BPR toolbox tutorial

Correction results and simple description

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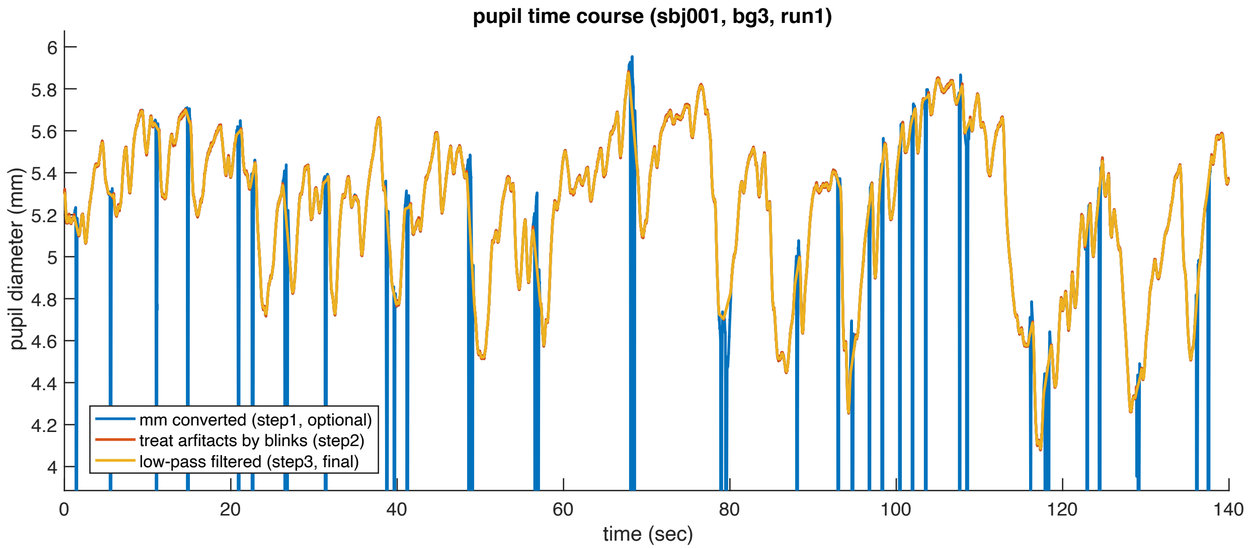
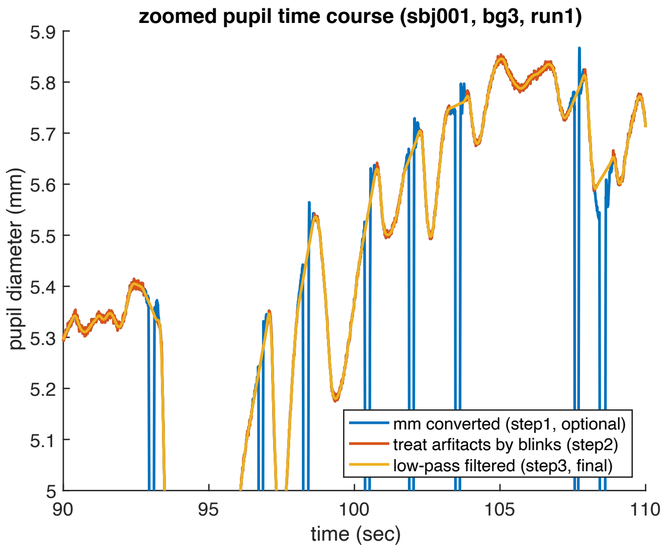
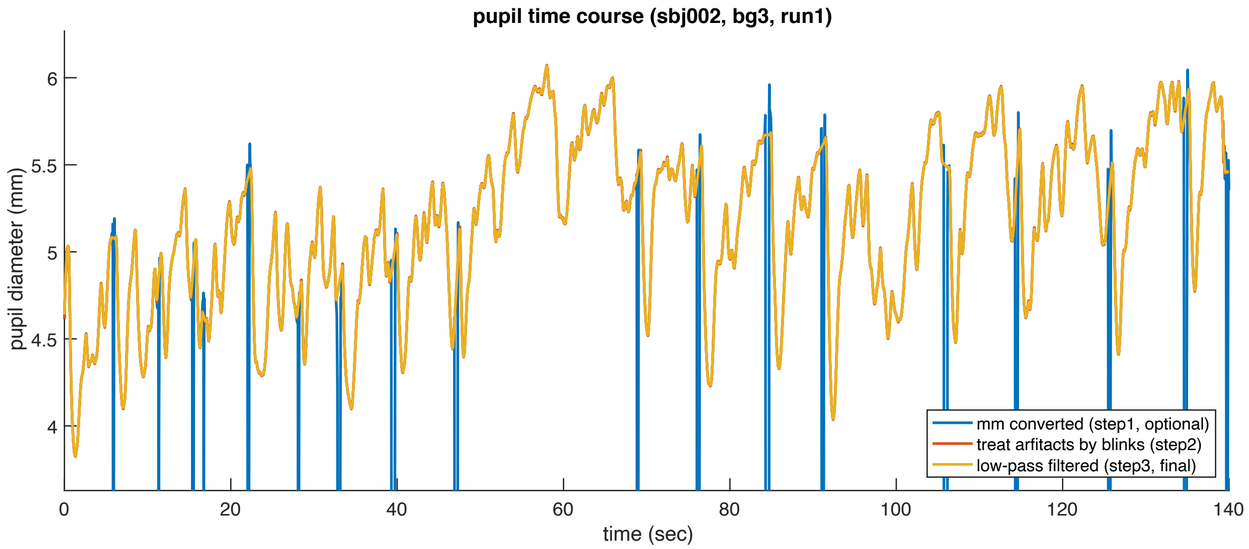
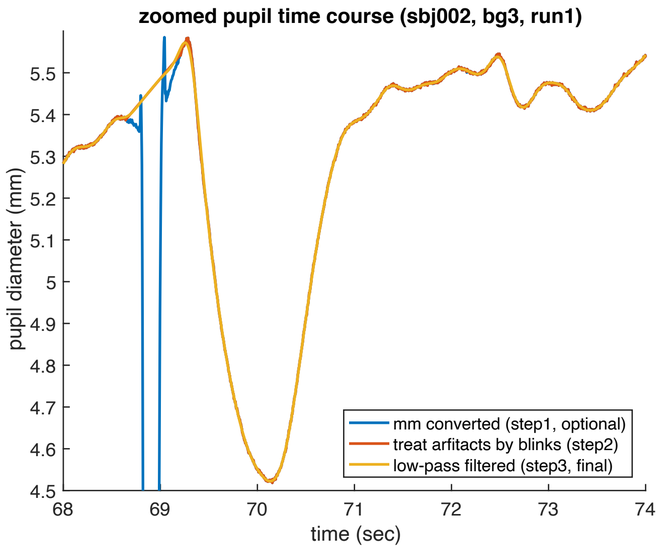


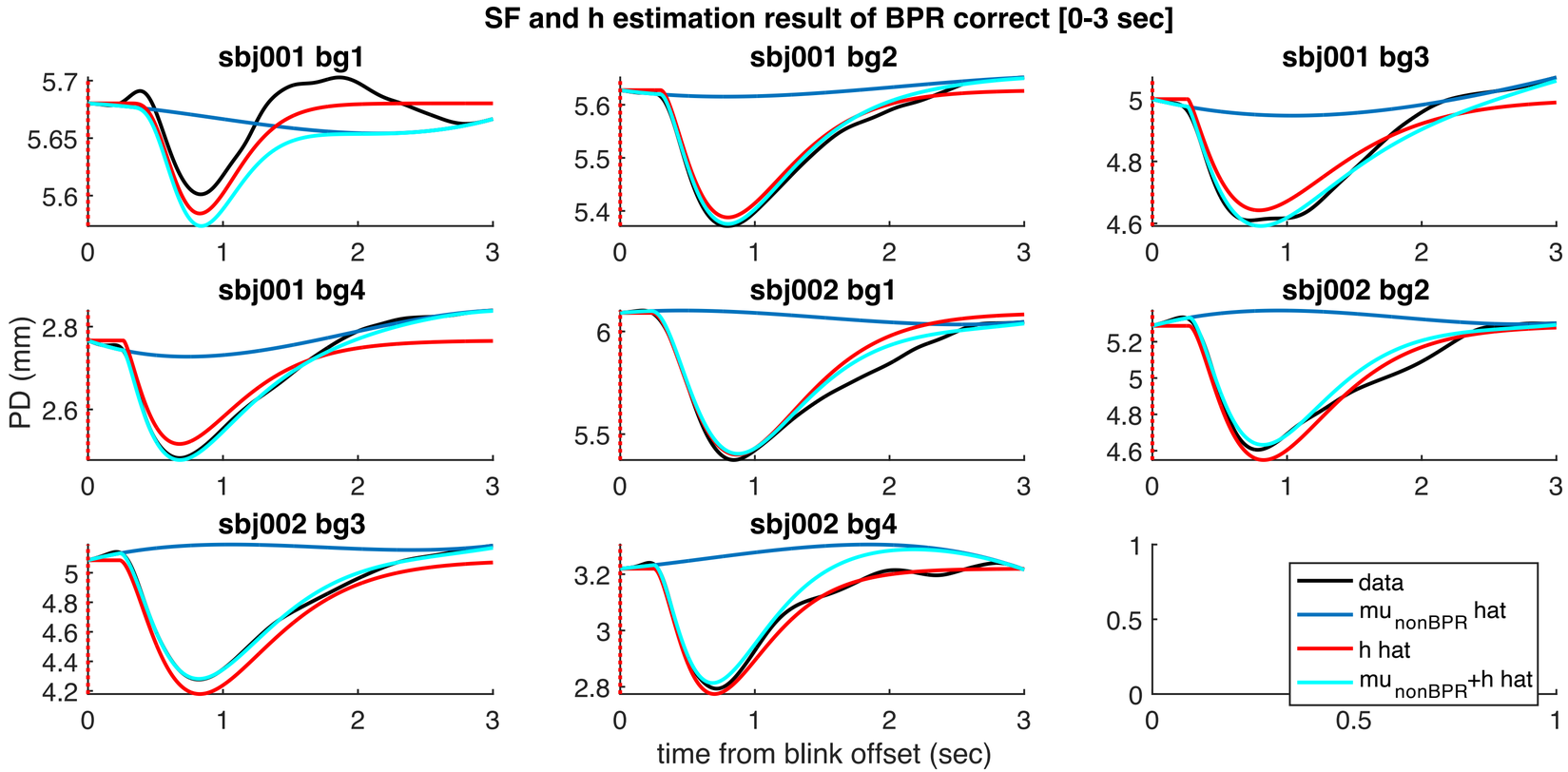


Example of first subject result: You can see the characteristic shape of BPR after each blink.
Blink artifacts were removed (step 2), and high-frequency noise was reduced (step 3)

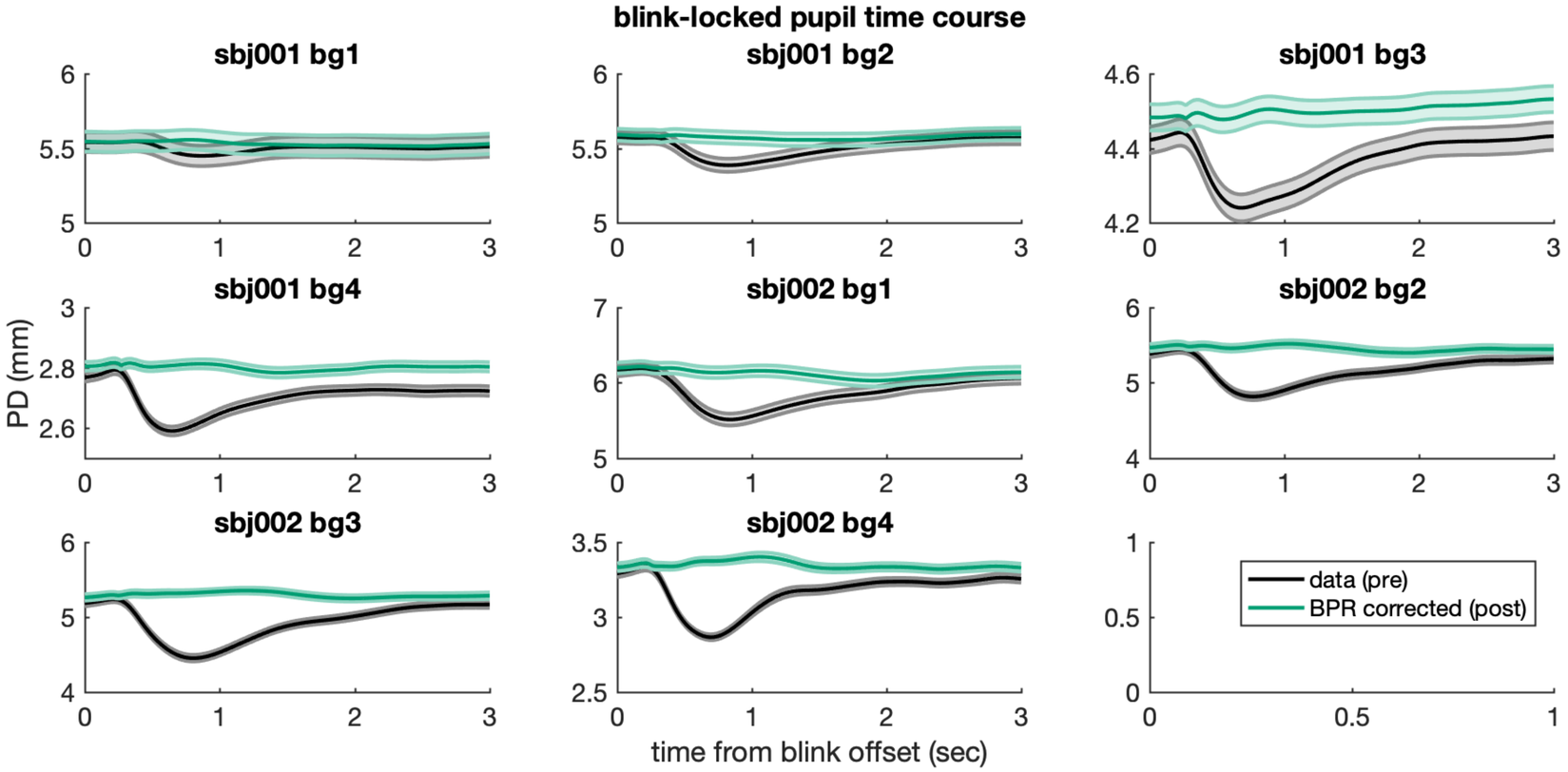




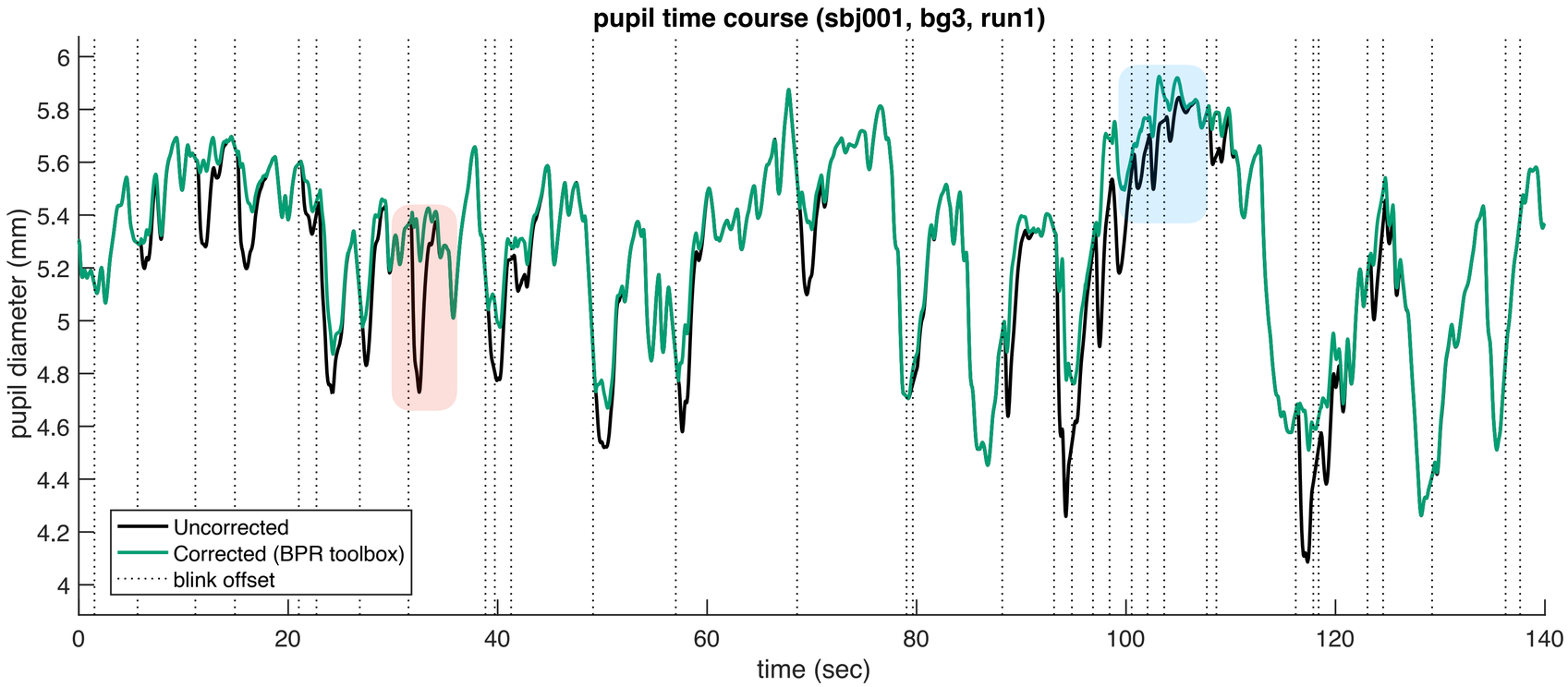
Example of second subject result: This subject had deeper BPR.
You can see the blink artifacts were removed (step 2), and high-frequency noise was reduced (step 3) as well.



BPR profile fitting: The blue line is estimated mean of non-BPR component, and red line is estimated BPR profile, ***h***.
We estimate parameters of BPR profile such that the sum of non-BPR component mean and BPR profile address maximally the blink-locked pupil time course (black line)
The cyan fits well to the black line, so we think the BPR profile, ***h***, (red line) seems to be estimated appropriately.



Visually inspection of blink-locked time course:
We expected the characteristic BPR shape to be removed and flattened, and the result shows it actually worked.



Example of BPR correction results of first subject:
You can see that the pupil time course confounded by BPR is corrected.
The amplitude of confound was estimated blink-by-blink, so small BPR (blue shade) was corrected small, large BPR (red shade) was corrected largely.

Example of BPR correction results of second subject:
You can see that the pupil time course confounded by BPR is corrected as well.
Small BPR (blue shade) was corrected small, large BPR (red shade) was corrected largely.