

Publications up to 2016

This is a list of articles published in peer-reviewed scientific journals related to seasonal forecasting up to 2016 with CNRM researchers (in bold fonts) as lead author or co-author.

- Déqué, M.**, 1988: The probabilistic formulation: a way to deal with ensemble forecasts. *Annales Geophysicae*, 6, 217-224.
- Déqué, M.**, 1990: Impact of prescribed sea surface temperatures on extended range forecasting. *J. Marine Systems*, 1, 61-70.
- Déqué, M.**, 1991: Removing the model systematic error in extended range forecasting. *Annales Geophysicae*, 9, 242-251.
- Déqué, M.** and **Royer, J.F.**, 1992: The skill of extended-range extratropical winter dynamical forecasts. *J. Climate*, 5, 1346-1356.
- Déqué, M.**, **Royer, J.F.** and Stroe, R., 1994: Formulation of gaussian probability forecasts based on model extended-range integrations. *Tellus*, 46A, 52-65.
- Déqué, M.**, 1997: Ensemble size for numerical seasonal forecasts. *Tellus*, 49A, 74-86.
- Doblas-Reyes, F.J., **Déqué, M.** and **Piedelievre, J.P.**, 2000: Model and multimodel spread in the PROVOST seasonal forecasts : application to probabilistic forecasts. *Quart. J. Roy. Meteor. Soc.*, 126, 2069-2088.
- Douville, H.** and **Chauvin, F.**, 2000: Relevance of soil moisture for seasonal climate predictions: a preliminary study. *Climate Dynamics*, 16, 719-736
- Déqué, M.**, 2001: Seasonal predictability of tropical rainfall : probabilistic formulation and validation. *Tellus*, 53A, 500-512.
- Sperber, K.R., Brankovic, C., **Déqué, M.**, Frederiksen, C.S., Graham, R., Kitoh, A., Kobayashi, C., Palmer, T., Puri, K., Tennant, W. and Volodin, W., 2001: Dynamical seasonal predictability of the Asian summer monsoon. *Mon. Wea. Rev.*, 129, 2226-2248.
- Garric, G., **Douville, H.** and **Déqué, M.**, 2002: Prospects for improved seasonal predictions of monsoon precipitation over Sahel. *Int. J. Climatol.*, 22(3), 331-345.
- Clark, R.T. and **Déqué, M.**, 2003: Conditional probability seasonal predictions of precipitation. *Quart. J. Roy. Meteor. Soc.*, 129, 1-15.
- Palmer, T.N., Alessandri, A., Andersen, U., Cantelaube, P., Davey, M., Délécluse, P., **Déqué, M.**, Díez, E., Doblas-Reyes, F.J., Feddersen, H., Graham, R., Gualdi, S., **Guérémy, J.F.**, Hagedorn, R., Hoshen, M., Keenlyside, N., Latif, M., Lazar, A., Maisonnave, E., Marletto, V., Morse, A.P., Orfila, B., Rogel, P., Terres, J.M. and Thomson, M.C., 2004: Development of a European Multi-Model Ensemble System for Seasonal to Inter-Annual Prediction (DEMETER). *Bull. Am. Meteorol. Soc.*, 85, 853-872.
- Douville, H.** 2004: Relevance of soil moisture for seasonal climate predictions: is it an initial value problem ? *Climate Dynamics*, 22, 429-446

- Guérémy, J.F., Déqué, M., Braun, A. and Pielieuvre, J.P.**, 2005: Actual and potential skill of seasonal predictions using the CNRM contribution to DEMETER: coupled versus uncoupled model. *Tellus*, 57A, 308-319.
- Guldberg, A., Kaas, E., **Déqué, M.**, Yang, S. and Vester Thorsen, S., 2005: Reduction of systematic errors by empirical model correction: impact on seasonal prediction skill. *Tellus*, 57A, 575-588.
- Chauvin, F., Royer, J.F. and Douville, H.**, 2005 : Interannual variability and predictability of African easterly waves in a GCM. *Climate Dynamics*, 24, 523-544, DOI 10.1007/s00382-004-0507-9.
- Vitart, F., Huddleston, M.R., **Déqué, M.**, Peake, D., Palmer, T.N., Stockdale, T.N., Davey, M.K., Ineson, S. and Weisheimer, A., 2007: Dynamically-based seasonal forecasts of Atlantic tropical storm activity issued in June by EUROSIP. *Geophys. Res. Lett.*, 34, L16815, doi:10.1029/2007GL030740
- Douville, H.**, 2007, Soil moisture memory and West African monsoon predictability: artefact or reality ? *Climate Dynamics*, 28, 723-742
- Douville, H.**, Conil, S., **Tyteca, S.** and **Voldoire, A.**, 2007: Soil moisture memory and West African monsoon predictability : artefact or reality ? *Climate Dyn.*, 28, 723-742, [doi:10.1007/s00382-006-0207-8](https://doi.org/10.1007/s00382-006-0207-8).
- Conil S., **Douville, H.**, and **Tyteca, S.**, 2008: Contribution of realistic soil moisture initial conditions to boreal summer predictability. *Climate Dyn.*, 32, 75-93, doi:10.1007/s00382-008-0375-9.
- Weisheimer, A., Doblas-Reyes, F.J. Palmer, T.N. Alessandri, A. Arribas, A. **Déqué, M.**, Keenlyside, N. MacVean, M. Navarra, A. and Rogel, P., 2009 : ENSEMBLES: A new multi-model ensemble for seasonal-to-annual predictions--Skill and progress beyond DEMETER in forecasting tropical Pacific SSTs. *Geophysical Research Letters*, 36, doi : 10.1029/2009GL040896
- Douville, H.**, 2009: Stratospheric polar vortex influence on Northern Hemisphere winter climate variability. *Geophys. Res. Lett.*, 36, doi.: 10.1029/2009GL039334
- Douville, H.**, 2010: Relative contributions of soil and snow hydrology to seasonal climate predictability : a pilot study. *Climate Dyn.*, 34, 797-818, doi : 10.1007/s00382-008-0508-1.
- Alessandri, A., Borelli, A., Navarra, A., Arribas, A., **Déqué, M.**, Rogel, P. and Weisheimer, A, 2011: Evaluation of Probabilistic Quality and Value of the ENSEMBLES Multimodel Seasonal Forecasts: Comparison with DEMETER. *Monthly Weather Review*, 139, 581-607, doi : 10.1175/2010MWR3417.1
- Batté, L.**, and **Déqué, M.**, 2011: Seasonal predictions of precipitation over Africa using coupled ocean-atmosphere general circulation models : skill of the ENSEMBLES project multimodel ensemble forecasts. *Tellus SERIES A-Dynamic Meteorology and Oceanography*, Volume : 63, Issue : 2, Pages : 283-299, Published : MAR 2011. doi : 10.1111/j.1600-0870.2010.00493.x.
- Peings, Y., **Douville, H.**, Alkama, R. and **B. Decharme**, 2011: Snow contribution to springtime atmospheric predictability over the second half of the twentieth century. *Climate Dyn.*, doi :

10.1007/s00382010-0884-1.

- Batté, L.** and **Déqué, M.** , 2012: A stochastic method for improving seasonal predictions. *Geophysical Research Letters*, Vol. 39, L09707, doi:10.1029/2012GL051406
- Chevallier, M.** and **Salas Y Mélia, D.**, 2012. The role of sea ice thickness distribution in the Arctic sea ice potential predictability: a diagnostic approach with a coupled GCM. *Journal of Climate*, 25, 3025-3038, doi:10.1175/JCLI-D-11-00209.1
- Guérémy, J.F.**, Laanaia, N. and **Céron, J.P.**, 2012.: Seasonal forecast of French Mediterranean heavy precipitating events linked to weather regimes, *Nat. Hazards Earth Syst. Sci.*, 12, 2389-2398, doi:10.5194/nhess-12-2389-2012.
- Chevallier, M.**, **Salas y Mélia, D.**, **Voltaire, A.**, **Déqué, M.** and Garric, G., 2013: Seasonal Forecasts of the Pan-Arctic Sea Ice Extent Using a GCM-Based Seasonal Prediction System. *J. Climate*, 26, 6092–6104.
- Guémas V.**, Blanchard-Wrigglesworth, E., **Chevallier, M.**, Day, J.J, **Déqué, M.**, Doblas-Reyes, F.J., Germe, A., Hawkins, E., Keeley, S., Koenigk, T., **Salas y Mélia, D.**, and Tietsche, S. 2014 : A review on Arctic sea ice predictability and prediction on seasonal-to-decadal timescales, *QJRM*, doi:10.1002/qj.2401
- Singla, S., **Céron, J.P.**, **Martin, E.**, **Regimbeau, F.**, **Déqué, M.**, Habets, F. and Vidal, J.P., 2012 : Predictability of Soil Moisture and River Flows over France for the Spring Season *Hydrol. Earth Syst. Sci.*, 16, 201-216, doi:10.5194/hess-16-201-2012
- Batté, L.** and Doblas-Reyes, F.J., 2015 : Stochastic atmospheric perturbations in the EC-Earth3 global coupled model: impact of SPPT on seasonal forecast quality. *Climate Dynamics*, doi: 10.1007/s00382-015-2548-7
- Blanchard-Wrigglesworth, E., A., Barthélemy, **M. Chevallier**, R. Cullather, N. Fučkar, F.Massonnet, P. Posey, W. Wang, J. Zhang, **C. Ardilouze**, C. M. Bitz, G. Vernieres, A.Wallcraft, M. Wang, 2016 : Multi-model seasonal forecast of Arctic sea-ice: forecast uncertainty at pan-Arctic and regional scales. *Climate Dynamics*. doi:10.1007/s00382-016-3388-9
- Batté, L.** and **Déqué, M.**, 2016 : Randomly correcting model errors in the ARPEGE-Climate v6.1 component of CNRM-CM: applications for seasonal forecasts. *Geoscientific Model Development*, vol. 9, pp 2055-2076, doi: 10.5194/gmd-9-2055-2016