

Image: The transits of ISS and Mercury captured simultaneously

June 1 2016



Credit: Thierry Legault

On 9 May Mercury passed in front of the Sun as seen from Earth. These transits of Mercury occur only around 13 times every century, so astronomers all over Earth were eager to capture the event.

For astrophotographer Thierry Legault, capturing Mercury and the Sun alone was not enough, however – he wanted the International Space Station in the frame as well.

To catch the Station passing across the Sun, you need to set up your equipment within a ground track less than 3 km wide. For Thierry, this meant flying to the USA from his home near Paris, France.

On 9 May there were three possible areas to capture the Station and Mercury at the same time against the [solar disc](#): Quebec, Canada, the Great Lakes and Florida, USA.

Choosing the right spot took considerable effort, says Thierry: "Canada had bad weather predicted and around Florida I couldn't find a suitably quiet but [public place](#), so I went to the suburbs of Philadelphia."

With 45 kg of equipment, Thierry flew to New York and drove two hours to Philadelphia to scout the best spot. Even then, all the preparations and intercontinental travel could have been for nothing because the Station crosses the Sun in less than a second and any clouds could have ruined the shot.

"I was very lucky: 10 minutes after I took the photos, clouds covered the sky," says a relieved Thierry.

"Adrenaline flows in the moments before the Station flies by – it is a one-shot chance. I cannot ask the space agencies to turn around so I can try again. Anything can happen."

The hard work and luck paid off. The image here includes frames superimposed on each other to show the Station's path. Mercury appears as a black dot at bottom-centre of the Sun.

For Thierry, the preparation and the hunt for the perfect shot is the best part.

"Astrophotography is my hobby that I spend many hours on, but even without a camera I encourage everybody to look up at the night sky. The International Space Station can be seen quite often and there are many more things to see. It is just a case of looking up at the right time."

Provided by European Space Agency

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