SERVIR SCO INTERNAL VIC TRAINING

Draft Training Agenda

Training Dates: 15-17 February 2017

Training Objectives

The specific objectives of the workshop are to:

1. Provide an overview on the background and physics of the Variable Infiltration Capacity (VIC) model;
2. Train participants on how to setup and their own VIC model for specific applications; and
3. Highlight research applications of the VIC model and discuss VIC's development roadmap

Expected Outcomes

By the end of the training, participants will:

1. Have an understanding of the VIC model structure and model physics;
2. Be able to set up a VIC model for their own domain and specific application; and
3. Have an understanding of hydrologic modeling applications and VIC developments through GitHub.

Prerequisites

1. Background in hydrology/hydrologic modeling,
2. Experience with Linux and command line operations,
3. Basic understanding of Python scripting, and
4. Ideas for hydrologic modeling applications

Agenda

Day 1: VIC Overview

Time	Activity
9:00 AM – 10:30 AM	VIC overview (Model physics and assumptions)
10:30 AM – 10:45 AM	Coffee break
10:45 AM – 12:00 PM	VIC Overview (Model inputs/additional features)
12:00 PM – 1:00 PM	Lunch
1:00 PM – 1:30 PM	VIC installation/running the model
1:30 PM – 2:30 PM	VIC application on small watershed
2:30 PM – 2:45 PM	Break
2:45 PM – 3:30 PM	Summary of the day

Day 2: Nyando Basin Model

9:00 AM – 10:00 AM	VIC I/O formatting
10:00 AM – 10:45 AM	Nyando Basin model setup (Soil and vegetation parameters)
10:45 AM – 11:00 AM	Coffee break
11:00 AM – 12:00 PM	Nyando Basin model setup (Vegetation library and meteorological forcing files)
12:00 PM – 1:00 PM	Lunch
1:00 PM – 2:00 PM	Nyando Basin model setup (Global parameters, running the model, and formatting outputs)
2:00 PM – 2:45 PM	Nyando Basin model setup (Routing inputs and running the routing model)
2:45 PM – 3:00 PM	Break
3:00 PM – 4:15 PM	Nyando Basin model setup (Validation, final outputs and visualization of data)
4:15 PM – 5:00 PM	Summary of the day

Day 3: VIC Special Topics

9:00 AM – 10:45 AM	Bias correction of satellite precipitation products
10:45 AM – 11:00 AM	Break
11:00 AM – 12:00 PM	VIC Applications (Hydro-crop model coupling)
12:00 PM – 1:00 PM	SERVIR SCO Team Lunch
1:00 PM – 2:00 PM	VIC Applications (Climate/land cover change impacts)
2:00 PM – 3:00 PM	Calibrating VIC
3:00 PM – 3:15 PM	Break
3:15:PM – 4:00 PM	VIC development/new releases
4:15 PM – 5:00 PM	Summary of the day