



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

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Memorandum

To: Mike Fienen, Research Hydrologist, Wisconsin Water Science Center, Middleton, Wis.

From: Mike Eberle, Technical Writer-Editor, Columbus Publishing Service Center, Columbus, Ohio

Subject: PUBLICATIONS—"Approaches in Highly Parameterized Inversion: bgaPEST, A Bayesian Geostatistical Approach Implementation With PEST" (USGS Scientific Investigations Report)

Edited files related to the subject report are available for pickup at the Columbus PSC's ftp site. Despite the workarounds needed to edit a document being processed via LaTeX, this job felt strangely similar to editing within the standard workflow. Dealing with the edits will be slightly cumbersome for you, unfortunately, because you'll need to examine the change-tracked Lyx file, a list of 21 notes that are called out in the Lyx file, and a commented version of the layout-style PDF you supplied (which is where I dealt with the figures, tables, and miscellaneous typographical elements). You also promised to create a for-the-record version of the Lyx file that the Bureau Approving Official can examine. Still, this apparently will amount to less work than your having to convert the whole package to MS Word, particularly given the numerous equations.

Overall, the quality of the writing was good. Knowing that a lot of the text originated with your dissertation and needed to have an academic sound, I used a somewhat lighter hand than normal and allowed an occasional superfluous word or quaint twist of phrase that I would've hacked from a more standard USGS publication. Still, I made sure that nothing retained was frivolous or embarrassing by USGS standards.

My suggestions are mostly about minor points of grammar and style and are noted in the electronic files mentioned in the first paragraph of this memo. Only two issues need to be brought up here:

1. Whereas the images in the figures are of excellent quality, type size and style of the figures varies a lot throughout the report, making the final product (as previewed via the layout-style PDF) look less professional than it could. Because the report is to be issued as an SIR, it's supposed to conform to official USGS illustrations standards (summarized for authors in a guide available at http://internal.usgs.gov/publishing/toolboxes/illustrations/standards_guide.pdf). I'm not sure how much work it would take to revise your illustrations make them totally to specs, but any effort to achieve more uniformity in type size and style and move more toward the "Survey look" would really enhance the appearance of your report. If you want to discuss this issue with me further, please call and we'll hash out some possibilities.

2. Although the report is well organized, I think a few minor changes to section headings and order of presentation would be helpful. For example, the current preferred placement of an acknowledgments section that credits both USGS and non-USGS persons is in the front matter of the report, either before or after the table of contents. Also, “bgaPEST” can be removed from several section headings because it is identified in a heading of higher rank. The easiest way to show my suggestions is to type out a new contents list below for you to compare with the current one:

Abstract

Introduction

Purpose and Scope [moved up one position]

Obtaining the Software

The Bayesian Geostatistical Approach [you don’t need to say “Background”]

Overview

Beta Associations

Overview of bgaPEST

Running bgaPEST

Control Variables

Input Files

Output Files

Record File

Parameter Value Files

Observation Value Files

Posterior Covariance File

Suggestions and Guidelines for Initial Use

Characteristics of Appropriate bgaPEST Uses

Guidelines

Limitations of bgaPEST Version 1.0

References Cited

In all, I spent 36 hours on this editorial review. You need not respond in writing to the comments, but please let me know if you have any questions. I hope that my input will be of help.