Total Alkalinity
GLODAP v2018 bottle ship data + DIC, pH

Test data

Gridded / satellite data
SST, Salt, MLD, Chl-a, phosphate, silicate +

Training data

GRaCER-TA
model

Estimated Total Alkalinity

GRaCER-pCO2
model

Estimated pCO2

Ancillary data used in pyCO2SYS

pyCO2SYS
marine carbonate system with propagated errors

Dissolved inorganic carbon

Ω_{Ar/ Ca}

pH

Independent data
Moorings: pH, pCO_2,
SOCOM: pH,
LT-stations: TA, DIC,
LDEO: pCO_2