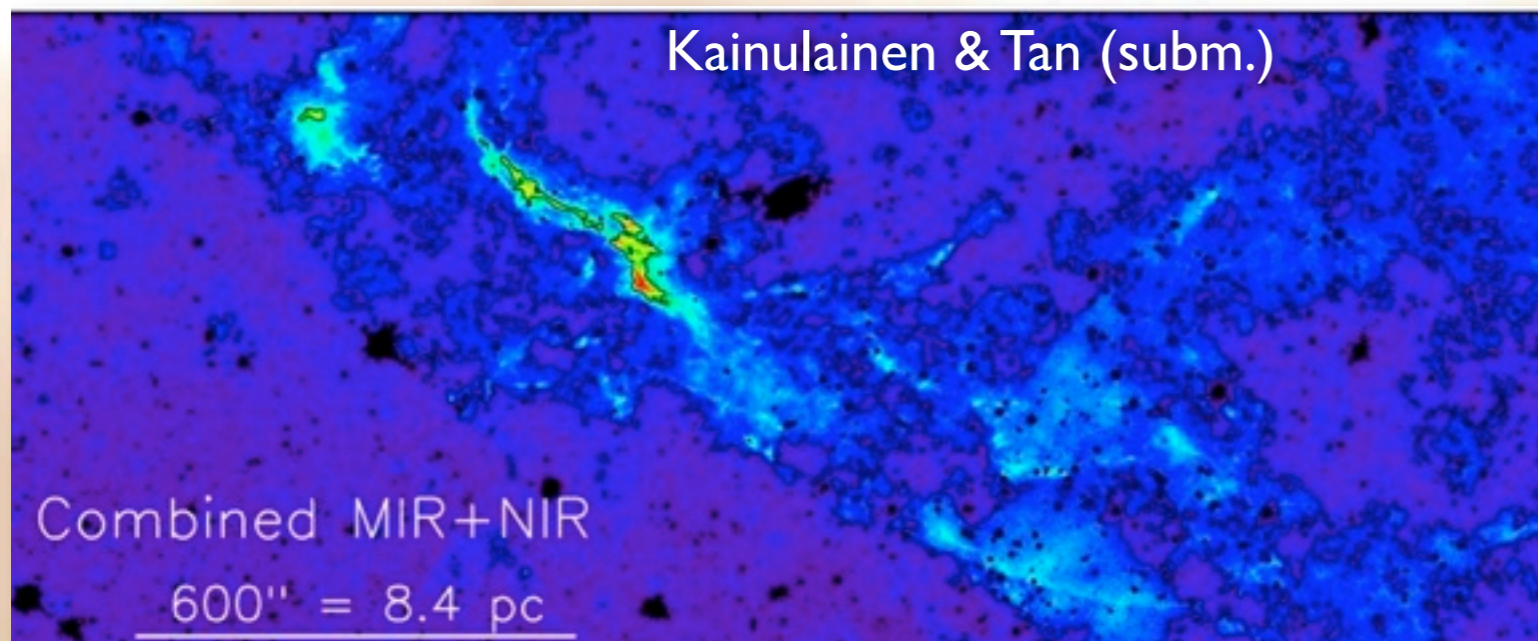
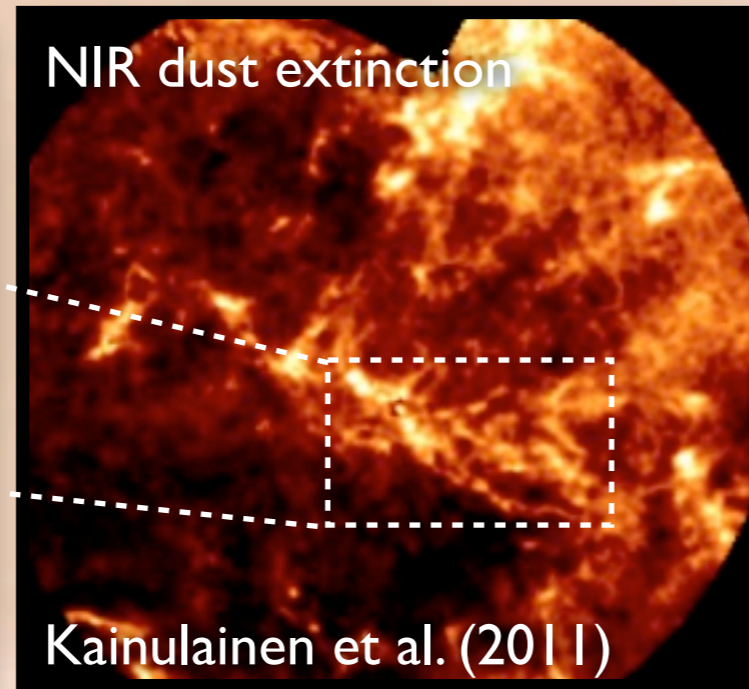
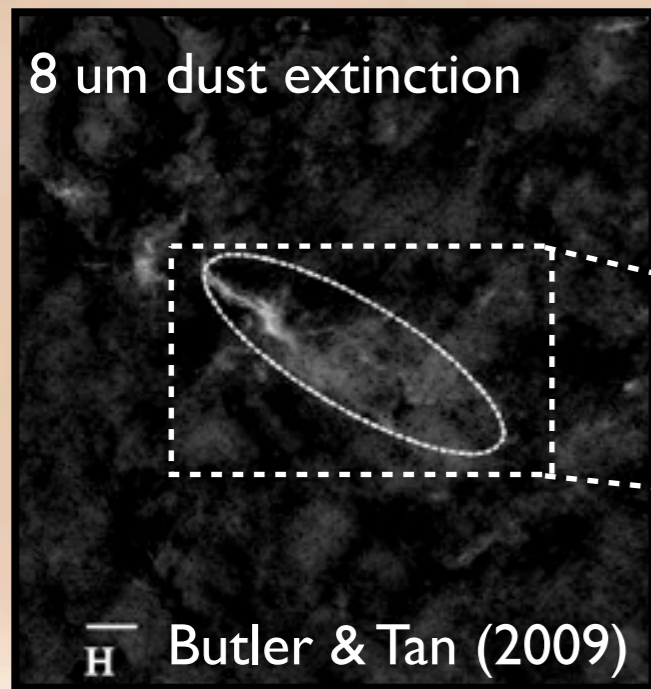


# High-dynamic-range column density data for IRDCs:

## Dependence between the density structure and turbulence

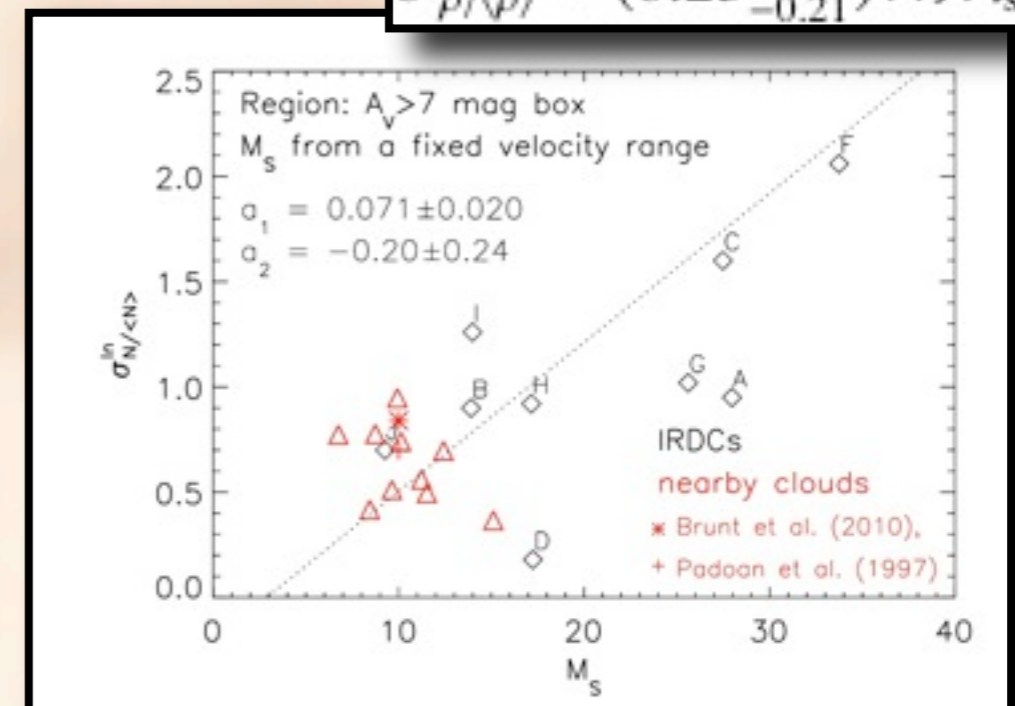
Kainulainen J., Tan J.C.

Example: G035.39-00.33



- ◆ A new, **high-dynamic-range** technique for measuring  $N(\text{H}_2)$  in IRDCs using dust extinction.
- ◆  **$A_V = 1-100$  mag, FWHM = 2"**. Low- $\rho$  gas - envelopes - cores.
- ◆ The first direct observational detection of the dependence of the density fluctuations with turbulence:

$$\sigma_{\rho/\langle\rho\rangle} \approx (0.23^{+0.58}_{-0.21}) \times \mathcal{M}_s$$



Kainulainen & Tan (subm.)