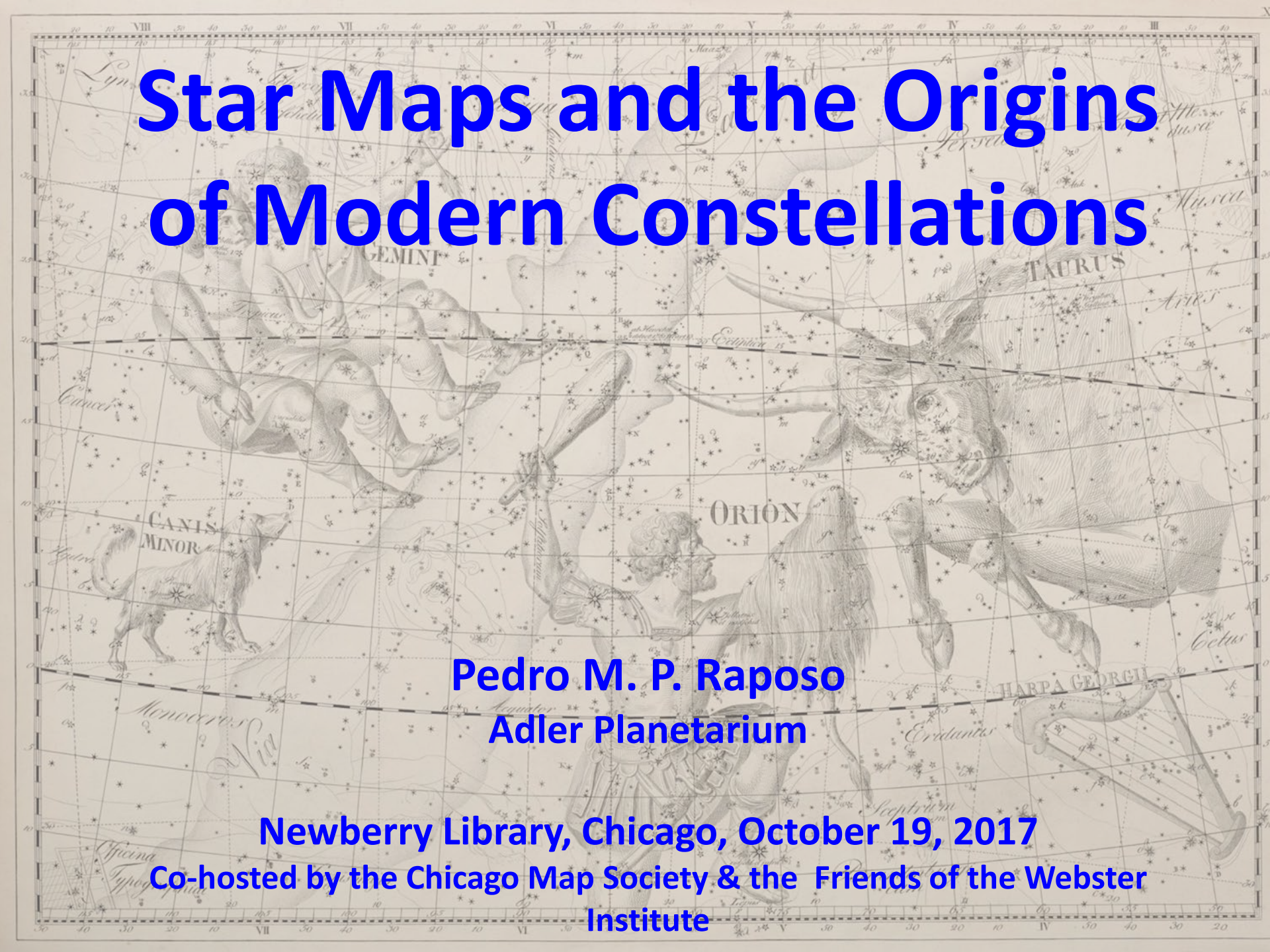
Star Maps and the Origins of Modern Constellations



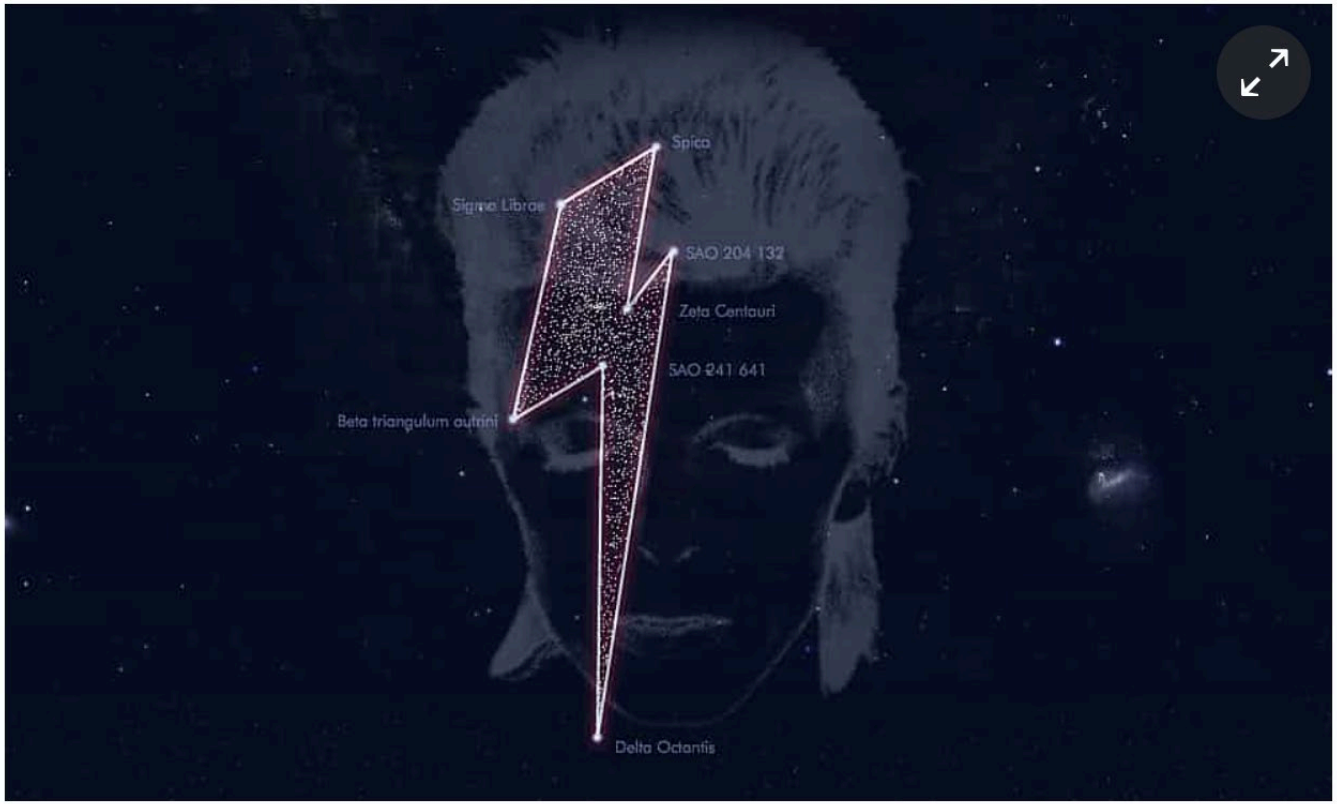
Pedro M. P. Raposo
Adler Planetarium

Newberry Library, Chicago, October 19, 2017
Co-hosted by the Chicago Map Society & the Friends of the Webster Institute

David Robert Jones (8 January 1947 – 10 January 2016)

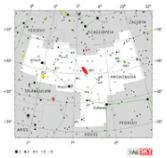
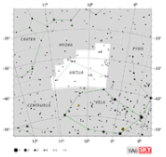
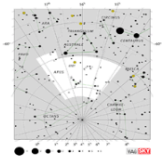
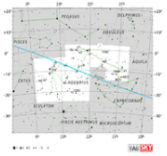
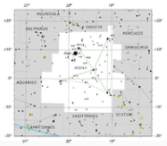
David Bowie: astronomers give the Starman his own constellation

Scientists have registered a constellation shaped like a lightning bolt in honour of David Bowie and his out-of-this-world talent

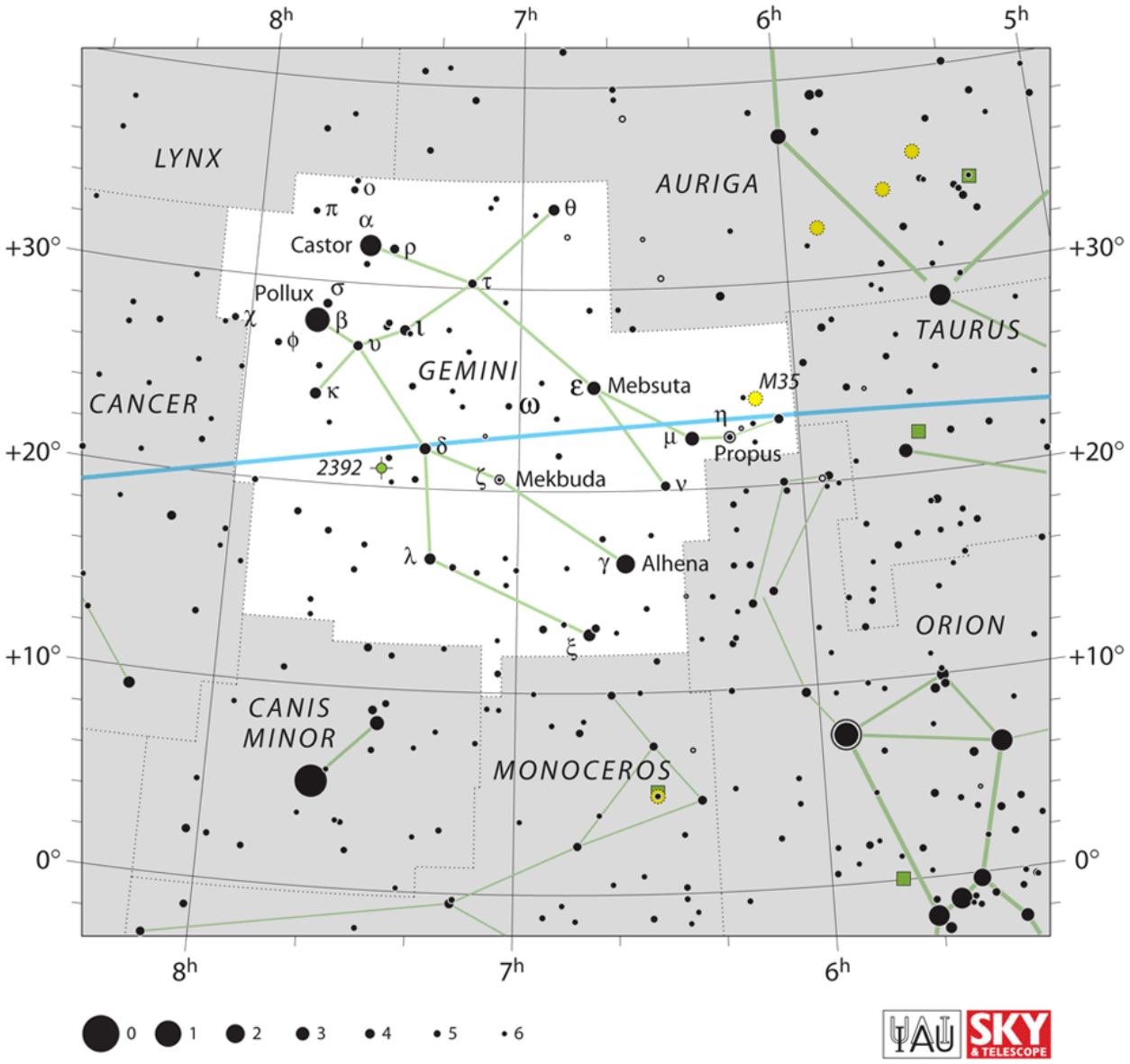


A constellation of stars registered in tribute to the musician David Bowie. Photograph: www.stardustforbowie.be

https://www.theguardian.com, January 17, 2016

Name / Pronunciation	Abbr.	English Name	Genitive / Pronunciation	Downloads	
Andromeda *an-DRAH-mih-duh*	And	the Chained Maiden	Andromedae *an-DRAH-mih-dee*	**Constellation charts** GIF (117 KB) PDF (829 KB) TIF **Constellation boundary** TXT (2 KB)	
Antlia ANT-lee-uh	Ant	the Air Pump	Antliae ANT-lee-ee	**Constellation charts** GIF (111 KB) PDF (815 KB) TIF **Constellation boundary** TXT (1 KB)	
Apus APE-us, APP-us	Aps	the Bird of Paradise	Apodis APP-oh-diss	**Constellation charts** GIF (155 KB) PDF (836 KB) TIF **Constellation boundary** TXT (1 KB)	
Aquarius uh-QUAIR-ee-us	Aqr	the Water Bearer	Aquarii uh-QUAIR-ee-eye	**Constellation charts** GIF (124 KB) PDF (879 KB) TIF **Constellation boundary** TXT (1 KB)	
Aquila ACK-will-uh, uh-QUILL-uh	Aql	the Eagle	Aquilae ACK-will-ee, uh-QUILL-ee	**Constellation charts** GIF (108 KB) PDF (820KB) TIF	

https://www.iau.org/public/themes/constellations/



Alan MacRobert/IAU/Sky & Telescope

https://www.iau.org/static/public/constellations/gif/GEM.gif

‘Map of Europe showing countries as established by the Peace Conference of Paris’, c. 1919

Library of Congress

https://www.nasa.gov/audience/formedia/telecon-20071106/1.html

Map by Bormay & Co., early 20th century [used in Gorge Stephen Godspeed, A History of the Babylonians and Assyrians (New York: Charles Scribner's Sons, 1902)]

Farnese Atlas, 2nd Century AD, National Archeological Museum, Naples, Italy

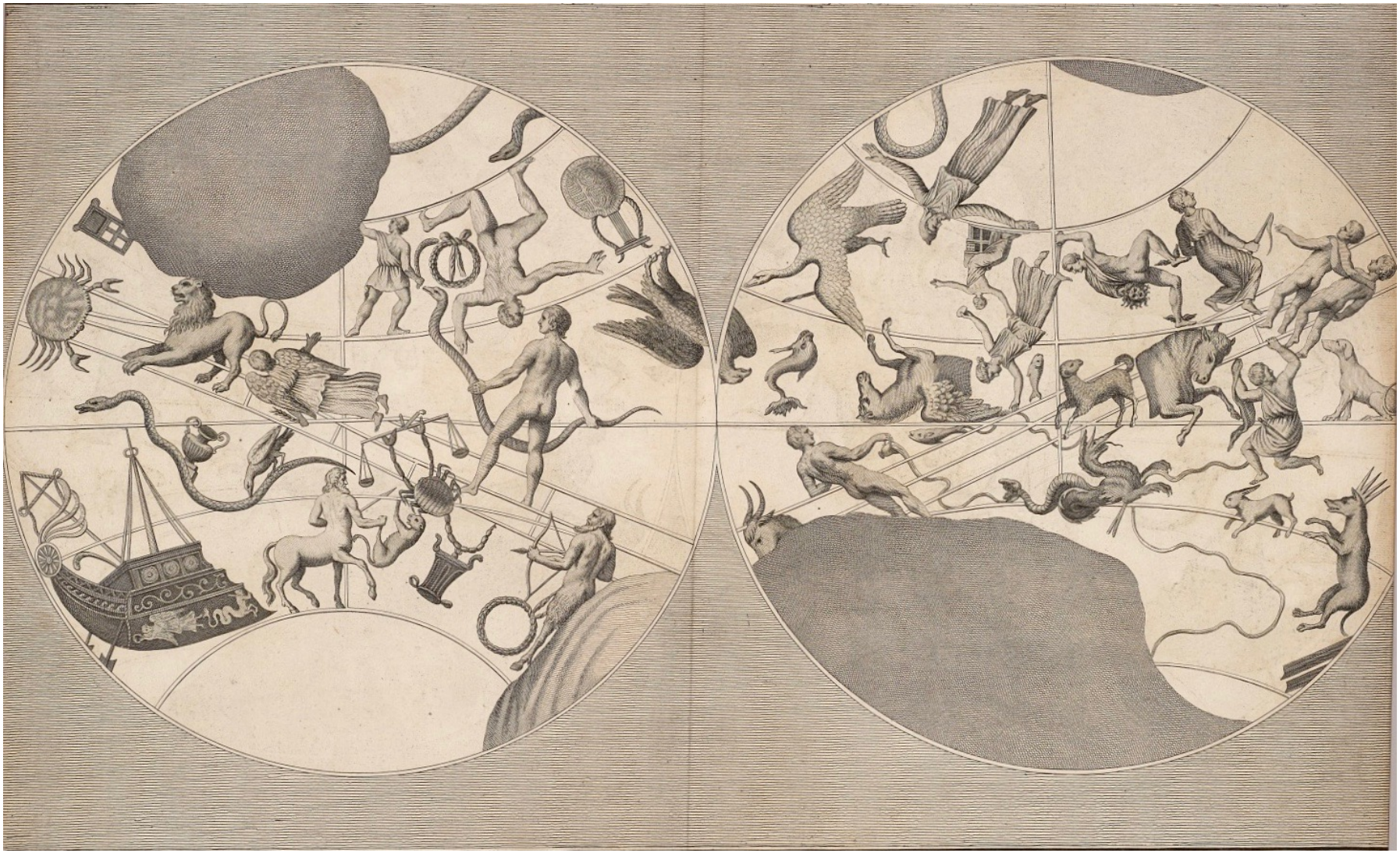


Illustration of constellations on Farnese Globe, A. P. Boite

Adler Planetarium collections P-173

Claudius Ptolemy (100 AD – 168 AD)

University of Texas at Austin, the Perry-Castañeda Library Map Collection

‘Abd al-Rahman ibn ‘Umar al-Sufi, *Kitab suwar al-kawakib* (‘Book of the constellations of the fixed stars’), c. 964

Images from copy in the collections of the Library of Congress, produced in south or central Asia, circa 1730. An exact copy of a manuscript, now lost, prepared for Ulug Beg of Samarkand (present-day Uzbekistan) in 1417 [820 A.H.]

Astrolabe, Muhammad ibn al-Fattuh al-Khama'iri, Seville, Spain, 1236/7 [634 AH]

Adler Planetarium collections M-35

,

Augusta (Ausburg), Georg Braun and Franz Hogenberg (authors), Peter von Brachel, Cologne, 1575

David Rumsey Historical Map Collection

Johannes Bayer, Uranometria: omnium asterismorum continens schemata, nova methodo delineata, aeris laminis expressa (Augsburg, 1603)

Adler Planetarium collections QB65 .B29 1603

Scorpij prior pars que chele dicit ita primit ab equi/
noctiali circulo: vt eū sustinere videat. Ipse aūt pe/
dibus ophiulci de quo supra dixim⁹ subditus extre/
ma cauda circulū hyemalē cōtingere videt. Neqz lō/
ge est ab eo qō pro hostia centaurus ferre prospicit.
Occidit autē inclinato capite: exorit erect⁹ a chelis. Hic habet stel/
las in his que chele dicunt in vnaquaqz earū binas: ex quib⁹ pri/
me sūt clariores: Preterea habet in fronte stellas tres: quarū me/
dia est clarissima. Inter scapilio tres. In ventre duas. In cauda
quinqz. In acumine ipso quo percutere existimat duas. Omni/
no stellarum. xix.

Scorpius

brachio vnam. In manu altera. In zona tres. Sup zonā quattuor
In vtroqz genu vnam. In pedibus autem binas. Ita omnino est
stellarum numerus. xx.

Perseus huius sinistrū crus ⁊ humerū leuū: circulus
estiuus a reliquo corpore diuidit. Ipse manu dextra
arcticū circulū tangit: dextro pede caput aurige pre/
mere velut currens videt. Idē occidens sagictario ⁊
capricorno exorto inclinat ad caput versus: cū ariete
⁊ tauro rectus exorit. Habet ātⁱ vtroqz būero stellā vnā. In manu
dextra clare lucentē vnam qua falcē tenere dicit: quo telo Gorgonā

Perseus

Clarissimi uiri Iginij Poeticon astronomicon: opus vtilissimmu[m] foeliciter incipit (Venice: Erhard Ratdolt, 1482) Adler Planetarium library PA6445 .H8 P6 1482

Albrecht Durer, Imagines Coeli Septentrionales/… Meridionales (Nuremberg, 1515)

Images: Adler Planetarium

ons A-255

Illustration of Tycho Brahe's mural quadrant with scenes from his observatory. From the French edition of J. Blaeu's Atlas Major, 1663

Adler Planetarium collections P-125g

Johannes Bayer, Uranometria: omnium asterismorum continens schemata, nova methodo delineata, aeris laminis expressa (Augsburg, 1603)

Adler Planetarium collections QB65 .B29 1603

Johannes Bayer, Uranometria: omnium asterismorum continens schemata, nova methodo delineata, aeris laminis expressa (Ulm, 1661) Adler Planetarium collections QB65 .B29 1661

Johannes Bayer, Uranometria: omnium asterismorum continens schemata, no a methodo delineata, aeris laminis expressa (Ulm, 1661) Adler Planetarium library QB65 .B29 1661

Johannes Hevelius, Prodromus astronomiae…/Firmamentum sobiescianum, sive Uranographia (Gdansk, 1690) Adler Planetarium library QB41 .H59 1690

John Flamsteed, Atlas Coelestis (London, 1729)

Adler Planetarium library QB65 .F5 1729

Pocket globe, Joseph Moxon, London, c. 1680

Adler Planetarium collections A-253

A plan of Berlin, Germany, drawn and engraved by J. Dower. Published by William Orr, London, 1836

Tower of the old Berlin Observatory

F. W. Klose, 1832-48, oil on canvas, Schloss Charlottenburg, Berlin

Johann Bode (1747-1826)

JOANNIS ELERTI BODE

URANOGRAPHIA

Sive

ASTRORUM DESCRIPTIO

viginti tabulis æneis inciſa

ex recentiſſimis et abſolutiſſimis Astronomorum obſervationibus.

Sumtus commodante

Illuſtriſſimo Aſtronomiæ Patrono

Generoſiſſimo Equite Megalopolitano

FRIDERICO DE HAHN

Dynaſte Remptini

---

juvat ire per altum
Aëra et immenſe ſpatiantem vivere cœlo
Signaque et æternos ſtellarum noscere curſus

Manil.

Berolini, MDCCCI.

Apud Autorem.


GEMINI
TAURUS
ORION
CANIS MINOR
Aequator
Officina Typographica
Capus mager
Sceptrum
Eridanus
HARPA GEORGII
Ecliptica

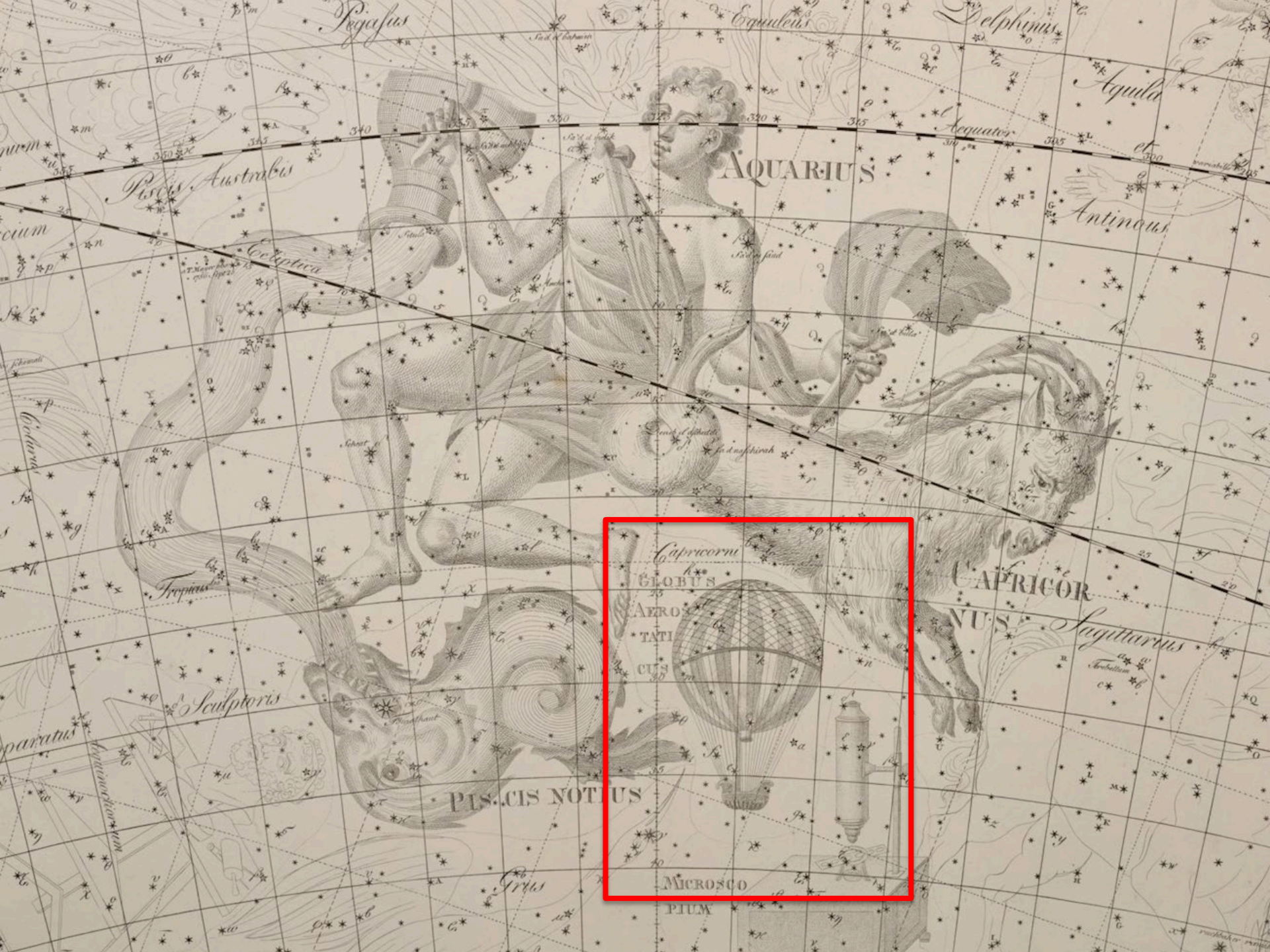

Lynx
Telescopium Herschelii
Auriga
Lacerta
Caput Medusæ
Perseus
Musca
GEMINI
TAURUS
Aries
Tropicus
Cancer
Eridanus
Cancer
CANIS MINOR
Hydra
ORION
Monoceros
Æquator
Nix
Eridanus
Sceptrum
Officina Typographica
Canis major
Brandenburgum
Cetus
HARPA GEORGII

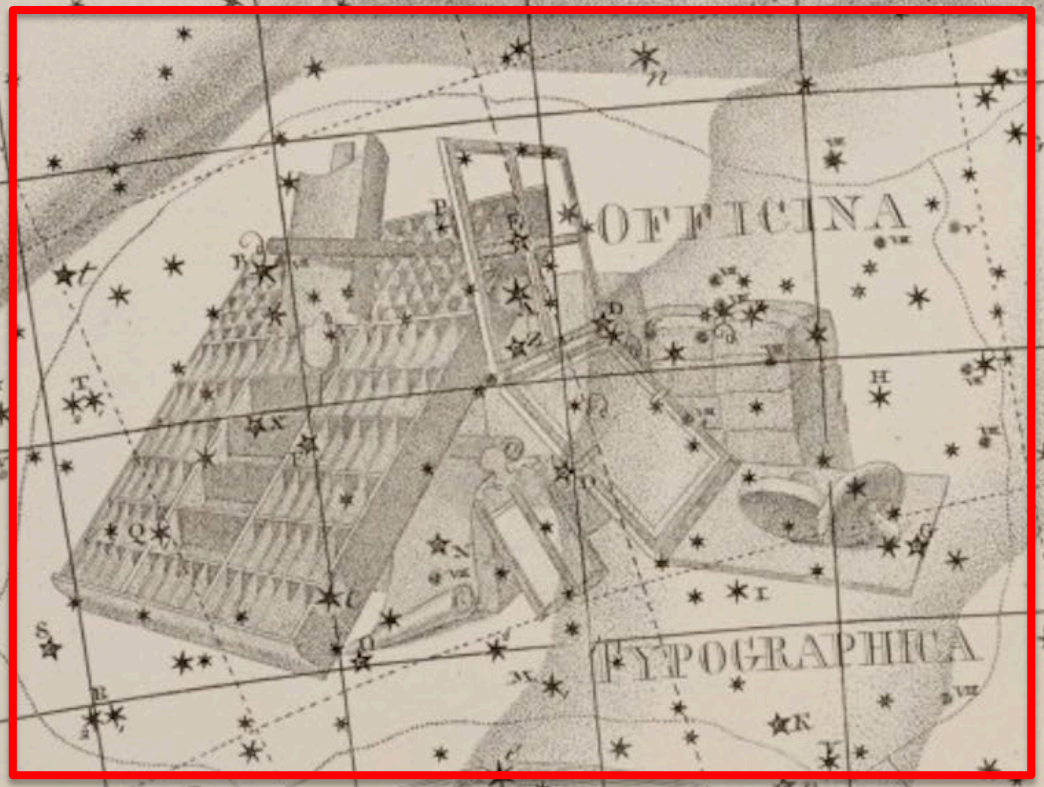
Via
Caph
Schedir
Colurus
LACERTA
HONORES
FRIDERICI
ANDROMEDA
Mirach
Pegasus
Scheat


Aries
Taurus
Pisces
Linum
Piscium
Equator
Harpa Georgii
CETUS
MONSTRUM
MARINUM
Sceptrum
ERIDANUS.
Tropicus
APPARATUS
CHEMICUS
MACHINA ELECTRICA
APPARATUS SCULPTORIS
Caela
Sculptoris
ERIDANUS
Phœnix
Grus


LYNX
TELESCOPIUM
HERSCHELII
AURIGA


CRATER
Sextans
Uraniæ
HYDRA
CORVUS
SEU
SERPENS
AQUATICUS
Capricorni
FELIS
Monoceros
HYDRÆ
Pixis
Nautica
ANTLIA
PNEVMATICA


Pegasus
Equuleus
Delphinus
Aquila
Aquator
AQUARIUS
Piscis Austrinus
Antinous
Capricorni
GLOBUS
AEROS
TATI
CUS
CAPRICOR
NUS
Sagittarius
Sculptoris
PISCIS NOTIUS
MICROSCO
PIUM



CANIS
MAJOR

Sidney Hall, Jehoshaphat Aspin, *Urania's mirror: or, A view of the heavens* (London, c. 1835)

Adler Planetarium collections QB68 .U7 1825


NOCTUA. CORVUS. CRATER. SEXTANS.
HYDRA. FELIS AND ANTLIA PNEUMATICA.


NOCTUA, CORVUS, CRATER, SEXTANS.
HYDRA, FELIS AND ANTLIA PNEUMATICA.

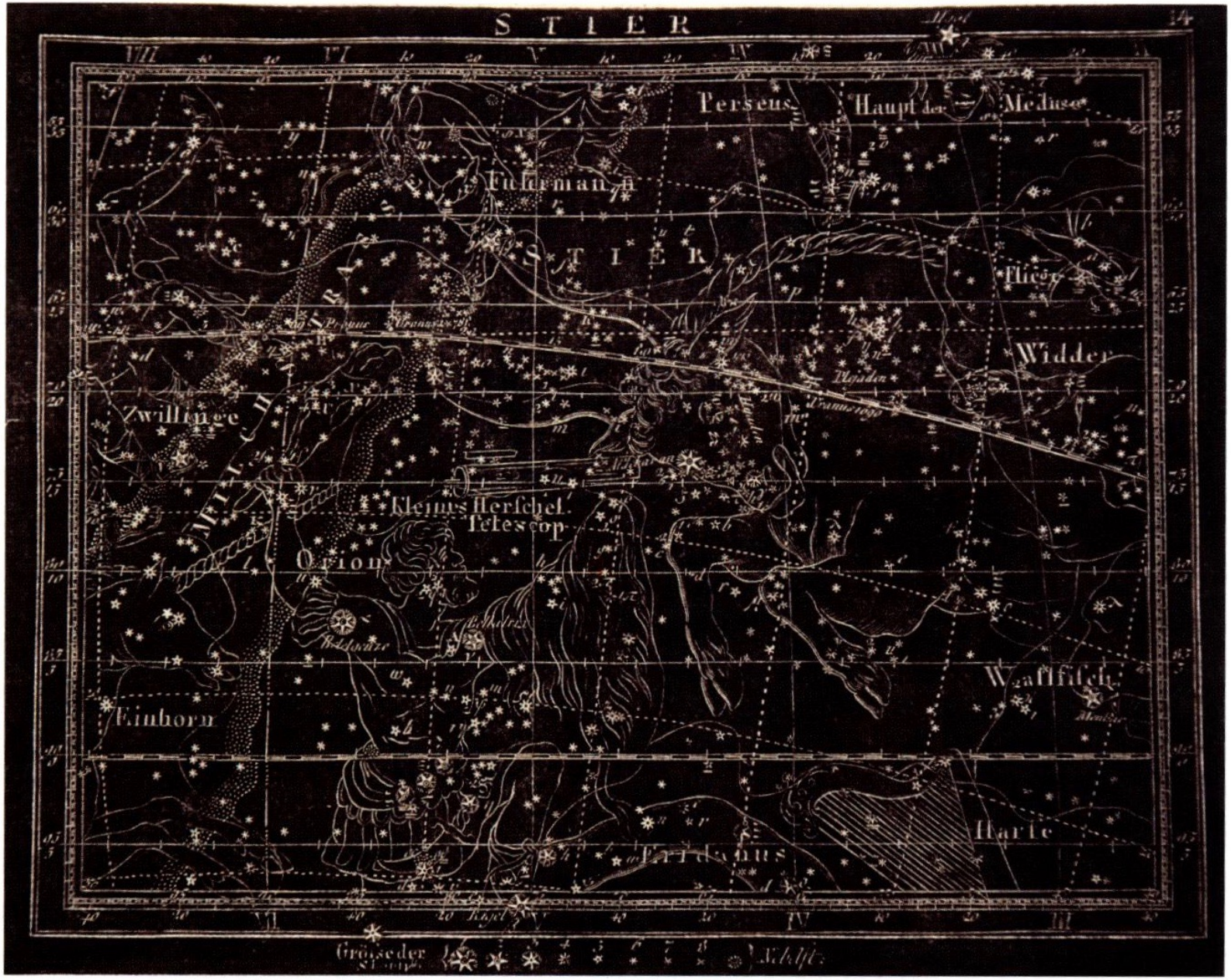
Planisphere, Henri Whitall, Philadelphia, 1871

Adler Planetarium collections A-307


λ Lambda
μ Mu
ν Nu
ξ Zi
ο Omicron
π Pi
τ Tau
υ Upsilon
φ Phi
χ Chi
ψ Psi
ω Omega
Line of TWILIGHT BEGINS
Line of TWILIGHT ENDS
by HENRY WHITALL
Ursa Major
Ursa Minor
Draco
Quadrans Muralis
Bootes
Corona
Hercules
Ophiucus
Serpentarius
Taurus Poniatowski
Aquila
Sagitta
Antinous
Scutum Sobieski
Sagittarius
Corona Australis
Andromeda
Pegasus
Lacerta
Honores Frederici
Triangulum
Perseus
Caput Medusa
Musca
Aries
Pisces
Equator
Ecliptic
Aquarius
Piscis Australis
Delphi
Equuleus
South Horizon
NOON
12 o'clock

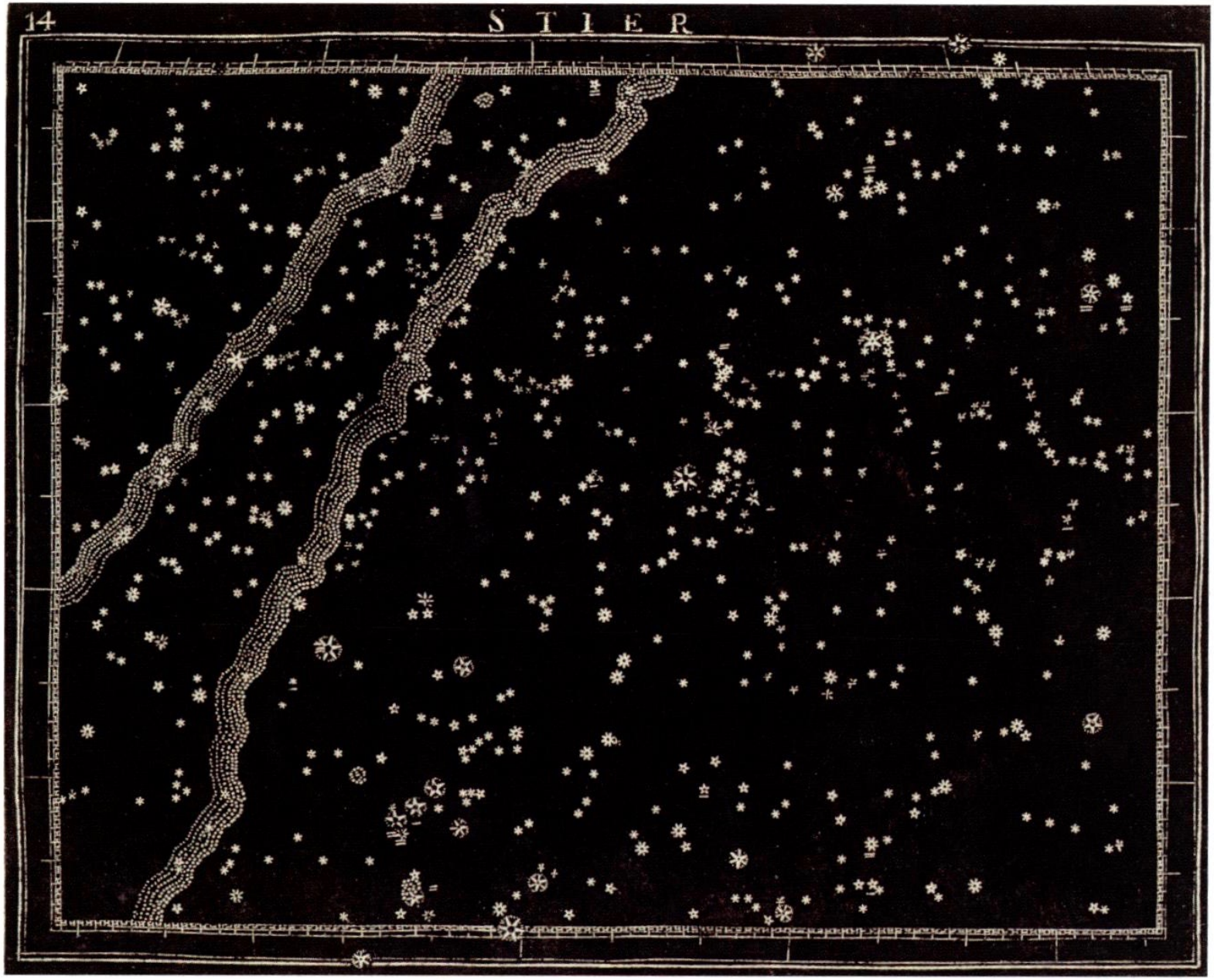
Planisphere, Henri Whitall, Philadelphia, 1862

Adler Planetarium collections A-308



C. F. Goldbach, *Neuester Himmels-Atlas* (Weimar, 1799)

Adler Planetarium library QB65 .G6 1799



C. F. Goldbach, *Neuester Himmels-Atlas* (Weimar, 1799)

Adler Planetarium library QB65 .G6 1799

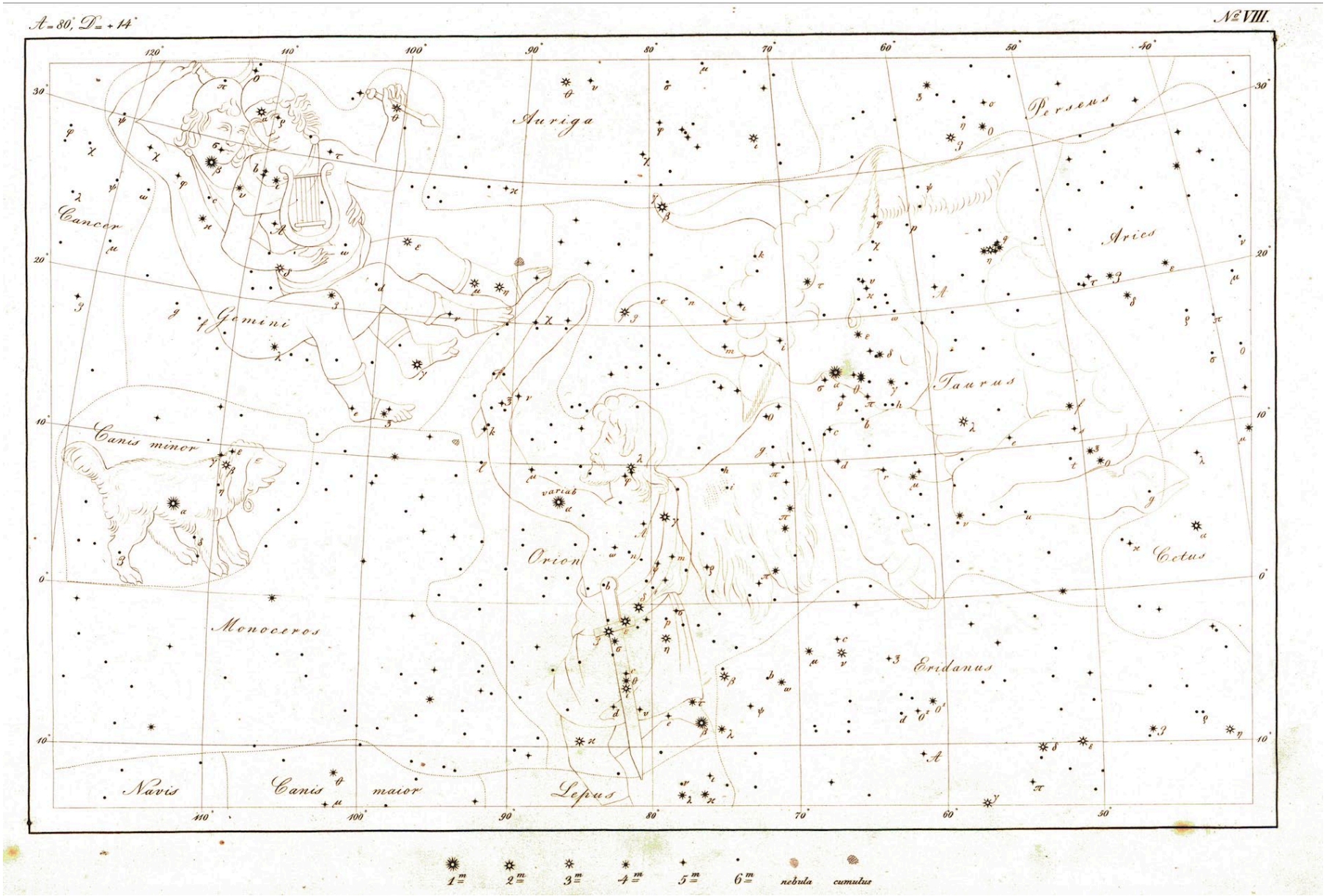
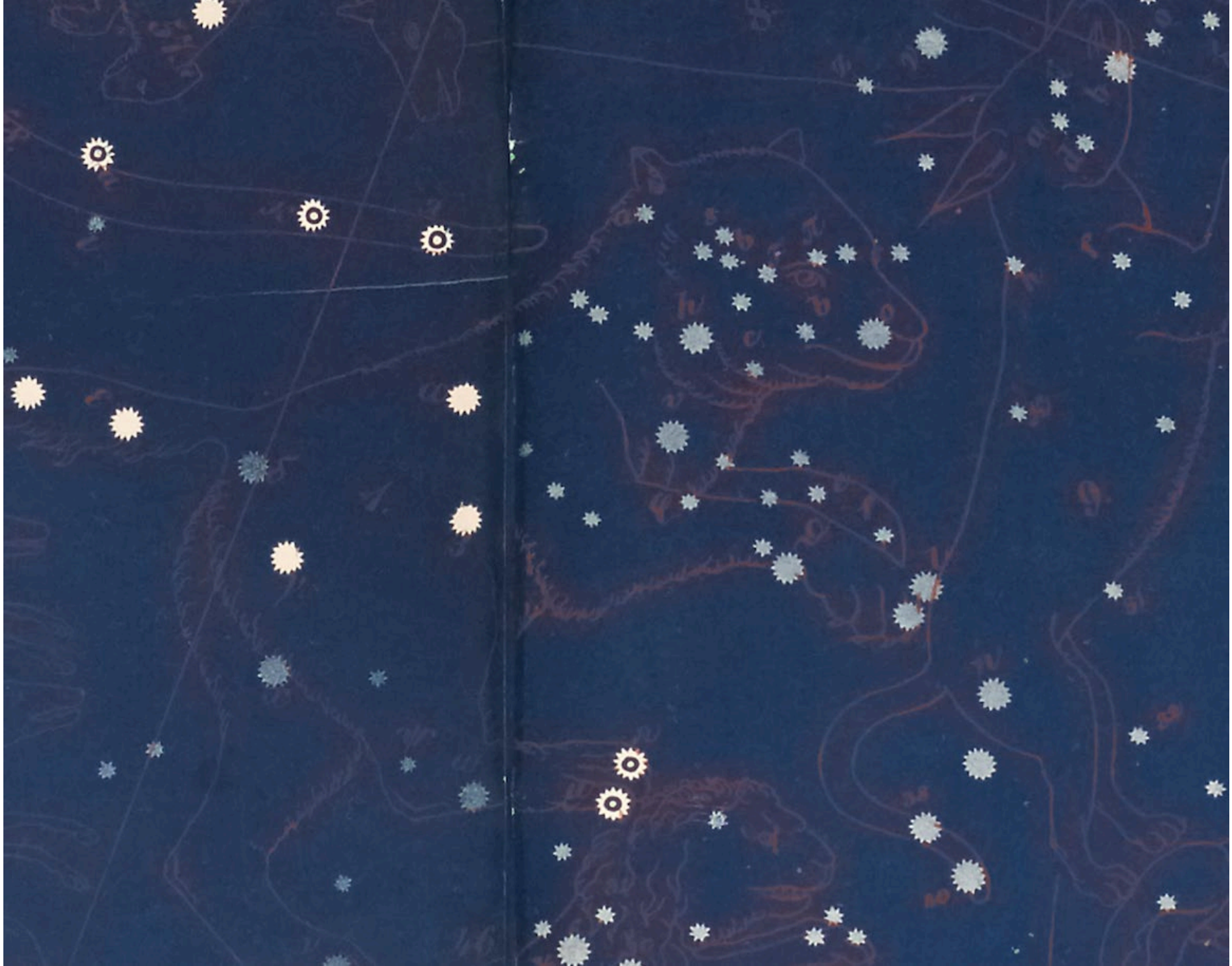


Plate from Friedrich Argelander, Uranometria *Nova* (Berlin, 1843)

Adler Planetarium library



“18 Inch Celestial Globe/ W. & K. Johnston/ Limited / Edinburgh & London”, c. 1879
Adler Planetarium collections A-47

BONNER DURCHMUSTERUNG

DES NÖRDLICHEN HIMMELS

Erster Band

(Bonner Beobachtungen Band III)

enthaltend die Sternörter von —2° bis +20° Decl. für 1855.0

unter Mitwirkung von E. Schönfeld und A. Krüger

auf der Königlichen Sternwarte zu Bonn beobachtet und berechnet

von

F. ARGELANDER

Direktor der Sternwarte

Zweite berichtigte Auflage

unter Mitwirkung von F. Deichmüller

bearbeitet von

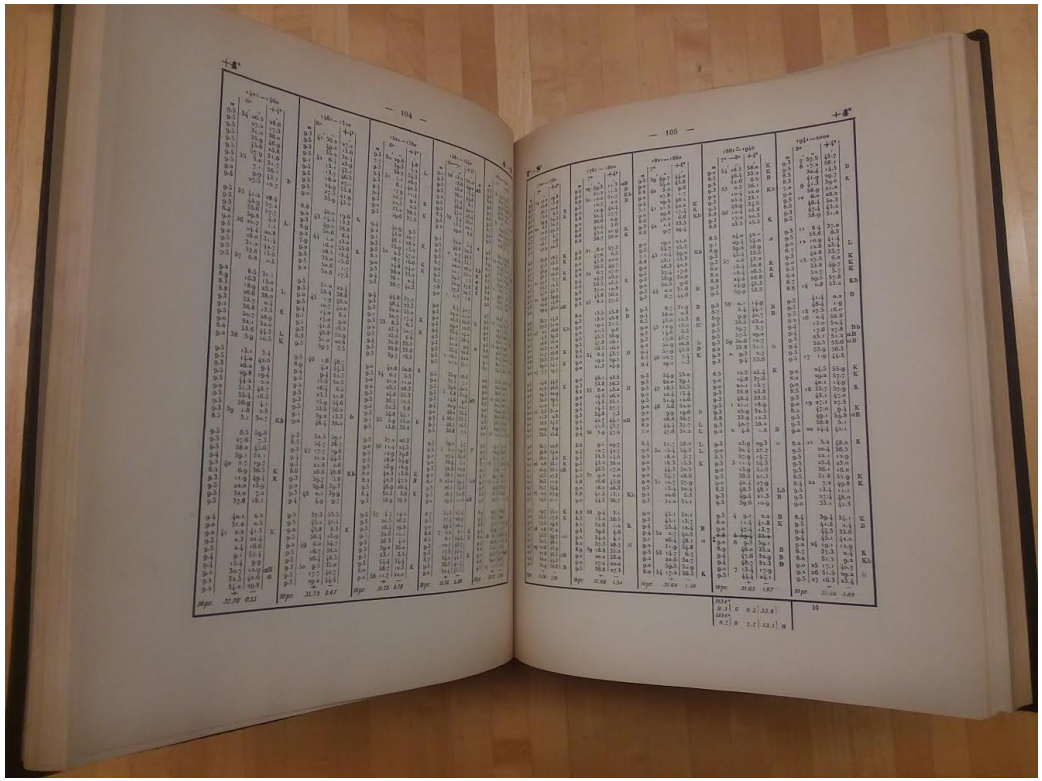
F. KÜSTNER

Direktor der Sternwarte

Bonn

A. Marcus und E. Weber's Verlag

1903

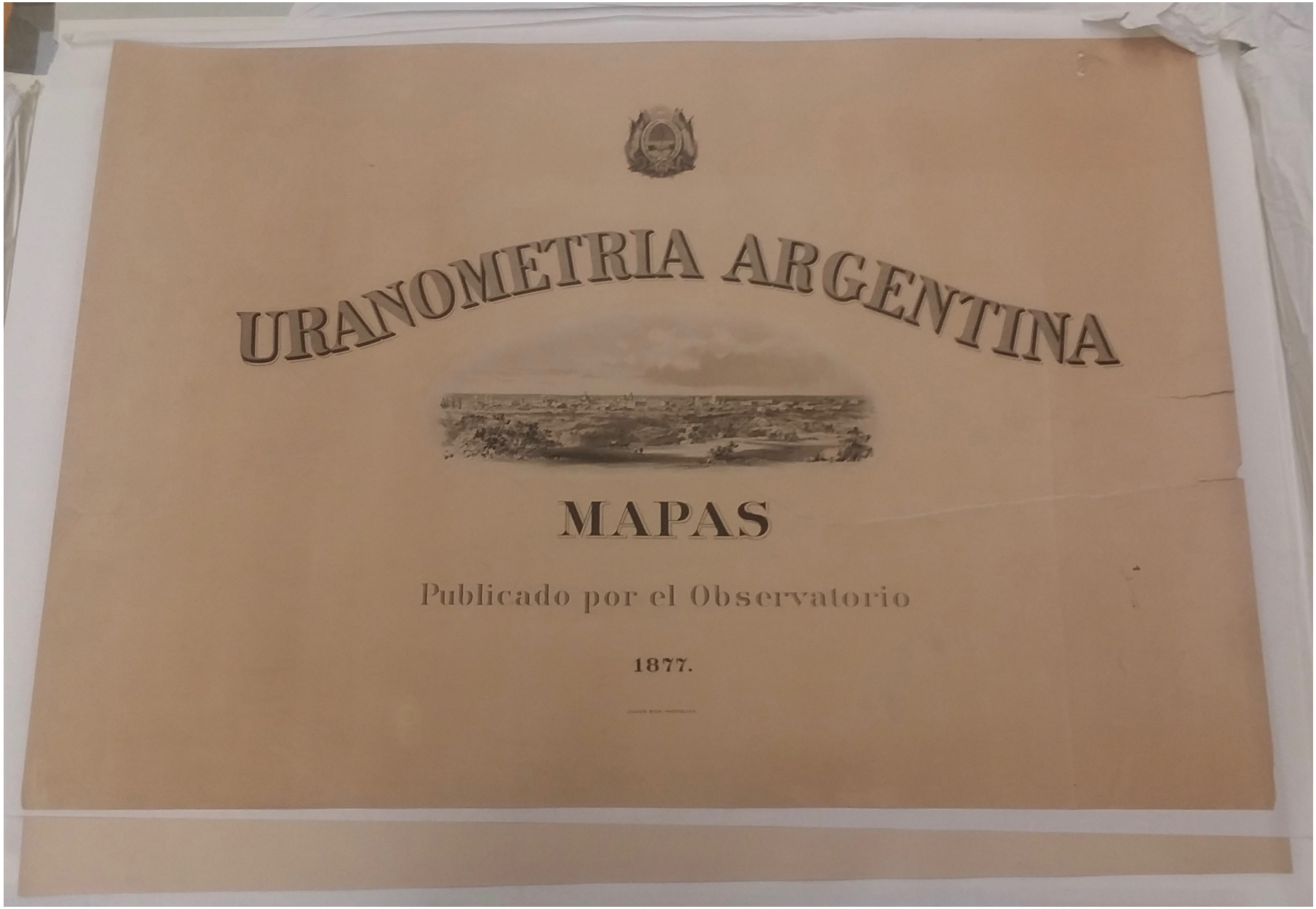


Bonner Durchmusterung des nördlichen Himmels: unter Mitwirkung von E. Schönfeld und A. Krüger auf der Königlichen Sternwarte zu Bonn / beobachtet und berechnet von F. Argelander (Bonn, 1903) Adler Planetarium QB6 .B62 v.1

Carlos de Chapeaurouge, Buenos Aires, 1901
David Rumsey Map Collection

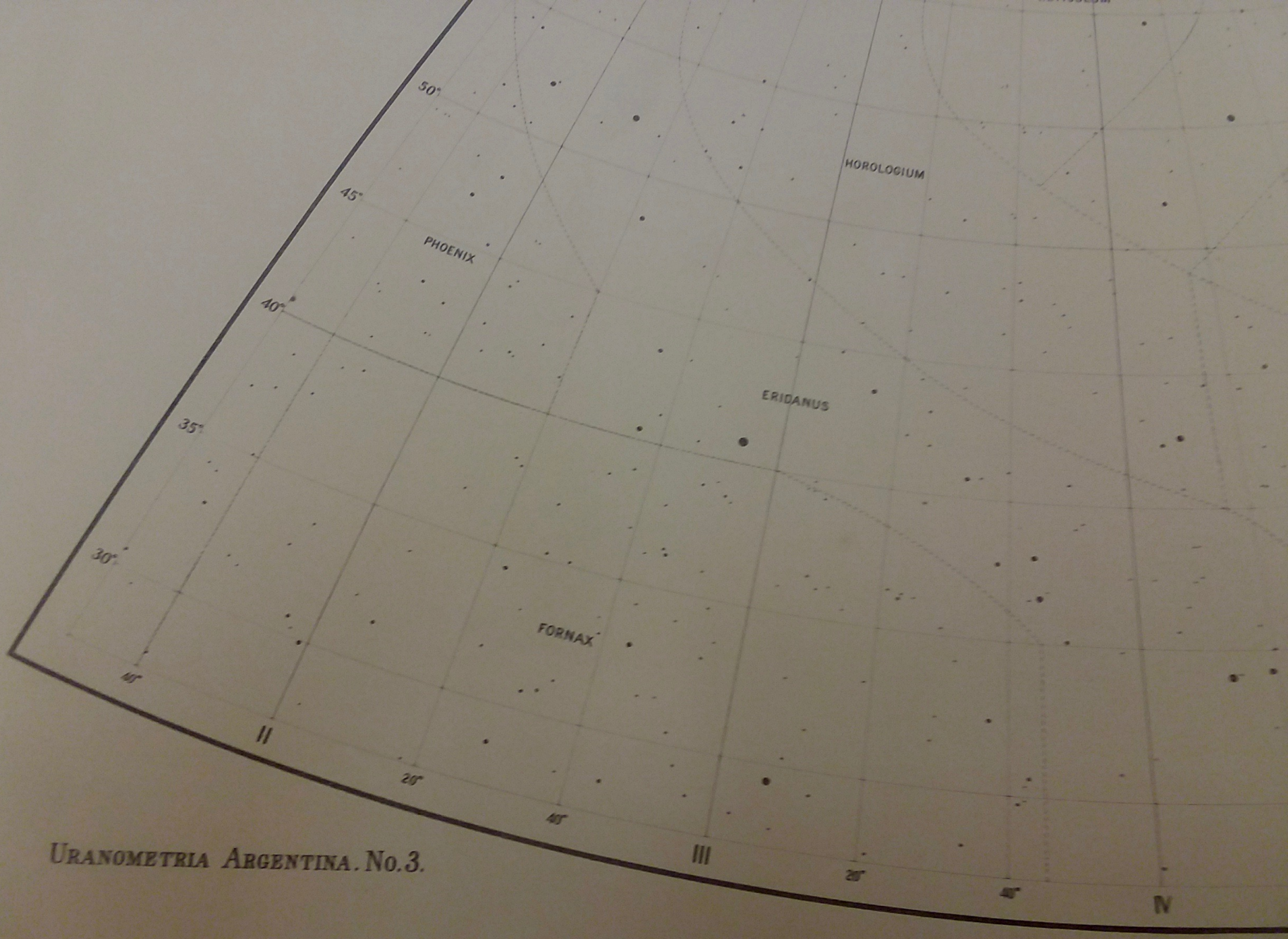
National Argentine Observatory, Córdoba

Benjamin Apthorp Gould
(1824-1896)



Benjamin A. Gould, *Uranometria Argentina: Mapas* (Córdoba, 1877)

Adler Planetarium library QB65 .U736 1877



URANOMETRIA ARGENTINA. No. 3.

IAU INTERNATIONAL ASTRONOMICAL UNION

Eugène Joseph Delporte (1882 -1955)

INTERNATIONAL ASTRONOMICAL UNION

DÉLIMITATION SCIENTIFIQUE DES CONSTELLATIONS

(TABLES ET CARTES)

par

E. DELPORTE

Being the Report of
Commission III
1930

Cep = Cepheus* (1 N, 2 N, 7 N)

Méridien de 20 h. 0 m. de 59° 30′ à 61° 30′	Draco
Parallèle de 61° 30′ de 20 h. 0 m. à 20 h. 25 m.	
Méridien de 20 h. 25 m. de 61° 30′ à 67° 0′	
Parallèle de 67° 0′ de 20 h. 25 m. à 20 h. 40 m.	
Méridien de 20 h. 40 m. de 67° 0′ à 75° 0′	
Parallèle de 75° 0′ de 20 h. 40 m. à 20 h. 10 m.	
Méridien de 20 h. 10 m. de 75° 0′ à 80° 0′	
Parallèle de 80° 0′ de 20 h. 10 m. à 21 h. 0 m.	
Méridien de 21 h. 0 m. de 80° 0′ à 86° 0′	
Méridien *suite* de 21 h. 0 m. de 86° 0′ à 86° 10′	Ursa Minor
Parallèle de 86° 10′ de 21 h. 0 m. à 23 h. 0 m.	
Méridien de 23 h. 0 m. de 86° 10′ à 88° 0′	
Parallèle de 88° 0′ de 23 h. 0 m. à 8 h. 0 m.	
Méridien de 8 h. 0 m. de 88° 0′ à 86° 30′	
Méridien *suite* de 8 h. 0 m. de 86° 30′ à 85° 0′	Camelopardalis
Parallèle de 85° 0′ de 8 h. 0 m. à 5 h. 0 m.	
Méridien de 5 h. 0 m. de 85° 0′ à 80° 0′	
Parallèle de 80° 0′ de 5 h. 0 m. à 3 h. 30 m. 30 s.	
Méridien de 3 h. 30 m. 30 s. de 80° 0′ à 77° 0′	
Parallèle de 77° 0′ de 3 h. 30 m. 30 s. à 3 h. 25 m.	
Parallèle *suite* de 77° 0′ de 3 h. 25 m. à 0 h. 20 m.	Cassiopeia
Méridien de 0 h. 20 m. de 77° 0′ à 66° 0′	
Parallèle de 66° 0′ de 0 h. 20 m. à 23 h. 35 m.	
Méridien de 23 h. 35 m. de 66° 0′ à 63° 0′	
Parallèle de 63° 0′ de 23 h. 35 m. à 23 h. 10 m.	
Méridien de 23 h. 10 m. de 63° 0′ à 59° 5′	
Parallèle de 59° 5′ de 23 h. 10 m. à 22 h. 52 m.	
Méridien de 22 h. 52 m. de 59° 5′ à 56° 15′	
Parallèle de 56° 15′ de 22 h. 52 m. à 22 h. 19 m.	Lacerta
Méridien de 22 h. 19 m. de 56° 15′ à 55° 0′	
Parallèle de 55° 0′ de 22 h. 19 m. à 22 h. 8 m.	
Méridien de 22 h. 8 m. de 55° 0′ à 52° 45′	
Parallèle de 52° 45′ de 22 h. 8 m. à 21 h. 58 m.	
Méridien de 21 h. 58 m. de 52° 45′ à 54° 50′	Cygnus
Parallèle de 54° 50′ de 21 h. 58 m. à 20 h. 36 m.	
Méridien de 20 h. 36 m. de 54° 50′ à 60° 55′	
Parallèle de 60° 55′ de 20 h. 36 m. à 20 h. 32 m. 12 s.	
Méridien de 20 h. 32 m. 12 s. de 60° 55′ à 59° 30′	
Parallèle de 59° 30′ de 20 h. 32 m. 12 s. à 20 h. 0 m.	

Cet = Cetus (8 S)

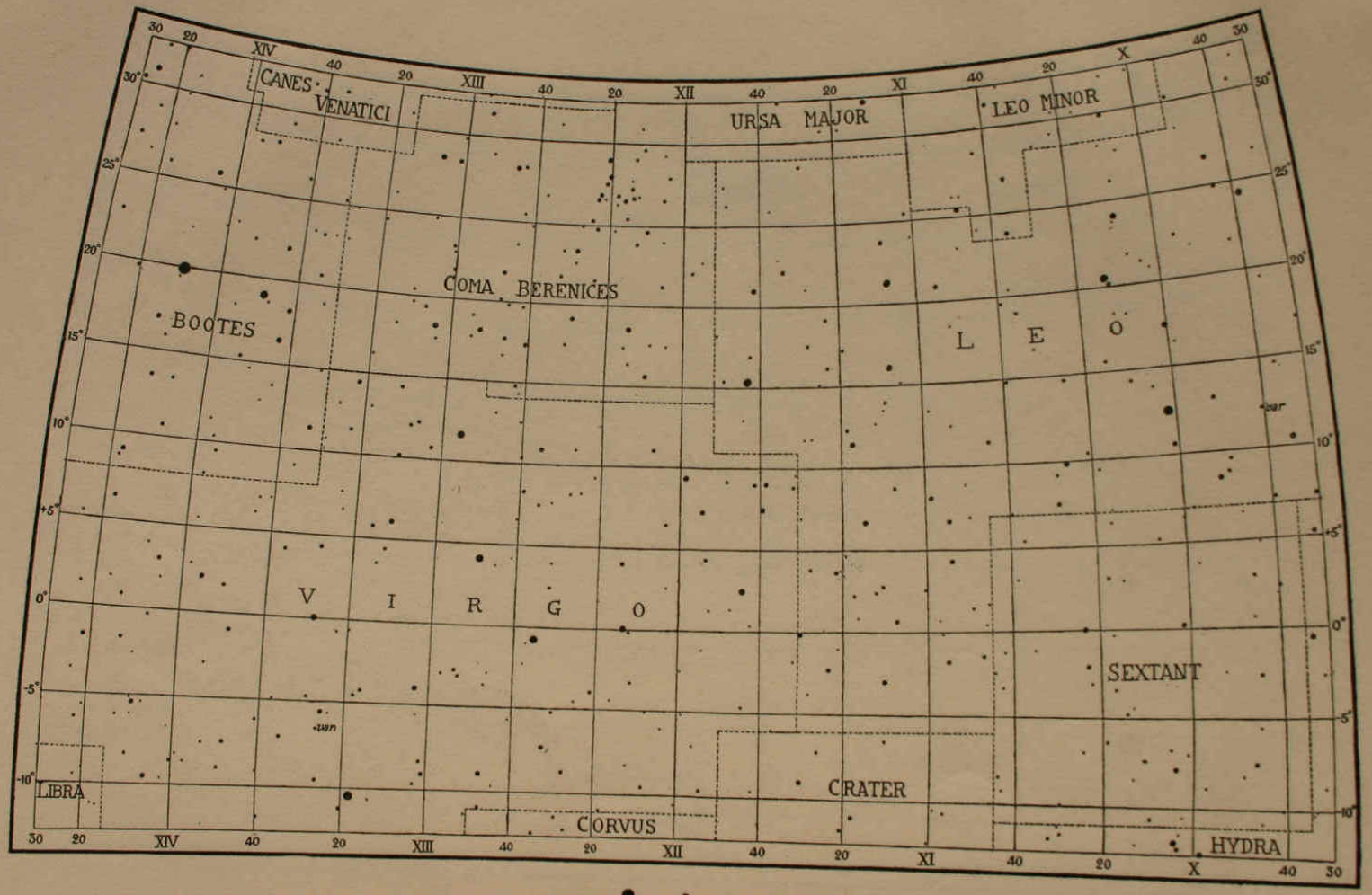
Méridien de 0 h. 20 m. de l'équateur à + 2° 0′	Pisces
Parallèle de 2° 0′ de 0 h. 20 m. à 2 h. 0 m.	
Méridien de 2 h. 0 m. de 2° 0′ à 9° 55′	
Parallèle de 9° 55′ de 2 h. 0 m. à 3 h. 17 m.	Aries
Méridien de 3 h. 17 m. de + 9° 55′ à l'équateur	Taurus

* Note. La variable R Cephei *20 h. 21 m. 18·5 s. + 88° 45′·3* passe à *Ursa Minor*. La variabilité de l'étoile est d'ailleurs mise en doute, et sa position la fait appartenir nécessairement à *Ursa Minor*. Voir à ce sujet Müller et Hartwig.

Parallèle de 63° 0′ de 23 h. 10 m. à 23 h. 35 m.	Cepheus
Méridien de 23 h. 35 m. de 63° 0′ à 66° 0′	
Parallèle de 66° 0′ de 23 h. 35 m. à 0 h. 20 m.	
Méridien de 0 h. 20 m. de 66° 0′ à 77° 0′	
Parallèle de 77° 0′ de 0 h. 20 m. à 3 h. 25 m.	
Méridien de 3 h. 25 m. de 77° 0′ à 68° 0′	Camelopardalis
Parallèle de 68° 0′ de 3 h. 25 m. à 3 h. 6 m.	
Méridien de 3 h. 6 m. de 68° 0′ à 57° 0′	
Parallèle de 57° 0′ de 3 h. 6 m. à 2 h. 26 m.	Perseus
Méridien de 2 h. 26 m. de 57° 0′ à 58° 30′	
Parallèle de 58° 30′ de 2 h. 26 m. à 1 h. 54 m. 30 s.	
Méridien de 1 h. 54 m. 30 s. de 58° 30′ à 57° 30′	
Parallèle de 57° 30′ de 1 h. 54 m. 30 s. à 1 h. 42 m.	
Méridien de 1 h. 42 m. de 57° 30′ à 54° 0′	
Parallèle de 54° 0′ de 1 h. 42 m. à 1 h. 22 m.	
Méridien de 1 h. 22 m. de 54° 0′ à 50° 0′	
Parallèle de 50° 0′ de 1 h. 22 m. à 1 h. 7 m.	Andromeda
Méridien de 1 h. 7 m. de 50° 0′ à 48° 0′	
Parallèle de 48° 0′ de 1 h. 7 m. à 0 h. 52 m.	
Méridien de 0 h. 52 m. de 48° 0′ à 46° 0′	
Parallèle de 46° 0′ de 0 h. 52 m. à 0 h. 10 m.	
Méridien de 0 h. 10 m. de 46° 0′ à 48° 0′	
Parallèle de 48° 0′ de 0 h. 10 m. à 23 h. 35 m.	
Méridien de 23 h. 35 m. de 48° 0′ à 50° 0′	
Parallèle de 50° 0′ de 23 h. 35 m. à 23 h. 20 m.	
Méridien de 23 h. 20 m. de 50° 0′ à 52° 30′	
Parallèle de 52° 30′ de 23 h. 20 m. à 22 h. 52 m.	

Cen = Centaurus (5 S, 6 S)

Méridien de 11 h. 0 m. de − 35° 0′ à − 39° 45′	Antlia
Méridien *suite* de 11 h. 0 m. de − 39° 45′ à − 56° 30′	Vela
Parallèle de − 56° 30′ de 11 h. 0 m. à 11 h. 15 m.	Carina
Méridien de 11 h. 15 m. de − 56° 30′ à − 64° 0′	
Parallèle de − 64° 0′ de 11 h. 15 m. à 11 h. 50 m.	Musca
Méridien de 11 h. 50 m. de − 64° 0′ à − 55° 0′	Crux
Parallèle de − 55° 0′ de 11 h. 50 m. à 12 h. 50 m.	
Méridien de 12 h. 50 m. de − 55° 0′ à − 64° 0′	
Parallèle de − 64° 0′ de 12 h. 50 m. à 13 h. 30 m.	Musca
Parallèle *suite* de − 64° 0′ de 13 h. 30 m. à 14 h. 32 m.	Circinus
Méridien de 14 h. 32 m. de − 64° 0′ à − 55° 0′	
Parallèle de − 55° 0′ de 14 h. 32 m. à 14 h. 10 m.	Lupus
Méridien de 14 h. 10 m. de − 55° 0′ à − 42° 0′	
Parallèle de − 42° 0′ de 14 h. 10 m. à 14 h. 55 m.	
Méridien de 14 h. 55 m. de − 42° 0′ à − 29° 30′	
Parallèle de − 29° 30′ de 14 h. 55 m. à 12 h. 35 m.	Hydra
Méridien de 12 h. 35 m. de − 29° 30′ à − 33° 0′	
Parallèle de − 33° 0′ de 12 h. 35 m. à 12 h. 15 m.	
Méridien de 12 h. 15 m. de − 33° 0′ à − 35° 0′	
Parallèle de − 35° 0′ de 12 h. 15 m. à 11 h. 0 m.	

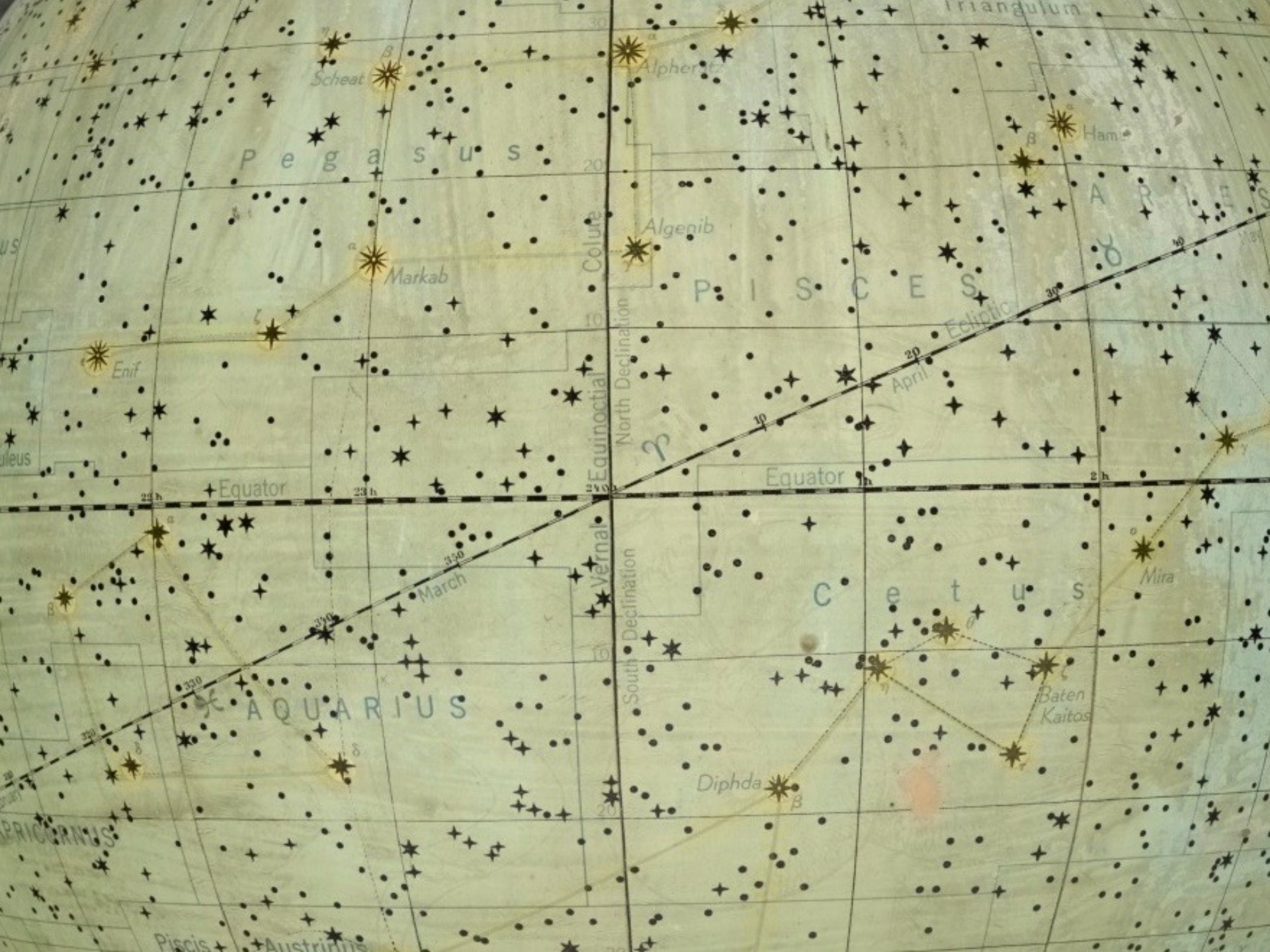


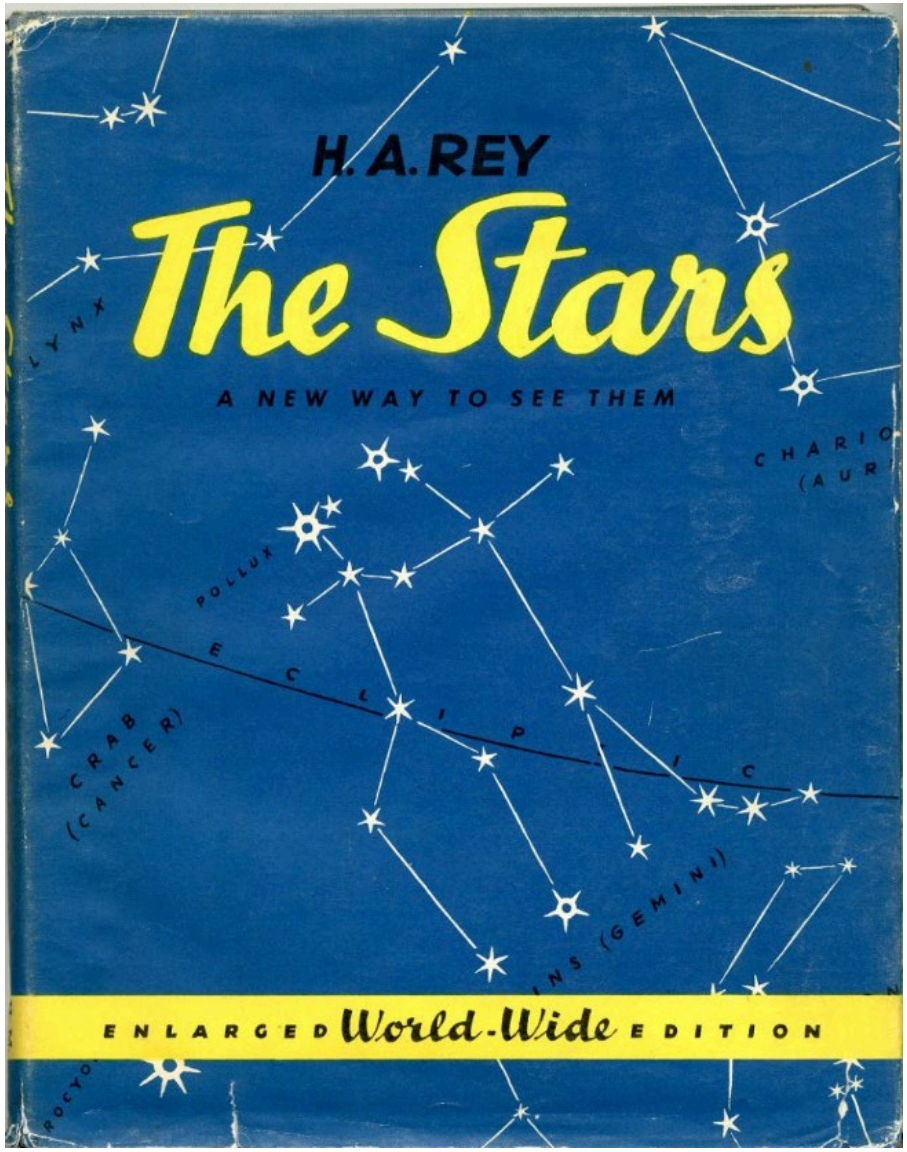
Grandeur des Etoiles 0 1 2 3 4 5 6

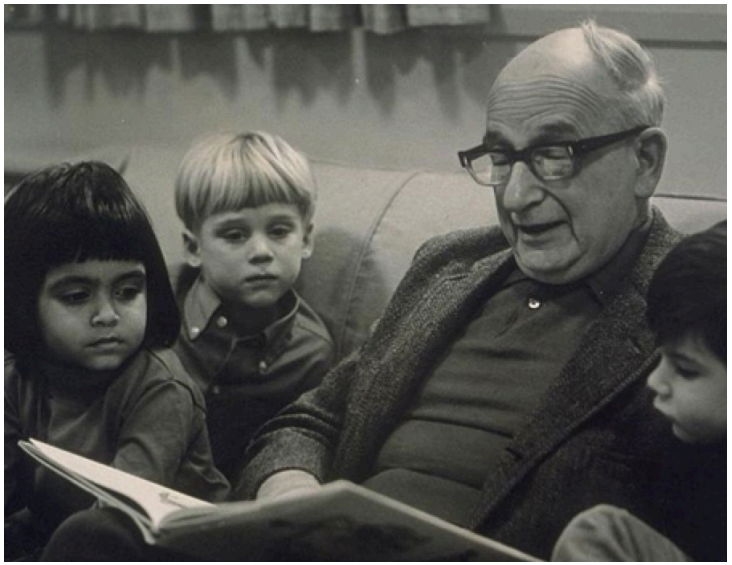
N II

Denoyer-Geppert Company, Chicago, C. 1930

Adler Planetarium collections G-31


Triangulum
Scheat
Alpheratz
Ham
Pegasus
Algenib
Markab
Colure
PISCES
Ecliptic
Enif
April
North Declination
Equinoctial
Equator
Equator
Vernal
March
South Declination
Mira
Cetus
AQUARIUS
Baten Kaitos
Diphda
Piscis Austrinus





H. A. Rey (1898- 1977)

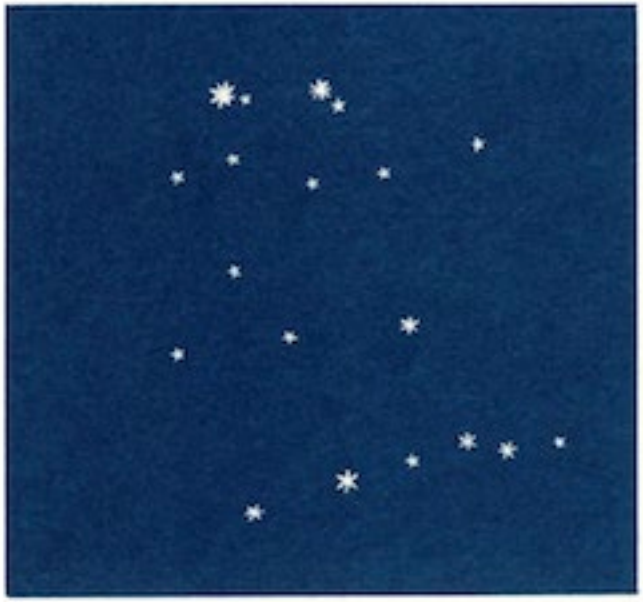
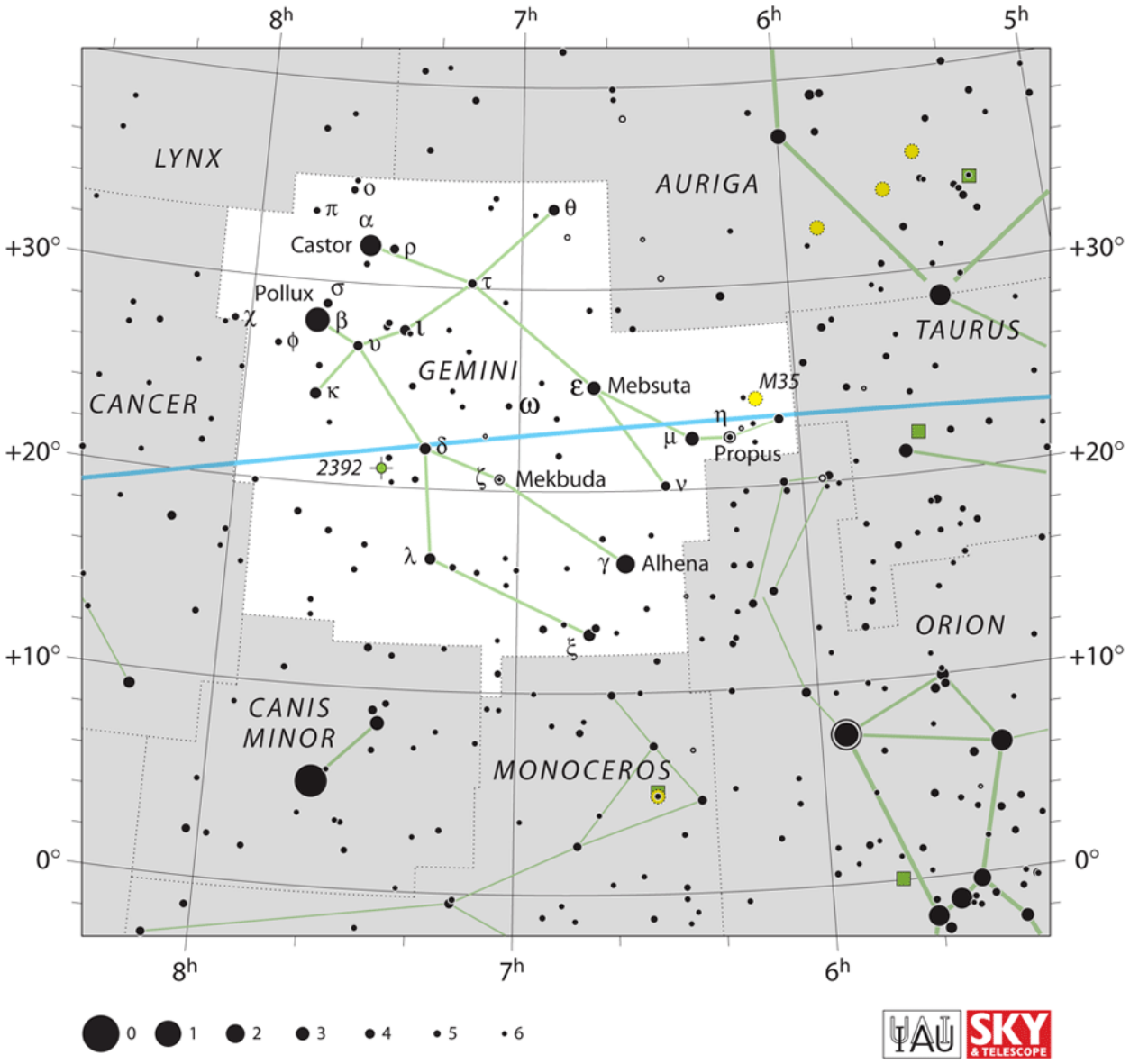


Figure 1: The Twins—A Group of Stars

Figure 2: The Twins—Allegorical

Figure 3: The Twins—Geometrical

Figure 4: The Twins—Graphic



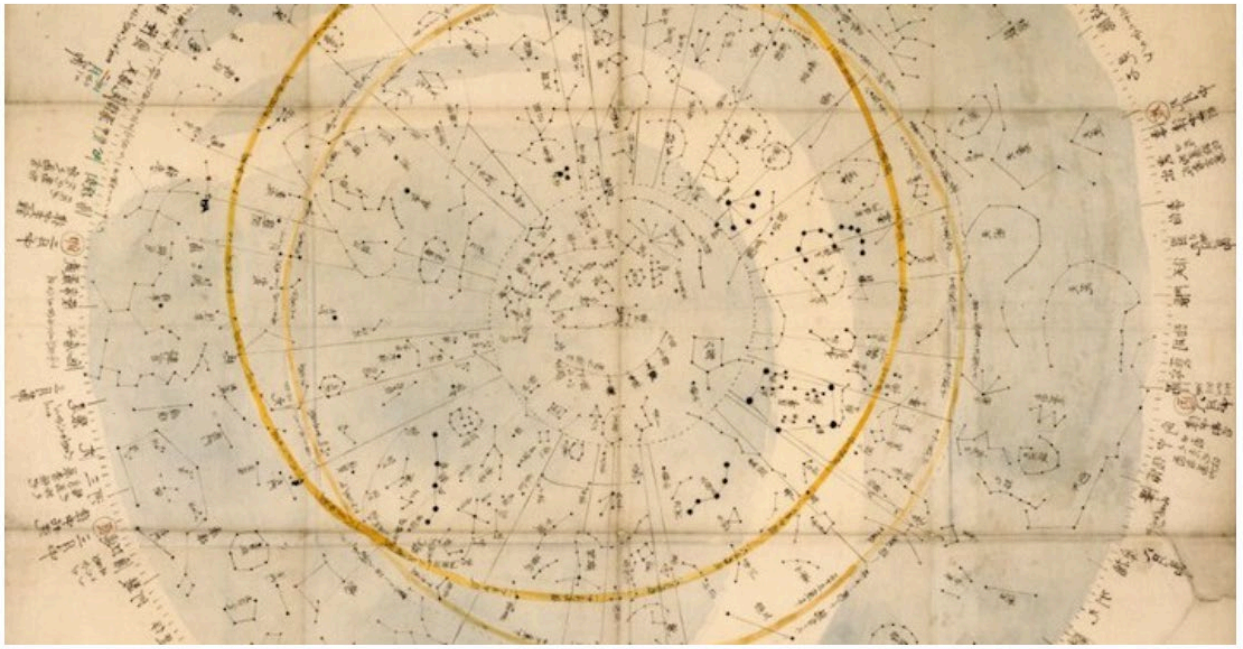
Alan MacRobert/IAU/Sky & Telescope

https://www.iau.org/static/public/constellations/gif/GEM.gif

Grace Wolf-Chase, PhD
Astronomer, Adler Planetarium

"I use celestial coordinate systems to locate astronomical objects just as you would pinpoint a location on Earth by its longitude and latitude, but **I think of the constellations the way I think about states or countries on a map** (…) **when I consider my relatives across the Atlantic, what comes to mind is "Germany", not their geographical coordinates.**

Similarly, I fondly think of the constellation "Monoceros" as the "home" of the star-forming region I studied to get my Ph.D. I think these designations enrich the science by facilitating a **deeper way of connecting to the cosmos**."

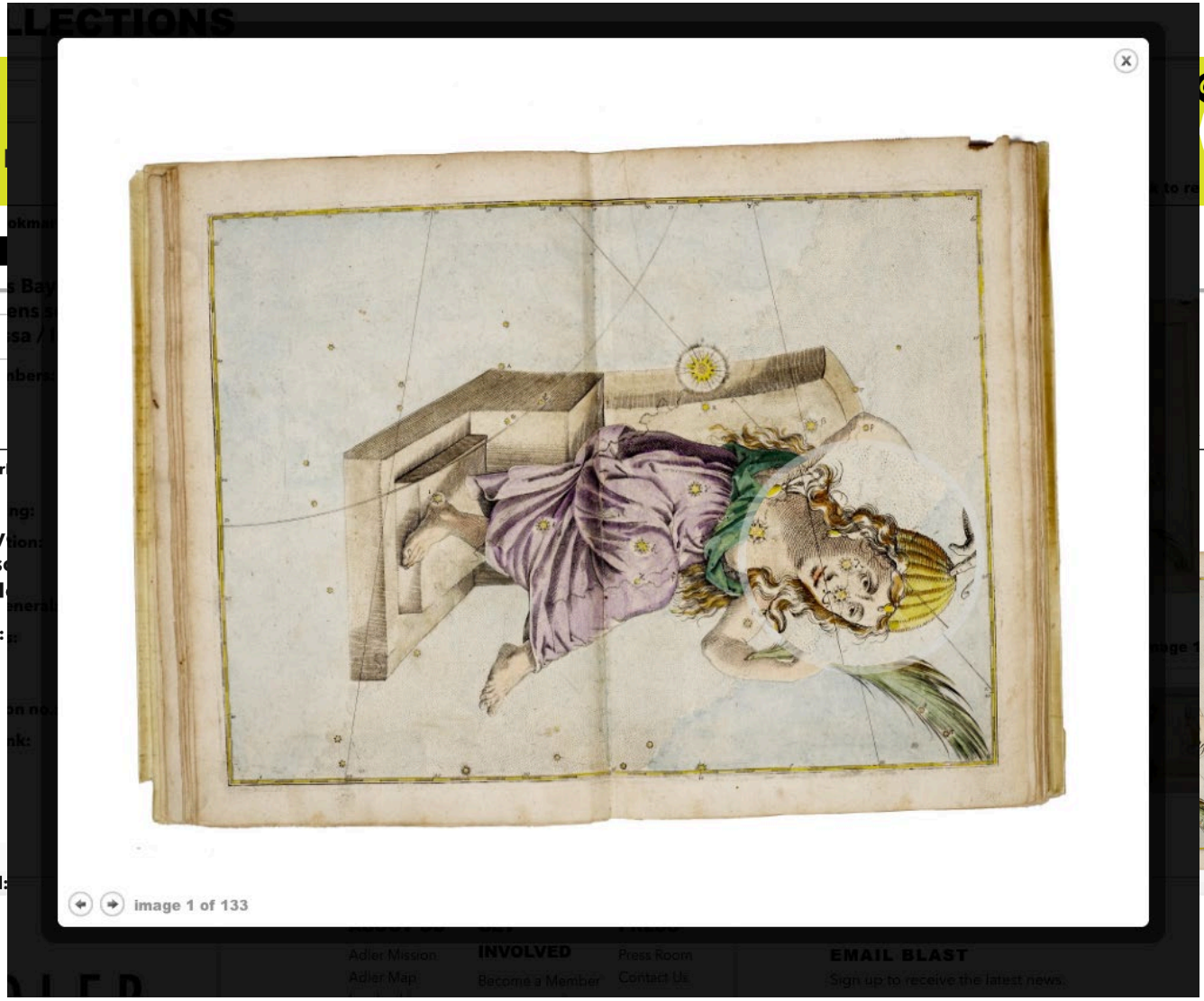


Celestial Cartography Digitization

The Webster Institute is currently working on a celestial cartography digitization project, part of the Collections Access Initiative to bring Adler collections to the broadest possible audience. Through 2017, staff will digitize and create metadata for approximately 6000 celestial maps. The project includes more than 227 rare books and atlases, containing over 1,000 star charts; 97 works on paper; 58 objects from the scientific instrument collection; and the Carte du Ciel collection of approximately 3,750 prints. Dating from the fifteenth through twentieth centuries, the Adler's celestial cartography focuses on European astronomy, but also includes significant examples from China and the Islamic world. The images will be available online in the Adler Collections Catalog.

The Celestial Cartography Digitization Project has been made possible in part by a major grant from the National Endowment for the Humanities: Celebrating 50 Years of Excellence.

7987 distinct images processed from 521 objects: 262 rare books, 97 works on paper, 64 scientific instruments, and the Carte Du Ciel collection

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Constellation Boundaries
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Equatorial Grid
Galactic Grid
AltAz Grid
Ecliptic Grid
Ecliptic Overview
Precession Chart
2d Sky
Show Solar System
3d Solar System
Milky Way (Dr. R. Hurt)
Stars (Hipparcos, ESA)
Planets (NASA, ETAL)
Planetary Orbits
Moon & Satellite Orbits
Asteroids (IAU MPC)
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Multi-Res Solar System Bo...
American Astronomical Society
WorldWide Telescope
Welcome to the WorldWide Telescope Web Client
Move around the sky by clicking and dragging the Field of View.
Zoom in/out by scrolling the mouse wheel, pressing -/+ or Page Up/Page Down.
Drag with center mouse button or hold Ctrl while dragging to rotate and tilt view.
Right-click an object to display the contextual Finder Scope for more information.
Menu Tabs have two parts: click the tab's top to open a pane, click the tab's bottom to open submenus with additional functionality.
Home Page Update
We have moved our home page to worldwidetelescope.org/home. The web client (this page) is now the default landing page for WWT on the web. You can open the home page by clicking the home (🏠) icon in the top-left corner.
To return to this screen, click the Explore menu and choose Show Welcome Tips.
Show the web client as WWT landing page
Do not show me this dialog again
Tour WWT Features
Close
Look At
Sky
Imagery
Digitized Sky Survey (Color)
1 of 64
N
Ursa Minor
60:00:00
RA: 00h00m00s
Dec: 00:00:00
Neptune
Supernova Dust
Supernova Dust
CGCG 436-030
NGC 520
Hubble Finds Dark
Searching for Dark
The 'Perfect Spiral'
Knotted Galactic

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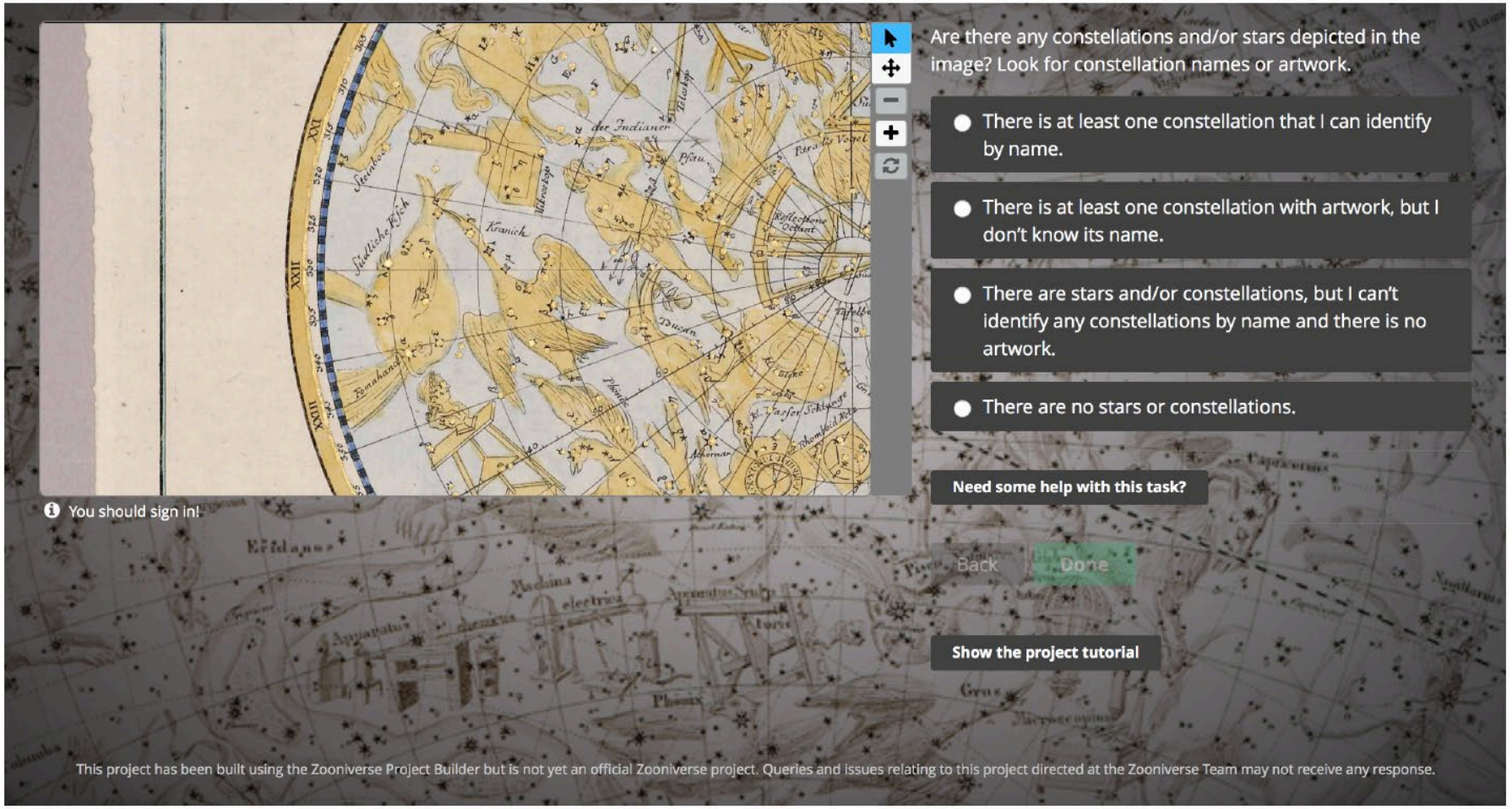
People-powered research

See All Projects

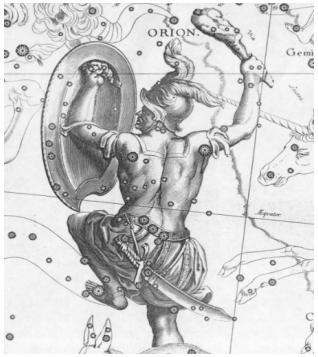
FEATURED PROJECT

Digital Historic Skies project

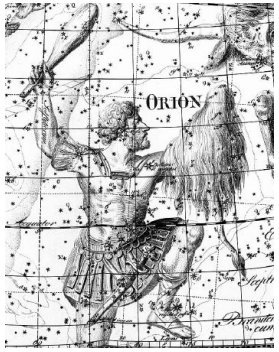
Citizen science interface prototype 0.2



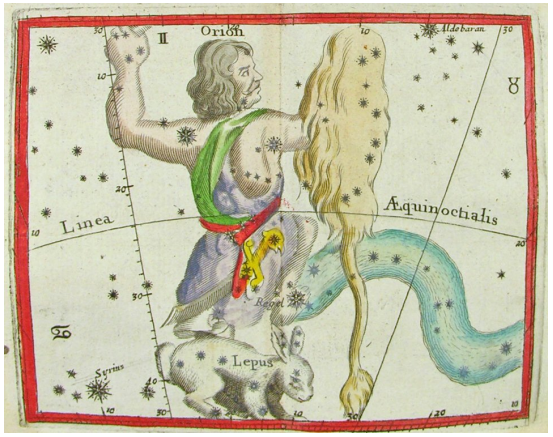
NATIONAL ENDOWMENT FOR THE HUMANITIES FIFTY YEARS


ORION


TAURUS
Orion
Lepus
GEMINI


ORION


Bellatrix


Orion
Aldebaran
Linea
Æquinoctialis
Lepus


THE ATWOOD SPHERE
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of ATWOOD
Adler
Space
Theater