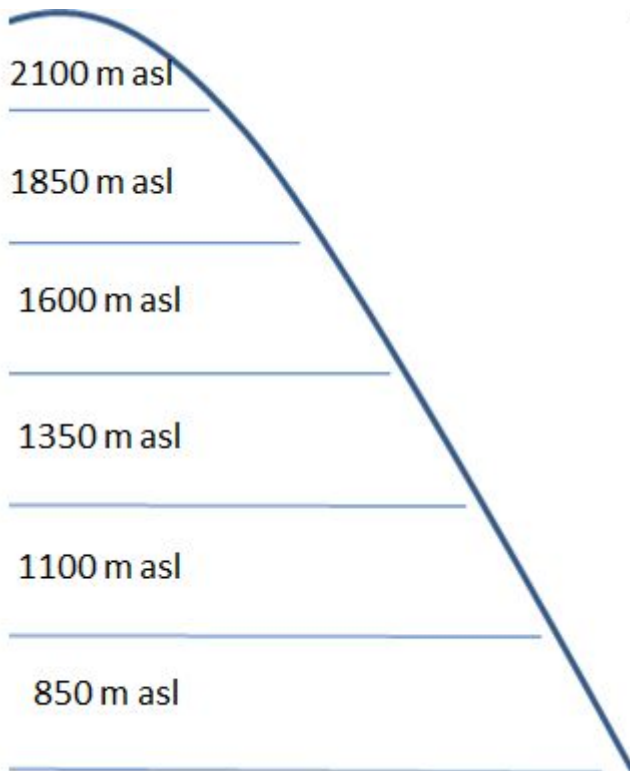


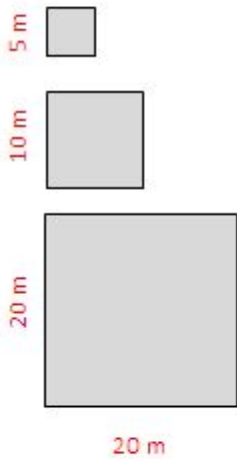
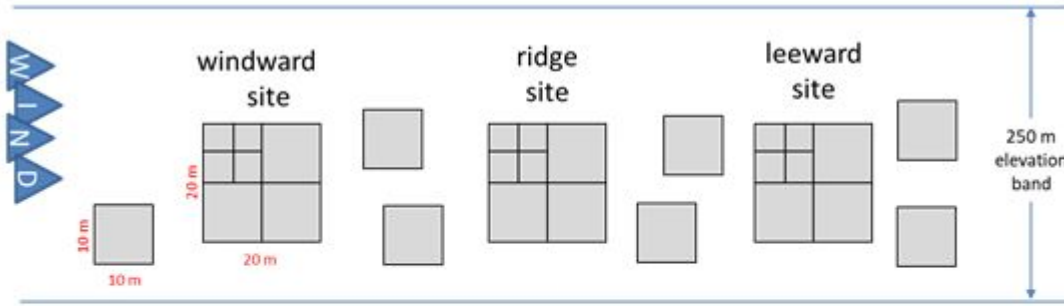
Lalashan elevation transect



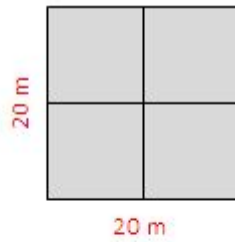
The transect along elevation from the top of Mt. Taman toward the lowland is separated into six elevation zones, each 250 wide.



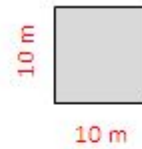
In each elevation zone, we established three permanent and seven non-permanent vegetation plots. The three permanent plots are of size 20 m x 20 m, while seven non-permanent plots are of size 10 m x 10 m. In each plot, we surveyed complete species composition (woody species, herbs, epiphytes, lianas) and collected a set of environmental variables. In the permanent plots, we also installed microclimatic loggers (measuring temperature and air humidity) and in two of the plots also wind speed and direction loggers.



nested plots
(3 sets)



standard
vegetation
plots (3)



small plots
(10)

Environmental variables

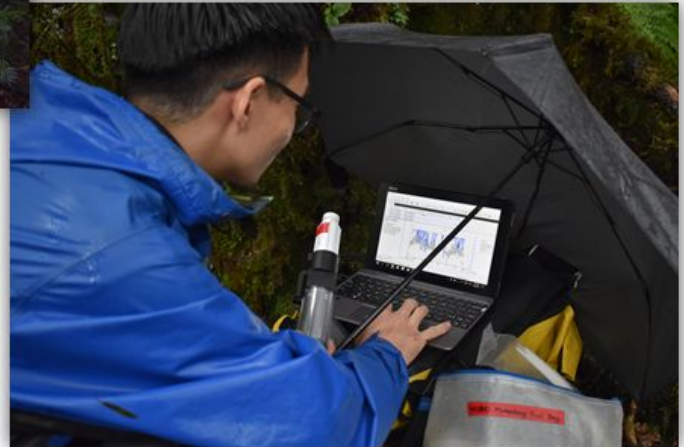
For each permanent 20×20 m plot, we collect:

- standard topographical data
- soil samples for chemical analysis
- canopy structure (fish-eye photography)
- long-term air temperature and humidity measurement
- interior wind speed and direction measurement (for selected windward and leeward plots)

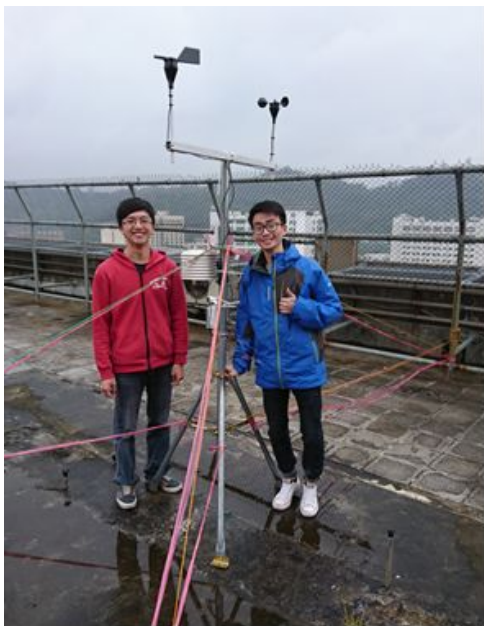
Long-term measuring of air temperature and humidity



Lin, Tsung-Yi (林宗儀) installing and downloading the loggers



Wind speed and direction measurement



Measured and calculated traits

Standard leaf traits (woody species & ferns)

- specific leaf area (SLA)
- leaf area (LA)
- leaf thickness
- leaf dry matter content (LDMC)
- leaf chlorophyll content
- succulence

Additional leaf and wood traits (for woody species only)

- leaf nitrogen and phosphorus concentration and isotopic ratio
- stem specific density (SSD, wood density)
- leaf vein density
- leaf wettability
- leaf mechanical resistance (force to tear) [planned, not measured yet]

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