## Technical Computing for the Earth Sciences, Lecture 5:

## Package Management Debuggers

EARS 80.03

## Package management

Pkg

```
julia> ] # Press left square bracket to enter pkg mode
pkg> add PackageName # If registered. Note: case sensetive
pkg> add http://github.com/some/Package.jl # If unregistered
pkg> rm PackageName # To delete a package
pkg> gc # To clean up unused packages
```

- To make a new package of your own, try pkg> generate
  - See also <u>PkgTemplates.jl</u>
  - All you really need is a git repo containing a directory `src` with a module file in it.
- Packages can be "registered" at <u>github.com/JuliaRegistries/General</u>

## Debuggers

- JuliaInterpreter
  - Underlies the built-in debuggers in to Juno¹ and VSCode².
     1: <a href="https://docs.junolab.org/latest/man/debugging/">https://docs.junolab.org/latest/man/debugging/</a> 2: exists but not documented.
  - Can also call directly from repl
- More advanced debugging tools:
  - https://github.com/JuliaDebug/Cthulhu.jl
  - other things in <a href="https://github.com/JuliaDebug/">https://github.com/JuliaDebug/</a>
- The old-fashioned way
  - println(). Actually not bad for parallel programs.