

MALÈ DECLARATION ON CONTROL AND PREVENTION OF AIR POLLUTION AND ITS LIKELY TRANSBOUNDARY EFFECTS FOR SOUTH ASIA



By
R.N.R.Jayaratne & P.H.G.Achala Lakmini Abeysirigunawardena
Air, Noise, Vibration Monitoring and Male Declaration Unit
Central Environmental Authority
Sri Lanka



Monitoring Locations

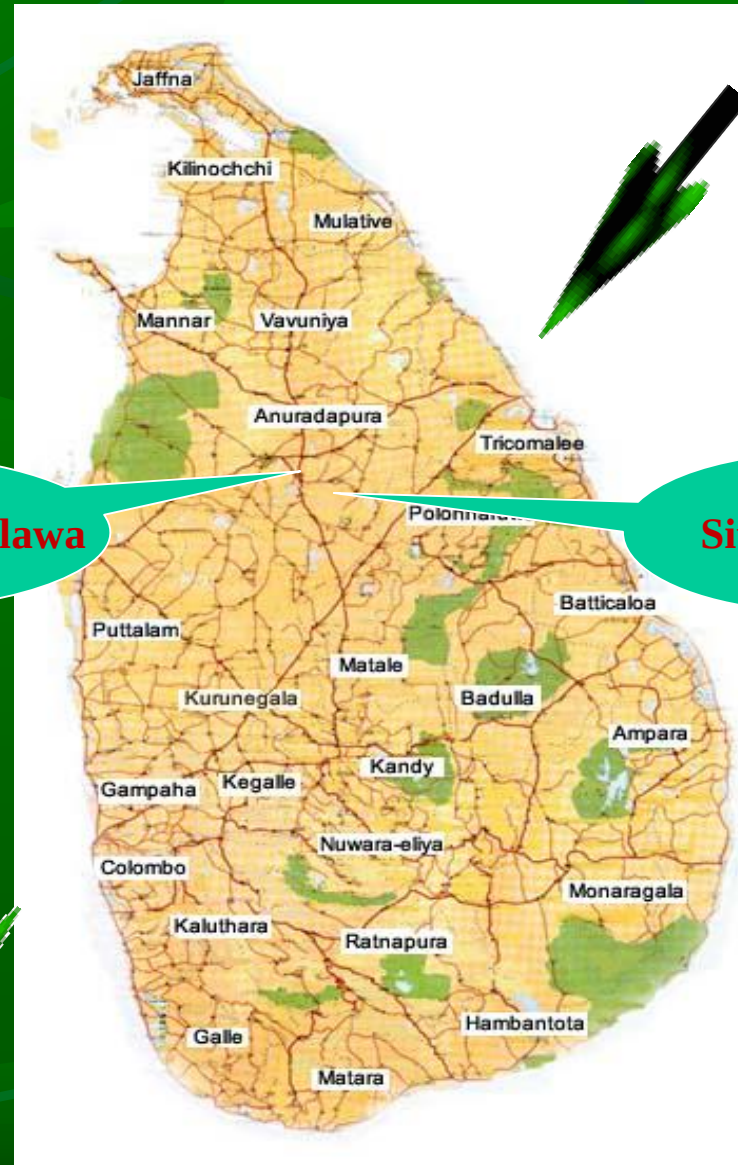


**North East
Monsoon
(Dec-Feb)**

Site 2 Doramadallawa

Site 1 Dutuwewa

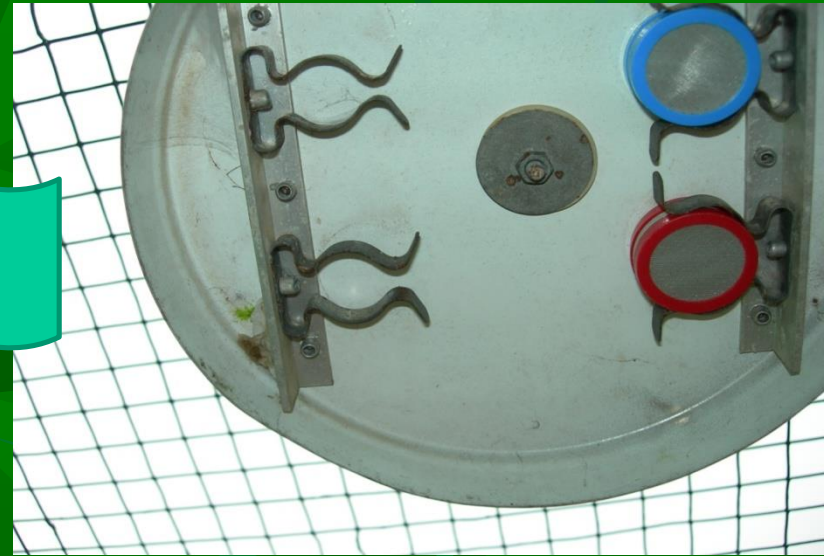
**South West
Monsoon
(May-Sep)**



Monitoring of SO_2 , NO_2 & O_3 using Passive Sampling



Dutuwewa

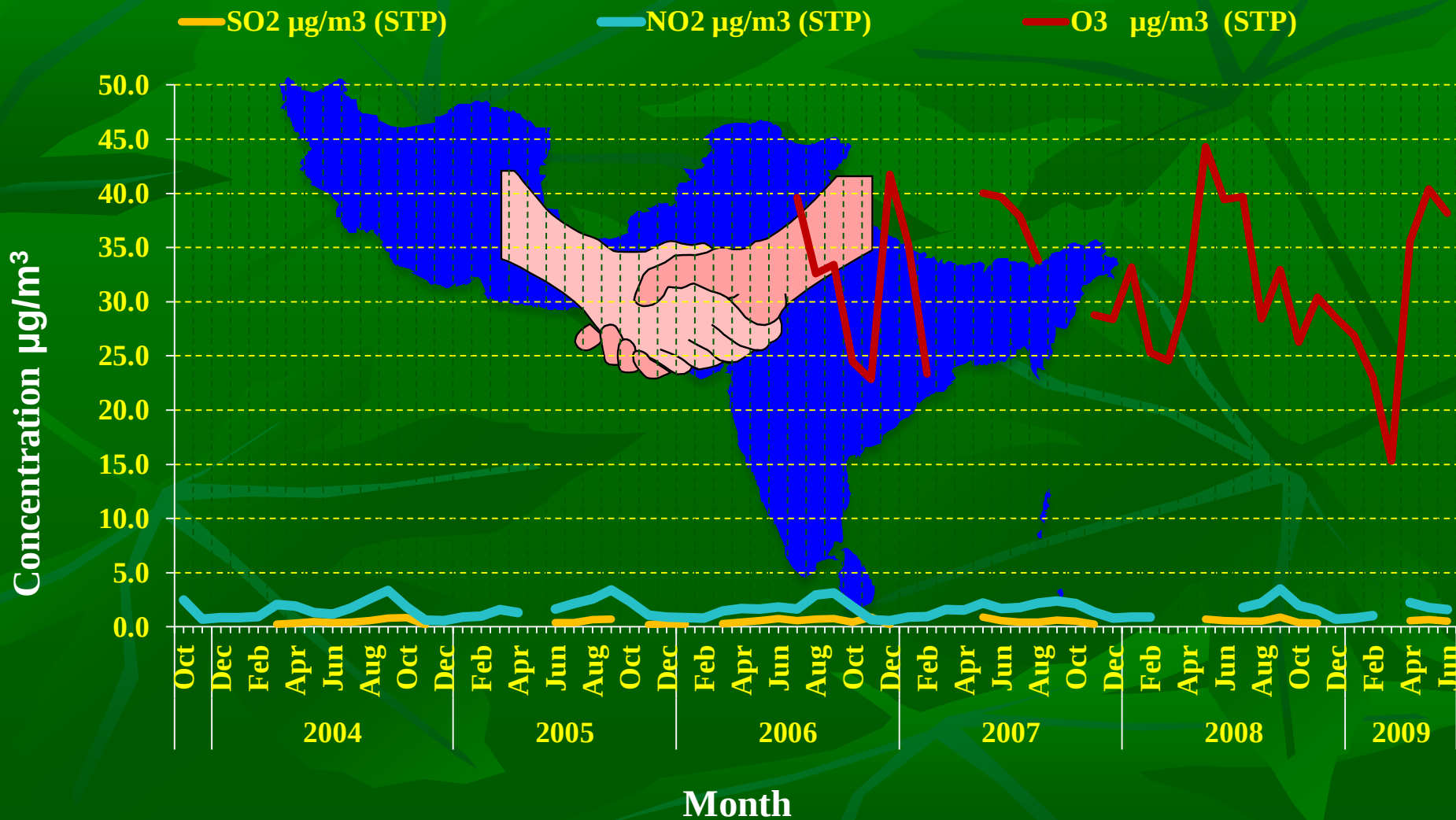


Doramadalawa



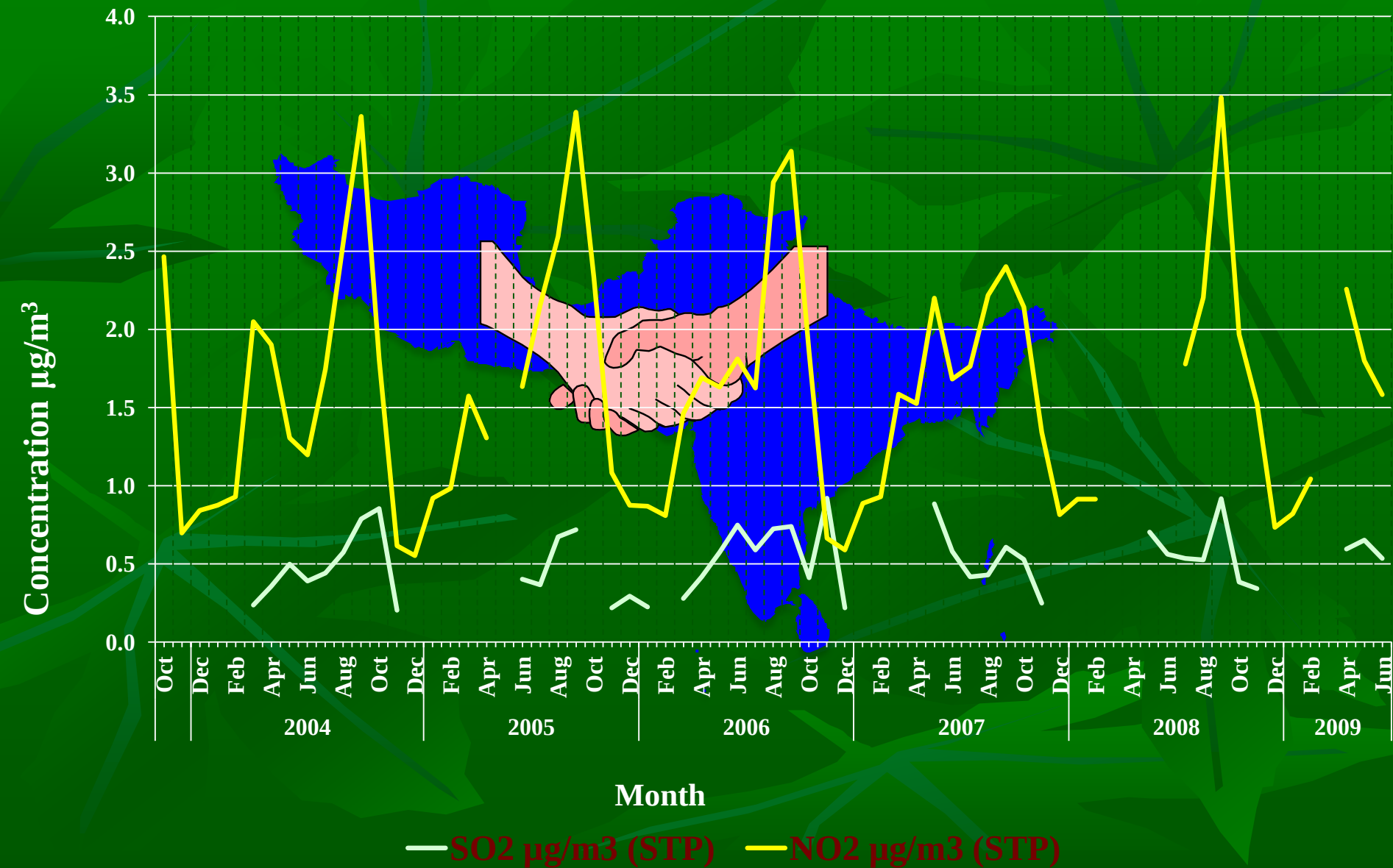


DIFFUSIVE SAMPLE RESULTS FOR SO₂, NO₂ & O₃ At Dutuwewa Site



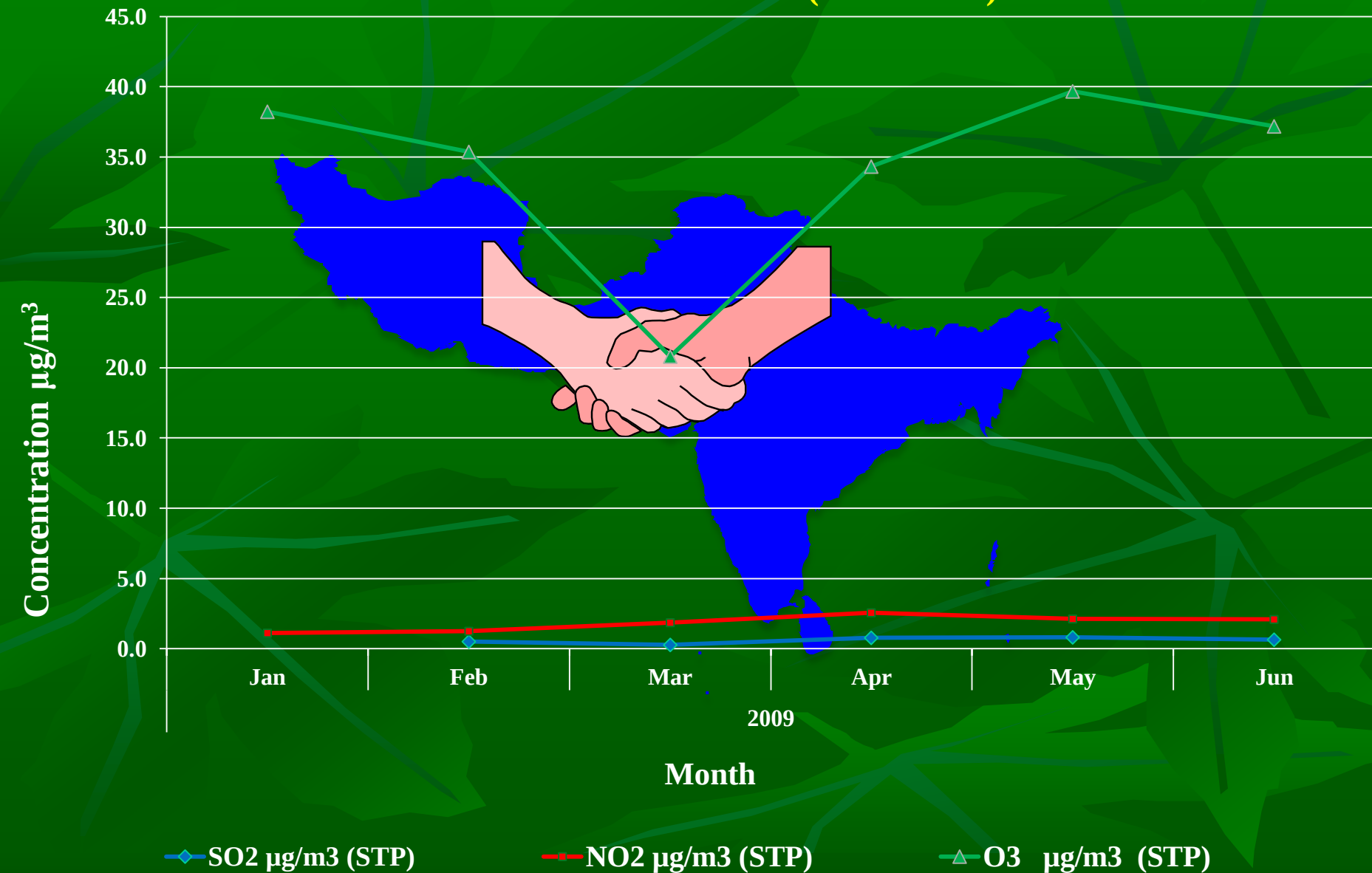
DIFFUSIVE SAMPLE RESULTS FOR SO₂ & NO₂

At Dutuwewa Site



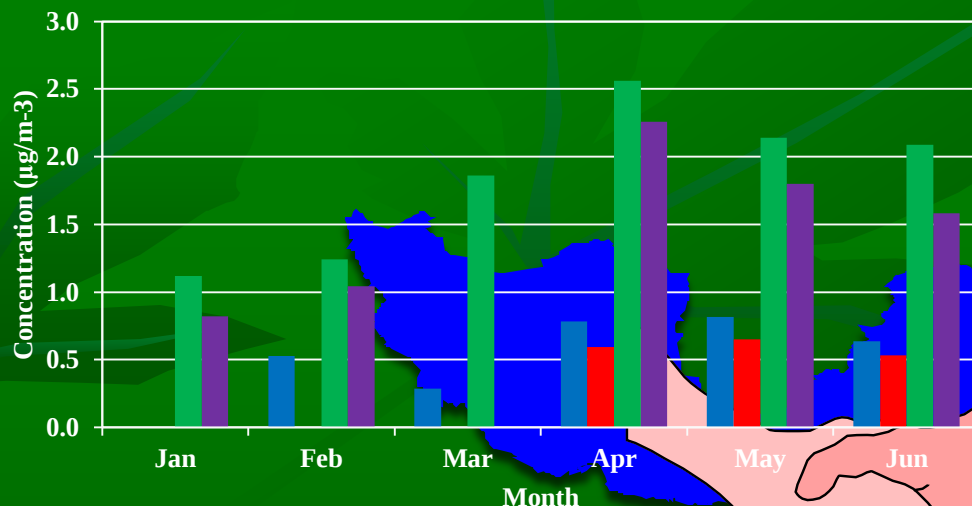
DIFFUSIVE SAMPLE RESULTS FOR SO₂ & NO₂

At Doramadalawa Site (Mihinthale)



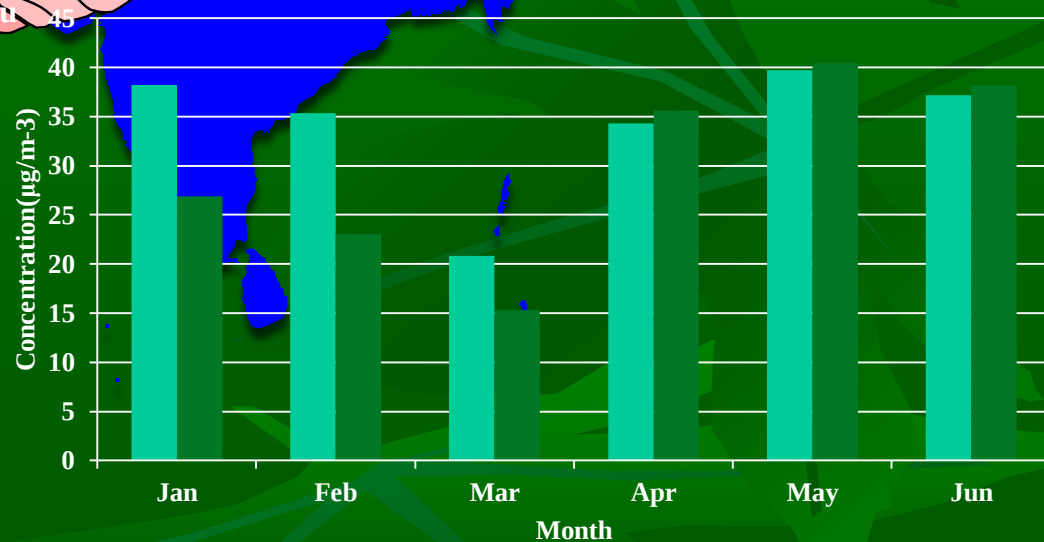
COMPARISON OF DIFFUSIVE SAMPLE RESULTS FOR SO₂, NO₂ & O₃

At Dutuwewa Site and Doramadala site



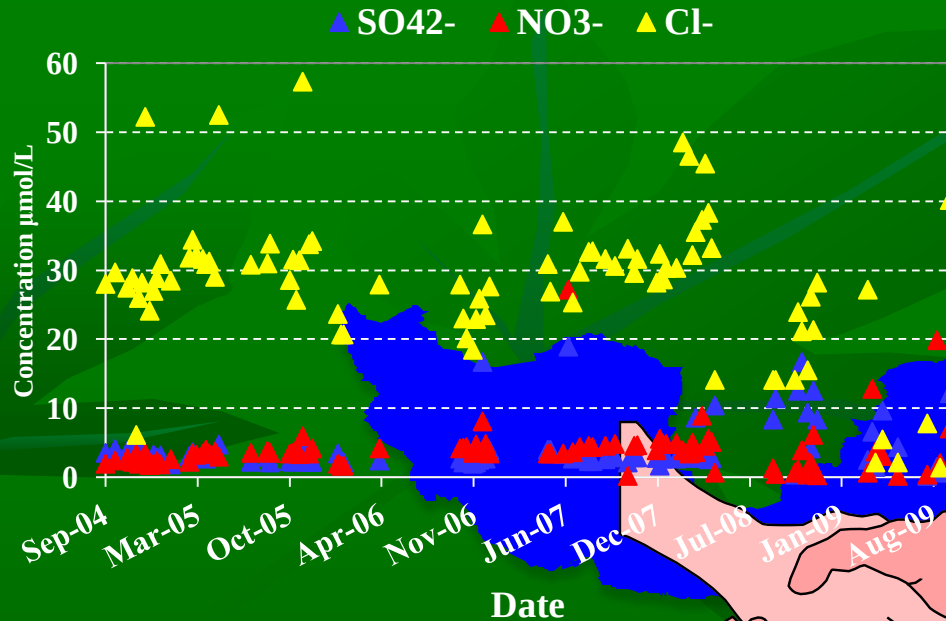
COMPARISON OF
DIFFUSIVE SAMPLE
RESULTS FOR SO₂ & NO₂

COMPARISON OF
DIFFUSIVE SAMPLE
RESULTS FOR O₃



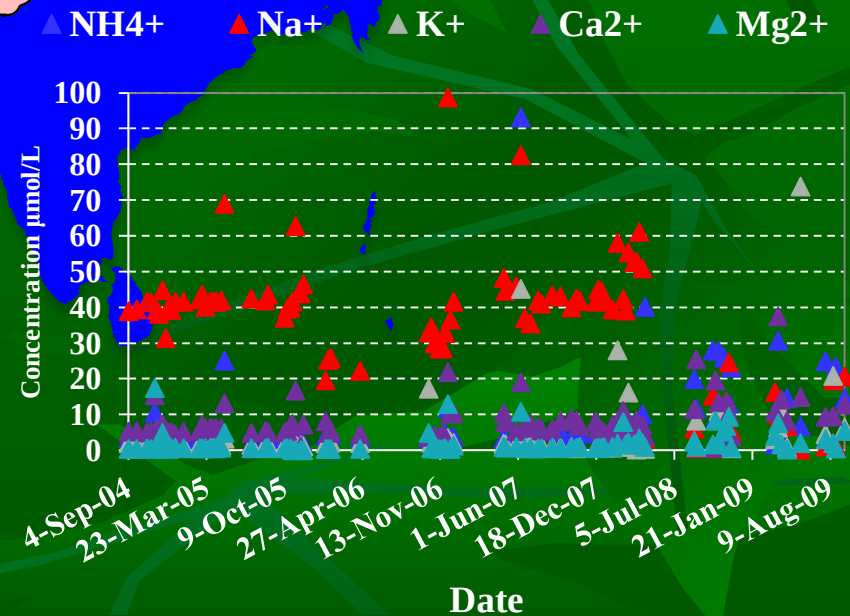
o3 dora o3 dutu

Ion concentration of Rain water at Dutuwewa site- Wet Only

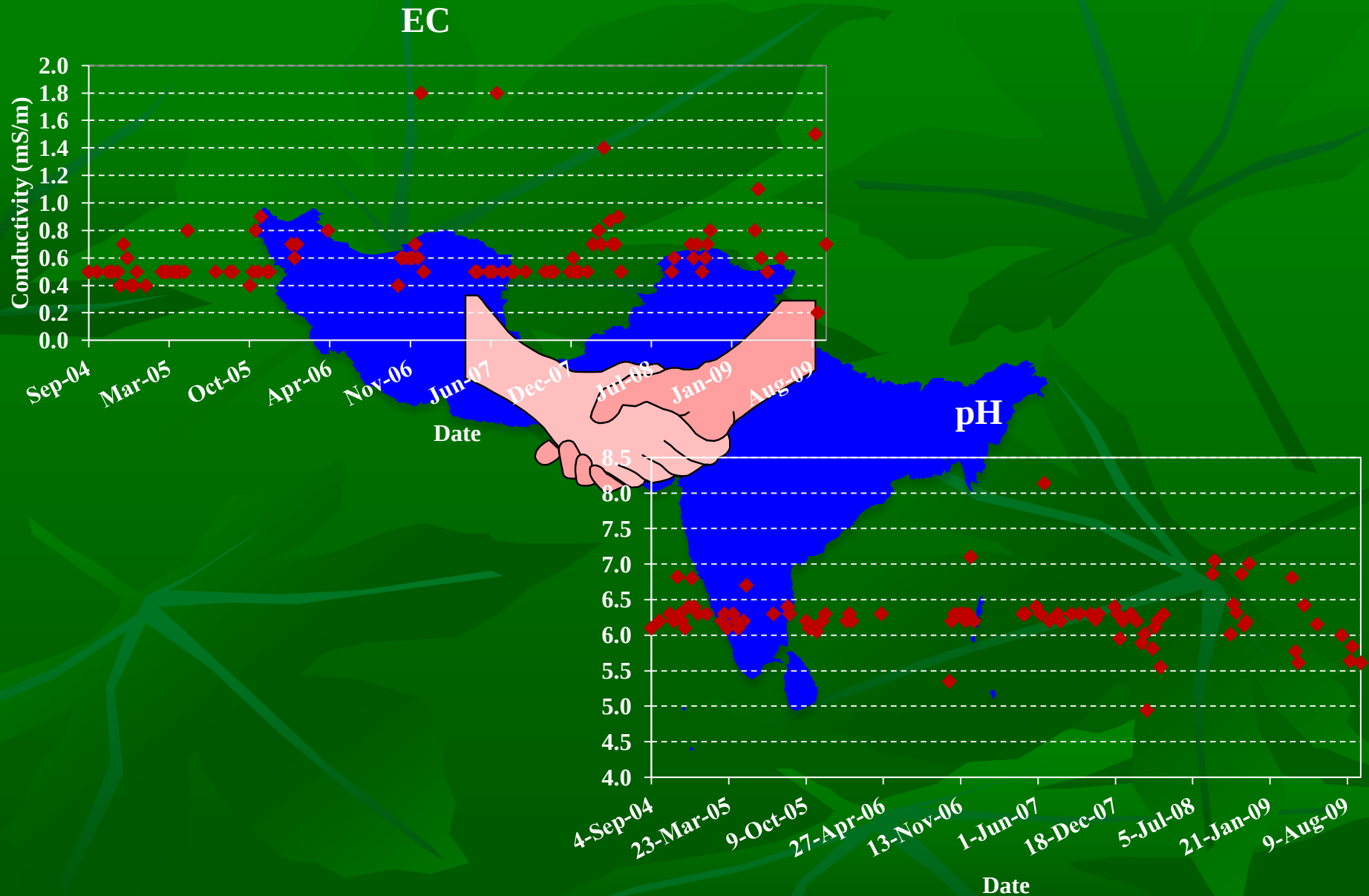


Variation of Anion Concentrations

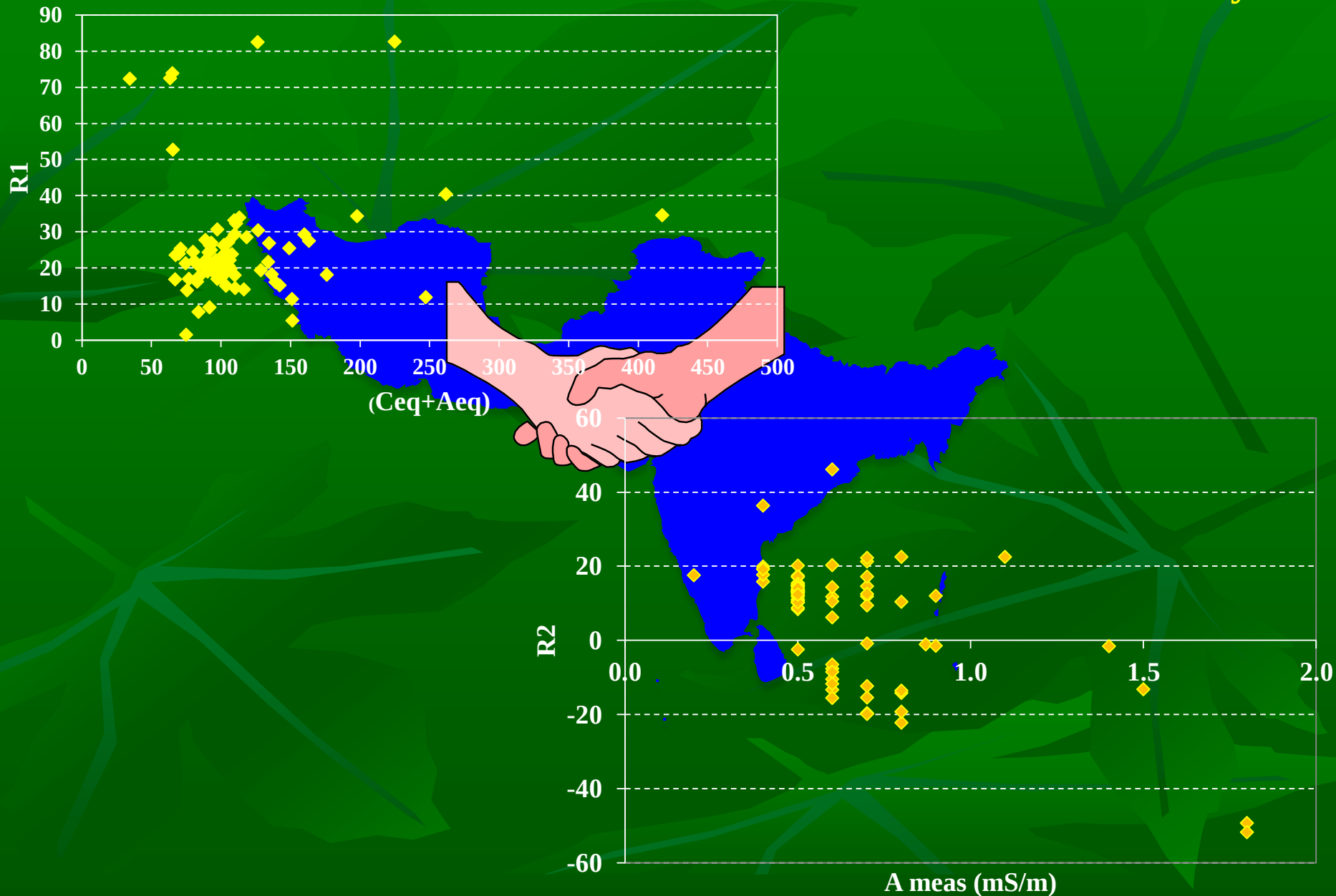
Variation of Cation Concentrations



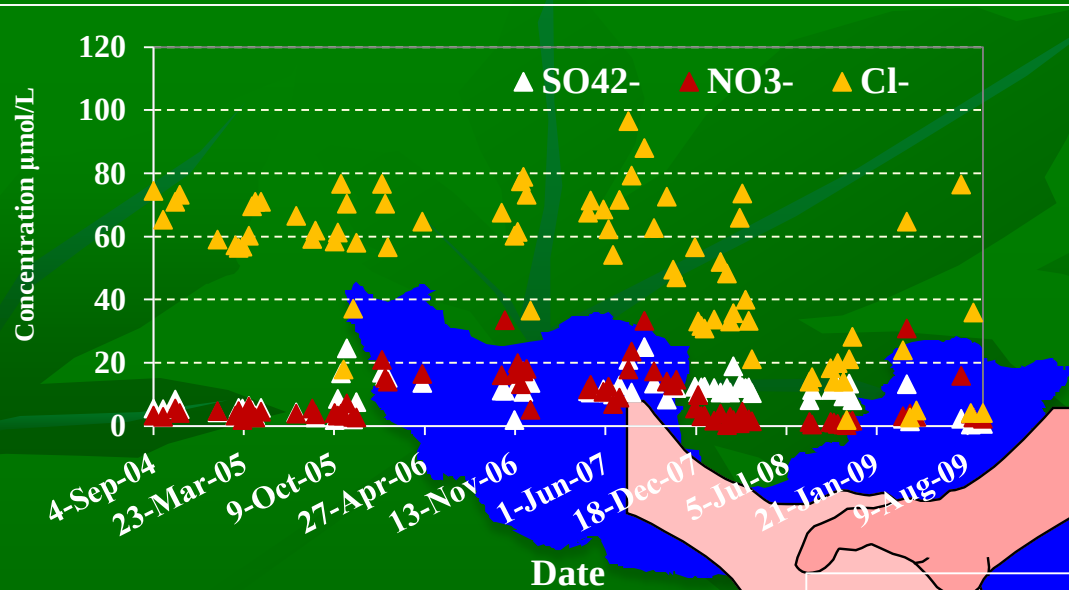
Variation of EC and pH of Rain water at Dutuwewa site Wet Only



Variation of R1 and R2 of Rain water at Dutuwewa site Wet Only

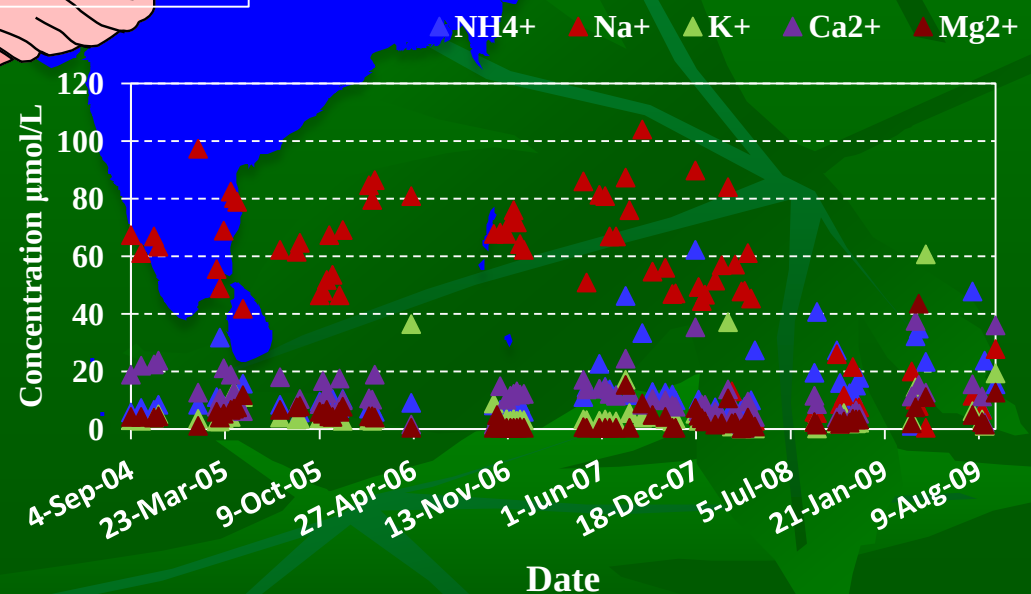


Ion concentration of Rain water at Dutuwewa site - Bulk

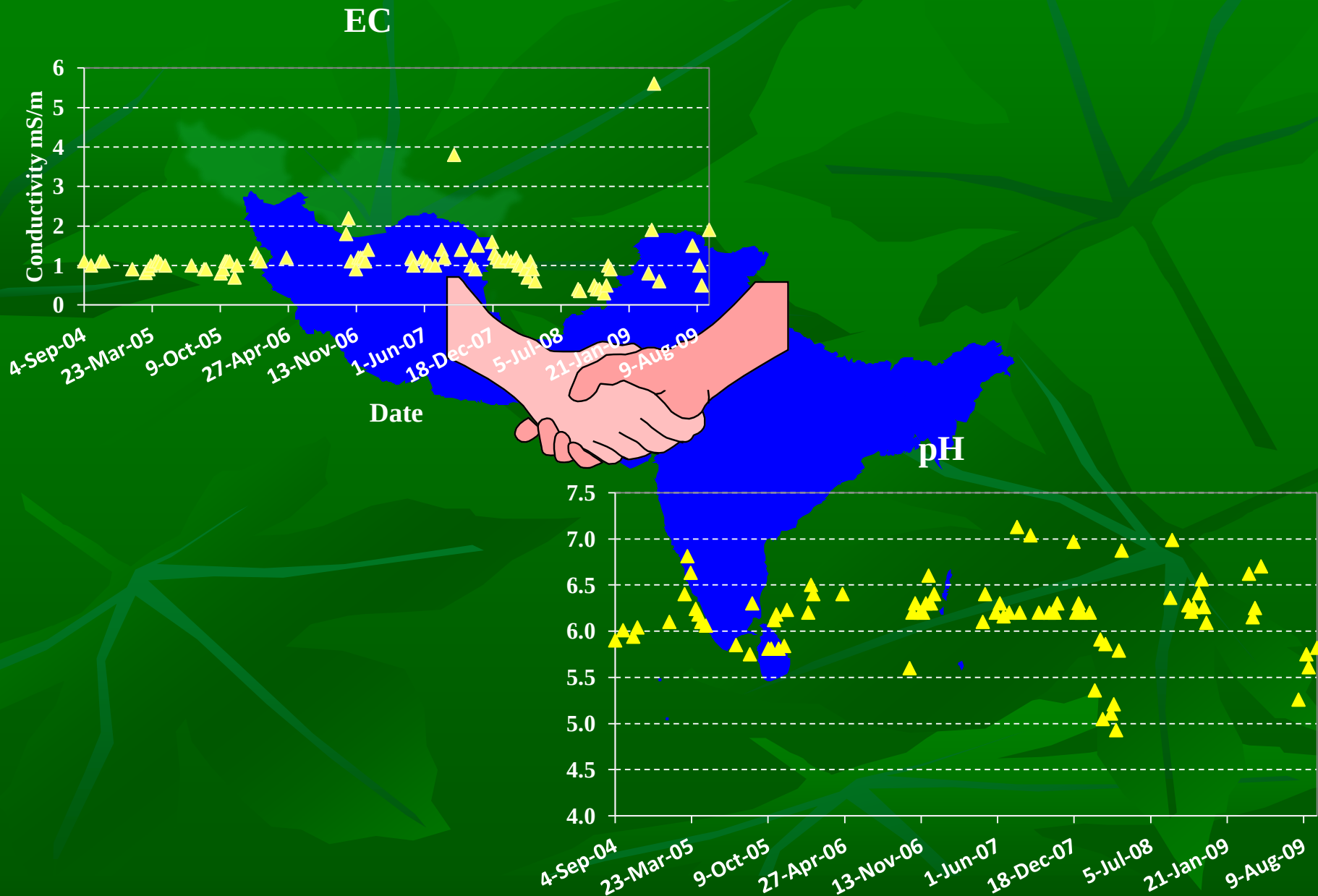


Variation of Anion Concentrations

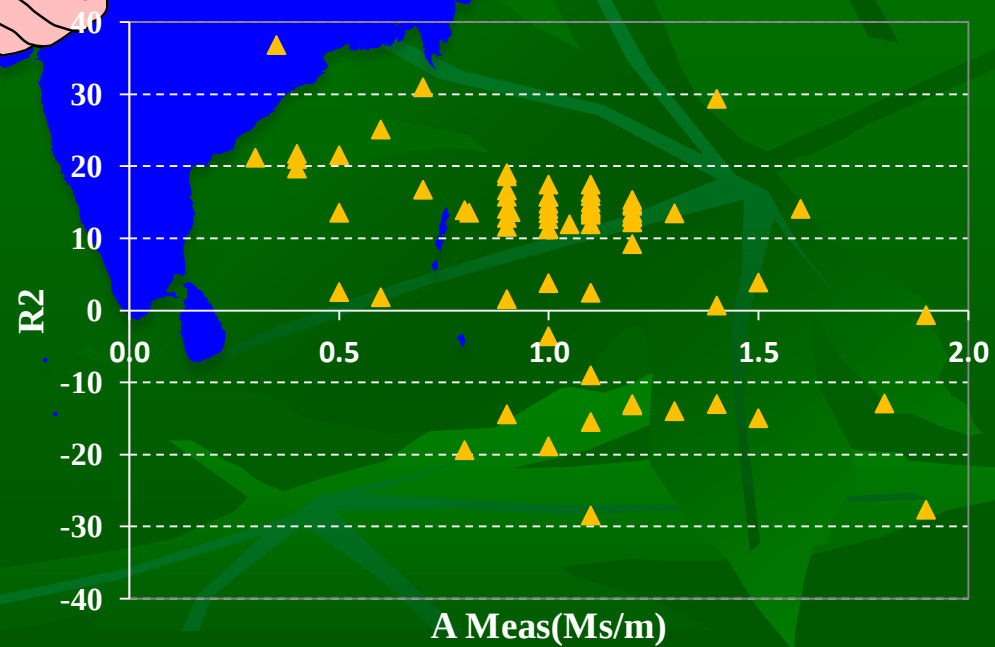
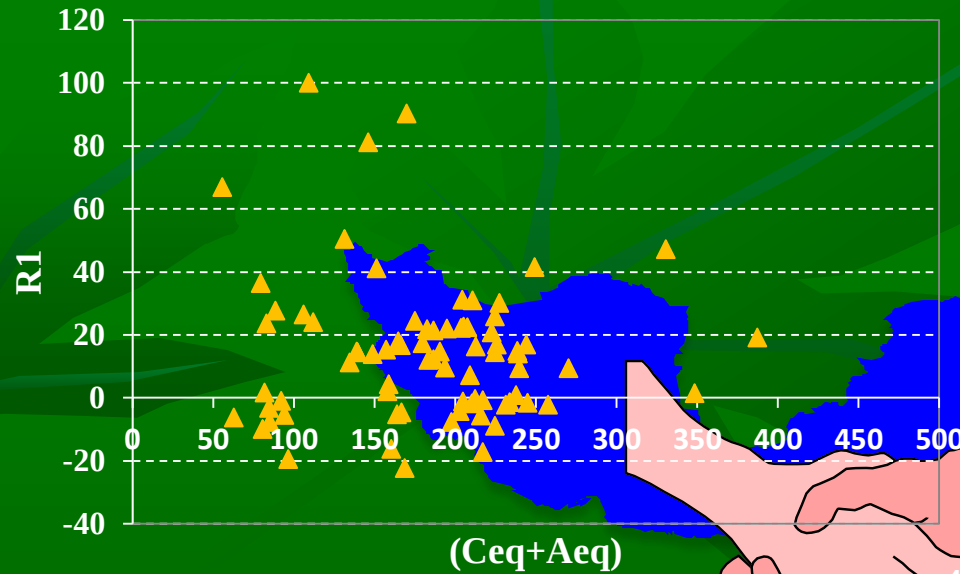
Variation of Cation Concentrations



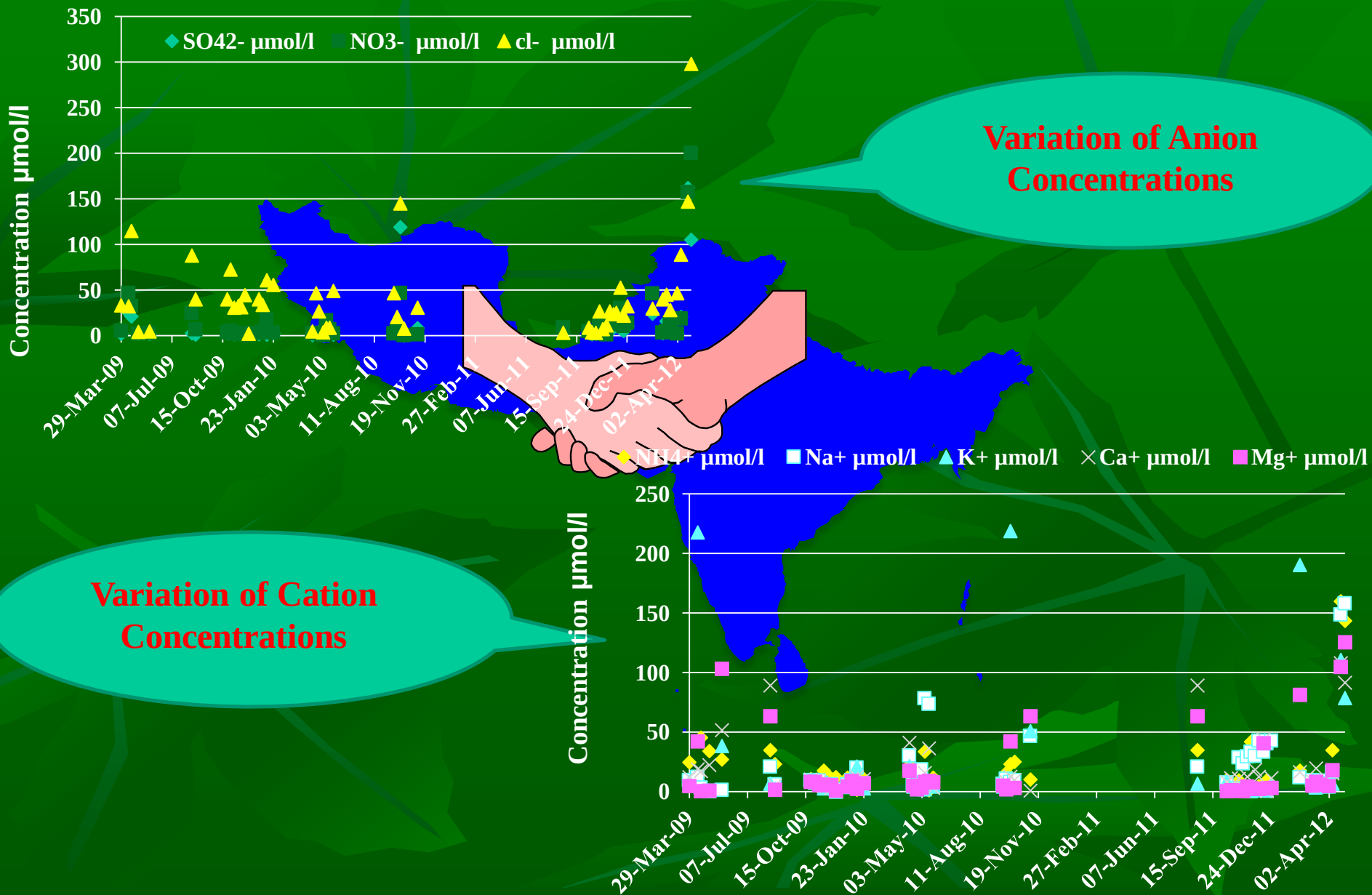
Variation of EC and PH of Rain water at Dutuwewa site Bulk



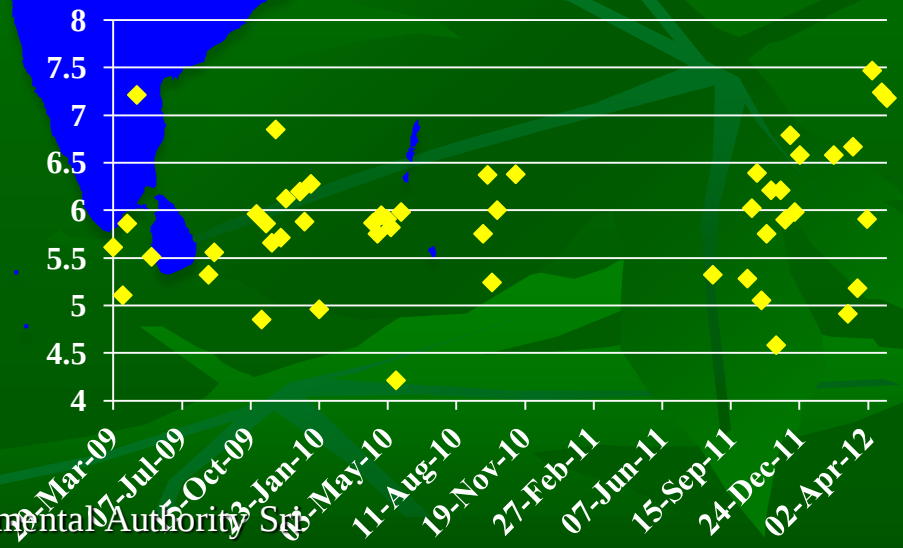
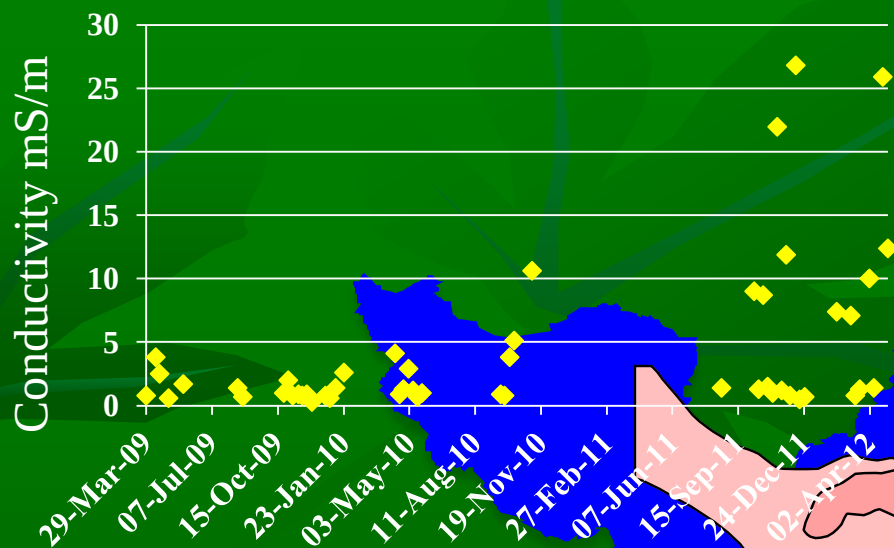
Variation of R1 and R2 of Rain water at Dutuwewa site Bulk



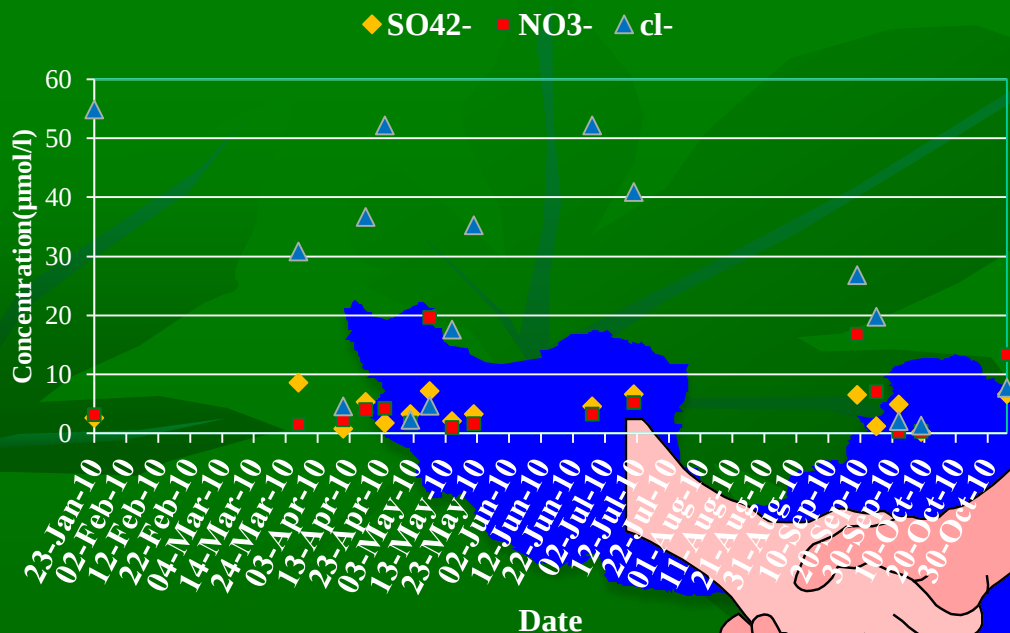
Ion concentration of Rain water at Doramadala site - Bulk



Variation of EC and PH of Rain water at Doramadalawa site Bulk

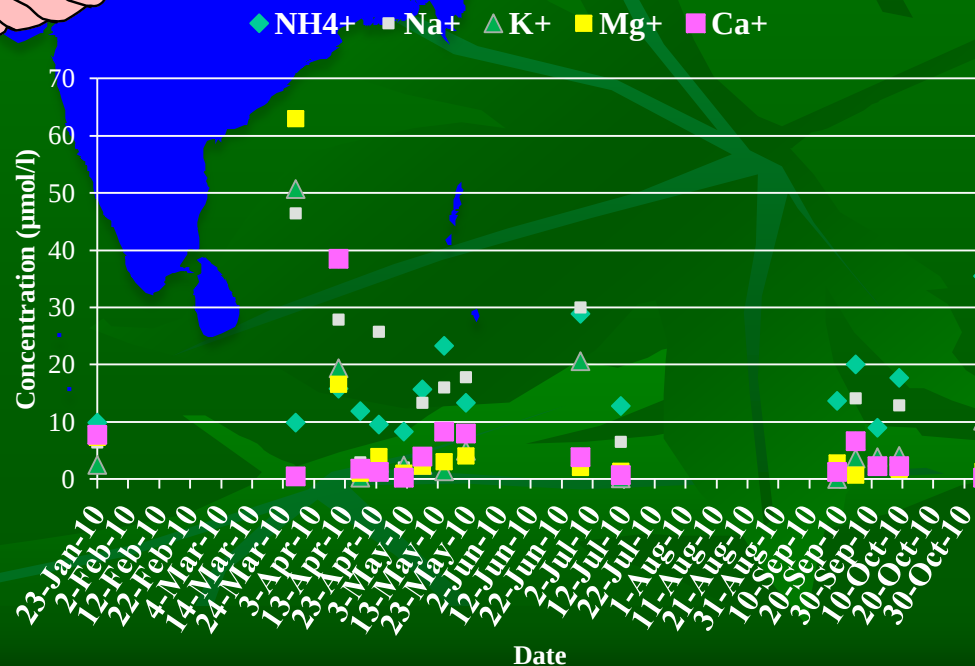


Ion concentration of Rain water at Doramadalawa site - WO



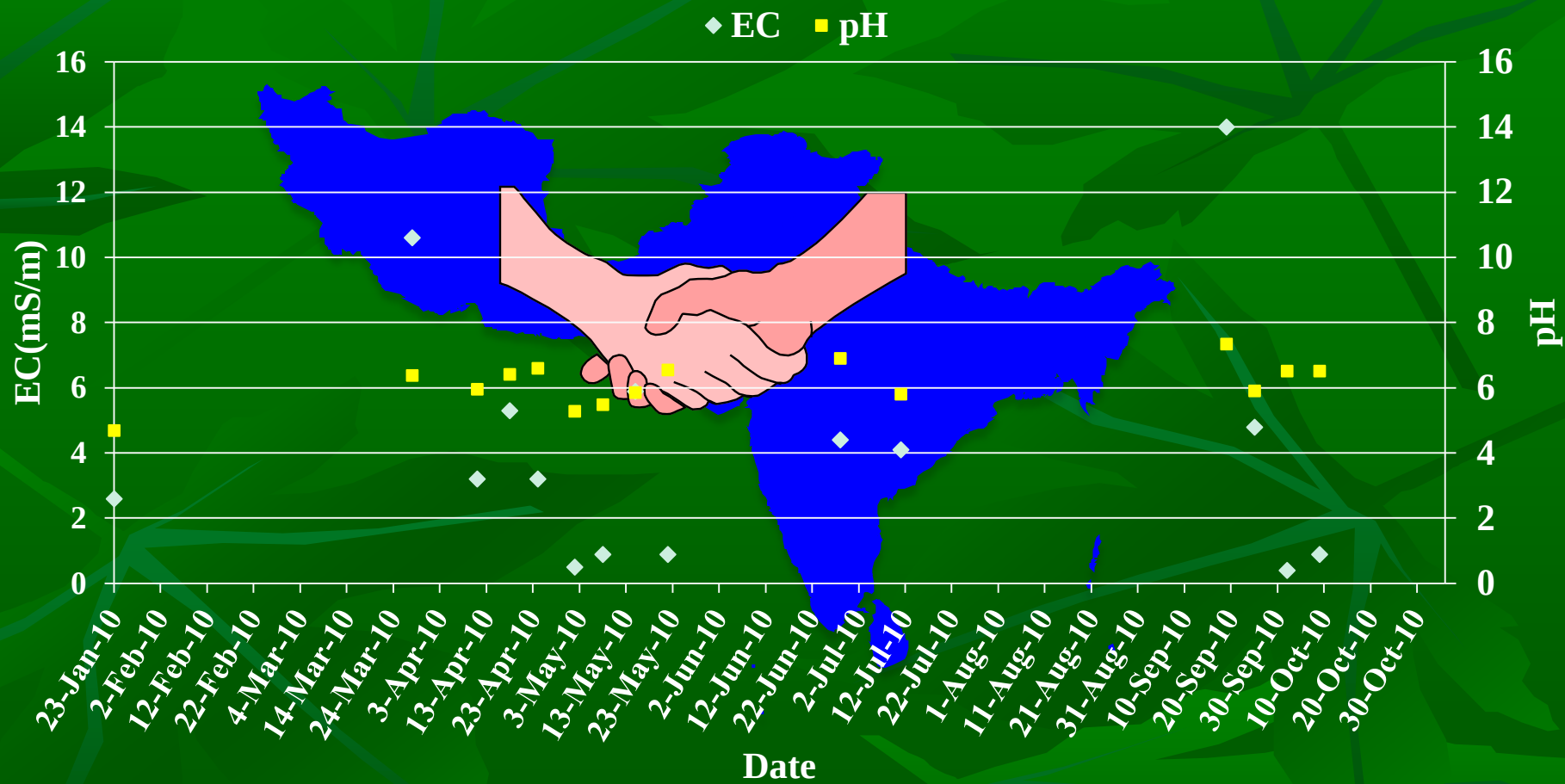
Variation of Anion Concentrations

Variation of Cation Concentrations



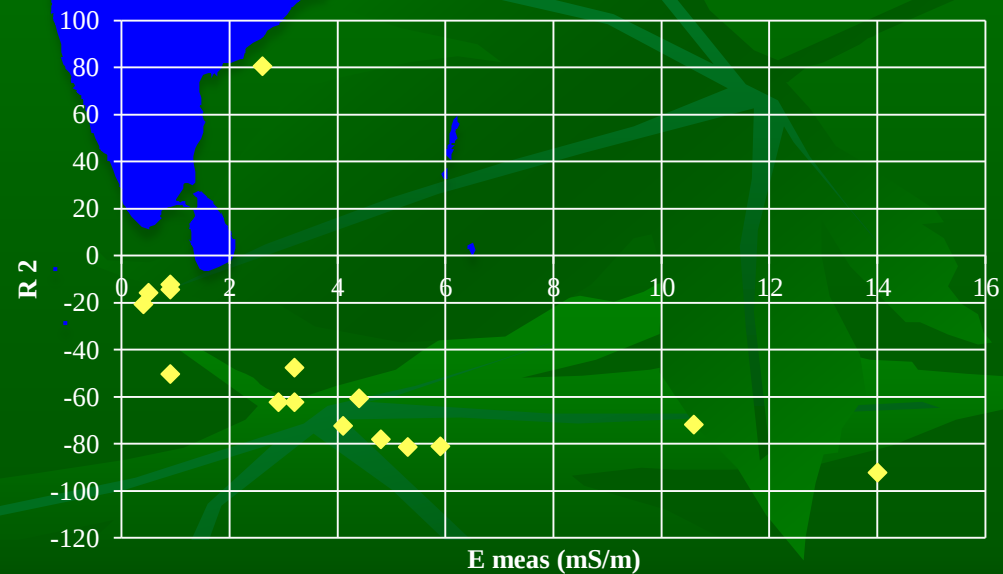
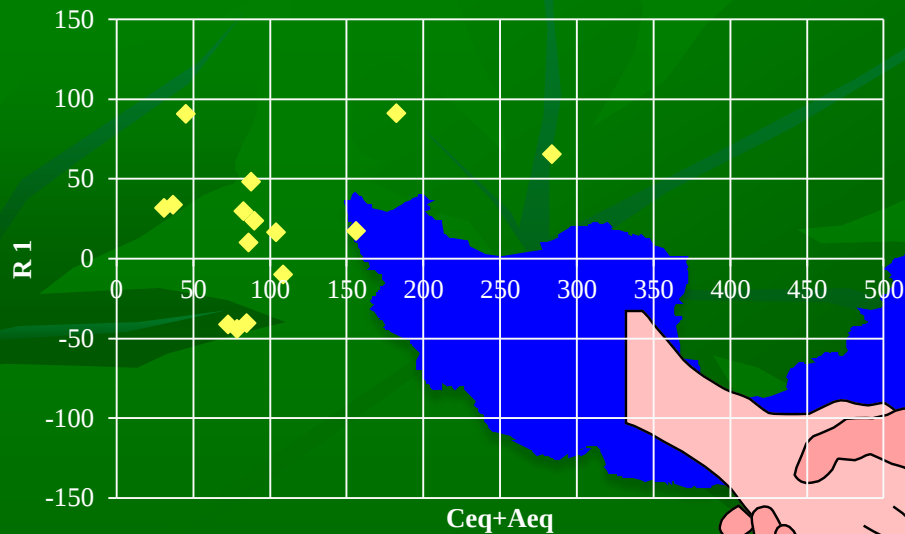
Variation of EC and PH of Rain water at Doramadalawa site

Wet Only

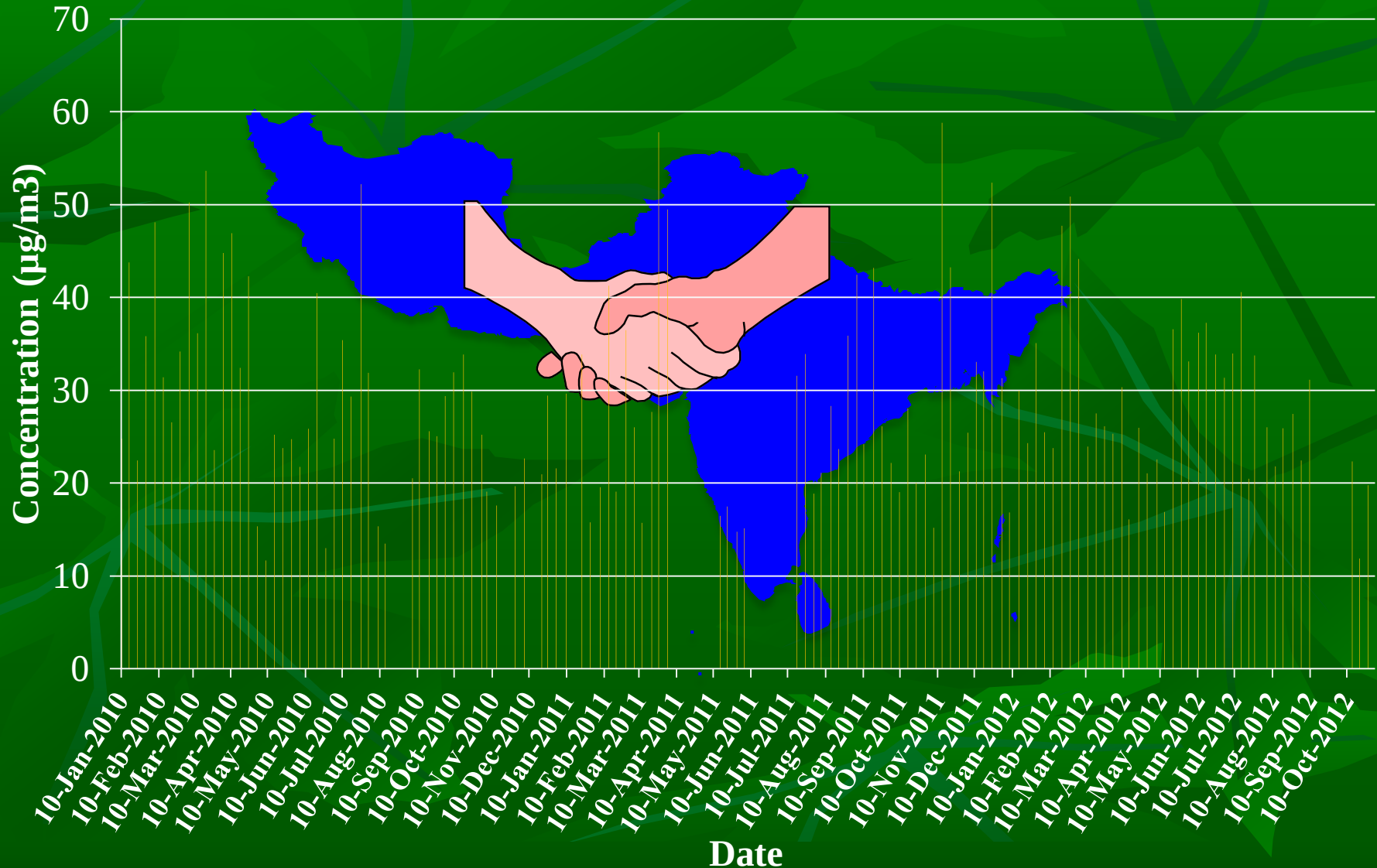


Variation of R1 and R2 of Rain water at Doramadalawa site

Wet Only



Variation of 24 Hour average PM-10 Concentration at Doramadallawa site



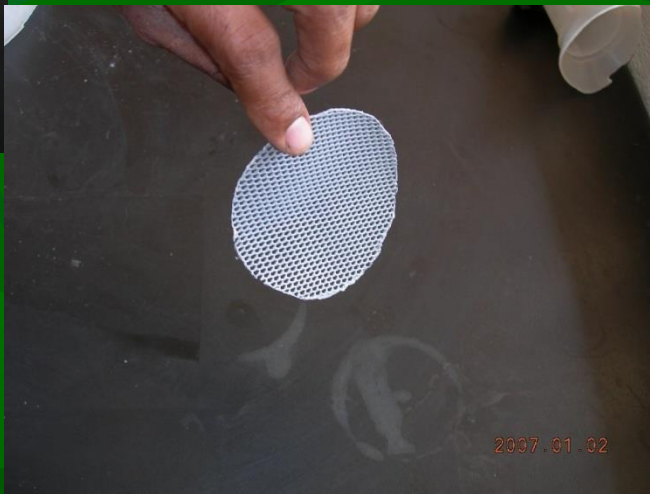
Challenges and difficulties;

Non durability of plastic material of the lid and the funnel holder of the wet only collector and funnel of bulk collector in Sri Lanka's climatic condition, mainly due to hot sunshine, the material became brittle.

Need spare lids at least one for every 06 months

Wet only collector not working. Electronic part is working properly. But small gear box in the mechanical part not working due to damage of the wheel inside.









Thank You