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United Kingdom

## Carl L. Amos, PhD

### Education

### Thesis

### Research Experience

*Mar 1999 – present* **Professor (Full)**

National Oceanography Centre, Southampton, Ocean and Earth Science  
Programme  
Southampton, United Kingdom

The coastal group is made up of specialists in coastal morphodynamics, coastal oceanography and numerical modelling. A review of these activities can be found on our blog site: [mscecesoton.wordpress.com](http://mscecesoton.wordpress.com)

*Mar 1974 – Mar 1999*

Bedford Institute of Oceanography,  
Dartmouth, Canada

### Statistics

*RG Score* 34.89

*Publications* 158

*Total Impact Points* 172.29

*Views* 6k

*Downloads* 4,082

*Citations* 1257

## Awards & Grants

## Skills & Activities

<i>Skills</i>	Sediments, Navigation, Hydraulics, Sediment Transport, Coastal Geomorphology, Coastal Processes, Computer Programming, Environment, Earth Sciences, Quaternary Geology, Sedimentology, Marine Geology, Surveying, Hydrology, Oceanography, small boat operation, Coastal Research and Management
<i>Languages</i>	French, Italian
<i>Scientific Memberships</i>	International Association of Sedimentologists American Geophysical Union Coastal and Estuarine Research Federation Estuarine & Coastal Sciences Association
<i>Interests</i>	Coastal sediment dynamics (the nuts and bolts) Sea surface temperature trends Human impacts in the coastal zone

## Publication Highlights

[authors]: [title]. [details]

### Books

Amos C.L. and Long, B.F.N: *The Sedimentary Character of the Minas Basin, Bay of Fundy..* edited by B. McCann, 01/1980; Maritime Sediments.

Amos CL: *Submersible observations of Quaternary sediments and bedforms on the Scotian Shelf.* Paper 88-20, 9-26 edited by Piper DJW; Geological Survey of Canada.

### Book Chapters

Helsby R, Amos CL, Umgiesser G: *Tidal prism variation and associated channel stability in N. Venice lagoon.* 01/2008: pages 453-466;

Kovacevic V, Defendi V, Zaggia L, Costa F, Arena F, Simionato F, Mazzoldi A, Gacic M, Amos CL: *Time-series of suspended particle concentration from the conversion of acoustic backscatter at the Lido inlet.* 12/2007: pages 315-329;

DePascalis F, Umgiesser G, Ferrarin C, Amos CL: *Sediment transport model application to Lido inlet and Treporti canal.* 12/2006: pages 349-364;

Ferrarin C, Umgiesser G, Amos CL: *A 3-D sediment transport model and bed reworking for the Venice lagoon.* 12/2006: pages 491-506;

Helsby R, Amos CL, Umgiesser G: *Morphological evolution and sand pathways in northern Venice lagoon, italy.* 12/2006: pages 388-402;

Carl L. Amos, Helsby R, Thompson CEL, Villatoro M, Venturini V, Manca E, Mazzoldi A, Umgiesser G, Tosi L: *The origin of sand in Venice lagoon, the next step.* 01/2006: pages 429-452;

Brancolini G, Tosi L, Rizzetto F, Donda F, Baradello L, Nieto D, Fanzutti F, Wardell N, Teatini P, Amos CL, Bonardi M: *New very high resolution seismic surveys in shallow water to study the subsurface in the Venice lagoon.* 01/2006: pages 417-427;

Umgiesser G, Ferrarin C, De Pascalis F, Amos CL: *Modeling sand transport in a canal system, northern Venice lagoon.* 12/2005: pages 177-192;

Carl L. Amos, Helsby R, Umgiesser G, Mazzoldi A, Tosi L: *Sand transport in the northern Venice lagoon.* 12/2005: pages 369-383;

Albani A, Amos CL, Bergamasco A, Bonardi M, Bonsembiante N, Breda A, Carmel S, Coraci E, Cucco A, De Pascalis F, Donnici S, Ferrarin C, Friend PL, Helsby R, Rizzetto F, Sclavo M, Serandrei Barbero R, Strozzi T, Teatini P, Tosi L, Wegmuller U: *Hydrodynamics and morphology, CORILA 3.2.* 12/2005: pages 111-130;

Carl L. Amos, Friend PL: *Ripple Marks.* 01/2005: pages 813-814;

Carl L. Amos, Umgiesser G, Helsby R, Friend PL: *The origin of the sand in the Venice lagoon..* 01/2005: pages 161-176; , ISBN: 88-89405-09-0

Morgens R. Flindt, Joao Neto, Carl L. Amos, Miguel A. Pardal, Alessandro Bergamasco, Cathrine B. Pedersen, Frede ø. Andersen: *Plant Bound Nutrient Transport. Mass Transport In Estuaries And Lagoons.* 11/2004: pages 93-128;

Flindt M.R, Neto J.M, Amos C.L, Pardal M.A, Bergamasco A, Pedersen C.B, Andersen F.O: *Plant bound nutrient transport. Mass transport in estuaries and lagoons. In S.L. Nielsen, G.T. Banta & M.F. Pedersen (Eds.) The influence of primary producers on estuarine nutrient cycling: The Fate of Nutrient Biomass..* 01/2004: pages 93 - 128;

Carl L. Amos, Umgiesser G, Bonardi M, Cappucci S: *Sedimentation mechanisms in northern Venice lagoon.* 12/2002: pages 315-332;

Carl L. Amos: *Siliciclastic Tidal Flats.* 01/1995: pages 273-304;

Carl L. Amos, Tee KT, Zaitlin BA: *The post-glacial evolution of Chignecto Bay, Bay of Fundy, and its modern environment of deposition.* 03/1991: pages 59-89;

Amos CL, Barrie JV, Buckley DE, Dalrymple RW, D'Anglejan B, Davidson-Arnott R, Fader GB, Gillie R, HARper JR, Hill PR, Huntley DA, Josenahns HW, Keen MJ, Piper DJW, Syvitski JPM, Taylor BB, Taylor RB: *Chapter 11 - Modern Sedimentary Processes.* 02/1990: pages 611-673;

Carl L. Amos: *Physical Processes and Sedimentation in the Bay of Fundy.* 01/1980: pages 95-132;

Amos CL: *Sedimentation resulting from Fundy tidal power.* 01/1979: pages 173-179;

Amos CL: *Bottom photography and sediment analyses on CESAR.* pages 25-45;

## Journal Publications

A. Al-Ragum, M. Monge-Ganuzas, C.L. Amos, A. Cearreta, I. Townend, E. Manca: *An evaluation of the Rouse Theory for sand transport in the Oka estuary, Spain.* Continental Shelf Research 01/2014;

David A Feary, John A Burt, Andrew G Bauman, Shaker Al Hazeem, Mohamed A Abdel-Moati, Khalifa A Al-Khalifa, Donald M Anderson, Carl Amos, Andrew Baker, Aaron Bartholomew, Rita Bento, Geórgenes H Cavalcante, Chaolun Allen Chen, Steve L Coles, Koosha Dab, Ashley M Fowler, David George, Edwin Grandcourt, Ross Hill, David M John, David A Jones, Shashank Keshavmurthy, Huda Mahmoud, Mahdi Moradi Och Tapeh, Pargol Ghavam Mostafavi, Humood Naser, Michel Pichon, Sam Purkis, Bernhard Riegl, Kaveh Samimi-Namin, Charles Sheppard, Jahangir Vajed Samiei, Christian R Voolstra, Joerg Wiedenmann: *Critical research needs for identifying future changes in Gulf coral reef ecosystems..* Marine pollution bulletin 04/2013; 72(2):406.

David A. Feary, John A. Burt, Andrew G. Bauman, Shaker Al Hazeem, Mohamed A. Abdel-Moati, Khalifa A. Al-Khalifa, Donald M. Anderson, Carl Amos, Andrew Baker, Aaron Bartholomew, Rita Bento, Georgenes H. Cavalcante, Chaolun Allen Chen, Steve L. Coles, Koosha Dab, Ashley M. Fowler, David George, Edwin Grandcourt, Ross Hill, David M. John, David A. Jones, Shashank Keshavmurthy, Huda Mahmoud, Mahdi Moradi Och Tapeh, Pargol Ghavam Mostafavi, Humood Naser, Michel Pichon, Sam Purkis, Bernhard Riegl, Kaveh Samimi-Namin, Charles Sheppard, Jahangir Vajed Samiei, Christian R. Voolstra, Joerg Wiedenmann: *Critical research needs for identifying future changes in Gulf coral reef ecosystems.* Marine Pollution Bulletin 04/2013;

Amos CL, Al Rashidi T, Rakha K, El-Gamilly H, Nicholls RJ: *sea surface temperature trends in the coastal ocean.* Current developments in Oceanography. 01/2013;

Fay Couceiro, Gary R Fones, Charlotte E L Thompson, bullet Peter, J Statham, David B Sivyer, bullet Ruth, Parker @bullet, Boris A Kelly-Gerrey, Carl L @bullet, Amos: *Impact of resuspension of cohesive sediments at the Oyster Grounds (North Sea) on nutrient exchange across the sediment–water interface.* Biogeochemistry 01/2013; 113:37-52.

Amos C.L, Sutherland T.F, Marino, S. and Al Rashidi: *Sea surface temperature trends in the coastal zone of British Columbia, Canada.* Limnology and oceanography 12/2012;

E. Manca, I. Caceres, J. M. Alsina, V. Stratigaki, I. Townend, C. L. Amos: *Wave energy and wave-induced flow reduction by full-scale model Posidonia oceanica seagrass.* Continental Shelf Research 12/2012; Vol. 50-51:100-116.

Paul M, Bouma TJ, Amos CL: *Wave attenuation by submerged vegetation: combined the effect of organism traits and tidal current.* Marine Ecology Progress Series 01/2012; 444:31-41.

Vasiliki Stratigaki, Eleonora Manca, Panayotis Prinos, Inigo J. Losada, Javier L. Lara, Mauro Sclavo, Carl L. Amos, Iván Cáceres, Agustín Sánchez-Arcilla: *Large-scale experiments on wave propagation over Posidonia oceanica.* Journal of Hydraulic Research 12/2011; 49(Suppl. 1):31 - 43.

C E L Thompson, F Couceiro, G R Fones, R Helsby, C L Amos, K Black, E R Parker, N Greenwood, P J Statham, B A Kelly-Gerrey: *In situ flume measurements of resuspension in the North Sea.* Estuarine Coastal and Shelf Science 07/2011; 94:77-88.

- M Paul, C L Amos: *Spatial and seasonal variation in wave attenuation over Zostera noltii*. Journal of Geophysical Research 01/2011; 116.
- M. Paul, A. Lefebvre, E. Manca, C. L. Amos: *An acoustic method for the remote measurement of seagrass metrics*. Estuarine, Coastal and Shelf Science. 01/2011; 93:68-79.
- A Lefebvre, C E L Thompson, C L Amos: *Influence of Zostera marina canopies on unidirectional flow, hydraulic roughness and sediment movement*. Continental Shelf Research 09/2010; 30:1783-1794.
- John Shaw, Carl L. Amos, David A. Greenberg, Charles T. O'Reilly, D. R. Parrott, Eric Patton: *Catastrophic tidal expansion in the Bay of Fundy, Canada*. Canadian Journal of Earth Sciences 07/2010; 47(8):1079-1091.
- Carl L Amos, G Umgiesser, C Ferrarin, C E L Thompson, R J S Whitehouse, T F Sutherland, A Bergamasco: *The erosion rates of cohesive sediments in Venice lagoon, Italy*. Continental Shelf Research 01/2010; 30(8):859-870.
- C.L. Amos, G. Umgiesser, L.Tosi, I.H. Townend: *The coastal morphodynamics of Venice lagoon, Italy: An introduction*. Continental Shelf Research 01/2010; 30(8-ISSN 0278-4343):837-846.
- C.L. Amos, M. Villatoro, R. Helsby, C.E.L. Thompson, L. Zaggia, G. Umgiesser, V. Venturini, D. Are, T.F. Sutherland, A. Mazzoldi, F. Rizzetto: *The measurement of sand transport in two inlets of Venice lagoon, Italy*. Estuarine Coastal and Shelf Science 01/2010; 87(2):225-236.
- Christian Ferrarin, Andrea Cucco, Georg Umgiesser, Debora Bellafiore, Carl L. Amos: *Modelling fluxes of water and sediment between Venice Lagoon and the sea*. Continental Shelf Research 01/2010;
- Annelies Bolle, Zheng Bing Wang, Carl Amos, John De Ronde: *The influence of changes in tidal asymmetry on residual sediment transport in the Western Scheldt*. Continental Shelf Research 01/2010;
- Monique M Villatoro, Carl L Amos, Georg Umgiesser, Christian Ferrarin, Luca Zaggia, Charlotte E L Thompson, Daniele Are: *Sand transport measurements in Chioggia inlet, Venice lagoon: Theory versus observations*. Continental Shelf Research 08/2009; 30(8).
- Amos CL, Barrie JV, Judge JT: *Storm-enhanced sand transport in a macrotidal setting, Queen Charlotte Islands, British Columbia, Canada*. International Association of Sedimentologists. 01/2009; 24:53-68.
- Paul Carling, Jon Williams, Ian Croudace, Carl Amos: *Erratum: Carling, P.A., et al., Formation of mud ridge and runnels in the intertidal zone of the Severn Estuary, UK*. Continental Shelf Research (2009), doi:10.1016/j.csr.2008.12.009. Continental Shelf Research 01/2009; 29(14):1756-1756.
- P. A. Carling, J. J. Williams, I. W. Croudace, C. L. Amos: *Formation of mud ridge and runnels in the intertidal zone of the Severn Estuary, UK*. Continental Shelf Research 01/2009; 29:1913-1926.
- A. Lefebvre, C.E.L. Thompson, K.J. Collins, C.L. Amos: *Use of a high-resolution profiling sonar and a towed video camera to map a Zostera marina bed, Solent, UK*. Estuarine Coastal and Shelf Science 01/2009;
- Urs Neumeier, Christian Ferrarin, Carl L. Amos, Georg Umgiesser, Michael Z. Li: *Sedtrans05: An improved sediment-transport model for continental shelves and coastal waters with a new algorithm for cohesive sediments*. Computers & Geosciences 10/2008; 34(10):1223-1242.

- Christian Ferrarin, Georg Umgiesser, Andrea Cucco, Tai-Wen Hsu, Aron Roland, Carl L. Amos: *Development and validation of a finite element morphological model for shallow water basins*. Coastal Engineering. 01/2008;
- F. Bourrin, P.L. Friend, C.L. Amos, E. Manca, C. Ulses, A. Palanques, X. Durrieu de Madron, C.E.L. Thompson: *Sediment dispersal from a typical Mediterranean flood: The Têt River, Gulf of Lions*. Continental Shelf Research. 01/2008;
- Jon J. Williams, Paul A. Carling, Carl L. Amos, Charlie Thompson: *Field investigation of ridge-runnel dynamics on an intertidal mudflat*. Estuarine Coastal and Shelf Science 01/2008;
- Valéria da S. Quaresma, Alex C. Bastos, Carl L. Amos: *Sedimentary processes over an intertidal flat: A field investigation at Hythe flats, Southampton Water (UK)*. Marine Geology. 01/2007; 241:117-136.
- M R Flindt, C B Pedersen, C L Amos, A Levy, A Bergamasco, P L Friend: *Transport, sloughing and settling rates of estuarine macrophytes: Mechanisms and ecological implications*. Continental Shelf Research 01/2007; 27(8):1096-1103.
- Friend plf, amos cl: *Natural mechanisms - flume and field experiments on links between biology, sediments and flow*. Continental Shelf Research 01/2007; 27(8):1017-1019.
- A.J. Manning, P.L. Friend, N. Prowse, C.L. Amos: *Estuarine mud flocculation properties determined using an annular mini-flume and the LabSFLOC system*. Continental Shelf Research. 01/2007;
- Urs Neumeier, Patrick L. Friend, Uffe Gangelhof, Jens Lunding, Morten Lundkvist, Alessandro Bergamasco, Carl L. Amos, Mogens Flindt: *The influence of fish feed pellets on the stability of seabed sediment: A laboratory flume investigation*. Estuarine Coastal and Shelf Science 01/2007; 75(3):347-357.
- Patrick L. Friend, Carl L. Amos: *Natural coastal mechanisms – flume and field experiments on links between biology, sediments, and flow*. Continental Shelf Research - CONT SHELF RES. 01/2007; 27(8):1017-1019.
- Valéria da S. Quaresma, Carl L. Amos, Alex C. Bastos: *The Influence of Articulated and Disarticulated Cockle Shells on the Erosion of a Cohesive Bed*. Journal of Coastal Research - J COASTAL RES. 01/2007; 23(6):1443-1451.
- T. F. Sutherland, C. L. Amos, C. Ridley, Ian G. Droppo, S. A. Petersen: *The settling behavior and benthic transport of fish feed pellets under steady flows*. Estuaries and Coasts 09/2006; 29(5):810-819.
- CARL L. AMOS, T. F. SUTHERLAND, J. ZEVENHUIZEN: *The stability of sublittoral, fine- grained sediments in a subarctic estuary*. Sedimentology 06/2006; 43(1):1 - 19.
- URS NEUMEIER, CARL L. AMOS: *The influence of vegetation on turbulence and flow velocities in European salt- marshes*. Sedimentology 03/2006; 53(2):259 - 277.
- Grégoire M. Maillet, Claude Vella, Serge Berné, Patrick L. Friend, Carl L. Amos, Thomas J. Fleury, Alain Normand: *Morphological changes and sedimentary processes induced by the December 2003 flood event at the present mouth of the Grand Rhône River (southern France)*. Marine Geology. 01/2006;
- Georg Umgiesser, Francesca De Pascalis, Christian Ferrarin, Carl L. Amos: *A model of sand transport in Treporti channel: northern Venice lagoon*. Ocean Dynamics 01/2006; 56(3):339-351.

Carl L. Amos: *Turbulence Reduction by the Canopy of Coastal Salt-Marshes Spartina*. Journal of Coastal Research 01/2006; 39:433-439.

Danielle Cloutier, Magali N. LeCouturier, Carl L. Amos, Phil R. Hill: *The effects of suspended sediment concentration on turbulence in an annular flume*. Aquatic Ecology 01/2006; 40(4):555-565.

C E L Thompson, C L Amos, M Angelaki, T E R Jones, C E Binks: *An evaluation of bed shear stress under turbid flows*. Journal of Geophysical Research 01/2006; 111.

EDUARDO A. GÓMEZ, CARL L. AMOS: *Dewatering effects on the erodibility of newly deposited cohesive beds by unidirectional currents*. Sedimentology 01/2005; 52(1):183 - 189.

Carl L. Amos: *Coastal-Marine Conservation:Science and Policy - A book review*. Estuarine Coastal and Shelf Science 01/2005; 62:385.

G. Umgiesser, CL Amos, E. Coraci, A. Cucco, C. Ferrarin, D.M. CANU, I. Scroccaro, C. Solidoro, L. Zampato: *An open source model for the Venice Lagoon and other shallow water bodies. Flooding and environmental challenges for Venice and its lagoon: state of knowledge*. 01/2005;

Rodolfo Bolaños-Sánchez, Rolf Riethmüller, Gerhard Gayer, Carl L. Amos: *Sediment Transport in a Tidal Lagoon Subject to Varying Winds Evaluated with a Coupled Current-Wave Model*. Journal of Coastal Research - J COASTAL RES. 01/2005; 21(2).

S. Cappucci, C. L. Amos, T. Hosoe, G. Umgiesser: *SLIM: a numerical model to evaluate the factors controlling the evolution of intertidal mudflats in Venice Lagoon, Italy*. Journal of Marine Systems 11/2004;

Charlotte E L Thompson, Carl L Amos, Georg Umgiesser: *A comparison between fluid shear stress reduction by halophytic plants in Venice Lagoon, Italy and Rustico Bay, Canada – analyses of in situ measurements*. Journal of Marine Systems 10/2004; 51:293-308.

C E L Thompson, C L Amos, M Lecouturier, T E R Jones: *Flow deceleration as a method of determining drag coefficient over roughened flat beds*. Journal of Geophysical Research 03/2004; 109(3).

V. da S. Quaresma, C. L. Amos, M. Flindt: *The Influences of Biological Activity and Consolidation Time on Laboratory Cohesive Beds*. Journal of Sedimentary Research - J SEDIMENT RES. 01/2004; 74(2):184-190.

Coraci E, Ymgiesser G, Sclavo M, Amos CL: *Modeling sand transport in the Venice lagoon inlets*. Scientific Research and Safeguarding of Venice. 01/2004; 2:157-173.

Amos CL, Umgiesser G, Reed P, Munford G, Lea J: *The residual tidal circulation of water, sediment and organics in northern Venice lagoon, Italy*. Scientific Research and Safeguarding of Venice. 01/2004; 2:189-202..

A. Bergamasco, L. De Nat, M. R. Flindt, C. L. Amos: *Erratum to "Interactions and feedbacks among phytoplankton, hydrodynamics, nutrient cycling and sediment transport in estuarine ecosystems"* [Continental Shelf Research (2003) 1715-1741]. Continental Shelf Research - CONT SHELF RES. 01/2004; 24:755-756.

Gomez EA, Amos CL, Li MZ: *Evaluation of sand transport models by in situ observations under unidirectional flow*. Journal of Coastal Research 01/2004; 39.

- Charlotte E L Thompson, Carl L Amos: *Effect of Sand Movement on a Cohesive Substrate*. Journal of Hydraulic Engineering 01/2004; 130:1123-1125.
- C.L. Amos, A. Bergamasco, G. Umgiesser, S. Cappucci, D. Cloutier, L. DeNat, M. Flindt, M. Bonardi, S. Cristante: *The stability of tidal flats in Venice Lagoon – the results of in-situ measurements using two benthic, annular flumes*. Journal of Marine Systems 01/2004;
- Shimeta J, Amos cl, Beaulieu e, Katz sl: *Resuspension of benthic protists at subtidal coastal sites with differing sediment composition*. Marine Ecology Progress Series 10/2003; 259:103-115.
- C L Amos, M Z Li, F L Chiocci, G B La Monica, S Cappucci, E H King, F Corbani: *Origin of shore-normal channels from the shoreface of Sable Island, Canada*. Journal of Geophysical Research 03/2003; 108(3094).
- Thompson CEL, Amos CL, Jones TER, Chaplin J: *The manifestation of fluid-transmitted bed shear stress in a smooth annular flume - a comparison of methods*. Journal of Coastal Research 02/2003; 19(4):1094-1103.
- Carl L. Amos, Ian G. Droppo, Eduardo A. Gomez, Tom P. Murphy: *The stability of a remediated bed in Hamilton Harbour, Lake Ontario, Canada*. Sedimentology 01/2003; 50(1):149 - 168.
- A Bergamasco, L De Nat, M.R Flindt, C.L Amos: *Interactions and feedbacks among phytoplankton, hydrodynamics, nutrient cycling and sediment transport in estuarine ecosystems*. Continental Shelf Research. 01/2003;
- C. E. L. Thompson, C. L. Amos: *The impact of mobile disarticulated shells of Cerastoderma edulis on the abrasion of a cohesive substrate*. Estuaries and Coasts 01/2002; 25(2):204-214.
- Danielle Cloutier, Carl L. Amos, Philip R. Hill, Kenneth Lee: *Oil Erosion in an Annular Flume by Seawater of Varying Turbidities: A Critical Bed Shear Stress Approach*. Spill Science & Technology Bulletin. 01/2002;
- Jeff Shimeta, Carl L Amos, Stace E Beaulieu, Oladipo M Ashiru: *Sequential resuspension of protists by accelerating tidal flow: Implications for community structure in the benthic boundary layer*. Limnology and oceanography 01/2002; 47(4):1152-1164.
- Michael Z Li, Carl L Amos: *SEDTRANS96: the upgraded and better calibrated sediment-transport model for continental shelves*. Computers & Geosciences. 01/2001;
- Ian G Droppo, Carl L Amos: *STRUCTURE, STABILITY, AND TRANSFORMATION OF CONTAMINATED LACUSTRINE SURFACE FINE-GRAINED LAMINAEE*. Journal of Sedimentary Research 01/2001; 71:717-726.
- T F Sutherland, P M Lane, C L Amos, J Downing: *The calibration of optical backscatter sensors for suspended sediment of varying darkness levels*. Ž . Marine Geology. 01/2000; 162:587-597.
- C L Amos, T F Sutherland, D Cloutier, S Patterson: *Corrasion of a remoulded cohesive bed by saltating littorinid shells*. Continental Shelf Research 01/2000; 20:1291-1315.
- C.L. Amos, A.J. Bowen, D.A. Huntley, C.F.M. Lewis: *Ripple generation under the combined influences of waves and currents on the Canadian continental shelf*. Continental Shelf Research 08/1999;
- M Z Li, C L Amos: *Sheet flow and large wave ripples under combined waves and currents: field observations, model predictions and effects on boundary layer dynamics*. Continental Shelf Research 01/1999; 19:637-663.

Michael Z Li, Carl L Amos: *Sheet flow and large wave ripples under combined waves and currents: field observations, model predictions and effect on boundary layer dynamics*. Continental Shelf Research 01/1999; 19:637-663.

Michael Z. Li, Carl L. Amos: *Field observations of bedforms and sediment transport thresholds of fine sand under combined waves and currents*. Marine Geology. 01/1999;

Sutherland tf, Amos cl, Grant j: *The Effect of Buoyant Biofilms on the Erodibility of Sublittoral Sediments of a Temperate Microtidal Estuary*. Limnology and oceanography 04/1998; 43(2):225-235.

Michael Z. Li, Carl L. Amos: *Predicting ripple geometry and bed roughness under combined waves and currents in a continental shelf environment*. Continental Shelf Research 01/1998;

T F Sutherland, J Grant, C L Amos: *The effect of carbohydrate production by the diatom Nitzschia curvilineata on the erodibility of sediment*. Limnology and oceanography 01/1998; 43(1):65-72.

T. F. Sutherland, C. L. Amos, J. Grant: *The erosion threshold of biotic sediments: a comparison of methods*. Geological Society, London, Special Publications. 01/1998; 139(1):295-307.

C. L. Amos, M. Brylinsky, T. F. Sutherland, D. O'Brien, S. Lee, A. Cramp: *The stability of a mudflat in the Humber estuary, South Yorkshire, UK*. Geological Society, London, Special Publications. 01/1998; 139(1):25-43.

Amos cl, Li MZ, Sutherland: *The contribution of ballistic momentum flux to the erosion of cohesive beds by flowing water*. Journal of Coastal Research 01/1998; 14(2):564-569.

Michael Z. Li, Carl L. Amos, David E. Heffler: *Boundary layer dynamics and sediment transport under storm and non-storm conditions on the Scotian Shelf*. Marine Geology. 01/1997;

Malcolm 0 Green, Kerry P Black, Carl L Amos: *Control of estuarine sediment dynamics by interactions between currents and waves at several scales*. Marine Geology 01/1997; 144:97-116.

C L Amos, T Feeney, T F Sutherland, J L Luternauer: *The Stability of Fine-grained Sediments from the Fraser River Delta*. Estuarine Coastal and Shelf Science 01/1997; 45:507-524.

Amos cl, Sutherland TF, Radziewski B, Doucette M: *A rapid technique to determine bulk density of fine-grained sediments by X-ray computed tomography*. Journal of Sedimentary Research 09/1996; 66(5):1023-1039.

Carl L. Amos, M. Z. Li, K. -S. Choung: *Storm-generated, hummocky stratification on the outer-Scotian Shelf*. Geo-Marine Letters 05/1996; 16(2):85-94.

Li MZ, Wright DL, Amos cl: *Predicting ripple roughness and sand resuspension under combined flows in a shoreface environment*. Marine Geology 01/1996; 130:139-161.

Michael Z. Li, Carl L. Amos: *SEDTRANS92: A sediment transport model for continental shelves*. Computers & Geosciences 01/1995;

Amos cl, Sutherland TF: *A rapid technique for the determination of dry sediment mass from saturated marine sands*. Journal of Sedimentary Research 01/1994; A64(3):668-670.

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- Carl L Amos, G.R Daborn, H.A Christian, A Atkinson, A Robertson: *In situ erosion measurements on fine-grained sediments from the Bay of Fundy*. Marine Geology. 01/1992;
- Carl L. Amos, J. Grant, G.R. Daborn, K. Black: *Sea Carousel – A benthic, annular flume*. Estuarine, Coastal and Shelf Science. 01/1992;
- Carl L. Amos, M.B. Collins: *Introduction*. Continental Shelf Research 01/1991; 11(s 8–10):665–668.
- Kim T. Tee, Carl L. Amos: *Tidal and buoyancy-driven currents in Chignecto Bay, Bay of Fundy*. Journal of Geophysical Research 01/1991; 961:15197-15216.
- Carl L. Amos, J. Tim Judge: *Sediment transport on the eastern Canadian continental shelf*. Continental Shelf Research. 01/1991;
- B. Boczar-Karakiewicz, C.L. Amos, G. Drapeau: *The origin and stability of sand ridges on Sable Island Bank, Scotian Shelf*. Continental Shelf Research 08/1990;
- B. J. TOPLISS, C. L. ALMOS, P. R. HILL: *Algorithms for remote sensing of high concentration, inorganic suspended sediment*. International Journal of Remote Sensing 01/1990; 11(6):947-966.
- Carl L Amos, Ann A L Miller: *The Quaternary stratigraphy of south-west Sable Island Bank eastern Canada..* Geological Society of America Bulletin 01/1990; 102:915-934.
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