On Demand Vicarious Calibration for Analysis Ready Data

Christopher Durell[1], Stephen Schiller

1) cdurell@labsphere.com, Labsphere, Inc

Abstract

An essential need in producing high quality exploitable and marketable remote sensing products is the ability to characterize the spatial and radiometric quality of a sensor's image data. The promise of producing eminent satellite and airborne remote sensing data is fundamentally hindered by a lack of resources for real-time calibration and validation. Available radiometrically validated calibration sites are increasing in number, but their existence and utility is still governed by mercurial government program budgets. Field campaigns for creating sensor specific vicarious calibration sites is expensive and time consuming. Government and commercial data users desire lower uncertainty in the available data and harmonization of that data so that it can be used easily without hundreds of man hours spent on post-processing for the customer applications. Labsphere has created a subscription-style calibration network where satellites and airborne sensors can pick the times and frequency of their calibrations virtually at will and with fractional costs of vicarious calibration today. This paper will detail the technology behind this new commercial system and how it could revolutionize real-time analysis ready data.

Keywords - Calibration methodology and techniques