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July 22, 2022

National Aeronautics and Space Administration
300 E Street SW
Washington, DC 20546

To Whom It May Concern,

Planet appreciates the opportunity to comment on the Draft Environmental Assessment for Land Withdrawal Application in Railroad Valley, Nevada (Draft EA) and Planet would like to express its support of NASA's proposed alternative to withdraw the land. Planet strongly opposes changes to this critical and unique national asset and supports continuing to protect and preserve this site. The Railroad Valley site is essential to Planet and other national and commercial Earth observing satellite systems to maintain radiometric calibration and ensure our imagery is accurate for our commercial, civil, and national security users.

Planet is one of the world's leading Earth imaging satellite companies. Based in San Francisco, we have been imaging the entire landmass of the world everyday for the past 6 years. This data is licensed to a wide variety of commercial and government customers. Seventy percent of our business is on the commercial side where we provide daily imagery to customers across many sectors including agriculture, energy and land management, emergency management, infrastructure, insurance, finance, security, scientific research and education. We also provide data to government customers including Earth scientists and researchers across the U.S. Government and the intelligence and defense community. Our imagery enables governments, agencies, communities, companies, and individuals to make better data driven decisions.

Critical to our ability to provide accurate imagery and data to our customers is our ability to calibrate our fleet of over 200 satellites. The Railroad Valley site is essential in this process and is used as both a pseudo invariant calibration site as well as leveraging the data that the RadCalNet station on the site produces. As laid out in section 1.1.1 of the Draft EA, Railroad Valley is a unique and critical site that enables Planet and other Earth imaging assets to calibrate and maintain effectiveness as a provider of remote sensing data for the world. Planet uses Landsat, Terra and Aqua data for radiometric calibration, atmospheric correction and derived data products like Planet Fusion Monitoring and Planet Basemaps.

Planet started radiometric calibration in 2016, with two of our initial test "Dove" satellites. Since then we have individually calibrated over 250 satellites. Radiometric calibration is how we can convert measurements from our satellites to a physical unit of energy. This allows the data from

our satellites to be easier to use and comparable with other satellites. For the process of radiometric calibration, we are reliant on well-characterized and stable sites that do not change over the years, generally called a pseudo invariant calibration site. This stability allows us to isolate changes in our satellites over time. The fact that Railroad Valley has been studied and characterized for over thirty years means we can take into account differences between satellite instruments for the purposes of our calibration. This is key in allowing us to leverage public missions from NASA and others that have advanced on-board calibration capabilities and transfer their calibration to our satellites. Our satellites have a wide variety of instruments on them so this aspect is also important when comparing different Planet satellites (Figure 1). Railroad Valley's use from the very first calibrated Dove to the latest SuperDove allows us to provide a continuity of metrics. Any alteration of the site would degrade our ability to provide accurate radiometry and break this link from our very first calibrated satellites to our current and future satellites.

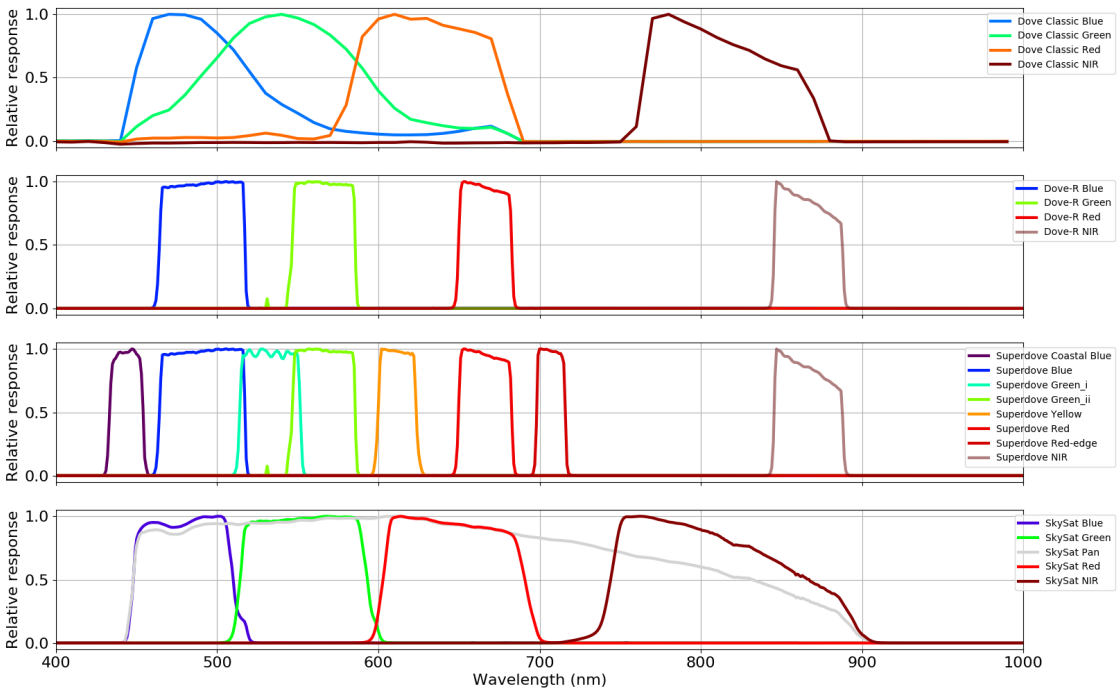

Figure 1 - Showing the different spectral bands for the satellites that Planet currently operates.

With the Railroad Valley Site also being used by reference missions like Landsat 8, Landsat 9, Sentinel-2 and other programs, protection of this site is critical to allow for data fusion work in science and industry across data sources. The calibration Planet and other commercial Earth observing satellite systems do using the site ensures data from early Landsat and other missions decades ago can be used along with additional commercial data being collected today

to enable new scientific understanding. This effectively multiplies the scientific impact of NASA's own missions as long as the Railroad Valley site is protected.

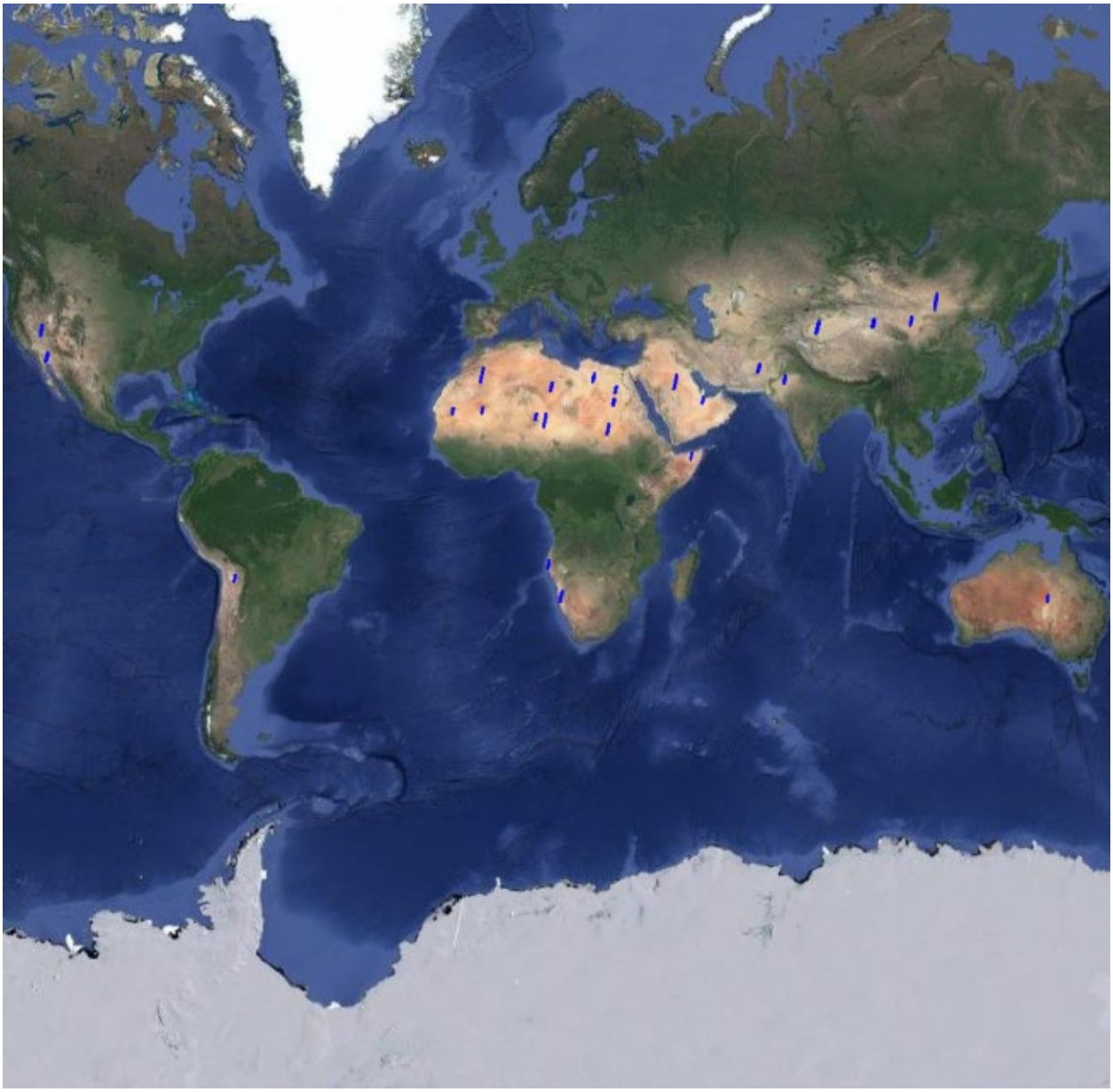

Figure 2 - The calibration sites that Planet uses across the world.

Planet uses a set of 27 calibration sites across the world (Figure 2). All these sites are important to our calibration process but Railroad Valley is the only one in the USA that is easily accessible. Figure 3 shows the amount of data for each calibration site as a proportion of the total calibration data for our newest satellites (Block 3 Skysats) launched in 2020 and shows how significant the Railroad Valley site plays in the calibration of these satellites.

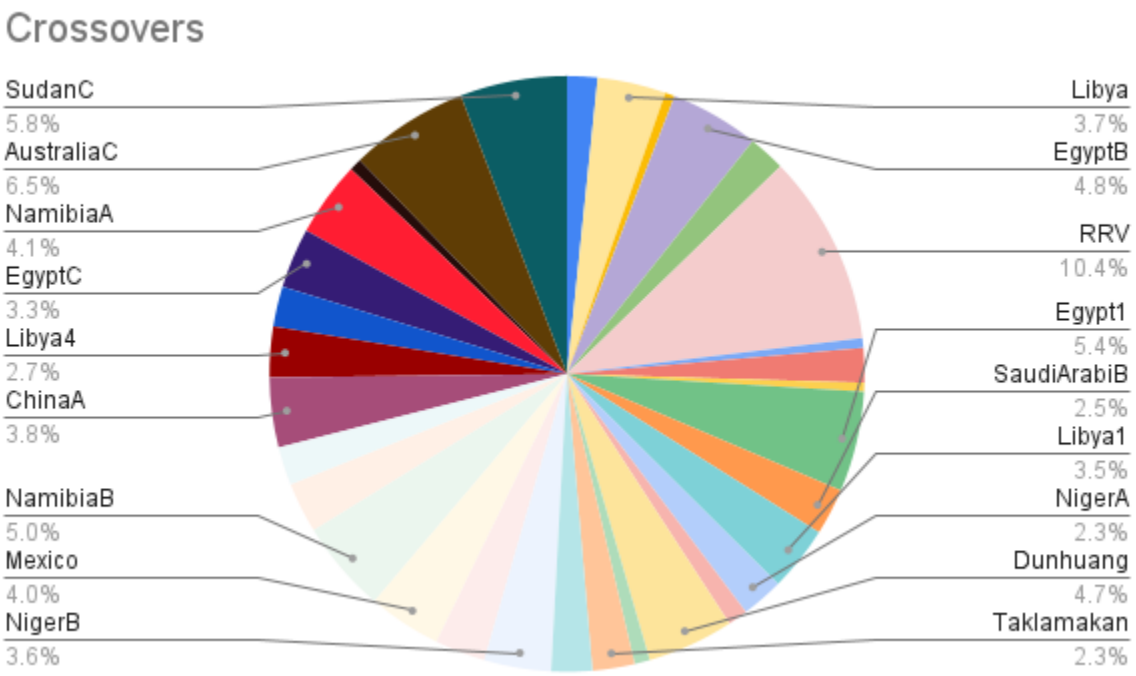

Figure 3 - The calibration data for Skysat Block 3 satellites separated by calibration site between September 2021 and January 2022. RRV denotes Railroad Valley.

Railroad Valley also has a RadCalNet station on the site. This provides an automated source of ground measurements, which can act as a source of truth to validate our measurements. The fact that RadCalNet is an open and widely used data source means it is a great tool to create publicly understandable and verifiable accuracy estimates. Railroad Valley is only one of four RadCalNet sites in the entire world. Figure 4 shows the proportion of RadCalNet data from all the SkySat satellites over a one year period (September 2020 to December 2021) that comes from Railroad Valley.

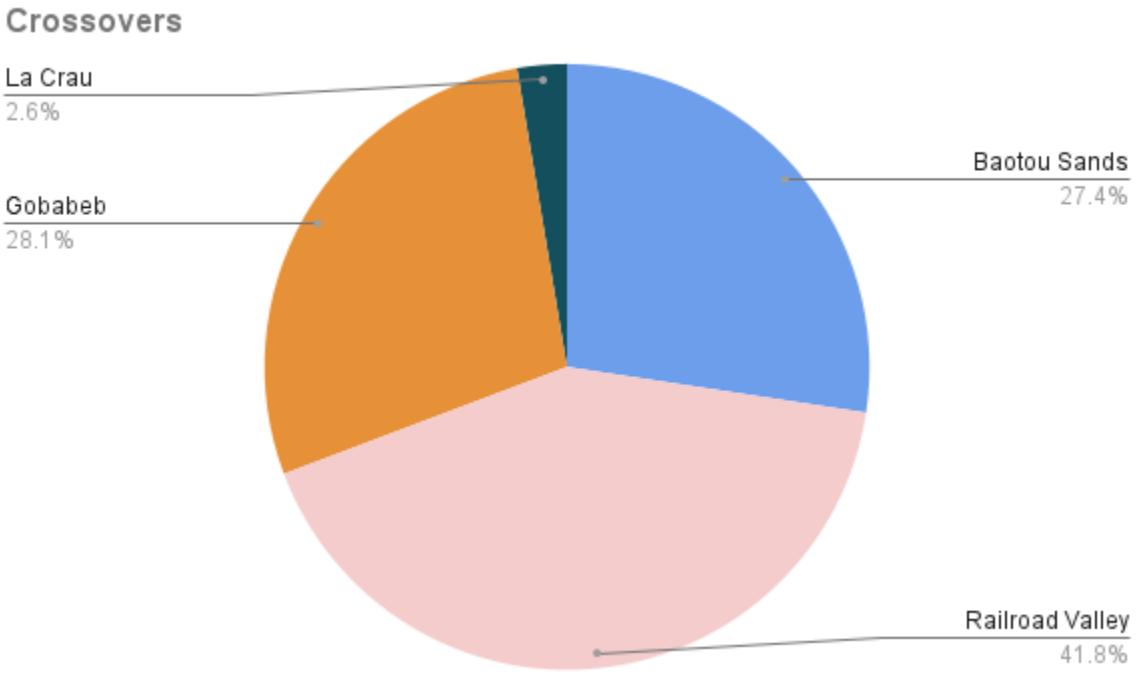

Figure 4 - The amount of RadCalNet data for all SkySat satellites between September 2020 to December 2021, split by site, that is used for public validation estimates.

The Draft EA also includes discussion of alternative calibration methods in section 2.3.1.

Planet engages in several calibration methodologies, including an extensive lunar campaign continuously since 2016. Planet satellites do not have on-board calibrators due to numerous factors including size constraints. Despite having numerous approaches to calibration, the absolute radiometric calibration of the Planet satellites (Dove Classic, Dove-R, SuperDove and SkySats) all use data from well-calibrated reference satellites that rely on Railroad Valley for their own absolute calibration.

As you know, calibrated data is of utmost importance for scientific research. It allows data across disparate satellites to be used together, such as Planet's Doves and NASA/USGS Landsat data, creating a cohesive network of information. Calibration is also critical for any reliable quantitative analysis of the data, because it allows real changes on the surface of the Earth to be distinguished from variations in imaging conditions on the ground, in the atmosphere, and onboard the satellite. Accurately monitoring change on Earth cannot be accomplished without well-calibrated data.

We thank you again for your work in protecting the unique and critical role the Railroad Valley site plays for remote sensing and Earth imagery. Railroad Valley is a unique national resource and is critical to maintain accurate measurements of our world. As our nation becomes ever more impacted by an evolving and changing environment, it is critical to have reliable and

accurate data and imagery of our planet to enable communities to make better data-driven decisions.

Thank you for your consideration,

DocuSigned by:
Ashley Johnson
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Ashley Johnson
Chief Financial Officer
Planet Labs PBC