How to calculate RTT

In the above example, the trace file captured at A include 6 segments. S1, S2, S3, S4, S5, S6. By checking source/dest addresse you know that S1, S2, S3, S4 are outgoing segments, S5 and S6 are incoming segments. You can find one match S1 - S5. and calculate RTT. For S6, you cannot find a match because you donot know whether it match S. ,S3., or S4. since both are possible. So in the above example, only one RTT value could be calculated!

If there are more segments after S6. your scan pointer just simply moves after S6 and find the matches following the above procedure.

To summarize, RTTs are calculated by the matched data/Ack pairs. segments that cannot find a match are ignored