

Biogeography. Lecture 23

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Outline

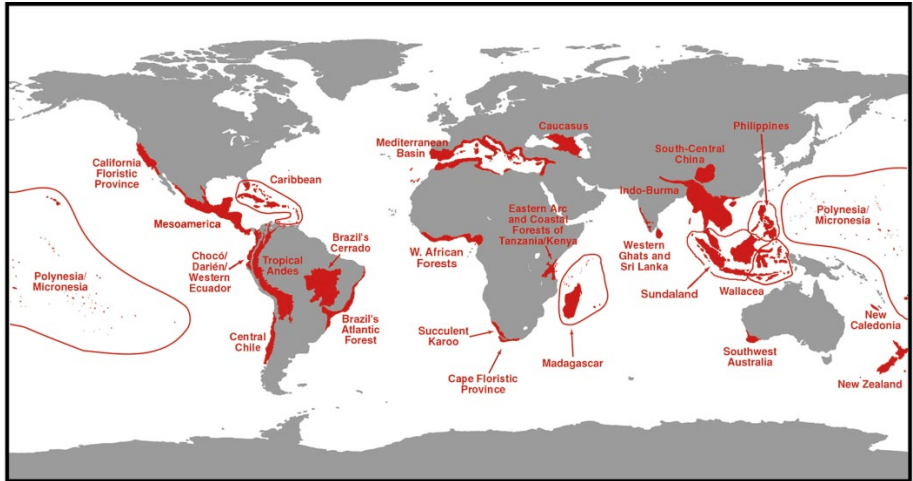
Biogeography of the World

- Biogeography rules

- Biogeography of South America, or Neotropics



Biodiversity hotspots of the world



(From Myers et al., 2000)



Biogeography of the World

Biogeography rules



Biogeography rules

- ▶ Allen's rule: endotherms minimize surface in cold climates and maximize in warm climates
- ▶ Bergmann's rule: northern are bigger
- ▶ Carlquist's rule: island plants tend to be woody
- ▶ Flight rule: island insects and birds often do not fly
- ▶ Foster's rule: island species tend to be either giants or dwarves
- ▶ Gloger's rule: pigmentation increases in humid climates



Biogeography of the World

Biogeography of South America, or Neotropics

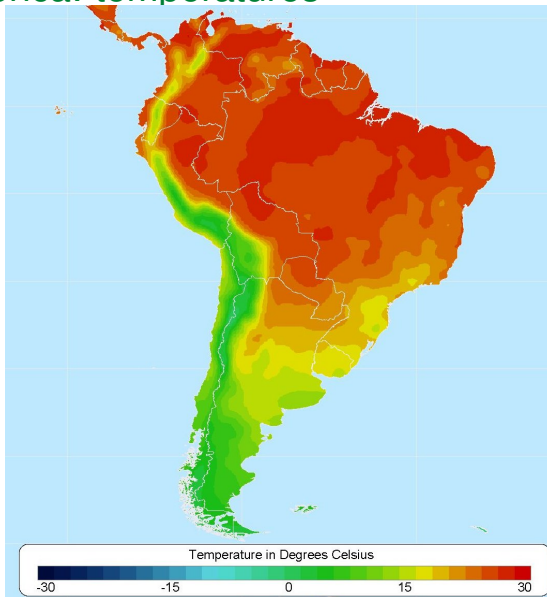




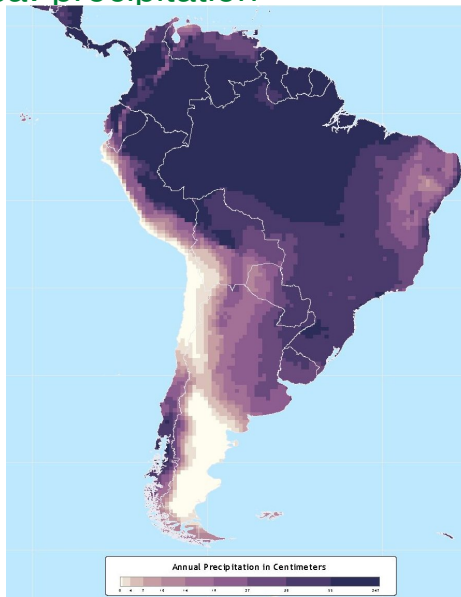
[Southern, tropical, low, new Andes, Amazon and Parana]



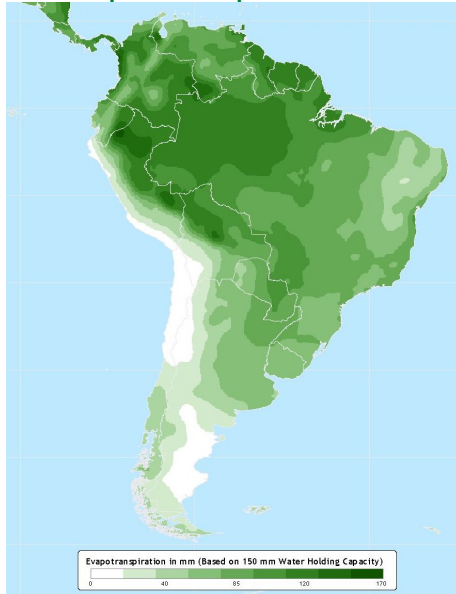
South America: temperatures



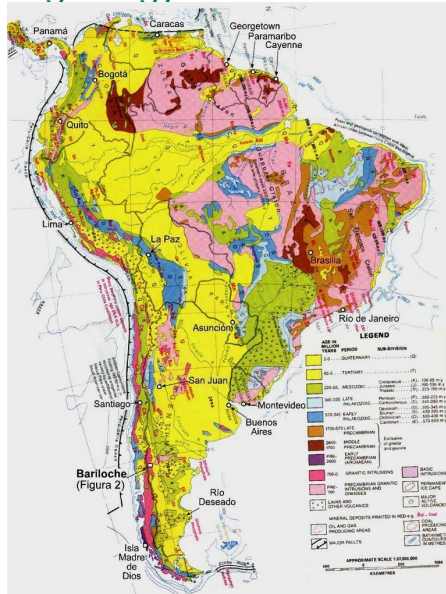
South America: precipitation



South America: evapotranspiration



South America: geology



South America: ecoregions



South America: 13 biogeographical regions

1. Tropical Central America
2. West Indies
3. Venezuela and Guiana Shield
4. Amazonian Basin
5. Brazilian Northeast
6. Brazilian Plateau
7. Gran Chaco
8. North and Central Andes (Columbia, Ecuador and Peru)
9. Pampas
10. Atacama desert
11. *Galapagos Islands*
12. Patagonia and Juan Fernandez
13. *South American Antarctic Islands*



For Further Reading



A. Shipunov.

Biogeography [Electronic resource].

2014—onwards.

Mode of access:

http://ashipunov.info/shipunov/school/biol_330



North America.

http://en.wikipedia.org/wiki/North_America

