

# GLI Level 1 Simulator Development Status

GLI Workshop @NASDA-EORC(Harumi) Japan

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# 1. GLI Level 1 Simulator Overview

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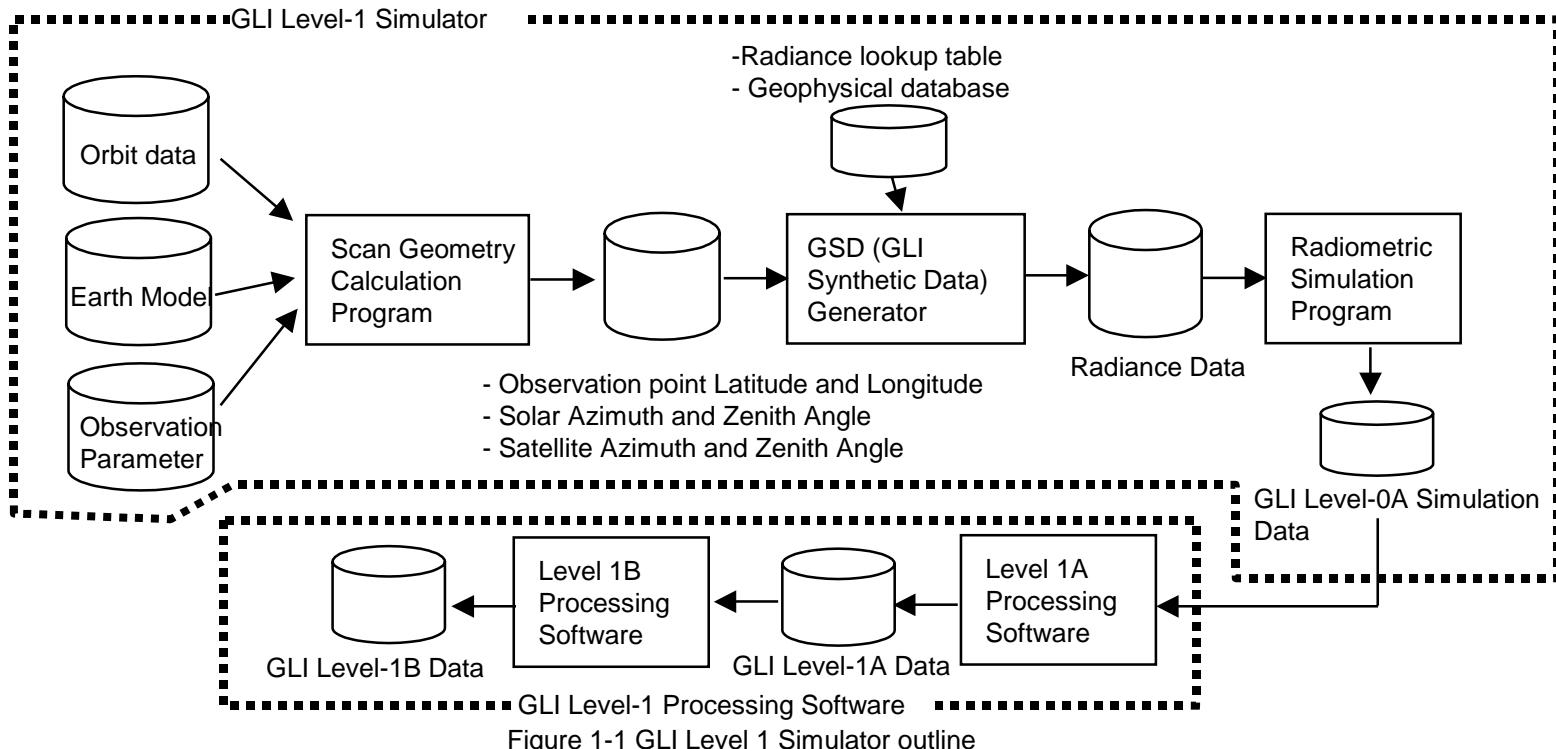
## 1) Objective

- To confirm GLI Level 1 Processing Software logics correctness
- To confirm GLI Level 1 and Higher Level Processing consistency

# 1. GLI Level 1 Simulator Overview

## 2) Outline

- GLI Level 1 Simulator generates GLI Level 1 data, using observation mechanism and radiometric model.



# 1. GLI Level 1 Simulator Overview

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## 3) Function of each program

Table 1-1 Function of GLI Level 1 Simulator

| Program                           | Function   | Developed by |
|-----------------------------------|--|--------------|
| Scan Geometry Calculation Program | <ul style="list-style-type: none"> <li>• Using orbit data, earth model and observation parameter (i.e., observation date), this program generates observation point information;           <ul style="list-style-type: none"> <li>– Latitude and longitude,</li> <li>– Solar azimuth and zenith angle,</li> <li>– Satellite azimuth and zenith angle.</li> </ul> </li> </ul> | EORC(WTC)    |
| GSD Generator                     | <ul style="list-style-type: none"> <li>• Using observation information, radiance lookup table and geophysical database, this program generates radiance observed at GLI aperture.</li> </ul>   | EORC(Harumi) |
| Radiometric Simulation Program    | <ul style="list-style-type: none"> <li>• Using radiance data, this program generates GLI Level 0A data by GLI radiometric model.</li> </ul>  | EORC(WTC)    |

## 2. GLI Level 1 Simulator Development Status

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### 2.1. Level 1 Simulator Development Status

- 1) Design Review --- completed in 2000/9E
- 2) Software test ---- completed in 2001/5E
- 3) Simulation data generation ---- completed in 2001/9E
- 4) Software Ver. 1.0 and simulation data --- released in 2001/9E

## 2. GLI Level 1 Simulator Development Status

## 2.2. Development Schedule

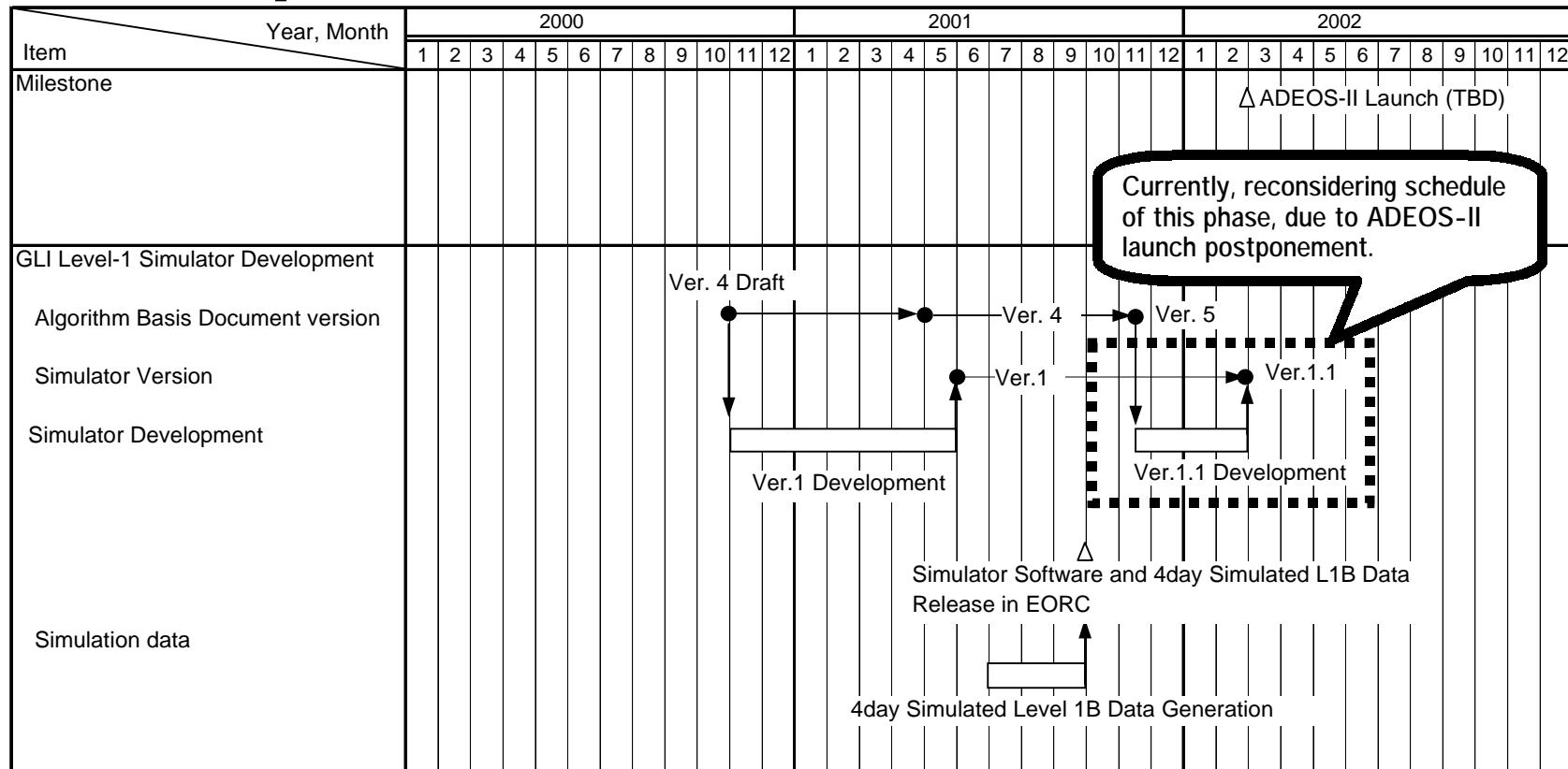


Figure 2-1 GLI Level 1 Simulator Development Schedule