

CV type ANR

A remplir en ligne, <https://iris.anr.fr/fr/cv/dispo>

CV de chaque responsable scientifique de chaque éventuel partenaire doivent être complétés en ligne avant les date et heure de clôture de l'étape2. Pour ce faire, les personnes concernées peuvent se connecter dès à présent à leur compte IRIS et compléter leur CV en cliquant sur leur nom/prénom en haut à droite de l'écran d'accueil.

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**Model of CV – Appendix:** submit **in one document PDF** the CVs of the scientific coordinator (the French coordinator and the foreign coordinator (country referent) for PRCI) and the principal investigators of the other partners. For a JCJC proposal, only the CV of the young researcher. **Any other information included in the appendix will not be taken into account by the scientific evaluation panels.** Applicants are strongly advised to draft their CV in English and not to use abbreviation as evaluations may be carried out by non-French-speakers.

Identité / Personal details					
Genre / Gender (Femme / Homme / Autre)		Homme			
Nom et prénom / Name and first name:		Somot Samuel			
Pays / Country		France			
Poste actuel / Current position <sup>1</sup>					
Titre / Function					
Senior researcher at CNRM, orcid: 0000-0002-5066-2921					
Organisme(s) public(s) français / French public organisation(s)					
Code RNSR / RNSR code	Organisme / Organisation	Laboratoire / Laboratory	Code unite / Unit code	Code postal / Postcode	Ville / Town
201320566C	Meteo-France	CNRM	UMR3589	31057	Toulouse
Organisme(s) privé(s) français / French private organisation(s)					
Siret	Etablissement / Organisation	Direction service / Department unit	Code postal / Postal code	Ville /Town	
Organisme(s) étranger(s) / Foreign organisation					
Etablissement / Organisation		Laboratoire / Laboratory		Ville / Town	Pays / Country
Autres activités / Other activities					
<i>Activités de direction, encadrement, enseignement, activité d'évaluation dans des commissions ou d'expertise scientifique / Executive board, supervision of student, teaching, memberships in panels or individual scientific reviewing activities</i>					
- Head of the Regional Climate Modelling Research Team at CNRM since 2016 (the MOSCA team, <a href="https://www.umer-cnrm.fr/spip.php?article1035">https://www.umer-cnrm.fr/spip.php?article1035</a> )					
- Member of the Med-CORDEX Steering Committee ( <a href="http://www.medcordex.eu">www.medcordex.eu</a> ) since 2009, of the Med-CLIVAR Scientific Steering Group since 2014 and of the French HyMeX executive committee (2011-2020)					
- Supervisor or co-supervisor of 9 PhD students: M. Herrmann (2007), J. Colin (2011), J. Beuvier (2011), P. Nabat (2014), R. Waldman (2016), S. Darmarki (2019), Q. Fumière (2019), A. Doury (-), C. Caillaud (-)					
- CNRM PI for the EUCP European project (H2020, 2017-2022) and C3S_34b_lot2 COPERNICUS project (2017-2021)					
- Contributing author to the IPCC-AR4 (2007) an IPCC-AR6 (2021) and Lead Author of the MedECC MAR1 (First Mediterranean Assessment Report, 2020)					
- Teaching at ENM (Ecole Nationale de la Météorologie) in Regional Climate Modelling ( <a href="https://doi.org/10.5281/zenodo.4586910">https://doi.org/10.5281/zenodo.4586910</a> )					
- More information on my personal web page : <a href="http://www.umer-cnrm.fr/spip.php?article437">www.umer-cnrm.fr/spip.php?article437</a>					
Postes antérieurs / Previous positions					
Début /	Fin / End	Ville / Town	Etablissement / Organisation	Fonction / Function	

<sup>1</sup> Compléter la ou les sections appropriées / Fill the appropriate field(s)

Start date	date			
2016	on-going	Toulouse	CNRM	Head of a research team
2012	2013	Paris, France	LOCEAN	Visiting scientist
2010	2010	New-York, USA	NASA/GISS	Visiting scientist
2003	2003	Reading, UK	ESSC	Visiting scientist
2003	on-going	Toulouse	CNRM	Researcher
<b>Interruption(s) de carrière / Career interruption(s)</b>				
none				
<b>Formation supérieure / Education<sup>2</sup></b>				
<ul style="list-style-type: none"> <li>- Visiting scientist at ESSC (Reading, 5 months, 2003), OURANOS (Montréal, 2 months, 2007), NASA/GISS (New-York, 4 months, 2010) and LOCEAN (Paris, 1 year, 2012-2013)</li> <li>- PhD in Climate physics at Université Paul Sabatier, Toulouse (2005)</li> <li>- Engineer at Ecole National de la Météorologie (Meteo-France), Toulouse (2003)</li> <li>- Master in Oceanography, Meteorology and Environnement at Paris 6 University, Paris (2000)</li> <li>- Bachelor in Physics at Ecole Normale Supérieure de Lyon, Lyon (1997-2001)</li> </ul>				
<b>Productions scientifiques / Scientific productions</b>				
<b>Projets de recherche, prix, distinctions, bourses, etc. / Grants, prizes, awards, fellowships, etc.</b>				
<ul style="list-style-type: none"> <li>- Publications: since 2006, I'm author or co-authors of more than 135 publications in peer-reviewed journal or books (Web-of-Science: h-factor: 49, citations: 8443) and more than 165 communications in national and international conferences (incl. 40 invited/solicited/keynote communications).</li> <li>- Awards: Med-CLIVAR Young Scientist Award in 2011</li> <li>- Grants: participation to 11 European projects in FP4 (MERCURE), FP5 (PRUDENCE), FP6 (ENSEMBLES, CECILIA, CIRCE), FP7 (CLIM-RUN, IMPACT2C), ERA-Net (CIRCLE-Med/CANTICO as CNRM PI), Marie-Curie (MARmaED as CNRM PI), COPERNICUS (C3S_34b_lot2 as CNRM PI) and HORIZON2020 (EUCP as CNRM PI)</li> <li>- Grants: participation to 17 national funded projects for ANR (CICLE, MEDUP as WP leader, SCAMPEI, VURCA, MUSCADE, ASICS-MED, REMEMBER as CNRM PI and WP leader, PopNCo as CNRM PI), LEFE (MISSTERRE, MISSTERRE-2), MERCATOR PPR (SiMed, SiMed-2), GICC (MedWater), ACI (CYPRIM) and ENVI-MED (CLHMag as CNRM PI, Med-MaHb as CNRM PI, TANGRAM as CNRM PI)</li> </ul>				
<b>5 publications majeures / 5 most relevant publications</b>			<b>Quel est l'apport majeur de cette publication ? / What is the major contribution of this publication?</b>	
1	Somot S., Houpert L., Sevault F., Testor P., Bosse A., Taupier-Letage I., Bouin M.N., Waldman R., Cassou C., Sanchez-Gomez E., Durrieu de Madron X., Adloff F., P. Nabat, Herrmann M. (2018) Characterizing, modelling and understanding the climate variability of the deep water formation in the North-Western Mediterranean Sea. <i>Climate Dynamics</i> , 51(3), 1179-1210, doi: 10.1007/s00382-016-3295-0, available on-line: <a href="https://link.springer.com/content/pdf/10.1007%2Fs00382-016-3295-0.pdf">https://link.springer.com/content/pdf/10.1007%2Fs00382-016-3295-0.pdf</a>		This article is the achievement of a 10-year long research idea, that started during my PhD, includes scientific visits at ESSC (Reading, UK) and LOCEAN (Paris, France) and relies on many researchers of various origins. It associates long-term research efforts for both the modelling and observation of the North-Western Mediterranean deep water formation and may become one of the few reference papers for the characterization and understanding of the climate variability of this key ocean process (Google scholar ACI: 80).	
2	Giorgi F., Torma C., Coppola E., Ban N., Schär C., Somot S. (2016) Enhanced summer convective rainfall at Alpine high elevations in response to climate warming. <i>Nature Geoscience</i> , 9, 584-589, doi:10.1038/ngeo2761		One of the rare "Nature" article based on regional climate models so far. Illustration of an important climate change "surprise" due to increased model resolution. It therefore contributes to legitimate the use of high-resolution climate models to assess regional climate change in addition to global climate models. In addition, F. Giorgi and C. Schär are among the most recognised researchers in the field (Google scholar ACI: 168)	
3	Ruti PM, Somot S, Giorgi F, Dubois C, Flaounas E, Obermann A, Dell'Aquila A, Pisacane G, Harzallah A, Lombardi E, Ahrens B, Akhtar N, Alias A, Arsouze T, Aznar R, Bastin S, Bartholy J, Béranger K, Beuvier J, Bouffies-Cloché S, Brauch J, Cabos W, Calmanti S, Calvet J-C, Carillo A, Conte D, Coppola E, Djurdjevic V, Drobinski P, Elizalde-Arellano A, Gaertner M, Galàn P, Gallardo C, Gualdi S,		Reference article of the Med-CORDEX initiative, illustrating my coordination role in the Med-CORDEX international initiative ( <a href="http://www.medcordex.eu">www.medcordex.eu</a> ) since its start in 2009. Initially I was co-coordinator of the initiative with Paolo Ruti, then single coordinator and finally member and leader of the 6-member Steering	

<sup>2</sup> Les non-titulaires d'un PhD indiquent la date de leur dernier diplôme académique. / Researchers without a PhD must indicate the date of their last academic degree.

	Goncalves M, Jorba O, Jordà G, L'Heveder B, Lebeaupin-Brossier C, Li L, Liguori G, Lionello P, Maciàs D, Nabat P, Onol B, Raikovic B, Ramage K, Sevault F, Sannino G, Struglia MV, Sanna A, Torma C, Vervatis V (2016) MED-CORDEX initiative for Mediterranean Climate studies. Bull. Amer. Meteor. Soc., 97(7), 1187-1208, July 2016, doi: <a href="http://dx.doi.org/10.1175/BAMS-D-14-00176.1">http://dx.doi.org/10.1175/BAMS-D-14-00176.1</a> <a href="http://journals.ametsoc.org/doi/abs/10.1175/BAMS-D-14-00176.1">http://journals.ametsoc.org/doi/abs/10.1175/BAMS-D-14-00176.1</a>	Committee. (Google scholar ACI: 225)
4	Somot S., Sevault F., Déqué M., Crépon M. (2008) 21st century climate change scenario for the Mediterranean using a coupled Atmosphere-Ocean Regional Climate Model. Global and Planetary Change, 63(2-3), 112-126, doi:10.1016/j.gloplacha.2007.10.003	First-of-its-kind air-sea coupled regional climate model dedicated to the study of the Mediterranean climate and sea. This article opens the way for the development of fully-coupled regional climate system models in other European and Mediterranean research groups which finally leads to coordinated actions, such as the CIRCE European project, the design of the MISTRALS/HyMeX climate modelling team and the international Med-CORDEX initiative under the WCRP umbrella. This article also illustrates that improving the representation of the Mediterranean Sea in climate models may modify (in this case enhance) the future regional climate change signal for the region. (Google scholar ACI: 410)
5	Somot S., Sevault F., Déqué M. (2006) Transient climate change scenario simulation of the Mediterranean Sea for the 21st century using a high-resolution ocean circulation model. Climate Dynamics, 27(7-8), 851-879, doi :10.1007/s00382-006-0167-z	First-of-its-kind realistic high-resolution climate change scenarios for the Mediterranean Sea. This pioneer article opens a new era for long-term climate modelling of the Mediterranean Sea and is very well cited for a PhD paper. In addition it claims for the first time that Mediterranean Deep Water Formation and Mediterranean Thermohaline Circulation may weaken during the 21st century (Google scholar ACI: 322)

#### Valorisation

*brevet, licence, création d'entreprise, développement de logiciel, base de données, prototype, etc. / patent, creation of a start-up, software development, database, prototype, etc.*

- Contribution to the development of the Mediterranean version of the NEMO ocean model: NEMOMED
- Contribution to the development of the climate version of the ALADIN regional climate model: CNRM-ALADIN
- Contribution to the development of the Med-CORDEX database ([www.medcordex.eu](http://www.medcordex.eu)) of regional climate simulations
- Coordination of the CNRM effort for the WCRP CORDEX initiative leading to the public availability of CNRM-ALADIN regional climate simulations on the ESGF distributed database and on the COPERNICUS Climate Data Store
- Scientific advisor for the French national climate service data portal (DRIAS, <http://www.drias-climat.fr/>)

#### Mots clés ERC : (PE10 : Earth System science )

PE10\_02 : Meteorology, atmospheric physics and dynamics

PE10\_03 : Climatology and climate change

PE10\_08 : Oceanography

Mots clés libres :

climat, Méditerranée, modélisation océanique et climatique régionale, physique océanique, scénarios futurs

climate, Mediterranean, regional climate and ocean modelling, ocean physics, future scenarios