

Pico

Commander updates 2.12.2021

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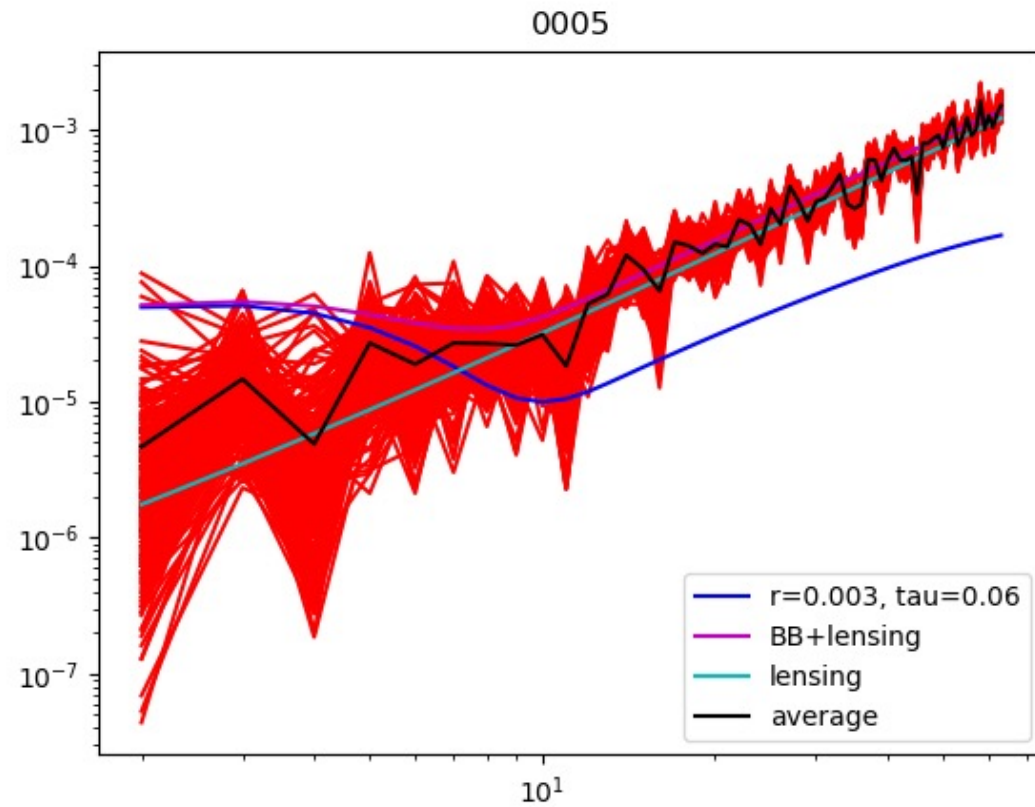
Simulations generated by Unni Fuskeland

- Both 90.91 and 90.92 simulations are ready
 - 40 arcmin beam
 - nside 512
 - White noise
- 10 different CMB and white noise realisations
 - With both $r = 0$ and $r = 0.003$

90.91

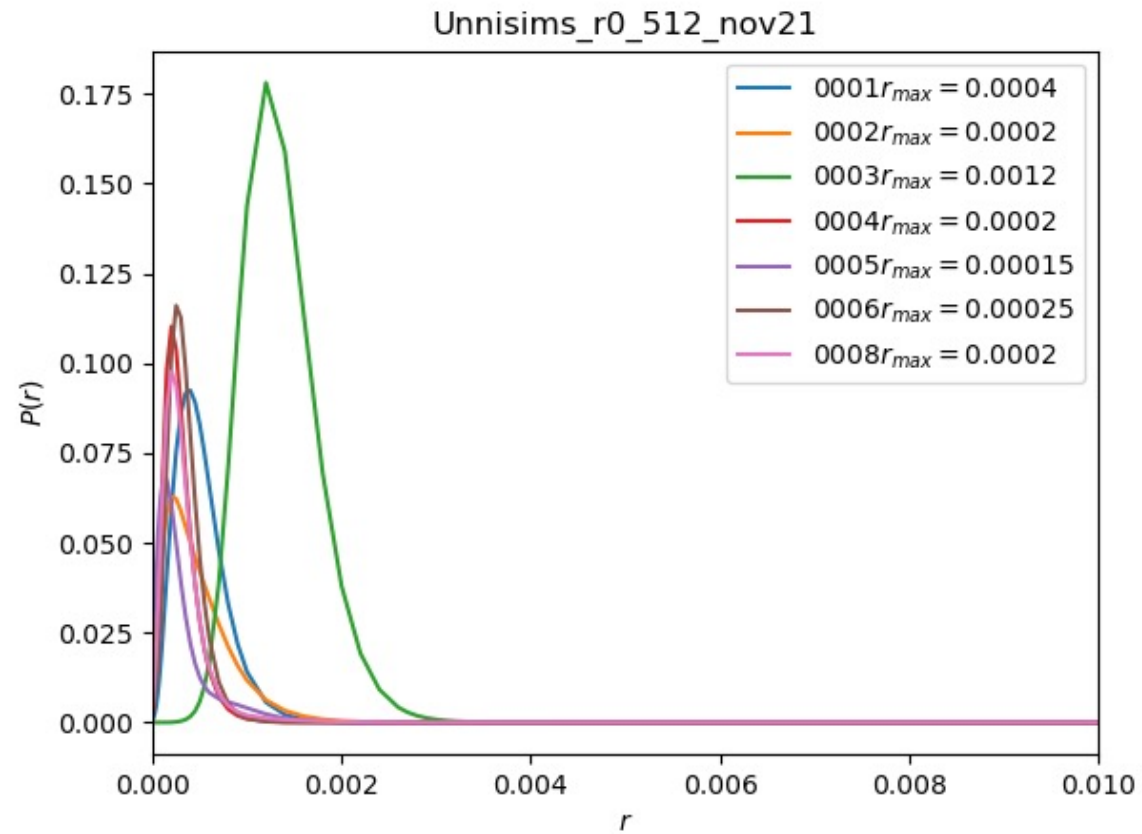
- Running Commander1 fitting 6 parameters pr pixel
 - CMB (A_{cmb})
 - One dust model ($A_{dust}, T_{dust}, \beta_{dust}$) (inside 256)
 - Synchrotron model (A_{sync}, β_{synch}) (inside64)
- 10 simulation sets with $r = 0$ and 10 with $r = 0.003$
- Masking 25% of the sky
 - Mask based on the χ^2 map
- ~ 100 iterations with infilling inside the mask (pr simulation set)
- Blackwell-Rao estimator for estimating r

Powerspectrum of ~ 100 iterations for one set of simulation
 $r = 0$



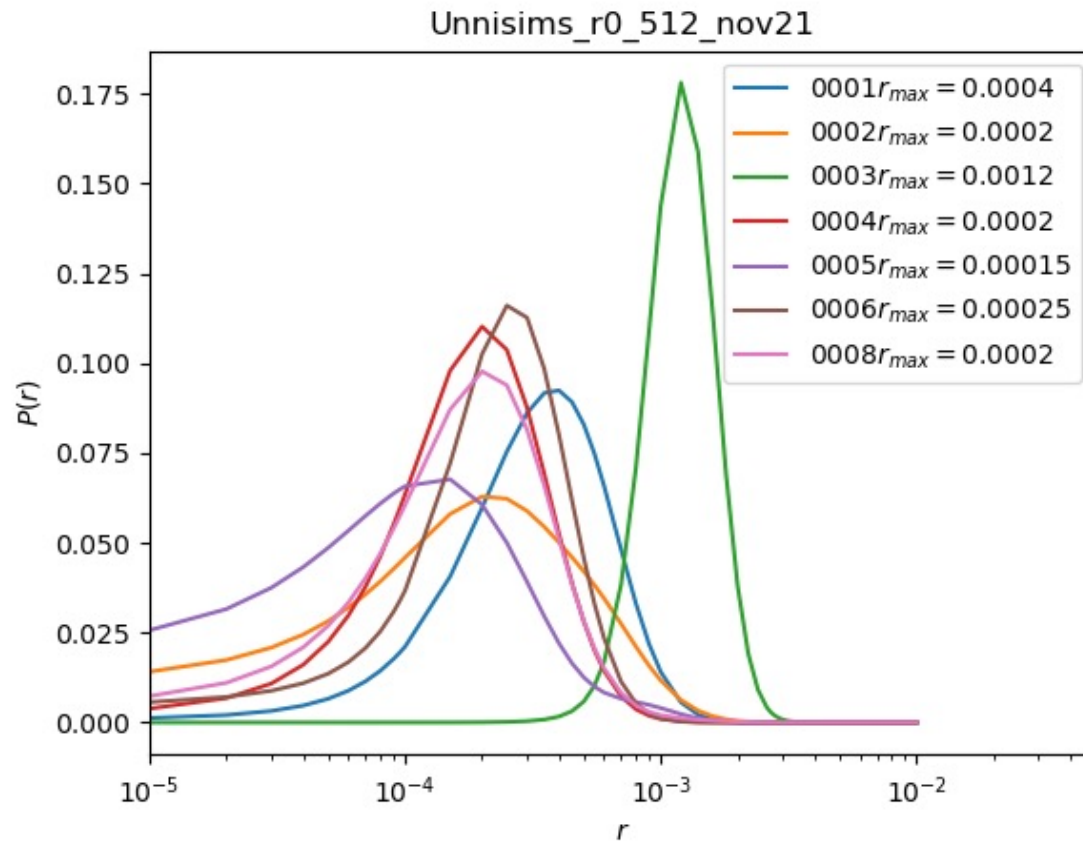
r-estimation for each simulation

0003 has a very high input CMB value



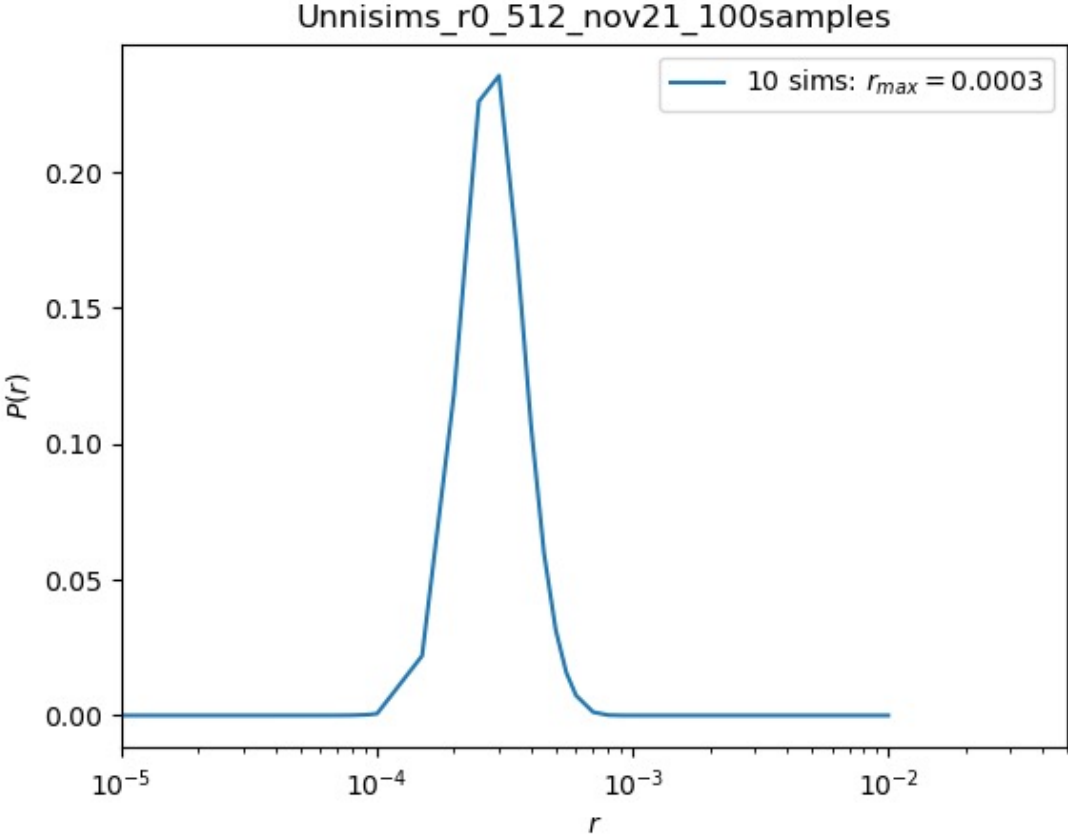
r-estimation for each simulation

0003 has a very high input CMB value

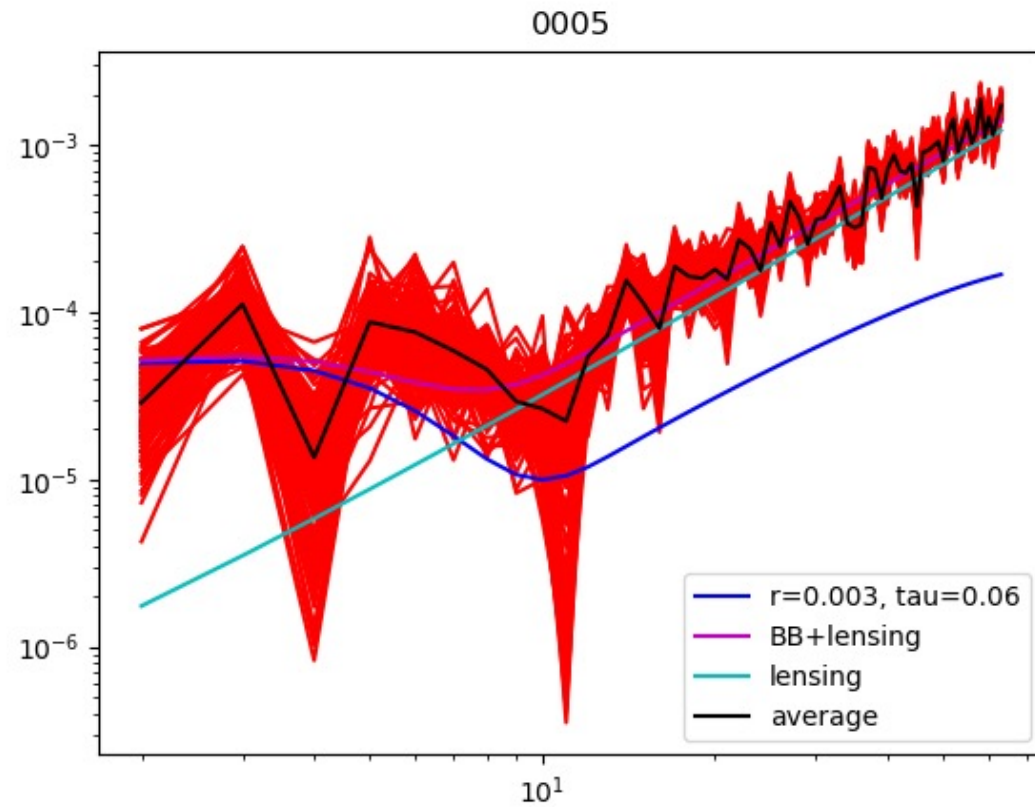


Total r-estimation

Biased due to 0003

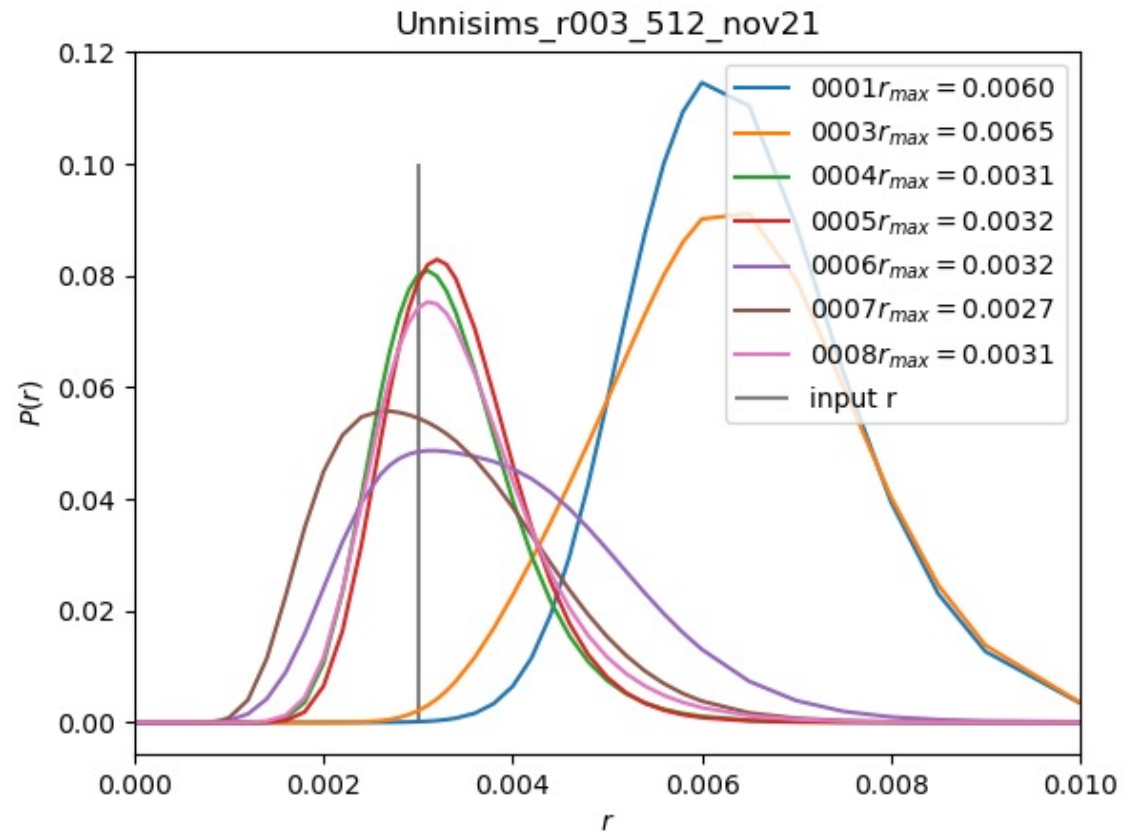


Powerspectrum of ~ 100 iterations for one set of simulation
 $r = 0.003$



r-estimation for each simulation

0001 few samples
0003 has a very high
input CMB value



Work in progress

- Component separation for 90.92 is in progress