

MeteoSwiss – the Zurich-Airport site



↑ The observation tower (located at the north side of the airfield) from the inside.

Without an exact knowledge of the current weather situation, today's busy air traffic would be inconceivable. In order that planes can take off, employees of MeteoSwiss at Zurich airport observe the weather around the clock and prepare specific forecasts for aviation.

Civil aviation boomed after the First World War. Taking this development into account, MeteoSwiss established the aviation weather section in 1927. Its first years were marked by cramped space conditions and meagre resources. The situation improved in 1948, when the aviation weather centre moved to Zurich-Kloten international airport, where it is still located.

Today, the aviation weather centre employs 20 people, most of whom are in the briefing and observation service. This service ensures that aviation weather information is recorded according to the guidelines of the International Civil Aviation Organization (ICAO), and is made available to regular and charter traffic, as well as to private air traffic.

MeteoSwiss

Tasks and role of the national weather service

The Federal Office for Meteorology and Climatology, MeteoSwiss, performs important tasks for the public, the state and the economy, and has been observing and forecasting the weather since 1881. In addition, we issue severe weather warnings to the cantonal authorities. To do this, we are on duty round the clock and in all regions of the country.

Another of our tasks is to keep climate records, for which we collect, archive and analyse meteorological data. This has resulted in long-term series of measurements which provide a valuable basis for investigating climate change. We are committed to a better understanding of climatic phenomena in both national and international projects.

Our vision

MeteoSwiss is the centre of competence for Alpine meteorology and climatology. In this function, we strive to expand our know-how in the service of society.

Quality management

On 8 December 2004, MeteoSwiss obtained the ISO 9001:2000 certificate for its quality management. We are thus committed to consistently maintaining binding quality standards.

Offices

As well as its headquarters in Zurich, MeteoSwiss is represented at four other sites: Zurich Airport, Geneva, Payerne and Locarno. This regional organization allows us not only to be at the front of weather developments, but also close to our clients.

Some key data

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| Employees | approx. 270 |
| Observation stations | 792 |
| Automatic measuring stations | 130 |
| Radar stations | 3 |
| Aerological stations | 1 |
| Phenological observation stations | 160 |





4 Pilots can also be briefed personally by the briefing service.

No flight without weather observations

Around the clock, our observation service monitors and assesses the airport weather. As well as visual observations, we are supported by data from a variety of measuring instruments, such as a transmissometer for measuring runway visibility, and a ceilometer for measuring cloud base. Every half-hour, information about the current weather is distributed worldwide in an internationally standardized format (METAR). For changes in important weather elements within the following two hours, we inform flight crews by means of a short forecast (TREND).

In the briefing centre, besides local observations, a multitude of model data, radar and satellite pictures, as well as the latest weather news from around the world are available. From these, special forecasts for aviation are produced. Our briefing service provides personal and telephone information around the clock, above all to pilots of powered aircraft, gliders, hang gliders

and balloonists, who fly according to visual flight rules and are thus particularly exposed to weather conditions. Pilots of regular and charter flights mainly collect weather data from the TAMSİ self-briefing stations, which can be found at the most strategic locations



around the airport. Aviation weather data is also available at AMIE self-briefing stations at regional airports. These will be adapted to current technology in 2006. In this way, even more data will be available even faster.

Just how important weather data is for aviation is shown in the following

▲ A multitude of instruments provide the observation service with valuable data for aviation weather reports.

examples. Skyguide air-traffic control decides on take-off and approach procedures based on our data, and passes on our information to the cockpit by radio. With the help of our forecasts, Unique Airport plans the use of clearing teams, and SWISS calculates optimum flight paths and maximum take-off weights. Even the office for aircraft-accident examinations bases itself on our reports in cases of flying accidents.

Cross-border cooperation

International cooperation is of great importance for aviation weather. For this reason, we represent Switzerland as its meteorological authority in international working groups that discuss, formulate and impose the ICAO rules and guidelines. Close cooperation with European aviation weather providers additionally ensures that experiences and specialized knowledge are exchanged, and that common products and systems are offered, such as, for instance, the cross-border home briefing portal www.alpenflugwetter.com. Within the framework of the European initiative Single European Sky (SES), we have already implemented an important guideline as an aviation weather provider, namely ISO certification of MeteoSwiss.

If most aeroplane passengers scarcely notice weather influences, this is due, amongst other things, to increasingly more precise measurements and forecasts. In the future too, we will actively shape developments in aviation and thus make an important contribution to the safety of air travel.