TMST EAF Roof Measurement

Worlds Dimensioner

API Test: Analysis

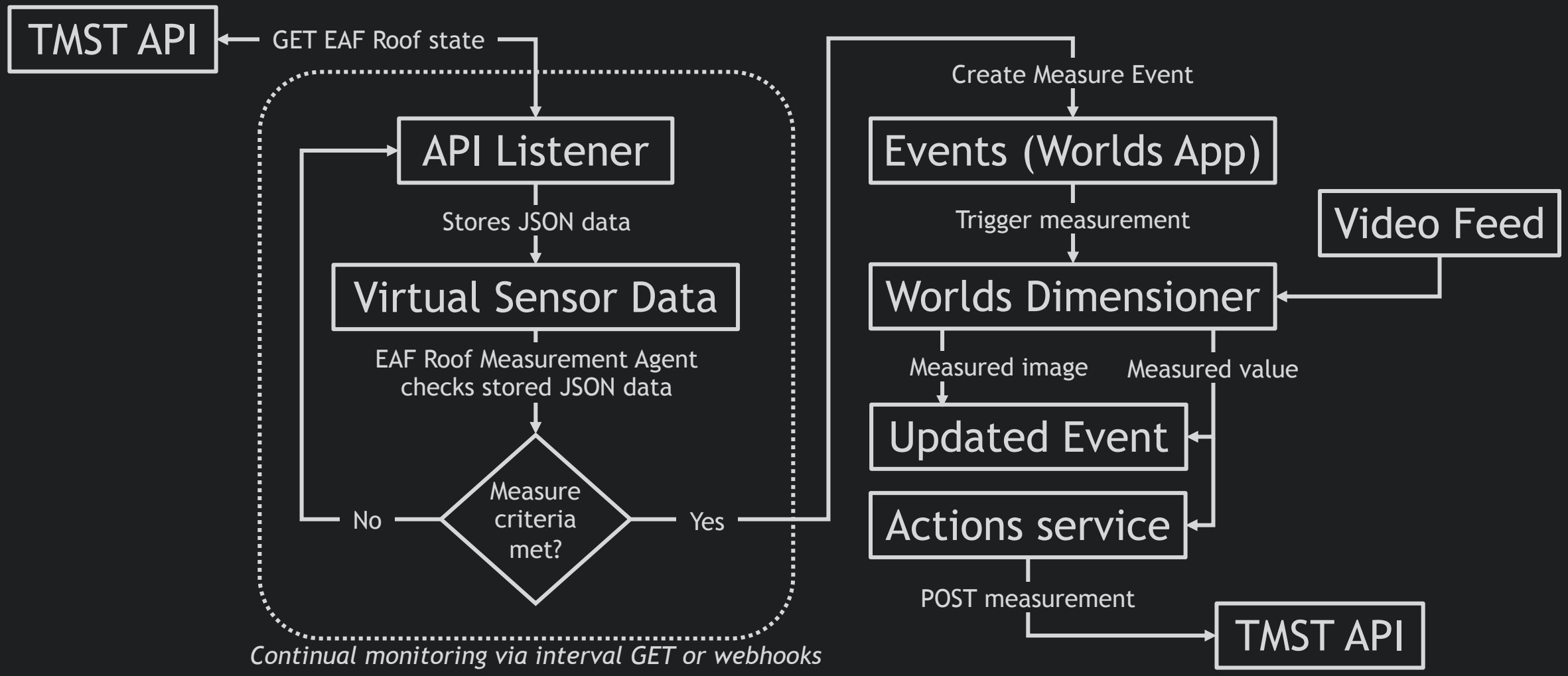
- Script GETs furnace state every 30 seconds
  - Ran yesterday from 11a-10p

Measure state = True Intervals

	Start Time	Stop Time	Interval (mm:ss)
1	12:55:32	12:57:33	02:01
2	13:55:00	13:57:31	02:31
3	16:37:11	16:38:42	01:30
4	17:45:47	17:47:48	02:01
5	18:54:21	18:54:21	02:00
6	20:06:54	20:09:26	02:31
7	21:22:03	21:24:34	02:31
		Average:	2:09

- 3-minute window is more likely than TSMT's 5-to-8-minute window

Solution overview for this use case



Worlds Dimensioner for this use case

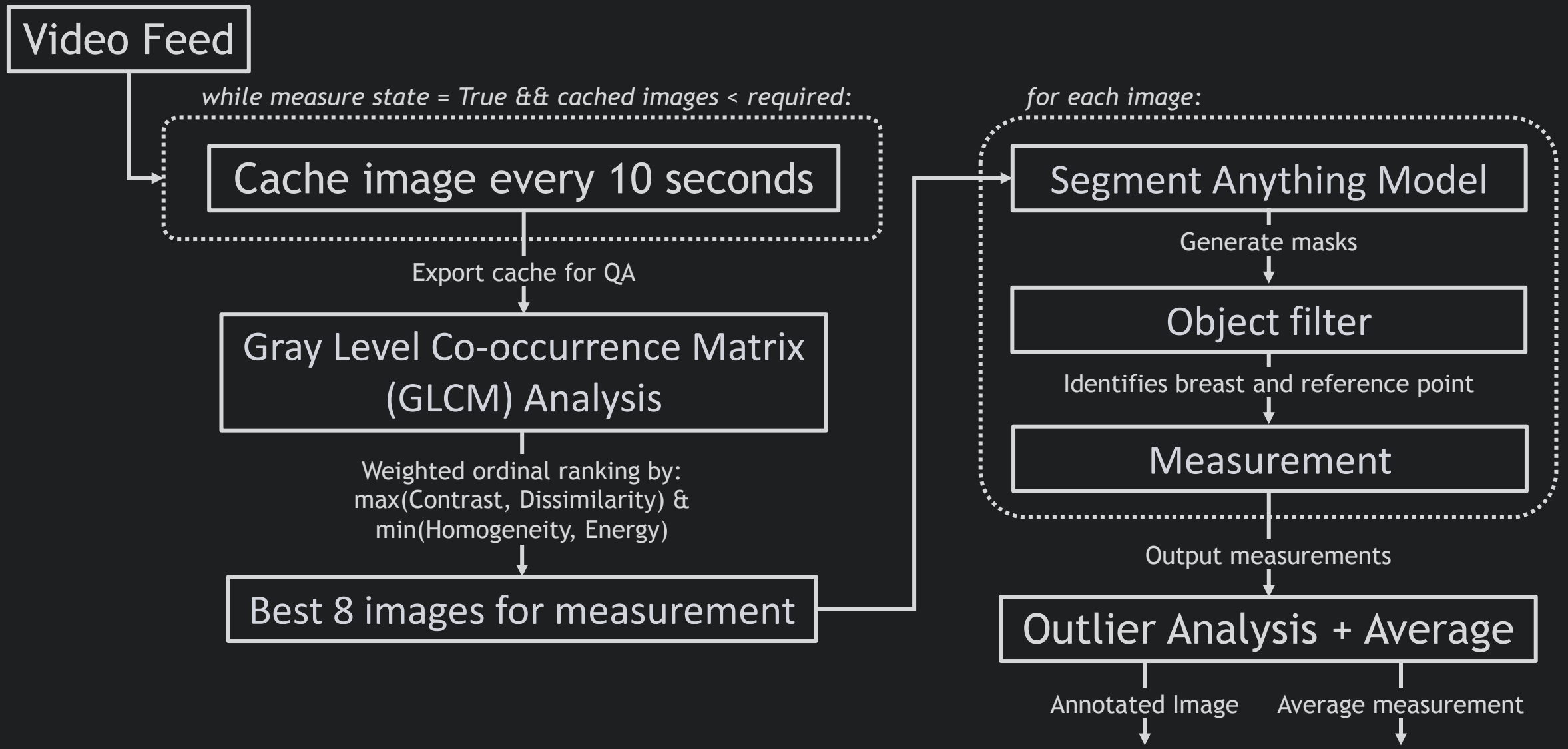
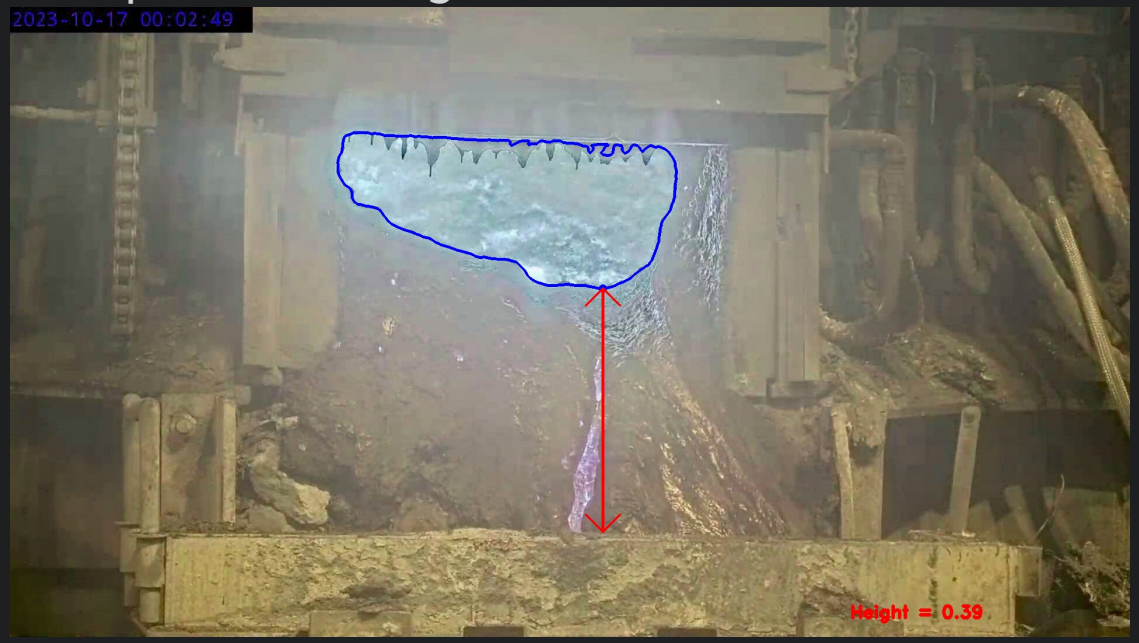


Image quality has a strong impact on accuracy

Example: Good Image



Example: Bad Image

- Solution: Procedurally sort for good images and measurements
  - Assuming there are good images at some point in the 5-8 minute period

Strategy to QA images

- Select images throughout the period to hopefully mitigate transient ambiguity
- Pre-measurement
  - Image processing (GLCM Analysis)
    - Finds the best images based on their contrast and other statistical methods
- Peri-measurement
  - Mask size / image size ratio
- Post-measurement
  - Height within expect range (non-negative)
  - Outlier analysis