

INAF – SARDINIA RADIO TELESCOPE

DESCRIPTION AND GENERAL CHARACTERISTICS

Location:

The Sardinia Radio Telescope (therein on “SRT”) is located in a small valley embedded in a rural area, which is property of the Autonomous Region of Sardinia, about 45 km far from Cagliari, the capital region. Formal reference for administrative tasks is due to municipality of San Basilio, a small village which is located about 15 km NW of SRT site.

We refer to the surrounding area as “Planusanguni”, where the landscape mostly reflects the main economic activity of the area, the sheep farming.

The formal surface address is: Strada provinciale 25, km 0,600 San Basilio (province of Cagliari) – 09040 Italy.

Georeferences: Lat. 39°29’34”N - Long. 9°14’42” E



Description:

The Sardinia Radio Telescope site is the INAF radio observational facility which is hosting the biggest Italian radio telescope, a 64-meters wheel-and-track antenna. SRT is conceived as a modern, highly efficient and versatile instrument, having several focal points, a large coverage of observational frequencies (from 0.3 to 100 GHz) and sophisticated robotic systems aimed to fastly and precisely change the receivers. SRT is extremely innovative also in the antenna structure: an «active surface», composed by a mosaic of over 1.000 aluminum panels supported by electro-mechanical computer-controlled actuators, allows the astronomers to compensate the structure deformations due to gravity effects, temperature fluctuations and wind pressure. All these features make SRT the most advanced single-dish radio telescope in Europe. Once completed, SRT will be an international astrophysical facility, a scientific pole attractive for astronomers from all over the world.

This observational facility, which will be soon opened for international guest and service observing, comprises three main buildings, and one of these, the “Visitor Center”, is devoted also to public activities, where the maximum capability in 65 seats.

Protection category:

The site is classified and protected against Radio Frequency Interference according to ITU / ECC commitments. A three-kilometers area around SRT should be RFI free.

ACCESSIBILITY

1. Accessibility of the resource (universal):

The external area of the site is a rural area. We are working for improving the whole area in order to be compliant also with the needs of people with reduced mobility (disabled, elderly, children), thanks to properly realized paths, inclined planes, specialized toilets etc....

2. Resource Signaling:

Due to very recent accomplishment of the headquarters at SRT, both outside (road signs) and indoor signals are not yet fully implemented. Indoor signs for visitor have been designed, yet not produced and installed. There will be icons and color coded signals, that will make very easy addressing people within the headquarters. Still, no signal has been still installed for external guidance and on the access road, but the procedure for that is in course.

3. Level of accessibility:

Given the rural location of the site, at the moment it is not yet comfortably served by public transports. Inside the buildings, toilets are well signaled and in general the public area will be well accessed thanks to the aforementioned system of signals, which have been installed. No itineraries have been yet organized.

MARKETING

1. Marketing profile:

Being this structure part of a public scientific Body, direct marketing will be very limited, although in a near future the activities developed at this site could enter inside touristic packages, school-trip specialized packages, etc.

2. Information available of the resource:

A web site (www.srt.inaf.it) and several brochure and leaflets are available, which presents the kind of observational and technological activity is being done with the radio telescope. 3D virtual tour of the antenna has been created, which allow to "visit" from inside the radio telescope; it is now accessible only during the on-site guided tours but it will be available on the web very soon. A dedicated Facebook page allows to put in evidence main activities and news and to keep in contact with general public.

VISITS

1. Capacity of the establishment:

The visit by default provides a general introduction to the astronomy and radioastronomy, as well as summarizes the scientific goal and technological assets of the Sardinia Radio Telescope. This first part of the visit is by default done in a tensile structure, where access is possible for groups up to about 50 people. After that, the visit continues in an external area, closer to the antenna, where a Q&A session is solicited by the INAF staff. Without any specific advertising, around 4,000 visitors came in this two last year to visit SRT and to talk with astronomers and technologist about radio astronomy, space science, radio interferometry, space debris monitoring.

2. Schedule and Availability for visitors:

A regular program of visits began on 2012, every Friday and on request. Only on very specific and very special days, visitors are allowed to visit the radio telescope. The list of available dates and a visitor booking form is available online (<https://docs.google.com/forms/d/13ZFFtwaYhEFA4fBD72Kdh1oJlSzzZnG7clpNBBVwQ/viewform>)

3. Admission:

At the present time the admission is free, but a ticket (likely of a few euros) for attending some of the forthcoming activities is foreseen.

4. Limitations:

The lacking of public transport is really the main worry. Minor yet present possible problems might come from the specific weather conditions (snow, presence of ice in the main road).

5. Visit the resource:

Only guided tours are allowed at the SRT site

TOURIST RATING OF THE RESORT

1. Hierarchical level of resource:

Level 1: Attractive with some striking feature, able to interest visitors from long distance that had come to the zone by other touristic reasons, or capable to motivate local tourist flows.

2. Tourism demand:

As it is the case for similar resources abroad and/or in Italy, students – both locals and coming from outside Sardinia thanks to school-organized trips – and general visitors will find interesting to discover the radio astronomy and the technology it is there used. This might suggest a seasonal trends in the number of visitors (students), with the summer season a little worse than the winter one. Also a significant flux of local people (adults, seniors and families) is expected, given the whole ensemble of the facilities at this site is not available elsewhere in Sardinia and in Italy. The numbers are not easily predictable, due to limited amount of visits we can handle with the actual (wo)manpower.

The Sardinia Radio Telescope has been designed and built with a specific attention to the operational and observational task / activity. The educational and outreach aspects were not initially supported. Since five years ago, we started to organize some provisional room space, so that the radio telescope might become a pivotal element in the cultural grow of the surrounding area and of the whole Sardinian territory. Given that, the resources at INAF – Sardinia Radio Telescope are adequate to also become a significant gravity point of the "scientific tourism".