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Head of External Relations
ESO



Who are we?

- European Organisation for Astronomical Research in the Southern Hemisphere
- The foremost intergovernmental astronomy organisation in Europe
- The world's most productive astronomical observatory
- Intergovernmental treaty-level organization, founded in 1962, by five countries





ESO Member States and Host (Chile)

Currently 15 member states (Brazil in the process of ratification)
May increase further

1962 Belgium, France, Germany,
The Netherlands, Sweden

1967 Denmark

1982 Switzerland, Italy

2001 Portugal

2002 United Kingdom

2004 Finland

2006 Spain

2007 Czech
Republic

2008 Austria

2010 Brazil



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Annual Income

- Annual contributions to the Organisation's budget based on the countries' net national income
- 2010 Scale of Contributions: 131 million EUR
 - Germany 22%
 - France 17%
 - United Kingdom 16%
 - Italy 13%
 - Spain 9%
 - other Member States between 1% and 5% each
- In steady state, Brazil will be approximately 13% on current estimates

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Purpose

- Mission – set for ESO in the Convention:
 - Develop and operate world-class observing facilities for astronomical research
 - Organise collaborations in astronomy



What do we do?

- Design, construct and operate a suite of the world's most powerful ground-based astronomical telescopes
- Design, construct and operate instruments
- Develop technology to support the programme
- Train scientists and engineers
- Leading to:
 - numerous possibilities for technology spin-off and transfer
 - high technology contract opportunities
 - skilled personnel





Facilities

- 4 operating units, spread over 5 sites: Garching HQ; Vitacura Office (Santiago), La Silla Paranal Observatory (split over 3 sites – La Silla, Paranal, and Sequitor), and ALMA
- Observatories
 - Optical/infrared: La Silla and Paranal
 - Submm: APEX and ALMA partnerships on Chajnantor
- HQ in Garching and Vitacura Office in Santiago



Personnel

- ~750 staff, split:
 - Garching HQ: ~ 450
 - Chile: 250+, spread over:
 - Vitacura
 - La Silla Paranal Observatory
 - La Silla
 - Paranal
 - Sequitor (near San Pedro de Atacama)
 - ALMA
- Staff comprise astronomers, engineers, technicians, administrators

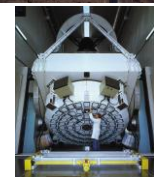


La Silla, Paranal & Chajnantor



La Silla

- Part of La Silla-Paranal Observatory
- Medium-size telescopes
 - 3.6m: focused on exo-planet searches
 - 3.5m NTT: room for visitor instruments
 - 2.2m in partnership with MPG and Brazil

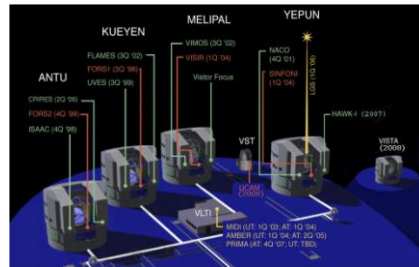


Paranal

- The VLT: 4 x 8.2m diameter optical/infrared telescopes
- The ATs: 4 x 1.8m diameter auxiliary telescopes

The VLT and the ATs, working together, make up the VLT Interferometer (VLTI)

- 2.6m diameter VLT Survey Telescope (VST; optical)
- 4m diameter VISTA Survey Telescope (infrared)



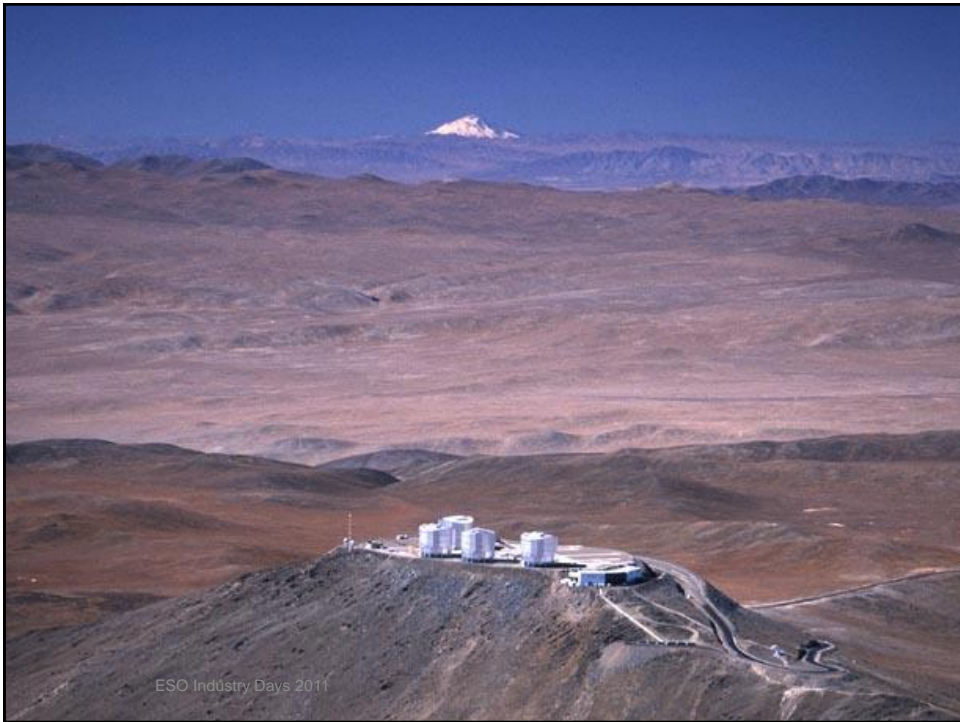
Paranal: View from Space




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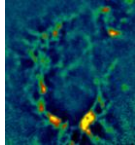
Chajnantor


- **APEX**
 - 12m sub-millimeter antenna, operated by ESO @ Sequitor
 - MPG (50%), Sweden (23%) and ESO (27%)
- **ALMA**
 - Transformational science
 - 66 antennas at 5050m
 - Operations support at 2950m
 - Global partnership with North America & East Asia



APEX








OSF

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Current ESO programme

- Exploit La Silla-Paranal Observatory to obtain best science:
 - Second generation instruments (VLT/VLTI)
 - Key surveys with VST and VISTA
 - Long-term programmes for unique science on La Silla
 - Prepare for ALMA science with APEX
- Complete construction of ALMA and start operations
- Design world-leading ELT, and secure funding for construction and operations
 - Timed to exploit synergy with JWST