

Registros en Aceleración de la Redes IPOC y RNA Versión Revisada

Elaborado por: Felipe Leyton, PhD
Abril de 2014

El Informe a continuación da cuenta de registros provenientes de acelerógrafos de la red IPOC, cuyo objetivo es el monitoreo de la sismicidad en el norte de Chile y que surge a partir de la colaboración entre el Centro Sismológico Nacional, el Departamento de Geofísica de la Universidad de Chile, el Departamento de Geología de la Universidad Católica del Norte, GFZ – Potsdam y el Instituto de Física del Globo de París. A esta base de datos se agregan algunos registros de la Red Nacional de Acelerógrafos (RNA), a cargo de la Onemi.

Estas redes buscan aportar al estudio de la sismicidad en Chile y sus efectos en las estructuras. De este modo, científicos e ingenieros civiles y estructurales, así como interesados del mundo civil y la comunidad entera, pueden hacer uso de esta información que se encuentra disponible. Las redes acelerógrafos de IPOC y RNA se presenta en la figura, a continuación.

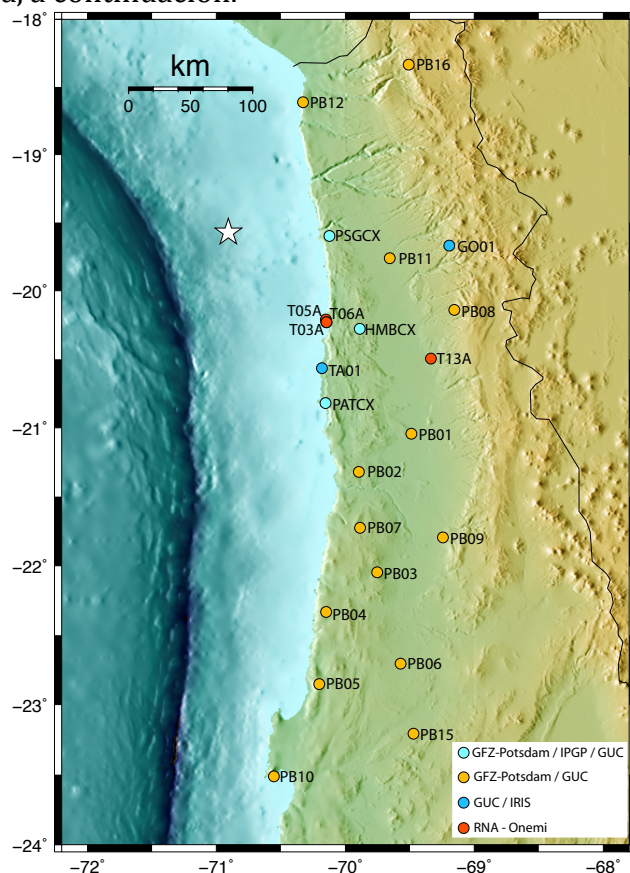


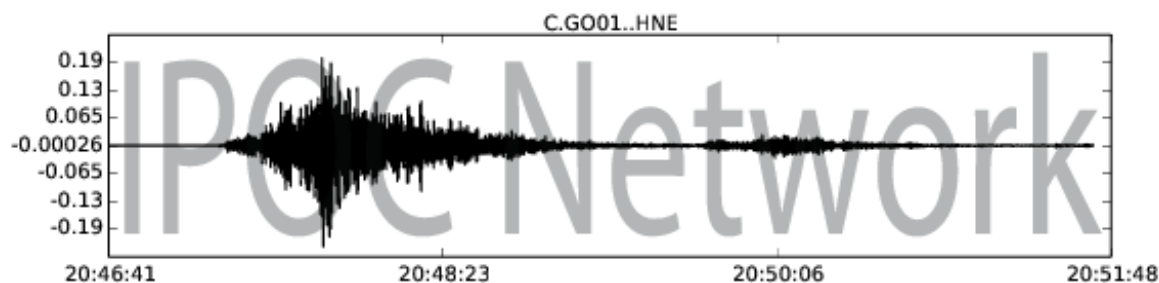
Figura 1: Mapa topográfico con las estaciones que componen la red IPOC y RNA; el color marca la procedencia de la estación, según la escala del borde inferior derecho. La estrella blanca marca el epicentro del terremoto 1 de abril de 2014. La localización exacta de cada estación se presenta en el Anexo.

Cada acelerograma fue procesado de la misma manera, siguiendo los siguientes pasos: transformar de cuentas a unidades físicas, siguiendo la ganancia de cada estación y, posteriormente, remoción de la baja frecuencia mediante un filtro pasa-alta de 0.01 Hz, de 2 polos y sin fase. Todas las trazas se encuentran en términos de la aceleración de gravedad ($g = 9.81 \text{ m/s}^2$). En caso de hacer uso de estos registros, se ruega dar los agradecimientos a la red IPOC, RNA y las instituciones relacionadas.

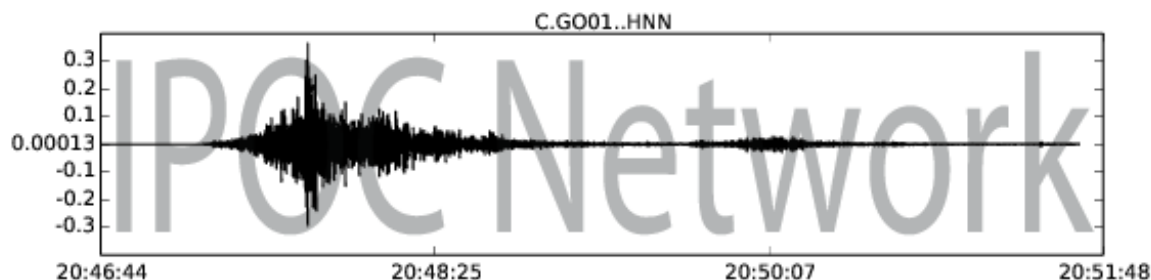
Registros del evento del 1 de abril de 2014, $M_w = 8.2$

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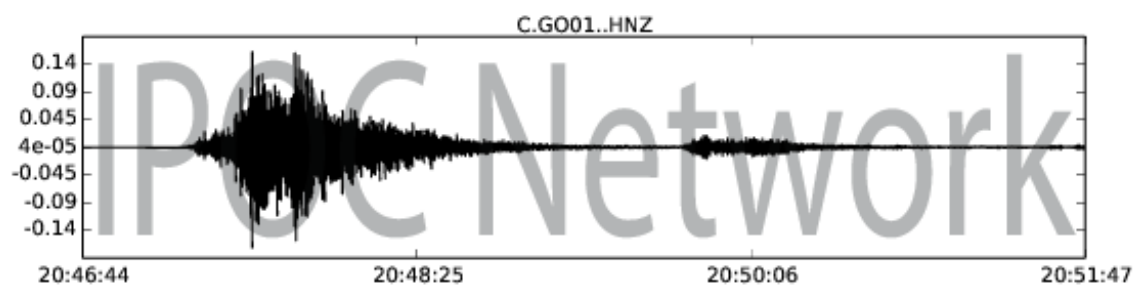
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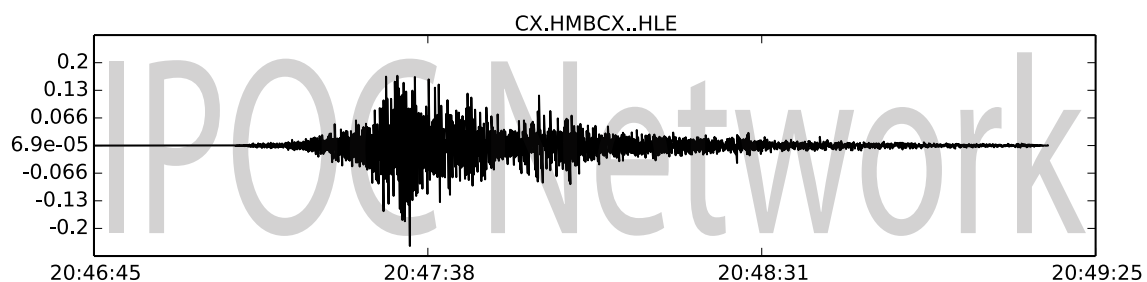


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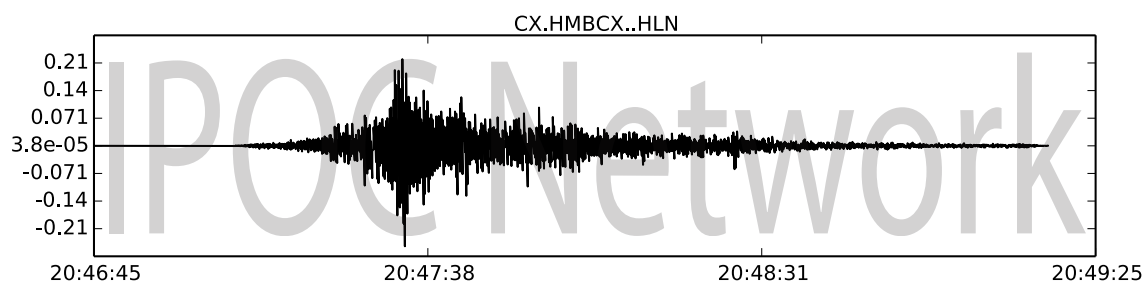


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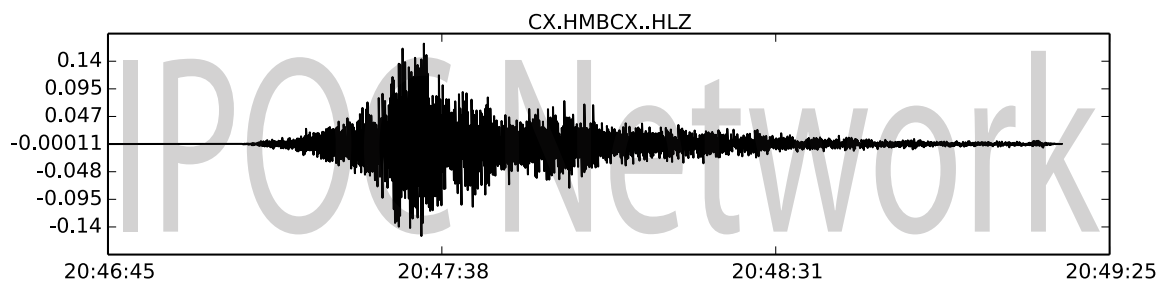
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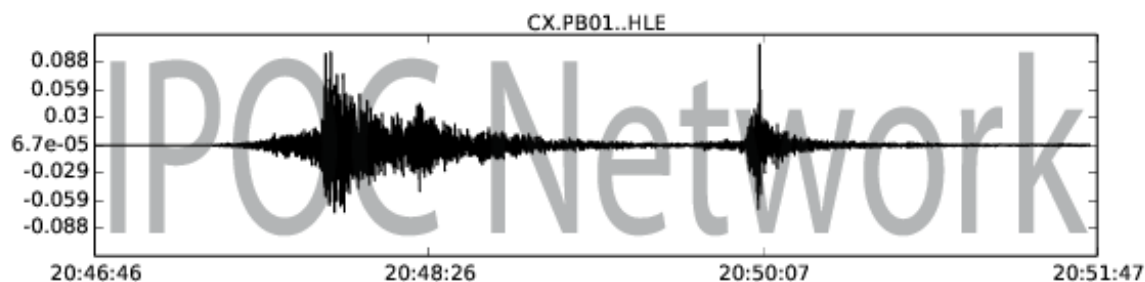


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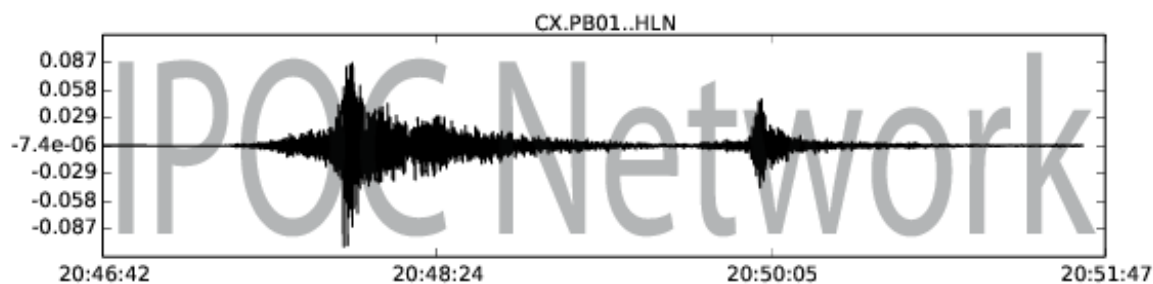


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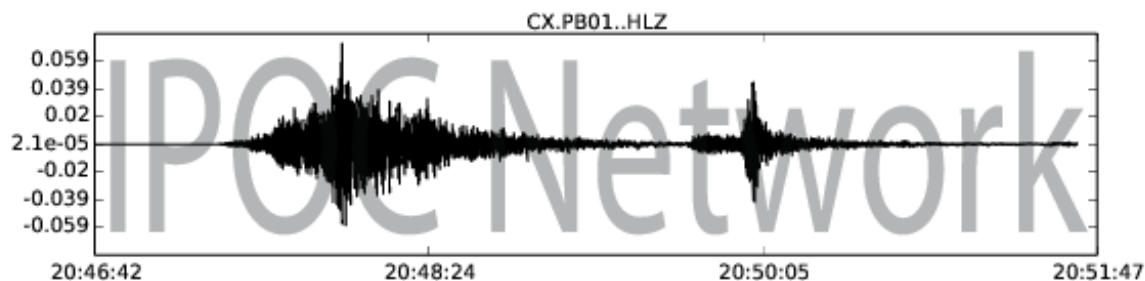
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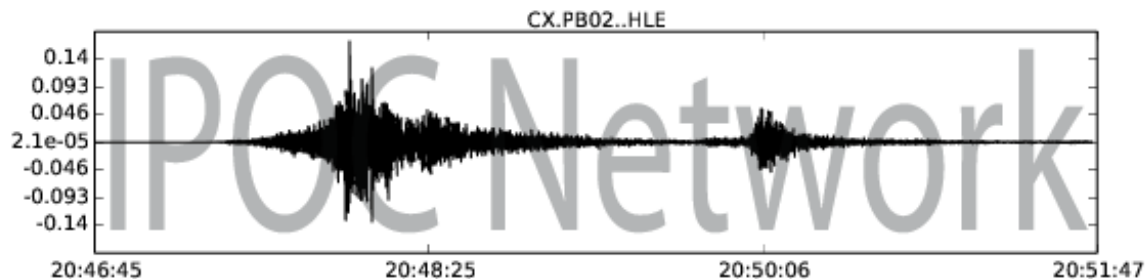


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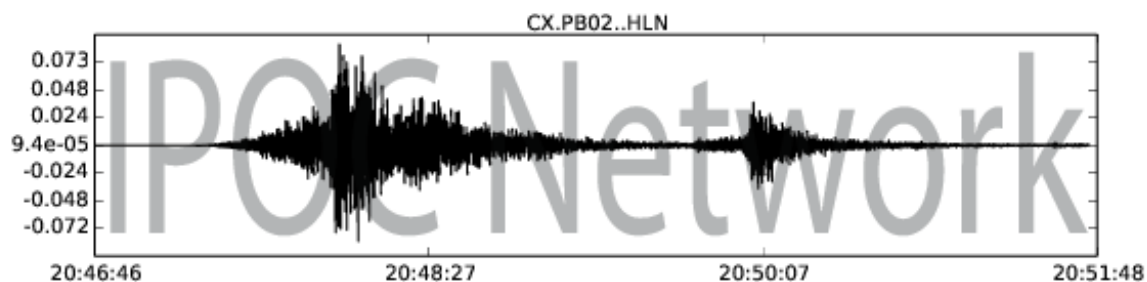


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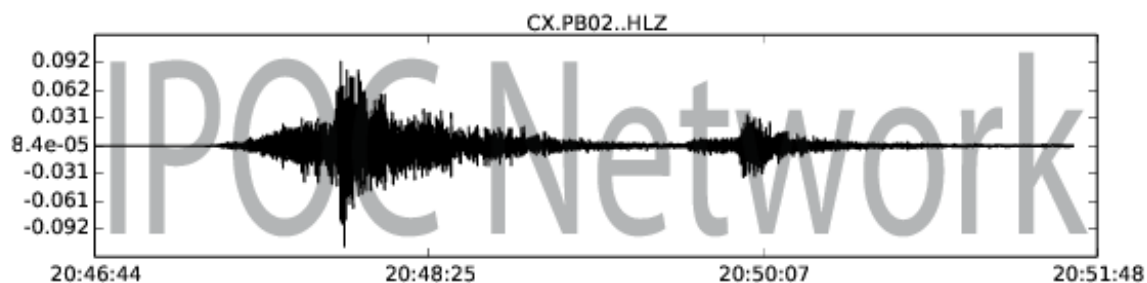
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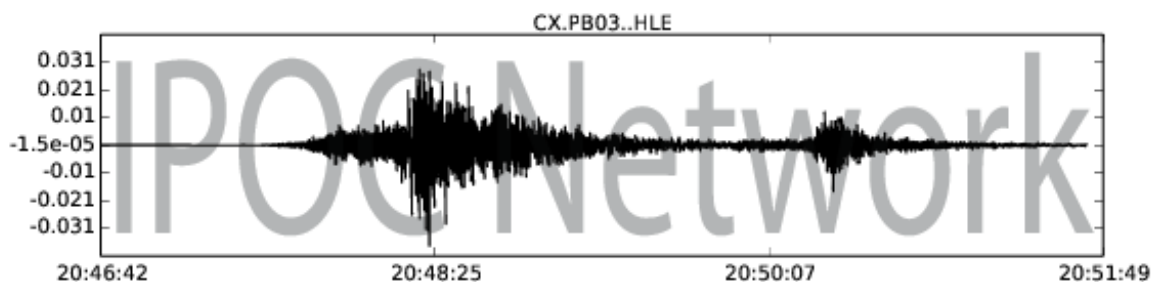


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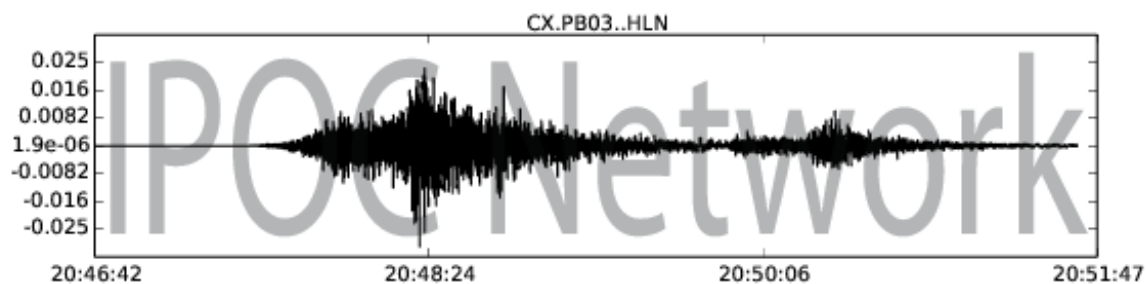


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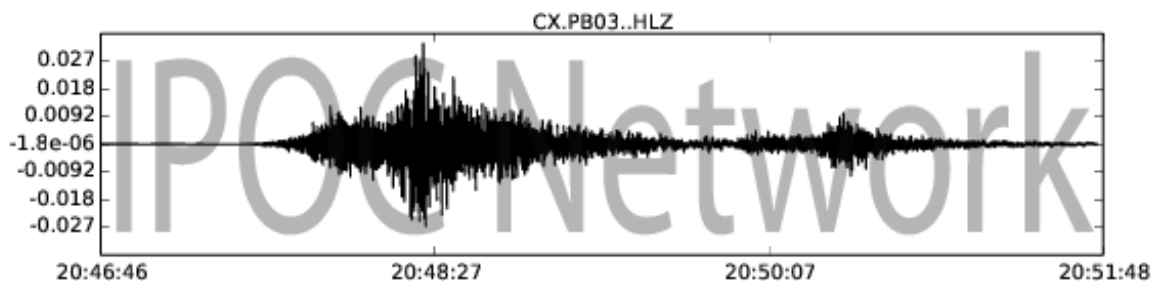
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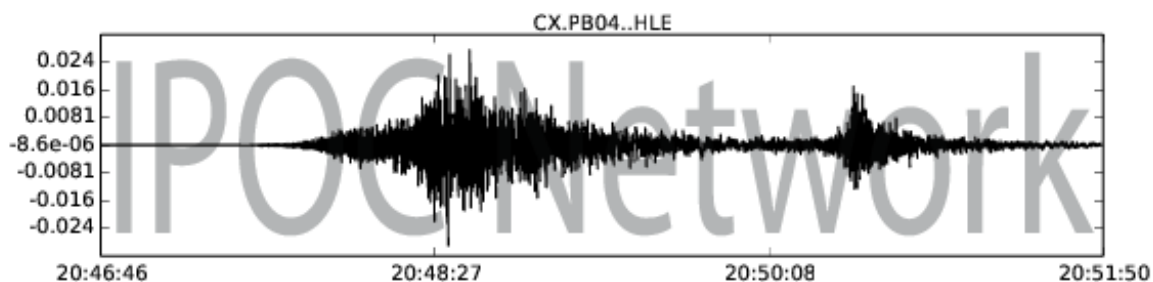


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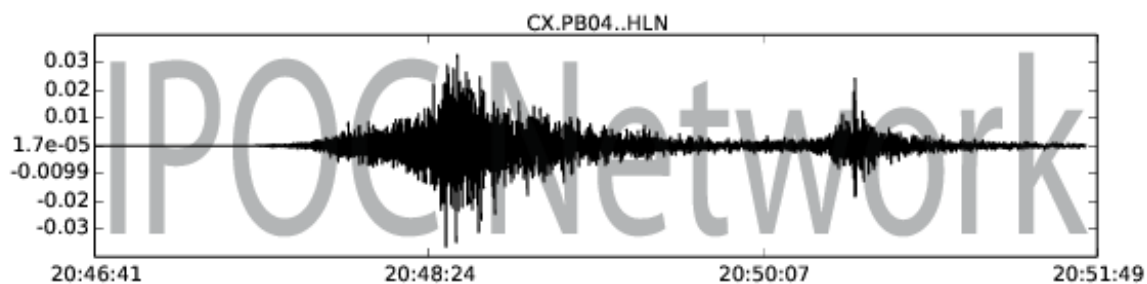


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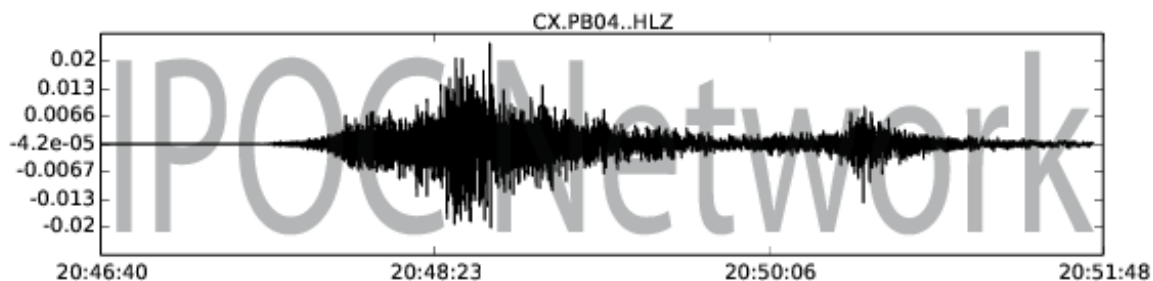
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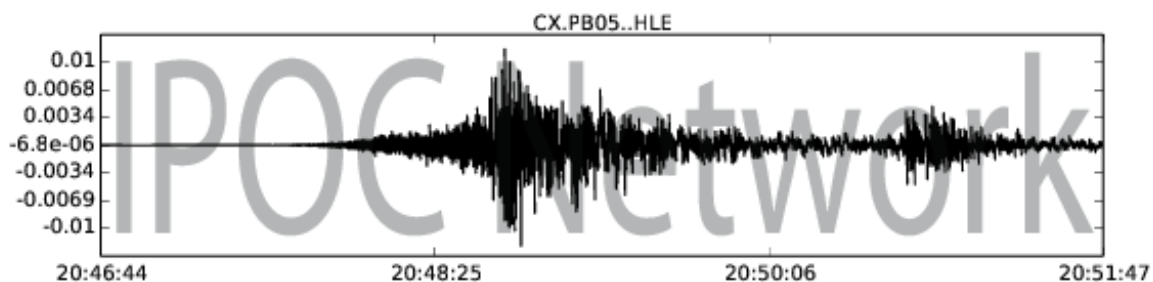


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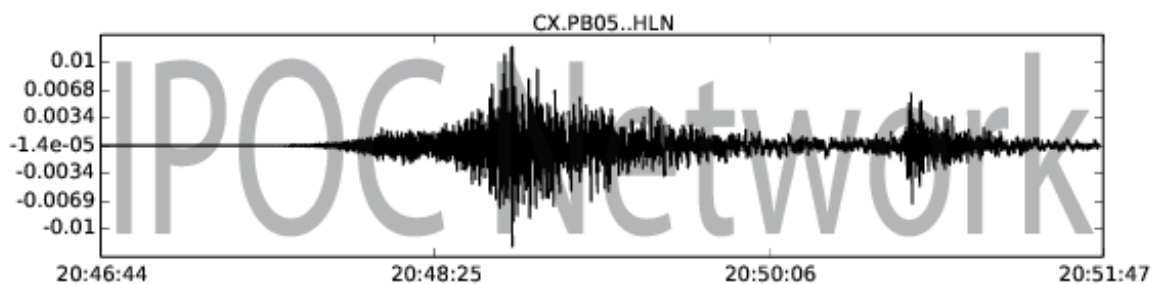


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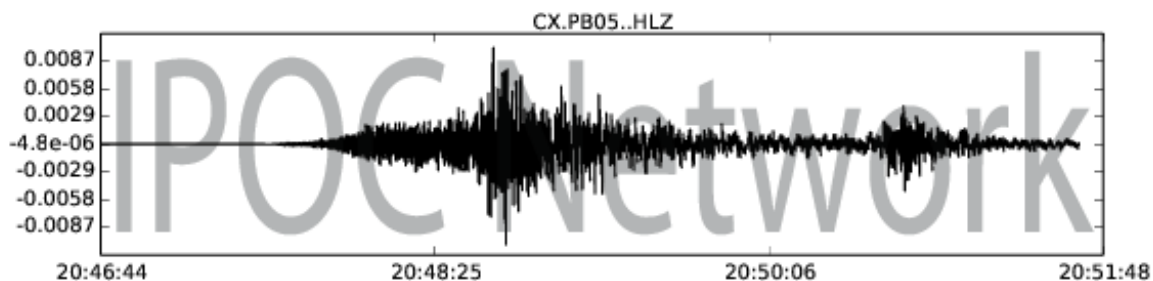
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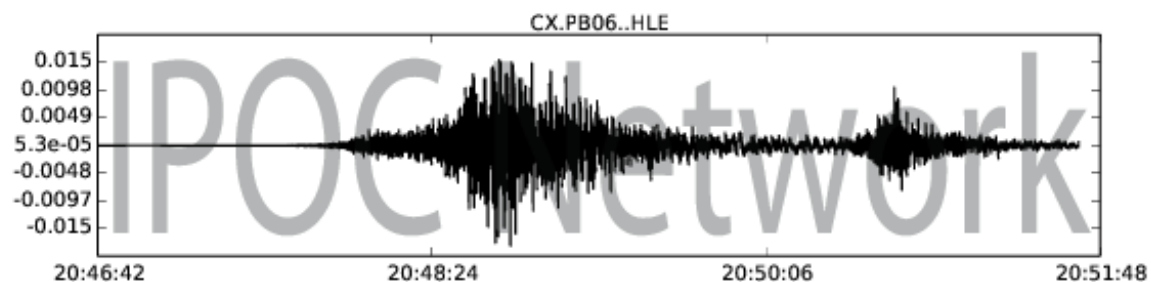


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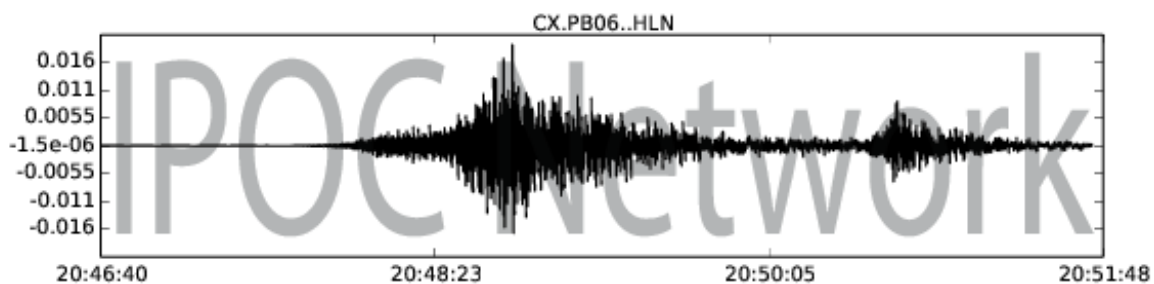


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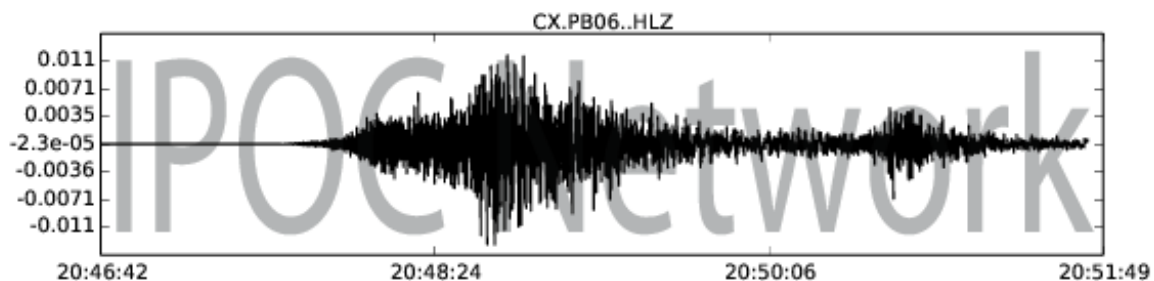
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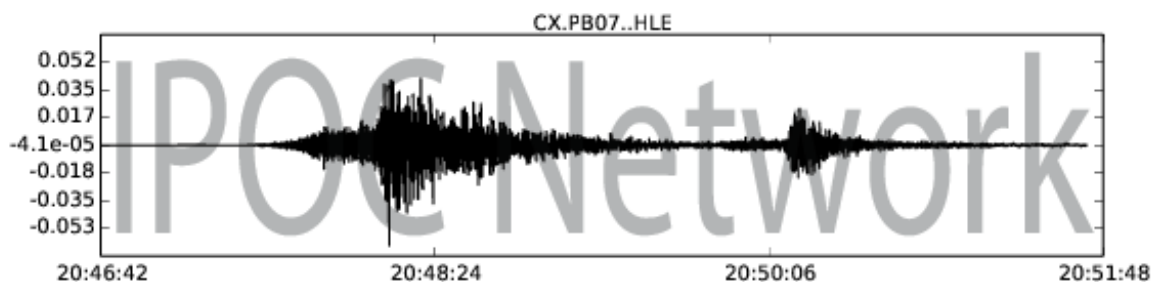


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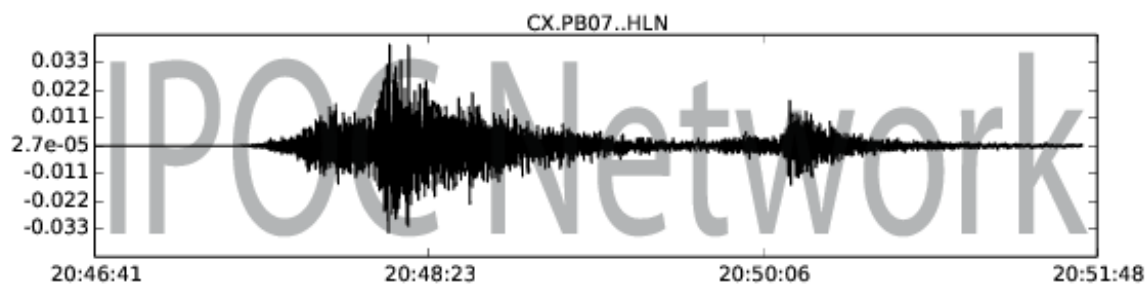


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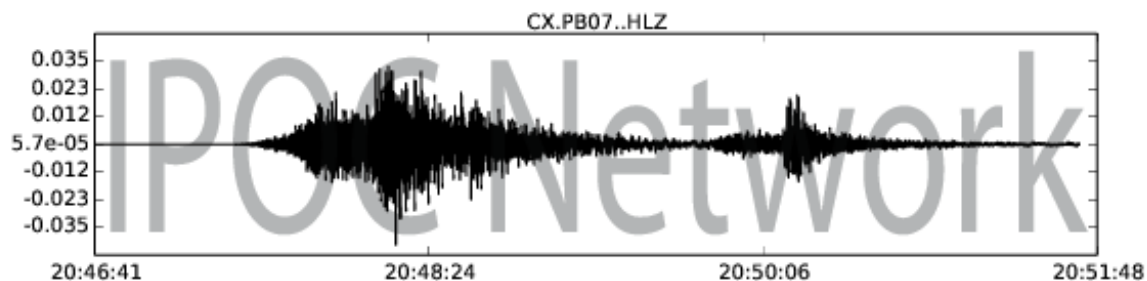
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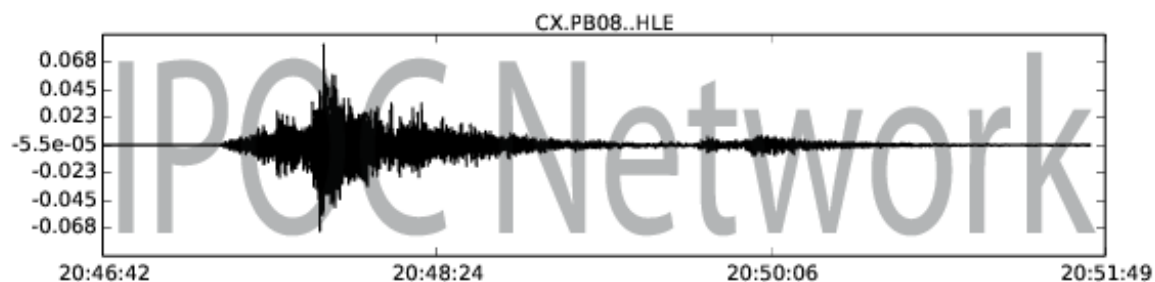


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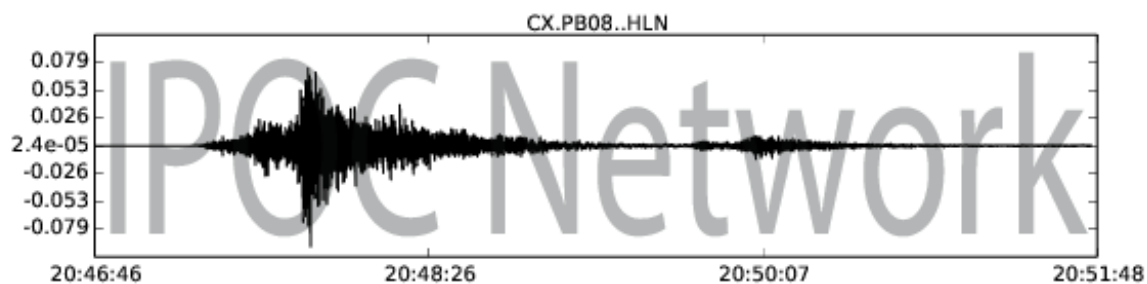


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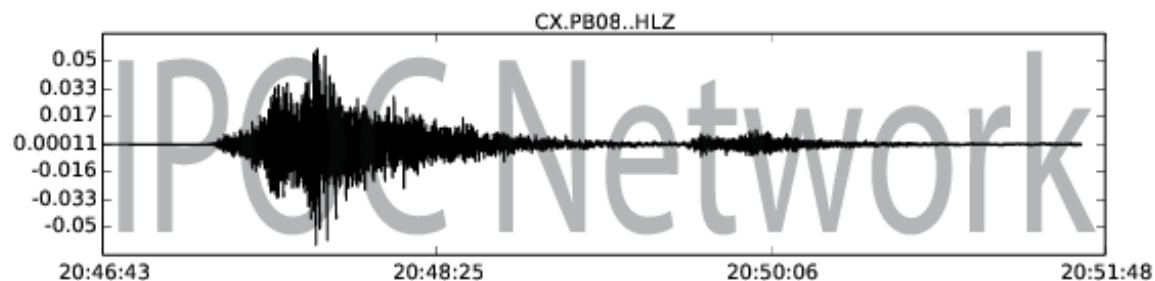
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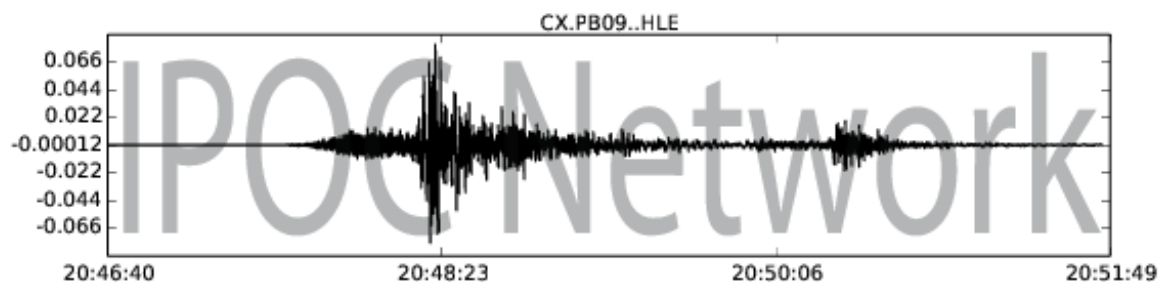


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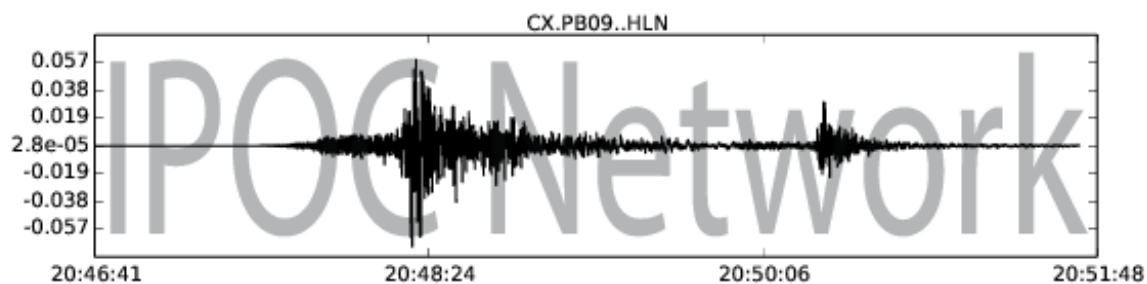


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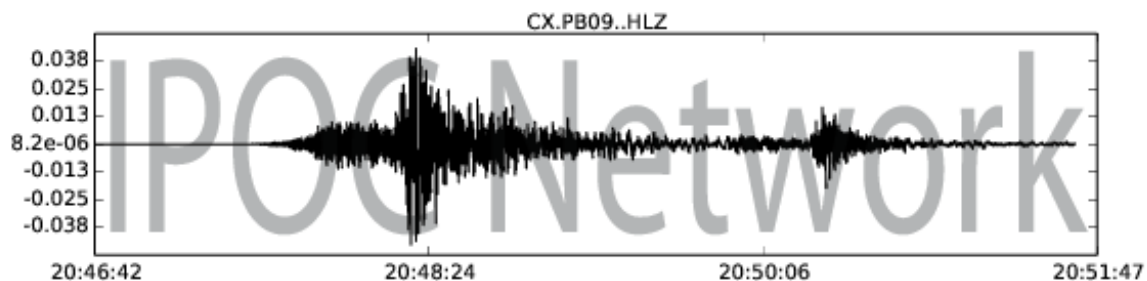
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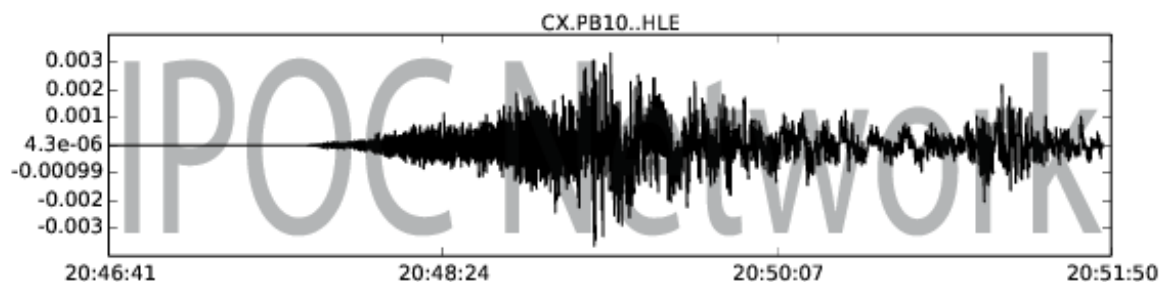


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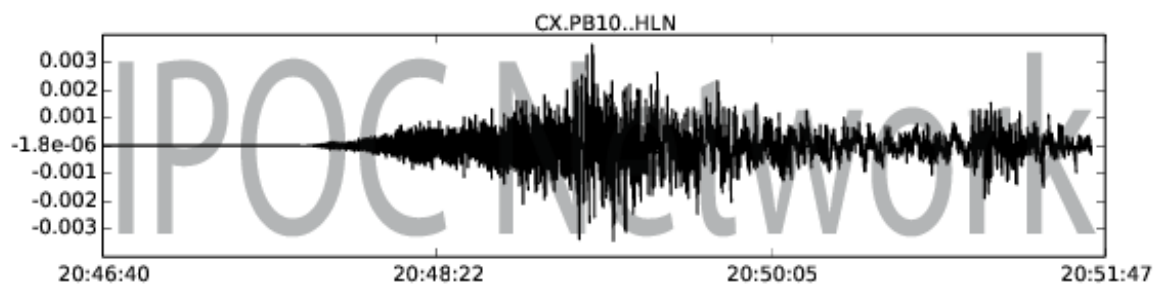


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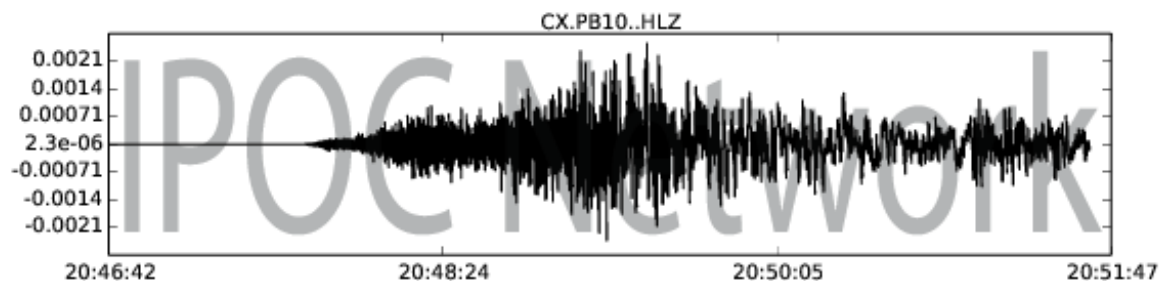
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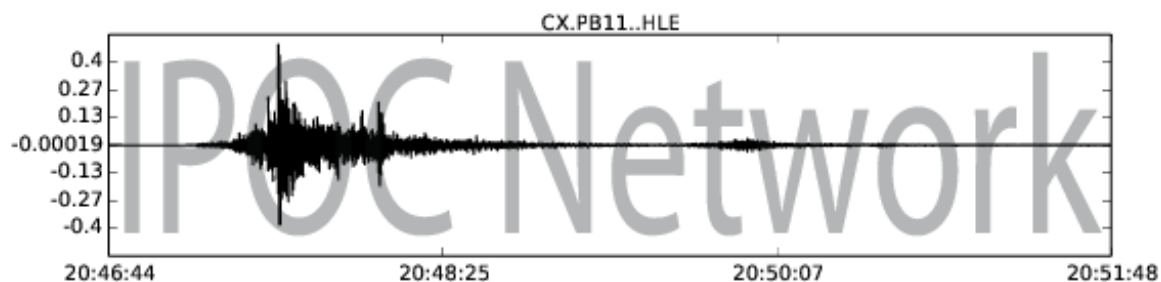


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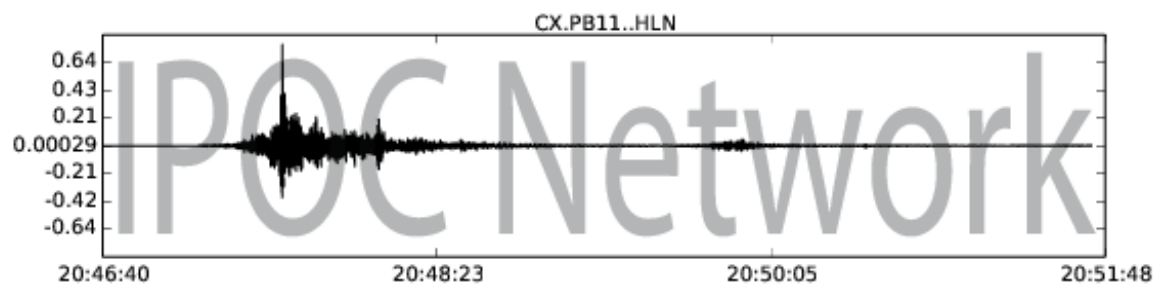


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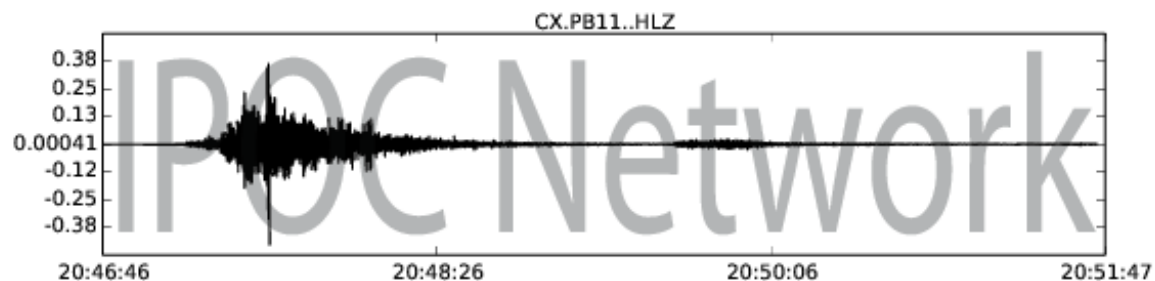
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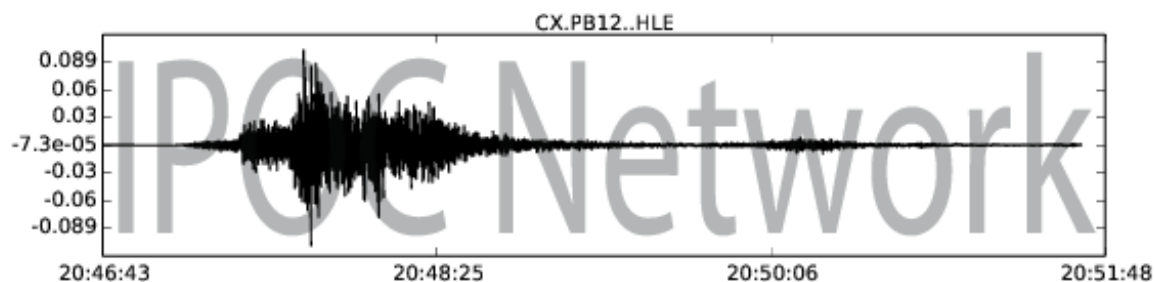


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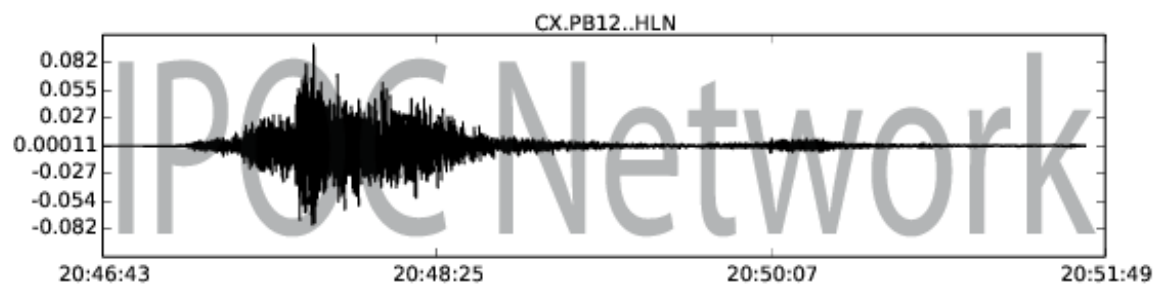


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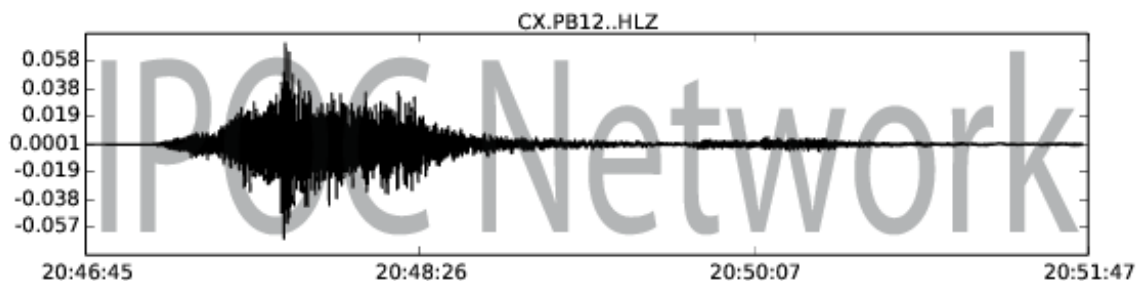
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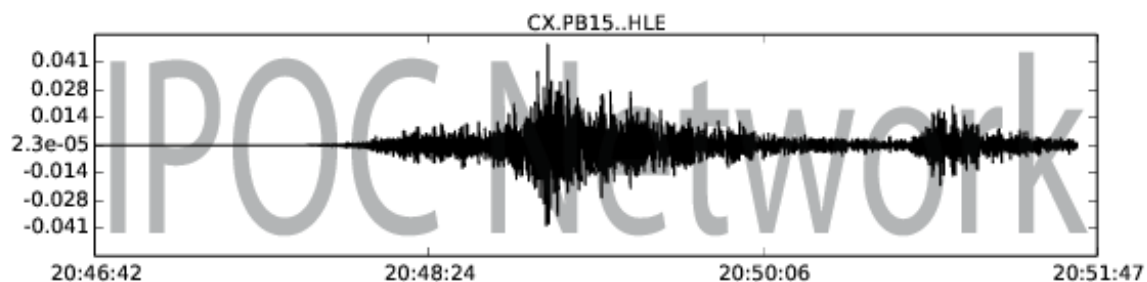


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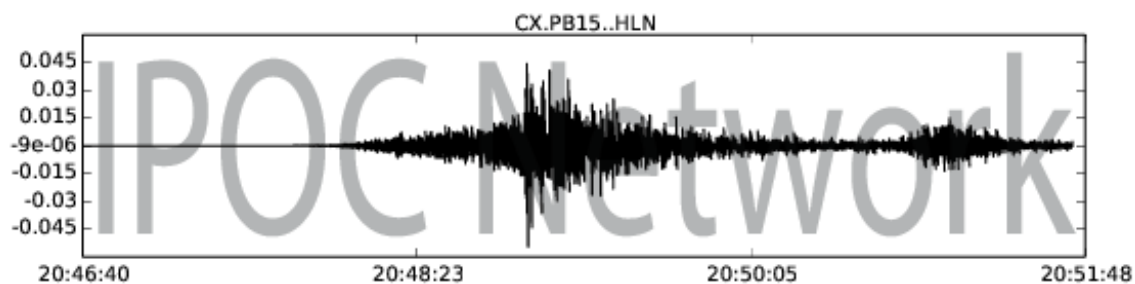


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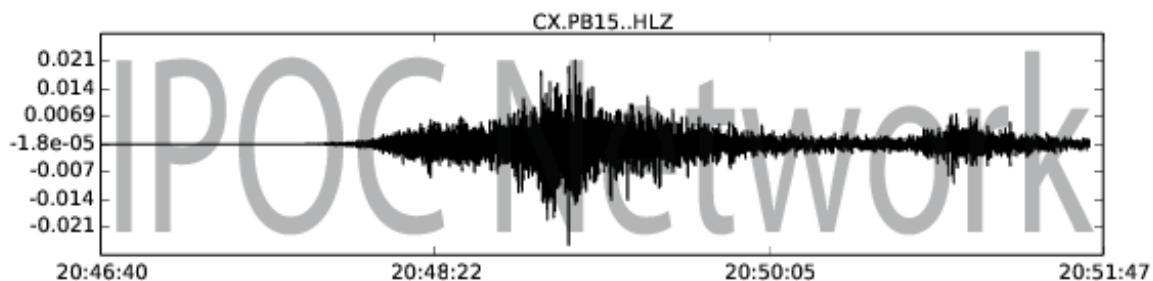
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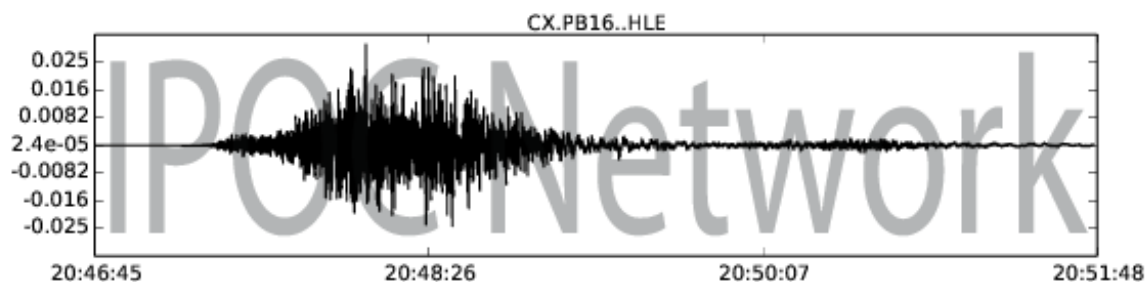


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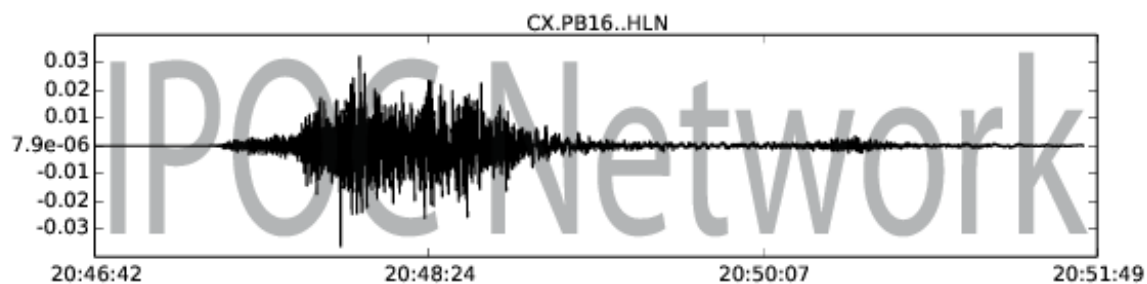


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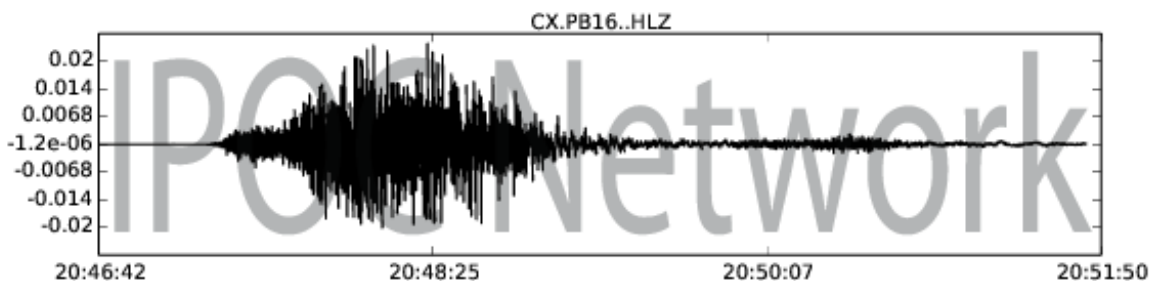
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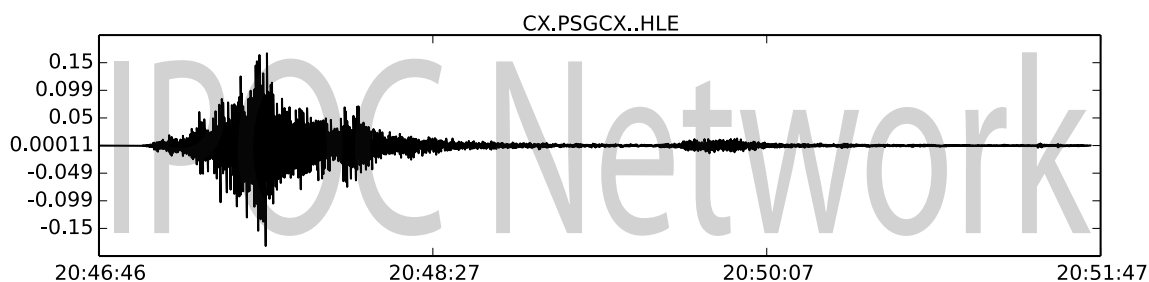


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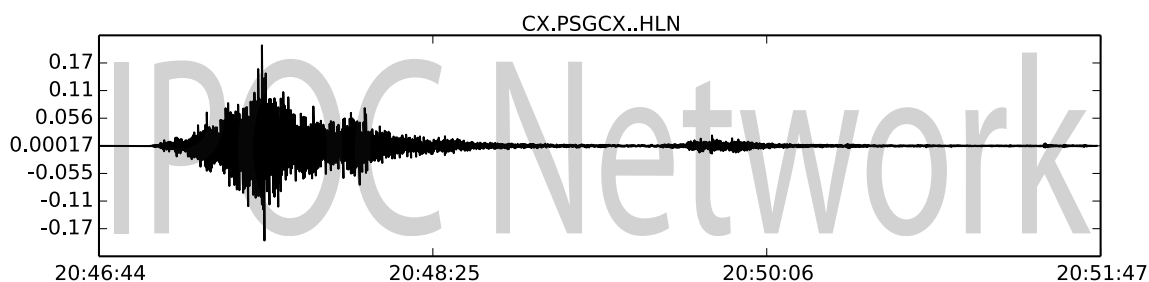


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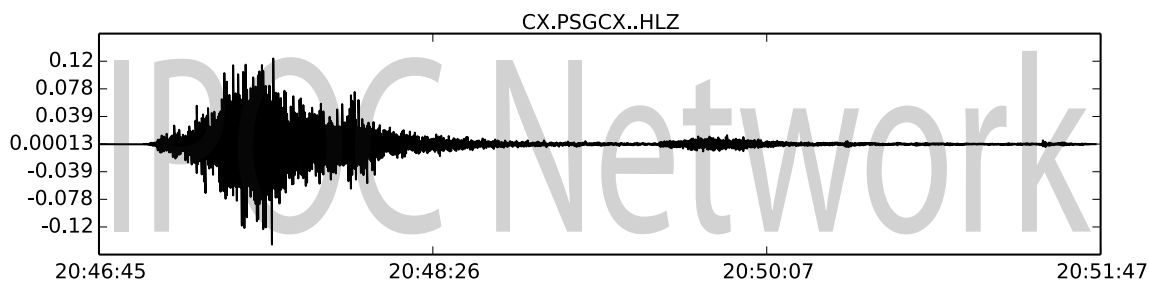
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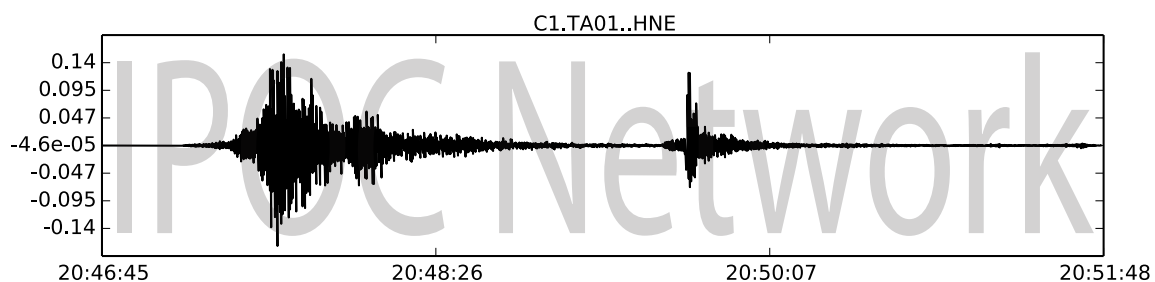


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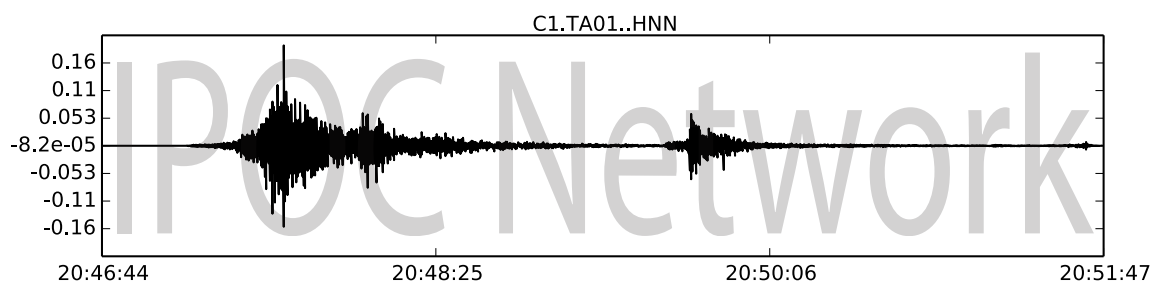


- TA01 – Aeropuerto Diego Aracena, Iquique

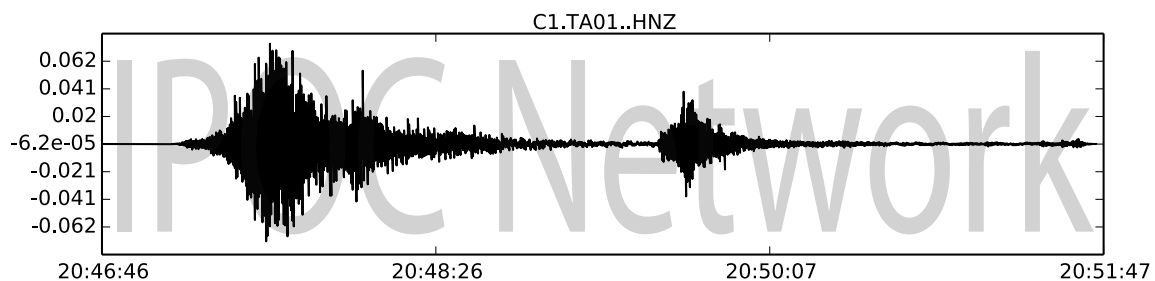
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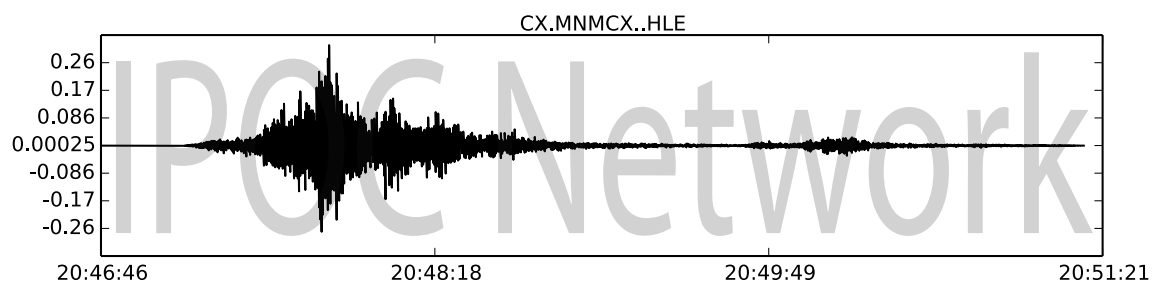


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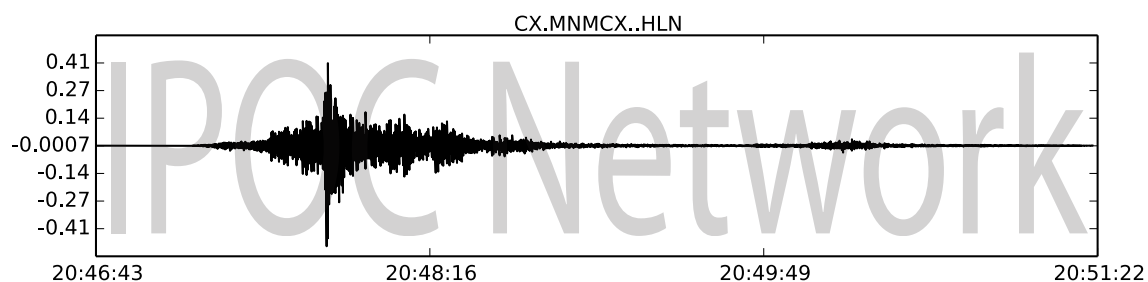


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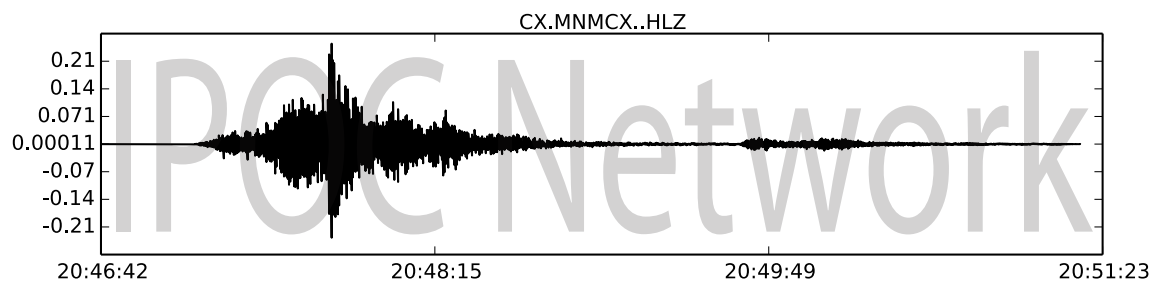
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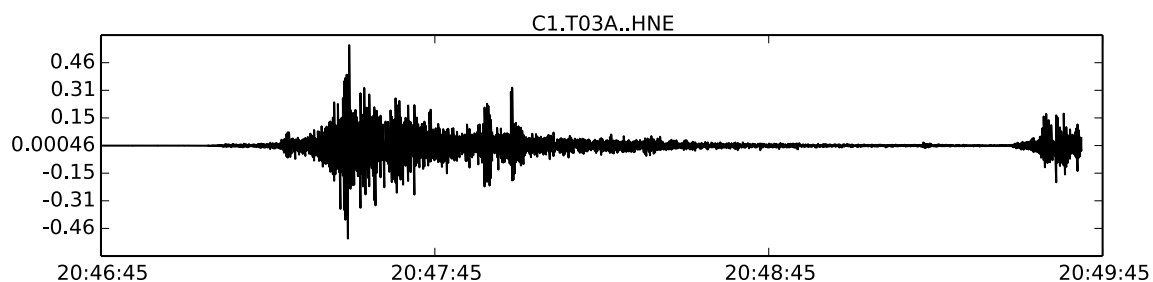


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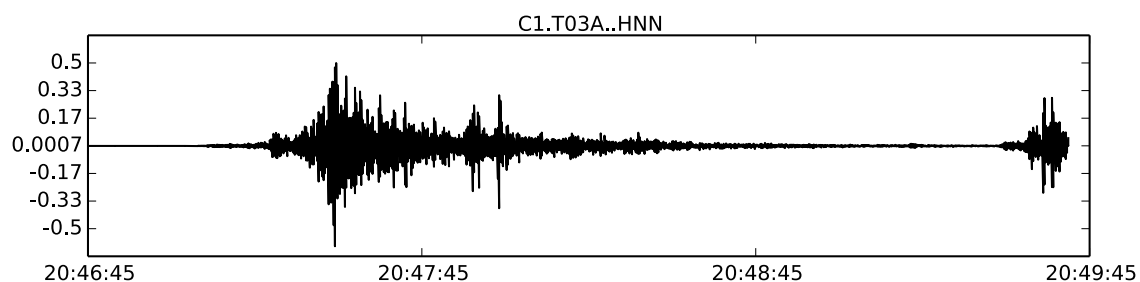


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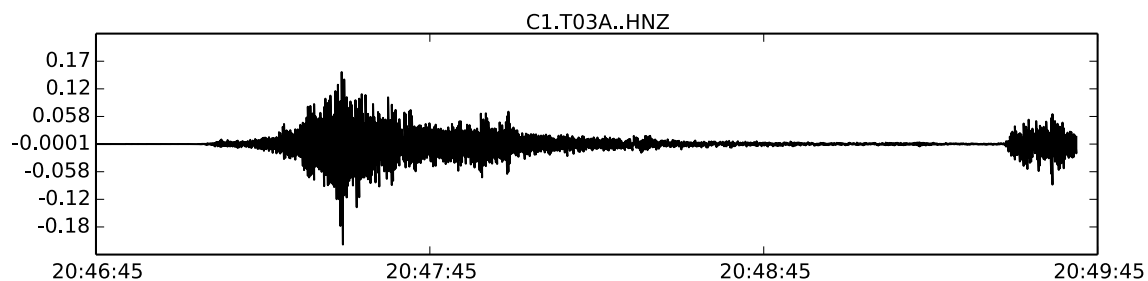
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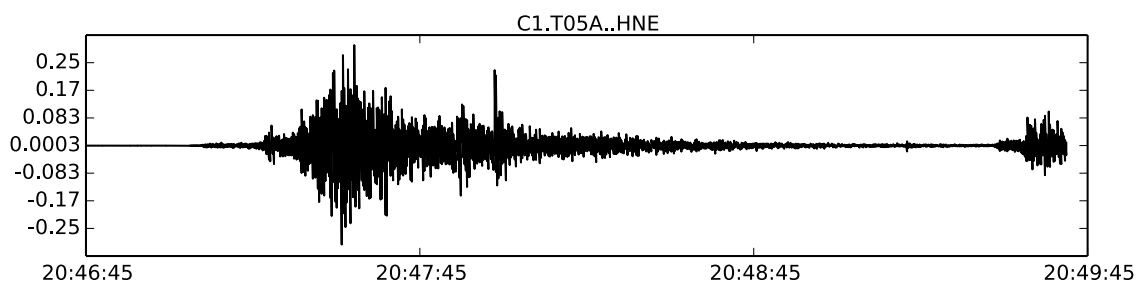


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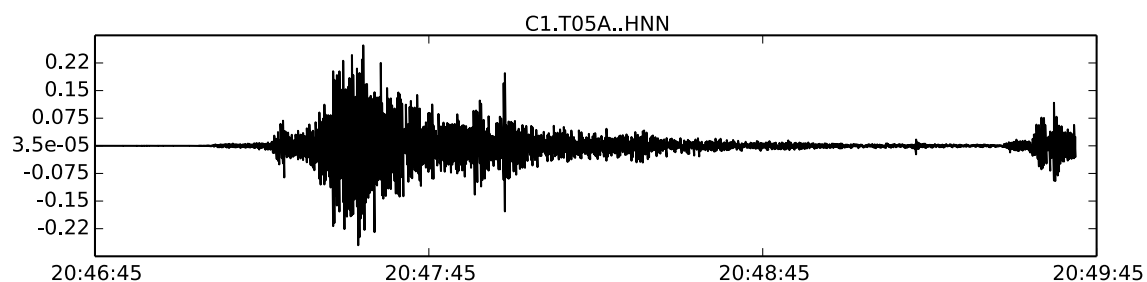


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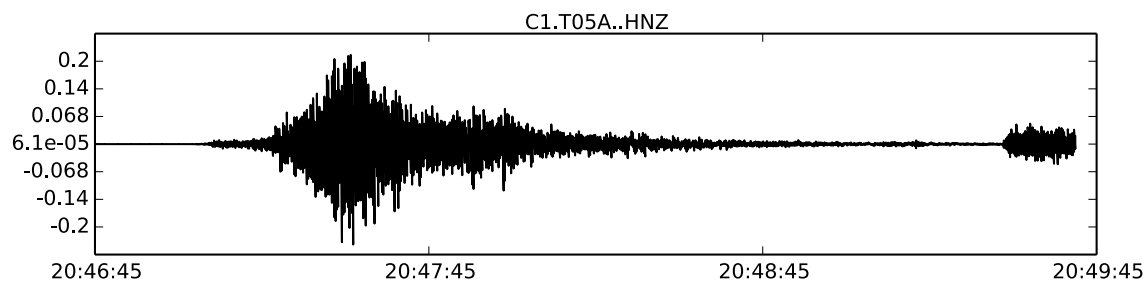
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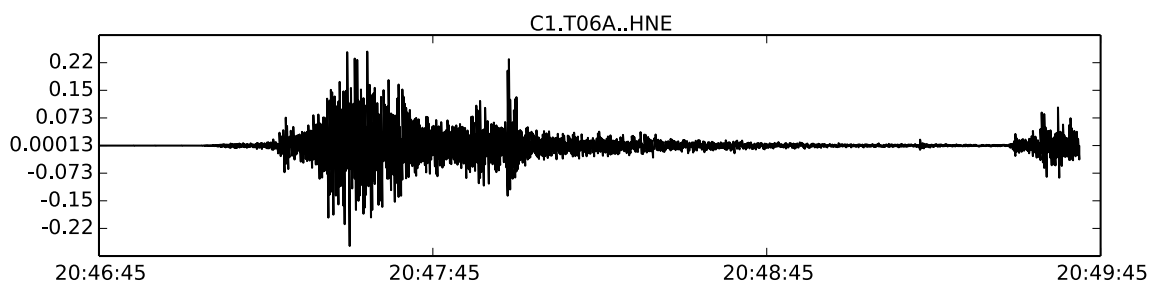


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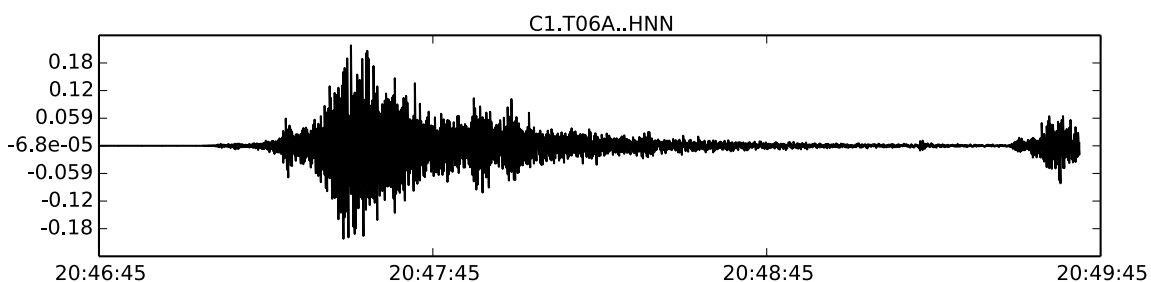


- T06A – Hospital Regional Dr. Ernesto Torres Galdames, Iquique

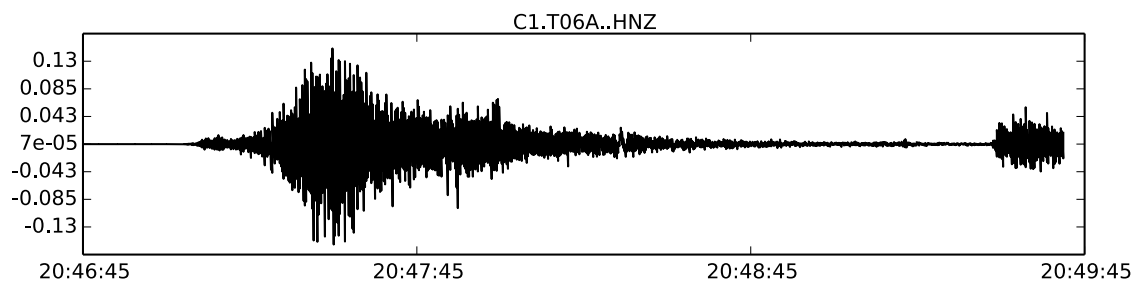
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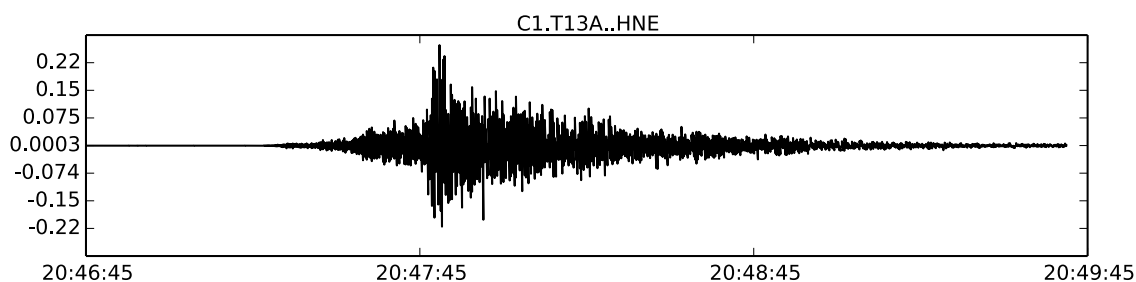


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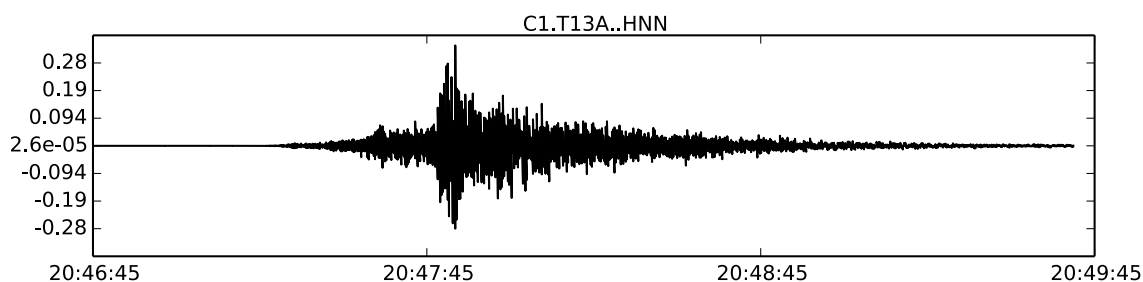


- T06A – Tenencia de Pica

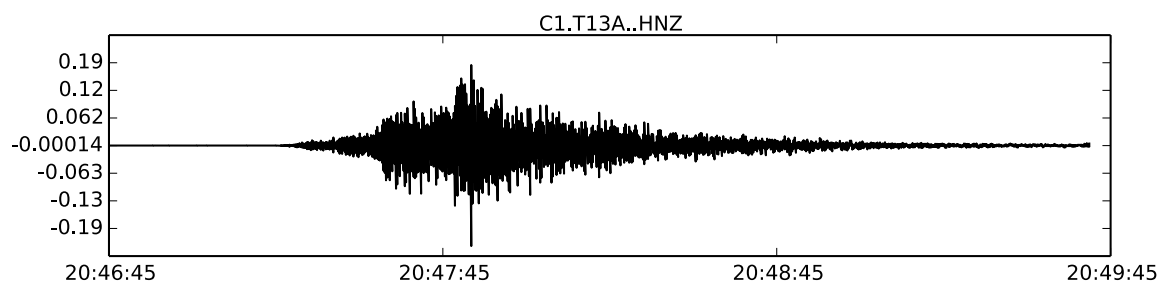
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Anexo

Tabla con la localización de las estaciones antes presentadas.

Estación	Latitud	Longitud
GO01	-19.6686	-69.1942
PATCX	-20.8207	-70.1529
PB01	-21.0432	-69.4874
PB02	-21.3197	-69.8960
PB03	-22.0485	-69.7531
PB04	-22.3337	-70.1492
PB05	-22.8528	-70.2024
PB06	-22.7058	-69.5719
PB07	-21.7267	-69.8862
PB08	-20.1411	-69.1534
PB09	-21.7964	-69.2419
PB10	-23.5134	-70.5541
PB11	-19.7610	-69.6558
PB12	-18.6141	-70.3281
PB15	-23.2083	-69.4709
PB16	-18.3351	-69.5077
PSGCX	-19.5972	-70.1230
TA01	-20.5657	-70.1807
HMBCX	-20.2782	-69.8879
T05A	-20.2098	-70.1502
T13A	-20.4967	-69.3370
T03A	-20.2303	-70.1458
T06A	-20.2146	-70.1387