

Earth Week: Innovating with Sea Sensors

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Water Floods Tarmac at Dubai International Airport.

Source: Jamie Smith via Sam Chui Aviation & Travel; April 17, 2024.

In the year before Earth Week 2024, weather crises stoked global market demand for climate change data. The cruise and shipping industry can add value by gathering and analyzing such data via a network of onboard sea sensors. Creative implementations would diversify revenue via data resale and scientific sharing agreements. Regulators will recognize industry leaders who rise to the challenge by enabling a global climate change monitoring mesh network. ELYON can help clients integrate sensors and analytics across shipping lines.

Floods in a Desert Oasis

Torrential rains last week in the desert metropolis of Dubai caused consternation at the world's busiest global airport, resulting in over 200,000 ticket disruptions by airline Emirates alone:

- International news outlets and aviation aficionados captured surreal scenes of water stretching across Dubai International Airport's tarmacs.¹
- International passengers stranded within terminals were sometimes short food and drinks amidst difficulties keeping restaurants stockpiled.²

Wildfires and Record Temperatures Scorched Europe in 2023

In Europe last year, record heat coincided with wildfires across the continent, according to newly released analysis by the Copernicus Climate Change Service (C3S) and the World Meteorological Organization (WMO).³

- According to *Bloomberg News*, the Copernicus program uses billions of worldwide measurements from satellites, ships, aircraft, and weather stations for its forecasts.⁴ This reveals partnership and revenue diversification opportunities for industry.
- The European Union (EU) endured its joint-hottest year on record in 2023.⁵
- Last summer, EU-area fires burned the size of London, Paris, and Berlin combined.⁶

Data Demand Grows in Global Reinsurance Market

Swiss Re, a Zurich-based top-three provider of global reinsurance, estimated last year that new partnerships were needed to create better climate data underwriting for property catastrophe insurance plans. This poses an opportunity for global fleets to profitably collect climate data.

- Swiss Re is observing steady growth of insured catastrophe losses as the ten-year moving average approaches nearly \$100b—recent damages have already spiked above.⁷
- The trendline continued in 2023 with a new record in the number of declared insured catastrophes. Swiss Re estimates insured losses could double within the next ten years as temperatures rise and extreme weather events become more frequent and intense.⁸

Sources

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² Simon Calder, “Dubai Airports News Today: Emirates Boss Apologises for Congestion, Lack of Information, and Confusion in the Terminal,” *The Independent*, April 22, 2024, sec. Travel, <https://www.independent.co.uk/travel/news-and-advice/dubai-airport-transfers-floods-emirates-apology-b2532396.html>.

³ “European State of the Climate 2023 | Copernicus,” accessed April 25, 2024, <https://climate.copernicus.eu/esotc/2023>.

⁴ “Europe Is Being Scorched and Flooded by Growing Climate Extremes,” *Bloomberg.Com*, April 22, 2024, <https://www.bloomberg.com/news/articles/2024-04-22/europe-s-annual-weather-report-highlights-floods-wildfires-heat-in-2023>.

⁵ “European State of the Climate 2023,” World Meteorological Organization, April 19, 2024, <https://wmo.int/publication-series/european-state-of-climate-2023>.

⁶ “Europe Is Being Scorched and Flooded by Growing Climate Extremes.”

⁷ “The State of the Reinsurance Property Catastrophe Market | Swiss Re,” May 16, 2023, <https://www.swissre.com/risk-knowledge/mitigating-climate-risk/state-of-reinsurance-property-cat-market.html>.

⁸ “New Record of 142 Natural Catastrophes Accumulates to USD 108 Billion Insured Losses in 2023, Finds Swiss Re Institute | Swiss Re,” March 26, 2024, <https://www.swissre.com/press-release/New-record-of-142-natural-catastrophes-accumulates-to-USD-108-billion-insured-losses-in-2023-finds-Swiss-Re-Institute/a2512914-6d3a-492e-a190-aac37feca15b>.