

# NeuroElf pipeline

## Requirements

MATLAB 64bit

NeuroElf v1.0

BrainVoyager 2.4

Following folders of Dropbox\一贯性\Sources\bv\_umg on your MATLAB path list:

- \_4NeuroElf
- monkeypsych\_mat2prt
- ne\_era
- ne\_pipeline\_converged
- ne\_prt2avg (add the script for your dataset)

Following folders of Dropbox\一贯性\Sources on your MATLAB path list:

- roi
- NaN
- Igtools

See also [neuroelf\\_resources](#)

## ne\_fmriquality.m

modification of original fmriquality with options for outliers analysis IK 2014

does not work with NE v1.0 (many @neuroelf\private function that are used inside are missing)

<http://neuroelf.net/wiki/doku.php?id=fmriquality> : **Finally, at the moment, the “problem detection” thresholds (to mark a volume as outliers) are fixed, but are likely to change in a future version.**

## Create VTC

[http://neuroelf.net/wiki/doku.php?id=vmr.createvtc#method\\_reference\\_vmrhelp\\_createvtc](http://neuroelf.net/wiki/doku.php?id=vmr.createvtc#method_reference_vmrhelp_createvtc)

Current issue that it doesn't work with monkey data - sag, cor and axi planes are confused in the resulting VTC.

## Sources\MATLAB\bv\_umg\ne\_era

### ne\_era.m

This function relies on vtc.VOITimeCourse method, which has been changed from v0.9c → newer versions. The new method is AFT::VOITimeCourse, in versions v0.9d and 1.0, this method works only

with TAL vois. The method vtc.VOITimeCourseOrig is kept for backward compatibility (works with both BV and TAL vois).

ne\_era.m takes care of this:

```
if strcmp('0.9c',v) || strcmp(voi.ReferenceSpace,'TAL'),  
    tc = vtc.VOITimeCourse(voi)'; % each row - one roi tc  
else  
    tc = vtc.VOITimeCourseOrig(voi)';  
end
```

## ne\_era\_mdm.m

This function extracts single-trial BOLD responses from VTCs using MDM::VOITimeCourses for each VOI specified in a given VOI file. If necessary, VOIs in BV native space are automatically converted into TAL space using ne\_voicoord2tal.m.

From:

<http://dag.dokuwiki.dpz.lokal/> - **DAG wiki**



Permanent link:

[http://dag.dokuwiki.dpz.lokal/doku.php?id=neuroelf:neuroelf\\_pipeline](http://dag.dokuwiki.dpz.lokal/doku.php?id=neuroelf:neuroelf_pipeline)

Last update: **2022/12/29 07:15**