

Prelude

Welcome to the worlds of women astronomers! Your editors have had the very good fortune to be able to collect here thirty-seven autobiographies. This means that some very distinguished scientists, now deceased, are missing (see chapters 1 and 39). Also missing are a dozen or more colleagues whom we asked for their stories but who were just too busy, otherwise committed, or, sometimes, just not sufficiently interested to contribute. Also missing are at least as many important other watchers of the skies, because the publisher limited the number of pages you now hold. For these many reasons, this volume is not all-inclusive and encyclopedic. Since there may someday be a volume 2 or an online version (with fewer grams per chapter), please let us know about anyone, including yourself, who really should be here.

As it is, we hope these chapters cover a wide enough range of generations (PhDs from 1963 to 2010), nationalities, and subdisciplines to give some feel for the territory. Every chapter writer tells of some triumphs and some failures, barriers overcome, some mild and some monstrous, and a life that has brought, on balance, fulfillment. Yes, there have been other women who started out to be astronomers, but for whom the barriers were simply too high. They necessarily are not here, though we know at least a few.

To paraphrase the late Supreme Court justice Thurgood Marshall, we cannot know the names of all the people who fought to open doors for us, though many are in the timelines of chapter 1. Nor can we know the names of the people who will walk through the doors we ourselves had to kick and shove to get through—sometimes while getting our hands dirty. But they will surely include students of many of our chapter

writers. Our job is to keep working to open those doors anyway, not for the thanks or the glory but for the sake of doing what is right.

What was clear before we started was that things do change. Time was when a woman who wanted to study the stars had to have a father, brother, or husband to provide entry. (This road is still not completely closed.) Then came a time when the best available was to be a “computer” at a large observatory, examining positional measurements, photographs, or spectrograms obtained by male observers. None of these human computers is here either, though the history of astronomy includes some spectacular achievements by women whose job descriptions did not actually include “research” or “discovery.”

Both the world wars, the space race, and the Cold War contributed to changes, partly because men were drawn away from observatories, laboratories, and calculating machines and partly because these events brought about a need for more education, more research, and more knowledge in fields that at least overlapped astronomy.

Opportunities for women to attend graduate school, to receive fellowships and prizes, and to lead projects and teams have definitely increased more or less monotonically from the 1950s onward. Does this mean that the authors of the later chapters found a more welcoming environment than the writers of the first few chapters? That you must judge for yourself and decide if not, why not, and what still needs to be done and by whom.

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The Sky Is for Everyone

