

**Wir schaffen Wissen – heute für morgen**

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**Reactive transport with OGS-GEMS:  
gems2gsrf**

Gems2gsrf is a tool that helps to convert exported GEMS records to formats that can be used in OGS-GEMS input files.

Supported output:

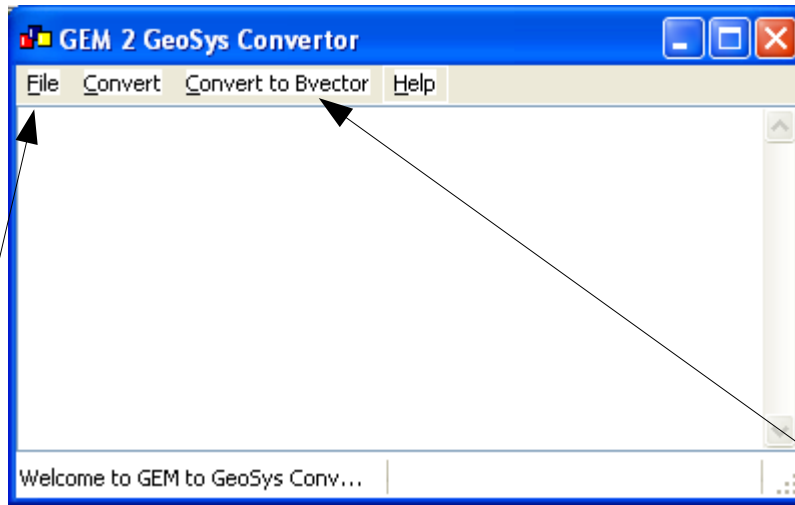
Initial conditions for \*.ic files

Boundary conditions for \*.bc files

Component properties for \*.mcp files

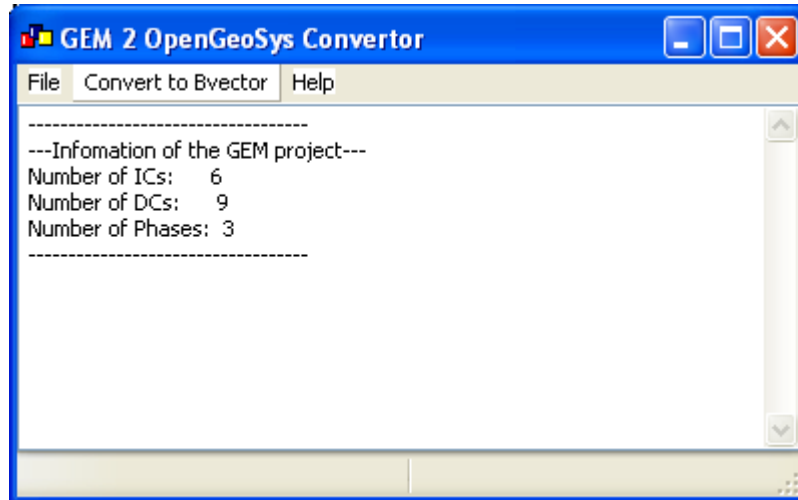
Output files for \*.out

## General menu

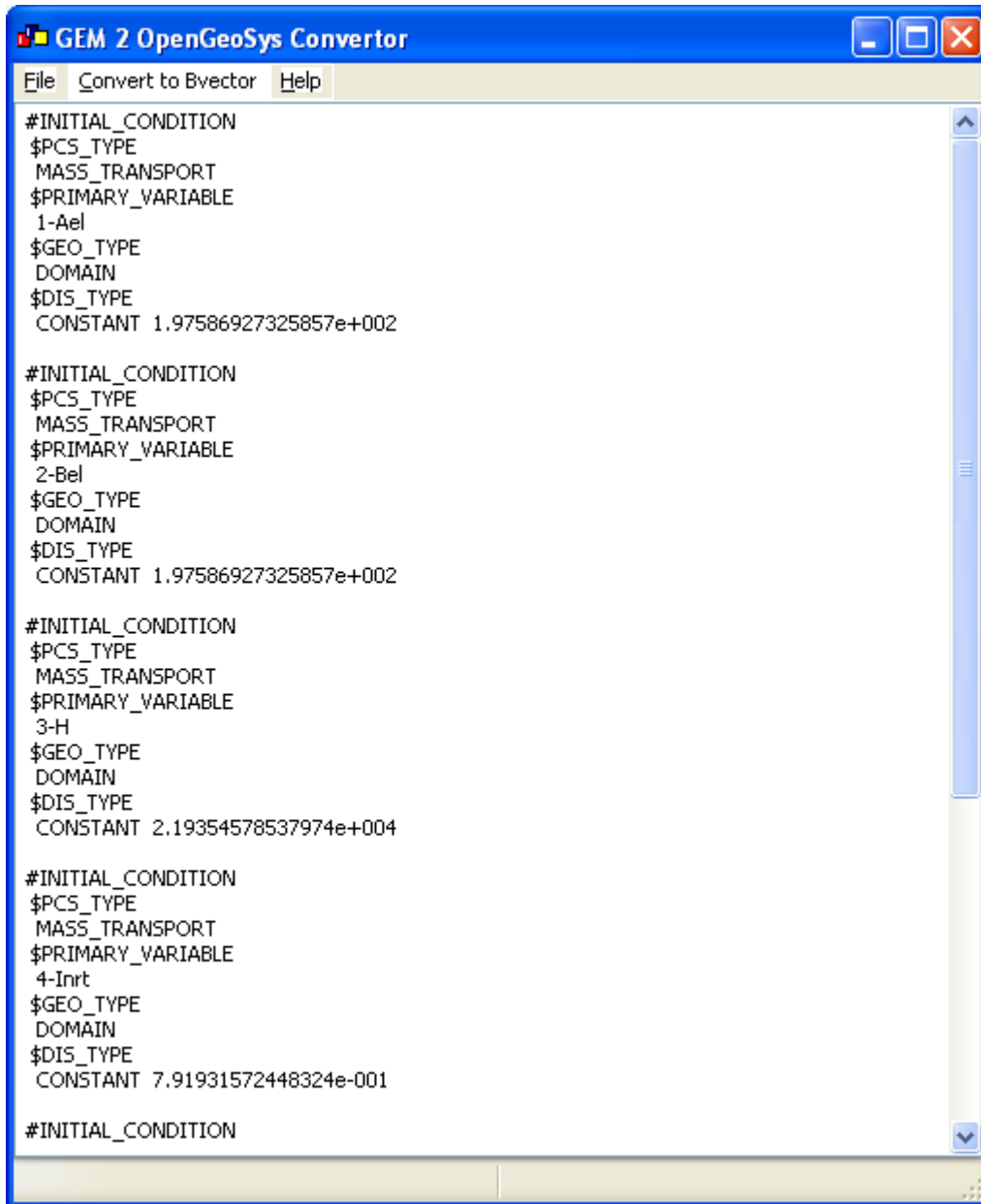


Here you  
load the  
exported  
gems record.

The current version of OGS-GEMS  
supports only the option Bvector  
(transport of dissolved independent  
components)



After successfully loading a GEMS record you windows should look like this!



```
File Convert to Bvector Help

#INITIAL_CONDITION
$PCS_TYPE
MASS_TRANSPORT
$PRIMARY_VARIABLE
1-Ael
$GEO_TYPE
DOMAIN
$DIS_TYPE
CONSTANT 1.97586927325857e+002

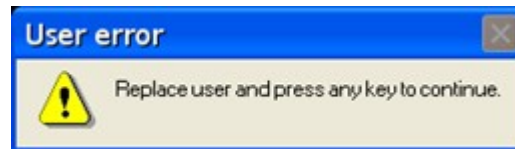
#INITIAL_CONDITION
$PCS_TYPE
MASS_TRANSPORT
$PRIMARY_VARIABLE
2-BeI
$GEO_TYPE
DOMAIN
$DIS_TYPE
CONSTANT 1.97586927325857e+002

#INITIAL_CONDITION
$PCS_TYPE
MASS_TRANSPORT
$PRIMARY_VARIABLE
3-H
$GEO_TYPE
DOMAIN
$DIS_TYPE
CONSTANT 2.19354578537974e+004

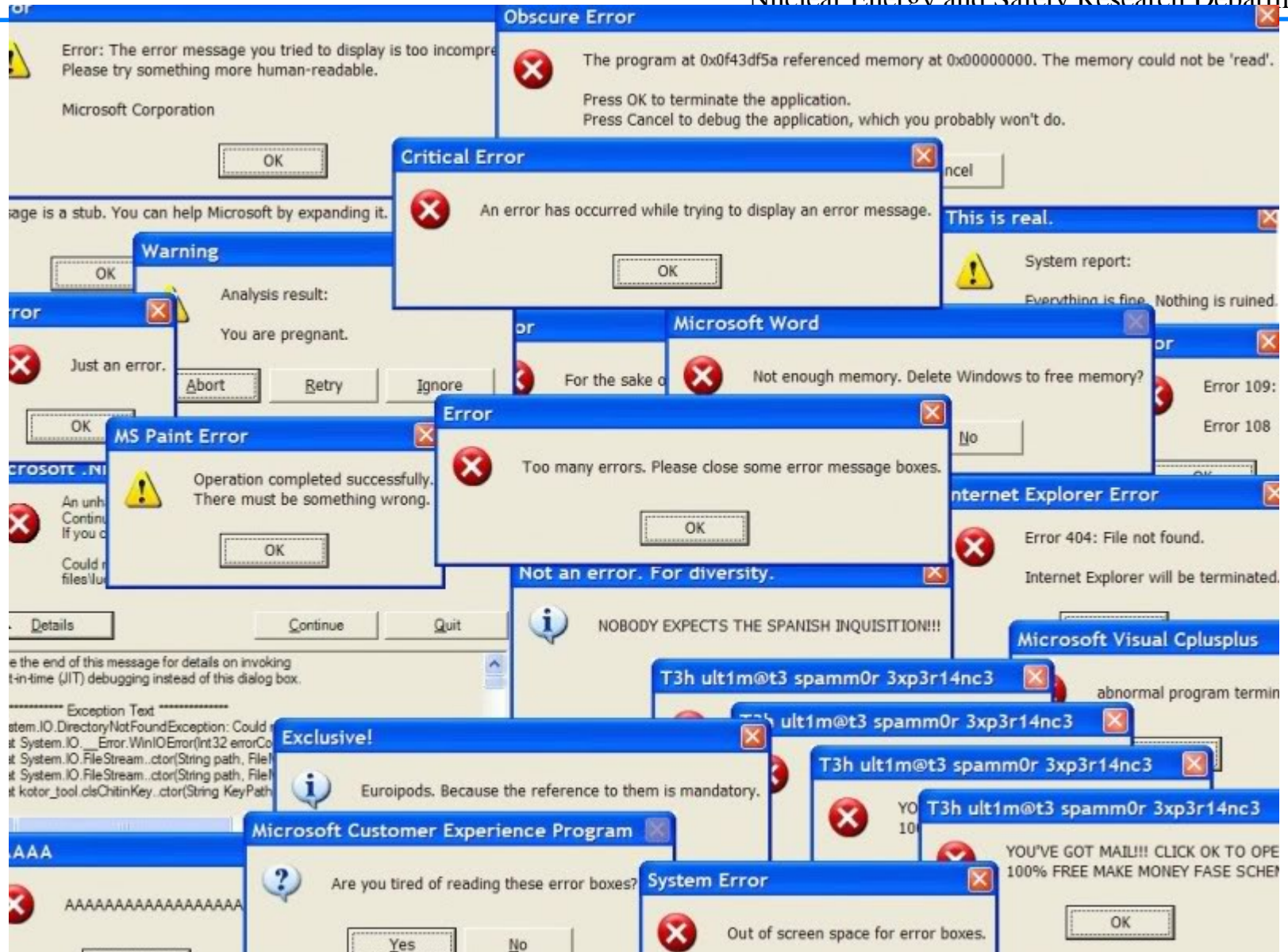
#INITIAL_CONDITION
$PCS_TYPE
MASS_TRANSPORT
$PRIMARY_VARIABLE
4-Inrt
$GEO_TYPE
DOMAIN
$DIS_TYPE
CONSTANT 7.91931572448324e-001

#INITIAL_CONDITION
```

This is the result for creating initial conditions:  
Now save the result in a file or copy the screen content into an OGS ic file.









Thanks to Dimitrii Kulik for the excellent work on improving GEMS-PSI and to Haibing Shao and the OGS-community for the OGS-GEMS coupling.

