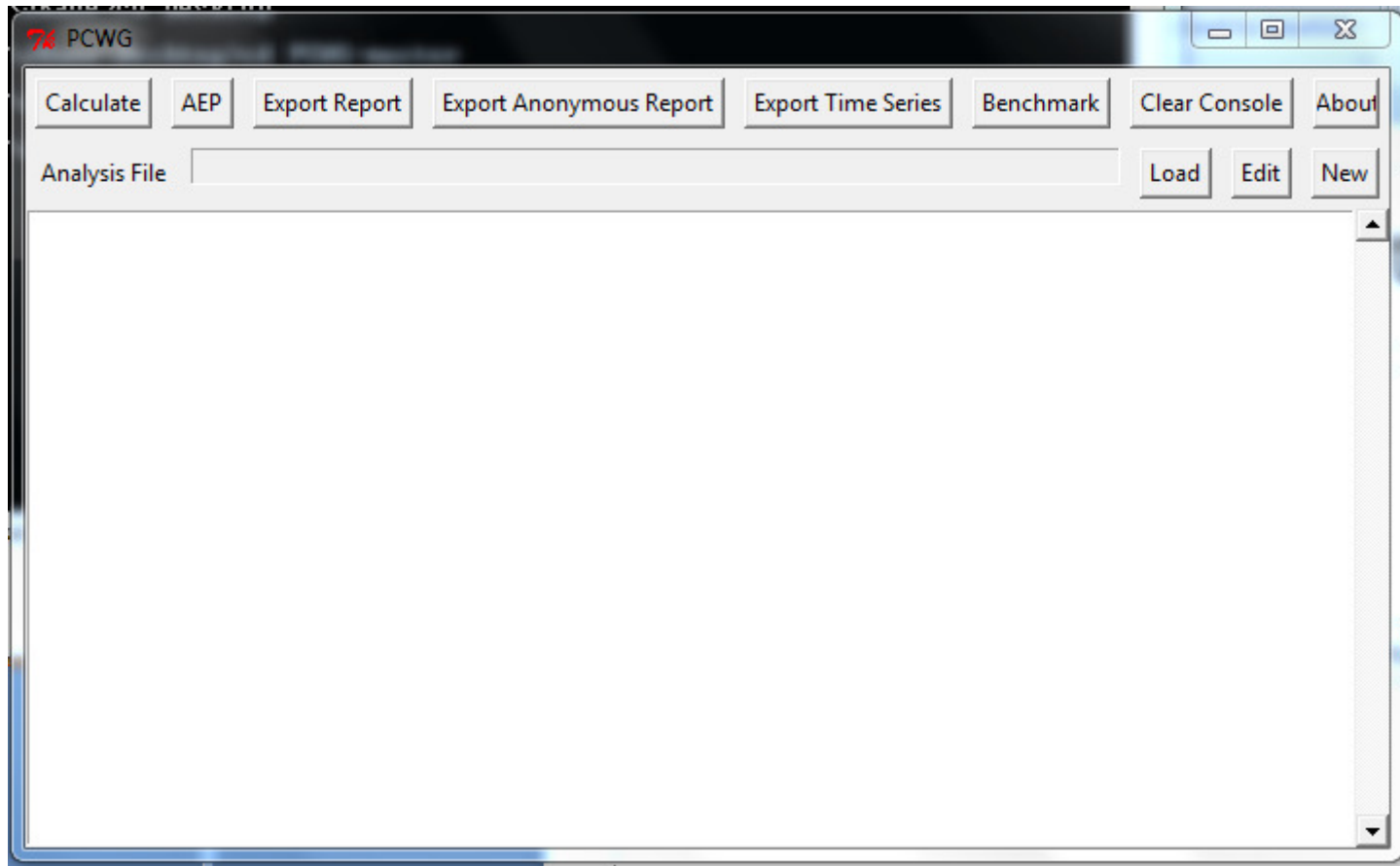


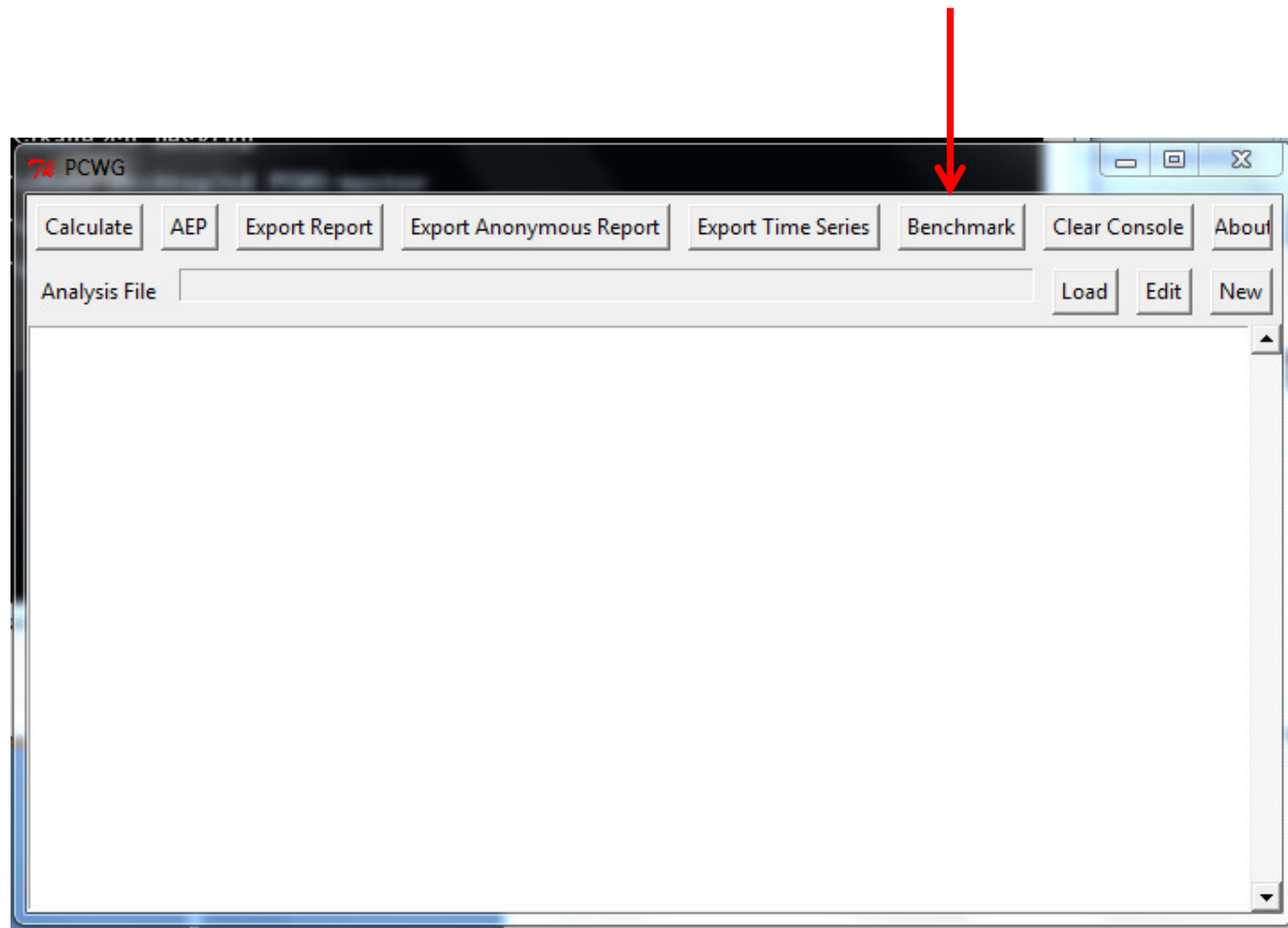
PCWG Data/Intelligence Sharing

Dress Rehearsal Exercise

PCWG Tool

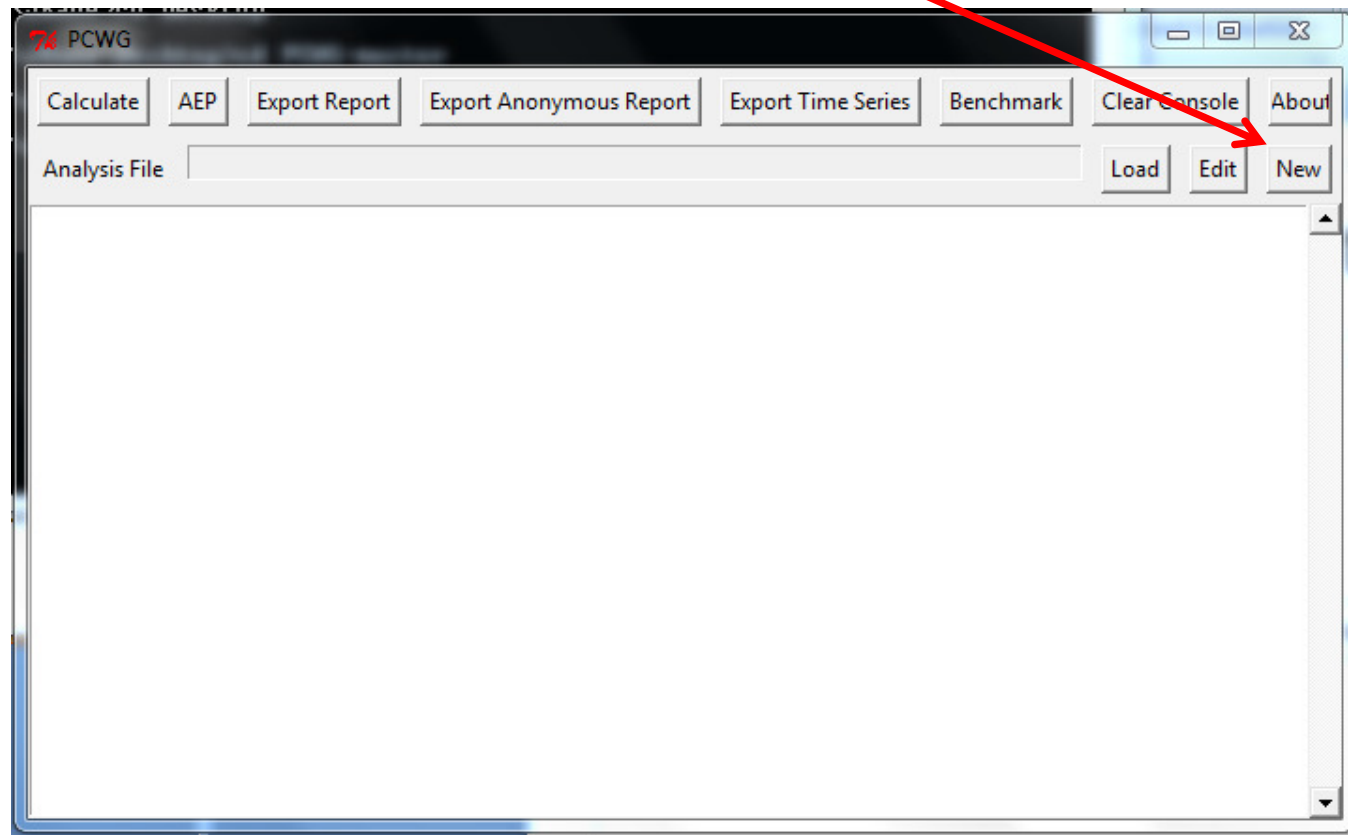


Unit tests verifies tool is consistent with round robin results.



Data Sharing Dress Rehearsal Exercise

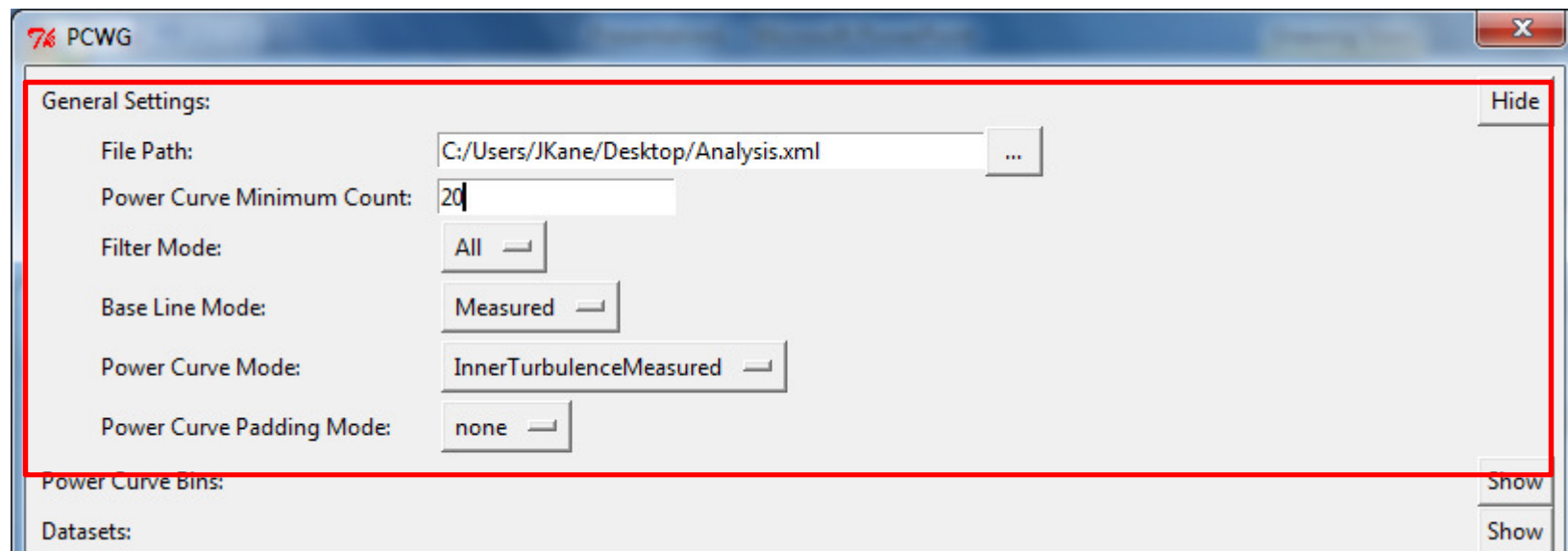
Let's create a new analysis XML.



Data Sharing Dress Rehearsal Exercise

General Settings:

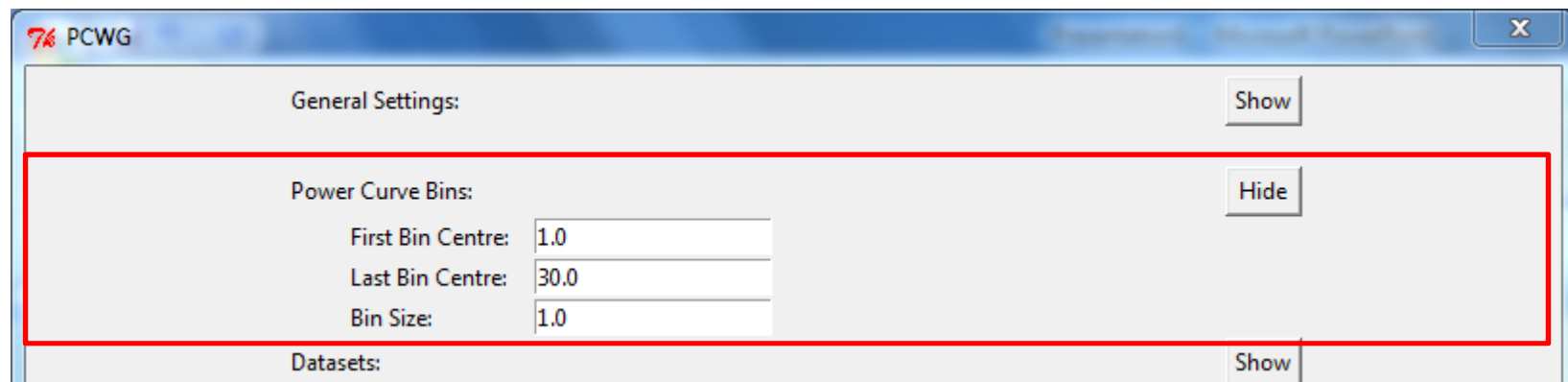
- Path to XML.
- Power Curve Minimum Data Count: **20**
- Filter Mode: **All**
- Power Curve Mode: **InnerTurbulenceMeasured**
- Padding Mode: **None**



Data Sharing Dress Rehearsal Exercise

Power Curve Bins:

- First Bin Centre: **1**
- Last bin Centre: **30**
- Bin Size: **1**



The screenshot shows a software window titled "74 PCWG". It contains three main sections: "General Settings:" with a "Show" button, "Power Curve Bins:" with a "Hide" button, and "Datasets:" with a "Show" button. The "Power Curve Bins:" section is highlighted with a red rectangle and contains three input fields: "First Bin Centre:" with the value "1.0", "Last Bin Centre:" with the value "30.0", and "Bin Size:" with the value "1.0".

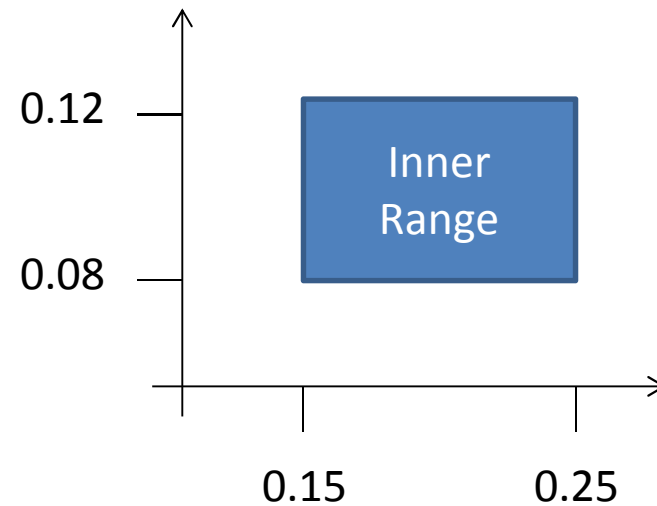
Section	Field	Value
Power Curve Bins:	First Bin Centre:	1.0
	Last Bin Centre:	30.0
	Bin Size:	1.0

Data Sharing Exercise

(Skip datasets for now...)

Inner Range Settings:

- Turbulence
 - Lower: **0.08**
 - Upper: **0.12**
- Shear
 - Lower: **0.15**
 - Upper: **0.25**



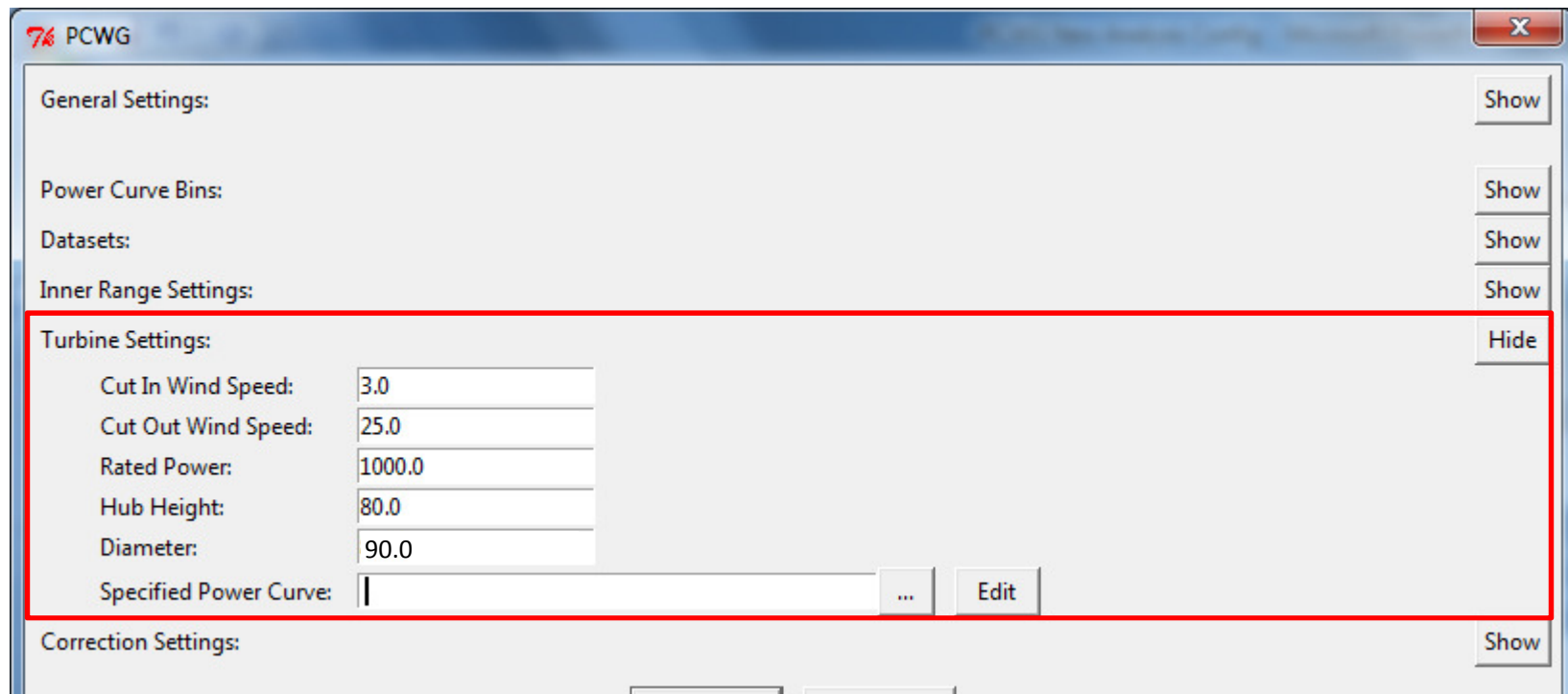
The screenshot shows a software window titled '7% PCWG'. It contains several sections with 'Show' buttons: 'General Settings:', 'Power Curve Bins:', 'Datasets:', 'Inner Range Settings:', 'Turbine Settings:', and 'Correction Settings:'. The 'Inner Range Settings:' section is highlighted with a red rectangular box. Inside this box, there are four input fields with their corresponding values:

Inner Range Lower Turbulence:	0.08
Inner Range Upper Turbulence:	0.12
Inner Range Lower Shear:	0.15
Inner Range Upper Shear:	0.25

Data Sharing Exercise

Turbine Settings:

- Cut In Wind Speed: **3.0**
- Cut Out Wind Speed: **25.0**
- Rated Power: **1000** [kW]
- Hub Height: **80**
- Diameter: **90**
- Specified Power Curve: Browse to PowerCurve.xml in Data folder.



The screenshot shows the PCWG software interface with a red box highlighting the Turbine Settings section. The settings are as follows:

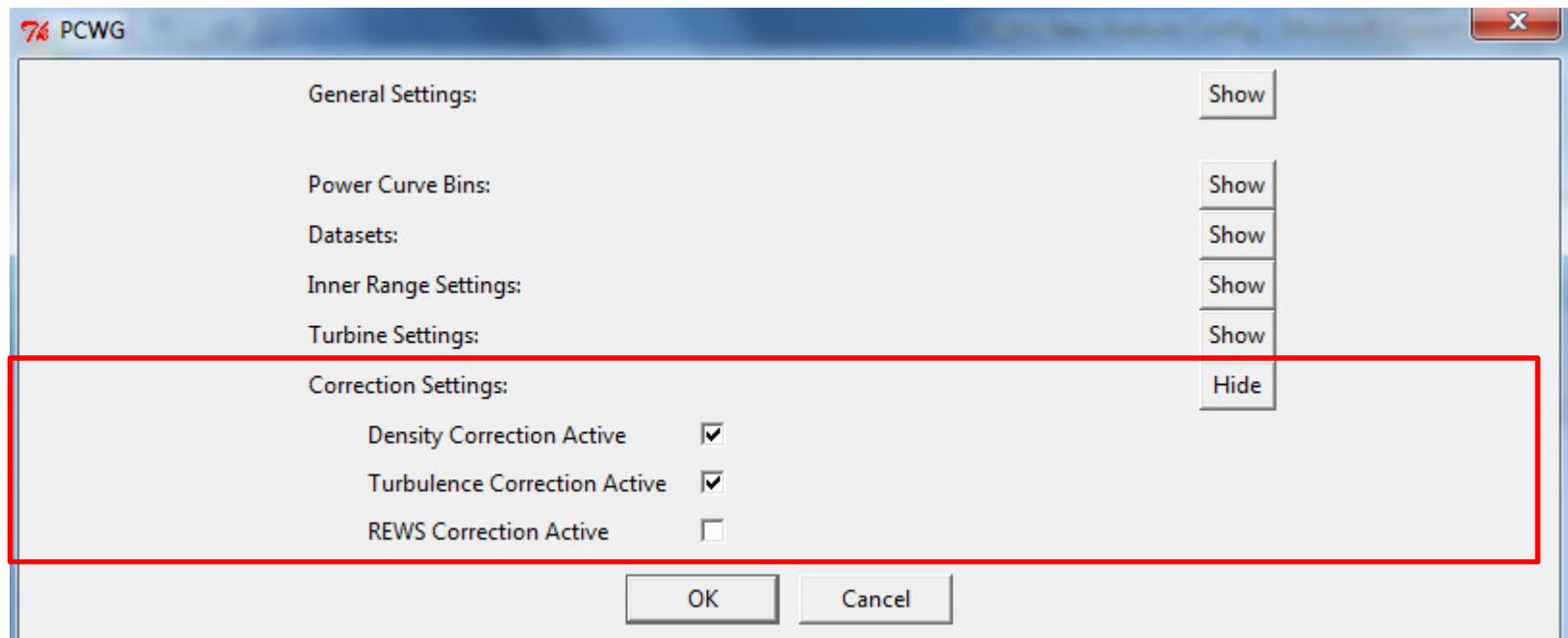
Setting	Value
Cut In Wind Speed:	3.0
Cut Out Wind Speed:	25.0
Rated Power:	1000.0
Hub Height:	80.0
Diameter:	90.0
Specified Power Curve:	[Empty field with ... and Edit buttons]

The interface also includes sections for General Settings, Power Curve Bins, Datasets, Inner Range Settings, and Correction Settings, each with a 'Show' button. The Turbine Settings section has a 'Hide' button.

Data Sharing Exercise

Correction Settings:

- Density Correction: **TRUE**
- Turbulence Renormalisation: **TRUE**
- REWS Correction Active: **FALSE**

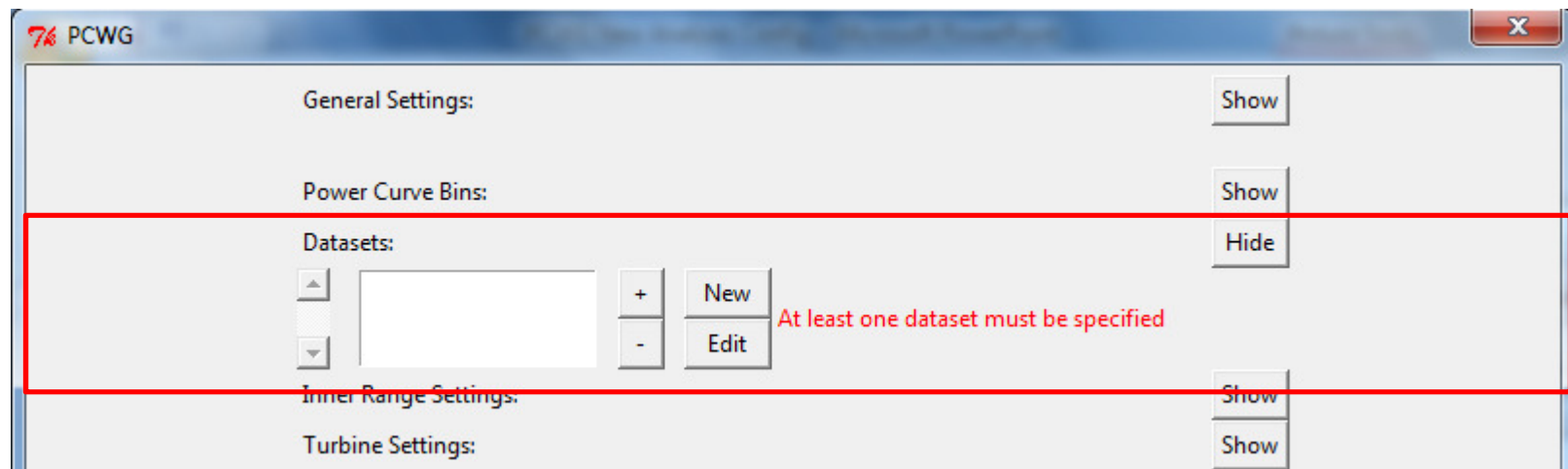


Data Sharing Dress Rehearsal Exercise

Datasets:

Multiple datasets allowed.

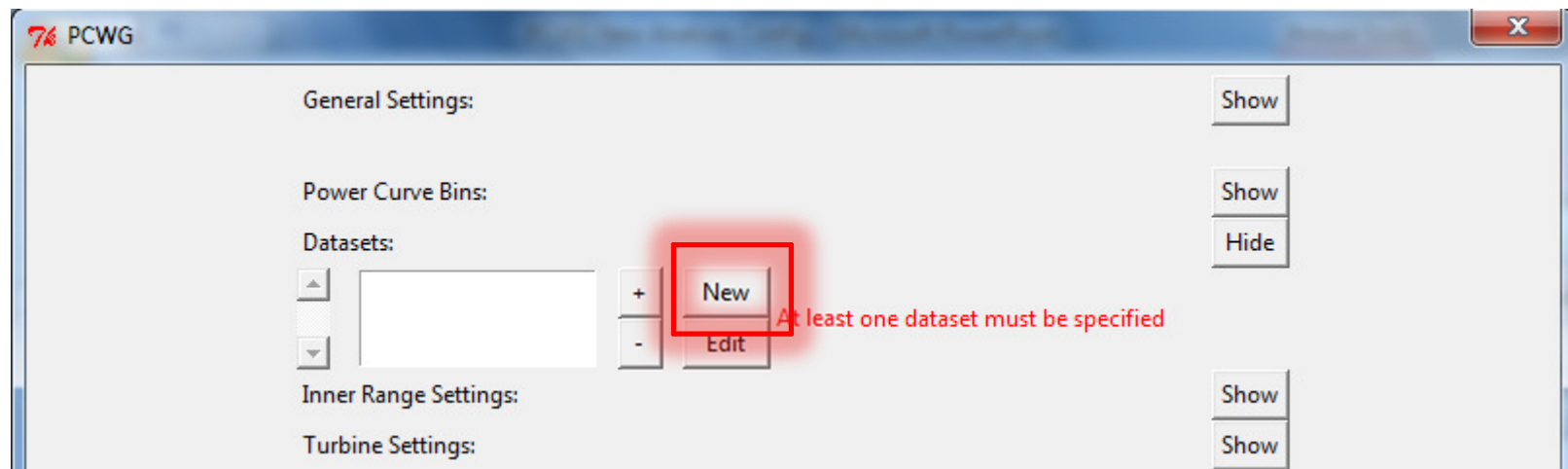
For this exercise – 1 dataset each.



Data Sharing Dress Rehearsal Exercise

Datasets:

Click New – save in appropriate location



Data Sharing Dress Rehearsal Exercise

Datasets:

DryRun20 - Notepad							
File Edit Format View Help							
TimeStamp	Power	ReferencewindDirection	Density	Referencewindspeed	ReferencewindspeedStdDev	Hub	
29/8/2012 12:00	317.214525	132	1.199534209	6.766520908	1.446313029	6.735531266	0.21591037
29/8/2012 12:20	2.749365361	142	1.170964983	3.520445088	0.756235478	3.558679724	p. 0.215630372
29/8/2012 12:30	11.97650988	1	1.217279283	3.323967155	0.496769285	3.221153952	0.147721472
29/8/2012 13:10	201.0506077	335	1.205627074	6.22485531	2.035690168	6.043893105	0.323206688
29/8/2012 13:30	843.4894343	27	1.226632459	10.54097802	1.5424996	10.33015846	0.146814109
29/8/2012 13:40	649.6806311	147	1.234266328	9.413608389	1.073557805	9.493784412	0.109876196
29/8/2012 14:00	273.0218537	116	1.209706985	6.679947315	0.624254885	6.898739201	0.091118182
29/8/2012 14:30	383.2421831	334	1.227002923	7.939203476	0.698044241	7.712706141	0.091230506
29/8/2012 14:40	294.0295326	115	1.18802956	6.975877226	0.700044768	7.246722964	0.096726338
29/8/2012 15:00	339.7571374	97	1.205765678	7.461037259	0.758549915	7.497472462	0.099264894
29/8/2012 15:10	281.4479536	12	1.234067862	7.191988254	0.706628382	7.201168914	0.09864 7.1
29/8/2012 15:40	472.7460796	20	1.208807859	8.471217141	0.66904244	8.541874465	0.079469792
29/8/2012 15:50	562.0079973	358	1.207005626	8.607839292	0.755843397	8.813926564	0.086718686
29/8/2012 16:20	379.1169983	100	1.231690407	6.998028977	0.769330767	7.004959091	0.110068208
29/8/2012 16:30	441.0289324	312	1.224252507	7.754721713	0.65585315	7.867300272	0.085570361
29/8/2012 16:50	582.4294624	137	1.211941921	8.015242463	0.61610397	7.795592467	0.078522843
29/8/2012 17:00	495.2916252	12	1.224357373	8.393670304	0.916194998	8.407017425	0.107256205
29/8/2012 17:40	714.1240196	139	1.210748386	9.906206736	1.1671003	9.845020761	0.118800202
29/8/2012 18:00	726.2827402	165	1.201951233	9.546942216	1.113808789	9.772078483	0.111499793
29/8/2012 18:20	668.0796368	70	1.198370424	9.696191649	1.094557889	9.799076665	0.112898853
29/8/2012 18:30	814.6549526	344	1.231253898	10.56885925	0.974872303	10.33047172	0.094291498
29/8/2012 18:40	874.8304627	6	1.216931193	10.62345522	1.038374428	10.55029389	0.09826307
29/8/2012 19:00	771.1882522	102	1.190924427	10.15270997	0.935999863	9.90071001	0.092860765
29/8/2012 19:10	646.519343	174	1.216369782	9.539360526	0.907525685	9.366826134	0.097138298
29/8/2012 19:20	686.5187423	76	1.20981085	8.773706176	0.826564733	8.747851336	0.092533784
29/8/2012 20:00	334.51666	342	1.214479581	7.668570039	0.682011969	7.662498329	0.090073437
29/8/2012 20:10	407.2160164	124	1.193805825	7.946357212	0.825586223	7.97420009	0.10573995
29/8/2012 20:30	287.3501375	38	1.22053382	7.091949438	0.73000152	6.914282025	0.10478317
29/8/2012 20:50	536.4680449	61	1.185899663	8.501395882	0.67996714	8.491947023	0.078917431
29/8/2012 21:20	578.5577103	122	1.22277774	8.605943946	0.586413952	8.444933907	0.068446821
29/8/2012 21:30	578.2191189	13	1.20298019	8.550831986	0.673855552	8.635476585	0.078196123
29/8/2012 22:00	416.2934598	130	1.218783573	7.947909834	0.831062978	7.974352119	0.106386084
29/8/2012 22:20	733.6000428	229	1.231070252	10.15991387	0.70198319	10.21084587	0.069372062
29/8/2012 22:40	680.8606195	23	1.211298004	9.537372002	0.649148683	9.71060475	0.070067967
29/8/2012 22:50	715.9052545	79	1.223194156	9.458720869	0.576229731	9.780948407	0.058956762

7% PCWG

General Settings: Hide

File Path: C:/Users/JKane/Desktop/Dataset.xml ...

Name: Dataset20

Start Date:

End Date:

Hub Wind Speed Mode: Specified

Calibration Method: None

Density Mode: Specified

REWS Settings: Show

Measurement Settings: Hide

Input Time Series Path: Dataset20.txt ...

Time Step In Seconds: 600

Bad Data Value: -99.99

Date Format: %d/%m/%Y %H:%M

Header Rows: 0

Time Stamp: TimeStamp

Power: Power

Reference Wind Speed:

Reference Wind Speed: Std Dev:

Reference Wind Direction:

Reference Wind Direction Offset: 0

Turbine Location Wind Speed:

Hub Wind Speed: HubWindSpeed

Hub Turbulence: HubTurbulence

Temperature:

Pressure:

Density: Density

%d/%m/%Y %H:%M

76 PCWG

General Settings:

REWS Settings:

REWS Active: ☐

REWS Number of Rotor Levels: 0

REWS Rotor Mode:

Hub Mode:

Measurement Settings:

Input Time Series Path: Dataset20.txt ...

Time Step In Seconds: 600

Bad Data Value: -99.99

Date Format: %d/%m/%Y %H:%M

Header Rows: 0

Time Stamp: TimeStamp

Power: Power

Reference Wind Speed: ReferenceWindSpeed

Reference Wind Speed: Std Dev: ReferenceWindSpeedStdDev

Reference Wind Direction: ReferenceWindDirection

Reference Wind Direction Offset: 0.0

Turbine Location Wind Speed:

Hub Wind Speed: HubWindSpeed

Hub Turbulence: HubTurbulence

Temperature:

Pressure:

Density: Density

Shear Measurements:

Wind Speed 1: LowerWindSpeed

Wind Speed 1 Height: 35.0

Wind Speed 2: UpperWindSpeed

Wind Speed 2 Height: 125.0

Show

Hide

Hide

Shear Measurement Heights:
35m and 125m

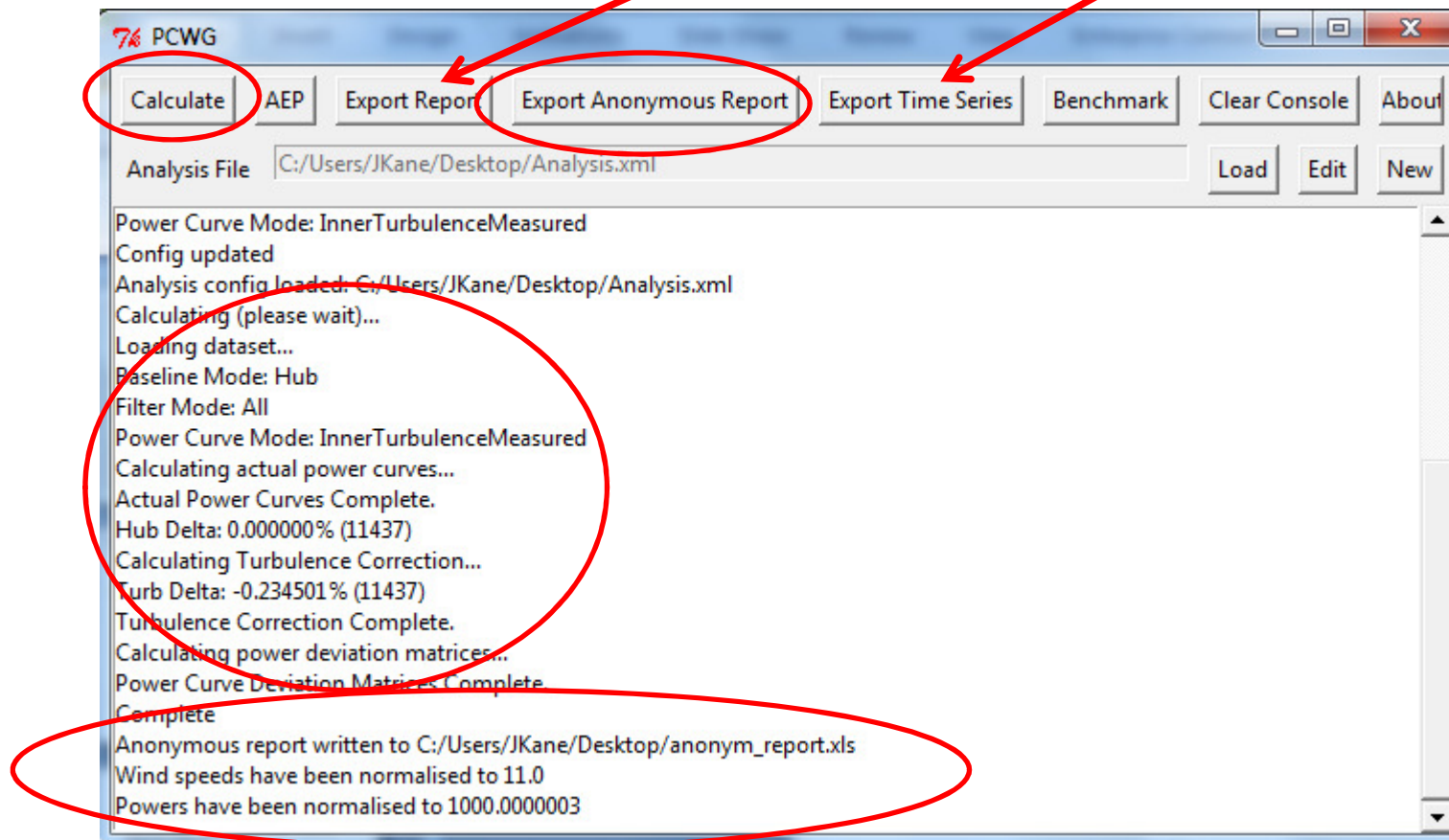
Please name:

Anonym_report_#.xls

Where # is your dataset number

Hit calculate!

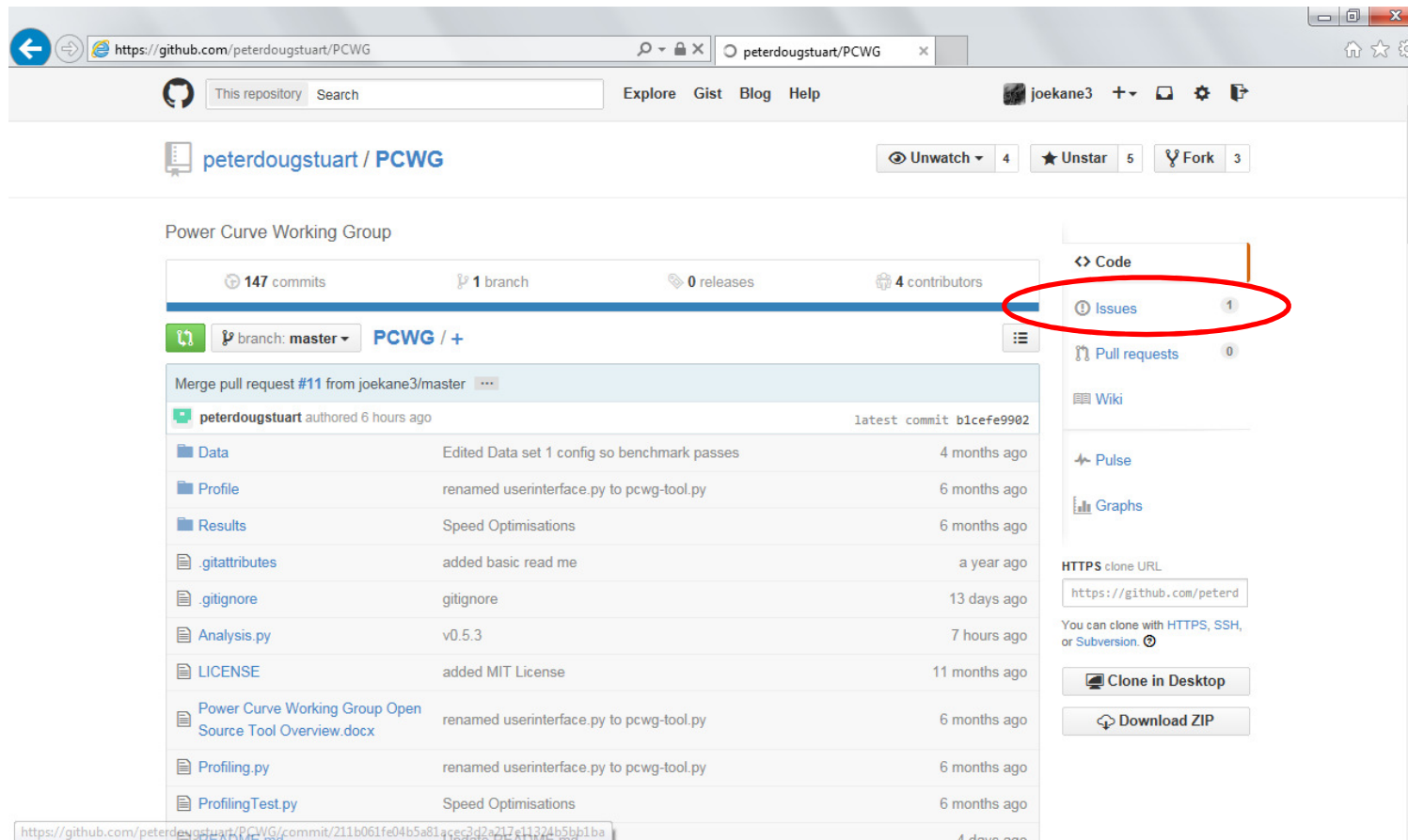
Further, potentially
sensitive information




Furthering the discussion

- Something wrong? Need help? Want to discuss further?
 - GitHub provides a great platform for developing open source projects. Even if you don't want to write any code, your input is valuable!
 - <https://github.com/peterdougstuart/PCWG>

- Do this by raising an 'Issue'.



 peterdougstuart / PCWG

 Unwatch ▾ 4  Unstar 5  Fork 3

Issues Pull requests Labels Milestones

Filters ▾ 🔍 is:issue is:open

New issue

🔔 1 Open ✓ 2 Closed


Author ▾ Labels ▾ Milestones ▾ Assignee ▾ Sort ▾

🔔 **TimeStepInSeconds node repeated**
#1 opened on Nov 18, 2014 by aclerc

💬 3

💡 ProTip! Ears burning? Get @joekane3 mentions with [mentions:joekane3](#).



 peterdougstuart / PCWG

Unwatch 4 Unstar 5 Fork 3

Issues Pull requests Labels Milestones

Write Preview

Markdown supported Edit in fullscreen

Leave a comment

Attach images by dragging & dropping or [selecting them](#).

Submit new issue



←

↻

https://github.com/peterdougstuart/PCWG/issues/1

🔍

🔒

GitHub, Inc. [US]


🔄

TimeStepInSeconds node r... x

🏠

★


⚙️



aclerc commented on Nov 18, 2014


Data set 1 currently fails the benchmark because TimeStepInSeconds is missing from the config xml.

TimeStepInSeconds is often in both the Analysis xml and config xml. This duplication should be resolved, the config xml is likely the best place for TimeStepInSeconds as it is a property of the dataset.





aclerc commented on Nov 18, 2014


Benchmark currently fails if TimeStepInSeconds is missing from either the config or the Analysis



aclerc referenced this issue from a commit in aclerc/PCWG on Nov 18, 2014

  Edited Data set 1 config so benchmark passes ...


3463415



aclerc referenced this issue on Nov 18, 2014


Edited Data set 1 config so benchmark passes #2

Merged



joekane3 commented 6 hours ago

TimeStepInSeconds is now in dataset config files as of #11. Logic is applied in the analysis section to work out the minimum time difference. This assumes that the data in each dataset are of the same time period. To break this assumption we can have an extra column "TimeInSeconds" in analysis.dataFrame or change the dataframe's index from datetimeindex to period index.



joekane3 commented 6 hours ago

That is to say the current assumption is implicit, i.e. no explicit exception is raised if dataset's TimeStepInSeconds are different

Labels

None yet

Milestone

No milestone

Assignee

No one assigned

Notifications

🔔 Unsubscribe

You're receiving notifications because you commented.

2 participants

