

Monitoring aviation safety in diverse climates

VAISALA

Case Study



The client:

Dirección General de Aeronáutica civil de Chile (DGAC)

Vaisala solution:

Wide range of automated weather and visibility technologies

Consulting services

THE CHALLENGE:

Ensure flight frequency and safety in remarkably different climates and locales

Chile's civil aviation authority, Dirección General de Aeronáutica civil de Chile (DGAC), is responsible for maintaining safety and operations throughout a country that stretches 2,653 miles (4,270km) in latitude and contains nearly every climate type on earth. While some of Chile's airports are highly equipped and modern, many are remote, unmanned, and difficult to service.

With a rapidly growing aviation sector, the DGAC faces stiff requirements for weather information, data availability, and reliability across its aviation network. Above all, the DGAC has been tasked with maintaining safety while improving airport accessibility and traffic. To do this, they require a comprehensive, highly scalable approach to collecting and reporting aviation weather data.

THE APPROACH:

Reliable, scalable aviation weather infrastructure

The DGAC has deployed a wide range of Vaisala technologies, including:

- Vaisala AviMet® AWOS: Full, integrated weather awareness for ATC, pilots, and other users
- Transmissometer LT31: Automatic Runway Visual Range (RVR) assessment
- Aviation Weather Reporter AW11: Weather condition data for fields with no ground-based meteorological support

The organization also uses a variety of other Vaisala tools, including decades-old equipment that they are only replacing due to end-of-service cutoffs or improvements offered by newer sensors — not because of system failure or

"With Vaisala as a partner we can rest assured that air traffic controllers, pilots, and other airport users can get the information they need, when they need it."

*Raúl Burgos
Head of Chilean Southern region
Meteorological Laboratory*

performance degradation. One leader reported that they are finally decommissioning a sensor that's been turned on and working for 24 years.

Over the years, the DGAC has tried other vendors' equipment, but that equipment has not met expectations. Leaders say they trust Vaisala technology because of its dependability and data accuracy, and because it helps them meet their primary goals of continuously improving airport capacity and safety.

"Vaisala has decades of experience in meteorological measurements for aviation, and their field service is second to none. Their engineers have always gone the extra mile for us," says Raúl Burgos, Head of Chilean Southern region, Meteorological Laboratory.

THE RESULTS:

Safety, growth, and a long, successful relationship

The DGAC has overseen robust growth, increases in airport capacity, and improved accessibility across its vast network of major hubs and smaller airfields. This is due in large part because of its Vaisala weather sensor infrastructure.

From the start of the partnership in the early 1980s, when Vaisala supplied DGAC with automated sounding systems and wind systems, the organization has enjoyed the confidence and stability afforded by Vaisala's superior product quality, reliability, and after-sales support.

The operational benefits span a wide range of airport types and locales. The four larger Chilean airports that use the AviMet AWOS now operate as fully equipped CAT IIIB airports and conform to all relevant ICAO and WMO weather requirements. At the other end of the spectrum, the various remote locations equipped with AW11, LT31, or

Why Vaisala?

For over 45 years, Vaisala has been a pioneer in aviation weather technology, ensuring that every measure is taken for unparalleled safety, efficiency, and sustainability.

Our gold standard suite of solutions is trusted in more than 170 countries and over 2000 airports globally. In fact, every commercial flight around the world will use weather observations produced by Vaisala equipment or forecasts driven by our sensor measurements at some point in their journey.

With a commitment to constantly evolving our portfolio, Vaisala remains at the forefront of the industry, continuously exploring new horizons.

