Identification\_Information:

 Citation:

 Citation\_Information:

 Originator: U.S. Geological Survey (USGS)

 Publication\_Date: 2012

 Title: LiDAR Scene: CA\_ORANGECO\_2011\_000157

 Geospatial\_Data\_Presentation\_Form: remote-sensing imagery

 Publication\_Information:

 Publication\_Place: Sioux Falls, SD

 Publisher: U. S. Geological Survey

Earth Resources Observation and Science (EROS) Center

 Online\_Linkage: http://earthexplorer.usgs.gov

 Description:

 Abstract: LiDAR (LIght Detection And Ranging) discrete-return point cloud data are available in the American Society for Photogrammetry and Remote Sensing (ASPRS)LAS format. The LAS format is a standardized binary format for storing 3-dimensional point cloud data and point attributes along with header information and variable length records specific to the data. Millions of data points are stored as a 3-dimensional data cloud as a series of x (longitude), y (latitude) and z (elevation) points. A few older projects in this collection are in ASCII format. Please refer to <http://www.asprs.org/Committee-General/LASer-LAS-File-Format-Exchange-Activities.html> for additional information.

 Purpose: High-resolution digital elevation maps generated by airborne and stationary LiDAR have led to significant advances in geomorphology, the branch of geoscience concerned with the origin and evolution of Earth's surface topography. LiDAR provides unique characteristics relative to other remotely sensed data sources by providing three-dimensional feature information that cannot be derived from traditional imaging sensors.

 Time\_Period\_of\_Content:

 Time\_Period\_Information:

 Range\_of\_Dates/Times:

 Beginning\_Date: 17-DEC-11

 Ending\_Date: 09-FEB-12

 Currentness\_Reference: ground condition

 Status:

 Progress: In Work

 Maintenance\_and\_Update\_Frequency: As Needed

 Spatial\_Domain:

 Data\_Set\_G-Polygon:

 Data\_Set\_G-Polygon\_Outer\_G-Ring:

 G-Ring\_Latitude: 33.7481749

 G-Ring\_Longitude: -117.8782138

 G-Ring\_Latitude: 33.7482888

 G-Ring\_Longitude: -117.862

 G-Ring\_Latitude: 33.7347444

 G-Ring\_Longitude: -117.8618638

 G-Ring\_Latitude: 33.7346305

 G-Ring\_Longitude: -117.8780777

 Keywords:

 Theme:

 Theme\_Keyword\_Thesaurus: None

 Theme\_Keyword: 3-dimensional

 Theme\_Keyword: point cloud

 Theme\_Keyword: LiDAR

 Theme\_Keyword: radar

 Theme\_Keyword: CLICK

 Theme\_Keyword: LIght Detection And Ranging

 Theme\_Keyword: USGS

 Theme\_Keyword: U.S. Geological Survey

 Theme\_Keyword: LAS

 Theme\_Keyword\_Thesaurus: ISO 19115 Category

 Theme\_Keyword: 010

 Theme\_Keyword: imageryBaseMapsEarthCover

 Place:

 Place\_Keyword\_Thesaurus: None

 Place\_Keyword: Earth Resources Observation and Science (EROS) Center

 Place\_Keyword\_Thesaurus: U.S. Department of Commerce, 1995, Countries, dependencies, areas of special sovereignty, and their principal administrative divisions, Federal Information Processing Standard 10-4,): Washington, D.C., National Institute of Standards and Technology

 Place\_Keyword: United States

 Place\_Keyword: U.S.

 Access\_Constraints: Any downloading and use of these data signifies a user's agreement to comprehension and compliance of the USGS Standard Disclaimer. Insure all portions of metadata are read and clearly understood before using these data in order to protect both user and USGS interests.

 Use\_Constraints: There is no guarantee of warranty concerning the accuracy of these data. Users should be aware that temporal changes may have occurred since the data was collected and that some parts of these data may no longer represent actual surface conditions. Users should not use these data for critical applications without a full awareness of their limitations. Acknowledgement of the originating agencies would be appreciated in products derived from these data. Any user who modifies the data set is obligated to describe the types of modifications they perform. User specifically agrees not to misrepresent the data set, nor to imply that changes made were approved or endorsed by the U.S. Geological Survey. Please refer to http://www.usgs.gov/privacy.html for the USGS disclaimer.

 Point\_of\_Contact:

 Contact\_Information:

 Contact\_Person\_Primary:

 Contact\_Person: lta@usgs.gov

 Contact\_Organization\_Primary:

 Contact\_Organization: U.S. Geological Survey Earth Resources Observation and Science (EROS) Center

 Contact\_Person: lta@usgs.gov

 Contact\_Position: Long Term Archive (LTA) Representative

 Contact\_Address:

 Address\_Type: mailing and physical address

 Address: Long Term Archive (LTA), U.S. Geological Survey (USGS)

Earth Resources Observation and Science (EROS) Center 47914 252nd Street

 City: Sioux Falls

 State\_or\_Province: SD

 Postal\_Code: 57198-0001

 Country: USA

 Contact\_Electronic\_Mail\_Address: lta@usgs.gov

 Hours\_of\_Service: 0800 - 1600 CT, M-F, -6 h GMT

 Contact\_Instructions:

 Browse\_Graphic:

 Browse\_Graphic\_File\_Name:

lidar/CA/2011/CA\_OrangeCo\_2011/CA\_OrangeCo\_2011\_000157.jpg

 Browse\_Graphic\_File\_Type: JPEG

 Data\_Set\_Credit: U.S. Geological Survey

 Security\_Information:

 Security\_Classification\_System: none

 Security\_Classification: unclassified

 Security\_Handling\_Description: none

 Native\_Data\_Set\_Environment: Oracle

Data\_Quality\_Information:

 Attribute\_Accuracy:

 Attribute\_Accuracy\_Report: The identification of features is provided by the distinct electromagnetic energy it emits,reflects, or otherwise transmits. This is called the spectral signature. Other signatures such as tone (lightness or darkness), texture (surface roughness or smoothness), pattern,shadow, shape, and size are as important. Thus, through the use of the thematic mapper sensor, such elements as water features, soils, and vegetation can be identified and distinguished from each other.

 Completeness\_Report: The lidar collection has been acquired by the USGS through contracts, partnerships with other Federal, state, tribal, or regional agencies, from direct purchases from private industry vendors, and through volunteer contributions from the science community. While USGS makes every effort to provide accurate and complete information, USGS provides no warranty, expressed or implied, as to the accuracy, reliability or completeness of furnished lidar point clouds. Please note that USGS does not control and cannot guarantee the relevance, timeliness, or accuracy of these outside materials.

 Lineage:

 Process\_Step:

 Process\_Contact:

 Contact\_Information:

Contact\_Person\_Primary:

Contact\_Person: lta@usgs.gov

Contact\_Organization\_Primary:

Contact\_Person: lta@usgs.gov

 Contact\_Position: Long Term Archive (LTA) Representative

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 Contact\_Electronic\_Mail\_Address: lta@usgs.gov

Spatial\_Data\_Organization\_Information:

 Direct\_Spatial\_Reference\_Method: 3-dimensional point cloud

Distribution\_Information:

 Distributor:

 Contact\_Information:

 Contact\_Person\_Primary:

Contact\_Person: lta@usgs.gov

 Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey Earth Resources Observation and Science (EROS) Center

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 Distribution\_Liability: Although these data have been processed successfully on a computer system at the U.S. Geological Survey, no warranty, expressed or implied, is made by the USGS regarding the use of the data on any other system, nor does the act of distribution constitute any such warranty.

 Standard\_Order\_Process:

 Digital\_Form:

 Digital\_Transfer\_Option:

Online\_Option:

Access\_Instructions: The URL "http://earthexplorer.usgs.gov" provides a

map interface that allows for data downloads within a customer defined area of interest. Zoom tools are available that can be used to investigate areas of interest on the map interface.

Online\_Computer\_and\_Operating\_System: http://earthexplorer.usgs.gov

 Fees: Typically, all data available from USGS/EROS are downloadable at no cost to the user. There are some cases when a service fee is required to convert the analog film record to a digital file. This non-refundable fee is $30 per scene/frame.

 Ordering\_Instructions: Consult the data sets product page for specific

information.

 Turnaround: A majority of the data are available for immediate downloading. Specific data processing may take 24 to 48 hours and film scanning service requests involving payment to USGS can require 3 - 4 weeks upon successful payment of the request.

 Custom\_Order\_Process: Limited from data set to data set. Please consult the data

sets product page for specific information.

 Technical\_Prerequisites: Adequate computer capability is the only technical prerequisite for viewing data in digital form. You may return here at any time and add to your data request before final submission.

Metadata\_Reference\_Information:

 Metadata\_Date: 201207

 Metadata\_Review\_Date: as needed

 Metadata\_Contact:

 Contact\_Information:

 Contact\_Person\_Primary:

 Contact\_Person: lta@usgs.gov

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 Metadata\_Standard\_Name: Content Standards for Digital Geospatial Metadata

 Metadata\_Standard\_Version: FGDC-STD-001-1998, Version 2

 Metadata\_Time\_Convention: local time

 Metadata\_Access\_Constraints: None

 Metadata\_Use\_Constraints: None

 Metadata\_Security\_Information:

 Metadata\_Security\_Classification\_System: None

 Metadata\_Security\_Classification: Unclassified

 Metadata\_Security\_Handling\_Description: None