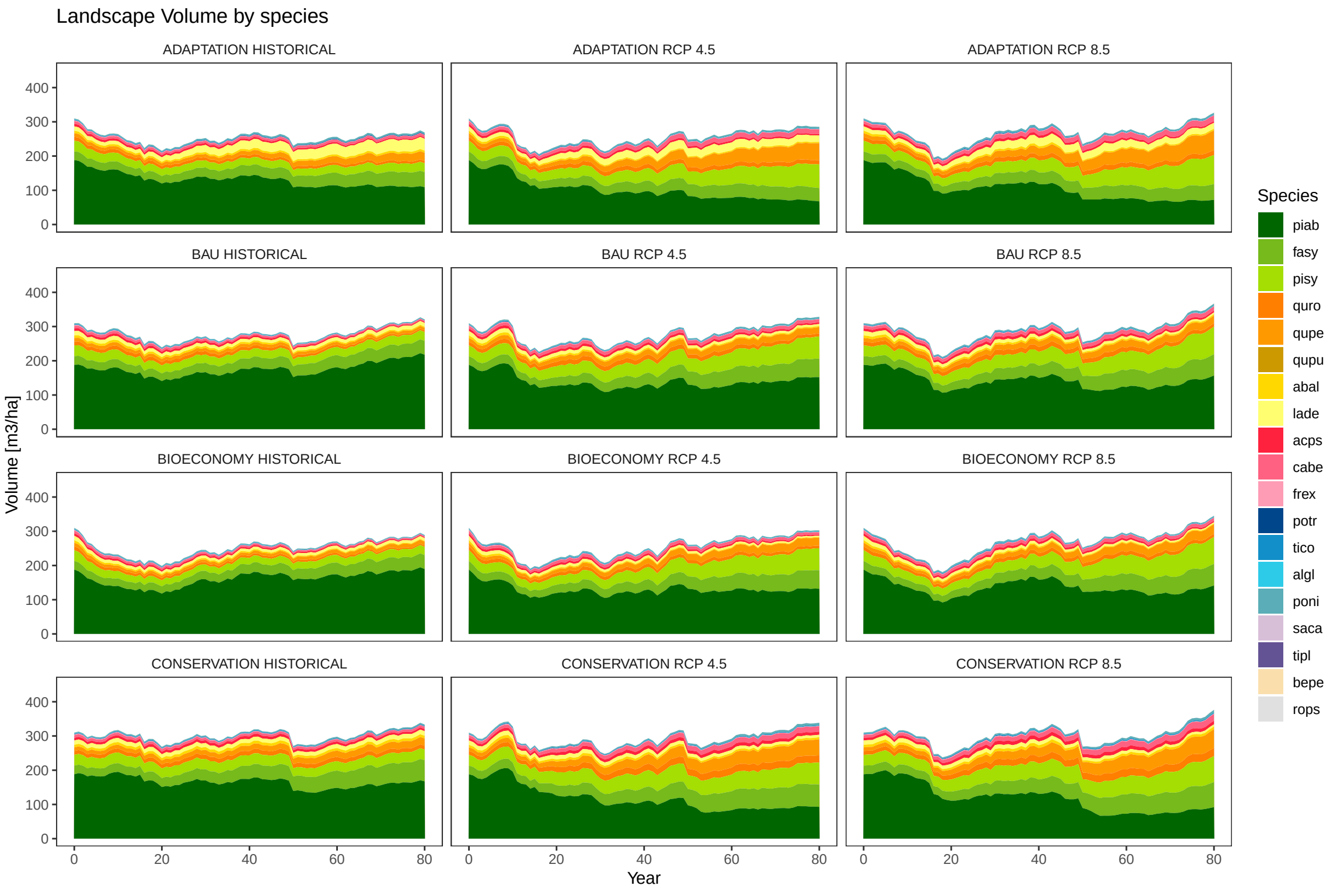
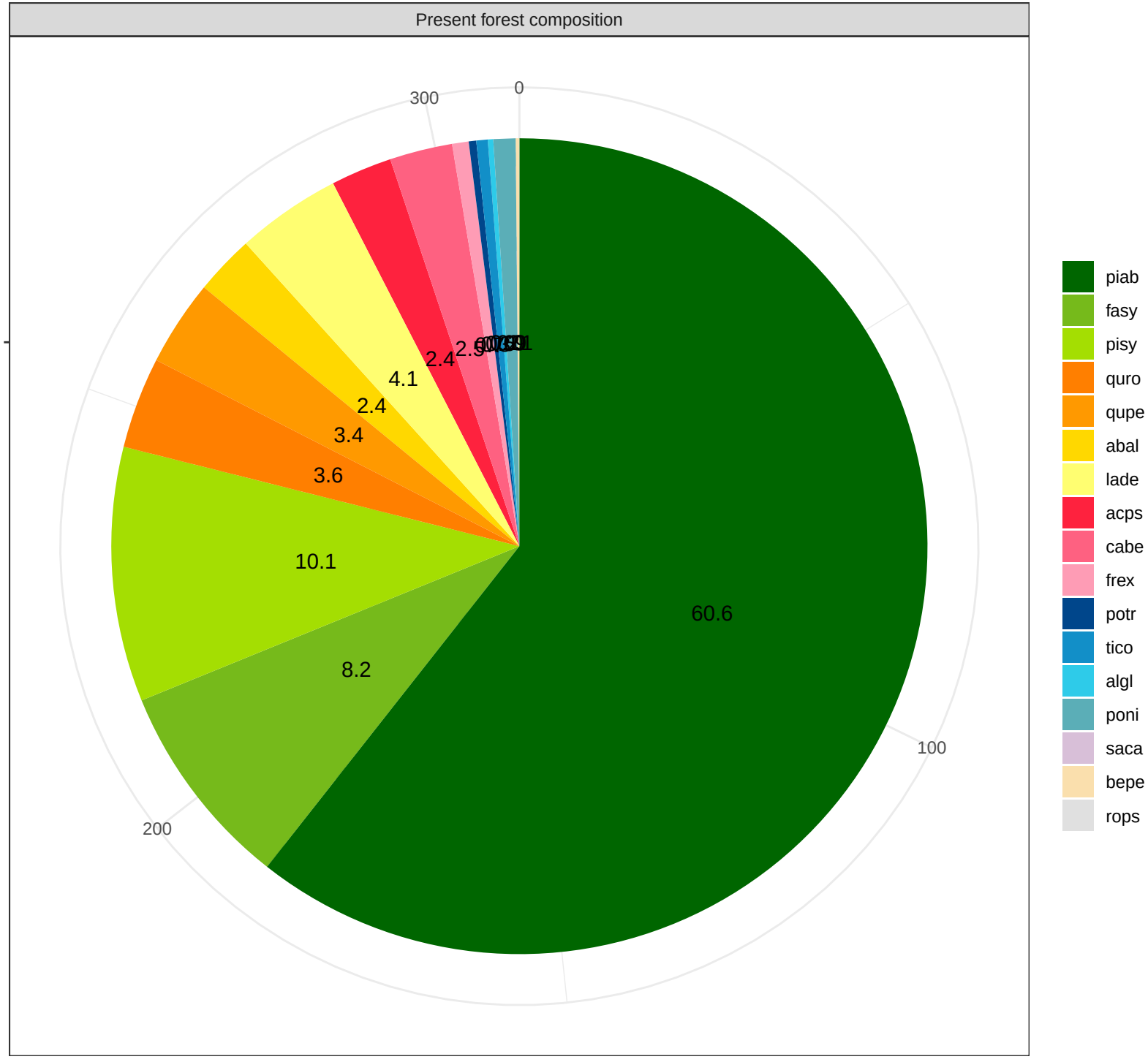
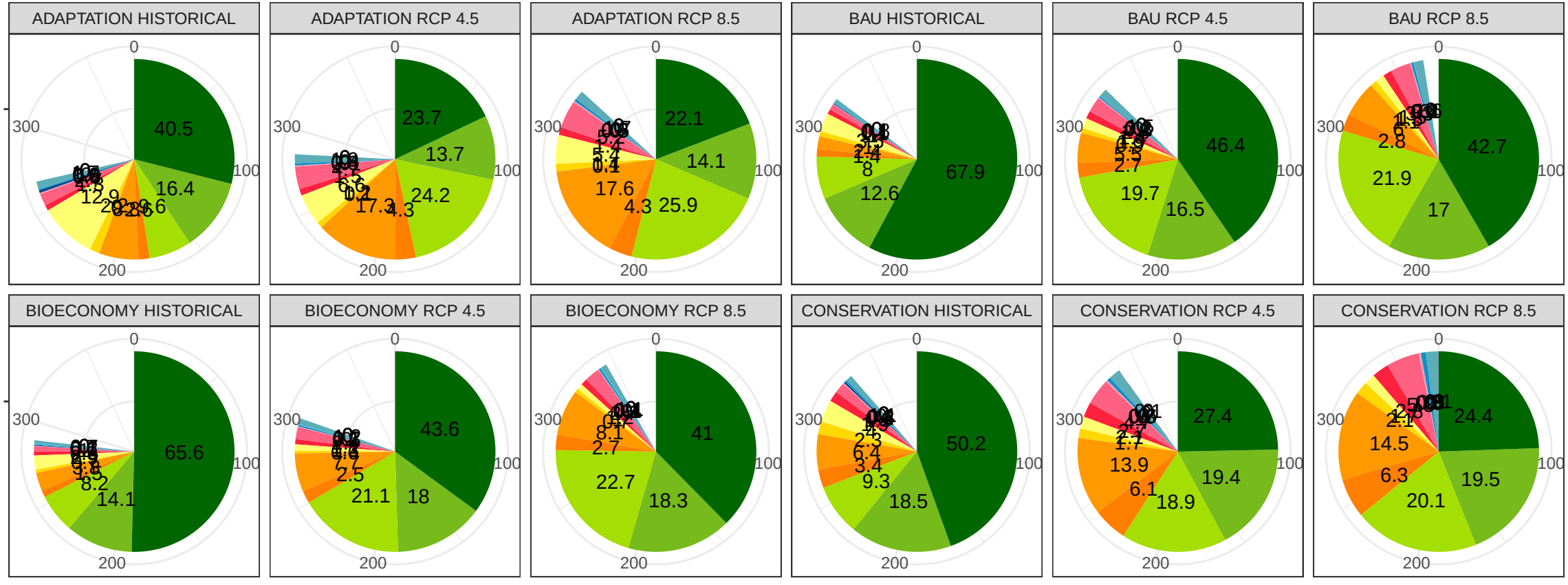
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Removed volume [m3/ha]
0
10
20
30
40
Year
0
25
50
75
100
Removal
regcut
finalcut
thinning
NA

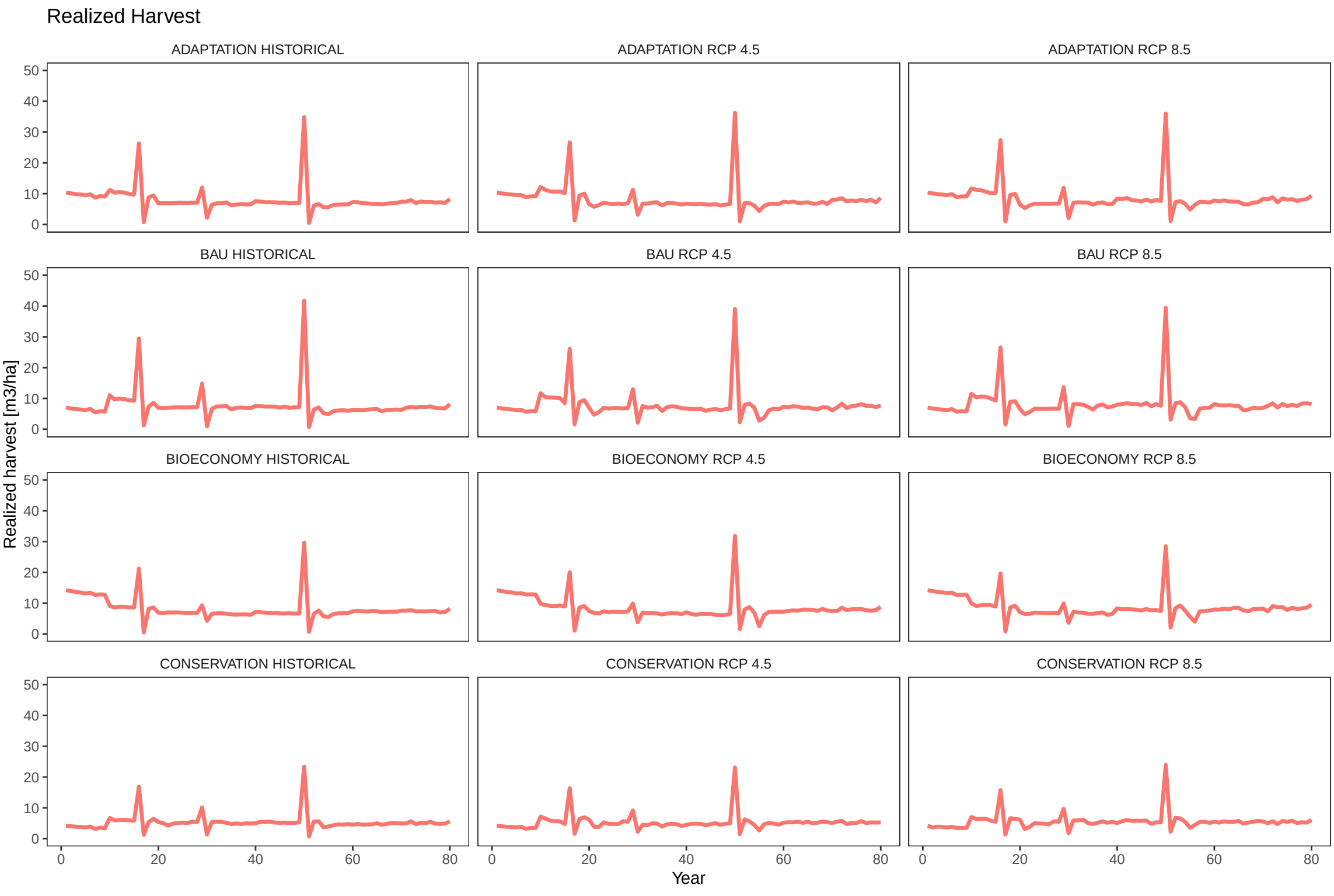

Landscape Volume by species
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Volume [m3/ha]
0
100
200
300
400
Year
0
20
40
60
80
Species
piab
fasy
pisy
quro
qupe
qupu
abal
lade
acps
cabe
frex
potr
tico
algl
poni
saca
tipl
bepe
rops

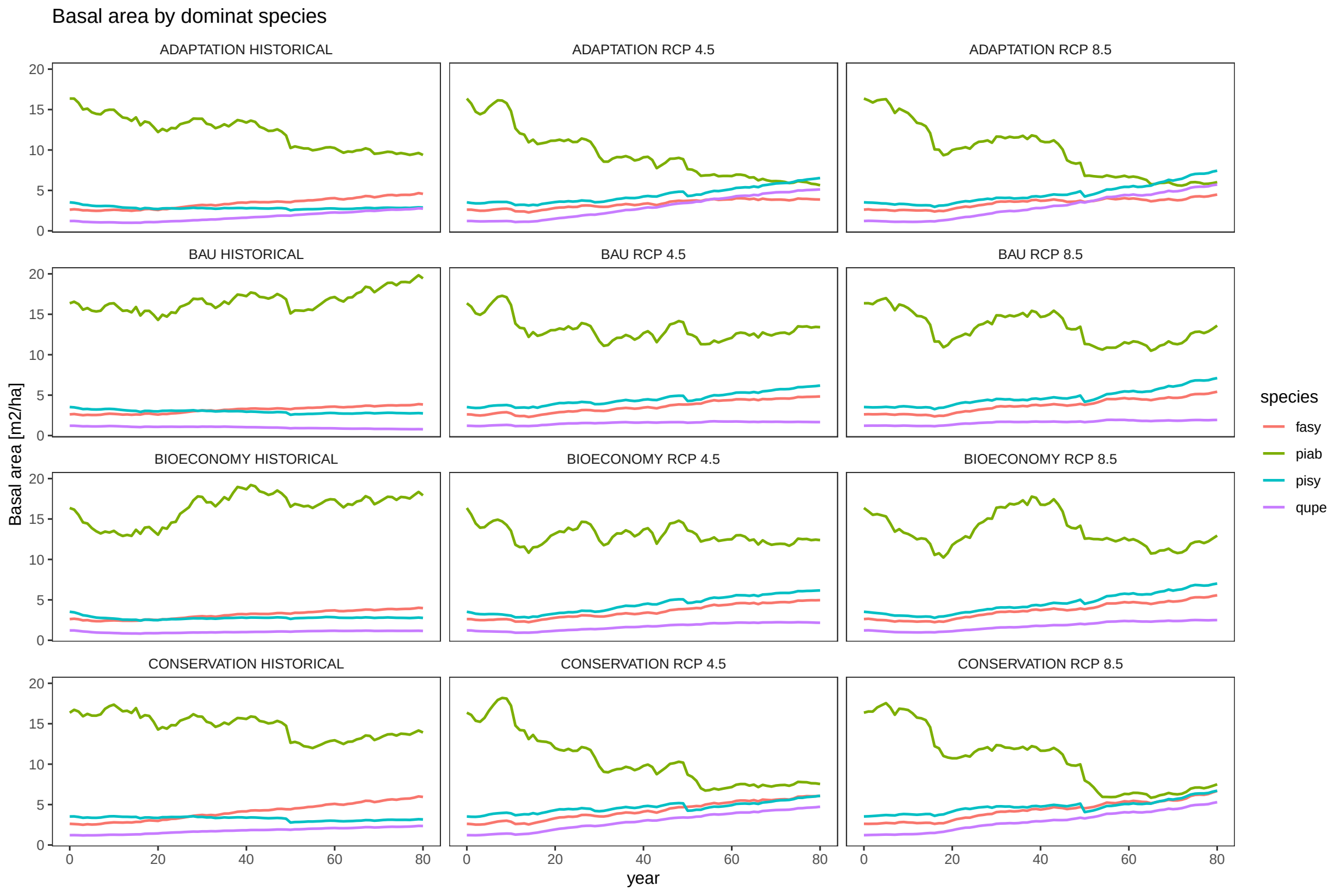
Species proportions [%] based on landscape volume [m3/ha] in year 0

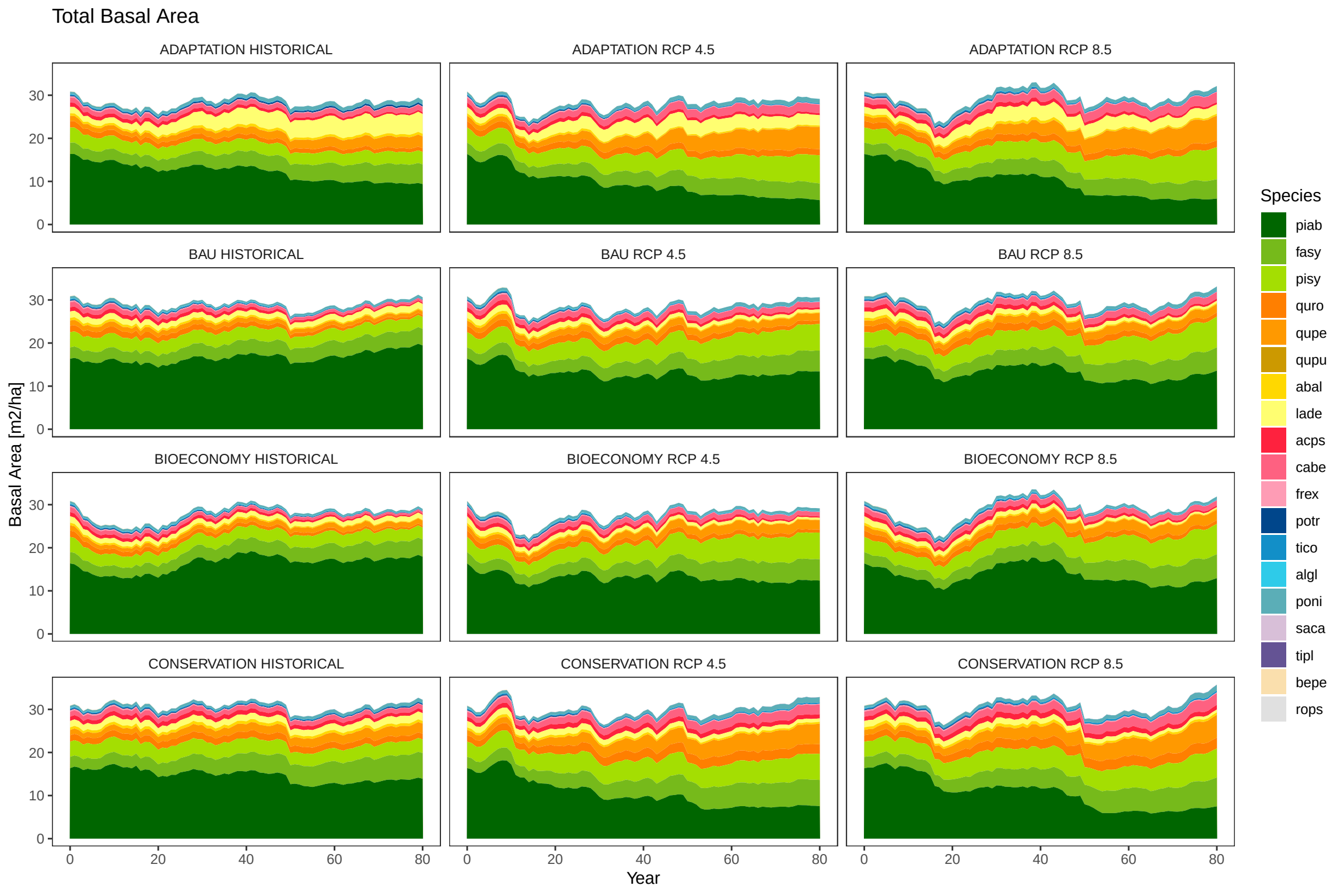


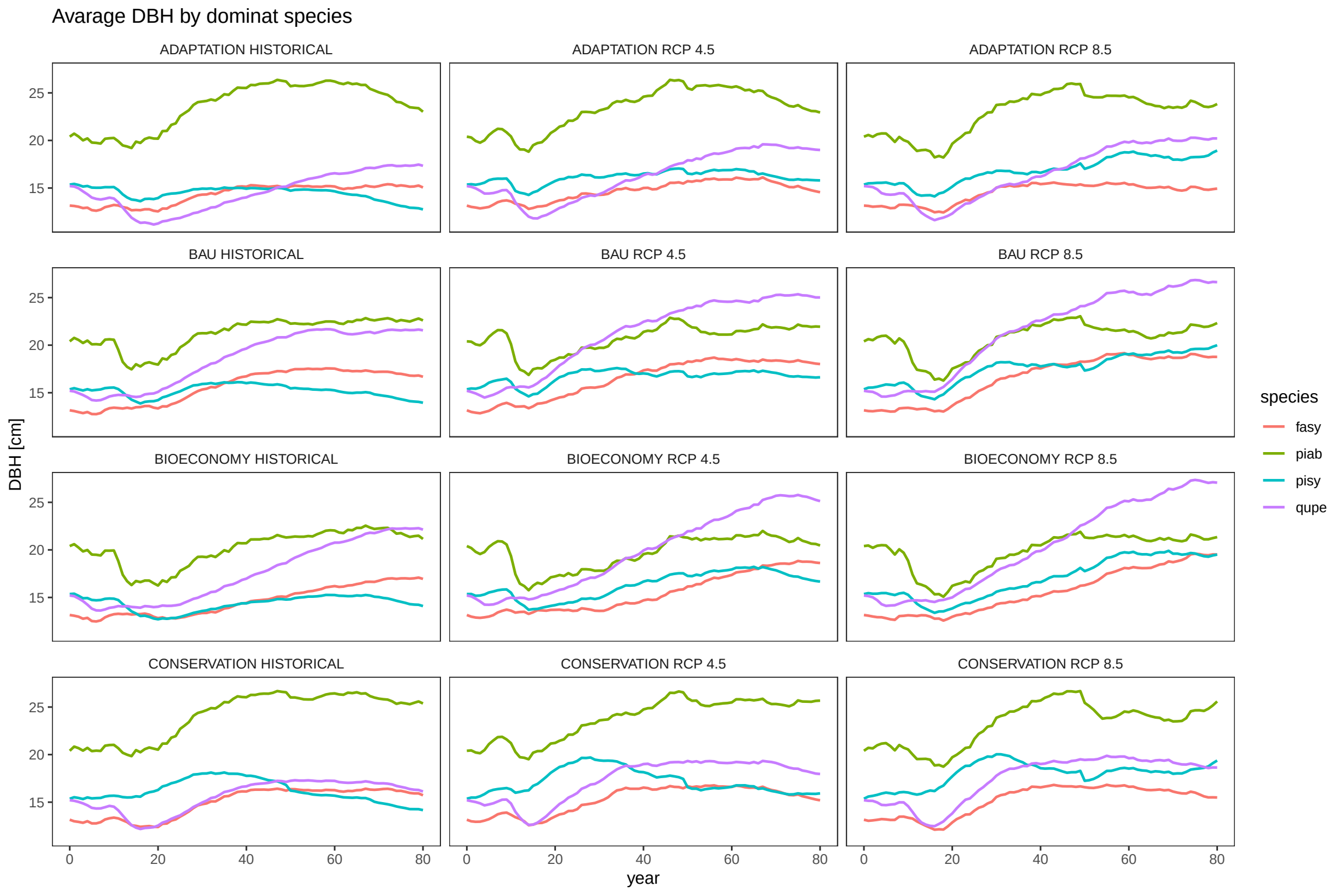
Species proportions [%] based on landscape volume [m3/ha] in year 80 ADP−BAU−BIOEC−CNS

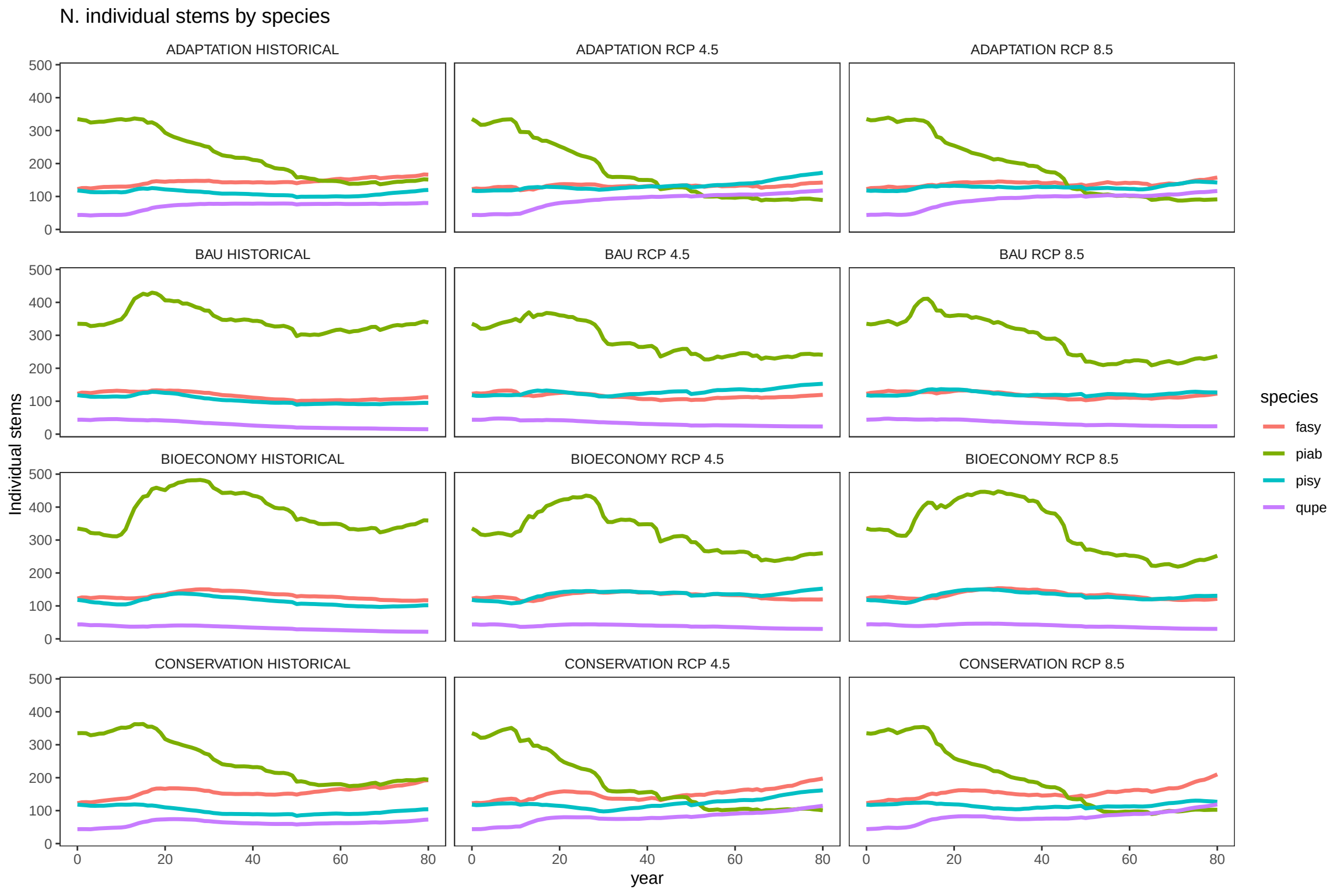


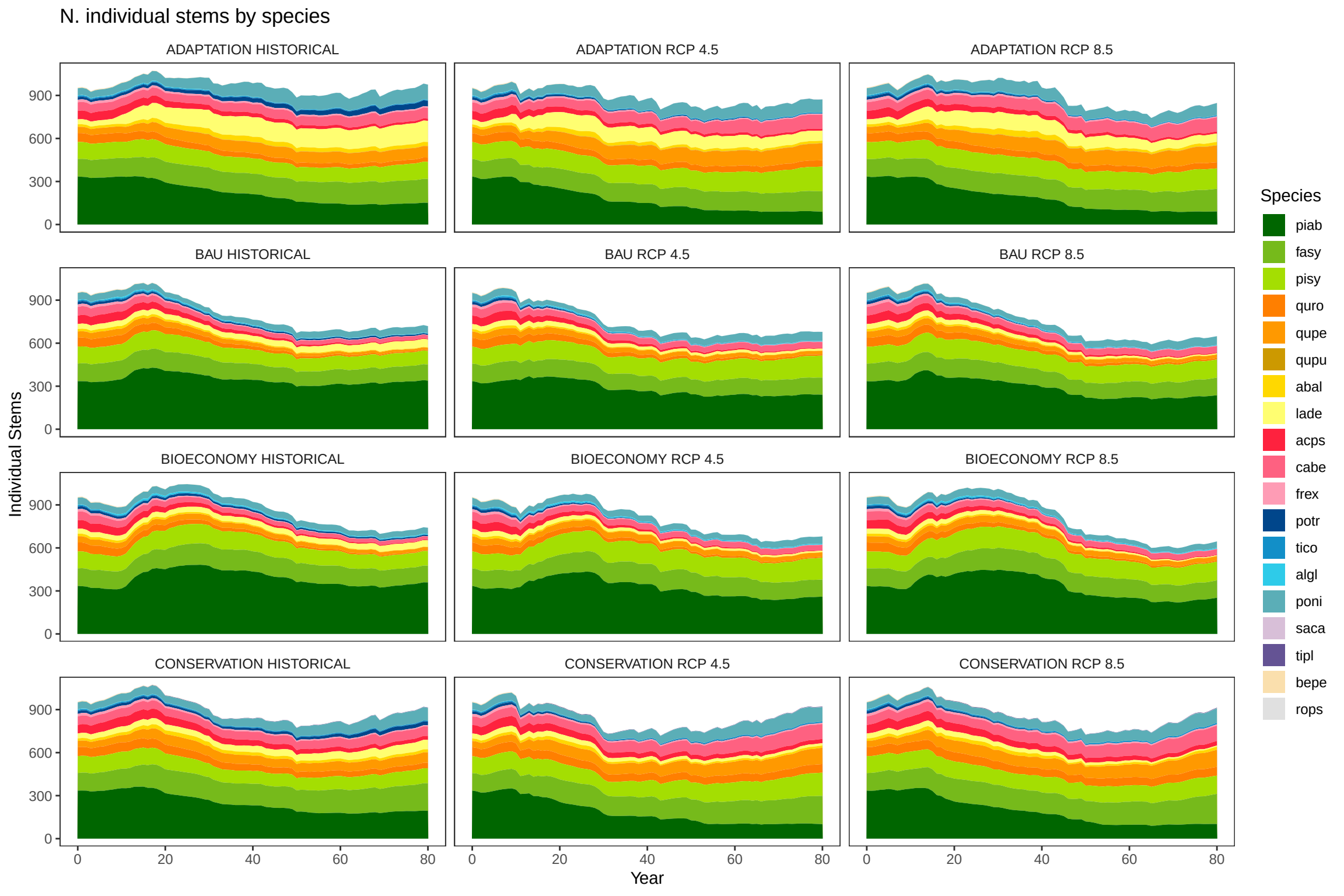

Realized Harvest
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Realized harvest [m3/ha]
0
10
20
30
40
50
0
20
40
60
80
Year

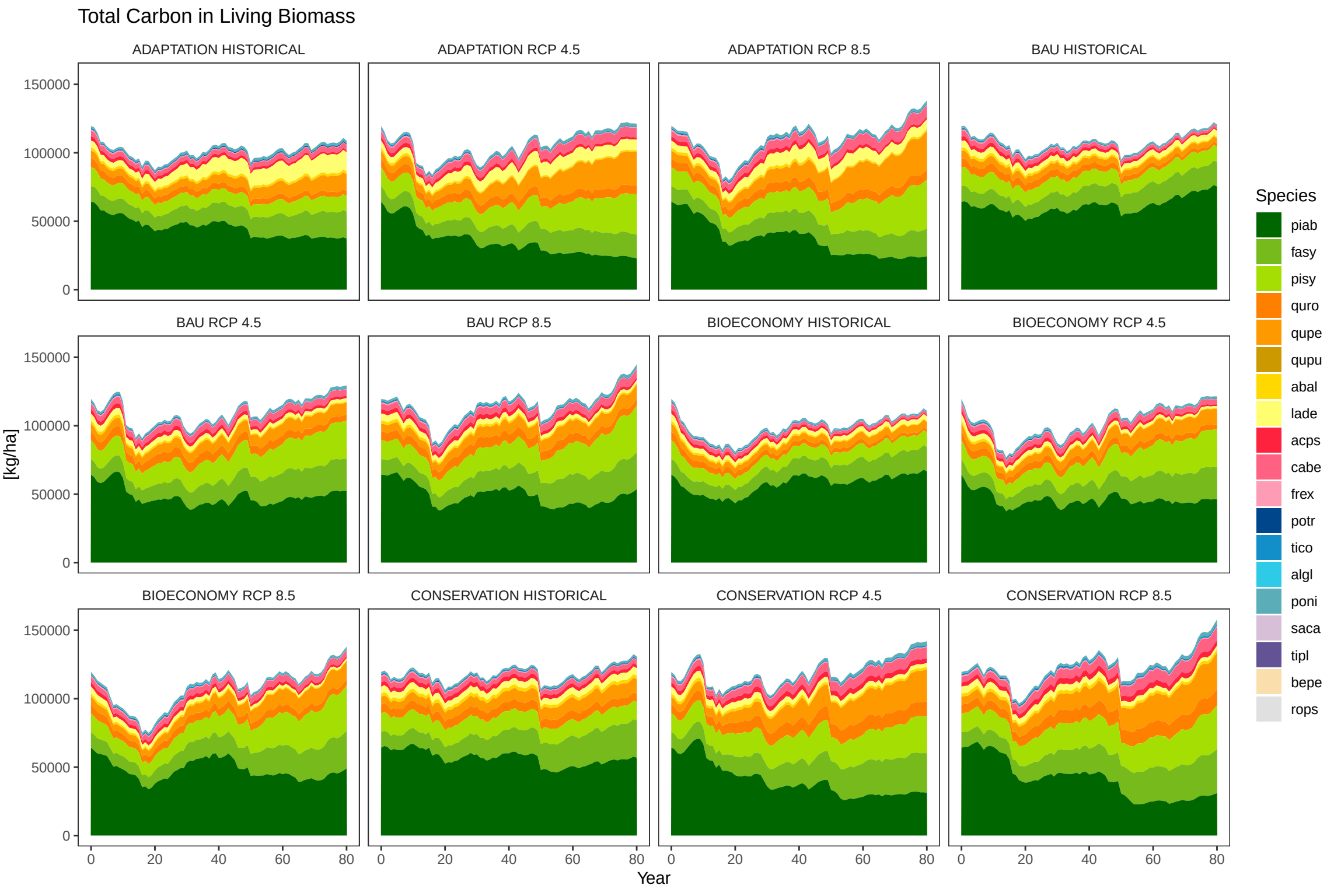

Basal area by dominat species
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Basal area [m2/ha]
year
species
fasy
piab
pisy
qupe

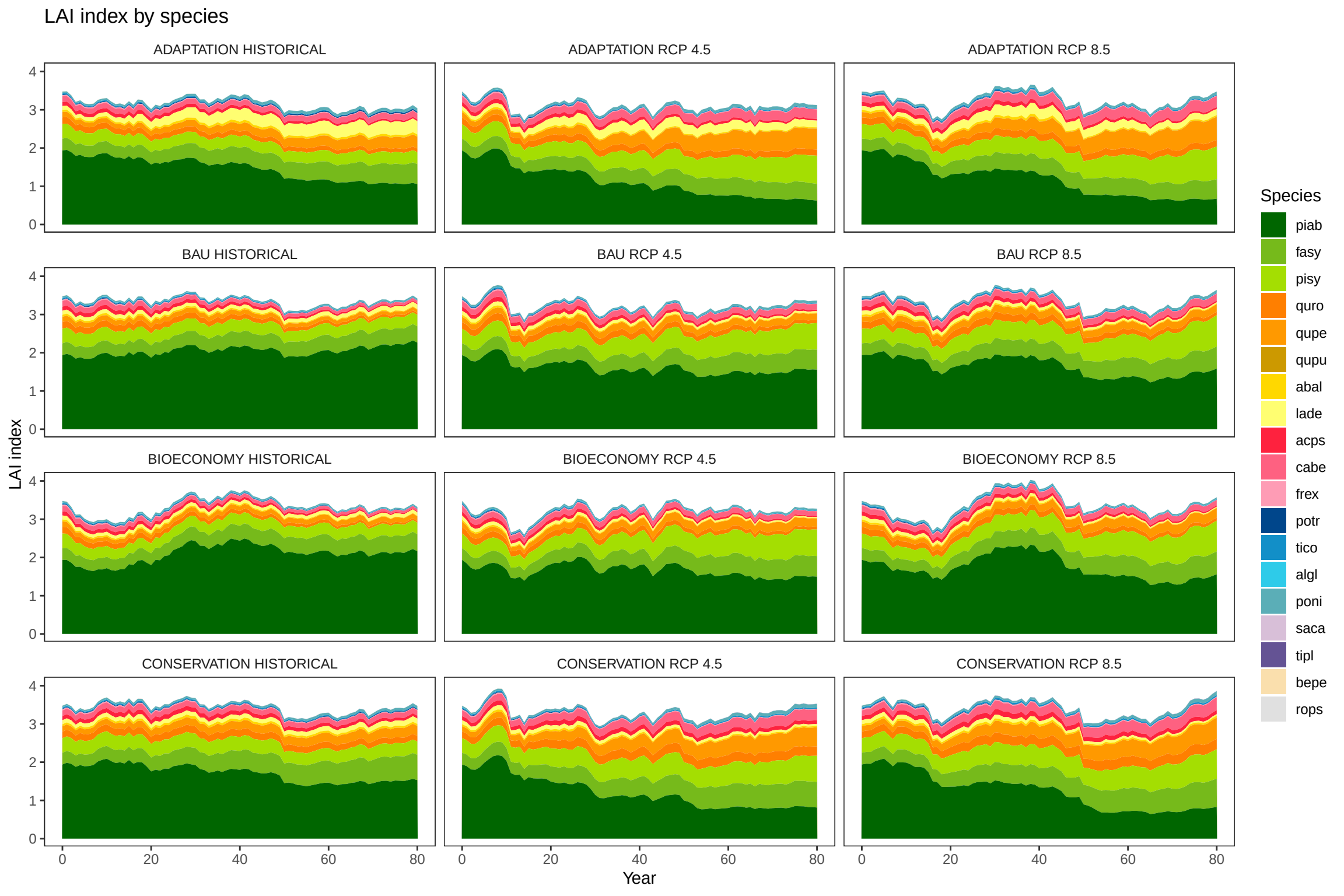

Total Basal Area
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Basal Area [m2/ha]
0
10
20
30
Year
0
20
40
60
80
Species
piab
fasy
pisy
quro
qupe
qupu
abal
lade
acps
cabe
frex
potr
tico
algl
poni
saca
tipl
bepe
rops

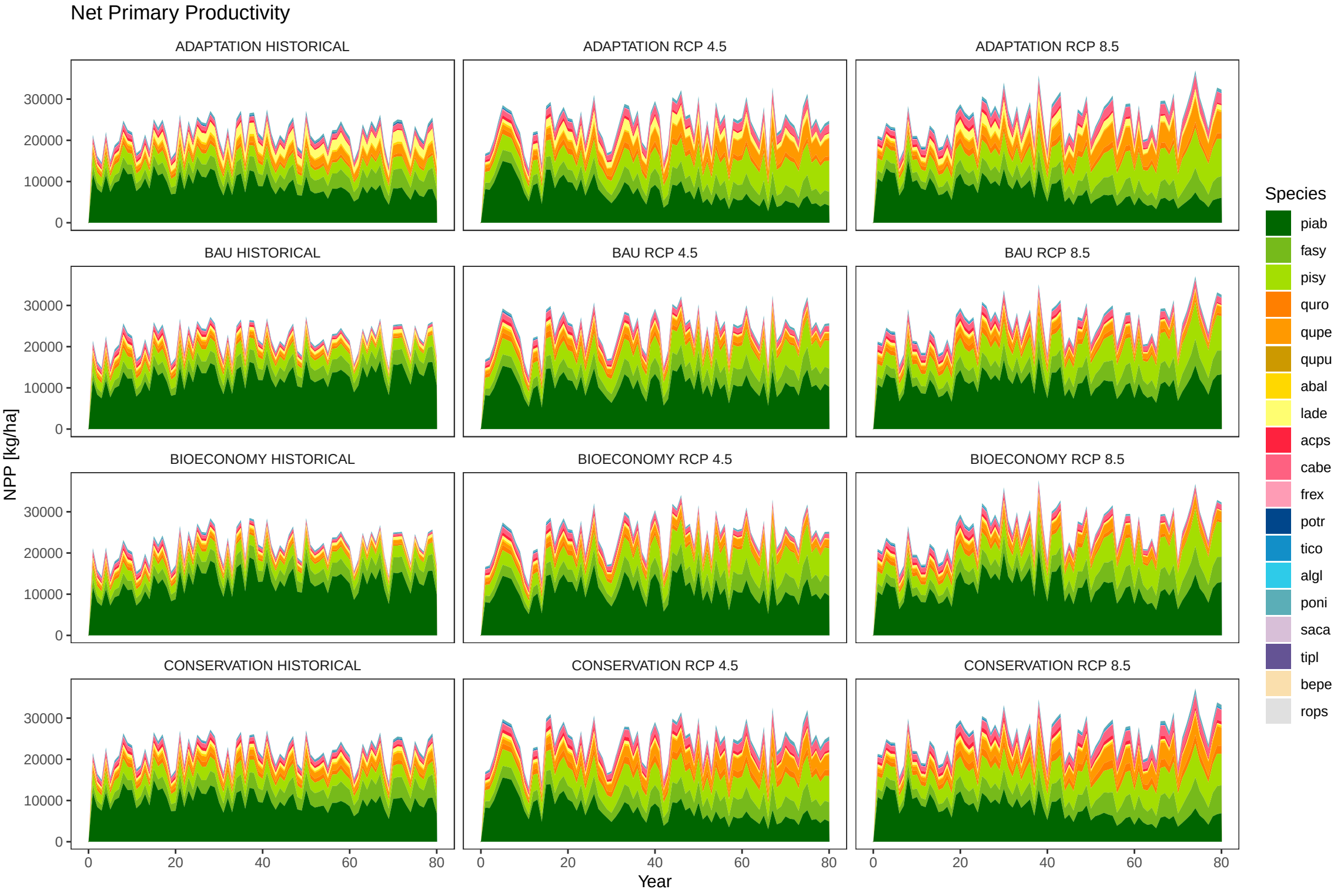

Avarage DBH by dominat species
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
DBH [cm]
year
species
fasy
piab
pisy
qupe

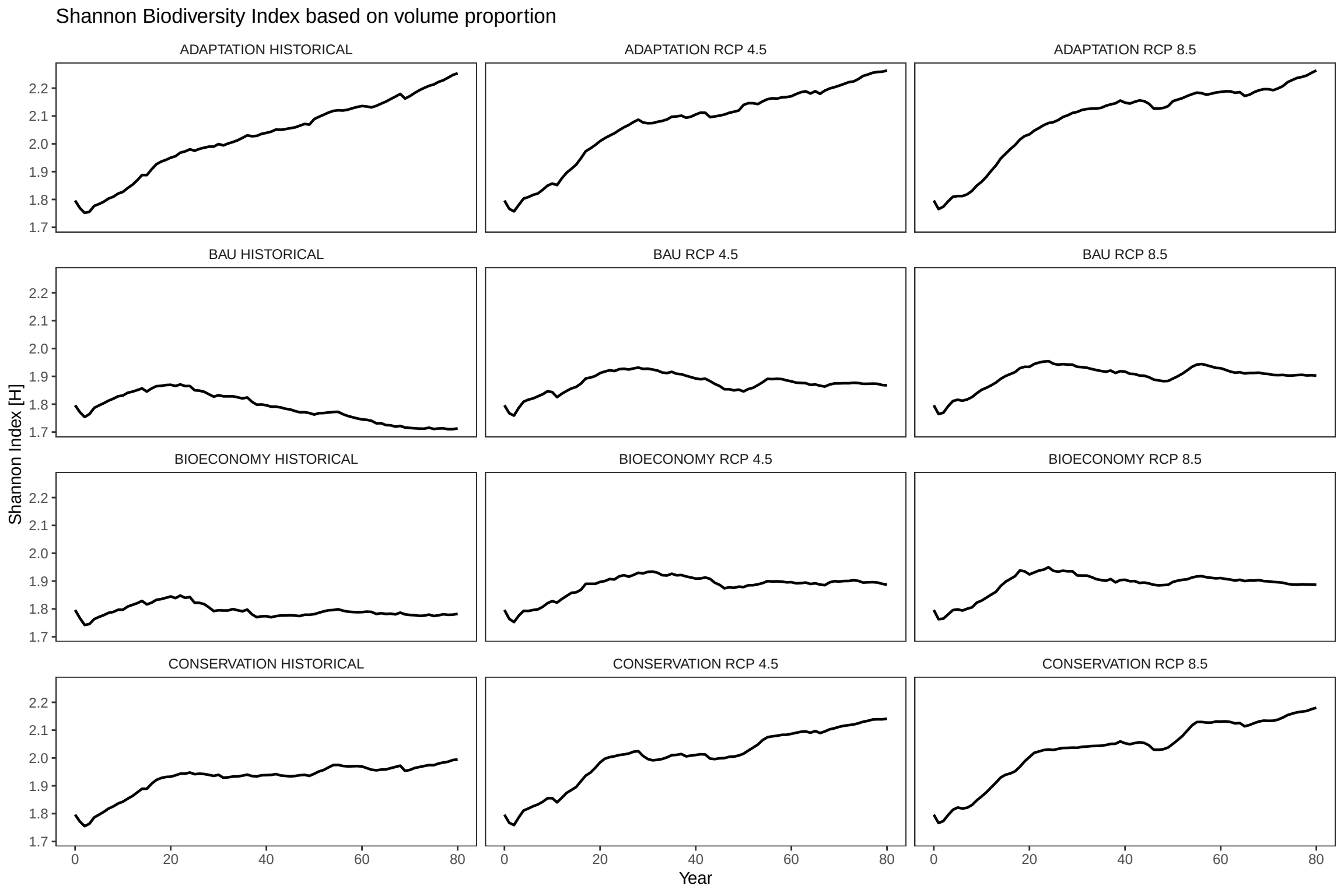

N. individual stems by species
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Individual stems
0
100
200
300
400
500
year
0
20
40
60
80
species
fasy
piab
pisy
qupe

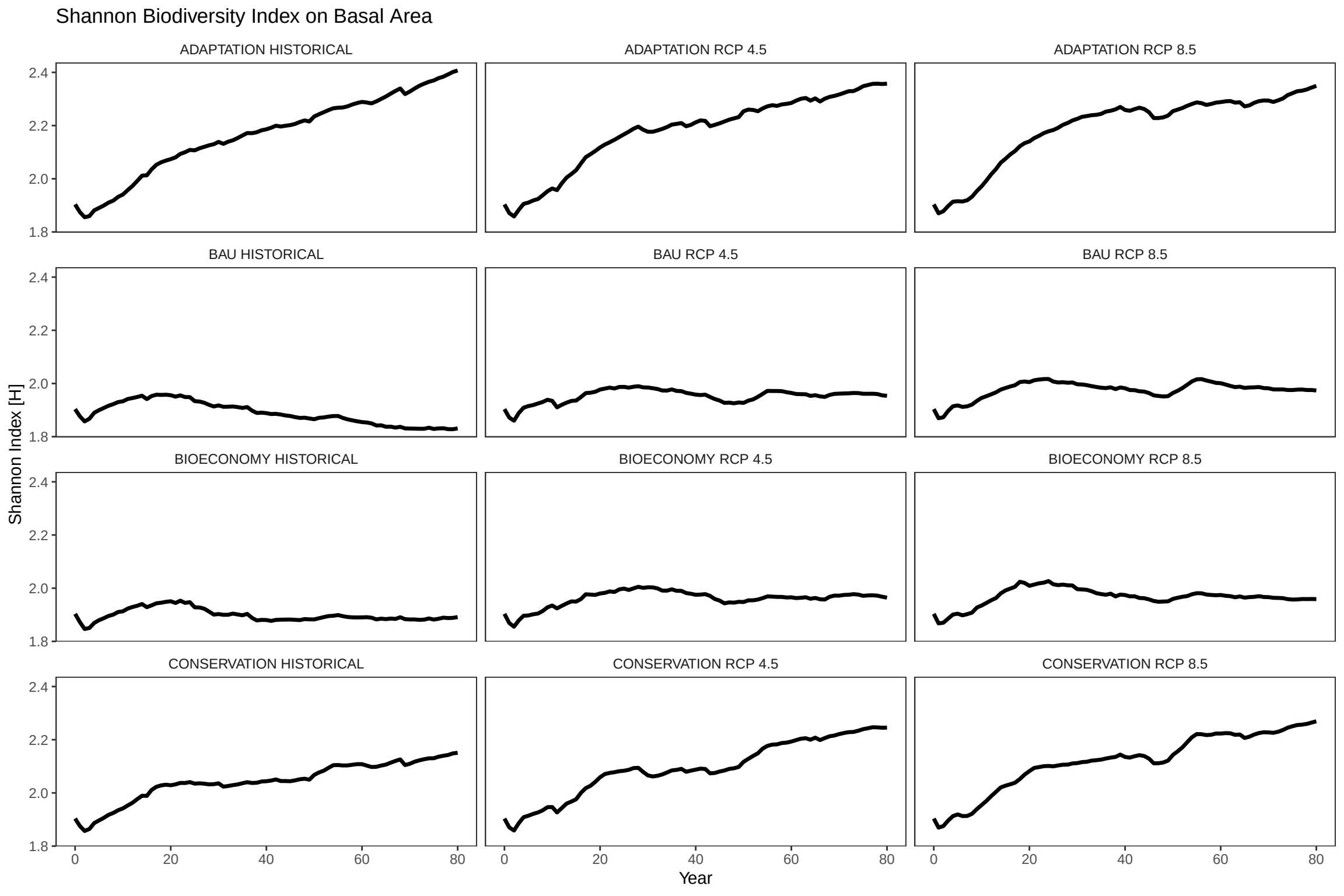

N. individual stems by species
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Individual Stems
0
300
600
900
Year
0
20
40
60
80
Species
piab
fasy
pisy
quro
qupe
qupu
abal
lade
acps
cabe
frex
potr
tico
algl
poni
saca
tipl
bepe
rops

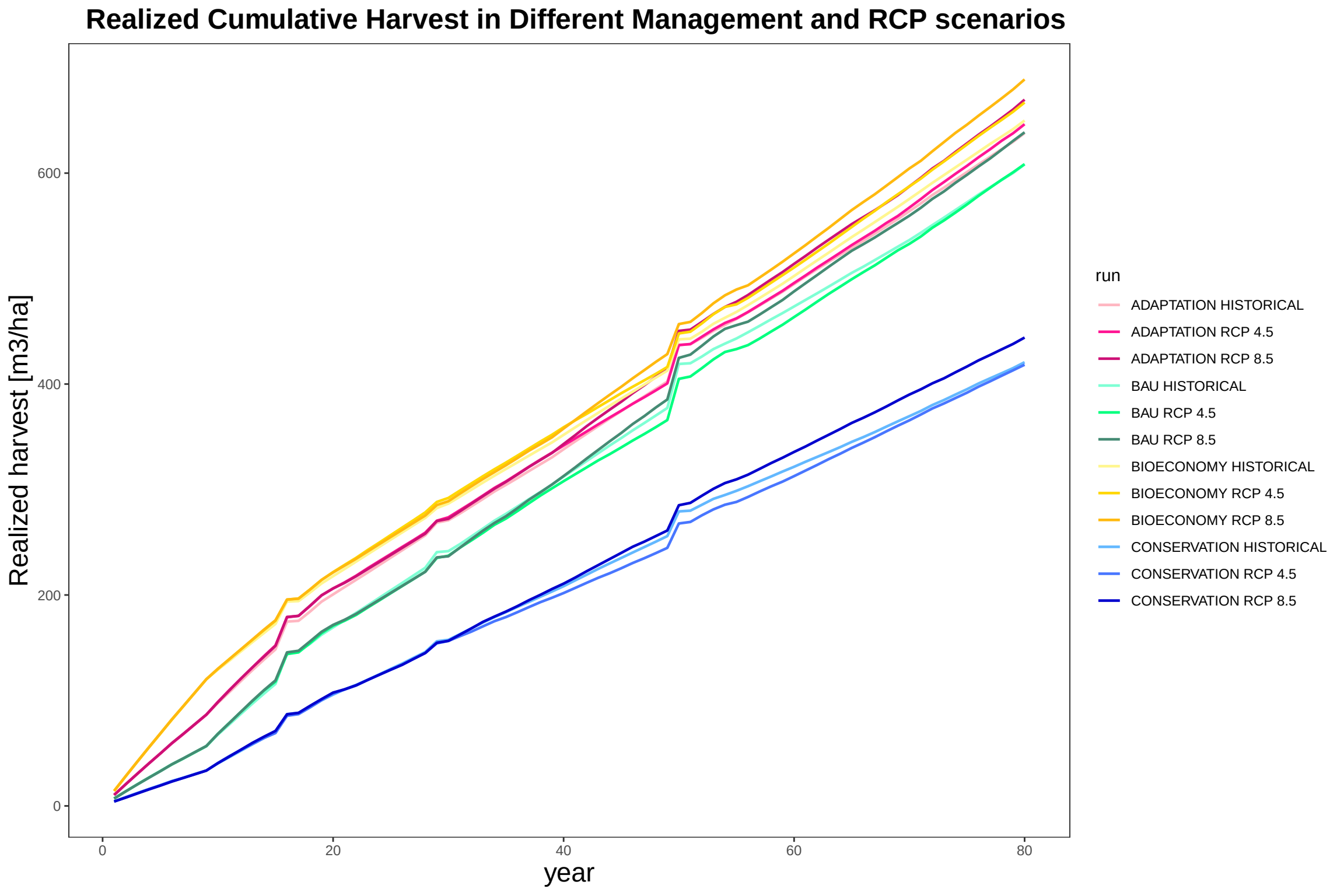

Total Carbon in Living Biomass
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
[kg/ha]
150000
100000
50000
0
0
20
40
60
80
Year
Species
piab
fasy
pisy
quro
qupe
qupu
abal
lade
acps
cabe
frex
potr
tico
algl
poni
saca
tipl
bepe
rops

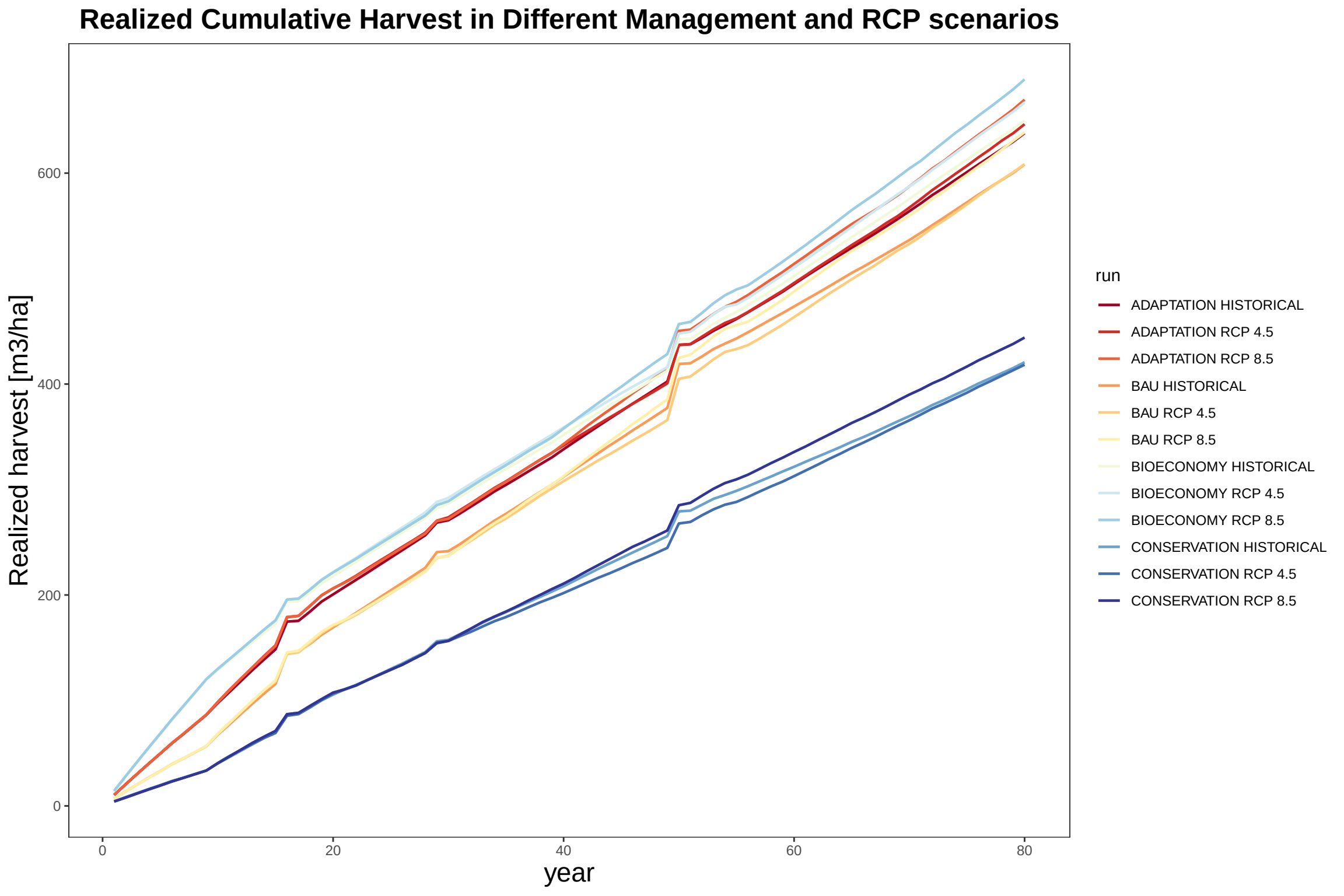

LAI index by species
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
LAI index
Year
0
20
40
60
80
0
1
2
3
4
Species
piab
fasy
pisy
quro
qupe
qupu
abal
lade
acps
cabe
frex
potr
tico
algl
poni
saca
tipl
bepe
rops

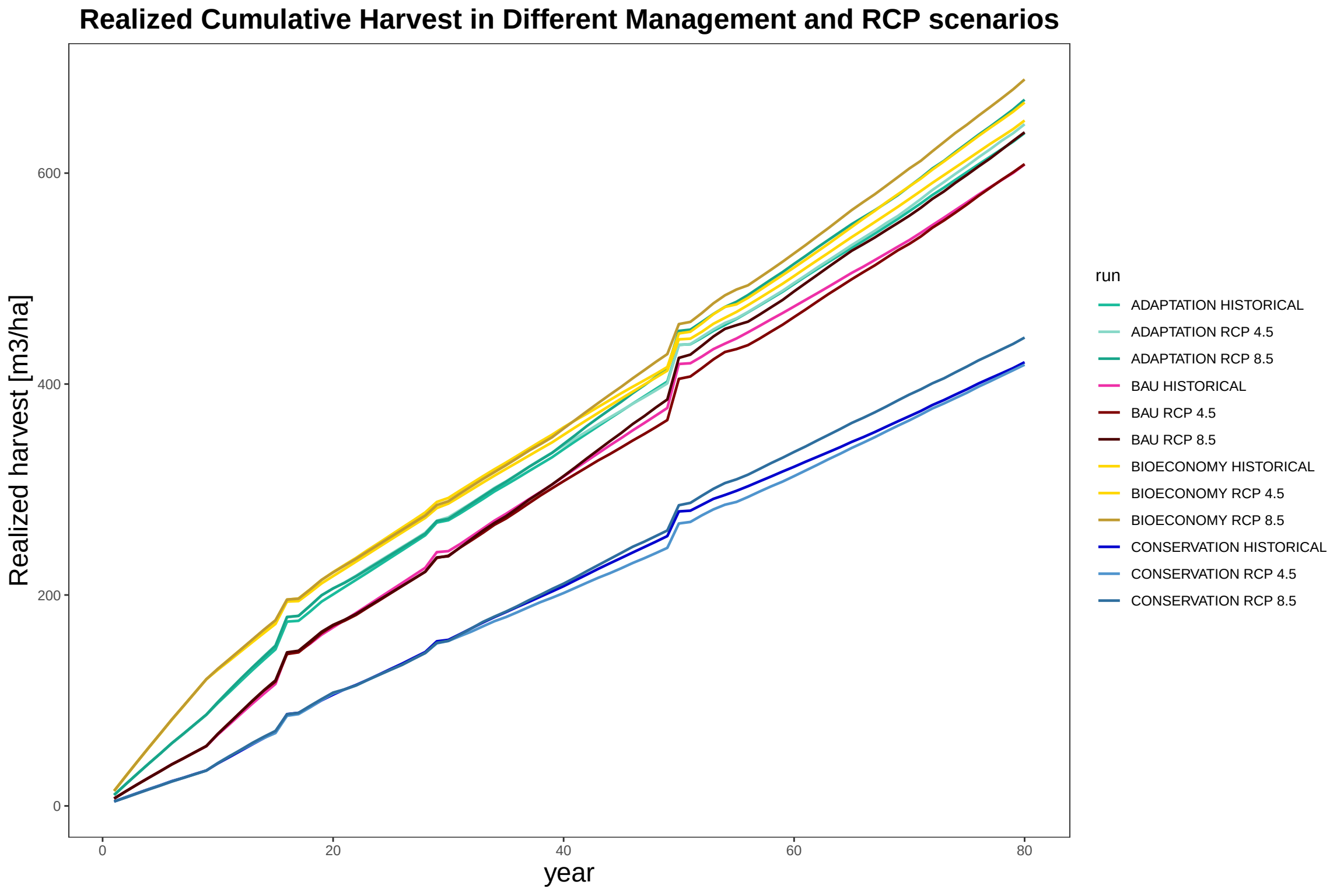

Net Primary Productivity
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
NPP [kg/ha]
0
10000
20000
30000
Year
0
20
40
60
80
Species
piab
fasy
pisy
quro
qupe
qupu
abal
lade
acps
cabe
frex
potr
tico
algl
poni
saca
tipl
bepe
rops

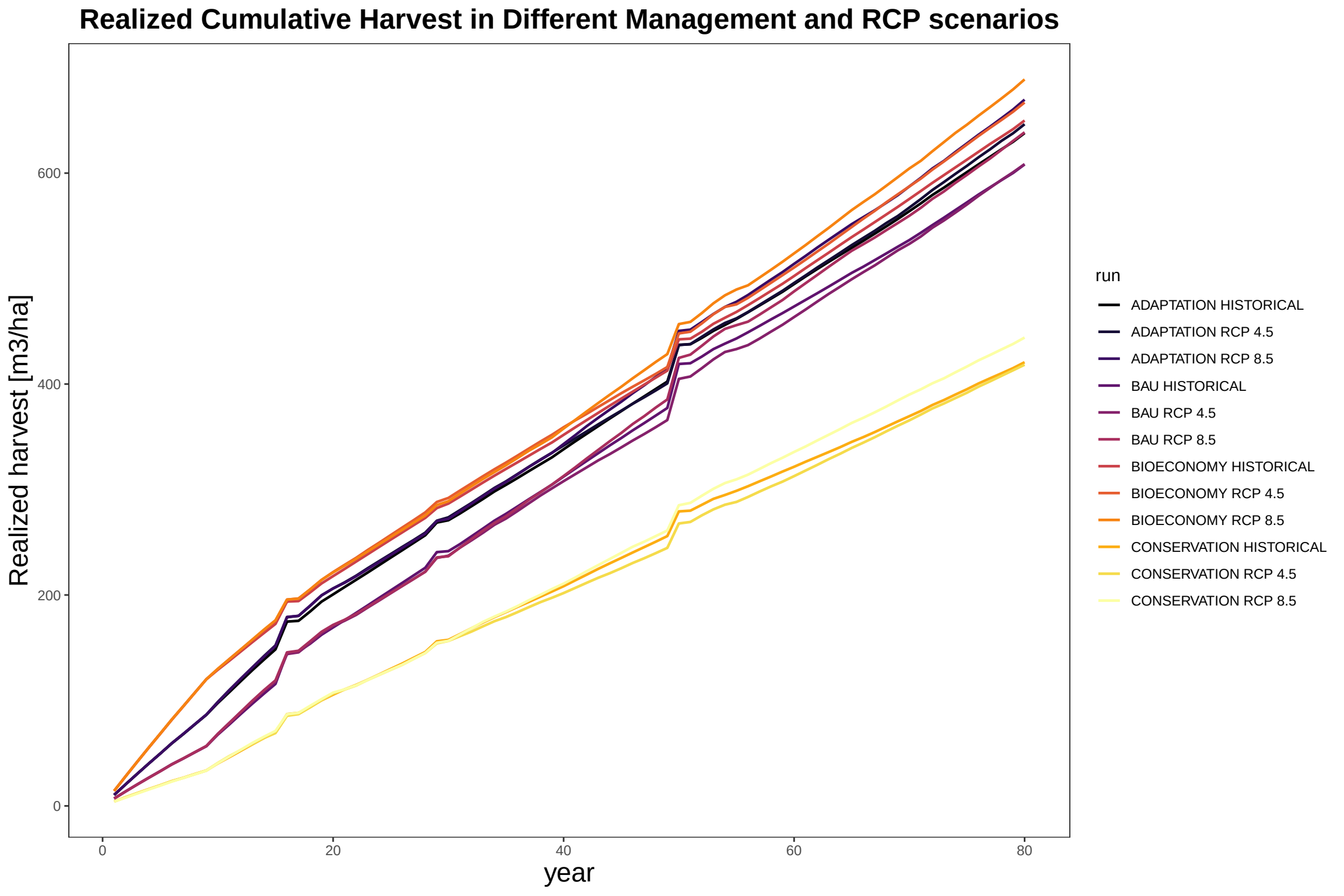

Shannon Biodiversity Index based on volume proportion
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Shannon Index [H]
1.7
1.8
1.9
2.0
2.1
2.2
0
20
40
60
80
Year

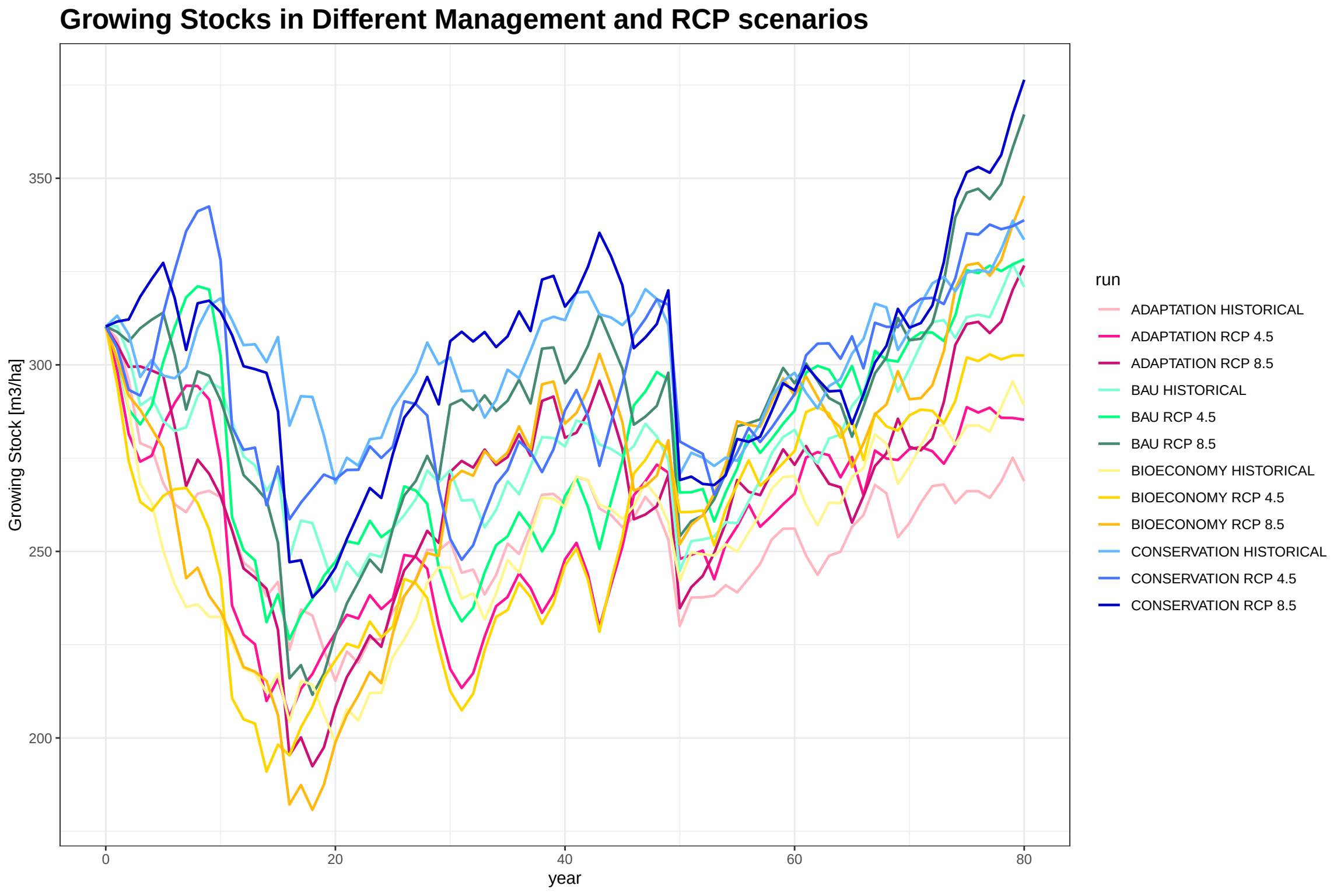

Shannon Biodiversity Index on Basal Area
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Shannon Index [H]
2.4
2.2
2.0
1.8
0
20
40
60
80
Year


Realized Cumulative Harvest in Different Management and RCP scenarios
Realized harvest [m3/ha]
0
200
400
600
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

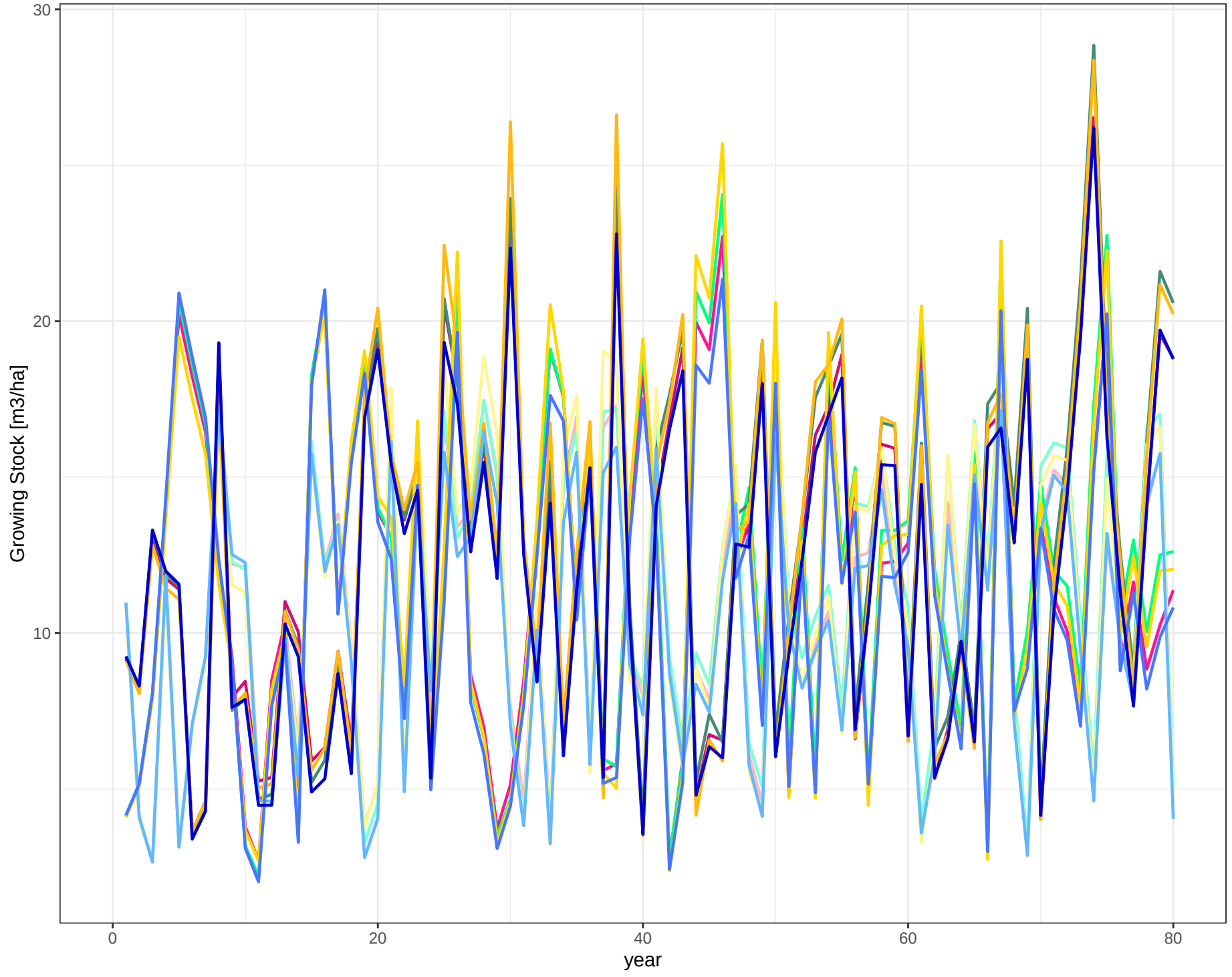

Realized Cumulative Harvest in Different Management and RCP scenarios
Realized harvest [m3/ha]
0
200
400
600
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5


Realized Cumulative Harvest in Different Management and RCP scenarios
Realized harvest [m3/ha]
0
200
400
600
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5


Realized Cumulative Harvest in Different Management and RCP scenarios
Realized harvest [m3/ha]
0
200
400
600
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5


Growing Stocks in Different Management and RCP scenarios
Growing Stock [m3/ha]
350
300
250
200
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

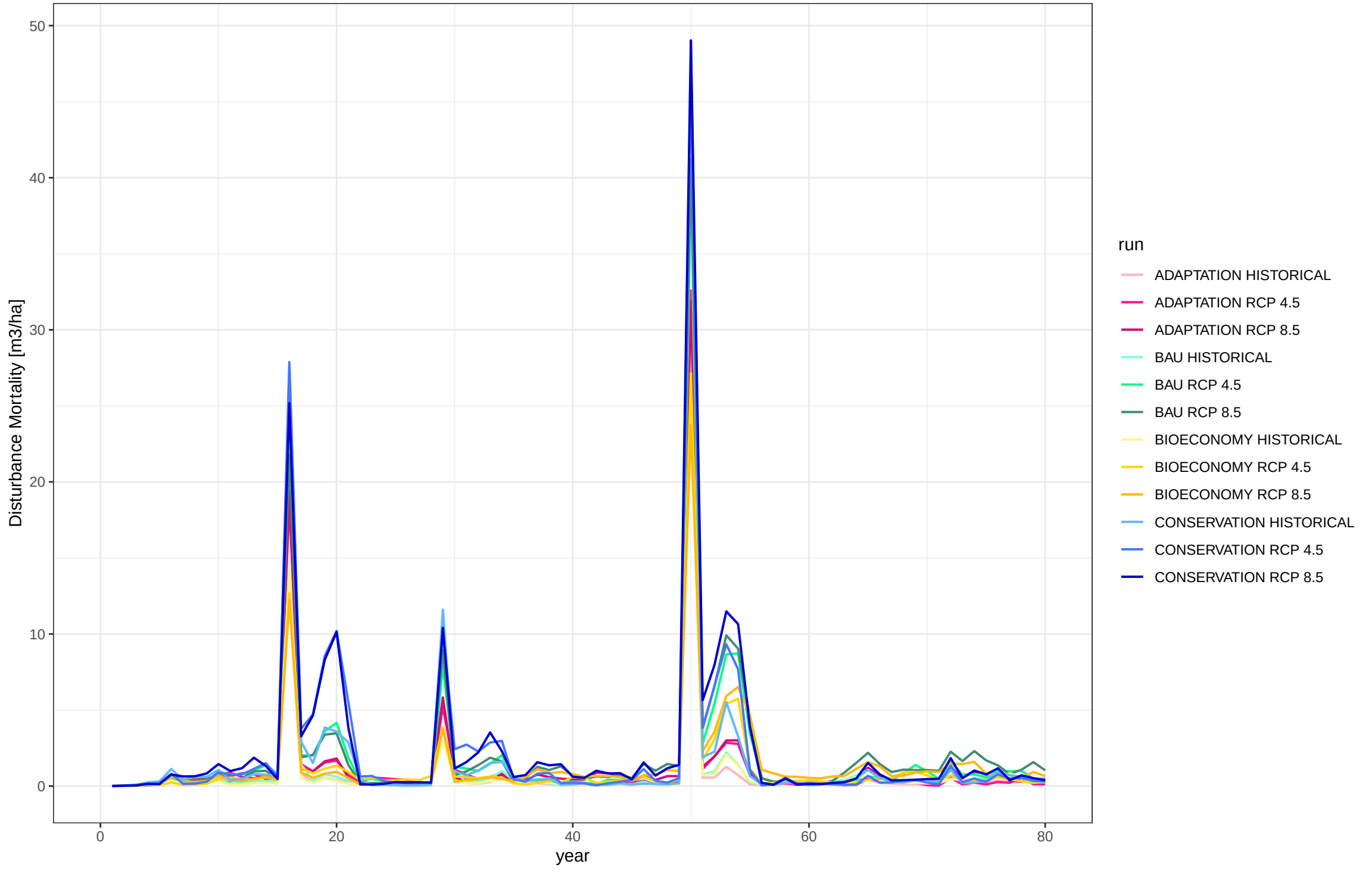
Annual Increment in Different Management and RCP scenarios



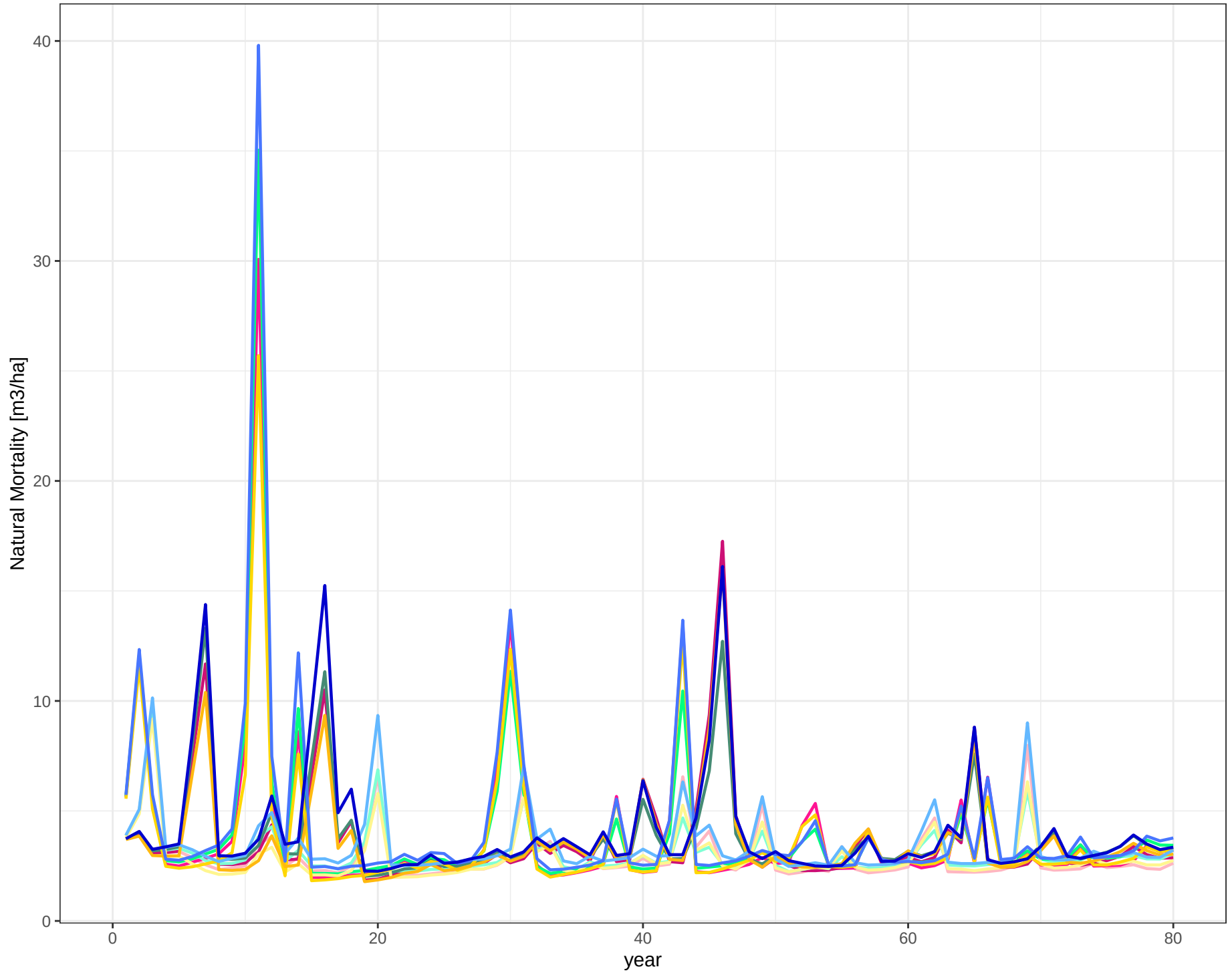
run

- ADAPTATION HISTORICAL
- ADAPTATION RCP 4.5
- ADAPTATION RCP 8.5
- BAU HISTORICAL
- BAU RCP 4.5
- BAU RCP 8.5
- BIOECONOMY HISTORICAL
- BIOECONOMY RCP 4.5
- BIOECONOMY RCP 8.5
- CONSERVATION HISTORICAL
- CONSERVATION RCP 4.5
- CONSERVATION RCP 8.5

Disturbance Mortality in Different Management and RCP scenarios



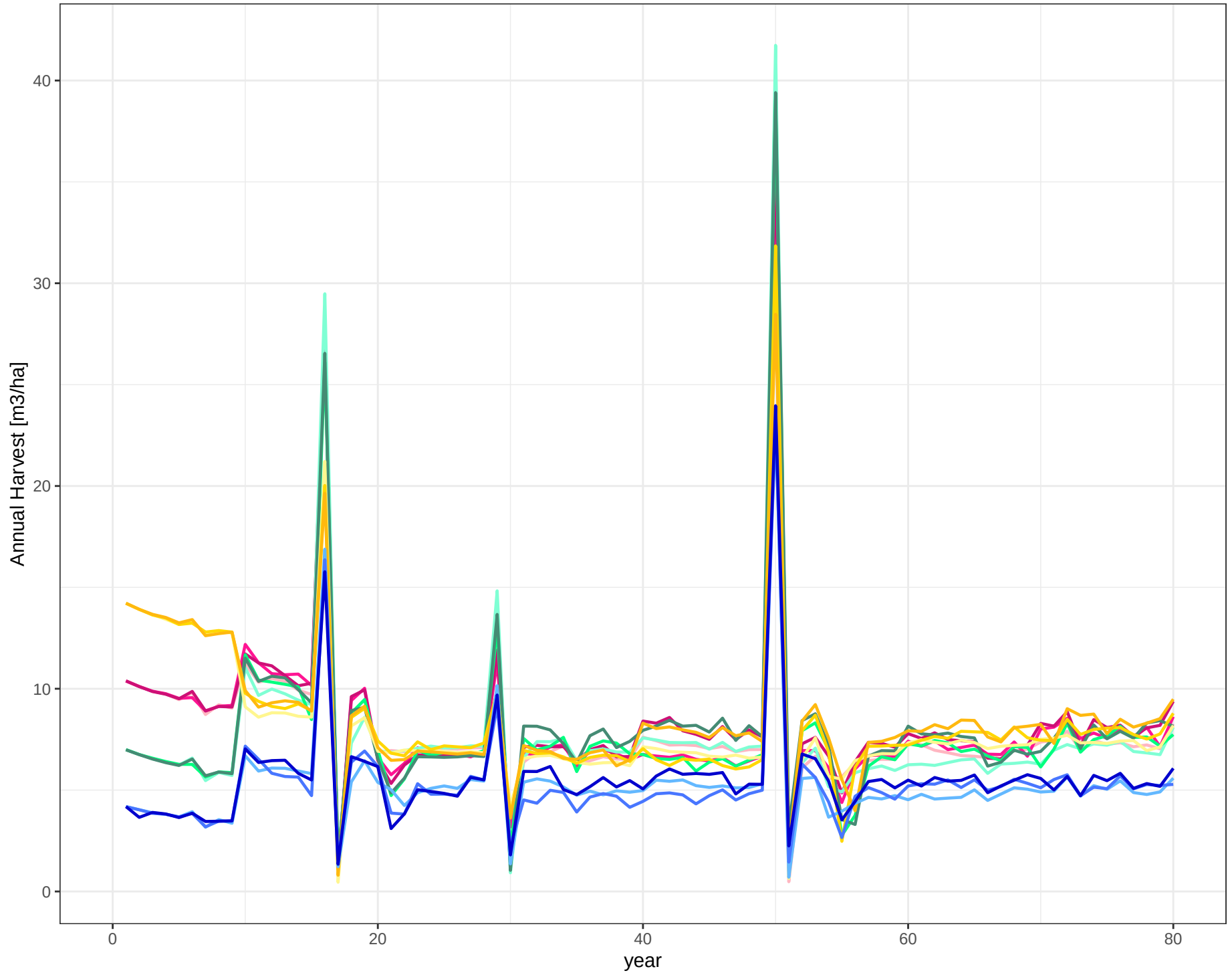
Natural Mortality in Different Management and RCP scenarios

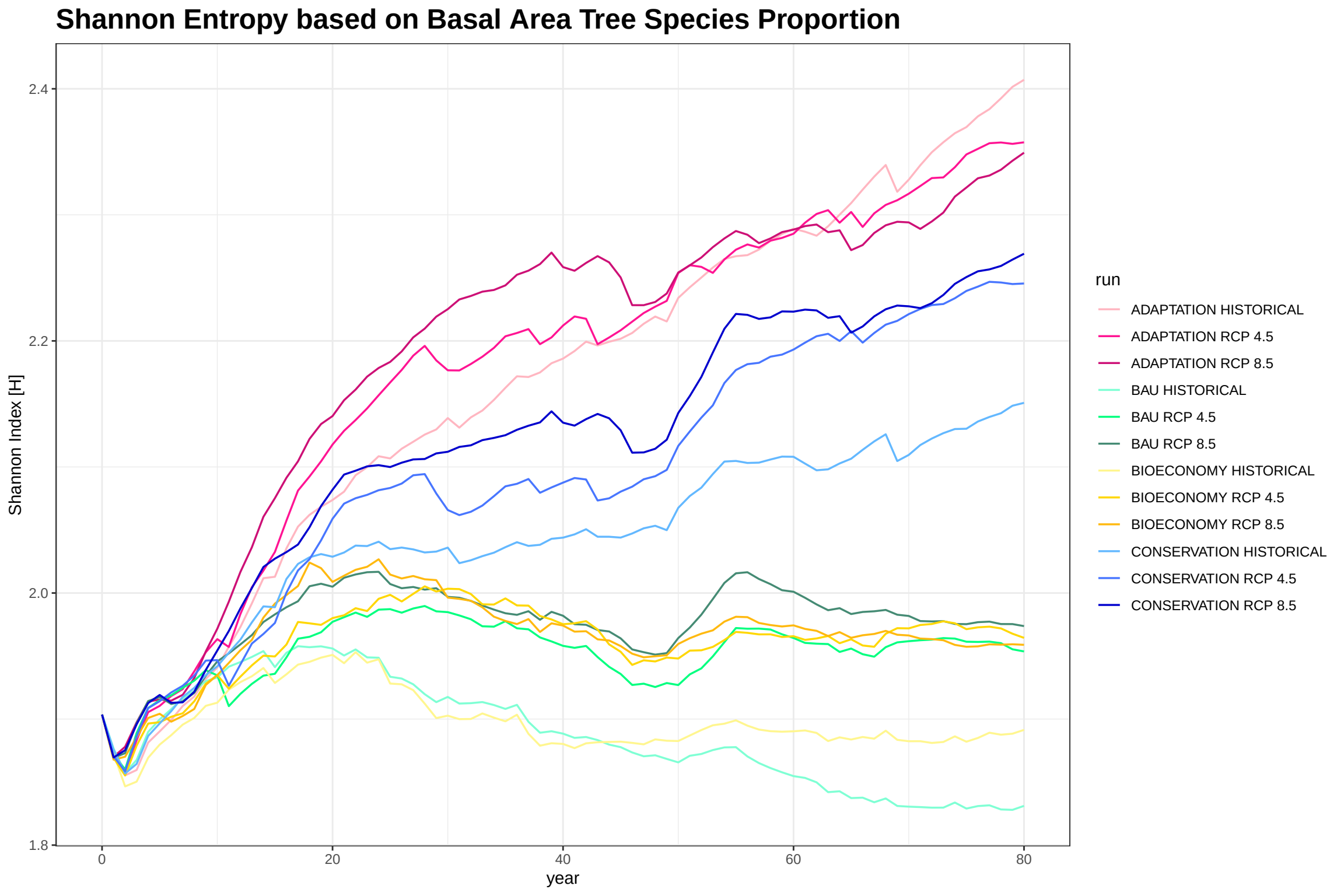


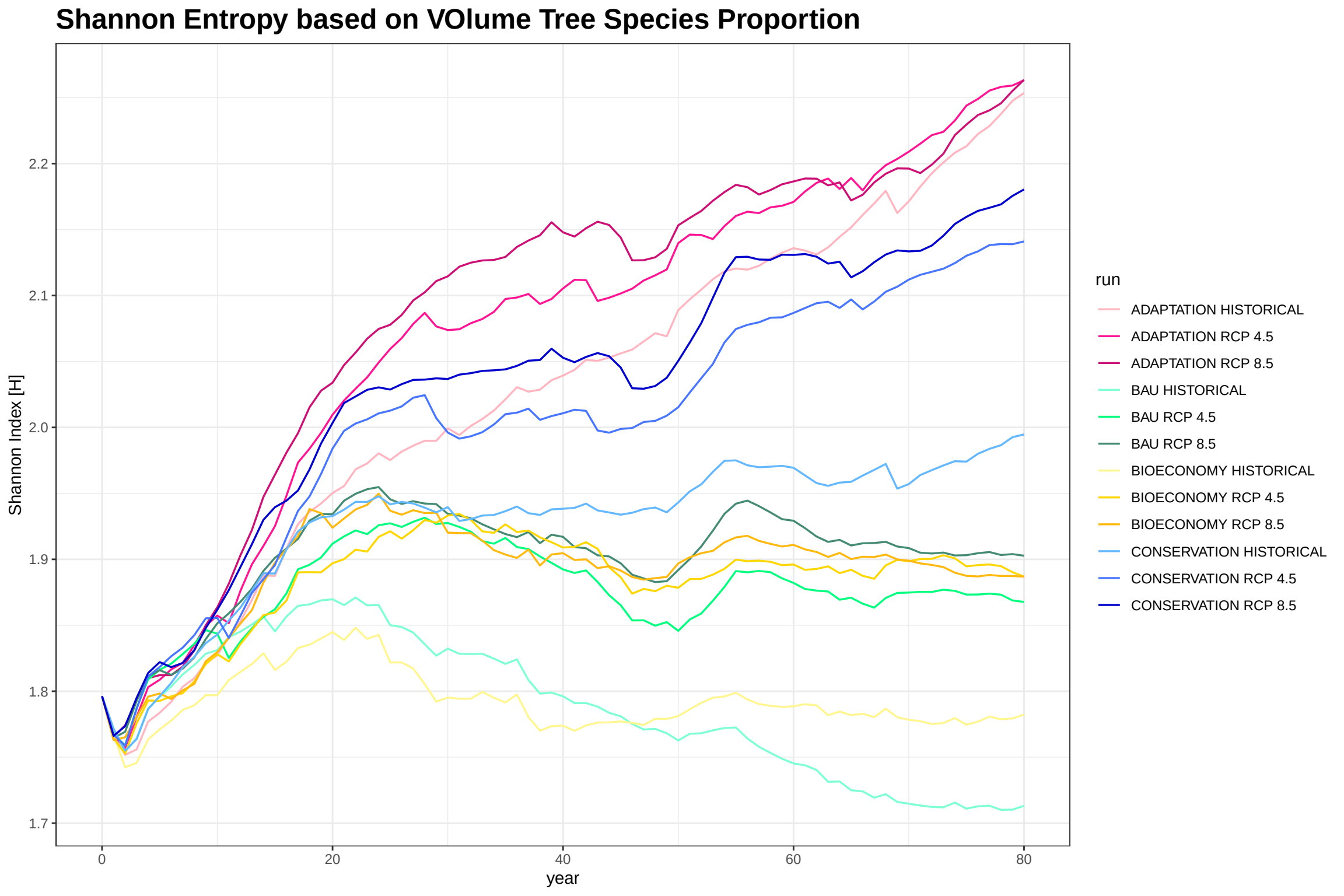
run

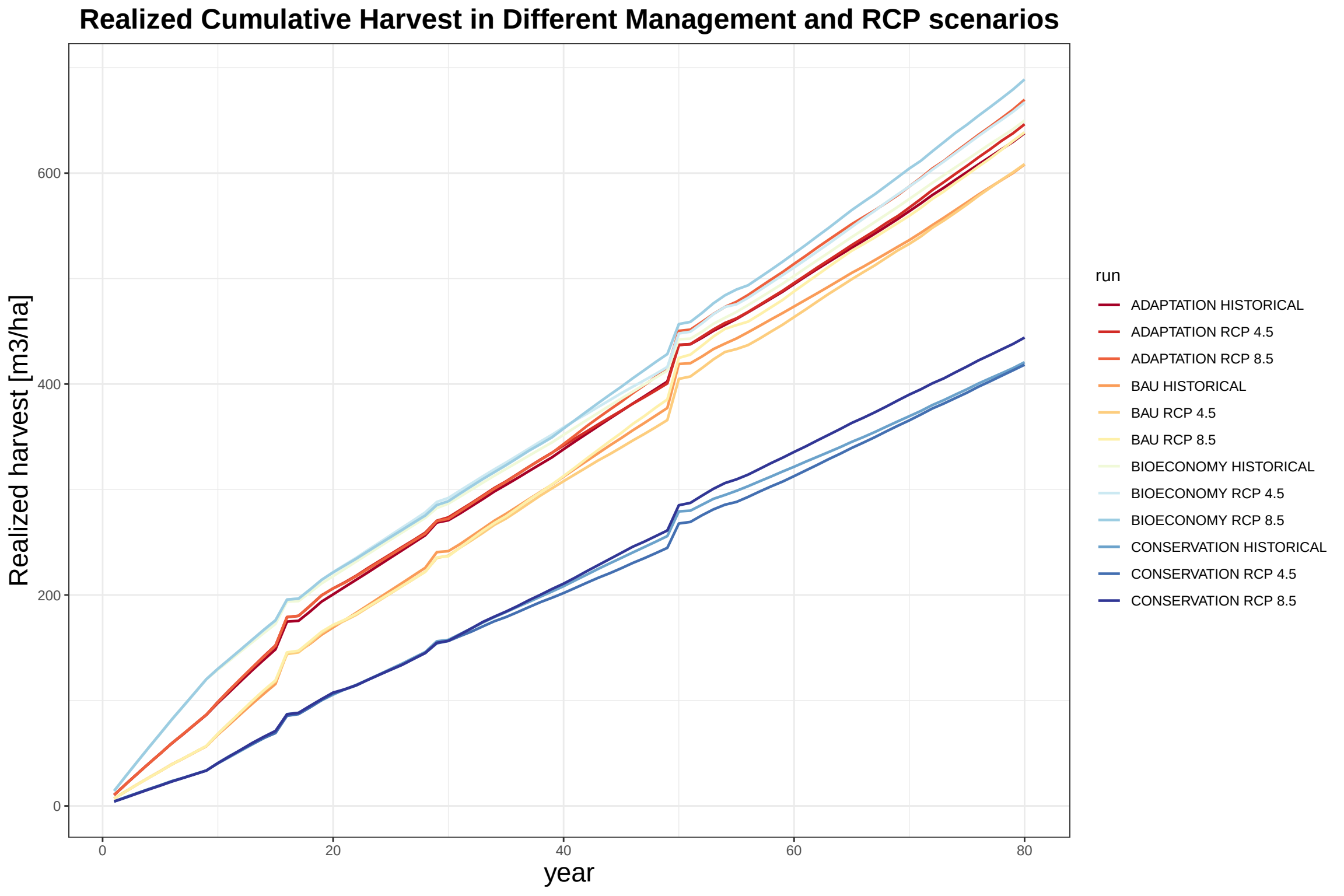
- ADAPTATION HISTORICAL
- ADAPTATION RCP 4.5
- ADAPTATION RCP 8.5
- BAU HISTORICAL
- BAU RCP 4.5
- BAU RCP 8.5
- BIOECONOMY HISTORICAL
- BIOECONOMY RCP 4.5
- BIOECONOMY RCP 8.5
- CONSERVATION HISTORICAL
- CONSERVATION RCP 4.5
- CONSERVATION RCP 8.5

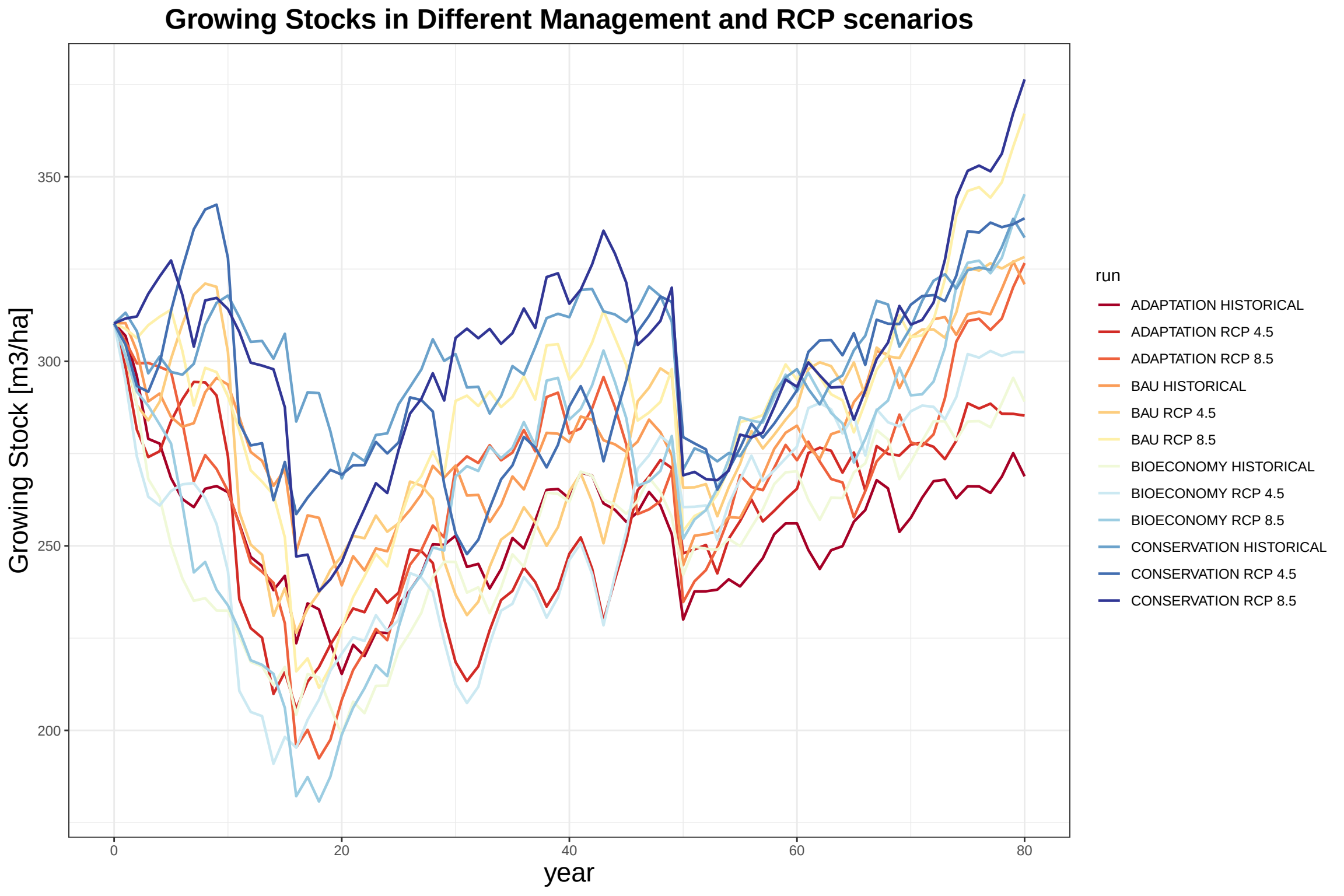
Annual Harvest in Different Management and RCP scenarios

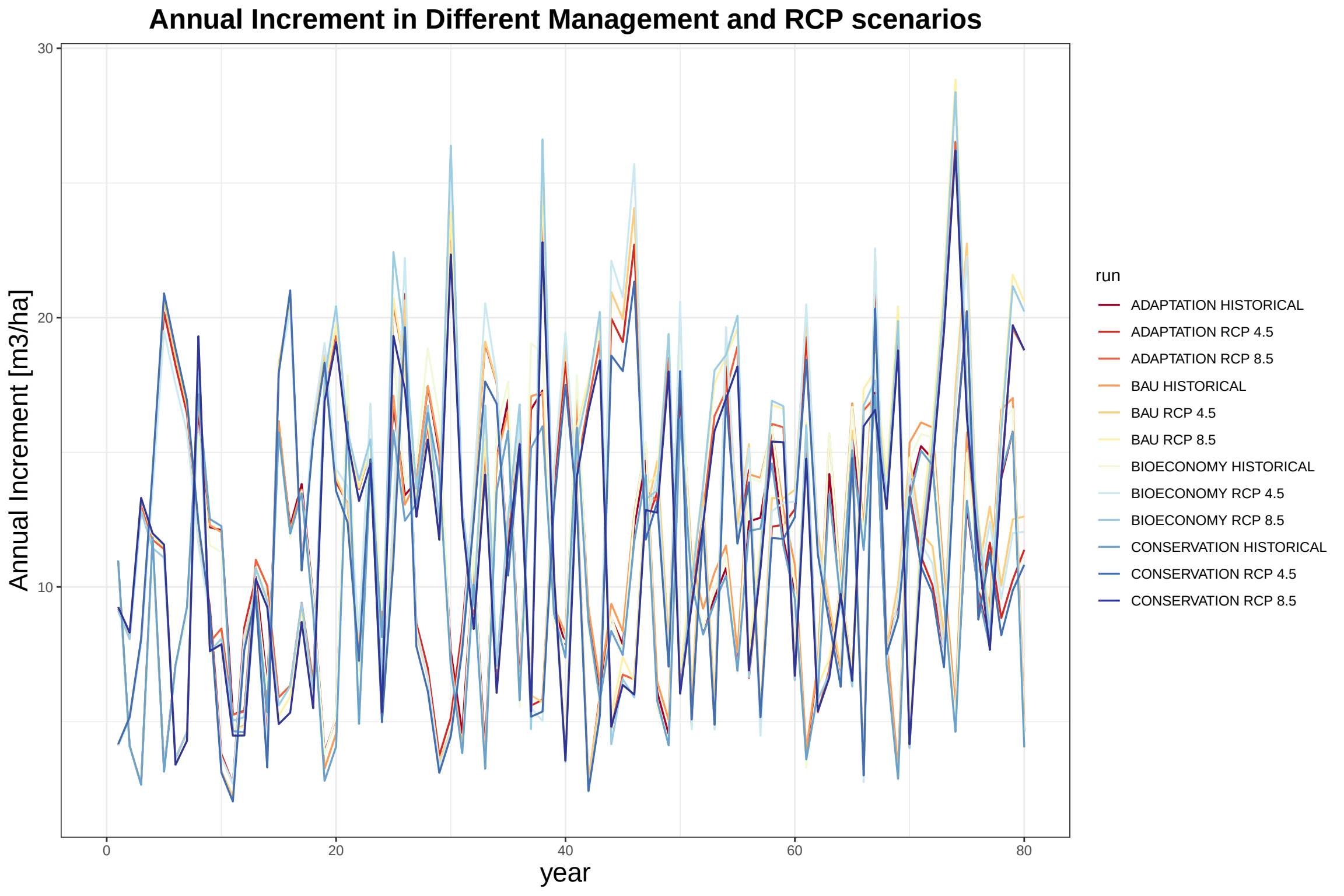


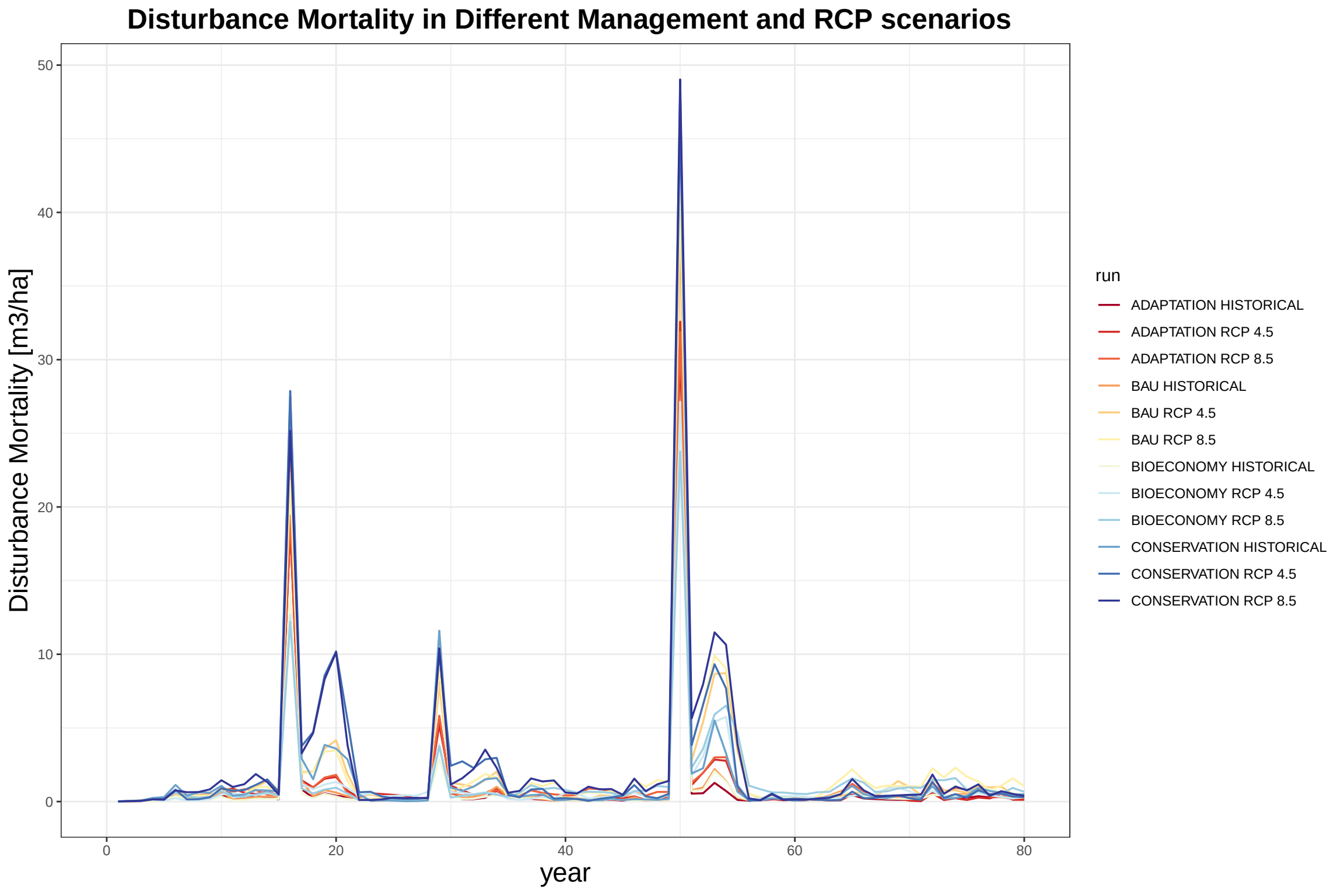

Shannon Entropy based on Basal Area Tree Species Proportion
Shannon Index [H]
2.4
2.2
2.0
1.8
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

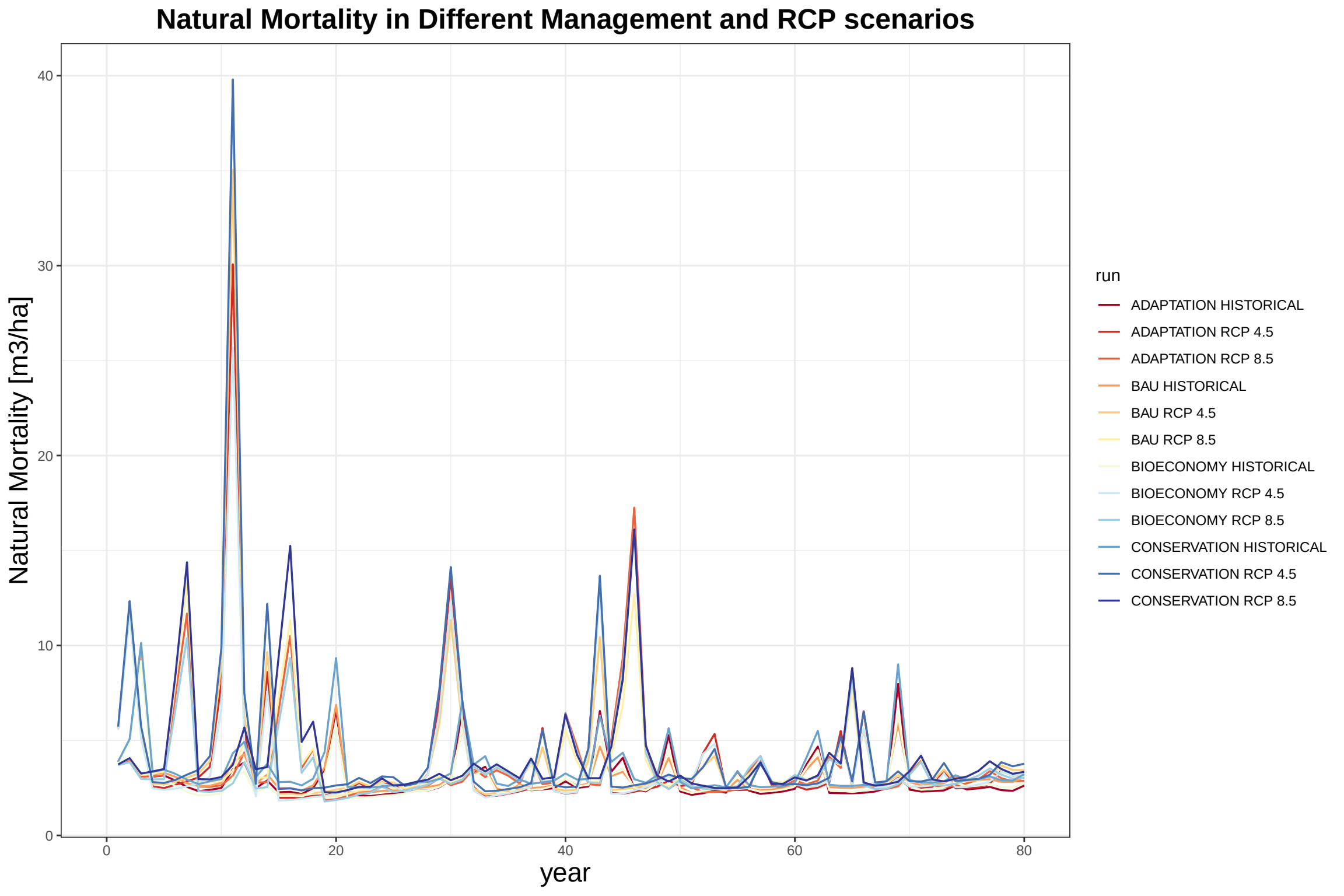

Shannon Entropy based on VOlume Tree Species Proportion
Shannon Index [H]
2.2
2.1
2.0
1.9
1.8
1.7
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

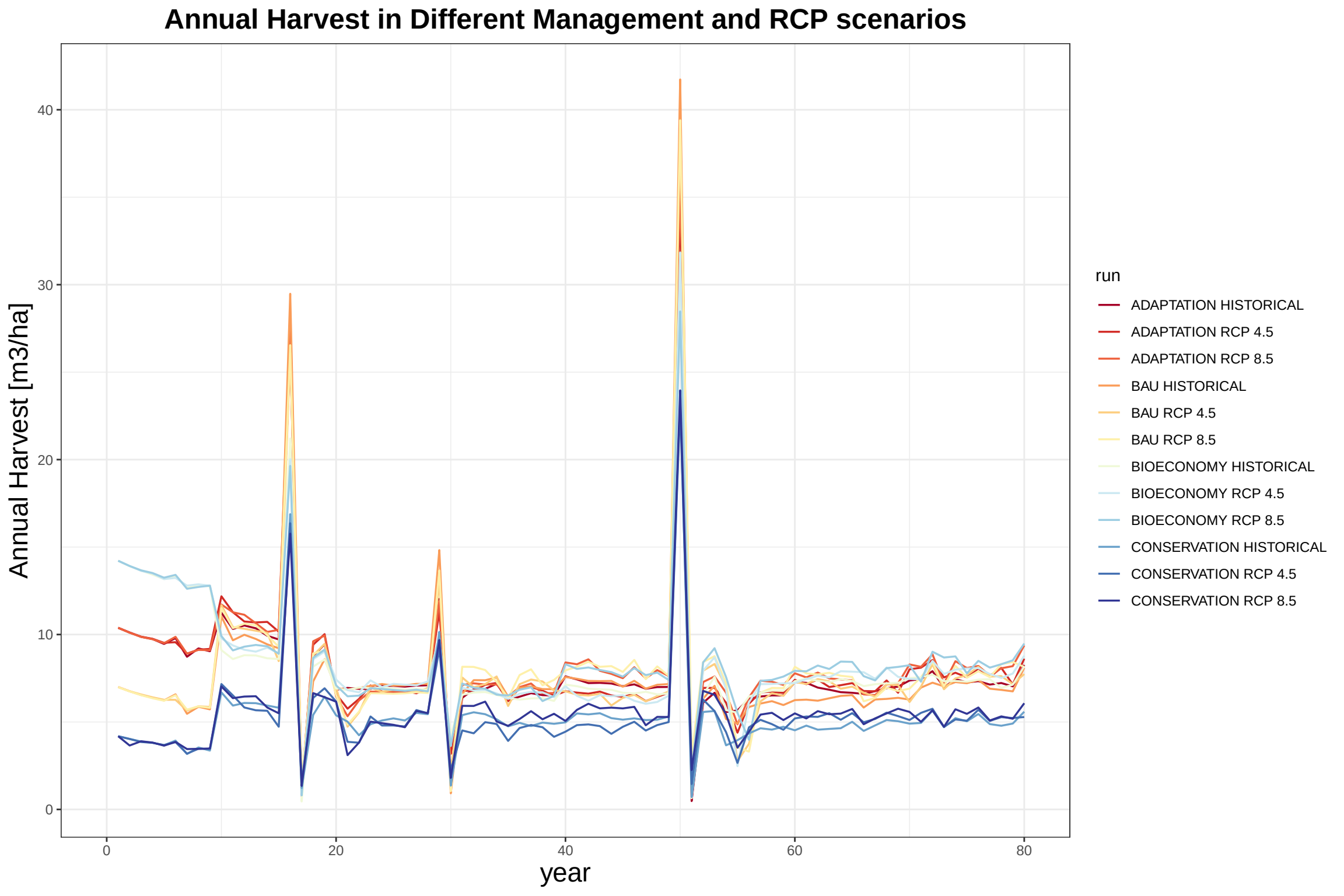

Realized Cumulative Harvest in Different Management and RCP scenarios
Realized harvest [m3/ha]
0
200
400
600
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

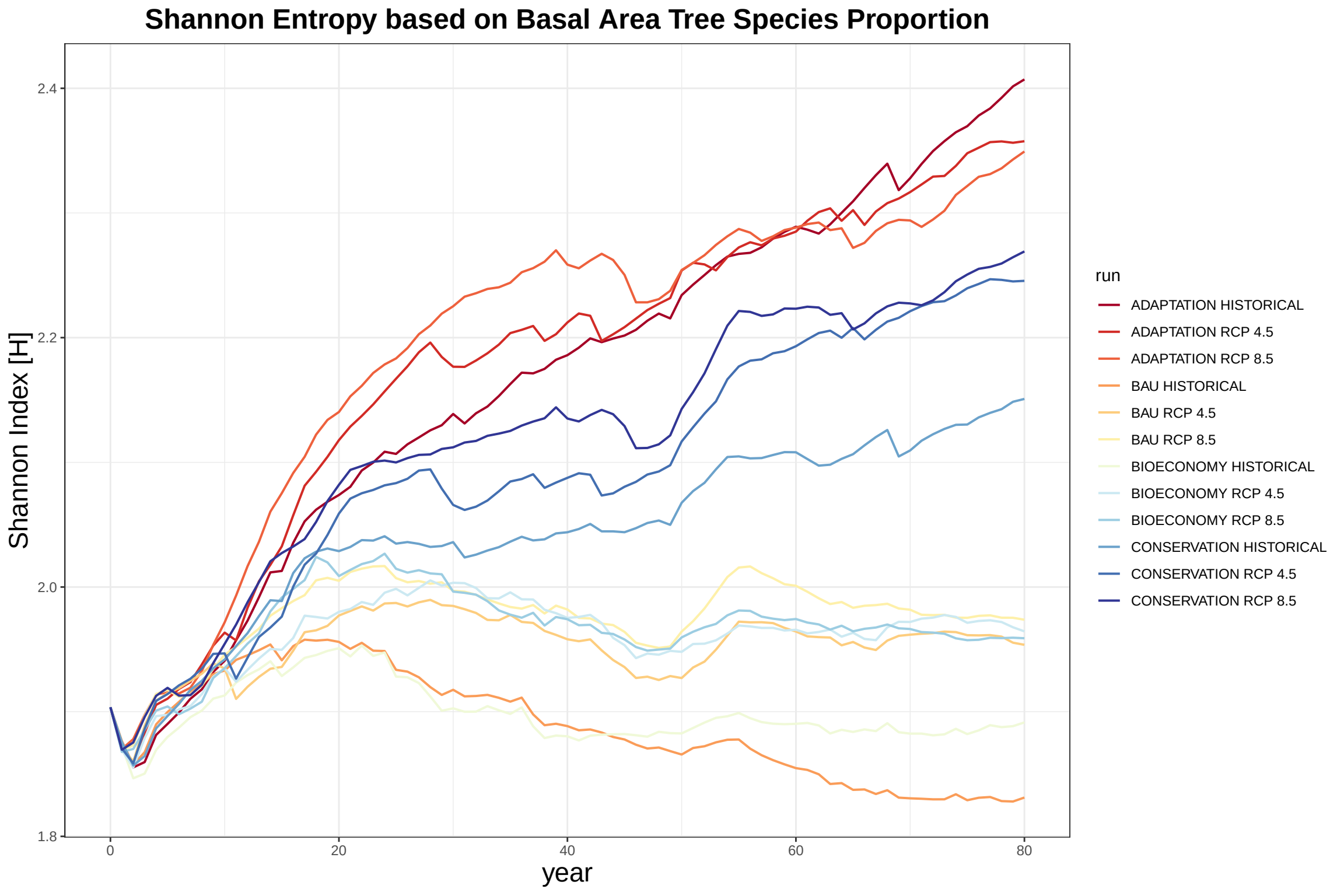

Growing Stocks in Different Management and RCP scenarios
Growing Stock [m3/ha]
350
300
250
200
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

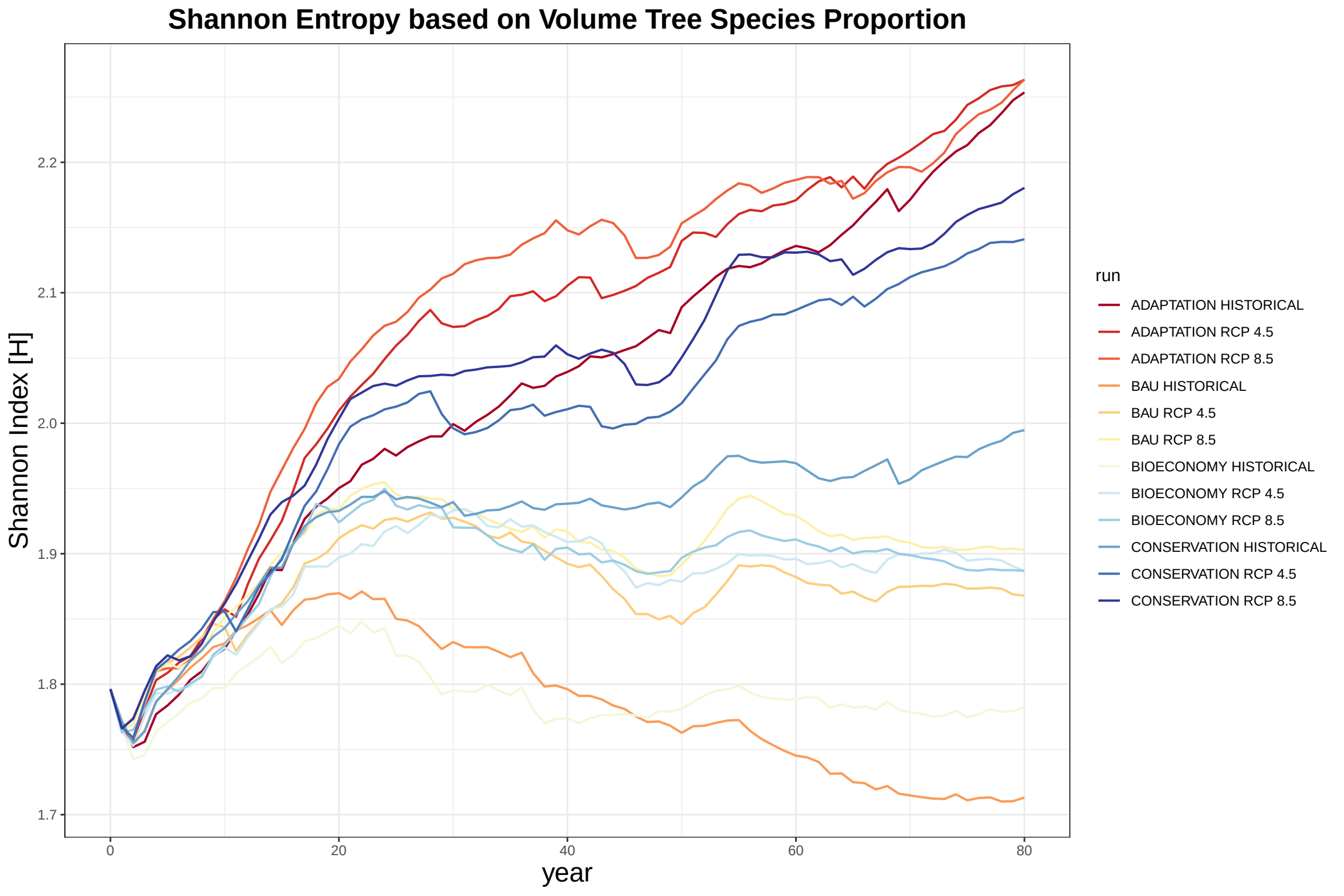

Annual Increment in Different Management and RCP scenarios
Annual Increment [m3/ha]
30
20
10
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

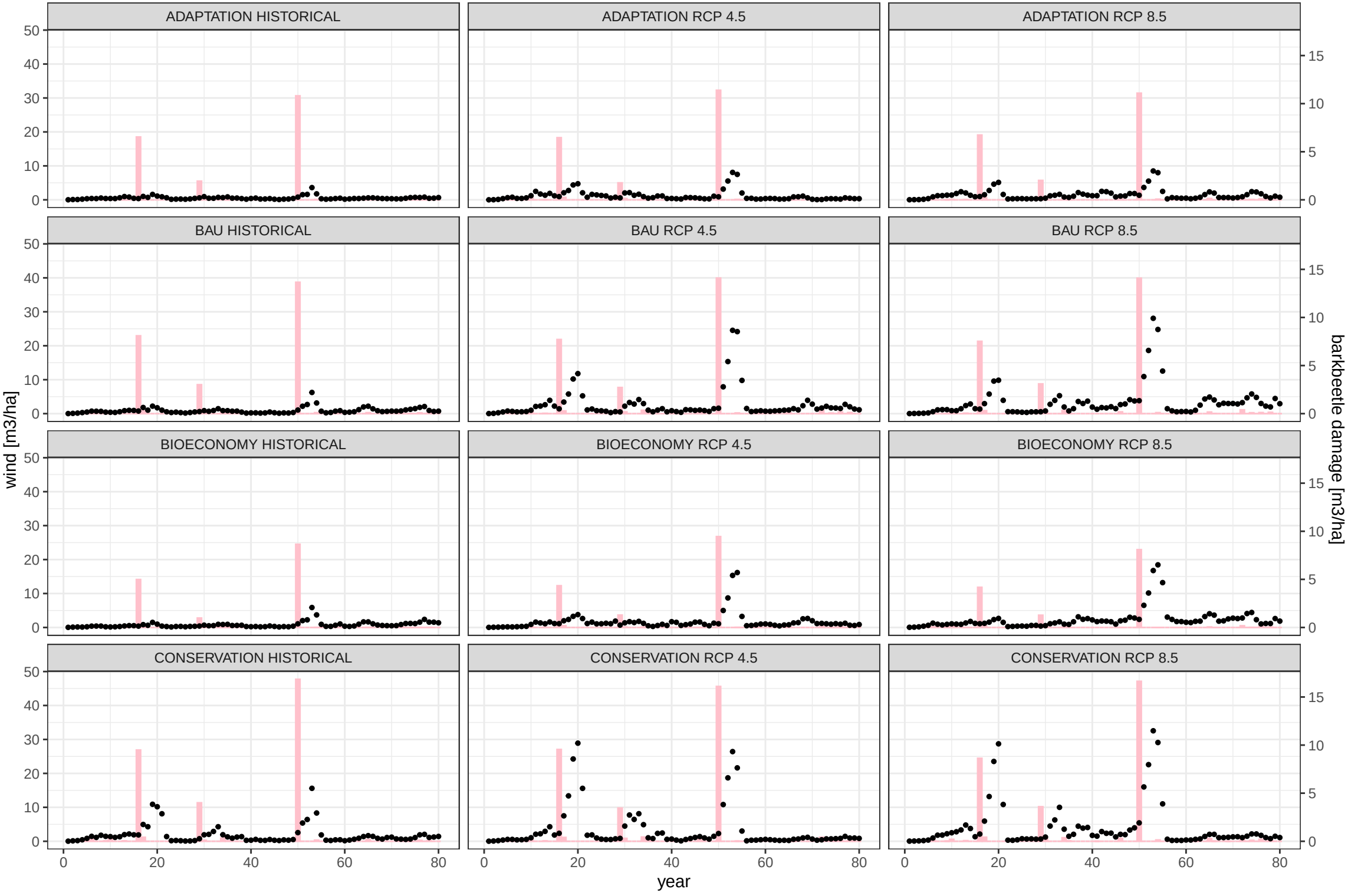

Disturbance Mortality in Different Management and RCP scenarios
Disturbance Mortality [m3/ha]
50
40
30
20
10
0
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

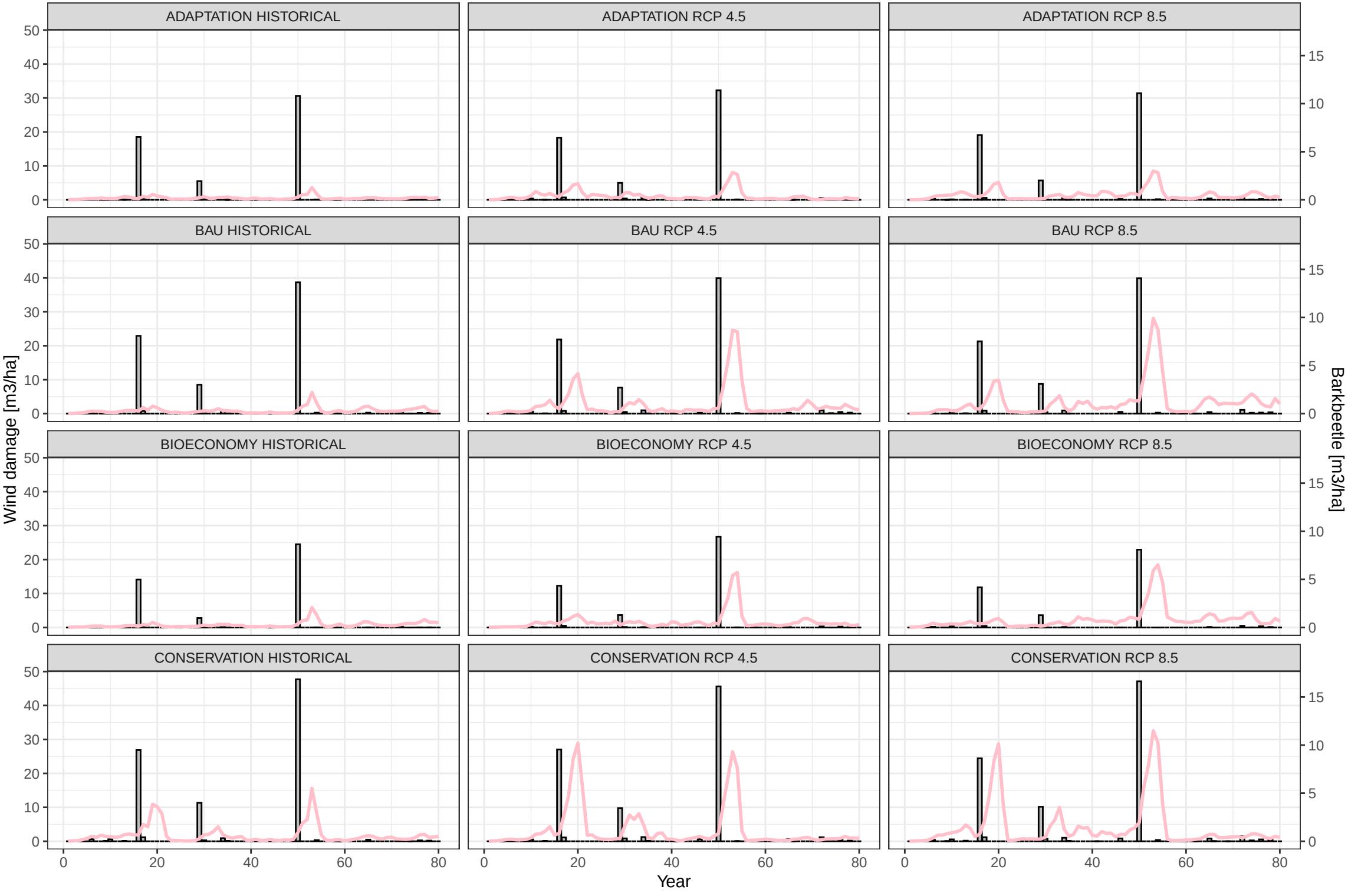

Natural Mortality in Different Management and RCP scenarios
Natural Mortality [m3/ha]
0
10
20
30
40
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

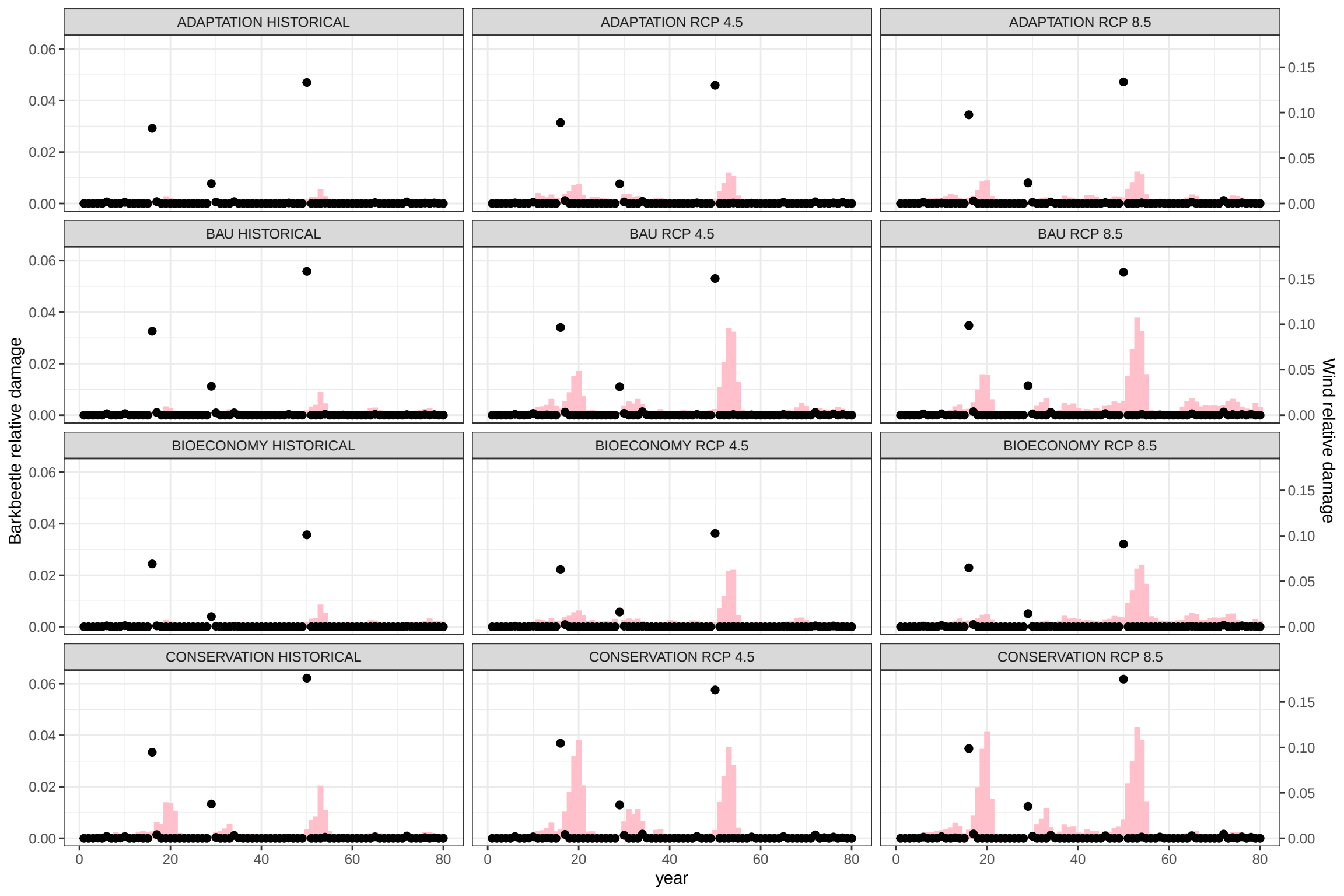

Annual Harvest in Different Management and RCP scenarios
Annual Harvest [m3/ha]
0
10
20
30
40
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

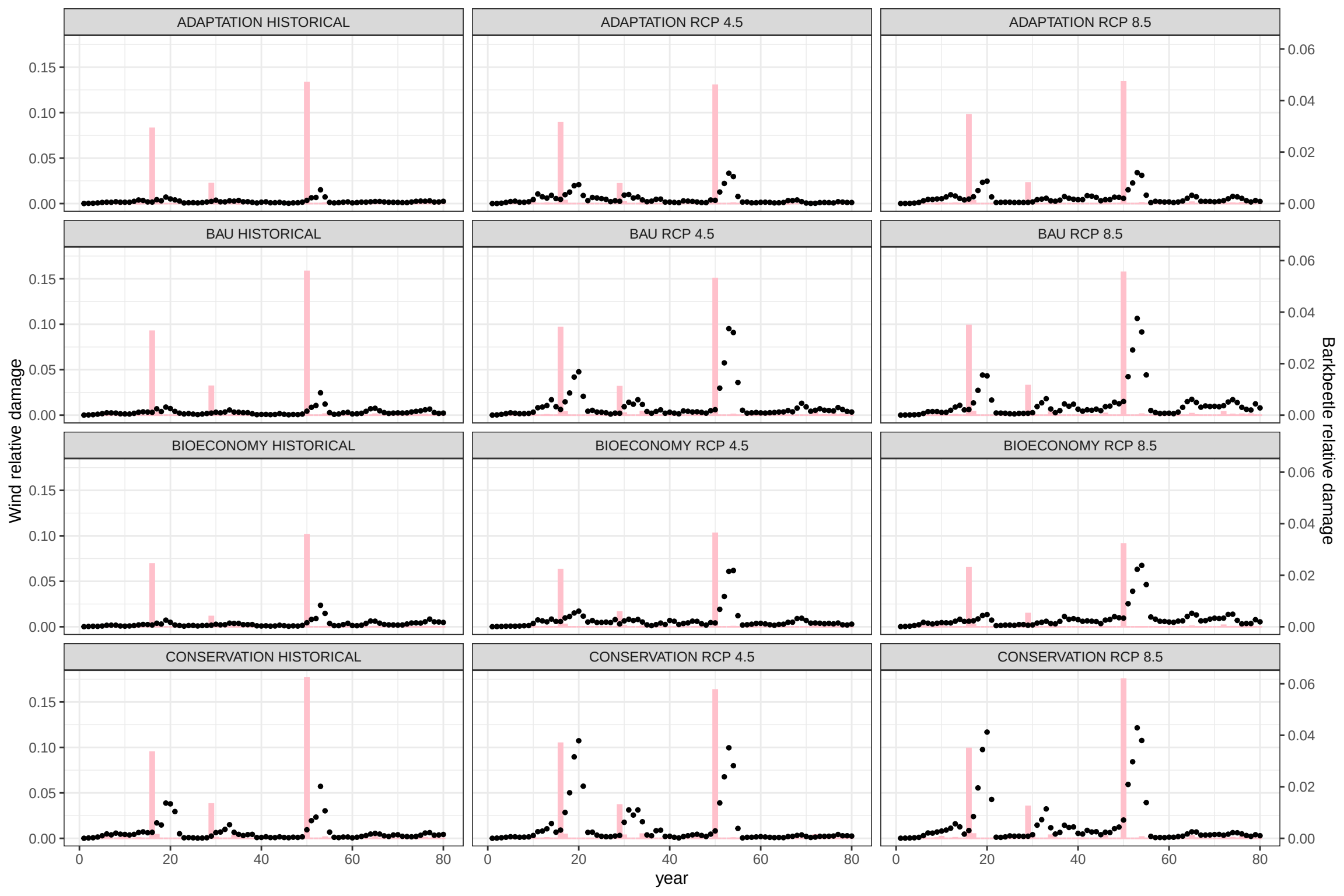

Shannon Entropy based on Basal Area Tree Species Proportion
Shannon Index [H]
2.4
2.2
2.0
1.8
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5

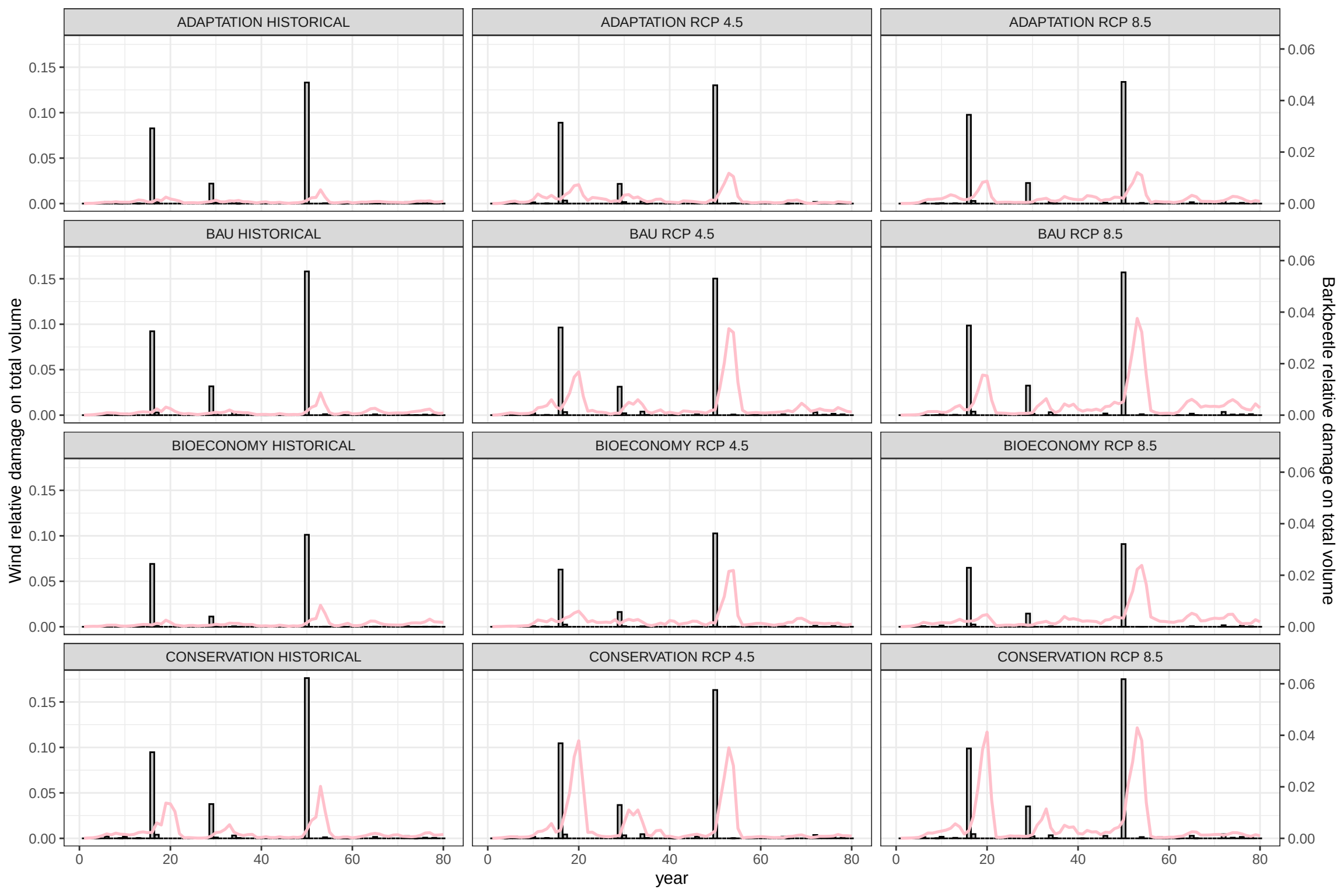

Shannon Entropy based on Volume Tree Species Proportion
Shannon Index [H]
2.2
2.1
2.0
1.9
1.8
1.7
0
20
40
60
80
year
run
ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5


ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
wind [m3/ha]
barkbeetle damage [m3/ha]
year
0
20
40
60
80
0
10
20
30
40
50
0
5
10
15


ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Wind damage [m3/ha]
Barkbeetle [m3/ha]
Year
0
20
40
60
80
0
10
20
30
40
50
0
5
10
15


ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Barkbeetle relative damage
Wind relative damage
year
0.00
0.02
0.04
0.06
0.00
0.05
0.10
0.15
0
20
40
60
80


ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Wind relative damage
Barkbeetle relative damage
year
0.00
0.05
0.10
0.15
0.02
0.04
0.06
0
20
40
60
80


ADAPTATION HISTORICAL
ADAPTATION RCP 4.5
ADAPTATION RCP 8.5
BAU HISTORICAL
BAU RCP 4.5
BAU RCP 8.5
BIOECONOMY HISTORICAL
BIOECONOMY RCP 4.5
BIOECONOMY RCP 8.5
CONSERVATION HISTORICAL
CONSERVATION RCP 4.5
CONSERVATION RCP 8.5
Wind relative damage on total volume
Barkbeetle relative damage on total volume
year
0.00
0.05
0.10
0.15
0.02
0.04
0.06
0
20
40
60
80