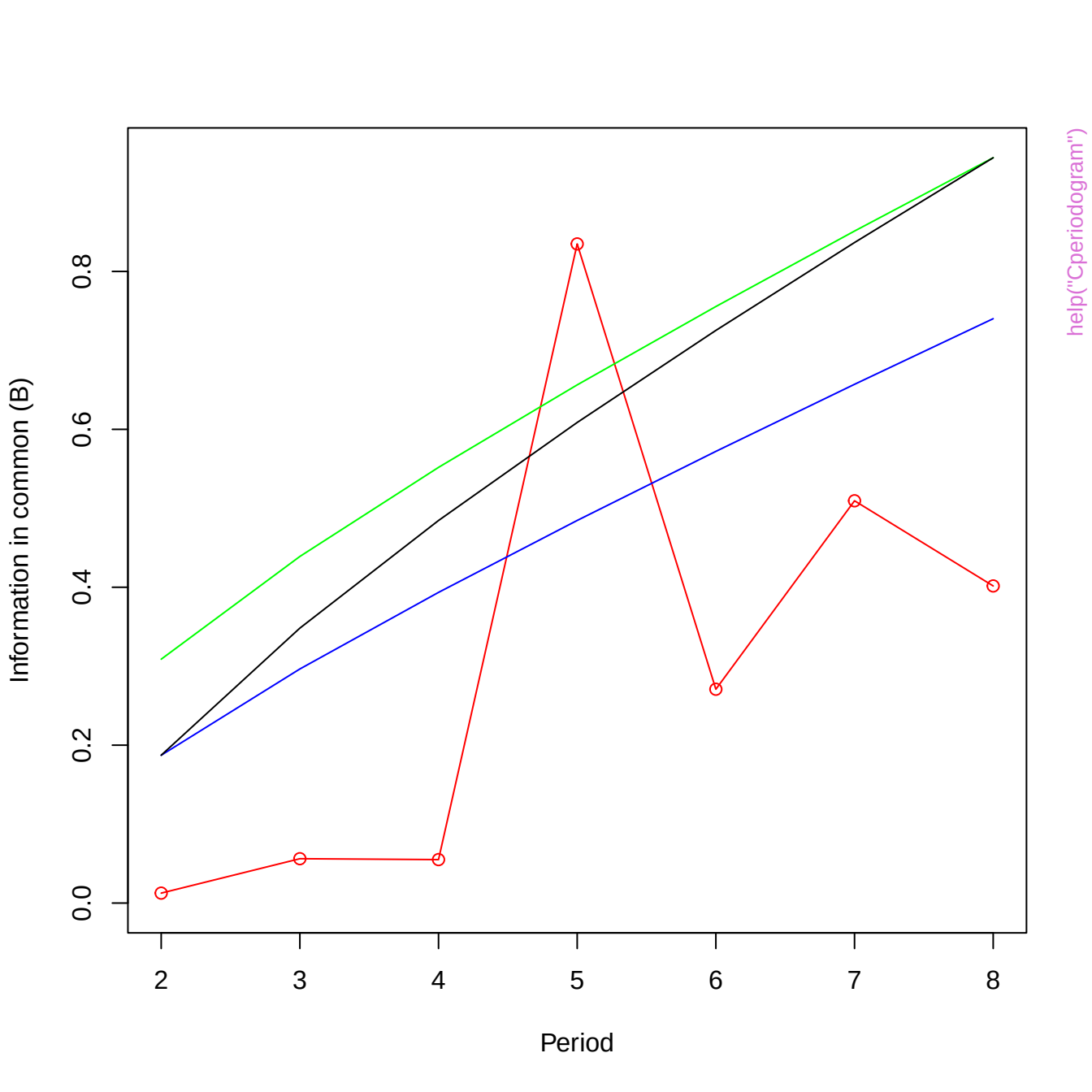
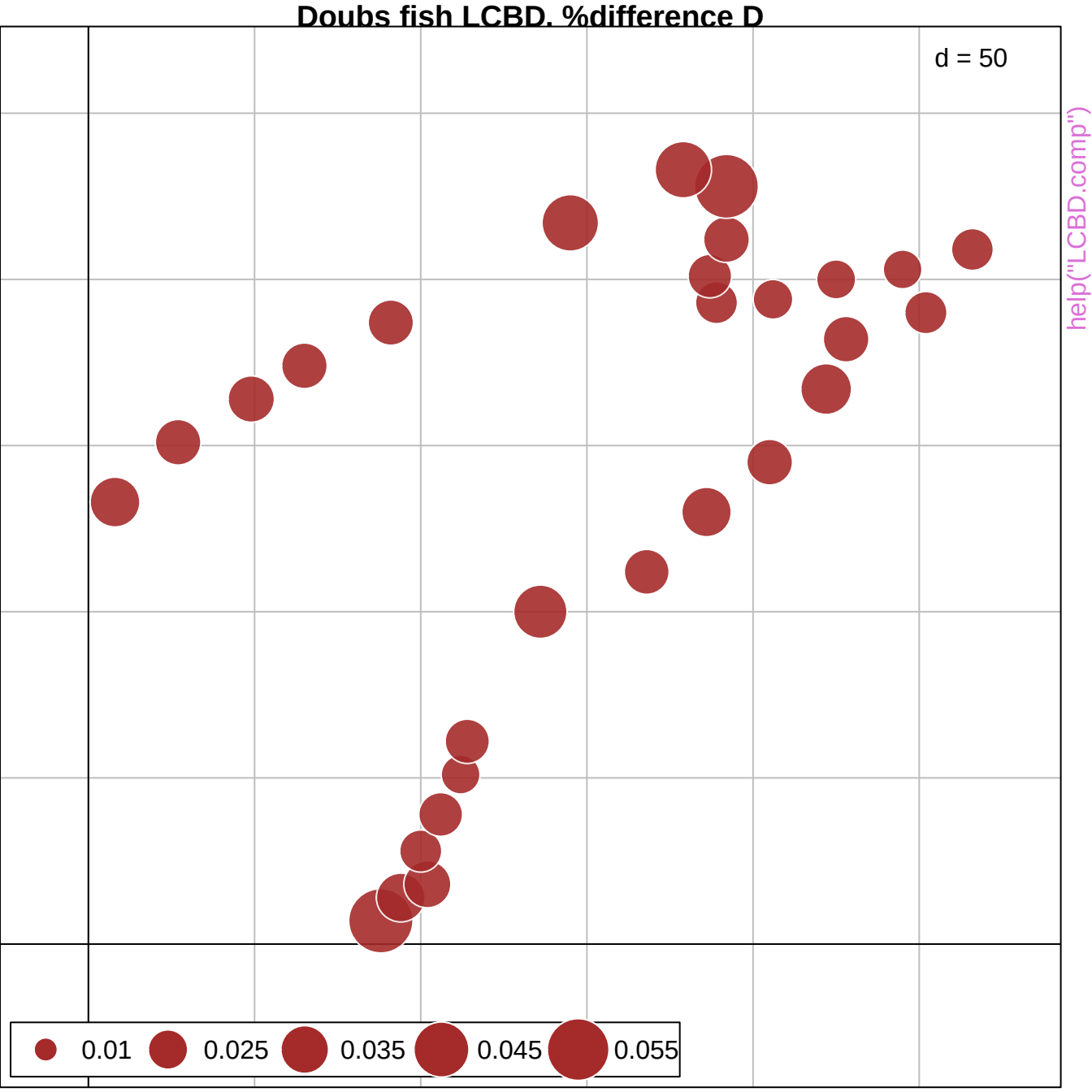
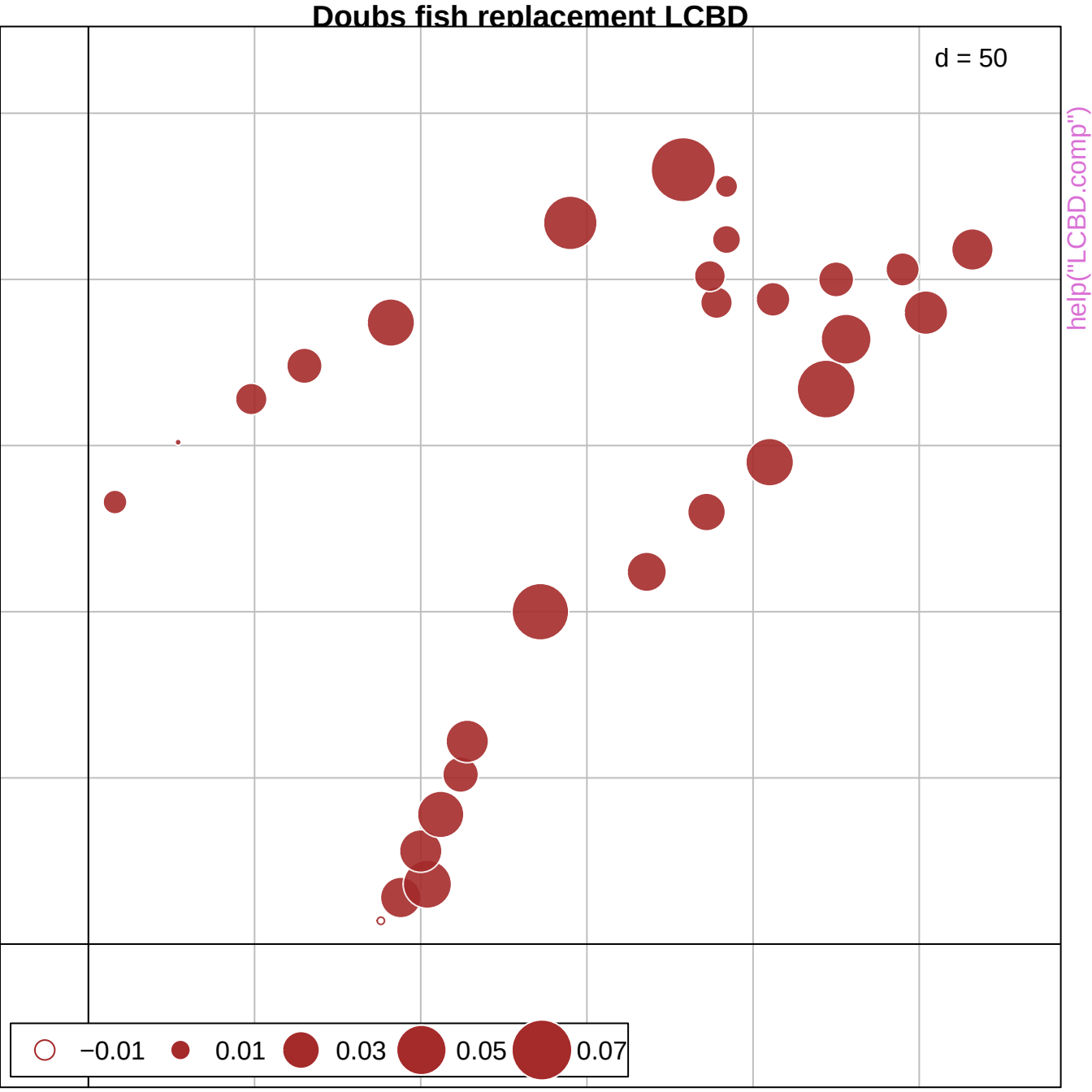
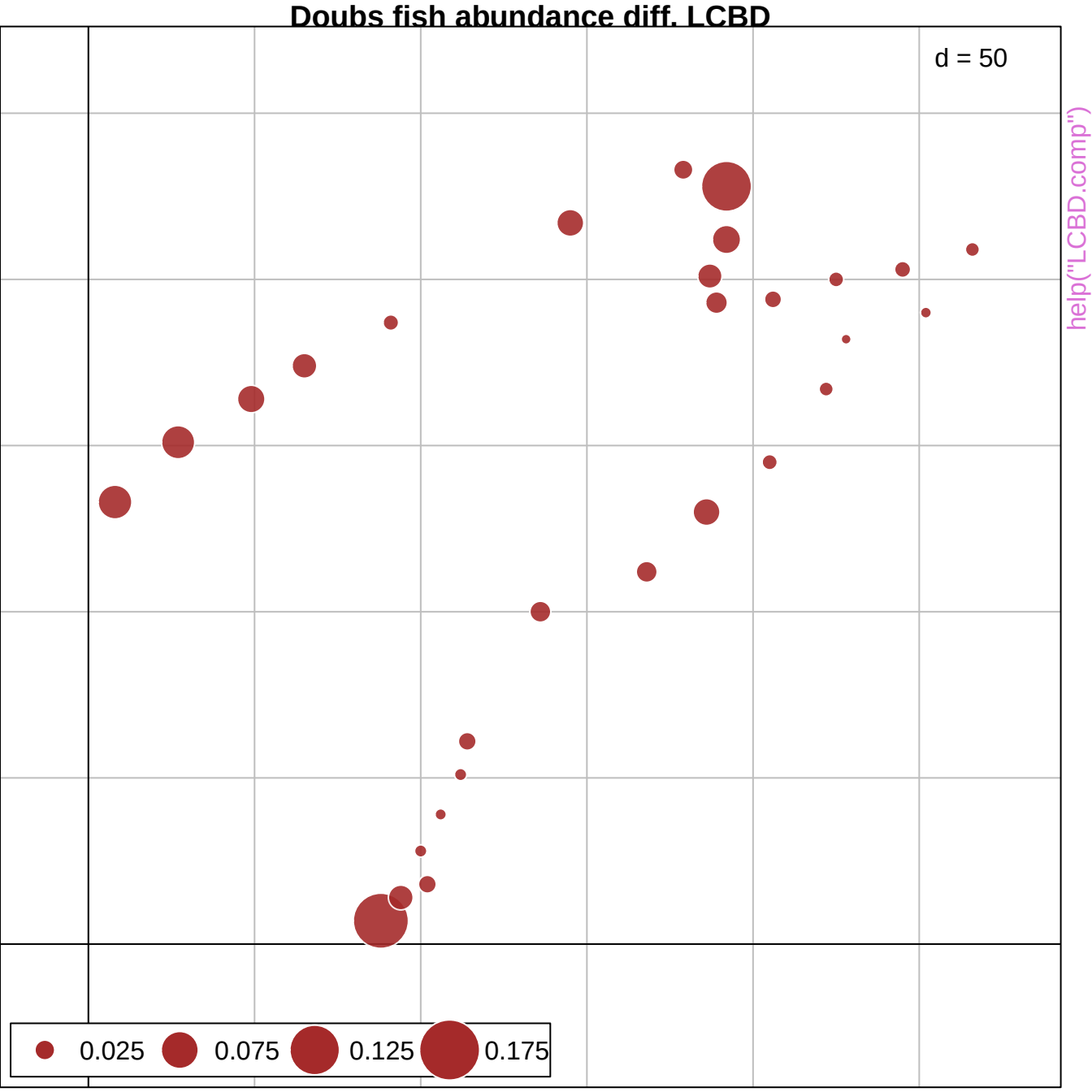
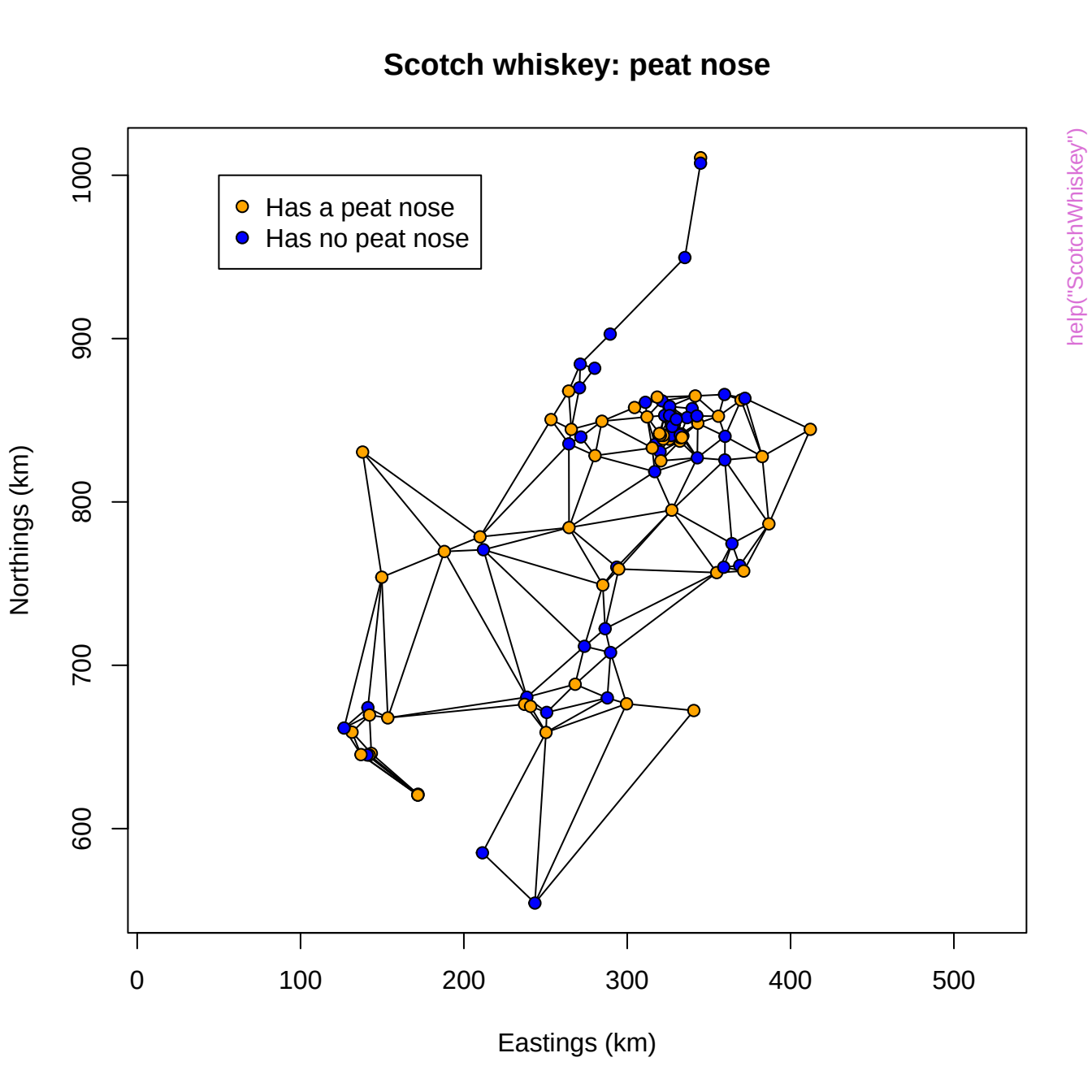
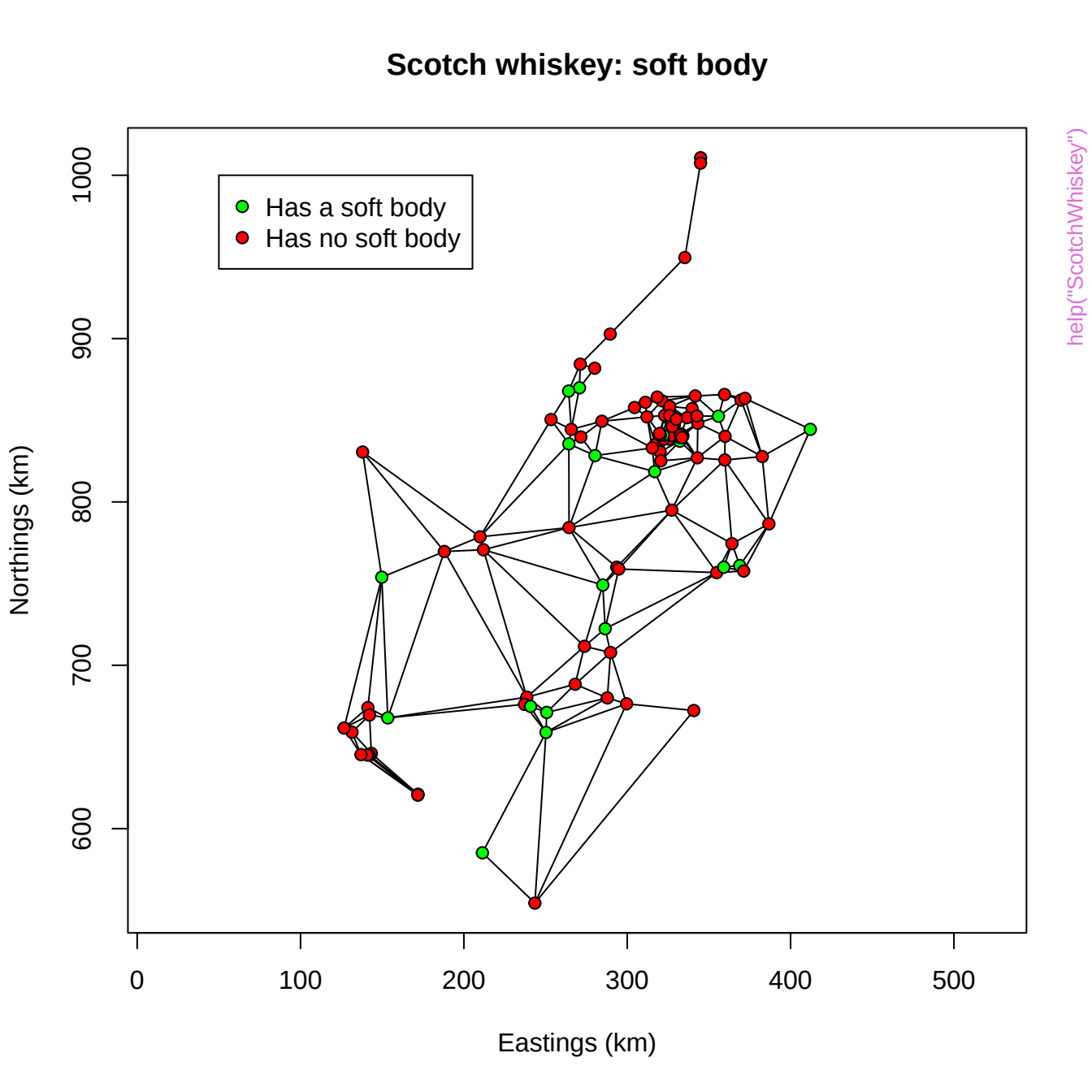

Information in common (B)
0.0
0.2
0.4
0.6
0.8
2
3
4
5
6
7
8
Period
help("Cperiodogram")

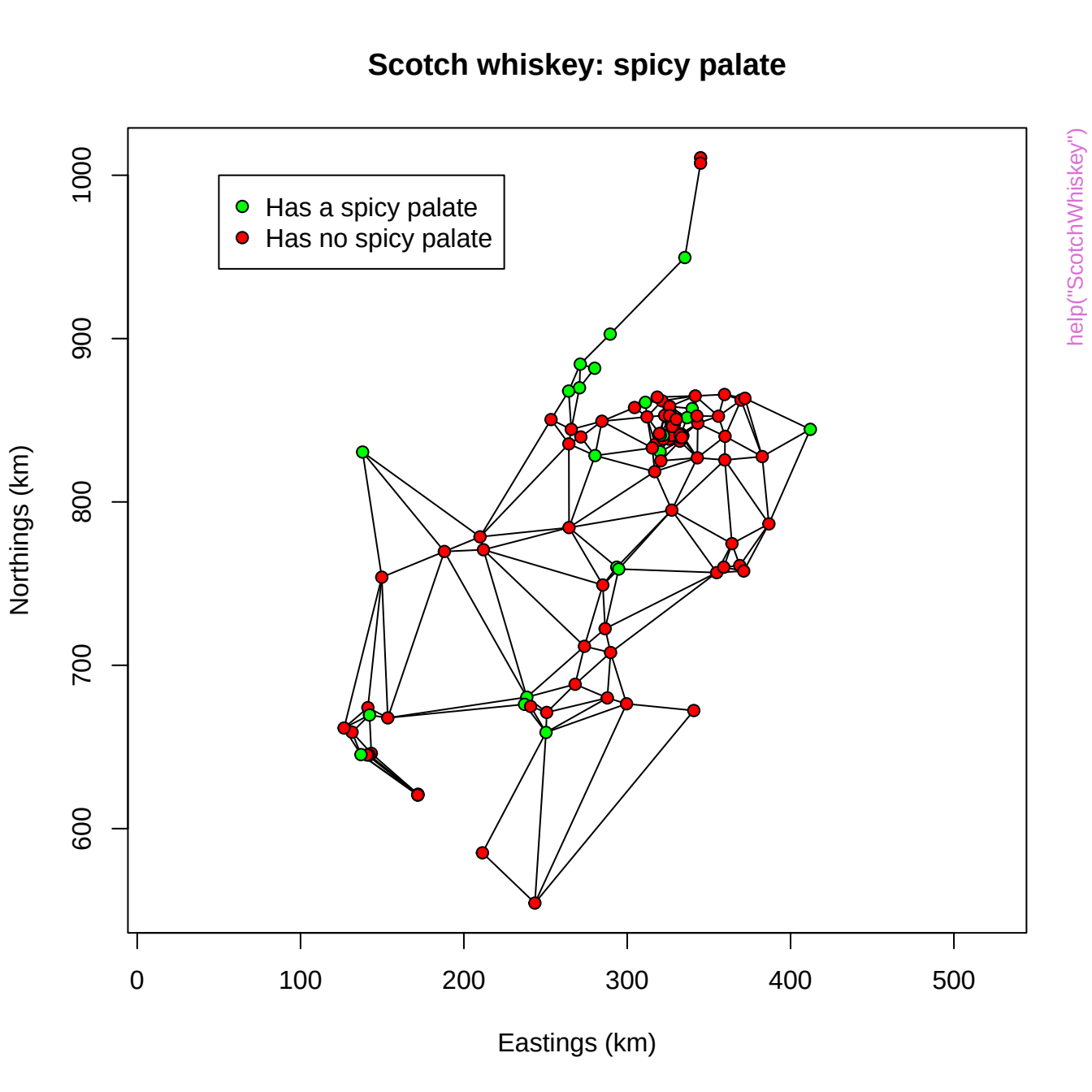

Doubs fish LCBD. %difference D
d = 50
help("LCBD.comp")
0.01
0.025
0.035
0.045
0.055

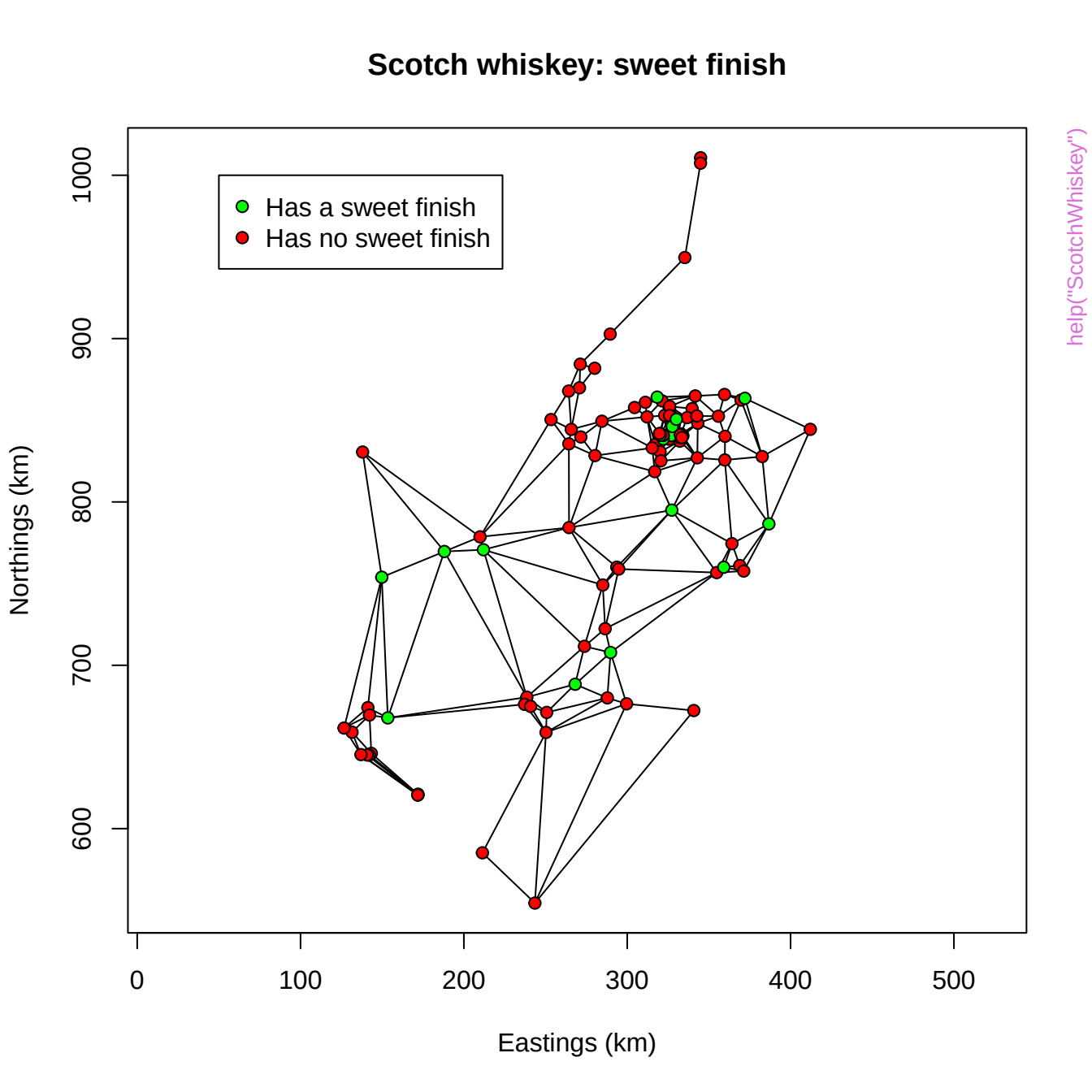

Doubs fish replacement LCBD
d = 50
help("LCBD.comp")
−0.01
0.01
0.03
0.05
0.07

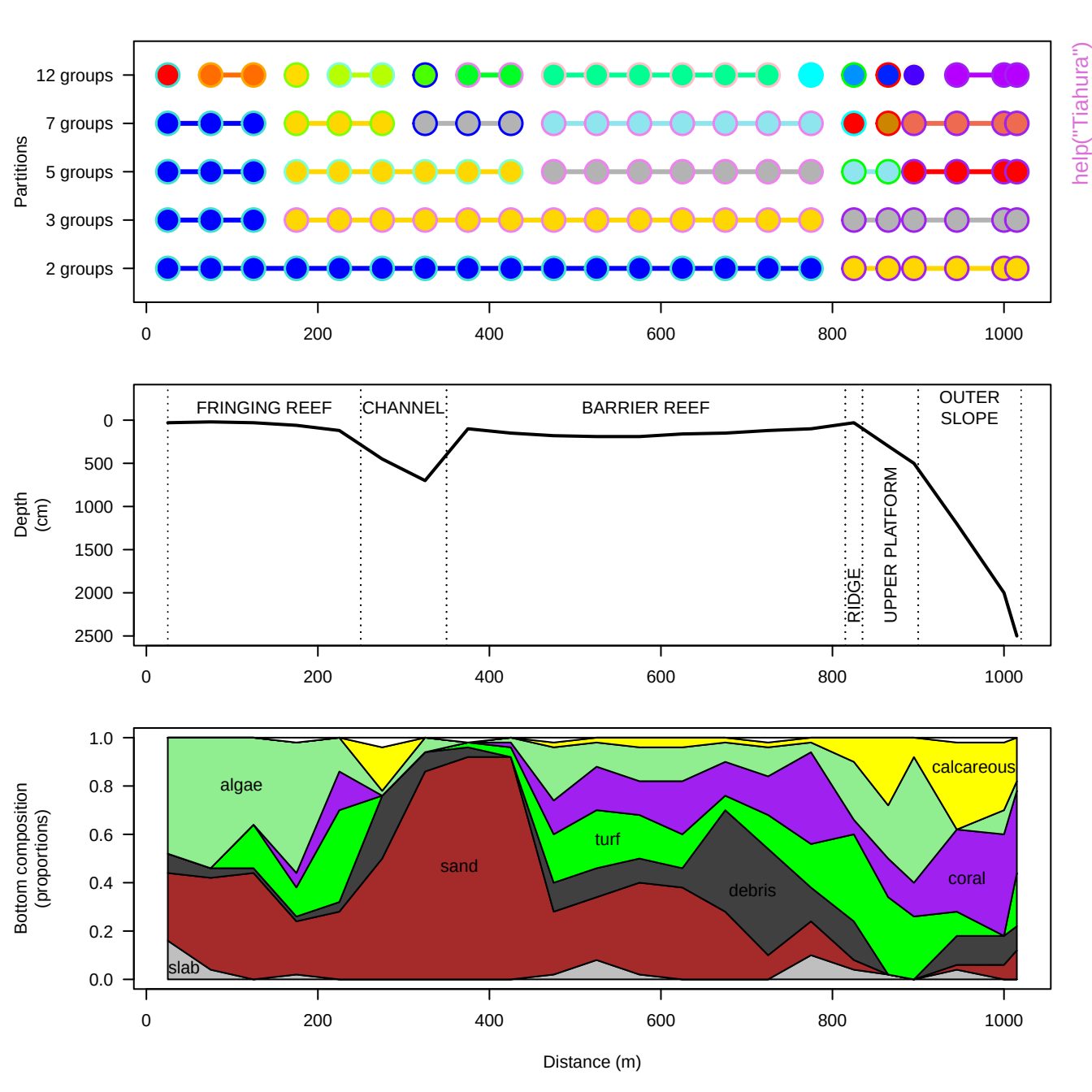

Doubs fish abundance diff. LCBD
d = 50
help("LCBD.comp")
0.025
0.075
0.125
0.175


Scotch whiskey: peat nose
Has a peat nose
Has no peat nose
Northings (km)
600
700
800
900
1000
0
100
200
300
400
500
Eastings (km)
help("ScotchWhiskey")

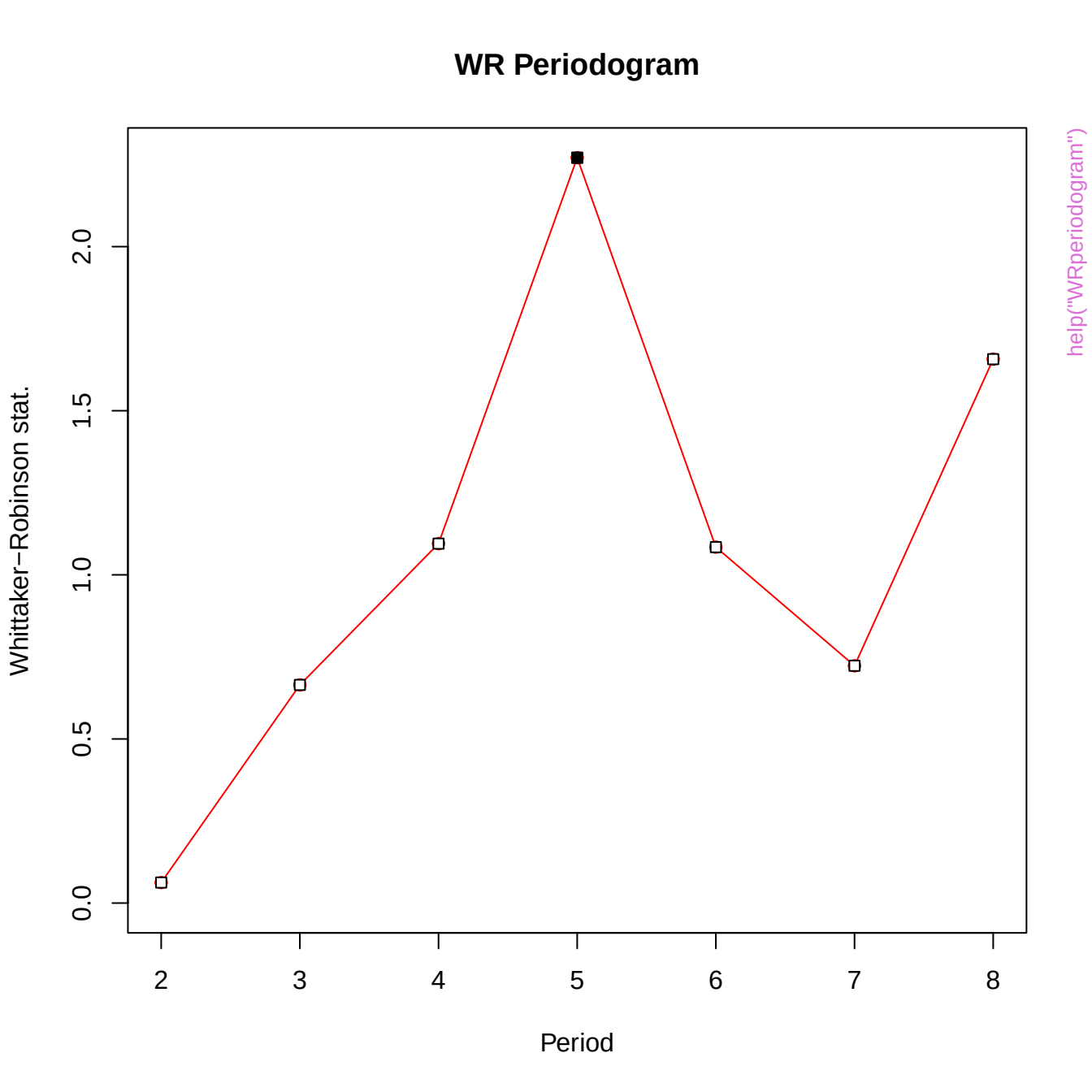

Scotch whiskey: soft body
Has a soft body
Has no soft body
Northings (km)
600
700
800
900
1000
0
100
200
300
400
500
Eastings (km)
help("ScotchWhiskey")

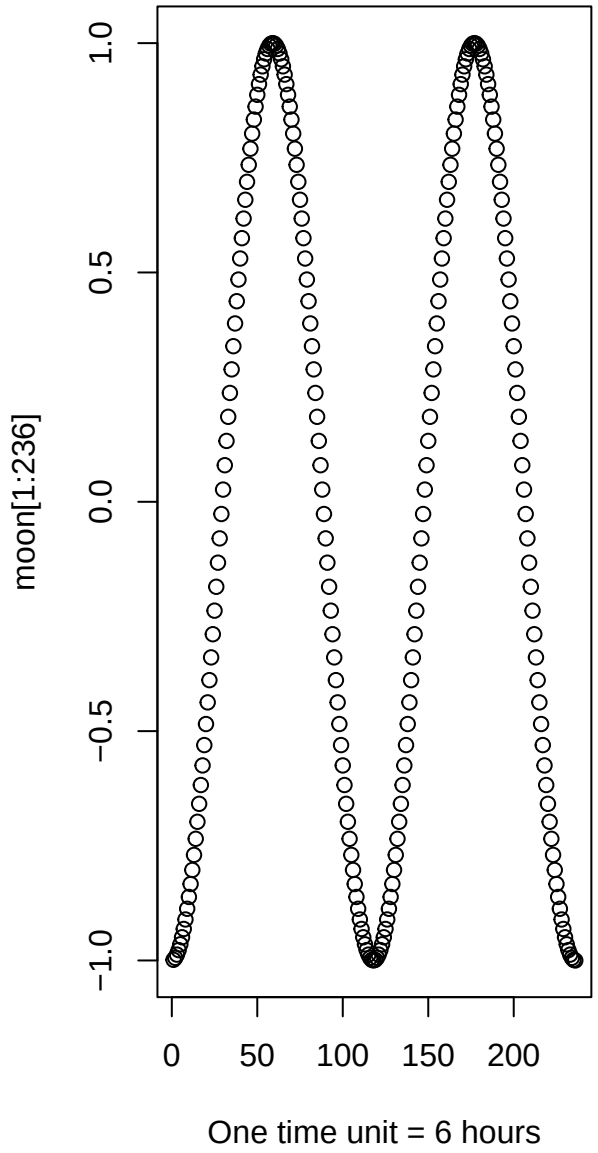

Scotch whiskey: spicy palate
Has a spicy palate
Has no spicy palate
Northings (km)
600
700
800
900
1000
0
100
200
300
400
500
Eastings (km)
help("ScotchWhiskey")

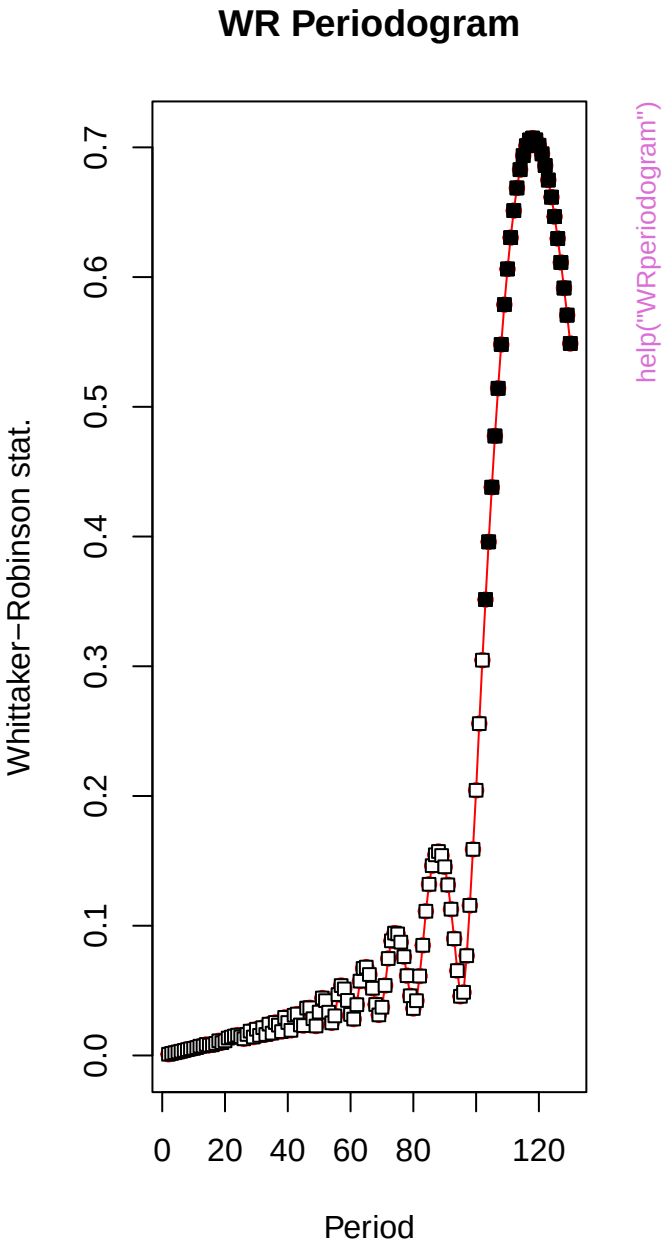

Scotch whiskey: sweet finish
Has a sweet finish
Has no sweet finish
Northings (km)
600
700
800
900
1000
0
100
200
300
400
500
Eastings (km)
help("ScotchWhiskey")

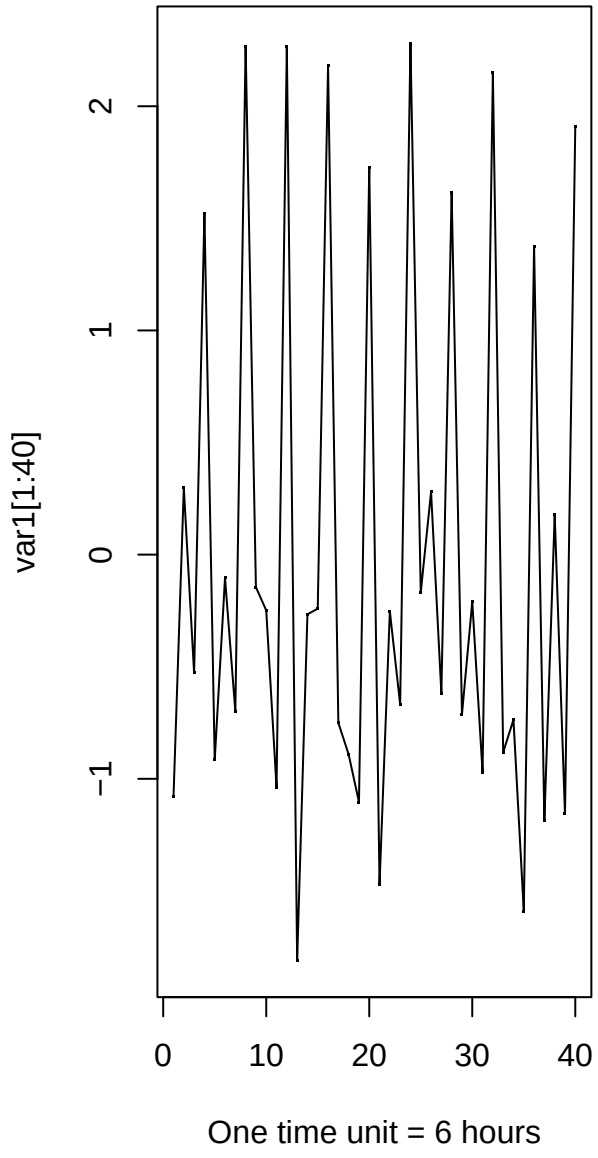

Partitions
12 groups
7 groups
5 groups
3 groups
2 groups
0
200
400
600
800
1000
help("Tiahura")
Depth (cm)
FRINGING REEF
CHANNEL
BARRIER REEF
OUTER SLOPE
RIDGE
UPPER PLATFORM
0
500
1000
1500
2000
2500
Bottom composition (proportions)
algae
sand
turf
debris
calcareous
coral
slab
0.0
0.2
0.4
0.6
0.8
1.0
Distance (m)

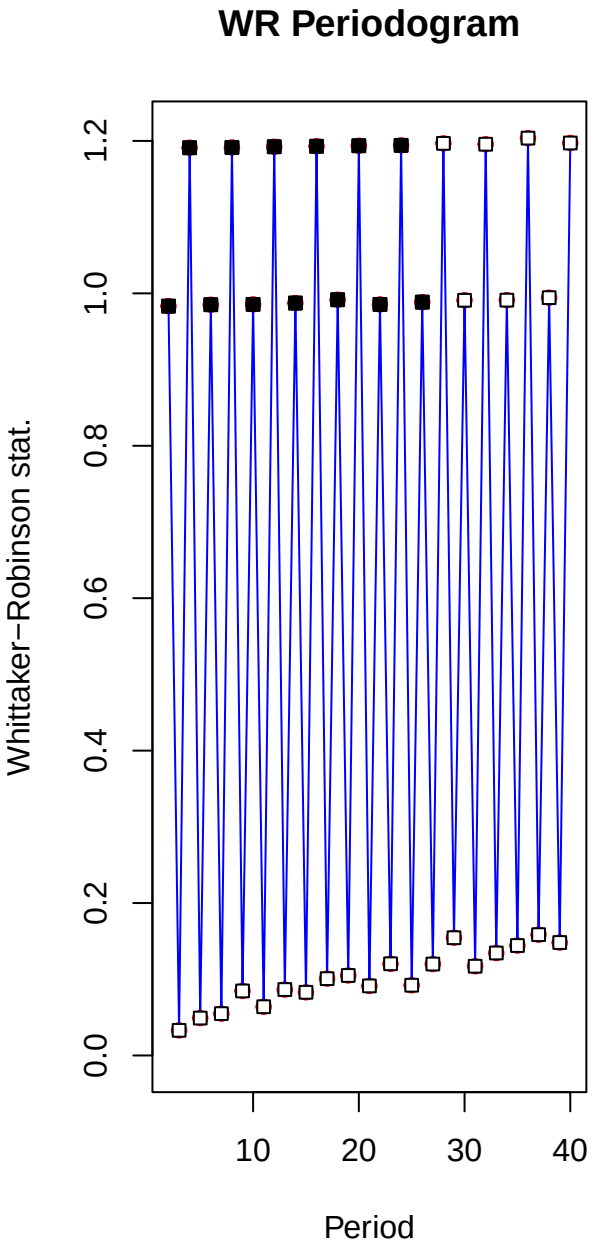
Site_1
Carcharhinus melanopterus
Megalops cyprinoides
Moringua javanica
Echidna leucotaenia
Echidna nebulosa
Echidna polyzona
Enchelycore bayeri
Gymnothorax buroensis
Gymnothorax flavimarginatus
Gymnothorax javanicus
Gymnothorax margaritophorus
Gymnothorax moluccensis
Gymnothorax undulatus
Uropterygius supraforatus
Uropterygius xanthopterus
Leptenchelys labialis
Muraenichthys laticaudata
Saurida gracilis
Synodus binotatus
Synodus variegatus
Brotula multibarbata
Ablennes hians
Platybelone argala
Tylosurus crocodilus
Myripristis berndti
Myripristis pralinus
Myripristis violaceus
Myripristis sp. 417
Neoniphon sammara
Plectrypops lima
Sargocentron caudimaculatum
Sargocentron diadema
Sargocentron microstoma
Sargocentron spiniferum
Aulostomus chinensis
Fistularia commersonii
Coythoichthys flavofasciatus
Doryrhampus excisus excisus
Dendrochirus biocellatus
Pterois radiata
Scorpaenodes guamensis
Scorpaenopsis diabolus
Taeniatonus triacanthus
Genus sp.164
Thysanophrys papillolabium
Cephalopholis analis
Cephalopholis argus
Cephalopholis urodelus
Epinephelus fasciatus
Epinephelus merra
Epinephelus socialis
Epinephelus tauvina
Gracila albomarginata
Liopoproma pallida
Plectranthias longimanus
Grammistes sexlineatus
help("Tiahura")


WR Periodogram
Whittaker−Robinson stat.
0.0
0.5
1.0
1.5
2.0
2
3
4
5
6
7
8
Period
help("WRperiodogram")

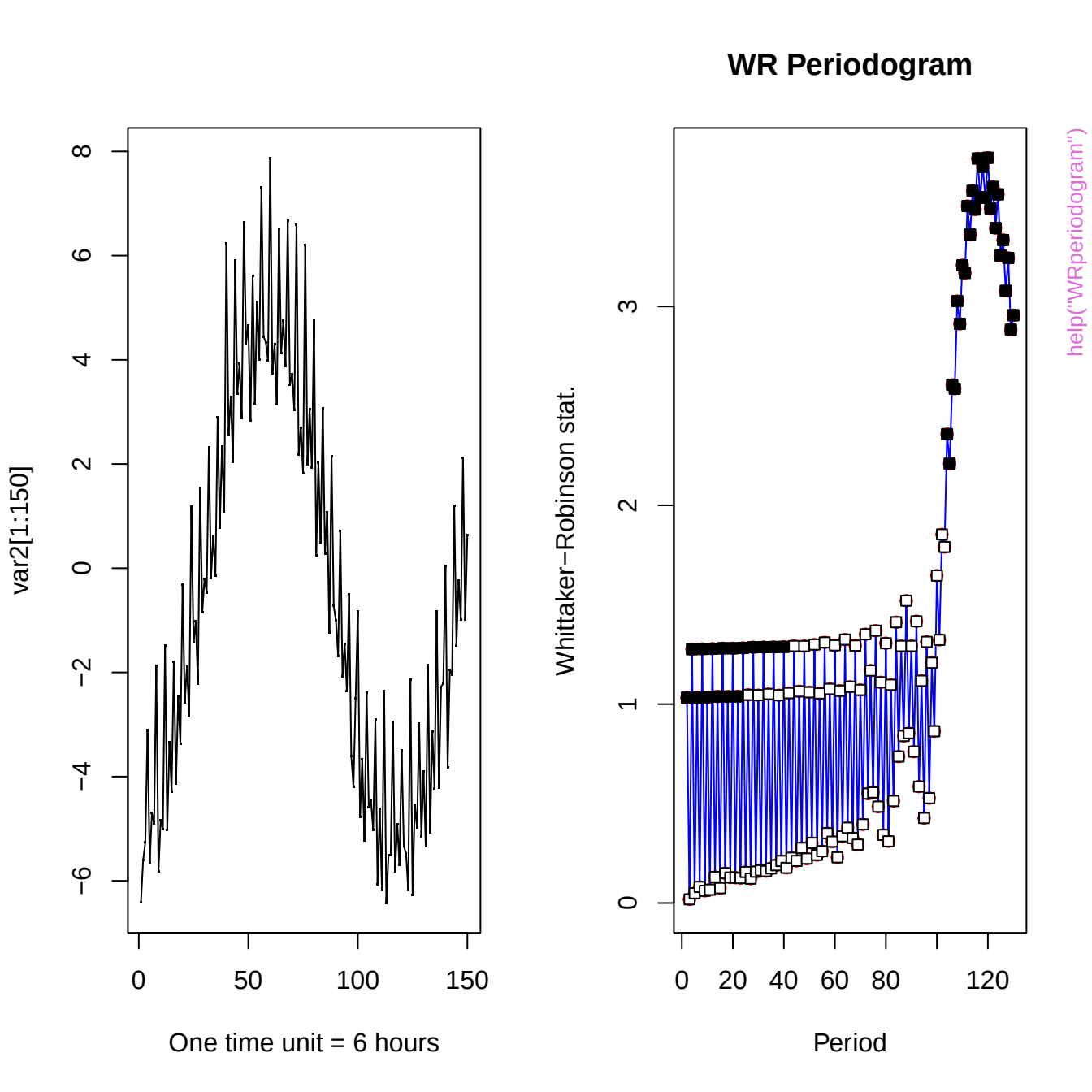

moon[1:236]
1.0
0.5
0.0
−0.5
−1.0
0
50
100
150
200
One time unit = 6 hours

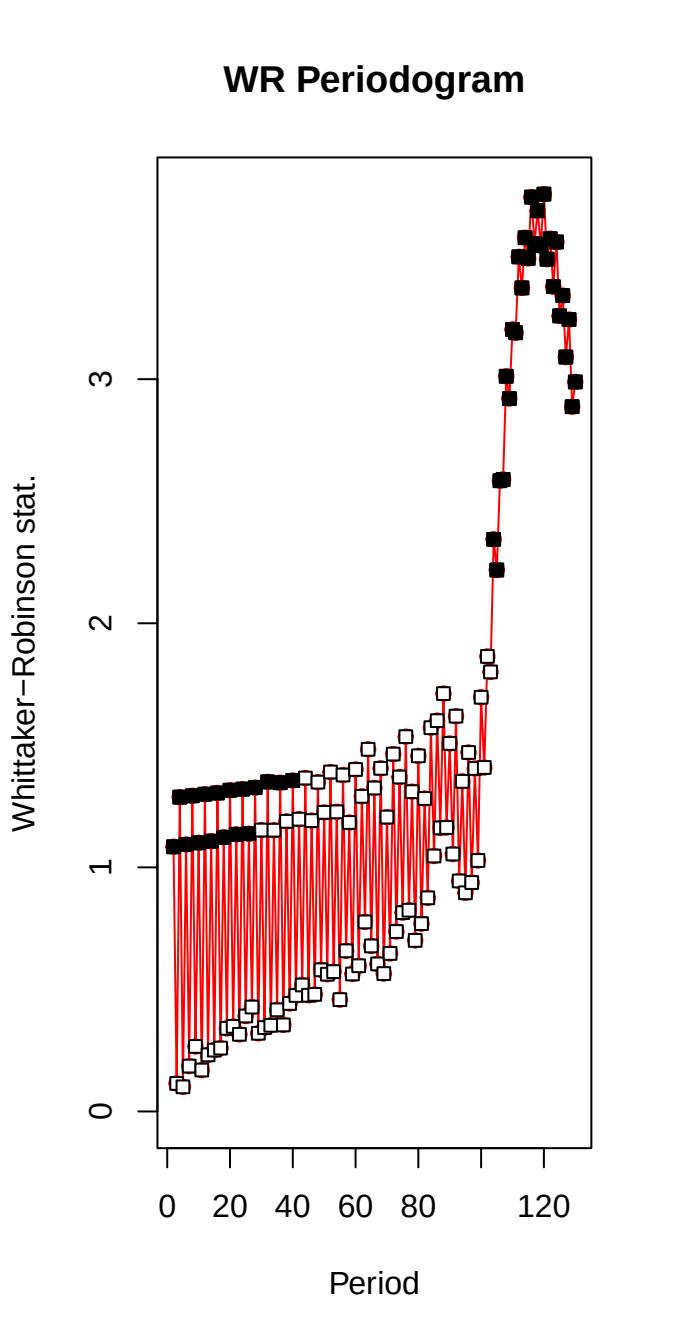

WR Periodogram
Whittaker−Robinson stat.
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0
20
40
60
80
120
Period
help("WRperiodogram")

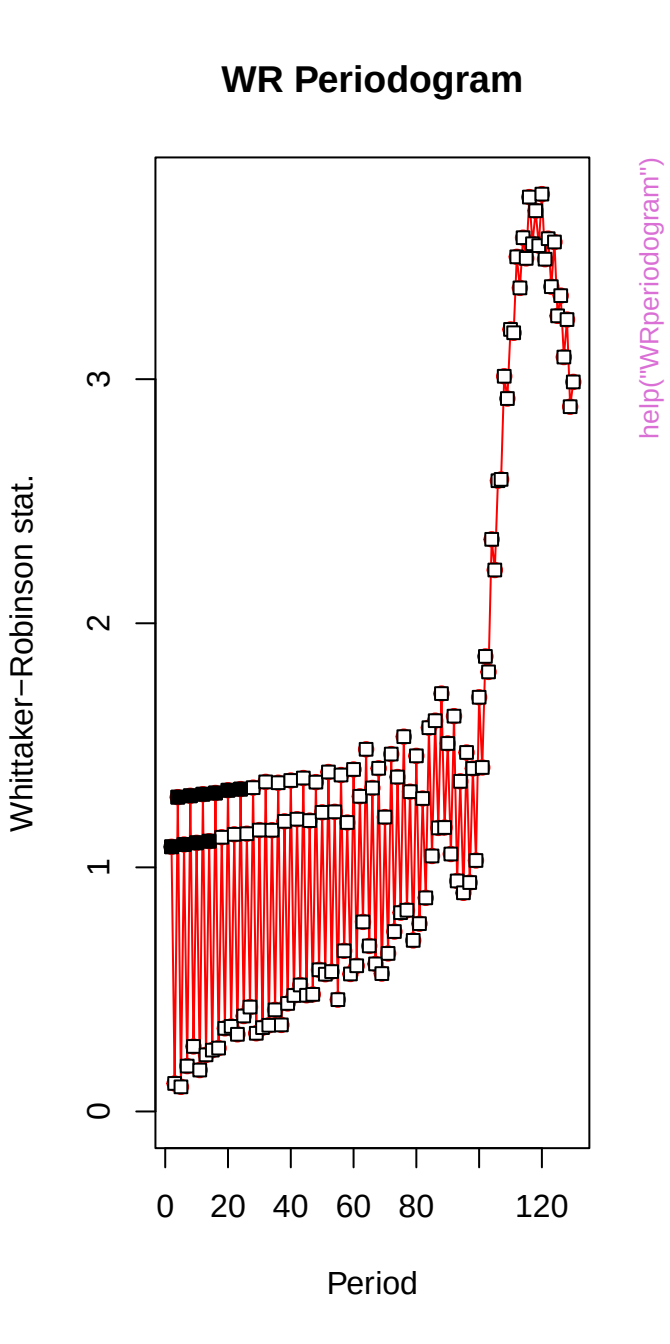




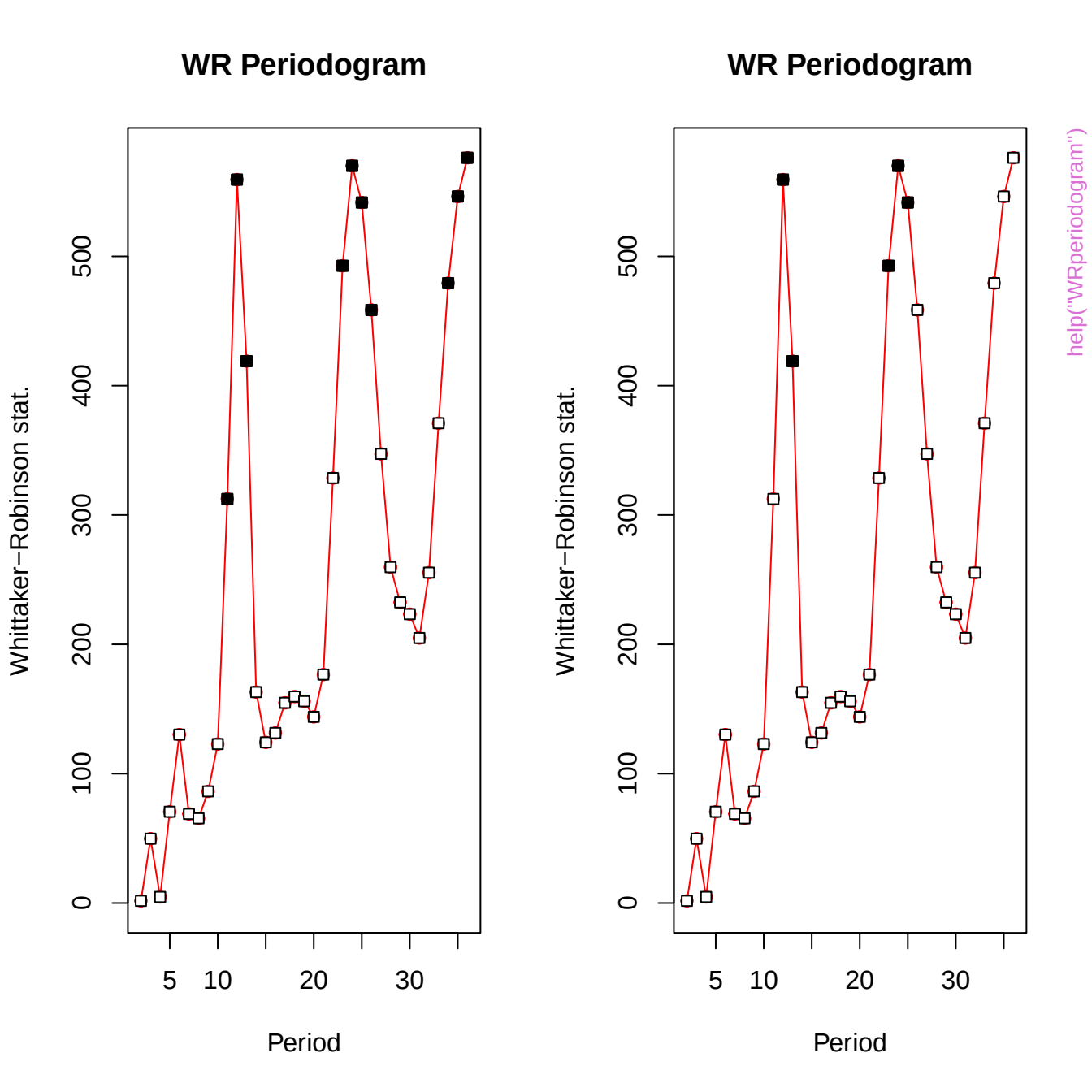
help("WRperiodogram")

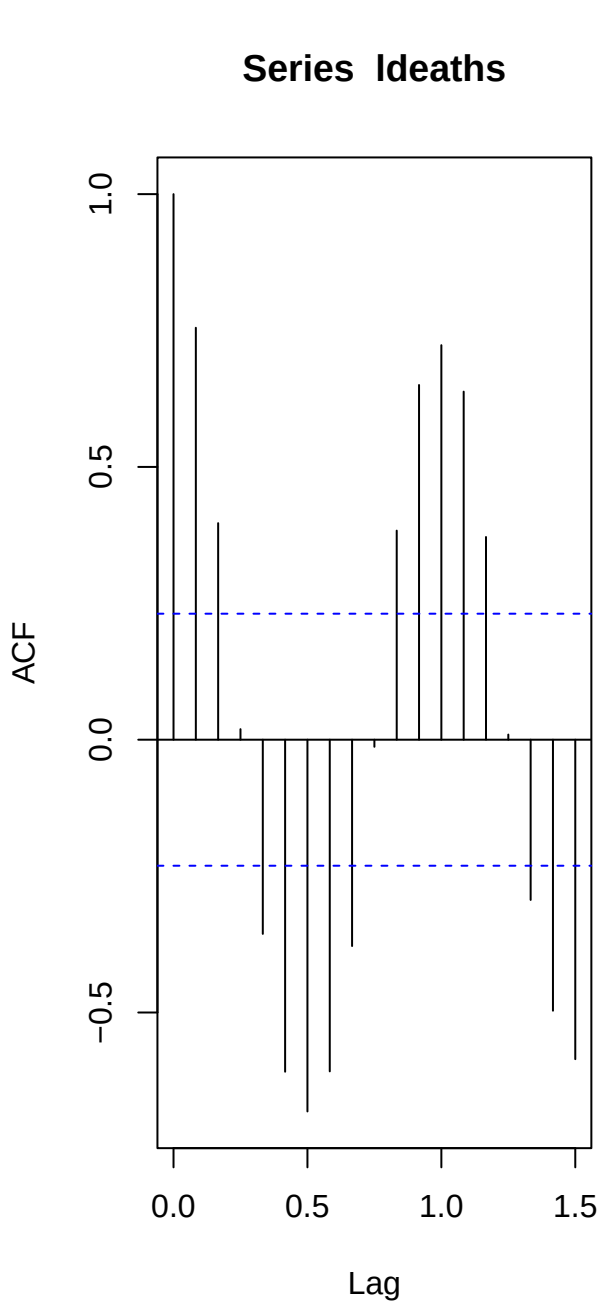

var2[1:150]
8
6
4
2
0
−2
−4
−6
0
50
100
150
One time unit = 6 hours
WR Periodogram
Whittaker−Robinson stat.
3
2
1
0
0
20
40
60
80
120
Period
help("WRperiodogram")

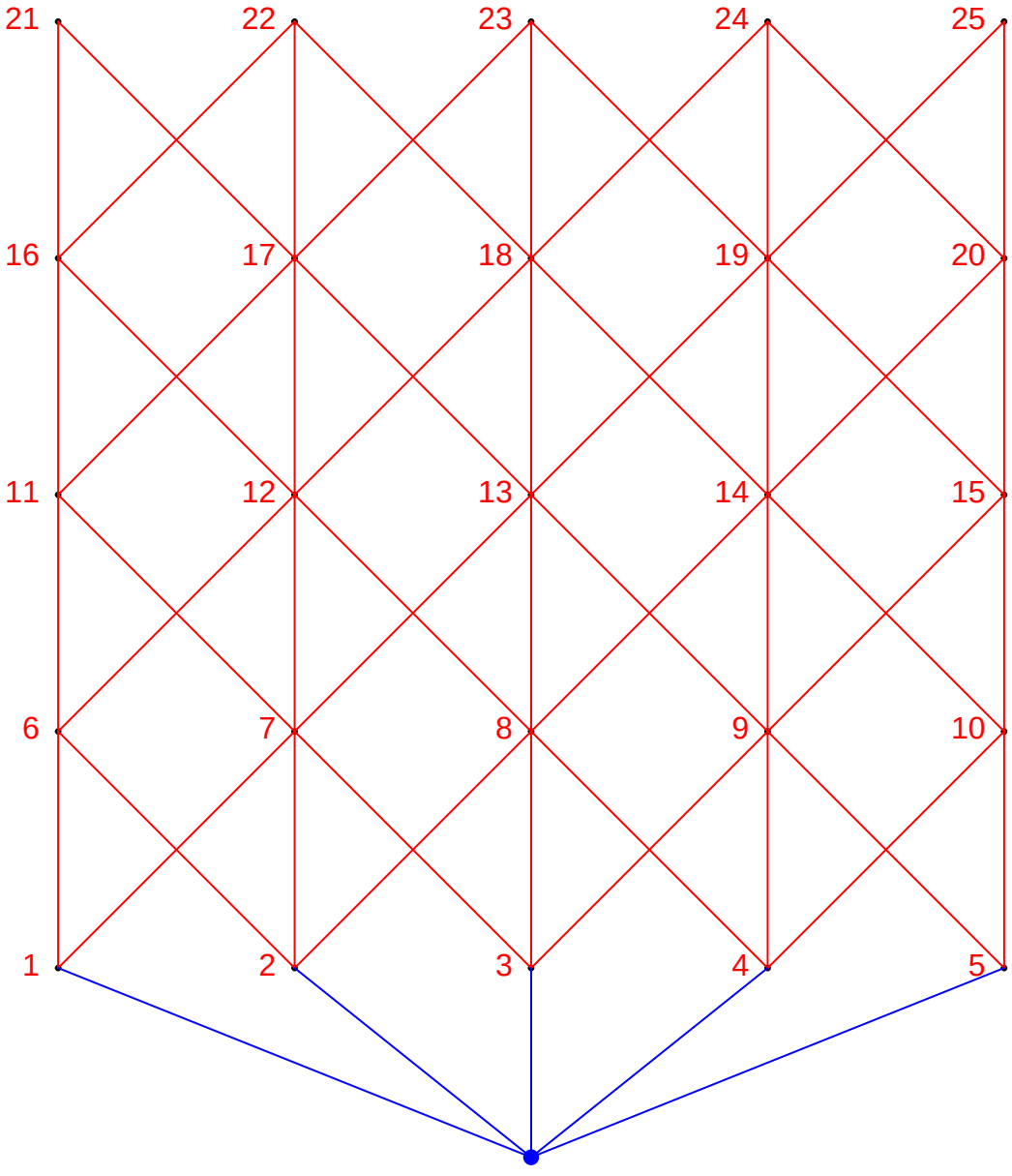




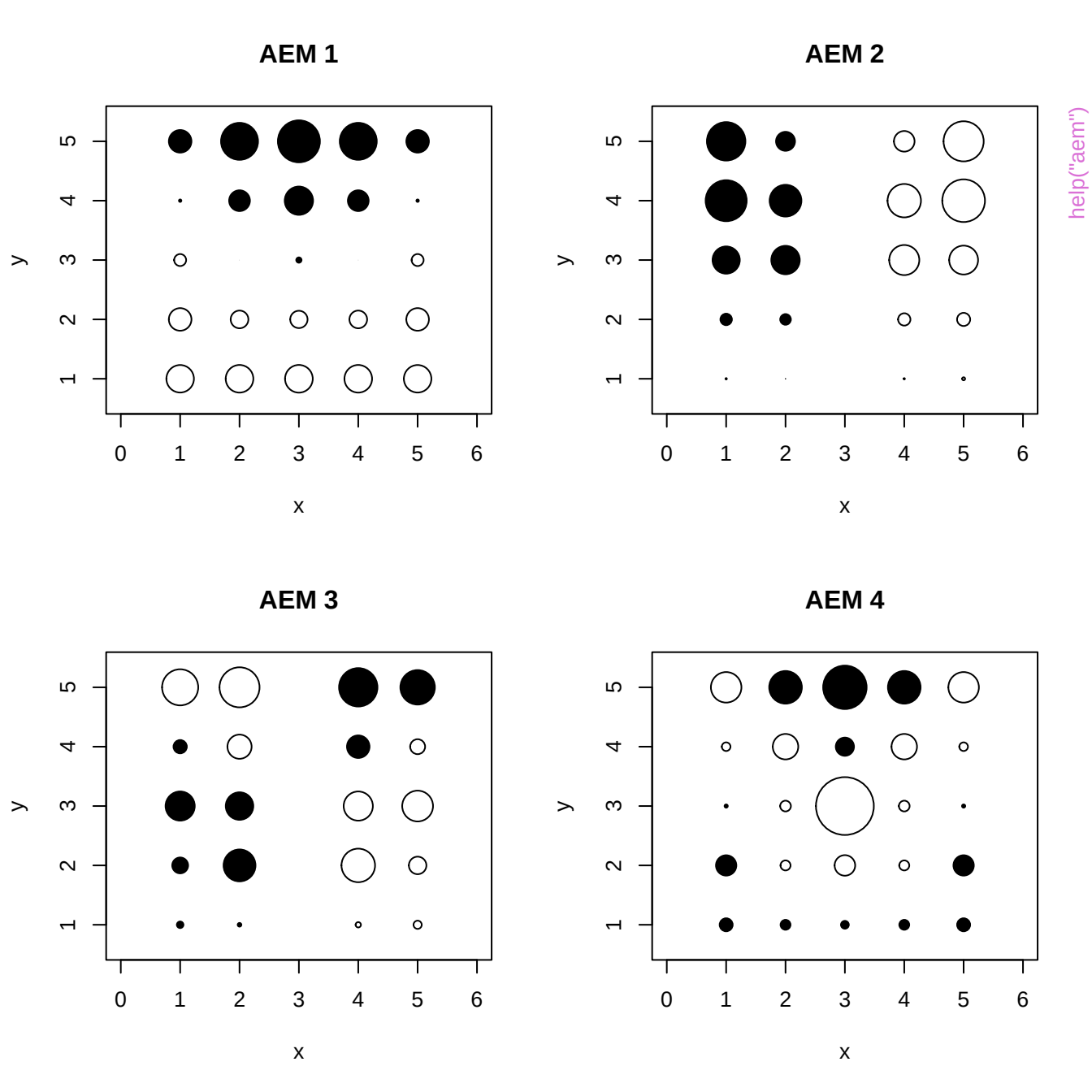
help("WRperiodogram")

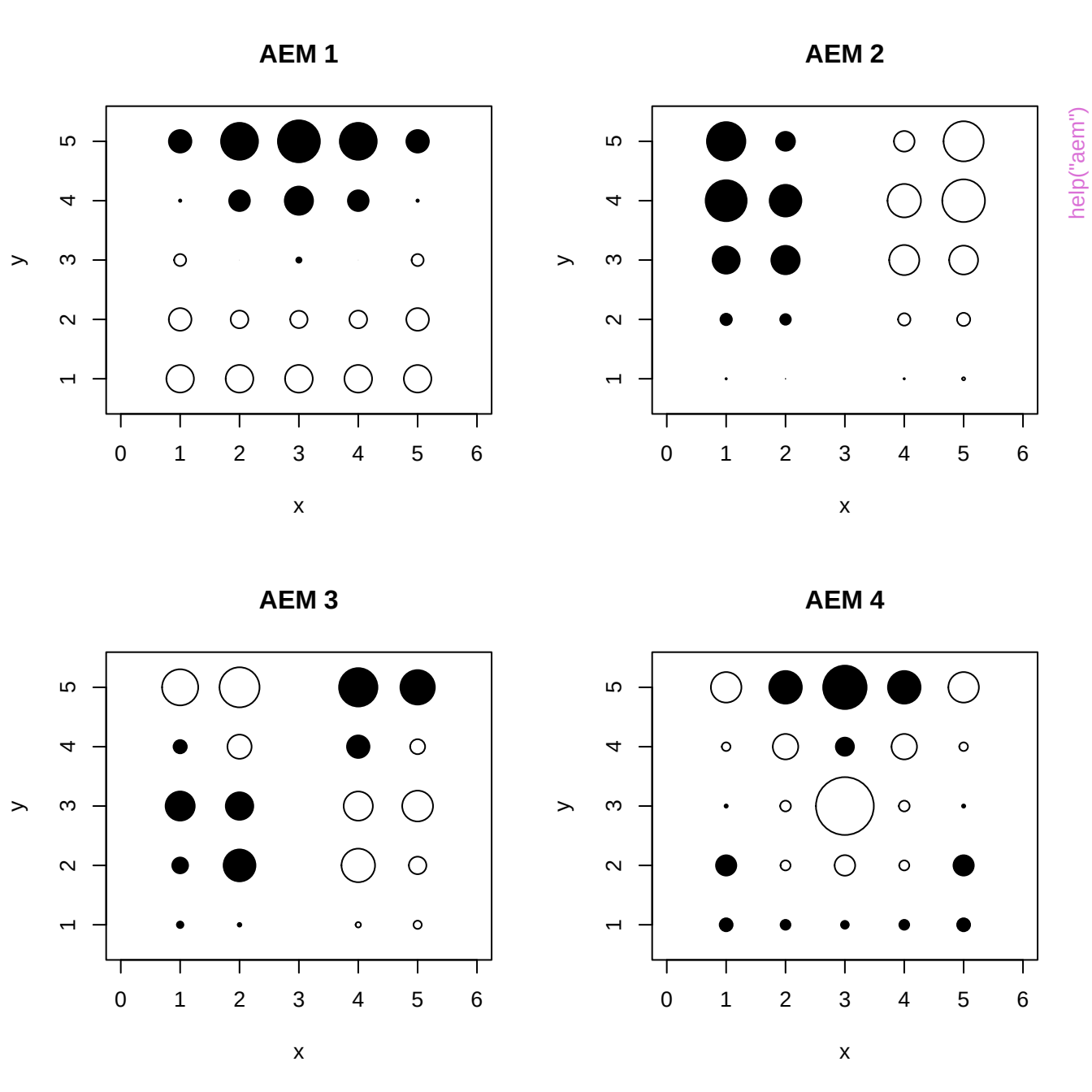

WR Periodogram
Whittaker−Robinson stat.
0
100
200
300
400
500
5
10
20
30
Period
WR Periodogram
Whittaker−Robinson stat.
0
100
200
300
400
500
5
10
20
30
Period
help("WRperiodogram")

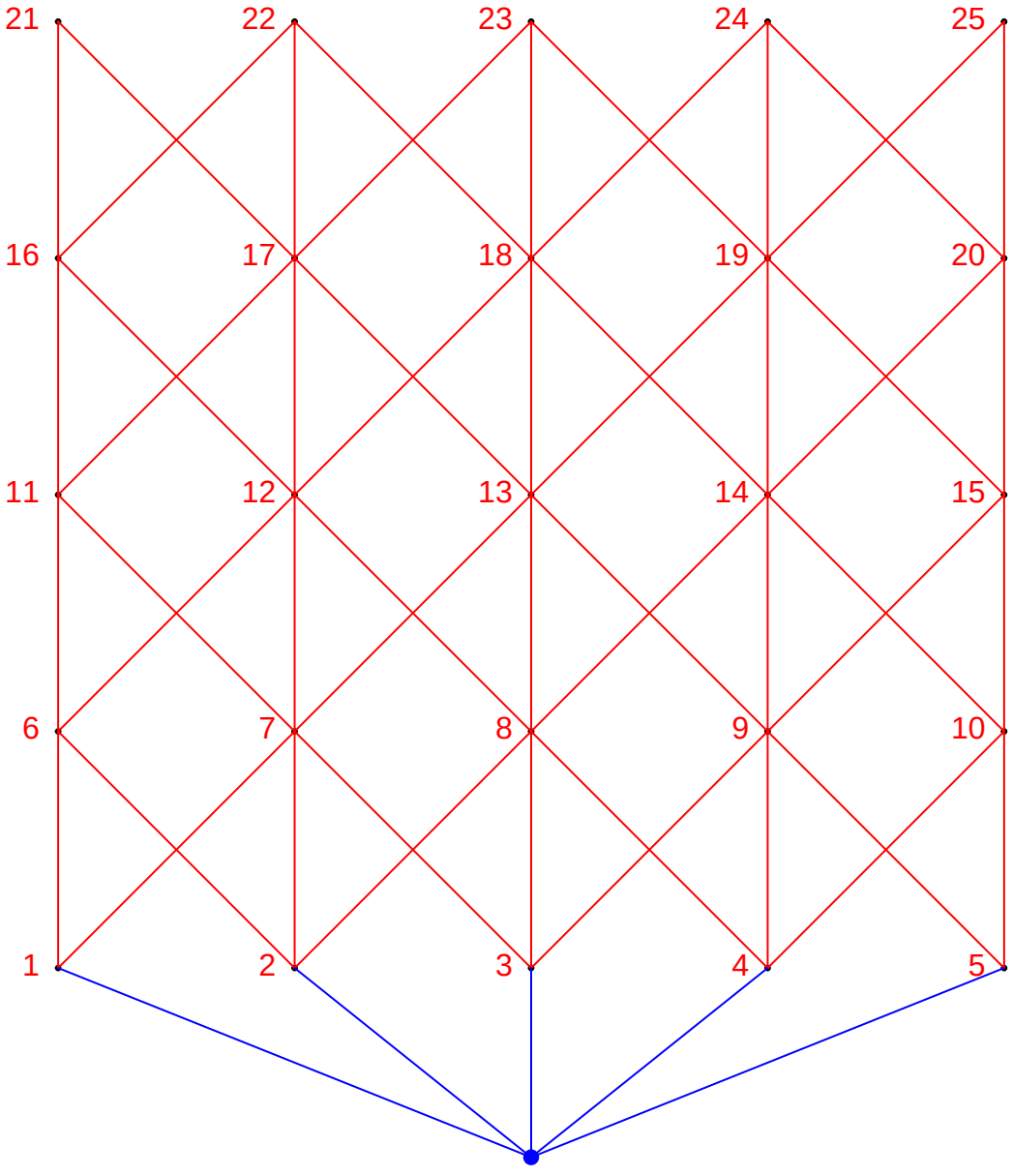

Series Ideaths
ACF
1.0
0.5
0.0
−0.5
0.0
0.5
1.0
1.5
Lag



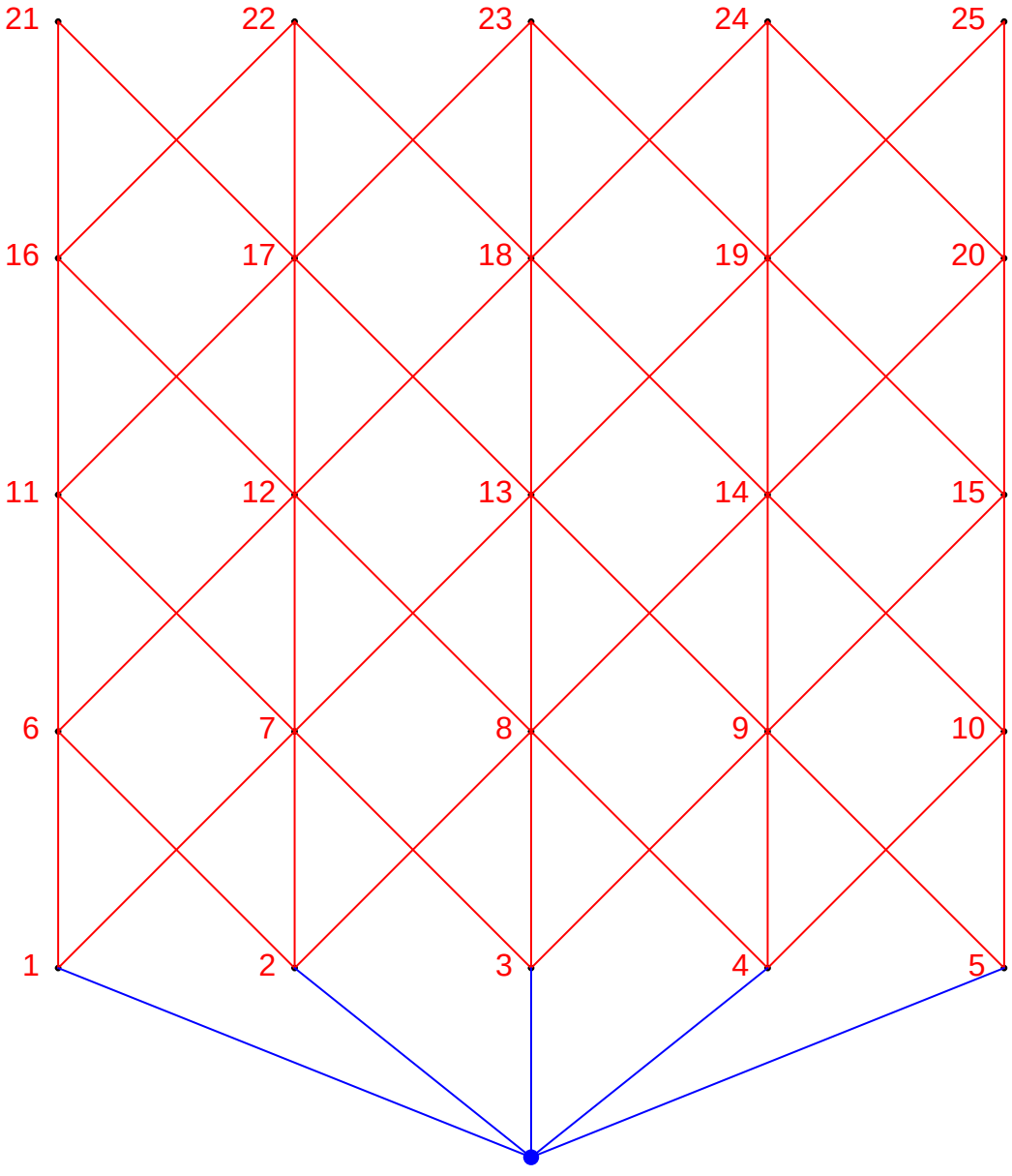
help("aem")


AEM 1
AEM 2
AEM 3
AEM 4
y
x
0 1 2 3 4 5 6
1 2 3 4 5
help("aem")

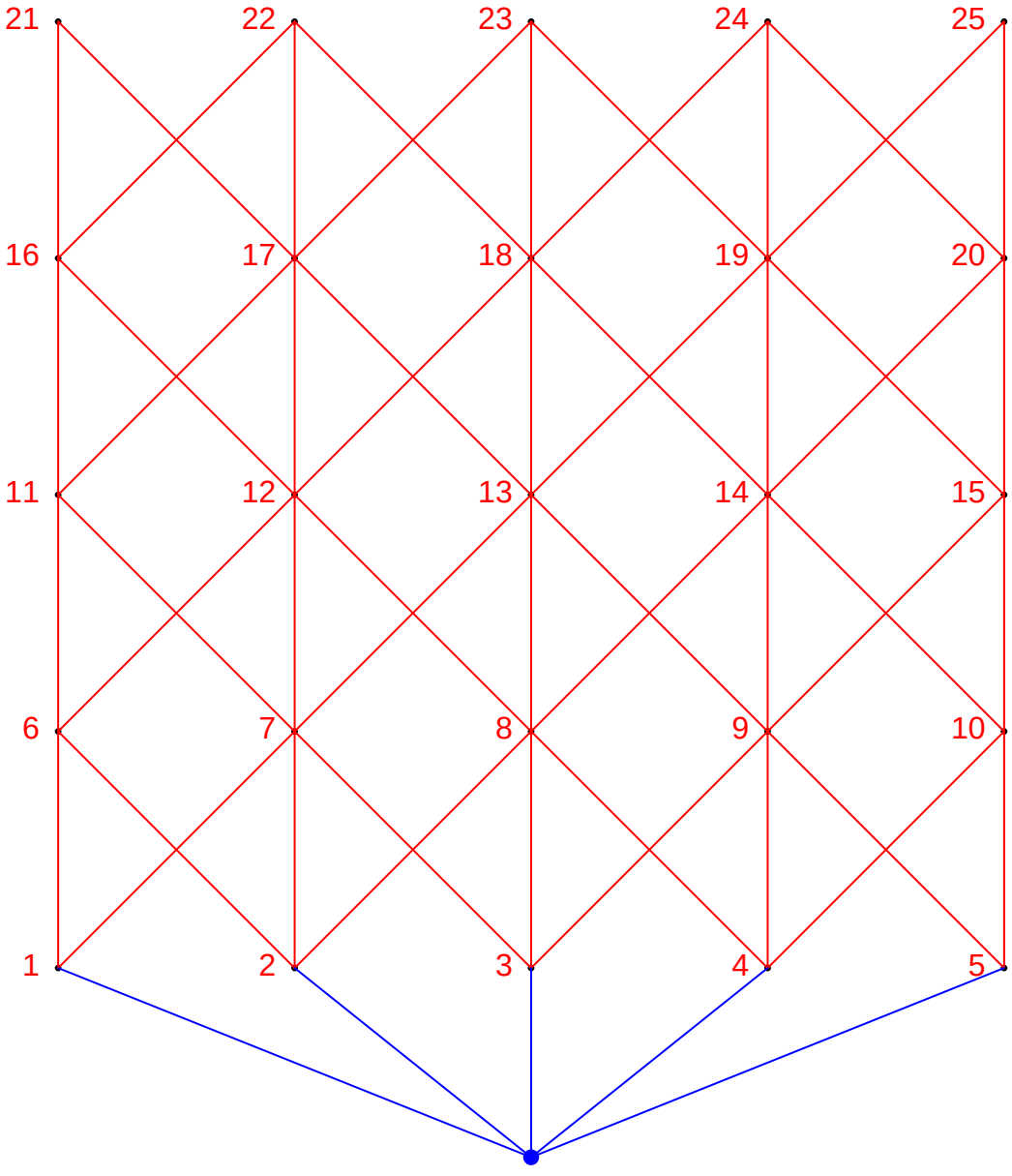

AEM 1
AEM 2
AEM 3
AEM 4
y
x
0 1 2 3 4 5 6
1 2 3 4 5
help("aem")



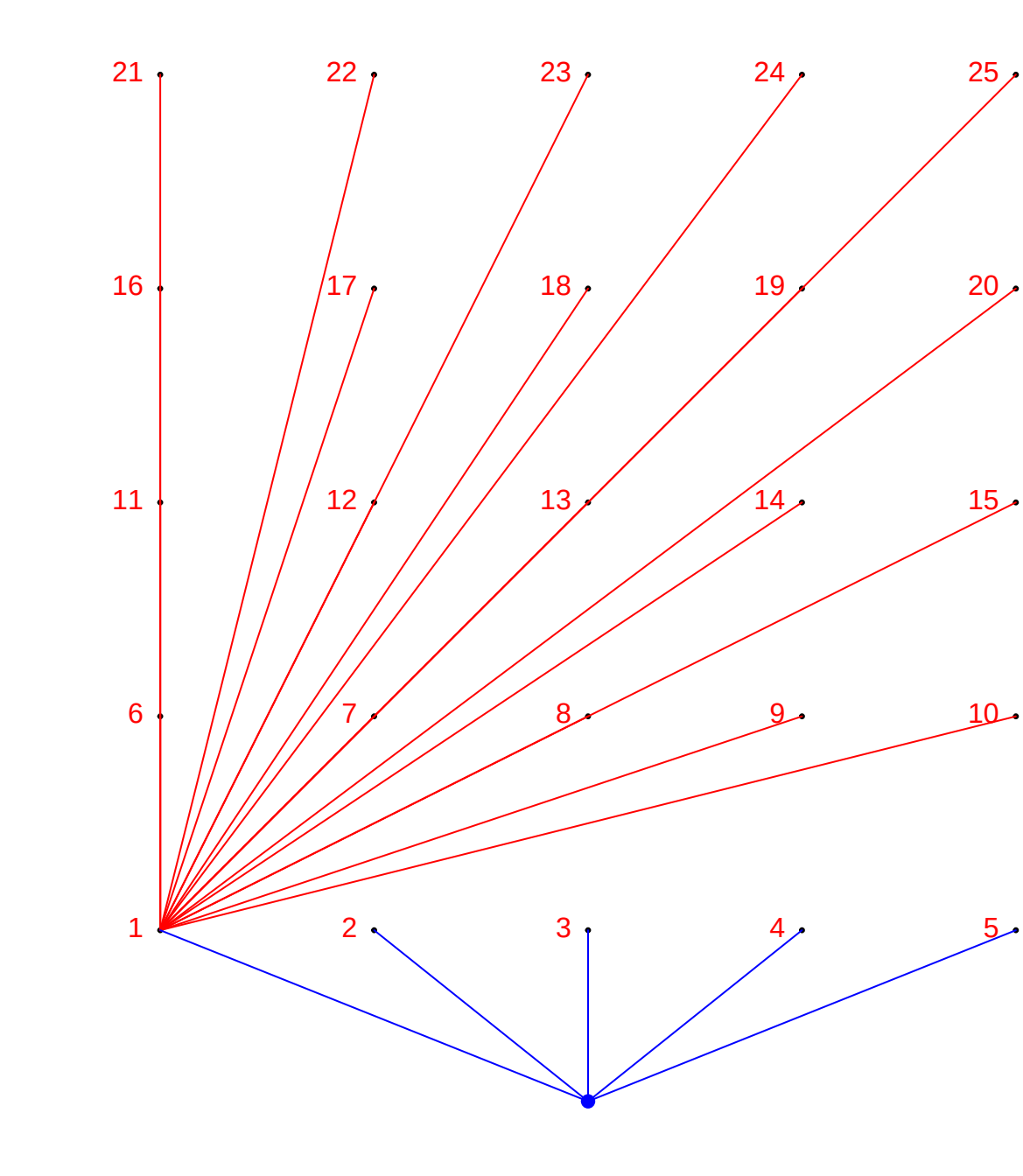
help("aem")



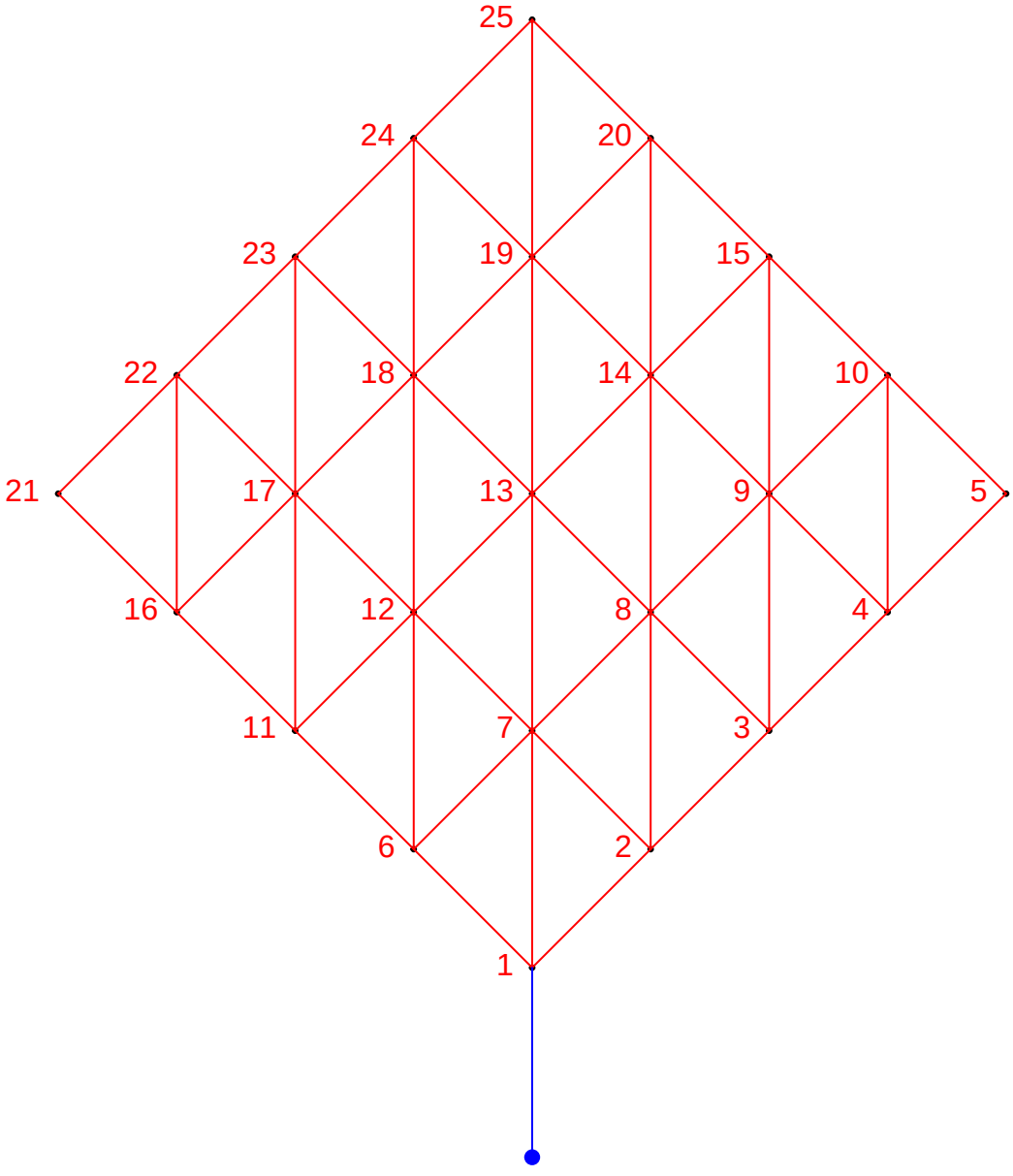
help("aem")



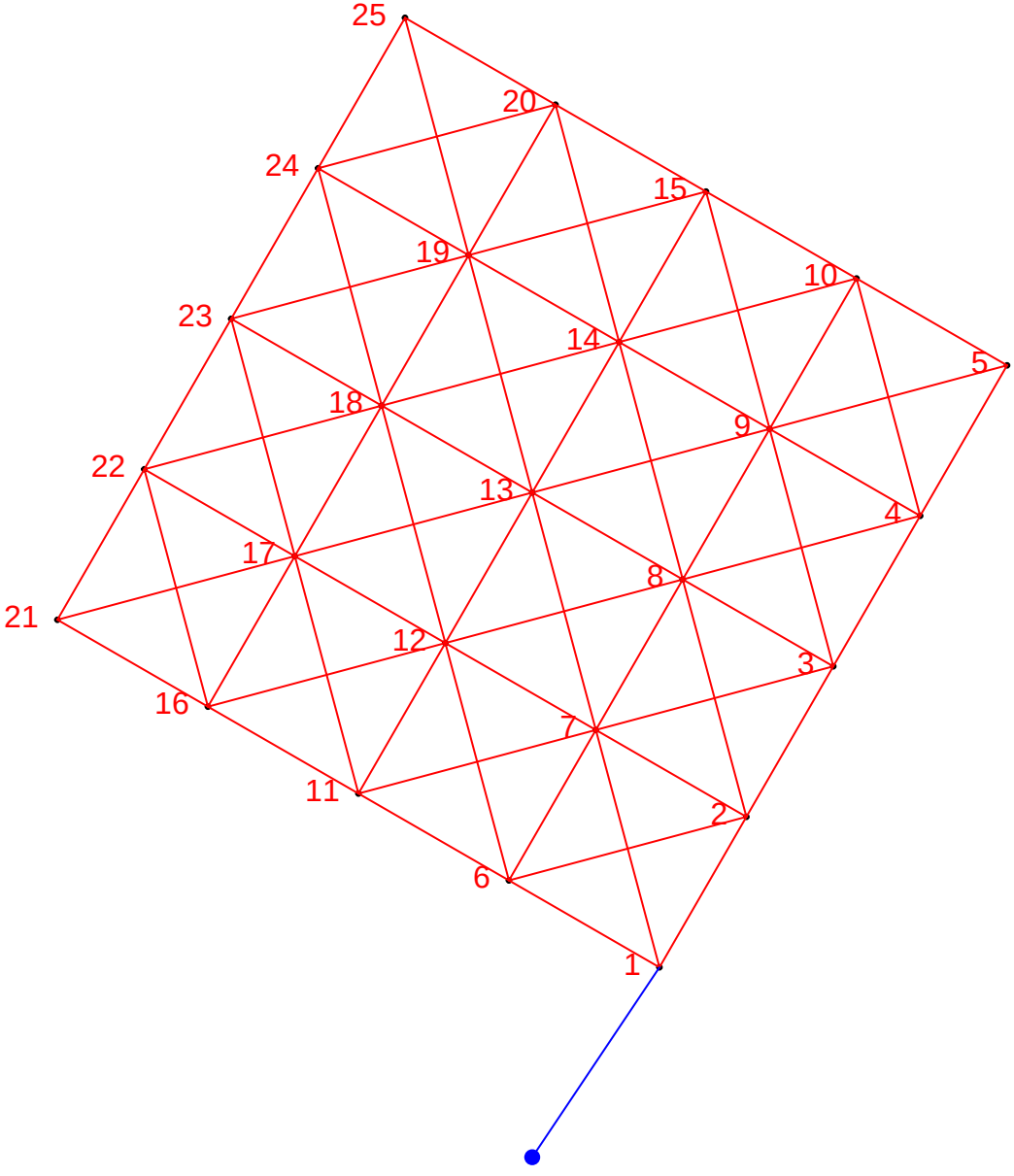
help("aem.build.binary")



help("aem.build.binary")



help("aem.build.binary")

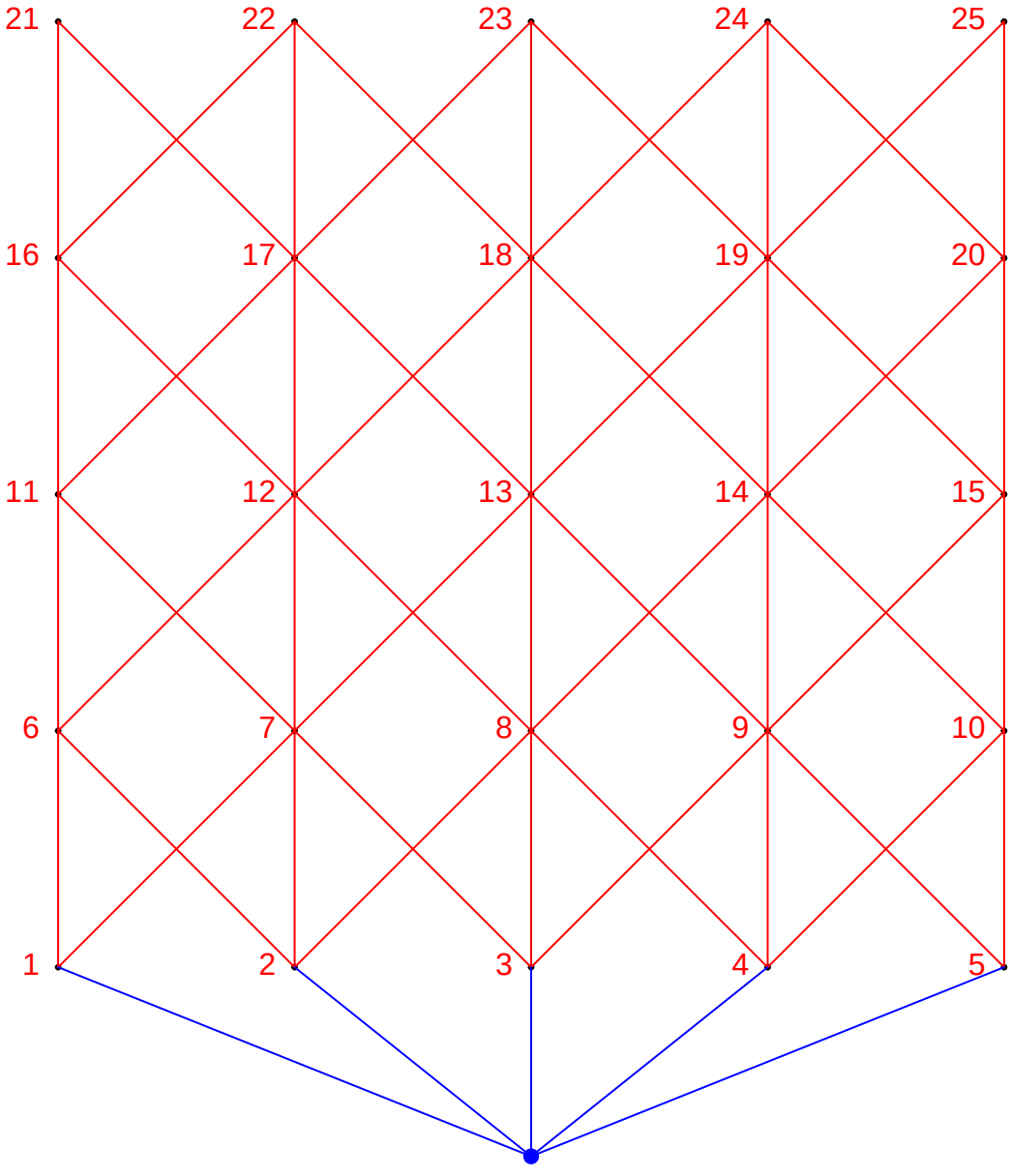


help("aem.build.binary")

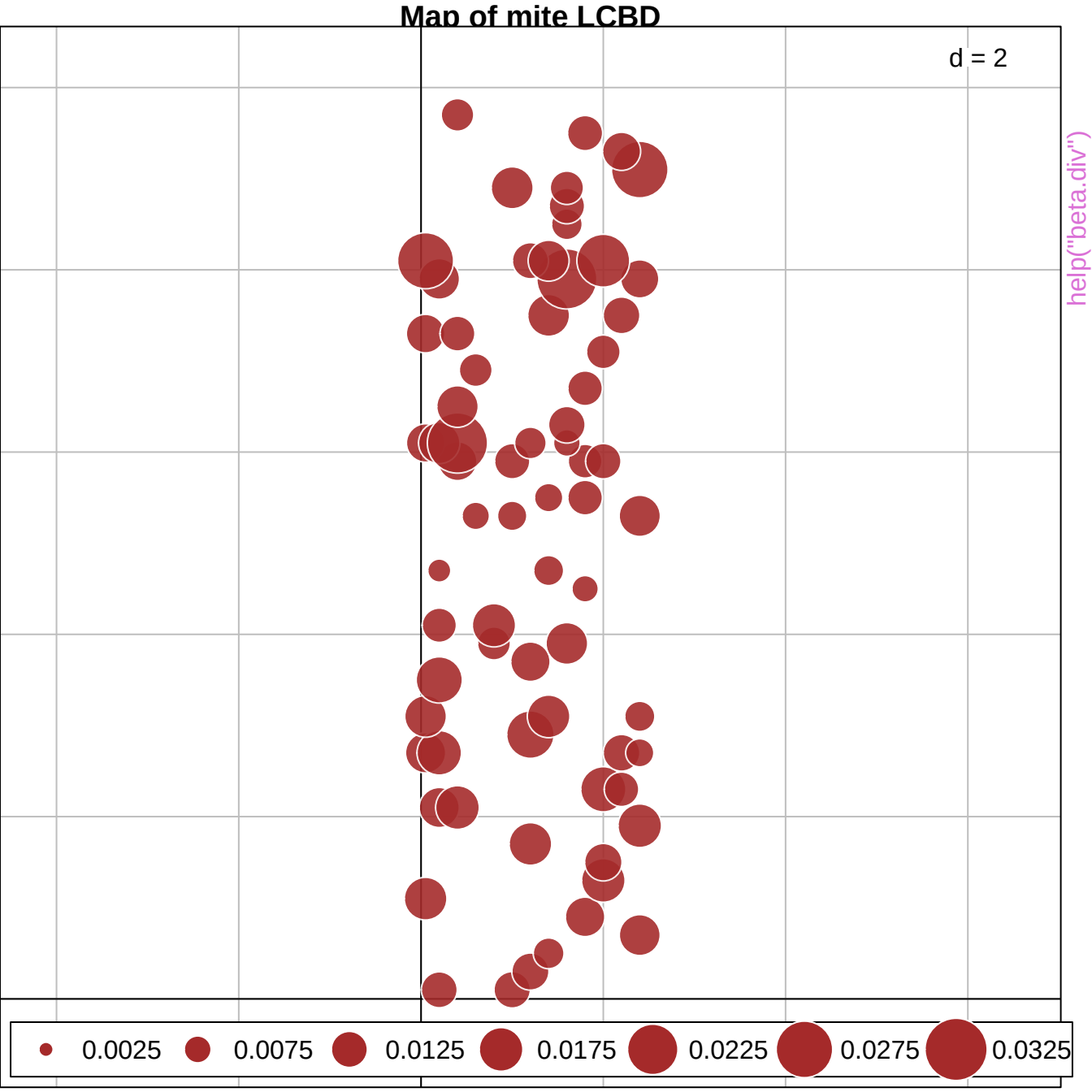
help("aem.weight.edges")

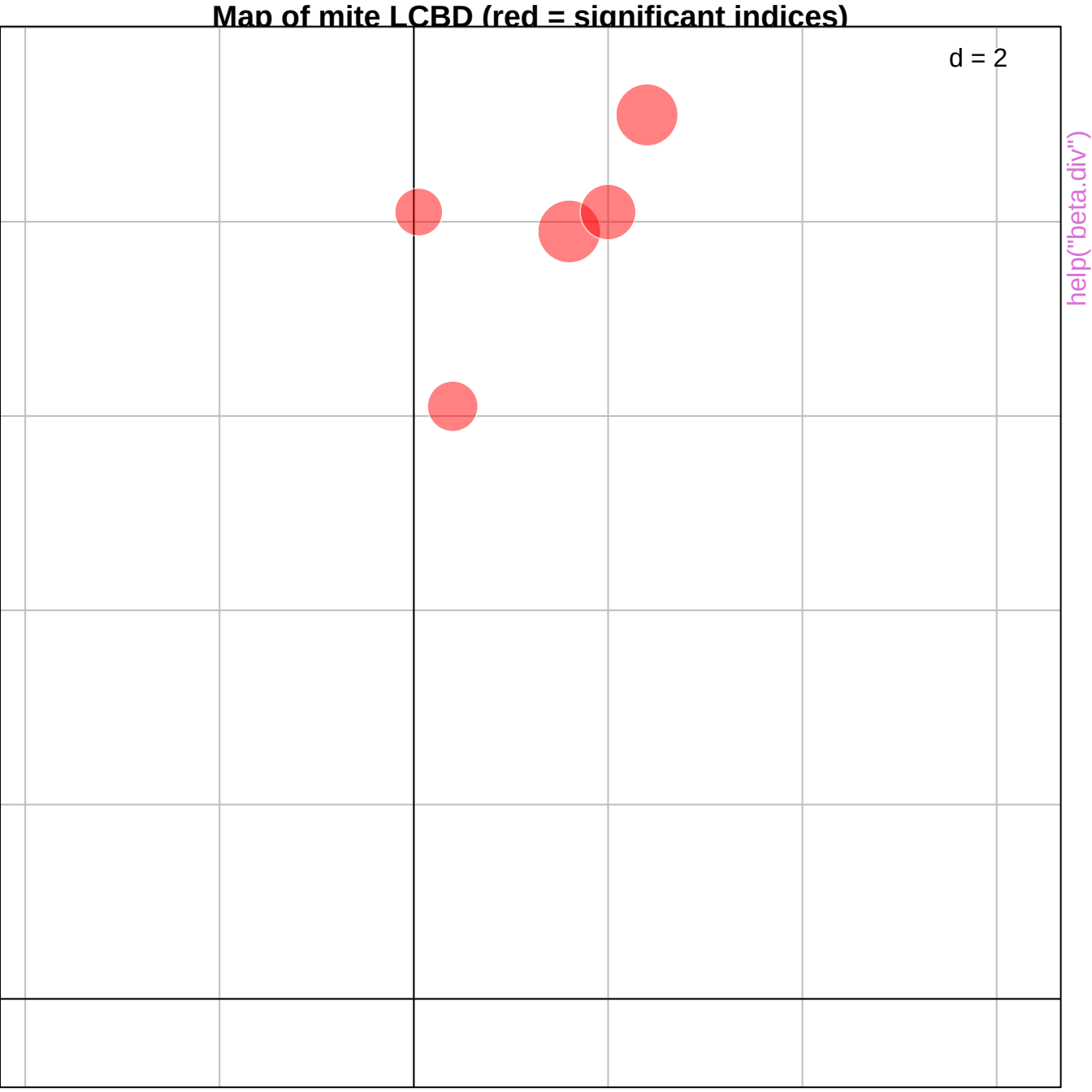
help("aem.weight.edges")

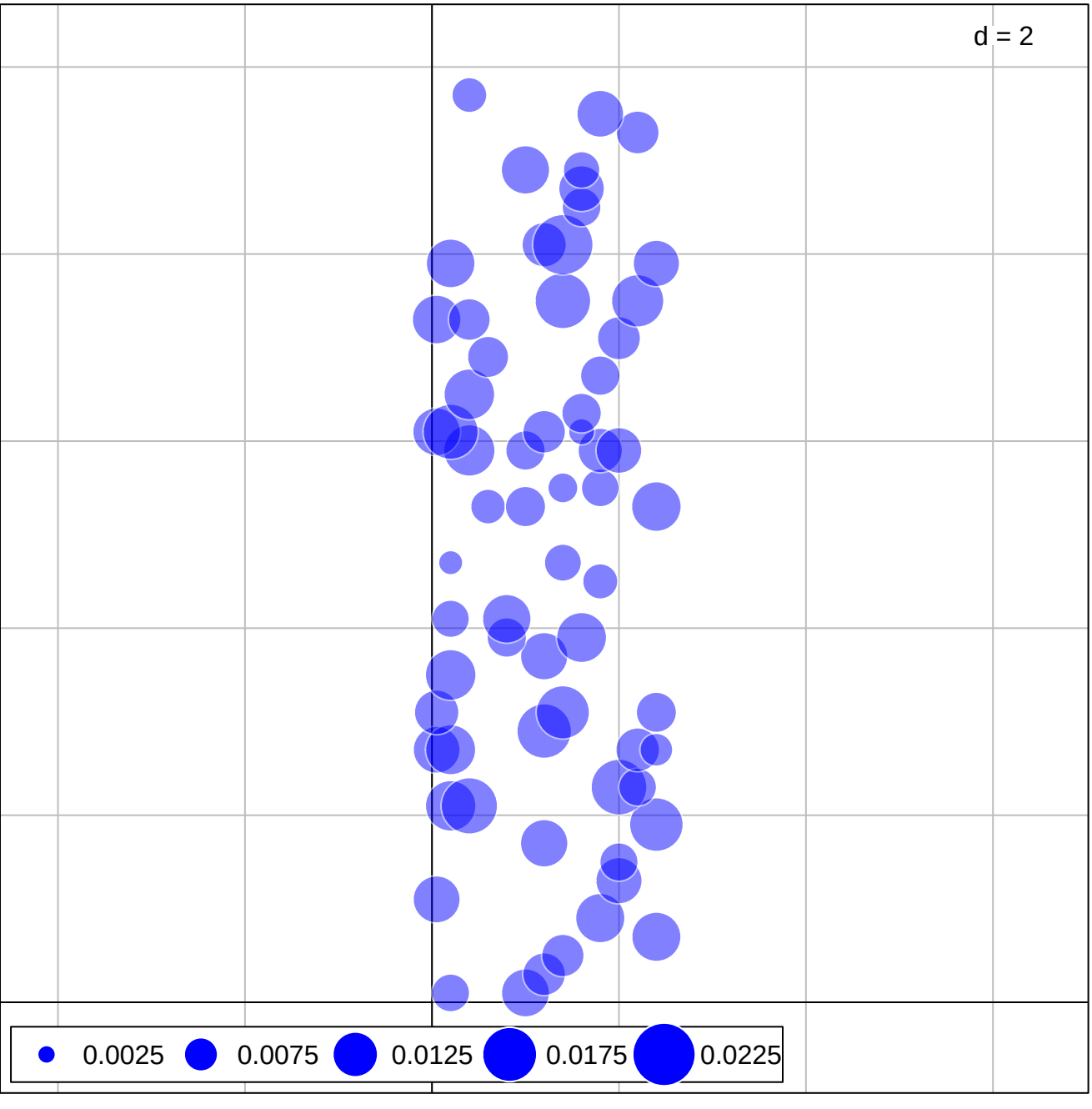
help("aem.weight.edges")

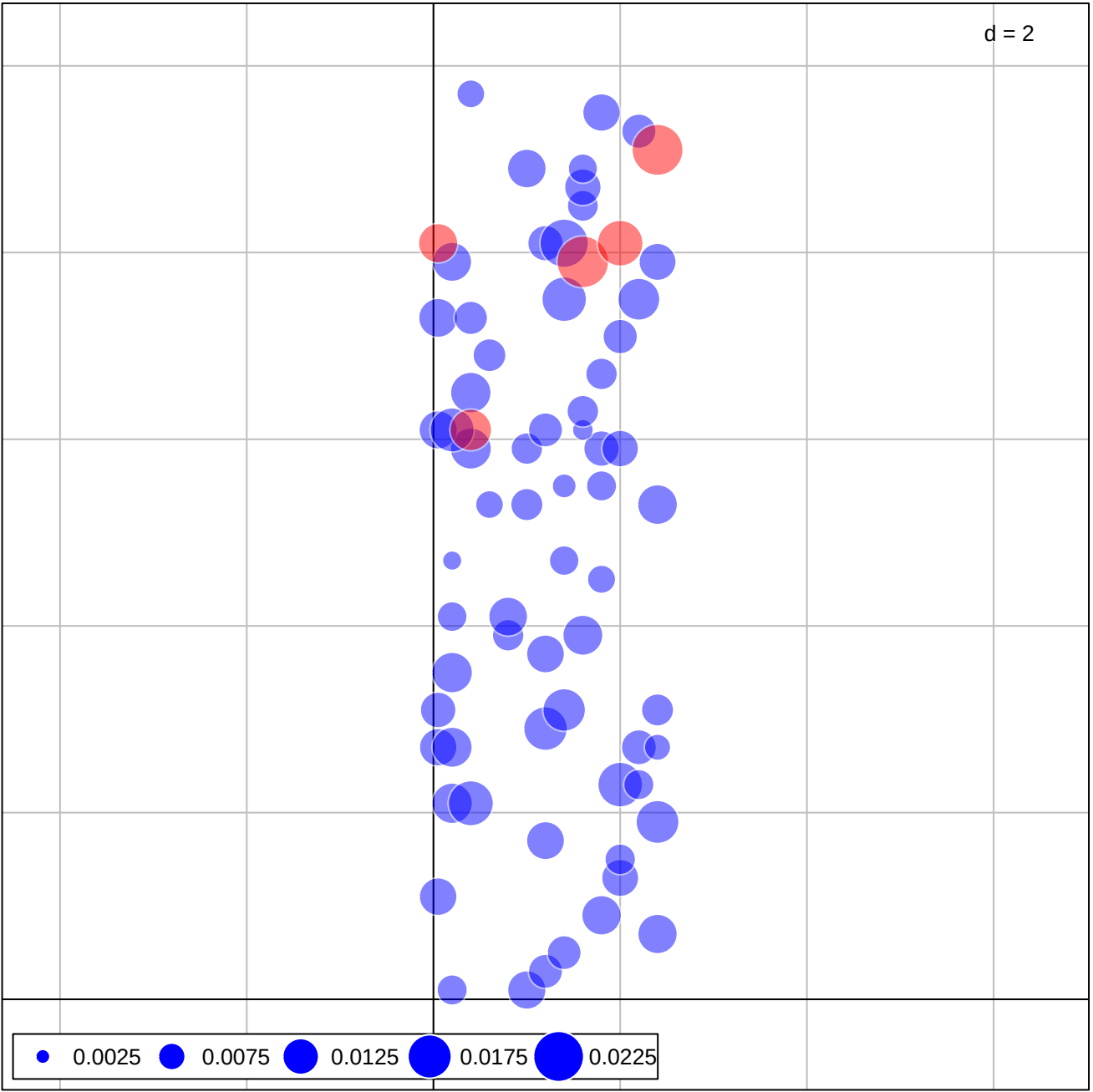


help("aem.weight.edges")

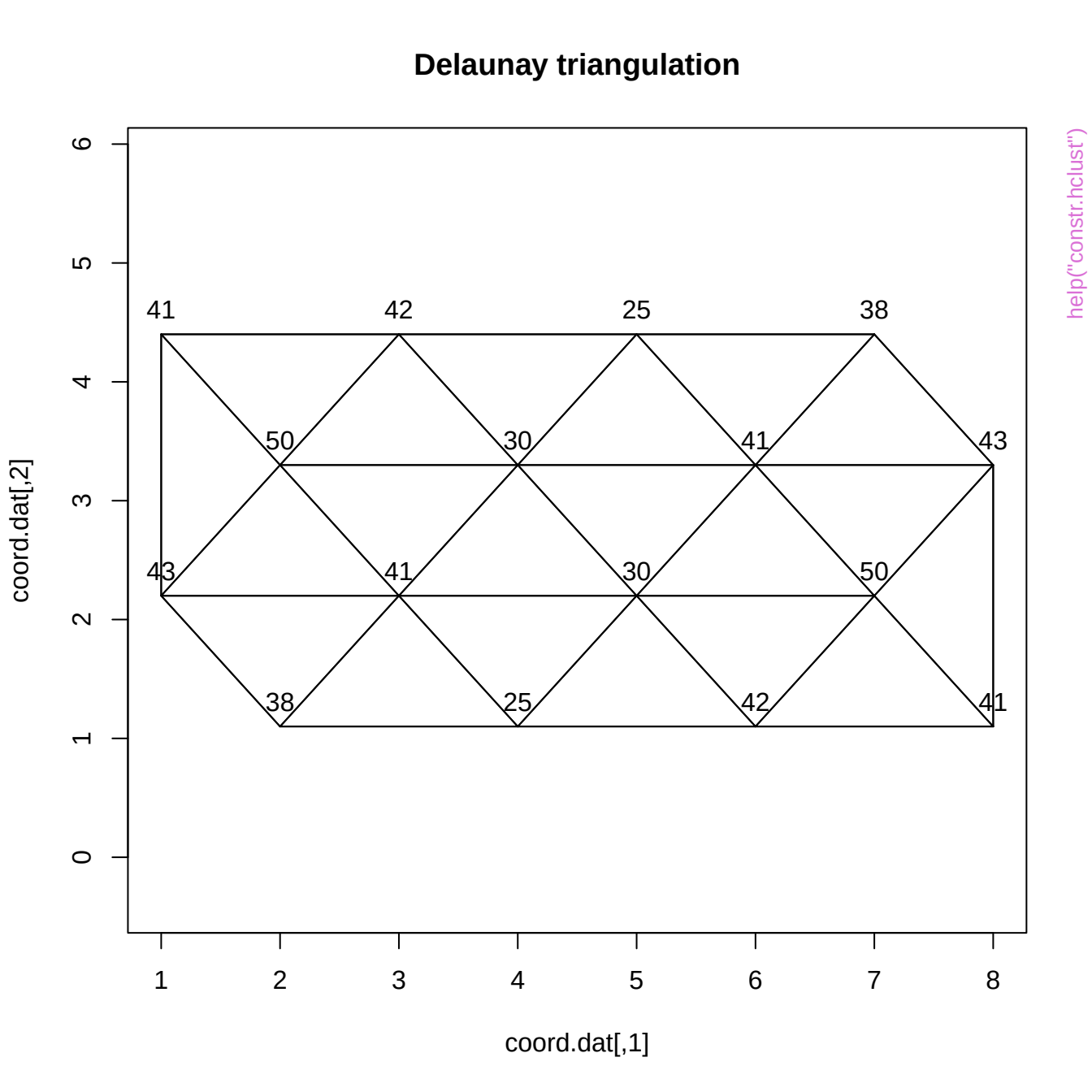

Map of mite LCBD
d = 2
help("beta.div")
0.0025
0.0075
0.0125
0.0175
0.0225
0.0275
0.0325

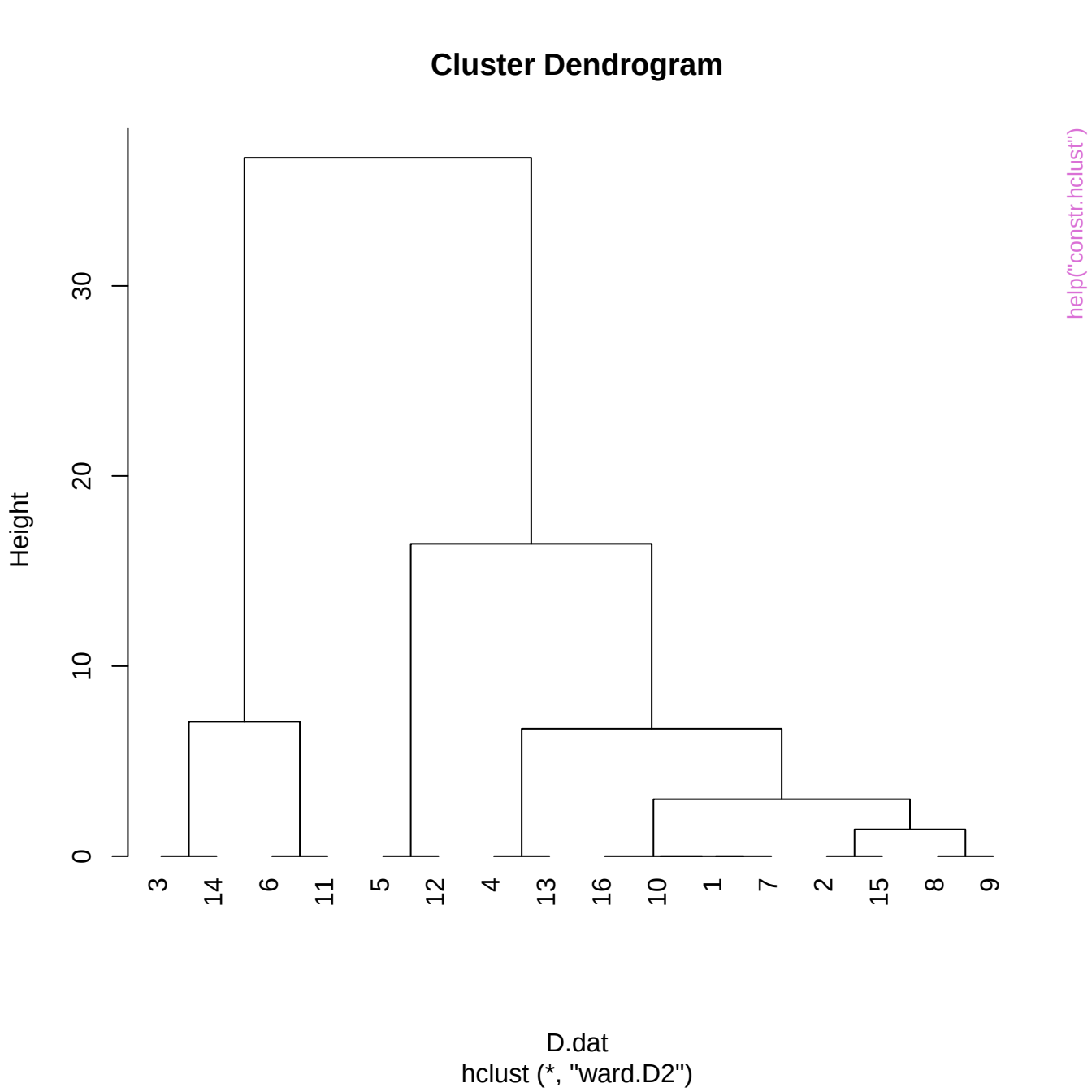

Map of mite LCBD (red = significant indices)
d = 2
help("beta.div")

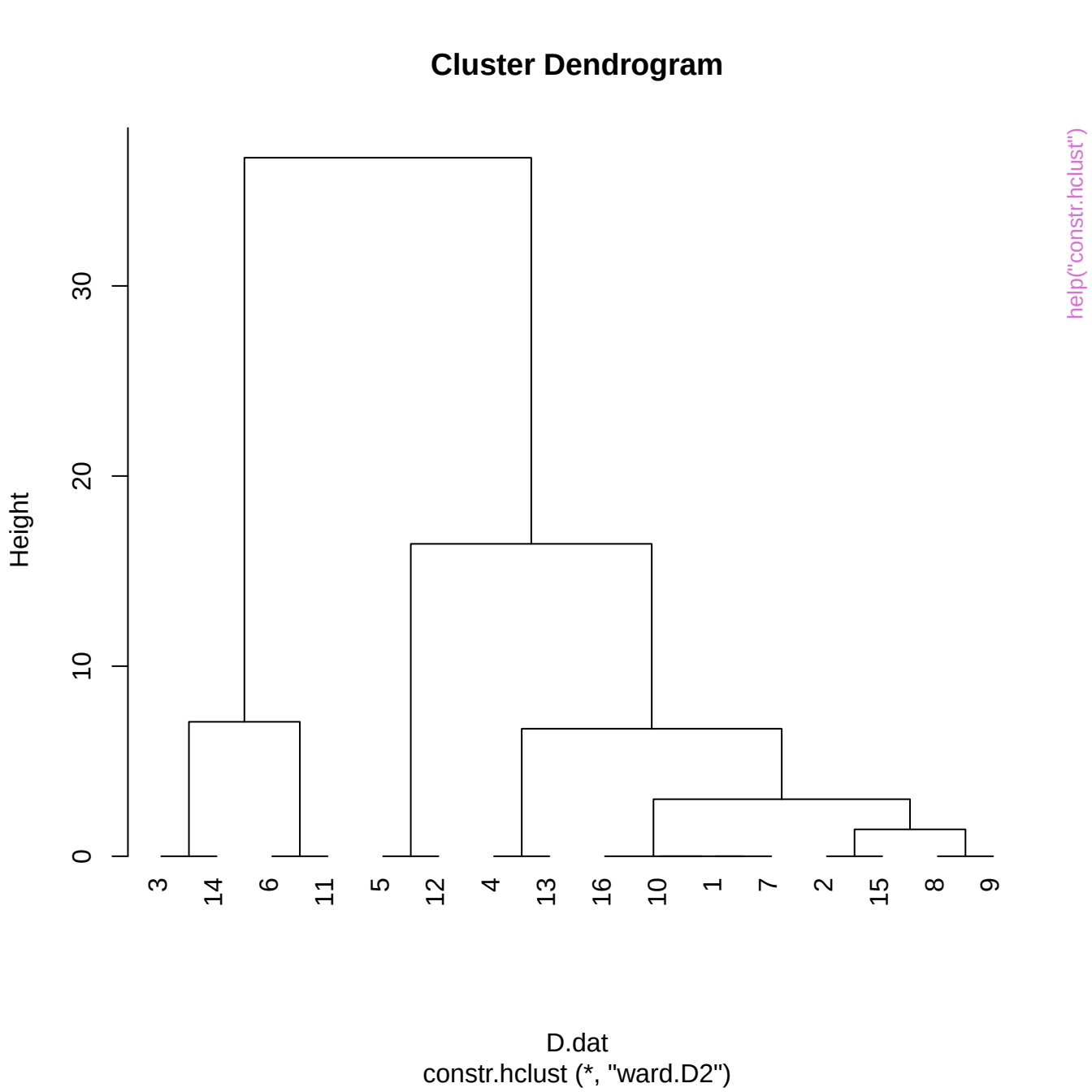

d = 2
help("beta.div")
0.0025
0.0075
0.0125
0.0175
0.0225

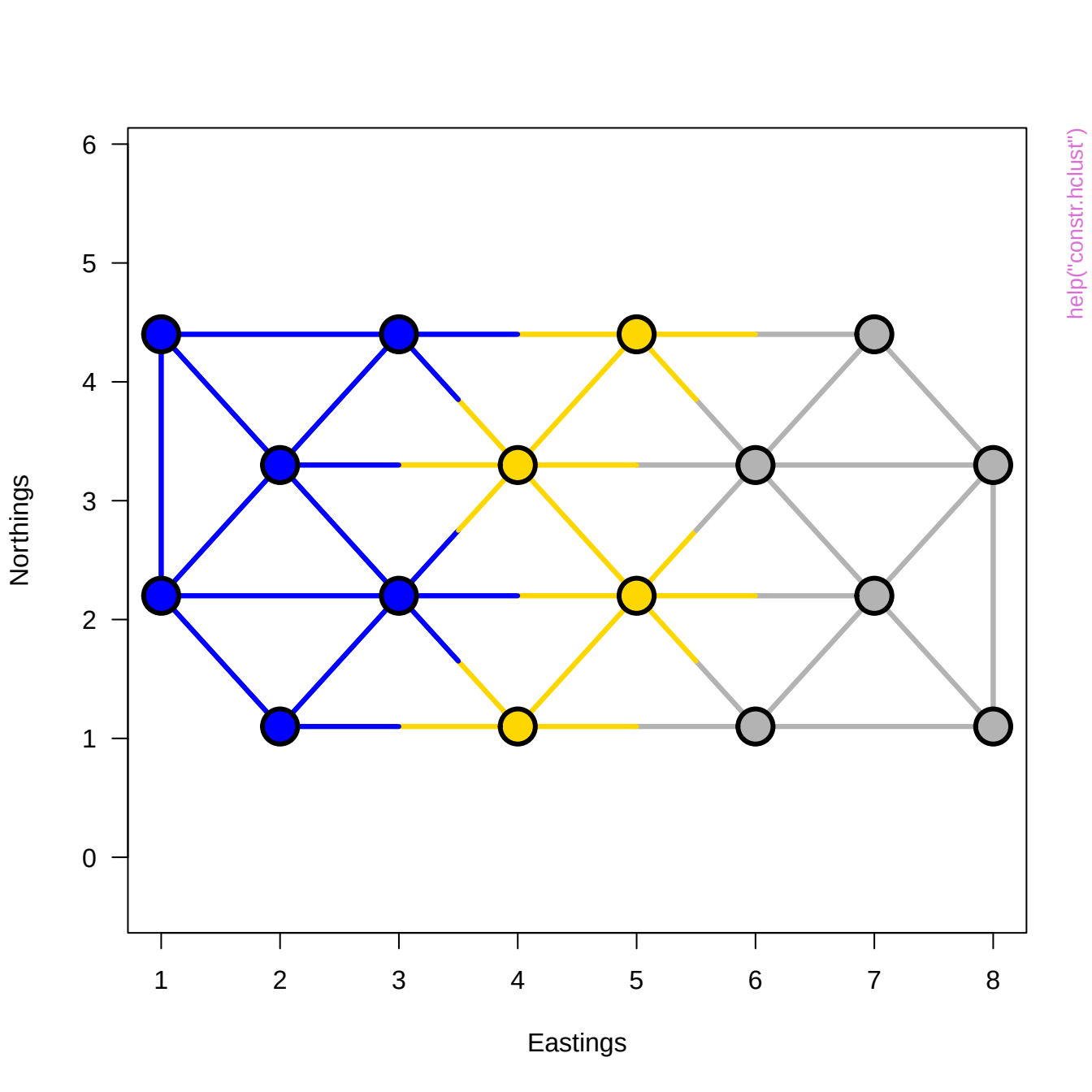

d = 2
help("beta.div")
0.0025
0.0075
0.0125
0.0175
0.0225

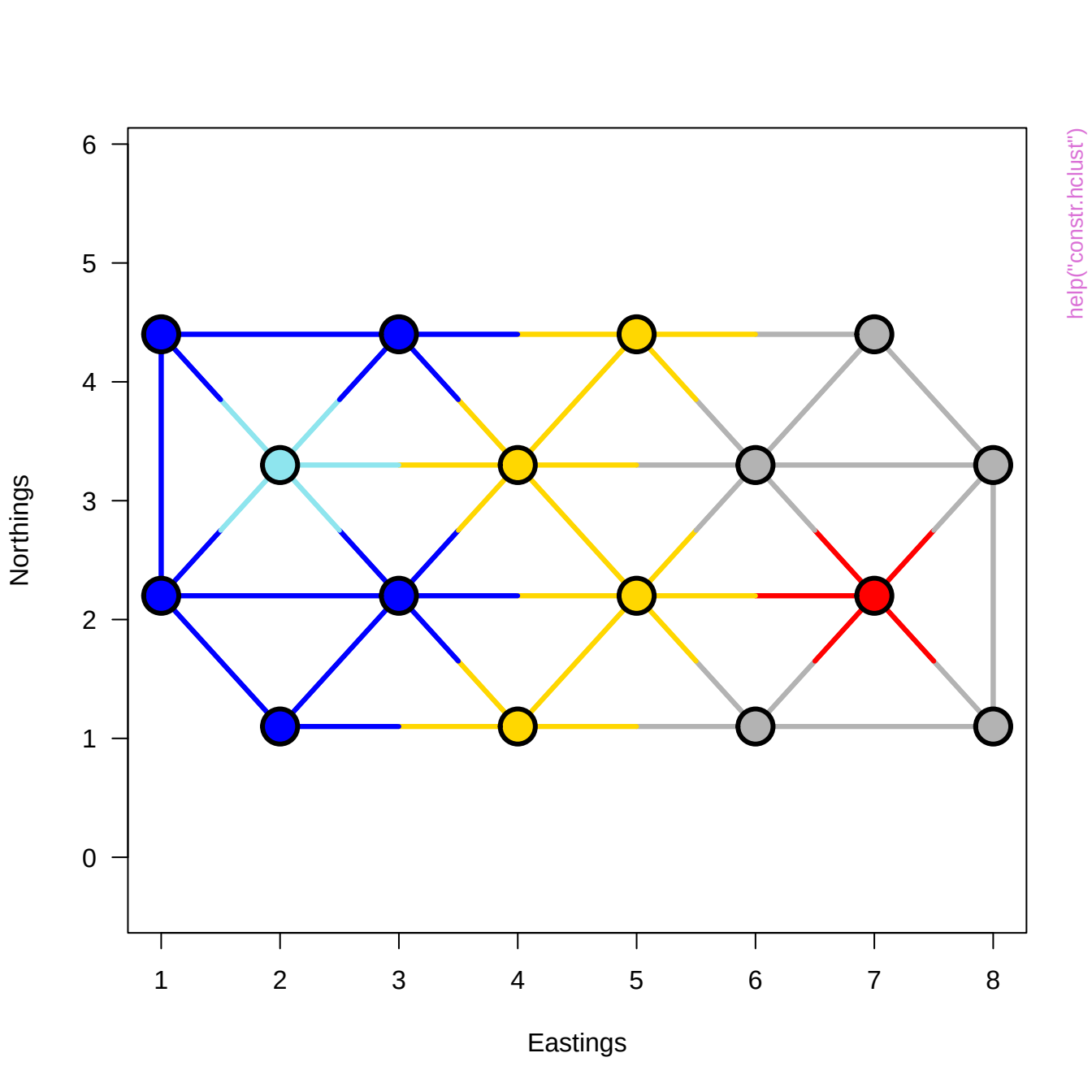
help("chooseCN")

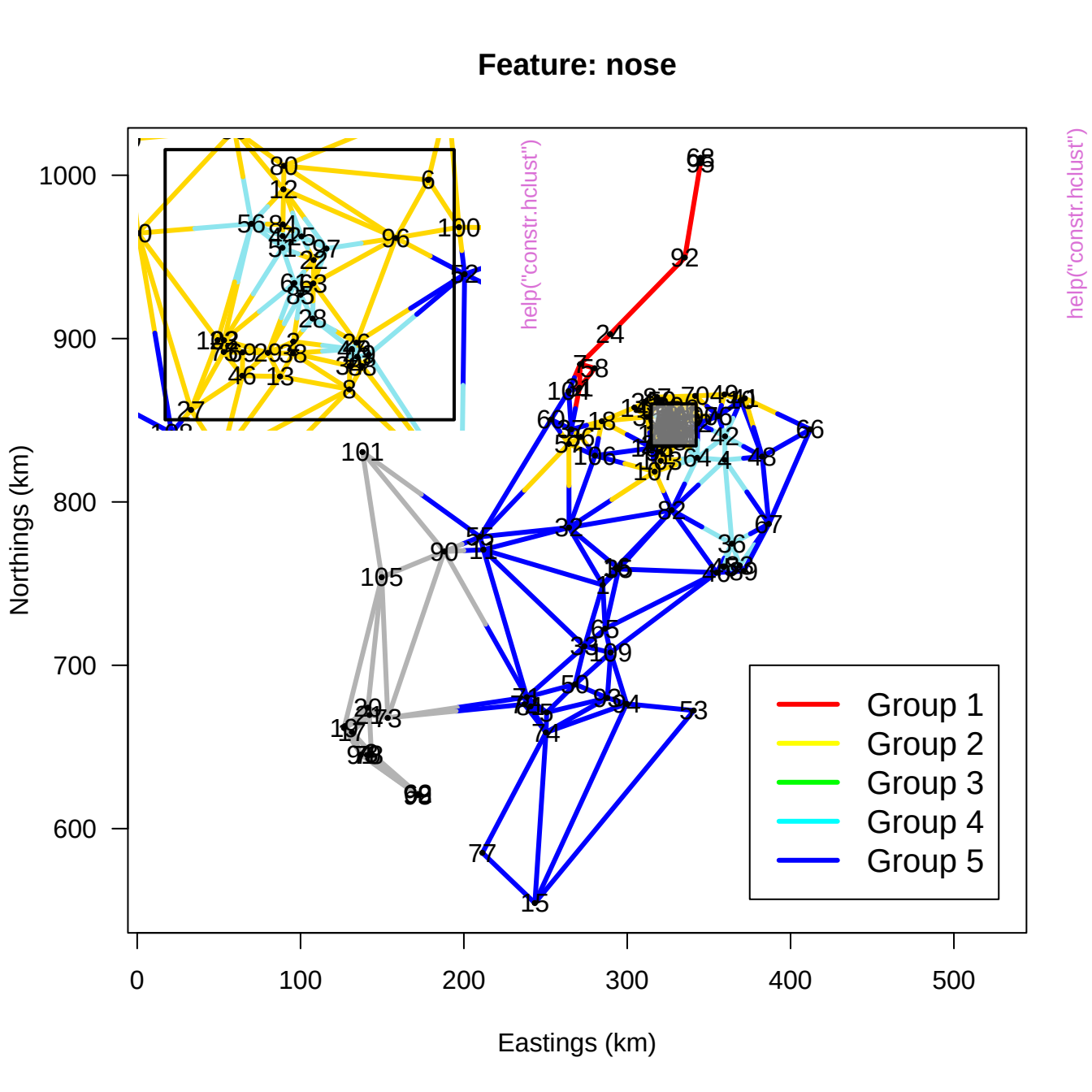

Delaunay triangulation
coord.dat[,2]
coord.dat[,1]
0
1
2
3
4
5
6
1
2
3
4
5
6
7
8
41
42
25
38
50
30
41
43
43
41
30
50
38
25
42
41
help("constr.hclust")

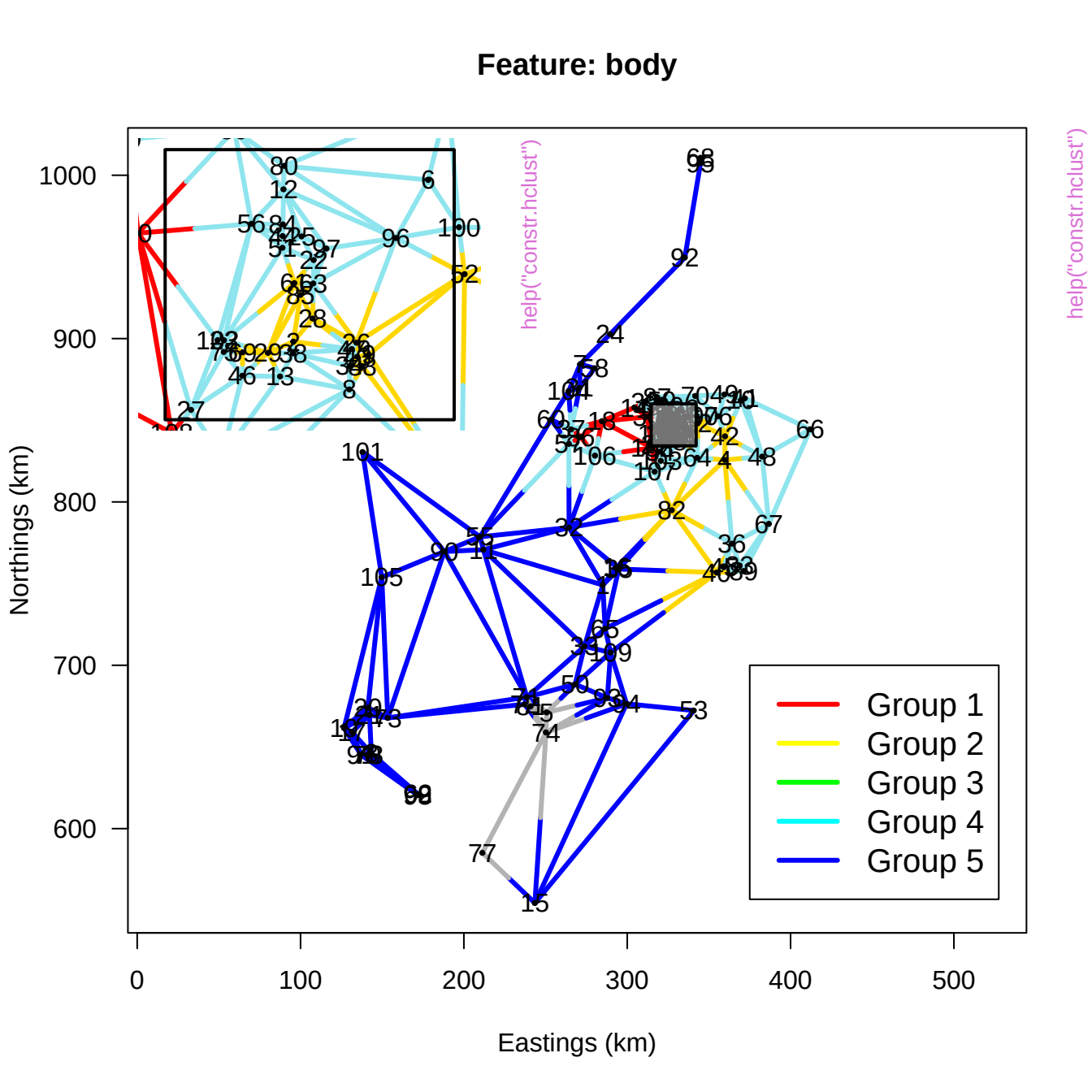

Cluster Dendrogram
Height
0
10
20
30
3
14
6
11
5
12
4
13
16
10
1
7
2
15
8
9
D.dat
hclust (*, "ward.D2")
help("constr.hclust")

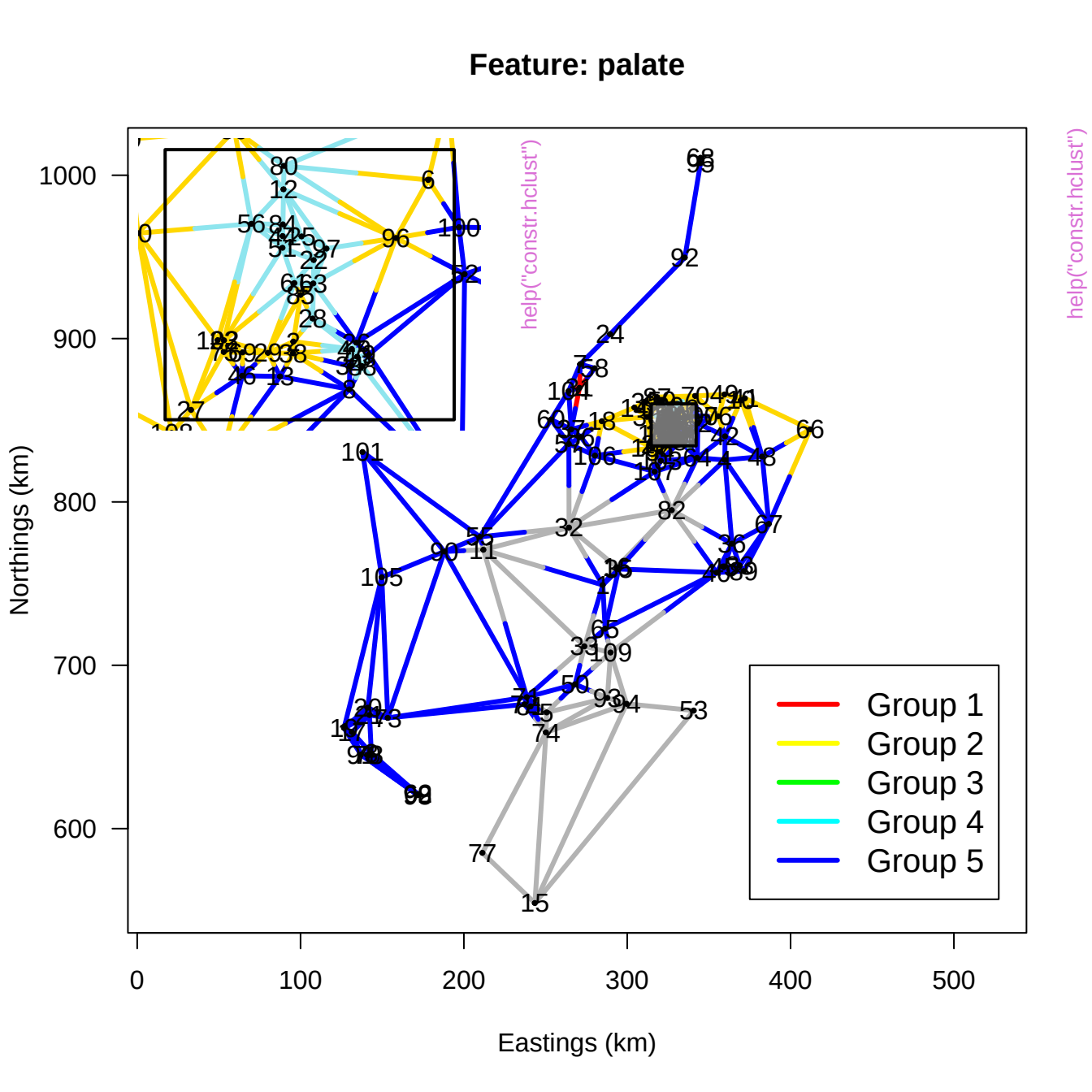

Cluster Dendrogram
Height
0
10
20
30
3
14
6
11
5
12
4
13
16
10
1
7
2
15
8
9
D.dat
constr.hclust (*, "ward.D2")
help("constr.hclust")

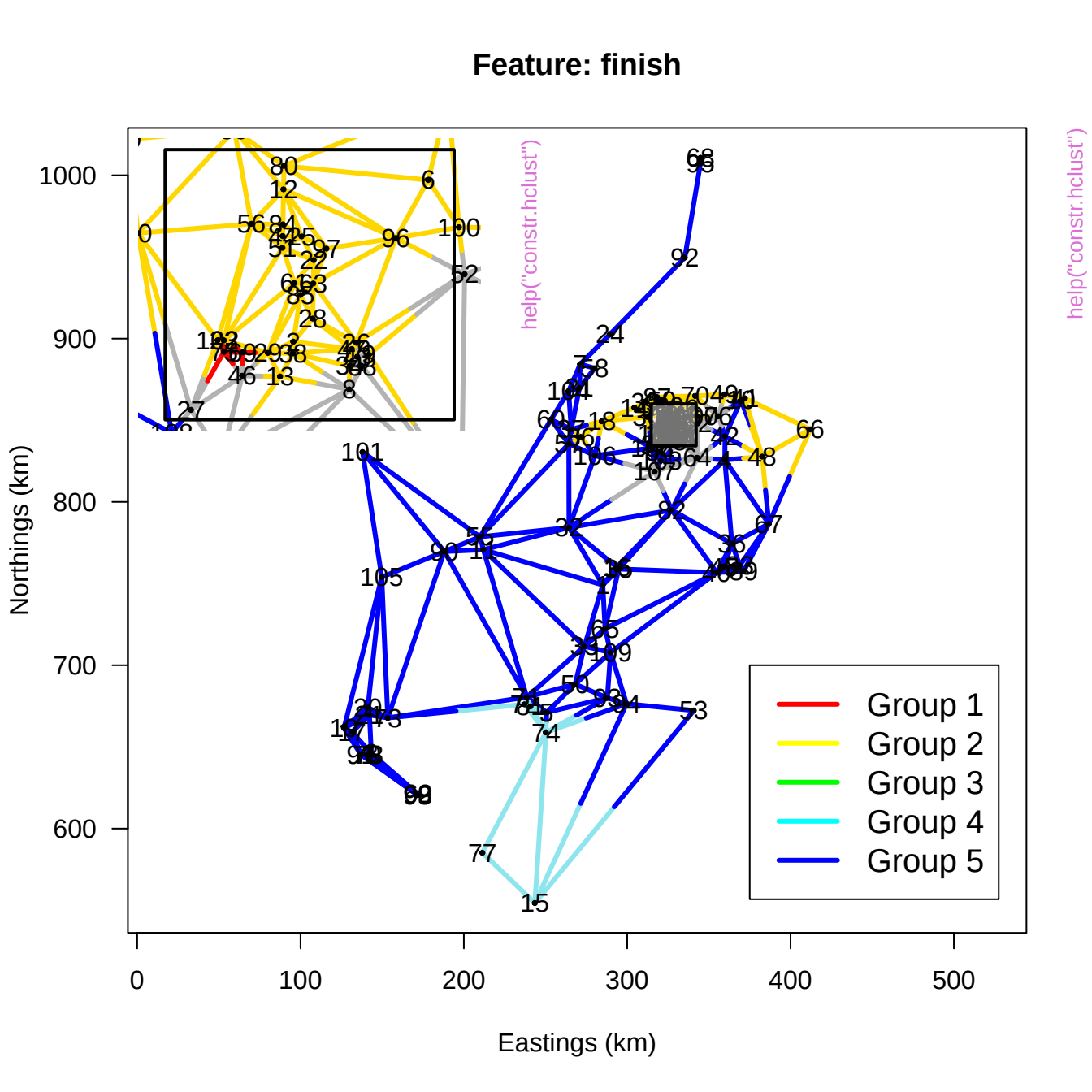

help("constr.hclust")
Northings
Eastings
0
1
2
3
4
5
6
1
2
3
4
5
6
7
8

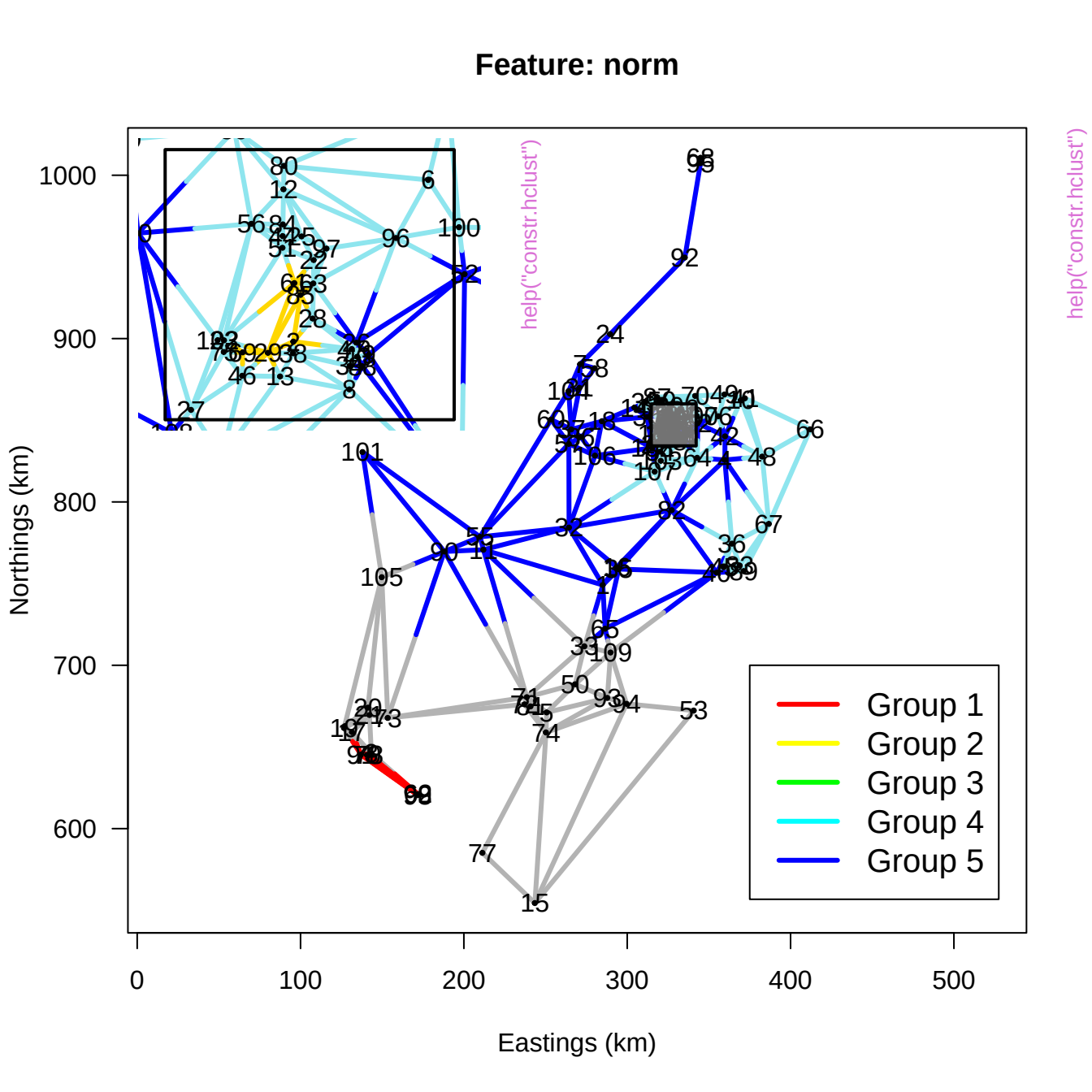

help("constr.hclust")
Northings
Eastings
0
1
2
3
4
5
6
1
2
3
4
5
6
7
8

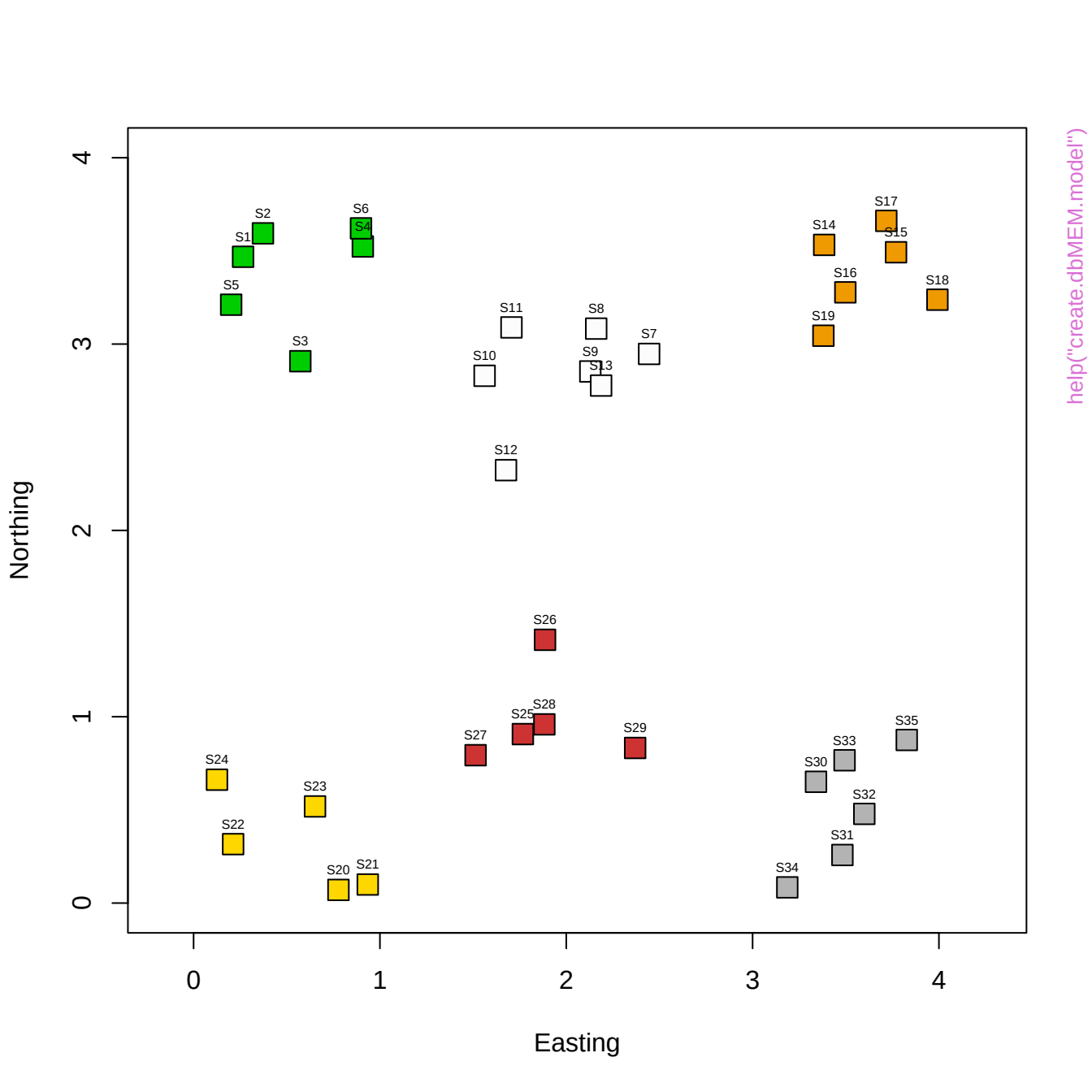

Feature: nose
help("constr.hclust")
help("constr.hclust")
Northings (km)
Eastings (km)
1000
900
800
700
600
0
100
200
300
400
500
Group 1
Group 2
Group 3
Group 4
Group 5

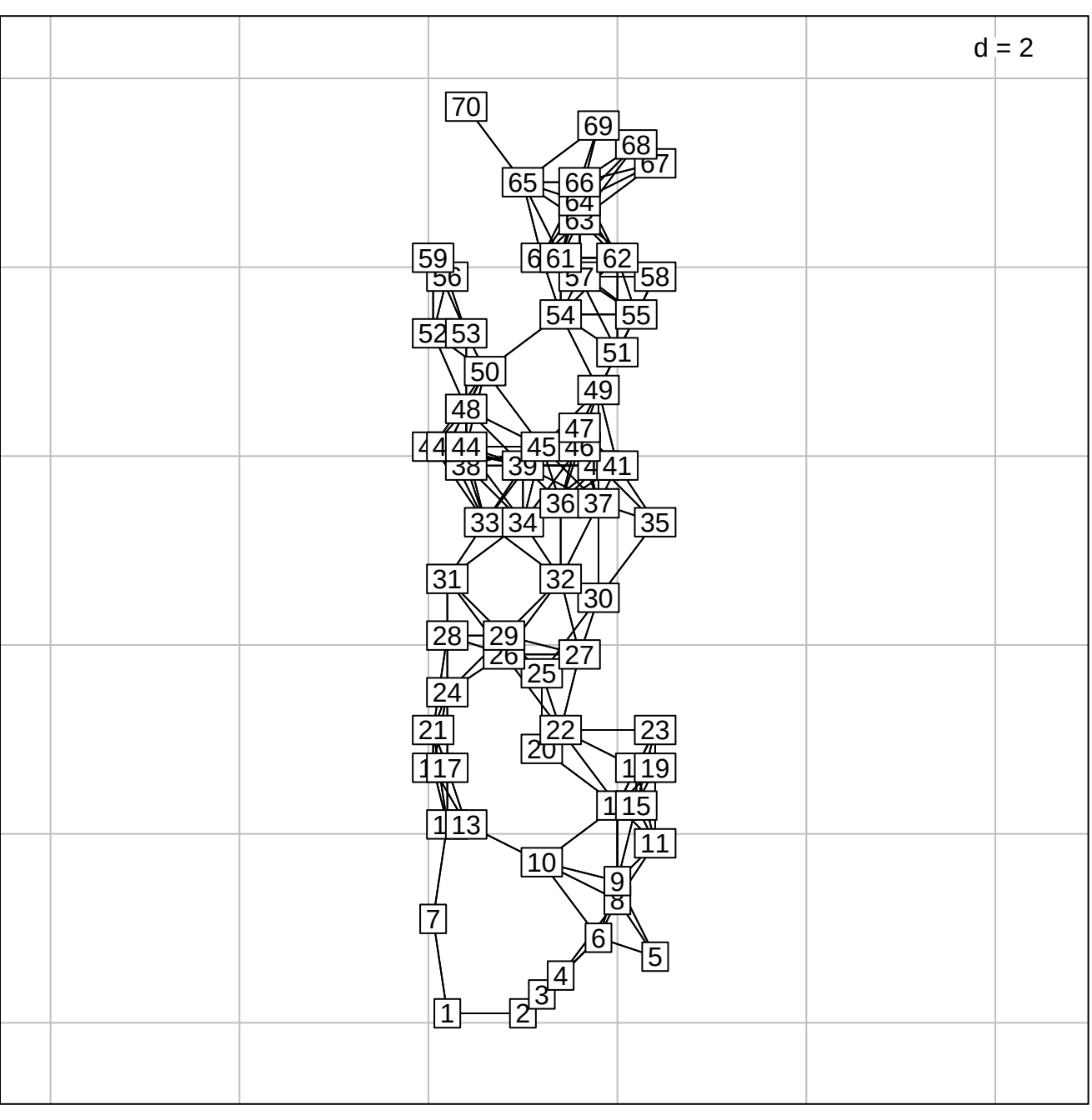

Feature: body
help("constr.hclust")
help("constr.hclust")
Northings (km)
Eastings (km)
1000
900
800
700
600
0
100
200
300
400
500
Group 1
Group 2
Group 3
Group 4
Group 5


Feature: palate
help("constr.hclust")
help("constr.hclust")
Northings (km)
Eastings (km)
1000
900
800
700
600
0
100
200
300
400
500
Group 1
Group 2
Group 3
Group 4
Group 5

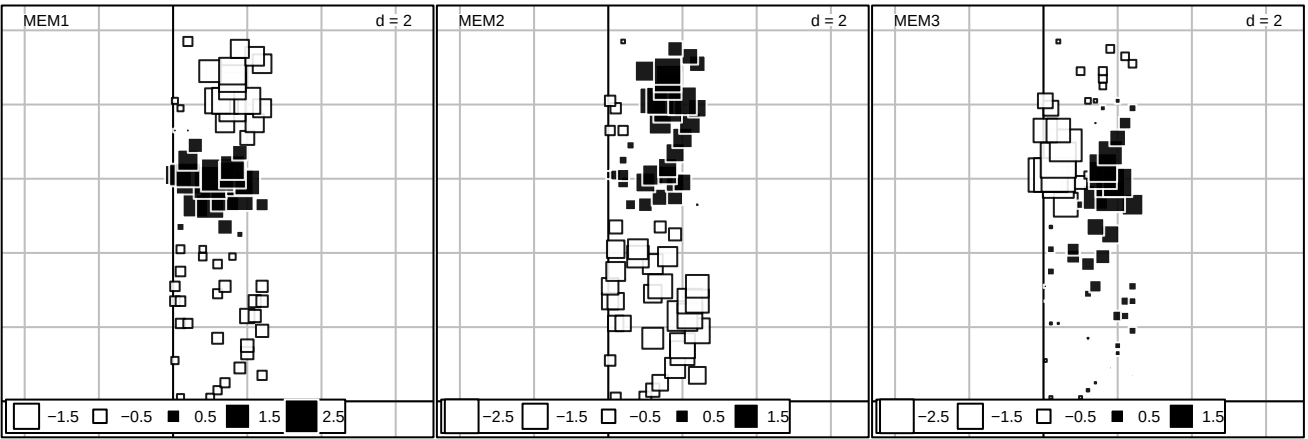

Feature: finish
help("constr.hclust")
help("constr.hclust")
Northings (km)
Eastings (km)
1000
900
800
700
600
0
100
200
300
400
500
Group 1
Group 2
Group 3
Group 4
Group 5

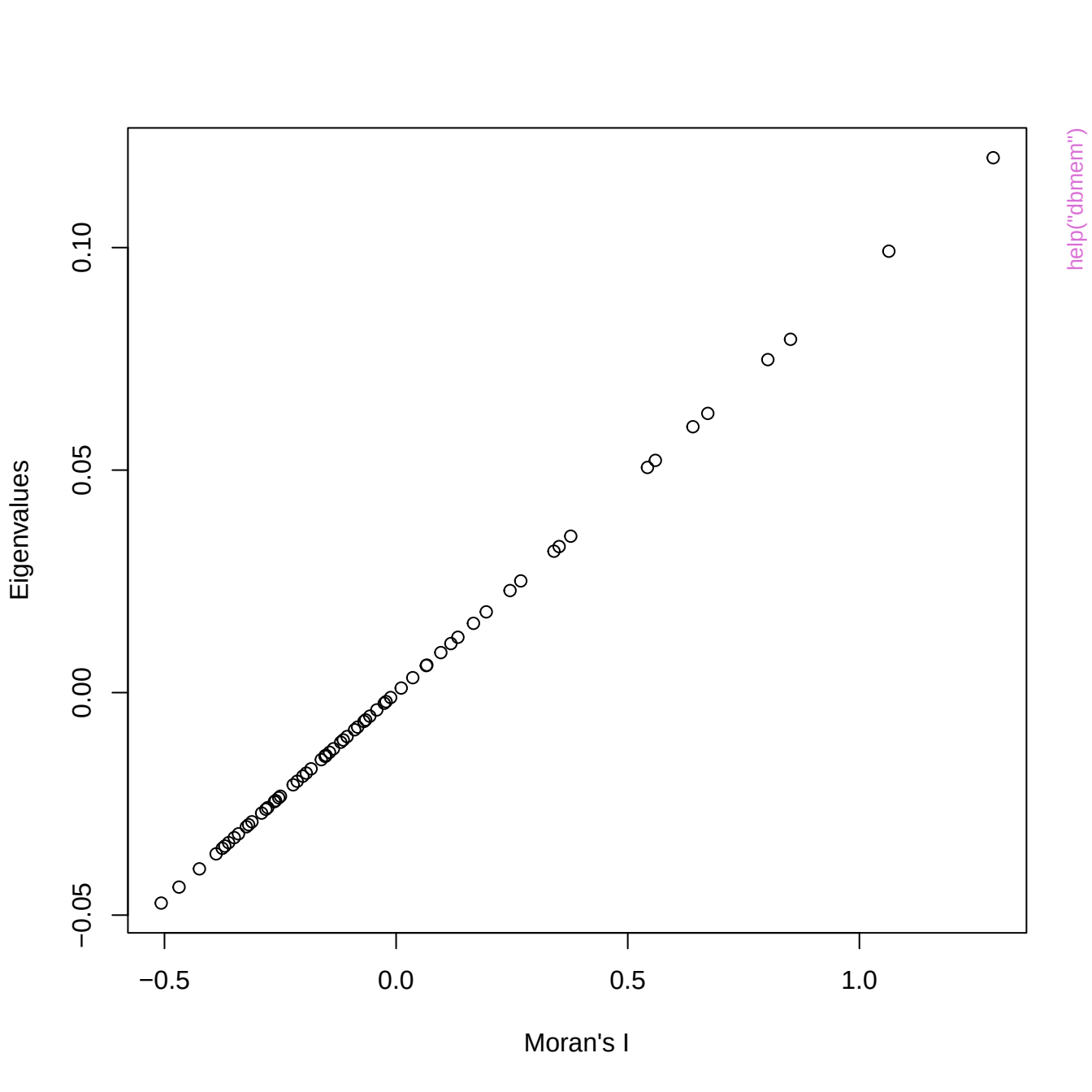

Feature: norm
Northings (km)
Eastings (km)
1000
900
800
700
600
0
100
200
300
400
500
Group 1
Group 2
Group 3
Group 4
Group 5
help("constr.hclust")
help("constr.hclust")

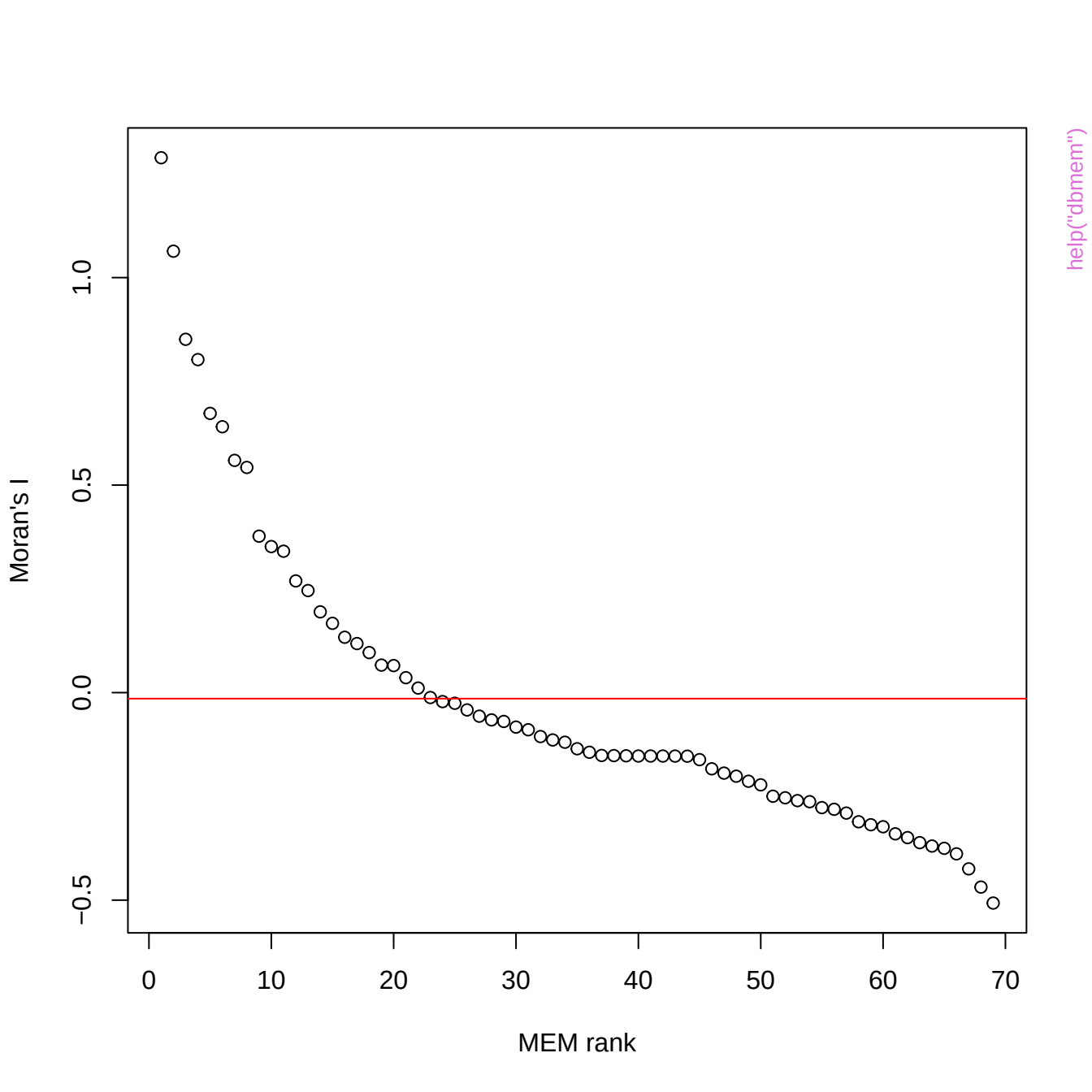

S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S32
S33
S34
S35
Northing
Easting
0
1
2
3
4
help("create.dbMEM.model")

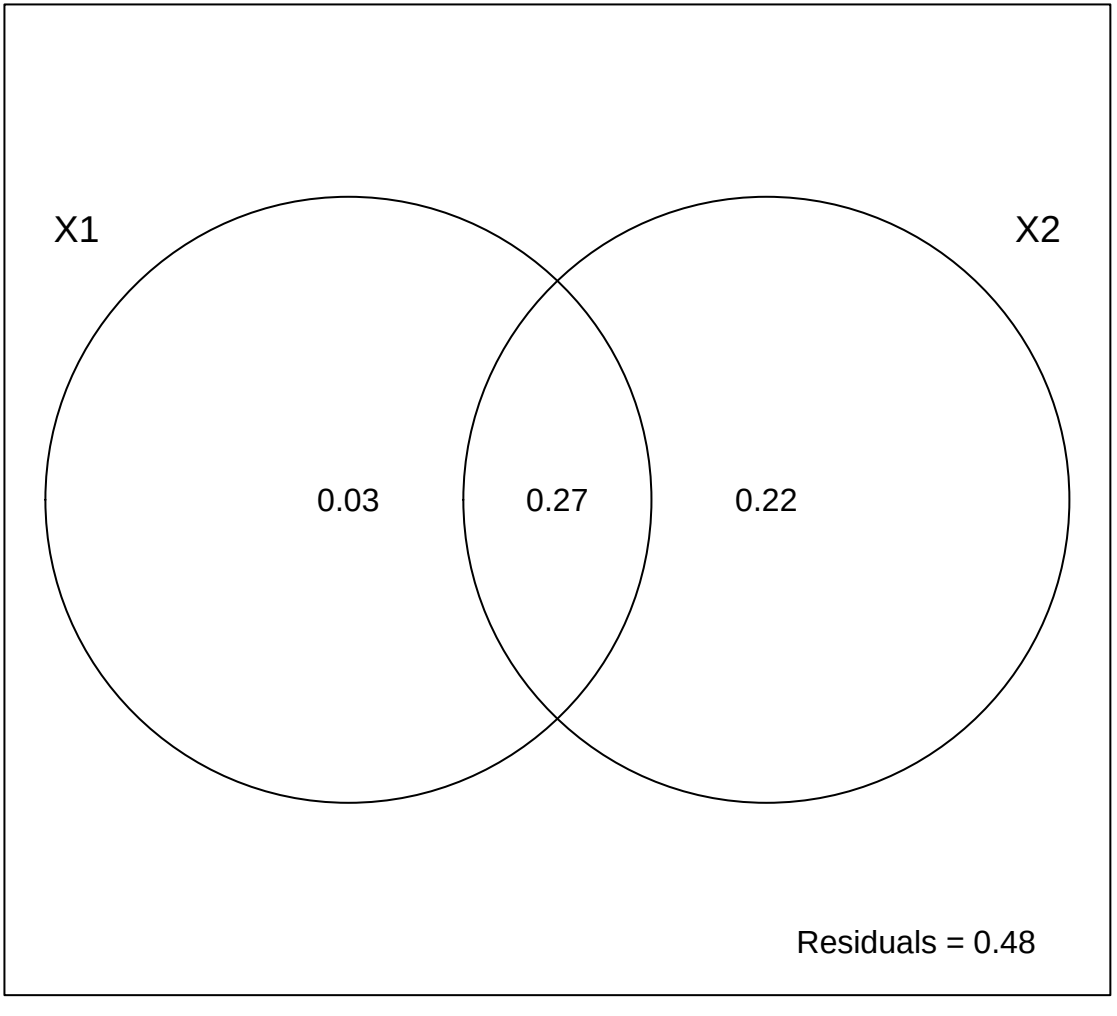

d = 2
help("dbmem")

help("dbmem")

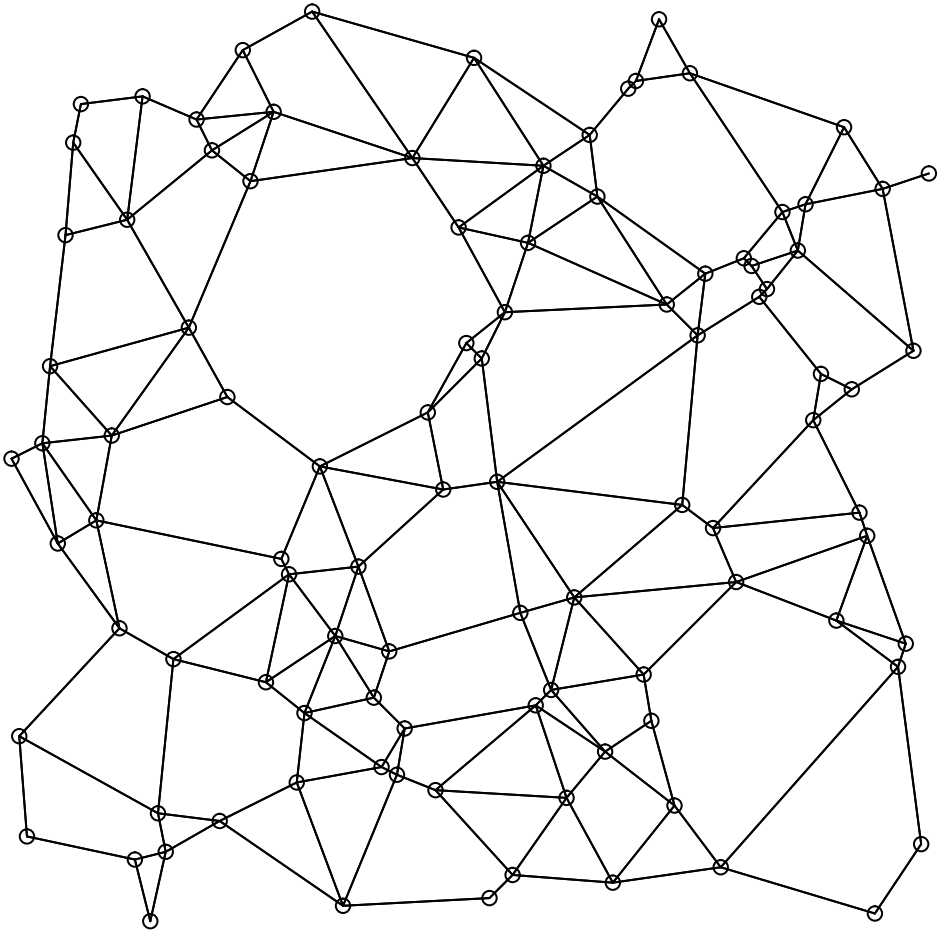



Eigenvalues
0.10
0.05
0.00
−0.05
−0.5
0.0
0.5
1.0
Moran's I
help("dbmem")

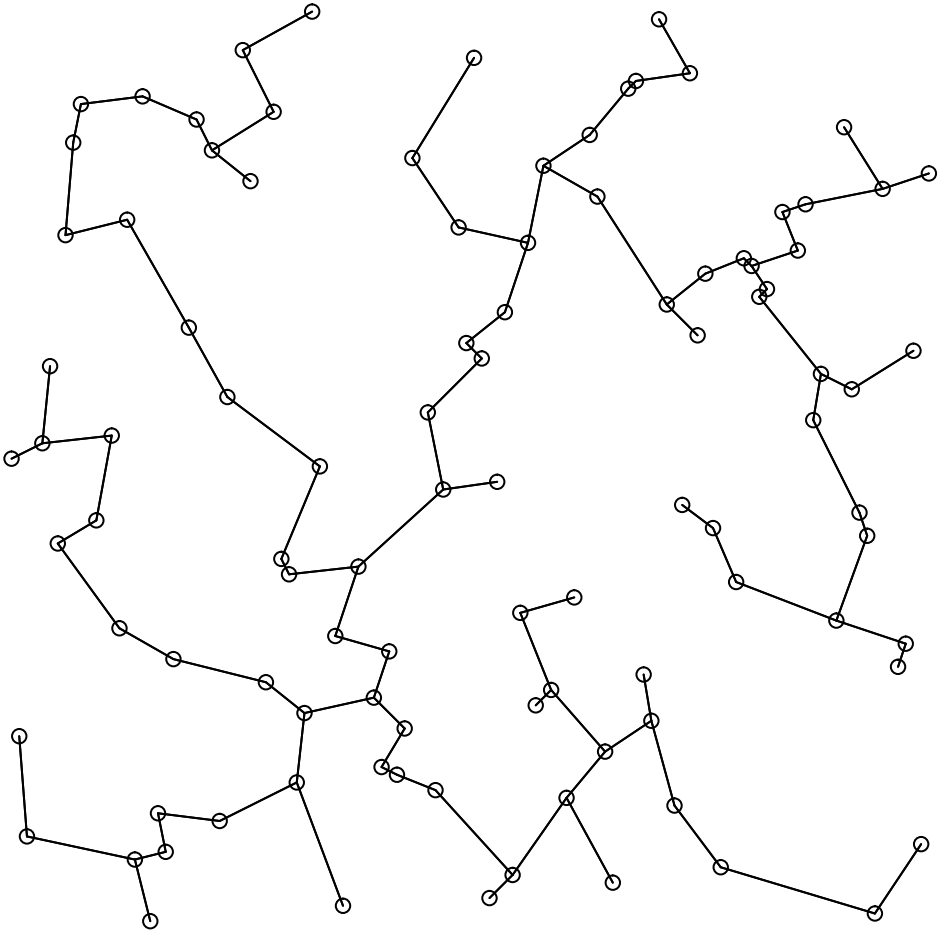

Moran's I
1.0
0.5
0.0
−0.5
0
10
20
30
40
50
60
70
MEM rank
help("dbmem")



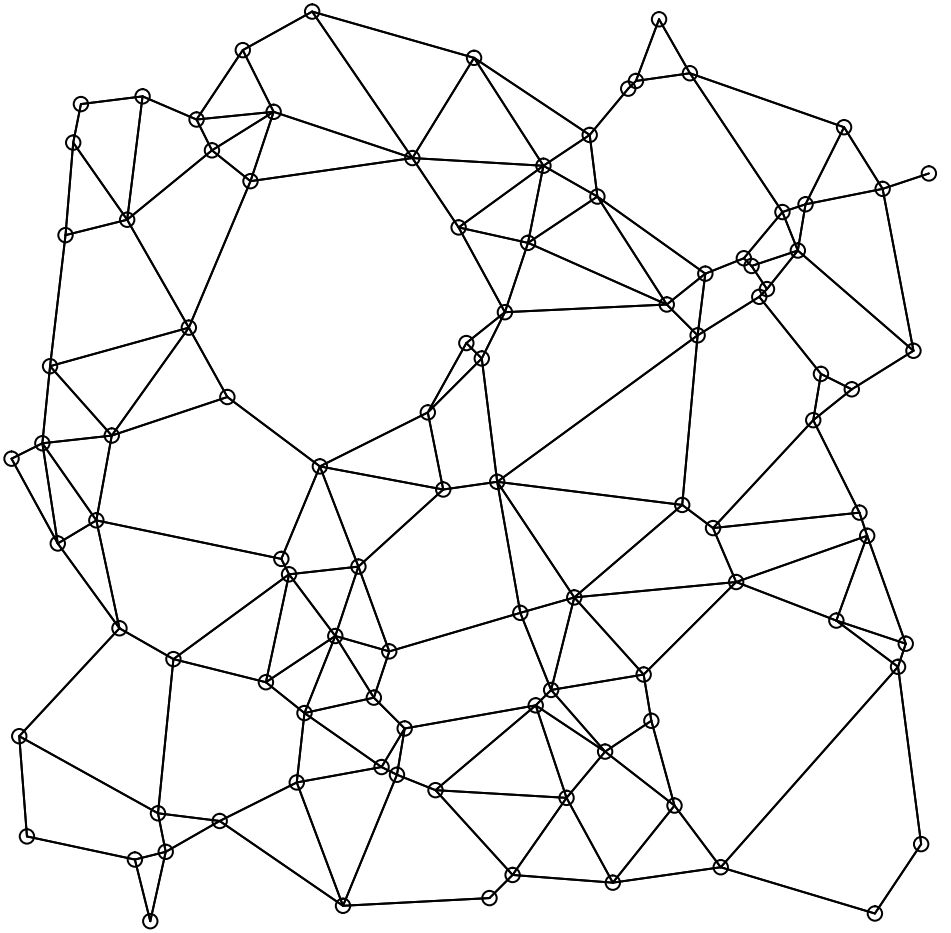
help("envspace.test")



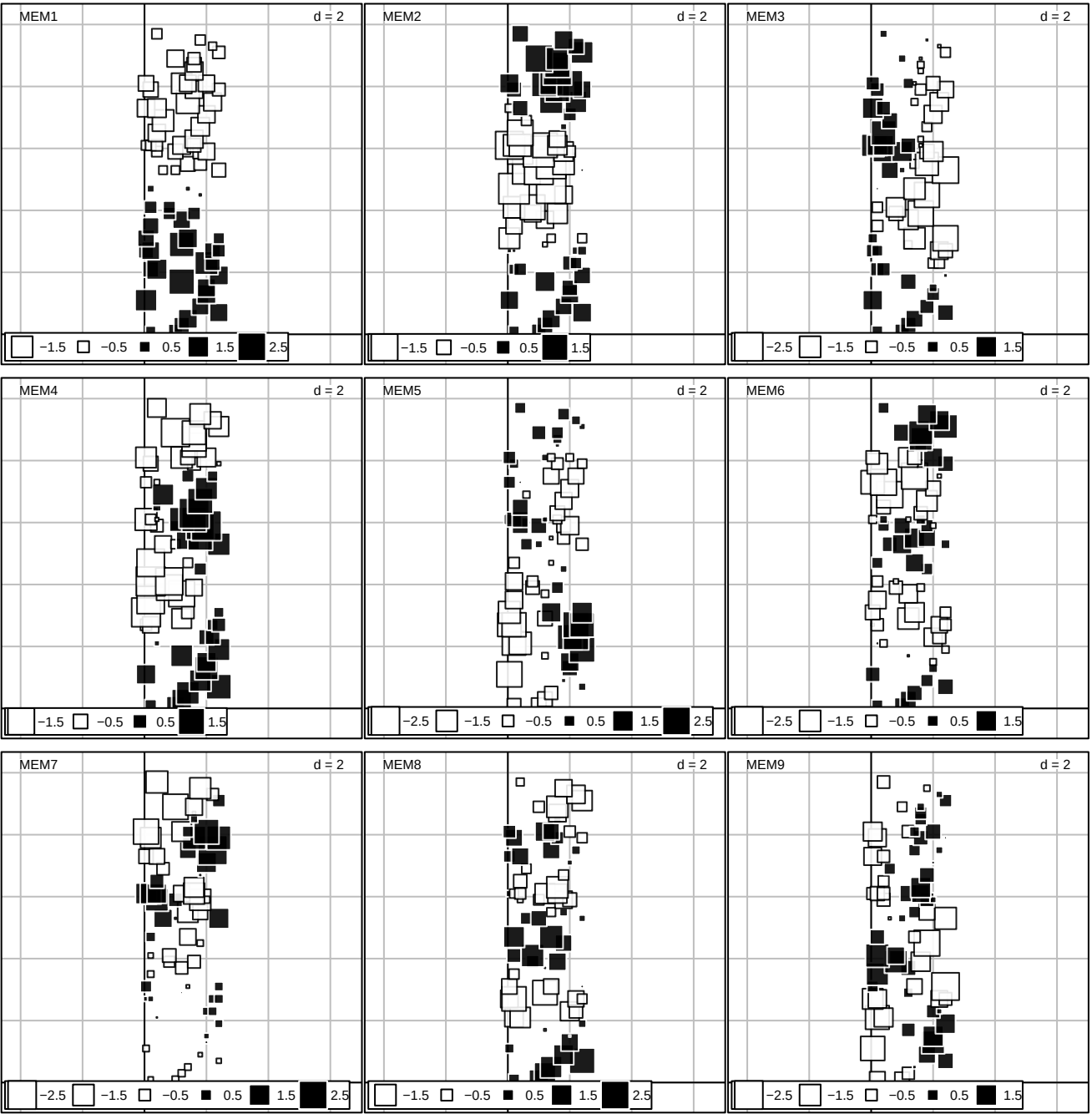
help("listw.candidates")



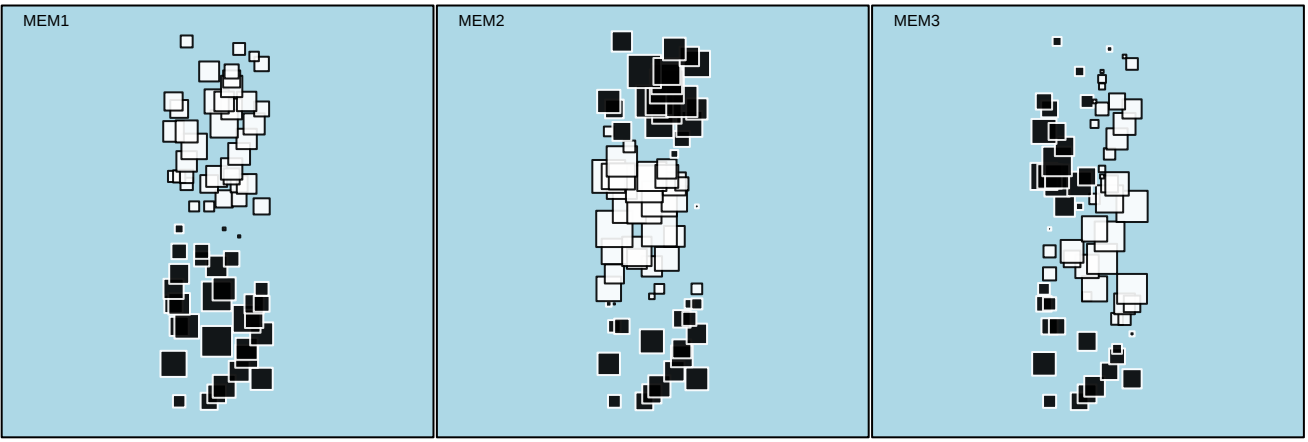
help("listw.candidates")

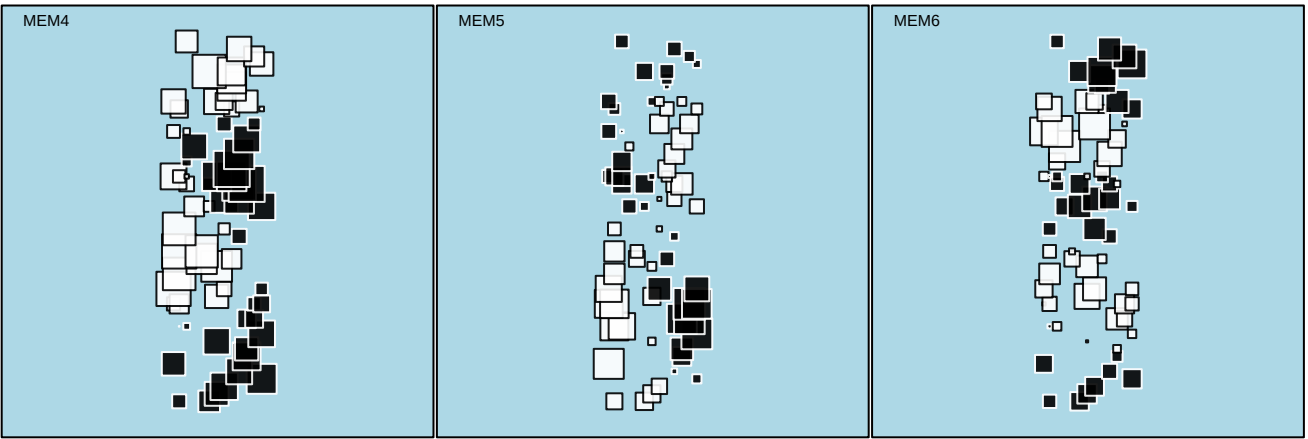


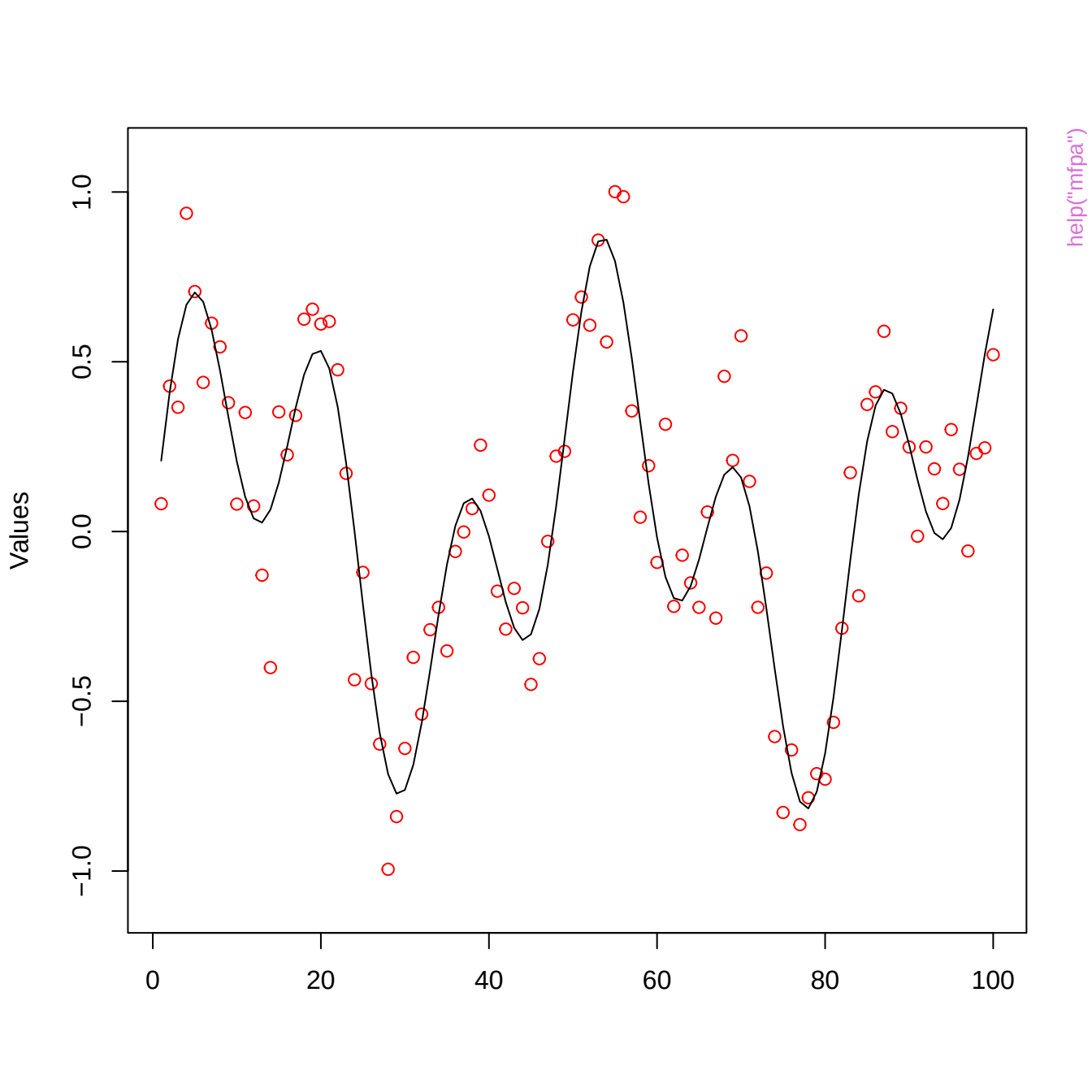
help("listw.candidates")

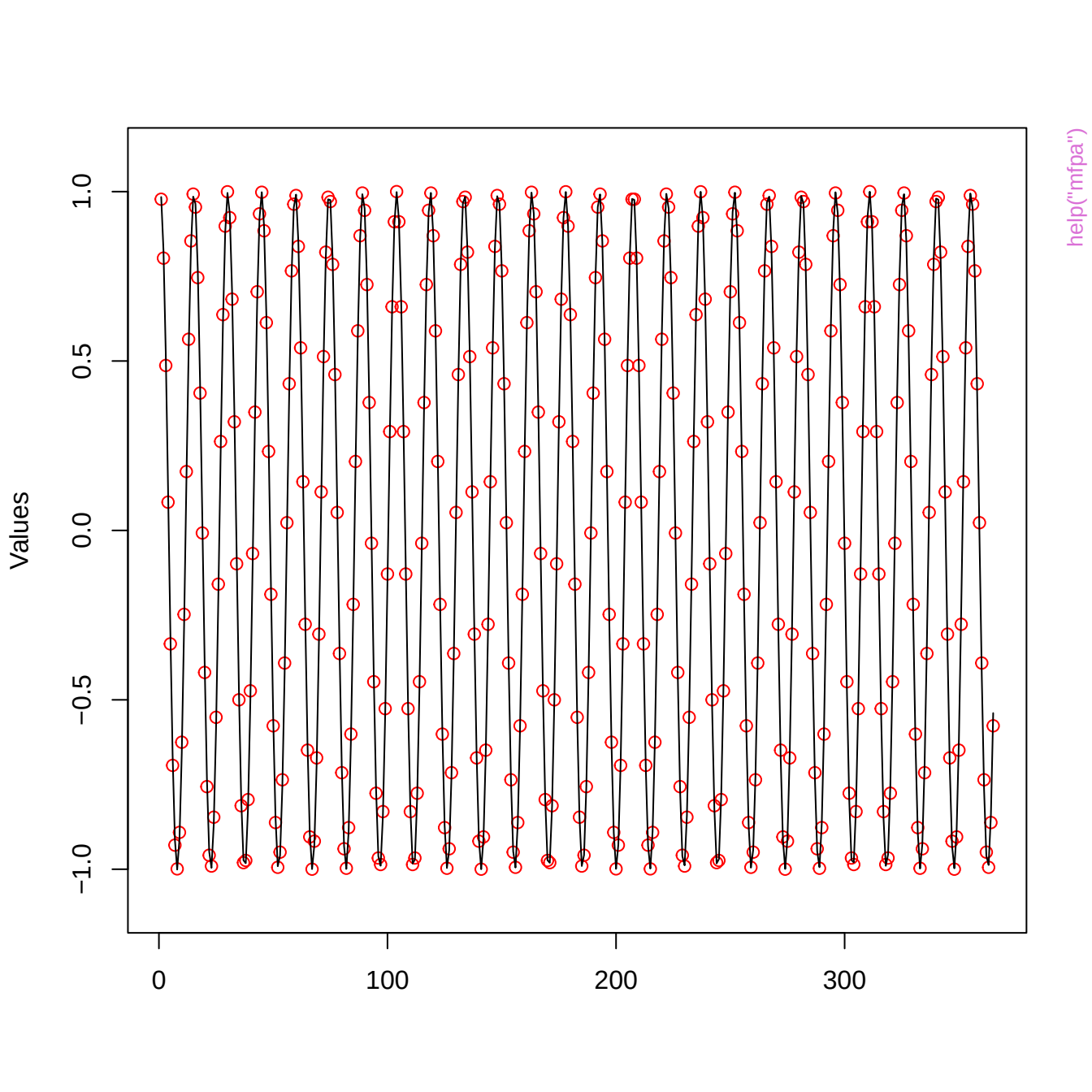

MEM1
d = 2
−1.5 −0.5 0.5 1.5 2.5
MEM2
d = 2
−1.5 −0.5 0.5 1.5
MEM3
d = 2
−2.5 −1.5 −0.5 0.5 1.5
MEM4
d = 2
−1.5 −0.5 0.5 1.5
MEM5
d = 2
−2.5 −1.5 −0.5 0.5 1.5 2.5
MEM6
d = 2
−2.5 −1.5 −0.5 0.5 1.5
MEM7
d = 2
−2.5 −1.5 −0.5 0.5 1.5 2.5
MEM8
d = 2
−1.5 −0.5 0.5 1.5 2.5
MEM9
d = 2
−2.5 −1.5 −0.5 0.5 1.5
help("mem")

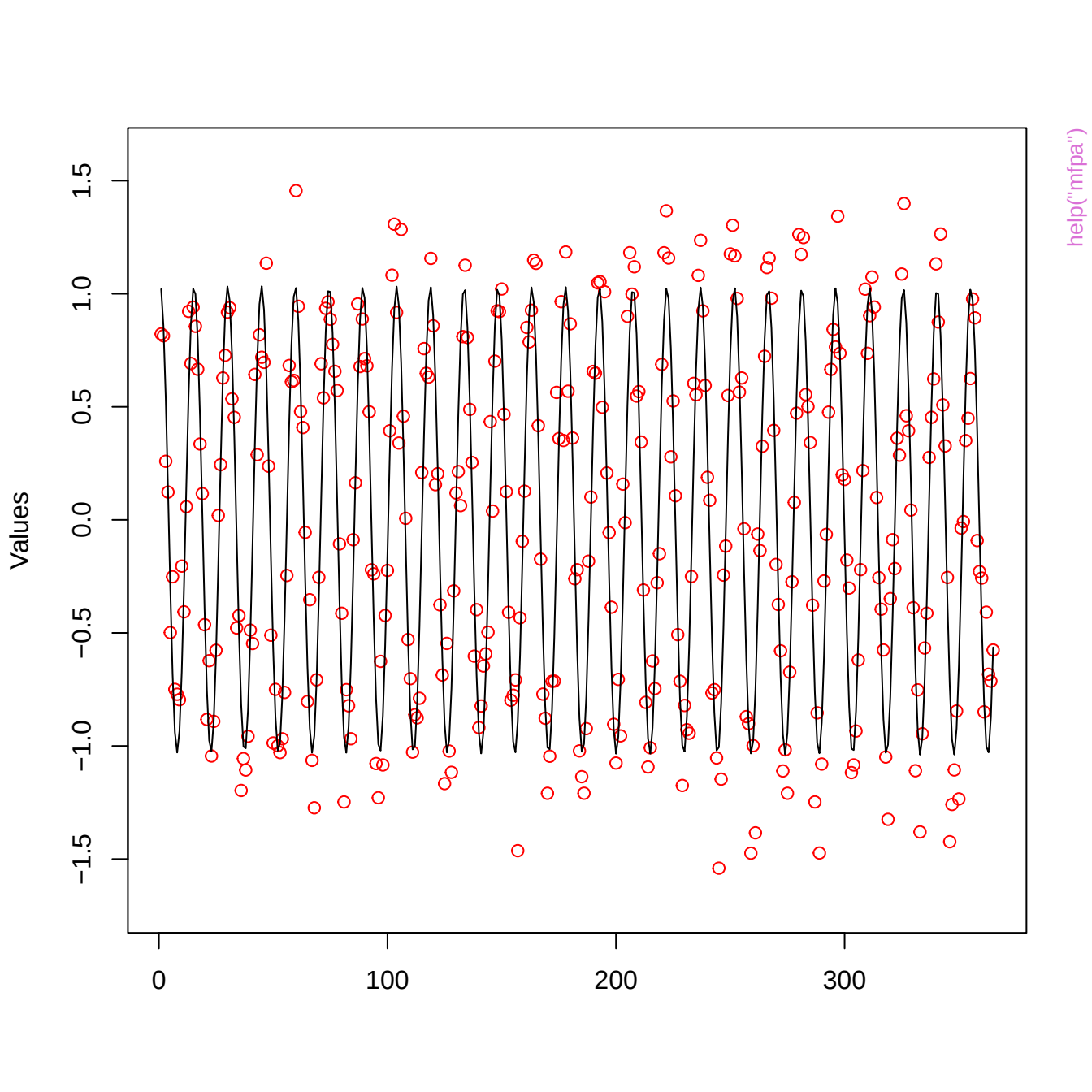
help("mem")

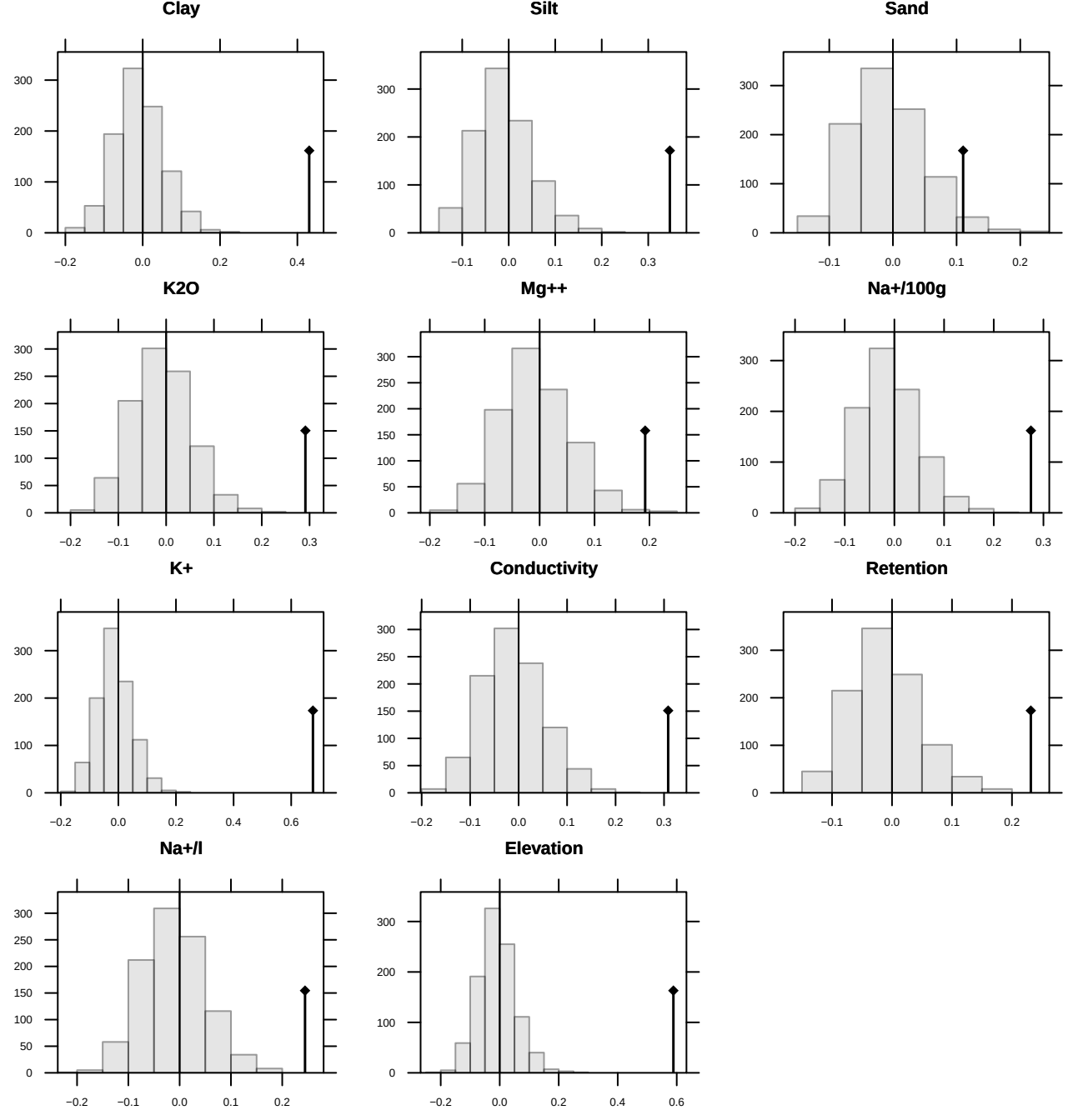




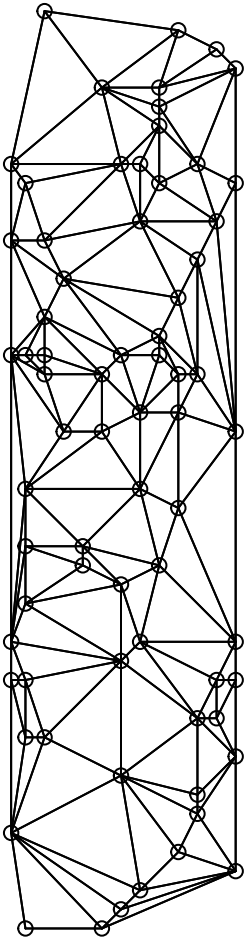

Values
1.0
0.5
0.0
−0.5
−1.0
0
20
40
60
80
100
help("mfpa")


Values
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
help("mfpa")

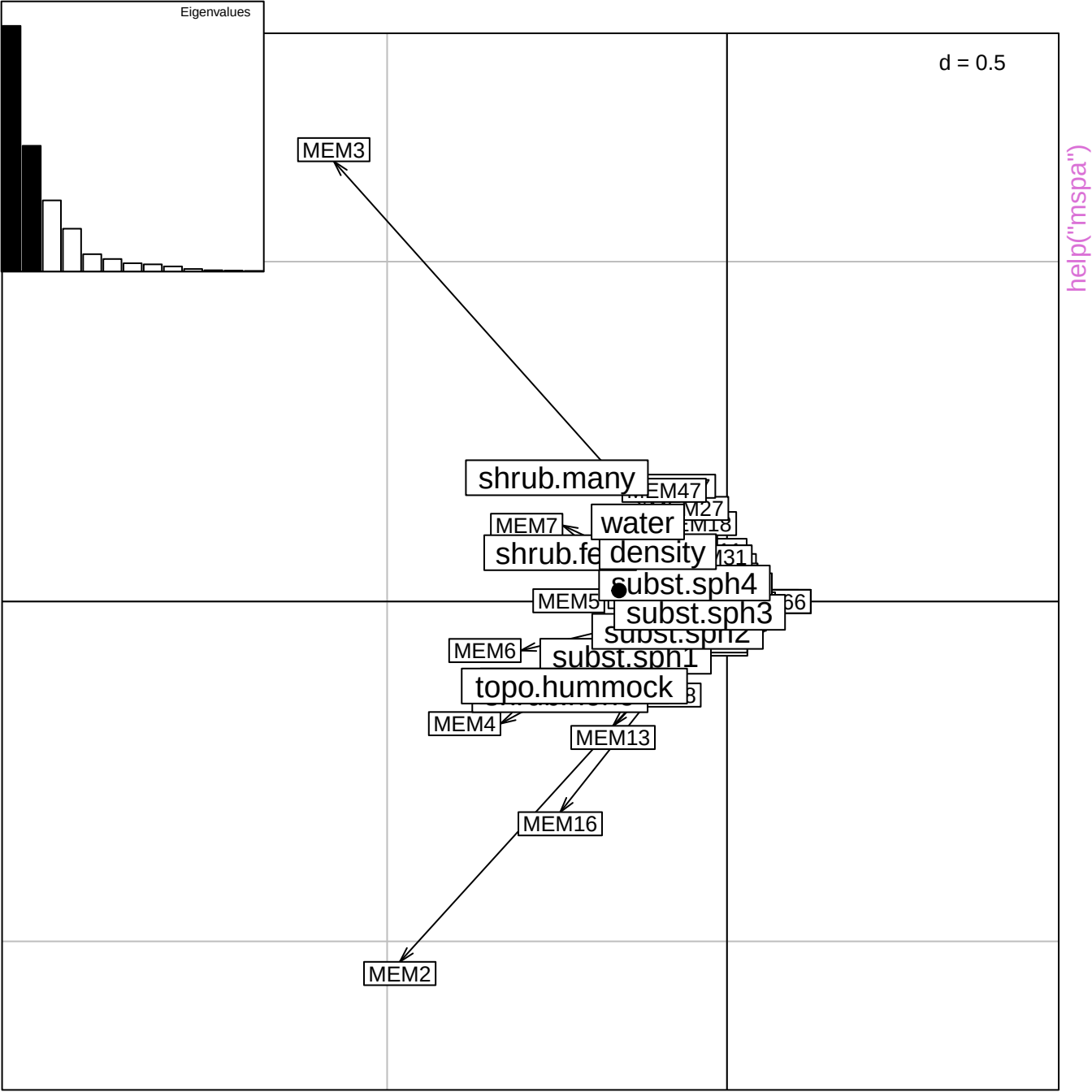

Values
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
0
100
200
300
help("mfpa")

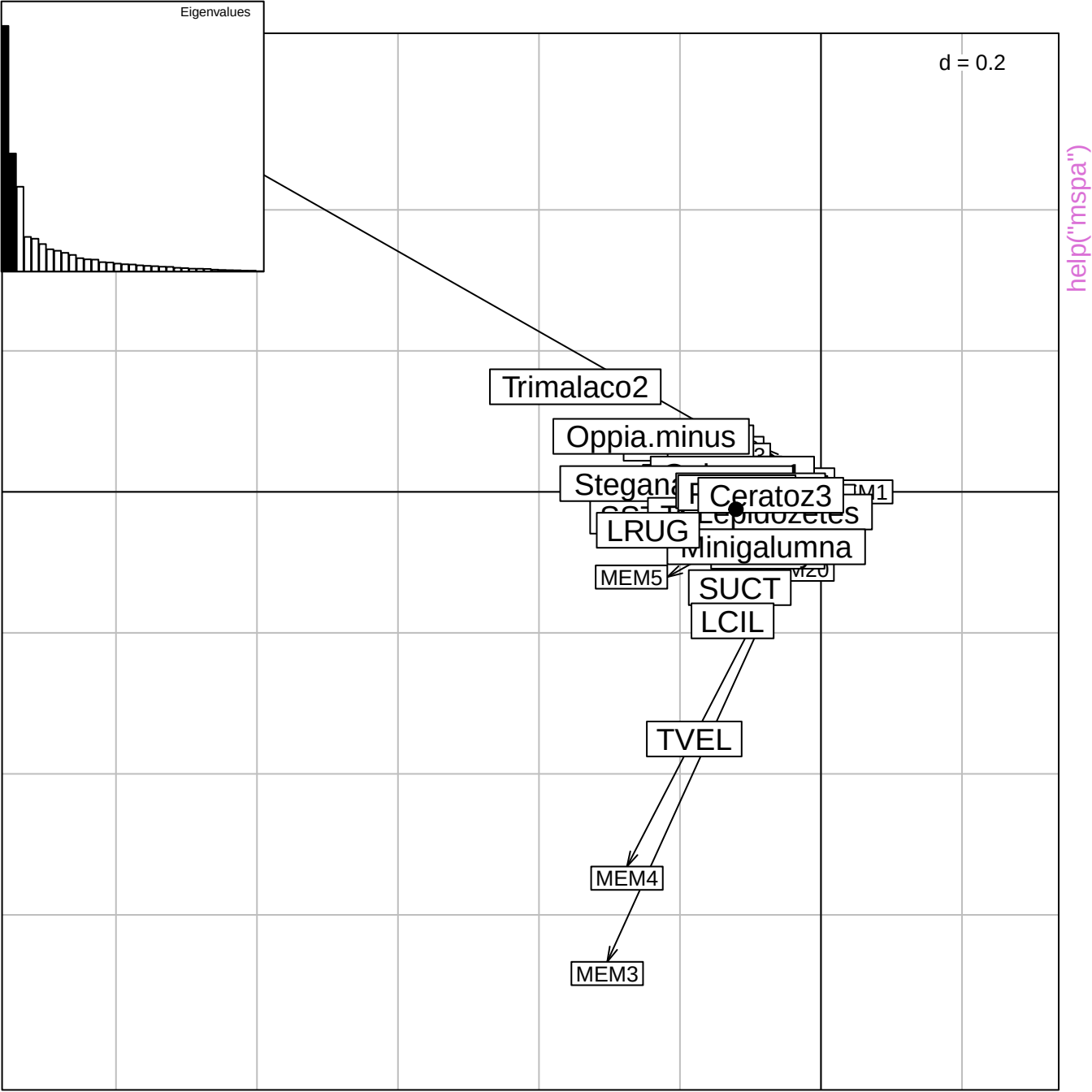


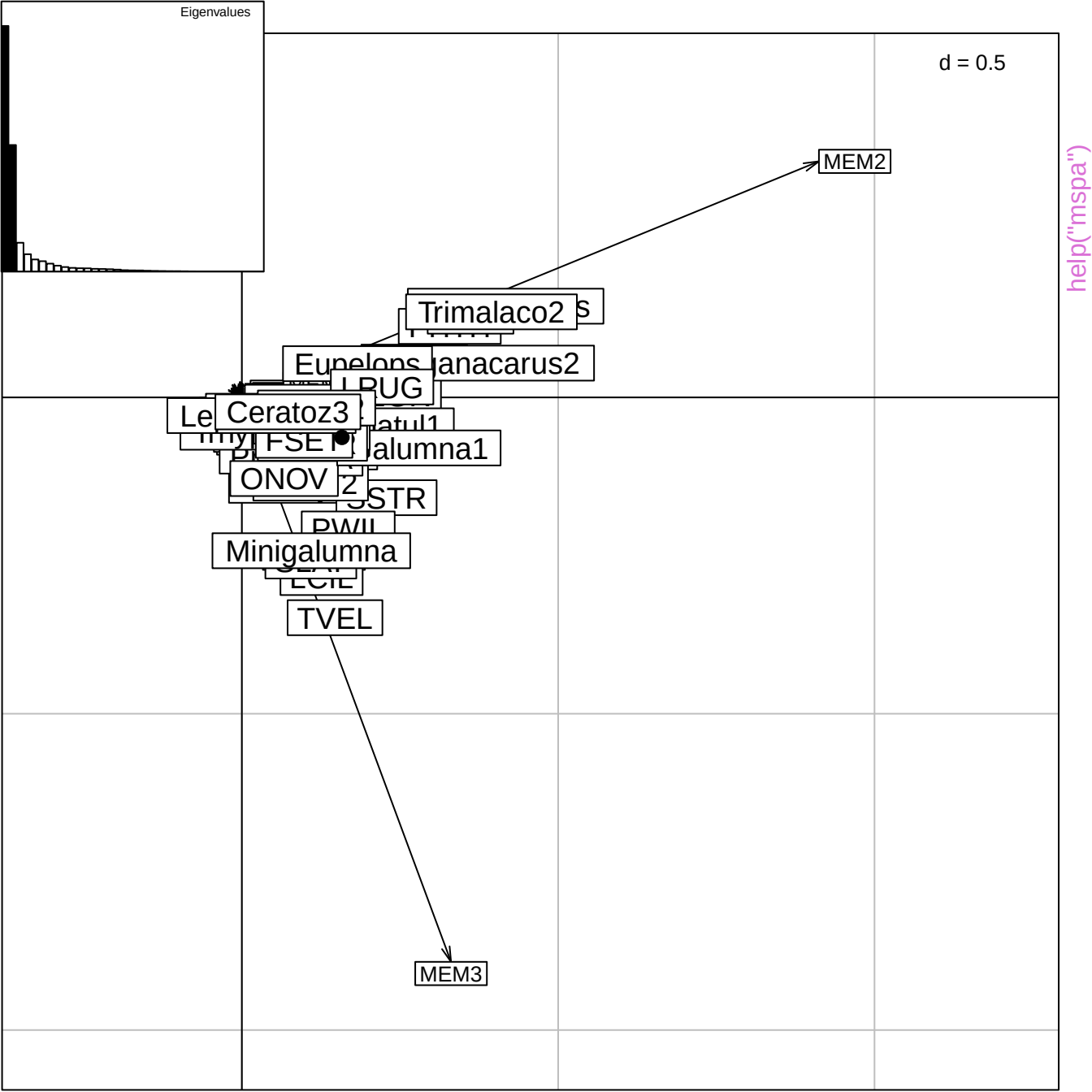
help("moran.randtest")

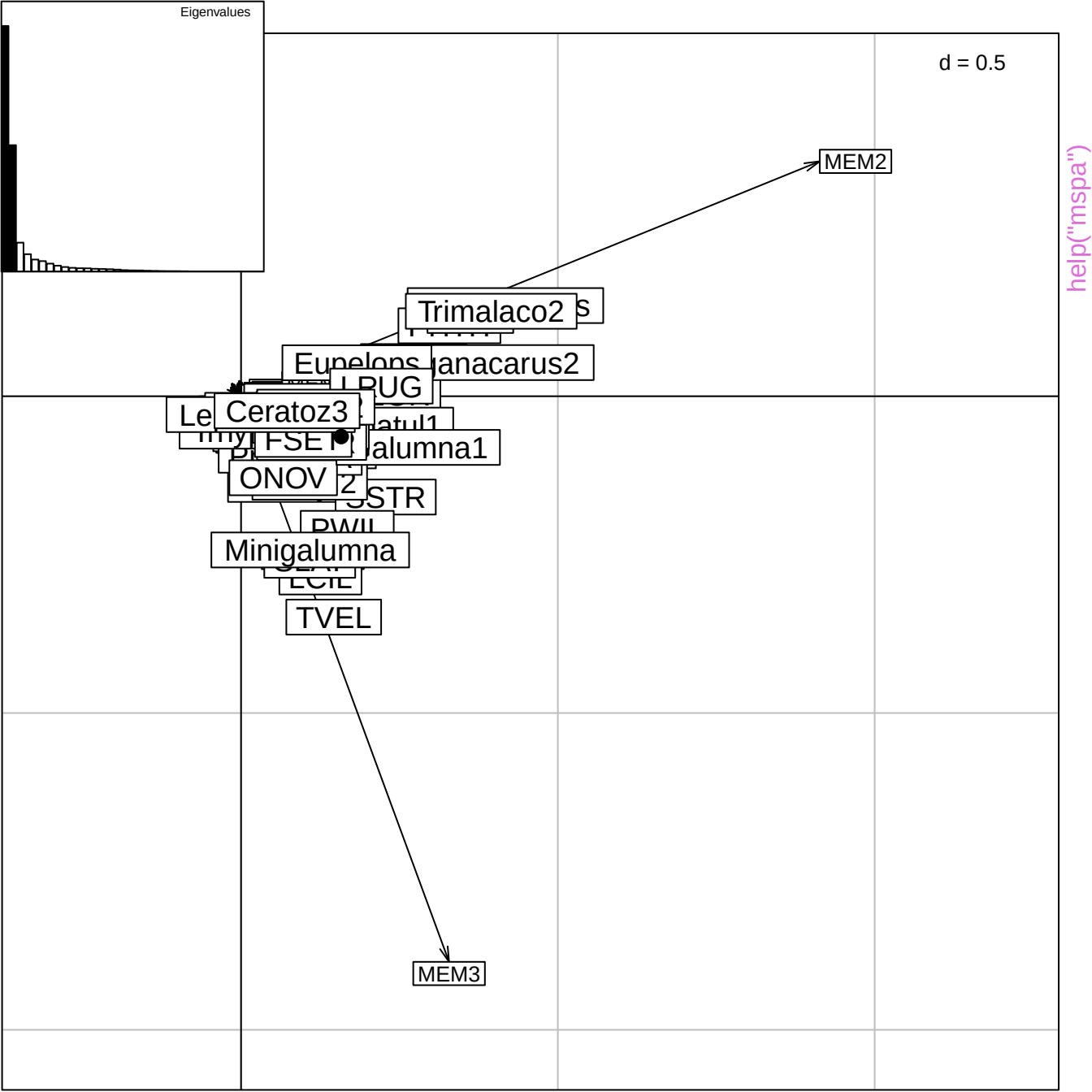


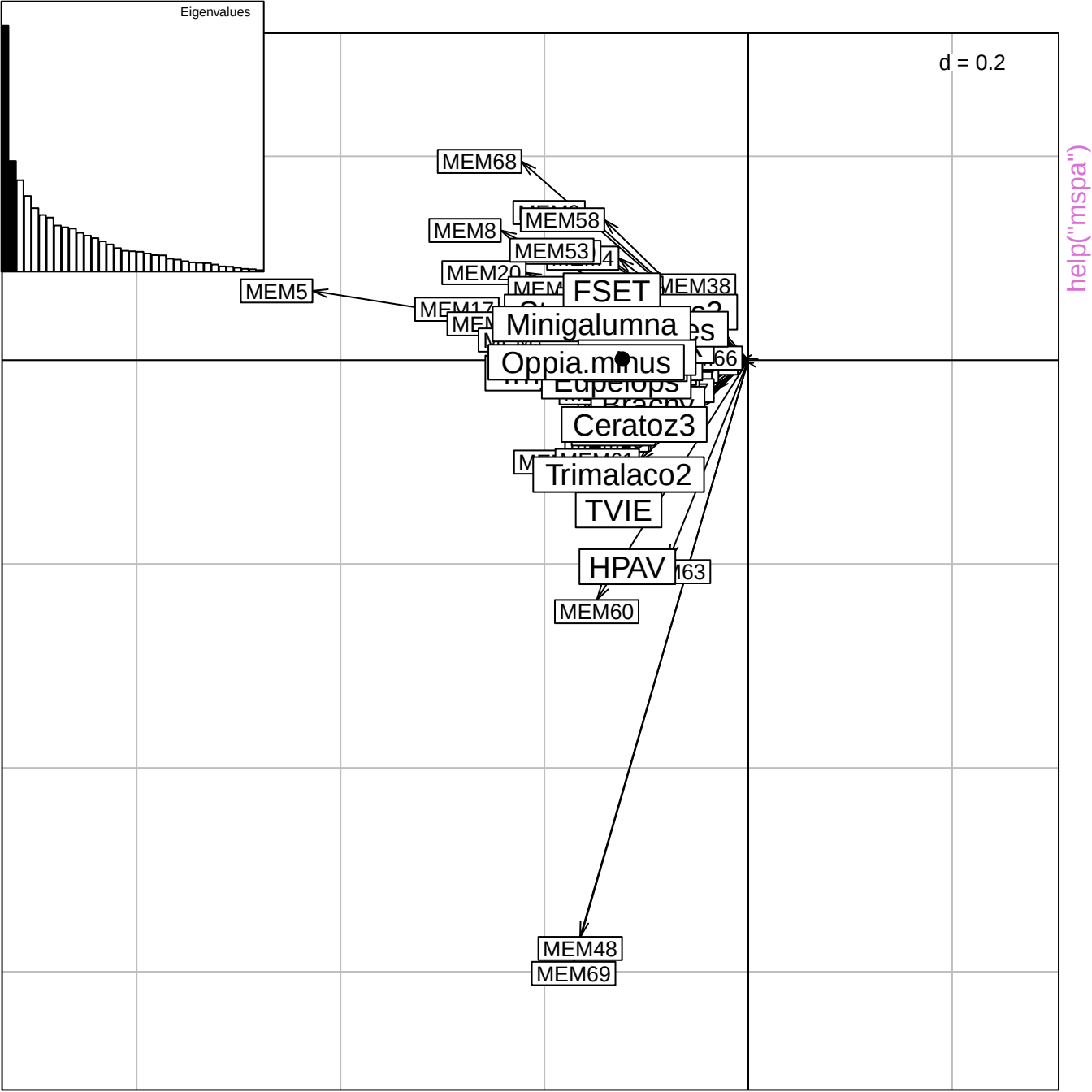
help("mspa")


Eigenvalues
d = 0.5
help("mspa")
MEM3
shrub.many
MEM47
water
MEM7
density
shrub.fe
subst.sph4
MEM5
subst.sph3
subst.sph2
MEM6
subst.sph1
topo.hummock
MEM4
MEM13
MEM16
MEM2

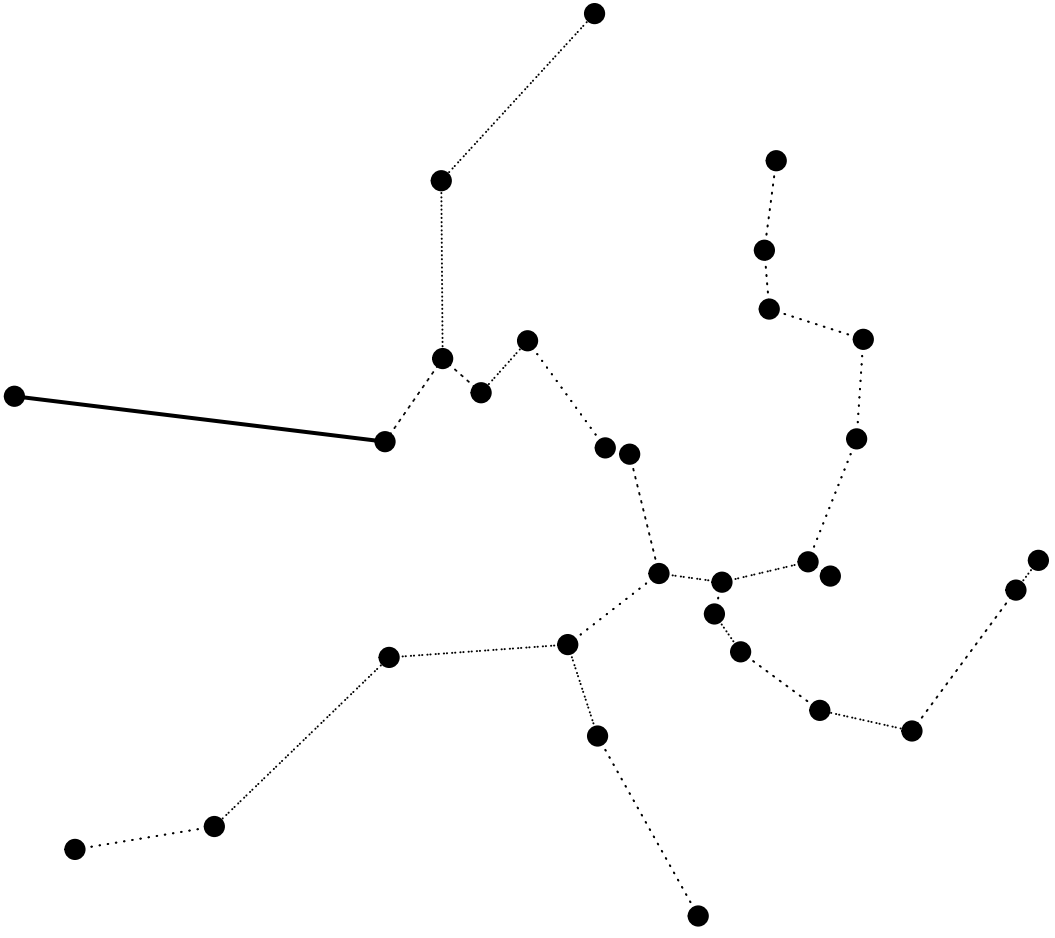

Eigenvalues
d = 0.2
help("mspa")
Trimalaco2
Oppia.minus
Ceratoz3
LRUG
Minigalumna
MEM5
SUCT
LCIL
TVEL
MEM4
MEM3


Eigenvalues
d = 0.5
help("mspa")
MEM2
Trimalaco2
Ceratoz3
FSET
ONOV
Minigalumna
TVEL
MEM3

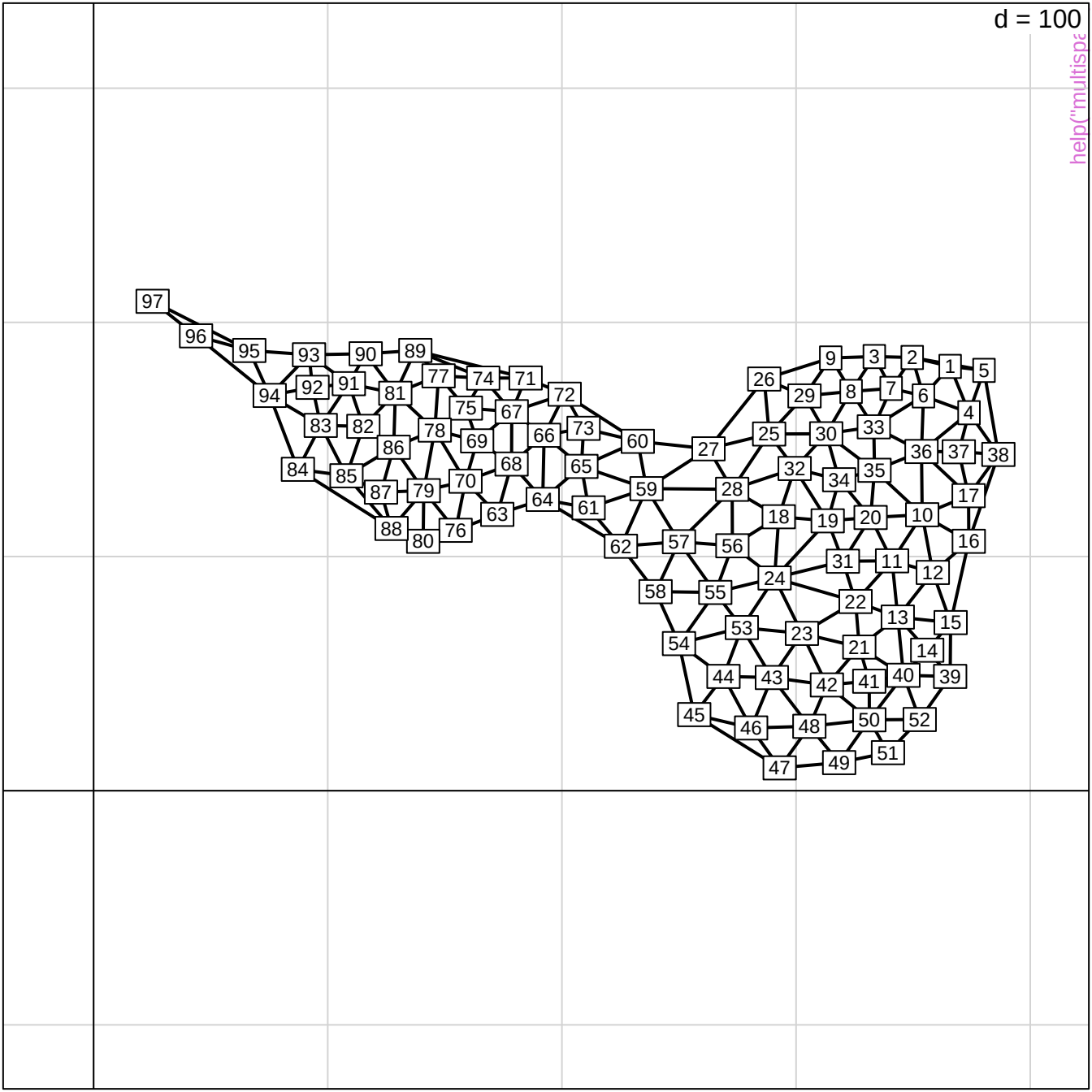

Eigenvalues
d = 0.5
help("mspa")
MEM2
MEM3
Trimalaco2
Ceratoz3
FSET
ONOV
Minigalumna
TVEL


Eigenvalues
d = 0.2
help("mspa")
MEM68
MEM58
MEM8
MEM53
MEM20
MEM5
MEM38
FSET
Minigalumna
Oppia.minus
Ceratoz3
Trimalaco2
TVIE
HPAV
MEM60
MEM48
MEM69

Maximum distance of the minimum spanning tree in bold



help("mst.nb")


d = 100
help("multispa
97
96
95
93
90
89
94
92
91
81
77
74
71
72
83
82
86
78
75
67
69
66
73
60
84
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87
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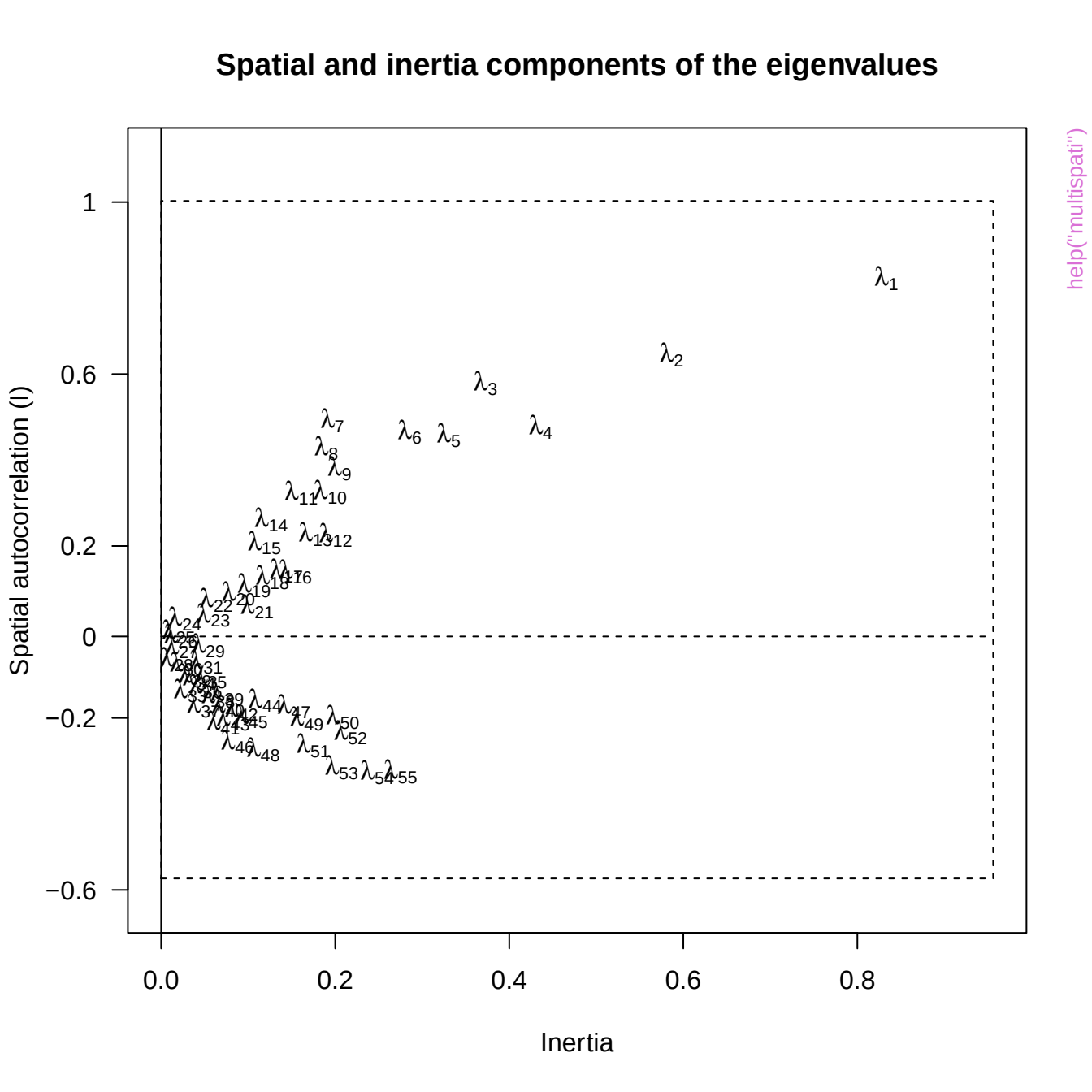
35
34
32
28
27
25
30
33
4
6
7
8
29
26
9
3
2
1
5


Spatial and inertia components of the eigenvalues
Spatial autocorrelation (I)
Inertia
1
0.6
0.2
0
−0.2
−0.6
0.0
0.2
0.4
0.6
0.8
λ1
λ2
λ3
λ4
λ5
λ6
λ7
λ8
λ9
λ10
λ11
λ12
λ13
λ14
λ15
λ16
λ17
λ18
λ19
λ20
λ21
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λ35
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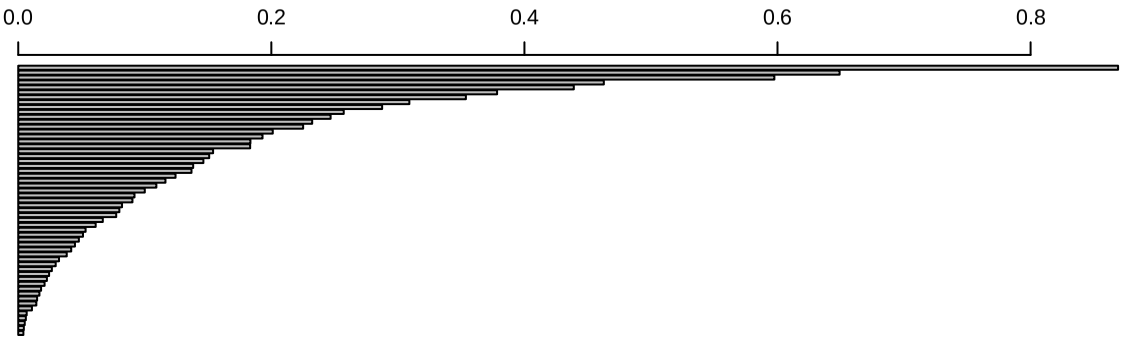
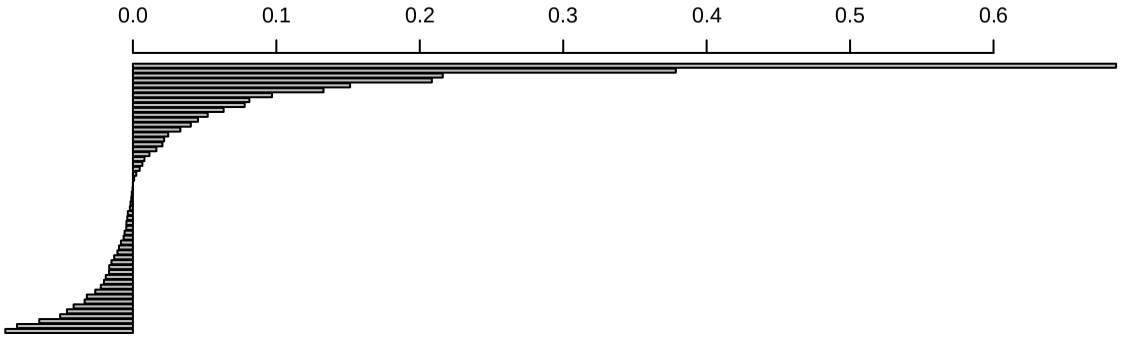
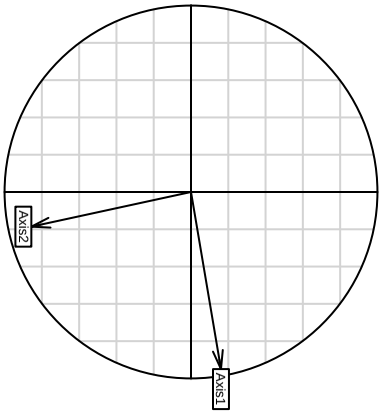
λ37
λ38
λ39
λ40
λ41
λ42
λ43
λ44
λ45
λ46
λ47
λ48
λ49
λ50
λ51
λ52
λ53
λ54
λ55
help("multispati")

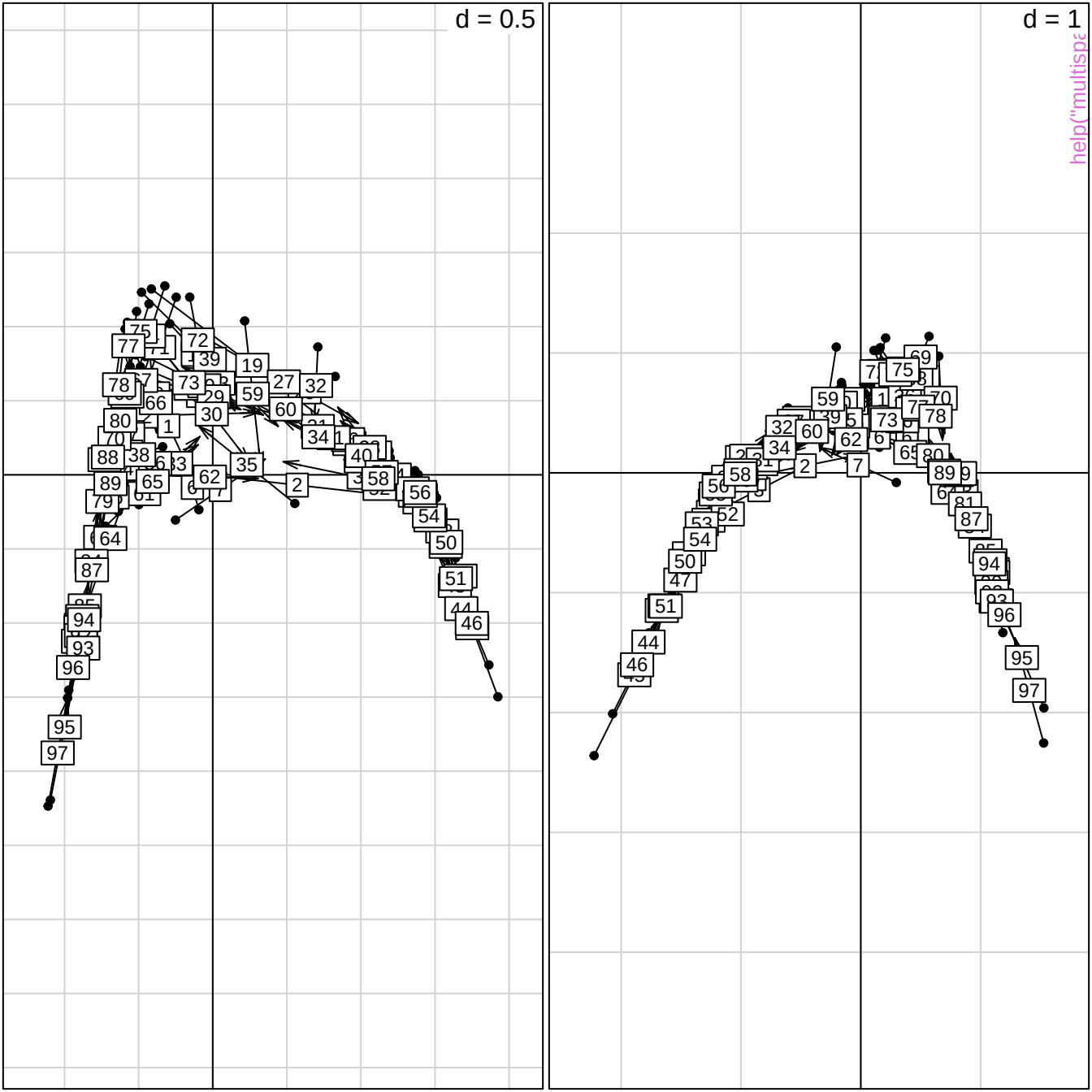




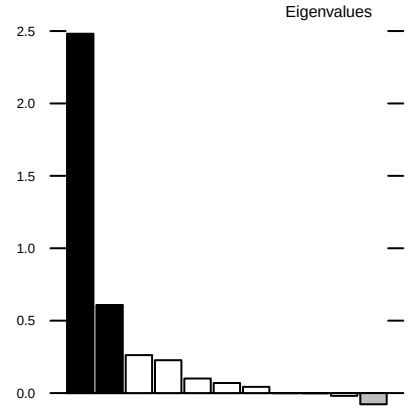


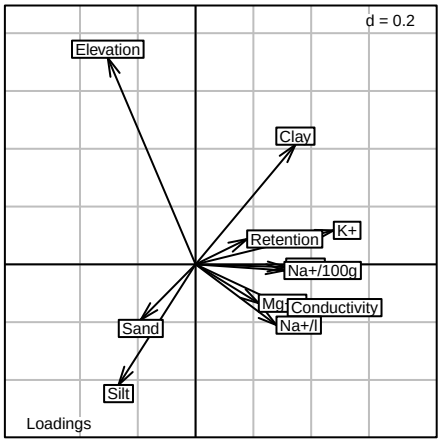
help("multispati")

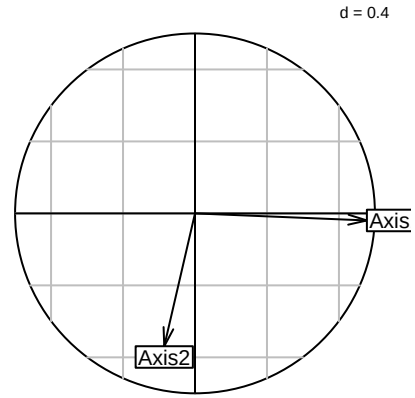
d = 100
−1.5
−0.5
0.5
1.5
d = 100
help("multispati
−2.5
−1.5
−0.5
0.5
1.5
d = 100
−2.5
−1.5
−0.5
0.5
1.5
d = 100
−2.5
−1.5
−0.5
0.5
1.5


d = 0.5
d = 1
help("multispa

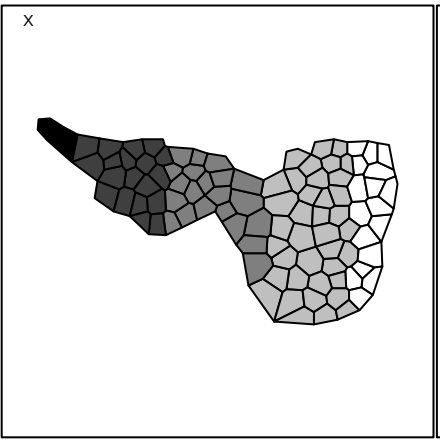
help("multispati")

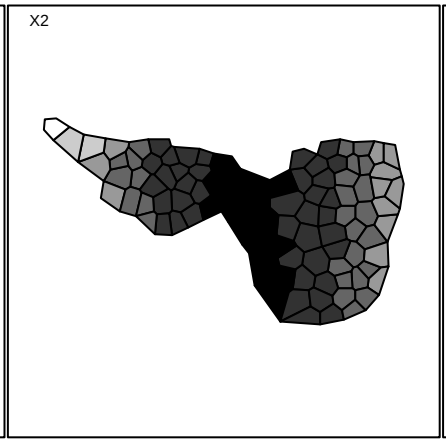


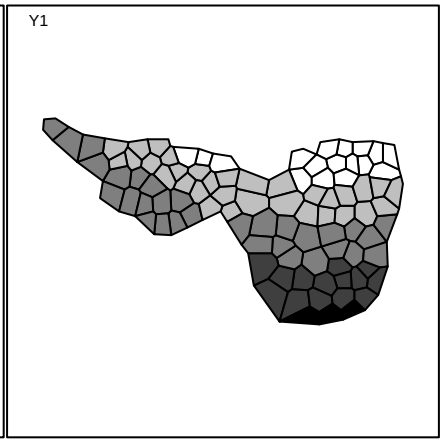


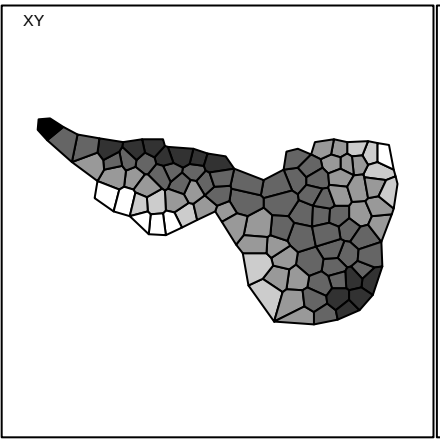


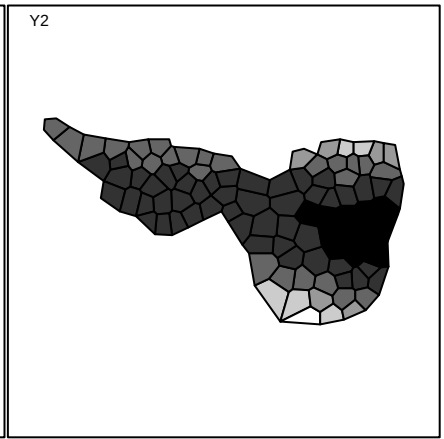
help("orthobasis.poly")

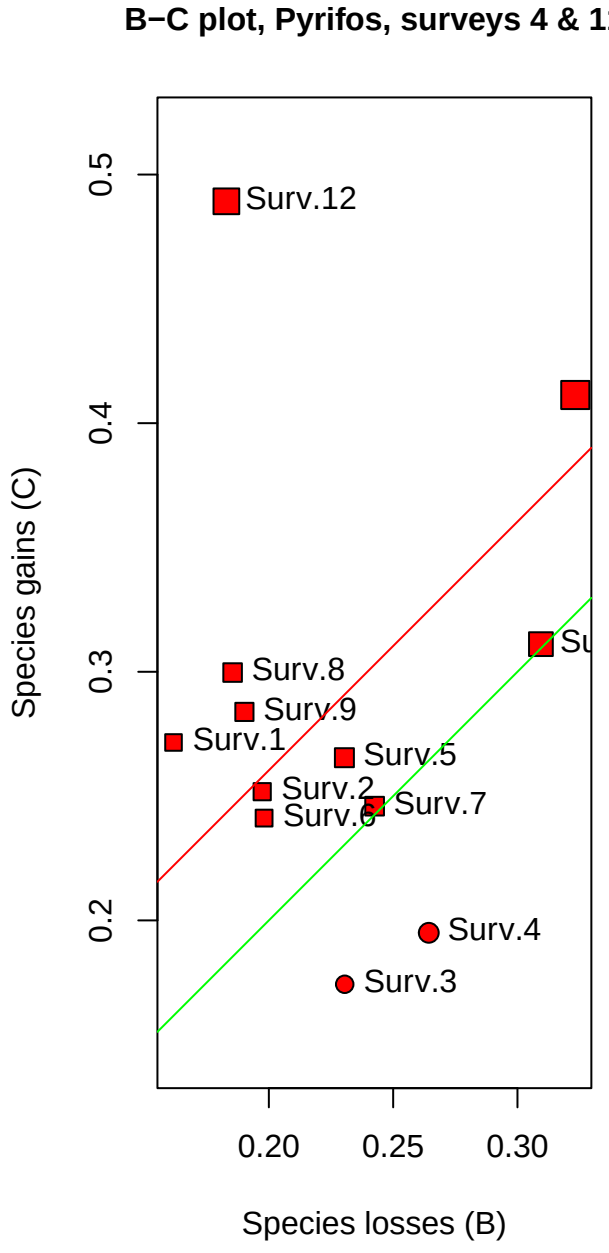


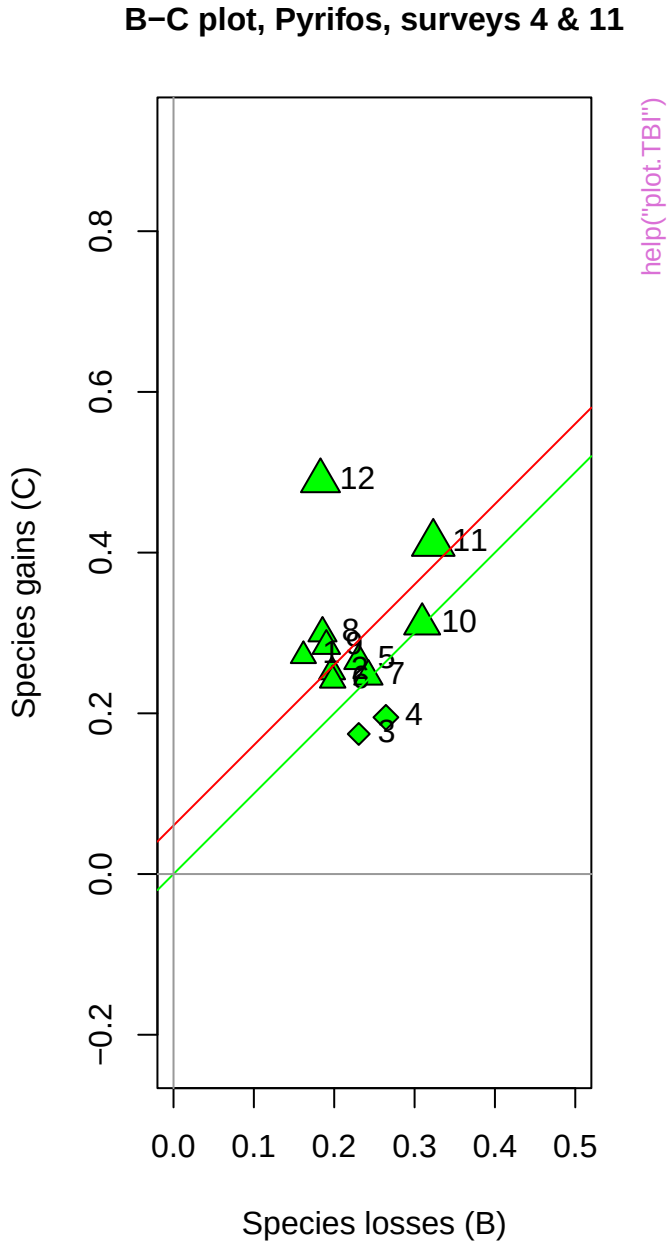


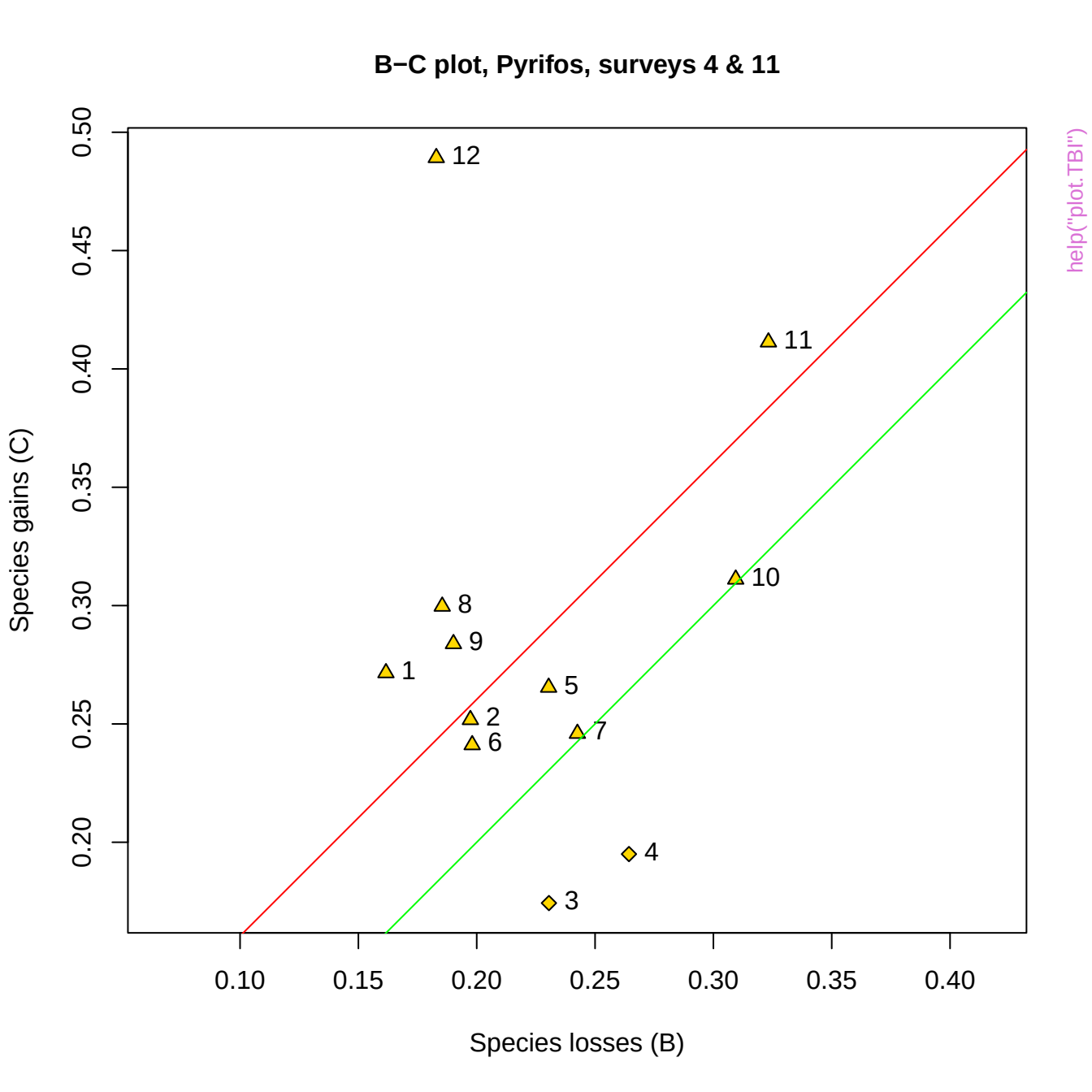


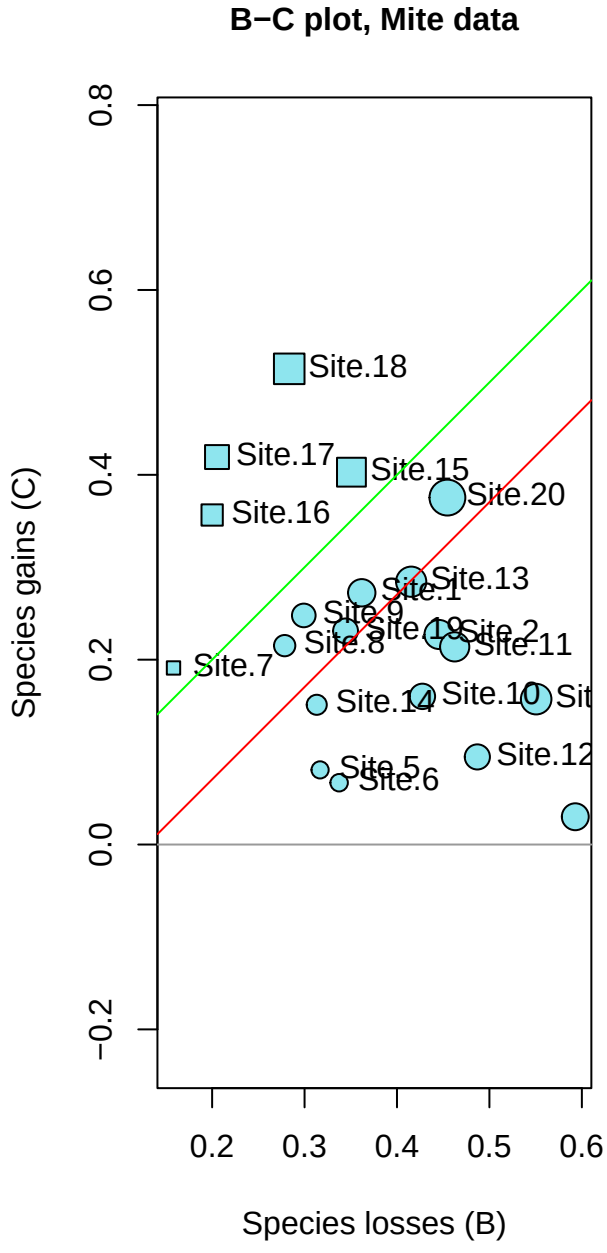


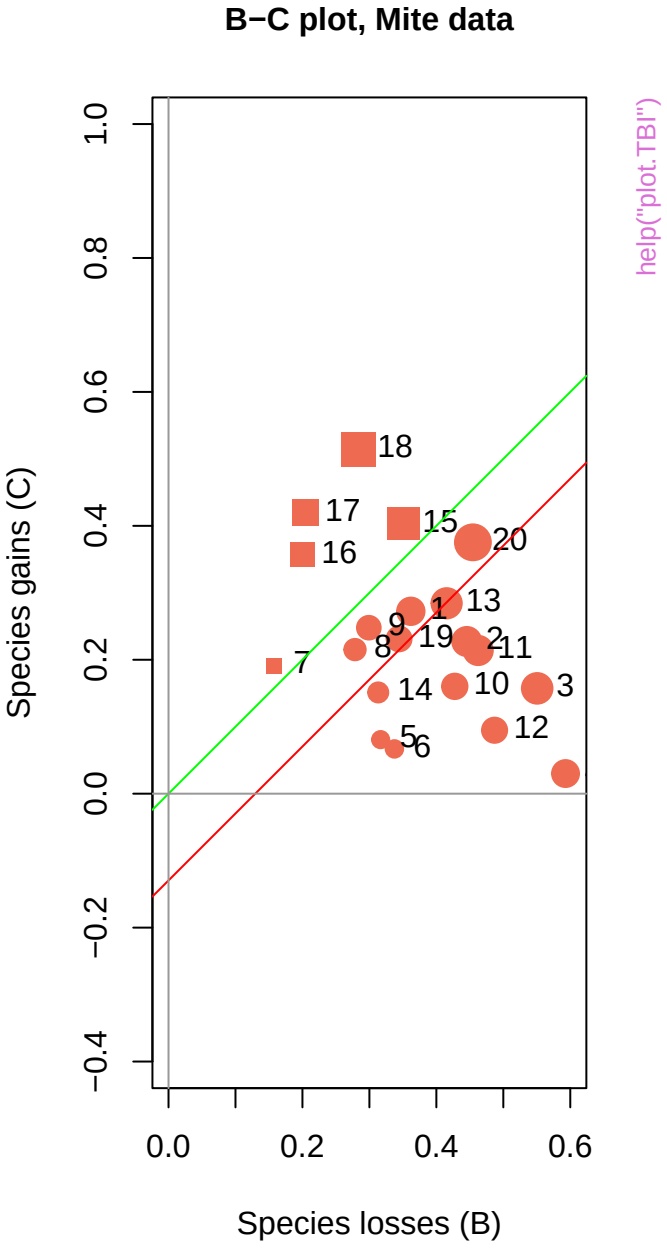



B−C plot, Pyrifos, surveys 4 & 11
Species gains (C)
Species losses (B)
0.2
0.3
0.4
0.5
0.20
0.25
0.30
Surv.12
Surv.8
Surv.9
Surv.1
Surv.5
Surv.2
Surv.6
Surv.7
Surv.4
Surv.3

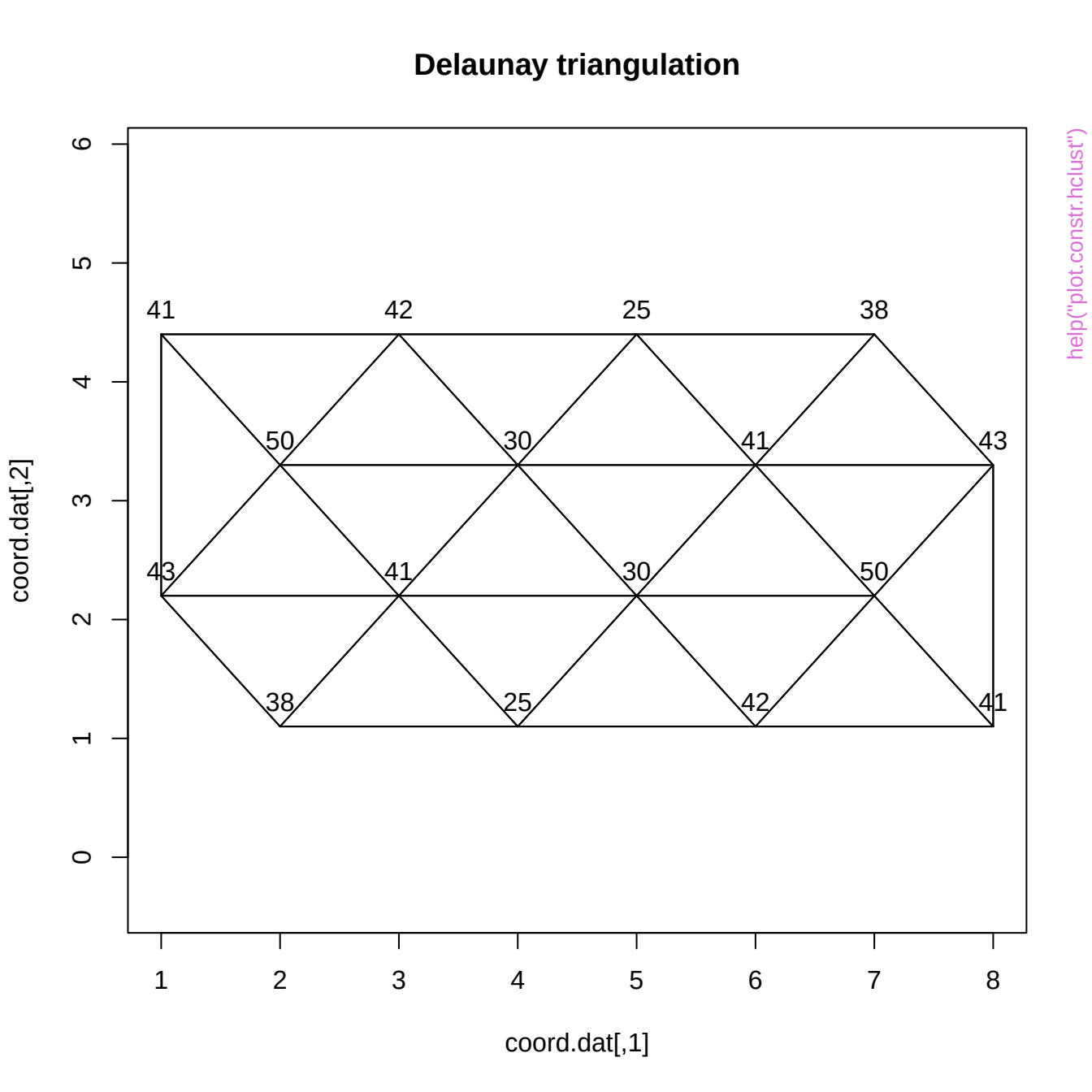

B−C plot, Pyrifos, surveys 4 & 11
help("plot.TBI")
Species gains (C)
Species losses (B)
−0.2
0.0
0.2
0.4
0.6
0.8
0.0
0.1
0.2
0.3
0.4
0.5
12
11
10
8
5
7
4
3

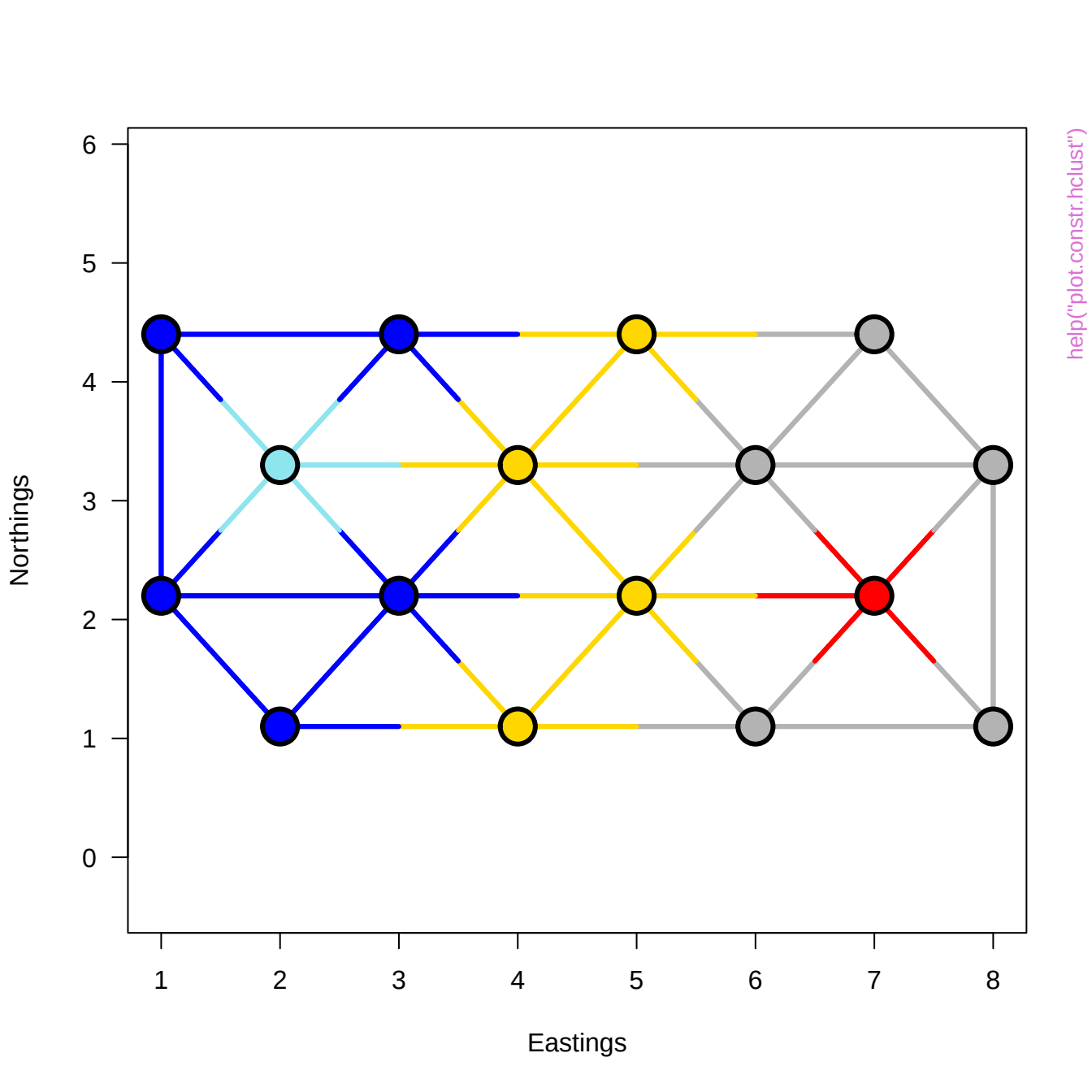

B−C plot, Pyrifos, surveys 4 & 11
Species gains (C)
Species losses (B)
0.20
0.25
0.30
0.35
0.40
0.45
0.50
0.10
0.15
0.20
0.25
0.30
0.35
0.40
12
11
10
8
9
1
5
2
6
7
4
3
help("plot.TBI")



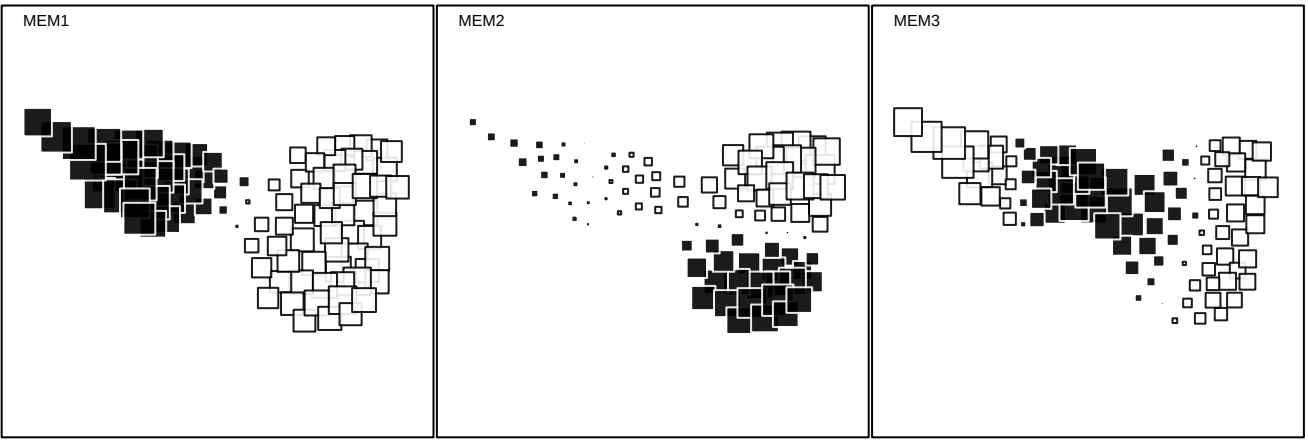


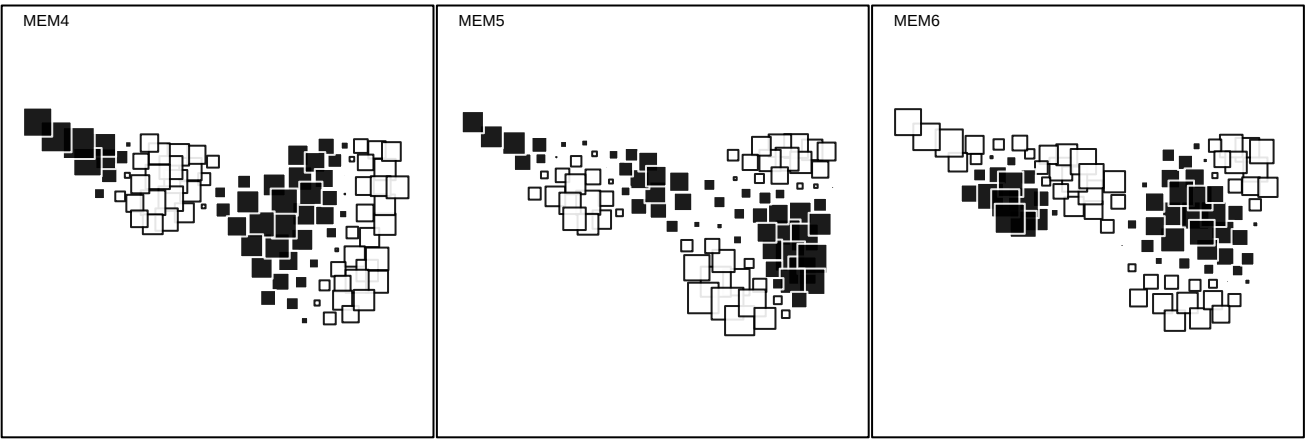
help("plot.TBI")


Delaunay triangulation
help("plot.constr.hclust")
coord.dat[,2]
coord.dat[,1]
0
1
2
3
4
5
6
1
2
3
4
5
6
7
8
41
42
25
38
50
30
41
43
43
41
30
50
38
25
42
41

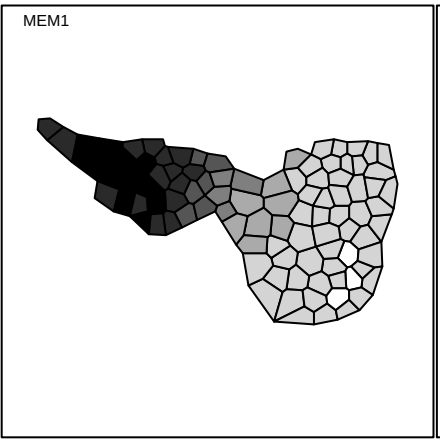

help("plot.constr.hclust")
Northings
Eastings
0
1
2
3
4
5
6
1
2
3
4
5
6
7
8

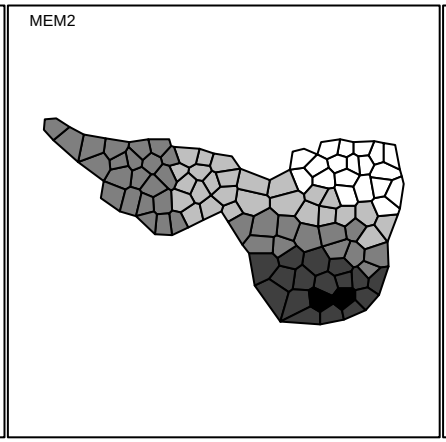
help("plot.orthobasisSp")

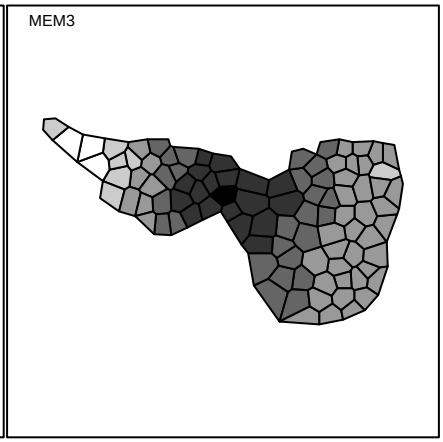


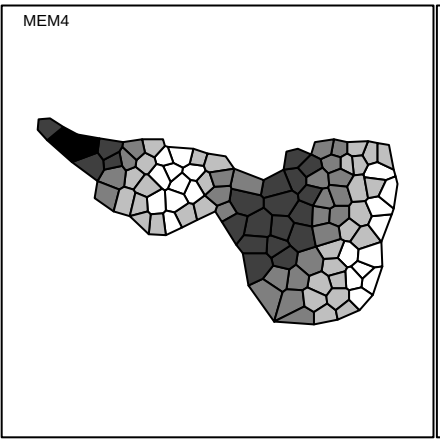


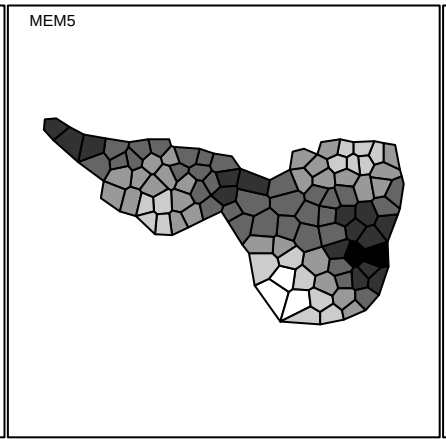
help("plot.orthobasisSp")

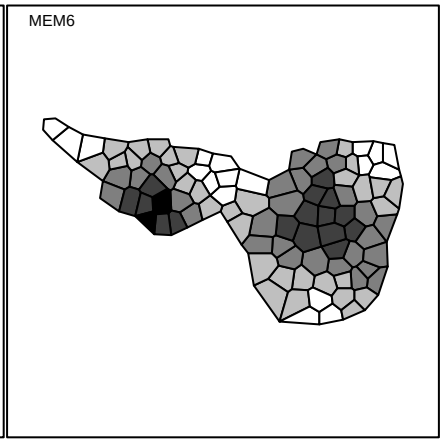


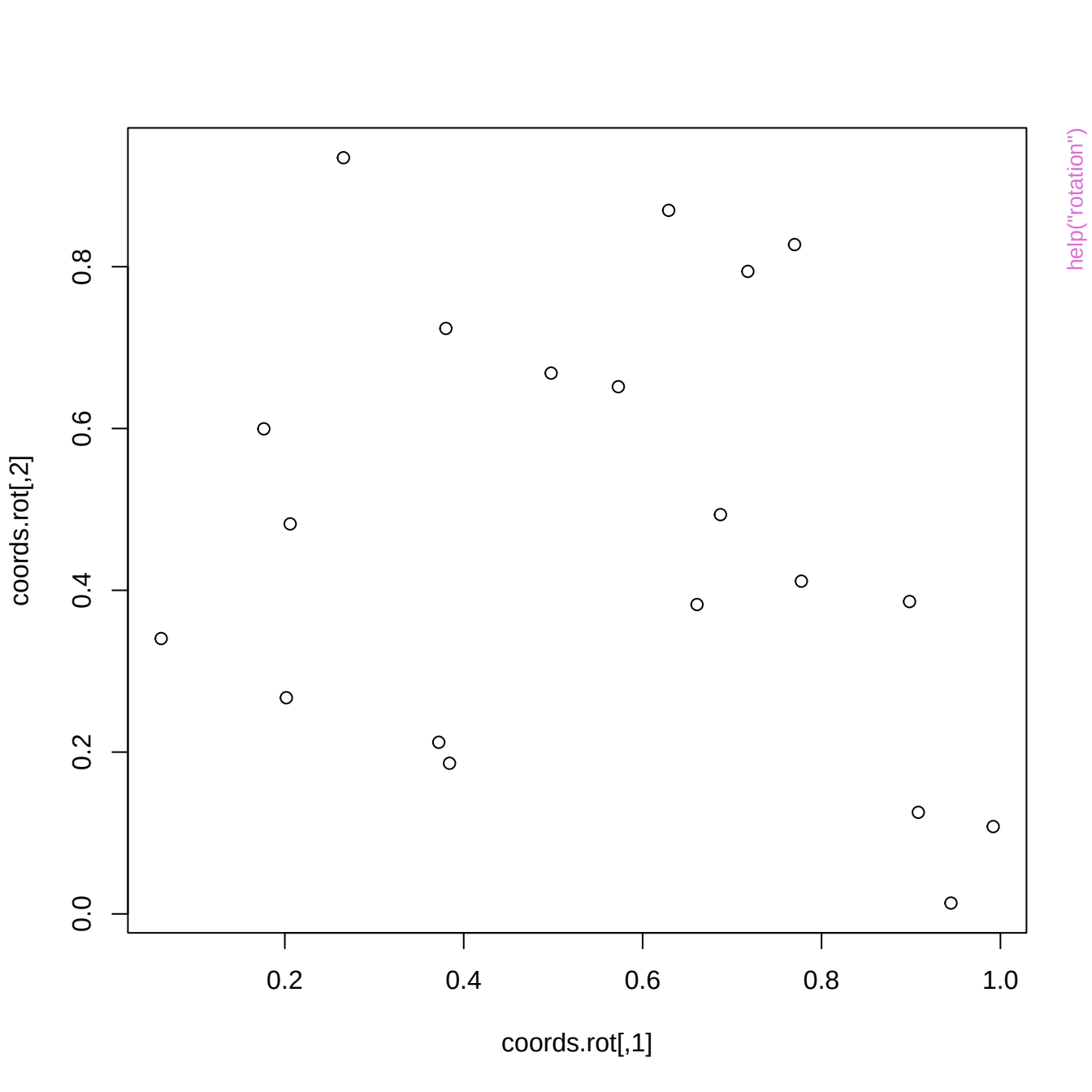


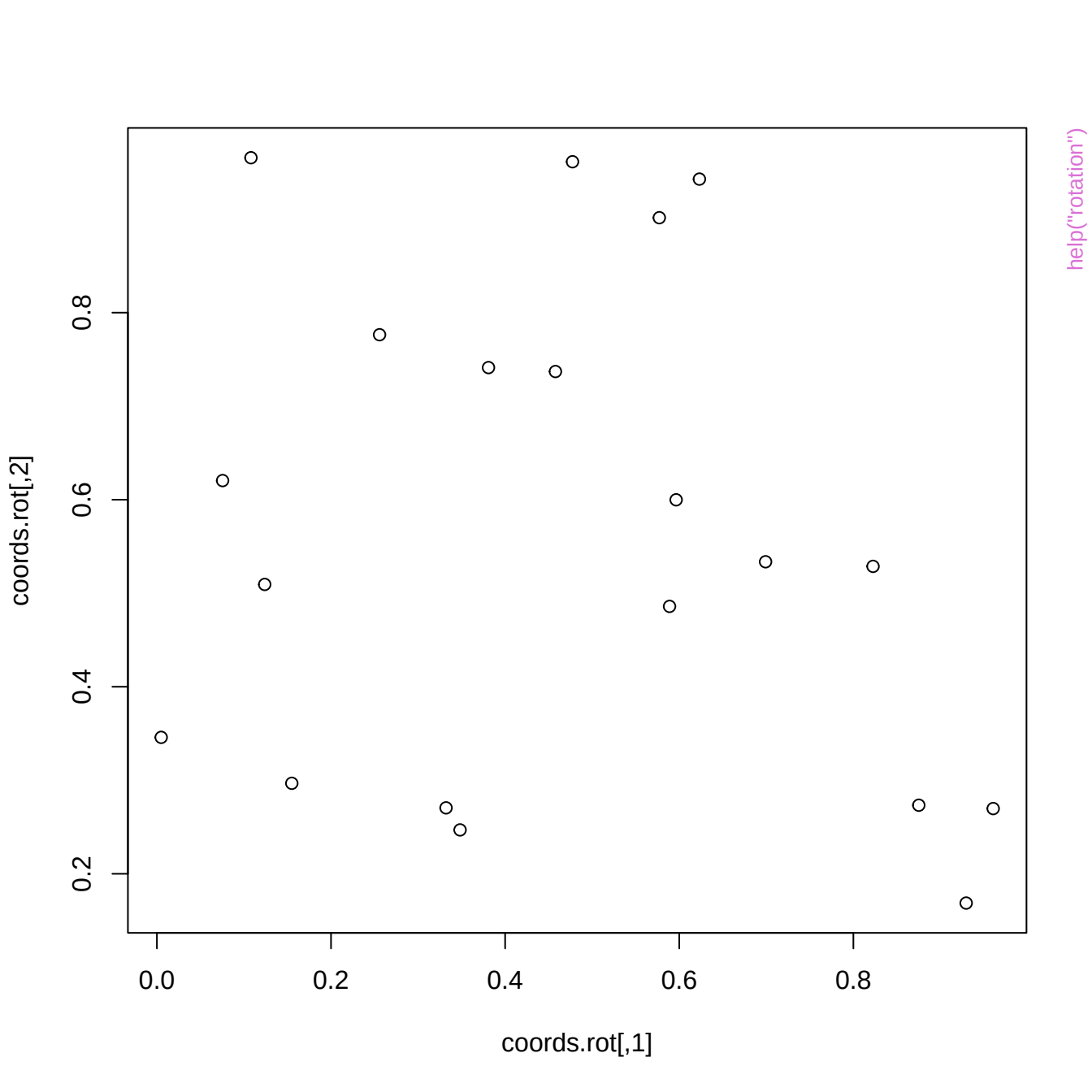


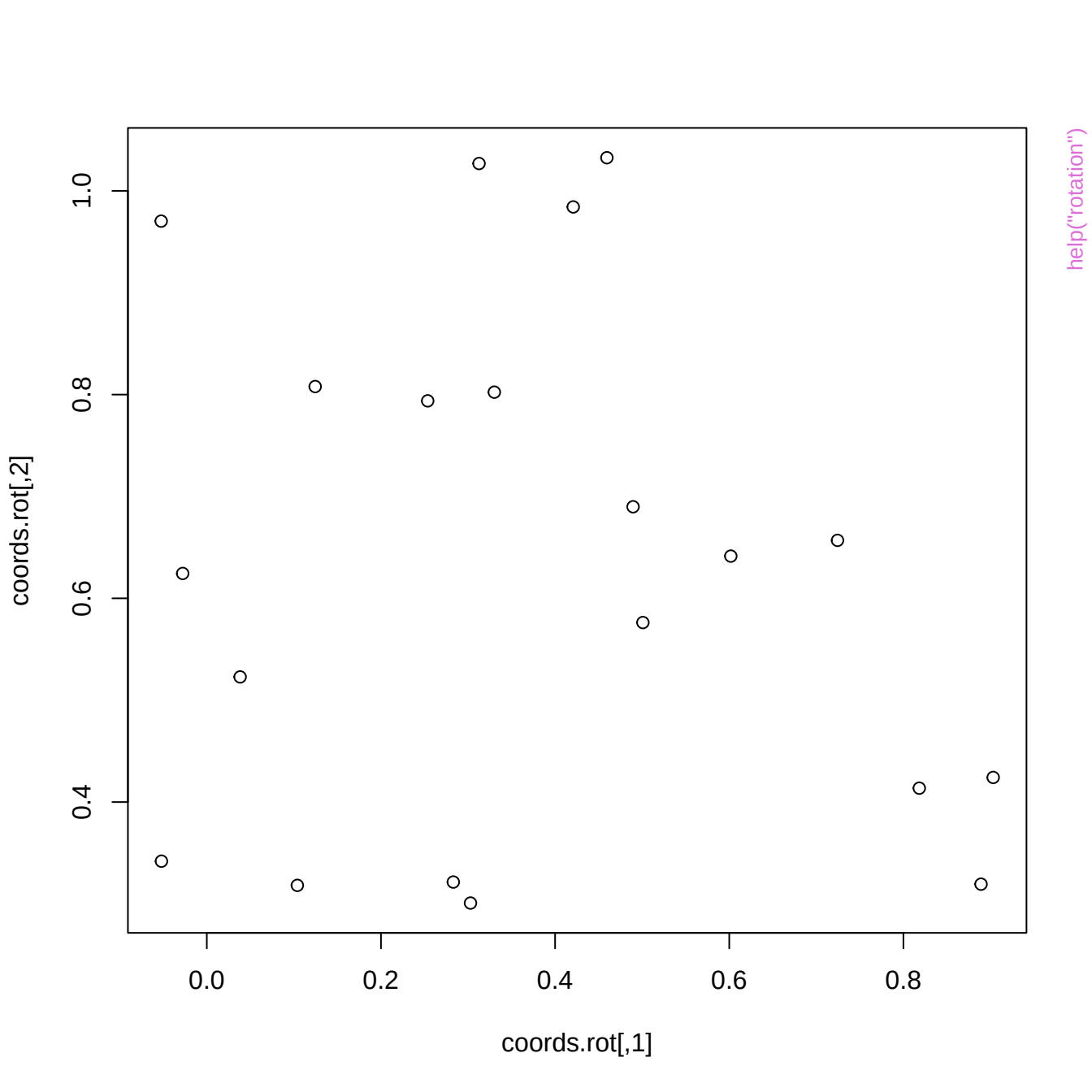


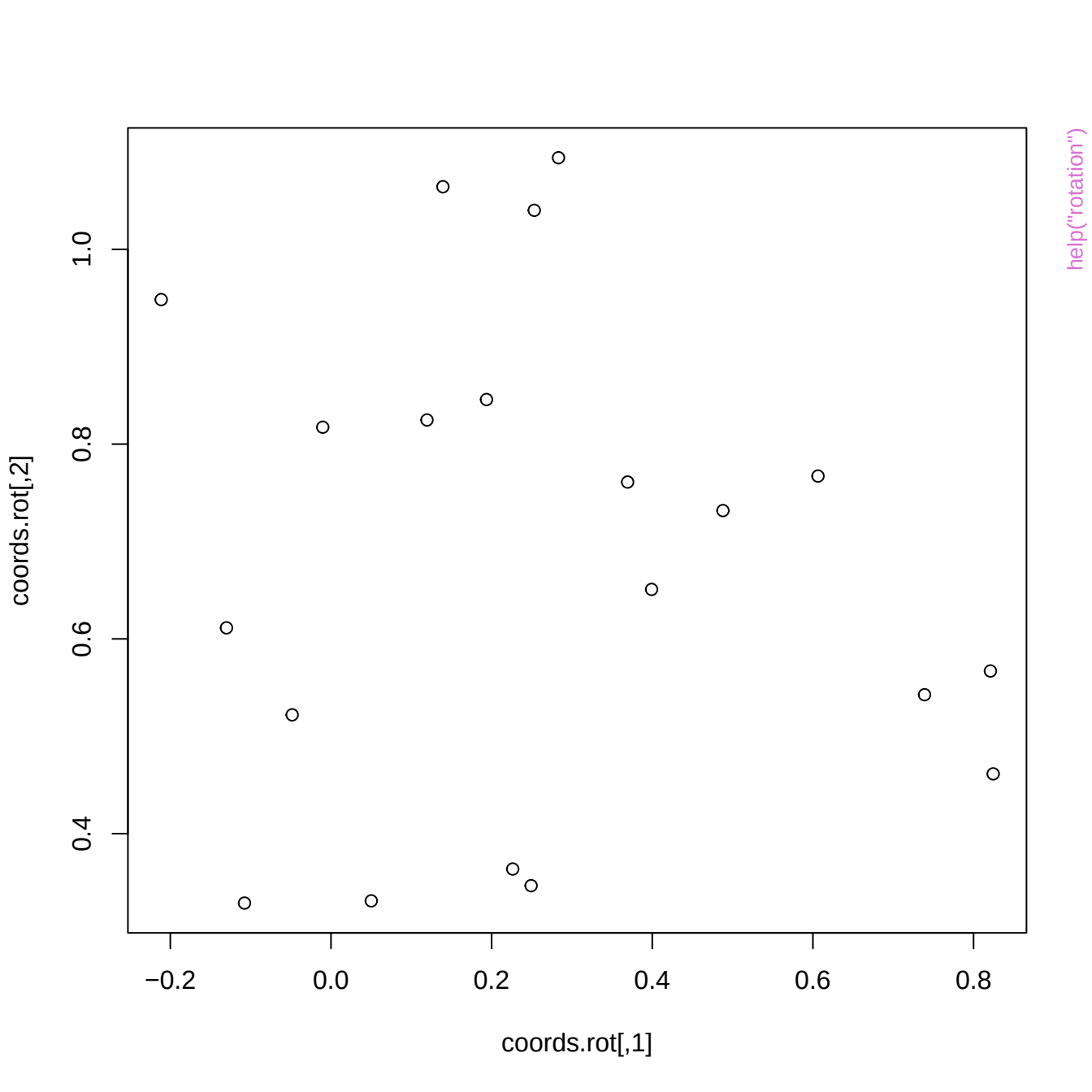


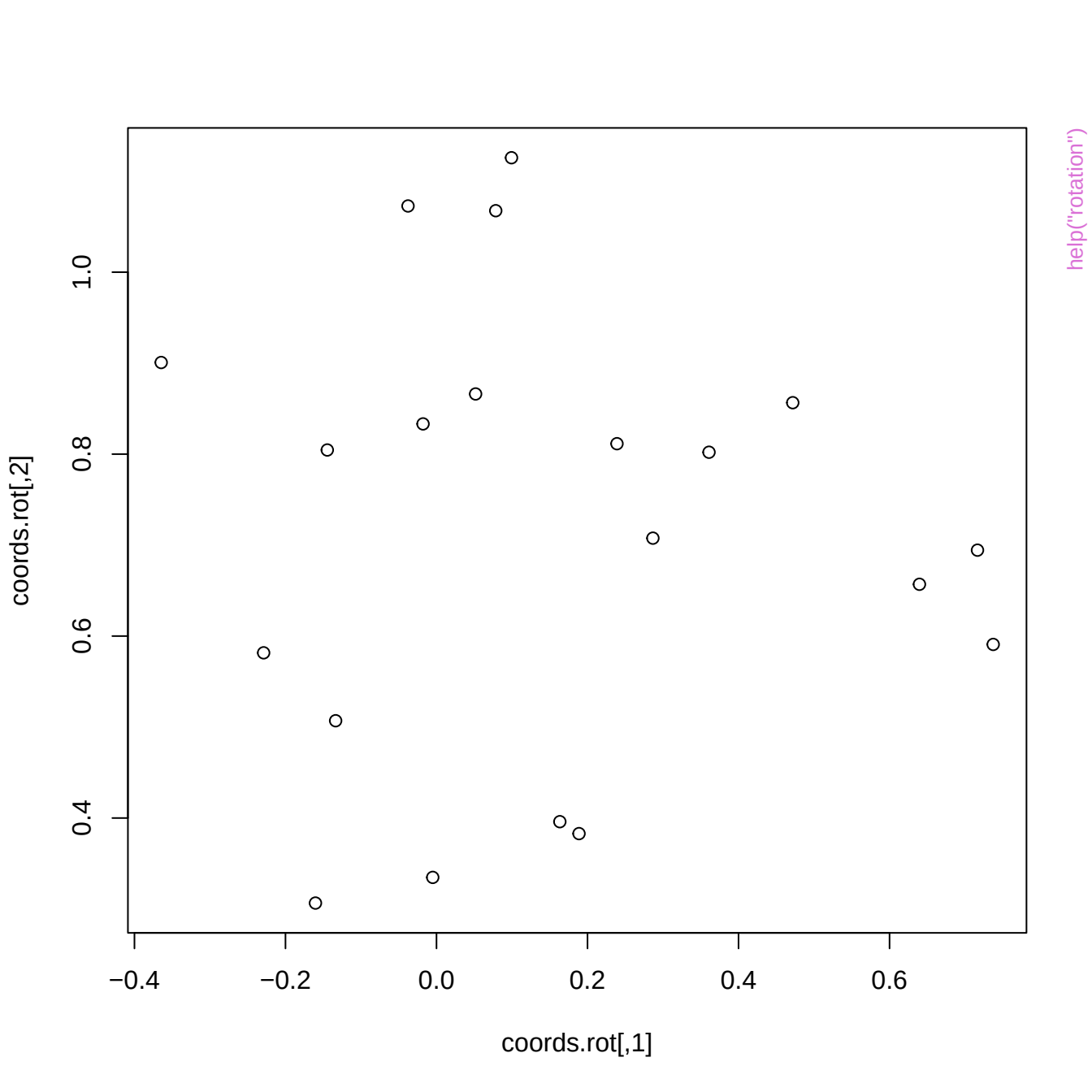


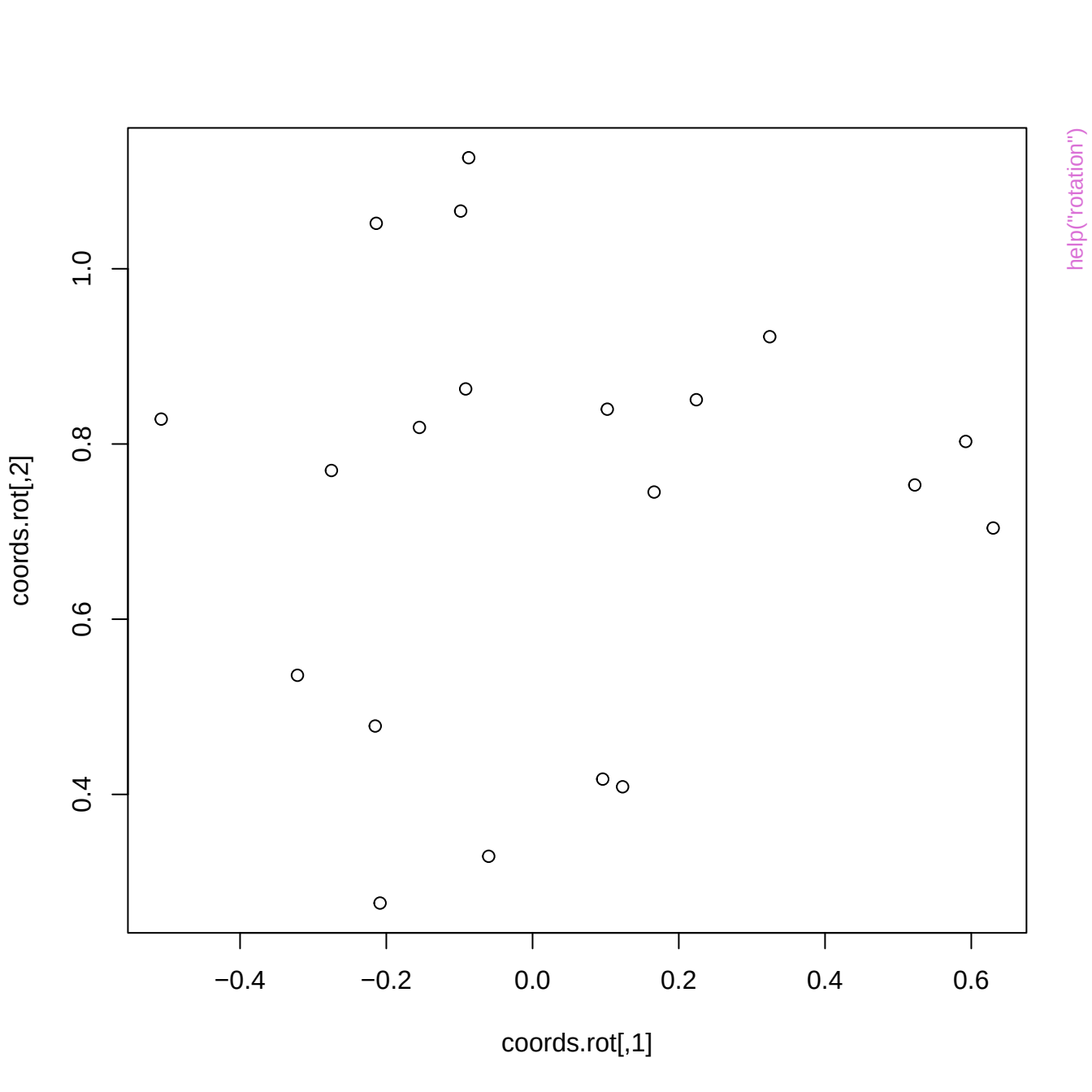

coords.rot[,2]
0.0
0.2
0.4
0.6
0.8
0.2
0.4
0.6
0.8
1.0
coords.rot[,1]
help("rotation")

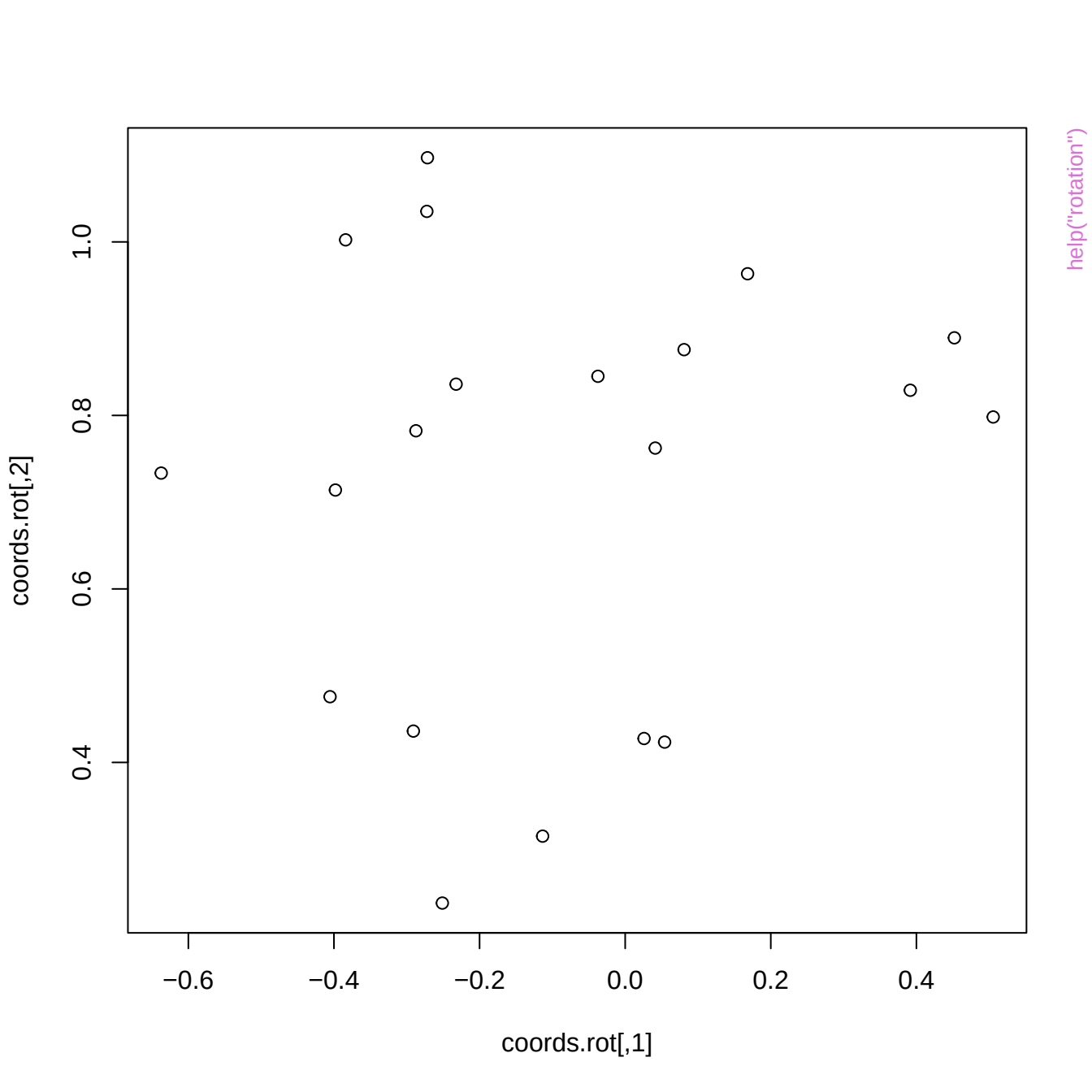

coords.rot[,2]
0.2
0.4
0.6
0.8
0.0
0.2
0.4
0.6
0.8
coords.rot[,1]
help("rotation")


coords.rot[,2]
1.0
0.8
0.6
0.4
0.0
0.2
0.4
0.6
0.8
coords.rot[,1]
help("rotation")

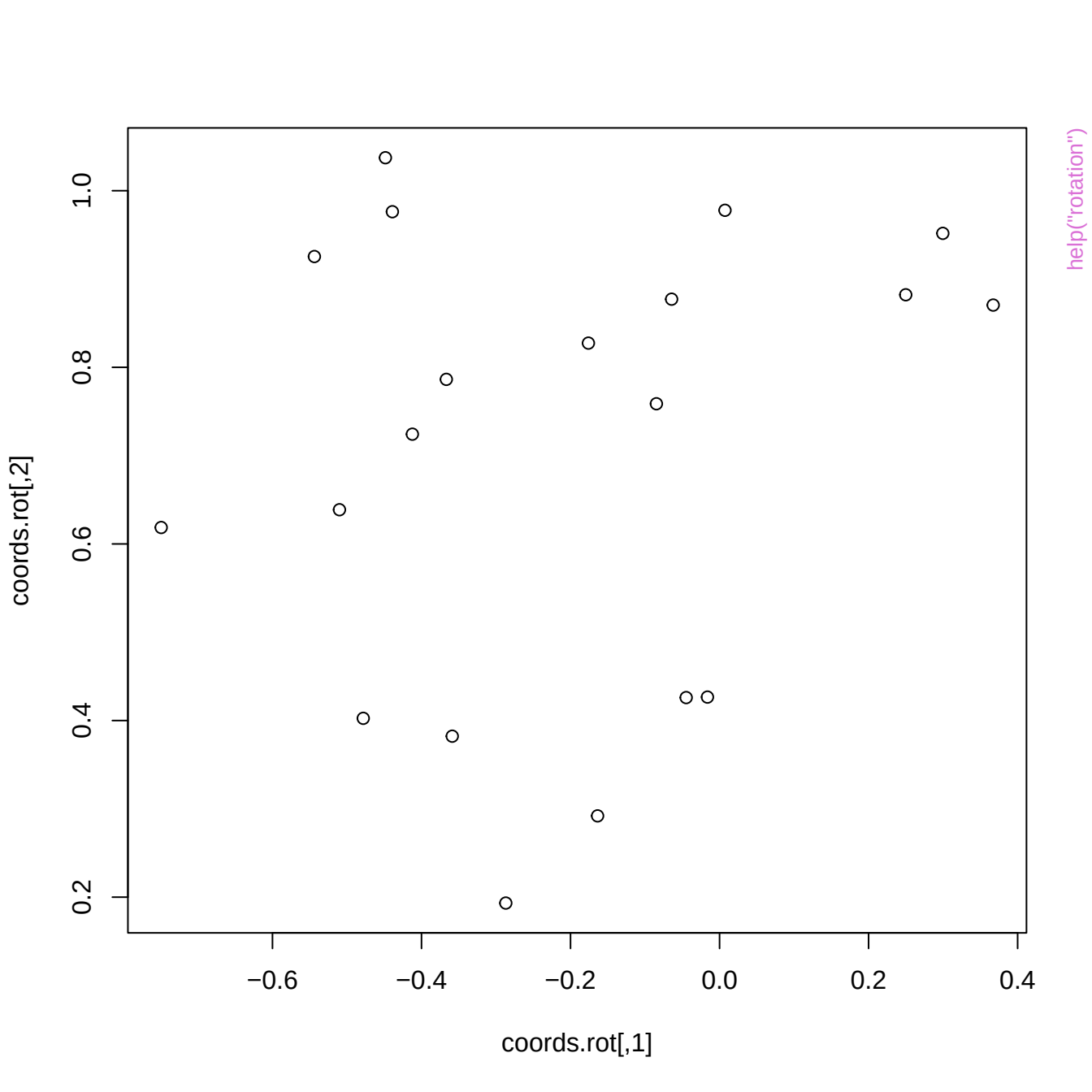

coords.rot[,2]
1.0
0.8
0.6
0.4
−0.2
0.0
0.2
0.4
0.6
0.8
coords.rot[,1]
help("rotation")

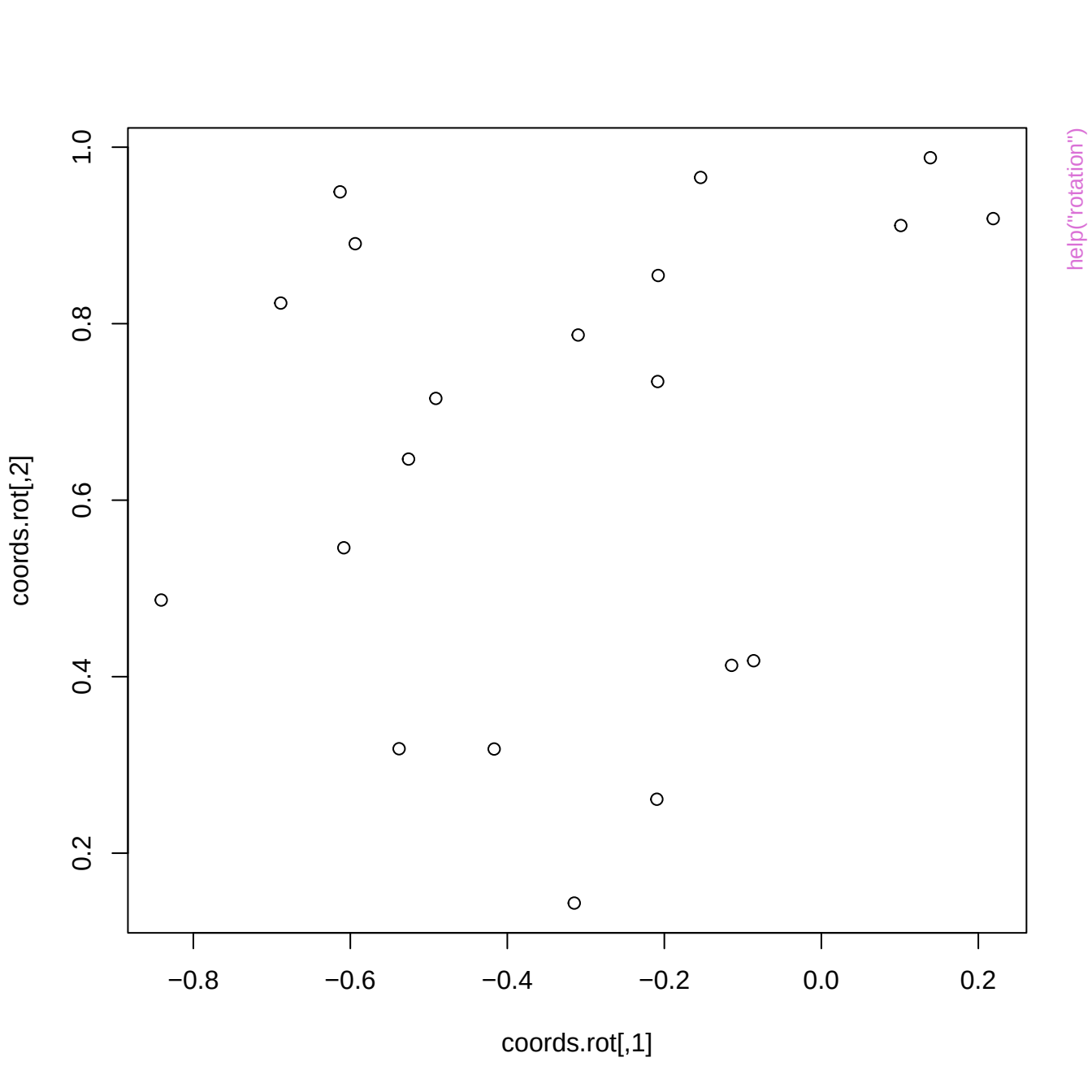

coords.rot[,2]
1.0
0.8
0.6
0.4
−0.4
−0.2
0.0
0.2
0.4
0.6
coords.rot[,1]
help("rotation")


coords.rot[,2]
1.0
0.8
0.6
0.4
−0.4
−0.2
0.0
0.2
0.4
0.6
coords.rot[,1]
help("rotation")

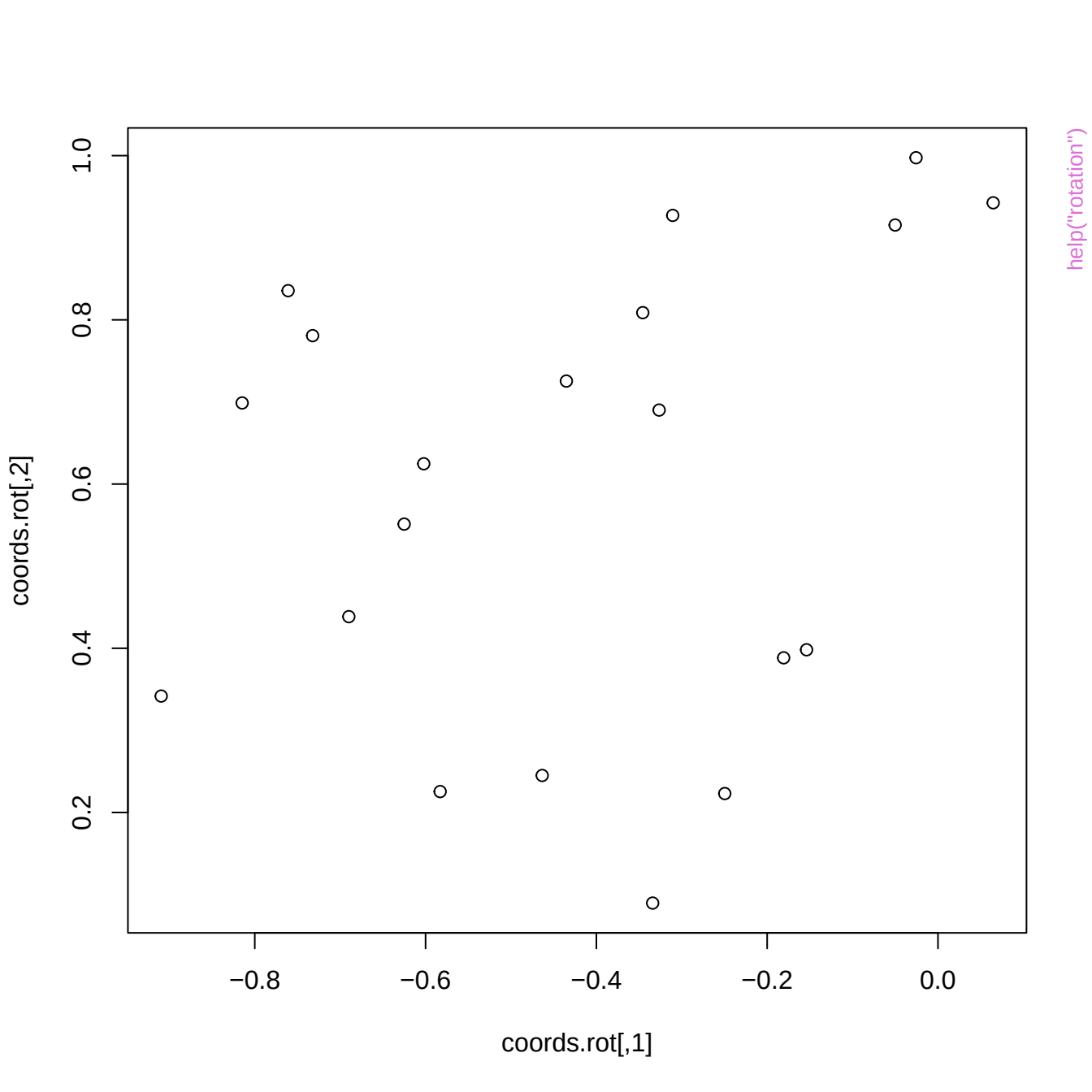


help("rotation")

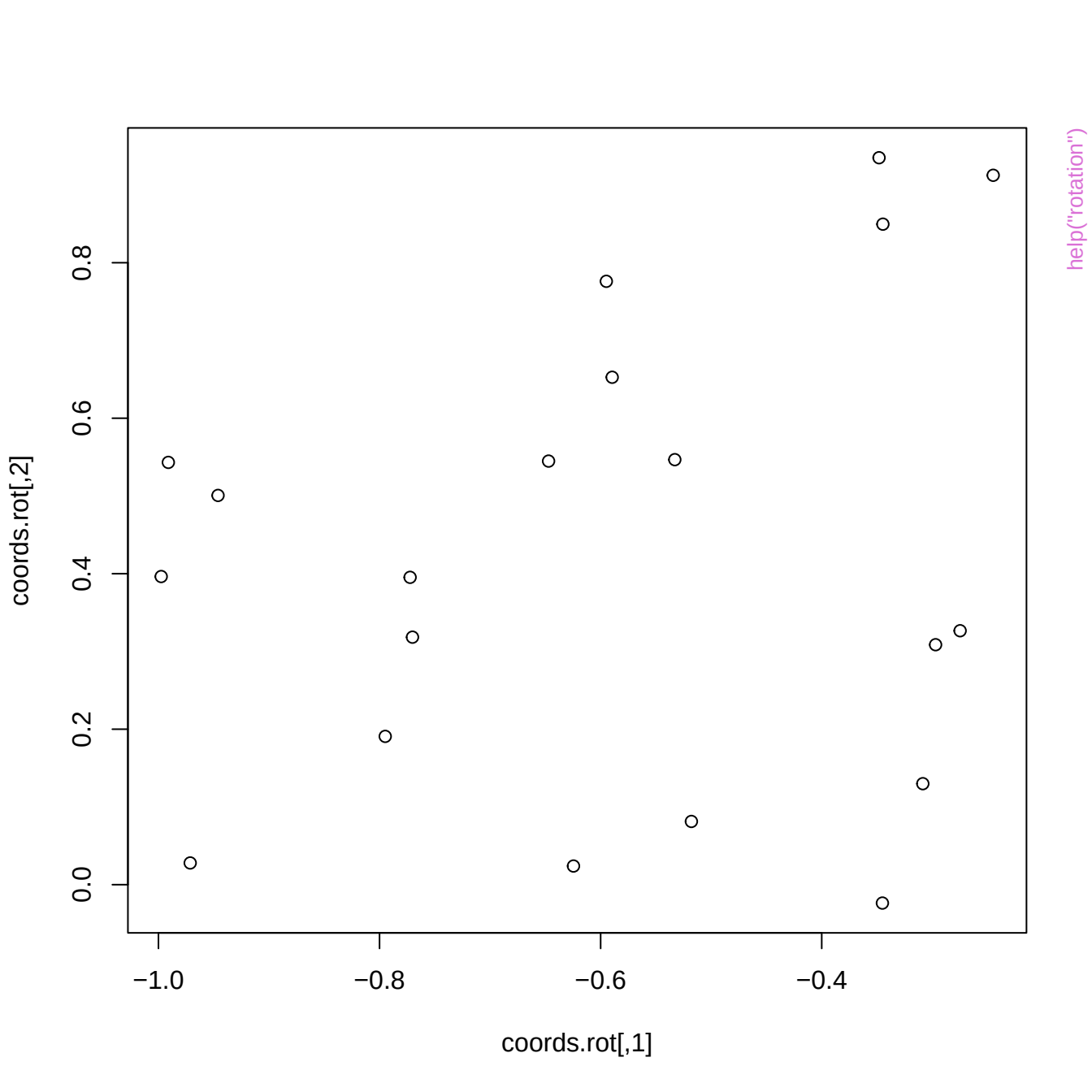

help("rotation")
coords.rot[,2]
1.0
0.8
0.6
0.4
0.2
−0.6
−0.4
−0.2
0.0
0.2
0.4
coords.rot[,1]



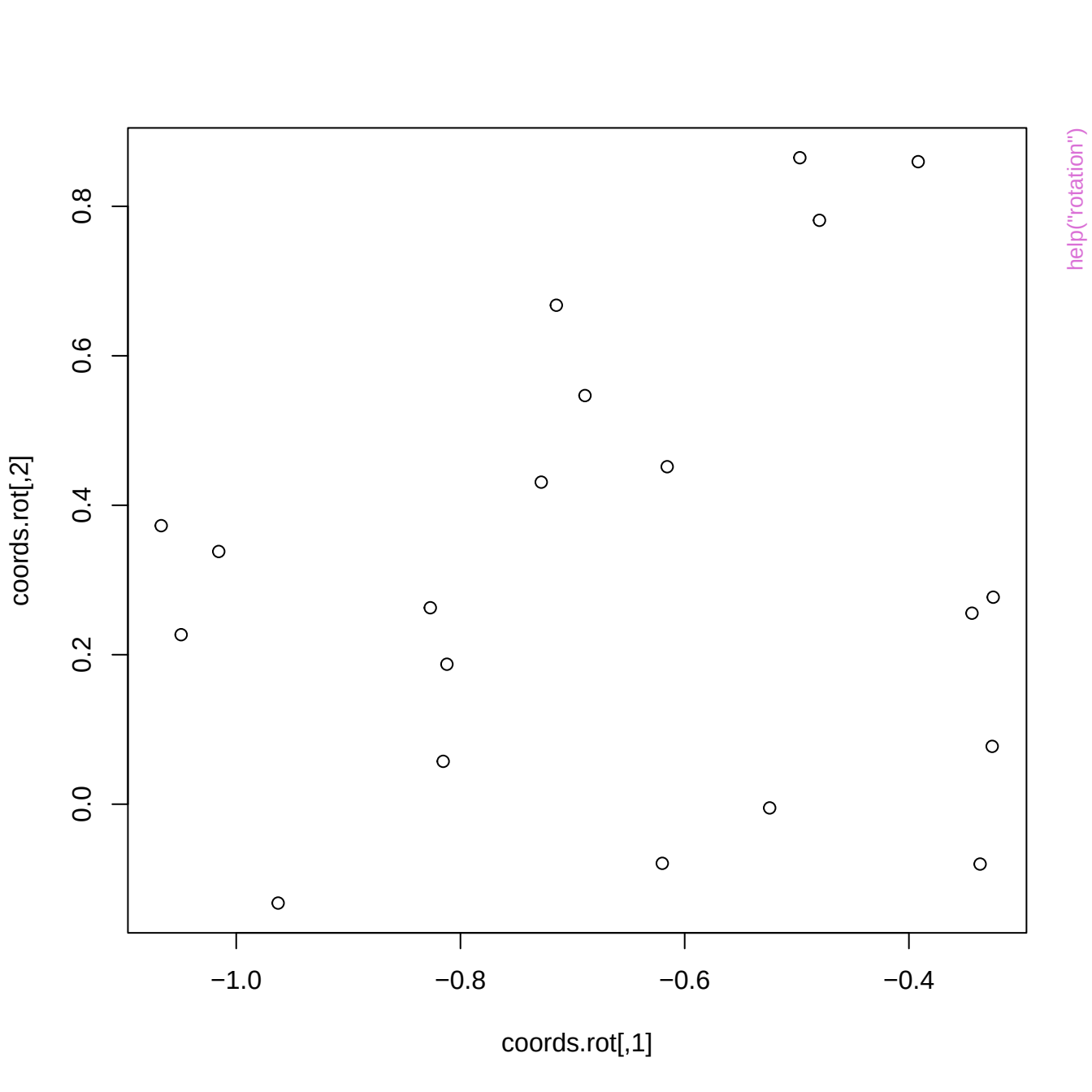
help("rotation")

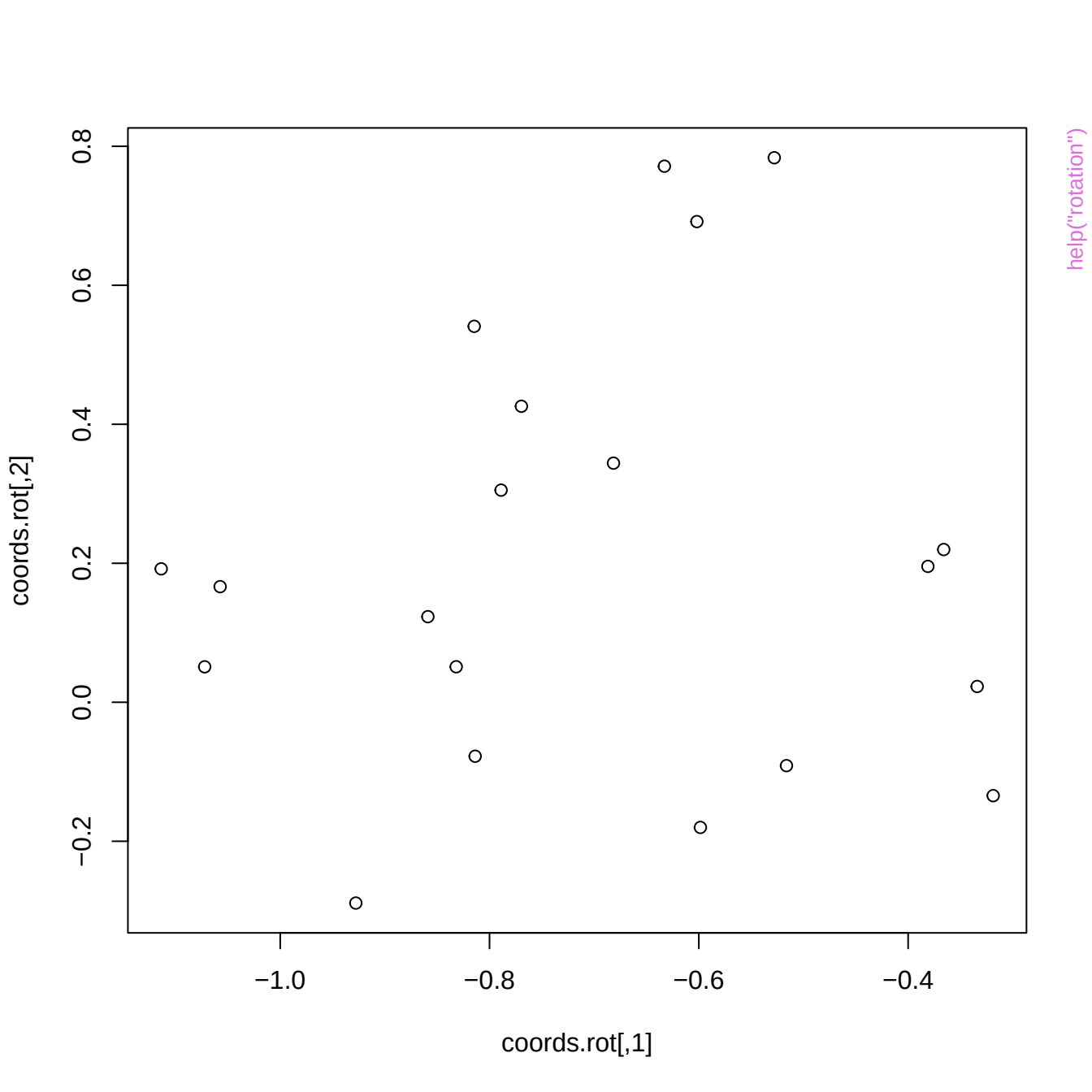

coords.rot[,2]
1.0
0.8
0.6
0.4
0.2
−0.8
−0.6
−0.4
−0.2
0.0
coords.rot[,1]
help("rotation")

coords.rot[,2]
1.0
0.8
0.6
0.4
0.2
0.0
−0.8
−0.6
−0.4
−0.2
coords.rot[,1]
help("rotation")

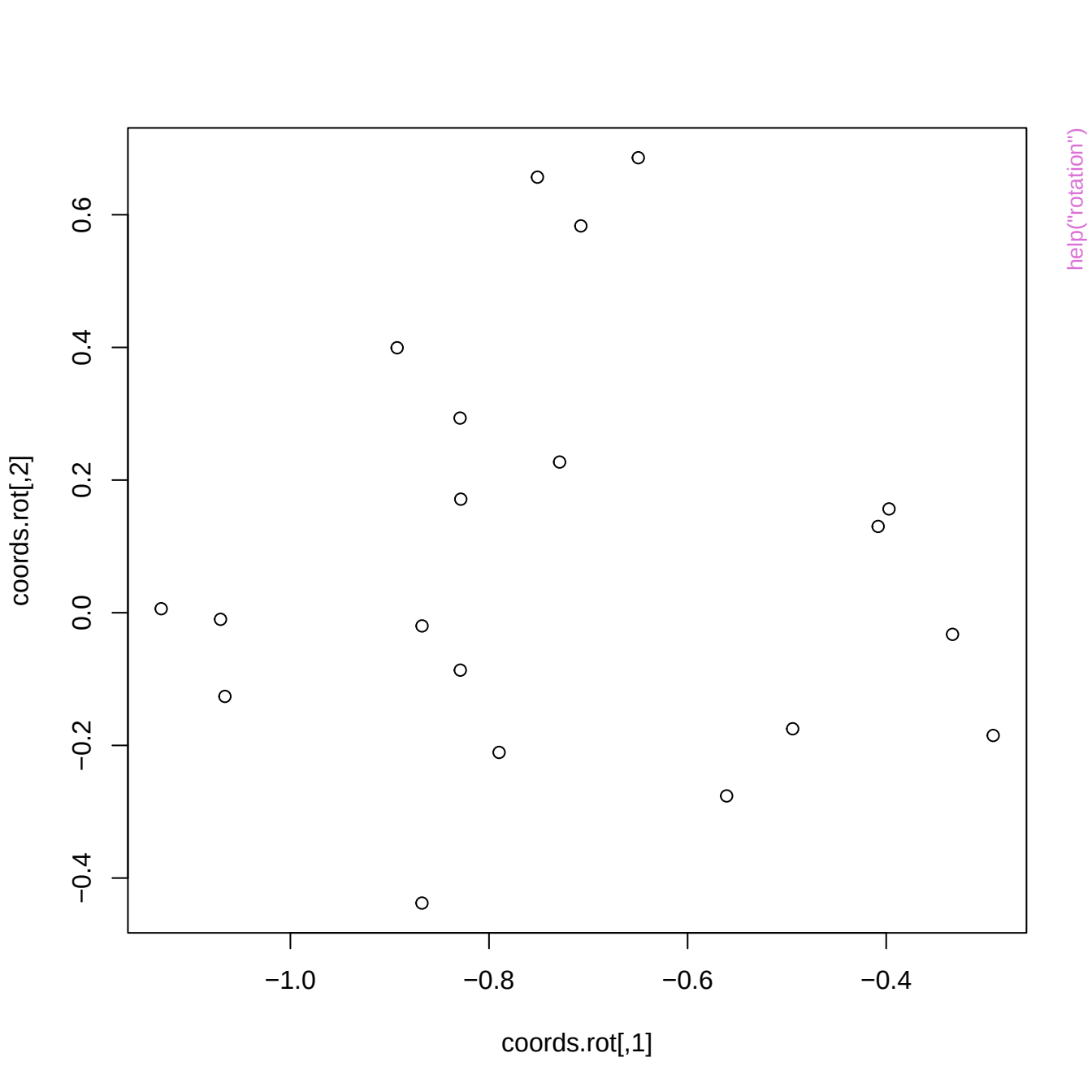


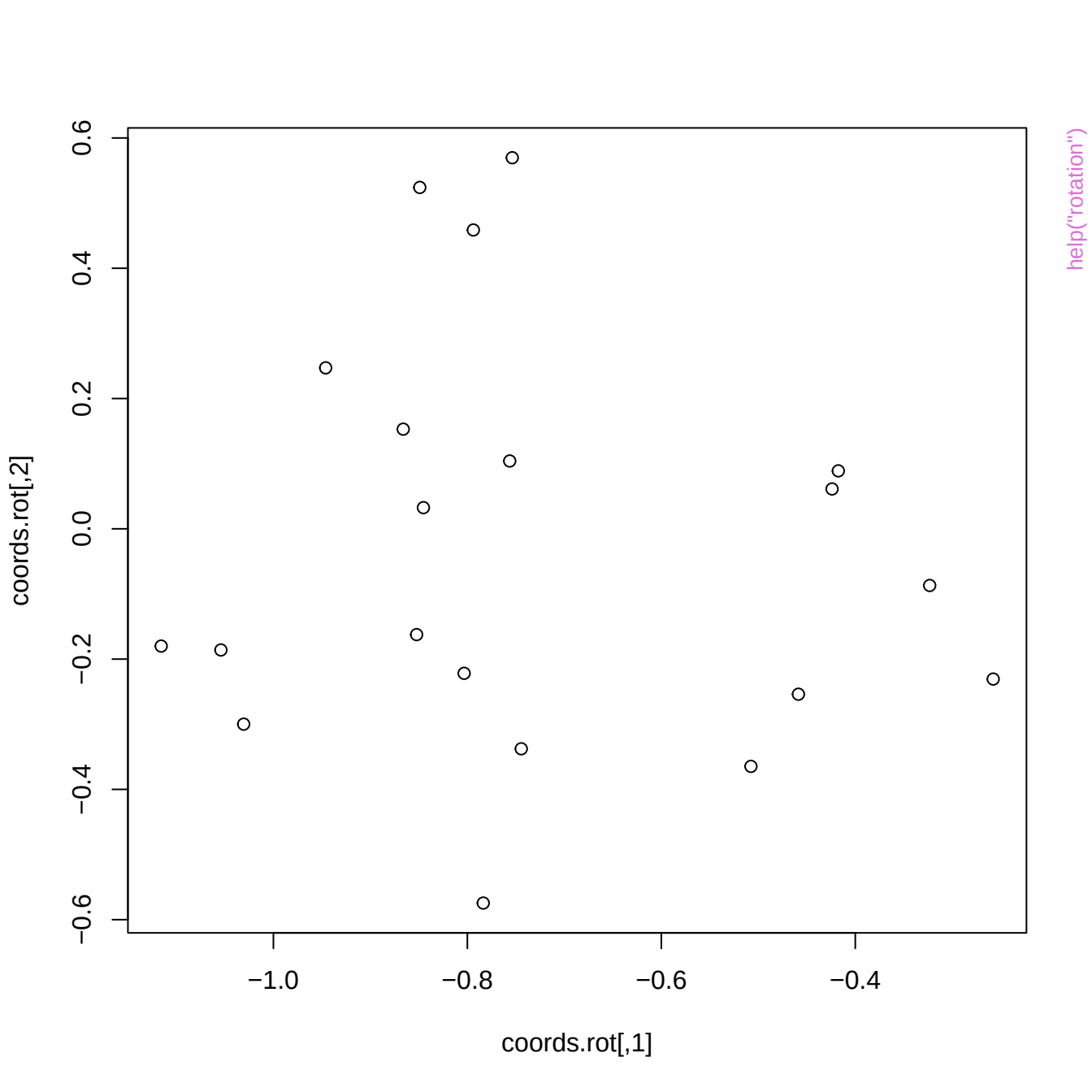
help("rotation")

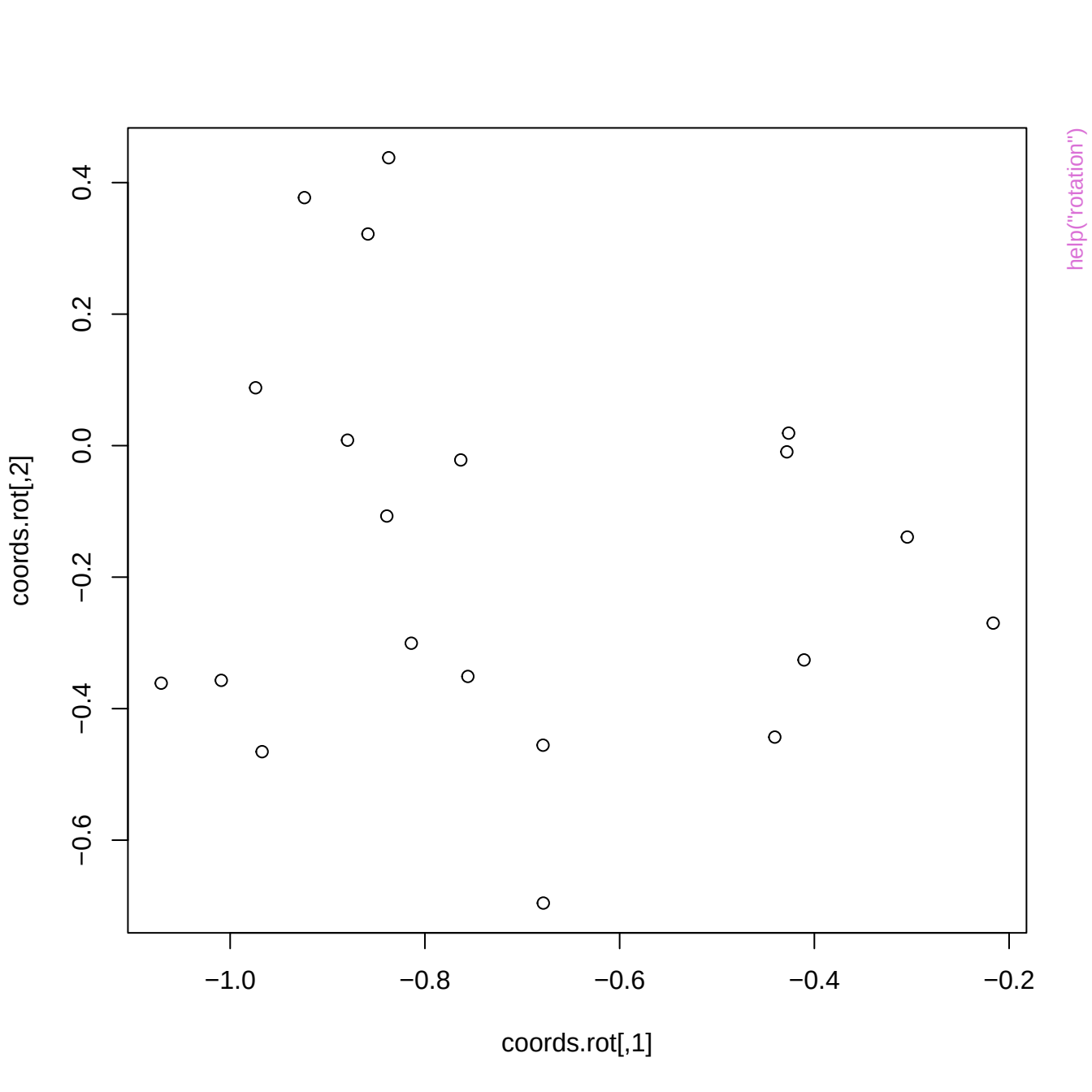

coords.rot[,2]
0.0
0.2
0.4
0.6
0.8
−1.0
−0.8
−0.6
−0.4
coords.rot[,1]
help("rotation")



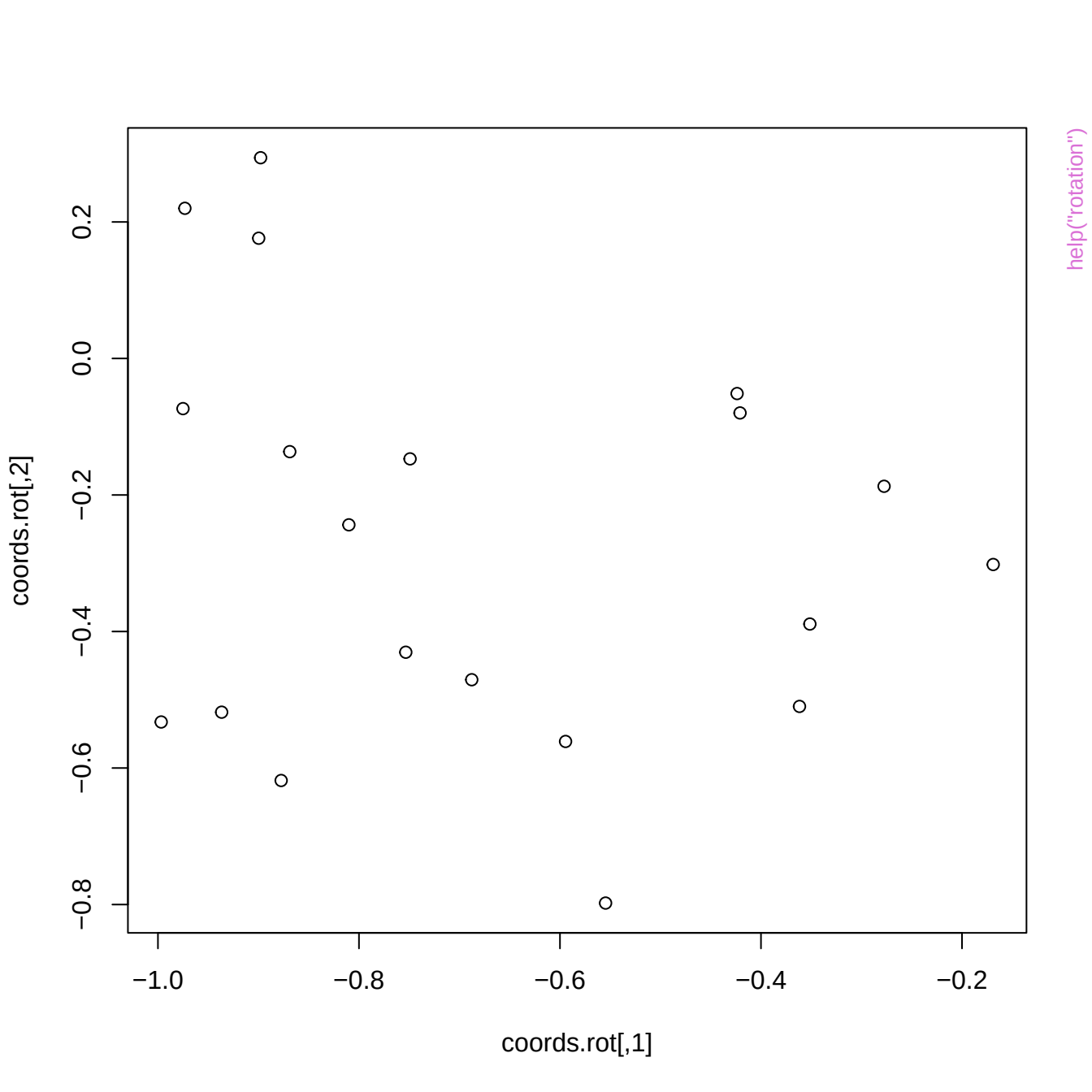
help("rotation")


coords.rot[,2]
0.6
0.4
0.2
0.0
−0.2
−0.4
−1.0
−0.8
−0.6
−0.4
coords.rot[,1]
help("rotation")

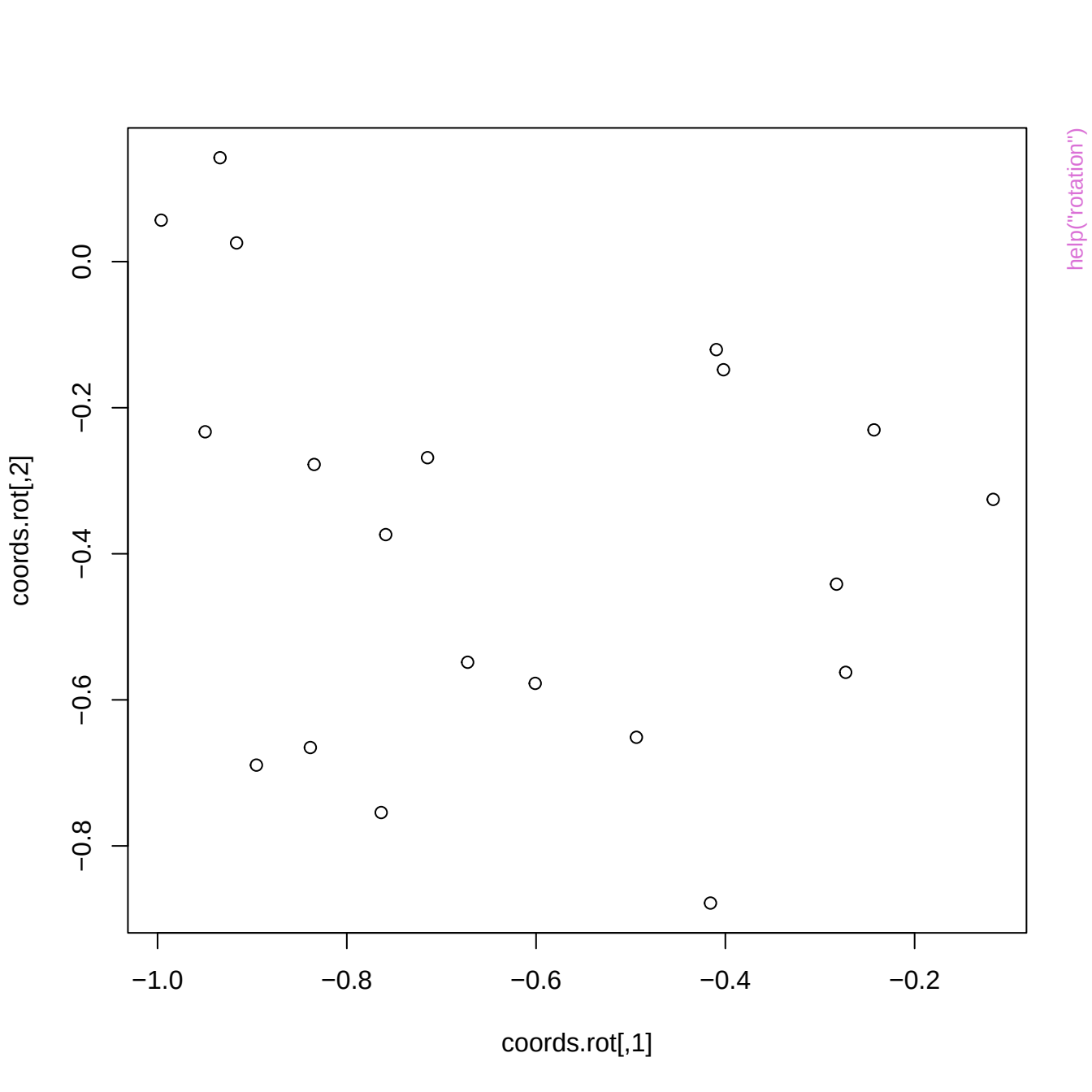

help("rotation")
coords.rot[,2]
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6
−1.0
−0.8
−0.6
−0.4
coords.rot[,1]

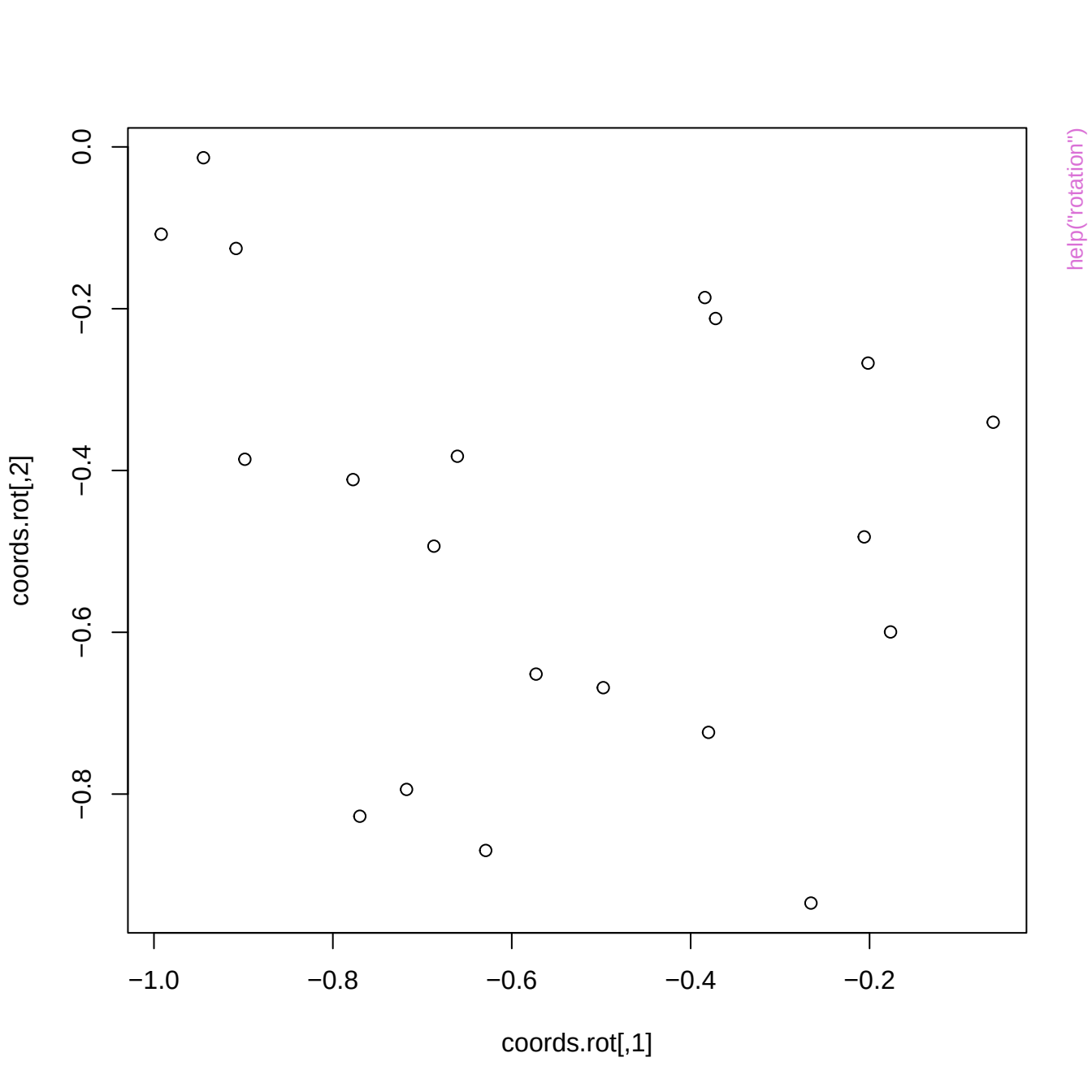


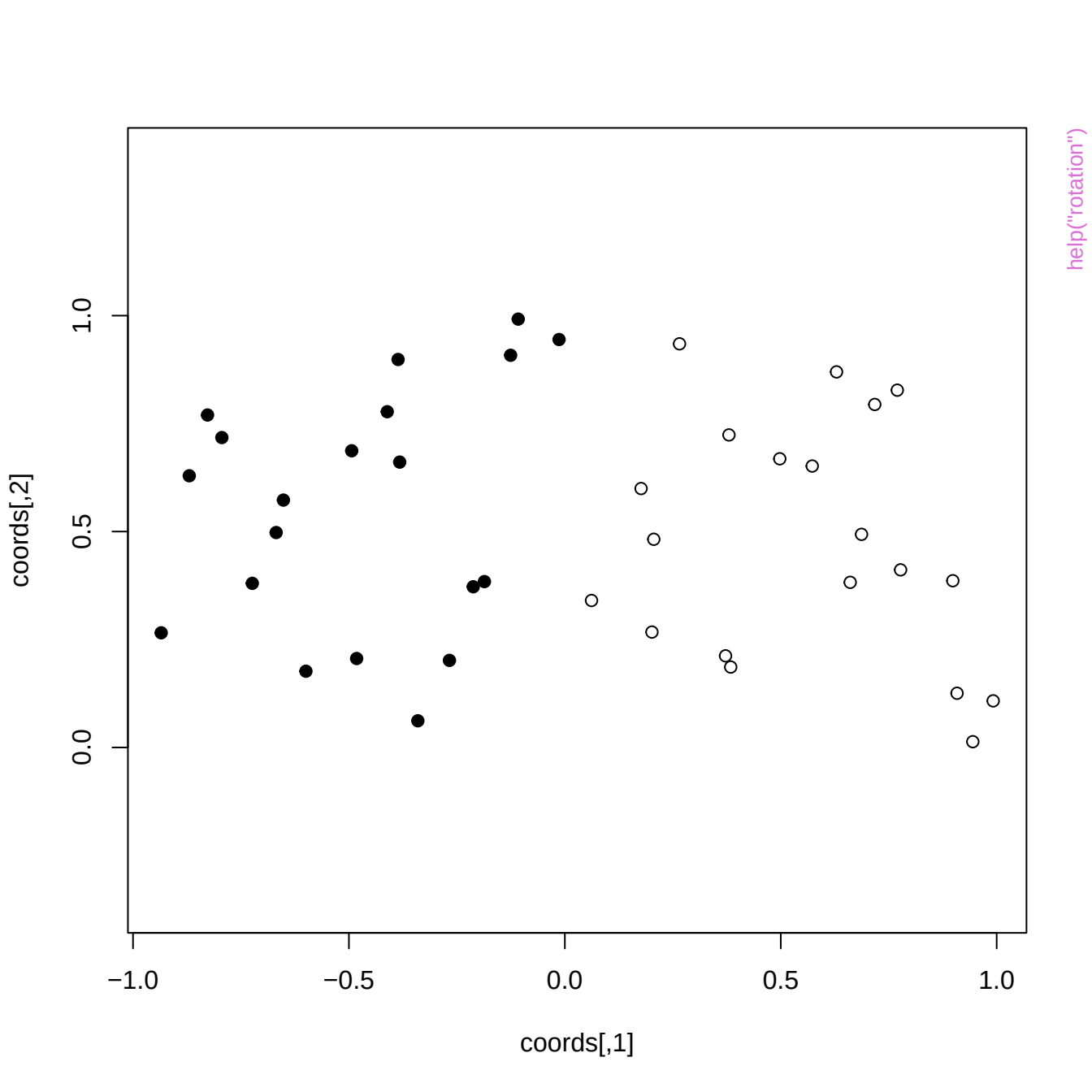
help("rotation")

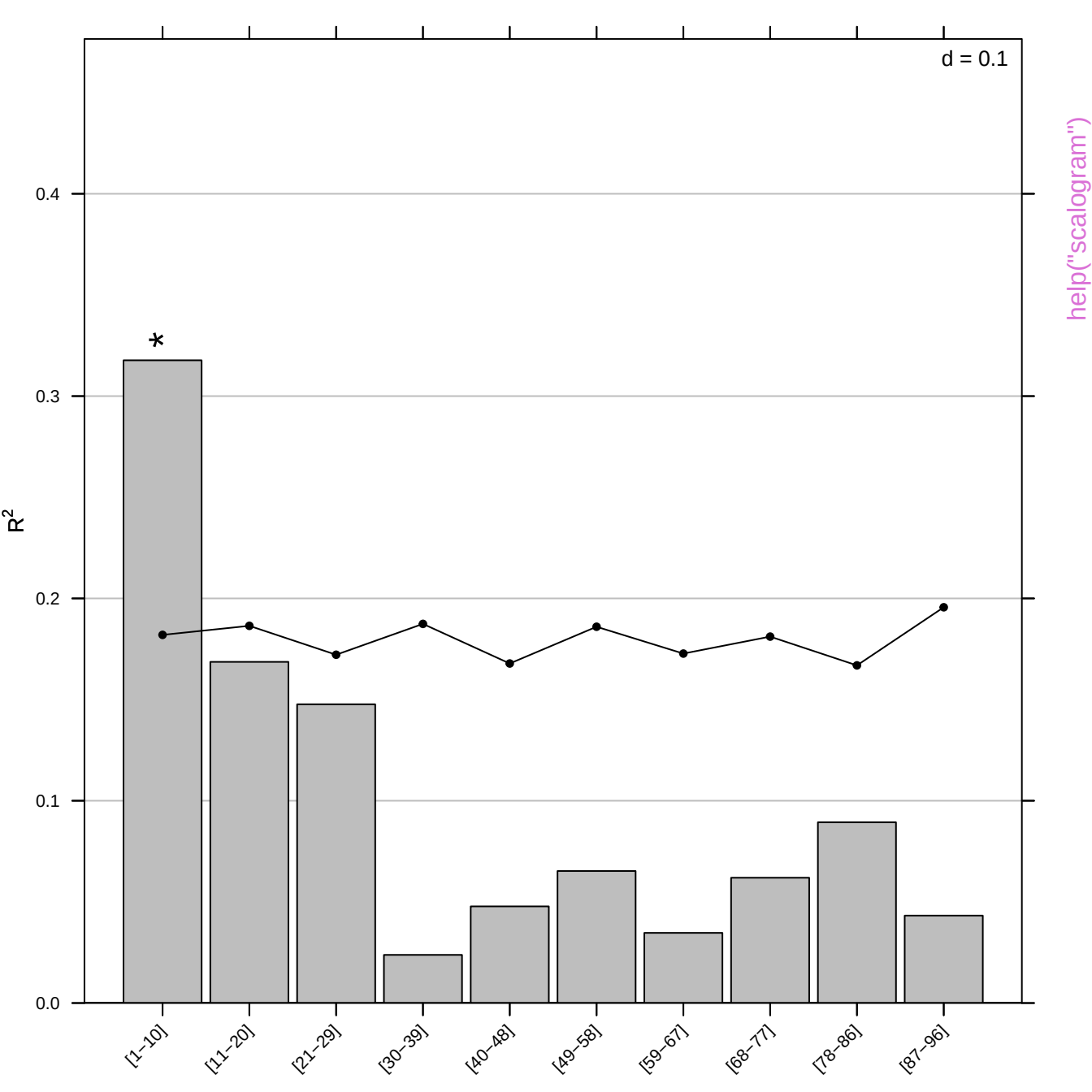


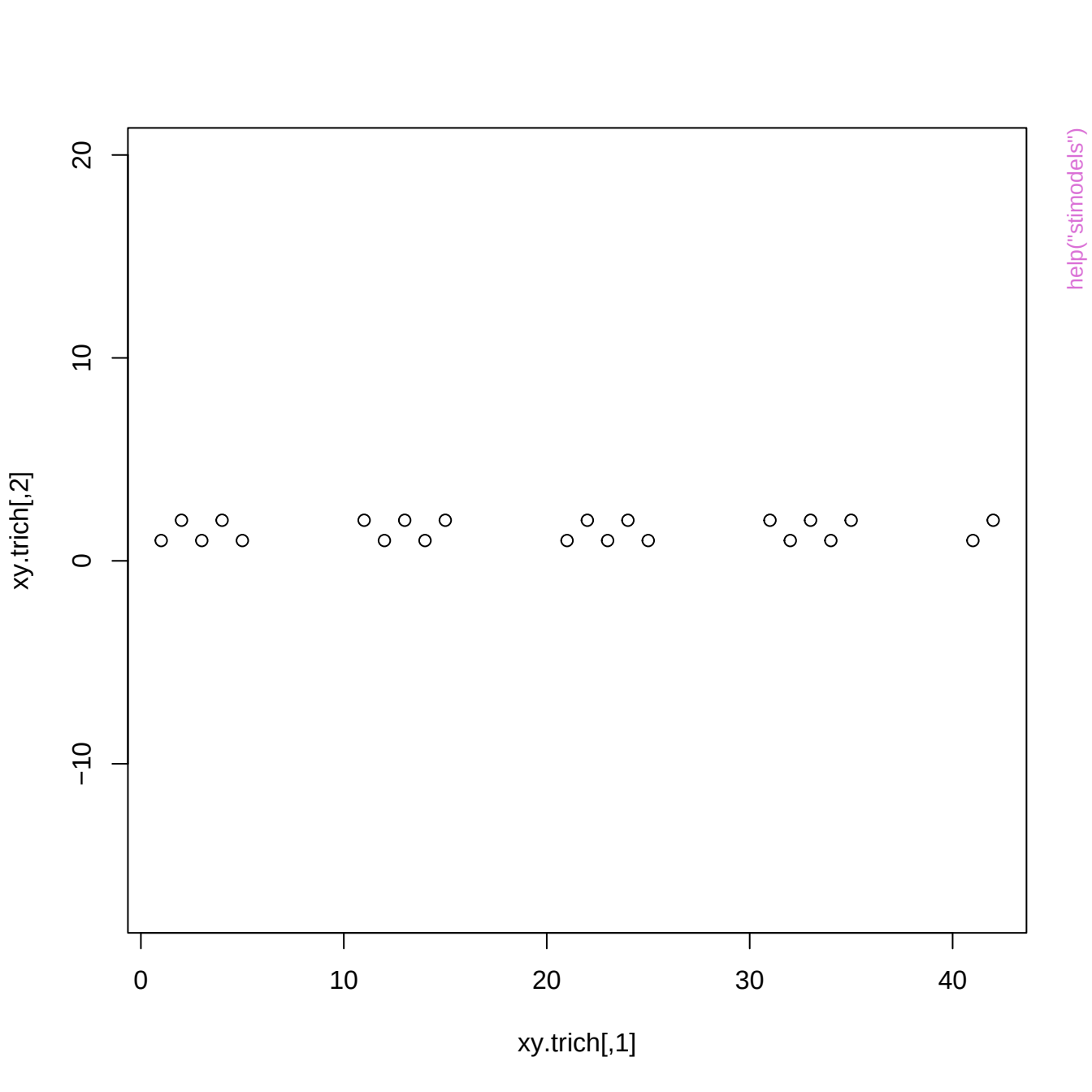
help("rotation")


help("rotation")
coords.rot[,2]
0.0
−0.2
−0.4
−0.6
−0.8
−1.0
−0.8
−0.6
−0.4
−0.2
coords.rot[,1]

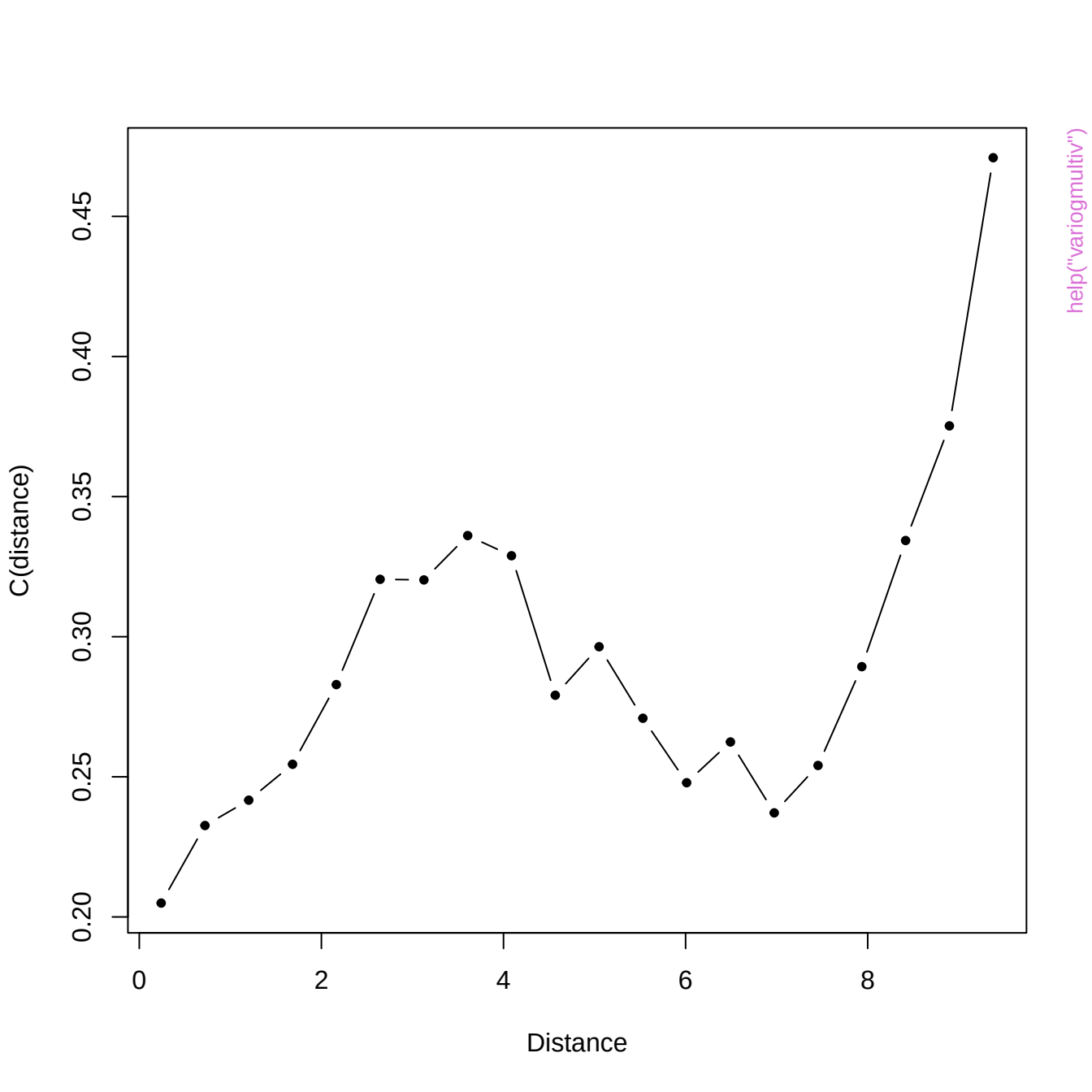

0.0
−0.2
−0.4
−0.6
−0.8
coords.rot[,2]
−1.0
−0.8
−0.6
−0.4
−0.2
coords.rot[,1]
help("rotation")


coords[,2]
1.0
0.5
0.0
−1.0
−0.5
0.0
0.5
1.0
coords[,1]
help("rotation")


d = 0.1
help("scalogram")
R2
0.0
0.1
0.2
0.3
0.4
*
[1–10]
[11–20]
[21–29]
[30–39]
[40–48]
[49–58]
[59–67]
[68–77]
[78–86]
[87–96]



help("stimodels")


C(distance)
0.20
0.25
0.30
0.35
0.40
0.45
0
2
4
6
8
Distance
help("variogmultiv")