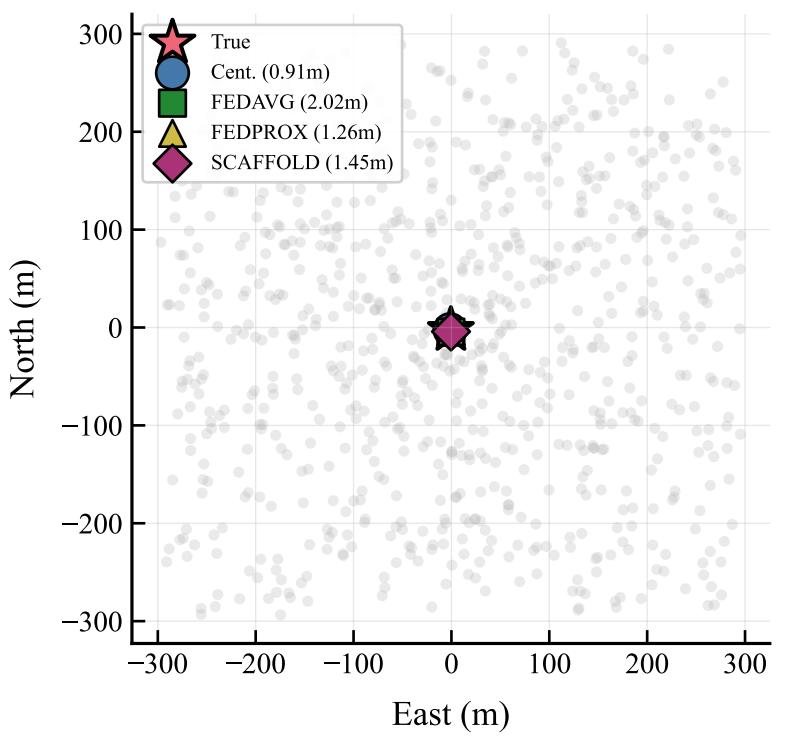


## Stage 2: Localization Summary — Open Sky

**(a) Localization Results**



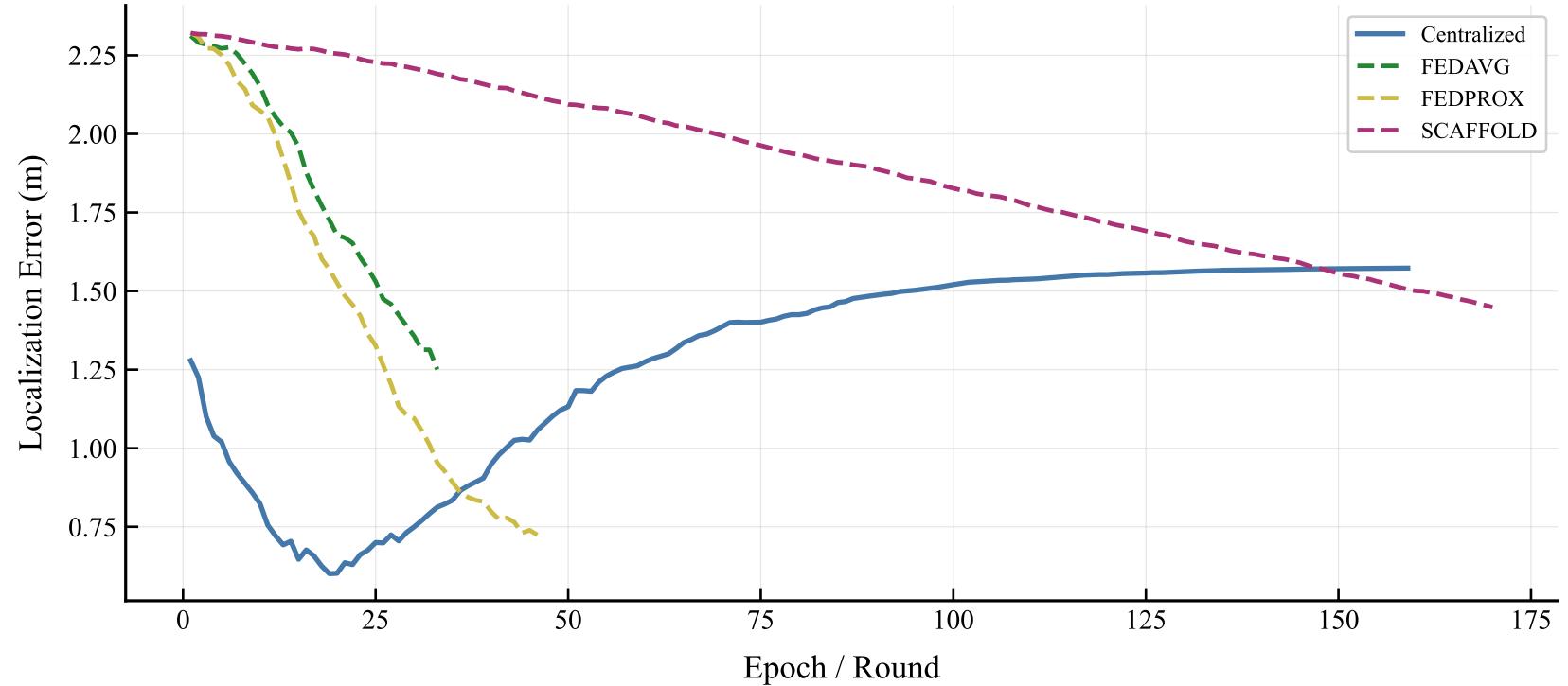
**STAGE 2 METRICS**

Centralized:  
Error: 0.91 m

Federated:  
FEDAVG: 2.02 m  
FEDPROX: 1.26 m  
SCAFFOLD: 1.45 m

Dataset: 821 samples  
Environment: Open Sky

**(b) Convergence Comparison**



**(c) Final Errors**

