Astronomical Observatories and the Republic of Chile Pave the Way for Future Projects

Gonzalo Argandoña, Félix Mirabel (ESO)

For the very first time after more than four decades of operations of several astronomical observatories in the country, the Chilean Ministry of Foreign Affairs hosted an international workshop, held on 4 and 5 December 2007. The event, called "Chile: A Window into the Universe", was jointly organised by the Ministry and all international observatories currently installed in Chile – including ESO, SOCHIAS (the Chilean Astronomical Society) and CONICYT (the National Commission of Science and Technology).

The workshop offered the unique opportunity of bringing together a wide range of institutions essential for the success of astronomical operations in the country, including local universities, mayors and representatives of local governments, members of industry, officers dealing with legal affairs, and Chilean national agencies in charge of key issues, such as environment, light pollution control, mining and administration of the electromagnetic spectrum.

"Astronomy is a fascinating discipline that captivates not only the interest of experts, but also of those who are impressed every day by the advancements of this science in the understanding of the origin of our planet and the Universe", said the Vice Minister of Foreign Affairs, Ambassador Carlos Portales, during the inauguration of the event. The president of SOCHIAS, Dr. Andreas Reisenegger, commented that "having this international workshop at the Ministry of Foreign Affairs implies a very important recognition of astronomy by the government of Chile. Besides, this initiative confirms the importance of astronomy for the promotion of science in Chile, given the great interest in astronomy by young people".

On behalf of ESO, two presentations were made. Félix Mirabel, Representative in Chile, introduced the main ESO operations in the country, including the La Silla Paranal Observatory, APEX and ALMA, as well as several cooperation agreements with the government and local communities. Michael Sterzik, Deputy Director of the La Silla Paranal Observatory, presented plans for the future

E-ELT (European Extremely Large Telescope), where Chile is one of a few candidates in the world to host this new giant foreseen for the next decade.

Astronomers from Chilean universities presented the main science contributions of recent years undertaken by global teams of scientists, thanks to the international telescopes installed in the country. Topics included the use of supernovae for the determination of the acceleration rate of the expansion of the Universe, the detailed study of a massive black hole at the centre of the Milky Way, and the detection of dozens of new exoplanets, including the first direct image of one of these objects (obtained at Paranal) and the discovery from La Silla of the first rocky exoplanet in the habitable zone.

On behalf of all international observatories in the country, Félix Mirabel also gave a short talk on the general impact of astronomy in Chile, in addition to science

and education. In the same round table session, Sandra Berna, mayor of San Pedro de Atacama (the closest village to the ALMA construction site) emphasised the benefits for the Andean local communities arising from the recent arrival of a series of radio astronomy projects, including ALMA.

The final session of the workshop inspired a rich, lively discussion on future challenges for astronomical activities in the country, including the protection of the sky and the possible installation of new international facilities in the next decades.

Figure 1 (below): Round table on the impact of international astronomical activities for Chile as host country, being chaired by Ambassador Juan Eduardo Eguiguren, Director of Special Policies of the Ministry of Foreign Affairs. From left to right: Félix Mirabel, ESO Representative in Chile; Juan Alcayaga, Tourism National Service; Roberto Guarini, SOFOFA (association representing industry); Fernando Mercado, Intendencia of Coquimbo Region; and Sandra Berna, mayor of San Pedro de Atacama.





Figure 2: The ESO interactive stand explaining the principles of interferometry attracted the interest of many secondary school students visiting a parallel exhibition on astronomy at the Chilean Ministry of Foreign Affairs.