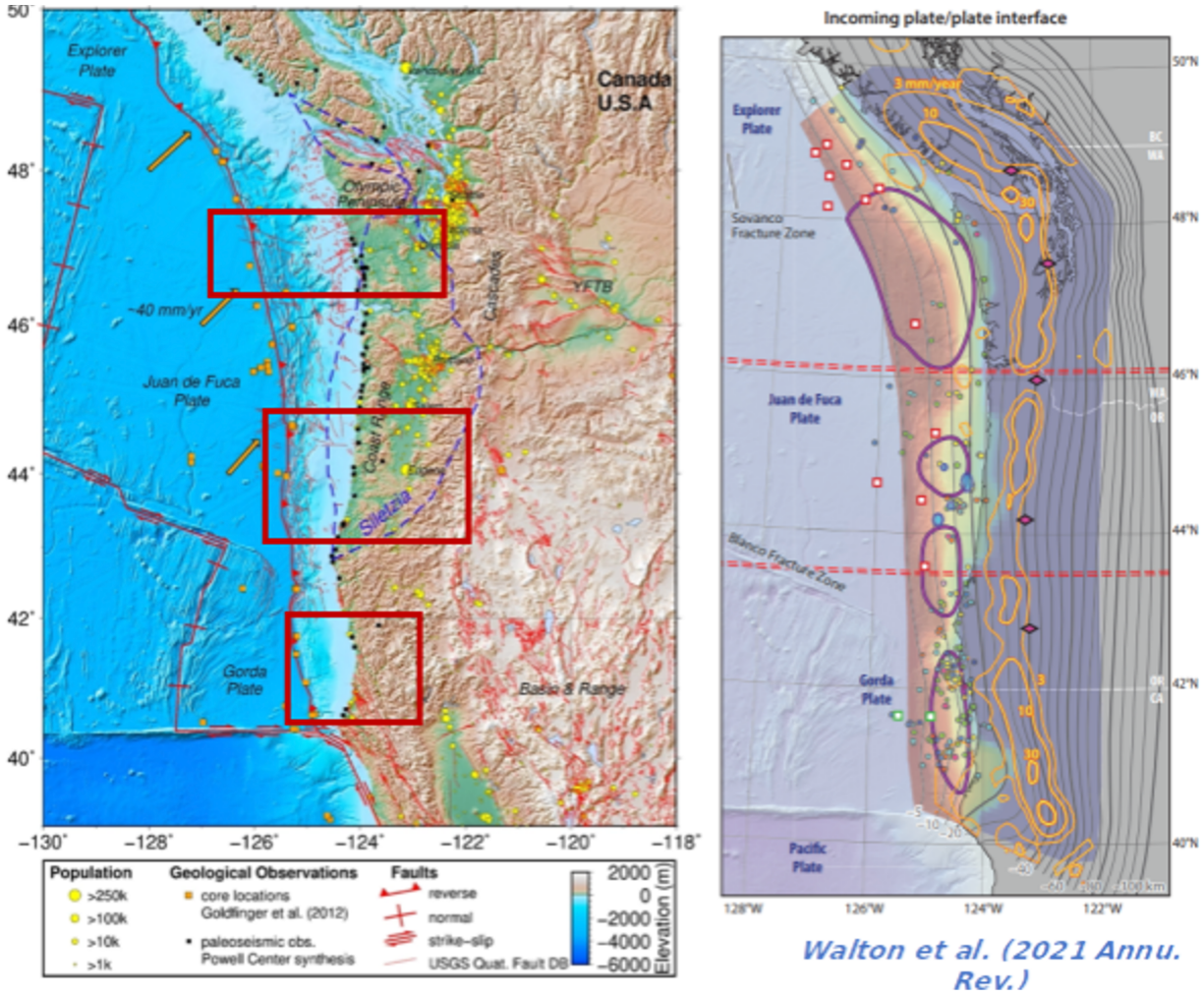

Figure 1. Image reproduced from Diana Roman's November presentation to the CRESCENT Offshore Observations SIG attributed to (left) CRESCENT (2024) and (right) Walton et al. (2021). SZ4D envisions deploying ~3-4 GNSS-A and APG sites in each of 3 transect corridors: (1) Northern Cascadia which has the widest locked zone that may continue to trench and has faults in the overriding plate that can be studied, (2) Central Cascadia which has variations in locking and upper plate terranes and (3) Southern Cascadia which is site to study the relationships between upper plate faulting and megathrust.

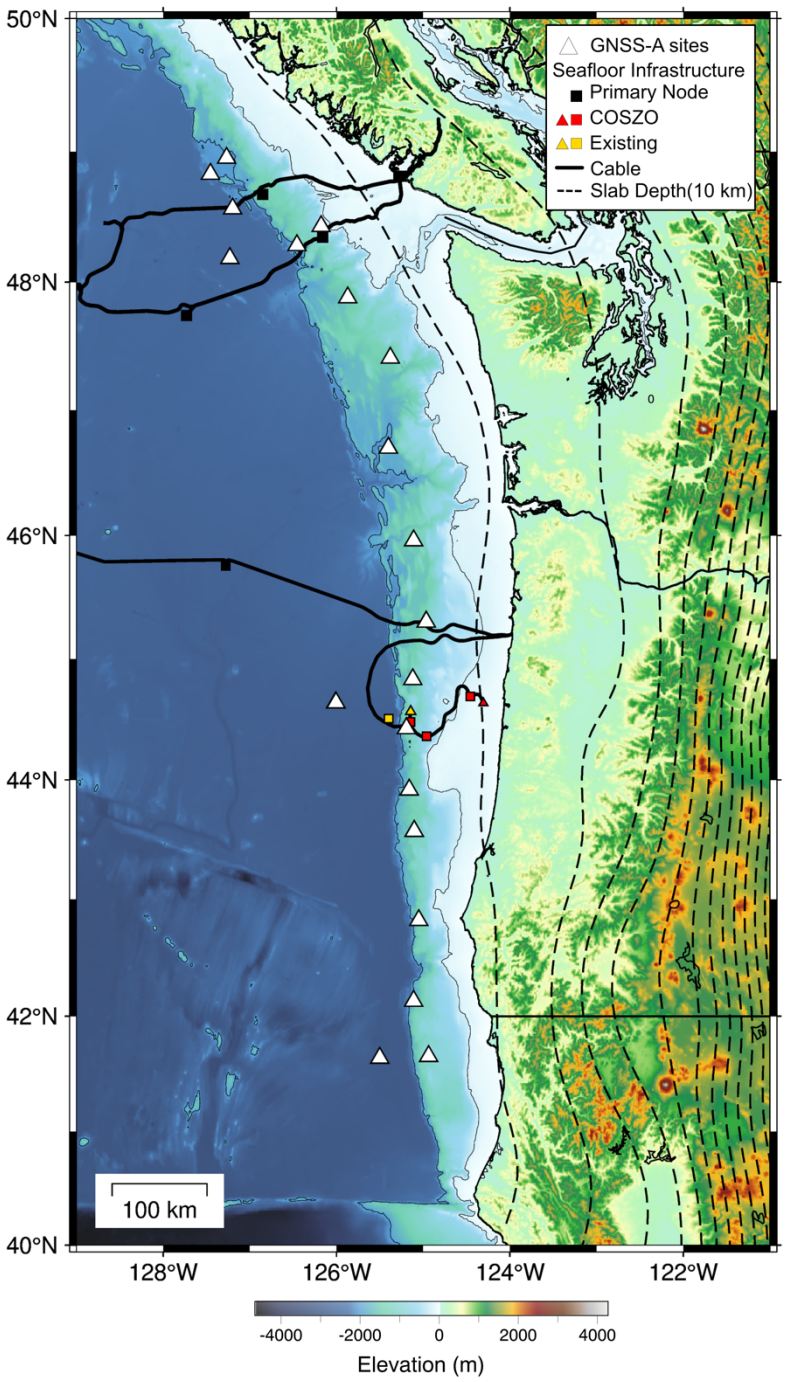

Figure 2. Overview map of the Cascadia Subduction Zone showing: bathymetry/topography (color scale with contours at depths of 200 m and 2000 m to approximately delineate the edge of the continental shelf and the deformation front); GNSS-A sites; cable routes and primary node locations for cabled observatories, with sites offshore Oregon color-coded to indicate sites with existing geophysical instrumentation and those that will be instrumented with seismometers and pressure gauges in 2026 for Cascadia Offshore Subduction Zone Observatory (COSZO) infrastructure project; and slab depth contoured at 10 km (Hayes et al., 2018). (*Based on a figure for the COSZO proposal created by Maleen Kidiwela and Zoe Krauss and then modified by Maleen Kidiwela*).

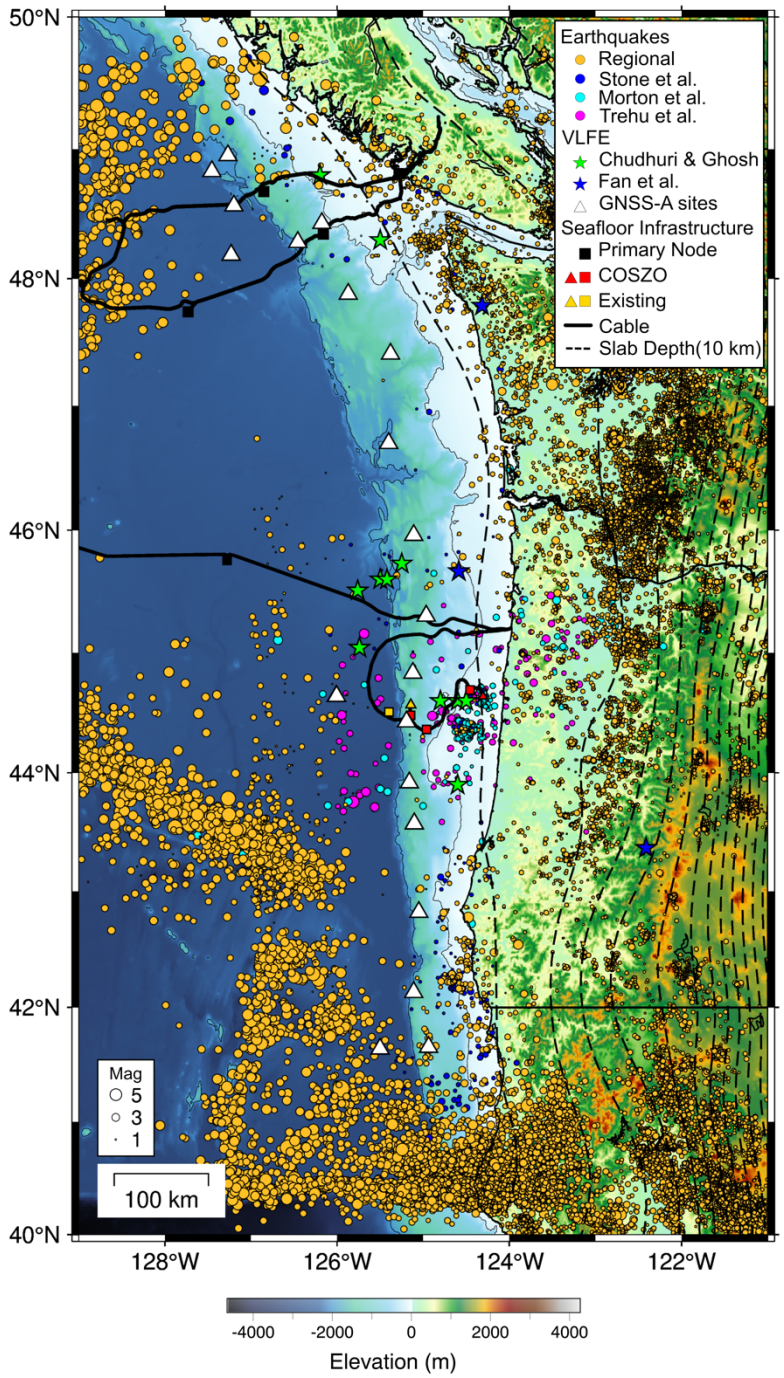

Figure 3. As for Figure 2 but showing earthquakes for 2000-2023 for the ANSS catalog and three studies of offshore earthquakes (Tréhu et al., 2018; Morton et al., 2018; Stone et al., 2018), as well as very low frequency earthquakes (VLFEs) from two studies (Chudhuri and Ghosh, 2022; Fan et al., 2022). (*Based on a figure for the COSZO proposal created by Maleen Kidiwela and Zoe Krauss and then modified by Maleen Kidiwela*).

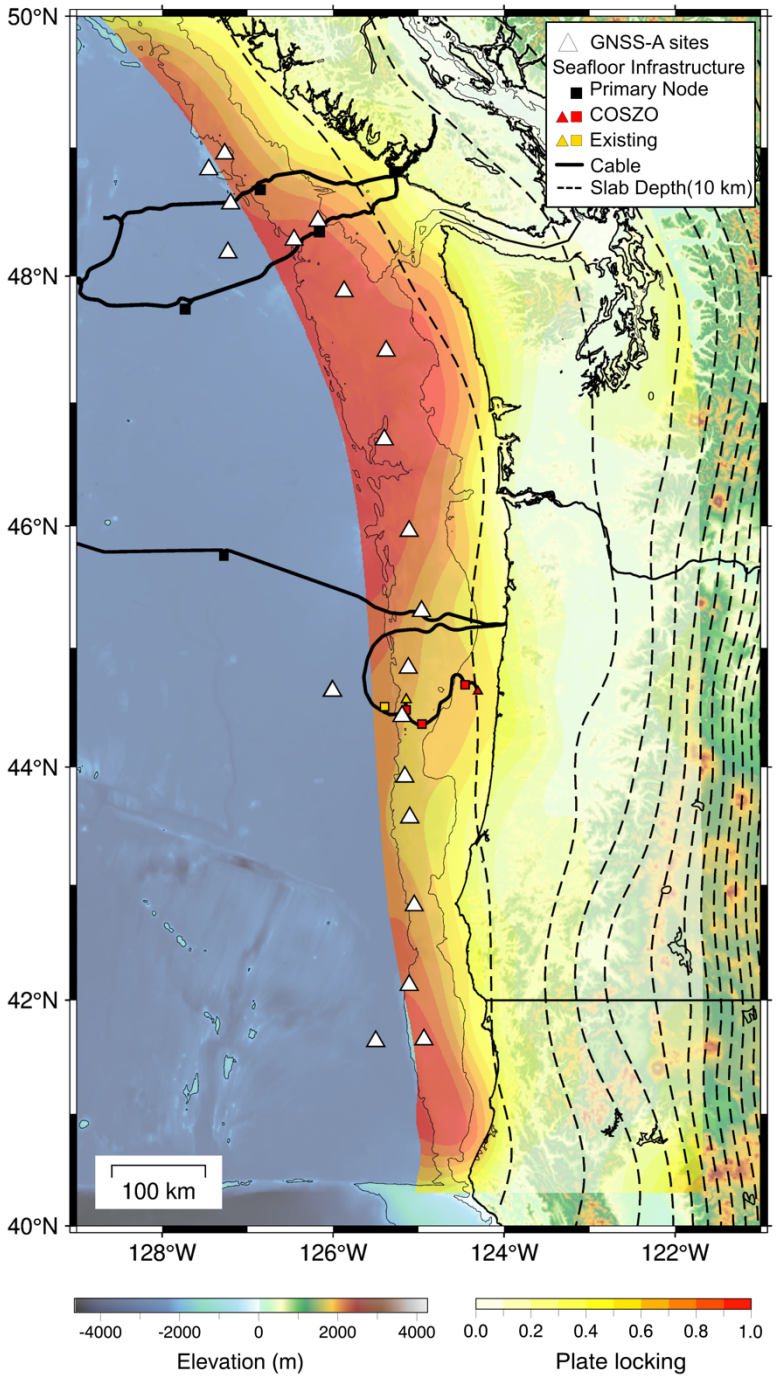

Figure 4. As for Figure 2 but with bathymetry/topography on the overriding plate overlain by a model of the locking state of the megathrust (red-yellow-white shading) that fits the terrestrial GNSS data (from Fig. 8b of Li et al., 2018). (*Based on a figure for the COSZO proposal created by Maleen Kidiwela and Zoe Krauss and then modified by Maleen Kidiwela*).

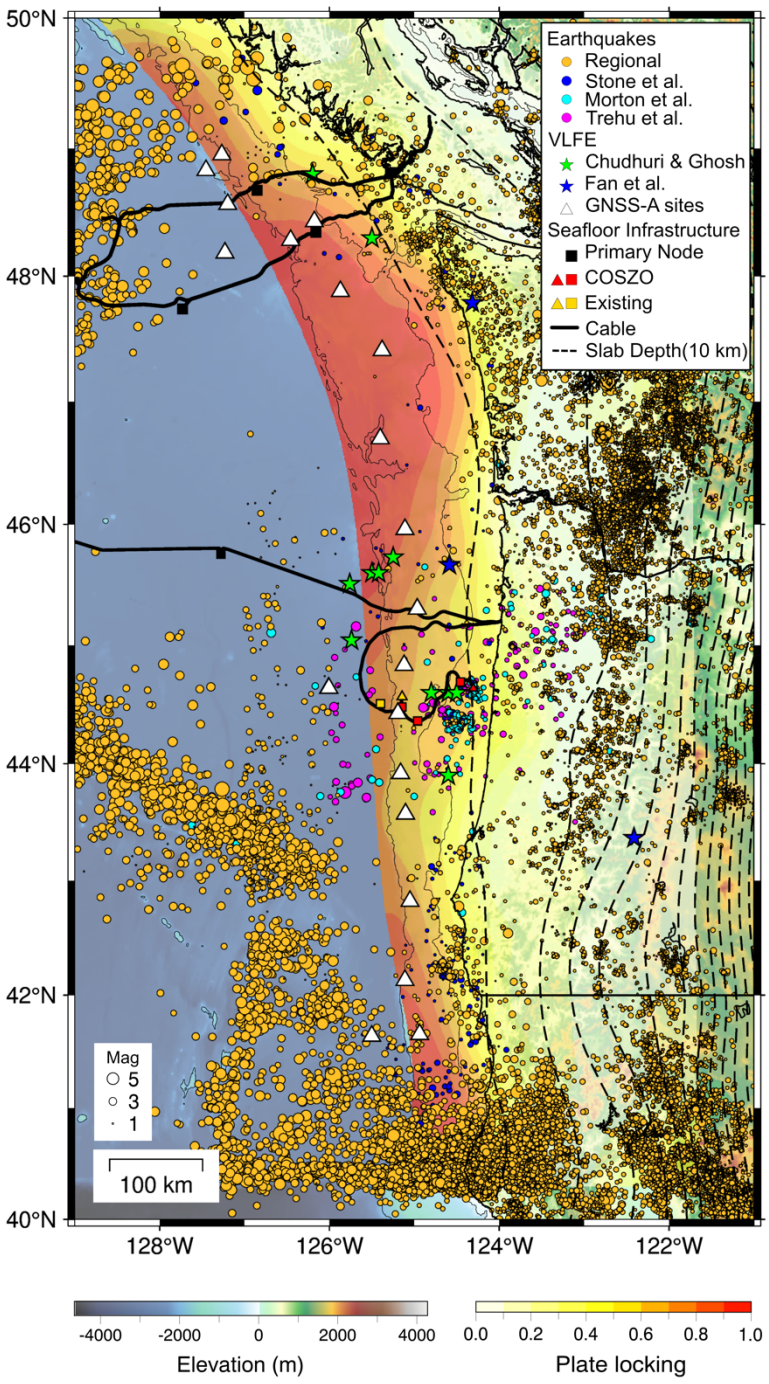

Figure 5. As for Figure 2 with the earthquakes as in Figure 3 and the locking model of Figure 4. (*Based on a figure for the COSZO proposal created by Maleen Kidiwela and Zoe Krauss and then modified by Maleen Kidiwela*).

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