



Astro Pixel Processor introduction

drs. M.Sc. E.M.W.P. Haverkamp (Mabula)

overview of talk

- introduction of Mabula
- What is Astro Pixel Processor or APP?
- Example: Widefield Mosaic
- Short demonstration
- Overview of a Workshop
- Q&A

introduction of Mabula

- Mabula?
- education
- publication
- professional career
- Aries Productions & APP

introduction - Mabula?

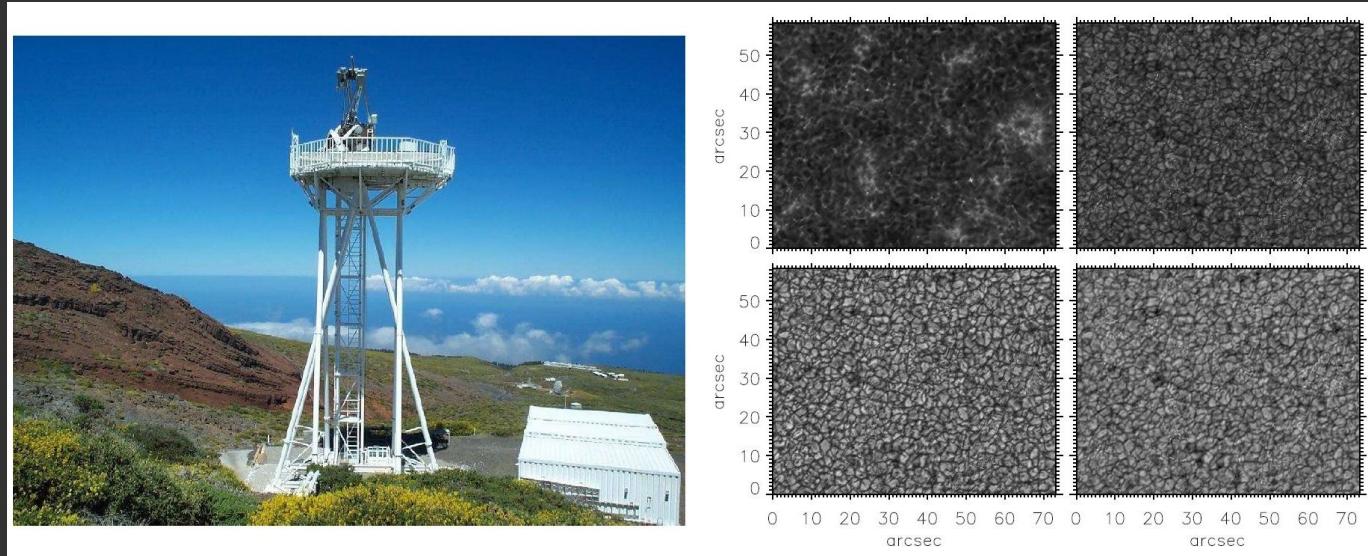
Mabula Haverkamp
April 10th, 1977, Ndala (Tanzania)



introduction - education

drs. M.Sc. Astrophysics, University of Utrecht, The Netherlands 2004

Solar magnetic fluxtubes diagnosed from isolated internetwork bright points -
An analysis of Dutch Open Telescope observations



introduction - publication

Astronomy & Astrophysics, AA 441, 1183-1190 (2005)

A&A 441, 1183-1190 (2005)

DOI: 10.1051/0004-6361:20053373

DOT tomography of the solar atmosphere

IV. Magnetic patches in internetwork areas

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Abstract

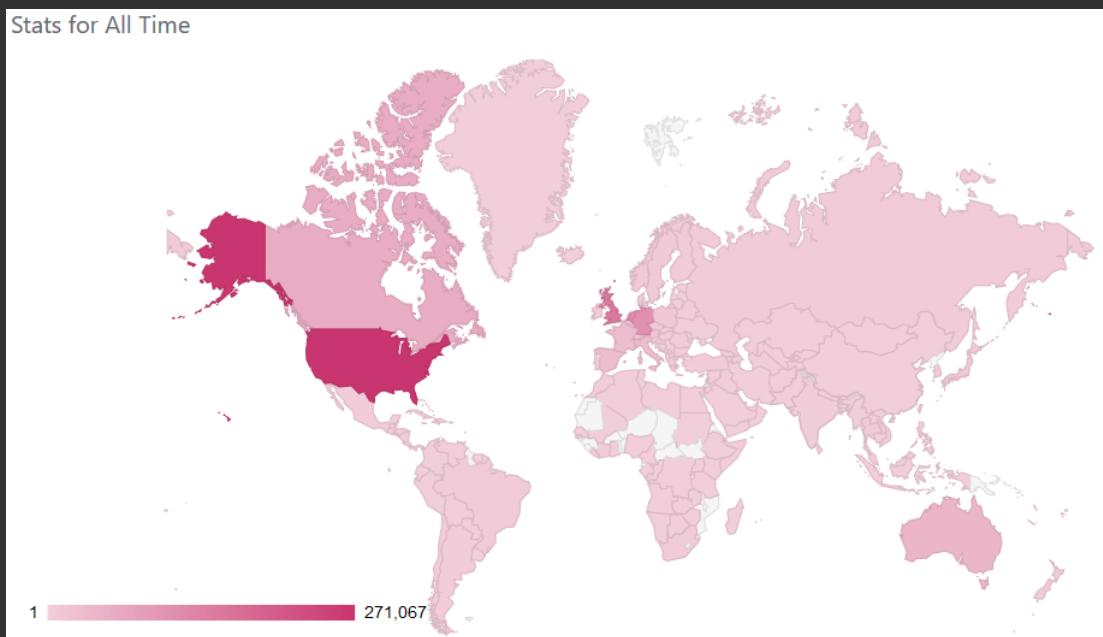
We use G-band and Ca II H image sequences from the Dutch Open Telescope (DOT) to study magnetic elements that appear as bright points in internetwork parts of the quiet solar photosphere and chromosphere. We find that many of these bright points appear recurrently with varying intensity and horizontal motion within longer-lived magnetic patches. We develop an algorithm for detection of the patches and find that all patches identified last much longer than the granulation. The patches outline cell patterns on mesogranular scales, indicating that magnetic flux tubes are advected by granular flows to mesogranular boundaries. Statistical analysis of the emergence and disappearance of the patches points to an average patch lifetime as long as 530 ± 50 min (about nine hours), which suggests that the magnetic elements constituting strong internetwork fields are not generated by a local turbulent dynamo.

introduction - professional career

- Market Maker (finance), Curvalue, 2005-2009
- Middleware/ICT specialist/consultant, Axxius BV, 2010-2011
- diagnosis: chronic sarcoidosis 2011 - 2019
- Start development of APP 2015 - now
- Launch of Aries Productions & APP on June 2nd, 2017

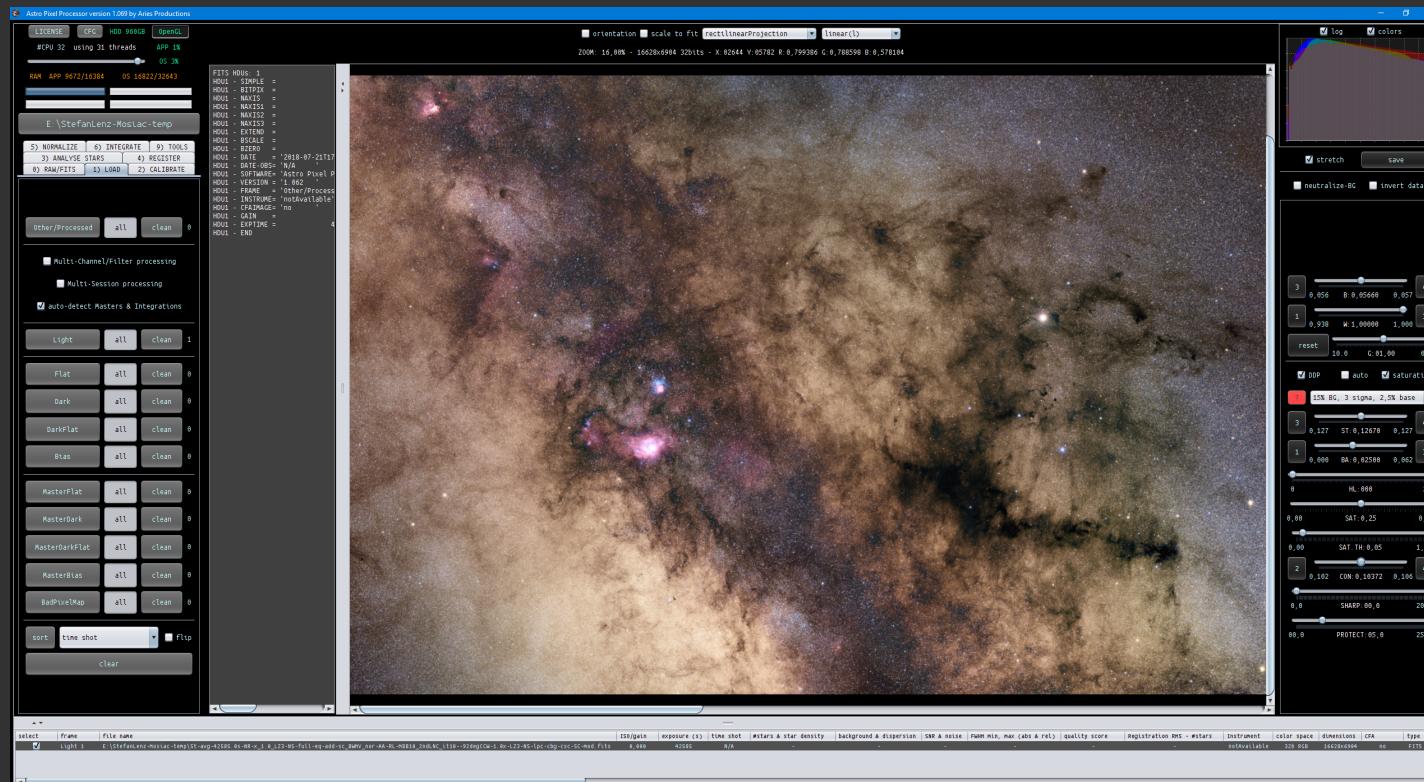
introduction - Aries Productions & APP

Since it's launch, APP has quickly spread globally and is now being used by 1000s of astronomers, from absolute beginners to professionals.



What is Astro Pixel Processor or APP?

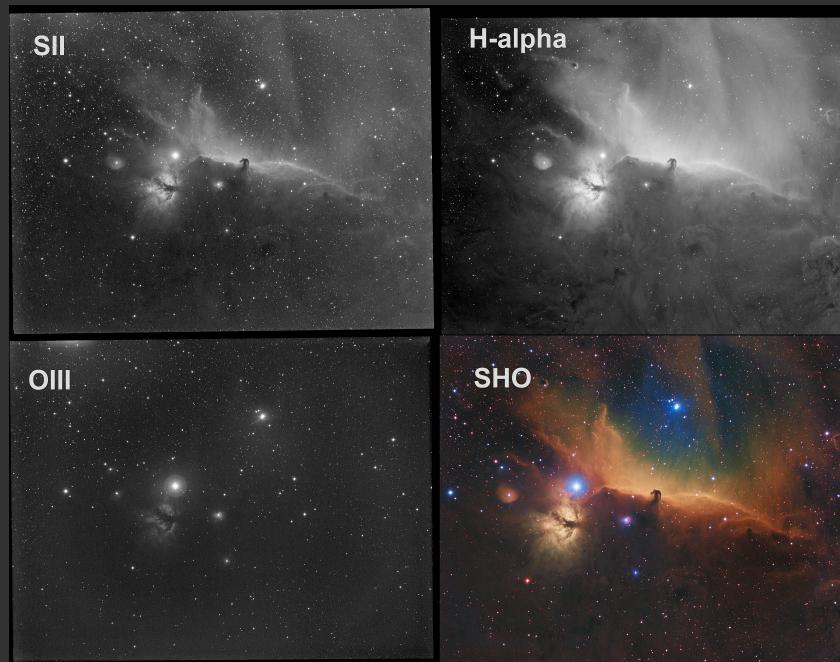
data courtesy of Stefan Lenz, Germany



What is Astro Pixel Processor or APP?

complete application for pre & post processing of Deep Sky exposures
from data calibration to a final Star Color Calibrated and stretched image

data courtesy of Sara Wager, Spain



What is Astro Pixel Processor or APP?

Main development goals:

- focus on ease of use !
- delivers top-notch results with default/automatic settings
- very mature calibration, registration & integration modules
- more and more focus now on post-processing capabilities

Example: Widefield Mosaic

Milkyway & Rho Ophiuchi Mosaic

Stefan Lenz & Mabula

shot at Kiripotib, Namibia

Nikon D810a, Nikon VR 400mm f/2.8G, Sigma Art 135mm f/1.8

Milkyway & Rho Ophiuchi Mosaic, Stefan Lenz & Mabula

Short demonstration

iTelescope.net T08 - The Small Magellanic Cloud Luminance data

Overview of a Workshop

A workshop will offer the following:

- good practise data (ccd and/or cmos)
- extensive printable documentation (8 hour workshop, 50+ pages)
- explanation of the entire APP interface that shows you everything that APP does with your data
- basic workflow from raw data to finished image

Overview of a Workshop

A workshop will offer the following:

- specialized topics possible, like Star Color Calibration and Light Pollution/gradient correction
- the ability to prepare before workshop by providing data and documentation in advance
- Learn and practise during the workshop
- redo everything afterwards using the documentation and support from Mabula

Overview of a Workshop

A workshop will offer the following:

- free 30-day Trial/Workshop license that works 100%
- a discount coupon to purchase APP after the workshop (8 hour workshop, 25% discount)

Q&A

Check old presentations !

<https://www.astropixelprocessor.com/presentations/>

Q&A

Trial, Renter's, or Owner's license

<https://www.astropixelprocessor.com/shop/>

Q&A

support@astropixelprocessor.com

<https://www.astropixelprocessor.com/community/>



Q&A

Thank you very much!

Any questions now?