

EDM 2.2 automated verification of commit: *388a06b_mlo_aa7dc6b_v1_rapid*

Marcos Longo and Ryan Knox

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Table of Contents

- 1 Test Specifications
- 2 Test Summary
 - Debug Completion Test
 - Output Comparison Table
- 3 Site of Interest (SOI) Runs
 - Manaus km 34
 - Atacama Desert
 - Santarem km 67
 - Harvard Forest
 - Pe de Gigante
 - Caxiuna
 - Tonzi
 - Tapajos National Forest
 - Petrolina
- 4 High Frequency Output
 - Petrolina High Frequency
 - Manaus High Frequency
- 5 Gridded Output
 - 12x12 Offline Grid - Rebio Jaru

Test Version Branched from: 388a06b

Committer (changed model code): Marcos Longo and Ryan Knox

Tester (generated this report): Marcos Longo and Ryan Knox

Description of Changes: 1. Changed minimum height for reproduction based on BCI measurements (tropical trees only). 2. Changes in minimum reproduction size, so seed_rain works. 3. Added a new mortality parameter (mort0) to allow shifting the curve. 4. Changed compilation instructions so it can compile most files with -O3 but uses -O2 for files that would otherwise take days to compile with ifort 13. 4. New dist_type categories, which now distinguishes tree fall, logging, fires, abandonment and forest plantations. 5. Changed forestry.f90, this file computes the disturbance rates but lets disturbance.f90 to apply them do cpoly-disturbance_rates is now correctly updated. 6. Miscellaneous minor bug fixes.

Test Specifications
Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

	INIT_MODE	INTEGRATION	LAT	LOI	ISOILFLG	ISOILCOL	NZG	ISOILBC	IBIGLEAF	IBRANCH	IALLM	IGRASS	IPHEN	CROWNMOD	DECOMP_SCHEME	H2O_PLANT_LIM
M34																
TEST:	5	3	-2.609075	-60.2093	1	2	16	1	0	1	2	1	2	0	0	2
DEBUG:	5	3	-2.609075	-60.2093	1	2	16	1	0	1	2	1	2	0	0	2
MAIN:	5	3	-2.609075	-60.2093	1	2	16	1	0	1	2	1	2	0	0	2
S67																
TEST:	0	1	-2.856667	-54.958889	2	2	16	1	0	0	2	0	2	0	0	1
DEBUG:	0	1	-2.856667	-54.958889	2	2	16	1	0	0	2	0	2	0	0	1
MAIN:	0	1	-2.856667	-54.958889	2	2	16	1	0	0	2	0	2	0	0	1
HAR																
TEST:	6	1	42.54	-72.17	2	2	14	0	0	0	0	0	1	0	0	1
DEBUG:	6	1	42.54	-72.17	2	2	14	0	0	0	0	0	1	0	0	1
MAIN:	6	1	42.54	-72.17	2	2	14	0	0	0	0	0	1	0	0	1
PDG																
TEST:	0	1	-21.619	-47.650	2	21	14	1	0	0	2	0	2	0	0	1
DEBUG:	0	1	-21.619	-47.650	2	21	14	1	0	0	2	0	2	0	0	1
MAIN:	0	1	-21.619	-47.650	2	21	14	1	0	0	2	0	2	0	0	1
TON																
TEST:	5	1	38.432	-120.966	2	21	9	1	0	0	0	0	2	0	0	1
DEBUG:	5	1	38.432	-120.966	2	21	9	1	0	0	0	0	2	0	0	1
MAIN:	5	1	38.432	-120.966	2	21	9	1	0	0	0	0	2	0	0	1
CAX																
TEST:	0	1	-1.72	-51.46	2	2	16	1	0	0	2	1	2	0	0	1
DEBUG:	0	1	-1.72	-51.46	2	2	16	1	0	0	2	1	2	0	0	1
MAIN:	0	1	-1.72	-51.46	2	2	16	1	0	0	2	1	2	0	0	1

Test Specifications
 Test Summary
 Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

	INIT_MODE	INTEGRATION	LAT	LOI	ISOILFLG	ISOILCOL	NZG	ISOILEC	IBIGLEAF	IBRANCH	IALLON	IGRASS	IPHEN	CROWNMOD	DECOMP_SCHEME	H2O_PLANT_LIM
TNF																
TEST:	5	1	-3.02	-54.97	2	2	16	1	0	0	2	0	2	0	0	1
DEBUG:	5	1	-3.02	-54.97	2	2	16	1	0	0	2	0	2	0	0	1
MAIN:	5	1	-3.02	-54.97	2	2	16	1	0	0	2	0	2	0	0	1
ATA																
TEST:	0	1	-20.509	-67.478	1	21	16	2	0	0	2	0	2	0	0	1
DEBUG:	0	1	-20.509	-67.478	1	21	16	2	0	0	2	0	2	0	0	1
MAIN:	0	1	-20.509	-67.478	1	21	16	2	0	0	2	0	2	0	0	1
PET																
TEST:	6	1	-9.165	-40.37	2	14	16	2	0	1	2	0	2	0	2	2
DEBUG:	6	1	-9.165	-40.37	2	14	16	2	0	1	2	0	2	0	2	2
MAIN:	6	1	-9.165	-40.37	2	14	16	2	0	1	2	0	2	0	2	2
HIM																
TEST:	5	3	-2.609075	-60.2093	2	2	16	1	0	1	2	1	2	0	0	2
DEBUG:	5	3	-2.609075	-60.2093	2	2	16	1	0	1	2	1	2	0	0	2
MAIN:	5	3	-2.609075	-60.2093	2	2	16	1	0	1	2	1	2	0	0	2
HIP																
TEST:	6	1	-9.165	-40.37	2	14	16	2	0	1	2	0	2	0	2	2
DEBUG:	6	1	-9.165	-40.37	2	14	16	2	0	1	2	0	2	0	2	2
MAIN:	6	1	-9.165	-40.37	2	14	16	2	0	1	2	0	2	0	2	2
RJG																
TEST:	5	1	-2.609075	-60.2093	1	2	16	2	0	1	2	1	2	0	0	2
DEBUG:	5	1	-2.609075	-60.2093	1	2	16	2	0	1	2	1	2	0	0	2
MAIN:	5	1	-2.609075	-60.2093	1	2	16	2	0	1	2	1	2	0	0	2

Test Specifications
Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

	IDDMORT_SCHEME	THETACRIT	INCLUDE_FIRE	IANTH_DISTURB	ICANTURB	IPERCOL	MAXSITE	MAXPATCH	MAXCOHORT	TREEFALL_RATE	IMETAVG	IMETRAD	DT_CENSUS	IDETAILED	PATCH_KEEP
M34															
TEST:	0	-1.20	2	1	3	0	3	20	80	0.014	2	2	1	0	0
DEBUG:	0	-1.20	2	1	3	0	3	20	80	0.014	2	2	1	0	0
MAIN:	0	-1.20	2	1	3	0	3	20	80	0.014	2	2	1	0	0
S67															
TEST:	0	-1.20	0	0	2	1	1	20	80	0.014	2	0	1	0	0
DEBUG:	0	-1.20	0	0	2	1	1	20	80	0.014	2	0	1	0	0
MAIN:	0	-1.20	0	0	2	1	1	20	80	0.014	2	0	1	0	0
HAR															
TEST:	1	0.09	0	0	2	1	1	20	80	0.014	2	0	1	0	0
DEBUG:	1	0.09	0	0	2	1	1	20	80	0.014	2	0	1	0	0
MAIN:	1	0.09	0	0	2	1	1	20	80	0.014	2	0	1	0	0
PDG															
TEST:	0	-1.20	2	0	2	1	1	20	80	0.014	2	0	12	0	0
DEBUG:	0	-1.20	2	0	2	1	1	20	80	0.014	2	0	12	0	0
MAIN:	0	-1.20	2	0	2	1	1	20	80	0.014	2	0	12	0	0
TON															
TEST:	1	-1.20	0	0	2	1	1	8	40	0.0	0	0	1	0	0
DEBUG:	1	-1.20	0	0	2	1	1	8	40	0.0	0	0	1	0	0
MAIN:	1	-1.20	0	0	2	1	1	8	40	0.0	0	0	1	0	0
CAX															
TEST:	0	0.09	0	0	2	0	1	20	80	0.014	1	0	12	0	0
DEBUG:	0	0.09	0	0	2	0	1	20	80	0.014	1	0	12	0	0
MAIN:	0	0.09	0	0	2	0	1	20	80	0.014	1	0	12	0	0

MAXPATCH	MAXCOHORT	TREEFALL_RATE	IMETAVG	IMETRAD	DT_CENSUS	IDETAILED	PATCH_KEEP
20	80	0.014	1	0	12	0	0
20	80	0.014	1	0	12	0	0
20	80	0.014	1	0	12	0	0
20	80	0.014	2	2	1	0	0
20	80	0.014	2	2	1	0	0
20	80	0.014	2	2	1	0	0
20	40	0.014	1	2	1	0	0
20	80	0.014	1	2	1	0	0
20	40	0.014	1	2	1	0	0
20	80	0.014	2	2	1	1	-1
20	80	0.014	2	2	1	1	-1
20	80	0.014	2	2	1	1	-1
20	80	0.014	1	2	1	7	-1
20	80	0.014	1	2	1	0	-1
20	80	0.014	1	2	1	7	-1
15	20	0.014	1	2	1	0	0
15	20	0.014	1	2	1	0	0
15	20	0.014	1	2	1	0	0

The following simulations resulted in completion or failure:

RUN	DEBUG	TEST	MAIN
m34:	COMP	COMP	COMP
ata:	COMP	COMP	COMP
s67:	COMP	COMP	COMP
har:	COMP	COMP	COMP
pdg:	COMP	COMP	COMP
cax:	COMP	COMP	COMP
ton:	COMP	COMP	COMP
tnf:	COMP	COMP	COMP
pet:	COMP	COMP	COMP
hip:	COMP	COMP	COMP
him:	COMP	COMP	COMP
rjg:	COMP	COMP	COMP

Test Specifications
Test Summary
 Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

Debug Completion Test
Output Comparison Table

SOI Run(s)

Site	ΔET [mm/m ²]	ΔSHF [W/m ²]	ΔR_{net} [W/m ²]	ΔR_{SWU} [W/m ²]	ΔGPP [kgC/m ²]	ΔNEP [kgC/m ²]	ΔCO_2C [ppm]	Δ_{50cm} [m ³ /m ³]	ΔT_L [°C]
m34	0.1771	-0.0162	0.0977	0.0977	-0.0813	0.0586	0.0951	0.0001	-0.0520
ata	0.0777	0.1362	0.2327	0.2327	-0.0906	0.0016	0.0015	0.0002	-0.0268
s67	0.4347	0.0977	0.3956	0.3956	-0.1603	0.0344	0.0179	-0.0002	-0.0236
har	-0.0010	0.0049	0.0355	0.0355	-0.0291	0.0003	0.0019	0.0000	0.0010
pdg	-0.1329	0.0212	-0.0779	-0.0779	0.0895	-0.0107	-0.0048	-0.0002	-0.0005
cax	0.5140	0.2450	0.5703	0.5703	-0.2771	0.1237	0.0362	0.0003	-0.0351
ton	-0.0070	-0.1528	-0.1880	-0.1880	0.1579	0.0147	0.0060	-0.0001	-0.0500
tnf	1.0143	-0.3541	0.3296	0.3296	-0.1603	0.1367	0.1311	0.0005	-0.0601
pet	-0.0002	-0.0070	-0.0072	-0.0072	0.0038	-0.0000	-0.0000	0.0000	0.0004

Hi-Frequency Run(s) (Time-Integrated)

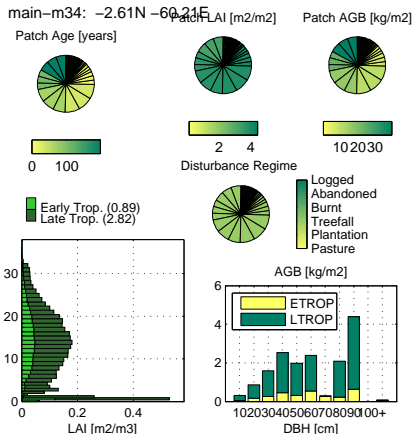
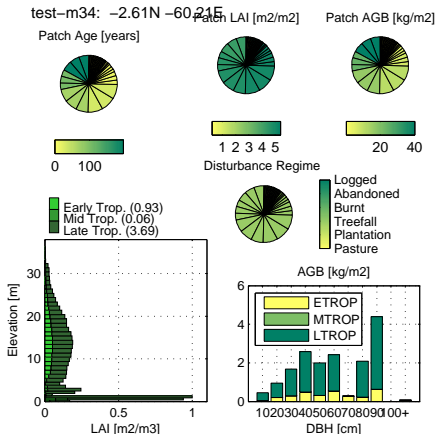
Site	ΔE GJ/m ²	\dot{E}_{Pcp} GJ/m ²	\dot{E}_{Rn} GJ/m ²	\dot{E} GJ/m ²	\dot{E}_P GJ/m ²	$H + L$ GJ/m ²	\dot{E}_{DR} GJ/m ²	\dot{E}_{RO} GJ/m ²	ΔC umol/m ²	\dot{C}_{NEP} umol/m ²
hip	0.0280	0.0000	-0.0170	-0.0170	0.0000	-0.0000	-0.0422	0.0000	-236.0326	-7194.0142
him	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Gridded Run(s)

Site	AGB kgC/ha	BA m ² /ha
rjg	0.0388	0.0164

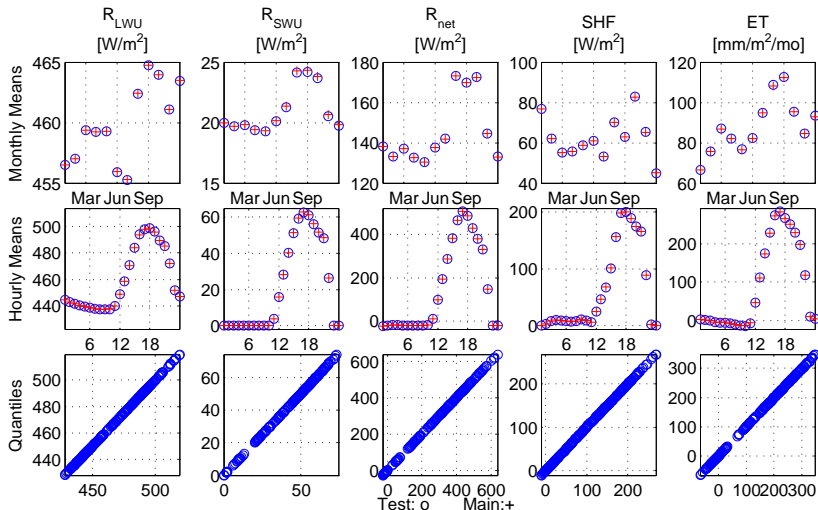
Test Specifications
Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

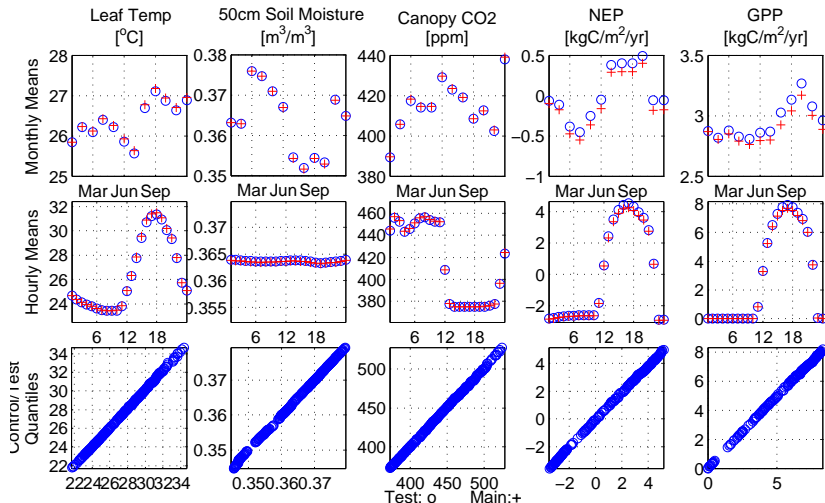
Manaus km 34
Atacama Desert
Santarem km 67
Harvard Forest
Pe de Gigante
Caxiuana
Tonzi
Tapajos National Forest
Petrilina



Test Specifications
 Test Summary
 Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

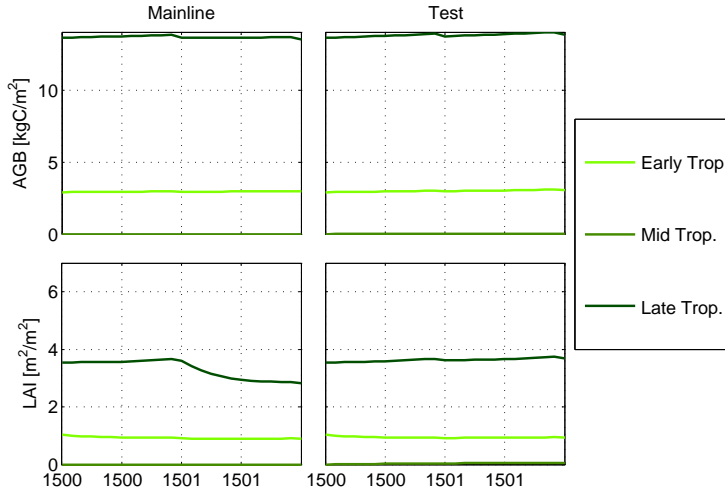
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 Caxiuana
 Tonzi
 Tapajos National Forest
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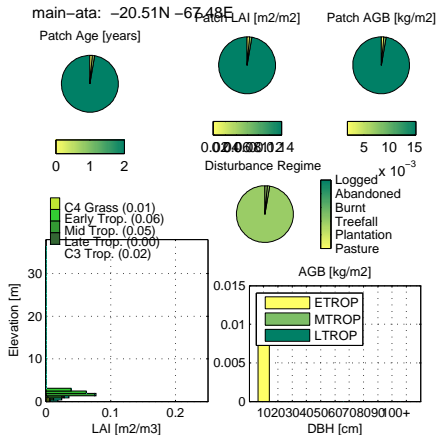


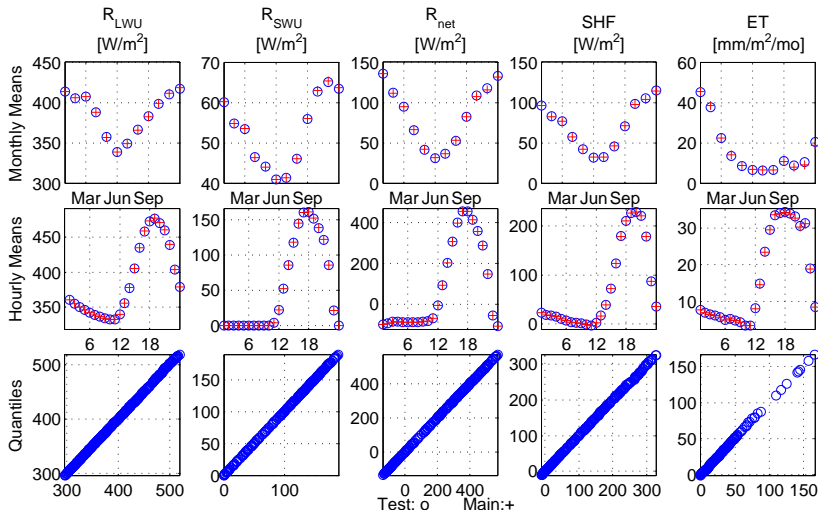


Test Specifications
Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

Manaus km 34
Atacama Desert
Santarem km 67
Harvard Forest
Pe de Gigante
Caxiuana
Tonzi
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Petrolina

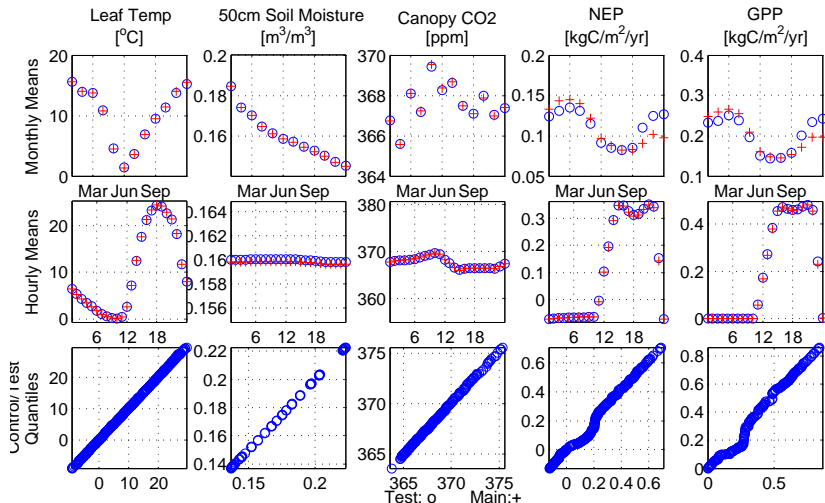


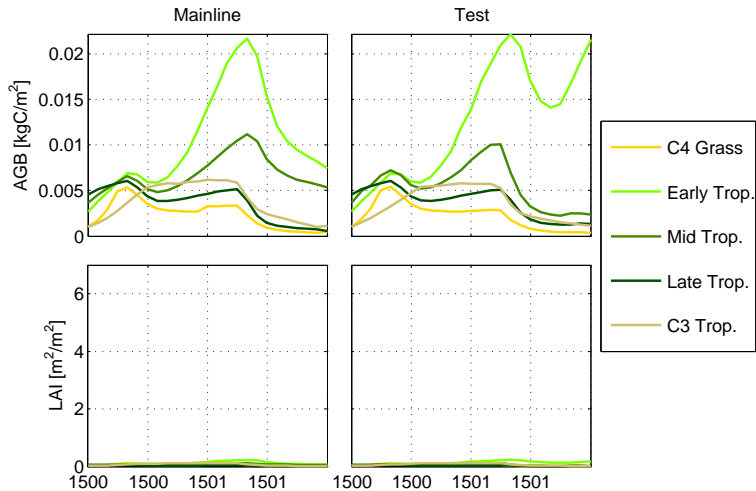




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Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

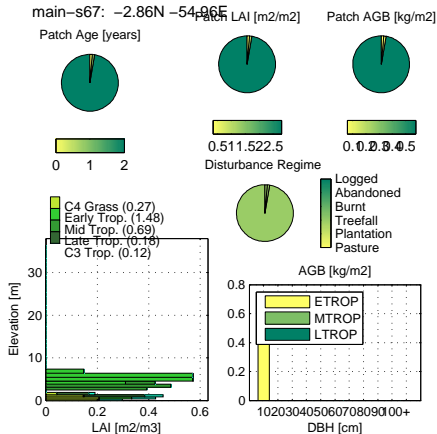
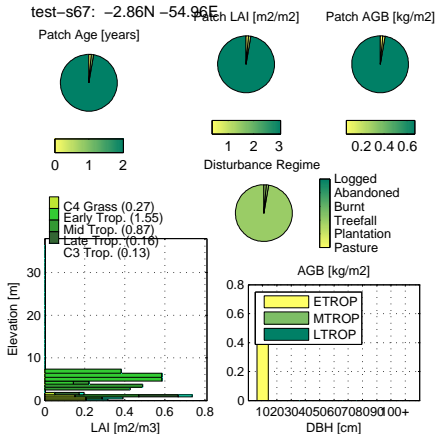
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Caxiuaia
Tonzi
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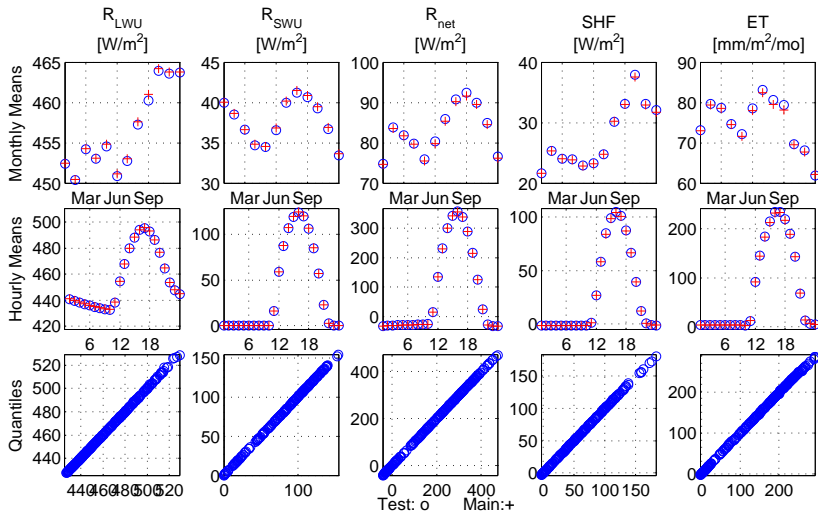
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Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

Manaus km 34
Atacama Desert
Santarem km 67
Harvard Forest
Pe de Gigante
Caxiuana
Tonzi
Tapajos National Forest
Petrilina



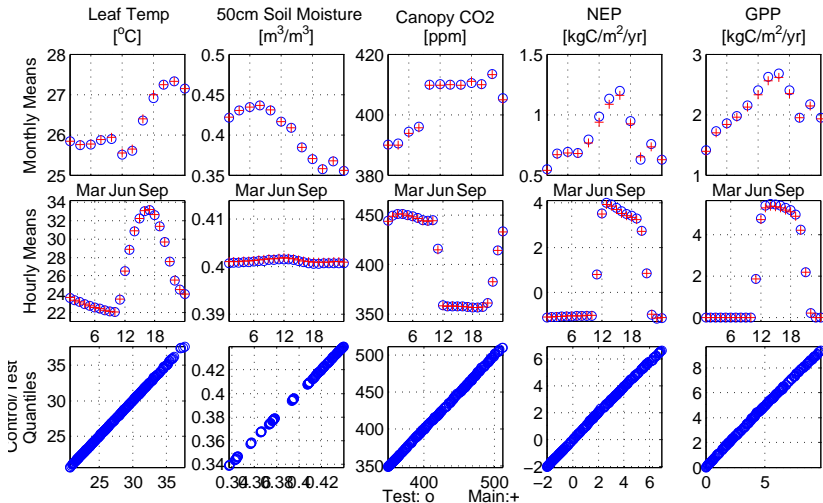
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 Test Summary
 Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

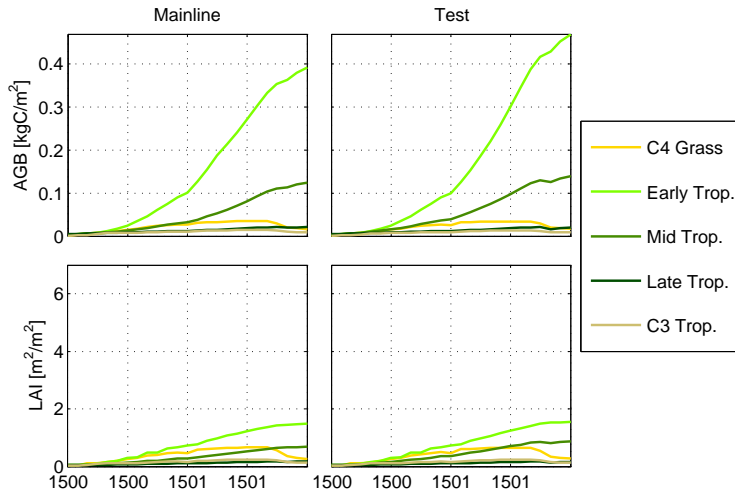
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 Atacama Desert
 Santarem km 67
 Harvard Forest
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Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

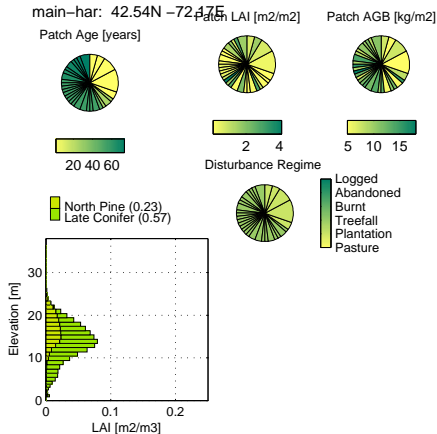
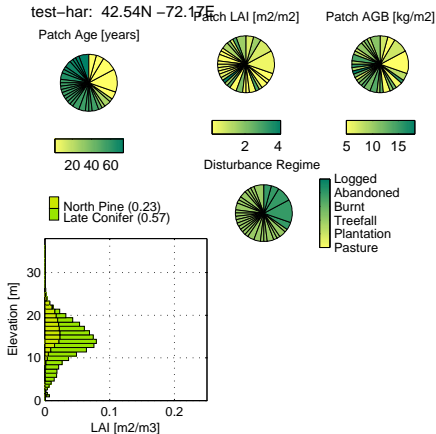
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 Atacama Desert
Santarem km 67
 Harvard Forest
 Pe de Gigante
 Caxiuana
 Tonzi
 Tapajos National Forest
 Petrolina





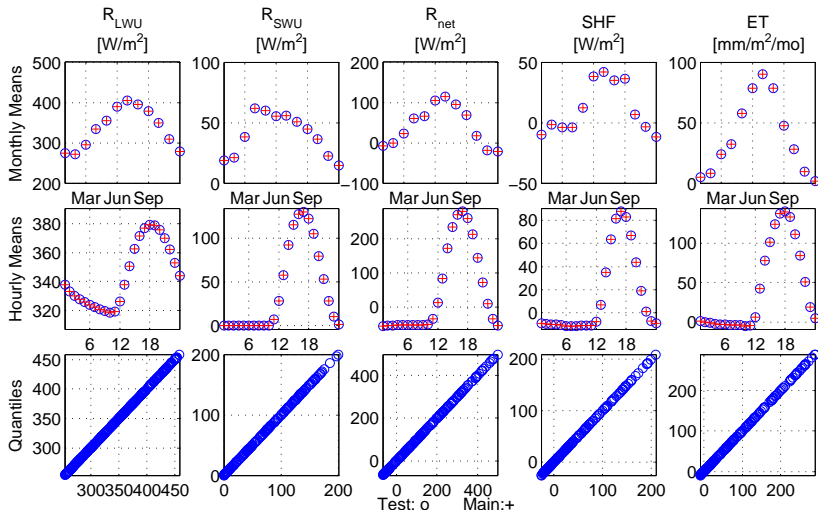
Test Specifications
Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

Manaus km 34
Atacama Desert
Santarem km 67
Harvard Forest
Pe de Gigante
Caxiuana
Tonzi
Tapajos National Forest
Petrobrina



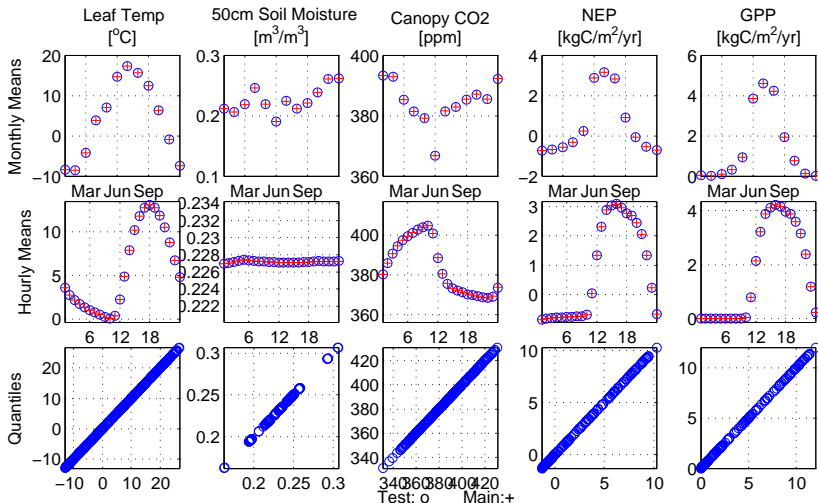
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 Test Summary
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 High Frequency Output
 Gridded Output

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Harvard Forest
 Pe de Gigante
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 Tonzi
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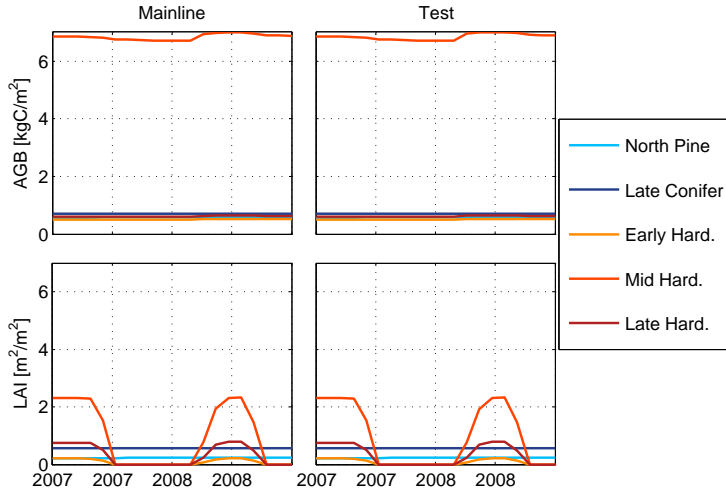
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Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

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Atacama Desert
Santarem km 67
Harvard Forest
Pe de Gigante
Caxiuana
Tonzi
Tapajos National Forest
Petrilina



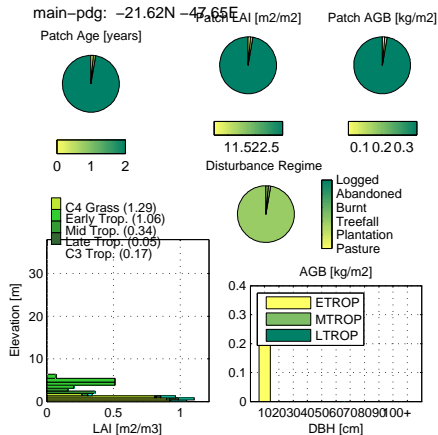
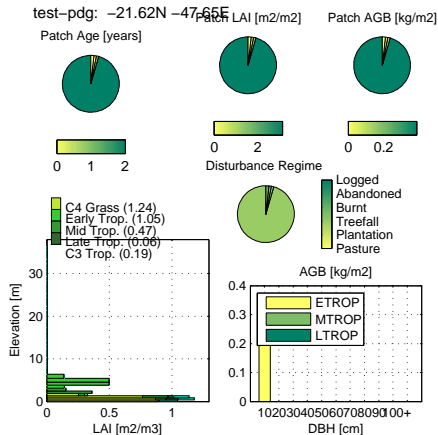
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 Test Summary
Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

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 Atacama Desert
 Santarem km 67
Harvard Forest
 Pe de Gigante
 Caxiuana
 Tonzi
 Tapajos National Forest
 Petrolina



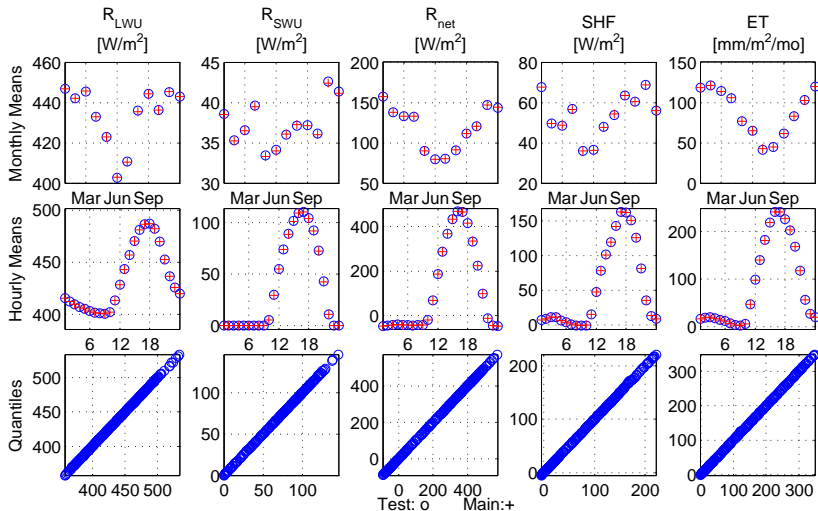
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Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

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Atacama Desert
Santarem km 67
Harvard Forest
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Caxiuana
Tonzi
Tapajos National Forest
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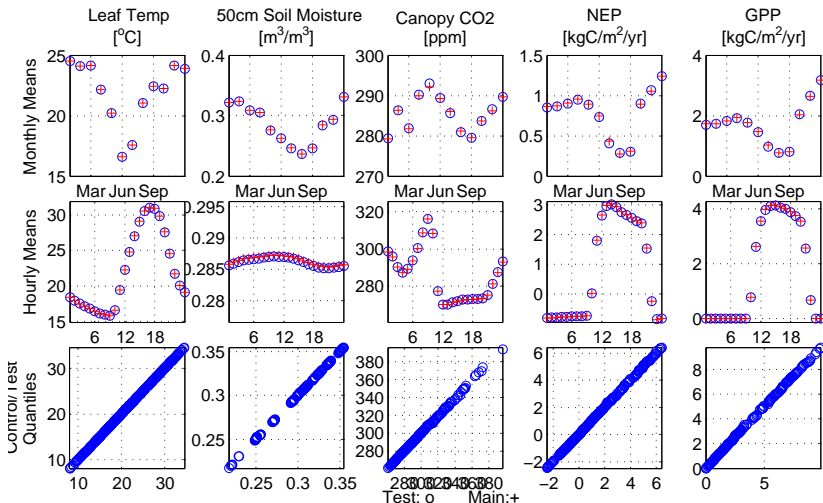
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 Test Summary
 Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

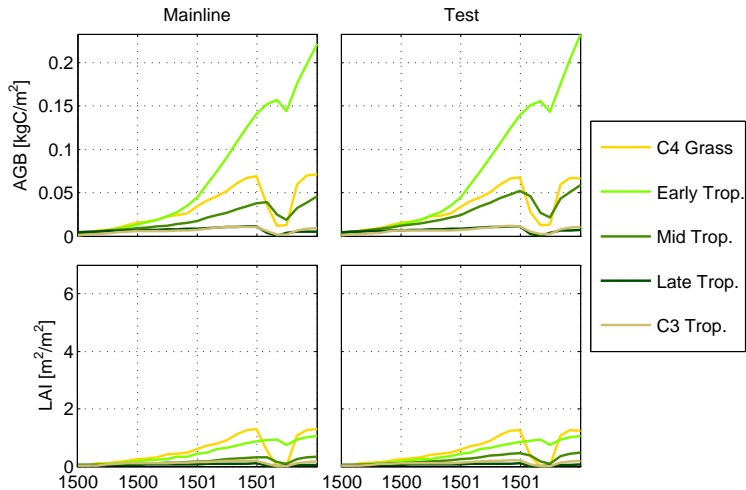
Manaus km 34
 Atacama Desert
 Santarem km 67
 Harvard Forest
 Pe de Gigante
 Caxiuana
 Tonzi
 Tapajos National Forest
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 Test Summary
 Site of Interest (SOI) Runs
 High Frequency Output
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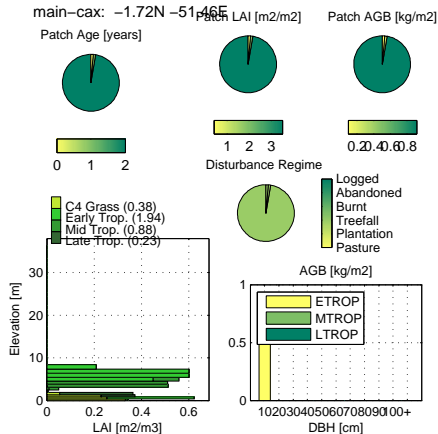
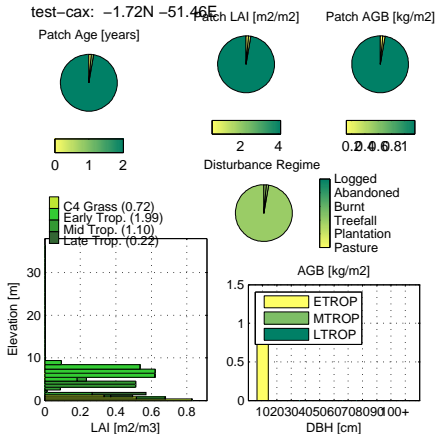
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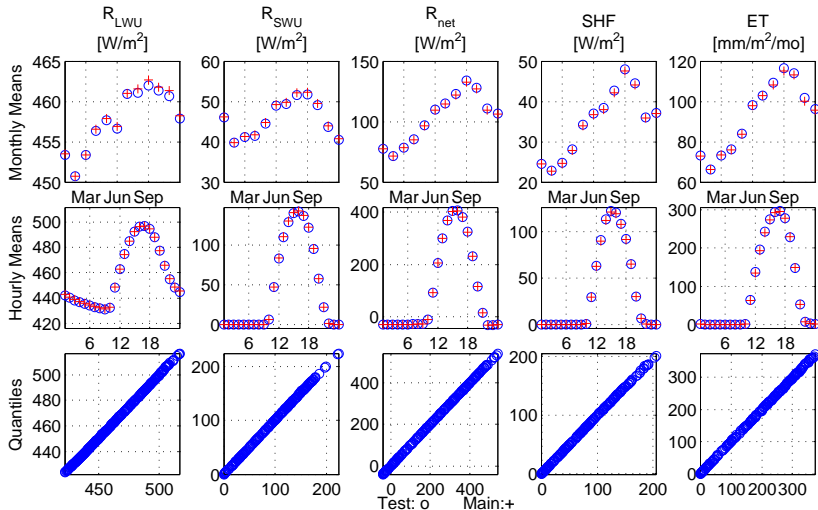
Test Specifications
Test Summary
Site of Interest (SOI) Runs
High Frequency Output
Gridded Output

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Atacama Desert
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Harvard Forest
Pe de Gigante
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Tapajos National Forest
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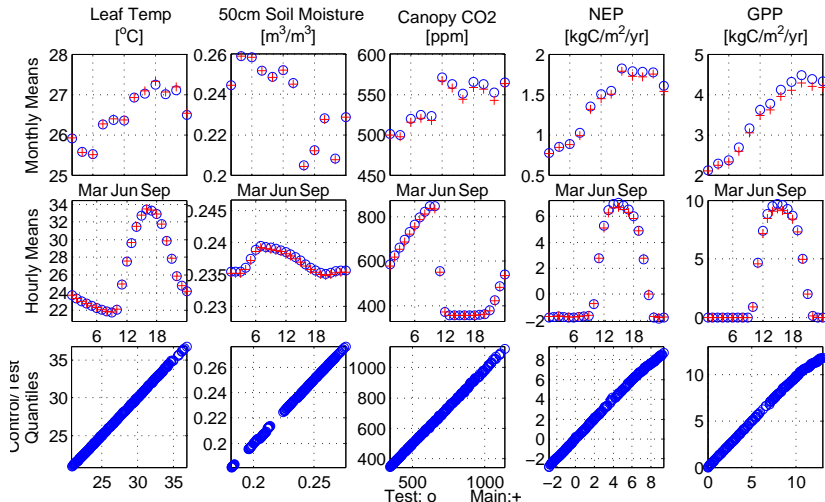
Test Specifications
 Test Summary
 Site of Interest (SOI) Runs
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 Gridded Output

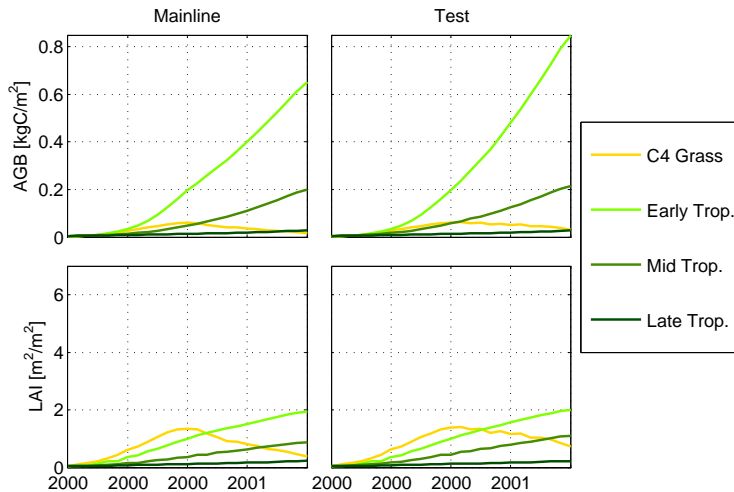
Manaus km 34
 Atacama Desert
 Santarem km 67
 Harvard Forest
 Pe de Gigante
Caxiuana
 Tonzi
 Tapajos National Forest
 Petrolina



Test Specifications
 Test Summary
 Site of Interest (SOI) Runs
 High Frequency Output
 Gridded Output

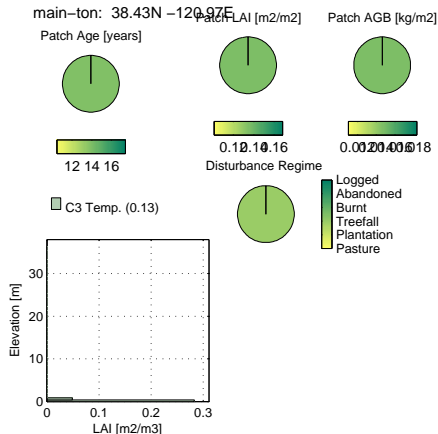
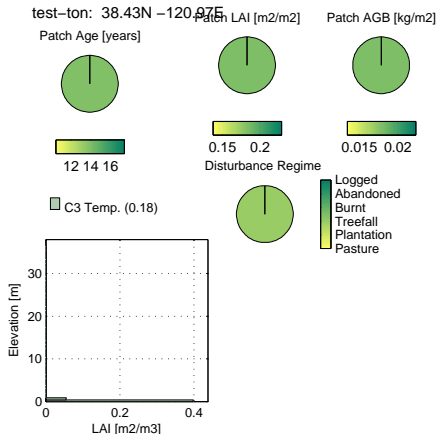
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Caxiuana
 Tonzi
 Tapajos National Forest
 Petrolina





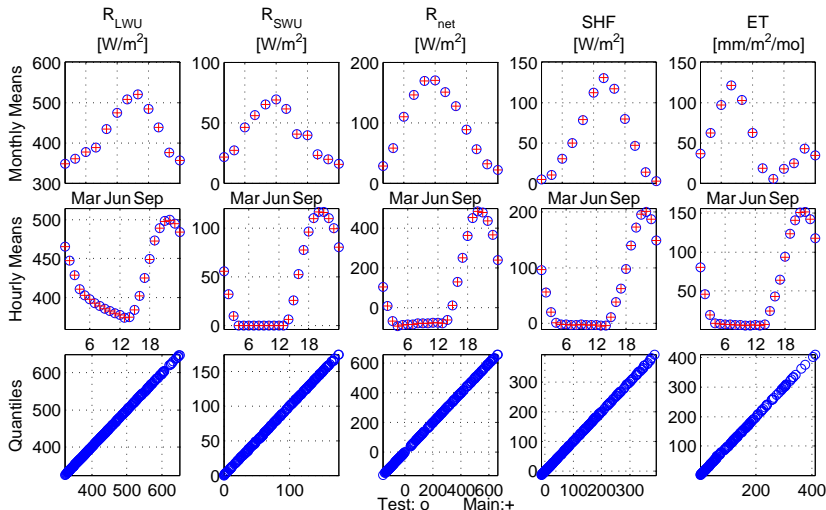
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Manaus km 34
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Tonzi
Tapajos National Forest
Petrilina



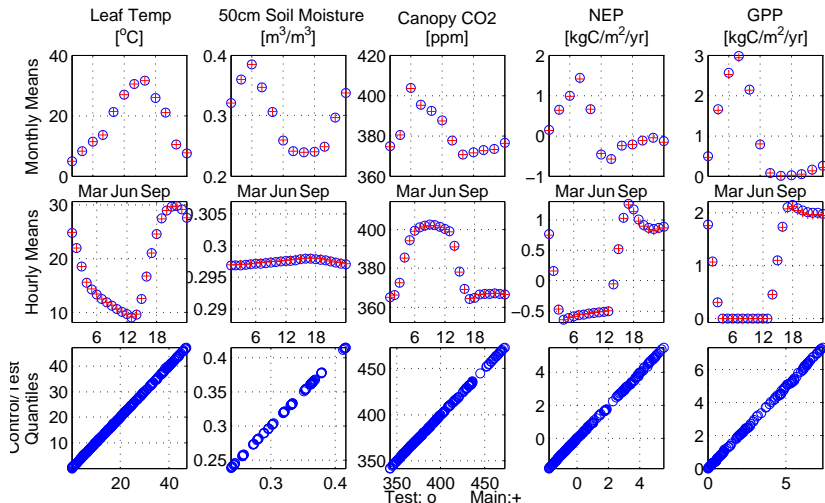
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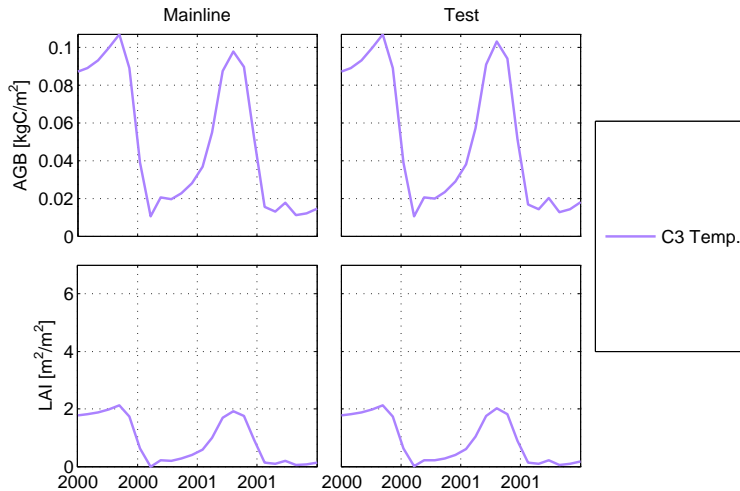
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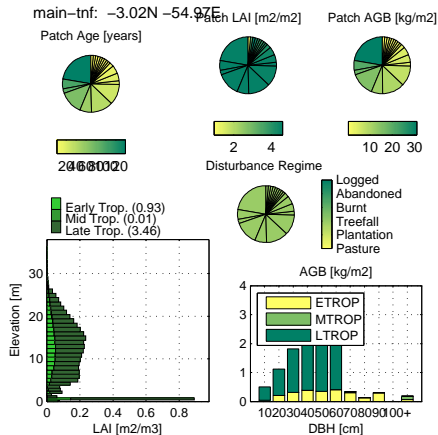
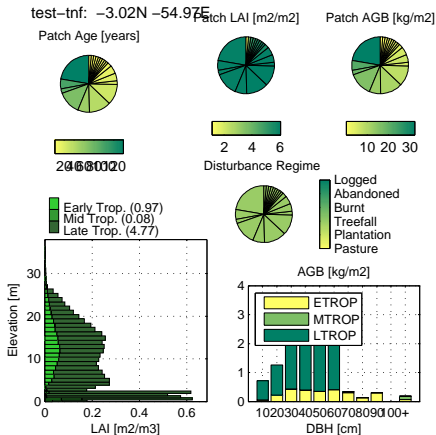
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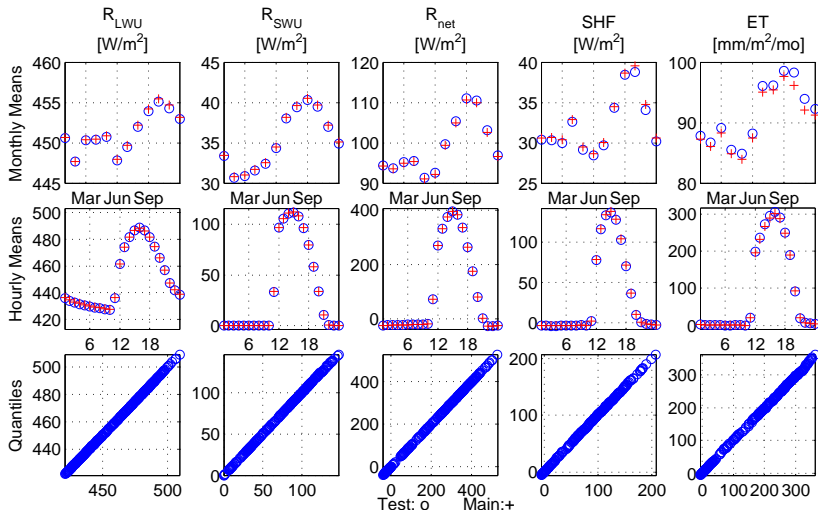
Test Specifications
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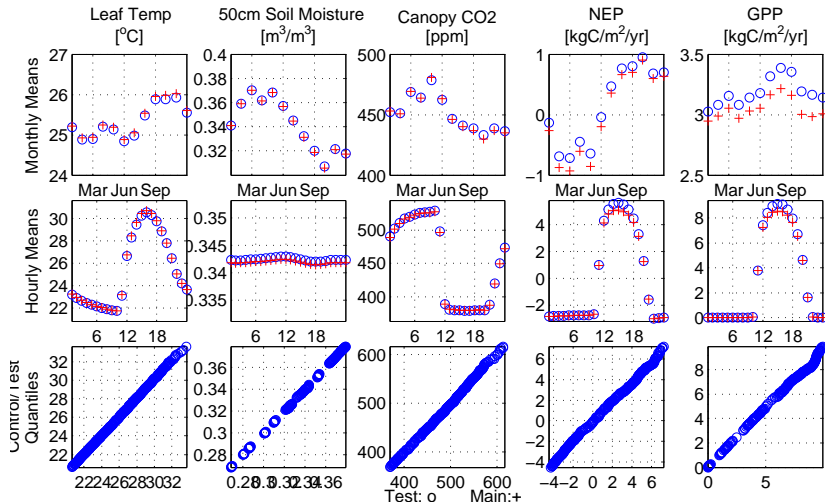
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Tonzi
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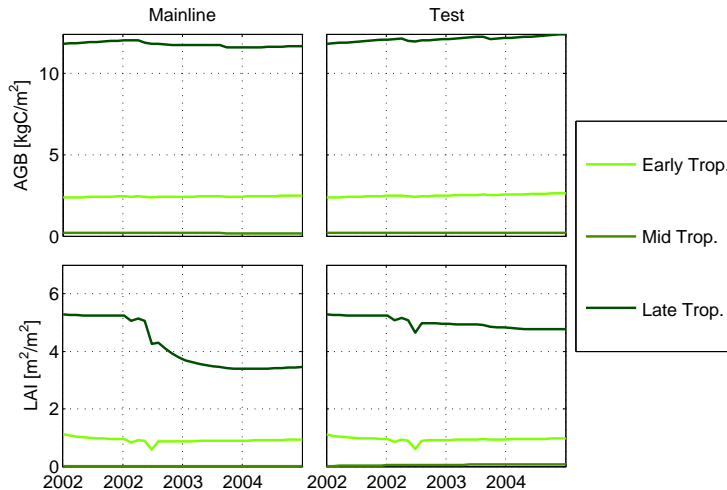


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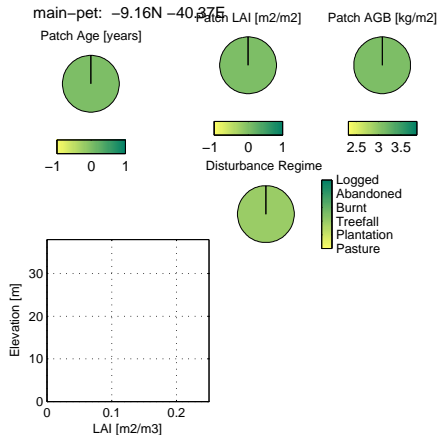
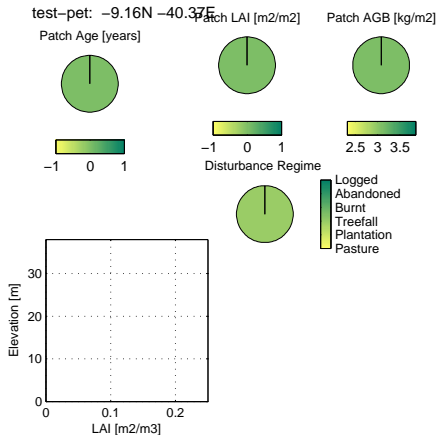






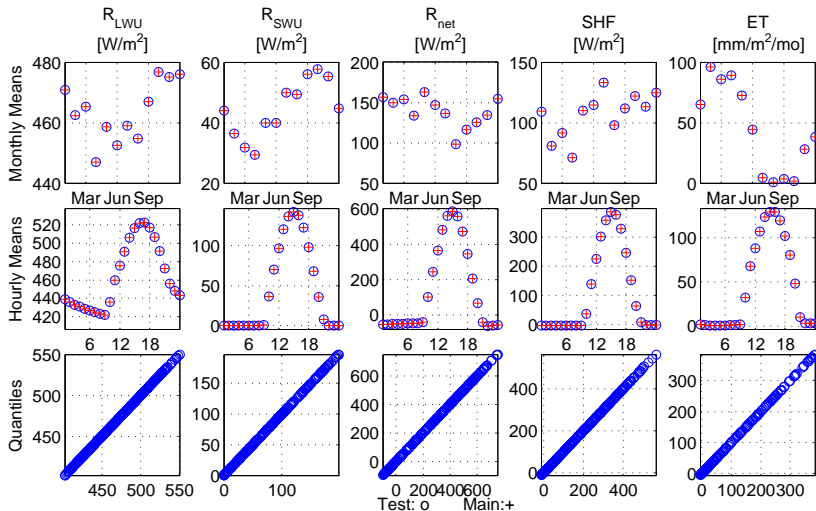
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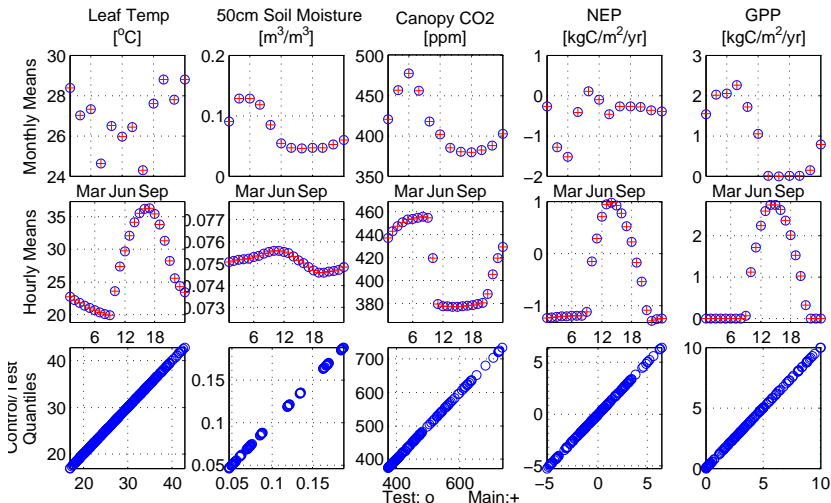
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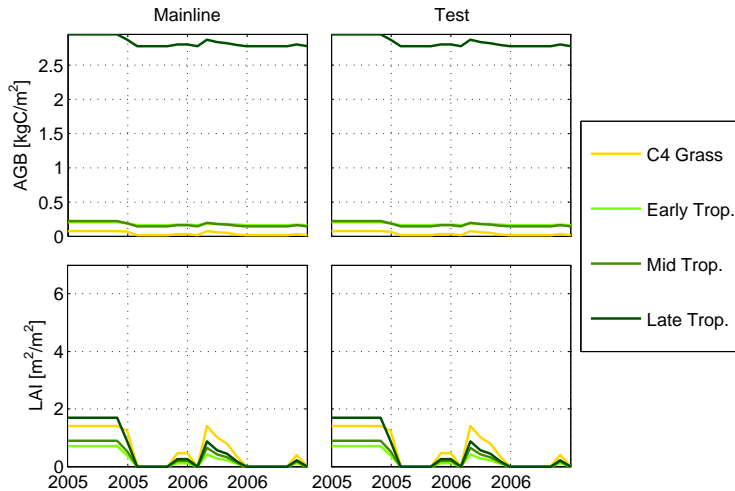
Manaus km 34
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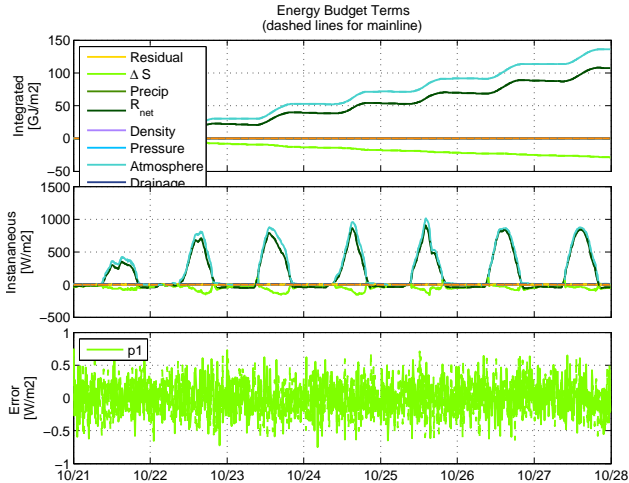


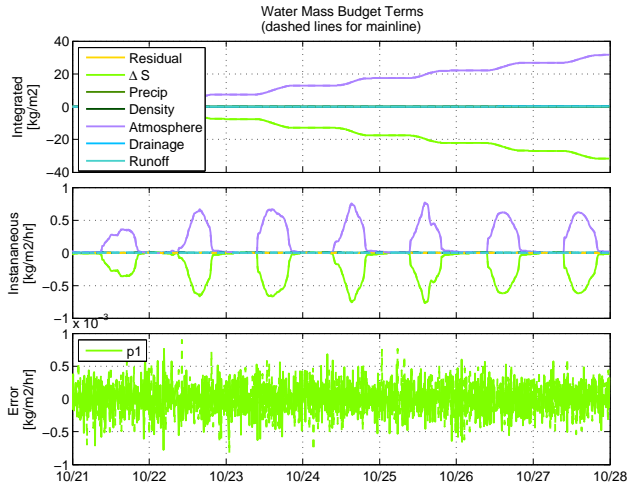
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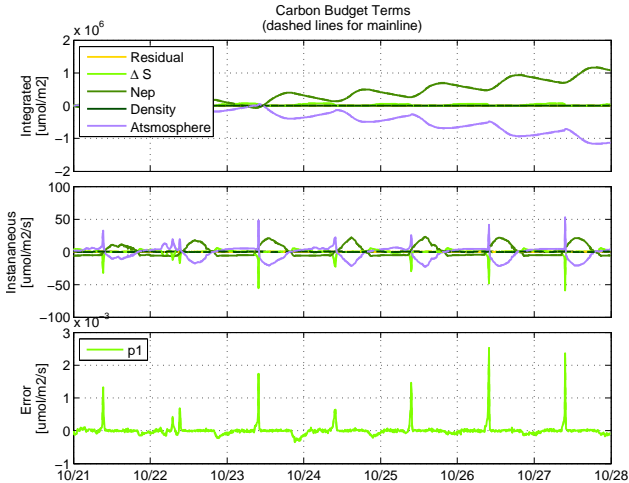
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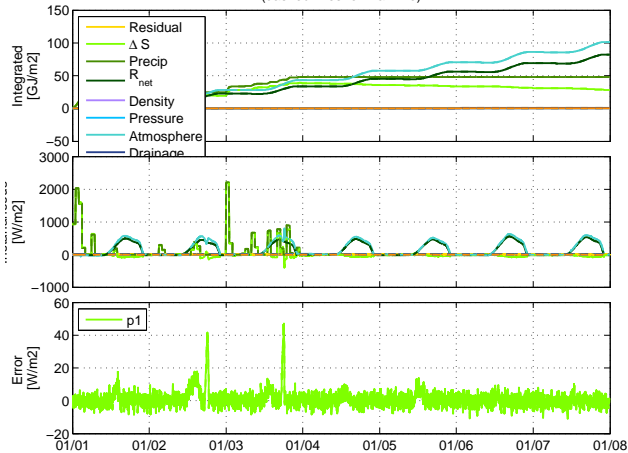


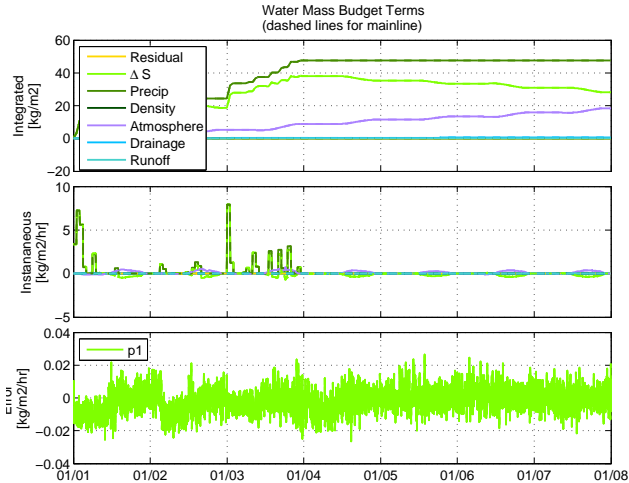


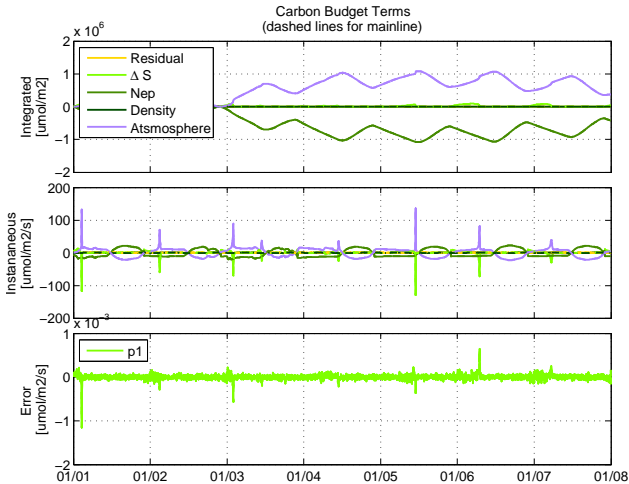




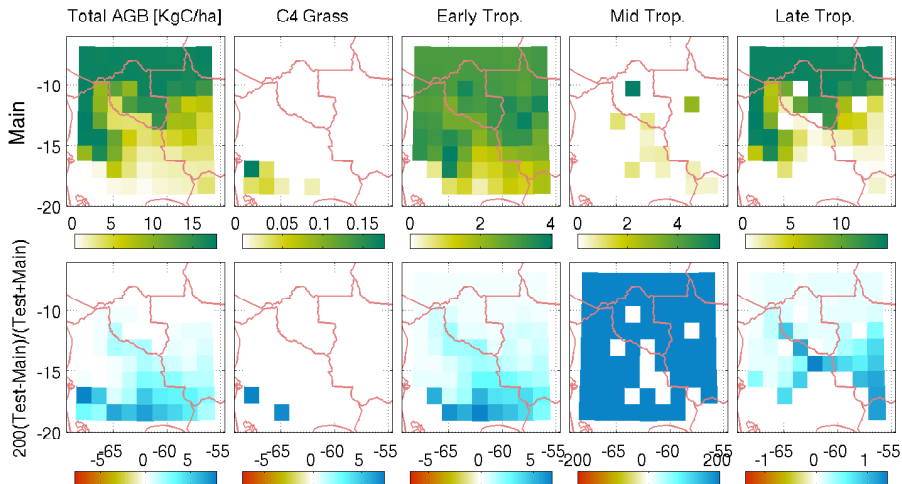
Energy Budget Terms
(dashed lines for mainline)







AGB - 12x12 Offline Grid - Rebio Jaru



LAI - 12x12 Offline Grid - Rebio Jaru

