



# CHARA Update

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# CHARA MEETINGS

- 2005 Paris
- 2006 Tucson
- 2007 New York
- 2009 Nice
- 2010 Pasadena: Caltech
- 2011 Atlanta
- 2012 Atlanta
- 2013 Flagstaff
- 2014 Ann Arbor
- 2015 Atlanta
- 2016 Nice
- 2017 Pasadena: Carnegie

*Carrying on the  
legacy of Hale*



# Paris 2005







# Nice 2016







# Thanks to the CHARA Staff!



+ Chris Farrington, Norm Vargas, Olli Majoinen (observers), Brenda Stith



# Staff Notes

- Matt Anderson joined staff September 2016
- Five new MSIP positions now advertized
- New Postdoctoral associate as part of GSU “Solar-Stellar Connection” program
- Gail Schaefer’s 10 year anniversary
- Laszlo Sturmann’s 20 year anniversary
- Brenda Stith will be retiring as Business Manager at GSU in Atlanta



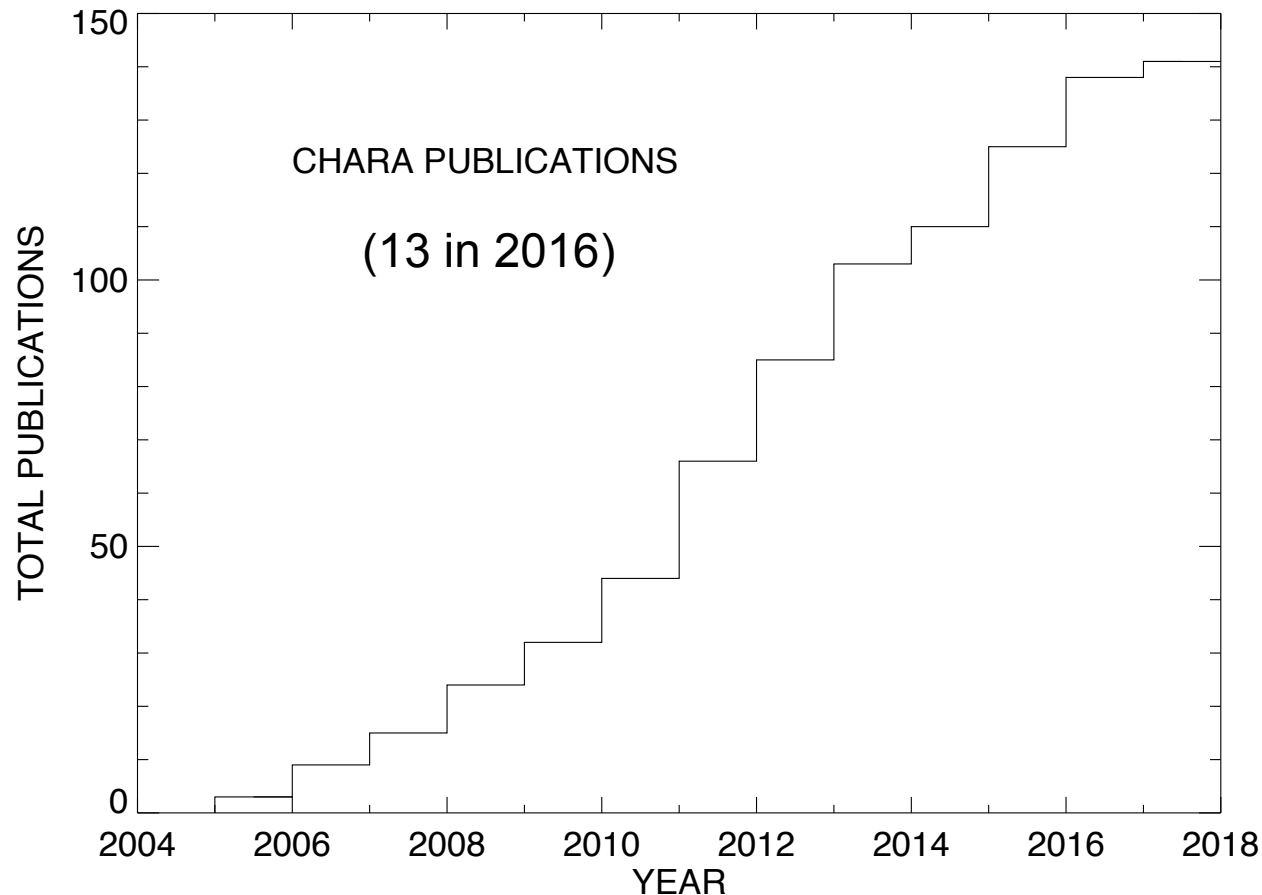


# MSIP Open Access

- New NSF/MSIP grant for public archive and open access to guest observers
- Following NOAO semester schedule:  
15 nights available in 2017B (Aug – Dec)  
<http://ast.noao.edu/observing/call-for-proposals-2017b>
- Plan to expand to 25 nights per semester
- Open to investigators outside the CHARA collaboration
- 12 month proprietary period

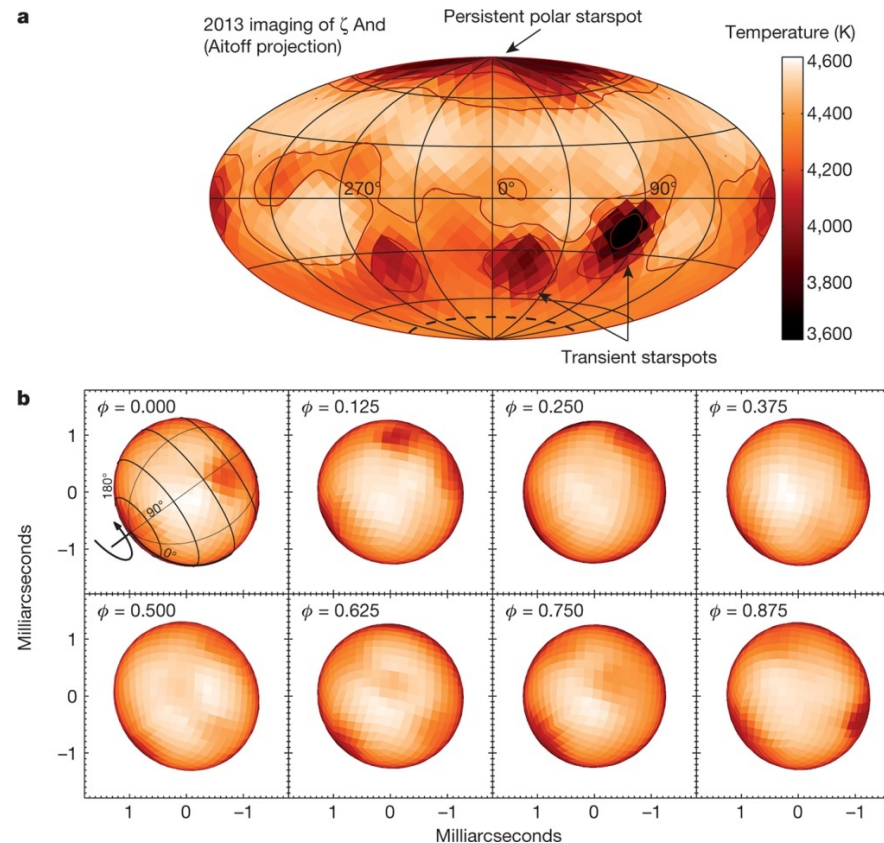


# 13 Science Publications in 2016: 141 in total (+3 in press)



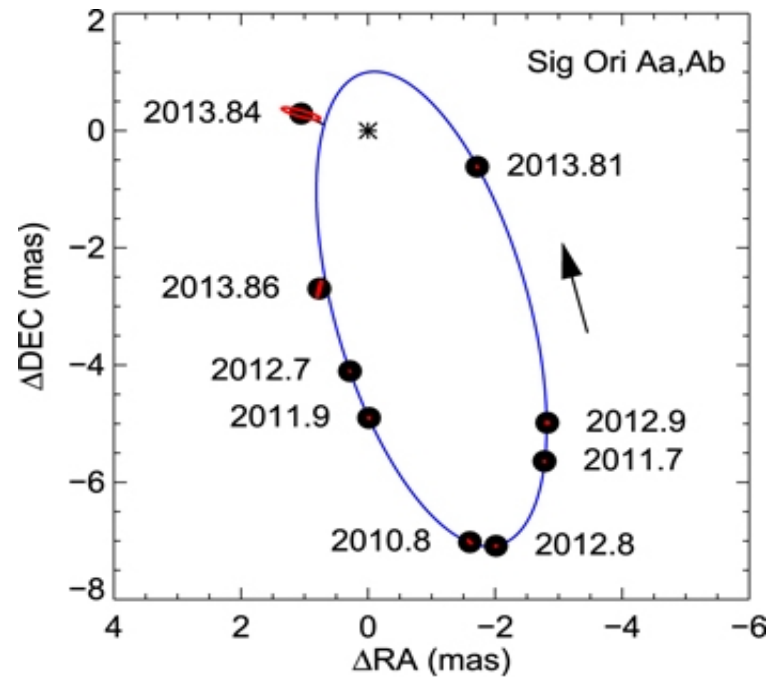


# Starspots on Zeta And (Roettenbacher et al.)





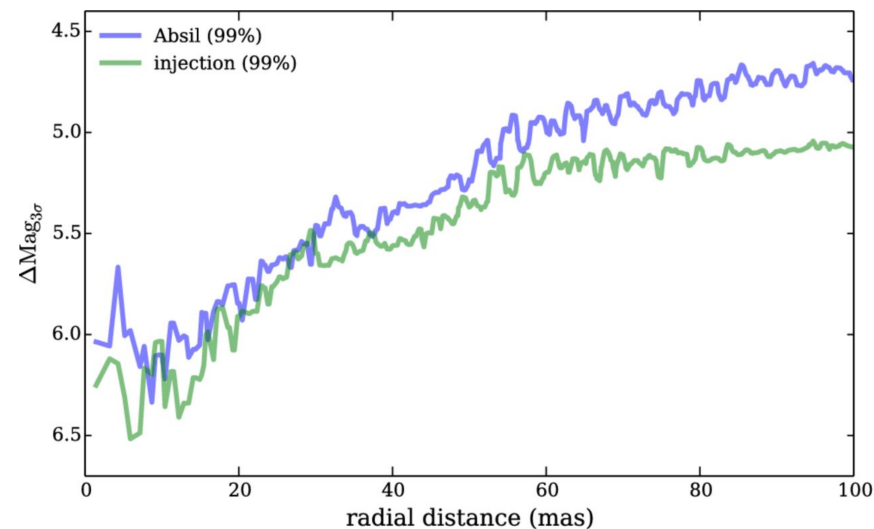
# Orbit of sigma Ori (Schaefer et al.)







# Limits on a companion to delta Cep (Gallenne et al.)



Should be able to detect companions as faint as  $\Delta \text{mag} = 6.5$  (0.25 %) in favorable circumstances.



# CHARA Developments Underway

- Replacement of aging systems (MSIP)
- Adaptive optics installation:  
better efficiency and fainter limits
- MIRC-X: *H*-band replacement for MIRC
- MYSTIC: *K*-band replacement for MIRC
- SPICA: Visual combiner to replace VEGA





# Future Dreams for CHARA

- Limits: 8 telescopes, aperture  $< 2.5$  m
- More baselines?
- Longer baselines?
- Larger aperture telescopes?
- Need your ideas based upon science goals.



# Thanks to:

- *Carnegie Observatories*  
John Mulchaey (Director), Beverly Fink
- *Mount Wilson Institute*  
Tom Meneghini (Director)
- *LOC*  
Theo ten Brummelaar  
Gail Schaefer  
Brenda Stith
- *You* for your participation here



## CHARA 2017: Year 13 Science Review – Adaptive Optics and Open Access

