

我国近年来天文的新发现

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摘 要

这里叙述的新发现仅指某一特殊类型天体的发现(如新星, 超新星和小行星等)及某一特殊类型天体的证认(如 X 射线源证认为类星体等), 而不包括某一类天体的某种天象及未知性质源的列表(如深度成像观测得到的前人没有纪录过的一般天体, 如恒星, 但一些特殊天体亦列入)。由于收集不全面和所谓“发现”定义的困难, 向有发现而未列入者先致歉意。

从 80 年代后期开始, 我国的观测设备有了很大的发展, 所以有一批重要的天文发现, 为天文研究提供了很好的机会。它包括下列几方面:

星系层次天体:

- (1) 用 X 射线源和射电源证认了一批包括类星体, BL Lac 天体, 赛弗特天体在内的活动星系核;
- (2) 用 IRAS 源证认了一批 W-R 星系;
- (3) BATC 巡天在一个星系周围发现了一个“环”。

恒星层次天体:

- (1) 河外星系中发现了一批超新星和一个新星;
- (2) 发现了和用 ROSAT 源证认了一批激变变星;
- (3) BATC 和超新星巡天发现了一批变星;
- (4) 发现了若干新的 δ Sct 变星;
- (5) 发现了一批 Herbig-Haro 天体;
- (6) 发现了一批水脉泽。

行星层次天体:

- (1) 发现了大批小行星, 特别是有些是近地小行星;
- (2) 发现若干彗星。

关键词 天文学 — 新发现 — 证认 — 观测

分类号 P1

New Astronomical Discoveries in China During Recent Years

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Abstract

In this paper, "new discovery" refers to successful discoverage of special kind of objects (such as nova, supernova, asteroid *et al.*) and identifications of special objects (such as an X-ray source identified as a Quasar), which do not include discoveries of special celestial phenomena of some objects and catalogue of sources of unknown properties (for example, deep image observations of normal objects for which previous records are not available, such as stars, but some specific objects are included). I apologize in advance for what are not listed due to the incomplete collection and difficult definition of "new discovery".

A number of remarkable astronomical discoveries in China have been obtained with the significant developments and improvements of observational facilities since late 1980's. This provides good chances for astronomical research. New discoveries include:

extragalactic objects:

(1) identification of a number of X-ray and radio sources as AGN, including Quasar, BL Lac objects and Seyfert galaxies.

(2) identification of IRAS sources as W-R galaxies.

(3) a "ring" around one galaxy observed by BATC survey.

objects in the Galaxy:

(1) a number of supernovae and one nova in extragalactic systems.

(2) discoveries of cataclysmic binaries and Identification of ROSAT sources as cataclysmic binaries.

(3) a series of variable stars by BATC and supernova survey.

(4) some new δ Sct variable stars.

(5) Herbig-Haro objects.

(6) water masers.

objects in the solar system:

(1) a large number of asteroids, especially some near-earth asteroids.

(2) some comets.

Key words astronomy—new discovery—identification—observation