

e-Infrastructures in Latin America

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Conference: Open e-IRG Workshop
Date: June 17, 2010
Place: Madrid, Spain (Thru GLOBAL)



CLARA

This project is funded
by the European Union

A project implemented
by CLARA



RedCLARA2: Towards an Optical Network in Latin America



RedCLARA

January-September 2009

Including EuropeAid's ALICE2, CLARA and NSF's IRNC





Technical Description RedCLARA

- Backbone:
 - STM-1 Leased SDH Circuits
 - Mostly submarine cables usage
- Access Links
 - STM-1 Leased SDH Circuits except
 - Uruguay's link was E-3 (34 Mbps)
 - Colombia's link was DS-3 (45 Mbps)
 - Ecuador's link was DS-3 (45 Mbps)
- Central American countries connected thru Miami

RedCLARA 1.5 March-April 2010

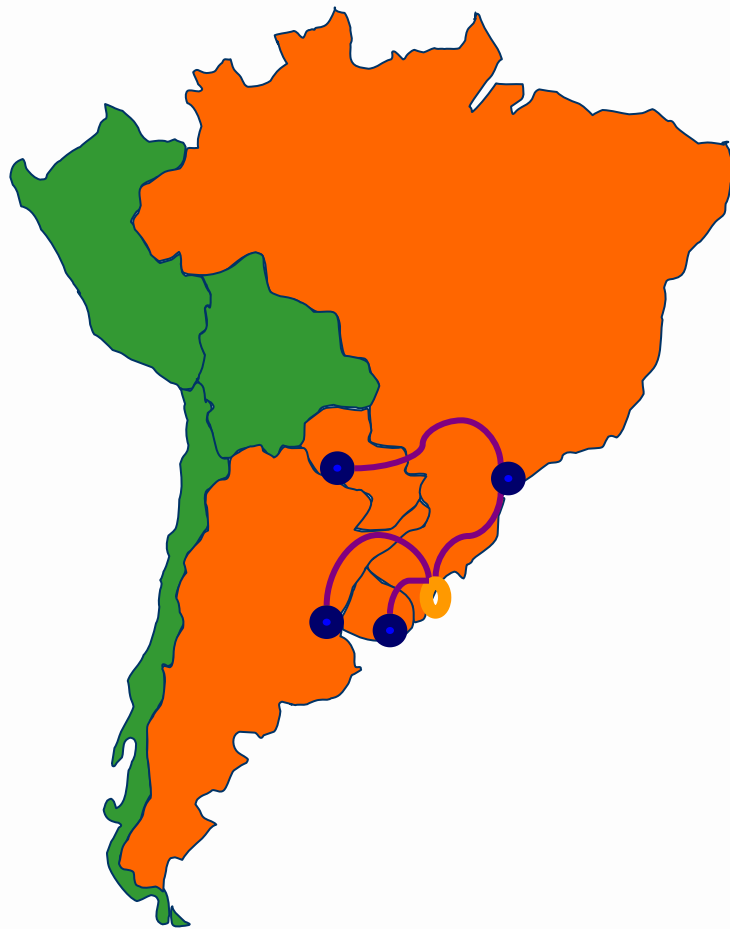




Technical Description RedCLARA 1.5

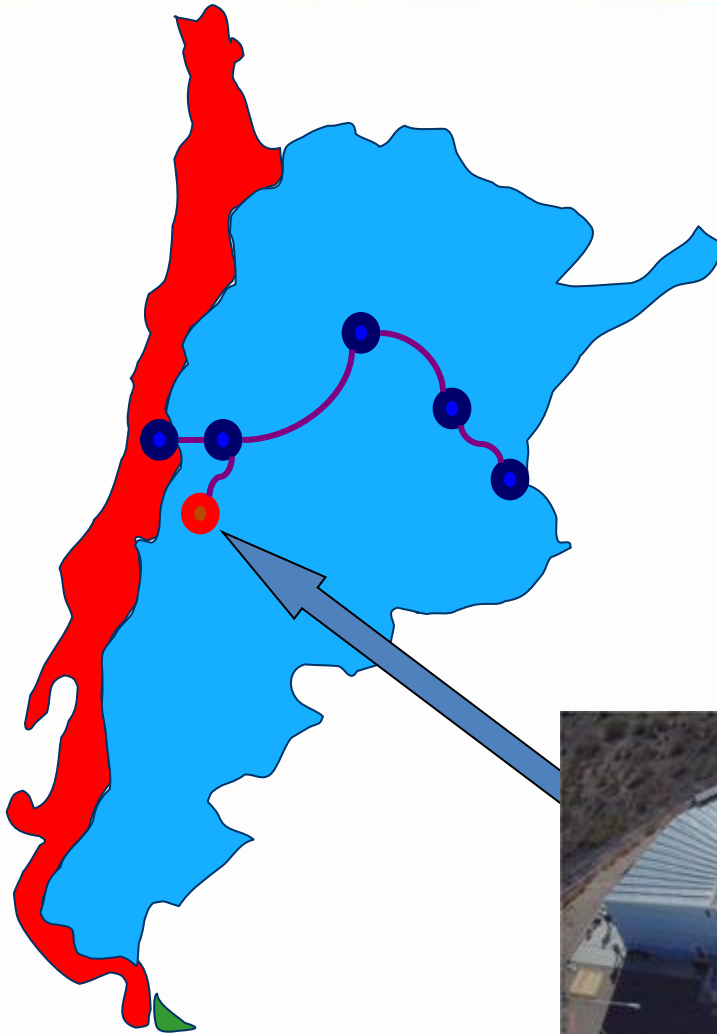
- Backbone:
 - STM-4 Leased SDH Circuits
 - BR-CL-PA-ES
 - Mostly submarine cables usage
- Access Links
 - STM-1 Leased SDH Circuits
- One Optical 2.5 Gbps link connecting GT and SV
- Only Costa Rica Connected thru Miami
- 1 Gbps links to the US provided by Brazil and LILA Project (NSF)

Creating Synergy with other Projects I



- Brazil's RNP using funding from FINEP (Brazil) will provide US\$ 10,000,000 to support acquisition of dark fiber and optical equipment for Mercosur Countries (Brazil, Argentina, Paraguay, Uruguay)
- Additional funding is expected from Argentina and Uruguay for this project.

Creating Synergy with other Projects II



- The Auger Observatory located south of Mendoza needed connection to InnovaRed (AR)
- FP6's AugerExpress + RNP + InnovaRed + Silica Networks + CLARA built the whole Santiago-Buenos Aires backbone and fiber to Malargüe

The AugerAcces Project

- The Observatory is located 400 Km south of Mendoza in the Andes mountains
- Connect the Auger Observatory to InnovaRed (Argentina) and RedCLARA





Creating Sinergy with other Projects III

- America's Light Project
 - Submitted to IRNC Call for Proposals on September 2009
 - FIU, CENIC, LEARN, CUDI, FAPESP, RNP, REUNA, CLARA
 - Two 10 Gbps Sao Paulo-Miami
 - Dark fiber links cross border Mexico- US in California and Texas
 - 1.2+ Gbps from Miami to Panamá

Sinergy along the Santiago Lima Path



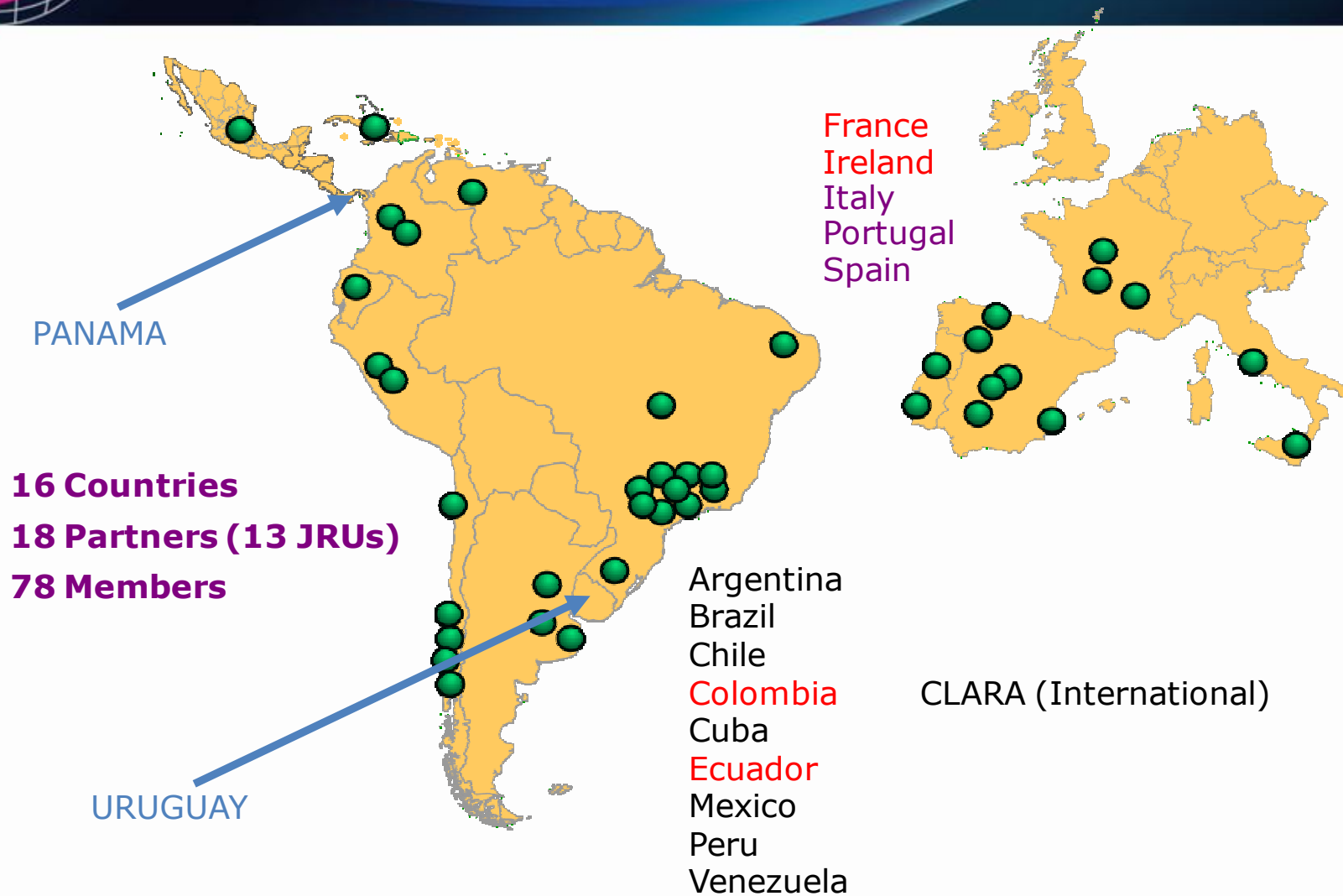
RedCLARA1.75 December 2010



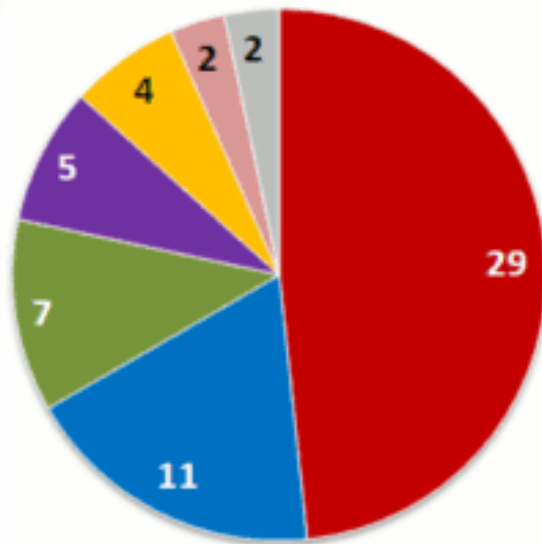


e-Science Projects in LA

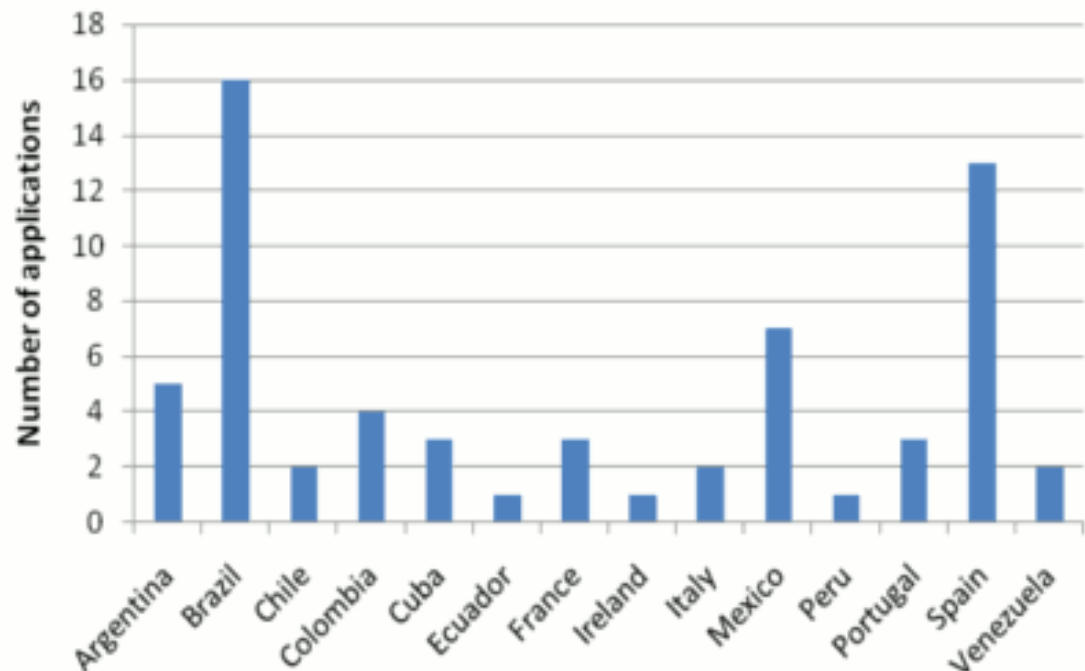
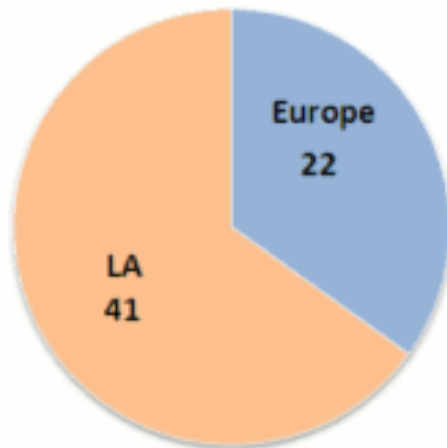
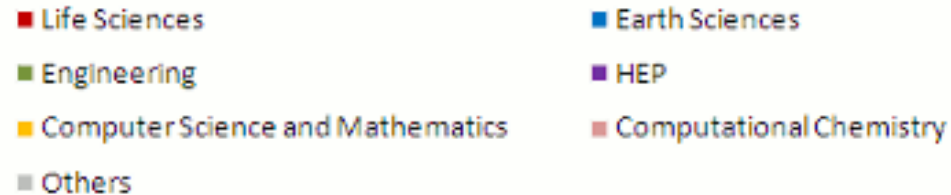
EELA-2 Countries / Resources



EELA-2 Applications



Scientific Domain



Source: B. Marechal's Presentation at 2nd EELA-2 Conference
- Choroní (Venezuela) - 25 to 27 November 2009



The GISELA Project

The GISELA objective is to guarantee the long-term sustainability of the European – Latin American e-Infrastructure implemented thru de EELA Project and thus ensure the continuity and enhancement of the Virtual Research Communities (VRC) using it. The project will focus on:

- Implementing the Latin American Grid Initiative (LGI) sustainability model rooted on National Grid Initiatives (NGI) or Equivalent Domestic Grid Structures (EDGS), in association with CLARA and collaborating with EGI.
- Providing VRCs with the e-Infrastructure and Application-related Services required to improve the effectiveness of their research, addressing both:
 - Current EELA-2 small User Communities;
 - Larger VRCs through “Specialised Support Centres” (SSCs).

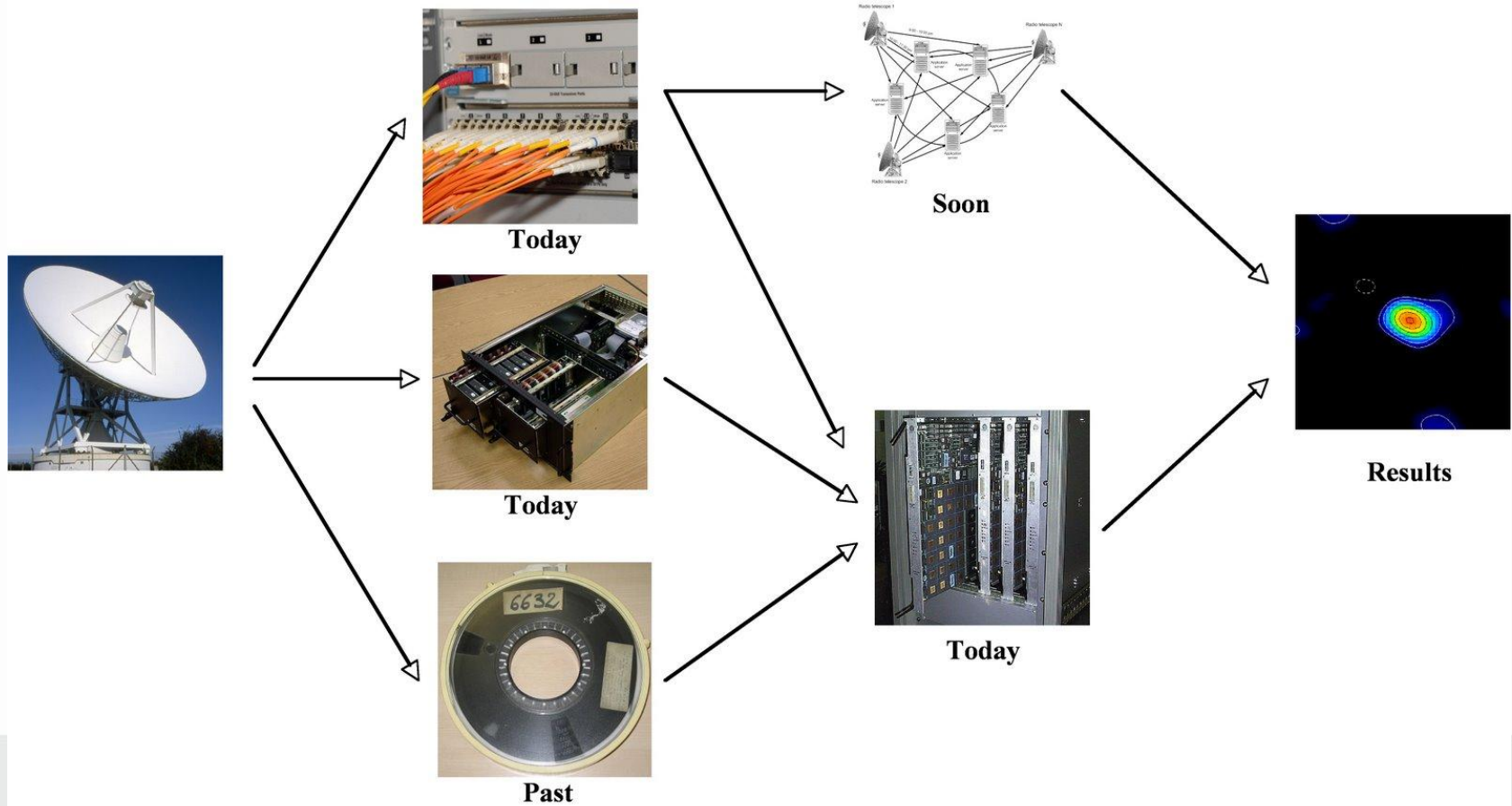




National Grid Projects in LA

- The Brazilian Initiatives
 - [GIGA](#)
 - [OurGrid](#)
 - [SINAPAD](#)
 - [National Grid Certification Authority](#)
- The Chilean CLGrid Project
 - www.clgrid.cl/
- The Colombian Project
 - [Grid Colombia](#)
- The Mexican Project
 - [JRU-MX](#)
- [The EELA Summary of JRUs](#)

ExPreSS: e-VLBI Integrates VLBI around the World



TIGO: The Chielan Node

- Geodesic Observatory of Very Long Base Interferometry (VLBI)
- Several observatories around the world are used (Europe, USA, Japón)
- Chilean Node located in the South of Chile is connected to the World thru REUNA and RedCLARA



EVN Members MAG 03/2002

The EVALSO Project

- Paranal Observatory is located 130 Km South of Antofagasta in Chile
- To instal Optical Fibre from Cerro Paranal to Antofagasta and connect there with REUNA and RedCLARA
- Purpose, to develop new modes of observation





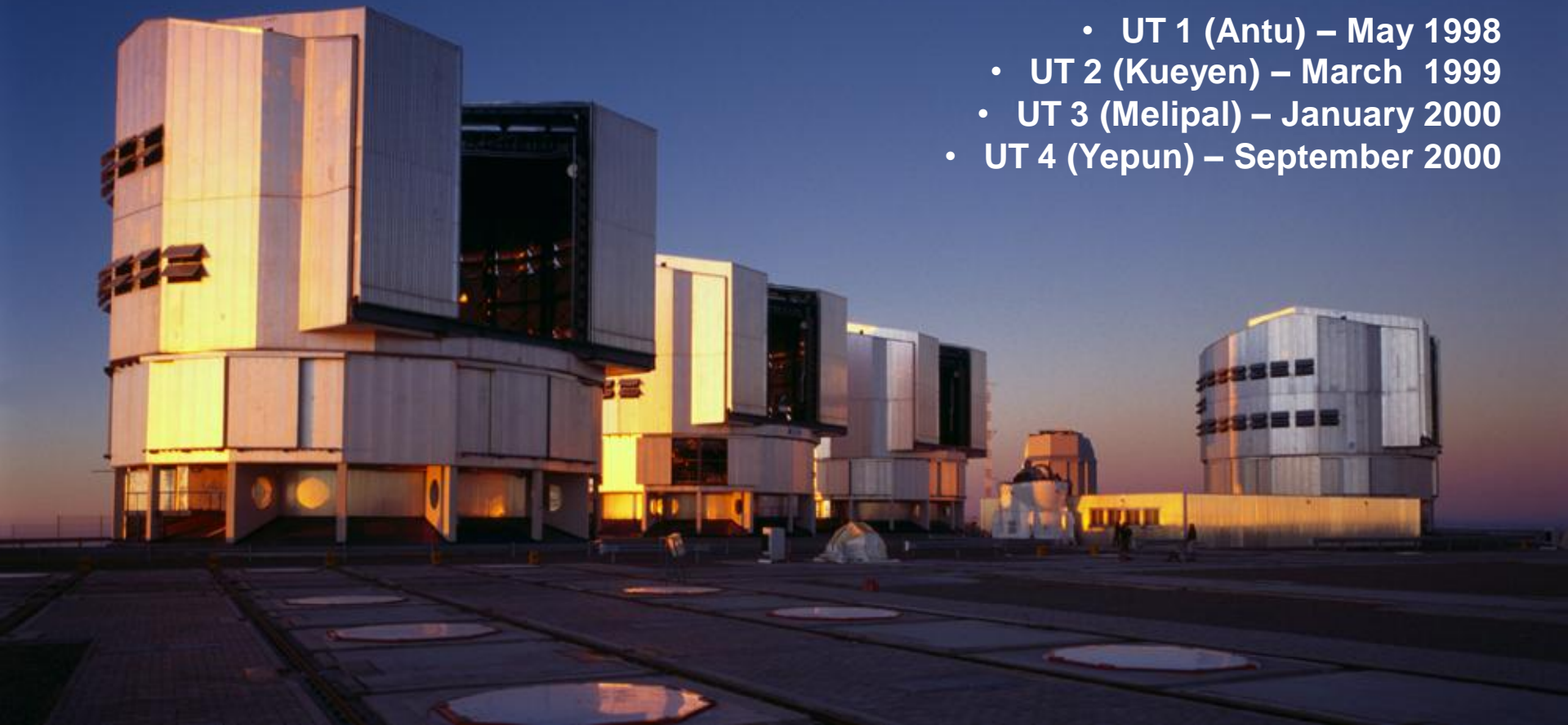
ESO – Cerro Paranal



ESO
European Organisation
for Astronomical
Research in the
Southern Hemisphere

The Very Large Telescope (VLT)

- UT 1 (Antu) – May 1998
- UT 2 (Kueyen) – March 1999
- UT 3 (Melipal) – January 2000
- UT 4 (Yepun) – September 2000





<http://www.redclara.net>
<http://alice2.redclara.net>