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Deconvolution Estimation in Measurement Error Models: The R Package decon

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Konvolutsioon

Statistikas: kaks j.s. X ja Y , konvolutsiooni abil leiame nende summa jaotuse:

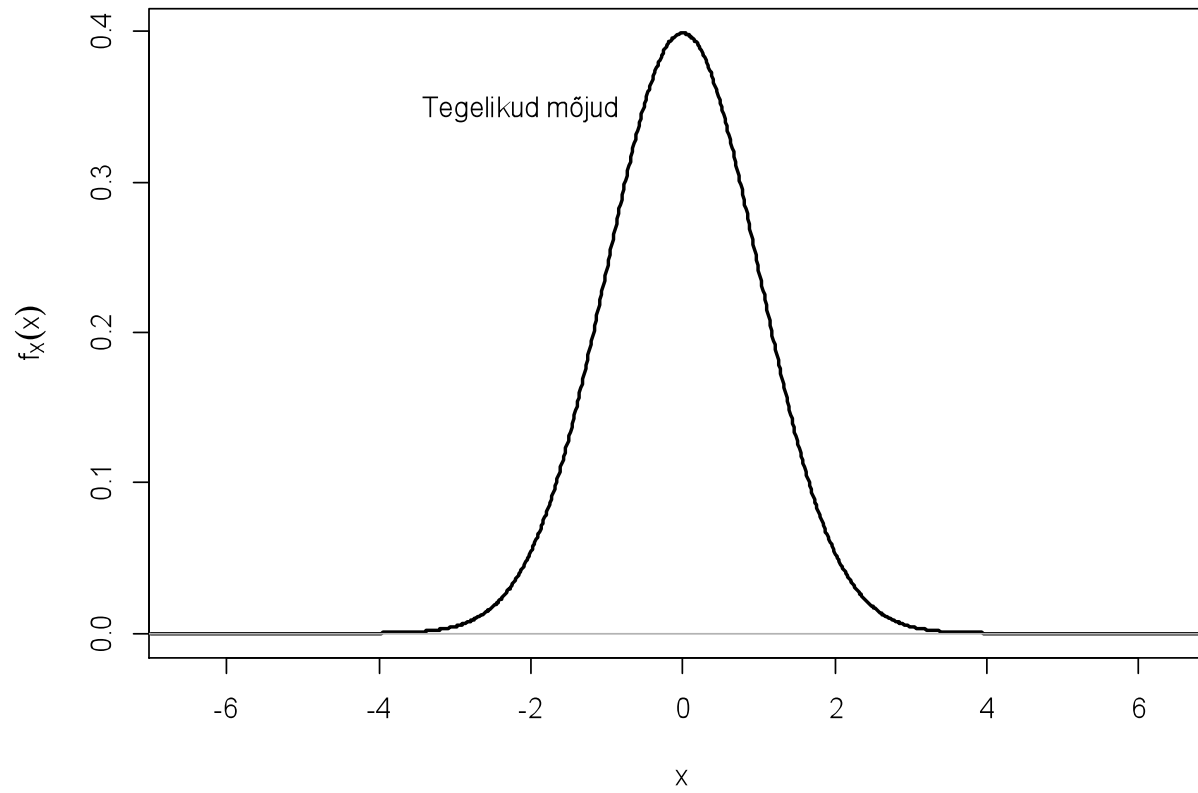
$$Z = X + Y, \quad f_X, f_Y \text{ teada}$$

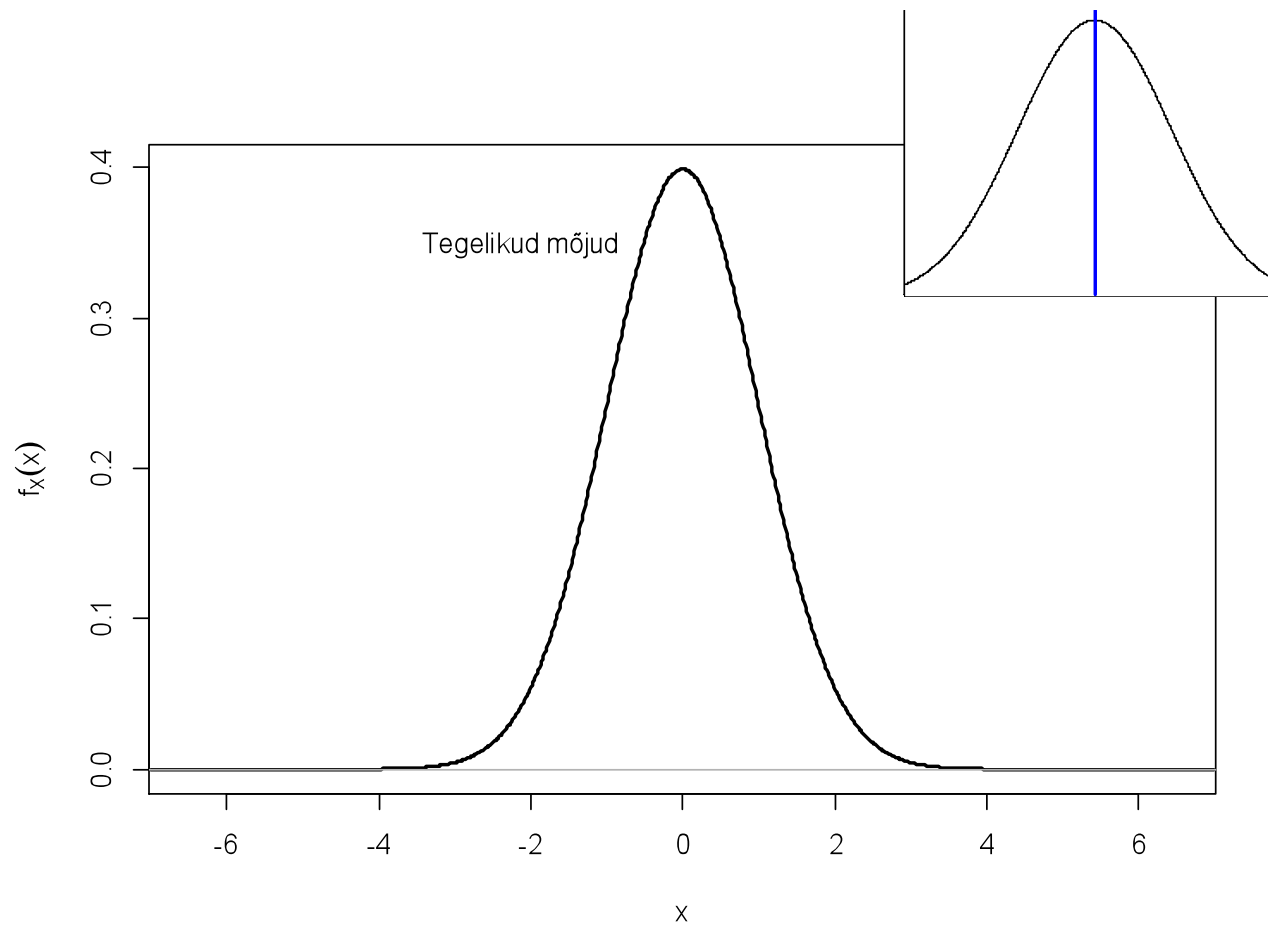
$$f_Z = ?$$

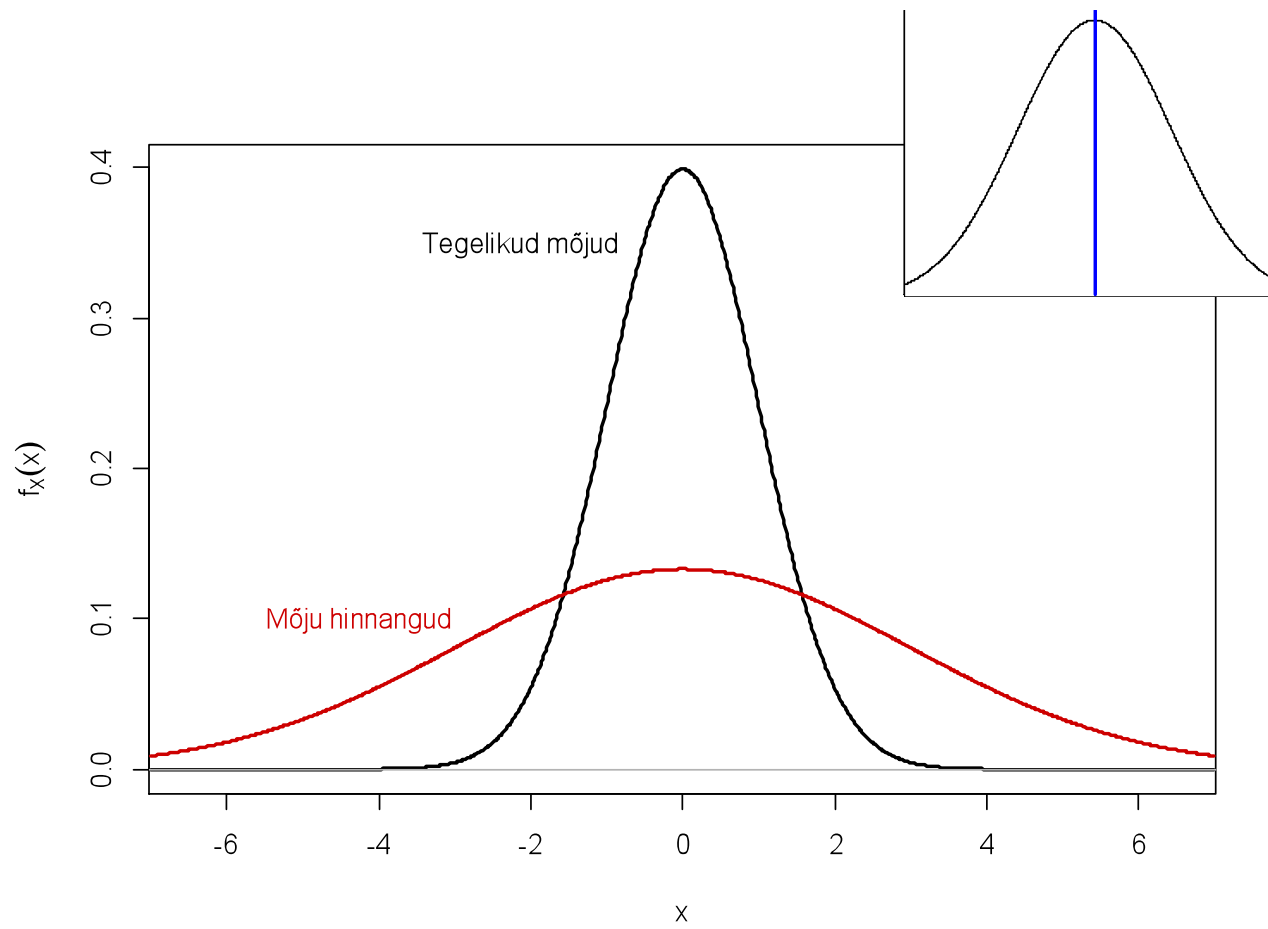
Vastus:

$$f_Z(x) = \int_{-\infty}^{\infty} f_X(x-t)f_Y(t)dt$$

Näiteid







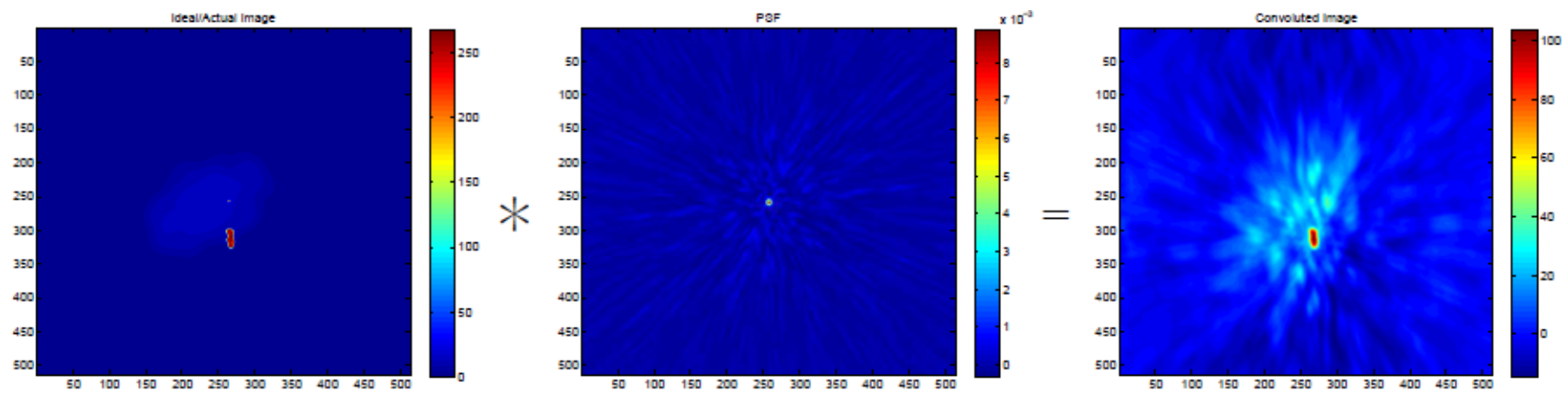


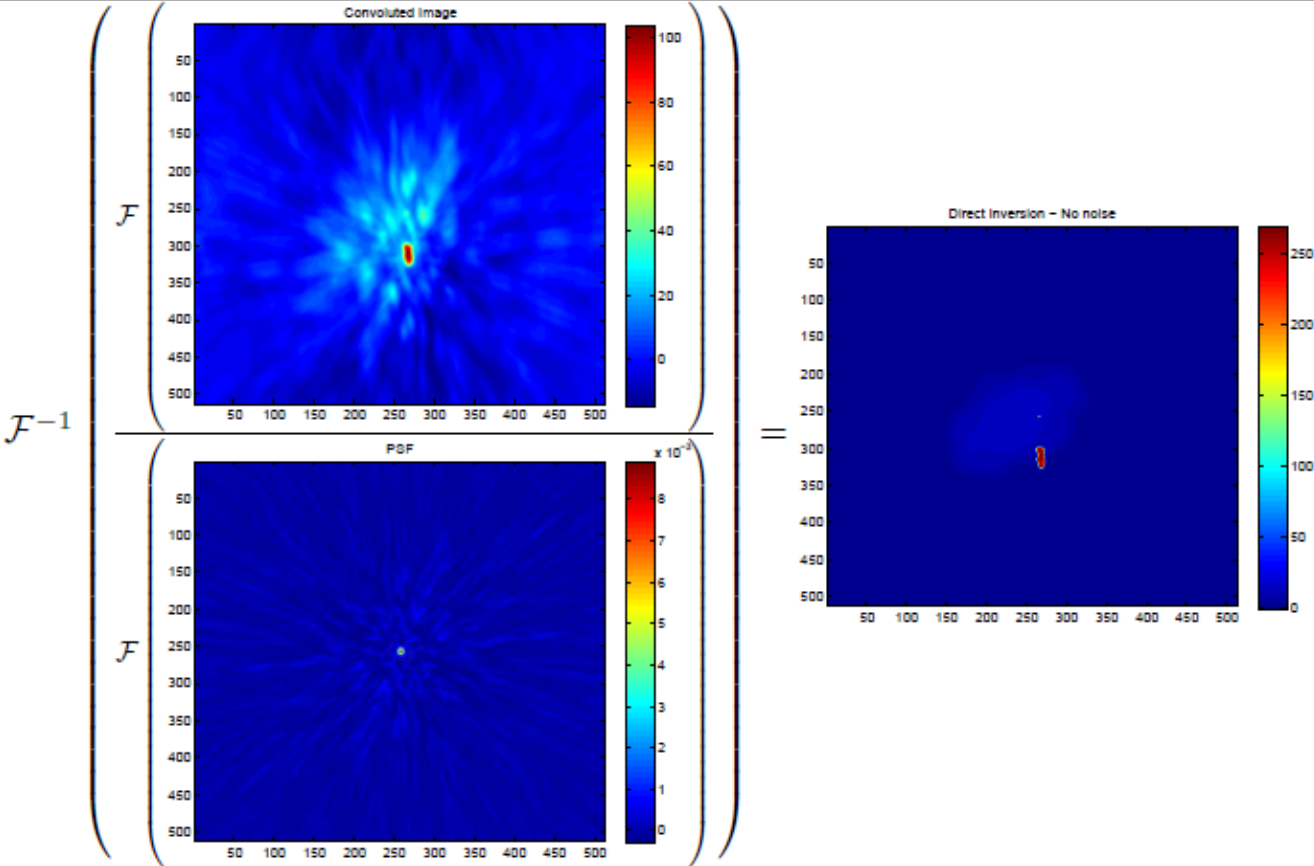
Figure 2.1: *Left: Actual Intensity map of the sky. Middle: Point spread function of the interferometer. Right: The convolution of the two, this is the data that the interferometer produces (minus any noise).*

Dekonvolutsioon

$$Z = X + Y, \quad f_Z, f_Y \text{ teada}$$

$$f_X = ?$$

The Naïve Solution: Direct Inversion



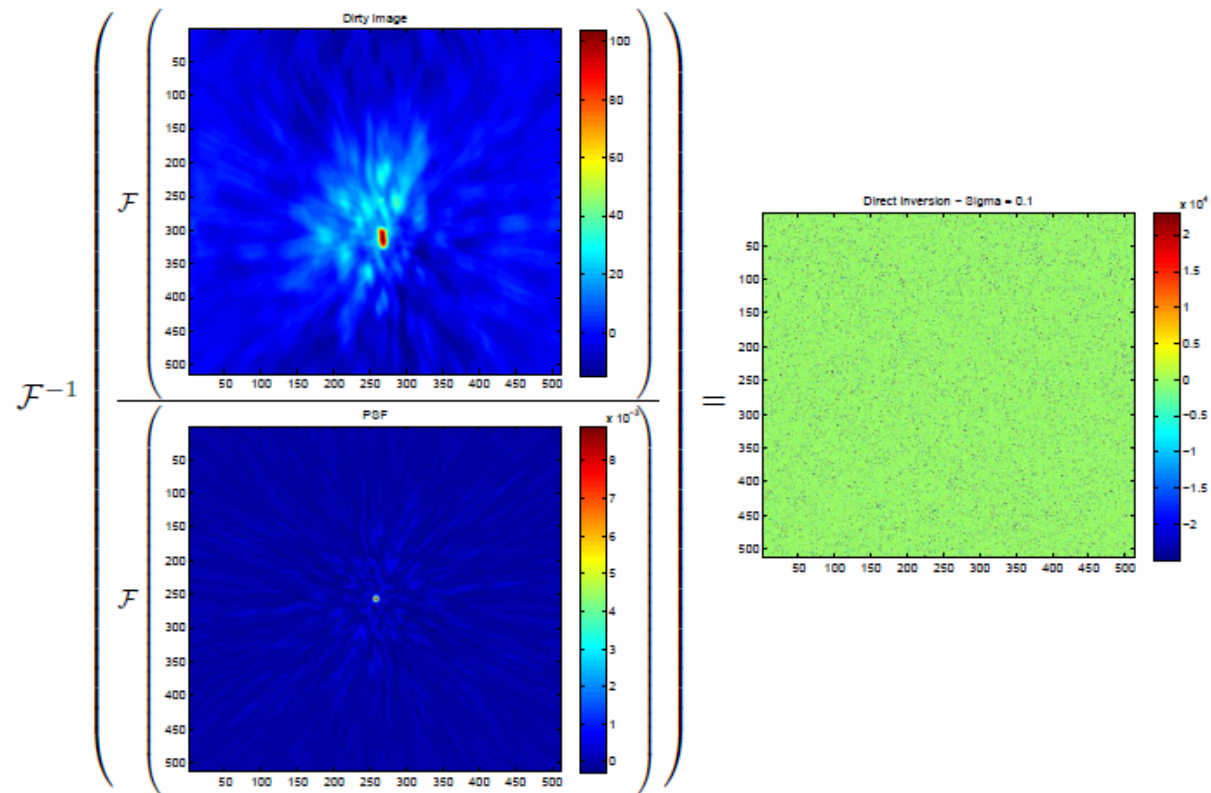
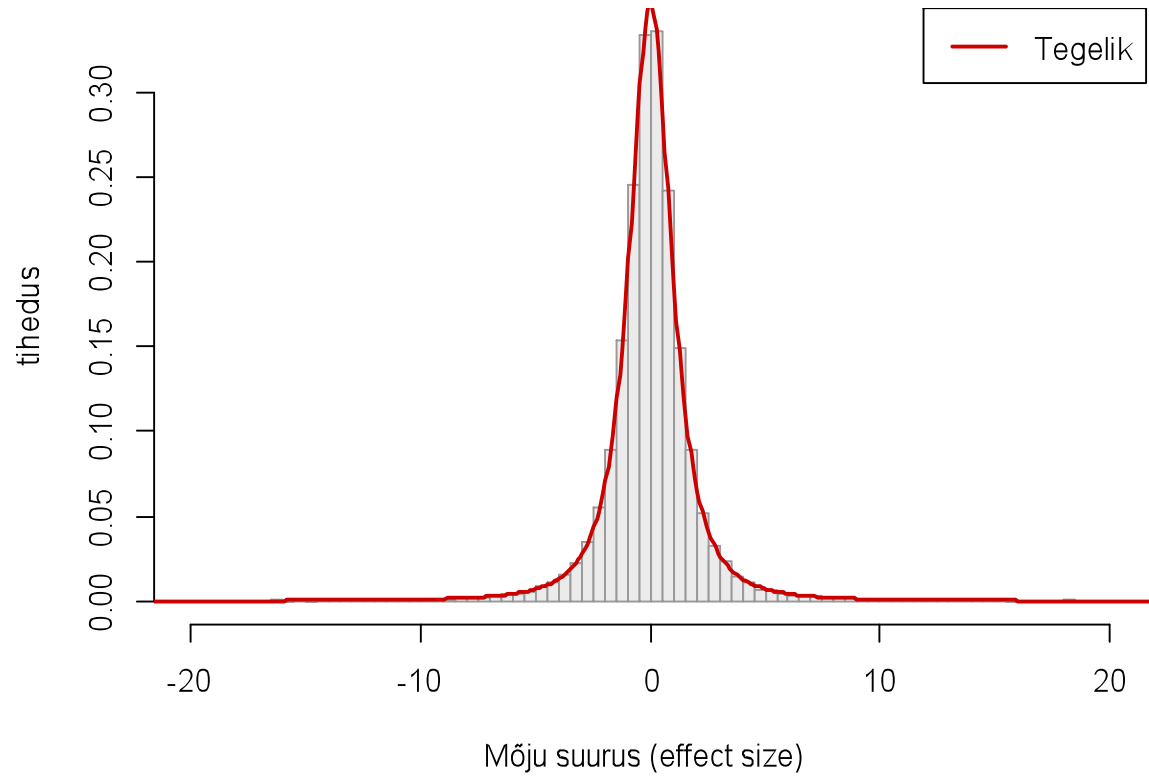
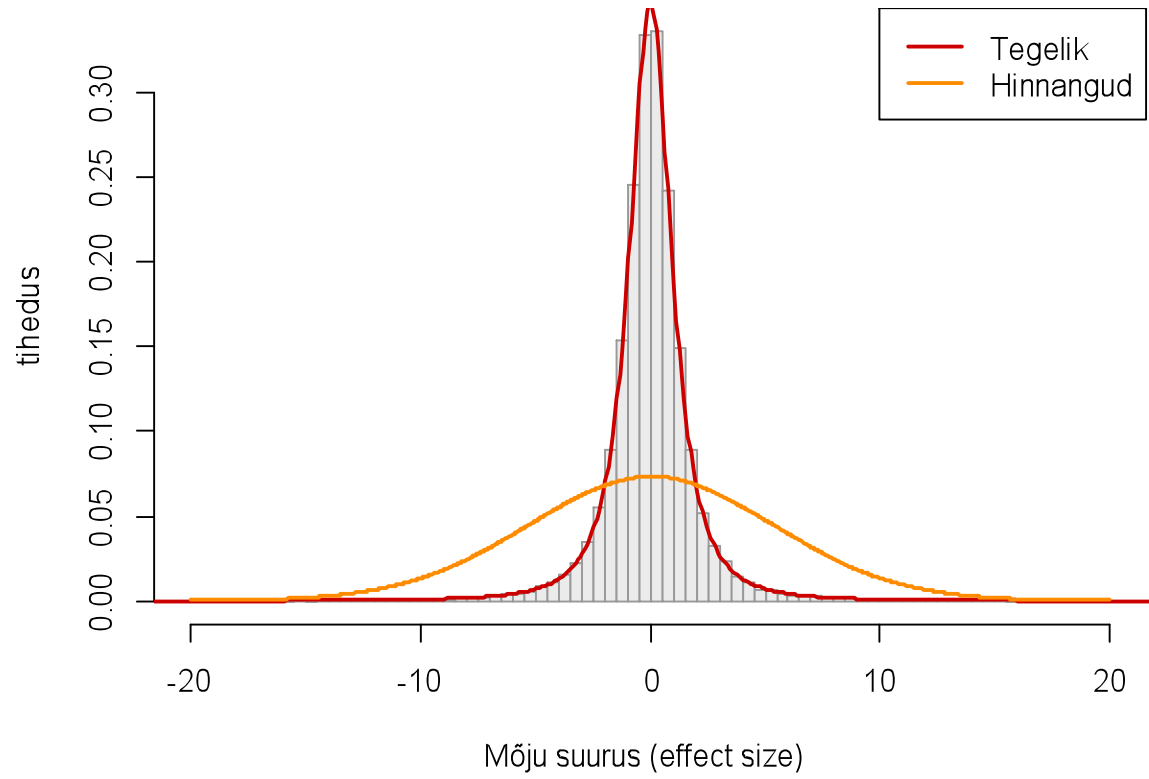


Figure 2.4: When performing the direct inversion on noisy data, the equation produces a noise-like result. In this example the dirty image was contaminated by a seemingly insignificant noise level ($\sigma = 0.1$).

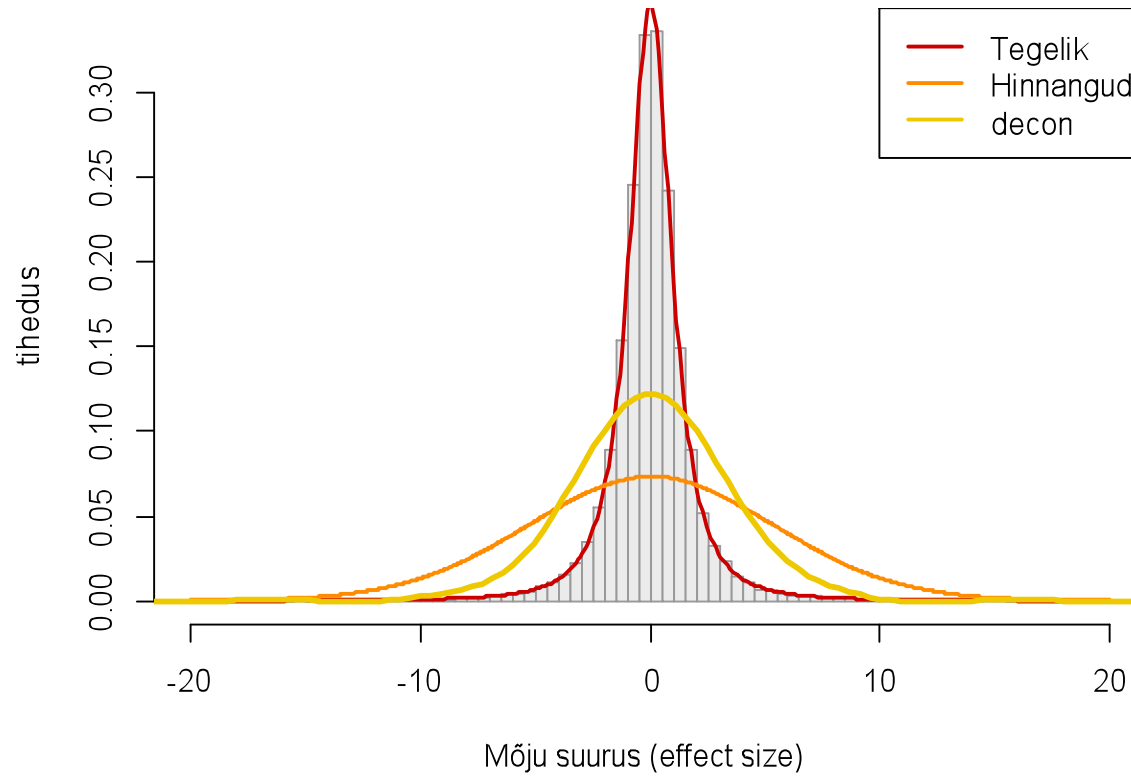
SNP'ide mõjude tugevused



SNP'ide mõjude tugevused

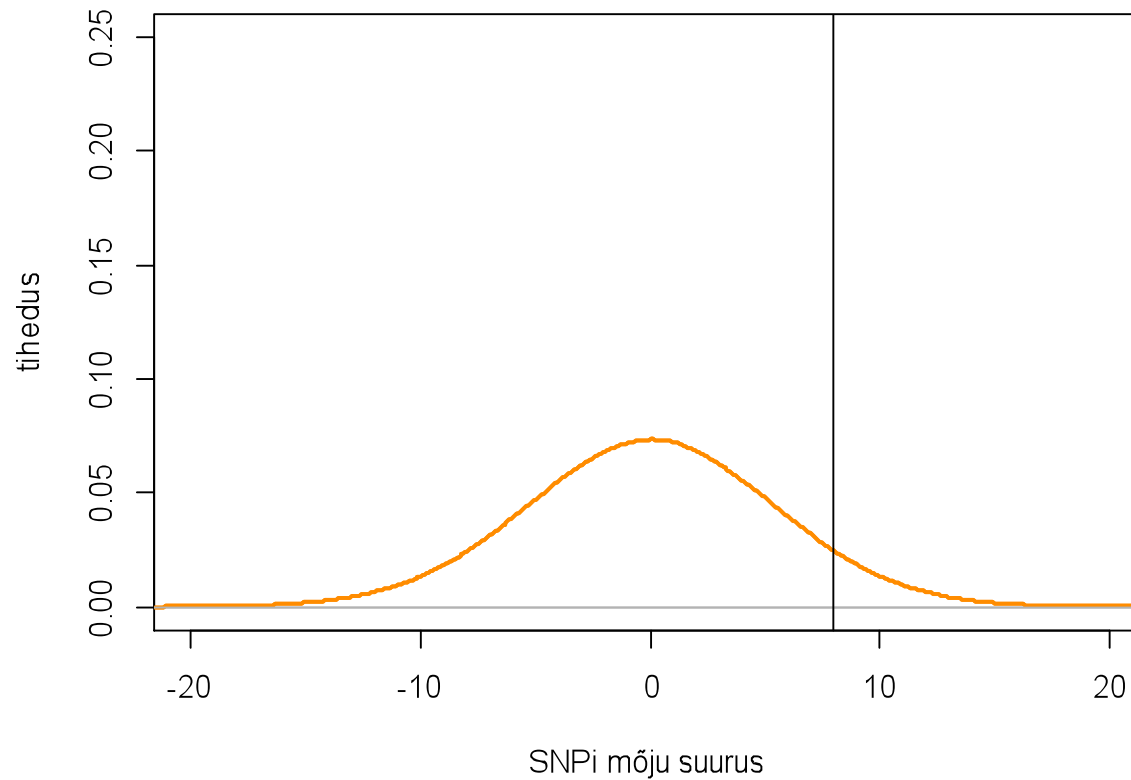


SNP'ide mõjude tugevused

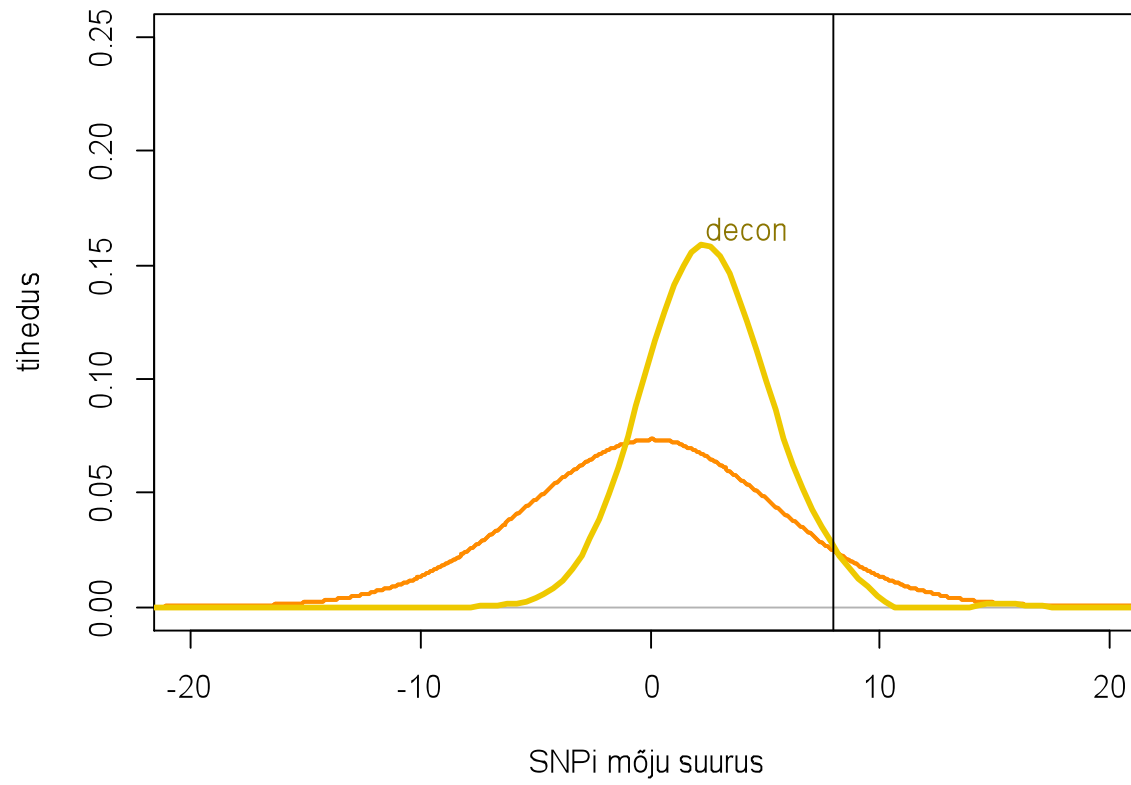


Milline on tegelik SNPi mõju,
kui mõju hinnang on 8?

Tinglik jaotus



Tinglik jaotus



Tinglik jaotus

