

# Package ‘AtmChile’

May 4, 2021

**Type** Package

**Title** Download Air Quality and Meteorological Information of Chile

**Version** 0.1.0

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**Description**

Download air quality and meteorological information of Chile from the National Air Quality System (S.I.N.C.A.)<<https://sinca.mma.gob.cl/>> dependent on the Ministry of the Environment and the Meteorological Directorate of Chile (D.M.C.)<<http://www.meteochile.gob.cl/>> dependent on the Directorate General of Civil Aeronautics.

**License** GPL-3

**URL** <https://github.com/franciscoxaxo/AtmChile>

**Encoding** UTF-8

**LazyData** false

**RoxygenNote** 7.1.1

**Imports** data.table

**NeedsCompilation** no

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ChileAirQuality

*ChileAirQuality*


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### Description

function that compiles air quality data from the National Air Quality System (S.I.N.C.A.)

### Usage

```
ChileAirQuality(
  Comunas = "INFO",
  Parametros,
  fechadeInicio,
  fechadeTermino,
  Site = FALSE,
  Curar = TRUE
)
```

### Arguments

Comunas	data vector containing the names or codes of the monitoring stations. Available stations: "P. O'Higgins", "Cerrillos 1", "Cerrillos", "Cerro Navia", "El Bosque", "Independencia", "La Florida", "Las Condes", "Pudahuel", "Puente Alto", "Quilicura", "Quilicura 1", "Coyhaique I", "Coyhaique II". To see the full list of stations use <code>ChileAirQuality()</code>
Parametros	data vector containing the names of the air quality parameters. Available parameters: "PM10", "PM25", "CO", "SO2", "NOX", "NO2", "NO", "O3", "temp" (temperature), "RH" (relative humidity), "ws" (wind speed), "wd" (wind direction).
fechadeInicio	text string containing the start date of the data request
fechadeTermino	text string containing the end date of the data request
Site	logical value that allows entering the code of the monitoring station in the variable "Comunas"
Curar	logical value that activates data curation for particulate matter, nitrogen oxides, relative humidity and wind direction.

### Value

A data frame with air quality data.

### Source

<<https://sinca.mma.gob.cl/>>

**Examples**

```

try({
stations <- ChileAirQuality()
}, silent =TRUE)

try({
data <- ChileAirQuality(Comunas = "El Bosque",
  Parametros = c("PM10", "PM25"), fechadeInicio = "01/01/2020",
  fechadeTermino = "02/01/2020")
}, silent =TRUE)

try({
ChileAirQuality(Comunas = c("EB", "SA"),
Parametros = "PM10", fechadeInicio = "01/01/2020",
fechadeTermino = "01/01/2021", Site = TRUE)
}, silent = TRUE)

```

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ChileClimateData

*Title ChileClimateData*


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**Description**

function that compiles climate data from Climate direction of Chile (D.M.C.)

**Usage**

```
ChileClimateData(Estaciones = "INFO", Parametros, inicio, fin, Region = FALSE)
```

**Arguments**

Estaciones	data vector containing the codes of the monitoring stations. To see the table with the monitoring stations use ChileClimateData()
Parametros	data vector containing the names of the climate parameters. Available parameters: "Temperatura", "PuntoRocio", "Humedad", "Viento", "PresionQFE", "PresionQFF".
inicio	text string containing the start year of the data request.
fin	text string containing the end year of the data request.
Region	logical parameter. If region is true it allows to enter the administrative region in which the station is located instead of the station code.

**Value**

A data frame with climate data of Chile.

**Source**

<<http://www.meteochile.gob.cl/>>

**Examples**

```
try({ChileClimateData()}, silent = TRUE)

try({
  head(ChileClimateData(Estaciones = "180005",
    Parametros = c("Temperatura", "Humedad"),
    inicio = "2020", fin = "2021"))
}, silent = TRUE)

try({
  ChileClimateData(Estaciones = "II",
    Parametros = "Temperatura", inicio = "2020",
    fin = "2021", Region = TRUE)
}, silent = TRUE)
```

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