

# Flood Prediction Platforms

## ANMD-MRS18-172 · Environmental AI Applications

### A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US\$

## WHY THIS REPORT

Flood prediction platforms forecast and map flooding — combining hydrological models, machine-learning forecasting, satellite SAR inundation mapping and early-warning systems. Covering riverine, urban pluvial, coastal and flash floods, they turn weather and terrain data into actionable warnings. The pay-off is measurable: earlier warnings, reduced losses, better insurance pricing and resilient infrastructure planning. This report is a comprehensive, decision-grade study of the flood prediction platform market across modelling approach, flood type, application, end-user, scale, ownership and business model, spanning history 2020–2024, a 2025 base year, a 2025–2032 forecast and long-term outlooks to 2035, 2040 and 2050. This decision-grade study sizes the global market three ways — value, platform seats/licences and area coverage — across segmentation, seven regions and four scenarios to 2032, with outlooks to 2050.

## SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

The sustainability case here is resilience and adaptation. Flood prediction reduces loss of life and property and supports climate adaptation, while raising equity and warning-access questions. The analysis applies double materiality, maps outcomes to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, and Forecast-reliability and false-alarm risk, warning-access equity, and data-governance are treated as material risks — with greenwashing and SDG-washing screens applied throughout.

### Mapped Sustainable Development Goals:

<b>SDG 11</b> Sustainable Cities	<b>SDG 13</b> Climate Action	<b>SDG 6</b> Clean Water & Sanitation
-------------------------------------	---------------------------------	--

### Measurable sustainability outcomes assessed:

- Reduced loss of life and property from flooding
- Stronger climate adaptation and resilience
- Actionable, high-resolution early warning
- Warning access, equity and forecast reliability as material risks

**Framework alignment:** Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

## WHAT'S INSIDE AT A GLANCE

<b>53</b> Chapters	<b>9</b> Report Parts	<b>7</b> Regions Covered	<b>40+</b> Country Markets
<b>2025–32</b> Forecast Horizon	<b>4</b> Forward Scenarios	<b>25+</b> Companies Profiled	<b>3</b> SDGs Mapped

## REPORT COVERAGE

**Geographic scope:** North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. North America and Europe lead AI-forecasting and insurance demand; Asia Pacific drives climate-resilience deployment; other regions assessed on their own merits.

## MARKET OVERVIEW

### From coarse models to AI-driven, high-resolution, real-time forecasting.

Flood prediction is moving from coarse models to AI-driven, high-resolution, real-time forecasting. Demand is driven by climate-intensified flooding, insurance needs and resilience funding across North America, Europe and Asia Pacific. The market is read three ways — value, platform seats/licences and area coverage — and forecast under four scenarios (conservative, base, accelerated and disruption), each region reported separately.

- **North America leads platform innovation** — supported by insurer demand, federal resilience funding and leading flood-AI developers.
- **Europe scales on resilience** — anchored by the UK and the Netherlands, where flood risk and water management drive advanced platforms.
- **Asia Pacific grows fastest** — led by China, India and Southeast Asia, where monsoon and coastal flooding create acute demand.
- **Modelling approach segments the value** — across hydrological, ML-forecasting, SAR-inundation and early-warning designs, each with distinct economics.

## REGIONAL OUTLOOK

Across seven reporting regions, the report separates commercialisation and supply leaders from high-growth and emerging markets — each profiled in full rather than aggregated into Rest of World.

Region	Stage	Lead Markets & Drivers
North America	Platform leader	United States, Canada — regulation, funding, tech-vendor base
Europe	Resilience-led	Germany, France, UK, Netherlands — environmental rules, CSRD, climate funding
Asia Pacific	Fastest growth	China, India, Southeast Asia — monsoon & coastal flooding
Middle East	Emerging	Saudi Arabia, UAE — environmental strategy, sovereign investment
Latin America	Emerging	Brazil, Chile — biodiversity, deforestation, climate risk
Africa	Frontier	Kenya, Mozambique — flood resilience, blended finance

## KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
<ul style="list-style-type: none"> <li>• Climate-intensified flooding</li> <li>• Insurance &amp; risk-pricing demand</li> <li>• Resilience &amp; early-warning funding</li> <li>• AI forecasting &amp; SAR-EO advances</li> <li>• Urban &amp; coastal flood exposure</li> </ul>	<ul style="list-style-type: none"> <li>• Data-availability &amp; DEM-quality gaps</li> <li>• Forecast-accuracy &amp; uncertainty limits</li> <li>• Last-mile warning &amp; action gaps</li> <li>• Integration with emergency systems</li> <li>• Funding &amp; public-good business models</li> </ul>

## SEGMENTATION SNAPSHOT

<b>By Modelling Approach</b>	Hydrological models · ML forecasting · SAR / EO inundation · early-warning
<b>By Flood Type</b>	Riverine · pluvial (urban) · coastal · flash-flood
<b>By Application</b>	Riverine · pluvial (urban) · coastal · flash-flood prediction
<b>By End User</b>	Governments · insurers · utilities · cities · emergency services
<b>By Business Model</b>	Hardware sale · SaaS · data · managed service
<b>By Scale</b>	Pilot · deployment · enterprise / national-scale

## TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

### Part I — Report Foundation, Discovery and Strategic Intelligence

- › Chapter 1. Scope, Methodology and Report Architecture
- › Chapter 2. Industry Discovery Summary — Flood Prediction Platforms
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

### Part II — Market Intelligence, Sizing, Forecasting and Segmentation

- › Chapter 5. Industry Overview and Market Evolution
- › Chapter 6. Market Dynamics
- › Chapter 7. Global Market Size and Forecast, 2020–2032
- › Chapter 8. Market Segmentation Analysis
- › Chapter 9. End-User and Demand-Side Intelligence
- › Chapter 10. Pricing, Cost and Commercial Model Intelligence

### Part III — Regional and Country Intelligence

- › Chapter 11. Global Regional Intelligence Framework
- › Chapter 12. North America Market Intelligence
- › Chapter 13. Europe Market Intelligence
- › Chapter 14. Asia Pacific Market Intelligence
- › Chapter 15. Latin America Market Intelligence
- › Chapter 16. Africa Market Intelligence
- › Chapter 17. Middle East Market Intelligence
- › Chapter 18. Rest of World Market Intelligence

### Part IV — Technology, Innovation and Category-Specific Intelligence

- › Chapter 19. Technology Landscape and Architecture
- › Chapter 20. Emerging and Next-Generation Technology Intelligence
- › Chapter 21. Category-Specific Intelligence Module
- › Chapter 22. Research, Innovation and Funding Landscape

## Part V — Company, Competition, Patent and Project Intelligence

- › Chapter 23. Competitive Landscape
- › Chapter 24. Company Profiles
- › Chapter 25. Mergers, Acquisitions, Partnerships and Ecosystem Intelligence
- › Chapter 26. Patent Landscape and Intellectual Property Intelligence
- › Chapter 27. Project, Deployment and Case-Study Intelligence

## Part VI — Sustainability, ESG, SDG, Climate and Natural-Capital Intelligence

- › Chapter 28. Sustainability Intelligence Suite
- › Chapter 29. ESG Intelligence and Double Materiality
- › Chapter 30. ESG and Sustainability Framework Alignment
- › Chapter 31. SDG Intelligence
- › Chapter 32. Carbon, Net-Zero and Climate-Mitigation Intelligence
- › Chapter 33. Water, Biodiversity and Natural-Capital Intelligence
- › Chapter 34. Circular Economy and Resource-Security Intelligence
- › Chapter 35. Social Impact, Human Capital and Community Intelligence
- › Chapter 36. Climate Risk, Adaptation and Resilience Intelligence

## Part VII — Supply Chain, Policy, Legal, Economics and Finance

- › Chapter 37. Value Chain, Supply Chain and Geopolitical Intelligence
- › Chapter 38. Policy, Regulation and Incentive Intelligence
- › Chapter 39. Legal, Contracting and Risk-Allocation Intelligence
- › Chapter 40. Unit Economics, CAPEX, OPEX and Return Analysis
- › Chapter 41. Investment, Sustainable Finance and Bankability Intelligence

## Part VIII — Scenario, Future Intelligence and Final Due Diligence Verdict

- › Chapter 42. Scenario Analysis and Future Intelligence
- › Chapter 43. Sustainability Due Diligence Framework and Data-Room Index
- › Chapter 44. Risk Register, RAG Rating and Anti-Greenwashing Screen
- › Chapter 45. Bottom-Line Verdict and Strategic Recommendations
- › Chapter 46. Implementation Roadmap and Stakeholder Playbooks

## Part IX — Annexes, Directories and Reference Material

- › Chapter 47. Methodology Annex
- › Chapter 48. Corporate Directory and Company Intelligence Annex
- › Chapter 49. Patent Directory and Patent Intelligence Annex
- › Chapter 50. Project Intelligence Annex
- › Chapter 51. Forecast Annex
- › Chapter 52. Sustainability KPI Annex
- › Chapter 53. Reference Annexes

## COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans tech-giant forecasting, flood-risk modelling specialists, and SAR-satellite and early-warning innovators.

### Representative players profiled in the full report:

Google LLC (Alphabet Inc.) · JBA Risk Management Limited · Fathom (SSBN Limited) · One Concern, Inc · and 20+ further profiled players across flood-risk modelling and SAR / early-warning innovators.

**Investment intelligence:** venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a clear, decision-ready investment verdict.

## KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global flood prediction platforms market, and how fast will it grow to 2032?
- ? Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- ? How does AI-driven, high-resolution forecasting change resilience value versus coarse hydrological models?
- ? Who leads, and where is the competitive and patent white space?
- ? Is the investment case bankable — and under what conditions?
- ? How does the category align with the SDGs, circular-economy and resource-security and disclosure regulation?

## WHY ANMD — THE DIFFERENCE

*Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, water and natural-capital intelligence and a decision-ready bankability verdict in a single architecture.*

- **Triangulated sizing** — every market read three ways (value, platform seats/licences and area coverage) so value-led and volume-led views reconcile rather than conflict.
- **Region-honest forecasting** — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- **Integrated evidence base** — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- **No-fabrication discipline** — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- **Anti-greenwashing rigour** — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- **Decision-first structure** — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear, decision-ready investment verdict.

## WHO SHOULD BUY THIS REPORT

Investors and climate-tech / PE funds, governments and disaster agencies, insurers and reinsurers, infrastructure operators and developers, regulators and standards bodies, and corporate strategy and ESG teams.

### Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com) · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

### Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com). The full detailed table of contents will be sent directly to your registered company email address.