

Uses or Remote Sensing data by GCMRC projects

The quadrennial overflight has proven to be extremely valuable beyond the data processing / image classification objectives described in the remote sensing portions of annual work plans.

Over the last 10+ years, the digital imagery data sets (and associated DSM topography data sets) have been applied to many more projects than could have been imagined prior to the completion of the remote sensing initiative which recommended the quadrennial digital imagery data collection effort.

Just about every piece of field work conducted by GCMRC in the past 10 years has relied heavily on the overflight data for navigation, orientation, site selection, field mapping, and spatial database development and analysis purposes. Below is a list of known projects that have used the imagery data for some or all of these purposes.

Biological Projects

Mainstem Fish Monitoring (AGF)	2002 – Present
Lees Ferry Trout Fisheries (AGF)	2002 – Present
Lees Ferry REDDS Study (Ecometrics)	2002 – Present
LCR Humpback Chub Monitoring (USFWS)	2002 - Present
RBT Fish Removal Project (GCMRC)	2002 – 2005
Near-shore Ecology (GCMRC, Univ. of Florida)	2007 – 2010
Natal Origins (GCMRC, Ecometrics)	2011 – Present
Backwater seining (GCMRC, USFWS, SWCA)	2005 – 2009
Aquatic Foodbase Monitoring (GCMRC, Univ. of Wyoming, Loyola Univ.)	2005 – Present
Citizen Scientist Light Trap Study (GCMRC, Commerical Guides)	2012 – Present
Vegetation studies (GCMRC, NAU, others)	Various years
Kearsley Veg. Transects, Gwen Waring Mesquite study	
Vegetation Mapping (GCMRC & NPS)	2002 - Present
Terrestrial Ecosystem Monitoring (GCMRC, NAU, Univ. of New Mexico,...)	2004 – 2006
Kanab Amber Snail Monitoring (GCMRC, USFWS, NPS)	2002 - 2008

Physical Projects

NAU Sandbar Monitoring (GCMRC, NAU)	2002 – Present
Fine-grained Sediment Team (GCMRC, NAU)	2002 – 2005
Channel Mapping Project (GCMRC, NAU)	2009 – Present
Aeolian Dune Monitoring & Research (GCMRC, USGS – Amy Draut)	2006 - Present
Arroyo Monitoring Trips (GCMRC, USGS – Brian Collins)	2006 , 2010
Survey Network Control Trips (GCMRC, NGS)	2003 – Present

Cultural Projects

Archeaology Site Monitoring and Analysis (NPS)	2008 - 2011
Campsite Atlas Monitoring and Mapping (GCMRC, NPS, GCRG)	2007 – Present
Ground-Based LiDAR Data Collection (GCMRC, USGS – Brian Collins)	2006, 2010, 2013
Maps for Tribal River Trips (GCMRC, NPS, Tribal Nations)	2010 – Present

External Requests for Imagery Maps and/or Data

Grand Canyon National Park (NPS)	
Western Area Power Administration (WAPA)	
Google Earth Historical Imagery Tool (GCMRC's May 2002 RGB data set)	
LTEMP EIS Team (Bureau of Reclamation, Argonne National Labs)	
Northern Arizona University (many users ranging from professors to researchers to students)	
Utah State University (many users ranging from professors to researchers to students)	
Karl Karlstrom (Univ. of New Mexico), Red Slide area	
Ryan Crowe (Univ. of Arizona), Blue Springs rock slide	
Kate Behn (Univ. of Idaho), LCR aquatic research	

Private river runners during the High Flow Events of March 2008 and November 2012

Countless figures for publications using GCMRC's imagery data holdings as reference

Anyone in the world who has visited GCMRC's current web mapping sites and the former Internet Mapping Service (IMS) since 2003.