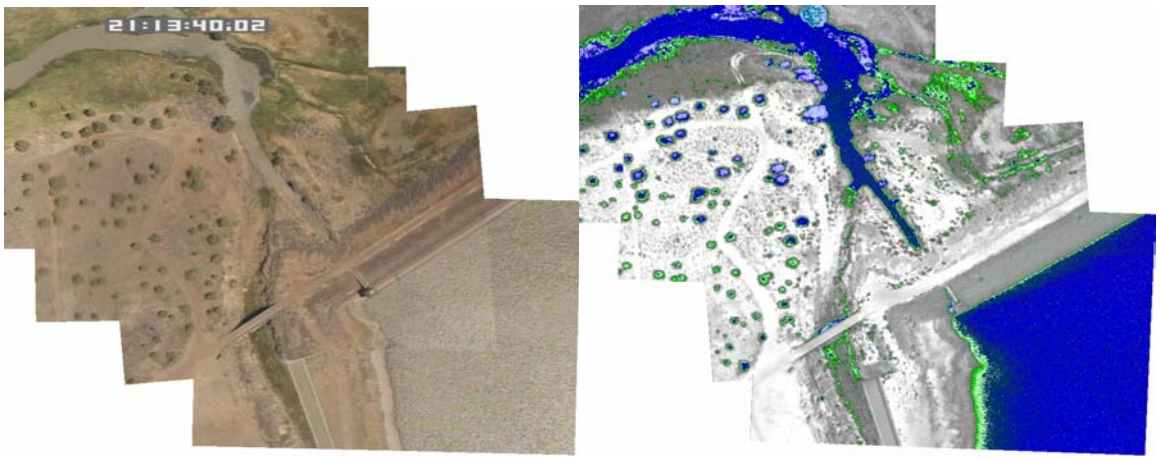
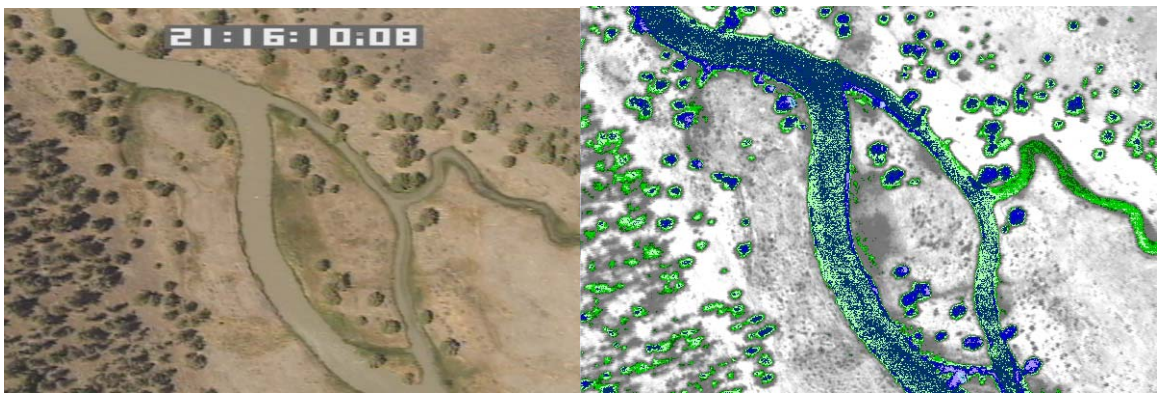
Appendix B – Selected Images from the Lost River Basin

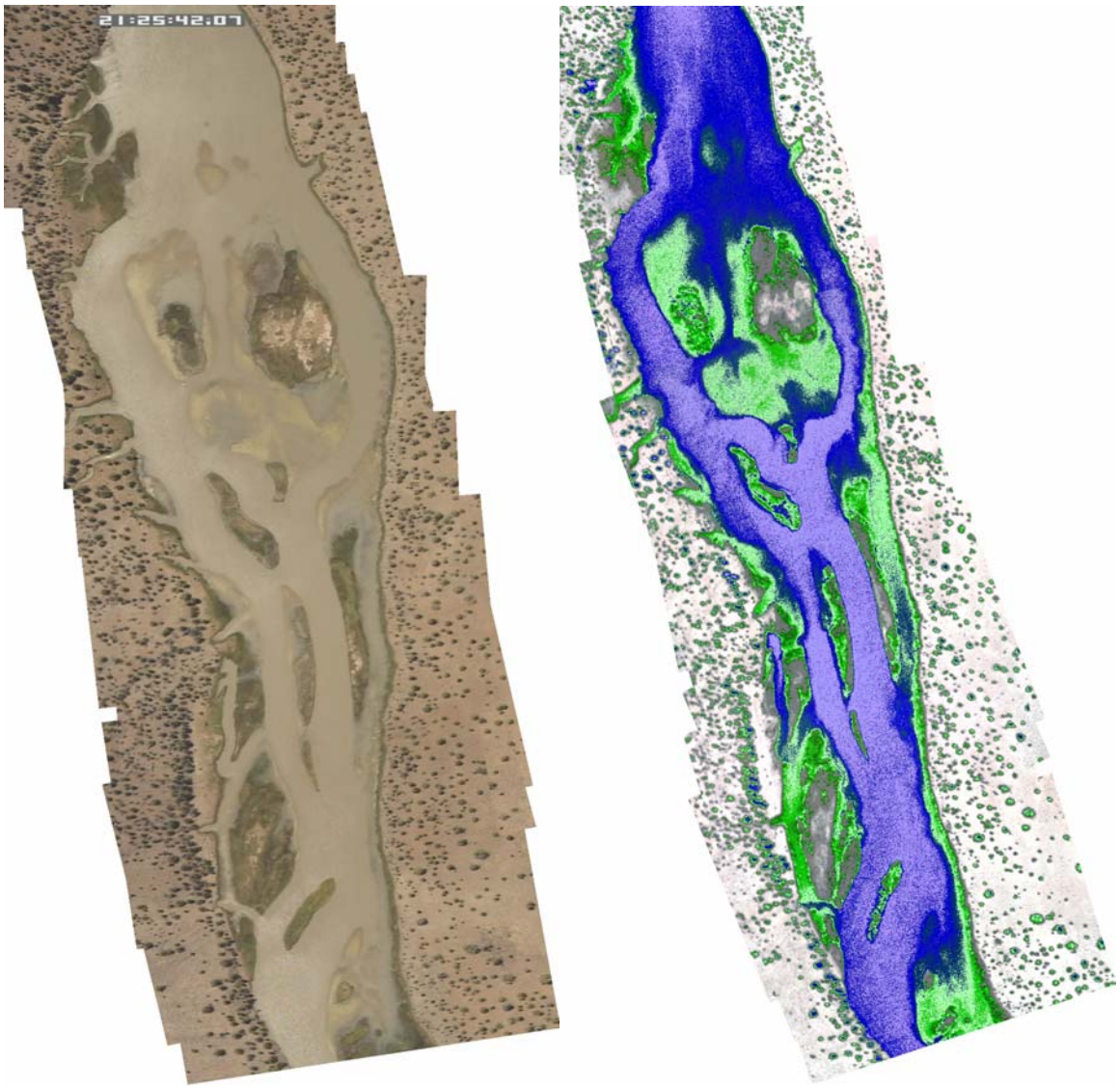
Lost River



Frame: lst0055-0058 – Visible band/TIR images showing the outlet of Clear Lake Reservoir (21.5°C) to the Lost River (22°C) at river mile 75. Flow direction is from the bottom to the top of the image.



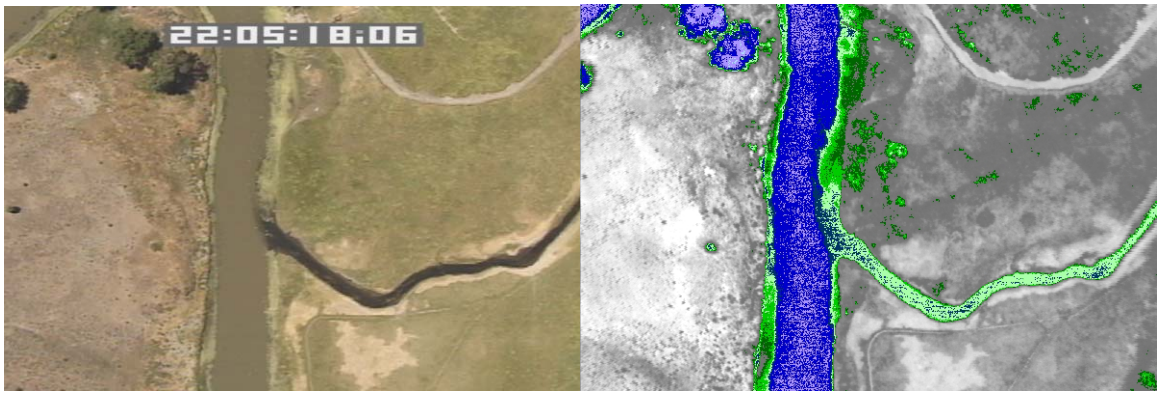
Frame: lst0133 – Visible band/TIR image showing the confluence of an unnamed tributary (23.8°C) to the right bank of Lost River (22.8°C) at river mile 72.8. Flow direction is from the bottom to the top of the image.



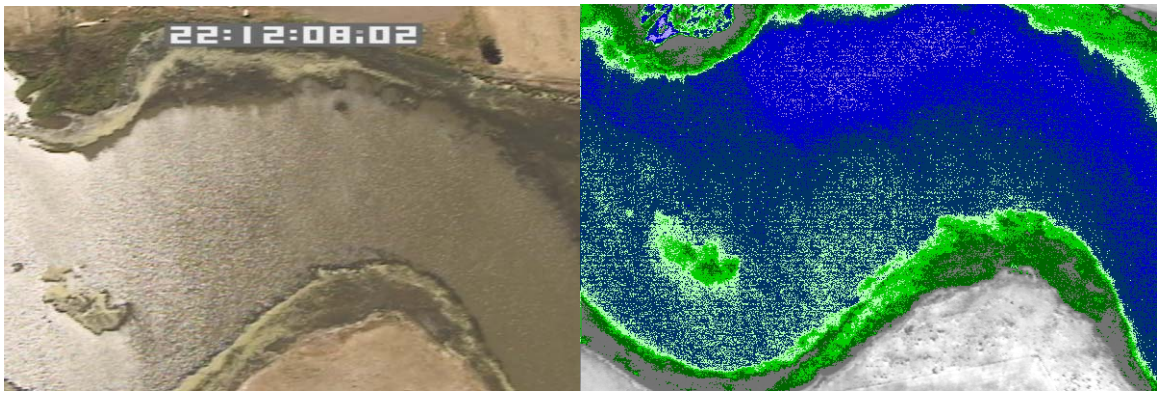
Frame: lst0401-0419 – Visible band/TIR image mosaic showing a region of Lost River with multiple channels and wet soils reach at river mile 64.7. The off channels and soils have different surface temperatures. Flow direction is from the top to bottom of the image.

Frame: lst0712 – Visible band/TIR image showing the confluence of the Lost River (22.1°C) and Miller Creek (21.1°C) river mile 55.6,

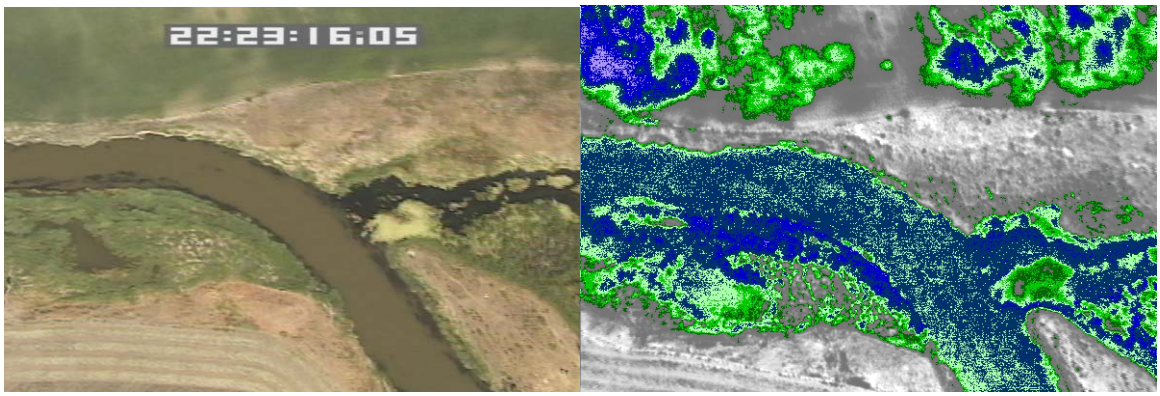
Frame: lst1440 – Visible band/TIR image showing the Lost River (22.7°C) at river mile 34.8. The images illustrate how stagnant material on the waters surface creates different thermal signatures. These types of temperature patterns were observed at several locations along the Lost River. Flow direction is from the top to bottom of the image.



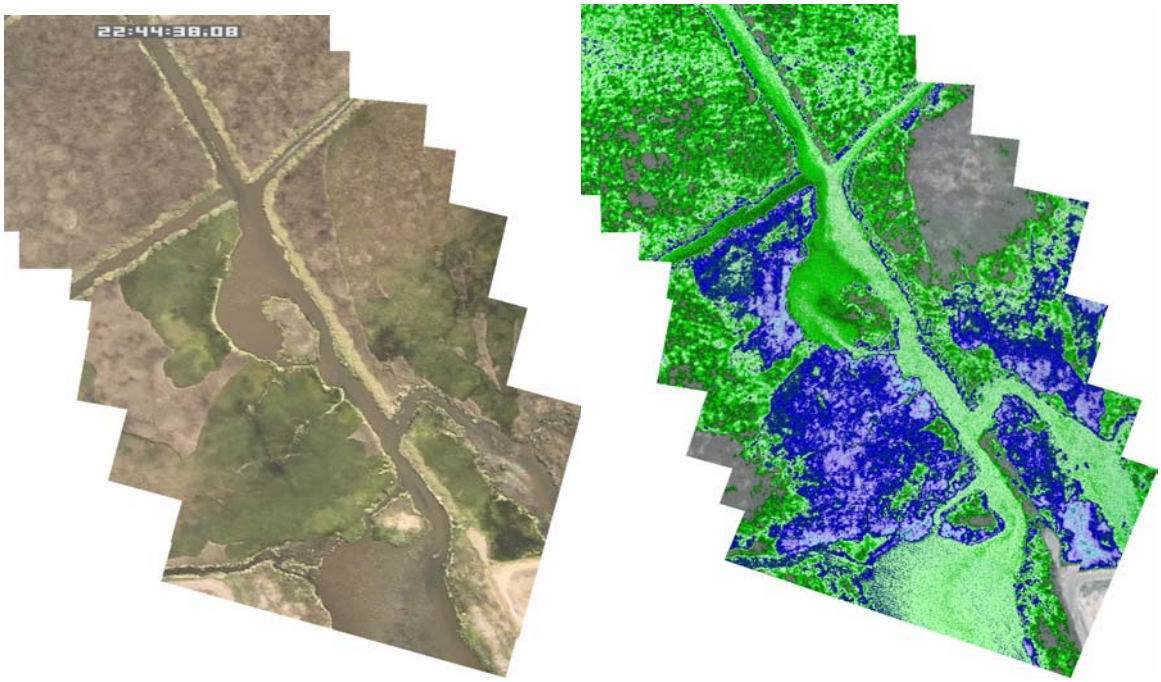
Frame: lst1607 – Visible band/TIR image showing an the confluence of the Lost River (21.1°C) and an unnamed surface inflow (22.8°C) at river mile 30.1.



Frame: lst1789 – Visible band/TIR image showing the Lost River at river mile 25.3. The images show an apparent transition from a mixed to a thermally stratified condition. Flow direction is from left to right in the image. The left bank measured 22.9°C and the right bank had a temperature of 21.2°C.

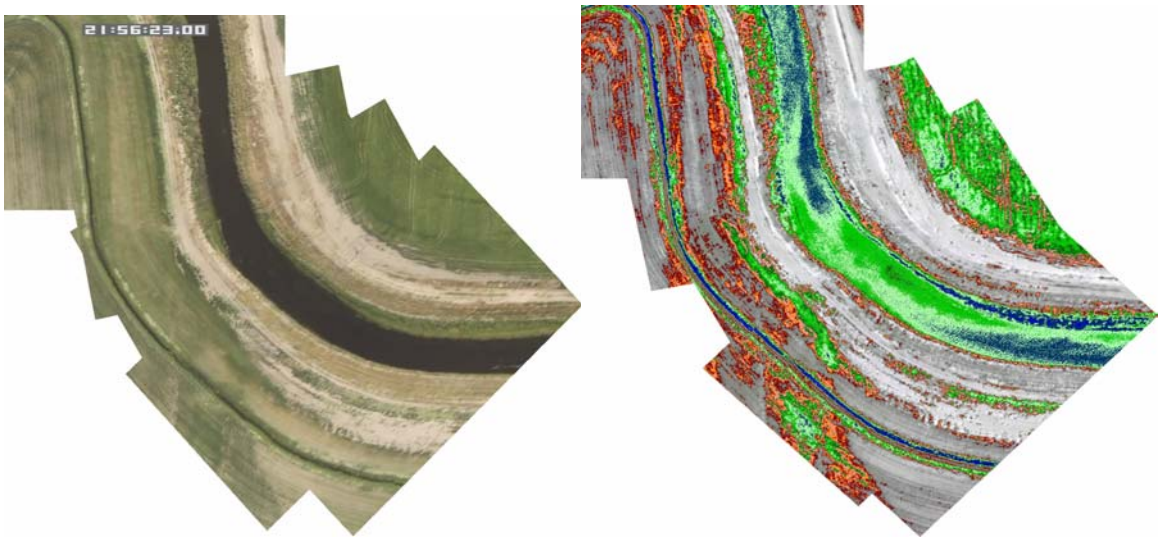


Frame: lst2123 – Visible band/TIR image showing the confluence of the Lost River (22.7°C) and the outlet from Spring Lake (22.2°C) at river mile 16.6. Flow direction is from the bottom to top of the image.



Frame: lst2725-2734 – Visible band/TIR image showing the multiple surface connections at the tip of Tule Lake (bottom of the image). The temperature of the Lost River at the time of the survey was 23.8°C.

Klamath Straight Drain

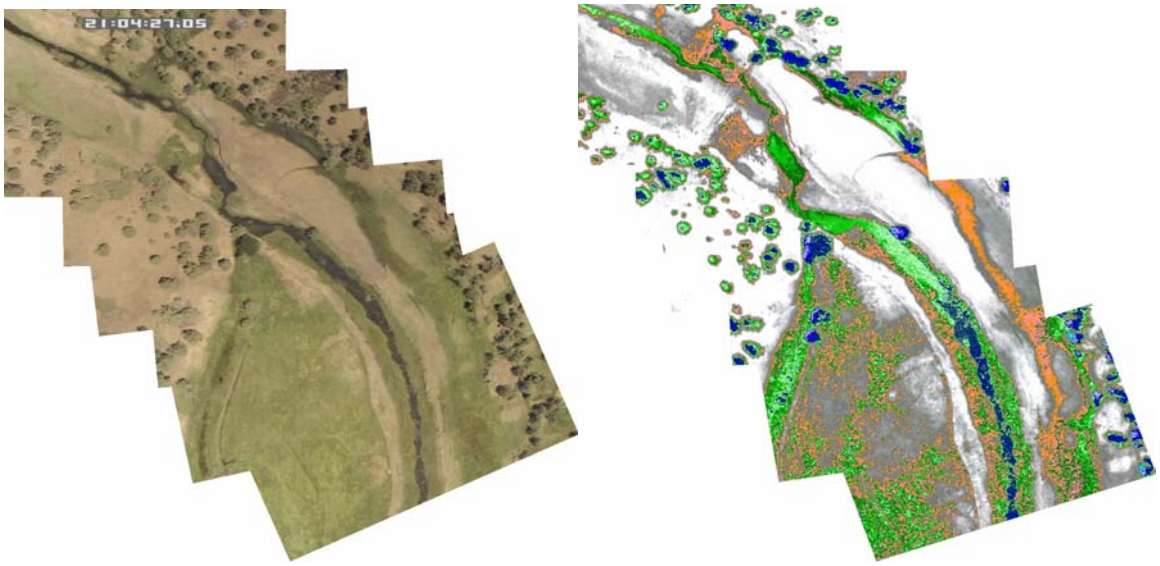


Frame: can0160-0165 – Visible band/TIR image showing signs of thermal stratification in the Klamath Straight Drain at river mile 3.3. Flow direction is from the bottom to top of the image. The surface temperature in the stratified area is 25.1°C and 22.8°C in the mixing areas.

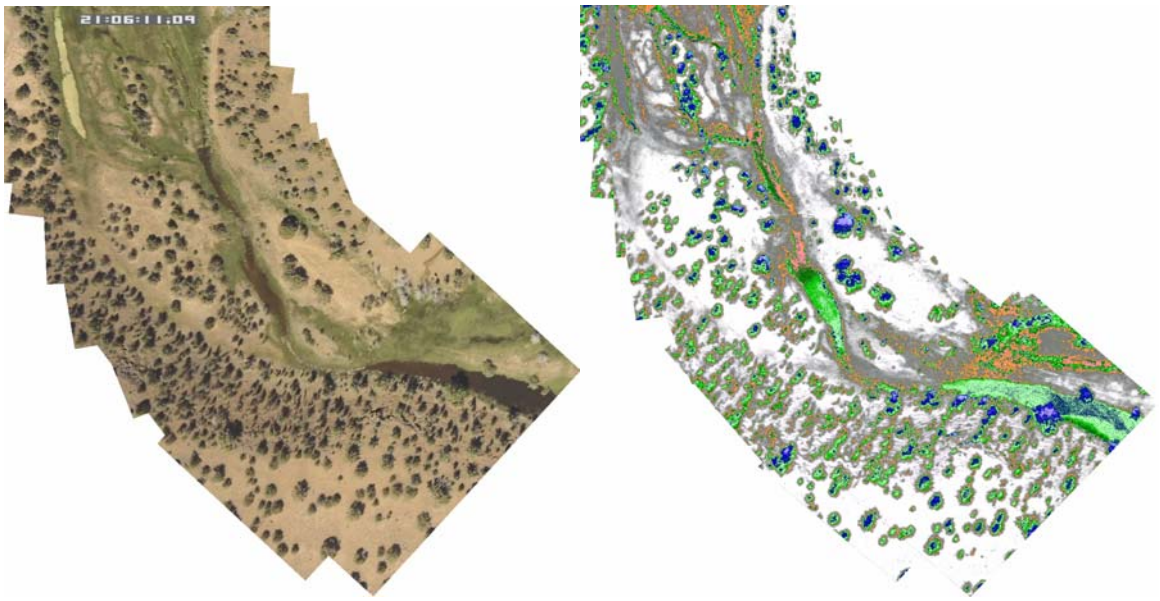
Frame: can0253-0256 – Visible band/TIR image mosaic showing the Klamath Straight Drain at the USBR Pumping Plant E (river mile 5.6). The image shows a temperature shift from upstream (25.6°C) to downstream (24.5°C) of the pumping plant indicating an apparent transition from a thermally stratified to a mixed condition.

Frame: can0501 – Visible band/TIR image showing an apparently stagnant section of the drain with algae visible at the water surface (river mile 12.5). The algae surfaces had warmer apparent temperatures.

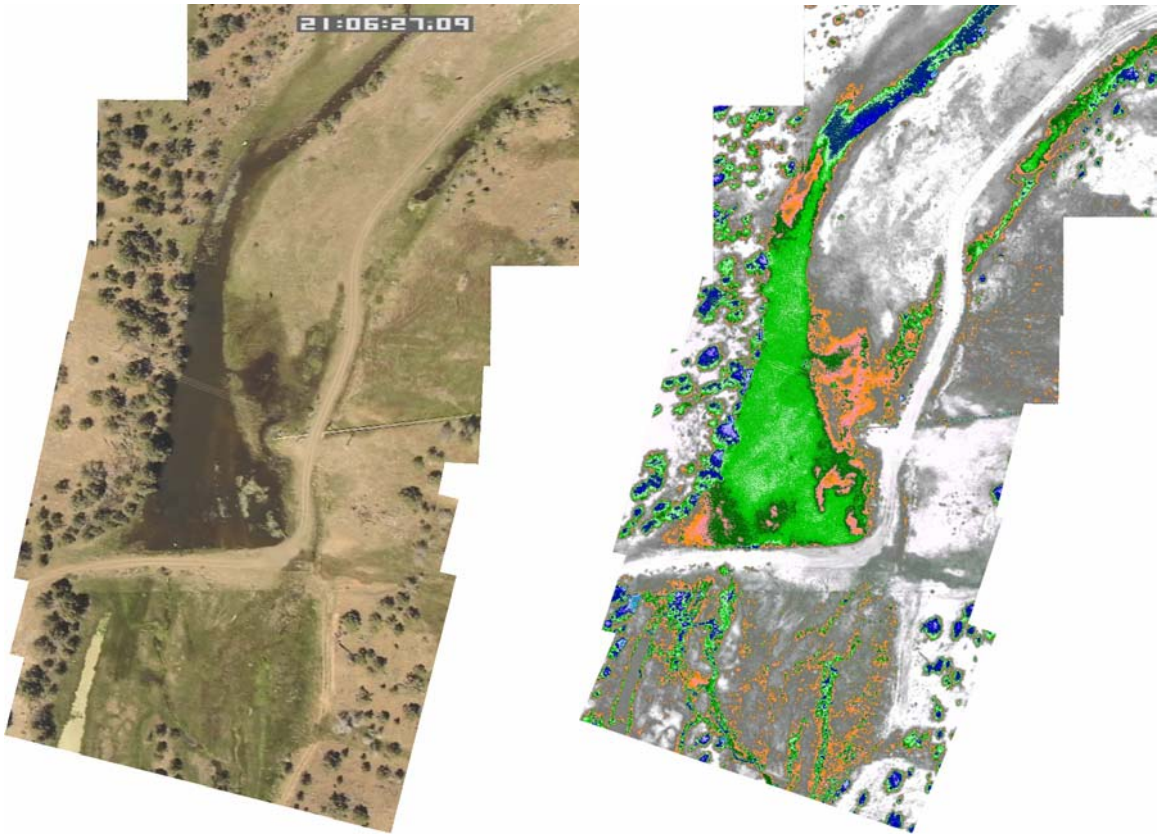
Miller Creek



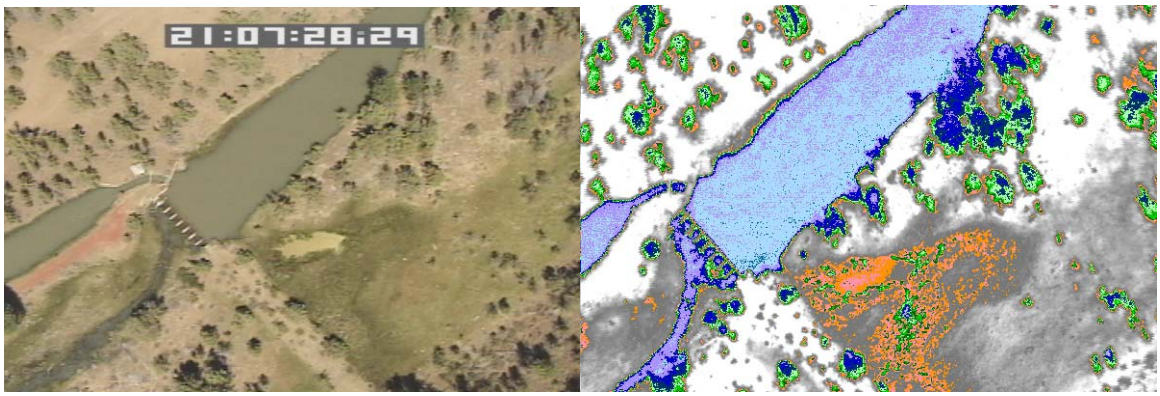
Frame: mlr0131-0136 – Visible band/TIR image showing miller creek at river mile 2.2. The images illustrate the channel characteristics and spatial temperature variability observed in the lower 4.7 miles of Miller Creek. The flow direction is from the top to bottom of the image.



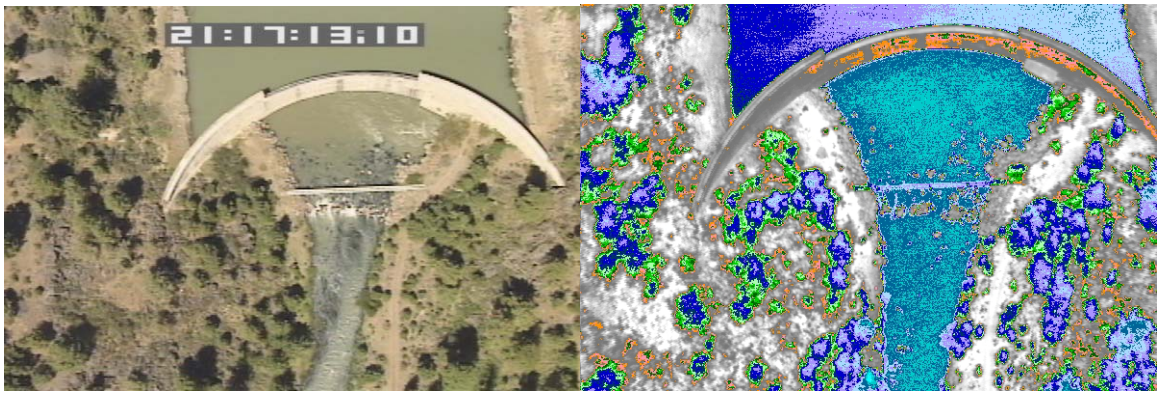
Frame: mlr0180-0188 – Visible band/TIR image showing a transition from little or no surface water to cooler temperatures of surface water at river mile 3.6 of Miller Creek.



Frame: mlr0190-0196 – Visible band/TIR image mosaics illustrating a segment of Miller Creek at river mile 3.8. The images show a thermally stratified condition behind the impoundment and almost no visible surface water downstream. Stream temperatures upstream of the stratified area were 22.1^{o}C.

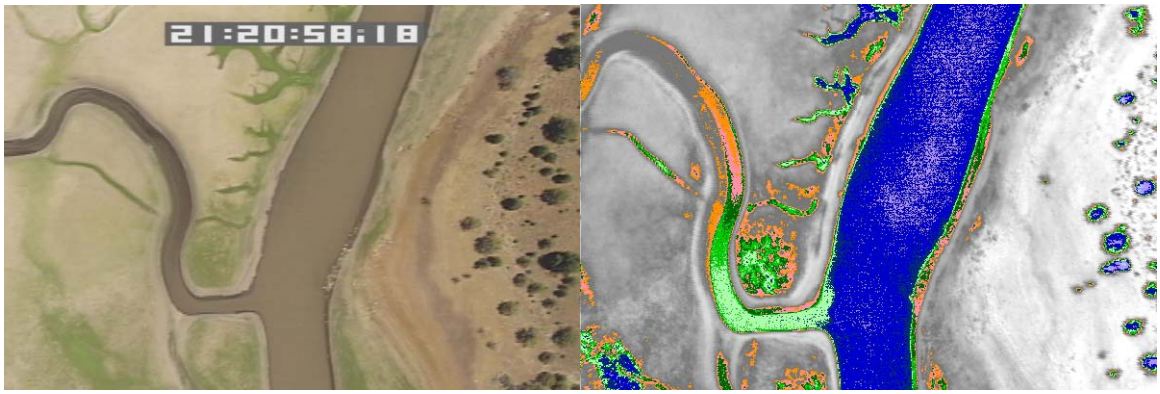


Frame: mlr0227 – Visible band/TIR image showing the Miller Creek Diversion Dam at river mile 4.7. The diversion location marks a change in the spatial stream temperature patterns along Miller Creek.

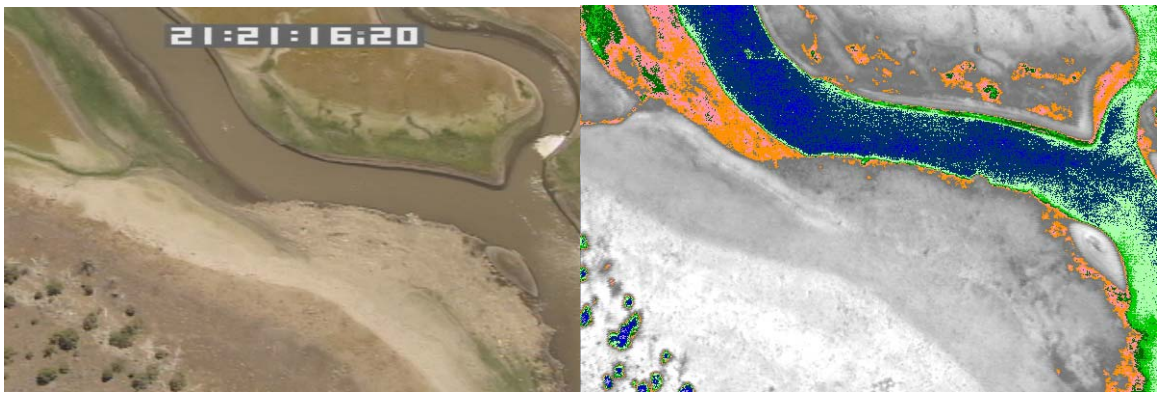


Frame: mlr0519 – Visible band/TIR image showing the outlet of Gerber Dam to Miller Creek (18.1°C) at river mile 11.8.

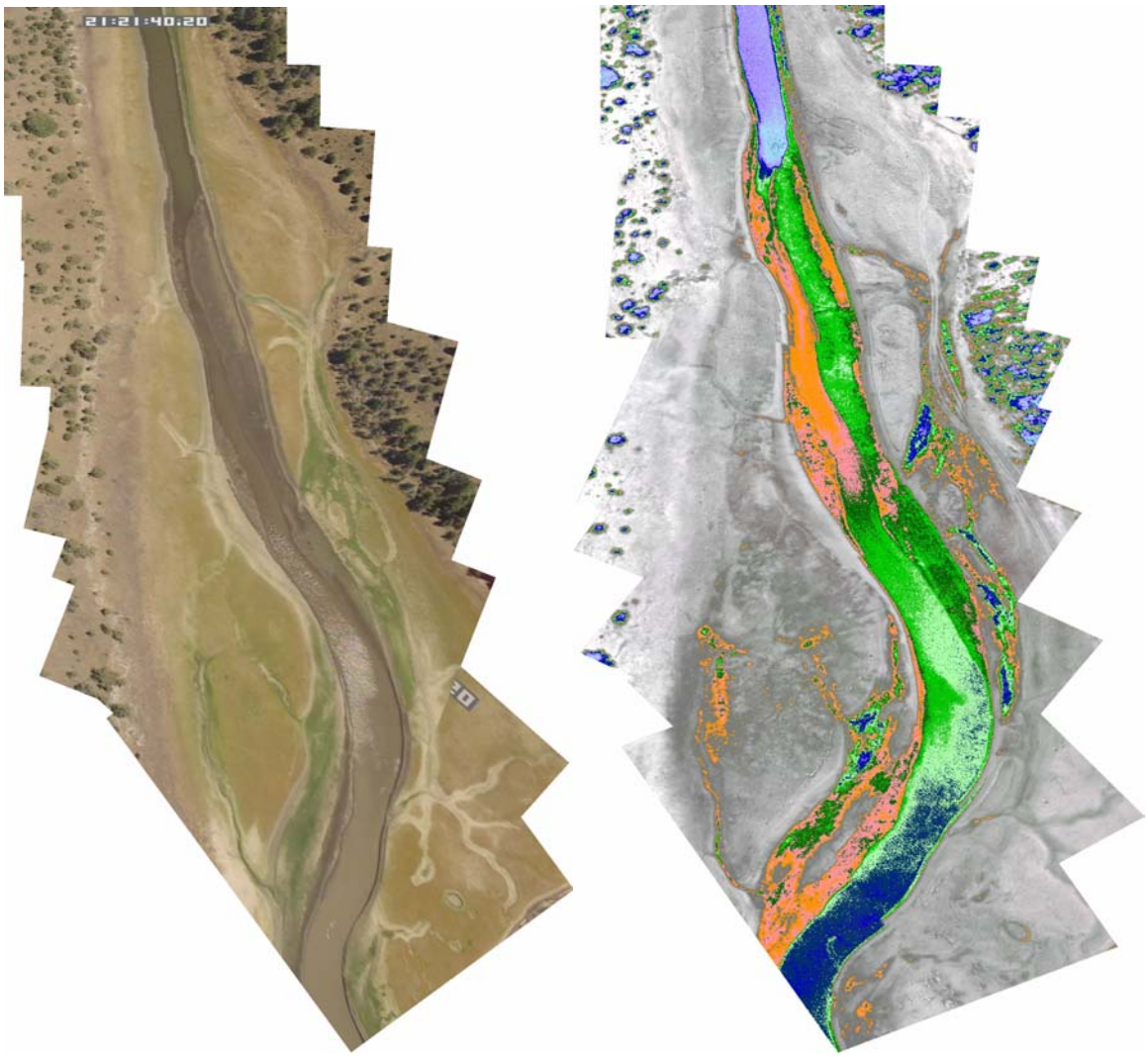
Barnes Valley Creek



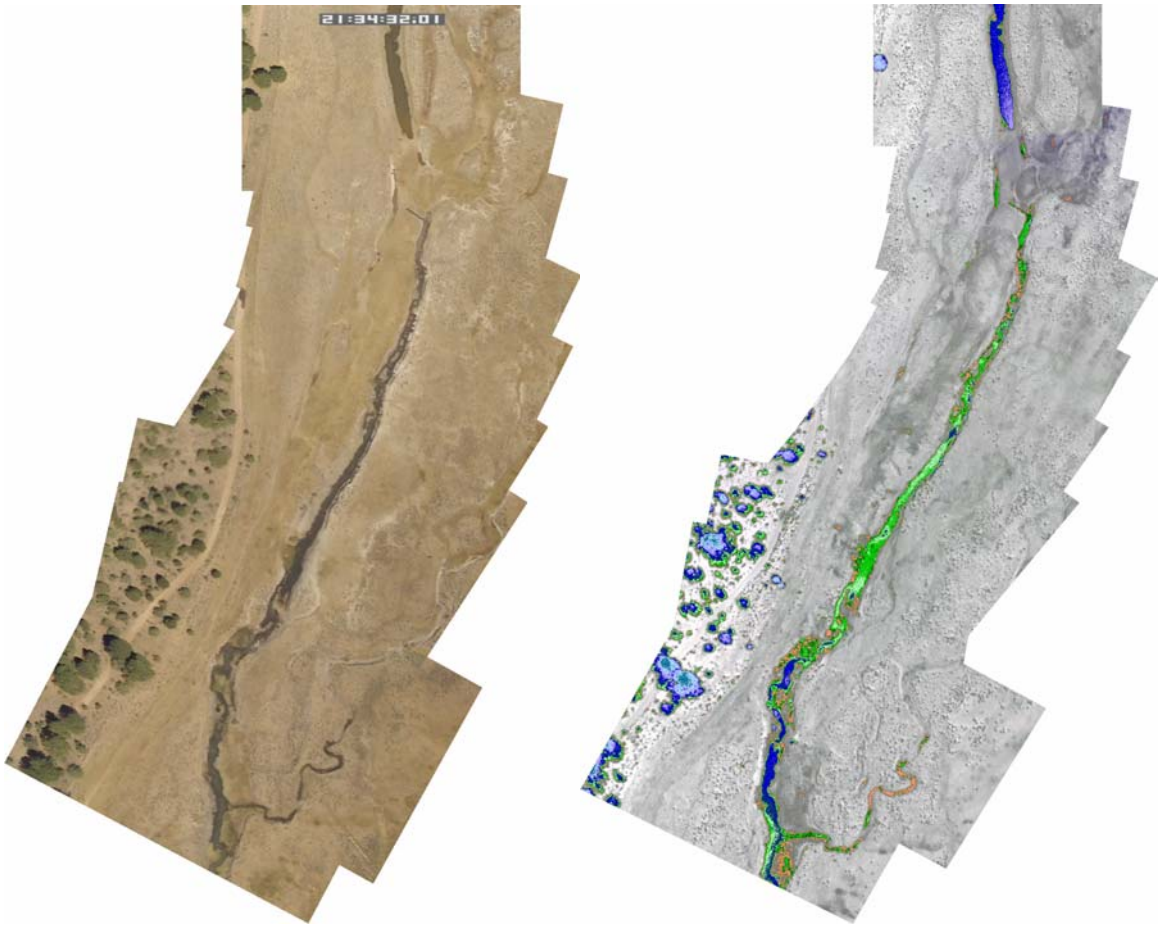
Frame: brn0046 – Visible band/TIR image showing an unnamed tributary (23.4°C) on the right bank of Barnes Valley Creek (21.1°C) near the inlet to Gerber Reservoir. Flow direction is from the top to bottom of the image.



Frame: brn0055 – Visible band/TIR image showing the inflow of Wildhorse Creek (22.8°C) to the left bank of the Barnes Valley Creek (22.2°C) near the inlet of Gerber Reservoir.

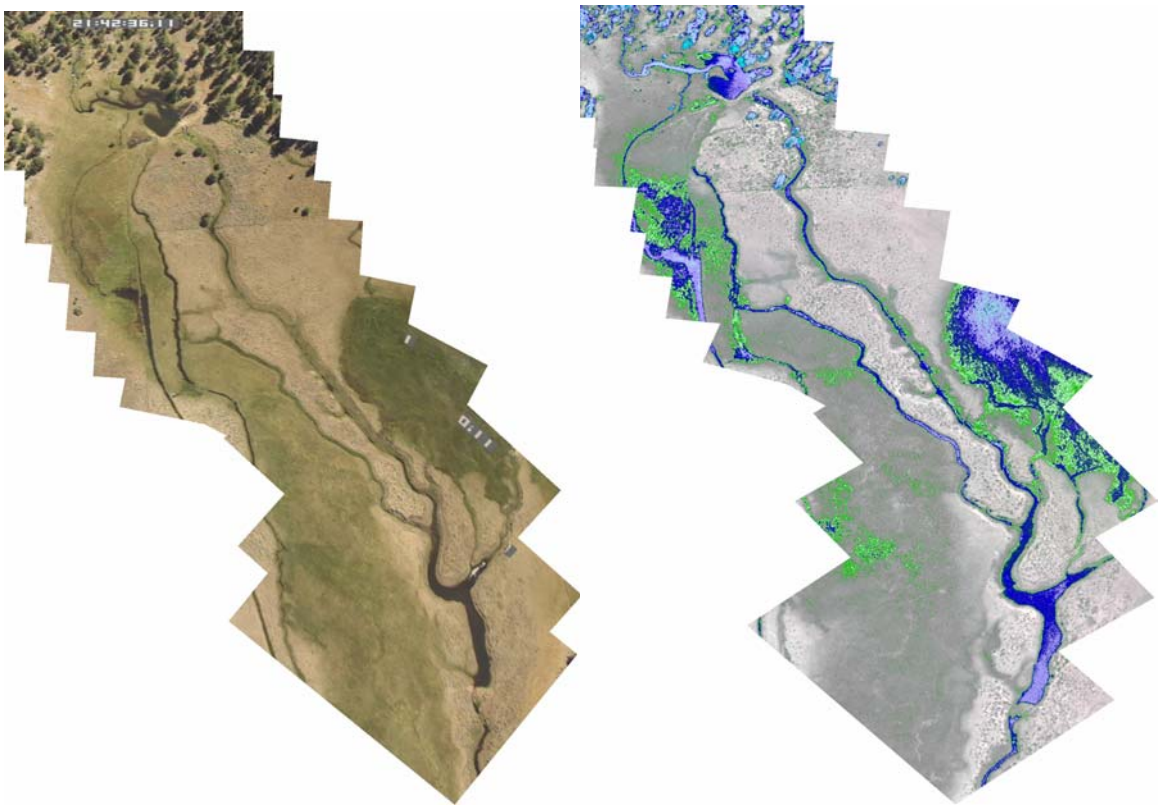


Frame: brn0057-0067 – Visible band/TIR image mosaic showing spatial variability in surface temperature in Barnes Valley Creek at the inlet to Gerber Reservoir. Upstream temperatures (top of the image) are 19.9°C and downstream surface temperatures are 22.4°C (bottom of the image). The shift in temperature may indicate the transition from the flowing stream to the reservoir backwater.

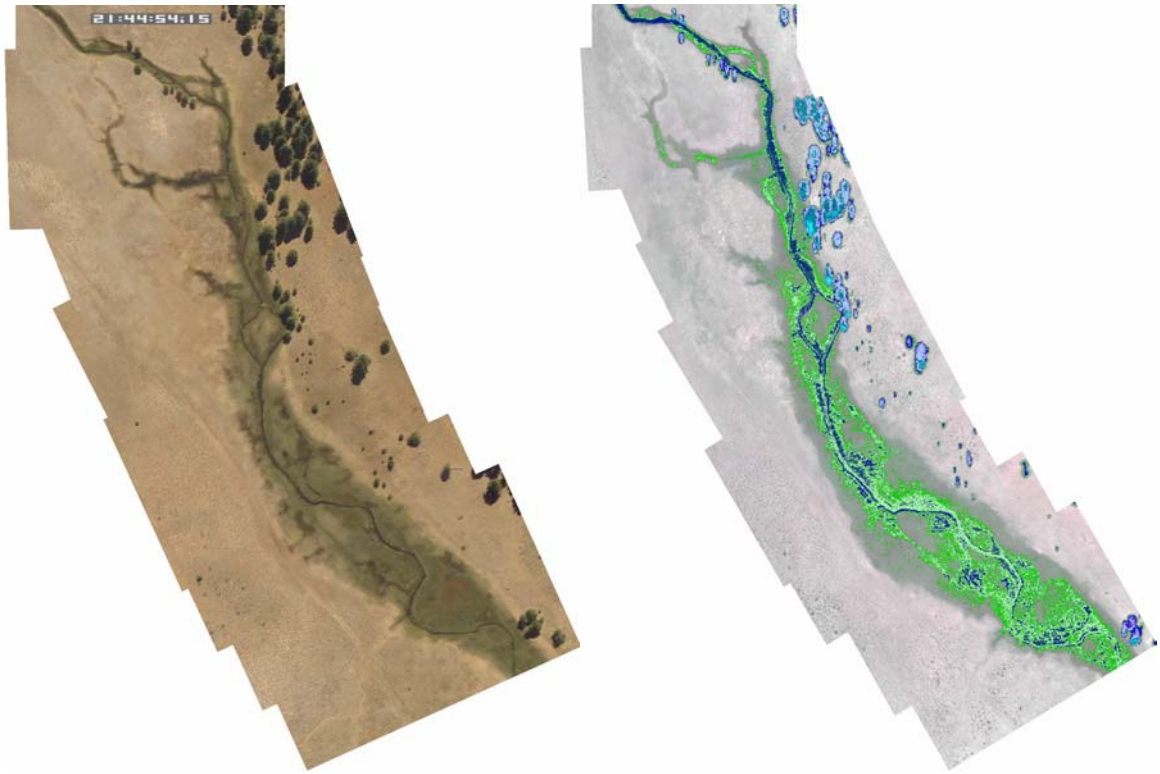


Frame: brn0443-0453 – Visible band/TIR image showing characteristic surface water conditions in Barnes Valley Creek at river mile 7.5.

Strawberry Creek

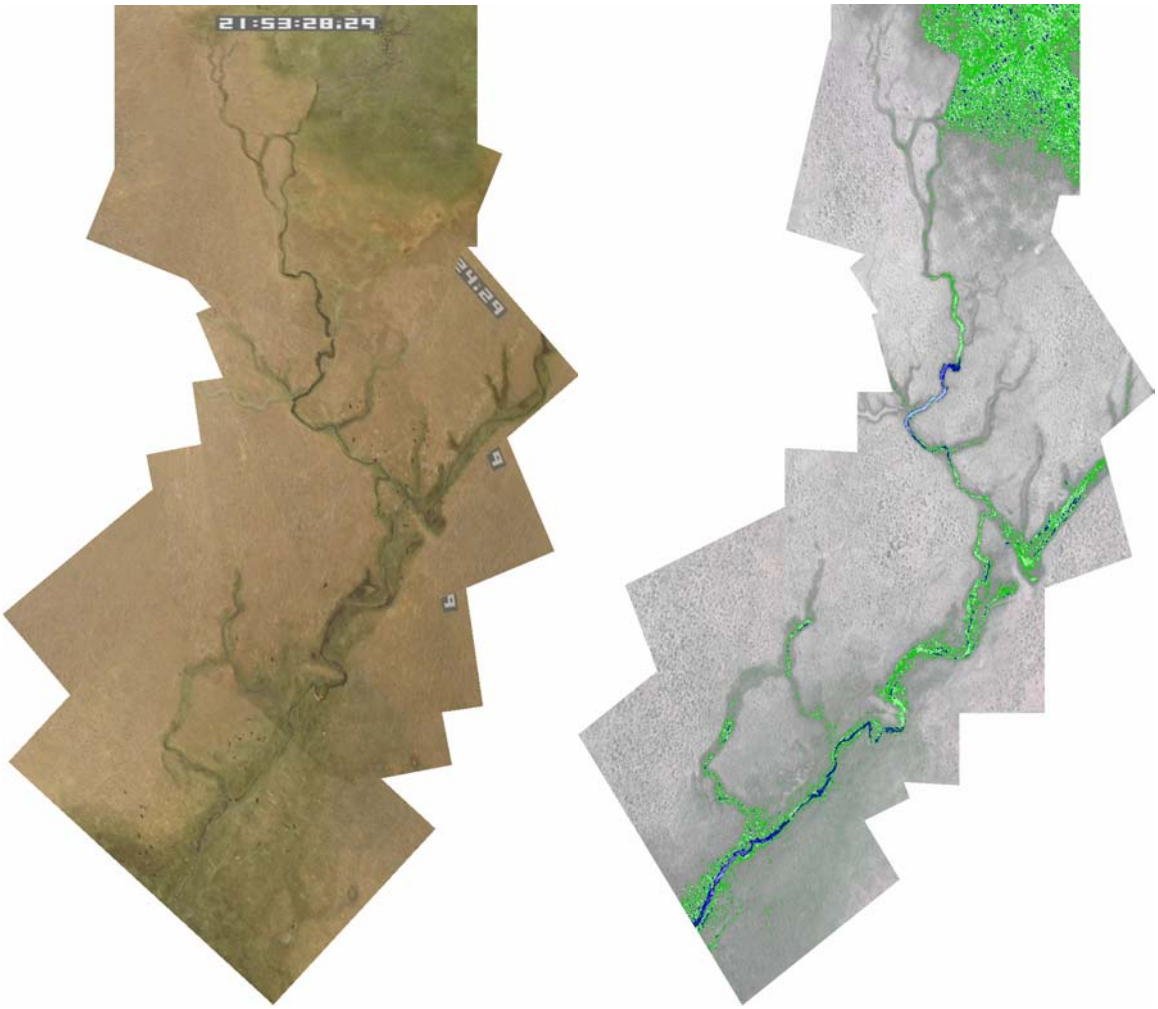


Frame: brn0685-0695 – Visible band/TIR image showing Strawberry Creek between river miles 0.5-0.8. The images show the multiple, relatively small channels that made it difficult to sample temperatures in Barnes Valley, Strawberry, and Lapham Creeks.



Frame: brn0754-0764 – Visible band /TIR image mosaics showing Strawberry Creek from river mile 2.1 – 2.4. The images illustrate a section of stream that was difficult to sample due to narrow channel and intermittent surface flow.

Lapham Creek



Frame: brn0847-0854 – Visible band/TIR image pair a segment of Lapham Creek. The segment is representative of much of the creek that was difficult to sample due to the lack of a defined mainstream. This section was from river mile 0.7 - 0.9.