

Seisplotjs

..because I am really bad at picking names.

Philip Crotwell

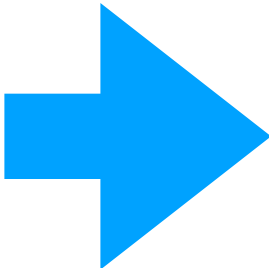
South Carolina Seismic Network

<http://github.com/crotwell/seisplotjs>

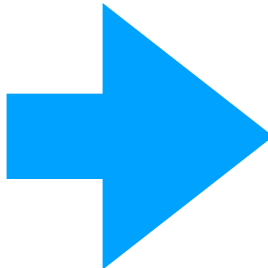
Server Side

Client Side

Data



Render



Display

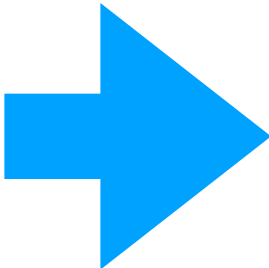


Ye Olde Internet

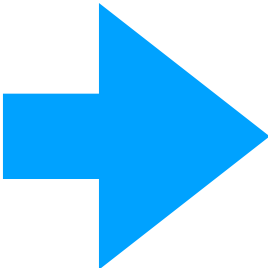
Server Side

Client Side

Data



Render



Display

Ye Olde Internet

**Never Ever Do A Live
Internet Demo In Front Of
An Audience. Never!**

<http://www.seis.sc.edu/~crotwell/NetOps2018/Demo/demo.html>

seisplotjs.fdsndataselect

```
var ds = seisplotjs.fdsndataselect;

var dsQuery = new ds.DataSelectQuery()
  .nodata(404)
  .networkCode('UW')
  .stationCode('DOSE')
  .locationCode('--')
  .channelCode('BHZ')
  .startTime('2018-03-13T20:17:00Z')
  .endTime('2018-03-13T20:23:00Z');

dsQuery.query().then(function(records) {
  // populate table
});
```

URL: <http://service.iris.edu/fdsnws/dataselect/1/query?net=UW&sta=DOSE&loc=--&cha=BHZ&starttime=2018-03-13T20%3A17%3A00.000&endtime=2018-03-13T20%3A23%3A00.000&nodata=404>

Seq	Net	Sta	Loc	Chan	Start	End	NumSamp	Sps
000002	UW	DOSE		BHZ	2018-03-13T20:17:00.015Z	2018-03-13T20:17:08.615Z	345	40
000001	UW	DOSE		BHZ	2018-03-13T20:17:08.640Z	2018-03-13T20:17:18.815Z	408	40
000002	UW	DOSE		BHZ	2018-03-13T20:17:18.840Z	2018-03-13T20:17:28.940Z	405	40
000001	UW	DOSE		BHZ	2018-03-13T20:17:28.965Z	2018-03-13T20:17:38.915Z	399	40
000002	UW	DOSE		BHZ	2018-03-13T20:17:38.940Z	2018-03-13T20:17:49.015Z	404	40
000003	UW	DOSE		BHZ	2018-03-13T20:17:49.040Z	2018-03-13T20:17:59.240Z	409	40
000001	UW	DOSE		BHZ	2018-03-13T20:17:59.265Z	2018-03-13T20:18:09.215Z	399	40
000002	UW	DOSE		BHZ	2018-03-13T20:18:09.240Z	2018-03-13T20:18:19.090Z	395	40
000602	UW	DOSE		BHZ	2018-03-13T20:18:19.115Z	2018-03-13T20:18:27.890Z	352	40

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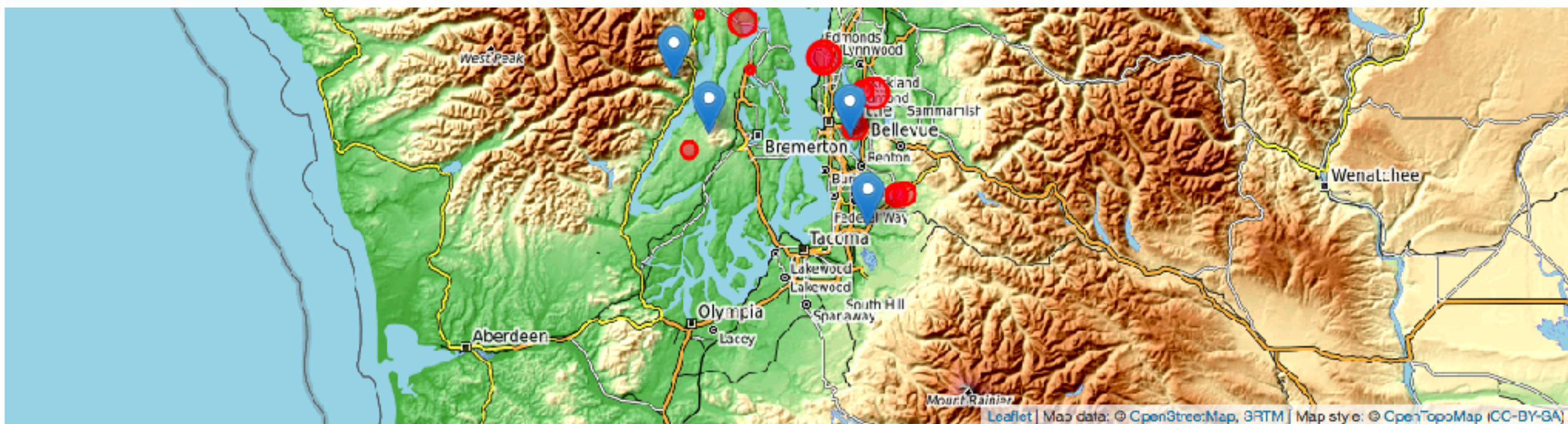
Seisplotjs.fdsnevent

```
var fdsnevent = seisplotjs.fdsnevent
var moment = fdsnevent.model.moment;
var daysAgo = 10;

var quakeQuery = new fdsnevent.EventQuery()
  .minLat(46).maxLat(48)
  .minLon(-123).maxLon(-121)
  .startTime(moment.utc().subtract(daysAgo, 'days'))
  .endTime(moment.utc());
quakeQuery.query().then(function(quakes) {
  // populate table
});
```

URL: <http://earthquake.usgs.gov/fdsnws/event/1/query?starttime=2018-03-05T15%3A39%3A44.404&endtime=2018-03-15T15%3A39%3A44.404&minlon=-123&maxlon=-121>

Time	Mag	Lat,Lon	Depth	Decription
2018-03-14T22:13:04.860Z	0.37 ml	(46.4041667, -122.3116667)	17.29km	17km S of Morton, Washington
2018-03-14T14:34:43.400Z	1.78 ml	(47.7788333, -122.3638333)	20.72km	1km SSW of Esperance, Washington
2018-03-14T08:06:36.930Z	-0.01 md	(46.2416667, -122.0315)	9.14km	39km SSE of Morton, Washington
2018-03-14T06:43:39.610Z	0.57 ml	(46.0333333, -122.5556667)	21.04km	16km NNW of Amboy, Washington
2018-03-13T11:07:32.200Z	0.59 ml	(47.748, -122.6585)	11.3km	1km NNW of Poulsbo, Washington
2018-03-13T08:17:11.680Z	0.86 ml	(47.205, -121.8821667)	20.75km	8km E of Enumclaw, Washington
2018-03-13T04:55:14.450Z	1.75 ml	(46.2606667, -122.0631667)	10.84km	36km SSE of Morton, Washington
2018-03-13T21:26:18.060Z	1.03 ml	(47.8771667, -122.6951667)	0.26km	5km S of Port Ludlow, Washington

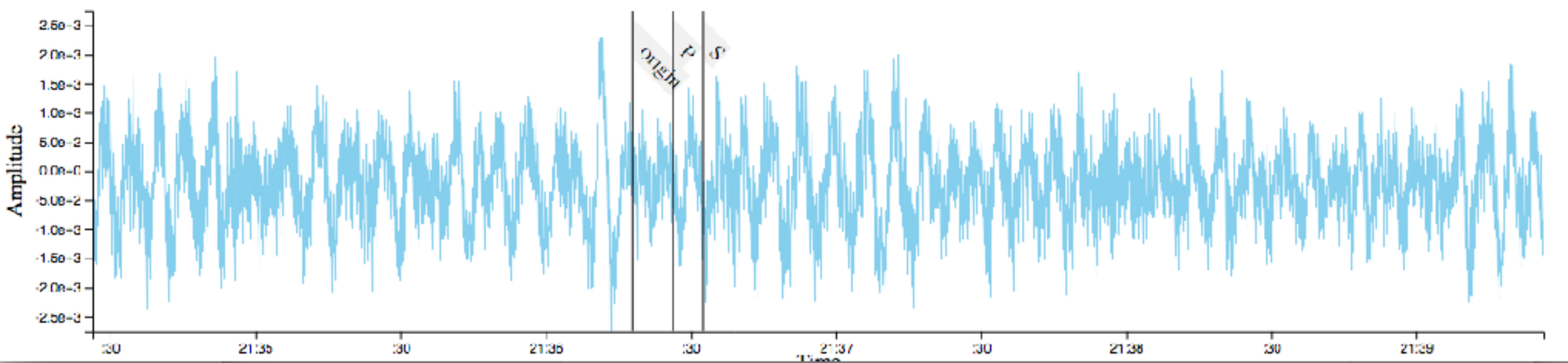


Seismograms

quake: 2018-03-12T21:36:18.060Z 1.93 ml (47.8771667, -122.6851667) -0.26km 5km S of Port Ludlow, Washington

No data found for UW.GRCC

Plot for UW.SP2..BHZ



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Seisplotjs.seedlink

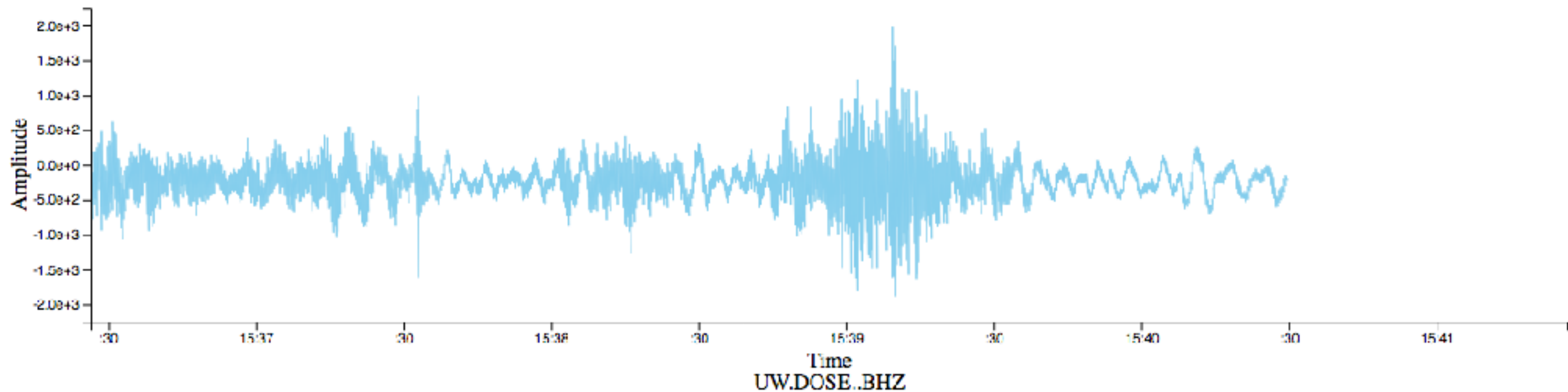
```
var host = "rtserve.iris.washington.edu";
var port = 80;
var seedlinkUrl = wsProtocol+"//"+host+(port==80?'':(':'+port))+'/seedlink';
console.log("URL: "+seedlinkUrl);

var config = [
  'STATION DOSE UW',
  'SELECT --BHZ.D',
  'STATION JSC CO',
  'SELECT 00BHZ.D',
  'STATION SNEO IU',
  'SELECT 00BHZ.D' ];

var slConn = new seedlink.SeedlinkConnection(seedlinkUrl, config, callbackFn, errorFn);
slConn.setTimeCommand(timeWindow.start);
slConn.connect();
```

Play

Disconnect



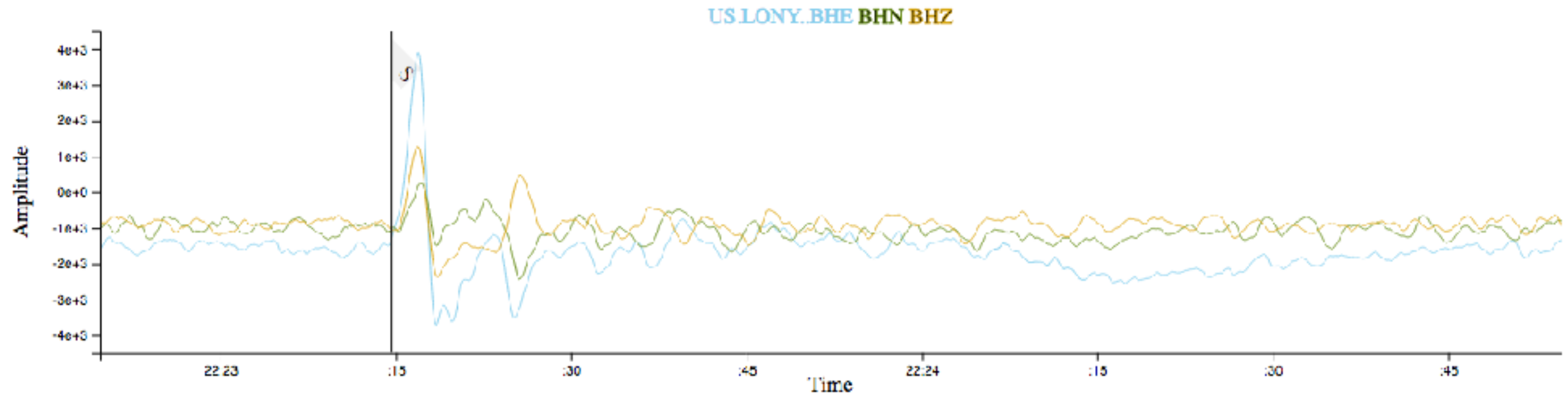
Rotate

```
let distaz = seisplotjs.distaz.distaz(station.latitude(), station.longitude(), quake.latitude(), quake.longitude());  
let rotated = seisplotjs.filter.rotate(seisNorth[0], 0, seisEast[0], 90, (distaz.baz+180)%360);
```

Quakes URL: <http://earthquake.usgs.gov/fdsnws/event/1/query?starttime=2010-04-11T22%3A08%3A00.000&endtime=2010-04-11T22%3A09%3A00.000&minlat=36&maxlat=37&minlon=-4&maxlon=-3>

Stations URL: <http://service.iris.edu/fdsnws/station/1/query?level=station&nct=US&sta=LONY&cha=BH%3F>

Seismograms



Rotated Seismograms

