

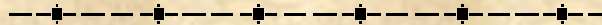
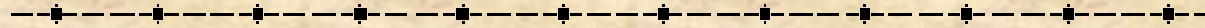


The History of Boyden Observatory

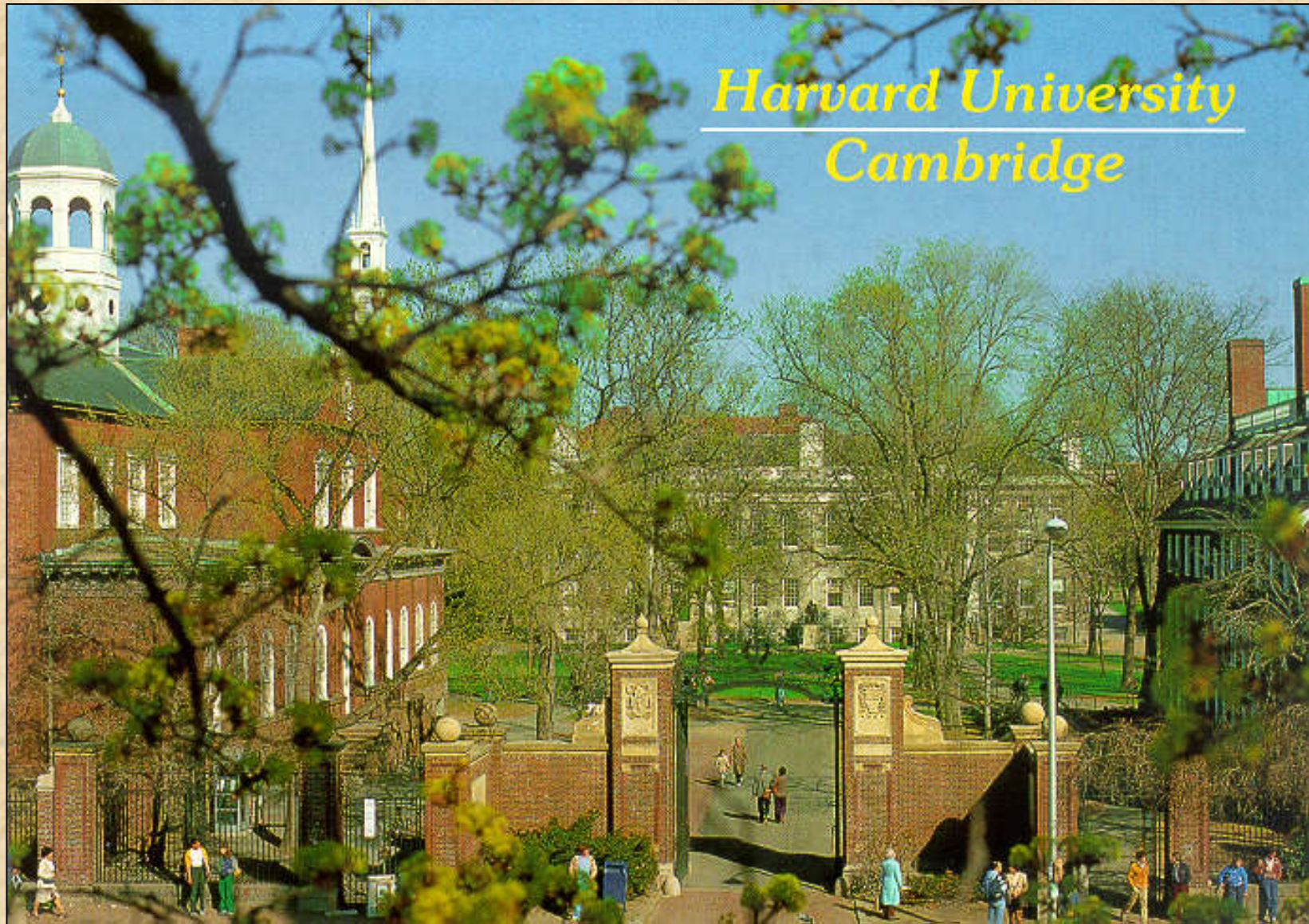
Compiled by
Dawie and Deirdre van Jaarsveldt

2006©

Background



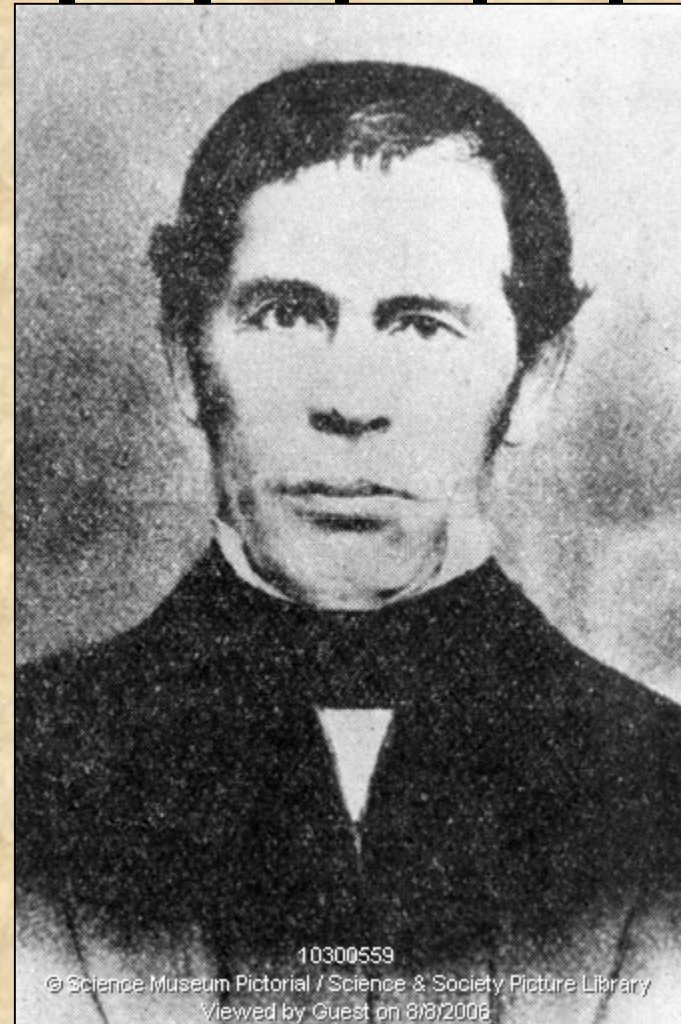
Where it all began ...



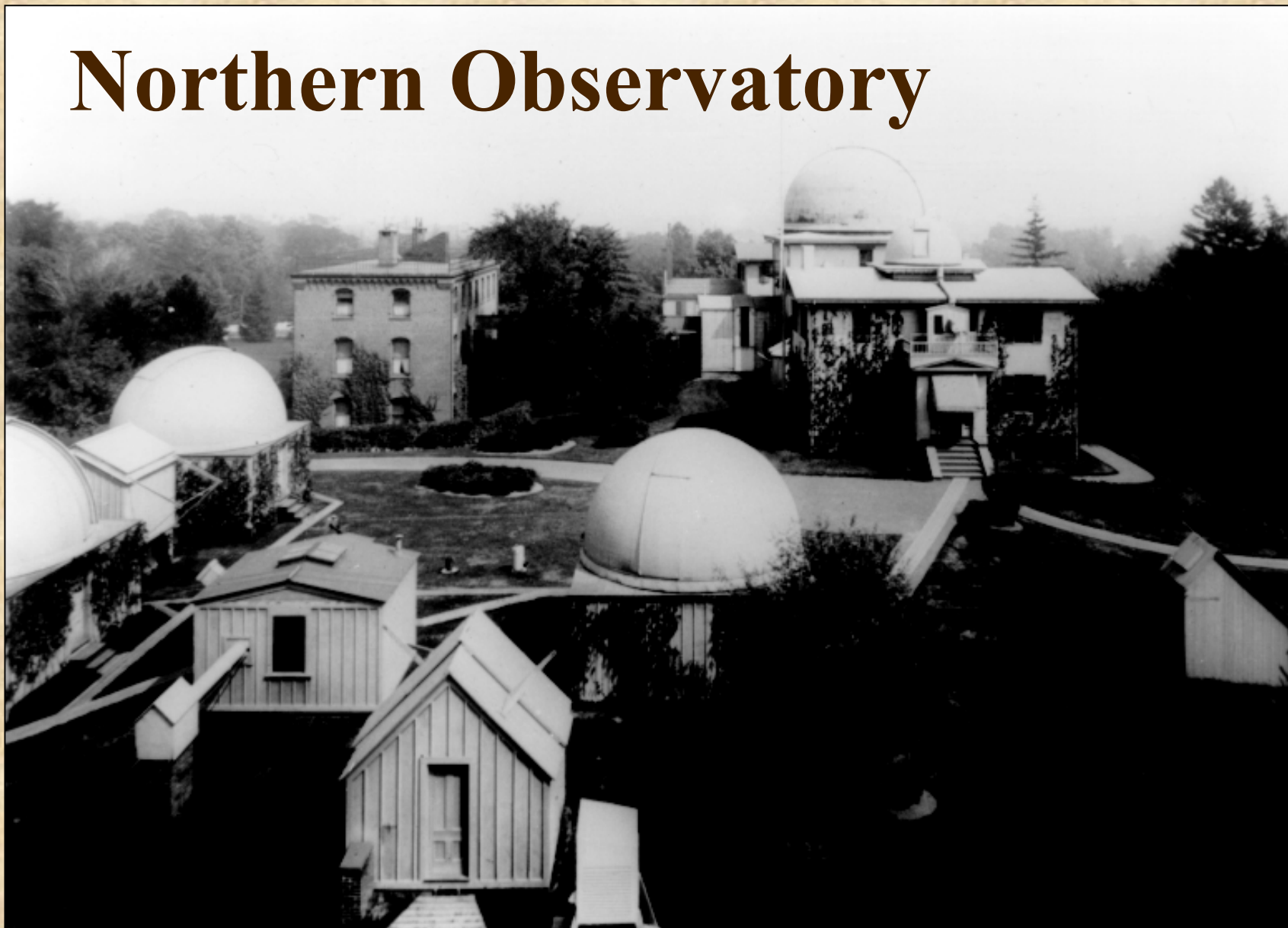
Harvard University
Cambridge

Uriah Boyden

- ✦ Born in 1804 in Massachusetts
- ✦ Mechanical engineer in Boston
- ✦ Received an honorary degree from Harvard University in 1853
- ✦ Died on 17 October 1879
- ✦ Left a sum of \$238 000 for an observatory at a high altitude

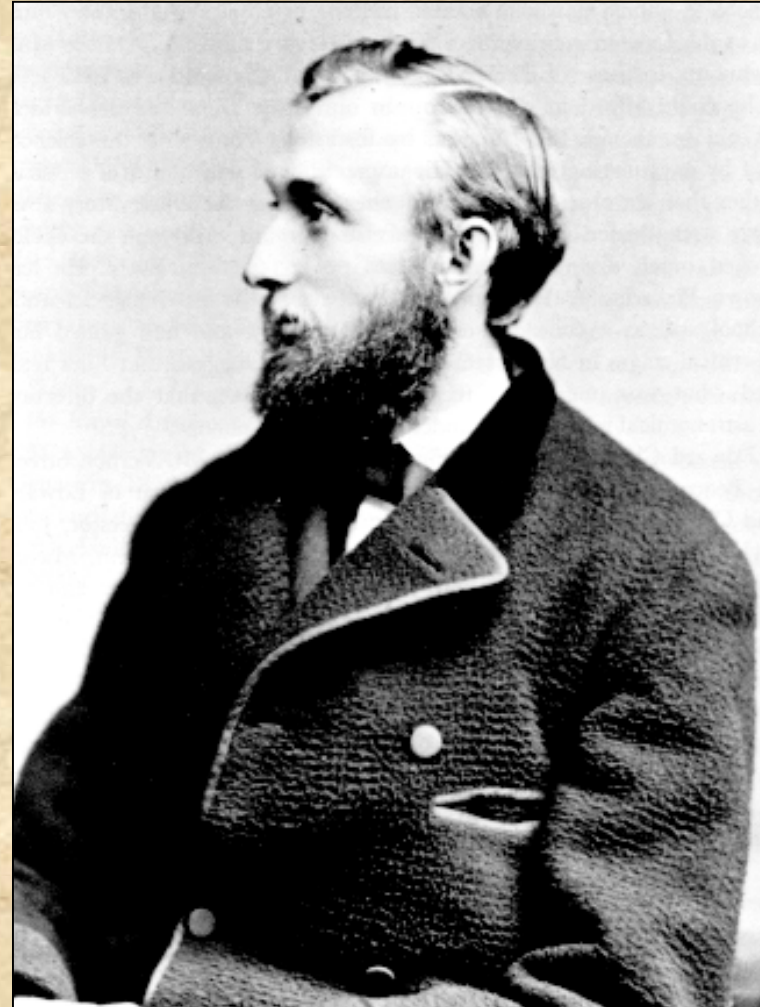


Northern Observatory



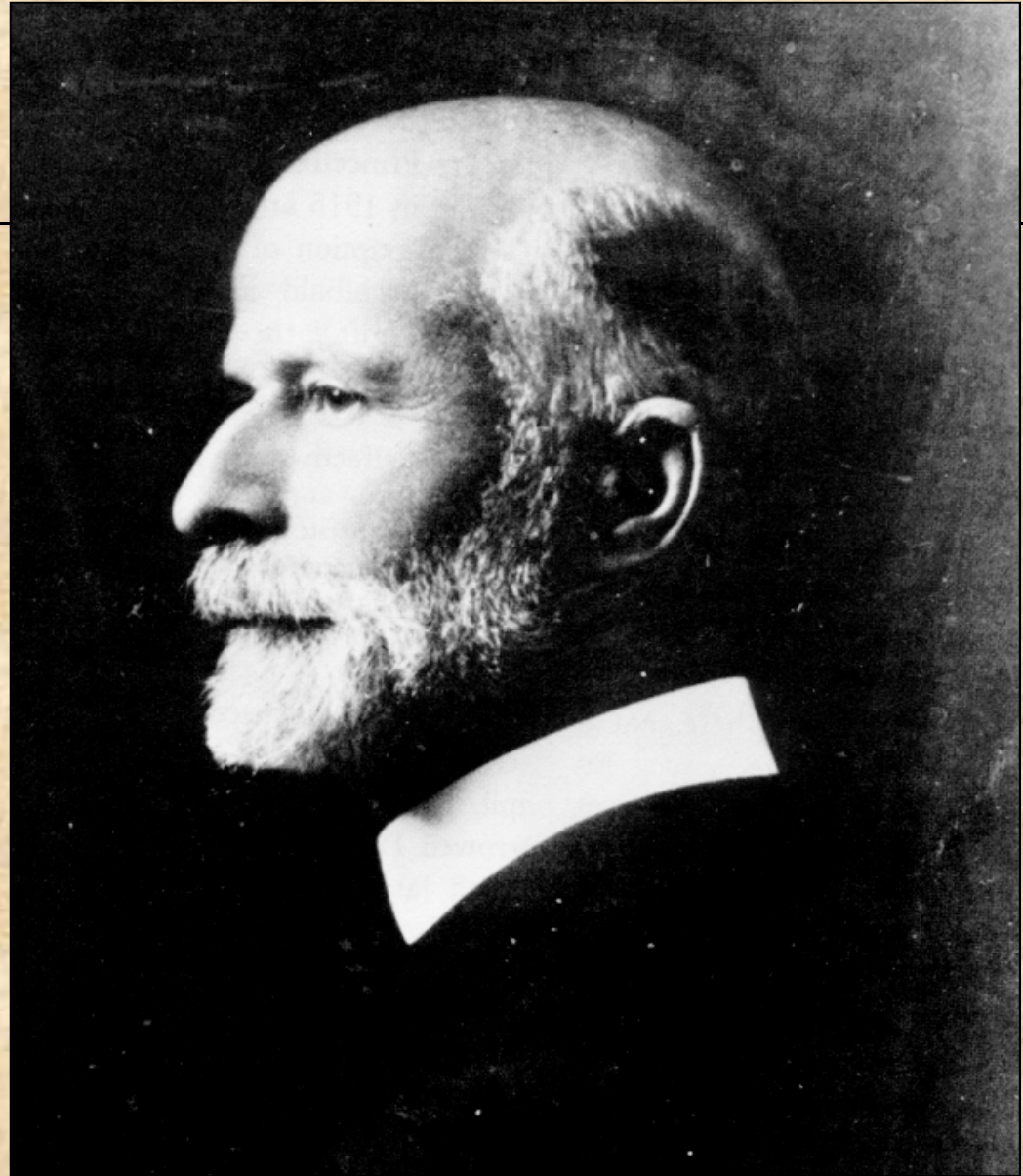
Prof. Edward Pickering:

- ✦ Director of Harvard Observatory
- ✦ Decided to build an observatory in the Southern Hemisphere

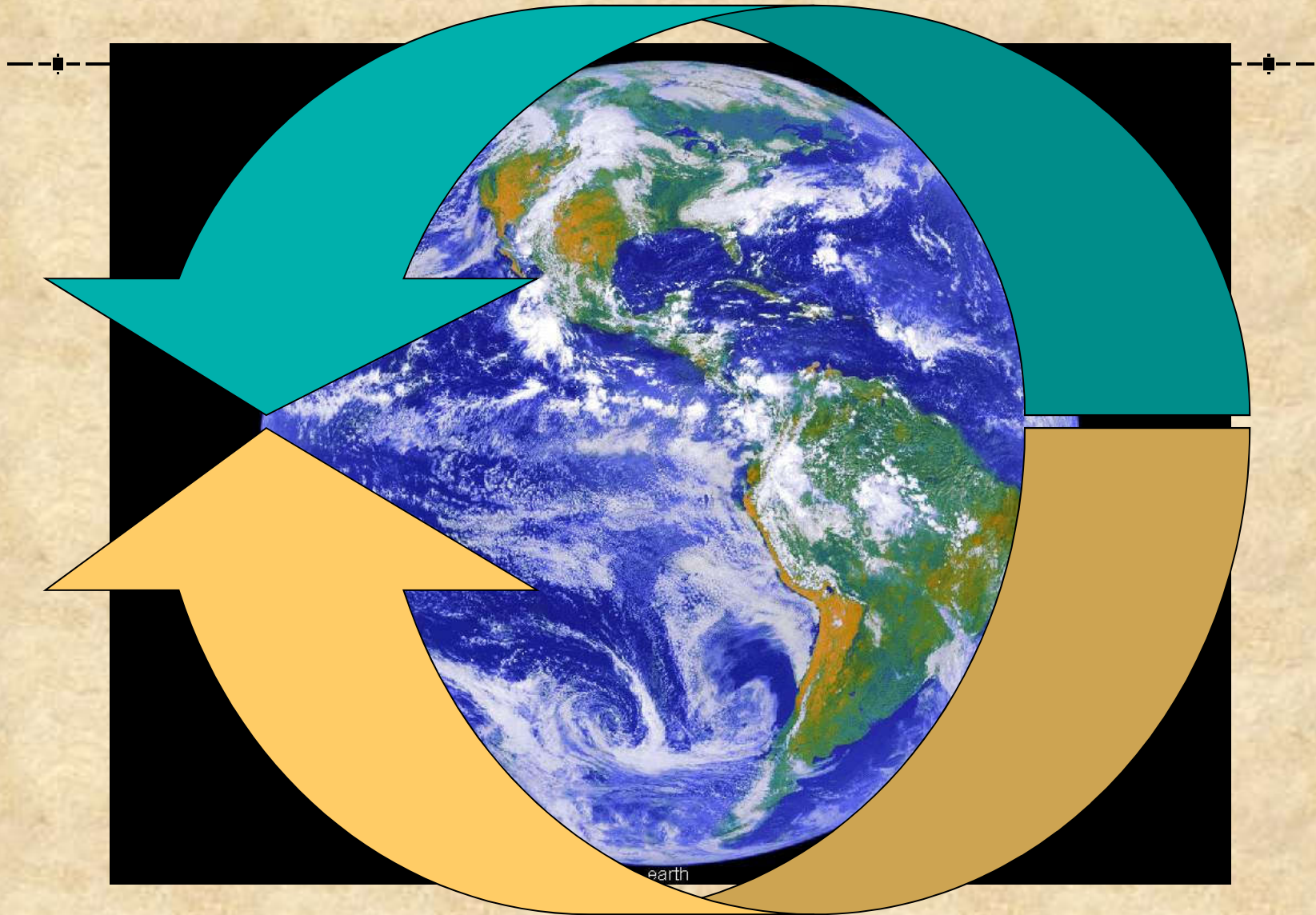


— — — — —

**Prof.
Solon
Bailey**

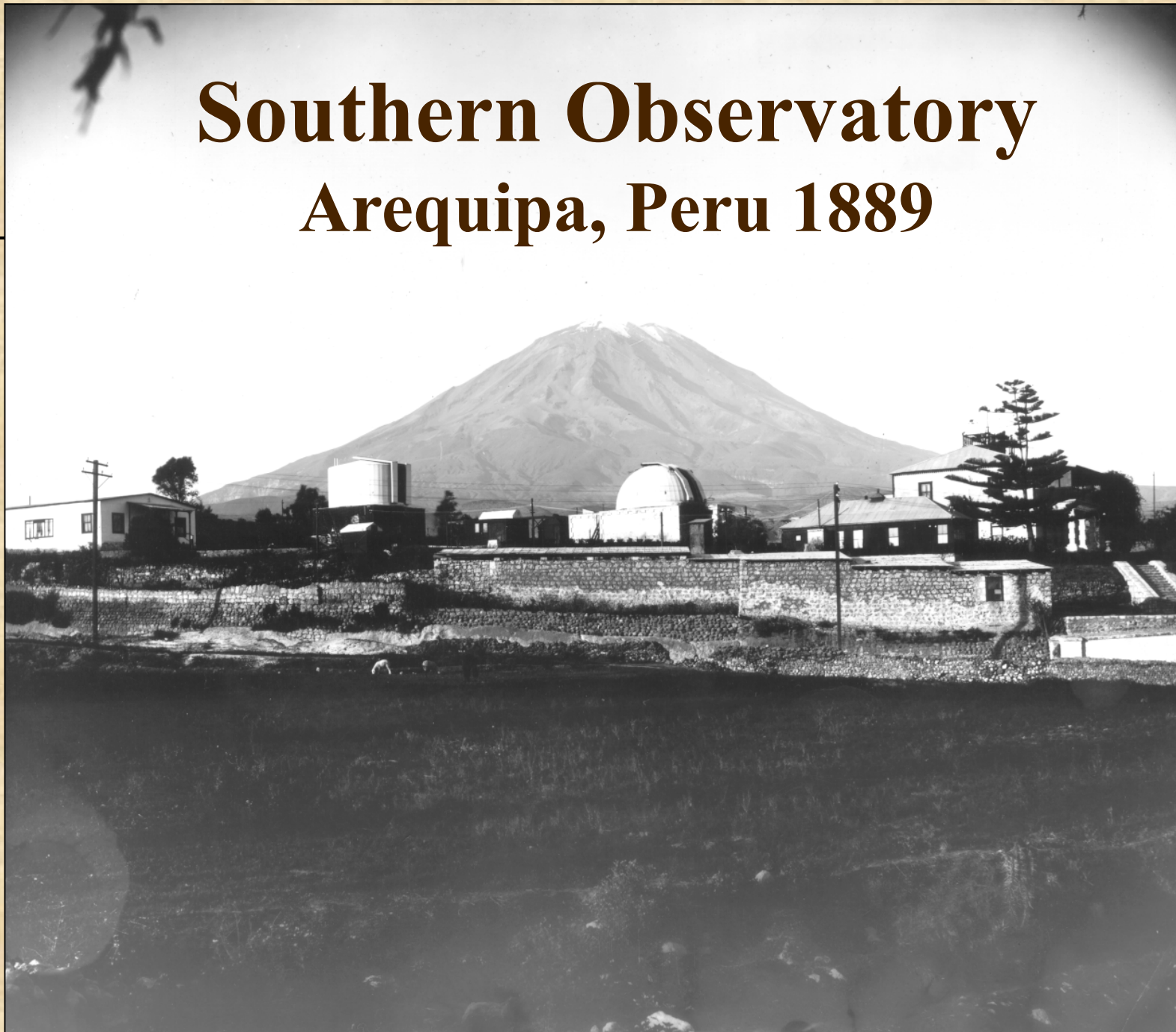


Why the Southern Hemisphere?



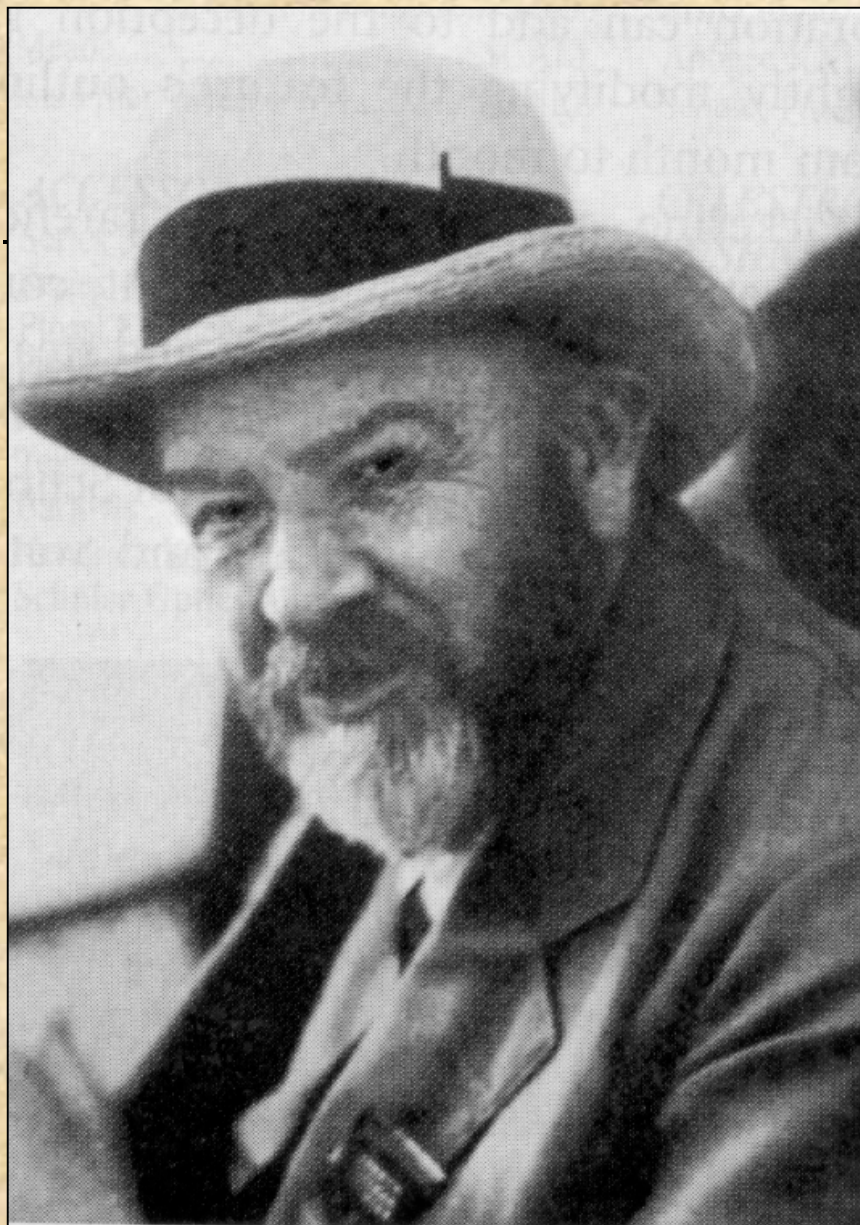
Southern Observatory

Arequipa, Peru 1889

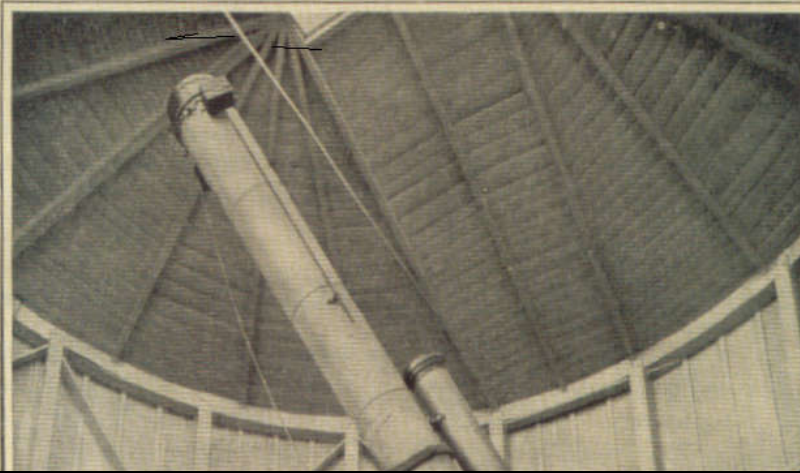


—♦—♦—♦—♦—♦—♦—♦—♦—♦—

William Pickering

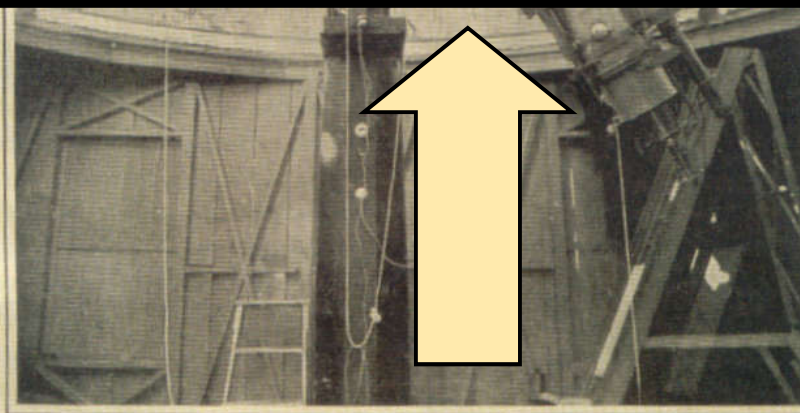


OUR PLANET NEIGHBORS



TELESCOPE, HARVARD OBSERVATORY, AREQUIPA, PERU

Arequipa is about 8,000 feet above the sea and is a great observation point from which to photograph the heavens. The photographic outfit here is one of the largest and most powerful in the world.

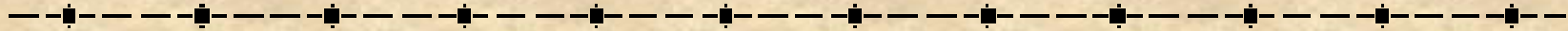


TELESCOPE, HARVARD OBSERVATORY, AREQUIPA, PERU

Arequipa is about 8,000 feet above the sea and is a great observation point from which to photograph the heavens. The photographic outfit here is one of the largest and most powerful in the world.

TOM COBBINS

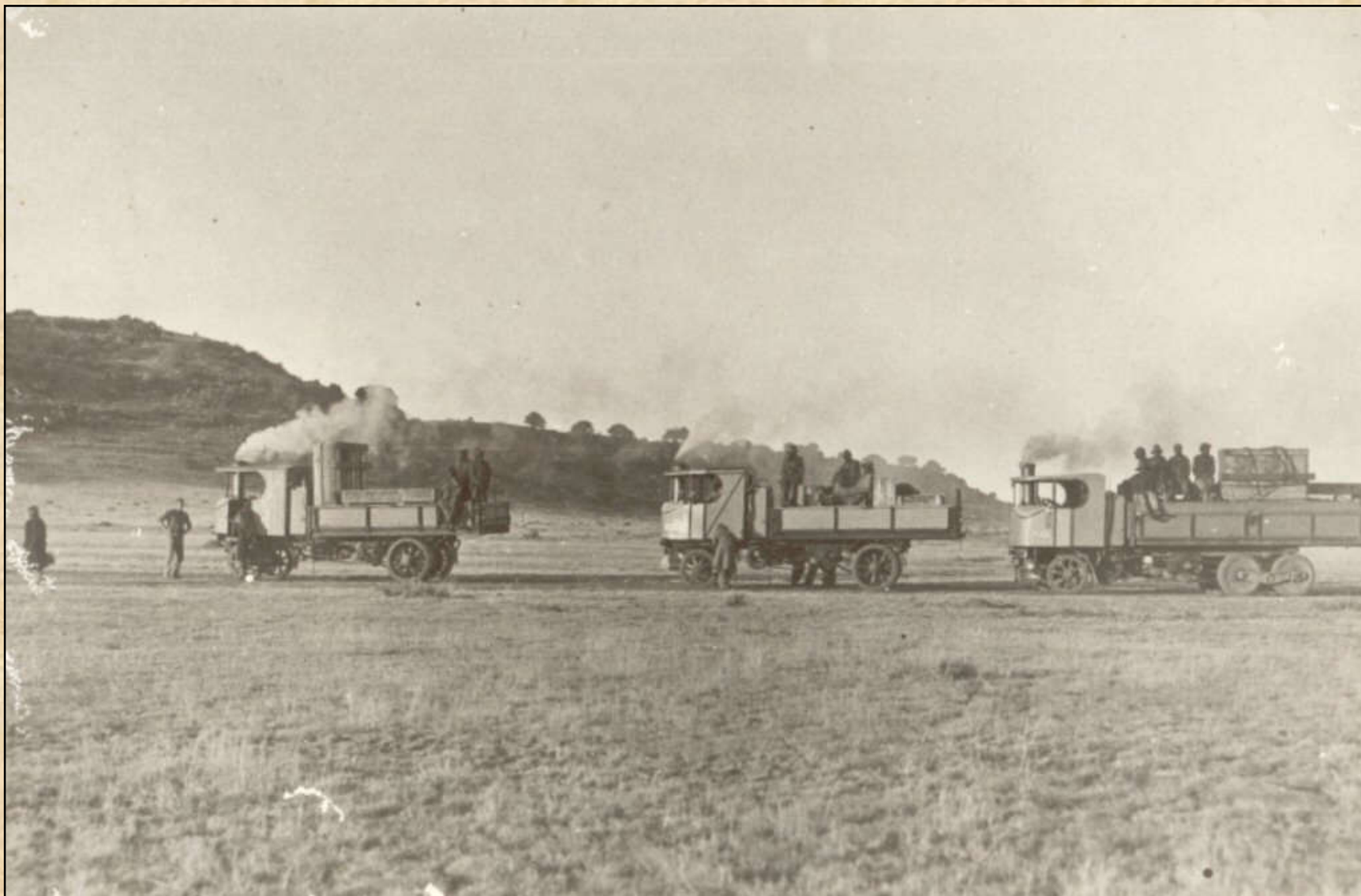
Cloudy weather spoils observation



**Dr.
Harlow
Shapley**

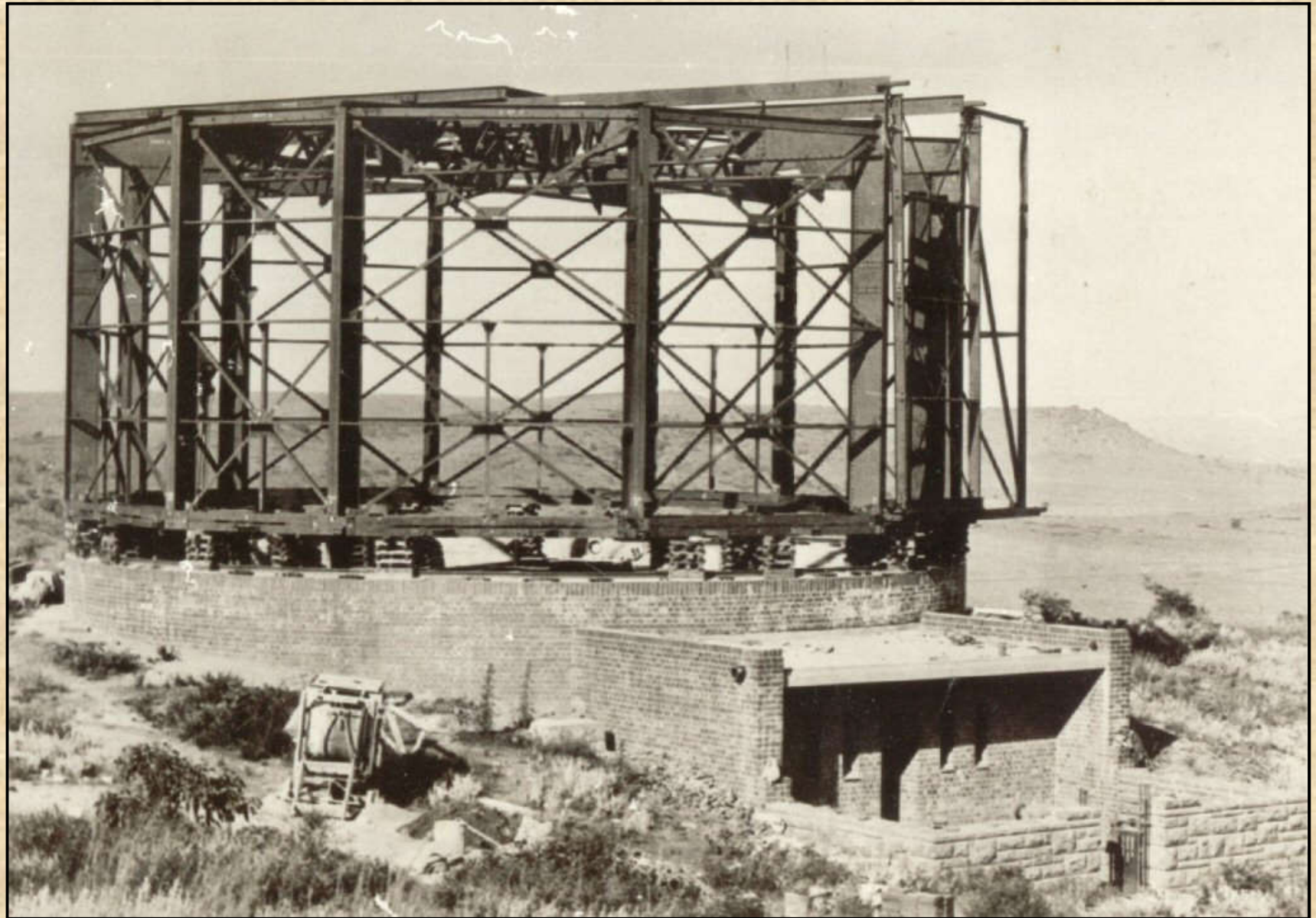


The Trek (1927)...



The Construction...





Prof. Paraskevopoulos

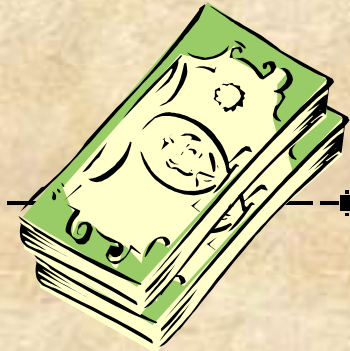




The Paraskevopoulos Crater



Financial Responsibility



✦ 1927: Harvard University

✦ 1955: International Boyden Council

[First observatory to receive international sponsorship this council, founded on the recommendation of Dr. Eric Lindsay (Armagh observatory) and Prof. Herman Brück (Dunsink observatory)]

✦ 1976: University of the Free State

— — — — —

**Dr. Eric
Lindsay
(International
Boyden
Council)**

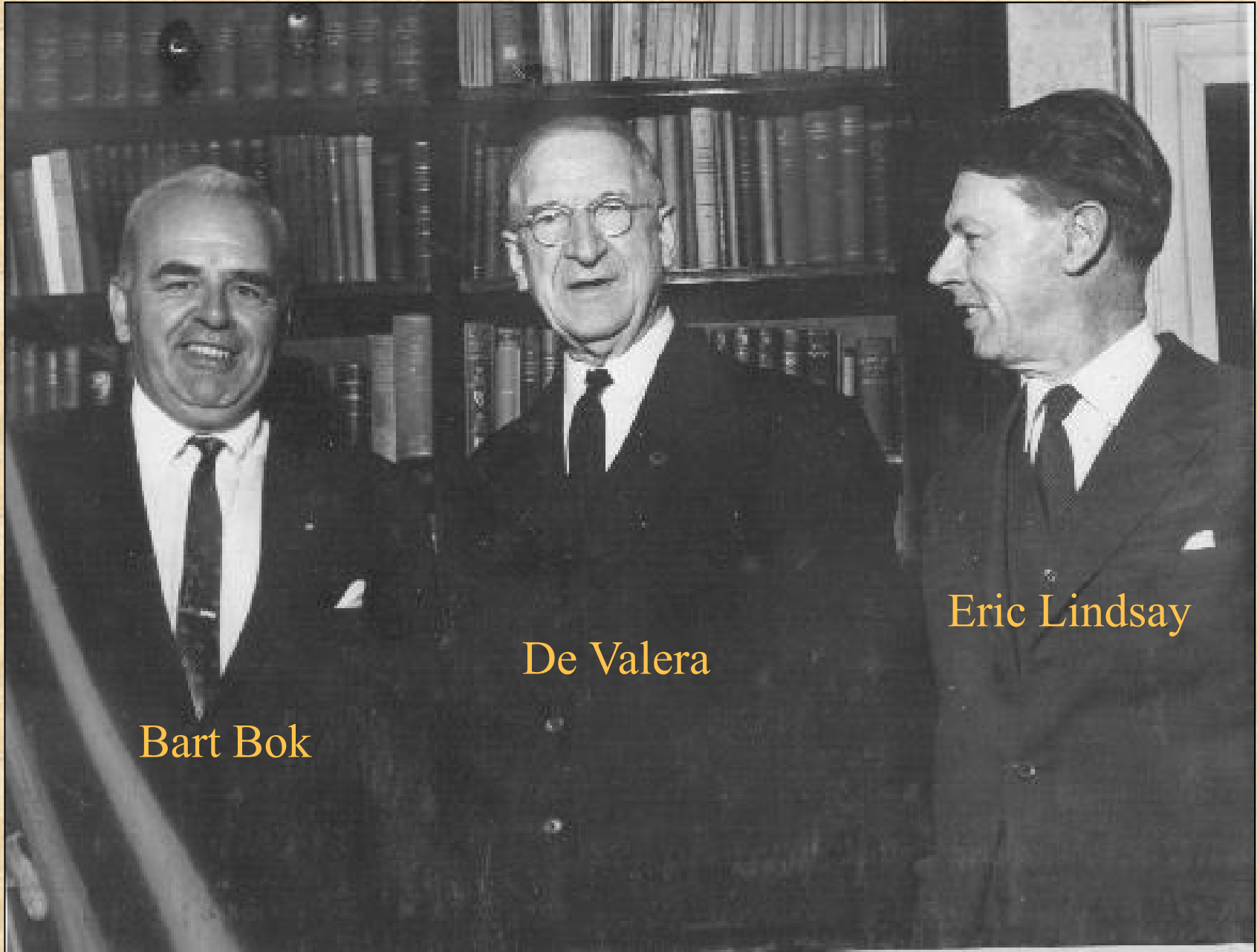


The ADH Telescope

Dr. Lindsay

36





Bart Bok

De Valera

Eric Lindsay

Famous Astronomers at Boyden



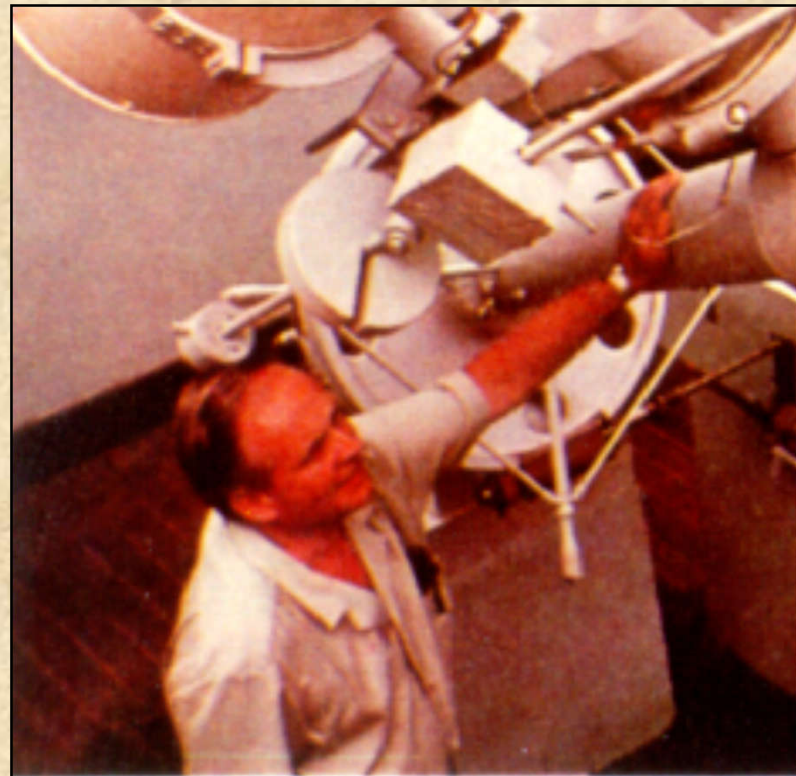
Eric Lindsay Jan Oort

Father G
LeMaitre

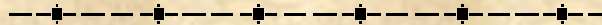
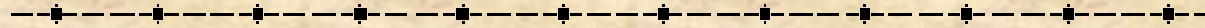
JM Ramsay

1976

- ✦ **Boyden
Observatory
presented to the
UFS as a gift**
- ✦ **First Director:
Prof AH Jarret**



Research



Rev. Joël Hastings Metcalf

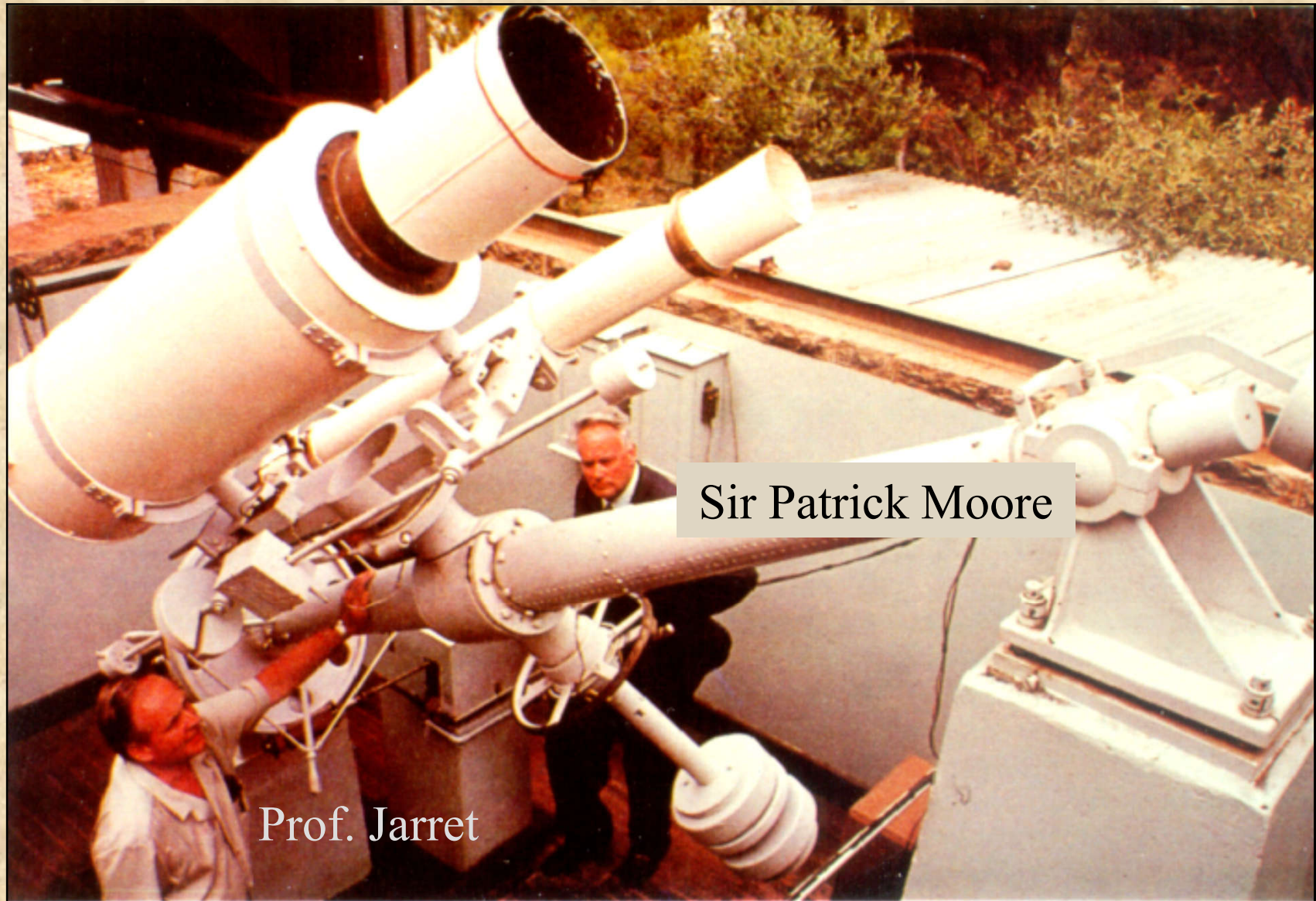


Comet Metcalf



On September 3rd, 1989, Martin Mobberley took this image of 23P/Brorsen-Metcalf. The exposure lasted from 03:14 to 03:23 UT.

Metcalf 10"



Sir Patrick Moore

Prof. Jarret

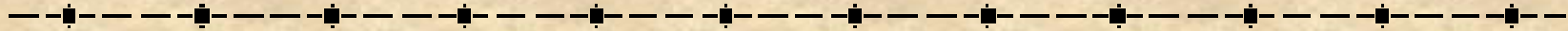
The Limits of our Galaxy



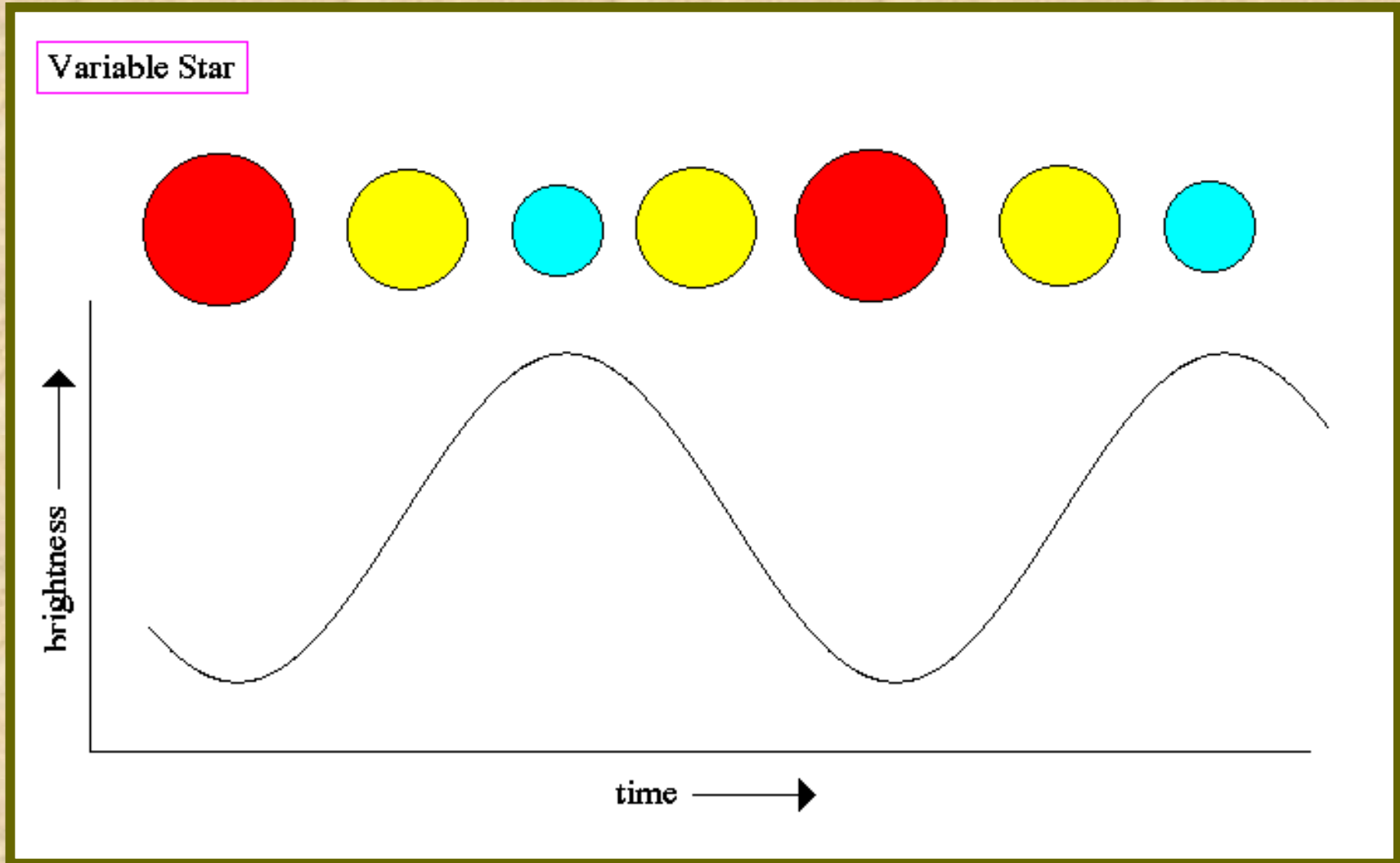
The Female Computer



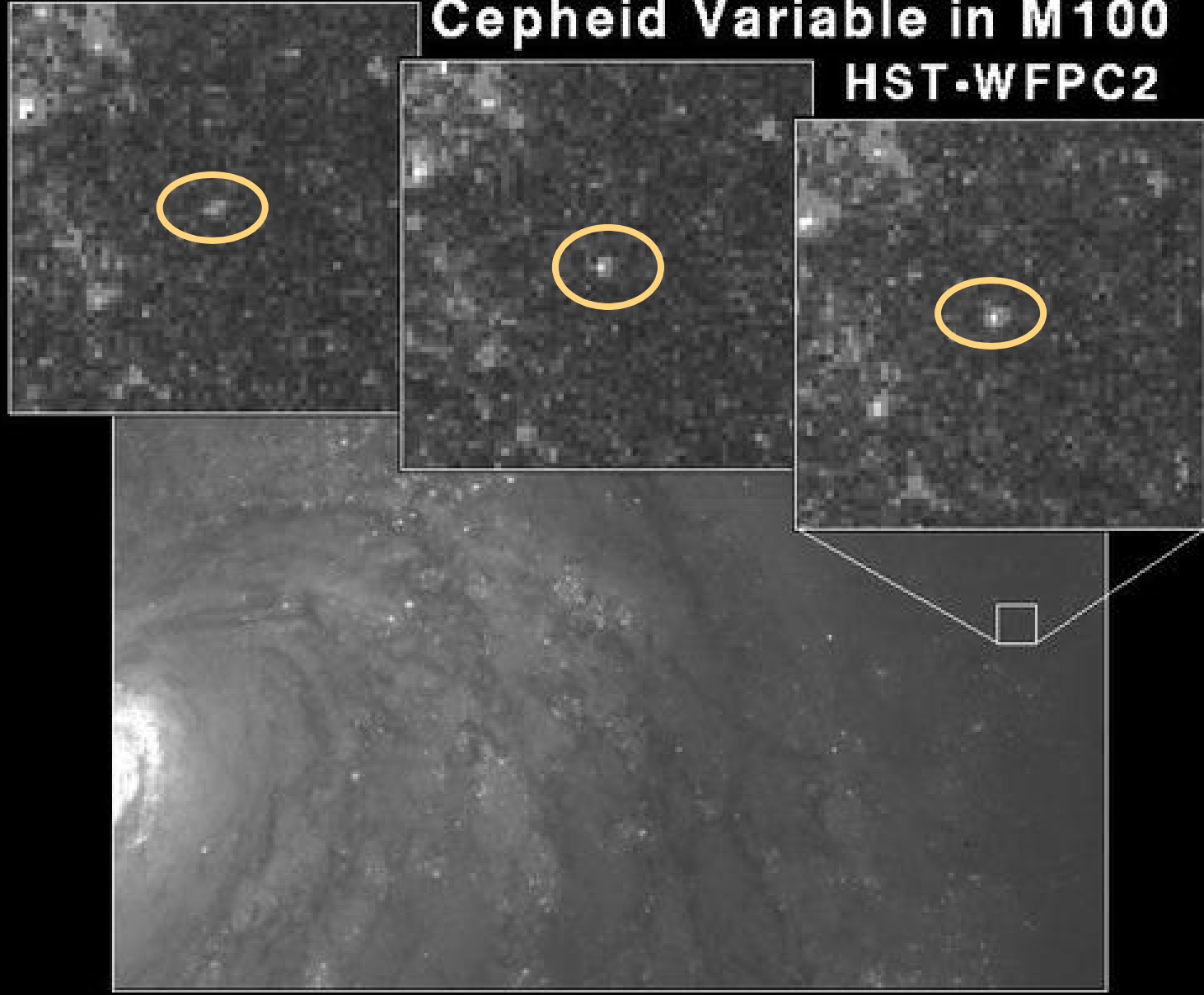
Henrietta Leavitt



Cepheid Variable Star



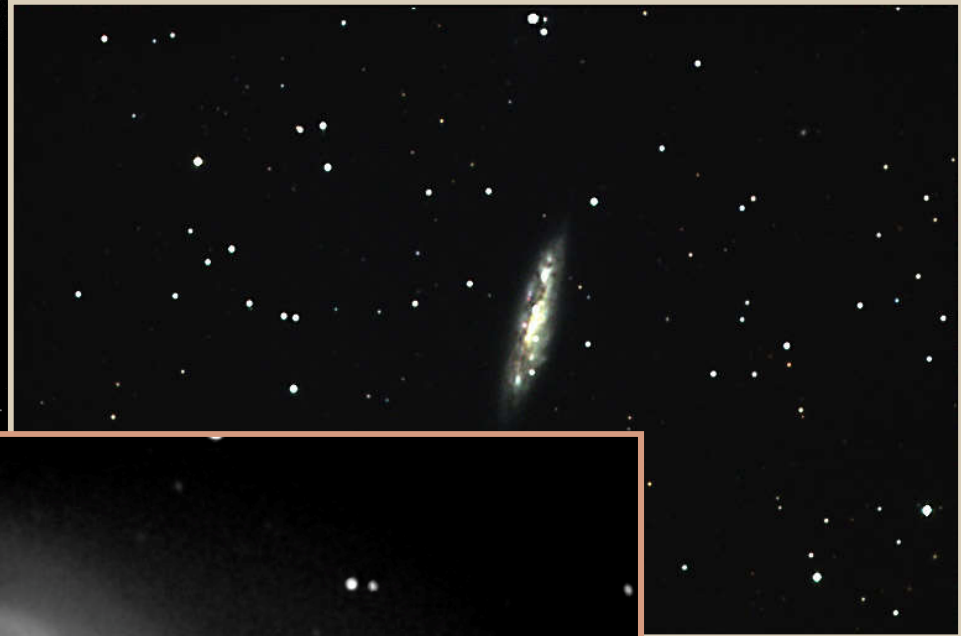
Cepheid Variable in M100 HST-WFPC2



Determining the Distance of Stars



Clouds?



Edwin Hubble





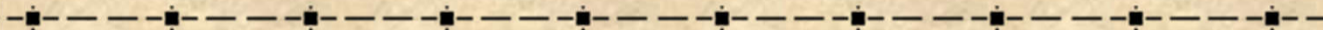
Andromeda





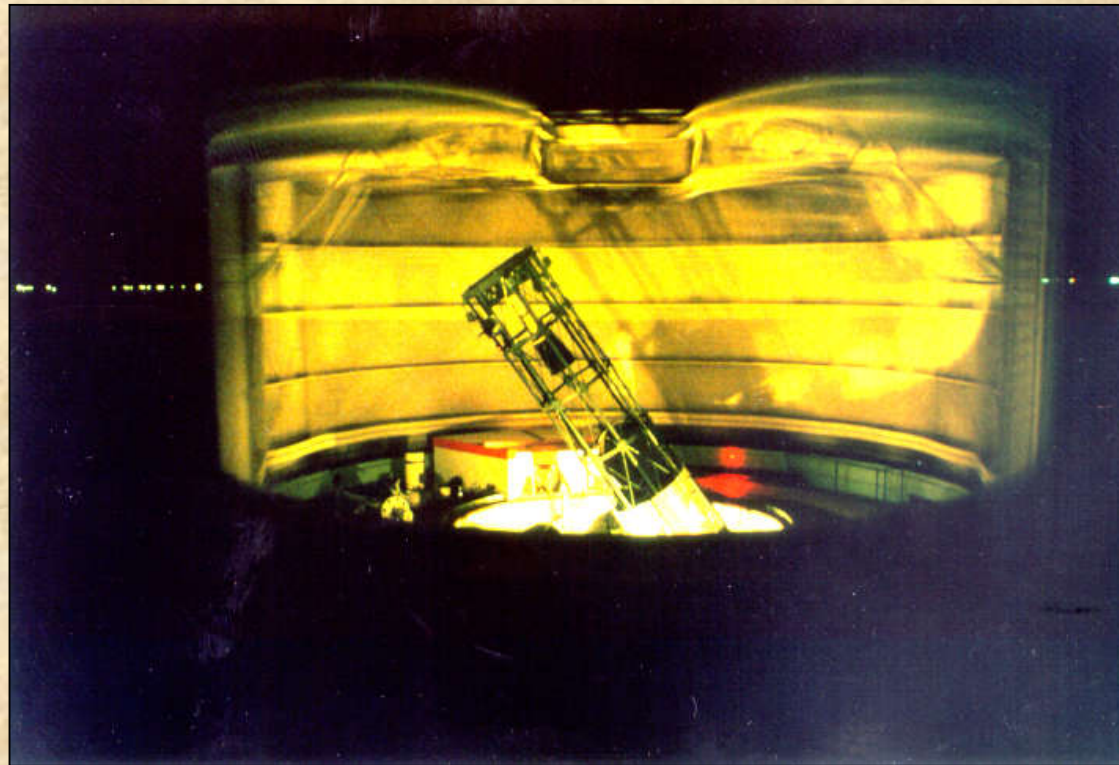
Hubble Deep Field HST - WFPC2

© 1996 by ST ScI Corp. January 15, 1996. D. Williams (ST ScI, NASA)



Present Day Research:

✧ Search for Exoplanets



**Upgrading of the
1.52m Boyden
Telescope: 2001**



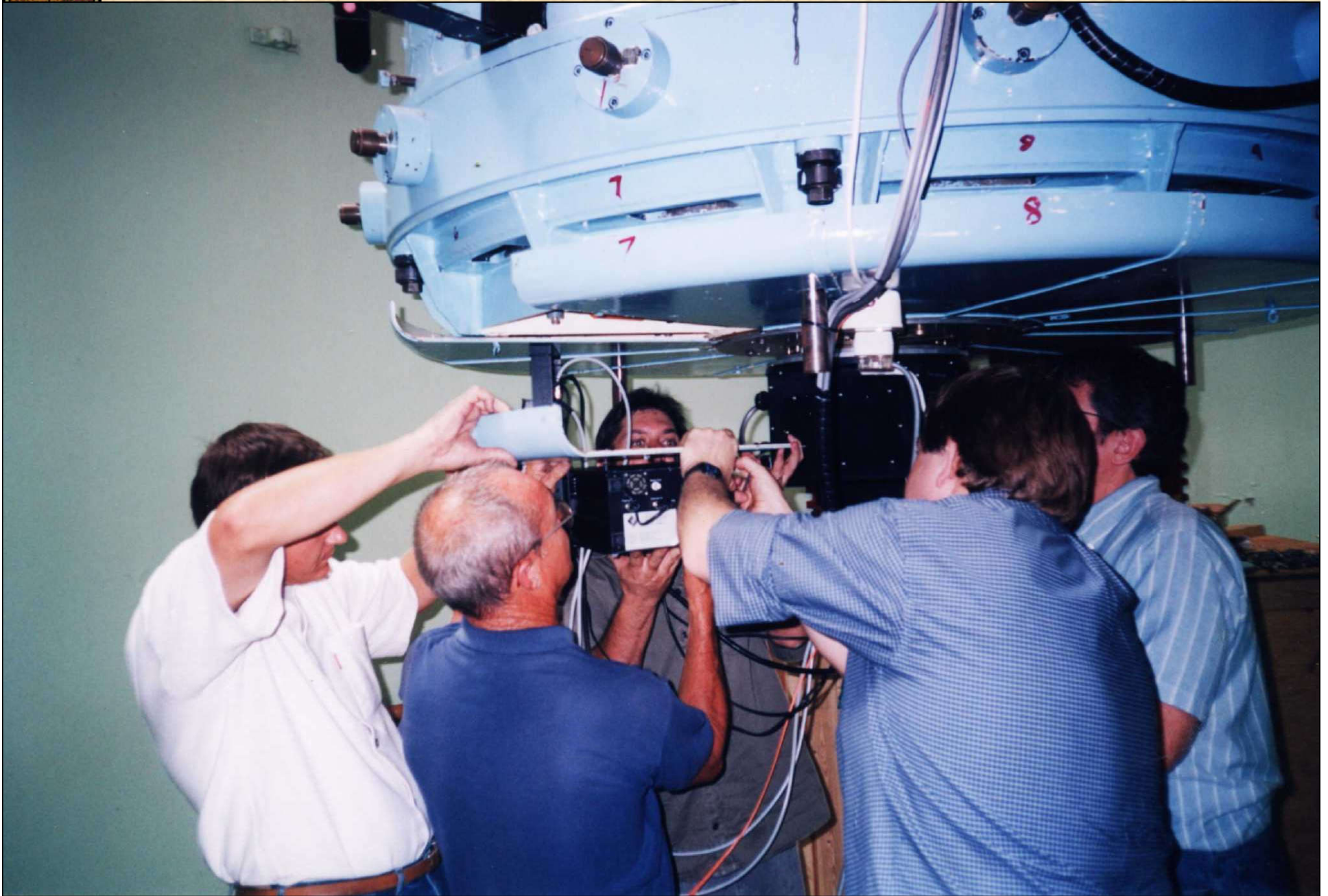












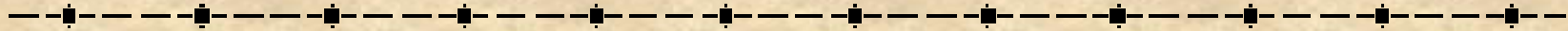






**...let us introduce it
to the its inhabitants...**

Boyden Science Centre







The first groups arrive. Grade 11 and 12 learners from Botshabelo



The 13" telescope aimed at Jupiter



Learners from CBC Bloemfontein waiting on the auditorium while some test the propagation of sound through the sound pipe



CBC learners being fascinated in the auditorium by a spectacular DVD on the Wonders of the Universe





The CBC learners on top of the auditorium with the 1.5-m telescope building in the background



The solar telescope being used for a calculation on the size of sun spots



A young learner being surprised on the propagation of sound through a pipe all around the auditorium



Boyden Today





Here's to the future ...

