

and Pierre Kaufmann reported the detection of a bright 30 THz impulsive solar burst using a new imaging system.

Among others, Robert Laing presented a talk on the current status of ALMA and verification of the solar science capabilities. He gave a short report on the current status of ALMA and plans for Cycles 1 and 2 observations. The Joint ALMA Observatory is in the process of planning solar commissioning and science verification observations and he outlined the opportunities for the solar radio astronomy community to become involved.

The second part of the meeting was mainly devoted to a general discussion of different aspects of solar observations with ALMA. The introduction to this part of the workshop was given by Tim Bastian. There were discussions about ALMA commissioning and science verification activities in the context of one or more ALMA development proposals.

Bartosz Dąbrowski briefly presented the solar ALMA wiki platform. This is a special website (wiki form) devoted to the ALMA-minded solar community and it was created by the Czech ARC node.

This wiki website is only available to registered users and those interested should contact Bartosz directly.

The workshop was immediately followed by the Community of European Solar Radio Astronomers CESRA2013 conference, which also included sessions on solar observation with ALMA.

#### Links

<sup>1</sup> Workshop webpage:  
<http://www.asu.cas.cz/solar-workshop>

## Retirement of Massimo Tarenghi

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Massimo Tarenghi, chronologically MPG/ESO project scientist, NTT project manager, VLT programme manager and first Director, ALMA Director and ESO Representative in Chile, has retired after 35 years at ESO. A brief summary of his achievements is presented.

Readers of *The Messenger* will be well aware that ESO has recently passed the 50-year mark of its existence. During those five decades, many people — astronomers, engineers, technicians and people of other professions — have worked for the organisation, some for a relatively short period, others for longer. Few people, however, have stayed with the organisation for 35 years or more. In such cases, it almost feels as if they belong permanently to “the house”, and this certainly applies to Massimo Tarenghi, who retired on 1 September 2013.

Born in 1945, Massimo was awarded his PhD at the University of Milan in 1970. After post-doc assignments in Milan and Pavia, he became an ESRO Fellow at the Steward Observatory in the USA in 1973, but returned to Europe in 1975. Two years later, on 1 September 1977, he joined the newly established science group at ESO, at the time based in Geneva. This was also shortly after first light of the ESO 3.6-metre telescope, and, with his scientific interests in cosmology, he became one of the first official users of that telescope.

#### The ESO 3.6-metre and MPG/ESO 2.2-metre telescopes

Unsurprisingly, the telescope was still suffering from teething troubles. “I spent five nights observing — identifying [technical] problems,” he later recalled. At the suggestion of André Muller, he continued working with the ESO 3.6-metre during technical time, testing the prime focus camera. Massimo is an incredibly energetic person with a wide range of interests, perhaps especially in technical matters, so it is no surprise that in parallel with his scientific work, he began to play

an active role in the technical aspects of the telescope and its instrumentation. Thus he became an “instrument scientist” for the new ESO 3.6-metre prime focus automatic camera that was under development at ESO. “Automatic” meant remotely-controlled plate- and filter-changing, removing the need for the astronomer to ride in the prime focus cage of the telescope during observations.

With Italy and Switzerland expected to join ESO, it was decided to substantially increase the complement in the telescope park. The MPG/ESO 2.2-metre telescope was the first addition, followed by the 3.58-metre New Technology Telescope (NTT). It seemed natural for Massimo to become project scientist for this new 2.2-metre telescope, which had been built for the Max Planck Society for deployment in Namibia, but had never been installed there. Shortly afterwards, Massimo took over the task of project manager, leading the installation of the telescope at La Silla, not just in record time, but also on a shoestring budget. The 2.2-metre telescope saw first light in June 1983, and in 1984 Massimo led the first remote control experiments with this telescope.

From the NTT to the VLT

In 1983, he became project manager for the 3.58-metre NTT, which served as an important test-bed for many of the technologies that were to be fully used at the Very Large Telescope (VLT), including the active optics system developed by Ray Wilson. In 1989, at first light, the NTT produced the sharpest images of stellar objects ever obtained with a ground-based telescope (0.33 arcseconds; Wilson, 1989). At the inauguration of the telescope (Figure 1) the following year<sup>1</sup>, Massimo was awarded the title *Commendatore della Repubblica Italiana* in recognition of his achievements in connection with the NTT.

Most importantly, the initial great success of the NTT proved that ESO was on the right track towards the VLT. And so was Massimo, who, from 1988, became involved in ESO's "big telescope" project — the VLT. In November 1991, he was appointed VLT Programme Manager and Head of the VLT Division. Over the years to come, he led the project to its successful conclusion — the first-light milestones for the four Unit Telescopes (UTs) and the first fringes to be obtained with the VLT Interferometer.

As for all large and innovative projects, the road towards realising the VLT was bumpy and paved with many challenges — be it of a financial, technical, political or legal nature. Despite these exigencies, some of them external to the project, Massimo kept his team focussed on the work at hand and delivered a fantastic telescope to the scientific community (see Figure 2). For all the difficulties, however, these tough years also offered high points, such as the UT1 first-light event on 25 May 1998 (ESO, 1998; and Figure 3). Speaking afterwards to members of the press assembled at ESO Headquarters, Massimo could hardly contain his enthusiasm, saying: "... the pleasure to do astronomy as I have in the last few days is incredible; you have to come here and spend a night with us, and I can tell you, you will have one beautiful night, one of the best nights of your life!" It clearly had been so for him.



Figure 1. Presenting the NTT to the public: a happy ESO team, including Massimo Tarengi (right) at the press conference at ESO Headquarters on the occasion of the NTT inauguration on 6 February 1990.

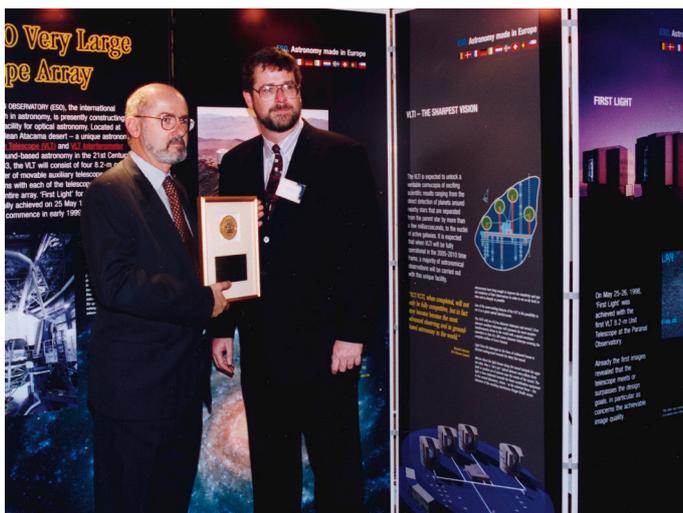


Figure 2. Following the success of the VLT first light, ESO was awarded the Best of What's New prize for 1998 by the US *Popular Science* magazine. A proud Massimo Tarengi received the prize at a ceremony in New York on 13 November 1998.

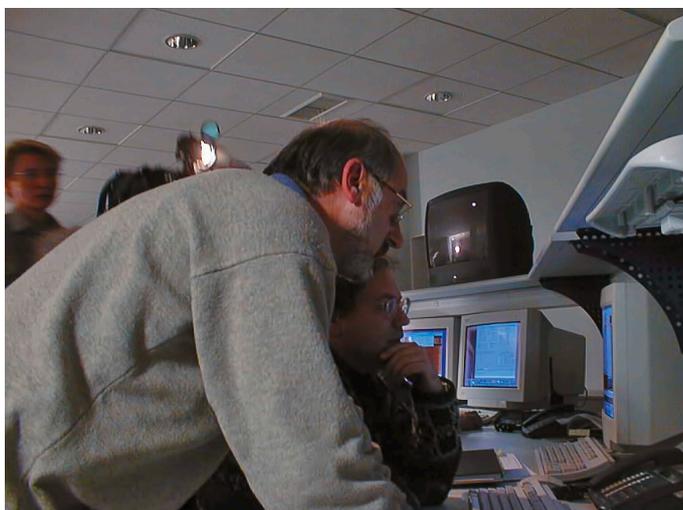


Figure 3. Massimo Tarengi and Roberto Gilmozzi watching the first results during the night of UT1 first light on 25 May 1998.

## ALMA

After the VLT's first light, Massimo continued as Director of the Paranal Observatory until 2002. However, if he had ever entertained the hope of leaving the stressful job of project management and returning to the role of an active researcher and enjoying the scientific fruits of the VLT, he might well have been disappointed. In June 2002 he became the ALMA interim project manager, moving to become ALMA Director in the spring of 2003. This was just when the first ALMA prototype antenna was being tested at Socorro, New Mexico, and in November 2003 the formal ground-breaking ceremony took place at Cerro de Chajnantor (Madsen, 2012). This period was an intense one of planning, design, manufacture and development of the site and Massimo successfully shepherded the project through these crucial stages. During this period Japan formally joined the North American and European partners and ALMA became the first truly global, ground-based astronomy project.

## ESO Representative in Chile

In 2008, Massimo handed over the ALMA project to his successor Thijs de Graauw. In turn, Massimo succeeded Daniel Hofstadter as the official ESO Representative in Chile. In this diplomatic function, he helped to pave the way for the European Extremely Large Telescope (E-ELT), working closely with the Chilean authorities and decision-makers to secure the new E-ELT site on Cerro Armazones. In his previous functions, Massimo may not have been known for his diplomatic skills, but as ESO Representative he passed the test with flying colours. In 2012 he was granted the Chilean nationality by "special grace" in a vote by the Chilean national congress<sup>2</sup> — awarded "in recognition of his great contribution to the development of astronomy in Europe and Chile". This extraordinary honour demonstrated his ability to act as a highly respected interlocutor, clearly representing ESO's interests, but always striving to reach solutions of mutual benefit.

His diplomatic successes notwithstanding, Massimo is arguably one of the most experienced project managers in ground-



Figure 4. The award of the Grand Cross of the order of Bernardo O'Higgins was made to Massimo Tarengi on 10 May 2013. He is shown here after having received the order from the Chilean Minister of Foreign Affairs, Alfredo Moreno.

based astronomy in the world. He has excelled in this function, but occasionally it has required great personal sacrifice. For example, in 2003, unexpected but severe illness — and three operations — forced him to slow down for 2½ months. However, just two hours after the third operation, he participated in an ALMA board meeting from his hospital bed. As a hard-nosed manager, Massimo has often faced tough decisions, realising that such decisions must be taken by the person who is ultimately responsible, and understanding that project management is not a popularity contest. In this context he has often described himself as "a difficult person", but this view is hardly just. The truth is that through his hard work and undisputed successes, he has earned the deep respect of his colleagues in a way that only true professionals can appreciate. This respect is also reciprocal. Asked by a television journalist shortly before first light for VLT UT1, if he was nervous about the outcome, his answer was short and clear: "No, because I have confidence in my people."

## Honours

Massimo has now completed his career at ESO, a sterling one indeed, and one which has led to the award of the Tycho Brahe Prize in 2013 by the European Astronomical Society<sup>3</sup>. It is a fitting reward. Tycho built Europe's largest and

most prominent astronomical observatory of his time; Massimo, it can be argued, did the same in our time. More honours flowed (Figure 4) when he was awarded the Grand Cross, the highest rank of the order of Bernardo O'Higgins, by the Chilean Ministry of Foreign Affairs<sup>4</sup>. Yet he will not stop working. He is providing help to the European Research Council and continues to undertake other activities in the service of science.

Even if Massimo has formally left ESO, those who were privileged to work with him — *his people*, as he would put it — will think back with pride — and with one or two anecdotes to enjoy. In this sense, he will always remain a part "of the house". We wish him well for the time to come.

## References

- ESO, 1998, *The Messenger*, 92, 1
- Madsen, C. 2012, *The Jewel on the Mountaintop — The European Southern Observatory through Fifty Years*, (Weinheim: Wiley-VCH)
- Wilson, R. 1989, *The Messenger*, 56, 1

## Links

- <sup>1</sup> NTT inauguration: <http://www.eso.org/public/news/eso9003>
- <sup>2</sup> Chilean nationality for Massimo Tarengi: <http://www.eso.org/public/news/ann12079>
- <sup>3</sup> Massimo Tarengi awarded Tycho Brahe prize: <http://www.eso.org/public/news/ann13030>
- <sup>4</sup> Massimo Tarengi awarded Grand Cross by the Chilean Ministry of Foreign Affairs: <http://www.eso.org/public/news/ann13045>