



Executions Comparison with Trace Compass

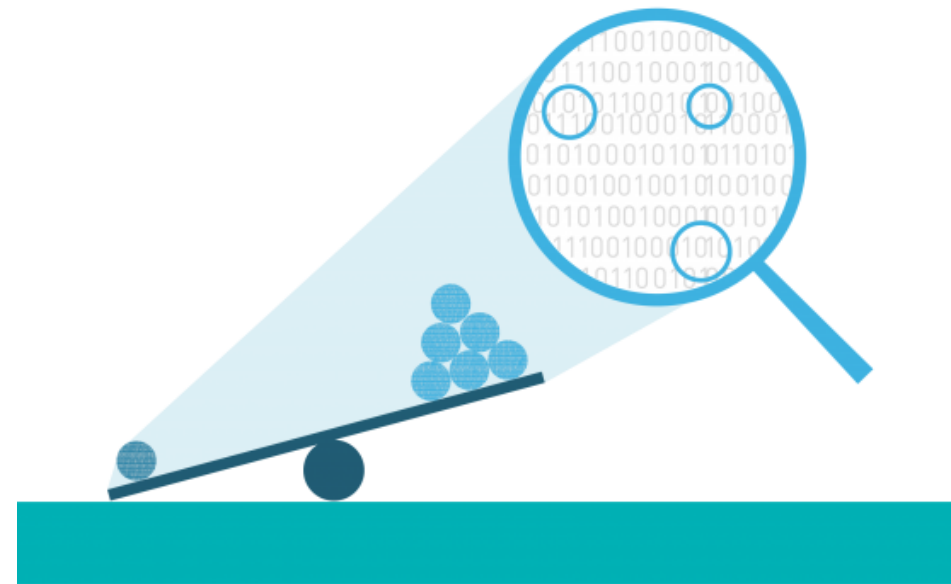
Fateme Faraji Daneshgar
Research Associate

Polytechnique Montréal

DORSAL Laboratory

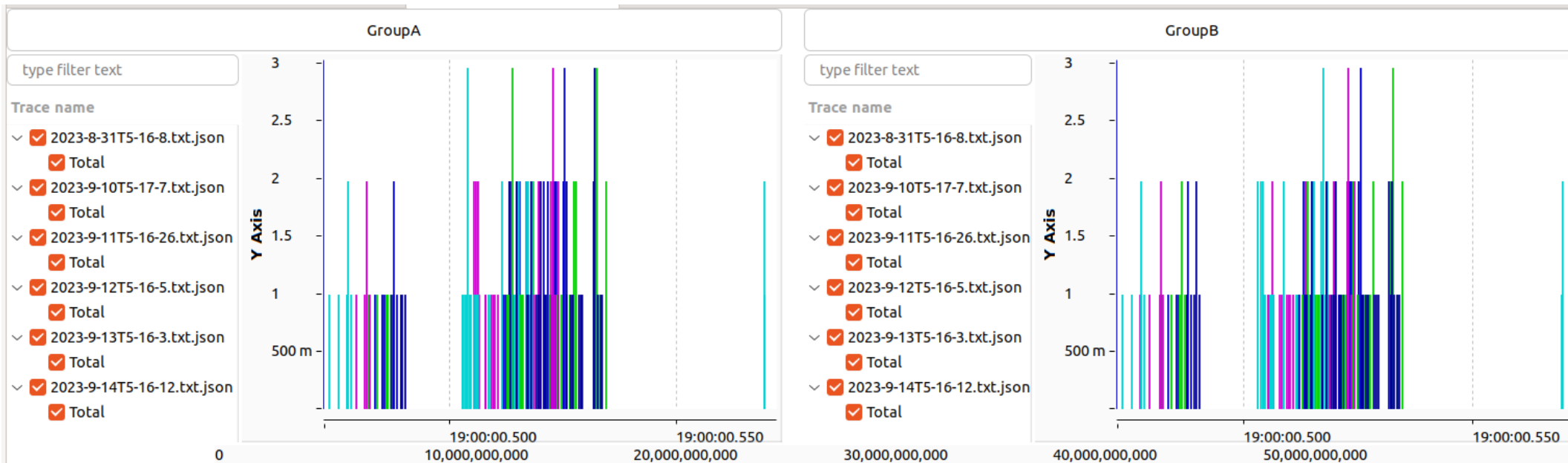
Agenda

- Updates on Execution Comparison
 - Synchronous Execution comparison
 - Differential flame graph
 - Adding metrics for comparison
 - Asynchronous Execution comparison
 - Adding Callstack analysis for OpenTracing Traces
 - Adding Flame Graph Analysis for OpenTracing traces

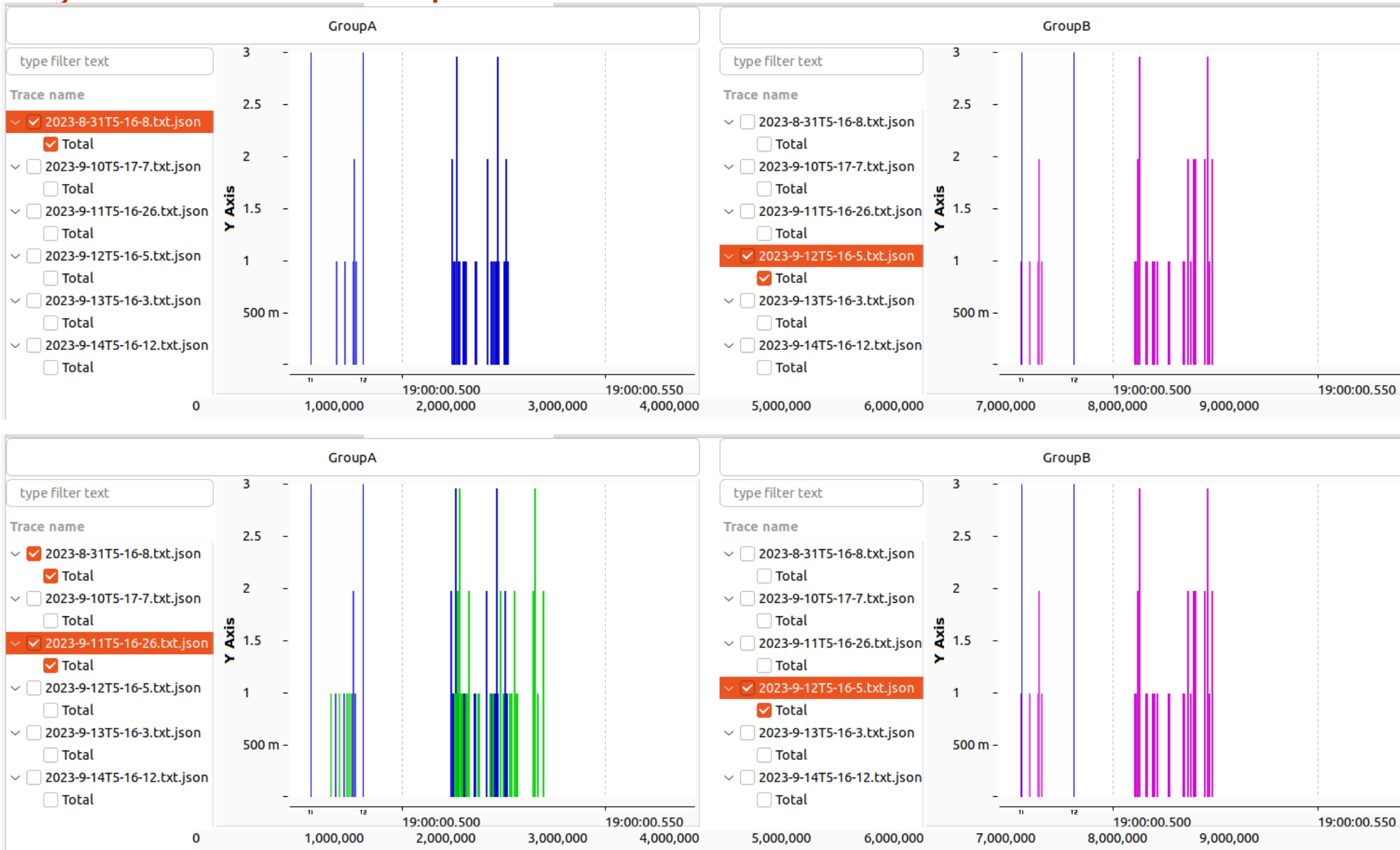


Sync. Execution Comparison

➤ Filtering based on the time



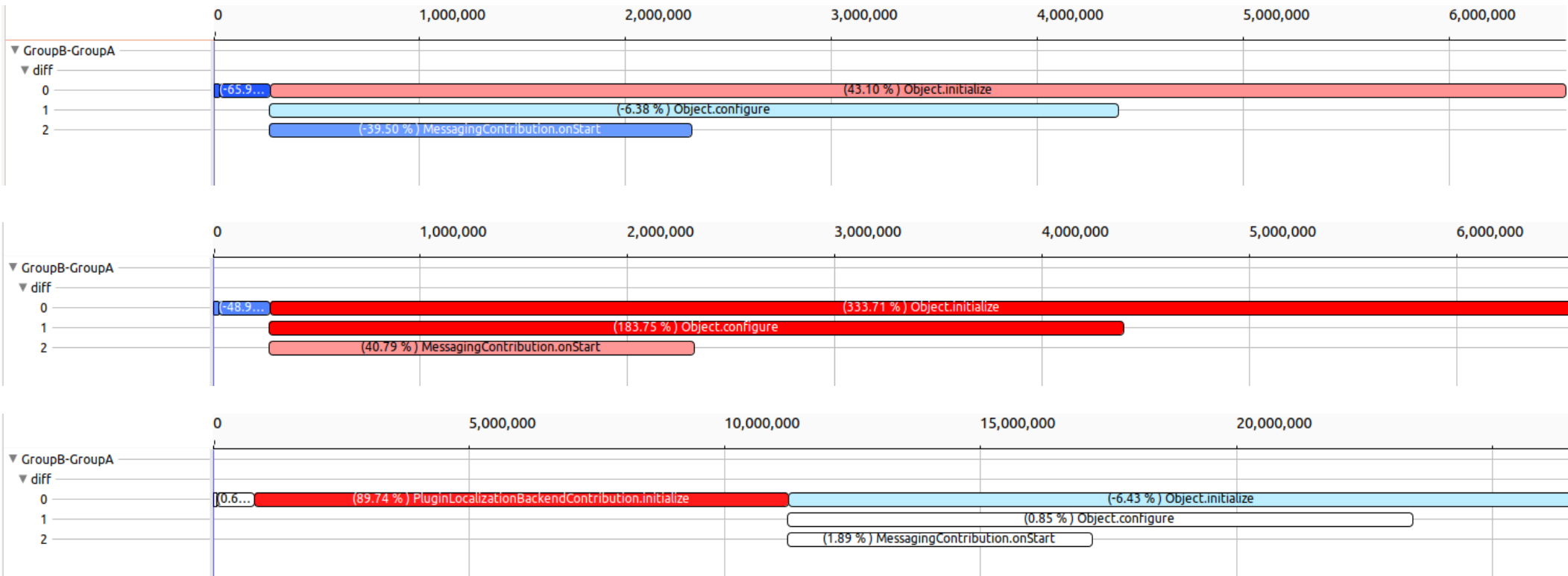
Sync. Execution Comparison



Sync. Execution Comparison

➤ Differential Flame Graph

- Red color palette for longer executions
- Blue color palette for shorter executions
- White for almost similar

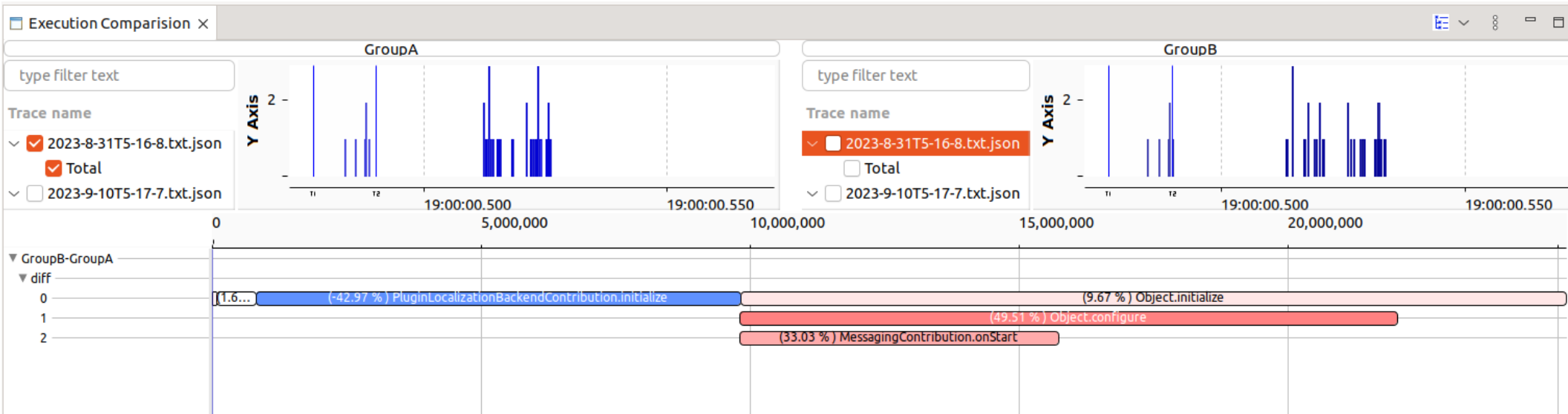
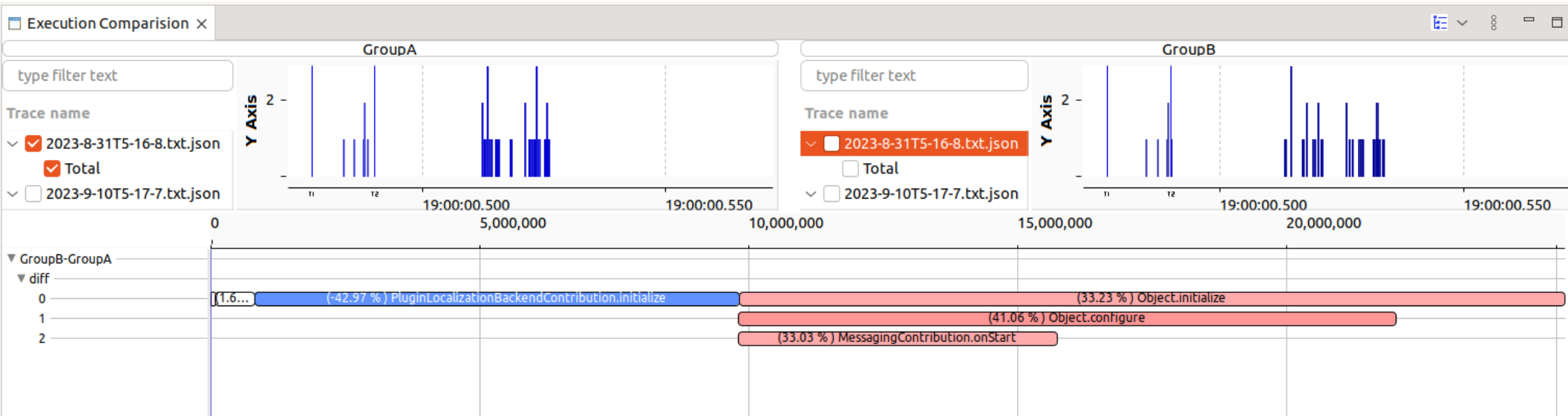


Sync. Execution Comparison

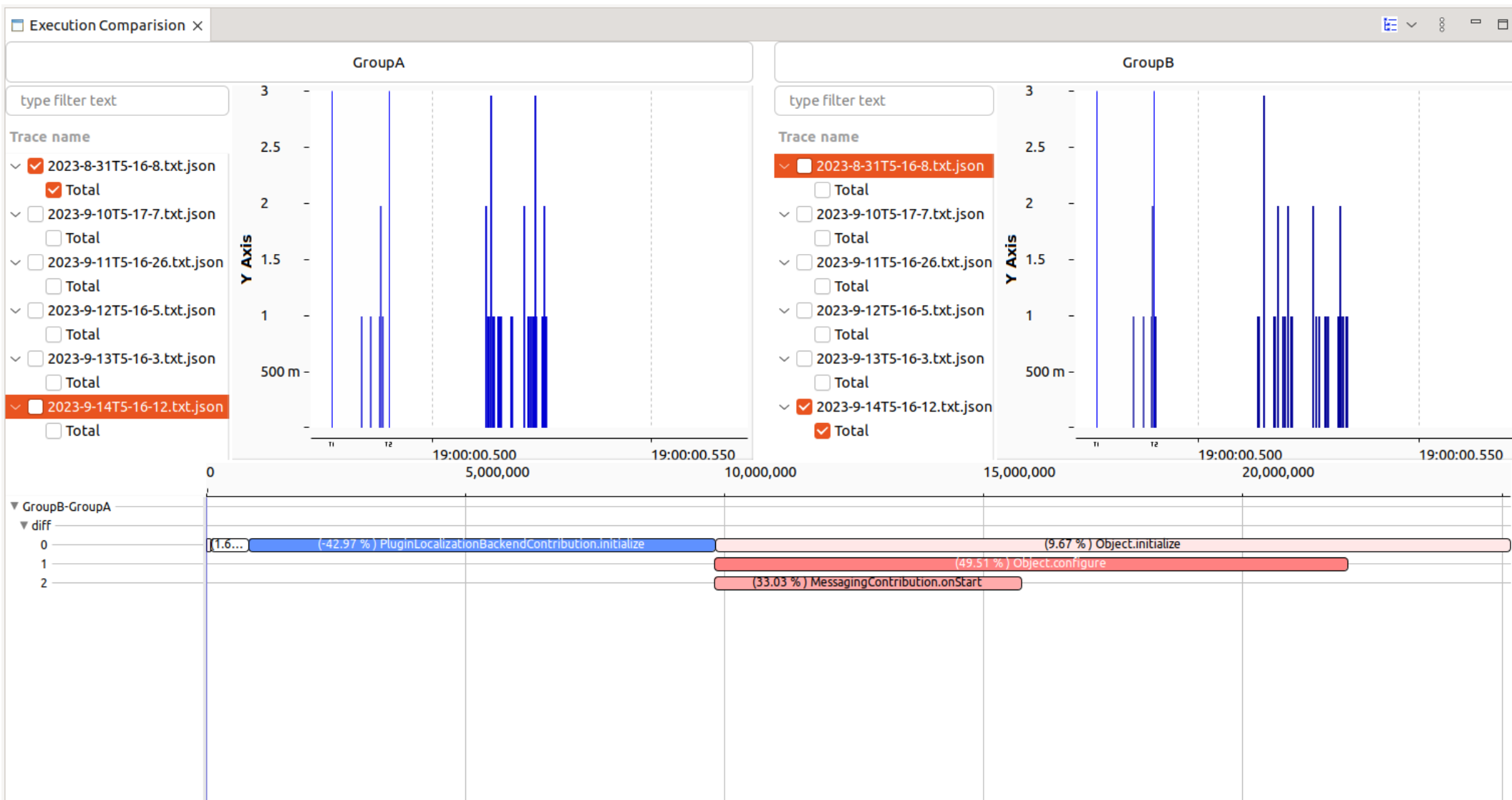
- Metrics
 - Flame graph
 - Aggregated data representation
 - Duration
- New : Flame Graph based on Self Time



Sync. Execution Comparison

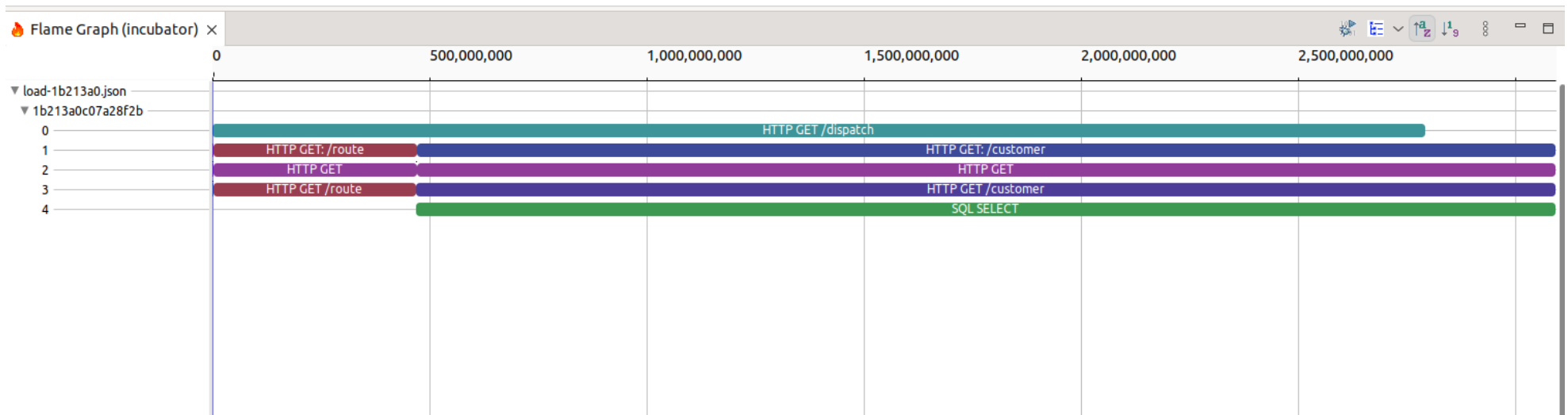


Sync. Execution Comparison



OpenTracing Flame Graph

- Async execution comparison
 - concurrent nested subrequests
 - Callstack analysis
 - Flame graph analysis
 - On async traces
- Flame graph analysis is added for opentracing trace



Future Work

- Async execution comparison

Thank you for your attention