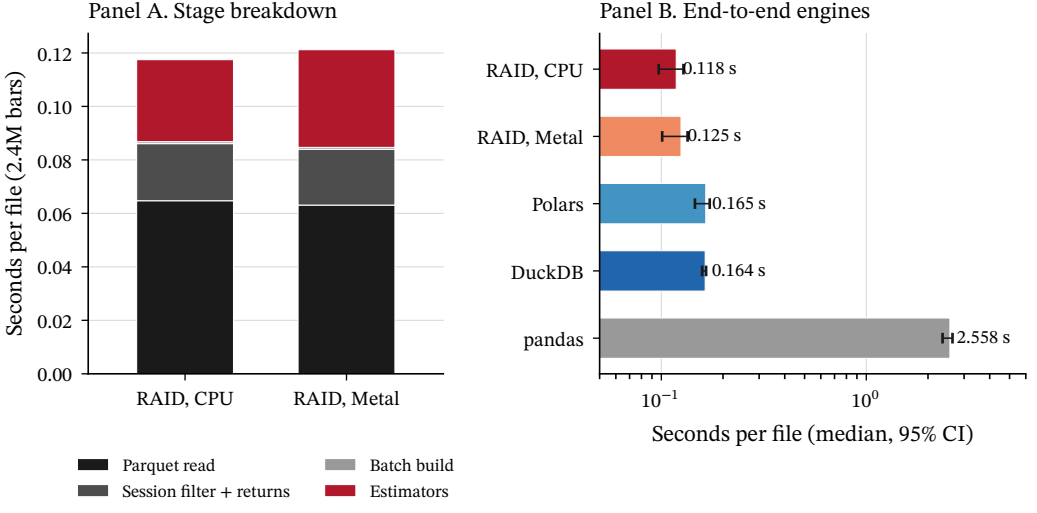

Panel A. Stage breakdown
Seconds per file (2.4M bars)
0.12
0.10
0.08
0.06
0.04
0.02
0.00
RAID, CPU
RAID, Metal
Parquet read
Session filter + returns
Batch build
Estimators
Panel B. End-to-end engines
RAID, CPU
0.118 s
RAID, Metal
0.125 s
Polars
0.165 s
DuckDB
0.164 s
pandas
2.558 s
$10^{-1}$
$10^{0}$
Seconds per file (median, 95% CI)