

CE.WChem_Od - Major ions and trace elements, Donga catchment

General information

Dataset name: CE.WChem_Od - Major ions and trace elements, Donga catchment
Created on: 2005-12-02

Contact(s)

Séguis Luc - IRD Bénin - seguis@ird.fr (PI or Lead scientist)

Period

Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Project(s)

AMMA > AMMA-EOP

Data description

Abstract

Identification of the chemical signature of the different compartments (surface runoff, sub-surface, deep water tables) contributing to river flow. Hydrograph decomposition by mixing models based on chemical signatures of each compartment involved in stream flow production.

Observing strategy

Regular sampling in wells, boreholes and river, sampling of a few flooding events according with electric conductivity measurements in river flow (CL.Run_Od).

Instrument information

Sensor

Instrument type: Chemical Meters/Analyzers
Model: Sampling in ground and surface waters

Geographic information

Donga catchment

Location name:	Donga catchment
Platform type:	GROUND STATIONS
West bounding coordinate (°):	1.5623
East bounding coordinate (°):	1.9479
North bounding coordinate (°):	9.8892
South bounding coordinate (°):	9.6875

Measured parameters

Magnesium Ion

Parameter name:	Magnesium Ion
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	equivalents per cubic meter
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Calcium Ion

Parameter name:	Calcium Ion
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	equivalents per cubic meter
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Vanadium

Parameter name:	Vanadium
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Copper

Parameter name:	Copper
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Hydrogen Carbonate Ion

Parameter name: Hydrogen Carbonate Ion
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: equivalents per cubic meter
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Molybdenum

Parameter name: Molybdenum
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: millimoles per cubic meter - mmol/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Silicon

Parameter name: Silicon
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: grams per cubic meter - g.m-3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Nitrate Ion

Parameter name: Nitrate Ion
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: equivalents per cubic meter
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Uranium

Parameter name: Uranium
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: millimoles per cubic meter - mmol/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Delta Oxygen-18

Parameter name: delta Oxygen-18
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: permillage - ?
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Conductivity

Parameter name:	Conductivity
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry > Conductivity
Unit:	micro Siemens per centimeter - $\mu\text{S/cm}$
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Sodium Ion

Parameter name:	Sodium Ion
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	equivalents per cubic meter
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Cadmium

Parameter name:	Cadmium
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	milligramm per cubic meter - mg/m^3
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Strontium

Parameter name:	Strontium
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	milligramm per cubic meter - mg/m^3
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Total Organic Carbon

Parameter name:	Total Organic Carbon
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	gramm per square meter - g.m^{-2}
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Lead

Parameter name:	Lead
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	milligramm per cubic meter - mg/m^3
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Caesium

Parameter name: Caesium
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Water Table

Parameter name: Water Table
Parameter keyword: Terrestrial Hydrosphere > Ground Water > Ground Water Features > Water Table
Unit: meters
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Iron

Parameter name: Iron
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Water Temperature

Parameter name: Water Temperature
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry > Water Temperature
Unit: Degrees Celsius - °C
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Oxygen

Parameter name: Oxygen
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry > Oxygen
Unit: percent - %
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Rubidium

Parameter name: Rubidium
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Manganese

Parameter name: Manganese
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Barium

Parameter name: Barium
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Zinc

Parameter name: Zinc
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Boron

Parameter name: Boron
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Potassium Ion

Parameter name: Potassium Ion
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: equivalentents per cubic meter
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Aluminium

Parameter name: Aluminium
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Arsenic

Parameter name: Arsenic
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Chromium

Parameter name: Chromium
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Cobalt

Parameter name: Cobalt
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Carbonate Ion

Parameter name: Carbonate Ion
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: equivalentents per cubic meter
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Chloride Ion

Parameter name: Chloride Ion
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit: equivalentents per cubic meter
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

PH

Parameter name: pH
Parameter keyword: Terrestrial Hydrosphere > Water Quality/Water Chemistry > pH
Unit: pH unit
Date begin (yyyy-mm-jj): 2002-07-28
Date end (yyyy-mm-jj): 2008-10-23

Lithium

Parameter name:	Lithium
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Nickel

Parameter name:	Nickel
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	milligramm per cubic meter - mg/m3
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Delta Deuterium

Parameter name:	delta Deuterium
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	permillage - ?
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Sulfate Ion

Parameter name:	Sulfate Ion
Parameter keyword:	Terrestrial Hydrosphere > Water Quality/Water Chemistry
Unit:	equivalents per cubic meter
Date begin (yyyy-mm-jj):	2002-07-28
Date end (yyyy-mm-jj):	2008-10-23

Data use information

Use constraints:	Permission is granted to use these data in research and publications when accompanied by the following statement: "The AMMA-CATCH regional observing system was set up thanks to an incentive funding of the French Ministry of Research that allowed pooling together various pre-existing small scale observing setups. The continuity and long term perenity of the measurements are made possible by an undisrupted IRD funding since 1990 and by a continuous CNRS-INSU funding since 2005."
Data policy:	AMMA data policy