

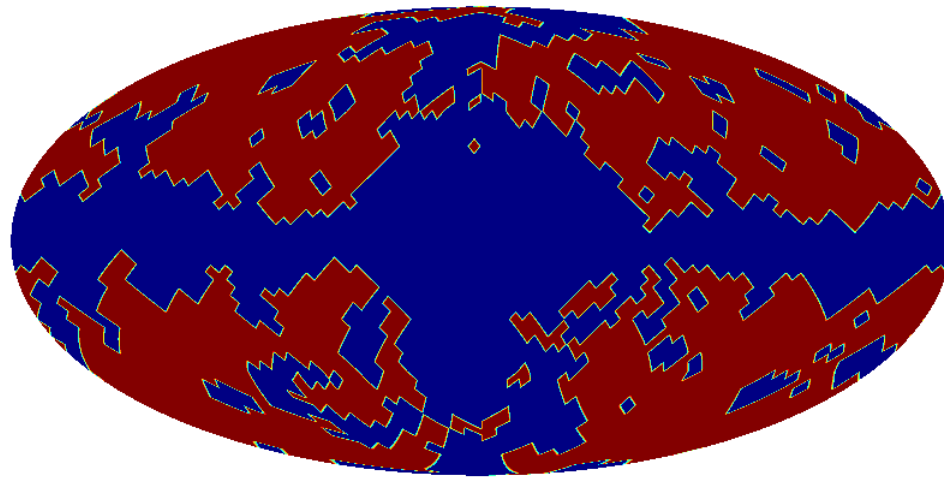
SEVEM: effect of masks on residuals

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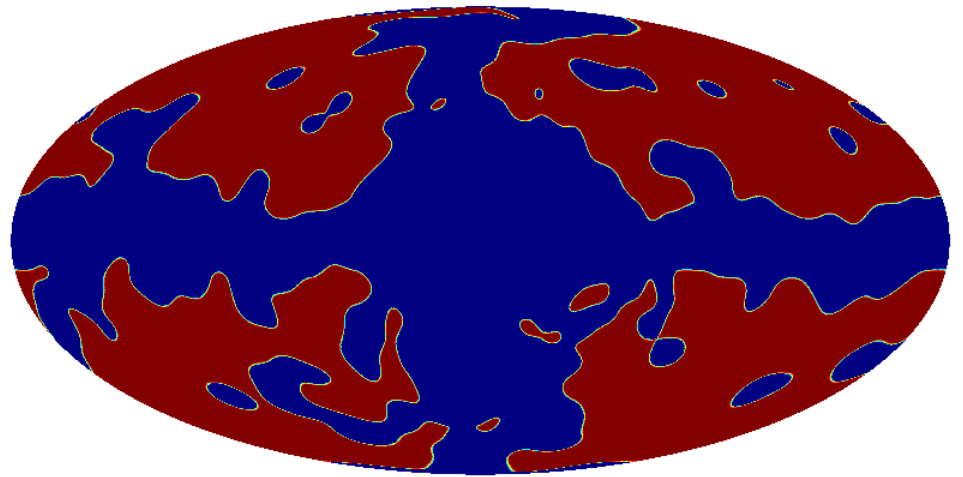
11th October 2018

Masks based on PSM simulations (from Mathieu)

Constructed at Nside=16



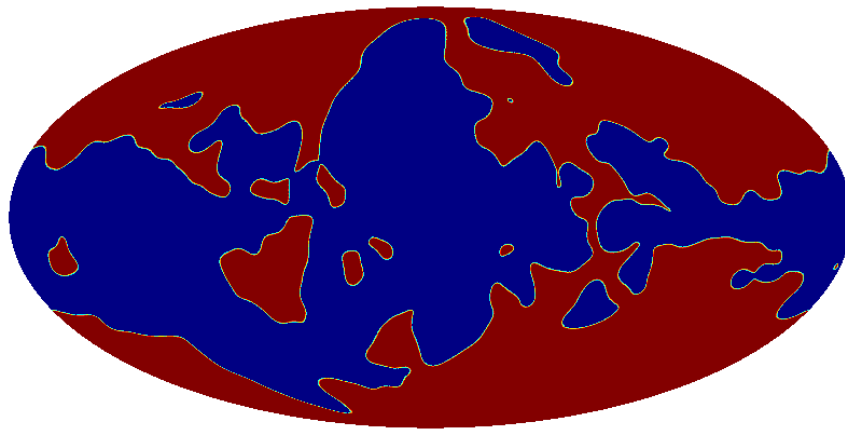
Smoothed version



~50% sky

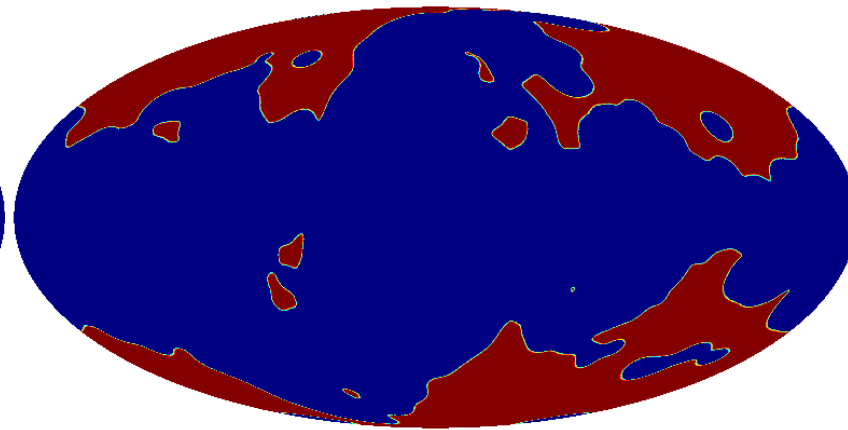
They are ideal in the sense that residuals are used to construct the mask

Masks based on PySM simulations (from Clem)



0.00 0.25 0.50 0.75 1.00 +1.00

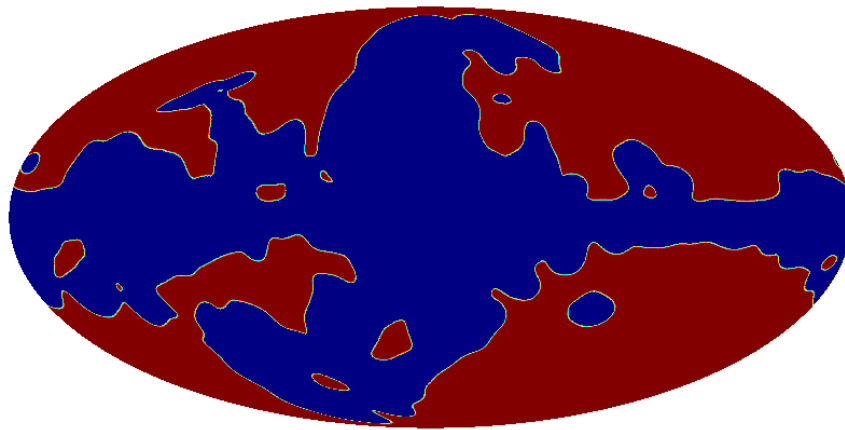
~50% sky



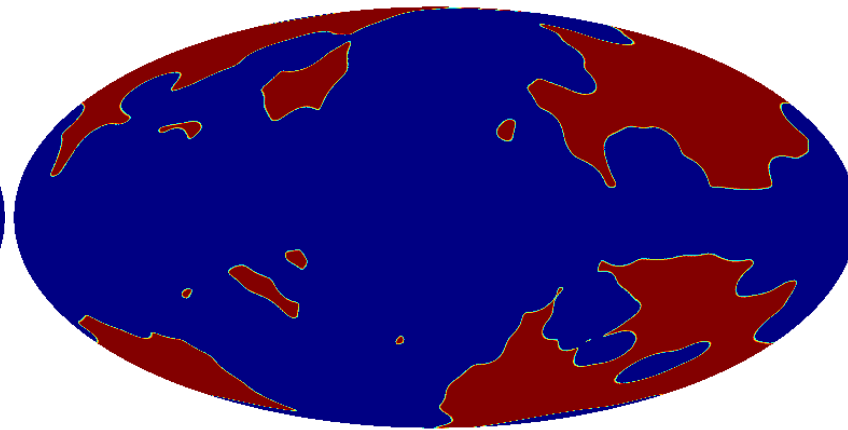
0.00 0.25 0.50 0.75 1.00 +1.00

~25% sky

Model
90.91



0.00 0.25 0.50 0.75 1.00 +1.00

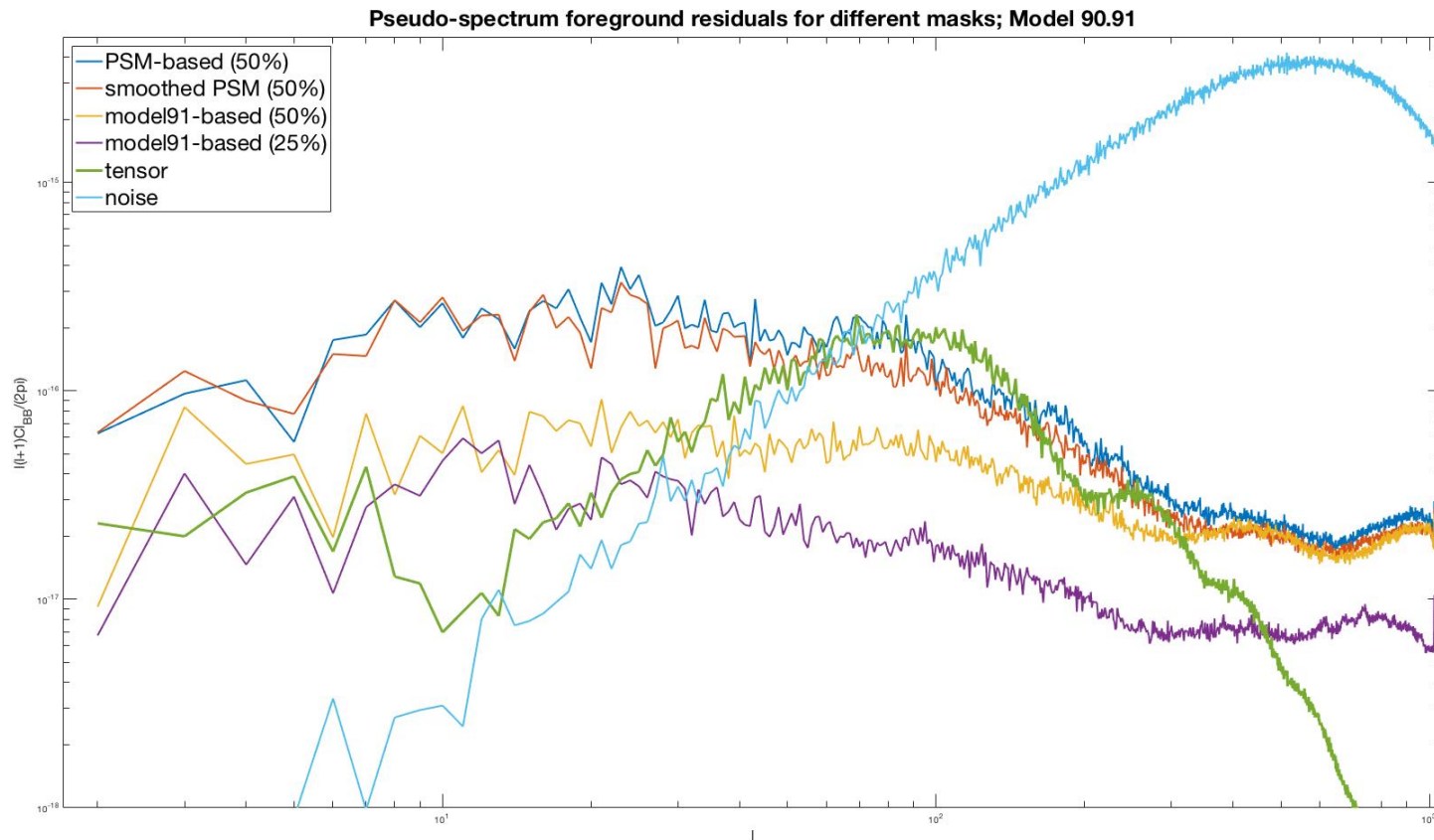


0.00 0.25 0.50 0.75 1.00 +1.00

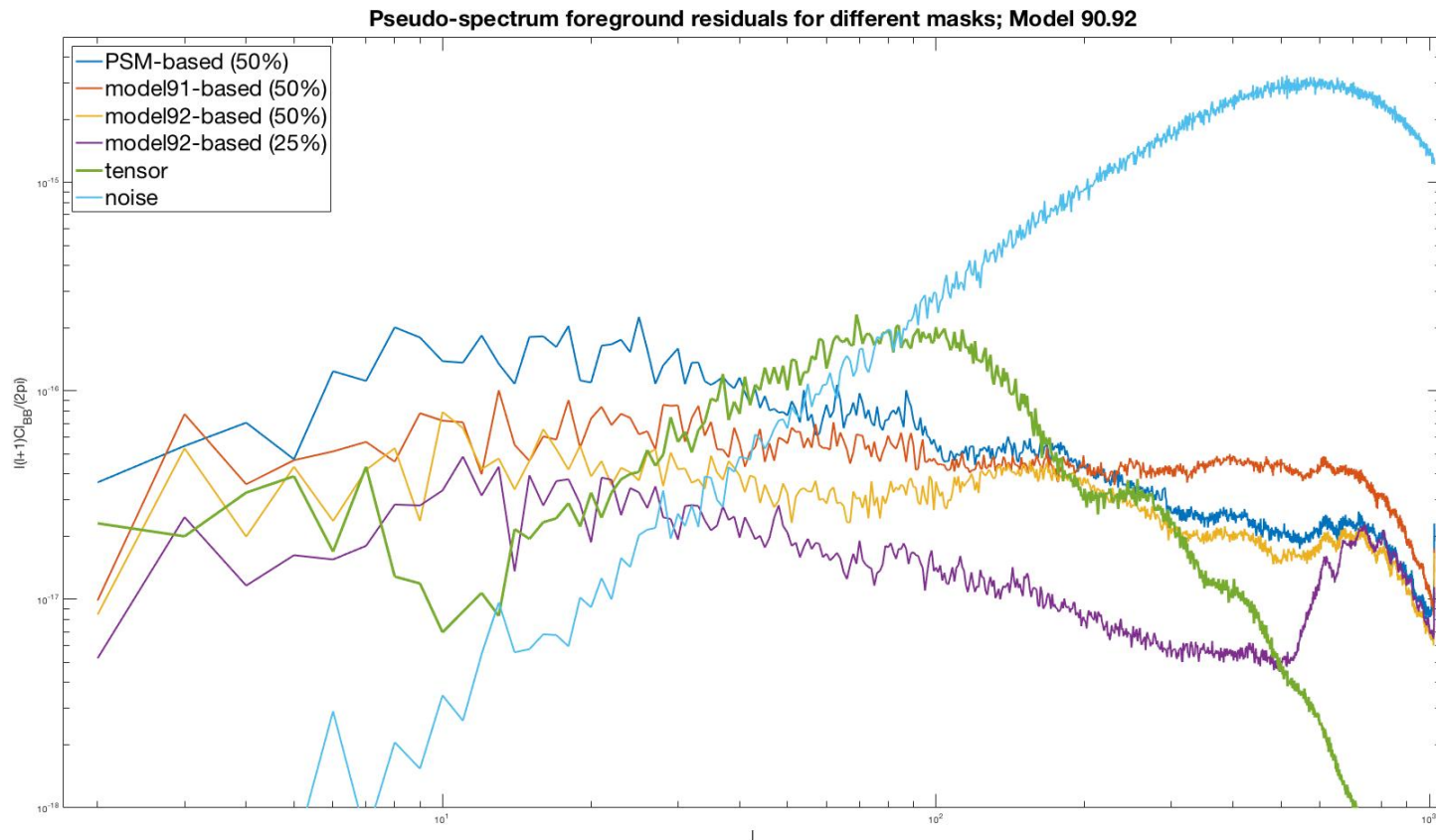
Model
90.92

They are ideal in the sense that residuals are used to construct the mask

Foreground residuals for 90.91 with different masks



Foreground residuals for 90.92 with different masks



Remarks

- Significant improvement by optimising/
reducing the mask
- Next step: clean at **lower resolution** to try to
recover better the low multipoles
- For SEVEM, **use only $\ell > 30$** for estimating r ?
- Residuals from pure B-mode expected to be a
bit lower than those shown here by pseudo-
spectrum (due to mixing with E-mode)