REFERENCIAS BIBLIOGRÁFICAS

Acha, E.M., Mianzan, W.H., Guerrero R.A., Favero, M. y Bava, J., 2004. Marine Fronts and the continental shelves of Austral South America, Physical and ecological processes. Journal of Marine Systems, 44: 83-105.

Akaprahamyan, R. ,1991. Estudio de la circulación inducida por el viento en el Golfo San Matías aplicando el modelo COX/CIMA. Tesis de Licenciatura. Instituto tecnológico de Buenos Aires.

Amoroso, R.O., 2004. Heterogeneidad espacial en la dinámica de la metapoblación de vieira tehuelche (*Aequipecten tehuelchus*) del golfo San Jose´. Chubut, Argentina: Universidad Nacional de la Patagonia San Juan Bosco. Tesis de Licenciatura, 55p.

Amoroso, R., Gagliardini, A., 2010. Inferring complex hydrographic processes using remote-sensed images: turbulent fluxes in the patagonian gulfs and implications for scallop metapopulation dynamics. J. Coastal Res. In press

Anderson, D.M., 1997. Bloom dynamics of toxic Alexandrium species in the northeastern U.S., Limnol. Oceanogr., 42: 1009-1022.

Backhaus, J. O., 1983. A semi-implicit scheme for shallow water equations for applications to shelf sea modelling. Continental Shelf Research, 2, 243-254,.

Bakun A. y R.H. Parrish, 1991 Comparative studies of coastal pelagic fish reproductive habitats: the anchovy (Engraulis anchoita) of the southwestern Atlantic, ICES J. Mar. Sci., 48: 343-361.

Barnier, 1998, Forcing the ocean, In Ocean modelling and parameterization, Chassingnet and Verron, eds Kluwer Academic Publishers, pp. 45-80.

Barros, V.R. y Krepper, C.M. 1977. Modelo estacionario del Golfo Nuevo. Acta Oceanographica Argentina, 1 (2): 11-29.

Bennett A. F., and P. E. Kloeden, 1978: Boundary conditions for limited-area forecasts. J. Atmos. Sci., 35, 990–996.

Bogazzi E, A Baldoni, A Rivas, P Martos, R Reta, JM Orensanz, M Lasta, P Dell' Arciprete & F Werner. 2005. Spatial correspondence between areas of concentration of Patagonian scallop (Zygochlamys patagonica) and frontal systems in the Southwestern Atlantic. Fisheries Oceanography 14(5): 359-376.

Brandhorst W & JP Castello. 1971. Evaluación de los recursos de anchoíta (Engraulis anchoita) frente a la Argentina y Uruguay. I. Las condiciones oceanográficas, sinopsis de conocimiento actual sobre la anchoíta y el plan para su evaluación. Proyecto de Desarrollo Pesquero FAO 29: 1-63.

Bryan, K., 1969. A numerical method for the study of the circulation of the world ocean. J. Comput. Physics, 4 :347-376.

Carreto J.I., C.A. Verona, A.B. Casal and M.A. Laborde, 1974. Fitoplancton, pigmentos y condiciones ecológicas del golfo San Matías III. Instituto de Biología Marina de Mar del Plata, Informe N° 10. Contribución 237, CIC pcia. de Buenos Aires, 10: 49-76.

Carreto, J.I., H. Bevídes, R. Negri and P.D. Glorioso. 1986. Toxic red tide in the Argentine Sea. Phytoplankton distribution and survival of the toxic dinoflagellate Gonyaulax excavata in a frontal area. J. Plankton ReS., 8: 15-28.

Carreto, J. I., N. G. Montoya, D. Cucchi Colleoni and R. Akselman. 1998, Alexandrium tamarense blooms and shellfish toxicity in the Argentine Sea: A retrospective view. In: B. Reguera, J. Blanco, M.L. Fernández and T. Wyatt (eds.) Harmful Algae, pp. 131-134. UNESCO.

Charpy, L.J., C.J. Charpy-Roubaud y M.J. Pizarro, 1980. La production primaire des aux du Golfe San José (Péninsule Valdés, Argentine). I. Parametres physiques et teneurs en sels miéraux. Hydrobiologia, 75 (3): 209-214.

Chen P. and G. L. Mellor, 1994. Dertermination of Tidal Boundary forcing Using Tide Station Data, in Coastal Ocean Prediction, Coastal and Estuarine Studies 56:329-351.

Ciechommski, J.D. De & Weiss, G. 1974. Estudios sobre la alimentación de larvas de la merluza, Merluccius hubbsi y de la anchoíta, Engraulis anchoita, en el mar. Physis, Secc. A, 33 (86): 199-208.

Ciocco, N.F.; Lasta, M.L.; Narvarte, M.; Bremec, C.; Bogazzi, E.; Valero, J., and Orensanz, J.M., 2006. Argentina. *In*: Shumway, S. And Parsons, G.J. (eds.), *Scallops: Biology, Ecology and Aquaculture,*2nd edition. Amsterdam, the Netherlands: Elsevier, pp. 1251–1292.

Conkright, M.E., R.A. Locarnini, H.E. Garcia, T.D. O Brien, T.P. Boyer, C. Stephens, J.I. 22 Antonov, 2002. World Ocean Atlas 2001: Objective Analyses, Data Statistics, and Figures, CD-ROM Documentation. National Oceanographic Data Center, Silver Spring, MD, 17 pp.

Cox, M. D., 1984. A primitive equation three-dimensional model of the ocean. Report, GFDL Ocean Group, NOAA, Princeton Univ., Princeton, NJ.

Csanady G.T.1973, Wind-Induced Barotropic Motions in Long Lakes. J. Phys. Oceogr. V.3, pp 429-438.

Csanady G.T.,1982. Circulation in the coastal ocean.Reidel. Dordrecht, 279p.

Da Silva, A.M., Young, C.C., Levitus, S, 1994. Atlas of surface marine data 1994, Vol. 1, algorithms and procedures, NOAA Atlas NESDIS 6, U. S. Department of Commerce, NOAA, NESDIS, USA, 74 pp.

Daan, N., et al. 1990, Ecology of the North Sea. Neth. J. Sea Res., 26: 342-386.

Davies and Hall, 2000. The response of the North Channel of the Irish Sea and Clyde Sea to wind forcing. Continental Shelf Research, Volume 20, 8, pp. 897-940(44).

Davies, A. M. and Lawrence, J., 1994. Examining the influence of wind and wave turbulence on tidal currents, using a three-dimensional hydrodynamic model including wave-current Interaction. J. Phys. Oceanogr., 24, 2441-2460

Egbert G. D., A F Bennett, M G G Foreman, 1994. Topex/Poseidon tides estimated using a global inverse model, J. Geophys. Res., 99, 24821-52.

Ezer, T. and G. L. Mellor., 1992. A numerical study of the variability and the separation of the Gulf Stream induced by surface atmospheric forcing and lateral boundary flows, J. Phys. Oceanogr. 22: 660-682.

Flather R. A., 1976: A tidal model of the northwest European continental shelf. Memo. Soc. Roy. Sci. Liege, **6**, 141–164, 10.

Framiñan, M. B., C. F. Balestrini, A. A. Bianchi, G. Demilio, and A. R. Piola. 1991. Datos CTD y series temporales de velocidad, temperatura y conductividad en el golfo San Matías. Servicio de Hidrografía Naval, Informe Técnico N°63/1991, Argentina.

Forbes, M. C., and Z. D. Garraffo, 1988. A note on the mean seasonal transport on the Argentinean shelf, J. Geophys. Res., 93, 2311 –2319.

Gagliardini, D. A. and A. L. Rivas. 2004. Environmental characteristics of San Matías Gufl obtained from LANDSAT-TM and ETM+data. Gayana (Concepc.) 68/2:186–193.

Gagliardini, D. A, Amoroso, R., Dell' Arcipriete, P., Yorio, P. and Orensanz, J. M. 2004. Detection of small-scale coastal oceanographic processes through Landsat-TM/ETM+ images: implications for the study of biological processes along the Patagonian coasts of Argentina. Gayana. 68 (2): 194-200

Gallagher, B.S., Shimada, K.M., Gonzalez Jr., F.I., Stroup, E.D.,1971. Tides and currents in fanning atoll lagoon. Pacific Science 25, 191–205.

Gargett, A. E. and G. Holloway. 1984: Dissipation and diffusion by internal wave breaking. J. Mar. Res., 42, 15-27.

Glorioso, P. D. 1987. Temperature distribution related to shelf-sea fronts on the Patagonian shelf. Continental Shelf Research 7/1:27–34.
Glorioso, P. D., and R. A. Simpson, 1994. Numerical modelling of the M2 tide on the northern Patagonian Shelf, Cont. Shelf Res., 14:267–278,.

Glorioso, P. D., and R. A. Flather,1995. A barotropic model of the currents off SE South America, J. Geophys. Res., 100:13,427– 13,440.

González, R. 2003. Propuesta de medidas de manejo complementarias para una gestión sustentable de la pesquería de merluza común Merluccius hubbsi y otras especies demersales del Golfo San Matías. Informe Técnico IBMP Nº 06/03: 5 pp.

González, R.; Narvarte M. y E. Morsan. 2004. Estado de situación de los recursos pesqueros del Golfo San Matías, sus pesquerías, especies asociadas y ambiente: informe ad hoc para la evaluación preliminar de las pesquerías marinas de Río Negro con vistas a la certificación de su sustentabilidad. Informe Técnico IBMP Nº 03/04: 51 pp.

Glorioso, P. D., and R. A. Flather, 1997. The Patagonian Shelf tides, Prog. Oceanogr., 40, 263–283.

Greenberg, D.A., J.W. Loder, Y. Shen, D.R. Lynch and C.E. Naimie, 1997. Spatial and temporal structure of the barotropic response of the Scotian Shelf and Gulf of Maine to surface wind stress: a model-based study. J. Geophys. Res. 102: 20,897-20,915

Guerrero, R.A. y A.R. Piola, 1997, Masas de agua, El mar argentino y sus Recursos Pesqueros, Instituto Nacional de Investigación y Desarrollo Pesquero, Secretaría de Agricultura, Ganadería, Pesca y Alimentación, Argentina, 1:107:118.

Haidvogel, D. B., J. L. Wikin, and R. Young, 1991: A semi-spectral primitive equation model using vertical sigma and orthogonal curvilinear coordinates. J. Comput. Phys., 94, 151–185.

Haidvogel, D.B., and A. Beckmann, 1998: Numerical modeling of the coastal ocean. In: K.H. Brink and A.R. Robinson (Eds.), The Sea, Vol. 10, 457-482.

Hellerman, S., and M. Rosenstein, 1983: Normal monthly wind stress over the world ocean with error estimates. J. Phys. Oceanogr., 13, 1093-1104.

Hill, A. E., J. Brown and L. Fernand, 1997. The Summer Gyre in the Western Irish Sea: Shelf Sea Paradigms and Management Implications. Estuarine Coastal and Shelf Science 44 A, 83-95.

HÖFLICH, O. 1984. Climate of the South Atlantic Ocean. In:H. van Loon (Ed.). Climates of the oceans. World survey of climatology 15: 1–195. Amsterdam: Elsevier.

Horsburgh K. J., A. E. Hill, J. Brown, L. Fernand, R. W. Garvine, and M. M. P. Angelico, 2000: Seasonal evolution of the cold pool gyre in the western Irish Sea. Progress in Oceanography, Vol. 46, Pergamon, 1–58.

Hunter, J.R, P.D. Craig, and H.E. Philips, 1993: On the use of random walk models with spatially variable diffusivity, Journal of Computational Physics, 106, 366-376.

Kalnay, et al. 1996, The NCEP/NCAR 40-Year Reanalysis Project. Bulletin of the American Meteorological Society

Khanta, L. H., 1995. Barotropic tides in the global oceans from a nonlinear tidal model assimilating altimetric tides. 1. Model description and results. J. Geophys. Res., 100, 25283-25308.

Kantha L. H., and C. A. Clayson, 2000. Numerical Models of Oceans and Oceanic Processes. Academic Press. pp. 940.

Kantha L. H., and C. A. Clayson, 2004: On the effect of surface gravity waves on mixing in the oceanic mixed layer. Ocean Modell., **6**, 101–124.

Kritzer JP, Sale PF, 2006. The metapopulation ecology of coral reef fishes. In Marine metapopulations. Edited by: Kritzer JP, Sale PF. Amsterdam, Academic Press;:31-68.

Kundu, P.K., 1994, Fluids Mechanics, Elsevier, 759 pp.

Large, W. G., J. C. McWilliams, and S. C. Doney, 1994: Oceanic vertical mixing: A review and a model with a nonlocal boundary layer parameterization. Rev. Geophys., 32, 363–403.

LeBlond, P.H., and L.A. Mysak, 1978. Waves in the Ocean, 602 pp., Elsevier, New York.

Le Fèvre, J., 1986. Aspects of the biology of frontal systems. Adv. Mar. Biol. 23, 163– 299.

Loder y Greenberg, 1986. Predicted positions of tidal fronts in the Gulf Of Maine regions, Cont. Shelf Res., Vol 6, No 3, pp. 397-414.

Lucas, A. J., Guerrero, R.A., Mianzan, M.W., Acha, E.M., y Lasta, C.A., 2005, Coastal oceanographic regimes of the Northern Argentine Continental Shelf (34-43ºS), Estuarine Coastal and Shelf Science 65, 405-420, oi:10.1016/j.ecss.2005.06.015.

Lusquiños, A. & Schorott, A. G. 1983. Corrientes en el Mar Epicontinental Argentino en invierno. Subsecr. Cienc. Tecnol., pp. 1-74.

Lynch, D. R., and C. E. Naimie, 1993. The M_2 tide and its residual on the outer banks of the Gulf of Maine, J. Phys. Oceanogr., 23**,** 2222–2253

Lynch, J. Ip, C. Naimie, and F. Werner, 1996: Comprehensive coastal circulation model with application to the Gulf of Maine. Contin. Shelf Res., 16, 875–906.

Marchesiello, P., J. C. McWilliams, and A. Shchepetkin, 2001. Open boundary conditions for long-term integration of regional oceanic models. Ocean Modelling., 3:1–20.

Mazio, C. A. , Walter C. Dragani, Fernando J. Caviglia, and Jorge L. Pousab, 2004. Tidal Hydrodynamics in Golfo Nuevo, Argentina, and the Adjacent Continental Shelf, Journal of Coastal Research, 20 (4): 1000–1011.

Mellor, G. L., and T. Yamada, 1982: Development of a turbulence closure model for geophysical fluid problems. Rev. Geophys. Space Phys., 20, 851–875.

Mellor, George L. 1996. Introduction to Physical Oceanography. New York, NY: Springer-Verlag. 300 pp.

Menni, R.C. 1983. Los peces en el medio marino. Estudio Sigma, Bs.As.

Mianzan, H. 2008, comunicación personal.

Moreira, D., Simionato, C.G., Dragani, W.C. and Nuñez, M.N., 2009. Tidal and residual currents observations at San Matías and San José gulfs, Northen Patagonian, Argentina. Journal of Coastal Research, 08-1035.

Narvarte, M. 2004. Growth and survival of the tehuelche scallop Aequipecten tehuelchus in culture. Aquaculture, 216: 127-142.

Ocampo- Reinaldo, M. et al. 2008. Distribution patterns of the Argentine hake Merluccius hubbsi in San Matías Gulf as inferred from the fishing fleet activity and remote sensing data, 4th, Aquarius/SAC-D science workshop, Puerto Madryn, 2008.

Orensanz JM, M Pascual & M Fernández. 1991. Argentina. En: SE Shumway (ed) Scallops: Biology, ecology and aquaculture, pp. 981-999. Elsevier, Amsterdam.

Orlanski I., 1976: A simple boundary condition for unbounded hyperbolic flows. J. Comput. Phys., 21, 251–269.

Panella S., Michelato A., Perdicaro R., Magazzu G., Decembrini F., Scarazzato P., 1991, A preliminary contribution to understanding the hydrological characteristics of the Strait of Magellan: austral spring 1989, Bollettino di Oceanologia Teorica ed Applicata (2–3 special issue), 107–126.

Palma, E. D., and R. P. Matano, 1998. On the Implementation of passive Open Boundary Conditions for a General Circulation Model: The Barotropic Mode. Journal of Geophysical Research, 103, 1319-1341.

Palma E.D. y R.P. Matano, 2000. On the implementation of open boundary conditions for a General Circulation Model: The three dimensional case, J. of Geophys. Res., 105, 8605-8627.

Palma, E. D., 2002. "Tidal Flow and Tidal Energy in Valdés Peninsula". Revista Geofísica (México) (1): 31-50.

Palma, E.D., R.P. Matano y A.R. Piola, 2004a, Three dimensional barotropic response of the southwestern Atlantic shelf circulation to tidal and wind forcing, J. Geophys. Res., 109, C08014, doi:10.1029/2004JC002315.

Palma, E.D., R.P. Matano, A.R. Piola y L.E. Sitz, 2004b, A comparison of the circulation patterns over the Southwestern Atlantic Shelf driven by different wind climatologies, Geophys. Res. Lett, 31, L24303, doi:10.1029/2004GL021068.

Palma, E.D., R.P. Matano y A.R. Piola, 2008, A numerical study of the Southwestern Atlantic Shelf circulation: Stratified ocean response to local and offshore forcing, J. Geophys. Res., 113, C11, doi:10.1029/2007JC004720.

Park, M. J. and D. P. Wang, 1994. Tidal vorticity over isolated topographic features, Cont. Shelf Res., Vol 14, No 13/14, pp. 1583-1599.

Pitcher, et al., 1998. Subsurface dinoflagellate populations, frontal blooms and the formation of red tide in the southern Benguela upwelling system. Mar. Ecol. Prog. Se., 172:253-264.

Piccolo M.C., 1998. Oceanography of the western South Atlantic Continental Shelf from 33 to 55°S, The sea: The Global Coastal Ocean.Regional Studies and Synthesis., A. Robinson and K. Brink, eds, Vol 11, Chapter 9, pp 253-271.

Pingree R.D., 1978. The formation of the Shambles and other banks by tidal stirring of the seas, Journal of the Marine Biological Association, UK 58: 211–226.

Pingree R. D. and Maddock L., 1985. Rotary current and residual circulation around banks and islands, Deep-Sea Research, 32:8: 929-947.

Piola A.R. y Scasso L. M., 1988. Circulación en el Golfo San Matías. Geoacta, 15 (1): 33-51.

Piola A. R. y A.L. Rivas, 1997. Corrientes en la Plataforma Continental, en El Mar Argentino y sus Recursos Pesqueros, Editor: E.E. Boschi, INIDEP, Tomo 1, (119: 132).

Pisoni, J.P., 2008, comunicación personal.

Pisoni J. P., G. Williams, R. Amoroso y D. A. Gagliardini, 2008. Near-shore Frontal Systems in the Patagonian Shelf Using High and Low Resolution Temperature Data. 4th Science Workshop Aquarius SAC-D. Diciembre de 2008. Puerto Madryn, Argentina.

Pugh D.T., 1987. Tides, Surges, and Mean Sea-Level, Chichester: John Wiley & Sons,.

Ridderinkhof, H., 1989: Tidal and residual flows in the Western Dutch Wadden Sea: Vorticity balances. Neth. J. Sea Res., 24, 9–16..

Risien, C. M., and D. B. Chelton, 2008: Global climatology of wind stress and wind stress derivative fields from 7 years of QuikSCAT scatterometer data. J. Phys. Oceanogr., 38, 2379–2413.

Rivas, A., 1990. Analisis estacional de la estructura termohalina en el Golfo San José, Argentina. GEOACTA, Vol. 17, n1 pp 33-48.

Rivas, A. y P. Ripa, 1985 Seasonal heat and fresh water budget in Golfo Nuevo, Argentina. EOS Transactions, American Geophysical Union, 66(18): 288. Washington D.C.

Rivas, A.L., 1989. Corrientes originadas por la acción del viento y la marea en el Golfo Nuevo. Geoacta, 16: 185-205.

Rivas, A.L. y Beier, E,J., 1990. "Temperatura and salinity fields in the nortpatagonic gulfs", Oceanologica Acta, 13: 15-20.

Rivas, A.L., 1994. Spatial variation of the annual cycle of temperatura in the patagonian shelf between 40 and 50º of the south latitude. Cont. Shelf Res., 14: 1539-1554.

Rivas, A. L., and A. Frank Langer, 1996. Mass and heat transport in the Argentine continental shelf, Cont. Shelf Res., 16, 1283–1285.

Rivas, A. L., 1997. Current meter observations in the Argentine continental shelf", Cont. Shelf Res., 17, pp. 391-406.

Rivas, A. L., 2006. Quantitative estimation of the influence of surface thermal fronts over chlorophyll concentration at the Patagonian shelf. Journal of Marine Systems 63 : 183–190.

Rivas, A.L. y P. Dell'Arciprete., 2000. Frentes térmicos en la plataforma Patagónica inferidos a partir de datos satelitales". IV Jornadas Nacionales de Ciencias del Mar, Resúmenes, Pto. Madryn (Argentina), 107.

Robinson, I. S. , 1983. Tidally induced residual flows , in Physical oceanography of coastal and shelf seas, B. Johns, editor, Elsevier, Amsterdam, pp. 321-356.

Romero, S. L., A. R. Piola, M. Charo and C. E. García, 2006. Chlorophyll-a variability off Patagonia based on SeaWiFS data, J. Geophys. Res.,111, C05021, doi:10.1029/2005JC003244.

Sabatini, M., Martos, P., 2002. Mesozooplankton features in a frontal area off northern Patagonia (Argentina) during spring 1995 and 1998. Scientia Marina 66 (3): 215–232.

Scarabino V., 1977. Moluscos del Golfo San Matías (Provincia de Río Negro, República Argentina). Inventario y claves para su identificación. comunicaciones de la Sociedad Malacológica del Uruguay 4: 177-285.

Scasso, L.M.L. y Piola, A.R., 1988. Intercambio neto de agua entre el mar y la atmósfra en el Golfo San Matías. Geoacta, 15 (1): 13-31.

Shchepetkin, A.F. y McWilliams, J.C., 2005. The regional oceanic modeling system

(ROMS): a split-explicit, free-surface, topography-following-coordinate oceanic model. Ocean Modelling , 9 :347–404.

Simonato, C.G.,Dragani, W., Nuñez, M. y Engel, M. , 2004. A Set of 3-D Nested Models for Tidal Propagation from the Argentinean Continental Shelf to the Río de la Plata Estuary – Part I. M2, Journal of Coastal Research, 20 (3): 641-936.

Simpson, J.H., and J. Hunter, 1974: Fronts in the Irish Sea. Nature 250, 404-406.

Simpson, J. H., 1981; The Shelf-sea fronts: Implications of their existence and behavior. Philos. Trans. Roy. Soy. London, A302, 531-546.

Sinclair, M. 1987. Marine populations: An essay on population regulation and speciation. Books in Recruitment Fishery Oceanography. Univ. Washington Press, Seattle. 252 p.

Tartinville, B., Deleersnijder, E., Lazure, P., Proctor, R., Ruddick, K.G., Uittenbogaard, R.E., 1998. A coastal ocean model intercomparison study for a three-dimensional idealised test case. Applied Mathematical Modelling 22, 165–182.

Tonini, M, E. D. Palma, and A. Rivas, 2006. Modelo de alta resolución de los Golfos Patagónicos. en Mecánica Computacional XXV, Cardona, Nigro, Sonzogni y Storti Eds, AMCA, Santa Fé, 25: 1461-1479.

Umlauf, L., and H. Burchard, 2003. A generic length-scale equation for geophysical turbulence models, J. Mar. Res., 61, 235–265.

Vallis, G.K., 2006. Atmospheric and oceanic fluid dynamics: fundamentals and large-scale circulation. CUP,745 pp.

Xu, Z., 2002. Ellipse parameters conversion and velocity profiles for tidal currents in Matlab. Maurice-Lamontagne Institute, Quebec, Canada. 28 pp.

Zimmerman, J.T.F., 1978. Topographic generation of residual circulation by oscillatory (tidal) currents. Geophys. Astrophys. Fluid Dyn., 11: 35–47.

Zimmerman, J. T. F., 1980: Vorticity transfer by tidal currents over an irregular topography. J. Mar. Res., 38, 601–630.

Zyryanov, V.N. & D.N. Severov, 1979. Water circulation in the Falkland-Patagonia region and its seasonal variation. Oceanology. 19(5): 518-522.