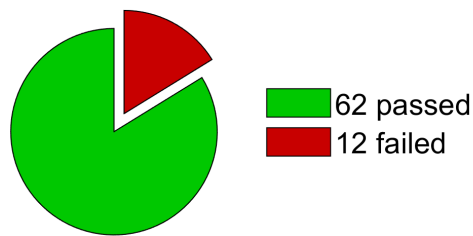




MATLAB® Test Report

Timestamp: 13-Jan-2022 12:21:17
Host: ME-GS28
Platform: win64
MATLAB Version: 9.11.0.1837725 (R2021b) Update 2
Number of Tests: 74
Testing Time: 109.2151 seconds
Overall Result: FAILED



Failure Summary

12 tests failed.


Name of Failing Test	Failure Reasons	
River_TestIO/test_load_usgs_data_instantaneous	Errored.	(Details)
River_TestIO/test_load_usgs_data_daily	Errored.	(Details)
River_TestIO/test_request_usgs_data_daily	Errored.	(Details)
River_TestIO/test_request_usgs_data_instant	Errored.	(Details)
Tidal_TestIO/test_load_noaa_data	Errored.	(Details)
Tidal_TestIO/test_request_noaa_data	Errored.	(Details)
Tidal_TestResource/test_principal_flow_directions	Errored.	(Details)
Tidal_TestResource/test_plot_current_timeseries	Errored.	(Details)
Tidal_TestResource/test_plot_joint_probability_distribution	Errored.	(Details)
Tidal_TestResource/test_plot_rose	Errored.	(Details)
Wave_TestResourceSpectrum/test_pierson_moskowitz_spectrum	Errored.	(Details)
Wave_TestResourceSpectrum/test_plot_spectrum	Errored.	(Details)

Overview

C:\Users\pwo1002\Documents\GitHub\MHkiT-MATLAB\mhkit\tests\

Loads_TestLoads	19.0736 seconds	✓✓✓✓✓✓
Power_TestDevice	1.1898 seconds	✓✓✓✓✓✓
River_TestDevice	0.0661 seconds	✓✓✓✓✓✓
River_TestIO	0.0	



	
River_TestResource	4.6899 seconds
	
Tidal_TestIO	0.0443 seconds
	
Tidal_TestResource	0.0975 seconds
	
Utils_TestGenUtils	3.3298 seconds
	
Wave_TestIO	10.2434 seconds
	
Wave_TestPerformance	15.7721 seconds
	
Wave_TestResourceMetrics	45.9452 seconds
	
Wave_TestResourceSpectrum	8.7262 seconds
	

Details

C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\tests\

Loads_TestLoads

 test_bin_statistics

The test passed.
Duration: 3.0826 seconds

[\(Overview\)](#)

 test_damage_equivalent_loads

The test passed.
Duration: 2.3785 seconds

[\(Overview\)](#)

 test_blade_moments

The test passed.
Duration: 0.2503 seconds

[\(Overview\)](#)

 test_plot_statistics

The test passed.
Duration: 9.6304 seconds

[\(Overview\)](#)

 test_plot_bin_statistics

The test passed.
Duration: 3.7303 seconds

[\(Overview\)](#)

 test_mhkit_import

Test Tags: DebuggingActions

The test passed.
Duration: 0.0014 seconds

Power_TestDevice

✔ test_harmonics_sine_wave

The test passed.
Duration: 0.4084 seconds

[\(Overview\)](#)

✔ test_harmonic_subgroup_sine_wave

The test passed.
Duration: 0.0608 seconds

[\(Overview\)](#)

✔ test_TCHD_sine_wave

The test passed.
Duration: 0.0839 seconds

[\(Overview\)](#)

✔ test_interharmonics_sine_wave

The test passed.
Duration: 0.0872 seconds

[\(Overview\)](#)

✔ test_instfreq

The test passed.
Duration: 0.4590 seconds

[\(Overview\)](#)

✔ test_dc_power

The test passed.
Duration: 0.0460 seconds

[\(Overview\)](#)

✔ test_ac_power_three_phase

The test passed.
Duration: 0.0445 seconds

[\(Overview\)](#)

River_TestDevice

✔ test_circular

The test passed.
Duration: 0.0090 seconds

[\(Overview\)](#)

✔ test_ducted

The test passed.
Duration: 0.0103 seconds

[\(Overview\)](#)

✔ test_rectangular

The test passed.
Duration: 0.0134 seconds

[\(Overview\)](#)

✔ test_multiple_circular

The test passed.
Duration: 0.0123 seconds

✔ test_tip_speed_ratio

The test passed.
Duration: 0.0125 seconds

[\(Overview\)](#)

✔ test_power_coefficient

The test passed.
Duration: 0.0086 seconds

[\(Overview\)](#)

River_TestIO

✘ test_load_usgs_data_instantaneous

The test failed and did not run to completion.
Duration: 0.0135 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

Unable to resolve the name py.mhkit.river.io.usgs.read_usgs_file.

```
Error in read_usgs_file (line 26)
datapd=py.mhkit.river.io.usgs.read_usgs_file(file_name);
```

```
Error in River_TestIO/test_load_usgs_data_instantaneous (line 8)
    data = read_usgs_file(full_file_name);
```

Event Location: River_TestIO/test_load_usgs_data_instantaneous

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\river\IO\read_usgs_file.m (read_usgs_file) at 26
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\tests\River_TestIO.m (River_TestIO.test_load_usgs_data_instantaneous) at 8
```

[\(Overview\)](#)

✘ test_load_usgs_data_daily

The test failed and did not run to completion.
Duration: 0.0023 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

Unable to resolve the name py.mhkit.river.io.usgs.read_usgs_file.

```
Error in read_usgs_file (line 26)
datapd=py.mhkit.river.io.usgs.read_usgs_file(file_name);
```

```
Error in River_TestIO/test_load_usgs_data_daily (line 17)
    data = read_usgs_file(full_file_name);
```

Event Location: River_TestIO/test_load_usgs_data_daily

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\river\IO\read_usgs_file.m (read_usgs_file) at 26
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\tests\River_TestIO.m (River_TestIO.test_load_usgs_data_daily) at 17
```

[\(Overview\)](#)

✘ test_request_usgs_data_daily

The test failed and did not run to completion.
Duration: 0.0175 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

Unable to resolve the name py.mhkit.river.io.usgs.request_usgs_data.

```
Error in request_usgs_data (line 64)
datapd=py.mhkit.River.io.usgs.request_usgs_data(station, parameter, start_date, end_date,pyargs('data_type',options.data_type,...
```

```
Error in River_TestIO/test_request_usgs_data daily (line 28)
data=request_usgs_data("15515500","00060","2009-08-01","2009-08-10","data_type",'Daily');
```

Event Location: River_TestIO/test_request_usgs_data_daily

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\river\IO\request_usgs_data.m (request_usgs_data) at 64
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\tests\River_TestIO.m (River_TestIO.test_request_usgs_data_daily) at 28
```

[\(Overview\)](#)

✘ test_request_usgs_data_instant

The test failed and did not run to completion.

Duration: 0.0041 seconds

Event:

- o Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

Unable to resolve the name py.mhkit.river.io.usgs.request_usgs_data.

```
Error in request_usgs_data (line 64)
datapd=py.mhkit.River.io.usgs.request_usgs_data(station, parameter, start_date, end_date,pyargs('data_type',options.data_type,...
```

```
Error in River_TestIO/test_request_usgs_data_instant (line 35)
data=request_usgs_data("15515500","00060","2009-08-01","2009-08-10","data_type",'Instantaneous');
```

Event Location: River_TestIO/test_request_usgs_data_instant

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\river\IO\request_usgs_data.m (request_usgs_data) at 64
In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\tests\River_TestIO.m (River_TestIO.test_request_usgs_data_instant) at 35
```

[\(Overview\)](#)

River_TestResource

✔ test_Froude_number

The test passed.

Duration: 0.0120 seconds

[\(Overview\)](#)

✔ test_exceedance_probability

The test passed.

Duration: 0.0669 seconds

[\(Overview\)](#)

✔ test_polynomial_fit

The test passed.

Duration: 0.1439 seconds

[\(Overview\)](#)

✔ test_discharge_to_velocity

The test passed.

Duration: 0.0232 seconds

[\(Overview\)](#)

✔ test_velocity_to_power

The test passed.

Duration: 0.0411 seconds

[\(Overview\)](#)

✔ test_energy_produced

The test passed.

Duration: 0.0414 seconds



✔ test_plot_flow_duration_curve

The test passed.
Duration: 0.7446 seconds

[\(Overview\)](#)

✔ test_plot_power_duration_curve

The test passed.
Duration: 0.4686 seconds

[\(Overview\)](#)

✔ test_plot_velocity_duration_curve

The test passed.
Duration: 0.7684 seconds

[\(Overview\)](#)

✔ test_plot_discharge_timeseries

The test passed.
Duration: 0.9100 seconds

[\(Overview\)](#)

✔ test_plot_discharge_vs_velocity

The test passed.
Duration: 0.4553 seconds

[\(Overview\)](#)

✔ test_plot_velocity_vs_power

The test passed.
Duration: 1.0144 seconds

[\(Overview\)](#)

Tidal_TestIO

✘ test_load_noaa_data

The test failed and did not run to completion.
Duration: 0.0251 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

Unable to resolve the name py.mhkit.tidal.io.noaa.read_noaa_json.

```
Error in read_noaa_json (line 25)
datap = py.mhkit.tidal.io.noaa.read_noaa_json(filename);
```

```
Error in Tidal_TestIO/test_load_noaa_data (line 8)
    data = read_noaa_json(full_file_name);
```

Event Location: Tidal_TestIO/test_load_noaa_data

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKIT-MATLAB\mhkit\tidal\io\read_noaa_json.m (read_noaa_json) at 25
In C:\Users\pwo1002\Documents\GitHub\MHKIT-MATLAB\mhkit\tests\Tidal_TestIO.m (Tidal_TestIO.test_load_noaa_data) at 8
```

[\(Overview\)](#)

✘ test_request_noaa_data

The test failed and did not run to completion.
Duration: 0.0192 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:



```
Unable to resolve the name py.mhkit.tidal.io.noaa.request_noaa_data.

Error in request_noaa_data (line 68)
    datap=py.mhkit.tidal.io.noaa.request_noaa_data(station,parameter,start_date,end_date);

Error in Tidal_TestIO/test_request_noaa_data (line 19)
    data = request_noaa_data('s08010', 'currents','20180101','20180102');
```

Event Location: Tidal_TestIO/test_request_noaa_data

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tidal\io\request_noaa_data.m (request_noaa_data) at 68
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tests\Tidal_TestIO.m (Tidal_TestIO.test_request_noaa_data) at 19
```

[\(Overview\)](#)

Tidal_TestResource

✔ test_exceedance_probability

The test passed.

Duration: 0.0200 seconds

[\(Overview\)](#)

✘ test_principal_flow_directions

The test failed and did not run to completion.

Duration: 0.0280 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

```
Unable to resolve the name py.mhkit.tidal.io.noaa.read_noaa_json.
```

```
Error in read_noaa_json (line 25)
    datap = py.mhkit.tidal.io.noaa.read_noaa_json(filename);
```

```
Error in Tidal_TestResource/test_principal_flow_directions (line 15)
    data = read_noaa_json(full_file_name);
```

Event Location: Tidal_TestResource/test_principal_flow_directions

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tidal\io\read_noaa_json.m (read_noaa_json) at 25
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tests\Tidal_TestResource.m (Tidal_TestResource.test_principal_flow_directions) at 15
```

[\(Overview\)](#)

✘ test_plot_current_timeseries

The test failed and did not run to completion.

Duration: 0.0151 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

```
Unable to resolve the name py.mhkit.tidal.io.noaa.read_noaa_json.
```

```
Error in read_noaa_json (line 25)
    datap = py.mhkit.tidal.io.noaa.read_noaa_json(filename);
```

```
Error in Tidal_TestResource/test_plot_current_timeseries (line 32)
    data = read_noaa_json(full_file_name);
```

Event Location: Tidal_TestResource/test_plot_current_timeseries

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tidal\io\read_noaa_json.m (read_noaa_json) at 25
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tests\Tidal_TestResource.m (Tidal_TestResource.test_plot_current_timeseries) at 32
```

[\(Overview\)](#)

✘ test_plot_joint_probability_distribution

The test failed and did not run to completion.

Duration: 0.0167 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:



```
Unable to resolve the name py.mhkit.tidal.io.noaa.read_noaa_json.
```

```
Error in read_noaa_json (line 25)  
datap = py.mhkit.tidal.io.noaa.read_noaa_json(filename);
```

```
Error in Tidal_TestResource/test_plot_joint_probability_distribution (line 51)  
data = read_noaa_json(full_file_name);
```

Event Location: Tidal_TestResource/test_plot_joint_probability_distribution

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tidal\io\read_noaa_json.m (read_noaa_json) at 25  
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tests\Tidal_TestResource.m  
(Tidal_TestResource.test_plot_joint_probability_distribution) at 51
```

[\(Overview\)](#)

✖ test_plot_rose

The test failed and did not run to completion.

Duration: 0.0177 seconds

Event:

- Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:undefinedVarOrClass

Error Report:

```
Unable to resolve the name py.mhkit.tidal.io.noaa.read_noaa_json.
```

```
Error in read_noaa_json (line 25)  
datap = py.mhkit.tidal.io.noaa.read_noaa_json(filename);
```

```
Error in Tidal_TestResource/test_plot_rose (line 75)  
data = read_noaa_json(full_file_name);
```

Event Location: Tidal_TestResource/test_plot_rose

Stack:

```
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tidal\io\read_noaa_json.m (read_noaa_json) at 25  
In C:\Users\pwo1002\Documents\GitHub\MHKiT-MATLAB\mhkit\tests\Tidal_TestResource.m (Tidal_TestResource.test_plot_rose) at 75
```

[\(Overview\)](#)

Utils_TestGenUtils

✔ test_get_statistics

The test passed.

Duration: 3.2869 seconds

[\(Overview\)](#)

✔ test_excel_to_datetime

The test passed.

Duration: 0.0429 seconds

[\(Overview\)](#)

Wave_TestIO

✔ test_read_NDBC_realtime_met

The test passed.

Duration: 3.4129 seconds

[\(Overview\)](#)

✔ test_read_NDBC_historical_met

The test passed.

Duration: 2.0444 seconds

[\(Overview\)](#)

✔ test_read_NDBC_spectral

The test passed.

Duration: 0.3658 seconds

[\(Overview\)](#)

✔ test_ndbc_available_data



The test passed.
Duration: 0.9204 seconds



[\(Overview\)](#)

✔ test_ndbc_request_data

The test passed.
Duration: 3.1123 seconds

[\(Overview\)](#)

✔ test_swan_read_table

The test passed.
Duration: 0.2131 seconds

[\(Overview\)](#)

✔ test_swan_read_block

The test passed.
Duration: 0.1745 seconds

[\(Overview\)](#)

Wave_TestPerformance

✔ test_capture_length

The test passed.
Duration: 0.0432 seconds

[\(Overview\)](#)

✔ test_capture_length_matrix

The test passed.
Duration: 0.1837 seconds

[\(Overview\)](#)

✔ test_wave_energy_flux_matrix

The test passed.
Duration: 0.0440 seconds

[\(Overview\)](#)

✔ test_power_matrix

The test passed.
Duration: 0.0923 seconds

[\(Overview\)](#)

✔ test_mean_annual_energy_production

The test passed.
Duration: 0.0366 seconds

[\(Overview\)](#)

✔ test_plot_matrix

The test passed.
Duration: 10.2227 seconds

[\(Overview\)](#)

✔ test_power_performance_workflow

The test passed.
Duration: 5.1497 seconds

[\(Overview\)](#)

Wave_TestResourceMetrics



✔ test_kfromw

The test passed.
Duration: 0.0424 seconds

[\(Overview\)](#)

✔ test_moments

The test passed.
Duration: 0.5882 seconds

[\(Overview\)](#)

✔ test_metrics_HsP

The test passed.
Duration: 0.4150 seconds

[\(Overview\)](#)

✔ test_metrics_AH

The test passed.
Duration: 0.3346 seconds

[\(Overview\)](#)

✔ test_metrics_CDIP1

The test passed.
Duration: 0.2920 seconds

[\(Overview\)](#)

✔ test_plot_elevation_timeseries

The test passed.
Duration: 1.8943 seconds

[\(Overview\)](#)

✔ test_environmental_contour

The test passed.
Duration: 9.0441 seconds

[\(Overview\)](#)

✔ test_plot_environmental_contour

The test passed.
Duration: 10.8019 seconds

[\(Overview\)](#)

✔ test_plot_environmental_contour_multiyear

The test passed.
Duration: 17.9060 seconds

[\(Overview\)](#)

✔ test_chakrabarti

The test passed.
Duration: 4.6267 seconds

[\(Overview\)](#)

Wave_TestResourceSpectrum

✘ test_pierson_moskowitz_spectrum

The test failed and did not run to completion.
Duration: 0.0427 seconds

Event:





- o Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:Python:PyException

Error Report:

Error using Wave_TestResourceSpectrum/test_pierson_moskowitz_spectrum (line 10)
Python Error: TypeError: pierson_moskowitz_spectrum() takes 2 positional arguments but 3 were given

Event Location: Wave_TestResourceSpectrum/test_pierson_moskowitz_spectrum

Stack:

In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\tests\Wave_TestResourceSpectrum.m
(Wave_TestResourceSpectrum.test_pierson_moskowitz_spectrum) at 10

[\(Overview\)](#)

✔ test_surface_elevation_seed

The test passed.

Duration: 3.3601 seconds

[\(Overview\)](#)

✔ test_surface_elevation_phasing

The test passed.

Duration: 3.5078 seconds

[\(Overview\)](#)

✔ test_surface_elevation_moments

The test passed.

Duration: 1.7483 seconds

[\(Overview\)](#)

✔ test_jonswap_spectrum

The test passed.

Duration: 0.0497 seconds

[\(Overview\)](#)

✘ test_plot_spectrum

The test failed and did not run to completion.

Duration: 0.0175 seconds

Event:

- o Error occurred. As a result, the test did not run to completion.

Error Identifier: MATLAB:Python:PyException

Error Report:

Error using Wave_TestResourceSpectrum/test_plot_spectrum (line 127)
Python Error: TypeError: pierson_moskowitz_spectrum() takes 2 positional arguments but 3 were given

Event Location: Wave_TestResourceSpectrum/test_plot_spectrum

Stack:

In C:\Users\pwo1002\Documents\GitHub\MHKit-MATLAB\mhkit\tests\Wave_TestResourceSpectrum.m (Wave_TestResourceSpectrum.test_plot_spectrum) at
127

[\(Overview\)](#)