

Fire VASE Validation Contrast Report

Expected-failure controls showing that the validators reject corrupted cube views and a real FIRED event that violates the declared geometry simplification threshold. Red FAIL labels are the intended outcome here; they do not describe the production sample.

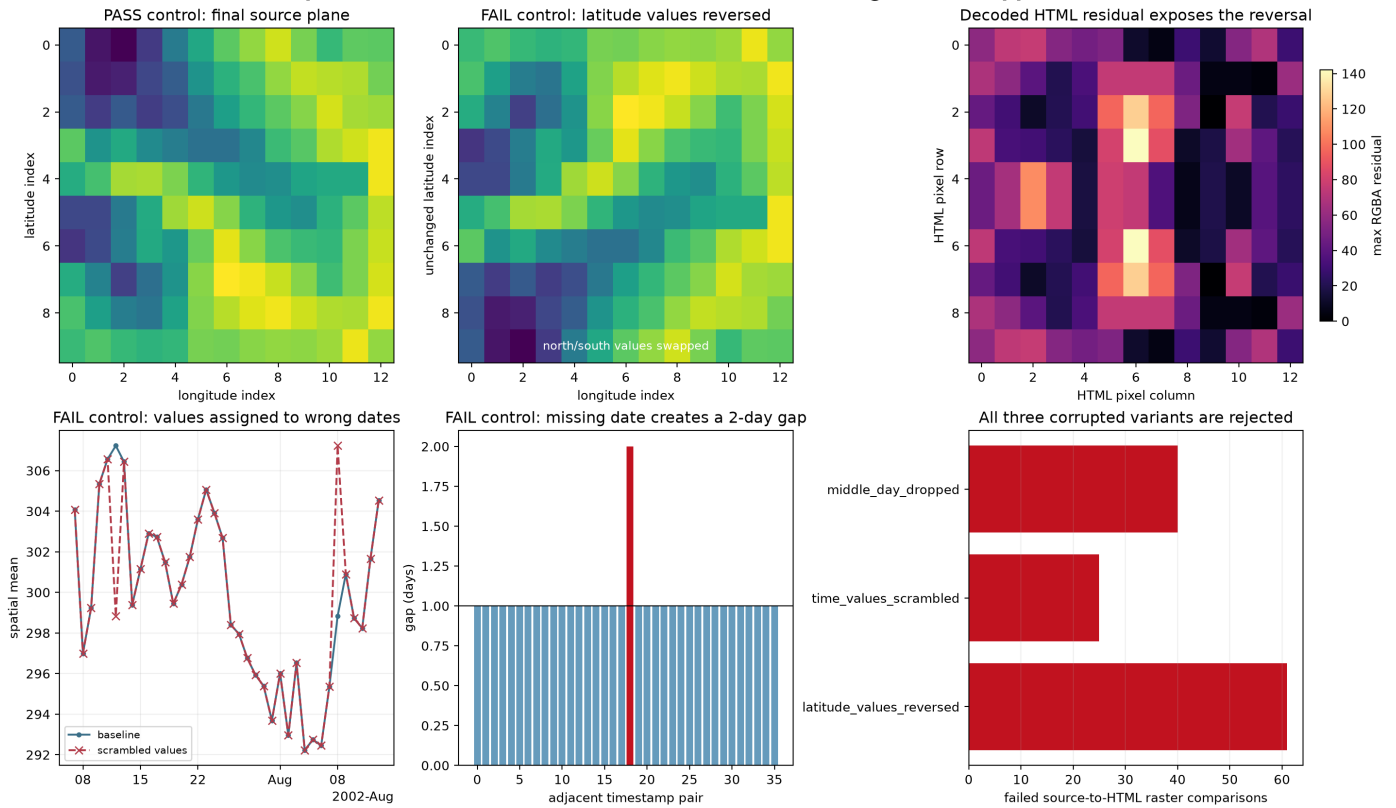
module	status	purpose
cube_negative_controls	FAIL	Expected FAIL: the baseline passes, while latitude reversal, time-value scrambling, and a dropped date are all rejected by the cube/HTML audit.
geometry	FAIL	Expected FAIL: real FIRED event 72016 changes cumulative area by 26.86% at the operational 125 m simplification, exceeding the 10% threshold.

Generated 2026-08-25T16:55:38+00:00. Each module also writes CSV/JSON evidence beside its plot; this PDF is a collation, not the only QA record.

1. Cube Negative Controls validation

FAIL - Expected FAIL: the baseline passes, while latitude reversal, time-value scrambling, and a dropped date are all rejected by the cube/HTML audit.

Expected FAIL controls - axis reversal, time scrambling, and a dropped date

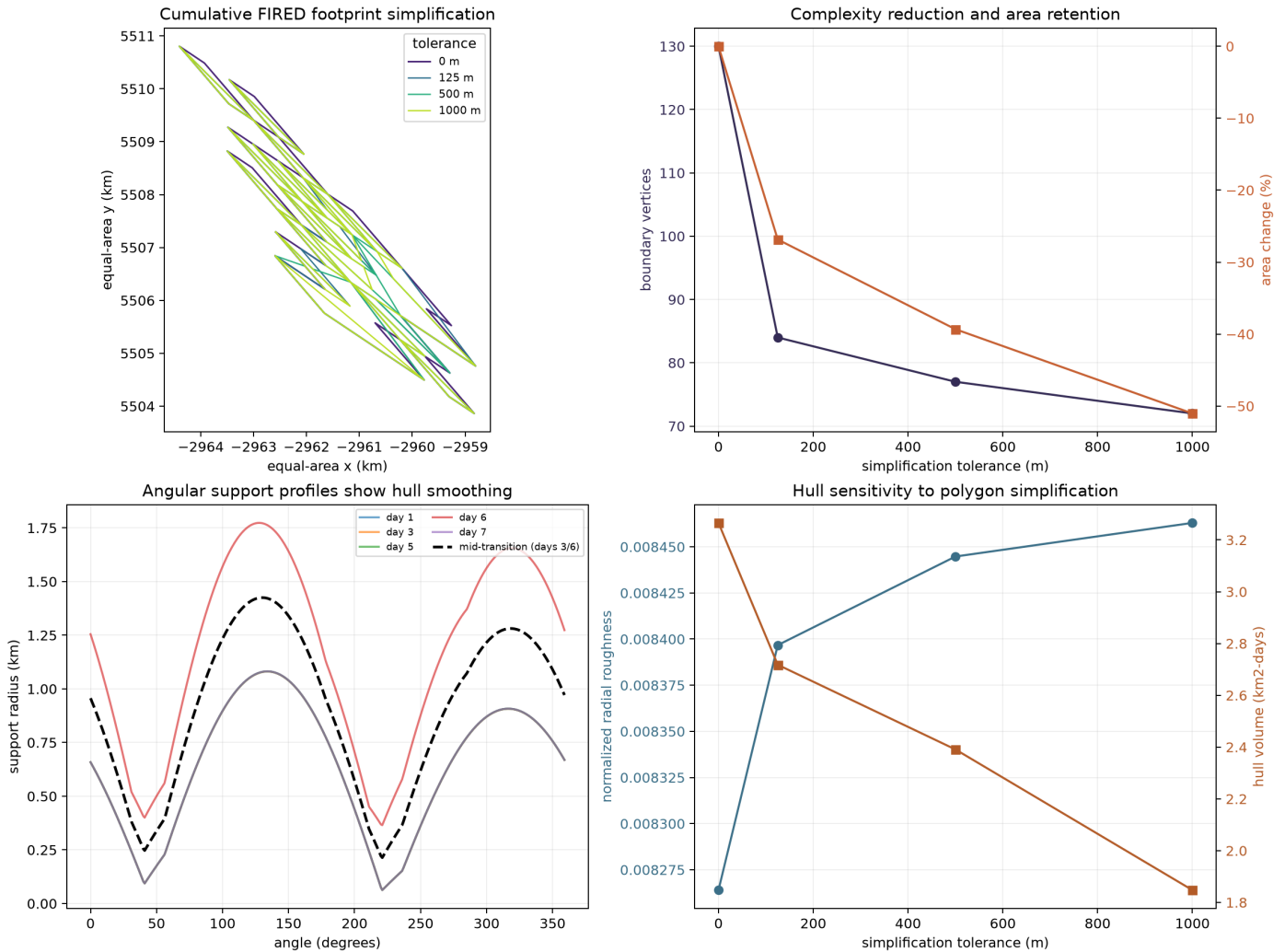


metric	value
fire id	20657
variable	tmmx
uncorrupted baseline passed	True
corrupted variants	3
corruptions detected	3
all negative controls detected	True
latitude reversal failed comparisons	61
time scramble failed comparisons	25
dropped day daily contiguity	False

2. Geometry validation

FAIL - Expected FAIL: real FIRED event 72016 changes cumulative area by 26.86% at the operational 125 m simplification, exceeding the 10% threshold.

QA 2 - FIRED polygon to time-hull construction



metric	value
fire id	72016
daily polygon rows	7
tolerances m	0.0, 125.0, 500.0, 1000.0
n theta	96
operational max tolerance m	125.0
all simplified geometries valid	True
operational max absolute area change pct	26.856982547314722
max absolute area change pct	51.02901984717752
base daily polygon vertices	130
most simplified daily polygon vertices	72