

Figure 15. Total data elements, gigabytes, and time consumed by workflow activity running with no user steering.

Table 6. Summary of the user-steered reductions (q_1 – q_5) with their user-defined slices.

Interaction	Issued time (s)	Slice query
q_1	190	wind_speed < 16
q_2	310	wind_speed < 25
q_3	370	wind_speed < 30
q_4	430	wind_speed < 34.5
q_5	520	wind_speed < 35.5

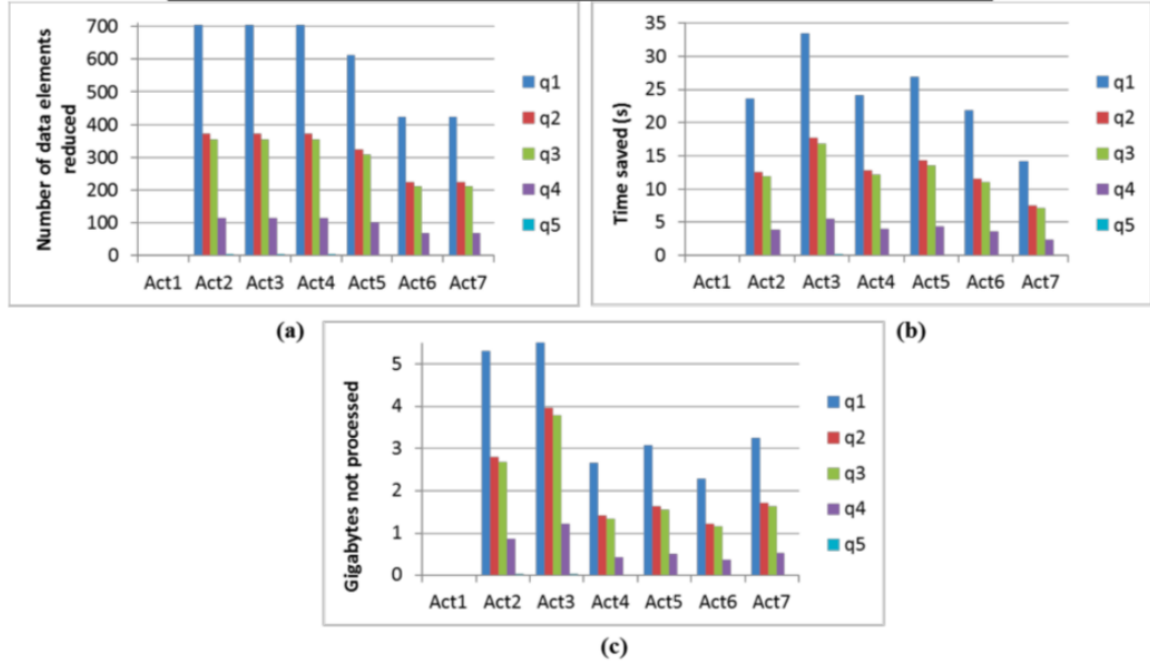


Figure 16. Reduced resources by activity caused by each user-steered reduction q_i .

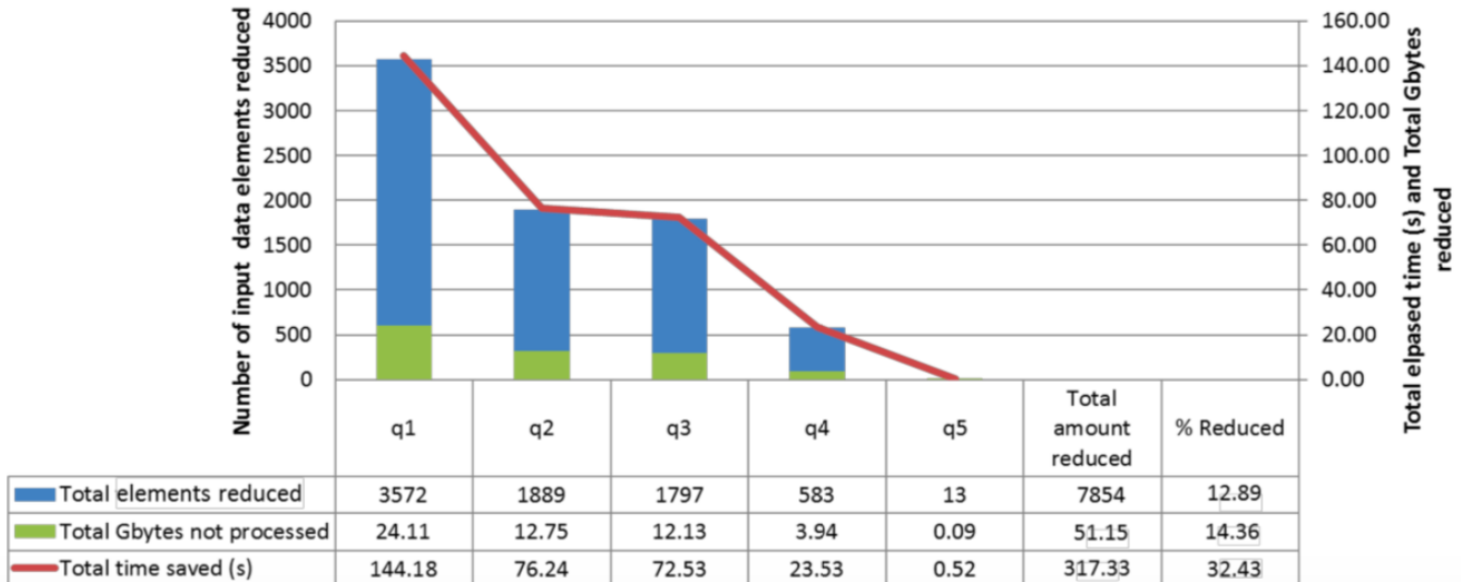


Figure 17. Summary of all online user-steered reductions (q_1 – q_5) in the workflow.