



Questions & Answers Session 3

Please type your questions in the Question Box. We will try our best to get to all your questions. If we don't, feel free to email Karyn Tabor (ktabor@conservation.org) or David Hunt (dhunt@conservation.org)

Question 1: Is it possible to download a free near real-time data for a specific region?

Answer 1: There are a few options and we covered a few in the 3rd session of this series. Additionally, NASA's Land, Atmosphere Near real-time Capability for EOS (LANCE) system offers some as well. Most data products are available within 3 hours from satellite observation. NRT imagery are generally available 3-5 hours after observation. <https://earthdata.nasa.gov/earth-observation-data/near-real-time/download-nrt-data>

Also, the active fire data can be downloaded for a specific region through FIRMS, Firecast, GWF Fires, and many other global or regional systems.

Question 2: Is there any Geoapp (story) available in the context of Early warning and alert systems?

Answer 2: I know that Firecast has an esri story map here (<http://conservation.maps.arcgis.com/apps/MapJournal/index.html?appid=c2eac3e5934548c28c58d972f4bd383f>)

It's worth searching the story map gallery for more examples.

Question 3: Do you think one can successfully apply Remote Sensing for Indigenous-Led Land Management in African Countries considering the high level of wildlife killings in the continent?

Answer 3: There are ways to apply remote sensing to tackle illegal wildlife poaching. For example, you can predict wildlife migrations during remote sensing, but tracking wet season greening. This will indicate where and when migratory species may be at a certain location to strategize patrols. There are other groups who specialize in using remote sensing for biodiversity monitoring, such as the Jane Goodall Institute. I can provide more information following this webinar. Wildlife Insights uses remote cameras.



Question 4: The fires in the FIRECAST application include fires detected in urban areas?

Answer 4: Yes, fire are detected in urban areas. Smoke stacks are filtered out of urban areas.

Question 5: AFIS: is it predicted fire spread or it is observation?

Answer 5: AFIS has active fire detections globally. Fire danger is also indicated (dry areas of potential and spread). There is a predictive fire spread model in parts of Africa.

Question 6: Is there an application like Firecast for the Mediterranean area?

Answer 6: yes, the JRC in Italy. Joint Research Center also has a fire (regional) alert system.

Question 7: Being Internet a large limitation in remote areas like Amazon, how do you handle it to still use the apps? Are there other way to rise alerts like phones or radio communications?

Answer 7: The apps we have shown, most, work offline but connecting periodically will be needed. GPS will still be used. Offline capability is supported in some of these apps. Radio communication is used and coordinated locally. Two examples at the local and regional level used radio and phones to provide alerts in the field. At some level internet will be needed but working in conjunction with radio and phone.

Question 8: Are any of the applications you demonstrated in need of volunteer skilled application developers?

Answer 8: There are many opportunities in country and skilled developers would likely be needed. We do not have the list of which specific ones however.

Question 9: As some Indigenous communities - especially in Asia - are practicing shifting cultivation, it is rather problematic that these apps focus so much on fire alerts (they burn parts of the forest for cultivation - in a sustainable manner, leaving it fallow for years after use), since they are criminalised for practicing this cultivation method. Is it possible to use the remote sensing for documenting that the shifting cultivation is in fact sustainable over time? Rather than governments and rangers using them to criminalize the indigenous communities?

Answer 9: Many active fire apps are intended to prevent uncontrolled burning, primarily. Focussing on the information to enhance practices as to be more



sustainable. There are some RS products that show greenness that could be used to show sustainable land mgmt practices.

Question 10: There is a platform for unify all geodata generated with different tools?

Answer 10: No single platform. One initiative (Global Forest Watch, for instance tries to tie in multiple datasets). The ESRI platform in Session 1 is another.

Question 11: In the past experiences, how did use transfer knowledge to indigenous people (how did you train them)? Was it a challenge to empower people?

Answer 11: The Conservation International Team has experience engaging groups in Peru and Ecuador. This will have to be a long term engagement and involves a lot of listening. More listening than teaching. The reansfer goes both ways. We can learn much from the communities as well.

Question 12: Is there any work that you have done on using GOES 16 and 17 for Fire Detection?

Answer 12: Some (AFIS, for example) uses some GOES data. A global geostationary fire product will be available in the coming years.

Question 13: Are you aware of any mobile applications that can help monitor human rights violations?

Answer 13: We will consult the team at CI on that.

Question 14: how much does the Drought is responsible for the fires in forests and why there wasn't early warning alerts in the recent fires in California to alert the locals?

Answer 14: Drought plays a large role to show potential. US early warning models did provide alerts in California on prediction. The fires moved very quickly due to high winds.

Question 15: Would you know what organization(s) are doing similar work like yours, but applied to air quality and pollution?

Answer 15: WRI's Global Forest Watch covers air quality. Near real time AQ monitoring is certainly possible using remote sensing.