

Liste des publications 2016 de l'Observatoire CRYOBS-CLIM

- Amory, C., Naaïm-Bouvet, F., Gallée, H. and Vignon, E.: Brief communication: Two well-marked cases of aerodynamic adjustment of sastrugi, *The Cryosphere*, 10(2), 743–750, <https://doi.org/10.5194/tc-10-743-2016>, 2016.
- Basantes-Serrano, R., Rabatel, A., Francou, B., Vincent, C., Maisincho, L., CáCeres, B., Galarraga, R. and Alvarez, D.: Slight mass loss revealed by reanalyzing glacier mass-balance observations on Glaciar Antisana 15 $\alpha$  (inner tropics) during the 1995–2012 period, *Journal of Glaciology*, 62(231), 124–136, <https://doi.org/10.1017/jog.2016.17>, 2016.
- Berthier, E., Cabot, V., Vincent, C. and Six, D.: Decadal Region-Wide and Glacier-Wide Mass Balances Derived from Multi-Temporal ASTER Satellite Digital Elevation Models. Validation over the Mont-Blanc Area, *Frontiers in Earth Science*, 4, <https://doi.org/10.3389/feart.2016.00063>, 2016.
- Bonan, B., Baines, M. J., Nichols, N. K. and Partridge, D.: A moving-point approach to model shallow ice sheets: a study case with radially symmetrical ice sheets, *The Cryosphere*, 10(1), 1–14, <https://doi.org/10.5194/tc-10-1-2016>, 2016.
- Casado, M., Landais, A., Masson-Delmotte, V., Genthon, C., Kerstel, E., Kassi, S., Arnaud, L., Picard, G., Prie, F., Cattani, O., Steen-Larsen, H.-C., Vignon, E. and Cermak, P.: Continuous measurements of isotopic composition of water vapour on the East Antarctic Plateau, *Atmos. Chem. Phys.*, 16(13), 8521–8538, <https://doi.org/10.5194/acp-16-8521-2016>, 2016.
- Cavitte, M. G. P., Blankenship, D. D., Young, D. A., Schroeder, D. M., Parrenin, F., Lemeur, E., Macgregor, J. A. and Siegert, M. J.: Deep radiostratigraphy of the East Antarctic plateau: connecting the Dome C and Vostok ice core sites, *Journal of Glaciology*, 62(232), 323–334, <https://doi.org/10.1017/jog.2016.11>, 2016.
- Charrois, L., Cosme, E., Dumont, M., Lafaysse, M., Morin, S., Libois, Q. and Picard, G.: On the assimilation of optical reflectances and snow depth observations into a detailed snowpack model, *The Cryosphere*, 10, 1021–1038, <https://doi.org/10.5194/tc-10-1021-2016-supplement>, 2016.
- Decharme, B., Brun, E., Boone, A., Delire, C., Le Moigne, P. and Morin, S.: Impacts of snow and organic soils parameterization on northern Eurasian soil temperature profiles simulated by the ISBA land surface model, *The Cryosphere*, 10(2), 853–877, <https://doi.org/10.5194/tc-10-853-2016>, 2016.
- Dedieu, J.-P., Carlson, B. Z., Bigot, S., Sirguey, P., Vionnet, V. and Choler, P.: On the Importance of High-Resolution Time Series of Optical Imagery for Quantifying the Effects of Snow Cover Duration on Alpine Plant Habitat, *Remote Sensing*, 8(6), 481, <https://doi.org/10.3390/rs8060481>, 2016.
- Dehecq, A., Millan, R., Berthier, E., Gourmelen, N., Trouvé, E. and Vionnet, V.: Elevation Changes Inferred From TanDEM-X Data Over the Mont-Blanc Area: Impact of the X-Band Interferometric Bias, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 9(8), 3870–3882, <https://doi.org/10.1109/JSTARS.2016.2581482>, 2016.

François, H., Morin, S., Spandre, P., Lafaysse, M., Lejeune, Y. and George-Marcelpoil, E.: Croisement de simulations numériques des conditions d'enneigement avec une base de données socio-économiques spatialisée des stations de sports d'hiver : description de l'approche, application aux Alpes françaises et introduction de la prise en compte des pratiques de gestion (damage et neige de culture), *La Houille Blanche*, (4), 66–84, <https://doi.org/10.1051/lhb/2016041>, 2016.

Garambois, S., Legchenko, A., Vincent, C. and Thibert, E.: Ground-penetrating radar and surface nuclear magnetic resonance monitoring of an englacial water-filled cavity in the polythermal glacier of Tête Rousse, *GEOPHYSICS*, 81(1), WA131–WA146, <https://doi.org/10.1190/geo2015-0125.1>, 2016.

Genthon, C., Six, D., Scarchilli, C., Ciardini, V. and Frezzotti, M.: Meteorological and snow accumulation gradients across Dome C, East Antarctic plateau: METEOROLOGICAL AND SNOW ACCUMULATION GRADIENTS AT DOME C, *International Journal of Climatology*, 36(1), 455–466, <https://doi.org/10.1002/joc.4362>, 2016.

Gonga-Saholiariliva, N., Neppel, L., Chevallier, P., Delclaux, F. and Savéan, M.: Geostatistical Estimation of Daily Monsoon Precipitation at Fine Spatial Scale: Koshi River Basin, *Journal of Hydrologic Engineering*, 21(9), 05016017, [https://doi.org/10.1061/\(ASCE\)HE.1943-5584.0001388](https://doi.org/10.1061/(ASCE)HE.1943-5584.0001388), 2016.

Hagenmuller, P. and Pilloix, T.: A New Method for Comparing and Matching Snow Profiles, Application for Profiles Measured by Penetrometers, *Frontiers in Earth Science*, 4, <https://doi.org/10.3389/feart.2016.00052>, 2016.

Mourre, L., Condom, T., Junquas, C., Lebel, T., E. Sicart, J., Figueroa, R. and Cochachin, A.: Spatio-temporal assessment of WRF, TRMM and in situ precipitation data in a tropical mountain environment (Cordillera Blanca, Peru), *Hydrol. Earth Syst. Sci.*, 20(1), 125–141, <https://doi.org/10.5194/hess-20-125-2016>, 2016.

Nicolet, G., Eckert, N., Morin, S. and Blanchet, J.: Decreasing spatial dependence in extreme snowfall in the French Alps since 1958 under climate change: DECREASING SPATIAL DEPENDENCE IN EXTREME SNOWFALL, *Journal of Geophysical Research: Atmospheres*, 121(14), 8297–8310, <https://doi.org/10.1002/2016JD025427>, 2016.

Pellarin, T., Mialon, A., Biron, R., Coulaud, C., Gibon, F., Kerr, Y., Lafaysse, M., Mercier, B., Morin, S., Redor, I., Schwank, M. and Völksch, I.: Three years of L-band brightness temperature measurements in a mountainous area: Topography, vegetation and snowmelt issues, *Special Issue: ESA's Soil Moisture and Ocean Salinity Mission - Achievements and Applications*, 180(Supplement C), 85–98, <https://doi.org/10.1016/j.rse.2016.02.047>, 2016.

Picard, G., Arnaud, L., Panel, J.-M. and Morin, S.: Design of a scanning laser meter for monitoring the spatio-temporal evolution of snow depth and its application in the Alps and in Antarctica, *The Cryosphere*, 10(4), 1495–1511, <https://doi.org/10.5194/tc-10-1495-2016>, 2016a.

Picard, G., Libois, Q., Arnaud, L., Verin, G. and Dumont, M.: Development and calibration of an automatic spectral albedometer to estimate near-surface snow SSA time series, *The Cryosphere*, 10(3), 1297–1316, <https://doi.org/10.5194/tc-10-1297-2016>, 2016b.

Picard, G., Libois, Q., Arnaud, L., Vérin, G. and Dumont, M.: Estimation of superficial snow specific surface area from spectral albedo time-series at Dome C, Antarctica, *The Cryosphere Discussions*, 1–39, <https://doi.org/10.5194/tc-2015-213>, 2016c.

Picard, G., Libois, Q. and Arnaud, L.: Refinement of the ice absorption spectrum in the visible using radiance profile measurements in Antarctic snow, *The Cryosphere Discussions*, 1–36, <https://doi.org/10.5194/tc-2016-146>, 2016d.

Picard, G., Arnaud, L., Panel, J.-M. and Morin, S.: Spatio-temporal evolution of snow depth observed by time-lapse laser scanning in the Alps and in Antarctica, *The Cryosphere Discussions*, 1–32, <https://doi.org/10.5194/tc-2016-67>, 2016e.

Quéno, L., Vionnet, V., Dombrowski-Etchevers, I., Lafaysse, M., Dumont, M. and Karbou, F.: Snowpack modelling in the Pyrenees driven by kilometric-resolution meteorological forecasts, *The Cryosphere*, 10(4), 1571–1589, <https://doi.org/10.5194/tc-10-1571-2016>, 2016.

Rabatel, A., Dedieu, J. P. and Vincent, C.: Spatio-temporal changes in glacier-wide mass balance quantified by optical remote sensing on 30 glaciers in the French Alps for the period 1983–2014, *Journal of Glaciology*, 62(236), 1153–1166, <https://doi.org/10.1017/jog.2016.113>, 2016.

Revuelto, J., Vionnet, V., López-Moreno, J.-I., Lafaysse, M. and Morin, S.: Combining snowpack modeling and terrestrial laser scanner observations improves the simulation of small scale snow dynamics, *Journal of Hydrology*, 533(Supplement C), 291–307, <https://doi.org/10.1016/j.jhydrol.2015.12.015>, 2016.

Rysman, J.-F., Lahellec, A., Vignon, E., Genthon, C. and Verrier, S.: Characterization of Atmospheric Ekman Spirals at Dome C, Antarctica, *Boundary-Layer Meteorology*, 160(2), 363–373, <https://doi.org/10.1007/s10546-016-0144-y>, 2016.

Sicart, J. E., Espinoza, J. C., Quéno, L. and Medina, M.: Radiative properties of clouds over a tropical Bolivian glacier: seasonal variations and relationship with regional atmospheric circulation: Tropical glacier clouds: radiation fluxes and atmospheric circulation, *International Journal of Climatology*, 36(8), 3116–3128, <https://doi.org/10.1002/joc.4540>, 2016.

Spandre, P., Morin, S., Lafaysse, M., Lejeune, Y., François, H. and George-Marcelpoil, E.: Integration of snow management processes into a detailed snowpack model, *Cold Regions Science and Technology*, 125(Supplement C), 48–64, <https://doi.org/10.1016/j.coldregions.2016.01.002>, 2016.

Vincent, C. and Moreau, L.: Sliding velocity fluctuations and subglacial hydrology over the last two decades on Argentière glacier, Mont Blanc area, *Journal of Glaciology*, 62(235), 805–815, <https://doi.org/10.1017/jog.2016.35>, 2016.

Vincent, C., Wagnon, P., Shea, J. M., Immerzeel, W. W., Kraaijenbrink, P., Shrestha, D., Soruco, A., Arnaud, Y., Brun, F., Berthier, E. and Sherpa, S. F.: Reduced melt on debris-covered glaciers: investigations from Changri Nup Glacier, Nepal, *The Cryosphere*, 10(4), 1845–1858, <https://doi.org/10.5194/tc-10-1845-2016>, 2016.

Vionnet, V., Dombrowski-Etchevers, I., Lafaysse, M., Quéno, L., Seity, Y. and Bazile, E.: Numerical Weather Forecasts at Kilometer Scale in the French Alps: Evaluation and Application for Snowpack

Modeling, *Journal of Hydrometeorology*, 17(10), 2591–2614, <https://doi.org/10.1175/JHM-D-15-0241.1>, 2016.