


Global Exoplanet Transit Surveys

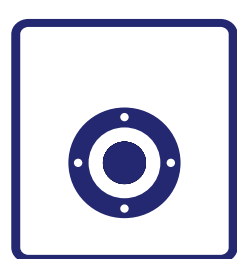


 Observatory Locations

Are you an Andor customer using one of our products for exoplanet transit surveys? If so, please get in touch* - we would love to hear more about your research.

WASP

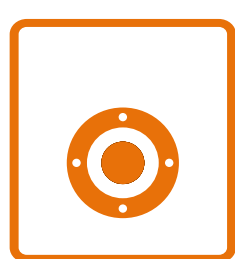
The Wide Angle Search for Planets (WASP)^{1,2} is an exoplanet survey based on the transit method, having found over 170 planets. The project is comprised of two camera arrays, namely SuperWASP (La Palma, Spain) and WASP-South (Sutherland, South Africa). Each of these arrays is equipped with 8 CCD cameras, covering 480 degrees of sky in each exposure.



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NGTS

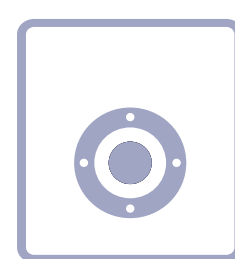
The Next Generation Transit Survey (NGTS)³⁻⁵ WASP's successor, is a wide-field survey based at Paranal Observatory with the aim to discover and characterize exoplanets. NGTS consists of 12 fully-robotic 20 cm aperture telescopes, which are equipped with customized CCDs operating at red-optical wavelengths.



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SPECULOOS

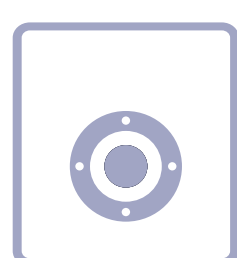
The Search for Planets EClipping ULtra-coOL Stars (SPECULOOS)^{6,7,8} is a dedicated survey to discover transiting terrestrial planets orbiting cool and small-sized stars. This project is based on a network of robotic telescopes, such as SPECULOOS South (Chile, 4 telescopes), SPECULOOS North (Tenerife, 1 telescope), SAINT-EX (Mexico, 1 telescope) and TRAPPIST (Chile and Morocco, 1 telescope each), utilizing deep depletion CCD cameras.



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SAINT-EX

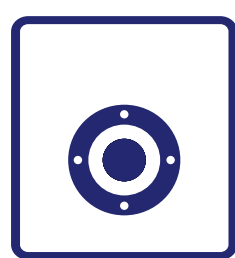
SAINT-EX,^{9,10} which stands for the Search And characterisation of Transiting EXoplanets, is a fully-robotic 1m telescope based in San Pedro Mártir, Mexico. It looks for exoplanets and performs follow-up observations for space telescopes.



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TRAPPIST

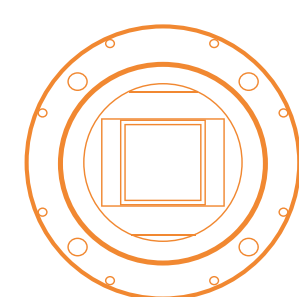
The TRAnSiting Planets and Planetesimals Small Telescope (TRAPPIST)^{11,12} is a dedicated survey to discover and characterize extrasolar planets and to investigate small solar system objects like comets and asteroids. It is comprised of two robotic 60 cm telescopes, which are called TRAPPIST-South (La Silla Observatory, Chile) and TRAPPIST-NORTH (Oukaïmeden Observatory, Morocco). The latter is supported by a deep depletion CCD camera with extended UV/NIR sensitivity.



iKon-L BEX2-DD

BSST

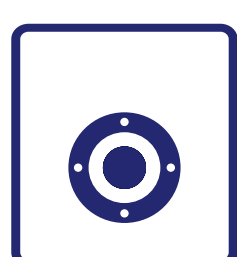
The Bright Star Survey Telescope (BSST)¹⁰ is a planetary transit survey based in Antarctica. The BSST was first tested in 2015 at Lijiang observatory in China and achieved photometric precision of 3.5 mmag for stars with V~11 mag using exposure times of 75 seconds and a back-illuminated 4K x 4K CCD camera.



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RISE2

The Rapid Imager for Surveys of Exoplanets 2 (RISE 2)^{14,15} camera focuses on exoplanet studies and the detection of transit timing variations (TTVs), which can reveal the presence of a third body in the exoplanetary system. RISE2 is in operation at the 2.3m ARISTARCHOS telescope at Helmos Observatory in Greece.



iKon-M

References and Further Reading:

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This graphic provides an non exhaustive overview of different exoplanet studies utilizing Andor products.

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