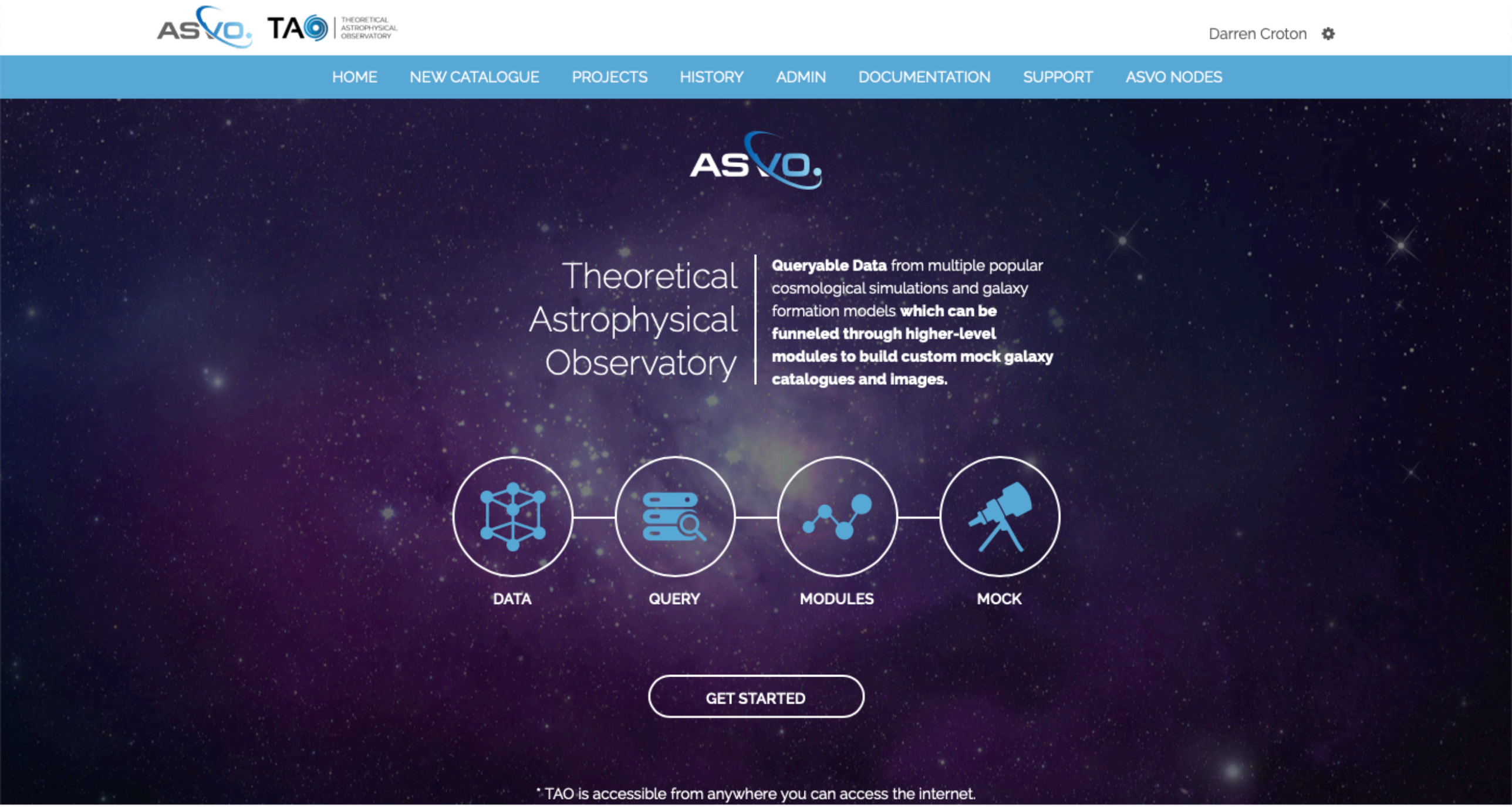

ACKNOWLEDGEMENTS

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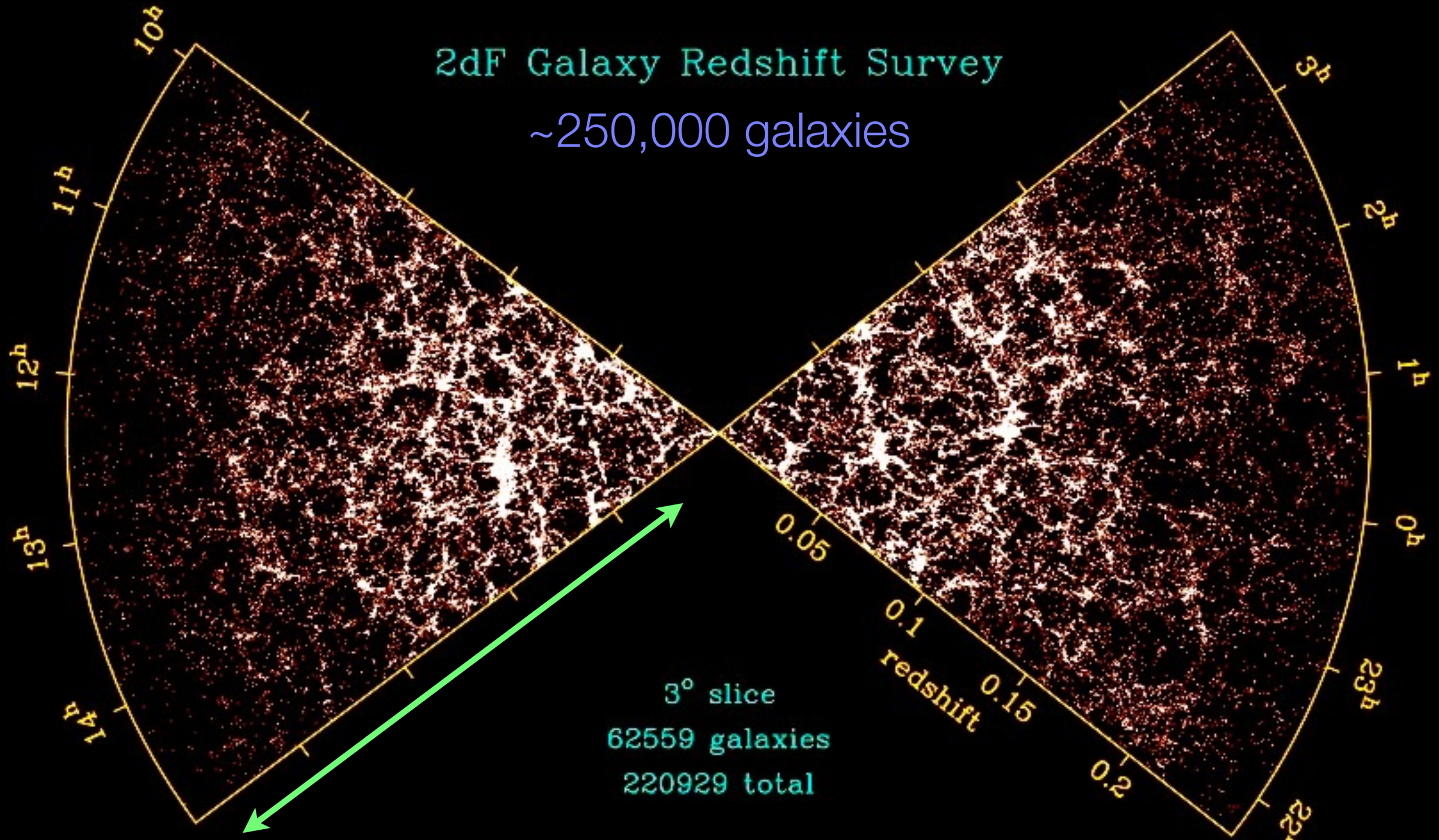
https://tao.asvo.org.au



~3 billion light years

TAO

Telescope simulator

Image generation

SEDs + Filters

Light cone generation

Web form data query

Simulation database

Traditional

SQL data query

Simulation database


Developer: Makes a simple, intuitive UI
Users

New Catalogue

START — GENERAL PROPERTIES — SPECTRAL ENERGY DISTRIBUTION — SELECTION — OUTPUT FORMAT — SUMMARY AND SUBMIT

< PREVIOUS NEXT >

Data Selection

Catalogue type *

Box

Simulation: Millennium

Galaxy Model: SAGE

Version: 2016

Box size (Mpc/h)*: 500

Redshift*: 0.0000

Output properties*

Available

TYPE TO FILTER

- **Galaxy Masses**
  - Total Stellar Mass
  - Bulge Stellar Mass
  - Black Hole Mass
  - Cold Gas Mass
  - Hot Gas Mass
  - Ejected Gas Mass
  - Intracluster Stars Mass
  - Metals Total Stellar Mass
  - Metals Bulge Mass
  - Metals Cold Gas Mass

Selected

TYPE TO FILTER

INFOBAR

Selected simulation details
Millennium

Cosmology
WMAP-1

Cosmological parameters
Ωm = 0.25, ΩΛ = 0.75, Ωb = 0.045, σ8 = 0.9, h = 0.73, n = 1

Box size
500 Mpc/h

Mass resolution
8.6x10^8 Msun/h

Force resolution
5 kpc/h

Paper
Springel et al. 2005

External link
The German Astrophysical Virtual Observatory

Selected galaxy model details
SAGE

The Semi-Analytic Galaxy Evolution (SAGE) model used in this work is a publicly available codebase that runs on the dark matter halo trees of a cosmological N-body simulation.

Paper

Viewing Catalogue 3262

DELETE IMAGE CONE REQUEST DOI LOAD AS TEMPLATE

SUMMARY

STATUS

Disk Usage	783MB
Number of Galaxies	1394191
Status	Completed

Description CLICK TO EDIT

SDSS preset cone

Projects >>

GENERAL PROPERTIES

Catalogue Geometry	Light-Cone
Dataset	Millennium / SAGE / 2016 >>
Dimensions	0° < RA < 90° 0° < Dec < 60° Redshift: 0 ≤ z ≤ 0.15
Number of Light-Cones	1 random light-cone
Output Properties	52 properties selected >>

INFOBAR

DOWNLOAD

TXT summary.txt

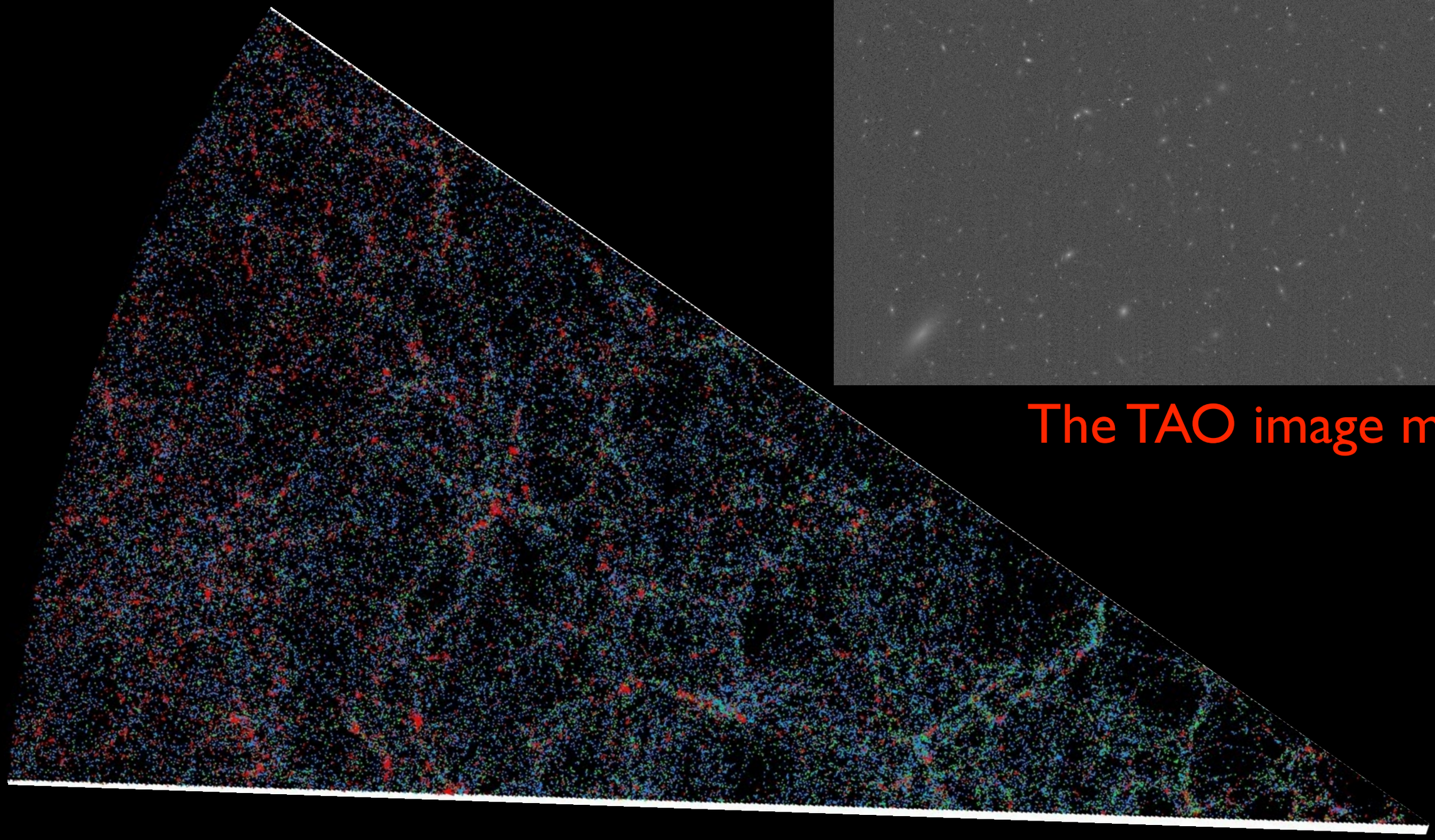
DOWNLOAD AS SINGLE FILE

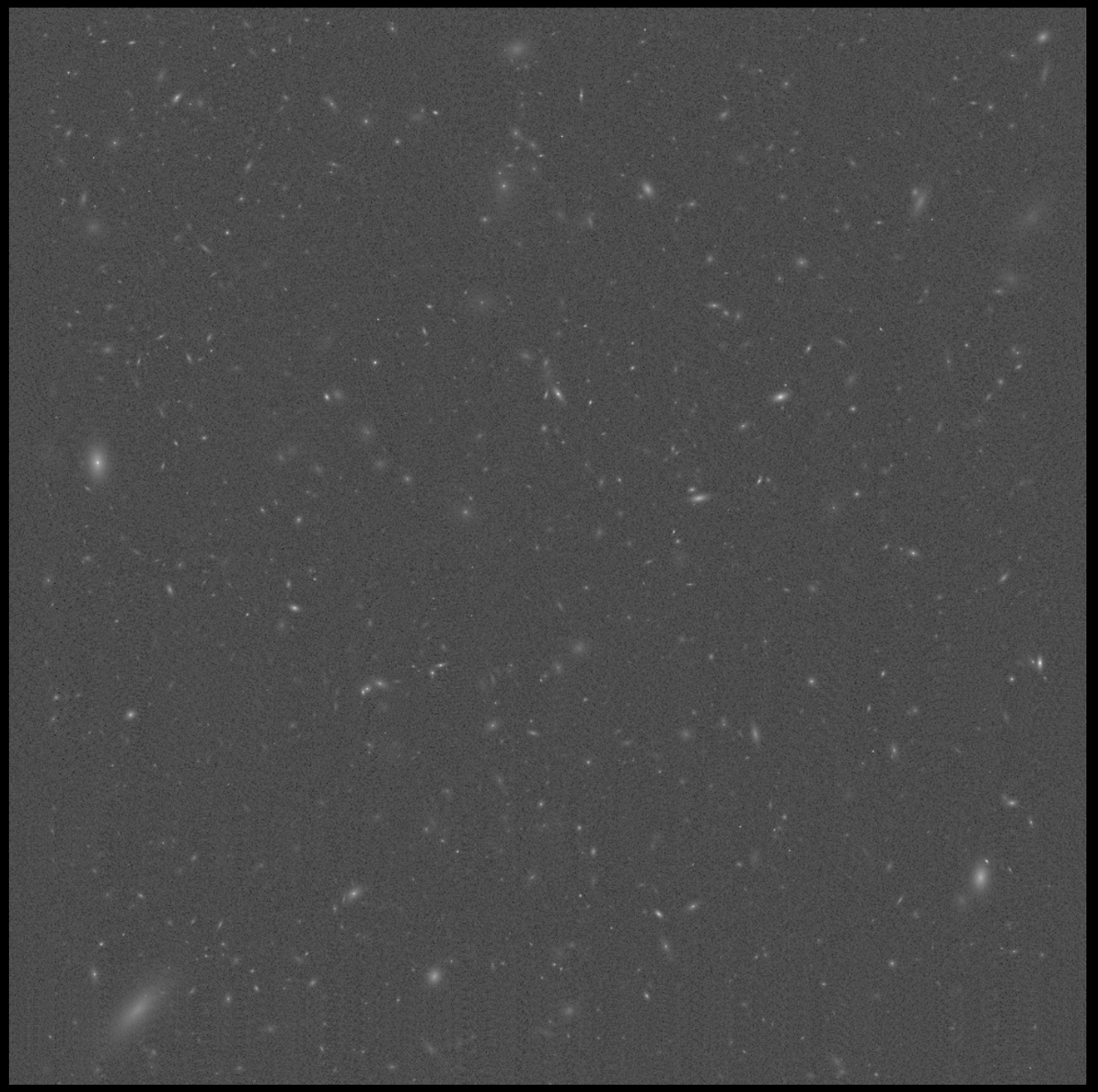
TAR Recommended

IMAGES FOR CATALOGUE 3262

ID	STATUS
3263	COMPLETED

The TAO
light-cone module



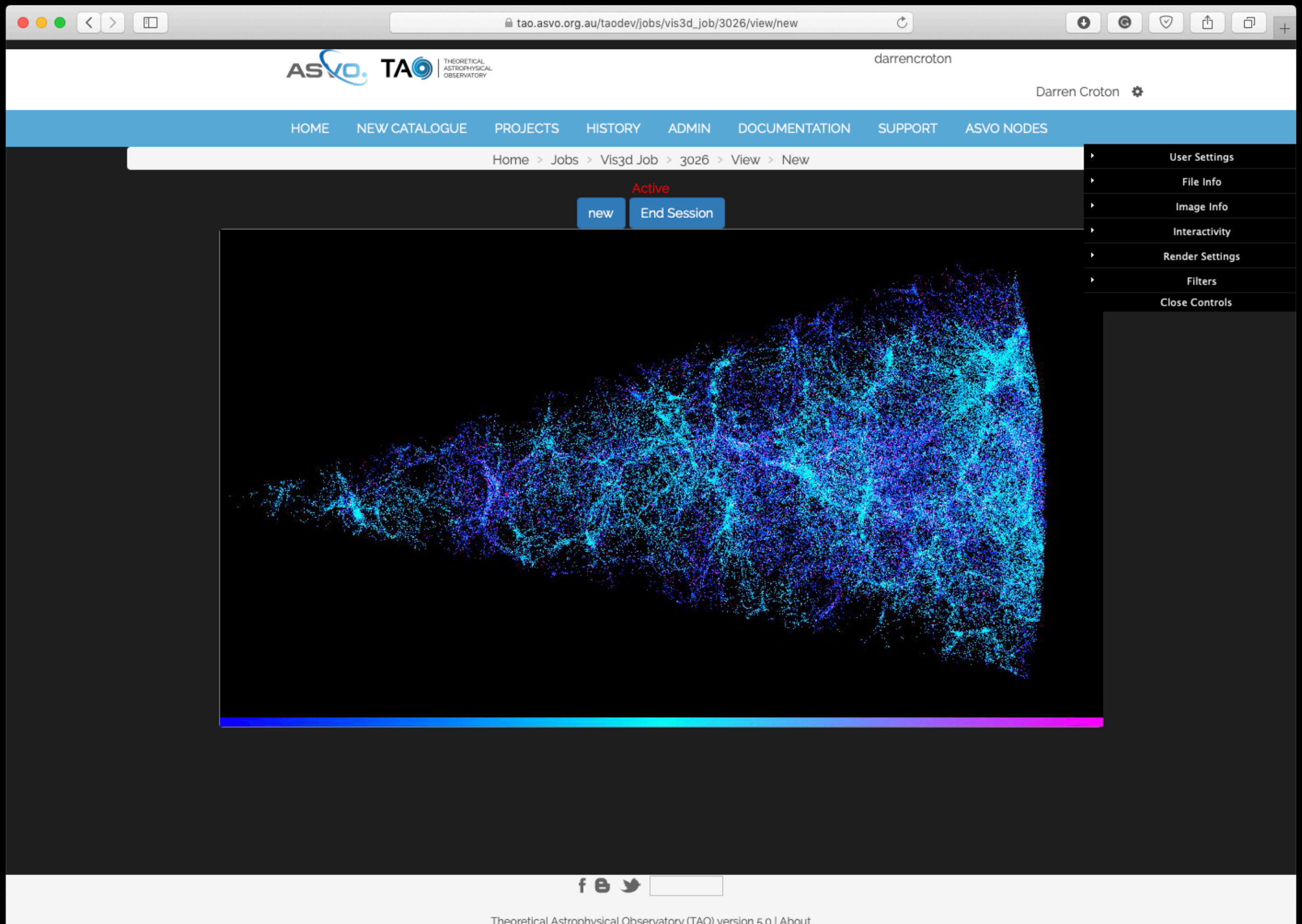


The TAO image module

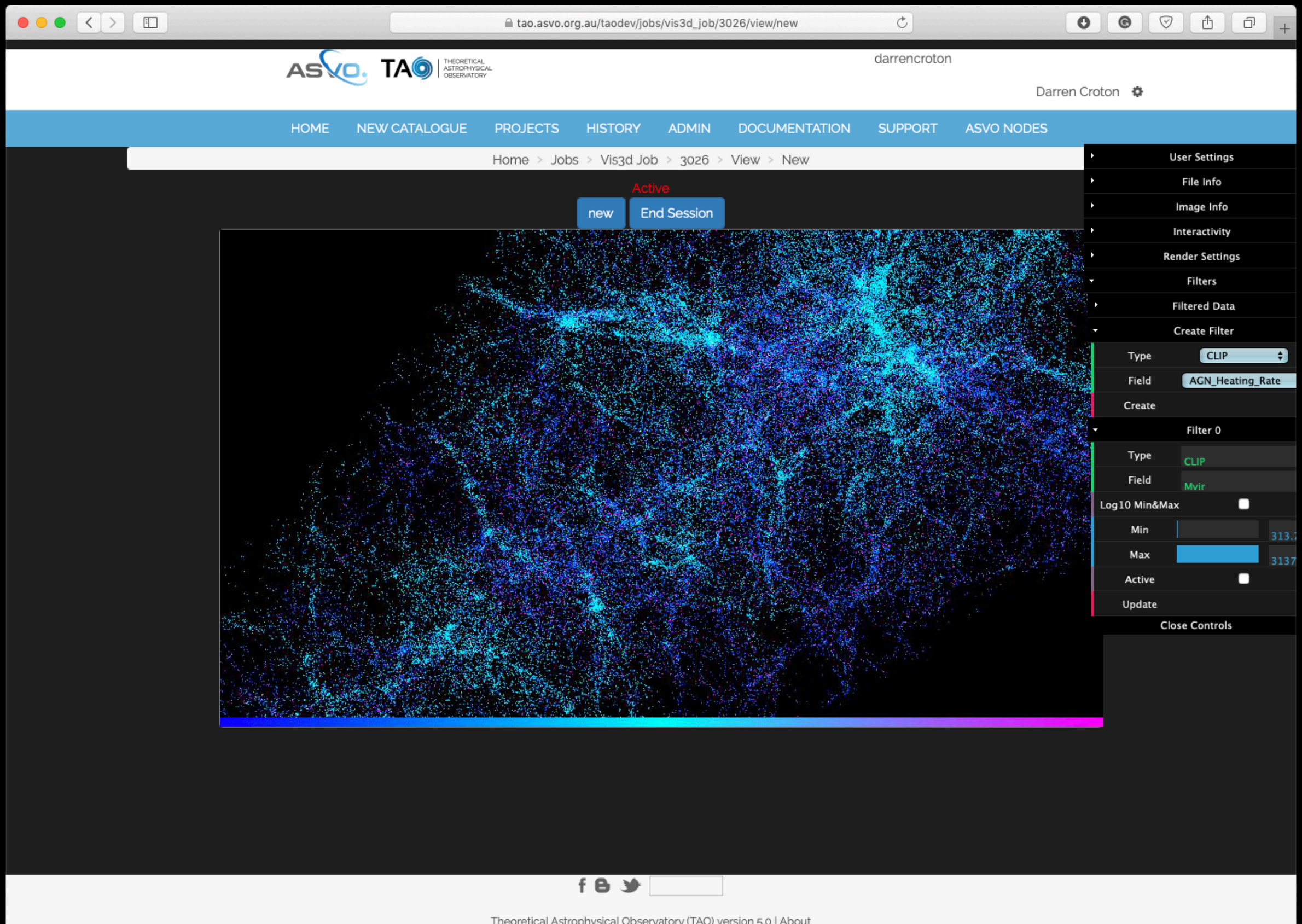
General Statistics …

- TAO has been live since 2014, lives on OzStar and GADI
- 15 different base catalogues build on 6 simulations
- 500+ total users, ~100 active users in the past 12 months producing 200+ mock catalogues
- 5TB total galaxy catalogues; 40TB total user generated data

Data Visualisation with Vis3D



Data Visualisation with Vis3D



The Future

- Getting data in …
- Bringing users in …
- Connecting to other platforms …
- Funding … ?

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