

An AI-powered weather and climate data analytics platform

2025.09.03

DI Lab Inc.



Facing the Climate Crisis: Tackle Extreme Weather Risks

Climate Risk AI Agent

We empower industries and governments to manage extreme climate risks through advanced AI-powered solutions.

Service



AI-Powered Climate Data
Anomaly Detection and
Forecasting Solution



**MODOO
SOLAR**

Solar Power Forecasting
and Climate Risk
Management Service



AI-based precipitation
monitoring service

Technological Edge: Proprietary AI models generate high-quality, real-time climate data.

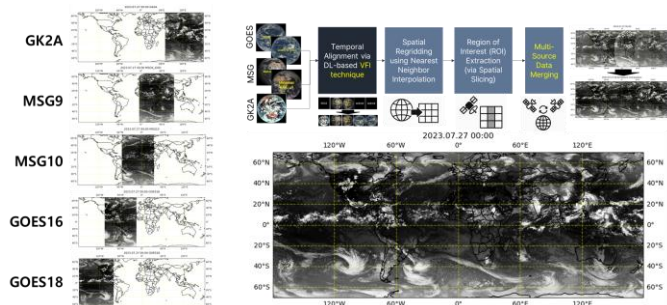
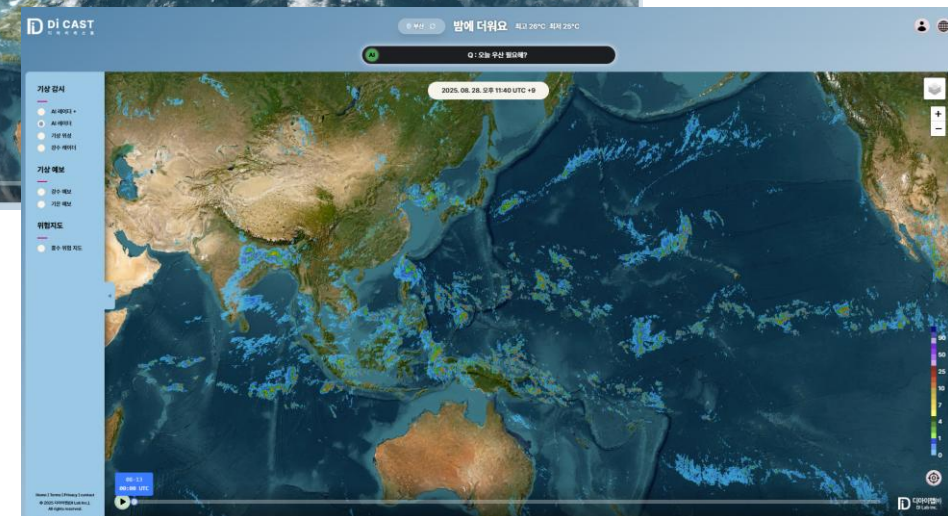
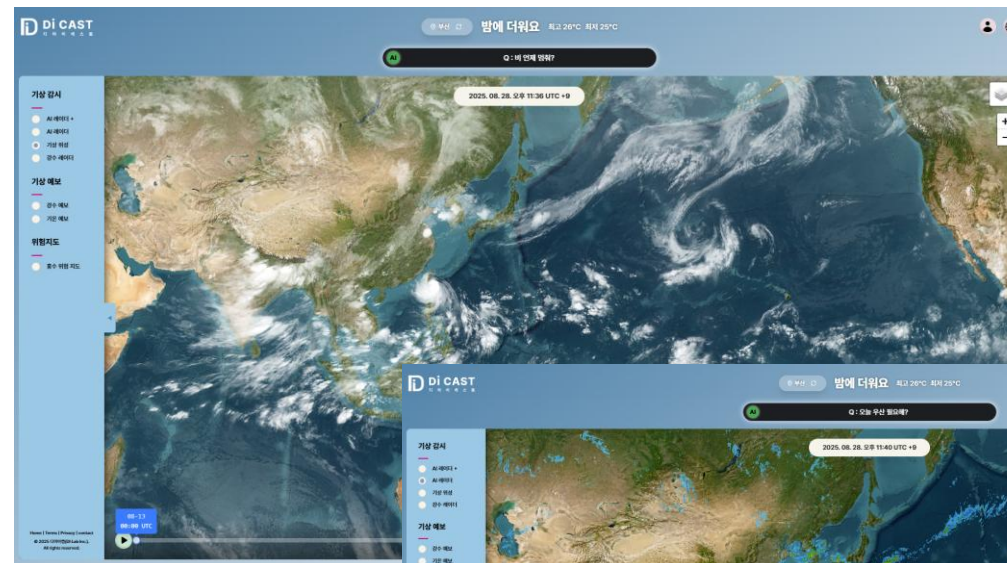
Market Competitiveness: Accurate risk diagnostics and responsive services based on premium datasets.

Growth Strategy: Targeting global markets in supply chain resilience, climate disclosures, and regulatory compliance.

From continuous monitoring using geostationary satellites to high-resolution data generation using low Earth orbit satellites

AI-based satellite products — cloud and precipitation monitoring

- Global integration of geostationary satellites and monitoring at 10-minute intervals, enabled by AI-based satellite alignment technology.
- Real-time tracking of cloud movement, formation, and dissipation.
- Climatic analysis of cloud behavior using historical satellite data.
- Utilizes generative AI to produce weather information.
- Provides more accurate weather data compared to traditional forecasts.
- Integrates real-time rainfall observation and prediction data.
- Includes flood risk maps for early detection of inundation hazards.

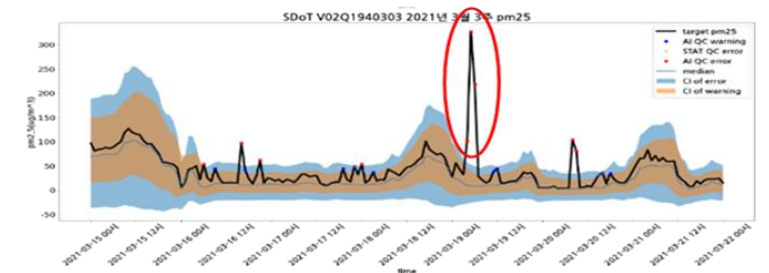
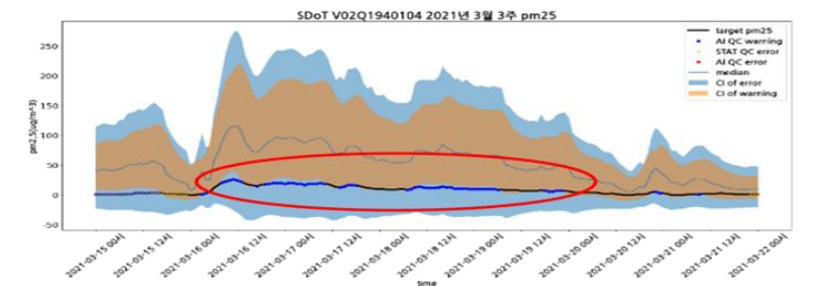
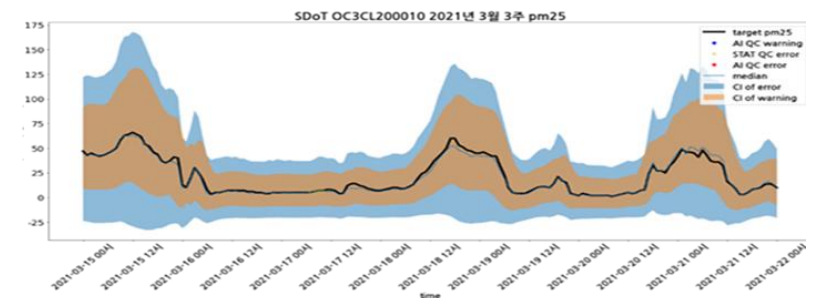
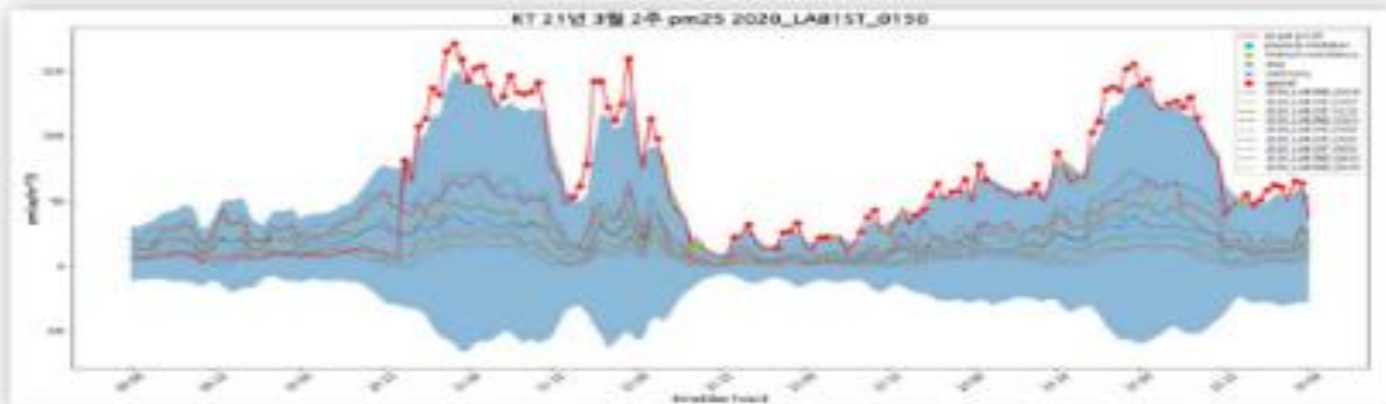


	RMSE	CSI	POD	FAR
GK2A/GOES level2	4.38 / 9.99	0.29 / 0.18	0.66 / 0.29	0.65 / 0.66
GSMAP (For china)	0.14-0.99	0.2-0.35	0.4	0.35-0.75
202307 total	3.21	0.59	0.73	0.29
202312 total	0.57	0.63	0.74	0.29

AI-Powered Anomaly Detection and Prediction, Built on 10+ Years of Expertise

AI-Based Anomaly Detection Solution

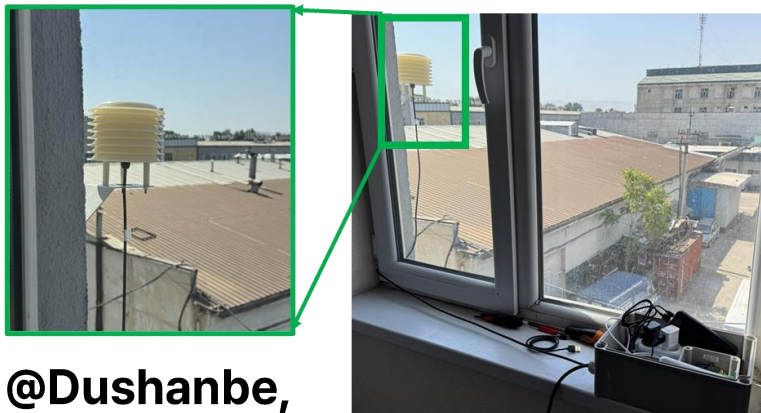
- DI CAST provides IoT-based anomaly detection and forecasting solutions tailored for the climate and environmental sector, leveraging domain expertise, accumulated climate-environmental data, and advanced AI technologies
- Holds 2 registered patents and 5 pending applications related to anomaly detection and forecasting (including AI-based detection, IoT sensor operation management, solar power forecasting and anomaly detection, etc.)
- Utilizes high-quality, high-resolution data generated through its solutions to diagnose climate risks and establish effective response strategies.



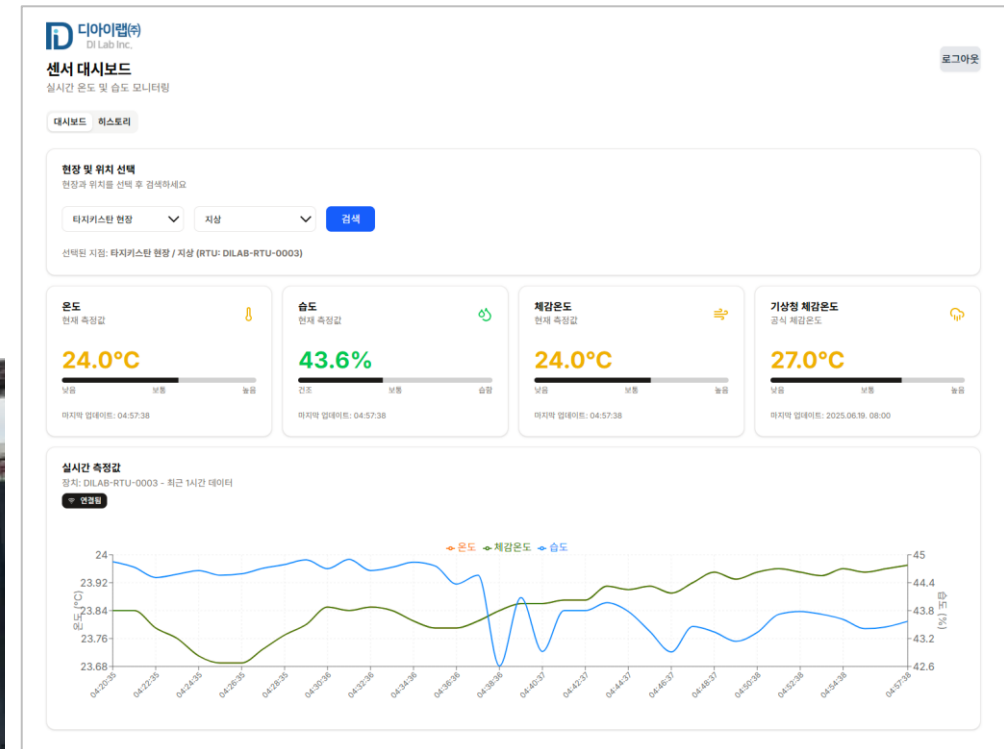
AI-Powered Anomaly Detection and Prediction, Built on 10+ Years of Expertise

Detection of hazardous weather in production using IoT

- Real-time detection of hazardous weather conditions using IoT sensors at industrial sites to monitor phenomena such as strong winds, heavy rainfall, lightning, and extreme temperatures.
- Early warning capabilities for site managers and workers, enabling preventive measures to protect personnel, equipment, and production processes from weather threats.
- Risk analysis based on data through the collection and evaluation of meteorological information from sites to identify trends, improve hazardous weather forecasting, and strengthen operational safety protocols.



@Dushanbe,
Tajikistan



Pre-feasibility study for building a satellite-based meteorological and climate information integration platform in Tajikistan



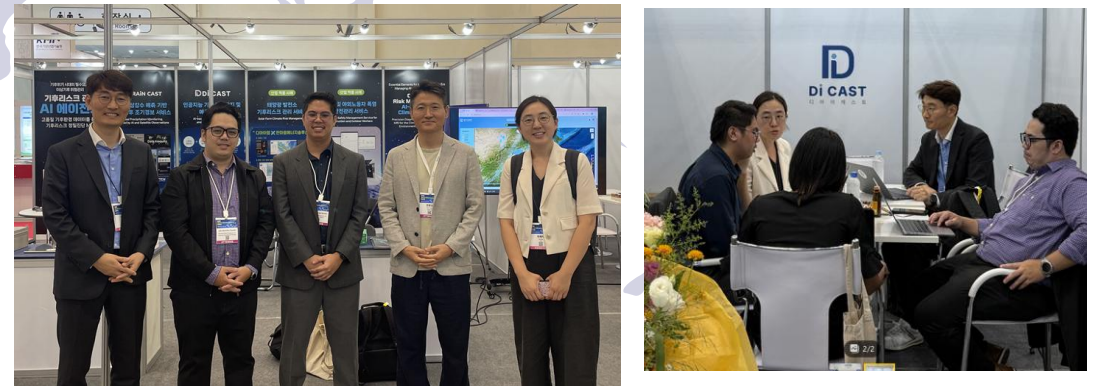
Establish of a Multi-Hazard Early Warning System using meteorological and climate information in Pacific Island Countries



Nepal Satellite based landslide Early Warning and Damage Detection System Planning



Climate risk monitoring and forecasting in the Philippines using AI radar maps

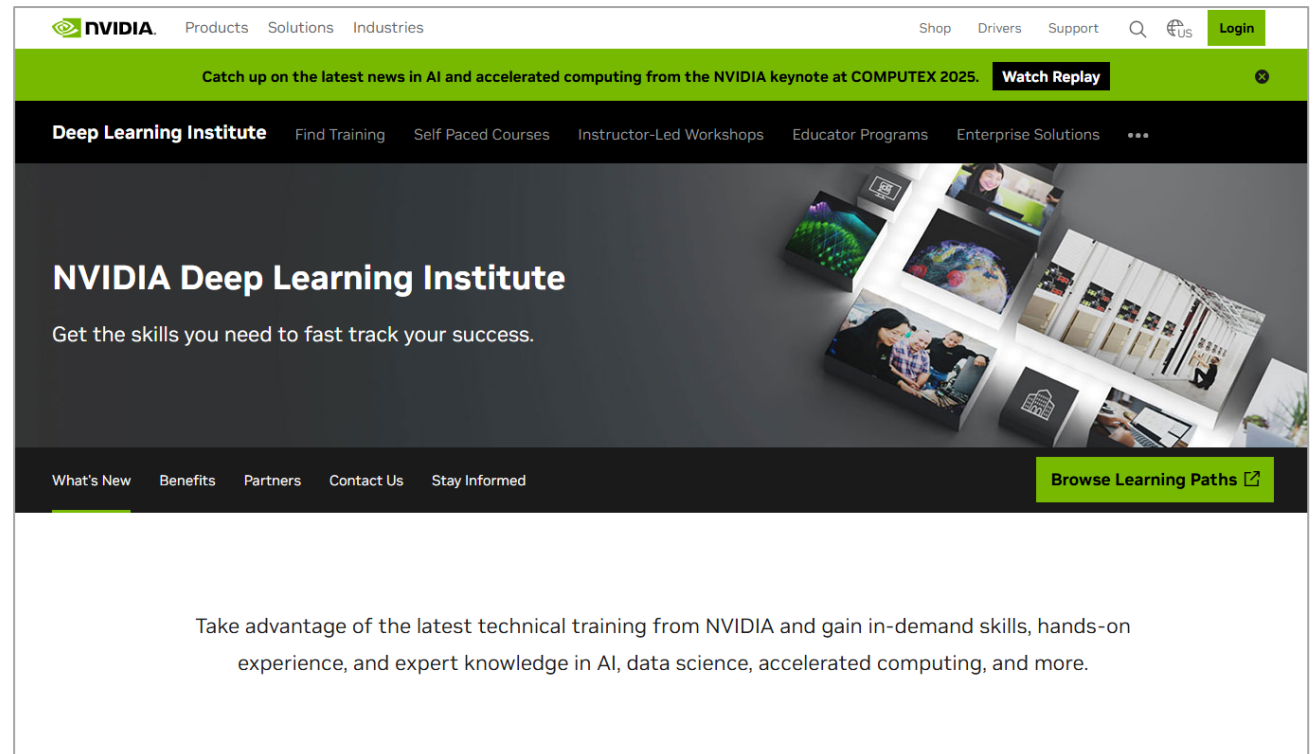




The NVIDIA Inception Program is a global innovation program that selects and helps grow next-generation innovative startups in AI, data science, and high-performance computing.



Empowering climate response with advanced data analytics – DI Lab x NVIDIA



We address the climate crisis through intelligent data processing

Thank you

