

# fdsnevent(1)

## Name

fdsnevent - example client to query a remote FDSN Event web service

## Synopsis

```
fdsnevent [-vV] [--help] [--includeallmagnitudes] [--includeallorigins] [--includearrivals] [
--printurl] [--raw] [--schema] [--validate] [-b=<startTime>] [--baseurl=<baseURL>] [--box=w/e/s/n] [
-c=<catalog>] [-C=<contributor>] [--donut=lat/lon/min/max] [-e=<endTime>] [--eventid=<eventid>] [
--host=<host>] [--lat=<latitude>] [--limit=<limit>] [--lon=<longitude>] [--maxdepth=<maxDepth>] [
--maxlat=<maxLatitude>] [--maxlon=<maxLongitude>] [--maxmag=<maxMagnitude>] [--
maxradius=<maxRadius>] [--mindepth=<minDepth>] [--minlat=<minLatitude>] [--minlon
=<minLongitude>] [--minmag=<minMagnitude>] [--minradius=<minRadius>] [--nodata=<nodata>] [
-o=<outputFile>] [--offset=<offset>] [--orderby=<orderBy>] [--port=<port>] [-t=<magnitudeType>] [
--updatedafter=<updatedAfter>] [-m=<magnitudeRange> [<magnitudeRange>]]...
```

## Description

example client to query a remote FDSN Event web service

Times are ISO8601 formatted strings, like yyyy-MM-ddTHH:mm:ss, and may be shortened to include only the significant fields. The remaining fields will be filled in as either zero or max value depending on the use. For example 2006-11-19 or 2006-11-19T06:34:21. The special strings now and yesterday may also be used.

[View source code here.](#)

## Options

**-b, --start, --starttime=<startTime>**

Limit to events on or after the specified start time.

**--baseurl=<baseURL>**

Base URL for queries, ie everything before the '<service>/<version>/<query>?'

**--box=w/e/s/n**

constraining box as west/east/south/north

**-c, --catalog=<catalog>**

Limit to events from a specified catalog

**-C, --contributor=<contributor>**

Limit to events contributed by a specified contributor.

**--donut=lat/lon/min/max**

constraining donut as lat/lon/minRadius/maxRadius

**-e, --end, --endtime=<endTime>**

Limit to events on or before the specified end time.

**--eventid=<eventid>**

Select a specific event by ID; event identifiers are data center specific.

**--help**

display a help message

**--host=<host>**

host to connect to, defaults to earthquake.usgs.gov

**--includeallmagnitudes**

Specify if all magnitudes for the event should be included, default is data center dependent but is suggested to be the preferred magnitude only.

**--includeallorigins**

Specify if all origins for the event should be included, default is data center dependent but is suggested to be the preferred origin only.

**--includearrivals**

Specify if phase arrivals should be included.

**--lat, --latitude=<latitude>**

Specify the latitude to be used for a radius search.

**--limit=<limit>**

Limit the results to the specified number of events.

**--lon, --longitude=<longitude>**

Specify the longitude to be used for a radius search.

**-m, --magnitude=<magnitudeRange> [<magnitudeRange>]**

The range of acceptable magnitudes, max may be omitted.

**--maxdepth=<maxDepth>**

Limit to events with depth less than the specified maximum.

**--maxlat, --maxlatitude=<maxLatitude>**

Limit to events with a latitude smaller than the specified maximum.

**--maxlon, --maxlongitude=<maxLongitude>**

Limit to events with a longitude smaller than the specified maximum.

**--maxmag, --maxmagnitude=<maxMagnitude>**

Limit to events with a magnitude smaller than the specified maximum.

**--maxradius=<maxRadius>**

Limit to events within the specified maximum number of degrees from the geographic point defined by the latitude and longitude parameters.

**--mindepth=<minDepth>**

Limit to events with depth more than the specified minimum.

**--minlat, --minlatitude=<minLatitude>**

Limit to events with a latitude larger than the specified minimum.

**--minlon, --minlongitude=<minLongitude>**

Limit to events with a longitude larger than the specified minimum.

**--minmag, --minmagnitude=<minMagnitude>**

Limit to events with a magnitude larger than the specified minimum.

**--minradius=<minRadius>**

Limit to events within the specified minimum number of degrees from the geographic point defined by the latitude and longitude parameters.

**--nodata=<nodata>**

nodata http return code

**-o, --output=<outputFile>**

File for outputting result

**--offset=<offset>**

Return results starting at the event count specified, starting at 1.

**--orderby=<orderBy>**

Order the result by time or magnitude with the following possibilities: time: order by origin descending time time-asc : order by origin ascending time magnitude: order by descending magnitude magnitude-asc : order by ascending magnitude

**--port=<port>**

port to connect to, defaults to 80

**--printurl**

Construct and print URL and exit

**--raw**

Output the raw data to stdout

**--schema**

prints schema

**-t, --magtype, --magnitudetype=<magnitudeType>**

Specify a magnitude type to use for testing the minimum and maximum limits.

**--updatedafter=<updatedAfter>**

Limit to events updated after the specified time.

**-v, --verbose**

Verbose

**-V, --version**

Print version and exit

**--validate**

Validate XML against schema

## Examples

Ask for magnitude 2 or larger events within 3 degrees of 32/-81 in December 2020 or January 2021.

```
> fdsnevent -b 2020-12 -e 2021-01 --donut 32/-81/0/3 -m 2
34.031166/-80.3835 2.05 md 2021-01-18T10:52:50.750Z
33.68667/-82.55883 2.38 md 2020-12-27T05:17:10.310Z
34.01483/-81.02033 2.37 md 2020-12-12T01:37:34.710Z
```

Only print the URL that would be accessed without connecting to the remote server.

```
> fdsnevent -b 2020-12 -e 2021-01 --donut 32/-81/0/3 -m 2 --printurl
http://earthquake.usgs.gov:80/fdsnws/event/1/query?endtime=2021-01-
31T23:59:59.999Z&latitude=32.0&longitude=-
81.0&maxradius=3.0&minmagnitude=2.0&minradius=0.0&starttime=2020-12-01T00:00:00.000Z
```

Output the raw quakeml to a file.

```
> fdsnevent -b 2020-12 -e 2021-01 --donut 32/-81/0/3 -m 2 --raw -o events.quakeml
```