Plots for the M_{ej} correlations

December 15, 2015

This document has the plots for the ejecta mass calculations using the measured NIR light curves of CSP-I objects. It also includes a short discussion of the distributions in the literature or from complementary methods.

- ^{56}Ni mass using Arnett's rule and t_0 using the Jeffrey 1999 formalism
- ^{56}Ni mass from the nebular phase line and the ejecta mass from Scalzo et al 2014 relation (using the stretch values)
- Calculated from Richard's MCMC

Richard's sample doesn't include fast-decliners and uses the Bayesian framework.

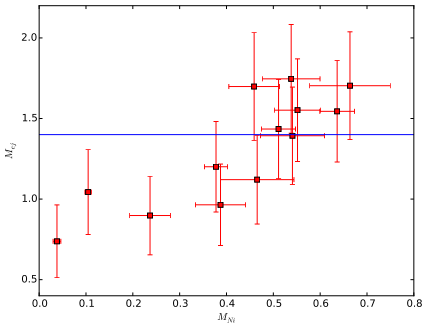

Figure 1: Using a variable rise time for the Nickel mass calculations, the relation between M_{ej}- ^{56}Ni mass

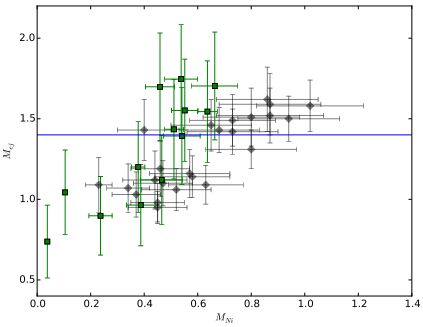

Figure 2: Comparing the SNe in Figure 1 to the calculations by Richard