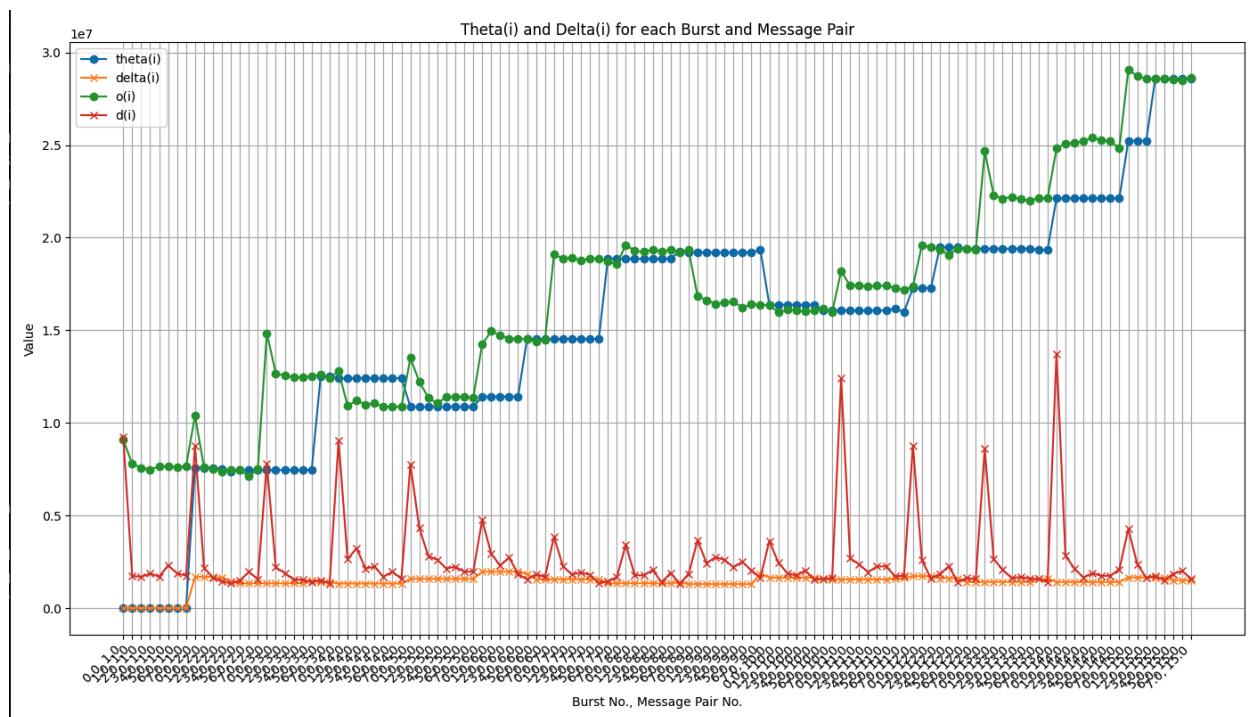
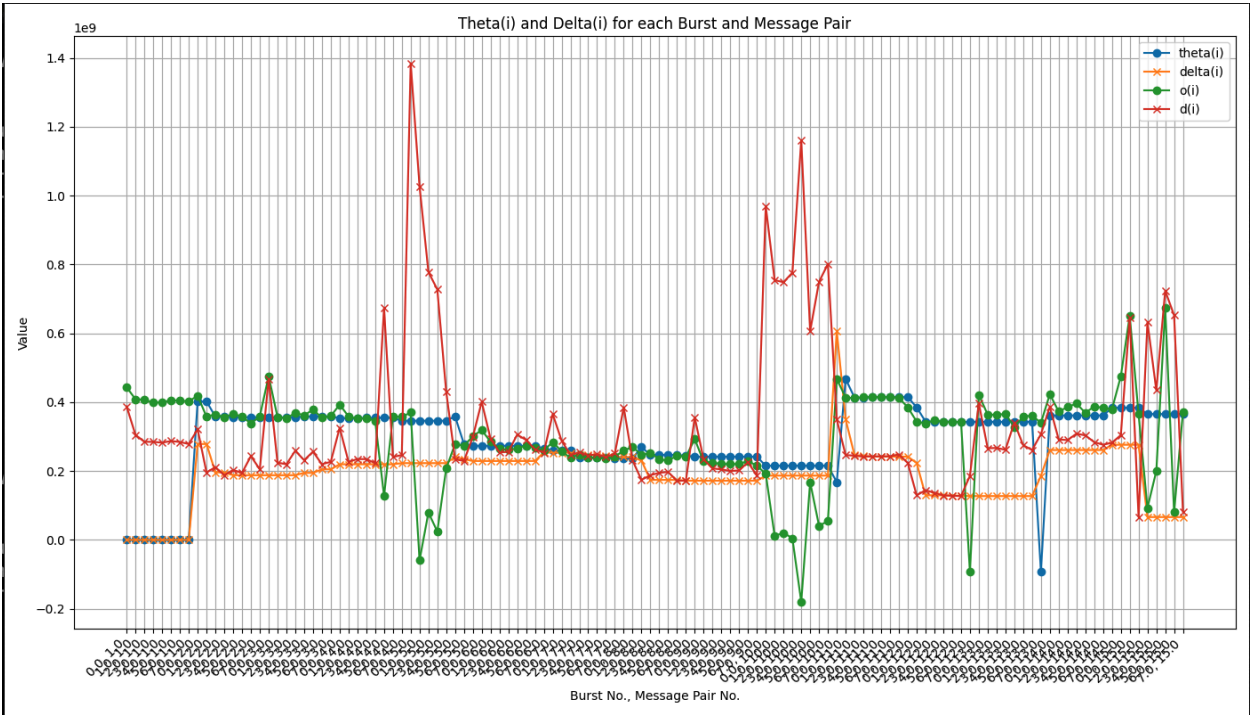


Statement: The shorter and more symmetric the round-trip time is, the more accurate the estimate of the current time will be.

- Shorter: If the round trip time is 0, then the client can get the exact time as the server, we won't have any delay/offset at all, our estimate will be exact. If we are near the source of IAT/UTC, our delay/offset will be very minimal(a few milliseconds) and thus, we get a more accurate estimate. But if we get farther from the source, delay/offset will increase because the round trip time increases, thus giving us poorer estimates.
- Symmetric: The offset calculation is based on taking the average/median time difference(we have only two values, $(T2 - T1)$ and $(T3 - T4)$ so both are the same). These metrics generally give us the centricity of data. Thus, if the round trip is asymmetric, the calculation of offset and delay will still return us the estimated center of data, resulting in inaccurate estimates. Eg: If the roundtrip takes 200ms, with the client-to-server trip taking 5ms, and the server-to-client trip taking 195ms, our estimate of the offset will be 100ms, which is a poor estimate in this case. But if the 200ms round trip took 100ms for client to server, and 100ms for server back to client, our estimates would be exact.
- LAN:



- Public:



- Cloud:

