

# Climateprediction.net: Climate research and Free Software



**Juan Antonio Añel**

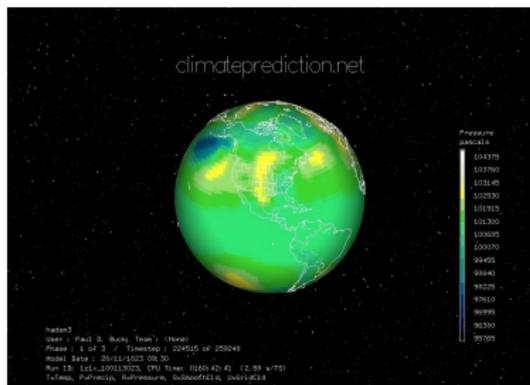
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**February 2, 2013**

**FOSDEM 2013**

# Climateprediction.net & Weatherathome.net



Your PC



1) get instructions

2) download applications and input files

3) compute

4) upload output files

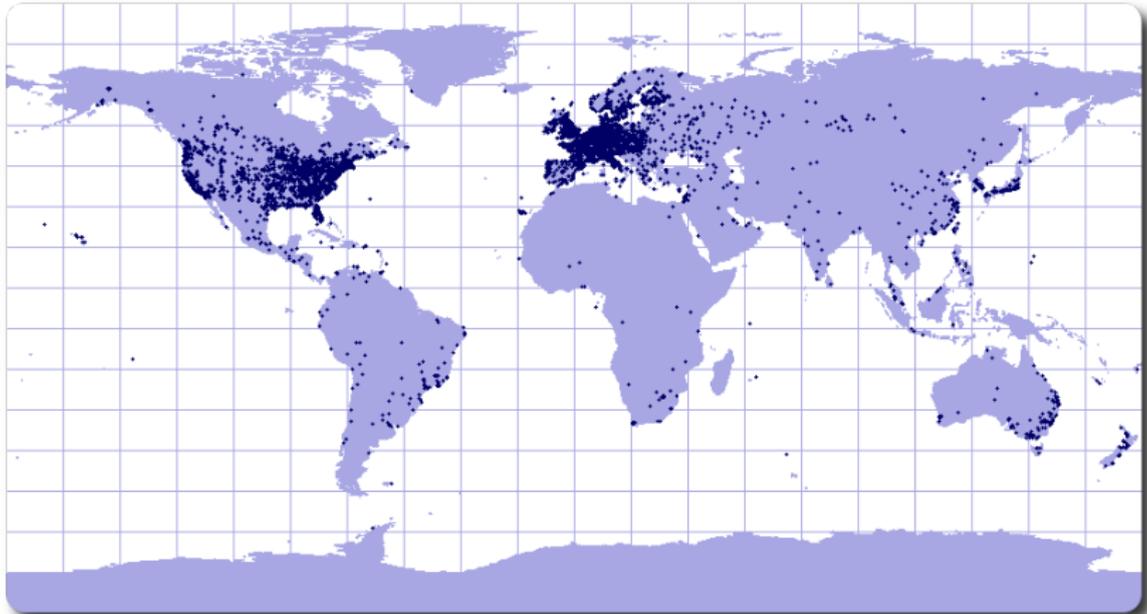
5) report results

Project servers



# Climateprediction.net & Weatherathome.net

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# Climateprediction.net & Weatherathome.net

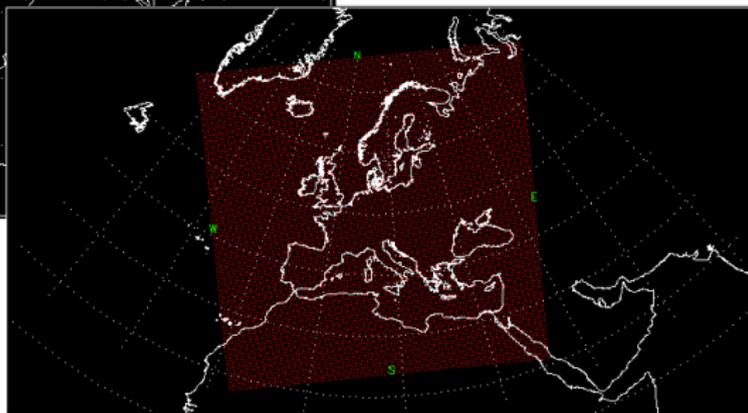
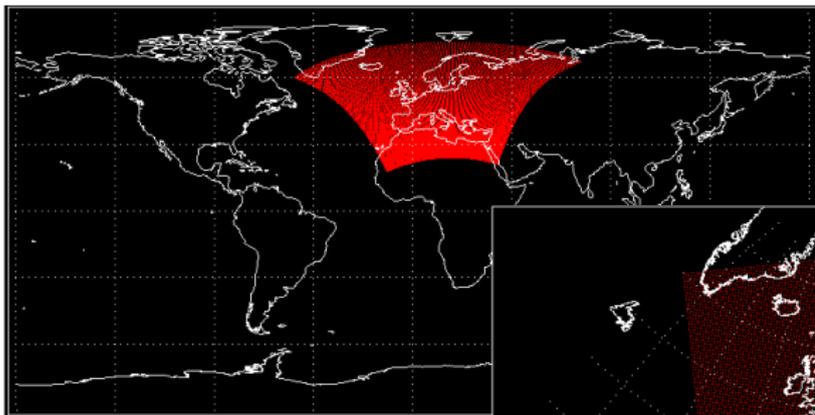
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**BERKELEY OPEN INFRASTRUCTURE  
FOR NETWORK COMPUTING  
- LGPLv3 -**

# Weatherathome Europe

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# Weatherathome Europe

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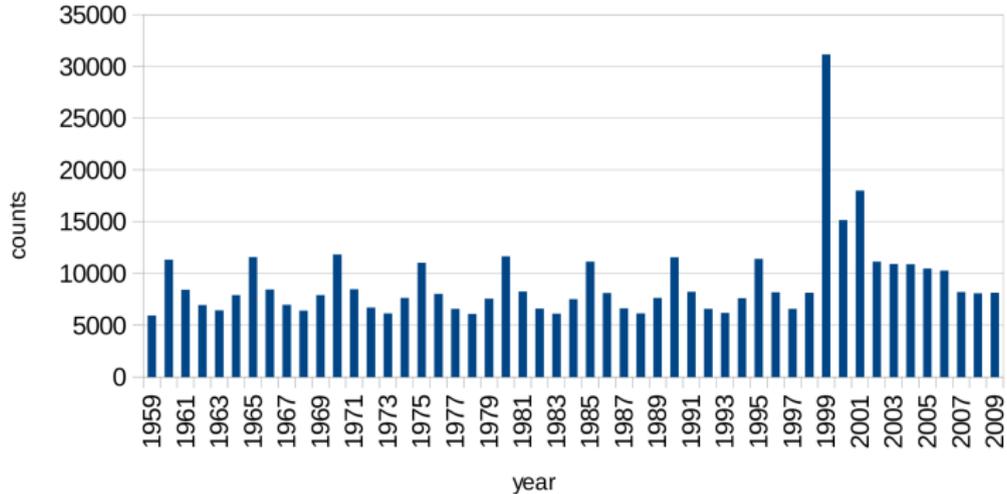
- HADAM3P (1.875x 1.25, 19 levels, 15 minutes timestep)
- HADRM3P (0.44x 0.44, 19 levels, 5 minutes timestep)
- coupling between the models every 6 hours
- > 300.000 years simulated
- period: 1960-2010

Model licenses...

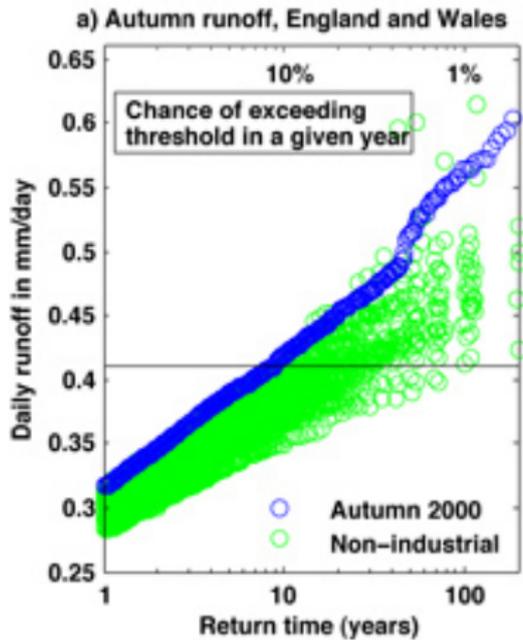
# Weatherathome Europe == workunits sent out

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Statistics for Weatherathome - Europe



# Probabilistic Event Attribution

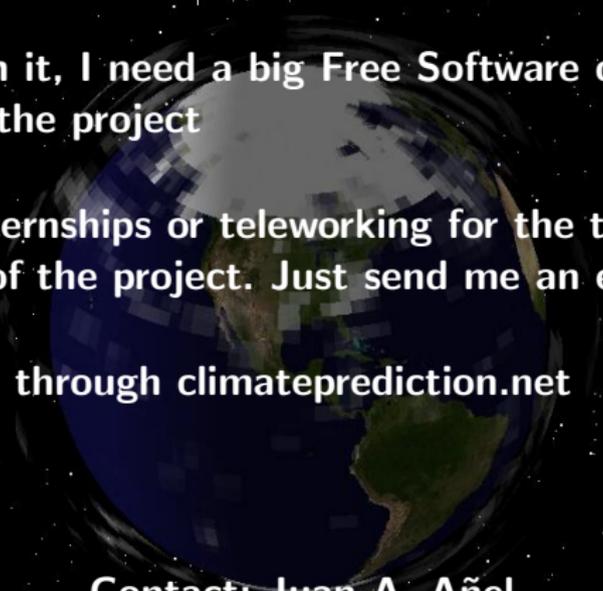


## From the technical side

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- CPDN vs HPC infrastructure
  - compilers
  - heating
  - development for GNU/Linux systems
- the big bottleneck: data transfer
- GNU/Linux upload and download servers + 1TB MySQL
- xml files to generate initial simulations
- next steps: dual, virtualbox + only GNU/Linux support

# How to help us



climateprediction.net

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- \* Install and run it, I need a big Free Software community contributing to the project
- \* Your time: internships or teleworking for the technical or scientific parts of the project. Just send me an email
- \* Donations: :-) through [climateprediction.net](http://climateprediction.net)

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hadsm3

User : Paul D. Buck; Team : <None>

Phase : 1 of 3. / Timestep : 224551 of 259248

Model Date : 29/11/1823 03:30

Run ID: 1z1x\_100113023, CPU Time: 0160:44:16 (2.58 s/TS)

Toggle Btn: 1=Sn