

APS/Users Monthly Operations Meeting

R. Gerig

July 25, 2012

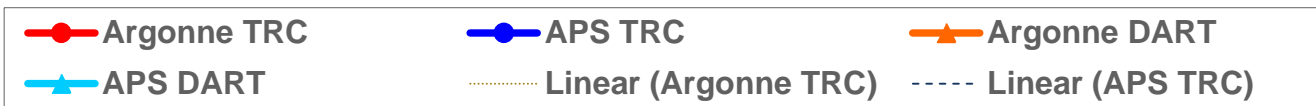
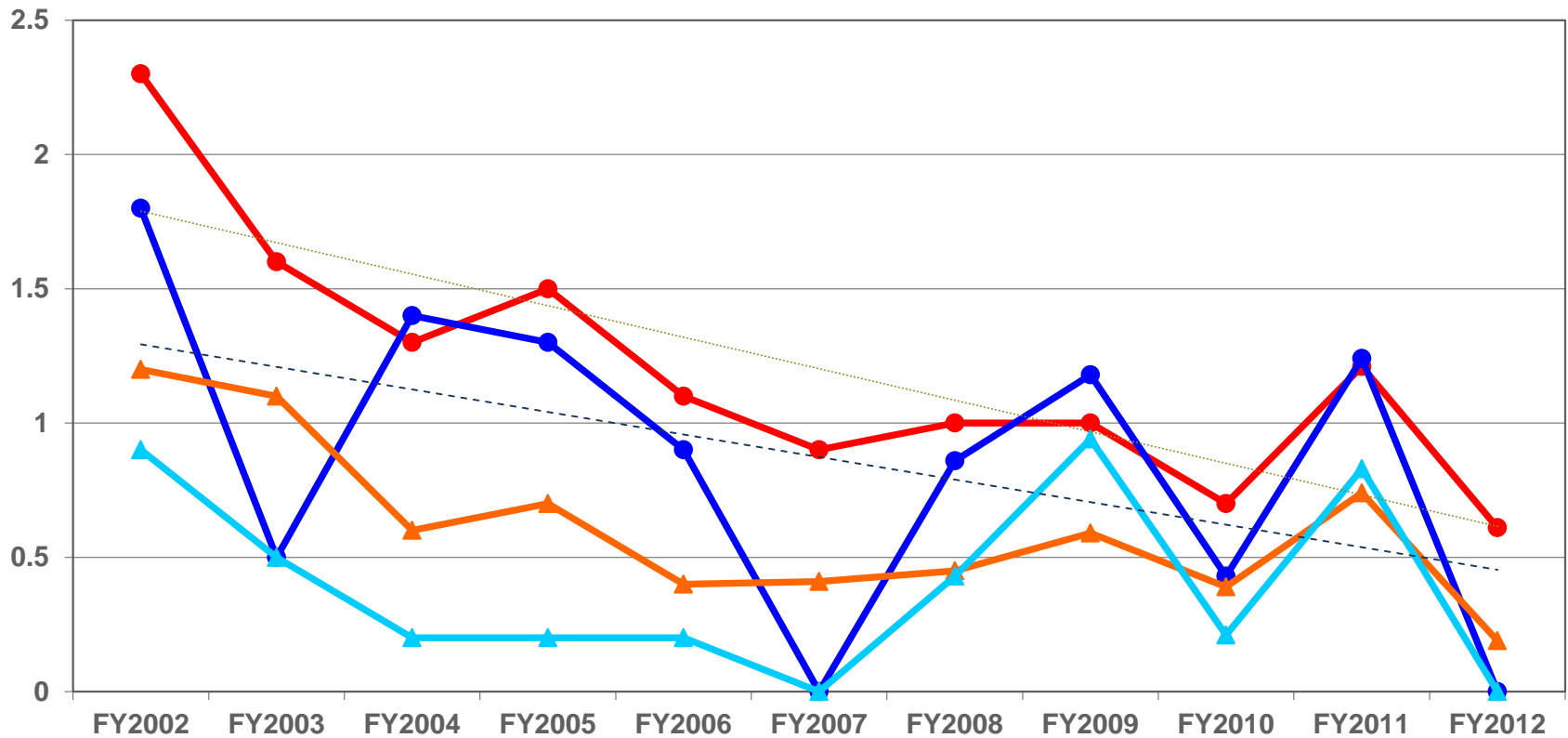
Agenda

- APS Update – R. Gerig
 - Safety
 - UofC Review
 - News
 - Construction Updates: 400A, APCF
 - Vibration Monitoring
- APS Upgrade Update – Jim Kerby
- Optics and Detector Testing at 1-BM - Al Macrander



APS Still Doing Great on Injury Rates

Data as of June 30



TRC = Total OSHA Recordable Case Rate per 200,000 Hours Worked

DART = Days Away, Restricted Duty, or Job Transfer Case Rate per 200,000 Hours Worked

FY2002-4 APS Divs.

FY2005-8 SUF (APS Divs.+ IPNS)

FY2009-12 PSC (APS Divs. Only)

Safety

Follow-up to the eye splash incidents discussed at last month's meeting:

- A message from Brian Stephenson was sent to all APS employees and resident users clarifying when chemical PPE is required
- The ESAF language for chemical hazards has been modified to clarify when chemical PPE is required
- A meeting was held with beamline safety and chemical safety coordinators on July 6 to discuss the incidents, the APS requirements for chemical safety, how those requirements are being implemented by beamline staff, and a general chemical PPE discussion - about a third of the sectors were represented; suggestions include:
 - Identify a way to involve student users (graduate and post-graduate levels) in preparing safety analyses
 - Developing hazard controls providing more specific guidance for when experimental apparatus should receive a safety review above and beyond the normal ESAF process

Safety

- There will be a mini-roadshow on eye PPE on August 2 from 11:30 AM to 1 PM near the 401 Grill - various types of eye protective gear will be available - anyone who wears their eye PPE to the table will receive a treat and can discuss whether or not the PPE is appropriate for the work they are doing.
- This will help us understand what to carry in the stock room



UChicago Argonne, LLC Board of Governors Review of Photon Sciences

July 18-20, 2012

The review went very well, the verbal close-out focused on each charge element. Written report is forthcoming.

The specific elements of the review charge are:

- Provide a detailed assessment of the status of APS's strategic planning beyond the APS upgrade. (Underscored APS commitment for developing hard X-ray capabilities and science, also encouraged timing modes)

UChicago Argonne, LLC Board of Governors Review of Photon Sciences

- Provide a brief review of the status of APS since the last review with emphasis on the following areas:
 - APS's strategies for identifying and addressing future challenges and growth opportunities. (Funding for CATs, CAT collaborations, Life Sciences)
 - Assess as appropriate, the current risk profile within the Directorate, including an evaluation of mitigation strategies for the core risk areas identified by the APS. (Safety, Funding, WP&C, Reliability)
 - APS's progress toward defined metrics (publications/presentations, success at funding opportunities, technology transfer initiatives), as well as progress toward identification of new metrics to evaluate improvements in communication and internal/external partnering. (Encouraged us to understand pubs metrics in broad context, other metrics supported, no strong endorsement of new metrics.)

UChicago Argonne, LLC Board of Governors Review of Photon Sciences July 18-20, 2012

- APS's commitment to continue the operations at current levels during the upgrade (Appreciated and affirmed APS commitment to operations. Noted that APS management has made progress in communicating impacts, and encouraged further communication.)
- Evaluate status of APS's current and planned integration with other Laboratory expertise to determine whether APS is effectively utilizing all available resources needed to achieve high-quality transformational interdisciplinary research and development. (Noted progress, picked up on improved integration with Ops side of house, particularly FMS involvement.)
- Develop recommendations as to specific areas of focus for future reviews. (from BES review: Service Coordination Board, Life Sciences, Staff Morale)



Monthly Users Meeting - News

- DOE BES Neutron & Photon Detector Workshop will be held in DC area on Aug 1-3
 - By invitation only, about six attending from APS; contact Denny Mills or Chris Jacobsen
 - A similar Optics workshop is planned for 1st quarter of calendar 2013
- High Current test at end of run... the Front Ends *and* beamline Radiation Safety System components of the following ID beamlines have been reviewed and confirmed to be capable of handling 150 mA with gaps closed.
 - 13 GSECARS
 - 16 HP-CAT
 - 21 LS-CAT
 - 23 GM/CA
 - 24 NE-CAT
 - 26 Nano-CDT
 - 30 XSD-IXN
 - 34 XSD-SSM
- Non-RSS optical elements, such as monochromators and slits, are the responsibility of the beamline and have not been reviewed for thermal performance by APS.



SAC Beamline Reviews: October 3, 2012

Panel A: HERIX and NRS

- Beamlines to be reviewed: 3-ID and 30-ID (HERIX)
- Review Panel:
 - Dan Neuman (SAC, NIST), Chair
 - Mark Sutton (SAC, McGill)
 - Chi-chang Kao (SSRL)
 - Jay Bass (UIUC)
 - Steve Durbin (Purdue)
 - Laura Edwards (UIUC), invited

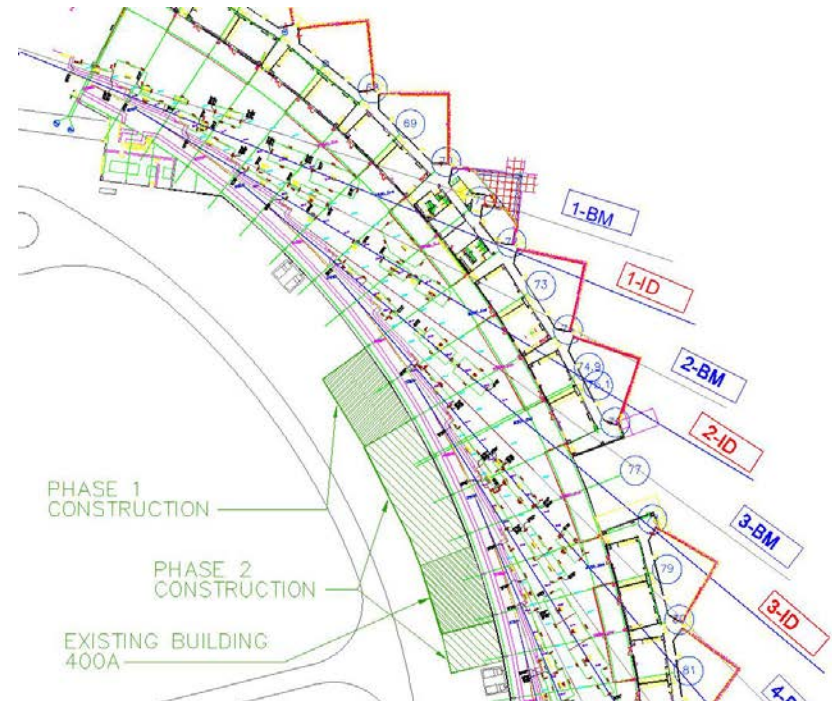
SAC Beamline Reviews: October 3, 2012

Panel B: SAXS, WAXS, GISAXS, USAXS, and XPCS

- Beamlines to be reviewed: 8-ID-E, 8-ID-I, 12-ID-B, 12-ID-C/D, (SAXS/WAXS only), 15-ID (USAXS only)
- Review Panel:
 - KaYee Lee (SAC, UofC), Chair (invited)
 - Friso van der Veen (SAC, Paul Scherrer)
 - Roger Leach (SAC, DuPont)
 - Jack Johnson (SAC, Scripps)
 - Soichi Wakatsuki (SAC, Photon Factory)
 - Andrei Fluerasu (BNL)

Building 400A Project

- Building 400A is being extended to house RF and cryo plant for the Short Pulse X-ray facility.
- Phase 1: 3/18/12 – 7/8/12
 - All foundations and slab
 - All work below finish floor
 - Completion of North section of building (steelwork, roofing, paneling, life safety etc.)
 - All other site work (driveway, etc.)
- Phase 2: 7/9/12 – 9/30/12
 - Completion of the rest of the building is now underway



APCF Construction will begin this month!



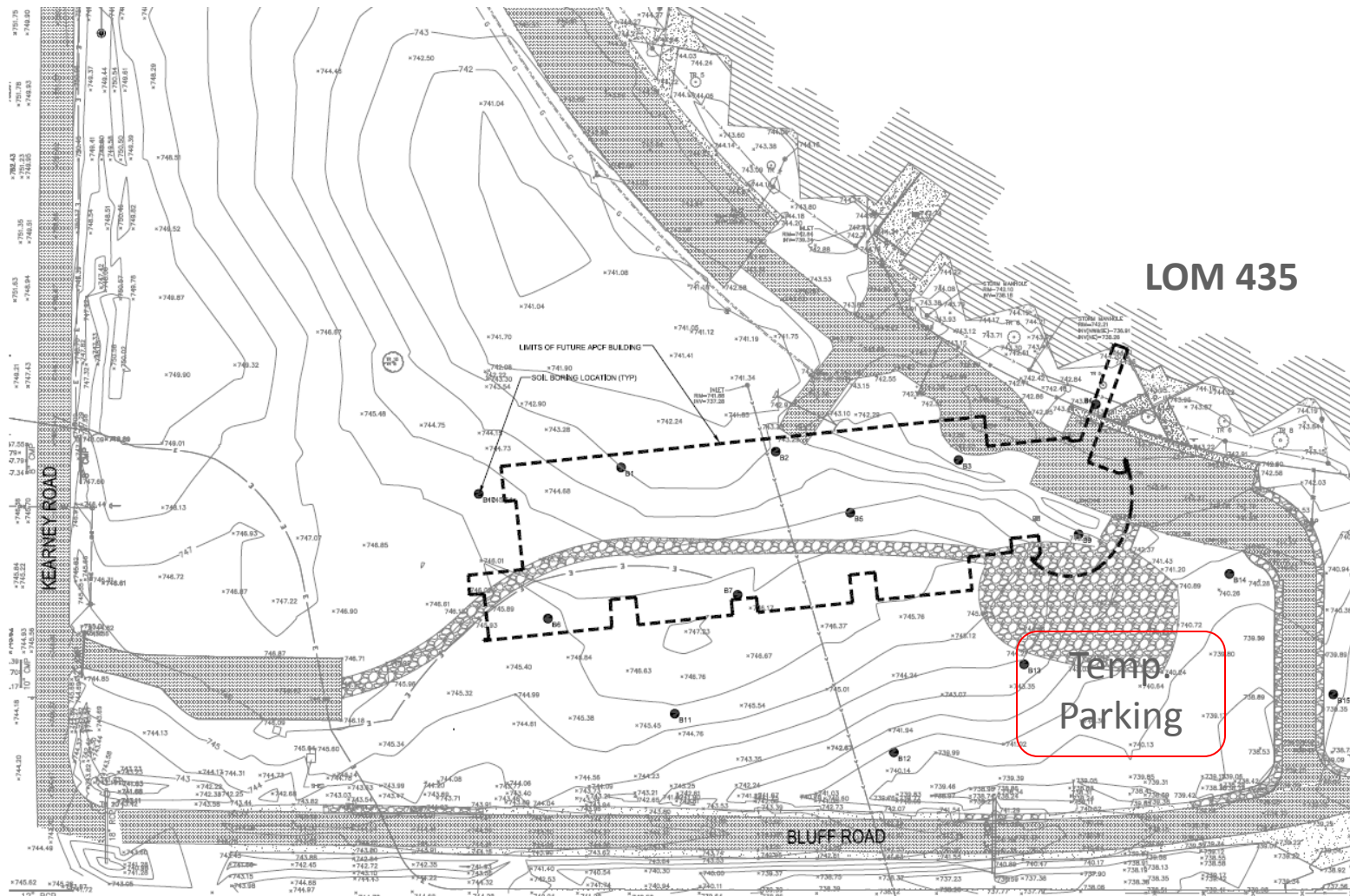
Project Overview



APCF Location



APCF Location

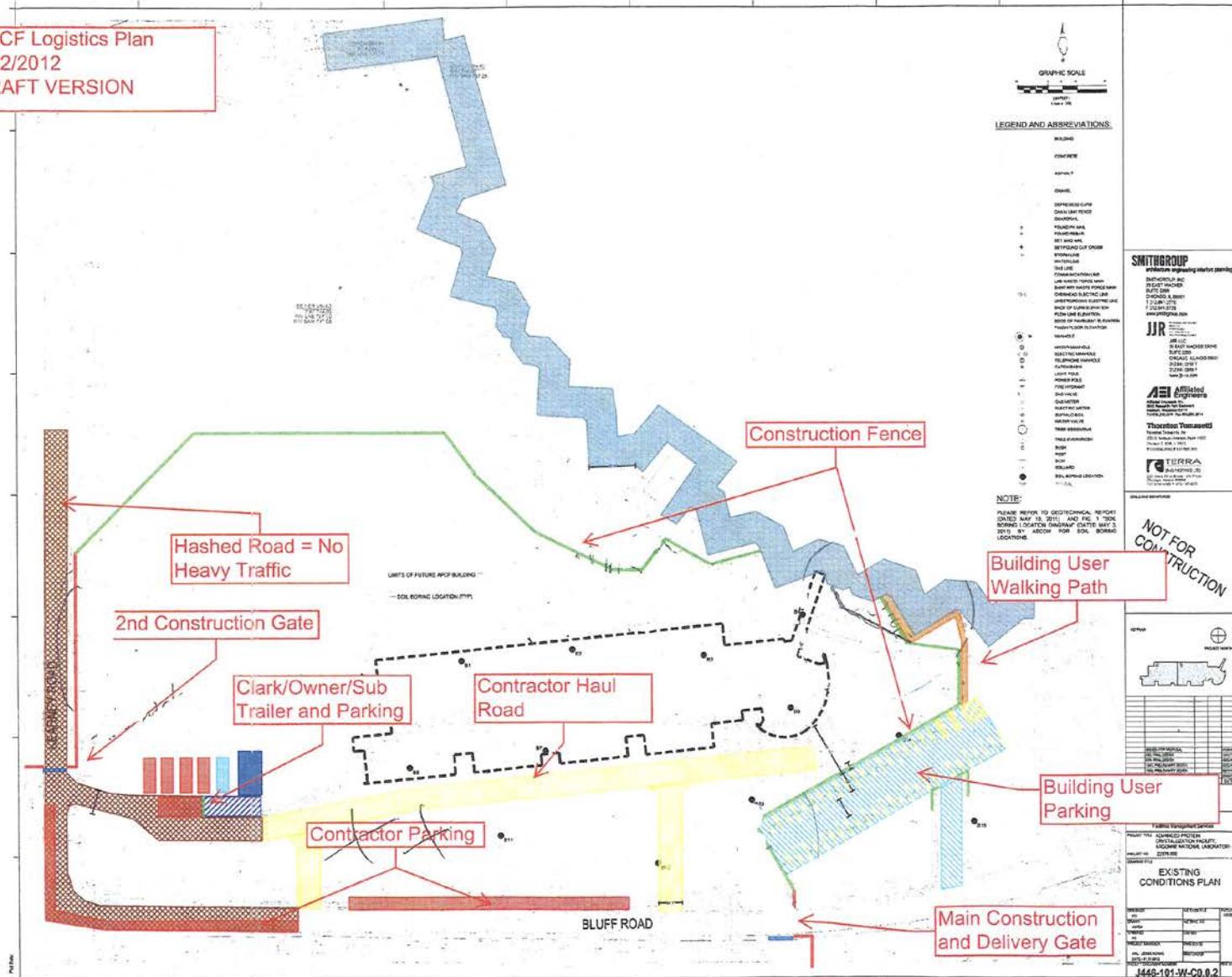


APCF Construction - Impacts

- Parking for LOM 435 to be relocated to a paved temporary area adjacent to the building. LOM 436 unaffected.
- Deliveries and access to LOM 435 & 436 will be maintained, including N2 delivery near Sector 20.
- Portions of Kearny & Bluff Roads are planned to be closed.
(Similar to Winter conditions)
 - Access to LOM 435 – Bluff Road West
 - Access to LOM 436 – Kearny to “F” Road South
- Detailed Site Logistics Plan currently in development.

APCF Construction logistics

APCF Logistics Plan
7/22/2012
DRAFT VERSION



APCF Construction - Timing (*Next 6 Months*)

Construction Fencing & Barricade: July 31st – Mid August

Earthmoving: Mid August – September

Foundations: September – November

Steel Superstructure: November – February

Completion: Winter 2014

Advanced Protein Crystallization Facility

Construction Points of Contact

Jesse Adams - Project Manager

p. 630-252-7724

c. 224-532-3882

e. jjadams@anl.gov

Steve Hunsberger - Project Superintendent

p. 630-252-0794

c. 847-975-9428

e. shunsberger@anl.gov

Pat Hogan - Construction Manager

p. 630-252-6947

c. 312-656-1672

e. phogan@anl.gov



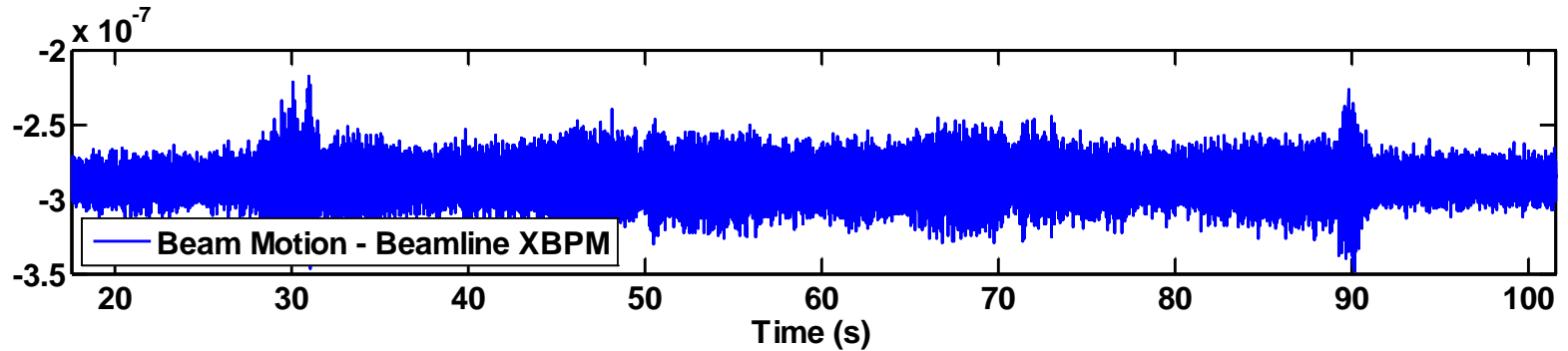
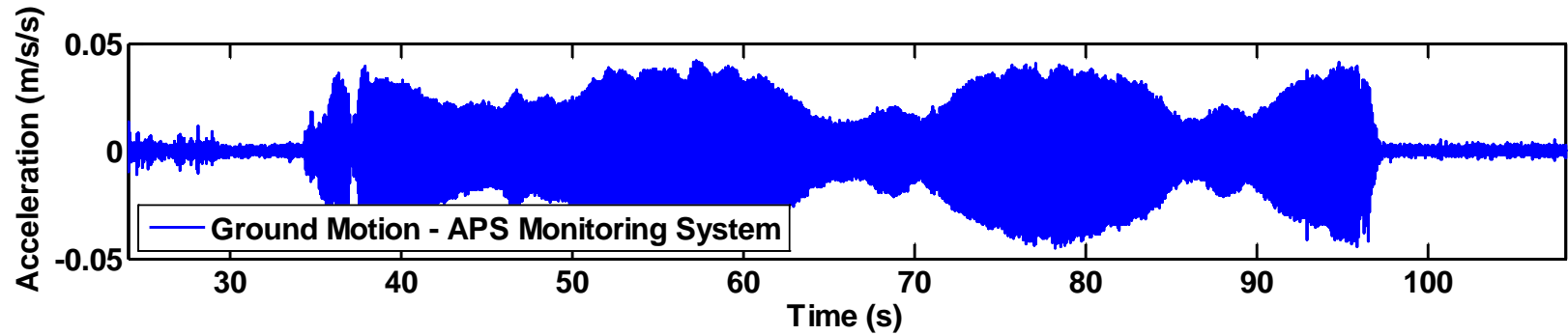
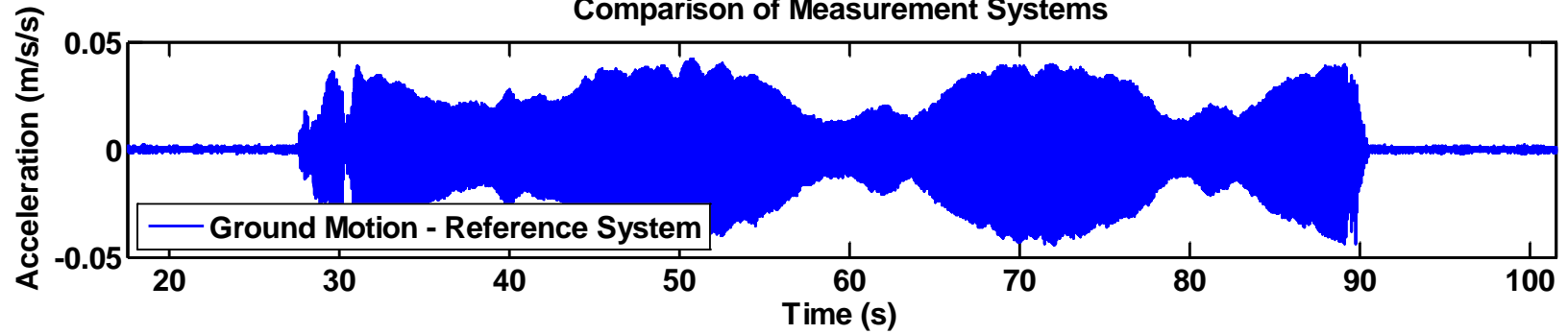
Status of Vibration Monitoring and Alarm System

- On Tuesday July 17, fifteen vibration tests were conducted with construction equipment in the APCF area. This was a preliminary test of the system.
- Shutter permit was given to all beamlines at this time.
- The purpose of the test was to:
 - Check if the prototype sensor network could successfully detect and record vibrations,
 - Allow beamlines to participate and determine what effect the tests had on their operation, and
 - Acquire data to be used along with *beamline feedback* to ultimately set alarm levels
- Test result: The vibratory roller affects the beamlines' ability to run experiments



Preliminary Data

2012-07-17 Vibration System Testing
Comparison of Measurement Systems



Vibration Monitoring (continued)

- On Tuesday, July 31 more equipment will be tested.
- Shutter permit will be given to all beamlines at this time.
- The APS will be acquiring data throughout the test.
- **However, to correlate the type of equipment and the effect on operations, we request feedback from the beamlines.**
- **Please contact Julie Cross for more information.**