GHRC Data Management

Leigh Sinclair
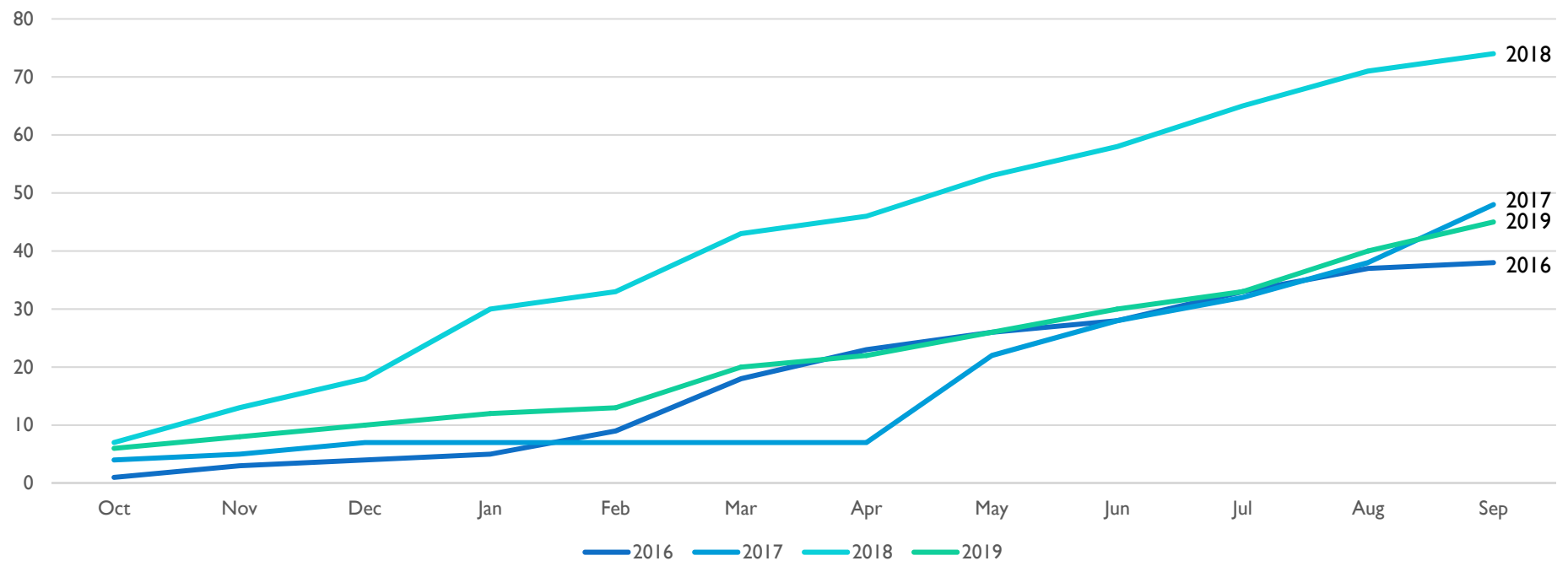
Dataset Coordinator

2019 Data Publications
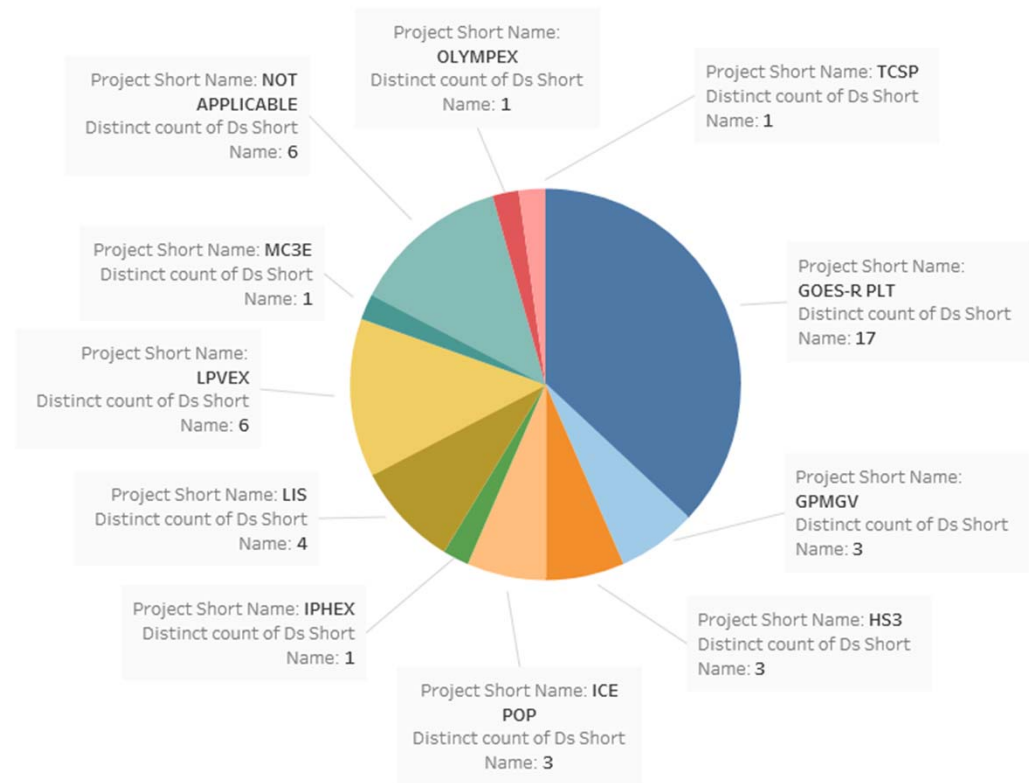
GHRC

Cumulative Number of Publications

Dataset Types Published in FY19   GHRC

- 46 Datasets published
- Averaged ~4 datasets per month

Project Short Name: OLYMPEX
Distinct count of Ds Short Name: 1

Project Short Name: NOT APPLICABLE
Distinct count of Ds Short Name: 6

Project Short Name: TCSP
Distinct count of Ds Short Name: 1

Project Short Name: MC3E
Distinct count of Ds Short Name: 1

Project Short Name: GOES-R PLT
Distinct count of Ds Short Name: 17

Project Short Name: LPVEX
Distinct count of Ds Short Name: 6

Project Short Name: GPMGV
Distinct count of Ds Short Name: 3

Project Short Name: LIS
Distinct count of Ds Short Name: 4

Project Short Name: HS3
Distinct count of Ds Short Name: 3

Project Short Name: IPHEX
Distinct count of Ds Short Name: 1

Project Short Name: ICE POP
Distinct count of Ds Short Name: 3

- GOES-R Post Launch Test (PLT) – March - May 2017
  - Goal was to provide a collection of coincident airborne, satellite, ground based, and near surface measurements of surface weather phenomena to test, validate, and improve the accuracy of GOES-R ABI and GLM measurements

- International Collaborative Experiments for PyeongChang 2018 Olympic and Paralympic Winter Games (ICE POP) – February - March 2018
  - Focused on the measurement, physics, and improved prediction of heavy orographic snow in the PyeongChang region of South Korea

- ~25 datasets remaining **in-house**
  - Some may be combined into one dataset
  - Some may split out into multiple datasets
  - Does not include IMPACTS or addition GPM GV data
- Currently publishing data in both the cloud and on-premise
  - Expecting a decrease in dataset publication rate

GHRC Ongoing Datasets

- Data that continue to be collected and made public on GHRC servers
  - ISS LIS data (2), NRT LIS data on LANCE
  - DISCOVER MEaSUREs SSMIS ocean products from F16 and F17 (8)
  - DISCOVER MEaSUREs TPW and Wind Speed climatology (2)
  - AMSU/MSU V6 Temperature Anomalies and Annual Cycle products (4)
- AMSU/MSU Atmospheric Temperatures updated to V6
  - Update already completed in October 2018 (FY2019)

GHRC Metadata Repairs

- ARC = Analysis and Review of CMR (Common Metadata Repository)

- ARC project consists of a team of metadata checkers confirming quality of metadata for DAAC published data

- ARC report is sent to DAACs with problems/issues to be fixed and recommendations of changes to make
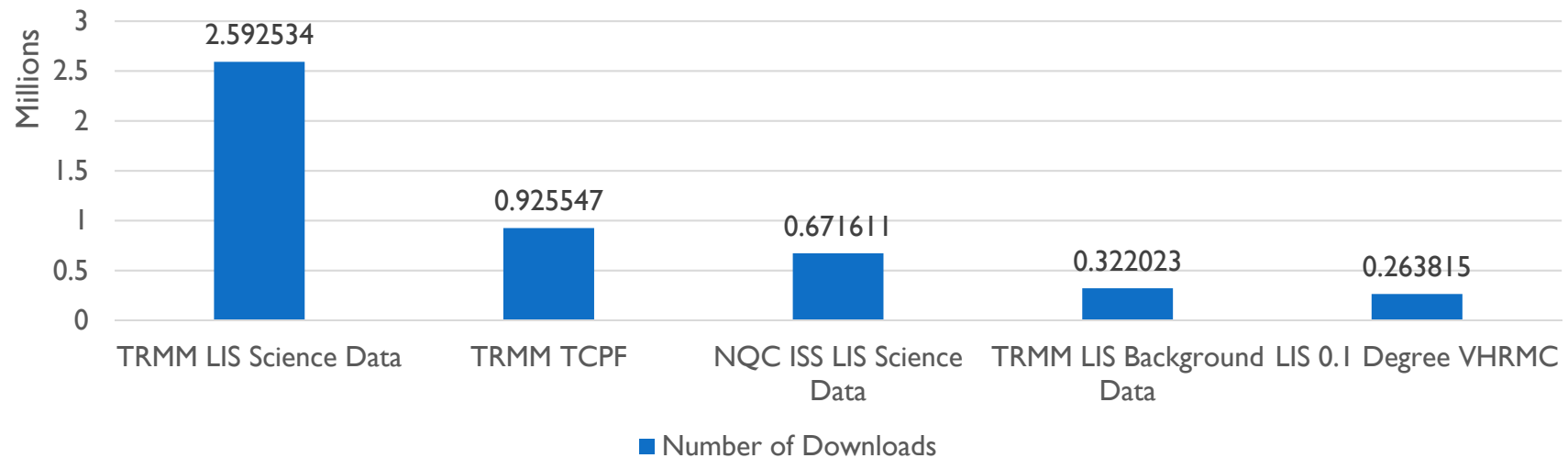
GHRC Metadata Repairs

- GHRC received their first ARC report in April 2016 and started collection-level metadata changes first

- Collection metadata changes are complete

- 13 dataset granule metadata changes remain (~96% completed)

- Remaining datasets are old, take more time, and need special handling
  - Expect completion in early 2020

- GHRC received their second ARC report in September 2019
  - Small updates
  - Already started on these updates

Data Access Metrics

- Total Number of Published Datasets at end of FY19: 478

- Number Published Granules at end of FY19: >5 Million

- Cumulative Downloads since Mar 2015: ~17 Million

Top 5 Datasets Downloaded in FY19

Bar chart — Millions (y-axis, 0 to 3):
- TRMM LIS Science Data: 2.592534
- TRMM TCPF: 0.925547
- NQC ISS LIS Science Data: 0.671611
- TRMM LIS Background Data: 0.322023
- LIS 0.1 Degree VHRMC: 0.263815

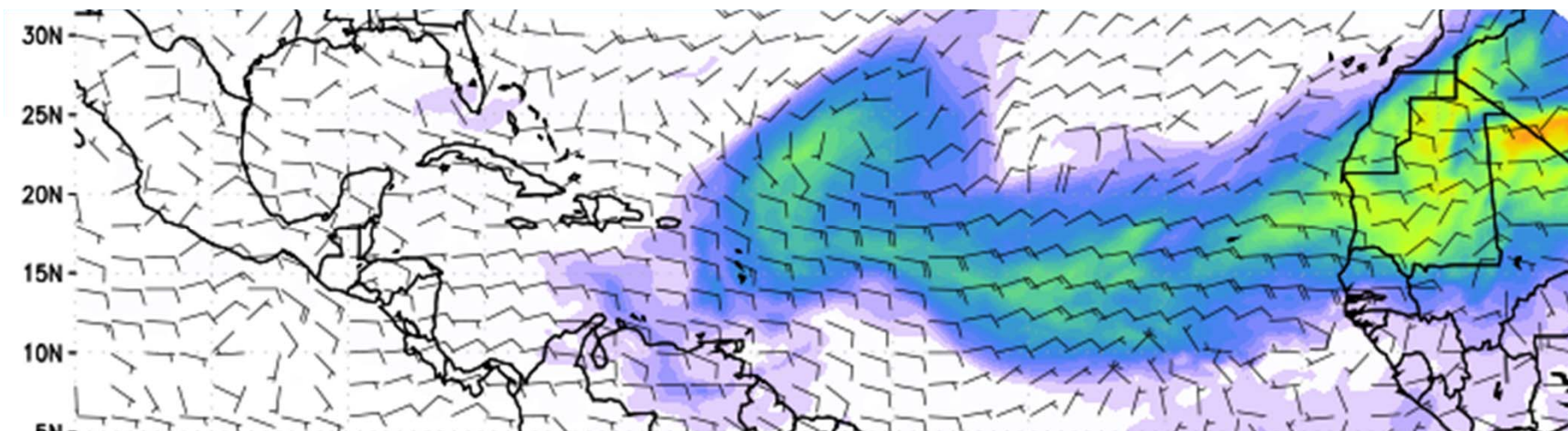■ Number of Downloads

2020 Publication Plans

- Investigation of Microphysics and Precipitation for Atlantic Coast-Threatening Snowstorms (IMPACTS)

- January – March each year of 2020-2022

- Mid-Atlantic and New England states

- ~50 datasets to GHRC
  - Includes a variety of datasets similar to data published at GHRC, such as CRS and D3R

- First end-to-end publication that will be cloud only

- First data expected to arrive at GHRC by September 2020

2020 Publication Plans

- More GPM GV Datasets
- Publishing in the Cloud
    - Dual-publishing
    - Publication rate may decrease at first
    - Earthdata Pub
- Afternoon Brainstorming Session on future data recruitment
- We want your ideas on what GHRC can do to obtain more data relevant to our mission

THANK YOU!

QUESTIONS?