

THE JEAN-MARC SALOMON TELESCOPE TJMS : AN OPPORTUNITY FOR PARTICIPATORY SCIENCE / CITIZEN SCIENCE

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Abstract. In 2022, following the renovation of the Centre Astronomie Jean-Marc Salomon and the Jean-Marc Salomon Telescope (TJMS) and the addition of a LISA spectroscope, we have created a Scientific Promotion Committee (CPS) to promote the TJMS as a scientific instrument. Its main actions are : to set up scientific programs in spectroscopy and photometry; to establish a link between TJMS amateurs and professionals; to follow up on the exploitation of data with missionaries and to propose assistance in the processing and publication of data in recognized databases and with professionals.

1 Jean-Marc Salomon astronomy center

Forty-five years of practice of experimental astronomy for young people give us a unique and precious know-how, recognized by all our partners. In constant evolution, our tools are up to our ambitions. At the first rank of these tools, the Jean-Marc Salomon Telescope (UAI 199 Station) of sixty centimeters in diameter, the largest amateur telescope of Ile-de-France and the only one in France to welcome groups of young people for activities of an educational nature.

In 2020, the Astronomical Society of France and the French Society of Astronomy and Astrophysics awarded the researcher Alexandre Santerne the "Gemini Prize - Cooperation between Pro-Amateur Astronomers" for the project "Detection and Monitoring of Exoplanets by Amateur Astronomers". Three of our volunteers (Pierre Barroy, A. Lekic and Bruno Dauchet) have collaborated with this researcher using the Jean-Marc Salomon Telescope.



Fig. 1. Telescope Jean Marc Salomon

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Fig. 2. Logo gemini, Planète Sciences

2 Discoveries and publications at the TJMS

The TJMS' CPS team participated in a campaign to observe stellar occultations by Pluto. A scientific paper was published in the journal *Astronomy and Astrophysics*: "Lower atmosphere and pressure evolution on Pluto from ground-based stellar occultations, 1988-2016". We contribute globally to projects around the Stellar Occultation. We have received members of the 38th European Symposium on Occultation Projects in 2019. The existence of two asteroids has been confirmed thanks to the Jean-Marc Salomon Telescope: (125592) Buthiers = 2001 XO33 and (125718) Jemasalomon = 2001 XH105 = 2002 AX70 = 2003 FL110. The CPS is actively involved in the exoplanet transit validation program called EXOCLOCK, but also: Lucy, Binast Survey, BESS, ARAS, IOTA ES, Lucky-Star, KILONOVA CATCHER and many others.

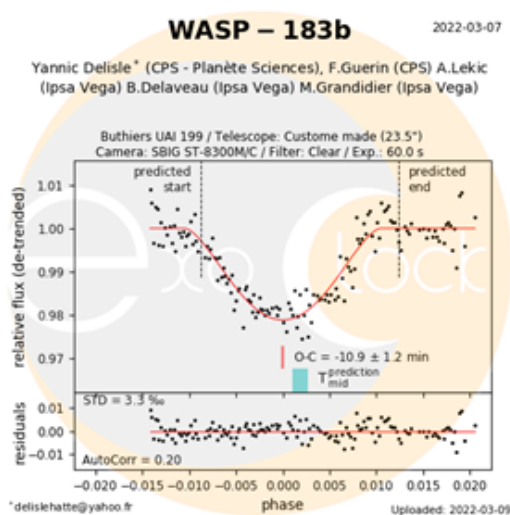


Fig. 3. Transit of WASP - 183b

IAU The International Astronomical Union Minor Planet Center <i>The nerve center of asteroid detection in the Solar System</i>		
OBSERVERS	PUBLIC	IAWN
(125718) Jemasalomon = 2001 XH105 = 2002 AX70 = 2003 FL110 Discovered at Buthiers on 2001-12-15 by J.-C. Merlin. (125718) Jemasalomon = 2001 XH105 Jean-Marc Salomon (1955-1981) established the astronomy section of the Association Planète Sciences in the 1970s. His dynamism was largely responsible for the establishment of the Buthiers Observatory. The 0.6-m telescope with which this minor planet was discovered is named in his honor. [Ref: <i>Minor Planet Circ.</i> 56963]		
OBSERVERS	PUBLIC	IAWN
(125592) Buthiers = 2001 XO33 Discovered at Buthiers on 2001-12-15 by J.-C. Merlin. (125592) Buthiers = 2001 XO33 The Buthiers Observatory was established in the forest of Fontainebleau in 2000 under the auspices of the Association Nationale Sciences Techniques Jeunesse (now the Association Planète Sciences). [Ref: <i>Minor Planet Circ.</i> 56963]		

Fig. 4. Discovered asteroid