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GLASGOW UPDATE

Outline

- ⦿ Brief Outline of Technique
- ⦿ Look at 'Superglue'
 - Transmission properties
 - Time evolution of Transmission
 - Issues arising during curing
- ⦿ Prototype tests
 - Planned tests prior to beam time.

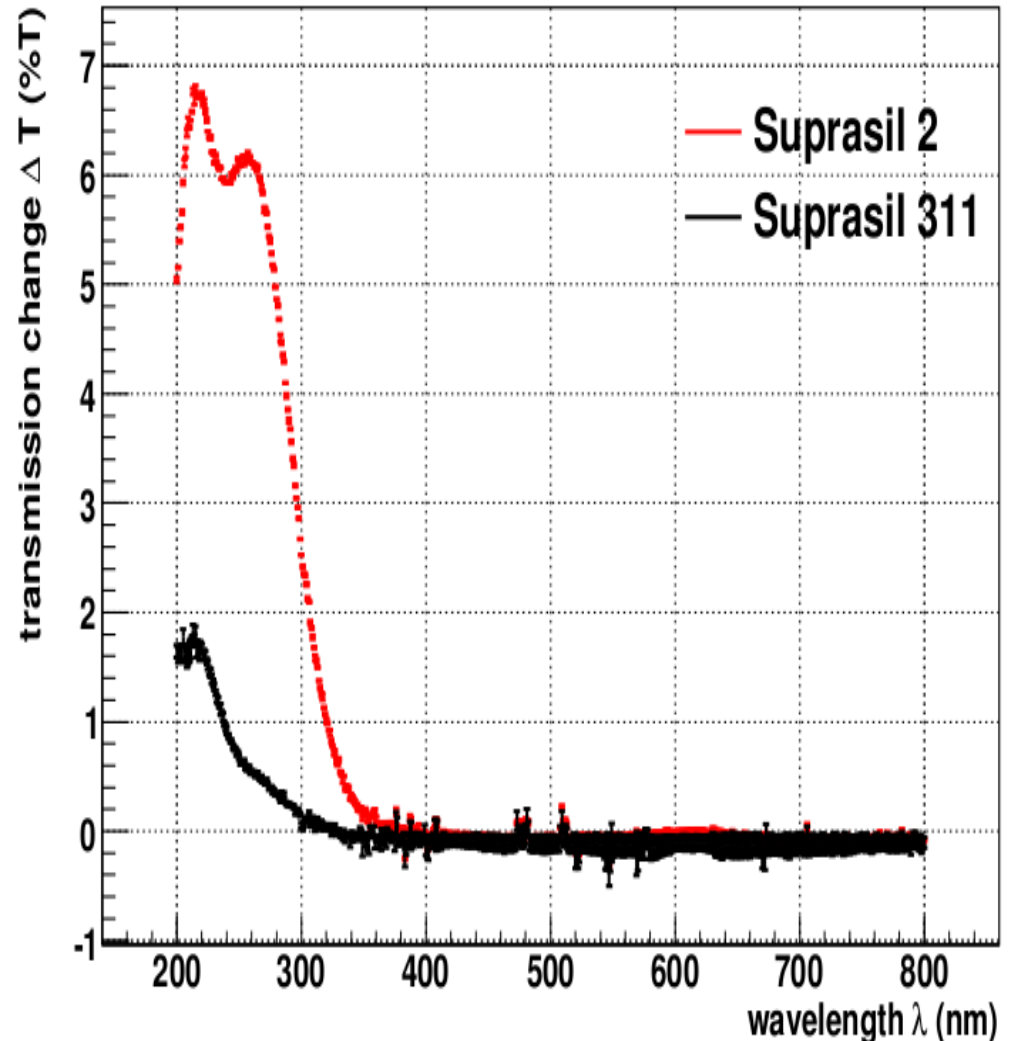
Technique

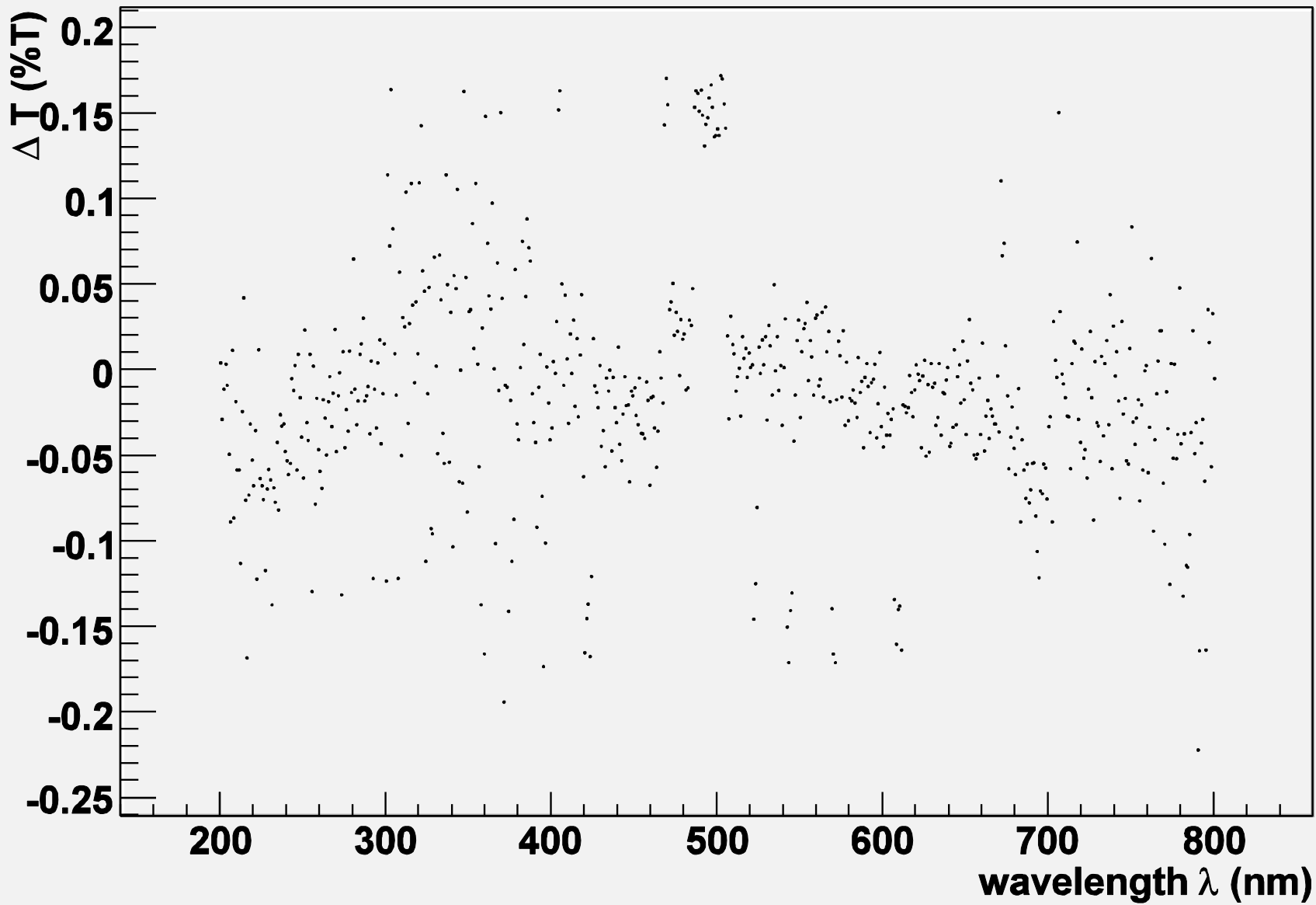
- Varian Cary-300 UV-Vis-NIR Spectrophotometer used
- Beam shone through sample and compared with reference beam
- Estimation of systematic errors allows for parameter optimisation

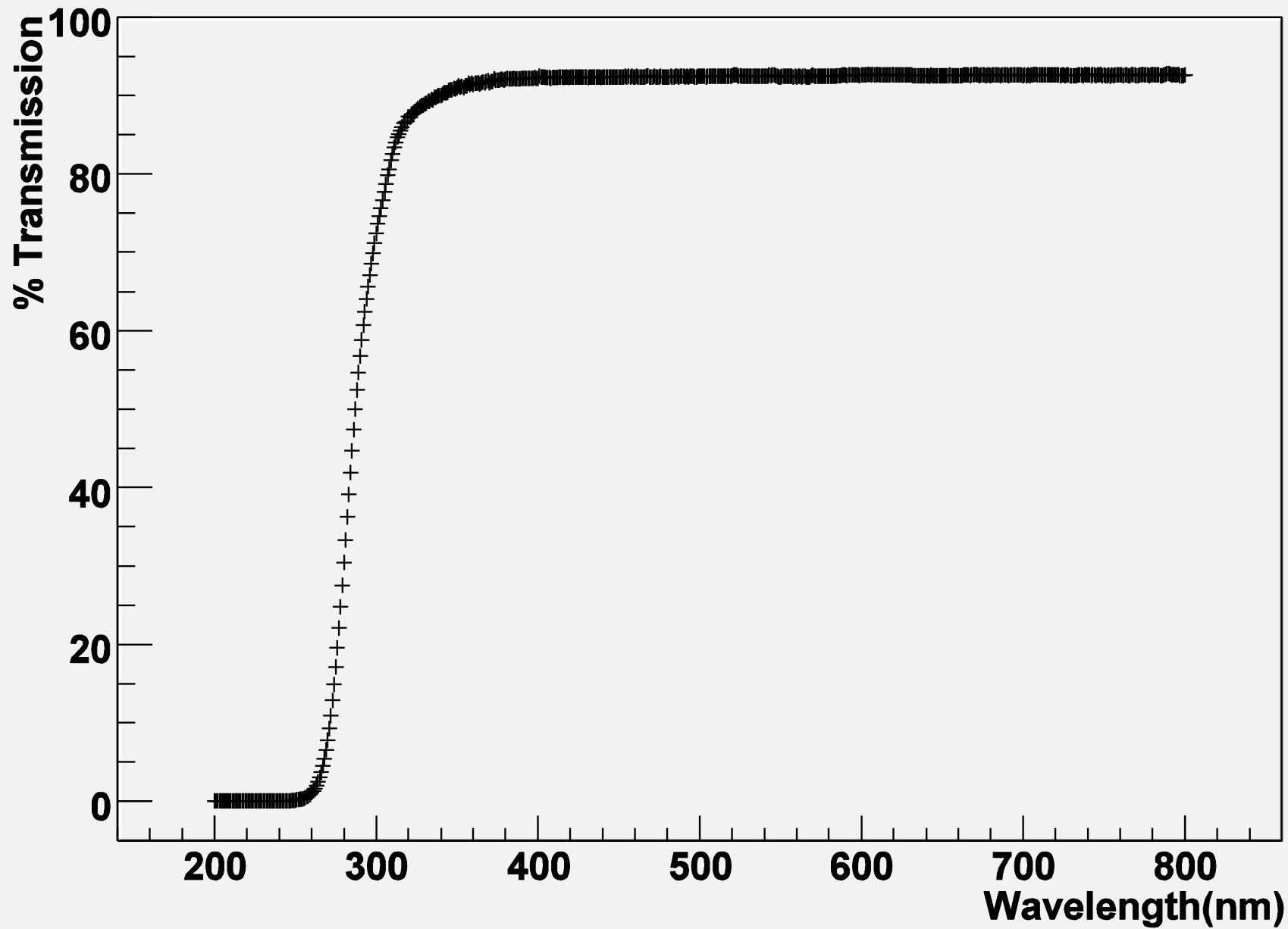


Past results

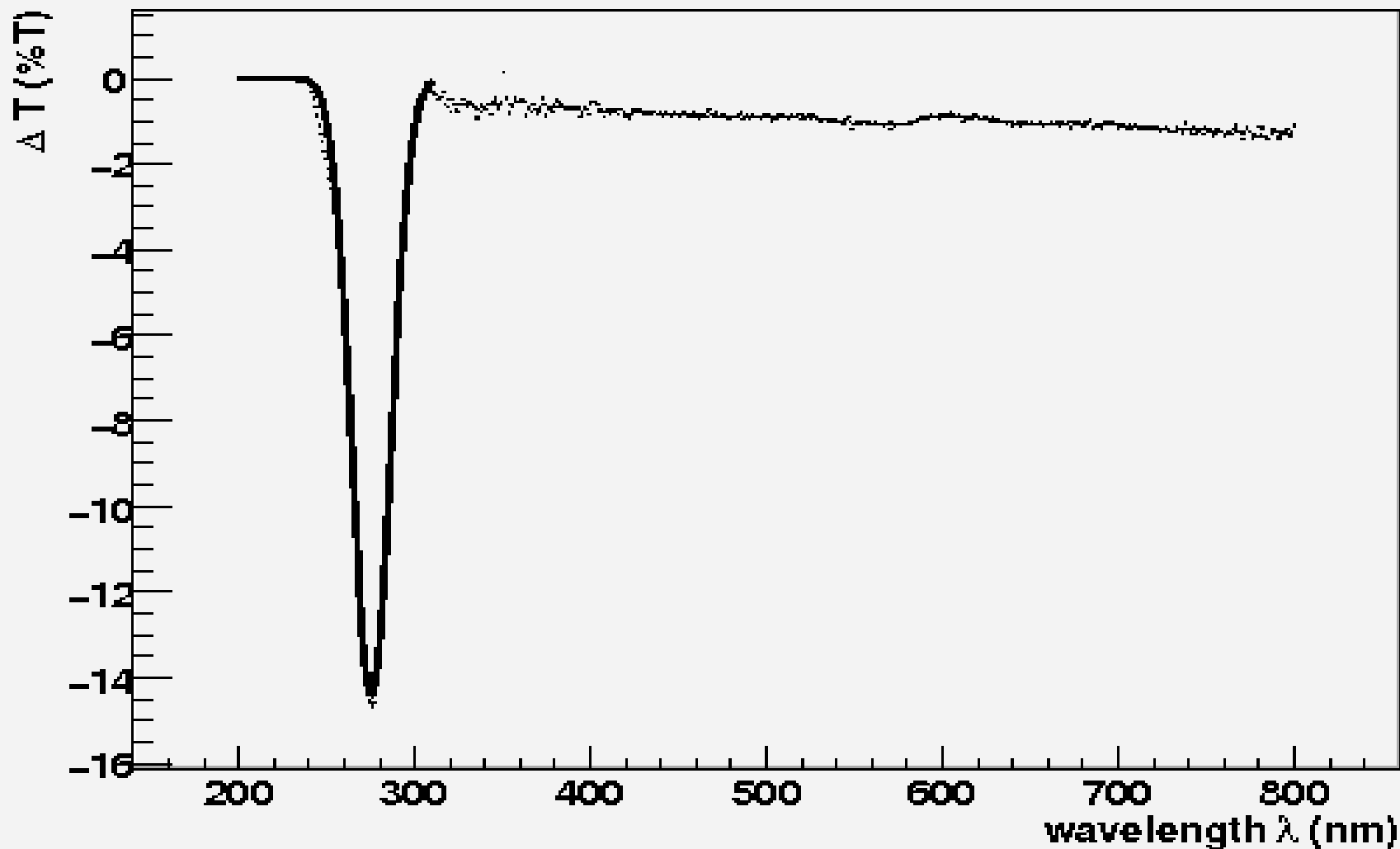
- 100krad dose on Suprasil 2 & Suprasil 311
- Transmission measured
- Direct comparison between the 2 and 311 shows different behaviour



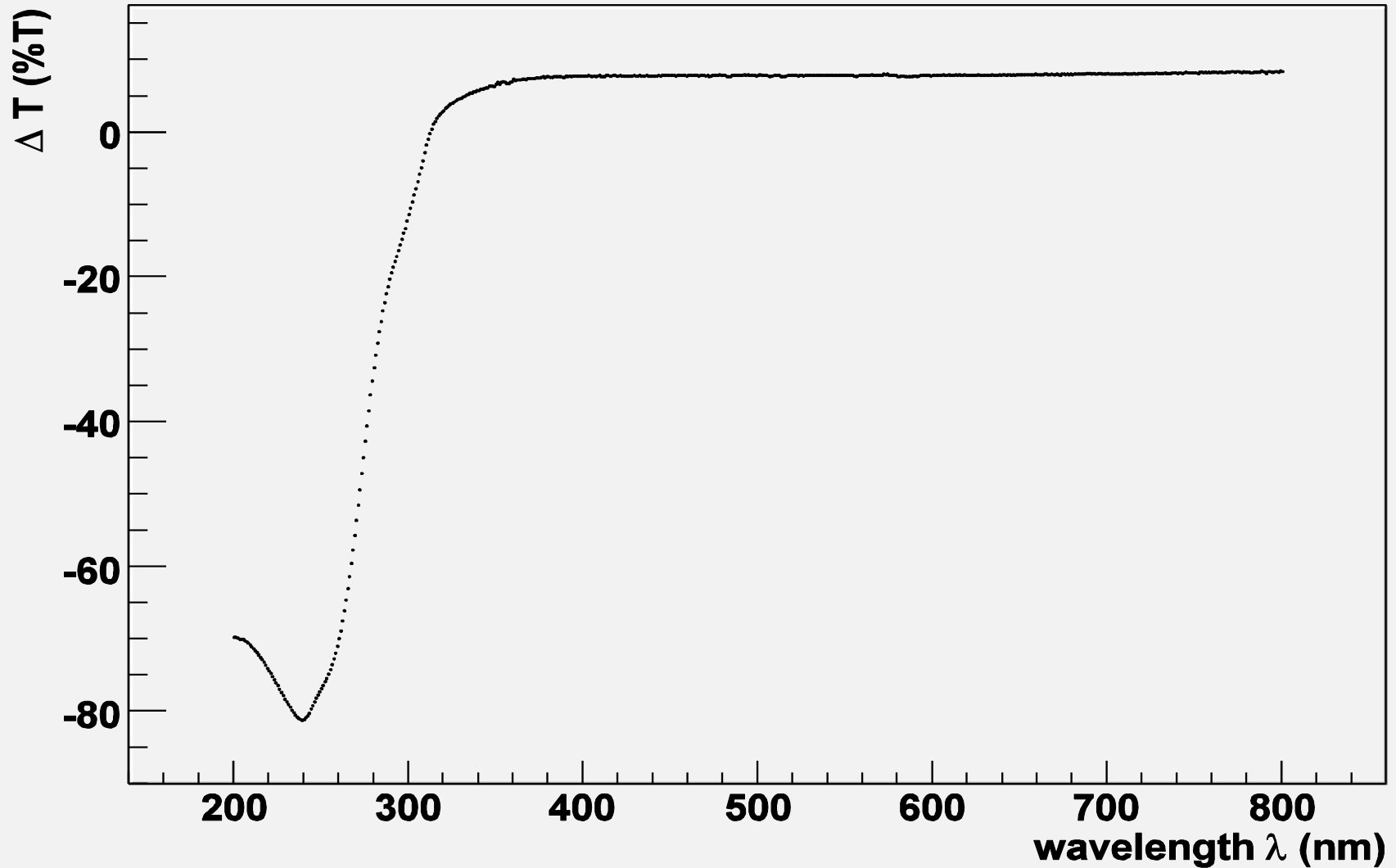




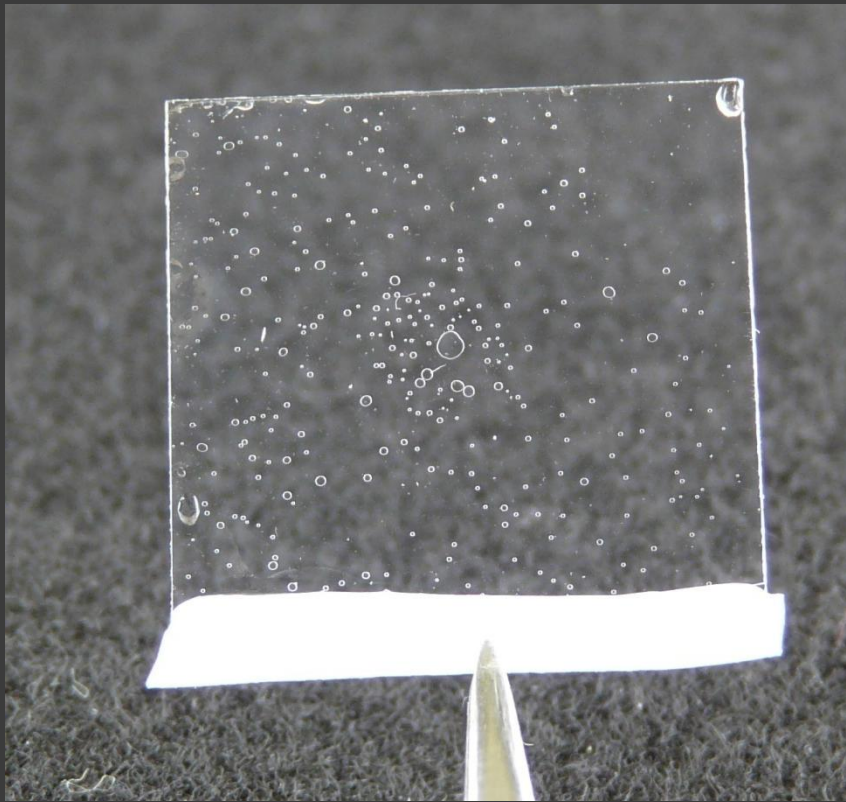
“Super” Glued Samples



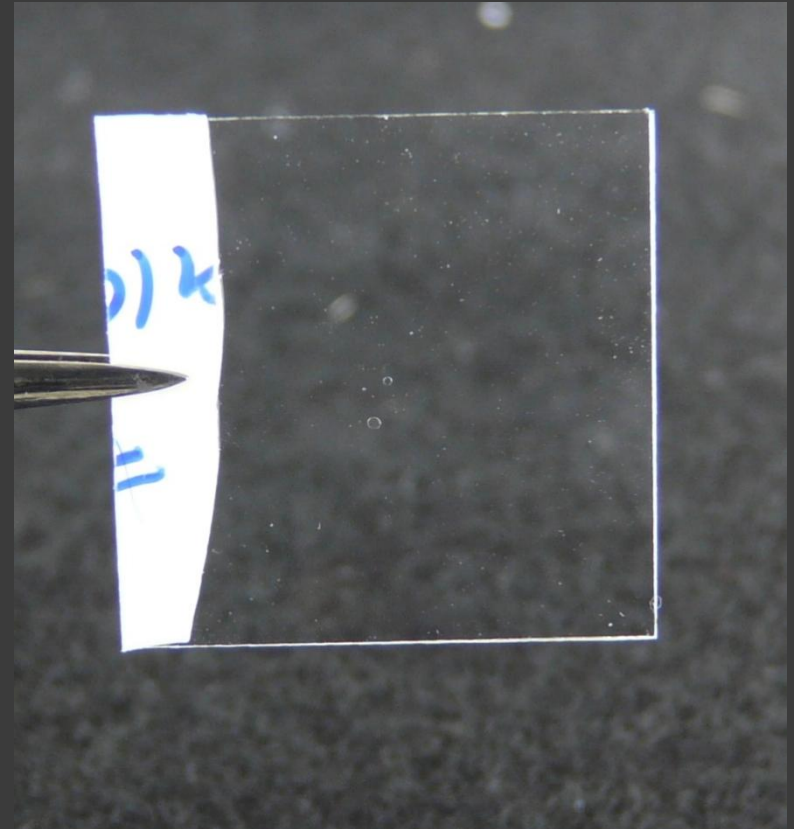
“Not-So-Super” Glue?



Importance of Gluing Method



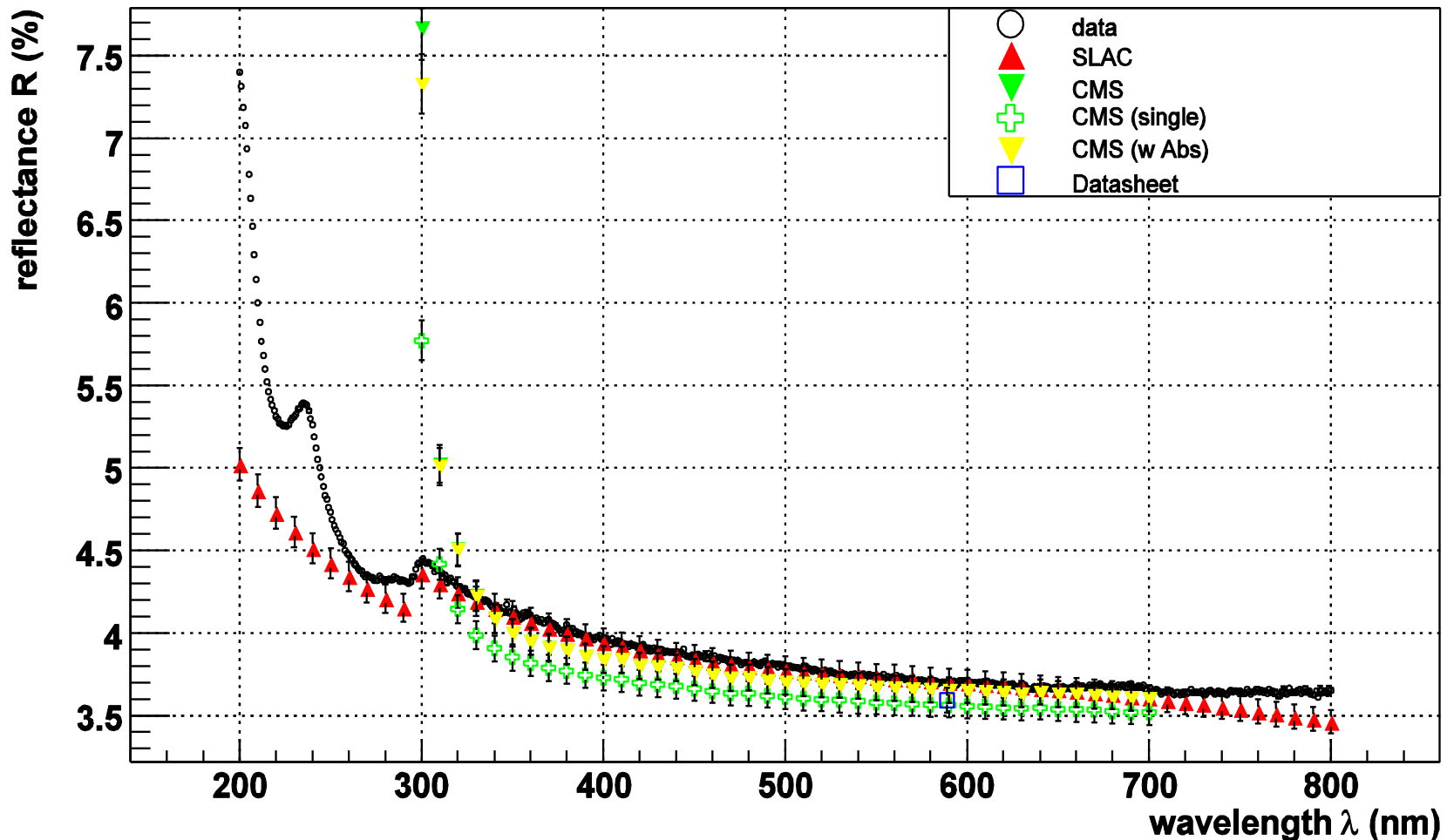
Non-Evacuated



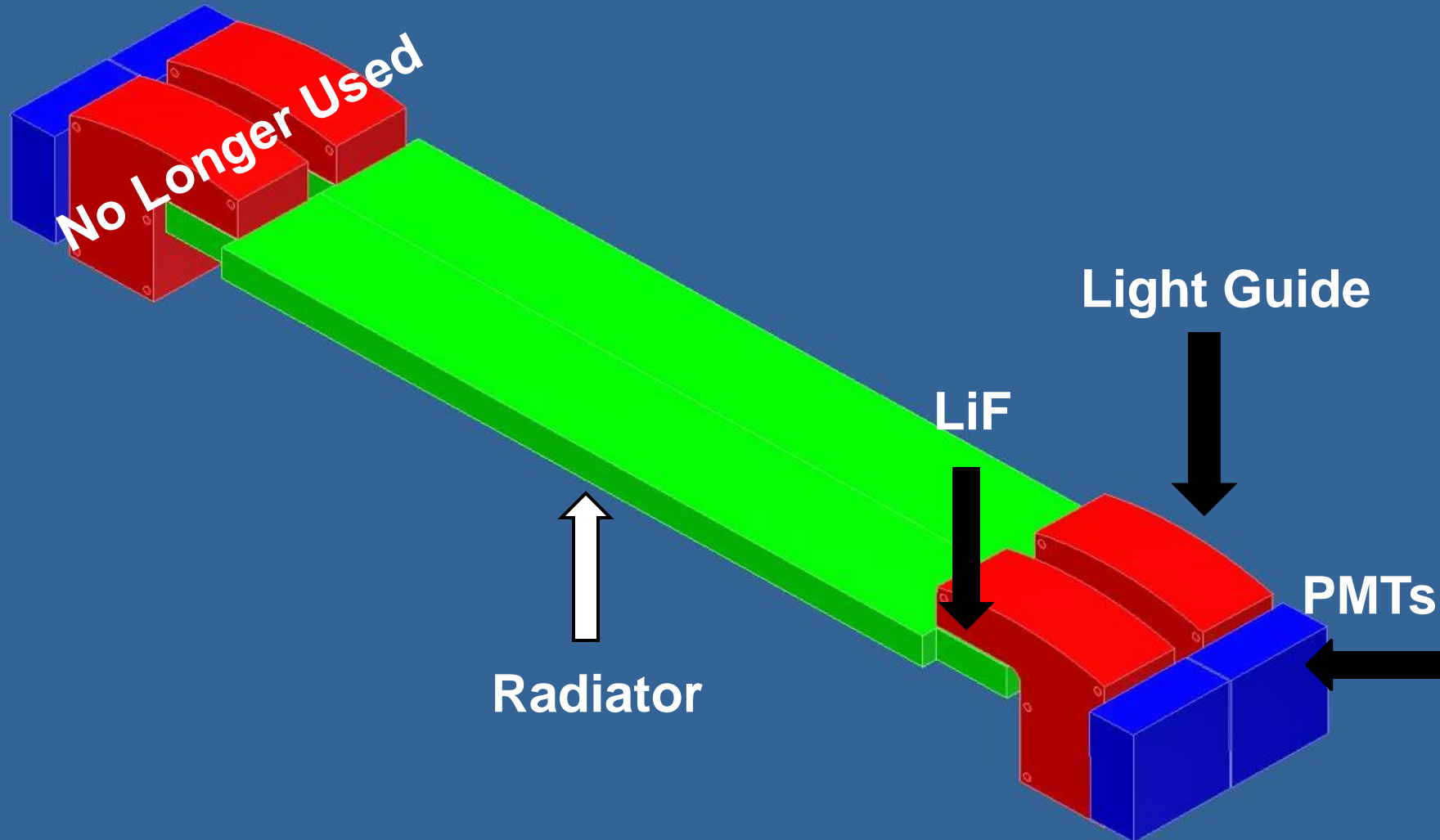
Evacuated

Reflectivity of Epotek 301-2

Epotek 301-2 reflectance



Prototype Design





Future work

- ⦿ Light yield measurements
- ⦿ Prediction of chromatic correction
- ⦿ Assembly and testing using full prototype
 - Photon transport
 - “Real” data
 - Pattern Recognition
 - Unforeseen Challenges