

CURSUS



Personal information

Name **Danièle Caraux Garson**
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<http://www.danielegarson.sitew.com>
Nationality French
Date of birth 27th November 1953

Consultancy and Training in GIS and Remote sensing

Remote Sensing applications in Coastal area, Oceanography, Agronomy, and Environment

Physical and Biological indicators from Remote Sensing in Mediterranean areas

Competences and skills

- Knowledge about the state of the art in remote sensing applications for sea shore, agriculture and environmental area in Mediterranean countries , drought applications
- Writing proposals for European Union, ESA, PNUD..
- Capability to connect partners, stakeholders, researchers, to federate quickly an international or regional team, International network in public and private sectors

(France, Eurisy/ESA, Earsel, Unesco, Switzerland PNUD, Lebanon, Morocco, , Italy (JRC), Spain, Greece, USA/California Scripps Institution of Oceanography, Canada, Indonesia, Germany, Nederland, Burkina Faso...)

- Training for opensource GIS/RS : QGIS, knowledge, OTB (Monteverdi) ,educational software (leoworks...), contributive mapping tools (JOSM, UMAP, ID, fieldpapers..).
- Bureautic software: Office (word, excel, powerpoint); Openoffice.
- Picture : software (Picasa, photoshop)

I have used different scientific software during my career in image processing and GIS (spider algorithm library- morphomaths- Erdas-imagine, Envi, Envi EX, **ArcGIS** Arcview (+image analysis, spatial analysis, 3D), Ermapper, idrisi..

Mother tongue(s) **French**
Other language(s) **English- Spanish**

I am good at analyzing and synthesizing information. I have the ability to understand quickly a subject and to explain it to others. To be a researcher and to teach students develop these abilities.
Good to assign priorities for a project and to keep deadlines when planning tasks
Good to make contact between organisms

Work experience

	International G.I.S Remote Sensing expert in Environment (EU ECAS database since 1996) DG Consultance company: "Usages géomatiques des Territoires et des Océans" "Member at the Regional Organism "Parlement de la Mer in Languedoc Roussillon "Commission « Aménagement Durables et Environnement » for the Mediterranean sea (sea shore, lagoons, biodiversity...) Member Association « Collectif des Garrigues » Member Association SIG LR »
Dates	2010-2015
Position held	DG Consultance and training for GIS-Remote Sensing users Contributive mapping project in Burkina Faso (Openstreetmap, Bing aerial) in partnership with non governmental organizations (C.A.S.E Burkina, Yam Daabo, agroecological projet in Baszaïdo village) CIRAD spatial data analysis LANDSAT GIS database for agroindustrial concessions landgrabbing in Central Africa with QGIS and ENVI software Quantum GIS training courses: Institut Agronomique Méditerranéen- Montpellier (IAMM), CIHEAM Contributive mapping training courses « Centre d'animation du Pays de Sommières La Saussinette », IAMM
Dates	
Position held	"Conseil d'administration" SIG-LR
Activities	<ul style="list-style-type: none">➤ Survey for Integration of Remote Sensing by GIS users in Languedoc-Roussillon➤ Co-Winner of GMES Astrium challenge with GEOTRANSFERT: Balist project: the nearshore bathymetry service from space using Sentinel 1 and Sentinel 2➤ Creation of a Working Group "Satellite"-at SIG L-R (coastal area...) SIG LR is in Partnership with GEOSUD, Maison de la Télédétection
Address	Association Sig-L-R Maison de la Télédétection 500 rue JF Breton 34093 Montpellier cedex 5
Dates	2005-2013
Position held	Voluntary worker in a mutual exchange knowledge Network (RERS)
Activities	Responsible of the exchanges with the other networks for FORESCO (France network) Writing educational materials to be used at distance by other networks. Developing workshops in Oenology, numeric Photography and writing « Formation Réciproque et Solidaire entre collectifs européens » (RERS Sommières Calade, 1 rue Poterie 30250 Sommières France)
Sector	Education and Culture Lifelong Learning (European program FRESC)
Dates	2004-2005
Position held	Project Coordinator
Activities	"Aide à la Gestion Intégrée des Littoraux project (AGIL)" : Creating a GIS database about coastal land cover using remote sensing and GIS data in Languedoc-Roussillon, coordination between Bas Rhône Languedoc and Research (Ifremer, IRD, Cirad...),
Address	BRL 1105, avenue Pierre Mendès France BP 94001 – 30001 Nîmes – Cedex 5 – France
Sector	R&D department
Dates	2000-2003
Position held	Project manager in my company Ceis-Quercus,incubation Cap alpha, Anvar funding
Activities	Centre for expertise in Remote Sensing and GIS for Agro-Environment - Germa-Glove European Union project at CRTS in Morocco: extracting biomass evolution parameters from RS. Oceanographic and terrestrial applications. Integration in a GIS database - United Nations expertise and training at Bekaa Valley, Lebanon - Modeling expert tools in geology Conseil Général Hérault - Training courses in GIS/RS University, GDTA
Address	SARL Ceis-Quercus 38 Grand rue Jean Moulin 34000 Montpellier France
Sector	SARL

Dates	1999
Position held	GIS/RS Professor and Project leader
Activities	Creation of the GIS-RS laboratory DEMOS INCO european project: monitoring vegetation with satellite sensors. Creation of a GIS database in Bekaa valley. Teaching GIS and Remote sensing to students. Ecophysiological measurements Winner of ESRI poster session in Lebanon
Address	CIHEAM-Mediterranean Agronomic Institut of Chania, Crete, Greece
Sector	Intergovernmental organization
Dates	1996-1998
Position held	GIS/RS project leader
Activities	DEMON 2 European project (dryland monitoring indicators for desertification processes in Crete with JRC researchers) Creation of Geocoded landcover databases at various scales in Languedoc (Landsat T, Noaa-Avhrr) Research programs, publishing scientific articles, student supervisions
Address	Centre Ecologie Fonctionnelle et Evolutive, CNRS, route de Mende Montpellier France
Sector	Public French Research organism
Dates	1995-1996
Position held	GIS/RS project leader under Alain Vidal supervision
Activities	Thematic projects using thermal and radar sensors (NOAA, ERS) Student supervisions and training courses
Address	Maison de la Télédétection, IRSTEA (Cemagref), 500 rue JF Breton, Montpellier France
Sector	French Specialized Environmental Science Research Organism
Dates	1992-1994
Position held	engineer
Activities	Experimental trials for wine making
Address	Sicarex Beaujolais, 210 boulevard Victor Vermorel 69400 Villefranche-sur-saône France
Sector	French Specialized Wine Research Organism
Dates	1988-1991
Position held	Project Leader
Activities	Administration of the IBM mainframe and chemical databases, training scientific software, image analysis, collaboration with foreign divisions
Address	Rhône Poulenc Agrochimie (Aventis Crop science) La Dargoire, Lyon, France
Sector	Multinational chemical company
Dates	1983-1987
Position held	Computer scientist
Activities	Project leader to develop satellite imagery, cartography, medical imagery Training courses in image processing for researchers
Address	CINES, 950 rue de St Priest 34184 Montpellier, France
Sector	National University French Computer Centre
Dates	1981-1982
Position held	Visiting Scientist
Activities	Developing biological models from remote sensing of oceans Scientific articles about multitemporal studies of frontal structures
Address	Scripps Institution of Oceanography, University of California San Diego, La Jolla, USA

Sector	Oceanographic laboratory US research centre
Education and training	
Dates	2009
Title of qualification awarded	Sustainable Development qualification
Subject skills covered	Interviews and conferences in sustainable development
Name	“Dynamique d’Information et de Formation sur l’Environnement et le Développement Durable Association, Montpellier University of Sciences (DIFED)
Dates	2007
Title of qualification awarded	“Formateur Responsable Pédagogique : Educational trainer manager
Subject skills covered	Educational coordination, vocational education, individualization training, learning teaching methods...
Name	Centre Académique de Formation Continue, Education Nationale
Level in national or international classification	Level II
Dates	1992
Title of qualification awarded	Diploma National in Viticulture Oenology
Subject skills covered	Viticulture and Oenology
Name	Ecole Nationale Supérieure Agronomique Montpellier France
Level in national or international classification	University diploma (2 nd cycle)
Dates	1985
Title of qualification awarded	Ph-D Doctorat d’Etat in Oceanography using Remote sensing
Subject skills covered	Thermal and visible satellite remote sensing for studying water masses boundaries Using computerized information a comparison of infrared and visible data has been done to show connexions between physical and biological events in Marine ecology. After atmospheric correction chlorophyll pigment concentration were derived from subsurface upwelling radiance using biological algorithm. We characterized boundaries of Rhône river plume, coastal upwellings and eddies from phytoplankton distribution
Name	University Montpellier 2, Scripps Inst. Oceanography UCSD , Laboratoire Arago Banyuls, University Paris VI
Level in national or international classification	Terminal science degree, Bac +8 level 1
Dates	1978
Title of qualification awarded	DEA
Subject skills covered	Aquatic Ecology Algae vegetation repartition in lagoons from airborne remote sensing
Name	University Montpellier 2
Level in national or international classification	Bac +5 level 2
Dates	1978
Title of qualification awarded	Engineer in Agronomy
Subject skills covered	Agronomic fields
Name	Ecole Nationale Supérieure Agronomique de Montpellier (SupAgro)
Level in national or international classification	“Concours des Grandes écoles”

Additional information | M.O.O.C., cooking, writing, reading, Flûte, music, taking pictures, sewing, gym, yoga...

Permis B driving licence (1972)

Winner of “foundation de la Vocation” Marcel Bleustein Blanchet (1983) for my work in remote sensing in Oceanography from space.

PUBLICATIONS

SCIENTIFIC PAPERS

Caraux Garson D. and Lacaze B. (2003) Monitoring Leaf Area Index of Mediterranean oak woodlands: comparisons of remotely-sensed estimates with simulations from ecological process-based model. *Int. J. Remote Sensing*, 24 (17) : 3441-3456.

Caraux D. and Austin R.W. (1984). Multispectral satellite remote sensing of an oceanic cyclone in the northwestern Mediterranean. *Int. J. Remote Sens.*, 5 (5) : 855-860.

Caraux D. & Austin R.W. (1983). Delineation of seasonal changes of chlorophyll frontal boundaries in Mediterranean coastal waters with Nimbus-7 CZCS data. *Remote Sens. Environ.*, 13 : 239-249.

Caraux D. & Austin R.W. (1982). Upwellings côtiers et extension des eaux du Rhône dans le Golfe du Lion. Visualisation par analyse des fronts chlorophylliens à partir du radiomètre Nimbus-7 CZCS (6 et 7 juillet 1979). *Photo Interprét.*, 6 (2) : 2.1-2.6.

REPORTS

Caraux D., Vidal A., Loumagne C., Normand M., Cognard A.-L., Ottle C. (1996). Observatoire Hydrologique de Naizin en Bretagne Centrale, Phase D - ERS 1. **Rapport n°94/CNES/0238**, Maison de la télédétection en Languedoc-Roussillon, Montpellier.

Caraux D. (1996). Aptitude des données de satellite radar à estimer l'état hydrique du sol. **Rapport CNES LCT/Cemagref**, Montpellier.

Caraux D. (1985). Traitement de données satellitaires pour l'étude des structures frontales du Golf du Lion. **Doctorat d'Etat**, Montpellier.

Caraux D. (1978). Contribution à l'étude des répartitions végétales dans les étangs littoraux par télédétection. Traitements densitométriques et application à l'étang de Mauguio. **D.E.A.** (Université de Montpellier II).

Caraux D. (1977). Pollution marine en Languedoc, apport de la télédétection. **Rapport E.N.S.A.M.**

SCIENTIFIC SYMPOSIUMS

Akl P., Caraux-Garson D., Doulis A., Scimone M. (1999) Applying GIS tools using multitemporal satellite data and ecophysiological measurements for assessing land degradation in Central Bekaa valley, Lebanon., *5th Annual Middle East GIS ESRI user conference, Lebanon 17-20 May*.

Hill J., Hostert P., Roeder A., Lacaze B., Caraux-Garson D., Riezebos H., Brouwer L., DeJong S., Caselles V., Valor E., Sommer S., Mehl W., Preissler H. and Tsiourlis G. (1998) Desertification in the European Mediterranean. Satellite-based observation. *A tool for study the Mediterranean basin, Tunis 23-27 November*.

Caraux-Garson D., Lacaze B., Hoff C., Sommer S., Hill J., Mehl W. (1998). Ten years of vegetation cover monitoring with LANDSAT-TM remote sensing, an operational approach of DeMon-2 in Languedoc, France., *Symposium on operational remote sensing for sustainable development, Enschede, the Netherlands, 11 – 15 may*.

Caraux-Garson D. and Lacaze B. (1998) Monitoring Mediterranean vegetation cover over a decade of Landsat-TM data in Languedoc, France. *27th Intern. Symposium on Remote Sensing of Environment, Trömsø, Norway, 8-12 June*.

Caraux-Garson D. and Lacaze B. (1998) Monitoring Mediterranean oak woodlands over 12 years (1984-1993) from Landsat-TM spatiotemporal data analysis, Languedoc, France. *Earth's changing Land, IGCTE-LUCC open science conference, Barcelona, 14-18 March*.

Lacaze B., Caraux-Garson D., Scala F., Hill J., Hostert P., Mehl W., Tabarant F. (1997) Monitoring Mediterranean ecosystems spatiotemporal processes over a decade (1984-1993) from multisource remote sensing data : a case study in Languedoc, southern France. *Intern. Conference on Mediterranean-type ecosystems in a changing world, San Diego, California, 18-26 Oct*.

Scala F., Caraux-Garson D., Lacaze B. (1997) Cefe-Cnrs : earth observation, *Italian space agency, da ersa envisat workshop matera, 14-15 oct*.

Lacaze B., Caraux-Garson D., Scala F., Hill J., Hostert P., Mehl W., Tabarant F. (1997). Monitoring Mediterranean ecosystems spatio-temporal processes over a decade (1984-1993) from multisource remote sensing data : a case study in Languedoc, Southern France., *Int. Conf. on Mediterranean-type ecosystems in a changing world., San Diego, 18-26 Oct*

Hill J., Hostert P., Lacaze B., Caraux D., Riezebos H., Dejong S., Brouwer L., Caselles V., Valor E., Mehl W., Sommer S., Preisler H., Tsiourlis G. (1996). Satellite remote sensing for assessing and monitoring environmental degradation. The DeMon-2 approach, *Int. conference on Mediterranean desertification, Crete, 29 oct-1 Nov*.

- Caraux D., Lacaze B., Tamisier A., Lemaire S., Gagnier F. & J. Bacave** (1987). Small scale features detected at the sea-land interface by using satellite sensors Landsat-TM & Spot HRV. *Int. Un. Geodesy Geophys., Vancouver, 9-22 Aug. (présidente de la session PS10/IAPSO)*.
- Lacaze B., Debussche G., Khelifa A., Mazurek H., Rambal S. & Caraux D.** (1984). A comparison of Landsat-MSS, HCMM and NOAA-AVHRR features for identifying dominant vegetation patterns in Mediterranean areas. *Int. Symp. on Remote Sens. Environ., Paris, 1-5 Oct.*
- Caraux D., Millot C. & Jacques G.** (1984). Comparison between thermal and visible satellite imagery to assess coastal upwellings in the mediterranean. *Int. Symp. on Remote Sens. Environ., Paris, 1-5 Oct.*
- Caraux D. & Austin R.W.** (1983). Detection of the influence of the Rhône river runoff in the Gulf of Lions determined from the light attenuation length derived from satellite data. *Int. Un. Geodesy Geophys., Hamburg, 15-27 Aug. (2) : 900.*
- Caraux D. & Austin R.W.** (1983). Etude de la répartition du phytoplancton d'après l'analyse des données du satellite Nimbus-7 CZCS en Méditerranée nord-occidentale. *Comm. Int. Explor. mer Méd., Cannes, 2-11 Dec., 28 (2) : 59-60.*
- Caraux D. & Austin R.W.** (1983). Extension of the plume of the Rhône river in coastal waters of the Gulf of Lions (northwestern Mediterranean) monitored with Nimbus-7 CZCS. *Int. Symp. on Remote Sens. Environ., Ann Arbor, MI, 9-13 May.*
- Caraux D. & Austin R.W.** (1982). Remote sensing analysis of phytoplankton distribution in coastal waters of the Gulf of Lions (Nimbus-7 CZCS, northwestern Mediterranean). *Int. Symp. Comm. VII, Soc. Int. Photogrammétrie Télédétection, Toulouse, 1 : 689-695.*