Streaming Queries over Streaming Data

- Discussion -

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OUTLINE

- Contributions
- Limitations
- Analysis
- Presentation

Ideas in PSoup

- Streaming Data (subject of research especially sensor data)
- Streaming Queries (NiagaraCQ, CACQ, ...)
- Queries on old and new data using materialization (Wave indices)
- Intermittent Connectivity (delivery on demand – is it a big contribution?)

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Limitations

- PSoup builds on CACQ but lacks some of its features (e.g. Disjunctive predicates)
- Aggregation queries (data structures are only shared if we have the same SELECT-PROJECT-JOIN clause for different queries)
- MAIN MEMORY Implementation: Maximum window size for data is limited.

Analysis

- Most of the analysis is to validate implementation choices.
- Most comparison of results involve variations of PSoup only.
- Is data generated and used for analysis representative of streaming data?
- If data streams can be archived on disk, how would it change the analysis?

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Presentation

- The authors do not sufficiently motivate the general problem of streaming data and continuous queries
- Very little details on previous related work
- Too many implementation details
- Some figures are difficult to read (see Figure 11) + names (e.g. pSoup-C_UnShrd)

Conclusion

- The authors have the credit to provide an efficient and flexible system
- I look forward to future work. E.g. "Temporal Browser"

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• What are your critiques?

Thank you.