

# **DETECTION OF SARS-CoV-2 IN WASTEWATER AS AN EARLIER PREDICTOR OF COVID-19 EPIDEMIC PEAKS IN VENEZUELA**

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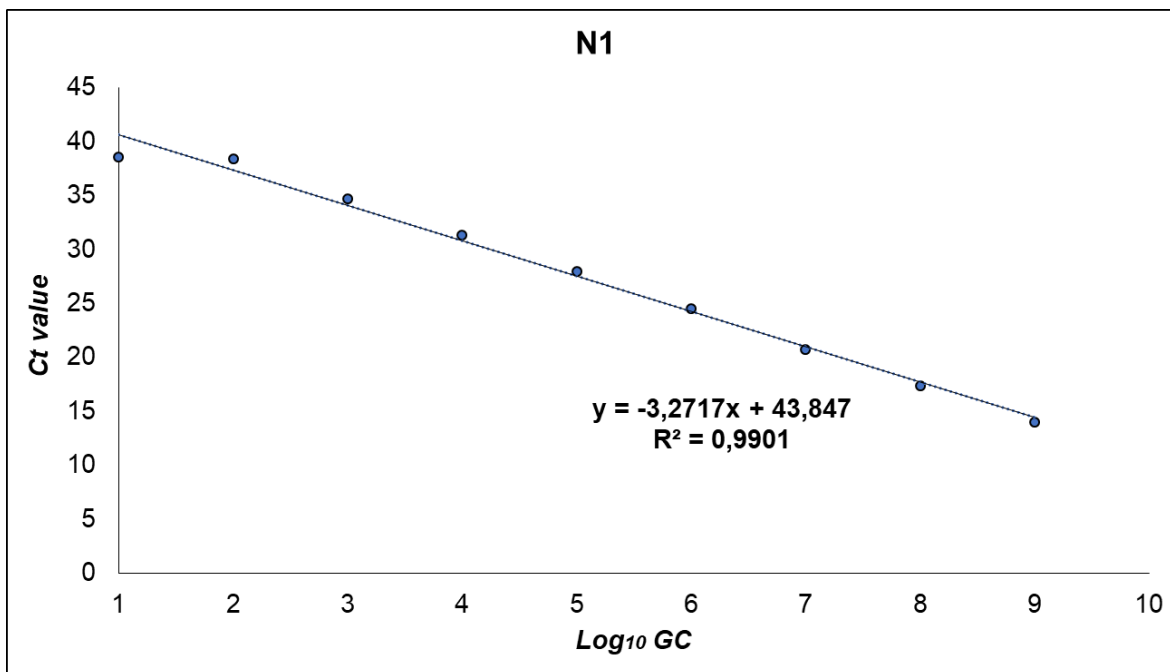
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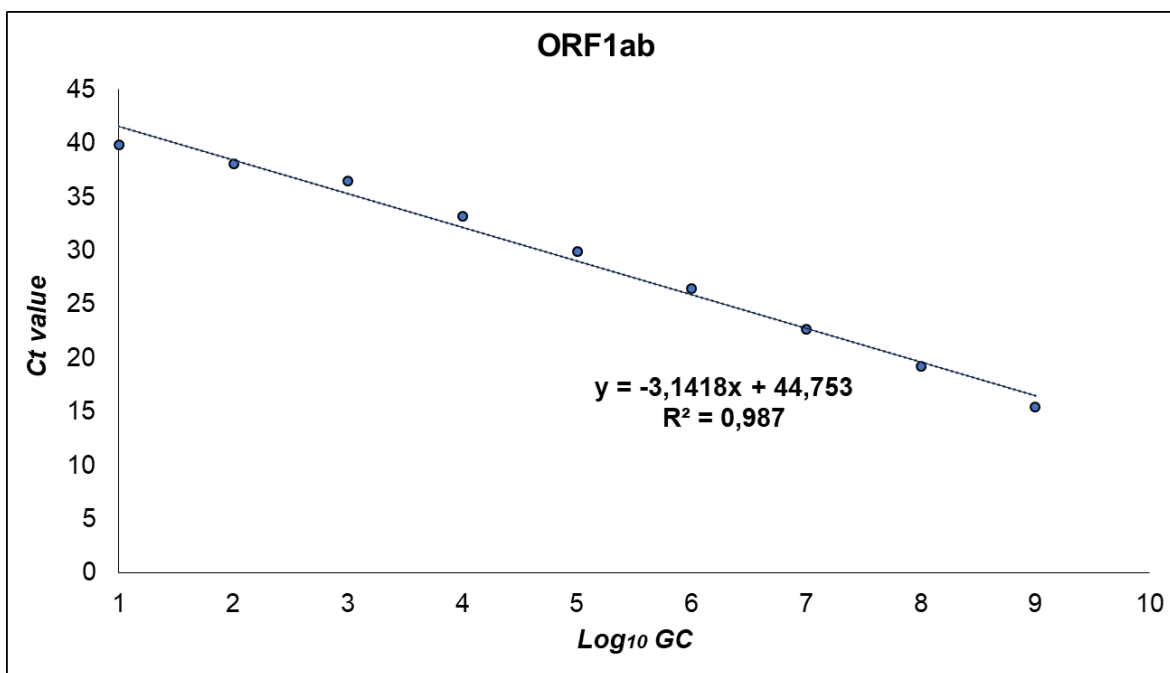
<sup>3</sup>Centro de Ecología y Evolución. Instituto de Zoología y Ecología Tropical. Facultad de Ciencias. Universidad Central de Venezuela (UCV), Caracas, Venezuela.

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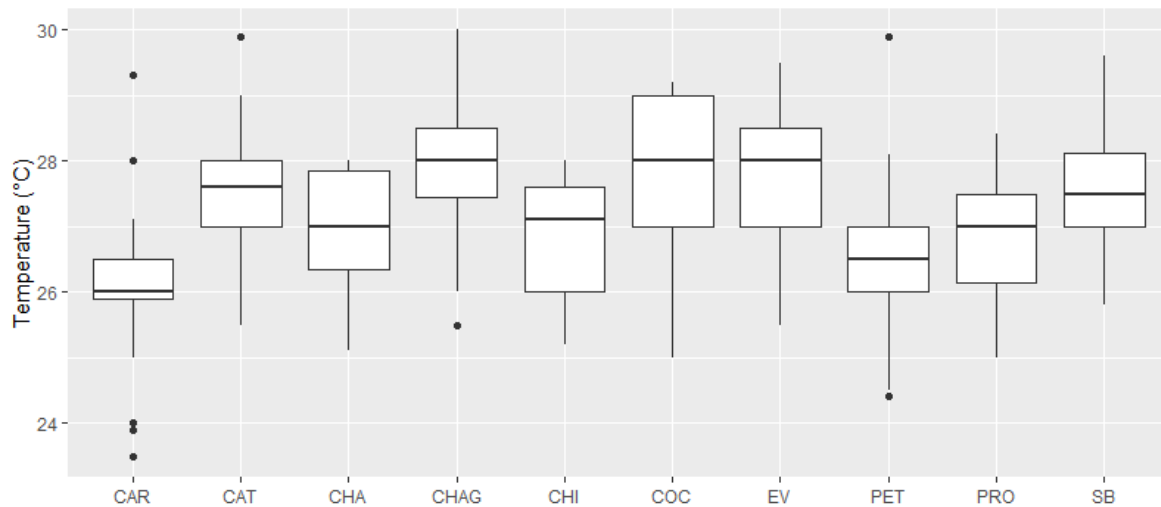
E-mail: [alejandra.zamora@gmail.com](mailto:alejandra.zamora@gmail.com), [alejandra.zamora@ucv.ve](mailto:alejandra.zamora@ucv.ve) (AZF)



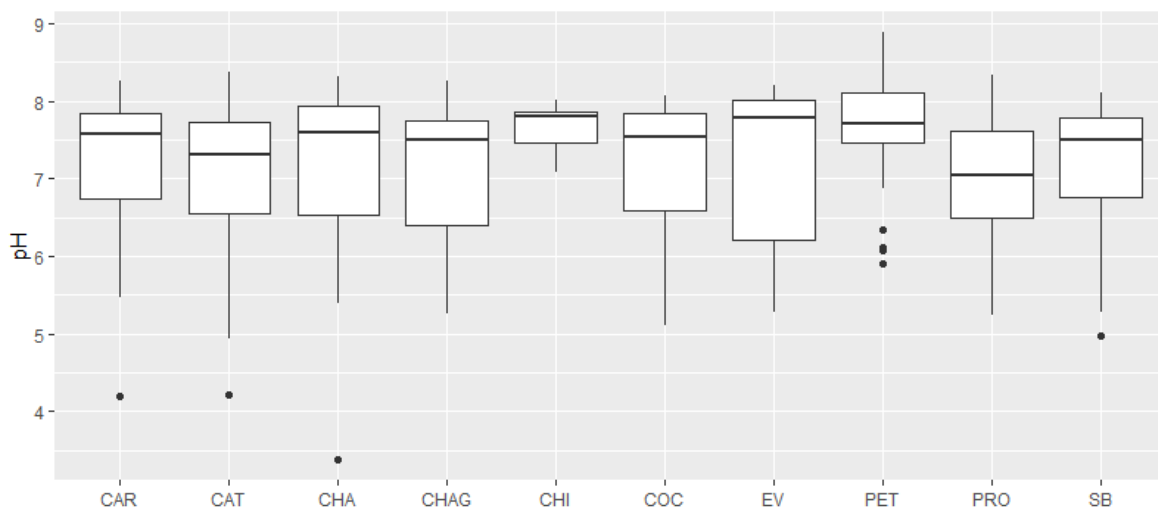
**Figure S1.** Standard curve for the N1 gene.



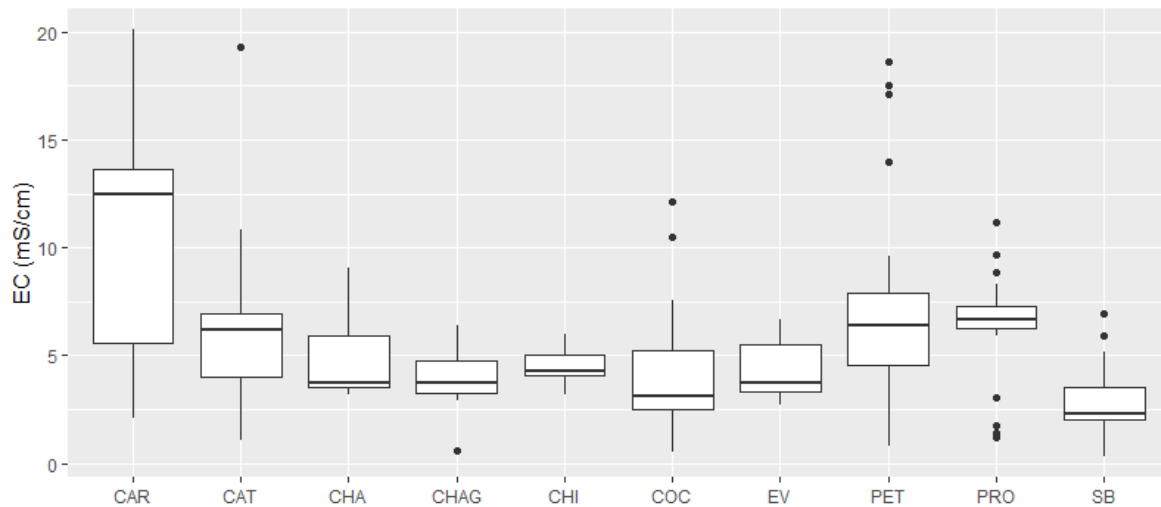
**Figure S2.** Standard curve for the ORF1ab gene.



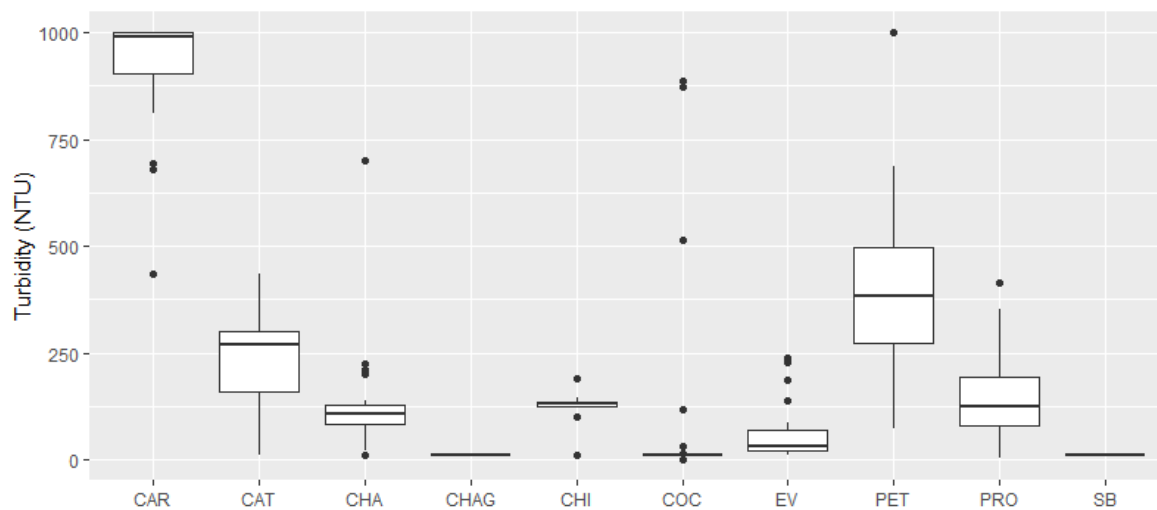
**Figure S3.1.** Boxplots of temperature in wastewater in different sampling site. CAR = Caricuao. CAT = Catia. CHA = Chacao. CHAG = Chaguaramos. CHI = Chacaito. COC = Coche, EV = El Valle. PET = Petare. PRO = Propatria. SB = San Bernardino.



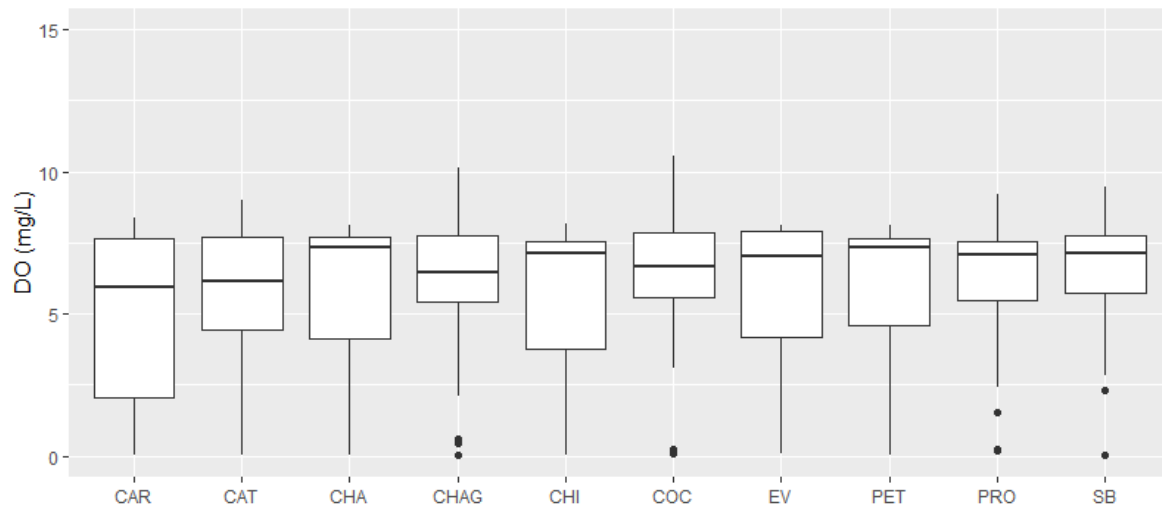
**Figure S3.2.** Boxplots of pH in wastewater in different sampling site. CAR = Caricuao. CAT = Catia. CHA = Chacao. CHAG = Chaguaramos. CHI = Chacaito. COC = Coche, EV = El Valle. PET = Petare. PRO = Propatria. SB = San Bernardino.



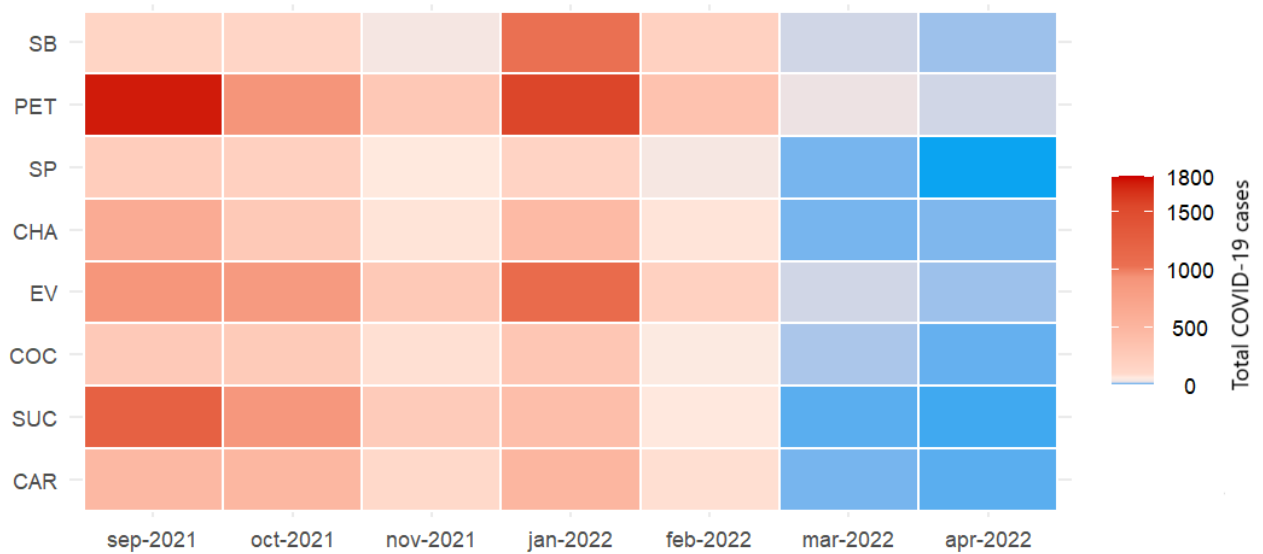
**Figure S3.3.** Boxplots of electric conductivity in wastewater in different sampling site. CAR = Caricuao. CAT = Catia. CHA = Chacao. CHAG = Chaguaramos. CHI = Chacaito. COC = Coche, EV = El Valle. PET = Petare. PRO = Propatria. SB = San Bernardino.



**Figure S3.4.** Boxplots of turbidity in wastewater in different sampling site. CAR = Caricuao. CAT = Catia. CHA = Chacao. CHAG = Chaguaramos. CHI = Chacaito. COC = Coche, EV = El Valle. PET = Petare. PRO = Propatria. SB = San Bernardino.



**Figure S3.5.** Boxplots of dissolved oxygen in wastewater in different sampling site. CAR = Caricuao. CAT = Catia. CHA = Chacao. CHAG = Chaguaramos. CHI = Chacaito. COC = Coche, EV = El Valle. PET = Petare. PRO = Propatria. SB = San Bernardino.



**Figure S4. Heat map of COVID-19 cumulative cases per month by parishes, from September 2021 to April 2022.** SB = San Bernardino, PET = Petare, SP = San Pedro (Chaguaramos site), CHA = Chacao, EV = El Valle, COC = Coche, SUC = Sucre (Propatria and Catia sites), CAR = Caricuao. The warmer colors indicate higher incidence.