



# Terra Featured Workspace (template)

## Dashboard Documentation

*The goal is to get users excited about using Terra by showcasing various scientific use cases. A user should be able to easily understand and model a Featured Workspace. In general, all Featured Workspace content should emphasize the big picture - concepts and ideas that will resonate with a broad swath of users and use cases. Content should be self-explanatory - without making too many assumptions about prior knowledge - as well as concise and easy to follow.*

### Title

- *Descriptive, with the broadest possible appeal, and no more than 15 words.*
- *TAGS - Enable searchability by choosing five to eight descriptive tags that would help the broadest subset of users to find the workspace.*

### Overview Paragraph

*A high-level description of the workspace and its purpose, the overview paragraph is an opportunity to capture the importance and relevance of the workspace and to draw potential users in to read as well as to see how they can do their own work on Terra.*

*It should include an explanation of the focus (tool, data or analysis), if relevant, as well as:*

- *Links to scientific description of the workflow*
- *Links to “Best Practices” description*
- *Links to any other resources (published papers or pre-prints, etc.)*
- *“Please direct all questions to the Terra [forum](#)”*

### Experimental Design (required for analysis-focused workspaces)

*One or more paragraphs describing the general motivation for the scientist/analyst’s experiment, caveats and concerns, and an ordered list of the case study steps. This section is especially important if the Featured Workspace reproduces or captures a particular experiment or publication (as with the ASHG Tetralogy of Fallot workspace).*



## Data

### Sample Data

*A real-language description of the data set (e.g. the origin of the data, important details about how it was processed, its shorting comings, whether or not it's public) as well as where to find links to data types. It could also include a list of all data set names and types if not too long or cumbersome.*

*Featured Workspace Datasets will ideally be public access and be (ideally):*

- *large sets that show something meaningful or*
- *small sets that won't cost users money to query/access.*

### Workspace Data

*A concise description of any required or optional references and resources for the methods and links to where to find them. In Terra this information is also captured in the Data tab.*

## Tools

*General specifications of all tools ("methods") and their preset configurations, as well as what each method does (in terms the scientist/analyst will understand).*

- ***Best practices or optimization instructions should be included here.***
- ***Link each tool to its GATK documentation page***

## Tool name versions

- *Name*
- *Root entity type*
- *Tool ("Method") source*
- *Tool ("Method") name and version*

## Notebooks

*General specifications of all Jupyter Notebooks and their preset configurations, as well as what each Notebook does (in terms the scientist/analyst will understand).*

## Software versions

*Explicitly state versions of all software applications (GATK4 versus GATK3, for example).*

## Time and cost

*This information is very much in-demand by users for comparison, especially users new to a cloud-based system. If it's possible to include (even if it's from test runs) that would be great!*

- *Sample name*
- *Sample size*
- *Run time*



- Cost

*Include the following caveats:*

*\*\*Cost and Time will vary due to the use of preemptibles.*

*\*\*Users can also use [Google's cost calculator](#).*

## Contact information

*The author of the workspace should provide their own contact method. Comms will include a link to our forum site here because we are responsible for the Featured Workspaces and the forum is how we address user questions.*

## License

*License information and links.*



## Terra Notebooks Guidelines

*All analysis-focused Featured Workspaces on Terra will include a notebook portion*

*Because notebooks should stand alone as a resource for people who want to follow the analysis process, please include copious comments.*

- **Naming** - Use dashes ("-") instead of spaces, in workspace and notebook names.
  - **Sharing**
  - **Dependencies** - Include a separate notebook for setting up all dependencies (R libraries etc.), that should be run first.
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## Job History Best Practices

*This is automated; everytime a workflow is launched a row is generated under this tab. A successful run should be listed in the FW, as an example for users to show the successful execution of the methods in the workspace.*