Transition Phase Status Assessment (PRM)

Report Compiled by Patrick Funnell. PSR contributions by Cam Nyberg

17 October 2021

Introduction

The key aims of the Transition Phase are to:

- Conduct beta testing in the production environment to ensure product is fit for purpose. Although given the structure of this project (as a POC) this phase of the project is about fixes and project cleanup for the handover of usable concept pipelines.
- Remedy any critical and significant defects and usability issues.
- Obtain sponsor and/or stakeholder acceptance that the product is complete.

Achievement of these aims is embodied in the deliverables of the Product Release Milestone. PRM is achieved by:

1. Developing a final production version of the system that is ready for operational use.
2. Conducting and recording beta tests verifying that all critical and significant defects and usability issues have been remedied.
3. Producing programmer documentation sufficient for passing off to another development team to efficiently come to understand and maintain the final product.
4. Conducting a demonstration of the final version of the system to sponsors and stakeholders.
5. Obtaining sponsor/stakeholder acceptance of the final product

This report assesses current project progress against these outcomes. It also summarises progress and issues faced during each iteration of the Transition Phase. Finally it assesses final project outcomes against initial project aims

Quick personnel breakdown

Patrick Funnell (Pat)	CSU	Internal project management and developer
Adam Blewitt	CSU	Developer
Darren Sheehan	CSU	Developer
Andrew Smith	CSU	Developer
Cameron Nyberg	CSU	Developer
David Tien	CSU Lecturer	Technical guidance and university requirements enforcer
Maria Jensen	DCS/Spatial services	Project manager
Nikzad Babaii	Intellify	Technical lead for the project, providing guidance and technical insight
Simon Reynolds	DCS/Spatial services	Manager Business Technology Services
Lars Hansen	DCS/Spatial services	Director Information Services

Executive Summary

The transition iteration phase represents the final stage of this major project, cleanup and finalisation is well underway with the handover date in sight and the final meeting with Spatial Services planned. It has been a long but rewarding project, following the unified approach of software development with some spin of Scrum and agile development thrown in the team has been able to plan, document and deliver a usable system. Initially it was thought that this system was going to be a production system and later team 5 was informed that it was a POC (proof of concept), this impacted the way we went about the solution and documentation. The documented lessons learnt along the way with the various pipelines were the major focus for Spatial Services but ultimately we not only have this documented information but we also have usable pipelines for image processing. Whilst these pipelines are not perfect that give the opportunity for Spatial Services to improve their workflow, reduce operational costs surrounding image processing and it provides a platform to build off. During the span of the second half of the project, a lot of ground was covered, a number of algorithms were trialed and documented. Weekly meetings with Spatial Services and Nik from Intellify gave good insight into refining the solution at hand and always taking things to the next level. A number of weeks ago, the major presentation was held, the team was excited at the positive feedback provided by Spatial Services and other guests such as members of SES. The SES representative stated that the platform represented a great benefit to SES and their operations.

Some feedback has been received from Spatial Services using our UAT forms but unfortunately some were lacking in solid material in which we could work with, having worked along side Simon, Nik and some of their staff we were able to gather a clear idea of fixes and features required. The majority of the functional and non-functional requirements were met in the initial pipelines GMM and SS, but given time constraints the other

new experimental pipelines did not receive UATs, although they were closely based on the originals, using existing code components. No major bugs have been identified, the notebooks are extremely customisable with git backups so users can modify, experiment and test further without fear of dire consequences. A bug squash tactic was used, as bugs came up they were dealt with. Originally there was some issues with spaces between the tiles but fixes have been outlined and dcoumented.

The handover documentation provides enough detail for future developers to continue work with this system, included are user manuals, associated IOU (Intersection over union) or Jaccard testing, PDF exports of the Jupyter markdown (text comments or instructions), UAT testing reports and more. This project primarily represents a starting point for a production system, team 5 has explored a great number of options and documented it, now it is time for another company to take it on from here. It is believed that Intellify will continue on from here with the work.

The stakeholders are yet to sign off on the project but team 5 has been praised for the work thus far, sign off will be approached in the agreed upon final project meeting, in which Lars will be attending (the project sponsor).

Major assessment task that the team is working towards.

Key	Summary	Due	Description
FEAII-28	Product Release Milestone (PRM)	18/Oct/21	**Assessment item 3 - Product Release Milestone (PRM)** **Value:** 20%; **Due Date:** 18-Oct-2021; **Return Date:** 09-Nov-2021 TASK back to top The goals of the Transition Phase are: • To ensure the project is ready for release into a production environment. • To obtain user testing feedback and product acceptance. • To obtain stakeholder acceptance of final project. The main emphasis in the Transition Phase is on deployment of the finished software artefact, completion of user acceptance testing and responding to any defects found. The primary tasks involved in the Transition Phase are: 1. A deployment of the 'beta ready' software to the intended deployment environment. 2. The conducting of user acceptance tests. 3. The rectification of any defects or issues uncovered in the acceptance tests. 4. The completion of any programmer documentation to the 'hand off' stage. The Product Release Milestone (PRM) represents the completion of the Transition Phase. Deliverables for the PRM include: 1. An Implementation Model that embodies the final production version of the completed software. (30 marks) 2. A successful demonstration of the software to the project sponsor resulting in sponsor signoff. (10 marks) 3. A Test Model including completed user acceptance tests for the final product. (25 marks) 4. Programmer documentation sufficient to pass on to a separate development team to maintain the product. (25 marks) 5. An Transition Phase Project Status Assessment - which assesses your project progress against the overall aims of the project, and against the specific aims of the Transition Phase (10 marks). Due to the limitations imposed by the university semester timetable, beta testing is truncated. An initial round of testing is conducted and all issues and bugs uncovered in that round must be addressed and resolved. This must be verified in a second round of testing. However, once all issues uncovered in the first round are resolved, the project is deemed complete for submission purposes. It is not required that you address any **additional** issues uncovered in the second round of testing. Conducting a round of testing and resolving the issues uncovered forms the basis of Transition iterations. Please note that if you are developing a real application for a real sponsor, beta testing may continue for as many rounds as required to meet sponsor's requirements. In this context, please note the utility of a clear Vision document to set a well defined end point for the project.

Assessment target	Product release milestone (PRM)
Assessment date	18-Oct-2021
Participants	All
Project status	90% - Completion will see 100%.

Assessment target	Project Management Assessment Stream (PMAS)
Assessment date	18-Oct-2021
Participants	All

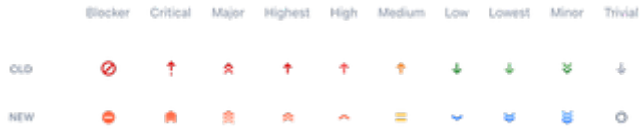
Project status	90% - Completion will see 100%.

Timeline

Green - Complete. Blue - In progress. Grey - To do.

Key System Qualities and Functionality

Initial requirement analysis identified the following critical and significant system quality and functional requirements:



System Qualities

Key	Summary	T	P	Description
FEAII-72	DCS Non Func Req 1 - Data Storage			Temporary files generated during running of the solution should be removed at the end of each run. The solution is not required to manage data retention of previously generated outputs.
FEAII-73	DCS NonFunc Req 2 - Data Validation - No automated tools			We will check the format, projection, spatial accuracy and congruence with source imagery manually. After confidence is achieved in the method, a quick check will only be performed if required.
FEAII-74	DCS Non Func Req 3 - Data and User Access			The system will be designed to be an operated by a single user at a time. The solution does not require a graphical user interface, it may be via command line style execution. The user will already be authenticated in AWS to give access to use this tool. The system will not publish any APIs, web interfaces or the like either externally or internally within Spatial Services.
FEAII-75	DCS Non Func Req 5 - Usability			The amount of human effort required to use the solution should be minimised. After this POC the developed system may be extended to be fully automated.
FEAII-76	DCS Non Func Req 4 - Auditing (Not required)			As a manually operated tool for this POC, auditing is not required.
FEAII-77	DCS Non Func Req 7 - Performance			As the solution is designed to be used for rapid response environments, it should complete within hours, not days.
FEAII-78	DCS Non Func Req 8 - Supportability			Documentation shall be provided on how to operate the system and troubleshoot common errors.
FEAII-79	DCS Non Func Req 9 - System Availability			The solution will usually remain offline and will be started as needed when there is a flood. Documentation should include information on how to start the system. Should run on windows
FEAII-80	DCS Non Func Req 10 - Cost			Consideration should be given to the cost to run the system.

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Functional Requirements

Key	Summary	T	P	Description
FEAII-56	DCS Func Req 1 - Accept input of aerial images in ecw or JP2 (JPEG 2000) format.			High level requirements - Computer Vision POC Data Input Images will be in 3 band, RGB and 3 band false colour (Near Infrared, Red, Green)
FEAII-57	DCS Fun Req 2 - The data will be already othorectified as GDA2020 MGA56 (Hawkesbury) and MGA55 (Brewarrina)			High level req - cv POC Data Input The data will be already othorectified as GDA2020 MGA56 (Hawkesbury) and MGA55 (Brewarrina)
FEAII-58	DCS Func Req 3 - The solution will accept 1 or more aerial images in strip mosaic format. Tiled input for testing only			High level req - cv POC Data Input The solution will accept 1 or more aerial images in strip mosaic format. Tiled input for testing only
FEAII-59	DCS Func Req 4 - Aerial images to be read from Amazon s3			High level req - cv POC Data Input Aerial images to be read from Amazon s3

FEAII-60	DCS Func Req 5 - Configuration settings for general operation			High level req - cv POC Configuration Any settings required to operate the system (for example the location of the input s3 images) shall be configurable, either via a command line or configuration file.
FEAII-61	DCS Func Req 6 - Detect current boundaries from the Aerial Images			As determined in conjunction with the SES
FEAII-62	DCS Func Req 9 - Output flood extents as a polygon in ESRI shapefile format, or GDB (GeoDatabase)			High level req - cv POC Polygon outputs Output flood extents as a polygon in ESRI shapefile format, or GDB (GeoDatabase).
FEAII-63	DCS Func Req 10 - Output polygons to be georeferenced to the same level of alignment accuracy as the input images			High level req - cv POC Polygon outputs Output polygons to be georeferenced to the same level of alignment accuracy as the input images.
FEAII-64	DCS Func Req 7 - Output flood extent in the same resolution as the input images			One output raster per input raster.
FEAII-65	DCS Func Req 11 - Output polygons to be clean and minimally smoothed only to eliminate noise.			High level req - cv POC Polygon outputs Output polygons to be clean and minimally smoothed only to eliminate noise. E.g. with a main predominant floodline, rather than many small polygons of a few pixels each. Minimum polygon size for a patch of land to be 25 square meters.
FEAII-66	DCS Func Req 8 - Output flood extent rasters in the same file format as the input			Output flood extent rasters in the same file format as the input images.
FEAII-67	DCS Func Req 12 - It is preferable for the polygon output to be a single file with a continuous floodline, even where the flood line spans across input mosaics.			High level req - cv POC Polygon Outputs It is preferable for the polygon output to be a single file with a continuous floodline, even where the flood line spans across input mosaics.
FEAII-68	DCS Func Req 15 - Generated flood extent files are to be saved in Amazon S3			Generated flood extent files are to be saved in Amazon S3.
FEAII-69	DCS Func Req 13 - Polygon outputs to be closed polygons (i.e. the end of each polygon must join back to the start) Note: open polygon is a line not a polygon.			High level req - cv POC Polygon outputs Polygon outputs to be closed polygons (i.e. the end of each polygon must join back to the start) Note: open polygon is a line not a polygon.
FEAII-70	DCS Func Req 16 - Soloution will report its level of confidence in the produced flood extent map.			Soloution will report its level of confidence in the produced flood extent map.
FEAII-71	DCS Func Req 14 - Polygon outputs to contain only the flood extent			High level req - cv POC Polygon outputs Polygon outputs to contain only the flood extent, so that other software using the output can overlay the flood extent on top of other imagery and maps.

16 issues

1.Deliverables

1.1. Beta Ready Version of the Product

Git repo root folder

CSU-SpatialServices / FloodAnalysis

Flood Extent Extraction

Invite Clone ...

Here's where you'll find this repository's source files. To give your users an idea of what they'll find here, add a description to your repository.

main Files Filter files

/

Name	Size	Last commit	Message
App		4 hours ago	added notebook
Documentation		26 minutes ago	updated manuals
Images		2021-08-08	Initial commit
Logs			
Models		2021-10-10	Initial commit
Out			
.gitignore	682 B	2021-08-08	Initial commit
README.md	293 B	2021-08-08	Initial commit

README.md

Flood Extent Extraction

Collection of user ready notebooks / apps for the extraction of flood extents from aerial imagery.

Steps

Basic steps to get up and running

- Start Sagemaker Notebook
- Clone this respository
- Check app documentation for system setup
- Configure app
- Run

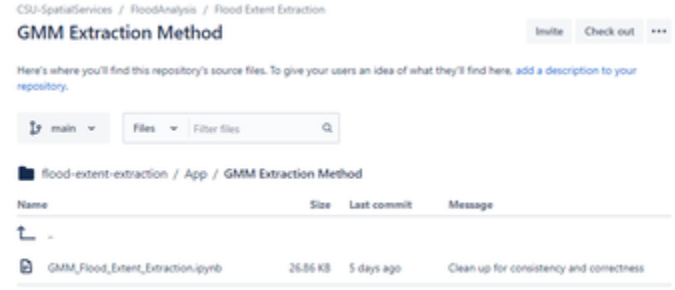
Clustering pipeline (GMM) pipeline

Status: **HAND OVER**

Access: DCS / Spatial Services, CSU Students

Source: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/App/GMM%20Extraction%20Method/

Manual: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/Documentation/Flood%20Extent%20Extraction%20Manual%20(GMM%20Method).pdf



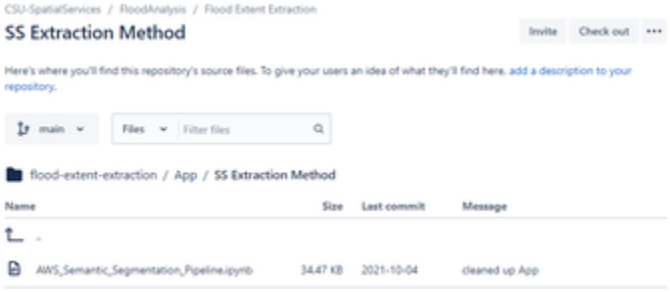
AWS Semantic Segmentation (SS) pipeline

Status: **HAND OVER**

Access: DCS / Spatial Services, CSU Students

Source: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/App/SS%20Extraction%20Method/

Manual: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/Documentation/Flood%20Extent%20Extraction%20Manual%20(SS%20Method).docx.pdf



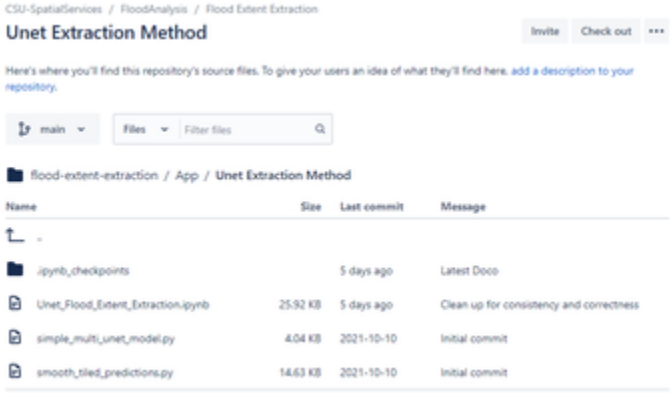
UNET CNN Pipeline

Status **HAND OVER**

Access: DCS / Spatial Services, CSU Students

Source: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/App/Unet%20Extraction%20Method/

Manual: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/Documentation/Flood%20Extent%20Extraction%20Manual%20(Unet%20CNN%20Method).pdf



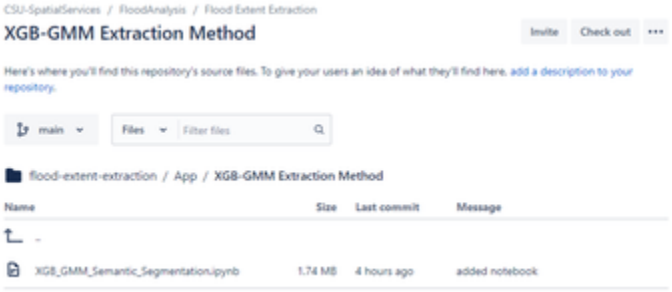
XGB-GMM Pipeline

Status **HAND OVER**

Access: DCS / Spatial Services, CSU Students

Source: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/App/XGB-GMM%20Extraction%20Method/

Manual: https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/main/Documentation/Flood%20Extent%20Extraction%20Manual%20(Hybrid%20Method).docx.pdf



1.2. Supporting Test Evidence

https://github.com/ablewitt/ITC303-Documents/blob/main/IOCM/UAT%20Alpha%20Testing.pdf

UAT Alpha Testing

Conducted by Patrick Funnell & Darren Sheehan

[The Test Case ID should be unique. In addition, the name of each Test Case should reflect the intent of the test case, ideally expressed as a Boolean condition.]

KEY

<Test Case ID> - <Test Case Name>:

Description: [Describe the logical condition that the Test Case evaluates. Include the expected result.]
Pre-conditions: [List conditions that must be true before this Test Case can start.]
Post-conditions: [List conditions that should be true when this Test Case ends.]
Data required: [Identify the type of data required for this Test Case.]

Functional

Test Case FEAII-56 (JIRA) - Data Input (DCS Requirements - HLR)

Sub case 1. Accept input of aerial images in ecw or JP2 (JPEG2000) format.

Description	The system should accept JP2s with support for ecw as a backup, in which will be used to generate the flood extents and export to a shape file.
Pre conditions	Working ecw or JP2 files (can be tested by opening and manually confirming content is loading in a local file viewer, windows 10, MacOS, Linux. JP2s open fine but ecw may not be native to these systems)
Post conditions	Image data is loaded in the notebook and processed accordingly.
Data required	Image dataset

Clustering Pipeline

Reviewer: Patrick, Darren
Notebook: TBC
Conducted in git branch: review_pat
https://bitbucket.org/csu-spatialservices/flood-extent-extraction/src/review-pat/
Primary developer: Adam
Status: 80-90% Complete, some further follow up internally required.
Date completed: In progress

ID	Status	Description
FEAII-56	PASS	**Sub case 1. Accept input of aerial images in ecw or JP2 (JPEG2000) format.** The clustering pipeline accepts JP2 images, ecw and JP2 are very similar in format. Ecw is a proprietary file type and has a similar file composition to JP2 although they have not been tested through this system. The clustering pipeline makes use of the NRG (near infrared) colour spectrum images in JP2 and as such it is recommended to use the JP2 file format with accompanying location and image data (infrared). (5-Sep-21) Raster file formats—ArcGIS Pro | Documentation

1.3. Beta Test materials

See deliverables section ***1.1. Beta Ready Version of the Product*** . The notebooks and manuals will be provided to DCS / Spatial Services for a beta test period along with the following feedback forms, they are not completed yet but will be a few days after the delivery of this document.

Clustering Technique - Feedback (Beta UAT) - Google Forms

AWS Semantic Segmentation - Feedback (Beta UAT) - Google Forms

Results

https://github.com/ablewitt/ITC303-Documents/blob/main/PRM/UAT%20Testing/Feedback%20response%20(GMM%20Pipeline).pdf

https://github.com/ablewitt/ITC303-Documents/blob/main/PRM/UAT%20Testing/Feedback%20response%20(SS%20Pipeline).pdf

1.4. User Manuals

See deliverables section ***1.1. Beta Ready Version of the Product*** .

1.5 Sponsor Demonstration

Below is a link to the presentation that was held with many stakeholders internal and external to both Spatial Services and CSU.

https://drive.google.com/file/d/1LR_Evjc9FAq_1-2youO4aV_DRVLB2vbp/view?usp=sharing

1.6. Sponsor Stakeholder Signoff

TBC. Sign off still needed, verbal approval given. Written signoff still required.

2.Iterations

2.1. Transition Iteration 1

Note: Not all jobs were assigned to Patrick Funnell, Jira assigns by default for notification and reporting purposes to the admin account.

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution

FEAII-108	Transition iteration plan 1 creation		22/Sep/21 9:56 AM	04/Oct/21 10:10 AM	14/Sep/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-107	Xgboost		15/Sep/21 10:31 AM	Saturday 7:13 AM	13/Oct/21	ablewitt	Patrick Funnell	=	DONE	Done
FEAII-106	Xgboost		15/Sep/21 10:31 AM	Saturday 7:12 AM	13/Oct/21	Andrew Smith	Patrick Funnell	=	DONE	Done
FEAII-105	Unet exploration		15/Sep/21 10:30 AM	Saturday 7:12 AM	18/Oct/21	ablewitt	Patrick Funnell	=	DONE	Done
FEAII-87	UATs (Hand over Beta test system to DCS for testing, plus user manual, they will work with it and then return some feedback)		10/Aug/21 11:29 AM	28/Sep/21 2:46 AM	20/Sep/21	Patrick Funnell	Patrick Funnell	=	DONE	Done

5 issues

Contingency experimentation was being conducted in this iteration out of interest and exploration, Nik from Intellify raised a new pipeline XGBoost, which was interesting and more effective to a degree so this is being run in the background by Andrew and Adam. Adam also found another algorithm to experiment with, Unet which was very effective as well but was later found to be more demanding of training set data. More data could see this as a very effective algorithm to use.

2.2. Transition Iteration 2

Note: Not all jobs were assigned to Patrick Funnell, Jira assigns by default for notification and reporting purposes to the admin account.

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
FEAII-120	Transition iteration plan 3		10/Oct/21 1:58 AM	Saturday 7:11 AM	14/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-113	Document refinement and polish document set for release		22/Sep/21 10:25 AM	Yesterday 1:17 PM	14/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-110	Transition iteration plan 2		22/Sep/21 10:02 AM	09/Oct/21 5:53 AM	05/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-109	PSR Reporting (September)		22/Sep/21 9:59 AM	Saturday 7:11 AM	07/Oct/21	Cam	Patrick Funnell	=	DONE	Done
FEAII-101	Lessons learnt collection session (internal G5)		18/Aug/21 1:05 PM	Yesterday 1:17 PM	13/Oct/21	Patrick Funnell	Patrick Funnell	^^	DONE	Done

5 issues

During this iteration, document cleanup was the major focus. Some tasks from the previous iteration overlapped this iteration due to the amount of work involved. This includes tasks like Unet exploration where a pipeline was to be assembled for the new algorithm as a contingency/exciting new development with what has already been created (similar pipeline components reused with the new algorithm).

2.3. Transition Iteration 3

Note: Not all jobs were assigned to Patrick Funnell, Jira assigns by default for notification and reporting purposes to the admin account.

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
FEAII-119	Create user manual for XGB+GMM pipeline		06/Oct/21 8:52 AM	Yesterday 8:35 AM	15/Oct/21	Andrew Smith	Andrew Smith	=	DONE	Done
FEAII-117	End of project report (DCS)		05/Oct/21 10:29 AM	Yesterday 12:32 PM	18/Oct/21	Darren Sheehan	Patrick Funnell	=	DONE	Done
FEAII-116	Video presentation cutdown - 2nd Nov		05/Oct/21 10:17 AM	Yesterday 12:32 PM	31/Oct/21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-115	Confluence export documents for PRM and handover		29/Sep/21 10:40	Yesterday 12:32 PM	15/Oct/21	Patrick Funnell	Patrick Funnell	^	DONE	Done

			AM							
FEAII-114	Create Confluence page for XGB pipeline		22/Sep/21 10:43 AM	Yesterday 8:35 AM	08/Oct/21	Andrew Smith	Andrew Smith	=	DONE	Done
FEAII-112	Transition Phase Project Status Assessment		22/Sep/21 10:24 AM	Yesterday 1:16 PM	13/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-111	Free discussion surrounding what has been accomplished by the team (with David)		22/Sep/21 10:07 AM	05/Oct/21 10:30 AM	05/Oct/21	Patrick Funnell	Patrick Funnell	^	DONE	Done
FEAII-103	Code Compliance		12/Sep/21 8:53 AM	Wednesday 10:00 AM	15/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-100	Final presentation (Handover, 18th)		18/Aug/21 1:03 PM	09/Oct/21 5:55 AM	18/Oct/21	Patrick Funnell	Patrick Funnell	^^	IN PROGRESS	Unresolved

9 issues

The majority of the jobs were completed in this iteration, the user acceptance testing has taken longer than expected and the results were limited, we have made do with the insight we have been provided in the weekly technical meetings with Spatial Services and Intellify. The video cut down for the end internal presentation has begun and will be finished shortly after the external hand over is completed. Handover as outlined in the Jira tickets is on the 18th October, this will be done as a downloadable export of specific data hosted on a google drive. A follow up meeting is being held on the 22nd October to call a close to the project and confirm that the Spatial Services stakeholders can access the files from the export. After this the project will be at a close with only finite amounts of tasks left for internal matters (video presentation, etc).

3.General Issues

3.1. Risks

Risks / issues outlined below this the August / September PSR (project status report) this report summarises most of the activity to date. The team has been working with a keen focus on cleanup and refinement, making sure documentation is clear enough and is all present in the final handover documentation set.

Project Status Report (August/September 2021)

GOVERNANCE		**PARTICULARS**		**PROJECT INFORMATION**			
Project Manager:	James Triggs (Intellify: Product and Delivery Lead)	**Report date:**	12/10/2021 (Month of focus: August/September)	**Project ID:**	DCS-CSU/Intellify	**Description:**	CSU students will present, test and finalise their machine learning models for flood identification, using existing researched and tested methods on the AWS platform.

Sponsor:	Lars Hansen (Spatial Services: Info Services Director)	**% Complete**	90%	**Project name:**	CSU/Intellify	**Work status:**	The final session for the student team is coming to an end. Findings and technical learnings must be documented, presented and passed over to Intellify; the project is in its finalisation stage.

UPDATES

Status indicators:	**OVERALL STATUS**	**SCHEDULE**	**SCOPE**	**RESOURCES**	**STAKEHOLDERS**
	The project is tracking extremely well, with the final pieces being put together, user acceptance testing progressing and hand over documentation is well underway.	From a CSU student perspective, the project is perfectly on schedule, with handover and the finalisation of weekly meetings, scheduled in the coming weeks. The technical meetings, between Adam, Andrew & Nik (from Intellify) have been discontinued.	The pre-trained Gaussian Mixture Model (GMM) has been implemented to increase the accuracy of predictions. Semantic Segmentation (SS) did not prove to be as accurate as GMM, though with the use of XGBoost (a similar machine learning algorithm to SS), alongside GMM, predictions have improved in accuracy substantially. A new pipeline implementing a U-Net convolutional neural network also shows potential. No new development streams will be created, due to time constraints of the project.	Resources have been adequate and no additional resources are required at this time. Heavy compute workloads have been allocated where needed (a 768 GB RAM instance was created). Budgetary approval received from DCS for more vigorous testing and determination of a better price-to-performance ratio.	Communications between CSU/DCS/intelify has remained positive and productive. All parties are satisfied with current progress and a presentation from students has been made to all stakeholders, to assess the outcomes for the project and user acceptance testing has been performed.

Executive update:	Project has entered its final stages, as requirements are met and the final stages of development and testing are completed. The CSU students have presented their work and findings to the stakeholders of DCS and user acceptance testing is underway, to address concerns with the final product. Semantic Segmentation hasn't proved as accurate as the Gaussian Mixture Model, which has been implemented with a pre-trained model and development has been finalised. Other development paths such as XGBoost and UNet are also being considered. Initial Operation Capability Milestone (IOCM) documents have been compiled and uploaded for David Tien (CSU) to distribute for stakeholder review.

ACTIVITIES

Last month:	• Manual labelling of Hawkesbury-Nepean & Brewarrina datasets complete • Gaussian Mixture Model development complete • Semantic Segmentation development complete • Project handover documents initialised • Weekly workshops with Nikzad Babaii discontinued • User acceptance testing performed • Presentation to stakeholders
Next month:	• User manual • Project handover • Project end

RISKS

Risk ID: 6	RSK:CSU /INT-006	**Description**	Jupyter notebook platform is costly if left running	**Impact**	Reduces overall budget for the project, this budget is maintained by DCS and they will have budget alarms but can still be a costly exercise.	**Resolution / Mitigation**	Following the presentation to the DCS stakeholders, budgetary approval was given to test the constraints of the CSU students' product with higher tiered SageMaker instances.

				Consequence	Halt on AWS testing for CSU students, due to budgetary constraints	**Owner**	Team 5 (Raised by All)
Risk ID: 15	RSK:CSU /INT-015	**Description**	Translating image coordinates into real world coordinates. Is the distance linear or does the image geoid /curvature correction?	**Impact**	Will result in inaccurate translation between image data and eventual GIS input	**Resolution / Mitigation**	Images do not require curvature / geoid correction. Images are already ortho rectified
				Consequence	May limit the usefulness of the output images to stakeholders.	**Owner**	Team 5 (Raised by Adam)
ISSUES							
Issue ID 4	ISS:CSU /INT-004	**Description**	Feedback from User Acceptance Testing	**Impact**	Unable to make final tuning to the solution to improve or resolve any issues.	**Impact of issue**	Incomplete User Acceptance Testing phase
				Resolution / issue action	Need more feedback from DCS	**Owner**	Team 5 (Raised by All)

All Jira issues:

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
FEAII-120	Transition iteration plan 3		10/Oct/21 1:58 AM	Saturday 7:11 AM	14/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-119	Create user manual for XGB+GMM pipeline		06/Oct/21 8:52 AM	Yesterday 8:35 AM	15/Oct/21	Andrew Smith	Andrew Smith	=	DONE	Done
FEAII-117	End of project report (DCS)		05/Oct/21 10:29 AM	Yesterday 12:32 PM	18/Oct/21	Darren Sheehan	Patrick Funnell	=	DONE	Done
FEAII-116	Video presentation cutdown - 2nd Nov		05/Oct/21 10:17 AM	Yesterday 12:32 PM	31/Oct/21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-115	Confluence export documents for PRM and handover		29/Sep/21 10:40 AM	Yesterday 12:32 PM	15/Oct/21	Patrick Funnell	Patrick Funnell	^	DONE	Done
FEAII-114	Create Confluence page for XGB pipeline		22/Sep/21 10:43 AM	Yesterday 8:35 AM	08/Oct/21	Andrew Smith	Andrew Smith	=	DONE	Done
FEAII-113	Document refinement and polish document set for release		22/Sep/21 10:25 AM	Yesterday 1:17 PM	14/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-112	Transition Phase Project Status Assessment		22/Sep/21 10:24 AM	Yesterday 1:16 PM	13/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-111	Free discussion surrounding what has been accomplished by the team (with David)		22/Sep/21 10:07 AM	05/Oct/21 10:30 AM	05/Oct/21	Patrick Funnell	Patrick Funnell	^	DONE	Done
FEAII-110	Transition iteration plan 2		22/Sep/21 10:02 AM	09/Oct/21 5:53 AM	05/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-109	PSR Reporting (September)		22/Sep/21 9:59 AM	Saturday 7:11 AM	07/Oct/21	Cam	Patrick Funnell	=	DONE	Done
FEAII-108	Transition iteration plan 1 creation		22/Sep/21 9:56 AM	04/Oct/21 10:10 AM	14/Sep/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-	Xgboost		15/Sep	Saturday	13/Oct	ablewitt	Patrick	=	DONE	Done

107			/21 10:31 AM	7:13 AM	/21		Funnell			
FEAII-106	Xgboost		15/Sep/21 10:31 AM	Saturday 7:12 AM	13/Oct/21	Andrew Smith	Patrick Funnell	=	DONE	Done
FEAII-105	Unet exploration		15/Sep/21 10:30 AM	Saturday 7:12 AM	18/Oct/21	ablewitt	Patrick Funnell	=	DONE	Done
FEAII-103	Code Compliance		12/Sep/21 8:53 AM	Wednesday 10:00 AM	15/Oct/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-102	Pixel Classification - XGBOOST		25/Aug/21 11:13 AM	06/Oct/21 8:49 AM	24/Sep/21	Andrew Smith	Andrew Smith	=	DONE	Done
FEAII-101	Lessons learnt collection session (internal G5)		18/Aug/21 1:05 PM	Yesterday 1:17 PM	13/Oct/21	Patrick Funnell	Patrick Funnell	^^	DONE	Done
FEAII-100	Final presentation (Handover, 18th)		18/Aug/21 1:03 PM	09/Oct/21 5:55 AM	18/Oct/21	Patrick Funnell	Patrick Funnell	^^	IN PROGRESS	Unresolved
FEAII-99	Project presentation for DCS		18/Aug/21 12:59 PM	05/Sep/21 2:40 AM	03/Sep/21	Patrick Funnell	Patrick Funnell	^^	DONE	Done
FEAII-98	FOLLOW UP WITH DCS - System able to run on windows, confirm whether this is a firm requirement.		16/Aug/21 10:22 AM	05/Oct/21 10:31 AM	01/Sep/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-97	PSR Reporting (August)		14/Aug/21 10:50 AM	29/Sep/21 10:31 AM	03/Oct/21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-96	Update PMAS, IOCM on wiki		11/Aug/21 11:31 AM	19/Aug/21 11:01 PM	22/Aug/21	Darren Sheehan	Patrick Funnell	=	DONE	Done
FEAII-95	Compile iteration plan		11/Aug/21 11:15 AM	16/Aug/21 10:29 AM	22/Aug/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-94	Alpha phase UAT (Bug checking, etc - Internal)		11/Aug/21 11:06 AM	12/Sep/21 9:07 AM	07/Sep/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-93	Finish off image annotations Darren		11/Aug/21 11:01 AM	15/Aug/21 4:07 AM	22/Aug/21	Darren Sheehan	Patrick Funnell	=	DONE	Done
FEAII-92	Finish off image annotations Cam		11/Aug/21 11:00 AM	05/Sep/21 2:40 AM	22/Aug/21	Cam	Patrick Funnell	=	DONE	Done
FEAII-91	Finish off Image annotations Pat		11/Aug/21 11:00 AM	14/Aug/21 10:49 AM	22/Aug/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-90	A completed end to end working model for AWS semantic segmentation (For UAT purposes)		11/Aug/21 10:51 AM	05/Sep/21 2:39 AM	22/Aug/21	Andrew Smith	Patrick Funnell	=	DONE	Done
FEAII-89	Masks completed (drawn based on JSON converter)		11/Aug/21 10:50 AM	12/Sep/21 9:43 AM	22/Aug/21	Cam	Patrick Funnell	=	DONE	Done
FEAII-88	UAT GMM intro		11/Aug/21 10:46 AM	28/Sep/21 11:16 AM	08/Sep/21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-87	UATs (Hand over Beta test system to DCS for testing, plus user manual, they will work with it and then return some feedback)		10/Aug/21 11:29 AM	28/Sep/21 2:46 AM	20/Sep/21	Patrick Funnell	Patrick Funnell	=	DONE	Done

FEAII-86	DCS Non-functional Requirements Alignment Review		06/Aug /21 1:21 AM	09/Oct /21 5:09 AM	11/Sep /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-85	DCS Functional Requirements Alignment Review		06/Aug /21 1:21 AM	09/Oct /21 5:09 AM	11/Sep /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-84	Transition Iteration 3		05/Aug /21 12: 24 PM	06/Oct /21 9:36 AM	18/Oct /21	Patrick Funnell	Patrick Funnell	=	IN PROGRESS	Unresolved
FEAII-83	Transition Iteration 2		05/Aug /21 12: 23 PM	Saturday 7:12 AM	04/Oct /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-82	Transition Iteration 1		05/Aug /21 12: 23 PM	22/Sep /21 9:56 AM	20/Sep /21	Patrick Funnell	Patrick Funnell	^^	DONE	Done
FEAII-81	Requirement review and document adjusted based off feedback Pat / Maria		05/Aug /21 9:45 AM	11/Aug /21 10: 41 AM	13/Aug /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-80	DCS Non Func Req 10 - Cost		30/Jul /21 12: 16 PM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	=	TO DO	Unresolved
FEAII-79	DCS Non Func Req 9 - System Availability		30/Jul /21 12: 13 PM	15/Aug /21 10: 54 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-78	DCS Non Func Req 8 - Supportability		30/Jul /21 12: 12 PM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-77	DCS Non Func Req 7 - Performance		30/Jul /21 12: 11 PM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	=	TO DO	Unresolved
FEAII-76	DCS Non Func Req 4 - Auditing (Not required)		30/Jul /21 12: 10 PM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	vv	DONE	Done
FEAII-75	DCS Non Func Req 5 - Usability		30/Jul /21 12: 10 PM	10/Aug /21 11: 27 AM	05/Sep /21	Darren Sheehan	Darren Sheehan	=	TO DO	Unresolved
FEAII-74	DCS Non Func Req 3 - Data and User Access		30/Jul /21 12: 09 PM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-73	DCS NonFunc Req 2 - Data Validation - No automated tools		30/Jul /21 12: 08 PM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	^^	TO DO	Unresolved
FEAII-72	DCS Non Func Req 1 - Data Storage		30/Jul /21 12: 07 PM	10/Aug /21 11: 26 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-71	DCS Func Req 14 - Polygon outputs to contain only the flood extent		30/Jul /21 11: 59 AM	10/Aug /21 11: 28 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-70	DCS Func Req 16 - Soloution will report its level of confidence in the produced flood extent map.		30/Jul /21 11: 58 AM	10/Aug /21 11: 28 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	=	TO DO	Unresolved
FEAII-69	DCS Func Req 13 - Polygon outputs to be closed polygons (i.e. the end of each polygon must join back to the start) Note: open polygon is a line not a polygon.		30/Jul /21 11: 58 AM	10/Aug /21 11: 28 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-68	DCS Func Req 15 - Generated flood extent files are to be saved in Amazon S3		30/Jul /21 11: 57 AM	10/Aug /21 11: 28 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	^^	TO DO	Unresolved
FEAII-67	DCS Func Req 12 - It is preferable for the polygon output to be a single		30/Jul /21 11:	10/Aug /21 11:	05/Sep /21	Patrick Funnell	Patrick Funnell	v	TO DO	Unresolved

	file with a continuous floodline, even where the flood line spans across input mosaics.		56 AM	28 AM						
FEAII-66	DCS Func Req 8 - Output flood extent rasters in the same file format as the input		30/Jul /21 11: 54 AM	15/Aug /21 6:35 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	=	TO DO	Unresolved
FEAII-65	DCS Func Req 11 - Output polygons to be clean and minimally smoothed only to eliminate noise.		30/Jul /21 11: 53 AM	10/Aug /21 11: 28 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-64	DCS Func Req 7 - Output flood extent in the same resolution as the input images		30/Jul /21 11: 52 AM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	^^	TO DO	Unresolved
FEAII-63	DCS Func Req 10 - Output polygons to be georeferenced to the same level of alignment accuracy as the input images		30/Jul /21 11: 49 AM	10/Aug /21 11: 28 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-62	DCS Func Req 9 - Output flood extents as a polygon in ESRI shapefile format, or GDB (GeoDatabase)		30/Jul /21 11: 44 AM	10/Aug /21 11: 28 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-61	DCS Func Req 6 - Detect current boundaries from the Aerial Images		30/Jul /21 11: 41 AM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Darren Sheehan	^^	TO DO	Unresolved
FEAII-60	DCS Func Req 5 - Configuration settings for general operation		30/Jul /21 11: 33 AM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	=	TO DO	Unresolved
FEAII-59	DCS Func Req 4 - Aerial images to be read from Amazon s3		30/Jul /21 11: 30 AM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-58	DCS Func Req 3 - The solution will accept 1 or more aerial images in strip mosaic format. Tiled input for testing only		30/Jul /21 11: 28 AM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-57	DCS Fun Req 2 - The data will be already othorectified as GDA2020 MGA56 (Hawkesbury) and MGA55 (Brewarrina)		30/Jul /21 11: 27 AM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-56	DCS Func Req 1 - Accept input of aerial images in ecw or JP2 (JPEG 2000) format.		30/Jul /21 11: 23 AM	10/Aug /21 11: 27 AM	05/Sep /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved
FEAII-55	AWS Semantic Segmentation Pipeline		30/Jul /21 10: 58 AM	06/Oct /21 8:49 AM	06/Sep /21	Andrew Smith	Patrick Funnell	^	DONE	Done
FEAII-54	Clustering pipeline		30/Jul /21 10: 56 AM	09/Oct /21 5:09 AM	06/Sep /21	Patrick Funnell	Patrick Funnell	^	DONE	Done
FEAII-53	PSR reporting due (June/July)		28/Jul /21 1:33 PM	01/Aug /21 4:38 AM	31/Jul /21	Patrick Funnell	Patrick Funnell	^	DONE	Done
FEAII-52	Pat and Darren discussion regarding Jira and test plan / tests		28/Jul /21 1:29 PM	01/Aug /21 4:38 AM	30/Jul /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-51	The first results using AWS Semantic Segmentation (as provided in the previous emails) (Nik)		27/Jul /21 1:36 PM	11/Aug /21 11: 03 AM	06/Aug /21	Andrew Smith	Patrick Funnell	^^	DONE	Done
FEAII-50	Finalise the clustering technique + Contour for all images (Nik)		27/Jul /21 1:32 PM	09/Sep /21 12: 21 PM	06/Aug /21	ablewitt	Patrick Funnell	^^	DONE	Done
FEAII-49	Create a pipeline to concatenate images (Nik)		27/Jul /21 1:24 PM	27/Jul /21 1:37 PM	06/Aug /21	Patrick Funnell	Patrick Funnell	^^	TO DO	Unresolved

FEAII-48	Refine NDWI notebooks to deal with edge cases		27/Jul /21 7:42 AM	11/Aug /21 2:16 PM	30/Jul /21	Andrew Smith	Andrew Smith	=	DONE	Done
FEAII-47	Integrate automatic flood cluster selection into production pipeline BETA		27/Jul /21 7:40 AM	11/Aug /21 2:15 PM	30/Jul /21	Andrew Smith	Andrew Smith	^	DONE	Done
FEAII-46	NDWI Jaccard Scores		27/Jul /21 7:37 AM	27/Jul /21 8:16 AM	25/Jul /21	Andrew Smith	Andrew Smith	=	DONE	Done
FEAII-44	Meeting scribe 4th August		26/Jul /21 1:38 PM	04/Aug /21 11:26 AM	04/Aug /21	Unassigned	Patrick Funnell	⌄⌄	DONE	Done
FEAII-43	Create Construction Iteration 2 Confluence Page		26/Jul /21 1:36 PM	02/Aug /21 10:54 AM	01/Aug /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-42	0.1_Flood_Extent_Extraction.ipynb | Todo tasks - Shapefile		26/Jul /21 1:32 PM	11/Aug /21 10:39 AM	04/Aug /21	ablewitt	Patrick Funnell	^	DONE	Done
FEAII-41	Meeting scribe 28th July		26/Jul /21 1:27 PM	30/Jul /21 10:53 AM	28/Jul /21	Cam	Patrick Funnell	⌄⌄	DONE	Done
FEAII-40	Fix up Git, decide a method of working on the master files as well as making dev files available to all		26/Jul /21 1:22 PM	11/Aug /21 11:03 AM	28/Jul /21	Patrick Funnell	Patrick Funnell	^^	DONE	Done
FEAII-39	0.1_Flood_Extent_Extraction.ipynb | Todo tasks - Logging and error tracking		26/Jul /21 1:21 PM	11/Aug /21 10:40 AM	04/Aug /21	ablewitt	Patrick Funnell	^	DONE	Done
FEAII-37	Project Status Assessment		21/Jul /21 10:21 AM	22/Sep /21 9:57 AM	21/Sep /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-36	Construction Iteration 4 (Subtasks)		21/Jul /21 10:18 AM	22/Sep /21 9:57 AM	06/Sep /21	Patrick Funnell	Patrick Funnell	^^	DONE	Done
FEAII-35	Construction Iteration 3 (Subtasks)		21/Jul /21 10:18 AM	12/Sep /21 9:44 AM	22/Aug /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-34	Construction Iteration 2 (Subtasks)		21/Jul /21 10:18 AM	11/Aug /21 11:15 AM	08/Aug /21	Patrick Funnell	Patrick Funnell	^^	DONE	Done
FEAII-33	User Manual		21/Jul /21 10:17 AM	22/Sep /21 9:57 AM	21/Sep /21	ablewitt	Patrick Funnell	=	DONE	Done
FEAII-32	Test Model		21/Jul /21 10:17 AM	28/Sep /21 11:16 AM	08/Sep /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-31	Beta Ready Implementation Model of the Final Application		21/Jul /21 10:17 AM	12/Sep /21 9:43 AM	08/Sep /21	ablewitt	Patrick Funnell	^^	DONE	Done
FEAII-30	Construction Iteration 1 (Subtasks)		21/Jul /21 10:16 AM	27/Jul /21 11:57 AM	25/Jul /21	Patrick Funnell	Patrick Funnell	=	DONE	Done
FEAII-28	Product Release Milestone (PRM)		21/Jul /21 9:54 AM	15/Sep /21 10:29 AM	18/Oct /21	Patrick Funnell	Patrick Funnell	^^	IN PROGRESS	Unresolved
FEAII-26	Initial Operation Capability Milestone (IOCM)		21/Jul /21 9:51 AM	22/Sep /21 9:57 AM	06/Sep /21	Patrick Funnell	Patrick Funnell	^^	DONE	Done
FEAII-24	Identify development timeline and then the required steps to enter QA and then Prod		20/Jul /21 1:00 PM	26/Jul /21 1:25 PM	24/Jul /21	Patrick Funnell	Patrick Funnell	=	DONE	Done

FEAII-23	MTP XXX - Testing how Jira tags		20/Jul/21 11:10 AM	23/Jul/21 1:46 AM	22/Jul/21	Patrick Funnell	Patrick Funnell		DONE	Done
FEAII-22	Email David regarding incorrect dates in schedule for project		20/Jul/21 2:45 AM	27/Jul/21 10:41 AM	27/Jul/21	Patrick Funnell	Patrick Funnell		DONE	Done
FEAII-21	Testing discussed and converted into issues in Jira		20/Jul/21 2:35 AM	21/Jul/21 1:18 PM	27/Jul/21	Darren Sheehan	Patrick Funnell		DONE	Done
FEAII-14	Confirm other notebooks that are in production, can be presented		17/Jul/21 5:34 AM	09/Oct/21 5:12 AM	21/Jul/21	Patrick Funnell	Patrick Funnell		DONE	Done
FEAII-13	End to end solution planning		17/Jul/21 4:40 AM	27/Jul/21 8:25 AM	30/Jul/21	ablewitt	Patrick Funnell		DONE	Done
FEAII-12	Finalise LCAM Project Plan		17/Jul/21 1:14 AM	27/Jul/21 8:31 AM	17/Jul/21	Patrick Funnell	Patrick Funnell		DONE	Done
FEAII-11	Image Normalisation Investigation		16/Jul/21 11:16 AM	07/Sep/21 10:51 AM	23/Aug/21	Darren Sheehan	Patrick Funnell		DONE	Done
FEAII-10	Testing with RGB colour space		16/Jul/21 11:08 AM	01/Aug/21 4:05 AM	23/Jul/21	Cam	Patrick Funnell		DONE	Done
FEAII-9	Investigating shapefiles and related technical implementation		16/Jul/21 10:26 AM	26/Jul/21 1:19 PM	23/Jul/21	ablewitt	Patrick Funnell		DONE	Done
FEAII-8	Submit LCAM revision Session 2		16/Jul/21 9:06 AM	19/Jul/21 9:12 AM	17/Jul/21	Patrick Funnell	Patrick Funnell		DONE	Done
FEAII-7	Switch meeting minutes collection for our weekly meetings to confluence		16/Jul/21 9:05 AM	16/Jul/21 11:09 AM		Patrick Funnell	Patrick Funnell		TO DO	Unresolved
FEAII-6	Collate meeting minutes in confluence		16/Jul/21 9:05 AM	16/Jul/21 11:09 AM		Patrick Funnell	Patrick Funnell		IN PROGRESS	Unresolved
FEAII-5	Upload project management information		16/Jul/21 9:04 AM	21/Jul/21 1:13 PM		Patrick Funnell	Patrick Funnell		DONE	Done
FEAII-4	Create the confluence site		16/Jul/21 9:04 AM	16/Jul/21 9:15 AM		Patrick Funnell	Patrick Funnell		DONE	Done
FEAII-3	Populate Confluence		16/Jul/21 9:03 AM	21/Jul/21 1:13 PM	17/Jul/21	Patrick Funnell	Patrick Funnell		DONE	Done

105 issues