

## Observation handling

Size  $N_y$  of vector  
of observations

Initialize vector of  
observations

Apply observation  
operator  $\mathbf{H}(x)$

Observation error  
covariance matrix  
(multiply or add)

Pre- & post-  
processing

Model fields to  
state vector

**PDAF filter  
analysis**

State vector  
to model fields

## Treat localization

Local size of  
state vector

Global to local  
ensemble

Number of local  
observations

Local observed  
ensemble

Fill local vector of  
observations

Local to global  
ensemble

