

# WP3 Overview

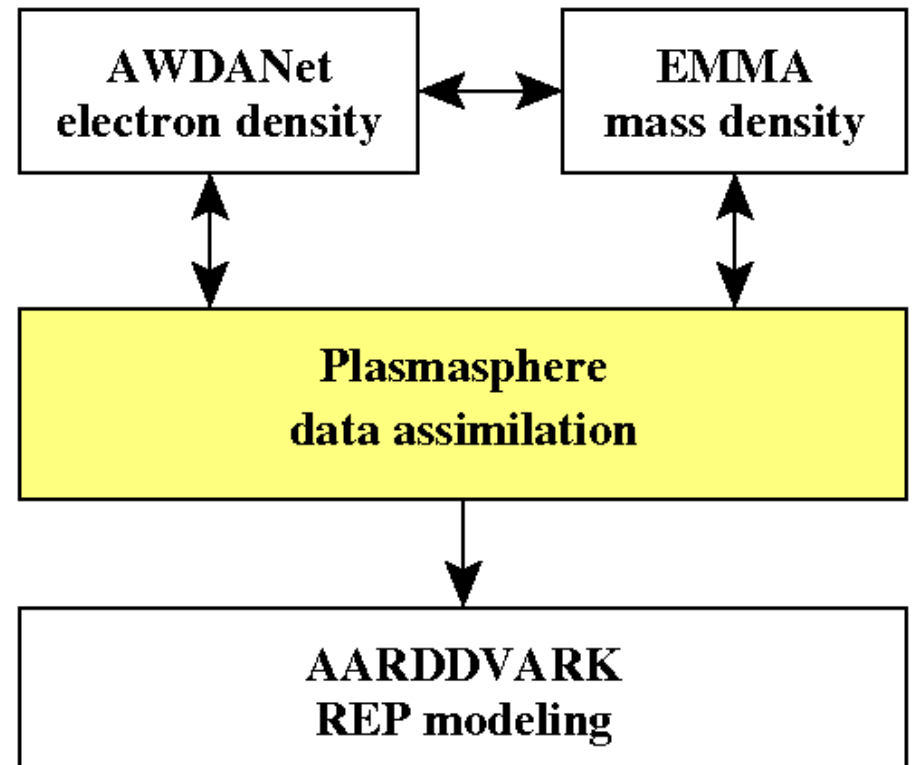
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# Objectives

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- Develop a Particle Filter based data assimilation framework for plasmaspheric data assimilation and compare it with a Kalman filter
- Create data ingestion functions for FLR data, whistler data, and in-situ density measurements
- Test the assimilation by comparing with in-situ observations
- Provide plasmaspheric density maps for WP4



# Participants

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## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
1	ELTE	4.00
3	ELGI	4.00
7	HMO	2.00
8	NMT	20.00
9	IGFPAS	2.00
11	LANL	2.00
	Total	34.00

# Deliverables

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List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D3.1	A data assimilation code written in C++ and parallelized with MPI	8	10.00	R	PU	24
D3.2	Plasma density maps as a function of time for interesting study periods selected by the project.	8	12.00	R	PU	24
D3.3	A set of instruction that allows users to run the assimilation code	8	12.00	R	PU	42
		Total	34.00			

# Milestones

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## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS6	Basic particle filter and Ensemble Kalman filter	8	6	Documentation available
MS7	Compare particle and Kalman filter with simulated data	8	12	Documentation available
MS8	Demonstrate use of data assimilation with whistler and FLR data	8	24	Documentation available
MS9	Begin delivering plasma density maps to work package 4	8	24	Documentation available

# Summary

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- Milestones modified
- No impact on rest of PLASMON
- WP 3 on schedule