

# Can I use Isca on my own computer? (ICTP day 5)

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# Can I use Isca on my own computer?

- The simple answer: Yes!
- Isca is designed to be portable, and (relatively!) easy to setup on new machines.
- On a linux-type machine (including supercomputers), Isca requires a Fortran compiler (Intel or gFortran), mpi, netcdf, git and Python.
- To get started with Isca on a linux machine, follow the instructions in the main Isca 'Readme.md':
  - https://github.com/ExeClim/Isca

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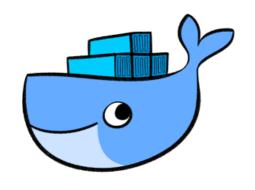
- If you need a hand with this, then do email me (s.i.thomson@exeter.ac.uk)
- However, if you need to install compilers etc, your University computing officers will be more use than me!
- Isca is already running in Exeter, Chicago, ETH Zürich, ICTP, NCAR's Cheyenne machine (this week...!)
- If you get Isca to work on your machine, do get in touch and we can add your configuration files to our repository. This will make it easier for other people to use.
- What about running it on my Non-linux machine?

### What about running on a non-linux machine?

James Penn (Exeter PhD student, who wrote the python wrapper for Isca) has got

Isca running in 'Docker'

- Docker is a program that creates a linux virtual machine on your computer (including Macs), that makes it very easy to port code from one machine to another.
- Only Held-Suarez running in Docker at the moment more testing needed.
- Steps to install Isca with Docker:
  - Download Docker https://www.docker.com/get-docker
  - Follow James' instructions here: <a href="https://hub.docker.com/r/jamespenn/isca/">https://hub.docker.com/r/jamespenn/isca/</a>
- We are hoping to get Isca running natively on a Mac do get in touch if you'd like to help with that.



#### Can I contribute to Isca?



- YES!!! The best way is for you to create an account on Github, and create your own 'fork' of Isca.
- You can then install and develop this on your own machine, and send us your modifications so that they can be incorporated.
- Our plans for Isca:
  - Adding cloud schemes (Talk to Qun)
  - Adding a dynamical ocean to Isca
  - Maybe an ice model too?
- If you're interested in helping with any of this, then please do get in touch.

# If you've enjoyed using Isca this week...

- Hopefully you've enjoyed using Isca this week, and you'll continue to use it in the future.
- One of the key people in Isca's development has been James Penn (mentioned before)
  who wrote the python wrapper and contributed lots of the Fortran.
- If you feel inclined, do email him to tell him how much you've enjoyed using Isca, and the
  wrapper in particular, as I'm sure he'd appreciate it! His email is jp492@exeter.ac.uk
- Other key people are Ruth Geen, Greg Colyer, Alex Patterson, Penny Maher, Marianne Pietschnig, Qun Liu (all from Exeter), Martin Jucker and Ed Gerber.
- I won't be here next week, but if you need any Isca help during that time, do email me on s.i.thomson@exeter.ac.uk
- You can also talk to Ruth Geen and Penny Maher from Exeter there'll both be here next week, and Ruth will be presenting her work with Isca.
- If you want to keep up to date with Isca, then I tweet about it occasionally, so if you want to find me twitter I'm @StephenIThomson
- You can also keep track of our GMD paper: <a href="https://www.geosci-model-dev.net/">https://www.geosci-model-dev.net/</a>
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