Nice, May 12-13, 2016

# JUNO GROUND-BASED SUPPORT FROM AMATEURS

# WELCOME!

P. Tanga - Laboratoire Lagrange





# OBSERVATOIRE DE LA CÔTE D'AZUR IN A FEW WORDS





- Established in 1879 by R. Bishoffsheim on private funds, at Mt. Gros
- Historical buildings, by R. Garnier, G. Eiffel
- First instruments: 38 cm and 76 cm refractors to study the planets!
- becomes a national observatory in 1913

Today:

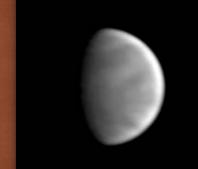
- 450 people, 380 researchers
- 4 sites: Mont Gros, Calern (observing station), Valrose (Univ. Campus), Sophie-Antipolis (techno-pole)
- 3 research departments, on Geophysics and Astrophysics

# SOME PRACTICAL INFOS

- Public transportations
  - a local bus strike is under way we will provide updates
- Bus to/from Riquier sq.
  - today at 6:30pm; tomorrow 8:30am 2:30pm
- Restaurant, on site fixed menu
- Wifi
  - eduroam (if you configured it)
  - OCA-WIFI: personal access available



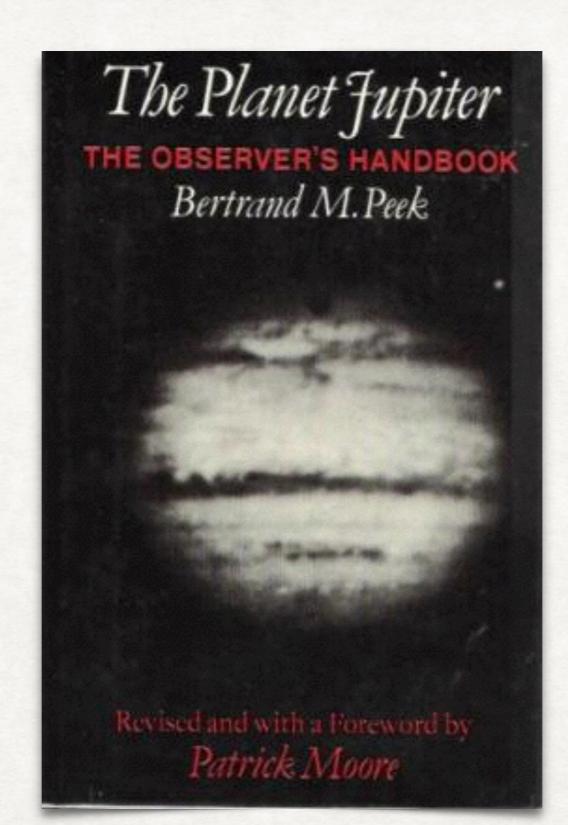
# ON AMATEUR OBSERVATIONS OF THE PLANETS FROM THE EYE TO THE CCD



# A "PERSONAL" PERSPECTIVE BY P. TANGA

LABORATOIRE LAGRANGE OBSERVATOIRE DE LA LA CÔTE D'AZUR





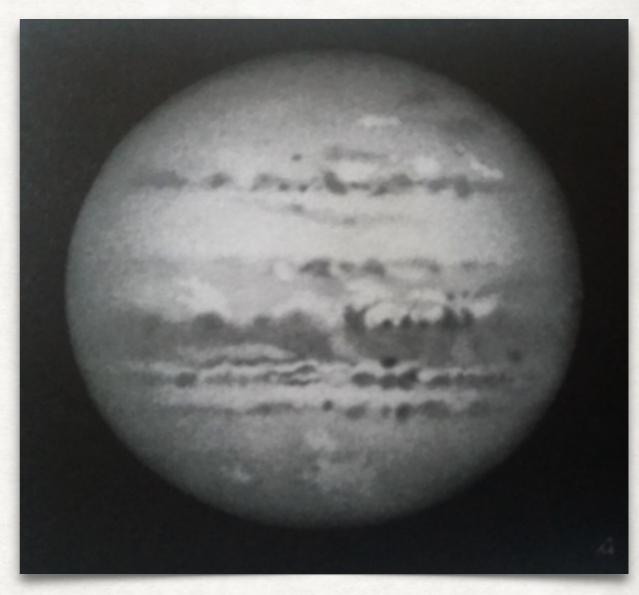
# PHOTOGRAPHY VS. VISUAL OBSERVATIONS



#### Catalina, Steward Observatory (AZ, USA)



in the 70s



E.M. Antoniadi, Aug 11, 1928

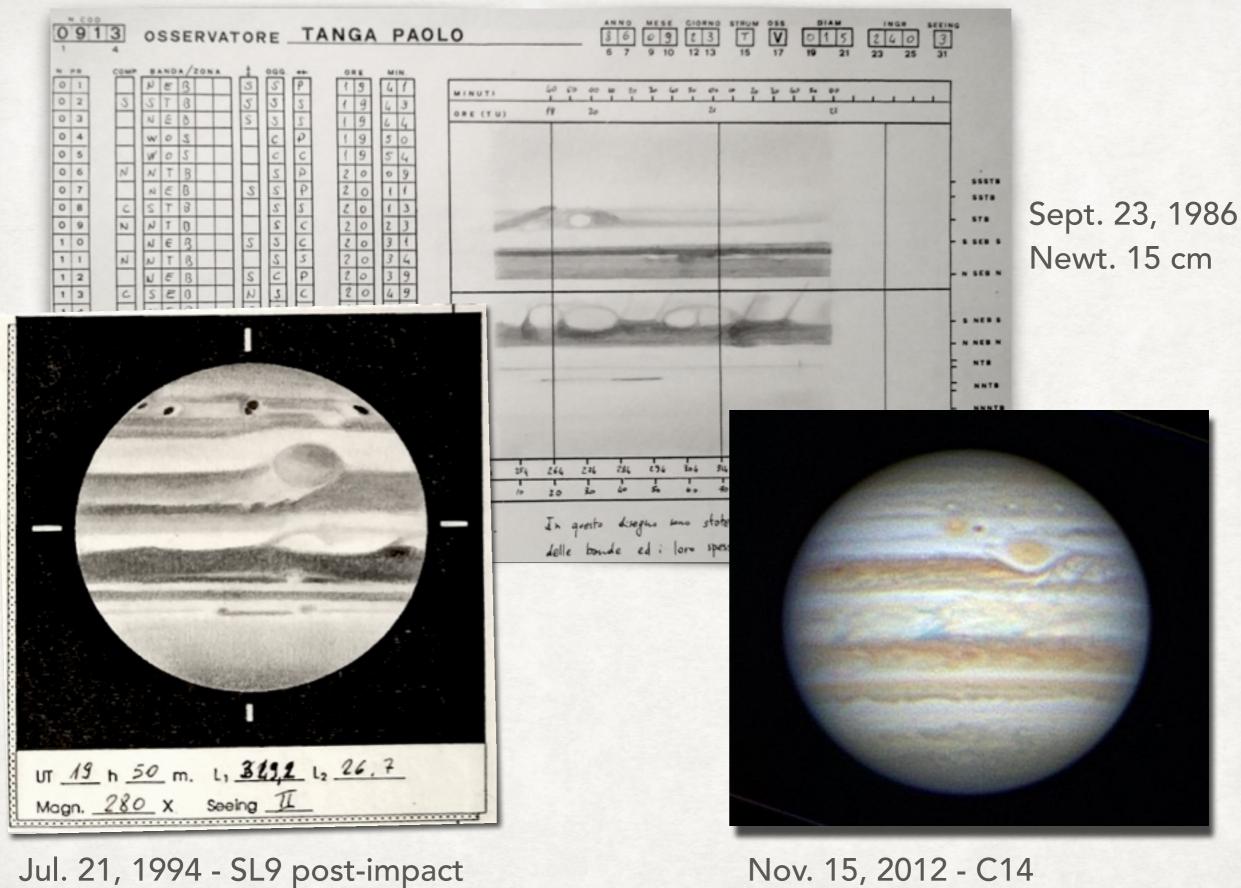
## **SENSITIVITY AND RESOLUTION** A WAR AGAINST TURBULENCE



J. Dragesco, 1986, 1m Pic du Midi Kodak TP2415 film



221 x 145 CCD - Pic du Midi P. Laques, J. Lecacheux, F. Colas Ch. Buil, E. Thouvenot



40 cm refractor, Turin Obs.

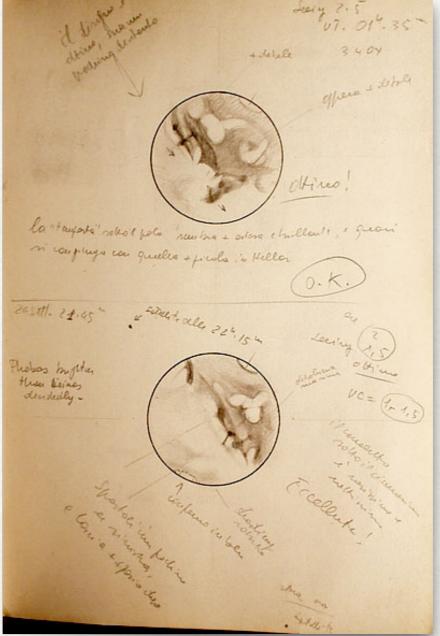
Nov. 15, 2012 - C14

## SEZIONE PIANETI UNIONE ASTROFILI ITALIANI



Marco Falorni (1944-1995)





# A FEW FACTS...

#### EVOLVING PLANETARY OBSERVATIONS AS AN OPPORTUNITY

- Several "crisis" for amateur activity (Mariner/Viking era for Mars, Voyager/Galileo @ Jupiter... etc.)
  - but always a re-birth, renewed approaches and goals
- Visual observations: rewarding, accessible, teaching so much...but requiring constant application and exercise
  - Photography: remarkable technical difficulties
- Starting from the 90s, cheap and fast CCDs made planetary imaging widely accessible - multi-band, and fast
- What's next: faster, more sensitive, narrow bands... perspectives?

## **CONCLUSIONS** AND SUGGESTIONS

- Several 10s (100s ?) of amateur planetary observers. They observe for pleasure. How many "scientists", how many "collectors of nice pictures"? How to motivate them? What we can propose to newcomers?
- Don't forget our past: visual observation (outdated for science) still have such a strong value to learn the basics (instrument limitations, seeing, ...)
- Explain to non-scientists, to amateurs that observe "for their fun":
  - science is not only for large telescope and from space: it is more a matter of "method", than "telescope size"
  - the goal: to learn the sky! Not to solve technical issues... only!
- Keep a permanent trace of this JUNO workshop, and spread the word!

# **ENJOY THE WORKSHOP**

ENJOY OBSERVATOIRE DE LA CÔTE D'AZUR