Adjustment Computations. Spatial Data Analysis. 5th Edition

Description: the complete guide to adjusting for measurement error—expanded and updated

no measurement is ever exact. Adjustment Computations updates a classic, definitive text on surveying with the latest methodologies and tools for analyzing and adjusting errors with a focus on least squares adjustments, the most rigorous methodology available and the one on which accuracy standards for surveys are based.

This extensively updated Fifth Edition shares new information on advances in modern software and GNSS-acquired data. Expanded sections offer a greater amount of computable problems and their worked solutions, while new screenshots guide readers through the exercises. Continuing its legacy as a reliable primer, Adjustment Computations covers the basic terms and fundamentals of errors and methods of analyzing them and progresses to specific adjustment computations and spatial information analysis. Current and comprehensive, the book features:

Easy-to-understand language and an emphasis on real-world applications

Analyzing data in three dimensions, confidence intervals, statistical testing, and more

An updated support web page containing a 150-page solutions manual, software (STATS, ADJUST, and MATRIX for Windows computers), MathCAD worksheets, and more

latest information on advanced topics such as the tau criterion used in post-adjustment statistical blunder detection

Adjustment Computations, Fifth Edition is an invaluable reference and self-study resource for working surveyors, photogrammetrists, and professionals who use GNSS and GIS for data collection and analysis, including oceanographers, urban planners, foresters, geographers, and transportation planners. It's also an indispensable resource for students preparing for licensing exams and the ideal textbook for courses in surveying, civil engineering, forestry, cartography, and geology.

Contents:

PREFACE.

ACKNOWLEDGMENTS.

1 Introduction.

1.1. Introduction.

1.2. Direct and Indirect Measurements.

1.3. Measurement Error Sources.

1.4. Definitions.

1.5. Precision versus Accuracy.

1.6. Redundant Observations in Surveying and Their Adjustment.

1.7. Advantages of Least Squares Adjustment.

1.8. Overview of the Book.

Problems.
2 Observations and Their Analysis.

2.1. Introduction.

2.2. Sample versus Population.

2.3. Range and Median.

2.4. Graphical Representation of Data.

2.5. Numerical Methods of Describing Data.

2.6. Measures of Central Tendency.

2.7. Additional Definitions.


2.9. Numerical Examples.

2.10. Derivation of the Sample Variance (Bessel's Correction).

2.11. Software.

Problems.

Practical Exercises.

3 Random Error Theory.

3.1. Introduction.

3.2. Theory of Probability.

3.3. Properties of the Normal Distribution Curve.


3.5. Probability of the Standard Error.

3.6. Uses for Percent Errors.

3.7. Practical Examples.

Problems.

Programming Problems.

4 Confidence Intervals.

4.1. Introduction.

4.2. Distributions Used in Sampling Theory.

4.3. Confidence Interval for the Mean: t statistic.

4.4. Testing the Validity of the Confidence Interval.

4.5. Selecting a Sample Size.

4.6. Confidence Interval for a Population Variance.

4.7. Confidence Interval for the Ratio of Two Population Variances.
4.8. Software.
Problems.

5 Statistical Testing.
5.1. Hypothesis Testing.
5.2. Systematic Development of a Test.
5.3. Test of Hypothesis for the Population Mean.
5.4. Test of Hypothesis for the Population Variance.
5.5. Test of Hypothesis for the Ratio of Two Population Variances.
5.6. Software.
Problems.

6 Propagation of Random Errors in Indirectly Measured Quantities.
6.1. Basic Error Propagation Equation.
6.2. Frequently Encountered Specific Functions.
6.4. Software.
6.5. Conclusions.
Problems.

Practical Exercises.

7 Error Propagation in Angle and Distance Observations.
7.1. Introduction.
7.2. Error Sources in Horizontal Angles.
7.3. Reading Errors.
7.4. Pointing Errors.
7.5. Estimated Pointing and Reading Errors with Total Stations.
7.6. Target-Centering Errors.
7.10. Using Estimated Errors to Check Angular Misclosure in a Traverse.
7.11. Errors in Astronomical Observations for Azimuth.
7.12. Errors in Electronic Distance Observations.
7.13. Software.
Problems.
Programming Problems.

8 Error Propagation in Traverse Surveys.
8.1. Introduction.
8.2. Derivation of Estimated Error in Latitude and Departure.
8.3. Derivation of Estimated Standard Errors in Course Azimuths.
8.4. Computing and Analyzing Polygon Traverse Misclosure Errors.
8.5. Computing and Analyzing Link Traverse Misclosure Errors.
8.6. Software.
8.7. Conclusions.
Problems.
Programming Problems.

9 Error Propagation in Elevation Determination.
9.1. Introduction.
Problems.
Programming Problems.

10 Weights of Observations.
10.1. Introduction.
10.2. Weighted Mean.
10.3. Relation between Weights and Standard Errors.
10.5. Weights in Angle Observations.
10.7. Practical Examples.
Problems.

11 Principles of Least Squares.
11.1. Introduction.
11.3. Fundamental Principle of Weighted Least Squares.
11.4. Stochastic Model.
11.5. Functional Model.
11.6. Observation Equations.
11.7. Systematic Formulation of the Normal Equations.
11.8. Tabular Formation of the Normal Equations.
11.9. Using Matrices to Form Normal Equations.
11.11. Least Squares Fit of Points to a Line or Curve.
11.15. Software.
Problems.

12 Adjustment of Level Nets.
12.1. Introduction.
12.2. Observation Equation.
12.3. Unweighted Example.
12.4. Weighted Example.
12.5. Reference Standard Deviation.
12.6. Another Weighted Adjustment.
12.7. Software.
Problems.
Programming Problems.

13 Precisions of Indirectly Determined Quantities.
13.1. Introduction.
13.2. Development of the Covariance Matrix.
Problems.
Programming Problems.
14 Adjustment of Horizontal Surveys: Trilateration.
14.1. Introduction.
14.2. Distance Observation Equation.
14.3. Trilateration Adjustment Example.
14.5. Computer Solution of a Trilaterated Quadrilateral.
14.6. Iteration Termination.
14.7. Software.
Problems.
Programming Problems.
15 Adjustment of Horizontal Surveys: Triangulation.
15.1. Introduction.
15.2. Azimuth Observation Equation.
15.3. Angle Observation Equation.
15.4. Adjustment of Intersections.
15.5. Adjustment of Resections.
15.6. Adjustment of Triangulated Quadrilaterals.
Problems.
Programming Problems.
16 Adjustment of Horizontal Surveys: Traverses and Horizontal Networks.
16.1. Introduction to Traverse Adjustments.
16.2. Observation Equations.
16.3. Redundant Equations.
16.4. Numerical Example.
16.5. Minimum Amount of Control.
16.6. Adjustment of Networks.
16.7. ?2 Test: Goodness of Fit.
Problems.
Programming Problems.
17 Adjustment of GNSS Networks.
17.1. Introduction.
17.2. GNSS Observations.
17.3. GNSS Errors and the Need for Adjustment.

17.4. Reference Coordinate Systems for GNSS Observations.

17.5. Converting between the Terrestrial and Geodetic Coordinate Systems.

17.6. Application of Least Squares in Processing GNSS Data.

17.7. Network Preadjustment Data Analysis.

17.8. Least Squares Adjustment of GNSS Networks.

Problems.

Programming Problems.

18 Coordinate Transformations.

18.1. Introduction.

18.2. Two-Dimensional Conformal Coordinate.

18.3. Equation Development.

18.4. Application of Least Squares.

18.5. Two-Dimensional Affine Coordinate Transformation.

18.6. Two-Dimensional Projective Coordinate Transformation.

18.7. Three-Dimensional Conformal Coordinate Transformation.

18.8. Statistically Valid Parameters.

Problems.

Programming Problems.

19 Error Ellipse.

19.1. Introduction.


19.3. Example Problem of Standard Error Ellipse Calculations.

19.4. Another Example Problem.

19.5. Error Ellipse Confidence Level.


19.7. Other Measures of Station Uncertainty.

Problems.

Programming Problems.

20 Constraint Equations.

20.1. Introduction.
20.2. Adjustment of Control Station Coordinates.
20.3. Holding Control Fixed in a Trilateration Adjustment.
20.5. Redundancies in a Constrained Adjustment.
20.6. Enforcing Constraints through Weighting.

Problems.
Practical Exercises.

21 Blunder Detection in Horizontal Networks.
21.1. Introduction.
21.3. A Posteriori Blunder Detection.
21.7. Techniques Used In Adjusting Control.
21.10. Survey Design.
21.11. Software.

Problems.
Practical Exercises.

22 General Least Squares Method and Its Application to Curve Fitting and Coordinate Transformations.
22.1. Introduction to General Least Squares.
22.2. General Least Squares Equations for Fitting a Straight Line.
22.3. General Least Squares Solution.
22.4. Two-Dimensional Coordinate Transformation by General Least Squares.
22.5. Three-Dimensional Conformal Coordinate Transformation by General Least Squares.

Problems.
Programming Problems.

23 Three-Dimensional Geodetic Network Adjustment.
23.1. Introduction.
23.2. Linearization of Equations.
23.3. Minimum Number of Constraints.

23.4. Example Adjustment.

23.5. Building an Adjustment.

23.6. Comments on Systematic Errors.

23.7. Software.

Problems.

Programming Problems.

24 Combining GPS and Terrestrial Observations.

24.1. Introduction.


24.3. Rotations between Coordinate Systems.

24.4. Combining GPS Baseline Vectors with Traditional Observations.

24.5. Another Approach to Transforming Coordinates between Reference Frames.

24.6. Other Considerations.

Problems.

Programming Problems.

25 Analysis of Adjustments.

25.1. Introduction.

25.2. Basic Concepts, Residuals, and the Normal Distribution.

25.3. Goodness-of-Fit Test.

25.4. Comparison of Residual Plots.

25.5. Use of Statistical Blunder Detection.

Problems.

26 Computer Optimization.

26.1. Introduction.

26.2. Storage Optimization.

26.3. Direct Formation of the Normal Equations.

26.4. Cholesky Decomposition.

26.5. Forward and Back Solutions.

26.6. Using the Cholesky Factor to Find the Inverse of the Normal Matrix.

26.7. Spareness and Optimization of the Normal Matrix.
Problems.

Programming Problems.

Appendix A Introduction to Matrices.
A.1. Introduction.
A.2. Definition of a Matrix.
A.3. Size or Dimensions of a Matrix.
A.4. Types of Matrices.
A.6. Addition or Subtraction of Matrices.
A.7. Scalar Multiplication of a Matrix.
A.10. Use of the MATRIX Software.

Problems.

Programming Problems.

Appendix B Solution of Equations by Matrix Methods.
B-1. Introduction.
B-2. Inverse Matrix.
B-3. Inverse of a 2 × 2 Matrix.
B-4. Inverses by Adjoints.
B-5. Inverses by Elementary Row Transformations.
B-6. Example Problem.

Problems.

Programming Problems.

Appendix C Nonlinear Equations and Taylor’s Theorem.
C.1. Introduction.
C.5. Simple Matrix Example.
C.6. Practical Example.
Problems.
Programming Problems.
Appendix D Normal Error Distribution Curve and Other Statistical Tables.
D.1. Development of the Normal Distribution Curve Equation.
D.2. Other Statistical Tables.
Appendix E Confidence Intervals for the Mean.
Appendix F Map Projection Coordinate Systems.
F.1. Introduction.
F.3. Mathematics from the Transverse Mercator.
F.5. Reduction of Observations.
Appendix G Companion Web Site.
G.1. Introduction.
G.2. File Formats and Memory Matters.
G.3. Software.
G.4. Using the Software as an Instructional Aid.
Appendix H Solutions to Selected Problems.
BIBLIOGRAPHY.
INDEX.

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