

## List of OZCAR Observatories:

OZCAR gathers long-term observatories monitoring parts of the Critical Zone, from the high mountains to the sea. They have dedicated personnel and are open to any research collaboration. OZCAR are also associating Southern Countries (Asia, Africa and South America).

**H+ observatory:** a French national network of hydrogeological formations sites (<http://hplus.ore.fr/>)

**RBV network** (Réseau des Bassins Versants): Drainage basins network: water, energy, sediment and matter transport, geochemistry monitoring to derive fluxes and storages (<http://portailrbv.sedoo.fr/>). \*

**CRYOBS-CLIM observatory** (CRYosphere, an OBServatory of CLIMate): glaciers, snow and permafrost processes (<https://cryobsclim.osug.fr/>)

**TOURBIERES observatory:** a network of 4 French instrumented sites for Carbon budget and biodiversity of peatlands (<http://www.sno-tourbieres.cnrs.fr/>)

**OSR**, the Regional Space Observatory for a sustainable management of territories and their resources in the South-West of France. <http://www.cesbio.ups-tlse.fr/fr/osr.html>

**OPE observatory:** a long-term environmental monitoring strategy that guarantees environmental safety (<http://www.andra.fr/ope>)

\* RBV network : Elementary observatories, web sites and main driving research questions associated.

Elementary observatory	Supporting organism	Location	Main Research question	Number of instrumented sites
		Oldest data	2 recent publications.	
OHMCV <a href="http://www.ohmcv.fr/">http://www.ohmcv.fr/</a>	INSU SO INSU	Cévennes Vivarais 1983	Hydro-meteorological extreme flood events in mediterranean context.	4 sites in Cevennes-Vivarais + regional hydrometeorological observations
DRAIX-BLEONE <a href="http://oredraixbleone.irstea.fr/">http://oredraixbleone.irstea.fr/</a>	IRSTEA	Haute Provence 1984	Hydro-meteorological extreme flood events and erosion in mountainous Mediterranean setting.	7 sites of contrasted scales and vegetation patterns

AMMA-CATCH <a href="http://www.amma-catch.org/">http://www.amma-catch.org/</a>	INSU/IRD SO INSU	West Africa 1990	West Africa monsoon climatic and hydrological observatory	1 tropical humid site in Benin + 1 tropical dry site in Niger + 1 semi-arid site in Mali
HYBAM <a href="http://www.ore-hybam.org/">http://www.ore-hybam.org/</a>	INSU/IRD SO INSU	Amazonian basin 1995	Geodynamic, hydrologic and biogeochemical control of chemical and physical denudation in the Amazon Basin	15 sampling stations on the Amazon and its tributaries.
AGRHY'S <a href="http://www6.inra.fr/ore_agrhys">http://www6.inra.fr/ore_agrhys</a>	INRA	Bretagne 1980	Response time to agricultural and climatic forcings in hydro-agrosystems	2 sites of contrasted land use.
OMERE <a href="http://www.obs-omere.org">http://www.obs-omere.org</a>	INRA/IRD Label ORE	Languedoc - 1992 Tunisie - 1994	Global changes and agricultural changes in Mediterranean hydro-agrosystems.	1 site in France 1 site in Tunisia
Oracle <a href="http://gisoracle.irstea.fr/">http://gisoracle.irstea.fr/</a>	IRSTEA	Brie, Bassin de Paris 1962	Hydrological and biogeochemical behavior of hydro-agrosystems in intensive farming sedimentary area.	3 sites of different scales.
Auradé-Montoussé <a href="http://www.ecolab.omp.eu/bvael/">http://www.ecolab.omp.eu/bvael/</a>	INEE/GPN	Gers 1983	Impact of agricultural practices on water, nutrient, erosion fluxes and biodiversity in hydro-agrosystems.	1 site
MSEC Vietnam/Laos/Thaïlande <a href="http://msec.obs-mip.fr/">http://msec.obs-mip.fr/</a>	IRD	South East Asia 2001	Impact of land use changes on erosion and water resource in foothills of South Asia	3 sites (Huay Pano in Laos is the most instrumented)
OPE : observatoire pérenne de l'Environnement <a href="http://www.andra.fr/ope/">www.andra.fr/ope/</a>	ANDRA	East of France 2007	Long-term (100 years) monitoring of the environment above the underground storage site of high and intermediate nuclear wastes.	Several catchment and soil sites
BVET <a href="http://bvet.obs-mip.fr/fr">http://bvet.obs-mip.fr/fr</a>	INSU/IRD SO INSU	India (2004)	Water and biogeochemical cycles in tropical drainage basins	2 sites in India of contrasted land use

		Cameroon (1994)		1 site in Cameroon
OHGE <a href="http://ohge.unistra.fr/">http://ohge.unistra.fr/</a>	INSU SO INSU	Vosges 1986	Biogeochemical cycles in a temperate forested granitic catchment submitted to acid rain.	1 site
ObsErA <a href="https://morpho.ipgp.fr/Obsera/Home">https://morpho.ipgp.fr/Obsera/ Home</a>	INSU SO INSU	Guadeloupe 2004	Coupling physical and chemical denudation in volcanic arc context and cyclonic climate.	2 sites
SO KARST* <a href="http://www.sokarst.org/">http://www.sokarst.org/</a>	INSU	1970	Network of French karst observatories along altitudinal and climate gradient (Languedoc, Jura, Provence, Pyrénées, Paris Basin, Dordogne).	10 sites
EroRUN <a href="http://osur.univ-reunion.fr/observations/soere/rbv/">http://osur.univ- reunion.fr/observations/soere/r bv/</a>	INSU	Réunion 1987	Hydrology and biogeochemistry of a fast eroding drainage basin on basaltic rocks.	1 main site
Observatoire de Nouvelle Calédonie New Caledonia.	IRD	Nouvelle-Calédonie 2010	Metal fluxes in hydrosystems draining ultrabasics rocks	2 sites
Real Collobrier <a href="https://bdoh.irstea.fr/REAL-COLLOBRIER/">https://bdoh.irstea.fr/REAL- COLLOBRIER/</a>	IRSTEA	Massif des Maures, Var 1967	Hydrological phenomena in the Mediterranean area	
OTHU Yzeron <a href="http://www.graie.org/othu/index.htm">http://www.graie.org/othu/index.htm</a>	IRSTEA	Lyon 1997	Sharp Mediterranean-type flood events in a French periurban area	

- the different karst observatories (MEDCYSS, Jurassic Karst, Fontaine de Vaucluse, SEE Moulins) were integrated in 2014 into a unique overarching sub-network : SO KARST