MUP – FUND contribution

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Outline

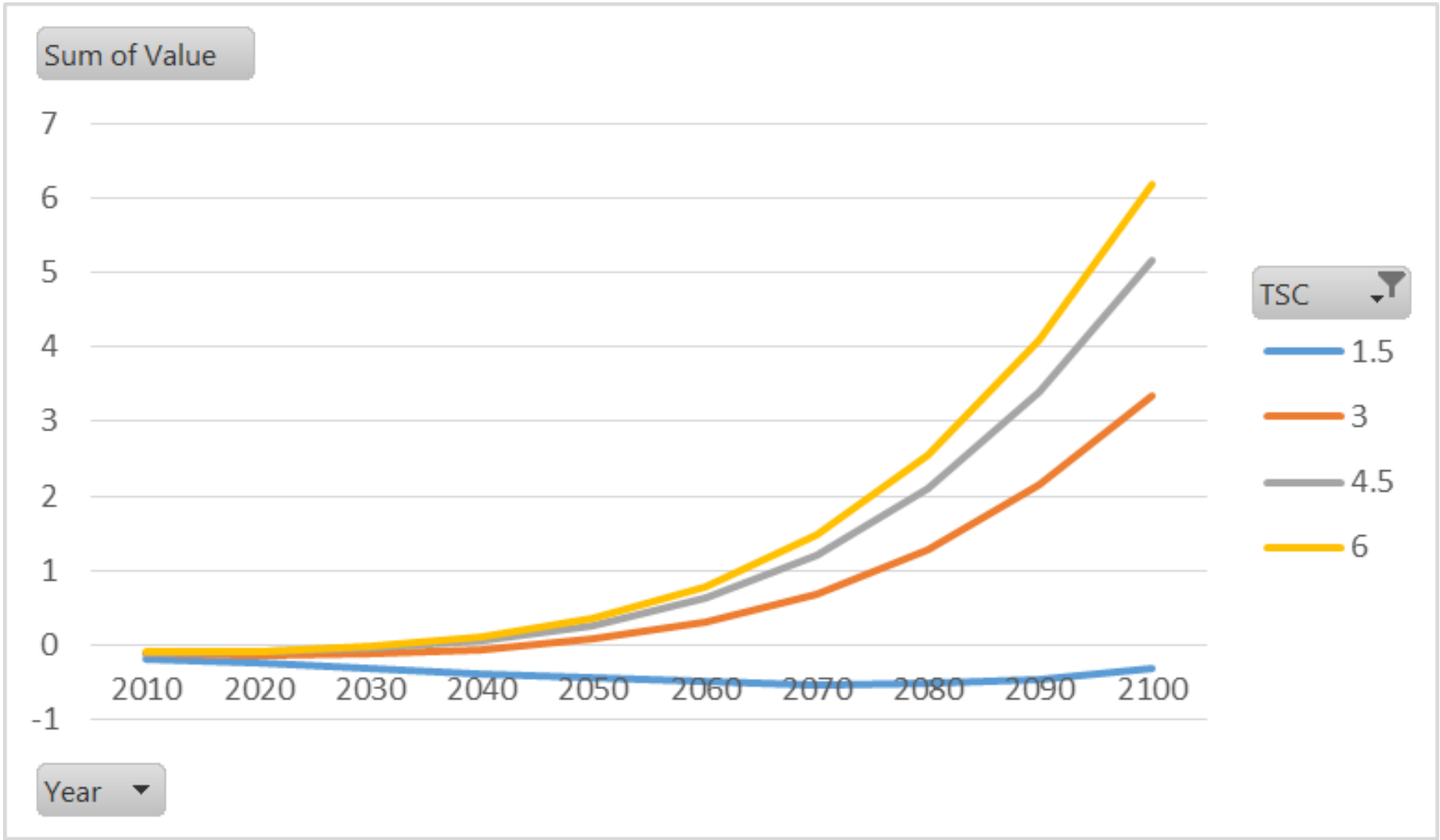
- The FUND runs
- Some results
- Minor comments on the protocol
- TSC & Discounting
- Questions from the agenda
- Next steps

On the FUND runs

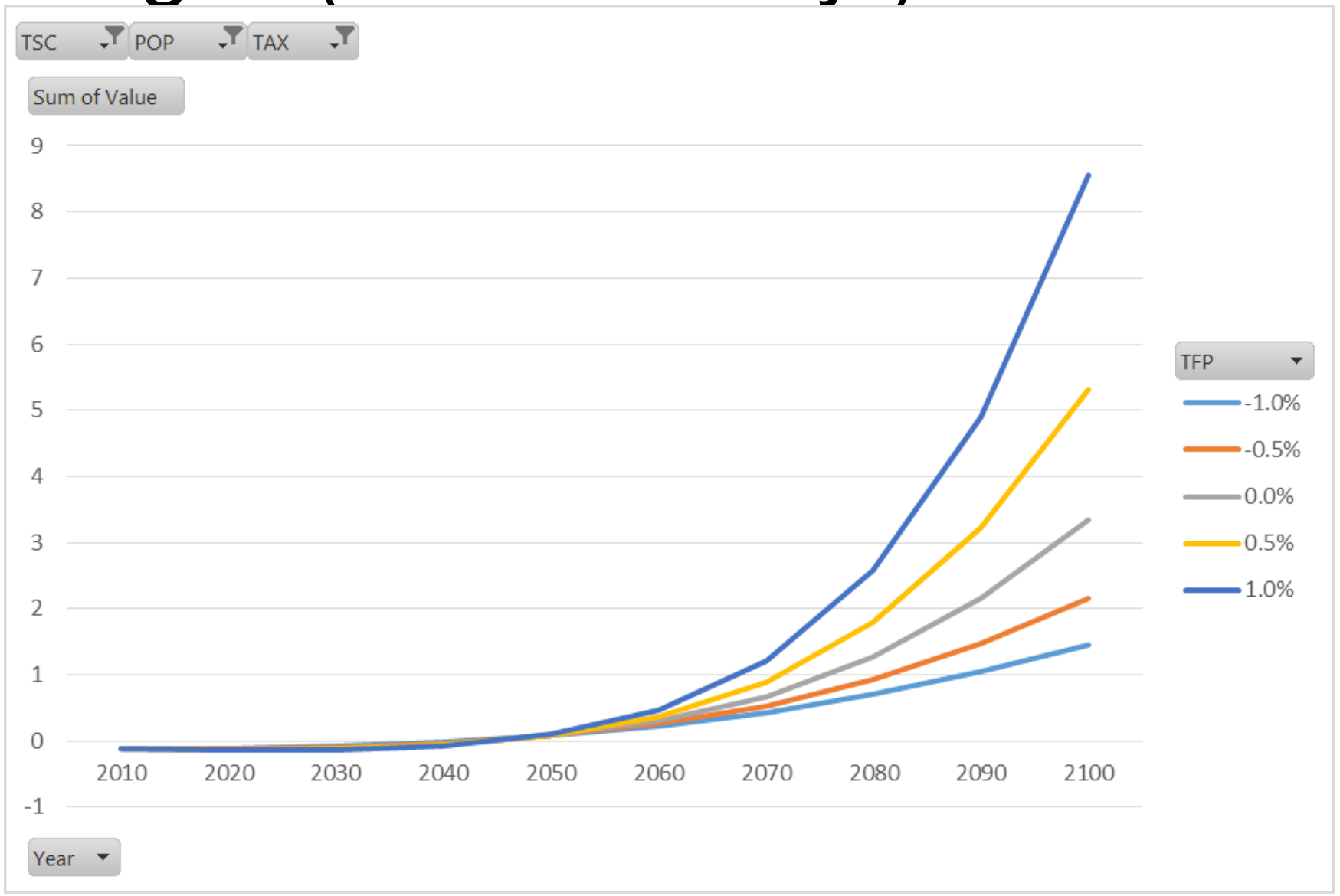
- No major complications
- Takes a few minutes to run
- Caveats for this round:
  - Didn’t include energy consumption, but will add in the future
  - Emission reduction costs only include direct effect
  - Damages only include direct effect
  - Discount rate: regionally differentiated in FUND
  - Discount rate: used DICE-2013 preferences for now
  - Used a work in progress version of FUND

Some results

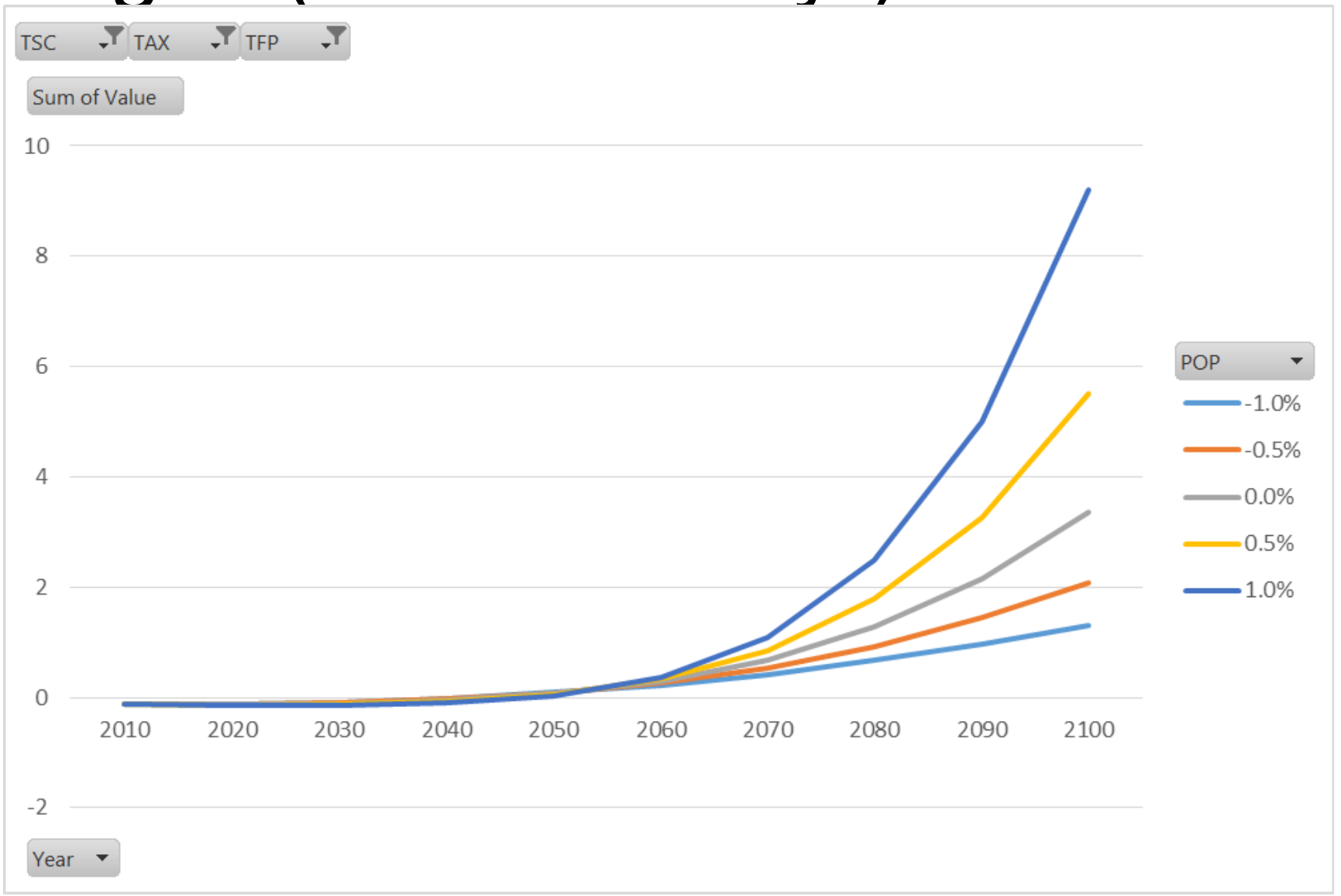
Damages (trillion USD/yr)



Damages (trillion USD/yr)



Damages (trillion USD/yr)



On the protocol

- CO_2-e emissions: GWPs from IPCC TAR or FAR?
- CO_2-e concentrations: Kyoto gases, other set of gases or total?
- CO_2-e concentrations: Why include at all?
- Radiative forcing: Kyoto gases or everything?
- (Global T: above pre-industrial vs. some other base year)
- Discount rate: what to report if different for different regions?

TSC & Discounting

- Should we really do the TSC off the models base case?
- For the SCC: report results for a range of discount rates?

Questions from the agenda

- Should we continue with the 3 uncertain variables? Or add others?
  - Sort out publication plan first?
- What are the major methodological questions that need to be addressed (tools for determining uncertainty, thin v. thick tails, assessing dependencies among uncertainties, others)
  - Don’t see how we could to thick tails in the current setup
  - No dependencies seem fine with the three variables we have
- Other models that might be included?
  - PAGE (or drop SCC?)
  - Something like SNEASY for the temperature?
- Establish a formal group for developing pdfs?
  - Three groups?

Next steps

- Should think about paper we want to publish/report to write/final product
- Decide on final set of runs
- Double check separate track approach with Monte Carlo approach in fast/simple models

Thank you!

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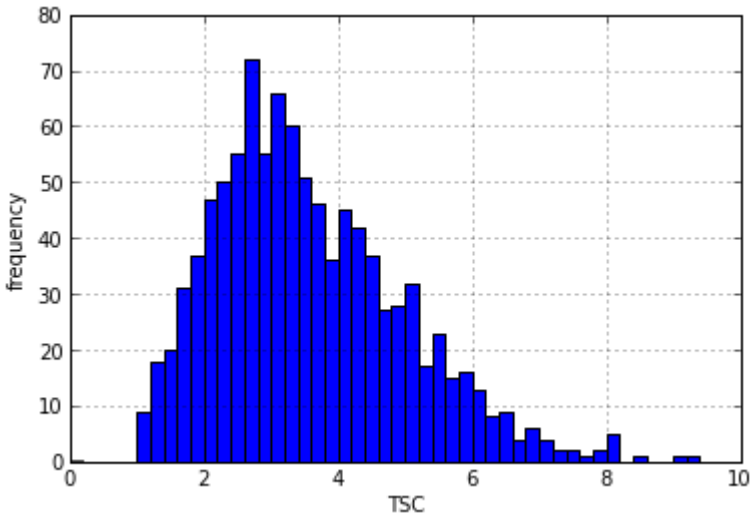
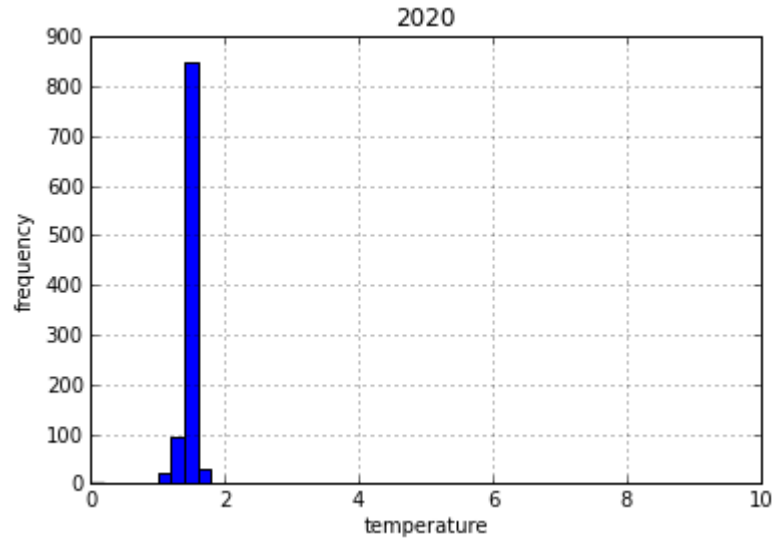

frequency
TSC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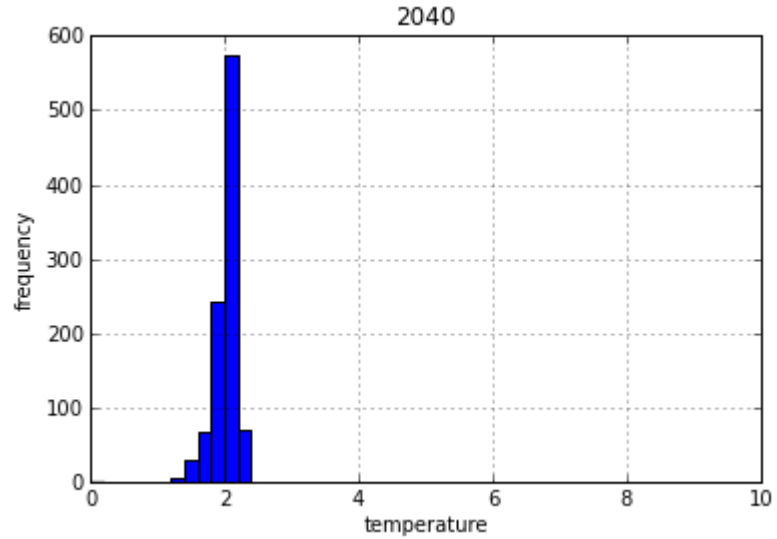
frequency
temperature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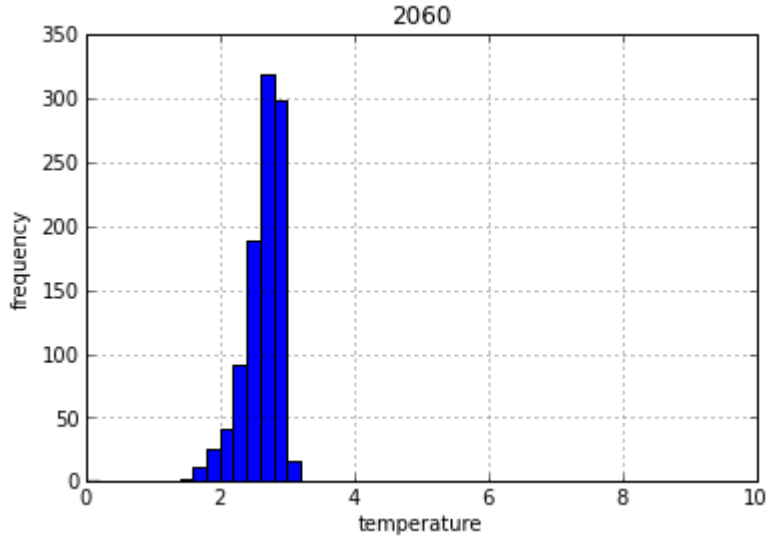
temperature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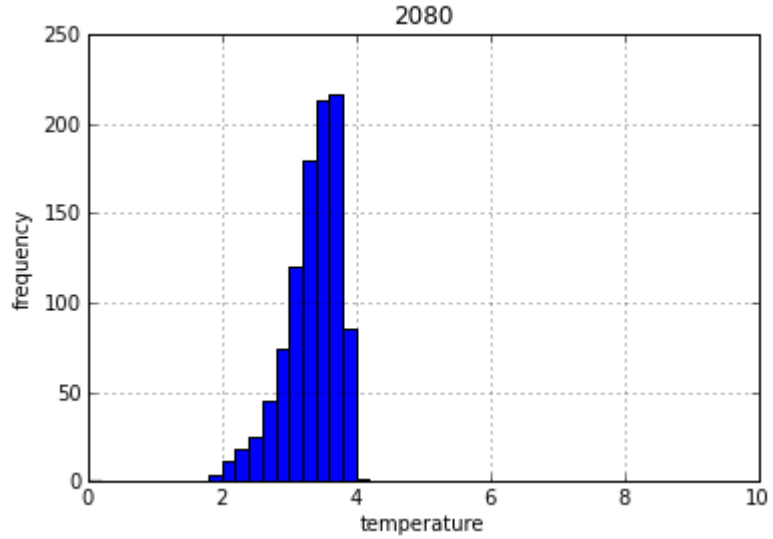
temperature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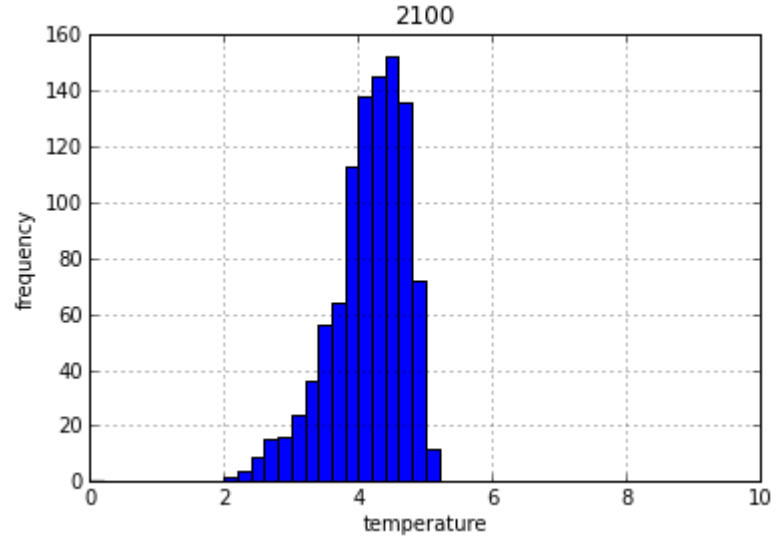
temperature


2100
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