

New Heavens and a New Earth

The Jewish Reception of Copernican Thought

JEREMY BROWN

OXFORD
UNIVERSITY PRESS

CONTENTS

Acknowledgments xvii

Introduction 1

1. Nicolaus Copernicus and His Revolution 13

WHAT WE BELIEVED 17

THE COPERNICAN INNOVATION 20

THE EARLY RECEPTION OF *DE REVOLUTIONIBUS* 23

JOHANNES KEPLER 24

GALILEO 25

2. The Talmudic View of the Universe 27

THE SHAPE OF THE EARTH 27

THE PATH OF THE SUN 29

THE SOLAR SYSTEM 31

THE LENGTH OF THE SOLAR YEAR AND ITS RELIGIOUS
CONSEQUENCES 32

THE MAIMONIDEAN DESCRIPTION OF THE UNIVERSE 34

TALMUDIC ASTRONOMY AND ANCIENT ASTRONOMY 37

PTOLEMAIC BIBLICAL COMMENTARY 38

3. David Gans and the First Mention of Copernicus in Hebrew Literature 42

EARLY INFLUENCES—EUCLID AND THE SUPERNOVA 44

THE FORMATIVE YEARS—CRACOW AND PRAGUE 45

MAHARAL AND THE FIRST JEWISH ALLUSION TO COPERNICUS 47

11. "Let Copernicus and Another Thousand Like Him Be Removed From the World." Reuven Landau's Rejection 200

LANDAU'S EARLY LIFE 201

MAHALAKH HAKOHAVIM 202

BIBLICAL OBJECTIONS 205

SCIENTIFIC OBJECTIONS 206

TYCHO BRAHE AND SCIENTIFIC SKEPTICISM 208

REB ZADOK 211

SPIRITUAL OBJECTIONS 213

LANDAU'S SOURCES AND *SEFER HABERIT* 217

NIVRESHET LENEZ HAHAMAH 219

12. The Modern Period 224

CONVERSATION ON A TRAIN 224

CONVERSATION ON A BOAT 225

THE PRINCIPLE OF CHARITY 229

A NEW THEORY—EVOLUTION 231

DARWIN THE *MESHUGA* 232

JEWISH SECULARIZATION—ASTRONOMY WITHOUT GOD 235

THE NEW ASTRONOMY AND THE JEWS OF THE MIDDLE EAST 243

A JEWISH GUIDE TO THE NIGHT SKY 250

13. Relativity and Contemporary Jewish Geocentrists 254

PTOLEMY IN THE SPACE AGE 254

THE LUBAVITCHER REBBE AND THE WAGER 256

EINSTEIN AND THE NEO-GEOCENTRISTS 259

SHLOMO BENIZRI, THE GOVERNMENT MINISTER WHO REJECTED
COPERNICUS 262

COPERNICUS IN THE CONTEMPORARY *HAREDI* WORLD 266

Conclusion 274

THE CURRENT STATE OF THE SCIENCE-AND-RELIGION
DEBATE 274

PLURALIZE, LOCALIZE, HYBRIDIZE, AND POLITICIZE 276

THE POWER OF THE PERSONALITY 277

RELIGIOUS RATIONALITY AND SCIENTIFIC RATIONALITY 281

Appendix 287

DAVID FRIESENHAUSEN'S SABBATH ZEMIRAH IN PRAISE OF
THE SOLAR SYSTEM 287

Notes 295

Bibliography 369

Index 385