

Table 1. Summary information of the datasets from the SIMPATICO monitoring station and associated river discharge data.

Data source	Location	Instrumentation	Datafiles start-end	Acquisition rate	Dataset parameters
SIMPATICO	Lower Guadiana Estuary	Multi-parametric probe	#1: 19/03/2008–15/02/2010 #2: 26/01/2012–06/12/2013	Hourly	Temperature (°C), pH, dissolved oxygen (mg l ⁻¹), turbidity (NTU), chlorophyll (µg l ⁻¹), salinity (PSU) at ~1 m below the water surface
SIMPATICO	Lower Guadiana Estuary	Acoustic Doppler current profiler	#1: 19/03/2008–04/01/2010 #2: 07/12/2011–12/12/2012 #3: 02/03/2013–08/04/2014	15 minutes	<u>Sensor data</u> : Near-bed temperature (°C), pressure (dbar), pitch (°), roll (°) <u>Diagnostic data (counts)</u> : multi-cell beam amplitude, main-cell beam noise, main-cell beam strength <u>Velocity data (east, north, vertical components, m s⁻¹)</u> : main-cell, multi-cell <u>Standard deviation</u> : pressure (dbar), pitch (°), roll (°), main-cell velocity (m s ⁻¹), multi-cell velocity (m s ⁻¹)
Hydrographic station	#1: Pedrogão #2: Pulo do Lobo	#1: Water level sensor #2: Stage sensor	#1: 19/03/2008 – 09/04/2014 #2: 19/03/2008 – 07/04/2014	#1: Daily #2: hourly	River discharge (m ³ s ⁻¹)