



The field observation program

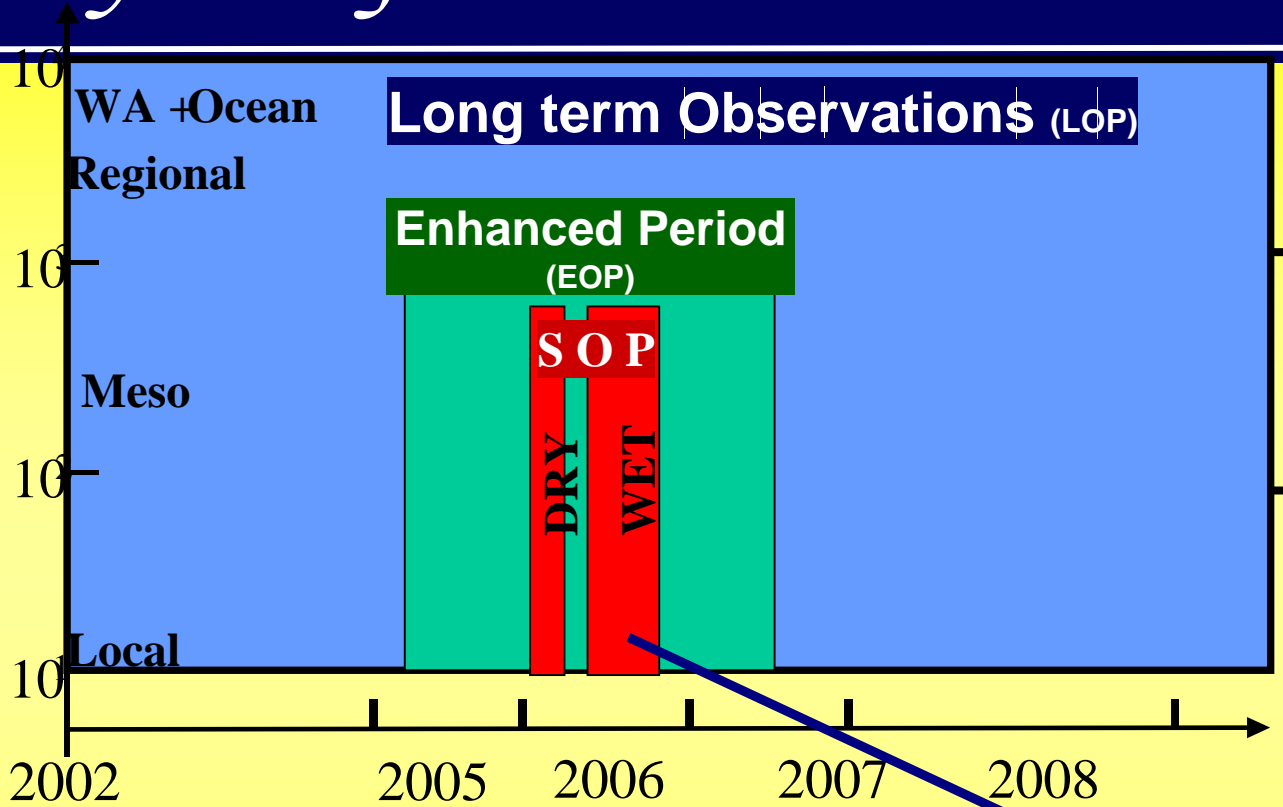
International Coordination and Implementation Group

Observing Strategy

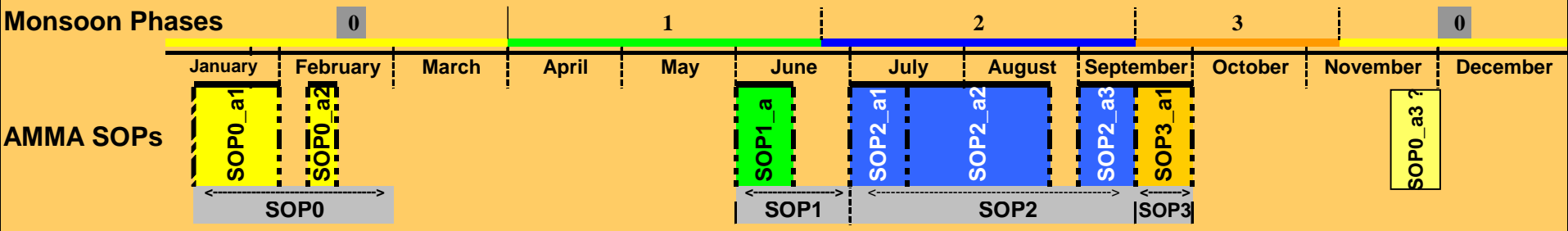
- **Monitoring of the Environment, Climate and Impacts (LOP: 2001-2010)**
 - Operational observations from African services
 - Specific observing systems (*Observatoires de Recherche en Environnement*)
 - Historical Data Base
- **Enhanced Observations (EOP: 2005-2007)**
 - Radiosounding and GPS networks
 - RV cruises; flux stations over land ; soil moisture; aerosol-chemistry
- **Intensive Campaigns (SOP: 2006)**
 - Research Aircrafts (5 + ?)
 - Drift and Stratospheric Balloons
 - Radars, Lidars, ARM Mobile Facility



10 years of observation and research

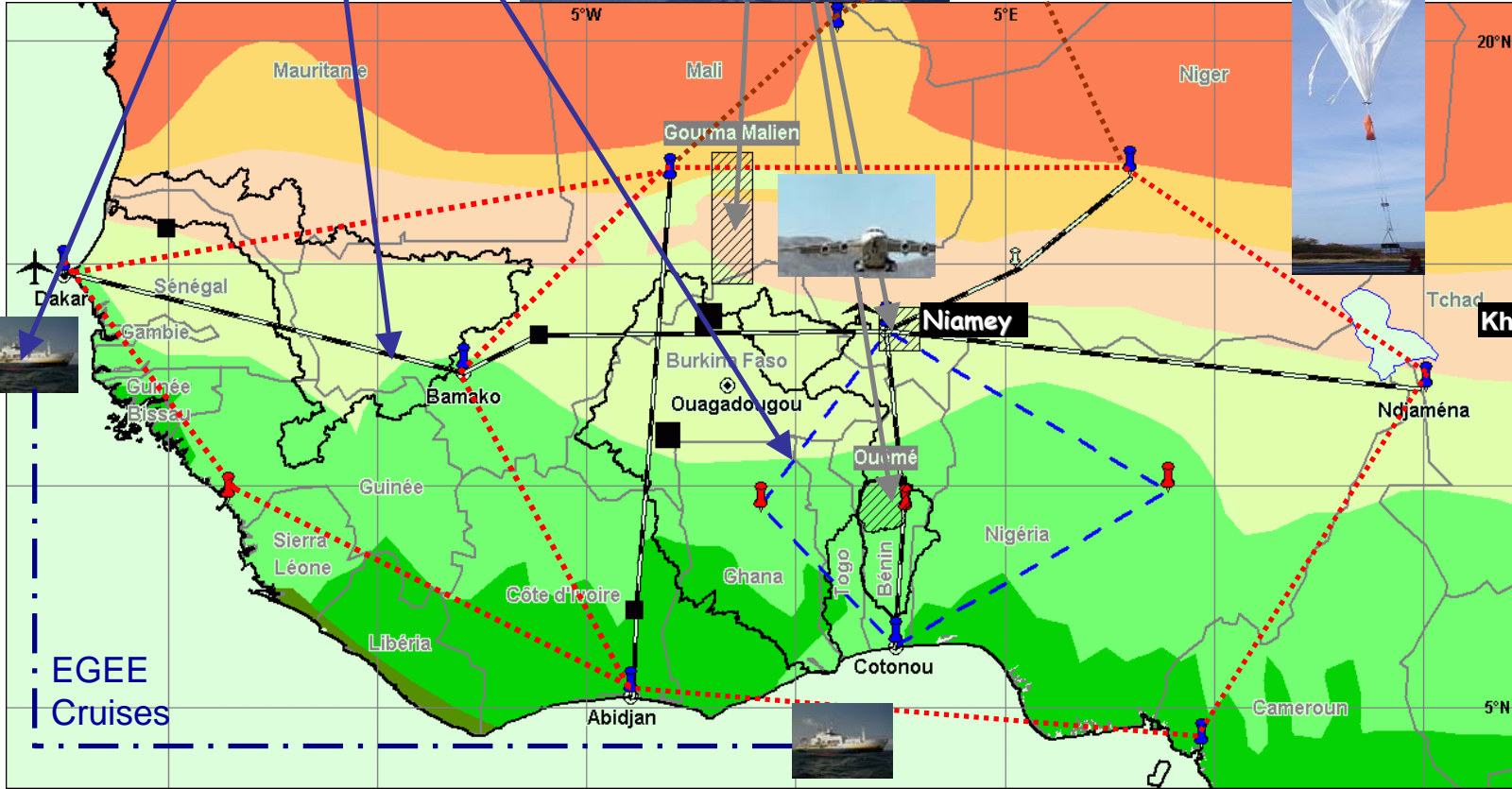


AMMA SOP Year: 2006



----- SOP Ground instruments remaining on site for the whole annual cycle (AMF, Aerosol Measurements, Lidars, ...) ----->

From the continental to the local scale



← Sal

→ Khartoum

EGEE
Cruises

Coordination of the implementation through Task Teams

•EOP- Regional

TT1- Atmospheric soundings: A. Fink, S. Janicot

TT2a- Surface fluxes on the continent : C. Lloyd, C. Taylor

TT2b- Surface fluxes on the continent : B. Marticorena, F. Cairo

TT6- EOP oceanic studies : B. Bourles

•EOP- Mesoscale

TT3- Integrated studies on the Gourma site: E. Mougin, J. Seghieri

TT4- Int. studies on the Niamey site: L. Descroix, B. Cappelaere

TT5- Integrated studies on the Ouémé site: C. Peugeot, S. Galle

•SOP

TT7- SOP dry season: J. Haywood, J. Pelon

TT8- SOP monsoon: D. Parker, C. Flamant, C. Mari, C. Reeves

TT9- SOP downstream: *G. Holland*, F. Roux

TT10- SOP full year: Tony Slingo, Mark Miller

Support, planning, capacity building

- **ST1, ST2, AOC**

A. Diedhiou, C. Kane, F. Saïd; Ariane Borgstedt, J.-M. Bouchez

- **ST3, data base**

L. Eymard, L. Fleury

- **ST4, capacity building**

A. Diedhiou, C. Kane, D. Parker

WEB Site:

<http://www.amma-international.org/implementation/index>

Implementation, the ICIG rules

Partnership, scientific integration, planning and logistics

➤ Partnership --->

Partnership Guide

Deploying an instrument requires an African collaborator

➤ Scientific integration --->

TT Documents

How the instrument fits into the overall AMMA strategy?

Synergy with other instruments

What are the teams that will use the data, to which purpose?

➤ Planning and logistics --->

Implementation Guide

Recces, allow sufficient time for deployment, contact AOCs to know what you can expect from them

<http://www.amma-international.org/implementation/index>

The TT documents and instrument forms were conceived to share this information with the whole AMMA community

---> AMMA International Implementation Plan

LOP and EOP-1

28 **LOP** and 41 **EOP** instruments, representing several hundreds of sensors over the whole of West Africa

➤ LOP ---->

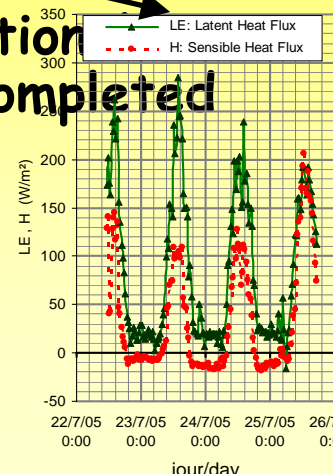
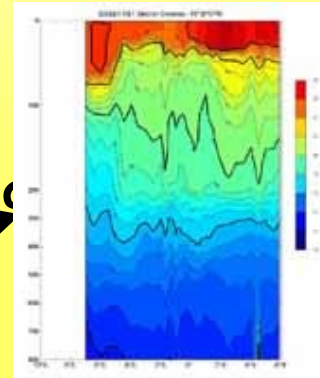
5 to 15 years of hydrological and vegetation data
10 to 15 years of optical and emission/deposition data

➤ EOP-1 ---->

2 EGGE cruises carried out (nominal)
Aerosol Sahelian transect completed
Flux stations and soil moisture deployed
XPORT radar operational, VHF radar to be installed.
GPS operational and Ozone sounding Cotonou operation
Upgrade of the PTU sounding network still to be completed

➤ EOP-follow on ---->

PTU Sounding network upgrade to complete
Nox measurements in Hombori
Scintillometry and Geophysical campaigns in 2006



SOP preparation

48 SOP instruments, some for the whole year, others for the wet season only, 5 aircrafts, balloons, three RVs

- **Increase of the sampling frequency of existing instruments ---->**

Radio-soundings

- **New instruments ---->**

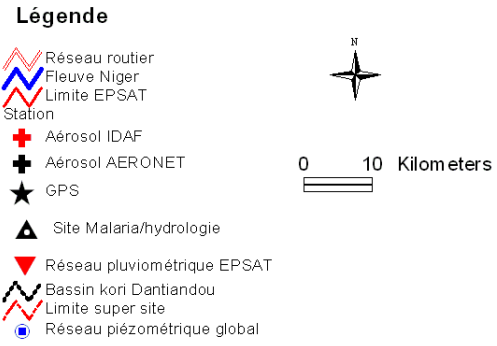
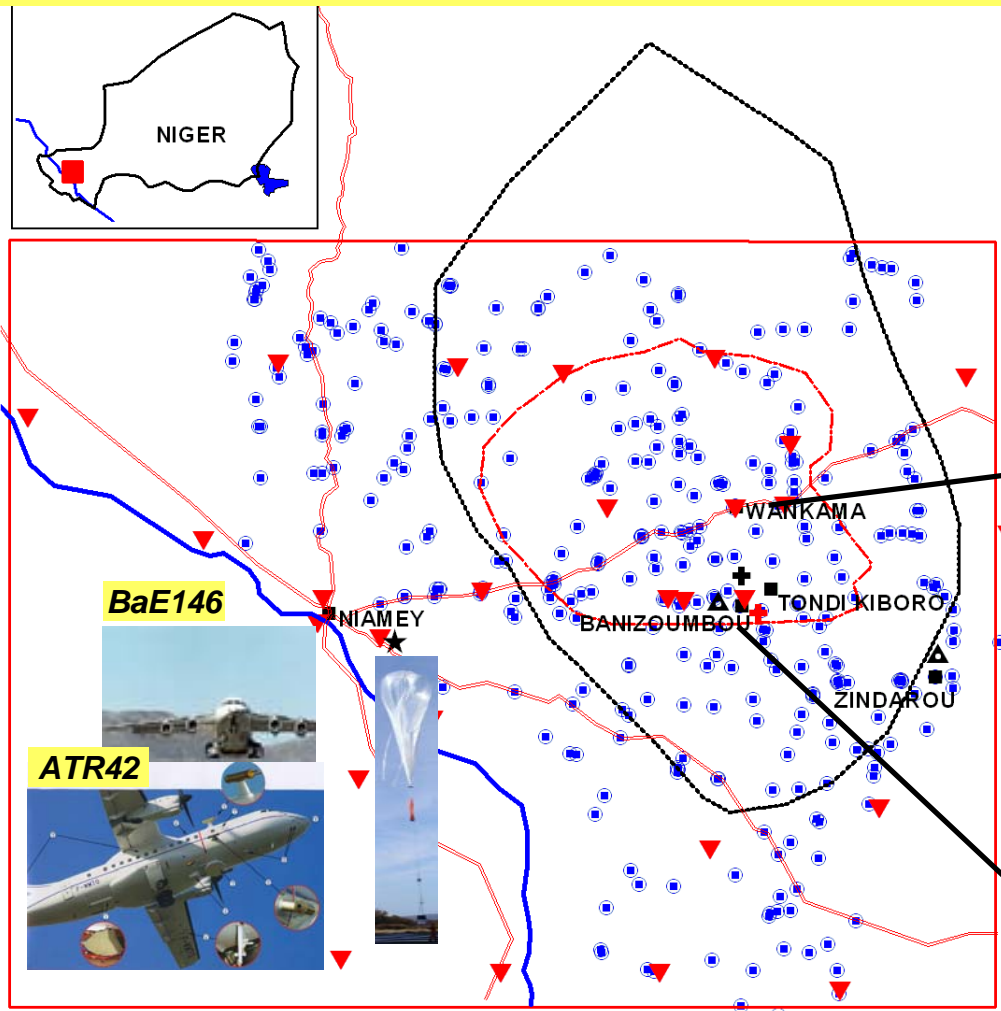
- ✓ Already installed: (ex: *ARM Mobile Facility*)

- ✓ In installation: (ex: *AS.Dust in Bani; Lidar in M'Bour*)

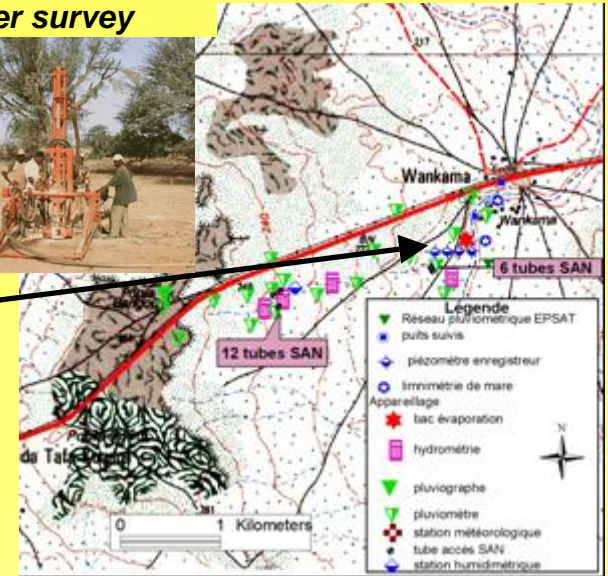
- **Pre-SOP Testing ---->**

Two SCOUT balloon launches (Nov.05)

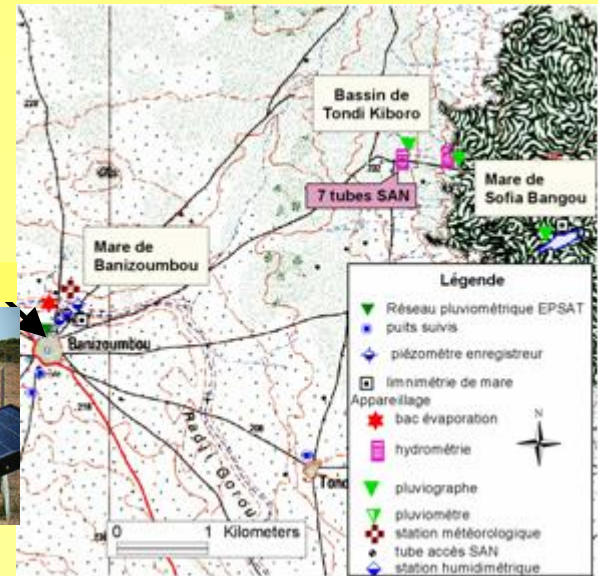
Niamey Mesoscale site



Drilling for ground water survey



Photon Station



Transfer of knowledge

- **AMMA seminars during the SOP**
- **Training of African Technicians (“field schools”)**
- **Training for research (PhDs, ...)**
- **Data base transfer**



See you in the field