

**Project: NeCTAR – Virtual Hazard Impact and Risk Laboratory (VHIRL)**

**Steering Committee Meeting: 002, 27/8/14**

**Time: 11:00am (EST)**

**Duration: 60mins**

**Agenda**

**1. Welcome & intros – LW**

- In Attendance – Lesley Wyborn –GA (LW), Ryan Fraser (RF), Stewart Allen – BoM (SA), David Lescinsky – GA (DL), Ben Evans – NCI (BE), Glenn Maloney - NeCTAR(GM),
- Apologies from - Martine Woolf – GA (MW), Jane Sexton – GA (JS), Tom Baldock – UQ (GA), Phil Cummins – ANU/GA (PC)

**2. Overview of Current status**

- Previous ACTION: RF – bi-weekly meets -> DONE -happening, the "Tech" related team are meeting. RF is meeting with GA and NCI reps on at least a weekly basis

-Previous ACTION: RF – once established “what” data will be available inform all SC (TB requested)

- Question for GA - David/Lesley, can we have this documented

**Discussion on Data**

- LW - *Natural Hazards Collection - wind multiplier models, earthquakes, tsunami modelling data*

- DL - *project to merge the elevation with bathymetry -> BIG project, will take time (various groups working on this)*
- RF - *National Elevation coverage - is up in VHIRL*
- LW/DL - *All GA data should be at RDSI by end of Dec 2014*
- DL/BE - *rollout of data via web services, will happen from Dec 2014*
- DL - *merged gridding process (bath/dem), done by a separate team(s) in GA, David is communicating with them on how they do this. They do NOT have an on-the-fly mechanism for this, 2 different scientific communities needing to align processes – will take time*

- **ACTION - Lesley to circulate RDSI data plan and dataset listings**

- RF - *Thredds in WSG84 and NetCDF 4*
  - BE - *starting point is on the GA side - what "state" is the data going to be in,*
  - BE - *NCI will- provide way to serve data, do have errdap and thredds*
    - *can handle all spectrums*

**Workflows:**

- Anuga is included in v1 release. GA are sorting “merged” grids for this workflow. The creation of the merged grids is complex and time consuming (not automated – see comments under data discussion), Anuga currently works on these merged grids, some effort would be required by Anuga developers to get to work on bath/dem data
- eScript – progress has been made yet the models requiring validating – this will be included in v1.1 release
- TCRM – this has been included and part of the v1 release

**Conclusion - ANUGA (Tsunami) is included with limited data, eScript (Earthquake) will be in v1.1, TCRM (Wind/Cyclone) is in -> As committed to within the contract, at least 2 workflows have been included in VHIRL v1**

**Compute Resources:**

- Nectar resourcing issues have been resolved
- NCI cloud is provisioned and includes same codes available on Nectar cloud (Anuga, TCRM and eScript)

**Resolved** ->Nectar Cloud compute and NCI issues resolved

BE - what amount of cores have you available at Nectar?

GM - explained what is available for usage

RF - VHIRL has up to 80 cores on the Nectar cloud (further allocation can be negotiated when required)

**Data Delivery**

- Progress has been made and recipe to “convert” GA’s proprietary grids into an open format (netCDF) has been delivered. GA to work with NCI on conversion of data (**ACTION – DL to provide an estimate on when this can occur**)
- Progress – NOAA will implement suggested changes – no ETA, we do have a work around for the short term. **ACTION – RF to follow up and push to get an ETA on this**

**In Progress** -> Limited data will be available in VHIRL v1

**Project Team Staffing**

Staff are on board, gain ground next month (post v1 release)

**Technical:**

- RF - Authorisation mechanism used by VGL are no longer supported. VGL/VHIRL has been updated to utilise a new framework and included in v1 on <http://vhirl.net>

**3. Review of Milestone 6 (inc. Testing results) – Release of VHIRL v1**

**ANUGA** - included and has the ability to compute on 1 dataset

**Result** -> works

**TCRM** - included and has the ability to process automatically acquired data from external servers pending context

**Result** -> works

Requesting permission to release V1 as is as contractually it meets the requirements however it is a little "light-on" at present

DL – asked for a little time to confirm GA is comfortable with csiro releasing VHIRL v1 (DL to confirm GA happy for Anuga datasets being released etc) – 2<sup>nd</sup> Sept 2014

**ACTION: RF to release VHIRL v1 on 2<sup>nd</sup> Sept 2014**

#### 4. Pending Issues

- Parallel processing capability -> Remote submission to Raijin
- Data access
- Computational code limitations - ANUGA only works with merged grids – possibility to extend to consume standard elevations and bathymetry? **ACTION – RF to follow up with Steve Roberts from ANU**

#### 5. Plan for next release v1.1 (next 2 months)

- We are still about 4weeks behind so all pending work items are being pushed back to 30 Oct 2014 (was 30 Sept 2014) This is ok from my point of view as Q2FY15 was relatively light
- SCM has been designed ->
  - Scientific code provision part has a "way forward" and thanks to the efforts of NCI, a standardised approach can be used
  - Researchers will have mechanism to "share" their code in the SCM - this will be a registry with all the relevant information to run a "template"
  - the PROVENANCE project will allow ALL users to "share" their workflows via prov records

#### 6. Promotional Opportunities

- eResearch - poster
- <http://www.carltonconnect.com.au> - Risk and Resilience
- eResearch - demo's at NeCTAR booth

#### 7. Next Steps & final questions/comments

Work to the plan (push things back 4 weeks)

<https://www.seegrid.csiro.au/wiki/NeCTARProjects/Vhirl/VHIRLPlanPhase1>

- SC motioned to include the ANDS Provenance project within the scope of responsibilities of the VHIRL SC , **ACTION – RF to extend an invite to Andrew Treloar to join the SC**

***ACTION - Lesley to circulate RDSI data plan and dataset listings***

***ACTION – DL to provide an estimate on when this can occur***

***ACTION – RF to follow up and push to get an ETA on this***

***ACTION - RF to release VHIRL v1 on 2<sup>nd</sup> Sept 2014***

***ACTION – RF to follow up with Steve Roberts from ANU***

***ACTION – RF to extend an invite to Andrew Treloar to join the SC***

#### 8. Close - LW

Next meeting scheduled for – 30 October 2014 (VHIRL release 1.1)