



MetGIS® ...

- is an extremely powerful meteorological forecast system, specialized on **ultra high resolution predictions** over mountainous terrain,
- calculates highly precise forecasts in **excellent, user-friendly graphics** (recently completely overhauled),
- includes the **world's most prominent mountain ranges**, with several prediction updates a day,
- **facilitates planning** of mountain-related activities,
- delivers an important contribution to **reduce the risk** of accidents, and
- helps weather-dependent enterprises to **save money**, since it allows them to apply their resources in a more efficient way.

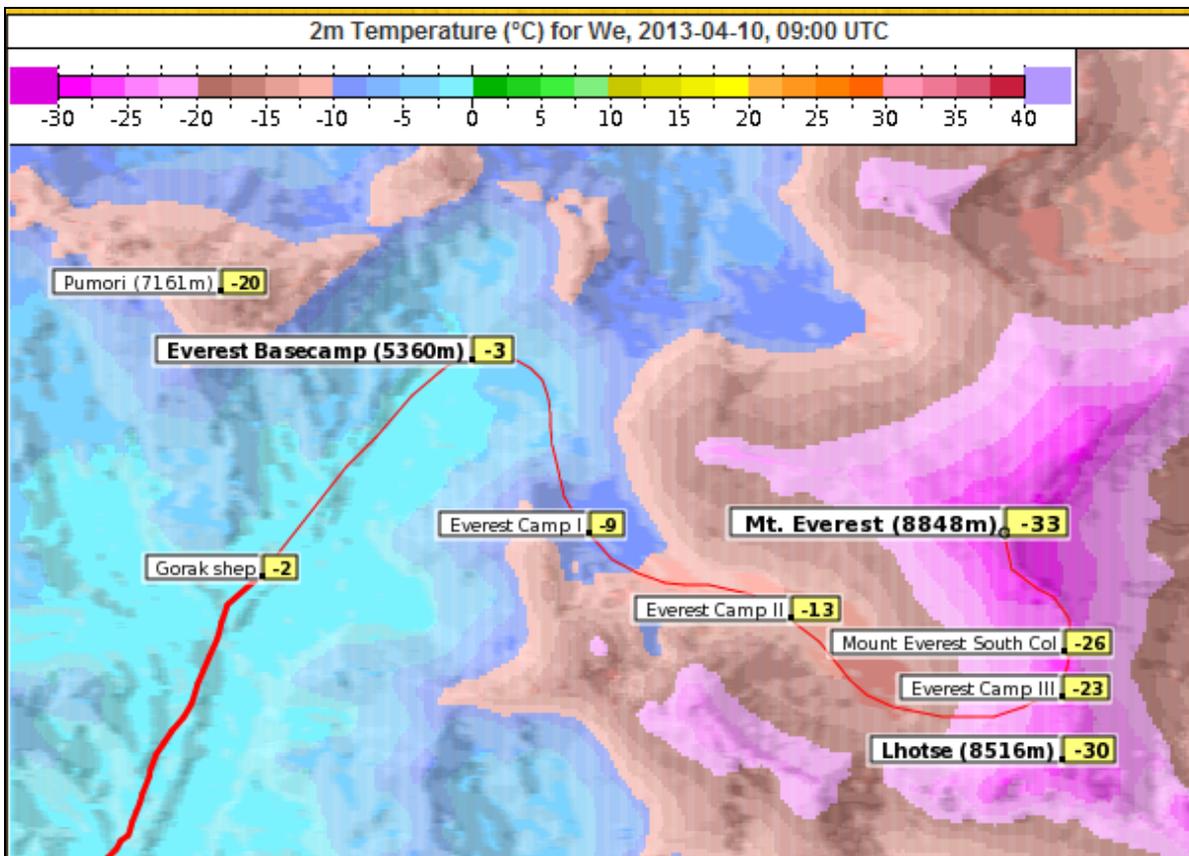
MetGIS Basics

➤ World-Wide Mountain Weather Forecasts

MetGIS is a powerful weather forecast system, specialized on the automated production of ultra high-resolution meteorological forecast maps. It is in successful application with weather-dependent business customers since 2007. The highly positive response of these users encouraged us to stepwise increase the capabilities and the geographic coverage of our products. Currently MetGIS forecasts are operationally produced in 7 languages for around 200 regions and thousands of cities, villages and summits around the globe, with several prediction updates a day.

➤ Highly Innovative Forecast Techniques

The expression MetGIS is comprised of the syllables “Met” (abbreviating Meteorology) and “GIS” (standing for Geographic Information System). This tries to indicate that one of the major features of MetGIS is the application of highly innovative forecast techniques, combining the output of numerical weather prediction models with extremely high resolution geographic data. Especially over mountainous terrain this results in a clear advantage of MetGIS compared to conventional meteorological forecast systems, since the exact altitude and location of forecast points enters the prediction process. For the first time, the construction of highly detailed forecast maps is possible, covering small-scale areas from ski resorts to expedition mountains in remote regions with horizontal resolutions of 100 m and beyond.



Example of a MetGIS temperature forecast for the Everest region

➤ **Excellence in Visualization**

The recent fundamental redesign of our graphical user interface makes navigation through our forecasts easier and more enjoyable than ever. A striking, unique feature of MetGIS is the possibility of simply retrieving information about the meteorological forecast at ANY point of our prediction maps, not only at the location of cities (the common standard): the numerical values of the predicted parameters are always visible beside the respective position of the mouse cursor. Moreover, time series of point and line forecasts (related to roads and alpine ascent routes) can be accessed in a very practical way through simple mouse clicks in the prediction maps.

➤ **Highly Professional Background**

The outstanding quality of MetGIS predictions can be attributed to its highly academic background. MetGIS has been developed within the framework of a number of interdisciplinary international research collaborations. Very specific expert knowledge of research institutes, universities and meteorological services from a number of countries had an impact on MetGIS, covering a wide range of fields such as of meteorology, snow science, geographic information systems and software engineering. However, the key members of our team do not only possess high technical skills, but are also outdoor enthusiasts and mountain climbers, which greatly helps us to design products with high relevance for practical application!



Our Products

MetGIS Light

- Simplified product version to get a glance of MetGIS
- World-wide mountain weather forecasts in supreme quality
- Free access via www.metgis.com, no password required

Do you love the great outdoors and need excellent weather predictions for planning your leisure and mountain sports activities, no matter if in your region or if travelling abroad? Then MetGIS Light will provide you with valuable support!

This product version is tailor-made for all those who would like to profit from free access to supreme-quality MetGIS forecasts and want to get a first impression of our predictions. You can conveniently retrieve MetGIS Light forecasts via www.metgis.com, without the need of introducing a password.

In contrast to MetGIS Pro and MetGIS Basic, MetGIS Light only gives access to a limited number of functions and display features. Moreover, many forecast regions included in MetGIS Pro and MetGIS Basic are not covered at all by the Light-Version, particularly the small-scale, extra high resolution mountain areas.

MetGIS Basic

- World-wide mountain weather forecasts, mainly for private users
- Available via our webshop (www.metgis.com/shop)
- Larger scope of functions and longer forecast range than in MetGIS Light

This product is the ideal tool for everybody interested in highly detailed weather forecasts for planning mountain-related activities. This includes hikers, alpine skiers, ski tourers, international travelers and members of expeditions to remote mountain- and trekking regions (from the Himalayas to the Andes).

Compared to MetGIS Light, MetGIS Basic comes up with a number of advantages:

- You also have access to most of our extra small-scale weather forecast maps for mountain areas around the world. These cover numerous well-known ski and ski touring areas, popular expedition and trekking mountains, and climbing routes.
- In the forecast maps you can retrieve the weather prediction for each specific map location individually. This function is a special advantage for all users who work or practice sports in mountainous or hilly terrain off the settled areas.
- The forecast range is 7 days (instead of 2 days with MetGIS Light).

MetGIS Basic may essentially just be acquired for private use. However, some exceptions apply for ski instructors, mountain guides, etc. For more detailed information concerning the commercial use of MetGIS Basic, see section 2 of our terms and conditions.

MetGIS Pro

- Since 2007 much-used forecast tool for international business customers
- You receive individual, tailor-made high resolution forecast services
- Forecast areas, parameters and functionalities set according to the specific user needs

This web interface for professionals is a favorite with enterprises and institutions whose activities and economic success are influenced by the weather conditions in mountain areas.

Typical users are open-pit mining companies, avalanche control centers, operators of ski resorts, cable car companies, the tourism industry, traffic operation centers, event organizers, agricultural companies and even national meteorological services.

As a user of MetGIS Pro you do not need any specific meteorological formation. You receive individual, tailor-made high resolution forecast services. You can access your specific predictions after entering your user name and password on www.metgis.com.

You have the possibility to select the exact geographic coverage of your prediction maps. Additionally you can choose which geographic information you want to have displayed on your maps (including specific waypoints like cable car stations, mountain tops, etc.). You may define the meteorological parameters available for selection (including special parameters) and also the international numerical forecast models used as a base for your MetGIS predictions. Seven-day point and line (profile) forecasts are available for you and can be retrieved by simple mouse-clicks in the prediction maps.

MetGIS Flex Data

- Automated inclusion of MetGIS forecasts in external, customer-specific websites and information systems
- Point forecasts (time series) and area predictions, as graphics or in numerical format
- Driving external simulation models through MetGIS data possible

MetGIS Flex Data is a powerful special service for all those who don't want to access MetGIS high resolution forecasts via www.metgis.com, but rather prefer to integrate the prediction data into their own information system or webpage. As additional value, this product allows the possibility to drive external numerical simulation models that rely on meteorological input for their operation, such as hydrological models (used for flood warning), snow cover simulation models (utilized for avalanche warning) and models of energy providers (used for the optimization of the energy production).

MetGIS Flex Data is an attractive alternative for many of the user groups of MetGIS Pro. At the same time this product is also highly appreciated by providers of mountain information platforms, hydrological services, energy suppliers, online journals and newspapers, providers of route-planning and suppliers of geographic information systems.

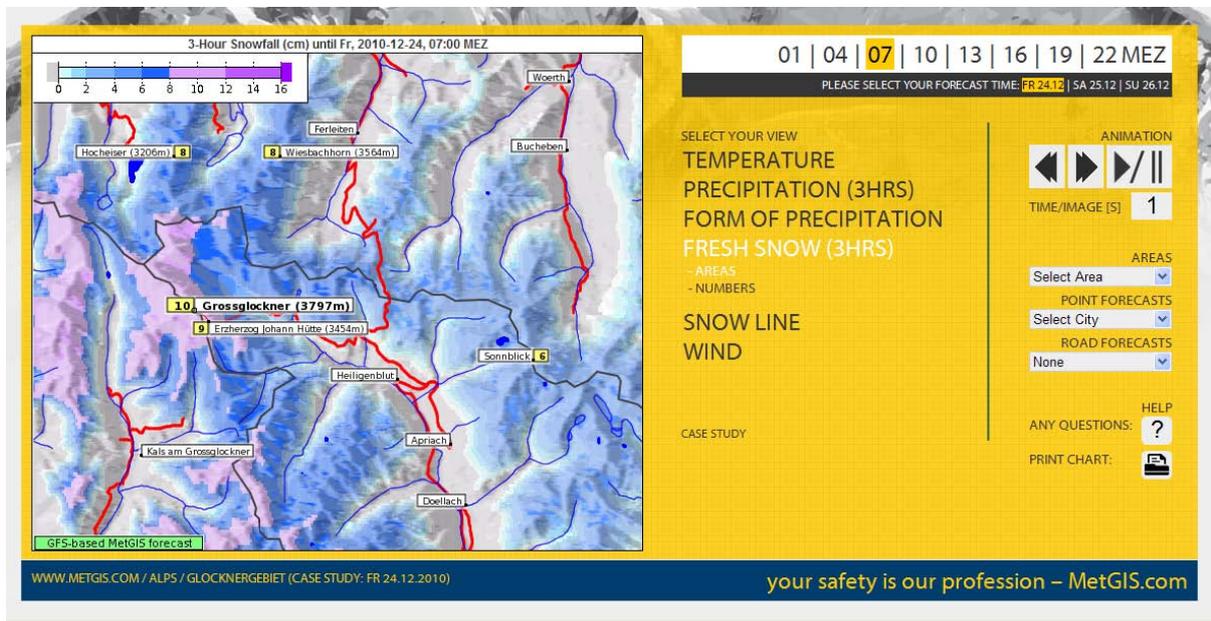
Users of MetGIS Flex Data have the possibility to automatically download the latest high resolution forecasts from the MetGIS data servers, either as weather prediction graphics (maps, point and line forecasts) or as numerical forecast values at a regular latitude/longitude grid with a horizontal resolutions till around 100 m.

Comparison of the most important features of the products MetGIS Light, MetGIS Basic and MetGIS Pro:

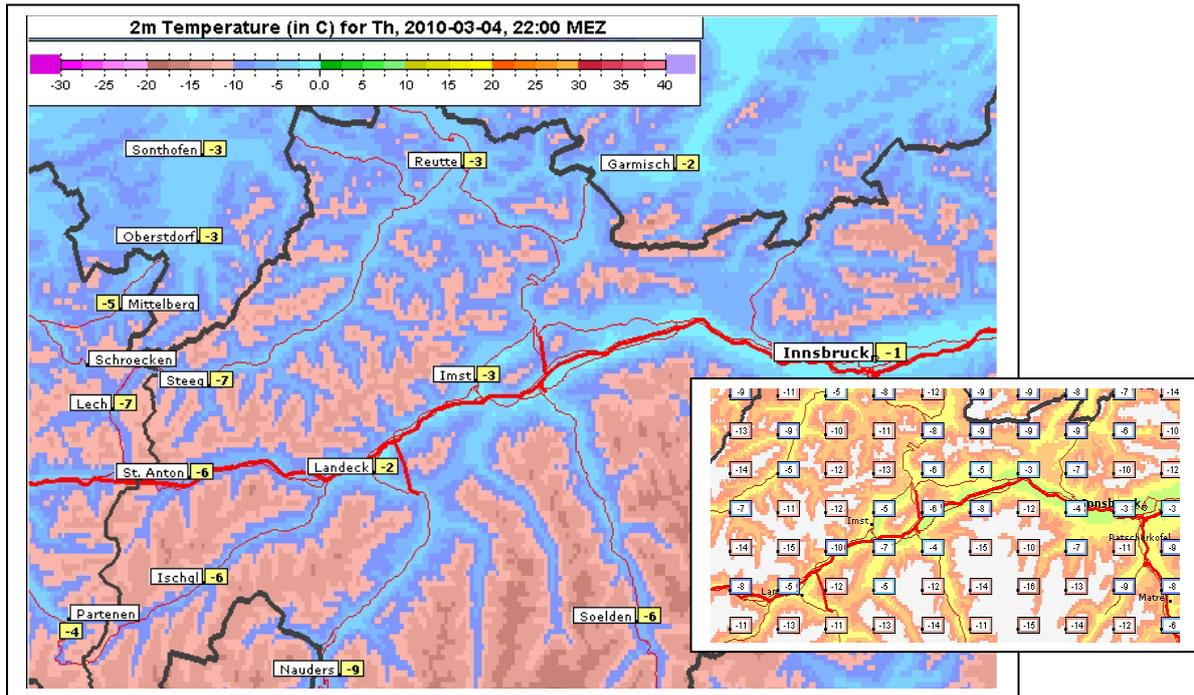
Feature	MetGIS Light	MetGIS Basic	MetGIS Pro
Category of Clients	no restrictions	only private customers (exceptions: see our terms and conditions , section 2.2)	business customers
Cost	currently free	depends on the ordered forecast maps; check the MetGIS Webshop	depends on the specific service
Forecast access (via www.metgis.com)	possible without entering a password	password-protected (obtain password in MetGIS Webshop)	password-protected (please contact us directly to receive your password)
Support	not guaranteed	by email	by email und telephone, promptly
Forecast service active since	2013	2014	2007
Number of forecast areas that can be viewed	ca. 60	ca. 150	ca. 200 (and more areas available on request)
Forecast range	2 days	7 days	7-15 days
Forecast update frequency	1-2 per day	1-2 per day	4 per day
Interval between two forecast times	3-6 hours	3 hours	1-3 hours
Tailor-made setup of forecast areas	no	no	yes
Forecast values available at any point of the maps („Mouse Over-Effekt“)	no	yes	yes
Customized point forecasts after mouse click in maps available	no	yes	yes
Customized line forecasts available	no	no	yes
Information about forecast probabilities possible	no	no	yes
Number of forecast parameters available	≥ 2 (temperature and precipitation, ...)	≥ 4 (temperature, precipitation, snowfall, wind, ...)	≥ 6 (standard parameters and individual parameters)
Forecast model used as base for MetGIS forecasts	GFS	GFS, WRF (depending on the forecast region)	GFS, WRF and others (even such provided by the users)
Time availability of forecasts	Lowest priority (forecasts calculated after those for paying customers)	Medium priority	Highest priority (forecasts will be calculated first)

Some Technical Specifications

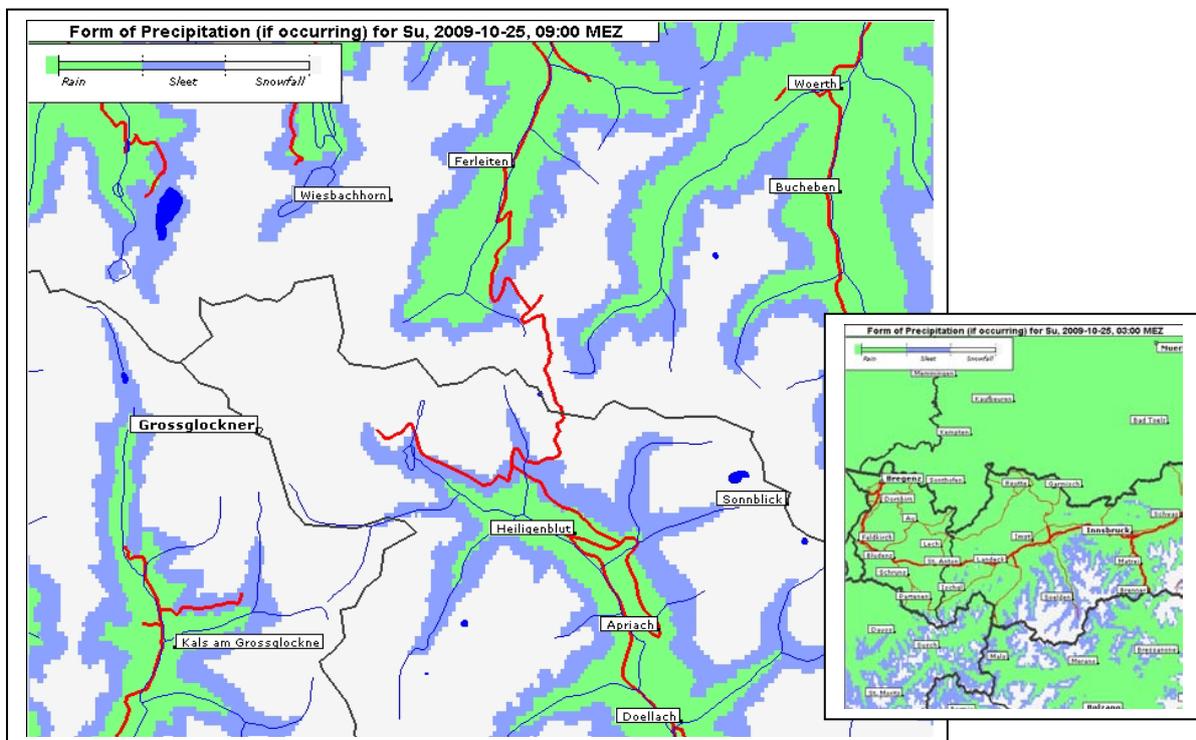
- As a base for MetGIS forecasts we use well-known high-performance **numerical weather forecast models**, such as the GFS (Global Forecast System) from the US American National Weather Service and WRF (Weather Research and Forecast Model).
- **Update of MetGIS forecasts** (termination of new model runs): four times a day.
- The **forecast range** (time covered by each model run) is up to 7 days, thus successive individual forecasts are overlapping in time.
- **Time resolution** of the forecasts: three hours or less. A **time-lapse operation mode** is available, allowing to display movies of the time evolution of certain parameters (e.g. the predicted movement of areas of heavy precipitation).
- **Forecast parameters**: air temperature, intensity and type of precipitation (snow, freezing rain, sleet, rain), fresh snow depth, height of the snow line, wind speed and direction, cloudiness, risk of thunderstorms, felt temperature, relative humidity, radiation, and other parameters (in agreement with the needs of the users).
- **Display styles** offered: “Numbers” (framed numbers on a regular grid) or “Areas” (colored areas).
- **Operating languages** of the MetGIS web version: English, German, Spanish, French, Italian, Slovenian, Russian, Japanese.
- The **system users** do not have to be meteorologists. MetGIS has been designed in a way that it can be easily operated by anyone not expert in meteorology.



Example of a MetGIS forecast of the depth of fresh snow for the Glockner range (Eastern Alps), related to a three-hour period. Note the big differences in snow accumulation between the valleys and the higher regions.



MetGIS forecast of the air temperature 2m above the ground for the western part of Tyrol, Austria. Two display styles are used in this example (left: colored areas, right: framed numbers).



MetGIS forecast of the precipitation type: The system distinguishes between areas where precipitation falls in form of rain, freezing rain, sleet or snow.

Geographic Coverage

MetGIS forecasts cover most of the world's prominent mountain ranges.



For any questions, please feel free to contact us:

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