

Twelfth IVS TOW (TOW2023)  
Summary of participants' evaluation  
Compiled by D. Behrend

Multiple "x"s indicate the number of people making the same comment.

### 1. Classes

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- Best:   xxxx Science Overview  
      xxx VLBI Session Pre-checks and IVS Operations  
      xxx Operational Recovery from System Failures  
      xx  Pointing and Amplitude Calibration Concepts  
      xx  Discussion Board  
      xx  FS Station Code  
      xx  VLBI Data Acquisition, Formats, Transfer and Tools  
      x  Operational Use of Mark 6  
      x  Setup and Operations of the DBBC3  
      x  Understanding Correlator Feedback  
      x  Antenna Gain Calibration  
      x  RFI Determination and Spectrum Management  
      x  Time and Frequency in VLBI  
      x  VLBI Basics  
      x  Impact of Operations on Data Analysis  
      x  PolConvert for Station Operators  
      x  Lectures

- Least:  x  Antenna Gain Calibration  
      x  Phase Cal Basics  
      x  Pointing and Amplitude Calibration Concepts  
      x  Operational Data Transport in the IVS  
      x  BRAND and DBBC4  
(xxxx All were worthwhile)

### 2. Arrangements

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	++	+	0	-
Web registration	13	5	1	.
Hotel	8	5	5	.
Food	10	8	1	.
Transportation	8	5	.	.
Class content	9	9	1	.
Class assignment	9	6	3	.
Other	3	.	.	1 (overall; weather)

### 3. Overall

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Liked best: xxxxx xxxx face-to-face, getting to know people, share knowledge  
xx contacts for help and collaboration opportunities  
xx interactions with people from different parts of IVS  
xx hallway discussions  
xx social interactions  
xx organization  
x meeting new staff  
x getting a general overview of VLBI  
x classes about timing, RFI, pre-checks, cryo system  
x learning about future of VLBI (VGOS)  
x location

Liked least: xx air conditioning in class rooms  
x lower part of screen not visible from back in Conf\_A  
x uncomfortable chairs  
x provide class descriptions for class sign-up  
x more hands-on and practical tasks, too theoretical  
x focus a bit more on VGOS  
x limited time to talk to people in breaks  
x fatigue level after 3 pm  
x missing bar at meeting hotel

Wanted but was not offered in a class:

- more involvement of geodetic analysts (to show that VGOS works)
- more hands-on classes or interactive sessions
- group work for solving real-world problems and doing installations
- a dedicated maser class, more in-depth timing
- lecture on imaging, since source structure limits VGOS until fixed
- introduction to radio astronomical instrumentation

Improvements for TOW2025:

- spread classes over more days (allowing for shorter days)
- maybe organize a discussion-board type session about RFI (or other topics)
- have discussion about common issues for the stations
- general class about VLBI basics
- more practical, remote connections to stations
- more in-depth class about masers (e.g., invite Brian Owings of Microsemi (SigmaTau))
- establish an offline video archive
- consider hotel with walking distance food options such as the Residence Inn Westford
- different hotel/location with bar for social interactions
- make deal with hotel in advance for Govt per-diem rates
- visit a Red Sox game at Fenway Park
- organize an excursion
- keep it like this

Other comments:

- It was helpful to have food available all day.
- Thanks for organizing! And for the food!
- Hotel was excellent. But nearby nightlife (i.e., bar, restaurants, theater, movies) would be nice.
- A hotel in Lowell or Chelmsford has more options nearby. The Groton Inn does not have a good accessible bar to reconvene at end of day.
- It would be beneficial to encourage the creation of an equipment failure tracker, that operators could update as they see/resolve problems. Such a tracker would give station/project managers an idea of upcoming parts/replacement needs, so that they can budget that in over time, instead of having a surprise \$30k bill. We as operators/engineers need to be mindful that we don't mask the problems. It is true that the squeaky wheel gets the grease. But if the project/station manager isn't aware of a problem, they cannot help. This tracker would provide station or project-level feedback that would be useful in budgeting, reduce downtime and missed operations, and avoid nasty surprise costs.
- Thanks to Heidi and Dirk. I'll be coming back to the next TOW!
- Thank you for everything. We were well taken care of this week.
- Many thanks for supporting.
- Great to meet again.