

# Package: evalhyd (via r-universe)

November 11, 2024

**Type** Package

**Title** R Bindings for EvalHyd

**Version** 0.1.2.0

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**Description** An evaluator for probabilistic and deterministic streamflow predictions.

**SystemRequirements** C++14, GNU make

**Depends** R (>= 3.0.3)

**License** GPL (>= 3)

**Imports** Rcpp (>= 1.0.8)

**LinkingTo** Rcpp

**Suggests** testthat, R.utils

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**URL** <https://hydrogr.github.io/evalhyd/r/>

**BugReports** <https://gitlab.irstea.fr/HYCAR-Hydro/evalhyd/evalhyd-r/-/issues/>

**Config/pak/sysreqs** make

**Repository** <https://hydrogr.r-universe.dev>

**RemoteUrl** <https://gitlab.irstea.fr/HYCAR-Hydro/evalhyd/evalhyd-r>

**RemoteRef** main

**RemoteSha** 198e78dc34024c7aac21a5f24187ff21346cdb8a

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evald	<i>Deterministic evaluation</i>
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### Description

Deterministic evaluation

### Usage

```
evald(
  q_obs,
  q_prd,
  metrics,
  q_thr = NULL,
  events = NULL,
  transform = NULL,
  exponent = NULL,
  epsilon = NULL,
  t_msk = NULL,
  m_cdt = NULL,
  bootstrap = NULL,
  dts = NULL,
  seed = NULL,
  diagnostics = NULL
)
```

### Arguments

<code>q_obs</code>	A numeric vector (or numeric matrix) of streamflow observations.
<code>q_prd</code>	A numeric vector (or numeric matrix) of streamflow predictions.
<code>metrics</code>	A string vector of evaluation metrics to be computed.
<code>q_thr</code>	A numeric vector (or numeric matrix) of streamflow thresholds.
<code>events</code>	A string specifying the type of streamflow events to consider for threshold exceedance-based metrics.
<code>transform</code>	A string specifying the transformation to apply to both streamflow observations and predictions.
<code>exponent</code>	A numeric scalar specifying the value of the exponent $n$ to use when the transform is the power function.
<code>epsilon</code>	A numeric scalar specifying the value of the small constant to add to both the streamflow observations and predictions.
<code>t_msk</code>	A logical array of mask(s).
<code>m_cdt</code>	A string array of masking condition(s).
<code>bootstrap</code>	A list providing the parameters of the bootstrapping method.
<code>dts</code>	A string vector of corresponding dates and times.

seed	An integer value for the seed used by random generators.
diagnostics	A string vector of evaluation diagnostics to be computed.

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evalp	<i>Probabilistic evaluation</i>
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## Description

Probabilistic evaluation

## Usage

```
evalp(
  q_obs,
  q_prd,
  metrics,
  q_thr = NULL,
  events = NULL,
  c_lvl = NULL,
  t_msk = NULL,
  m_cdt = NULL,
  bootstrap = NULL,
  dts = NULL,
  seed = NULL,
  diagnostics = NULL
)
```

## Arguments

q_obs	A numeric vector (or numeric matrix) of streamflow observations.
q_prd	A numeric vector (or numeric matrix) of streamflow predictions.
metrics	A string vector of evaluation metrics to be computed.
q_thr	A numeric vector (or numeric matrix) of streamflow thresholds.
events	A string specifying the type of streamflow events to consider for threshold exceedance-based metrics.
c_lvl	A numeric vector containing the confidence interval(s).
t_msk	A logical array of mask(s).
m_cdt	A string array of masking condition(s).
bootstrap	A list providing the parameters of the bootstrapping method.
dts	A string vector of corresponding dates and times.
seed	An integer value for the seed used by random generators.
diagnostics	A string vector of evaluation diagnostics to be computed.

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