



StEER
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Product Curation Handbook

Version 3.1

Updated December 1, 2020

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Preface

Effective March 2020, DesignSafe has requested that PVRR, EARRs and Datasets be published under a single unified project using the new Field Research Project data model. The instructions herein have been updated to follow this model. This project type does have more overhead (in terms of required information and effort in configuring the project), but this guidance will help to systematize and speed set up.



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Creating DesignSafe Project for Event Briefings

This process describes how to use a single Field Research Project for all StEER products associated with an event, in this case focusing on the Event Briefing.

Responsible Party: Lead Author

Project Header Information

1. **Project Title:** StEER - [EVENT]
2. **Project Type:** Field Research Project
3. **Principal Investigators:**
 - Tracy Kijewski-Correa (tkijewsk)
 - David Prevatt (dprev)
 - Khalid Mosalam (mosalam)
 - Ian Robertson (ianrob30)
 - David Roueche (droueche)
4. **Project Members:** All contributing VAST members (see Event Briefing Header)
5. **Unregistered Members:** Not common for StEER Projects but add any person here who was part of the team but did not have DesignSafe account; add them manually here
6. **Award Name:** EAGER: Operationalization of the Structural Extreme Events Reconnaissance (StEER) Network
7. **Award Number:** CMMI-1841667
8. **Related Work:** N/A
9. **Natural Hazard Event:** [Event Name]
10. **Natural Hazard Date:** Enter start and date (curation workflow performs better in curation when start and end date are provided -- Must be in dashes or directly use calendar tool, confirm the date appears on the calendar tool properly)
11. **Natural Hazard Type:** select from choices
12. **Keywords:** StEER, virtual reconnaissance, [Event type: tornado, earthquake, etc], [Event name and/or location(s)], event briefing
13. **Project Description** - Example: This project encompasses only an Event Briefing, an abbreviated StEER response mechanism that briefly summarizes the event and any key lessons that can be learned or reemphasized from the 15 May 2020 Mw 6.5 Nevada Earthquake.

*From Working Directory, Press the Add button to upload the Event Briefing PDF to the project.
Switch to Curation Directory to Create Missions and Collections and to Relate Data*

MISSIONS



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Missions are not required to publish an Event Briefing -- it can simply be published as a document collection, thus this step is not needed.

COLLECTIONS

Create one for each product, in this case the Event Briefing

- **Collection Type:** Documents Collection
- **Collection Title:** Event Briefing
- **Authors:** Select all who contributed to Briefing, including editors
- **Referenced Data Title:** (generally does not apply for Briefing)
- **Collection Description:** [Extract a short synopsis from the Introduction of briefing. See example] This Event Briefing is intended to: (1) to provide details of the 18 March Mw 5.7 Utah Earthquake, (2) to describe damage to buildings and transportation and industrial infrastructure, as well as disruption to the community in terms downtime and economic losses, and (3) to list key lessons learned. Information provided herein was gathered from various websites, news channels, and USGS. As the product of entirely virtual reconnaissance, the Event Briefing is not based upon detailed field investigations by StEER.

By pressing + Add Collection button the collection is recorded and should appear at the bottom of pop up. Close pop up.

Relate Data:

The Documents box should automatically be displayed showing the Event Briefing. No Collection options are available. No further action is required.

Assign Tags:

1. Now go to the Briefing the project directory and make an assignment. Dropping down to select the Event Briefing Tag.
2. Select Collection File Tags (hit save after each) = Virtual Reconnaissance

Preparing to Publish

1. Click Publication preview
2. Drop down on the Documents | Event Briefing to verify that the PDF file is attached and authors are listed.
3. Click Prepare to Publish x2
4. **Selection:** Select Documents | Event Briefing and click the “Select this Report and all of its file” link above the menu bar for the Event Briefing. Click Continue.
5. **Proofread Project:** make sure title, PIs, Report Type, Award, Keywords and Description are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project. If all looks good, Click Continue.



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6. **Proofread Mission:** There should be nothing here. Briefings don't require us to define a Mission so simply hit Continue.
7. **Proofread Collections:** make sure authors and description of this Document Collection are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project.
8. **Order Authors:** Please arrange individuals in the following order (note individuals on the project who did not contribute to the Briefing -- were not checked as authors on this document collection, will have a "strike-through"):
 - a. Authors in order from cover of Event Briefing
 - b. Editors in alphabetical order from cover of Event Briefing (usually PIs not included in the above authorship)
9. Check Authors order, save and Click Continue
10. **Licenses:** select Creative Commons Attribution Share Alike
11. Click Request DOI & Publish
 - a. Ensure the report meets the terms of Human Subjects Data (check box)
 - b. Ensure you agree with user agreement (check box)
12. Click Request DOI & Publish
13. Click Complete Submission.

Go into DesignSafe Published Projects and confirm it is listed (this may take a few hours or days depending on DesignSafe). The citation can be accessed when you click on the published project.

Preparing to Publish

1. Click Publication Preview
2. Click Prepare to Publish x2
3. Check the box next to the briefing (PDF)
4. Select Tag as "Other" and in the provided space enter "Document"
5. Click Save Selections -- you should now see the PDF tagged as "Document" in the blue box under "These files will be published:"
6. Hit Continue
7. Preview Proofread project: make sure title, PIs, Report Type, Award, Keywords and Description are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project.
8. Proofread Data: Confirm the PDF of the briefing is displayed with "Document" as the tag. If so, Hit Continue.
9. Order Authors. Please arrange individuals:
 - a. in the order of authors shown on the briefing
 - b. PIs who assisted in editing
 - c. any other PIs not included above, alphabetically
10. Save the Authors and Continue



11. License -- select Creative Commons Attribution Share Alike
12. Click Request DOI & Publish green button at top right
13. Check 'I agree' box and click Request DOI & Publish green button at top right
14. Click Complete Submission Green Button
15. Go into DesignSafe Published Projects and confirm it is listed (this may take a few hours or days depending on DesignSafe). The citation can be accessed when you click on the published project.



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Creating DesignSafe Project for PVRR

This process describes how to use a single Field Research Project for all StEER products associated with an event, in this case focusing on the PVRR.

Responsible Party: VAST Lead

Project Header Information

14. **Project Title:** StEER - [EVENT]
15. **Project Type:** Field Research Project
16. **Principal Investigators:**
 - Tracy Kijewski-Correa (tkijewsk)
 - David Prevatt (dprev)
 - Khalid Mosalam (mosalam)
 - Ian Robertson (ianrob30)
 - David Roueche (droueche)
17. **Project Members:** All contributing VAST members (see PVRR cover)
18. **Unregistered Members:** Not common for StEER Projects but add any person here who was part of the team but did not have DesignSafe account; add them manually here
19. **Award Name:** EAGER: Operationalization of the Structural Extreme Events Reconnaissance (StEER) Network
20. **Award Number:** CMMI-1841667
21. **Related Work:** if the PVRR and EARR are now part of this unified field dataset, related work is unlikely; if independently published then do the following:
 - a. **Box 1:** Title of PVRR **Box 2:** URL for DOI of PVRR (available at <https://www.steer.network/products>)
 - b. **Box 1:** Title of EARR **Box 2:** URL for DOI of EARR (available at <https://www.steer.network/products>)
22. **Natural Hazard Event:** [Event Name]
23. **Natural Hazard Date:** Enter start and date (curation workflow performs better in curation when start and end date are provided -- Must be in dashes or directly use calendar tool, confirm the date appears on the calendar tool properly)
24. **Natural Hazard Type:** select from choices
25. **Keywords:** StEER, Reconnaissance, [Event type: tornado, earthquake, etc], [Event name and/or location(s)], [Assessments types: damage assessment, coastal survey, etc]
26. **Project Description** - [Take from paragraphs 1-3 of Executive Summary, remove unnecessary details] End with: This project encompasses the products of StEER's response to this event: [insert known products: Preliminary Virtual Reconnaissance Report (PVRR), Early Access Reconnaissance Report (EARR) and Curated Dataset.]



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*From Working Directory, Press the Add button to upload the PVRR PDF to the project.
Switch to Curation Directory to Create Missions and Collections and to Relate Data*

MISSIONS

Missions are not required to publish a PVRR or EARR. They can simply be published as document collections, thus this step is not needed for a PVRR. Appendix B retains the instructions originally created

COLLECTIONS

Create one for each product, in this case the PVRR

- **Collection Type:** Documents Collection
- **Collection Title:** Preliminary Virtual Reconnaissance Report (PVRR)
- **Authors:** Select all who contributed to PVRR, including editors
- **Referenced Data Title:** (generally does not apply for PVRR)
- **Collection Description:** [Last statement from Executive Summary where objectives are outlined - example: “The first product of StEER’s effort to learn from the Nashville Tornadoes of 3 March 2020 is this Preliminary Virtual Reconnaissance Report (PVRR), which is intended to: (1) provide an overview of the tornado sequence, particularly relating to the impact of strong winds and wind-borne debris on the built environment, (2) overview the regulatory environment and construction practices in the affected area, (3) summarize the preliminary reports of damage to residential and commercial construction, as well as critical facilities such as schools, airports and power infrastructure, (4) establish current conditions in the affected area with respect to access and services, (5) outline recommendations to inform the continued study of this event by the engineering reconnaissance community, including interdisciplinary teams focusing on sheltering choices and decision making.” and close with “As the product of entirely virtual reconnaissance, the PVRR is not based upon detailed field investigations by StEER.”]

By pressing + Add Collection button the collection is recorded and should appear at bottom of pop up. Close pop up.

Relate Data:

The Documents box should automatically be displayed showing the PVRR. No Collection options are available. No further action is required.

Assign Tags:

3. Now go to PVRR in the project directory and make an assignment. Dropping down to select the PVRR Tag.



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4. Select Collection File Tags (hit save after each) = Preliminary Virtual Assessment, Virtual Reconnaissance

Preparing to Publish

14. Click Publication preview
15. Drop down on the Documents | PVRR to verify that the report (PDF) file is attached and authors are listed.
16. Click Prepare to Publish x2
17. **Selection:** Select Documents | Preliminary Virtual Reconnaissance Report (PVRR) and click the “Select this Report and all of its file” link above the menu bar for the PVRR. Click Continue.
18. **Proofread Project:** make sure title, PIs, Report Type, Award, Keywords and Description are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project. If all looks good, Click Continue.
19. **Proofread Mission:** There should be nothing here. PVRR’s don’t require us to define a Mission so simply hit Continue.
20. **Proofread Collections:** make sure authors and description of this Document Collection are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project.
21. **Order Authors:** Please arrange individuals in the following order (note individuals on the project who did not contribute to the PVRR -- were not checked as authors on this document collection, will have a “strike-through”):
 - a. VAST Lead(s)
 - b. VAST members in alphabetical order
 - c. Lead Editor (if any)
 - d. Other Editors (usually PIs not included in the above authorship)
22. Check Authors order, save and Click Continue
23. **Licenses:** select Creative Commons Attribution Share Alike
24. Click Request DOI & Publish
 - a. Ensure the report meets the terms of Human Subjects Data (check box)
 - b. Ensure you agree with user agreement (check box)
25. Click Request DOI & Publish
26. Click Complete Submission.

Go into DesignSafe Published Projects and confirm it is listed (this may take a few hours or days depending on DesignSafe). The citation can be accessed when you click on the published project.



Creating DesignSafe Project for EARR

Responsible Party: VAST Lead

For an EARR, a PVRR has generally already been created (if not, follow the instructions in the PVRR section of this document). This section focuses on how to update this existing project to prepare for the publication of the EARR. The responses required for each field of the project creation workflow in DesignSafe are summarized below.

Update Project

Use the Edit Project Feature to update the project heading to prepare for the EARR. Items to check or update in the project are as follows:

- Project Members -- ensure everyone on the cover of the EARR is included as Project Members (preferred) or Unregistered Members (those without DS accounts)
- Project Description -- ensure this includes EARR in last sentence regarding products for this event

From Working Directory, Press the Add button to upload the EARR PDF to the project.

Switch to Curation Directory to Create Missions and Collections and to Relate Data

MISSIONS

Missions are not required to publish a PVRR or EARR. They can simply be published as document collections, thus this step is not needed for a PVRR. Appendix B retains the instructions originally created

COLLECTIONS

Create one for each product, in this case the EARR

- **Collection Type:** Documents Collection
- **Collection Title:** Early Access Reconnaissance Report (EARR)
- **Authors:** Select all who contributed to EARR, including FAST and VAST
- **Referenced Data Title:** (generally does not apply for PVRR)
- **Collection Description:** [Extract from Executive Summary where objectives are outlined and disclaimer is made - example: "In the overnight and early morning hours of March 2-3, 2020, a series of tornadoes struck Tennessee and Kentucky. The seven tornadoes touching down in Tennessee caused 25 fatalities, 19 of which occurred within a two-mile stretch just west of Cookeville, TN. This Early Access Reconnaissance Report (EARR) is StEER's second product in response to these tornadoes, (1) overviewing the hazard characteristics, (2) StEER's event response, (3) preliminary



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findings based on the data and observations generated by its Field Assessment Structural Team (FAST), and (4) recommendations for further study. Note that all observations and findings provided in this EARR should be considered preliminary and are based on the limited scope of the FAST.”]

By pressing + Add Collection button the collection is recorded and should appear at the bottom of pop up (where the PVRR collection, if any, is already displayed). Close pop up.

Relate Data:

The Documents box should automatically be displayed showing the EARR. No Collection options are available. No further action is required.

Assign Tags:

5. Now go to EARR in the project directory and make an assignment in the collections menu under the file. Dropping down to select the EARR Tag.
6. Select Collection File Tags (hit save after each) = Field Assessment

Preparing to Publish

27. Click Publication preview
28. Drop down on the Documents | EARR to verify that the report (PDF) file is attached and authors are listed.
29. **Selection:** Select Documents | EARR and click the “Select this Report and all of its files” link above the menu bar for the EARR. Click Continue.
30. **Proofread Project:** make sure title, PIs, Report Type, Award, Keywords and Description are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project. If all looks good, Click Continue.
31. **Proofread Mission:** There should be nothing here. EARR’s don’t require us to define a Mission so simply hit Continue.
32. **Proofread Collections:** make sure authors and description of this Document Collection are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project.
33. **Order Authors:** Please arrange individuals in the following order (note individuals on the project who did not contribute to the EARR -- were not checked as authors on this document collection, will have a “strike-through”):
 - a. FAST Lead(s)
 - b. remaining FAST members in alphabetical order
 - c. VAST Lead or master editor
 - d. Contributing VAST authors in alphabetical order
 - e. other editors in alphabetical order
 - f. Any other PIs not included above
34. Check Authors order, save and Click Continue



35. **Licenses:** select Creative Commons Attribution Share Alike (under Works)
36. Click Request DOI & Publish
 - a. Ensure the report meets the terms of Human Subjects Data (check box)
 - b. Ensure you agree with user agreement (check box)
37. Click Request DOI & Publish
38. Click Complete Submission.

Go into DesignSafe Published Projects and confirm it is listed (this may take a few hours or days depending on DesignSafe). The citation can be accessed when you click on the published project.

Preparing to Publish

39. Click Publication preview
40. Click Prepare to Publish x2
41. Check the box next to the report (PDF)
42. Select Tag as “Other” and in the provided space enter “Document”
43. Click Save Selections -- you should now see the PDF tagged as “Document” in the blue box under “These files will be published:”
44. Hit Continue
45. Preview Proofread project: make sure title, PIs, Report Type, Award, Keywords and Description are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project.
46. Proofread Data: Confirm the PDF of the report is displayed with “Report” as the tag. If so, Hit Continue.
47. Order Authors. Please arrange individuals in the following order:
 - a. FAST Lead(s)
 - b. remaining FAST members in alphabetical order
 - c. VAST Lead or master editor
 - d. Contributing VAST authors in alphabetical order
 - e. other editors in alphabetical order
 - f. Any other PIs not included above
48. Click Authors Saved and then Click Continue
49. Select License: Creative Commons Attribution Share Alike License
50. Click Request DOI & Publish
51. Check I Agree and Click Request DOI & Publish
52. Click Complete Submission.
53. Go into DesignSafe Published Projects and confirm it is listed (this may take a few hours or days depending on DesignSafe). The citation can be accessed when you click on the published project.



Creating DesignSafe Project for Datasets

Responsible Party: VAST Lead

The responses required for each field of the project creation workflow in DesignSafe are summarized below.

Project Header Information - Should have been set up when PVRR/EARR were released -- if your dataset is standalone, complete all the header fields below; those already having the header set up should have an **update of: project members and unregistered members, keywords and project description accordingly**

1. **Project Title:** StEER - [EVENT]
2. **Project Type:** Field Research Project
3. **Principal Investigators:**
 - Tracy Kijewski-Correa (tkijewsk)
 - David Prevatt (dprev)
 - Khalid Mosalam (mosalam)
 - Ian Robertson (ianrob30)
 - David Roueche (droueche)
4. **Project Members:** All contributing FAST and VAST members including data librarians (see report cover, include 'uwrapid' if NHERI RAPID EF is used)
5. **Unregistered Members:** Not common for StEER Projects but add any person here who was part of the team but did not have DesignSafe account; add them manually [here](#)
6. **Award Name:** EAGER: Operationalization of the Structural Extreme Events Reconnaissance (StEER) Network
7. **Award Number:** CMMI-1841667
 - a. If RAPID provided any in-kind support, also link their award: [Natural Hazards Engineering Research Infrastructure: Post-Disaster, Rapid Response Research \(RAPID\) Facility \(CMMI-1611820\)](#)
8. **Related Work:** if the PVRR and EARR are now part of this unified field dataset, related work is unlikely; if independently published then do the following:
 - a. **Box 1:** Title of PVRR **Box 2:** URL for DOI of PVRR (available at <https://www.steer.network/products>)
 - b. **Box 1:** Title of EARR **Box 2:** URL for DOI of EARR (available at <https://www.steer.network/products>)
9. **Natural Hazard Event:** [Event Name]
10. **Natural Hazard Date:** Enter start and date (curation workflow performs better in curation when start and end date are provided -- Must be in dashes or directly use calendar tool, confirm the date appears on the calendar tool properly)



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11. **Natural Hazard Type:** select from choices
12. **Keywords:** StEER, reconnaissance, [Event type: tornado, earthquake, etc], [Event name and/or location(s)], [Assessment types: damage assessment, coastal survey, streetview, UAS, laser scan]
13. **Project Description** - [Take from paragraphs 1-3 of Executive Summary of EARR, remove unnecessary details] End with: This project encompasses the products of StEER's response to this event: [insert known products: Preliminary Virtual Reconnaissance Report (PVRR), Early Access Reconnaissance Report (EARR) and Curated Dataset.]

FOLDER STRUCTURE

Upload all relevant data into standard folder structures (D1, D2, etc). The Data Report should be uploaded to the main directory as a PDF. Within each folder, data can be further organized using additional subfolders by site, date or to distinguish processed or unprocessed data. The logic of this structure should be explained in the data report.

Numbering should be updated if only a subset of the possible folders shown below are used, but generally they should be ordered as follows:

- D0. Planning Documents - Required for the Research Planning Collection; contains Pre-Deployment Briefing(s)
 - D1. Building Damage Assessments
 - OR (if multiple StEER Apps are used)
 - D1.1 Building Damage Assessments
 - D1.2 Non-Building Damage Assessments
 - D1.3 Hazard Indicators
 - D2. Streetview Panoramas
 - OR (if multiple analogous technologies are used)
 - D2.1. Applied Streetview
 - D2.2 OSMO Camera Imagery
 - D3. Unmanned Aerial System
 - D4. Laser Scans
 - D5. 360 Camera
 - D6. Other Ground-Based Observations
 - D7. GPS Data
 - D8. Daily Summaries
 - D9. Dissemination Products
- Data Report (remains outside the folders above)



Note: You can make duplicate folders (DX.1, DX.2) if the same data was acquired by different organizations and add the extension “- StEER” and “- RAPID EF” to the folder name to distinguish them.

Switch to Curation Directory to Create Missions and Collections and to Relate Data

MISSIONS

Create one for each type of team in the response, these can be FAST-1 or FAST-2 or subteams like coastal vs. imaging teams, especially if they work different geographies

- **Mission Title:** Field Assessment Structural Team: [Specialization] (FAST-1)
- **Event:** (event name)
- **Dates of Mission (in Dash FORMAT):** [Enter start and end dates of FAST work, must be in dashes, confirm the date appears on the calendar tool properly]
- **Authorship:** Check all members of that team (include Data Librarians or other VASTs who helped generate, DE/QC or process data, as well as mission coordinators or others who oversaw data post-processing and curation)
- **Mission Site Location:** City and coordinates
- **Mission Description:** [Describe purpose and methodology, comes from Section 2 of Data Report]
 - (example for damage assessments) Observing damage and documenting successful performance of buildings. Classes include residential, commercial and airport/industrial. Methodologies include detailed damage assessments in Fulcrum, UAS and Applied StreetView.

Repeat for each FAST or FAST sub group by pressing + Add Mission button -- Confirm it appears at bottom of pop up

COLLECTIONS

Create one for each type of data collection approach

Note: Each Mission will need both a Research Planning Collection (for pre-deployment briefings and Data Report) as well as Engineering/Geosciences Collection at minimum to be able to publish.

Note: do not create a collection for any data you don't plan to publish.

- D0. Planning Documents** (Select Research Planning Collection)
 - **Collection Title:** Planning Documents



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- **Data Collector(s):** Mission coordinator and individuals who selected targets/prepared briefings
- **Referenced Data:** (include PVRR if published under different project)
- **Collection Description:** This documentation set includes Pre-Deployment Briefings summarizing mission parameters and planning.

(Add collection when done. Confirm it appears at bottom of pop up)

Data Report (Select Documents Collection)

- **Collection Title:** Data Report
- **Data Collector(s):** Person who authored report and any others who contributed to these files
- **Referenced Data:** None.
- **Collection Description:** This documents collection includes the Data Report that introduces (1) the team and objectives of the mission, (2) how the data was collected, including chronology and instruments/methodology, (3) how data was processed, (4) how data was organized in the corresponding DesignSafe repository, and (5) contacts for further information. The Data Report serves as a guide to the use and interpretation of the curated dataset.

(Add collection when done. Confirm it appears at bottom of pop up)

D1 Building Damage Assessments (Select Engineering/Geosciences Collection)

- **Collection Title:** Detailed Damage Assessments
- **Observation Type:** Structural (possibly other Hazards if Hazard Indicator App was used)
- **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)
- **Data Collectors:** Check the names of persons acquiring that data
- **Collection Site Location:** (enter name and lat, long)
- **Equipment:** select Other, Personal Mobile Device with Fulcrum App (StEER Custom App)
- **Referenced Data Title:** Fulcrum Community Platform, URL: <https://web.fulcrumapp.com/communities/nsf-rapid>
- **Collection Description:** (Adapted from Section 2 of Data Report) D2D assessments were conducted using personal mobile phones and StEER Fulcrum Apps to capture geotagged photos and various attributes and features of the structure. Data was further enriched by Data Librarians using supplemental data sources. This includes all records acquired from the StEER Fulcrum App suite (building and non-building structures, hazard indicators).

(Add collection when done. Confirm it appears at bottom of pop up)



- **D2 Applied Streetview** (Select Engineering/Geosciences Collection)
 - **Collection Title:** Applied StreetView Technology
 - **Observation Type:** Structural (other hazards could also be selected)
 - **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)
 - **Data Collectors:** Check the names of persons acquiring that data
 - **Collection Site Location:** (enter location with lat/long)
 - **Equipment:** select Car Camera System
 - **Referenced Data Title:** (Generally Leave Blank)
 - **Collection Description:** (Adapted from Section 2 of Data Report) This method was used to rapidly scan passable streets to collect 360 imagery of debris and building condition along routes within impacted areas.

- **D3 Unmanned Aerial System** (Select Engineering/Geosciences Collection)
 - **Collection Title:** Unmanned Aerial System
 - **Observation Type:** Structural (other hazards could also be selected)
 - **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)
 - **Data Collectors:** Check the names of persons acquiring that data
 - **Collection Site Location:** (enter location with lat/long)
 - **Equipment:** select the drone classes used (possibly more than one)
 - **Referenced Data Title:** (Generally Leave Blank)
 - **Collection Description:** (Adapted from Section 2 of Data Report) This method was used to supplement the ground-based damage assessments, capturing damage levels over larger geographic areas, and to provide a superior vantage point for roof damages.

- **D4 Laser Scans** (Select Engineering/Geosciences Collection)
 - **Collection Title:** Laser Scans (Terrestrial)
 - **Observation Type:** Structural (other hazards could also be selected)
 - **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)
 - **Data Collectors:** Check the names of persons acquiring that data
 - **Collection Site Location:** (enter location with lat/long)
 - **Equipment:** select the scanner class used (possibly more than one)
 - **Referenced Data Title:** (Generally Leave Blank)
 - **Collection Description:** (Adapted from Section 2 of Data Report) This terrestrial scanning method was used to collect point clouds of noteworthy case study buildings.

- **D5 360 Camera** (Select Engineering/Geosciences Collection)
 - **Collection Title:** 360 Imagery
 - **Observation Type:** Structural (other hazards could also be selected)



- **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)
 - **Data Collectors:** Check the names of persons acquiring that data
 - **Collection Site Location:** (enter location with lat/long)
 - **Equipment:** select the scanner class used (possibly more than one)
 - **Referenced Data Title:** (Generally Leave Blank)
 - **Collection Description:** (Adapted from Section 2 of Data Report) This is a collection of supplemental, ground-based 360 degree images.
- ☐ **D6 Other Ground-Based Observations** (Select Engineering/Geosciences Collection)
- **Collection Title:** Other Ground-Based Observations
 - **Observation Type:** Structural (other hazards could also be selected) -OR- Field Sensors
 - **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)
 - **Data Collectors:** Check the names of persons acquiring that data
 - **Collection Site Location:** (enter location with lat/long)
 - **Equipment:** Other, personal GPS-enabled camera
 - **Referenced Data Title:** (Generally Leave Blank)
 - **Collection Description:** (Adapted from Section 2 of Data Report) This is a collection of photographs taken by investigators outside of the Fulcrum platform using a personal GPS-enabled camera. -OR- While collecting data, investigators at times acquired additional photos/videos on their personal mobile devices or GPS cameras to document site conditions or equipment configurations.
- ☐ **D7 GPS Data** (Select Engineering/Geosciences Collection)
- **Collection Title:** GPS Data
 - **Observation Type:** Other: Positioning
 - **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)
 - **Data Collectors:** Check the names of persons acquiring that data
 - **Collection Site Location:** (enter location with lat/long)
 - **Equipment:** Select from list
 - **Referenced Data Title:** (Generally Leave Blank)
 - **Collection Description:** (Adapted from Section 2 of Data Report) Collection of GPS data used in the process of acquiring data.
- ☐ **D8 Daily Summaries** (Select Engineering/Geosciences Collection)
- **Collection Title:** Daily Summaries
 - **Observation Type:** Structural
 - **Date(s) of Collection (in Dash FORMAT):** (enter both start and end dates, must be in dashes, confirm the date appears on the calendar tool properly)



- **Data Collectors:** Check the names of persons who authored daily summary
- **Collection Site Location:** (enter location with lat/long)
- **Equipment:** None
- **Referenced Data Title:** (Generally Leave Blank)
- **Collection Description:** (Adapted from Section 2 of Data Report) This directory contains daily summaries capturing key observations and illustrative examples of the damage documented by the FAST, using a StEER standard template.

RELATE DATA

(Choose collections that relate to the respective Missions -- all collections must eventually be assigned to one or more of the missions; use arrows to position them in the same order as they appear in the Table of Contents in the Data Report; some collections may be associated with multiple missions, as is the case with the Data Report.)

Assign Tags: *Now go to each directory or item in your project directory and make an assignment, clicking save after that is completed. More than one can be assigned. Here are possible classes:*

7. **Planning Documents** -- Tag with Planning Documents (hit save) -- Select Collection File Tags (as relevant, hit save after each) Other: Data Collection Strategy, Planning Document
8. **Damage Assessments (Building or Non-Building)** -- Tag with Detailed Damage Assessments (hit save) --Select Collection File Tags (hit save after each) = Ground Investigation, Image, Structural Observation, Forensic Observation
9. **Damage Assessments (Hazard Indicator)** -- Tag with Detailed Damage Assessments (hit save) --Select Collection File Tags (hit save after each) = Ground Investigation, Image, Forensic Observation, (Relevant hazards like Wind, Coastal, etc)
10. **Applied Street View Imagery** -- Tag with Applied Streetview Imagery (hit save) -- Select Collection File Tags (hit save after each) = Ground Investigation, Image, Structural Observation, Forensic Observation, Route
11. **OSMO Camera Imagery** -- Tag with OSMO Camera Imagery (hit save) -- Select Collection File Tags (hit save after each) = Ground Investigation, Image, Video, Structural Observation, Forensic Observation, Route
12. **Unmanned Aerial Survey** -- Tag with Unmanned Aerial Survey (hit save) -- Select Collection File Tags (hit save after each) = Other (Aerial Investigation), (add each of these if in the UAV dataset: Point Cloud, Image, Video), Structural Observation, Forensic Observation
13. **Laser Scan** -- Tag with Laser Scans (hit save) -- Ground Investigation, Point Cloud, Scan, Structural Observation, Forensic Observation
14. **360 Imagery** -- Tag with 360 Imagery (hit save) -- Select Collection File Tags (hit save after each) = Ground Investigation, Image



15. **Other Ground-Based Imagery** -- Tag with Other Ground-Based Imagery -- Select Collection File Tags (hit save after each) = Ground Investigation, Image, Structural Observation, Forensic Observation OR Select Collection File Tags (hit save after each) = Other: Instrumentation Configuration, Image
16. **GPS Data** -- Tag with GPS data (hit save) -- Select Collection File Tags (hit save after each) = Other: Positioning Data, Survey Observation
17. **Daily Summaries** -- Tag with Daily Summaries (hit save) -- Select Collection File Tags (hit save after each) = Structural Observation, Forensic Observation, Note
18. **Dissemination Products** -- Tag with collections referenced in product (hit save after each) -- for all, Select Collection File Tags (hit save after each) = Report, Structural Observation, Forensic Observation, Damage Type
19. **Data Report** -- Tag with Data Report (hit save) -- Select Collection File Tags (as relevant, hit save after each) = Report, Other: Data Organization, Other: Data Collection Methods, Other: Data Processing Methods

Preparing to Publish

Note: if you are publishing multiple missions, you will need to publish one mission at a time. Each gets a unique DOI.

54. Click Publication preview
55. Click Prepare to Publish x2
56. **Selection:** For each Mission -- Click " Mission and all of its files" -- Click Continue
57. **Proofread Project:** make sure title, PIs, Report Type, Award, Keywords and Description are summarized correctly. If so, hit continue. If not, Hit Exit Prepare to Publish and go back to Edit the Project. If all looks good, Click Continue.
58. **Proofread Mission:** Review mission(s) -- if all looks well, Click Continue.
59. **Proofread Collections:** Review collection(s) -- if all looks well, Click Continue.
60. **Order Authors:** Please arrange individuals in the following order:
 - a. FAST Lead(s)
 - b. Data Standards Lead (if applicable)
 - c. Mission Coordinator (if applicable)
 - d. remaining FAST members in alphabetical order
 - e. Data Librarians/VAST (lead following by others in alphabetical order)
 - f. Data Report Lead (if applicable)
61. Check Authors order, save and Click Continue
62. **Licenses:** Select Open Data Commons Attribution
63. Click Request DOI & Publish
64. Check I Agree and Click Request DOI & Publish
65. Click Complete Submission.
66. Go into DesignSafe Published Projects and confirm it is listed (this may take a few hours or days depending on DesignSafe and size of the dataset).



Dissemination

Once the product is curated in DesignSafe and the DOI is generated, the StEER administrator will promote the product according to the following strategy.

Note that StEER may create a trackable URL for the product, which links to the DesignSafe DOI. That URL should be used in all the communications below; however, the final product on the StEER website is referenced by DOI.

- Update StEER website Products Page (<https://www.steer.network/products>)
- Update Response Catalog (<https://www.steer.network/responses>)
- Update News Page (<https://www.steer.network/news>)
- Update Event Responses Map on home page (<https://www.steer.network/>)
- Email to StEER Mailing List
- Post on Slack Channels: StEER, Announce, Leadership Corps, <Hazard-Relevant Channels>, <Event Slack Channels, if any>

See [Appendix](#) for example language for report releases by email and Slack.



Appendix A: Report Release Sample Language

Greetings,

StEER has released its Event Briefing for Hurricane Delta. The briefing is accessible at <https://aub.ie/steer-delta> with official citation and DOI from DesignSafe as follows:

Roueche, D. Kameshwar, S. Marshall, J. Bandaru, S. Do, T. Kijewski-Correa, T. Cortes, M. Crawford, S. Javadinasab Hormozabad, S. Strader, S. Prevatt, D. (2020) "Event Briefing", in StEER - Hurricane Delta. DesignSafe-CI. <https://doi.org/10.17603/ds2-y2gc-xj10>.

This is a unique Event Briefing in that it includes a summary of direct field observations informed by streetview imagery collected by the same Field Assessment Structural Teams (FASTs) that responded to Hurricane Laura. Since Laura and Delta affected many of the same communities, the dataset collected following Delta provides a valuable longitudinal study to explore compounded losses, interior losses in Laura (evidenced by debris piles), and rates of post-Laura recovery.

StEER is also pleased to announce the following webinar:

Best Practices to Enhance the Quality, Discoverability and Reuse Potential for Post-Event Reconnaissance Data

November 11, 2020

1PM TO 2PM Eastern Time

Tracy Kijewski-Correa, PhD

Registration required to receive connection information for the webinar.

<https://www.designsafe-ci.org/learning-center/training/webinars/2020-tutorials/best-practices-reconnaissance-data/>

The Structural Engineering Extreme Events Reconnaissance (StEER) network was founded with the mission to build societal resilience by generating new knowledge on the performance of the built environment through impactful post-event reconnaissance disseminated to affected communities. In the past two years, StEER has focused on shifting the Natural Hazard Engineering (NHE) community's paradigm from isolated researchers using paper forms to explore specific hypotheses by generating proprietary data toward community collaboratives using digital platforms to acquire openly curated data. As part of this shift, StEER has focused not only on efficiently collecting perishable data, but also on ensuring that data is suitable for reuse.



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This required firstly assuring the quality and reliability of the data, addressed through the creation of objective and consistent approaches to structural assessment with dedicated Data Librarians enacting a rigorous Data Enrichment and Quality Control (DEQC) process. The reuse potential of the data, which emphasizes both reusability and discoverability, was then enhanced through the creation of policies and protocols for curation/publication within DesignSafe.

This webinar, contextualized within the response to Hurricane Michael, will overview StEER’s approach to generating high-quality, reusable reconnaissance data compatible with the DesignSafe Field Research Data Model. Specific topics include:

1. Best practices for ensuring high-quality and reliable reconnaissance data;
2. Guidance for documenting reconnaissance data, including structuring of the DesignSafe project and development of a comprehensive Data Report to ensure the data is discoverable and reusable;
3. Suggestions for defining project headings, missions, collections and tags used in the Field Research Data Model to enhance discoverability and consistency when describing and organizing multi-phase investigations with different instruments/teams;
4. Applications of Field Research Data Model to different products beyond the actual measurements/observations, such as reports and briefings.

Please continue to monitor relevant #steer for future event responses in the 2020 Hurricane Season.

As always, we appreciate your collaboration in helping to Build Resilience through Reconnaissance. Please direct additional queries to admin@steer.network.

Best Wishes,

Tracy Kijewski-Correa	Khalid Mosalam	David O. Prevatt	Ian Robertson	David Roueche
StEER Director	StEER Associate Director for Seismic Hazards	StEER Associate Director for Wind Hazards	StEER Associate Director for Coastal Hazards	StEER Associate Director for Data Standards
University of Notre Dame	University of California, Berkeley	University of Florida	University of Hawai'i at Manoa	Auburn University

SLACK _____



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Roueche, D. Kameshwar, S. Marshall, J. Bandaru, S. Do, T. Kijewski-Correa, T. Cortes, M. Crawford, S. Javadinasab Hormozabad, S. Strader, S. Prevatt, D. (2020) "Event Briefing", in StEER - Hurricane Delta. DesignSafe-CI. <https://doi.org/10.17603/ds2-y2gc-xj10>.

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Appendix B: Instructions to Create Mission for PVRR

- **Mission Title:** StEER: Virtual Assessment Structural Team (VAST)
- **Event:** [Name of event]
- **Dates (in Dash FORMAT):** 11-10- 2017 to 11-14-2017 (Must be in dashes, confirm the date appears on the calendar tool properly)
- **Assign Authorship:** All members of the VAST, including editors
- **Geolocation:** [Enter location and Lat/Long in decimals]
- **Mission Description:** “Virtual Assessment Structural Team (VAST) support StEER efforts by (1) compiling and exchanging publicly-available information from various websites, news channels and agencies, (2) assisting with the authorship of various reports, and (3) executing data enrichment/quality control on damage assessments conducted by StEER Field Assessment Structural Teams (FASTs). For this event, their role will encompass [define if 1, 2, or 3 are part of their role in this response]

By pressing + Add Mission button, the mission is recorded and should appear at the bottom of the pop up. Close pop up.



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