



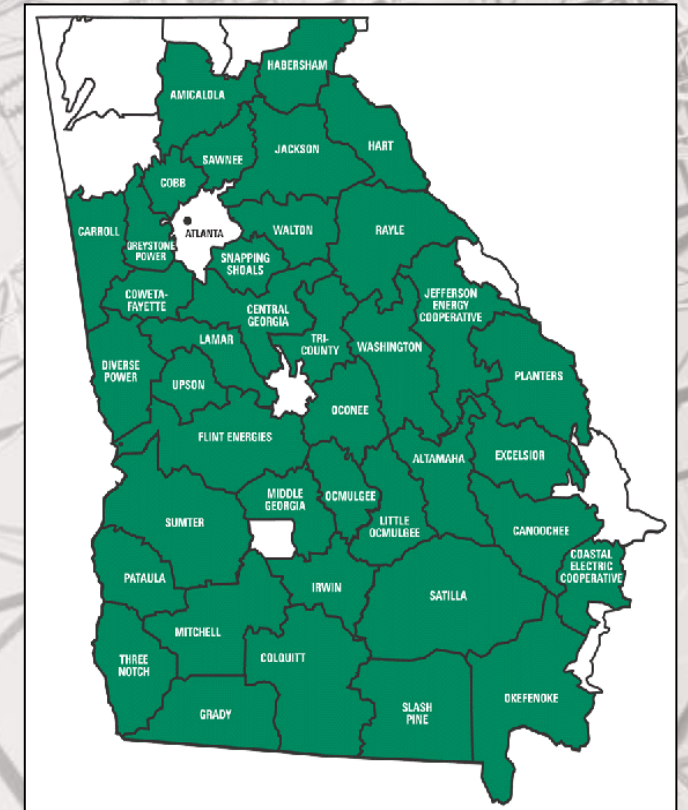
Georgia**Transmission**

# PQ Dashboard User's Group Meeting

April 21, 2022 – WebEx

## About Georgia Transmission Corporation (GTC)

- Transmission-only, not-for-profit cooperative
- Formed in March 1997 from the restructuring of Oglethorpe Power Corporation (OPC)
- GTC provides network transmission service to 38 Member EMCs in Georgia
- GTC provides point-to-point service to other customers



# GTC PQ Dashboard Overview

- GTC DFR Assets - Stations with DFRs owned by GTC (95 DFRs)
- GPC DFR Assets - Stations with DFRs owned by Georgia Power Company (135 DFRs)
- GTC PQMeter Assets - Stations with Power Quality Meters owned by GTC (44 PQMs)
- Fault Trace Tool (FTT) tied into the PQ Dashboard
- TrenDAP – Coming 2022



# Power Quality Dashboard 2022 Goals:

- Add Calculated Cause Code
  - Also correlate with FTT Lightning
- Replace map background with GTC GIS
- Add button to turn Heat Map on/off
- Testing of OpenXDA 3.0 upgrade

# Power Quality Monitors 2022 Goals:

- Elspec trending data brought into TrenDAP

# Fault Trace Tool Update:

- Updates in 2021
  - Fault Indicators
- Updates in 2022:
  - Open Source
  - EMC Lightning Viewer



Sun 6/20/2021 1:02 AM

PQDashboard@gasoc.com

Fault detected on BAY CREEK - MOON RD 115KV LINE (00003395)

To

**Fault 1** - 2021-06-19 23:59:33.9208333

DFRs: R66 at Bay Creek triggered at 23:59:33.7614583 ([click for wav](#))

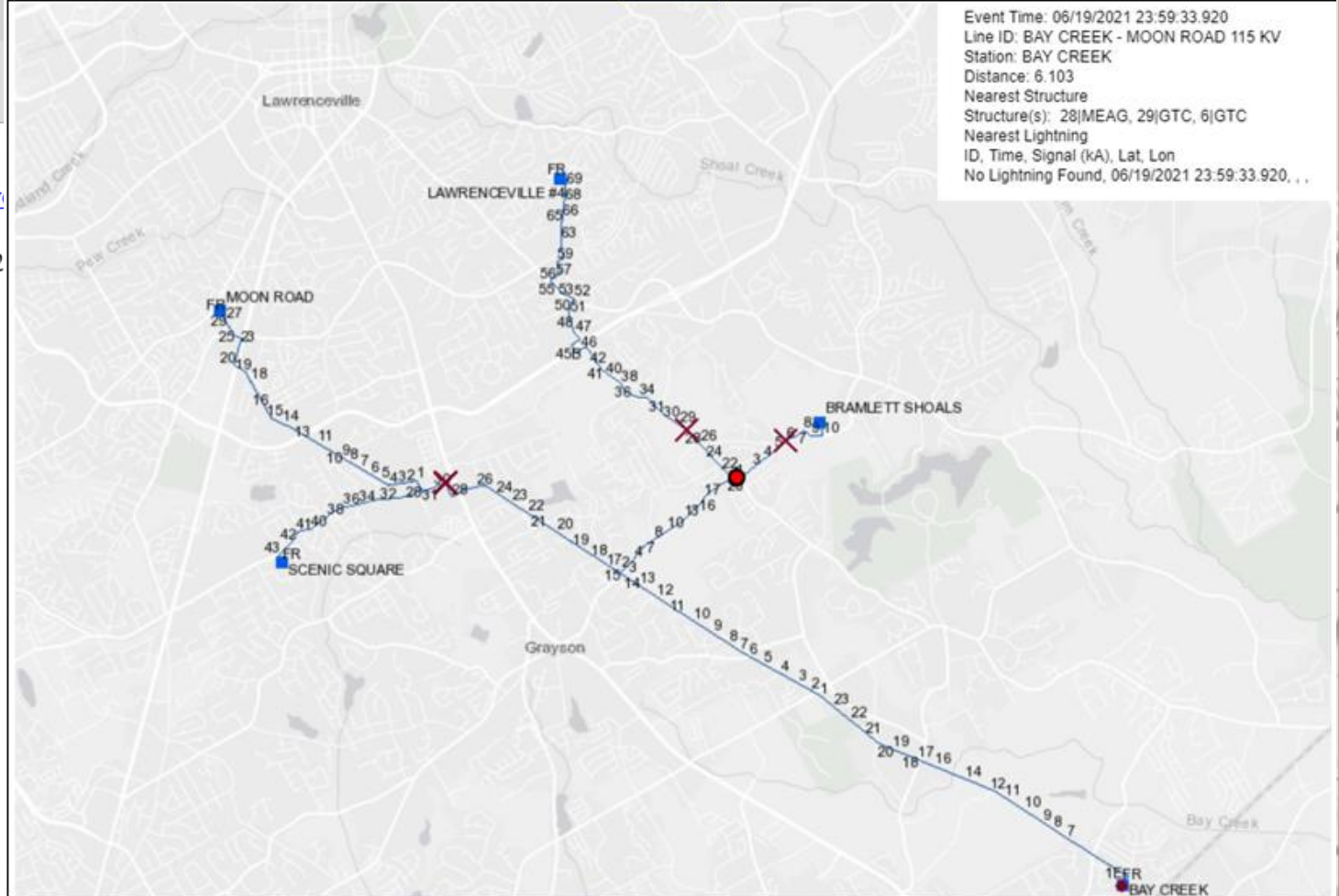
Files: 210619,235933921,-2t,BAY CREEK (GTC) 230\_115KV,USI\_2

Line: BAY CREEK - MOON RD 115KV LINE (8.71 miles)

	Bay Creek - R66
Fault Type:	AN
Inception Time:	23:59:33.9208333
Fault Duration:	66.042 msec (3.96 cycles)
Fault Current:	5768.1 Amps (RMS)
Prefault Current:	4.7 Amps (RMS)
Postfault Current:	16.4 Amps (RMS)
Distance Method:	Takagi
Single-ended Distance:	6.103 miles
Is Breaker Restrike?:	No
Short file name:	R66F2280.dat
openXDA Event ID:	1576313

**R66 - Fault Trace**

[View in FTI](#)





Sun 6/20/2021 1:02 AM

PQDashboard@gasoc.com

Fault detected on BAY CREEK - MOON RD 115KV LINE (00003395)

To

[Redacted recipient information]

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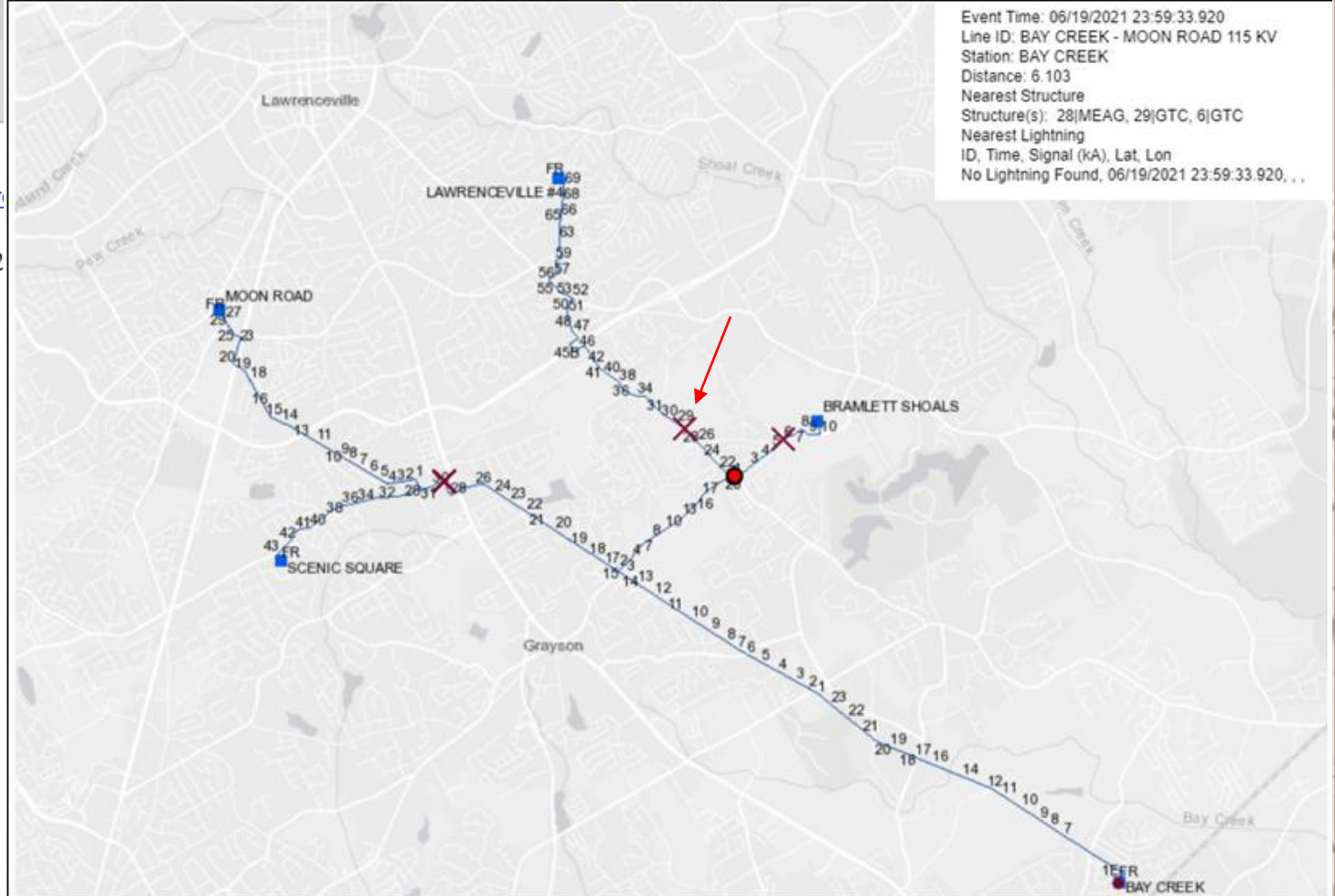
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**R66 - Fault Trace**

[View in FTI](#)



Event Time: 06/19/2021 23:59:33.920  
 Line ID: BAY CREEK - MOON ROAD 115 KV  
 Station: BAY CREEK  
 Distance: 6.103  
 Nearest Structure  
 Structure(s): 28|MEAG, 29|GTC, 6|GTC  
 Nearest Lightning  
 ID, Time, Signal (kA), Lat, Lon  
 No Lightning Found, 06/19/2021 23:59:33.920, , ,



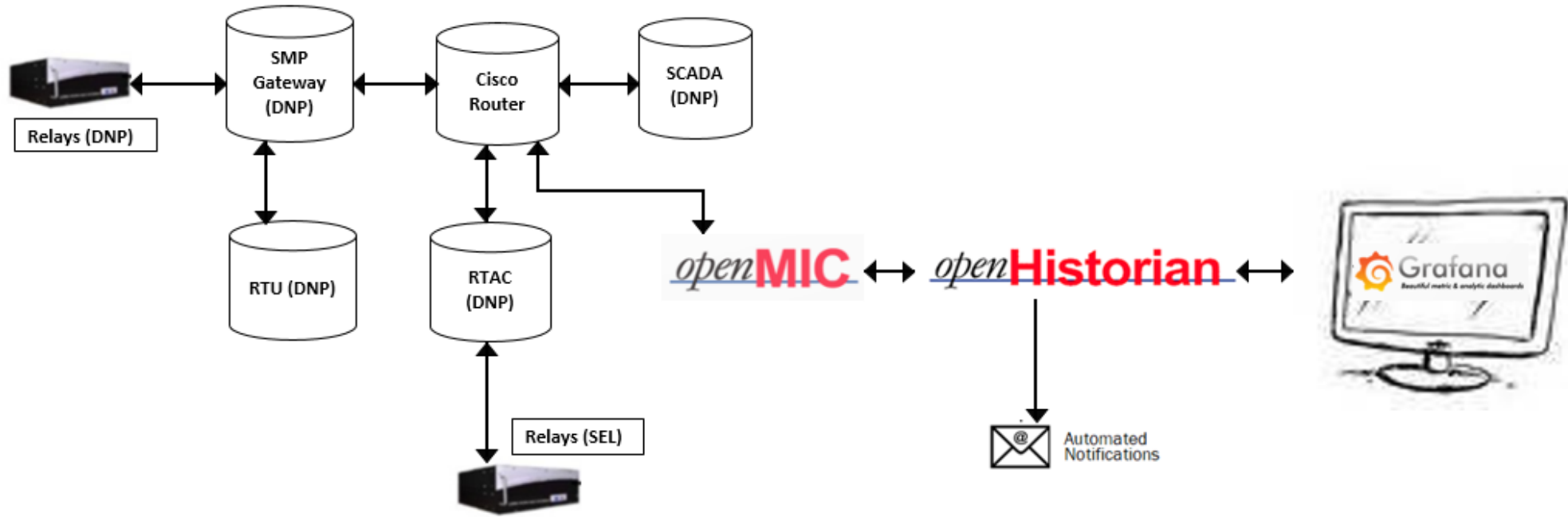
# Fault Trace Tool:

- Coming tools in 2022:
  - Date/time picker
  - Enhanced address search
  - Lightning search by clicking on map
  - Print/email capability
  - Line switch display
  - Automatic double ended fault location

## EDDC Project Goals:

- Alert engineering to research equipment issues
- Creation of conditional maintenance work orders
- Feed an Asset Health Program

# EDDC Flowchart:





## EDDC 2022 Goals:

- Set up email alarms for bushing monitors and DGA monitors – **In progress**
- Bring distribution pilot substation into EDDC - **Completed**
- Pilot of battery project data in EDDC for alarming
- Pilot of capacitor bank monitors in EDDC for alarming

# EDDC Alarm Email Example



Mon 4/11/2022 12:14 PM

eddc@gasoc.com

**EDDC Douglasville Ethane > 150 (Major alarm)**

To

Douglasville Bank A Ethane data point has exceeded 150ppm.



Wed 4/6/2022 11:50 AM

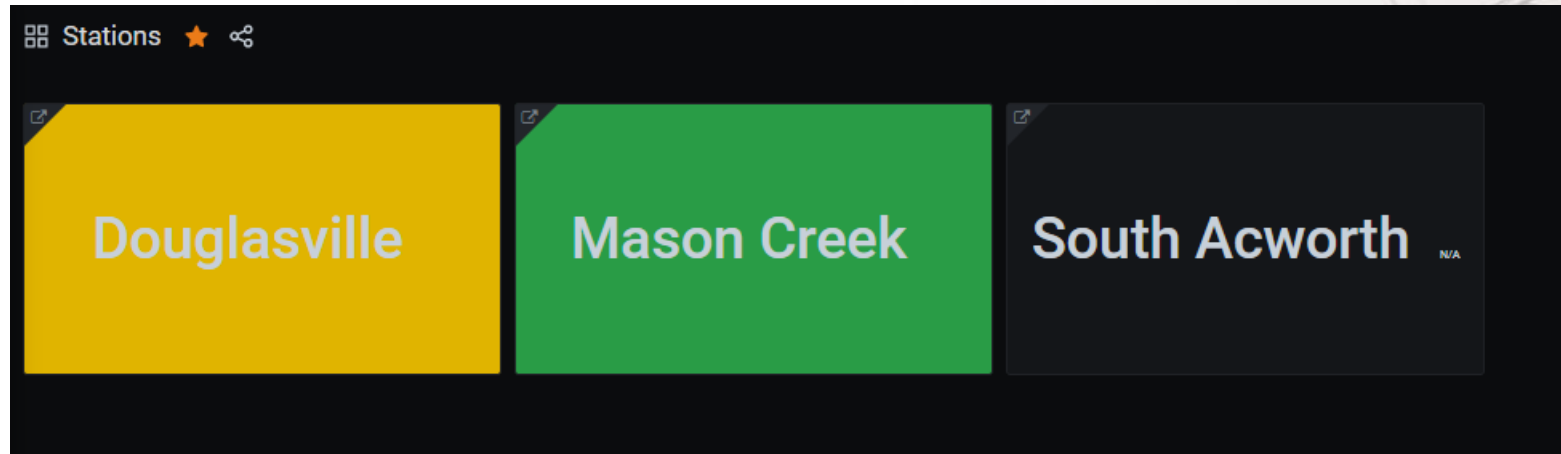
eddc@gasoc.com

**EDDC Douglasville Ethane > 65 (Minor Alarm)**

To

Douglasville Bank A Ethane data point has exceeded 65 ppm.

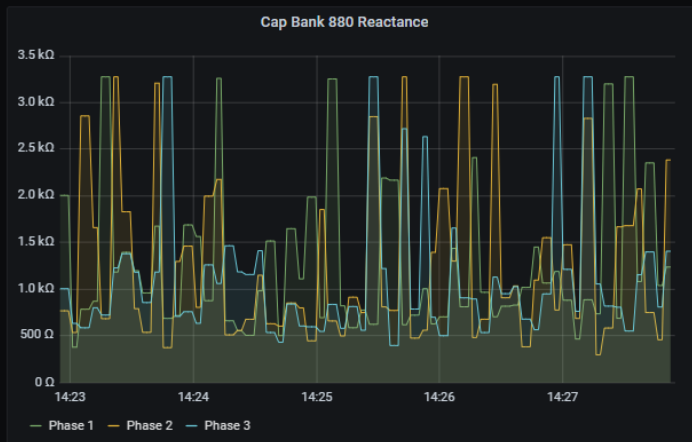
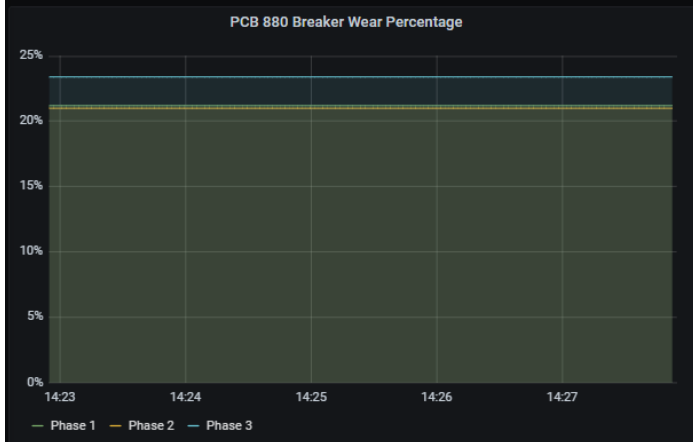
# EDDC Dashboard





# EDDC Dashboard

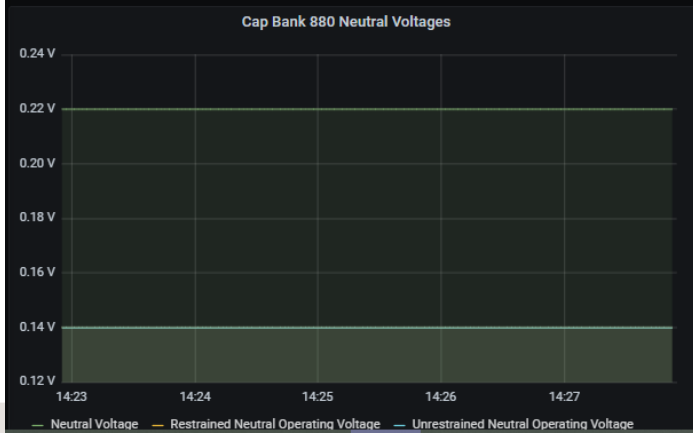
Stations > Mason Creek > Trends



## Harmonic Currents

Number of PCB880 Operations

# 27



**880 Open**

Cap Bank 880 KAB Coefficient		Cap Bank 880 KAC Coefficient	
Stored KAB Coefficient	<b>0.999</b>	Stored KAC Coefficient	<b>0.996</b>
Real Time KAB Coefficient	<b>0.992</b>	Real Time KAC Coefficient	<b>0.989</b>



Questions?