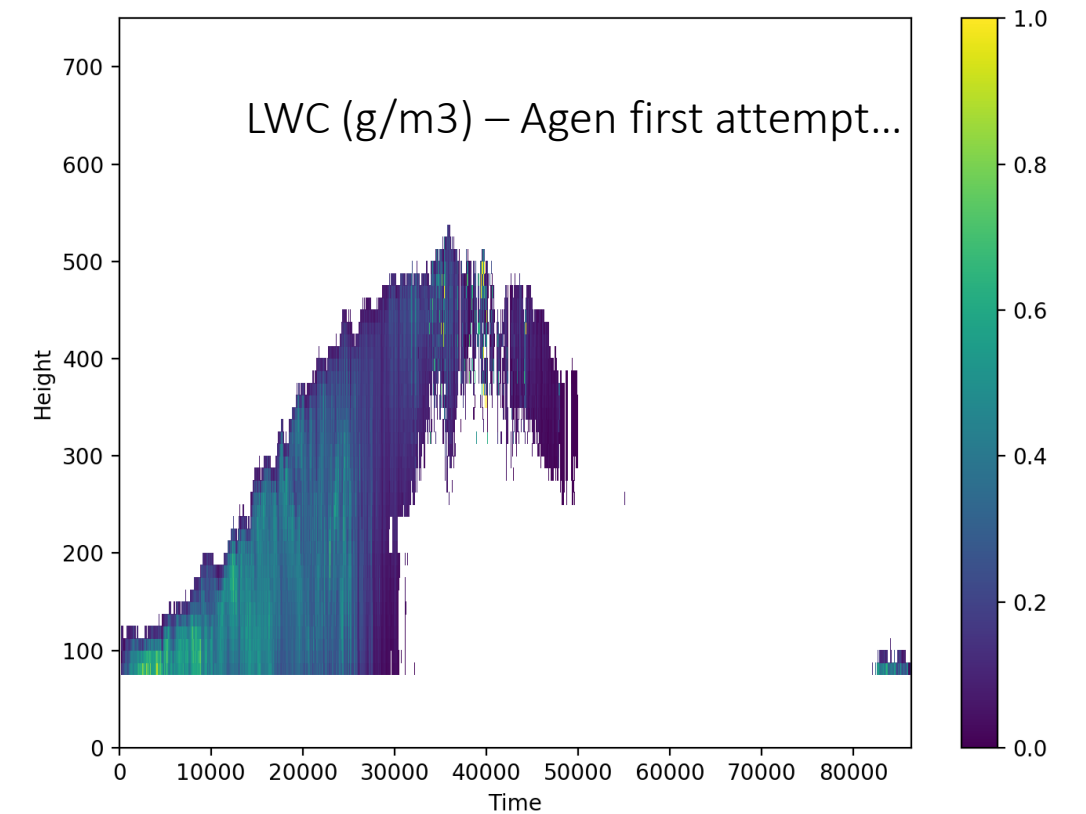# SOFOG3D

16 June 2020

Outline

- Update on Pragya's work
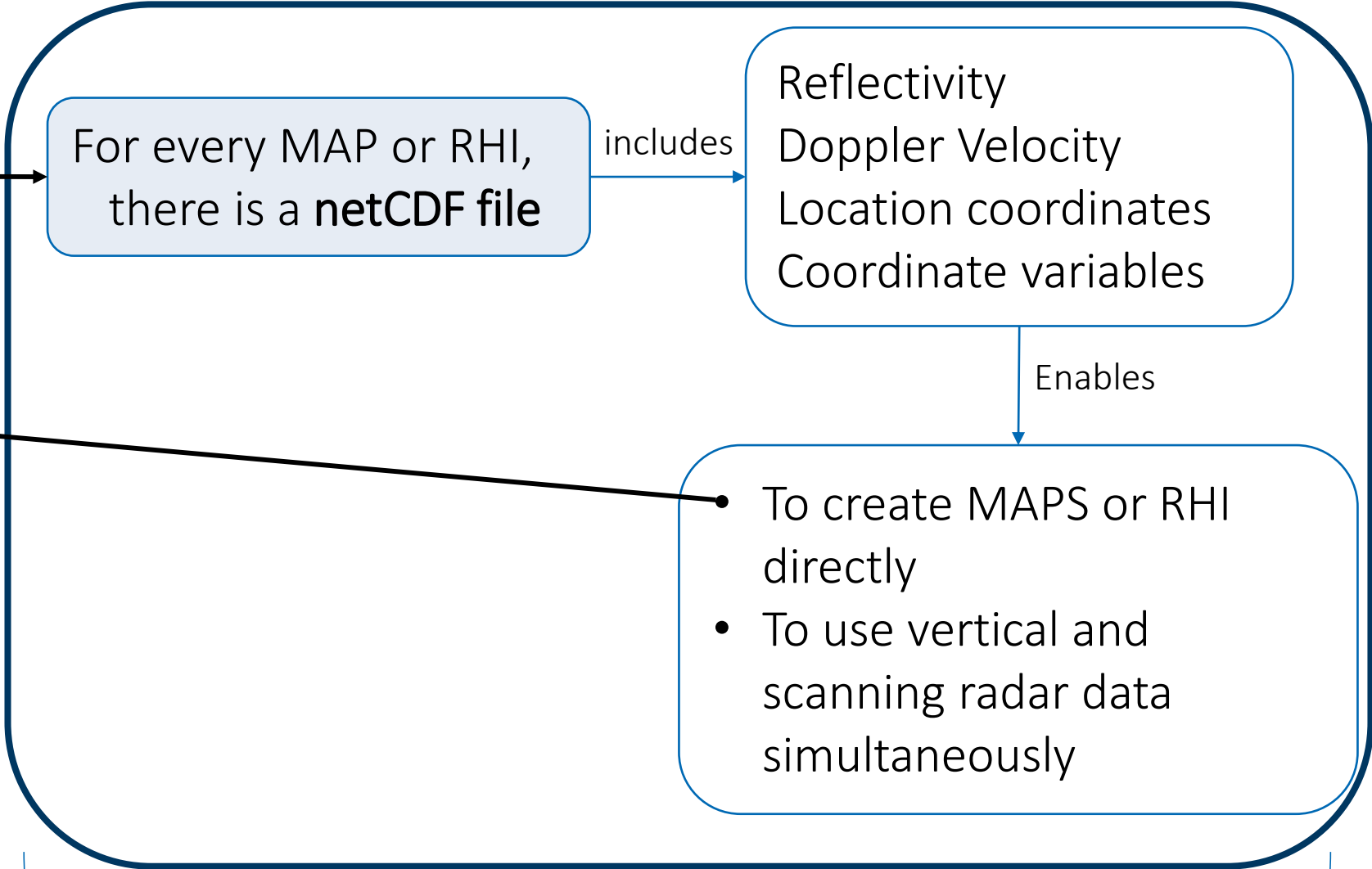- New files and documents available

Pragya's work

- First version of the retrieval tested on synthetic profile

Z, LWP are assimilated in order to retrieve LWC and a (The forward model $Z = aLWC^b$)

- First adaptation to real data (more than a single profile):

Agen site: LWP from HATPRO and Z from BASTA-CNRM

We will develop an ancillary file with LWP, temperature etc… co-located to BASTA L2a data (for both Agen and Super Site)

We will look at the impact of using LWP on a parameter and test different LWP from Pauline

We need to evaluate the impact of the radar blind area… (when LWP is assimilated)

LWC (g/m3) – Agen first attempt…

Document availability

	Previously available	New products
Radar data	L0 L1 L2	MAPS netCDF RHI netCDF
Quicklooks	MAPS (Scanning BASTA) RHI (Scanning BASTA) Reflectivity (Vertical BASTA) Doppler Velocity (Vertical BASTA)	
Documentation	Catalogue	L1* L2* MAPS/RHI doc

* Work in progress

For every MAP or RHI, there is a **netCDF file**

includes

Reflectivity
Doppler Velocity
Location coordinates
Coordinate variables

Enables

- To create MAPS or RHI directly
- To use vertical and scanning radar data simultaneously

This document explains the netCDF variables

Example: MAP

Quicklook	
Radar:	BASTA-mini LATMOS
Data Acquisition mode:	Scanning
Sampling mode:	12m5
Data:	MAPS

Figure file name = netCDF file name:

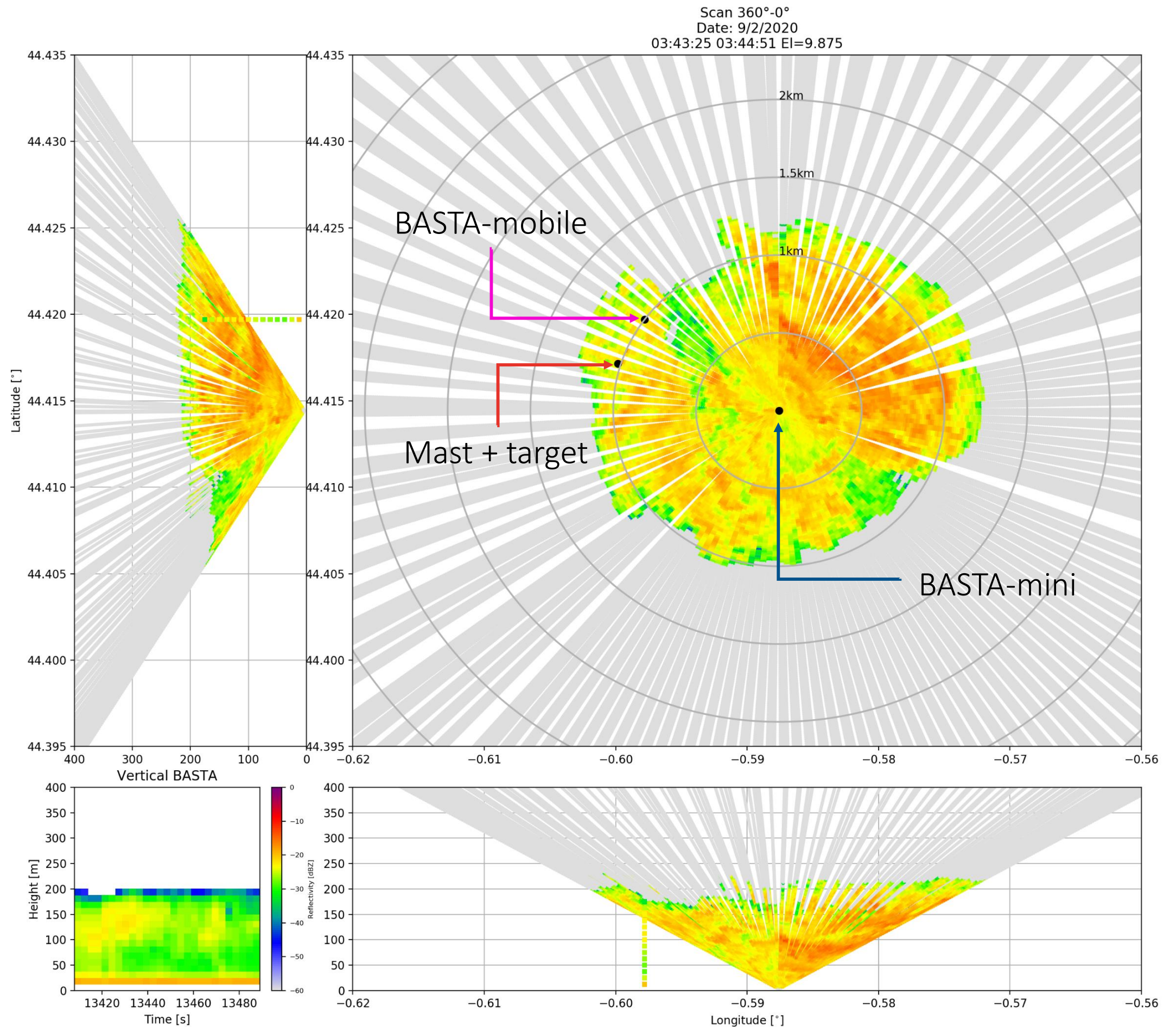seq_16_maps_360_0_20200209_034325_034451_El=9.875

Date   Time interval   Elevation

NetCDF variables	
Location coordinates	Supersite
	BASTA-mini LATMOS
	BASTA-mobile LATMOS
	Mast + target
Coordinate variables	Coordinates for each gate during the sweep: latitude, longitude, height

Scan 360°-0°
Date: 9/2/2020
03:43:25 03:44:51 El=9.875

BASTA-mobile

Mast + target

BASTA-mini

Vertical BASTA