q_nc = 1.1e-05; c_b = 0.1 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 25 100 50 75 25 50 75 100 50 75 0 25 100

q_nc = 1.1e-05; c_b = 0.12 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 25 100 50 75 25 50 75 100 50 75 0 . 25 100

q_nc = 1.1e-05; c_b = 0.13 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 25 100 50 75 25 50 75 100 50 75 0 . 25 100

q_nc = 1.1e-05; c_b = 0.14 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 25 100 50 75 25 50 75 100 50 75

0

. 25

q_nc = 1.1e-05; c_b = 0.15 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00

50

time

75

100

50

0

. 25 75

100

25

50

75

q_nc = 1.1e-05; c_b = 0.16 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00

50

time

75

100

50

0

. 25 75

100

25

50

75

q_nc = 1.1e-05; c_b = 0.17 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 25 100 50 75 25 50 75 100 50 75 0 . 25 100

q_nc = 1.1e-05; c_b = 0.18 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00

50

time

75

100

50

0

. 25 75

100

25

50

75

q_nc = 1.1e-05; c_b = 0.19 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0.000 -0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1

50

time

75

100

25

50

75

100

0e+00

0

25

50

75

q_nc = 0.00011; c_b = 0.1 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 25 100 50 75 25 50 75 100 50 75 0 25 100

q_nc = 0.00011; c_b = 0.12 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00

50

time

75

100

50

0

25

75

100

25

50

75

q_nc = 0.00011; c_b = 0.13 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00

50

time

75

100

50

0

25

75

100

25

50

75

q_nc = 0.00011; c_b = 0.14 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1

50

time

75

100

25

50

75

100

0e+00

0

25

50

75

q_nc = 0.00011; c_b = 0.15 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1

50

time

75

100

25

50

75

100

0e+00

0

. 25 50

75

q_nc = 0.00011; c_b = 0.16 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1

50

time

75

100

25

50

75

100

0e+00

0

. 25 50

75

q_nc = 0.00011; c_b = 0.17 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 25 100 50 75 25 50 75 100 50 75

0

. 25

q_nc = 0.00011; c_b = 0.18 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1

50

time

75

100

25

50

75

100

0e+00

0

. 25 50

75

q_nc = 0.00011; c_b = 0.19 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 6e-04 0.006 0.0075 nutrient low 4e-04 0.004 0.0050 +N 2e-04 0.002 +N+P 0.0025 0e+00 -0.000 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1

50

time

75

100

25

50

75

100

0e+00

0

. 25 50

75

q_nc = 0.0011; c_b = 0.1 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 75 25 100 50 75 100 25 50 100 50 75 0 . 25 time

q_nc = 0.0011; c_b = 0.12 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 75 25 100 50 75 100 25 50 100 50 75 0 . 25

 $q_nc = 0.0011; c_b = 0.13$ Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 75 25 100 50 75 100 25 50 100 50 75 0 . 25

q_nc = 0.0011; c_b = 0.14 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 75 25 100 50 75 100 25 50 100 50 75 0 25

 $q_nc = 0.0011; c_b = 0.15$ Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 75 25 100 50 75 100 25 50 100 50 75 0 25

q_nc = 0.0011; c_b = 0.16 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 75 25 100 50 75 100 25 50 100 50 75 0 25

q_nc = 0.0011; c_b = 0.17 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00 75 25 100 50 75 100 25 50 100 50 75 0 25

q_nc = 0.0011; c_b = 0.18 Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00

0

25

75

100

25

50

time

75

100

25

50

75

 $q_nc = 0.0011; c_b = 0.19$ Н PAV_conc PAV_pop 4 0.04 4 3 0.03 2 2 0.02 1 0.01 0 -Q_n Q_p R_n 0.0075 0.006 nutrient low 4e-04 value 0.0050 0.004 +N 2e-04 +N+P 0.0025 0.002 0e+00 -0.0000 -R_p RPV_pop RPV_conc 8e-05 4 6e-05 4 3 4e-05 2 2 · 2e-05 1 0e+00

100

25

50

time

50

0

25

75

100

25

50

75

q_nc = 0.011; c_b = 0.1 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 0.000 R_p RPV_conc RPV_pop 8e-05 4 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.011; c_b = 0.12 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 4 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.011; c_b = 0.13 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.011; c_b = 0.14 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.011; c_b = 0.15 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.011; c_b = 0.16 Н PAV_conc PAV_pop 4 -5 -3 4 4 3 2 2 · 2 1 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.011; c_b = 0.17 Н PAV_conc PAV_pop 4 -5 -3 4 4 3 2 2 2 1 1 0 -0 Q_n Q_p R_n 0.003 6e-04 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.011; c_b = 0.18 Н PAV_conc PAV_pop 4 -5 -3 4 4 3 2 2 2 1 1 0 -0 Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00

100

25

50

time

25

50

75

100

100

25

0

50

q_nc = 0.011; c_b = 0.19 Н PAV_conc PAV_pop 4 -5 -4 3 4 3 2 2 · 2 1 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 25 100 25 50 75 25 50 100 50 75 0

q_nc = 0.11; c_b = 0.1 Н PAV_conc PAV_pop 6 7 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 0.000 R_p RPV_conc RPV_pop 8e-05 4 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.11; c_b = 0.12 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.11; c_b = 0.13 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.11; c_b = 0.14 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.11; c_b = 0.15 Н PAV_conc PAV_pop 4 -3 4 4 2 2 2 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.11; c_b = 0.16 Н PAV_conc PAV_pop 4 -5 -3 4 4 3 2 2 · 2 1 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.11; c_b = 0.17 Н PAV_conc PAV_pop 4 -5 -3 4 4 3 2 2 2 1 1 0 -Q_n Q_p R_n 0.003 6e-04 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 100 25 50 75 25 50 100 25 50 75 0

q_nc = 0.11; c_b = 0.18 Н PAV_conc PAV_pop 4 -5 -3 4 4 3 2 2 2 1 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 25 100 25 50 75 25 50 100 50 75 0

q_nc = 0.11; c_b = 0.19 Н PAV_conc PAV_pop 4 -5 -4 3 4 3 2 2 2 1 1 0 -Q_n Q_p R_n 6e-04 0.003 0.006 nutrient low 4e-04 0.002 0.004 kg +N 2e-04 0.001 +N+P 0.002 0e+00 -0.000 R_p RPV_conc RPV_pop 8e-05 6e-05 4 3 4e-05 2 2 2e-05 1 0e+00 100 75 25 100 25 50 75 25 50 100 50 75 0