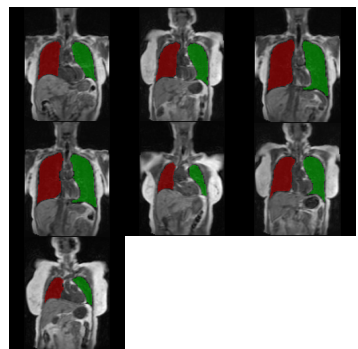
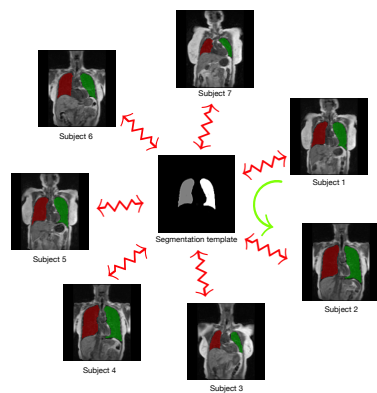


Proton model training



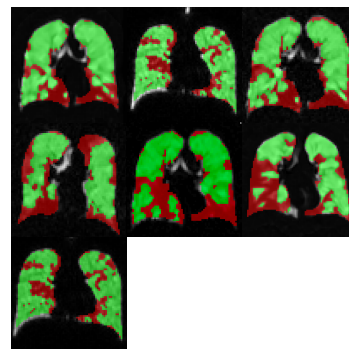
Training data

+



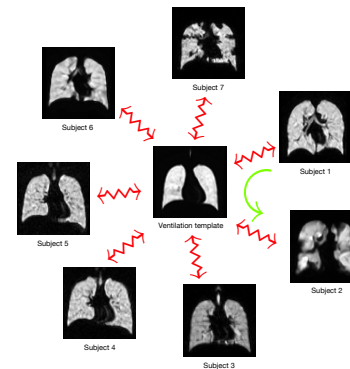
Data augmentation

Ventilation model training



Training data

+

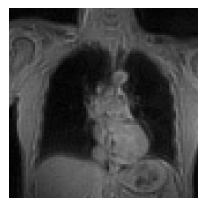


Data augmentation

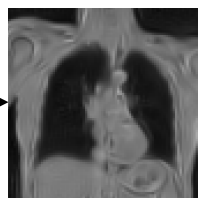
Offline processing

Individual subject processing

Preprocessing

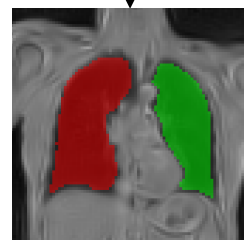


Proton MRI



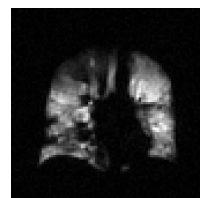
N4 + denoising

Proton U-net
model

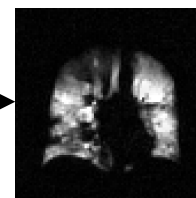


Predicted lung mask

Preprocessing

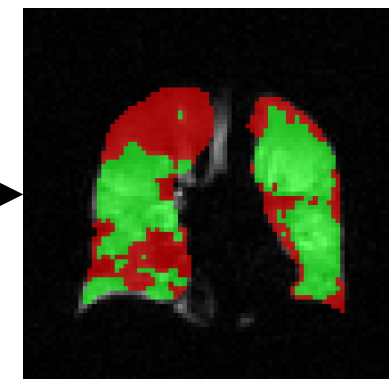


Ventilation MRI



N4

Ventilation U-net
model



Predicted ventilation
segmentation