

# Advances in participatory hydrological monitoring in mountain regions



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# The iMHEA monitoring initiative

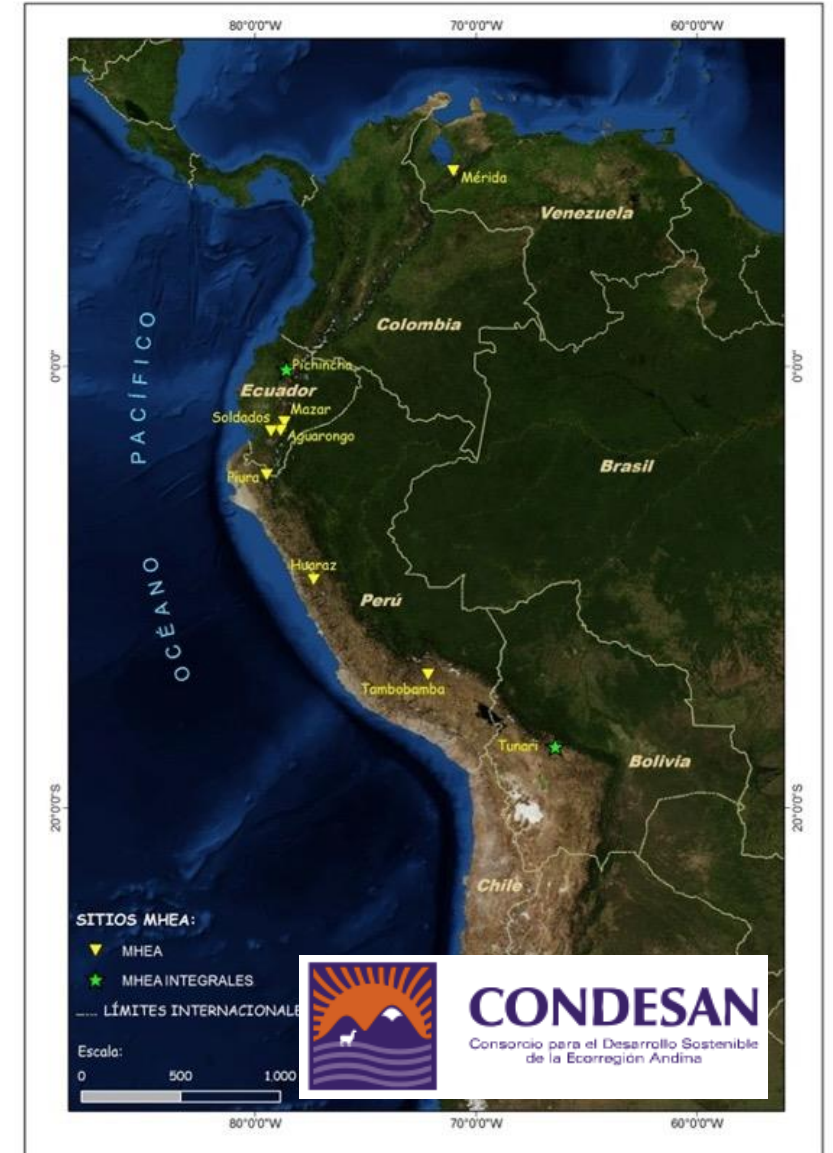
<http://www.imhea.org>



Iniciativa Regional de  
**Monitoreo Hidrológico**  
de Ecosistemas Andinos

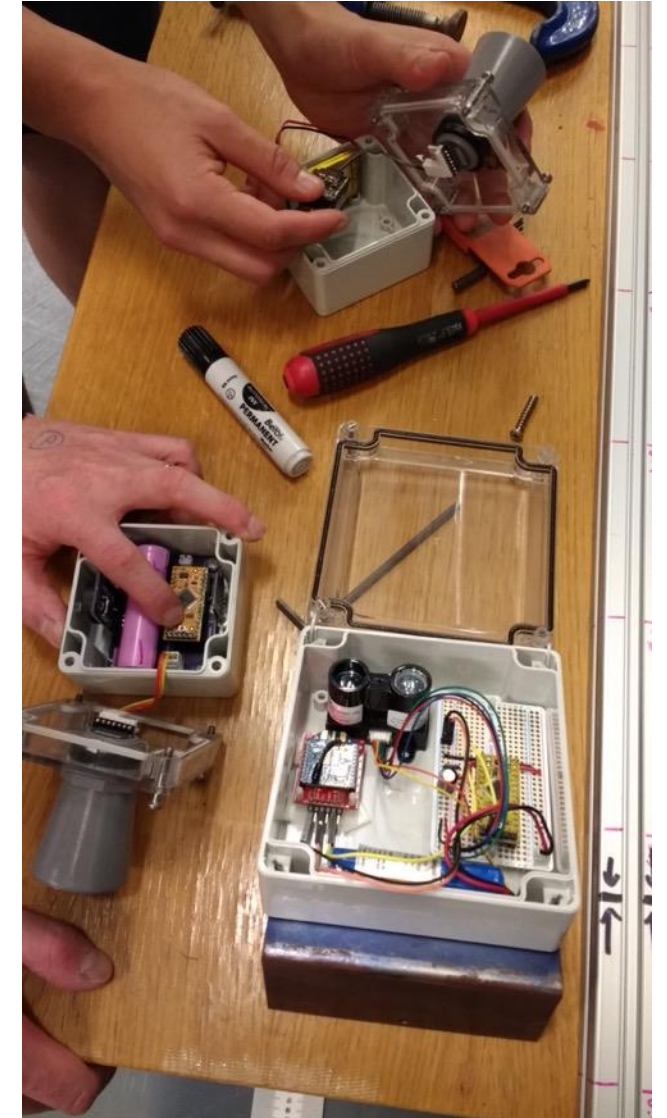
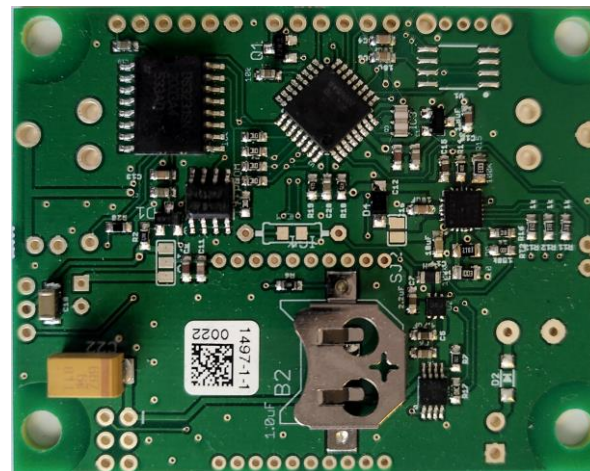
- 59 catchments
- 22 locations
- P, Q, (ET0), and more
- 21 partners
- Bolivia, Chile, Colombia, Ecuador, Peru, Venezuela

Ochoa-Tocachi et al., 2018, Scientific Data



# Infusing new technologies

Paul et al., 2020

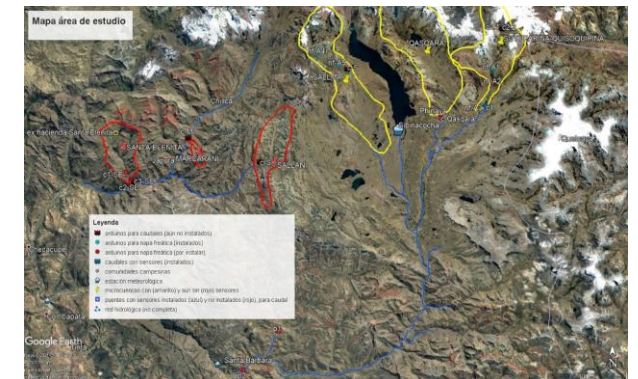
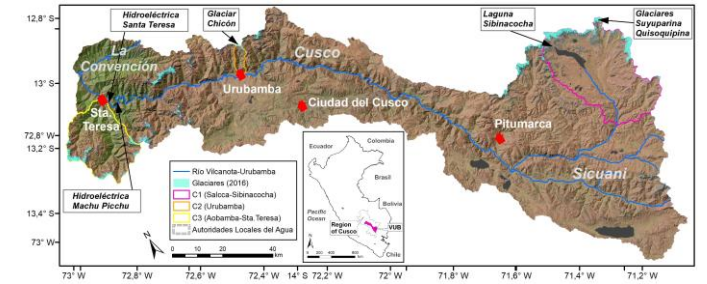


# Vilcanota Urubamba basin, Peru

RAHU project



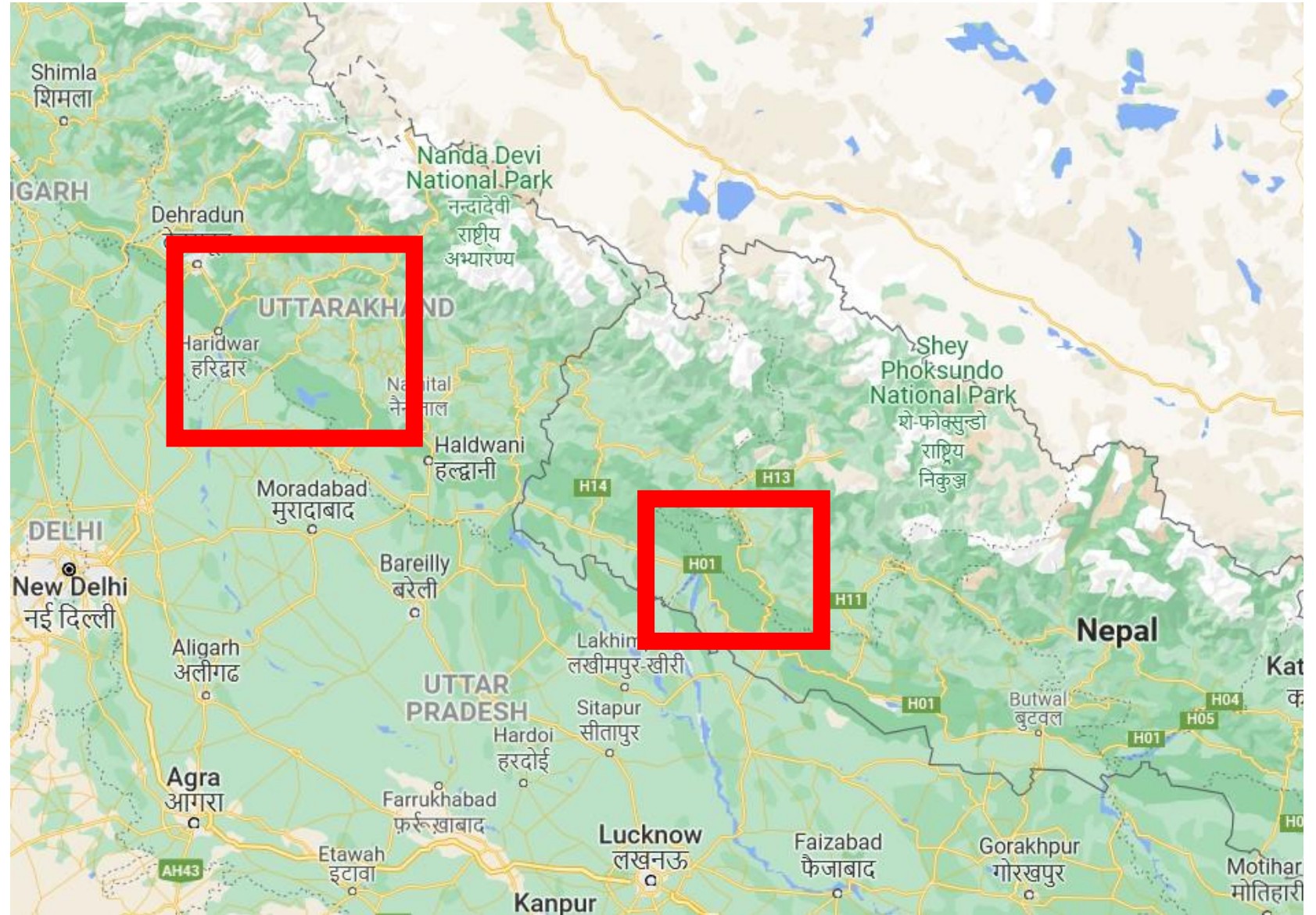
Photo: Jon Mackay. BGS



# Flood early warning and resilience building



UNIVERSITY OF BIRMINGHAM



# Lidar for water level sensing



# Remote training and support

The image shows a Zoom meeting window with a grid of 20 participants. Below the grid is a VLC media player window showing a video of hands assembling a small electronic device on a wooden desk. The video player shows a progress bar at 49:04 out of 2:33:41.

The screenshot shows a web browser window displaying the Riverlabs documentation page. The URL is [ichydro.github.io/Riverlabs/index.html](https://ichydro.github.io/Riverlabs/index.html). The page title is "Documentation for the Riverlabs suite of sensors". The page content includes a navigation menu, a summary, and a table of contents.

## Documentation for the Riverlabs suite of sensors

**Summary:** This page gives a concise overview of operating the Riverlabs environmental loggers. Further details can be found in the rest of this documentation

- Table of Contents
  - Introduction
  - Overview and specifications
    - Wari
    - Lidar
  - Power considerations
  - Programming the loggers
  - Telemetry

The screenshot shows the ThingsBoard dashboard for the RLMB0174 device. The dashboard displays a "New Timeseries table" and a "Realtime - last 7 days" line chart. The table shows data points for the device, and the chart shows the device's performance over time.

Timestamp	h	t	v
2021-04-23 08:00:00	2594	1625	3854
2021-04-23 07:55:00	0	1625	3854
2021-04-23 07:50:00	2602	1650	3854
2021-04-23 07:45:00	2604	1675	3854
2021-04-23 07:40:00	2600	1700	3854
2021-04-23 07:35:00	2597	1700	3854
2021-04-23 07:30:00	2598	1700	3854
2021-04-23 07:25:00	0	1700	3854
2021-04-23 07:20:00	2598	1700	3854
2021-04-23 07:15:00	2599	1725	3854



Thank you!



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