# **Project Overview S1-Vis**

This document provides project related management tables to document the project structure and progress. It is subject to regular updates.

### **1** Document version

Table 1: Document version

Nr.	Date	Version	Altered chapters	Type of altering	Author
1	15.03.2022	1.0	all	Creation	Niklas Jaggy
2					
3					
4					
5					

# 2 Project information

Please provide important facts for your project, e.g. acronym, title, proposed period, principal investigator and contractor.

Table 2: Overall project information

Project										
Acronym	S1-Vis	S1-Vis								
Title	A Google Earth Engine App for a Sentinel-1 based visual interpretation tool									
Period	Start:	01.03.2022	End:	30.06.2022						
Principal investigator	Dr. Herrmann Klug,									
Contractor	University of Salzburg, Department of Geoinformatics (Z_GIS)									

### 3 Project Content and Project Goals

Please provide an overview of your project with its main activities. Additionally give some information on the purpose, benefits and target groups as well as the proposed goals of your project. Please also provide explicit information on those aspects of the overall challenges, which you will not tackle with your project.

#### **Table 3: Project Content and Project Goals**

#### **Content & Goals**

#### Project description (~100-150 words)

This project aims at creating an interactive Google Earth Engine that allows to intuitively access radar imagery and visualizes it instantly. The user thereby selects an area and time-period of interest for which the data is collected and presented using RGB composites and split-panel views. The focus of the application is set on dwelling detection in crisis areas but can be extended towards other topics such as flood detection. Extended functionality such as thresholding images for retrieving classification masks or basic classification tasks are in planning.

#### Project purpose, benefits and target group description (~100 words)

The main purpose is to provide easy and intuitive access for non-radar experts to radar data and using it for information visualization and retrieval in humanitarian contexts. It aims at directly supporting humanitarian applications through data and information provision. Direct benefits are the exploitation of a complementary satellite data source for humanitarian actors in interactive application form and the generation of geospatial datasets.

#### Project objectives (please also include a listing of the sub-goals) (~100 words)

- Working Google Earth Engine App
- User friendly and intuitive app interface
  - o Interactive
  - o Meaningful buttons, labels and descriptions

#### Non-Goals

- Implementation of complex image classification routines
- Accuracy assessment of results

### 4 Frame of the project

Please provide a description of the existing situation. Therefore, please describe the actual state and the identified challenges. As a second part, please also provide the most important information with regard to the proposed project period and the most important dates (Kick-off, interim/mid-term report/presentation, final report, paper submission etc.).

Table 4: Frame of the project - Part 1

#### Context

#### Up-to-date status (~50-100 words)

There is a lack of freely available applications that allow to utilize radar data in humanitarian contexts. This GEE app hope to contribute to filling this gap of software solutions. Major challenges will be on the coding side, meaning the development of the code logic that should result in a working app. It is assumed that the GEE platform is and remains available for now.

#### Project setting (~50 Wörter)

The official project kick-off is on 01.03.2022 with the first course session. Within the first 2-3 weeks, the project concept and its framework is developed before starting the app development phase. Important dates are the delivery of the final project product on 20.06.2022 and mid-term presentations on the project status in end of April.

Table 5: Frame of the project - Part 2

Time frame of the project								
Start:	<b>Start:</b> 01.03.2022			End:	30.06.2022			
Importar	t Dates							
1	01.03.202	2	Kick-Off, First Session					
2	22.03.202	2	Project Idea/Abstract presentation					
3 26.04.2022		Mid-Term Pecha Kucha presentation						
4	21.06.202	2	Final Poster Presentation					
5	30.06.202	2	Delivering of final product, Project closing					

# 5 Resources & Budget

Please provide information on the project lead and the project team. Please include information on name, role and qualification. Additionally provide information about the planned resources with regard to personal costs and other costs.

Table 6: Resources and Budget - Part 1

Project Team
Project Lead
Niklas Jaggy
Project Team
Niklas Jaggy

Table 7: Resources and Budget - Part 2

Resources
Personal costs
300 working hours
Project costs
300 working hours
Other Costs
-

# 6 Project structure, description and risk matrix

Please provide a description about your work plan (work breakdown structure) your work packages in tabular and graphical form.

### 6.1 Work packages overview

Table 8: Work packages overview

WP	Name of the Work Package	Time Frame [to - from]
1	Project Management	01.03.2022 - 30.06.2022
2	Program logic	20.03.2022 - 30.04.2022
3	App Design/UI design	20.03.2022 - 15.06.2022
4	App creation	01.06.2022 - 25.06.2022

### 6.2 Work Breakdown Structure (WBS)

Create a work breakdown structure for your work packages including the important tasks.

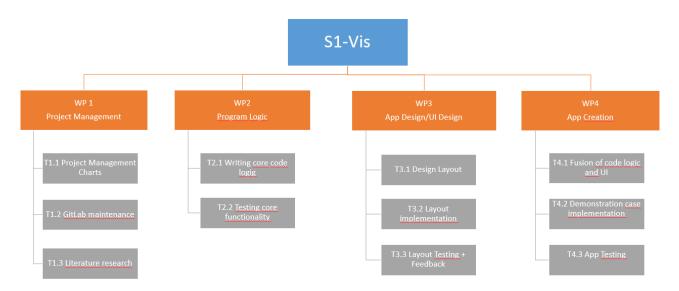


Figure 1 Work breakdown Structure

## 6.3 Detailed work plan

Please document the goals, content and expected results for each work package. Provide information on the planned approach and methods you want to apply as well as the expected results (including the planned milestones and deliverables). As a first work package please use 'project management'.

Table 9: Detailled Work Plan - WP1

WP 1	Project management	Duration	01.03.2022 - 30.06.2022				
Project Lead	Project team						
Niklas Jaggy	Niklas Jaggy						

#### **Objectives**

Continuous project management for successful completing the project

#### Content & Tasks

- Creating and updating essential project management charts
- Set up and maintaining GitLab project

#### **Expected results**

- Supporting charts and overviews on project status and progress
- GitLab repository for documentation and results

#### Milestones & Deliverables

M1 Kick-Off

M2 Project Concept Presentation

D1 Projectmanagement Charts (Gantt Chart, PERT Chart, Risk Matrix, Time Sheet)

D2 GitLab project

#### Table 10: Detailled Work Plan - WP2

WP 2 Program Logic Du		Du	uration 20.03.2022 - 30.04.2022		
Project Lead			Project team		
Niklas Jaggy			Niklas Jaggy		

### **Objectives**

Writing the core functionality of the app

#### Content & Tasks

- Implement the core routines necessary for making the app work
- Testing each part

#### **Expected results**

Java Script code that implements the app functionality

#### Milestones & Deliverables

M3 Code delivery

D3 Ready-to-implement code

#### Table 11: Detailled Work Plan - WP3

WP 3	P 3 App Design/UI Design Du		uration 20.03.2022 - 15.06.2022		
Project Lead			Project team		
Niklas Jaggy			Niklas Jaggy		
Objectives					

To design an user interface that is intuitive and easy to navigate but allows to exploit the entire code functionality

#### Content & Tasks

- Making Design concepts
- Translating design concepts into script

#### **Expected results**

• App design code ready for integration with the core code

#### Milestones & Deliverables

M4 Design delivery

D4 Working layout code

#### Table 12: Detailled Work Plan - WP4

WP 4	App creation	Durati	on	01.06.2022 - 25.06.2022					
Project Lead			Project team						
Niklas Jaggy		Nik	Niklas Jaggy						
Objectives	Objectives								
Merge code logic a	Merge code logic and UI design into a working app								
Content & Tasks									
<ul><li>Integrating the</li><li>Deploy app</li></ul>	previously created core code log	ic and l	JI code into a sir	ngle script					
Expected results									
Working GEE a	Working GEE app ready for use								
Milestones & Deliverables									
M5 Product delivery									
D5 Final working app									

### 6.4 Milestone plan

Please provide a summary of the planned milestones and provide an according overview graphic.

Table 12: Milestone plan

MS	Name	Date Completion
M1	Kick-Off	01.03.2022
M2	Project Concept Presentation	22.03.2022
МЗ	Code delivery	30.04.2022
M4	Design delivery	31.05.2022
M5	Product delivery	30.06.2022

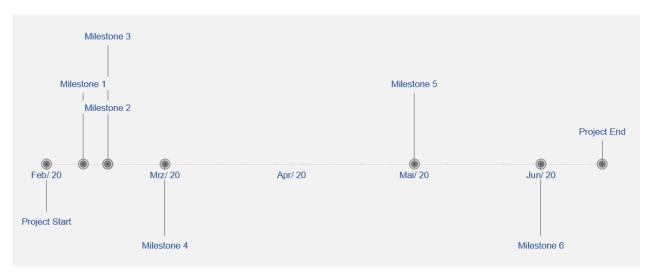


Figure 2 Milestones (from Excel template)

### 6.5 Gantt Chart

Please provide an image of your Gantt chart as overview graphics. Please attach the Gantt chart and its monthly updates in addition to this document.

Table 13: Milestone plan

[place the table here]

### 6.6 Risk Matrix

In this table, please provide the important risk information. Please categorize the risks accordingly. ([ $\mathbf{L}$ ]ow, [ $\mathbf{M}$ ]edium, [ $\mathbf{H}$ ]igh], [ $\mathbf{C}$ ]leared) as well as your mitigation strategy. Please update this list accordingly during your project execution time frame.

Table 14: Risk matrix

No	Risk	Potential adverse impact	Risk level*	Risk management strategy	Responsibility

# 7 Additional comments

Add additional comments if necessary.

Table 15: Additional comments

Comments	

# 8 Approval

Please provide further information if necessary.

Table 16: Approval

Freigabe				
Date:	dd.mm.yyyy	Date:	dd.mm.yyyy	
Signature principal investigator		Signature project lead/contractor		

# 9 Attachments

Attachment 1: Gantt chart (biweekly updated).