Sprint 27 1906-01

Overview

Duration: 10 Jun - 21 June

completed	in progress	on hold	review	to do
44	2	6	1	3

(vs record 61 completed sprint 19)

Multiple NeSI issues - 4 issues (file system, SLURM, compute node, mahuika login-node)

Epic	Story	Owner	Deliverables	Link
Validati on	1. Help Sarah/Robin as needed			
Cybers hake	Resume HF (subject to HF evaluation / investigation) and complete CS19p5 Cybershake pseudo validation	Jason, Jonney	Delayed until verification of HF_5.4.5.2 (Blocked by NeSI, Robin/Jonney) Ran several benchmarks until blocked by Multiple errors from Maui. Subduction stoch files able to be generated with fault rounding. Skarlatoudis scaling implemented. Consistent with matlab script	
	Subduction • Stoch files • Mag Scaling • SRF gen with 5.4.2			
Slurm Workflow	1)Finite fault size rounding (0.5 km and a comparison plots) 2)Update SRF2Stoch to use target-dx/dy and comparison 3)Move squeue monitoring to queue monitor (logical split for automation) 5)Completion test for MergeTS	James, Jason, Jonney	1) investigation completed: Changes to fault rounding as expected, verified with plots. 2) Test run to see changes in output underway (1~2 days part-time) 3) Done 5) Done 6) plot_ts completed	
	6)Added quick sim visualization to automated workflow		7) IM_plot (to be merged) 7. 1) im_plot.py completed.	
	7)Add IM_plot to automated workflow	Melody	7. 2) updated python2 environment for plot_station.py in im_plot.sl. Tested with the new fix in master/queue_monitor.py	

SeisFin der	Hazard and Disagg modules working. see example usage hazardEnsemble: (1) B10 emp for fault-based and DS sources (2) B10 emp for DS and CS18p6 for fault-based 50/50 weighting Disagg refactoring Rerun hazard/deagg for Karim (SA5.0 for GA02,CCCC) Consolidate modular design: (to accommodate BB's comment on source dir for clearer link between rupture/realisation, source, fault etc)	Viktor / Sung	from seistech_calc.modules.Hazard Hazard import Hazard x = Hazard.w_hazard("v18p6", "PGA", "CCCC") x.to_csv("filepath or BytesIO") x.exceedance2im(0.0014) x.exceedance2im((0.1, 50)) x.data from seistech_calc.modules.Disagg.Disagg import Disagg x = Disagg.w_disagg("v18p6", "CCCC", "PGA", exceedance=(0.1, 50)) x.plot_type("test_type") # test_type.png and .csv x.plot_epsilon("test_epsilon") # test_epsilon.png and .csv	All activities
Test	Improved test suite (many sim run, cs v18p9) Deployed git repos into shared virt_env	James Jason 2)Melody	Added a test for the restarting the auto submission wrapper. Added cs v18p9 as a large test run. Made a new test for the database where 30k realisations are simulated	E2E test updates
IM_Calc	Meet with Vahid at some point	Jason		
Bug fixes	The station list - allow multiple points Investigate HF processes finish time HF/LF step mismatch detection	Jason	1) Done and tested (to be merged) 2) Had a look at currently completed HF calculations in v19p5. Most had been stopped and started and so had inaccurate time recording. Log messages have been added to the end of each process to allow for accurate recording in future runs. 3) Added a check for a mismatch in the number of HF and LF steps	
Misc	1)Run Hik Subdution (low priority) 2)Added Date input selector for dashboard	2)Melody	1)Generated srfinfo and plotted srf. Need updated DEM to create VM (Ethan: early this week) 2) Done	

v18p6.yaml

```
name: "Cybershake 2018.06"
\verb|station_file: "/nesi/nobackup/nesi00213/seistech/sites/18p6/non\_uniform\_whole\_nz\_with\_real\_stations-linesity of the control of the contro
hh400\_v18p6\_land.11"
ims: None
datasets:
       sim:
             erf: "/nesi/nobackup/nesi00213/seistech/sources/18p6/NZ_FLTmodel_2010.txt"
             erf_type: "nhm"
               imdb_fault: "/nesi/nobackup/nesi00213/seistech/simulations/18p6/cs18p6_flt.h5"
              imdb_ds: "/nesi/nobackup/nesi00213/seistech/empiricals/18p6/b10_ds.h5"
             ssdb: "/nesi/nobackup/nesi00213/seistech/site_source/18p6/site_source_db.h5"
             weight: 0.5
       emp:
             erf: "/nesi/nobackup/nesi00213/seistech/sources/18p6/NZ_FLTmodel_2010.txt"
             erf_type: "nhm"
               imdb\_fault: \ "/nesi/nobackup/nesi00213/seistech/empiricals/18p6/b10\_flt.h5" \\
              imdb_ds: "/nesi/nobackup/nesi00213/seistech/empiricals/18p6/b10_ds.h5"
              weight: 0.5
```