

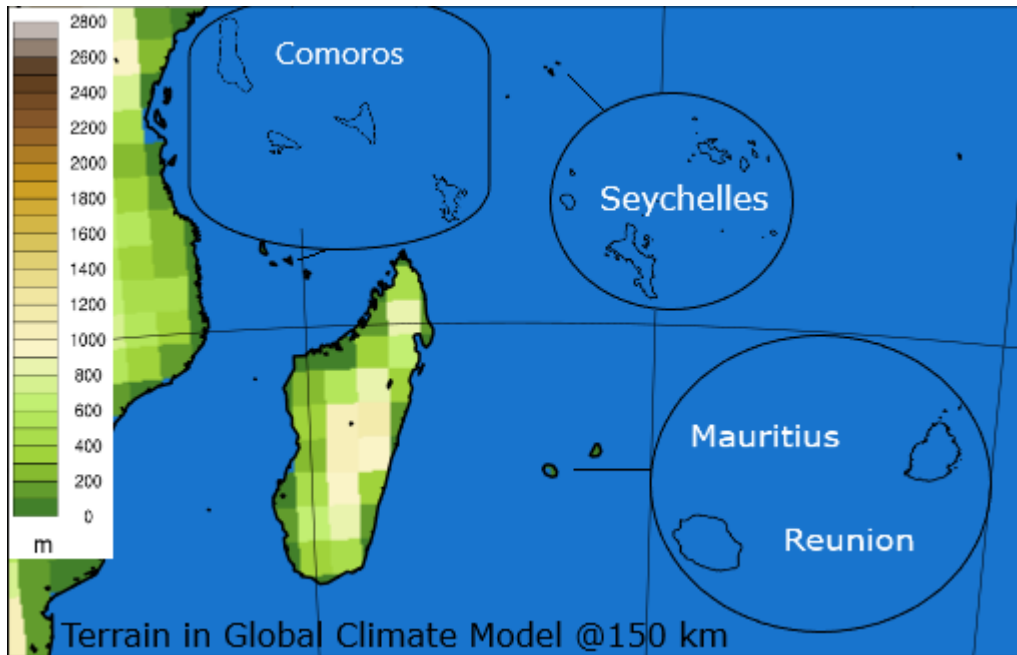
CAPACITY GAPS & CHALLENGES

- No climate services in the SWIO basin before 2018
- No climate modeling in IOC countries
- No climate information to rely on for the IOC steep and small islands

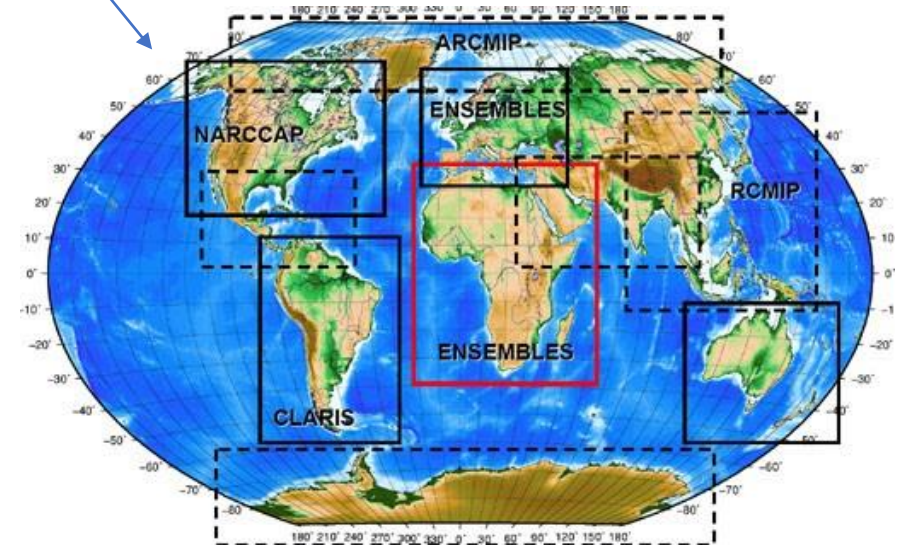
ISSUES (in the context of climate change)

- Coastal population exposed to sea level rising
- Tropical cyclone hazard
- Geopolitical risk

SWIO = Southwest Indian Ocean
IOC = Indian Ocean Commission

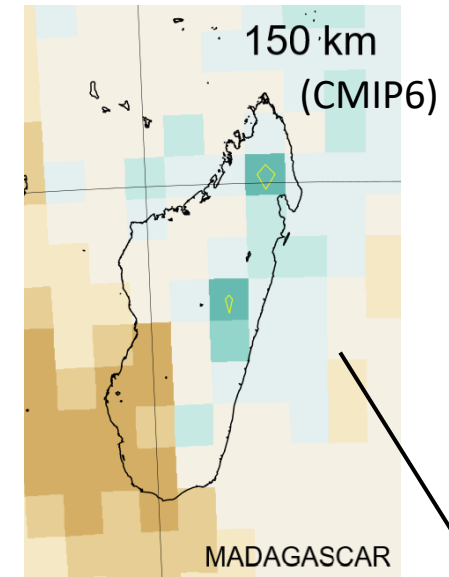
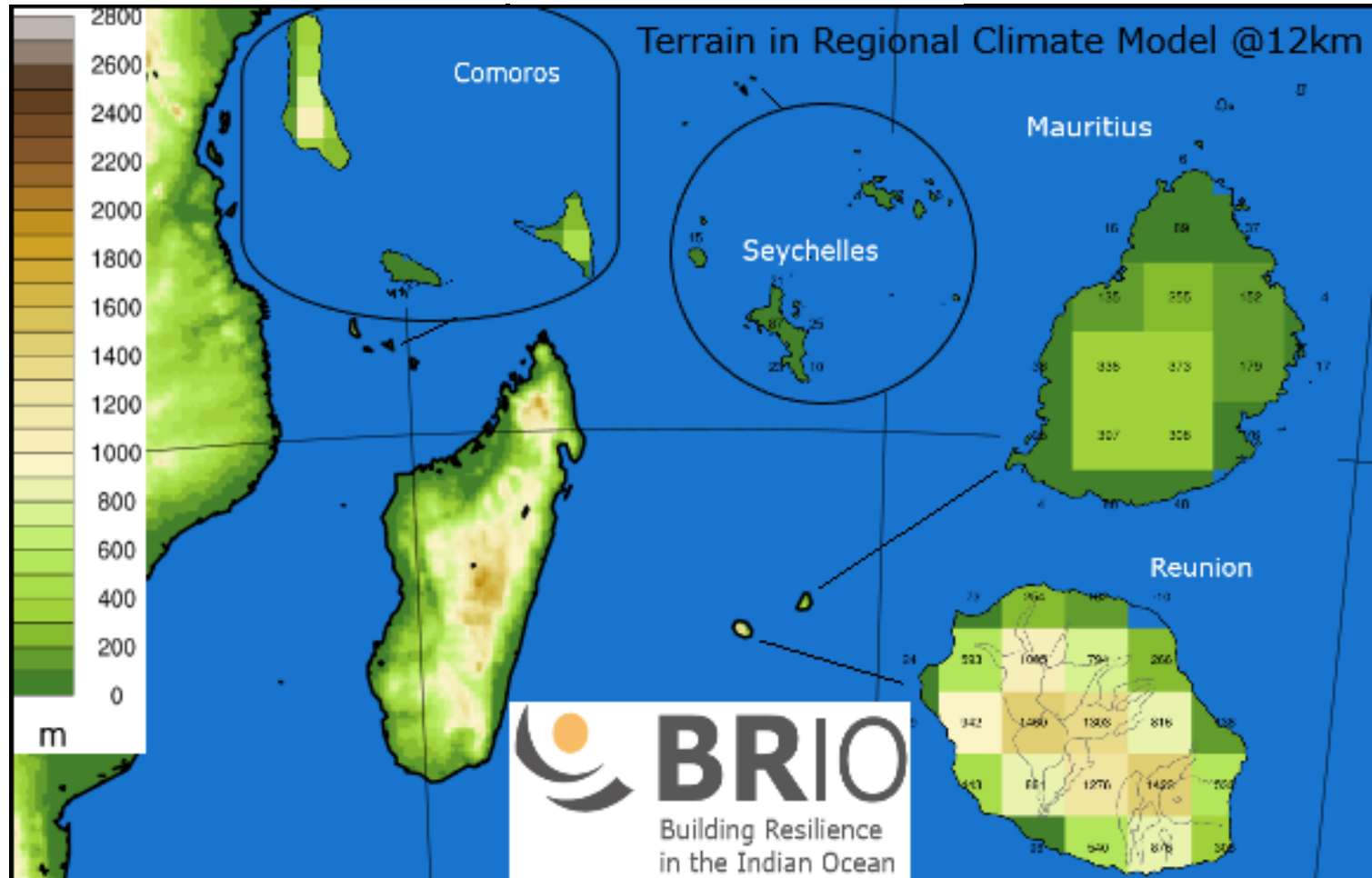


Current CMIP6 Global models misrepresent small and steep islands and hence precipitation climatology



Current CORDEX Africa region (regional models at 50-km resolution) does not cover the entire basin (misrepresentation of TC and precipitation climatology)

Tested SOLUTION : Regional climate modeling with ALADIN @12 km resolution (from CMIP6)



REFINED TERRAIN
REFINED PRECIPITATION

