



Australian Government
Geoscience Australia



Geoscience Australia Report on scientific AOV sessions

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How to make AOV visible?

**Non-standard scientific
projects
(papers in peer-reviewed journal,
etc)**
2017-2018

How to make AOV session index

2017-2018

- 16-Jan-17 AOV013 - geodesy (Syowa)
- 21-Mar-17 AOV014 - many strong sources (178)
- 11-Apr-17 AOV015 -
- 20-Jun-17 AOV016 - 28 new weak sources, Tianma65
- 08-Aug-17 AOV017 - 56 new weak sources, Tianma65
- 15-Nov-17 AOV 018 - geodesy
- 23-Jan-18 AOV019 - **20 new weak sources, Tianma65, HR5907 (20)**
- 27-Feb-18 AOV020 - **narrow bandwidth geodesy (Syowa), not arrived**
- 20-Mar-18 AOV021 - **1 Gbps, wideband, astro & imaging, ecliptic n/a**
- 01-May-18 AOV022 - **1 Gbps, wideband, testing of GR**
- 21-May-18 AOV023 - **1 Gbps, geodesy**
- 19-Jun-18 AOV024 - **narrow bandwidth geodesy (Syowa), not arrived**

Syowa (Antarctica)



Syowa (Antarctica)

AOV013 – 16-Jan-2017

AOV020 – 27-Feb-2018 n/a

AOV024 – 19-June-2018 n/a

Geodesy for 16-Jan-2017

Height: 6359568.400 +/- 0.037 m

Latitude: -7667383.094 +/- 0.014 m

Longitude: 1588182.170 +/- 0.012 m

List of radio stars

HR1099 (V0711 Tau) - detected in three sessions S/X

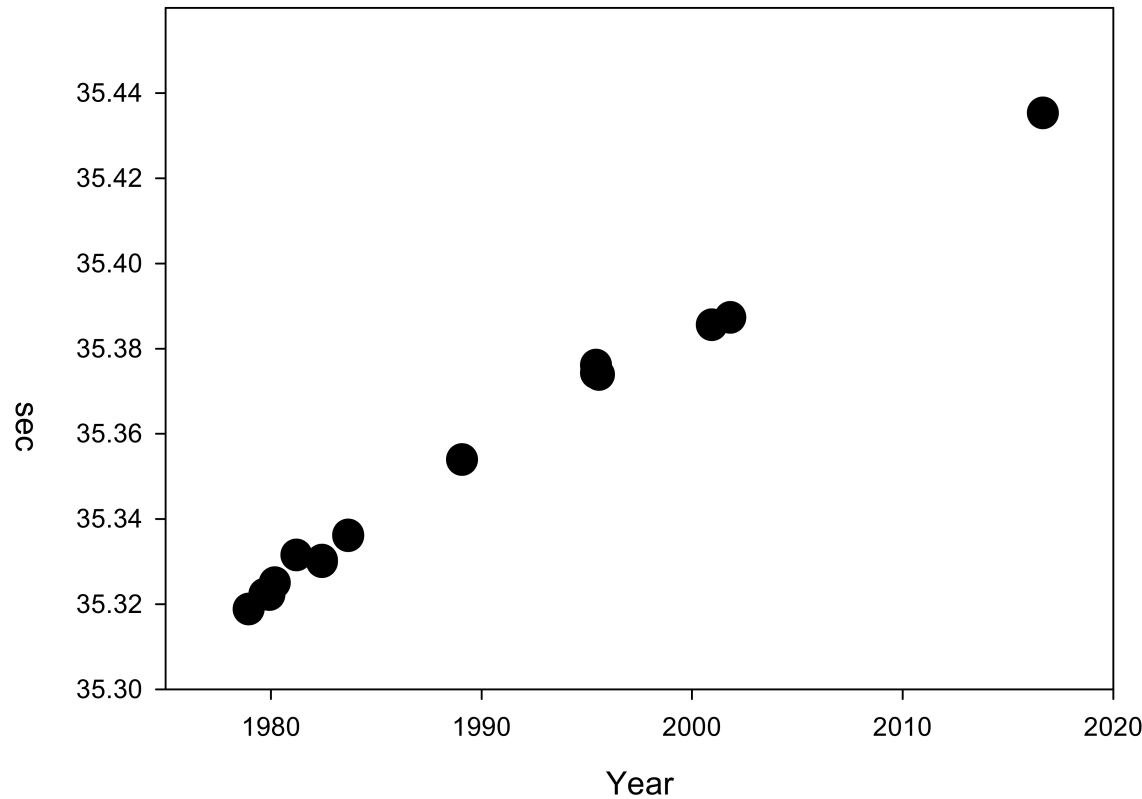
UX Ari – detected in one session; X band

HD 132742 – detected in one session; X-band

HR5907 – detected in one session S/X

UX Ari, RA

UX Ari



Boboltz et al (2003) AJ, 126, 484 (period 51.1 +/- 24.4 year)

Radio star HR5907

HR5907 – detected in one session S/X (2017)

Second session is AOV019 – 23-Jan-2018 (20 observations)

RA = 15h 53m 55s.846754 (+/- 0.000050)

Dec = -23d 58' 41".60010 (+/- 0".00025)

Conclusion

1. Syowa geodesy is delayed
2. Radio stars are difficult to observe.

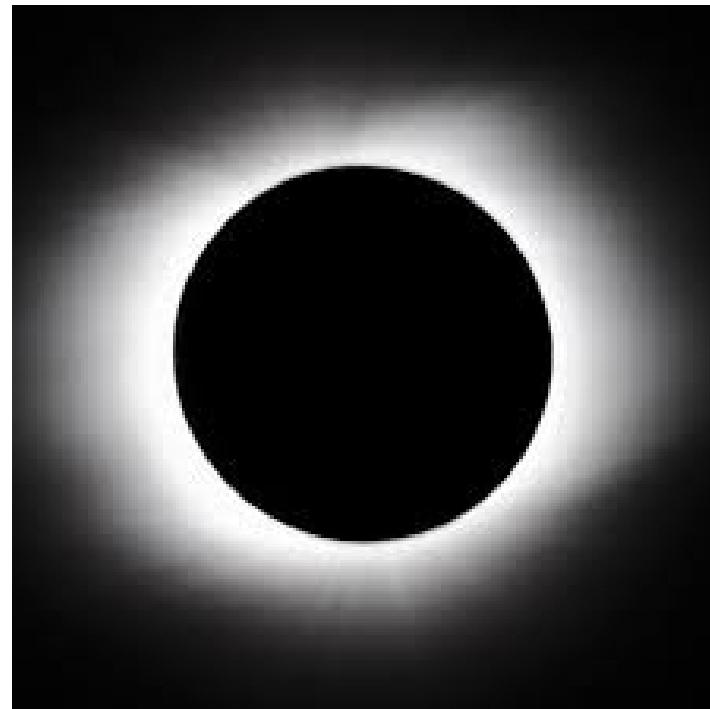


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Any Questions?

Thank you for your attention



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