



Training Report

GBON AWS Stations- Rwanda

Project Reference:	Job6685
Project Name:	UNDP GBON SOFF 3 x Research Grade Stations Rwanda
Location:	Rwanda

**Rwanda Meteorology Agency
(METEO RWANDA)**

23V5+Q33, KN 96 St,
Rwanda Kigali
Iyakaremye Vedaste (PhD)
Data Observations, Quality Control and
Processing Division Manager
v.iyakaremye@meteorwanda.gov.rw
Cell (+250) 783622984

Campbell Scientific Africa Pty. (Ltd)

1A Meson Street, Technopark, Stellenbosch,
Western Cape, 7600, South Africa
sales@campbellsci.co.za
support@campbellsci.co.za
+27 21 880 9960
www.campbellsci.co.za

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d. Document History

Revisions	Brief Change History	Prepared by	Approved by	Date
00	Original	S.C Boyi	J. van Jaarsveldt	2025-07-11

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This warranty does not cover damage resulting from normal wear and tear, surges, or from failure to properly maintain or calibrate the product as recommended. Consumable items and items with limited life expectancy, such as batteries, mechanical relays, fine-wire thermocouples, and desiccant, are only warranted to perform to specification at the time of delivery.

Campbell Scientific Africa's obligation under this warranty is limited to repairing or replacing defective products, at our discretion. This repair or replacement is the sole and exclusive remedy provided under this warranty.

The customer is responsible for all costs associated with removing, reinstalling, and shipping defective products to Campbell Scientific Africa. However, Campbell Scientific Africa will cover the cost of carriage (excluding any local Customs or clearance fees) for all repairs or replacements covered under warranty.

Under ex-works terms, the customer assumes responsibility for any expenses related to work performed or items provided beyond the warranty coverage, subject to fair and reasonable assessment. Additionally, the customer is responsible for shipping costs to our location and our expenses for returning the repaired or replacement goods to them.

Warranty start date:	01 June 2025 (From date of installation)
Warranty end date:	01 June 2026

iii. Support, Repairs, Returns & Calibrations

Products may not be returned without prior authorization. Products shipped to Campbell Scientific require a Returned Materials Authorization (RMA) or Repair Reference number and must be clean and uncontaminated by harmful substances, such as hazardous materials, chemicals, insects, and pests. Please complete the required forms prior to shipping equipment.

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Campbell Scientific Africa is unable to process any returns until we receive this statement. If the statement is not received within three days of product receipt or is incomplete, the product will be returned to the customer at the customer's expense. Campbell Scientific Africa reserves the right to refuse service on products that were exposed to contaminants that may cause health or safety concerns for our employees.

Technical Support

For any assistance, please reach out to our technical support team using one of the following communication channels.

Email (Primary channel):	support@campbellsci.co.za
WhatsApp:	+27 79 528 8014
Telephonically:	+27 21 880 9960

Operating hours	Refer to business hours on our website.
Response time	2-3 working days.

Our support services are unavailable beyond regular operating hours, weekends, or public holidays. In anticipation of an upcoming site visit, we kindly request advance notification (2-3 business days). Failure to provide prior notice may impact the assurance of technical support availability.

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1. Introduction

This report outlines the practical training conducted at Meteo Rwanda from 19 May 2025 to 23 May 2025 for technical users, and on 2 June 2025 for data users. The primary objective of this training was to provide both theoretical and operational instruction on the utilisation of Campbell Scientific Automatic Weather Stations.

During the training, trainees participated in activities including system wiring, troubleshooting, and maintenance procedures, as well as using software for operations and designing procedures.

The training aims to empower the Meteo Rwanda team in the use and operation of their systems; however, there are also a number of great resources online that, should the user aim to increase their knowledge, they can do so with ease now that they have the fundamental principles. In the reference section, links to such materials have been given.

2. Technical Training

The following are the topics that were covered during the pre-installation training for the technical users.

Day	Topic	Detail	Instructor
1	Introduction	Introduction to CSA and Brief history Overview of tender requirements	Sibusiso Boyi
1	System Overview	Overview of stations delivered. Main components Wiring diagrams System outputs	Sibusiso Boyi
1	CR1000X and LoggerNet Training	Data acquisition and datalogger hardware Specifications Datalogger memory EZSetup, Datalogger Programs and ShortCut Program Generator LoggerNet	Sibusiso Boyi
2	CR1000X and LoggerNet Training	Introduction to CRBasic Programming & GBON-Compliant QC Protocols Communications options and scheduled collections Software architecture LoggerNet RTMC Pro WIS 2.0 Integration	Sibusiso Boyi
3	Software practical	Practical exercise in LoggerNet, LNDB, RTMC Pro Setup RTMC Pro monitoring screens	Sibusiso Boyi
4	Maintenance and support	Recommended maintenance activities Troubleshooting Calibration and verification	Sibusiso Boyi
5	Recap & practical individual exercises		Sibusiso Boyi

3. User Training

The following are the topics that were covered during the pre-installation training for the Data users.

Day	Topic	Detail	Instructor
1	Introduction	Introduction to CSA and Brief history Overview of tender requirements	Sibusiso Boyi
1	System Overview	Overview of stations delivered. Main components Wiring diagrams System outputs	Sibusiso Boyi
1	CR1000X and LoggerNet Training	Data acquisition and datalogger hardware Specifications Datalogger memory EZSetup, Datalogger Programs and ShortCut Program Generator LoggerNet	Sibusiso Boyi
2	CR1000X and LoggerNet Training	Communications options and scheduled collections Software architecture LoggerNet RTMC Pro WIS 2.0 Integration Practical exercise in LoggerNet, LNDB, RTMC Pro Setup RTMC Pro monitoring screens	Sibusiso Boyi
3	Climsoft	Meteo Rwanda Internal	Bikorimana Christian
4	Recap & practical individual exercises		Sibusiso Boyi & Bikorimana Christian
5	Holiday	Worked on Servers	Sibusiso Boyi

4. Training photographs

This section provides a picture gallery that serves as proof that the training took places



Figure 1: Technical Training – Pre-Installation




Figure 2: User Training – Post-Installation

5. Training Resources

1. RTMC Introduction <https://www.campbellsci.co.za/videos/rtmc-pro-software-an-introduction>
2. Getting Started <https://www.campbellsci.co.za/videos/rtmc-software-getting-started>
3. Create a report and Hotspot <https://www.campbellsci.co.za/videos/rtmc-pro-6>
4. RTMC Pro page Publishing <https://www.campbellsci.co.za/videos/rtmc-pro-6>
5. Sending OS https://www.youtube.com/watch?v=9mnZH8ArL_s
6. SDI-12 <https://www.youtube.com/watch?v=P0gYbnhqypw>
7. View Pro <https://www.youtube.com/watch?v=lcaygty5v48>
8. CRBasic Fundamentals <https://www.youtube.com/watch?v=jS4f0f0BDI8>
9. Video Tutorials <https://www.campbellsci.co.za/videos>

6. Document Control

Campbell Scientific	METEO Rwanda
Mr SC Boyi 	

Appendix A: Training Registers

Rwanda Meteorology Agency

Attendance List Form

Doc#: 009/MET/017/01 Version#: 03 Revision date: 2024 June

ACTIVITY: *Final ToT meeting in the technical of community based station engagement*

VENUE: METEO Rwanda HQs

DATES: from 19/05/2025 to 23/05/2025

Time: from 09:30 to 17:00

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List of participants

#	Names	Institution/Position	Gender	Email	Phone Number	Signature				
						Day 1	Day 2	Day 3	Day 4	Day 5
1.	Karera James	Metro Brand/Operations	M	j.karera@meteorwanda.gov.rw	0782490576	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	Hwizye Nicola	METEO Rwanda Technical Support	M	Phumiriz@meteorwanda.gov.rw	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
3	Bakurumuhungu	METEO Rwanda Technical Support	M	phumiriz@meteorwanda.gov.rw	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
4	Mubensanga Juvie	METEO Rwanda	M	d.witirigye@meteorwanda.gov.rw	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
5	Shusiso Boy	CSA/Instructor	M	Shusiso@campbellsci.co.za	127 64837	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
6.	Mwiza Hani	Decade/IT	M	h.mwiza@campbellsci.co.za	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
7	Habukurei Gashyamba	Metro/Operations	M	g.habukurei@meteorwanda.gov.rw	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	Higin Steven	Metro/Operations	M	s.higin@meteorwanda.gov.rw	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
9	Mwiza Amantse	Meteorwanda/MISA	F	a.mwiza@meteorwanda.gov.rw	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	Mwiza Amantse	Meteorwanda/MISA	F	a.mwiza@meteorwanda.gov.rw	078249310	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

Address: Nyungwe K2, 960
P.O Box 898 KIGALI

Email: info@meteorwanda.gov.rw
Website: www.meteorwanda.gov.rw

Meteorwanda | Meteorwanda
Toll Free: 6080

			Attendance List Form							
			Doc#: 009/MET/017/01		Version#: 03		Revision date: 2024 June			
ACTIVITY: Training on installed <i>And</i>			VENUE: METEORUANDA		DATES: from 02.10.2025 to 05.10.2025 Time: from 09:30 to 14:00					
List of participants										
#	Names	Institution/Position	Gender	Email	Phone Number	Signature				
						Day 1	Day 2	Day 3	Day 4	Day 5
01	MTSANGANA Jeanne	METEORUANDA	M	mtsangana.jeanne@meteoruanda.gov.rw	07835437					
02	NZEMANYA Alexis	METEORUANDA	M	nzemanya.alexis@meteoruanda.gov.rw	0783793408					
03	UMUKIZERO Angeli Paul	METEORUANDA	F	umukizero.angeli@meteoruanda.gov.rw	07834793					
04	MUNYANEZA Eric	METEORUANDA	M	munyaneza.eric@meteoruanda.gov.rw	0783232510					
05	MUKAMUKIZA Pierre Olivier	METEORUANDA	M	mmukamukiza.pierre@meteoruanda.gov.rw	0783553663					
06	MUKAMUKIZA Amos Ntibabwira	METEORUANDA	F	mmukamukiza.amos@meteoruanda.gov.rw	0783553663					
07	MUKAMUKIZA Agathe Ntibabwira	METEORUANDA	F	mmukamukiza.agathe@meteoruanda.gov.rw	07835437					
08	MUKAMUKIZA Fabien	METEORUANDA	M	mmukamukiza.fabien@meteoruanda.gov.rw	07835437					
09	SIBUMISA Bayi	CSA	M	sibumisa.bayi@csa.gov.rw	07835437					
10	MUKAMUKIZA Eric	METEORUANDA	M	mmukamukiza.eric@meteoruanda.gov.rw	07835437					

Address: Nyarugenge KN2, 96st
 P.O Box 898 KIGALI

E-mail: info@meteoruanda.gov.rw
 Website: www.meteoruanda.gov.rw

Meteoruanda | Ontere Rwanda
 Toll Free: 6080