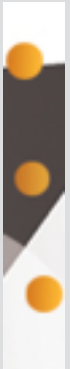


PLAsticiTY of P erceptual space U nder S ensorimotor interactions



**Research and Innovation
Staff Exchange (RISE) Call:
H2020-MSCA-RISE-2016**



A gap in the map: the blind spot

Task 2.1



- probe appears after 500-1100 ms
- probe size 2x2 pix
- present for 14ms
- slow stabilization



Signal to answer

- Joypad: left, right



Recalibration trial

- both targets 4x4 pix
- different intervals



Data Exclusion

- Exclusion of trials during which 100 ms before and after stimulus presentation
 - velocity exceeded 120 arcmin/s
 - blinks
 - no-tracks
 - saccades
- xshift in test calibration > 10 arcmin

Set Up

- Monitor at 80 cm distance \rightarrow .9636 arcmin/pixel
- Darkened Room
- Wireless Joypad





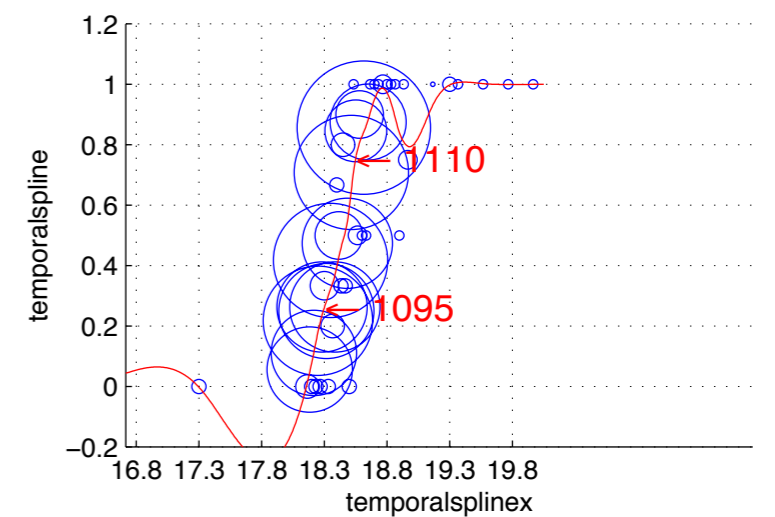
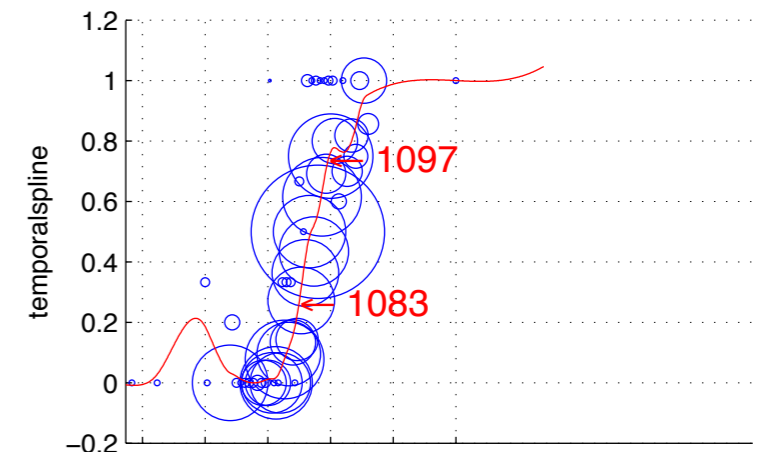
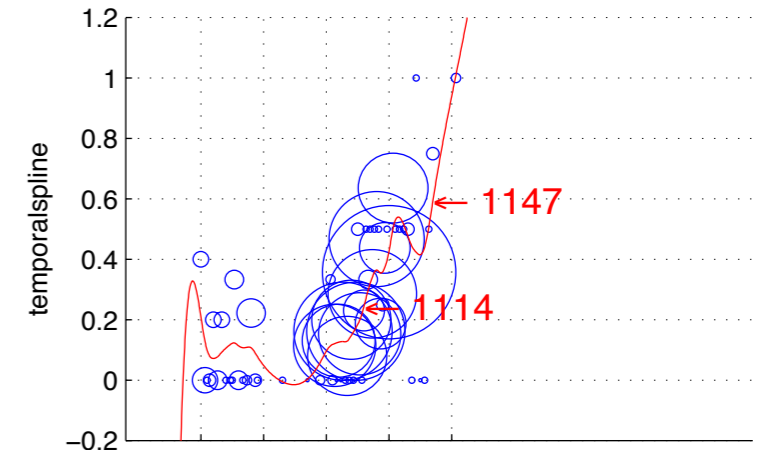
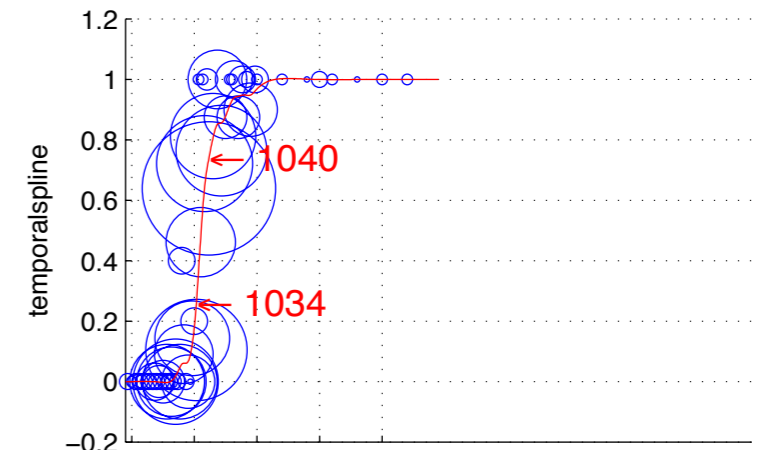
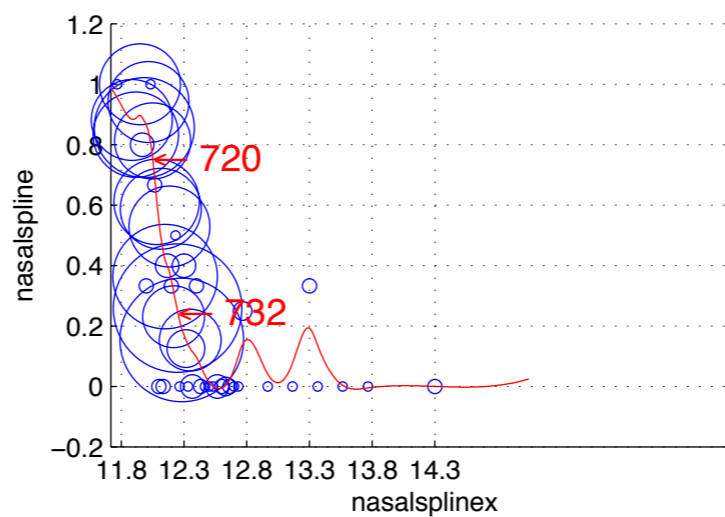
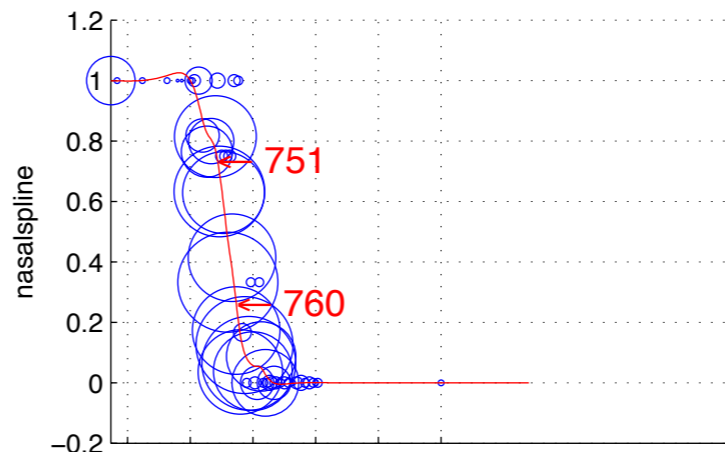
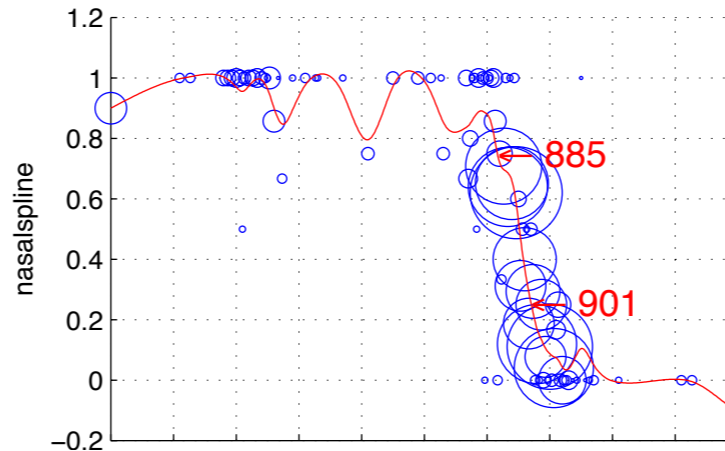
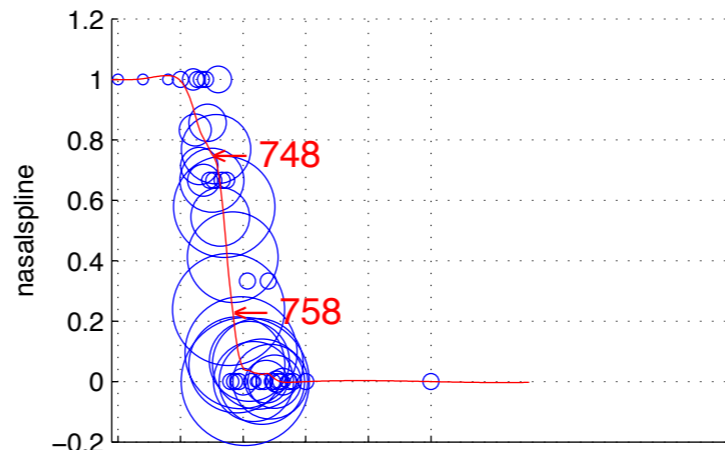
Raw Data in pixel

780 trials AM

1166 trials GM

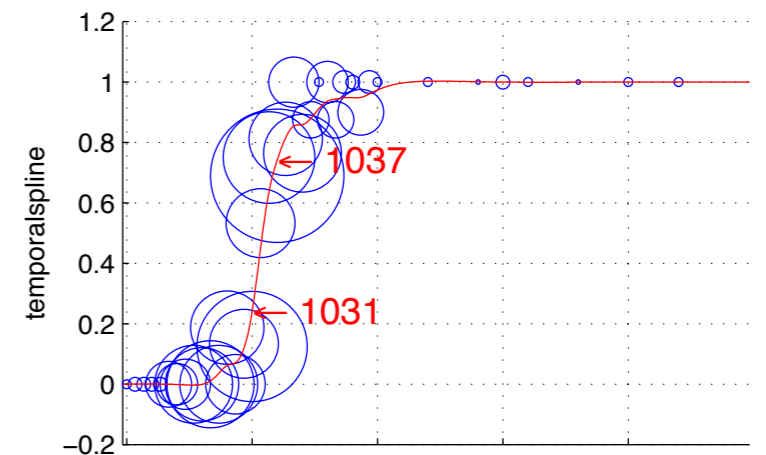
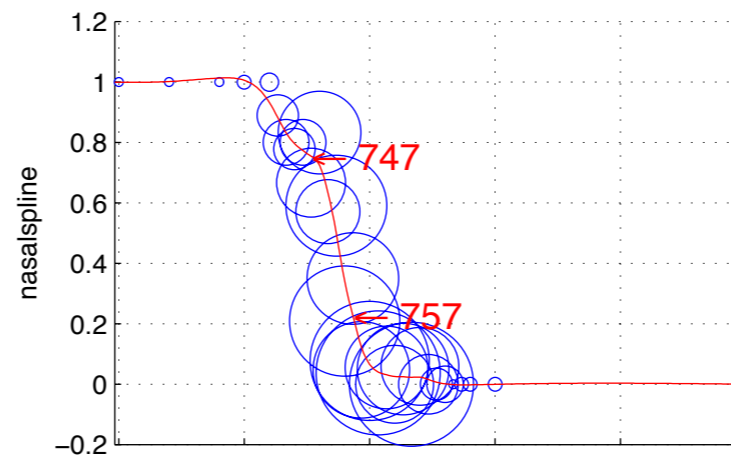
1122 trials RE

736 trials KS

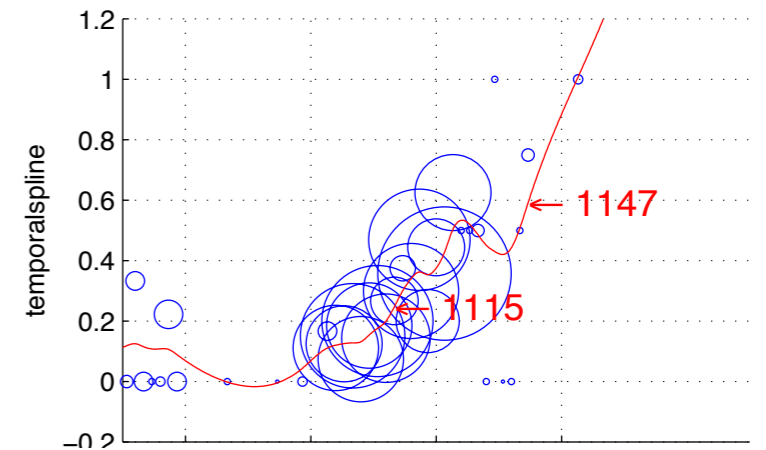
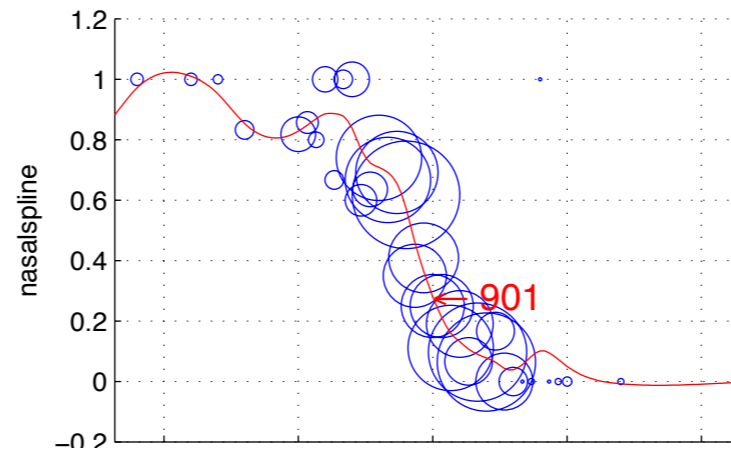




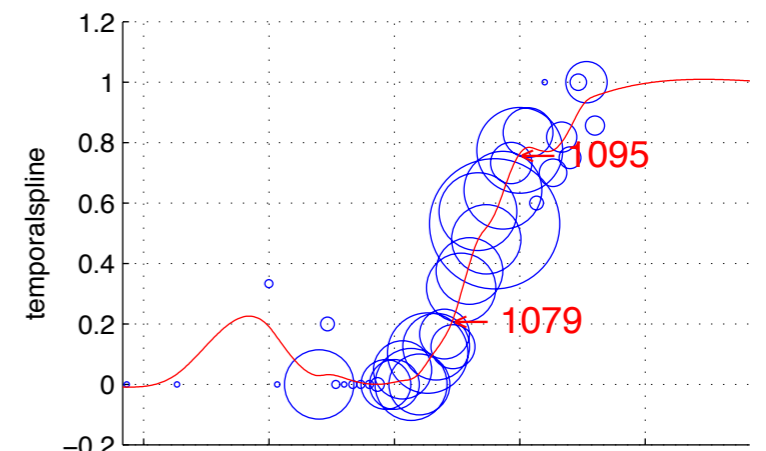
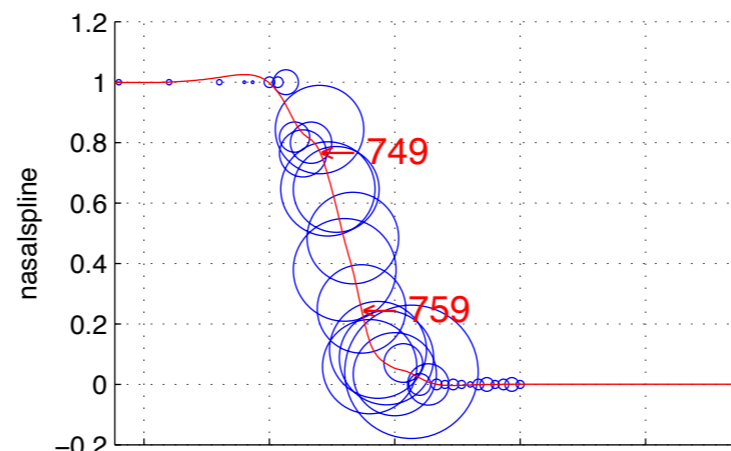
Data in arcmin AM



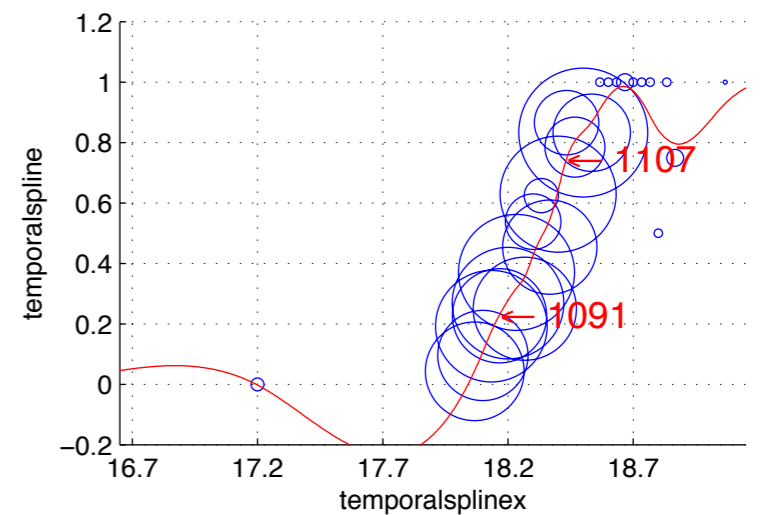
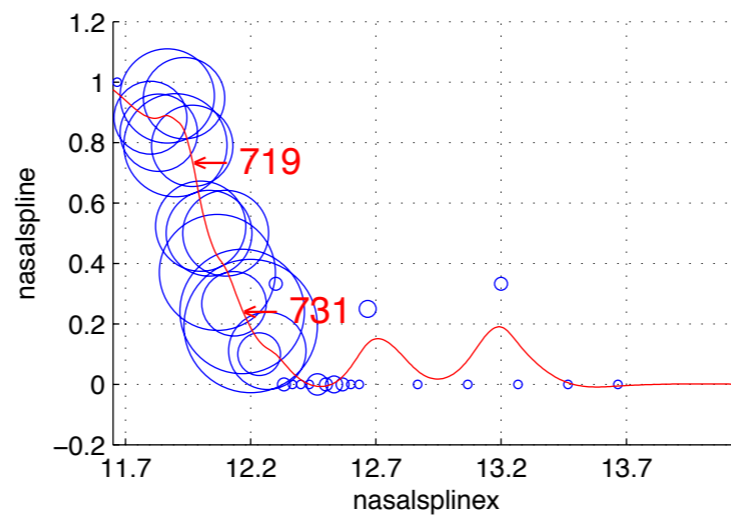
GM



RE



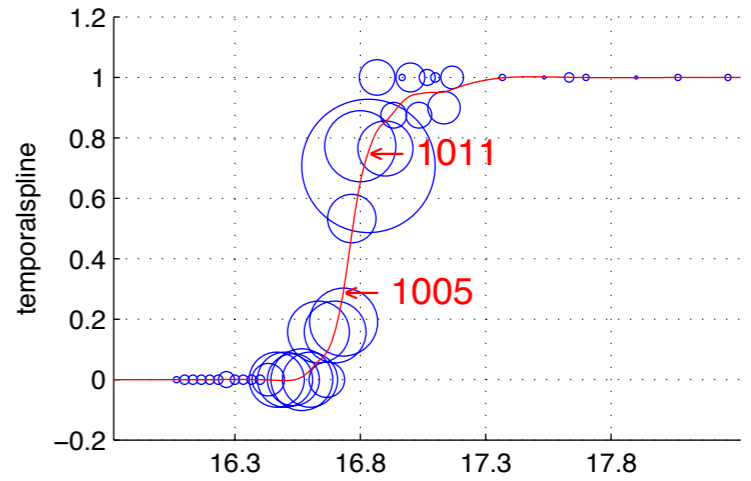
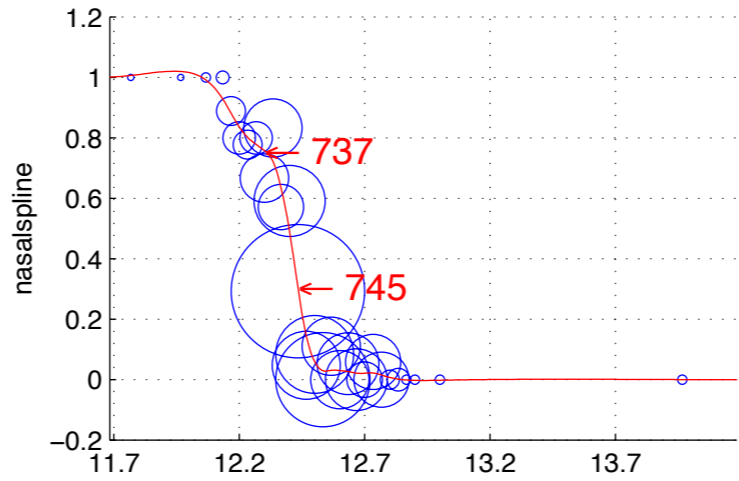
KS



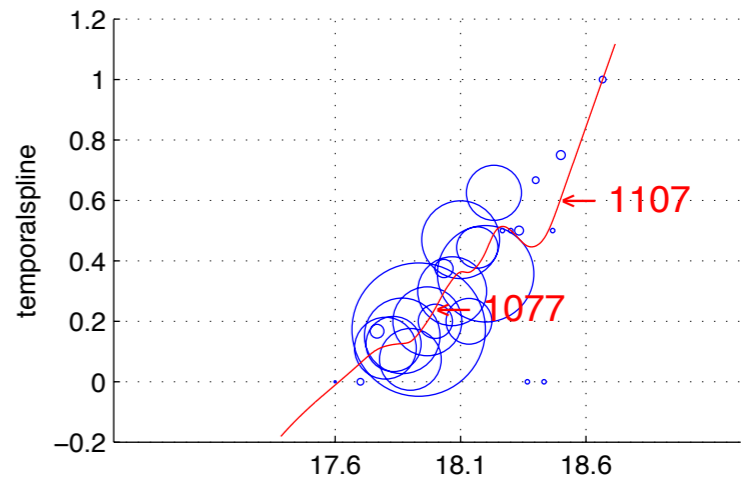
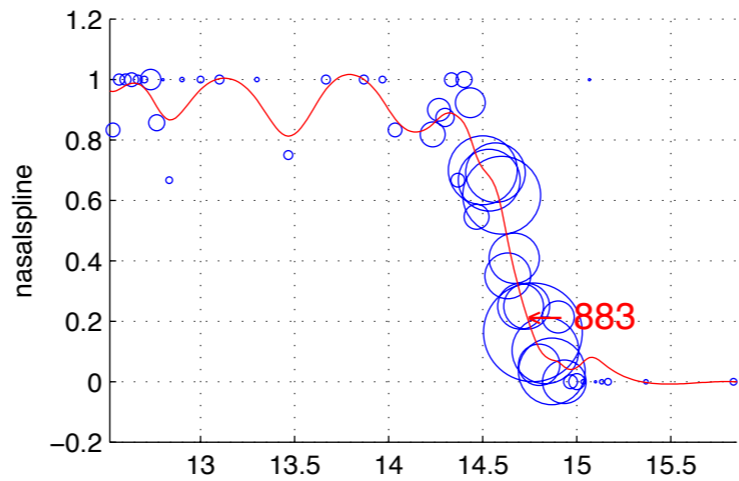


Data in
corrected
arcmin

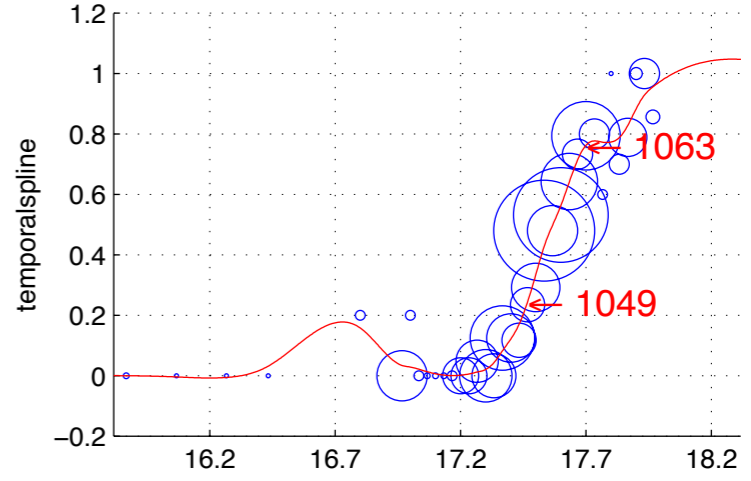
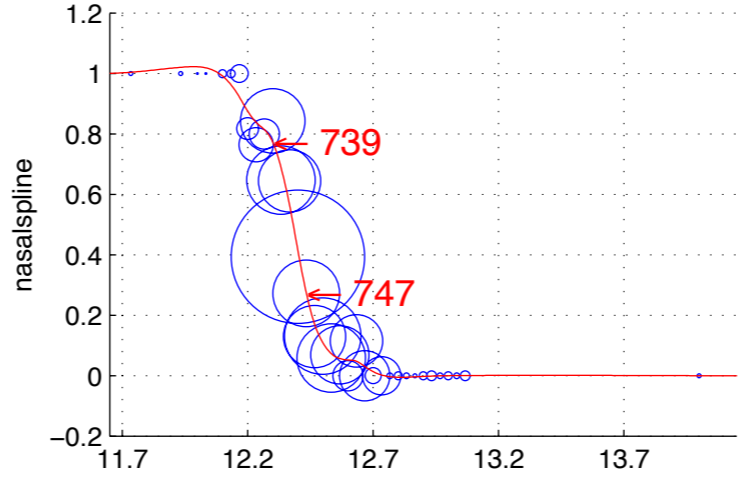
AM



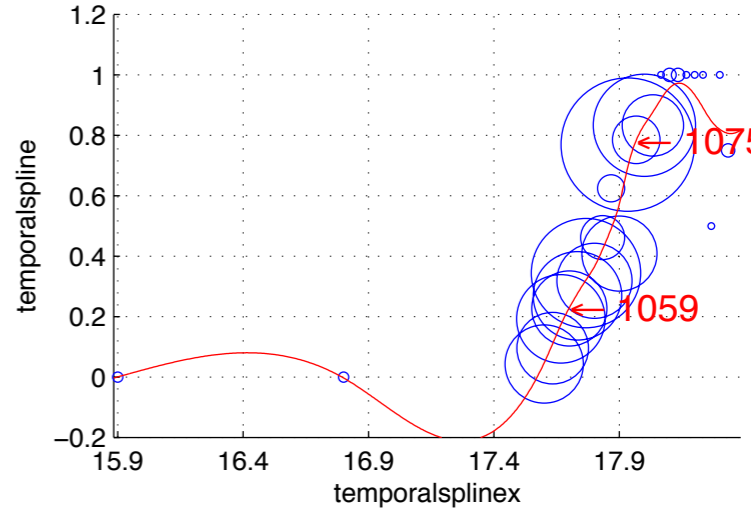
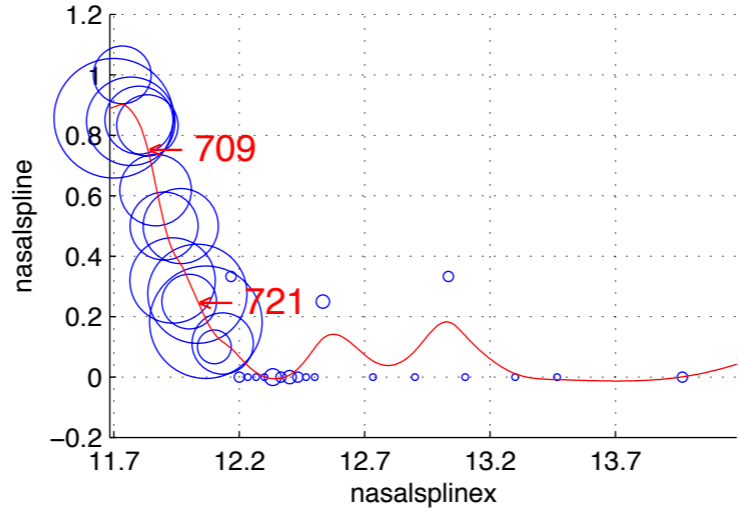
GM



RE

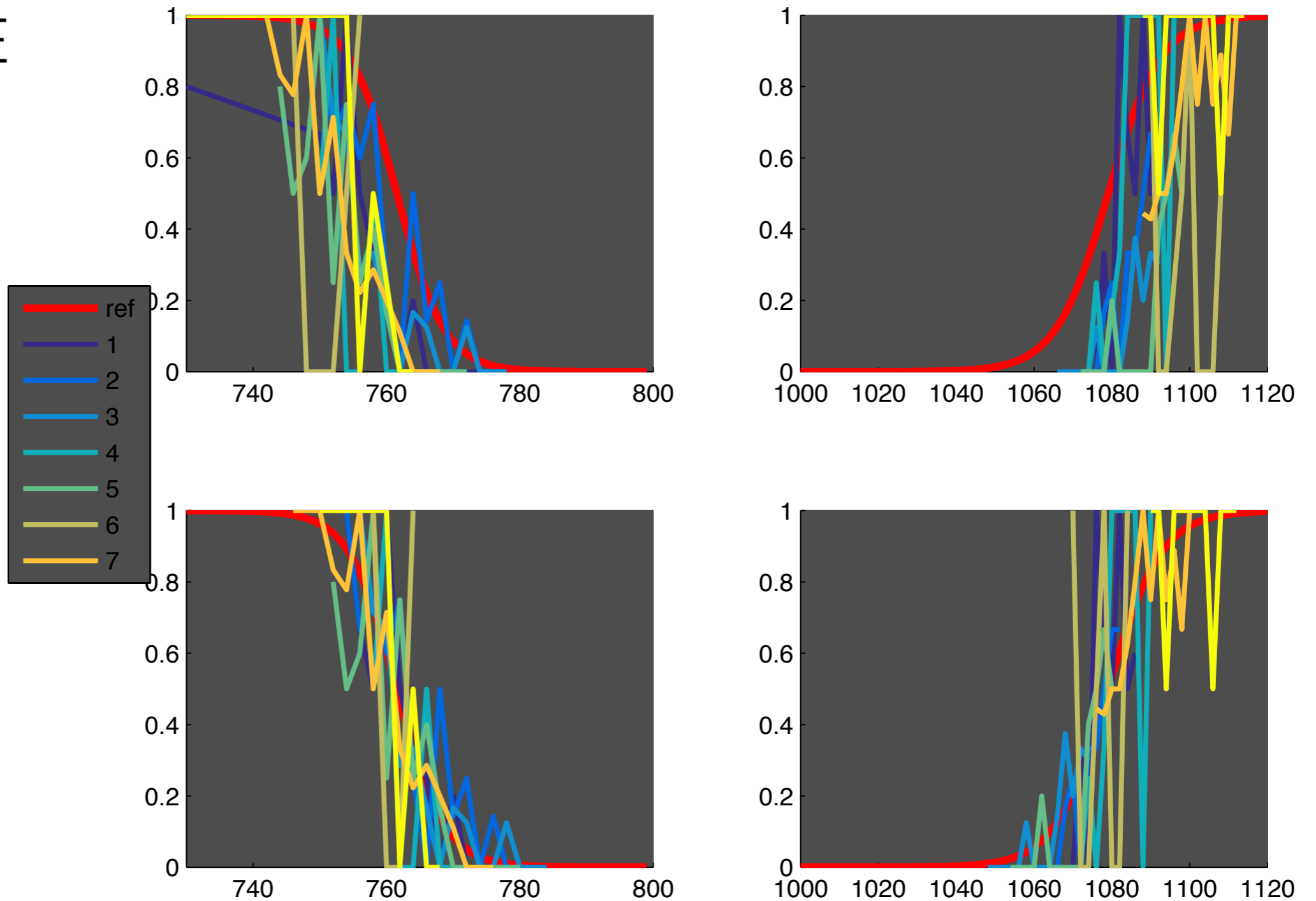


KS



Alignment of Data

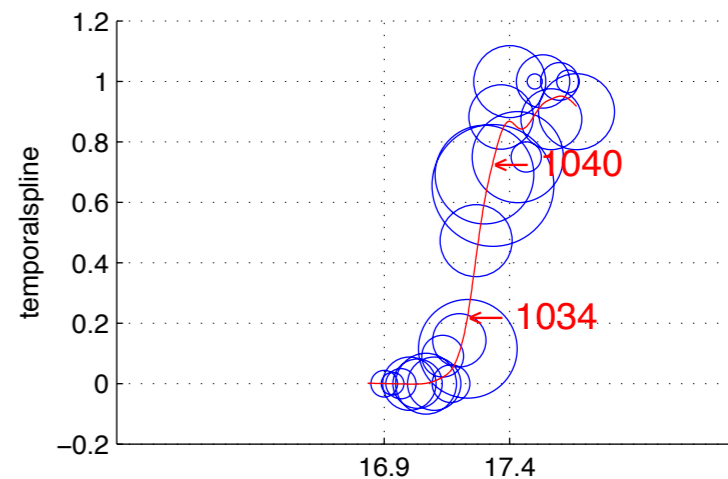
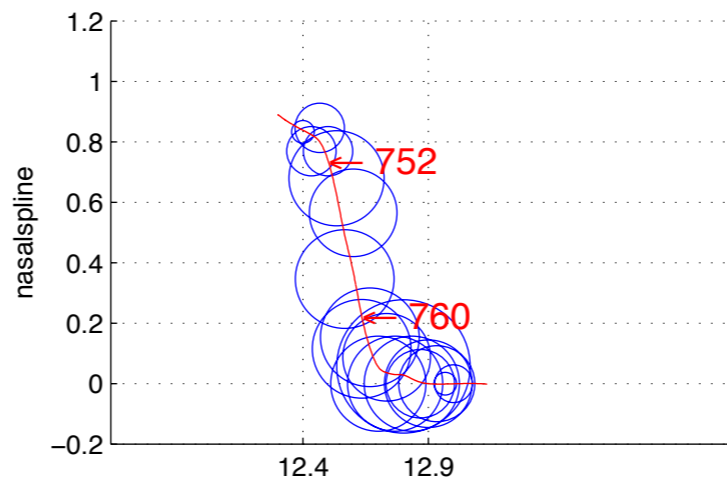
Subject RE



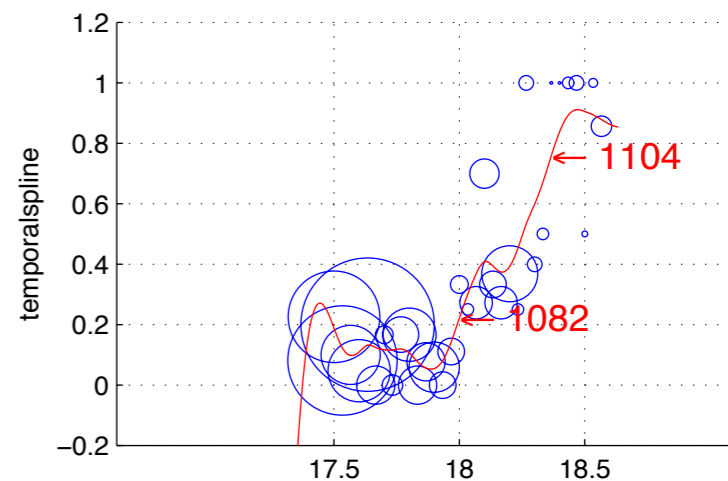
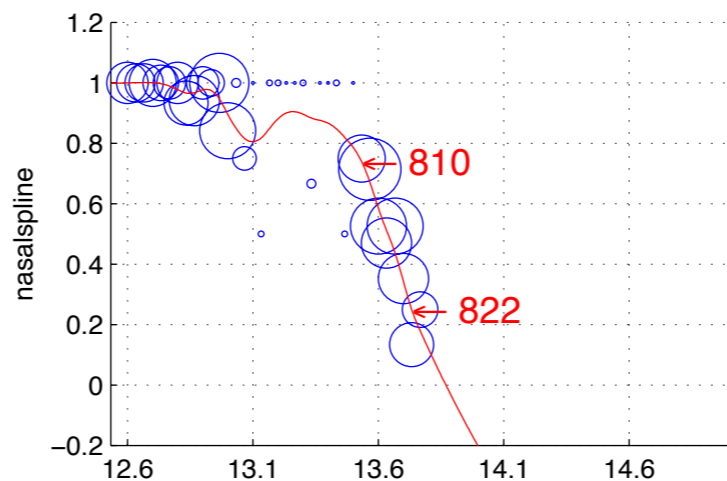


Aligned Data

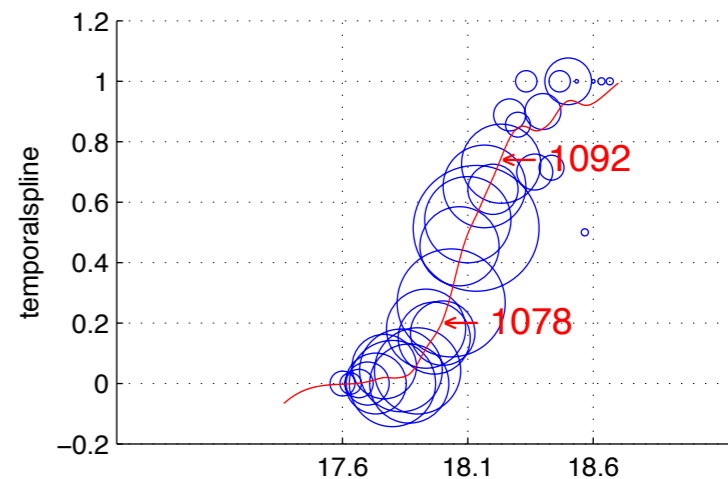
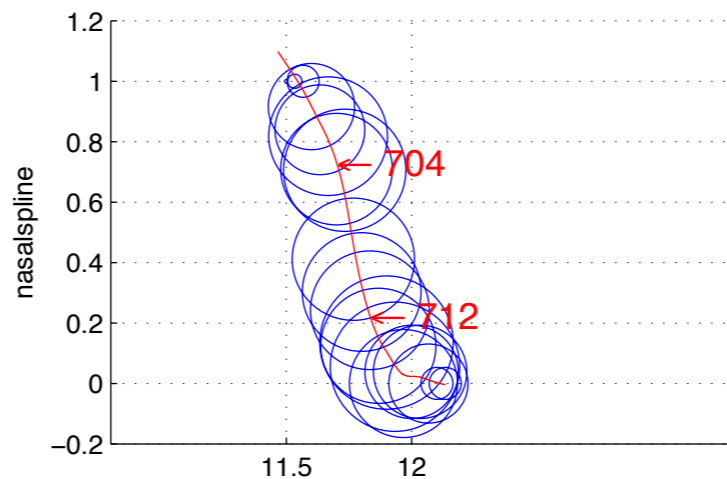
AM



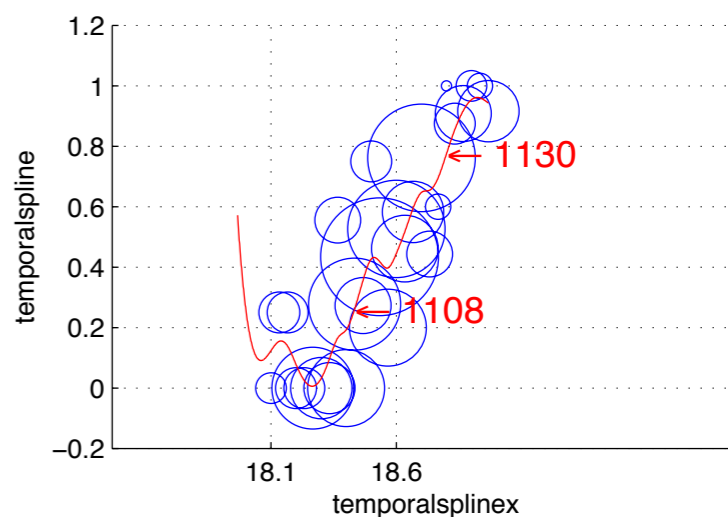
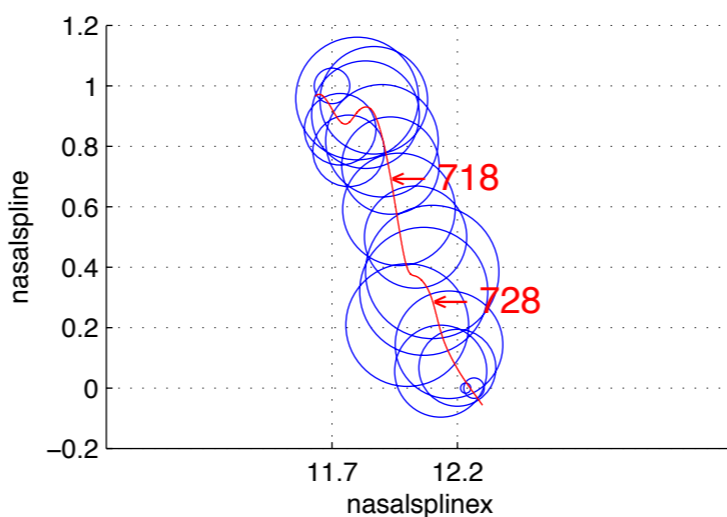
GM



RE

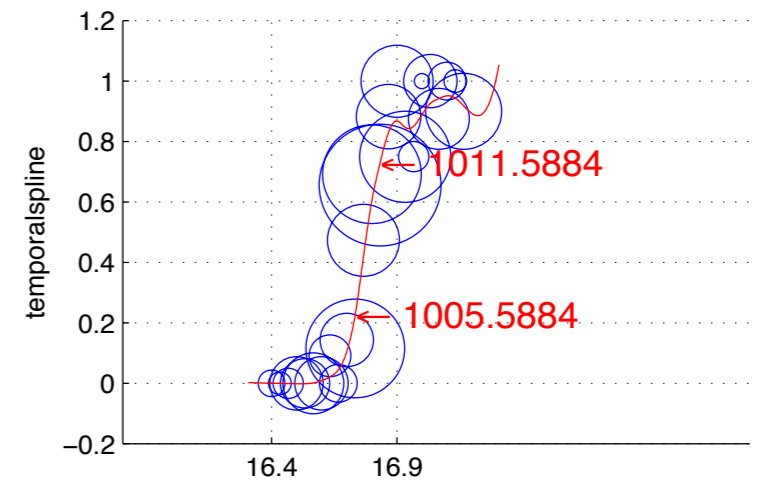
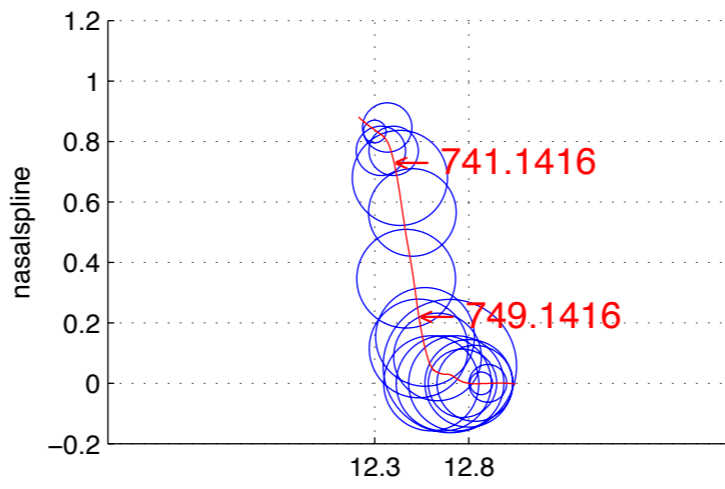


KS

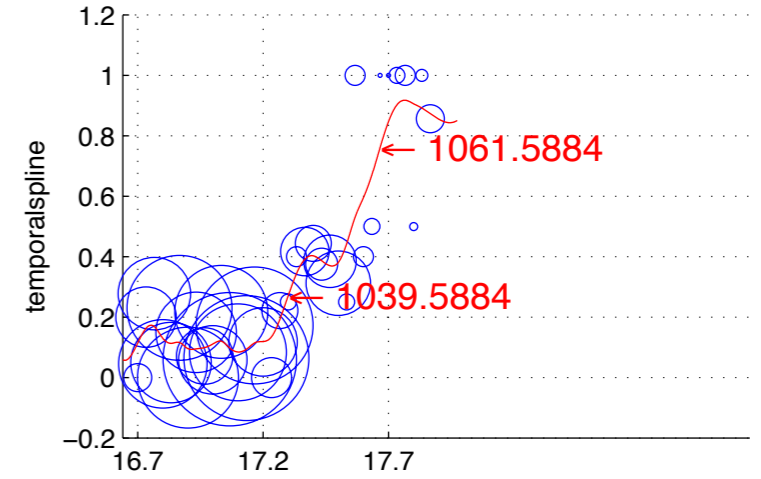
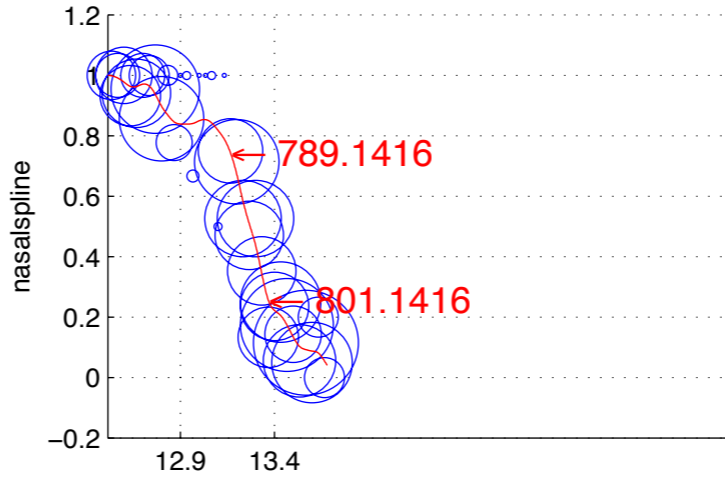


Corrected Aligned Data

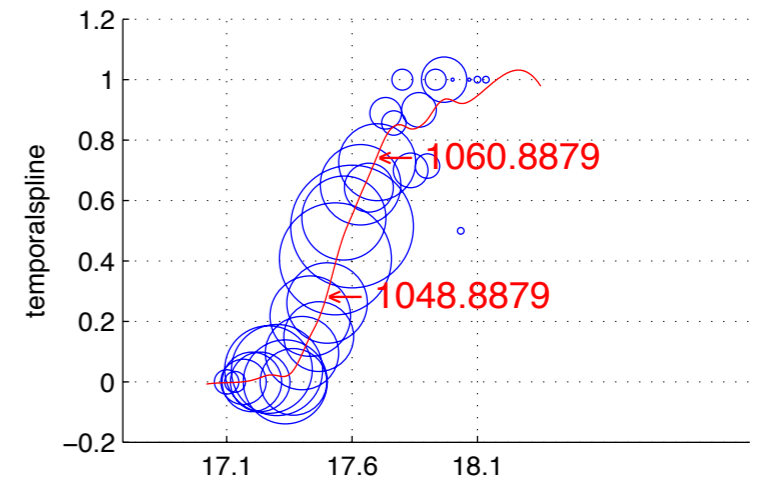
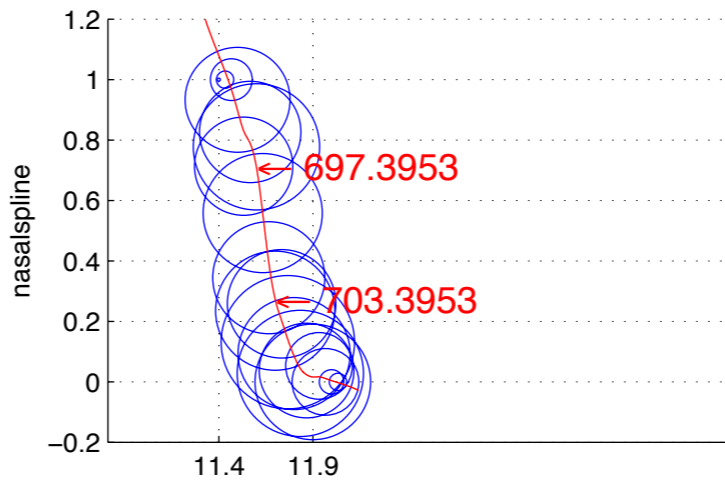
AM



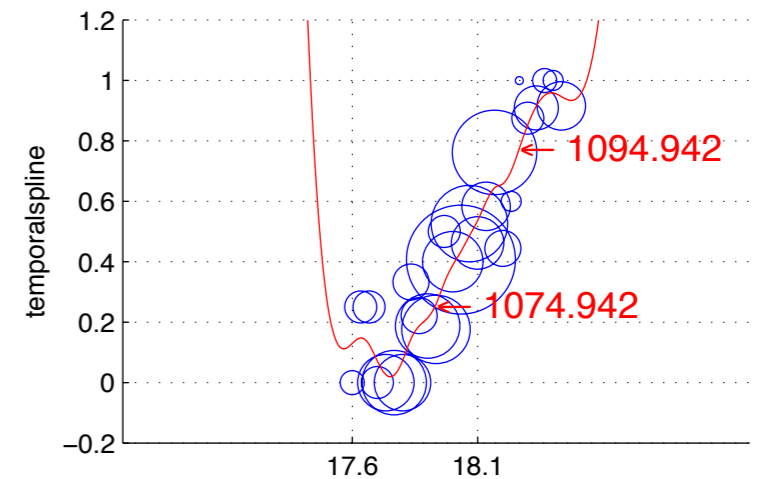
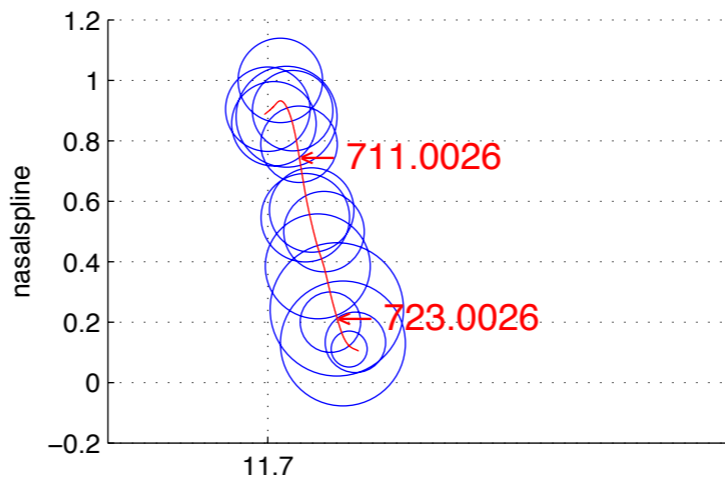
GM



RE



KS

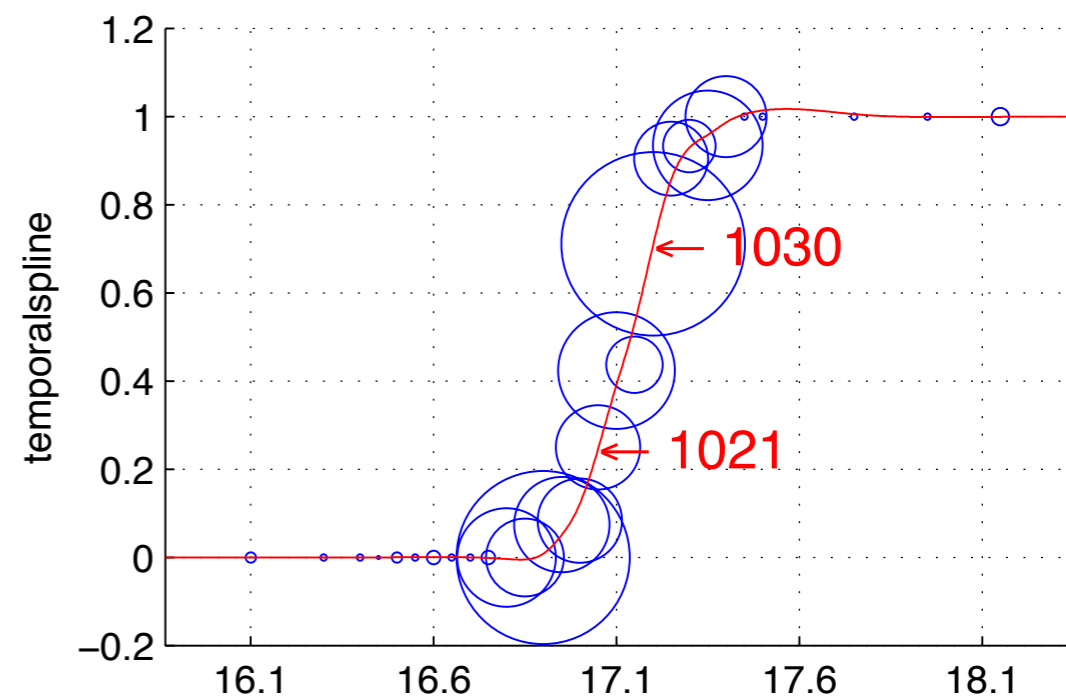
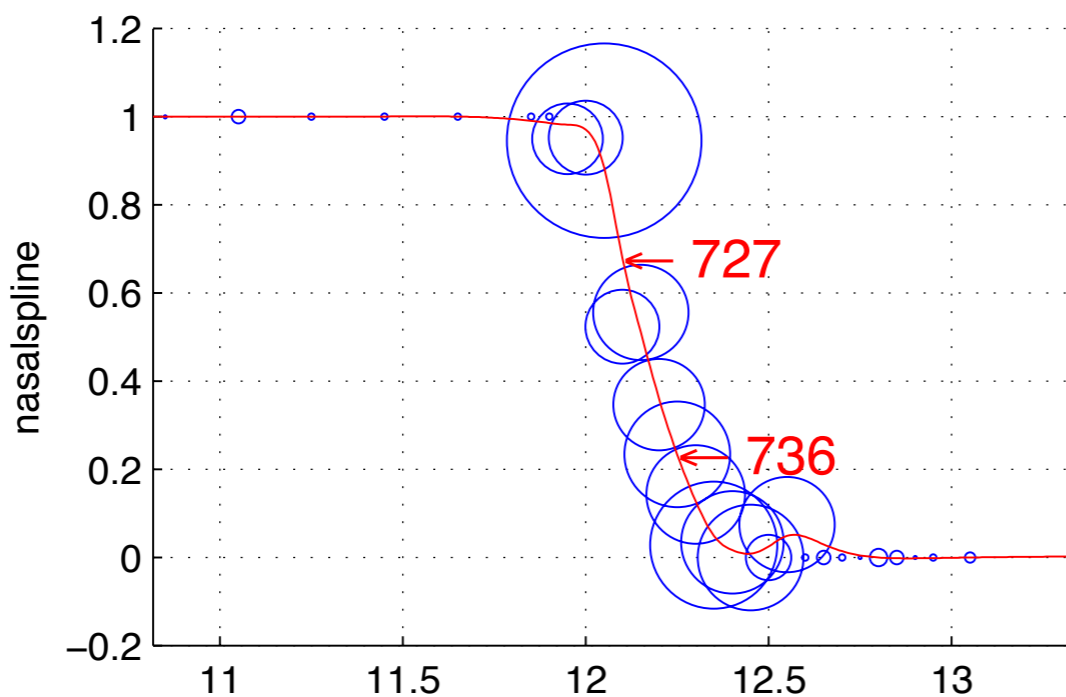


Comparison DPI and dDPI

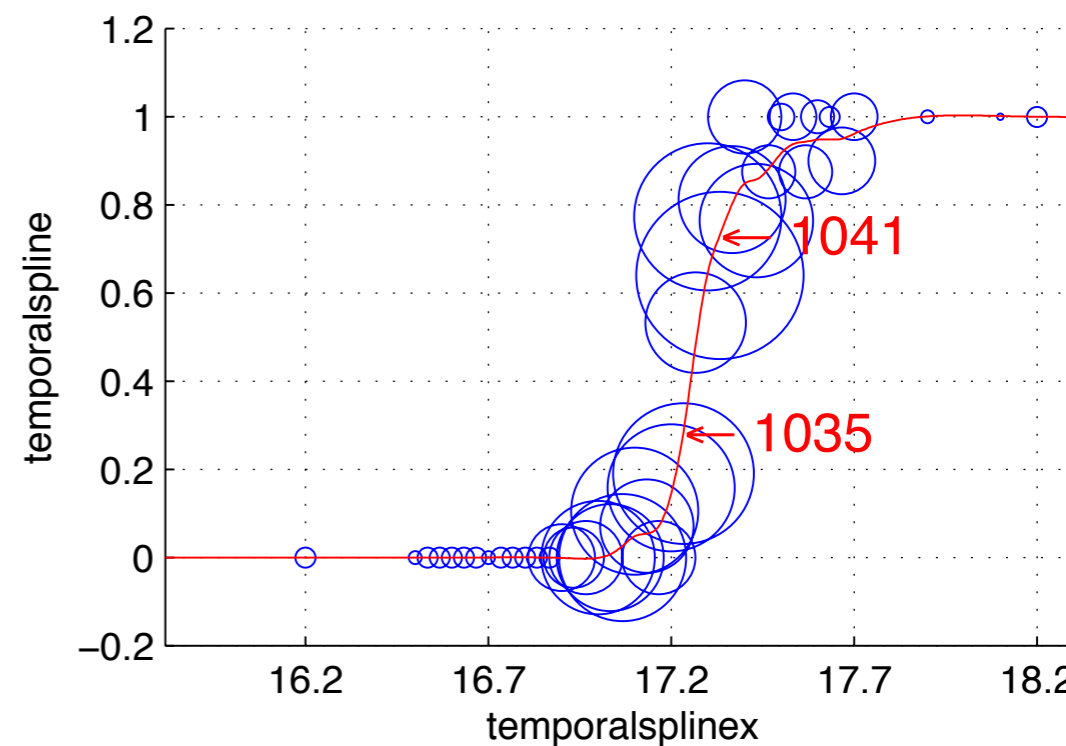
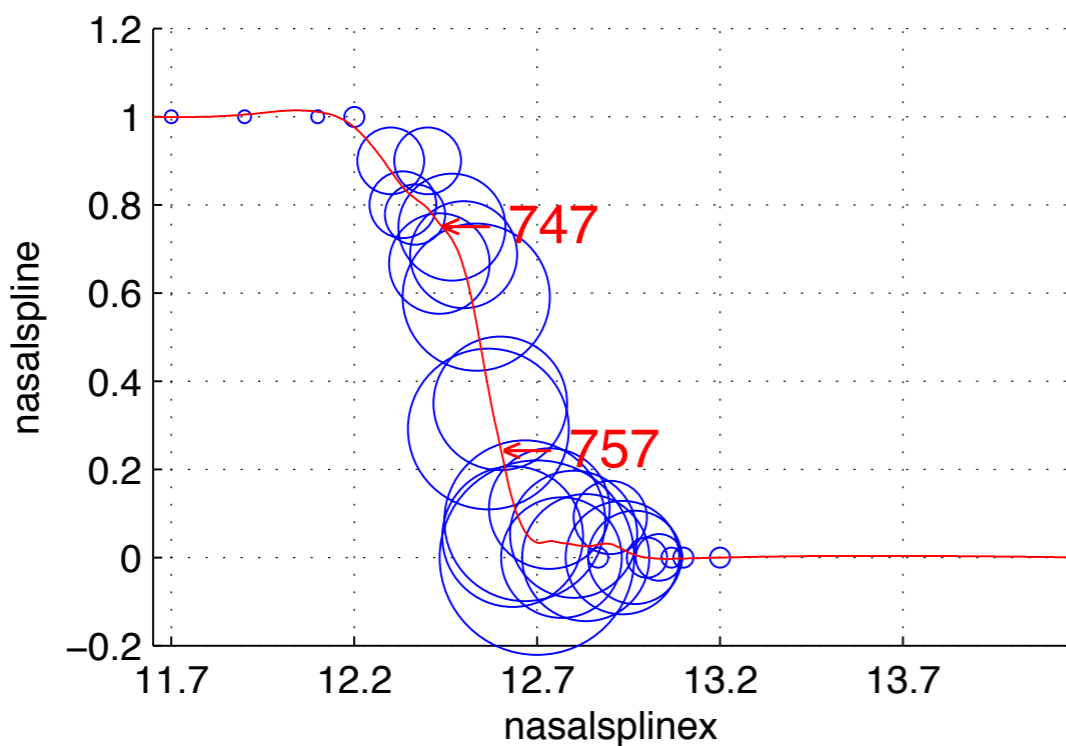
subject

AM

DPI

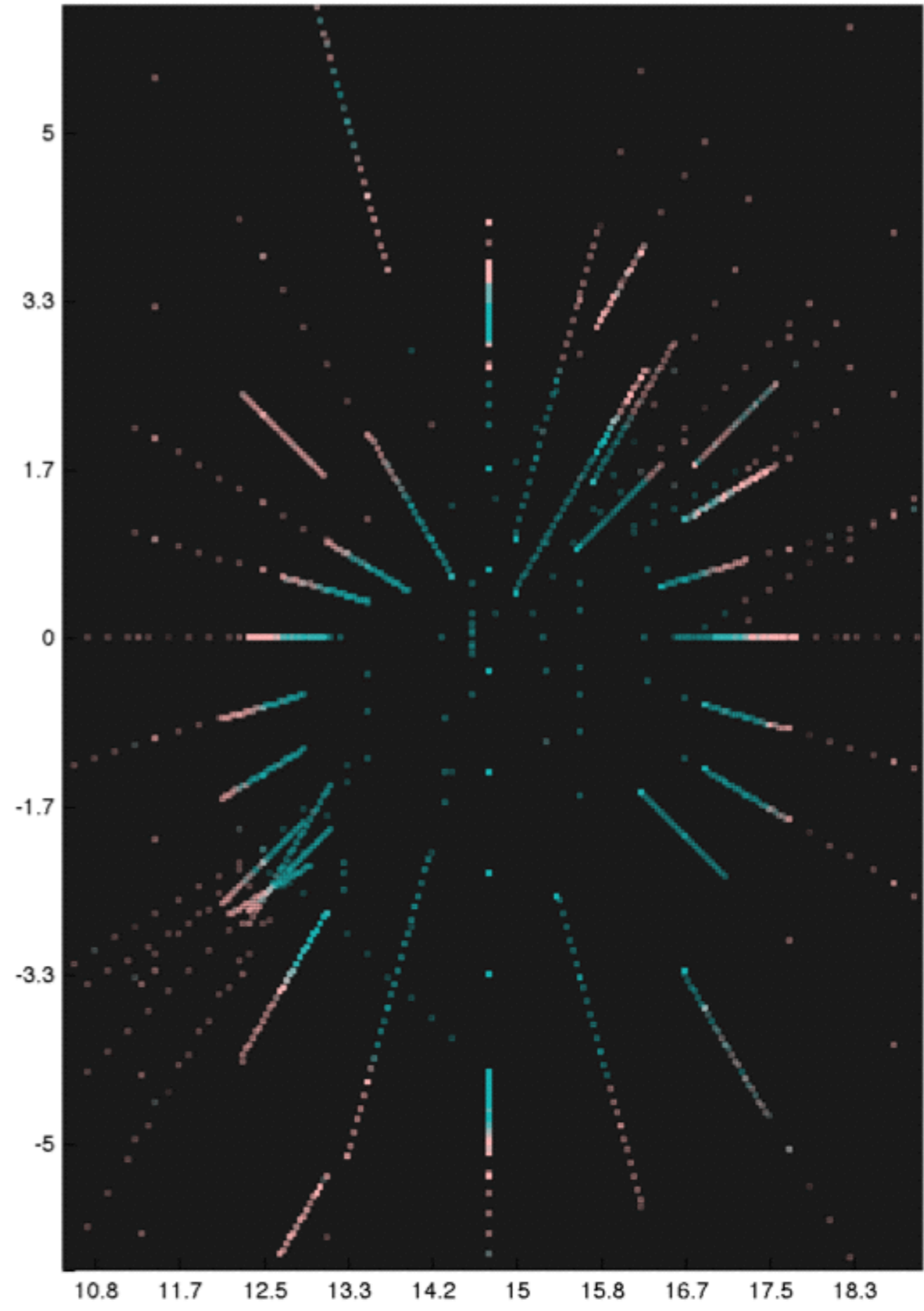


dDPI





BlindSpot AM





Ideas for Experiments

- **What is the contribution of eye movements (microsaccades, drifts) to the filling in process at the blind spot border?**
 - apparent motion within blind spot border and across blind spot borders
 - thinking about blind spot in 3D- stereo vision
 - blind spot and color perception- is the filling in process barely due to its absolute retinal stability?
 - half stabilization of e.g. pattern across blind spot borders —>filling in?