National Aeronautics and Space Administration

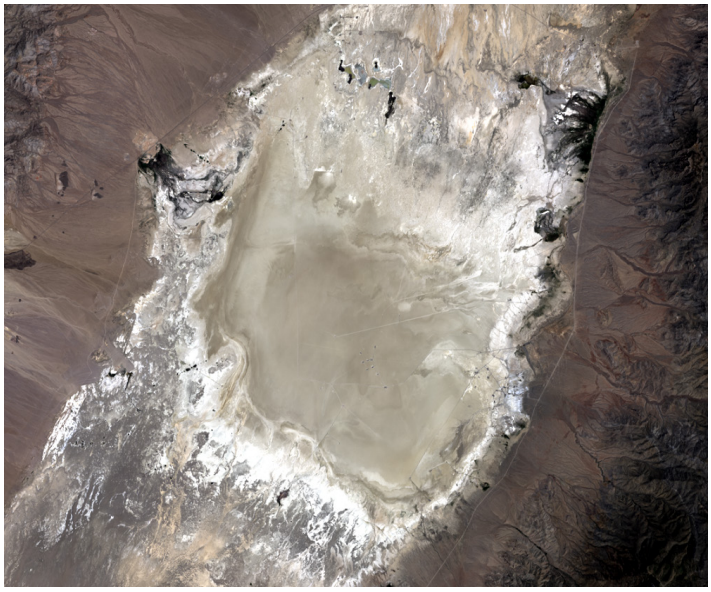
Railroad Valley, Nevada

Since 1993, NASA has relied on Railroad Valley (RRV), a dry lakebed in Nevada, for conducting ground-based calibration of Earth-observing satellite instruments. Calibration is critical to ensure data returned is accurate, which in turn lends trust and credibility to the science that informs policy and decision-making.

Railroad Valley is the best location in the United States (and one of the best in the world) for satellite calibration due to the playa being large enough, flat, free of vegetation, with a useful and consistent surface color, mostly free of human disturbances, accessible, and under mostly cloud-free skies with low airborne particle concentrations

Protecting the RRV's surface integrity is an important goal for NASA for enabling ongoing satellite instrument calibration crucial to the viability of several important Earth Science missions.

Examples of Earth Science instruments that rely on the playa include those on NASA's Aqua, Terra, Orbiting Carbon Observatory-2 & -3 (OCO-2 & OCO-3), USGS's Landsat, and NOAA's Joint Polar Satellite System. It is also the primary calibration site for future NASA satellite missions, such as GeoCarb, which will observe carbon dioxide and methane over the Americas. In addition, other



Credit: USGS/Earth Resources Observation Science Center

governmental agencies, such as NOAA and USGS, as well as international and commercial partners rely on RRV for calibration.

Data received from these missions and others impact everyday life on Earth by informing decisions and policies affecting agriculture, for example, food security, water, urban planning, climate change, weather, transportation, disaster preparedness and emergency response.

For more information on NASA's Earth Science Programs, visit science.nasa.gov/earth-science.

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