The

Motivation

In order to reveal the turbulence structure of molecular clouds, systematic co
servational signatures of turbulence and simulations of the physical processe
and evolution of cloud structures are required.

The comparison has to rely on some statistical measures for the scaling of the c
structure that can be determined both in observational data and turbulence si
test several structure analysis tools providing means for such a comparison w
sitivity to changes in the turbulence model and to observational distortions to
to disclose reliably the molecular cloud turbulence.