Paris Session 2022

Assessment of type & level of pollution: Need of pollution mapping

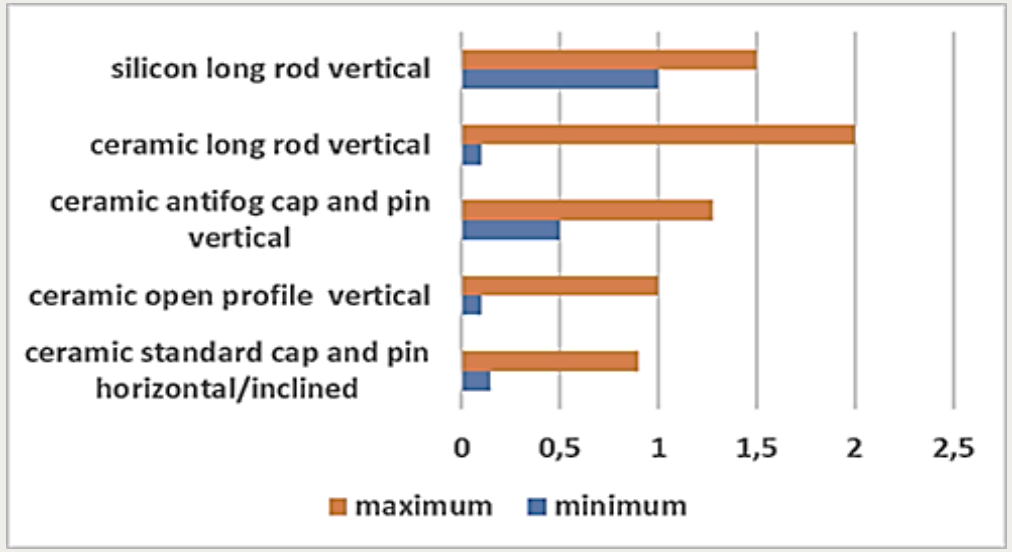
Overhead lines SC B2

PS1 Question 1.3

Alberto Pigini- Italy

Pollution mapping: open points

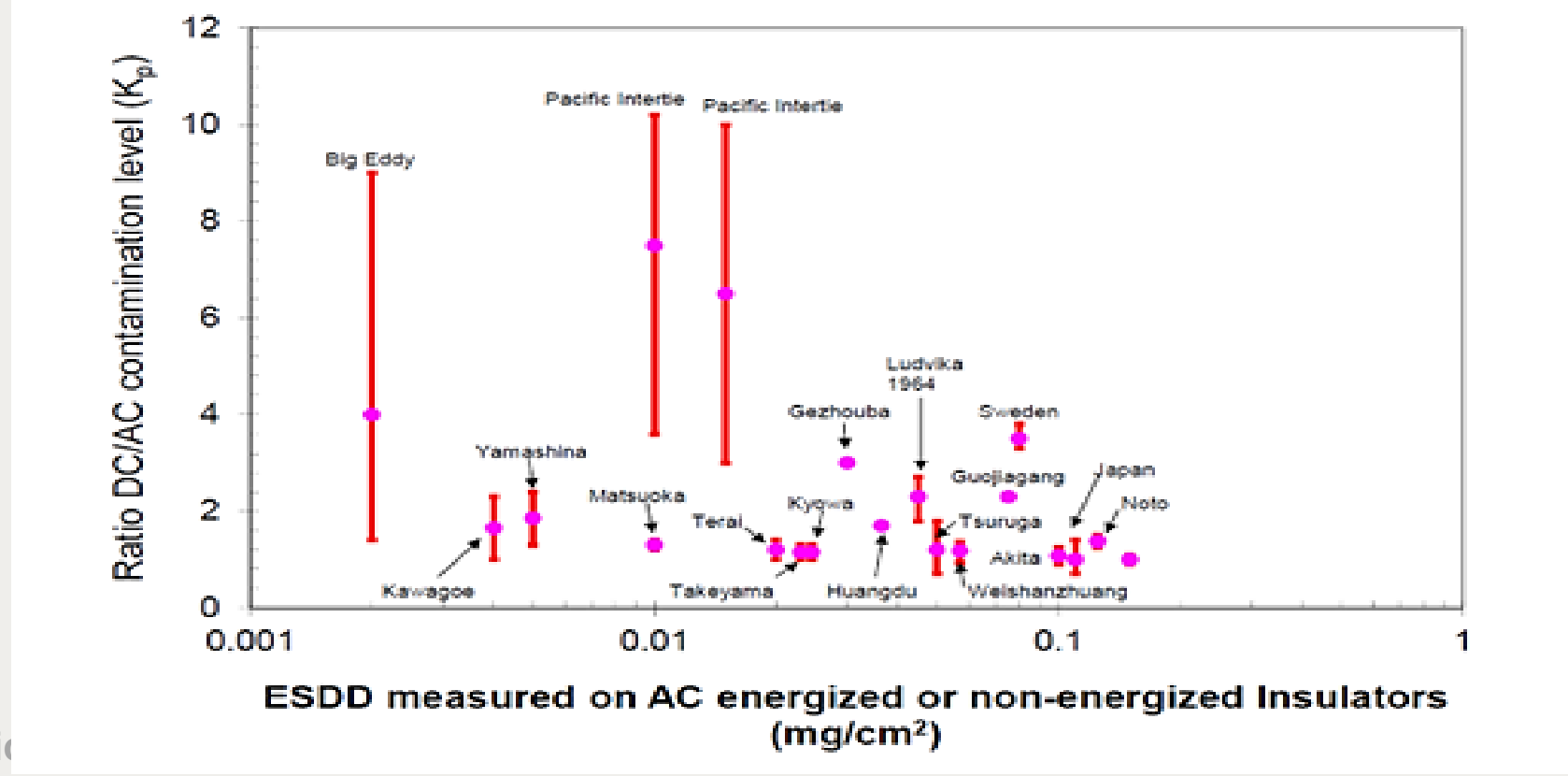
•*Improve the definition of the dependence of the contamination severity on the type of insulator/installation conditions/type of environment (data from Cigre TB 158-361)*



Examples of pollution accumulation observed on different insulator types, orientation and materials in p.u. of the accumulation on standard cap and pin insulator string (vertical orientation). Minimum and maximum in different environments (desert, coastal. Industrial, inland)

Pollution mapping: open points

•*Improve information on the dependence of the contamination severity on the type of voltage AC/DC (data from Cigre TB 518)*



Group Discussi

Pollution mapping: open points

•*Need of pollution maps*

- Additional information on the relative performance of different insulators in different environment/ voltage to be gathered. Pollution maps are needed.

- There cannot be a pollution flashover without “critical” humidification. Pollution maps should include: severity maps and humidification conditions maps (numbers of critical wetting events to be considered)
- Many nations set up pollution maps following different approaches, e.g. China, India , Namibia , Greece , Israel, Saudi Arabia, South Africa, Italy.
- **The setting up of a CIGRE WG to collect the world wide experience is recommended to produce a Guideline to facilitate/optimise pollution mapping.**