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行星会合指数变化与太阳绕太阳系质心运转的周期

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Changes of the planet juncture index and solar revolution cycle around the mass center of the solar system

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摘要

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摘要

本文创建了行星会合指数(K)运动学方程,通过定义的行星会合指数可以指代行星会合与相背离的程度,进而发现太阳(S)绕太阳系质心(C)运动的轨迹、形态变化特征.对该运动学方程构建的图像分析发现,太阳绕太阳系质心转动有近半程时间,太阳系质心是处于太阳本体之内.以质量为权重求出了行星系质心运日运动的恒星周期,从而获得了太阳绕太阳系质心运转的真正周期为21.8192年(约22年),并得到了太阳绕太阳系质心运动的轨迹.

关键词 行星系质心, 运动学方程, 行星会合指数(K), 改正系数(m), 22年周期

Abstract:

The kinematic equation of the planet juncture index (K) was created in this article, which can be used to express the degree of planet meet or depart. Then the track and variation of the Sun (S) around the centroid (C) of solar system could be found. Through the image created by the kinematic equation, we found that about half of the time of the centroid of solar system was in the body of the Sun during the track. The sidereal period was also calculated by weight function of quality, then the sidereal period of the Sun around the centroid of solar system was obtained as 21.8192 years (about 22 years). And the track of the Sun around the centroid of solar system was found at last.

Keywords Centroid of planetary system, Kinematics equation, Planet juncture index (K), Coefficient of correction (m), 22 annual periods

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