

# Sprint 43 2002-01

## Overview

Duration: 10 Feb - 21 Feb (10 days)

completed	in progress	on hold	review	to do
29	6	2	5	14

(vs record 61 completed sprint 19)

Epic	Story	Owner	Deliverables	Link
Validation		Robin		
Cybershake	<ol style="list-style-type: none"><li>1. Capability for HF / HF calculation time estimate</li><li>2. Plan pre-production testing</li></ol>	Claudio /Jason /Sung		<a href="#">Cybershake v20p4</a> <a href="#">Pre Production Testing</a>
Slurm Workflow	<ol style="list-style-type: none"><li>1. Integrate HF 6.0.3 into the workflow</li><li>2. <b>HF Rayset default off</b></li><li>3. GeoNET code Python3-ize (LP)</li><li>4. Workflow change: HF to run separately (test)</li><li>5. Inform RGraves of the changes to HF</li><li>6. Remove restart files/ Unzip restart</li><li>7. Automated workflow for empirical</li></ol>	Sung Jason Jonney	<ol style="list-style-type: none"><li>1. Done</li><li>2. Done</li><li>3. Jason (background)</li><li>4. In-progress (successfully ran HF on hypo and HF2BB on Maui)</li><li>5. Done</li><li>6. Done</li><li>7. Jason(?)</li></ol>	
SeisTech	<ol style="list-style-type: none"><li>1) UHS plots for different number of periods (background)</li><li>2) Update context map and vs30 map.</li><li>3) vs30 verification</li><li>4) GM selection linking Daniel's work</li><li>5) Performance enhancement (Empirical MPI) (low-priority)</li><li>7) Caching of results</li><li>8) Add support for only exposing certain regions on seistech</li><li>9) Logging, specifically logging code version used</li><li>10) Make frontend usable (i.e. remove major bugs..)</li><li>11) Identify workflow / usage for API / seistech documentation</li></ol>	Claudio, Jason, Daniel	<ol style="list-style-type: none"><li>1) Periods identified</li><li>2) Were already up to date</li><li>3) Done</li><li>4) Initial integration complete, more refactoring to be done (and integrating last missing plot)</li><li>5) Complete and verified with a run on Epi/hypocentre</li><li>7) Complete</li><li>8) On-hold - will do through API-proxy</li><li>9) Code version appended to logs</li><li>11) Local version created. Will be hosted on github-pages.</li></ol>	<ol style="list-style-type: none"><li>1) pSA periods</li></ol> <a href="#">Roadmap / TeamGantt</a> <ol style="list-style-type: none"><li>3) user vs30 modification</li></ol>
Vs30 porting	Viktor to break down tasks and time estimate  (1) Vs30 Weighting			<a href="#">vs30 modifications</a>
IM Calc	<ol style="list-style-type: none"><li>1. <b>Convert and add Elastic/Inelastic IM</b></li><li>2. Contact Jae for theoretical test</li><li>3. Re-running Adv IMs (Fix required)</li></ol>	<ol style="list-style-type: none"><li>1) James</li><li>2) Jonney</li></ol>	<ol style="list-style-type: none"><li>1. MATLABPythonCython (Waiting on tests)</li><li>2. (on hold)</li><li>3. Done</li></ol>	<a href="#">IM Calculation</a>

Bug fixes				
Seismic risk				
Machine Learning	1) NN - GMM <ul style="list-style-type: none"> <li>Implement an initial basic pipeline with some NN config + flexible feature selection &amp; preprocessing</li> </ul> 2) GM Classifier	Claudio	1) Not worked on this sprint, ~1-2 days away from having some initial results 2) As per discussion, working on implementing clean training process in a new repo. <ul style="list-style-type: none"> <li>Feature/Metric extraction from records complete (requires testing), need records from Robin</li> </ul>	
Empirical engine	1. Filter median empirical aggregations (+manual selection)	Jason James	(on hold) waiting on Verification Empirical Workflow	
Misc	1. SimAtlas simulation+animation: : Test auto workflow with batch 4. (total 100 faults) 2. Talk to Cloud vendors 3. HF 6.0.3 verification	Sung Jonney Viktor	1. Up and running 2. Meeting with AWS solution architect to be arranged. Found potential solutions from AWS and Azure 3. 6.0.3 with binmod same as new CPU version, normal IM distribution around CPU mean for GPU version.	SimAtlas simulation+animation <a href="https://azure.microsoft.com/en-us/services/app-service/containers/">https://azure.microsoft.com/en-us/services/app-service/containers/</a> <a href="https://aws.amazon.com/ecs/">https://aws.amazon.com/ecs/</a>