

Table S3. Data and use in model

Data	Associated variables	Spatial resolution	Temporal resolution	Time span	Use
Trip tickets	catch C , effort E , price P_f	Baja California Sur	per trip	1997–2014	Cross-validation C , P_f , validation E
Mexico's National fisheries statistics, 2001–2016	catch C , migration M , price P_f	Mexico	monthly	2001–2016	Parameterization M , validation C , P_f , model simulation input M
Expert interviews	trader cooperation R , price P_f , catchability q	North-West Mexico	-	-	Model implementation
UN ComTrade	price P_m	World	per trade	1991–2014	Parameterization of P_m
Anuarios pesqueros	price P_m , catch C	Mexico	annual	1997–2013	Cross-validation UN ComTrade, Mexico's National fisheries statistics
NOAA Coastwatch	SST anomaly T	Guaymas basin	multiple per year	1981–2016	Model implementation and parameterization T
Mantle length measurements	catchability q	Guaymas basin	multiple per year	1996–2017	model simulation input q
Mexican gas prices	cost per unit effort σ	Mexico	annual	1996–2016	Parameter estimation σ