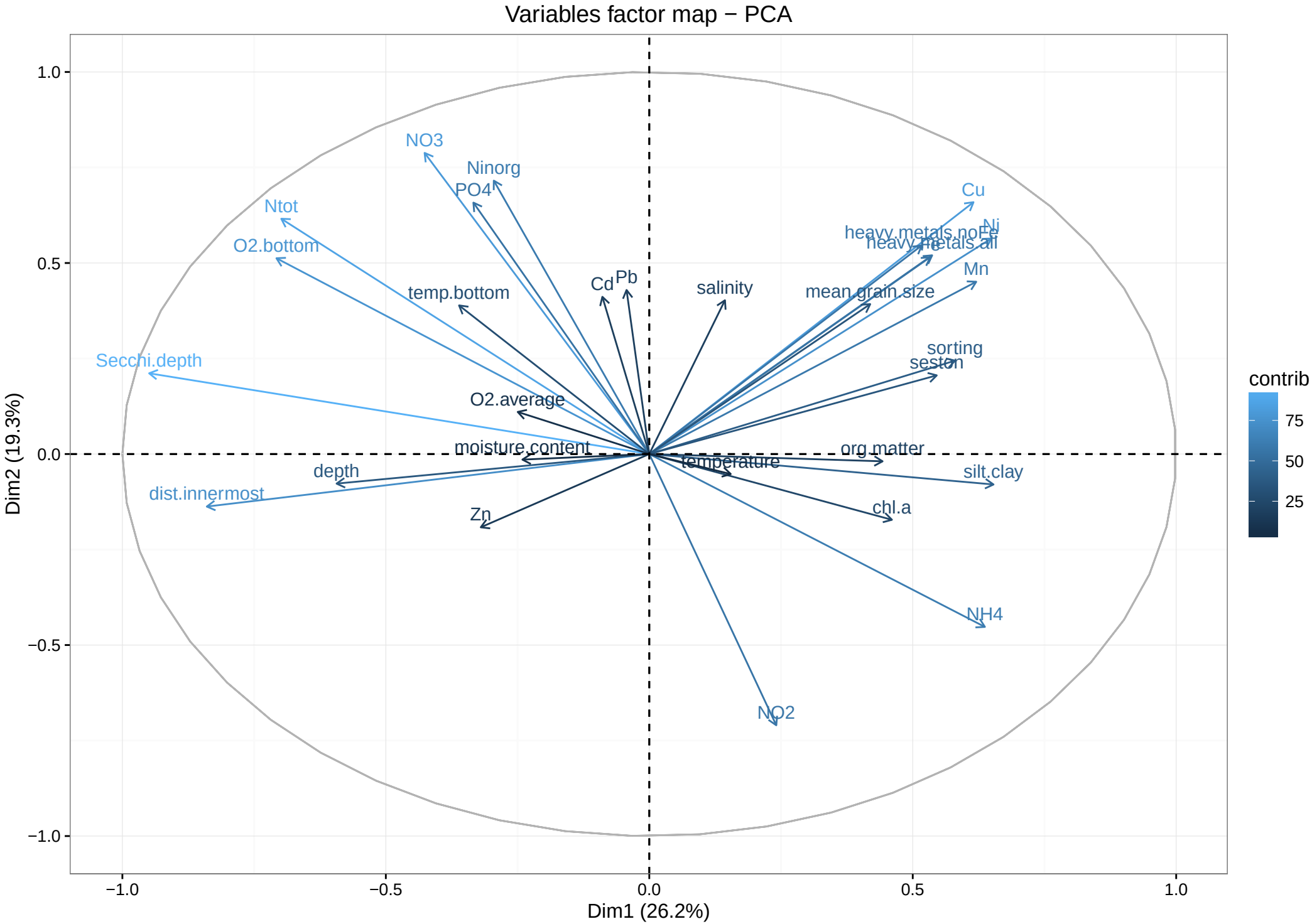

Variables factor map − PCA
org.matter
mean.grain.size
sorting
silt.clay
dist.innermost
Ntot
Secchi.depth
O2.bottom
heavy.metals.all
cos2
0.9
0.8
0.7
0.6
1.0
0.5
0.0
−0.5
−1.0
Dim3 (12.6%)
Dim1 (26.2%)

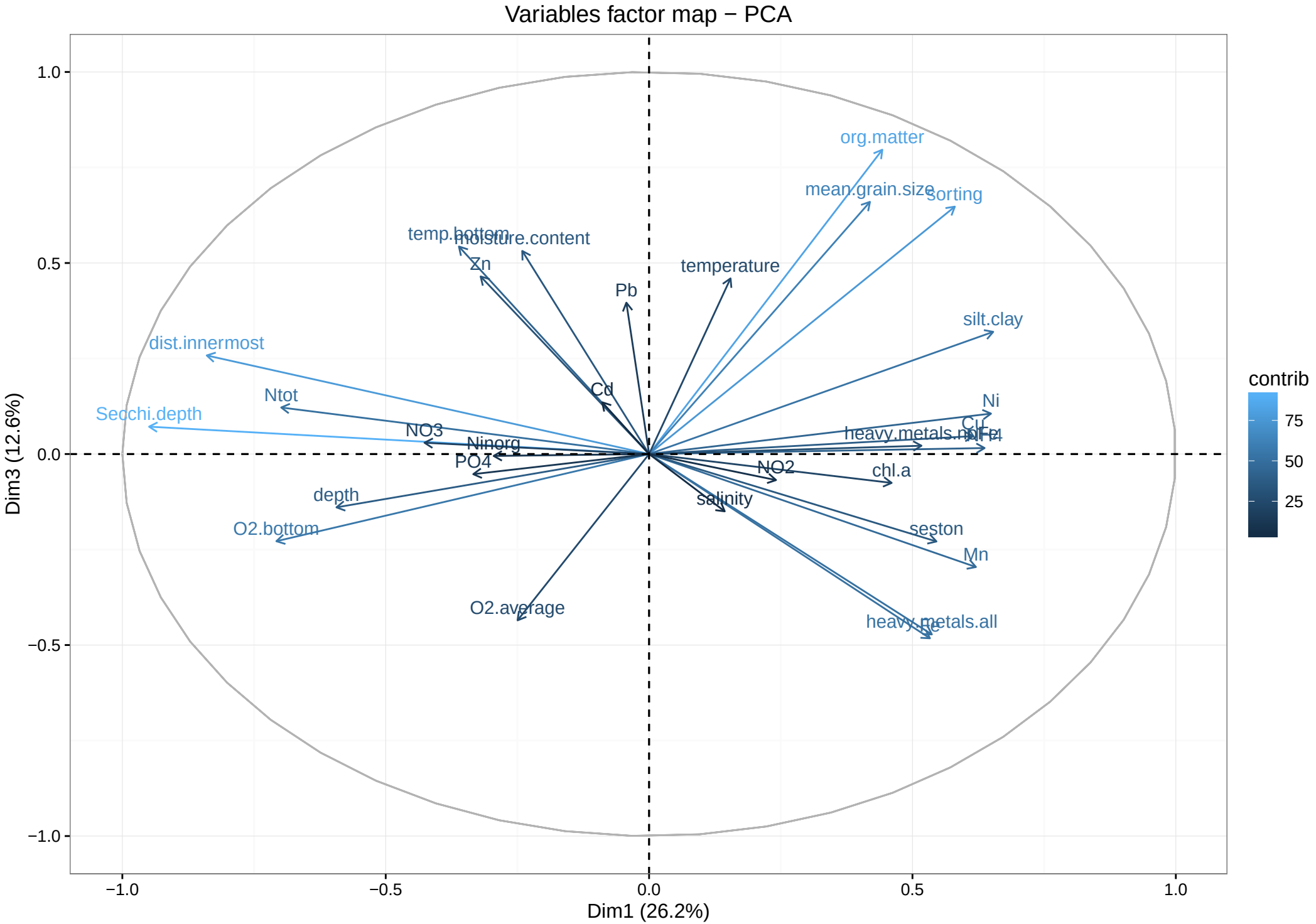

Contribution of variables to Dim−1
Contributions (%)
12
9
6
3
0
Secchi.depth
dist.innermost
O2.bottom
Ntot
silt.clay
Ni
NH4
Mn
Cu
depth
sorting
seston
heavy.metals.all
Fe
heavy.metals.noFe
chl.a
org.matter
NO3
mean.grain.size
temp.bottom
PO4
Zn
Ninorg
O2.average
NO2
moisture.content
temperature
salinity
Cd
Pb

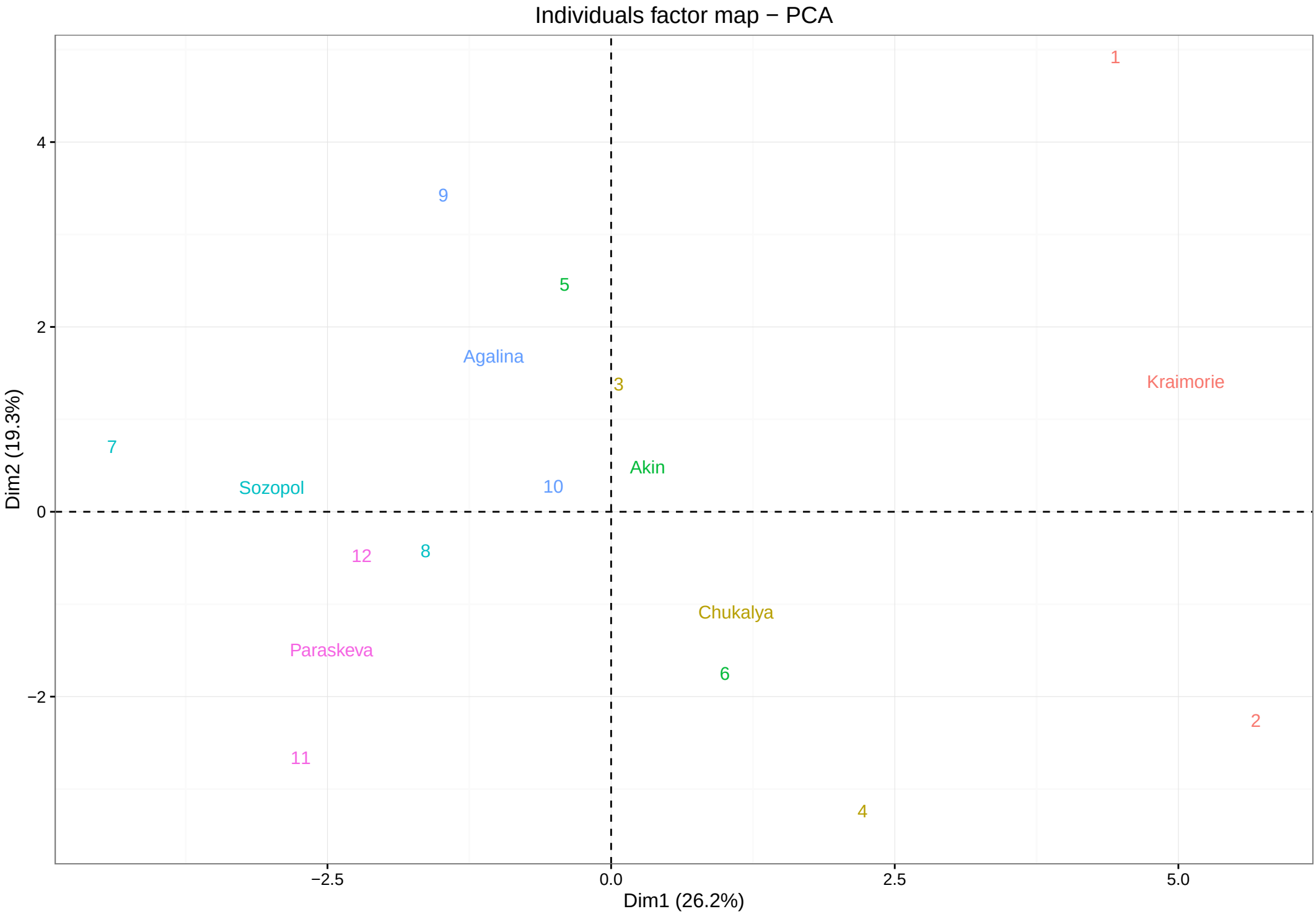

Contribution of variables to Dim−2
Contributions (%)
9
6
3
0
NO3
Ninorg
NO2
Cu
PO4
Ntot
Ni
heavy.metals.noFe
heavy.metals.all
Fe
O2.bottom
NH4
Mn
Pb
Cd
salinity
mean.grain.size
temp.bottom
sorting
Secchi.depth
seston
Zn
chl.a
dist.innermost
O2.average
silt.clay
depth
temperature
org.matter
moisture.conte

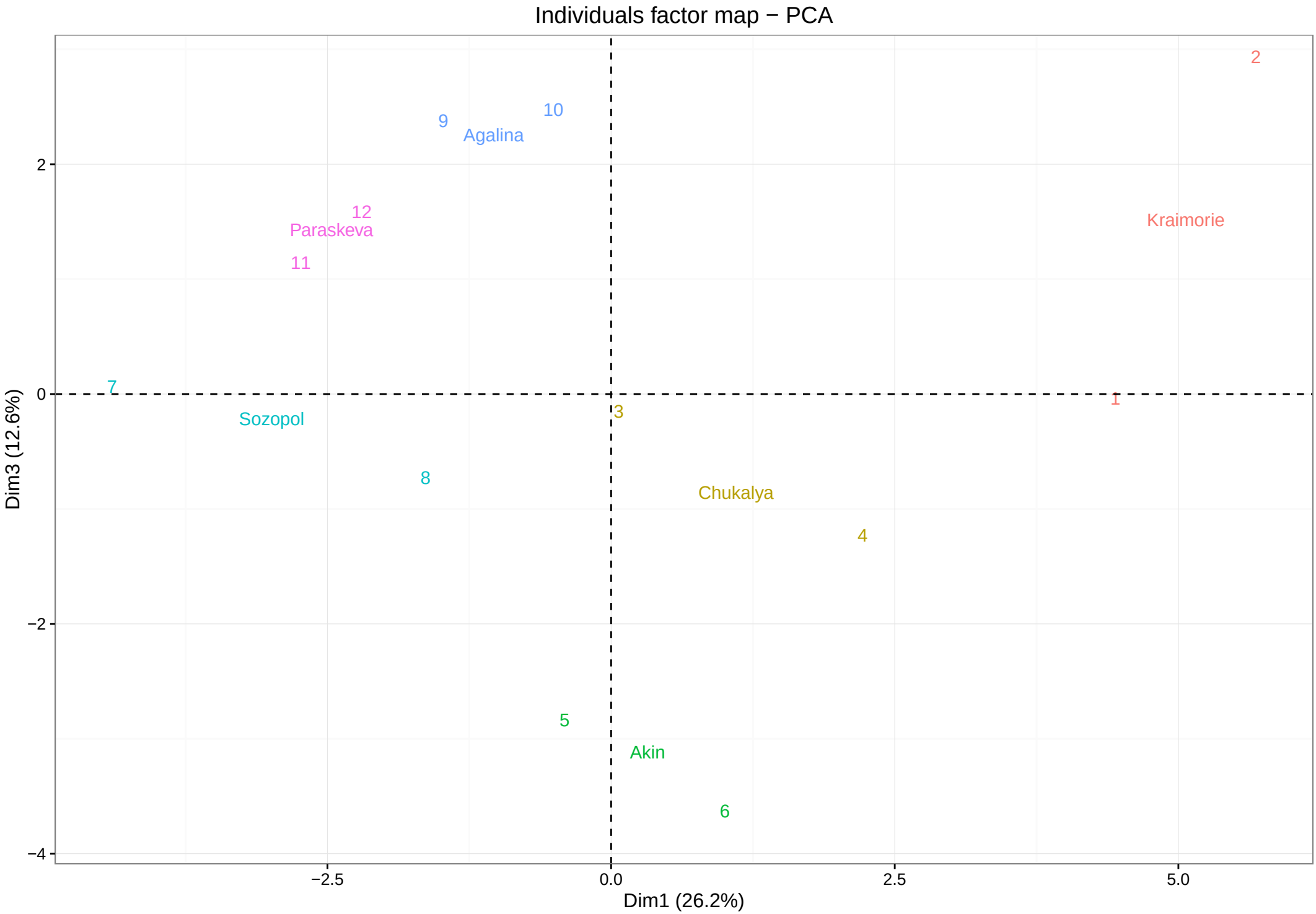

Contribution of variables to Dim−3
Contributions (%)
15
10
5
0
org.matter
mean.grain.size
sorting
temp.bottom
moisture.content
Fe
heavy.metals.all
Zn
temperature
O2.average
Pb
silt.clay
Mn
dist.innermost
seston
O2.bottom
salinity
depth
Cd
Ntot
Ni
chl.a
Secchi.depth
NO2
PO4
Cu
NO3
heavy.metals.noFe
NH4
Ninorg

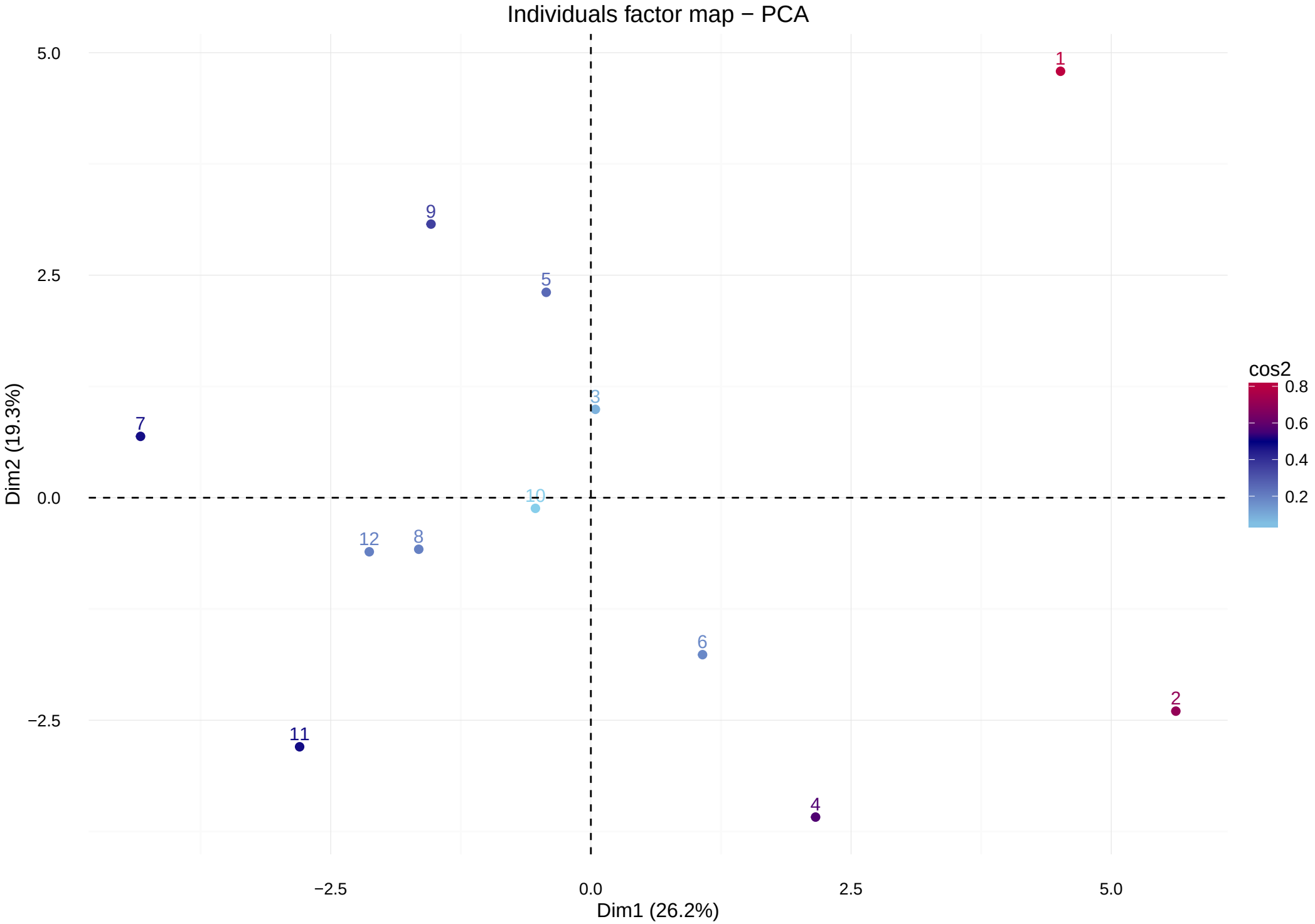

Contribution of variables to Dim−1−2−3
Contributions (%)
0
25
50
75
Secchi.depth
Ntot
org.matter
sorting
O2.bottom
Cu
NO3
dist.innermost
Fe
heavy.metals.all
mean.grain.size
Ni
Mn
NH4
Ninorg
temp.bottom
NO2
heavy.metals.noFe
PO4
silt.clay
seston
depth
Zn
Pb
moisture.content
O2.average
chl.a
temperature
salinity
Cd

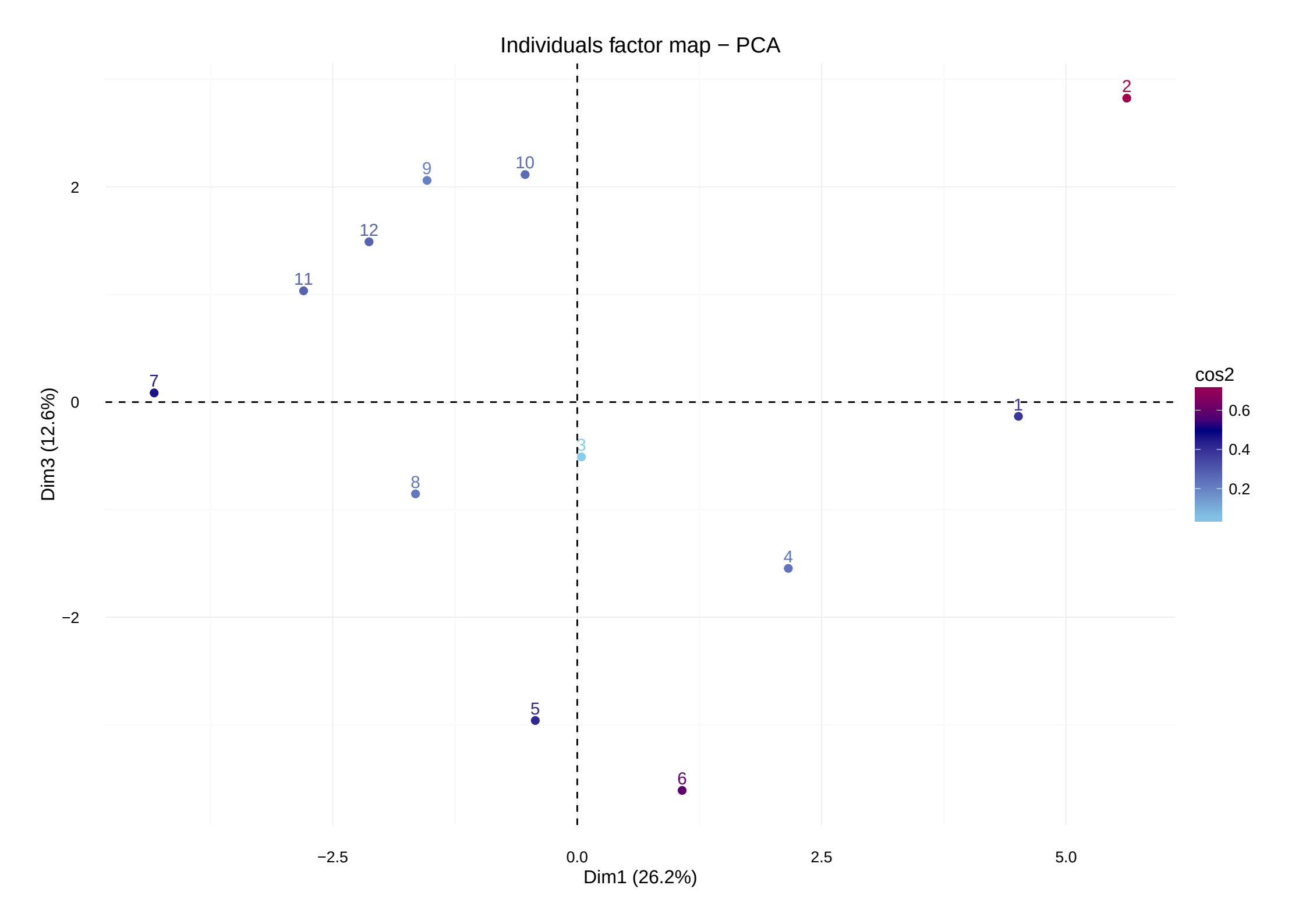

Variables factor map − PCA
Dim2 (19.3%)
Dim1 (26.2%)
1.0
0.5
0.0
−0.5
−1.0
NO3
Ninorg
PO4
Ntot
O2.bottom
temp.bottom
Cd
Pb
salinity
Cu
Ni
heavy.metals.noFe
heavy.metals.all
Mn
mean.grain.size
sorting
seston
Secchi.depth
O2.average
moisture.content
org.matter
temperature
depth
silt.clay
dist.innermost
Zn
chl.a
NH4
NO2
contrib
75
50
25

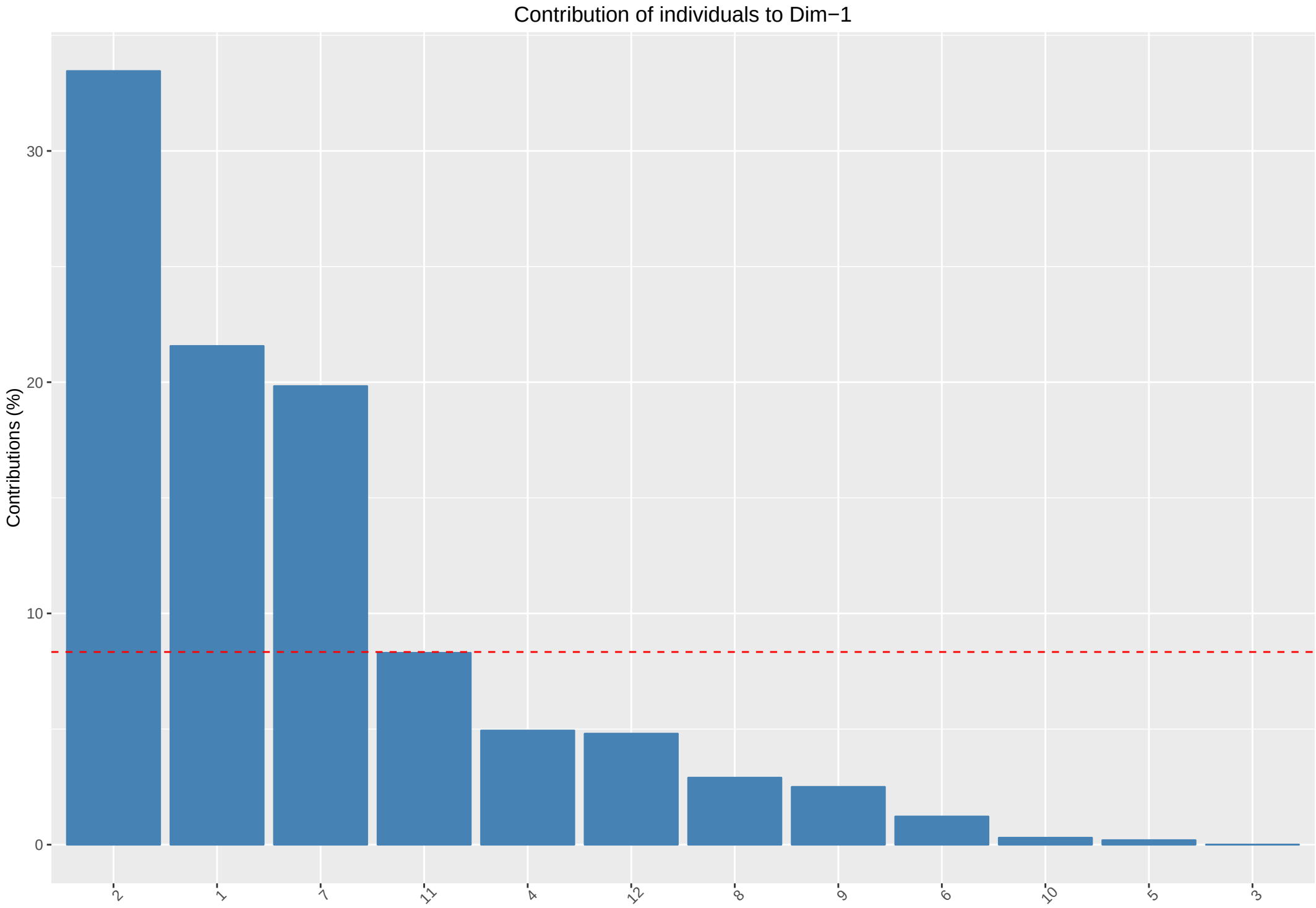

Variables factor map − PCA
org.matter
mean.grain.size
sorting
temp.bottom
moisture.content
Zn
temperature
Pb
silt.clay
dist.innermost
Cd
Ntot
Ni
Secchi.depth
NO3
Ninorg
PO4
NO2
chl.a
depth
salinity
O2.bottom
seston
Mn
O2.average
heavy.metals.all
contrib
75
50
25
1.0
0.5
0.0
−0.5
−1.0
Dim3 (12.6%)
Dim1 (26.2%)

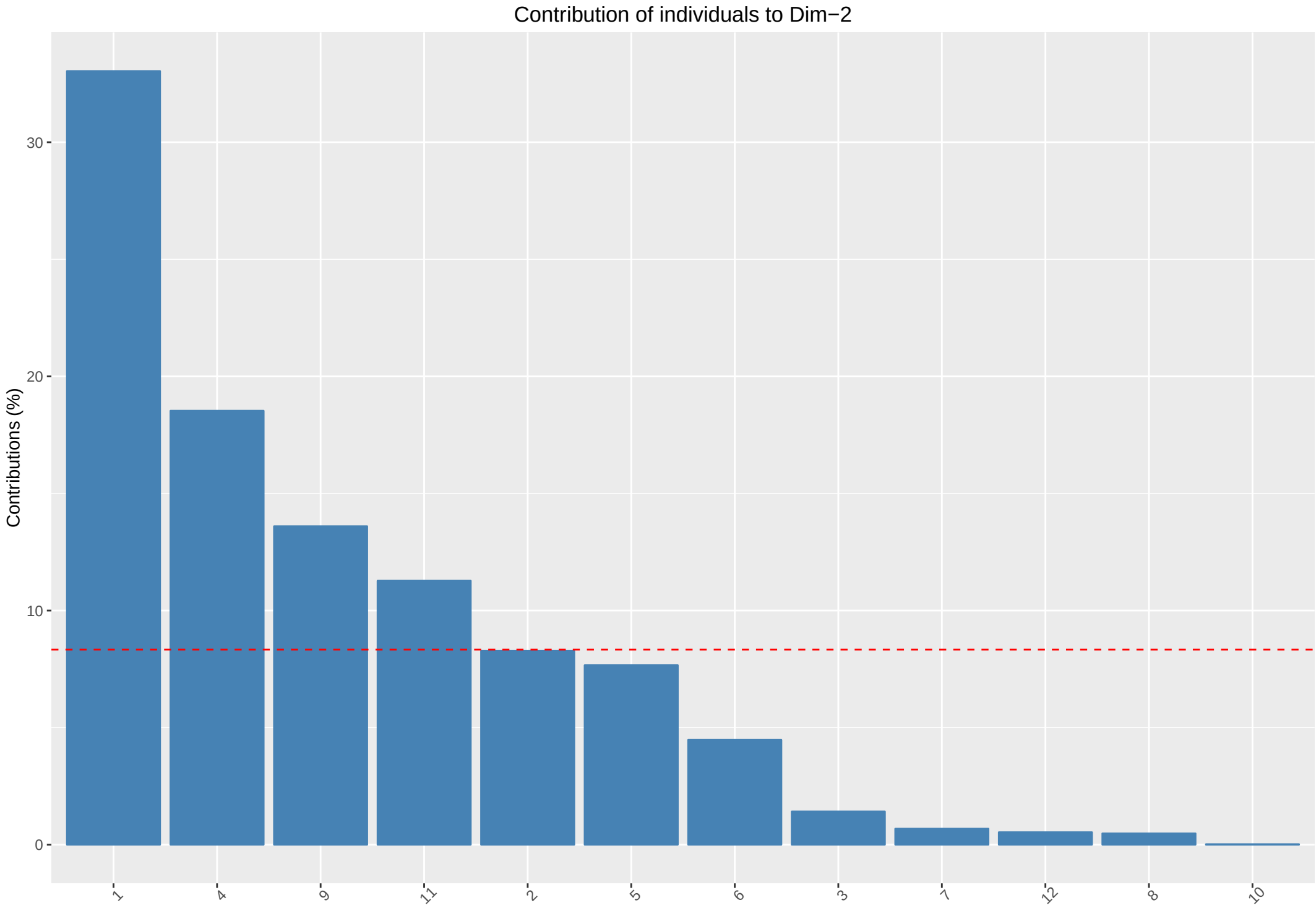

Individuals factor map − PCA
1
9
5
Agalina
3
Kraimorie
7
Akin
Sozopol
10
12
8
Chukalya
Paraskeva
6
2
11
4
4
2
0
−2
−2.5
0.0
2.5
5.0
Dim2 (19.3%)
Dim1 (26.2%)

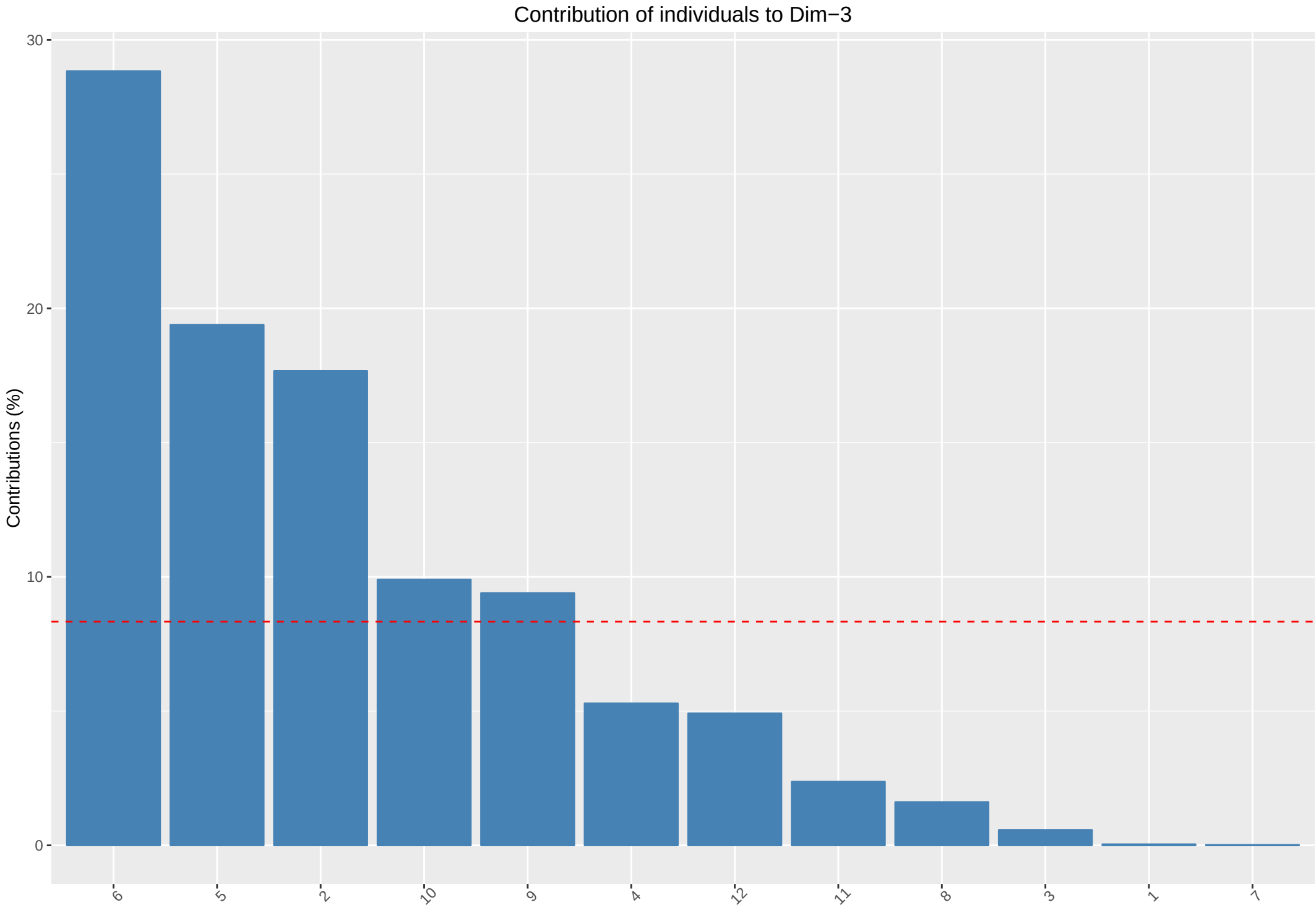

Individuals factor map − PCA
2
9
10
Agalina
12
Paraskeva
11
Kraimorie
7
Sozopol
3
1
8
Chukalya
4
5
Akin
6
2
0
−2
−4
−2.5
0.0
2.5
5.0
Dim3 (12.6%)
Dim1 (26.2%)

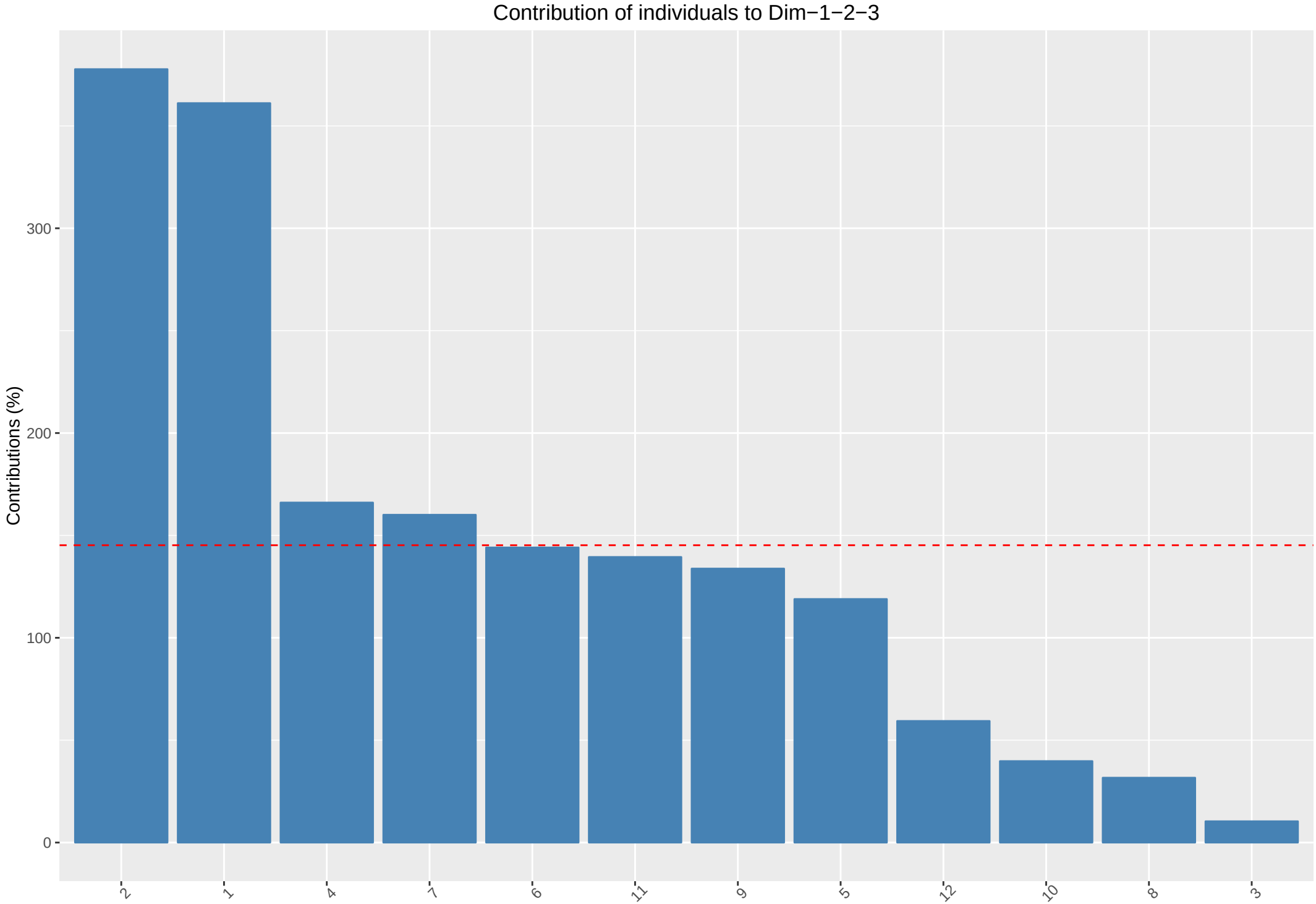

Individuals factor map − PCA
5.0
2.5
0.0
−2.5
Dim2 (19.3%)
−2.5
0.0
2.5
5.0
Dim1 (26.2%)
1
2
3
4
5
6
7
8
9
10
11
12
cos2
0.8
0.6
0.4
0.2


Individuals factor map − PCA
2
9
10
12
11
7
0
1
3
8
4
−2
5
6
cos2
0.6
0.4
0.2
−2.5
0.0
2.5
5.0
Dim1 (26.2%)
Dim3 (12.6%)


Contribution of individuals to Dim−1
Contributions (%)
30
20
10
0
2
1
7
11
4
12
8
9
6
10
5
3


Contribution of individuals to Dim−2
Contributions (%)
30
20
10
0
1
4
9
11
2
5
6
3
7
12
8
10


Contribution of individuals to Dim−3
Contributions (%)
30
20
10
0
6
5
2
10
9
4
12
11
8
3
1
7


Contribution of individuals to Dim−1−2−3
Contributions (%)
300
200
100
0
2
1
4
7
6
11
9
5
12
10
8
3