Bound-Bound opacity for Lanthanide free at t = 2.5 days 2 0 -6 data from Tanaka +2018 reprocessed data $log\lambda_0 = 3.45$ -8 fit: $\alpha = 9.26$, $\sigma = 0.017$ $\log \kappa_0 = 1.70 \text{ cm}^2/\text{g}$

> 3.50 logλ (Å)

3.75

4.00

4.25

3.25

 (cm^2/g)

 $\log \kappa_{b-b}$

2.75

3.00