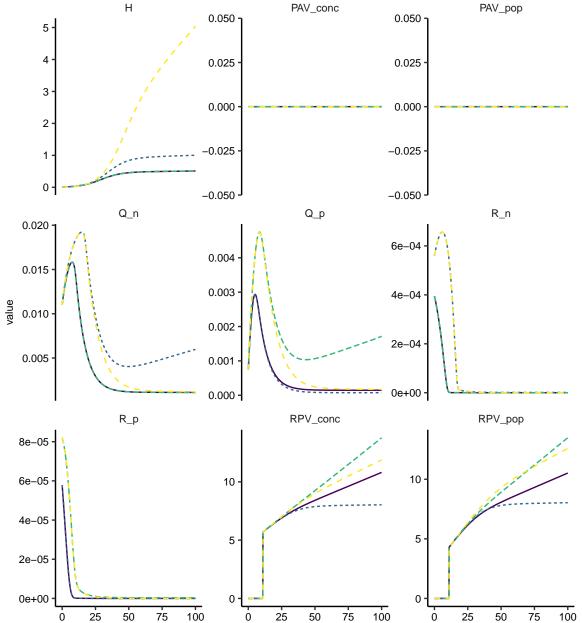
z_nc = 1e-18; q_nc = 1e-05 Н PAV_conc 0.050 5 -4 0.025 3 0.000 2 -0.025 1 0 --0.050 Q_n Q_p 0.020 -0.004 0.015

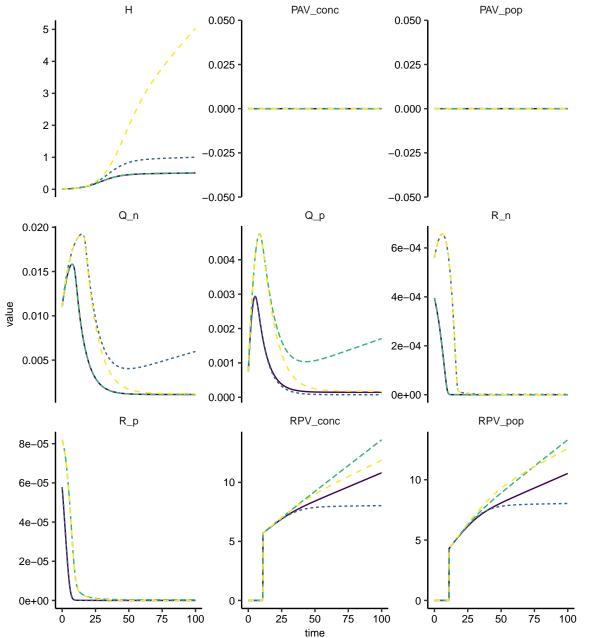


nutrient

low

+N

z_nc = 1e-18; q_nc = 1e-04

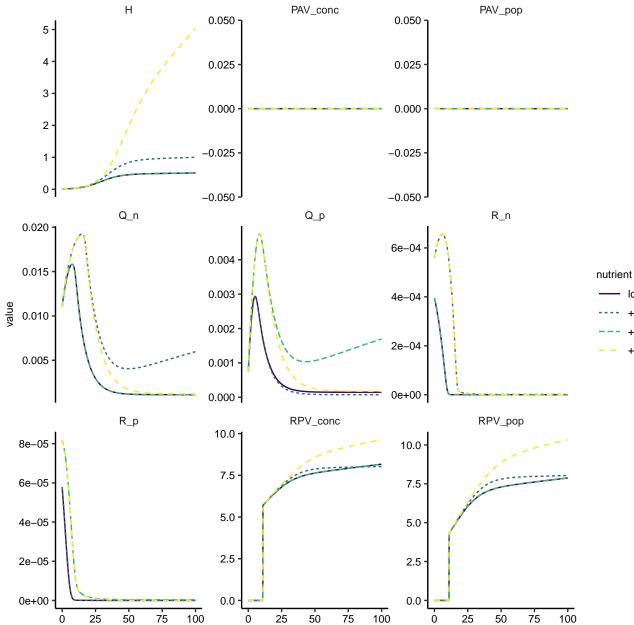


nutrient

low

+N

z_nc = 1e-18; q_nc = 0.001

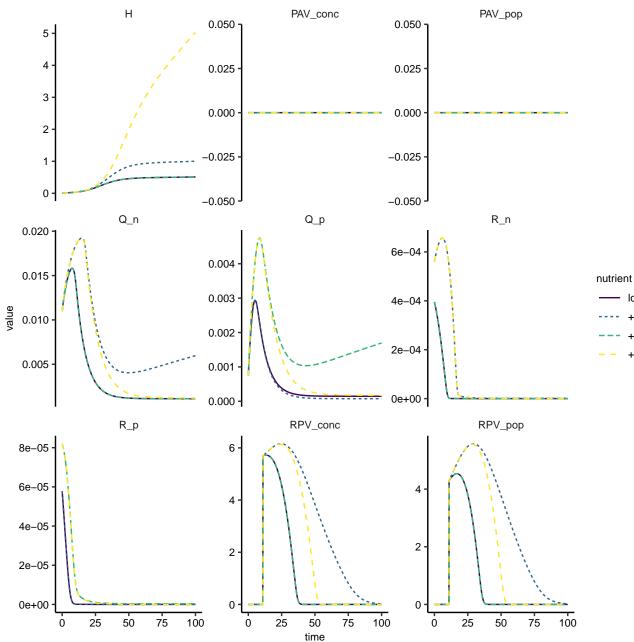


time

low

+N

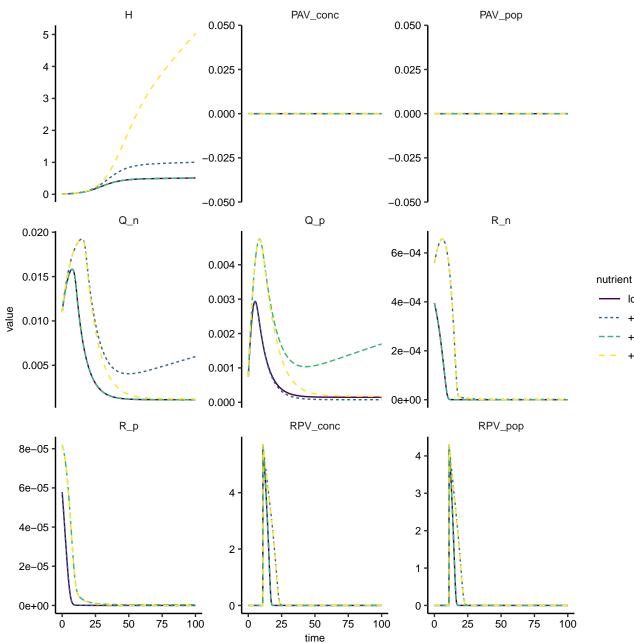
z_nc = 1e-18; q_nc = 0.01



low

+N

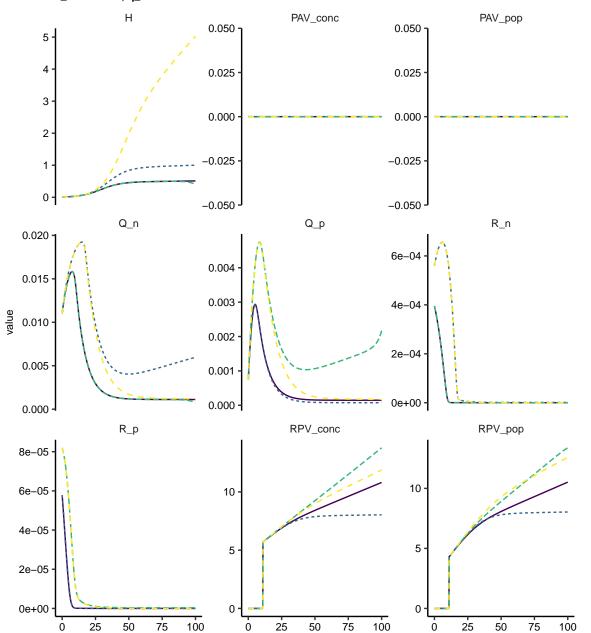
z_nc = 1e-18; q_nc = 0.1



low

+N

z_nc = 1e-17; q_nc = 1e-05 Н 5 -4

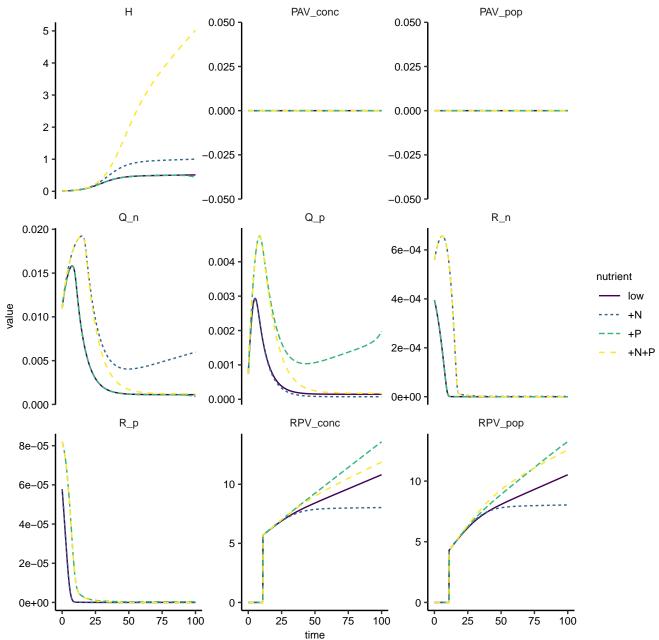


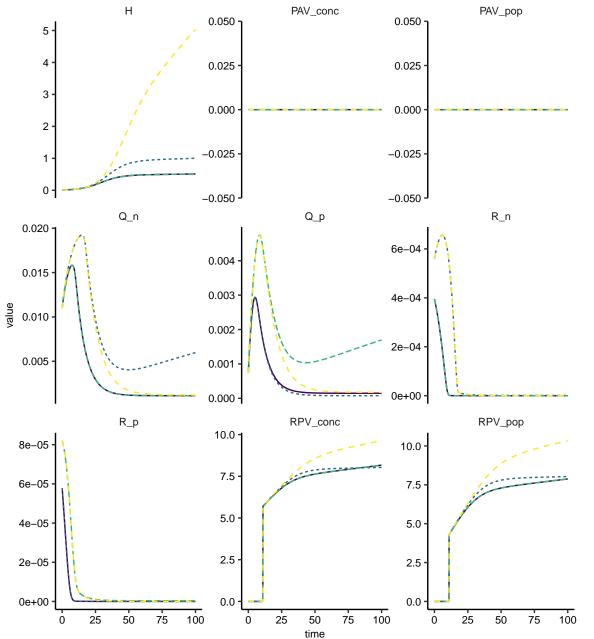
nutrient

low

+N

z_nc = 1e-17; q_nc = 1e-04



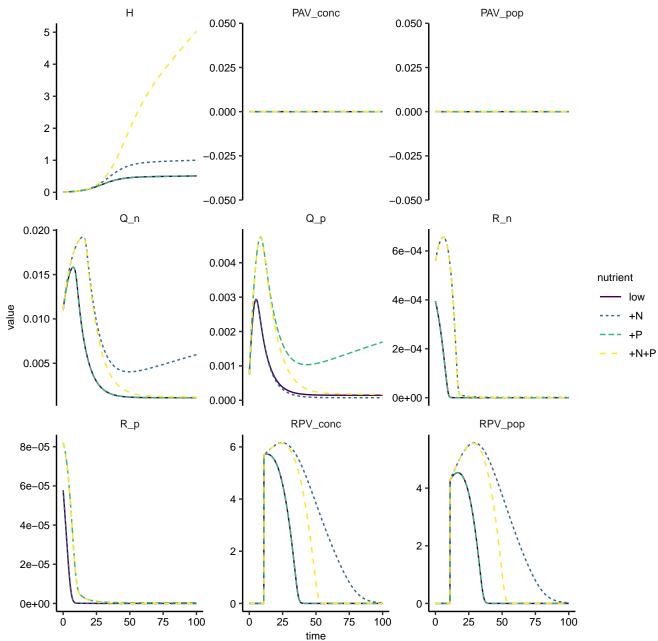


nutrient

low

+N

z_nc = 1e-17; q_nc = 0.01



z_nc = 1e-17; q_nc = 0.1 Н 0.050 5 -4 0.025 3 0.000 2 -0.025 1 0 --0.050 Q_n 0.020 -0.004 0.015 0.003

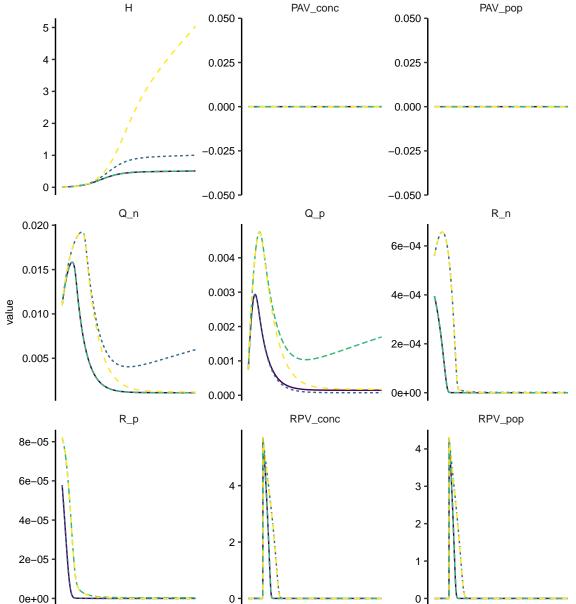
50

. 25

0

75

100



25

75

100

50

time

25

Ö

50

75

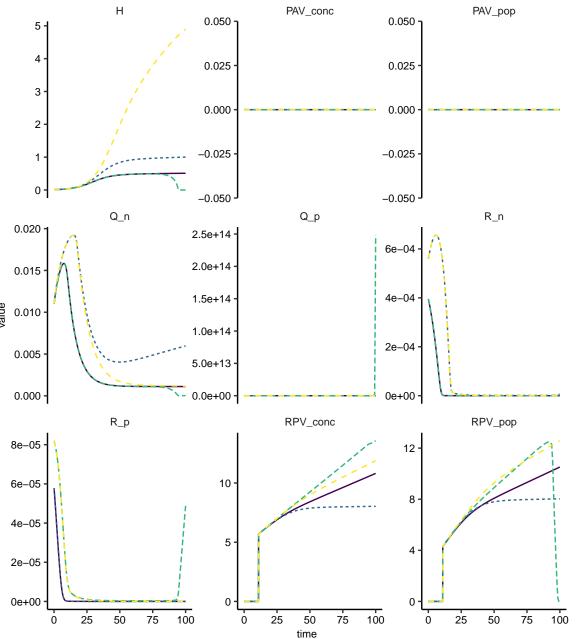
100

nutrient

low

+N

z_nc = 1e-16; q_nc = 1e-05

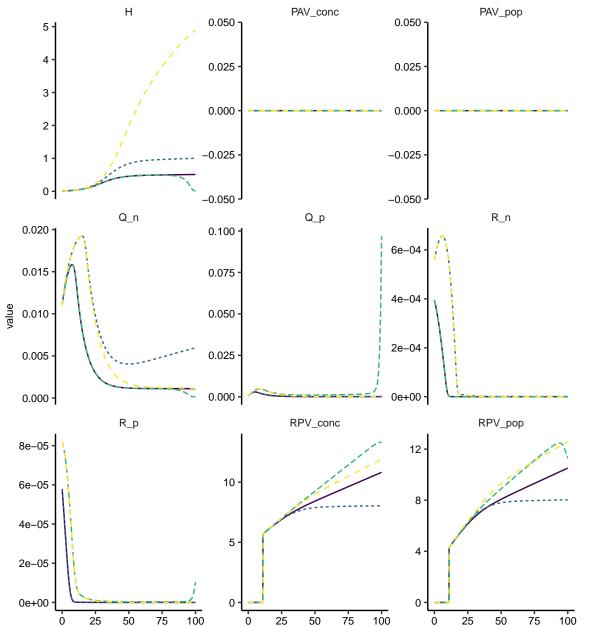


nutrient

low

+N

z_nc = 1e-16; q_nc = 1e-04 Н

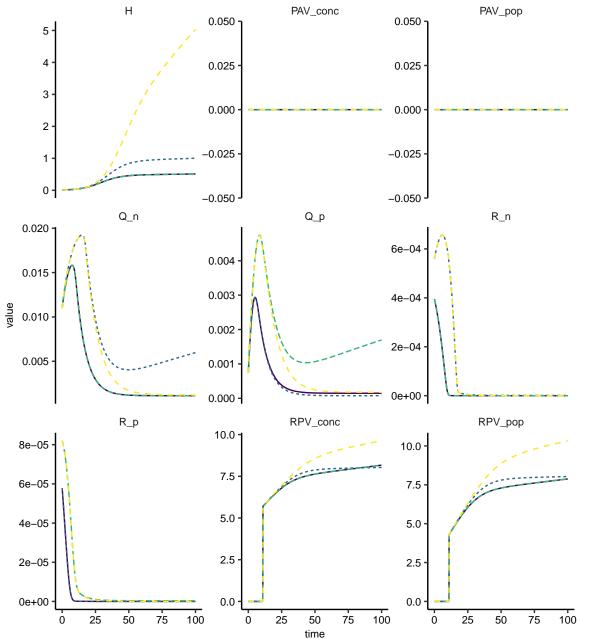


nutrient

low

+N

z_nc = 1e-16; q_nc = 0.001

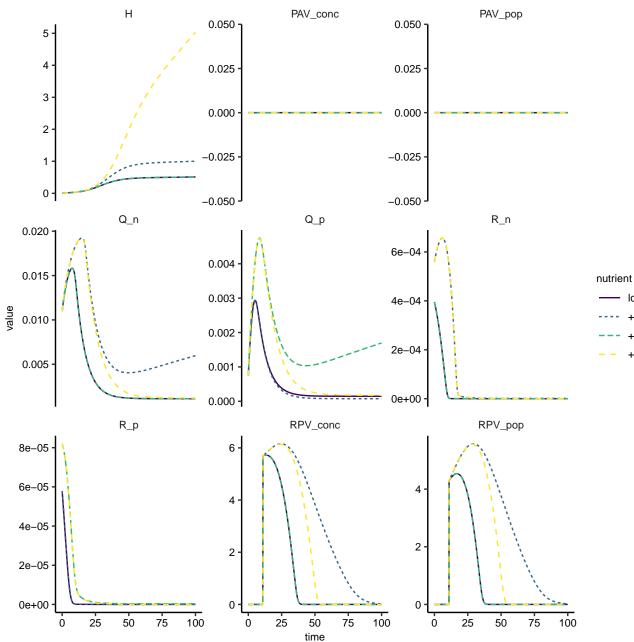


nutrient

low

+N

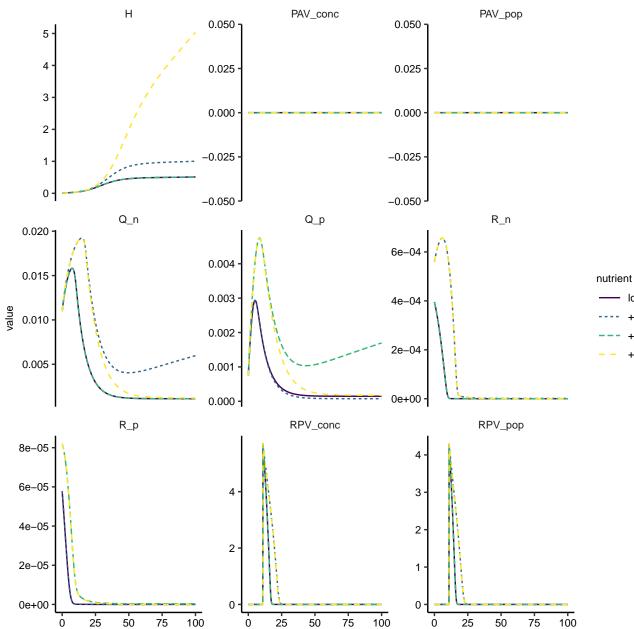
z_nc = 1e-16; q_nc = 0.01



low

+N

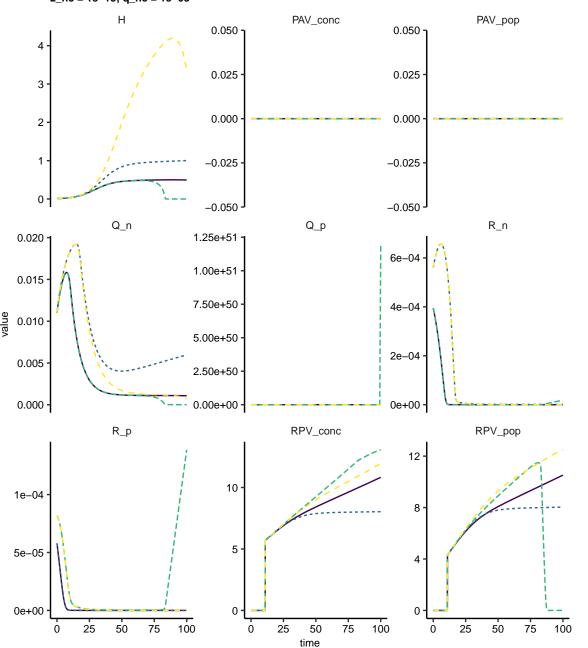
z_nc = 1e-16; q_nc = 0.1 Н 5 -4



low

+N

z_nc = 1e-15; q_nc = 1e-05 Н 4



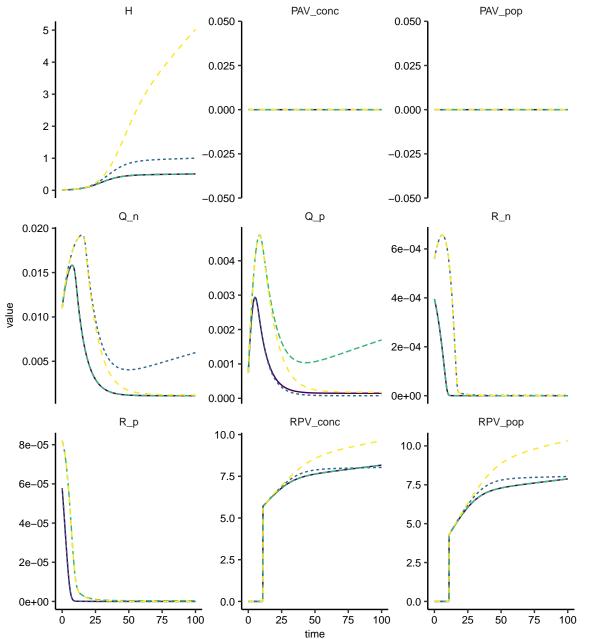
nutrient

low

+N

z_nc = 1e-15; q_nc = 1e-04 Н PAV_conc PAV_pop 0.050 0.050 4 0.025 0.025 3 0.000 0.000 2 1 -0.025 -0.0250 --0.050 --0.050 Q_n Q_p R_n 0.020 6e-04 150 0.015 nutrient low 4e-04 100 value 0.010 +N 2e-04 50 +N+P 0.005 0e+00 -0.000 -RPV_conc RPV_pop R_p 1.0e-04 -12 10 -7.5e-05 8 5.0e-05 5 4 2.5e-05 0.0e+00 50 75 75 25 50 75 100 100 . 25 50 100 . 25

z_nc = 1e-15; q_nc = 0.001

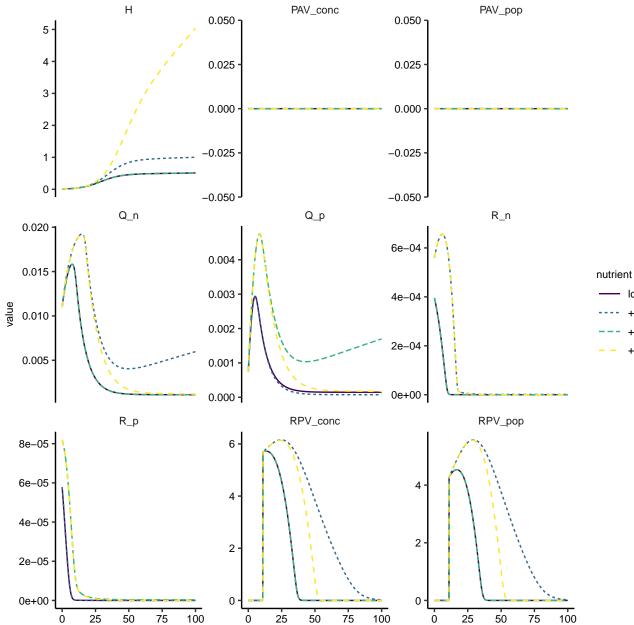


nutrient

low

+N

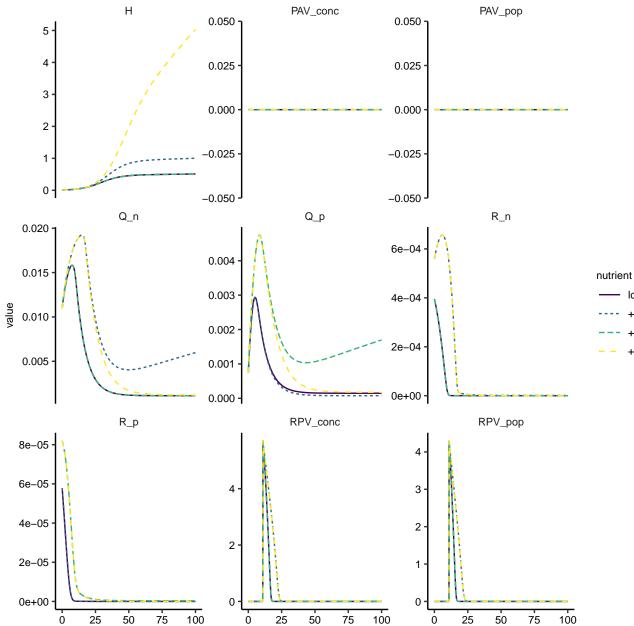
z_nc = 1e-15; q_nc = 0.01



low

+N

z_nc = 1e-15; q_nc = 0.1 Н 5 -4

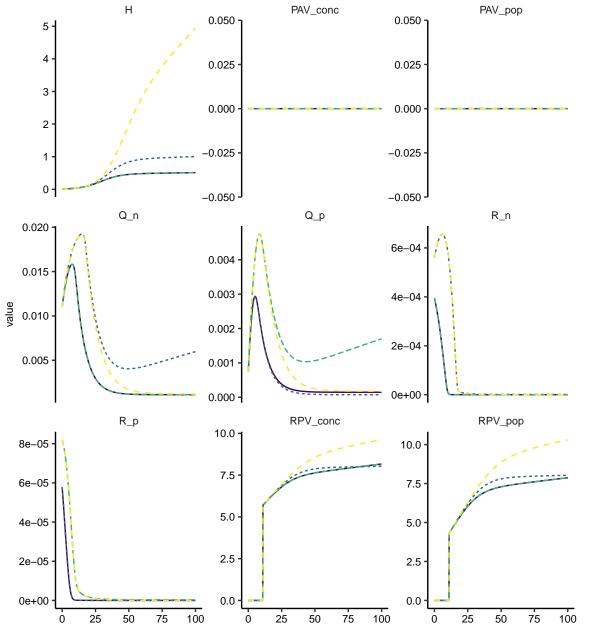


low

+N

z_nc = 1e-14; q_nc = 1e-05 Н PAV_conc PAV_pop 0.050 -0.050 3 0.025 0.025 2 0.000 0.000 1 -0.025 -0.025 0 --0.050 -0.050 Q_n Q_p R_n 0.020 8e+100 -6e-04 0.015 nutrient 6e+100 · low 4e-04 value 0.010 +N 4e+100 · 2e-04 +N+P 0.005 2e+100 -0.000 -0e+00 0e+00 -R_p RPV_conc RPV_pop 12 -12 -0.00020 9 0.00015 8 6 0.00010 -3 0.00005 0.00000 75 25 50 100 . 25 50 . 75 100 . 25 50 . 75 100

z_nc = 1e-14; q_nc = 1e-04 Н PAV_conc PAV_pop 0.050 0.050 3 0.025 0.025 2 0.000 0.000 1 -0.025-0.025 0 --0.050 -0.050 Q_n Q_p R_n 0.020 2000000 6e-04 0.015 nutrient 1500000 low 4e-04 value 0.010 1000000 2e-04 +N+P 0.005 500000 0.000 0 0e+00 R_p RPV_conc RPV_pop 0.00020 12 -12.5 10.0 0.00015 9 7.5 0.00010 6 5.0 0.00005 3 2.5 0.00000 0.0 75 25 50 100 . 75 . 25 50 . 75 100 Ö . 25 50 100

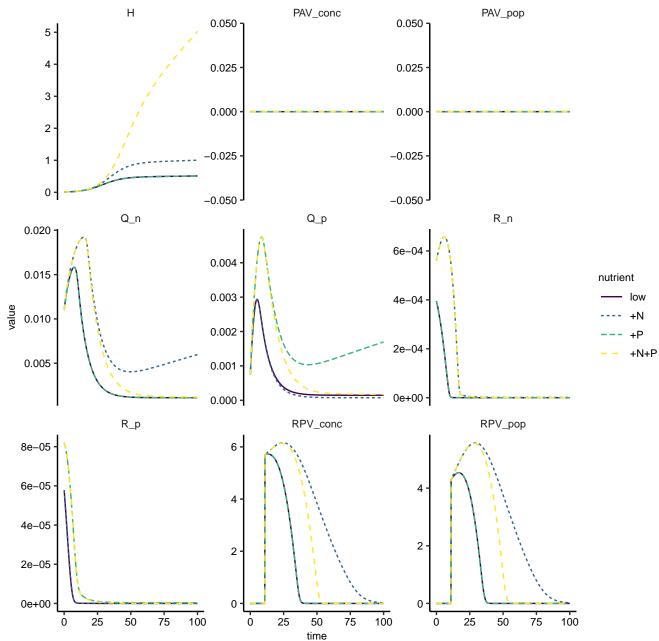


nutrient

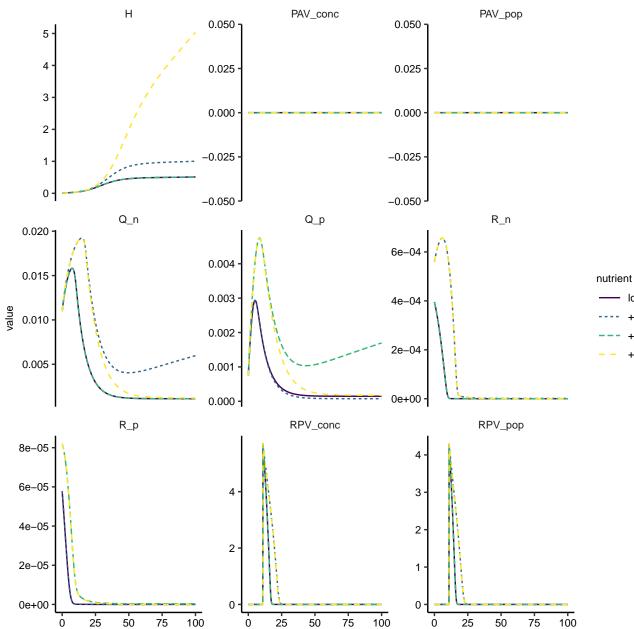
low

+N

z_nc = 1e-14; q_nc = 0.01



z_nc = 1e-14; q_nc = 0.1 Н 5 -4



low

+N

z_nc = 1e-13; q_nc = 1e-05 Н PAV_conc PAV_pop 0.050 0.050 2 0.025 0.025 0.000 0.000 1 -0.025-0.0250 --0.050 --0.050 -Q_n Q_p R_n 4.974828e+157 0.020 -0.0012 -0.015 3.671897e+157 nutrient 0.0008 low 0.010 2.368966e+157 +N 0.0004 +N+P 0.005 1.066035e+157 0.000 -0.0000 --2.368966e+156 R_p RPV_conc RPV_pop 10.0 3e-04 10.0 7.5 2e-04 7.5 5.0 5.0 1e-04

2.5 -

0.0

. 25

time

50

0e+00

. 25 50

. 75 100

2.5

0.0

25

50

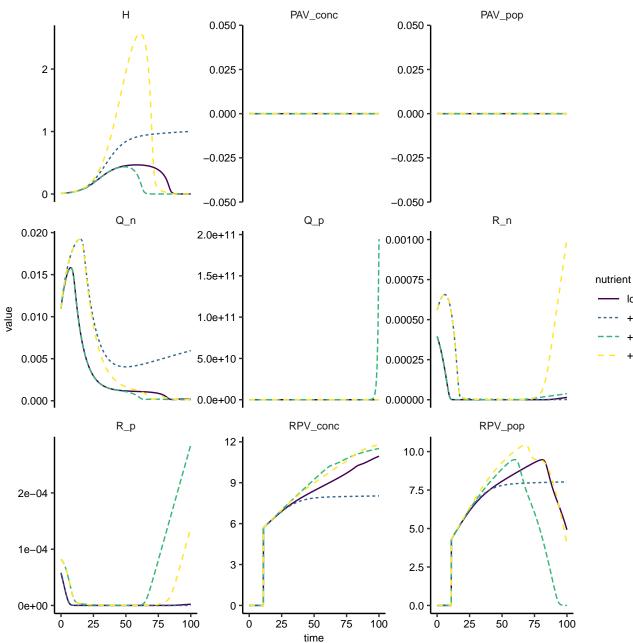
75

100

75

100

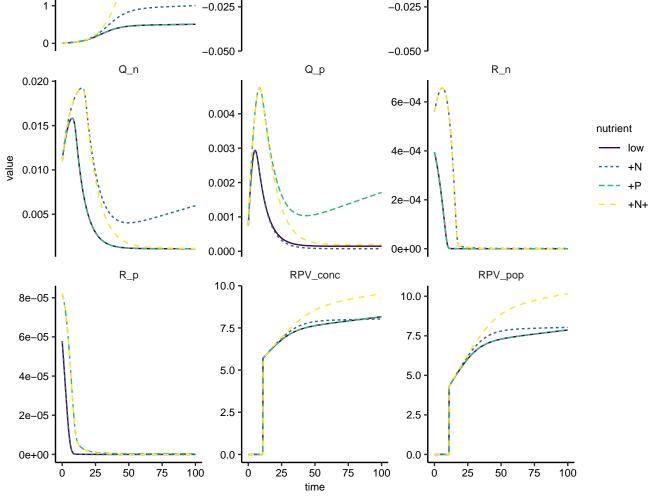
z_nc = 1e-13; q_nc = 1e-04 Н 2



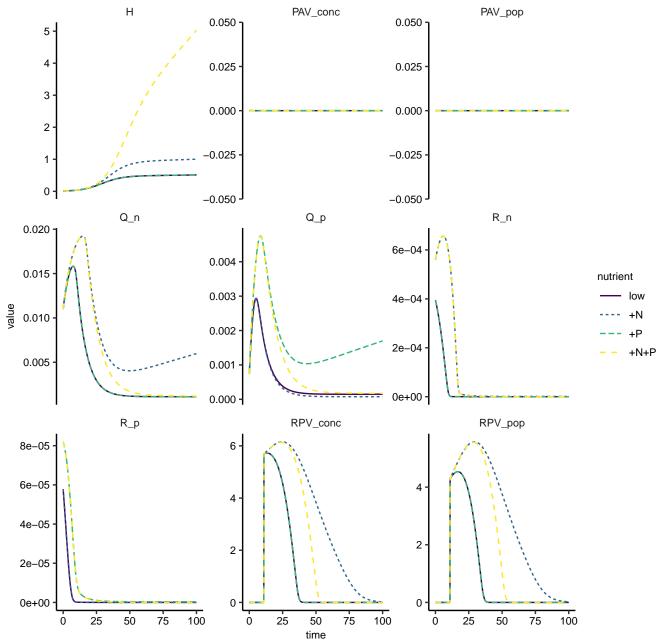
low

+N

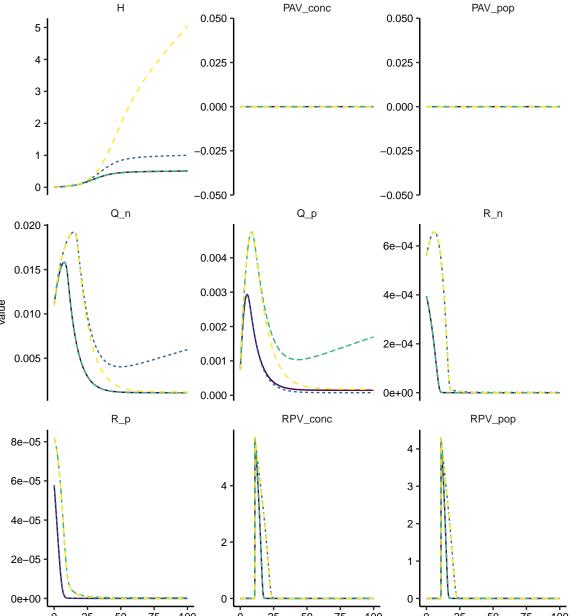
z_nc = 1e-13; q_nc = 0.001 Н PAV_conc PAV_pop 0.050 0.050 4 0.025 0.025 3 0.000 0.000 2 -0.025 -0.025 1 0 --0.050 J -0.050 Q_n Q_p R_n 0.020 -6e-04 0.004 0.015 nutrient 0.003 low 4e-04 +N 0.002 2e-04 +N+P 0.005 0.001 0e+00 0.000 -R_p RPV_conc RPV_pop 10.0 -10.0 -8e-05 7.5 6e-05 7.5



z_nc = 1e-13; q_nc = 0.01



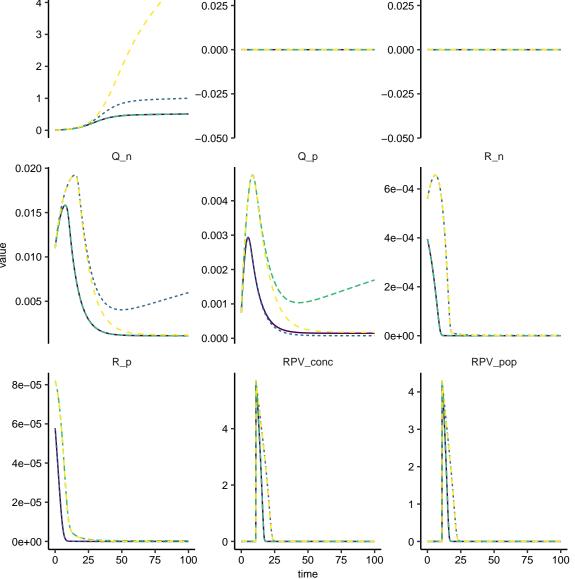
z_nc = 1e-13; q_nc = 0.1 Н PAV_conc 0.050 5 -4 0.025 3 0.000 2 -0.025 1 0 --0.050 J Q_n Q_p 0.020 -0.004 0.015 0.003 o.010 -0.002



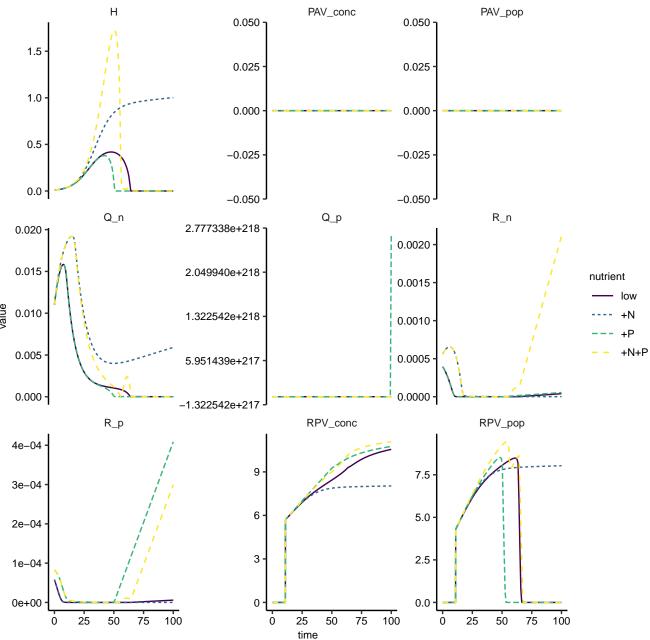
nutrient

low

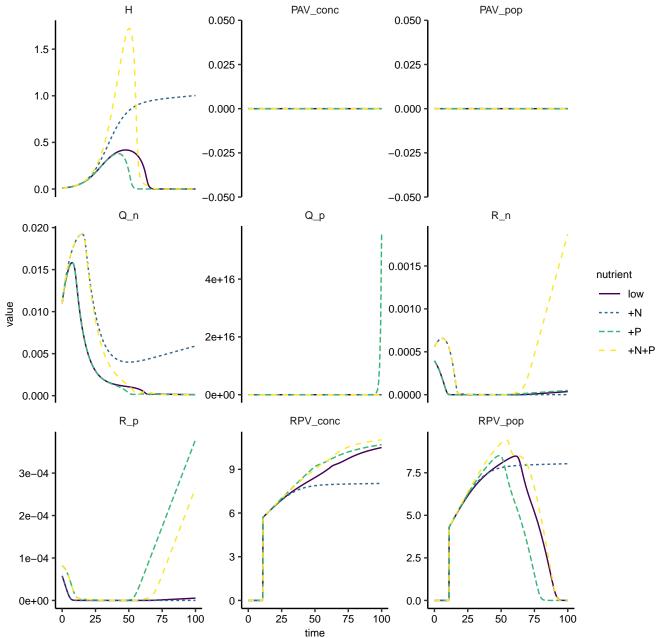
+N



z_nc = 1e-12; q_nc = 1e-05



z_nc = 1e-12; q_nc = 1e-04



z_nc = 1e-12; q_nc = 0.001 Н PAV_conc PAV_pop 0.050 0.050 0.025 0.025 2 0.000 0.000 1 -0.025 -0.025 0 --0.050 **-**-0.050 Q_n Q_p R_n 0.020 -6e-04 0.004 0.015 nutrient 0.003 low 4e-04 o.010 · +N 0.002 2e-04 +N+P 0.005 0.001 0e+00 0.000 -R_p RPV_conc RPV_pop 10.0 8e-05 7.5 7.5 6e-05 5.0 5.0 4e-05 2.5 2.5 2e-05

0.0

Ö

25

75

50

100

75

100

50

time

0.0

25

0e+00

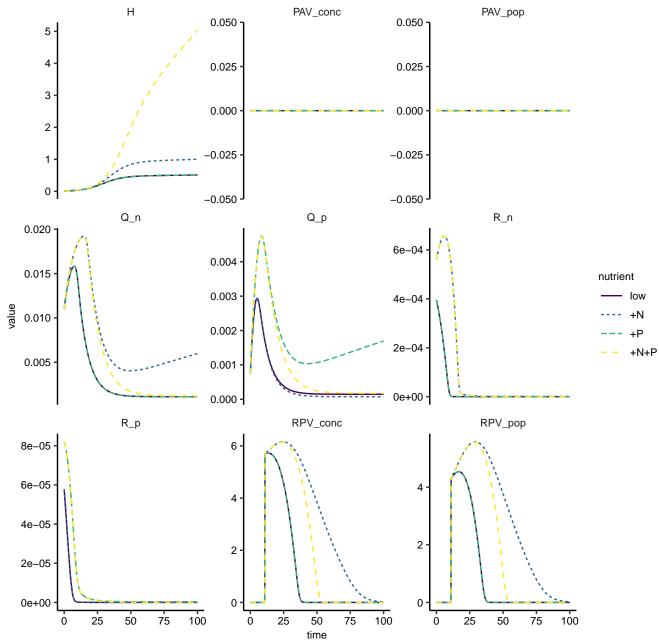
0

50

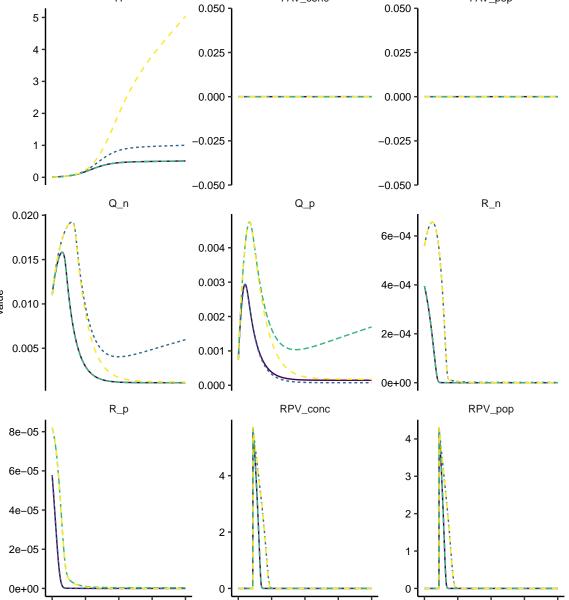
. 25 75

100

z_nc = 1e-12; q_nc = 0.01



z_nc = 1e-12; q_nc = 0.1 Н PAV_conc 0.050 5 -4 0.025 3 0.000 2 -0.025 1 0 --0.050 J Q_n 0.020 -0.004 0.015 0.003 o.010 -



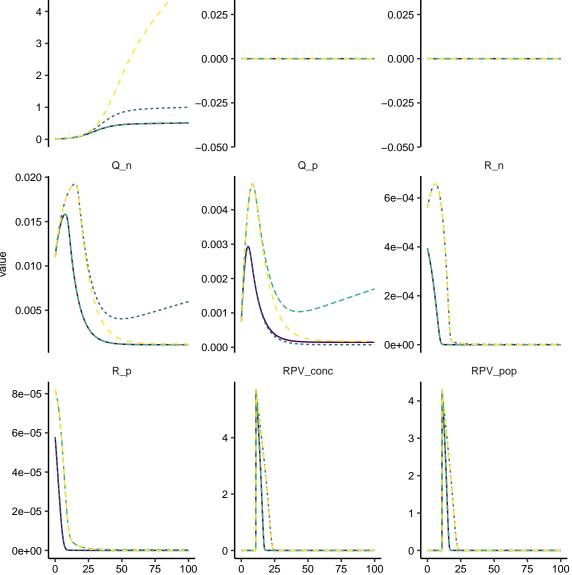
PAV_pop

nutrient

low

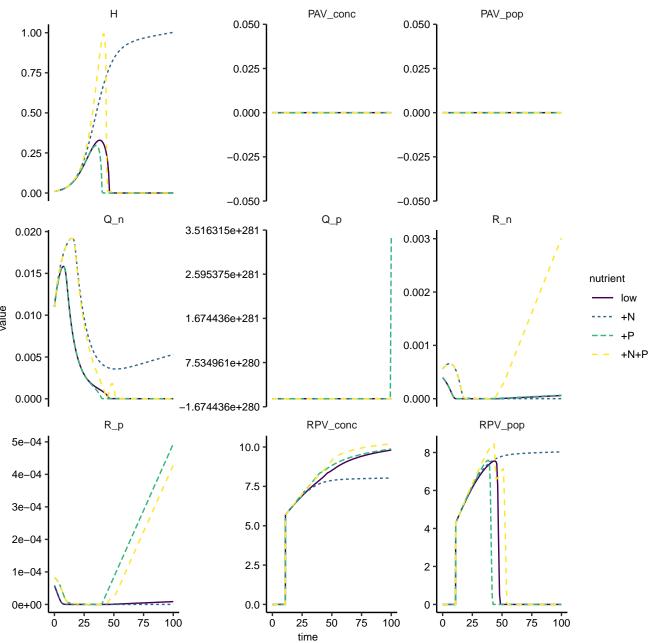
+N

+N+P

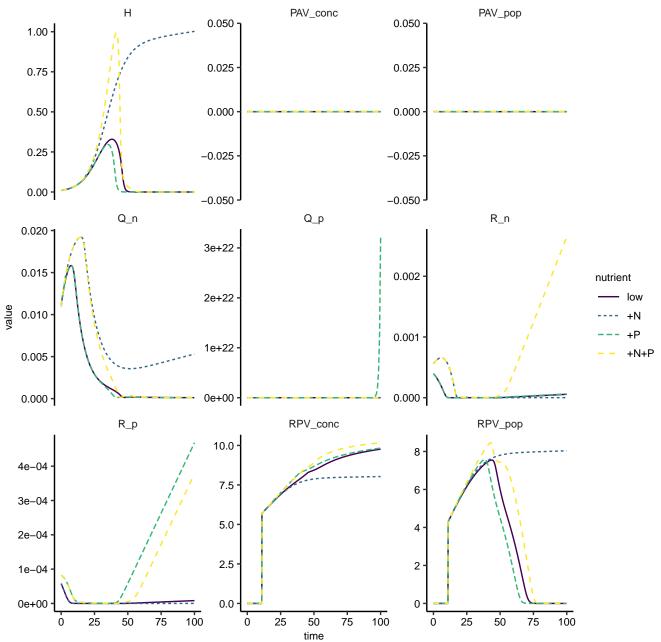


time

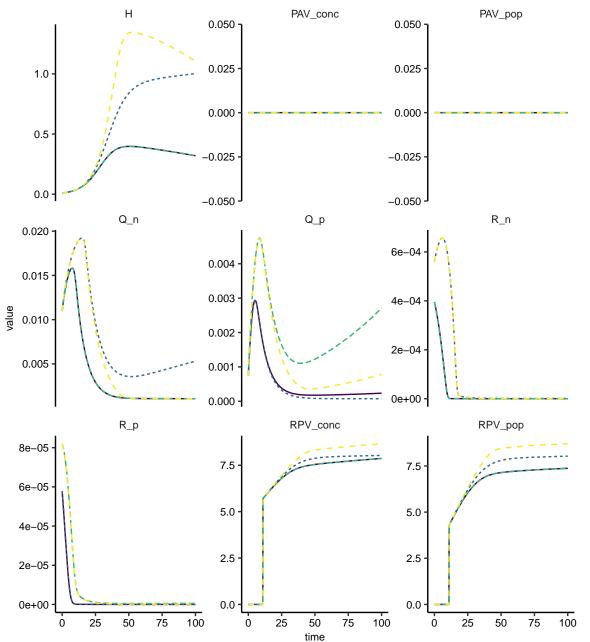
z_nc = 1e-11; q_nc = 1e-05 H



z_nc = 1e-11; q_nc = 1e-04



z_nc = 1e-11; q_nc = 0.001

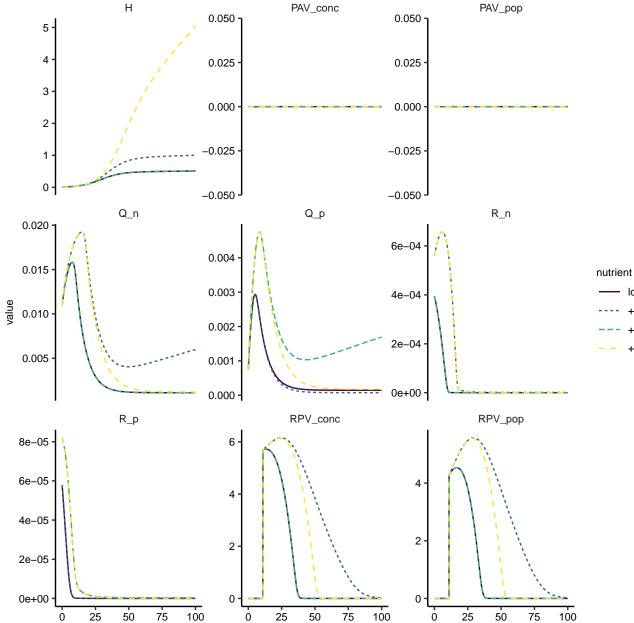


nutrient

low

+N

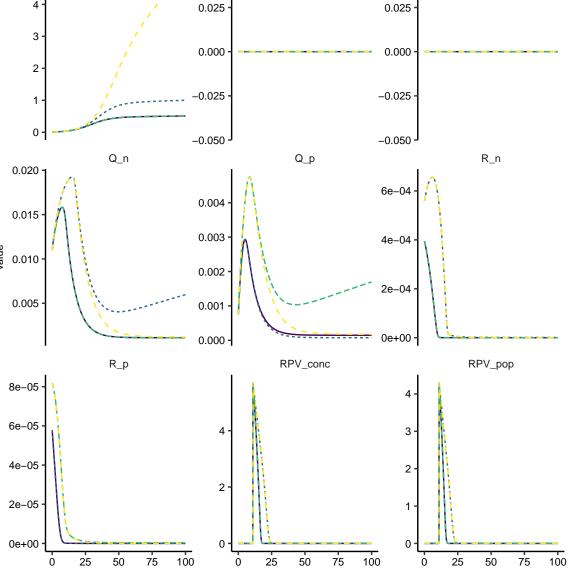
z_nc = 1e-11; q_nc = 0.01 Н 5 -



low

+N

z_nc = 1e-11; q_nc = 0.1 Н PAV_conc 0.050 0.050 5 -4 0.025 3 0.000 2 -0.025 1 0 --0.050 Q_n Q_p 0.020 -0.004 0.015 0.003 value .010.0 0.002 0.005 0.001



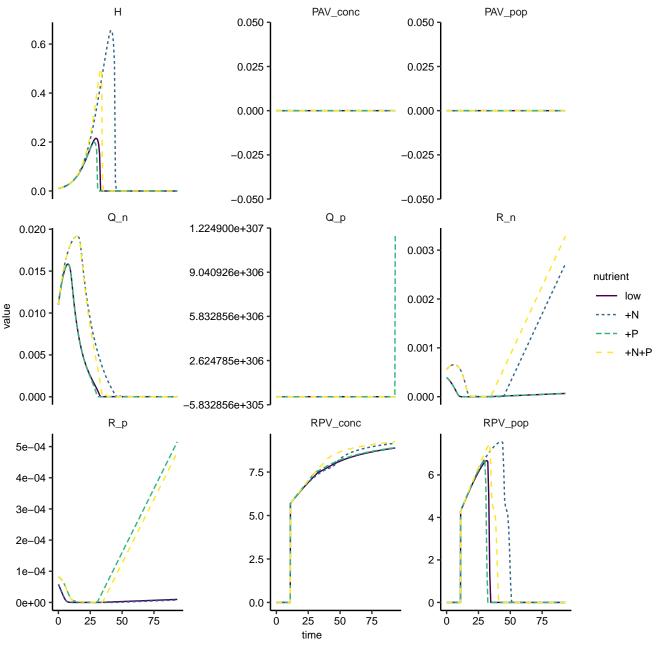
PAV_pop

nutrient

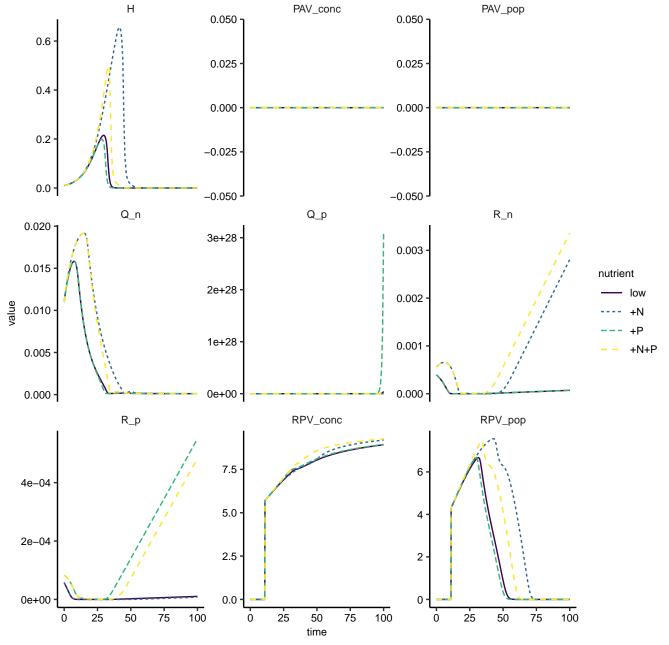
low

+N

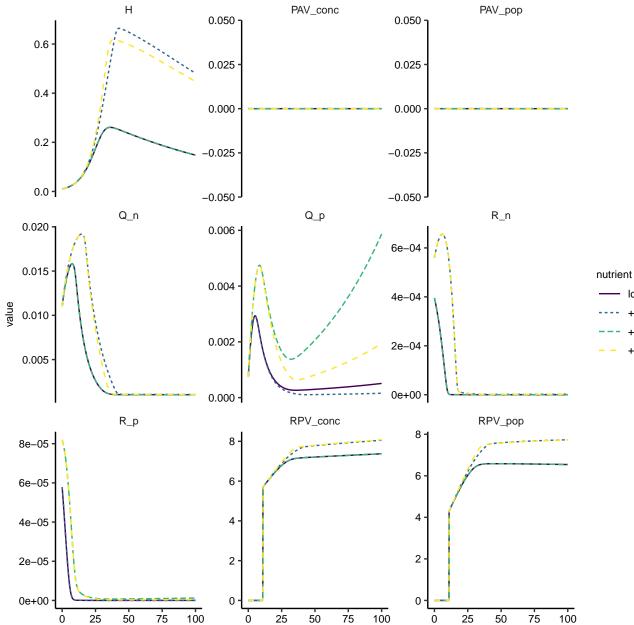
z_nc = 1e-10; q_nc = 1e-05



z_nc = 1e-10; q_nc = 1e-04



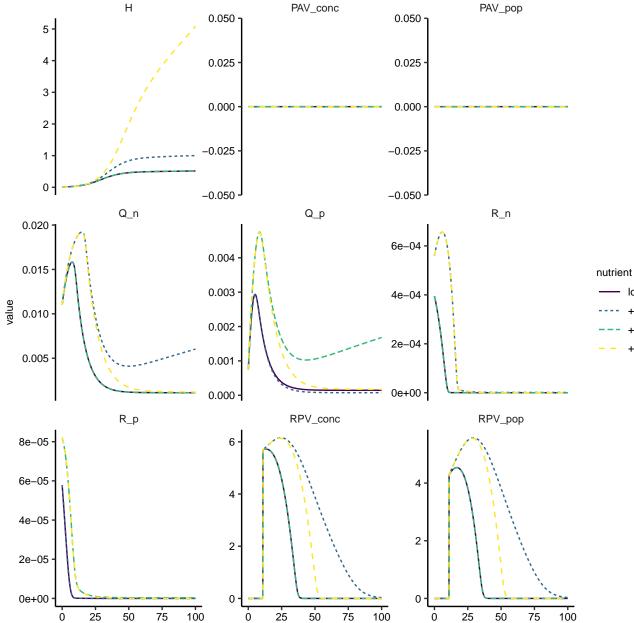
z_nc = 1e-10; q_nc = 0.001 H



low

+N

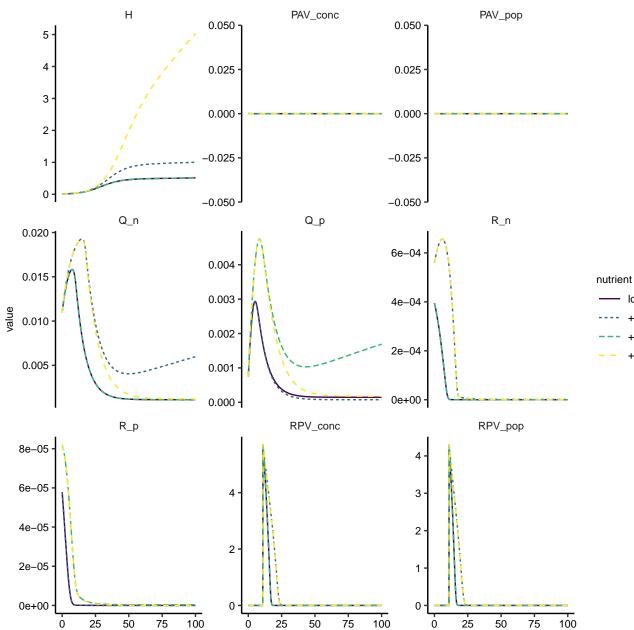
z_nc = 1e-10; q_nc = 0.01



low

+N

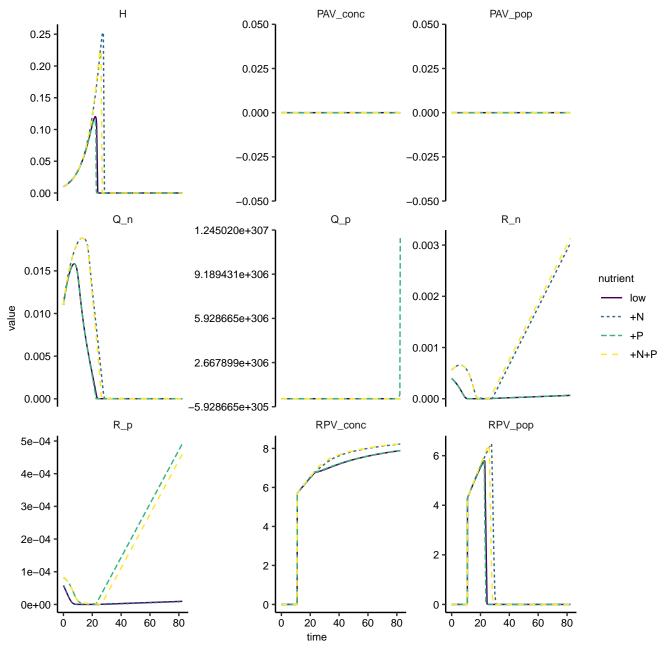
z_nc = 1e-10; q_nc = 0.1 Н 5 -4



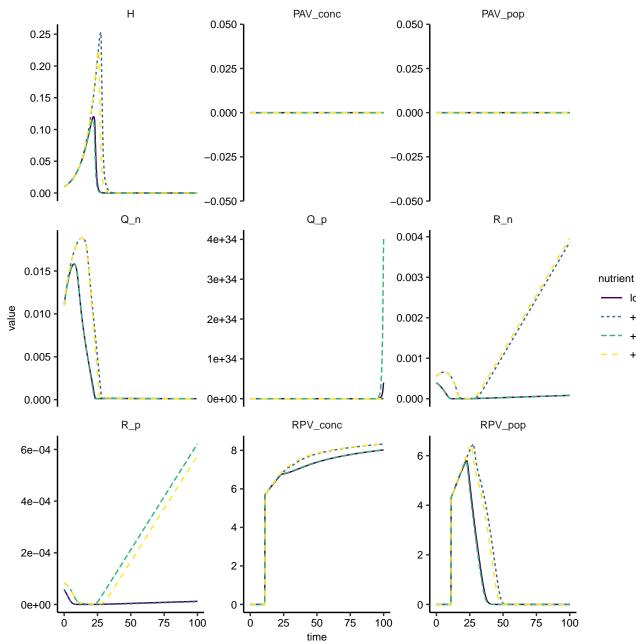
low

+N

z_nc = 1e-09; q_nc = 1e-05



z_nc = 1e-09; q_nc = 1e-04



low

+N

z_nc = 1e-09; q_nc = 0.001 Н PAV_conc PAV_pop 0.050 0.050 0.025 0.025 0.2 0.000 0.000 0.1 -0.025 -0.025 0.0 -0.050 --0.050 Q_n Q_p R_n 0.015 6e-04 0.015 nutrient 0.010 low 4e-04 o.010 +N 0.005 2e-04 +N+P 0.005 0e+00 0.000 RPV_conc RPV_pop R_p 8e-05 6 6 6e-05 4 4 4e-05 2 2 · 2e-05

100

25

Ö

50

50

time

25

100

75

0e+00

0

50

. 25 75

z_nc = 1e-09; q_nc = 0.01 Н PAV_conc PAV_pop 0.050 0.050 0.025 0.025 4 0.000 0.000 2 -0.025 -0.025 0 --0.050 J -0.050 Q_n Q_p R_n 6e-04 0.004 0.015 nutrient 0.003 low 4e-04 o.010 -+N 0.002 2e-04 +N+P 0.005 0.001 0e+00 0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 4 4e-05 2 2 · 2e-05

75

100

50

time

25

Ö

50

75

100

0e+00

0

50

. 25 75

z_nc = 1e-09; q_nc = 0.1 Н PAV_conc PAV_pop 0.050 0.050 5 4 0.025 0.025 3 0.000 0.000 2 -0.025 -0.025 1 0 --0.050 J -0.050 Q_n Q_p R_n 0.020 -6e-04 0.004 0.015 nutrient 0.003 low 4e-04 - 010.0 +N 0.002 2e-04 +N+P 0.005 0.001 0e+00 0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 3 4e-05 2 2

75

100

50

time

1

Ö

25

50

75

100

2e-05

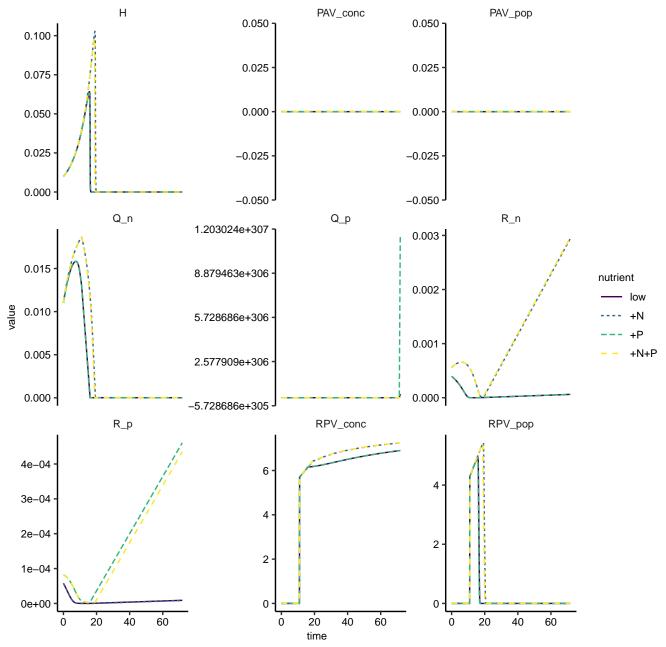
0e+00

0

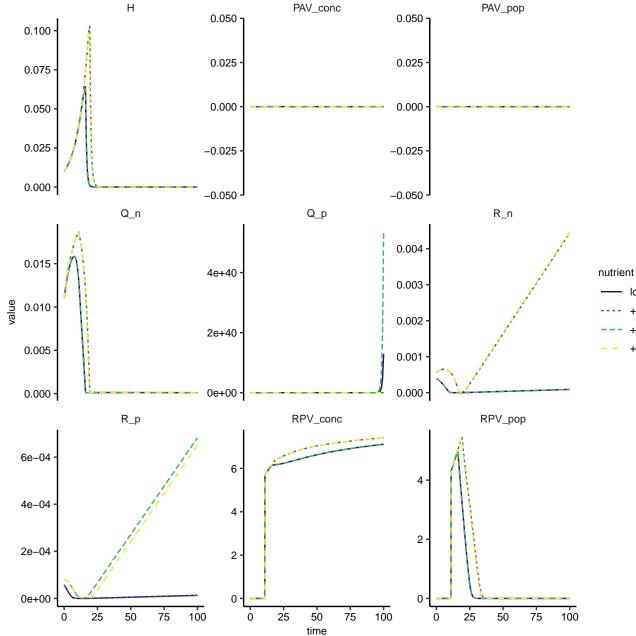
50

. 25 75

z_nc = 1e-08; q_nc = 1e-05



z_nc = 1e-08; q_nc = 1e-04 Н



low

+N

z_nc = 1e-08; q_nc = 0.001 Н PAV_conc PAV_pop 0.050 0.050 0.09 0.025 0.025 0.06 0.000 0.000 -0.025 -0.025 0.03 -0.050 **-**-0.050 Q_n Q_p R_n 6e-0.03 0.015 nutrient low 4e-04 value 0.02 0.010 +N 2e-04 0.01 +N+P 0.005 0e+00 0.00 -R_p RPV_conc RPV_pop 6 8e-05 6 6e-05 4 4e-05 2

100

50

time

100

75

50

25

Ö

2

25

2e-05

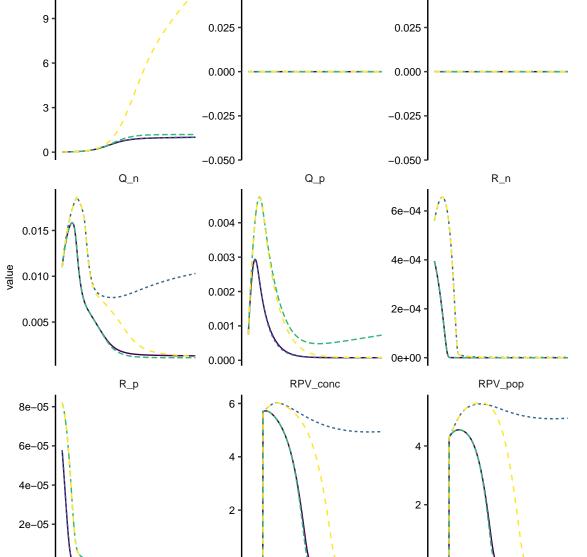
0e+00

0

50

. 25 75

z_nc = 1e-08; q_nc = 0.01 Н PAV_conc 0.050 9 0.025 6 0.000 3 -0.025 0 --0.050 J Q_n Q_p 0.004 0.015 0.003



PAV_pop

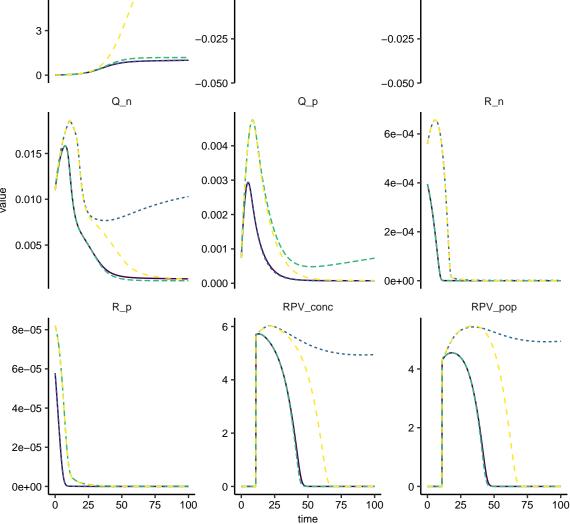
nutrient

low

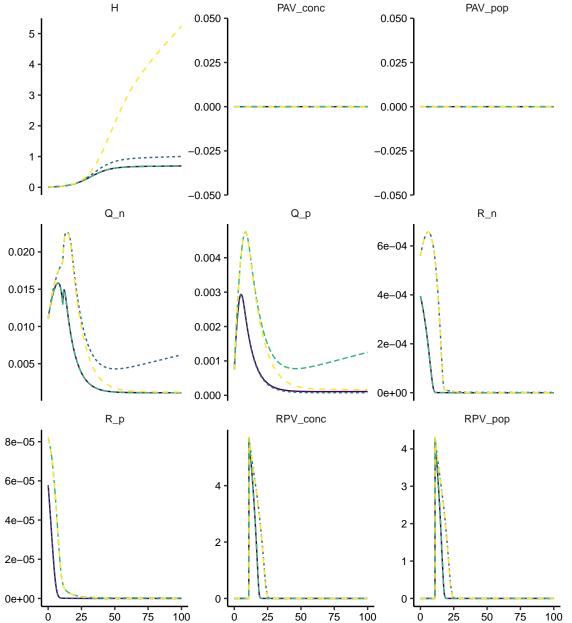
+N

+N+P

0.050



z_nc = 1e-08; q_nc = 0.1 Н PAV_conc 0.050 5 0.025 4 3 0.000 2 -0.025 1 0 --0.050 J Q_n 0.020 0.004 0.015 0.003 value



nutrient

low

+N

z_nc = 1e-07; q_nc = 1e-05 Н PAV_conc PAV_pop 0.050 0.050 0.04 0.025 0.025 0.03 0.000 0.000 0.02 -0.025 0.01 -0.0250.00 --0.050 --0.050 -Q_n R_n Q_p 1.159261e+307 0.003 0.015 8.556453e+306 nutrient low 0.002 0.010 5.520292e+306 +N 0.001 +N+P 0.005 2.484132e+306 0.000 -0.000 --5.520292e+305 RPV_conc R_p RPV_pop 4e-04 6 -4 3e-04 3 4 2e-04 2 -2

1

0

20

40

60

40

20

time

60

1e-04

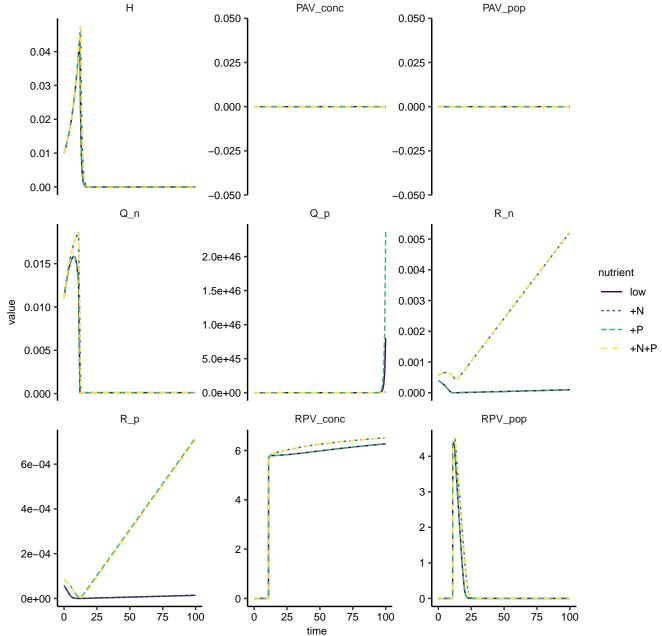
0e+00

0

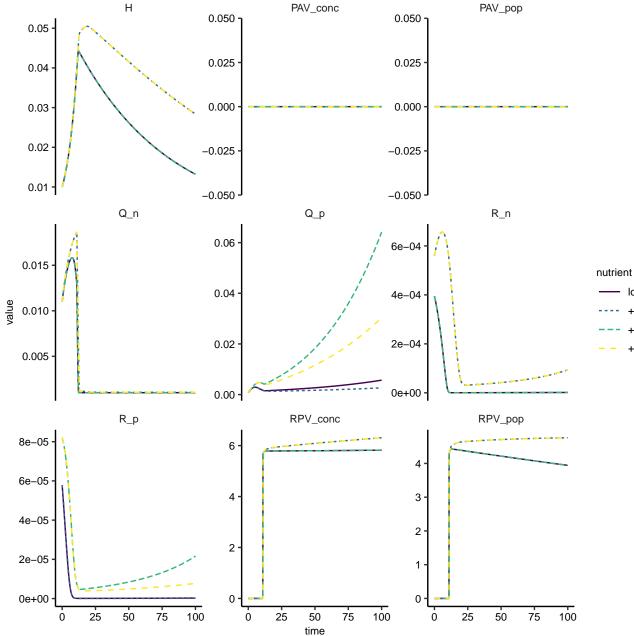
20

40

z_nc = 1e-07; q_nc = 1e-04



z_nc = 1e-07; q_nc = 0.001



low

+N

z_nc = 1e-07; q_nc = 0.01 Н PAV_conc PAV_pop 0.050 0.050 9 0.025 0.025 6 0.000 0.000 3 -0.025 -0.025 0 --0.050 --0.050 Q_n Q_p R_n 6e-04 0.0175 0.004 nutrient 0.0150 0.003 low 4e-04 value +N 0.0125 0.002 2e-04 +N+P 0.001 0.0100 0e+00 0.000 -R_p RPV_conc RPV_pop 8e-05 6 6e-05 4 4 4e-05 2 · 2 2e-05

100

25

50

75

25

50

time

100

0e+00

Ö

50

. 25 75

z_nc = 1e-07; q_nc = 0.1 Н PAV_conc PAV_pop 0.050 0.050 8 6 0.025 0.025 4 0.000 0.000 2 -0.025 -0.025 0 --0.050 J -0.050 Q_n Q_p R_n 6e-04 0.04 0.004 nutrient 0.03 0.003 low 4e-04 value +N 0.02 0.002 2e-04 +N+P 0.01 0.001 0e+00 0.000 0.00 R_p RPV_conc RPV_pop 8e-05 6e-05 3 4 4e-05 2 2 · 2e-05 1

100

50

time

25

25

Ö

50

100

. 75

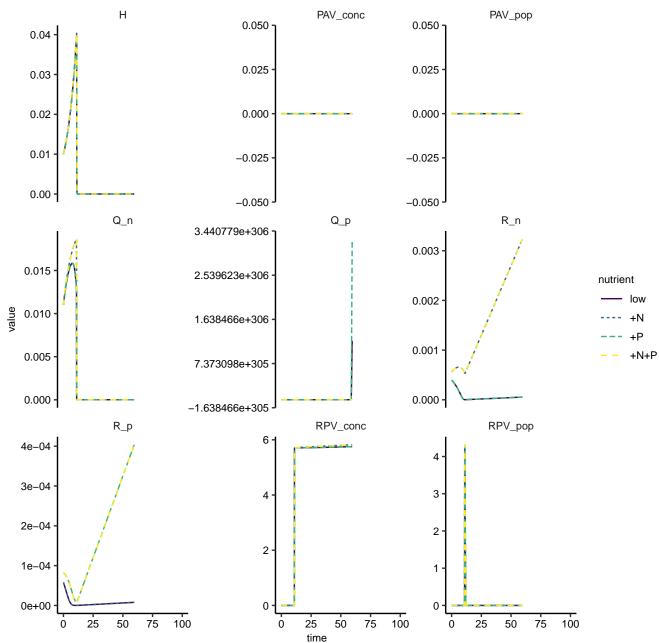
0e+00

0

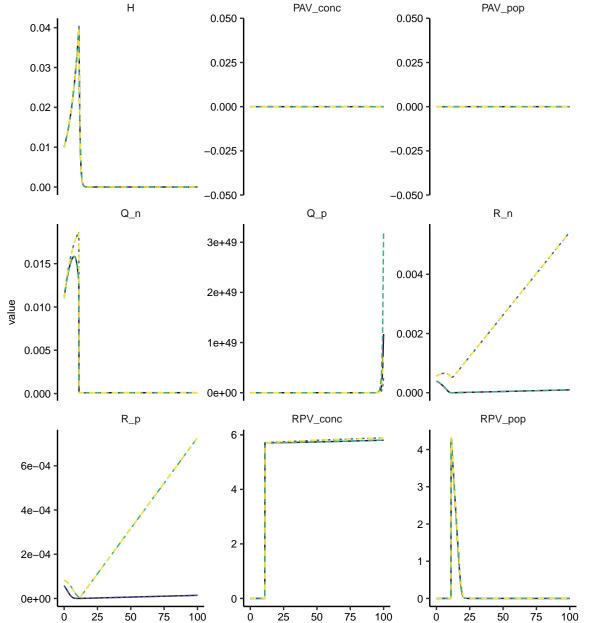
50

. 25 75

z_nc = 1e-06; q_nc = 1e-05



z_nc = 1e-06; q_nc = 1e-04 Н 0.04 0.03 0.02

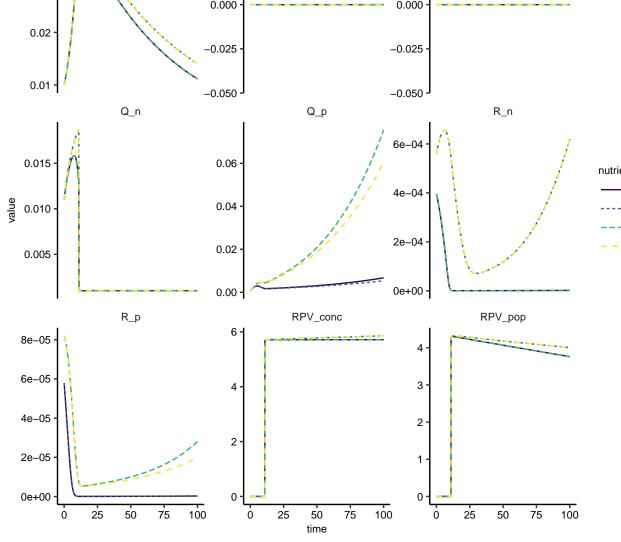


nutrient

low

+N

z_nc = 1e-06; q_nc = 0.001 Н PAV_conc PAV_pop 0.050 0.050 0.04 -0.025 0.025 0.03 0.000 0.000 0.02 -0.025 -0.025 0.01 --0.050 **-**-0.050 Q_n Q_p R_n 6e-04 0.015 0.06 nutrient low 4e-04 0.04 0.010 +N 2e-04 +N+P 0.02 0.005 0.00 -0e+00 R_p RPV_conc RPV_pop



z_nc = 1e-06; q_nc = 0.01 Н PAV_conc PAV_pop 0.050 0.050 9 0.025 0.025 6 0.000 0.000 3 -0.025 -0.0250 -0.050 --0.050 Q_n Q_p R_n 6e-04 0.0175 0.004 nutrient 0.003 low 4e-04 o.0150 +N 0.002 0.0125 2e-04 +N+P 0.001 0.0100 0e+00 0.000 -R_p RPV_conc RPV_pop 8e-05 6 6e-05 4 4 4e-05 2 2 2e-05

100

25

50

50

time

25

100

75

0e+00

Ö

50

. 25 75

z_nc = 1e-06; q_nc = 0.1 Н PAV_conc PAV_pop 0.050 0.050 9 0.025 0.025 6 0.000 0.000 3 -0.025 -0.025 0 --0.050 **-**-0.050 Q_n Q_p R_n 0.100 -6e-04 0.004 nutrient 0.075 0.003 low 4e-04 value +N 0.050 0.002 2e-04 +N+P 0.001 0.025 0e+00 0.000 RPV_conc RPV_pop R_p 8e-05 6e-05 4 4 4e-05 2 2 2e-05

100

50

time

25

100

75

50

25

Ö

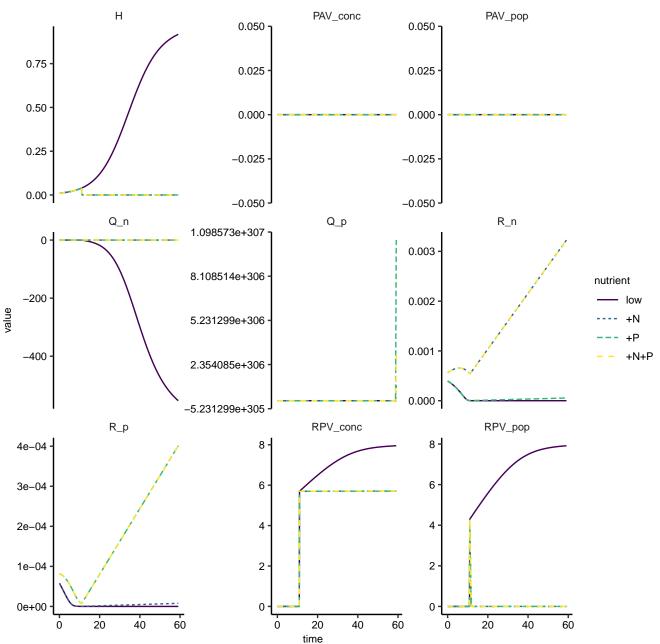
0e+00

0

50

. 25 75

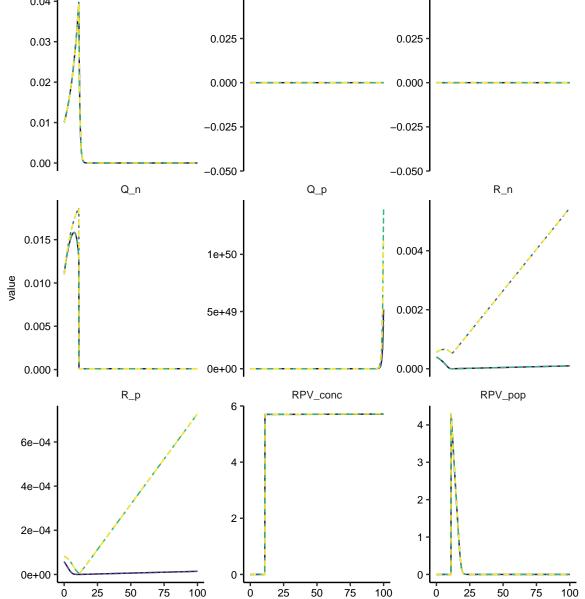
z_nc = 1e-05; q_nc = 1e-05



z_nc = 1e-05; q_nc = 1e-04 Н PAV_conc 0.050 0.04 0.025 0.03 0.02 0.000 0.01 -0.025 0.00 --0.050 **-**Q_n Q_p

0

. 25



25

50

time

100

25

0

50

75

100

PAV_pop

nutrient

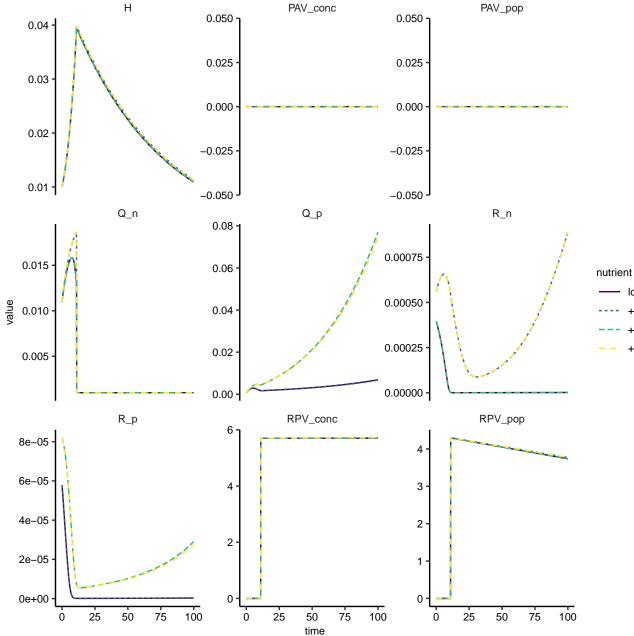
low

+N

+N+P

0.050

z_nc = 1e-05; q_nc = 0.001 Н



low

+N

z_nc = 1e-05; q_nc = 0.01 Н PAV_conc PAV_pop 0.050 0.050 9 0.025 0.025 6 0.000 0.000 3 -0.025 -0.025 0 --0.050 --0.050 Q_n Q_p R_n 6e-04 0.0175 0.004 nutrient 0.003 low 4e-04 o.0150 +N 0.002 2e-04 0.0125 +N+P 0.001 0.0100 -0e+00 0.000 -R_p RPV_conc RPV_pop 8e-05 6 6e-05 4 4 4e-05 2 2 2e-05 0e+00

100

25

50

50

time

25

50

. 25

Ö

75

100

100

z_nc = 1e-05; q_nc = 0.1 Н PAV_conc PAV_pop 0.050 0.050 9 0.025 0.025 6 0.000 0.000 3 -0.025 -0.025 0 --0.050 **-**-0.050 Q_n Q_p R_n 0.100 -6e-04 0.004 nutrient 0.075 0.003 low 4e-04 value +N 0.050 0.002 2e-04 +N+P 0.001 0.025 0e+00 0.000 RPV_conc RPV_pop R_p 8e-05 6 6e-05 4 4 4e-05 2 2 2e-05 0e+00

100

50

time

25

50

. 25

0

75

100

100

75

50

25

Ö