

Analysis of some data from microstructure database

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Contents

1	Overview	2
2	Methods	2
3	Results	2

1 Overview

I analyzed some data sets from the microstructure database that Amy set up, to compare the results to my EQ14 analysis.

2 Methods

I computed ϵ_χ as

$$\epsilon_\chi = \frac{N^2\chi}{2\gamma < T_z^2} \quad (1)$$

3 Results

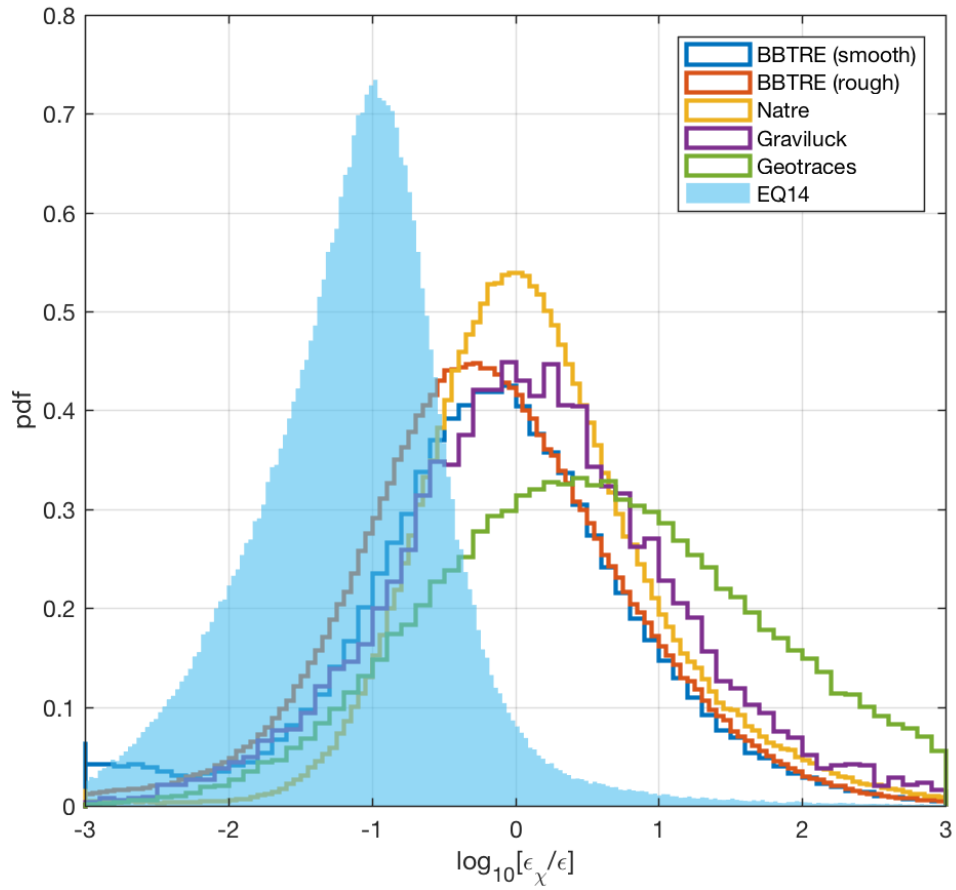


Figure 1: Histograms of (\log_{10}) the ratio ϵ_χ/ϵ .

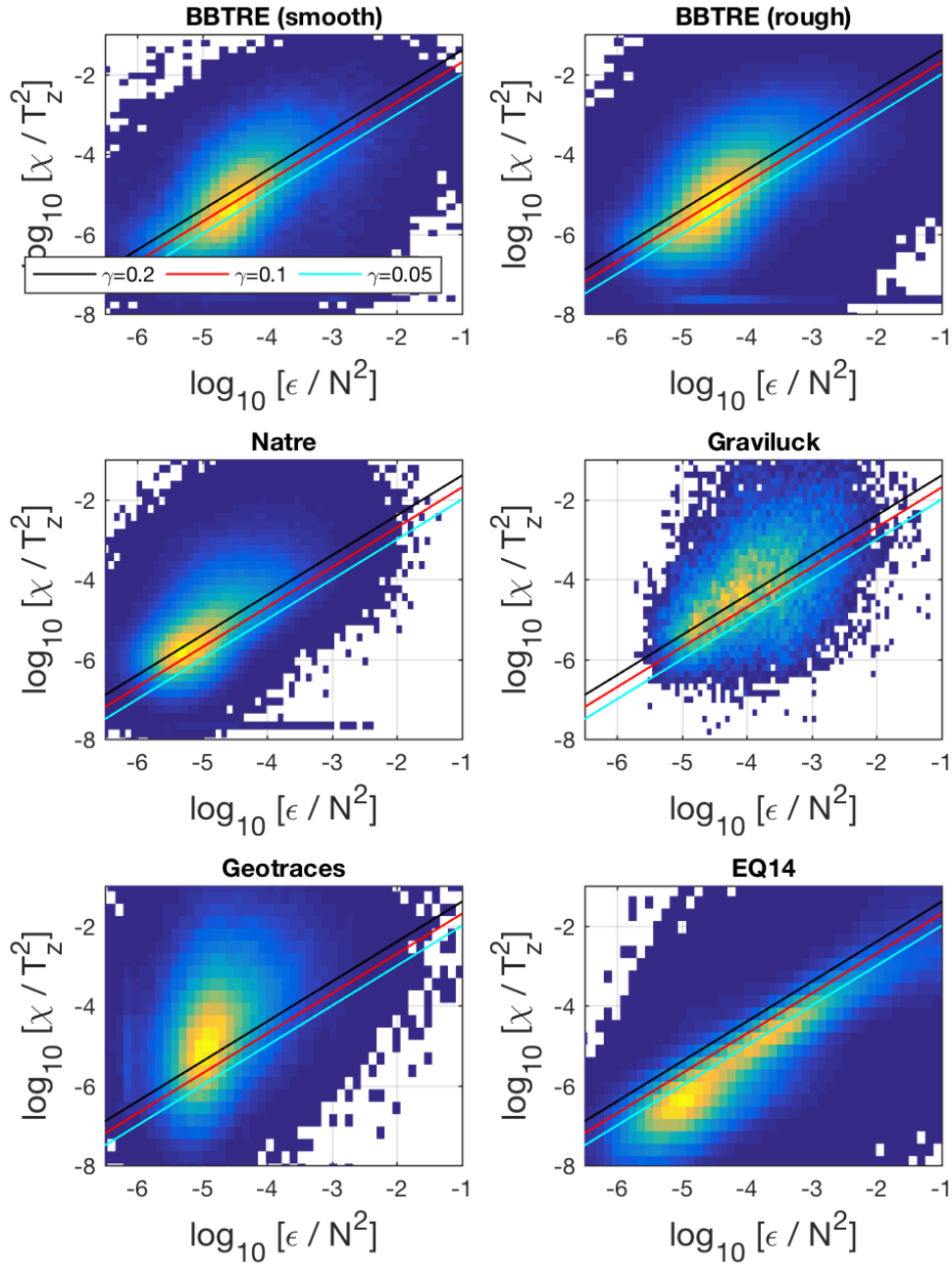


Figure 2: χ vs ϵ , normalized such that the slope is proportional to γ .

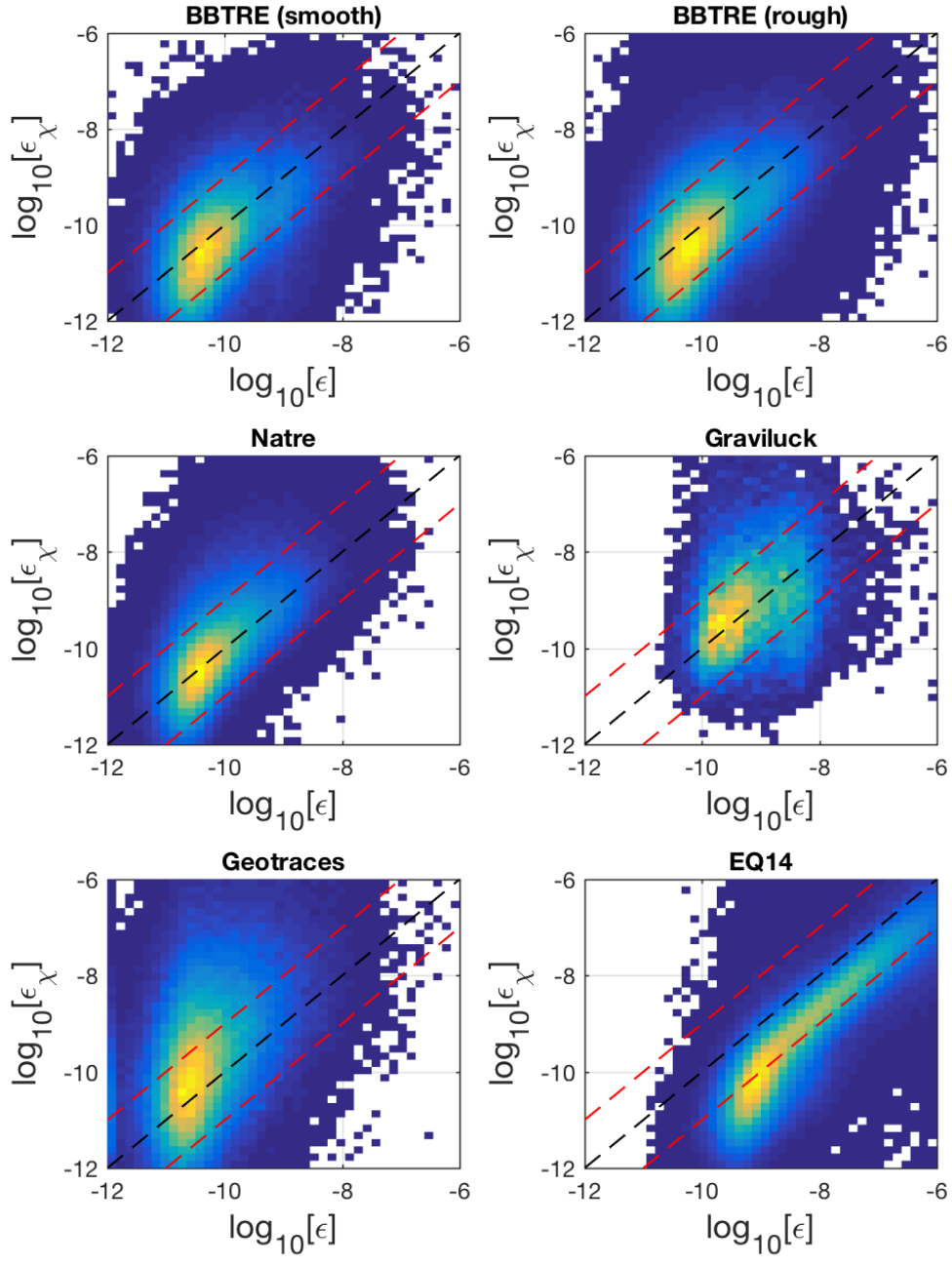


Figure 3: 2D histograms of ϵ_χ vs ϵ .