Problem 3

The parameter values with errors are estimated to be:

$$H_0 = 68 \pm 1$$

$$\Omega_b h^2 = (2.23 \pm 0.02) \cdot 10^{-2}$$

$$\Omega_c h^2 = 0.176 \pm 0.003$$

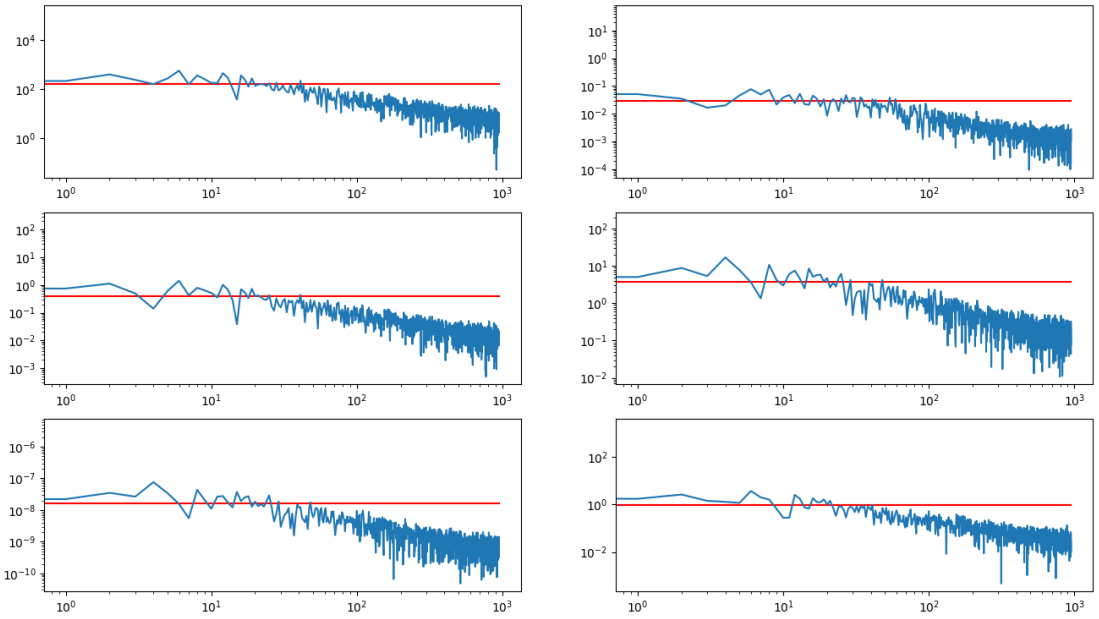
$$\tau = 0.09 \pm 0.02$$

$$A_s = (2.2 \pm 0.1) \cdot 10^{-9}$$

$$n_s = 0.973 \pm 0.007$$

Which leads to a mean value for $\Omega_\Lambda = 0.71$.

Below plots of the Fourier transforms, showing convergence and $\approx$ 200-300 independent samples.



The red lines are added to show the change in slope.