1   Introduction

2   Data Selection

- Fig. 1 illustrate the selection criteria followed in this study, and the information about the removed fills is stored in an EXCEL file.
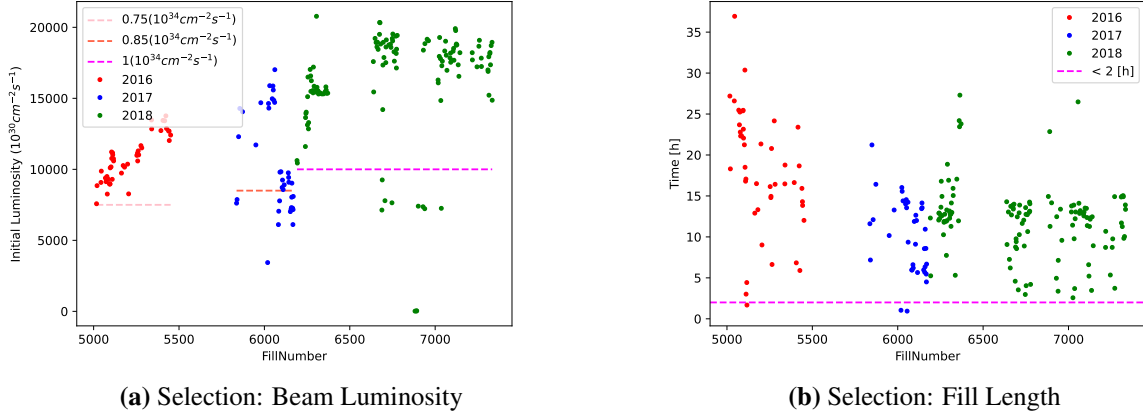

(a) Selection: Beam Luminosity

(b) Selection: Fill Length

Figure 1: Data selection

3   DA Model-2 Parameter Evolution

- Time evolution of normalized luminosity L/L_i, R^2_{adj} and normalized fit parameters κ, ρ, and $\epsilon * N_i$ for some specific fills are shown in Fig. 2

- For all fills in the same plot see Fig. 3

4   Double-Exponential Parameter Evolution

- Time evolution of normalized luminosity L/L_i, R^2_{adj} and normalized fit parameters b and d for some specific fills are shown in Fig. 4
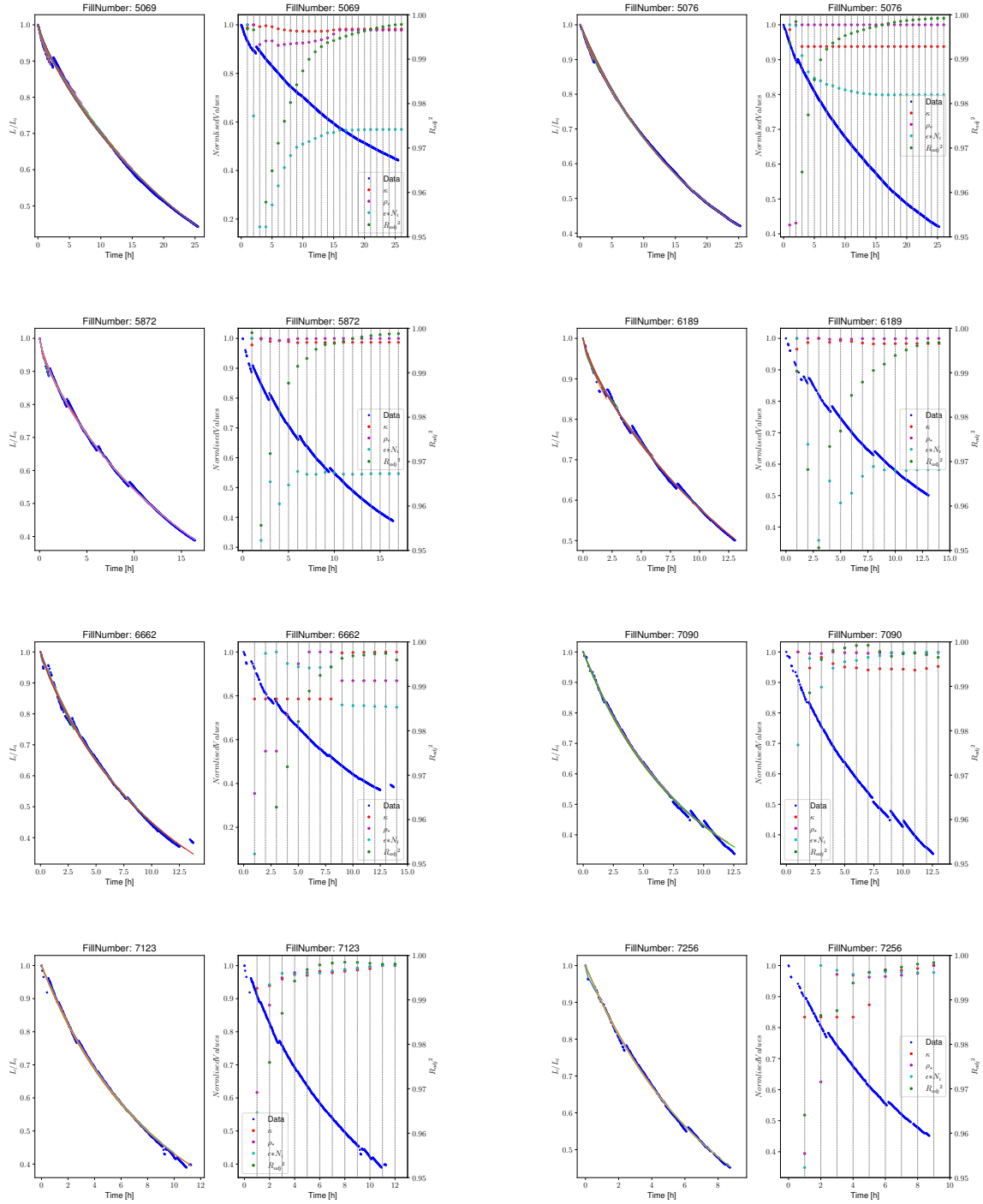
- For all fills in the same plot see Fig. 5

Figure 2: Some fills plots showing describing the time evolution of normalized luminosity L/L_i, R^2_adj and normalized fit parameters κ, ρ, and $\epsilon * N_\mathrm{i}$ for $Model\text{-}2$
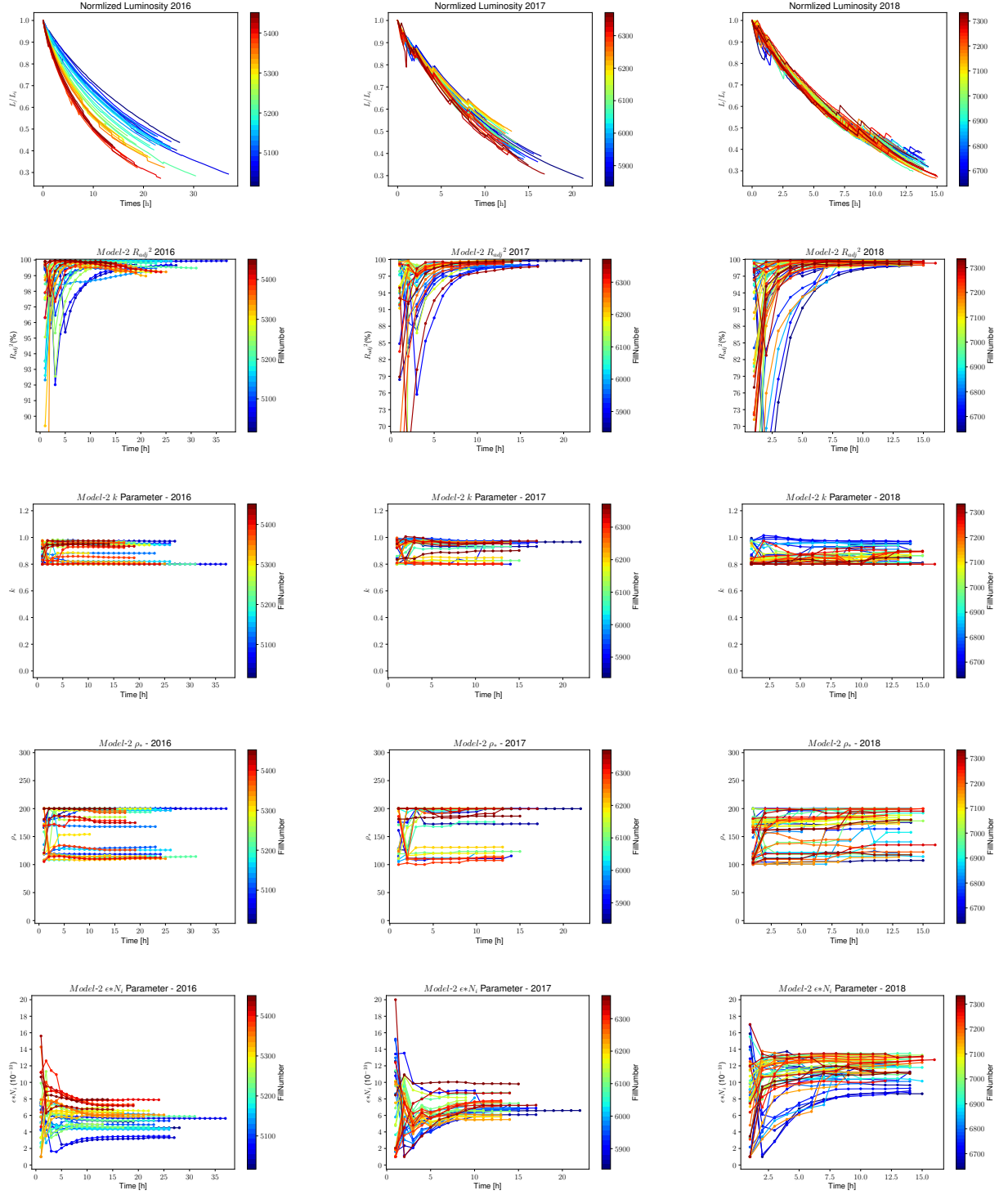
Figure 3: Time evolution of normalized luminosity L/L_i, R^2_adj and fit parameters κ, ρ, and $\epsilon*N_\mathrm{i}$ for $Model$-2, for years 2016 in the left, 2017 in the middle, and 2018 in the right

Figure 4: Some fills plots showing describing the time evolution of normalized luminosity $L/L_{\rm i}$, $R^2_{\rm adj}$ and normalized fit parameters b and d for *Double-Exponential Model*
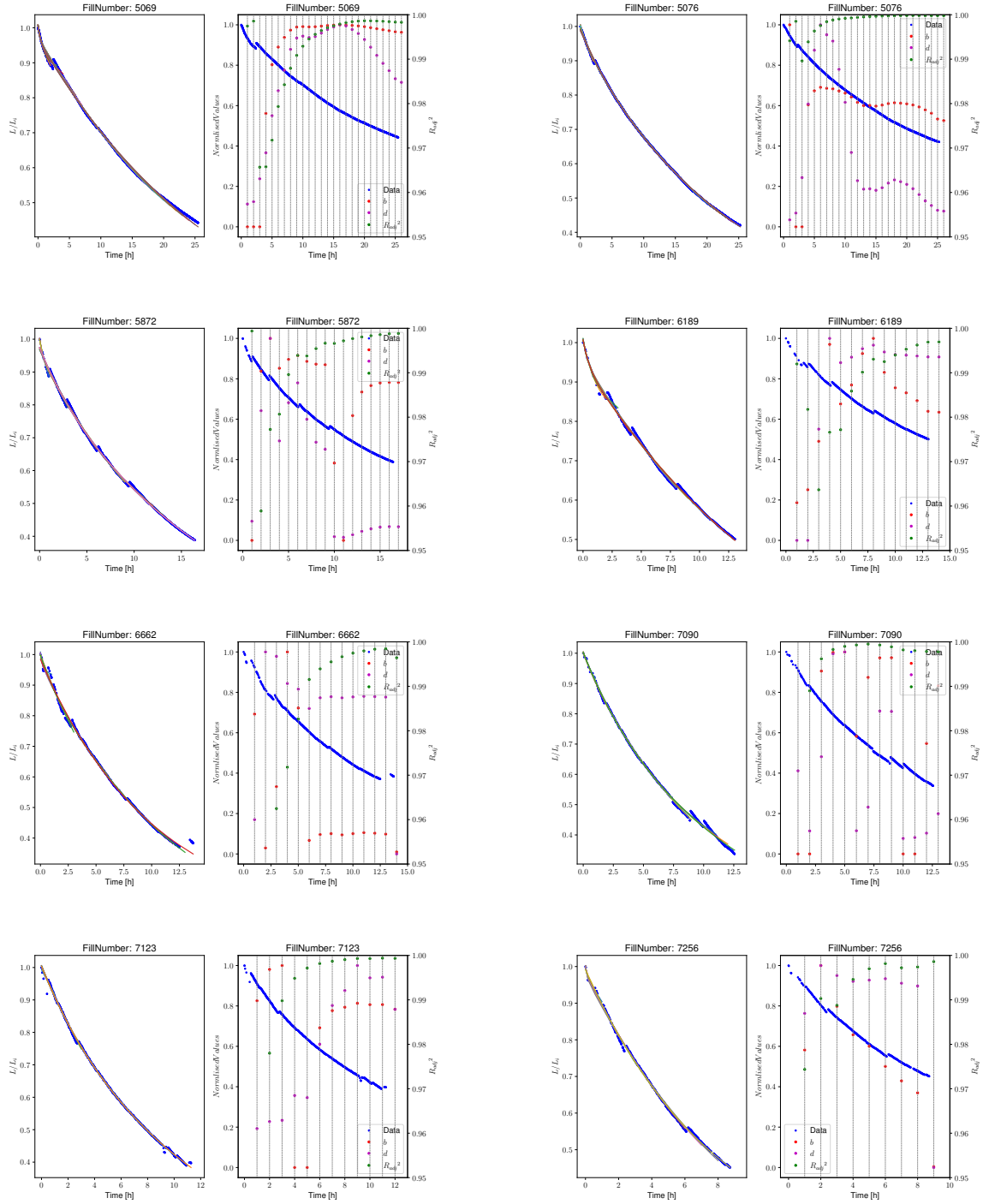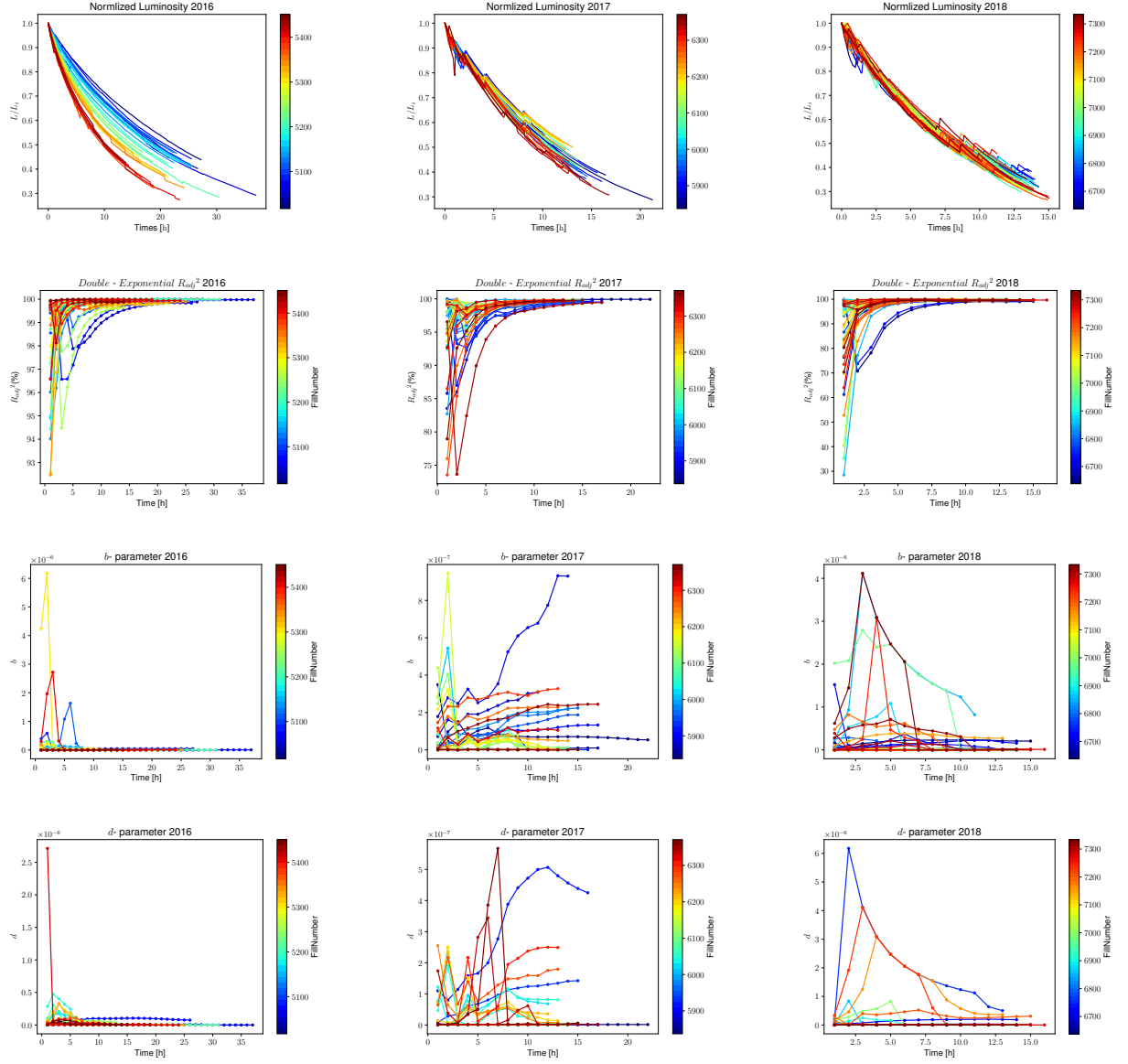
Figure 5: Time evolution of normalized luminosity L/L_{i}, R^2_{adj} and fit parameters b and d for *Double-Exponential Model*, for years 2016 in the left, 2017 in the middle, and 2018 in the right