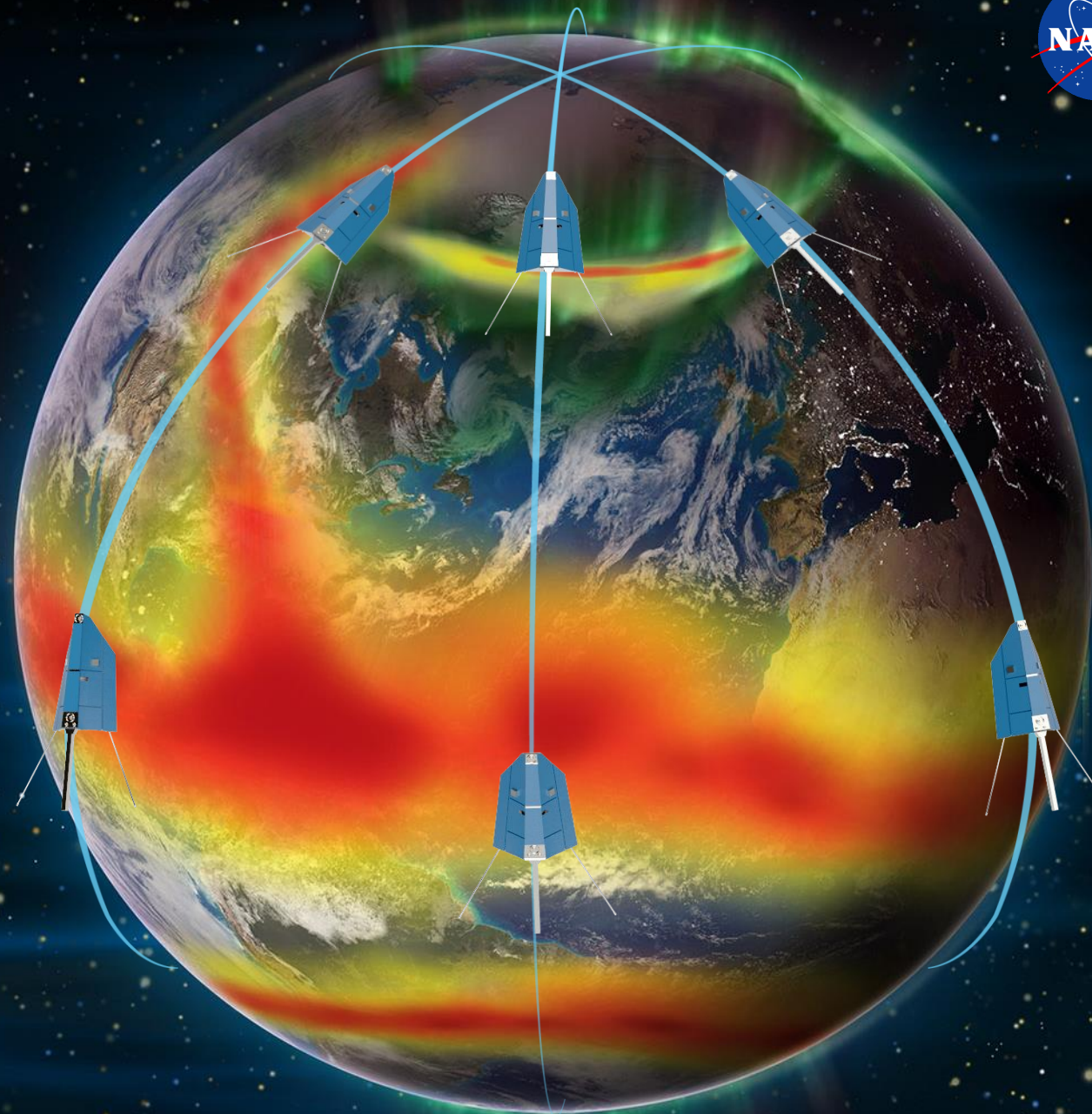




## Goals and Guidelines

Jared Leisner • GDC Program Scientist  
Heliophysics Division • NASA HQ

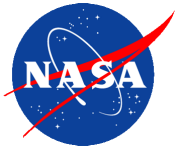
GDC Phase A Kick-off  
June 30, 2022





- The purpose of this Phase A Kick-off is to address questions about the process for the Geospace Dynamics Constellation competitive Phase A.
- The Kick-off is open to the Phase A PIs and their study teams.
- NASA's overall goals are to help improve the quality and responsiveness of reports by:
  - Offering overviews of the Phase A Guidelines and Criteria, review and selection processes, and information focused on other topics that typically generate questions;
  - Offering proposers an opportunity to have questions answered; and
  - Answering questions that were previously submitted (received no later than 5 business days ago)





- This Conference may not be recorded by attendees.
- Please hold your questions until the 5-10 minute Q&A session after each presentation and/or the extended Q&A session after all presentations are completed.
- We will accept written questions via chat or spoken questions via the teleconference line. You do not need to identify yourself when you ask your question.
  - As appropriate, please cite the Phase A Guidelines and Criteria and other documents with your question.
- All discussion between NASA and Kick-off attendees will be accessible to all attendees. However, NASA personnel may engage in private sidebar discussions to determine the best answer to a question before announcing it.
  - If a question can not be answered immediately, NASA may defer the question for answering on the GDC Acquisition Webpage.
- All presentations and Q&A will be posted within two weeks to the GDC Acquisition Webpage:  
<https://lws.larc.nasa.gov/gdc>





# Questions?



**Answers to previously submitted questions:**

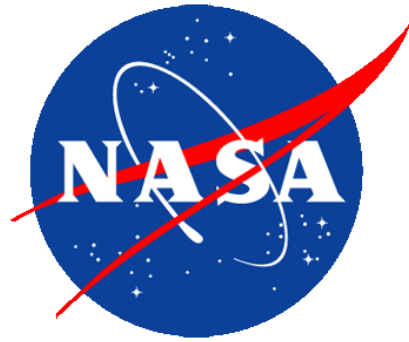
<https://lws.larc.nasa.gov/gdc/phaseAqas.html>

*(Phase A Competition Questions & Answers* tab on SOMA's GDC Acquisition Homepage)

Questions may be submitted up to 21 days before the IIR due date:

[jared.s.leisner@nasa.gov](mailto:jared.s.leisner@nasa.gov)



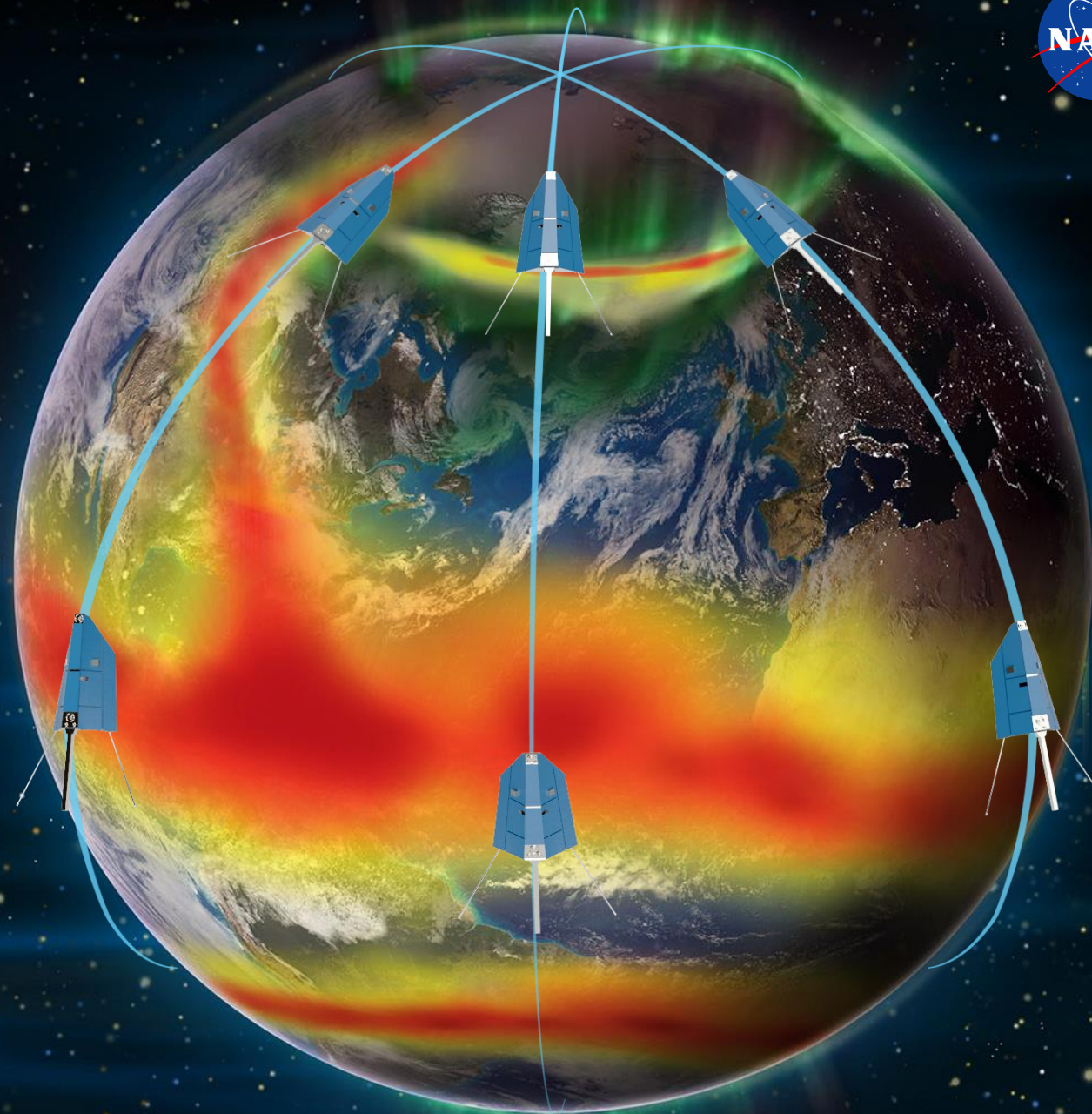




# GDC Phase A Overview

Jared Leisner • GDC Program Scientist  
Heliophysics Division • NASA HQ

GDC Phase A Kick-off  
June 30, 2022



# Introduction



- Overview of the Phase A process, schedule
- Scope of the Guidelines and Criteria
- Down-selection Process





# Phase A Approach



- “[I]ntended to provide NASA with more definitive information regarding the ability of each investigation to complete its science objectives and deliver its instrument within cost and on schedule, and of the instrument to provide its measurement capability without driving significant cost increases in the spacecraft development or in their investigation.” [*Guidelines and Criteria, Section I*]
- *Phase A Guidelines and Criteria* set requirements and expectations
  - Maintain Step-1 framework (e.g. mission schedule, PEA requirements)
  - Investigation Implementation Report (IIR), uniform structure
- NASA expects to down-select up to two investigations
  - Up to one investigation providing a magnetometer
  - Up to one investigation providing a plasma instrument





# Phase A Approach: Studies



- Each Investigation Implementation Study (IIS) is selected to resolve deficiencies and risks identified in their Step-1 proposal during the evaluation process
- Each IIS will produce an Investigation Implementation Report (IIR) that captures their resolutions
  - Resolutions are expected to be cost-effective, resource-efficient
  - Resolutions can involve additional supporting material, explanation, and/or analysis
  - Resolutions can involve modification of Step-1 proposal, including but not limited to
    - Research plan
    - Team structure, composition
    - Minor modifications to instrument design
    - Budget
  - IIRs are streamlined to aid preparation and review (see later slide)
- IISs are not expected to expand their investigation's scientific scope



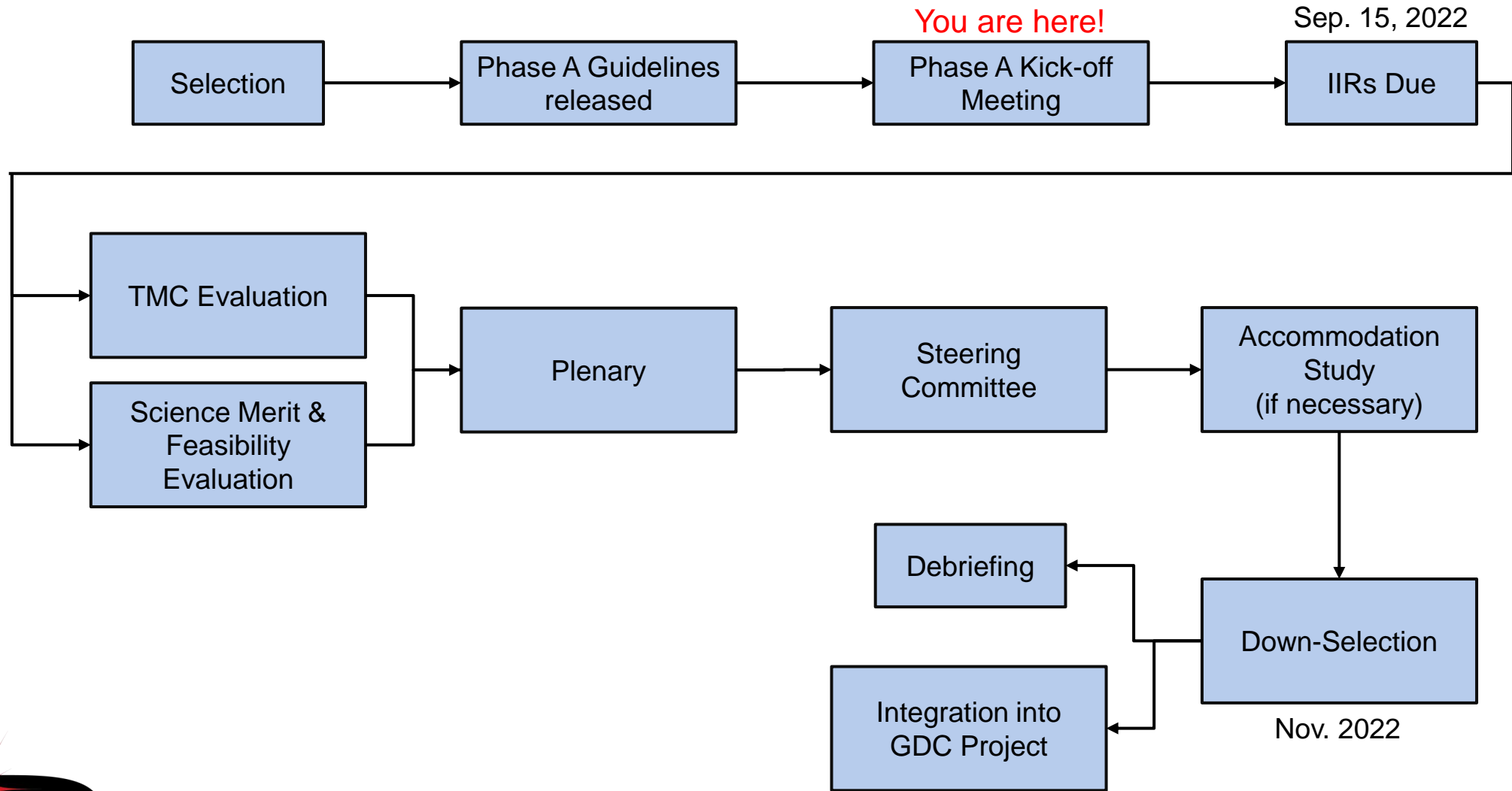
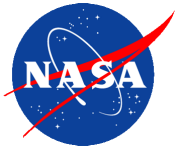
# GDC Phase A Schedule



2019 October .....	GDC STDT Final Report release	
	GDC Pre-Project Office established (GSFC)	
2020 September .....	GDC KDP A (project)	
2021 June 2 .....	GDC PEA, final release	
2022 April 27 .....	Selections announced	
<b>2022 June 30</b> .....	<b>Phase A Kick-off Meeting</b>	
2022 September 15 .....	Due date, Investigation Impl. Report (11:59pm EDT)	
2022 December (target) .....	Down-selections announced	
<hr/>		
2023 Q1 (est.) .....	Decision, final number of spacecraft	
2024 Q4 (est.) .....	GDC KDP C (project)	
2025 December .....	Delivery of flight units begin	<i>Unchanged</i>
2027 September .....	Launch Readiness Date	<i>from PEA</i>



# GDC Phase A Process



# Phase A Process



- Phase A Guidelines and Criteria sets requirements, incorporates PEA requirements
  - Order of precedence: Guidelines and Criteria, PEA, PIP
- Investigation Implementation Report
  - Due 15 Sep. 2022, to be submitted via Box (instructions will be sent ahead of the due date)
  - Consists of following parts (applicable structure, page limits in Req. IIR-2):
    - Step-1 proposal (unredacted and redacted) [includes Step-1 PMW responses]
    - IIR sections, delivered in a single PDF
      - Modifications to the Investigation
      - Resolution of Investigation Deficiencies and Risks
      - Investigation Structure and Composition
    - Investigation schedule (updated, can be provided in PDF)
    - Investigation budget (updated, in Excel format)
    - Investigation Bridge Contract Appendix





# Phase A Process



- Investigation Implementation Report
  - Modifications to the Investigation: Summary of changes to Step-1 proposal [not evaluated]
  - Resolution of Investigation Deficiencies and Risks: Combination of new material not included in the Step-1 proposal, modifications to material included in the Step-1 proposal, and replacements of material included in the Step-1 proposal
- Investigation Implementation Report, streamlining
  - Page limits set by section, prescribed location of information
  - Expected focus on Major Weaknesses
    - PI determines which findings to address
  - If investigation team structure/composition has no changes, do not need to resubmit [Q. M-1]
  - If investigation schedule or budget have no updates, do not need to resubmit [Q. M-2]
    - Do not need to update for competitive Phase A [Q. M-3]



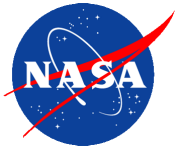
# Phase A Evaluation Process



- Evaluation Plan will be posted on the GDC Acquisition Homepage
- Evaluation criteria per PEA, Section 7.1
  - Scientific Merit of the Proposed Investigation
  - Scientific Implementation Merit and Feasibility of the Proposed Investigation
  - TMC Feasibility of the Mission Implementation, Including Cost Risk
- Evaluation will focus on Investigation Implementation Report
  - No re-evaluation of Step-1 proposal [Q. E-1]
  - No promotion of Minor Weaknesses not involved in IIR [Q. E-1, E-2]
  - No consideration of Minor Weaknesses in Forms A, B, or C ratings
- Intending a Clarification Process, with details to follow in the Evaluation Plan



# Down-Selection Process



- Down-selection process will have up to three components:
  - Accommodation study [if necessary]
  - Steering Committee
  - Down-selection
    - Expect up to one investigation providing a magnetometer
    - Expect up to one investigation providing a plasma instrument
- Accommodation study may be conducted to inform down-selection [PEA Sec. 7.2.1]
  - Anticipated only if instrument designs change
  - Based on updated Instrument Accommodation Table
  - Results will not be input to the proposal evaluation (Forms A, B, C)
  - Will consider the science payload as a whole
    - Instrument Accommodation Table asks about potential impacts onto other instruments, from other instruments



# Questions?



**Answers to previously submitted questions:**

<https://lws.larc.nasa.gov/gdc/phaseAqas.html>

*(Phase A Competition Questions & Answers* tab on SOMA's GDC Acquisition Homepage)

Questions may be submitted up to 21 days before the IIR due date:

[jared.s.leisner@nasa.gov](mailto:jared.s.leisner@nasa.gov)





