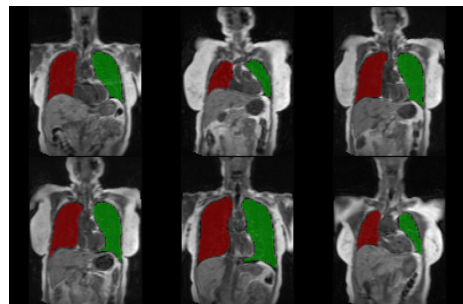
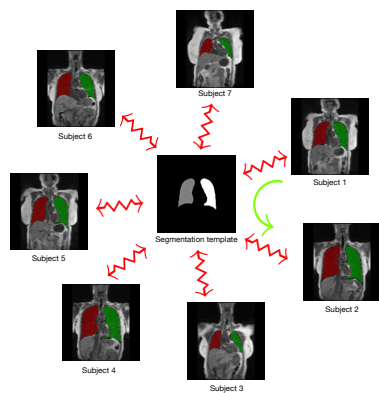


### Proton model training



Training data

+



Data augmentation

### Ventilation model training

+

Training data

Data augmentation

*Offline processing*

*Individual subject processing*

### Preprocessing

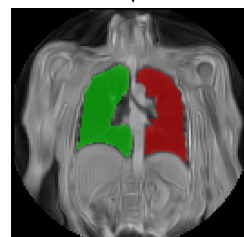


Proton MRI



N4 + Denoising

Proton U-net  
model



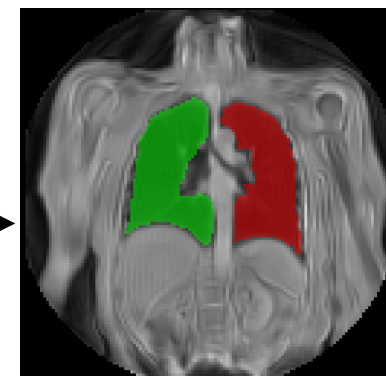
Predicted lung mask

### Preprocessing

Ventilation MRI

N4 + Denoising

Ventilation U-net  
model



Predicted ventilation  
segmentation