



Title: SRDP Risk Register	Authors: J. Kern, R. Treacy	Date: 6/25/2018
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Science Ready Data Products

Risk Register

Project 530

Released

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VERSION RELEASE BY	ORGANIZATION
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Change Record

VERSION	DATE	AUTHOR
1.1	6/25/2018	R. Treacy, J. Kern
Version 1.0 Release Notes: Released on content in draft Ver .06, 3/28/2018 Approved as part of document set defined in 530-SRDP-033-MGMT SRDP CoDR Package Approval by SharePoint workflow		
Version 1.01 Release Notes: Edits following CoDR		

Risk Identification										Risk Asses			
Category (Life cycle)	Risk Title [risk or opportunity]	Risk Number	Entry Date	Observatory Level Risk	Risk Description	Assessment Date	Source of Risk [cause]	Threat [effect]	Responsible POC	Probability (P)	Impact (I)	Composite Index (P*I)	Rating
Resource	Matrix organization	SRDP-1	2017Jul10	-	The SRDP project does not have direct oversight of critical project resources	2018Mar13	Observatory	Delayed Delivery		3	3	9	Med
Requirements	Scope Definition	SRDP-2	2017Jul10	-	Defining achievable consensus requirements in collaboration with a heterogeneous user community. Functionality will evolve with subsequent release cycles.	2017Jul10	User Community	Reputation loss		4	4	16	Med
Acceptance	Community Acceptance	SRDP-3	2017Jul10	SSR-08	Although established at other wavelengths, the SRDP initiative is a first for general purpose use at radio wavelengths.	2018Mar13	User Community	Reputation Loss		3	5	15	Med
Development	Delayed Algorithm Development	SRDP-4	2017Jul25	-	VCLASS is descoping algorithm development from their development project and putting it into operations. The risk is VCLASS will then distract SRDP project resources from delivering our principle goals by requiring continued effort on VCLASS	2018Mar13	VCLASS	Delayed Delivery		5	3	15	Med
Resource	Ops Manager	SRDP-5	2017Aug30	-	Recruitment of the Ops manager is delayed from the initial goal of FY18 Q1 to FY18 Q3	2018Mar13	Observatory	Late Operations Start		3	4	12	Med
Environment	Radio Frequency Interference	SRDP-6	2017Aug30	-	Radio frequency interference may prevent the successful generation of SRDP products in affected frequency ranges.	2018Mar13	Environment	Extra Effort Required for QA		4	3	12	Med
External	Archive pre-requisite failure	SRDP-7	2017Aug30	-	ALMA Archive fails to properly ingest calibration results. This will preclude using the results for the generation of SRDPs.	2018Mar13	ALMA	Unable to properly Serve ALMA Data		4	5	20	High
Resource	Delayed Hire of Project Scientist	SRDP-8	2017Sep05	?	The internal recruitment of the Project Scientist failed.	2018Mar13	Internal	Delayed Delivery		5	4	20	High

Requirements	Uncertainty in definition of Product QA	SRDP-9	2018Jan05	-	Defining Product QA has been a difficult problem for ALMA. The use of the QA process, and metrics to measure it have been hard to develop.	2018Mar13	Internal	Inconsistent Products Leads to Reputation Loss		3	2	6	Low
Resource	PMD Understaffing	SRDP-10	2018Jan05	-	PMD has been understaffed for several months, this may oversubscribe the PM for attention to other tasks outside of SRDP	2018Mar13	PMO	Delayed Delivery		4	3	12	Med
Requirements	ALMA Governance	SRDP-11	2018Jan05	-	ALMA governance model may delay or preclude addressing SRDP requirements in the ALMA OT.	2018Mar13	ALMA	Inability to deliver certain functionality		3	1	3	Low
Resource	DMS Resource conflict with VLASS	SRDP-12	2018Jan24	-	VLASS requirements continue to evolve, imposing high priority requirements on critical resources in DMS (SSA). This may impact timely delivery of SRDP functionality.	2018Mar13	VLASS	Delayed Delivery		3	3	9	Med
Process	DMS System Design Process	SRDP-13	2018Jan24	-	DMS does not have established processes for developing system designs that affect multiple subsystems.	2018Mar13	DMS	Incomplete or low quality delivered software		3	4	12	Med
Resource	Operations staff oversubscription	SRDP-14	2018Feb13	SSR-08	Unlimited reprocessing (optimized imaging) by the community could overwhelm the operations staff available for processing.	2018Mar13	Internal	Reputation Loss, High staff turnover		4	5	20	High
Resource	Computing Resources oversubscription	SRDP-15	2018Feb13	SSR-08	Sudden widespread acceptance and use of SRDP capabilities could overwhelm available computing resources.	2018Mar13	Internal	Reputation Loss		2	4	8	Low
Resource	Delayed beginning of Template Observing at VLA	SRDP-16	2018Feb27	-	NM Ops staff may be unavailable to implement template observing on SRDP Desired timescale.	2018Mar13	NMOps	Delayed Delivery, Extra Effort for QA		4	4	16	Med
Resource	Test Management	SRDP-17	2018Mar13	-	Most of the verification is done within DMS, validations are assigned by the CASA test manager, but fully coordinated test management across all the DMS products could be improved	2018Mar13	DMS	Low Software Quality		3	4	12	Med

Resource	DMS Architect Recruiting	SRDP-18	2018Apr02	-	The DMS architect is a key role for the delivery of integrated SRDP system requirements. The position is currently in recruitment, the risk is a suitable candidate is not identified.	2018Apr02	DMS	Delayed Delivery, Poor system design and integration		2	5	10	Med
Resource	ALMA Standard Product Quality	SRDP-19	2018May02	?	ALMA standard products do not meet the needs of the scientific community leading to increased demand for Optimized Imaging from the community.	2018May02	ALMA	Increased Demand for Optimized Imaging		4	5	20	High
External	CARTA Browser Unavailable	SRDP-20	2018May07	-	We plan to use the CARTA browser in the NRAO archive to allow online exploration of data. CARTA has had several aborted deliveries.	2018May07	ASIAA	Identify alternative product		3	4	12	Med

Assessment			Risk Mitigation			Action			
Other Considerations	Priority (1-n)	Contingency	Risk Treatment	Mitigation Strategy	Trigger	Action due date	Current Status	Closure Date	NOTES
			Periodically re-assess	Careful planning and communication with line management of other NRAO departments is essential.					
			Periodically re-assess	Careful stakeholder and expectation management as well as due diligence in requirements gathering and validation processes will be necessary to ensure satisfactory and transparent capture and prioritization of requirements is achieved		2018Apr15			
			Periodically re-assess	Building community acceptance and trust requires transparency and engagement.					
			Periodically re-assess	Priority within other projects is beyond our control, escalate if needed.					Specific instance of SRDP-4
			Accept	Cover with existing resources		2018Jun15			
			Mitigate	Engage with Observatory and ngVLA efforts on RFI mitigation.					
			Mitigate	Engage with ALMA Project Scientist to ensure prerequisites are addressed		2018Apr15			May be Resolved. Check with next deployment
	1		Accept	Engage recruiter for external hire. Make a large recruitment effort.		2018Apr15			If current recruitment fails then escalate to observatory level risk.

			Mitigate	Allocate effort for a comprehensive definition of QA meaning and metrics		2018Apr15			
			Mitigate	PMD has contracted some consulting help, mitigate by leveraging the added resources for SRDP support					Retire after new staff remove strain on PM
			Accept	Make those capabilities available through the reprocessing interface					
			Mitigate	Design deliverables to closely align with VLASS requirements to avoid conflict in early project.					Specific instance of SRDP-4
			Mitigate	Work with DMS to implement system level design process.		2018May10			
			Accept	Consistency in process at NAASC and NMOPS to allow resource balancing. Manage capability rollout to prevent shocks to the processing system.					
			Accept	See mitigation discussion in System Concept					Also carried on DMS register
			Accept	Be prepared to escalate if progress affects SRDP delivery					
			Mitigate	Use SRDP heuristics team to validate delivered software.					Re-evaluate after first delivery cycle

			Mitigate	Current Architect is continuing to serve until replacement is identified.					
		\$200K							
				If mitigation is required, consider re-using JVO tools.					

SRDP Risk Register
530-SRDP-006-MGMT

Date	Who	Version	Comment
7/10/2017		Ver 0.01	
7/25/2017		Ver 0.02	added risk for delayed algorithm development
8/30/2017		Ver 0.03	Added risk for missing ingestion of pipeline products and columns i
1/5/2018		Ver 0.04	Added risk for PMD understaffing likely to impact time for PM to c
3/13/2018	JSK	Ver 0.05	Completed risk assesment and strategy.
3/28/2018	JSK	Ver 0.06	Minor Edits from Quarterly assesment with Lewis
4/16/2018		Ver 1.0	Released for Codr
6/26/2018		Ver 1.01	Edfits following CoDER

for entry and assessment dates
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Composite Index Range	Risk rating
0-8	Low
9-16	Medium
17-25	High

Risk Treatment	Description
Avoidance	eliminate, withdraw from or not become involved
Reduction	optimise - mitigate
Sharing	transfer - outsource or insure
Retention	accept and budget