Are you talking about marine plastic pollution? An exploratory analysis of two years of Twitter conversations

Pablo Otero*, Patricia Quintas, Gustavo Blanco and Jesús Gago

Instituto Español de Oceanografía, IEO-CSIC, Spain
***corresponding author: pablo.otero@ieo.csic.es**

CSIC
Consejo Superior de Investigaciones Científicas

WHY?

Every day, about 200M people go on Twitter to share their updates, talk about their interests, and connect with others from all over the world. Although not as popular as platforms like Facebook or Instagram with billions of users, Twitter still has a loyal audience of those that log in on a regular basis. Users use this platform to spread large amounts of information on very diverse topics. For this reason, Twitter is a good place to observe citizen concerns about environmental issues, including marine ones.

HOW?

We have searched for tweets containing words 'plastic' or 'microplastic' in combination with any of these words: 'coast[s]', 'beach[es]', 'marine', 'ocean[s]'. The following languages have been taken into consideration: English, Japanese, Spanish, Portuguese, French, Italian, Malaysian, German, Turkish, Thai, Korean and Indi. Data pre-processing was required to eliminate unrelated tweets as far as possible.

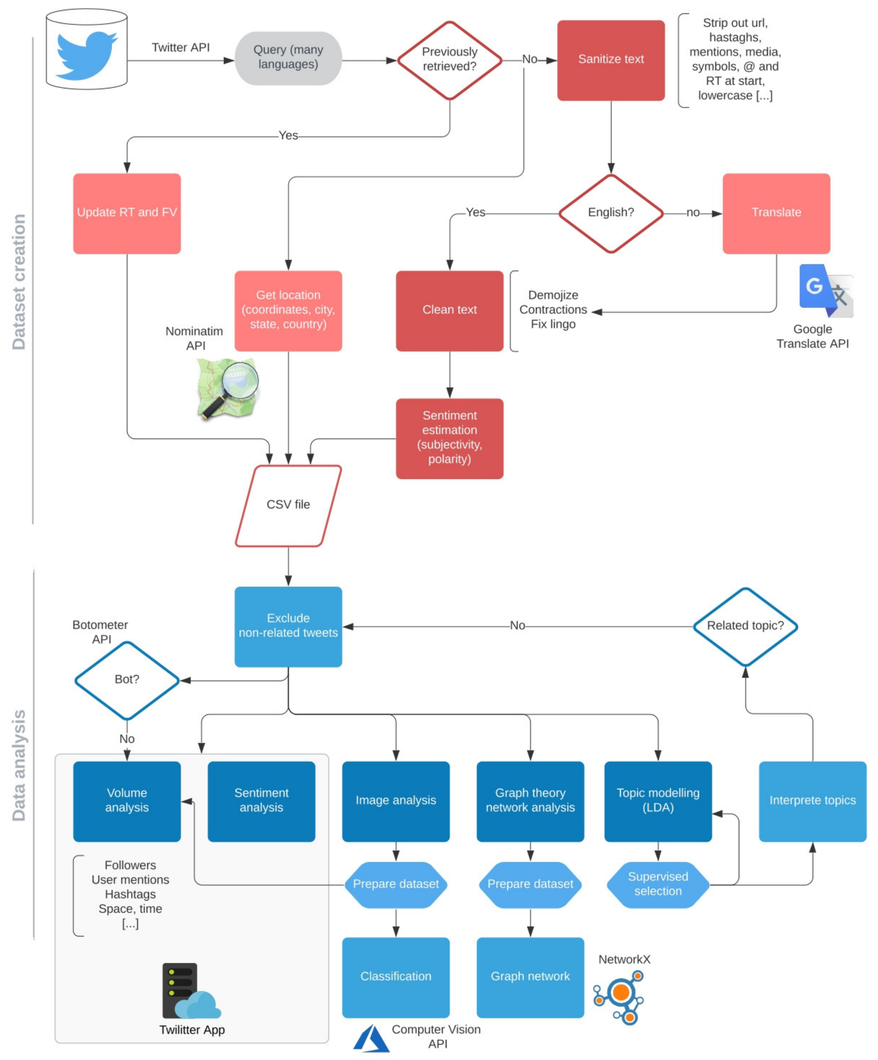


Fig 2. Flow chart showing the data processing steps

THE TWILITTER DASHBOARD

*To determine who, where, when, and for what reason marine plastic pollution is discussed, a data visualization dashboard called **Twilitter** has been developed. The analysis of ~500K tweets in 12 different languages posted during two years (1 Oct 2020 - 1 Oct 2022) shows, among other things, that London is the city from where this subject is tweeted the most, that World Ocean Day is the most celebrated date and that activity increases after the dissemination of news about relevant or impacting scientific advances. Knowing these data can be vitally important in aligning the messages of the institutions responsible for environmental protection with the interests and way of expressing themselves of the general public.*

LOOK!

HTTP://TWILITTER.HEROKUAPP.COM/

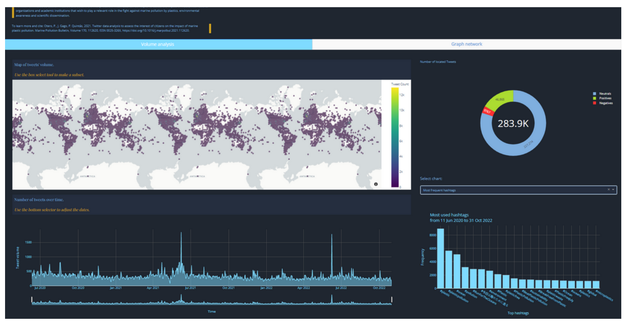


Fig 1. Screenshot of the Twilitter dashboard

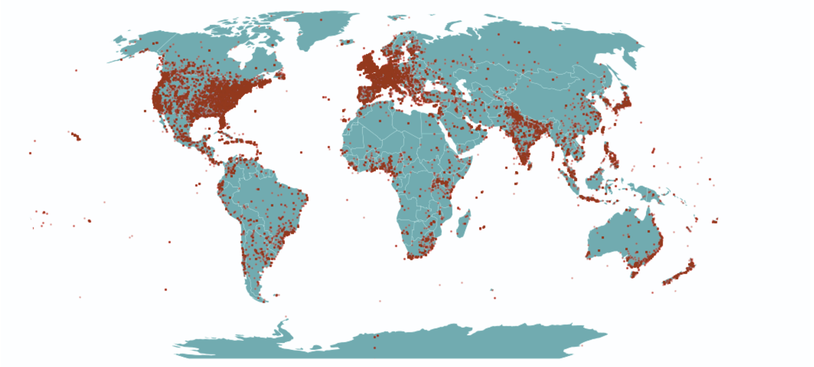
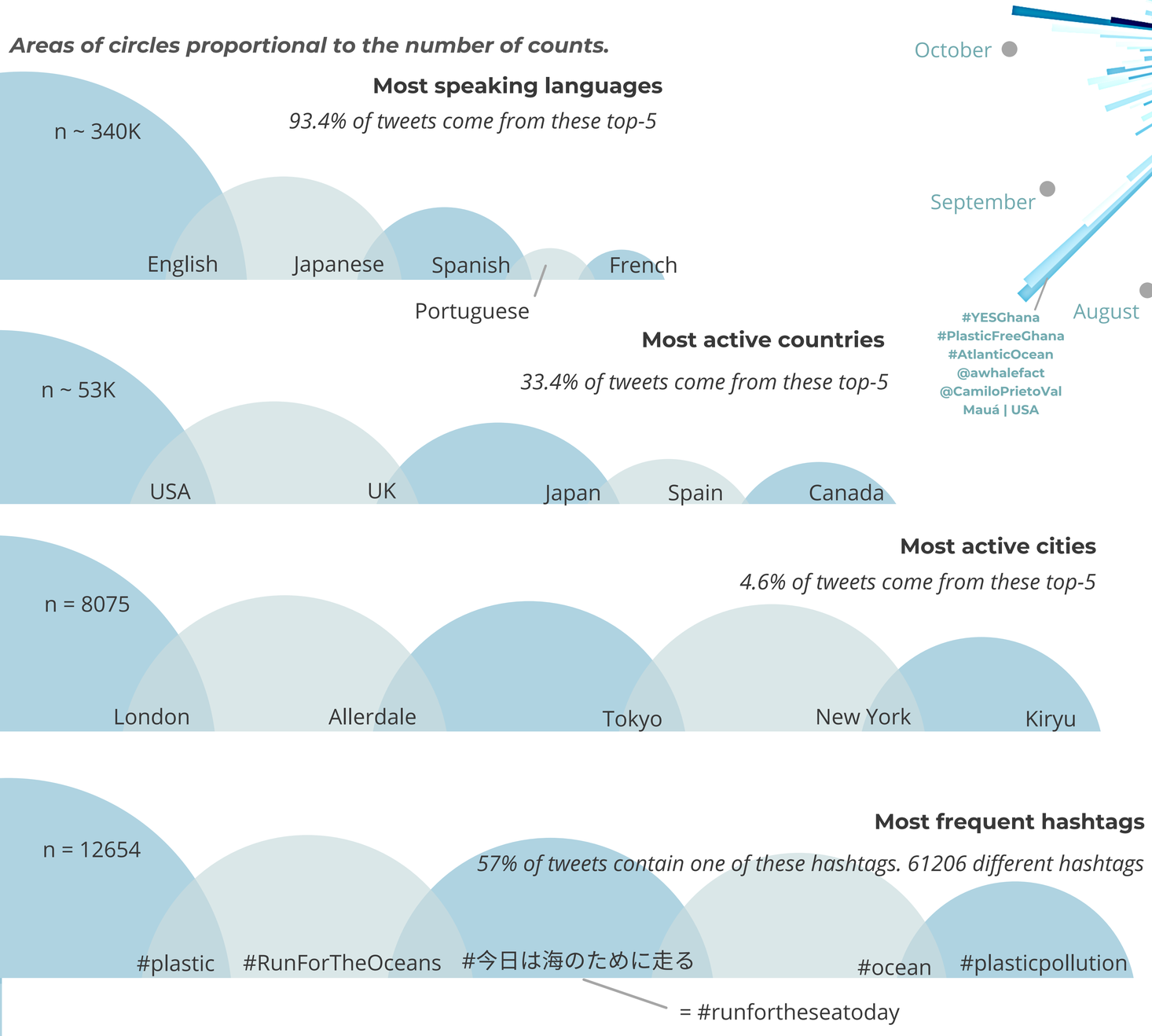


Fig 3. Worldwide distribution of tweets about marine plastic pollution



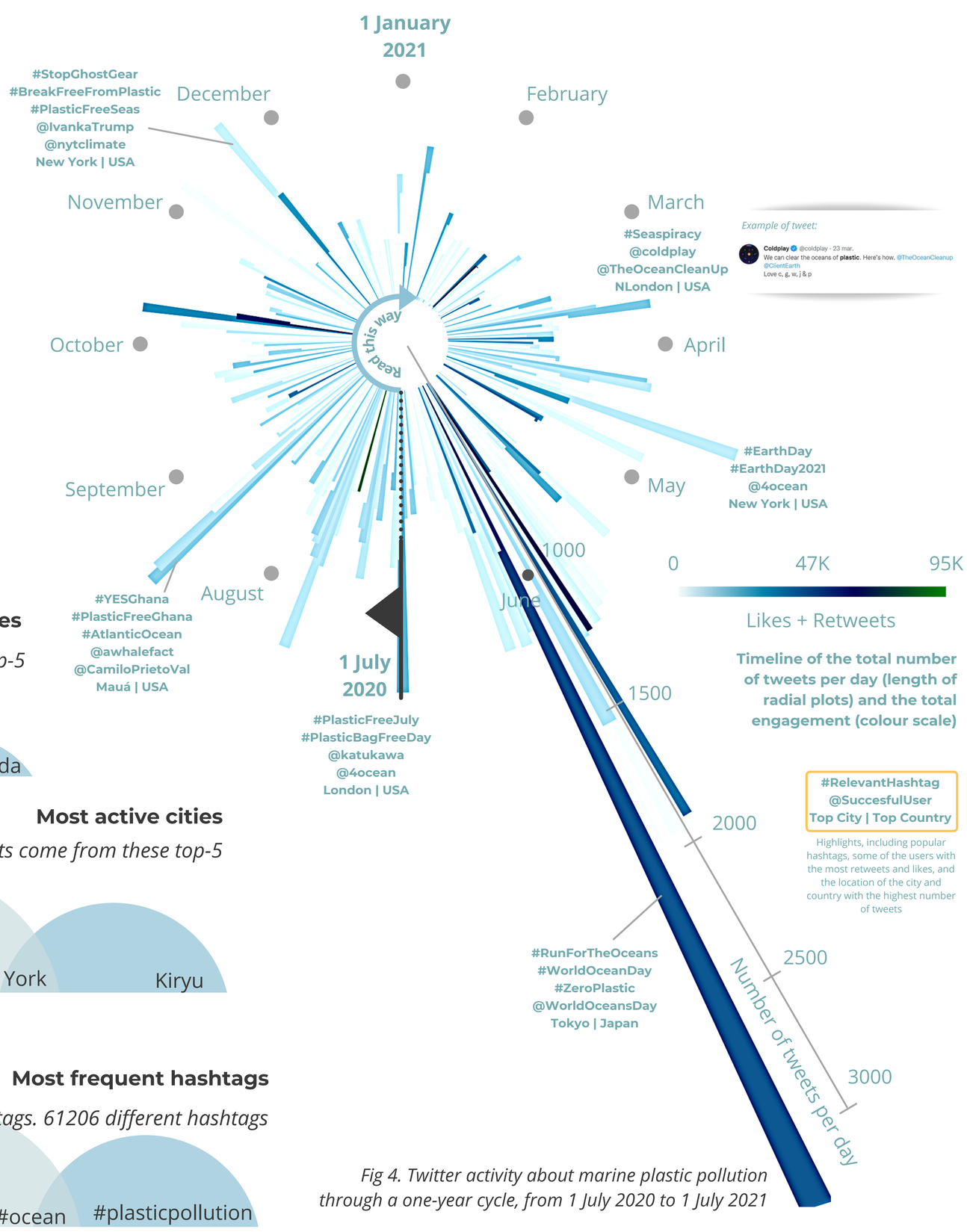


Fig 4. Twitter activity about marine plastic pollution through a one-year cycle, from 1 July 2020 to 1 July 2021

Learn more in Otero et al., 2021. Twitter data analysis to assess the interest of citizens on the impact of marine plastic pollution. Marine Pollution Bulletin. Volume 170. https://doi.org/10.1016/j.marpolbul.2021.112620

@PabloOteroT

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