



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
12201 Sunrise Valley Drive
Reston, Virginia 20192

In Reply Refer To:
U.S. Geological Survey
Attention: Ms. Litsa Marinos
12201 Sunrise Valley Drive
Mail Stop 159, Room 4B105
Reston, Virginia 20192-0002

October 11, 2019

Mr. Austin Evers
American Oversight
1030 15th Street, N.W.
Suite B255
Washington, D.C. 20005
foia@americanoversight.org

Transmitted by electronic mail

Re: U.S. Geological Survey (USGS) Freedom of Information Act (FOIA) Tracking
USGS-2019-00103 – Interim Response #1

Dear Mr. Evers:

This is our first interim response to your Freedom of Information Act (FOIA) request dated April 4, 2019. You requested the following records:

1. Any records reflecting assessments of the potential or actual impact of the partial government shutdown that lasted from December 22, 2018, until January 25, 2019, on your agency's scientific research or data-collection programs—including memoranda, summaries, after action reports, final talking points, impact analyses or other internal reports for Agency leadership—including long-term consequences of the shutdown. Records addressing the potential, actual, or anticipated long-term consequences from the government shutdown on your agency's research programs should be considered responsive to this request.
2. To the extent not already included in part 1, records sufficient to identify any research programs or studies that were halted, delayed, postponed, rescheduled, canceled, impaired, or otherwise impacted as a result of the partial government shutdown that lasted from December 22, 2018, until January 25, 2019.

3. To the extent not already included in parts 1 and 2, all records reflecting communications (including email messages, attachments, and calendar invitations) regarding the halting, cancellation, or impairment of any research programs or studies as a result of the partial government shutdown that lasted from December 22, 2018, until January 25, 2019.
4. Records sufficient to identify any funds reprogrammed within your agency to mitigate any effects of the pause in federal funding from December 22, 2018, until January 25, 2019.
5. Any communications from nongovernmental groups or individuals (e.g., anyone communicating from an email address ending in .com, .net, .org, .mail, or .edu) reporting hampered research efforts, such as data blackouts, as a result of the partial government shutdown that lasted from December 22, 2018, until January 25, 2019.
6. Any resignation letters submitted between December 22, 2018, and February 1, 2019.
7. Any communications (including email messages, email attachments, memoranda, or calendar invitations) regarding the effect of the partial government shutdown on recruitment efforts at your agency, such as a decline in applications, canceled recruiting events, or other recruitment-related initiatives.

On April 19, 2019, you had a conference with Mr. Brian May, USGS FOIA Officer and FOIA Public Liaison, and Ms. Charis Wilson, NPS FOIA Public Liaison regarding the vast scope of your request and the challenges it presents. In this discussion, you had informed us that you would accept aggregated records focused on senior leader-level records, not necessarily records (emails) from every person within the USGS or NPS. Some USGS regions were not able to comply with this amendment; we are looking into this further and will request a conference call with you for next week to discuss the records in our possession.

Today we are releasing to you, in full, one portable document format (PDF) electronic file consisting of 58 pages of responsive records including an Excel spreadsheet (12 KB).

Although we hope that you will wait so that we can complete our review process, please note that you may seek dispute resolution services from Mr. Brian May in his role as the USGS FOIA Public Liaison and/or seek dispute resolution services from the Office of Government Information Services (OGIS). Mr. May's contact information is, as follows:

U.S. Geological Survey
Attn: Mr. Brian A. May
5522 Research Park Drive
Baltimore, Maryland 21228
Telephone: (443) 498-5521 (office)
Telephone: (443) 750-2620 (work cell)
Fax: (443) 498-5510
E-mail: bmay@usgs.gov

If you choose to contact OGIS, you may do so in any of the following ways:

Office of Government Information Services
National Archives and Records Administration
8601 Adelphi Road – OGIS
College Park, Maryland 20740-6001
Telephone: (202) 741-5770
Fax: (202) 741-5769
Toll-free: 1-877-684-6448
E-mail: ogis@nara.gov
Web: <https://ogis.archives.gov>

On July 3, 2019, we provided you with appellate rights for our delayed response. We regret the delay and appreciate your consideration.

If you have any questions about our response to your request, you may contact Litsa Marinos by phone at (703) 648-7179, by email at foia@usgs.gov, or by mail at 12201 Sunrise Valley Drive, Mail Stop 159, Room 4B105, Reston, Virginia 20192.

Sincerely,

Litsa Marinos

Litsa Marinos
U.S. Geological Survey
Government Information Specialist

Enclosures:
2019-00103 – Interim Response 1.pdf (58 pages)
110 Deliv Changes 05 07 19.xlsx (12 KB)

TP 110-3 Deliverables that had changes due to Shutdown

		Due	Finished	Reason
A5704	Eco_CG - 30m Weekly NDVI	4/30/19	4/16/19	02/13/2019 - Per the COR, deliverable due date changed from 3/29/19 to 4/30/19 as a result/impact of the government shutdown.
A5774	Eco_Veg - Phenology Viewer Prototype	4/30/19	4/16/19	02/13/2019 - Per the COR, deliverable due date changed from 04/01/19 to 4/30/19 as a result/impact of the government shutdown.
A5784	Eco_Veg - Draft Research Paper	4/18/19	4/18/19	03/08/19 - Per the USGS PM this deliverable had a reduction in scope, as: The deliverable was to conduct a research activity and provide a draft, peer reviewed, research paper on the activity. Due to the recent government shutdown, TSSC will not be able to fully complete this effort. TSSC proposes to continue with the research activity and deliver (for A5784) an outline of the research paper that includes initial results. Continuation of this activity and the research paper could be put into the follow-on PoP
A5724	Eco_DS - 30m Annual Herbaceous Results	4/30/19	4/24/19	02/13/2019 - Per the COR, deliverable due date changed from 2/28/19 to 4/30/19 as a result/impact of the government shutdown.
A4429	Eco_Dyn - Annual Herbaceous Performance Anomaly Research Paper Submission	4/30/19	4/30/19	02/13/2019 - Per the COR, deliverable due date changed from 2/28/19 to 4/30/19 as a result/impact of the government shutdown.
A5744	Eco_HLS - Draft Research Paper	4/30/19	4/30/19	02/13/2019 - Per the COR, deliverable due date changed from 3/29/19 to 4/30/19 as a result/impact of the government shutdown.

Government Shutdown Acquisition and Financial Assistance Guidance – Responding to Awards Identification

Purpose and Applicability

Provide guidance for responding to OAG request to identify any acquisition or financial assistance award where continued performance is considered mission essential, as defined by USGS guidance relating to shutdown, or where continued performance is required to protect life or Government property.

Related Policy, Guidance and Additional Information

Related AOP Topics:

[Continuing Resolution](#)

[Government Shutdown Acquisition and Financial Assistance Guidance](#)



Subject Matter Expert [Bureau Procurement Chief](#)

Discussion

OAG requires assistance to identify any acquisition or financial assistance award where continued performance is considered mission essential as defined by USGS guidance relating to shutdown, or where continued performance is required to protect life or Government property. Therefore, those responsible for oversight of these awards (Cost Centers, program management officials, CORs, TOMs, or etc.) should complete and submit the [“Acquisition and Financial Assistance Awards Requiring Special Attention During Shutdown Form”](#). Below is description of the form fields for reference:

- Award Number
- Contractor/Recipient Organization
- Title/Description – Title or description of the requirement. Exact title is not essential, but some identification of the type of work being performed under the award will be useful
- Reporting PoC – Name of individual providing the information, should additional information be required.
- COR/Technical PoC – Name of designated Contracting Officer's Representative or other technical point of contact that could be contacted should an issue arise after shutdown and in-depth expertise is needed.
- Specialist – Name of Contract or Grants Specialist, or Contracting Officer, if known.
- Action Type – Indicate one of the following:
 - o A – Default Action based award type, as identified in 'Default Actions' below.
 - o B – Partial Mission Essential Function, indicating 'Action Language' must be included indicating what portion of the work should continue.
 - o C – Fully Mission Essential Function, indicating performance should continue in full, unchanged. Very few, if any, such awards will be identified.
 - o D – Continued Full or Partial Performance required to protect life or Government property. Guard services, security services, basic building maintenance services are examples. 'Action Language' must be included indicating what portion of the work should continue.
- Action Language – If applicable, include any special instruction that you recommend be included in direction to the awardee should a shutdown occur. For instance, guard services contractors may be directed to “perform in accordance with your contract on a weekend schedule”.

OAG will use inputs from this form to appropriately notify contractors, grantees, and recipients of their responsibilities during a shutdown. Questions about the form can be emailed to [AskOAG](mailto:askoag@usgs.gov).

Default Actions

Cost Type Contract Vehicles: A contractor working under a cost type contract, regardless of the amount of funding obligated to the vehicle, should not continue to work. Contractors will be notified by a Contracting Officer if any of the work within the scope of the agreement is considered mission essential.

Firm Fixed Price Type Contract Vehicles: A contractor working under a fixed price contract that is fully obligated for performance beyond the shutdown date can continue to work within the scope of that agreement. However, contractors with fixed priced vehicles who perform their duties on a Federal site (such as janitorial, information technology, warehousing, and like services) should seek additional guidance from the Contracting Officer to determine whether or not all staff normally working under the contract should report for work at the Federal site. Most recurring services contracts on Federal facilities will **not** continue on a full performance level.

Interagency Agreements: Since an interagency agreement is an agreement between Federal agencies, work should not continue unless both agencies agree the work is mission essential.

Reimbursable Agreements: Personnel working under a reimbursable agreement can continue working if the individual is fully funded by the agreement and the work is not being performed on a Federal site. If work is being completed on a Federal site, or if the work is not fully funded, work should not continue without notification from a Contracting Officer that the work is considered mission essential. **USGS bureau-level guidance should be closely followed** regarding the identification of any reimbursable contract or recipient work or Federal employee activity that should continue after shutdown.

Student Contracts: A student, regardless of the amount of funding obligated to the purchase order, should not continue to work. Students will be notified by their Government point of contact if any of the work within the scope of their order is considered mission essential.

Supply Contracts (i.e. purchase of a piece of equipment or supplies): No specific action is required. Guidance in regards to deliveries will be provided separately.

Time & Material/Labor Hour Contracts: A contractor working under a time & material or labor hour type contract, regardless of the amount of funding obligated to the vehicle, should not continue to work. Contractors will be notified by a Contracting Officer if any of the work within the scope of the agreement is considered mission essential.

Cooperative Agreements: A recipient working under a cooperative agreement that is fully obligated for performance beyond the shutdown date can continue to work within the scope of that agreement, as long as performance can continue without the need for Federal oversight that has not been designated as 'excepted'. If a decision or guidance point is reached that requires Federal involvement, performance must stop and the recipient should seek advice from the Contracting Officer. However, recipients who perform their duties on a Federal site that cannot be conducted elsewhere should seek additional guidance from the Contracting Officer to determine whether or not all staff normally working under the agreement should report for work at the Federal site.

Grants: A recipient working under a grant that is fully obligated for performance beyond the shutdown date can continue to work within the scope of that agreement. However, recipients who perform their duties on a Federal site that cannot be conducted elsewhere should seek additional guidance from the Contracting Officer to determine whether or not all staff normally working under the agreement should report for work at the Federal site.

USGS Vacancies that closed during the 12/22 – 2/1 timeframe

12/22/18 through 02/01/19

Number of Vacancies: 27

Applications Received: 1160

12/22/17 through 02/01/18

Number of Vacancies: 106

Applications Received: 6660

12/22/16 through 02/01/17

Number of Vacancies: 255

Applications Received: 13935

USGS Furlough Report

12.23.2018 - 1.25.2019

Key Accomplishments During Furlough (Add bullet points and quantify where possible).

Information Management Technology (IMT):

- Coordinated with Mission Area and Programs to assure excepted IMT operations were maintained.
 - Water Mission Area network issue, NEIC physical security issue on doors.
- Maintained daily contact with Departmental and other Bureau IMT leads.
 - Assisted DOI with Menlo Park Trusted Internet Connection, DOI Pulse Secure, DNS hijacking security datacall and actions, and EROS outage.
- Coordinated and tracked bureau-wide excepted IT operations, cybersecurity and outages.
 - Multiple local site outages, password expirations and web site issues.
- Assessed and deployed critical patches to externally facing systems.
- OEI, HR & Security Office worked together to help imminently expiring personal identity verification (PIV) cards for individuals (contractor and federal) who performed excepted work.
- Website PHP Hypertext Preprocessor unexpectedly required an upgrade, which in turn required an update to Drupal. The WRET developed a plan with time and cost estimates to inform a new task order for the contractor to begin this critical work earlier than planned.
- OC was able to get the Web Reengineering Team contractor funded to do a routine but necessary security patch to Drupal.

Disaster Recovery:

- Accepted delivery and provided pre-release lidar data and products to customer with a critical need in areas impacted by hurricanes and wildfires in 2018. Specific areas where data have either been delivered or were due to be delivered in the next 30-45 days: Puerto Rico/US Virgin Islands; Northern and Southern CA; Florida.

Hazards:

- Maintained executive coordination pertaining to network monitoring systems and worked in coordination with other Federal agencies in case of a natural disaster (flood). Primary focus was on the streamgauge monitoring network. Approximately 400 sites were serviced or repaired to ensure our partners have the information needed to help protect lives and property.
- Monitored and reported on domestic and global earthquakes through the 24X7 National Earthquake Information Center (NEIC) in Colorado. Staff at USGS volcano observatories provided basic monitoring of potential eruptive activity at US volcanoes.

- Maintained servers for the ShakeAlert West Coast earthquake early warning (EEW) system as well as continued to approve and monitor pilot projects for the ShakeAlert system and worked to permit and install seismic stations for earthquake early warning funded by the California Governor's Office of Emergency Services.
- Coordinated with the National Weather Service and the California Geological Survey on debris-flow conditions in central and southern California. Winter-season rains and recent wildfires created conditions conducive to debris flows in many parts of the state, and rainfall criteria developed by the USGS used by the NWS to deliver alerts for potential debris flow occurrence.
- The USGS also coordinated with the NWS in the San Francisco Bay region for the possibility of debris flows in unburned areas. The USGS maintains a network of stations in the region that collect data on soil-moisture conditions and this information is interpreted by the USGS and then used by the NWS to deliver alerts for debris flow and other landslide occurrence.
- Took procurement action on seismic equipment contracts for earthquake and volcano monitoring, EEW Build-out, ANSS Regional Seismic Network. Obtained permits and installed seismic stations.
- Conducted maintenance on remote weather stations in extreme weather winter environments. Public safety would be compromised without data from these stations.
- Collected storm water samples.
- Retrieved research platforms floating in New York's Finger Lakes before the sensitive equipment would sink and be unrecoverable saving \$250,000.

Time Sensitive Data:

- Conducted time-sensitive, critical maintenance of a long-term rangeland experiment to show BLM and private ranchers when resumption of livestock grazing could safely follow wildfire.
- Shipped critical samples for genetic analyses to be used for USFWS.

Landsat

Flight and ground operations for Landsat 7 and Landsat 8 missions were operated nominally throughout the shutdown.

- Authorization to Proceed (ATP) in place for the USGS-NOAA interagency agreement which provides NOAA services for taking Landsat 8 passes.
- Prior to the shutdown, the CO had given permission for NGIS to travel to the Landsat 8 MOC to repair a non-functioning Spacecraft/Observatory Simulator. Due to the shutdown, the contractor was directed to not travel and we are looking to re-schedule, which will be delayed due to lack of availability by the subject matter expert.

The Landsat 8 Spacecraft / Observatory Simulator (S/OS) has been in a state of disrepair for some time and is currently not functional.

- Due to the shutdown we were directed that no contractor travel was approved so we

cancelled the travel scheduled during the shutdown.

- We will reschedule with NGIS but it may be several weeks before they can reschedule due to the required subject matter expert availability.

Landsat 9 was able to continue critical ground system development and operational readiness work during the shutdown period through the “no-year” funding.

- The team was able to maintain the schedule for critical technical milestones.
- The Landsat Mission Operations team was able to hold the schedule for Landsat Multi-satellite Operation Center (LMOC) build 2.0 that is on the critical path for the ground system.
- The TSSC team was able to make significant progress on the Data Processing and Archive System (DPAS) build 1.0 which is needed for GRT-2.

Office of Acquisitions and Grants

The Office of Acquisition and Grants (OAG) had a Shutdown Master Contract List of over 4,000 services contacts to review to determine whether a notice to the contractor was required to either stop work or reduce the level of performance. OAG Contracting Officers issued hundreds of notices to contractors in the beginning of the Furlough to affect an orderly shutdown. As the Shutdown continued, OAG responded daily to inquiries from both contractors and excepted personnel, in addition to issuing over 50 contractor notices to resume some level of performance in response to mission essential activities. OAG staff was also called back to make award of 20 critical cooperative agreements supporting the Natural Hazards Seismic Network, Earthquake Early Warning system and the Volcano Hazards Program.

Unable to support / Data that was impacted (Identify the high-value/visibility activities that we had to forego, and describe the impacts/implications of that lost work).

- Cryo-freezer in Porter Indiana failed and some samples thawed -internet service was shut off by provider due to an unpaid bill . Samples were transferred to a backup freezer but viability is unknown pending analysis.
- National Minerals Information Center (NMIC) was unable to complete work on the annual Mineral Commodities Summary in time for scheduled release on January 28. This is a high visibility report that is released on the same week every year. New release date is uncertain, but is likely no earlier than late February.
- The USGS was not able to participate in the City of Los Angeles public rollout of a new EEW app that the city developed to take advantage of the ShakeAlert system.

- Many science center reimbursable projects are a month behind schedule potentially causing delay in delivery of products some of which may be high visibility.
- Hydrologic network data records are high visibility due to the number of water resource decisions based upon them; timeliness of records has been substantially impacted.
- Science centers will have substantially decreased financial freeboard with which to work on innovative new science at the center level; in USGS centers are an important source of innovation.
- The NRPP FY2019 cycle will need to be delayed and the SSP FY2020 cycle may have to be delayed. RFP process for making funding decisions for the FY19 Emerging Diseases Cyclical Disrupted. Secretarial clearance on several CRU Research Work Orders have been delayed which will influence start dates or the continuation of those projects.
- The Critical Minerals Mapping Initiative project has been preparing a report and data release to jumpstart the proposed 3DEEP partnership with State Geological Surveys and others. Because of the furlough, the presentation for State Geological Surveys that was slated for January 15 and the finalization and distribution of the report and data are delayed by 5 weeks. This delay will impact the proposal process for new geological mapping, geophysical surveys, and Lidar acquisition necessary to address the Nation's need for domestic sources of critical minerals.

Task Forces, Important Meetings and Conferences:

- Missed the Sagebrush Executive Oversight Committee meeting at the Western Association of Fish and Wildlife Agencies Mid-Winter Meeting on Jan 4th. This was an opportunity to provide important updates to State partners.
- Oversight team for the WAFWA Sagebrush Conservation Strategy unable to edit the Strategy document before stakeholder outreach meetings and other important events over the next few months. DOI Invasive Species Task Force in-person MIB meetings for 1/22/19 were cancelled.
- eDNA workshop *with NOAA* and others needs to be rescheduled; USGS led ecological forecasting workshop (*important to Wye River NOAA meeting*) to be rescheduled. Science Planning with BOEM, BLM, NPS, and FWS delayed until it can be rescheduled.
- Wind Energy and Bats coordination call with Wind Industry representatives, U.S. DOE Wind Technologies Program, USFWS, and NGOs missed.
- Several coordination meetings missed with fire management programs in DOI and bureaus, and with other emergency management programs about fire. USGS fire science strategic planning setback: January was slated for rollout of workplan and initiating effort on developing USGS fire science strategic plan. Joint Fire Science Program Governing Board January call canceled, including key discussion on recommendation for future governance of the program. Disrupted program of work, key decisions on renewal of Fire Science Exchange Network program.

Hiring and retention impacts:

In Pacific Region Centers, a key Network Ops supervisor is applying for work elsewhere. A Center Director had to talk another employee into staying. The shutdown delayed the process of bringing on-board the new Safety Officer for the Menlo Park campus. At another Center, eight candidates for positions stalled during the shutdown indicated they are no longer available for consideration. Overall, the shutdown increased the HR backlog and efficiency significantly delayed field tech recruitments, impactings some time sensitive field work.

Lessons Learned (Insert what you learned that would be helpful to know in future)

1. Need to know the funds status by Center. (the availability reports OAFM posted showed carryover by various views - ELT line authority, region and fund center - we need a better way of gathering the unknowns and recommendations on what additional reports could be be provided)
2. Need permission for reimbursable work in advance [we should get DOI/OMB clearance in advance that essentially all reimbursable-funded work can continue during a lapse, rather than that each reimbursable project needs permission before it can proceed]
3. Executives, budget officers and program coordinators should all be on the Part time excepted list.
4. Center Directors should also be part-time excepted from the start, as they get involved in assessing and dealing with problems, responding to information requests, activating people for hazard and emergency work, etc. throughout a furlough and it is difficult to do so mid-stream.
5. Thought may need to be given about the need to update the Contingency Plan to reflect the actions that will need to take place during each week of the shutdown (week #1, week #2, week #3, etc.). With each week new tasks emerged that were not necessarily in the plan.
6. Need a “one stop shop” of information that is easy to access and update
 - a. Would save HQ staff from having to answer duplicate questions - as they come in, could update FAQs.
 - b. Should create a “Shutdown Playbook” that is clear, well organized, definitive, detailed
7. Need for a centralized way to submit questions
 - a. Recommend having a “Shutdown Helpdesk” -- could have HQ and Regional operations staff work together, have access to shutdown inquiries -- might save double working. Input from helpdesk could be used to populate FAQ on “one stop shop.”
 - b. A website with searchable SOPs would be helpful and could be updated as guidance or capabilities change rapidly.
8. Excepted lists need to be one line per person for quick consolidation and easy roll-up
 - a. This action is complete
9. On Call Roster should include all employees approved for travel or on Permanent Change of Station (PCS) travel.

10. Need clear definitions on part-time excepted, excepted, exempt, and special case activities that can be shared with Centers. Also, having clear guidance/instructions on the approval authorities (Centers, Regions, HQ, etc) and processes would also be helpful.
11. Provide a means of acknowledging furlough notices without having to access the USGS intranet (i.e. via EARs, BisonConnect or web link)
12. IMT services that were operational required shipments for parts, which were impacted as the Reston mailroom was closed.
13. IMT POCs need to be established for each mission area and region to coordinate any activities that become immediate needs.
14. Need to clarify and rethink the ability to take computer home during a shutdown. All telework employees should be told to take their computer equipment home just in case they are activated.
15. At a minimum - if computers can't be taken home - employees should be able to bring government phones and tablets home rather than leave them at the office. Current guidance is essentially "leave everything behind", which greatly hinders the ability to communicate and potentially activate people during the shutdown.
16. Clarity should be provided regarding the ability to check email daily, the expectation that employees will check email daily, and the requirement to do so on government provided equipment.
17. Clarity should be provided if a person can be on excepted list to cancel travel - or could this be part of the allowed 15 minutes to check email.... OAFM was unable to cancel lodging reserved outside of travel system as
18. The same people need to be in the furlough preparation and actual furlough meetings.
 - a. This would allow for needed reports to be determined ahead of time and run consistently
 - b. This would allow for follow up to data calls to be completed consistently
- 19.



Gesch, Dean <gesch@usgs.gov>

Marshall Islands geodetic control

1 message

Helweg, David <dhelweg@usgs.gov>

Tue, Feb 19, 2019 at 2:56 PM

To: "Cushing, Janet" <jcushing@usgs.gov>, Jeffrey J Danielson <daniels@usgs.gov>, Dean Gesch <gesch@usgs.gov>, John Haines <jhaines@usgs.gov>, Guy Gelfenbaum <ggelfenbaum@usgs.gov>
Cc: Douglas Beard <dbeard@usgs.gov>

Aloha folks,

I hope this email finds you well!

We were sidelined by the shutdown, but the RMI government continues to be interested in developing this concept. I received email today indicating they are most interested in the Alternative #1 approach. It's easy to imagine how regional universities, such as the GIS center of excellence at UGuam and UAV expertise at UHawaii, could be involved along with the USGS (and NOAA geodesy) shops who already have been supporting coastal flooding issues in the Marshalls.

Importantly, the deadline to apply for OIA TAP funds is March 1. This is something they do, not us. At this time, they (RMI) are getting their ducks lined up as far as which of their agency's will take the lead, and they are very aware of the OIA deadline.

If USGS is going to collaborate then I hopeful that you can find time to renew the discussion we were having back in December.

Dave

David A. Helweg, Ph.D.
Senior Liaison for Insular Relations
National Climate Adaptation Science Center
US Geological Survey
cell 808.342.7606



RMI Geodetic Control and Mapping DRAFT 18Dec18.docx
116K



Gesch, Dean <gesch@usgs.gov>

Pohnpei trip

1 message

Buffington, Kevin <kbuffington@usgs.gov>

Thu, Feb 21, 2019 at 9:19 AM

To: Tamara Greenstone Alefaio <conservation@ourmicronesia.org>, Francisca Obispo <cspterrestrial@serehd.org>, "Irwin, Jeffrey" <jirwin@usgs.gov>, Jeffrey J Danielson <daniels@usgs.gov>, "MacKenzie, Richard -FS" <rmackenzie@fs.fed.us>, Bejay Obispo <bejayobispo81@gmail.com>

Cc: Karen Thorne <kthorne@usgs.gov>, Dean Gesch <gesch@usgs.gov>

Hi everyone,

Now that the threat of government shutdowns is behind us (for now...) we need to solidify plans for the survey campaign on Pohnpei ASAP. **April 7-28** is next best time for us GS folks, with field work **April 11-26**. To make that happen we need confirmation that CSP can provide logistical support for that time.

Fran/Bejay -- is CSP able to help out during that time? If so, I'll update and send the proposed daily schedule.

Tam -- if CSP is not able to help, are there other options for local support?

Once local assistance is confirmed we'll be able to complete the admin approvals process on our end & book tickets. Field gear would need be shipped to Pohnpei no later than the week of **March 11**.

Rich -- any chance you or your crew would be able to join us? Surveying the SETs are the top priority for us. It would be useful to have someone there to help us locate them, but probably not necessary.

Thanks,
Kevin

--

Kevin Buffington, PhD
One Shields Ave
USGS Davis Field Station
Davis, CA 95616
Cell: 707-315-4256



Gesch, Dean <gesch@usgs.gov>

RE: [EXTERNAL] Assessment of a research grant application

1 message

Gebruikersondersteuning Ruimteonderzoek <go@spaceoffice.nl>

Thu, Jan 31, 2019 at 3:14 AM

To: "Gesch, Dean" <gesch@usgs.gov>

Dear Dr Gesch,

Thank you very much for your kind e-mail and for your offer to serve as a reviewer. I realized that the government shutdown made it impossible for government employees to even access their e-mail. So I understand the delay in replying completely! In the past few weeks we have been busy trying to find alternate reviewers. To be honest, we already found sufficient reviewers for the proposal of Professor Middelkoop.

I very much welcome your offer to serve as a reviewer for future relevant proposals and it will be my pleasure to contact you again in the future.

Thanks again and all the best,

Danielle

Van: Gesch, Dean <gesch@usgs.gov>**Verzonden:** woensdag 30 januari 2019 21:39**Aan:** Gebruikersondersteuning Ruimteonderzoek <go@spaceoffice.nl>; Hollman - Bogaert, D.S.D. (Daniëlle) <d.hollman@spaceoffice.nl>**Onderwerp:** Re: [EXTERNAL] Assessment of a research grant application

Dear Dr. Hollman,

I apologize for the delayed reply to your inquiry. I am a U.S. federal government employee and due to the recent government shutdown (due to a lapse in funding) I was not allowed to perform any professional work, including replying to email. I appreciate the request to serve as a reviewer for the research grant, and given the subject matter I believe my review would have been appropriate. If, perhaps, there is still a need for the review, I would be glad to serve in that capacity. Or, perhaps I could serve as a reviewer for future relevant proposals.

Again, I apologize for the inconvenience of my non-response to the original inquiry, and I wish you the best with the research program.

Regards,

Dean

5/7/2019

DEPARTMENT OF THE INTERIOR Mail - RE: [EXTERNAL] Assessment of a research grant application

Dean Gesch, Ph.D.

U.S. Geological Survey

Earth Resources Observation and Science Center

Sioux Falls, SD 57198

Phone: 605-594-6055

Fax: 605-594-6529

Email: gesch@usgs.gov

On Mon, Dec 24, 2018 at 3:40 AM Gebruikersondersteuning Ruimteonderzoek <go@spaceoffice.nl> wrote:

Dear Dr Gesch,

Please find attached the Executive Summary of a research proposal that was submitted to the Netherlands Space Office (NSO) for funding. The User Support Programme Space Research, which is managed by NSO on behalf of the Dutch research council NWO, offers financial support to researchers working in the Netherlands during the (preparation for) use of scientific infrastructure in space for the purpose of high quality research.

We would greatly appreciate receiving your professional opinion concerning the scientific merits of the research proposal submitted by Prof Middelkoop. In case you (or one of your colleagues) are willing to review the full proposal and are able to meet the deadline of 31 January 2019, please reply to this e-mail as soon as possible. We will then send you the complete research proposal (22 pages) and a standard review form by e-mail.

In case you are not able to act as reviewer for this proposal, could you perhaps suggest the name (and preferably the e-mail address) of another expert in the field?

Thanking you in advance,

Danielle Hollman

Danielle Hollman

Advisor scientific programs

.....
Netherlands Space Office (NSO)

[Prinses Beatrixlaan 2 | 2595 AL | The Hague | The Netherlands](#)

P.O. Box 93144 | 2509 AC | The Hague | The Netherlands

.....
T +31 (0) 88 042 45 44

M +31 (0) 6 5023 15 89

AMERICAN
OVERSIGHT

MULTI-DOI-USGIS-19-0441-A-000014

d.hollman@spaceoffice.nl

<http://www.spaceoffice.nl>

.....

Note: If you agree to review the application specified above, we will assume that you can truly be considered as an independent referee, as referred to in the NWO Code of Conduct on Conflicts of Interest (available on www.nwo.nl). If this is not the case, I kindly request you to inform me as soon as possible. Should you have any doubts in this respect, please do not hesitate to contact me for more information.

Dit bericht kan informatie bevatten die niet voor u is bestemd. Indien u niet de geadresseerde bent of dit bericht abusievelijk aan u is gezonden, wordt u verzocht dat aan de afzender te melden en het bericht te verwijderen.

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Technical Assistance to Republic of the Marshall Islands to build capacity for Geodetic Control and UAV-based Mapping

DRAFT dated December 18, 2018

Purpose: the purpose of this white paper is to stimulate discussion between RMI agencies responsible for land survey, disaster, and coastal management and USGS science to develop a proposal for technical training to support coastal encroachment (flooding) analysis.

Background: The RMI is a nation of low islands and atolls that are highly vulnerable to coastal processes such as flooding and erosion, which can threaten infrastructure, fresh water systems, agricultural systems, and community health. For scientists to analyze these threats, they require high-resolution maps of nearshore water depth up to the waterline (bathymetry) and height above waterline (topography). However, before high-resolution mapping can be done, it is first required to make detailed measurements of the sea level and height of land above sea level on selected atolls and islets. This geospatial control permits accurate second-phase mapping to be accomplished. Once maps are created and validated, they form the basis for coastal encroachment analysis and planning.

Image thanks to Mark Stege.



Technical Assistance Need:

- A systematic approach to establishing a nation-wide geodetic control network and database of digital maps would start with the Marshallese government and organizations, and a plan to collect and analyze field data would be developed.
- This proposal capitalizes on the technical skills and interagency collaboration that led to successful development of the Majuro TBDEM developed by the US Geological Survey and colleagues¹.
- Personal communication with Mr. Mark Stege indicates that the RMI geodetic control network comprises Majuro, Ebeye, Wotho, and possibly Arno and others. In the pipeline for 2019-2020, Ebon, Mejit, Aur, and Likiep are due to be added as part of the GEF-5 Ridge to Reef project that Jennifer deBrum is leading.
- In locations for which geodetic control is likely to be quickly established (e.g., places for which accurate estimates of sea level already are available), technical training to create benchmarks and collect mapping transects could be conducted with UAVs (drones) and other manual methods. However, to convert the field measurements to digital maps of the land surface requires substantial expertise and high-performance computing. It may be possible to develop this in regional institutions such as the University of Guam.
- In locations for which accurate estimates of sea level are not available, it may be sensible for RMI to develop a plan to collect the necessary data and then work with USGS and NOAA to support this more intensive field work.

- Alternative Approach #1
 1. The RMI will lead development and execution of the efforts to create geodetic control and conduct mapping efforts, including a steering committee that will ensure all programs directed at developing maps, regardless of funding source(s), will be informed, coordinated, and non-duplicative.
 2. Data would be collected by local teams with Technical Assistance from USGS and regional experts (e.g., University of Hawaii at Hilo, University of Guam).
 3. It is recommended that mapping data be collected using a “toolkit” of UAVs and equipment to reside in-country, along with other public data, as per the Majuro TBDEM. USGS would be available to advise on the types of equipment needed to collect accurate data. Importantly, purchasing one or two “toolkits” might be included in a proposal for OIA TAP funds.
 4. Processing of mapping imagery to create Digital Elevation Models requires substantial expertise (e.g., Structure from Motion, Satellite-Derived Bathymetry) as well as computer resources. As part of this technical assistance proposal, it is recommended that USGS CoNED team partner with the USGS Pacific Islands Climate Adaptation Science Center to develop the computing expertise and resources needed with their University consortium.
 5. It is envisioned that a successful Technical Assistance will result in a fully-empowered geodetic and mapping team led by the RMI (“the Micronesian team”), with USGS and partner institutions being available for quality check after the Micronesian team is established.
- Alternative Approach #2:
 - o RMI government and partners provide funds to USGS to collect field data and create the digital maps. USGS will deliver project reports and digital maps on a per-island or per-effort basis.
- Alternative Approach #3:
 - o RMI government and partners provide funds to another science and technical assistance provider to collect field data and create the digital maps.

ⁱ <https://www.sciencebase.gov/catalog/item/59557881e4b04e08be532c9a>



Wylie, Bruce <wylie@usgs.gov>

Re: to 110 deliverable...

1 message

Wylie, Bruce <wylie@usgs.gov>

Wed, Apr 24, 2019 at 8:36 AM

To: "Howard, Danny (Contractor)" <dhoward@contractor.usgs.gov>

Cc: Frederick Badke <fbadke@usgs.gov>, GS-N-EDC TSSC TPCO <gs-n-edc_tssc_tpc@usgs.gov>, Ron Risty <risty@contractor.usgs.gov>

Yes! This sounds good to me. I know Steve (lead author) also has the Near-real time maps which are due in late May and late June, so I even think a late June submission would be fine. Great though if its submitted in May as you suggest...
A quality manuscript is our goal!!

Bruce K. Wylie
Research Physical Scientist
USGS Earth Resources Observation and Science Center
Sioux Falls, SD 57198
ORCID author ID: 0000-0002-7374-1083
lca.usgs.gov
wylie@usgs.gov
ph (605) 594-6078
Fx (605) 594-6529

On Wed, Apr 24, 2019 at 8:13 AM Howard, Danny (Contractor) <dhoward@contractor.usgs.gov> wrote:

Bruce,

The paper is nearing completion. We believe it will be ready to enter the review process, starting with co-author review, by May 3rd. The co-authors will be given 5 business days to respond and Steve will need maybe a day or two to reconcile. Then it will move onto the peer review. We have an individual already selected for this and has agreed to return within two weeks upon receiving. The paper will then be reconciled and submitted to the journal. I would say by Jun 14, the paper will be submitted.

The follow up to TO110 (which end April 30), TO136 has language in it to respond to reviewers of this paper... and ultimately bring to publication.

Up until recently, I was anticipating this being ready by the end of our contract, even with the govt shutdown. But, as you described in your email, this research has went in directions that were not expected (as these kind of activities often do!). Given this (and the govt shutdown), can TSSC deliver the latest draft of the paper on April 30th for delivery of A4429; Eco_Dyn - Annual Herbaceous Performance Anomaly Research Paper Submission and proceed as described above in TO136?

Thank you,

Danny Howard, PMP



KBRwyle | Task Manager

Contractor to the USGS Earth Resources Observation and Science (EROS) Center

47914 252nd Street | Sioux Falls, SD 57198 | USA

Office: +1 605.594.6085 | dhoward@contractor.usgs.gov | ORCID

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On Tue, Apr 23, 2019 at 9:21 AM Wylie, Bruce <wylie@usgs.gov> wrote:

It sounds like Steve B. will not get the performance anomaly paper submitted by the 30th.

"Manuscript submitted on herbaceous annual performance anomalies 2000- 2017 in the extended mapping area with assessment of post fire succession trajectories"

Steve and I have sought to preserve quality and have had our BLM collaborator review several versions of preliminary maps. Also some innovative summary statistics were developed by Steve and I. The manuscript and analysis has evolved (we listened to what the data was indicating) to mapping tipping points (conversion from sagebrush to cheatgrass), stable (maintained sagebrush), and sagebrush recovery). I have asked Steve for a copy of the current manuscript so I can better assess its current condition. I suspect the manuscript is near finalization and co-author review. Next would be internal USGS review before journal submission. My sense is that this will be submitted by the end of May (but near-real time mapping will be a priority then).

Bruce K. Wylie
Research Physical Scientist
USGS Earth Resources Observation and Science Center
Sioux Falls, SD 57198
ORCID author ID: 0000-0002-7374-1083
lca.usgs.gov
wylie@usgs.gov
ph (605) 594-6078
Fx (605) 594-6529



Wylie, Bruce <wylie@usgs.gov>

Fwd: impacts of the shut down...

1 message

Howard, Danny (Contractor) <dhoward@contractor.usgs.gov>
To: Bruce K Wylie <wylie@usgs.gov>

Tue, May 7, 2019 at 2:09 PM

Bruce, These are all deliverable changes for task 110. Does this get you the information you need?

Let me know if you need further explanation.

Danny Howard, PMP



KBRwyle | Task Manager

Contractor to the USGS Earth Resources Observation and Science (EROS) Center

47914 252nd Street | Sioux Falls, SD 57198 | USA

Office: +1 605.594.6085 | dhoward@contractor.usgs.gov | ORCID

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----- Forwarded message -----

From: **Munk, Karen (Contractor)** <kmunk@contractor.usgs.gov>
Date: Tue, May 7, 2019 at 1:49 PM
Subject: Re: impacts of the shut down...
To: Howard, Danny (Contractor) <dhoward@contractor.usgs.gov>



Karen A. Munk
KBR / Project Controller, Task Planning & Controls Office
KBR, Contractor to the USGS Earth Resources Observation
and Science (EROS) Center
[47914 252nd St.](#)
[Sioux Falls, South Dakota 57198](#)
Phone: (605) 594-6043
Email: kmunk@contractor.usgs.gov

On Tue, May 7, 2019 at 12:53 PM Howard, Danny (Contractor) <dhoward@contractor.usgs.gov> wrote:

Hi Karen, can you capture all deliverable mods that occurred on task 110? Would be great if you can also include the justification that we used.

Danny Howard, PMP



KBRwyle | Task Manager

Contractor to the USGS Earth Resources Observation and Science (EROS) Center

47914 252nd Street | Sioux Falls, SD 57198 | USA

Office: +1 605.594.6085 | dhoward@contractor.usgs.gov | ORCID

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5/8/2019

DEPARTMENT OF THE INTERIOR Mail - Fwd: impacts of the shut down...

----- Forwarded message -----
From: **Wylie, Bruce** <wylie@usgs.gov>
Date: Tue, May 7, 2019 at 9:00 AM
Subject: impacts of the shut down...
To: Danny Howard <dhoward@contractor.usgs.gov>

How do access those deliverable modifications associated with the shut down.
This so for a FOIA request.

Bruce K. Wylie
Research Physical Scientist
USGS Earth Resources Observation and Science Center
Sioux Falls, SD 57198
ORCID author ID: 0000-0002-7374-1083
ca.usgs.gov
wylie@usgs.gov
ph (605) 594-6078
Fx (605) 594-6529



110 Deliv Changes 05 07 19.xlsx

11K

-Alaska USGS LandCarbon work is focused on identifying vulnerable permafrost in high latitude systems. The collection of Landsat mosaics that capture the temporal dynamics of surface water (often linked with permafrost) was delayed by the Government shutdown. These are the building block data sets needed for assessing and mapping changing water dynamics that may be indicative of permafrost degradation. This has delayed the future planned publication of a scientific manuscript on this by about a month and impacted one ¾ month's level of effort of a Scientist contractor. Impacts of this could be linked to being more competitive in scientific calls for proposals and the probability of getting research funding sources (which are often very limited). Further, the latency of us producing new findings or finalizing new research findings does tend to degrade our scientific notoriety as both individual scientists and as an organization (USGS EROS).

-Sentinel-2/Landsat harmonization to improve cheatgrass (invasive species) mapping informs habitat degradation, increasing fire risk and fire behavior, control of invasive species, and possible targeted grazing during a very short growing season. Currently we produce near-real time herbaceous annual cover (mostly invasive species and 60% or more is often Cheatgrass) maps for the Great Basin extended through Wyoming. One map is produced in late May and one in June at a resolution of 250m. With a degrading and aging MODIS satellite system (250m resolution), we look to integrate Sentinel vegetation index (NDVI) with Landsat NDVI to produce cloud free weekly NDVI throughout the growing season. This would allow planned 30m near-real time herbaceous annual map products in the spring of 2020. Since herbaceous annual cover typically has an early and short growing season followed by rapid senescence and death, our mapping approach relies heavily on the phenological signal (biomass or vegetation cover through time) of an early rapid green up followed by rapid senescence. The Contract scientist has been working extended hours developing automated scripts for large area cloud free weekly 30m NDVI mapping, the basic building block for herbaceous annual cover mapping. This process was not only stopped by the shutdown but we also lost intellectual momentum as team members had to try and pick back up where they were a month ago. This impacted the efforts of 3.5 contractor staff members for a month (not including possible extended hours which was in effect prior to the shutdown). This delayed the preliminary mapping of 30m weekly NDVI for 2016-2018 on the test region (deliverable in contract with BLM) and may reduce our probability of getting year 2 monies from the BLM to develop the 30m near-real time herbaceous annual maps in 2020 for a larger area. This analysis will utilize BLM field data (AIM plots) for model development. The 30m herbaceous annual maps are also a promised product to Fish and Wildlife Service on selected wildlife refuges to aid in the control of cheatgrass invasion. We continue to refine and improve (speed and quality) our cloud-free 30m NDVI scripts to further improve products produced for the test region. Other objectives we hoped to achieve would be the cloud free weekly 30m mapping of the red-edge reflectance from the Sentinel-2 satellite, which has improved other shrubland/rangeland mapping efforts.

-We are preparing a manuscript (was due April 30, 2019, but not finalized largely due to the shutdown) on Sage ecosystem long term ecological tipping points and cheatgrass invasions. Completion of this manuscript has been postponed until June. One factor is that the scientist working on the manuscript now must halt this work to prepare the 2019 near-real time 250m herbaceous annual map mentioned above. We had planned to have the manuscript submitted to a journal prior to our having to build the 2019 near-real time maps. Another issue is that insight revealed in this analysis lead to modifications which greatly improved the mapping of 1) areas converted from sage to cheatgrass, 2) areas of stable sagebrush, and 3) areas of recovering sagebrush. The delayed manuscript submission and assumable

subsequent publication retards informing land stewards of these significant findings but also degrades our scientific notoriety and relevance. It may also reduce our probability of continued funding from the BLM. This impacted 1 month of a contractor's time.

-Ability to recruit new scientists to continue these useful efforts has been impacted. Current USGS lead scientist on these tasks has been eligible for retirement for over a year. These future duties are planned to be delegated to components of two separate federal positions (a Mendenhall post doc and a temporary USGS position, both in process). Given both budget uncertainties as well as sporadic shutdowns or threats of shutdowns does not bode well for a stable research environment, making recruitment of top talent difficult.

-Through our contracting mechanism, our contractor has made a request or appeal to get approval for paying contract staff time during the shutdown. This impacts our budget estimates as we do not know if those funds can be leveraged for future work or if they will be needed to pay for contractor hours during the shutdown



Payne, Julie <jpayne@usgs.gov>

One more item for FOIA

Sohl, Terry <sohl@usgs.gov>

Thu, May 9, 2019 at 1:59 PM

To: Julie Payne <jpayne@usgs.gov>

Hi Julie,

I can't find a record of it in an email, but I was just reminded of another impact of the shutdown. Here's a summary if this works?

Prior to the shutdown, personnel on the land-cover modeling task associated with ETQ10 and E8Y16 funding sources queued a long list of model runs. These are complex models that take many hours to run. The hope was that if we shut down, at least our modeling server would keep processing data.

However, when we returned in late January, the output of all model runs had been erased. A mechanism on our server automatically cleans up old files that haven't been downloaded for >30 days, and given the shutdown lasted longer than that, the automatic deletion of "old" files kicked in. Our project thus lost several weeks worth of model runs that had to be restarted once the shutdown was over. In effect, we "lost" several weeks worth of work (model runs) on top of the 5-week delay in kicking off additional work.

Terry L. Sohl

Research Physical Scientist

USGS Earth Resources Observation and Science (EROS) Center

47914 252nd Street

Sioux Falls, South Dakota 57198

sohl@usgs.gov

605-594-6537



Sohl, Terry <sohl@usgs.gov>

LULC Planned Deliverables

1 message

Risty (Contractor), Ron <risty@contractor.usgs.gov>
To: "Sohl, Terry" <sohl@usgs.gov>

Tue, Jan 29, 2019 at 7:23 AM

With the recent government shutdown, the COR is asking for a response back on what project deliverables were affected with new dates.

A4988 - Acquire and process historical backcasting for a Southeast ecoregion was due on December 31.

A4989 - Complete WAFERx scenarios - February 28

If you could provide an update date on the two deliverables, that would be appreciated. Our input back is due this Thursday.

Thanks,

RRR



Sohl, Terry <sohl@usgs.gov>

Fwd: LULC Planned Deliverables

1 message

Risty (Contractor), Ron <risty@contractor.usgs.gov>

Tue, Jan 29, 2019 at 12:56 PM

To: Frederick Badke <fbadke@usgs.gov>, "Sohl, Terry" <sohl@usgs.gov>, Ronald Feistner <feistner@contractor.usgs.gov>

See new request deliverable date to Task 115 Deliverable A4988 per Terry Sohl, USGS PM.

Thanks,

RRR

----- Forwarded message -----

From: **Sohl, Terry** <sohl@usgs.gov>

Date: Tue, Jan 29, 2019 at 7:32 AM

Subject: Re: LULC Planned Deliverables

To: Risty (Contractor), Ron <risty@contractor.usgs.gov>

Right before the shutdown I'd sent out the following about A4988, stating the end of February is fine. Losing 5 weeks, I'd now say April 12th is fine for delivery.

A4989 is completely dependent upon delivery of scenarios from our partners on this WAFERx project. I have no indication that those scenarios are coming soon. In fact, one of the emails I got from the shutdown seemed to imply a delay in sketching out the scenarios on their end. Given we can't proceed without their scenario input, this deliverable is indefinitely delayed.

=====

Providing notice that deadline for deliverable 115-4 A4988 is extended. Delivery was originally scheduled for 12-31-18. USGS now is shooting for the end of February for that work to wrap up (02/28/19). The delay in the deliverable date is simply related to the unknowns that accompany any research activity, through no specific fault or inaction on TSSC's part.

The delay does not negatively impact other deliverables. The ultimate goal is modeling land use in the Southeast from 1600-2100, as noted by related deliverable 115-4 A4990. Providing the historical backcasting data for model parameterization by the end of February still provides ample time to complete all subsequent, related deliverables.

Terry L. Sohl

Research Physical Scientist

USGS Earth Resources Observation and Science (EROS) Center

47914 252nd Street

Sioux Falls, South Dakota 57198

sohl@usgs.gov

605-594-6537



Sohl, Terry <sohl@usgs.gov>

Re: LULC Planned Deliverables

1 message

Badke, Frederick <fbadke@usgs.gov>

Tue, Jan 29, 2019 at 1:27 PM

To: "Risty (Contractor), Ron" <risty@contractor.usgs.gov>

Cc: "Sohl, Terry" <sohl@usgs.gov>, Ronald Feistner <feistner@contractor.usgs.gov>

Mr. Risty,

Work with Ron F., I believe TSSC is working a mass deliverable change email, because of the shutdown and the numerous TOs impacted.

Please contact me with any questions and/or concerns. Thank you.

Respectfully,

Fred Badke

Contract Officer's Representative TSSC
 Management Analyst
 USGS EROS
 47914 252nd Street
 Sioux Falls, SD 57198
 P: (605) 594-2847

fbadke@usgs.gov

On Tue, Jan 29, 2019 at 12:56 PM Risty (Contractor), Ron <risty@contractor.usgs.gov> wrote:

See new request deliverable date to Task 115 Deliverable A4988 per Terry Sohl, USGS PM.

Thanks,

RRR

----- Forwarded message -----

From: **Sohl, Terry** <sohl@usgs.gov>

Date: Tue, Jan 29, 2019 at 7:32 AM

Subject: Re: LULC Planned Deliverables

To: Risty (Contractor), Ron <risty@contractor.usgs.gov>

Right before the shutdown I'd sent out the following about A4988, stating the end of February is fine. Losing 5 weeks, I'd now say April 12th is fine for delivery.

A4989 is completely dependent upon delivery of scenarios from our partners on this WAFERx project. I have no indication that those scenarios are coming soon. In fact, one of the emails I got from the shutdown seemed to imply a delay in sketching out the scenarios on their end. Given we can't proceed without their scenario input, this deliverable is indefinitely delayed.

=====

Providing notice that deadline for deliverable 115-4 A4988 is extended. Delivery was originally scheduled for 12-31-18. USGS now is shooting for the end of February for that work to wrap up (02/28/19). The delay in the deliverable date is simply related to the unknowns that accompany any research activity, through no specific fault or inaction on TSSC's part.

The delay does not negatively impact other deliverables. The ultimate goal is modeling land use in the Southeast from 1600-2100, as noted by related deliverable 115-4 A4990. Providing the historical backcasting data for model

MULTI-DOI-USGIS-19-0441-A-000026

parameterization by the end of February still provides ample time to complete all subsequent, related deliverables.

Terry L. Sohl

Research Physical Scientist

USGS Earth Resources Observation and Science (EROS) Center

47914 252nd Street

Sioux Falls, South Dakota 57198

sohl@usgs.gov

605-594-6537



Sohl, Terry <sohl@usgs.gov>

TSSC TO 0115 Deliverable Relief and/or Cancellation Requested

1 message

Frederick Badke <fbadke@usgs.gov>

Mon, Feb 11, 2019 at 7:45 AM

To: Terry Sohl <sohl@usgs.gov>

Cc: "Brown, Amanda" <akbrown@usgs.gov>, Cassandra Boyer <kboyer@usgs.gov>

Good morning Mr. Sohl,

Terry, as a result of the government shutdown, TSSC has identified the following deliverables for cancellation and/or requesting a new deliverable date. Please review and respond accordingly:

Task Order	Task Manager	Due Date	Requested New Delivery Date	Deliverable Name	Deliverable ID	Deliverable Note
115-4	Ron Risty	12/31/2018	4/12/19	LCLUM - Acquire and process historical backcasting for a Southeast ecoregion	115-4.100.1.W01.1-A4988	

Please contact me with any questions and/or concerns. Thank you.

Respectfully,

Fred Badke

COR TSSC/ Management Analyst

USGS EROS

[47914 252nd Street](#)[Sioux Falls, SD 57198](#)

P: (605) 594-2847

-

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Sohl, Terry <sohl@usgs.gov>

SER Flex Team: Rescheduling Integrated Water Resource and Land Change Modeling Workshop (3rd time's the charm)

1 message

Claggett, Peter <pclaggett@usgs.gov>

Fri, Apr 5, 2019 at 10:03 AM

To: Ana Garcia <agarcia@usgs.gov>, "Choquette, Anne" <achoq@usgs.gov>, Georgina Sanchez <gmsanche@ncsu.edu>, John Jones <jwjones@usgs.gov>, Labeeb Ahmed <lahmed@chesapeakebay.net>, "McMahon, Gerard" <gmcmahon@usgs.gov>, Rheannon Hart <rmhart@usgs.gov>, Richard 'Dick' Smith <rsmith1@usgs.gov>, Roland Viger <rviger@usgs.gov>, Ryan Boyles <rboyles@usgs.gov>, "Sleeter, Rachel" <rsleeter@usgs.gov>, "Terando, Adam" <aterando@usgs.gov>, Terry Sohl <sohl@usgs.gov>, Ward Sanford <wsanford@usgs.gov>, Robert Regan <rregan@usgs.gov>

Dear SER Flex Team Members,

As you recall, our workshop has been cancelled twice- first due to an impending Hurricane (which skirted around Raleigh at the last minute) and second by the winter furlough (which ended a few days prior to our planned January workshop). Well- turns out our funding has been extended until September 30th (Yay!). Therefore, I would like to try one last time to reschedule our workshop. Hopefully most of you know your summer schedules by now.

Below is a doodle poll (I hate them too) to reschedule our 3 day meeting (+ 2 travel days) in Raleigh, NC. I would like to avoid September for Hurricane reasons and the last week of August for those with school-age kids or academic duties. The following poll lists seven potential weeks in June, July, and August. Please fill out the doodle poll found here by next Friday (April 12th):

<https://doodle.com/poll/s6pcdt7qzneasrvy>

There are a lot of dates listed in the poll- so if it helps your planning- they refer to weeks starting with the following Monday's:

June 10th
July 8th
July 22nd
July 29th
August 5th
August 12th
August 19th

Once we settle on a date for the workshop, I will schedule a call for May or June to finalize logistics and roles.

Also, we have funding to invite a few additional people if desired. You can see from this email's address list who's currently invited. Please forward me any names of others whom you'd like to be considered for attending the workshop.

Lastly, if there are new developments relevant to this workshop (e.g., Water Mission Area directives or the like) that you would like to share with the group- please do via Reply All.

Thank you!
- Peter

Peter Claggett,
Research Geographer
Lower Mississippi-Gulf Water Science Center
U.S. Geological Survey
410 Severn Avenue, Suite 112
Annapolis, Maryland 21403
pclaggett@usgs.gov
Desk: 410-267-5771
Cell: 443-370-5724



Payne, Julie <jpayne@usgs.gov>

Fwd: [EXTERNAL] Fw: Copernicus Sentinel International Partner Data Access Annual Reporting - 2018

Kline, Kristi <kkline@usgs.gov>
To: "Payne, Julie" <jpayne@usgs.gov>

Fri, May 10, 2019 at 10:56 AM

----- Forwarded message -----

From: <Alex.Madden@esa.int>

Date: Wed, Jan 23, 2019 at 2:15 AM

Subject: Re: [EXTERNAL] Fw: Copernicus Sentinel International Partner Data Access Annual Reporting - 2018

To: Kline, Kristi <kkline@usgs.gov>

Cc: John Dwyer <dwyer@usgs.gov>, Greg Land <greg.land.ctr@usgs.gov>, Jolyon Martin <Jolyon.Martin@esa.int>, Steven T Labahn <labahn@usgs.gov>

Dear Kristi,

Thank you very much for taking the time to respond despite the extraordinary circumstances you're in. We're all very sorry to hear about what you're all going through over there.

With best wishes,
Alex

From: "Kline, Kristi" <kkline@usgs.gov>

To: <Alex.Madden@esa.int>

Cc: Steven T Labahn <labahn@usgs.gov>, John Dwyer <dwyer@usgs.gov>, Greg Land <greg.land.ctr@usgs.gov>, Jolyon Martin <Jolyon.Martin@esa.int>

Date: 22/01/2019 23:07

Subject: Re: [EXTERNAL] Fw: Copernicus Sentinel International Partner Data Access Annual Reporting - 2018

Hi Alex,

Not sure if Steve has been on-line lately. We have now been shutdown for over a month. We are not allowed to work except on activities that are deemed essential for things like life and property. Unfortunately, most of us are not considered essential. I would expect to finish the reports once we are back to work. Sorry for the delay.

Kristi

On Mon, Jan 21, 2019 at 2:29 AM <Alex.Madden@esa.int> wrote:

Dear Steven,

I am helping Jolyon collate the statistics for the Sentinel Data Access Annual Report, and we were wondering if the US government shutdown might also be affecting your return of the annual statistics questionnaire. Given the chaos the shutdown is presumably causing, is it fair to assume you'll be unlikely to return the questionnaire before the end of January or even by as late as mid-February?

Serco is already in the final stages of preparing the Annual Report, so unfortunately this would mean we would have to issue the Report without any statistics for USGS, but we can obviously add an appropriate explanation if you would

like?

Best wishes,
Alex

Alex Madden
Copernicus Space Office
ESRIN/ESA
Largo Galileo Galilei 1
00044 Frascati
Italy
Tel: +39 06 941 80 453
alex.madden@esa.int

----- Forwarded by Jolyon Martin/esrin/ESA on 18/01/2019 15:58 -----

From: Jolyon Martin/esrin/ESA
To: Steven Labahn <labahn@usgs.gov>, John Dwyer <dwyer@usgs.gov>, Kristi Kline <kkline@usgs.gov>, Greg Land <greg.land.ctr@usgs.gov>
Date: 26/11/2018 10:08
Subject: Copernicus Sentinel International Partner Data Access Annual Reporting - 2018

Dear Steven, All

Attached below is the request for statistics for the Sentinel Data Access annual reporting ... as usual, many thanks for the collaboration.

Kind regards
Jolyon

=====

Dear International Partner for Sentinel Data Access,

In line with the provisions of the Copernicus Space Component Technical Operating Arrangement, we would be grateful if you would provide the annual report on data flow from your Sentinel data access system.

We would be grateful if you would use the template set out below to provide the required statistics. Please provide the data as fully as possible. Where information is either not available or not applicable, this should be indicated. The reporting period is 1 December 2017 to 30 November 2018, but some of the statistics requested require aggregated numbers going back to the beginning of your operations.

We highlight that we would like to include this data, or an analysis of the data, in the upcoming Sentinel Data Access Annual Report 2018. The report is being compiled by Serco SpA. It will be sent to the European Commission and subsequently made publicly available. We would be very grateful, therefore, if you could indicate in your document any information which you would not be willing for Serco to include in the Sentinel Data Access Annual Report 2018.

Please return your report by e-mail to jolyon.martin@esa.int, by 14 January 2019.

I take this occasion to thank you for your support to ESA.

Best regards

Jolyon Martin <Jolyon.Martin@esa.int>
Copernicus Space Component Ground Segment Development
<http://sentinels.copernicus.eu> <http://www.esa.int>
ESA-ESRIN, Largo Galileo Galilei 1, 00044 Frascati, Italy

MULTI-DOI-USGIS-19-0441-A-000032

tel +39 06 941 80663 fax +39 06 941 80612

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--

Kristi Kline
Project Manager
U. S. Geological Survey
Earth Resources Observation and Science Center
Sioux Falls, South Dakota 57198
Phone: (605) 594-2585

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--

Kristi Kline
Project Manager
U. S. Geological Survey
Earth Resources Observation and Science Center
Sioux Falls, South Dakota 57198
Phone: (605) 594-2585

<https://www.usgs.gov//land-resources/nli/landsat/january-28-2019-landsat-7-and-landsat-8-data-processing-status>

Landsat Headlines

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January 28, 2019 - Landsat 7 and Landsat 8 Data Processing Status

During the government shutdown Landsat 7 and Landsat 8 continually acquired data that were downlinked and archived at USGS EROS. The data were processed to the initial Real-Time (RT) collection tier, however calibration updates to process the scenes into Tier 1 or Tier 2 (Landsat 7 bumper mode and definitive ephemeris; Landsat 8 thermal line of sight model) were not able to be performed.

[Return to all Landsat Headlines](#)

Reprocessing of Landsat 8 data to Tier 1 or Tier 2 will begin Tuesday January 29; Landsat 7 reprocessing is planned to begin later this week.

We appreciate your patience during this time. Please contact [User Services](#) if you have any questions regarding this announcement.

NOTIFICATION FOR ACCEPTED PUBLICATION

The following information is requested of all USGS EROS authors for submission to John Dwyer and Jan Nelson. Please complete within 24-48 hours of notification that a publication has been accepted.

Name of USGS Author(s):	Data Set (No author. USGS Project Manager is Vaughn Ihlen vihlen@usgs.gov)
Date of Acceptance:	December 2018
Citation of Accepted Publication:	DOI links to Landsat Level-3 Science Product Pages Dynamic Surface Water Extent (DSWE) http://doi.org/10.5066/F7445KQK Fractional Snow-Covered Area (fSCA) http://doi.org/10.5066/F7XK8DS5 Burned Area (BA) http://doi.org/10.5066/F77W6BDJ
IPDS IP Publication Number:	DSWE: IP-103409 fSCA: IP-102818 BA: IP-102785
Anticipated Date of Publication:	December 2018

Please include 3-5 sentences* to describe the publication and its relevance or valued contribution to the Department of the Interior's missions and stake-holders. For new items, put [NEW] at the beginning of entry. For update items, include [UPDATE] at the beginning of entry and underline the updated information within the entry.

[NEW] The USGS have made a further improvement to the usability of Landsat satellite data with the release of three new Science Products called Dynamic Surface Water Extent (*describes the existence and condition of surface water*), Fractional Snow-Covered Area (*indicates the percentage of a pixel covered by snow*) and Burned Area (*represents per pixel burn classification and burn probability*). These products are now available for download from EarthExplorer for the United States from 1982 to present. Not only do these Landsat Science Products significantly reduce the burden of pre-processing on users of Landsat data, it also provides a significant advantage to scientists and land resource managers who monitor changes in our Nation's land cover state and condition.

**Be concise, use plain language, and spell out all acronyms.*

Example: [~~NEW~~ **or** ~~UPDATE~~] On February 16, a paper, authored by USGS scientists, titled “Investigation of permafrost dynamics across...” was accepted for publication in the journal *JOURNAL_NAME*. The research/study described in the paper examined... and found that... The paper outlines an approach for... and is significant because... The paper is expected to be published online on February 22 in advance of paper-copy publication expected to be released around... (02/16/2018, THIS IS THE DAY THAT THE UPDATE IS REPORTED).

notification of accepted publication for Jan Nelson >



➔ **Jenkerson, Calli (Contractor)** <jenkerson@contractor.usgs.gov>

Dec 12, 2018, 12:37 PM



to me, John, Christopher, Michelle ▾

Vaughn,

With PCB approval, we hereby request that you deliver the attached Notification of Accepted Publication describing the upcoming release of the Landsat Level-3 Science Products (DSWE, BA, fSCA) to Jan Nelson for subsequent delivery to HQ as soon as possible.

If all goes well, PCB will notify PDB next Wednesday of the planned release, giving us clearance to gain PCB approval and release the public collections any time after Dec 20 (and before Dec 31).

In the meantime, the Level-3 Sample Products page will be live today or tomorrow as a preview to the collection release.

--

Calli B. Jenkerson

LSRD Task Lead

SGT, Inc. Contractor

U.S. Geological Survey

Earth Resources Observation and Science Center

605 594 2638

jenkerson@contractor.usgs.gov

<https://landsat.usgs.gov/landsat-higher-level-science-data-products>

Please note new email address!

In April 2016 my email was changed from: jenkerson@usgs.gov to calli.jenkerson.ctr@usgs.gov

In August 2018 it was changed again to: jenkerson@contractor.usgs.gov

Please update your address book accordingly

NOTICE: This email may contain confidential, proprietary, or competition sensitive bid or proposal procurement information. Unauthorized disclosure of this information may carry criminal penalties as set forth in the Procurement Integrity Act, 41 U.S.C. 423, as amended. Further, the unauthorized disclosure of certain commercial information by civil servants may result in fines or imprisonment under the Trade Secrets Act (18 U.S.C. 1905). If you have received this information in error, please delete it, including all copies, and notify the sender of the error immediately.

W Notice of Accepted
Publication Landsat
Level-3 Science

25 KB



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Goode, Daniel <djgoode@usgs.gov>

Manohar Velpuri's work with MENA-ASR project

1 message

Goode, Daniel <djgoode@usgs.gov>

Thu, Jan 17, 2019 at 2:13 PM

To: Vaughn Ihlen <vihlen@usgs.gov>

Cc: Gabriel Senay <senay@usgs.gov>, John Hahn <jhahn@usgs.gov>

Hi Vaughn,

As you may know, Gabriel Senay, Manohar Velpuri, and I are working together on a Middle East North Africa - Aquifer Storage & Recovery (MENA-ASR) project, fully funded by USAID. We have been planning a major workshop for that project, in Cyprus next week, where we will be working with our regional partners from Jordan, Egypt, Lebanon, and the West Bank. Three teams will be meeting separately to focus on project tasks and on-the-job training. One of those teams is the Water Availability Team (WAT), which Gabriel is leading. Manohar Velpuri has been the primary remote sensing and modeling task leader for the project and the WAT, and provided that support and capacity-building training for our partners at our last workshop in December 2017.

Despite the current 'lapse', the Director has approved Gabriel and me to work during this time period, and to travel to Cyprus for the workshop, given the importance of this workshop for USGS and USAID. (This workshop was previously planned for August 2018, but had to be postponed while waiting for new Secretarial Clearance approvals required for grants to our partners.)

I'm writing in support of Manohar's participation in the workshop, if that is possible. The 7-hour time difference makes it impractical for him to conduct the work needed remotely, and we will be unable to replace his contributions that we have been counting on.

I stress that while I sincerely hope that Manohar can join us, I'm sure you understand that it is beyond my level of responsibility to direct EROS or the contractor with respect to his participation.

Please let me know if you have any questions about the project or Manohar's critical role for us,

Thanks,
Dan

Daniel J. Goode 717-571-8783 [Profile](#)
[USGS Pennsylvania Water Science Center](#)
(stationed @ [New Jersey WSC](#) 609-406-3812)



Brown, Jesslyn <jfbrown@usgs.gov>

QuickDRI status

Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov>

Fri, Feb 8, 2019 at 9:30 AM

To: "Michael (Contractor) Steuck" <steuck@contractor.usgs.gov>

Cc: "Howard, Danny" <dhoward@contractor.usgs.gov>, Jesslyn Brown <jfbrown@usgs.gov>

Mike,

The first 3 weeks of January have been rebuilt and am currently building week 4.

Kirk

--

Kirk Evenson

KBRwyle | Software Engineer

KBRwyle Contractor to the USGS Earth Resources Observation and Science (EROS) Center | Web:

<https://www.usgs.gov/centers/eros>Office: +1 605-594-2504 | evenson@contractor.usgs.gov



Brown, Jesslyn <jfbrown@usgs.gov>

Re: [EXTERNAL] RE: eMODIS QuickDRI Complete

Brown, Jesslyn <jfbrown@usgs.gov>

Mon, Jan 28, 2019 at 9:01 AM

To: Calvin Poulsen <cpoulsen2@unl.edu>

Cc: "steuck@contractor.usgs.gov" <steuck@contractor.usgs.gov>, "dhoward@contractor.usgs.gov"

<dhoward@contractor.usgs.gov>, "kirk.evanson.ctr@usgs.gov" <kirk.evanson.ctr@usgs.gov>

.....and we're back!

Chris, we will need some time to regroup this week but will try to get data to you ASAP. On our end, we will need to check the inputs to the last four 2019 VegDRI products (including today's) and confirm that they had good input data. If so, we can just post those files for you to grab. If not, we may have to do some reprocessing.

I can confirm that the December 30th product would be week 53.....I think that is correct that last year had 53 Sundays in in.

Please be patient with us as we catch up!

Jess

Jesslyn F. Brown
Research Geographer
U.S. Geological Survey
Earth Resources Observation and Science (EROS) Center
Sioux Falls, SD 57198

605-594-6003 (office)
605-594-6529 (fax)
jfbrown@usgs.gov
ORCID: <http://orcid.org/0000-0002-9976-1998>
<http://vegdr.cr.usgs.gov/>
<http://phenology.cr.usgs.gov/>

On Thu, Jan 10, 2019 at 10:29 AM Calvin Poulsen <cpoulsen2@unl.edu> wrote:

Folks

It doesn't look like vegdri or quickdri have generated geotiffs in 2019. It also appears that the png maps were generated but they are labeled as week 53 of 2018. Let me know if there is something we can help with.

Chris

Chris Poulsen, GIS Manager
National Drought Mitigation Center
School of Natural Resources
University of Nebraska-Lincoln
816 Hardin Hall
3310 Holdrege Street
Lincoln, NE 68583-0988

Phone: 402-472-8828
Phone: 402-472-6707 (NDMC Secretary)
Fax: 402-472-2946
Email: cpoulsen2@unl.edu
<http://www.drought.unl.edu>
<http://snr.unl.edu>

-----Original Message-----

From: steuck@contractor.usgs.gov <steuck@contractor.usgs.gov>

Sent: Monday, December 31, 2018 10:46 AM

To: dhoward@contractor.usgs.gov; jfbrown@usgs.gov; steuck@contractor.usgs.gov; Calvin Poulsen <cpoulsen2@unl.edu>; kirk.evenson.ctr@usgs.gov

Subject: eMODIS QuickDRI Complete

eMODIS QuickDRI GeoTif of the conterminous U.S. is now available for week 52, 2018.

https://urldefense.proofpoint.com/v2/url?u=http-3A__edcftp.cr.usgs.gov_project_vegdyn_quickdri_Geotif_&d=DwIBAg&c=Cu5g146wZdoqVuKpTNsYHeFX_rg6kWhlkLF8Eft-ww0&r=R_1_W9H-46HUag29sKq6Leov12bejC7Xtx9Yo0YZtOg&m=NR6iA7HAap600y35KWgc3alHd8ah98Kv0cLsNiB-DsU&s=Zwu9dYpy3fhyxkya9VuBmmlst_13FZDTS5VoR-bmbksk&e=

PNG graphics are available at:

https://urldefense.proofpoint.com/v2/url?u=http-3A__edcftp.cr.usgs.gov_project_vegdyn_quickdri_PNG_&d=DwIBAg&c=Cu5g146wZdoqVuKpTNsYHeFX_rg6kWhlkLF8Eft-ww0&r=R_1_W9H-46HUag29sKq6Leov12bejC7Xtx9Yo0YZtOg&m=NR6iA7HAap600y35KWgc3alHd8ah98Kv0cLsNiB-DsU&s=r_MxhGuUqRb2o4fs9sAHtNQUmjijRmaocnbA1zBbL0&e=

QuickDRI input data are available at:

https://urldefense.proofpoint.com/v2/url?u=https-3A__edcftp.cr.usgs.gov_project_vegdyn_quickdri_bsq_&d=DwIBAg&c=Cu5g146wZdoqVuKpTNsYHeFX_rg6kWhlkLF8Eft-ww0&r=R_1_W9H-46HUag29sKq6Leov12bejC7Xtx9Yo0YZtOg&m=NR6iA7HAap600y35KWgc3alHd8ah98Kv0cLsNiB-DsU&s=QMivRSQGkQ3RM2JMxdhvgDMnVqQ1YqOM0_a5WDfGegg&e=

Michael W. Steuck

Technical Specialist IV

Stinger Ghaffarian Technologies

Contractor to US Geological Survey Center for Earth Resources Observation and Science

47914 252nd Street

Sioux Falls, South Dakota 57198

steuck@contractor.usgs.gov

(605) 594-6539

www.sgt-inc.com



Brown, Jesslyn <jfbrown@usgs.gov>

Re: [EXTERNAL] RE: eMODIS VegDRI Complete**Evenson, Kirk (Contractor)** <evenson@contractor.usgs.gov>

Mon, Mar 25, 2019 at 2:36 PM

To: "Brown, Jesslyn" <jfbrown@usgs.gov>

Cc: Calvin Poulsen <cpoulsen2@unl.edu>, "Young, Claudia (Contractor)" <cyoung@contractor.usgs.gov>, "steuck@contractor.usgs.gov" <steuck@contractor.usgs.gov>, "dhoward@contractor.usgs.gov" <dhoward@contractor.usgs.gov>, Mark Svoboda <msvoboda2@unl.edu>, Brian Fuchs <bfuchs2@unl.edu>, Jeffrey Nothwehr <jnothwehr2@unl.edu>, John Swigart <jswigart2@unl.edu>, "kirk.evenson.ctr@usgs.gov" <kirk.evenson.ctr@usgs.gov>

It needs to be rerun since it built for week 11 rather than this week which is week 12.

I don't believe any issues from the past couple weeks were caused by pulling SPI files since I manually downloaded those. I'm not sure what problem happened two weeks ago, but the one from today is the only one I'm aware of that was caused by not updating the scripts to the current week because I'm manually downloading SPI.

I will see what I can do to modify the SPI download code so that we can get back to automatic builds.

On Mon, Mar 25, 2019 at 2:28 PM Brown, Jesslyn <jfbrown@usgs.gov> wrote:

Kirk,

Does it need to be totally rerun, or just rename all of the products to the correct week???

I guess that would depend on whether all of the input files you used corresponded to yesterday's date...??

It's my understanding that we need to get back to automated processing with your scripts, right? So is your manual processing tied to the "change" in the way we get access to the SPI data from UNL??? We have had glitches last week and this, although I think they weren't the same issue. Let's see if we can prevent another problem before we hit three weeks in a row. What would that take?

Jess

Jesslyn F. Brown
Research Geographer
U.S. Geological Survey
Earth Resources Observation and Science (EROS) Center
Sioux Falls, SD 57198

605-594-6003 (office)

605-594-6529 (fax)

jfbrown@usgs.gov

ORCID: <http://orcid.org/0000-0002-9976-1998>

<https://www.usgs.gov/land-resources/eros/lcmap/>

<https://www.usgs.gov/land-resources/eros/droughtstress/>

<https://www.usgs.gov/land-resources/eros/phenology/>

On Mon, Mar 25, 2019 at 2:14 PM Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov> wrote:

Looks like I forgot to flip the date yesterday when I manually downloaded the SPI data. And so I need to rerun the VegDRI and QuickDRI builds. Sorry about the delay.

On Mon, Mar 25, 2019 at 2:11 PM Calvin Poulsen <cpoulsen2@unl.edu> wrote:

Michael

This weeks VegDRI is labeled as week 11 again. Can you confirm it is a new VegDRI or if it is a rerun of last week?

Chris

MULTI-DOI-USGIS-19-0441-A-000042

-----Original Message-----

From: steuck@contractor.usgs.gov <steuck@contractor.usgs.gov>

Sent: Monday, March 25, 2019 10:31 AM

To: dhoward@contractor.usgs.gov; steuck@contractor.usgs.gov; Calvin Poulsen <cpoulsen2@unl.edu>; jfbrown@usgs.gov; Mark Svoboda <msvoboda2@unl.edu>; Brian Fuchs <bfuchs2@unl.edu>; Jeffrey Nothwehr <jnothwehr2@unl.edu>; John Swigart <jswigart2@unl.edu>; kirk.evenson.ctr@usgs.gov

Subject: eMODIS VegDRI Complete

eMODIS VegDRI GeoTif of the conterminous U.S. is now available for week 12, 2019.

https://urldefense.proofpoint.com/v2/url?u=http-3A__edcftp.cr.usgs.gov_project_vegdyn_vegdri_Geotif_&d=DwIBAg&c=Cu5g146wZdoqVuKpTNsYHeFX_rg6kWhkLF8Eft-ww0&r=R_1_W9H-46HUag29sKq6Leov12bejC7Xtx9Yo0YZtOg&m=lhiCW3uz5ItT6AULZbqglaOf5Q5Nw98JvWQZvbgeP1c&s=Zg8EGcNdGPzxV0MMTU7w1gwgnnAS05Z-a1VMU5NyhRc&e=

PNG graphics are available at:

https://urldefense.proofpoint.com/v2/url?u=http-3A__edcftp.cr.usgs.gov_project_vegdyn_vegdri_PNG_&d=DwIBAg&c=Cu5g146wZdoqVuKpTNsYHeFX_rg6kWhkLF8Eft-ww0&r=R_1_W9H-46HUag29sKq6Leov12bejC7Xtx9Yo0YZtOg&m=lhiCW3uz5ItT6AULZbqglaOf5Q5Nw98JvWQZvbgeP1c&s=TbJuGh7-xi66sMMfqzObKz7uNEWSfWU7KqtVRhwSZ6U&e=

VegDRI and Off Season Mask ESRI grid data are available at:

https://urldefense.proofpoint.com/v2/url?u=http-3A__edcftp.cr.usgs.gov_project_vegdyn_vegdri_Grids_&d=DwIBAg&c=Cu5g146wZdoqVuKpTNsYHeFX_rg6kWhkLF8Eft-ww0&r=R_1_W9H-46HUag29sKq6Leov12bejC7Xtx9Yo0YZtOg&m=lhiCW3uz5ItT6AULZbqglaOf5Q5Nw98JvWQZvbgeP1c&s=TW1KWVhxrghN8HTBBowea78BGegW0zxDugaX7XL_bzU&e=

Note: Off season mask values: 1 = off season; 0 = everywhere else.

Michael W. Steuck

Technical Specialist IV

KBRwyle

Contractor to US Geological Survey Center for Earth Resources Observation and Science

47914 252nd Street

Sioux Falls, South Dakota 57198

steuck@contractor.usgs.gov

(605) 594-6539

--

Kirk Evenson

KBRwyle | Software Engineer

KBRwyle Contractor to the USGS Earth Resources Observation and Science (EROS) Center | Web:

<https://www.usgs.gov/centers/eros>

Office: +1 605-594-2504 | evenson@contractor.usgs.gov

--

Kirk Evenson

KBRwyle | Software Engineer

KBRwyle Contractor to the USGS Earth Resources Observation and Science (EROS) Center | Web:

<https://www.usgs.gov/centers/eros>

Office: +1 605-594-2504 | evenson@contractor.usgs.gov

TP 110-3 Deliverables that had changes due to Shutdown

A5774 Eco_Veg - Phenology Viewer Prototype
A5784 Eco_Veg - Draft Research Paper

Due	Finished	Reason
4/30/2019	4/16/2019	02/13/2019 - Per the COR, deliverable due date changed from 04/01/19 to 4/30
4/18/2019	4/18/2019	03/08/19 - Per the USGS PM this deliverable had a reduction in scope, as: The de activity and provide a draft, peer reviewed, research paper on the activity. Du not be able to fully complete this effort. TSSC proposes to continue v outline of the research paper that includes initial results. Continuation

n of this activity and the research paper could be put into the follow-on PoP



Brown, Jesslyn <jfbrown@usgs.gov>

Re: 2018 week 52 VegDRI and QuickDRI**Evenson, Kirk (Contractor)** <evenson@contractor.usgs.gov>

Thu, Jan 31, 2019 at 1:28 PM

To: "Howard, Danny (Contractor)" <dhoward@contractor.usgs.gov>

Cc: "Brown, Jesslyn" <jfbrown@usgs.gov>, Michael Steuck <steuck@contractor.usgs.gov>

Okay, thanks. I will get it started right away then

On Thu, Jan 31, 2019 at 1:26 PM Howard, Danny (Contractor) <dhoward@contractor.usgs.gov> wrote:

Yes - upon further review. 51 and 52 are different, so we can start processing at week 1, 2019. see attached.

Danny Howard, PMP
Task Manager, Science Division
Stinger Ghaffarian Technologies (SGT), a KBRwyle Business Unit
Contractor to the U.S. Geological Survey (USGS)
Earth Resources Observation and Science (EROS) Center
47914 252nd Street
Sioux Falls, SD 57198
Phone: 605-594-6085
email: dhoward@contractor.usgs.gov
ORCID: <http://orcid.org/0000-0002-7563-7538>

On Thu, Jan 31, 2019 at 1:16 PM Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov> wrote:

Okay. It would save us a few hours of processing time and I would be able to start up the 1st week of 2019.

On Thu, Jan 31, 2019 at 1:13 PM Brown, Jesslyn <jfbrown@usgs.gov> wrote:

Kirk,

I don't know....I have not been able to look at those products...so I would need to know if the week 52 maps are available and where. ?? Mike or Danny--could one of you put those maps (VD and QD) somewhere (K:drive?) for me?

thanks

Jess

Jesslyn F. Brown
Research Geographer
U.S. Geological Survey
Earth Resources Observation and Science (EROS) Center
Sioux Falls, SD 57198

605-594-6003 (office)
605-594-6529 (fax)
jfbrown@usgs.gov
ORCID: <http://orcid.org/0000-0002-9976-1998>
<https://www.usgs.gov/land-resources/eros/lcmap/>
<https://www.usgs.gov/land-resources/eros/droughtstress/>
<https://www.usgs.gov/land-resources/eros/phenology/>

On Thu, Jan 31, 2019 at 12:10 PM Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov> wrote:

Jess,

I was looking at the VegDRI and QuickDRI for 2018 week 52. I noticed that they completed on time that week. Is it okay to use them as is or should I rebuild?

Kirk

MULTI-DOI-USGIS-19-0441-A-000047

--

Kirk Evenson, Software Engineer

SGT-KBRWylie

Contractor to the USGS EROS

[47914 252nd Street, Sioux Falls, SD 57198](#)Voice: 605-594-2504, Email: evenson@contractor.usgs.gov

--

Kirk Evenson, Software Engineer

SGT-KBRWylie

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--

Kirk Evenson, Software Engineer

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[47914 252nd Street, Sioux Falls, SD 57198](#)Voice: 605-594-2504, Email: evenson@contractor.usgs.gov



Brown, Jesslyn <jfbrown@usgs.gov>

Re: SPI data questions

Brown, Jesslyn <jfbrown@usgs.gov>

Wed, Jan 30, 2019 at 4:10 PM

To: "Evenson, Kirk (Contractor)" <evenson@contractor.usgs.gov>

Cc: Calvin Poulsen <cpoulsen2@unl.edu>, "Howard, Danny" <dhoward@contractor.usgs.gov>, "Michael (Contractor) Steuck" <steuck@contractor.usgs.gov>

Thanks Kirk!!

Chris.....we met earlier today to review where we are with reprocessing VegDRI and QuickDRI to cover the furlough period. Kirk is also in charge of the eMODIS processing so those data are upstream from VegDRI and QuickDRI and had to be taken care of first. Now we know that all VD and QD data sets must be redone and then reposted for you. It's going to take a little time (something like a week or two) to get all the reprocessing done for you guys. This was a perfect storm for us in that, when we shift into a new year, a bunch of the processing flows need to find new 2019 directories which were not put in place before the shutdown. So this is why we need to grab all of the SPI data from you again.

Kirk--although we didn't touch on this today, will you also be checking to see that we are ready Monday morning for the next VegDRI and QuickDRI products to run in an automated fashion--provided that Chris and the UNL crew can fix the issue with the SSL setup by the end of the week. I very much appreciate all the work that you (and Mike) are doing to get us back to speed!!

thanks!
Jess

Jesslyn F. Brown
Research Geographer
U.S. Geological Survey
Earth Resources Observation and Science (EROS) Center
Sioux Falls, SD 57198

605-594-6003 (office)
605-594-6529 (fax)
jfbrown@usgs.gov
ORCID: <http://orcid.org/0000-0002-9976-1998>
<https://www.usgs.gov/land-resources/eros/lcmap/>
<https://www.usgs.gov/land-resources/eros/droughtstress/>
<https://www.usgs.gov/land-resources/eros/phenology/>

On Wed, Jan 30, 2019 at 3:55 PM Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov> wrote:

Calvin,

Early today Jess said that you would be able to provide the VegDRI and QuickDRI SPI data for the past couple months. Here are the periods I will need the SPI data for

Dec 24 - 30
Dec 31 - Jan 6
Jan 7 - 13
Jan 14 - 20
Jan 21 - 27

Also, my Perl code is no longer able to download the SPI files from your site. Here is what our system admin was able to learn from checking our connection with your server hosting "<https://droughtcenter.unl.edu/vegdiri/>". He suggested I "... request that the folks running droughtcenter.unl.edu fix their SSL setup to work with OpenSSL, and that should fix the issue with perl modules"

Thanks,
Kirk

MULTI-DOI-USGIS-19-0441-A-000049

I'm stumped on how to solve this with perl; I can't get either IO::Socket::SSL or Net::SSL to work with this site. The site itself does not respond with valid ciphers on either EL6 or EL7 with nmap or openssl. Here EL7 outputs:

```
[gland@edclxvs331 ~]$ nmap --script ssl-cert,ssl-enum-ciphers -p 443
droughtcenter.unl.edu

Starting Nmap 6.40 ( http://nmap.org ) at 2019-01-29 14:10 CST

Nmap scan report for droughtcenter.unl.edu (129.93.168.107)

Host is up (0.0020s latency).

rDNS record for 129.93.168.107: ndmc-webd01.unl.edu

PORT      STATE SERVICE
443/tcp    open  https

| ssl-cert: Subject: commonName=droughtcenter.unl.edu/organizationName=University of
Nebraska-Lincoln/stateOrProvinceName=NE/countryName=US

| Issuer: commonName=fg5144c.sd.esn.doi.gov/organizationName=DOI/VZ/
stateOrProvinceName=SD/countryName=US

| Public Key type: rsa
| Public Key bits: 2048
| Not valid before: 2018-11-28T00:00:00+00:00
| Not valid after: 2020-11-27T23:59:59+00:00
| MD5: 48f3 3a81 c7f3 618c ddaf 080e aa3a 5795
|_SHA-1: fa70 bc46 6861 a706 6688 b00d 6077 63e5 a459 54e5

Nmap done: 1 IP address (1 host up) scanned in 0.65 seconds

[gland@edclxvs331 ~]$ for p in ssl2 ssl3 tls1 tls1_1 tls1_2; do echo | {
/usr/local/ssl/bin/openssl s_client -$p -connect droughtcenter.unl.edu:443 2>&1; }
>/dev/null && echo Successful $p connect || echo Failed $p connect; done

Failed ssl2 connect
Failed ssl3 connect
Failed tls1 connect
Failed tls1_1 connect
Failed tls1_2 connect
```

I can connect with curl from EL6 (edclxw30), but not EL7 (edclxvs331).

```
[gland@edclxw30 tmp]$ curl -v -I https://droughtcenter.unl.edu/vegdiri/

* About to connect() to droughtcenter.unl.edu port 443 (#0)
*   Trying 129.93.168.107... connected
* Connected to droughtcenter.unl.edu (129.93.168.107) port 443 (#0)
* Initializing NSS with certpath: sql:/etc/pki/nssdb
```

```
* CAfile: /etc/pki/tls/certs/ca-bundle.crt

CApath: none

* SSL connection using TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256

* Server certificate:

*      subject: CN=droughtcenter.unl.edu,OU=National Drought Mitigation
Center,O=University of Nebraska-Lincoln,STREET=14th And R St.,L=Lincoln,ST=NE,
postalCode=68588,C=US

*      start date: Nov 28 00:00:00 2018 GMT

*      expire date: Nov 27 23:59:59 2020 GMT

*      common name: droughtcenter.unl.edu

*      issuer: E=doinoc@verizon.com,CN=fg5144c.sd.esn.doi.gov,OU=DOI/
OS/IAD/IAO/VZ,O=DOI/VZ,L=Sioux Falls,ST=SD,C=US

> HEAD /vegdiri/ HTTP/1.1

> User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.36
zlib/1.2.3 libidn/1.18 libssh2/1.4.2

> Host: droughtcenter.unl.edu

> Accept: */*

>

< HTTP/1.1 200 OK

HTTP/1.1 200 OK

< Content-Length: 947

Content-Length: 947

< Content-Type: text/html; charset=UTF-8

Content-Type: text/html; charset=UTF-8

< Server: Microsoft-IIS/10.0

Server: Microsoft-IIS/10.0

< X-Powered-By: ASP.NET

X-Powered-By: ASP.NET

< Date: Tue, 29 Jan 2019 20:12:45 GMT

Date: Tue, 29 Jan 2019 20:12:45 GMT

<

* Connection #0 to host droughtcenter.unl.edu left intact

* Closing connection #0

[gland@edc1xvs331 ~]$ curl -v -I https://droughtcenter.unl.edu/vegdiri/

* About to connect() to droughtcenter.unl.edu port 443 (#0)

* Trying 129.93.168.107...

* Connected to droughtcenter.unl.edu (129.93.168.107) port 443 (#0)
```

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```
* Initializing NSS with certpath: sql:/etc/pki/nssdb
*   CAfile: /etc/pki/tls/certs/ca-bundle.crt
    CApath: none
* NSS error -5938 (PR_END_OF_FILE_ERROR)
* Encountered end of file
* Closing connection 0
curl: (35) Encountered end of file
```

And wget works on both EL6 & EL7 (EL7 output):

```
[gland@edclxvs331 ~]$ wget -v -O - https://droughtcenter.unl.edu/vegdiri/
--2019-01-29 14:17:22-- https://droughtcenter.unl.edu/vegdiri/
Resolving droughtcenter.unl.edu (droughtcenter.unl.edu)... 129.93.168.107
Connecting to droughtcenter.unl.edu (droughtcenter.unl.edu)|129.93.168.107|:443...
connected.
HTTP request sent, awaiting response... 200 OK
Length: 947 [text/html]
Saving to: 'STDOUT'

0% [
] 0      --.-K/s      <html><head><title>droughtcenter.unl.edu -
/vegdiri/</title></head><body><H1>droughtcenter.unl.edu - /vegdiri/</H1><hr>

<pre><A HREF="/">[To Parent Directory]</A><br><br> 1/29/2019  8:31 AM      26503686 <A
HREF="/vegdiri/usspi.bsq">usspi.bsq</A><br> 1/29/2019  8:31 AM      2169 <A
HREF="/vegdiri/usspi.bsq.aux.xml">usspi.bsq.aux.xml</A><br> 1/29/2019  8:31 AM
2066475 <A HREF="/vegdiri/usspi.bsq.ovr">usspi.bsq.ovr</A><br> 1/29/2019  8:31 AM
15155 <A HREF="/vegdiri/usspi.bsq.vat.dbf">usspi.bsq.vat.dbf</A><br> 1/29/2019  8:31
AM      7626 <A HREF="/vegdiri/usspi.bsq.xml">usspi.bsq.xml</A><br> 1/29/2019  8:31
AM      284 <A HREF="/vegdiri/usspi.hdr">usspi.hdr</A><br> 1/29/2019  8:31 AM
410 <A HREF="/vegdiri/usspi.prj">usspi.prj</A><br> 1/29/2019  8:31 AM      61 <A
HREF="/vegdiri/usspi.stx">100%[=====] 947      -
--.-K/s      in 0s

2019-01-29 14:17:23 (90.5 MB/s) - written to stdout [947/947]
```

And lftp works on EL7, but not EL6, go figure.

I'm not sure why curl on EL6, lftp on EL7, and wget on both EL6 & EL7 work, while OpenSSL on both does not work with this site. You can request that the folks running droughtcenter.unl.edu fix their SSL setup to work with OpenSSL, and that should fix the issue with perl modules. The alternative is to use something besides perl to do the downloads; normally, I'd recommend curl or lftp, but wget is more compatible for this site.

```
--
Kirk Evenson, Software Engineer
SGT-KBRWylie
Contractor to the USGS EROS
47914 252nd Street, Sioux Falls, SD 57198
Voice: 605-594-2504, Email: evenson@contractor.usgs.gov
```



Brown, Jesslyn <jfbrown@usgs.gov>

Re: SPI data questions

Brown, Jesslyn <jfbrown@usgs.gov>

Thu, Jan 31, 2019 at 9:13 AM

To: "Evenson, Kirk (Contractor)" <evenson@contractor.usgs.gov>

Cc: Calvin Poulsen <cpoulsen2@unl.edu>, "Howard, Danny" <dhoward@contractor.usgs.gov>, "Michael (Contractor) Steuck" <steuck@contractor.usgs.gov>

Thanks Kirk,

It sounds to me like the likely outcome Monday is more work...since it's going to take quite a bit of time to rerun 5 VegDRI and 5 QuickDRI products. Plus the SPI download issue is still pending a fix as well.

Just do the best you can!

And thank you!

Jess

Jesslyn F. Brown
Research Geographer
U.S. Geological Survey
Earth Resources Observation and Science (EROS) Center
Sioux Falls, SD 57198

605-594-6003 (office)
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ORCID: <http://orcid.org/0000-0002-9976-1998>
<https://www.usgs.gov/land-resources/eros/lcmap/>
<https://www.usgs.gov/land-resources/eros/droughtstress/>
<https://www.usgs.gov/land-resources/eros/phenology/>

On Thu, Jan 31, 2019 at 9:10 AM Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov> wrote:

Jess,

In order for this coming Monday to run in an automated way two things have to happen

1. All previous VegDRI and QuickDRI composites have to be built and
2. The problems with downloading SPI files from UNL need to be corrected.

Next Monday's VegDRI / QuickDRI build depends on the previous builds. If those aren't in place then it can't be built. And automating the process requires the access problems with UNL's servers are corrected.

Hopefully Greg provided enough information so that the UNL system admins can correct those problems by tomorrow.

Kirk

On Wed, Jan 30, 2019 at 4:10 PM Brown, Jesslyn <jfbrown@usgs.gov> wrote:

Thanks Kirk!!

Chris.....we met earlier today to review where we are with reprocessing VegDRI and QuickDRI to cover the furlough period. Kirk is also in charge of the eMODIS processing so those data are upstream from VegDRI and QuickDRI and had to be taken care of first. Now we know that all VD and QD data sets must be redone and then reposted for you. It's going to take a little time (something like a week or two) to get all the reprocessing done for you guys. This was a perfect storm for us in that, when we shift into a new year, a bunch of the processing flows need to find new 2019

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directories which were not put in place before the shutdown. So this is why we need to grab all of the SPI data from you again.

Kirk--although we didn't touch on this today, will you also be checking to see that we are ready Monday morning for the next VegDRI and QuickDRI products to run in an automated fashion--provided that Chris and the UNL crew can fix the issue with the SSL setup by the end of the week. I very much appreciate all the work that you (and Mike) are doing to get us back to speed!!

thanks!
Jess

Jesslyn F. Brown
Research Geographer
U.S. Geological Survey
Earth Resources Observation and Science (EROS) Center
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ORCID: <http://orcid.org/0000-0002-9976-1998>
<https://www.usgs.gov/land-resources/eros/lcmap/>
<https://www.usgs.gov/land-resources/eros/droughtstress/>
<https://www.usgs.gov/land-resources/eros/phenology/>

On Wed, Jan 30, 2019 at 3:55 PM Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov> wrote:
Calvin,

Early today Jess said that you would be able to provide the VegDRI and QuickDRI SPI data for the past couple months. Here are the periods I will need the SPI data for

Dec 24 - 30
Dec 31 - Jan 6
Jan 7 - 13
Jan 14 - 20
Jan 21 - 27

Also, my Perl code is no longer able to download the SPI files from your site. Here is what our system admin was able to learn from checking our connection with your server hosting "<https://droughtcenter.unl.edu/vegdiri/>". He suggested I "... request that the folks running droughtcenter.unl.edu fix their SSL setup to work with OpenSSL, and that should fix the issue with perl modules"

Thanks,
Kirk

I'm stumped on how to solve this with perl; I can't get either IO::Socket::SSL or Net::SSL to work with this site. The site itself does not respond with valid ciphers on either EL6 or EL7 with nmap or openssl. Here EL7 outputs:

```
[gland@edclxvs331 ~]$ nmap --script ssl-cert,ssl-enum-ciphers -p 443  
droughtcenter.unl.edu
```

Starting Nmap 6.40 (<http://nmap.org>) at 2019-01-29 14:10 CST

Nmap scan report for droughtcenter.unl.edu (129.93.168.107)

Host is up (0.0020s latency).

rDNS record for [129.93.168.107](https://droughtcenter.unl.edu): [ndmc-webd01.unl.edu](https://droughtcenter.unl.edu)

PORT STATE SERVICE

443/tcp open https

| ssl-cert: Subject: commonName=droughtcenter.unl.edu/organizationName=University of Nebraska-Lincoln/stateOrProvinceName=NE/countryName=US

| Issuer: commonName=fg5144c.sd.esn.doi.gov/organizationName=DOI/VZ/stateOrProvinceName=SD/countryName=US

| Public Key type: rsa

| Public Key bits: 2048

| Not valid before: 2018-11-28T00:00:00+00:00

| Not valid after: 2020-11-27T23:59:59+00:00

| MD5: 48f3 3a81 c7f3 618c ddaf 080e aa3a 5795

|_SHA-1: fa70 bc46 6861 a706 6688 b00d 6077 63e5 a459 54e5

Nmap done: 1 IP address (1 host up) scanned in 0.65 seconds

```
[gland@edclxvs331 ~]$ for p in ssl2 ssl3 tls1 tls1_1 tls1_2; do echo | {
/usr/local/ssl/bin/openssl s_client -sp -connect droughtcenter.unl.edu:443 2>&1; }
>/dev/null && echo Successful $p connect || echo Failed $p connect; done
```

Failed ssl2 connect

Failed ssl3 connect

Failed tls1 connect

Failed tls1_1 connect

Failed tls1_2 connect

I can connect with curl from EL6 (edclxw30), but not EL7 (edclxvs331).

```
[gland@edclxw30 tmp]$ curl -v -I https://droughtcenter.unl.edu/vegdri/
```

* About to connect() to droughtcenter.unl.edu port 443 (#0)

* Trying 129.93.168.107... connected

* Connected to droughtcenter.unl.edu (129.93.168.107) port 443 (#0)

* Initializing NSS with certpath: sql:/etc/pki/nssdb

* CAfile: /etc/pki/tls/certs/ca-bundle.crt

CAPath: none

* SSL connection using TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256

* Server certificate:

* subject: CN=droughtcenter.unl.edu, OU=National Drought Mitigation Center, O=University of Nebraska-Lincoln, STREET=14th And R St., L=Lincoln, ST=NE, postalCode=68588, C=US

* start date: Nov 28 00:00:00 2018 GMT

* expire date: Nov 27 23:59:59 2020 GMT

* common name: droughtcenter.unl.edu

```

*      issuer: E=doinoc@verizon.com,CN=fg5144c.sd.esn.doi.gov,OU=DOI/
OS/IAD/IAO/VZ,O=DOI/VZ,L=Sioux Falls,ST=SD,C=US

> HEAD /vegdiri/ HTTP/1.1

> User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.36
zlib/1.2.3 libidn/1.18 libssh2/1.4.2

> Host: droughtcenter.unl.edu

> Accept: */*

>

< HTTP/1.1 200 OK

HTTP/1.1 200 OK

< Content-Length: 947

Content-Length: 947

< Content-Type: text/html; charset=UTF-8

Content-Type: text/html; charset=UTF-8

< Server: Microsoft-IIS/10.0

Server: Microsoft-IIS/10.0

< X-Powered-By: ASP.NET

X-Powered-By: ASP.NET

< Date: Tue, 29 Jan 2019 20:12:45 GMT

Date: Tue, 29 Jan 2019 20:12:45 GMT

<

* Connection #0 to host droughtcenter.unl.edu left intact

* Closing connection #0

[gland@edc1xvs331 ~]$ curl -v -I https://droughtcenter.unl.edu/vegdiri/

* About to connect() to droughtcenter.unl.edu port 443 (#0)

* Trying 129.93.168.107...

* Connected to droughtcenter.unl.edu (129.93.168.107) port 443 (#0)

* Initializing NSS with certpath: sql:/etc/pki/nssdb

* CAfile: /etc/pki/tls/certs/ca-bundle.crt

  CPath: none

* NSS error -5938 (PR_END_OF_FILE_ERROR)

* Encountered end of file

* Closing connection 0

curl: (35) Encountered end of file

```

And wget works on both EL6 & EL7 (EL7 output):

```
[gland@edclxvs331 ~]$ wget -v -O - https://droughtcenter.unl.edu/vegdiri/
--2019-01-29 14:17:22-- https://droughtcenter.unl.edu/vegdiri/

Resolving droughtcenter.unl.edu (droughtcenter.unl.edu)... 129.93.168.107

Connecting to droughtcenter.unl.edu (droughtcenter.unl.edu)|129.93.168.107|:443...
connected.

HTTP request sent, awaiting response... 200 OK

Length: 947 [text/html]

Saving to: 'STDOUT'

0% [
] 0      --.-K/s      <html><head><title>droughtcenter.unl.edu -
/vegdiri/</title></head><body><H1>droughtcenter.unl.edu - /vegdiri/</H1><hr>

<pre><A HREF="/">[To Parent Directory]</A><br><br> 1/29/2019  8:31 AM
26503686 <A HREF="/vegdiri/usspi.bsq">usspi.bsq</A><br> 1/29/2019  8:31 AM
2169 <A HREF="/vegdiri/usspi.bsq.aux.xml">usspi.bsq.aux.xml</A><br> 1/29/2019
8:31 AM      2066475 <A HREF="/vegdiri/usspi.bsq.ovr">usspi.bsq.ovr</A><br>
1/29/2019  8:31 AM      15155 <A HREF="/vegdiri/usspi.bsq.vat.
dbf">usspi.bsq.vat.dbf</A><br> 1/29/2019  8:31 AM      7626 <A
HREF="/vegdiri/usspi.bsq.xml">usspi.bsq.xml</A><br> 1/29/2019  8:31 AM
284 <A HREF="/vegdiri/usspi.hdr">usspi.hdr</A><br> 1/29/2019  8:31 AM      410
<A HREF="/vegdiri/usspi.prj">usspi.prj</A><br> 1/29/2019  8:31 AM      61 <A
HREF="/vegdiri/usspi.stx">100%[=====
=====>] 947
--.-K/s    in 0s

2019-01-29 14:17:23 (90.5 MB/s) - written to stdout [947/947]
```

And lftp works on EL7, but not EL6, go figure.

I'm not sure why curl on EL6, lftp on EL7, and wget on both EL6 & EL7 work, while OpenSSL on both does not work with this site. You can request that the folks running droughtcenter.unl.edu fix their SSL setup to work with OpenSSL, and that should fix the issue with perl modules. The alternative is to use something besides perl to do the downloads; normally, I'd recommend curl or lftp, but wget is more compatible for this site.

--

Kirk Evenson, Software Engineer
SGT-KBRWylie
Contractor to the USGS EROS
47914 252nd Street, Sioux Falls, SD 57198
Voice: 605-594-2504, Email: evenson@contractor.usgs.gov

--

Kirk Evenson, Software Engineer
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Contractor to the USGS EROS
47914 252nd Street, Sioux Falls, SD 57198
Voice: 605-594-2504, Email: evenson@contractor.usgs.gov



Brown, Jesslyn <jfbrown@usgs.gov>

Re: Updated (png) files for 2019 weeks 1-5

Evenson, Kirk (Contractor) <evenson@contractor.usgs.gov>

Wed, Feb 6, 2019 at 4:58 PM

To: "Howard, Danny (Contractor)" <dhoward@contractor.usgs.gov>

Cc: "Steuck, Michael (Contractor)" <steuck@contractor.usgs.gov>, Jesslyn Brown <jfbrown@usgs.gov>

I checked the spi files that are in the climate directories that were used for weeks 1-5 and they are all different. If you would like I can rebuild all, some or a couple of them so that we can check and verify that different spi files were used.

Currently the main VegDRI script cleans up the spi files from the build directory along with some other files and so I don't have a copy of the exact spi files were used, other than knowing that the VegDRI climate directories for 2019 hold a copy of each one that was used for each build.

I just commented out this cleanup code so that in the future those files will remain in the build directory which will then make it easier for me to verify.

On Wed, Feb 6, 2019 at 3:39 PM Howard, Danny (Contractor) <dhoward@contractor.usgs.gov> wrote:

Thanks Mike,

Looks like there could be an issue with the SPI then..... wasn't expecting that.

Kirk, did UNL give us new SPI data for week 1-4? If they did, maybe they sent us identical ones? Can you investigate?

Thanks

Danny Howard, PMP

KBRwyle | Task Manager

Contractor to the USGS Earth Resources Observation and Science (EROS) Center

47914 252nd Street | Sioux Falls, SD 57198 | USA

Office: +1 605.594.6085 | dhoward@contractor.usgs.gov | [ORCiD](#)

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On Tue, Feb 5, 2019 at 1:25 PM Steuck, Michael (Contractor) <steuck@contractor.usgs.gov> wrote:

All-

I've completed recreating the production (png) files for our QuickDR & VegDRI products.

The results from what I'm seeing are as follows.

VegDRI - There is noticeable changes from weeks 1-5 all seems normal.

PASG - There is noticeable changes from weeks 1-5 all seems normal.

QuickDRI - There is noticeable changes from weeks 1-5 all seems normal.

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4Panel - Products SVI, ESI and VMA there is noticeable changes from weeks 1-5 all seems normal.

Product SPI weeks 1-4 all appear to be the same!

Product SPI This week 5 saw a noticeable change seems good.

These files can be seen on my 90day!

K:\90daytemp\Steuck\vegdri\2019_png_files

--

Michael W. Steuck
Technical Specialist IV
Stinger Ghaffarian Technologies
Contractor to US Geological Survey Center for
Earth Resources Observation and Science

47914 252nd Street
Sioux Falls, South Dakota 57198
steuck@contractor.usgs.gov
(605) 594-6539
www.sgt-inc.com

--

Kirk Evenson

KBRwyle | Software Engineer

KBRwyle Contractor to the USGS Earth Resources Observation and Science (EROS) Center | Web:

<https://www.usgs.gov/centers/eros>

Office: +1 605-594-2504 | evenson@contractor.usgs.gov