



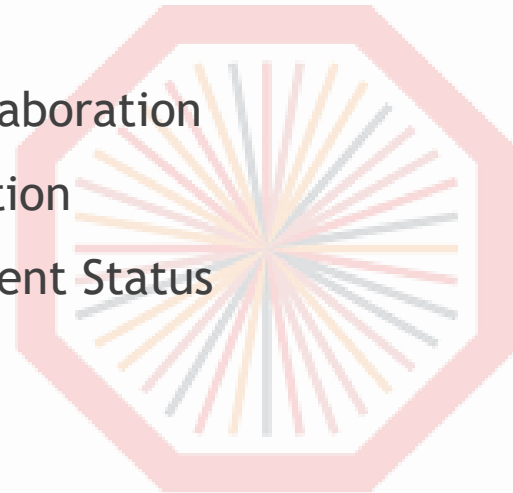
# PK-CIIT Grid Operations in Pakistan COMSATS

ALICE Ahmad  
Site Administrator



# Outline

- ▶ ALICE-COMSATS Collaboration
- ▶ COMSATS Site Evolution
- ▶ COMSATS Site - Current Status
- ▶ Plans for COMSATS
- ▶ Future Site Status



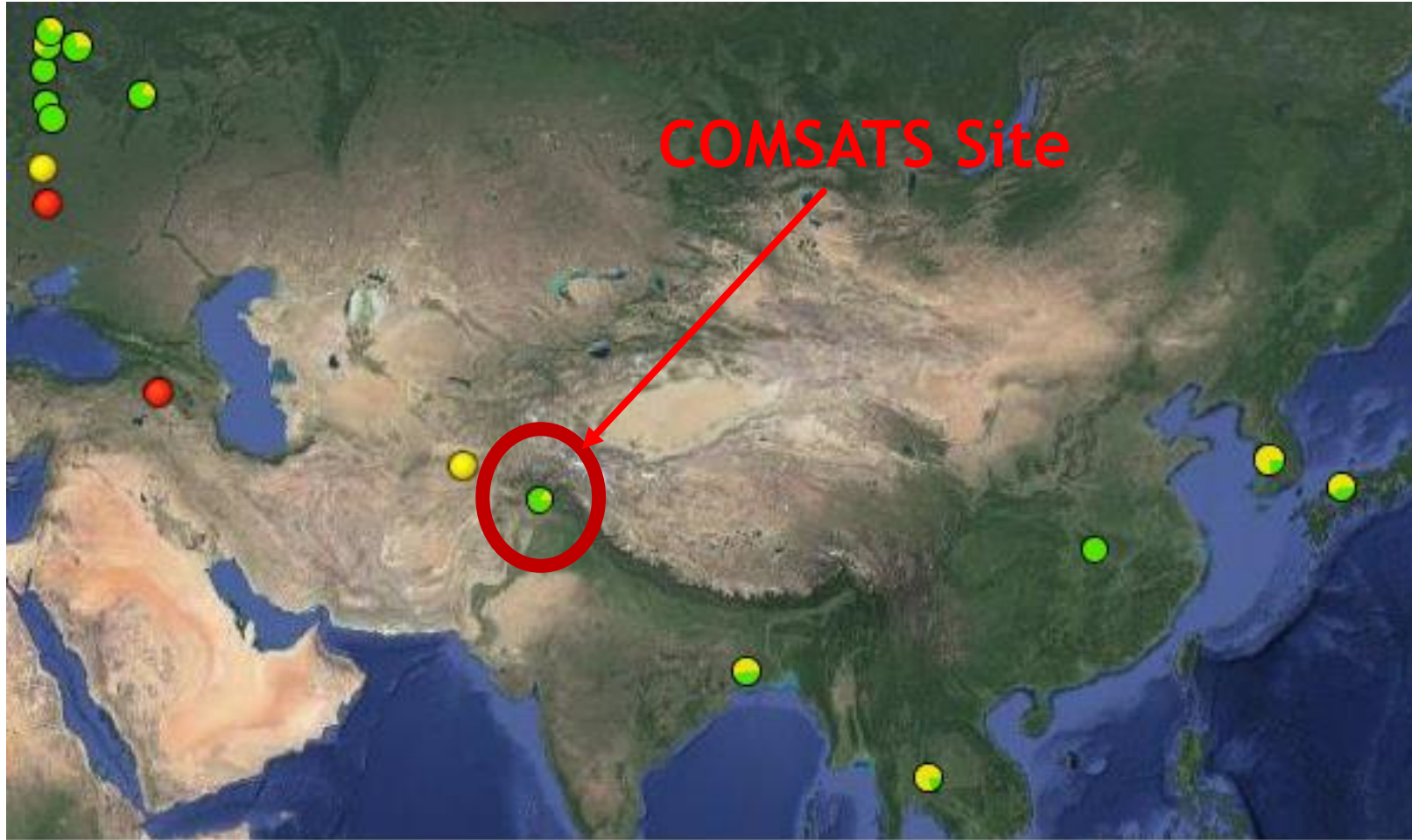
ALICE



# ALICE-COMSATS Collaboration

- ▶ ALICE-COMSATS Collaboration started in 2009
- ▶ Association revolves around two fields:
  - ▶ Study of the production of heavy flavor particles
  - ▶ Grid Computing
- ▶ Pakistan became Associate Member of CERN on July 31st, 2015
- ▶ Our aim was to acquire Tier-2 recognition by having reasonable hardware and bandwidth.





# COMSATS Site Evolution

- ▶ Desktop Computer as a VOBX (2009)
- ▶ Dell Server as VOBX (2010)
- ▶ Procurement of HPC equipment (2011)
- ▶ Cluster Building, Successful ALICE Grid Configuration (2012)
- ▶ Memory Upgradation (2013)
- ▶ Bandwidth Upgradation from 24Mbps to 48Mbps and 2 Servers were added in the existing Grid (2014)
- ▶ Six Servers were added in existing Grid (2015)
- ▶ Development of Data Center Planned (2016)
- ▶ Data Center Up and Running, Bandwidth Upgradation 72Mbps (2017-18)



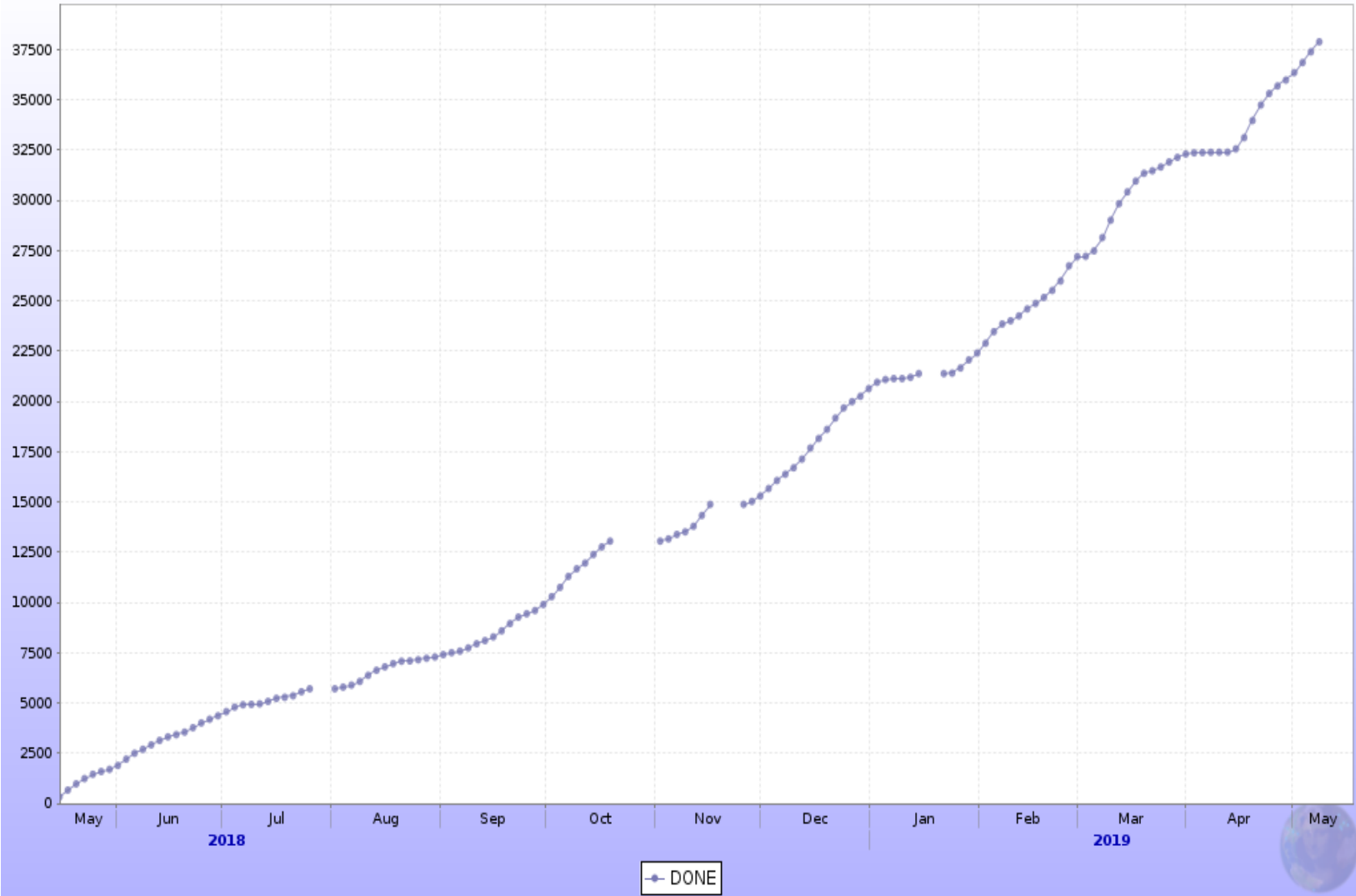


# COMSATS Site - Current Status

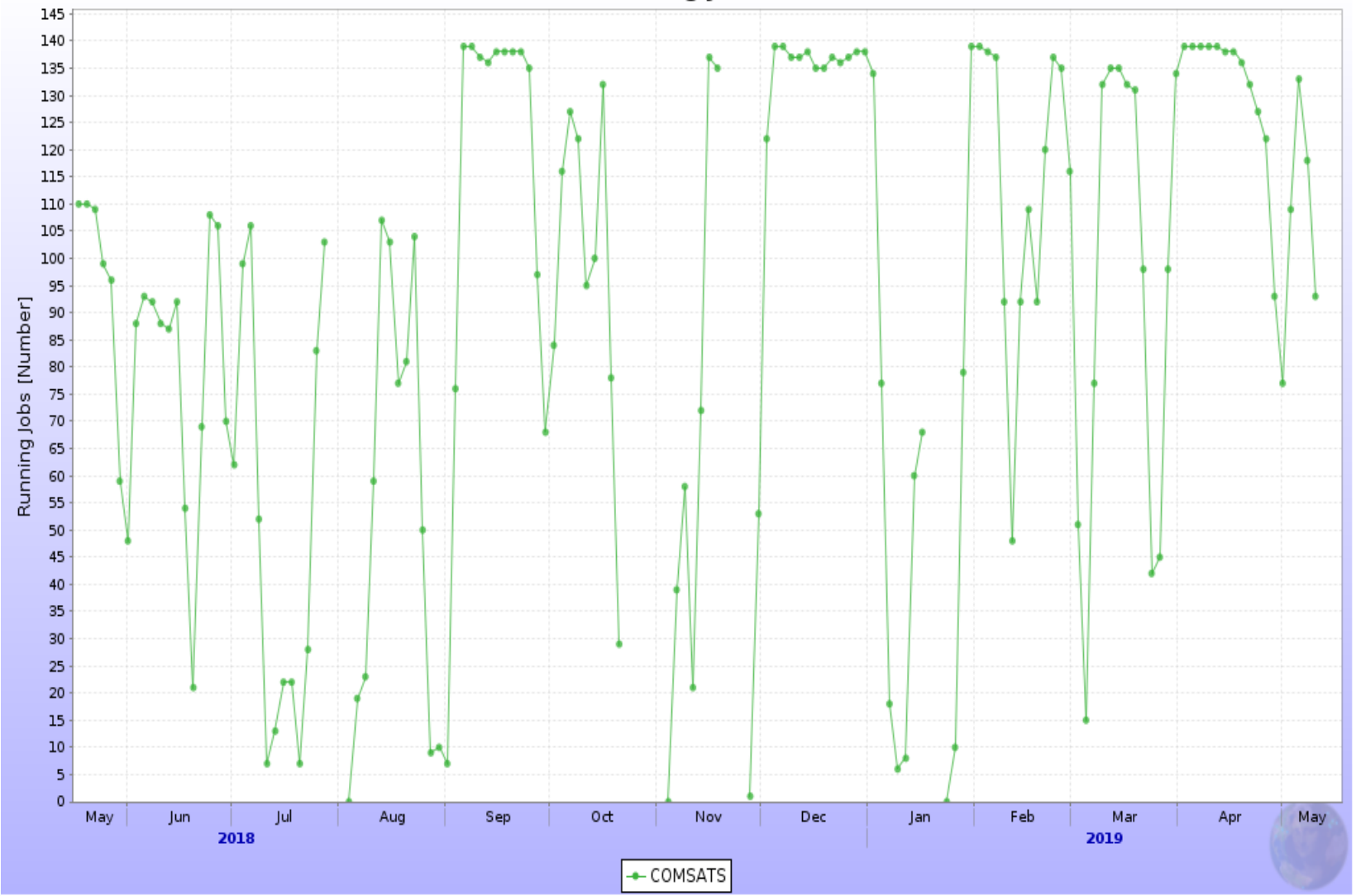
- ▶ Servers (VOBOX, SBDII, CREAM)
  - ▶ 16GB, Dual Quad Core, 1TB
  - ▶ SL6, EMI3
- ▶ 9 Worker Nodes
  - ▶ 300GB, 120 Cores
- ▶ Bandwidth
  - ▶ 72Mbps



# Done jobs in COMSATS



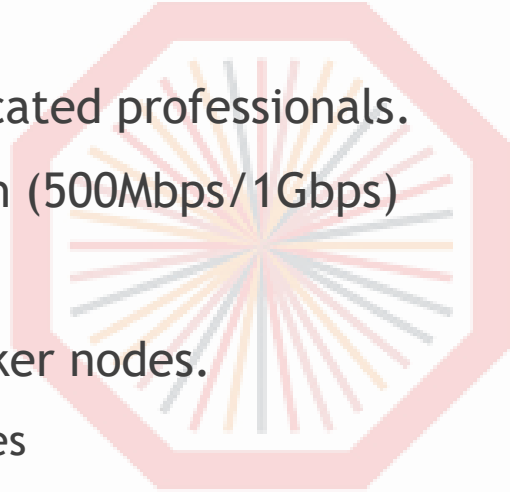
# Running Jobs





# Plans for COMSATS

- ▶ Hiring of more dedicated professionals.
- ▶ Increased Bandwidth (500Mbps/1Gbps)
- ▶ Shifting to CentOS
- ▶ Addition of 128 worker nodes.
  - ▶ 5376GB, 2048 Cores
- ▶ Storage Configuration. [300+ TB]
- ▶ IPv6 Configuration.
- ▶ COMSATS connection via PERN.



ALICE

