

The New Technology Telescope (NTT)

The 3.58-metre New Technology Telescope (NTT) was inaugurated in 1989. It broke new ground for telescope engineering and design and was the first in the world to have a computer-controlled main mirror.

The main mirror is flexible and its shape is actively adjusted during observations by actuators to preserve the optimal image quality. The secondary mirror position is also actively controlled in three directions.

This technology, developed by ESO, known as active optics, is now applied to all major modern telescopes, such as the Very Large Telescope at Cerro Paranal and the future European Extremely Large Telescope.

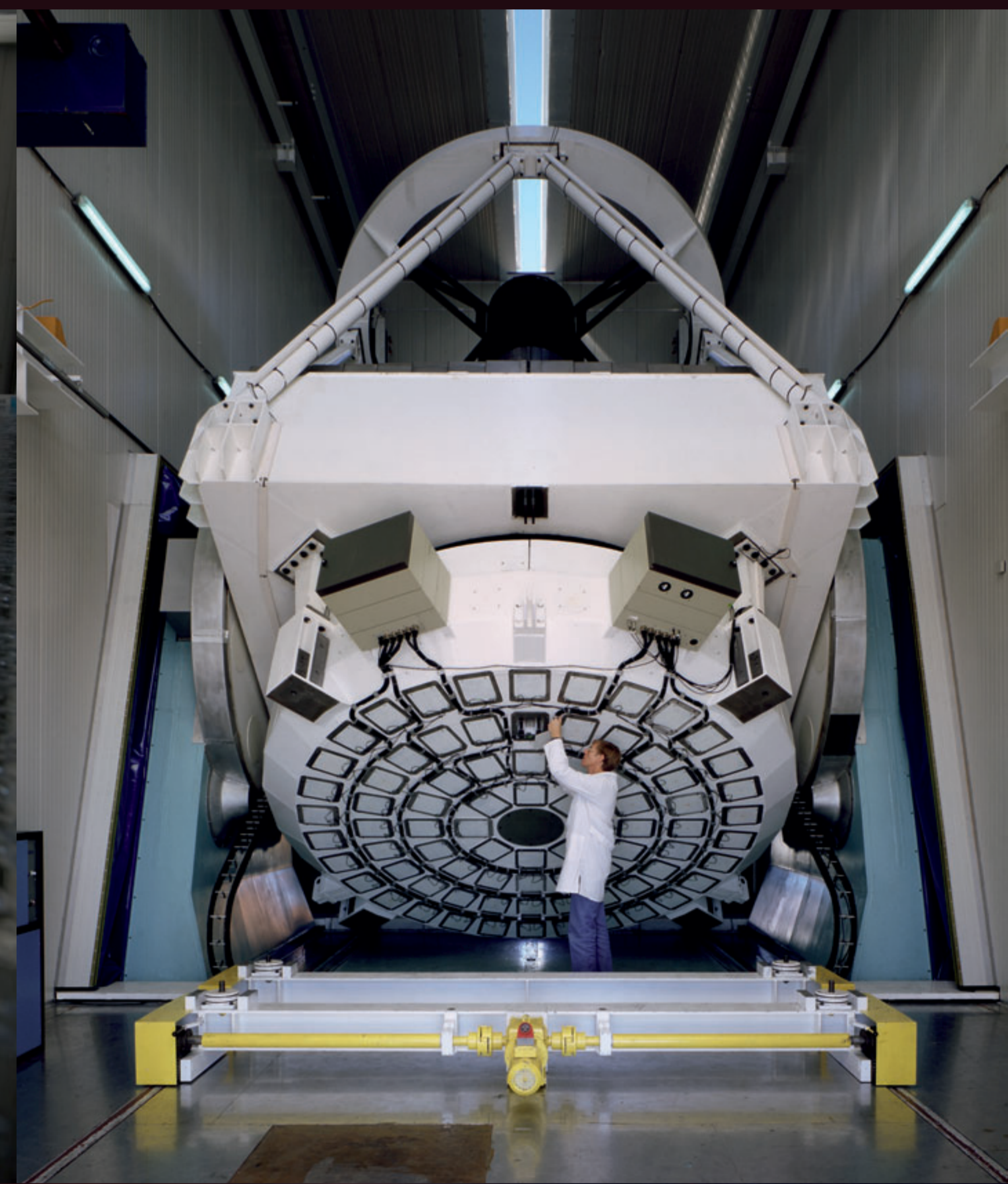
The design of the octagonal enclosure housing the NTT is another technological breakthrough. The telescope dome is relatively small, and is ventilated by a system of flaps that makes air flow smoothly across the mirror, reducing turbulence and leading to sharper images.



The NTT. Credit: ESO/C. Madsen



The main mirror of the NTT is removed from the telescope about twice a year for cleaning. Credit: ESO/H.H. Heyer



NTT — active optics support. Credit: ESO/C. Madsen



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