WMO/IOC/UNEP/ICSU
GLOBAL CLIMATE OBSERVING SYSTEM (GCOS)

Doc. 8.1
(26.II.2010)

2nd GRUAN Implementation-Coordination Meeting (ICM-2)
Payerne, Switzerland
2-4 March 2010

Item 8.1

GRUAN Data flow – Schemes

(Submitted by Michael Sommer, GRUAN Lead Centre)

Summary and Purpose of Document

This document presents data flow schemes for GRUAN data processing.

GRUAN Data flow – Schemes

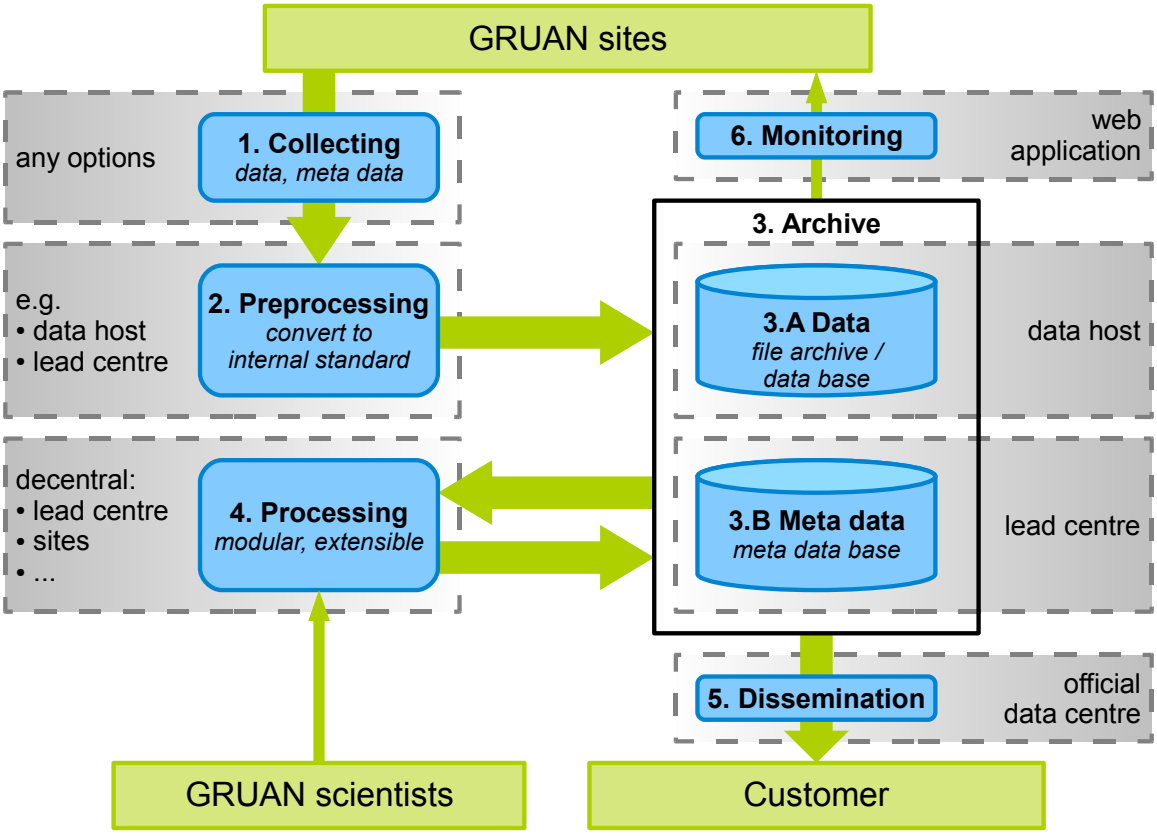

Figure 1: Data flow scheme for GRUAN.

This scheme was introduced and discussed at ICM-1. The strategy of data handling and all involved parts have been described in detail at ICM-1 (Doc. 5.1).

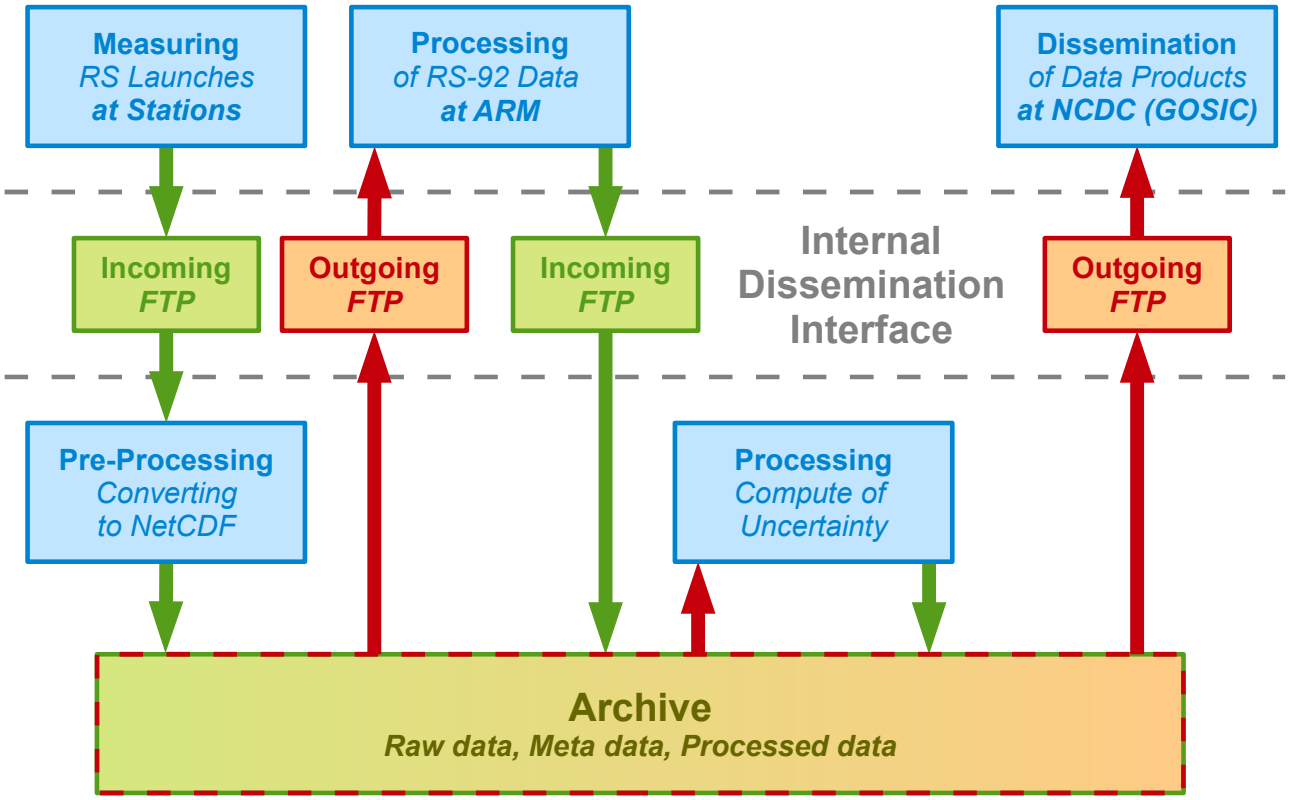

Figure 2: Data flow of RS92 data.

The RS92 data flow scheme has been created based on the general data flow scheme shown in Figure 1. It depicts all relevant data flow details for Vaisala RS92 data : Data flow is initiated with a measurement at a GRUAN site; pre-processing occurs at the lead centre; further processing (QA/QC) of RS92 data at ARM; computing of measurement uncertainty at the lead centre; dissemination of data products at NCDC.

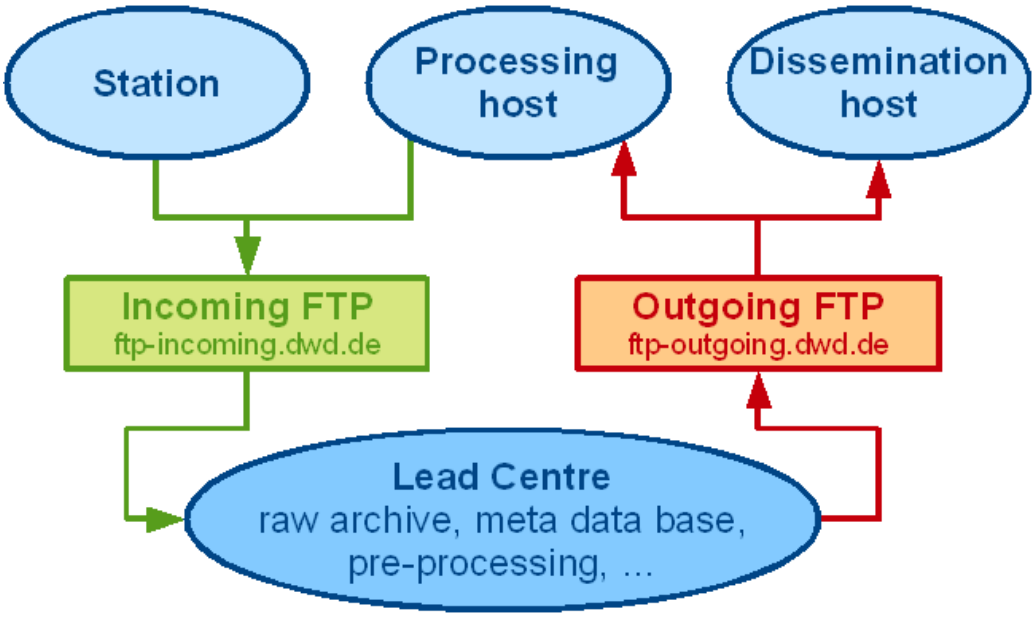

Figure 3: Implementation of the GRUAN data flow scheme. The interface for collecting and disseminating data within the GRUAN network will be an ftp server.

This figure shows the implementation of the GRUAN internal data flow similar to Figure 2. The interface between lead centre and all other members within the network is central to the data flow. It is implemented as simple FTP server consisting of incoming and outgoing ftp service.

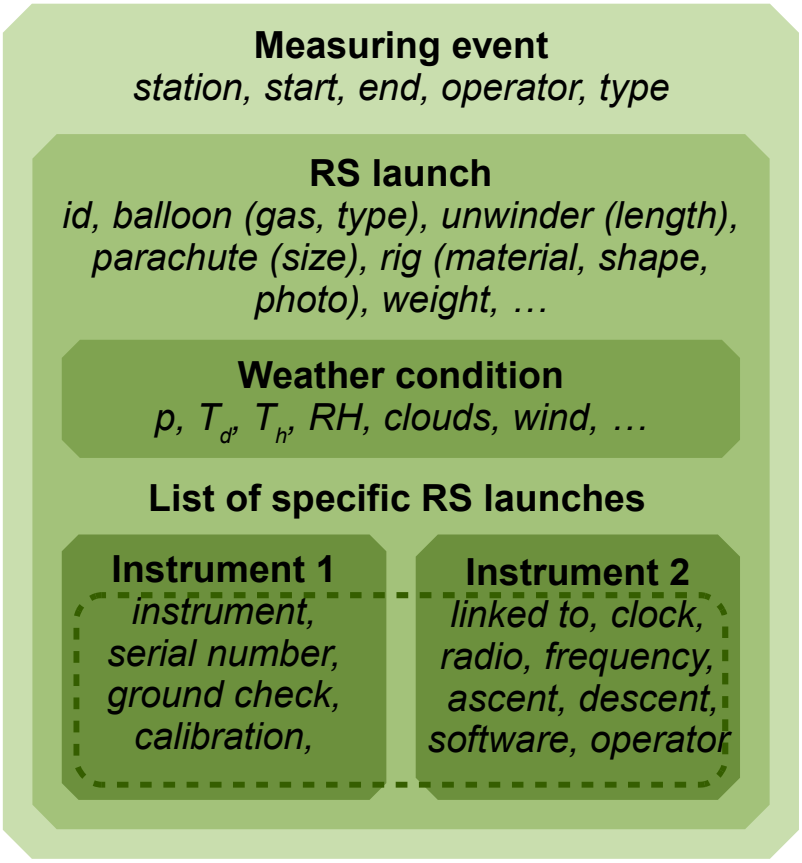

Figure 4: Modular regrouping of meta-data of a radiosonde launch.

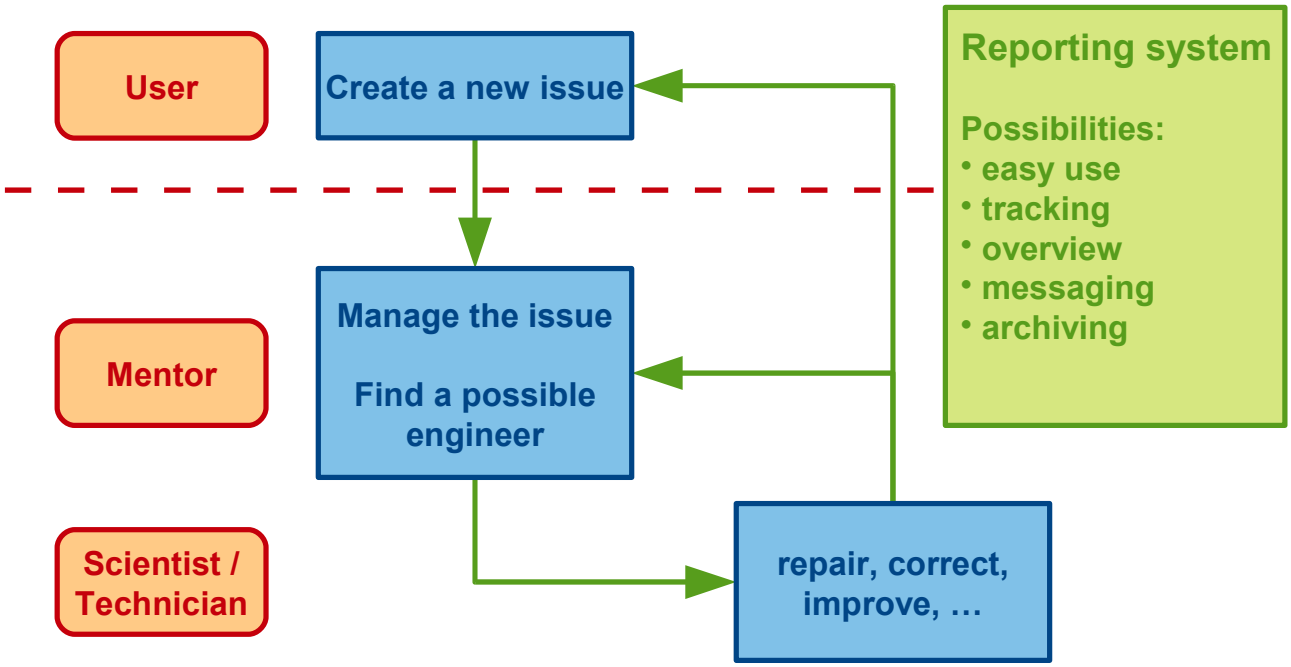

Figure 5: Basic structure of a reporting system.

A reporting system or "issue tracking system" is best suited for handling of all issues like data problems, instrument failures, comments, wishes, … . This system has three levels: The "user" is a person identifying and reporting an issue. An issue is captured and described using a web-form, which allows issue tracking. The "mentor" supervises new and current issues and routes them to dedicated scientists or technicians tasked to address these issues (e.g. repair, correct, improve, …). Once a solution has been found a message is sent to both the mentor and the user.