

1 Electronic supplementary information

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3 **Total phosphorus determination in Eutrophic Tropical River Sediments**
4 **by Laser-Induced Breakdown Spectroscopy techniques**

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31 **Experimental section:**

32 **Table S1.** Geographic coordinates of collection points.

| Collection points | Tributary | Geographic coordinates | |
|-------------------|-------------------|------------------------|--------------|
| Station 1 | Piracicaba river | 22°35'55.5"S | 48°13'02.8"W |
| Station 2 | Piracicaba river | 22°35'36.9"S | 48°16'00.0"W |
| Station 3 | Piracicaba river | 22°36'01.8"S | 48°17'53.5"W |
| Station 4 | Confluence region | 22°37'51.6"S | 48°20'29.2"W |
| Station 5 | Tietê river | 22°39'58.2"S | 48°21'49.4"W |
| Station 6 | Tietê river | 22°40'11.0"S | 48°19'26.4"W |
| Station 7 | Tietê river | 22°40'24.7"S | 48°15'05.3"W |

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34 **Table S2:** Depth of each sedimentary core.

| Depth (cm) | | | | | | |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Station 1 | Station 2 | Station 3 | Station 4 | Station 5 | Station 6 | Station 7 |
| 0 - 10 | 0 - 5 | 0 - 10 | 0 - 10 | 0 - 10 | 0 - 10 | 0 - 10 |
| 10 - 20 | 5 - 10 | 10 - 15 | 20 - 20 | 10 - 20 | 10 - 20 | 10 - 20 |
| 20 - 25 | 10 - 15 | 15 - 20 | 20 - 30 | 20 - 25 | 20 - 22 | 20 - 30 |
| 25 - 30 | 15 - 20 | 20 - 25 | 30 - 35 | 25 - 30 | 22 - 24 | 30 - 35 |
| 30 - 35 | 20 - 25 | 25 - 30 | 35 - 40 | 30 - 35 | 24 - 26 | 35 - 40 |
| 35 - 40 | 25 - 27 | 30 - 32 | 40 - 45 | 35 - 40 | 26 - 28 | 40 - 45 |
| 40 - 42 | 27 - 29 | 32 - 34 | 45 - 50 | 40 - 42 | 28 - 30 | 45 - 50 |
| 42 - 44 | 29 - 31 | 34 - 36 | 50 - 55 | 42 - 44 | 32 - 32 | 50 - 52 |
| 44 - 46 | 31 - 33 | 36 - 38 | 55 - 60 | 44 - 46 | 32 - 34 | 52 - 54 |
| 46 - 48 | 33 - 35 | - | 60 - 62 | 46 - 48 | - | 54 - 59 |
| - | - | - | 62 - 67 | - | - | - |

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