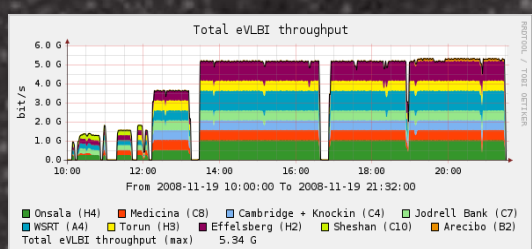
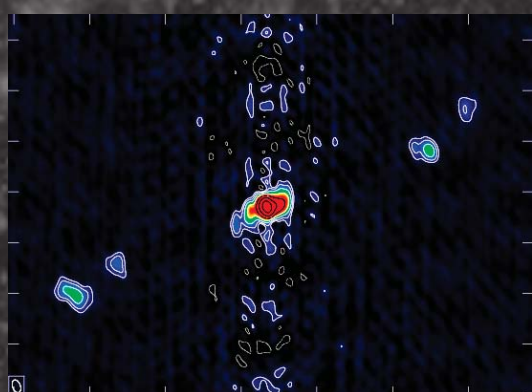
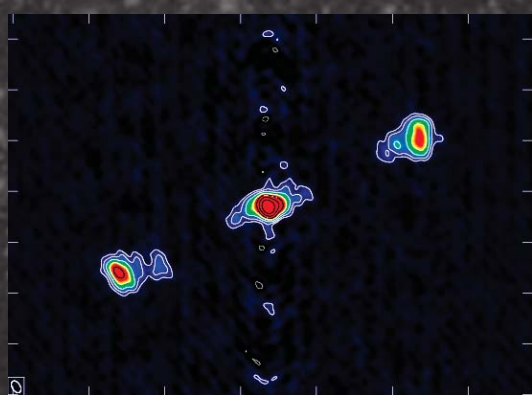
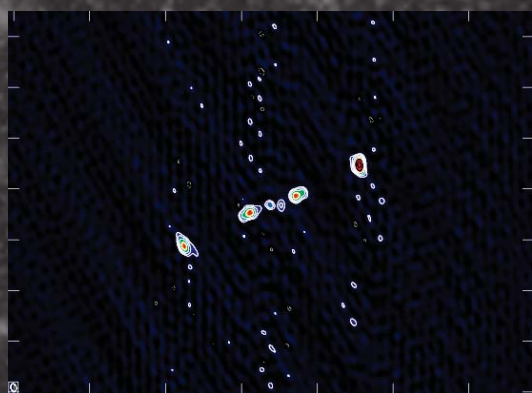


Science and Technology of Long Baseline Real-Time Interferometry: The 8th International e-VLBI Workshop

<http://www.oan.es/expres09/>

22-26 June 2009
Madrid, Spain



The above images of X-ray binary SS433 are the result of a series of three triggered e-VLBI observations by the EVN in November 2009 (V. Tudose et al). The bottom graph displays the total data throughput from participating stations during the 19 November 2009 observation of SS433, including 1024 Mbps rates from three of the stations (EXPREs).

Star cluster background image courtesy of NASA/JPL-Caltech, D. Figer, et al.

In recent years real-time, long-baseline, radio interferometry over optical networks has developed from a technical possibility to a mature technique. The time is ripe to bring together all those working on the science and technology of e-VLBI to discuss the state-of-the-art and future prospects.

This week long conference will cover both scientific applications (first half) and technical implementation (second half) with joint sessions in the middle. Participants are welcome to attend a part or the whole of the conference. The conference proceedings will be published electronically. Specific areas to be covered include:

- **Scientific:** Applications of real-time operation to astronomy, geodesy and other fields. How to best coordinate emerging e-VLBI arrays for best scientific return. Connections to transient monitoring in other wavebands including Fermi Gamma-Ray Space Telescope observations.
- **Technical:** e-VLBI test experiments, use of new long distance links, development of techniques including selective packet dropping and novel protocols, search for higher bandwidths, network status and monitoring, distributed processing, and future development.
- **Scientific/Technical:** Technical possibilities of interest in planning future instruments. Desired technical requirements to fulfill scientific goals, science priorities for development.

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- Chris Phillips, CSIRO (Australia)
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