

Sydney Neugebauer Fellow @ LaRC



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WE ARE YOUR PROJECT COORDINATION TEAM!

PROJECT COORDINATION

What do we do?

- Follow and support projects through their full lifecycle
 - Proposal → Handoff → Publication
- Review deliverables and provide feedback
- Support NPO with project partner relations, tracking projects/partners, and assessing projects' strengths.

Deliverable Process:



THE DELIVERABLES



2019 Fall Deliverable Calendar

Deliverable Due Dates For All Teams

*Please see additional due dates for teams creating videos, and/or submitting code to software release

| Term Week | Due Date | Item(s) | Submit To |
|--------------|-------------|--|--|
| 1 | 9/19 | 1) Info Sheet, 2) Personality Assessments, 3) Entrance Personal Growth Assessment, 4) DEVELOPedia Participant Page, 5) Orientation Completed | 1-2) LFT to Danielle 3) Google Form, 4) DEVELOPedia |
| 3 | 10/3 | 1) Project Summary RD | 1) PC Gmail |
| 4 | 10/10 | 1) Tech Paper RD | 1) PC Gmail |
| 5 | 10/14 | Offices Closed for Columbus Day | |
| 6 | 10/24 | 1) Presentation RD | 1) PC Gmail |
| 7 | 10/31 | 1) Project Summary FD, 2) Study Area Shapefile, 3) Website Image | 1-3) PC Gmail |
| 9 | 11/11 | Offices Closed for Veterans Day | |
| 9 | 11/14 | 1) Poster FD, 2) Presentation FD, 3) DEVELOPedia Project Page | 1-2) PC Gmail, 3) DEVELOPedia |
| 10 | 11/18 | 1) Exit Personal Growth Assessment | 1) Google Form |
| 10 | 11/21 | 1) Tech Paper FD, 2) Project Feedback Form | 1-2) PC Gmail |
| 10 | 11/22 | 1) Exit Survey | 1) Google Form |
| | | | |

DELIVERABLE CHECKLIST

NASA DEVELOP National Program

Fall 2019 Deliverable Checklist

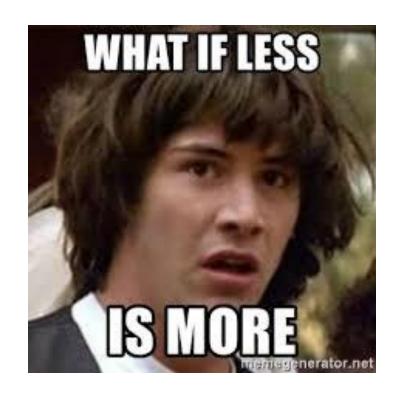
General Style Notes (for all or most deliverables)

- Use the correct filename: "YearTerm_NODE_ProjectShortTitle_DeliverableType_Draft"
 - ⇒ 2019Fall_LaRC_NewYorkCityUrban_ProjectSummary_FD
- Use the correct formal node name for each deliverable (e.g. Alabama Marshall, Colorado Fort Collins).
 - ° Note that this dash in an "en dash", i.e. a longer dash than the one located on your keyboard.
- The first letter of each word in the title, subtitle, and VPS title are capitalized (APA title case).
- The short title should be a combination of the study area and application area. If the project is a continuation, 'II' or 'III' should also be included.
- Do not double space after periods!!

2019 FALL DELIVERABLES

Changes to deliverables made in 2019 summer:

- NO Poster Rough Draft
- NO Technical Image
- Required Project Video for the final term of a multi-term project
- Optional Project Video for 1 term projects (consult with end user)



PROJECT SUMMARY

What it is:

 The Project Summary provides a short overview of project information in one place.

Why it matters:

- Content is compiled for reporting to NASA HQ project indicators, tracking metrics, annual reports, quarterly program reviews, monthly reports, etc.
- Future teams will refer to this document.
- In the summer term, content is used to populate the Project Booklet.
- Project Summaries are commonly shared when project information is requested (ex. Legislative Affairs, Partners).

How to make it work for you:

- This is where the abstract "lives" you will iterate with NPO in this file. Don't put the abstract on other deliverables until it's finalized here.
- Use the Project Summary to fill in the sections of the DEVELOPedia Project Page and Poster.
- Use this document in the future when you need to share information about the project you worked on.







What it is:

• The Tech Paper provides a synopsis of the project with technical details for partners and future DEVELOP teams to replicate and understand.

Why it matters:

- Tech Papers are the foundation for all future publications relating to the project.
- Tech Papers are commonly shared with project partners.
- Methods are a large focus of the paper and should assist others in replicating your work.

How to make it work for you:

- Develop your technical writing skills by working on the Tech Paper.
- Use content from the Tech Paper in the Video, Poster, and Presentation.
- When you are applying to jobs and schools this can be shared as a writing sample.



By the Way...

Any external distribution or publications of this work must go through NASA export control. Contact Amanda Clayton for more information about this process.

PRESENTATION

What it is:

• The Presentation is the "story" of your project laid out in a slide by slide progression. It should speak to all aspects of your project.

By The Way...

The template's layouts are a guide; feel free to modify it to fit your project.

Why it matters:

- Presentation skills are fundamental to effective communication of science.
- Presentations are commonly presented at the end-of-term node closeouts.
- Content from Presentations are often repackaged for recruiting presentations, conference presentations to inform potential partners and participants.
- This deliverable will be shared with project partners.
- Presentations are used to report to NASA HQ in ASP Program Reviews and SMD Monthly Status Reviews.

How to make it work for you:

- Presentation skills are critical having good content to practice those skills helps!
- The ability to craft a good PowerPoint presentation is important. Chartsmanship counts!
- Content is often the same/similar to the Poster content save yourself some time and reuse!
- Presenting your work at a conference, in a classroom, or other events is fun and builds your skills and network.

WEBSITE IMAGE

What it is:

 The Website Image is an attractive, processed image of your study area that will be used to represent the project.



• These images are used for website project pages, project booklets, video thumbnails, and the ASP website.

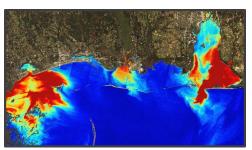
How to make it work for you:

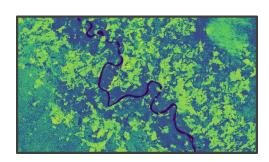
 The ability to make effective visualizations of your work can increase the resonance of your project and attract viewers.

By the Way...

It should NOT have any text on the image so it can be viewed at multiple scales without distortion.







STUDY AREA SHAPEFILE

What it is:

 Outlines the study area and is used for the creation of impact maps and congressional district maps

Why it matters:

- This shapefile is used in the creation of impact maps and the new interactive web mapper to discern project study areas.
- It shows how our program benefits taxpayers, giving insight into where we are increasing workforce development and building capacity to use NASA Earth observations.
- Maps will be used by ASP when reporting to members of Congress, and it is thus extremely important that these maps accurately reflect the extent of our projects' impact.

How to make it work for you:

 Ability to package shapefiles is helpful, and you can reuse this shapefile in the future.

By The Way

- Your shapefile must match the study area listed on your Project Summary.
- Create a polygon shapefile of your study area, containing only one feature.
- 3. Attribute table should contain a "project" field where your project short title is listed.
- The shapefile must be zipped and saved using standard file nomenclature.
- 5. Coordinate system: GCS WGS 1984





What it is:

 The Poster is a visual demonstration of your project. It should layout the important aspects of your project in an appealing and easy to understand manner.

Why it matters:

- Posters are commonly presented at node close out events.
- Poster presentations at conferences and recruiting are extremely common within DEVELOP.
- This deliverable will be shared with project partners.
- Posters are put on the website for perpetuity.

How to make it work for you:

- Content is often the same/similar to the Presentation content save yourself some time and reuse!
- Effectively communicating your project visually can be hard; use the opportunity to create your Poster to build your design skills.
- Presenting your work at a conference is an excellent opportunity to engage with the scientific community and a strong poster is key.



By the Way...

The template's layout is just a guide; feel free to modify it to fit your project.

Poster: http://www.devpedia.developexchange.com/dp/index.php?title=Poster

DEVELOPEDIA PROJECT PAGE

What it is:

 Each project has a page on DEVELOPedia that is accessible to current, future, and past DEVELOPers.

Why it matters:

- DEVELOPedia serves as the most complete project archive available – this is a resource to everyone in the program.
- Future teams will refer to this content.

By the Way....

DEVELOP Website Project Pages
Project pages are posted near
the end of the term on the NASA
DEVELOP website. You can
feature your experiences and
project pages on LinkedIn!

How to make it work for you:

- You can refer back to this page at anytime as DEVELOPers get to keep their accounts for eternity.
- After a final NPO review, final, archival sets of deliverables are posted by the PC team and you can access as needed.

FEEDBACK FORM

What it is:

• The Feedback Form was created in response to NASA Headquarters' request that we increase our collection and reporting of feedback relating to three things: 1) NASA Earth observation data (accessibility, processing, and use), 2) research questions surfaced by application projects (what do the feasibility study results lead our partners to pursue next), and 3) partner engagement.

Why it matters:

- Headquarters is looking for the wealth of knowledge rapidly gained in DEVELOP projects to feed into Science Teams
- Your knowledge is key for improving satellite missions and DEVELOP partnerships in the future!

How to make it work for you:

- Review the template at the beginning of the term to understand what it needs.
- Take notes on these items throughout the term so you don't have to try to remember at the end!
- Team discussion relating to the challenges and data use is a great exercise for the team to pursue.
- Follow up with project partners is also an important facet to the relationships built.

OPTIONAL DELIVERABLES

What it is:

 Your team may have extra time or decide that the creation of an optional deliverable will be of high-value. In this event, your team can utilize the resources and templates provided below to help create an excellent deliverable. Examples of optional deliverables are tutorials, one-pager/brochure, or image gallery, but really this is anything additional the team creates as part of a package for the partners.

Why it matters:

 Often project partners can benefit most from a tutorial or additional materials that highlight the project's methodology.

How to make it work for you:

- Tutorials can be referenced later on and you can submit as sample work when applying for a job or to graduate school.
- Brochures can be used at conferences to hand out at poster presentations or given to partners to increase awareness of the project.

By the Way...

Before pursuing optional deliverables, make sure they will not decrease the quality or timeliness of required deliverables. Some projects have specific optional deliverables written into the proposal. It's a good idea to discuss their creation early in the term.

CODE

What Code is:

 Teams are expected to turn in code that they developed for their projects. This can be any code that was used to help the project, such as batch processing imagery or converting files to a different format. Code is collected at the end of the term and will be put into a repository shared only among DEVELOP.

Want to know more?

Contact
 <u>develop.informationtechnology@gmai.com</u>
 and develop.geoinformatics@gmail.com

VIDEO & TRANSCRIPT

What it is:

 This is the "story" of your project in a video format. It highlights your project's purpose to project partners, scientific community, and the general public.

Want to know more?

Contact
 <u>develop.communications@gmail.com</u>

10 BEST DELIVERABLE TIPS & TRICKS

Keys to project success!



TIP #1 - START EARLY!

Deliverables take **time**. Don't wait until the last minute to start!

- This especially applies to the Project Video & the Tech Paper
- Team members should always have something to do
- It's best to have ALL team members review your deliverables before submission



TIP #2 - FOLLOW TEMPLATE DIRECTIONS

Templates have directions about what goes into each section \rightarrow follow them!

 Many also have comments with suggestions about how to complete deliverables → read them for further clarification!



Commonly Ignored Directions

Conclusions

Use bullets.

Use complete sentences with periods.

1. Abstract

[Placeholder - do not put anything here until the final draft submission. The abstract in the project summary is where the working draft of the abstract should "live"]







TIP #3 - PROPER PROJECT SHORT TITLE & NOMENCLATURE

Short Title: Study area + Primary application area

Ex. Belize & Honduras Water Resources II

Nomenclature: YearTerm_NODEAcronym_ProjectTitle_Deliverable_RD/FD_(v2+)

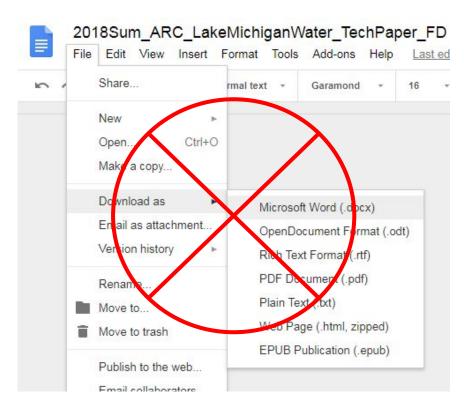
Ex. 2019Fall_JPL_Belize&HondurasWaterII_ProjectSummary_RD



Common Mistakes!

- **Shortening** the short title:
 - Ex. Northern Forest Food Security <u>& Agriculture II</u>
- Incorrect node acronym or project title
 - Ex. 2019Sum_NCEI_AshevilleUrban

TIP #4 - GOOGLE DRIVE CONVERSION BEWARE!



If you decide to use Google Drive, do not download your deliverables using the "download as" function because the conversion process messes up the formatting in deliverable templates!!!

Alternatively, you can natively edit Microsoft Office files in Google Drive:

https://www.theverge.com/2019/4/10/18304978/google-docs-sheets-slides-natively-edit-microsoft-office-word-excel-powerpoint

TIP #5 - HOW MUCH TO INCLUDE IN THE ROUGH DRAFTS

"How can I complete my tech paper rough draft in week 4 if I don't have all of my methods figured out and don't have results yet?"

- That's okay! Simply provide us with what you do have
- We understand that the methodology can change
- We don't need results in the RD to know that you are working hard



TIP #6 - KEEP TRACK OF AND KNOW YOUR DATA SOURCES!

Read data user guides, website documentation, & metadata:

- What is the proper dataset name? E.g. USDA CropScape
- Basic metadata: date, attribute table information, resolution, how the data were collected or compiled
- Who created the data (this could be different from the organization or data portal you got it from)?





zotero

You can reference management softwares, such as **Zotero** or **Mendeley**, to share sources and track citations.

TIP #6 CONT. - REFERENCING SATELLITE DATA

Proper and MANDATORY Copernicus acknowledgement wording:

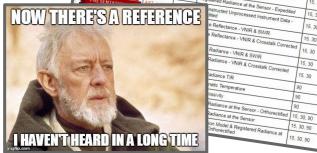
"contains modified Copernicus Sentinel data (yyyy e.g. 2018),

processed by ESA."

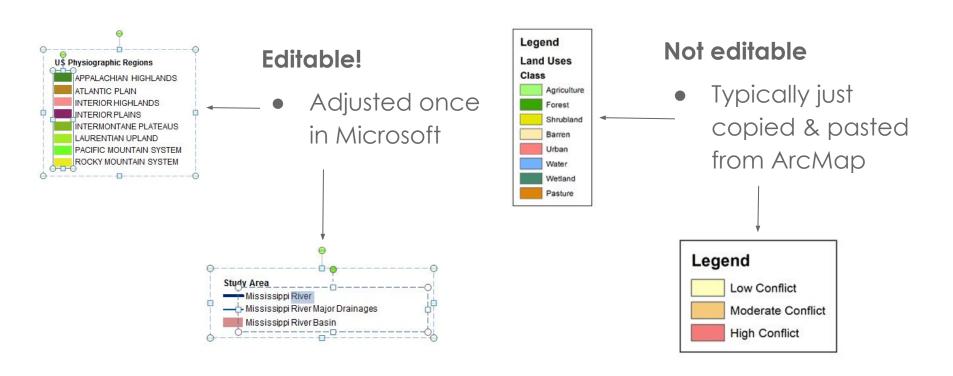
Understand your satellite data products:

- Explore the DAAC and product websites
- Find the formal dataset name
- Thoroughly read metadata
- Cite using Digital Object Identifiers (DOI)



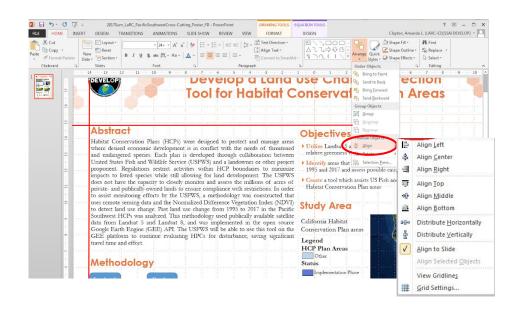


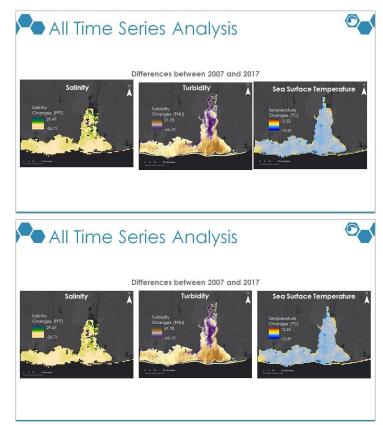
TIP #7 - MAKE ALL LEGENDS SEPARATE AND EDITABLE IMAGES



TIP #8 - GET FAMILIAR WITH THE ALIGN TOOL

- Use it to align text, images, etc.
- It also has a great distribution tool!





TIP #9 - RESULTS VS. CONCLUSION: KNOW THE DIFFERENCE!

Results:

 "We identified 10 oak trees and 80 pine trees"

Number of Dry Wells in Study Area, 2012

Dry wells

Conclusion:

- "The environment favors pine trees."
- "Wells in the study area were most likely to dry out during the summer dry season; however, most wells replenished during the fall rains."

TIP #9 CONT. - EXAMPLES OF CONCLUSIONS GONE WRONG

"This project automated the flood probability algorithm created by term I of the project."

"An interactive map of environmental and socio-economic layers was generated to dynamically query and visualize weekly data."

"This project produced a mathematical model that will transform VIIRS DNB imagery into measurement of predicted skyglow."

TIP #9 CONT. - CONCLUSIONS THE RIGHT WAY

"...Maryland's marshes are trending towards degradation and, if all contributing factors persist, will continue to degrade over time. Transitions in land cover were displayed spatially and graphically, but further work needs to occur to determine the driving factors behind those transitions. It is our anticipation that these analyses will successfully assist the Maryland Department of Natural Resources and The Nature Conservancy in identifying and restoring areas of marshland that provide the greatest risk reduction for coastal communities..."

The Purpose of a Conclusion:

- Revisit your main idea/research questions
- Connect the paper's findings to a larger context
- Suggest the implications and importance of your findings
- Ask questions or suggest ideas for further research



TIP #10 - KEEP YOUR PROJECT PARTNER LIST UPDATED

It's okay if you **add a new partner or drop one** over the course of the term, but make sure to **tell someone** from **Project Coordination** or **Impact Analysis**



Proper Partner Nomenclature:

- X USDA, Pocatello Field Office
- USDA, Natural Resources Conservation
 Service, Pocatello Field Office
- X Groundwork Milwaukee
- Groundwork USA, Groundwork Milwaukee

BONUS TIP - REVIEW BEFORE YOU SUBMIT!

- Review your deliverable along side a blank copy of the template
- Go through the Deliverables Checklist

"Make it nice or make it twice!"

- Lauren Childs-Gleason



IF YOU'RE LOST, ASK FOR HELP!

You don't need to struggle with deliverables, the Project Coordination team is here to help:

- Slack
- Email
- Webinars
- DEVELOPedia

There are no "dumb" questions. Ask us anything; we want you to succeed!



QUESTIONS?

Contact us!

Project Coordination Team Email:

develop.projectcoordination@gmail.com



Shelby IngramGeorgia – Athens



Sydney Neugebauer
Virginia – Langley



Zach BengtssonCalifornia – Ames

INTERESTED IN A PROJECT VIDEO?

Communications Team Fall 2019



Lindsay RogersNPO



Madison Murphy
Fellow at MSFC



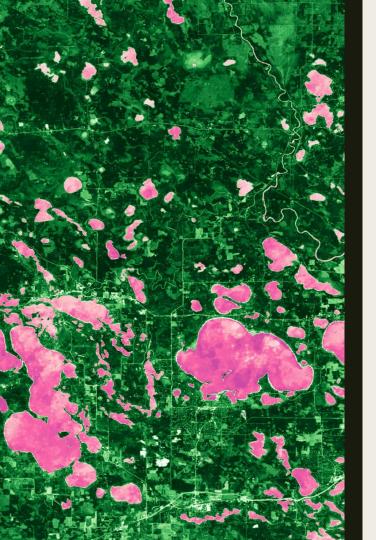
Celeste Gambino
Fellow at MA



Shanise Hunter
Participant



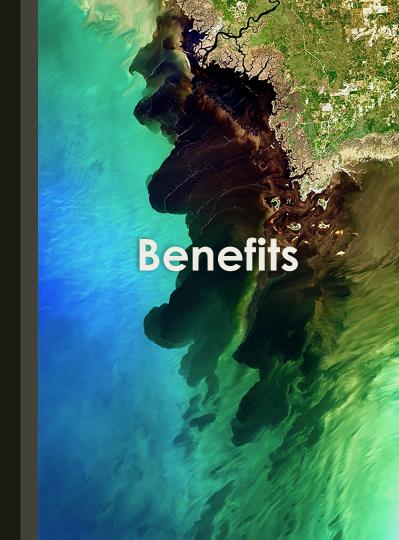
Danny Mangosing NPO

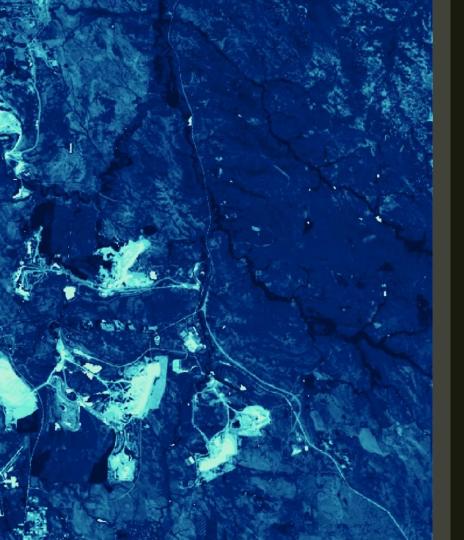


What is a Project Video?

The project video is a brief (2 – 4 minute) synopsis of your project and can be used as a tool for partners to leverage for education and outreach purposes. The video is our most public facing deliverable!

- Outreach engage audiences on the applications of NASA Earth observations
- **Education** use this platform to bring awareness on the uses of Earth observations and its variety of applications
- **Promotional** a way to highlight DEVELOP's partnerships and programmatic awareness
- **Showcasing** a tool for YOU to have in your arsenal to show future employers the work you have done
- Utility the project video can be leveraged as a resource in a variety of ways!





New Rules

- One Term Projects Optional! Video creation is dependent on end-user and team interest
- Multi-term Projects Required for the final term of the project (i.e. regardless of if that is term II or term III)

Video Requirements

- Access to video editing software! (Ask your Fellow what your options are)
- Complete all associated Project Video deliverables
 - Outline
 - Transcript
 - Citation Log
 - Final Video
- DEVELOP's intro and closing clips
- Length \rightarrow 2 4 minutes
- Media Releases for people who appear in the video

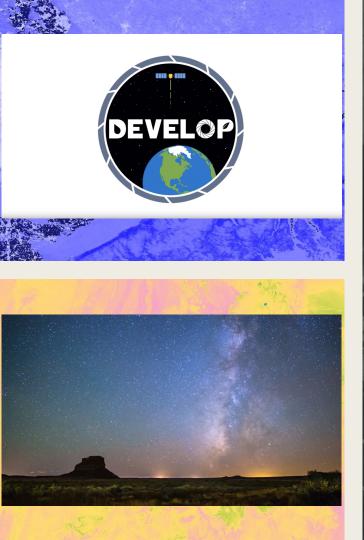
DELIVERABLES & DATES

Week 2: Interest Webinar

Week 3: Tips & Tricks Webinar

Week 5: Outline

Week 8: Transcript, Citation Log, Final Video





THANK YOU! develop.communications@gmail.com