

Publication Digest

A total of 783 refereed papers using observational data from ESO's telescopes and instruments appeared in 2011; this is an all-time high in ESO's history. Since 1996, almost 12 000 individual authors from nearly 90 countries have published more than 8500 scientific papers based on ESO data.

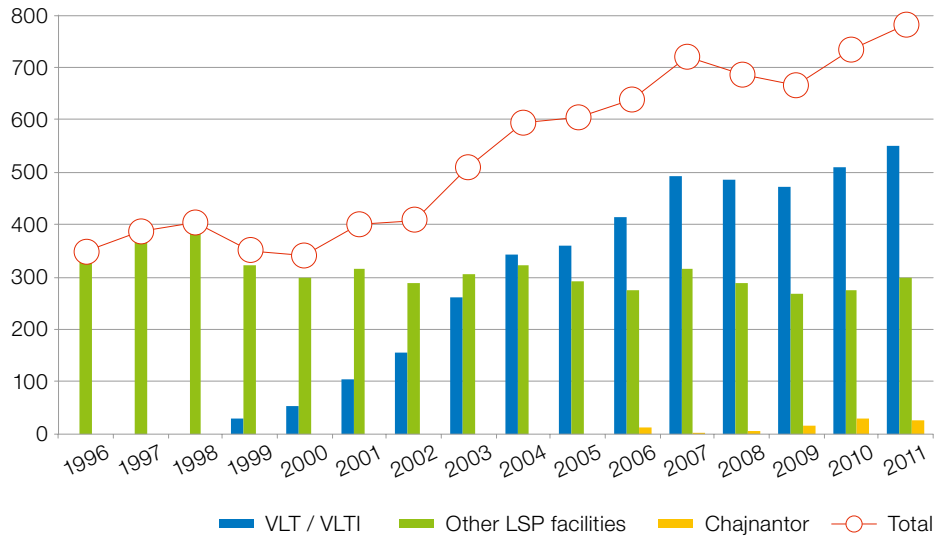
The VLT/VLTI alone provided data for 551 papers in 2011, an increase of approximately 8% since last year. The total number of papers using VLT/VLTI data is now well above 4000. Papers that use archival data have accounted for a steady fraction of 16% during recent years. Approximately 5% of papers each year use special data releases, known as data products (<http://archive.eso.org/cms/eso-data/eso-data-products/>).

ESO's facilities at La Silla and those at Paranal that are not part of the VLT/VLTI led to 298 refereed publications. The year 2011 marked the first year of science papers based on regular VISTA/VIRCAM observations, using data from the VMC and VVV surveys. APEX resulted in 25 papers. This number incorporates only those with data obtained during ESO/APEX observing time.

Papers can use data from more than one facility, and therefore the total number of papers cannot be calculated by simply adding all publications from the individual sites. The exact numbers per year can be found in the Basic ESO Statistics document (<http://www.eso.org/libraries/edocs/ESO/ESOstats.pdf>).

Note also that the publications discussed here do not include data from non-ESO time, such as the Swiss 1.2-metre Leonhard Euler Telescope, GROND on La Silla, APEX observations during non-ESO time, or visitor instruments for which observing time is not evaluated by the ESO Observing Programmes Committee (OPC). This means that in reality ESO facilitates many more papers through its operations support and by providing the infrastructure for such instruments and telescopes.

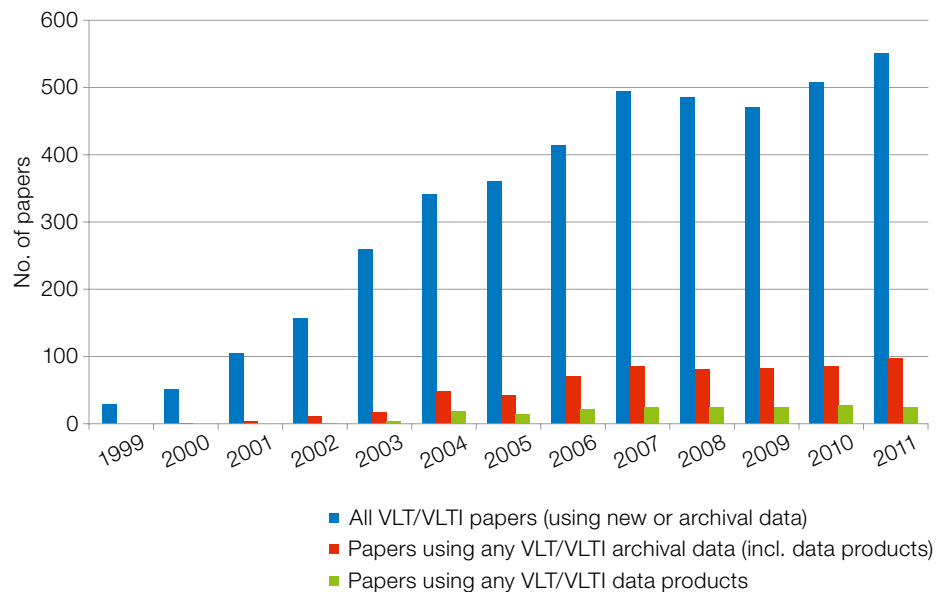
ESO Publications 1996–2011



Refereed papers using ESO data, 1996–2011.
VLT/VLTI: Papers using data generated by VLT and VLTI instruments, including visitor instruments for which observing time is recommended by the ESO OPC, e.g., VLT ULTRACAM, VLTI PIONIER.
Other LSP facilities: Papers using data generated by other facilities of the La Silla Paranal Observatory, including VISTA at Paranal, as well as La Silla telescopes and instruments. Visitor instruments for which observing time is recommended by the ESO OPC, e.g., NTT ULTRACAM are also included.

Papers based on data from non-ESO telescopes or observations obtained during "private" periods are not included.
Chajnantor: Papers using data generated by APEX instruments, including visitor instruments for which observing time is recommended by the ESO OPC, e.g., P-Artemis, Z-Spec. Other visitor instruments (e.g., APEX/CONDOR) are excluded. Only papers based (entirely or partly) on ESO APEX time are included.

VLT/VLTI papers



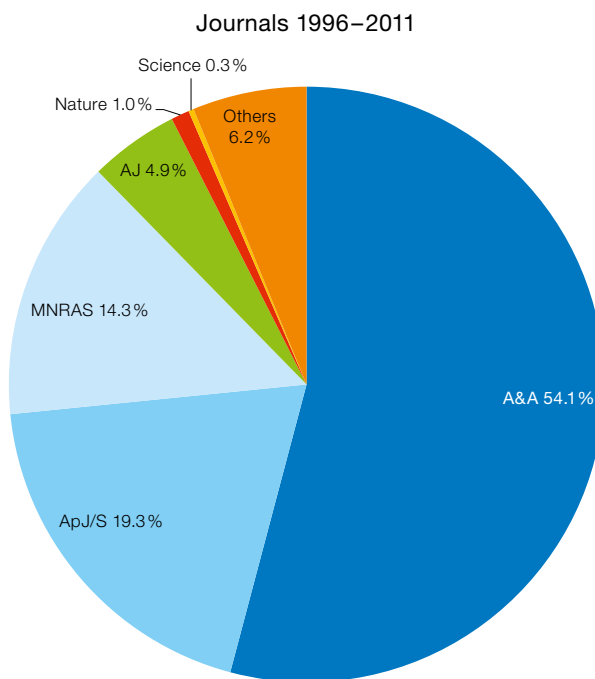
The graph shows the number of all VLT/VLTI papers (blue) as well as the number of those papers that use general archival data (red) and archive data products (green).

During the publication years from 1996 to the end of 2011, more than half of all ESO data papers were published in the European journal *A&A* (54.1%), followed by approx. 19% in the *ApJ* and its *Supplement*, and more than 14% in *MNRAS*. Papers published in *AJ* account for almost 5%.

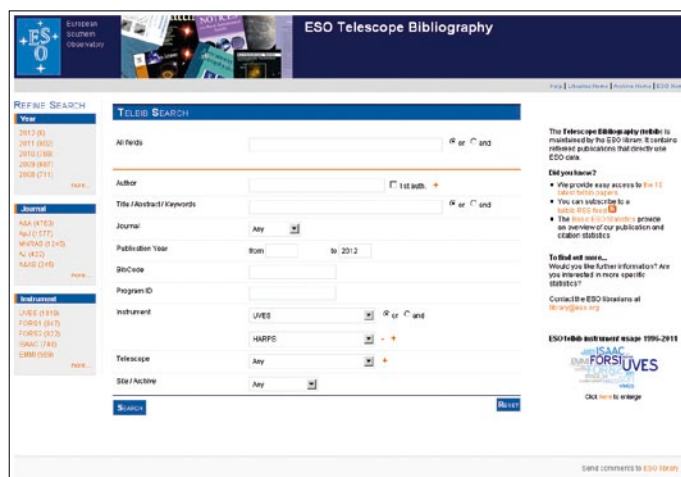
These numbers are extracted from the ESO Telescope Bibliography (telbib), a database of refereed publications that use ESO data. Telbib is a unique source that connects published articles with the observing programmes that generated the data. It is maintained by the ESO librarians. In December 2011 a completely redesigned public interface was released, providing new features and sophisticated search functionalities (<http://telbib.eso.org>). A detailed description of the telbib database can be found at <http://telbib.eso.org/help.html>.

In order to maintain telbib so that it is as complete and current as possible, more than 10 000 articles published in the main astronomy journals (Journals that are routinely screened for ESO-related keywords are: *A&A*, *A&ARv*, *AJ*, *ApJ*, *ApJS*, *AN*, *ARA&A*, *EM&P*, *Icarus*, *MNRAS*, *Nature*, *NewA*, *NewAR*, *PASJ*, *PASP*, *P&SS*, *Science*) were screened for ESO-related keywords during 2011. On average, 7–8% of these papers used ESO observing data in order to achieve new scientific results and therefore qualified for inclusion in the telbib database. At ESO, the selection policies are defined by the Director for Science. The ESO librarians are also in regular contact with telescope bibliography curators at other large observatories, for instance the Hubble Space Telescope and Gemini, in order to exchange best practices for bibliometric issues.

In addition to tracking the community's data papers, the ESO librarians also trace refereed papers published by ESO scientists. As these now occupy more than 35 pages of text they will not be published as part of the ESO Annual Report. Two lists can be found online at http://www.eso.org/libraries/telbib_info/AR/ESO_AnnualReport_publications2011.pdf



Distribution of ESO data papers by journal, 1996–2011.



The new public interface of the ESO Telescope Bibliography.

www.eso.org/libraries/telbib_info/AR/ESO_AnnualReport_publications2011.pdf

They contain all 2011 papers in refereed journals that use ESO data and all peer-reviewed publications by ESO scientists without ESO data use published in 2011.