

Discussion Forum: GDA2020 – Are You Ready to Make the Move?

Craig Roberts (moderator)

School of Civil & Environmental Engineering, University of New South Wales
c.roberts@unsw.edu.au

John Dawson (panel member)

Chair of the ICSM Permanent Committee on Geodesy (PCG), Geoscience Australia
John.Dawson@ga.gov.au

Daniel Jaksza (panel member)

Chair of the ICSM Geocentric Datum of Australia Modernisation Implementation Working Group
Geoscience Australia
Daniel.Jaksza@ga.gov.au

Les Gardner (panel member)

A/Director of Surveying & Cadastral Programs, Land and Property Information
NSW Department of Finance, Services & Innovation
Les.Gardner@lpi.nsw.gov.au

Donald Grant (panel member)

Associate Professor in Geospatial Science
Donald.Grant@rmit.edu.au

ABSTRACT

In nine short months at the start of 2017, GDA2020 – the modernised Australian datum – will be released to the public for implementation testing. Ultimately, it is expected that this new static datum will be adopted for wide-spread use in Australia by January 2020. Following that date, additional tools and methods will be made available to allow users to accurately account for deformation, whether predictable or spontaneous, and whether small or large-scale. By 2023 it is expected that all users will be able to seamlessly integrate data and observations gathered at different times by making appropriate use of time-stamp metadata and deformation models in their spatial processes. Datum modernisation will allow for greater productivity and innovation in the spatial industry, while still supporting those who desire a static datum for their conventional daily work. The increasing accuracy of spatial information now available to, and required by, both professional and inexperienced users is well known, but so too are the disastrous results that come from not properly understanding the datum which underpins that spatial information. It is imperative that spatial professionals now learn, understand and prepare for this upcoming datum modernisation and become aware of the differences between common datums in operation in Australia, including WGS84, ITRF2008, GDA94 and GDA2020. In particular, GDA2020 will be built on a new and more rigorous national adjustment with a modernised reference epoch. These changes will result in a more homogenous datum with known distortions removed and allow contemporary observations to better match fundamental datasets, but will also introduce an apparent coordinate shift of approximately 1.8 m in all spatial data. This forum is intended to promote discussion of questions or concerns related to datum change, and how we as a community can minimise any disruption as well as take advantage of the opportunities presented by the upcoming Australian Datum Modernisation.

KEYWORDS: *Next generation datum, infrastructure, GDA94, GDA2020, Australia.*