



# Astronomy

Part of La Société Guernesiaise

## RISK ASSESSMENT AND GUIDANCE TO VISITING GROUPS

### General

- The Observatory is operated by the Astronomy Section of La Société Guernesiaise and welcomes group visits. Directions to the Observatory are provided at the end of this document.
- Children accompanied by adults are particularly welcome. Our volunteer members gladly provide instruction, but rely on accompanying adults to supervise the children.
- Evening visits to the Observatory are inevitably in dusk, near-dark or dark conditions. Therefore people may bump into things or into each other.
- Small torches for personal use are advisable (although they should not be used indiscriminately as that can affect people's enjoyment of the night sky).
- There are no known flashing light hazards. Hand-held green lasers (<5-milliwatt power) are used by Astronomy Section members to point out objects in the sky, and a laser is also used to align the main telescope. These devices are safe when used properly, but can be hazardous if shone directly into someone's eyes or at aircraft. They are, therefore, under the secure control of our members at all times; others are not permitted to use them.
- The Observatory does not have a *salle publique* licence, none having been applied for. However, it does comply with Building Control regulations, and the advice of the Fire Safety Officer has been followed in respect of fire precautions, including the provision of fire extinguishers.
- La Société Guernesiaise holds adequate insurance in respect of third party liability.
- There is an outhouse-type modern toilet with hand-washing facilities (cold water only).
- No charge is made to visiting groups, but donations are always welcome to assist with running costs, maintenance and equipment.
- Directions to the Observatory are attached. The telephone number is 264252.

## Access

- There is limited parking at the Observatory. It may, therefore, be necessary to park at La Houquette School, where there is usually space during the evening or school holidays. The parking system there is such that it is possible to get blocked in by other cars.
- If walking at night between La Houquette School and the Observatory along the main road (Rue des Paysans, 100 metres) torches are definitely needed, and high visibility clothing is strongly recommended. There are no street-lights, and the single pavement, which is on the opposite side of the road, is uneven. It is necessary to cross the road twice.  
**There is a 25 mph speed limit in the area because of the proximity of the School, but traffic is known to go considerably faster than that, especially at night. At the School there is a pedestrian crossing, but care is needed, especially in the dark. There is no pedestrian crossing at the Observatory end of the road.**
- Rue du Lorier is a narrow lane, and there is no pavement. However, there is only a short stretch (about 20 metres) to walk along it from the main road. There is little traffic on it, and the 25 mph speed limit applies.
- Direction signs are normally put out (at the entrance to Rue du Lorier and at the Observatory entrance) when visitors are expected.
- If driving into the Observatory car park, please dim lights so as not to disturb any observing taking place.
- Often one or two telescopes are operated from outdoor concrete pads. There is easy wheelchair access to these areas and to the main building, which are level with the general outside area. There are two steps up into the building housing the largest telescope, and there is no ramp.

## Car park / entrance

- The surface is rough (rolled road planings), but reasonable. There are no exceptional surface hazards, although there are a few dips. There may be puddles after heavy rain.
- Two security-type lights in the Observatory car park illuminate when movement is sensed. They may occasionally be switched off, so it is advisable to use a torch.
- Cars are usually parked in this area, and it is necessary to walk around them.
- On the left (grass) side, there is a slight dip (about 50 cm), and gorse. However, it is not on the direct entrance route.

## Outside

- The outside area surface is grass, which is normally kept mown. It can, of course, be wet from rain or dew. Telescopes are often placed on this grass area.
- Protruding from the concrete pad outside the main building is an electric outlet (about 10 cm high) which can be a trip hazard when not in use. When it is in use the telescope covers it.
- Sometimes, but not always, red and/or white lights are on.
- Dogs from the neighbourhood occasionally leave their droppings; there has been little evidence of this recently, however.
- The area is surrounded by a hedge in which there are brambles

## Main building

- Members of the Astronomy Section present PowerPoint slide presentations and computer demonstrations, talk with visitors, answer questions, etc.
- The building is equipped with a ceiling-mounted projector, computer, seating for 20 people, wall-mounted pictures and displays, astronomical magazines, a library, and coffee/tea making facilities.
- The building has a single entrance/exit door and two shuttered windows which can be opened from the inside.
- Usually a white light is on, but sometimes just a red one (which helps to maintain night vision).
- An all-sky camera at the site (mounted on the corner of the telescope building) takes continuous images of the entire night sky, and uploads them to a website. It can be affected by lights in the area, so the door to the main building is kept closed as much as possible.

## Telescope building

- The telescope building has a roll-off roof, providing a clear view of the sky. It is operated by an electrically powered winch and cables. Hands must be kept clear of these when it is in operation, but they are not readily accessible and usually a member is present near the winch when it is working.
- The building contains two telescopes (a 16-inch Meade reflector, and a 5-inch Takahashi refractor) mounted together on a single pier. It also contains a computer on which can be shown sky simulations, pictures of objects, websites, etc. Sometimes a live image of the Moon is shown by the use of a webcam attached to one of the telescopes.
- There are two steps up to the door. They are constructed of concrete blocks, and the edges of the steps are marked by reflective treads. On one side of the steps there is a single, wooden railing, painted white.
- The telescopes are computer-driven, and, although under operator control, can move suddenly. It is

possible for people to get struck by them, but their rate of movement is slow and unlikely to cause harm. We normally give a warning when the telescopes are about to move.

- People can also bang their heads or eyes on the telescope, especially the eyepieces, in the dark. We generally guide people to the eyepiece.
- A small stepladder is available for use when the telescope eyepiece is in a high position, especially for children who may not be tall enough to see through the eyepiece. Users should:
  - ensure that the ladder is in the best position, not too close or too far; they should be able to stand upright, without leaning forward or backward;
  - not mount higher than the second step;
  - hold onto the rail provided on the ladder. (Do not hold onto the telescope.)
- There is a single entrance/exit to this building. During observing the roof is open. The walls are about two metres high. There are two 60-watt heaters, one on the telescope pier and one in the computer cupboard. These can be hot to the touch, but they are not easily accessible. Their purpose is to keep the equipment dry.
- There may sometimes be trailing leads, although we try to keep these out of people's way.

## Observing

- It is helpful if persons waiting their turn to look through a telescope can queue, and then, once they have had a look, move away from the telescope so that the next person can take a look. We are happy for people to take their time to ensure that they get a good telescope view.
- Please do not touch the telescopes. This can cause them to go out of alignment, which takes time to re-establish.

There are no eye hazards from observing objects visible in the night sky.

- Members of the Astronomy Section will point out stars, constellations, interesting objects, and passing satellites, and inform groups about objects of interest and the equipment. We encourage questions.
- Please note that our volunteer members are there to provide instruction, and we expect the adults accompanying children to provide adequate behavioural supervision and ensure that children are attentive at all times. Their behaviour should respect sensitive and expensive equipment, some of which is heavy and could potentially cause injury.
- **It is dangerous to look at the Sun directly, and especially through any optical instrument which has not been appropriately filtered.** Sometimes during daytime the Sun is observed using a heliostat mirror device, which projects an image onto a screen in the main building. The projected image is safe to look at, but those present should be warned not to look into the mirrors, which are outside. Occasionally specially filtered telescopes may be used for observing the Sun. People must follow members' directions and warning notices.

## Postscript

- Thousands of people have visited the Observatory since it was opened in 1991, and there have not to our knowledge been any significant untoward incidents.
- Our aim is to provide people with an enjoyable, memorable experience, and to impart some knowledge and understanding of the night sky, of the universe, and the wonderful objects it contains.
- If anyone is interested in pursuing the subject of astronomy, our website ([www.astronomy.org.gg](http://www.astronomy.org.gg)) contains a lot of information and links. We welcome new members. A leaflet about the Astronomy Section is available on request, and is published on the website.
- This self-assessment, consisting of four pages, has been compiled in good faith as an aid to La Société Guernesiaise and organisers of group visits to the Observatory. Neither the author nor La Société accept any responsibility for its accuracy or completeness.

Finally, we hope you enjoy your visit. We welcome feedback on this document and also on your visit to help us improve the experience for others.

## Did you know?

- You are made of star-stuff. Atoms of heavy elements such as carbon are created in supernovae – very hot stars which explode, spewing their material into space. This material then goes into forming new stars and their accompanying planets, like our solar system – and us!
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- The furthest object you can see with the naked eye, the Andromeda Galaxy, is over two million light-years away. That is over 12 million trillion miles (19 million trillion kilometres)!
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- Colours of stars indicate their surface temperature. Blue stars are hot, red stars are cooler.
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- The altitude of the pole star is always the same number of degrees as your latitude. It is always visible from our latitude, and is better than a compass at pointing true north.
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- We are moving eastwards at 675 miles per hour (1090 kph), as the Earth spins on its axis once every 24 hours.

Compiled by David Le Conte, Public Relations Officer, October 2002 (updated: Nov 2006, Feb 2008, Feb 2010, Oct 2011, Nov 2011, Jun 2015, May 2017, Nov 2017, Apr 2018, Jan 2019)

# La Société Guernesaise Astronomy Section

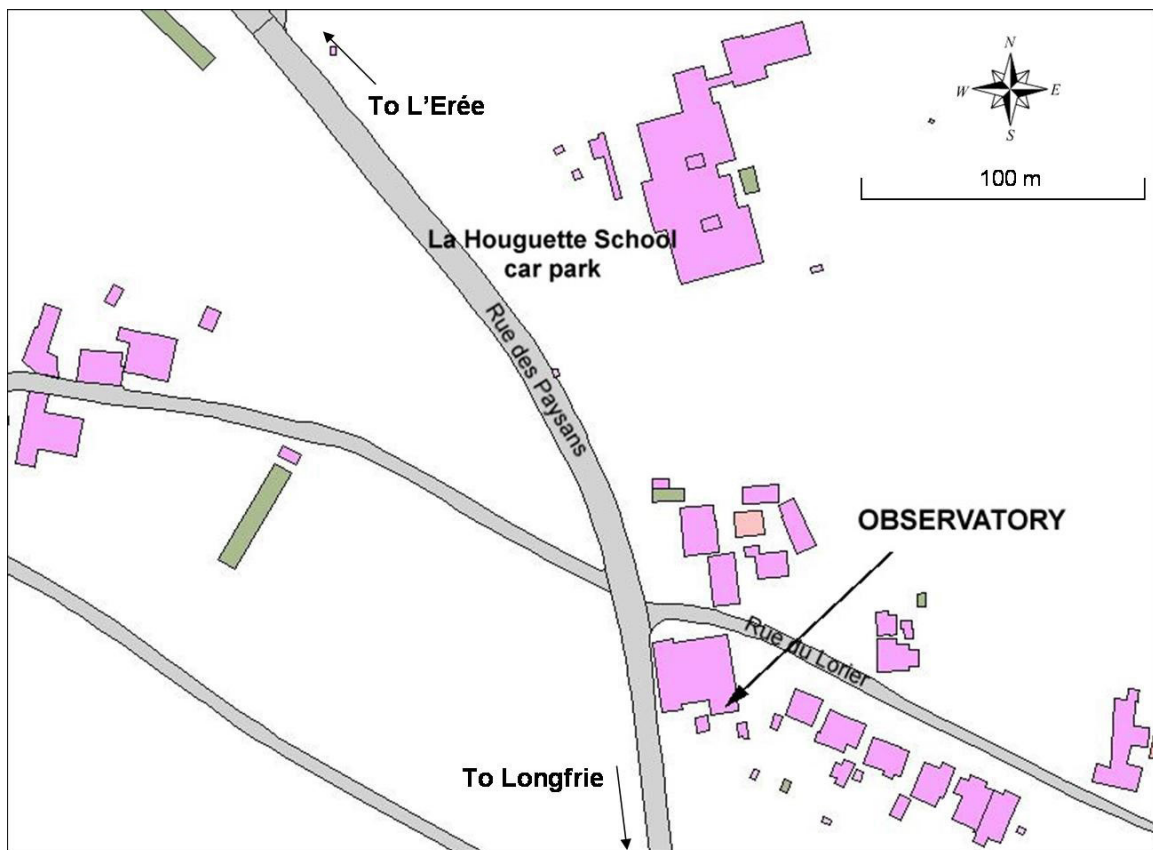
## Directions to Observatory

Lat 49° 26' 57".3895 N (49.44927), Long 2° 38' 08".8610 W (2.635795), Alt 46 metres.

The Observatory is at La Pointe, Rue du Lorier, St Pierre du Bois. Perry's Guide reference: Page 21 E3. It is about 100 metres up the road from La Houquette School, behind the large German bunker on the corner of Rue des Paysans and Rue du Lorier. Turn into the Rue du Lorier, and then immediately right, and proceed around the back of the bunker to the double doors. If these are locked, knock. Note that there are usually no signs indicating the location of the Observatory, except during open days and when groups are expected.

Parking at the Observatory is very limited, but additional parking is often available at La Houquette School. Note that there are no streetlights, so a torch and high-visibility clothing are essential when walking along the road at night.

The Observatory telephone number is 264252.



Map courtesy of Digimap Ltd, Guernsey