Poster Session (P) Poster Lunch (1)

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A STAR IDENTIFICATION ALGORITHM BASED ON FOCUS TRIANGLE OF ELLIPSE

Abstract

The traditional triangle star identification algorithm has a higher redundancy and a poor robustness to noise, a modified triangle algorithm based on traditional one is proposed. By the proposed algorithm, a focus triangle of ellipse is formed by three stars, then the eccentricity of ellipse can be calculated. Some navigational triangles within some scope are selected using the eccentricity value, compared three angles between the observed triangle and the navigational triangles, if exists redundancy, add unitary magnitude to eliminate it.