

# Data Analysis

PALM group

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First item is pure ASCII-data to give a short overview of the run. All other output is in netCDF format and can be graphically displayed.

Additionally, power spectra can be output using the spectra-package (use `mrun-option "-p spectra"`).

# Processing Standard Output Data with Graphics Software (Public Domain-Software)

The standard output files are in netCDF format which can be easily displayed with `ncview`, `ncl`, or `ferret`.

standard output	names of local files created by PALM	suffix of permanent files as defined in <code>.mrun.config</code>	call of graphics software
mean vertical profiles	DATA_1D_PR_NETCDF	<code>-pr.nc</code>	<code>ncview &lt;filename&gt;</code> <code>palmpplot pr &lt;options&gt;</code> <code>ferret -gui</code>
time series	DATA_1D_TS_NETCDF	<code>-ts.nc</code>	<code>ncview &lt;filename&gt;</code> <code>palmpplot ts &lt;options&gt;</code> <code>ferret -gui</code>
2d-cross-sections	DATA_2D_XY_NETCDF DATA_2D_XZ_NETCDF DATA_2D_YZ_NETCDF	<code>-xy.nc</code> <code>-xz.nc</code> <code>-yz.nc</code>	<code>ncview &lt;filename&gt;</code> <code>palmpplot xy &lt;options&gt;</code> <code>palmpplot xz &lt;options&gt;</code> <code>palmpplot yz &lt;options&gt;</code> <code>ferret -gui</code>
3d-data	DATA_3D_NETCDF	<code>-3d.nc</code>	<code>ncview &lt;filename&gt;</code> <code>palmpplot xy &lt;options&gt;</code> <code>ferret -gui</code>

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- 2. Find and set the appropriate output parameters in the parameter file**  
`data_output_pr = 'pt', 'u', 'w "pt" ', dt_dopr = 900.0,`  
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- 3. Check, if the necessary file connection statements exist in the .mrun.config file**

```
DATA_1D_PR_NETCDF out:loc:tr pr#  
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4. **Don't forget to activate the file connection statements by setting the correct activation string(s) in mrun-option -r**

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mrun ... -r "... pr# ..." ...
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5. **After job completion, change to the OUTPUT-directory and call the appropriate graphics software**

```
ncview <filename> or palmpplot pr <options>
```