

**Equatorial mountain lakes show extended periods of thermal stratification with recent
climate change**

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Supplementary Fig. 1. Photograph of Laguna Llaviucu in Cajas National Park, Ecuador.



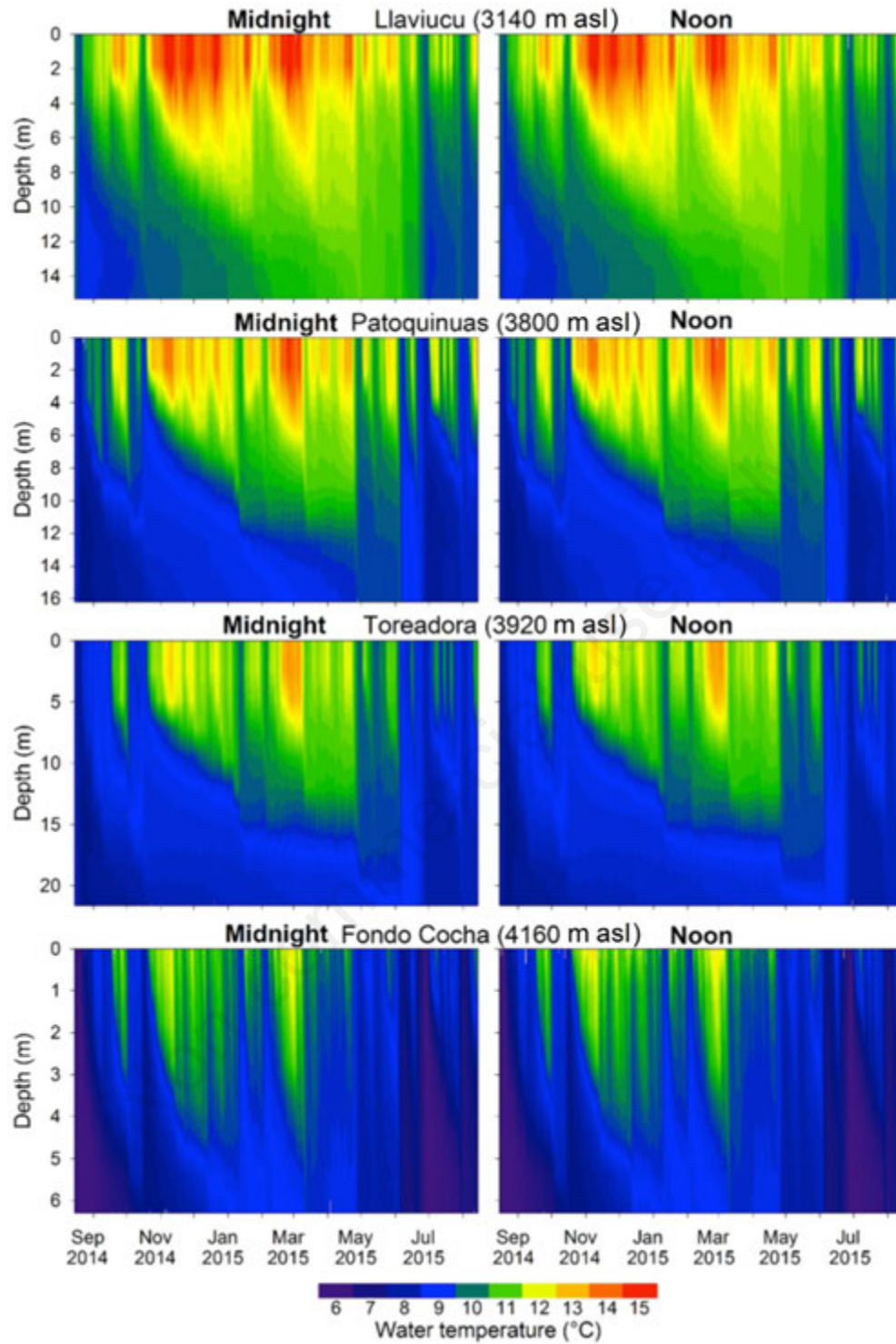
Supplementary Fig. 2. Photograph of Laguna Patoquinas in Cajas National Park, Ecuador.



Supplementary Fig. 3. Photograph of Laguna Toreadora in Cajas National Park, Ecuador.



Supplementary Fig. 4. Photograph of Laguna Fondo Cocha in Cajas National Park, Ecuador.



Supplementary Fig. 5. A comparison of isothermal variations ($^{\circ}\text{C}$) for midnight and noon temperatures *versus* time for all study lakes.

Supplementary Tab. 1. Select limnological and descriptive variables for the Cajas National Park study sites. All water chemistry values are from August 2014.

	pH	Conductivity ($\mu\text{S cm}^{-1}$)	TP (unfilt.) ($\mu\text{g L}^{-1}$)	TN (filt.) (mg L^{-1})	Chl <i>a</i> ($\mu\text{g L}^{-1}$)	DOC (mg L^{-1})	DIC (mg L^{-1})	POC (mg L^{-1})	PON (mg L^{-1})	Ca (mg L^{-1})	SiO ₂ (mg L^{-1})	Area (ha)	Max fetch (km)	Elevation (m asl)	Latitude	Longitude
Llaviucu	7.9	70	3.8	0.139	2	2.3	11.6	0.24	0.037	19	5.42	13	0.52	3140	S 02° 50.576"	W 79° 08.765"
Patoquinas	7.6	100	3.6	0.135	3	2.7	8.3	0.114	0.015	13.5	6.96	5.3	0.25	3800	S 02° 46.910"	W 79° 12.523"
Toreadora	8.1	75	2.9	0.128	1.5	2.8	9.8	0.154	0.033	15	7.09	18	0.6	3920	S 02° 46.792"	W 79° 13.411"
Fondo Cocha	7.9	30	4.5	0.247	2	3.1	5.7	0.39	0.039	8.27	8.17	3.5	0.27	4160	S 02° 45.677"	W 79° 14.182"

TP (unfilt./filt.), total phosphorus unfiltered/filtered; CHLA, chlorophyll *a*; DOC/DIC, dissolved organic/inorganic carbon; POC, particulate organic carbon; PON, particulate organic nitrogen; Ca, calcium; SiO₂, silica.