AI/ML for DMW UT Analysis

Nuclear

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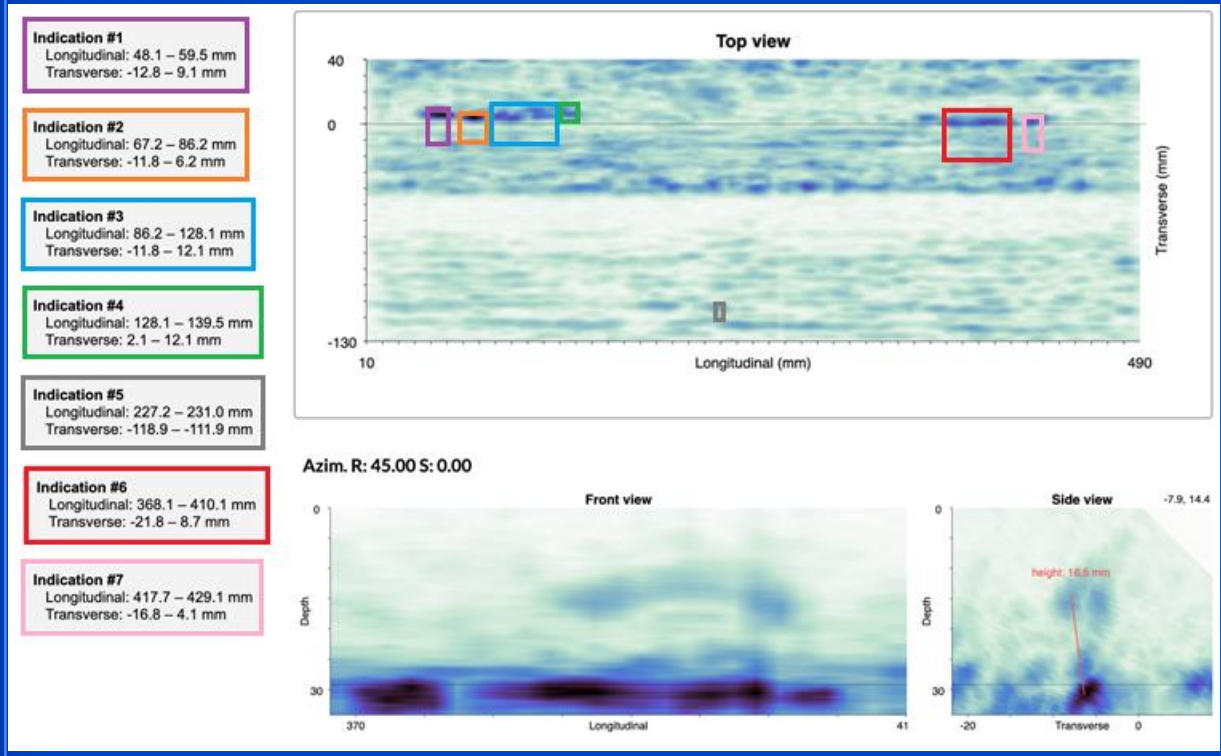
AI for DMW Examinations

- Training based on *open* PDI inventory
  - No field data available
- Assessment on *blind* PDI inventory

Field trials are paramount



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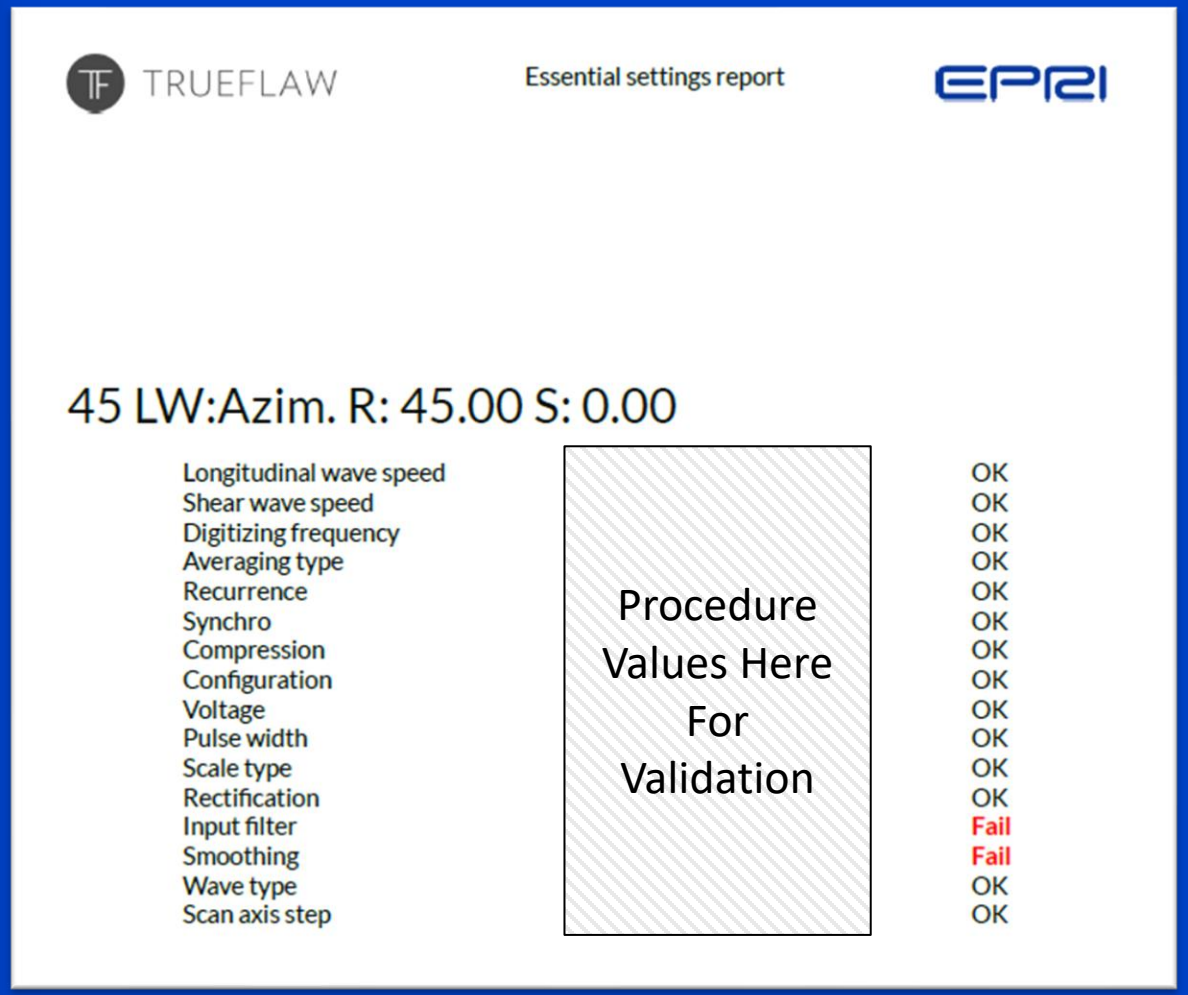
DMW Field Trial (Fall 2023)

- 25 welds inspected
- ✓ Essential variable check trialed with success
  - *Value added*
  - Extended to more variables & applications
- ✓ Good performance for circumferential flaws
  - Tuning based on field observations
  - Better data quality ⇒ better results

Model	Previous Outage	2023 Outage
Baseline	~9-10 call/weld	~4 call/weld
Tuned	~5-6 call/weld	**~2 call/weld**

- ✗ Excessive calls for axial flaws
  - Need for a dedicated model



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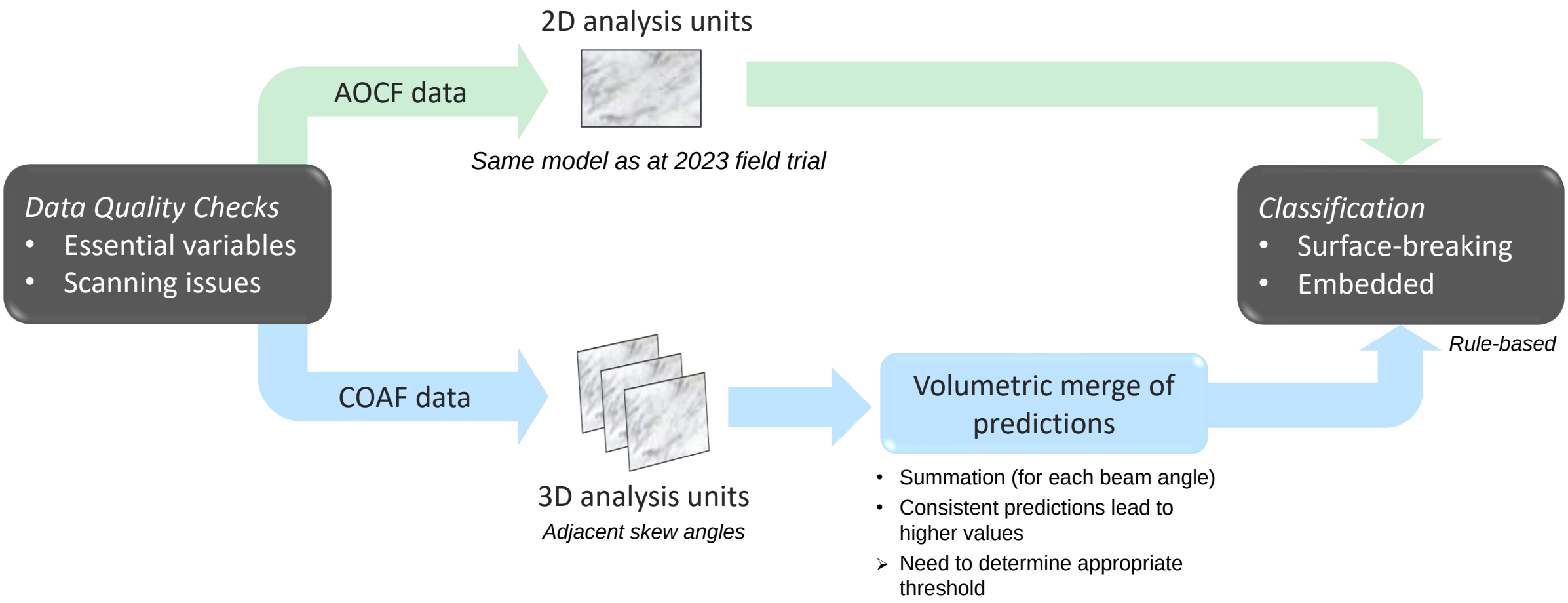
Lessons Learned → New Process



Proposed New Approach

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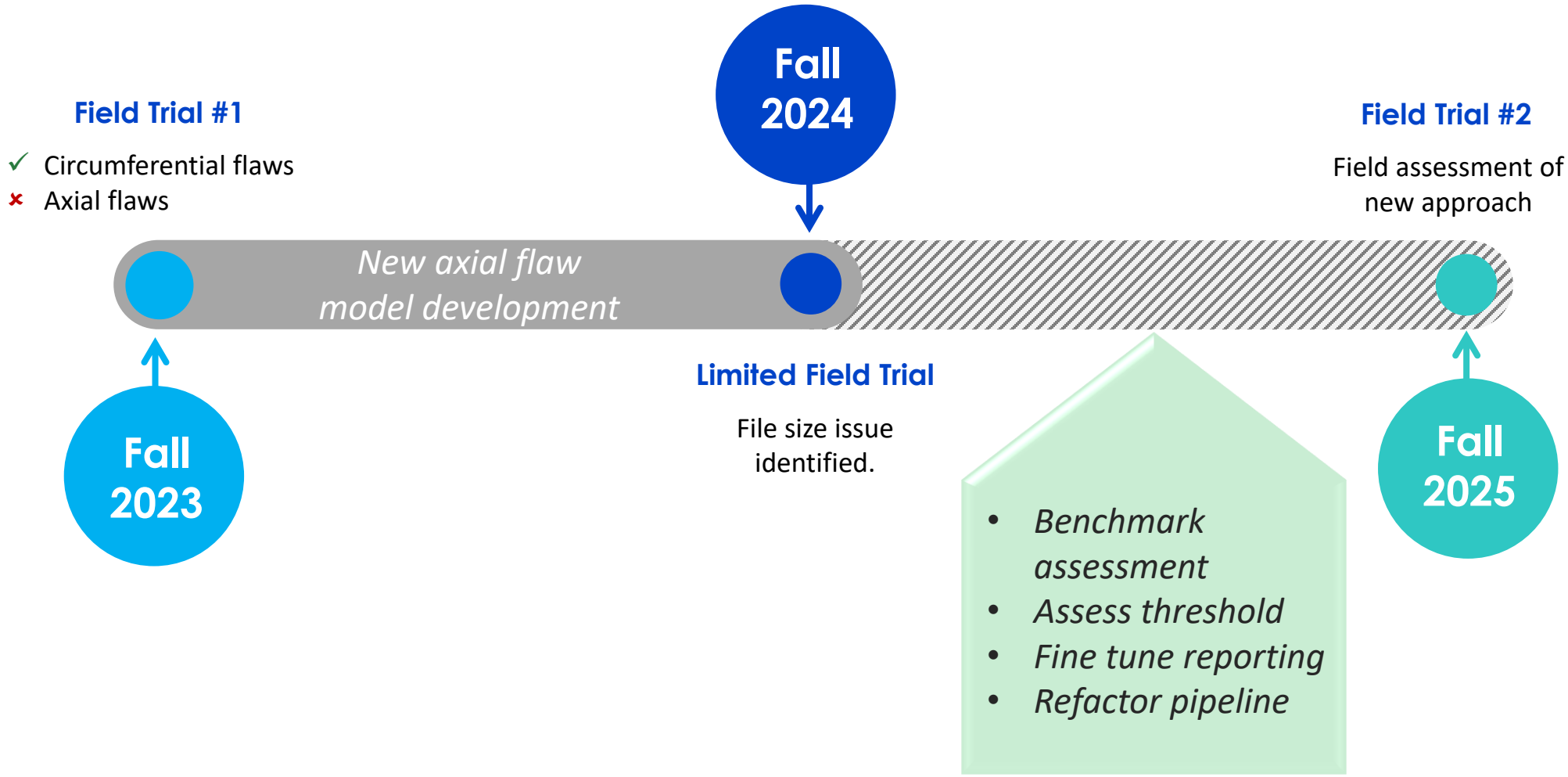
Activity Summary



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