The present five volumes contain the translation of Landau's "Grundlagen der Analysis" into the formal language AUT-QE. The text has been checked mechanically on the Burroughs B6700 at the University of Technology at Eindhoven, and produced afterwards as computer output.

Volume 1 contains the logic presupposed by Landau (which includes a naive concept of sets, and the theory of equivalence classes), and the chapters 1 and 2 of Landau's book (natural numbers and positive rationals).

Volume 2 contains chapter 3 (the positive reals).

Volume 3 contains the translation of Landau's chapter 4 (the real number system) where he introduces the negative reals by "creating" a copy of the positive reals. This "creation" is translated by a number of axioms.

Volume 4 gives an alternative version of chapter 4, where arbitrary reals are introduced as equivalence classes of pairs of positive reals, thus avoiding extra axioms.

Volume 5 contains chapter 5 (the complex numbers).

For a more detailed account of the language AUT-QE, and of the translation we refer to

L.S. van Benthem Jutting
Checking Landau's "Grundlagen" in the AUTOMATH system.
Mathematical Centre Tracks 83. Amsterdam 1979.
A translation of Landau's
"Grundlagen" in AUTOMATH *)

L.S. Jutting

Part 4

Contents: chapter 4a

October 1976

*) For an introduction to and a discussion of the present work, see the authors thesis (Eindhoven, 1977): On verifying Landau's "Grundlagen der Analysis" in the AUTOMATH System.
A translation of Landau's "Grundlagen" in AUTOMATH *)

L.S. Jutting

Part 5

Contents: chapter 5

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*) For an introduction to and a discussion of the present work, see the authors thesis (Eindhoven, 1977): On verifying Landau's "Grundlagen der Analysis" in the AUTOMATH System.
A translation of Landau's "Grundlagen" in AUTOMATH*)

L.S. Jutting

Part 3

Contents: chapter 4

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*) For an introduction to and a discussion of the present work, see the authors thesis (Eindhoven, 1977): On verifying Landau's "Grundlagen der Analysis" in the AUTOMATH System.
A translation of Landau's
"Grundlagen" in AUTOMATH*)

L.S. Jutting

Part 2

Contents: chapter 3

October 1976

*) For an introduction to and a discussion of the present work, see the authors thesis (Eindhoven, 1977): On verifying Landau's "Grundlagen der Analysis" in the AUTOMATH System.
A translation of Landau's "Grundlagen" in AUTOMATH *)

L.S. Jutting

Part 1

Contents: preliminaries
    chapter 1
    chapter 2

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*) For an introduction to and a discussion of the present work, see the authors thesis (Eindhoven, 1977): On verifying Landau's "Grundlagen der Analysis" in the AUTOMATH System.