**Yeti Workflow for Monarch Model Simulations**

Create model jar in RS. Start Monarch Model and use Batch Runner (white lightning bolt in yellow). Specify all the specifications then create the model archive using the Create Model Archive button (2 yellow arrows).

Create complete\_model.jar in Repast Simphony (RS). The .jar is saved in C:\Users\tjgrant\workspace\Monarchs\output\complete\_model.jar

Open GitBash, copy the .jar to YETI (need to cd to correct dir above):

scp complete\_model.jar yeti.cr.usgs.gov:.

Connect to Yeti: ssh yeti.cr.usgs.gov

Copy model jar to monarch folder (copies complete\_model.jar from source to current dir). This copies over the old jar:

cp ../complete\_model.jar .

Delete old instance folders and combined folder or else output combiner won’t work.

rm -r instance\_\*

rm –r combined\_data

rm –rf data/data

or rm -r data

Expand jar. Writes over old file structure, I think:

jar -xvf complete\_model.jar

Open a text editor to edit slurm.repast. The text editor nano is built in to Git BASH, apparently:

nano slurm.repast

The number of instances from RS is no. of cores divided by 2, because Brad Williams thought it was most efficient to use 2 cores/per instance, or task, as the slurm.repast file says.

unrolledparam.txt file contains param values for run.

This has to have the same number of lines as instances. Use nano to open it and copy down the lines until enough are there. Ctrl K to cut and Ctrl U to paste. Each line has to begin with a different number, e.g., 1,2,3…

(I need to try this with space-separated list in RS GUI.) *The space-separated list makes a line for each space-separated number.*

Submit the job:

sbatch slurm.repast

Check status of job using squeue, sidle, sidle/v, and website (using nodelist #s). Can use tail –f to check progress in output files as well.

Combine all the instances into one output file:

./outputcombiner.sh

~~Log out from Yeti. Copy the results files from the combined\_data folder using PuTTY (this command copies the entire folder). Put this command into the Windows Command Prompt:~~

~~pscp –r tjgrant@yeti.cr.usgs.gov:/home/tjgrant/monarch/combined\_data C:\Users\tjgrant\MonYeti\.~~

Log out from Yeti. Navigate to MonYeti folder and copy files there:

scp -r tjgrant@yeti.cr.usgs.gov:/home/tjgrant/monarch/combined\_data .

Copy output files to CyBox to move to laptop for analysis.