

DEVELOPMENT AND APPLICATION OF GEOMAGNETIC INDICES AT THE AUSTRALIAN SPACE FORECAST CENTER

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The Australian Space Forecast Center at IPS Radio and Space Services, an organisation within the Australian Government, is the delivery point for space weather information and services to the Australian region and beyond. IPS operates a network of observatories from Antarctica to equatorial regions that provide solar, geomagnetic and ionospheric data in near real-time. Products derived from geomagnetic observations include geomagnetic warnings, alerts and indices. Most of these geomagnetic indices have been developed with a focus on specific customer groups. These customer groups include the geophysics exploration industry, power system protection authorities, and pipeline corrosion protection companies. These groups often have different thresholds and timeliness requirements for geomagnetic activity information. This paper presents some of the different requirements of our customers and the geomagnetic indices currently being used and under development at IPS to address different customer needs.

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