Cloud Technology in Ecoinformatics

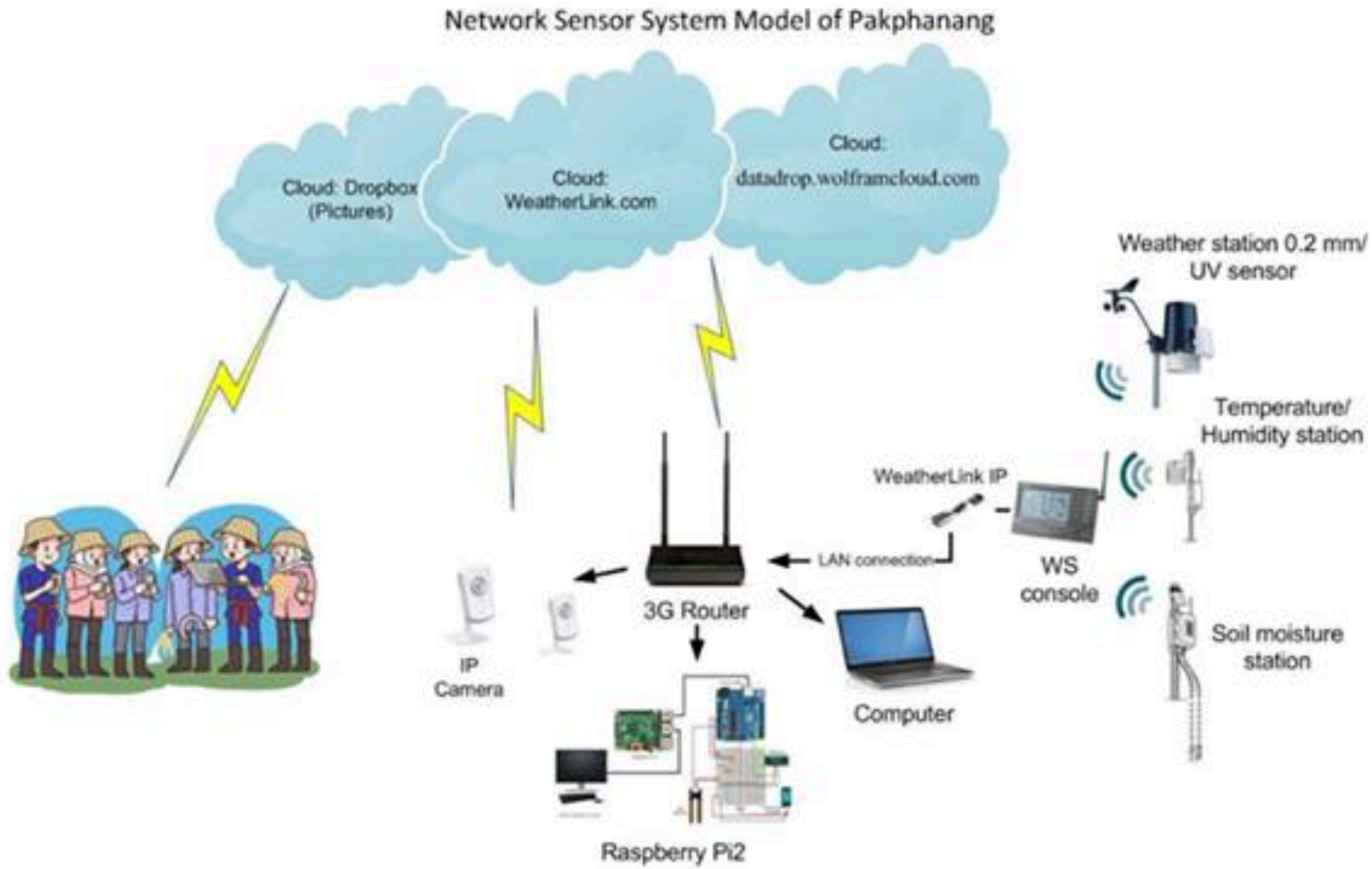
Assoc.Prof.Dr. Krisanadej Jaroensutasinee

PRAGMA31 Panel Discussion

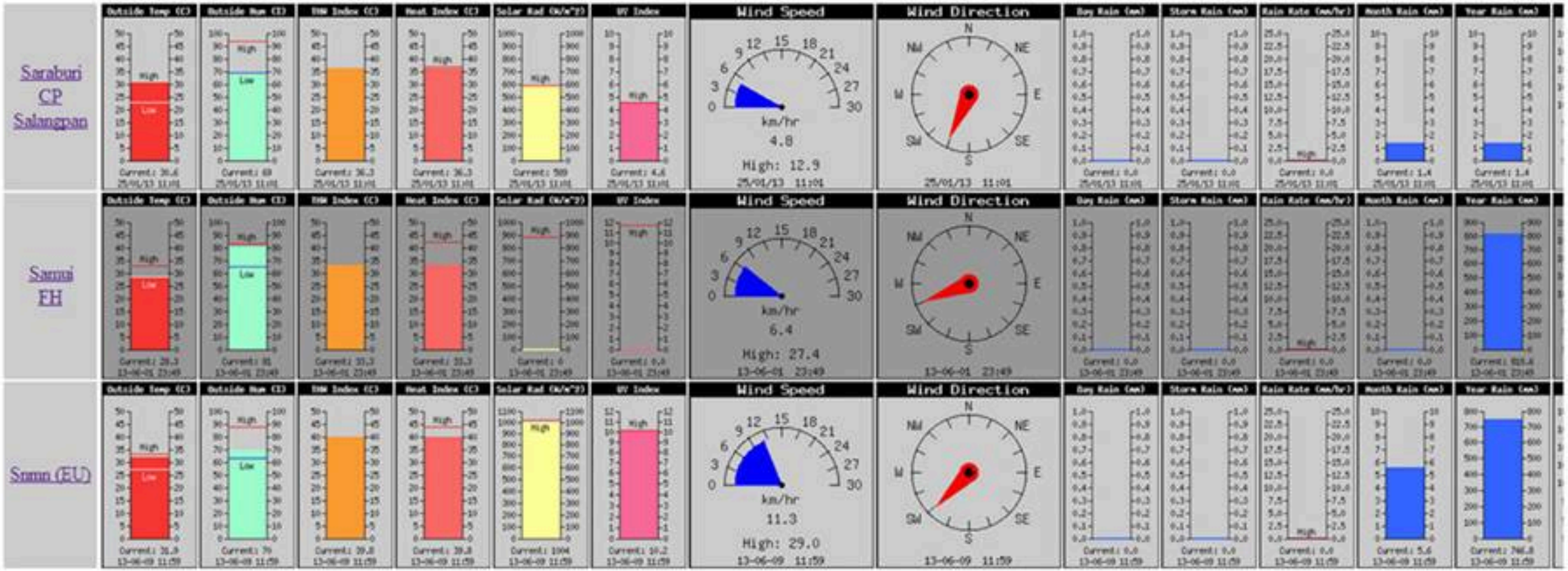
"e-Science in the Cloud: Possibilities and Challenges"

Thursday September 8th, 2016 - Main Plenary Hall, S31 Sukhumvit Hotel, Bangkok, Thailand

Ecosystem – Smart Rice Farming



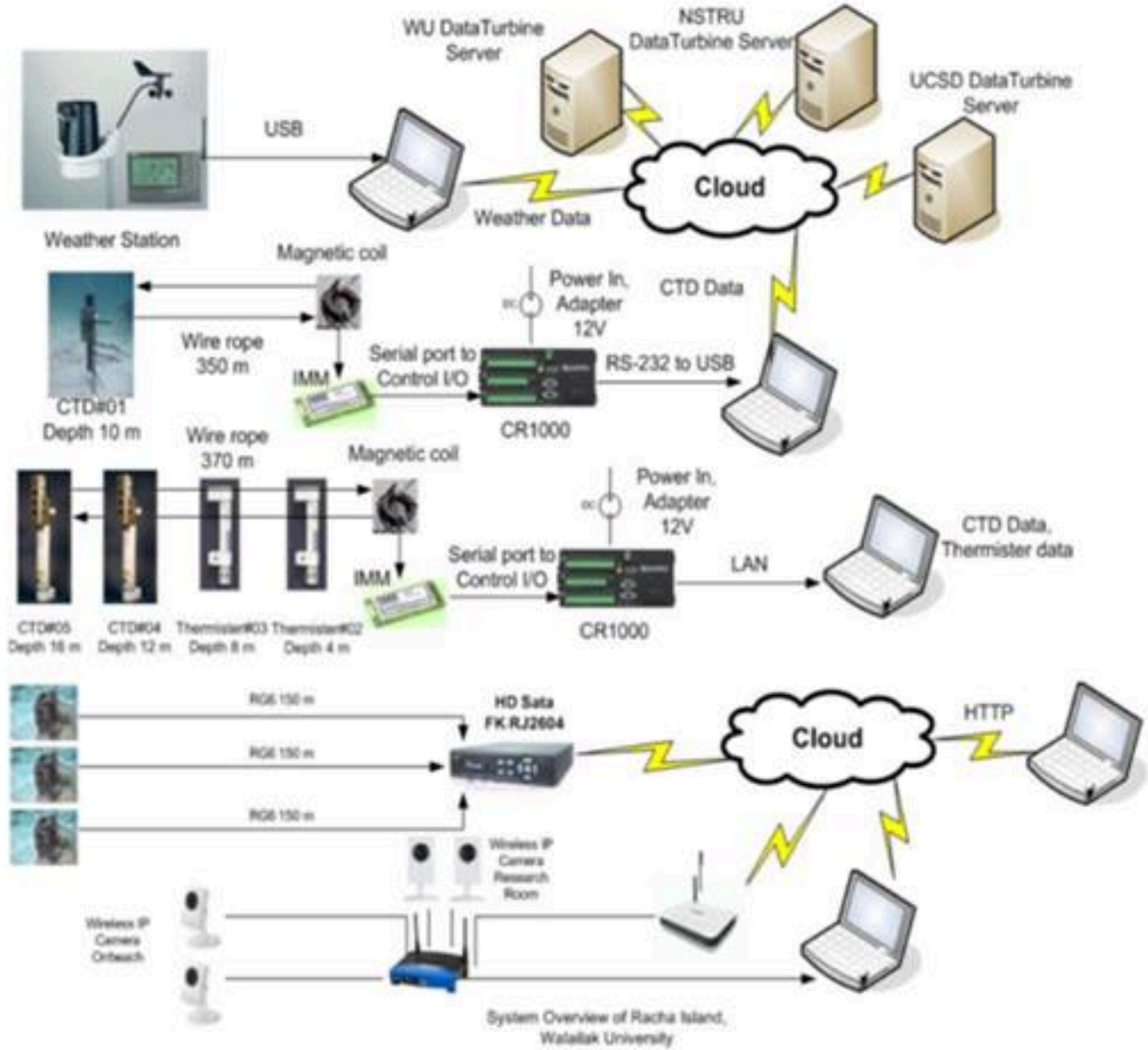
Multi-source/technology of Data sharing/Sensors – Cloud can integrate them all with ease.



http://www.twibl.org/dynamics/Dropbox/Ecocam/Monitor/SmartRicePakphanang.html

Ecosystem

- Coral Reef
- Got projects to extend this to sea grass areas – Dugong, Sea horses in Trang
- A lot more challenges.

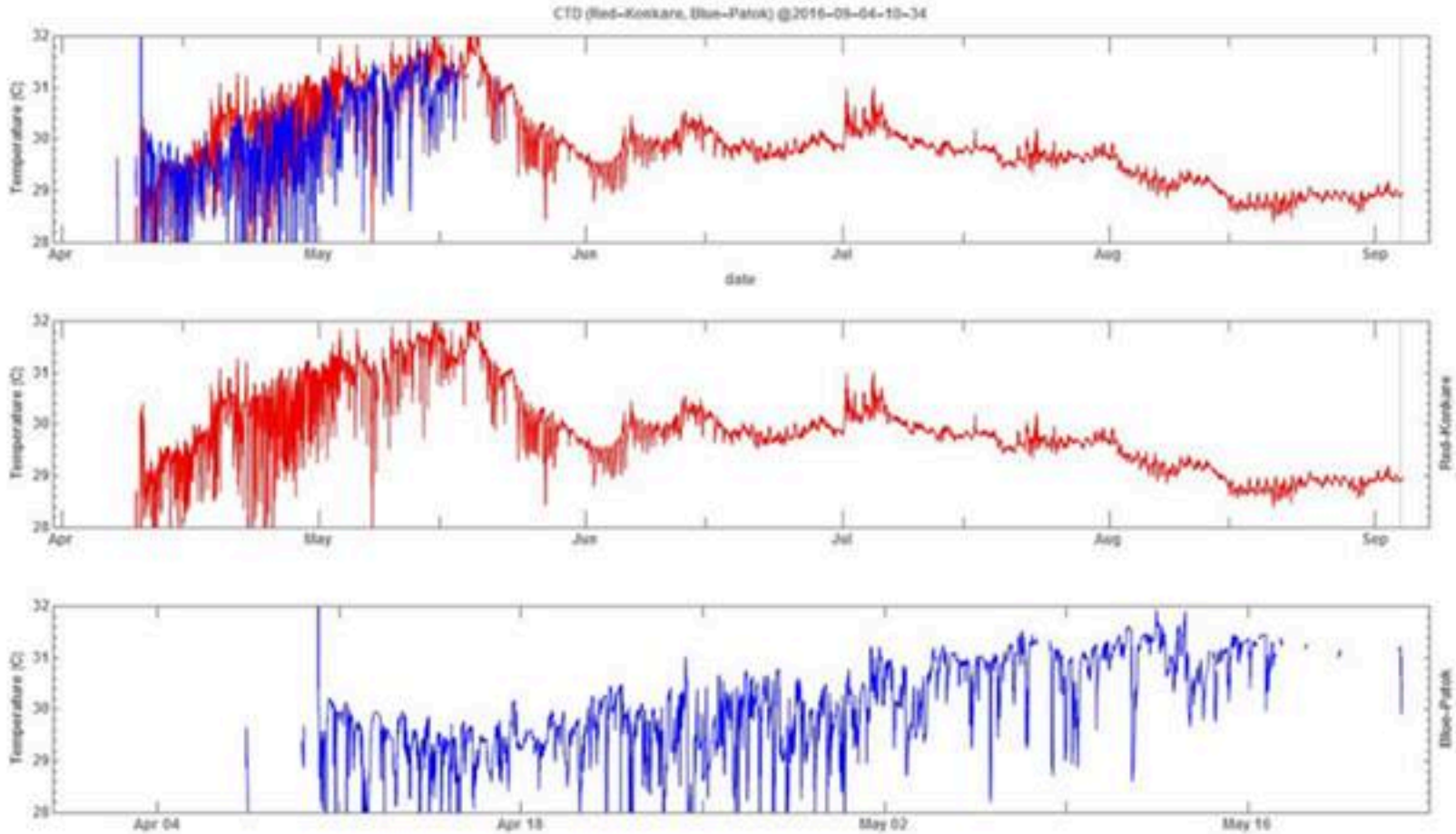


Big Data

Center of Excellence for Ecoinformatics, NECTEC-WU

IoT, Big Data and Data Science products , Supported by NSTDA, Nikorn Marine, NECTEC and Walailak University

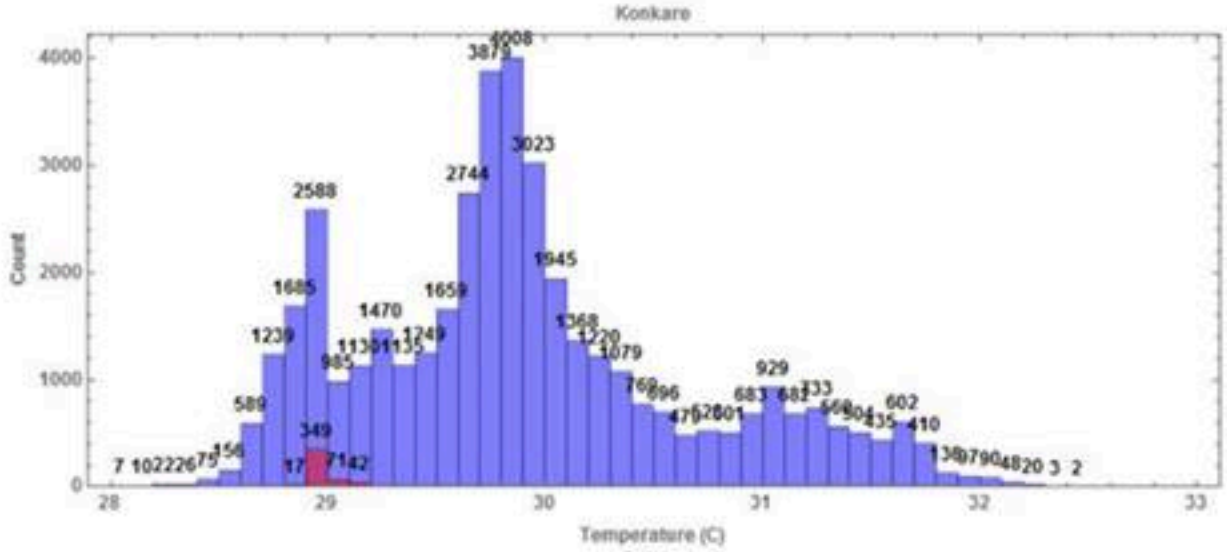
Temperature Time Series Visualization

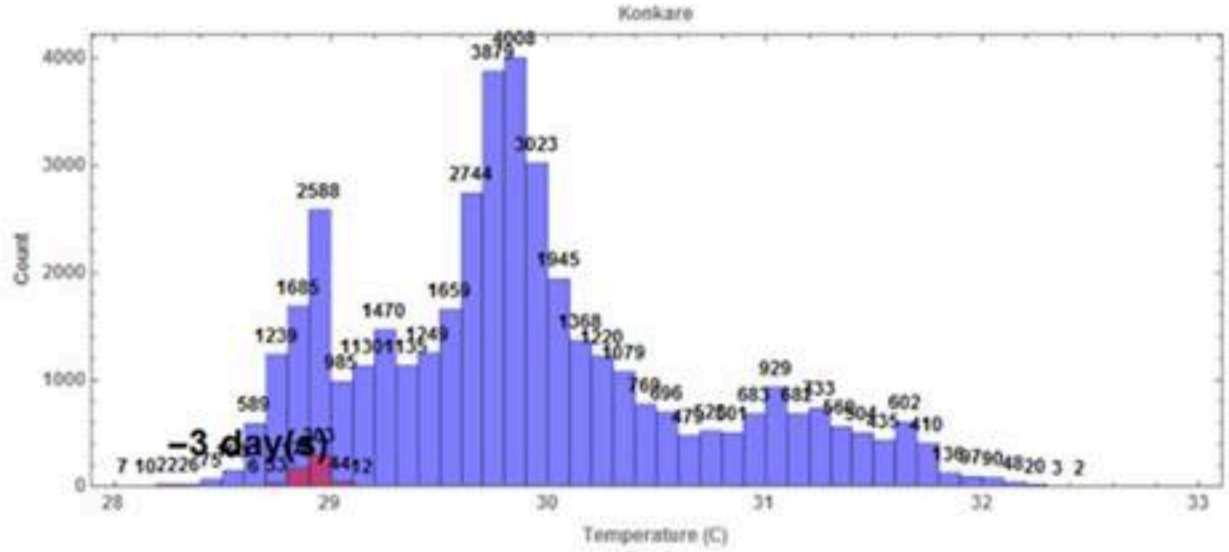


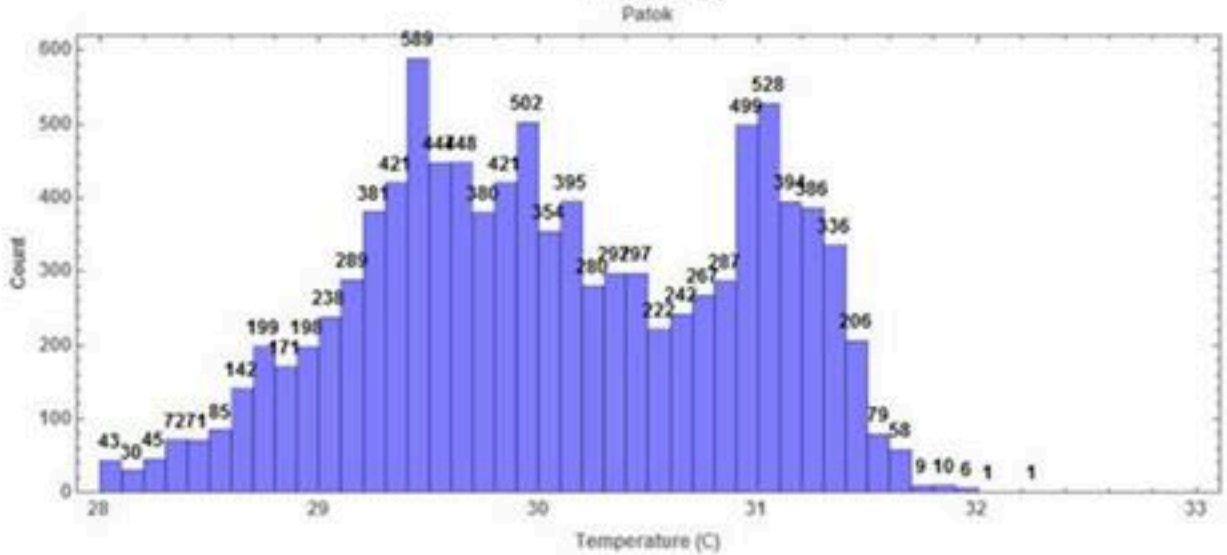
MH Analysis

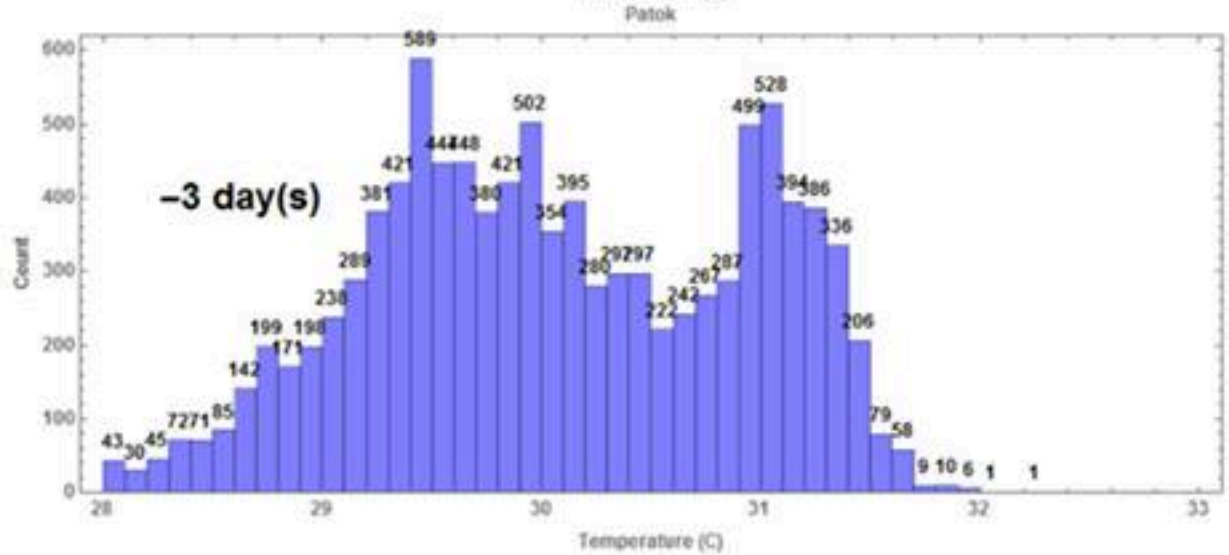
MH Analysis

Red histogram indicates last 48 data location in last two week blue histogram.

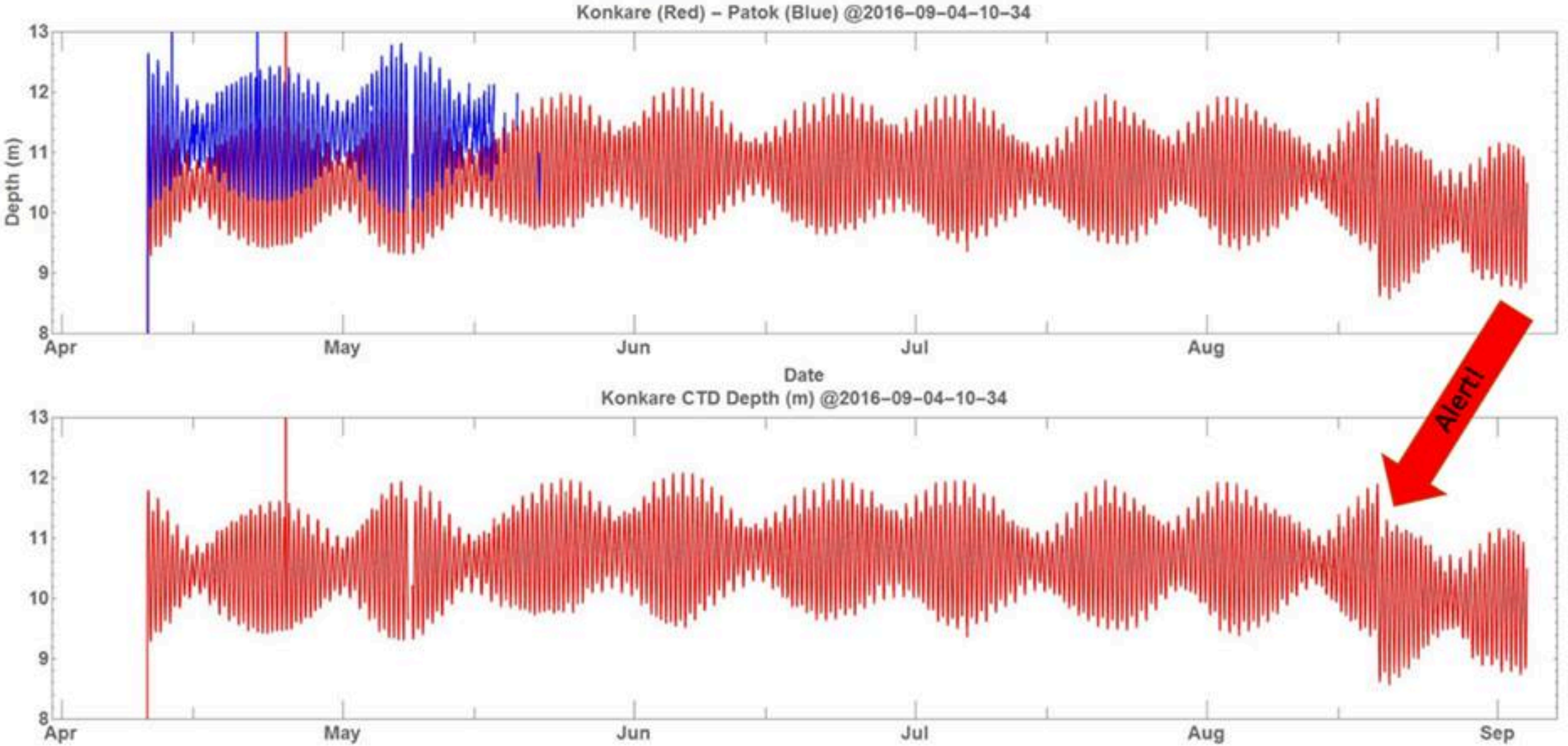




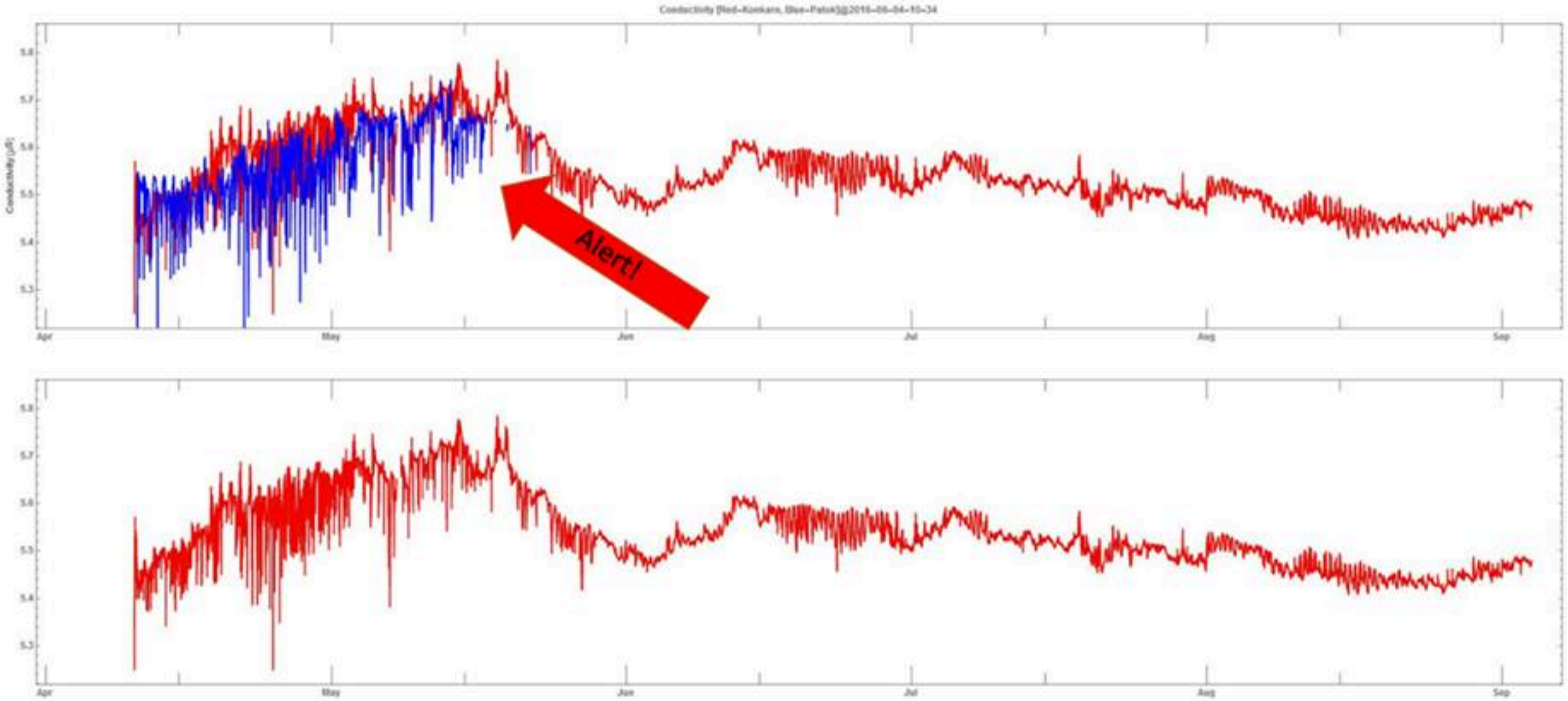


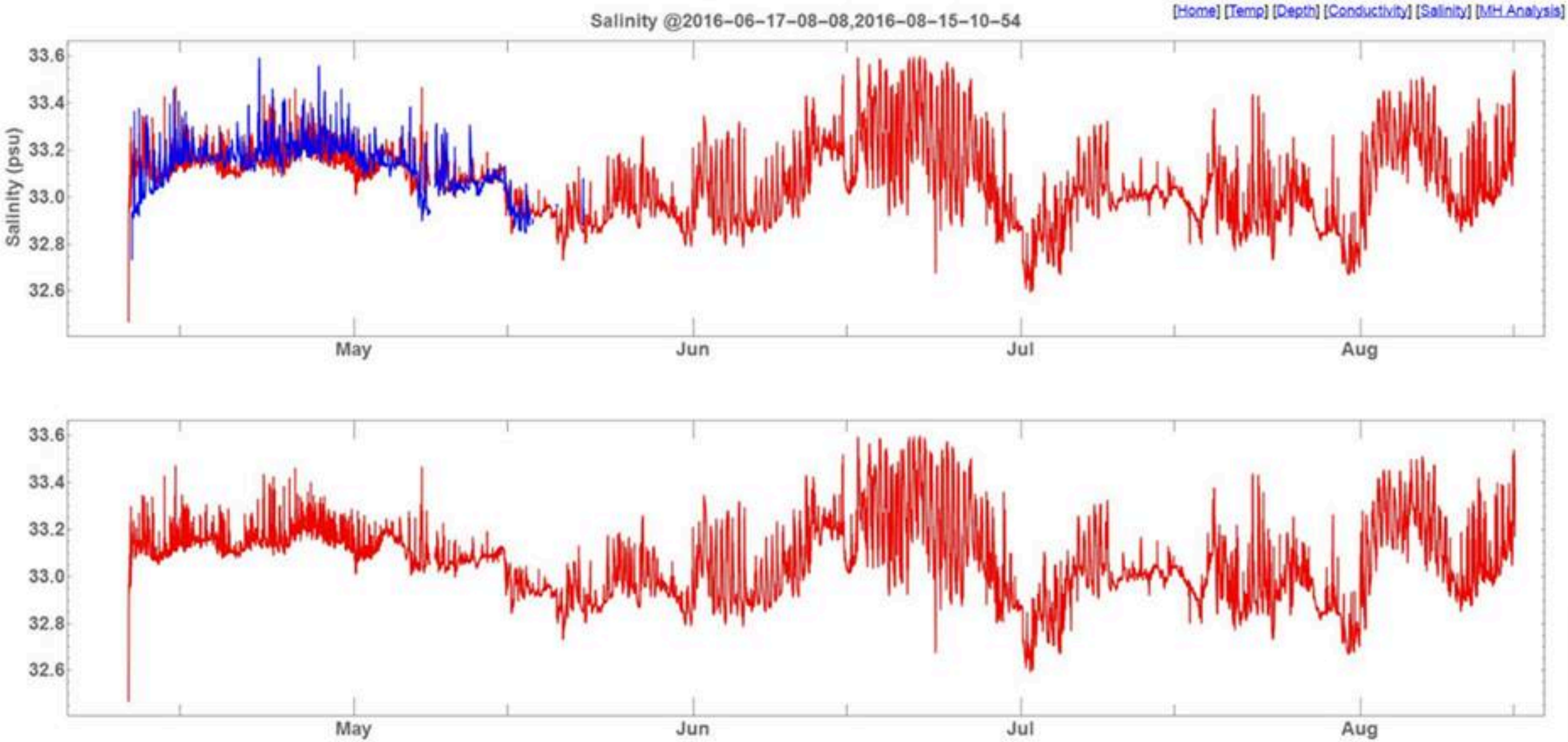


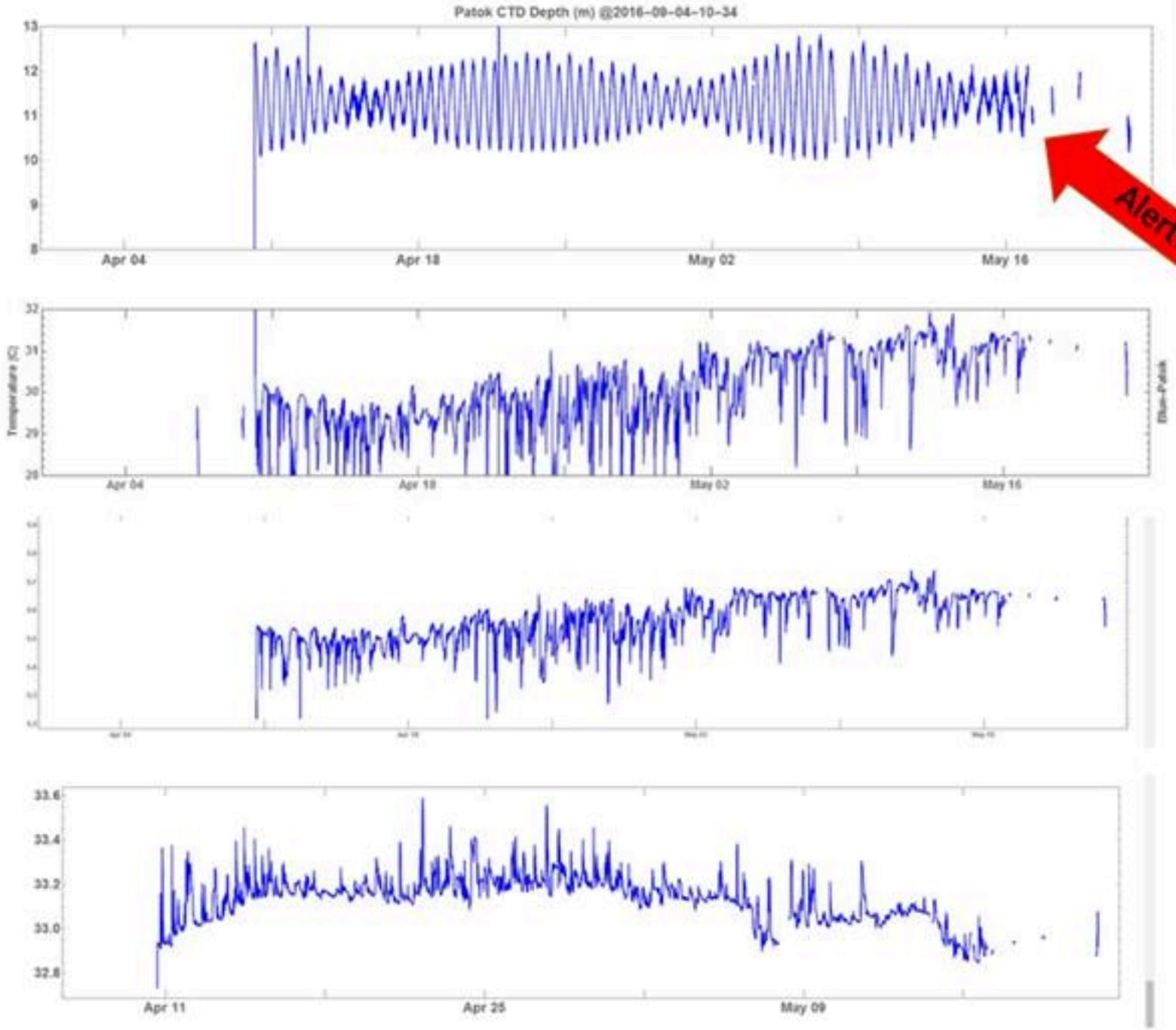
การวิเคราะห์ความลึก (เมตร)



การวิเคราะห์การนำไฟฟ้า Conductivity




Salinity @2016-06-17-08-08,2016-08-15-10-54
[Home] [Temp] [Depth] [Conductivity] [Salinity] [MH Analysis]
Salinity (psu)
33.6
33.4
33.2
33.0
32.8
32.6
May
Jun
Jul
Aug
33.6
33.4
33.2
33.0
32.8
32.6
May
Jun
Jul
Aug

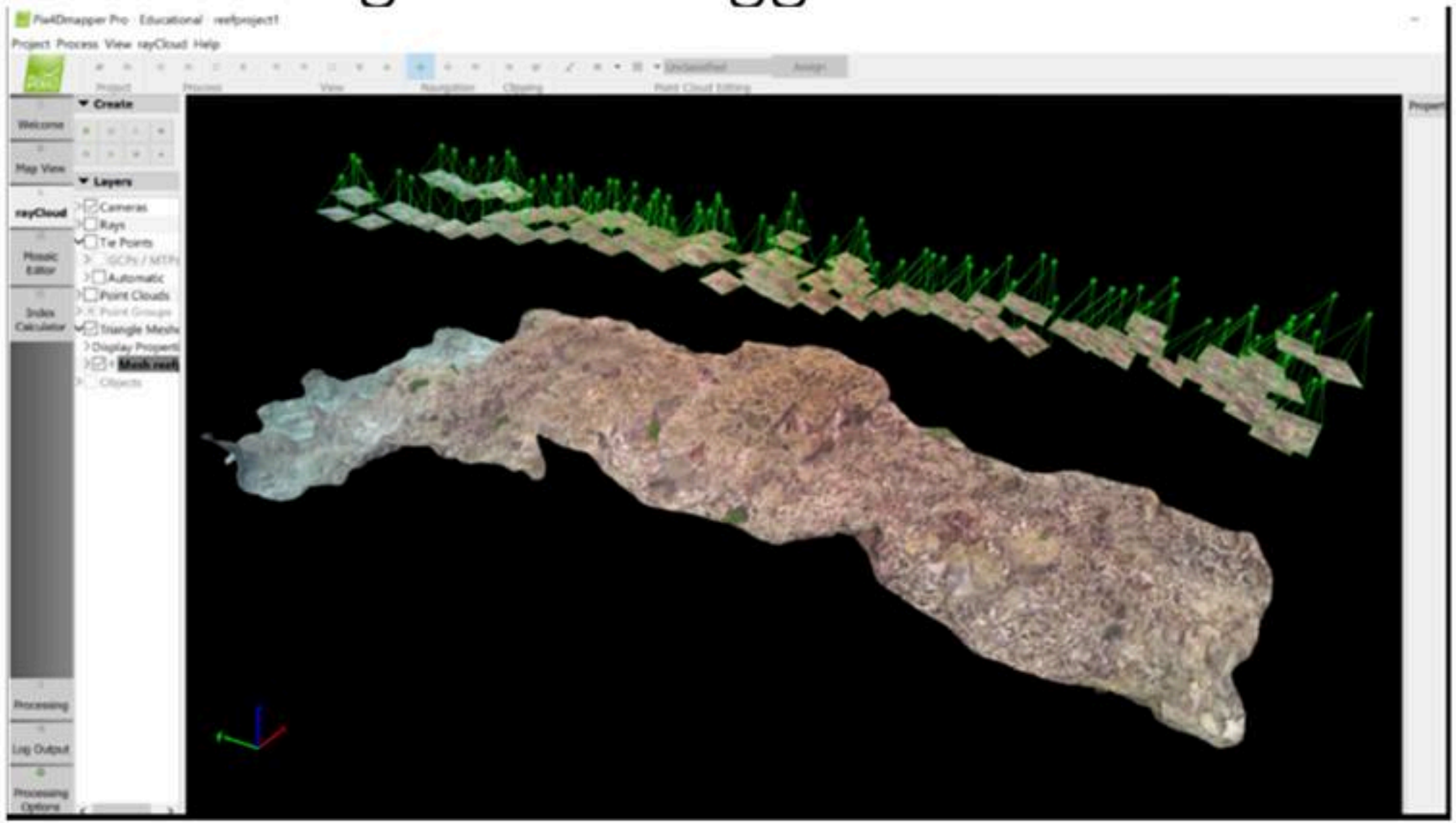


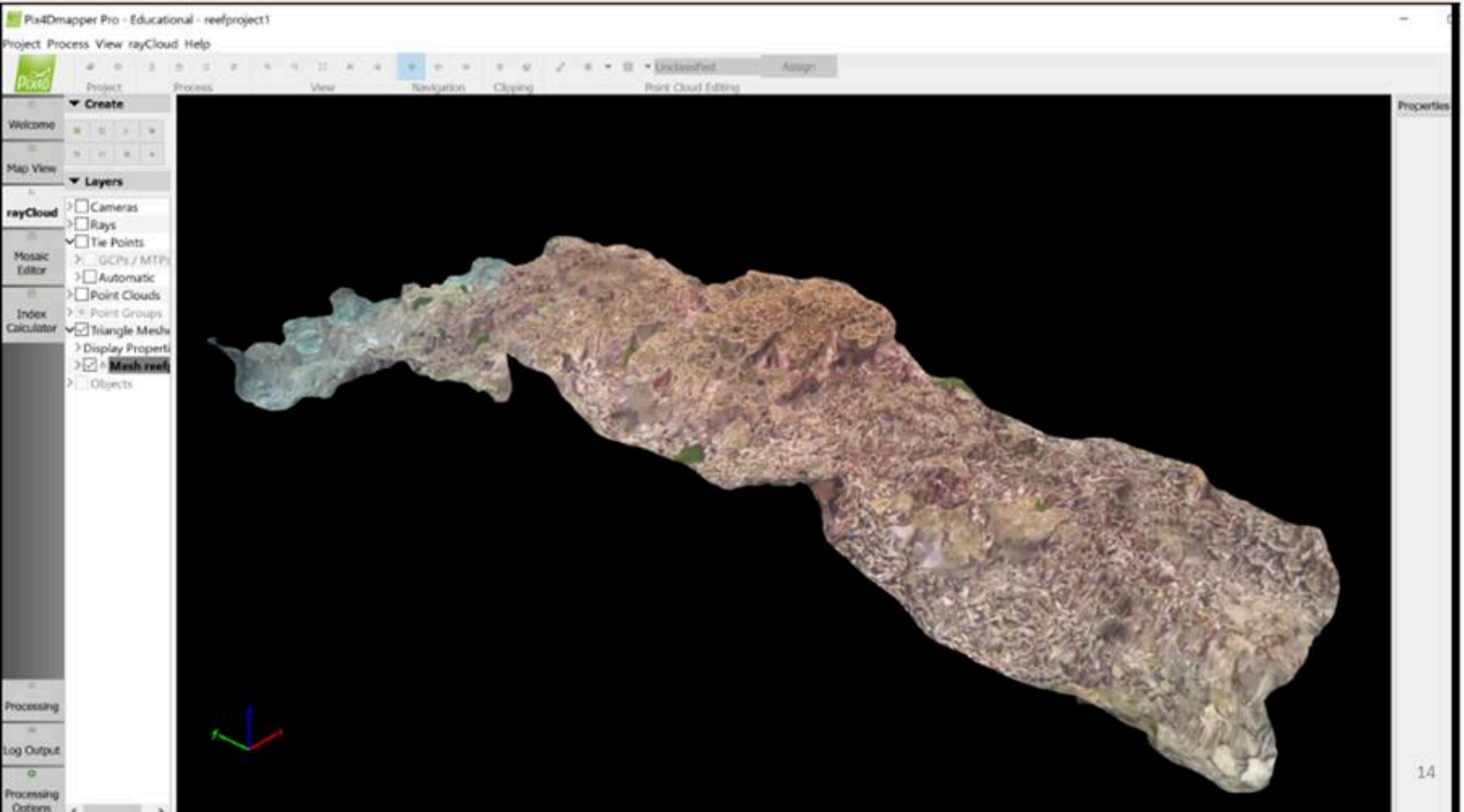
1. Depth(m)
2. Temperature (C)
3. Conductivity
4. Salinity (ppt)

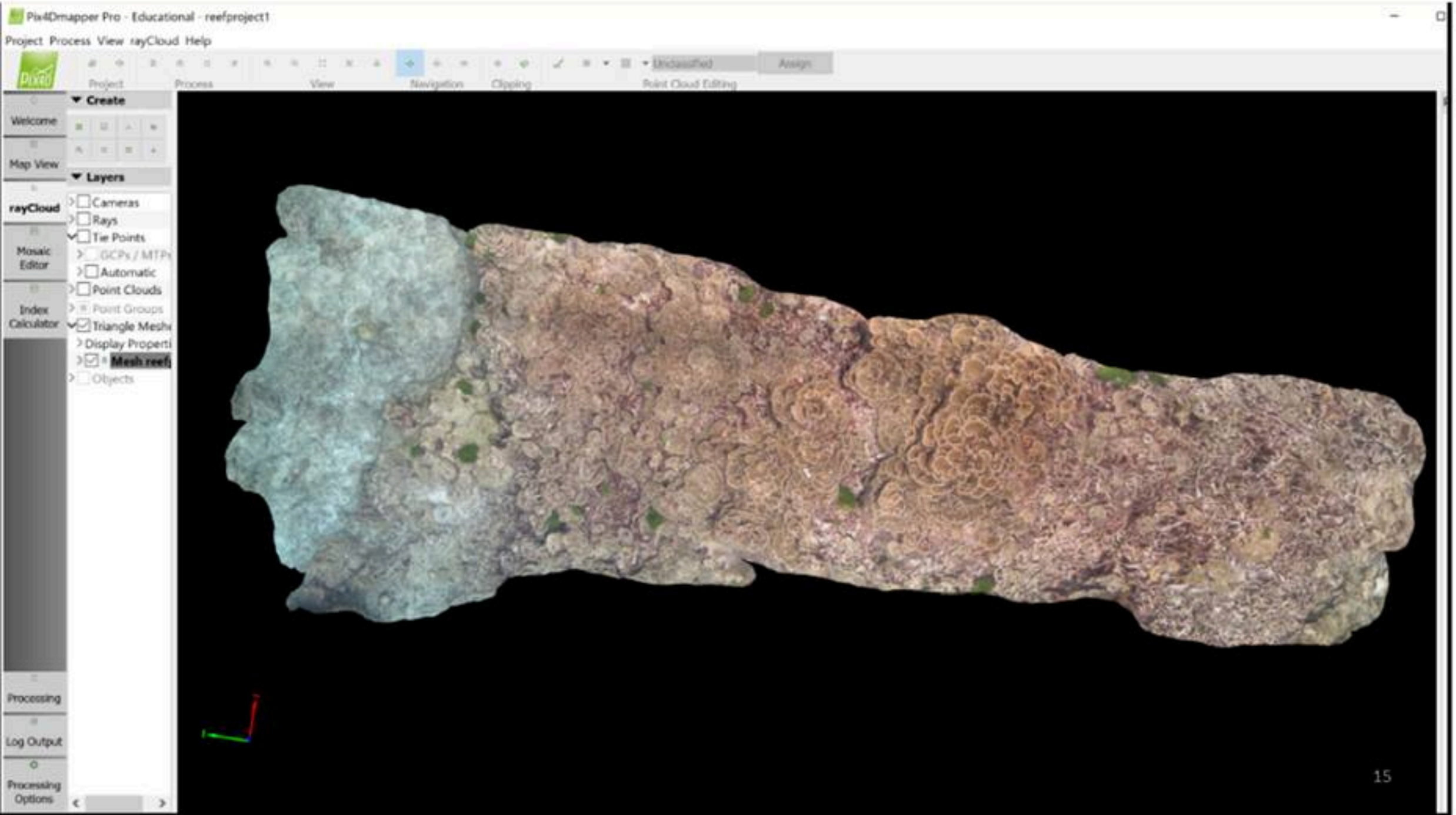
Cloud Technology opens possibilities with ease!

- Sharing data from any local computer, sensor, camera, manual station, etc.
- Large amount of data requires in-time computation, Big data technology certainly helps.
- Dissemination of analysed data is also very easy with Cloud Technology than ever before.
- Science is certainly benefitted from all these technology!

New challenge! Even bigger data!




Pix4Dmapper Pro - Educational - reefproject1
Project Process View rayCloud Help
Welcome
Map View
rayCloud
Mosaic Editor
Index Calculator
Processing
Log Output
Processing Options
Create
Layers
Cameras
Rays
Tie Points
Automatic
Point Clouds
Point Groups
Objects
Properties


Pix4Dmapper Pro - Educational - reefproject1
Project Process View rayCloud Help
Project
Process
View
Navigation
Clipping
Point Cloud Editing
Unclassified
Assign
Welcome
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Mosaic Editor
Index Calculator
Processing
Log Output
Processing Options
Create
Layers
Cameras
Rays
Tie Points
GCPs / MTPs
Automatic
Point Clouds
Point Groups
Triangle Mesh
Display Properti
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