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# Gould's Belt and Beyond

Jan Palous\*<sup>1</sup>

<sup>1</sup>Astronomical Institute of the Czech Academy of Sciences – Czech Republic

## Abstract

Expanding supershells are powered by winds of young and massive stars and by supernova explosions. We explore the results of the local supershell expansion: the Gould's Belt. With GAIA astrometric data we derive kinematical parameters of the Gould's belt and compute formation places of its young stars and OB associations. Their kinematics shows that they have been formed within a sheet-like region about 20 Myrs ago. The Gould's belt is compared to the galactic supershell GS242-03+37, which can be explained as expanding structure more than 100 Myr old. There, the formation of star clusters started about 40 Myr ago, when the ISM density increased due to galactic differential rotation. Similarly in the Solar vicinity, after about 50 Myr of expansion, the star formation process was triggered in a supershell walls, where the density of the ISM has been increased, creating young stars and OB associations of the Gould's belt.

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\*Speaker