CSRC, CRTN, and Executive Committee Election Results

Maria Turingan
CSRC Coordinating Council Fall Meeting
October 6, 2016
Caltrans Hosts: Mark Turner and Scott Martin
Caltrans TransLab, 5900 Folsom Boulevard
Sacramento, CA 95819
SCHEDULE

TUESDAY, OCTOBER 17, 2006

8:00 a.m. Introduction, Opening remarks, Workshop goals
Marti Ikehara, National Geodetic Survey (NGS)

8:15 a.m. Geoid Modeling and Corrector Surfaces
Greg Helmer, RBF Consulting

10:00 a.m. Break

10:30 a.m. The Inaugural Bill Young Memorial Lecture
The Application of InSAR for Optimizing and Designing GPS Networks; and an Overview of InSAR Measured Subsidence Throughout California
Gerald Bawden, Ph.D., United States Geological Survey

12:00 p.m. Lunch. Exhibits open.

1:00 p.m. Real Time GPS Issues, California Real Time Network, Use of CRTN
Yehuda Bock, Ph.D., California Spatial Reference Center (CSRC)

3:00 p.m. Break in Exhibit Hall

3:30 p.m. OPUS and OPUS-related Issues
Joe Evjen, National Geodetic Survey

5-6:30 p.m. Exhibitor's Reception in Exhibit Hall

REGISTRATION FORM

Please register me for the Spatial Reference Systems Workshop

Registration includes continental breakfast, lunch for both days and exhibitor reception. The conference hotel has been secured.

Please call the Radisson Hotel Sacramento at 1.800.333.3333, and mention the California Spatial Reference Center Workshop when you make your reservation.
Overview

1. CSRC – founded in 1999, 17 years ago
   * CSRC Coordinating Council
   * CSRC Executive Committee (Board) & Election Results

2. CRTN
   * Consortium (2009/2010) and Users

3. Sources of Support for CSRC/CRTN
CSRC - Understanding Our Organization

* California Spatial Reference Center (CSRC)
* Coordinating Council – UCSD Support Group
* CSRC Executive Committee
  * Election Results
  * In-Kind Support
* Our Research Group – Scripps Orbit and Permanent Array Center (SOPAC)
* The University – UCSD and SIO
The Regents of the University of California (UC) Founded 1868

University of California San Diego (UCSD) Founded 1960

Scripps Institution of Oceanography (SIO) Founded 1903

Institute of Geophysics and Planetary Physics (IGPP Department) Founded 1960’s
Coordinating Council - Responsibilities

* Attend Biannual CSRC Coordinating Council Meetings (generally May in Southern California and October in Northern California)
* Fosters Cooperation and Partnerships
* Education and Outreach
* Promotes the Center and assists in obtaining funds for the Center
Coordinating Council Membership

* Professional Surveying Organizations
* Geographic Information Systems (GIS) Organizations
* Geophysical Research
* Federal Government
* State Agencies
* Cities, Counties, and Local Agencies
* Utility Organizations
* Educational Professionals
* Private Organizations
Executive Committee - Responsibilities

* Serves as the CSRC Board
* Participate in Monthly One-hour Teleconferences
* Attend Biannual CSRC Coordinating Council Meetings
* Pursues and Solicits Funds for the Center
* Develops and Reviews CSRC Priorities
* Fosters Cooperation and Partnerships
* Education and Outreach
Newly Elected Members
* EC Member: Kimberley Holtz (City of Long Beach)
* EC Member: Ken Joyce (DigitalGlobe)

Re-Elected in 2016
* Treasurer: Jim McNeil (Riverside County Flood Control)
* EC Member: Bryan Banister (Caltrans)
Continuing Executive Committee Members

**Elected Members**
* Chairperson: Richard Maher (KDM Meridian)
* Vice-Chairperson: Scott Martin (Caltrans)
* Secretary: Thomas Dougherty (City of Fremont)
* EC Member: Greg A. Helmer (Psomas)

**Non-Elected Members**
* Director CSRC: Dr. Yehuda Bock (SIO, UCSD)
* Director IGPP: Dr. Steve Constable (SIO, UCSD)
* Chancellor UCSD Designee: Dr. John Orcutt (SIO, UCSD)
* Past Chairperson: Art Andrew (Orange County Public Works)
* NGS Pacific Southwest Regional Advisor (CA, NV): Dr. Dana John Caccamise (NOAA/NGS, office located at SIO, non-voting member)
Executive Committee (EC) - In-Kind Support

- City of Fremont
- City of Long Beach
- County of Orange
- DigitalGlobe
- KDM Meridian
- Psomas
- Riverside County Flood and Water Conservation District
California Spatial Reference Center (CSRC) and California Real Time Network (CRTN)

**CSRC Coordinating Council (CC)**
- UCSD Support Group
- Education and Outreach
- Builds Collaborations

**CSRC Executive Committee (EC)**
- Oversees CSRC
- Board and subset of the Coordinating Council

**CRTN Consortium**
- Provides funding support
- Guides CRTN
* CRTN exists through collaboration between many organizations that operation and maintain the various stations throughout California:
  * Bay Area Regional Deformation (BARD) Network (Berkeley Seismological Laboratory (BSL) and the United States Geological Survey (USGS) at Menlo Park)
  * Caltrans
  * Plate Boundary Observatory/UNAVCO
  * SOPAC
  * USGS at Pasadena
  * Orange County
  * San Diego County
  * Metropolitan Water District (MWD) of Southern California
CRTN Consortium Agencies

1. City of Los Angeles, Department of Public Works, Bureau of Engineering, Cesar Bregaudit, John Tosto, Robert Nielsen
2. Riverside County Flood Control and Water Conservation District, Jim McNeil
3. Orange County Public Works, Art Andrew
4. San Diego County, Department of Public Works, Ray Mathe
5. Riverside County Transportation Department, Rick Lantis, Ed Hunt, Tim Rayburn
6. Santa Clara Valley Water District, Kris Puthoff
7. City of Long Beach, Gas and Oil, Kimberley Holtz
8. California Land Surveyors Association, Michael McGee
9. California Department of Transportation, Scott Martin, Mark Turner
10. Swift Navigation, Rob Hranac
11. California Spatial Reference Center, Rich Maher
12. Scripps Institution of Oceanography, UCSD, Yehuda Bock
CRTN Users by Industry

47% Civil Engineering and/or Land Surveying

(CRTN Registration Form - 441 Respondents)
Industries/Organizations Using CRTN

* Telecommunications, Technology, Internet, Electronics
  * Qualcomm, Panasonic, Cannon
* Automotive Industry
  * Tesla Motors, Inc., Delphi Automotive, Honda Research Institute, Ford
* Agricultural Industry:
  * Terra Firma Farm, TriCal, Inc.
* Research and Education
What is CRTN used for? – Other uses

* Unmanned Aerial Systems
  * Applications across Natural Resource disciplines
  * To survey-in targets and produce rough topos for ground truth.
* Agriculture
  * Tillage and planting of annual and perennial crops
  * Precision agriculture
  * Vineyard layouts
* Sea level rise research
* FEMA Risk Map Assessment
* Testing and development such as testing Rugged GNSS Tablets
Sources of Support for CSRC/CRTN

* Beginning – Grew from grass roots partnerships and local support
* Past – Shifted from State and local support to Federal
* Currently
  * No direct Federal support
  * Shifted back to State and local support through the CRTN Consortium and Contributing Memberships
Current CRTN Budget
July 1, 2016 to June 30, 2017

- Projected Revenue primarily from Consortium Memberships and Donations: $140K
- Caltrans Contract: $236K
- Minus Indirect Costs: ($83K)
- CRTN Budget: = $293K
Acronyms from Chart (left to right):
• NSF – National Science Foundation
• NOAA – National Oceanic and Atmospheric Administration
• ESRL – Earth System Research Laboratory
• SCEC – Southern California Earthquake Center
• USC – University of Southern California
• USGS – United States Geological Survey
• NASA – National Aeronautics and Space Administration
Future Funding Efforts

- CRTN Consortium Membership and Contributions
- New Ideas and Adding Value to CRTN Membership
- New Collaborators and Partners
  • Private Companies
- Building Collaborations in New Areas
  • Structural engineering and monitoring, public works, office of emergency services, etc.
- Educational and Outreach
  • New users and potential collaborators through meetings, workshops, and presentations
- Research Opportunities Though SOPAC
  • Helps leverage costs
Questions, Next Meeting & Thank you!

CSRC Meeting Twice a Year
May and October

Next Meeting in the Spring
May 4, 2017 (Thursday)
in San Diego at SIO/UCSD