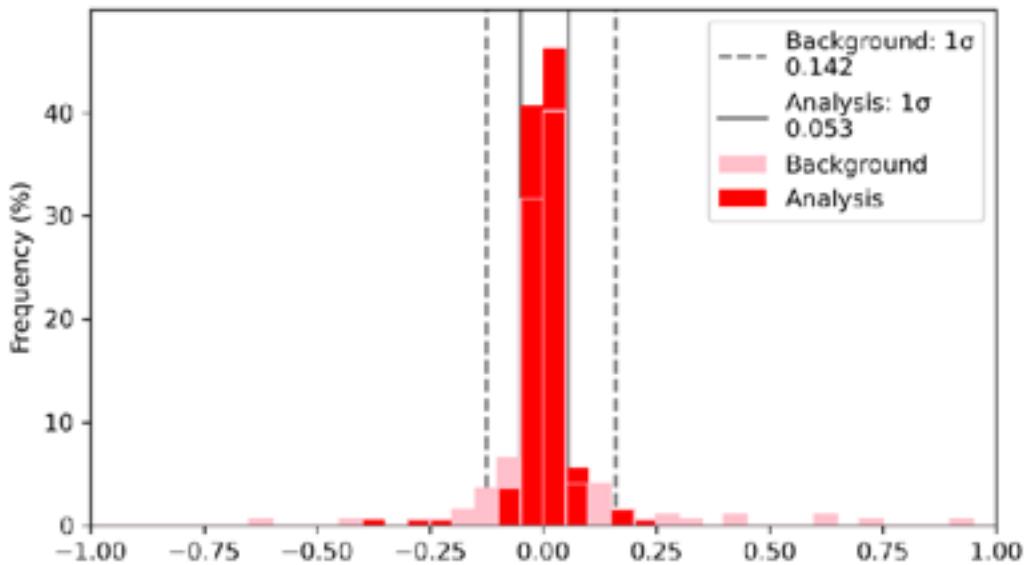


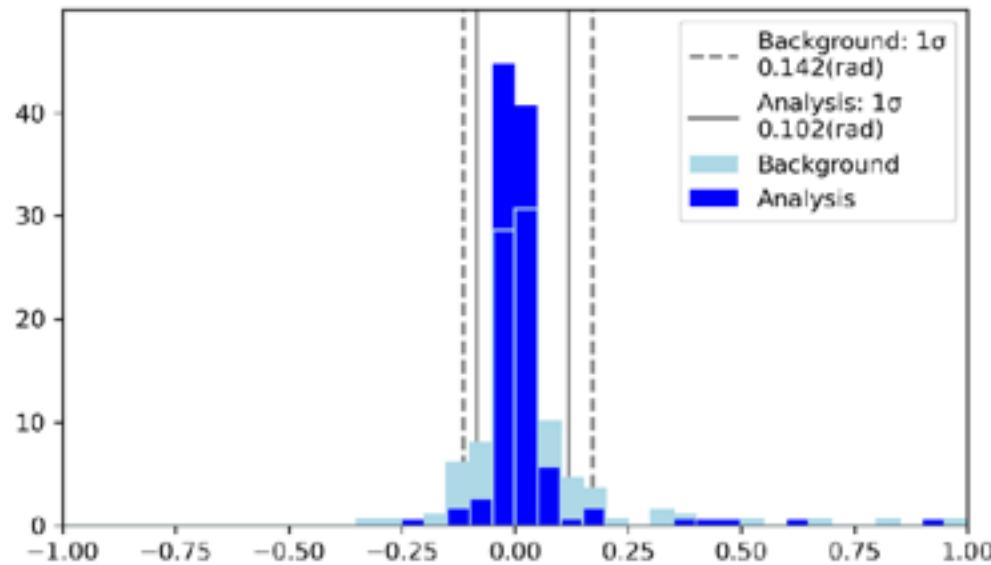
Experiment 4: Analysis vs Background

Remove Outliers: [-1, 1]

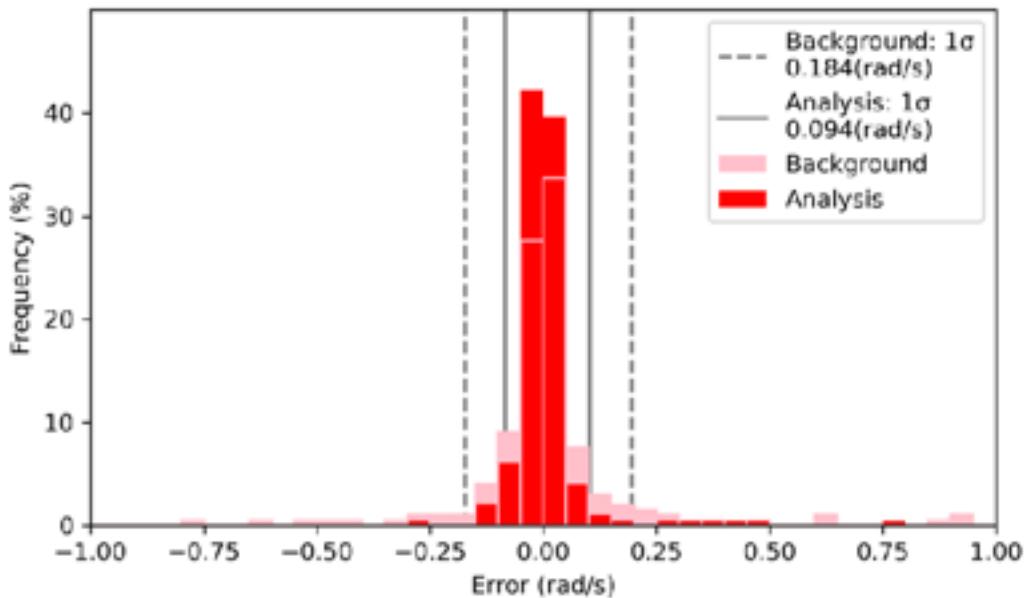
Theta1 Error



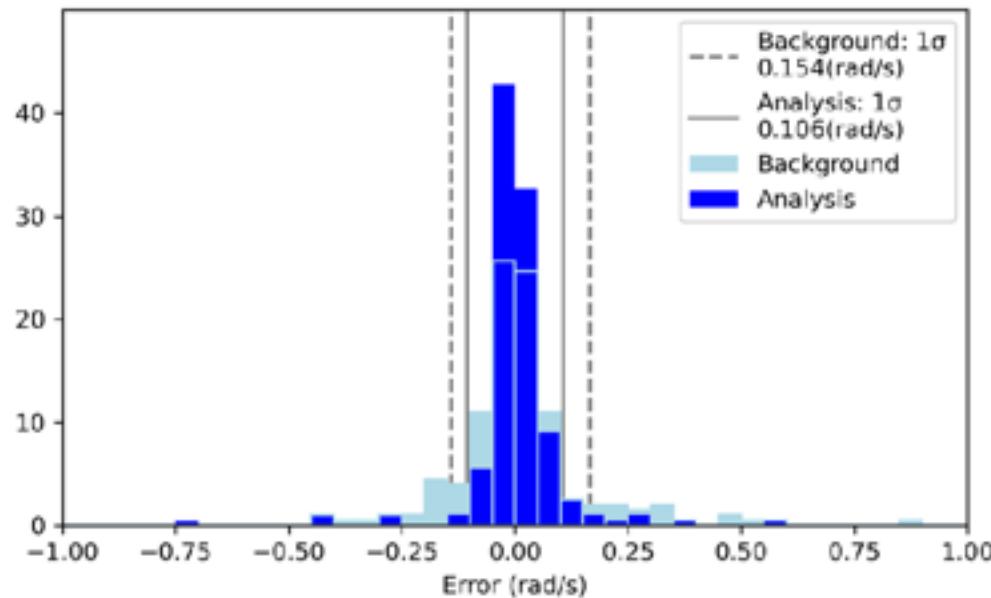
Theta2 Error



Thetadot Error



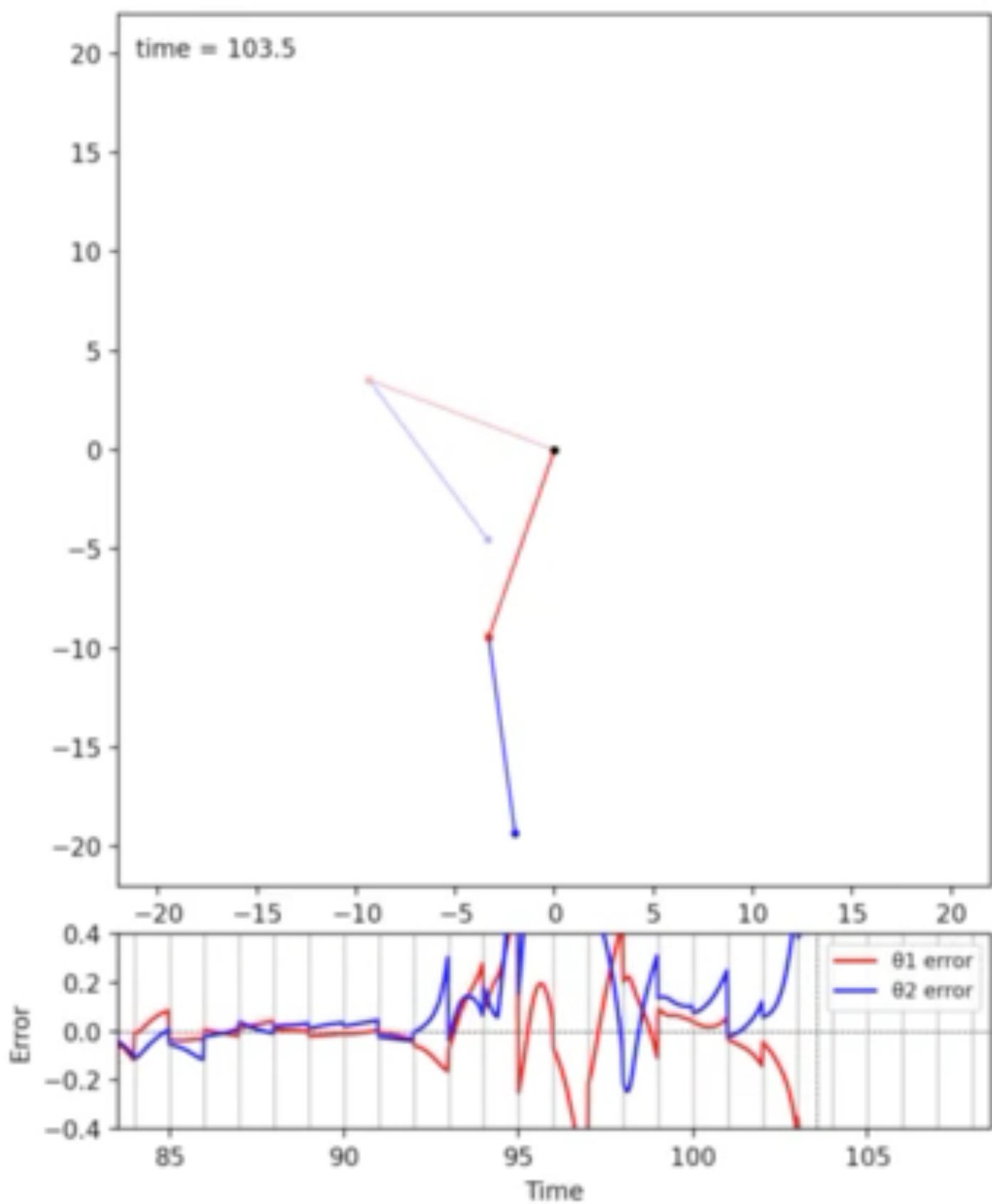
Theta2dot Error



experience

Experiment 4 EKF (Multiplicative Inflation)

Forecast Analysis Cycle Period: 1



θ_1 分析標準差 : 0.0360.053 (rad)

$\dot{\theta}_1$ 分析標準差 : 0.0480.094 (rad/s)

$\dot{\theta}_2$ 分析標準差 : 0.0360.102 (rad)

$\ddot{\theta}_2$ 分析標準差 : 0.0480.106 (rad/s)

註：初始的B試數為1.5，經多次嘗試得最佳結果。

父方祖父母之子也。夫子曰：「父母唯其子爲子。」故曰：「父母之子也。」

山東省濟寧市任城區南池鎮
中華人民共和國郵政總局
郵政編碼：272000

離君羊值不納入統計

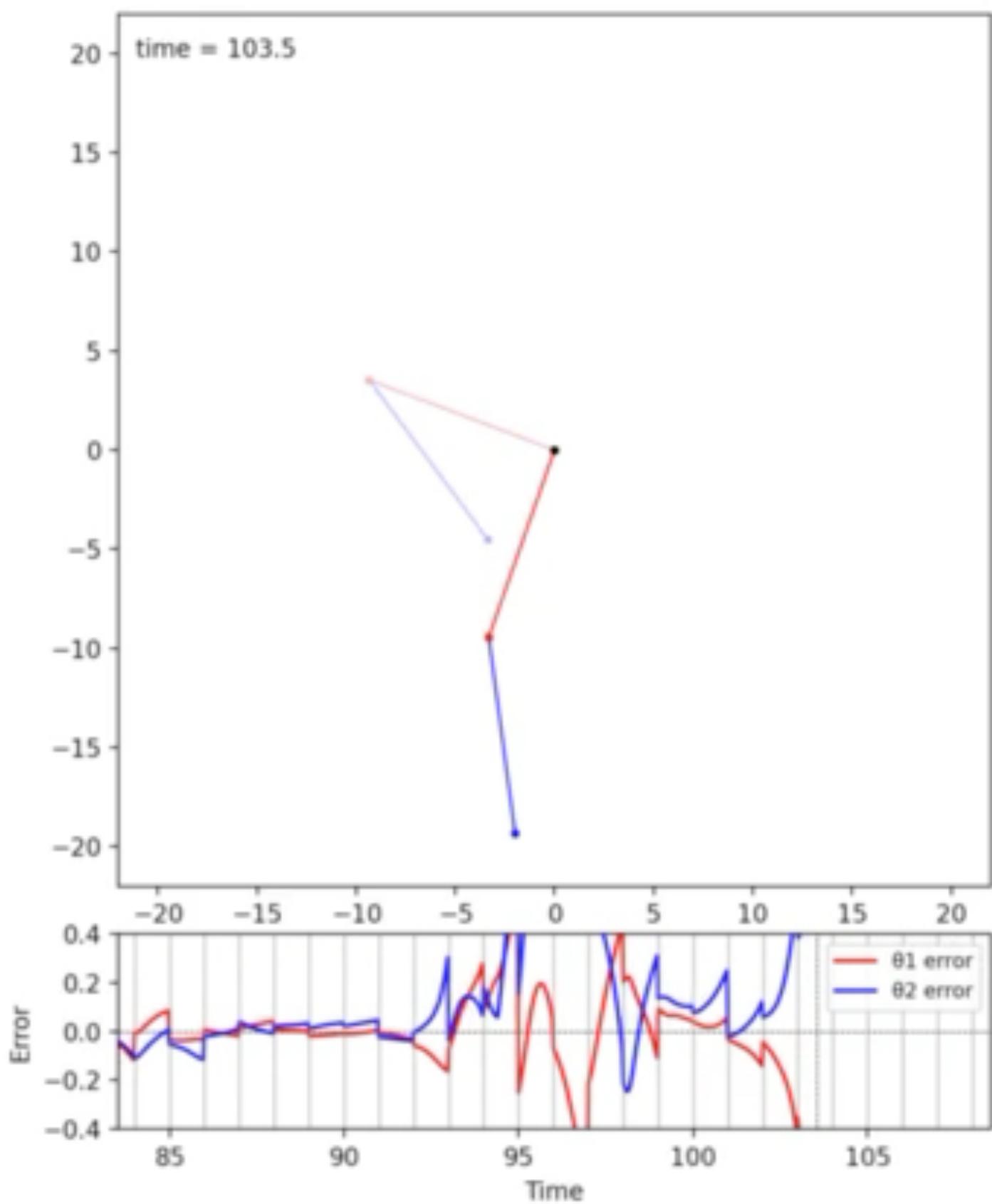
註：離君羊值在model spin up時被修正

(異常的離君羊值在model spin up時被修正)

Experiment 4: Multiplicative Inflation (將多B乘以固定倍數)

Experiment 4 EKF (Multiplicative Inflation)

Forecast Analysis Cycle Period: 1

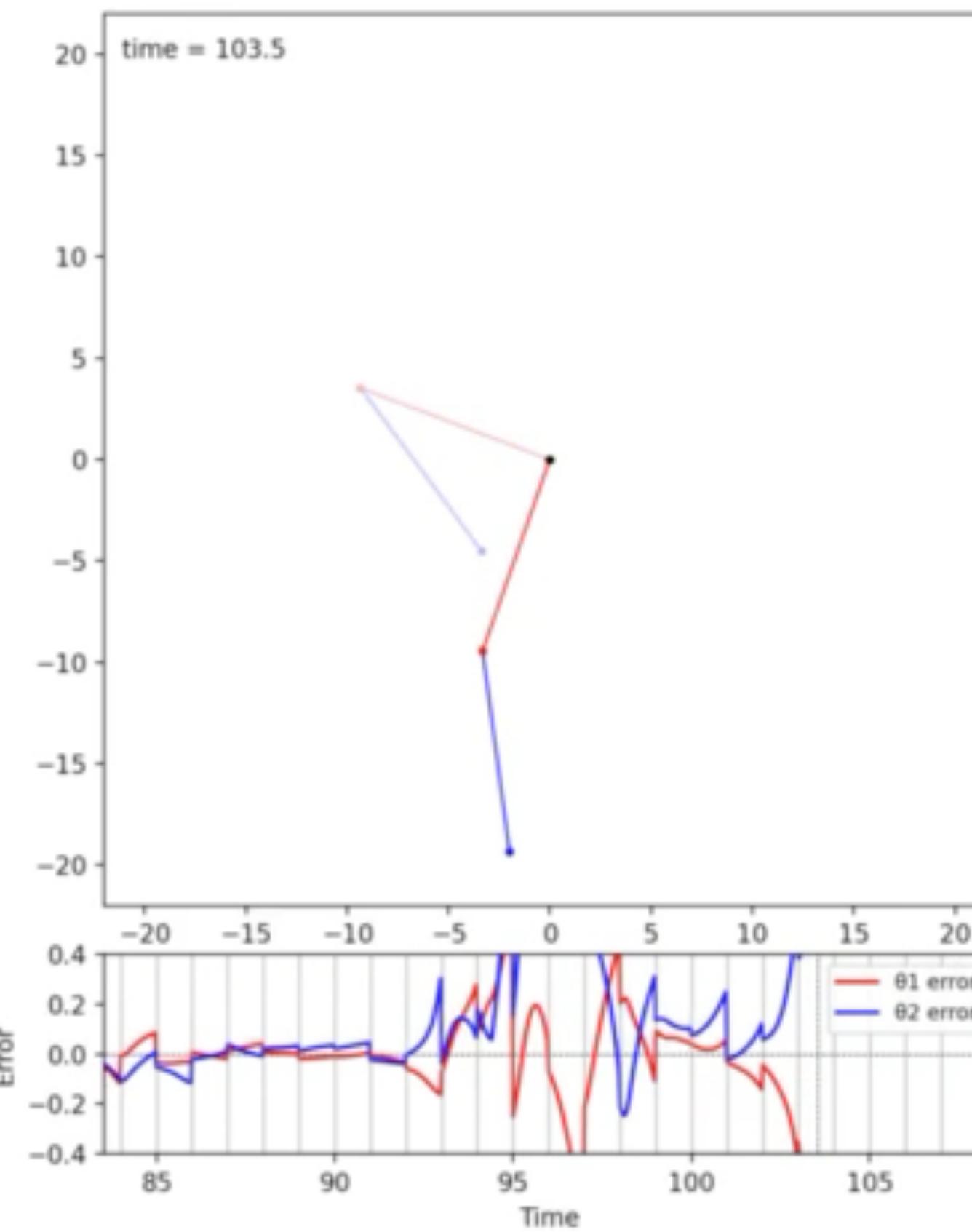


Experiment

Experiment 4: EKF - Multiplicative Inflation (將B乘以固定倍數)

Experiment 4 EKF (Multiplicative Inflation)

Forecast Analysis Cycle Period: 1

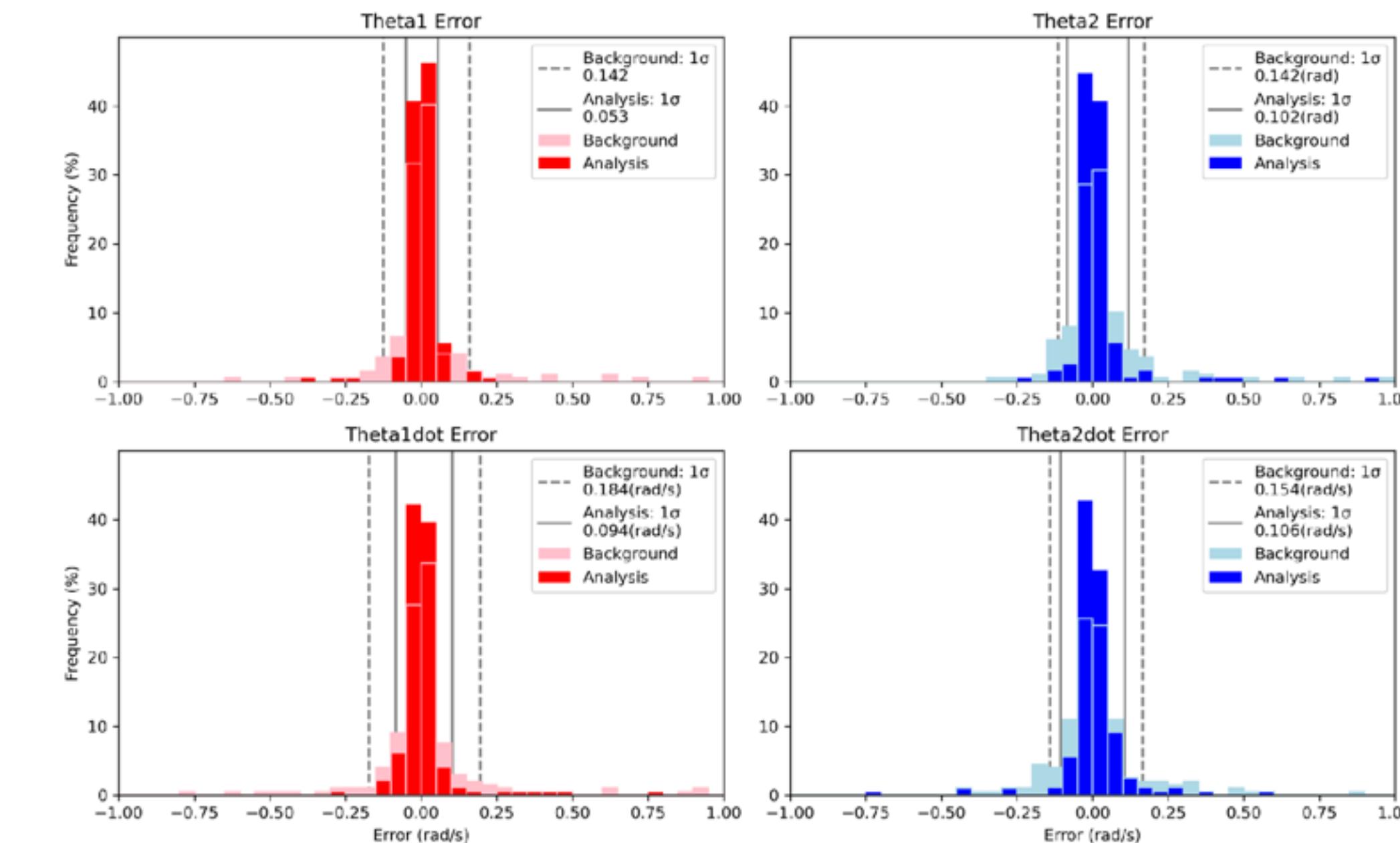


註：初始的 $\mathbf{B} = \mathbf{R}$ ，倍數為 1.5，經多次嘗試 1.5 倍能獲得最佳結果。

分析誤差相較於背景誤差改變了多少？

Experiment 4: Analysis vs Background

Remove Outliers: [-1, 1]



此實驗相較於觀測即分析時

註：離群值不納入統計
(異常的離群值在model spin up時被修正)

θ_1 分析標準差 : 0.036 0.053 (rad)
 $\dot{\theta}_1$ 分析標準差 : 0.048 0.094 (rad/s)

θ_2 分析標準差 : 0.036 0.102 (rad)
 $\dot{\theta}_2$ 分析標準差 : 0.048 0.106 (rad/s)

Experiment

Experiment 4: EKF - Multiplicative Inflation (將B乘以固定倍數)

雖然背景值值得相信，
但背景跟觀測差異很大時，
我們該相信觀測。