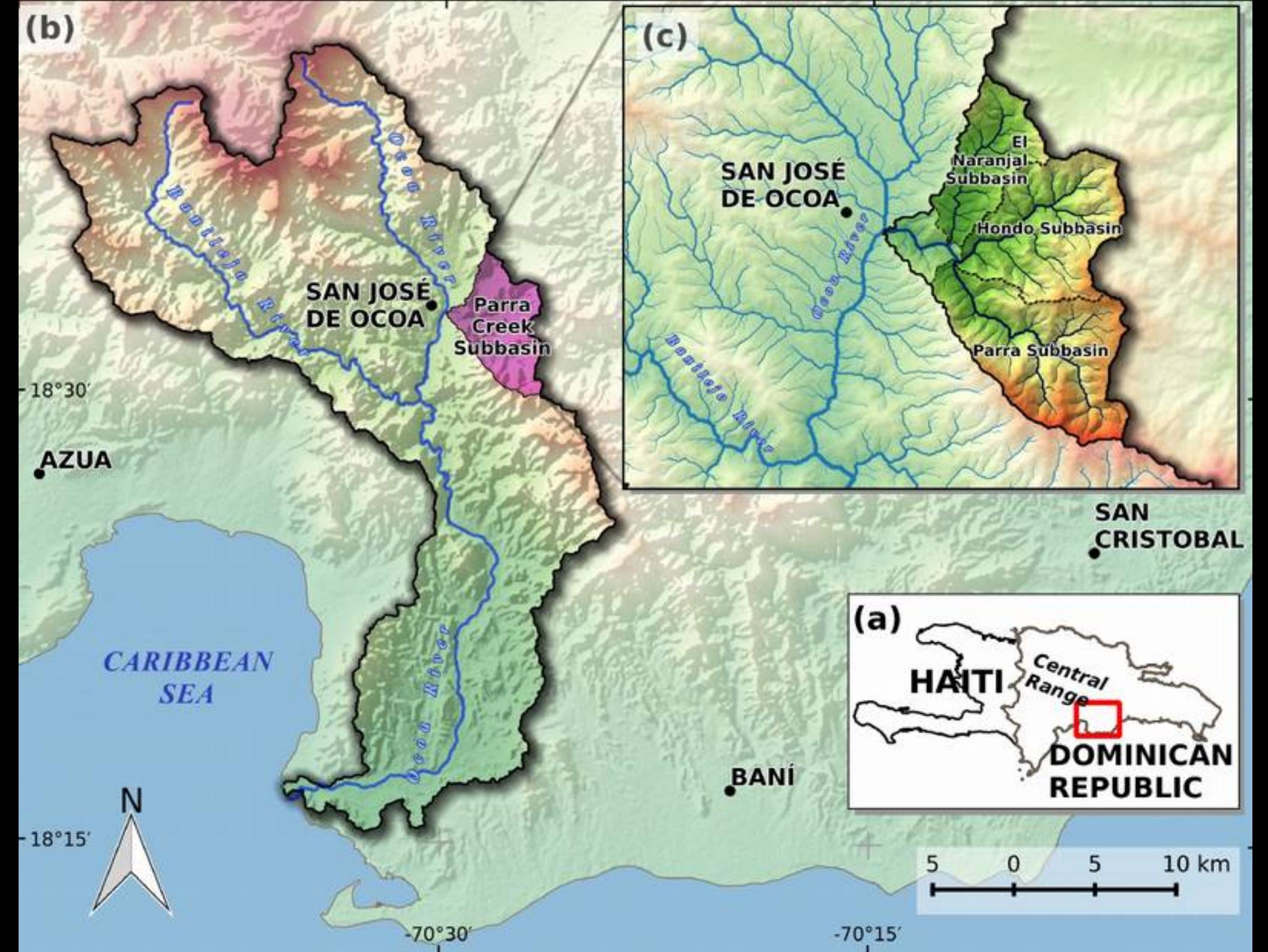


Reorganización del drenaje durante el Pleistoceno Superior en la cuenca del río Ocoa



22 de noviembre 2018

José Ramón Martínez Batlle
Investigador UASD



SAN JOSÉ DE OCOA

**El
Naranjal
Subbasin**

Hondo Subbasin

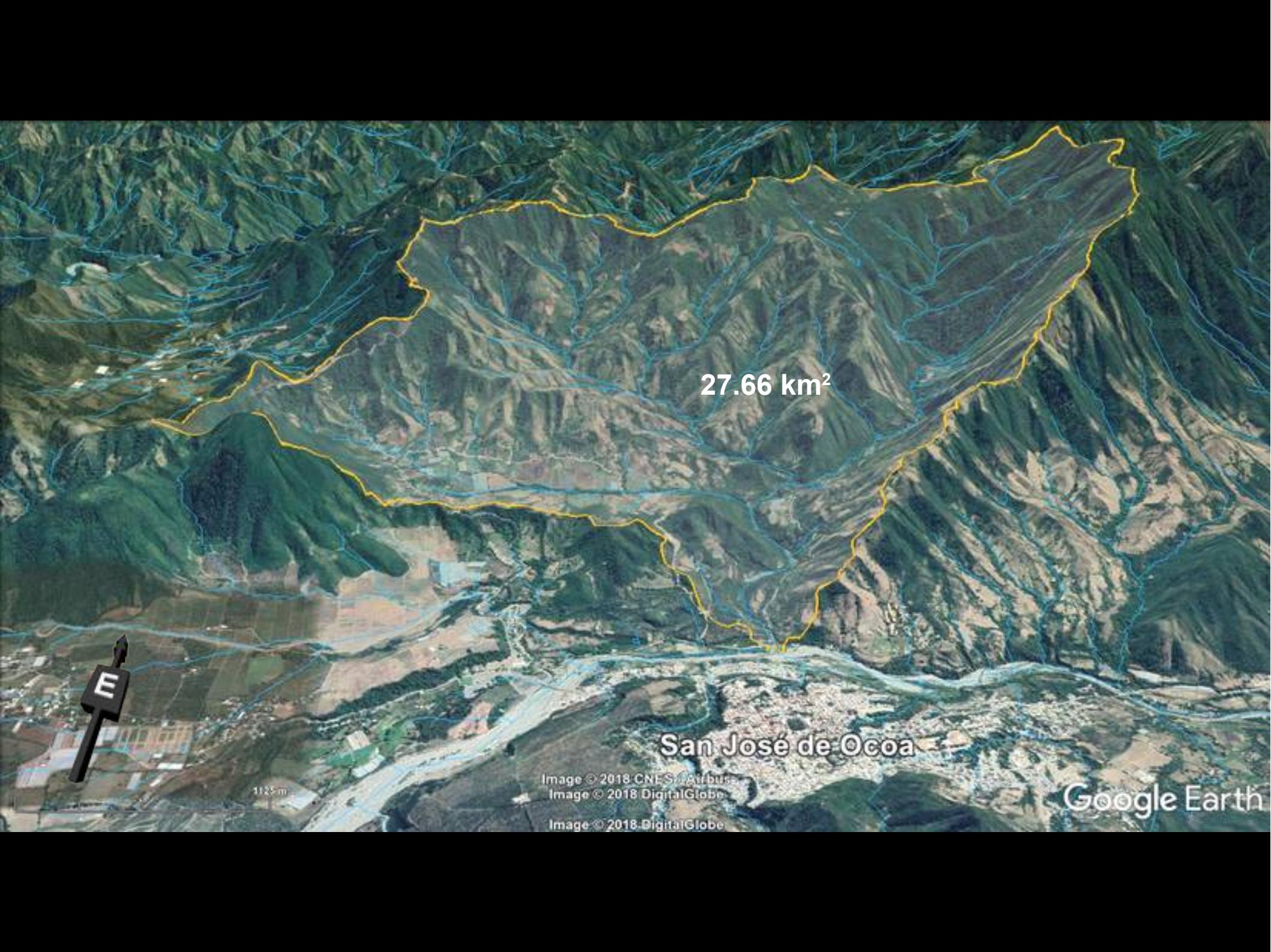
Parra Subbasin



Ocoa River

Bonitojo River

River



27.66 km²

San José de Ocoa

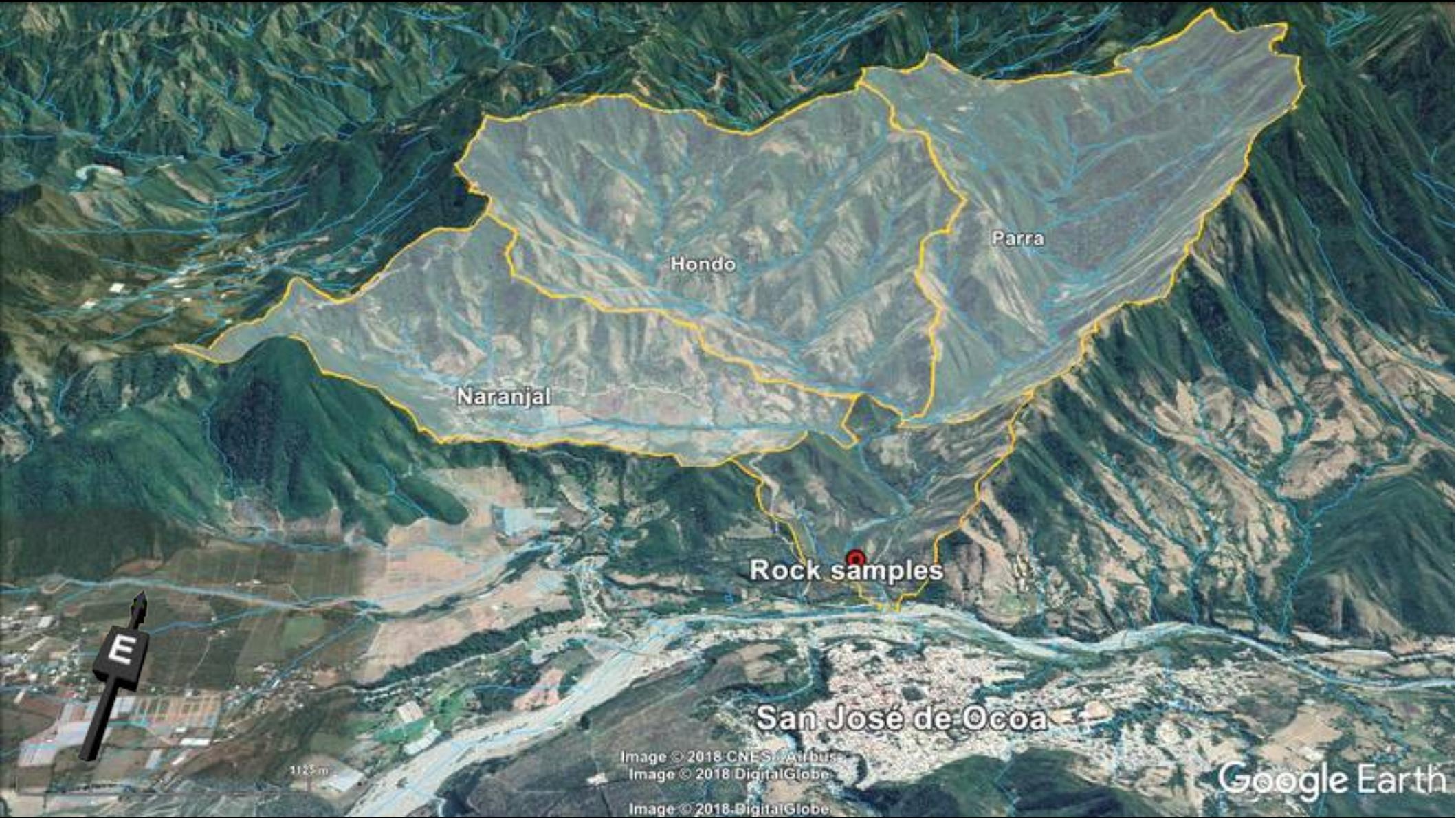
Image © 2018 CNES / Airbus

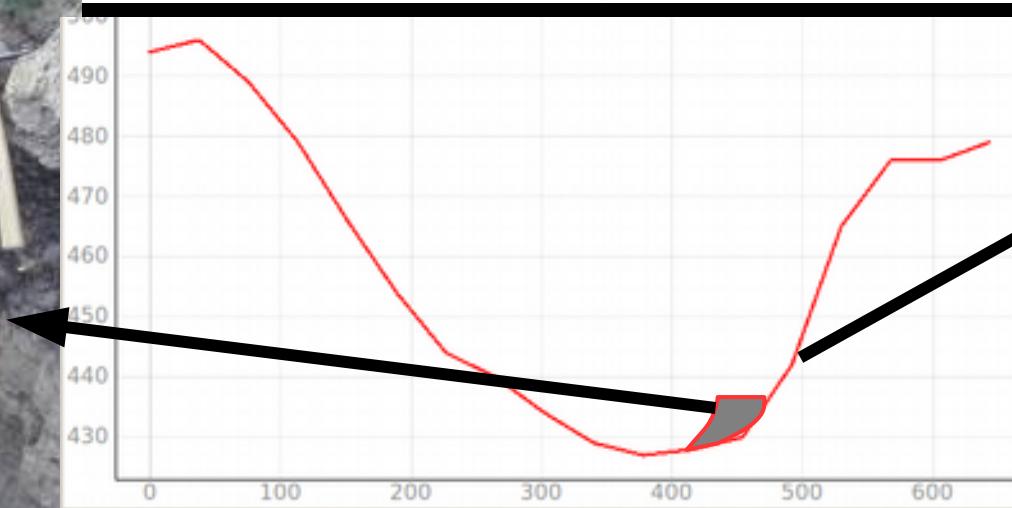
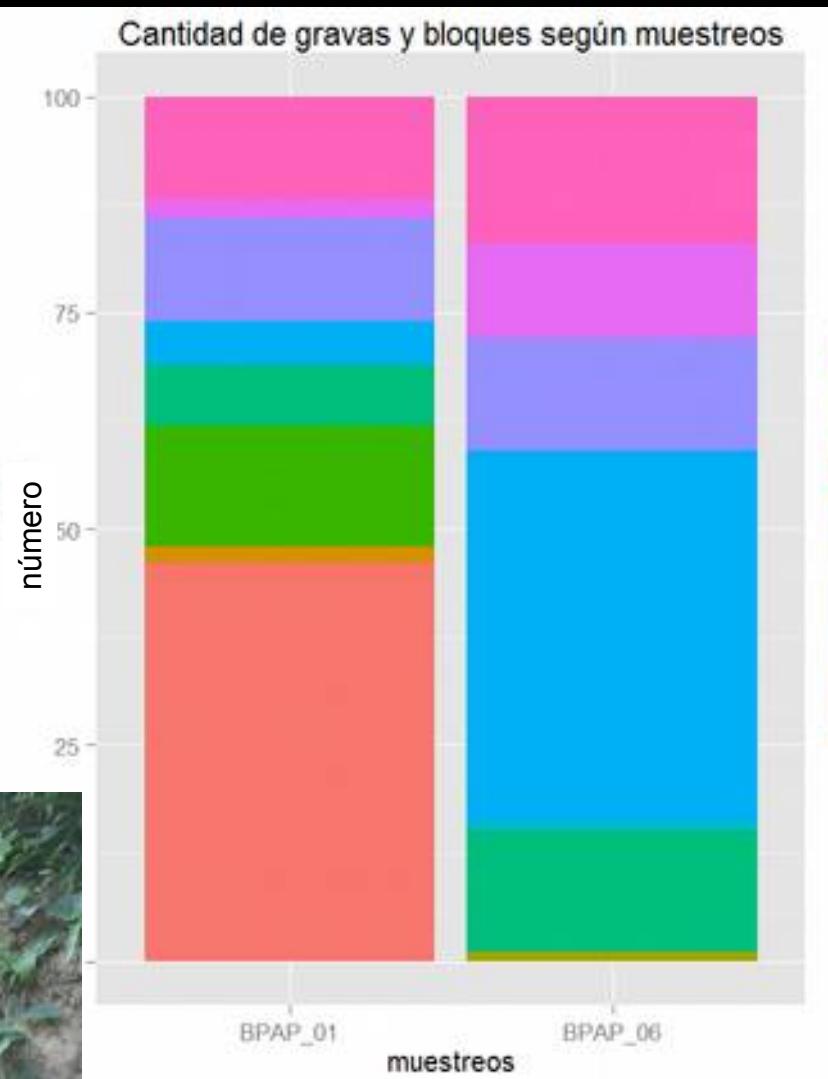
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No. 2.

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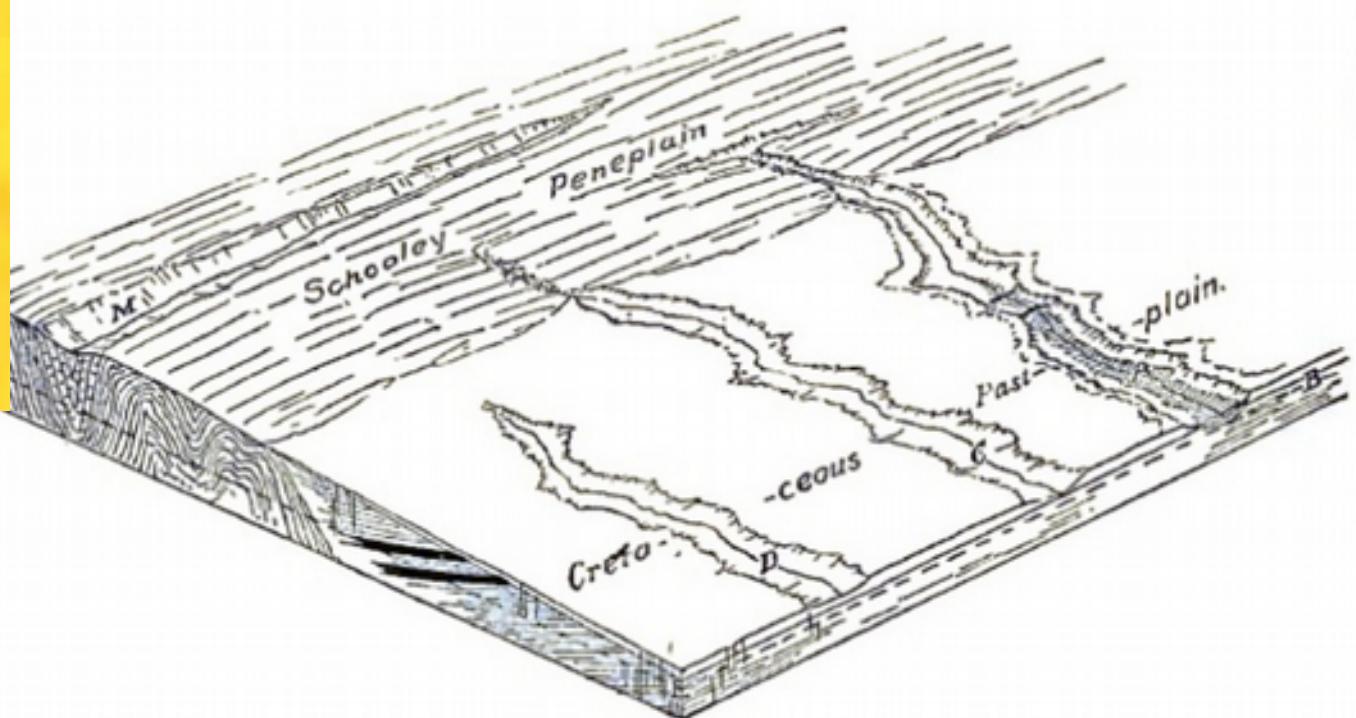


FIG. 3.

Drainage rearrangement by river capture, beheading and diversion

Paul Bishop

Victorian Institute of Earth and Planetary Sciences, Department of Geography and Environmental Science, Monash University, Clayton VIC 3168, Australia

Abstract: Drainage rearrangement, involving stream piracy (capture), drainage diversion and/or beheading, may be significant for sediment budgets (including sediment provenance) and biotic distributions, as well as for its more usually considered role in landscape evolution. The processes involved in drainage rearrangement are not as self-evident as its abundant literature indicates. This is especially the case with the commonly invoked stream capture. The key process in stream capture, namely, drainage head retreat, is difficult to envisage as a normal part of drainage net evolution, especially in the light of recent findings on drainage hollow evolution. Stream capture may therefore be a relatively rare event in drainage net evolution. This, and uncertainties with interpretations of supposed elbows of capture, mean that stream capture should not be routinely invoked in interpretations of long-term drainage evolution. Further uncertainties associated with the maintenance of drainage lines during the erosion of significant crustal sections, especially in faulted and folded terrains, diminish the likelihood of many supposed examples of stream capture. It is more likely that examples of drainage rearrangement attributed to stream capture were generated by drainage diversion, but even this may involve special conditions.

Key words: river capture, river beheading, river diversion, piracy, fluvial geomorphology, basin-hinterland relationships, tectonics.

Wind gap o puerto de montaña

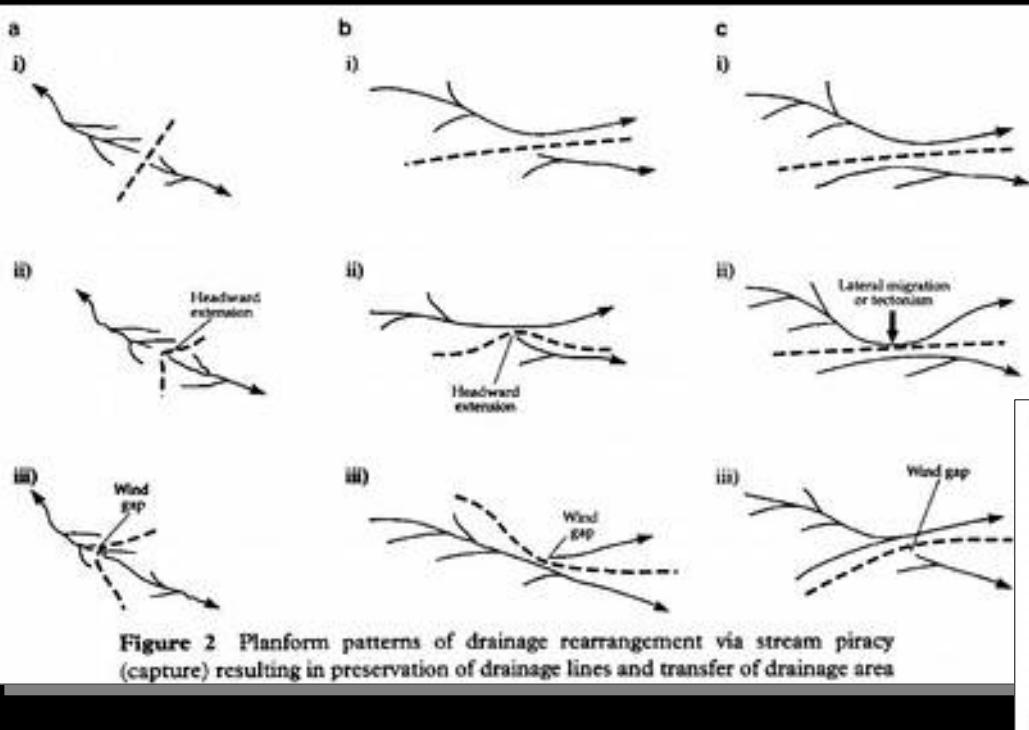


Figure 2 Planform patterns of drainage rearrangement via stream piracy (capture) resulting in preservation of drainage lines and transfer of drainage area

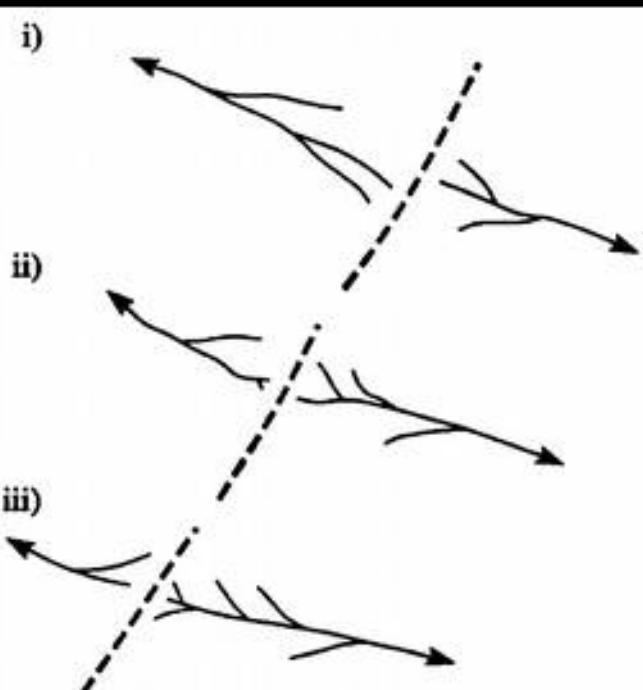


Figure 4 Planform patterns resulting from drainage rearrangement via beheading, involving transfer of drainage area between catchments but no preservation of drainage lines (dashed line is the drainage divide)

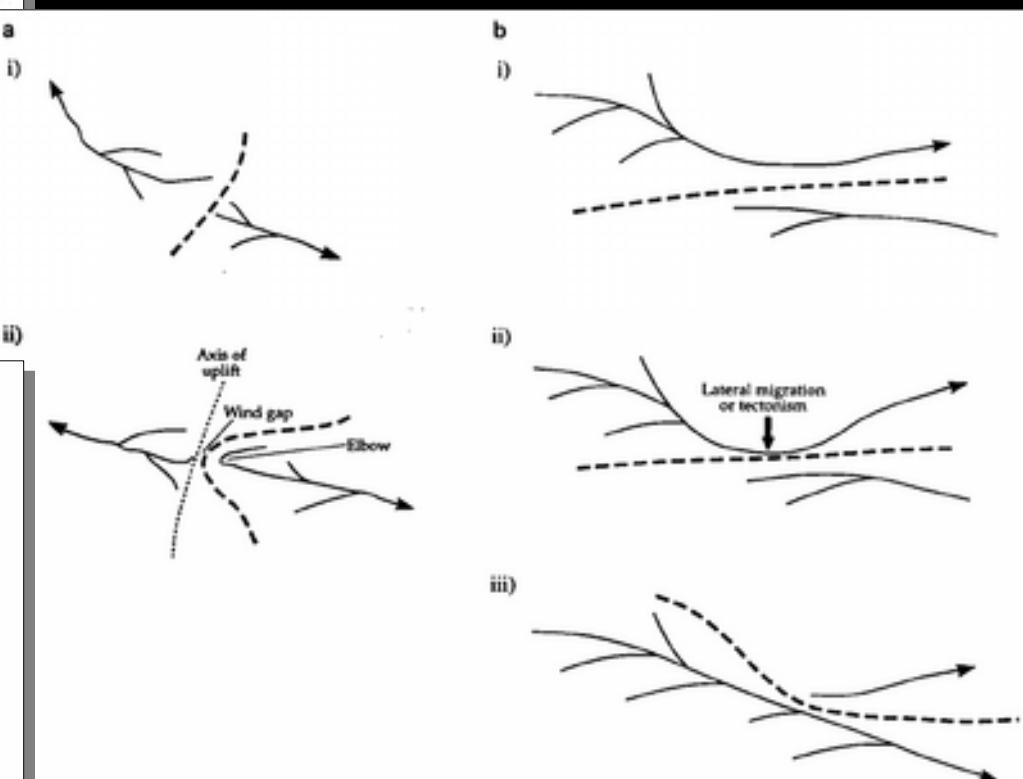


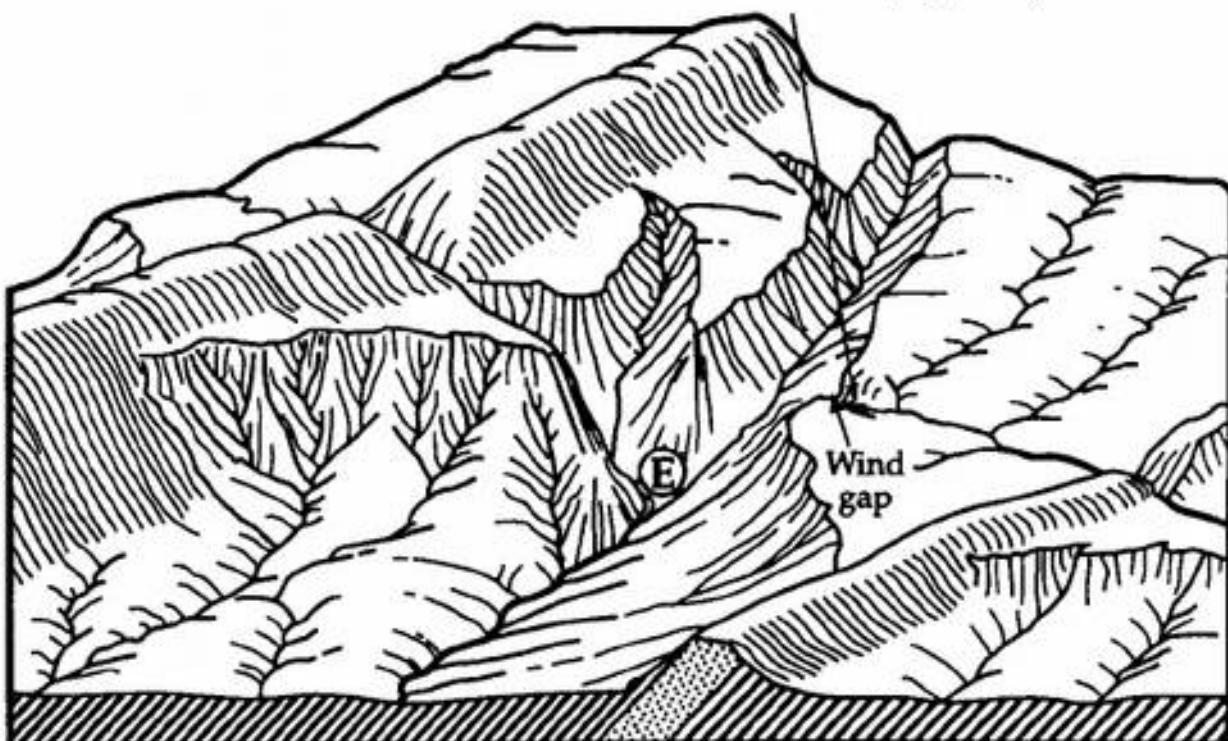
Figure 3 Planform patterns of two forms of drainage rearrangement via stream diversion as a result of lateral migration or tectonism (top-down processes) and

Drainage rearrangement by river capture, beheading and diversion

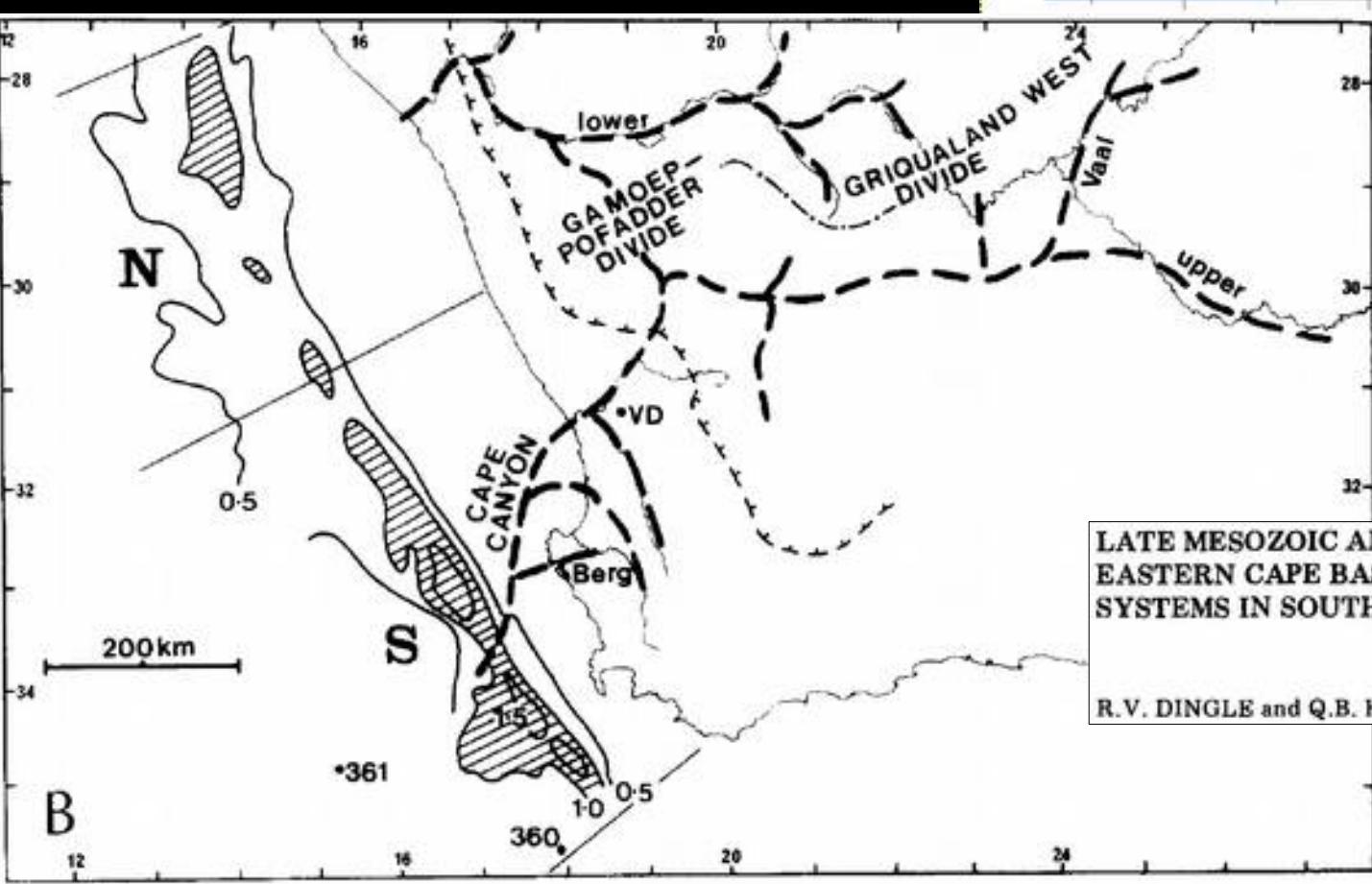
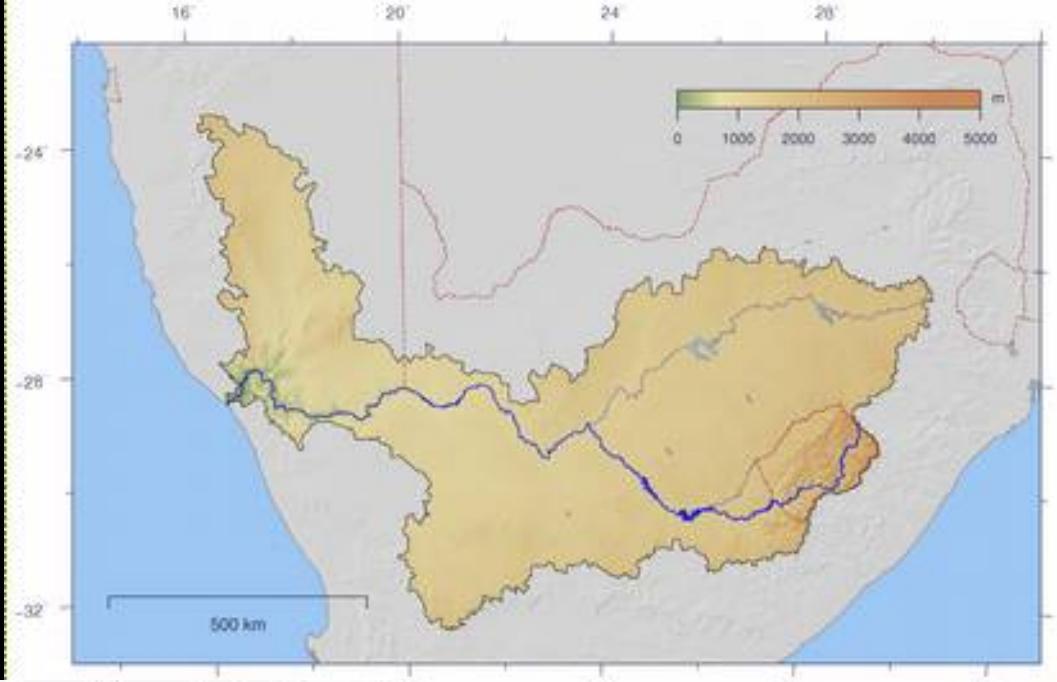
Paul Bishop



Possible fluvial sediments
in abandoned, dry valley

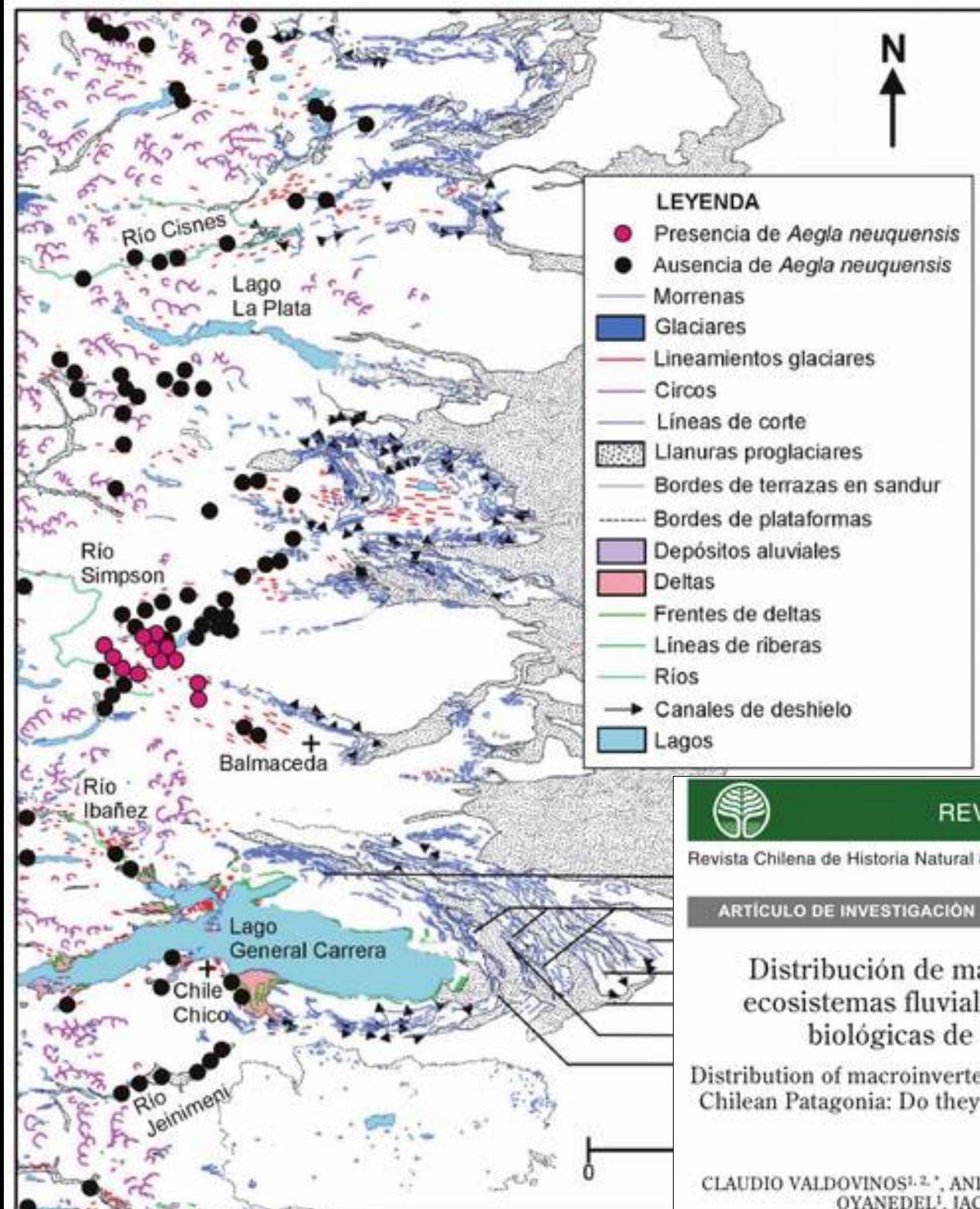


De Imago - The map has been created with the Generic Mapping Tools: <http://gmt.soest.hawaii.edu/> using additional public domain data from the VMAP0 data set., CC BY-SA 2.5, <https://commons.wikimedia.org/w/index.php?curid=1716032>



LATE MESOZOIC AND TERTIARY SEDIMENT SUPPLY TO THE
EASTERN CAPE BASIN (SE ATLANTIC) AND PALAEO-DRAINAGE
SYSTEMS IN SOUTHWESTERN AFRICA

R.V. DINGLE and Q.B. HENDEY



REVISTA CHILENA DE HISTORIA NATURAL

Revista Chilena de Historia Natural 83: 267-287, 2010

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ARTÍCULO DE INVESTIGACIÓN

Distribución de macroinvertebrados (Plecoptera y Aeglidae) en ecosistemas fluviales de la Patagonia chilena: ¿Muestran señales biológicas de la evolución geomorfológica postglacial?

Distribution of macroinvertebrates (Plecoptera and Aeglidae) in fluvial ecosystems of the Chilean Patagonia: Do they show biological signals of the postglacial geomorphological evolution?

CLAUDIO VALDOVINOS^{1,2,*}, ANDREA KISSLING¹, MARÍA MARDONES³, CAROLINA MOYA¹, ALEJANDRA OYANEDEL¹, JACQUELINE SALVO¹, VIVIANA OLMO¹ & ÓSCAR PARRA^{1,2}

A new species of *Austrolebias* Costa (Cyprinodontiformes: Rivulidae) from northeastern Uruguay, with comments on distribution patterns

Marcelo Loureiro^{1,2}, Alejandro Duarte¹ and Matías Zarucki¹

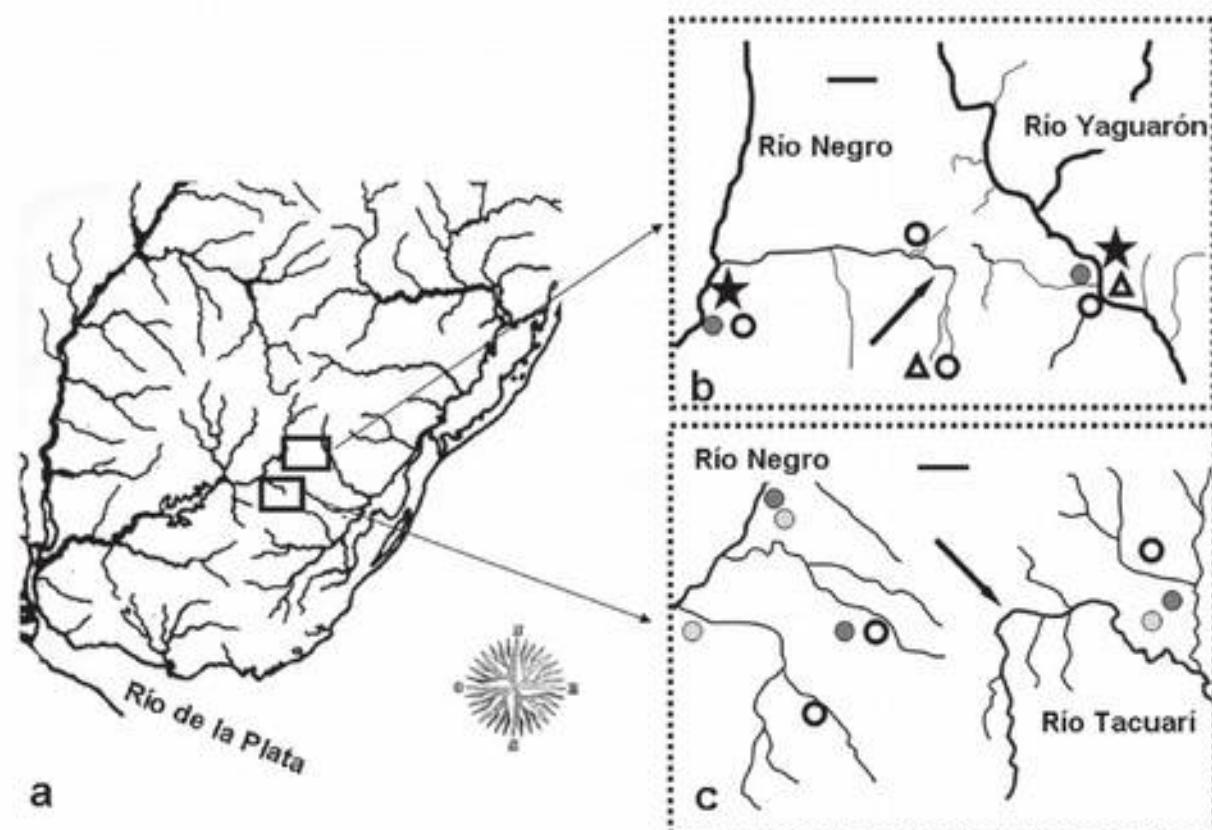
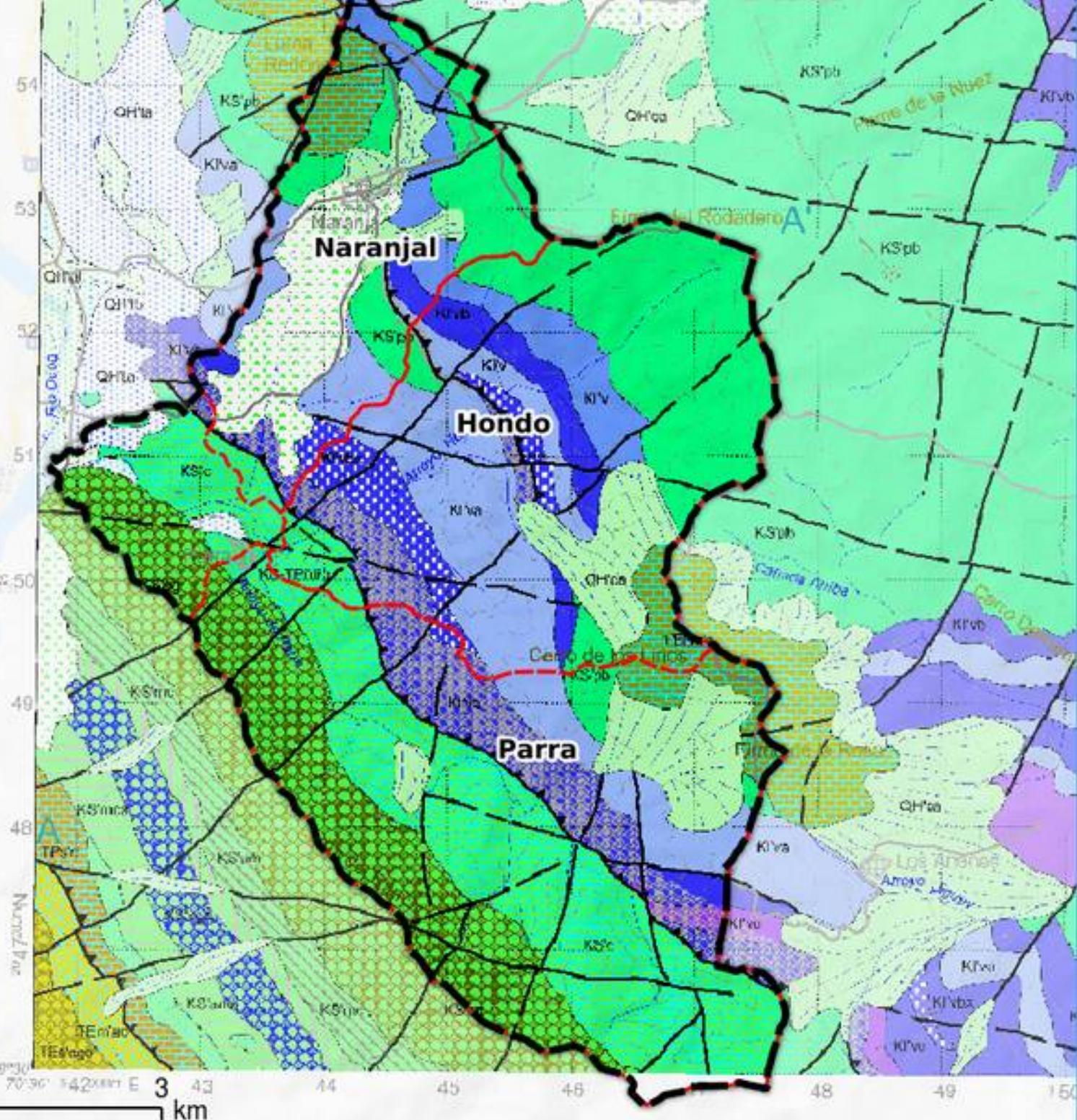


Fig. 5. **a.** Map of hypothesized areas of drainage rearrangements (empty squares) between río Negro and Laguna Merín tributaries, based on distribution patterns of *Austrolebias* and rivers morphology (elbows of capture); **b.** Detailed map of localities of *Austrolebias* and rivers configurations in río Negro and río Yaguarón; **c.** Detailed map of localities of *Austrolebias* and rivers configurations in río Negro and río Tacuari. Scale bars = 10 km; Black arrows indicate proposed elbow of capture. *Austrolebias quirogai* (stars), *A. arachan* (light gray circles), *A. vazferreira* (dark gray circles), *A. melanoorus* (white triangles), and *A. affinis* species group (white circles).



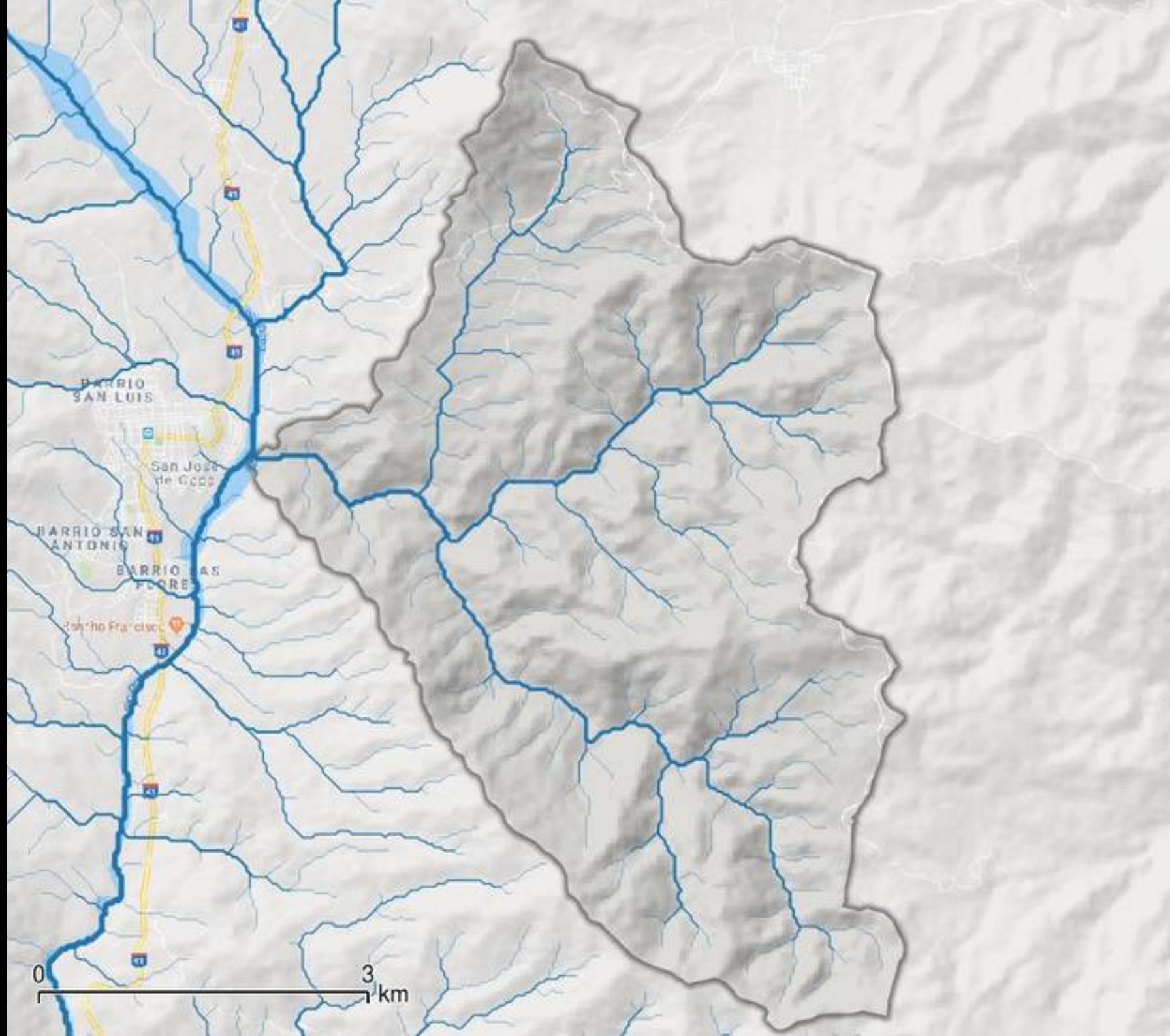


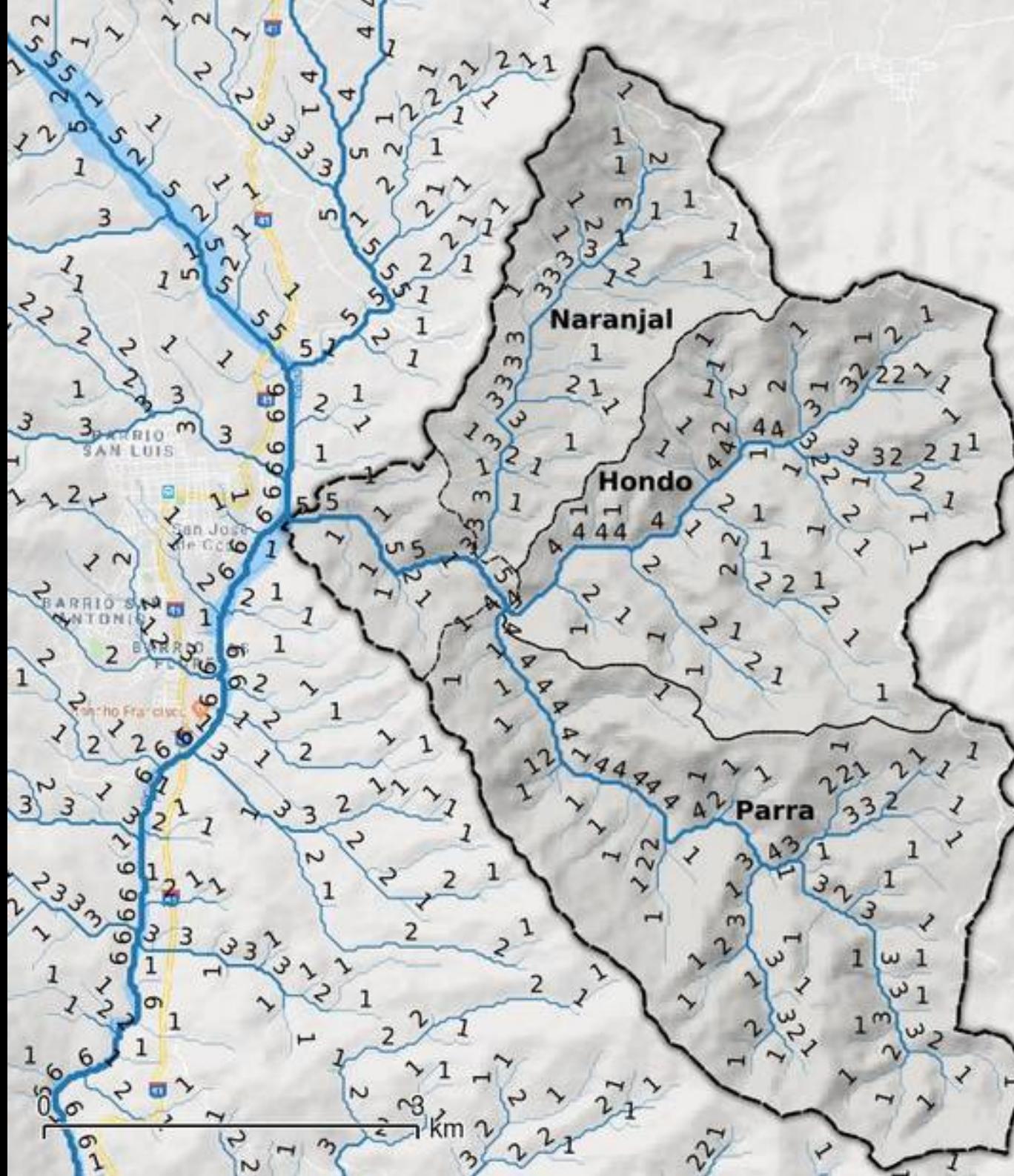
Caracterización morfométrica

- Los parámetros resultantes del addon de GRASS r.basin, e.g.: razón de circularidad, coeficiente de compacidad, tiempo de concentración, densidad de drenaje, entre otros
- Perfiles longitudinales de cursos más largos de cada subcuenca
- Índice de concavidad
- Curva hipsométrica e integral hipsométrica
- Simetría transversal topográfica

Nombre	Área (km ²)	Diferencia de elev.	Elev. media	Pendiente media	Razón de circ.	Coef. compac.
Parra	11.99	967.97	1002.51	23.9	0.46	4.63
Hondo	10	739.68	841.79	21.24	0.54	4.26
Naranjal	5.67	483.35	662.74	13.72	0.43	4.8

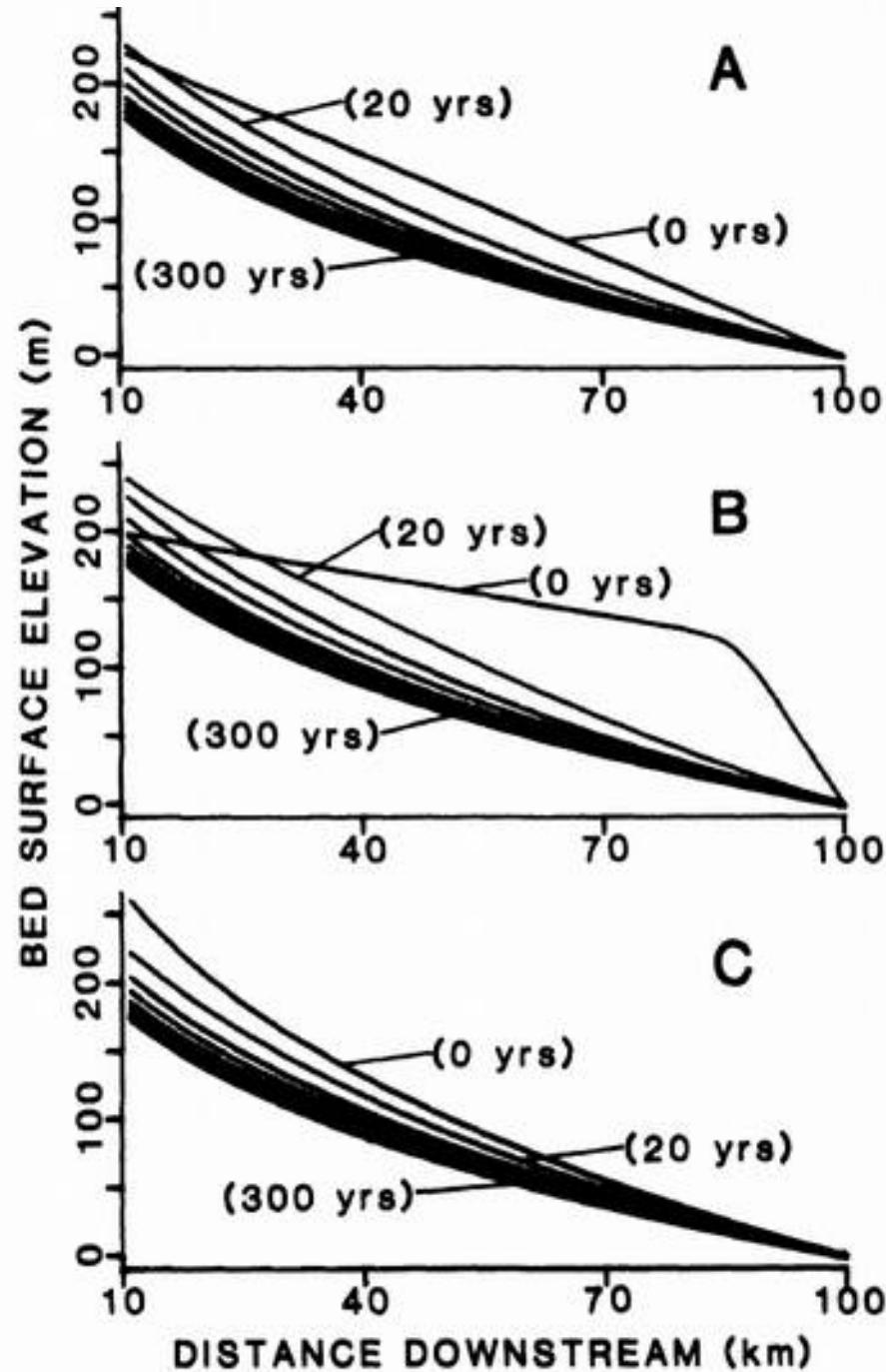
Nombre	Tiempo conc. (hr)	Strahler max	Número cursos	Long. cursos (km)	Freq. rel. cursos 1	L/A (km/km ²)
Parra	0.99	4	73	34.12	4.17	2.85
Hondo	0.92	4	64	29.68	4.3	2.97
Naranjal	0.94	3	36	18.01	4.24	3.18





MATHEMATICAL MODELING OF GRADED RIVER PROFILES¹

R. SCOTT SNOW AND RUDY L. SLINGERLAND



DEVELOPMENT OF DRAINAGE SYSTEMS ON AN UPRAISED LAKE FLOOR*

MARIE MORISAWA

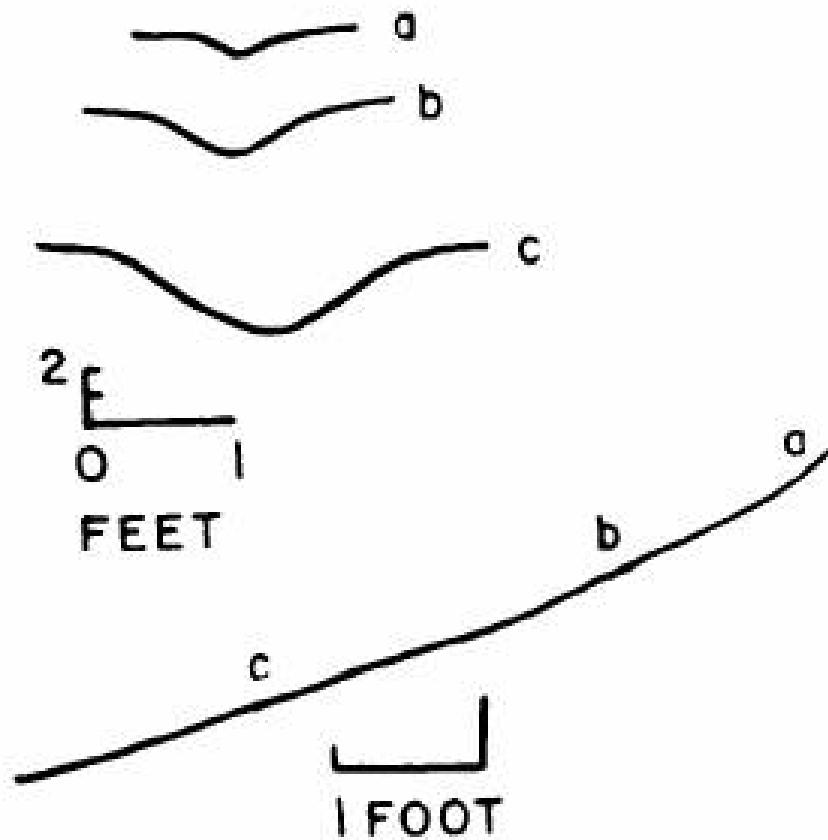


Fig. 6. Stream profiles, steep sandy area.

← → C ⌂ Es seguro | https://github.com/geofis/rgrass/blob/master/lfp_network.R

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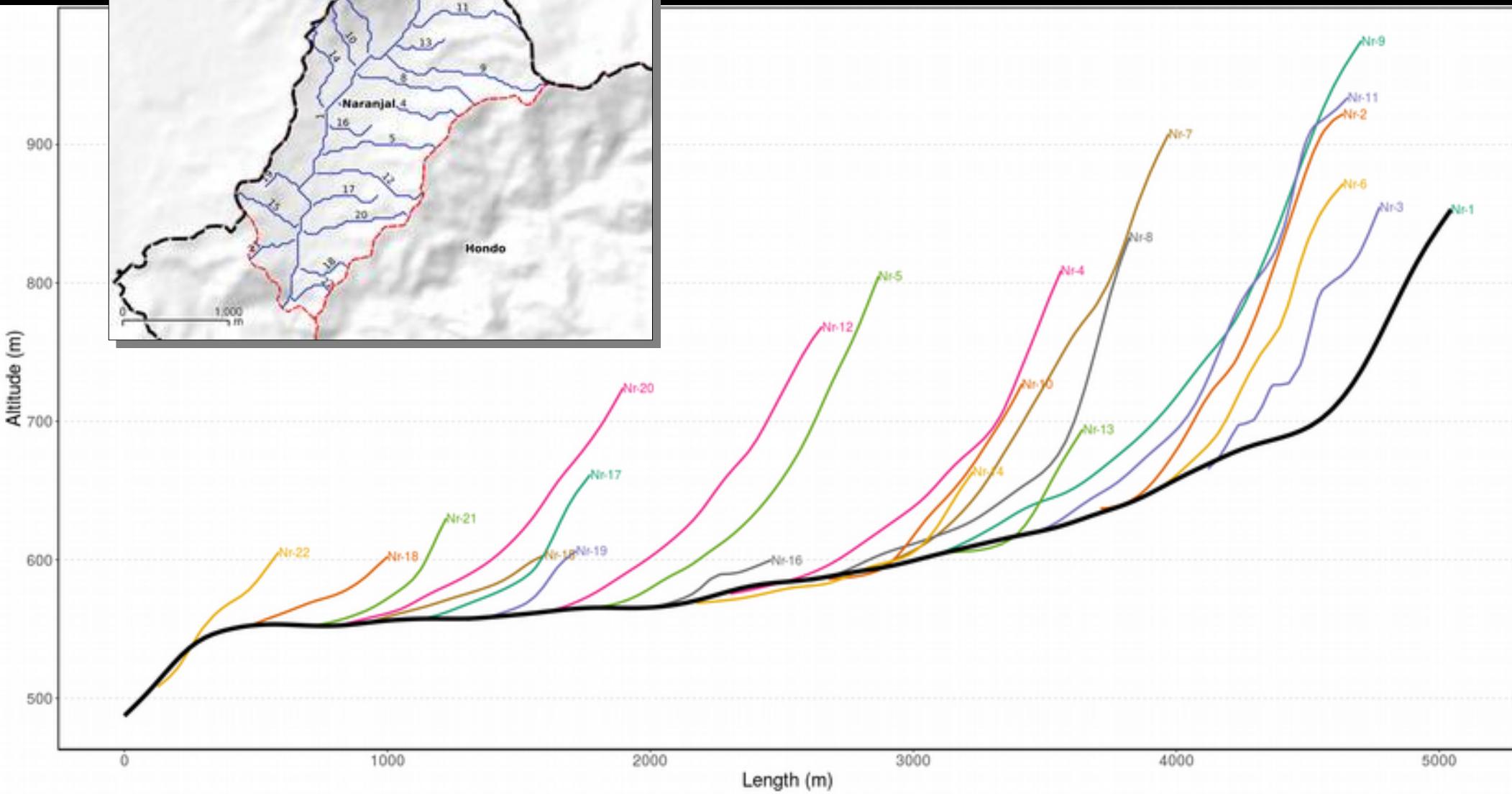
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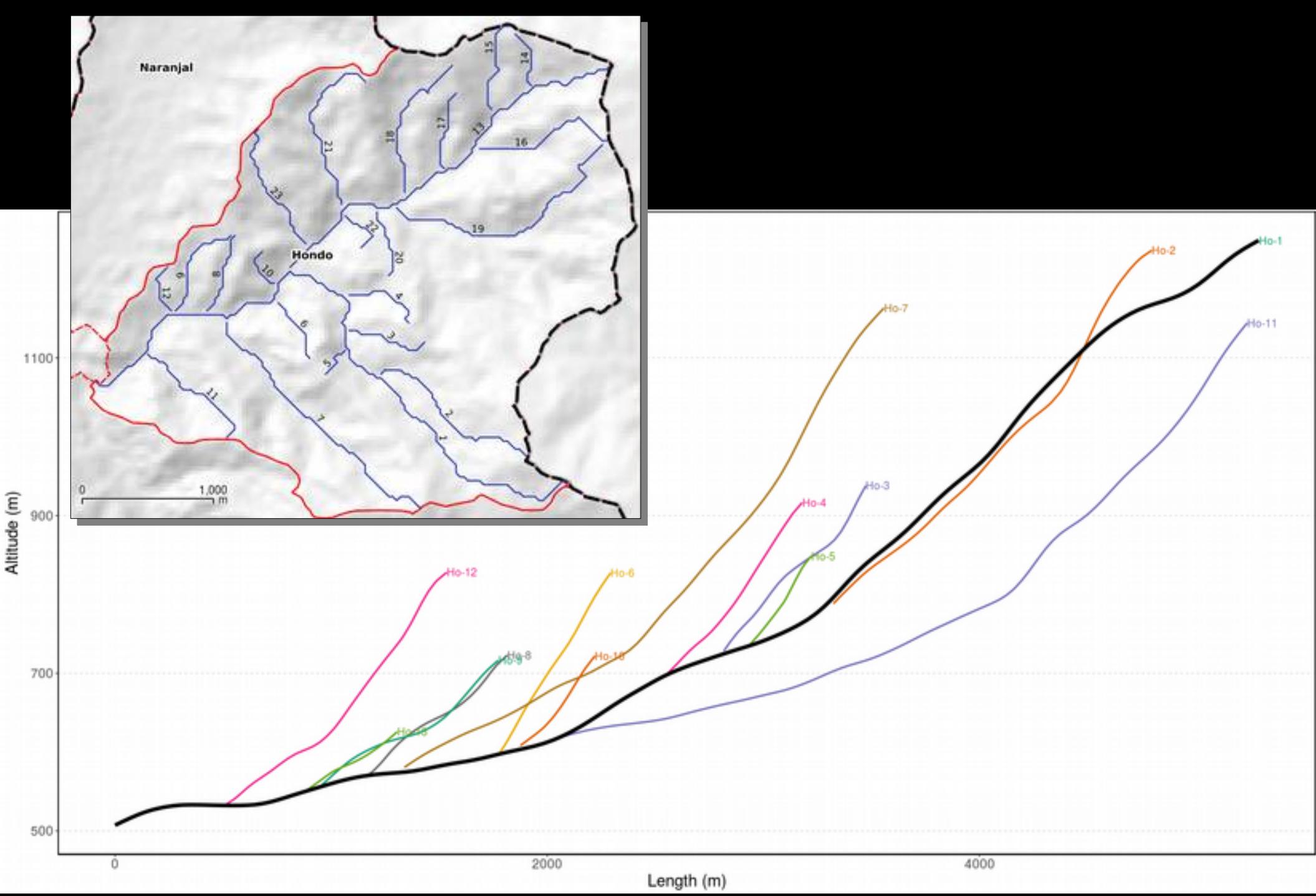
 geofis Stream direction parameter added to lfp_network.R b41b801 11 days ago

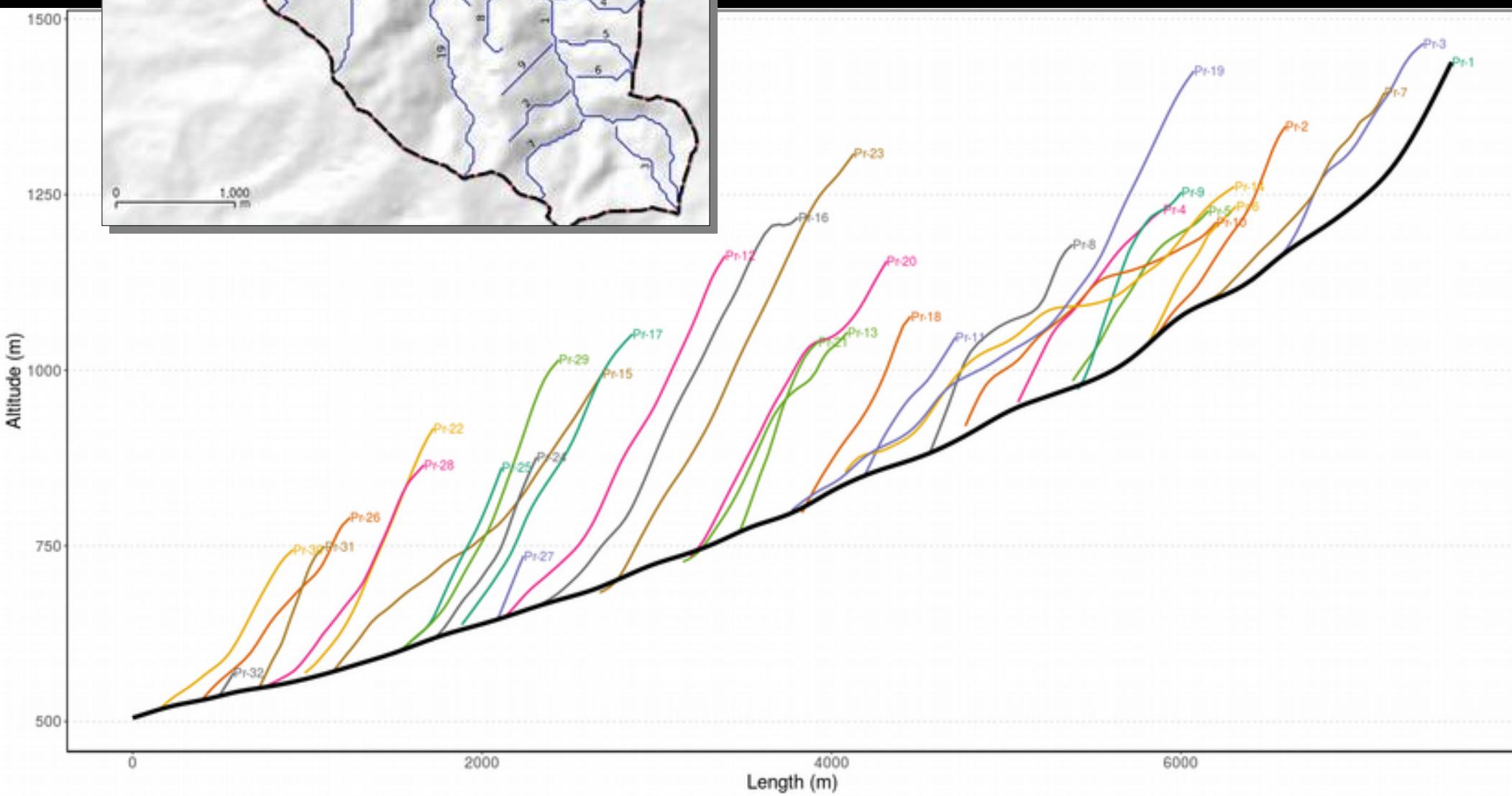
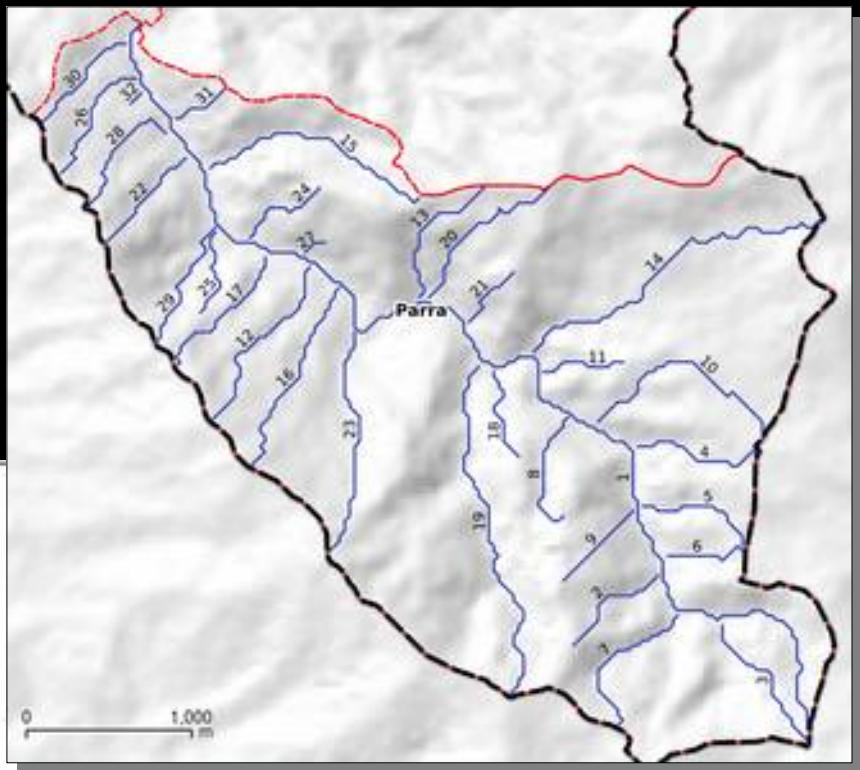
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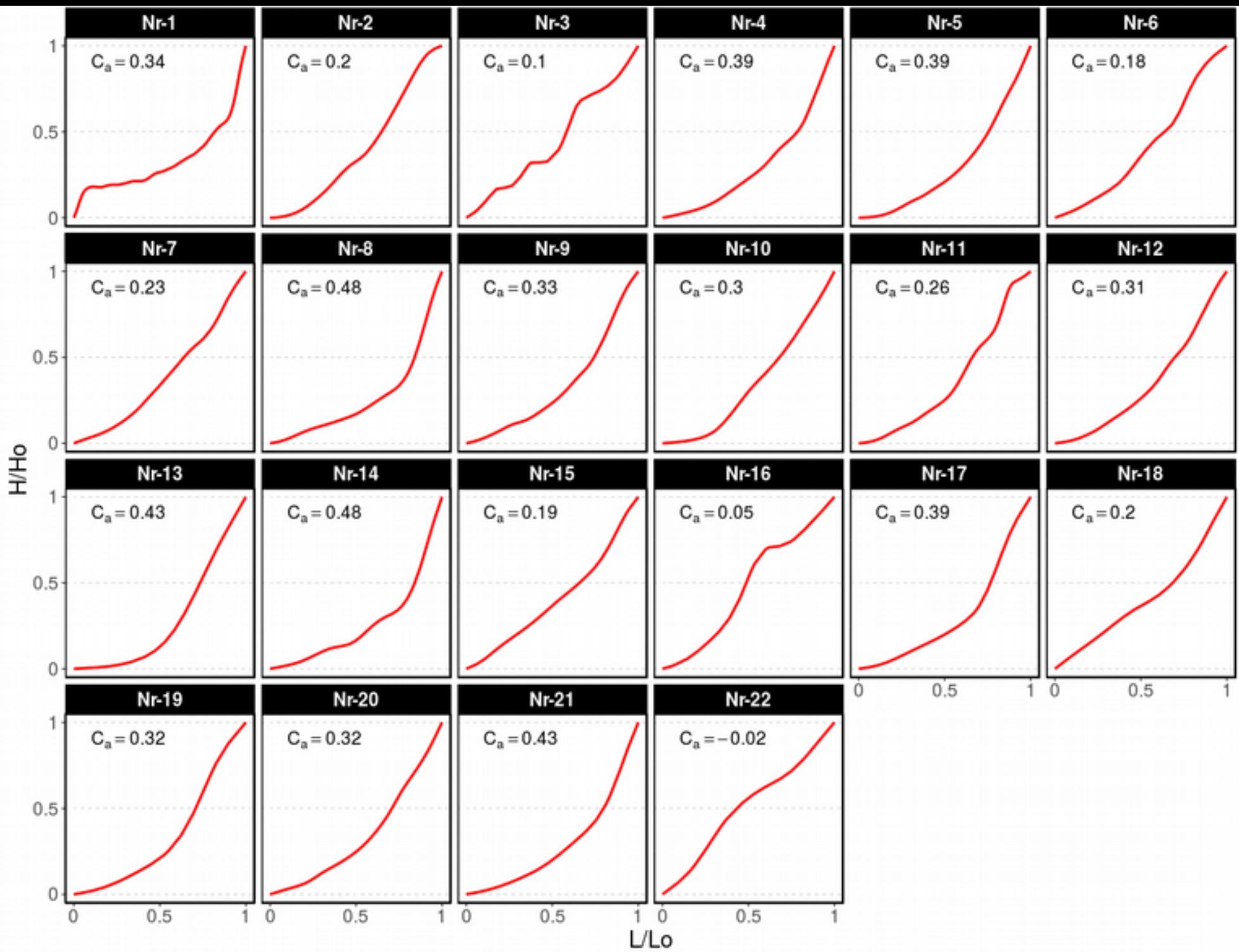
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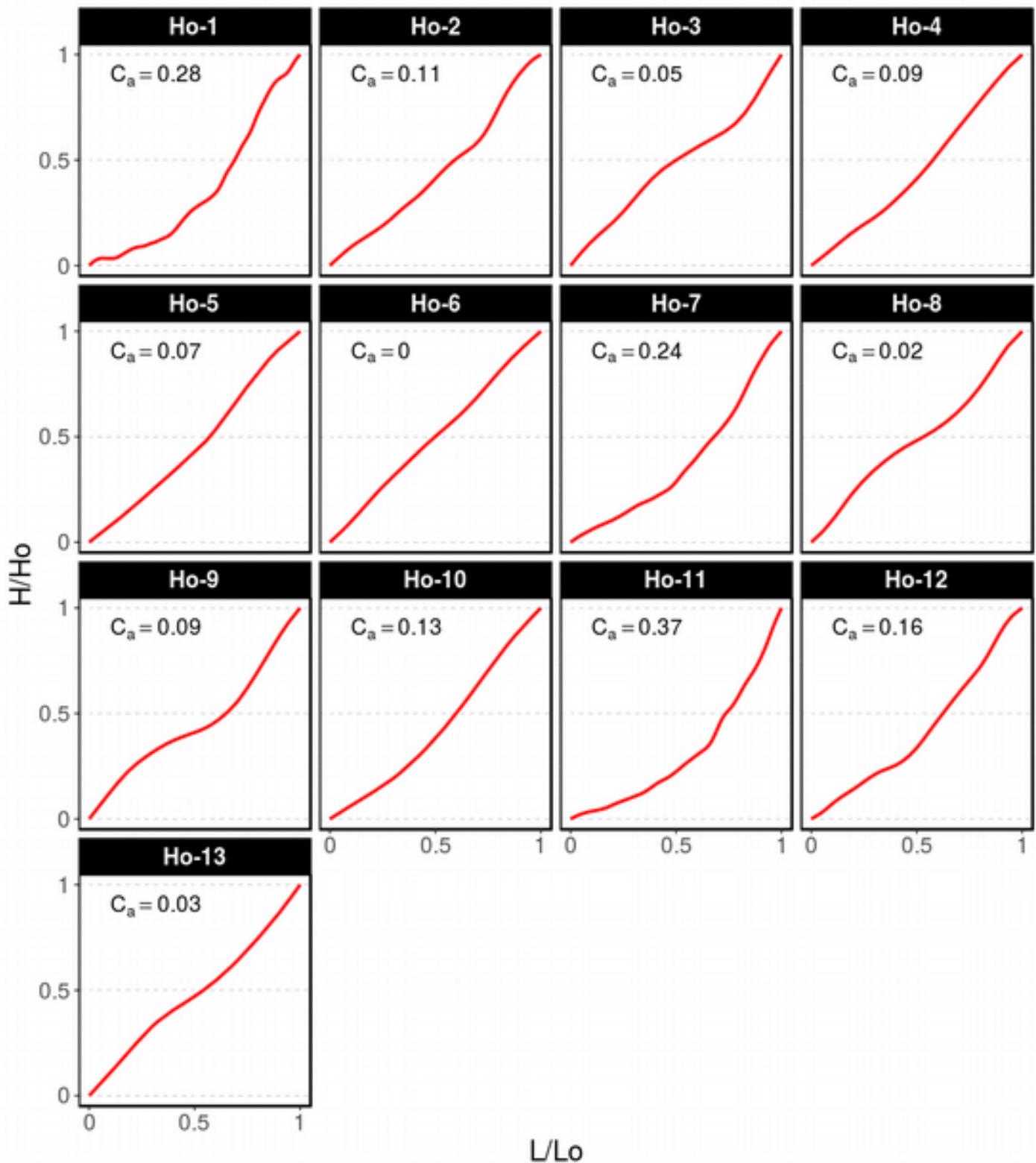
```
1 LfpNetwork <- function(xycoords, suffix, stream_vect, direction){  
2     # Generate the longest flow path of a basin and its tributaries  
3     # Args:  
4     #   xycoords: One vector with the coordinates of the basin outlet  
5     #   suffix: One string for the suffix of the GRASS GIS maps to be generated  
6     #   stream_vect: One string of the existing stream network in GRASS GIS  
7     #   direction: Flow direction raster map. May be generated with r.stream*.  
8     # Returns:  
9     #   GRASS GIS maps of the longest flow path and its tributaries  
10    #   of the basin with outlet at xycoords  
11    # Note:  
12    #   A GRASS session must be initiated using rgrass7 package  
13    # Error handling
```

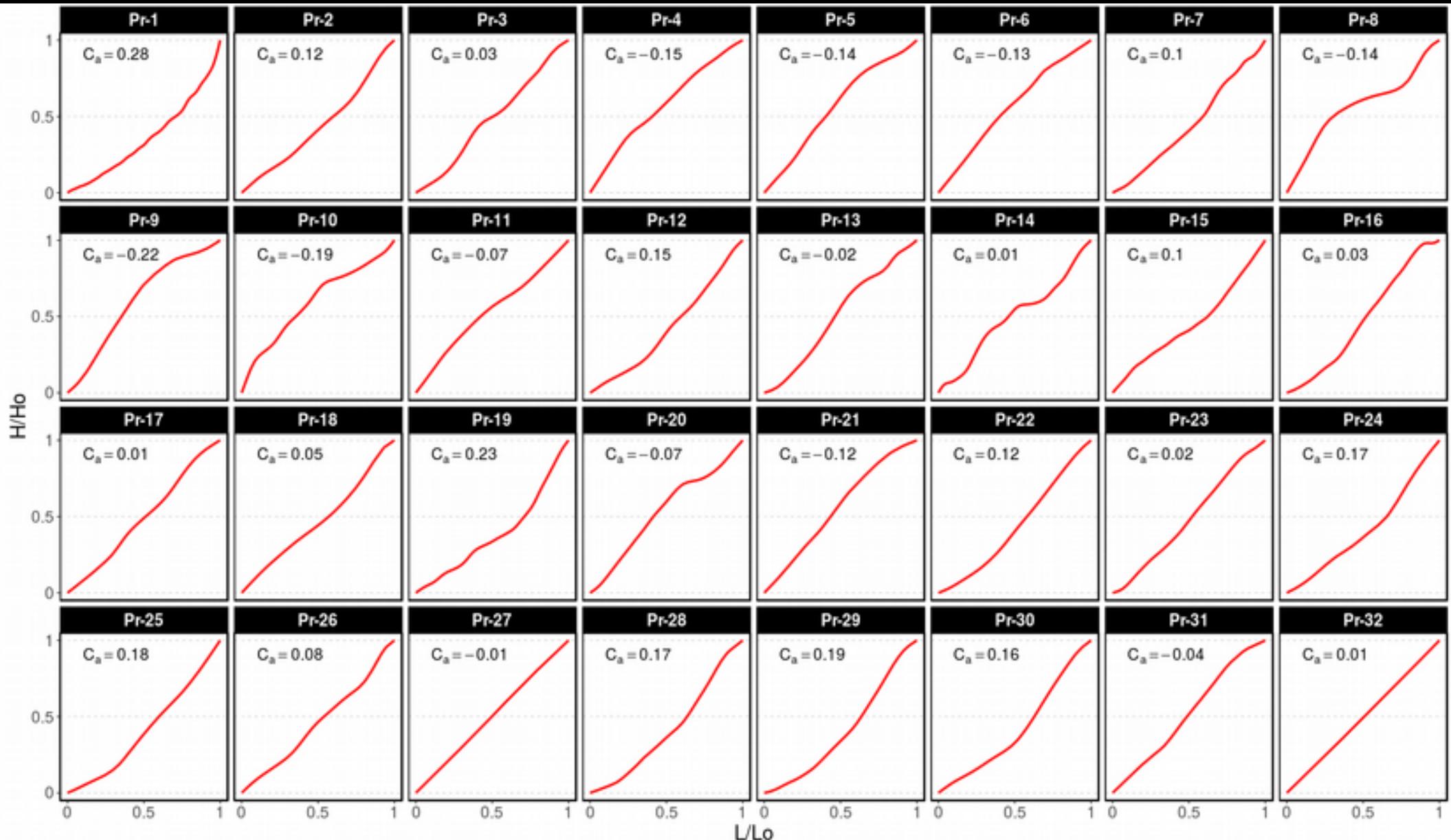


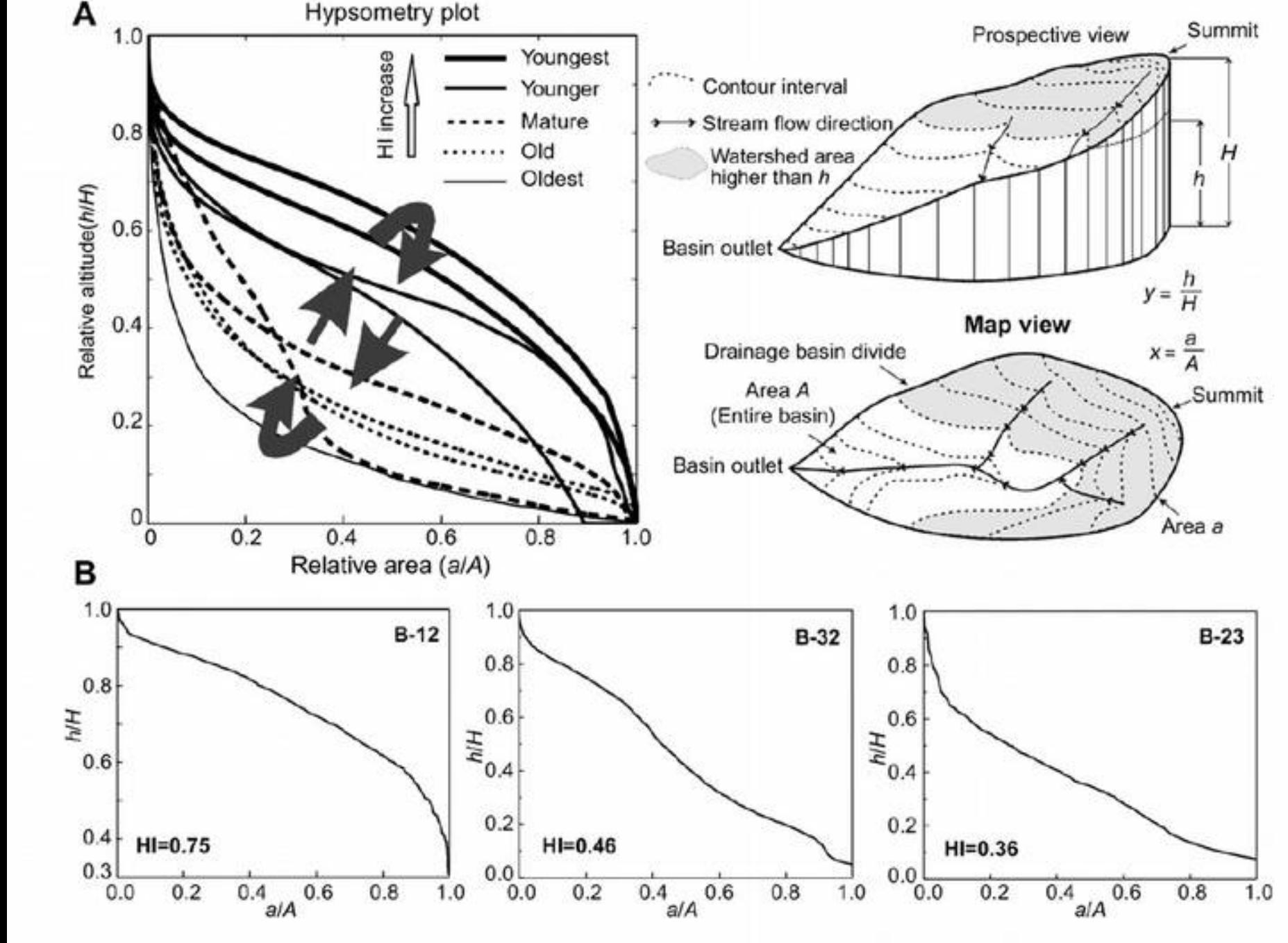




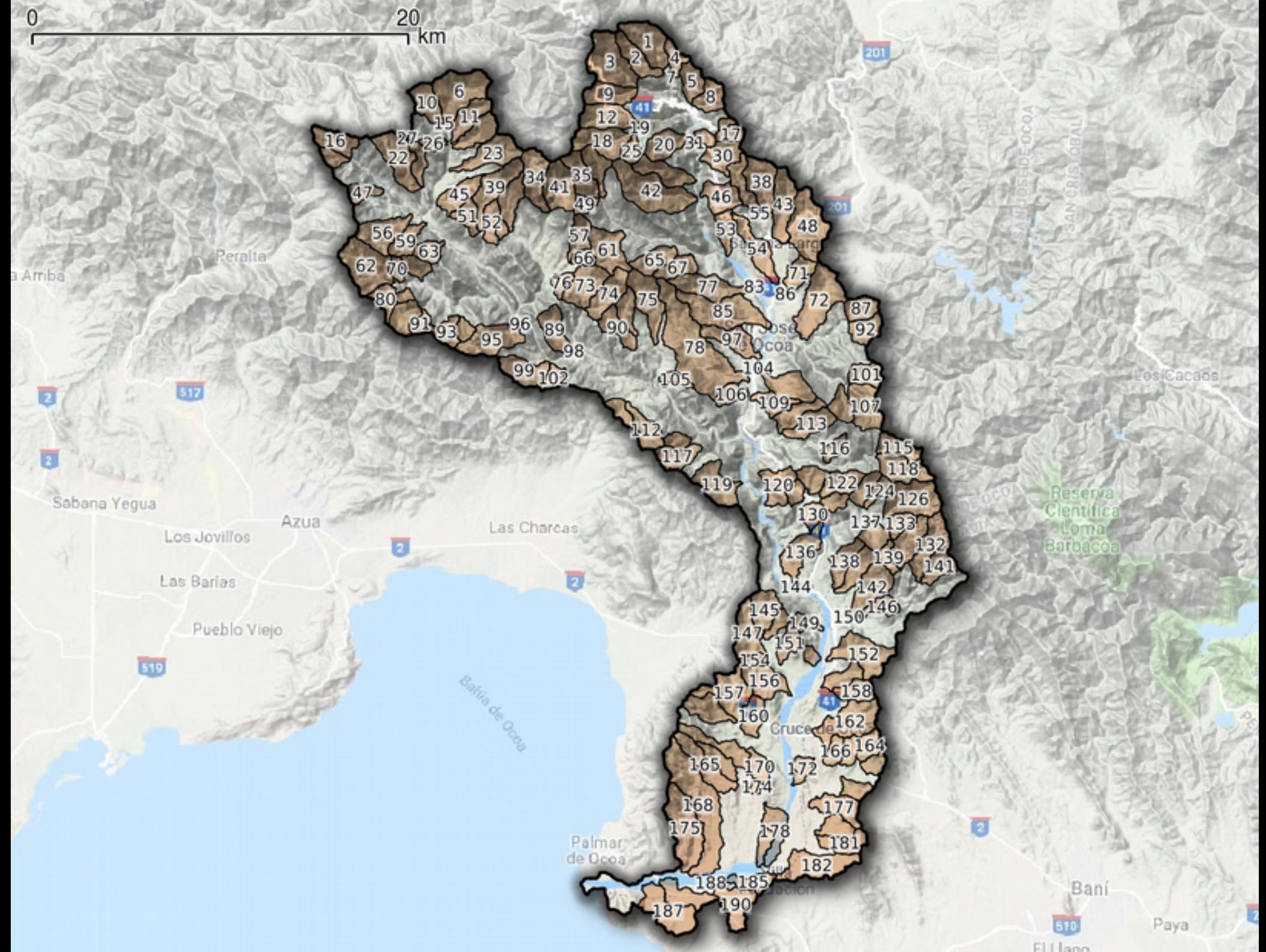


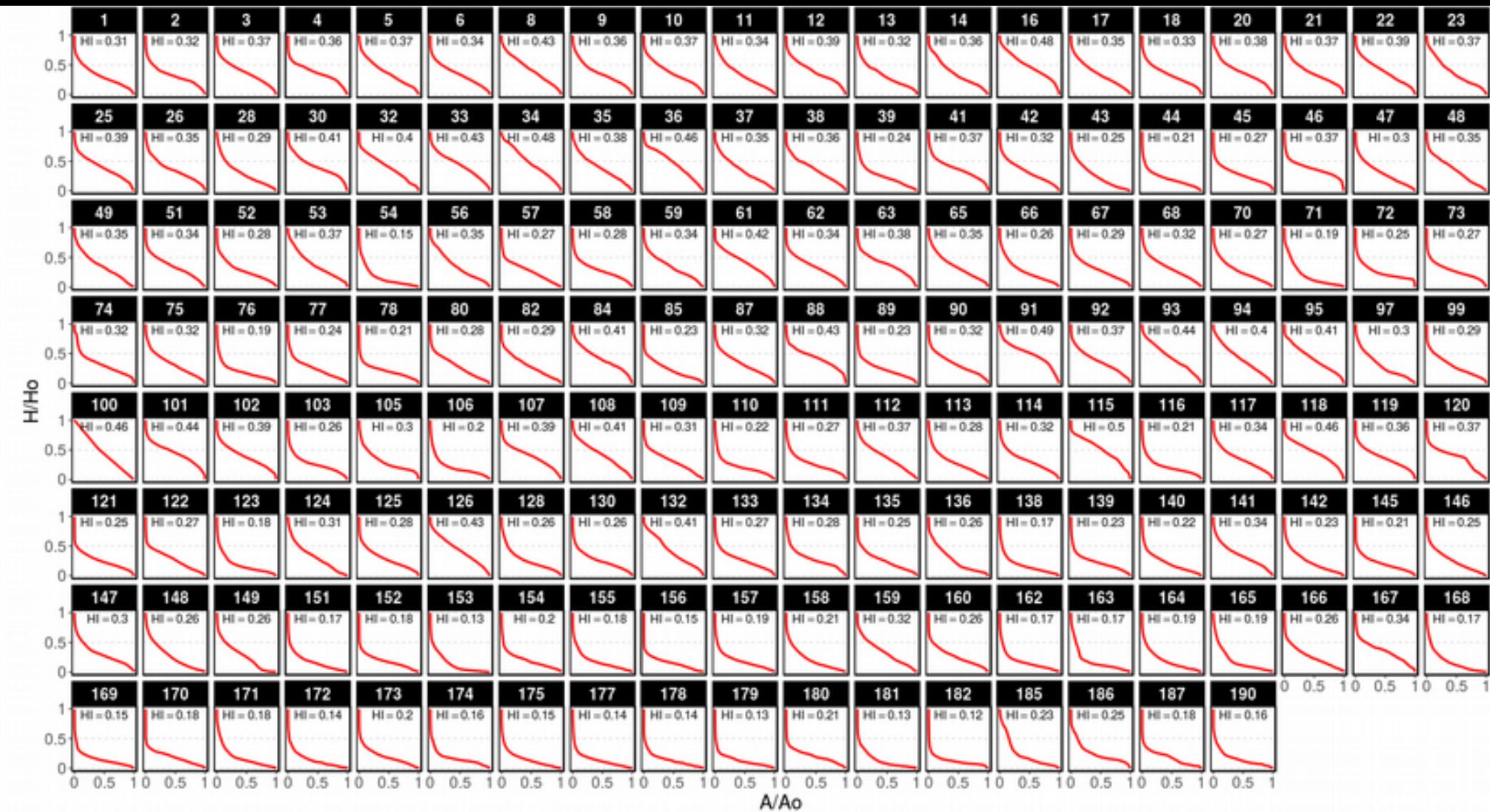


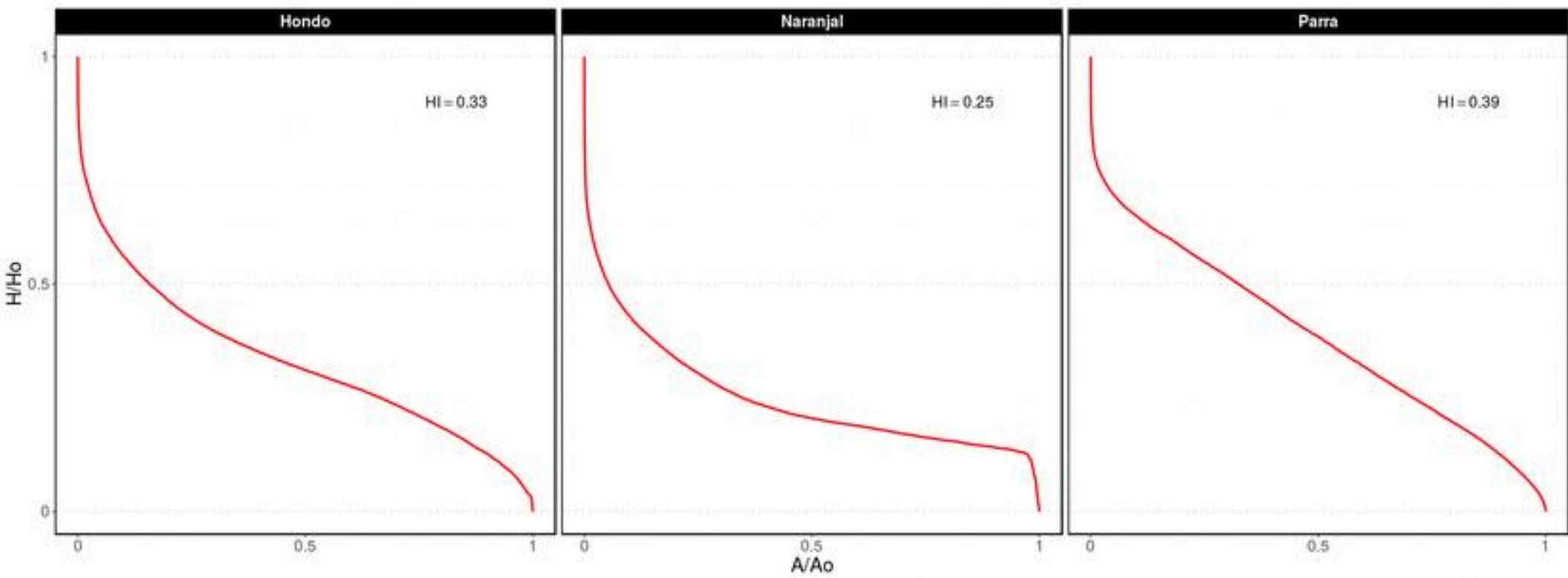




Appraisal of active tectonics in Hindu Kush: Insights from DEM derived geomorphic indices and drainage analysis





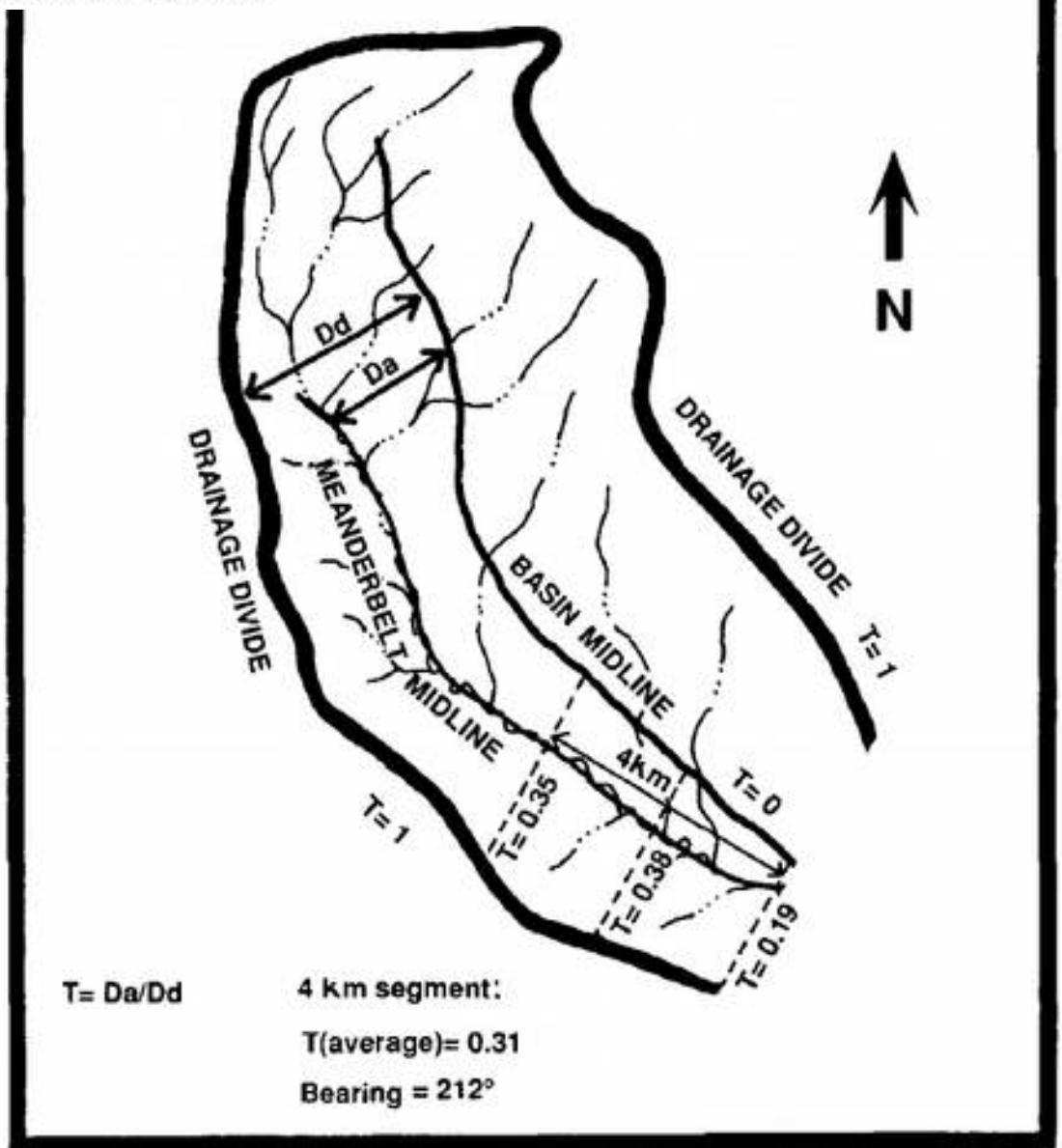


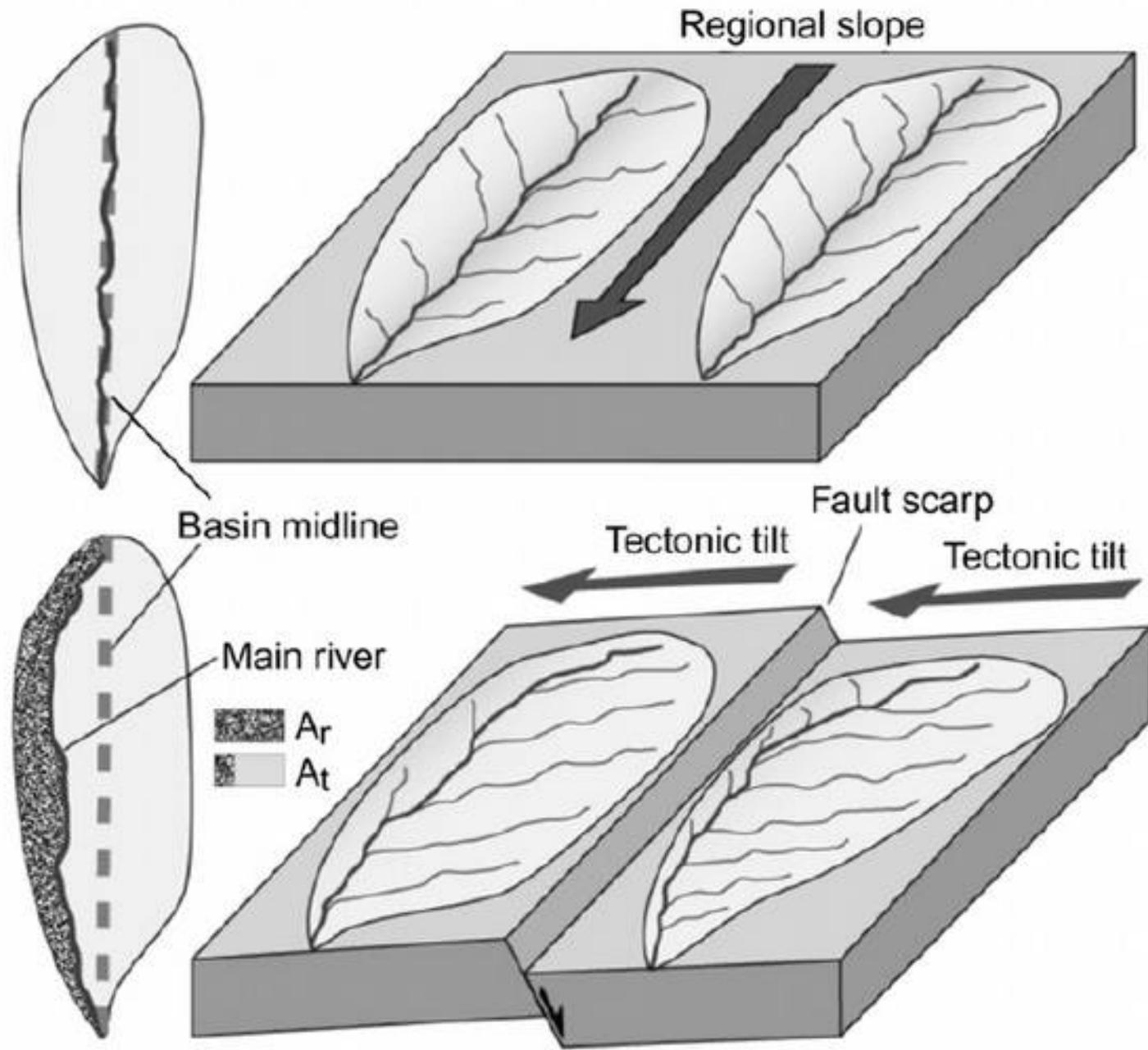
Analysis of drainage-basin symmetry as a rapid technique to identify areas of possible Quaternary tilt-block tectonics: An example from the Mississippi Embayment

RANDEL TOM COX 101 Geological Sciences Building, University of Missouri, Columbia, Missouri 65211

$$T = D_a / D_d$$

$$p = e^{(-L^2 n)} (10^{-4})$$

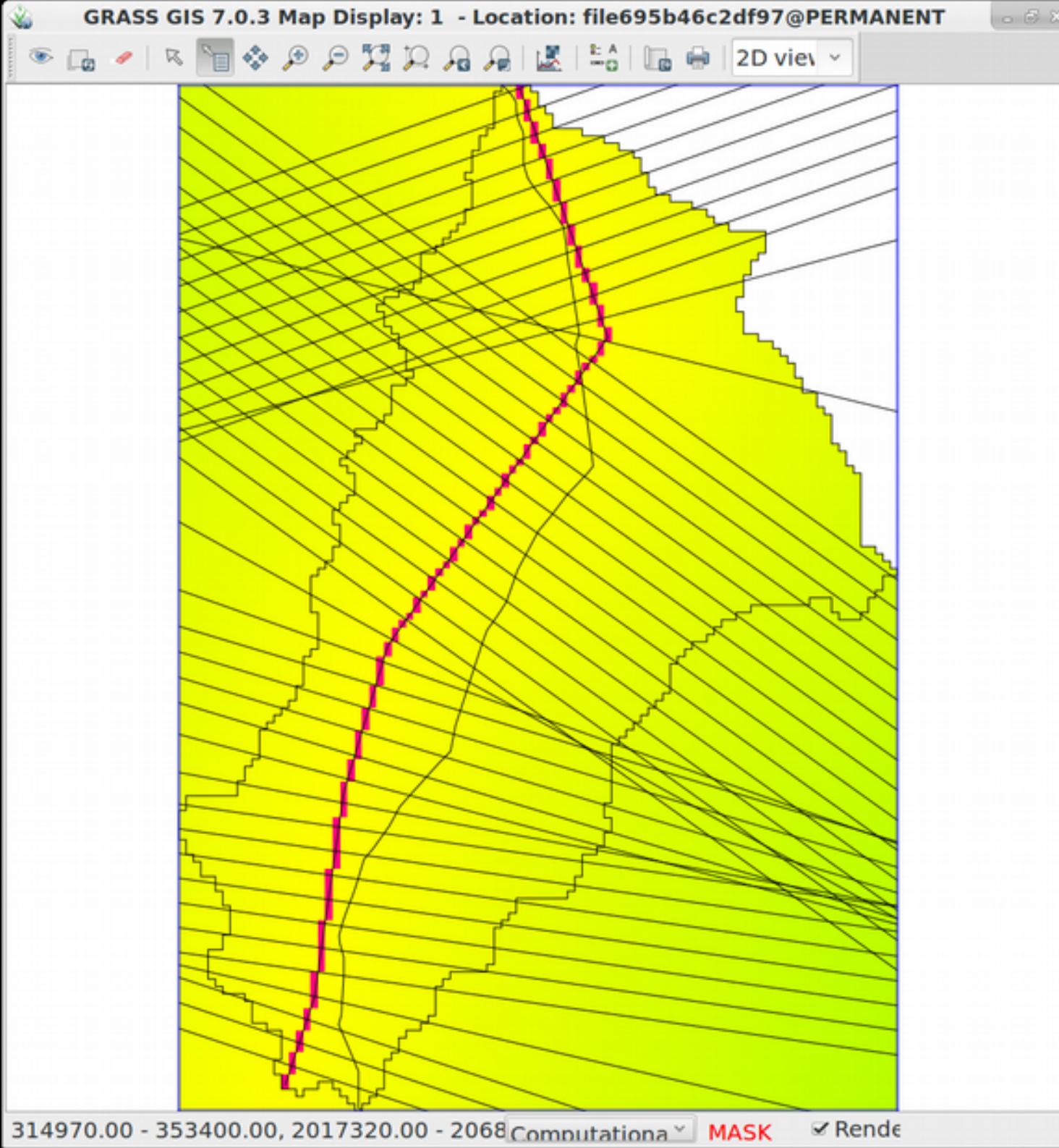




Appraisal of active tectonics in Hindu Kush: Insights from DEM derived geomorphic indices and drainage analysis

Syed Amer Mahmood^{a,b,*}, Richard Gloaguen^a

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rgrass / sources_for_tranverse_topographic_symmetry.R

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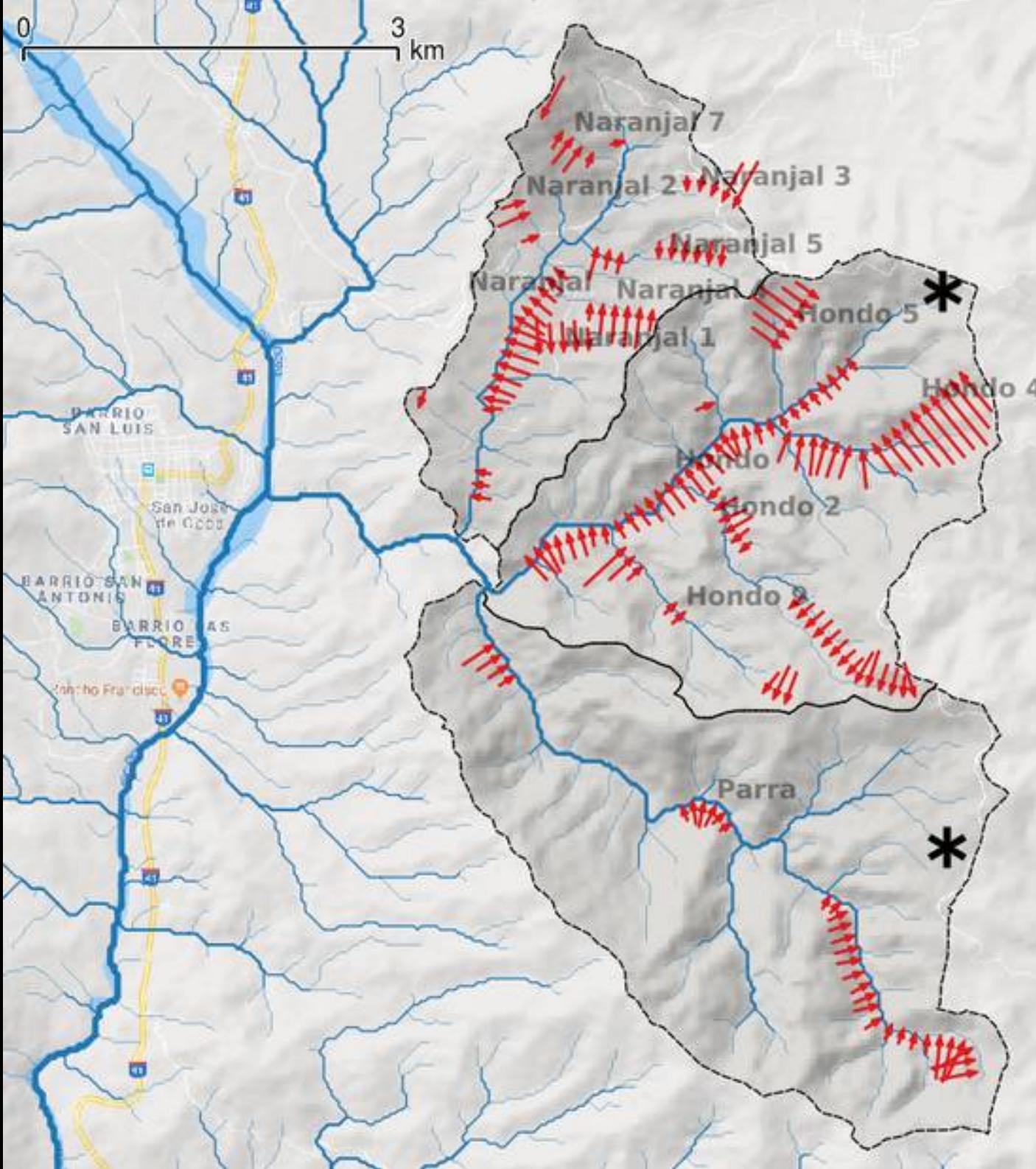
444f461 12 hours ago

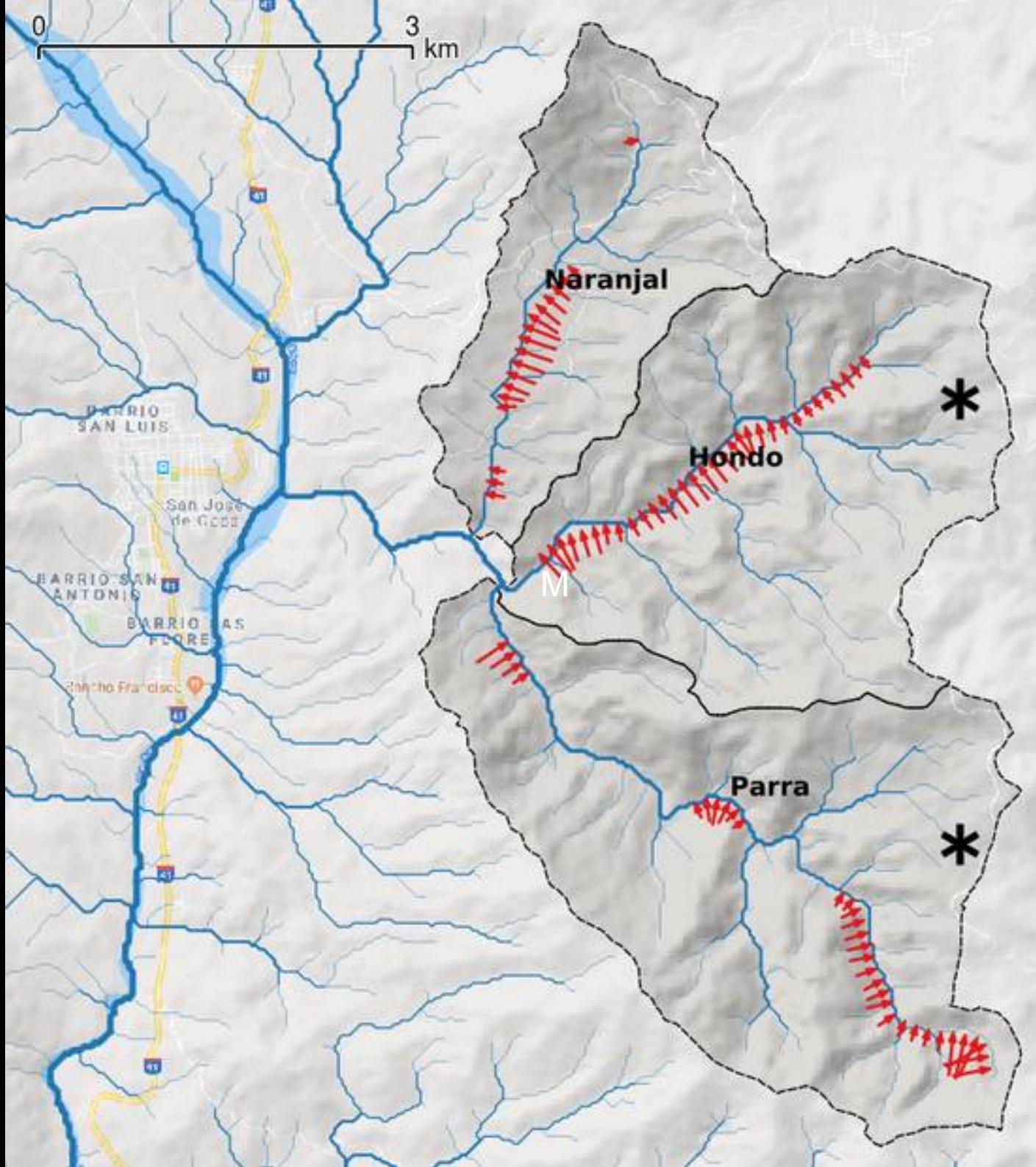
1 contributor

269 lines (247 sloc) 7.34 KB

Raw Blame History

```
1 SourcesForTransTopoSym <- function(direction, xycoords, prefix,
2                               smthpathf = 3, smthwatshdf = 3, thin = -1,
3                               tspacing = 100, fdistft = 1){
4   # Generates the sources for calculating the Transverse Topographic Basin Symmetry (T)
5   # vector of a stream path given the coordinates of a basin
6   # Args:
7   #   direction: Flow direction GRASS raster map. May be generated with r.stream*.
8   #   xycoords: One vector with the coordinates of the basin outlet.
9   #             X and Y coordinates must be placed in positions
10  #             1 and 2 of the vector, respectively
11  #   prefix: One string for the names of the GRASS maps and the shapefile.
```

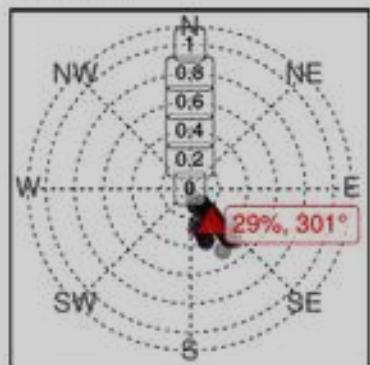




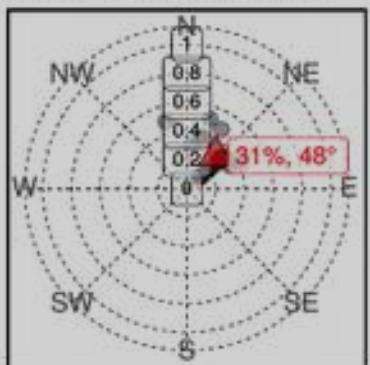
Transverse Topographic Symmetry.

Parra, Naranjal and Hondo Creeks (Dominican Republic)

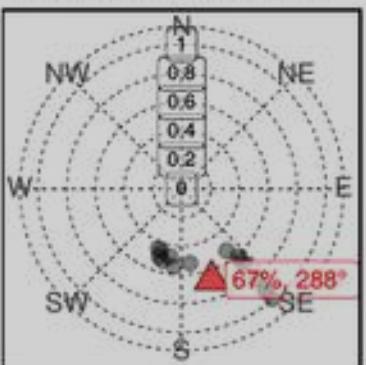
Hondo *



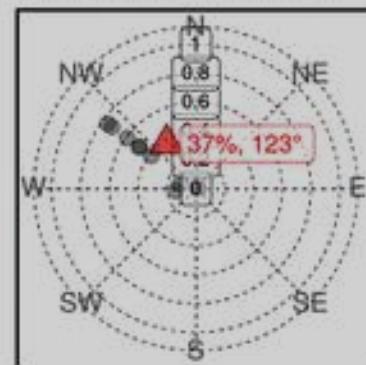
Hondo subbasin 2 ●



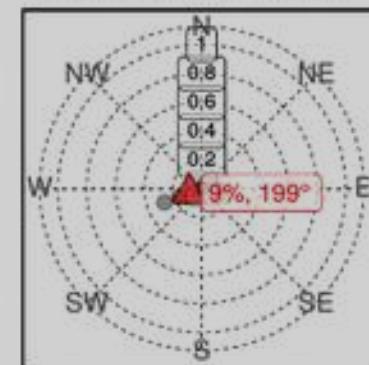
Hondo subbasin 4 *



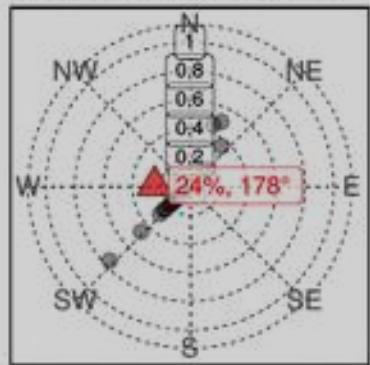
Hondo subbasin 5



Hondo subbasin 7



Hondo subbasin 9



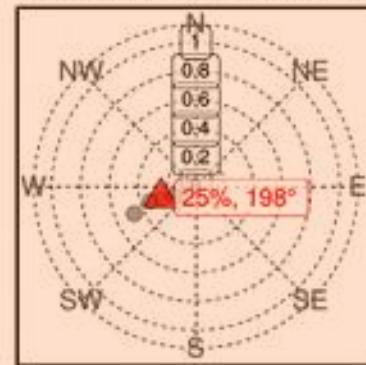
Naranjal



Naranjal subbasin 1

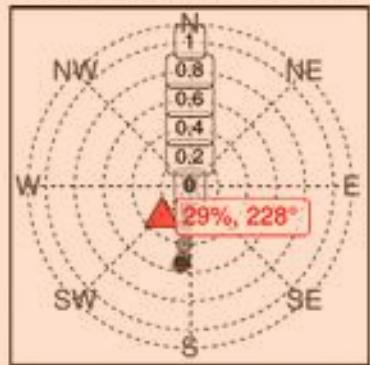


Naranjal subbasin 2



Naranjal subbasin 3

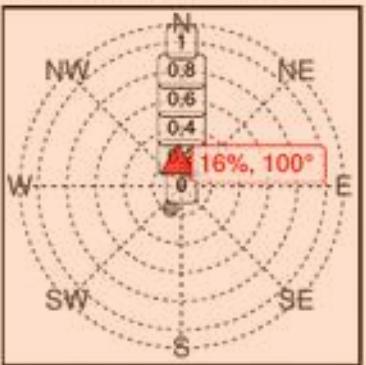
Naranjal subbasin 4



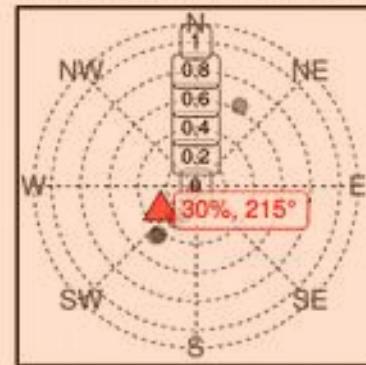
Naranjal subbasin 5



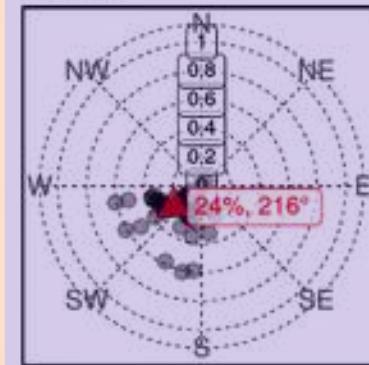
Naranjal subbasin 6

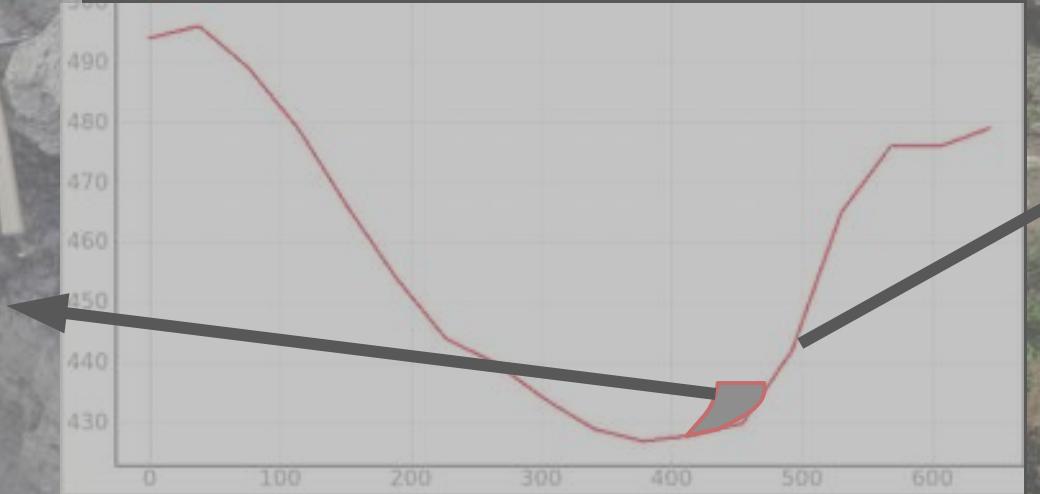
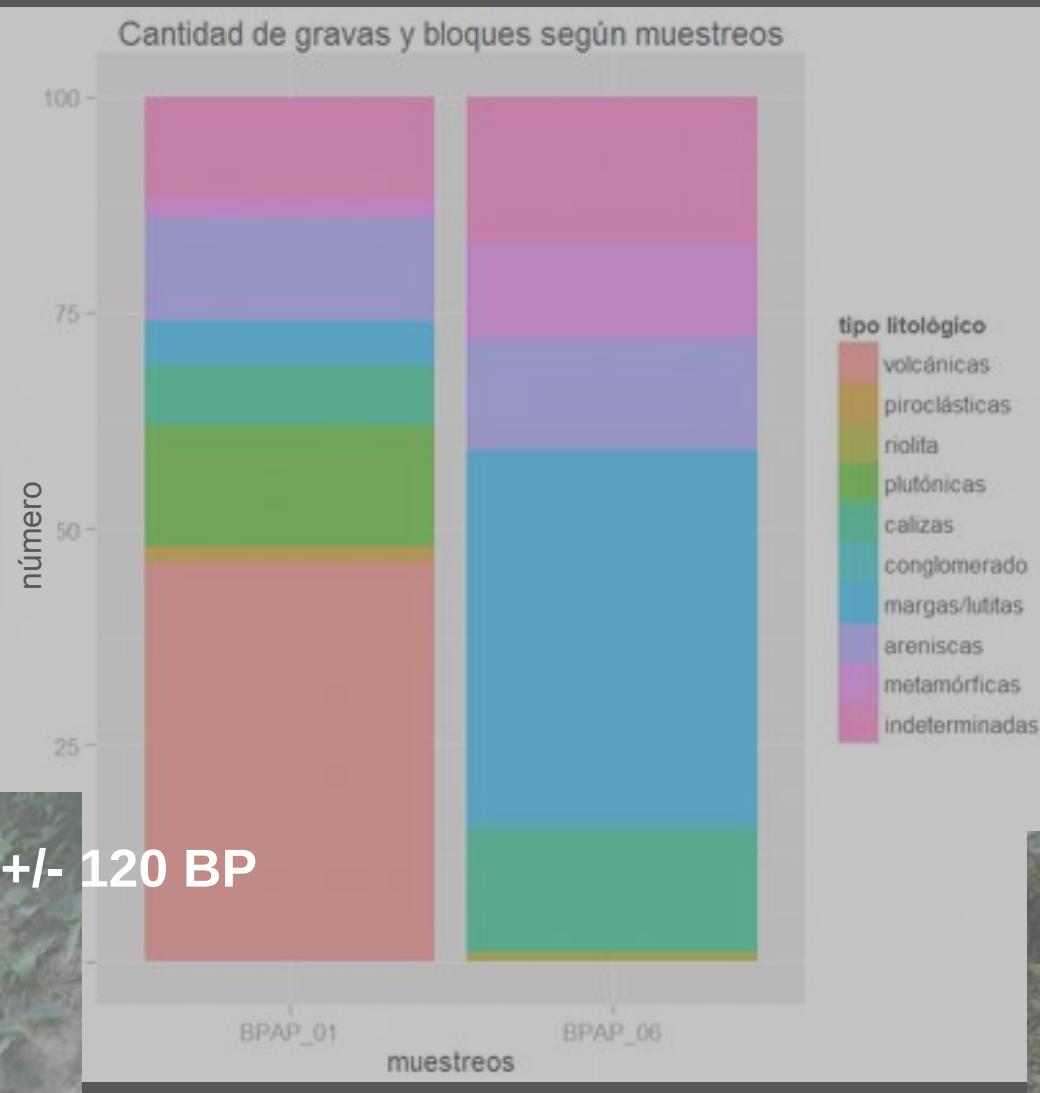


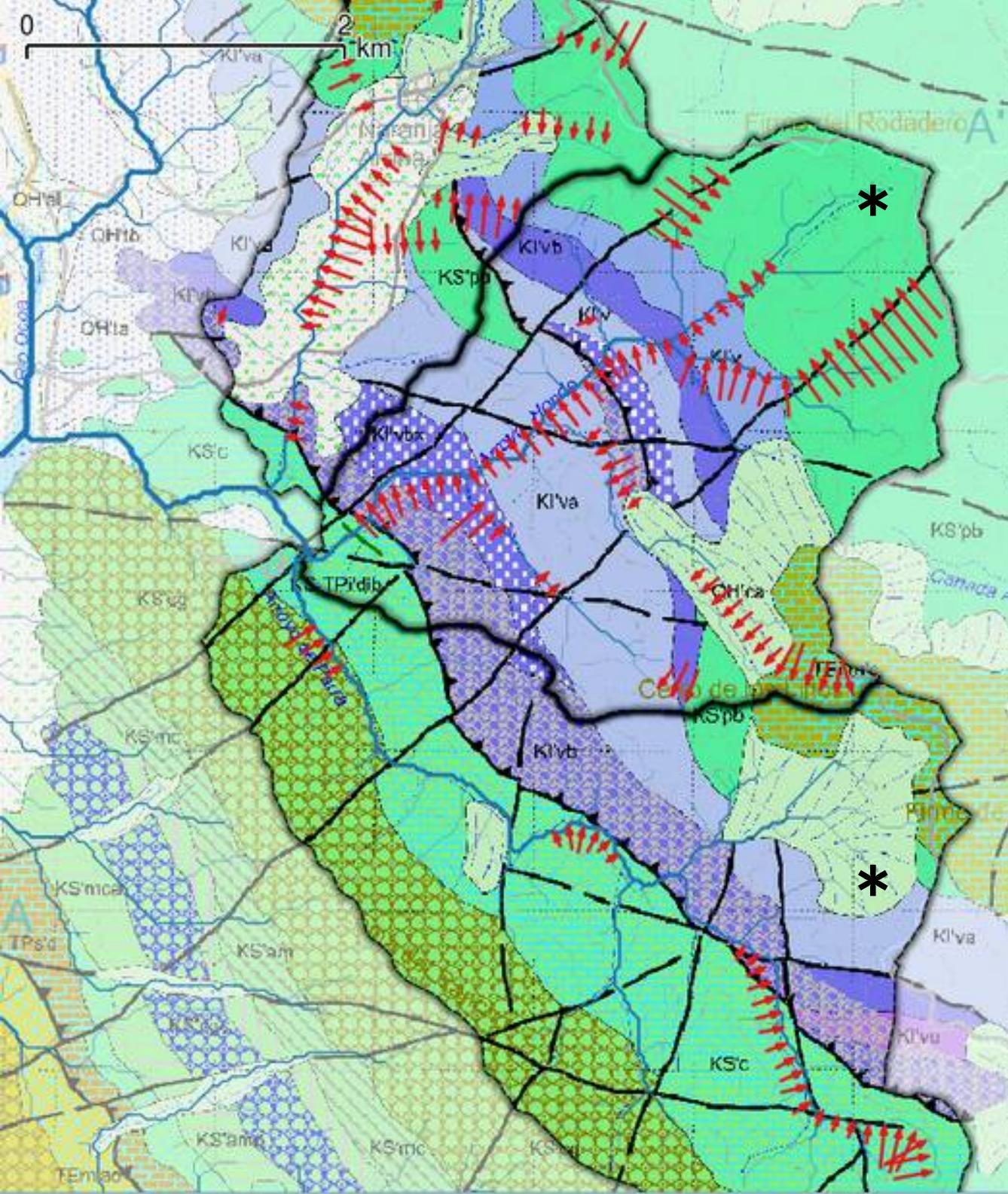
Naranjal subbasin 7



Parra *







Fuente mapa geológico base:



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SERVICIO GEOLÓGICO NACIONAL -SGN-

MAPA GEOLOGICO DE LA REPUBLICA DOMINICANA
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Drainage rearrangement during the Upper Pleistocene in the Ocoa River Basin, South of the Dominican Republic

José Ramón Martínez Batlle¹

¹ Universidad Autónoma de Santo Domingo (UASD)

Correspondence: José Martínez, Universidad Autónoma de Santo Domingo (UASD), Calle Alma Máter, Santo Domingo, República Dominicana, Código Postal 10103. E-mail: joseramon@geografiafisica.org