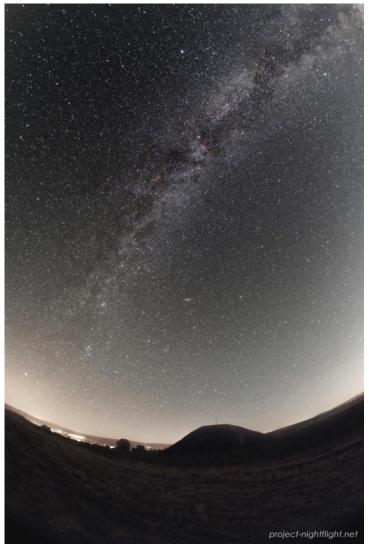
# The Grossmugl Star Walk Installation

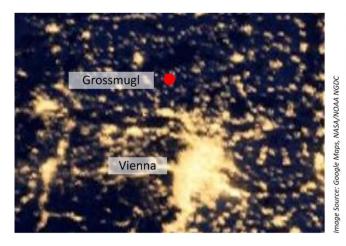
Erwin Matys, Karoline Mrazek

Grossmugl, the starlight oasis near Vienna, now features a permanent attraction. On a 90 minutes' walk, astronomically interested visitors get an easy introduction to observing the night sky, live and with their own unaided eyes. The self-guided tour is free of charge, open all year round day and night and available without booking or reservation. Nine stations guide the visitors through the starry sky, awesomeness guaranteed.

Grossmugl is a small town 35 km north of Austria's capital Vienna. In spite of its vicinity to this European metropolis, the night sky there is still largely intact. Although some light pollution is evident near the horizon, limiting magnitudes of 6.0 mag or better are frequent. As the picture to the right shows, on clear nights the Milky Way is a magnificent sight across the Grossmugl sky. For several years now, Grossmugl officials have been working to establish the location as a starlight oasis. For more information on Grossmugl see here. There have been star parties and guided tours organized by various local amateur groups, presenting meteor showers, comets, satellites, spectacular groupings of planets or interesting constellations. These star-light tours always



attract a large number of visitors. Only a half hours' drive away, Grossmugl offers easy access for Vienna's two million inhabitants to experience starlight, the Milky Way and other marvels of the night sky.





# The Idea by project nightflight

Recognizing their unique asset of an unspoiled starry sky this close to a European capital with over 2m inhabitants, Grossmugl's community was willing and ready to promote this resource. In 2013, project nightflight presented to mayor Karl Lehner a detailed concept of a maintenance-free astronomical attraction that would be open to visitors 24/7, the Grossmugl Star Walk. The plan for the Star Walk installation quickly passed town council and implementation began soon afterwards. Several months of design and construction work later, the "Sternenweg Großmugl" was inaugurated in May 2014. With this attraction Grossmugl is home to the worldwide first permanent star walk installation designed for astronomical observations with the unaided eye.

## **The Grand Opening**

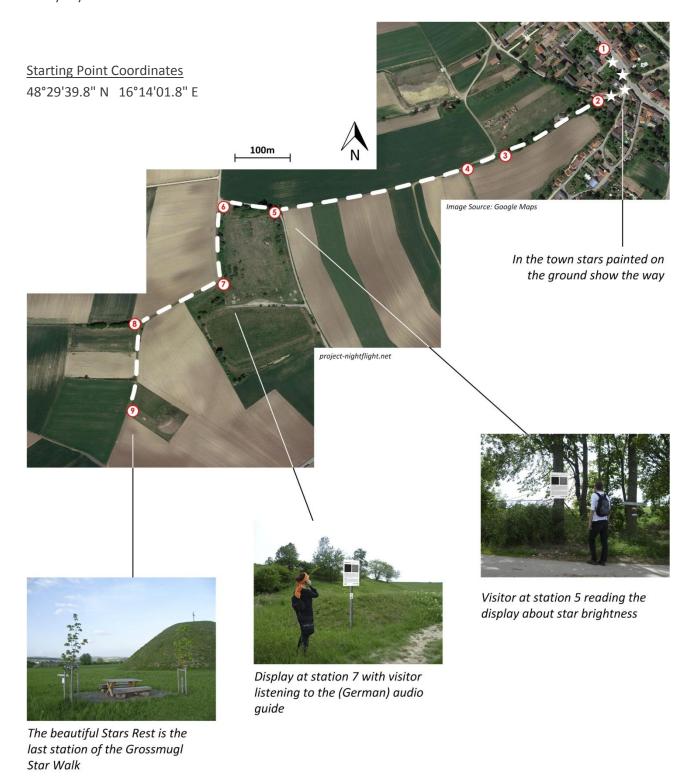
On a bright late spring day, May 24, 2014, the Grossmugl Star Walk was officially opened by mayor Karl Lehner. A group of enthusiastic visitors from neighboring villages and from Vienna came to celebrate the first walk together. In the light of a magical glowing sunset, the joyful party of star aficionados started their trek. Walking in the falling twilight, they followed the nine stations to Stars Rest, the last stop of the Grossmugl Star Walk. Later in the night, huge storm clouds built up on the horizon. Heavy lightning in all directions provided a spectacular light show and brought the event to a fantastic culmination.

The picture below shows the group of visitors during the inaugural walk as they gather at one of the stations. The Grossmugl Star Walk leads across a magical landscape reminiscent of Tolkien's Shire from The Lord of the Rings.



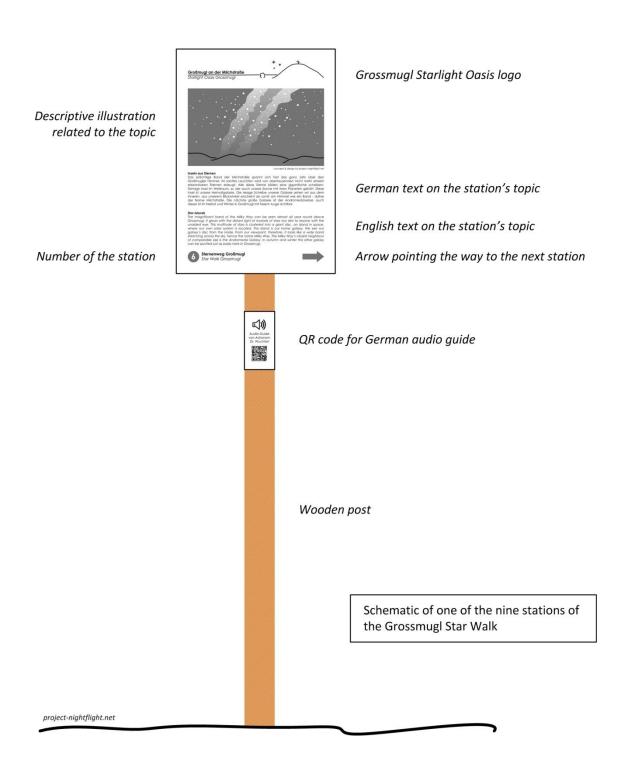
#### The Route

The Grossmugl Star Walk is a short trail about 1.5 kilometers long. It starts in town, where the path is indicated by stars painted on the ground. The Star Walk then crosses fields and meadows and has nine stations, each with a display encouraging night sky observations. It is an almost level, easy walk and fun for all ages in daylight and at nighttime. With short stops at the stations to read the displays and enjoy the starry sky it takes about an hour and a half to and fro.



#### The Stations

The Grossmugl Star Walk addresses the general public, not the skilled amateur astronomer. Therefore, the topics discussed on the displays are intentionally kept simple and require no prior knowledge of astronomy. Star colors and brightness, the Milky Way, light pollution prevention, dark adaption, artificial satellites and similar topics draw the attention toward the beauty of the night sky in all its unspoiled splendor. The Star Walk is suitable for grown-ups and children alike, optical instruments are not required. The texts on the displays are bilingual, in German and English. A German audio guide is also available at each station.



### The Astro Light Pictograms

At the start of the Star Walk, an additional sign includes some hints and guidelines to avoid excessive light. Three pictograms encourage the Star Walk visitors to use red torchlights which preserve the eye's night







vision and especially to avoid headlamps or bright white light sources in general. By the way, the <u>astro light pictograms</u> can be downloaded from project nightflight's tests & tools page in high-quality printable resolution for use at star parties, in observatories, at astronomical events or even in your backyard.

#### The Prehistoric Finale

The highlight at the end of the Grossmugl Star Walk is a fascinating experience. The visitor sees countless stars and the Milky Way over an Iron Age monument. The Leeberg tumulus, an ancient burial mound, is the picturesque scenery for the celestial show. It is a remnant of the Hallstatt culture and was erected between 600 and 500 BC. This was the time when Babylon experienced one of its wealthiest periods under king Nebuchadnezzar II, democracy was invented in Athens and the city of Rome was still a small kingdom, far from the great empire it would later become. When stargazing at this historic site one can almost feel the universe reverberate with the passing of time. It was not by chance that Grossmugl dedicated the meadow next to the mound to stargazers. The field covers an area of about one acre and is called the Star Meadow, which is reserved and groomed for astronomical activities all year round. Most visitors of the Star Walk welcome the opportunity to sit and relax here after the hike at a bench the locals call the Stars Rest.



### The Designers of the Grossmugl Star Walk



The Grossmugl Star Walk was designed by project nightflight and built in close collaboration with the municipality of Grossmugl.

The project nightflight team is a registered association in Austria by the official name of "Verein zur Darstellung und Erhaltung des Sternenhimmels", which translates as "Association for the Presentation and Conservation of the Starry Sky". project nightflight unites experienced, world-wide active astrophotographers in their endeavor to show the unspoiled starry sky on pictures and to internationally promote its conservation as environmental resource. To support this goal, astronomical articles and striking photos of the night sky are published. The construction of the Grossmugl Star Walk is another example of the activities of this association. project nightflight is headed by Karoline Mrazek and Erwin Matys.

Karoline is a translator by training, specialized in writing promotional and technical English documents for high-tech companies. Astronomically, she has some 10 years of practical astrophotography experience. When observing visually she goes after even the faintest details of an object, whether it is a low-contrast feature on Jupiter or a tiny wisp in a galaxy's spiral arm. In all cases, she loves to go to the limit in her stargazing experience.

Erwin is a marketing professional and author of several marketing publications. He specializes in marketing sophisticated high-end products. Astronomically, he looks back on over 30 years' worth of astrophotography experience and never stops improving his imaging techniques to perfection. His university education included an in-depth training in spherical astronomy and satellite navigation. Erwin knows the sky like the back of his hand and can spend endless hours stargazing without getting tired.

The authors **Karoline Mrazek** and **Erwin Matys** are founding members of the astrophotography group project nightflight. Check out their images, tests and tools at **www.project-nightflight.net** 

# How to Get to the Grossmugl Star Walk

