

# Monitoring Changes In Data

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useR!2019



Try the code

```
03input/monitoring.R
```



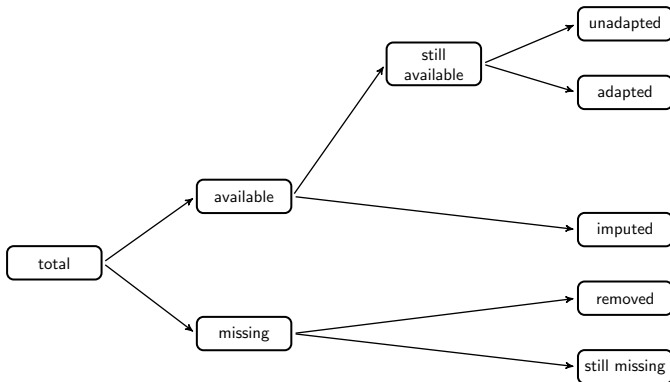
# How to monitor changes

**It depends . . .**

- Cell-by-cell changes?
- Count changes?
- Count changes in satisfying rules?
- Measure changes in aggregates?



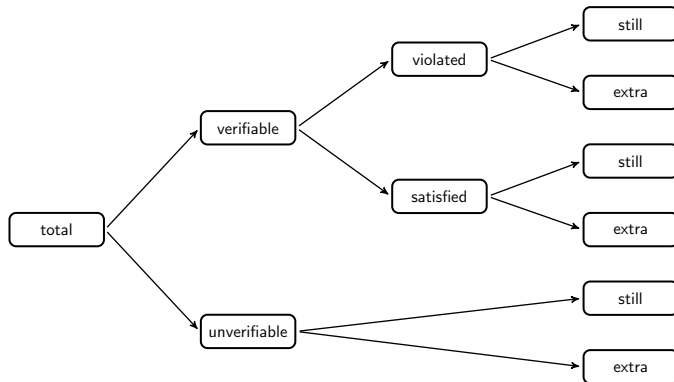
# Decomposing the number of changes in cells



```
validate::cells(start=dataset1, step1=dataset2, step3=dataset3, ...)
```



# Decomposing the number of changes in validation results



```
validate::compare(rules, start=dataset1, step1=dataset2, ...)
```



# Assignment

1. Read all the versions of datasets created today
2. Create plots showing the progress in the cell counts and rule counts methods.