Schedule - One day workshop - Google Earth Engine in Python (Google CoLab)

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| **Time** | **Topic** | **Location** |
| 15 minutes  10 am - 10:15 am MDT  (noon - 12:15 EST) | Welcome and “house-keeping” | Webex |
| 25 minutes  10:15 - 10:25 MDT  12:15 - 12:25 EDT | Presentation: Intro to Google Earth Engine   * What is it, what can you do with it? (what can’t you do with it) * Basic GEE data structure and terminology * Explore the Data Catalogue * Javascript API vs Python API * Earth Engine Assets | Webex |
| 40 minutes 10:25 - 11:05 MDT  *(12:25 - 1:05 pm EDT)* | Coding demo (1 - Intro & 2- Intro to GEE)   * Setting up a Colab Notebook and Basic python intro * Print statements and getInfo() * Installing and importing required packages * Import and filter images * Printing functions * Visualize a single Landsat image * Built in functions   + Calculate NDVI four ways | Webex (+colab) |
| 40 minutes  11:05 - 11:45 MDT  *(1:05 pm -11:45 pm EDT)* | Break out room 1 ( **Exercise1-answer**)   * Write your own script   + Import and visualize Sentinel-2 data   + Calculate NDWI | Zoom  Group 1: Room A  Group 2: Room B |
| 11:45 - noon MDT  *(1:45 - 2 pm EDT)* | Regroup/questions | Webex |
| 1 hour  Noon - 1 pm MDT  *(2 pm - 3 pm EDT)* | BREAK |  |
| 30 minutes  1:10 pm - 1:20 pm MDT  *(3:10 pm - 3:20 EDT)* | Presentation/Coding Demo (3 - Image Classification and 4 - Cloud Mask and Mosaic)   * Image Classification * Export results * Cloud Mask and Mosaicking images (Landsat-8)   + “Quality mosaic” | Webex (+colab) |
| 30 minutes  1:20 - 1:50 MDT  *(3:20 - 3:50 EDT)* | Break out rooms (**Exercise2-Answer**)   * Write your own script   + Cloud Mask and Mosaic sentinel-2 imagery | Zoom  Group 1: Room B  Group 2: Room A |
| 1:50 - 2 pm | Regroup/questions | Webex |
| 30 minutes  1:50 - 2:20 MDT  *(3:50 - 4:20 EDT)* | Presentation - Time Series Extraction (discussion of working with other Python packages) (5 - composite\_cloud\_mask\_timeseries.ipynb)   * Produce a monthly image composite * Time series extraction   Presentation Working with SAR data in GEE (6 - visualizing SAR.ipynb)   * Demo Sentinel1 visualization   Javascript to Python Conversion | Webex (+colab) |
| 30 minutes  2:20 - 2:50 pm  *(5:20 - 5:50 pm EDT)* | Break out rooms (zoom)   * Write your own script * “two challenges” (pick one)   + **Exercise 3 Answer** | Zoom  Group 1: Room A  Group 2: Room B |
| 10 minutes  2:50 - 3 pm MDT  *(4:50 - 5 pm EDT)* | Wrap up | Webex |

Zoom Room A (Adam Mohiuddin): [https://zoom.us/j/91402186535](https://zoom.us/j/91402186535?pwd=MS9MYzIvN2dDcFZPN0wyYlFnYW93QT09) (passcode CSRS\_A)

Zoom Room B (Koreen Millard): <https://carleton-ca.zoom.us/j/95416942002> (passcode CSRS\_B)

**Group 1:**

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| Alicia | Pouw |
| Irini | Soubry |
| Alexis | Robinson |
| Rebecca | Edwards |
| Jason | Skidmore |
| Yanben | Shen |
| Ambika | Paudel |
| Mishélle | Wehbe |
| S.M.Hansanee | Fernando |
| Thuy | Doan |
| Travis | Grant |
| Kevin | Murnaghan |
| Amanda | Boatswain Jacques |
| Lee | Coulthard |

**Group 2**

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| Craig | Coburn |
| Gifty | Attiah |
| Jennifer | Hird |
| A | Merchant |
| Rebecca | Warren |
| Claudio Ignacio | Fernandez |
| Sean | Herridge-Berry |
| Chris | Bater |
| Caitlin | Willier |
| Mary-Anne | Fobert |
| George | Choma |
| Gabriela | Siles |
| Andrew | Plowright |