**Info4Dourou**

- **Combined Research and Development Project**
- **Watershed dynamics & ecohydrology in heterogeneous landscape**

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**Equipped Small Watershed**
- 15 sensorscope stations
- Village of Tambarga, Singou Basin
- Kompienga region of Burkina Faso.
- 144 wind, soil, rain, solar radiation, temperature-humidity, and surface temperature sensors
- 3 networks
- Equipment installed in April 2009 and will remain installed a minimum of a year and a half
- Additional meteorological and hydrology equipment

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**Regional Context**

- Semi-arid West Africa
- Irregular rains
- Flashier or more quickly responding drainage system
- Livelihoods of rural farmers suffer from these problems
- Due to coupled:
  - Global climate change
  - Regional land use change

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**Objective 1: Watershed Modeling**

To understand spatial variability within the river basin

- Rocky escarpment that frames the watershed.
- Agricultural core of the watershed, on both sides of the stream, ranging from the well drained millet fields to the marshy rice fields.
- Outlet where the stream empties into a small wetland before being channeled under a bridge

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**Objective 2: Ecohydrology**

To understand the hydrologic importance of large woody vegetation in the agricultural landscape

- *Sclerocarya birrea*
- Agroforestry species
- Intensive soil measurements
- Light infiltration
- Vertical canopy temperature profiles
- Canopy interception
- Stemflow

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**Objective 3: Participatory Natural Resource Management**

- Support local efforts
- Make environmental information and technologies accessible to rural residents
  - Education
  - Outreach
- Tremendous support from local residents regarding our research and the stations
- Enthusiasm & collaborations with:
  - Rural farmers
  - Local technicians
  - Village children
  - African students and researchers

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**Example Data from First 3 Month Campaign**

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