



Publications de l'équipe GOHS depuis 2004

2004

1. Calmant S., Cheng, K., Jan, G., Shum C.K, and Y. Yi, Comparison of sea surface heights by JASON and ocean bottom gauges: the MOTEVAS project (SW Pacific), *Marine Geodesy*, vol 27, 3-4, 597-613, 2004.
2. Cazenave A and R S Nerem, Present-Day sea level change : observations and causes, *Review of Geophysics*, 42, RG3001, doi : 8755-1209/04/2003RG000139, 2004.
3. Cazenave A., Gennero M.C. and DoMinh K., Present-day sea level rise: from satellite and in situ observations to physical causes, in *Satellite Altimetry for geodesy, geophysics and oceanography*, International Association of Geodesy Symposia, vol. 126, F. Sanso Ed., Springer-Verlag, Berlin, pp.23-33, 2004.
4. Cazenave A., Milly, P.C.D., Douville H., Beneveniste J., Lettenmaier D. and Kosuth P., International workshop examines the role of space techniques to measure spatio-temporal change in terrestrial waters, *EOS, AGU Trans.*, vol 85, number 6, 2004.
5. Grippa M., N.M. Mognard, T. Letoan, E.G. Josberger, Siberia snow depth climatology from SSM/I data using a combined dynamic and static algorithm, *Remote Sensing of the Environment*, 93, 30-41, 2004.
6. Kouraev A., Zakharova E. A., Samain O., Mognard-Campbell N. and Cazenave A., Ob' river discharge from Topex/Poseidon satellite altimetry, *Remote Sensing of Environment*, 93, 238-245, 2004.
7. Kouraev A.V., Papa F., Mognard N.M., Buharizin P.I., Cazenave A., Crétaux J-F., Dozortseva J., Remy F., Sea ice cover in the Caspian and Aral seas from historical and satellite data, *Journal of Marine System*, 47, 89-100, 2004.
8. Kouraev A.V., Papa F., Mognard N.M., Buharizin P.I., Cazenave A., Crétaux J-F., Dozortseva J., Remy F., Synergy of active and passive satellite microwave data for the study of first-year sea ice in the Caspian and Aral seas. *Transactions Geophys. and Remote Sensing (TGARS)*, vol. 42, 42, 10, 2170-2176, 2004.
9. Mognard, N.M., Snow cover dynamics, in *Arctic Environmental Variability in the Context of Global Change*, eds Bobylev, L.P., K. Kondratyev, and O.M. Johannessen, Springer-Verlag, Berlin, 500 pp. ISBN 3-540-43458-5, 2004.
10. Ramillien G, A. Cazenave, O. Brunau, Global time variations of hydrological signals from GRACE satellite gravimetry, *Geophys. J. Int.*, 158,813-826, 2004.
11. Tiwari V., Cabanes C, Dominh K and Cazenave A., Correlation of interannual sea level variations in the Indian ocean from Topex/Poseidon altimetry, temperature data and tide gauges with ENSO, *Global and Planetary Change*, 43, 183-196, 2004.

2005

12. Aladin N.V., Crétaux J-F., Plotnikov I.S., Kouraev A.V., Smurov A.O., Cazenave A., Egorov A.N., Papa F., Modern hydro-biological state of the Small Aral Sea, *Environmetric*, 16, 1-18, doi: 10.1002/env.709, 2005.
13. Cazenave A., Volcanoes and sea level, *Nature*, 438,7064, 35-36, 2005.
14. Chang, A. T. C., R. E. J. Kelly, E. G. Josberger, R. L. Armstrong, J. L. Foster and N. M. Mognard. Analysis of ground-measured and passive-microwave-derived snow depth variations in midwinter across the northern Great Plains. *Journal of Hydrometeorology*, 6: 20-33, 2005.
15. Crétaux J-F, Kouraev A.V., Papa F., Bergé Nguyen M., Cazenave A., Aladin N.V., and Plotnikov I.S., Water balance of the Big Aral sea from satellite remote sensing and in situ observations, *Journal of Great Lakes Research*, 31 (4), 520-534, 2005.
16. Crétaux J-F., Kouraev A.V., Bergé-Nguyen M., Cazenave A., Papa F., Satellite altimetry for monitoring lake level changes, in *Transboundary Water Resources: Strategies for Regional Security and*



Ecological Stability', H. Vogtman and Dobretsov (eds), NATO Sciences Series, Springer, 141-146, 2005.

17. Evans D., Alpers W., Cazenave A., Elachi A., Farr T., Glackin D., Holt B., Jones L., Liu W.T., McCandless W., Menard Y., Moore R. and Njoku E., Seasat- A 25-year legacy of success, *Remote Sensing of Environment*, 94, 384-404, 2005.
18. Frappart F., F. Seyler, J.M. Martinez, J. Leon and A. Cazenave, Determination of the water volume in the Negro River sub basin by combination of satellite and in situ data, *Remote Sensing of Environment*, 99, 387-399, 2005.
19. Gerasimenko, M.D, A.G Kilomietc, M. Kasahara, J-F. Crétaux, L. Soudarin, Establishment of a global three-dimensional kinematic reference frame using VLBI and DORIS data, *Far Eastern Mathematical journal*, Tome 6, Russian Academy of Sciences, 2005.
20. Grippa M., L. Kergoat, T. Letoan, N.M. Mognard, N. Delbart, J. L'Hermitte, The impact of snow depth and snowmelt on the vegetation variability over Central Siberia, *Geophysical Research Letters*, 32, L21412, doi:10.1029/2005GL024286, 2005.
21. Grippa M., N.M. Mognard, T. LeToan, Comparison between the interannual variability of snow parameters derived from SSM/I and the Ob river discharge, *Remote Sensing of the Environment*, 98, 35-44, 2005.
22. Lagabrielle Y., P. Maurizot, Y. Lafoy, G. Cabioch, P. Douillet, B. Pelletier, D. Chardon, M. Régnier, I. Wabete et S. Calmant : Neogene-Quaternary extensional tectonics in Southern New Caledonia (SW Pacific) : insights from onshore fault analysis and offshore seismic data, *Tectonophysics*, 403, 1-28, 2005
23. Lombard A., Cazenave A., Dominh K., Cabanes C. and R.S. Nerem, 20th century sea level rise: new estimates of thermal and water mass contributions, *Global and Planetary Change*, 48, 303-312, 2005.
24. Lombard A., Cazenave A., Le Traon P.Y. and Ishii M., Contribution of thermal expansion to present-day sea level rise revisited, *Global and Planetary Change*, 47, 1-16, 2005.
25. Ngo-Duc T., Laval K., Polcher Y and Cazenave A., Analyses of the contribution of continental water to sea level variations during the 1997-1998 ENSO event; Comparison between the AMIP simulations and the Topex/Poseidon satellite data., *J. Geophys. Res.*, Vol.110, DO9103, doi:10.1029/2004JD004940, 2005.
26. Ngo-Duc T., Laval K., Polcher Y., Lombard A. and Cazenave A., Effects of land water storage on the global mean sea level over the last half century, *Geophys. Res. Lett.*, Vol.32, L09704, doi:10.1019/2005GL022719, 2005.
27. Ramillien G., Frappart F., Cazenave A. and Guentner A., Change in land water storage from 2 years of GRACE satellite data, *Earth and Planetary Science Letters*, 235, 283-301, 2005.
28. Tiwari V.M., Cabanes C., DoMinh K. and Cazenave A., Sea level in the Indian ocean from Topex/Poseidon altimetry and tide gauges, pp 150-168, in *Oceanology*, H.K. Gupta editor, University Press, Hyderabad, 2005.

2006

29. Boone, A., N. Mognard, B. Decharme, H. Douville, M. Grippa and K. Kerrigan. The impact of simulated soil temperatures on the estimation of snow depth over Siberia from SSM/I compared to a multi-model climatology. *Remote Sensing of Environment*, 101: 482-494, 2006.
30. Boy, J. P., M. Llubes, R. Ray, J. Hinderer and N. Florsch. Validation of long-period oceanic tidal models with superconducting gravimeters. *Journal of Geodynamics*, 41: 112-118, 2006.
31. Calmant, S. and F. Seyler. Continental surface waters from satellite altimetry. *Geosciences C.R.* 338, 1113-1122, 2006.
32. Cazenave A. and Boucher C., Observing the Earth from space, *Geosciences C.R.* , 338, issue 14-15, 943-948, 2006.
33. Cazenave A., How fast are the ice sheets melting?, *Science*, 314, 1250-1252, 2006.



34. Cazenave A., Present-day sea level rise : do we understand what we measure? in Proceedings of the "15 Years of Progress in Radar Altimetry Symposium Venice, Italy, 13-18 March 2006, ESA Special Publication SP-614, 2006.
35. Crétaux J-F and C. Birkett, lake studies from satellite altimetry, *Geosciences C.R.*, doi:10.1016/J.cre.2006.08.002, 2006.
36. Enjolras V., P. Vincent, J.C. Souyris, E. Rodriguez and A. Cazenave , Performances study of interferometric radar altimeter : from the instrument to the global definition mission, *Sensors*, 6, 3, 164-192, 2006.
37. Feissel-Vernier, M., K. Le Bail, P. Berio, D. Coulot, G. Ramillien and J.-J. Valette. "Geocenter motion measured with DORIS and SLR, and predicted by geophysical models. *J. of Geodesy* 80: 637-648 DOI 10.1007/s00190-006-0079-z, 2006.
38. Frappart F. , G. Ramillien, S. Biancamaria, N. Mognard-Campbell and A. Cazenave, Evolution of high-latitude snow mass derived from the GRACE gravimetry mission (2002-2004), *Geophys. Res. Lett.*, 33, L02501, doi:10.1029/2005GL024778, 2006.
39. Frappart F., Calmant S., Cauhopé M., Seyler F. and Cazenave A., Validation of ENVISAT RA-2 derived water levels over the Amazon basin, *Remote Sensing of Environment*, 100, 252-264, 2006.
40. Frappart F., Dominh K., Lhermitte J., Ramillien G., Cazenave A. and LeToan T., Water volume change in the lower Mekong Basin from satellite altimetry and imagery data, *Geophys. J. Int.*, 167, 570-584, 2006.
41. Leon, J. G., S. Calmant, F. Seyler, M. P. Bonnet, M. Cauhopé and F. Frappart. Rating curves and average water depth at the Upper Negro river from satellite altimetry and modelled discharges. *Journal of Hydrology*, 328(3-4): 481-496, 2006.
42. Lombard A., A. Cazenave , C. Cabanes, S. Guinehut and P.Y. Le Traon, Perspectives on present-day sea level change, *Ocean Dynamics*, 56, 445-451, doi:10.1007/s10236-005-0046-x, 2006.
43. Mognard, N.M. and D.E. Alsdorf, Why a Hydrology Mission Needs Two-Dimensional Acquisitions of Water Surface Elevations?, in Proceedings of the "15 Years of Progress in Radar Altimetry Symposium Venice, Italy, 13-18 March 2006, ESA Special Publication SP-614, 2006.
44. Nerem S., Leuliette E. and Cazenave A., Present-day sea level change, *Geoscience C.R.*, 338, issue 14-15, 1077-1083, 2006.
45. Ramillien G., Frappart F., Guntner A., Ngo-Duc T. and Cazenave A., Mapping time variations of evapotranspiration rate from GRACE satellite gravimetry, *Water Resources Research*, 42, W10403, doi:10.1029/2005WR004331, 2006.
46. Ramillien G., Lombard A., Cazenave A., E. Ivins, M. Llubes , F. Remy and R. Biancale, Interannual variations of ice sheets mass balance from GRACE and sea level, *Global and Planetary Change*, 53, 198-208, 2006.
47. Rietbroek, R., P. Legrand, B. Wouters, J.-M. Lemoine, G. Ramillien and C. W. Hughes. Comparison of in situ bottom pressure data with GRACE gravimetry in the Crozet-Kerguelen region. *Geophys. Res. Lett.*, 33: L21601 DOI 10.1029/2006GL027452, 2006.
48. Schmidt R., Flechtner F., Reigber Ch., Schwintzer P., Gunter A., Doll P., Ramillien G., Cazenave A., Petrovic S., Jochman H. and Wunsch J., GRACE observations of changes in continental water storage, *Global and Planetary Change*, Vol 50/1-2, 112-126, doi:10.1016/j.gloplacha.2004.11.018, 2006.
49. Soudarin L., and J-F Crétaux, A model of present-day tectonic plate motions from 12 years of DORIS measurements, *J. of Geodesy*, 80: 609-624, DOI 10.1007/s00190-006-0090-4, 2006.
50. Zakharova E., A. Kouraev and A. Cazenave, Amazon river discharge estimated from the Topex/Poseidon altimetry, *Geosciences C.R.*, 338, 188-196, 2006.

2007

51. Alsdorf, D., L.L. Fu, N. Mognard, A. Cazenave, E. Rodriguez, D. Chelton and D. Lettemaier, Measuring global oceans and terrestrial fresh water from space, *EOS, Transactions, AGU*, v88, n24, p253, 2007.



52. Bindoff N., Willebrand J., Artale V. , Cazenave A., Gregory J. , Gulev S., Hanawa K., Le Quéré C., Levitus S., Nojiri Y., Shum C.K., Talley L., Unnikrishnan A., Observations: oceanic climate and sea level. In: Climate change 2007: The physical Science Basis. Contribution of Working Group I to the Fourth Assessment report of the Intergovernmental Panel on Climate Change [Solomon S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, UK, and New York, USA., 2007.
53. Cazenave A., Lombard A., Dominh K., Llovel W., Bouhours S., Ramillien G. and Nerem R.S., Recent advances in measuring and understanding sea level change during the satellite altimetry era, Ocean Surface Topography (OST) publication, in press, 2007.
54. Garcia D., A. Lombard, G. Ramillien and A. Cazenave, Steric sea level variations inferred from combined Topex/Poseidon altimetry and GRACE gravimetry, PAGEOPH, 164, 721-731, doi:10.1007/s00024-007-0182y., 2007.
55. Grippa, M., N. M. Mognard, T. Le Toan and S. Biancamaria, Observations of changes in surface water over the western Siberia lowland. Geophys. Res. Lett. 34, L15403 10.1029/2007GL030165, 2007.
56. Kouraev A. V. , Semovski S. V., Shimaraev M. N., Mognard N. M., Legrésy B., Rémy F., « The ice regime of Lake Baikal from historical and satellite data: Relationship to air temperature, dynamical, and other factors", Limnol. Oceanogr., 52, 1268-1286, 2007.
57. Kouraev A. V., Semovski S. V., Shimaraev M. N., Mognard N. M., Legresy B., Remy F., « Observations of lake Baikal ice from satellite altimetry and radiometry » Remote Sensing of Environment, 108, 240-253, 2007.
58. Lombard A., Garcia D., Cazenave A. and Ramillien G., Fletchner, R. Biancale and M. Ishii, Estimation od steric sea level variations from combined GRACE and satellite altimetry data, Earth Planet. Sci. Lett., 254, 194-202, 2007.
59. Milly P.C.D., Cazenave A., Famiglietti J., Gornitz V., Laval K., Lettenmaier D., Sahagian D., Wahr J. and Wilson C. . Terrestrial water storage contributions to sea level rise and variability, Proceedings of the WCRP workshop 'Understanding sea level rise and variability', eds. J. Church, P. Woodworth, T. Aarup and S. Wilson et al., Blackwell Publishing, Inc., 2007.
60. Nerem R.S., A. Cazenave, D.P. Chambers, L.L. Fu, E.W. Leuliette and G.T. Mitchum, Comment on 'Estimating future sea level change from past records' by Nils-Axel Morner, Global and Planetary Change, 55, 358-360, 2007.
61. Ngo-Duc T., Laval. K., Polcher J., Ramillien G. and A. Cazenave, Validation of the land water storage simulated by Organising Carbon and Hydrology in Dynamic Ecosystems (ORCHIDEE) with Gravity Recovery and Climate Experiment (GRACE) data, Water Res. Res, 43, W04427, doi:10.1029/2006WR004941, 2007.
62. Rahmstorf S., Cazenave A., Church J.A., Hansen J., Keeling R., Parker D. and Somerville R., Recent climate observations compared to projections, Science, vol 316, 709, 10.1126/science.1136843, 2007.
63. Roemmich D. , J. Willis, J. Gilson, D. Stammer, A. Koehl, T. Yemenis, D. P. Chambers, F. Landerer, J. Marotzke, T. Suzuki, J. Church, A. Cazenave and P. Y Letraon, Global Ocean Warming and Sea Level Rise Proceedings of the WCRP workshop 'Understanding sea level rise and variability', eds. J. Church, P. Woodworth, T. Aarup and S. Wilson et al., Blackwell Publishing, Inc. , 2007.
64. Vicente-Serrano, S. M., M. Grippa, T. Le Toan and N. M. Mognard, The role of atmospheric circulation with respect to the interannual variability in the date of snow cover disappearance over northern latitudes between 1988 and 2003.J. Geophys. Res. 112, D08108 , 2007.

2008

65. Berge-Nguyen M., Cazenave A., Lombard A., Llovel W. and Cretaux J.F., Reconstruction of past decades sea level using tide gauge, altimetry and in situ hydrographic data, Global and Planetary Change, in press, 2008.



66. Bergeot, N., M.N. Bouin, M. Diament, S. Calmant, M. Régnier, B. Pelletier, V. Ballu, Interseismic velocity field in the Vanuatu locked subduction zone context from GPS estimates, submitted, *G³*, 2008.
67. Biancamaria S., P. Bates, A. Boone., N.M. Mognard, J.-F. Crétaux, Modelling the Ob River in Western Siberia, using Remotely Sensed Digital Elevation Models" Proceedings of the "2nd Space for Hydrology Workshop" WMO, Geneva, November 11-14, 2007, ESA Special Publication SP-xxx, 2008.
68. Biancamaria, S., Mognard N.M., Boone A., Grippa M., Josberger E.G., A satellite snow depth multi-year average derived from SSM/I for the high latitude regions , *Rem. Sens. Environm.*, in press, 2008.
69. Bonnet M.P, G. Barroux, J-M Martinez, F. Seyler, P. Moreira-Turcq, G. Cochonneau, J.-M. Melack, G. Boaventura, L. Maurice-Bourgoin, J.-G. León, E. Roux, S. Calmant, P. Kosuth, J-L. Guyot, P. Seyler, Floodplain hydrology in an Amazon floodplain lake (Lago Grande de Curuaí), in press, *Journal of Hydrology*, 2008.
70. Boronina A. and G. Ramillien, Application of AVHRR imagery and GRACE measurements for calculation of actual evapotranspiration over the Quaternary aquifer (Lake Chad basin) and validation of groundwater models, *J. of Hydrology*, 348, 98-109, doi: 10.1016/j.jhydrol.2007.09.061, 2008.
71. Calmant S., N. Bergeot et M-N. Bouin, Clipperton : un site test pour le mouvement tectonique absolu de la plaque Pacifique, Clipperton: environnement et biodiversité d'un microcosme océanique, Eds IRD-MNHN, in press, 2008.
72. Cazenave A. and A. Lombard., Present-day sea level rise: a synthesis, submitted, *Geosciences C.R.*, 2008.
73. Cazenave A., Recent advances in observing the Earth from space, in press, *Indian J. Geological Soc.* 2008.
74. Cretaux J.F., Calmant S., Romanovski V., Shibuyin A., Lyard F., Berge-Nguyen M., Cazenave A. and Hernandez F., Implementation of a new absolute calibration site for radar altimeter in the continental area: lake Issykkul in Central Asia, submitted, *Journal of Geodesy*, 2008.
75. Crétaux J-F, M. Leblanc, S. Tweed, S. Calmant, and G. Ramillien, combination of radar and laser altimetry, MODIS and GPS for the monitoring of flood events : application to the Diamantina river, submitted, *Remote Sensing of Environment*, 2008
76. Crétaux J-F, S. Calmant, V. Romanovski, A Shabunin, F. Lyard, M. Bergé-Nguyen, A. Cazenave, and F. Hernandez, A new absolute calibration site for radar altimeter in the continental domain: lake Issykkul in Central Asia., submitted, *Journal of Geodesy*, 2008
77. Kouraev A.V., Kostianoy A.G and Lebedev S.A., Recent changes of sea level and ice cover in the Aral Sea derived from satellite data (1992-2006). In revision, *Journal of Marine Systems*, 2008.
78. Lebedev S., A. Sirota, D. Medvedev, S. Khlebnikova, S. Vignudelli, H.M. Snaith, P. Cipollini, F. Venuti, F. Lyard., J. Bouffard., J-F. Cretaux., F. Birol., L. Roblou., A. Kostianoy., A. Ginzburg., N. Sheremet., E. Kuzmina., R. Mamedov., K. Ismatova., A. Alyev., & B. Mustafayev, Exploiting satellite altimetry in coastal ocean through the Alticore project, *Russian Journal of Earth Sciences*, Vol 10, ES1001, doi:10.2205/2007ES000262, 2008
79. Leon J.G., M.P. Bonnet, S. Calmant, M. Cauhopé, F. Seyler. Preliminary estimations of discharges in the Rio Negro basin by the flow routing model proGUM using altimetric spatial data, submitted, *Hydrological Processes*, 2008.
80. Leon, J-G, M-P Bonnet, F. Seyler et S. Calmant, Rating curve in the Amazon Basin combining Altimetry-derived water stages and discharge propagated from remote stations, *Proceeding of 2nd Hydrospace Workshop*, Geneva, Nov 2007, ESA, in press, 2008.
81. Lombard A., Garric G., Penduff T. and Molines J.M., Regional variability of sea level change using a global ocean model at ¼° resolution, submitted, *Ocean Dynamics*, 2008.
82. Mognard, N.M., Alsdorf D.E., Cazenave A, Rodriguez E., The Water And Terrestrial Elevation Recovery Hydrosphere Mapper (WATER-HM): a dedicated surface water mission, Proceedings of the "2nd Space for Hydrology Workshop" WMO, Geneva, November 11-14, 2007, ESA Special Publication SP-xxx, 2008.



83. Ramillien G., Bouhours S., Lombard A., Cazenave A., Flechtner F. and Schmidt R., Land water contributions from GRACE to sea level rise over 2002-2006, *Global and Planetary Change*, 60, 381-392, 2008.
84. Roux E, M. Cauhopé, M-P. Bonnet, S. Calmant, F. Seyler, Daily water stage estimated from satellite altimetric data for large river basin monitoring, in press, *Hydrological Sciences Journal - Journal des Sciences Hydrologiques*, 2008.
85. Santos da Silva, J., E. Roux, O. Correa Rotunno Filho, M-P Bonnet, F. Seyler. et S. Calmant, 3D selection of ENVISAT Data for Improved Water Stage Times series on the Rio Negro and Adjacent Wetlands (Amazon basin), *Proceeding of 2nd Hydrospace Workshop*, Geneva, Nov 2007, ESA, in press, 2008.
86. Strozzi T, A.V. Kouraev, A. Wiesmann, U. Wegmüller, A. Sharov, C. Werner. Estimation of Arctic glacier motion with satellite L-band SAR data. In press, *Remote Sensing of Environment*, Available online 2 August 2007, 2008.
87. Vaz de Almeida F., Blitzkow D., Ramillien G., Calmant S., Cazenave A. and Oliveira Campos I., GRACE satellite data and in situ water level time variation correlation analysis in the Amazon Basin, in revision, *J. Geodesy*, 2008.