Analysis of Non-Double-Couple source mechanisms in an area of induced seismicity, West Texas (USA)

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1. Study Area

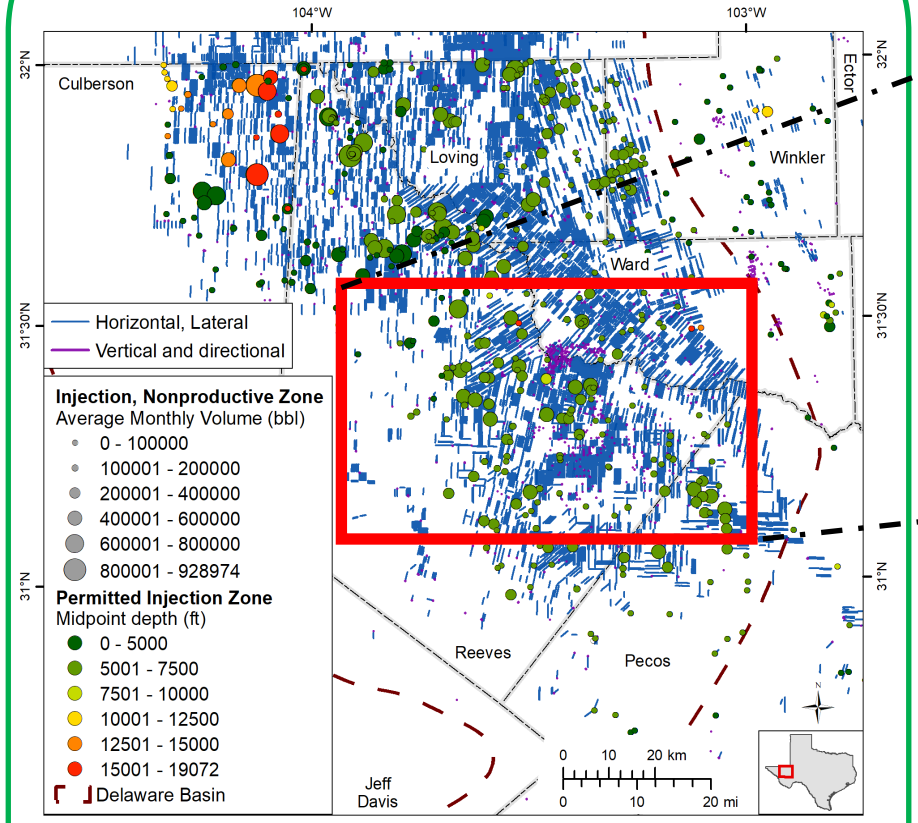

Fig.1: Location map of Delaware basin (Texas) with our area of interest (AOI; red rectangle); Salt water injection zones (coloured dots) with horizontal/vertical network hydraulic simulation wells are represented. The SH_{max} orientations are defined in a normal- to strike-slip faulting regime.

2. Preliminary Results

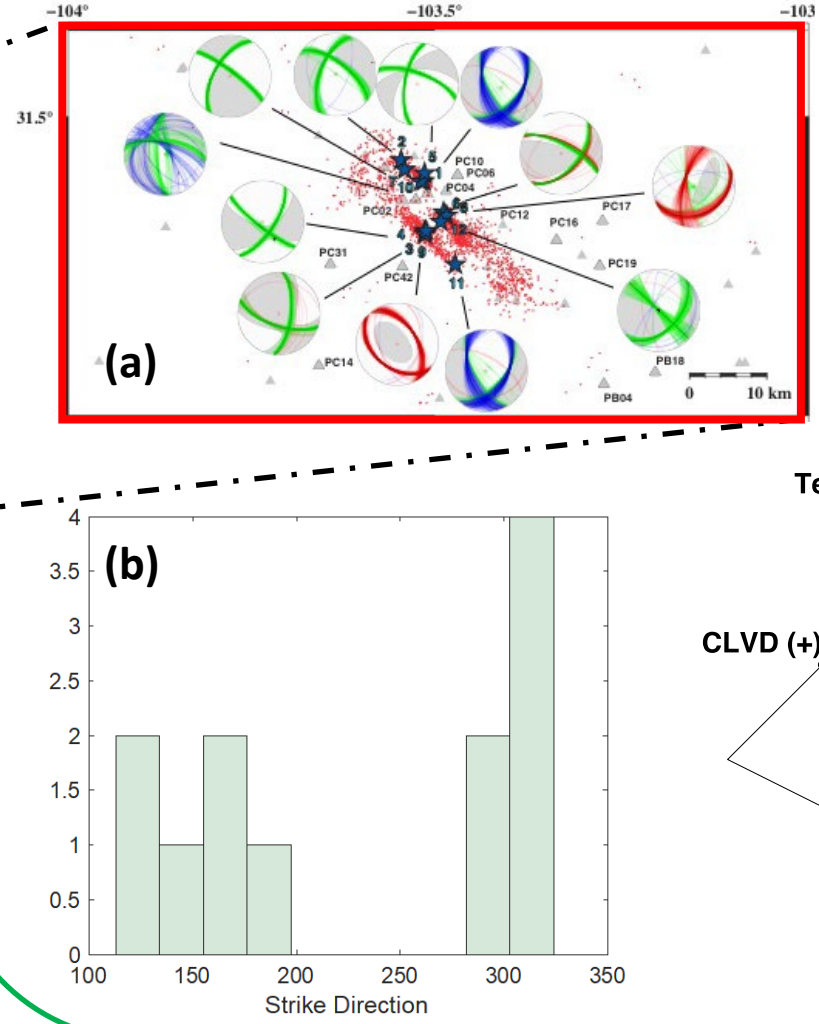

Fig.2: **a)** AOI with 2540 earthquakes (ML<2.7, 0.8-17.5 km depth, recorded between 2018-11-10 and 2019-12-31 (red dots): the sources inverted (blue stars) by using *Focimt* (Kwiatek et al., 2016) and the related beach balls of the full moment tensors **b)** histogram of the related strike directions **c)** Source type plots (Hudson, 1989) showing the full moment tensor decomposition of the sources analysed