

Towards Water Secure Industrial Operations in High Evaporation Zones of Southern India

ITC Case Study



Context

- Plant located in Coimbatore district, Tamil Nadu in a high evaporation and low water accumulation zone.
- Plant sits on a watershed divide, implying divided flows.
- Site experiences high rainfall variability ~ 30-35%.
- Groundwater is not a dependable source.
- High water risks to operations

WATSCAN Results

- WATSCAN applied successfully over various scales covering 35-40 million pixels.
- In a normal rainfall year, plant is able to meet the requirement from existing water source (river). Bad rainfall years however result in water deficit, impacting operations.
- WATSCAN successfully identified measures to meet the deficit through
 - Effective new storages – hydrologically viable locations (check dams)
 - Globally best measures to control evaporation losses
 - Deep borewells for meeting emergency water demands