

Climate Change and Tidal Hydrodynamics of Guadalquivir Estuary and Doñana Marshes: A Comprehensive Review

Inês Couto ¹, Ana Picado ², Marisela Des ³, Alejandro López-Ruiz ⁴, Manuel Díez-Minguito ⁵, Ricardo Díaz-Delgado ⁶, Rita Bastos ⁷ and João Miguel Dias ^{2,*}

¹ Physics Department, University of Aveiro, 3810-193 Aveiro, Portugal; inesncouto@ua.pt

² Centre for Environmental and Marine Studies (CESAM), Physics Department, University of Aveiro, 3810-193 Aveiro, Portugal; ana.picado@ua.pt

³ Environmental Physics Laboratory (EPhysLab), Centro de Investigación Mariña, Universidade de Vigo, Campus As Lagoas s/n, 32004 Ourense, Spain; mdes@uvigo.gal

⁴ Departamento de Ingeniería Aeroespacial y Mecánica de Fluidos, Universidad de Sevilla, Camino de los Descubrimientos s/n, 41092 Seville, Spain; alopez50@us.es

⁵ Andalusian Institute for Earth System Research, University of Granada, Avda. del Mediterráneo, s/n, 18006 Granada, Spain; mdiezm@ugr.es

⁶ LAST (Remote Sensing & GIS Lab) Doñana Biological Station-CSIC c/Américo Vespucio 26, Isla de la Cartuja, 41092 Sevilla, Spain; rdiaz@ebd.csic.es

⁷ Centro de Investigação em Biodiversidade e Recursos Genéticos (Centro de Investigação em Biodiversidade e Recursos Genéticos), Universidade do Porto, 4485-661 Vairão, Portugal; rita.bastos@gmail.com

* Correspondence: joao.dias@ua.pt

Figure:

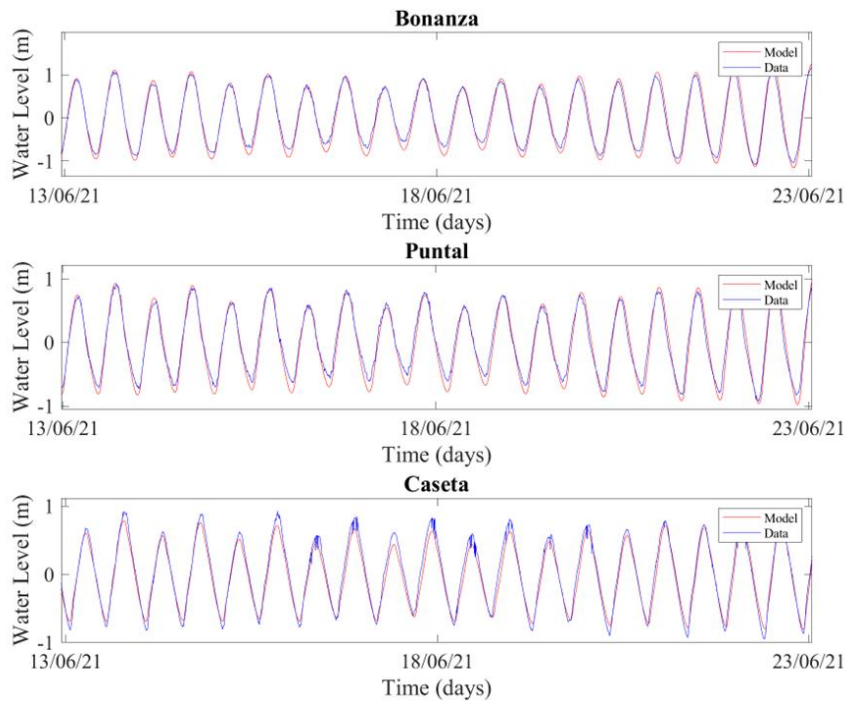


Figure S1. Comparison of the time series of sea surface height between observed and predicted data at the (a) Bonanza, (b) Puntal and (c) Caseta stations. The observed data is represented in blue (Data), while the simulation results are illustrated in red.