

FOR JOURNALISTS

Media FAQ

*North African Telescope Eclipse (NATE)***Q What is NATE, in one sentence?**

A NATE is an international science and outreach project that will deploy a synchronized network of about ten telescope stations across Northern Morocco to observe the solar corona during the total solar eclipse of August 2, 2027 — combining rigorous research with citizen science and community engagement.

Q What is the 10-minute extended observation window, exactly?

A A single observer only sees totality for a few minutes from one location. NATE spaces roughly ten stations along ~450 km of coastline; because the Moon's shadow reaches each station at a slightly different moment, their combined, overlapping observations extend continuous coronal data collection to approximately ten minutes — more than double what any individual station could capture alone, and enough to track how coronal structures evolve over time.

Q Why Morocco? Why 2027?

A The August 2, 2027 eclipse offers exceptional observing conditions: totality lasting up to nearly five minutes at its longest station, with the Sun reaching roughly 40 degrees above the horizon — a far higher, more favorable altitude than the brief, low-altitude eclipse visible from Spain in 2026. Combined with Morocco's clear coastal atmosphere, this is one of the best vantage points anywhere for this eclipse, and the longest totality Morocco has seen in centuries.

Q Why study the solar corona at all?

A The corona — the Sun's outer atmosphere — is only visible from Earth's surface during the few minutes of a total solar eclipse. It is the source of solar flares and coronal mass ejections, the drivers of space weather events that can damage satellites, disrupt power grids, and interfere with communications and navigation systems on Earth. Better observational data directly improves our ability to forecast and mitigate these effects.

Q How exactly are citizen scientists and students involved?

A NATE's field team of 25–30 people includes secondary-school and university students and teachers alongside professional astronomers and engineers from Spain, Morocco, and the United States. They complete a joint UM6P–IAC training programme in safe solar observation technique before deploying in small teams to operate the stations on eclipse day. Beyond the field team, each of the ten host communities receives its own public outreach hub, and a mobile SpaceBus tours the region for roughly a month, running workshops and solar-viewing sessions for schools and families who might otherwise never engage directly with a research-grade telescope.

Q What is the Citizen CATE connection?

A NATE is directly inspired by the Citizen CATE (Continental American Telescopic Eclipse) Experiment, run in the United States during the 2017 and 2024 eclipses by the National Science Foundation, the National Solar Observatory, and the Southwest Research Institute. That project

proved that trained volunteers operating standardized instruments across a wide geographic path can produce publication-quality scientific data — the same model NATE now adapts for Morocco.

Q What happens to the equipment after the eclipse?

A The telescope equipment used at every station is donated to its host community once the campaign concludes, leaving behind a lasting legacy of astronomy and solar-physics capacity across Morocco — not just a one-day event.

Q Who leads the project, and who funds it?

A NATE is led by the Instituto de Astrofísica de Canarias (IAC) in Spain, in partnership with Université Mohammed VI Polytechnique (UM6P) in Morocco, which coordinates the programme, field team, and hub network on the ground, and the U.S. National Solar Observatory (NSO). IAC funds and supplies the ten-station telescope network. The project is an open, multi-sponsor initiative and welcomes additional institutional, community, and equipment partners.

Q Was there a rehearsal before the main event?

A Yes. The international field team trained and tested equipment and protocols around the August 12, 2026 solar eclipse in Palencia, Spain — a lower-altitude, shorter-duration event well suited for training, though less favorable scientifically than the 2027 Moroccan eclipse.

Q What kind of scientific results does the team expect to publish?

A New results on the dynamics of magnetic fields and plasma in the solar corona, drawn from the combined multi-station dataset. The data-processing techniques developed are also expected to train participating teams in methods applicable to future scientific research.

Q How can journalists, schools, or organizations get involved or request access?

A Media, educational institutions, and potential community or equipment partners can reach the project team directly at eclipse2027@um6p.ma — see the visual assets guide in this kit for logo and image requests.