a_n_lo = 1e-13; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 . 25

a_n_lo = 1e-13; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 . 25

a_n_lo = 1e-13; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 . 25

a_n_lo = 1e-13; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 . 25

a_n_lo = 1e-13; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 . 25

a_n_lo = 1e-13; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 · 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5 0e+00 0.0 0.0

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a_n_lo = 1e-13; a_p_lo = 1e-07 Н PAV_conc PAV_pop 5 -6 6 -4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.02 low 4e-04 value 0.0050 +N 0.01 2e-04 +N+P 0.0025 0.0000 -0e+00 0.00 R_p RPV_conc RPV_pop 10.0 8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05

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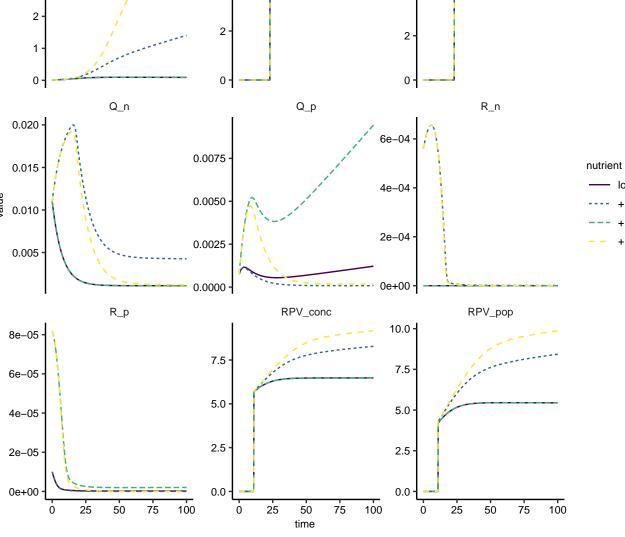
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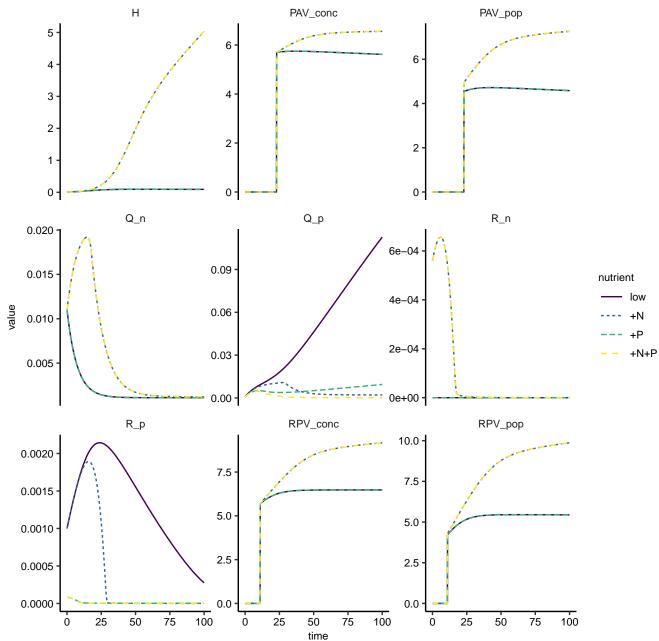
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a_n_lo = 1e-13; a_p_lo = 1e-06 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.020 -0.0075 nutrient 0.015 low 4e-04 0.010 0.0050 2e-04 +N+P 0.0025 0.005 0.0000 -0e+00 R_p RPV_conc RPV_pop 10.0 -8e-05 7.5 7.5



a_n_lo = 1e-13; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 · 2 · 1 -0 -Q_n Q_p R_n 0.020 0.012 -6e-04 0.009 0.015 nutrient low 4e-04 value 0.006 0.010 +N 2e-04 +N+P 0.003 0.005 0e+00 0.000 -R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 -7.5 7.5e-05 -5.0 -5.0e-05 5.0 2.5 -2.5e-05 2.5 0.0e+00 0.0 0.0 75 100 50 100 25 50 100 25 50 75 0 . 25 . 75

a_n_lo = 1e-13; a_p_lo = 1e-04



a_n_lo = 1e-12; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 . 25

a_n_lo = 1e-12; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-12; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-12; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-12; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0

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a_n_lo = 1e-12; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 · 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5

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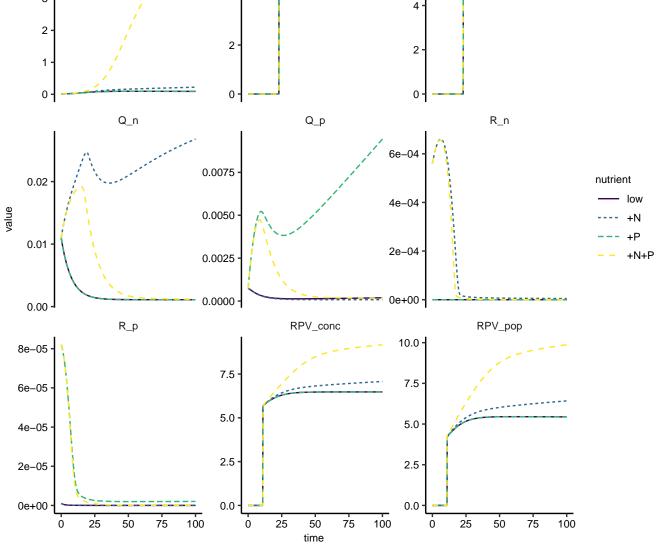
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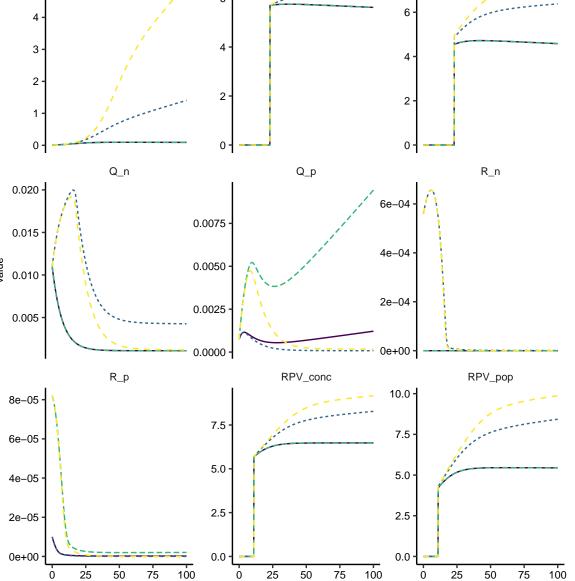
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a_n_lo = 1e-12; a_p_lo = 1e-06 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.020 -0.0075 nutrient 0.015 4e-04 0.010 0.0050 2e-04

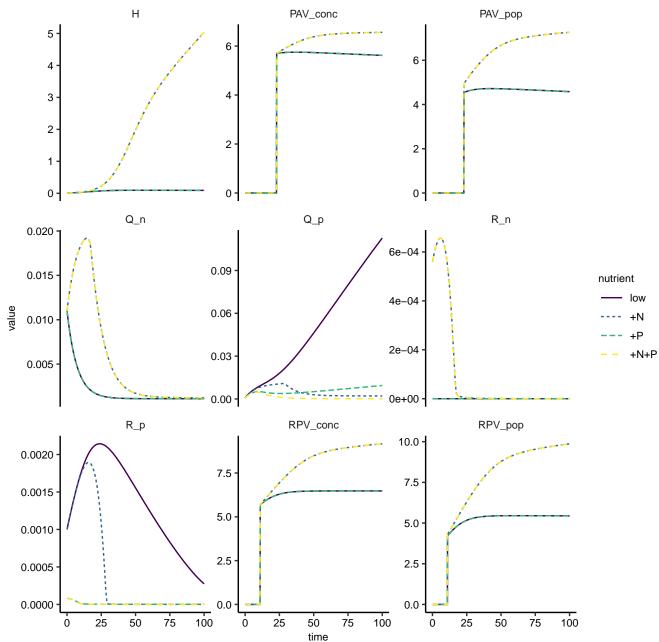


low

+N+P

a_n_lo = 1e-12; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 · 2 · 1 -0 -Q_n Q_p R_n 0.020 0.012 -6e-04 0.009 0.015 nutrient low 4e-04 value 0.006 0.010 +N 2e-04 +N+P 0.003 0.005 0e+00 0.000 -R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 -7.5 7.5e-05 -5.0 -5.0e-05 5.0 2.5 -2.5e-05 2.5 0.0e+00 0.0 0.0 75 100 50 100 25 50 100 25 50 75 0 . 25 . 75

a_n_lo = 1e-12; a_p_lo = 1e-04



a_n_lo = 1e-11; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-11; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-11; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-11; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-11; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 25

a_n_lo = 1e-11; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 · 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5 0e+00 0.0 0.0 25 100 50 75 100 25 50 75 100 50 75 25

a_n_lo = 1e-11; a_p_lo = 1e-07 Н PAV_conc PAV_pop 5 -6 6 -4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.02 low 4e-04 value 0.0050 +N 0.01 2e-04 +N+P 0.0025 0.0000 -0e+00 0.00 R_p RPV_conc RPV_pop 10.0 8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5

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a_n_lo = 1e-11; a_p_lo = 1e-06 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.020 -0.0075 nutrient 0.015 low 4e-04 0.010 0.0050 2e-04 +N+P 0.0025 0.005 0.0000 -0e+00 R_p RPV_conc RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5

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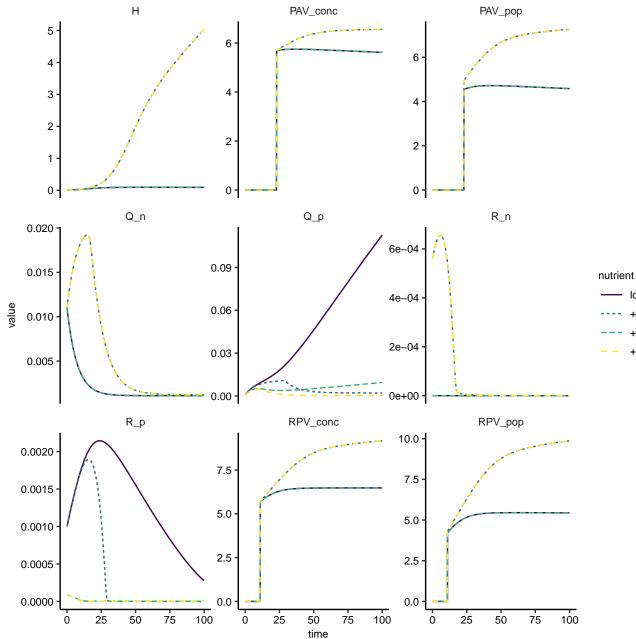
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a_n_lo = 1e-11; a_p_lo = 1e-04



low

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+N+P

a_n_lo = 1e-10; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 25

a_n_lo = 1e-10; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-10; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-10; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-10; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0

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a_n_lo = 1e-10; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5 0e+00 0.0 0.0

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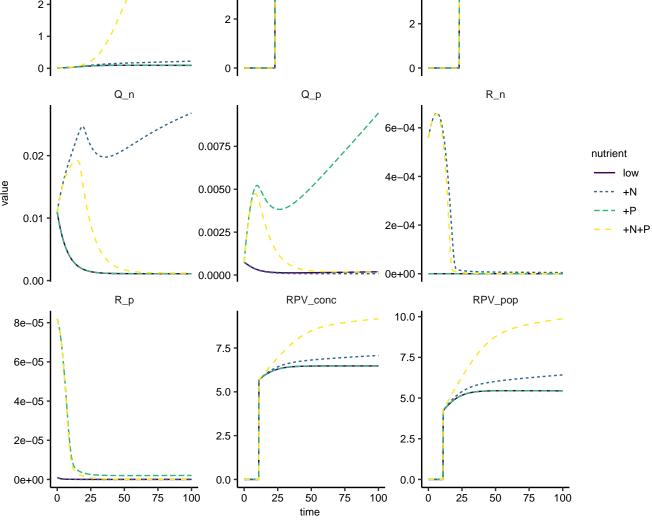
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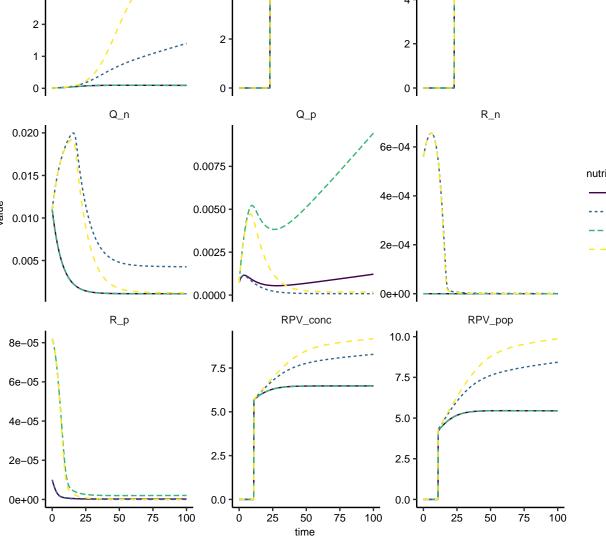
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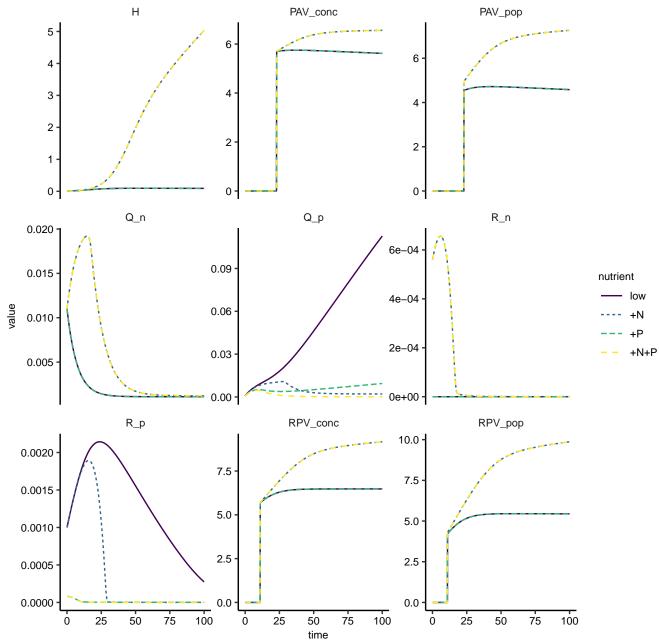


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a_n_lo = 1e-10; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 · 2 · 1 -0 -Q_n Q_p R_n 0.020 0.012 -6e-04 0.009 0.015 nutrient low 4e-04 value 0.006 0.010 +N 2e-04 +N+P 0.003 0.005 0e+00 0.000 -R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 -7.5 7.5e-05 5.0 -5.0e-05 5.0 2.5 -2.5e-05 2.5 0.0e+00 0.0 0.0 75 100 50 100 25 50 100 25 50 75 0 . 25 . 75

a_n_lo = 1e-10; a_p_lo = 1e-04



a_n_lo = 1e-09; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 . 25

a_n_lo = 1e-09; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 . 25

a_n_lo = 1e-09; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 . 25

a_n_lo = 1e-09; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 100 50 75 100 25 50 75 100 75 0 . 25

a_n_lo = 1e-09; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0

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a_n_lo = 1e-09; a_p_lo = 1e-07 Н PAV_conc PAV_pop 5 -6 6 -4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.02 low 4e-04 value 0.0050 +N 0.01 2e-04 +N+P 0.0025 0.0000 -0e+00 0.00 R_p RPV_conc RPV_pop 10.0 8e-05 7.5 7.5 6e-05 5.0 -

2.5 -

0.0

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time

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4e-05

2e-05

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5.0

2.5

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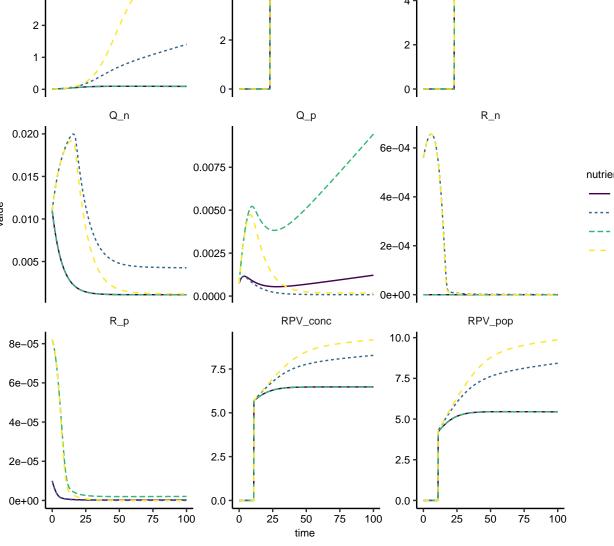
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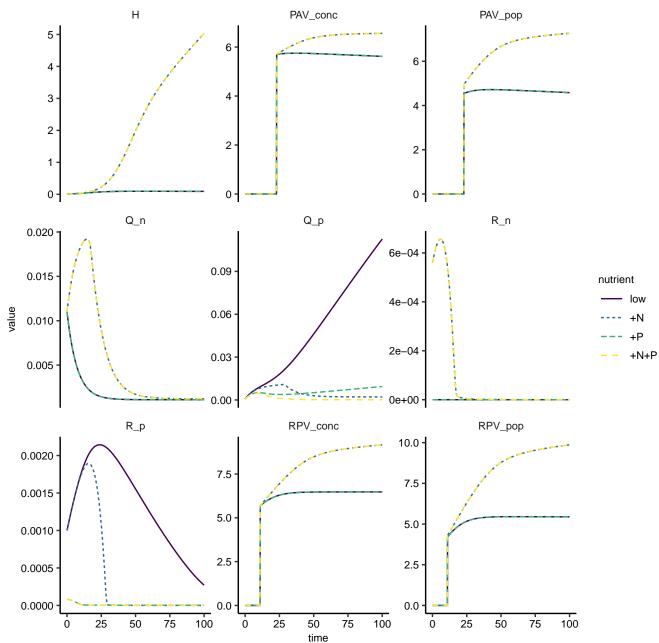
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a_n_lo = 1e-09; a_p_lo = 1e-06 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.020 -0.0075 nutrient 0.015 low 4e-04 0.010 0.0050 2e-04 +N+P 0.0025 0.005 0.0000 -0e+00 R_p RPV_conc RPV_pop 10.0 -8e-05 7.5



a_n_lo = 1e-09; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 · 2 · 1 -0 -Q_n Q_p R_n 0.020 0.012 -6e-04 0.009 0.015 nutrient low 4e-04 value 0.006 0.010 +N 2e-04 +N+P 0.003 0.005 0e+00 0.000 -R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 -7.5 7.5e-05 -5.0 -5.0e-05 5.0 2.5 -2.5e-05 2.5 0.0e+00 0.0 0.0 75 100 50 100 25 50 100 25 50 75 0 . 25 . 75

a_n_lo = 1e-09; a_p_lo = 1e-04



a_n_lo = 1e-08; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100

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a_n_lo = 1e-08; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0

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time

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a_n_lo = 1e-08; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-08; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 25

a_n_lo = 1e-08; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0

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a_n_lo = 1e-08; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.04 low 4e-04 value 0.0050 +N 0.02 2e-04 +N+P 0.0025 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5

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time

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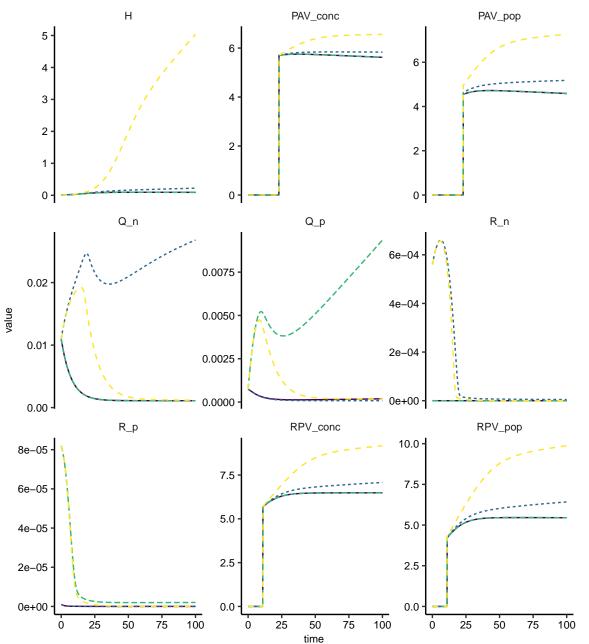
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a_n_lo = 1e-08; a_p_lo = 1e-07



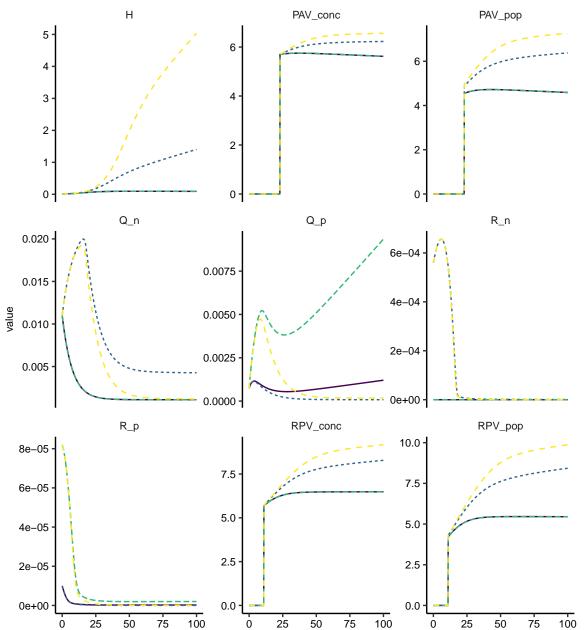
nutrient

low

+N

+N+P

a_n_lo = 1e-08; a_p_lo = 1e-06 Н 5 -



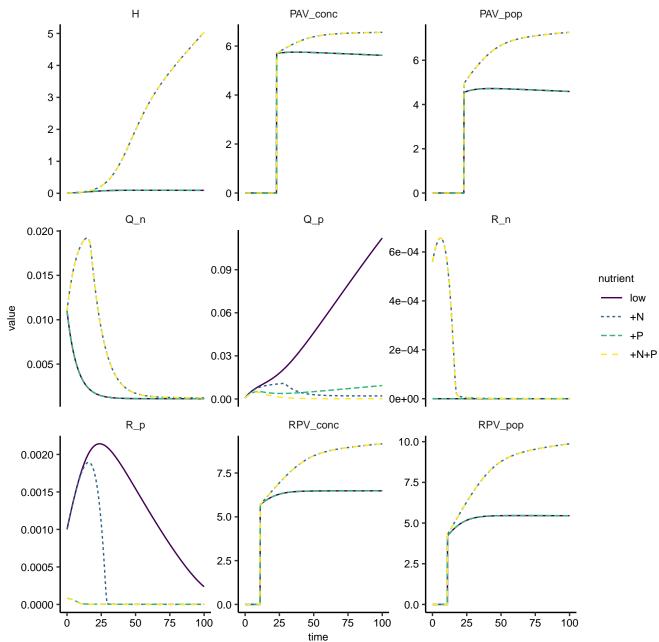
nutrient

low

+N+P

a_n_lo = 1e-08; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 · 2 · 1 -0 -Q_n Q_p R_n 0.020 6e-04 0.009 0.015 nutrient low 4e-04 value 0.006 0.010 +N 2e-04 +N+P 0.003 0.005 0e+00 0.000 -R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 -7.5 7.5e-05 -5.0 -5.0e-05 5.0 2.5 -2.5e-05 2.5 0.0e+00 0.0 0.0 75 100 25 50 100 25 50 100 25 50 75 0 . 75

a_n_lo = 1e-08; a_p_lo = 1e-04



a_n_lo = 1e-07; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 0.0050 value +N 0.02 2e-04 0.0025 +N+P 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-07; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 0.0050 4e-04 value +N 0.02 2e-04 0.0025 +N+P 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 25

a_n_lo = 1e-07; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 0.0050 value +N 0.02 2e-04 0.0025 +N+P 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-07; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient low 0.04 4e-04 0.0050 value +N 0.02 2e-04 0.0025 +N+P 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0 25 50 75 100 50 75 100 25 50 75 100 0 25

a_n_lo = 1e-07; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.06 0.0075 nutrient 0.04 low 4e-04 0.0050 value +N 0.02 2e-04 0.0025 +N+P 0.0000 0e+00 0.00 RPV_conc RPV_pop R_p 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0

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time

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a_n_lo = 1e-07; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 · 2 1 0 -Q_n Q_p R_n 0.0075 nutrient 0.04 low 4e-04 0.0050 value +N 0.02 2e-04 0.0025 +N+P 0.0000 0e+00 0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2.5 2e-05 0e+00 0.0 0.0

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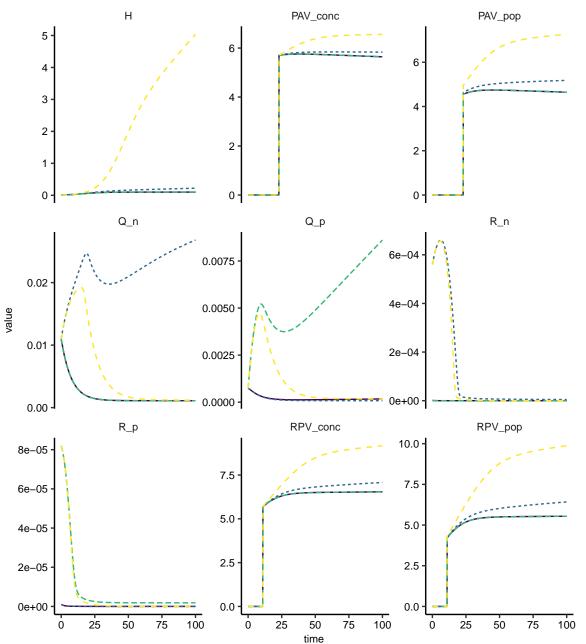
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a_n_lo = 1e-07; a_p_lo = 1e-07 Н 5 -



nutrient

low

+N

+N+P

a_n_lo = 1e-07; a_p_lo = 1e-06 Н PAV_conc PAV_pop 5 -6 6 4 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.020 -0.0075 nutrient 0.015 low 4e-04 0.0050 0.010 2e-04 0.0025 +N+P 0.005 0.0000 -0e+00 R_p RPV_conc RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 -5.0 4e-05 2.5 -2e-05 2.5

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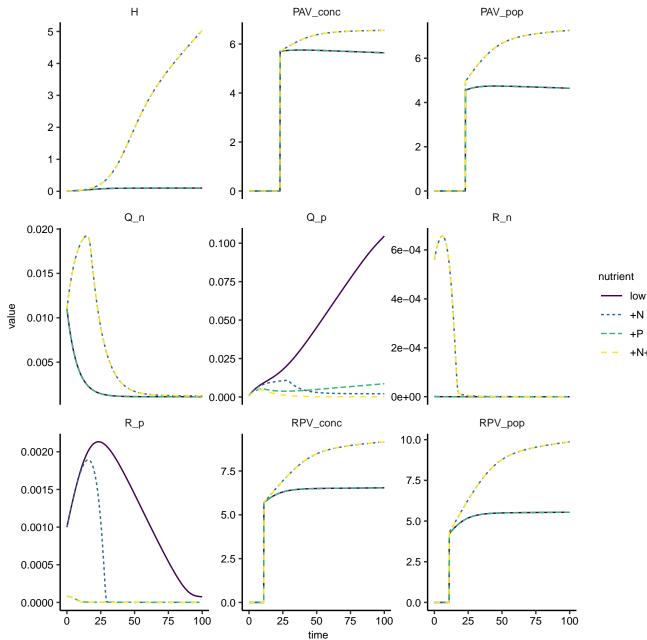
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a_n_lo = 1e-07; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 2 · 1 -0 -Q_n Q_p R_n 0.020 -0.0100 0.015 nutrient 0.0075 low 4e-04 value 0.010 +N 0.0050 2e-04 +N+P 0.005 0.0025 0e+00 -0.0000 -R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 7.5 -7.5e-05 5.0 5.0e-05 5.0 2.5 2.5e-05 2.5 -0.0e+00 0.0 0.0 75 25 50 100 25 50 100 25 50 75 100 . 75 Ö 0

a_n_lo = 1e-07; a_p_lo = 1e-04



+N

+N+P

a_n_lo = 1e-06; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -0 Q_n Q_p R_n 0.005 0.06 0.004 nutrient low 0.04 4e-04 0.003 value +N 0.002 0.02 2e-04 +N+P 0.001 0e+00 0.000 -0.00 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 0e+00 0.0 0.0

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a_n_lo = 1e-06; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 0.06 0.004 nutrient low 0.04 4e-04 0.003 value +N 0.002 0.02 2e-04 +N+P 0.001 0e+00 0.000 -0.00 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 0e+00 0.0 0.0

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time

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a_n_lo = 1e-06; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -0 Q_n Q_p R_n 0.005 0.06 0.004 nutrient low 0.04 4e-04 0.003 value +N 0.002 0.02 2e-04 +N+P 0.001 0e+00 0.000 -0.00 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 0e+00 0.0 0.0 100 75 100 25 75 25 50 100 25 50 75 50

time

a_n_lo = 1e-06; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 0.06 0.004 nutrient low 0.04 4e-04 0.003 value +N 0.002 0.02 2e-04 +N+P 0.001 0e+00 0.000 -0.00 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 0e+00 0.0 0.0

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a_n_lo = 1e-06; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 0.06 0.004 nutrient 0.04 low 4e-04 0.003 value +N 0.002 0.02 2e-04 +N+P 0.001 0e+00 0.000 -0.00 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

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a_n_lo = 1e-06; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 0.004 nutrient 0.04 low 4e-04 0.003 value +N 0.002 0.02 2e-04 +N+P 0.001 0e+00 0.000 -0.00 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

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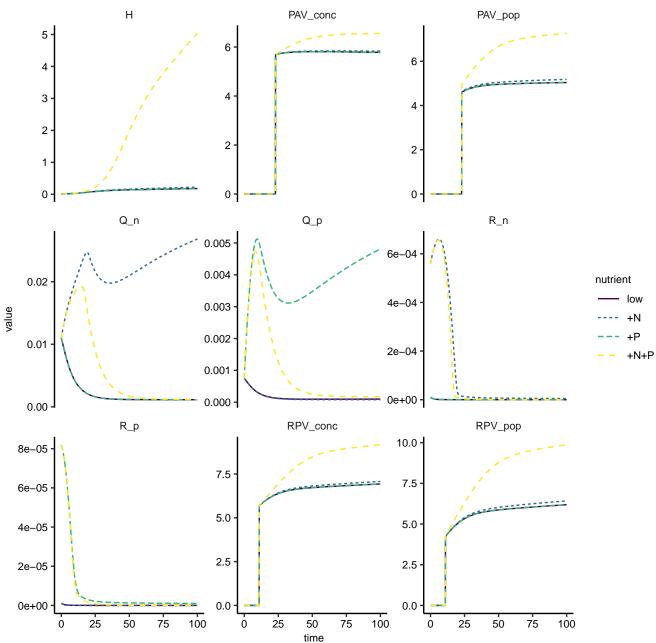
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0e+00

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25

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a_n_lo = 1e-06; a_p_lo = 1e-06 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.020 -0.005 0.004 nutrient 0.015 low 4e-04 0.003 0.010 0.002 2e-04 +N+P 0.005 0.001 0.000 0e+00 -R_p RPV_conc RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 5.0

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time

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4e-05

2e-05

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a_n_lo = 1e-06; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 · 2 · 1 -0 -0 Q_n Q_p R_n 0.020 0.006 -6e-04 0.015 nutrient 0.004 low 4e-04 value 0.010 +N 0.002 2e-04 +N+P 0.005 0e+00 0.000 R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 -7.5 7.5e-05 -5.0 -5.0e-05 5.0 2.5 -2.5e-05 2.5 0.0e+00 0.0 0.0

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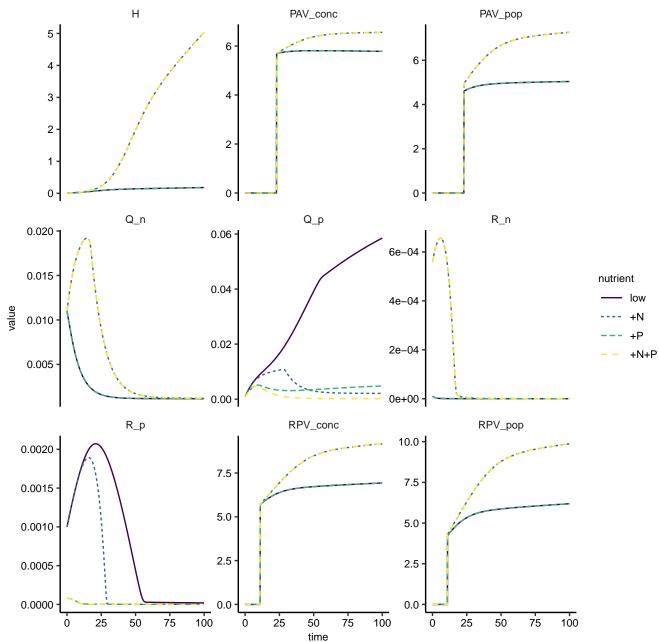
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a_n_lo = 1e-06; a_p_lo = 1e-04



a_n_lo = 1e-05; a_p_lo = 1e-13 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.06 0.004 nutrient 0.003 low 0.04 4e-04 value +N 0.002 2e-04 0.02 +N+P 0.001 0e+00 -0.000 -0.00 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

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a_n_lo = 1e-05; a_p_lo = 1e-12 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.06 0.004 nutrient 0.003 low 0.04 4e-04 value +N 0.002 2e-04 0.02 +N+P 0.001 0e+00 -0.000 -0.00 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

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0.0

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time

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a_n_lo = 1e-05; a_p_lo = 1e-11 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.06 0.004 nutrient 0.003 low 0.04 4e-04 value +N 0.002 2e-04 0.02 +N+P 0.001 0e+00 -0.000 -0.00 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 0e+00 0.0 0.0

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time

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100

a_n_lo = 1e-05; a_p_lo = 1e-10 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.06 0.004 nutrient 0.003 low 0.04 4e-04 value +N 0.002 2e-04 0.02 +N+P 0.001 0e+00 -0.000 -0.00 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 0e+00 0.0 0.0

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time

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a_n_lo = 1e-05; a_p_lo = 1e-09 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.06 0.004 nutrient 0.04 0.003 low 4e-04 value 0.002 2e-04 0.02 +N+P 0.001 0e+00 -0.000 -0.00 R_p RPV_conc RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 5.0 4e-05

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2.5

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time

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2e-05

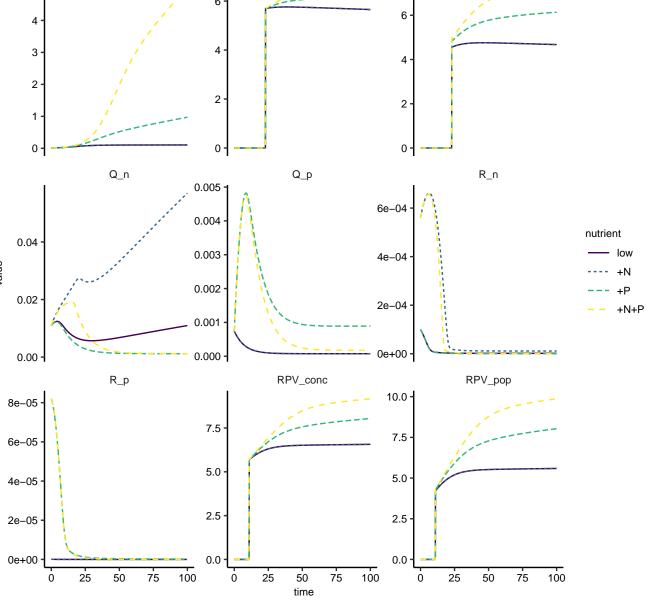
0e+00

Ö

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a_n_lo = 1e-05; a_p_lo = 1e-08 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.004 nutrient 0.04 0.003 low 4e-04 value +N 0.002 0.02 2e-04 0.001 0e+00 -0.000 -0.00 R_p RPV_conc RPV_pop 10.0 -8e-05 7.5



a_n_lo = 1e-05; a_p_lo = 1e-07 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.004 nutrient 0.02 0.003 low 4e-04 value 0.002 0.01 2e-04 +N+P 0.001 0e+00 0.000 -0.00 RPV_conc R_p RPV_pop 10.0 -8e-05 7.5 7.5 6e-05 5.0 5.0 4e-05 2.5 2.5 2e-05

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a_n_lo = 1e-05; a_p_lo = 1e-06 Н PAV_conc PAV_pop 5 -6 4 3 4 2 2 2 1 0 -Q_n Q_p R_n 0.005 -0.020 -0.004 nutrient 0.015 0.003 low 4e-04 value +N 0.010 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

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a_n_lo = 1e-05; a_p_lo = 1e-05 Н PAV_conc PAV_pop 5 -6 6 4 3 4 4 2 2 · 2 1 -0 -0 -Q_n Q_p R_n 0.020 6e-04 0.015 nutrient 0.004 low 4e-04 value 0.010 +N 0.002 2e-04 +N+P 0.005 0e+00 0.000 R_p RPV_conc RPV_pop 10.0 -1.0e-04 7.5 -7.5 7.5e-05 5.0 -5.0e-05 5.0 2.5 -2.5e-05 2.5 0.0 0.0e+00 0.0 75 100

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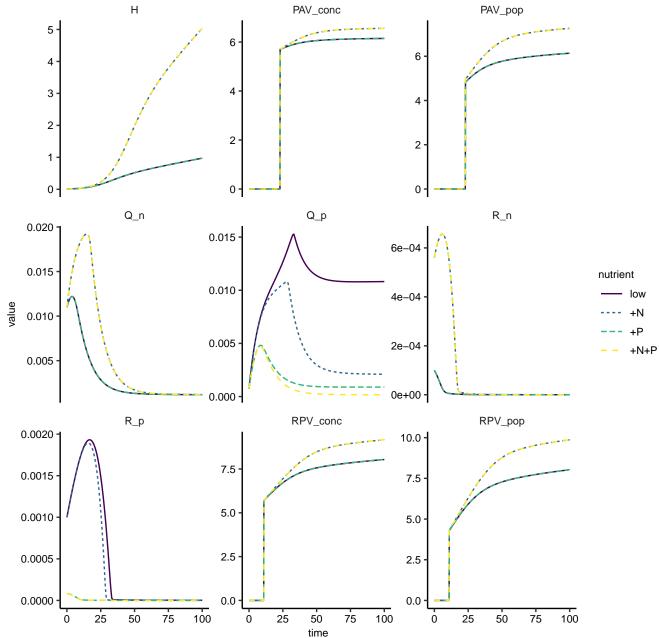
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a_n_lo = 1e-05; a_p_lo = 1e-04



a_n_lo = 1e-04; a_p_lo = 1e-13 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.12 -0.0015 -0.004 0.09 nutrient 0.0010 0.003 low value 0.06 +N 0.002 0.0005 +N+P 0.03 0.001 0.00 -0.0000 -0.000 -R_p RPV_conc RPV_pop 10.0 8e-05 10.0 7.5 -6e-05 7.5 5.0 -4e-05 5.0 2.5 -2e-05 2.5

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100

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a_n_lo = 1e-04; a_p_lo = 1e-12 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.12 -0.0015 -0.004 0.09 nutrient 0.0010 0.003 low value 0.06 +N 0.002 0.0005 +N+P 0.03 0.001 0.00 -0.0000 -0.000 -R_p RPV_conc RPV_pop 10.0 8e-05 10.0 7.5 -6e-05 7.5 5.0 -4e-05 5.0 2.5 -2e-05 2.5

25

100

50

75

0e+00

0

. 25 0.0

25

100

75

50

75

100

50

a_n_lo = 1e-04; a_p_lo = 1e-11 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.12 -0.0015 -0.004 0.09 nutrient 0.0010 0.003 low value 0.06 +N 0.002 0.0005 +N+P 0.03 0.001 0.00 -0.0000 -0.000 -R_p RPV_conc RPV_pop 10.0 8e-05 10.0 7.5 -6e-05 7.5 5.0 -4e-05 5.0 2.5 -2e-05 2.5

25

100

50

75

0e+00

0

. 25 0.0

25

100

75

50

75

100

50

a_n_lo = 1e-04; a_p_lo = 1e-10 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.12 -0.0015 -0.004 0.09 nutrient 0.0010 0.003 low value 0.06 +N 0.002 0.0005 +N+P 0.03 0.001 0.00 -0.0000 -0.000 -R_p RPV_conc RPV_pop 10.0 8e-05 10.0 7.5 -6e-05 7.5 5.0 -4e-05 5.0 2.5 -2e-05 2.5

25

100

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75

0e+00

0

. 25 0.0

25

100

75

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75

100

50

a_n_lo = 1e-04; a_p_lo = 1e-09 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.0015 -0.004 0.09 nutrient 0.0010 0.003 low value 0.06 0.002 0.0005 +N+P 0.03 0.001 0.00 -0.0000 -0.000 -R_p RPV_conc RPV_pop 10.0 8e-05 10.0 7.5 6e-05 7.5 5.0 -4e-05 5.0 2.5 2e-05 2.5

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100

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75

0e+00

0

. 25 0.0

25

100

75

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75

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time

a_n_lo = 1e-04; a_p_lo = 1e-08 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.0015 -0.100 -0.004 nutrient 0.075 0.0010 0.003 low value 0.050 0.002 0.0005 +N+P 0.025 0.001 0.0000 -0.000 -0.000 -RPV_pop R_p RPV_conc 10.0 8e-05 10.0 7.5 6e-05 7.5 5.0 -4e-05 5.0 2.5 2e-05 2.5

25

100

50

75

0e+00

0

. 25 0.0

25

100

75

50

75

100

50

a_n_lo = 1e-04; a_p_lo = 1e-07 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.0015 0.04 0.004 nutrient 0.0010 0.003 0.03 low value 0.002 0.02 0.0005 +N+P 0.001 0.01 0.0000 -0.000 -0.00 R_p RPV_conc RPV_pop 10.0 8e-05 10.0 7.5 6e-05 7.5 5.0 -4e-05 5.0 2.5 2e-05 2.5

Ö

25

50

time

100

50

75

0e+00

0

. 25 0.0

25

100

75

50

75

a_n_lo = 1e-04; a_p_lo = 1e-06 Н PAV_conc PAV_pop 8 7 6 7.5 6 5.0 4 2 2.5 2 0.0 -0 Q_n R_n Q_p 0.0015 0.020 0.004 nutrient 0.0010 0.015 0.003 low value 0.002 0.010 0.0005 +N+P 0.001 0.005 0.0000 -0.000 R_p RPV_conc RPV_pop 10.0 8e-05 10.0 7.5

5.0 -

2.5

0.0

Ö

25

50

time

100

7.5

5.0

2.5

0.0

25

100

75

50

75

100

6e-05

4e-05

2e-05

0e+00

Ö

25

50

a_n_lo = 1e-04; a_p_lo = 1e-05 Н PAV_conc PAV_pop 8 7 6 7.5 6 4 5.0 4 2 2.5 2 0.0 -0 -Q_n Q_p R_n 0.0015 0.020 nutrient 0.004 0.015 0.0010 low value +N 0.010 0.002 0.0005 +N+P 0.005 0.0000 -0.000 R_p RPV_conc RPV_pop 10.0 -1.0e-04 10.0 7.5 -7.5e-05 7.5 5.0 5.0e-05 5.0 2.5e-05 2.5 -2.5 0.0e+00 0.0 0.0 50 75 100 25 25 50 . 75 100 25 50 . 75 100 Ö

time

a_n_lo = 1e-04; a_p_lo = 1e-04

