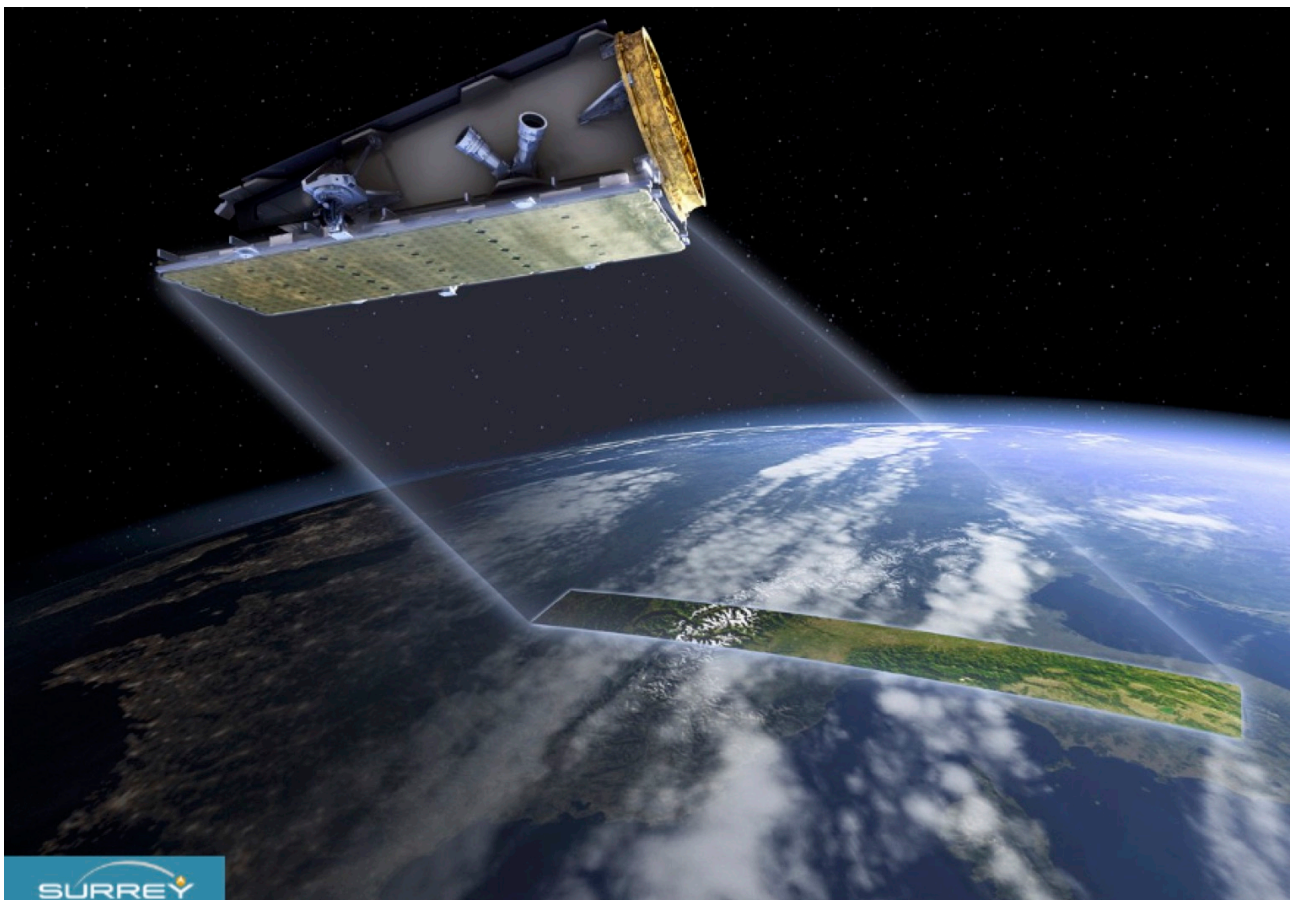




CSIRO SAR Community of Practice Meeting 2019 & SAR Science Initiative Workshop



CSIRO Black Mountain, Canberra, ACT

11 – 13 June 2019

Venue: Waterhouse Theatre, CSIRO Black Mountain, Canberra, ACT

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Day 1: Tuesday 11 June 2019		
Time	Topic	Speaker
10:30 - 11:00	Registration, coffee and tea	
11:00 - 11:10	Welcome address, meeting overview and logistics	Amy Parker, Jennifer Zhu, Zheng-Shu Zhou, CSIRO
11:10 - 11:40	The SAR Science Initiative Space Technologies Future Science Platform project	Amy Parker, CSIRO
Session 1: SAR Missions, Data Access and Processing		
11:40 - 12:10	Recent Development of Spaceborne Radar Remote Sensing and Potential Applications	Zheng-Shu Zhou, CSIRO
12:10 - 12:25	Overview of resources for accessing and processing SAR data and future missions	Amy Parker, CSIRO
12:25 - 12:55	Automatic processing of Sentinel-1 SAR using the Graph Processing Tool (GPT) in SNAP	Catherine Ticehurst, CSIRO
12:55 - 13:40	Lunch	
Session 2: SAR for Hydrological Applications		
13:40 - 14:10	SAR applications in groundwater sciences	Pascal Castelazzi, CSIRO
14:10 - 14:20	Using hydrodynamic modelling and SAR imagery for flood inundation modelling	Fazlul Karim, CSIRO
Session 3: SAR for Land Applications I		
14:20 - 14:50	InSAR-based hazard monitoring for Australia and the Pacific	Amy Parker, CSIRO
14:50 - 15:10	SAR for forest degradation mapping in REDD+	Neil Sims, CSIRO
15:10 - 15:40	Forest Structure Mapping Using Multi-Temporal Sentinel-1 RADAR Data in Robson Creek, Australia	Brent Murray, Winnipeg University (visiting CSIRO)
15:40 - 16:10	Coffee Break	
Session 4: Discussion Session		
16:10 - 17:00	Topics: <ul style="list-style-type: none">Australian SAR Supersites for multi-band data collection	All

	<ul style="list-style-type: none"> Mapping CSIRO's current and future international collaborations with SAR 	
17:00	Wrap-up for Day 1	
18:00 -	Catch-up & Informal Dinner – location TBD	

Day 2: Wednesday 12 June 2019		
Time	Topic	Speaker
09:00 - 09:15	Registration	
Session 5: SAR for Marine Applications		
09:15 - 09:45	Detecting Oil spills in Sentinel-1 SAR imagery	David Blondeau-Patissier, CSIRO
09:45 - 10:15	Sentinel-1 ocean surface wave measurements around Australia	Salman Saeed Khan, CSIRO
10:15 - 10:45	Coffee Break	
Session 6: SAR for Land Applications II		
10:45 - 11:15	Annual crop mapping using Landsat 8 OLI and Sentinel-1 SAR time series imagery	Drew Devereux, CSIRO
11:15 - 11:45	The power of integrating rich time-series of C-band SAR data for environmental condition assessment	Shaun Levick, CSIRO
11:45 - 12:05	SynthEEA – Data Synthesis for Environmental-Economic Accounting	Steve Stewart, CSIRO
12:05 - 13:00	Lunch	
Session 7: NovaSAR-1 operations and updates		
13:00 - 13:25	Introduction to NovaSAR-1 operations	Amy Parker, CSIRO
13:25 - 13:55	NovaSAR-1 orbits, modes and strategic background mission	Ake Rosenqvist, soloEO
13:55 - 15:15	OPAL: how to apply for NovaSAR-1 data and projects that were supported during Round 0	Amy Parker, CSIRO OPAL applicants
15:15 - 15:45	Coffee Break	

15:45 - 16:15	Open Q&A/discussions on potential applications or studies for NovaSAR-1	All
Session 8: NovaSAR-1 data demo		
16:15 - 16:45	Initial analysis of NovaSAR-1 commissioning data	Ake Rosenqvist, soloEO
16:45 - 17:15	Distribution of NovaSAR-1 test data and signing of end user license agreements	All
17:15	Wrap-up for Day 2	

Day 3: Thursday 13 June 2019		
Time	Topic	Speaker
08:45 - 09:00	Registration	
09:00 - 09:10	Introduction to Geoscience Australia and plans for building an Australian SAR community	Amy Parker, CSIRO
Session 9: Accessible SAR: Analysis Ready Data and Data Cubes		
09:10 - 09:30	An overview of the SAR ARD product definitions currently under development by CEOS	Ake Rosenqvist, soloEO
09:30 - 10:00	Sentinel-1 ARD InSAR products and progress towards large-scale Australian deformation maps	Matt Garthwaite, Geoscience Australia
10:00 - 10:30	Building an Australian SAR data cube	Catherine Ticehurst, CSIRO
10:30 - 10:45	High-performance computation of SAR analysis-ready data	Eric Lehmann, CSIRO
10:45 - 11:15	Coffee Break	
Session 10: SAR cal/val activities		
11:15 - 11:45	TBC	Medhavy Thankappan, Geoscience Australia
11:45 - 12:15	GAMMA-SNAP Comparison for Radiometric and Geometric Accuracy Assessment	Zheng-Shu Zhou, CSIRO

12:15 - 12:45	Discussion on SAR/InSAR ARD, NovaSAR-1 cal/val and data cubes	All
12:45 - 13:15	Lunch	
Session 11: Geoscience Australia SAR/InSAR Applications		
13:15 - 13:45	Surface water mapping with Sentinel-1	Fang Yuan, Geoscience Australia
13:45 - 14:15	InSAR applications to the resource industry	Thomas Fuhrmann, Geoscience Australia
14:15 - 14:45	Investigation of the tailings dam collapse at the Cadia Mine with Sentinel-1 and Sentinel-2	Sean Chua, Geoscience Australia
14:45 - 15:15	Urban monitoring of surface movements using high-resolution X-Band data	Thomas Fuhrmann, Geoscience Australia
Session 12: Discussion Session		
15:15 - 15:35	Coffee Break	
15:35 - 16:15	Topics: <ul style="list-style-type: none">A roadmap for Australian SARCollaboration including NovaSAR-1Looking towards future missions	All
16:15	Closing Remarks	