

# Package ‘tcxr’

May 8, 2026

**Title** Parse and Analyze TCX Files

**Version** 0.1.0

**Description** Framework provides functions to parse 'Training Center XML (TCX)' files and extract key activity metrics such as total distance, total time, calories burned, maximum altitude, and power values (watts). This package is useful for analyzing workout and training data from devices that export 'TCX' format.

**Depends** R (>= 3.5.0)

**License** MIT + file LICENSE

**Imports** XML

**Suggests** testthat

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**NeedsCompilation** no

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`parse_lap`*Parse a Lap from a TCX File*

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**Description**

Extracts data from a lap within a TCX file, including time, distance, altitude, speed, power, cadence, and heart rate.

**Usage**

```
parse_lap(lap)
```

**Arguments**

`lap` An XML node representing a lap in a TCX file.

**Value**

A dataframe containing the lap metrics.

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`parse_trackpoint`*Parse a Trackpoint from a TCX File*

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**Description**

Extracts data from a trackpoint, including altitude, distance, speed, power, cadence, and heart rate.

**Usage**

```
parse_trackpoint(trackpoint)
```

**Arguments**

`trackpoint` An XML node representing a trackpoint.

**Value**

A list of parsed trackpoint metrics.

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TCXRead

*Read and Parse a TCX File*

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**Description**

Parses a TCX file to extract key activity metrics such as speed, distance, time, altitude, power, cadence, heart rate, and activity type.

**Usage**

```
TCXRead(file_path)
```

**Arguments**

`file_path`      A character string specifying the path to the TCX file.

**Value**

A list containing the computed activity metrics, including the activity type.

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