

La Palma climatology

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What has been done

- Very late addition to lost of sites
- No CTA long term measurements
- Use archived data from local observatories

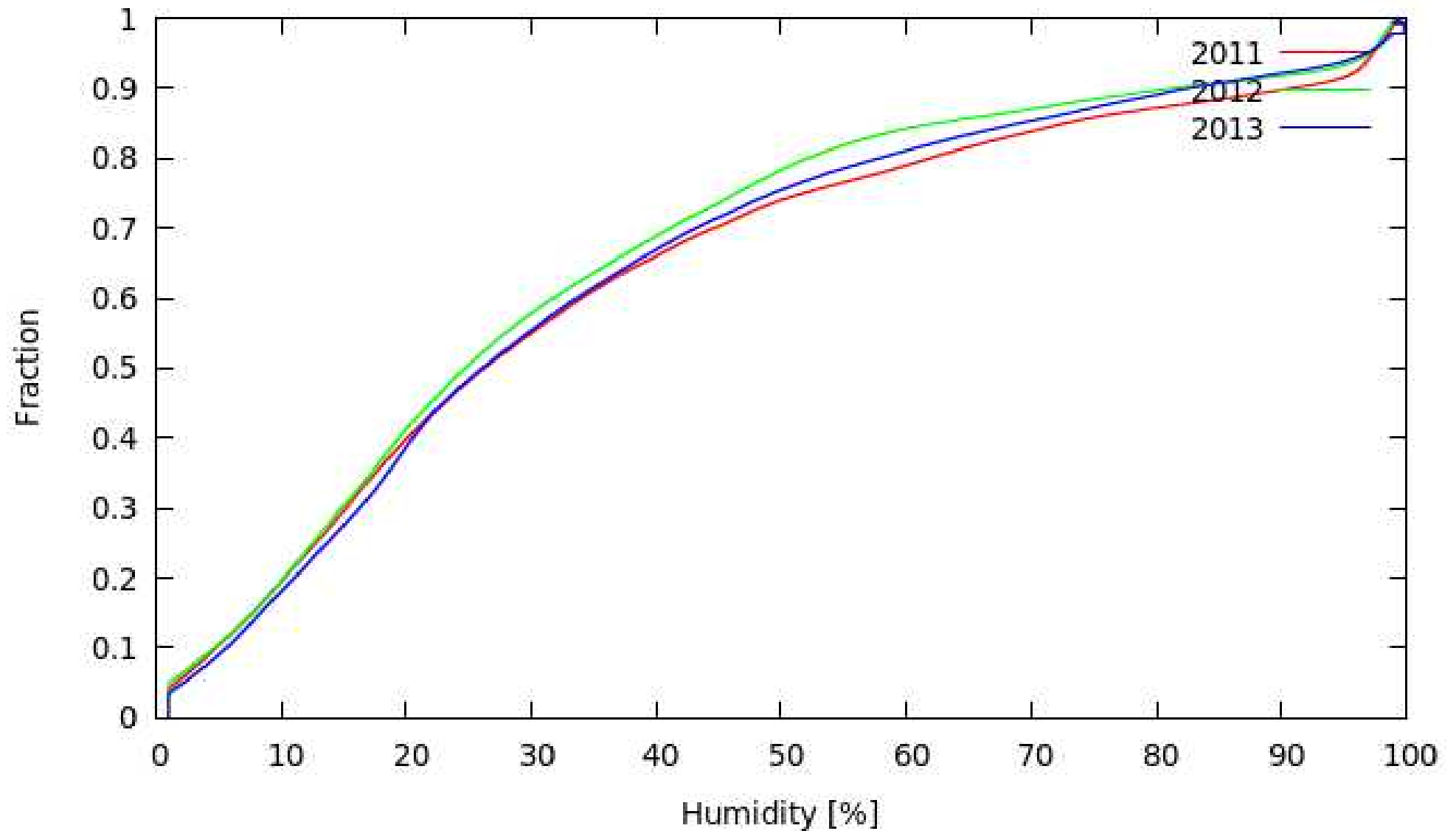
Our instruments

- All Sky Camera
- SQM
- No Atmoscope
- No wind tower

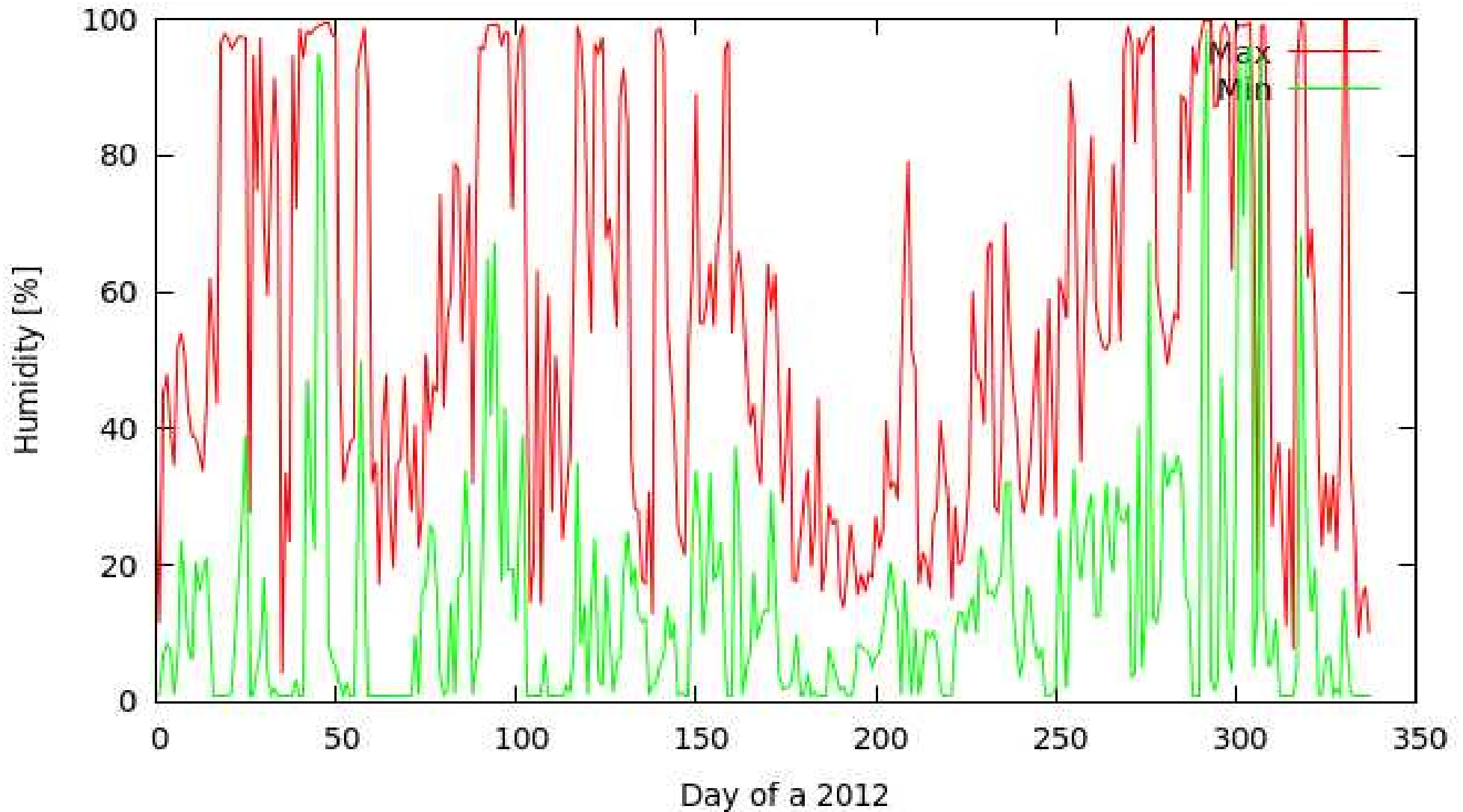
Archival data

- MAGIC archive made available by Markus
- Data from other telescopes available through the websites
- Location of the wind measurements is not ideal

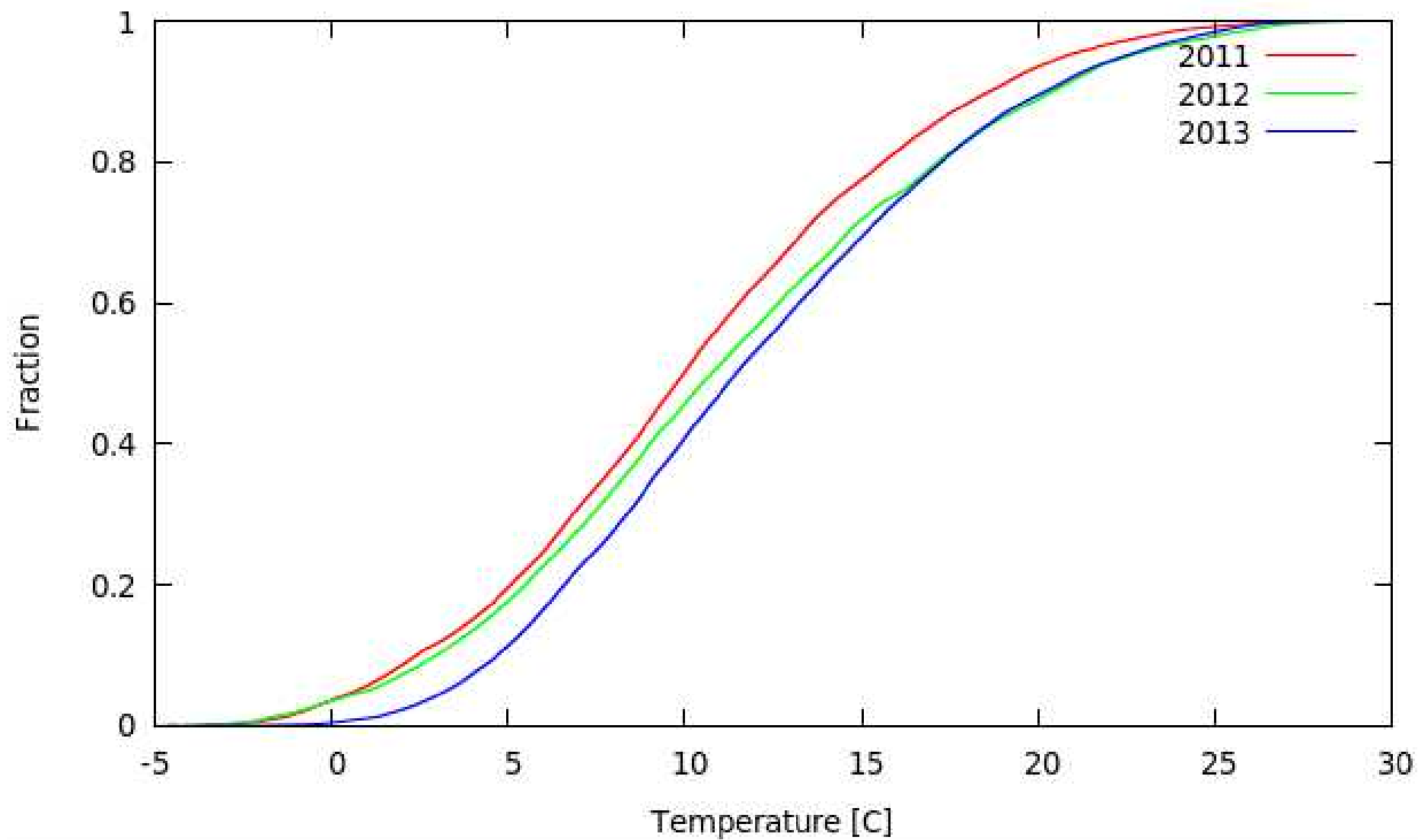
Humidity



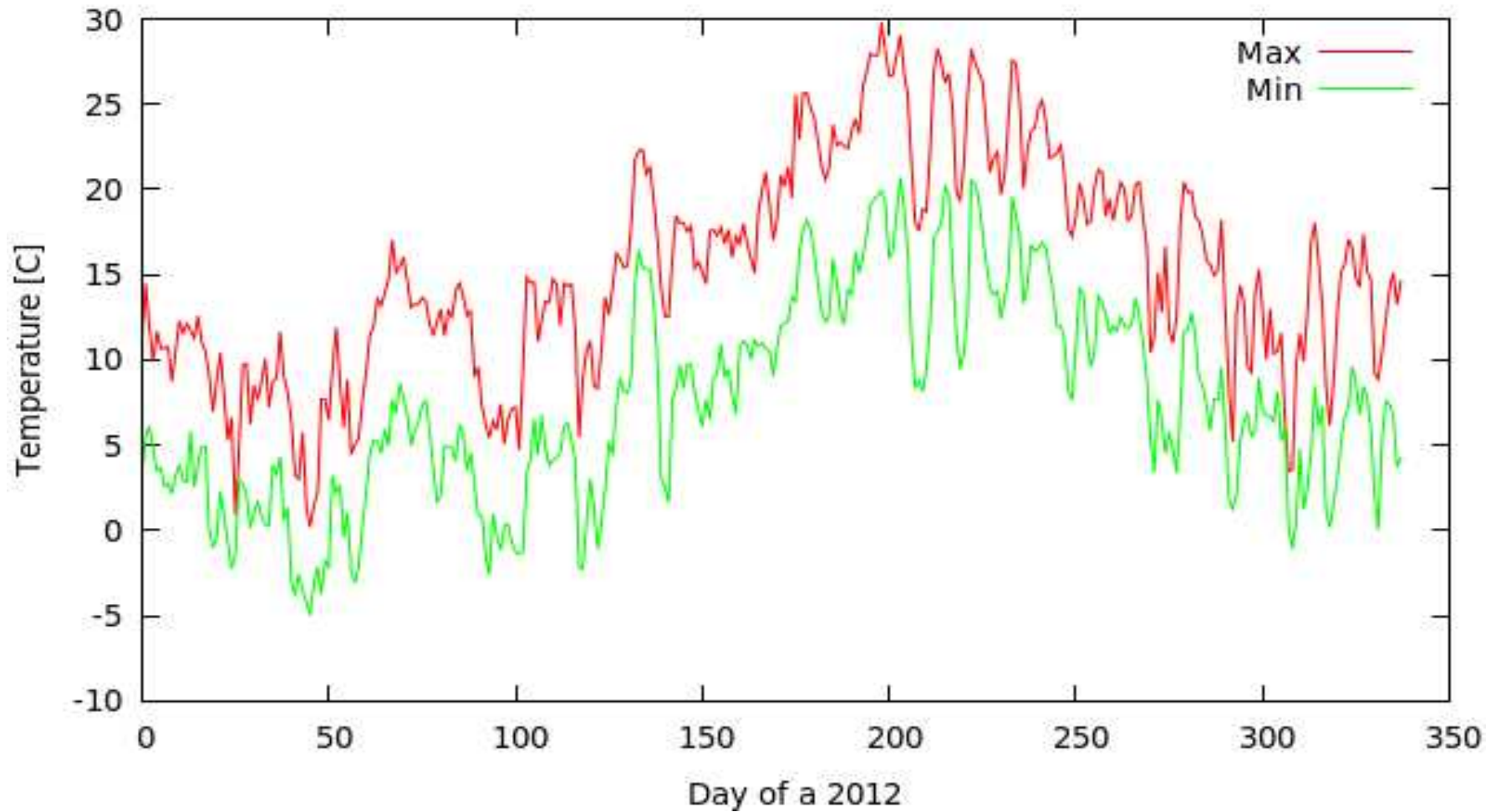
Humidity range



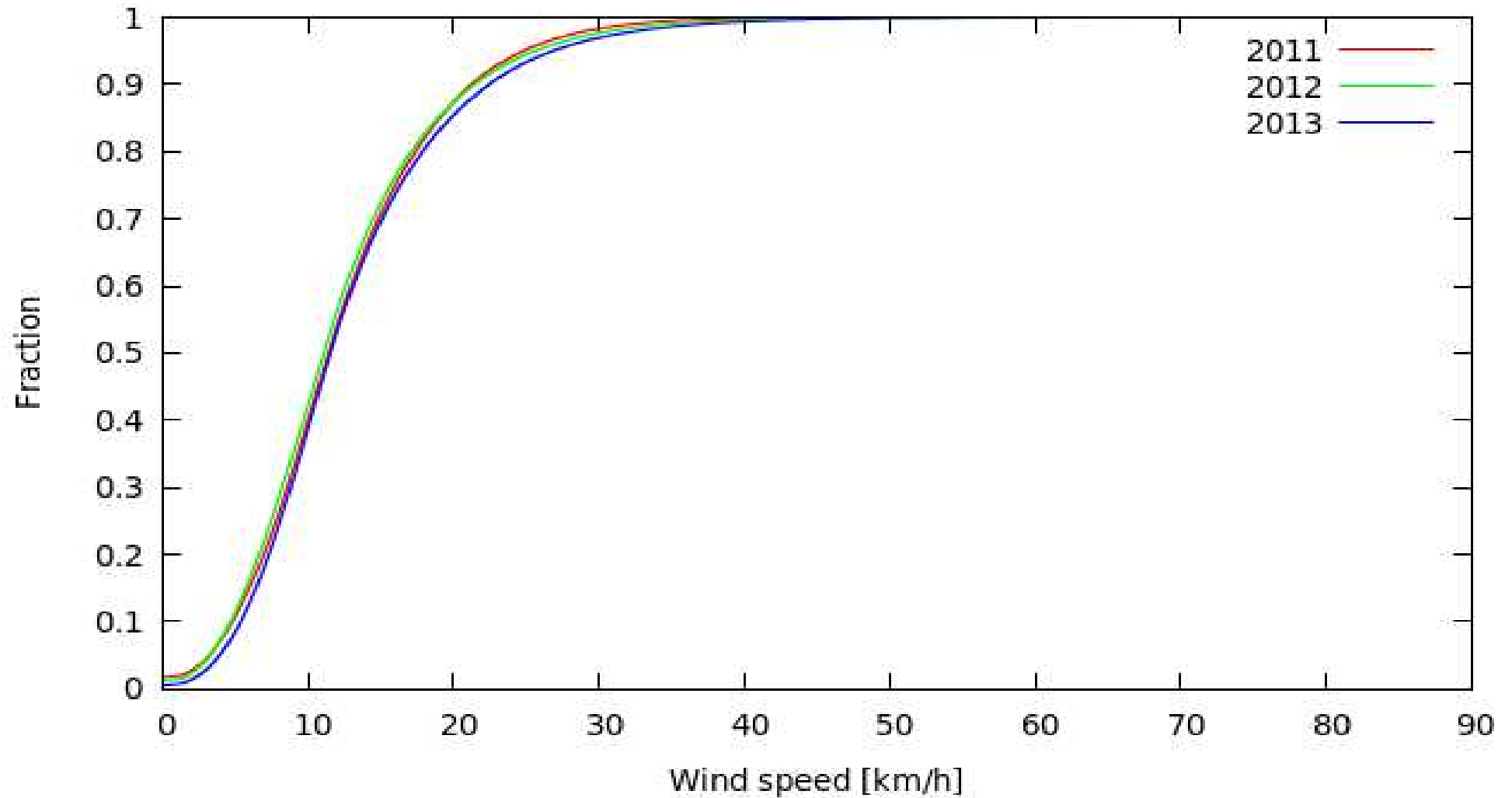
Temperature



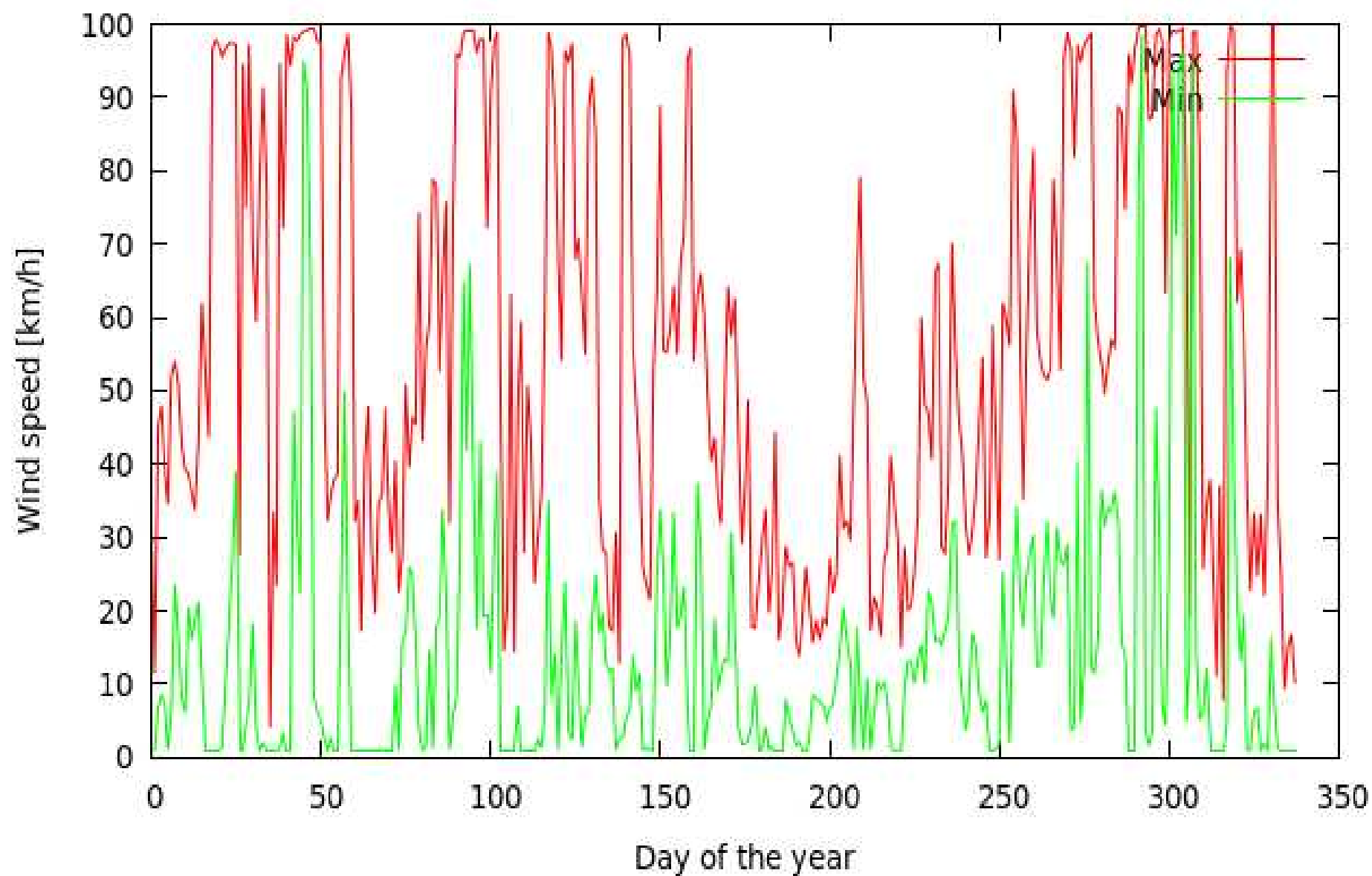
Temperature extremes



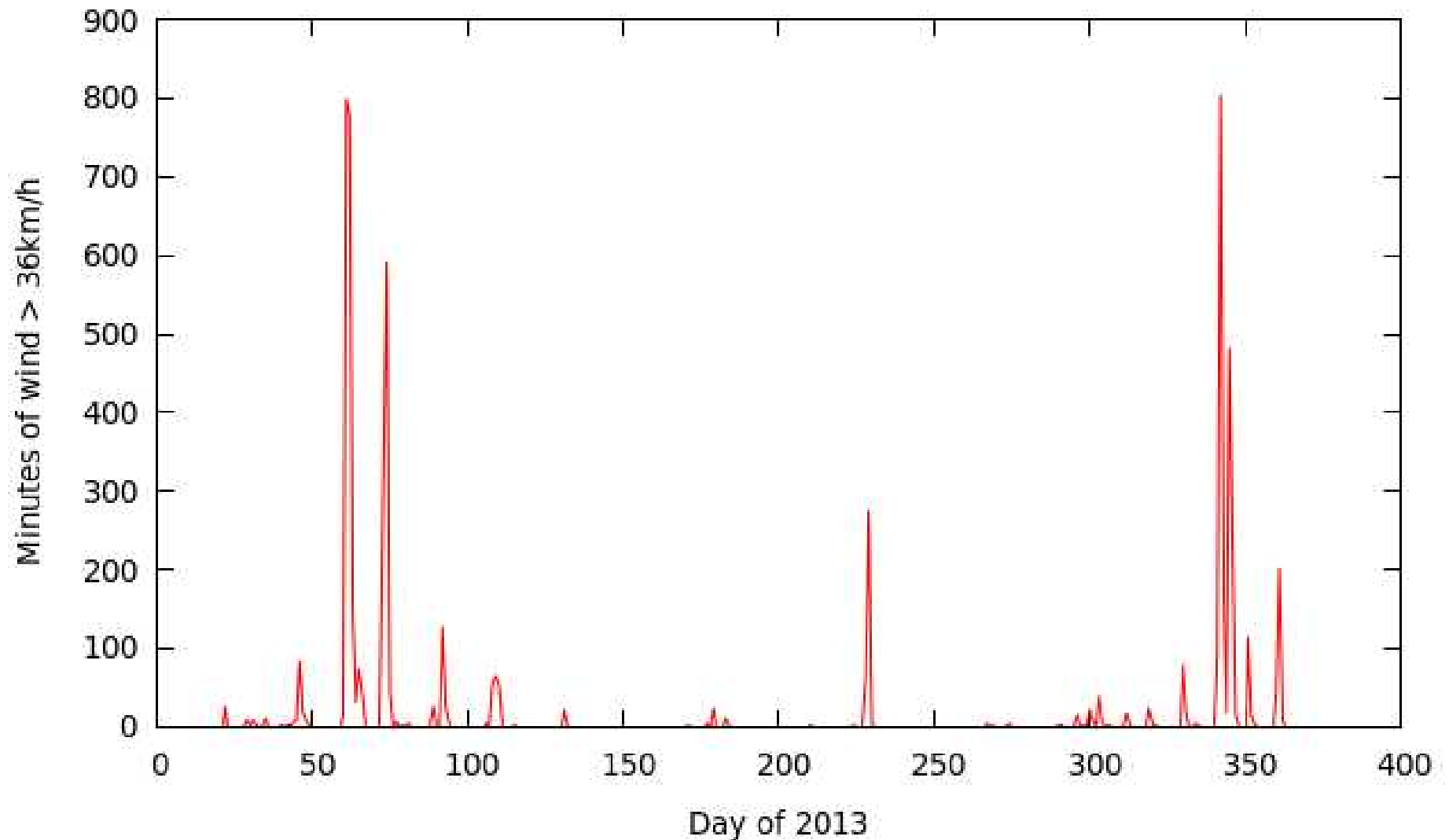
Wind speed



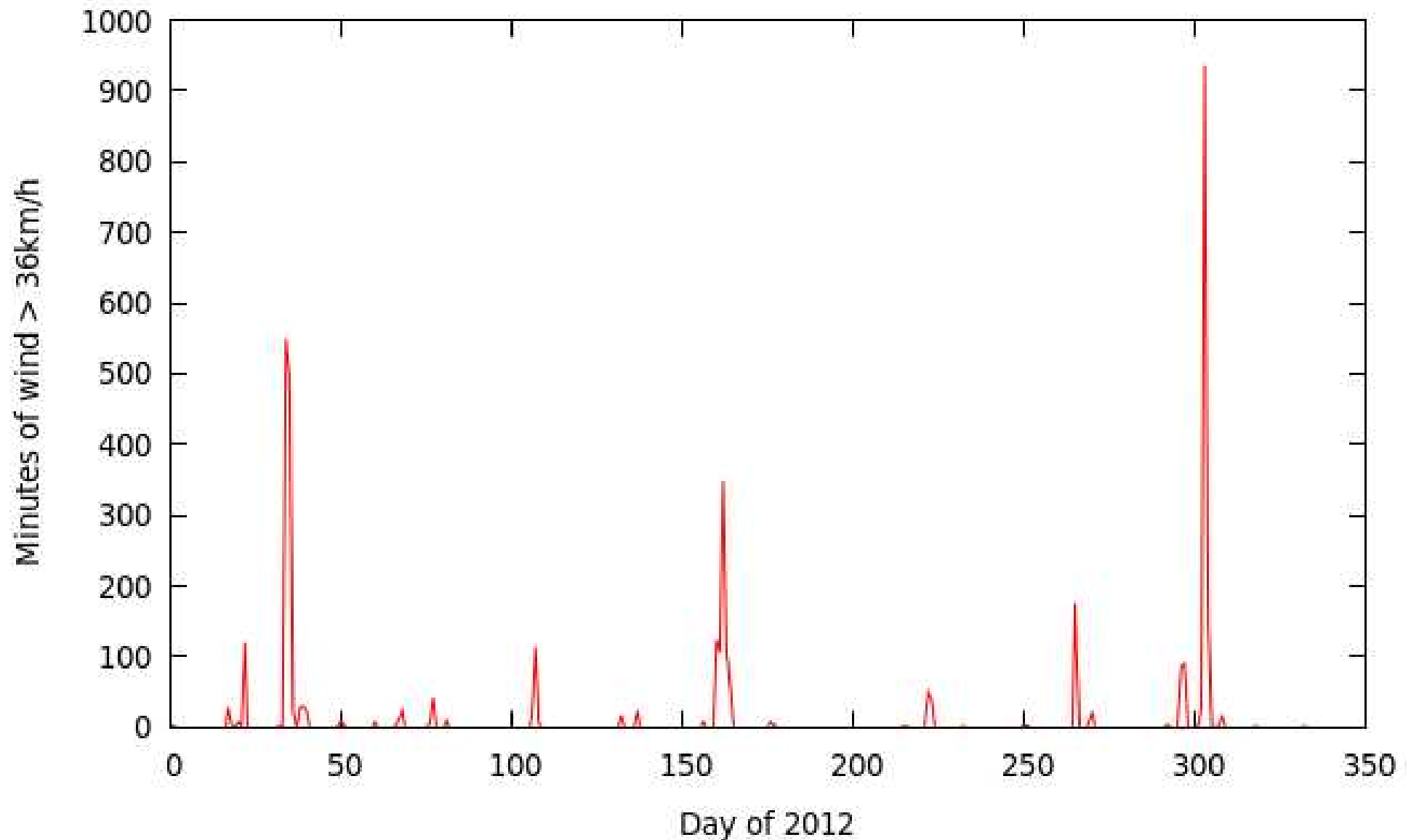
Wind extremes



Strong wind episodes



Same for 2012



Bottom line

- No temperature extremes
- Possible weather extremes
 - Ice storms
 - Occasional strong wind
 - Snow
- But they look like they are manageable

So what needs to be done?



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Wind situation

- Very complicated terrain
- Wind varies from point to point
- Location of telescopes at various places on the mountain.
- Would be useful to characterize the wind...

Proposal?

- Wind for LST
 - Measure the wind profile
 - Measure turbulence
 - Place a 30 meter wind tower at or near the LST location(s)
- Wind for MSTs
 - Place 10 meter masts at a few MST locationss
 - Make a wind map of the mountain
 - Which ones?
 - Can we use the existing measurements to create a wind map?

How?

- Use Spanish funds?
- Use the CTA money
- Start as soon as possible
- What are the legal requirements to get permissions
- Find what are the procurement constraints

Questions?

Opinions?

Anything else that should be done?