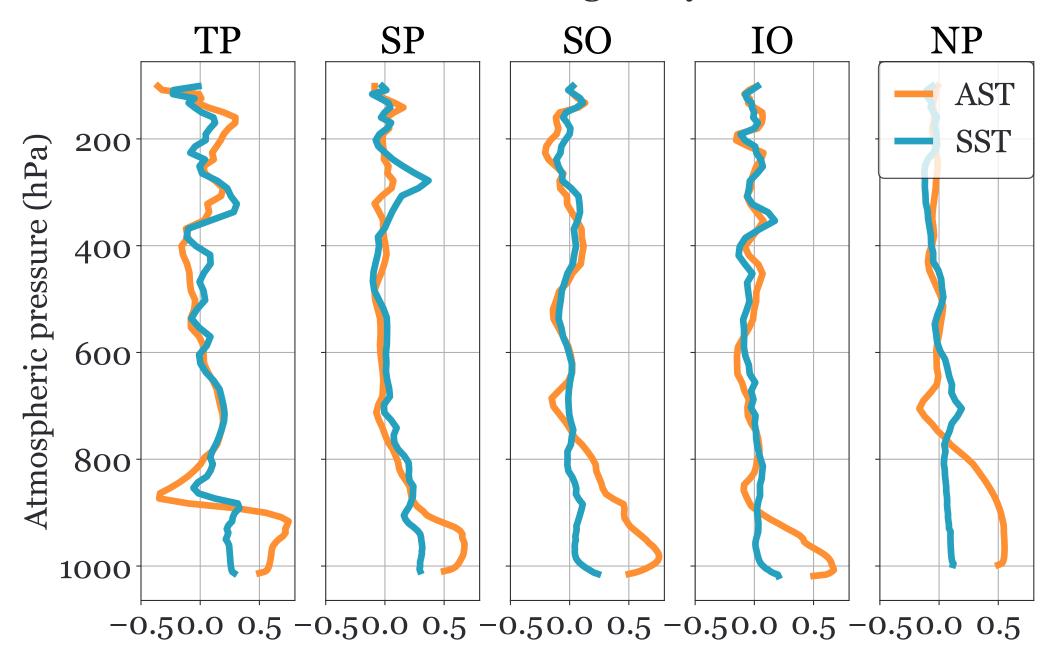'Perfect' Kalman gain by location