Customer : ESA Document Ref FRM4SST-MIN-SCL-021

Project : FRM4SST

Title : Minutes of Phase 3 PM7 Meeting

Abstract: This document contains the minutes of the Phase 3 PM7 meeting.

Author : Approved :

Sorrel Nelson Space ConneXions Limited

(Project Manager)

Werenfrid Wimmer University of Southampton

(Technical Leader)

Accepted by ESA:

Craig Donlon

ESA Technical Officer

Distribution: FRM4SST Project Team

ESA

EUROPEAN SPACE AGENCY CONTRACT REPORT

The work described in this document was done under ESA contract.

Responsibility for the contents resides in the author or organisation that prepared it.

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	ATTENDEES	1
3.	AGENDA	1
4.	MINUTES	2
4.1	Welcome	2
4.2	2 Tasks 1 and 2: Data Collection and maintenance of protocols and uncertainty budgets	2
	4.2.1 WP 21 – UoS Data Collection	2
	4.2.2 WP 22 – DMI Data Collection	2
	4.2.3 WP 23 – RAL Data Collection	3
4.3	Task 3: Process, archive, QC and delivery of FRM4SST data	3
	4.3.1 WP 20	3
	Task 4: Validation	
	4.4.1 WP 24	4
4.5	Task 5: FRM4SST Promotion and the ISFRN	4
	4.5.1 WP 10	4
	4.5.2 WP 11	
4.6	Task 6: Reporting and management	4
	4.6.1 WP 30 and WP31	
4.7	Open Actions	5
4.8	B AOB	6

1. INTRODUCTION

This document contains the minutes of the following meeting:

Project FRM4SST

Meeting ID Phase 3 PM7 Meeting

Venue WebEx
Date: 07/03/25

2. ATTENDEES

Present:

Werenfrid Wimmer WW University of Southampton

Ruth Wilson RW Space ConneXions Ltd

Sorrel Nelson SN Space ConneXions Ltd

Tim Nightingale TN STFC RAL Space
Arrow Lee AL STFC RAL Space

Craig Donlon CD ESA Technical Officer

Apologies:

Guisella Gacitúa GG DMI

3. AGENDA

10:30 Welcome

10:35 Work Package Presentations

Tasks 1 and 2: Data collection and maintenance of protocols and uncertainty budgets – 30 mins

- WP21 UoS Data Collection (UoS)
- WP22 DMI Data Collection (DMI)
- WP23 RAL Data Collection (RAL)

Task 3: Process, archive, QC and delivery of FRM4SST Data - 10 mins

WP20 (UoS)

Task 4: Validation – 15 mins

• WP24 (UoS)

Task 5: FRM4SST Promotion and the ISFRN - 10 mins

- WP 10 (SCL)
- WP 11 (SCL)

Task 6: Reporting, roadmap and management – 15 mins

- WP30 (SCL)
- WP31 (SCL)
- · Deliverables, milestones and schedules
- Open Actions

11:20 AOB - 5 mins

11:25 Meeting Close

4. MINUTES

4.1 Welcome

RW/SN welcomed everyone to the meeting.

RW checked in with WW on pending status of MS1 payments. WW mentioned there was a delay but this should be sorted now.

GG could not join us today as she is unwell, but we wish her a speedy recovery.

4.2 Tasks 1 and 2: Data Collection and maintenance of protocols and uncertainty budgets

4.2.1 WP 21 - UoS Data Collection

WW gave a presentation on WP 21 (see attachment 1). Additional points that arose include:

- Data from the ISAR deployment on METEOR for the EarthCARE satellite validation campaign in 10.08 to 24.09.2024, and the AMT in December, have been processed. WW is waiting to recover the actual ISAR for calibration.
- AMT 31 24/11/24 30/12/24 on RRS James Cook
- An ISAR will be used for an AMT on the Ocean Carbon 4 Climate project
- WW's new technician is working out well. WW mentioned that RH is retired but still active on some projects.

4.2.2 WP 22 - DMI Data Collection

GG was absent but will send slides with updates on WP 22 (see attachment 2).

Post meeting note: below are relevant details from the slides:

- ISAR19 retrieved on Feb 23 as monitoring of data collection had failed to connect
 to the instrument since January. Due to logistical reasons (DMI cars not available)
 it was only possible to retrieve it in February. When retrieved, the shutter was not
 properly closed. Back in the lab we found corrosion in the Hall switch, , power and
 rain gauge cables. We changed the damaged parts, did regular maintenance and
 run a post-calibration (data to be processed).
- ISAR8 not working as main board broken. It needs electronics upgrade.
- ISAR18 not working. Electronics to be shipped to Southampton for repairing.
 Pending data processing for deployment 27 (from 06/07-05/10) due to wrong time recording requiring extra treatment. This is expected to be processed in early 2025.

4.2.3 WP 23 - RAL Data Collection

AL gave a presentation on WP 23 (see attachment 3). Additional points that arose include:

- Post cruise 28 calibration issues, new scan mirrors have been made and delivered
- Cruise 29: Good quality data
- Cruise 30: Good data
- Upgrades: Calibration hardware
- Data processing reports 24,25,27,28 and 29 first issues are ready on Ifremer and CEDA. Some of the information is too sensitive for a public domain like the Ships4SST website, so AL decided to not host reports here. However, KML files could be created and put online, so that it is easier for the general public, including the Cunard sustainability team, to make plots using the ships4sst data.

Action PM7.01: AL/TN to consider KML files for website instead of the reports. Due by: ongoing

4.3 Task 3: Process, archive, QC and delivery of FRM4SST data

4.3.1 WP 20

WW gave a presentation on WP 20 (see attachment 4). The slides show the current status of the ships4sst archive. Additional points include:

- WW had extensive data to show and will send the slides to SN/RW so that the new plots can go on the website.
- WW now has the 2023/2024 data for M-AERI on the archive.
- The next validation run on Felyx is scheduled for March, so WW is hopeful that we will have these results to show at the ISFRN workshop.
- CD mentioned not having heard from Peter Minnett for a while and recent issues in America and NOAA.
- WW is in contact with Nicole Morgan, who has recently received a new ISAR.

4.4 Task 4: Validation

4.4.1 WP 24

WW gave a presentation on WP 24 (see attachment 5).

- WW's validation paper is ready to be sent to a journal, but he would like some more
 comments back before sending the paper off to the publishers. TN and CD asked
 WW to send out the paper again so that they can comment on it. He will send it
 out to the team for another review after he has added the 2018 2022 results to it
 as well.
- WW is waiting for the 2023 and 2024 data, which should be arriving in March.

4.5 Task 5: FRM4SST Promotion and the ISFRN

4.5.1 WP 10

SN gave a presentation on WP 10 (see attachment 6). Additional points that arose include:

- The website is being routinely updated with monthly 'results/news' and the project's 'X' page is active
- New website organisation to help users better navigate around the website was discussed.

Action PM7.02: SN to start updating new menu for ships4sst website. Due by: ongoing

 Next ISAR users meeting to be arranged for September, and at a time that Australia and China users could attend.

Action PM7.03: SN to arrange next ISAR user meeting for September. Due by: ongoing

• WW will hear back about his <u>ESA Living Planet Symposium</u> abstract in March. The team discussed meeting for a dinner together during the Symposium.

4.5.2 WP 11

SN gave a presentation on WP 11 (see attachment 6). Additional points that arose include:

- The team will meet in Southampton for the ISFRN workshop on Thursday 3, 12.30-5pm and Friday 4 April, 9:30am-12:30pm.
- Speakers for ISFRN 2025 are confirmed, abstracts nearly complete.
- SN will send out a link to the hotel that we stayed at for last year's workshop, and look into booking a restaurant for the evening meal(?).

4.6 Task 6: Reporting and management

4.6.1 WP 30 and WP31

RW gave a presentation on WP 30 (see attachment 7). Additional points include:

• PM8/MS2: Deliverables D1,D3,D4,D5, D6, D7 are due in June 2025

4.7 Open Actions

Action	Description	Who	Due Date	Status
ISFRN.01	Nicole will send WW the details of what she does to port the wall affect.	ww	31/05/24	Ongoing. 25/09/2024 WW will email PM7: Action closed
ISFRN.03	WW will look at Nicole's rolling pitch issues and come up with a plan to fix the issue	ww	30/06/24	25/09/2024 WW will email PM7: Action closed
ISFRN.05	Nicole to give feedback that the new printed doors are working fine (it will be fitted in August). If working well, we could replace all the old metal ones.	Nicole Morgan	After August 2024	Update: Not August, door will arrive in October PM7: new doors have just arrived so feedback will come in a few months' time.
ISFRN.06	CD/WW will look into a possible re-design of ISAR, so that it uses 2 maxxon motors including their own encoders.	CD/ WW	31/12/24	PM7: CD will not have the time to do this. Action Closed
ISFRN.08	SCL/UoS to develop issues log to be used by the ISAR users. This could be a Google doc? Or dropbox? It needs to have the option to attach pictures and documents. This will be sent around all the ships4sst data contractors.	WW/ All	30/08/24	PM7: WW will consider how to use it. Action closed
PM4.02	Contact the person in charge of the C3S in situ programme at ECMWF to see if they are interested in using ships4sst data in their SST validation	RW	31/07/24	Emailed; waiting to hear back. RW will discuss this at the C3S GA in June. Action closed

Action	Description	Who	Due Date	Status
PM5.01	WW will follow up on query of how parts can get more protection from humidity and corrosion. (there were problems with corrosion on the G55 board when WW and CD visited DMI in June)	WW	31/12/24	
PM6.02	SCL to resend ISAR Issues Log to WW to review.	SCL	Jan 2025	Action closed
PM7.01	AL/TN to consider KML files for website instead of the reports.	AL/TN	April 2025	
PM7.02	SN to start updating new menu for ships4sst website.	SN	April 2025	
PM7.03	SN to arrange next ISAR user meeting for September.	SN	April 2025	
PM7.04	SN to send out reminder for next PM8 meeting 18 July at 10am.	SN	April 2025	

4.8 AOB

Action PM7.04: SN to send out reminder for next PM8 meeting on 18 July at 10am.