

# LE Production report and planning

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Production meeting  
December 12th, 2024

# LE production request

[RITM2205749](#)

	<b>samples</b>	<b>full sample, TB</b>	<b>validation sample (50k), TB</b>
1	FD2-VD MARLEY CC (0.8 M)	0,64	0,04
2	FD1-HD MARLEY CC (0.8M)	0,456	0,0285
3	FD2-VD Radiological background + MARLEY CC (2.4M)	576	12
4	FD1-HD Radiological background central APA + MARLEY CC (0.8M)	54,24	3,39
5	FD1-HD Radiological background lateral APA + MARLEY CC (0.8M)	54,24	3,39
6	FD2-VD MARLEY ES (0.2M)	0,16	0,04
7	FD1-HD MARLEY ES (0.2M)	0,114	0,0285
8	FD2-VD Radiological background + MARLEY ES (0.6M)	144	12
9	FD1-HD Radiological background central APA + MARLEY ES (0.2M)	13,56	3,39
10	FD1-HD Radiological background lateral APA + MARLEY ES (0.2M)	8,34	2,085
11	FD2-VD Radiological background (1M)	240	12
12	FD1-HD Radiological central APA (0.5M)	34,05	3,405
13	FD1-HD Radiological lateral APA (0.5M)	20,95	2,095
14	FD1-HD Neutrons (filtered) - 100 million events filter at g4 level target 1M events	0,570	
		<b>data volume(TB)</b>	<b>validation samples(TB)</b>
		<b>1147,32</b>	<b>53,9205</b> 2

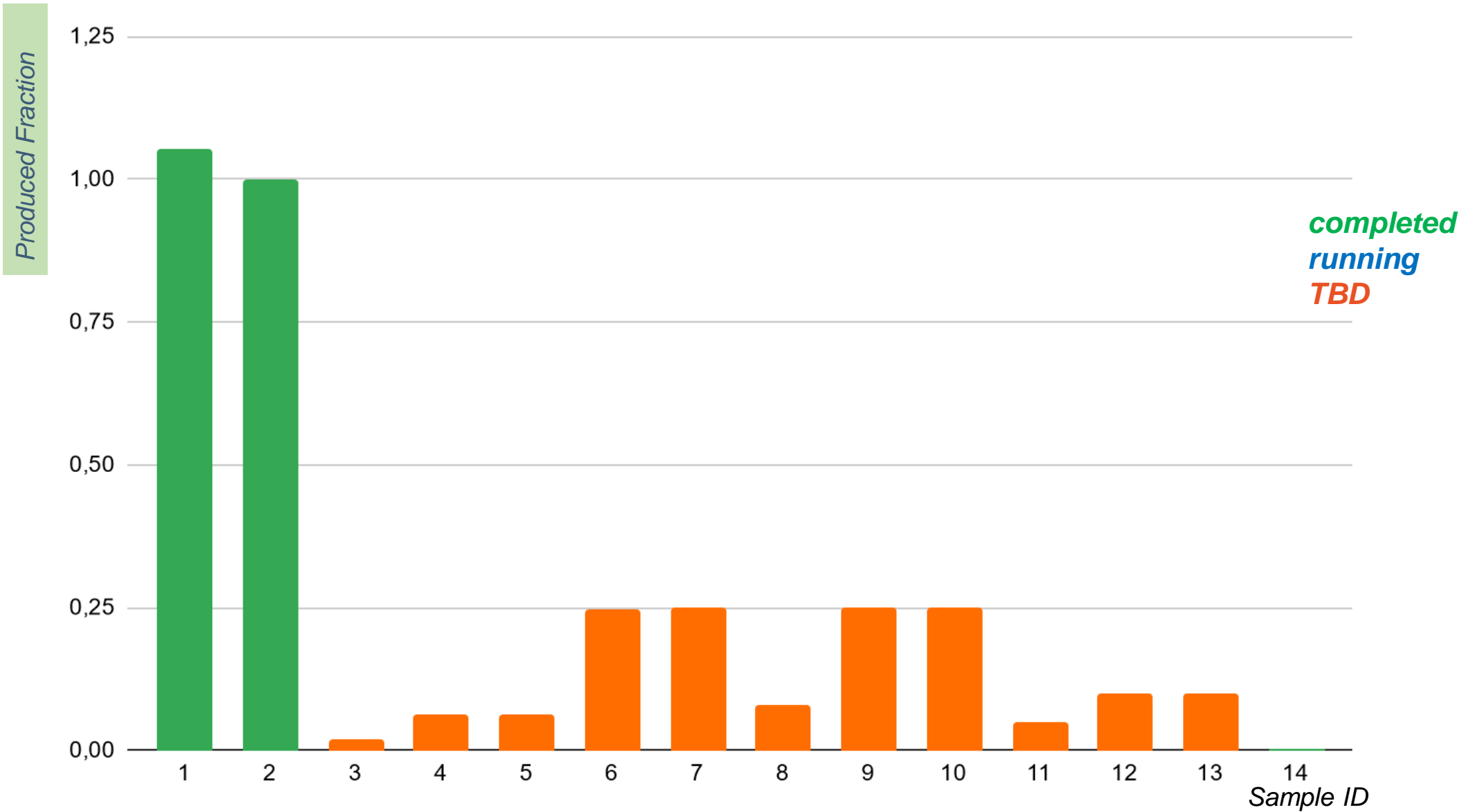
# Campaign organization

- [google doc](#)
- working dir: `/exp/dune/app/home/dunepro/le_ritm2205749`  
(one subdir for each sample)
- Validation samples produced (October)
- Dataset created (description in the [wiki](#))
- November 15<sup>th</sup>: Formal approval for full production received from Dom and Laura

# Validation samples: summary tables

sample id	workflow(s)	date	lifetime-days	evts/file	# files	volume	
1	<a href="#">3785</a>	2024-10-23	120 (2025-2-20)	100	499	40 GB	MERGING NEEDED
2	<a href="#">3786</a>	2024-10-23	120 (2025-2-20)	100	500	26 GB	MERGING NEEDED
3	<a href="#">3799</a> <a href="#">3844</a>	2024-10-23	120 (2025-2-20)	10	4760	14 TB	
4	<a href="#">3800</a>	2024-10-23	120 (2025-2-20)	50	1000	3 TB	
5	<a href="#">3801</a>	2024-10-24	120 (2025-2-21)	50	1000	1.8 TB	
6	<a href="#">3840</a>	2024-10-25	120 (2025-2-22)	100	497	37 GB	MERGING NEEDED
7	<a href="#">3848</a>	2024-10-26	120 (2025-2-23)	100	498	23 GB	MERGING NEEDED
8	<a href="#">3808</a>	2024-10-24	120 (2025-2-21)	10	4860	14.5 TB	
9	<a href="#">3809</a>	2024-10-24	120 (2025-2-21)	50	999	3 TB	
10	<a href="#">3787</a>	2024-10-23	120 (2025-2-20)	50	1000	1.8 TB	
11	<a href="#">3811</a> <a href="#">3841</a> <a href="#">4057</a>	2024-10-24	120 (2025-2-21)	10	5020	15 TB	
12	<a href="#">3842</a>	2024-10-25	120 (2025-2-22)	50	995	3 TB	
13	<a href="#">3843</a>	2024-10-25	120 (2025-2-22)	50	991	1.8 TB	

# Production status (Dec 12th)



# Production status

- Samples 1 and 2 completed: merging needed (see next slides)
  - Sample 1:
    - ✓ FD-VD MARLEY CC (no background) 800k events
    - ✓ 100 events/job output file ~80M → merging needed
    - ✓ 16 workflows, 500 jobs each, 8K jobs submitted, efficiency > 99.5%
    - ✓ output files in scratch (~630 GB)
  - Sample 2:
    - ✓ FD-HD MARLEY CC (no background) 800k events
    - ✓ 100 events/job output file ~60M → merging needed
    - ✓ 15 workflows, 500 jobs each, 7.5K jobs submitted, efficiency > 99.5%
    - ✓ output files in scratch (~400 GB)
- Sample 3 : can be started. When?

# Samples 1 and 2 merging

- Art files: use *MergeLar.sh* ([wiki](#)), input: file lis
- Sample 1: FD-VD

1. Files to merge: 499 from the validation samples, on disk at FNAL

Dataset: [fardet-vd:fardet-vd\\_hit-reconstructed\\_v09\\_91\\_04d00\\_standard\\_reco1\\_dunevd10kt\\_1x8x14\\_3view\\_30deg\\_prodmarley\\_nue\\_cc\\_flat\\_dunevd10kt\\_1x8x14\\_3view\\_30deg\\_out1\\_validation](#)

2. Files in scratch area (8000)

- Sample 2: FD-HD

1. Files to merge: 500 from the validation samples, on disk at FNAL

Dataset: [fardet-hd:fardet-hd\\_hit-reconstructed\\_v09\\_91\\_04d00\\_reco1\\_supernova\\_dune10kt\\_1x2x6\\_prodmarley\\_nue\\_cc\\_flat\\_dune10kt\\_1x2x6\\_out1\\_validation](#)

2. Files in scratch area (7500)

- Merging tested and results available here:
  - /pnfs/dune/scratch/users/epennacc/merging/fardet-hd\_supernova\_0\_500\_artcat.fcl\_20241212T080516
  - /pnfs/dune/scratch/users/epennacc/merging/fardet-vd\_supernova\_0\_500\_artcat.fcl\_20241205T043522
  
- Chunks of 25 files:
  - 2500 events/file
  - filesize 2 GB FDdVD, 1.4 GB FD-HD
  
- Asked Dom and Laura to validate the content of the merged files
  
- **TBD , next week:** (Elisabetta and Aaron):
  - check metadata
  - test declaration
  - merge all files