

# Package ‘truncatedNormals’

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**Title** R functions for truncated univariate normal distributions

**Author** Christopher Hans and Peter F. Craigmile

**Maintainer** Peter F. Craigmile <pfc@stat.osu.edu>

**Depends** R (>= 2.8)

**Description** R functions to simulate from and calculate densities and probabilities for univariate truncated normal distributions (left, right or interval truncated). Supported by the National Science Foundation under award number DMS-0604963.

**License** GPL-3

**URL** <http://www.r-project.org>, <http://www.stat.osu.edu/~pfc/>

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dnorm.truncated	<i>Calculate density function for truncated normal random variables</i>
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## Description

Calculate density function for truncated normal random variables

## Usage

dnorm.truncated(x, mu, sd, lower, upper, log)

**Arguments**

x	value to calculate density at
mu	mean
sd	standard deviation
lower	lower truncation point
upper	upper truncation point
log	if TRUE, calculate the log density

**Value**

A vector of density values

**Author(s)**

Peter F. Craigmile

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pnorm.truncated	<i>Calculate distribution function for truncated normal random variables</i>
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**Description**

Calculate distribution function for truncated normal random variables

**Usage**

```
pnorm.truncated(q, mu, sd, lower, upper, log.p)
```

**Arguments**

q	quantile to calculate
mu	mean
sd	standard deviation
lower	lower truncation point
upper	upper truncation point
log.p	if TRUE, probabilities are given as log(p)

**Value**

A vector of probabilities

**Author(s)**

Peter F. Craigmile

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rnorm.truncated	<i>Generate truncated normal random variables</i>
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**Description**

Generate truncated normal random variables

**Usage**

```
rnorm.truncated(n, mu, sd, lower, upper)
```

**Arguments**

n	number of variables to generate
mu	mean
sd	standard deviation
lower	lower truncation point
upper	upper truncation point

**Value**

A vector of truncated random variables

**Author(s)**

Christopher Hans and Peter F. Craigmile

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