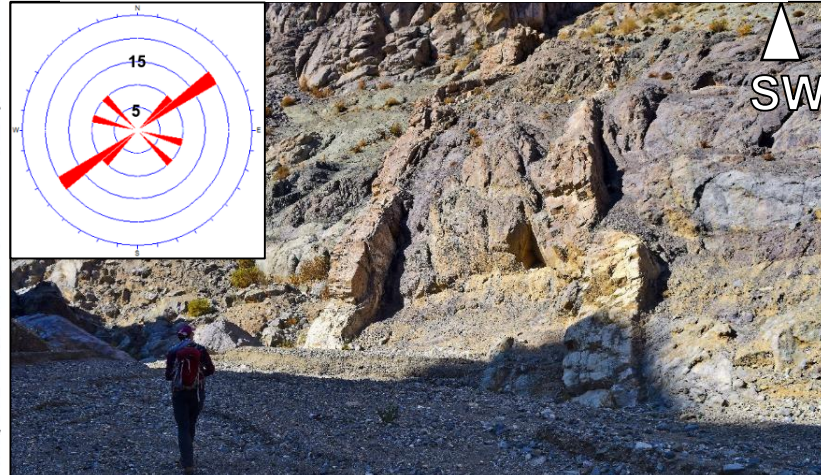
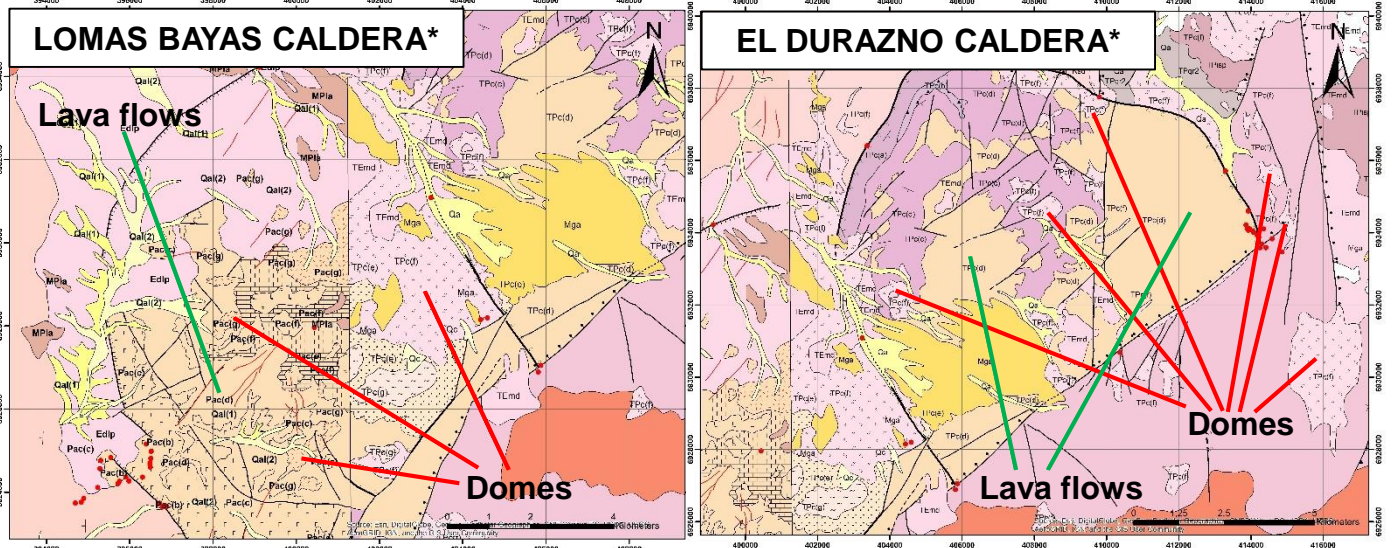
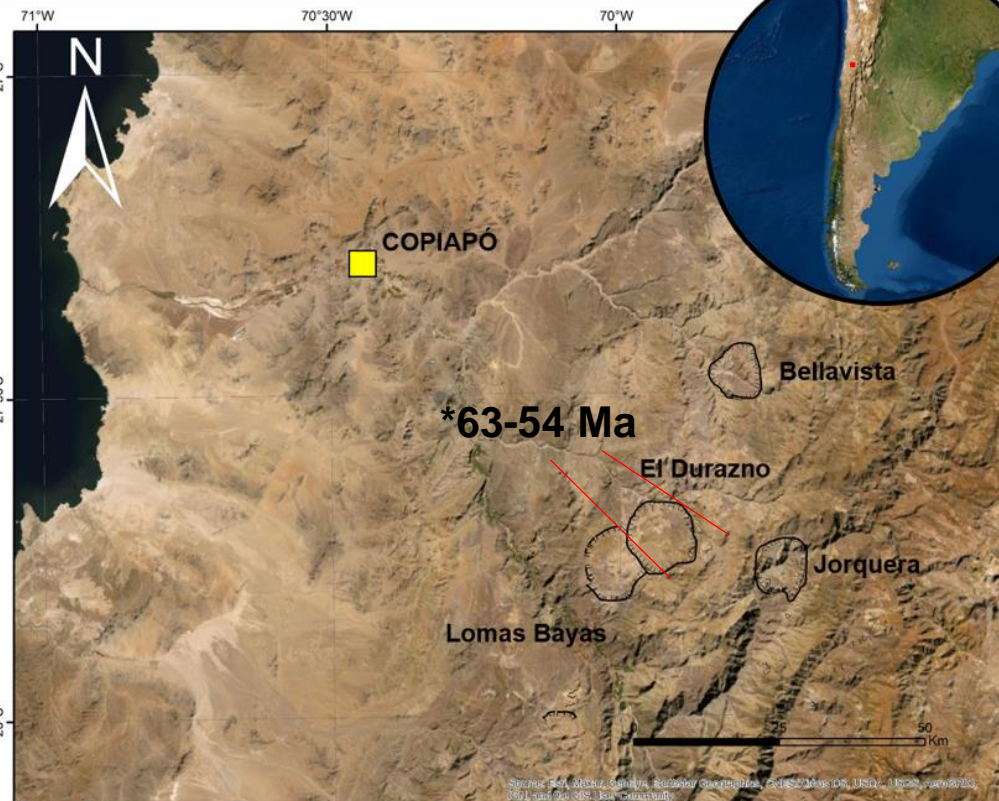


Reconciling the location of lava domes and eruption centers in Paleocene-Eocene calderas in northern Chile

Matías Clunes (mclunes@uc.cl), John Browning, Carlos Marquardt, José Cembrano, Matías Villarroel, Orlando Rivera, Constantino Mpodozis.

We use field data from dikes, domes and lava flows and regional stress field from fault kinematics as input to Finite Element Method (FEM models) to investigate the effect of caldera geometry and crustal heterogeneities on the location of post-collapse eruptive centers.



Left: Felsic dikes intruding intra-caldera deposits. **Right:** mafic dikes intruding an extra-caldera dome.

*Ages obtained from Iriarte et al. (1999) and Arévalo (2005). Maps modified from Rivera (1992), Iriarte et al. (1999) and Arévalo (2005).