News Release

Konica Minolta Expands Effort to Deploy Remote Monitoring Solution

Launching the Second Joint PoC Demonstration with the Nagano Prefectural Government for an AI-based Snow Depth Monitoring Solution

Tokyo (December 23, 2024) – Konica Minolta, Inc. (Konica Minolta) launched the second joint Proof of Concept (PoC) remote monitoring demonstration with the Nagano Prefectural Government at two locations in the prefecture, Sugadaira in Ueda City and Hokujo in Hakuba Village, this time for a snow depth monitoring solution.

Ensuring Social Safety and Security

With the recent increase in disaster risk due to climate change, there is a growing demand to solve social issues and ensure safety and security by promoting digital transformation (DX). Konica Minolta aims to contribute to the safety of communities that are prepared for emergencies by offering a remote monitoring solution utilizing highly durable and reliable edge devices, ICT and AI-based image analysis systems, while addressing five material issues including "ensuring social safety and security" through its business activities.

Last year, Konica Minolta conducted a demonstration of an AI-based reservoir monitoring solution for disaster risk mitigation jointly with the Nagano Prefectural Government. Building on the success of this demonstration, the Company embarked on the second remote monitoring demonstration, this time to verify the effectiveness of the snow depth monitoring solution to check road conditions, which it developed by applying the technology used in the reservoir monitoring solution.

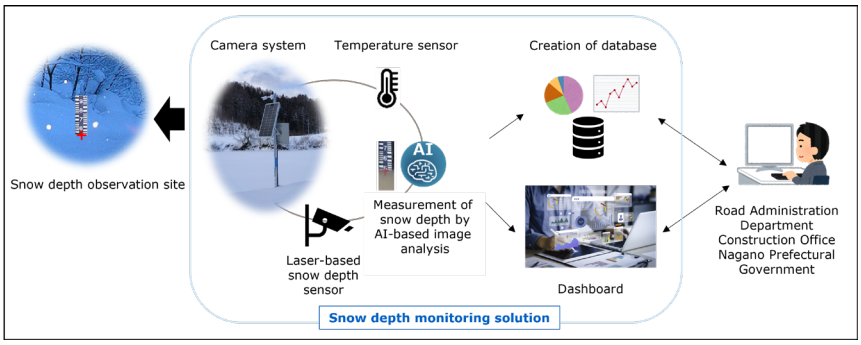
PoC Demonstration of Snow Depth Monitoring Solution

The PoC demonstration of Konica Minolta's snow depth monitoring solution is slated to be conducted from December 18, 2024 to March 31, 2025, during which period the snow depth measured at Sugadaira and Hokujo and remotely-captured live images of these locations will be monitored at the Nagano Prefectural Government office a few dozen kilometers away.

Because it must clear snow from roads to ensure safe and smooth traffic during the winter months, Nagano Prefecture has 66 snow depth observation sites, which include 44 sites where the snow depth is observed visually by external contractors. In isolated mountainous areas, in particular, it takes longer to determine the snow depth on the roads, which hinders real-time sharing of information. Considering the workload of observers, it will become increasingly difficult to find contractors to undertake this task.

Purposes of the PoC Demonstration

1) To verify the effectiveness of the solution in streamlining the workflow of snow depth observation:
   - To reduce human work and time by replacing daily on-site visual observation with remote monitoring
   - To restructure the workflow of snow depth observation and data management and enhance work efficiency and convenience via the dashboard function, which can display snow depth data and the situation of the observation sites on a single panel
2) To ensure monitoring devices can work reliably even in mountainous and deep-snow areas:
   - To demonstrate the weather resistance and operational stability of the solution in harsher environment by verifying that the monitoring devices can work stably without failing even in the extreme climate of Nagano Prefecture*
3) To monitor the situations of the observation sites and collect data in real time, in addition to observing snow depth:
   - To ensure that snow depth can be measured correctly by AI-based image analysis
   - To enable constant remote monitoring of the observation sites and surrounding areas by means of live images with high clarity



Konica Minolta entered into a DX strategic partnership agreement with the Nagano Prefectural Government in December 2020 and has since helped them improve the workflow within the government office mainly in the DX field.

Outcome of the Demonstration of the Reservoir Monitoring Solution

Konica Minolta conducted a PoC demonstration of remote live monitoring using its reservoir monitoring solution jointly with the Nagano Prefectural Government from November 2023 to March 2024, in which water level data of the Nanamagari Pond in Nakano City, Nagano Prefecture and its remotely-captured live images were monitored at the Nagano Prefectural Government office about 20 km away. The demonstration verified the high weather resistance of the monitoring devices, which worked stably even in cold conditions, as well as the outstanding clarity of the remotely-captured images, which clearly showed details even during the night hours.

This year, Konica Minolta will start another PoC demonstration at the Saguchi Pond in Sakuho Town, Nagano Prefecture and further expand the area of demonstration to promote the deployment of the reservoir monitoring solution across the prefecture. The Company aims to enhance the AI-based image analysis function to enable the collection of more precise data from the monitored sites, thereby bringing greater safety and security to local residents.

Features of Konica Minolta's Remote Monitoring Solution

Konica Minolta's remote monitoring solution can observe the water levels of rivers, roads (underpasses), regulating reservoirs and lakes as well as snow depth in real time by analyzing images captured by all-weather AI cameras, making it possible to notify local government staff and citizens of imminent danger in real time, help evacuation during emergencies, and support the development of business continuity plan (BCP) management structure.

Live images with enhanced clarity provided by Konica Minolta's remote monitoring solution allow users to check the snow depth and situation of rivers and reservoirs more closely, while the AI built into the camera main units, combined with various sensing technologies, can detect the early signs of a disaster and help government staff issue evacuation instructions before the disaster strikes. At normal times, the solution is effective for: preventing accidental falls into water; preventing and recording illegal dumping of waste which pollutes the environment; and prioritizing ancillary facilities to be maintained and inspected based on data.

In offering its remote monitoring solution, Konica Minolta flexibly selects devices and systems that best suit the operational requirements and needs of customers and supports local governments in the active use of AI in its effort to promote the solution as a tool that can be easily used even without special skills. By rolling out this effort, the Company hopes to help more local governments solve their issues.

Konica Minolta remains committed to ensuring social safety and security by working to solve various social issues and meet the demands of society.

* Snow depth in Hokujo is assumed to be 150cm or more and the temperature in Sugadaira to be −20℃ or lower.

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