Production Code: 'CHM-based Pipeline'

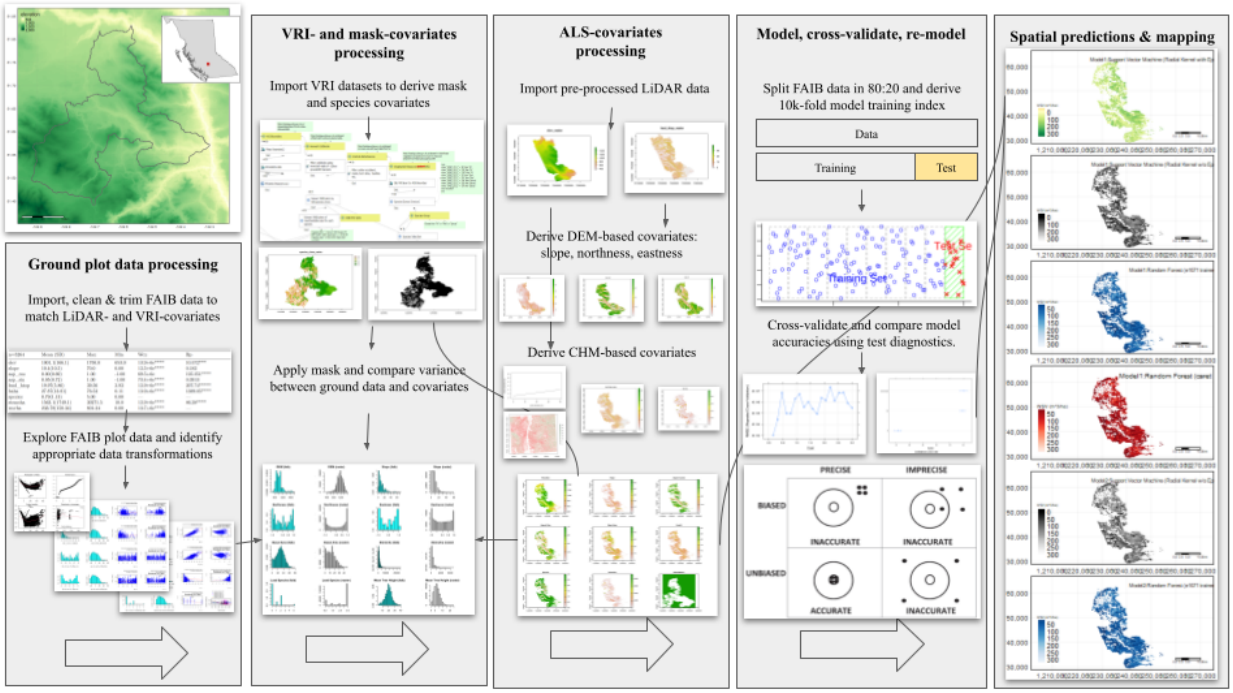
Cabin-GIS

21/06/2022

Contents

Action

For purpose of data quality control this report documents neccessary steps coded to stitch chunk mosaics for each of the 16 Operating Areas at 1m resolution, and then reprojection and aggregation to 3005EPSG and 100m resolution before merging everything into Williams Lake wide rasters representing CHM and DEM layers.

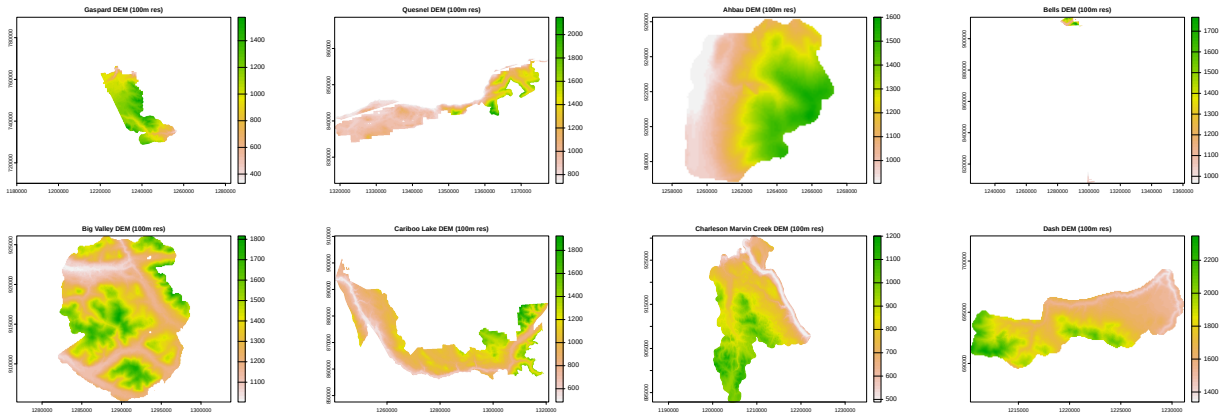


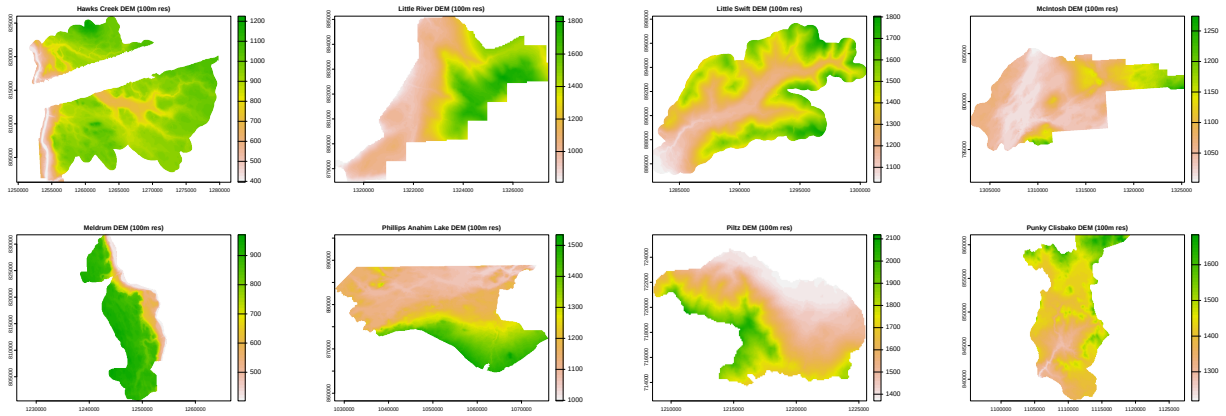
Import LiDAR: DEM mosaics

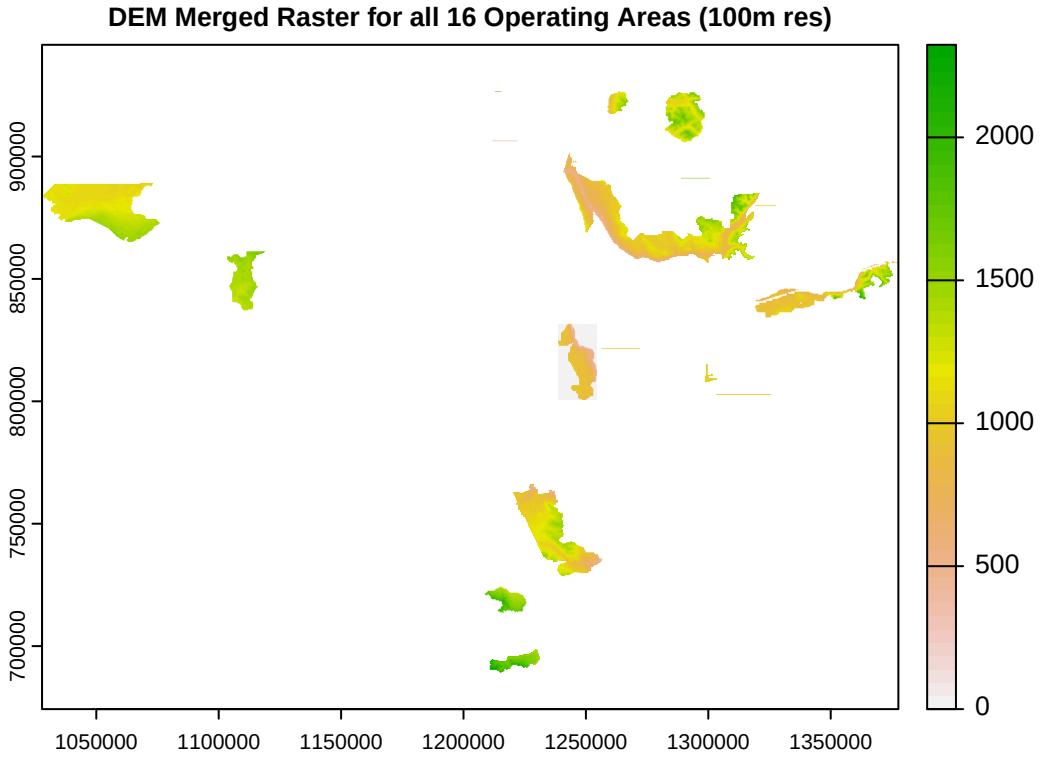
```
filez_be_gaspard = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/gaspard/BareEarth", full.nam
elev_raster_list_gaspard <- lapply(filez_be_gaspard, raster)
elev_raster_gaspard = do.call(merge, c(elev_raster_list_gaspard, tolerance = 1))
elev_rast_gaspard = terra::rast(elev_raster_gaspard)
terra::crs(elev_rast_gaspard) = "epsg:3005"
elev_rast_gaspard = terra::aggregate(elev_rast_gaspard, fact = 100, fun = mean)
writeRaster(elev_rast_gaspard, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/gaspard/elev_ras

filez_be_quesnel = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/quesnel/BareEarth", full.nam
elev_raster_list_quesnel <- lapply(filez_be_quesnel, raster)
elev_raster_quesnel = do.call(merge, c(elev_raster_list_quesnel, tolerance = 1))
elev_rast_quesnel = terra::rast(elev_raster_quesnel)
terra::crs(elev_rast_quesnel) = "epsg:3005"
elev_rast_quesnel = terra::aggregate(elev_rast_quesnel, fact = 100, fun = mean)
writeRaster(elev_rast_quesnel, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/quesnel/elev_ras

filez_be_ahbau = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/ahbau/BareEarth", full.names =
elev_raster_list_ahbau <- lapply(filez_be_ahbau, raster)
elev_raster_ahbau = do.call(merge, c(elev_raster_list_ahbau, tolerance = 1))
elev_rast_ahbau = terra::rast(elev_raster_ahbau)
terra::crs(elev_rast_ahbau) = "epsg:3005"
elev_rast_ahbau = terra::aggregate(elev_rast_ahbau, fact = 100, fun = mean)
writeRaster(elev_rast_ahbau, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/ahbau/elev_raster_

filez_be_bells = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/bells/BareEarth", full.names =
elev_raster_list_bells <- lapply(filez_be_bells, raster)
elev_raster_bells = do.call(merge, c(elev_raster_list_bells, tolerance = 1))
elev_rast_bells = terra::rast(elev_raster_bells)
terra::crs(elev_rast_bells) = "epsg:3005"
elev_rast_bells = terra::aggregate(elev_rast_bells, fact = 100, fun = mean)
writeRaster(elev_rast_bells, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/bells/elev_raster_

filez_be_big_valley = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/big_valley/BareEarth", fu
elev_raster_list_big_valley <- lapply(filez_be_big_valley, raster)
elev_raster_big_valley = do.call(merge, c(elev_raster_list_big_valley, tolerance = 1))
elev_rast_big_valley = terra::rast(elev_raster_big_valley)
terra::crs(elev_rast_big_valley) = "epsg:3005"
elev_rast_big_valley = terra::aggregate(elev_rast_big_valley, fact = 100, fun = mean)
writeRaster(elev_rast_big_valley, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/big_valley/el

filez_be_cariboo_lake = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/cariboo_lake/BareEarth
elev_raster_list_cariboo_lake <- lapply(filez_be_cariboo_lake, raster)
elev_raster_cariboo_lake = do.call(merge, c(elev_raster_list_cariboo_lake, tolerance = 1))
elev_rast_cariboo_lake = terra::rast(elev_raster_cariboo_lake)
terra::crs(elev_rast_cariboo_lake) = "epsg:3005"
elev_rast_cariboo_lake = terra::aggregate(elev_rast_cariboo_lake, fact = 100, fun = mean)
writeRaster(elev_rast_cariboo_lake, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/cariboo_lak

filez_be_charleson_marvincreek = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/charleson_mar
elev_raster_list_charleson_marvincreek <- lapply(filez_be_charleson_marvincreek, raster)
elev_raster_charleson_marvincreek = do.call(merge, c(elev_raster_list_charleson_marvincreek, tolerance =
```

```
elev_rast_charleson_marvincreek = terra::rast(elev_raster_charleson_marvincreek)
terra::crs(elev_rast_charleson_marvincreek) = "epsg:3005"
elev_rast_charleson_marvincreek = terra::aggregate(elev_rast_charleson_marvincreek, fact = 100, fun = me
writeRaster(elev_rast_charleson_marvincreek, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/cl

filez_be_dash = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/dash/BareEarth", full.names = T
elev_raster_list_dash <- lapply(filez_be_dash, raster)
elev_raster_dash = do.call(merge, c(elev_raster_list_dash, tolerance = 1))
elev_rast_dash = terra::rast(elev_raster_dash)
terra::crs(elev_rast_dash) = "epsg:3005"
elev_rast_dash = terra::aggregate(elev_rast_dash, fact = 100, fun = mean)
writeRaster(elev_rast_dash, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/dash/elev_raster_10

filez_be_hawks_creek = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/hawks_creek/BareEarth",
elev_raster_list_hawks_creek <- lapply(filez_be_hawks_creek, raster)
elev_raster_hawks_creek = do.call(merge, c(elev_raster_list_hawks_creek, tolerance = 1))
elev_rast_hawks_creek = terra::rast(elev_raster_hawks_creek)
terra::crs(elev_rast_hawks_creek) = "epsg:3005"
elev_rast_hawks_creek = terra::aggregate(elev_rast_hawks_creek, fact = 100, fun = mean)
writeRaster(elev_rast_hawks_creek, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/hawks_creek/

filez_be_little_river = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/little_river/BareEarth
elev_raster_list_little_river <- lapply(filez_be_little_river, raster)
elev_raster_little_river = do.call(merge, c(elev_raster_list_little_river, tolerance = 1))
elev_rast_little_river = terra::rast(elev_raster_little_river)
terra::crs(elev_rast_little_river) = "epsg:3005"
elev_rast_little_river = terra::aggregate(elev_rast_little_river, fact = 100, fun = mean)
writeRaster(elev_rast_little_river, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/little_rive

filez_be_little_swift = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/little_swift/BareEarth
elev_raster_list_little_swift <- lapply(filez_be_little_swift, raster)
elev_raster_little_swift = do.call(merge, c(elev_raster_list_little_swift, tolerance = 1))
elev_rast_little_swift = terra::rast(elev_raster_little_swift)
terra::crs(elev_rast_little_swift) = "epsg:3005"
elev_rast_little_swift = terra::aggregate(elev_rast_little_swift, fact = 100, fun = mean)
writeRaster(elev_rast_little_swift, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/little_swi

filez_be_mcintosh = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/mcintosh/BareEarth", full.n
elev_raster_list_mcintosh <- lapply(filez_be_mcintosh, raster)
elev_raster_mcintosh = do.call(merge, c(elev_raster_list_mcintosh, tolerance = 1))
elev_rast_mcintosh = terra::rast(elev_raster_mcintosh)
terra::crs(elev_rast_mcintosh) = "epsg:3005"
elev_rast_mcintosh = terra::aggregate(elev_rast_mcintosh, fact = 100, fun = mean)
writeRaster(elev_rast_mcintosh, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/mcintosh/elev_

filez_be_meldrum = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/meldrum/BareEarth", full.nam
elev_raster_list_meldrum = lapply(filez_be_meldrum, raster)
elev_raster_meldrum = do.call(merge, c(elev_raster_list_meldrum, tolerance = 1))
elev_rast_meldrum = terra::rast(elev_raster_meldrum)
terra::crs(elev_rast_meldrum) = "epsg:3005"
elev_rast_meldrum = terra::aggregate(elev_rast_meldrum, fact = 100, fun = mean)
writeRaster(elev_rast_meldrum, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/meldrum/elev_ras
```

```
filez_be_phillips_anahim_lake = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/phillips_anahi
elev_raster_list_phillips_anahim_lake <- lapply(filez_be_phillips_anahim_lake, raster)
elev_raster_phillips_anahim_lake = do.call(merge, c(elev_raster_list_phillips_anahim_lake, tolerance =
elev_rast_phillips_anahim_lake = terra::rast(elev_raster_phillips_anahim_lake)
terra::crs(elev_rast_phillips_anahim_lake) = "epsg:3005"
elev_rast_phillips_anahim_lake = terra::aggregate(elev_rast_phillips_anahim_lake, fact = 100, fun = mea
writeRaster(elev_rast_phillips_anahim_lake, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/ph

filez_be_piltz = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/piltz/BareEarth", full.names =
elev_raster_list_piltz = lapply(filez_be_piltz, raster)
elev_raster_piltz = do.call(merge, c(elev_raster_list_piltz, tolerance = 1))
elev_rast_piltz = terra::rast(elev_raster_piltz)
terra::crs(elev_rast_piltz) = "epsg:3005"
elev_rast_piltz = terra::aggregate(elev_rast_piltz, fact = 100, fun = mean)
writeRaster(elev_rast_piltz, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/piltz/elev_raster

filez_be_punky_clisbako = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/punky_clisbako/BareE
elev_raster_list_punky_clisbako = lapply(filez_be_punky_clisbako, raster)
elev_raster_punky_clisbako = do.call(merge, c(elev_raster_list_punky_clisbako, tolerance = 1))
elev_rast_punky_clisbako = terra::rast(elev_raster_punky_clisbako)
terra::crs(elev_rast_punky_clisbako) = "epsg:3005"
elev_rast_punky_clisbako = terra::aggregate(elev_rast_punky_clisbako, fact = 100, fun = mean)
writeRaster(elev_rast_punky_clisbako, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/punky_cl

elev_raster_list = list(
  elev_raster_quesnel, elev_raster_gaspard,
  elev_raster_ahbau, elev_raster_bells,
  elev_raster_big_valley, elev_raster_cariboo_lake,
  elev_raster_charleson_marvincreek, elev_raster_dash,
  elev_raster_hawks_creek, elev_raster_little_river,
  elev_raster_little_swift, elev_raster_mcintosh,
  elev_raster_meldrum, elev_raster_phillips_anahim_lake,
  elev_raster_piltz, elev_raster_punky_clisbako)
elev_raster_all = do.call(merge, c(elev_raster_list, tolerance = 1))
elev_rast_all = terra::rast(elev_raster_all)
writeRaster(elev_rast_all, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/elev_raster_100m_al
```







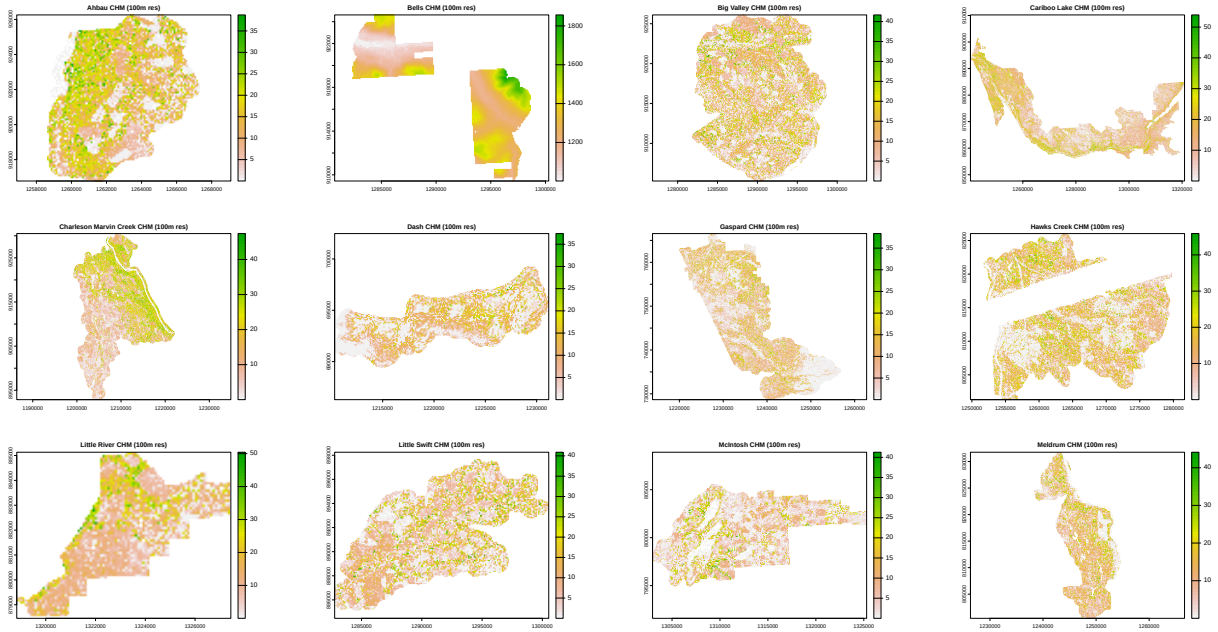
Import LiDAR: CHM mosaics

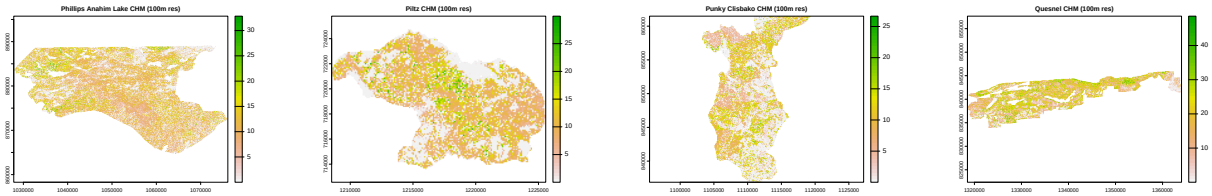
```
filez_vh_gaspard = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/gaspard/VegHt", full.names =
lead_htop_raster_list_gaspard <- lapply(filez_vh_gaspard, raster)
lead_htop_raster_gaspard = do.call(merge, c(lead_htop_raster_list_gaspard, tolerance = 1))
lead_htop_rast_gaspard = terra::rast(lead_htop_raster_gaspard)
terra::crs(lead_htop_rast_gaspard) = "epsg:3005"
lead_htop_rast_gaspard = terra::aggregate(lead_htop_rast_gaspard, fact = 100, fun = mean)
writeRaster(lead_htop_rast_gaspard, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/gaspard/lea
```

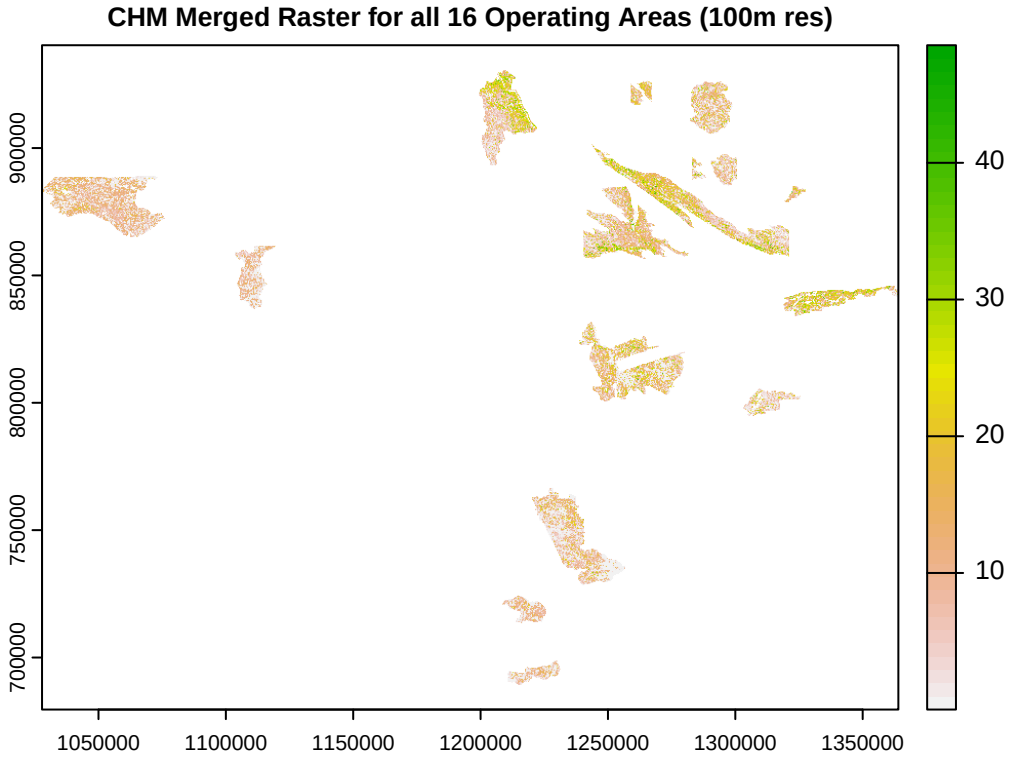
```
filez_vh_quesnel = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/quesnel/VegHt", full.names =
lead_htop_raster_list_quesnel <- lapply(filez_vh_quesnel, raster)
lead_htop_raster_quesnel = do.call(merge, c(lead_htop_raster_list_quesnel, tolerance = 1))
lead_htop_rast_quesnel = terra::rast(lead_htop_raster_quesnel)
terra::crs(lead_htop_rast_quesnel) = "epsg:3005"
lead_htop_rast_quesnel = terra::aggregate(lead_htop_rast_quesnel, fact = 100, fun = mean)
writeRaster(lead_htop_rast_quesnel, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/quesnel/lea

filez_vh_ahbau = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/ahbau/VegHt", full.names = T,
lead_htop_raster_list_ahbau <- lapply(filez_vh_ahbau, raster)
lead_htop_raster_ahbau = do.call(merge, c(lead_htop_raster_list_ahbau, tolerance = 1))
lead_htop_rast_ahbau = terra::rast(lead_htop_raster_ahbau)
terra::crs(lead_htop_rast_ahbau) = "epsg:3005"
lead_htop_rast_ahbau = terra::aggregate(lead_htop_rast_ahbau, fact = 100, fun = mean)
writeRaster(lead_htop_rast_ahbau, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/ahbau/lead_ht

filez_vh_bells = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/bells/VegHt", full.names = T,
lead_htop_raster_list_bells <- lapply(filez_vh_bells, raster)
lead_htop_raster_bells = do.call(merge, c(lead_htop_raster_list_bells, tolerance = 1))
lead_htop_rast_bells = terra::rast(lead_htop_raster_bells)
terra::crs(lead_htop_rast_bells) = "epsg:3005"
lead_htop_rast_bells = terra::aggregate(lead_htop_rast_bells, fact = 100, fun = mean)
writeRaster(lead_htop_rast_bells, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/bells/lead_ht

filez_vh_big_valley = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/big_valley/VegHt", full.n
lead_htop_raster_list_big_valley <- lapply(filez_vh_big_valley, raster)
lead_htop_raster_big_valley = do.call(merge, c(lead_htop_raster_list_big_valley, tolerance = 1))
lead_htop_rast_big_valley = terra::rast(lead_htop_raster_big_valley)
terra::crs(lead_htop_rast_big_valley) = "epsg:3005"
lead_htop_rast_big_valley = terra::aggregate(lead_htop_rast_big_valley, fact = 100, fun = mean)
writeRaster(lead_htop_rast_big_valley, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/big_vall

filez_vh_cariboo_lake = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/cariboo_lake/VegHt", fu
lead_htop_raster_list_cariboo_lake <- lapply(filez_vh_cariboo_lake, raster)
lead_htop_raster_cariboo_lake = do.call(merge, c(lead_htop_raster_list_cariboo_lake, tolerance = 1))
lead_htop_rast_cariboo_lake = terra::rast(lead_htop_raster_cariboo_lake)
terra::crs(lead_htop_rast_cariboo_lake) = "epsg:3005"
lead_htop_rast_cariboo_lake = terra::aggregate(lead_htop_rast_cariboo_lake, fact = 100, fun = mean)
writeRaster(lead_htop_rast_cariboo_lake, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/caribo

filez_vh_charleson_marvincreek = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/charleson_marv
lead_htop_raster_list_charleson_marvincreek <- lapply(filez_vh_charleson_marvincreek, raster)
lead_htop_raster_charleson_marvincreek = do.call(merge, c(lead_htop_raster_list_charleson_marvincreek,
lead_htop_rast_charleson_marvincreek = terra::rast(lead_htop_raster_charleson_marvincreek)
terra::crs(lead_htop_rast_charleson_marvincreek) = "epsg:3005"
lead_htop_rast_charleson_marvincreek = terra::aggregate(lead_htop_rast_charleson_marvincreek, fact = 100
writeRaster(lead_htop_rast_charleson_marvincreek, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosai

filez_vh_dash = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/dash/VegHt", full.names = T, al
lead_htop_raster_list_dash <- lapply(filez_vh_dash, raster)
lead_htop_raster_dash = do.call(merge, c(lead_htop_raster_list_dash, tolerance = 1))
lead_htop_rast_dash = terra::rast(lead_htop_raster_dash)
terra::crs(lead_htop_rast_dash) = "epsg:3005"
```

```
lead_htop_rast_dash = terra::aggregate(lead_htop_rast_dash, fact = 100, fun = mean)
writeRaster(lead_htop_rast_dash, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/hawks_creek/l

filez_vh_hawks_creek = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/hawks_creek/VegHt", full
lead_htop_raster_list_hawks_creek <- lapply(filez_vh_hawks_creek, raster)
lead_htop_raster_hawks_creek = do.call(merge, c(lead_htop_raster_list_hawks_creek, tolerance = 1))
lead_htop_rast_hawks_creek = terra::rast(lead_htop_raster_hawks_creek)
terra::crs(lead_htop_rast_hawks_creek) = "epsg:3005"
lead_htop_rast_hawks_creek = terra::aggregate(lead_htop_rast_hawks_creek, fact = 100, fun = mean)
writeRaster(lead_htop_rast_hawks_creek, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/hawks_

filez_vh_little_river = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/little_river/VegHt", fu
lead_htop_raster_list_little_river <- lapply(filez_vh_little_river, raster)
lead_htop_raster_little_river = do.call(merge, c(lead_htop_raster_list_little_river, tolerance = 1))
lead_htop_rast_little_river = terra::rast(lead_htop_raster_little_river)
terra::crs(lead_htop_rast_little_river) = "epsg:3005"
lead_htop_rast_little_river = terra::aggregate(lead_htop_rast_little_river, fact = 100, fun = mean)
writeRaster(lead_htop_rast_little_river, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/littl

filez_vh_little_swift = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/little_swift/VegHt", fu
lead_htop_raster_list_little_swift <- lapply(filez_vh_little_swift, raster)
lead_htop_raster_little_swift = do.call(merge, c(lead_htop_raster_list_little_swift, tolerance = 1))
lead_htop_rast_little_swift = terra::rast(lead_htop_raster_little_swift)
terra::crs(lead_htop_rast_little_swift) = "epsg:3005"
lead_htop_rast_little_swift = terra::aggregate(lead_htop_rast_little_swift, fact = 100, fun = mean)
writeRaster(lead_htop_rast_little_swift, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/littl

filez_vh_mcintosh = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/mcintosh/VegHt", full.name
lead_htop_raster_list_mcintosh <- lapply(filez_vh_mcintosh, raster)
lead_htop_raster_mcintosh = do.call(merge, c(lead_htop_raster_list_mcintosh, tolerance = 1))
lead_htop_rast_mcintosh = terra::rast(lead_htop_raster_mcintosh)
terra::crs(lead_htop_rast_mcintosh) = "epsg:3005"
lead_htop_rast_mcintosh = terra::aggregate(lead_htop_rast_mcintosh, fact = 100, fun = mean)
writeRaster(lead_htop_rast_mcintosh, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/mcintosh/

filez_vh_meldrum = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/meldrum/VegHt", full.names =
lead_htop_raster_list_meldrum = list(filez_vh_meldrum, raster)
lead_htop_raster_meldrum = do.call(merge, c(lead_htop_raster_list_meldrum, tolerance = 1))
lead_htop_rast_meldrum = terra::rast(lead_htop_raster_meldrum)
terra::crs(lead_htop_rast_meldrum) = "epsg:3005"
lead_htop_rast_meldrum = terra::aggregate(lead_htop_rast_meldrum, fact = 100, fun = mean)
writeRaster(lead_htop_rast_meldrum, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/meldrum/lea

filez_vh_phillips_anahim_lake = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/phillips_anahi
lead_htop_raster_list_phillips_anahim_lake <- lapply(filez_vh_phillips_anahim_lake, raster)
lead_htop_raster_phillips_anahim_lake = do.call(merge, c(lead_htop_raster_list_phillips_anahim_lake, to
lead_htop_rast_phillips_anahim_lake = terra::rast(lead_htop_raster_phillips_anahim_lake)
terra::crs(lead_htop_rast_phillips_anahim_lake) = "epsg:3005"
lead_htop_rast_phillips_anahim_lake = terra::aggregate(lead_htop_rast_phillips_anahim_lake, fact = 100,
writeRaster(lead_htop_rast_phillips_anahim_lake, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosai

filez_vh_piltz = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/piltz/VegHt", full.names = T,
lead_htop_raster_list_piltz <- lapply(filez_vh_piltz, raster)
```

```
lead_htop_raster_piltz = do.call(merge, c(lead_htop_raster_list_piltz, tolerance = 1))
lead_htop_rast_piltz = terra::rast(lead_htop_raster_piltz)
terra::crs(lead_htop_rast_piltz) = "epsg:3005"
lead_htop_rast_piltz = terra::aggregate(lead_htop_rast_piltz, fact = 100, fun = mean)
writeRaster(lead_htop_rast_piltz, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/piltz/lead_ht

filez_vh_punky_clisbako = list.files("/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/punky_clisbako/VegHt
lead_htop_raster_list_punky_clisbako <- lapply(filez_vh_punky_clisbako, raster)
lead_htop_raster_punky_clisbako = do.call(merge, c(lead_htop_raster_list_punky_clisbako, tolerance = 1))
lead_htop_rast_punky_clisbako = terra::rast(lead_htop_raster_punky_clisbako)
terra::crs(lead_htop_rast_punky_clisbako) = "epsg:3005"
lead_htop_rast_punky_clisbako = terra::aggregate(lead_htop_rast_punky_clisbako, fact = 100, fun = mean)
writeRaster(lead_htop_rast_punky_clisbako, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/punk

lead_htop_raster_list = list(
  lead_htop_raster_quesnel, lead_htop_raster_gaspard,
  lead_htop_raster_ahbau, #lead_htop_raster_bells,
  lead_htop_raster_big_valley, lead_htop_raster_cariboo_lake,
  lead_htop_raster_charleson_marvincreek, lead_htop_raster_dash,
  lead_htop_raster_hawks_creek, lead_htop_raster_little_river,
  lead_htop_raster_little_swift, lead_htop_raster_mcintosh,
  lead_htop_raster_meldrum, lead_htop_raster_phillips_anahim_lake,
  lead_htop_raster_piltz, lead_htop_raster_punky_clisbako)
lead_htop_raster_all = do.call(merge, c(lead_htop_raster_list, tolerance = 1))
lead_htop_rast_all = terra::rast(lead_htop_raster_all)
writeRaster(lead_htop_raster_all, filename = "/media/seamus/Ubuntu 22_04 LTS amd64/mosaics/lead_htop_ras
```




Phillips Anahim Lake CHM (100m res)
Piltz CHM (100m res)
Punky Clisbako CHM (100m res)
Quesnel CHM (100m res)


CHM Merged Raster for all 16 Operating Areas (100m res)
900000
850000
800000
750000
700000
1050000
1100000
1150000
1200000
1250000
1300000
1350000
40
30
20
10