

NILC-CMB APS from PICO simulations

Soumen Basak

Indian Institute of Science Education and Research (IISER)

Thiruvananthapuram, India



Summary

- Number needlet bands: 11
- Number of frequency channels: 11
- Beam resolution of NILC-CMB: 15 arcmin
- Nside parameter of NILC-CMB: 512
- Band-limit of NILC-CMB: 1000
- Sky fraction of the confidence mask: 60%
- Number of foreground models: 6

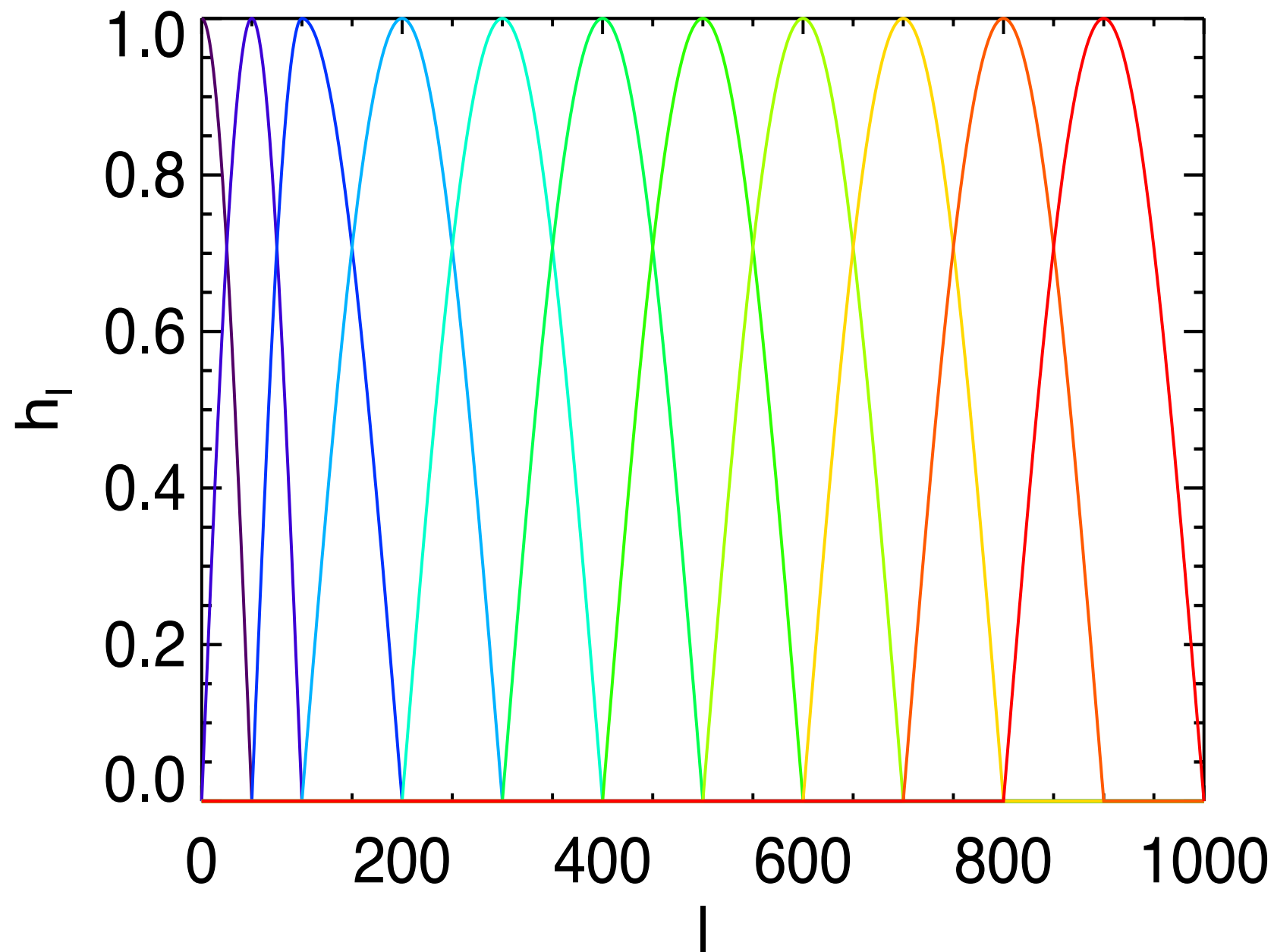
90:00 90:91 90:92 90:93 90:96 90:99

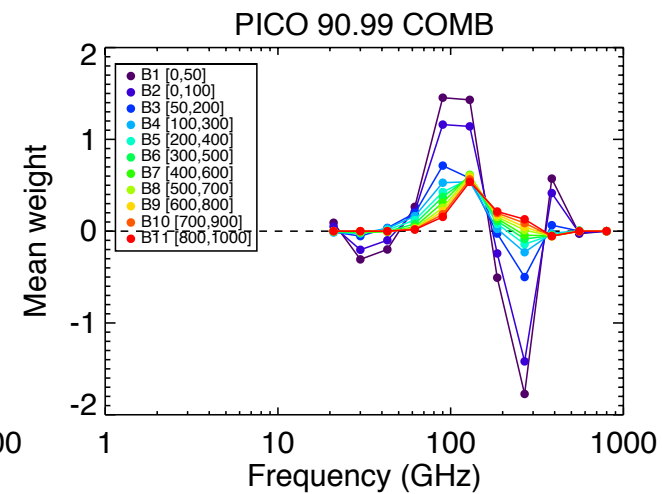
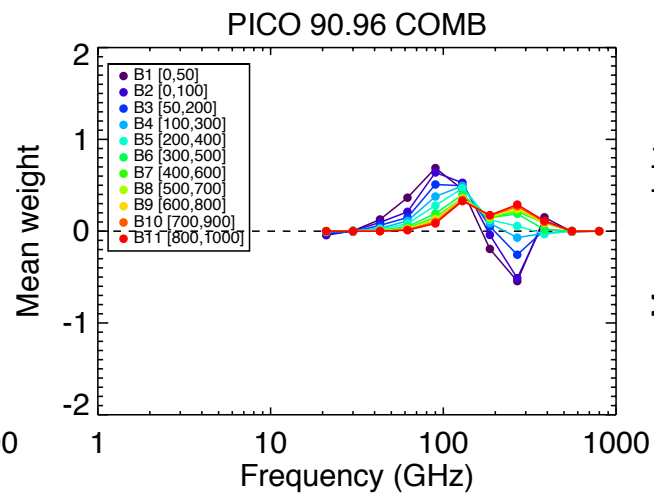
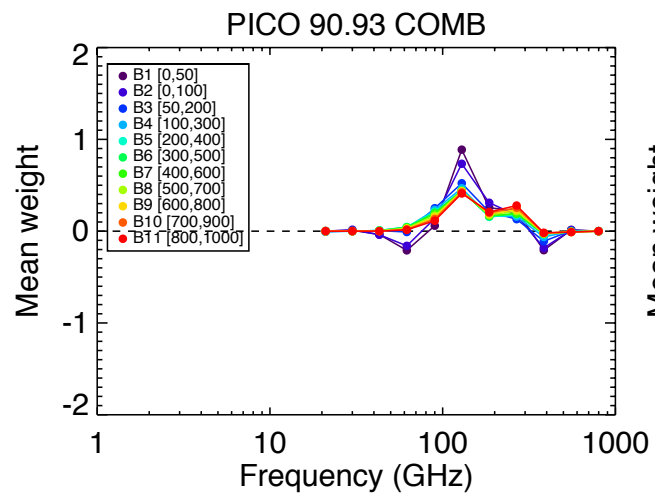
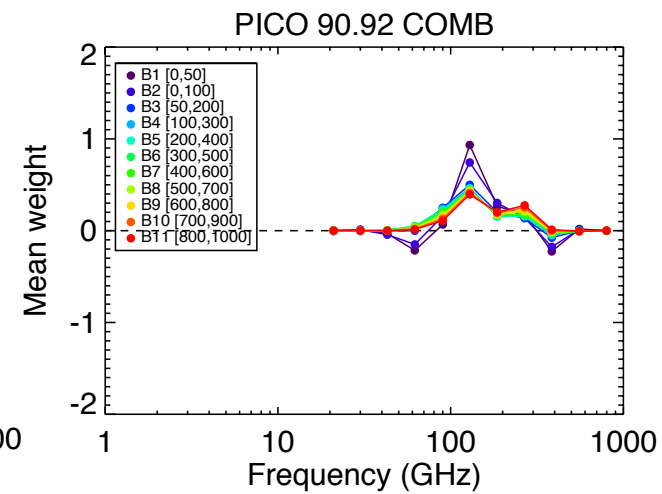
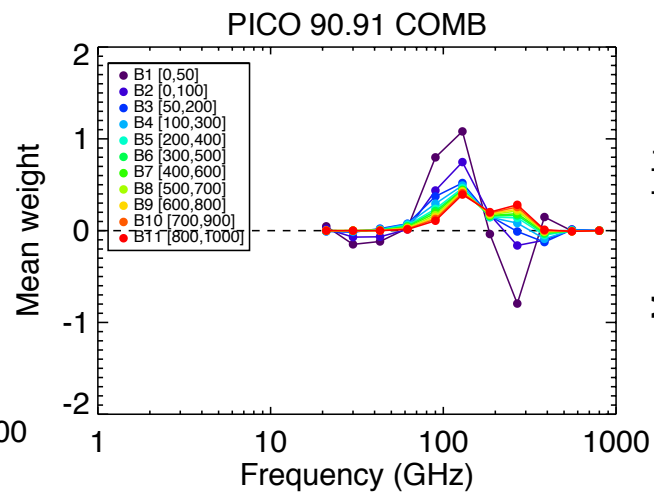
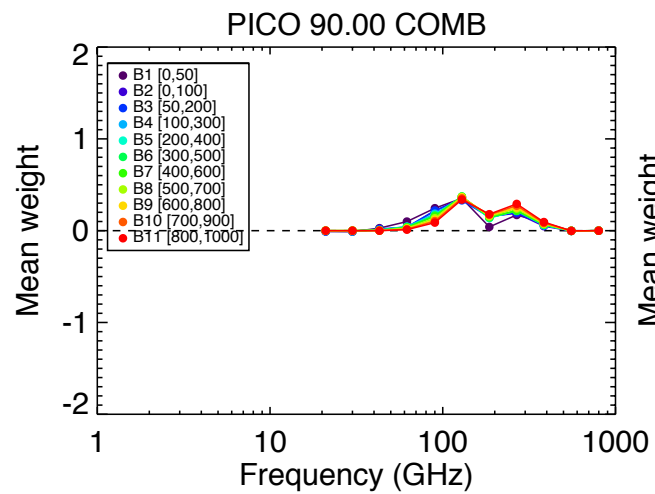
- Number of lensing amplitude: 4

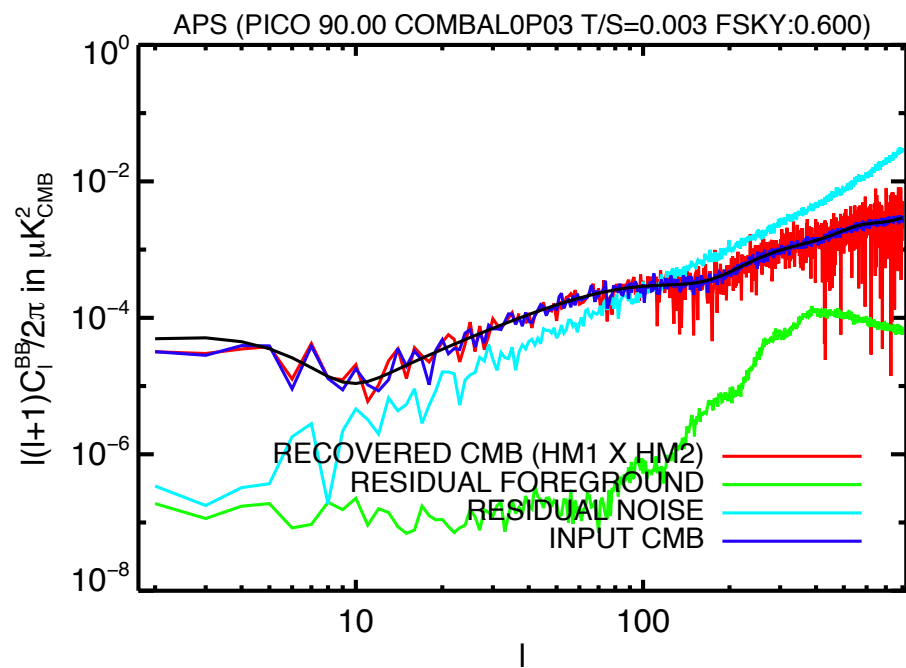
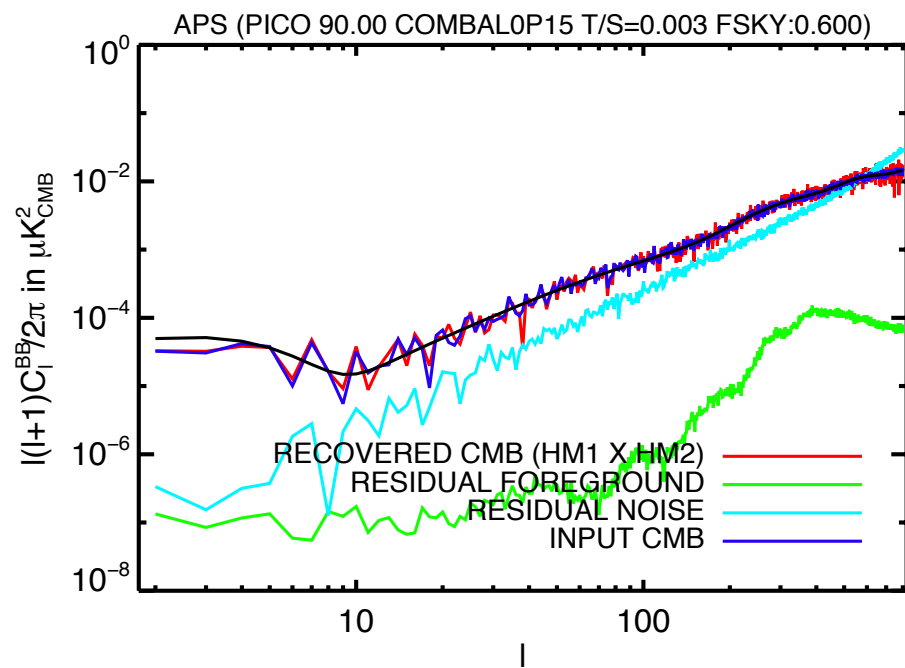
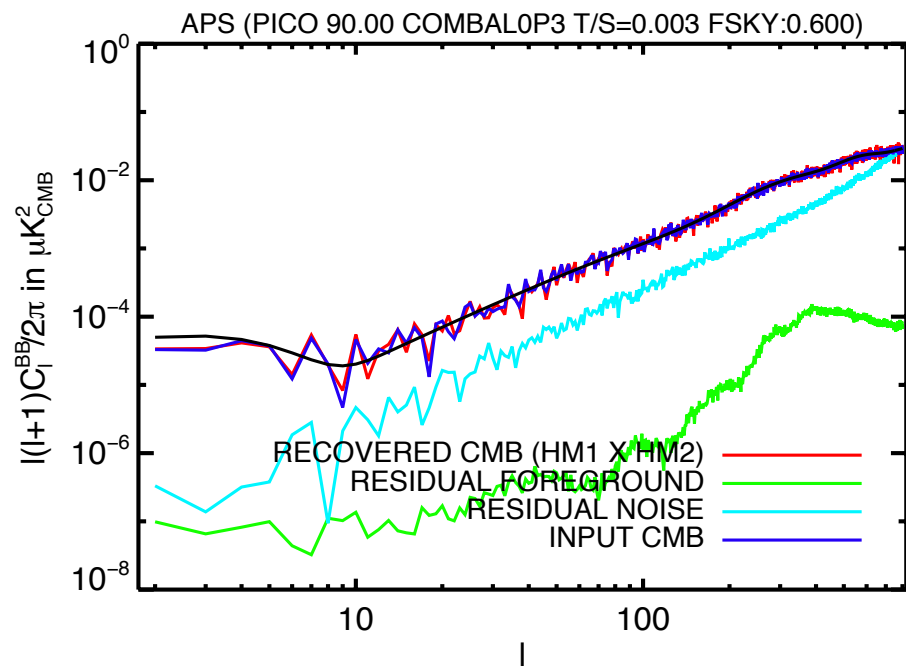
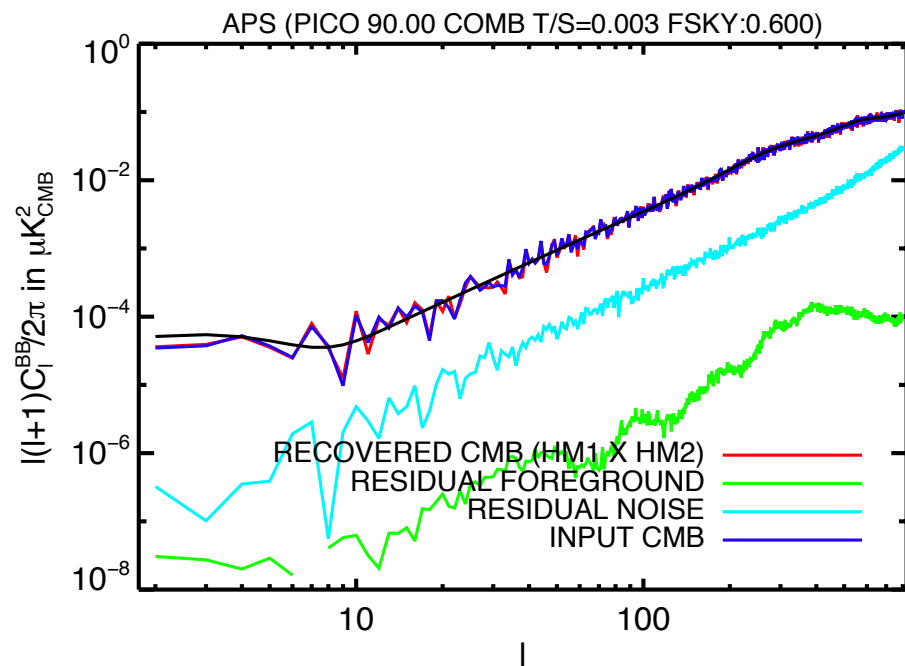
COMB COMBAL0P3 COMBAL0p15 COMBAL0P03

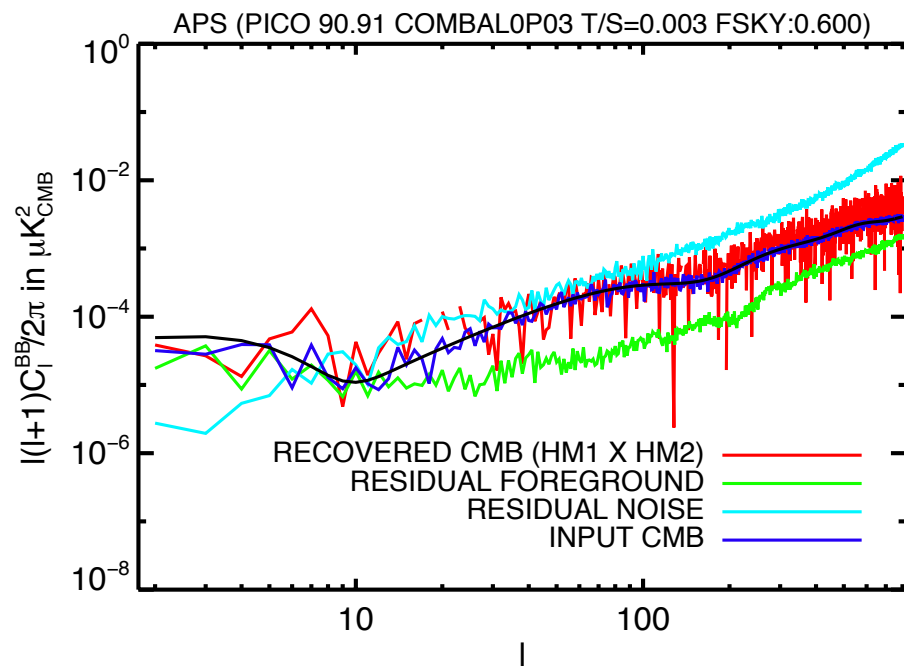
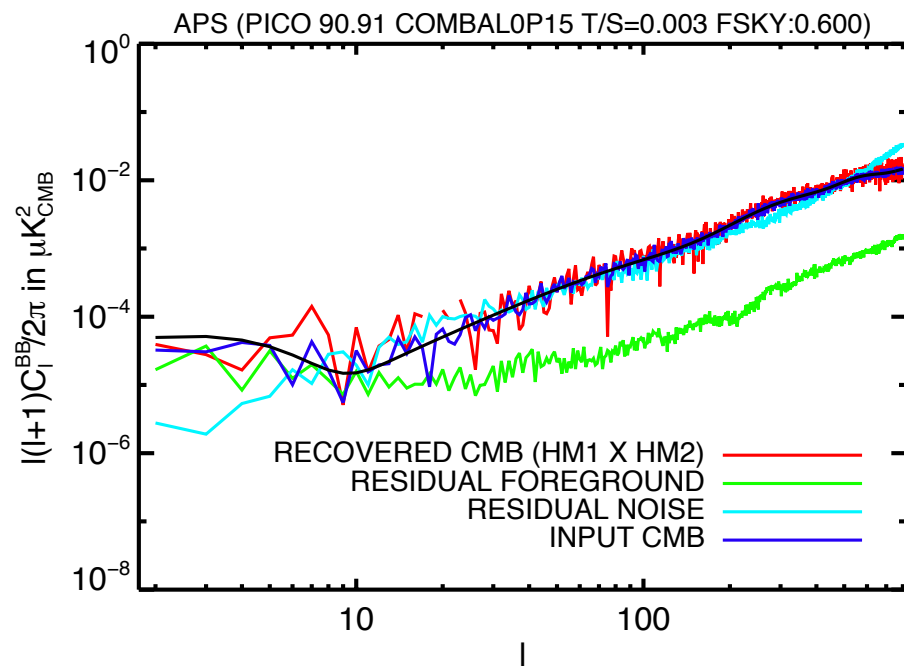
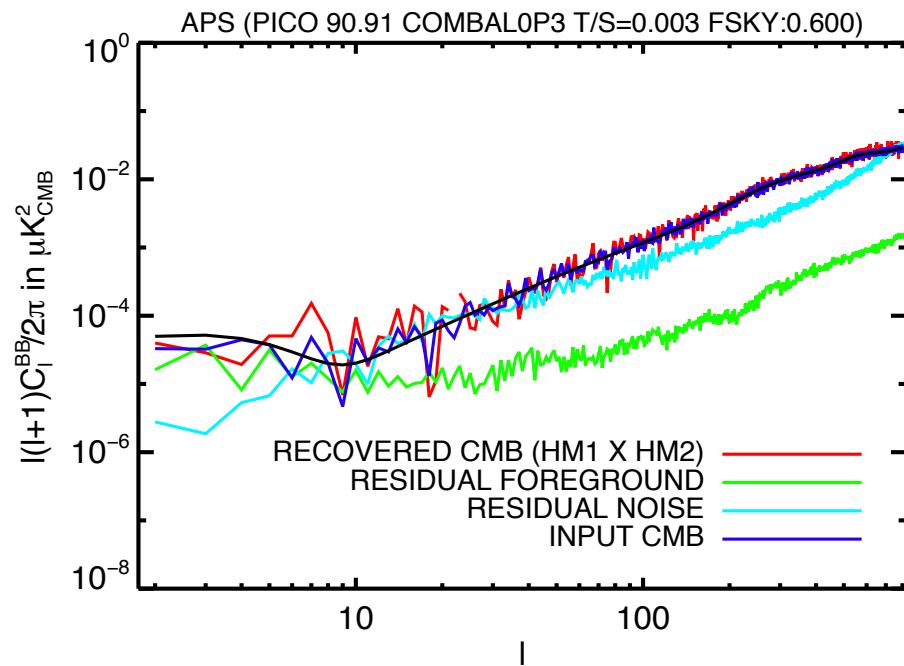
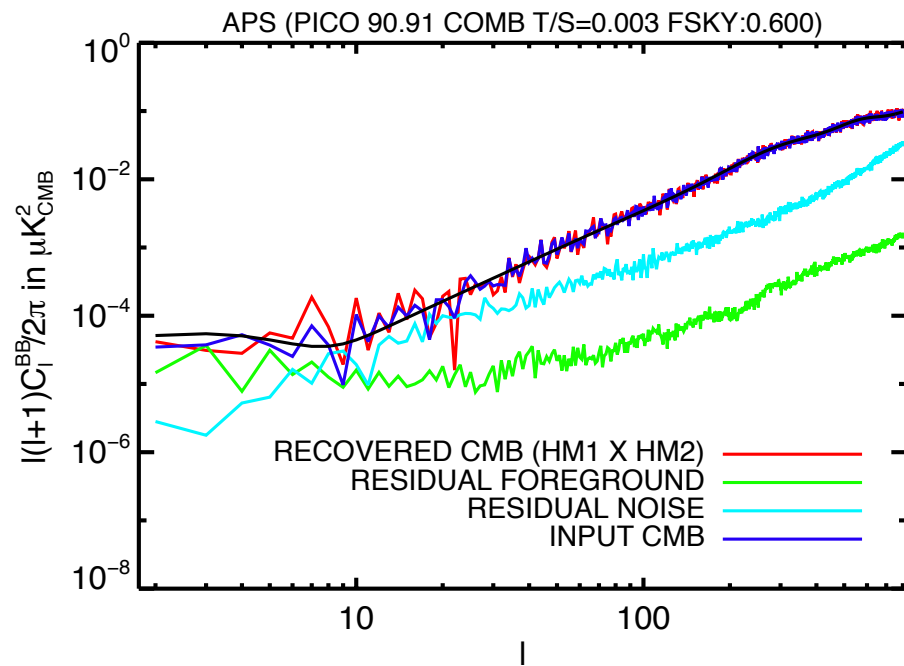
The results show good agreement between the input and recovered CMB except for the simulations of sky with very complex foreground model (i.e. with model 90:99) .

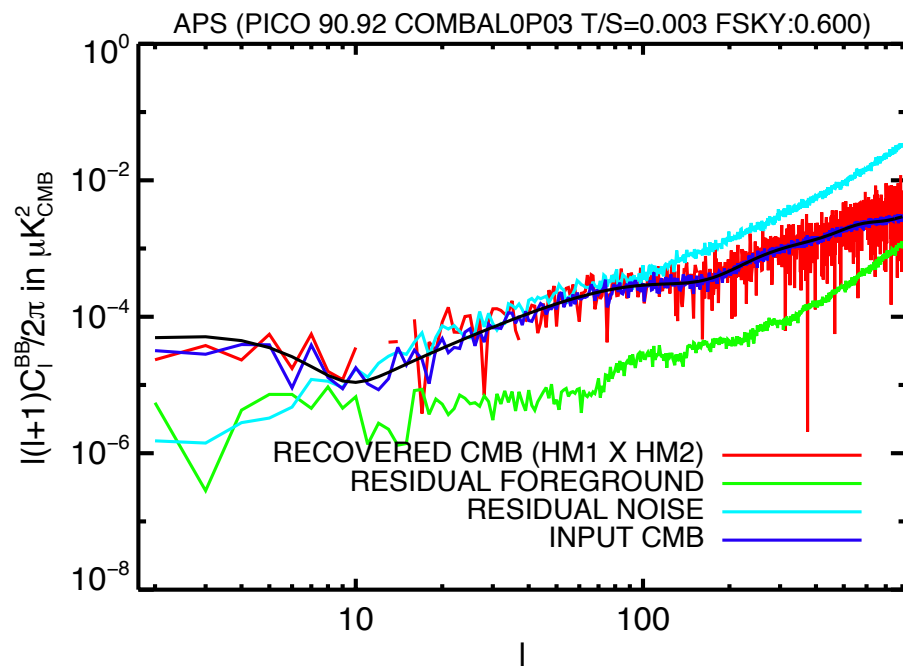
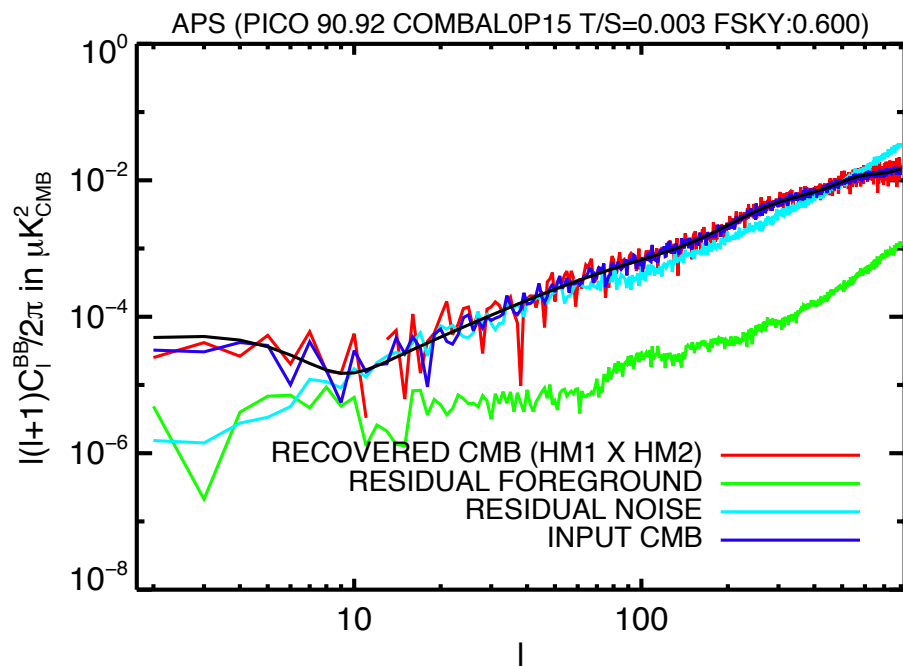
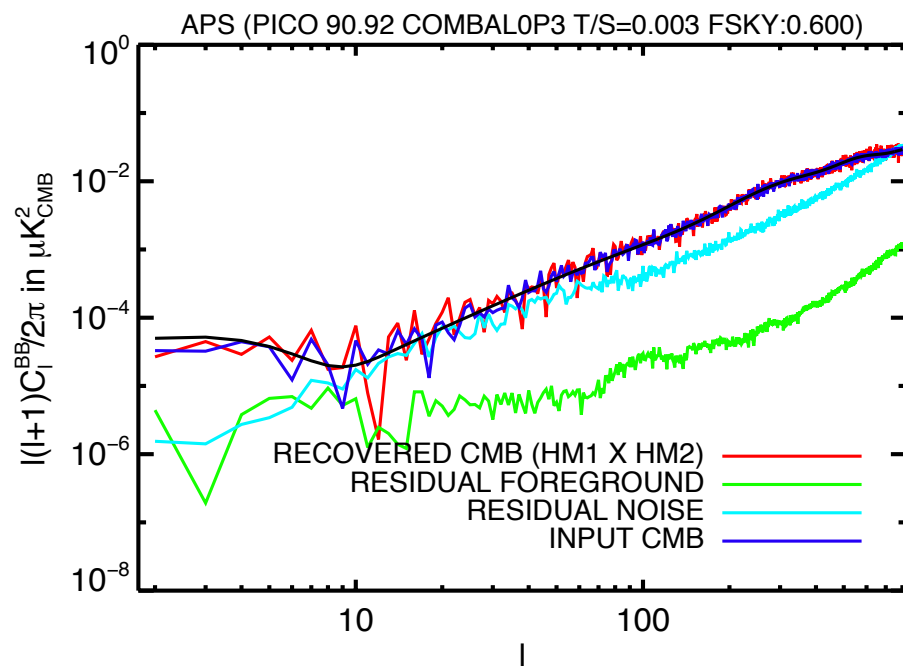
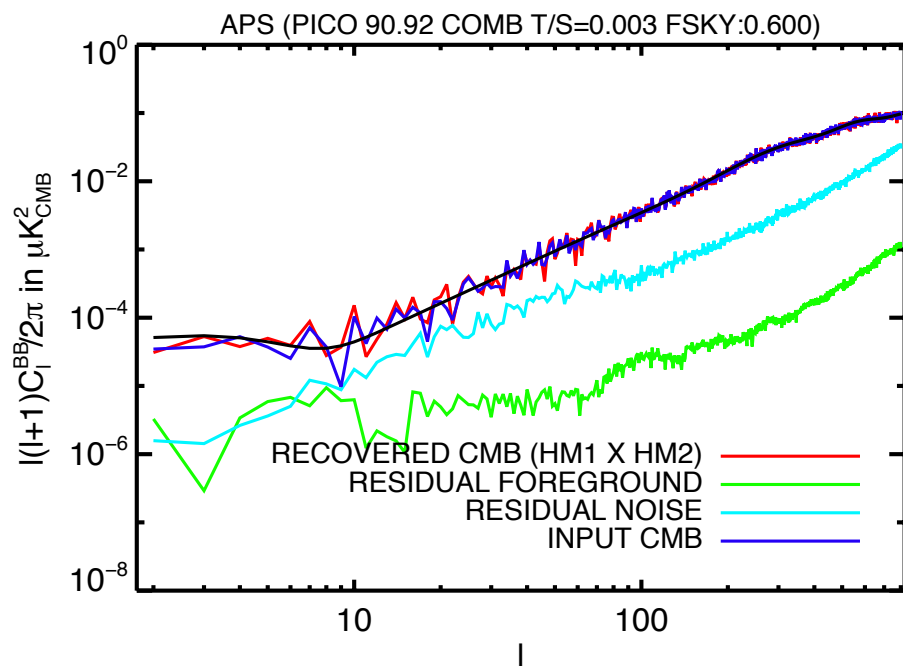
Needlet Bands

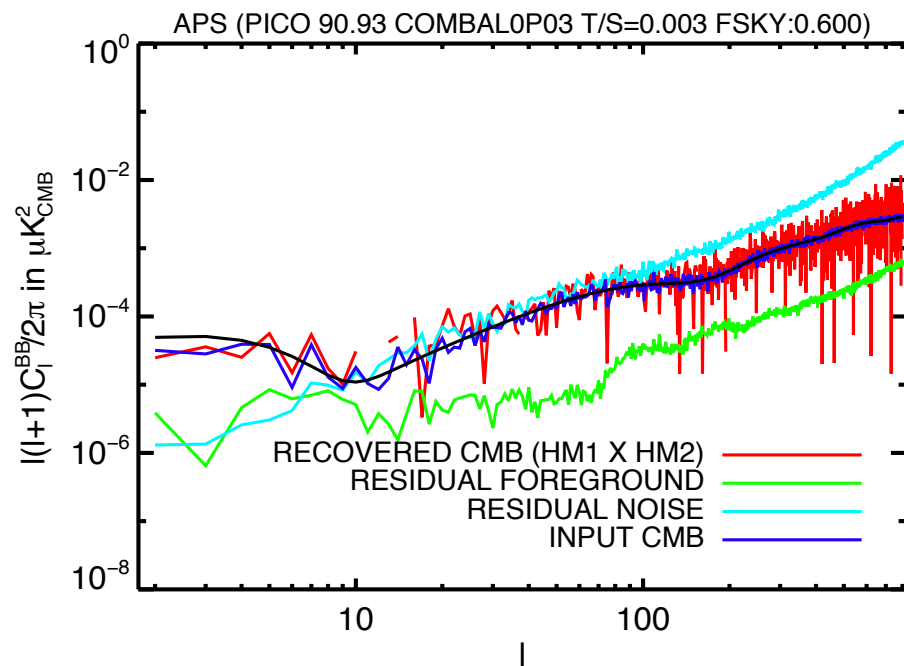
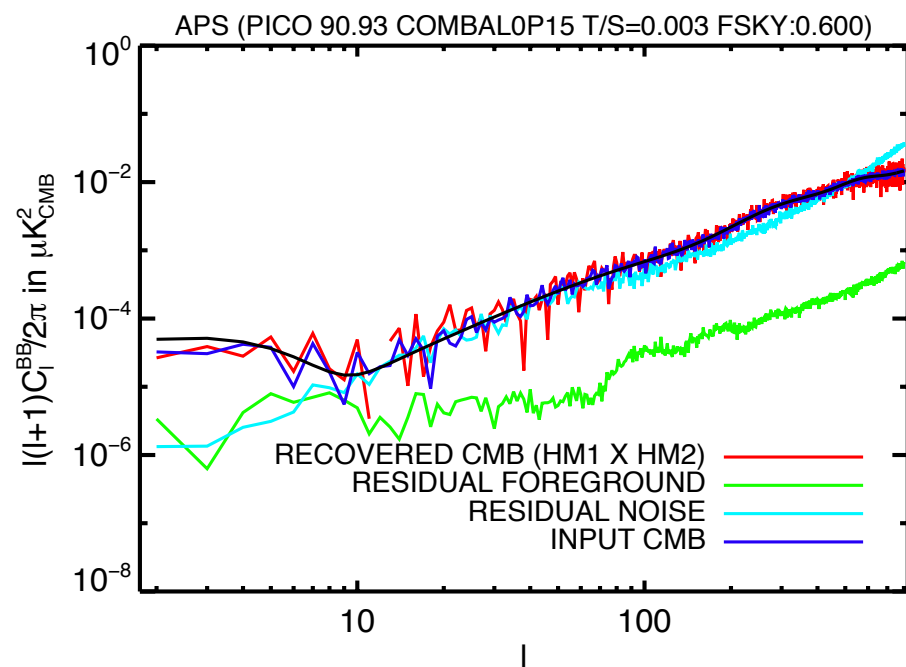
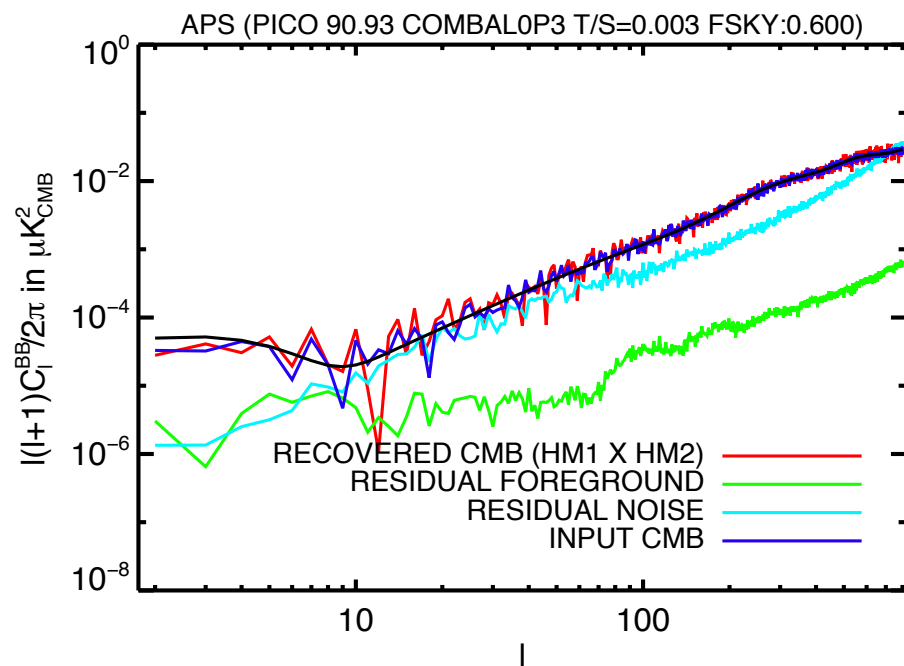
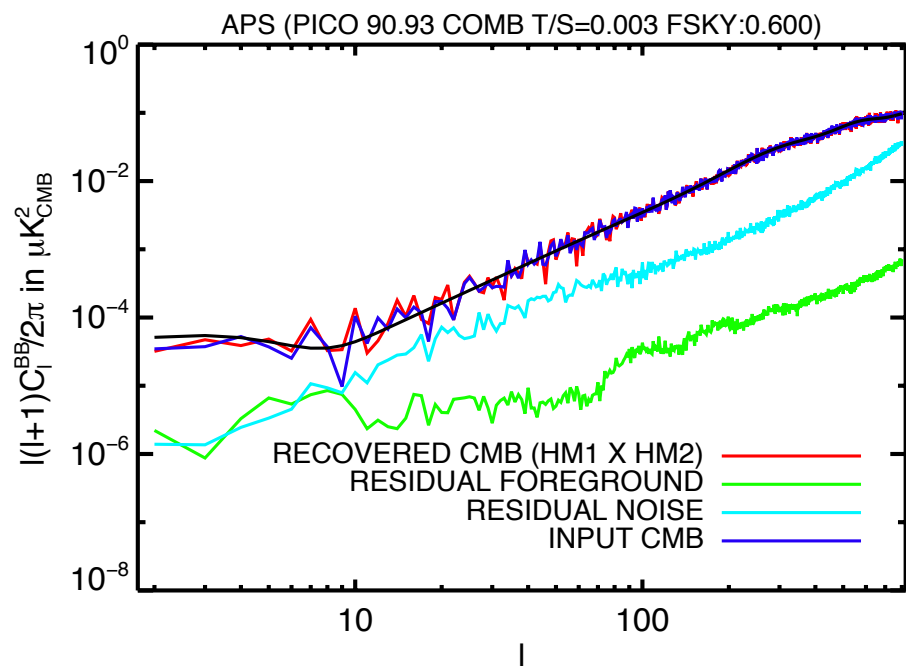


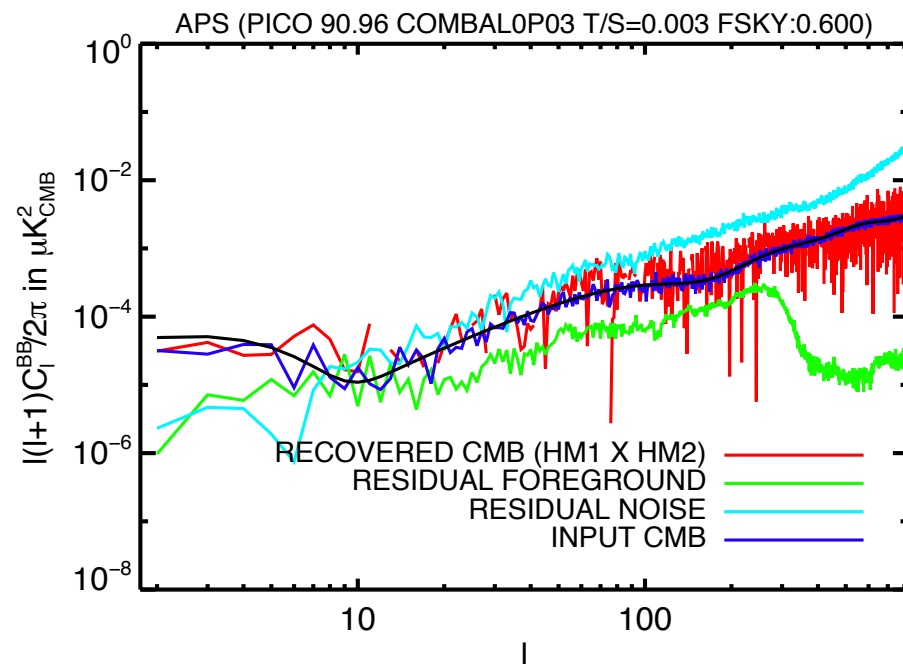
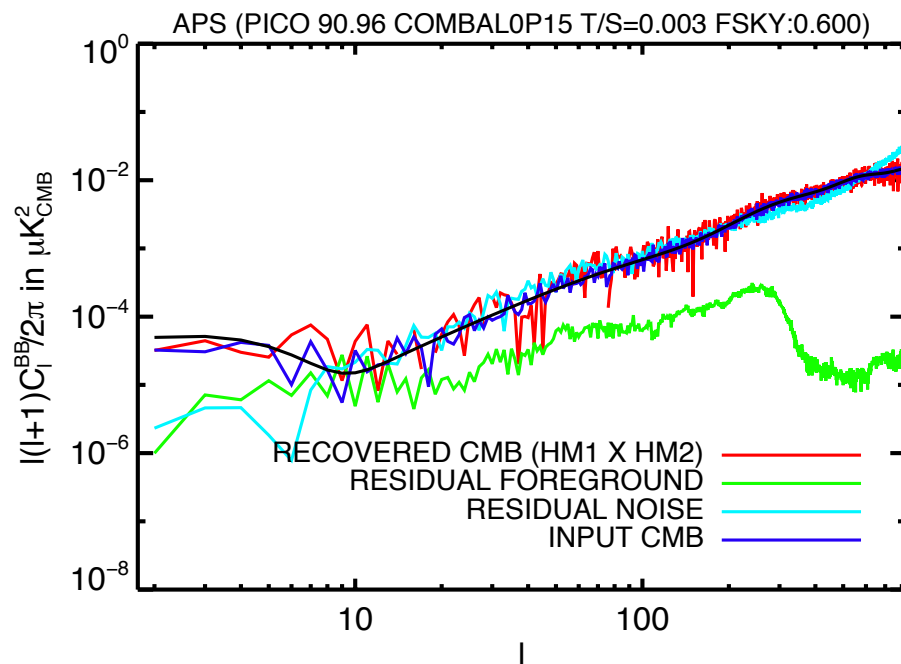
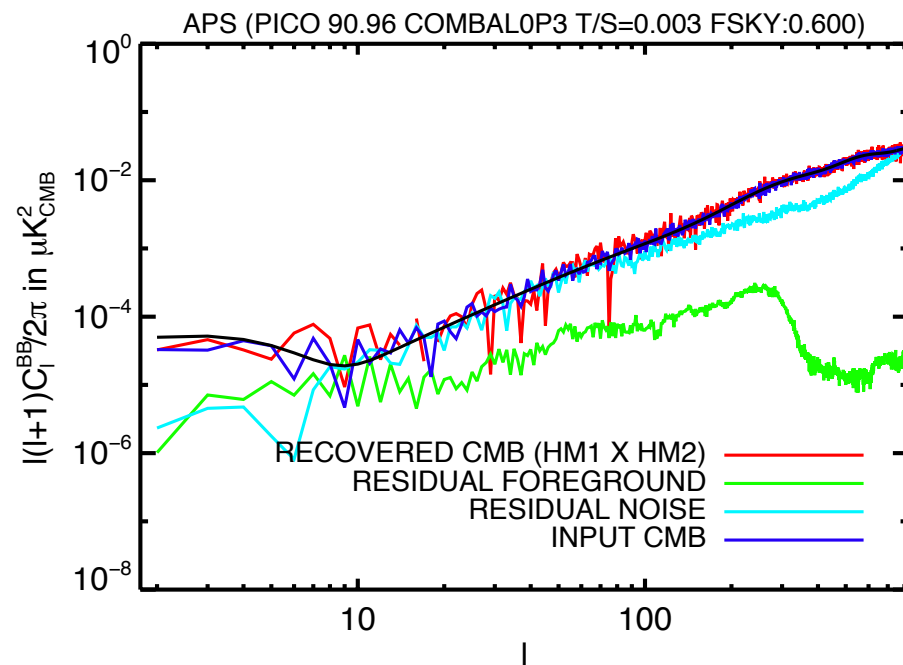
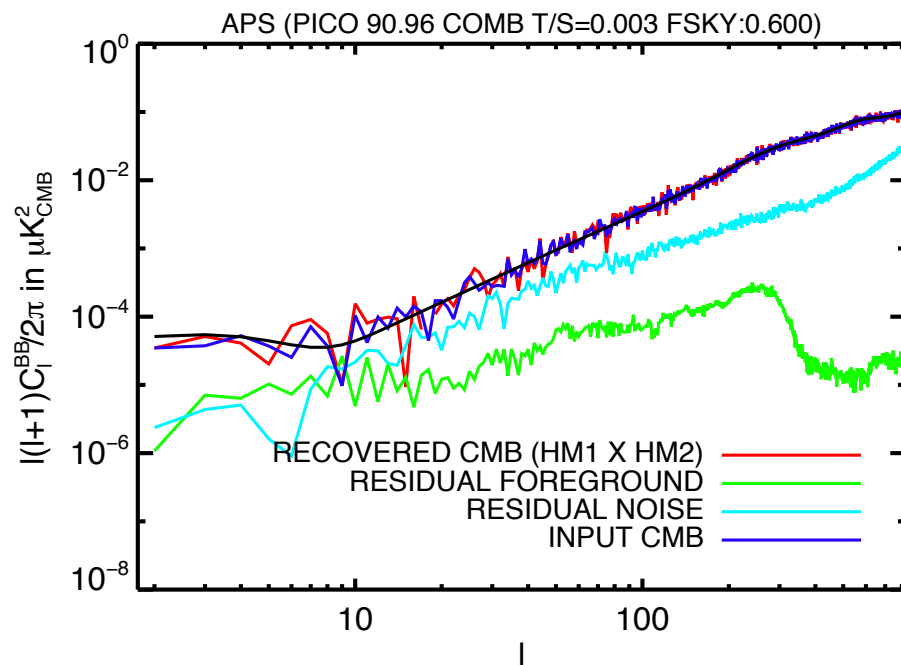


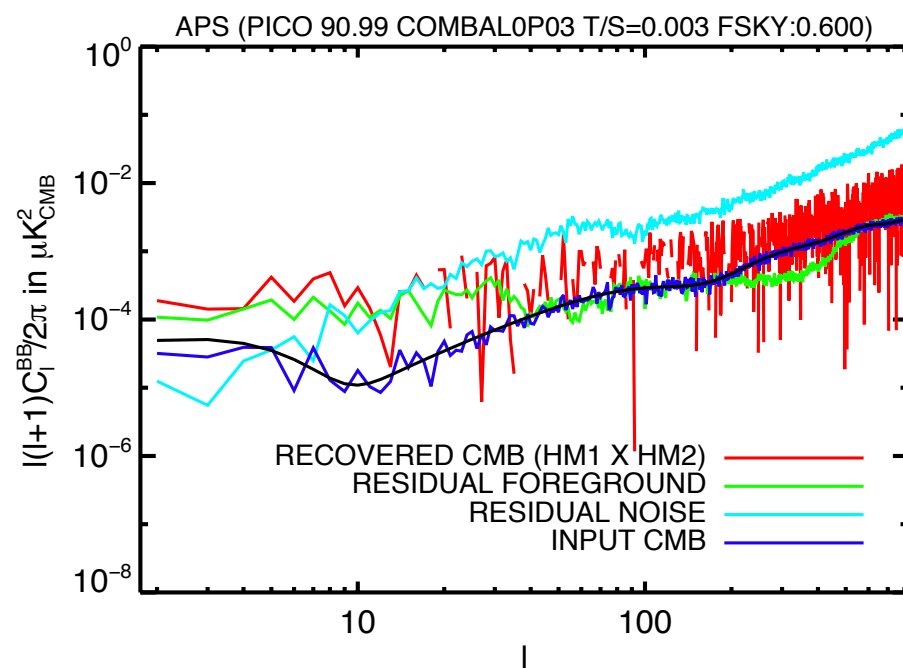
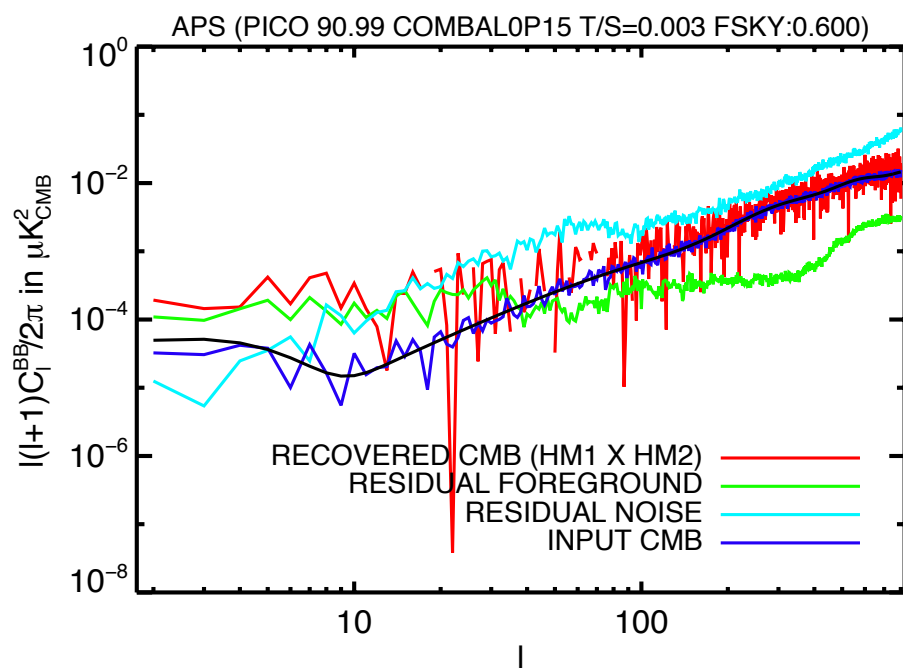
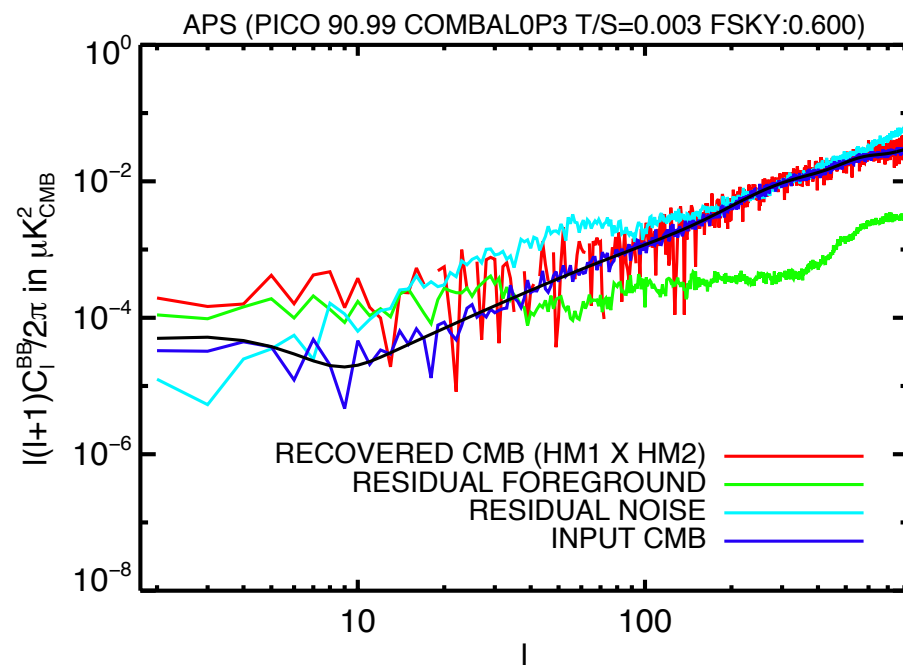
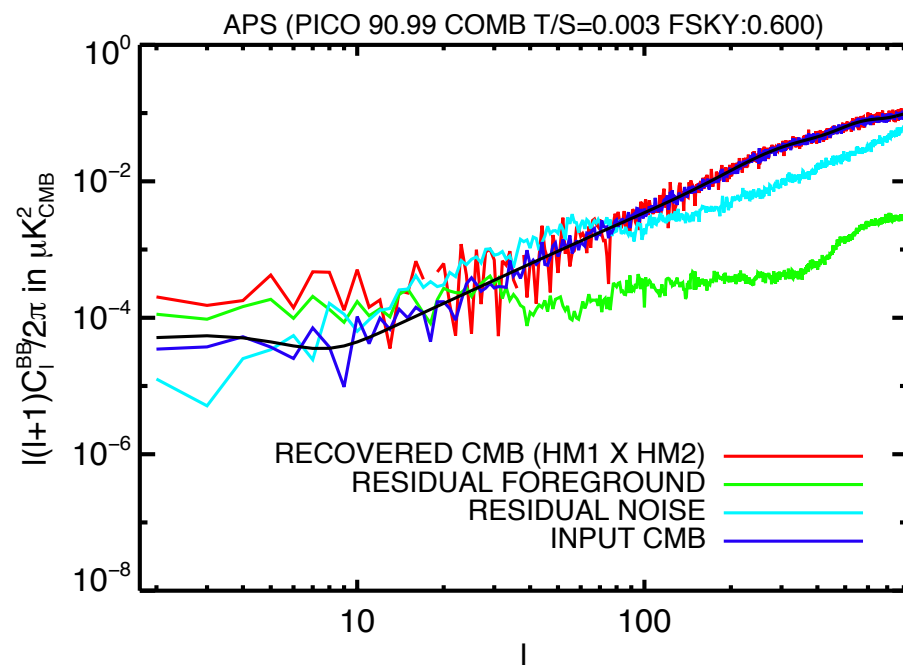












Thank you