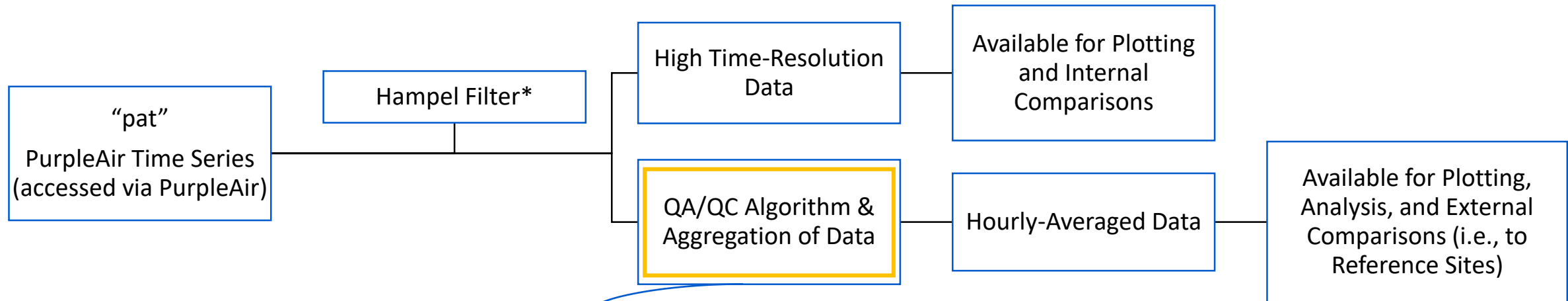


# More detail on QA/QC using the AirSensor package



“PurpleAirQC\_hourly\_AB\_01”

- ☐ Data values must be within manufacturer-specified bounds
- ☐ A specified proportion of the data must be present for each hour
- ☐ Hourly averages from Channels A and B must not be significantly different based on a student's t-test
- ☐ Mean difference must be below a given threshold

If all conditions are met, then the average of the averages from Channel A and B, for each hour, is computed

*Note: this is one algorithm, the code allows for adjustments to thresholds as well as the development and incorporation of new algorithms*

# Levels of Data

- Level 1 – “Raw” data, or data as provided by the manufacturer
- Level 2 – Simple/DIY calibration, this may include using a proxy sensor, etc.
- Level 3 – Application of “verified” correction factors to the sensor data\*

\*(for our work, this may be a global correction for sensors in the South Coast Air Basin)

*Disclaimer: The AirSensor package was developed by authors at South Coast AQMD and Mazama Science under Assistance Agreement No. RD83618401 awarded by the U.S. Environmental Protection Agency to the South Coast Air Quality Management District (South Coast AQMD). The code, the QA/QC procedures, and the different features included in the package may be subject to revision at any time depending on the needs of the project. It has not been formally reviewed by EPA. The views expressed in this work are solely those of the authors and do not necessarily reflect those of the Agency. EPA does not endorse any products or commercial services mentioned in this work.*

