Updates on SN Photometric classification from MINION

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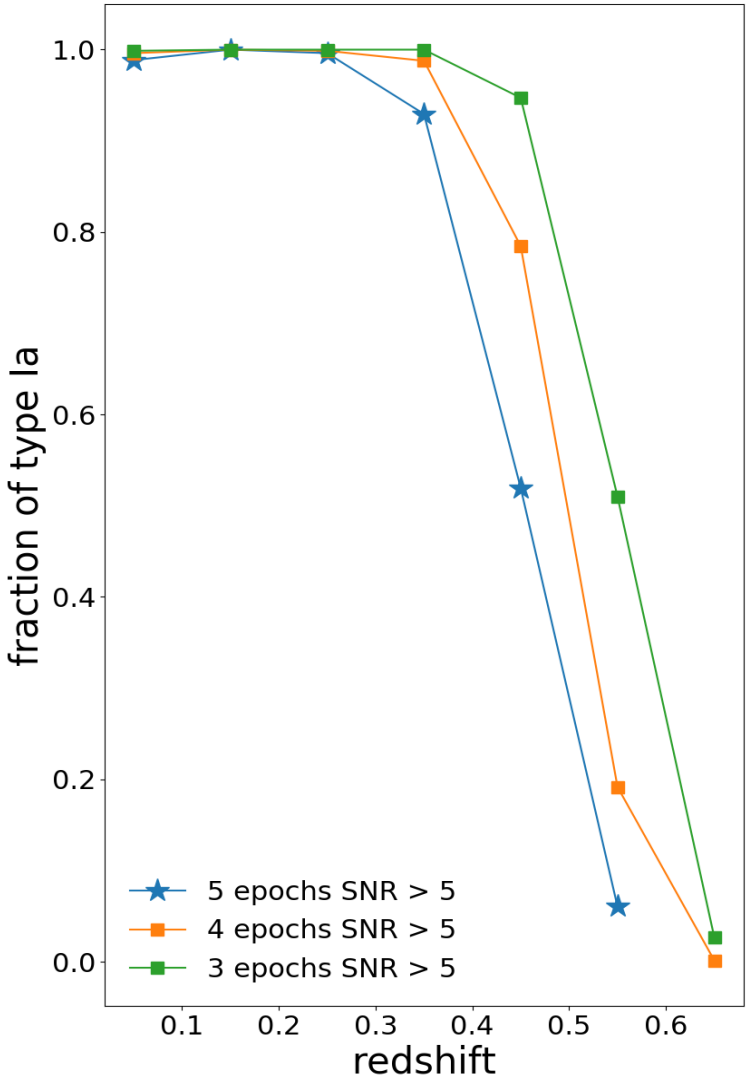
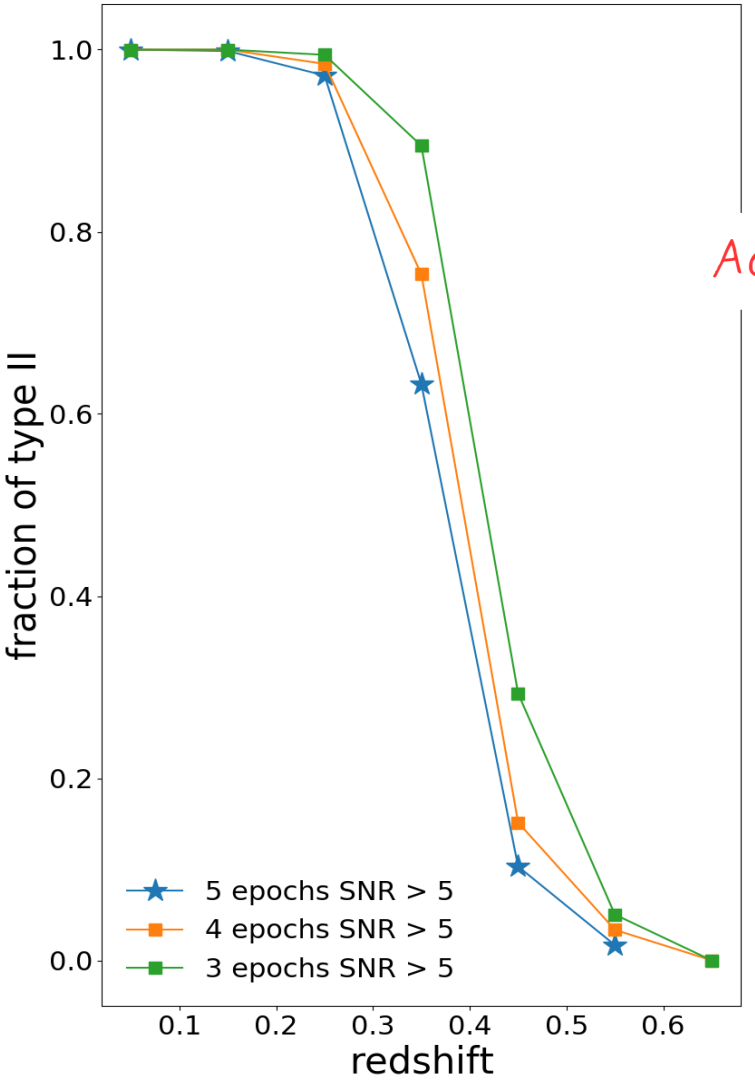
Exploratory plots:

Dataset: Phillipe's data based on minion_1016_DDF_v2 including SN Ia and II

5 epochs with SNR > 5 in gri --- after cuts: 66.32 %
4 epochs with SNR > 5 in gri --- after cuts: 66.32 %
3 epochs with SNR > 5 in gri --- after cuts: 77.57 %

← No cut in χ^2

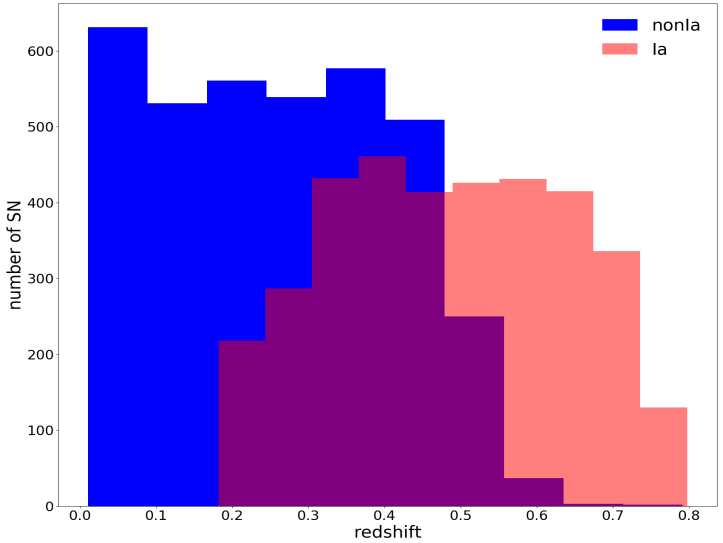


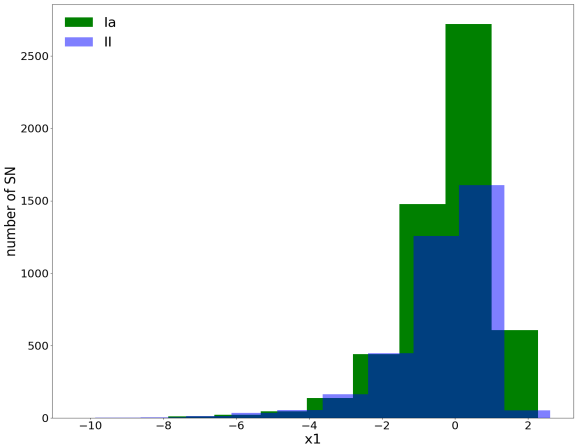


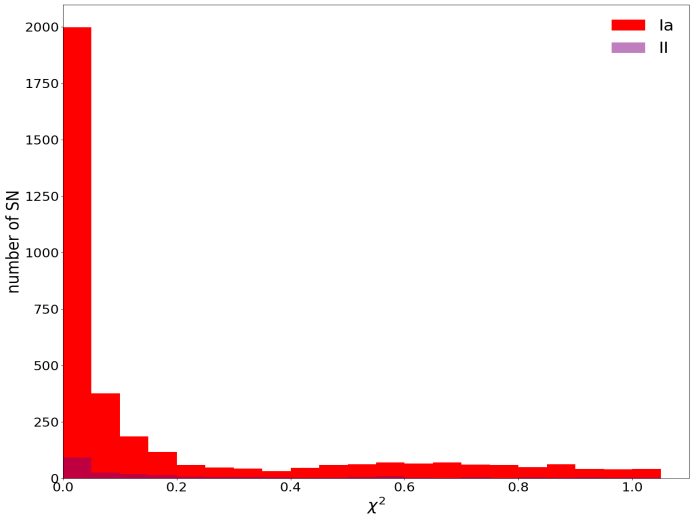
Adjust SFR

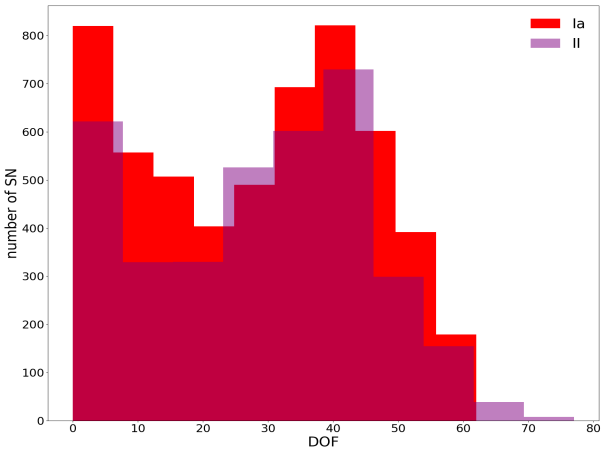
Exploratory plots:

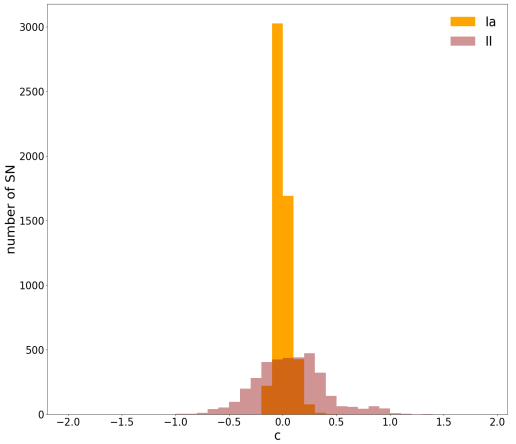
Dataset: Phillipe's data based on minion_1016_DDF_v2 including SN Ia and II











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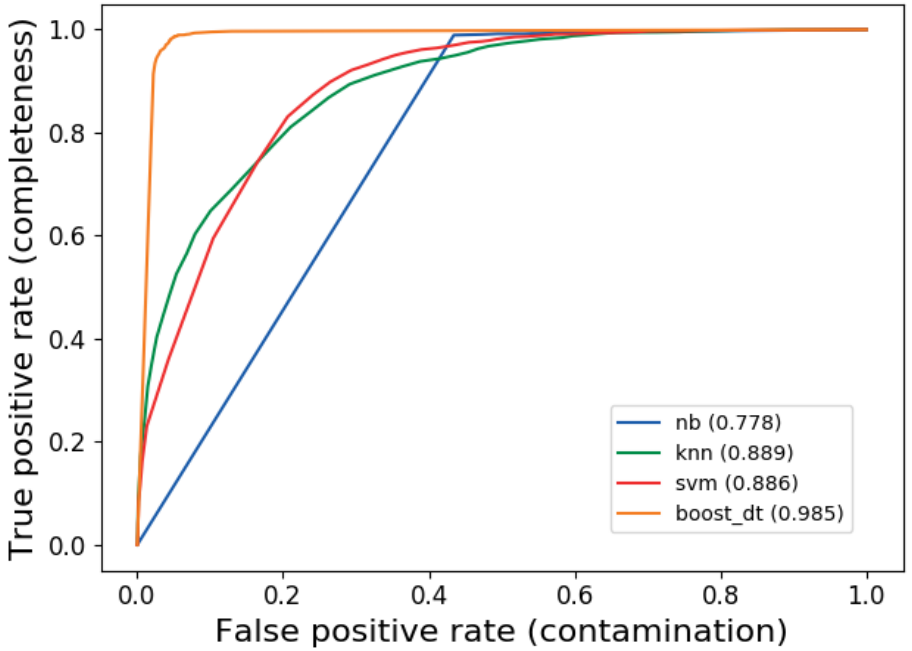
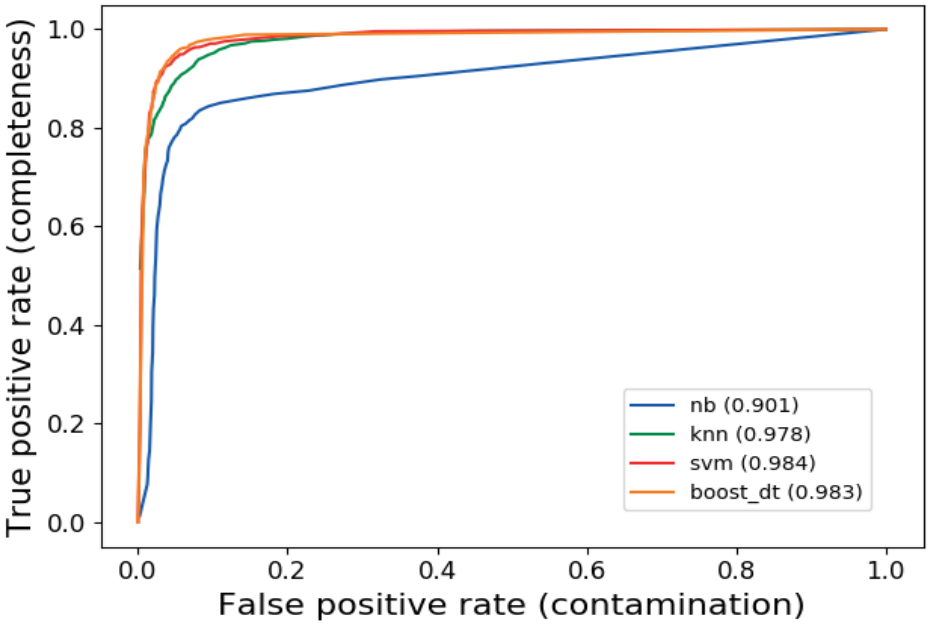
Classification results:

SALT2 features

Philippe's data with 25% random training



Rahul's data with 25% random training



OBS:

A weaker requirement in the filters do not change the results significantly!

Next steps:

- correct SFR according to SN type
- include Ibc
- define a realistic spectroscopic sample
- gather full light curve and apply other dimensionality reduction routines
- propagate to cosmology