THE FIRST SUPPLEMENT TO A CHECKLIST OF SUPERNOVAE IN THE NGC AND IC GALAXIES THROUGH 1985

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Abstract

This is the first supplement to the author's paper, A Checklist of Supernovae in the NGC and IC Galaxies Through 1985 (Spratt 1986).

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1. Introduction

Since the original paper (Spratt 1986) and its companion (Spratt 1987) were published, new supernovae have been discovered, including the exceptional Type II Pec? object (1987A) in the Large Magellanic Cloud (LMC). This object for a few days attained a visual magnitude of approximately 2.9. The listing in Table I is of these new supernovae and also any additional discoveries which were brought to my attention. As with the original paper, these supplemental additions in Table I are not intended to replace any general authoritative listing.

2. Description of Format

The format of Table I is the same as in Spratt 1986. However, a brief description of the typical data fields is given. For more detail on references, etc., Spratt (1986) should be consulted. Additional references are as noted in the text.

1. **NGC** = The standard number from the **New General Catalogue of Nebulae and Clusters of Stars** (Dreyer 1888).

2. **IC** = The number in the **Index Catalogue** (Dreyer 1895) and the **Second Index Catalogue** (Dreyer 1908).

3. **OTHER?** = Other designations as in the following example:
M31 - The number in the catalogue of Charles Messier (Becvar 1960). The LMC supernovae 1987A is listed, even though the LMC and its companion the SMC have no designated NGC or IC numbers, as this object was a true extra-galactic object.

4. **GALAXY TYPE** = Galaxy types were obtained primarily from **A Revised Shapley-Ames Catalog of Bright Galaxies** (Sandage and Tammann 1981).

5. **YEAR(S)** = Self-explanatory; the year the supernova was found, in most cases the same year the outburst actually occurred (but not always). Additional data on older discovery circumstances from the **Palomar Supernova Search Master List (Complete to 1986)** were used.

6. **SUPER MAG** = The supernovae magnitudes are from various published authorities and are noted as "v" (visual), "p" (photovisual), "pg" (photographic), and "B" (**B** on the **UBV** system). "Radio" indicates that data about the supernova were obtained primarily using radio frequencies, and little data were obtained in the optical range. The single candidate for this type (NGC 891) is included here for completeness' sake.

7. **GAL MAG** = The magnitude estimates for the galaxies were obtained from **Burnham's Celestial Handbook**, Volumes 1, 2, and 3 (Burnham 1978), with occasional reference to **Atlas Coeli - II Katalog 1950.0** (Becvar 1960). The magnitude estimates are visual unless appended with a "p" which indicates photographic.

8. **IAUC** = The **IAU Circulars**, as edited by Marsden, are referenced from December, 1975, to date.

3. Closing Remarks

This supplementary listing should assist the AAVSO Supernova Search Program and encourage new observers to undertake a systematic check of likely candidates for supernovae. Readers are urged to contact the author with any additional supernovae candidates that may have been overlooked.

4. Acknowledgements

My thanks go to James Bryan, who drew my attention to the existence of the **Palomar Supernova Search Master List (Complete to 1986).**

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TABLE I

Extra-Galactic Supernovae

NGC	IC	OTHER?	GALAXY TYPE	YEAR[S]	SUPER MAG	GAL MAG	IAUC
		LMC	SBm	1987	2.9v	0.63B	4316
	43		Sb	1973	16.5v	14.4p	
	4963		S	1987	16.0pg		4417
891			Sb EDGE ON	1986	14.0 RADIO	11.0	4248
1448			Sc	1983	14.5v	11.8	3877
1559			SBc(s)	1984;1986	13.2v; 13.5v	11.1	3963;4260
1667			Sc(r)	1986	15.0v	12.8pg	4287
2227			S	1986	14.0pg		4298
2336			SBbc(r)	1987	14.2pg	11.5p	4441
2715			Sc(s)	1987	15.0pg	12.0	4451
3367			Sbc(s)	1986	14.0v	12.3	4173
3561			Sa(r)	1953	16.0p	15.5p	
4254		M99	Sc(s)	1967; 1972; 1986	14.0p; 15.8B; 14.0v	10.1	4219
4302			Sc	1986	14.5pg	12.5	4202
4615			S	1987	15.8pg	14.0pg	4374
4651			Sc(r)	1987	15.0p	11.4	4426
5004A			Sb	1976	16.5p	15.3p	
5101			Sb0	1986	17.0B	12.0	4177/85
5128		CENT. A	S0 + S Pec	1986	12.5v	7.2	4208
5645			SCIII Pec	1986	17.0B	12.8	4213
5850			SBb(sr)	1987	14.4v	11.7	4321
6195			S	1975	17.8p	14.7p	
6850			S?	1984	16.0pg		3971
7499			E	1986	16.5pg		4282
7606			Sb(r)	1965; 1987	16.0p; 13.8v	11.6	4511