

Phase 3 – Handling Data Products from ESO Public Surveys and Large Programmes

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Overview: Phase 3 denotes the process in which principal investigators of ESO observing programmes return their reduced data products for storage in the ESO archive and subsequent data publication to the scientific community.

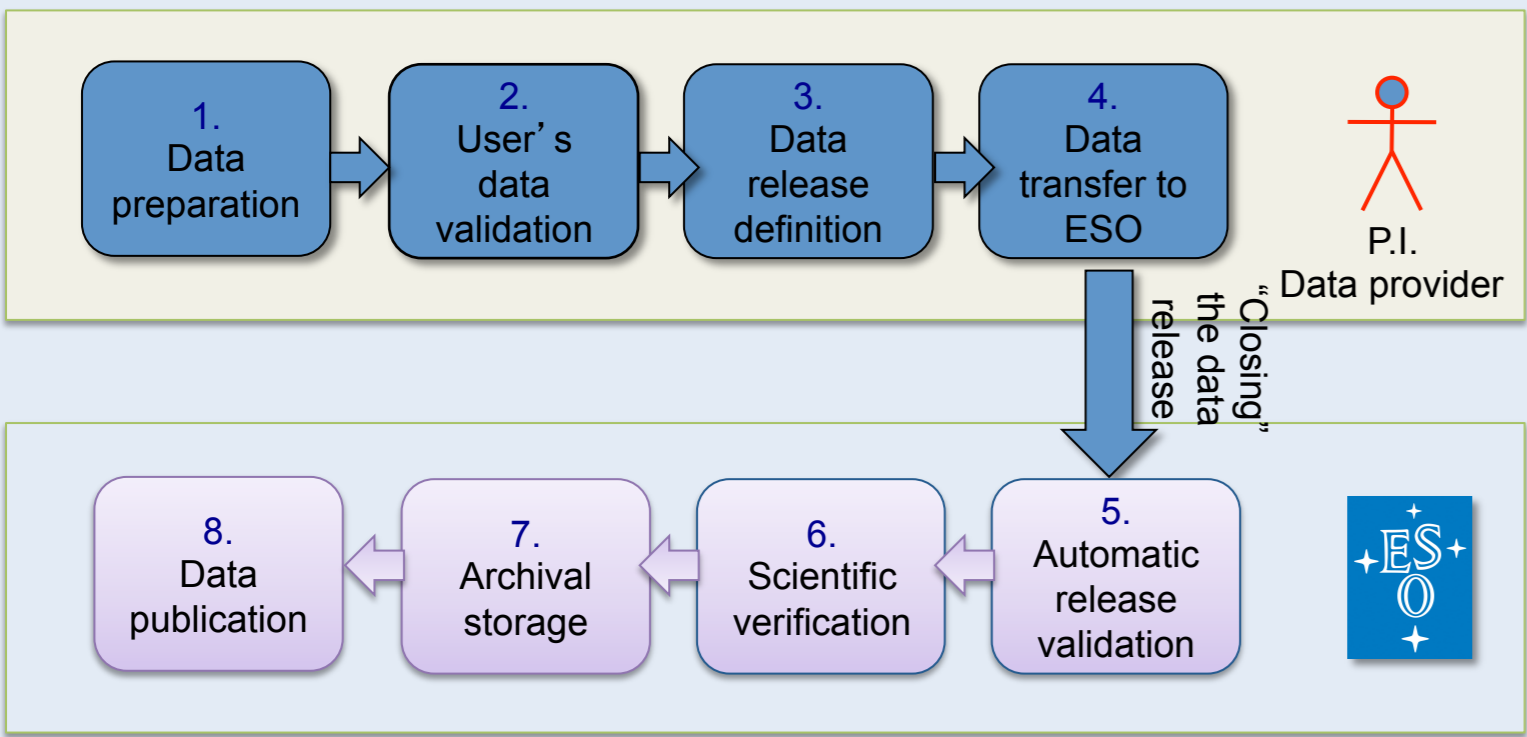


Diagram illustrating the Phase 3 process and responsibilities.

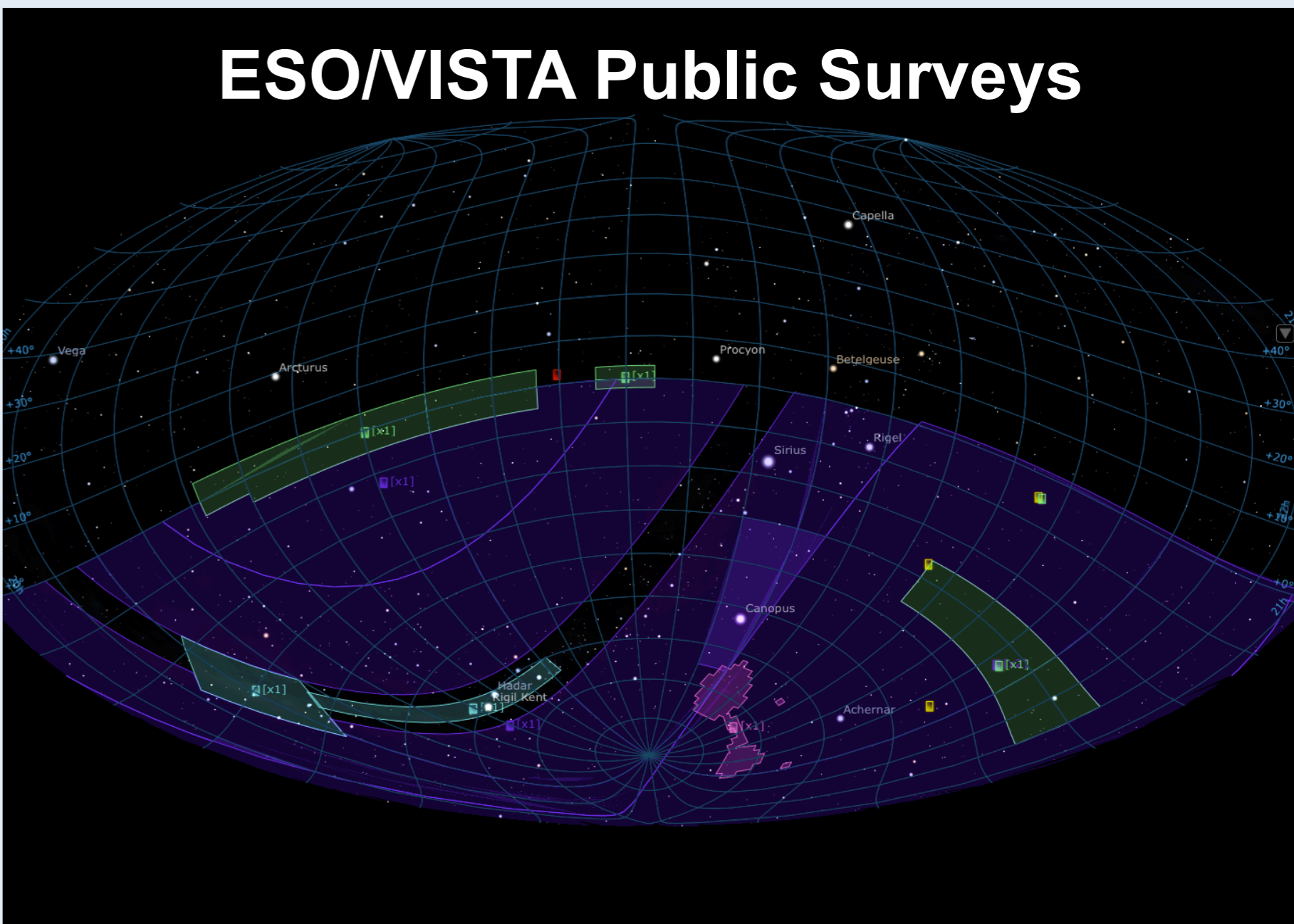
The Phase 3 process is carried out by the PI/Co-I and the ESO staff. PI/Co-I activities include the definition of new releases, data preparation and validation, data upload to ESO, submission of the release description, and finally closing the release.

ESO public surveys projects

The projects range from wide area surveys with short exposures, like the VISTA Hemisphere Survey to very deep surveys concentrating on small areas or even a single pointing on the sky.

ESO operates two dedicated survey telescopes, the near-infrared 4-metre VLT Infrared Survey Telescope for Astronomy (VISTA) and the optical 2.6-metre VLT Survey Telescope (VST).

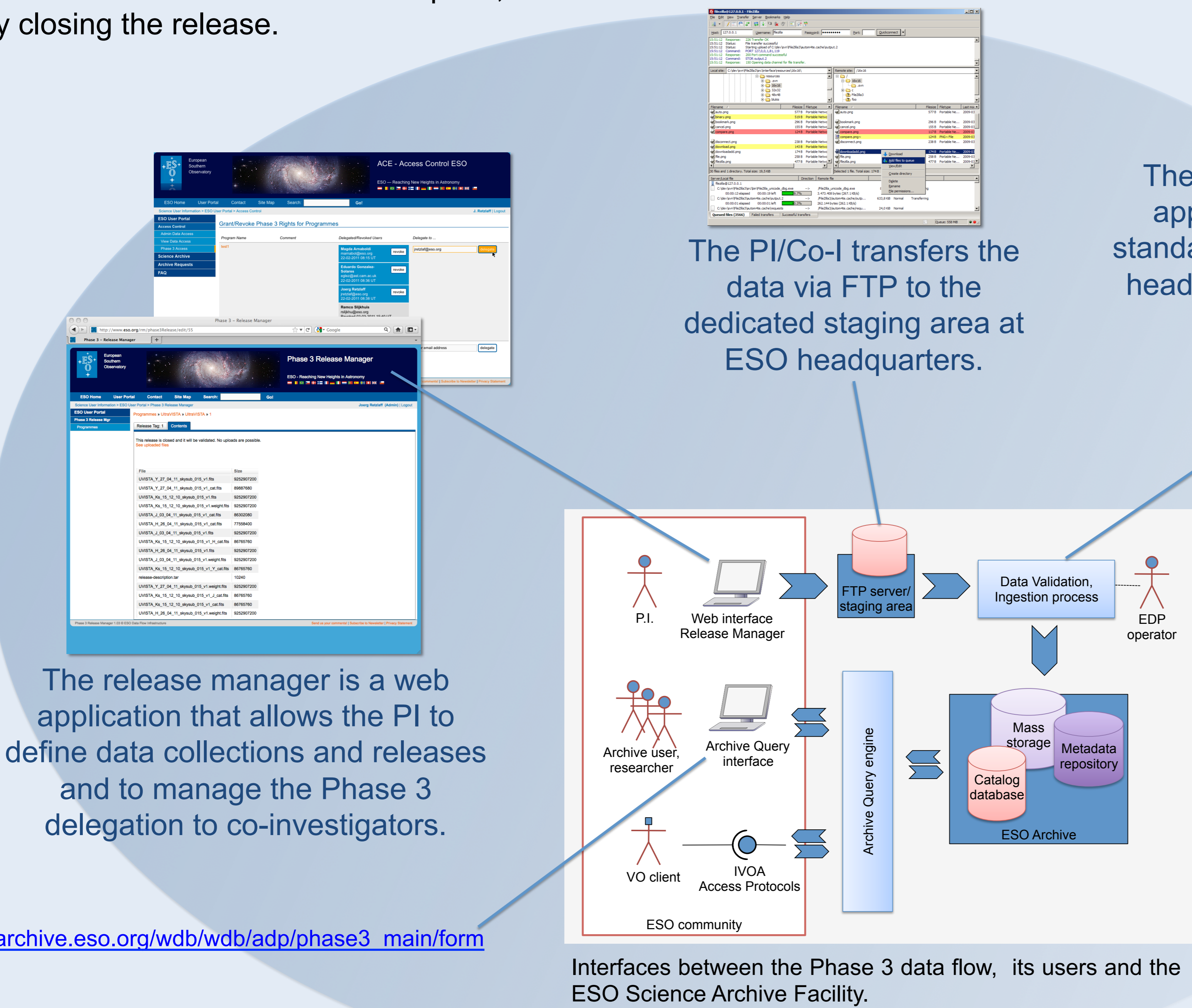
- Six VISTA surveys started in April 2010.
- Three VST surveys started operations on 15 October 2011.
- Two Spectroscopic Public Surveys were approved and will commence in 2012.



Sky regions covered by the six VISTA surveys: VHS in blue, VIKING green, VVV light blue, VMC purple, UltraVISTA and VIDEO in red and yellow, respectively.

<http://www.eso.org/sci/observing/policies/PublicSurveys.html>

The ESO Science Archive Facility is the collection point for the survey products and the primary point of publication/availability of these products to the ESO community (as per ESO Council Meeting 104, 17–18 December 2004).



http://archive.eso.org/wdb/wdb/adp/phase3_main/form

Interfaces between the Phase 3 data flow, its users and the ESO Science Archive Facility.

Data flow and infrastructure

The new Phase 3 infrastructure supports the reception, validation and publication of data products from the public survey projects and large programmes to the ESO Science Archive Facility. It consists of the Phase 3 release manager, the release validator and the dedicated FTP server for data upload.

Phase 3 in operation

The infrastructure was deployed on 10 March 2011. Between April and October the six VISTA public survey teams uploaded their first imaging products to the Phase 3 staging area, totalling ca. 5.5 terabytes of compressed data. For the majority of surveys these data have been verified, archived and are available for the community for access via the archive query interfaces.

For enquiries on the Phase 3 process or to initiate a Phase 3 submission, please contact usd-help@eso.org, quoting Subject: Phase 3.

<http://www.eso.org/sci/observing/phase3.html>

Status of ESO Phase 3 data releases resulting from VISTA public surveys

Survey	Submission Date	Date of Observations	Release Content	Pass-bands	Sky coverage (sq. deg.)	Type of Data Products	Total volume	Total number of files	VISTA tile images	Pub. date
VVV	03.05.2011	Feb 2010 – Sep 2010	Contiguous patch of bulge and disk region including multi-epoch data in Ks	ZYJHKS	~520 (348 tiles)	Tiles, single-band source lists	1.5 TB	7980	2660	25.07.2011
VIDEO	03.05.2011	Nov 2009 – Feb 2010	XMM-LSS field	YJHKS	1.5	Tiles, single-band source lists	24 GB	291	97	25.07.2011
VMC	08.09.2011	Nov 2009 – Nov 2010	2 tiles in the LMC: one overlapping the 30 Doradus and the other the South Ecliptic Pole region	YJHKS	3	Stacked tiles and pawprints, single-band and band-merged source lists	8.1 GB	1256	6	25.09.2011
VHS	15.09.2011	Nov 2009 – Sep 2010	VHS DES: 120secs in JHK VHS ATLAS: 60secs in YJHKS VHS GPS: 60secs in YJHKS	YJHKS	~1910	Tiles, pawprints, single-band source lists	3.9 TB	96474	4560	Oct 2011
UltraVISTA	06.10.2011	Dez 2009 – Apr 2010	Deep imaging of the COSMOS field	YJHKS	1.5	Stacked images, SExtractor catalogues including Ks-selected multi-band catalogue	70 GB	15	4	tbd
VIKING	10.10.2011	Phase 3 data submission to be closed by P.I.					19 GB	6276		

Date: 17.10.2011