

NSF/IUCRC CAC PROJECT

MONITORING, VISUALIZING, AND PREDICTING HEALTH STATUS OF HPC CENTERS

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04/03/2020

Advisors:

Mr. Jon Hass, SW Architect, Dell Inc.

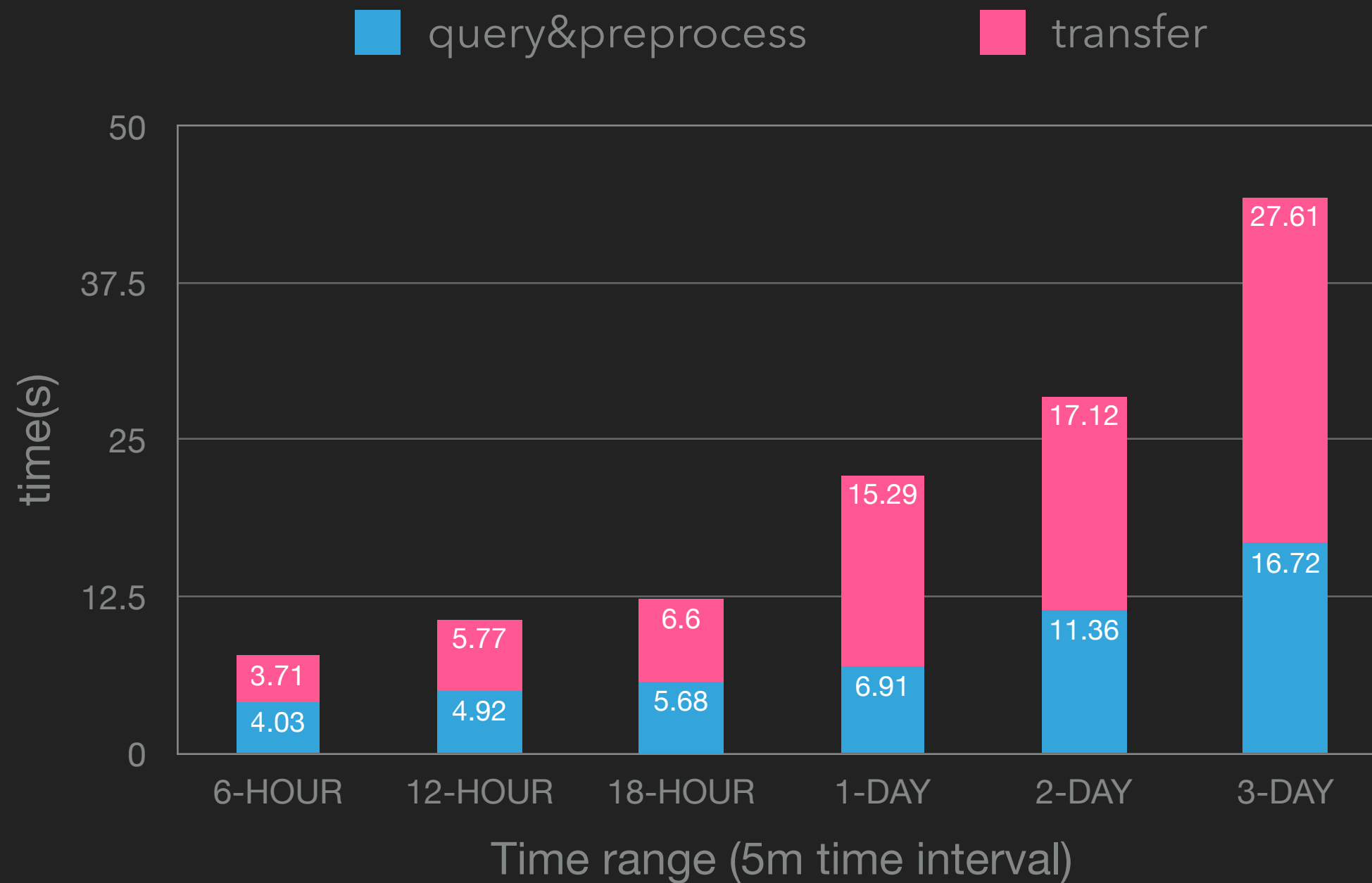
Dr. Alan Sill, Managing Director, HPCC, TTU

Dr. Yong Chen, Associate Professor, CS Dept, TTU

Dr. Tommy Dang, Assistant Professor, CS Dept, TTU

PERFORMANCE

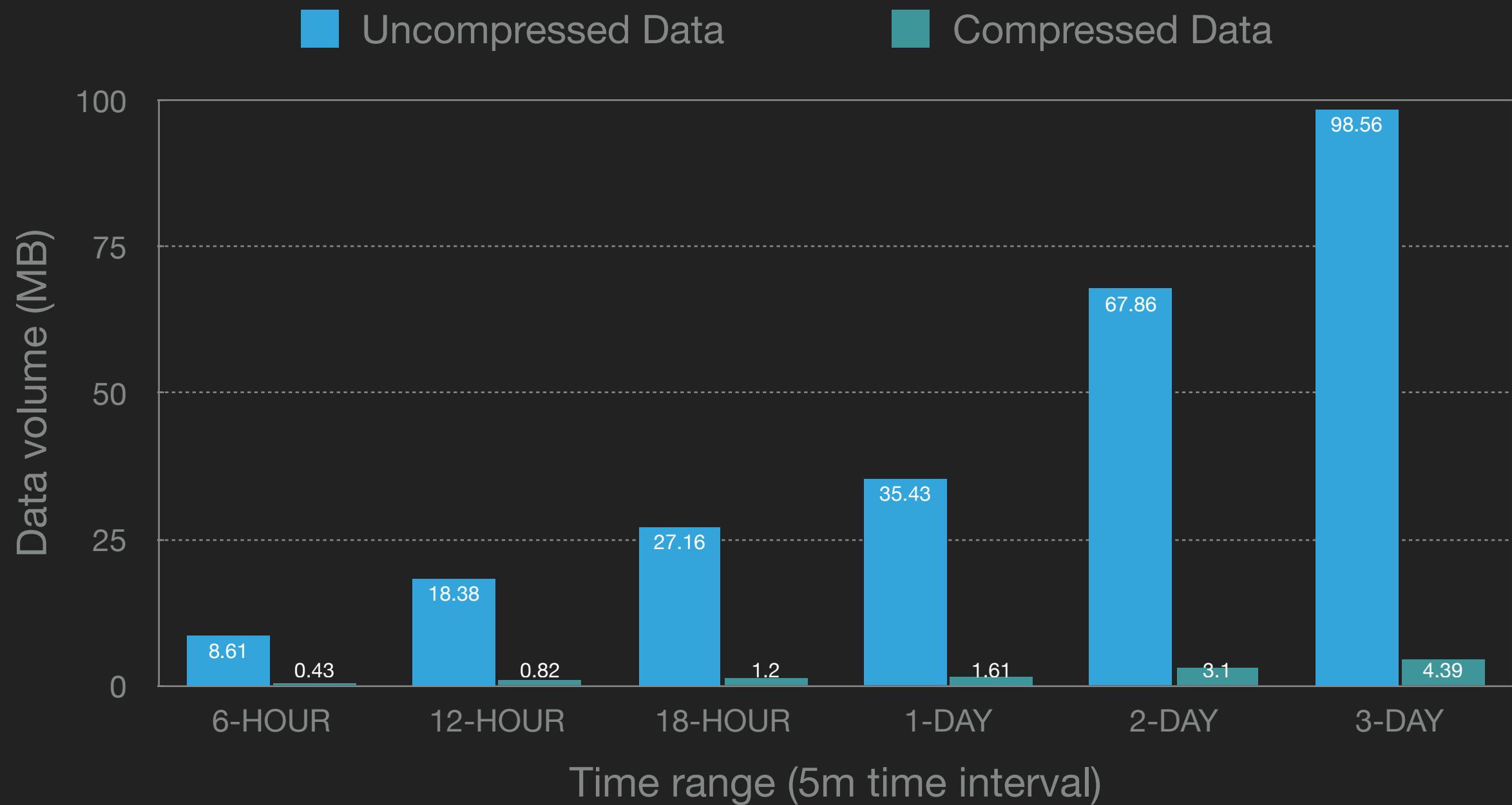
Data without compression



Transfer time is as much as **1.65x** of query & preprocess time

Use **zlib library** for data compression

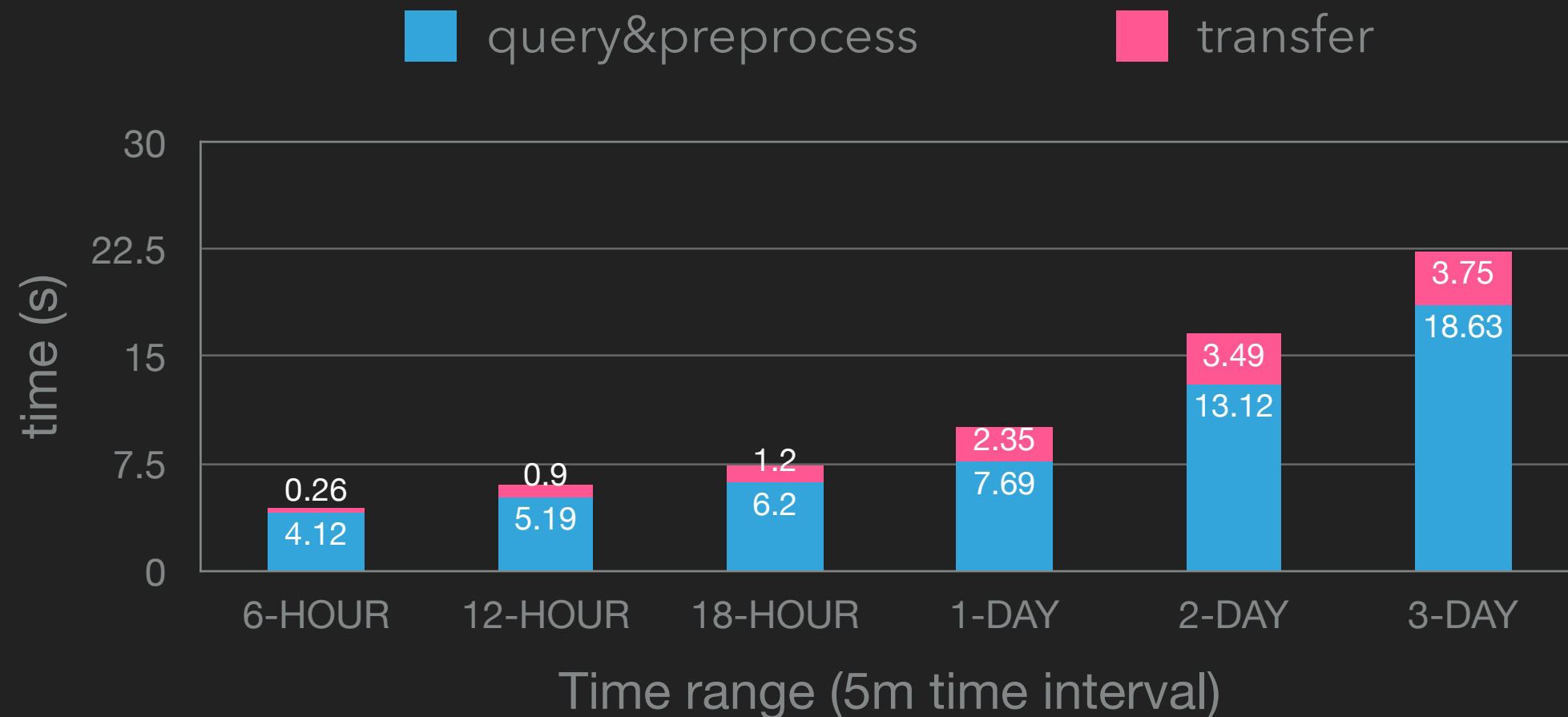
PERFORMANCE



Compressed data volume is only 4.45%~5.0% of uncompressed data

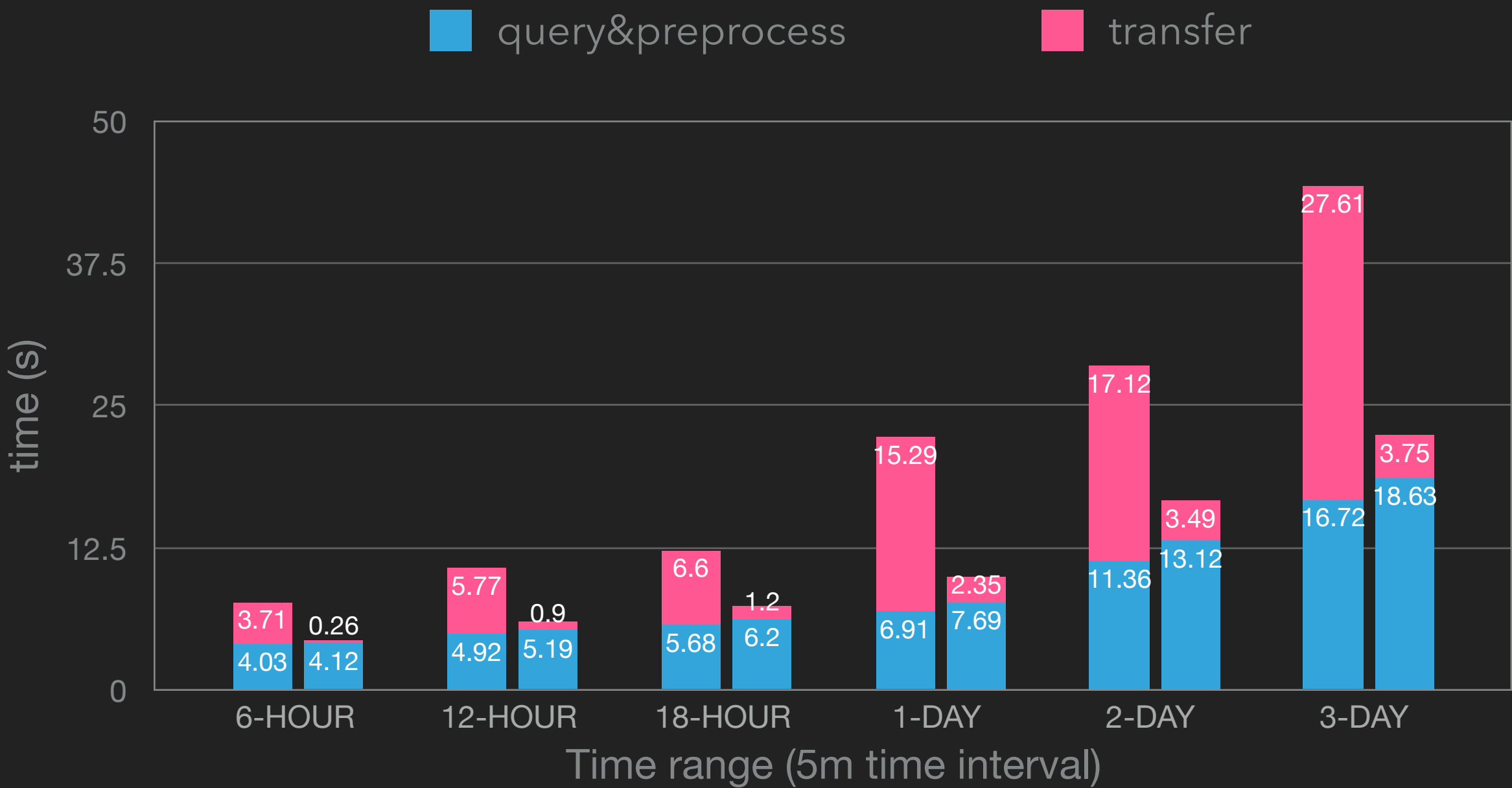
PERFORMANCE

Data with compression



Transfer time is as much as **22%** of query & preprocess time


PERFORMANCE



Using compressed data is 1.8x~2.16x faster than using uncompressed data

Demo

<http://redfish.hpcc.ttu.edu:8080/ui/>



QUESTIONS?/COMMENTS?