








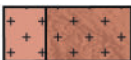




# Legend / Légende








## Oceanic crustal and mantellic series

-  Onshore ophiolites, Mindoro, Oligo-Miocene
-  Onshore undifferentiated 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
-  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


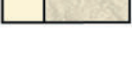




-  Paleozoic series (mostly Sinian pelitic rocks, Early to Middle Paleozoic quartzite and limestone, Late Paleozoic (limestone; quartzite; siliciclastic sediments and rhyolites)
-  Jurassic to Lower Cretaceous basins onshore: mostly continental molasse type sediments and red beds
-  Jurassic to Lower 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. Undifferentiated 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 volcanoclastic 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
-  Undifferentiated 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:



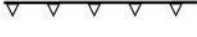





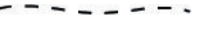


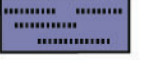
-  Plio-Pleistocene frontal wedge of Borneo and Philippines-Taiwan
-  Plio-Pleistocene basins onshore
-  Manila Trench accretionary wedge except Pleistocene frontal part
-  Reef above MMU, Tabon Limestone and Luconia platform
-  Pliocene to Present reefal platforms. Small pinacles up to surface not all 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)
-  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)