

Timesheet Details by Team

Dugal Harris

Between June 01, 2018 and September 24, 2018

| | Client | Project | Task | Notes | Hours | Billed |
|----------------------|-------------------|--|-----------------------------|--|-------|--------|
| Harris, Dugal | | | | | | |
| 06/25/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Post process and QC June 2018 field sampling DGPS positions | 2.00 | |
| 06/25/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Generate carbon stock density over current data to inform future strata to sample | 2.00 | |
| 06/25/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Retrieve DGPS data. Return DGPS to SU. | 3.00 | |
| 07/03/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Write up sections on GPS accuracy and post-processing for SOP | 3.00 | |
| 07/03/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Research | Understand real time GPS differential correction options | 1.00 | |
| 07/04/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Write application for satellite image grant from DigitalGlobe Foundation | 2.00 | |
| 07/04/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Research | Analyse available satellite images of study area for selection. Research which image types are geometrically & radiometrically suitable. | 4.00 | |
| 07/05/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote | Meetings, admin & reporting | Review SOP | 1.00 | |

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| | | Sensing | | | | |
| 07/23/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | QC June 2018 allometric data. Generate CS estimates from June 2018 allometric data and add these plots to shapefile | 3.00 | |
| 07/25/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Follow up & complying with conditions for satellite image grant from DG | 1.00 | |
| 07/25/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Software development | Make script to read and process litter data. Add to woody CS outputs. | 5.00 | |
| 07/26/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Test orthorectification of WV3 image with RPC only | 1.00 | |
| 07/27/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | First look at litter CS correlation with image features. Redo woody CS correlation study with June 2018 allometry data. | 2.00 | |
| 08/03/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Meeting with Cos to discuss sampling strategy | 1.00 | |
| 08/05/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Start change to allometry scripts for new spreadsheets | 1.00 | |
| 08/06/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Massage and error check latest spreadsheets. Implement unknown species guilds. Code for reading and processing new consolidated woody and litter C spreadsheets. Analyse results | 6.00 | |
| 08/07/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Analyse carbon statistics (SE/Mean). | 1.00 | |
| 08/10/18 | Rhodes University | GEF5 SLM: 3.1b - | Meetings, admin & | GEF outcome 3 strategy meeting | 1.00 | |

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| | | Carbon Stock Remote Sensing | reporting | | | |
| 08/13/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Field trip logistics planning with Cos | 1.00 | |
| 08/16/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Collect DGPS from SU | 2.00 | |
| 08/25/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Field work | Travel to Baviaanskloof | 9.00 | |
| 08/26/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Field work | Collect GCP's along main road | 4.00 | |
| 08/27/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Field work | Collect GCP's on Sewefontein and Tchnuganoo | 9.00 | |
| 08/28/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Field work | Collect GCP on Sederkloof road | 1.00 | |
| 08/29/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Field work | Travel from Baviaanskloof | 9.00 | |
| 09/03/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Python script to convert GCP's into PCI format | 4.00 | |
| 09/03/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Orthorectify WV3 pan image | 2.00 | |
| 09/03/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Orthorectify WV3 MS image using pan as reference | 2.00 | |

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| 09/04/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Experiment with various options for ATCOR radiometric calibration of WV3 image | 4.00 | |
| 09/05/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Research | Investigate suitable surface reflectance references for Worldview-3 | 3.00 | |
| 09/06/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Acquire Sentinel image concurrent and co-located to WV3 image. | 1.00 | |
| 09/06/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Correct Sentinel L1C data to BOA (surface) reflectance. | 2.00 | |
| 09/06/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Research | Learning about Sentinel data access and calibration. Acquire and install Sentinel software tools. | 2.00 | |
| 09/07/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Acquire and analyse WV2 and Sentinel RSR's to establish best band mapping | 2.00 | |
| 09/07/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Resample and stack Sentinel-2 bands to match WV2 | 3.00 | |
| 09/07/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Acquire and calibrate imagery | Redo Sentinel L2A generation from command line with DEM options | 1.00 | |
| 09/10/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Post process Sept 2018 sampling locations | 1.00 | |
| 09/10/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Return DGPS to SU | 2.00 | |
| 09/19/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote | Data analysis | Basic regression analysis with ATCOR WV3 image(s) | 5.00 | |

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| | | Sensing | | | | |
| 09/20/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Basic regression analysis with ATCOR WV3 image(s) | 4.00 | |
| 09/20/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Re-generate study site maps with latest carbon data and WV3 image | 1.00 | |
| 09/21/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Data analysis | Add litter data for trial plots to summary and shapefiles. Redo correlation analysis. | 1.00 | |
| 09/21/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Write Q3 report. | 4.00 | |
| 09/24/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Planning meeting with Cos. | 1.00 | |
| 09/24/18 | Rhodes University | GEF5 SLM: 3.1b - Carbon Stock Remote Sensing | Meetings, admin & reporting | Q4 budget planning. | 1.00 | |
| Total | | | | | 121.00 | |
| ALL TOTAL | | | | | 121.00 | |