Table of Contents

Summary 2

I. Introduction 3

II. Current methodology for TRF combination 4
- II.1. Physical model for simultaneous combination of station positions and velocities . . . 4
- II.2. Statistical and variance estimation modeling . . . 5

III. Selected data for ITRF96 6
- III.1. Solutions submitted by the IERS analysis centers . . . 6
  - III.1.1. Summary of the VLBI solutions . . . 7
  - III.1.2. Summary of the SLR solutions . . . 8
  - III.1.3. Summary of the GPS solutions . . . 9
  - III.1.4. Summary of the DORIS solutions . . . 12
  - III.1.5. Local surveys . . . 13

IV. The ITRF96 Data Analysis 14
- IV.1. Comparison to ITRF94 . . . 14
- IV.2. Combination per Technique . . . 14
- IV.3. The ITRF96 Global Combination . . . 14

V. ITRF96 Results 15

VI. Analysis of the ITRF96 results 16

VII. Solutions not included in ITRF96 17
- VII.1. Description of the solutions . . . 17
  - VII.1.1. Summary of the VLBI solutions . . . 17
  - VII.1.2. Summary of the LLR solutions . . . 17
  - VII.1.3. Summary of the SLR solutions . . . 18
- VII.2. Analysis of the solutions . . . 20

VIII. Access to the ITRF96 files 21

References 21

APPENDIX 23