

Seminaries NASE+, Messier Challenge

October 5th, 2024 – 12:00 – 14:00 UTC (Greenwich time)

HYBRID MEETING – Zoom room [HERE](#)



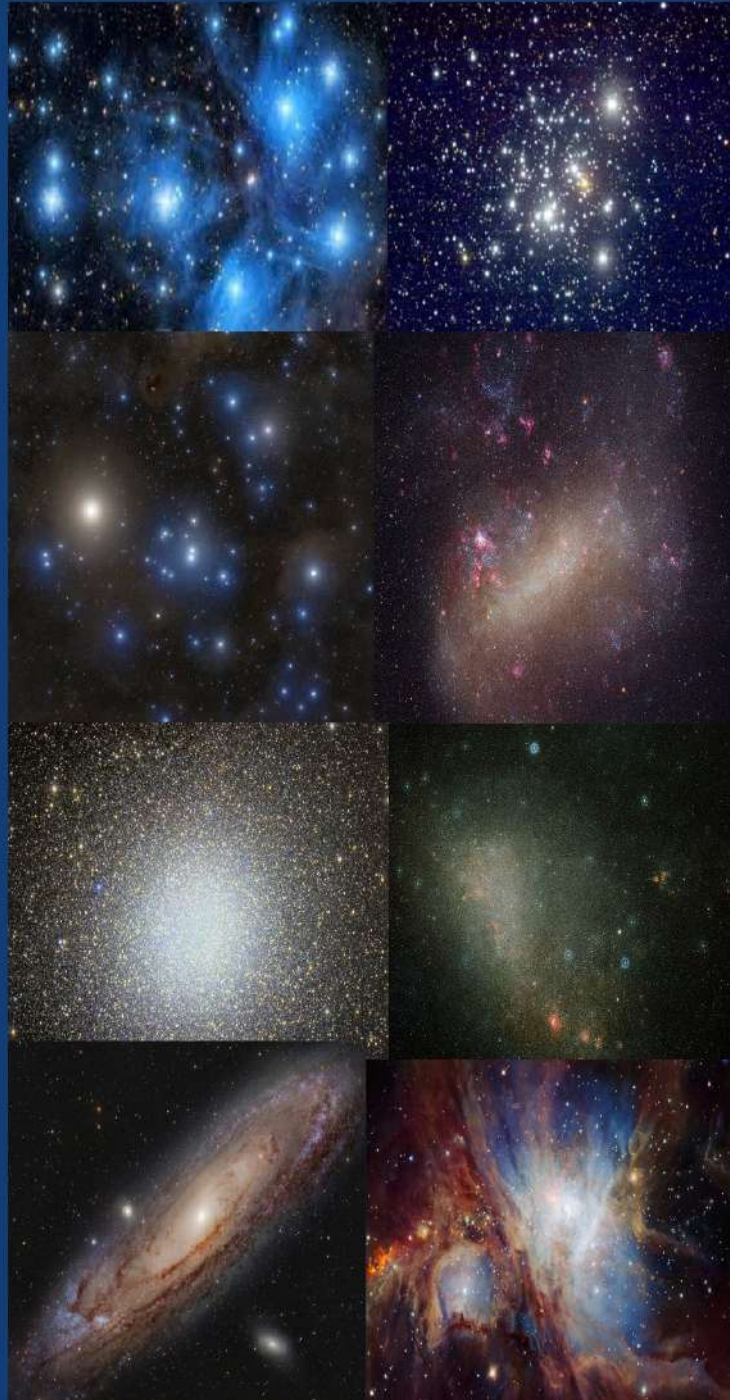
NASE Seminars
Hybrid meeting

Messier Challenge 2024

Saturday,
October 5th, 2024
12:00 – 14:00 (UTC)



zoom access



NASE-Virtual



Timeline

12:00 – 12:10 **Opening session** Beatriz García, Rosa M. Ros, Argentina, Spain.

12:10 – 12:20 **Welcome** by the Government of Malargüe City, Mnedoza, Argentina, the host of the face to face event.

12:20 – 12:30 **"Messier Challenge in China"**, Zhu Geya

12:30 – 12:40 **"Messier Challenge in Armenia"**, Lilit Hovhannisyan

12:40 – 12:50 **"Messier Challenge in Iran"**, Maryam Papari

12:50 - 13:00 **"Messier Challenge in Lithuania"**, Rytis Babianskas

13:00 - 13:10 **"Messier Challenge in Romania"**, Corina Toma

13:10 - 13:28 **"Messier Challenge in Malargüe: 9 stations in the city and in Argentina"**, several presentations from Argentina, Graciela Violaz, Beatriz García and teachers from Malargüe

13:28-13:50 **"Las constelaciones y la Uranometría Argentina"**, Santiago Paolantonio, Museo del Observatorio Astronómico de Córdoba, Argentina (in Spanish)

13:50 – 14:00 **Closing session.**

NASE

Network for Astronomy School Education

Rosa M. Ros - Beatriz García

WG Network for Astronomy School Education – IAU

WG Key Initiatives in Education, Outreach and Development - IAU



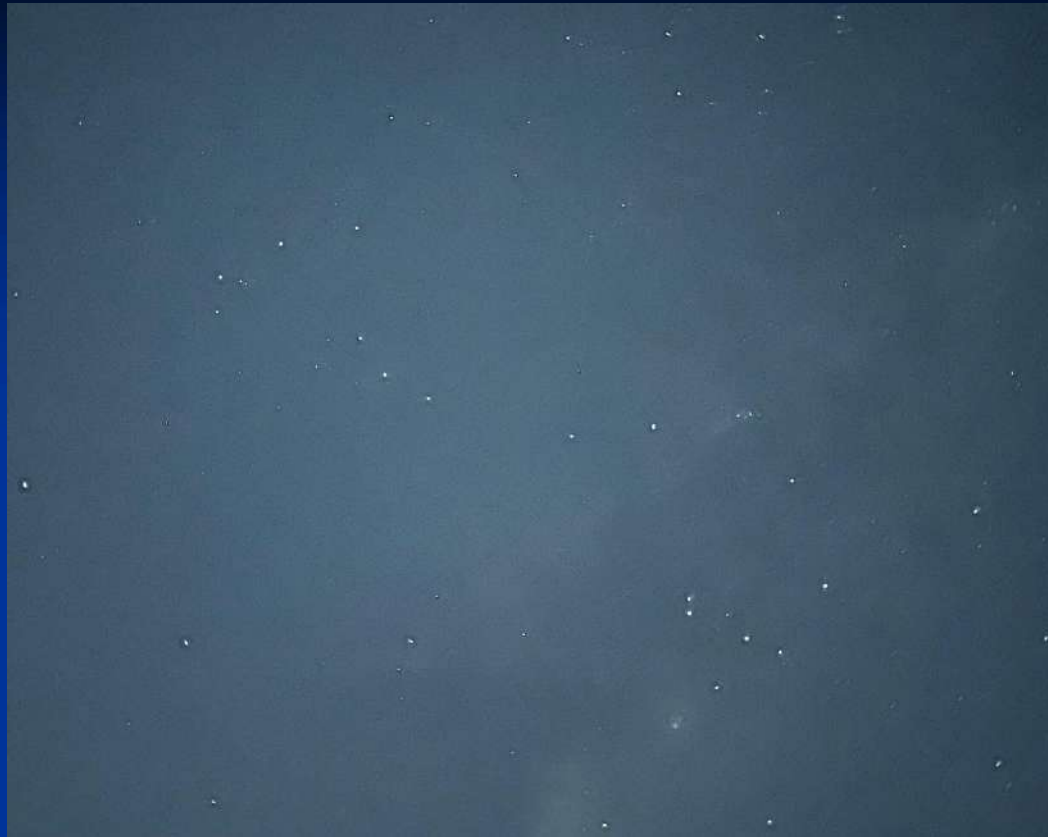


Program UNESCO-International Day of Light Messier Challenge

233 reports
in 13 countries
March - October 2024

Argentina Southern skies





Argentina Southern skies



Armenia

from primary school
to University





Bulgaria

astronomy party





China
primary school
and TV program
to 10 000 viewers



China

primary school
and TV program
to 10 000 viewers



Iran 80 reports received



Iran

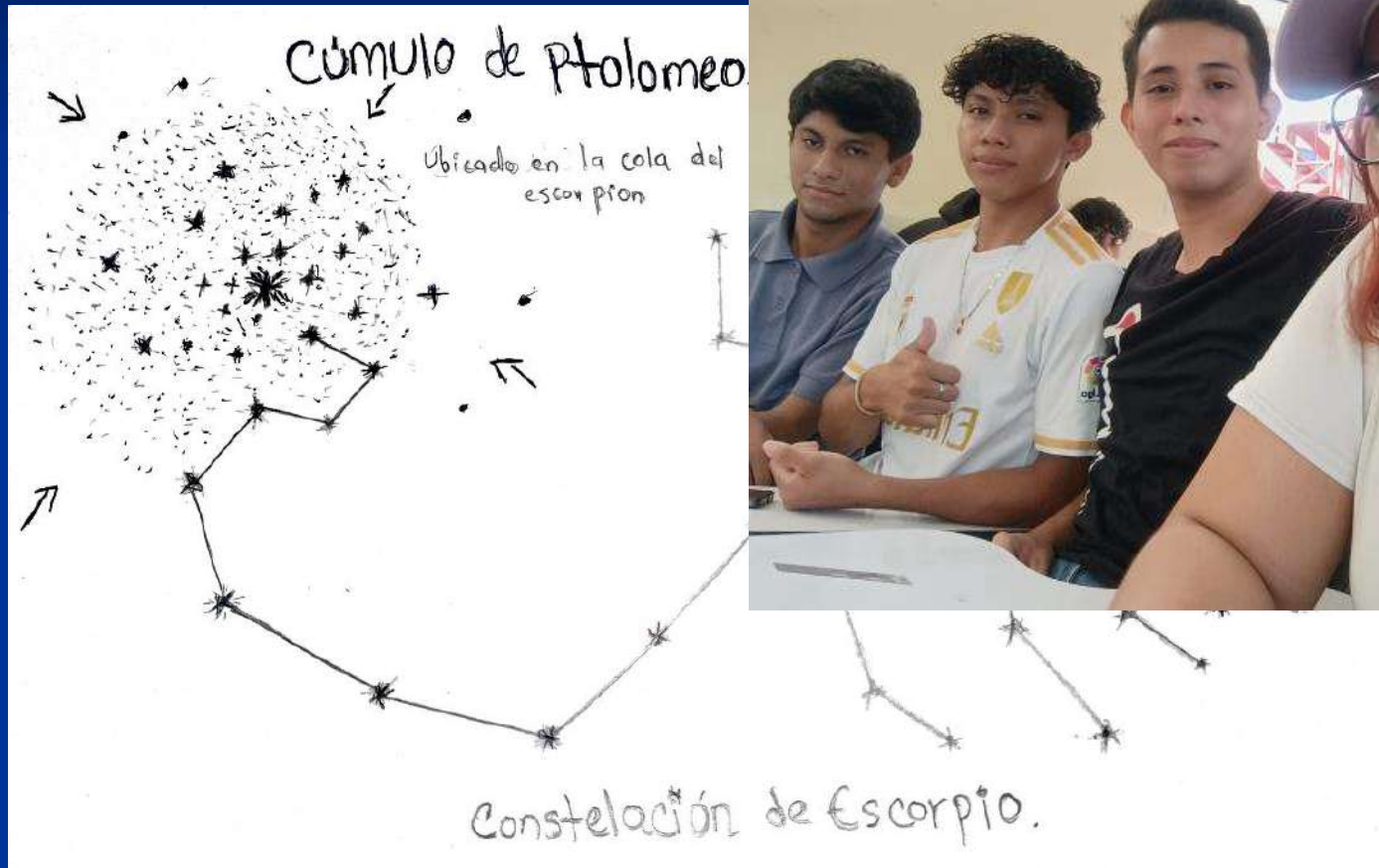
80 reports received





Lituania 14 years old and robotic telescopes





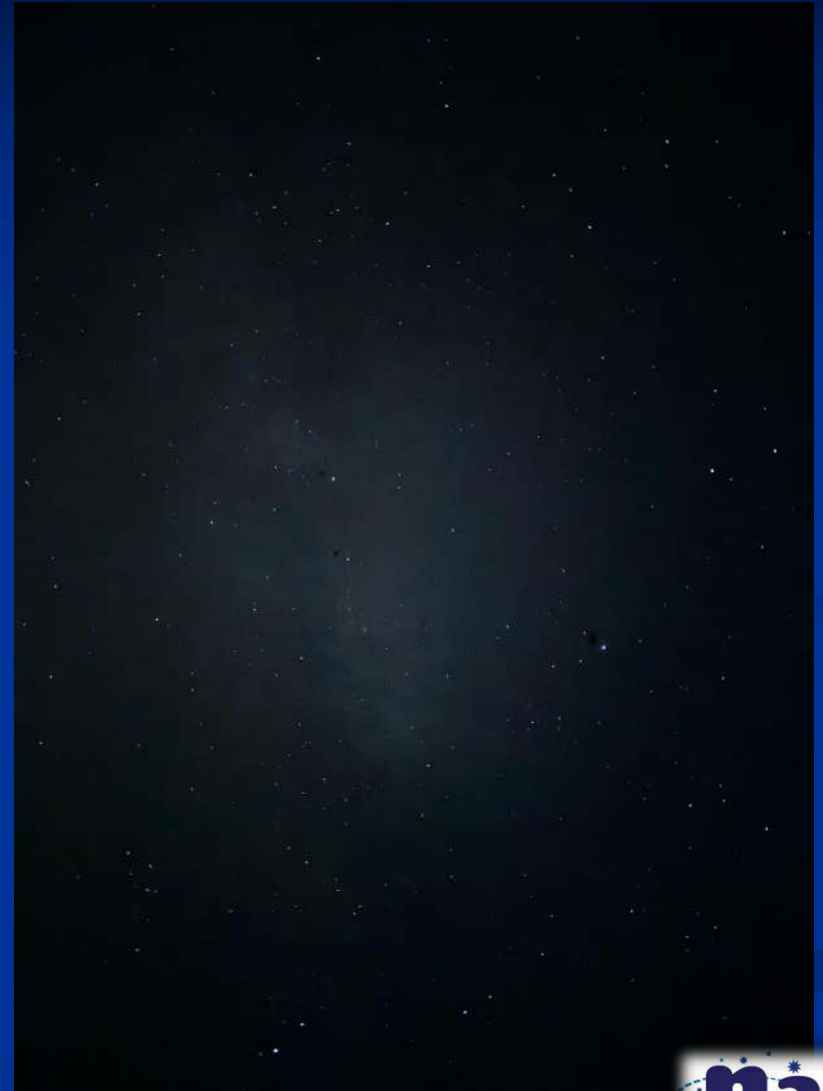
Nicaragua university students



Panama 5 and 3 years old



Romania photos and drawings



Spain primary schools

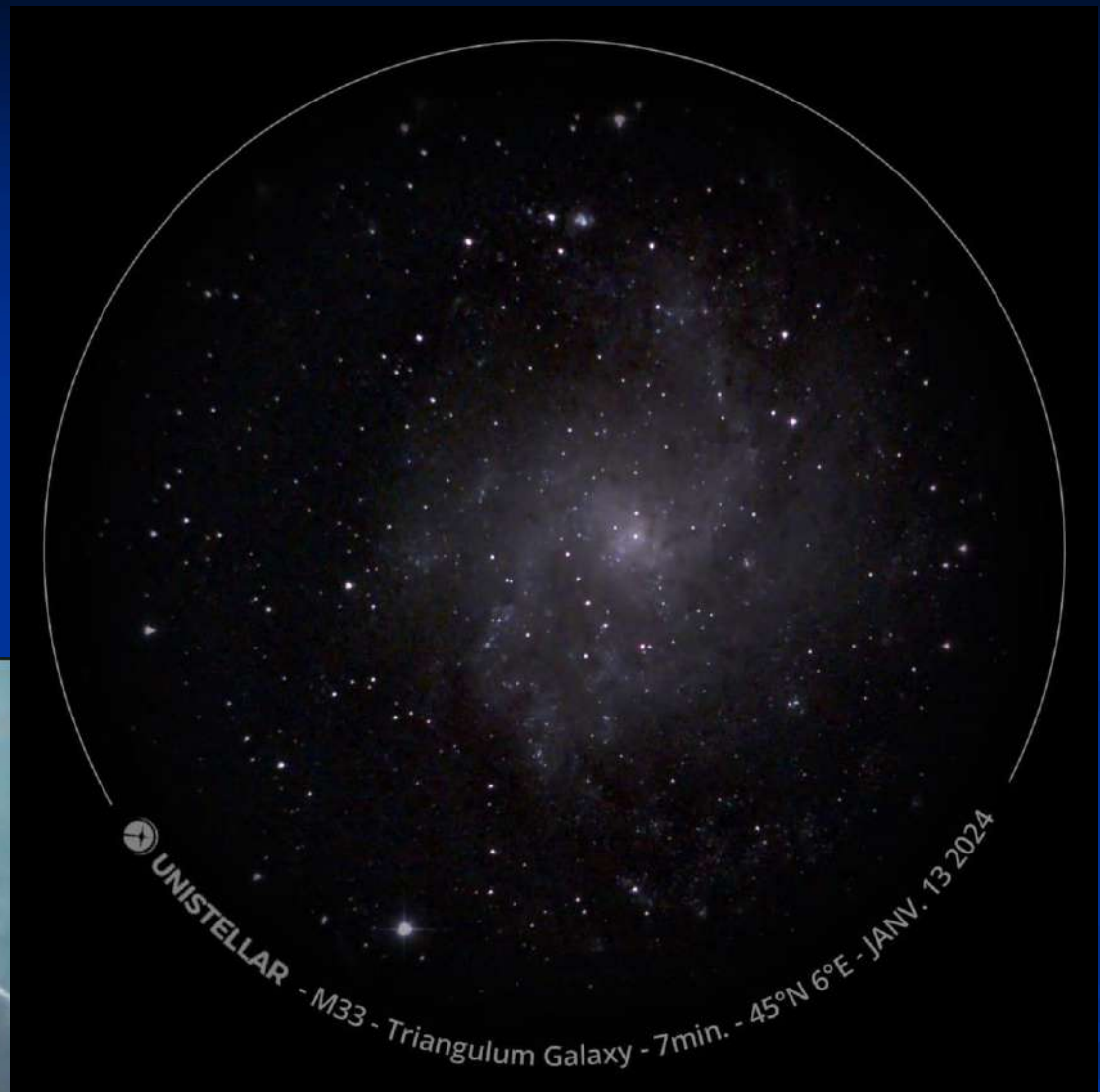


Sweden 7 and 3 years old



Togo

African sky



NASE Catalogue by Messier Challenge

M42 Orion Nebula
M31 Andromeda Galaxy
M45 Pleiades
M81 NGC 3031 Bode's Galaxy
M101 Pinwheel Galaxy
M13 Cumulo de Hércules
M7 Ptolomenus Cluster
M44 Praesepe
M6 Butterfly cluster
Hyades
NGC 4755 The jeweler
LMC Large Magallanic Cloud
SMC Small Magallanic Cloud
M57 Ring Nebula
NGC 5139 Omega Centauri
M1 Crab Nebula
M15
47 Tucanae



March 20th to September 23rd

Program UNESCO-International Day of Light

Messier Challenge: Cosmos light with 21st century eyes

online event March 23rd

online/face to face event October 5-7th in Argentina



Messier Challenge in China

Zhu Geya

Zhang Bohan

Lin Haowei

Nebula Society of Zhongguancun Second Primary School

From Zhu Geya:

Dear experts from NASE and astronomy enthusiasts around the world. I am Zhu Geya, an astronomy teacher from Zhongguancun No.2 Primary School in Beijing, China.

Since I established the Nebula Society in 2006, it has sparked a craze for studying astronomy in our school.

We greatly appreciate that you pay attention to our Society.

Now, our excellent members Zhang Bohan and Lin Haowei will introduce more details of our Messier Challenge activity to you.



The Nebula Society Bilibili live room



Beijing TV's official live streaming



BRTV 财经

1万人看过

高清



The total number of viewers reached 10,000



ssailingsan: oo[喝彩][妙]

学习依托使的小马: 有什么成果说说

ziyue09: 🤔

ziyue09: 几年级了你们

学习依托使的小马: 郭守敬是个人

liudaying: [赞]

ssailingsan: 冲冲鸭!

9702

**The deep space
observation
venue**



L A M O S T



130 telescope



C8 teledcope



**Preparing
meeting
online**

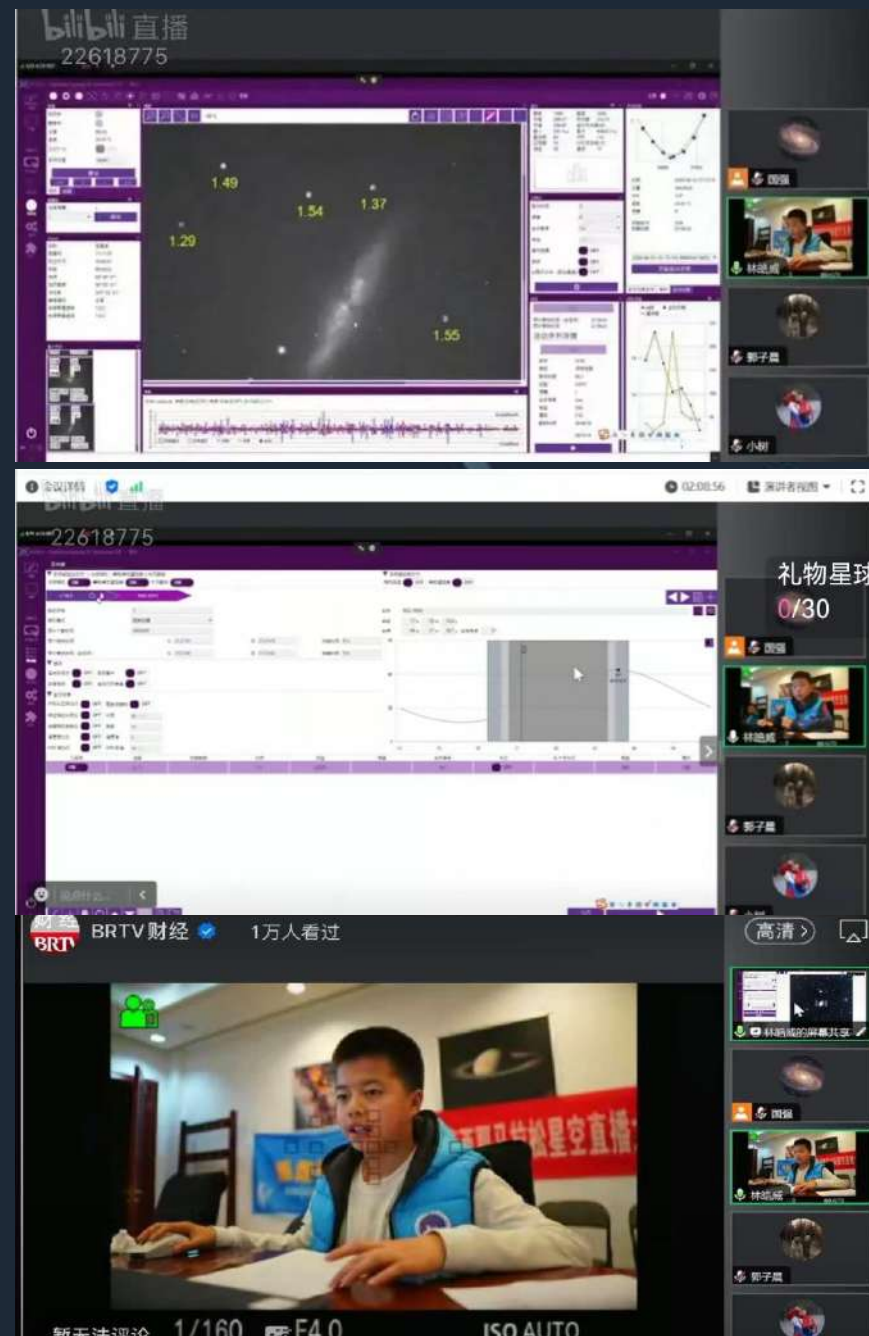


Assignment list

Names

Deep space objects & constellations

介绍国台兴隆观测站	林皓威	
介绍梅西耶马拉松活动	孙以蔚	
秋季星空	魏凡曦, 张夷中	英仙座, 御夫座, 双子座, 麒麟座
深空天体	张辰毅	狮子座三重奏 (130), M109 (C8)
深空天体	姜智涵	M94 (C8), M108 (130)
冬季星空	刘柏均	猎户座, 金牛座, 大犬座, 狮子座
拱极星座	徐溢佳	大熊座、小熊座、天龙座、仙王座、仙后座
第一次有奖问答		
深空天体	饶小树	M1 (C8), M97 (C14)
深空天体	张博涵	NGC6543(C14)/M95(C8)
春季星座	胡婉宁, 姜在恩	牧夫座, 室女座, 后发座, 猎犬座
第二次有奖问答		
深空天体	林皓威	M81、M82 (C14)
深空天体	张博涵	M3 (C8)
深空天体	郭子晨	M101 (130), M104 (C8)





Messier Challenge in China

THANKS!

Zhu Geya

Zhang Bohan

Lin Haowei

Nebula Society of Zhongguancun Second Primary School



“MESSIER CHALLENGE IN ARMENIA”

LILIT HOVHANNISYAN



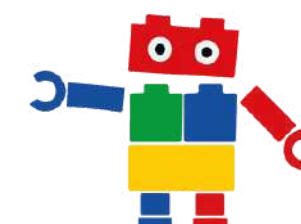
United Nations
Educational, Scientific and
Cultural Organization



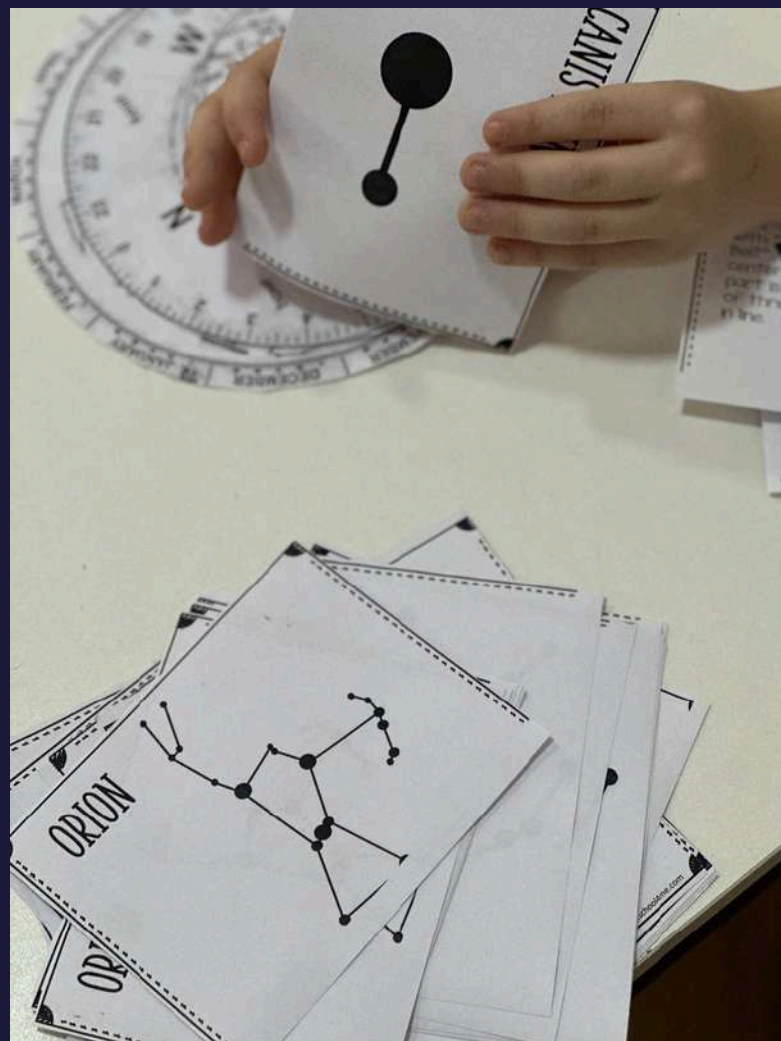
International
Day of Light
16 May



BYURAKAN
Astrophysical Observatory



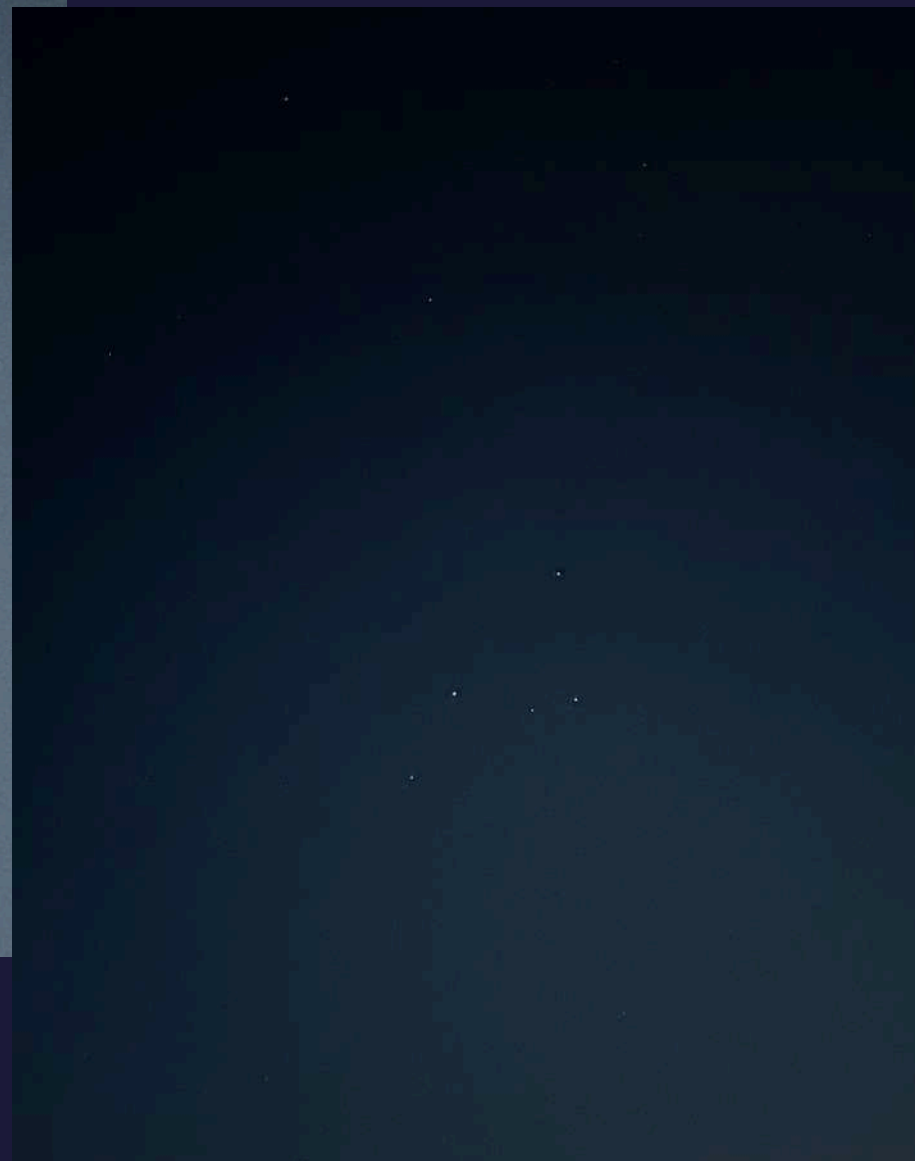
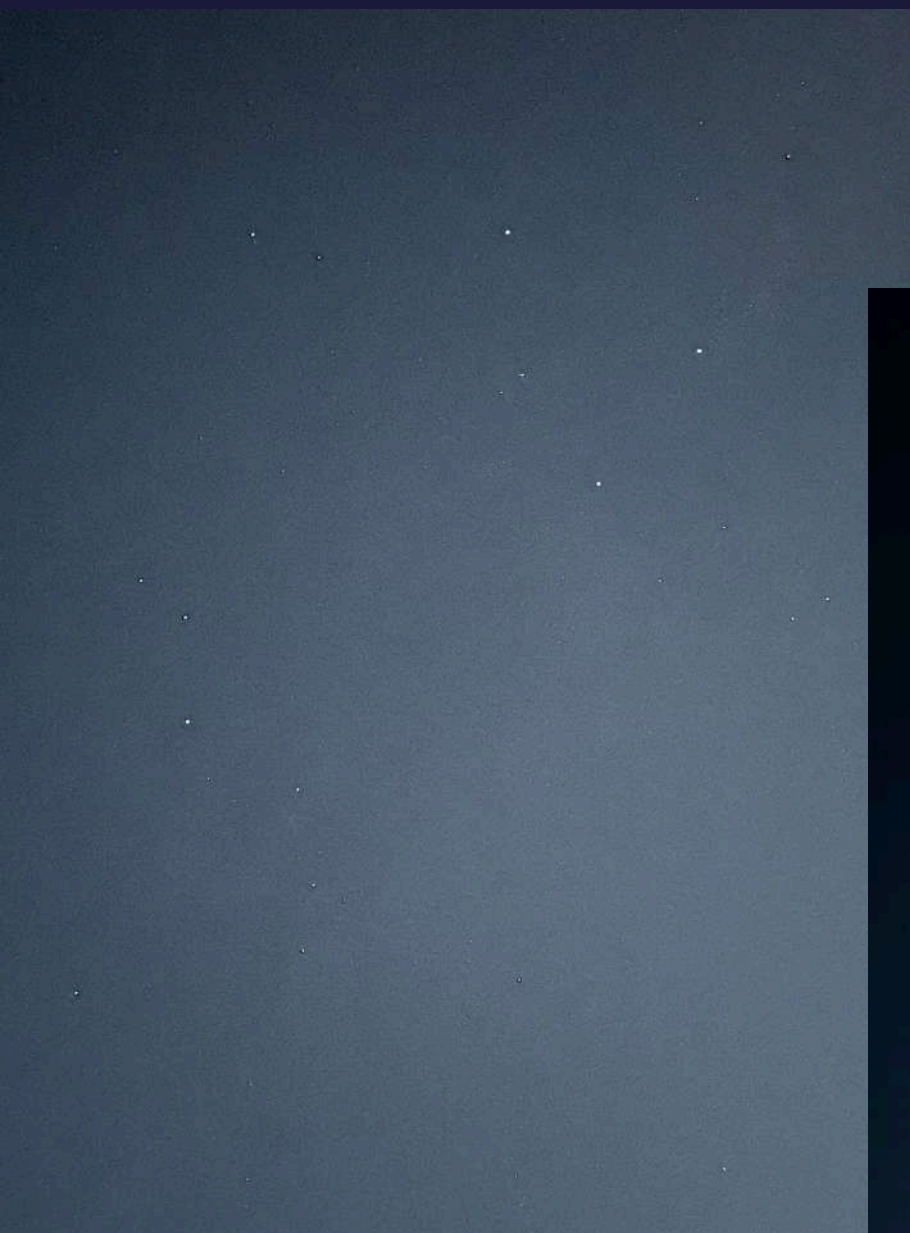
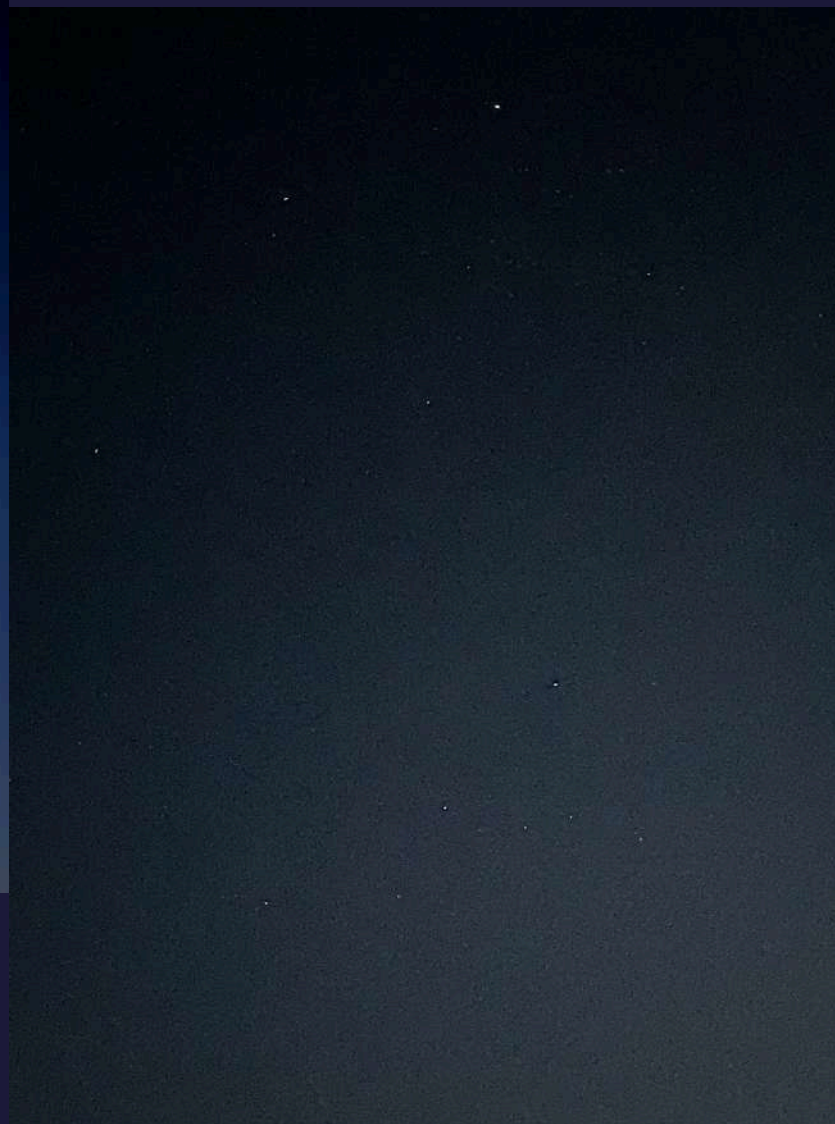
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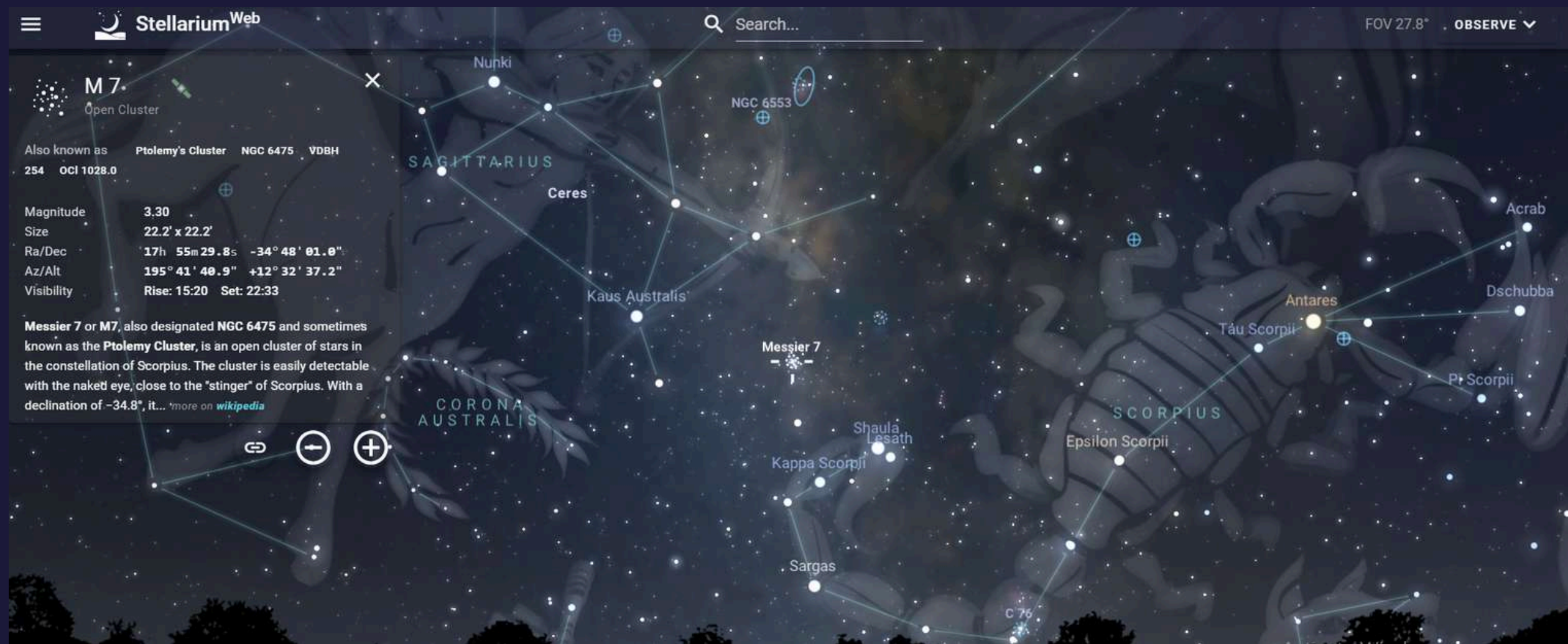
How We start



children's imagination and discussions



What they find



Thank You

NASE UNESCO PROJECT

Sadabad, Bushehr, Iran

30 July 2024

Latitude: 29° N



M13





The mayor and the head of the education department and visited the process of the Messier project



unesco

UAI

nase

**MESSIER
CHALLENGE**

NASE-UNESCO
PROJECT FOR 2024

Charles
Messier

چالش مسیه

پروژه ۲۰۲۴ اتحادیه بین المللی ستاره شناسی و یونسکو

رصدخانه مهر، دانش آموزان و معلمان ایران را به این پروژه دعوت می کند

Mehrobservatory3@gmail.com



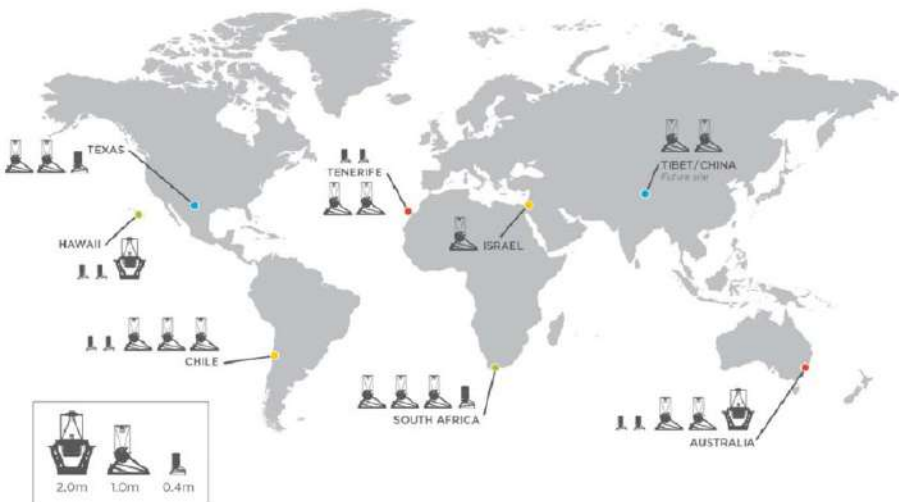
Messier Challenge in Lithuania

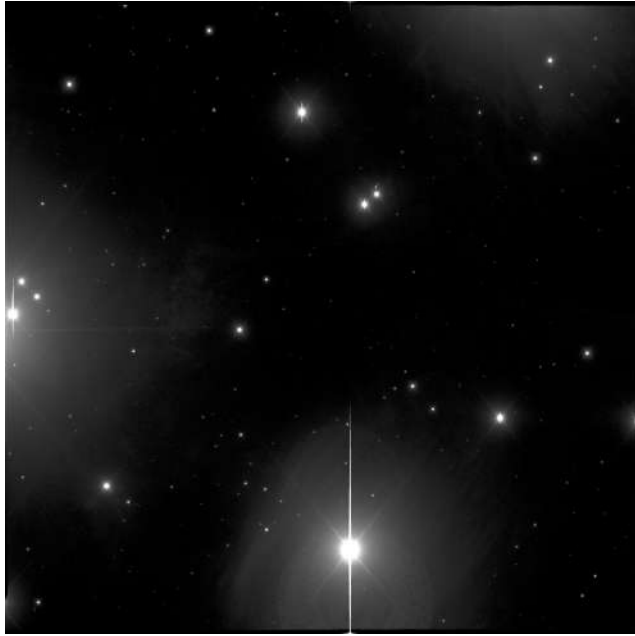
Rytis Babianskas





**LAS CUMBRES OBSERVATORY
GLOBAL TELESCOPE NETWORK**





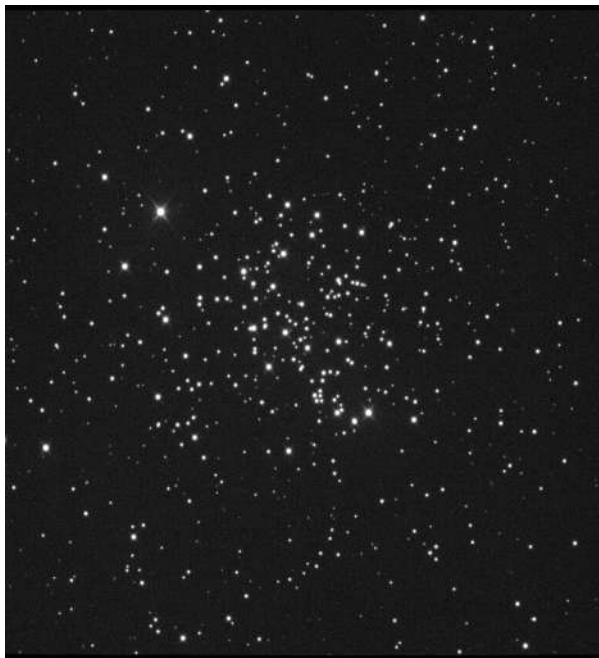
Pleiades or M45

January 30, 2022. McDonald Observatory (Texas, USA). 1 m. telescope. B filter. Exposure Time: 100 seconds



Orion nebula M42

February 13, 2022. Tenerife Observatory (Canary Islands, Spain). 1 m. telescope. B, V, R filters. Exposure Time: 30 seconds with each filter



M67

January 21, 2022. Tenerife Observatory
(Canary Islands, Spain). 1 m. telescope.
B filter. Exposure Time: 40 seconds



M64

February 13, 2022. Tenerife Observatory
(Canary Islands, Spain). 1 m. telescope.
B, V, R filters. Exposure Time: 50
seconds with each filter



M97

April 24, 2022. McDonald Observatory
(Texas, USA). 1 m. telescope. B, V, R
filters. Exposure Time: 60 seconds with
each filter



M101

February 12, 2022. Tenerife Observatory
(Canary Islands, Spain). 1 m. telescope.
B, V, R filters. Exposure Time: 50
seconds with each filter



M51

January 31, 2022. Tenerife Observatory
(Canary Islands, Spain). 1 m. telescope.
B, V, R filters. Exposure Time: 30
seconds with each filter



Crab nebula or M1

January 30, 2022. Cerro Tololo (Chile). 1
m. telescope. B, V, rp filters. Exposure
Time: 100 seconds with each filter

IRIS

An astronomical images processing software

Acknowledgements

LCO and Helen Usher

Faulkes Telescope Project

Faulkes Telescope Project



Projeto Telescópio Faulkes



**Network for
Astronomy
School
Education**



Messier Challenge in Romania

Dr. Corina Toma
National Pedagogical College
"Gheorghe Lazăr"
Cluj – Napoca, Romania



How we did it?

In the classroom:

- What is a Messier object?
- What are the Messier objects visible from Romania?
- How to find a Messier object on sky first with Stellarium?
- How to prepare a night observation?
- What each student must submit after observation?



Tracked Messier objects

Method: With naked eyes or with binoculars, or telescope

The students observed especially:

- Globular clusters: M5 near 5 Serpentis, M15 near Enif, and M71
- Andromeda Galaxy – M31





Luiza Rusu

For me, Messier Challenge is a fascinating journey through the Cosmos.

I made this trip with joy because I love to be a stargazer in every season and from any location.

M – Magic
E – Experience
S – Super
S - Stars
I – Identification
E - Education
R - Rarity

I think that participants impressions are often filled with excitement as they undercover the secrets and the mysteries of the Universe.





Mihai Oiță

- he got a telescope
- he was at an astronomy camp

Matei Mureșan

What I loved was that I could look up at the sky and notice other stars, planets or galaxies and see their beauty that is usually covered by the artificial light of the city.

I also liked that I could sit under the open sky.

If I could do it all over again, I would do it without a second thought.



Conclusions

The student:

- Understood that there are different celestial bodies
- Learned how to use Stellarium
- Investigated the night sky
- Found different stars and then Messier Objects

The interest for Astronomy increases!





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NASE-Virtual 



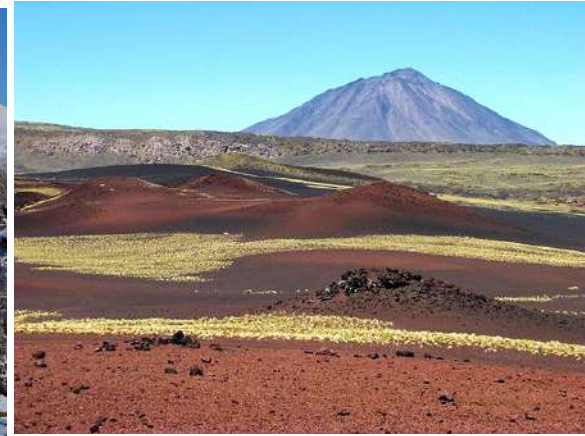
Bridges Between Cultures
An initiative by NASE and UNESCO

*“Messier Challenge in
Malargüe: 5 stations in the city”*

Presentations from Argentina

*Graciela Viollaz, Beatriz García and
teachers from Malargüe*

Messier Challenge in Malargüe





DESAFIO

MESSIER

Puentes entre Culturas



4 DE OCTUBRE DE 2024
DE 10 A 12 Y DE 16 A 18 HS
EN LUGARES ESTRATÉGICOS
DE LA CIUDAD

RESOLUCIÓN CON PUNTAJE DOCENTE 250/2024



Desafío Messier

Puentes Entre Culturas



04 OCTUBRE 2024
De 10 a 12hs De 16 a 18hs

¡Astronomía para todos!

Recorré las Estaciones para conocer más de nuestro cielo
en base al catálogo de Messier



MUNICIPALIDAD DE
MALARGÜE

Para más info: sdesarrolloeconomico24@gmail.com

Desafío Mes

Malargüe

Cielo Austr

Puentes entre cult

Desafío Messier

Malargüe

Cielo Austral

Puentes entre culturas



Pierre Auger Observatory, ~300 visitors

Desafío Messier

Puentes Entre Culturas

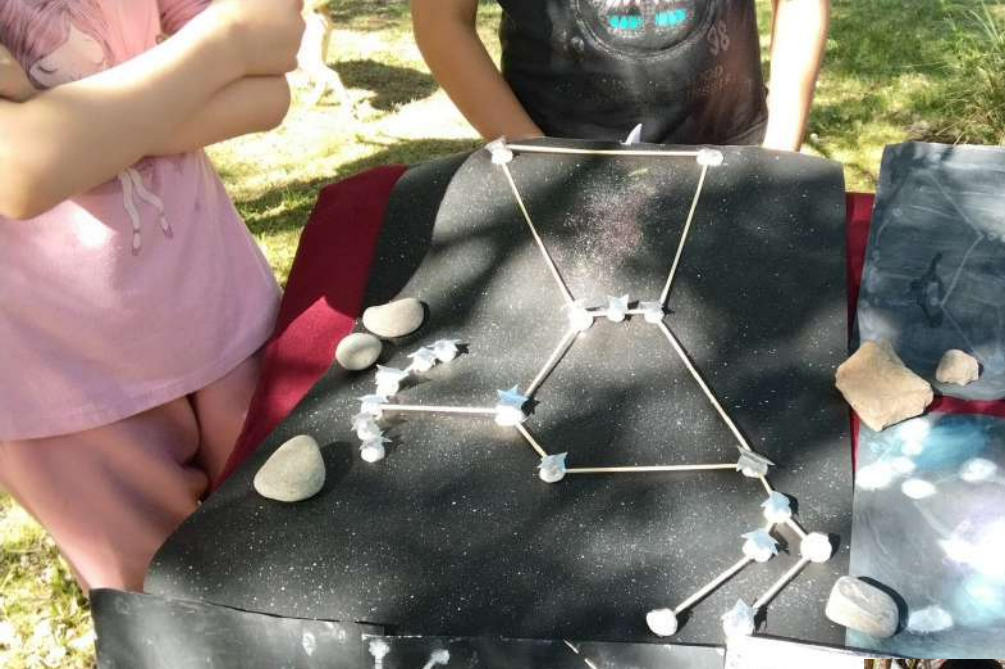
- Estación 1 Pierre Auger**
- Estación 2 Camping Municipal**
Alumnos y Docentes de CAE 216
- Estación 3 Plaza San Martín**
Alumnos y Docentes de Esc. Rufino Ortega
- Estación 4 Planetario**
- Estación 5 Escuela Savio**
Alumnos y Docentes

04 OCTUBRE 2024
De 10 a 12hs De 16 a 18hs

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na se UNESCO MUNICIPALIDAD DE MALARGÜE

Para más info: sdesarrolloeconomico24@gmail.com



Desafío Messier

Puentes Entre Culturas

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na se **UNESCO** **MUNICIPALIDAD DE MALARGÜE**

Para más info: sdesarrolloeconomico24@gmail.com

Center of Educative Support 216, ~200 visitors



Ruffino Ortega primary school, ~300 visitors

Desafío Messier

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Desafío Messier

Malargüe

Cielo Austral

Puentes entre culturas









Desafío Messier

Puentes Entre Culturas

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Para más info: sdesarrolloeconomico24@gmail.com



Planetario



Manuel N. Savio primary school, ~500 visitors





Centro de Apoyo Educativo



Pata Mora primary school





Closing Ceremony, Oct 4th, 2024, 19:00 h



The Pleyades



NASE – UNESCO Bridges Between Cultures 2024 – Messier Challenge

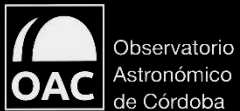


100 hours of Astronomy: from the solar annular eclipse to Messier Challenge

As conclusions, a words by a teacher Mariela Milisevic, , in representation of all teachers in Malargüe City (see video)

Las constelaciones y la Uranometría Argentina

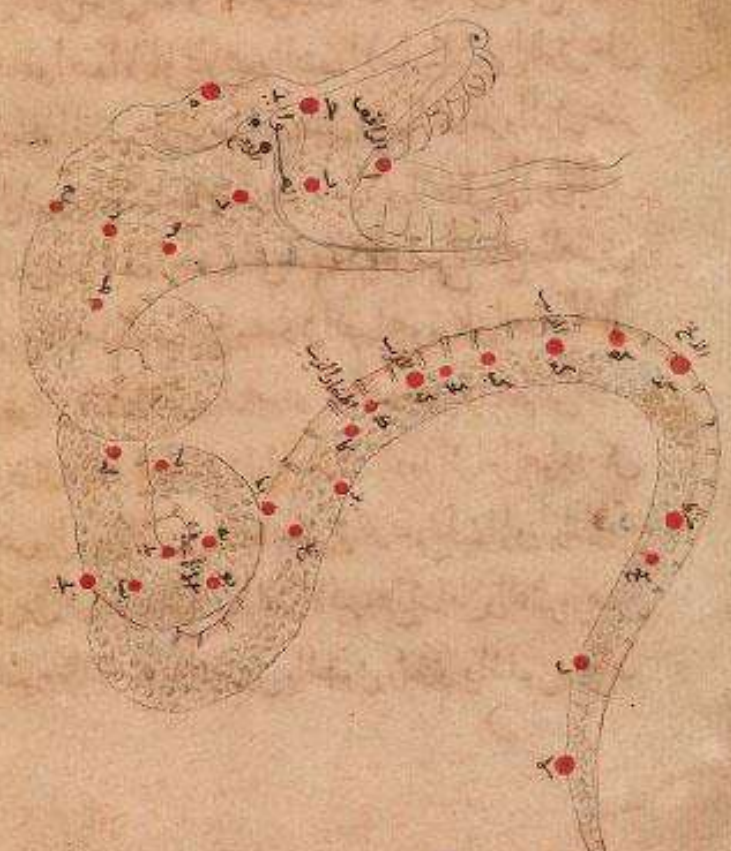
Santiago Paolantonio



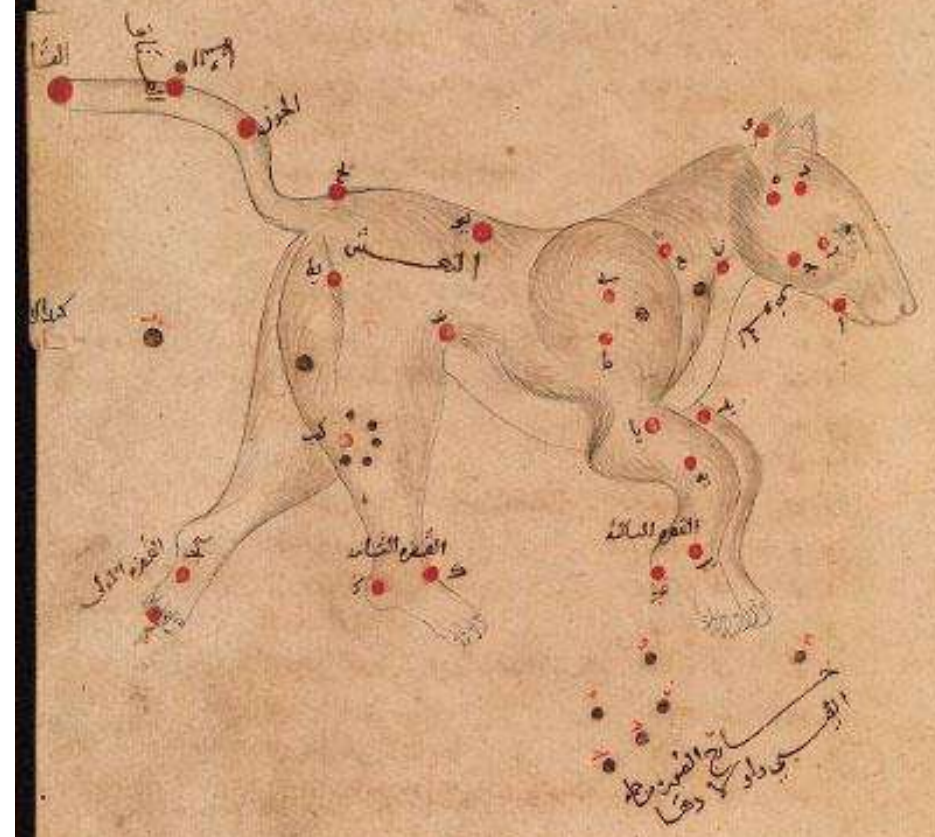


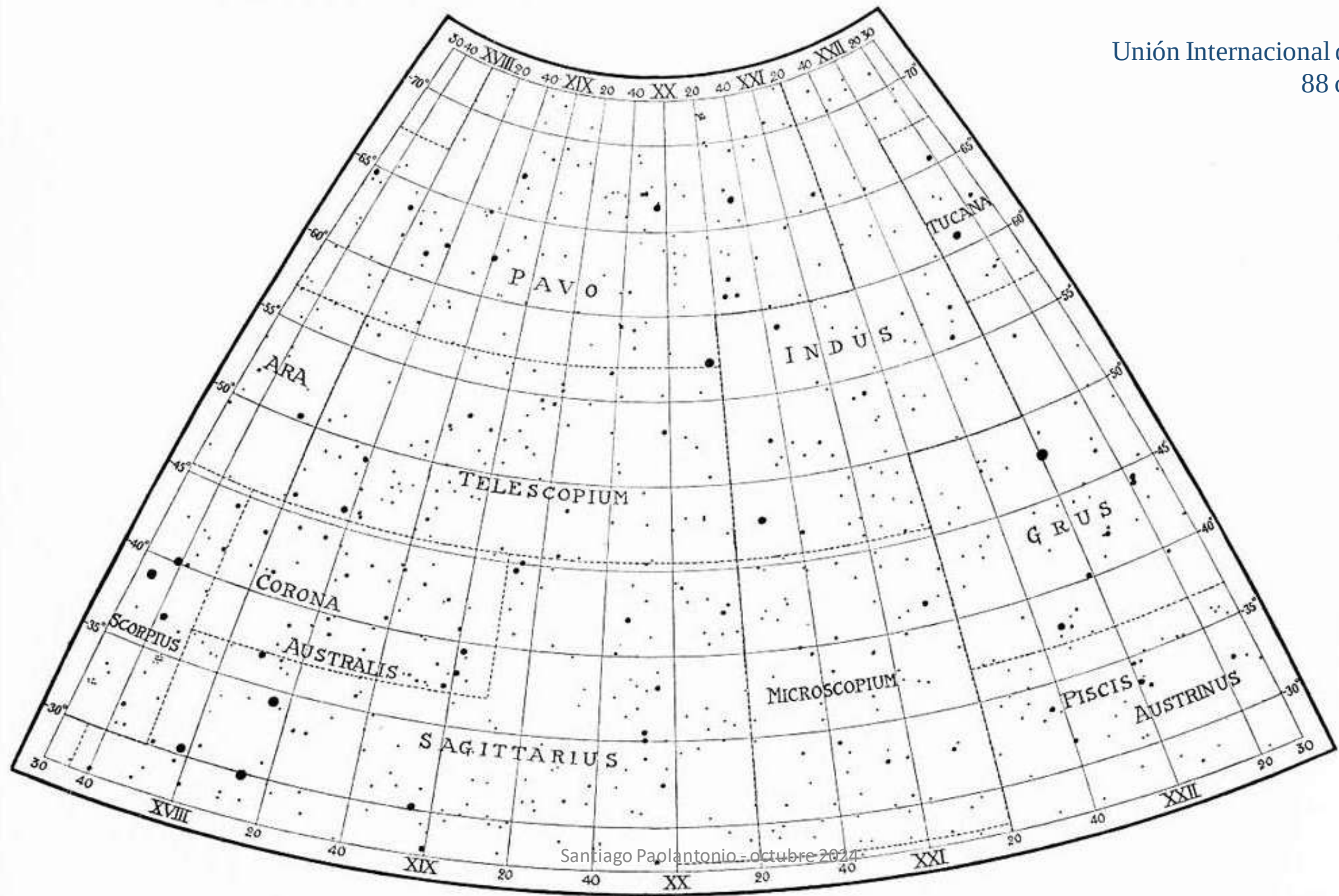


على فيه وذكرها بالسماع والظن ان راسها مثل رأس
الخنزير من غير ان يعرفوا شيئا منها كقول العوايد بعد هذه الأربعة
وبينها ومن العوايد الذين وغيرهما من كواكب التين
كوكب التين على ما في العشرة

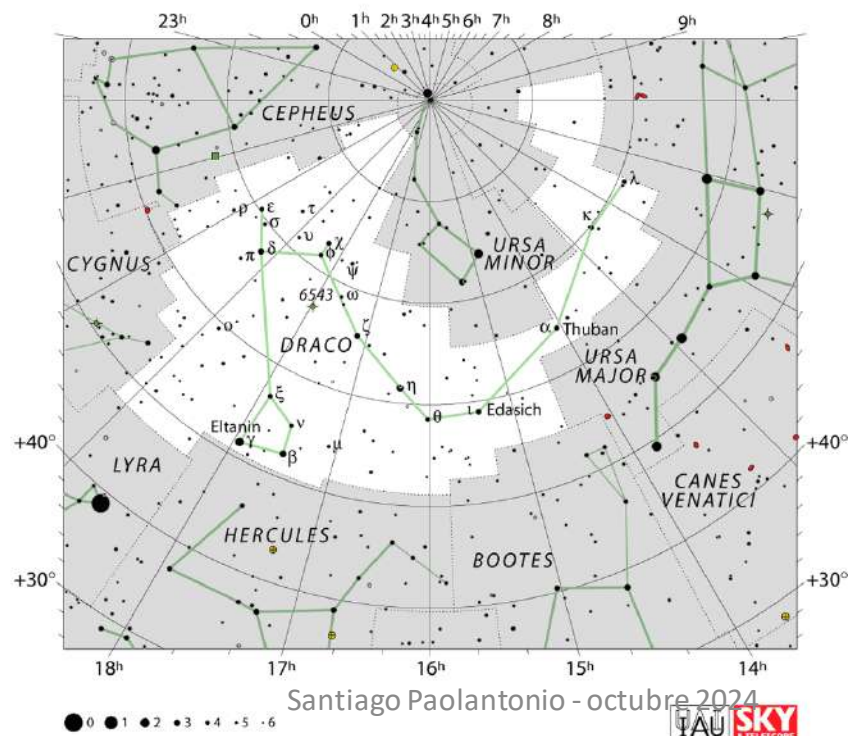
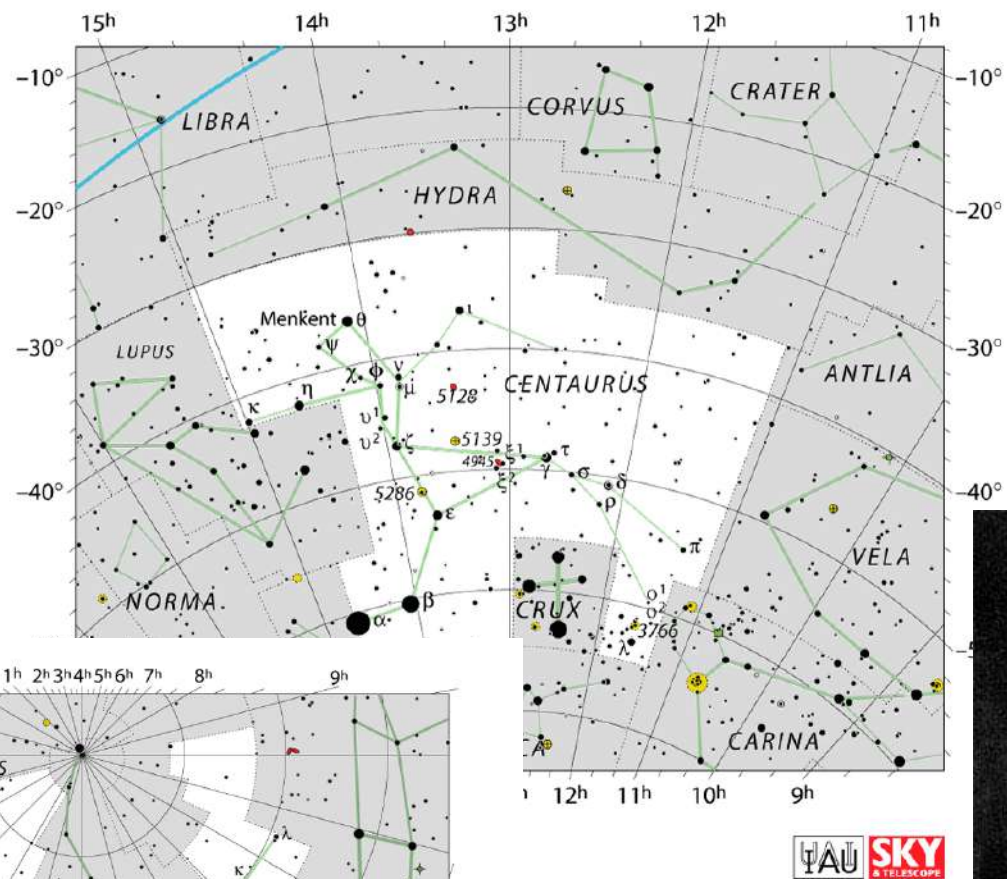
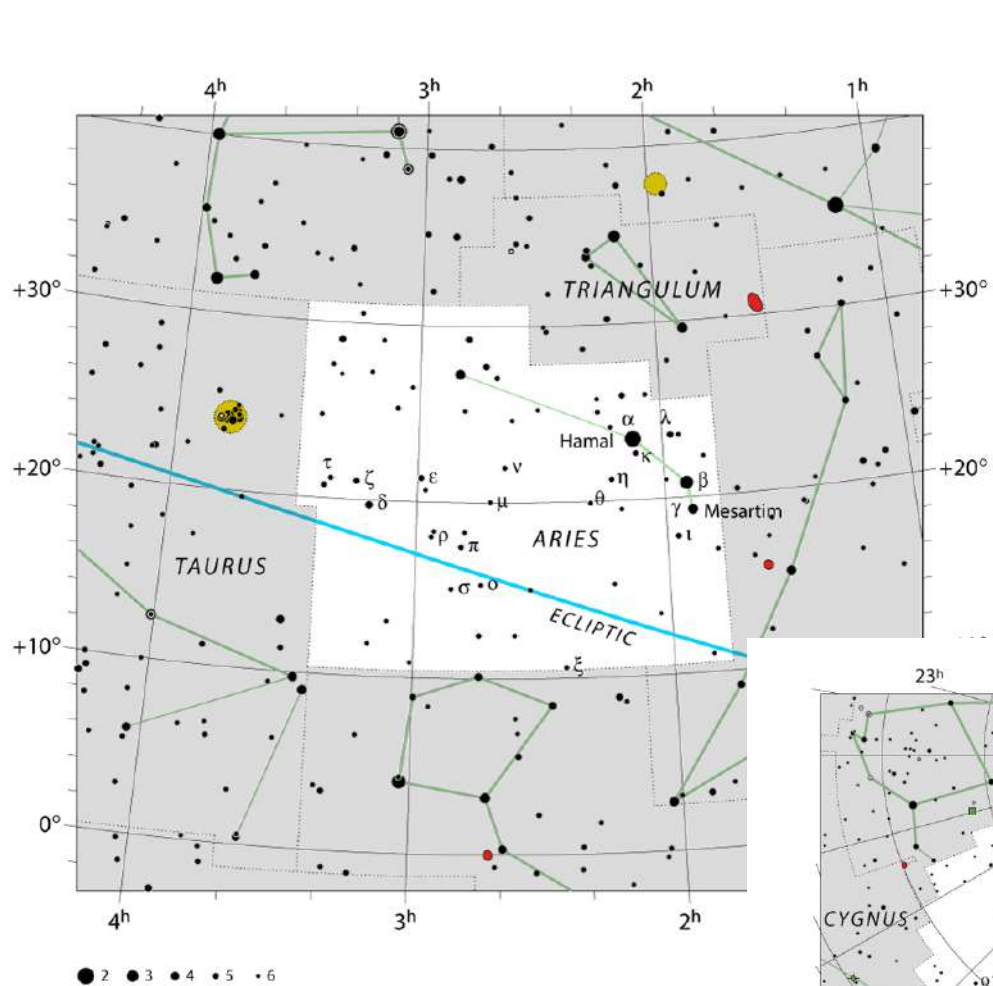


صورة الدت الأكبر على ما يرى في السماء





1930



Eugène J. Delporte
(1882-1955)
Flammarion, 1956



EL PROBLEMA

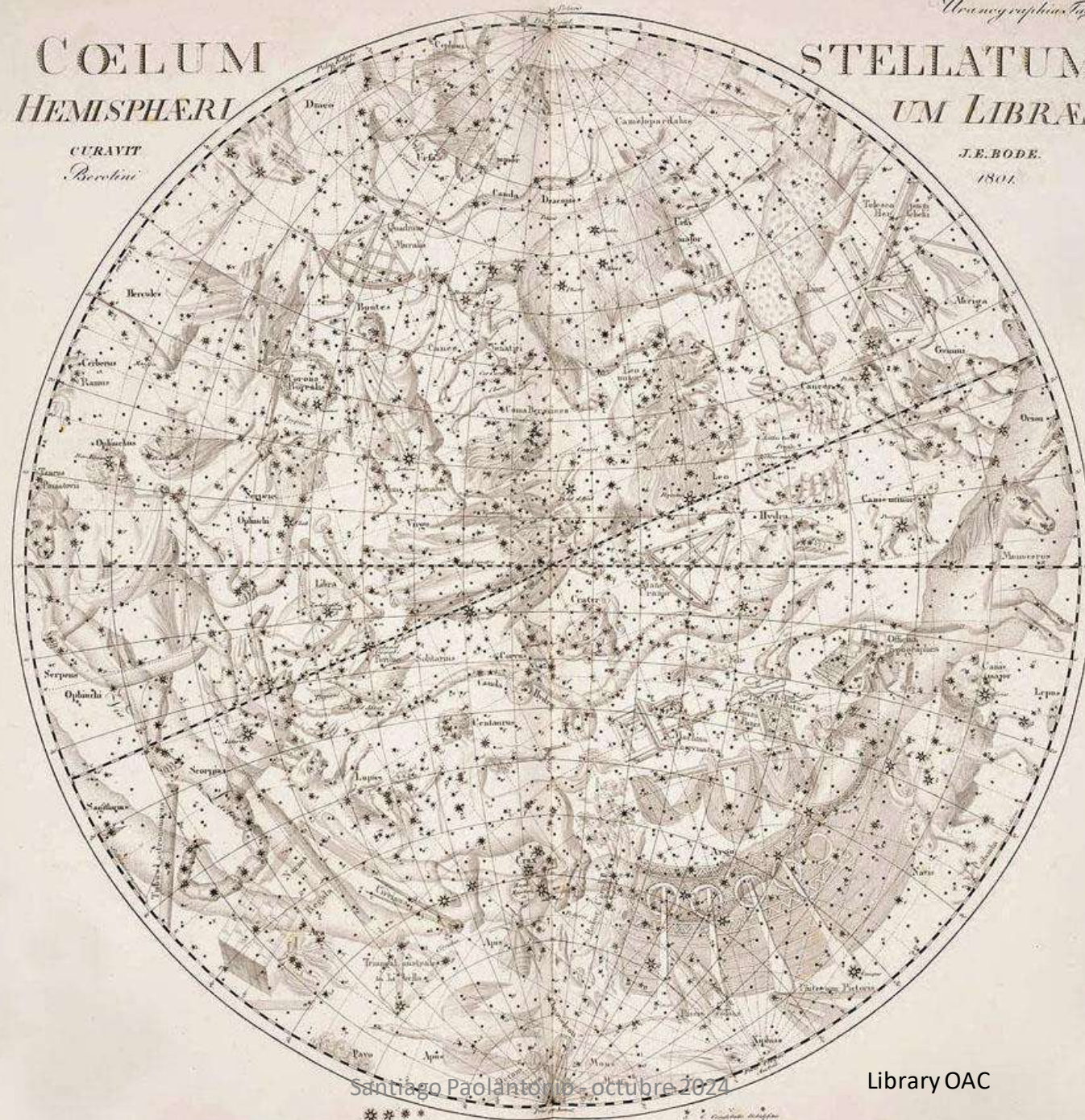
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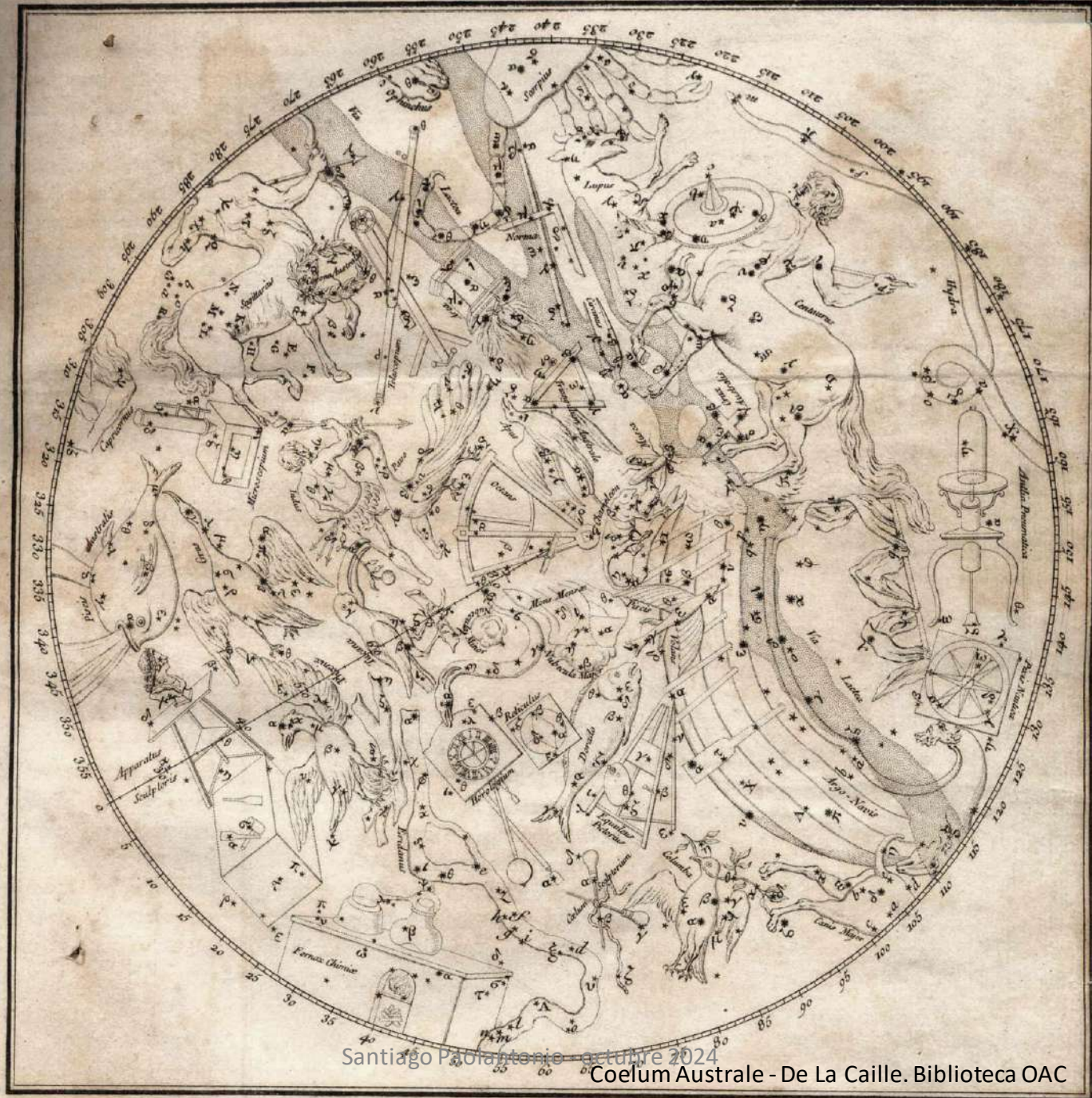
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HEMISPHERII

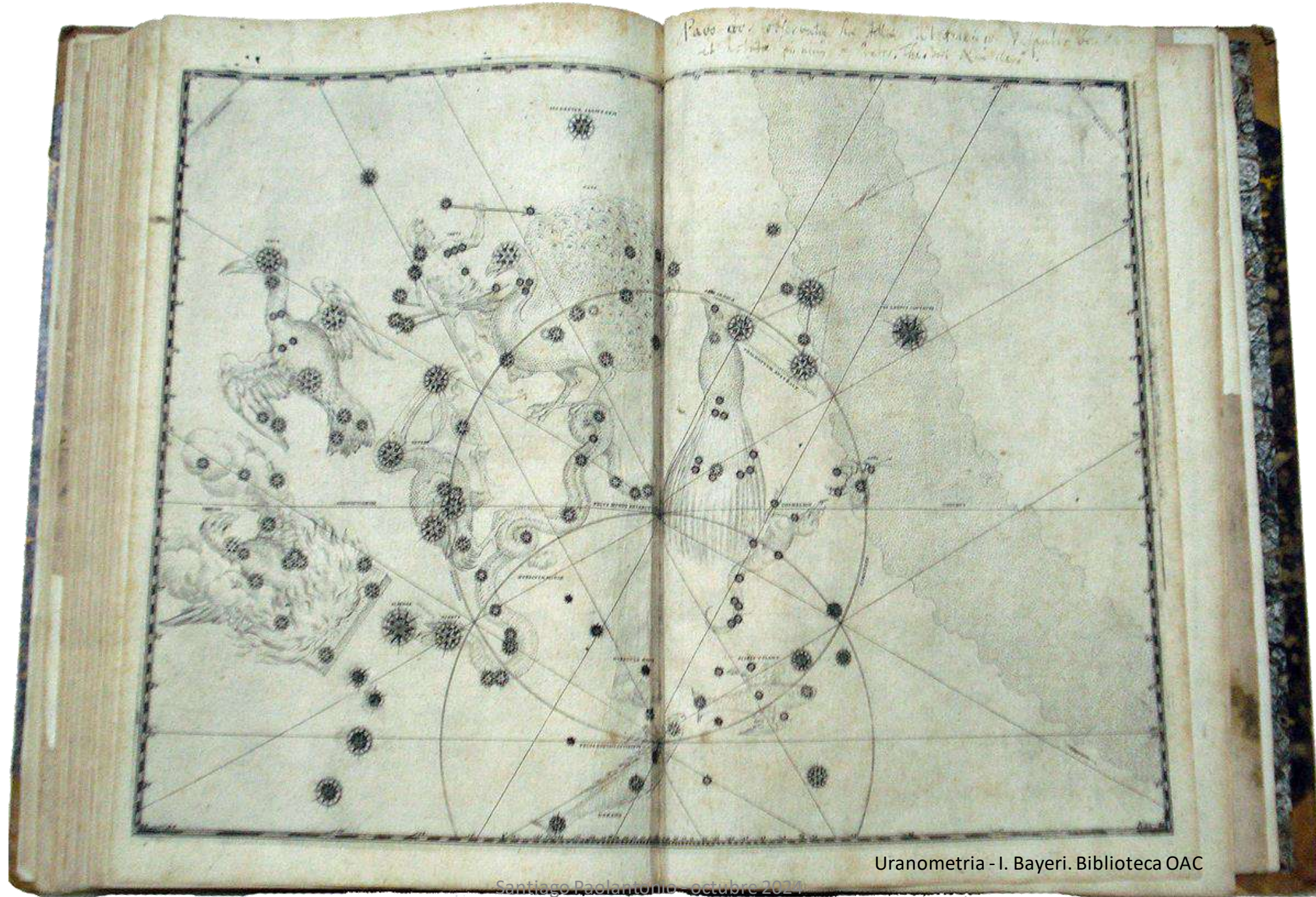
CURAVIT
Bechlin

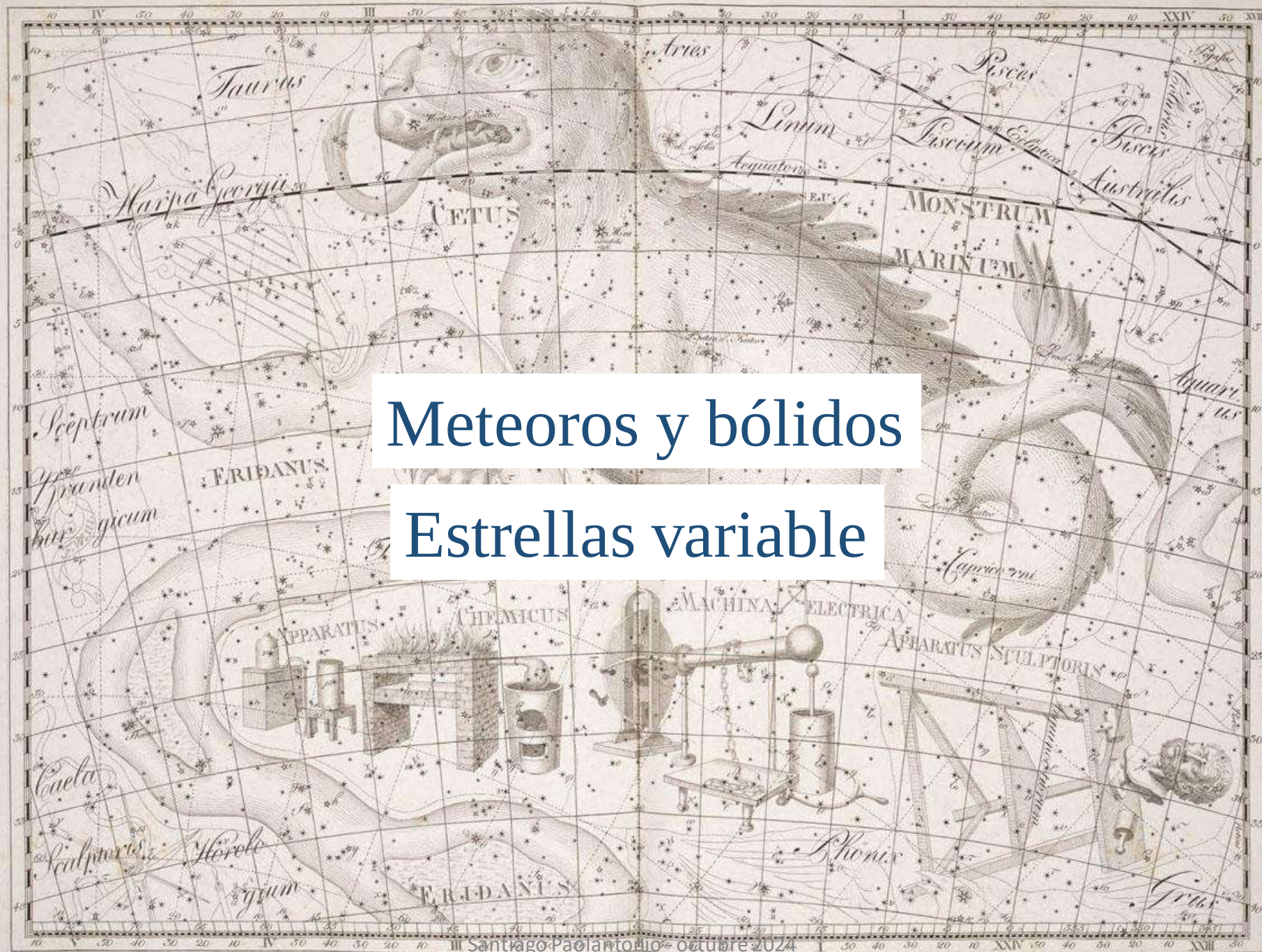
STELLATUM
UM LIBRÆ.

J.E.BODE.
1801.









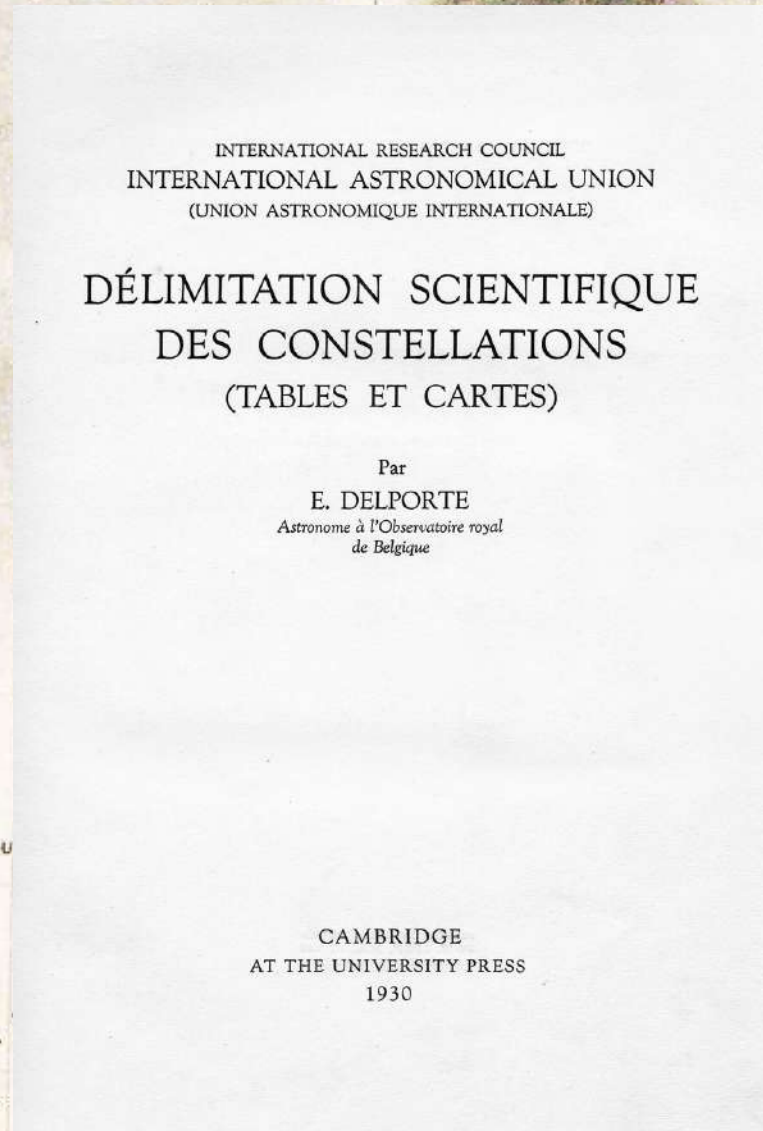
Meteores y bólidos

Estrellas variable

LA SOLUCIÓN



Eugène J. Delporte
(1882-1955)
Flammarion, 1956



Cover of the Report of E. J. Delporte Publicado en 1930

Biblioteca Observatorio Astronómico de Córdoba



Eugène J. Delporte
(1882-1955)
Flammarion, 1956

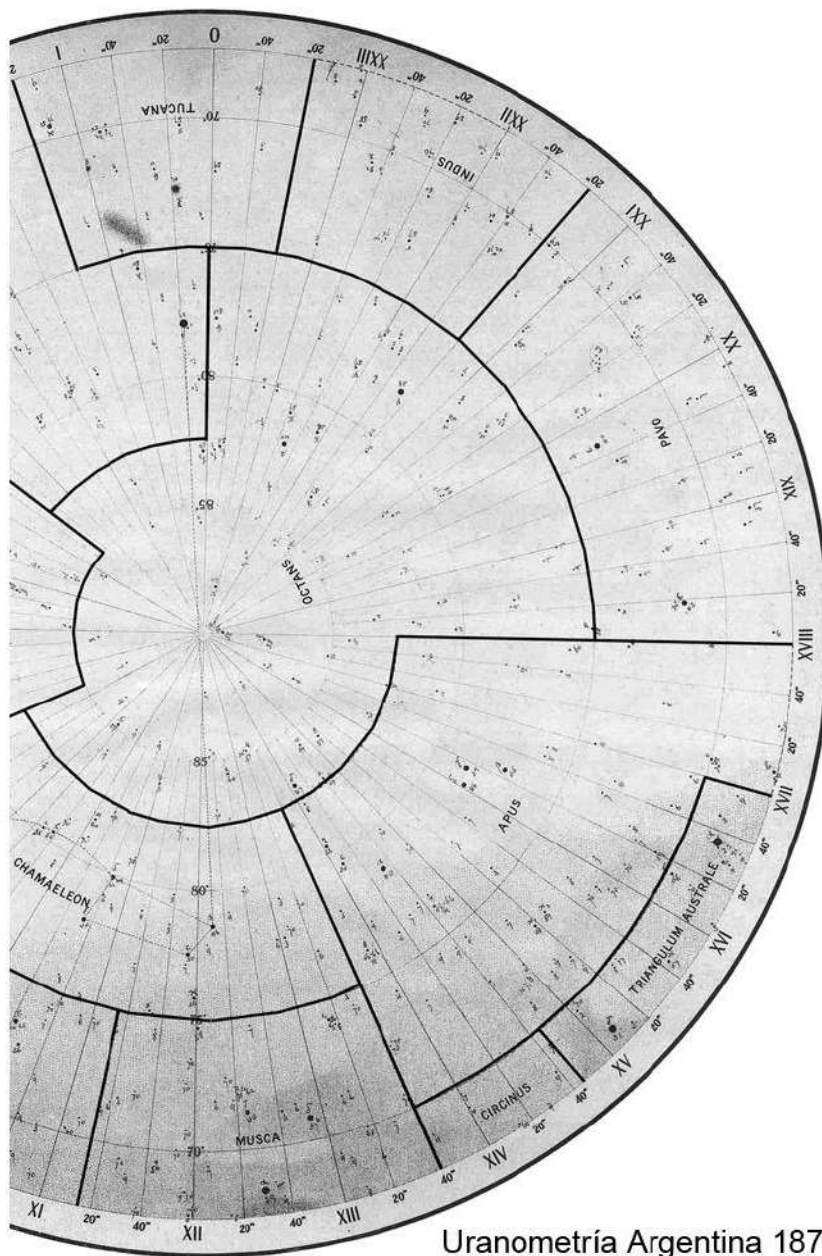


Atlas de las Uranometría Argentina
Resultados del Observatorio Nacional Argentino Vol. I 1877-1879

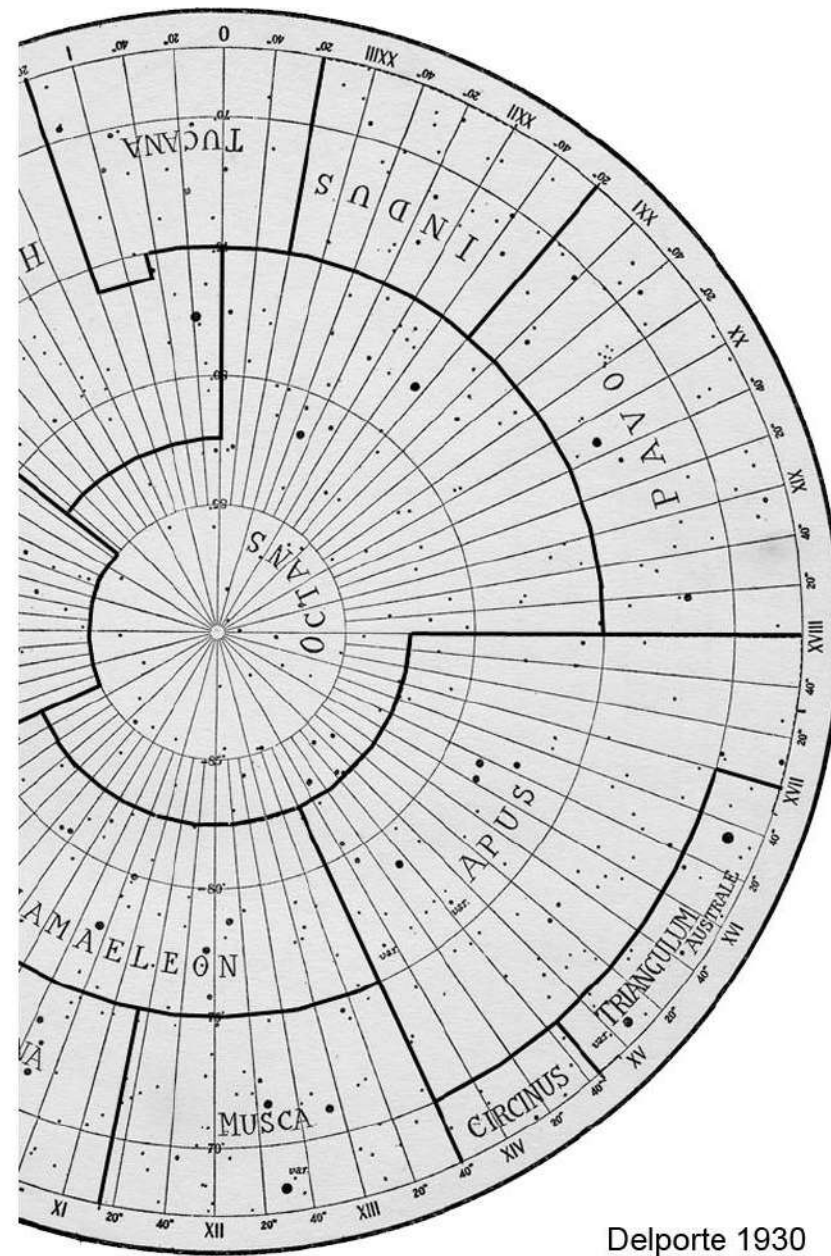
Uranometría Argentina

- ✓ Se registraron todas las estrellas visibles a simple vista desde Córdoba a lo largo del año (por eso es una “Uranometría”).
- ✓ Se propuso la unificación las denominaciones de las estrellas
- ✓ Se propusieron límites definidos de las constelaciones, minimizando los cambios respecto a los atlas existentes en la época.
- ✓ Se extendieron por primera vez las magnitudes de las estrellas estudiadas de la 6^{ta} a la 7^{ma}

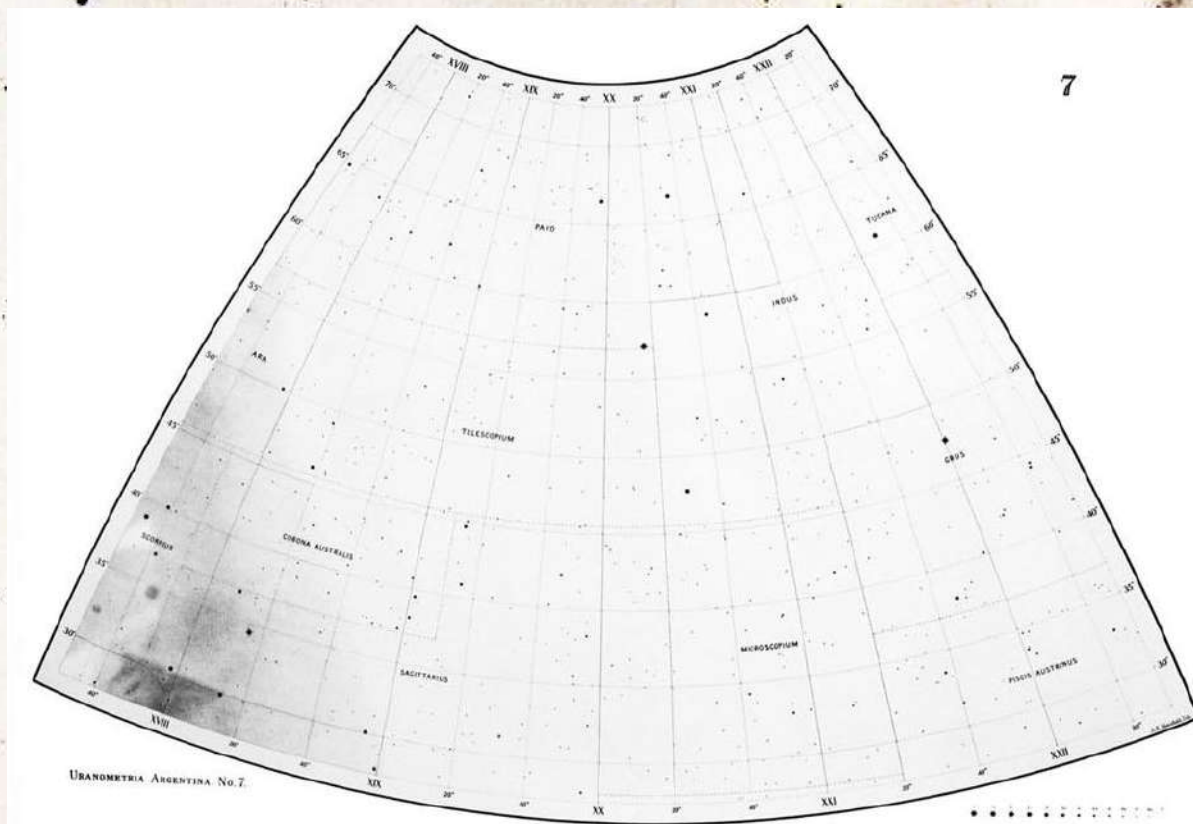
Catálogo (1879) y Atlas (1877)



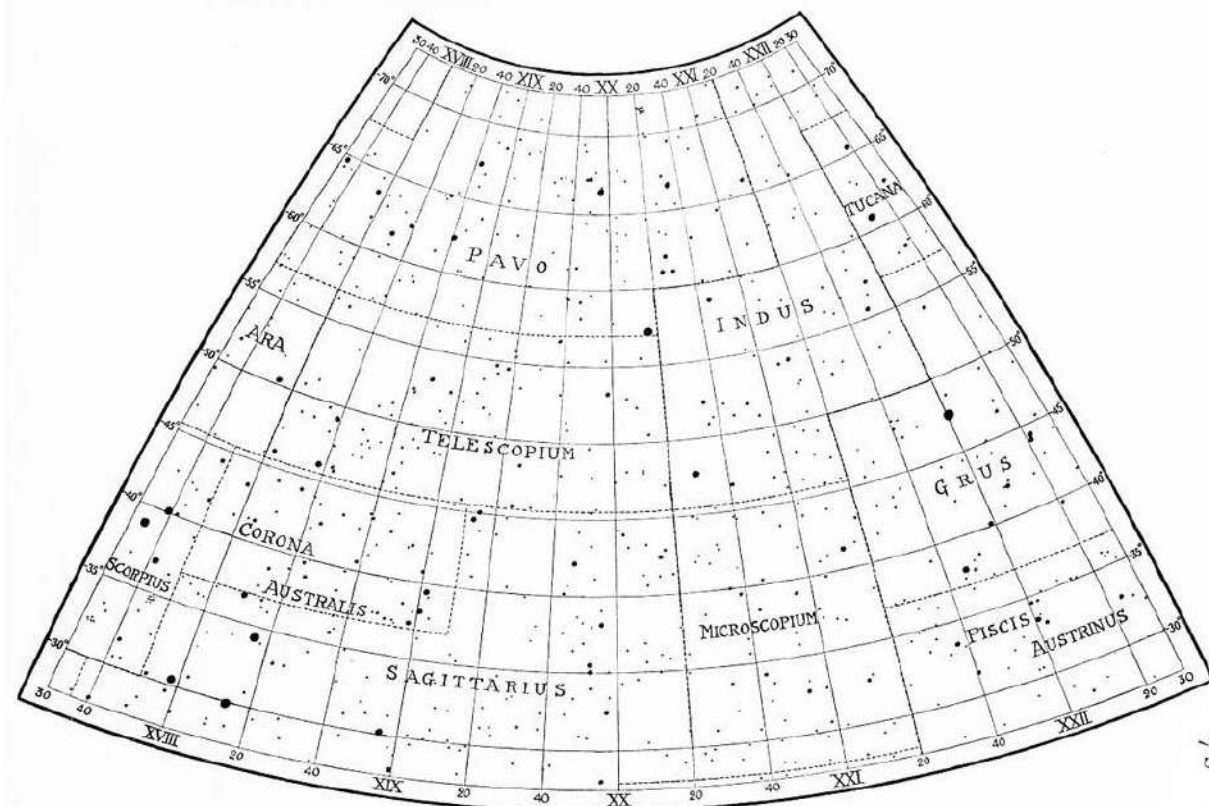
Uranometria Argentina 1877



Delporte 1930



Uranometria Argentina 1877

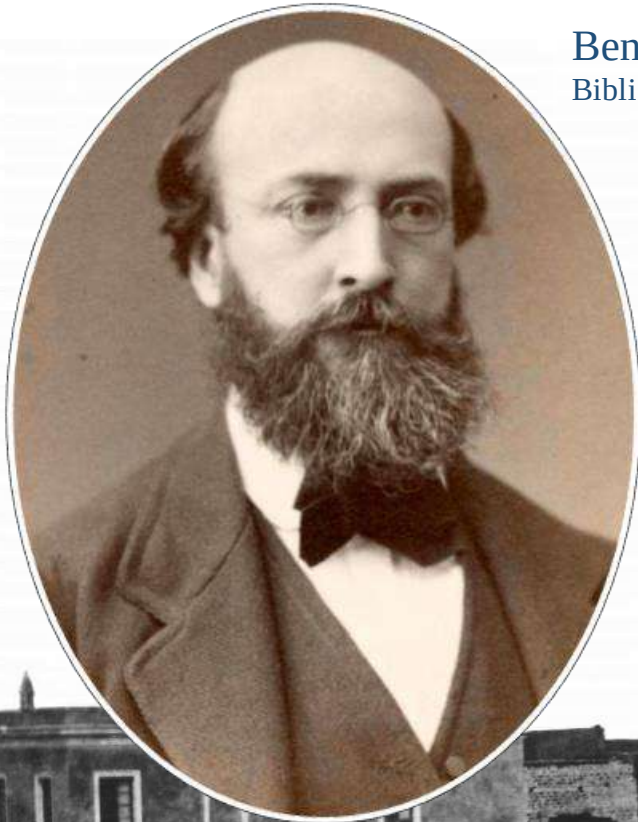


Delporte 1930

Equinoccio 1875.0



URANOMETRÍA ARGENTINA



Benjamin A. Gould (1824 - 1896)
Biblioteca OAC



Friedrich W. A. Argelander
(1799 - 1875)
Universität Bonn

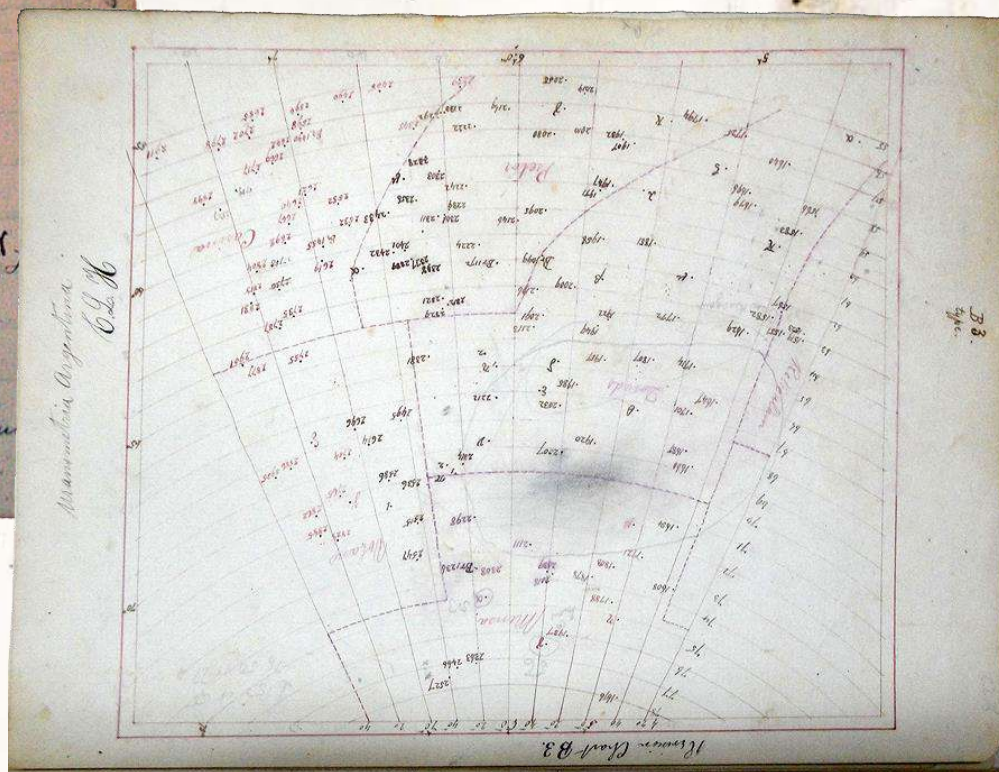


Observatorio Nacional Argentino,
24 de October de 1871.
Biblioteca OAC

Córdoba Monday Nov. 14. 1870.
1.30 a.m. - 4.30. - clear light clouds 2000 ft. - W. & SW.

Fomalhaut
 —
α Geminis
 —
β Geminis
β Ceti = α Pavonis
α Phoenicis - α Arctis - α Androm.
α Pegasi
β Arctis - α Hydri - β Hydri = α Tauri
γ Geminis = δ Eridani.
γ Hydri
ε Geminis - α Tauri = β Phoenicis
δ Hydri = δ Hydri = ζ Octant. = β Octant = γ
κ Eridani.
 —
β Androm. = α Androm.; β Oct. = α Oct.
β Phoenicis = α Erid.; Fomalhaut = α Geminis
" " = γ Erid.; α Geminis = β Geminis.

Libreta original. Registro de la primera observación del 14 de noviembre de 1870.
 Museo OAC

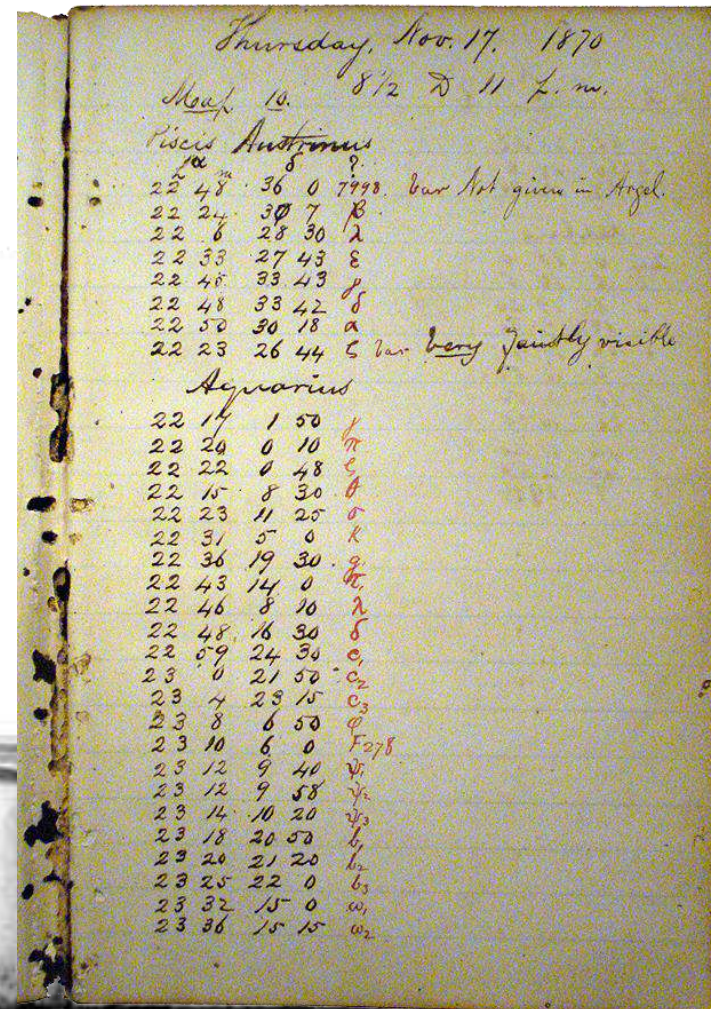


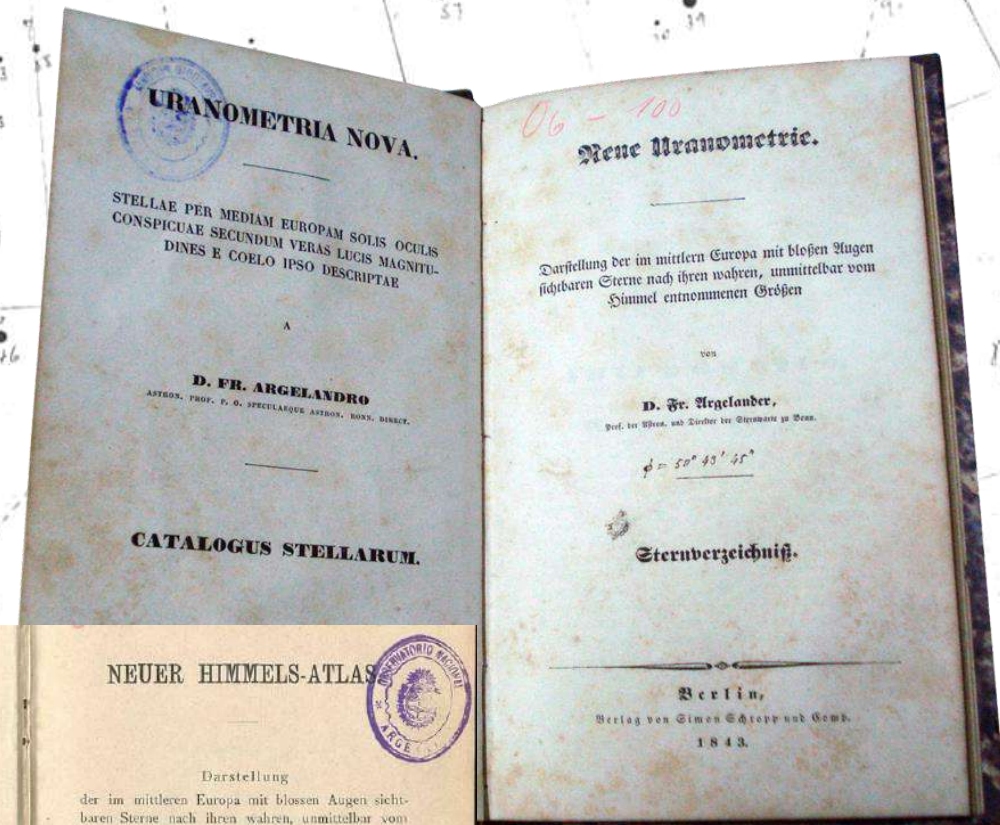
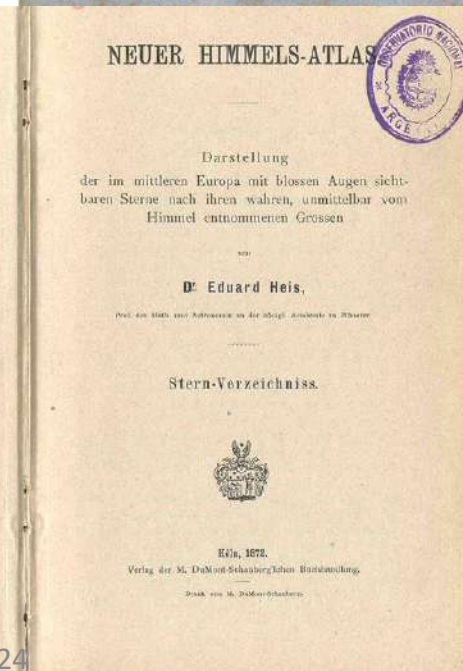
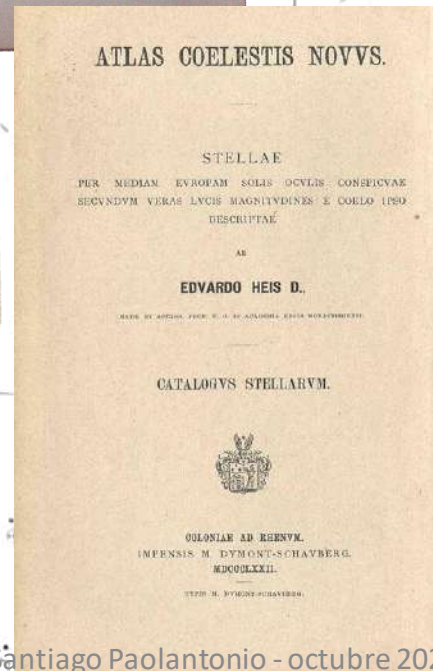
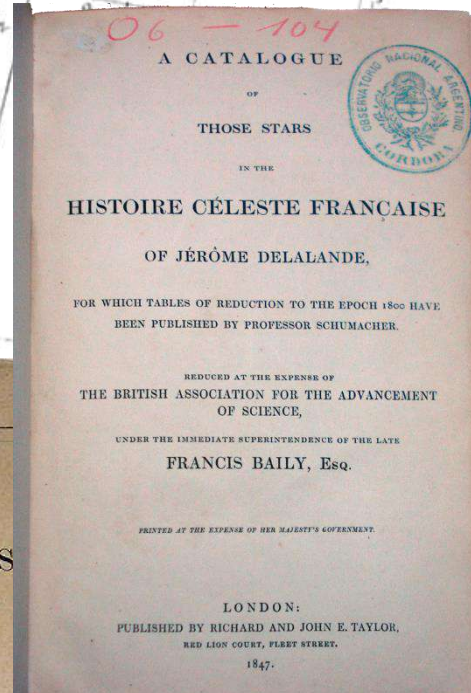
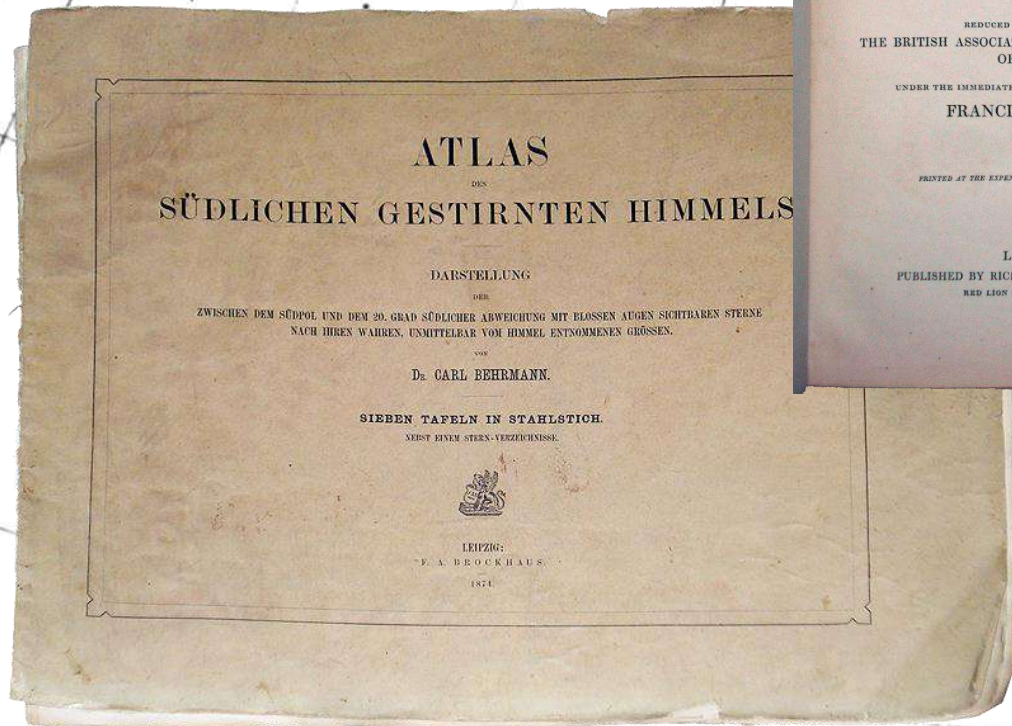
Williams Morris Davis (1850-1934).
 UC Santa Barbara. Department of Geography

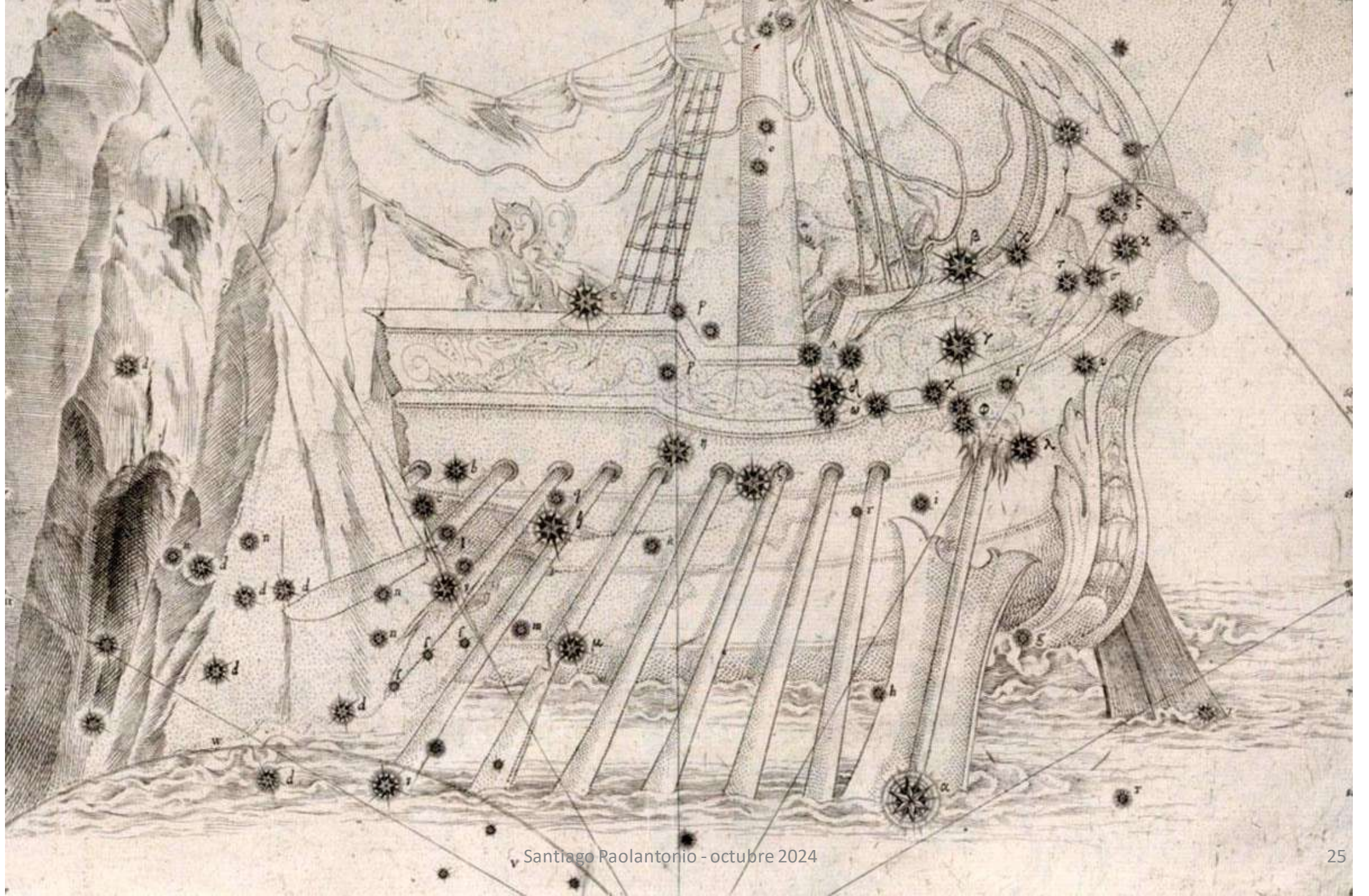


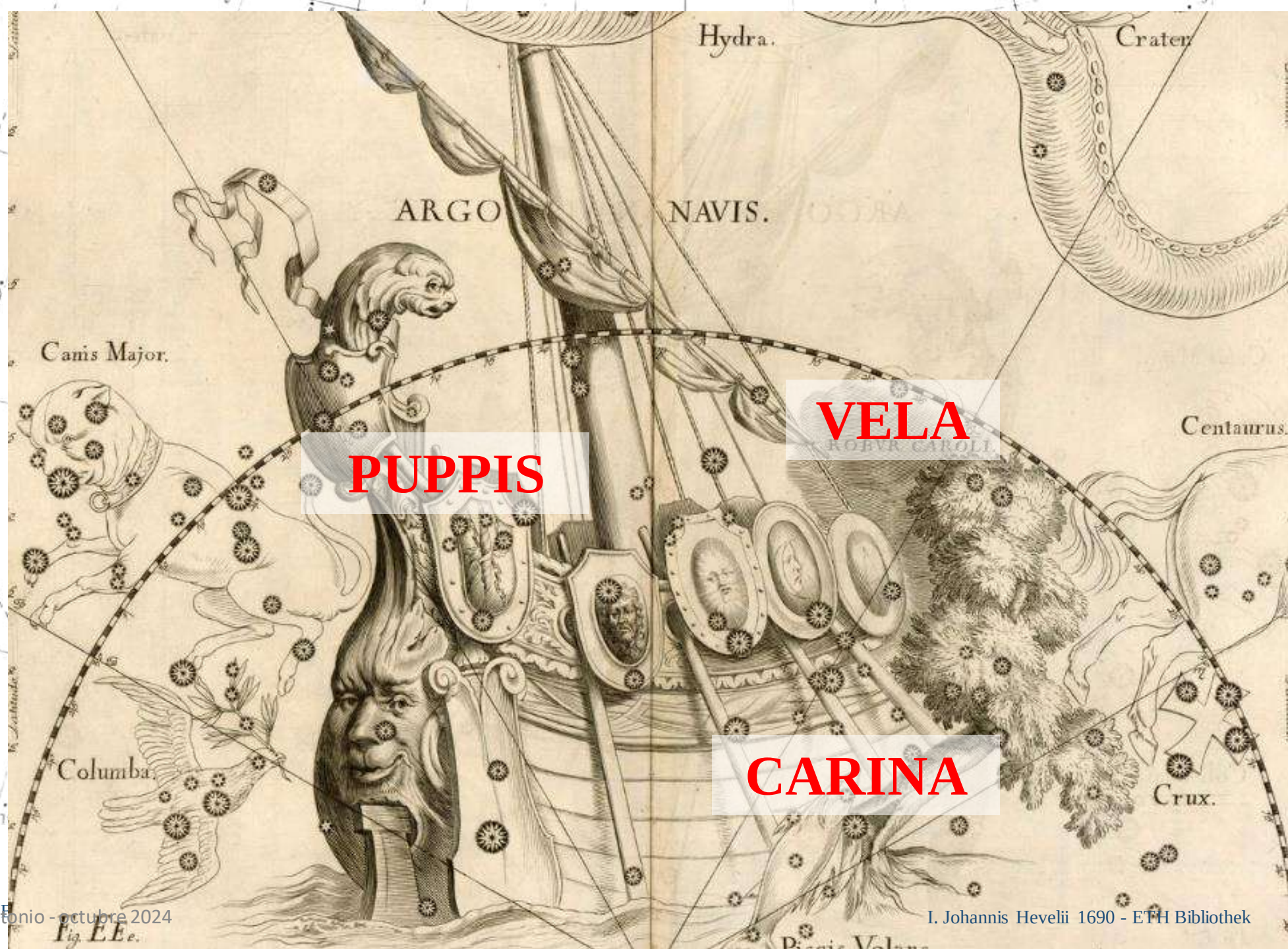
John (Juan) Macon Thome
(1843 - Palmyra, 1908 – Córdoba)
Museo OAC

17 de noviembre de 1870
Museo OAC







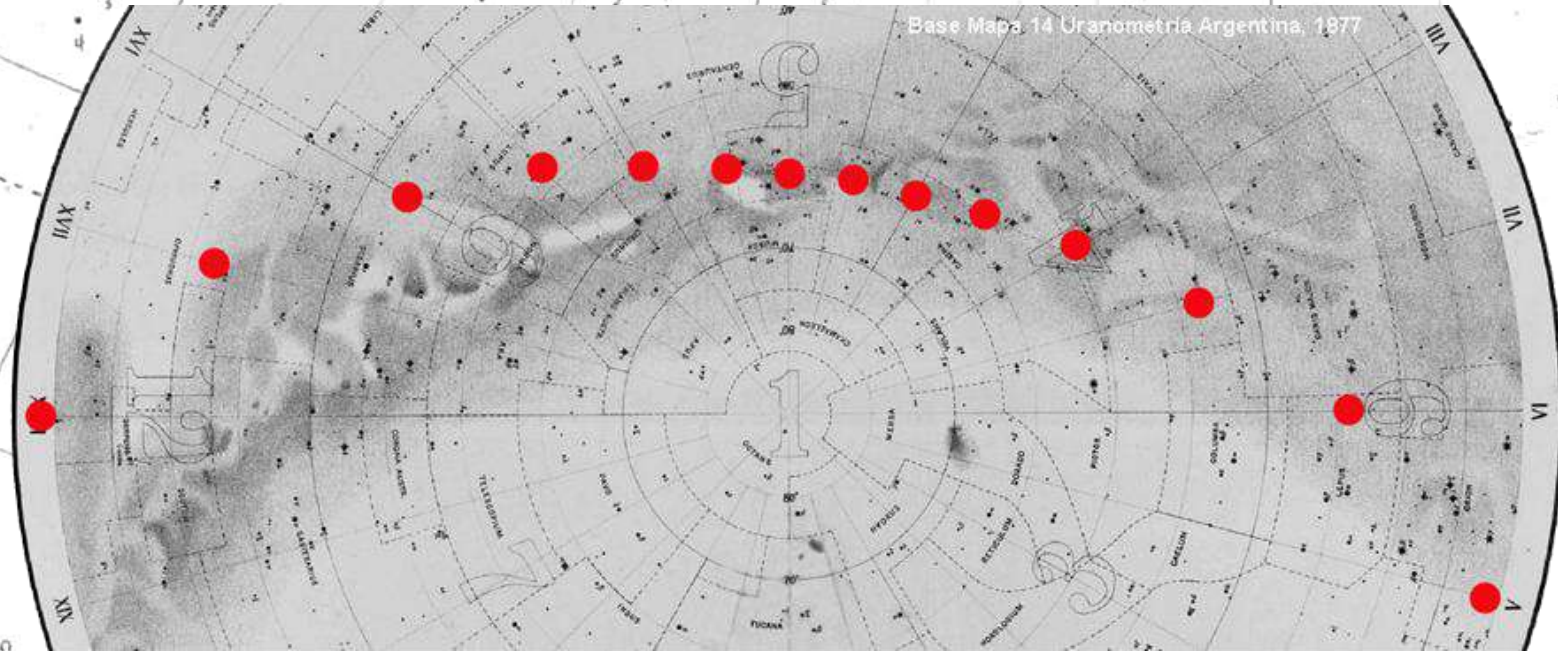


PUPPIS

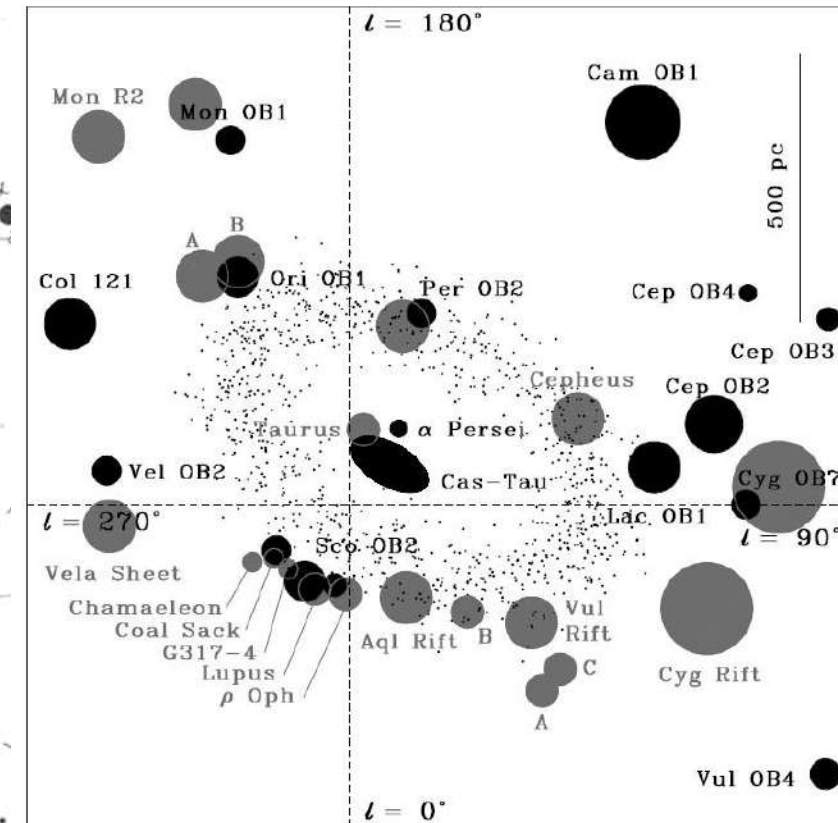
VELA

CARINA

Cinturón de Gould



Credit: 2MASS/J. Carpenter, T. H. Jarrett, & R. Hurt



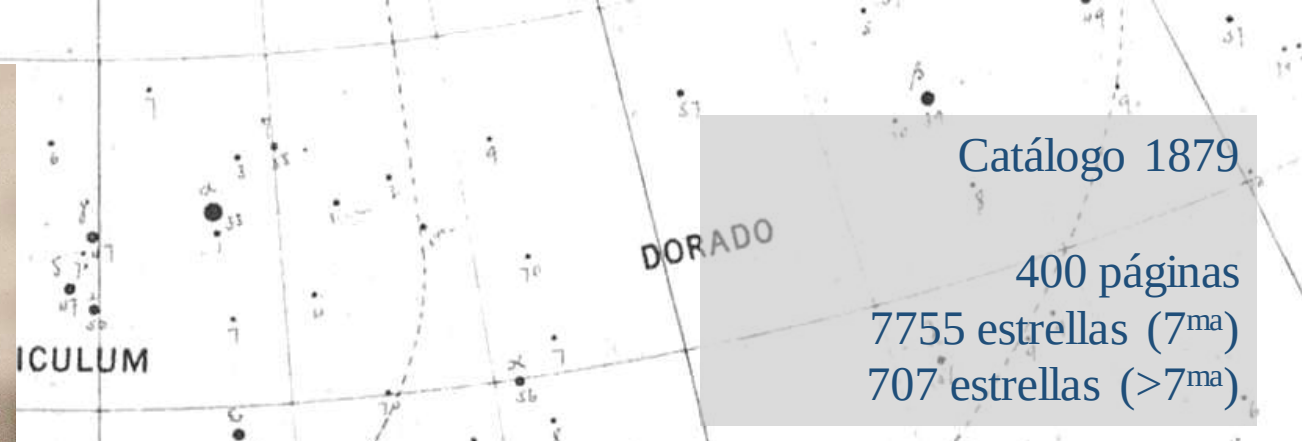


Atlas 1877

13 mapas de 50 x 70 cm

Desde el Polo Sur y $+10^\circ$

Santiago Paolantonio - octubre 2024



Catálogo 1879

400 páginas
7755 estrellas (7^{ma})
707 estrellas ($>7^{\text{ma}}$)

URANOMETRIA ARGENTINA

BRILLANTEZ Y POSICION

DE LAS ESTRELLAS FIJAS, HASTA LA SÉPTIMA MAGNITUD,

COMPRENDIDAS

DENTRO DE CIENTO GRADOS DEL POLO AUSTRAL,

POR

BENJAMIN APTHORP GOULD,

CON ATLAS



BUENOS AIRES
IMPRENTA DE PABLO E. CONI, ESPECIAL PARA OBRAS
60 — CALLE ALMIRA — 60
1879

URANOMETRIA ARGENTINA

BRIGHTNESS AND POSITION

OF EVERY FIXED STAR, DOWN TO THE SEVENTH MAGNITUDE,

WITHIN

ONE HUNDRED DEGREES OF THE SOUTH POLE,

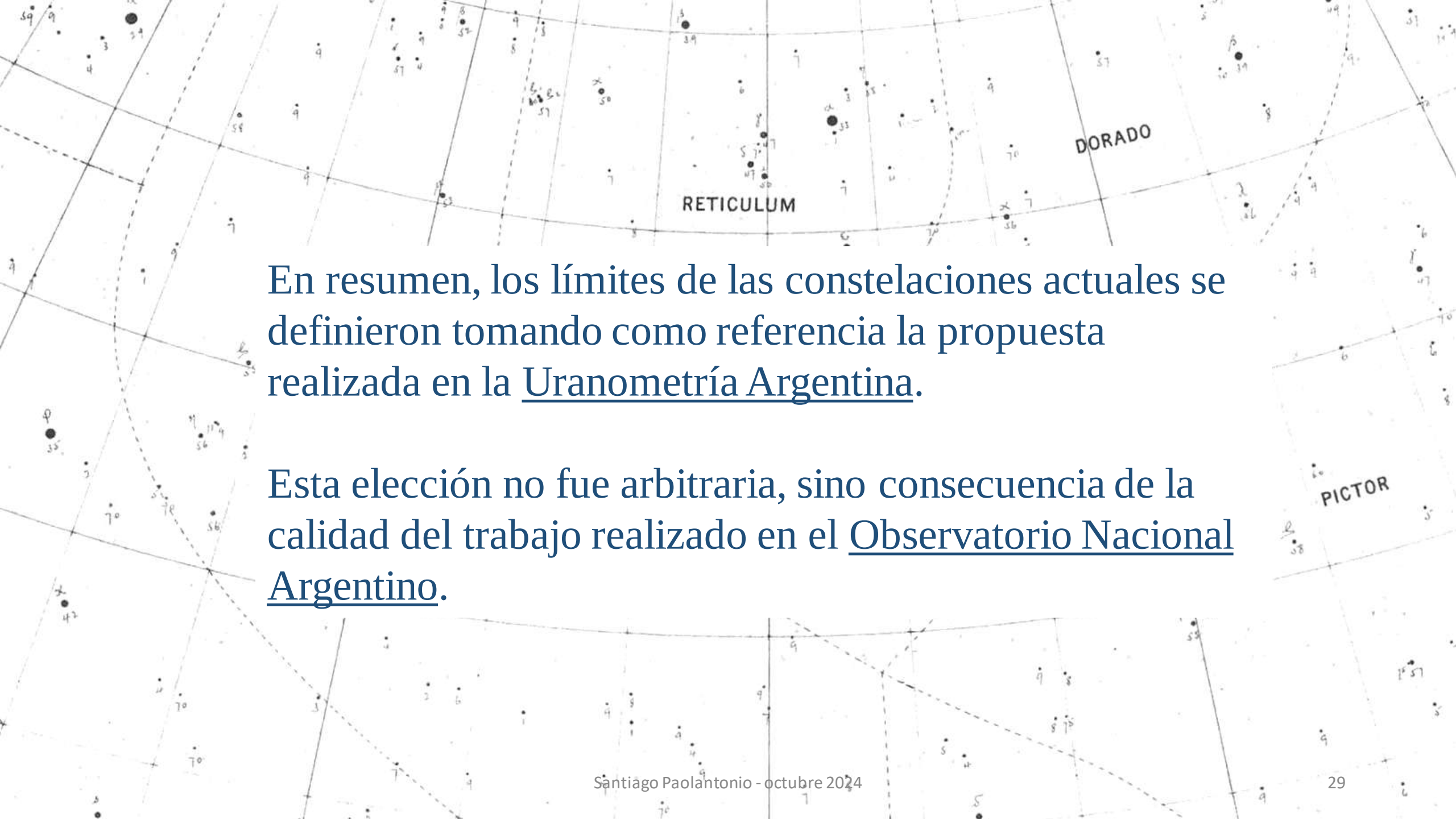
BY

BENJAMIN APTHORP GOULD,

WITH AN ATLAS



BUENOS AIRES
PRINTED BY PAUL EMILE CONI
60 — CALLE ALMIRA — 60
1879



En resumen, los límites de las constelaciones actuales se definieron tomando como referencia la propuesta realizada en la Uranometría Argentina.

Esta elección no fue arbitraria, sino consecuencia de la calidad del trabajo realizado en el Observatorio Nacional Argentino.



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