

## JIVE Newsletter number -1-

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-----+==== The JIVE Newsletter, Year 1998, Number 1 =====

Dear All,

This is the first issue of the JIVE newsletter. The JIVE newsletter is intended for those interested in and working with VLBI and its associated techniques. The newsletter will be prepared about six times per year.

Its contents will mostly discuss the current situation, performance and the capabilities of the EVN MkIV correlator at JIVE and progress thereof as well as issues concerning the European VLBI Network (EVN). Of course our attention will not be limited to only the European community, input from other groups/institutes will be gladly received and distributed as well. Our goal is to keep the users/developers in contact with recent developments in the field of VLBI.

Furthermore, the newsletter can be used to announce conferences, meetings and symposia on the subject of VLBI.

NOTE: subscription to the JIVE newsletter does not happen automatically, future versions will NOT be sent to existing mailing lists. If you are interested in receiving the JIVE newsletter, please mail to the following address, stating that you would like to receive the newsletter.

mailto:verkouter@jive.nfra.nl

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### 1) The Current situation of the JIVE MkIV Correlator

After the successful first fringes on July 21st 1997, the EVN MkIV DataProcessor team reached a new milestone on February 17 1998, when fringes were detected from 2 MarkIII tapes from Effelsberg and Medicina. The correlation was controlled using a prototype CJD (Correlation Job Descriptor) which controls the correlator hardware settings. The correlator was set for dynamic phase/delay correction. This test addressed two important issues: controlling the correlator settings from a UNIX workstation and controlling multiple Playback Units at the same time from the same high level control software. Refer to <http://www.jive.nl/jive/correlator/first.html> for specific information about the experiments. At this moment, experiments to get MkIV fringes are being carried out.

### 2) The JIVE MkIV Data Processor hardware

At this time, 10 out of the total number of 16 Data Playback Units (DPU's) have arrived at JIVE after passing their Factory Acceptance Tests (FATs). The last four DPU's will be tested within two weeks and are due to arrive shortly after that.

JIVE's technical manager, Steve Parsley, witnessed the FAT of the reproduced Station Units at Allied Signal. The reports are satisfactory. Two new station units are expected to arrive at JIVE within two weeks from now.

Almost all of the correlator boards, needed to make up the whole of the MkIV data processor, have arrived at JIVE and are being tested. Currently, the tests are run on a test setup, having one-eighth of the capacity of the full data processor.

### 3) The upgrading of EVN recording terminals from MkIII to MkIV

The upgraded MKIII to MkIV equipment continues to be successfully used for EVN observing sessions in both MkIII and VLBA modes. The problems at low bandwidths when 500 kHz sample rates are used in the formatter have been identified and solved. It should now be possible to run narrow band line experiments.

Furthermore, the recorder at Shanghai was upgraded. It now is possible to run thin tape at Shanghai. A number of other problems were also fixed, which should result in improvements in recording quality.

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This newsletter was prepared by Harro Verkouter, offline software scientist at JIVE, Dwingeloo.

I would appreciate your suggestions, comments, additions and any other form of feedback, especially if you plan to have a symposium (or the like). Please mailto:verkouter@jive.nfra.nl.

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