Architecture of PySyDyn

Functionality

Oliver

PysyDyn

function

Class

User_Interface

Stage 1 - init   ## Stage 2 - gen_enviro   ## Stage 3 - simulation   ## Stage 4 - post_process

Tony

earthy_constants.py

dict (Universal_Constants)

dict (Wind_Constants)

dict (Wave_Constants)

windy_and_wavy_loads.py

class(Windy_and_Wavy)

func(spectrum_gen)

func(gen_wind_loads)

func(gen_wave_loads)

Wind_and_Wavy.wave_plot

Wind_and_Wavy.wind_plot

floaty_sim.py

class(Floaty_in_Specified_Enviro)

func(dqdt)

func(plot)

func(save)

Floaty_in_Specified_Enviro.response_plot

Floaty_in_Specified_Enviro.PSD_plot

Floaty_in_Specified_Enviro.both_plot

floaty_sim.py

func(plot)

turbie_and_floaty.py

dict (Turbie_and_Floaty)

dict (Floaty)

dict (Moory)

Fikry

wind and wave
time series

.csv or
.txt

floater_motion
time series

.csv or
.txt

Tony

eom_matricies_gen.py

class(Turbie_and_Floaty)

def(added_mass_matrix_A)

def(mass_matrix_M)

def(stiffness_matrix_K)