

User manual to Sima

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Abstract:

This document describes using Sima -- program for computation of prediction of the measurements of the Earth orientation parameters using simulated VLBI observations.

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1 Overview

Sima is a tool which facilitate obtaining prediction of measurements of the EOP by VLBI. It assumes that the superfile with simulated VLBI experiment has been already created. It runs solve with using template control file, parses spool file, formats results and write them in the output file.

2 Usage

```
sima -i <Solve_initials> [-c <control file>] -s <superfile_name>
```

-i -- Solve user initials

-c -- specifies configuration file for Sima. Default is
\$MK4_ROOT/local/{Center_label}.sim

-s -- superfile name. Sima digests two forms: without leading dollar sign and with leading dollar sign. Dollar sign should be masked by \ in the latter case. NB: the latest version is considered. Sima doesn't provide the way to analyze not the latest version of the

superfile

3 Format of Sima configuration file

Configuration file contains records of three type:

- 1) comments: any line which beginning from ##
- 2) directives for Sima: the line which starts from # and which is not a comment line.
Directive consists of three or more words separated by one or more blanks.

Word1 -- symbol # -- directive attribute

Word2 -- keyword

Word3,4... value(s) of the keyword

Configuration file should contain definition of all keywords and all variables listed in the next subsection.

3.1 Descriptions of directives of Sima configuration file

BATCH_CONTROL_FILE: Template batch Solve control file for running simulated solution. This control file should have a record @arc_line@ in the \$ARC section. The actual superfile will replace this record.

TEMP_CONTROL_FILE: Name of the temporary file where the actual batch control file will be written.

SIMA_OUTPUT_FILE: Name of the output file which will contains summary of results of solve run.

3.2 Example of Sima configuration file

```
#####
##                                     ##
## Configuration file for program Sima at GSFC.          ##
##                                     ##
```

guide sima_01

```
## 02-AUG-2000 12:06:14                                ##
##                                                    ##
#####
# BATCH_CONTROL_FILE: /box1/control/sima_06.cnt
# TEMP_CONTROL_FILE: /tmp/sima.cnt
# SIMA_OUTPUT_FILE: /tmp/sima.out
#!
```

4 History

2000.08.02 L. Petrov Beginning of development.
2000.08.04 L. Petrov Release of 0.2 version
2000.09.19 L. Petrov Release of 0.5 version. Added check of solve status.
2000.10.31 L. Petrov Release of 1.0 version. Changed syntax of template
file. Release of this document.

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