neural earth

Contact
sales@neural.io

Website
neuralearth.ai

Hail Risk Gap Analysis

Dallas, TX

16 years of observed hail data layered against perceived risk scores. Where the market sees danger, the data reveals opportunity.

KEY CHALLENGES

What Hail Underwriters Face Today

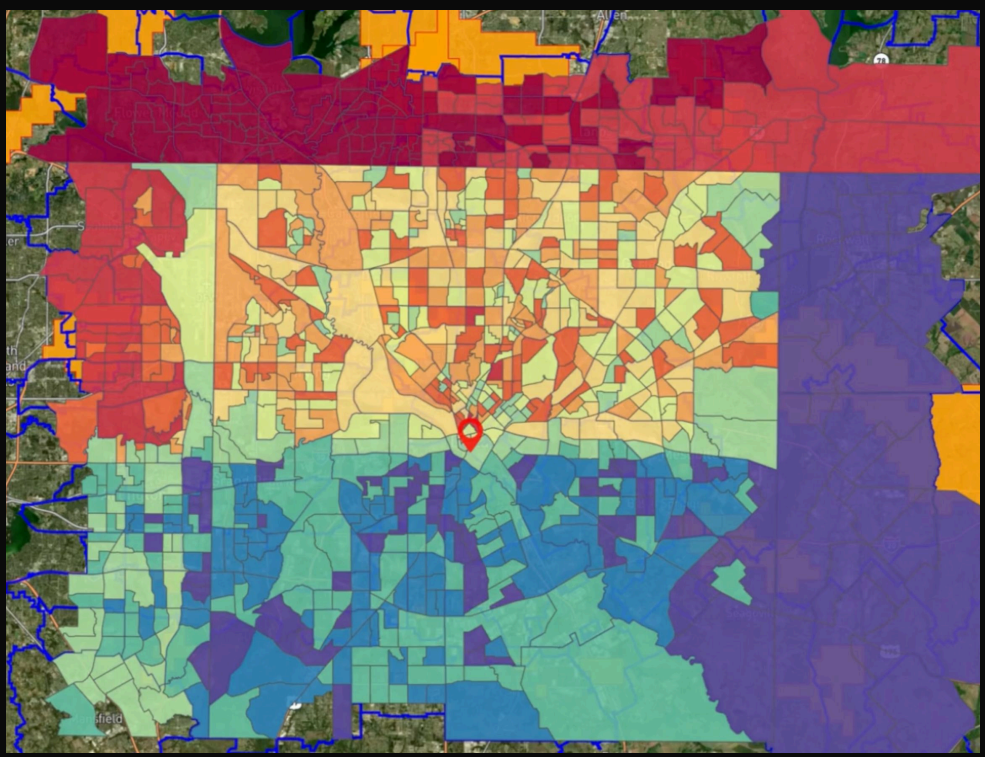
- Coarse risk scores cause underwriters and competitors to over-price or walk away from markets where the actual observed data tells a completely different story.
- Perceived hail risk and actual hail occurrence data live in separate systems, making it slow and difficult to identify gaps between market pricing and ground truth.
- Without a way to cross-reference observed events against index-based scores simultaneously, risk the data actually supports writing goes unidentified.

The Market Is Mispricing Hail Risk. The Data Proves It.

Traditional hail underwriting relies on index-based risk scores that combine FEMA metrics, home values, and income data but never cross-reference what actually happened on the ground.

Neural Earth Studio loads 16 years of NOAA NEXRAD radar coverage, layers ZIP code boundaries and the proprietary Roof Repair Hail Risk Index, then identifies where perceived risk and observed reality diverge.

The result is a specific, actionable list of markets the competition is avoiding or over-pricing. In minutes, not days.



How It Works.

4-STEP WORKFLOW

1. **Load: NOAA NEXRAD Radar Coverage**

   16 Years of observed hail data loaded directly into the Studio map, showing exactly where hail physically touched down across Dallas and where it did not.

2. **Layer: Roof Repair Hail Risk Index**

   ZIP code boundaries provide the market-level reference frame underwriters work from. The Neural Earth Roof Repair Hail Risk Index scores every census tract by perceived hail exposure using FEMA metrics, median home values, and household income data.

3. **Query: Perceived Risk v. Observed Data**

   Ask Neural Earth which ZIP codes score in the top quartile for perceived hail risk but show no overlap with actual observed hail events. Studio runs the spatial analysis across all three layers simultaneously and returns the answer in seconds.

4. **Surface: ZIP Codes Where the Market Is Wrong**

   A specific list of Dallas ZIP codes returns where the index signals danger but 16 years of radar data shows little to no hail activity. These are the gaps in the markets that the competition is avoiding based on a coarse score the observed evidence does not support.

WHAT NEURAL EARTH DELIVERS

Ground-Truth Hail Coverage.

16 years of NOAA NEXRAD radar data shows exactly where hail physically touched down — and where it did not.

Perceived Vs. Actual Risk Comparison.

Neural Earth's Roof Repair Hail Risk Index layered against observed events reveals ZIP codes where the market is mispricing risk.

Actionable Opportunity Identification.

Surface the specific ZIP codes scoring in the top quartile for perceived risk but showing little to no observed hail activity on the ground.

►► Where the market sees risk, the data sees opportunity. ◄◄

Neural Earth cross-references 16 years of observed hail data against perceived risk scores to surface the specific ZIP codes where competitors are over-pricing or walking away and the evidence says they are wrong.

sales@neural.io