

# Sprint 22 1904-01

## Overview

Duration: 1 Apr - 12 (10 days)

completed	in progress	on hold	to do
52	3	9	6

(vs record 61 completed sprint 19)

Epic	Story	Owner	Deliverables	Link
	GMSimViz animation	Viktor		
Technical Enhancements	Mid-term planning (~6 hours*2)  IM_calc performance improvement: only calculating 090 and 000 when only geom is needed		Done  performance improved by 50% (58s vs 38s) by adding a geom flag to read_waveform so that waveform object will be reassembled to have only 2 components. Needs a better way as read_waveform should not be aware of what geom is.	
Validation	regression testing with master against Robin's validation benchmark	Claudio	Part of e2e test - minor issues emerged	
Cybershake	Subduction cybershake (v19p4) from NZFM (just subduction-interface) <ul style="list-style-type: none"><li>How well does SRF generation (only ~10) work? : Does it work?</li><li>VM generation: Plotting</li><li>Estimation work?</li><li>Present numbers before running</li></ul> Automated workflow improvements <ul style="list-style-type: none"><li>Fixes mgmt db locking issue</li><li>Estimation models are only loaded once - &gt; increasing submit throughput. HPC queue can easily be kept at full capacity now.</li></ul> Subduction srf gen code	Jason       Claudio   James	SRF : Slow, memory intensive.  VM: Fixed, verification in progress.  Estimation: Estimation complete, comparison to be done once simulation completes.  HF finding bugs.  BB/IMCalc yet to be done (status unknown)  Done  Code acquired from Rob and compiled.  Yet to be verified.	
Dashboard	1. Display Physical core hours instead of visual core hours 2. Both Maui/Mahuika user core hour usage old data collection + plot 3. Both Maui/Mahuika total core hour usage old data collection + plot	Melody	1-3 Done  <a href="http://hypocentre:8050/">http://hypocentre:8050/</a>	
SeisFinder	Epsilon calculation  Ground motion integration  List of items and show the progress  Login, but no signup	Viktor	Done (except GM selection)	
Test	e2e_test: <ul style="list-style-type: none"><li>Run validation through existing e2e tests</li><li>source generation in validation</li><li>ensure that different GMSim versions can be handled</li></ul>	Claudio	1. In progress, resulted in mgmt db locking issue, which had to be fixed first. Ran 626/267 validation cases, just requires some minor fixes/improvements.	

Ground failure	PGA/PGV scaling Probability calculations for Jesse 17/ Zhu16 general Probability/susceptibility calculations for more other models Investigate shp files	James /Jason	Calculation is done Workflow needs to be verified (James/Jason) .shp file for next sprint	
Bug fixes	<ol style="list-style-type: none"> <li>1. Version number for GMSim workflow can be any string</li> <li>2. Neural network needs training</li> <li>3. Mgmt DB locking issue</li> <li>4. Merge Ts</li> <li>5. Mahuika queue check before submission</li> <li>6. Reduce extents for VMs out of (165,180) longitude range</li> </ol>	James Claudio	<ol style="list-style-type: none"> <li>1. To do</li> <li>2-5. Done</li> <li>6. To be verified</li> </ol>	