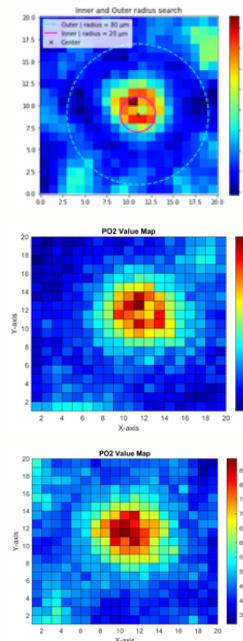


## The **Observation**: pO2 Map



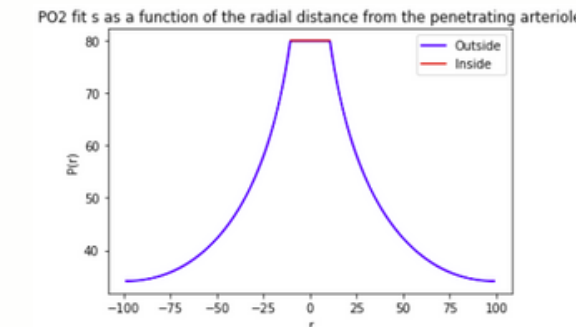
•  
•  
•

Assimilation of the O2 map  
to  
correct **M**

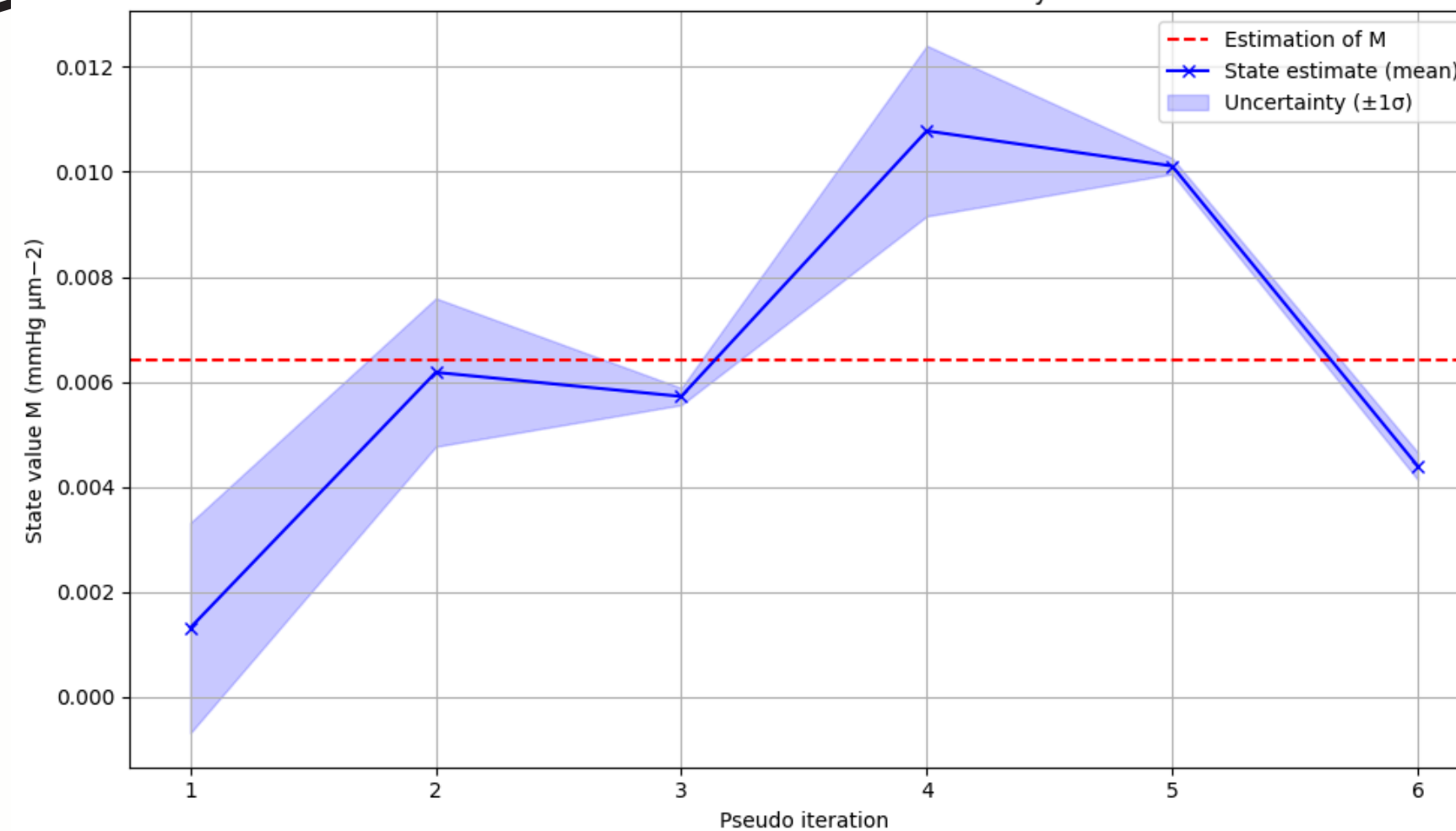
The **Analysis**: Best  
Estimate

## The Background: **Model**

$$p(r) = p_{vessel} + \frac{M}{4}(r^2 - r_{in}^2) - \frac{Mr_{out}^2}{2} \ln\left(\frac{r}{r_{in}}\right)$$



EnKF State Estimation with Uncertainty



The ratio M is:  $6.421275316096428 * 1e-3$   
 $\sqrt{(\text{Cov})}$ :  $0.9524859781971051 * 1e-3$