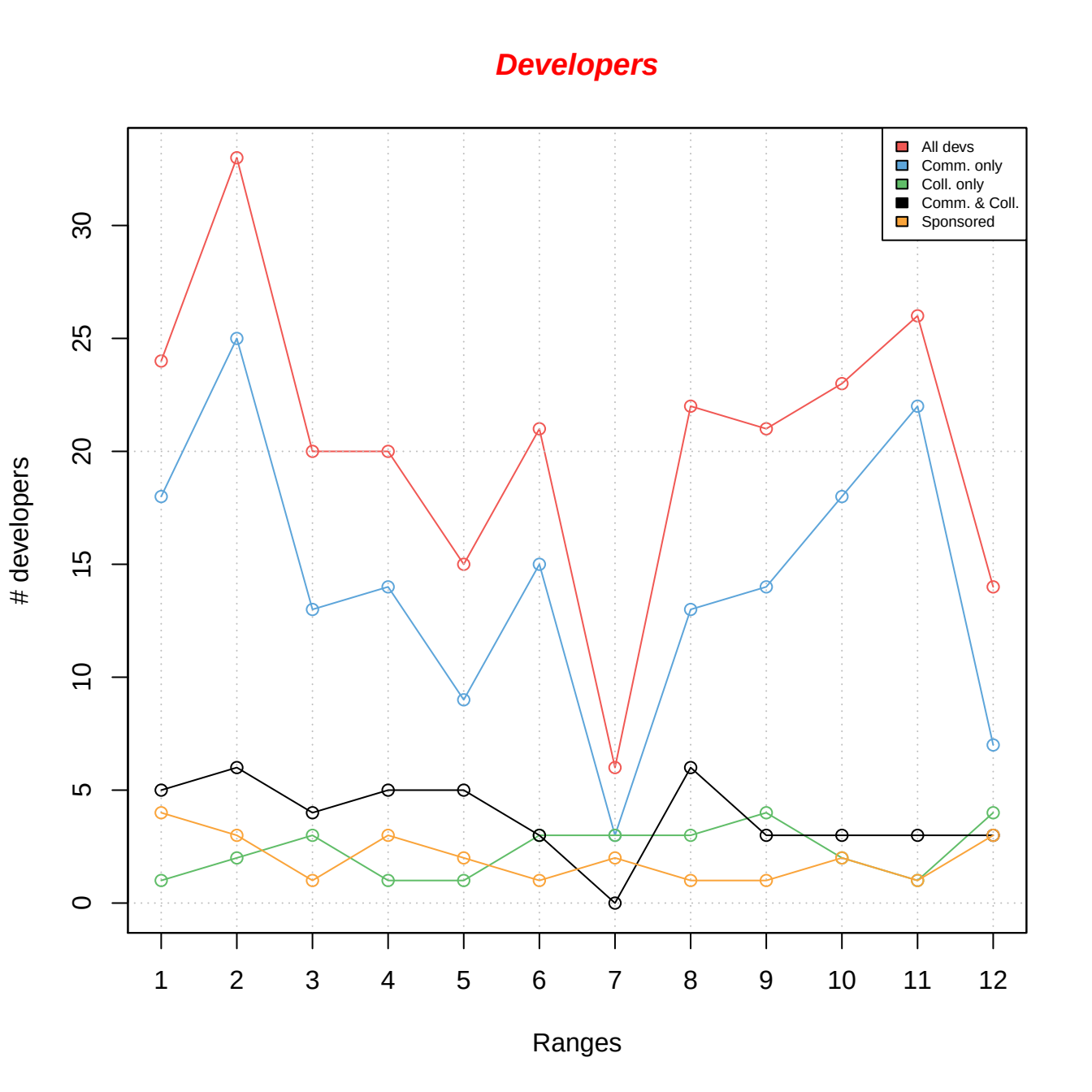
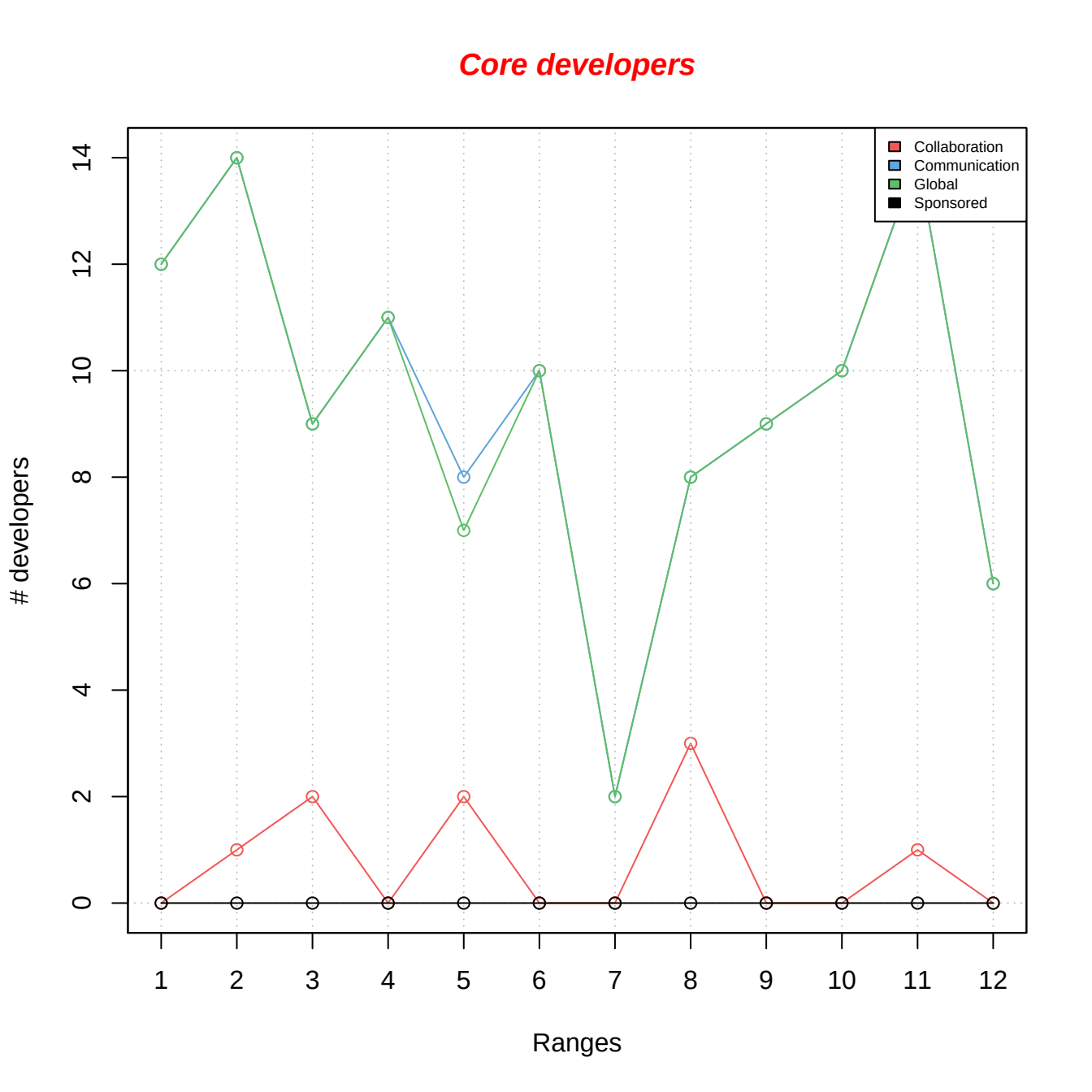
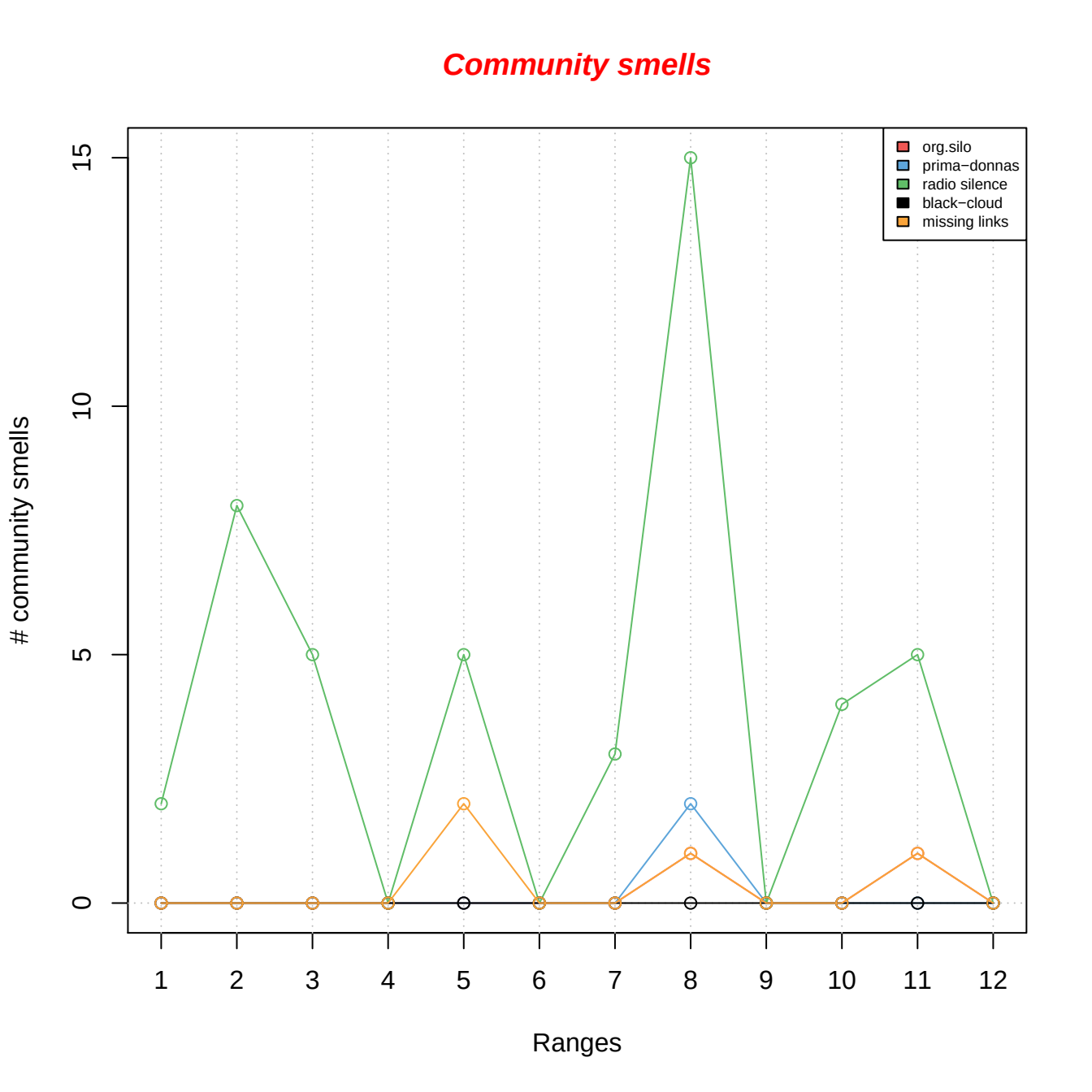
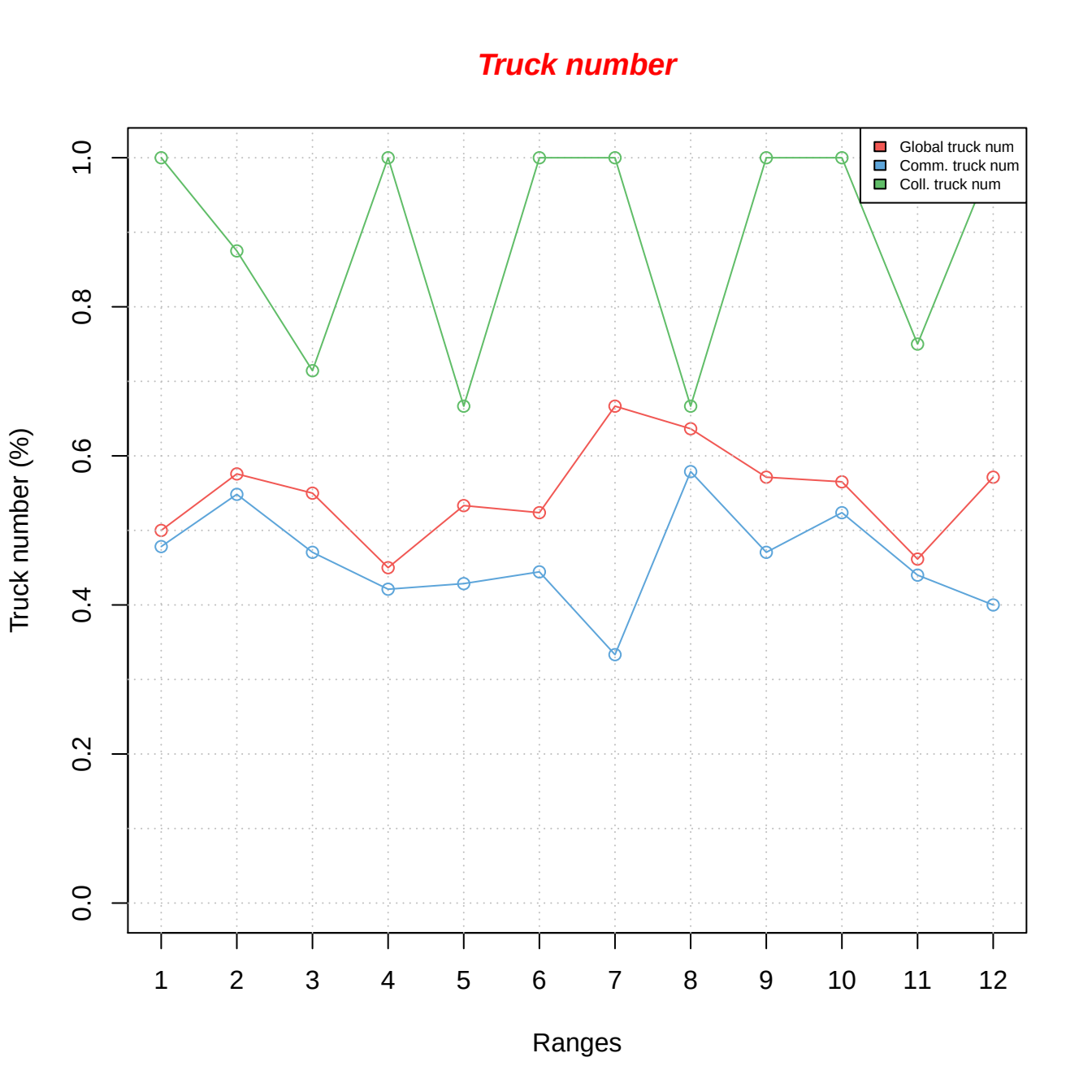
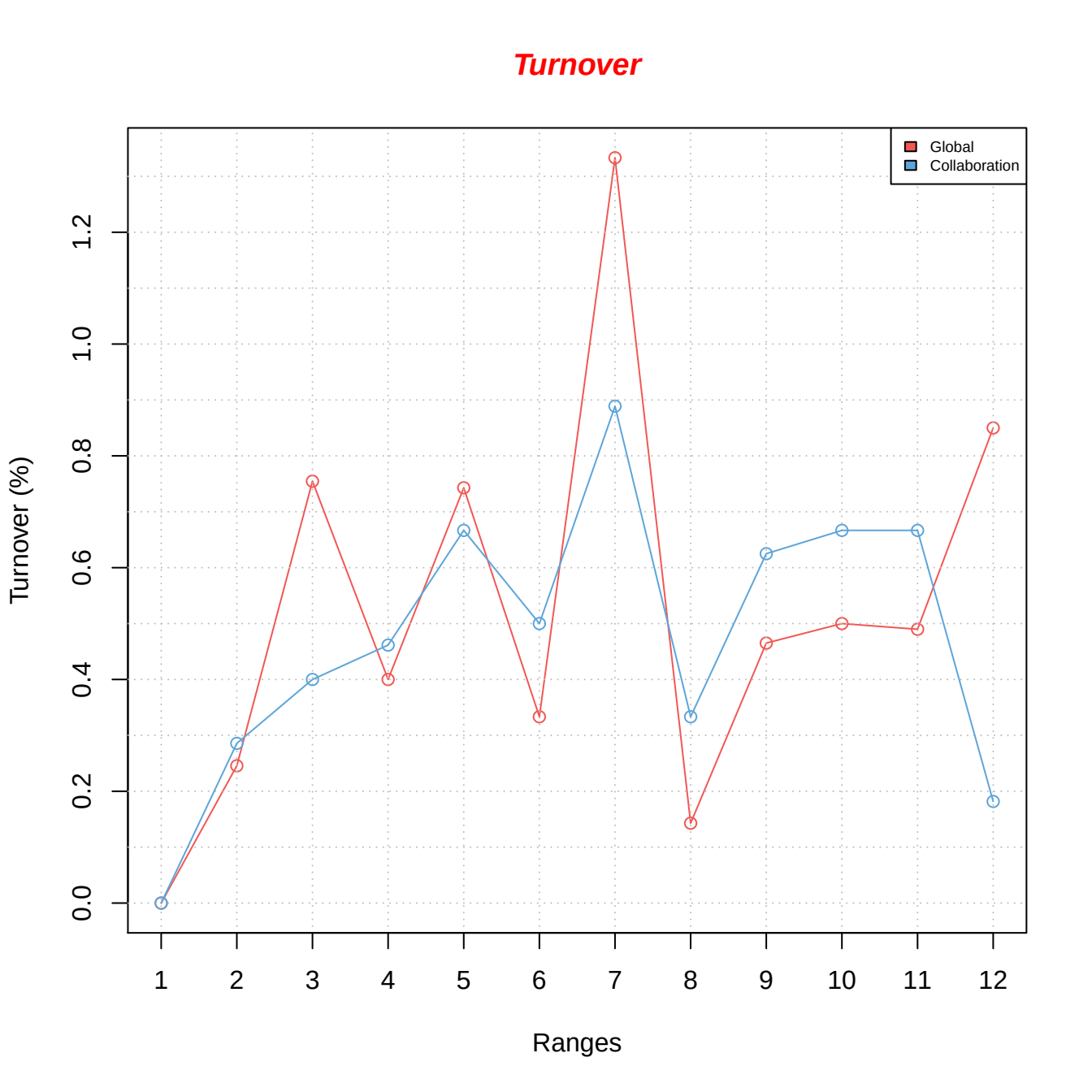
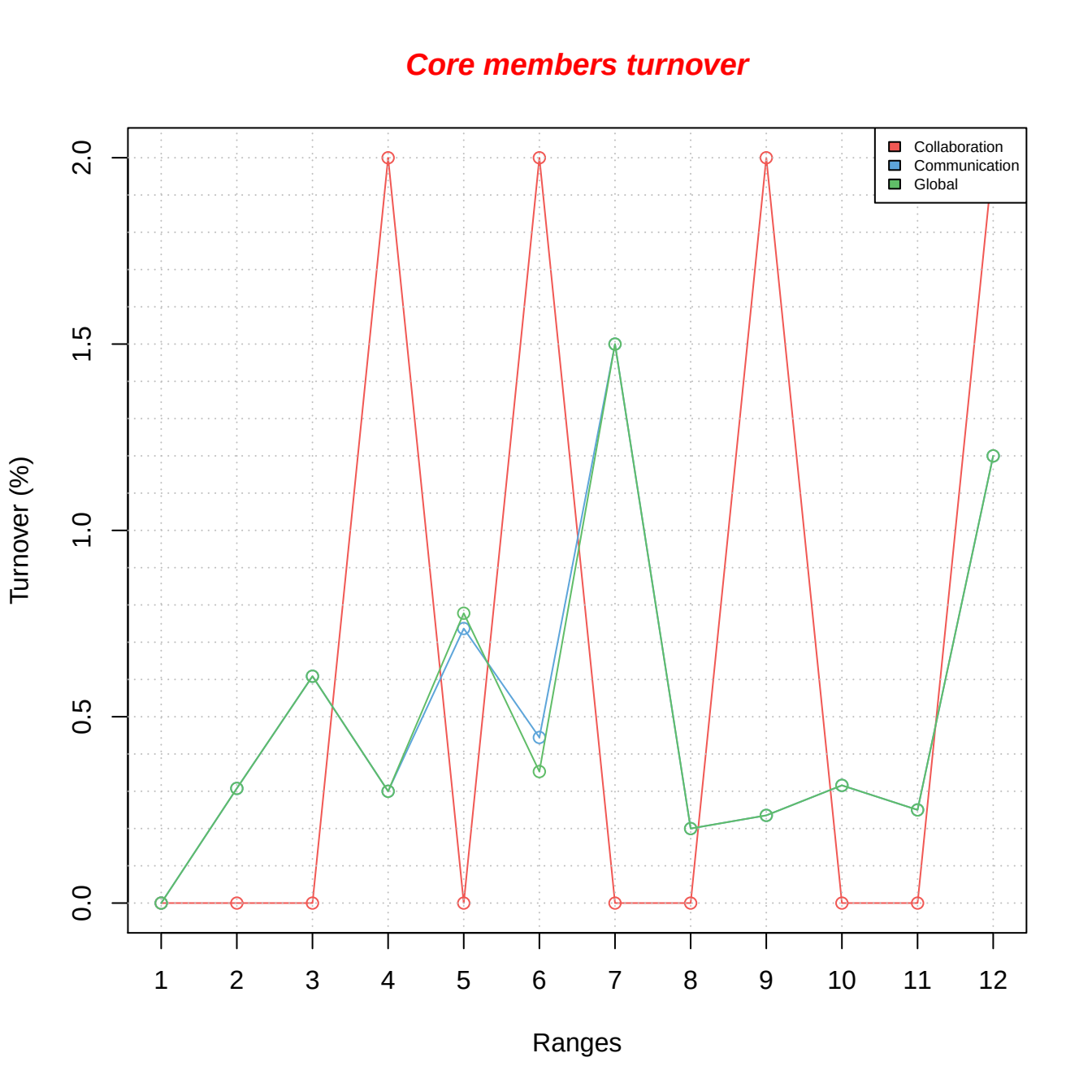

Developers
All devs
Comm. only
Coll. only
Comm. & Coll.
Sponsored
developers
0
5
10
15
20
25
30
1
2
3
4
5
6
7
8
9
10
11
12
Ranges

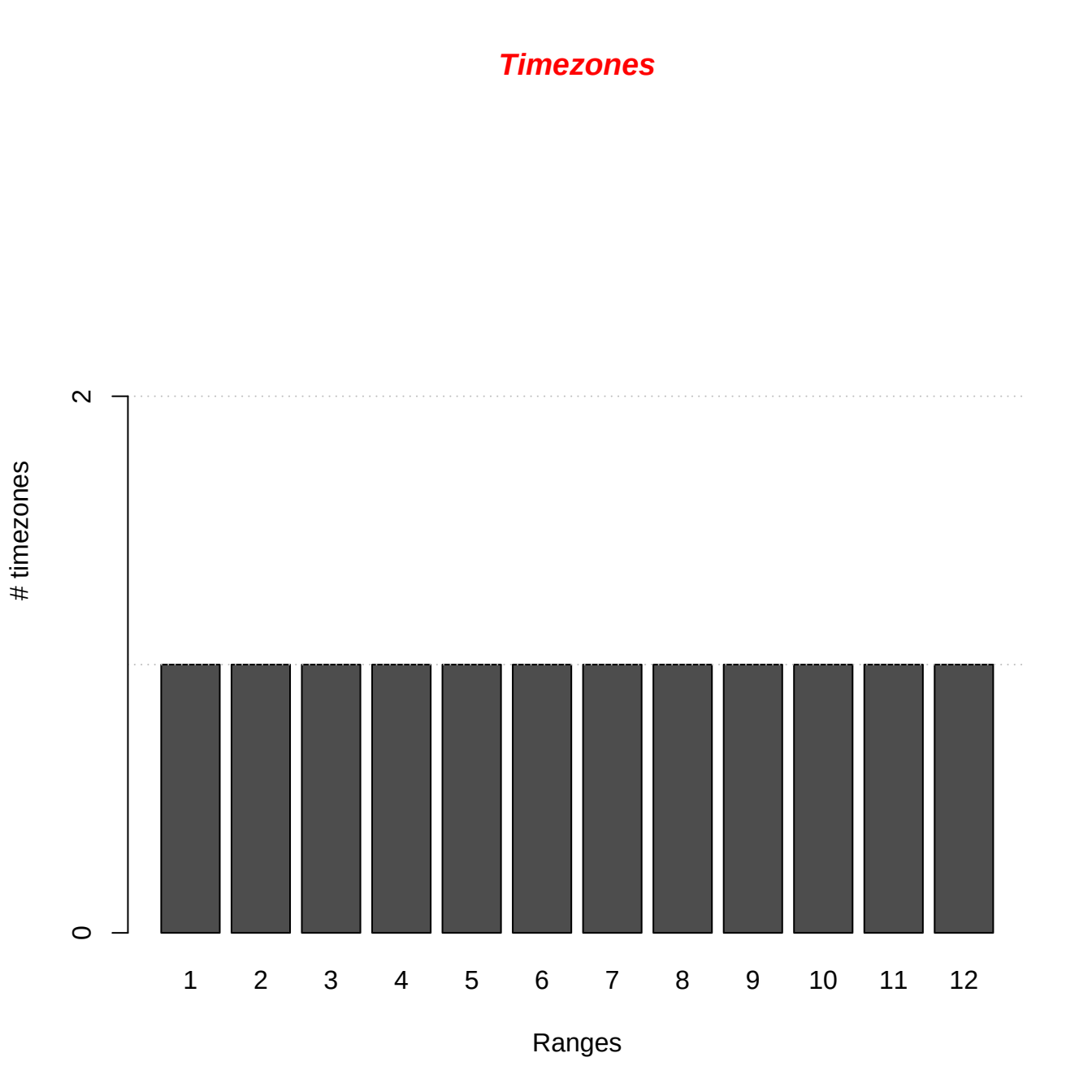

Core developers
Collaboration
Communication
Global
Sponsored
developers
0
2
4
6
8
10
12
14
1
2
3
4
5
6
7
8
9
10
11
12
Ranges

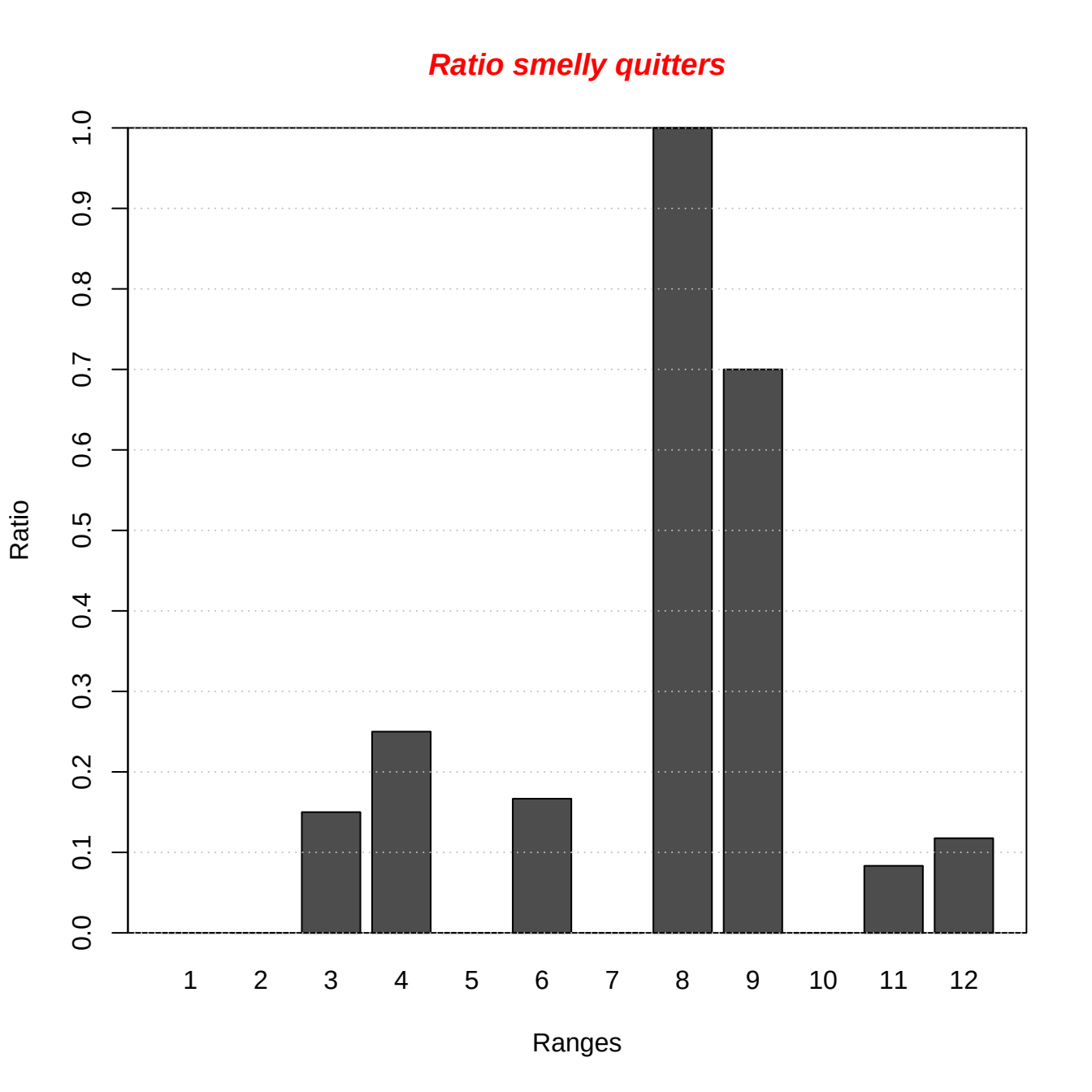

Community smells
org.silo
prima−donnas
radio silence
black−cloud
missing links
community smells
0
5
10
15
1
2
3
4
5
6
7
8
9
10
11
12
Ranges

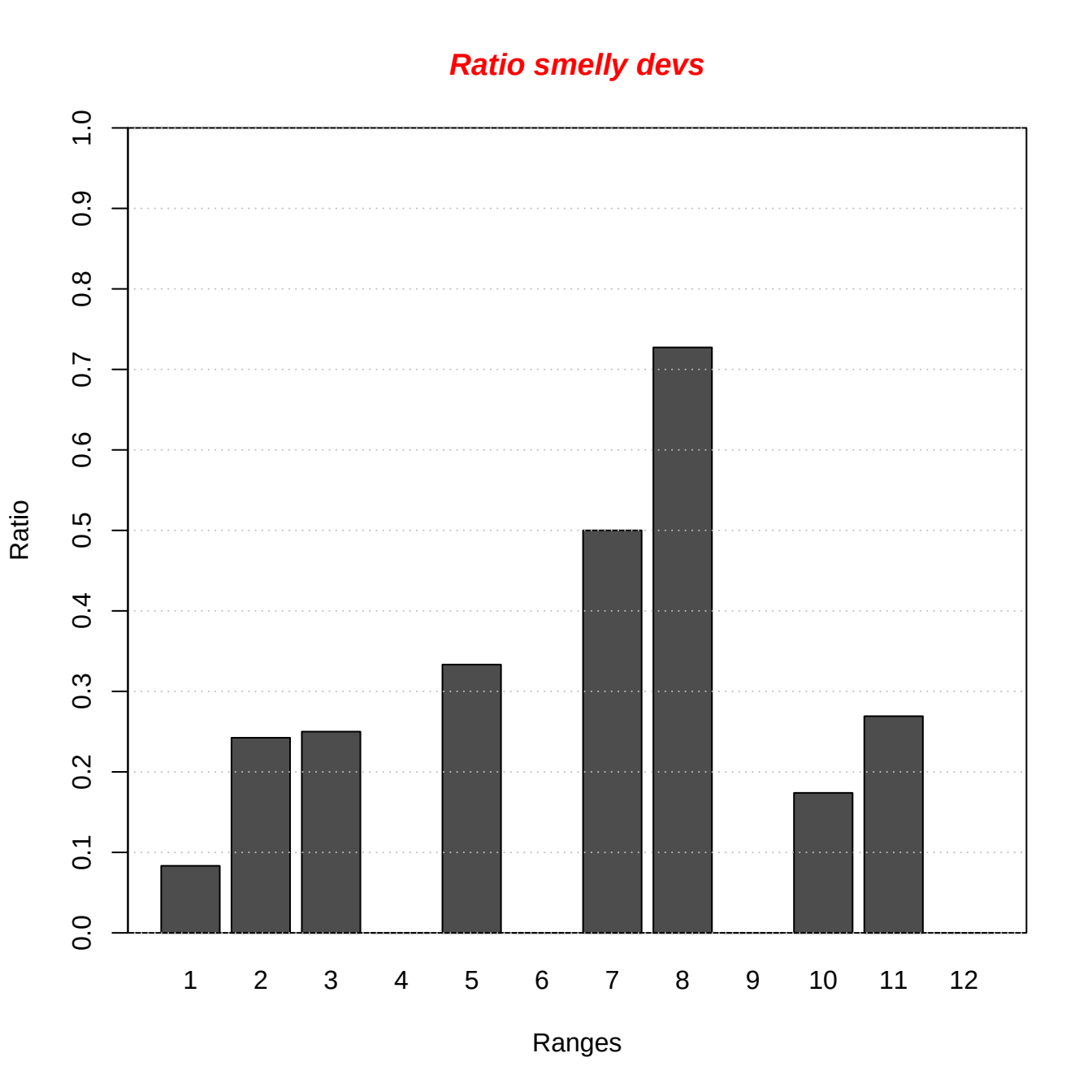

Truck number
Global truck num
Comm. truck num
Coll. truck num
Truck number (%)
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
Ranges

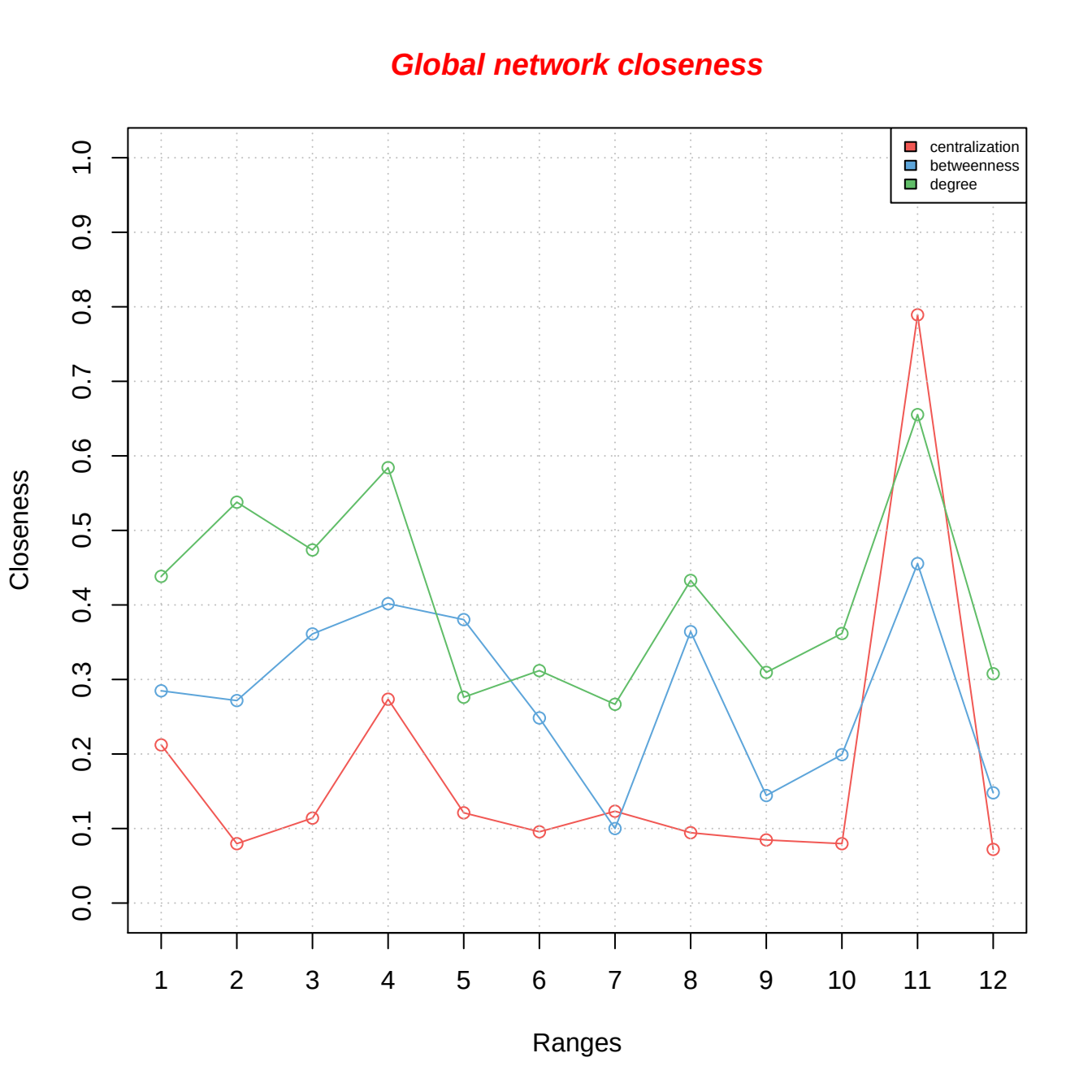

Turnover
Global
Collaboration
Turnover (%)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
Ranges

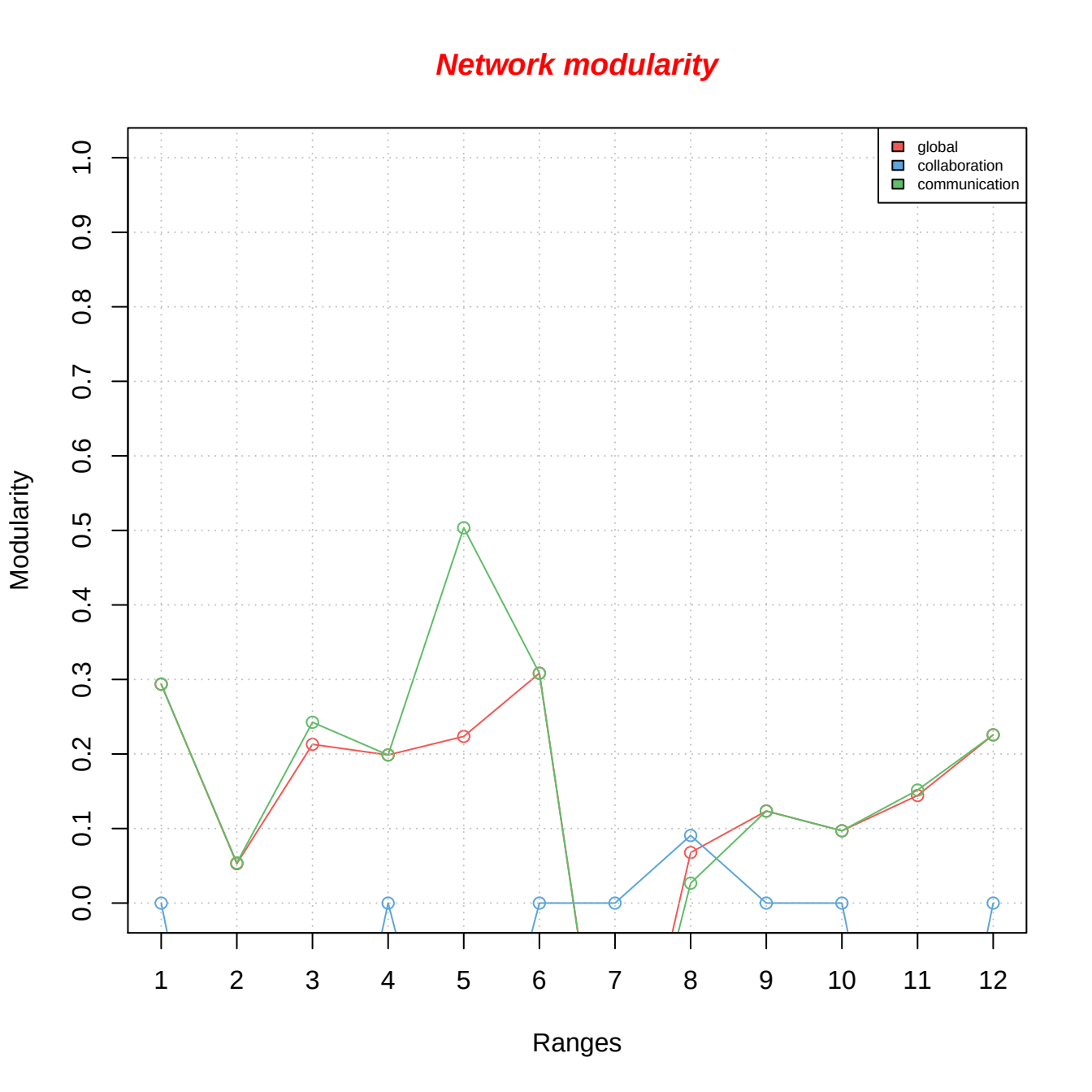

Core members turnover
Collaboration
Communication
Global
Turnover (%)
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
Ranges

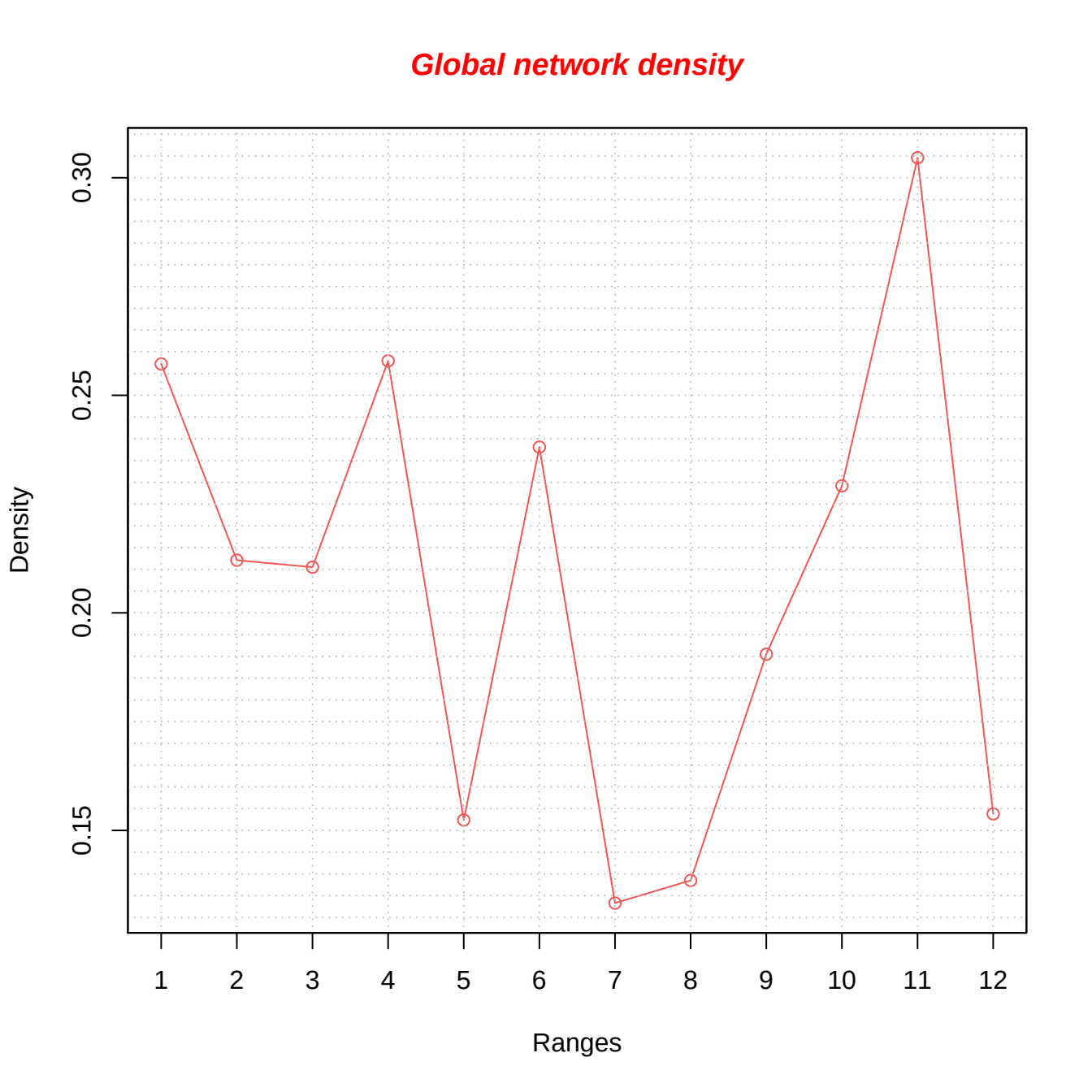

Timezones
timezones
2
0
1
2
3
4
5
6
7
8
9
10
11
12
Ranges


Ratio smelly quitters
Ratio
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1
2
3
4
5
6
7
8
9
10
11
12
Ranges


Ratio smelly devs
Ratio
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1
2
3
4
5
6
7
8
9
10
11
12
Ranges


Global network closeness
centralization
betweenness
degree
Closeness
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1
2
3
4
5
6
7
8
9
10
11
12
Ranges


Network modularity
global
collaboration
communication
Modularity
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1
2
3
4
5
6
7
8
9
10
11
12
Ranges


Global network density
Density
0.15
0.20
0.25
0.30
1
2
3
4
5
6
7
8
9
10
11
12
Ranges