

## INTRODUCTION

The most popular cities are Berlin, Munich, Hamburg, Frankfurt am Main, Cologne, Dusseldorf, Dresden, Stuttgart, Nuremberg and Leipzig.

### 1.- Analysis of the destination and visitor profile

When it comes to astrotourism based on the offer of observatories, it is very well developed in Germany. It derives from the fact that Germany has impressive network of observatories. It includes large research centers as well as huge number of smaller objects scattered around the country.

Most of these facilities open for wide public either for special events and workshops or at a regular basis. The great example is Archenhold Observatory in Berlin. This is the oldest and largest public observatory in Germany, and home to the longest moveable refracting telescope on earth (21 metres). The impressive observation devices allow taking photos of the sky, view planets, binary stars and the moon as well as observing the prismatic colours of sunlight and active solar zones. The observatory has great variety of packages dedicated for both adult and young visitors.

In case of dark sky parks, there are several initiatives of that kind in Germany. They are mostly established in the areas of protected nature. The example can be the first Dark Sky Reserve in Germany located in Naturpark Westhavelland in Brandenburg (under Dark Sky Association IDA). Even though the area is near to Berlin, the sky there is still very dark and stargazing is possible even with the use of binoculars. The main focus is stressed on dark sky protection which helps to conserve nature.

There are however stargazing sessions organized. The similar example is the first Dark Sky Park established in the Eifel National Park in North Rhine-Westphalia (western Germany) also certified by IDA as well as Dark Sky Reserve in UNESCO Biosphere Reserve Rhön in Rhön Mountains (central Germany).

Not all astrotourism initiatives in Germany are established within protected areas. Some of them are simply bottom-up initiatives taken in the areas characterized by good quality dark sky. There are some stargazing workshops organized for example on Sylt Island and in Bavarian Forest.

Germany is the seventh most visited country in the world with a total of 407.26 million overnights during 2012. This number includes 68.83 million nights by foreign visitors.

The most popular cities are Berlin, Munich, Hamburg, Frankfurt am Main, Cologne, Dusseldorf, Dresden, Stuttgart, Nuremberg and Leipzig.

Germany has 15 national parks and wide variety of other protected areas. The most popular among tourists are Western Pomerania Lagoon Area National Park, Saxon Switzerland National Park, Bavarian Forest National Park B a v a r i a and Jasmund National Park.

Germany has also large number of widely visited historical landmarks such as Cologne Cathedral, Reichstag Berlin, Hofbräuhaus Brewery in Munich, Heidelberg Castle and Neuschwanstein Castle.

39 objects in Germany are included on UNESCO World Heritage List.

## 2.- Analysis of the tourism supply

The list of services and activities directly related to Astrotourism is:

- Dark Sky Park – Nationalpark Eifel
- Dark Sky Reserve – Naturpark Westhavelland, Brandenburg
- Dark Sky Reserve – UNESCO Biosphärenreservat Rhön
- Naturpark Terra.vita
- Sylt Island
- Bavarian Forest
- Biosphärengebiet Schwäbische Alb/Münsingen (Sankt Andreasberg StarPark)
- Sternenpark Schwarze Elster

At least 10 large observatories (research centers) and about 60 smaller objects open for public

Examples:

- Archenhold Observatory in Berlin
- Thüringer Landessternwarte Tautenburg
- Volkssternwarte Aachen
- Volkssternwarte Ubedissen
- Starkenburg-Sternwarte
- Volkssternwarte Paderborn
- Astronomische Station „Tycho Brahe“
- Volkssternwarte Würzburg

Information about services is presented mainly online (on websites and social networks). Services may be arranged via e-mail, telephone or in person. There is no dedicated channel for astrotourism offer.

Also there are information about the destination available online in web pages or social networks. Some of them are:

- Dark Sky Park – Nationalpark Eifel - <http://www.nationalpark-eifel.de>
- Dark Sky Reserves – Naturpark Westhavelland, Brandenburg - <http://www.lugv.brandenburg.de/cms/detail.php/bb1.c.331126.de>
- Dark Sky Reserves – UNESCO Biosphärenreservat Rhön, Bayern/Hessen/Thüringen - <http://biosphaerenreservat-rhoen.de/>
- Naturpark Terra.vita - <http://www.naturpark-terravita.de/>
- Nature of the Night Sky" - <http://www.gibacht.com/> <http://starry-night.org/starparcs/nature-night-sky-jeff-talman>
- Biosphärengebiet Schwäbische Alb/Münsingen (Sankt Andreasberg StarPark) - <http://www.sternenpark-schwaebische-alb.de/> <http://biosphaerengebiet-alb.de/>
- Sternenpark Schwarze Elster - <http://www.herzberger-teleskoptreffen.de/news/ds.php>

The main tourism resources of special interest for Astrotourism are:

- Observatories
- Planetariums
- Science centers
- Dark sky parks and reserves

The observatories have Websites too and there are:

- Archenhold Observatory in Berlin - <http://www.sdtb.de>
- Thüringer Landessternwarte Tautenburg - <http://www.tls-tautenburg.de/TLS/index.php?id=2>
- Volkssternwarte Aachen - <http://www.sternwarte-aachen.de/>
- Volkssternwarte Ubedissen - <http://www.volkssternwarte-ubedissen.de/>
- Starkenburg-Sternwarte - <http://www.starkenburger-sternwarte.de/>
- Volkssternwarte Paderborn - <http://www.vspb.de/>
- Astronomische Station „Tycho Brahe“ - <http://www.sternwarte-rostock.de/>
- Volkssternwarte Würzburg - <http://www.sternwarte-wuerzburg.de/>

Also there are some events related with Astrotourism in Germany like astroworkshops in dark sky parks and reserves or astronomical observations in observatories.

The International Dark Sky Places Program – Dark Sky Association IDA

### 3.- Analysis of the tourist demand

There are no data available about the average visitors per year that perform the activity. The tourist who usually do this type of activities in their holidays are called "Discoverers" – people who prefer active forms of tourism, keen on sightseeing, choose off the beaten track places. In case of observatories – besides from "Discoverers", also families with children as well as school groups.

Three years ago astrotourism was rather unknown term in German tourism industry. Nowadays it is perceived as interesting and exciting. It is however still in the stage of development. Due to insufficient information it is still rather rarely chosen form of leisure.