



Getting data from the Herschel Science Archive

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*Herschel Pre-Launch Data Processing Workshop
ESAC, 4-5 December 2008*

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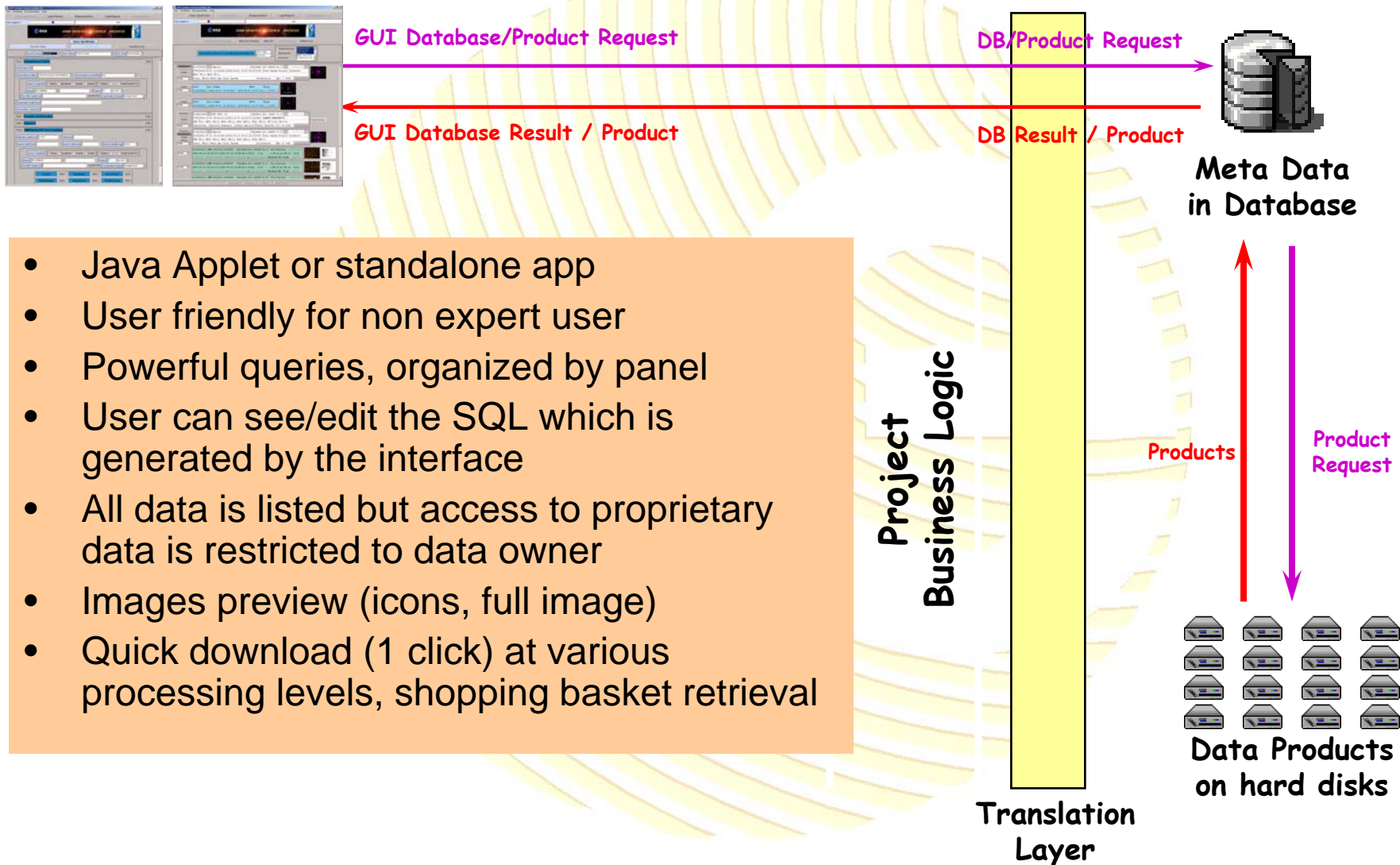
Herschel Science Archive (HSA)

(Technical specifications on behalf of the SAT)

- The HSA is being developed at ESAC by the Science Archive and VO team (SAT)
- The HSA is developed in line with all the other ESA Science Archives:
 - Same architecture
 - Same look and feel
 - Similar User Interface
 - Powerful and easy to use
 - Panels aimed at general users and expert users
- The HSA is already prepared to receive/distribute data from/to the Data Processing system

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Archive Access via User Interface

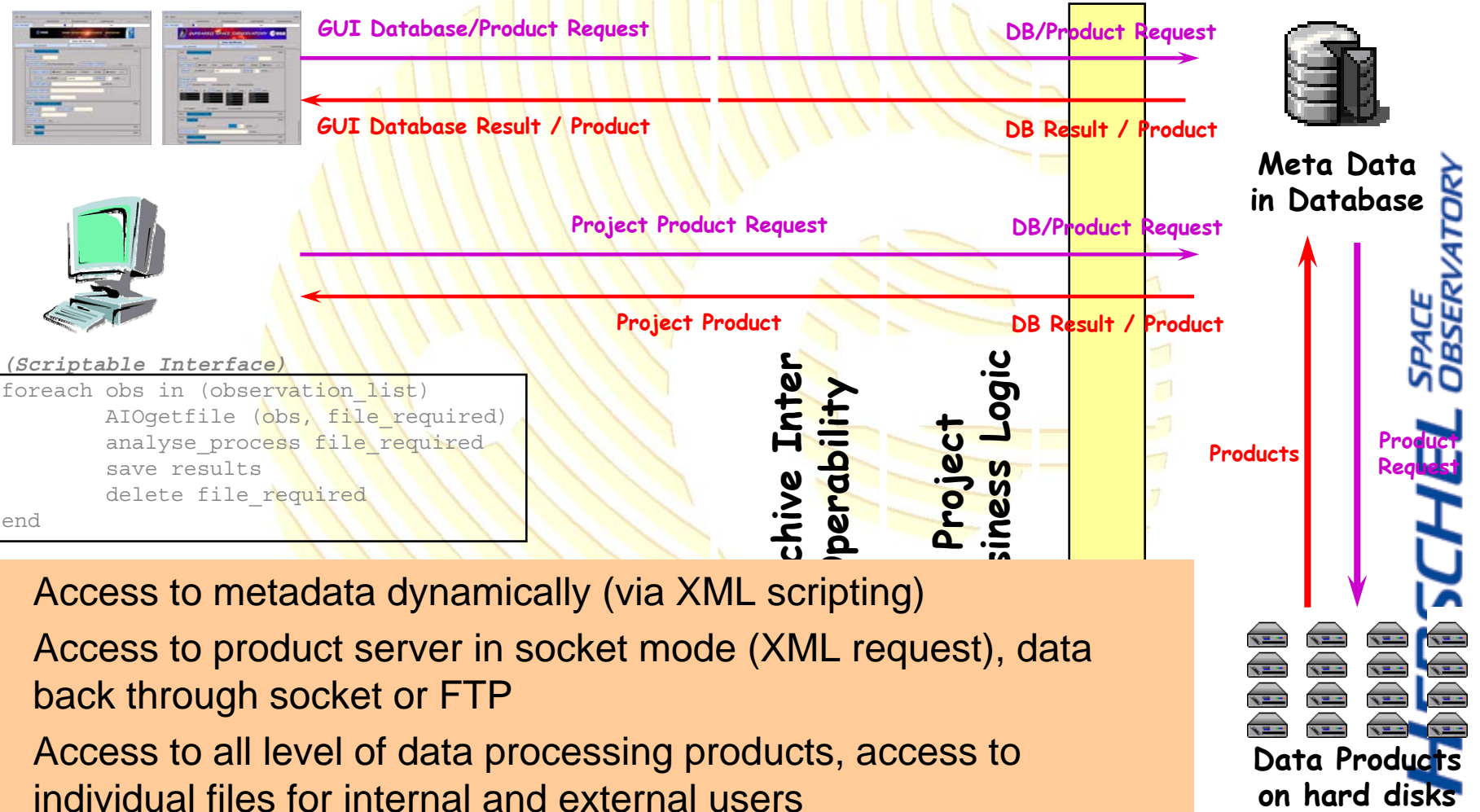


- Java Applet or standalone app
- User friendly for non expert user
- Powerful queries, organized by panel
- User can see/edit the SQL which is generated by the interface
- All data is listed but access to proprietary data is restricted to data owner
- Images preview (icons, full image)
- Quick download (1 click) at various processing levels, shopping basket retrieval

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Scriptable Interface : AIO



```
(Scriptable Interface)
foreach obs in (observation_list)
  AIOgetfile (obs, file_required)
  analyse_process file_required
  save results
  delete file_required
end
```

- Access to metadata dynamically (via XML scripting)
- Access to product server in socket mode (XML request), data back through socket or FTP
- Access to all level of data processing products, access to individual files for internal and external users
- Used a lot by Scientists for Calibration and Monitoring purposes
 - As if they have the complete data repository on their local disk



Archive VO compliant Architecture

- The existing AIO already carried all the functionalities required by the new VO standards
 - Access to metadata (database)
 - Access to products (data repository)
- By using “Translation Layer”, easy to convert the VO standards interfaces into our AIO interfaces
 - Little effort required
 - Translation Layer easy to code using XML
- As VO standards evolve, our AIO system remains, but we just have to adapt our translation layers

