Dataset Title:
CAMSIS WLEF Surface Reflectance Dataset

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Time of Interest:
2019/06/27 to 2019/08/21

Area of Interest:
Latitude/Longitude: 45.95 to 45.94/-90.28 to -90.27

Data Frequency:
Daily

Data Spatial Type:
Grid Raster. Single band geotiffs in EPSG32615 projection. Data available at original georeferenced resolution (~1m) and resampled to Sentinel-2 10m grid.

General Dataset Description:
The CAMSIS dataset provides daily surface reflectance for Blue (460-480nm), Green (530-570nm), Red (610-690nm), and Near-Infrared (810-890nm) bands at the WLEF site between 2019/06/27 to 2019/08/21. Data is captured 4 times a day at 16:45, 17:00, 17:15, and 17:30 (UTC) matching the overpass time of Landsat-8 and Sentinel-2 platforms. The clearest observation from each day is then selected and processed to surface reflectance using a reference 50% reflectance target present in each image. Data is made available in geotiff files (EPSG32615) both at original georeferenced resolution (~1m) and resampled to the Sentinel-2 10m grid.

Data restrictions:
Follow restrictions in https://www.eol.ucar.edu/content/cheesehead-data-policy .

Digital Object Identifier (DOI): https://doi.org/10.26023/4ECR-NGTP-1N0X

GCMD Keywords:
EARTH SCIENCE > LAND SURFACE > SURFACE RADIATIVE PROPERTIES > REFLECTANCE

Publications/Conferences:

Vermote, E., J. McCorkel, W. Rountree, A. Santamaría-Artigas, S. Skakun, B. Franch, and J. Roger (2019). “Validation Of High Spatial Resolution Surface Reflectance Using A Camera System (CAMSIS)”. American Geophysical Union (AGU) Fall Meeting. San Francisco, CA, USA.

About Data Files:

File Naming: <YYYYMMDD>T<HHMMSS>_<BAND>_georef_<RESOLUTION>.tif
File Format: Geotiff files in EPSG32615 projection at 01m and 10m resolutions.
Scale factor: 0.0001
View Zenith Angle at center of image: ~45 degrees

File Names:

camsis_01m/20190629T171503_BLUE_georef.tif
camsis_01m/20190629T171503_GREEN_georef.tif
camsis_01m/20190629T171503_NIR_georef.tif
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