



Fostering Best Practices in Earth Science Applications:

Meet the Guidebook

Erin Martin

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EARTH SCIENCE
APPLIED SCIENCES

WELCOME

Cindy Schmidt – Associate Program Manager, Ecological Forecasting



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EARTH SCIENCE APPLICATIONS GUIDEBOOK

Link:

[appliedsciences.nasa.gov/
guidebook](https://appliedsciences.nasa.gov/guidebook)

NASA EARTH SCIENCE APPLICATIONS GUIDEBOOK

Fostering Best Practices in Earth Science Applications: Meet the Guidebook

Session Agenda
2-3 pm

2:00 Welcome and scene-setter

Cindy Schmidt/Erin Martin

2:10 Team scavenger hunt for guidebook lessons

Participants work in small groups, clicking through the guidebook to pull out lessons related to key elements of applications.

2:25 Comparing PI experience to guidebook lessons

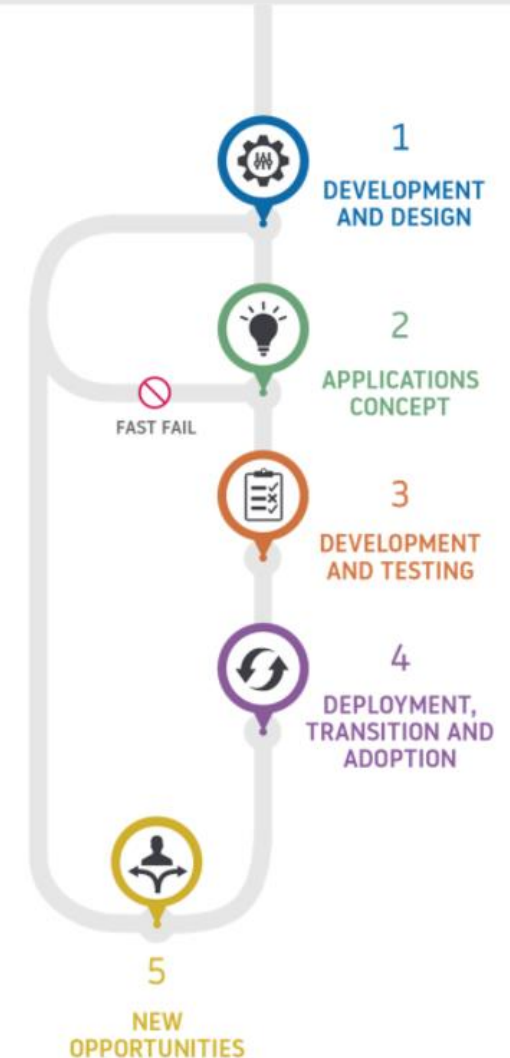
With guided questions to foster sharing, address uncertainties and reinforce guidebook messages

2:50 Wrap up and closing

Becca Lewison, SDSU Coastal and Marine Institute

Cindy/Erin

DELIVERING SUSTAINABLE APPLICATIONS



THE GUIDEBOOK IN BRIEF

- **Web-based resource:** synthesizing best practices for developing Earth applications
- **Audiences:** emerging applied scientists, basic research scientists considering applied work, partners new to NASA
- **People-centered:** features insights from scientists and users passionate about using science to solve today's urgent problems

Key features

Multiple entry pathways	Multimedia content
Easy user interface	Plain language
Downloadable content	Practical tips & insights

Explore: appliedsciences.nasa.gov/guidebook

NASA EARTH SCIENCE APPLIED SCIENCES

EARTH SCIENCE APPLICATIONS GUIDEBOOK

People use Earth science information from satellites and other sources to inform decisions about water, land, agriculture, disasters, health, and more. This guidebook translates decades of experience in applying this information into sharable knowledge and practical guidance. Whether you are new to Earth science applications or already an expert, you will find smart practices, new insights, and a few tips to support your work.

Select a topic and begin exploring...

APPLYING EARTH SCIENCE: WHAT IT TAKES

USING EARTH SCIENCE TO TACKLE CRITICAL CHALLENGES

DELIVERING SUSTAINABLE APPLICATIONS

USE CASES

TEAM SCAVENGER HUNT: GOOD LUCK!

Instructions

- Gather in your small group.
- Navigate to the guidebook.
- Work independently to scan the sections, identifying lessons on these topics:
 - *Communication*
 - *User engagement*
 - *Success*
 - *Data formats*
 - *Sustainability*
- Discuss the lessons with your group. Come to consensus on one lesson for each point.
- Record your lessons in the Padlet.

Guidebook link:
**[appliedsciences.nasa.gov/
guidebook](https://appliedsciences.nasa.gov/guidebook)**

Padlet link:
bit.ly/guidebook_padlet

SHARING EXPERIENCE

Topics for discussion

- Did any of these lessons resonate with you or align with an experience you had?
- Did you have an experience not captured here?
- Anything you read or saw surprise you?
- Do you have any uncertainties about anything you read in the Guidebook?
- Any other points to raise?



TALES FROM THE FIELD

Becca Lewison, San Diego State Univ, Coastal and Marine Institute



HOW WOULD YOU HANDLE THESE CIRCUMSTANCES?

Things don't always go as planned...

Leadership change

- You are working with a government partner when the leadership changes or shifts policy and your application no longer seems to be a priority.

Partner capacity challenges

- Your partners have a very small team with remote sensing skills. Staff turnover is high. You train people and then they leave.

Model doesn't perform as expected

- The model outputs do not answer the research question(s), nor meet the end users' information needs.

MORE TO COME IN 2023

The guidebook is intended to be a platform for building the Earth Science applications community.

Future plans include:

- A content refresh (late 2022)
- A self-paced online ARSET course (early 2023)
- An applications symposium (late 2023)



New content



Training



Symposium

GET INVOLVED...

Share with your networks!

[appliedsciences.nasa.gov/
guidebook](https://appliedsciences.nasa.gov/guidebook)



VIEW
GUIDEBOOK



VIEW VIDEO



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Thank You.

Learn more about the Earth Science Applications Guidebook at:

<https://appliedsciences.nasa.gov/>



EARTH SCIENCE
APPLIED SCIENCES

USE CASES

MEASURING DROUGHT SEVERITY
ON THE NAVAJO NATION

