ASIAA 天文所



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Highlights

- ALMA: Band-1 deployed — NAOJ DG award
- HPC: Kawas (2022)
- ASIAA@30 (2023)
- GMT (2024)
- BURSTT (2025)
- 690 GHz VLBI: first tests@JCMT-ALMA-APEX
- LMT partnership exploration
- SMA wind-down
- University leadership: National Observatory platform, etc


中央研究院天文及天文物理研究所三十周年
ASIAA 30th Anniversary
HAPPY BIRTHDAY

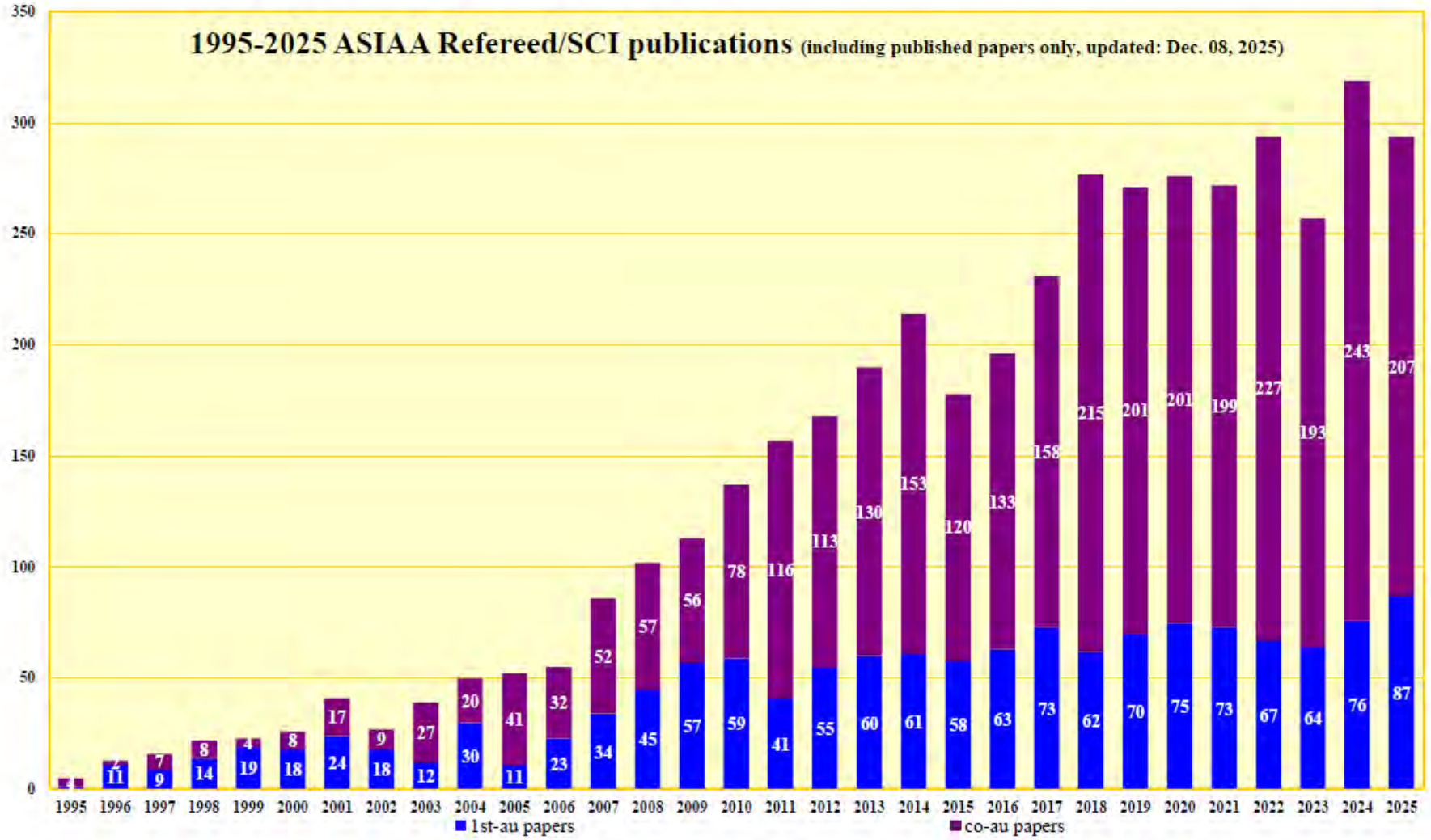
International Leadership

- Unique international niche: instrumentation + science
- Technology
  - Mature mm radio technology: wSMA, ngEHT mixers
  - Delivered ALMA Band-1 receivers
  - GLT-EHT: black hole image
  - potentially power complementary initiative in LMT array
- Science nurturing
  - Astrophysics has grown across Taiwan over 30 years, starting from near zero
  - Many faculty in Taiwan, Asia, international from ASIAA: 92 out of 198 former postdocs in faculty positions

Domestic Leadership

- growing number of university astronomy faculty, already exceeds numbers at ASIAA
- ASIAA provides coordination and support, leverage NSTC funding.
- Goal: university shares supported by NSTC, ASIAA partnership. E.g. ALMA, Magellan, GMT, 2m, EAO
- potential for growth into National Observatory (follow KASI model)

Output


1995-2025 ASIAA Refereed/SCI publications (including published papers only, updated: Dec. 08, 2025)
350
300
250
200
150
100
50
0
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
1st-au papers
co-au papers
11 9 14 19 18 24 18 12 30 11 23 34 45 57 59 41 55 60 61 58 63 73 62 70 75 73 67 64 76 87
9 14 19 18 24 18 12 30 11 23 34 45 57 59 41 55 60 61 58 63 73 62 70 75 73 67 64 76 87
7 8 4 8 17 9 27 20 41 32 52 57 56 78 116 113 130 153 120 133 158 215 201 201 199 227 193 243 207

ALMA, Chile

Photo credit: Wei-Hao Wang



Band-1 receivers, ASIAA/中科院

Regional collaboration: BURSTT



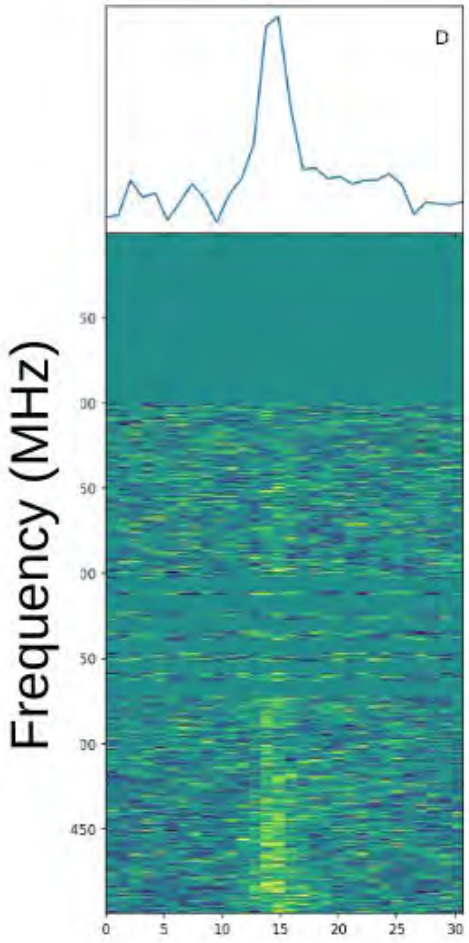


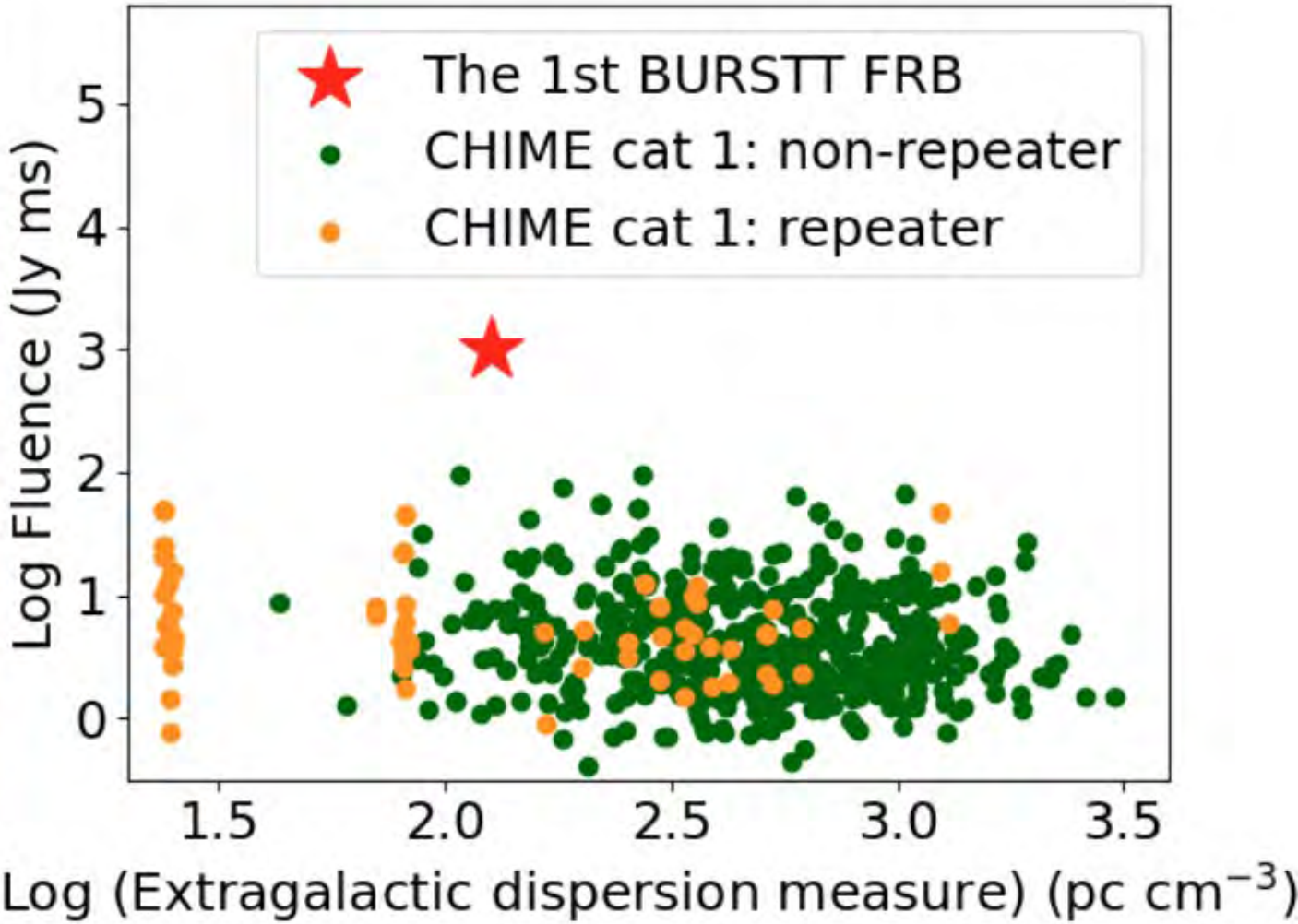


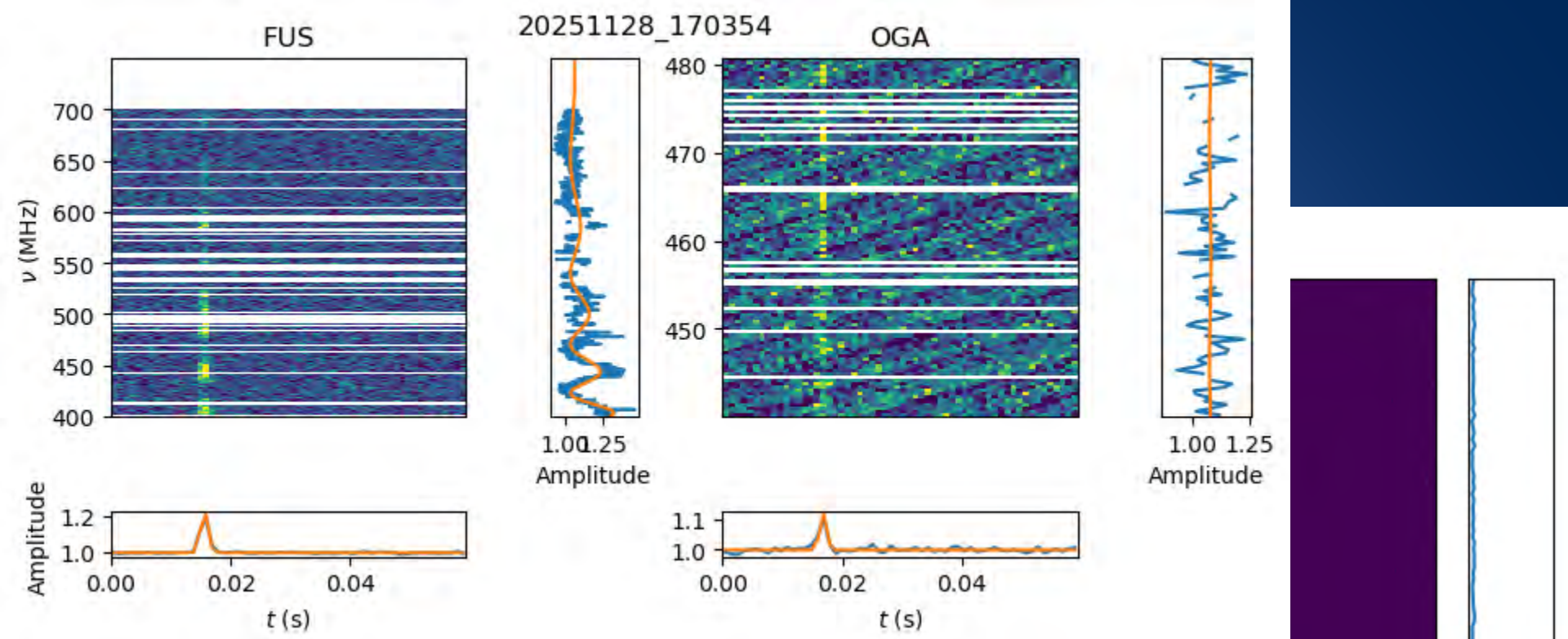




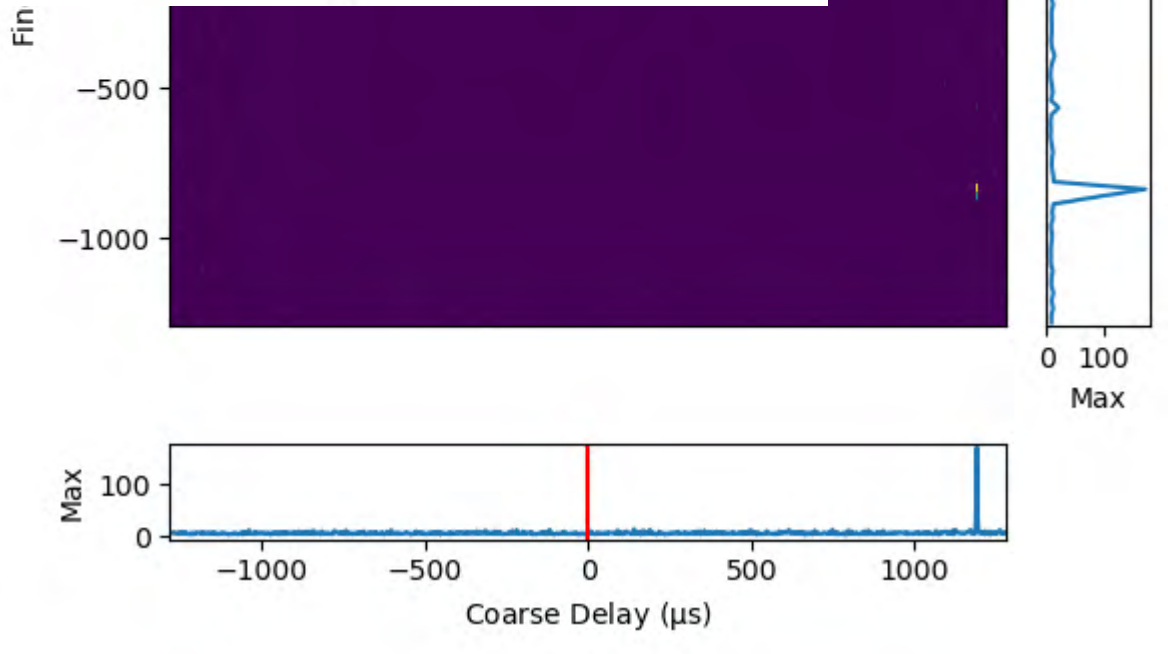
1st BURSTT FRB!







Fushan - Ogasawara first VLBI fringe (crab GP)

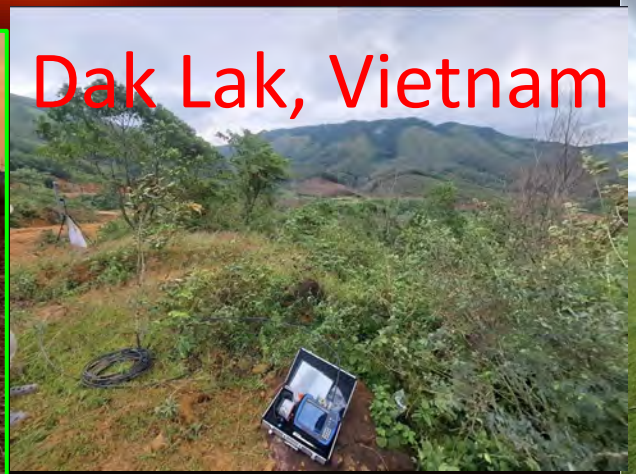


Leadership Opportunities

- Developing science and instrumentation capability in parallel
- Access to leading telescopes through instrumentation
- We lead smaller, timely, targeted experiments









Summary

- ASIAA grew successfully over 3 decades
- Exciting world-leading projects enable recruitment of young scientists
- Central resource allocation: postdoc, projects
- Major projects are moving forward smoothly with high performance instrumentation effort
- AS resources enable fast, timely experiments (e.g. BURSTT FRB telescope)
- Common regional initiatives: VLBI, FRB
- Open for new regional partnerships