CSRC Programs & Activities

Chairman’s Report

May 14, 2004
California Spatial Reference System

**Definitions**
- UTC
- ITRF / EOP
- NAD / NAVD

**Geodetic Models**
- Orbits
- Geoid
- Velocities
- Tides
- Datum Transformations
- Ionosphere/Troposphere
- Map Projections

**Geodetic Observations**

**CSRS**
- Coordinates & Elevations
- Accuracy
- CGPS Sites
- Passive Monuments
- Processing & Analysis

**Data Distribution**
- Web Interface db
- Standards & Specifications
- Post-Processing Apps
- Real-Time Infrastructure

**Public Outreach**
- Legislation
- Guidelines
- Education / Seminars
- Meetings & Forums
Passive Control Networks

South San Francisco Bay Height Modernization

- NGVD29 Transformed Vertcon
- Geoid 99
- Geoid 2003
San Joaquin Valley Network

- 105 Stations
- Caltrans Leveling (E-W Hwys 152 & 198)
- Caltrans Hght Mod GPS
- Consultant proposals in review
Northern California Densification Network

Caltrans Districts
800-900 Stations
~ 2 Years
2cm Hgt Mod
NSF / UNAVCO, Inc.
- 12 Years 800 CORS
- High-Speed Data

1st Five Years: $219M
PBO $30M FY03/04
Geodetic Models

- GPS Orbits
- Antenna Phase Center
- Ionosphere
- Troposphere
- Geoid
- Velocity Models
- Subsidence
- Datum Transformations
Spatial Reference System Infrastructure

Geoid 99 to 03
2cm Contours

Data Management
Metadata
Communication
Terminology
Data Management Infrastructure

CSRC Data Portal

NGS Data Sheets

Database - Shp, Program - datasheet, Version - 6.08

AC0794

DateTime: February 28, 2004

AC0794

Title: National Geodetic Survey, Descriptive Data - GPS无缝归档

AC0794

Title: CSRC Data Portal

AC0794

Title: NGS Data Sheets

AC0794

Title: GPS

Online GSAC Access Points

GPS Seamless Archive
Real-Time Networks

OCRTN - Operational
Parkfield - Operational
Riverside Co. - In Progress
Bay Area
LA County
San Diego Co. - In Progress
Real-Time High-Rate CORS

Diamonds: Real-Time (1 s) High-Rate (1 Hz) Sites

Squares: 6-24 hr download, 5-30 s sampling rate.
Real-Time Applications

~ Demand

- Machine Guidance
- Intelligent Vehicles
- Precision Navigation
- Emergency Warning Systems

- Weather Monitoring
- Seismic Analysis

Data Distribution Infrastructure