

collisional zones contain a rich diversity of tectonic processes, from plate-scale over millions of years to grain-scale over micro-seconds



collisional zones host many of Earth's most extreme natural events, combined with increasing human populations presents an urgent need to understand how they work



Reuter

cnn.com

James Nachtwey/TIME

Adnan Abidi | Reuters



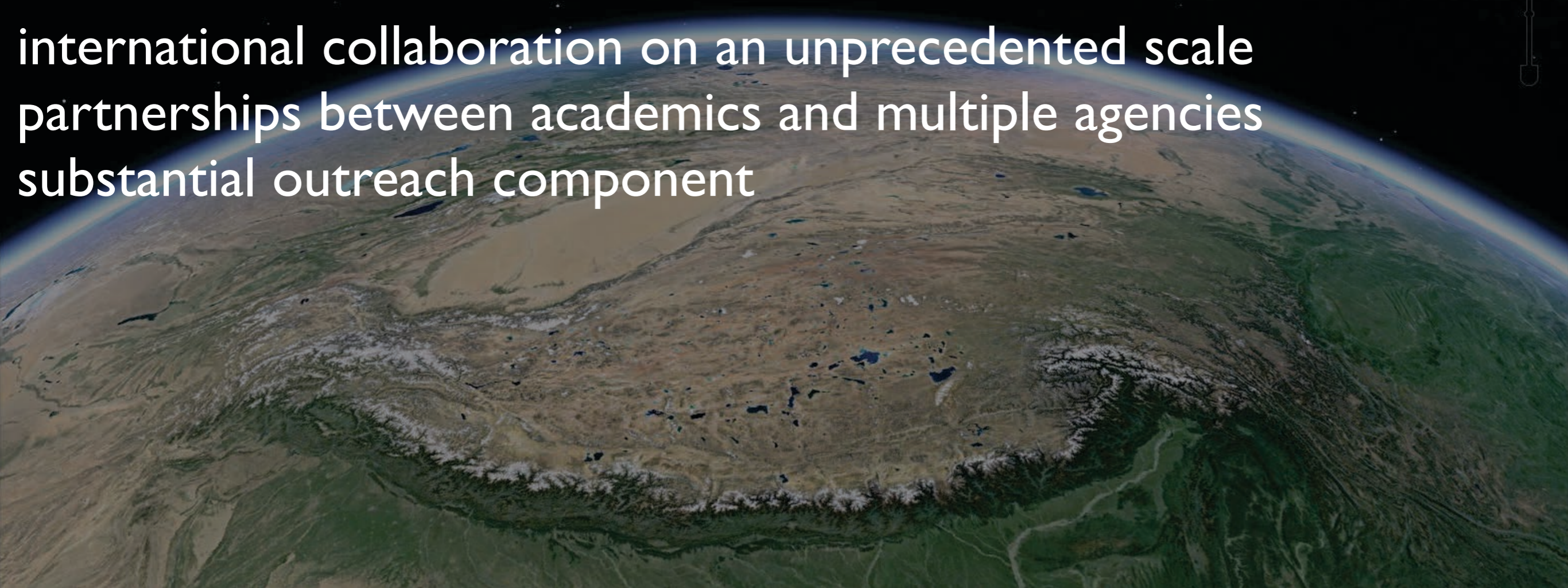
initiative of this scale needs to have:

transformational & high impact science
societal relevance - strong focus on hazards
Himalayan countries as primary participants
capacity building

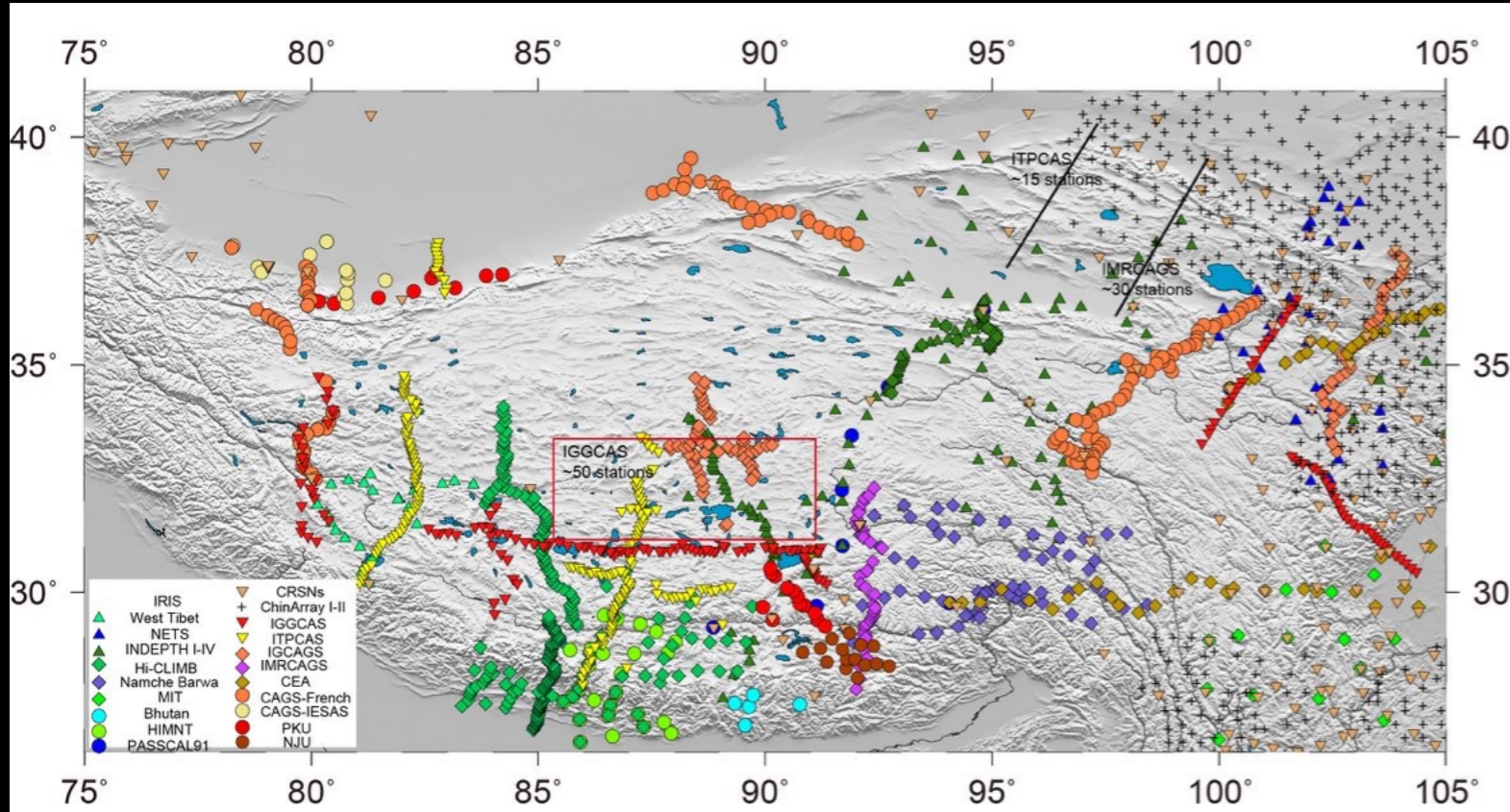
new technologies
new high quality data
multidisciplinary components
strong data integration and modeling

unique aspects of a Himalayan seismogenic zone initiative

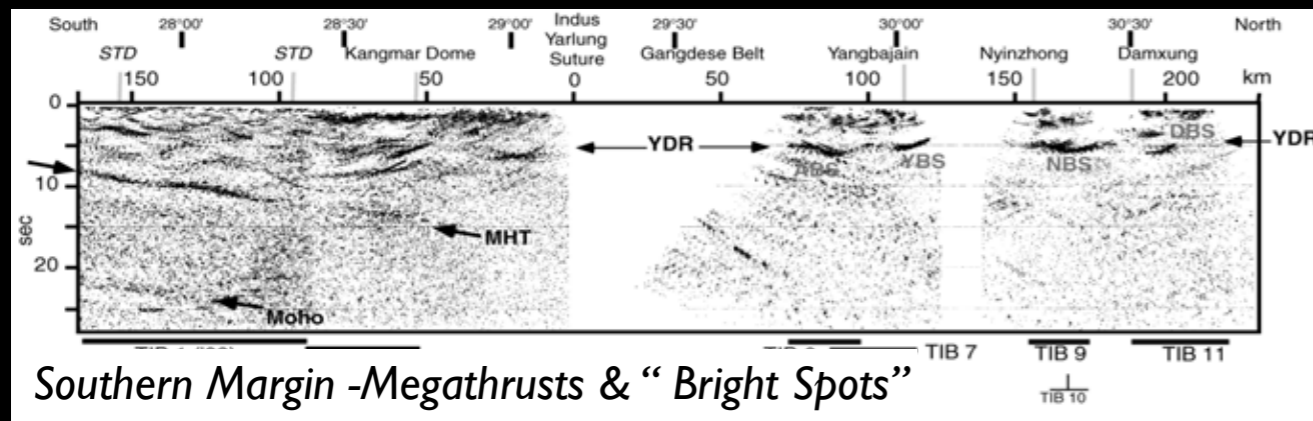
bold approach to geoscience research
integration across a broad spectrum of geoscience disciplines
open data for: research; hazard assessment, mitigation, and early
warning; education and outreach
community driven
coordinated and collaborative
international collaboration on an unprecedented scale
partnerships between academics and multiple agencies
substantial outreach component



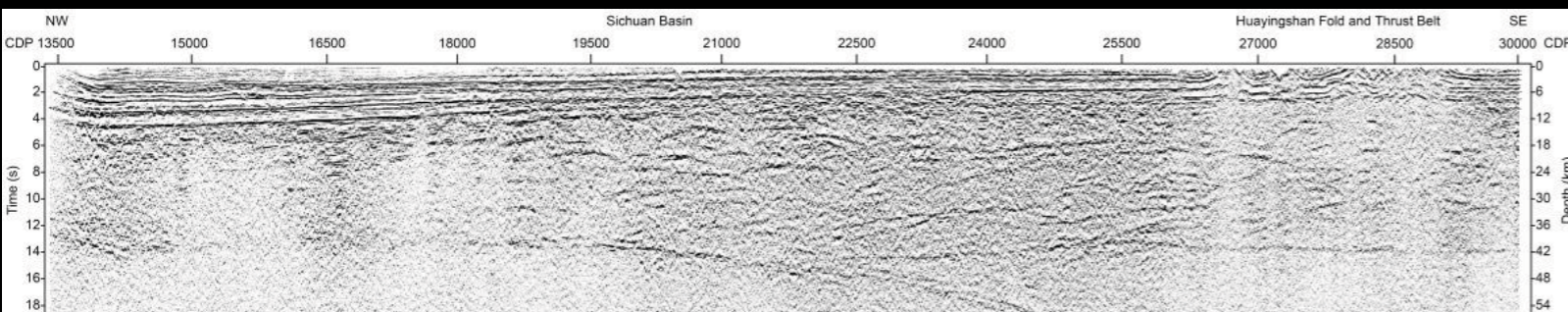
geophysical and geologic studies



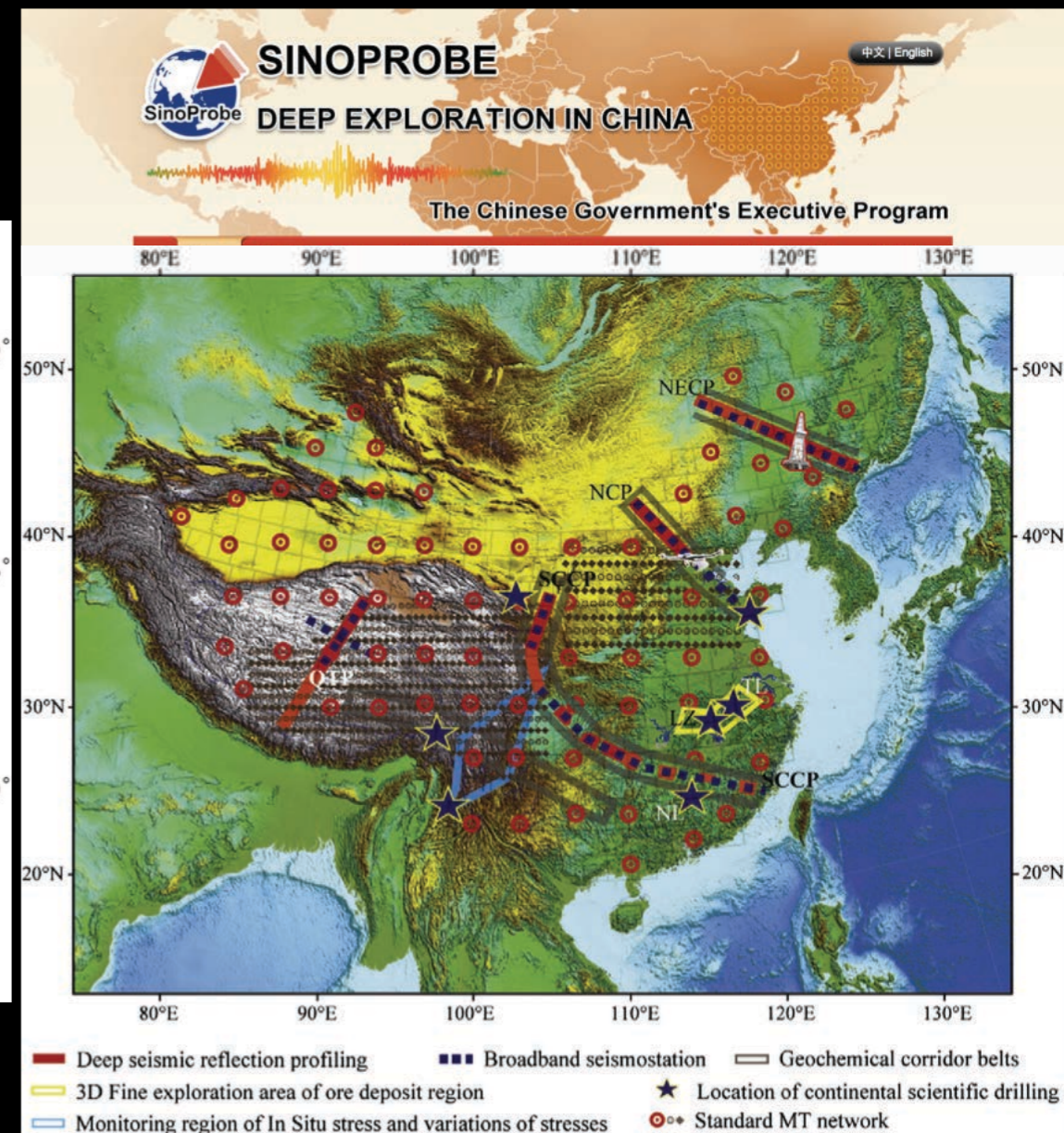
temporary seismic deployments in Tibet 1991-2015



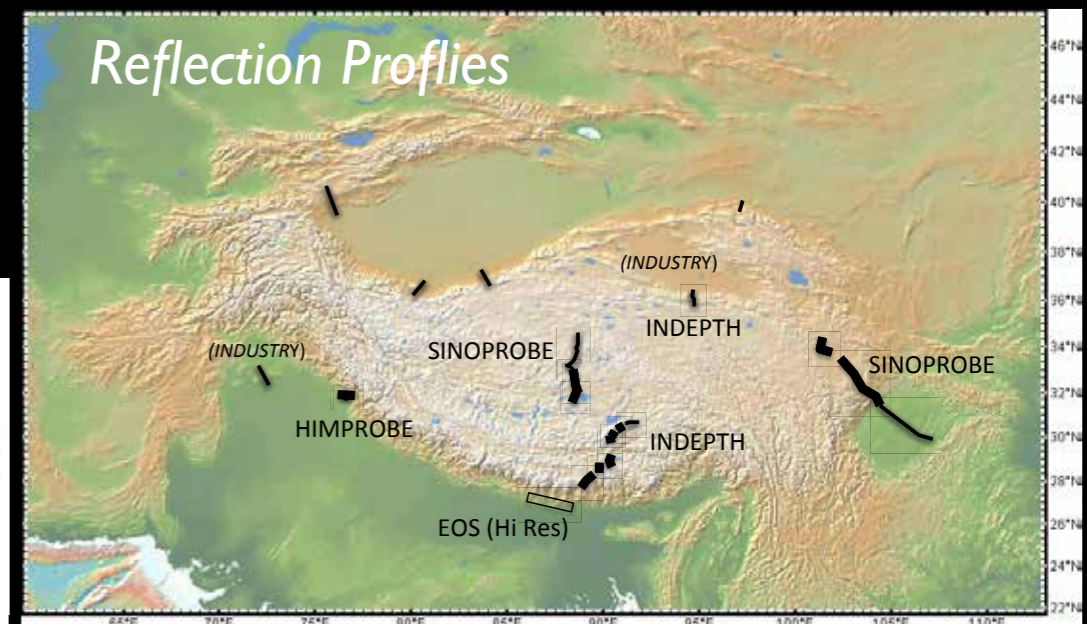
Southern Margin -Megathrusts & "Bright Spots"



Eastern Margin Mantle reflectors ~ Fossil Subduction



Dong et al., 2013, Tectonophysics





getting started....

open data, data integration and modeling framework