1   **Supplementary Information**

2   **Sand mining far outpaces natural supply in a large alluvial river**

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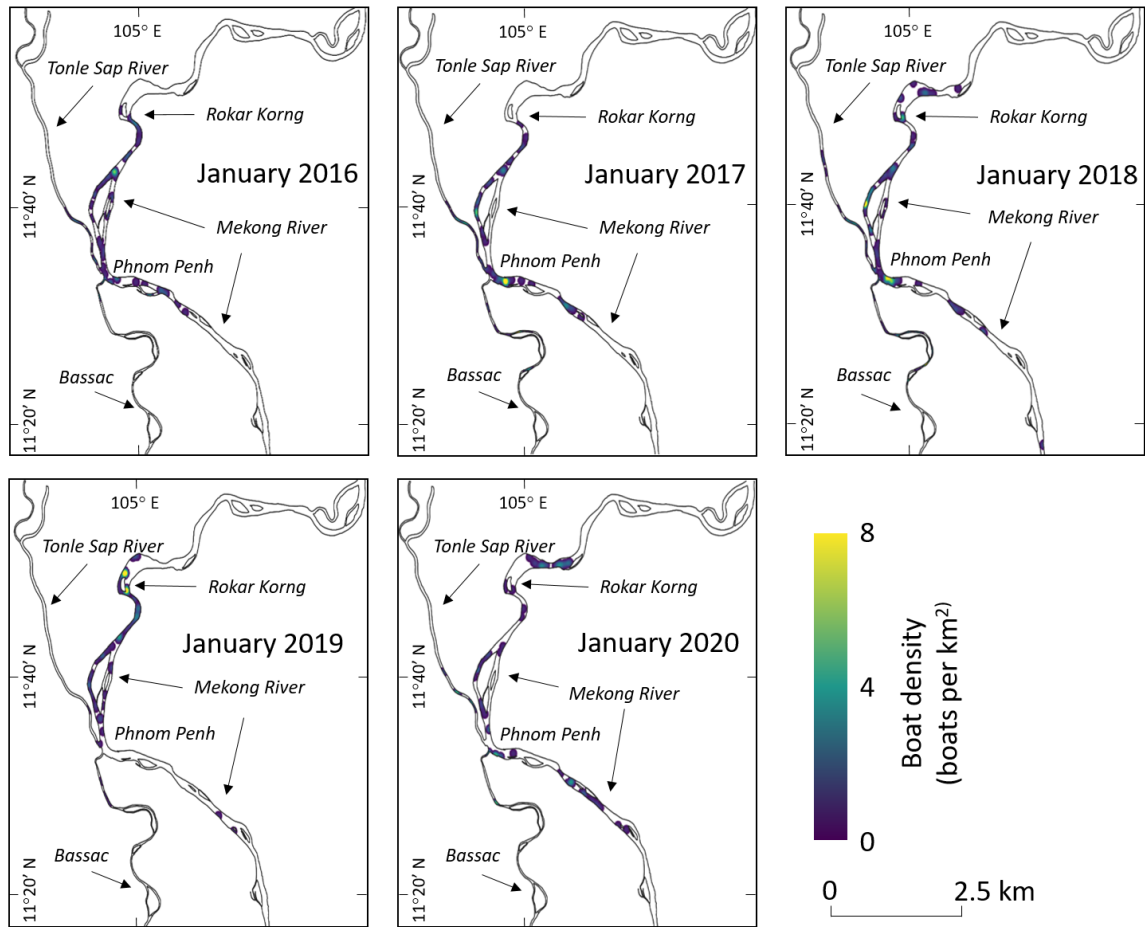
9   Samuel Walker, Energy and Environment Institute, University of Hull, Hull, UK, HU6 7RX

10   Daniel R. Parsons, Energy and Environment Institute, University of Hull, Hull, UK, HU6 7RX

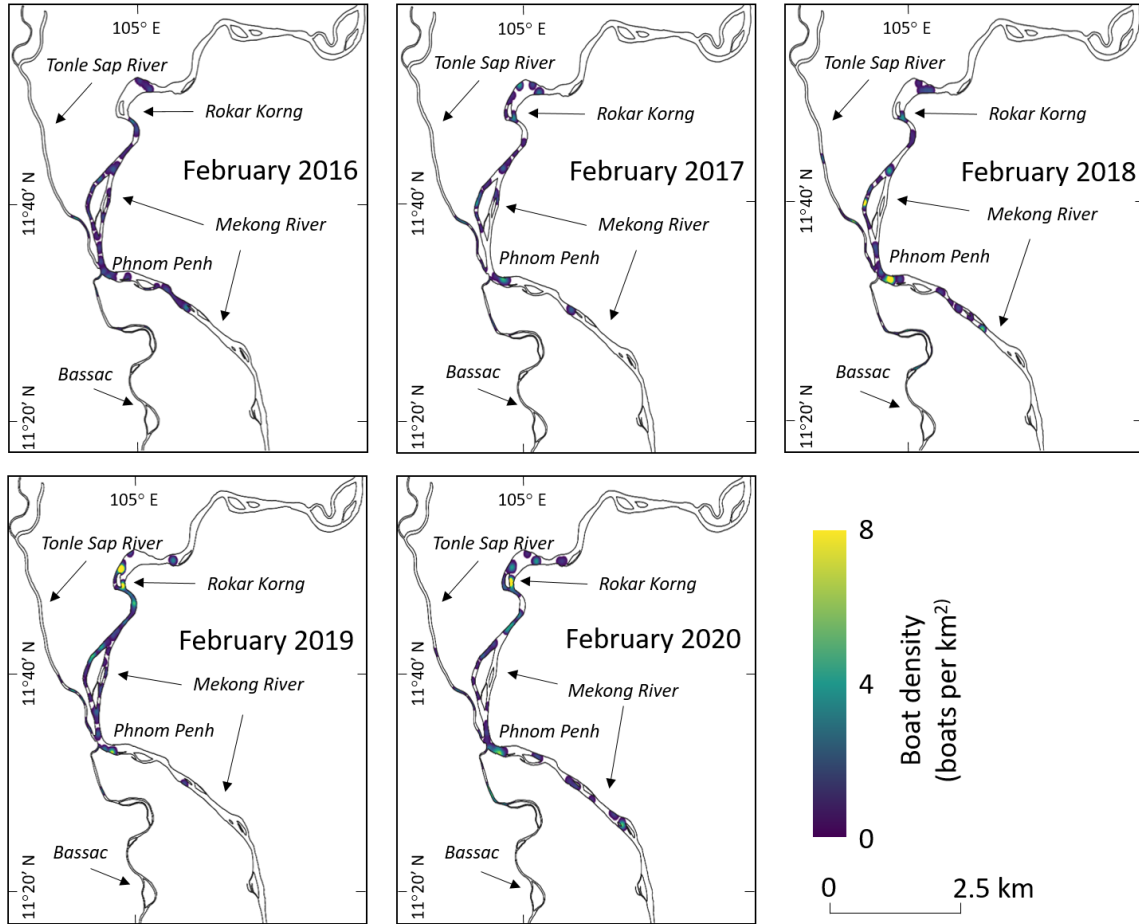11   *corresponding author's email address: christopher.hackney@ncl.ac.uk

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15 **SI Figure 1: Annual heat maps for January for the period 2016 - 2020 of the Mekong River around Phnom Penh**

16 **showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial**
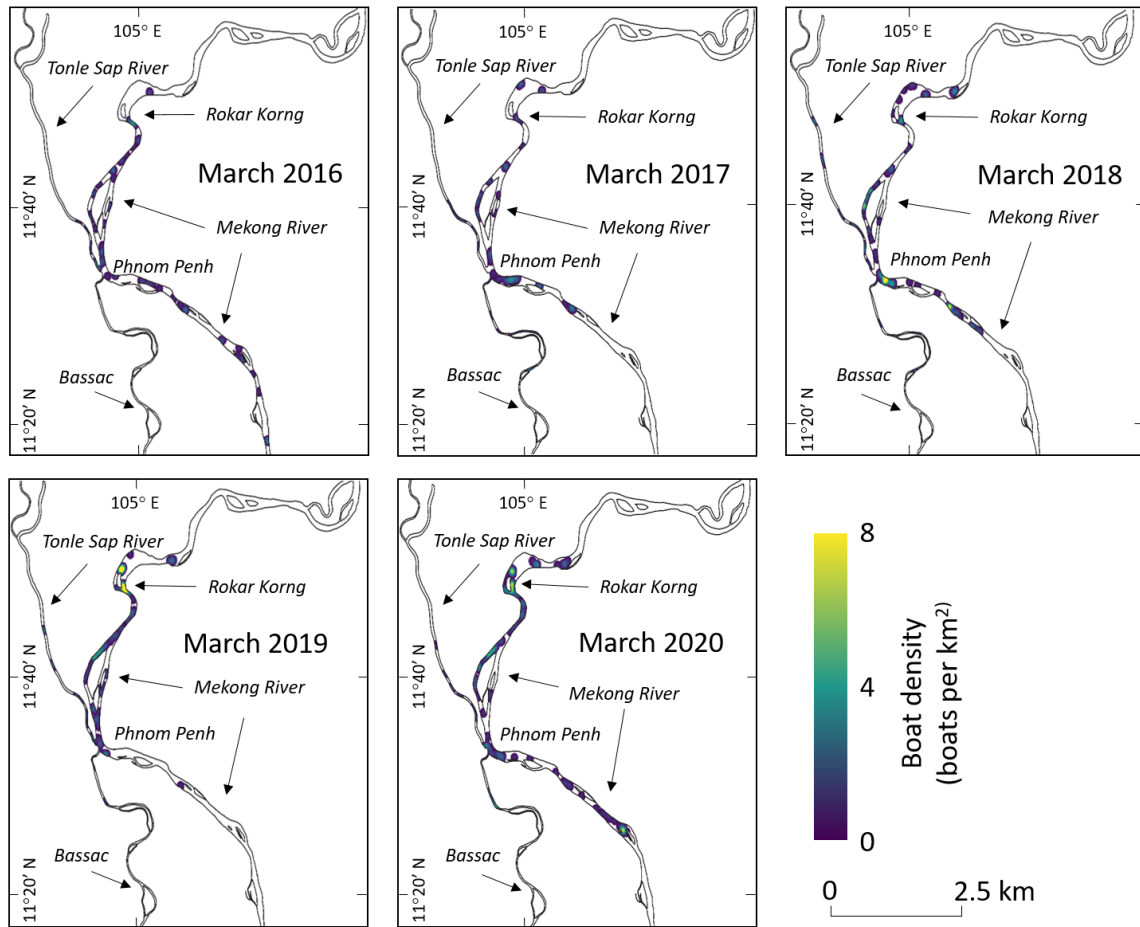
17 **distribution of mining activity over the five year period.**

SI Figure 2: Annual heat maps for February for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial distribution of mining activity over the five year period.
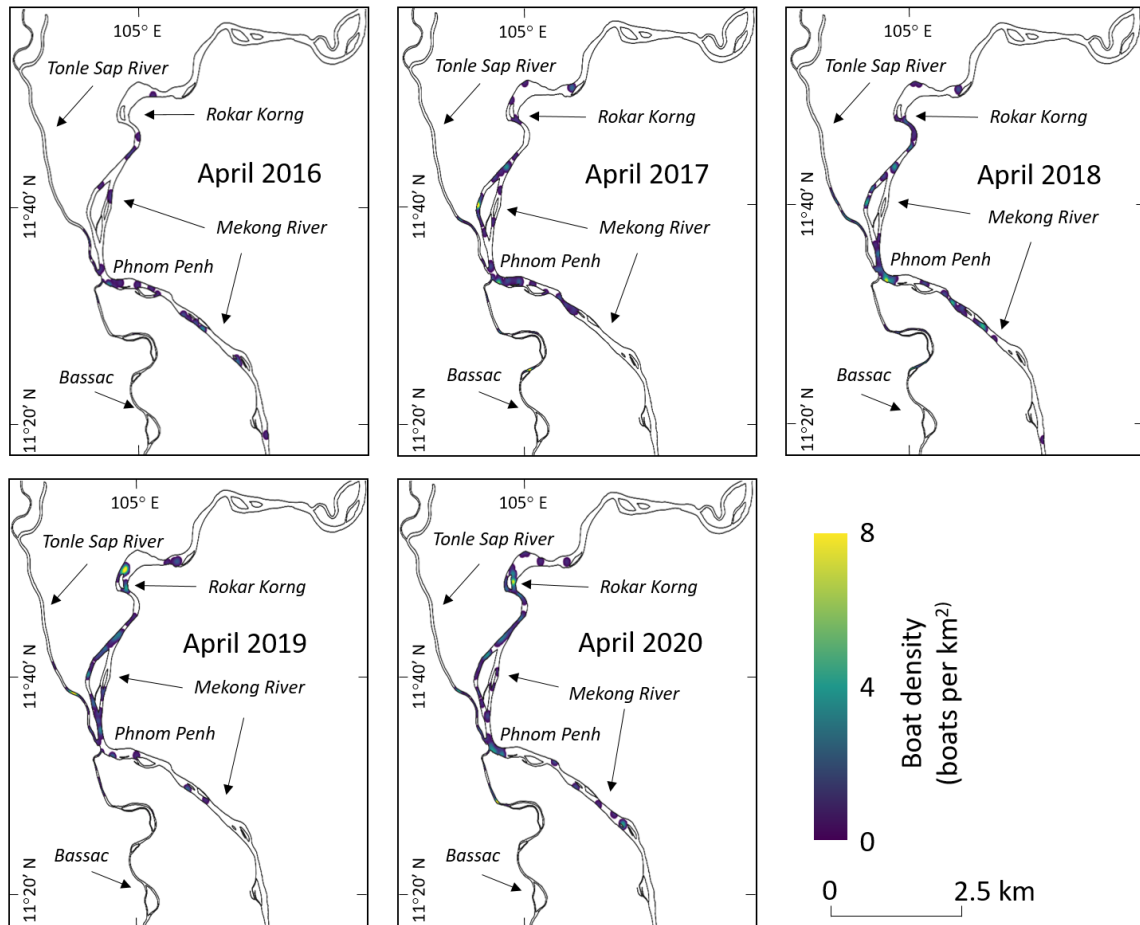
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SI Figure 3: Annual heat maps for March for the period 2016 - 2020 of the Mekong River around Phnom Penh

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showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial

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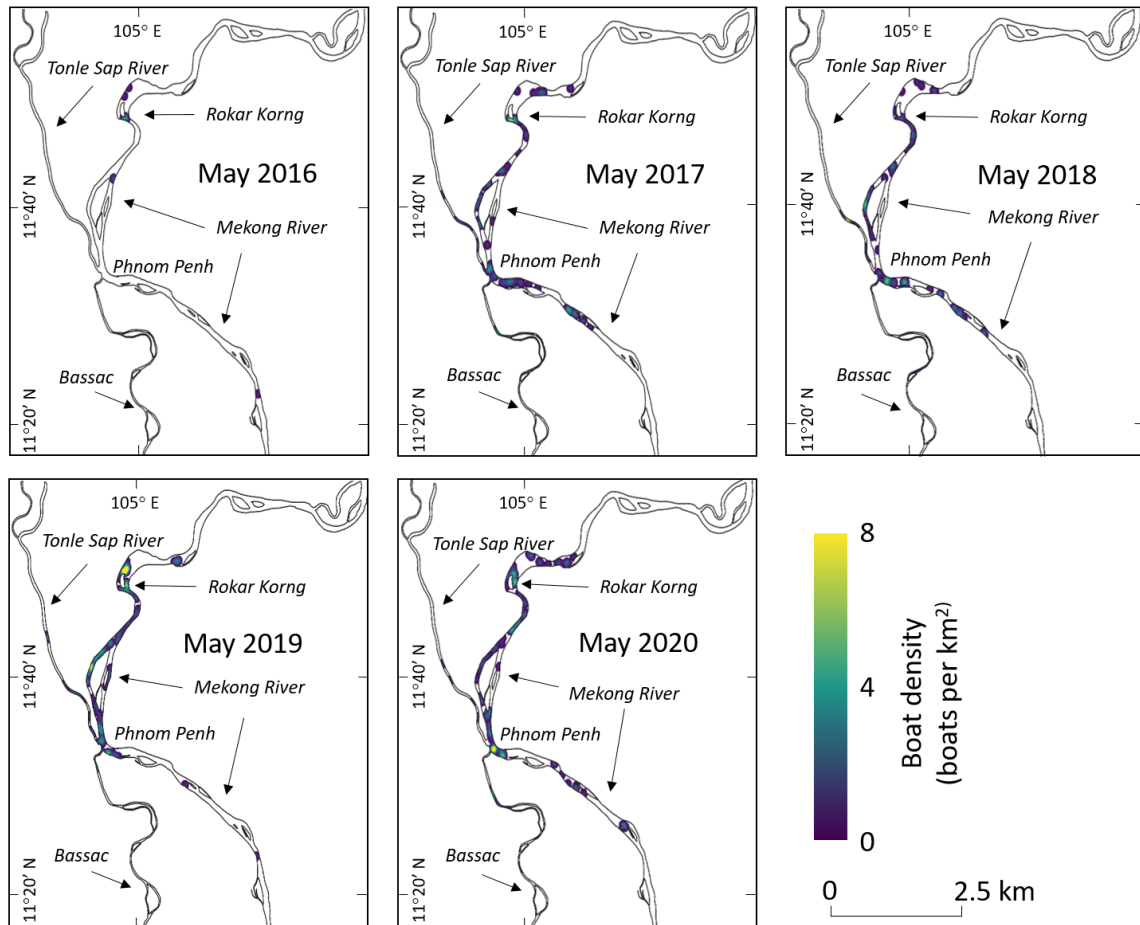**distribution of mining activity over the five year period.**

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SI Figure 4: Annual heat maps for April for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial distribution of mining activity over the five year period.

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SI Figure 5: Annual heat maps for May for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km²) showing changes in the spatial distribution of mining activity over the five year period.
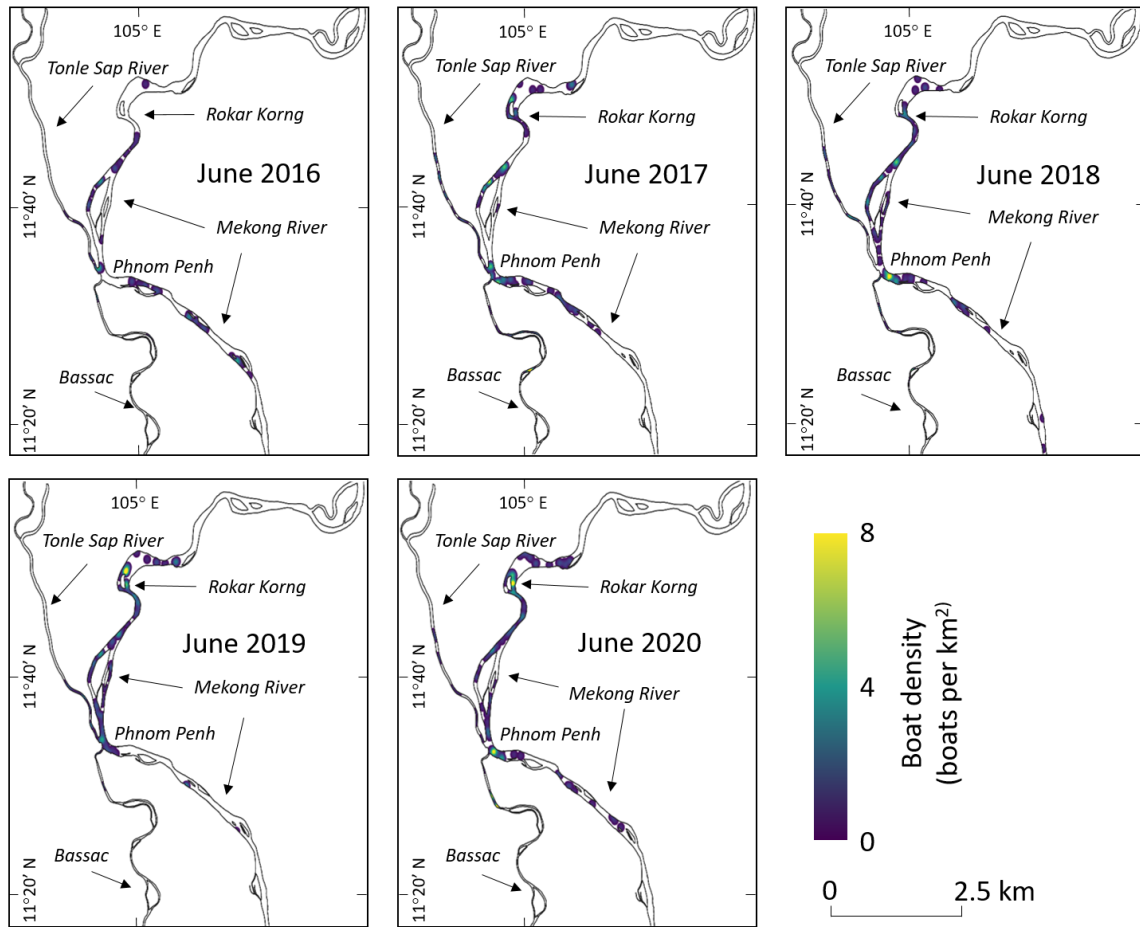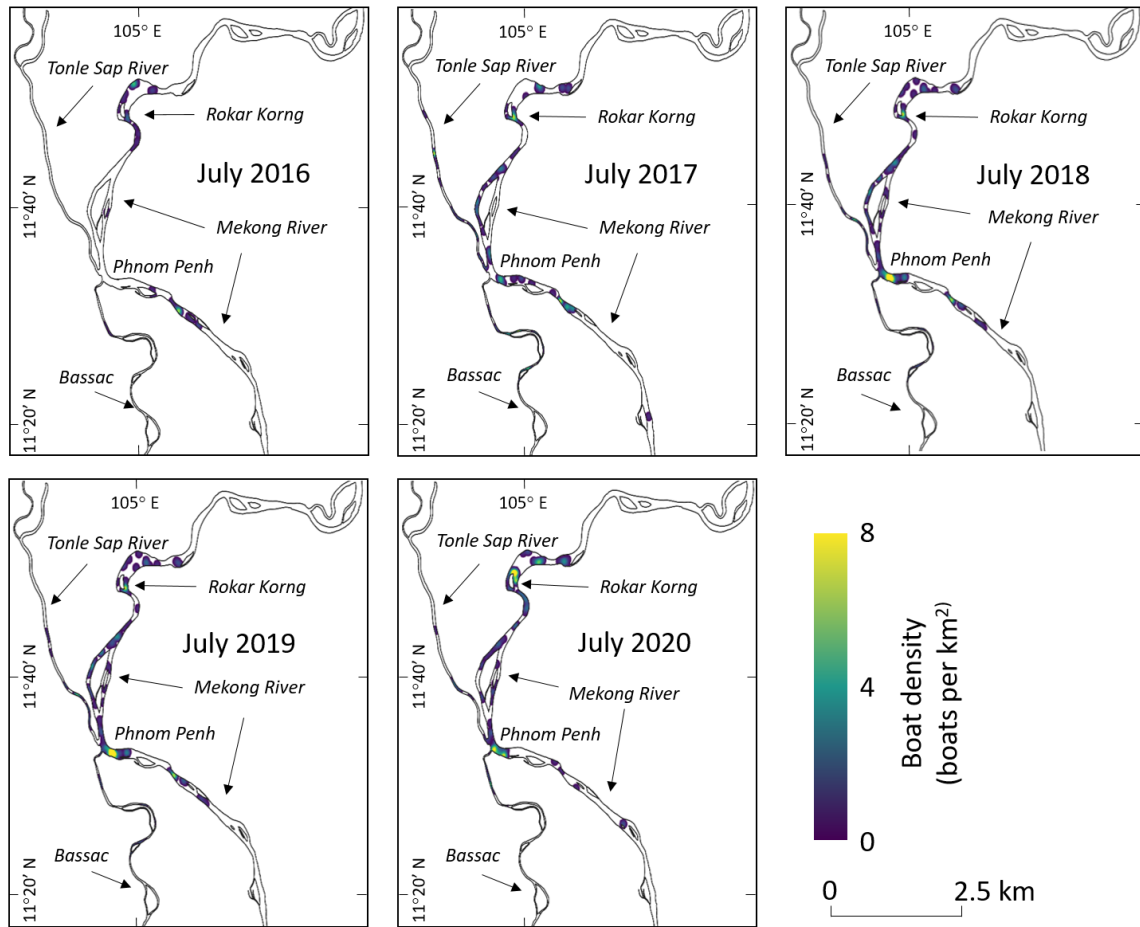
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SI Figure 6: Annual heat maps for June for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km²) showing changes in the spatial distribution of mining activity over the five year period.

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SI Figure 7: Annual heat maps for July for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km²) showing changes in the spatial distribution of mining activity over the five year period.
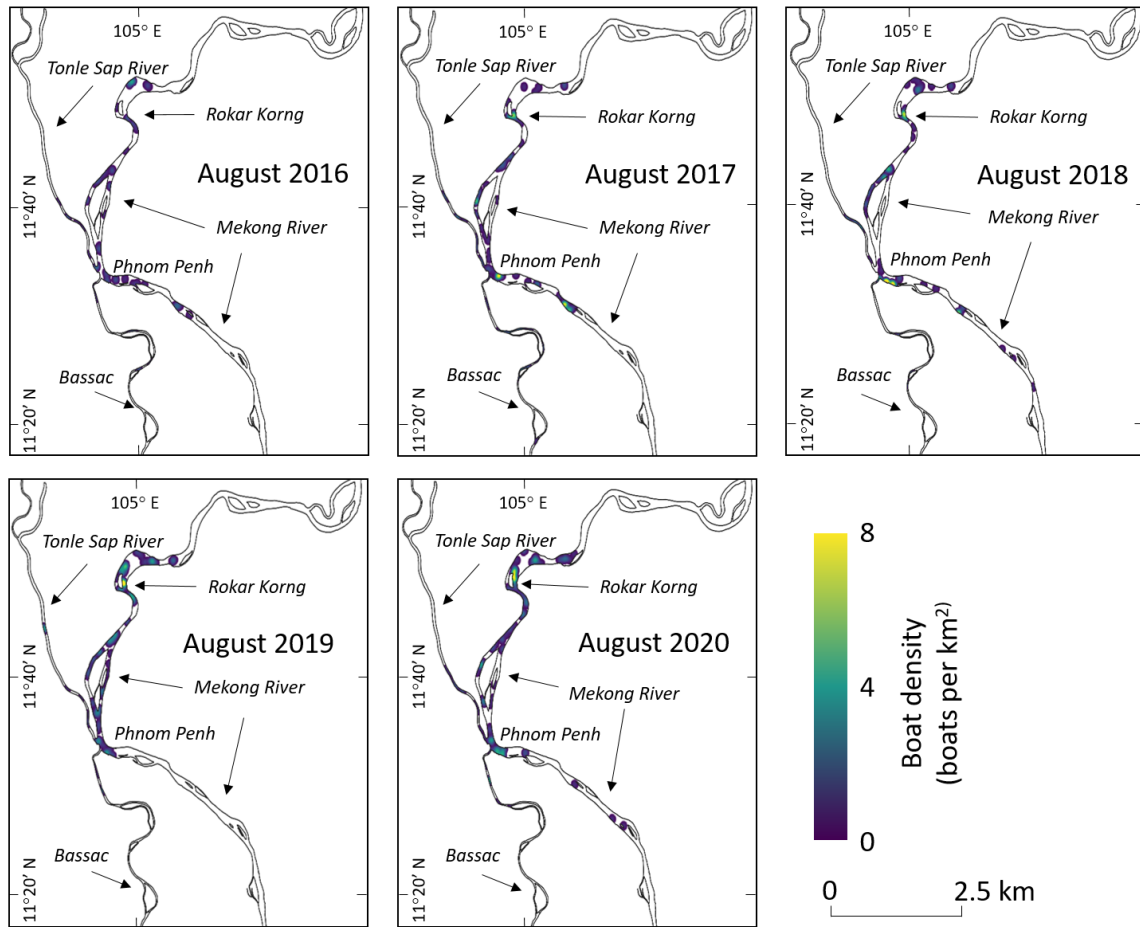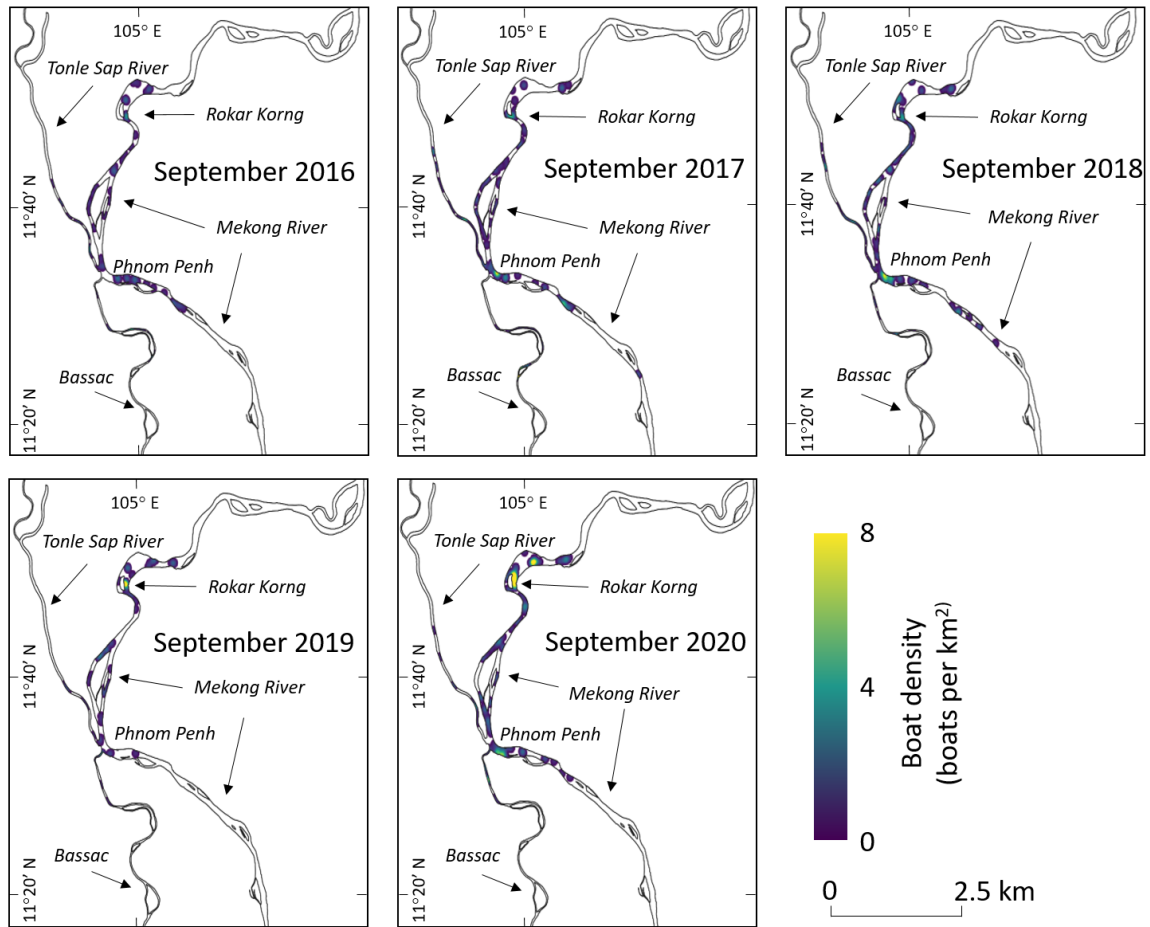
SI Figure 8: Annual heat maps for August for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial distribution of mining activity over the five year period.
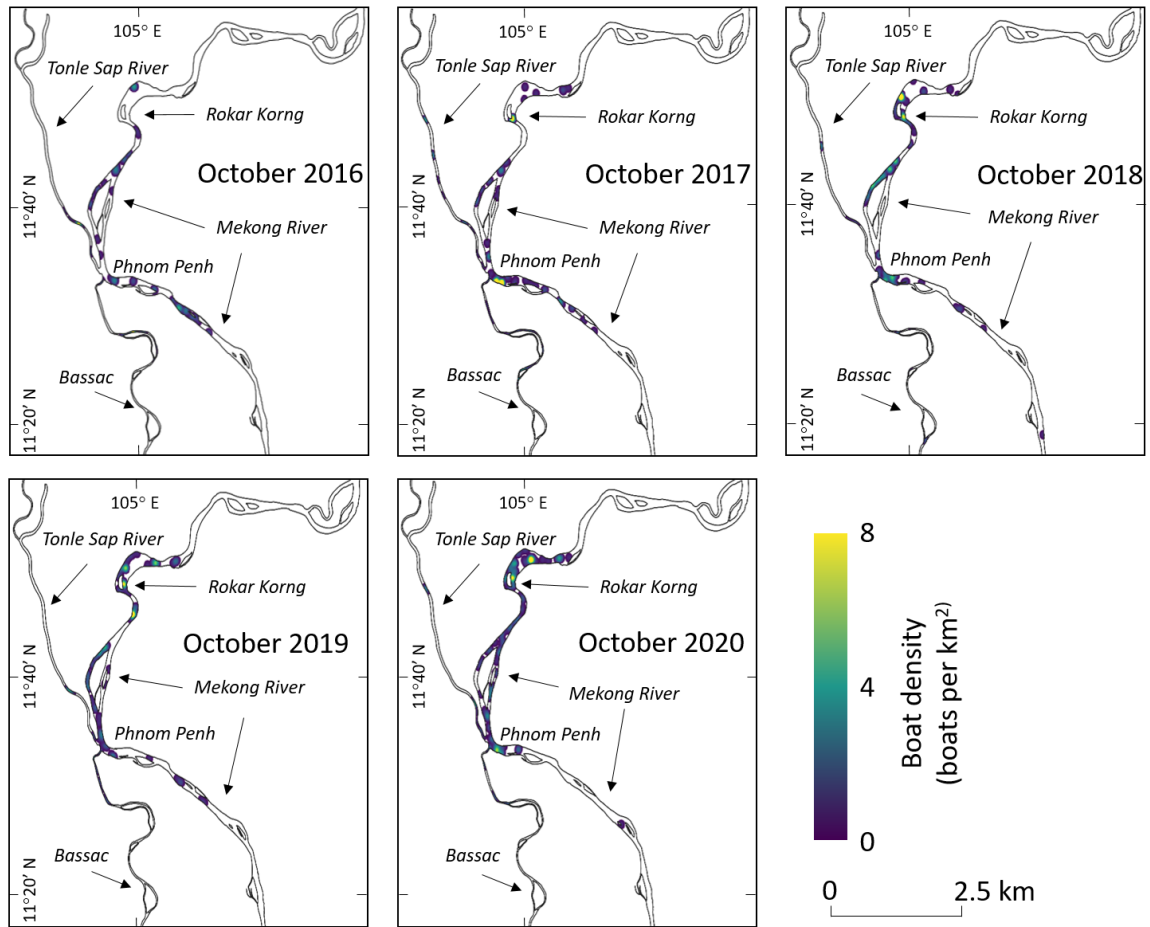
SI Figure 9: Annual heat maps for September for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial distribution of mining activity over the five year period.
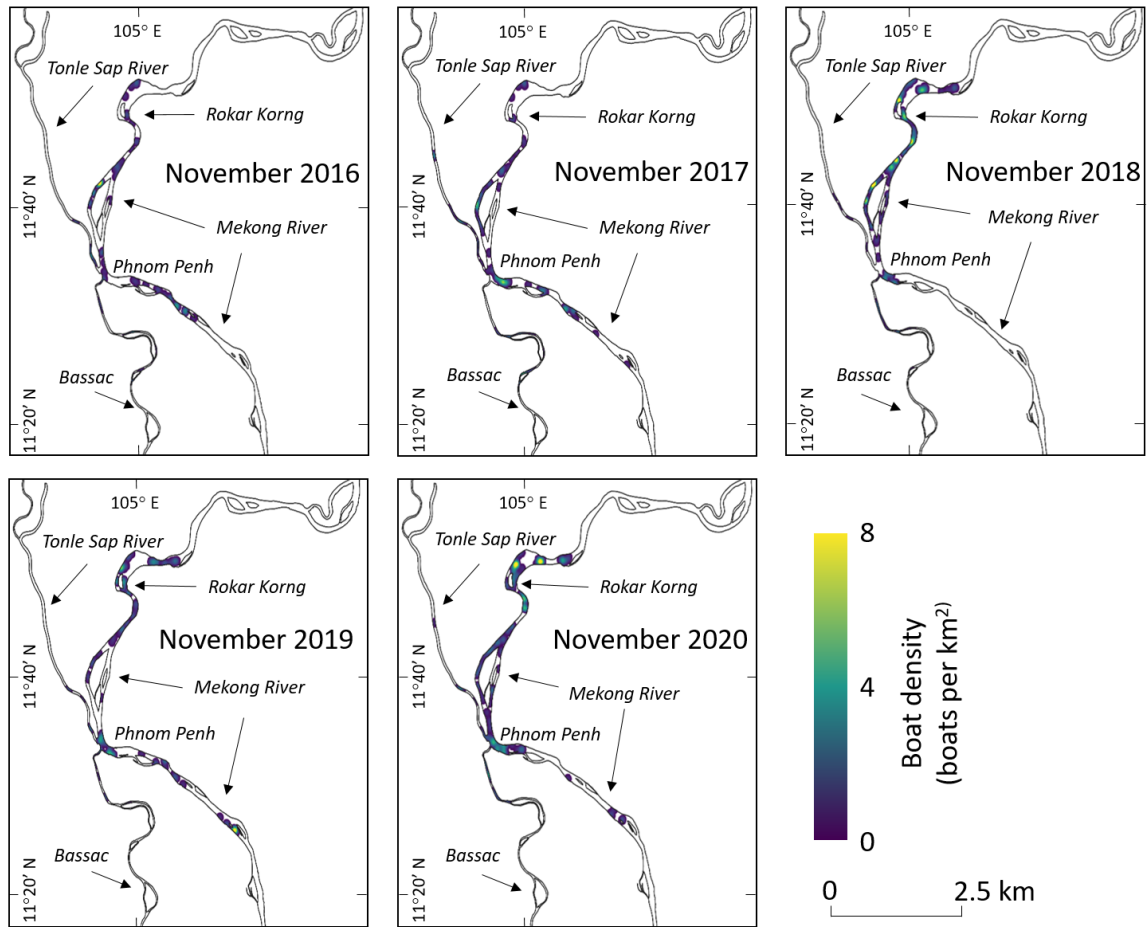
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74 **SI Figure 10: Annual heat maps for October for the period 2016 - 2020 of the Mekong River around Phnom Penh**

75 **showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial**

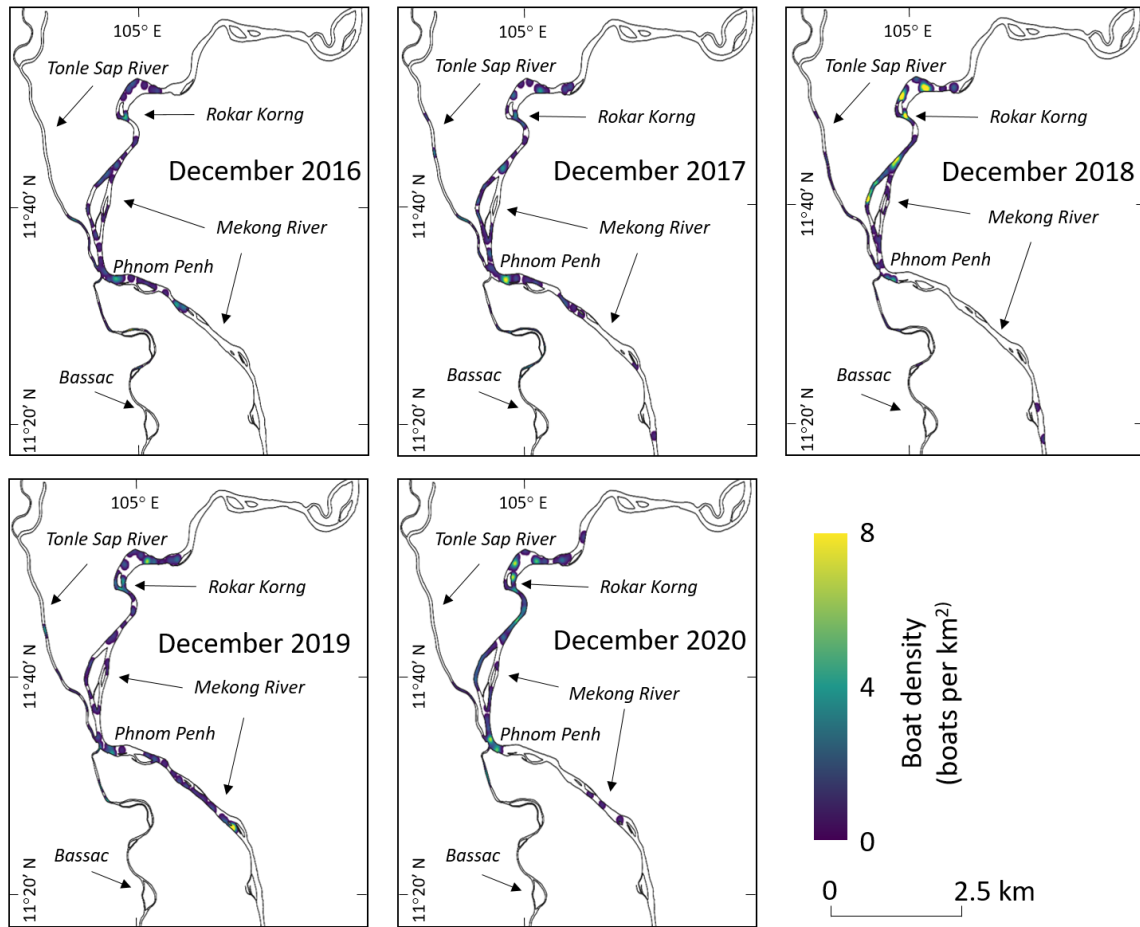76 **distribution of mining activity over the five year period.**

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SI Figure 11: Annual heat maps for November for the period 2016 - 2020 of the Mekong River around Phnom Penh
showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial
distribution of mining activity over the five year period.

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SI Figure 12: Annual heat maps for December for the period 2016 - 2020 of the Mekong River around Phnom Penh showing the locations of mining activity and the density of boats (boats per km^2) showing changes in the spatial distribution of mining activity over the five year period.