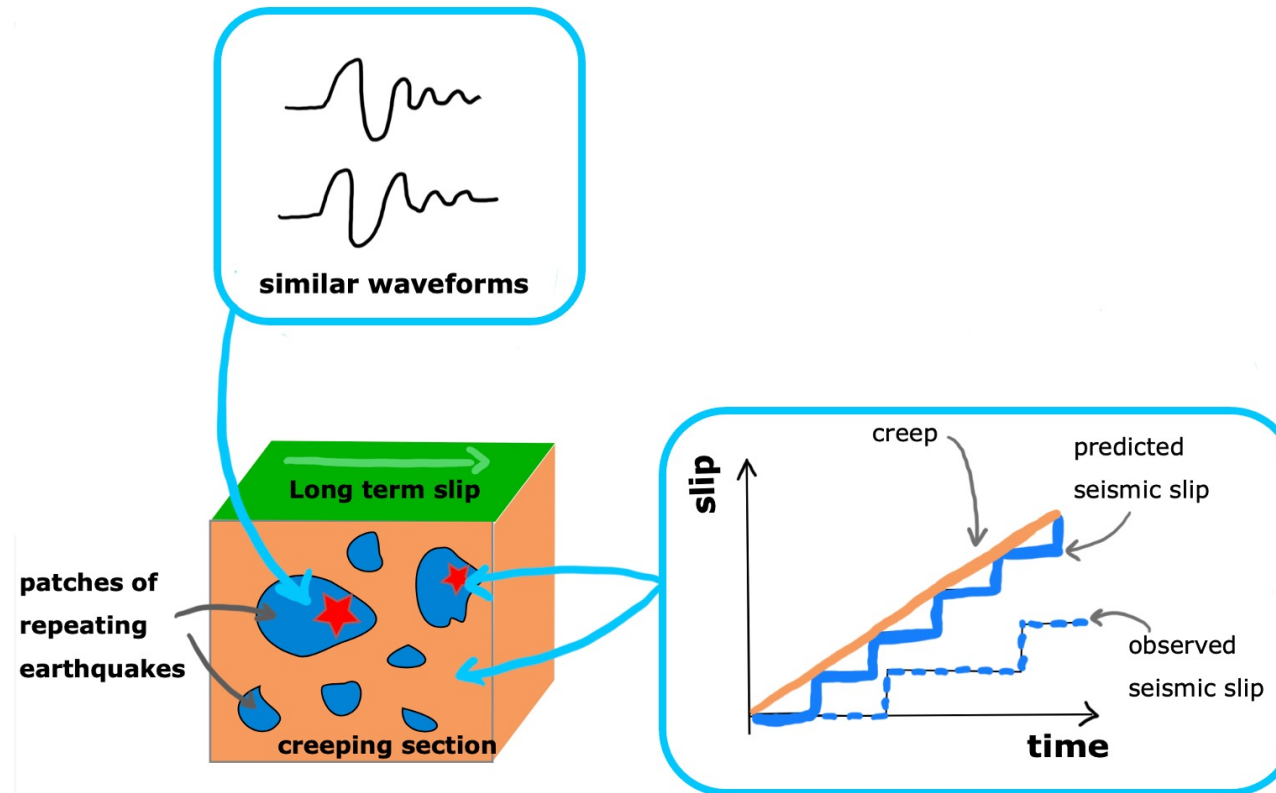


# Searching for partial ruptures of repeating earthquakes

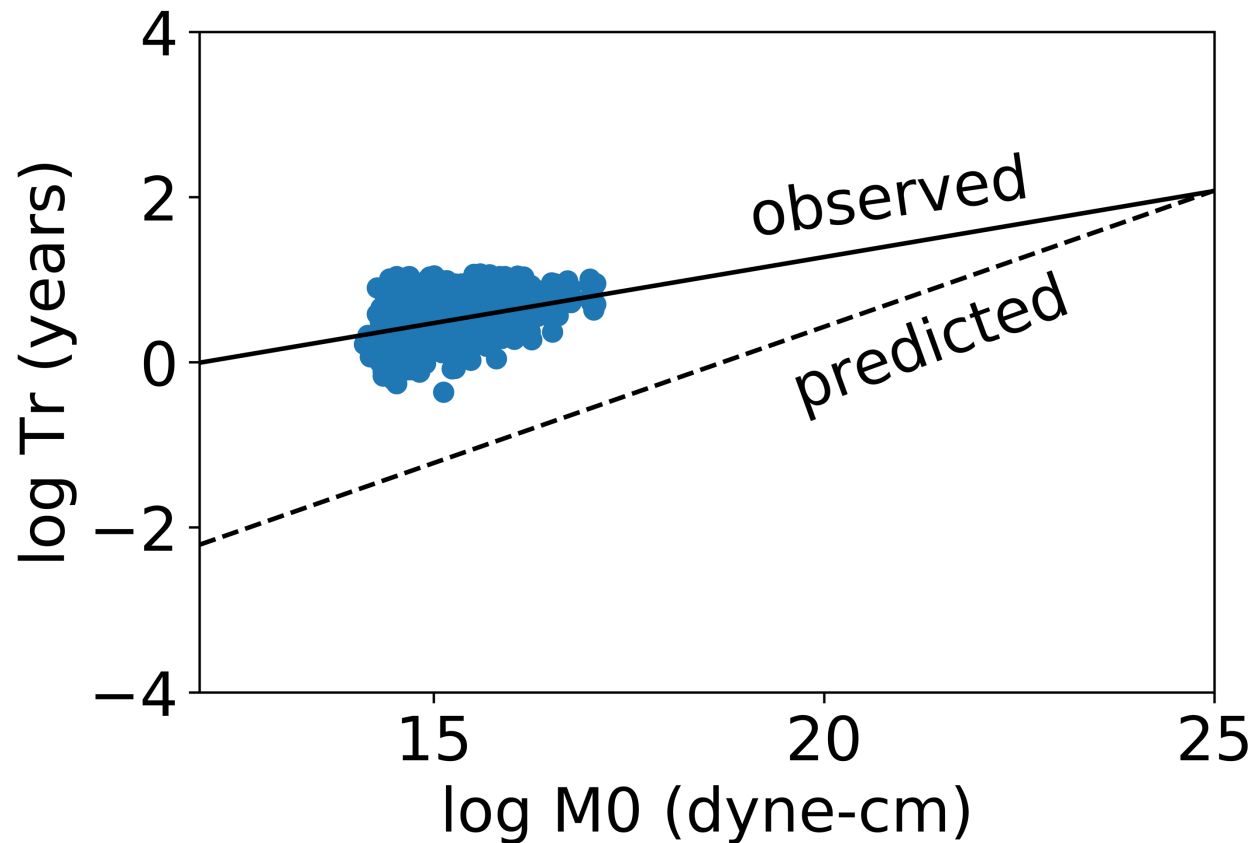
Alice Turner & Jessica Hawthorne | [alice.turner@earth.ox.ac.uk](mailto:alice.turner@earth.ox.ac.uk)

Repeating earthquakes happen on locked patches on a creeping fault



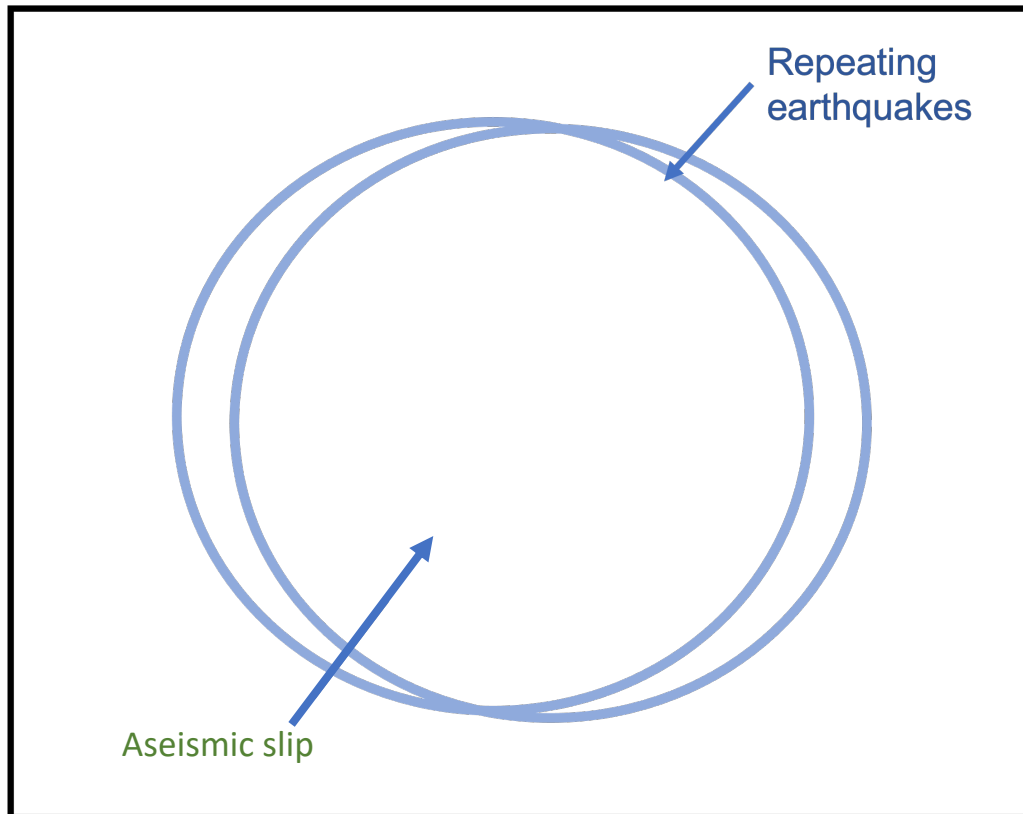
QR code to abstract!

## Repeating earthquakes are not keeping up with long term slip

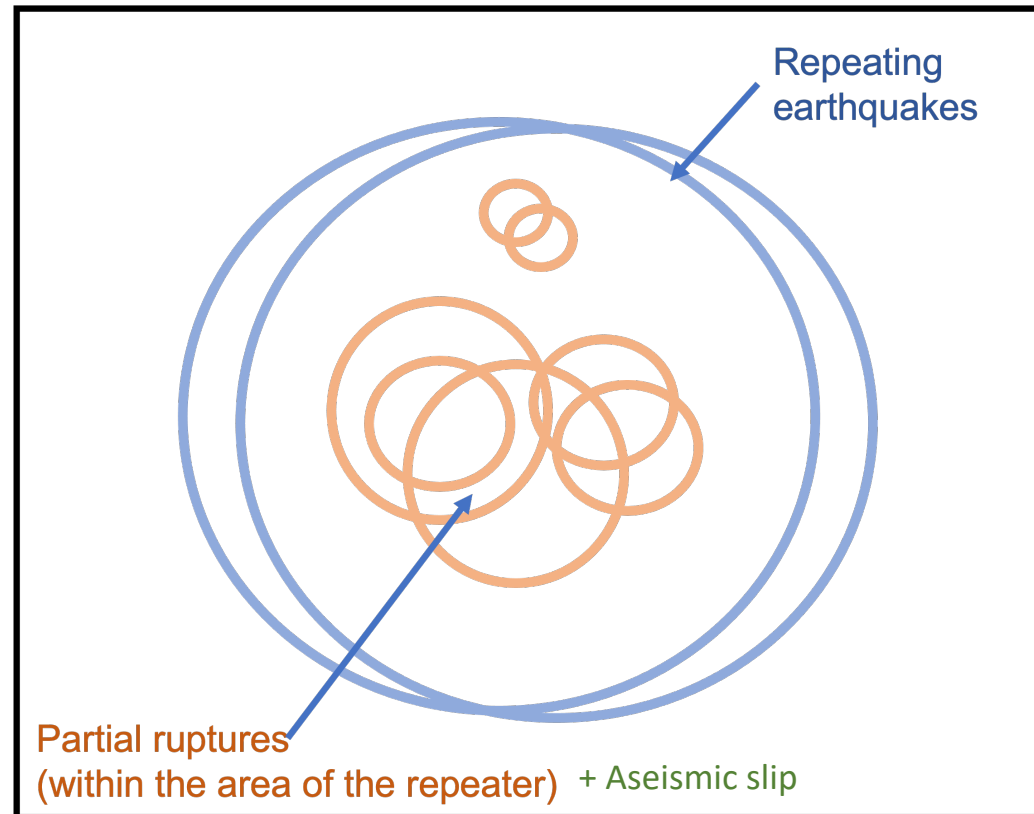


Recent models (Cattania and Segall, 2019; Chen and Lapusta, 2009) suggest a solution: aseismic slip and partial ruptures

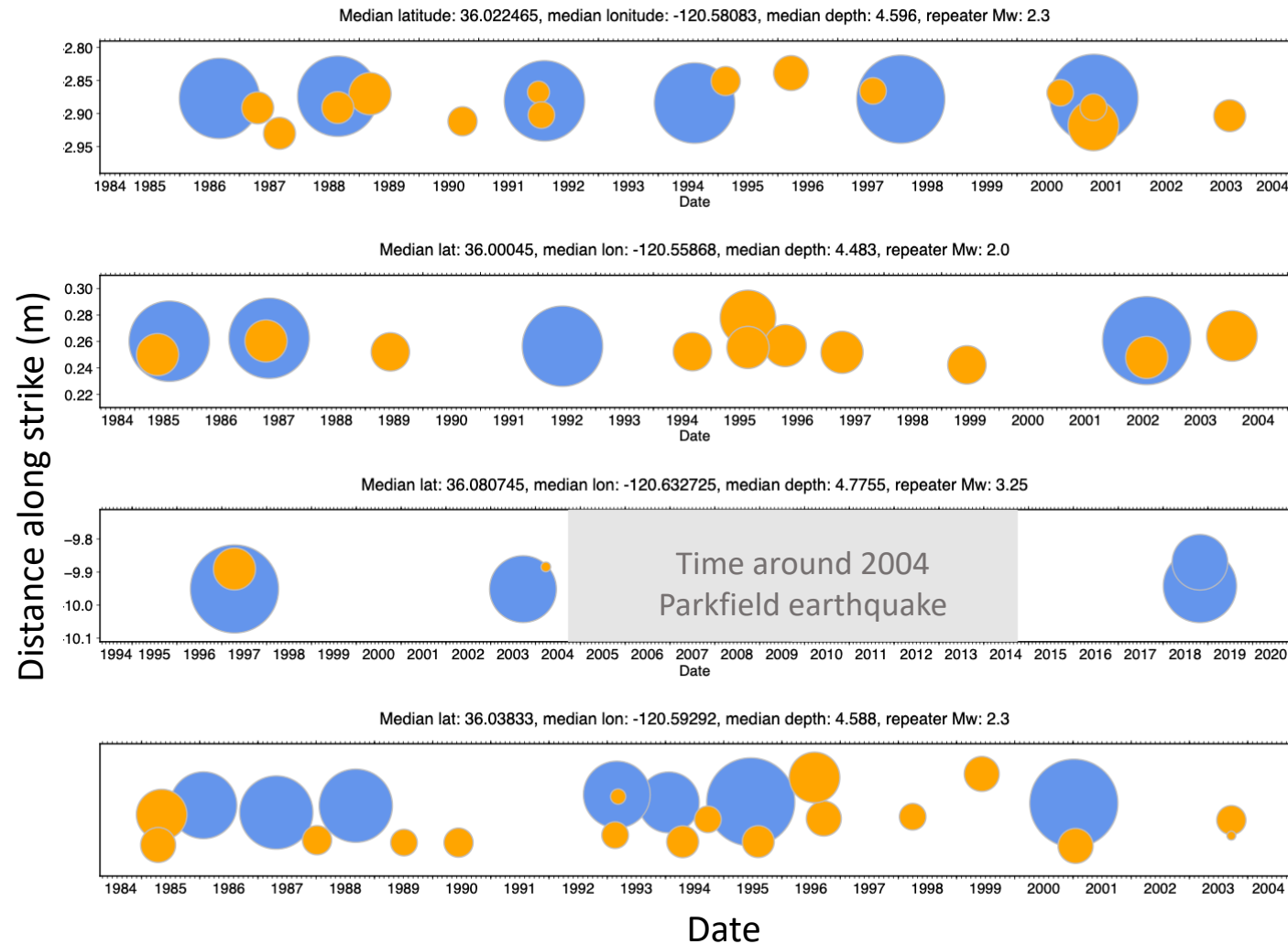
Small patch



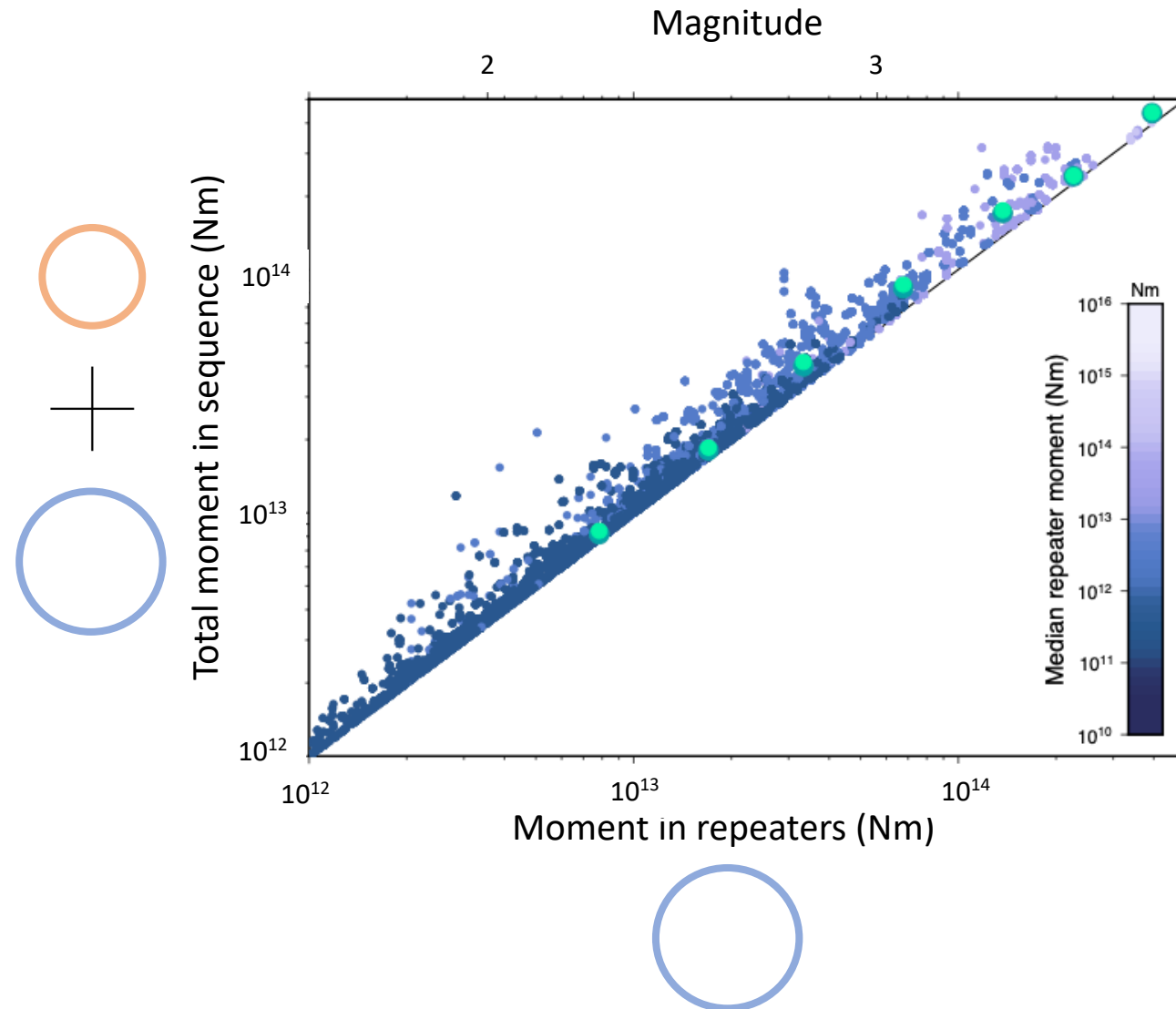
bigger patch



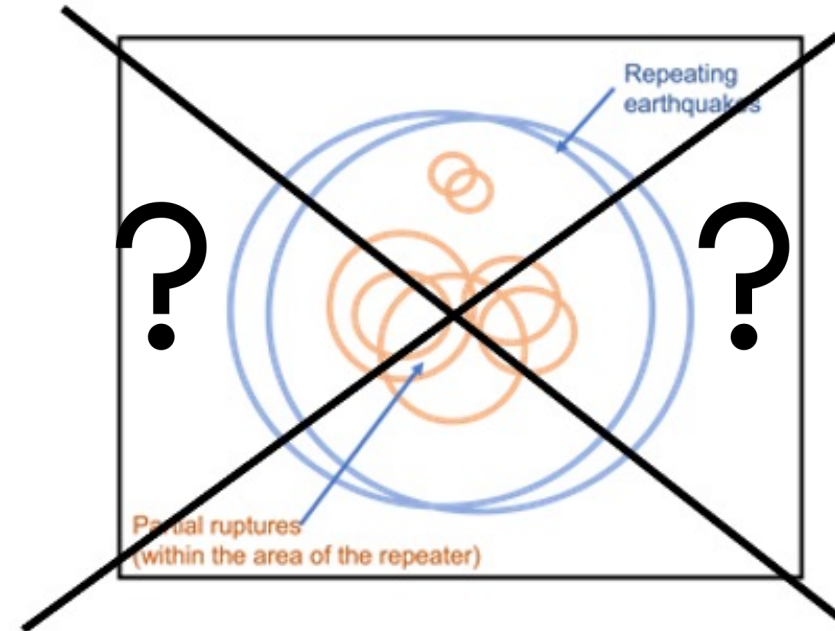
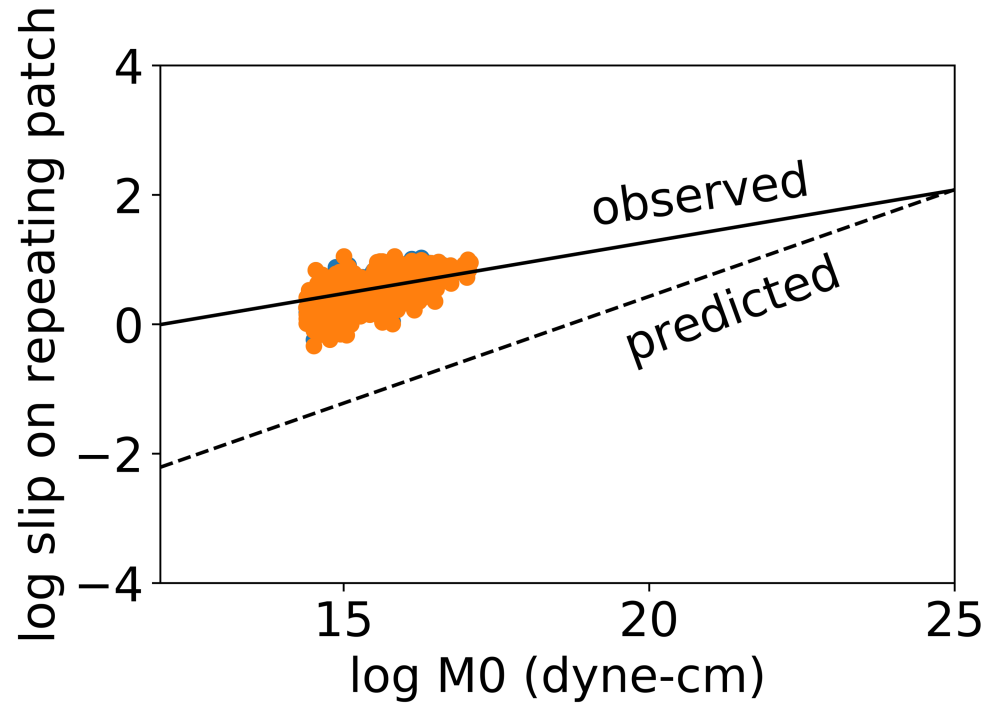
# In Parkfield, we identify repeating and partial rupture sequences



Most of the moment in each sequence is in repeating earthquakes



# Partial ruptures don't resolve the difference between seismic slip and long term slip



QR code to abstract!