

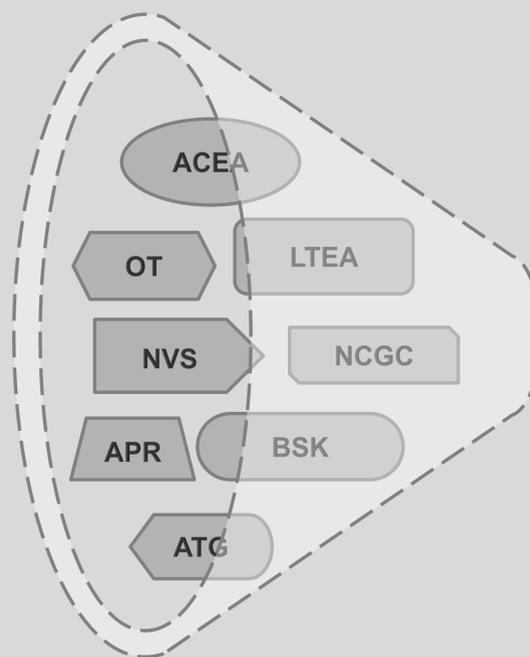
Primary Objective: Provide transparent and efficient analysis of heterogeneous HTS assay data

Conclusions

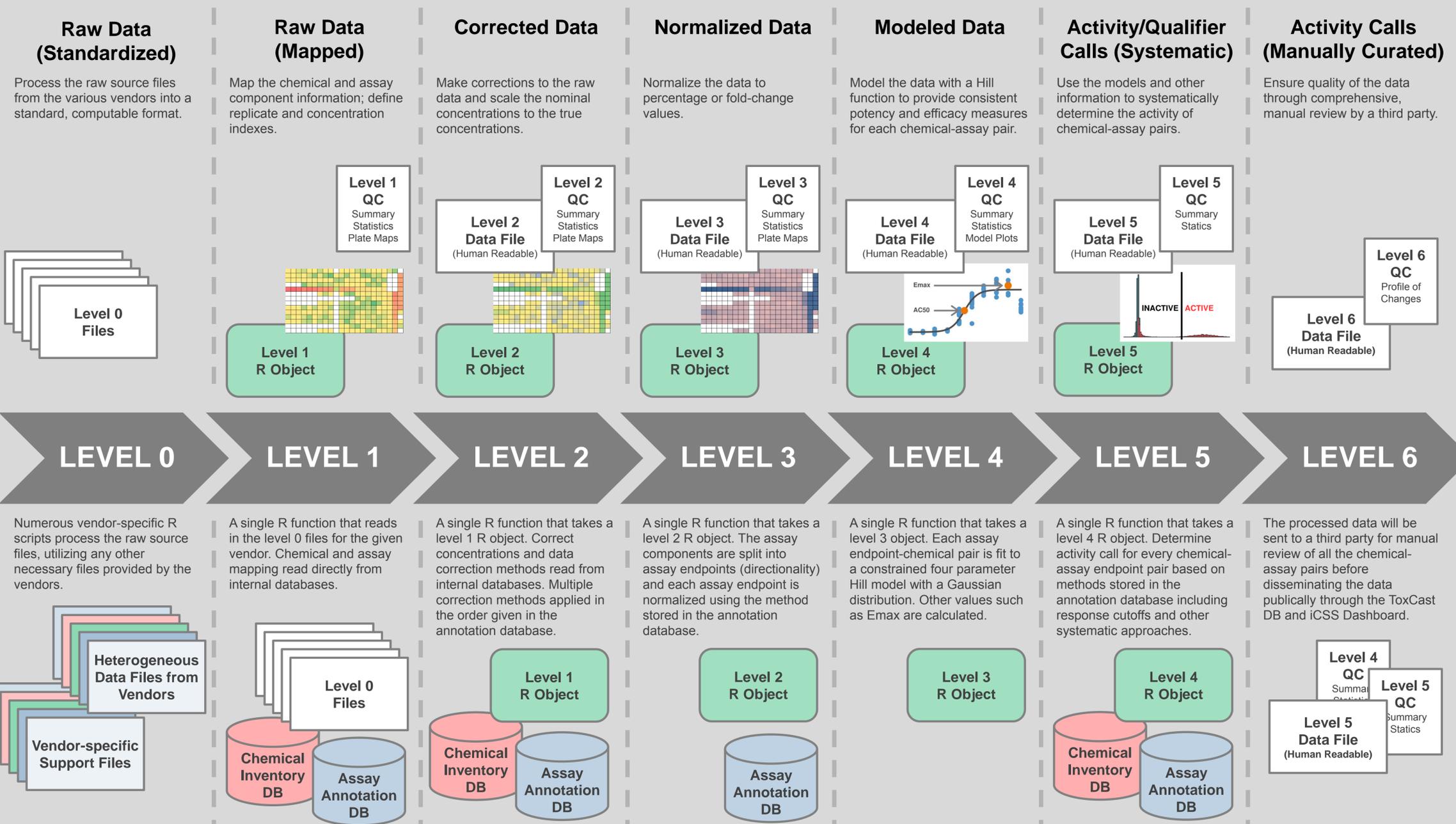
Description

Objective

Outputs



Inputs



- The ToxCast workflow, from level 0 to level 5, has been generalized with standardized algorithms and analysis procedures to accept heterogeneous assay read outs.
- The analysis process is systematic, consistent, and repeatable.
- Throughout level 0 to level 6, no changes involve data removal, unless invalid data points were identified by vendor's QA-QC.
- QC-check and data correction make data more accurate and trust worthy.
- Documentation of analysis procedure and results provides increased transparency.
- ToxCast data Analysis Pipeline handles highly heterogeneous chemical-assay datasets.

Future Directions

- Further QC analysis by plate level pattern recognition and batch-effect recognition
- Publicly available R-package for systematic and transparent level 0 to level 5 analyses
- Web-based integration for easy access workflow