7.4.6 The cross-indexing problem

Why does each star catalogue have its own numbering system? Largely because perfect cross-indexing is impossible. What do you do when your catalogue shows two stars where another catalogue shows only one, and you want to use the other catalogue's numbering system? Your only option is to make a mistake. To avoid this, SAO, GSC, HIP, and TYC have separate numbering systems (although HIP and TYC are well cross-indexed).

I once looked up α Centauri (which is a wide double star) in a popular star-mapping software package and was startled to see five bright stars instead of the expected two. Apparently, there were two star positions from SAO or a similar conventional catalogue, two more from Hipparcos (not recognized as the same star because proper motion had taken its toll), and one from the GSC, which did not split the double.

7.4.7 Bayer/Flamsteed to SAO cross-index

With those cautionary notes I present this cross-index of Bayer and Flamsteed designations to SAO numbers. Most computerized telescopes use SAO numbers to identify stars, so if you want to observe (say) β Lyrae, you need its SAO number.

The following table gives the SAO numbers for 1120 stars down to fifth magnitude that are identified by Bayer, Flamsteed, or variable-star designations. It is based on a larger index prepared by W. Barry Smith and distributed by the Astronomical Data Center (http://adc.gsfc.nasa.gov).

EDITOR: Perhaps put "SAO" above each column of SAO numbers.

SAO			SAO			SAO			SAO		
73765	α	And	54281	μ	And	37228	ω	And	200926	η	Ant
54471	β	And	36699	ν	And	52713	5	And	177908	θ	Ant
37734	γ^1	And	37155	ξ	And	73190	12	And	201927	ι	Ant
54058	δ	And	52609	o	And	73346	15	And	257193	α	Aps
74164	ϵ	And	54033	π	And	36123	22	And	257407	γ	Aps
74267	ζ	And	53828	ρ	And	37375	51	And	257380	δ^1	Aps
53216	ι	And	53798	σ	And	37948	62	And	257112	θ	Aps
53264	κ	And	37362	υ	And	201405	α	Ant	257491	ι	Aps
53204	λ	And	53355	ψ	And	200416	ϵ	Ant	257289	κ^1	Aps

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