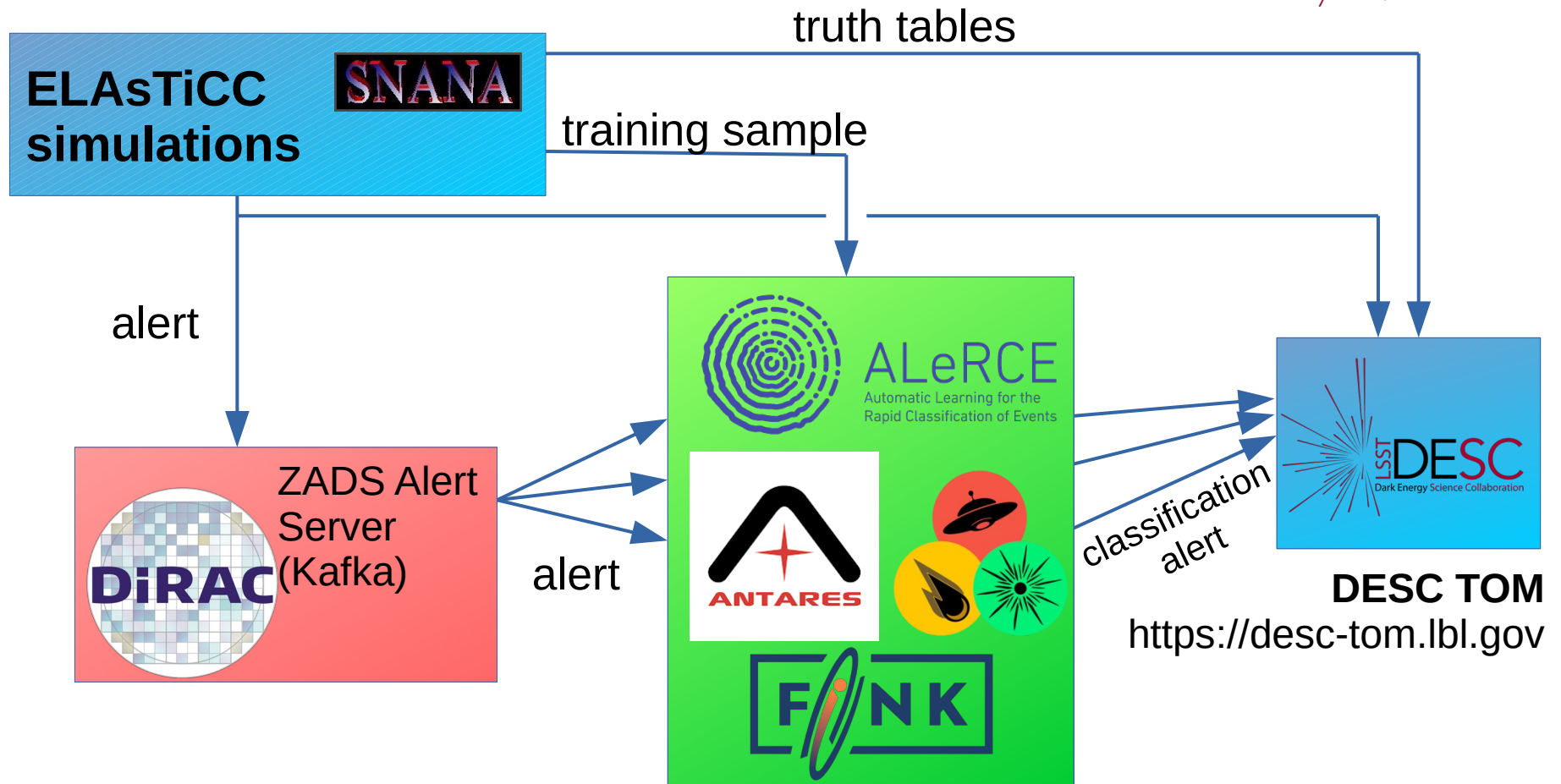


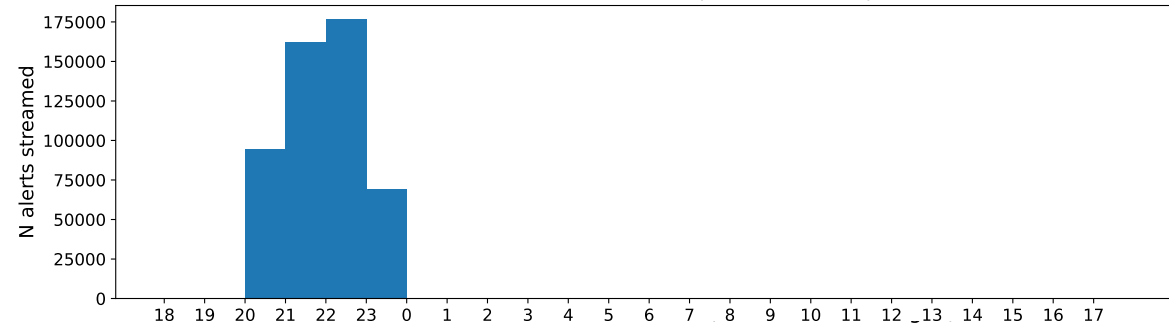
Lessons Learned Managing Alerts in the ELAsTiCC Challenge

Rob Knop (LBNL) & the ELAsTiCC Team

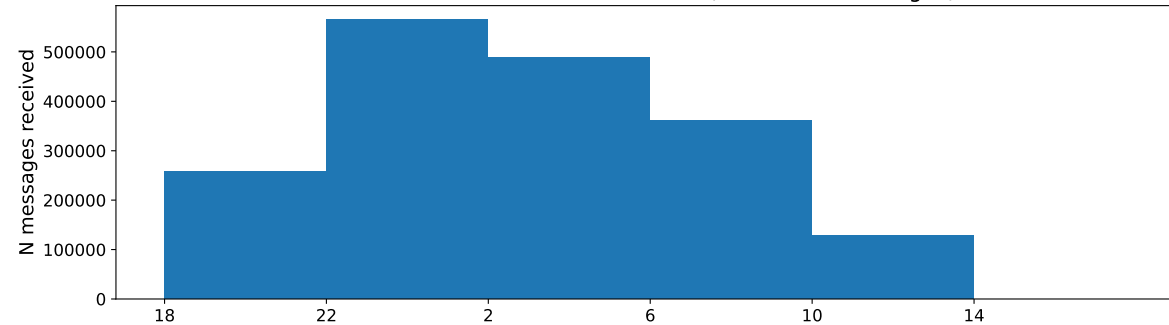




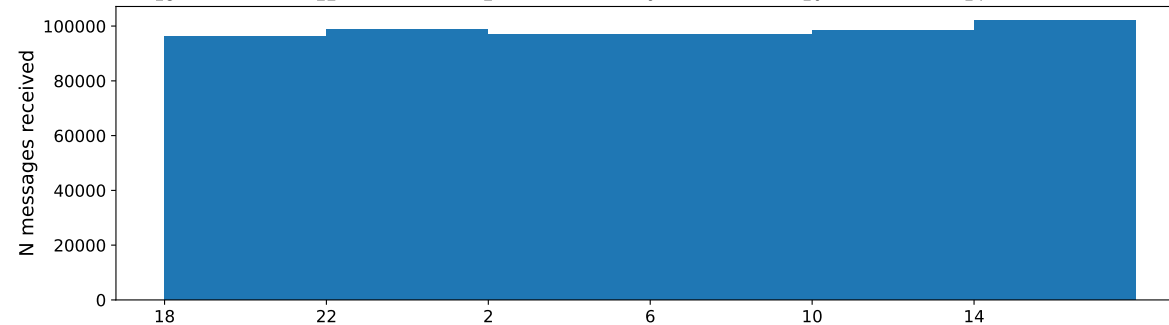
2023-1-13 to 2023-1-14 (502,922 alerts)



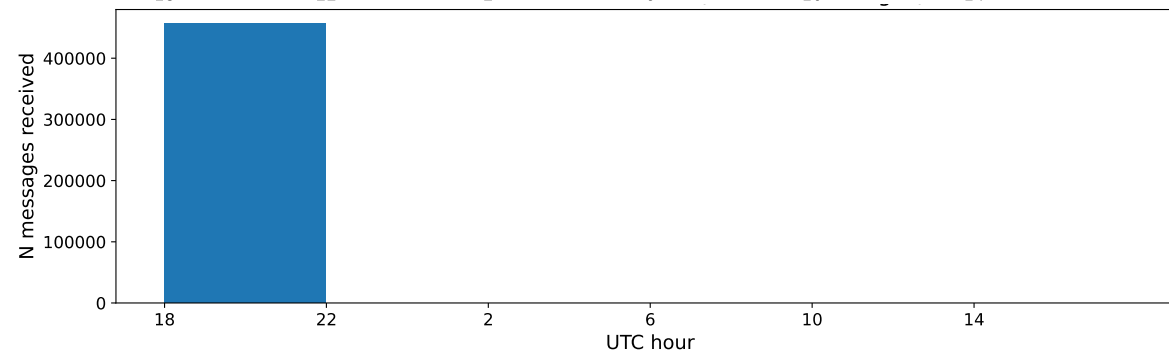
Alerts Sent
(One day in
the last week
of ELAsTiCC)



**Received —
ALeRCE**

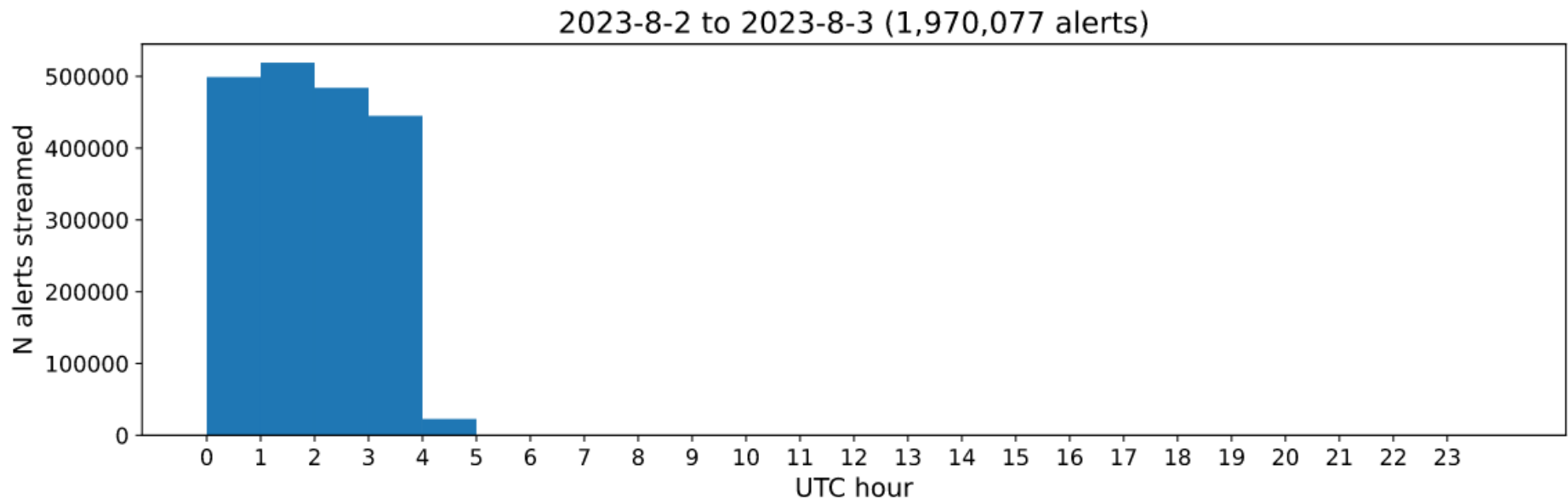


**Received —
ANTARES**



**Received —
Fink**

ELAsTiCC2 Streaming Rate (alerts sent – test stream)



Challenges

- SNANA FITS → AVRO slow ; change to database reconstruction
- Defined alert formats, schemless transmission; the “general alert infrastructure” is usually either too general or too specific
- Receiving alerts : ingestion rate vs. maintaining structure (indexes, foreign keys) for later analysis
- Brokers send in three different formats: Kafka (ALeRCE, ANTARES, Fink), Google Pub-Sub (PITT-Google), post to API (AMPEL)
- Future worry: getting only the alerts DESC is interested in to manage alert rate from brokers