# Legend / Légende

## Oceanic crustal and mantellic series

- Onshore ophiolites, Mindoro, Oligo-Miocene
- Onshore undifferenciated ophiolitic series of N. Sabah, Palawan Cretaceous Paleogene
- Sub-marine ophiolite or suspected relicts of oceanic crust (Proto South China Sea) in NW Sulu basin). Huatung Basin (Cretaceous), Celebes Sea (Eocene), Sulu Sea (Miocene), and Eocene for Benham Plateau
- 1 2 3 — Oceanic crust of the South China Sea. 1 -Early to Mid-Oligocene (33-30 Ma), 2 - Late Oligocene to Earliest Miocene (29-23 Ma), 3 - Early to Mid-Miocene (22-15.5 Ma)
- Inferred or suspected exhumed mantle or lower crust (approximate contours) structurally below Cenozoic sediments

## Basement dominant lithologies and granitoids

- Topographic/Bathymetric shaded DEM
- Shelf Miocene to Quaternary sediments offshore, covering subsurface lithologies and rifting faults and affected by moderate post-rift extension and compaction faults
- Hyper-stretched continental crust, mostly counter-regional normal faults under the shelf and grading to normal regional faults near the continent-ocean boundary
- Miocene subduction related granites onshore. Philippines
- Late Mesozoic to Early Cenozoic granitoids. Cenozoic migmatitic or metamorphic dome. Subsurface granitic/metamorphic rock inferred from seismic, gravity and magnetic data, including crystalline Proterozoic basement known from drilling. Below Cenozoic basins, lithologies appear orange
- Triassic-Jurassic granitoids. Post-Indosinian Orogeny
- Permian granitoids. Subduction related

## Pre-Cenozoic and Quaternary deposits on continental crust

- Paleozoic series (mostly Sinian pelitic rocks, Early to Middle Paleozoic quartzite and limestone, Late Paleozoic (limestone; quartzite; siliciclastic sediments and rhyolites)
- Jurassic to Lower Cretaceous basins onshore: mostly continental molasse type sediments and red beds
- Jurassic to Lower Cretaceous basins offshore mostly marine neritic on the northern margin, to bathyal sediments on the southern margin
- Middle and Upper Cretaceous basins onshore; molasse type sediments onshore China and Indochina landmasses. Undifferenciated Cretaceous series of Philippines and central Borneo
- Middle and Upper Cretaceous basins offshore South China Sea margin, deep marine on north of NW margin and the SE margin
- Late Mesozoic volcanic arc crust of the Philippine Mobile Belt. Includes mostly ophiolitic basement, volcanics and volcaniclastic series
- Quaternary sediments onshore; represented capping older structures West Luzon forearc basin

## Cenozoic sedimentary and metamorphic rocks

### Pre Mid Miocene:

- Rajang wedge of Borneo and Palawan-Sulu-Philippines-Taiwan equivalents (Cretaceous to Oligocene sediments in Oligocene wedge)
- Crocker wedge of Borneo and Palawan -Sulu-Philippines-Taiwan equivalents (Oligocene to Early Miocene sediments in Oligocene to Mid-Miocene wedge)
- Reef beneath MMU. Includes Late Oligocene to Early Miocene Nido and Kennon fm. (Philippines), Mulu Limestone (Sarawak), Eocene plateau of Benham (Philippines)
- Eocene-Oligocene rifted and pull-apart basins onshore China and Vietnam
- Undifferenciated Oligocene series onshore Borneo, Philippines and Taiwan
- Cenozoic rifted basins offshore (Paleocene? and Early Eocene continental to shallow marine deposits; overlain by late Miocene to Pliocene hemipelagic clay (not represented)

### Post Mid Miocene:

- Plio-Pleistocene frontal wedge of Borneo and Philippines-Taiwan
- Plio-Pleiostocene basins onshore
- Manila Trench accretionary wedge except Pleistocene frontal part
- Reef above MMU, Tabon Limestone and Luconia platform
- Pliocene to Present reefal platforms. Small pinacles up to surface not all included
- Gravity wedge in Miocene deltas. Deltas without gravity tectonics not represented

## Cenozoic volcanism

### Quaternary volcanism:

- Volcanic/volcanoclastic apron Post spreading volcanics (Pliocene)
- Volcanic proximal/emission point
- Underplated magma from Hainan mantle plume
- Cenozoic (Neogene) volcanics onshore, Offshore volc. arc above continental basement in Sulu and Cagayan ridges
- Oceanic crust associated volcanics

## Tectonic Features

- Gravity tectonics Growth faults (active)
- Basement rooted normal fault
- Thrust or reverse fault
- Major thrust
- Active subduction front
- ODP / IODP wells
- Paleo ridge axis
- Gravity tectonics Toe-thrusts (active)
- A — A′ Area encompassed by the synthetic cross-section
- Inferred sub-surface fault from gravity data or drainage anomalies
- Fault
- Magnetic anomalies. Chrons indicated when not controversial
- Crustal fabrics (mostly oceanic)