
Delta


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CREDOS
WakeNet Europe

Eurocontrol Headquarters
Brussels
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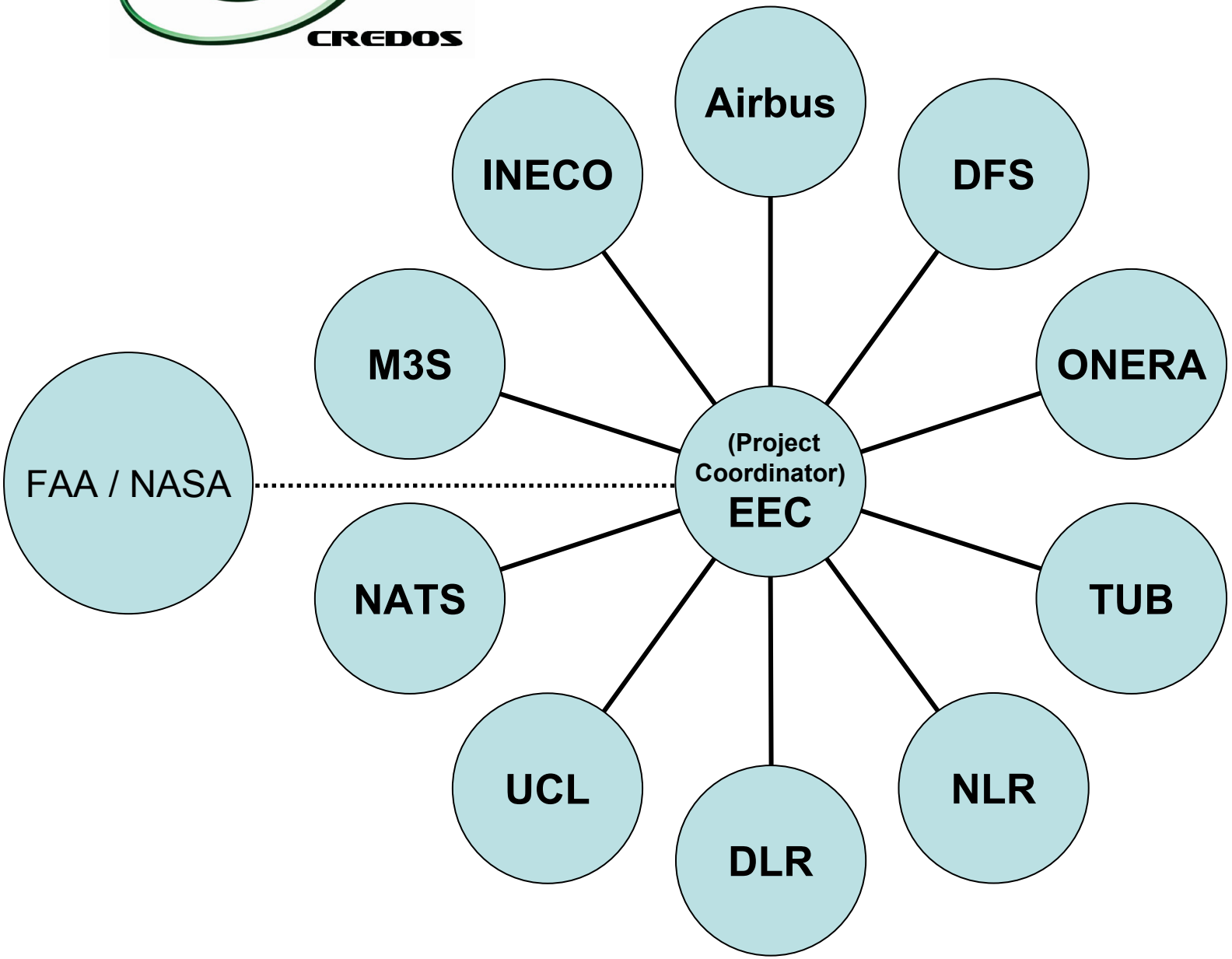
ATC-Wake Results

2.5 nm

	Extra Movements per Day Possible under ATC-Wake (number of Queued Hours per day)				
Airport	**Winter**	**Spring**	**Summer**	**Autumn**	**Annual Total**
EDDF	41 (13)	31 (15)	23 (14)	29 (15)	11315
EDDM	0 (0)	0 (0)	0 (0)	0 (0)	0
EHAM*	0 (0)	0 (0)	0 (0)	0 (0)	0
LIRF*	1 (1)	0 (2)	9 (4)	3 (4)	1186
LFPG	0 (0)	14 (2)	2 (1)	4 (1)	1824
LSZH	2 (2)	1 (2)	0 (2)	1 (2)	365
LEMD	10 (9)	11 (9)	20 (12)	10 (10)	4653
LEBL	0 (0)	0 (0)	0 (0)	0 (0)	0
EGLL	69 (14)	84 (15)	59 (14)	72 (16)	25915
EGKK	0 (0)	0 (0)	0 (0)	0 (0)	0
EGCC	0 (0)	0 (0)	0 (0)	0 (0)	0

The CREDOS Consortium



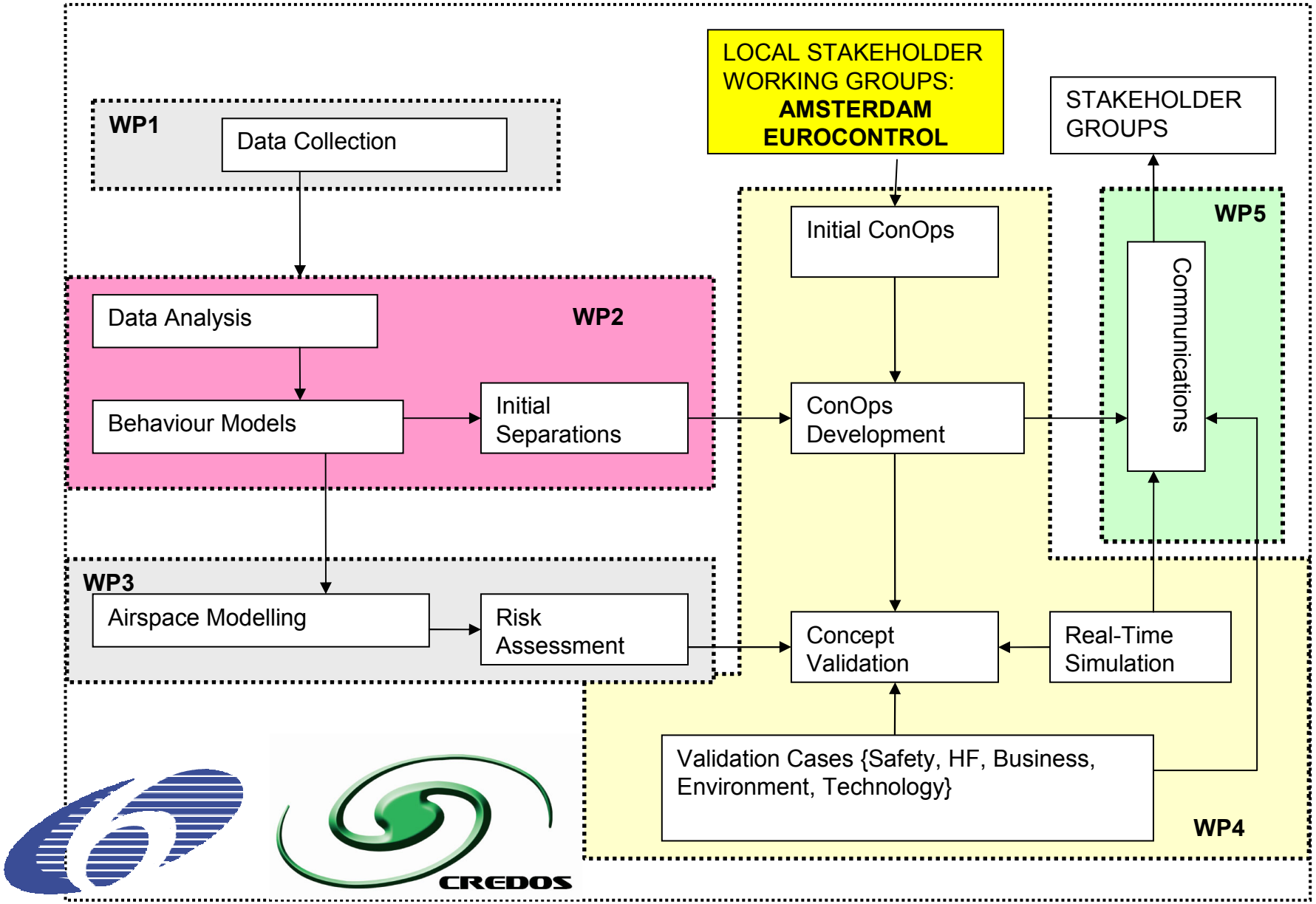
OBJECTIVES

- Demonstrate the feasibility of an Operational Concept for Reduced Separations for Single Runway Departures under Crosswind

Validate

- Provide all stakeholders with the required information for the implementation of this concept where appropriate in the near-term (pre-2012)

Implement


LOCAL STAKEHOLDER WORKING GROUPS: AMSTERDAM EUROCONTROL
STAKEHOLDER GROUPS
WP1
Data Collection
Initial ConOps
WP5
Communications
Data Analysis
WP2
Behaviour Models
Initial Separations
ConOps Development
WP3
Airspace Modelling
Risk Assessment
Concept Validation
Real-Time Simulation
Validation Cases {Safety, HF, Business, Environment, Technology}
WP4
CREDOS

Future Demand

	ATC-Wake, 3Nm		CREDOS, 80s	
Airport	*Current Demand*	*Constant Demand*	*Current Demand*	*Constant Demand*
EGLL	10,858	12,318	9,490	10,220
EDDF	3,923	6,002	91	3,011
EHAM	1,277	9,307	638	5,200
LFPG	638	13,961	0	3,832
LEMD	547	1,460	456	1,095
EDDM	0	273	0	91
LIRF	0	1,733	0	912
LSZH	0	912	0	547
LEBL	0	273	0	91
EGKK	0	4,471	0	2,372
EGCC	0	9,125	0	5,110

Conclusion

The CREDOS Project:

- Sound Basis / Wide Support
- Part of a wider picture
- Laying the way for implementation

CREDOS

Crosswind-reduced Separations for Departure Operations

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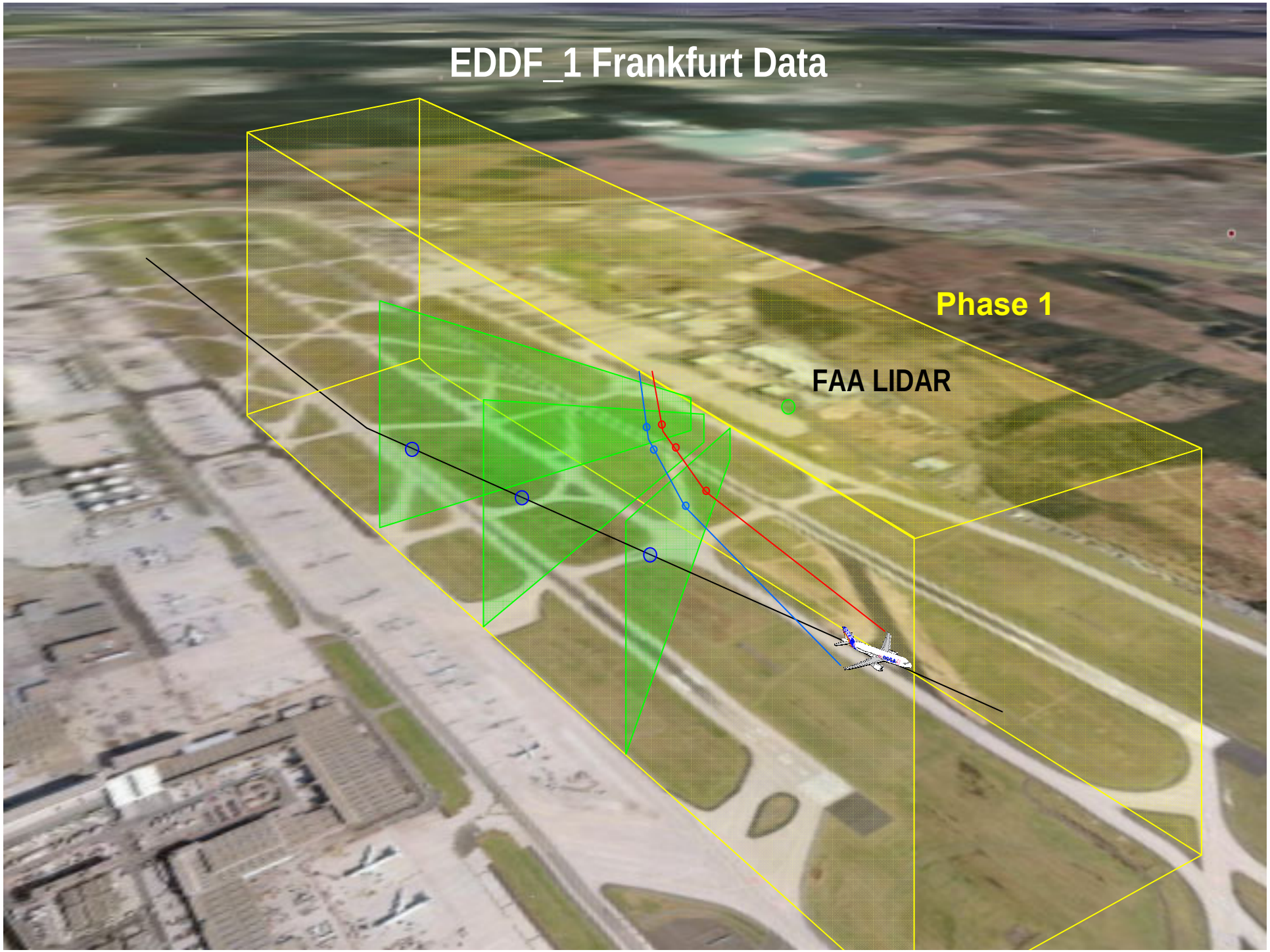
OneSky Teamsite: CREDOS


WindTracer®

WV Behaviour Models

- AVOSS Predictor Algorithm
  - APA (NASA)
- Probabilistic 2-Phase Model
  - P2P (DLR)
- Probabilistic Vortex Forecast System
  - P-VFS (UCL)

Validation strategy


EDDF_1 Frankfurt Data
Phase 1
FAA LIDAR