

Article: Auditing marine survey evidence for submerged prehistoric landscapes on the Spanish Gulf of Cádiz shelf
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Online Resource 2. Source-level evidence-readiness audit matrix

Codes: P = pass; Ptl = partial/recoverable; F = fail. Gate states are documented study-team judgments, not archaeological probabilities or independent blinded measurements. Strict cumulative retention requires P at every preceding gate; the sensitivity variant retains P or Ptl. Basis, decisive gap and next action expose every row for independent recoding. Inventory freeze: 21 August 2026.

ID	Evidence family and source locator	Metadata	Geometry	Config.	Target fit	Result	Reuse	Adequate negative	Basis, decisive gap and next action
GOC-001	IGME FOMAR Sheet 86 geophysics: GC-86-1; GC-88-3; G-86-1; HE-91-3; CD; CAMPSA-CGG. Samples: AMBIO-94; GC-86-2; GC-88-3; M-86-2; M-86-3; M-86-4 https://info.igme.es/cartografiadigital/datos/Fomar200/memorias/Memoria86_FM200.pdf	P	Ptl	Ptl	Ptl	F	Ptl	F	Basis: Published source family is identifiable, but observation geometry and settings are incomplete. Gap: No controlled target-level result. Next: Recover native navigation, configuration and result register.
GOC-002	ICM-CSIC Marine Geological Reference Collections and Marine Geosciences catalogue https://www.icm.csic.es/es/servicio/colecciones-geologicas-marinas-de-referencia-cgmr-icm	Ptl	F	F	Ptl	F	Ptl	F	Basis: Potentially relevant legacy evidence is described only at coarse catalogue level. Gap: No testable geometry or configuration. Next: Locate the primary campaign archive and spatial index.
GOC-003	EMODnet HR-DTM Atlantic Gulf of Cadiz 60 m; FRAME-MCS; FRAME-OBS; INSIGHT_LEG2 https://data.utm.csic.es/geonetwork/srv/eng/catalog.search#/metadata/urn:SDN:CSR:LOCAL:29SG20190930	P	P	Ptl	Ptl	Ptl	Ptl	F	Basis: Native geometry exists; configuration and results require target-level interpretation. Gap: No adequate archaeological negative result. Next: Link settings and target outcomes to individual lines.
GOC-004	RV METEOR cruise M167 multibeam and companion Parasound https://doi.org/10.1594/PANGAEA.938121 ; https://doi.org/10.1594/PANGAEA.938124	P	P	P	F	F	P	F	Basis: Technically documented dataset is usable for its original purpose. Gap: Not designed for the primary prehistoric-context target. Next: Retain as contextual/control evidence only.
GOC-005	RV Maria S. Merian cruise MSM36 gridded multibeam https://doi.org/10.1594/PANGAEA.893200	P	Ptl	Ptl	F	F	P	F	Basis: Source and some spatial information are available. Gap: Target mismatch and incomplete native geometry. Next: Use only for contextual comparison.
GOC-006	RC2912 SeaBeam multibeam and processed trackline geophysics https://www.ngdc.noaa.gov/ships/robert_d_conrad/RC2912_mb.html ; https://doi.org/10.1594/IEDA/315260	P	P	Ptl	Ptl	Ptl	P	F	Basis: Geometry is testable; configuration and controlled results remain partial. Gap: No adequate target-specific outcome register. Next: Recover acquisition settings and observation-level interpretations.
GOC-007	Duarte et al. Gulf of Cádiz seismic-oceanography dataset https://doi.org/10.5281/zenodo.14887001	P	P	P	F	F	P	F	Basis: Well-documented technical source. Gap: Not designed for the primary target. Next: Retain as contextual/control evidence only.
GOC-008	IODP Expedition 339 Mediterranean Outflow https://publications.iodp.org/preliminary_report/339/339pr_6.htm	P	P	Ptl	Ptl	Ptl	P	F	Basis: Native geometry is available and technically useful. Gap: Partial settings and target-outcome mapping. Next: Create observation units tied to line-level configuration.
GOC-009	MOUNDFORCE-2007; MVSEIS-2008 (29HE20080516/HE-129); SUBVENT-2 https://www.frontiersin.org/journals/earth-science/articles/10.3389/feart.2021.653639/full	P	Ptl	Ptl	Ptl	F	Ptl	F	Basis: Relevant source metadata exist. Gap: No controlled target-level results and only partial geometry. Next: Request native files and result register.
GOC-010	Cádiz Bay navigation-channel deepening archaeological geophysics https://www.puertocadiz.com/download/memoria-preliminar-y-final-de-la-actividad-arqueologica-preventiva-de-prospeccion-arqueologica-sub-acuatica-dragado-de-canal-de-acceso/?refresh=6a036cc46fef61778609348&wpdmdl=11897	P	Ptl	Ptl	F	Ptl	Ptl	F	Basis: 2019 geophysical targets and 2024 diver outcomes can be linked for ten points. Gap: Primary T1/T2 target mismatch; 2019 effort metrics incomplete. Next: Use ten linked records as T3 calibration, not prehistoric absence evidence.
GOC-011	Campamento dry-dock dredging preventive survey, San Roque https://www.juntadeandalucia.es/cultura/tabula/bitstream/20.500.11947/20065/1/AAA_2014_077_rojasroca_diquesecocampamento_cadiz_borrador.pdf	P	Ptl	Ptl	Ptl	Ptl	Ptl	F	Basis: Potentially relevant observations are described. Gap: Geometry, settings and controlled results are only partial. Next: Recover native records and define observation units.

ID	Evidence family and source locator	Metadata	Geometry	Config.	Target fit	Result	Reuse	Adequate negative	Basis, decisive gap and next action
GOC-012	Camposoto underwater archaeological surveys; 2009 preventive survey and 2010-2011 IAPH-CAS follow-up https://www.juntadeandalucia.es/cultura/tabula/handle/20.500.11947/21881	P	Ptl	Ptl	F	Ptl	Ptl	F	Basis: Positive T3 archaeological observations are documented. Gap: Does not test the primary buried prehistoric target; acquisition geometry is incomplete. Next: Use as positive T3 calibration and request original records.
GOC-013	HERAKLES Bay of Algeciras/Strait campaigns; El Saladillo SES-2000 survey https://www.mdpi.com/2077-1312/14/10/943	P	Ptl	Ptl	P	P	Ptl	F	Basis: Published shallow profiles detect a palaeochannel. Gap: Digital navigation, exact settings and raw profiles are unavailable. Next: Request primary data; retain positive T1 calibration.
GOC-014	VESTIGIUM intertidal archaeological project https://www.juntadeandalucia.es/organismos/iaph/servicios/actualidad/noticias/detalle/487216.html	Ptl	F	F	Ptl	F	Ptl	F	Basis: Catalogue-level evidence suggests relevance. Gap: No testable spatial footprint or configuration. Next: Locate primary archive and metadata.
GOC-015	CAS/IAPH DOCUSUB and underwater intervention archive https://www.juntadeandalucia.es/organismos/culturaydeporte/servicios/directorio-instituciones/detalle/2820.html	Ptl	F	F	Ptl	F	Ptl	F	Basis: Catalogue-level and restricted information indicate possible relevance. Gap: No testable geometry/configuration and access is constrained. Next: Pursue custodian route and usage terms.
GOC-016	Port of Huelva periodic bathymetry, dredging and geotechnical archive; expedientes 535, 533 and ORD/IN/0731.1 plus Recinto 4 and maintenance/deepening projects https://www.boe.es/diario_boe/txt.php?id=BOE-B-2024-6634	Ptl	F	F	Ptl	F	Ptl	F	Basis: Source family is known at catalogue level. Gap: No testable geometry, settings or outcomes. Next: Recover primary survey documentation.
GOC-017	Port of Algeciras 2018-2019 PDI environmental-geophysical package and related project archive https://puertodealgeciras.sede.gob.es/	P	F	Ptl	Ptl	F	Ptl	F	Basis: Campaign identity and some technical metadata are known. Gap: No recoverable in-mask observation geometry or controlled result. Next: Request spatial index and event files.
GOC-018	Spanish Navy Hydrographic Institute survey archive; MBAR24 https://cdihm.cnig.es/CentroDescargasIHM/home	P	P	Ptl	Ptl	P	P	F	Basis: Derived bathymetric coverage is quantified across the study mask. Gap: Fused product lacks source-survey effort and cannot support archaeological absence. Next: Use for regional morphology; recover source-survey metadata.
GOC-019	Cádiz Bay channel anomaly verification preventive archaeological survey https://www.puertocadiz.com/download/memoria-preliminar-y-final-de-la-actividad-arqueologica-preventiva-de-prospeccion-arqueologica-sub-acuatica-dragado-de-canal-de-acceso/?refresh=6a036cc46fef61778609348&wpdmdl=11897	P	P	Ptl	F	P	Ptl	F	Basis: Ten anomaly points have controlled 2024 diver outcomes. Gap: T3 target mismatch and incomplete effort metrics. Next: Use as T3 detection/non-relocation calibration only.
GOC-020	MOWER research cruise 29SG20140901 https://doi.org/10.20351/29SG20140901	P	Ptl	Ptl	Ptl	F	Ptl	F	Basis: Cruise metadata and ship navigation are recovered. Gap: Sensor-on geometry, event table and primary files remain inaccessible. Next: Obtain PI authorisation and request a reduced in-mask package.
GOC-021	MARINE_POLICY legacy GIS package: hydrocarbon-borehole points, terrain/context layers and prior model products Local package supplied privately; historical source recorded in metadata: http://www.mityc.es/energia/petroleo/Exploracion/Mapa/Paginas/mapaSondeos.aspx	P	P	F	F	F	Ptl	F	Basis: Legacy GIS layers and 34 borehole points are spatially recoverable. Gap: No survey configuration, drill logs or target-level outcomes; credentials and rights require control. Next: Sanitize projects and request drill-level logs, chronology and reuse terms.

Source: frozen Gulf of Cádiz survey-observation inventory and evidence-readiness gate register. Full locators are retained to support independent archive recovery.