

# Radar Doppler Spectra Products -- Next steps for MicroARSCCL

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*Radar data products breakout session*

*2016 ARM/ASR Joint User Facility and PI Meeting*

*May 4, 2016*



Stony Brook University

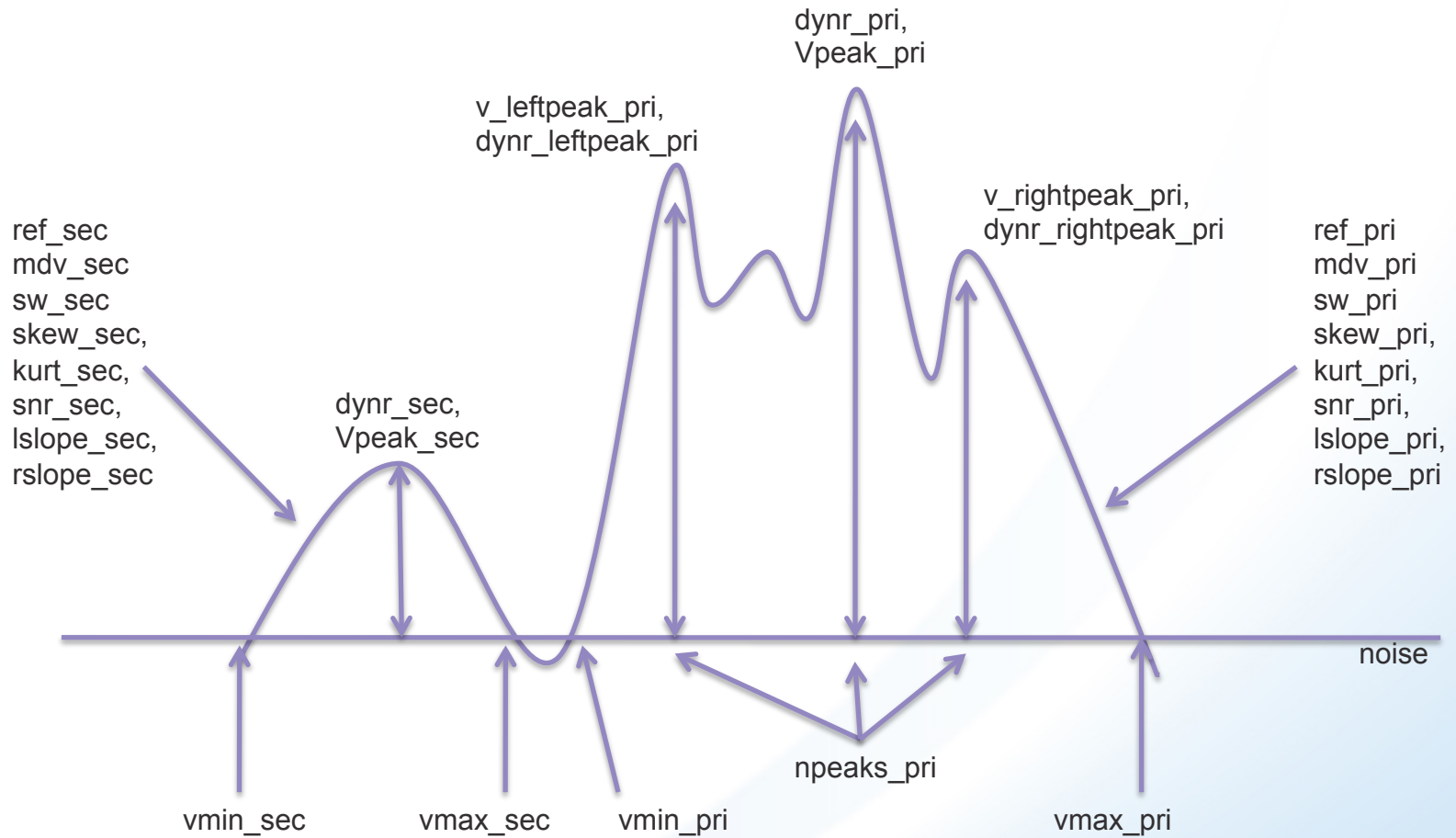
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*a passion for discovery*

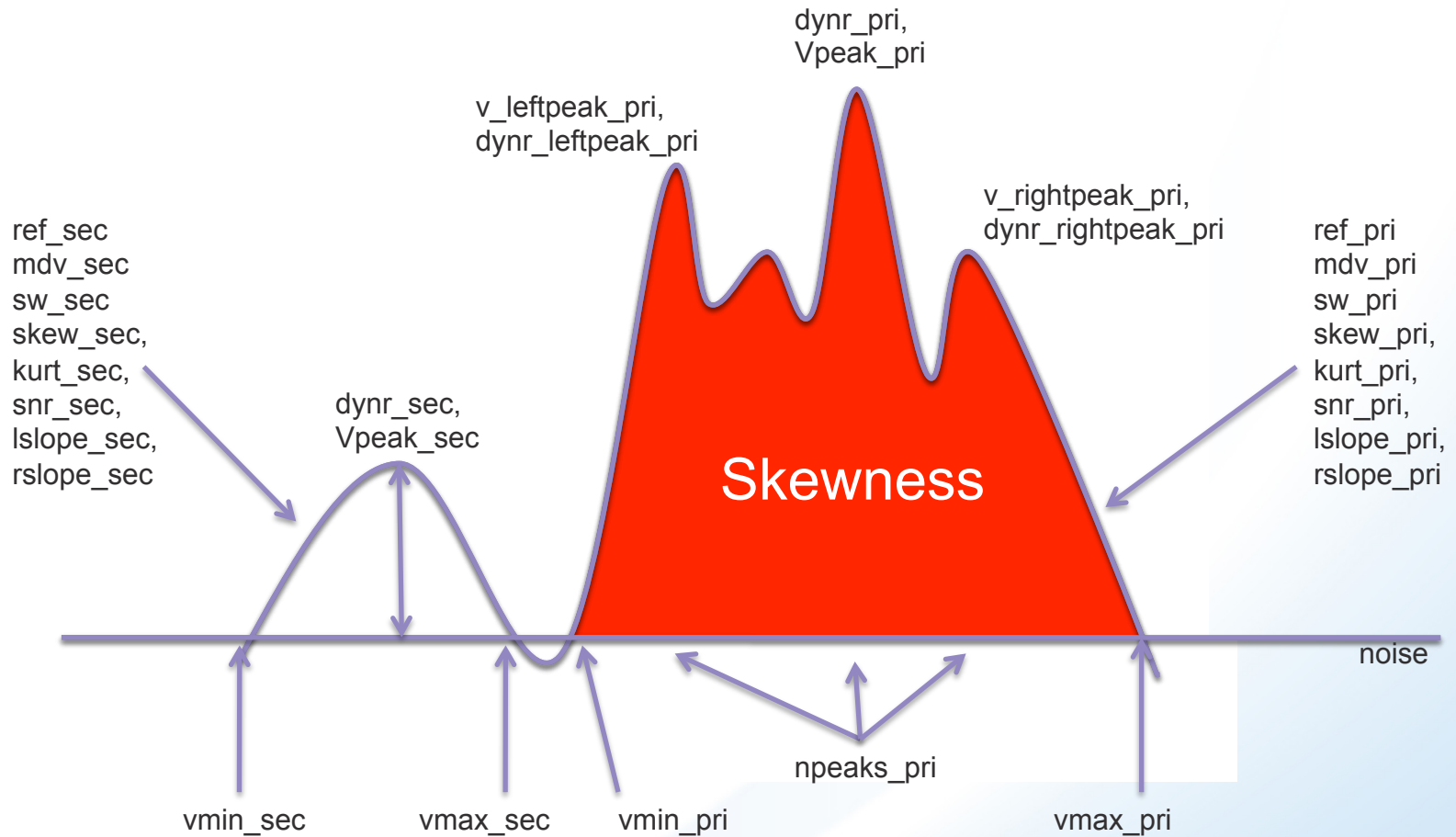
 Office of Science  
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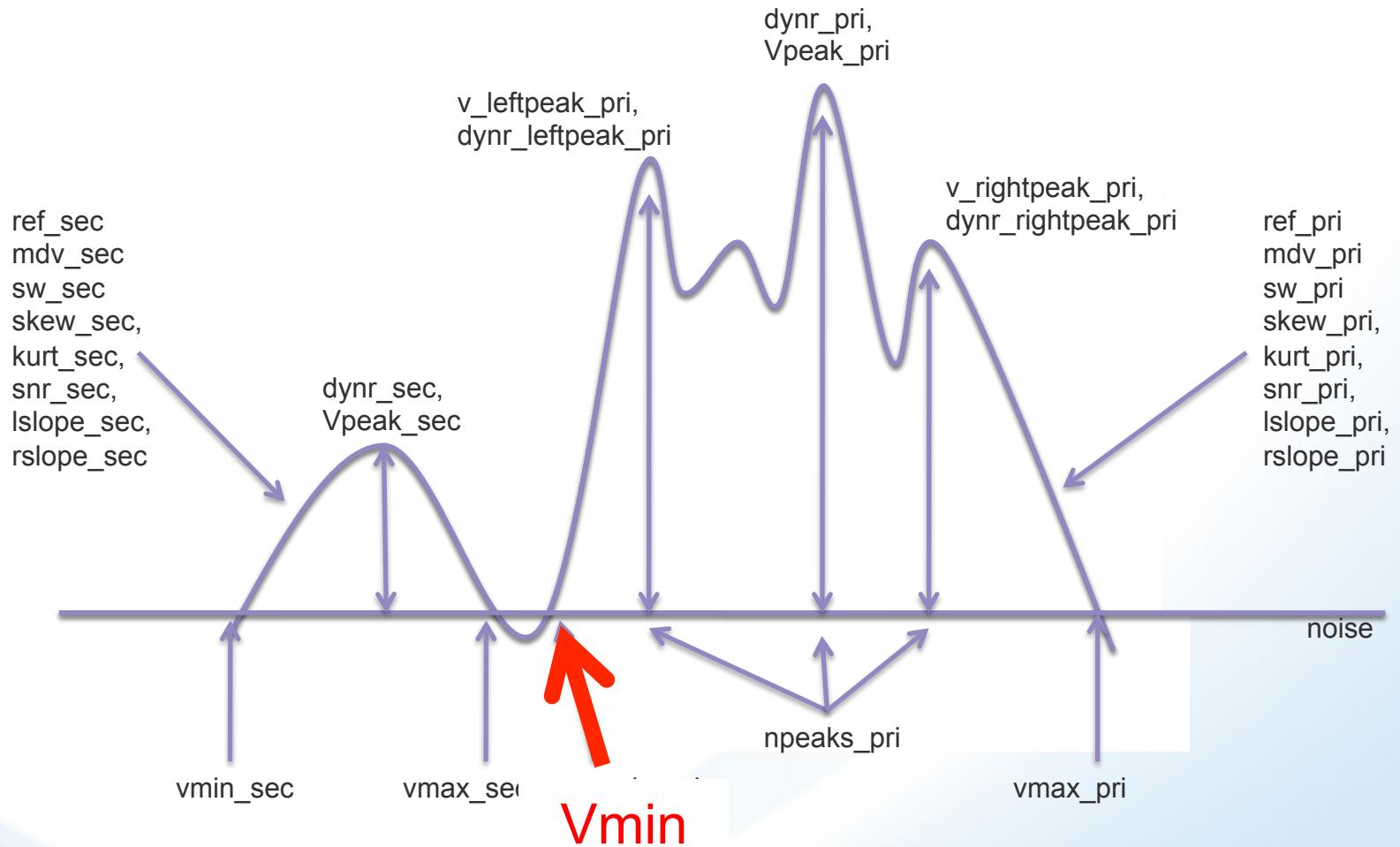
# Review of current MicroARSCCL



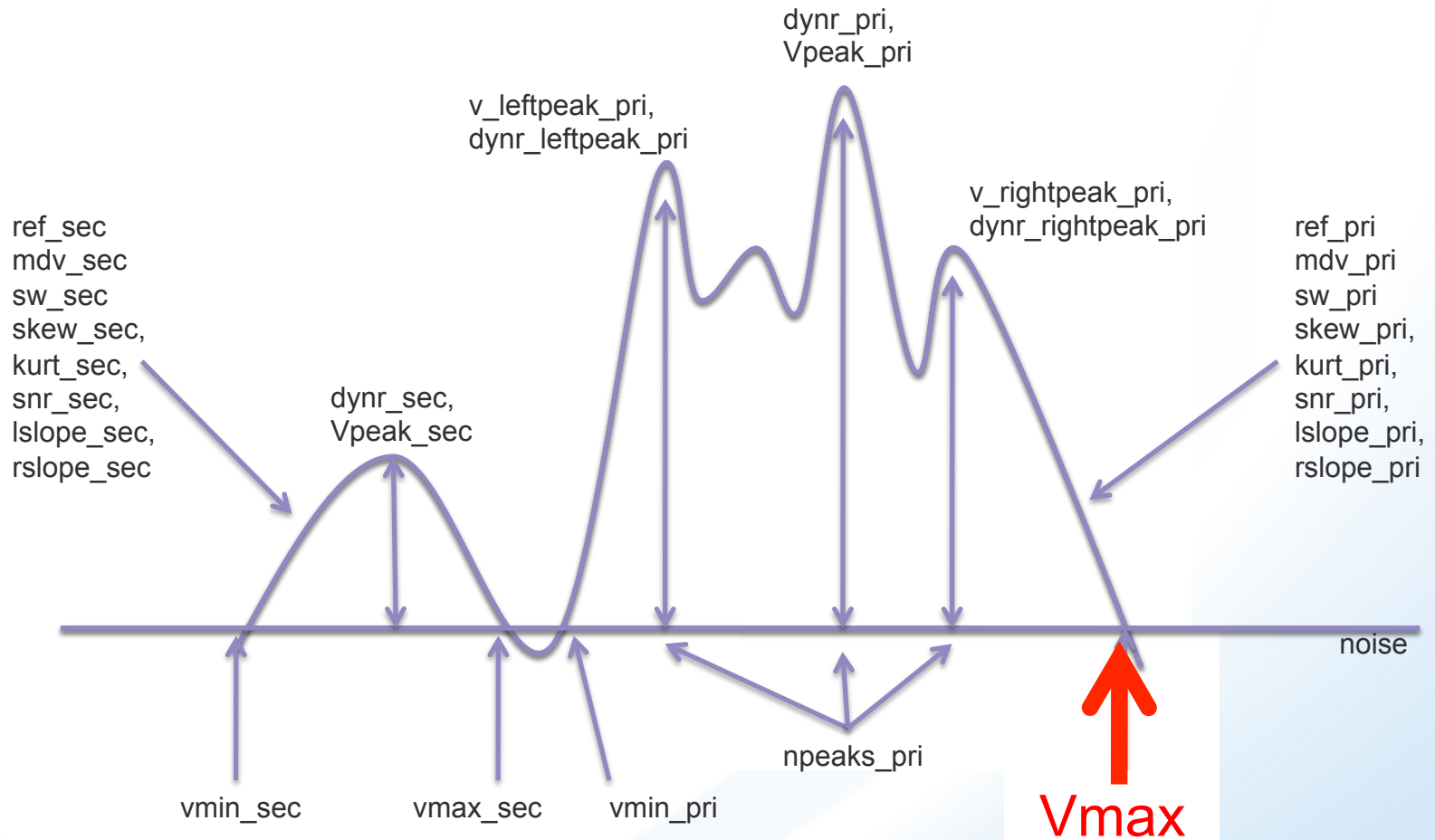
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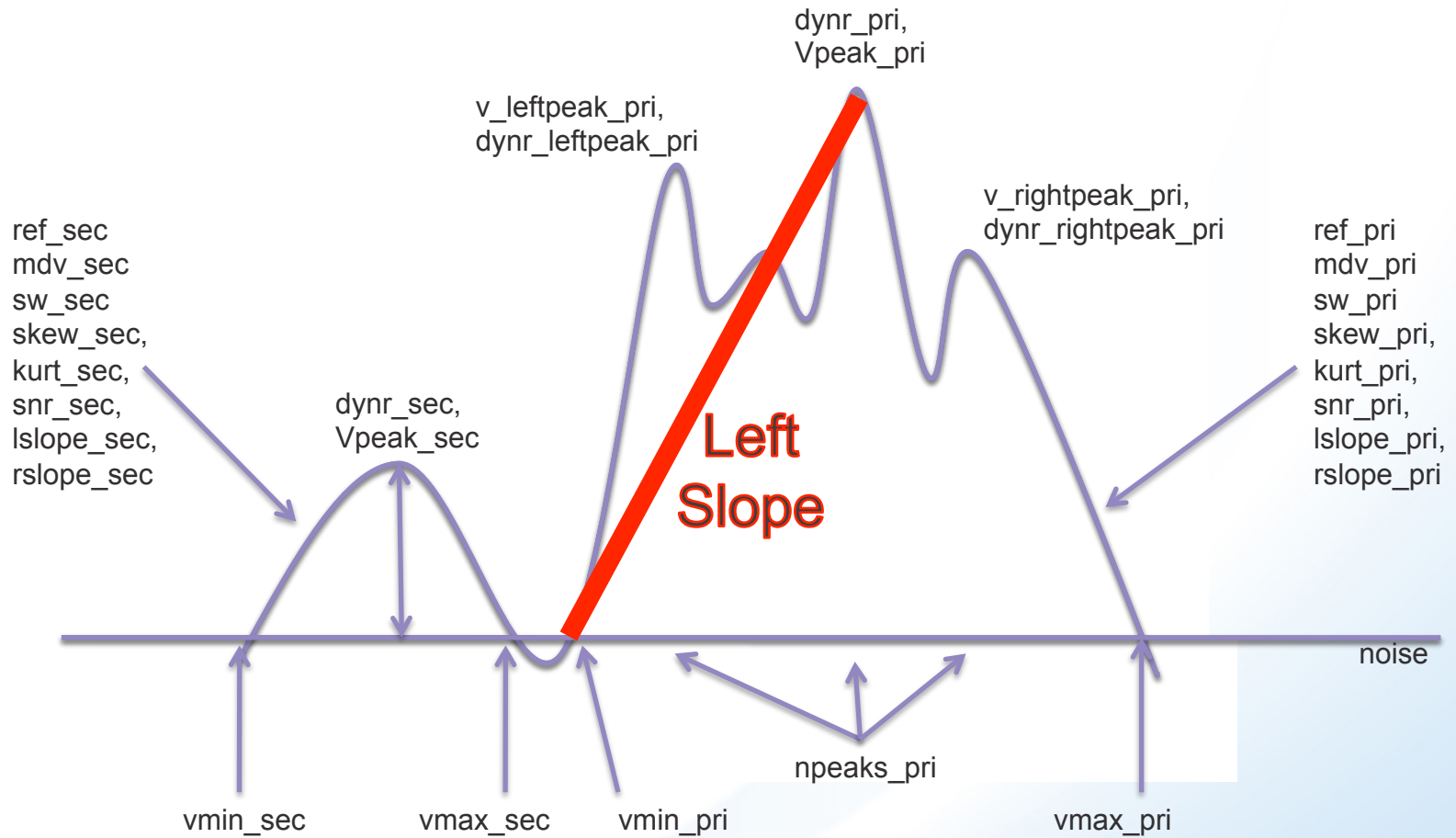
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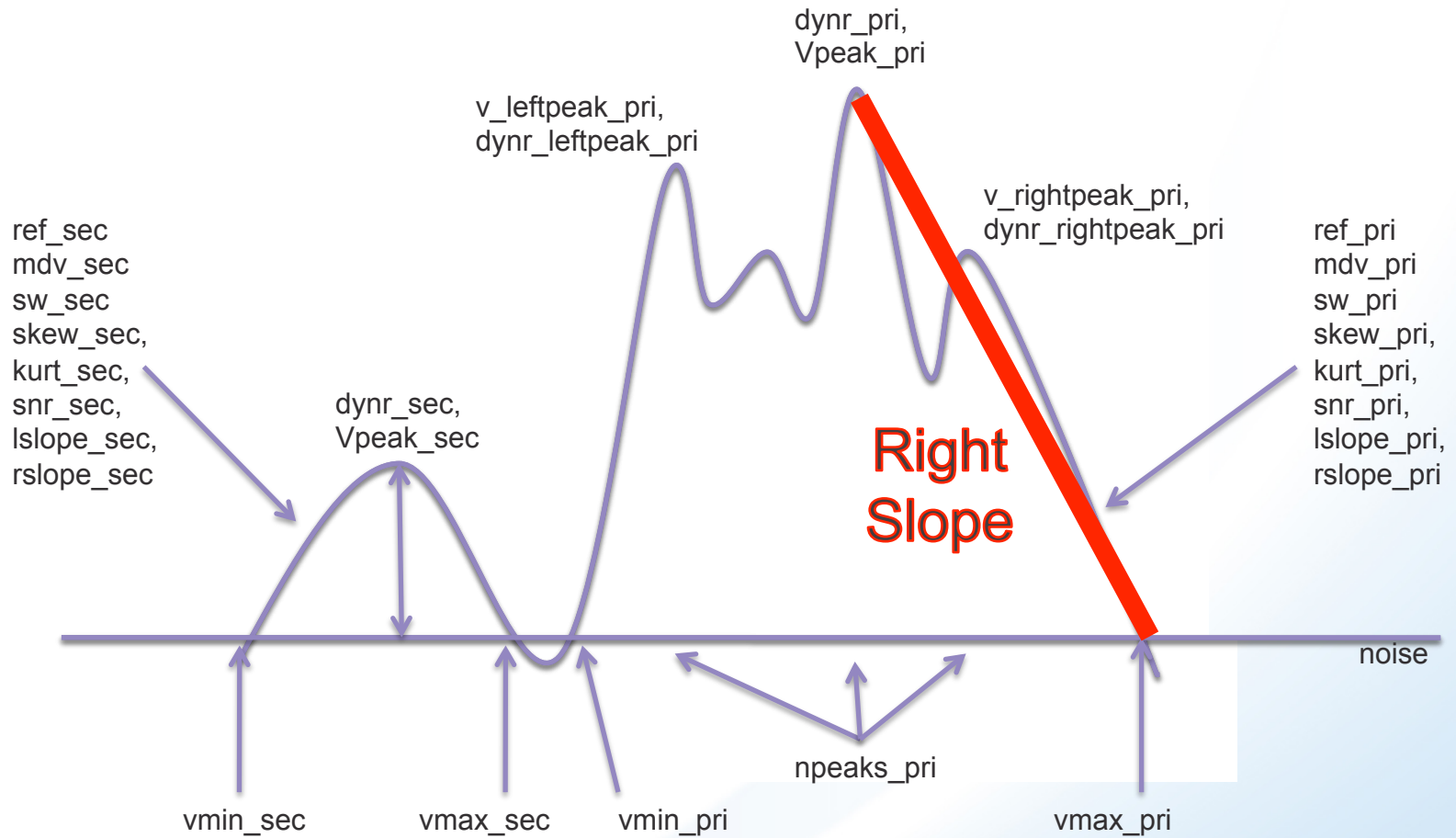
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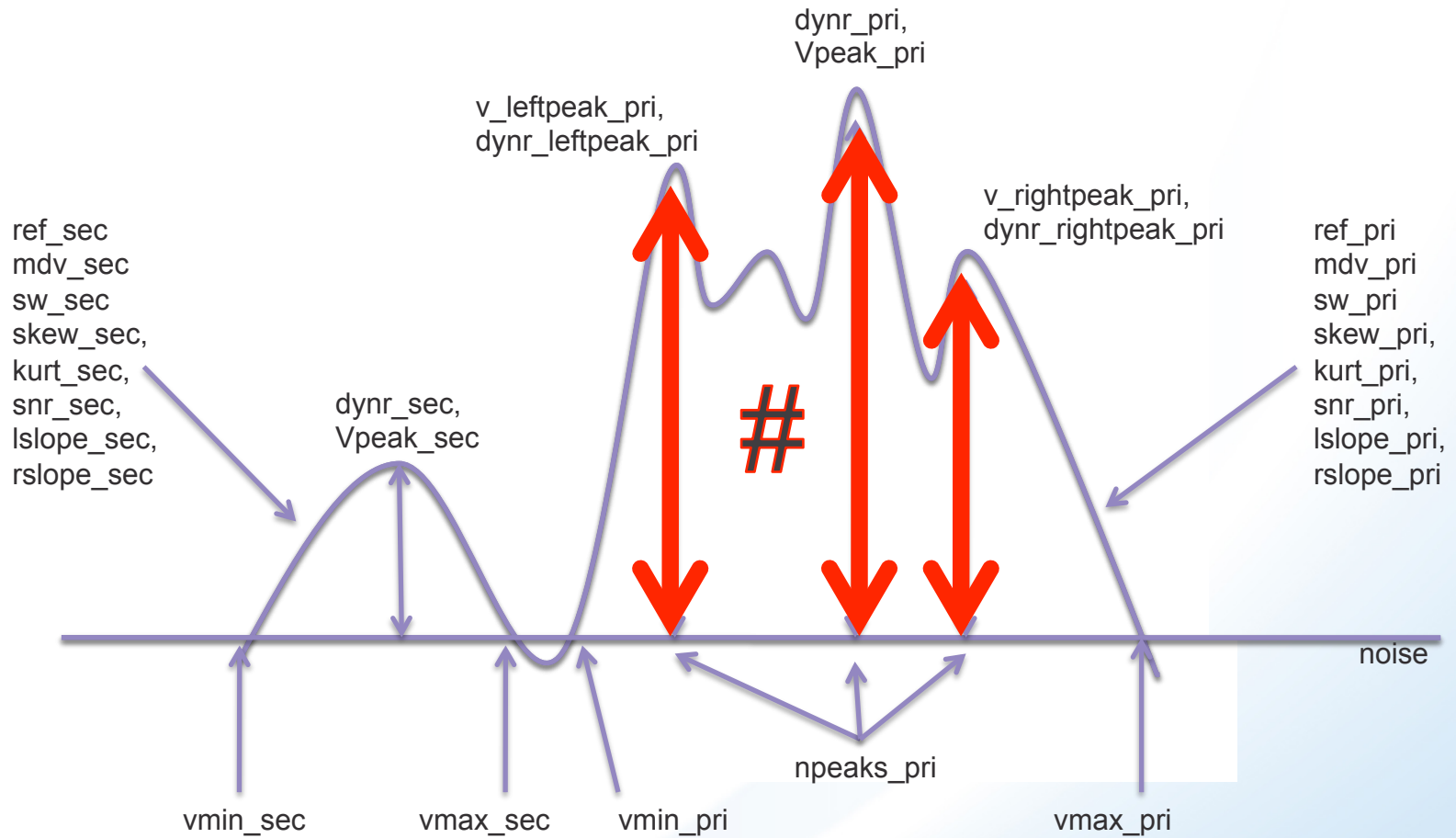
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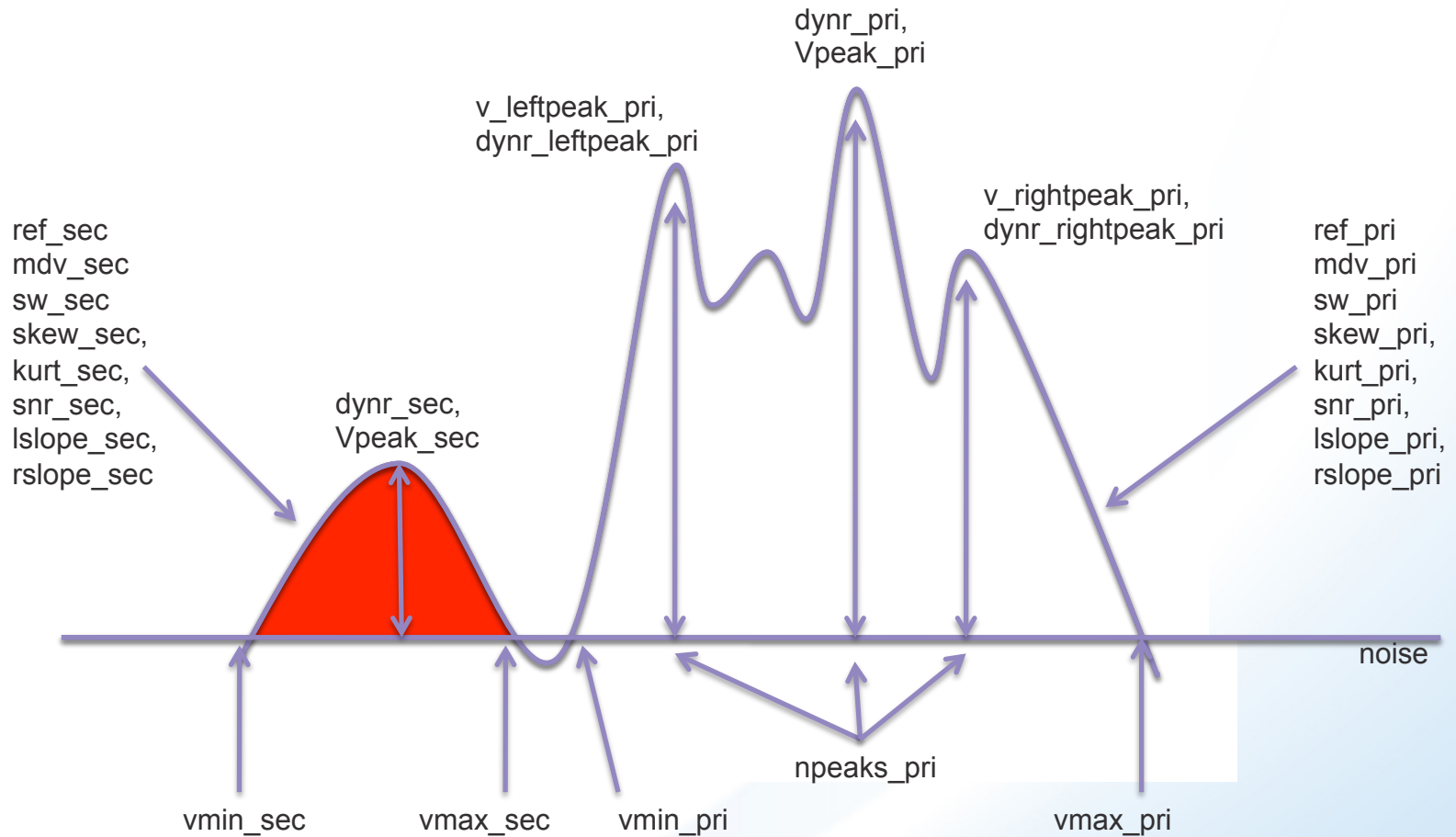


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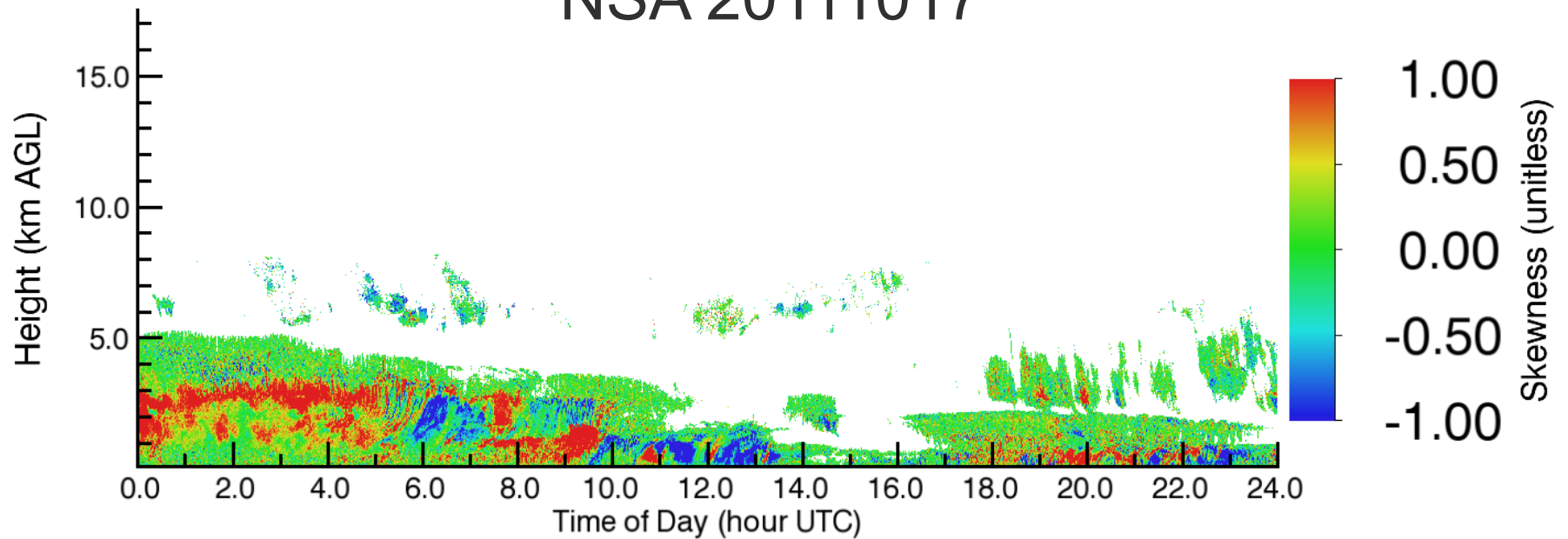


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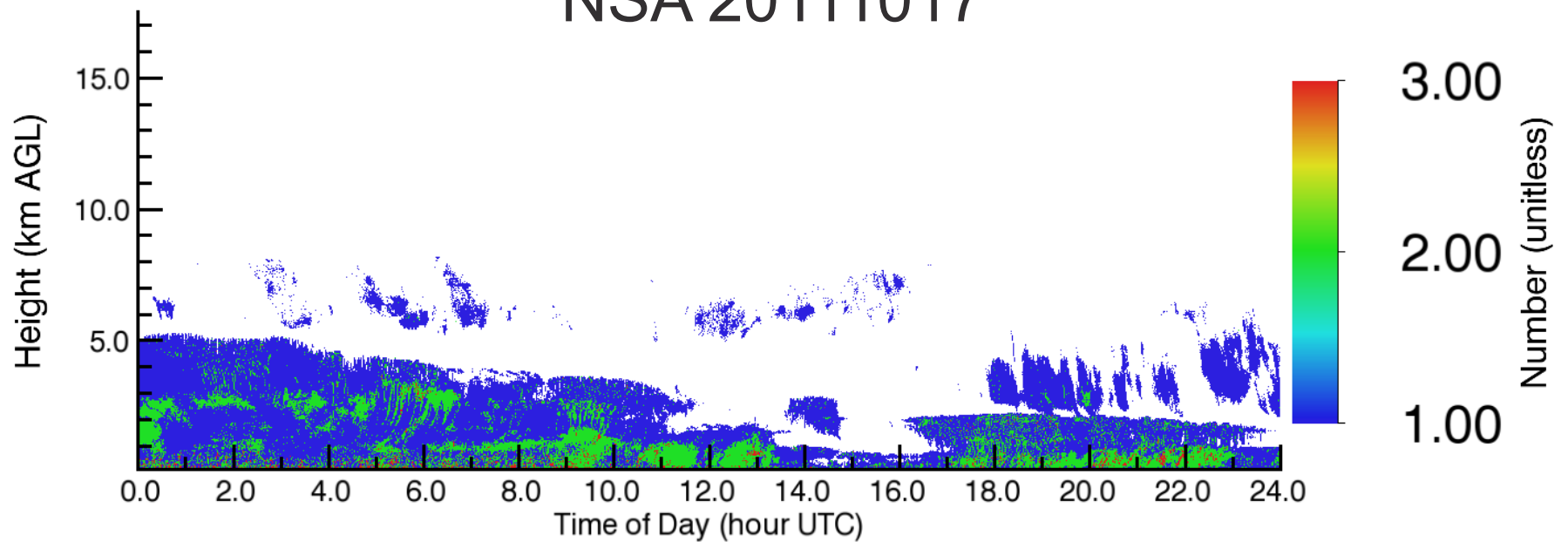
# Skewness Principle Peak

NSA 20111017



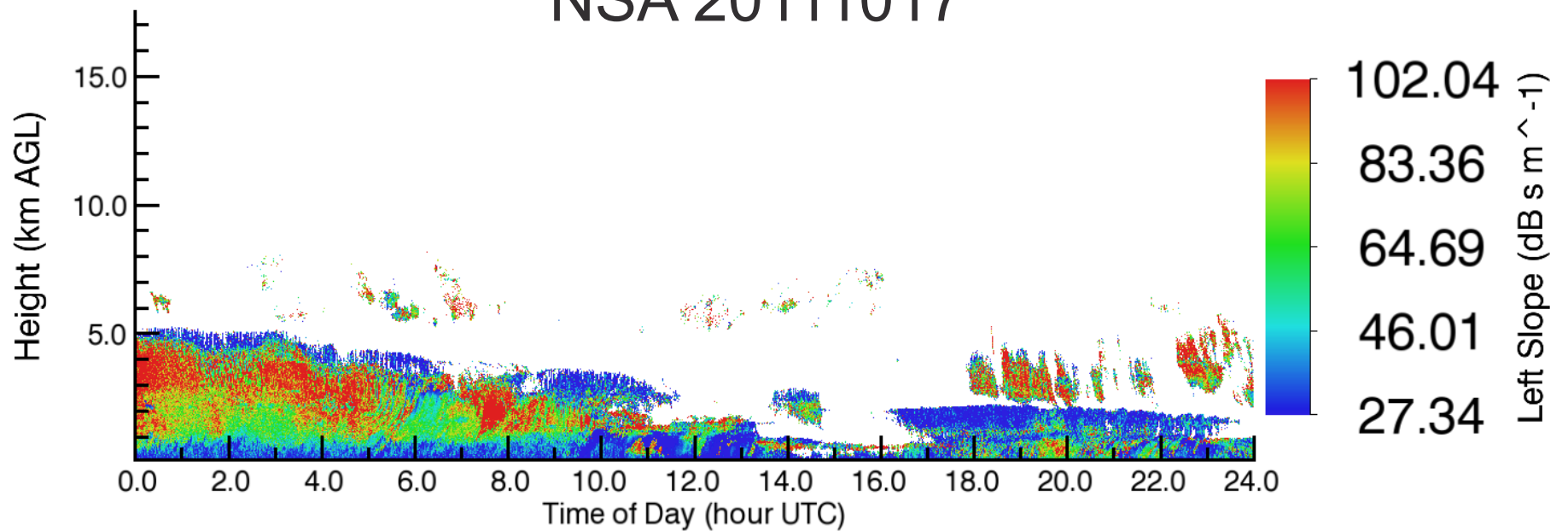
# Number of Principle Subpeaks

NSA 20111017



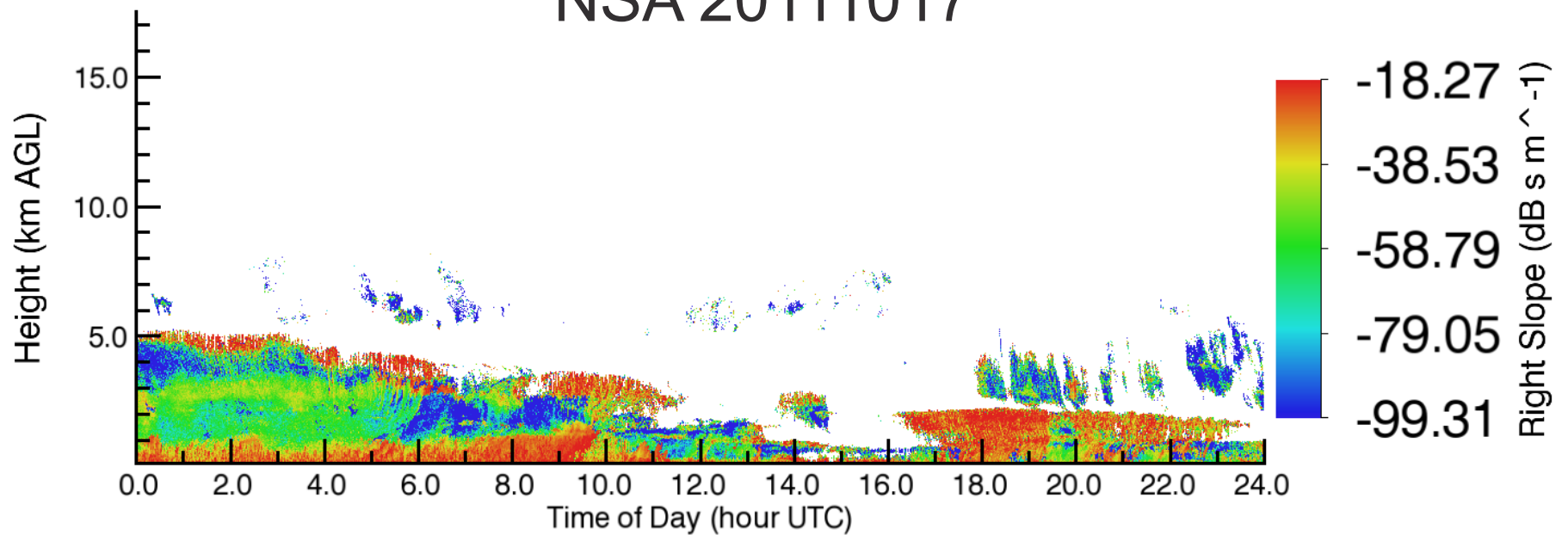
# Left Slope Principle Peak

NSA 20111017



# Right Slope Principle Peak

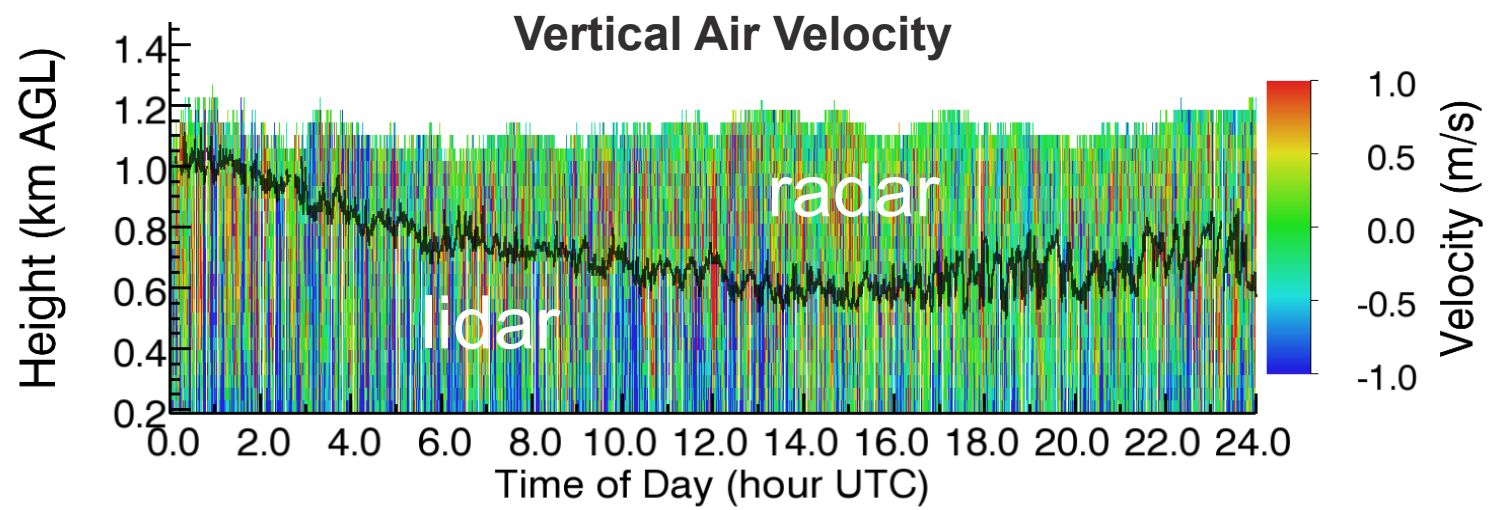
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# MicroARSCL version 2

Propose to add new variables at radar resolution:

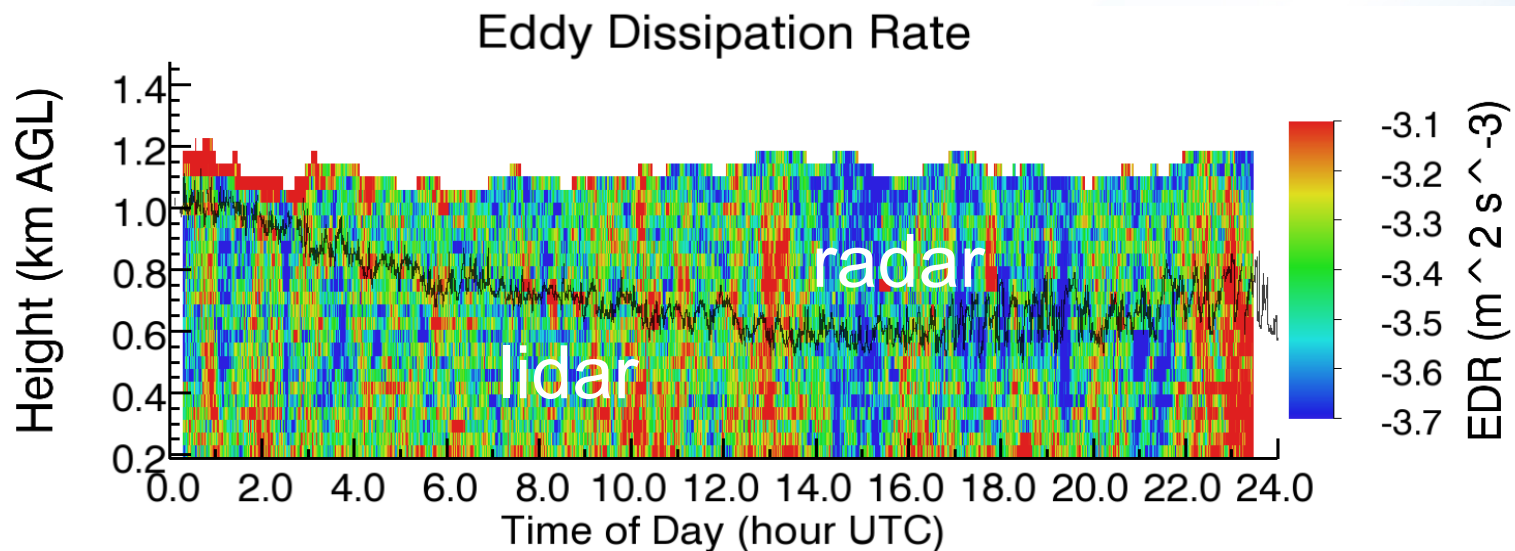
- Vertical air velocity
- Particle fall speed
- Eddy dissipation rate
- Supercooled liquid mask



# MicroARSCL version 2

Propose to add new variables at radar resolution:

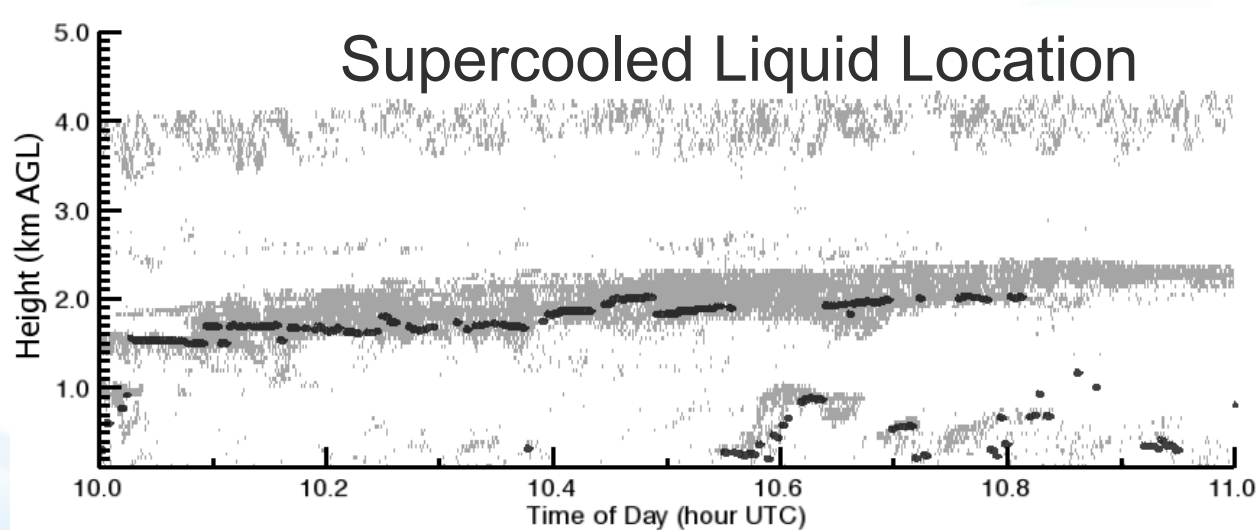
- Vertical air velocity
- Particle fall speed
- Eddy dissipation rate**
- Supercooled liquid mask



# MicroARSCL version 2

Propose to add new variables at radar resolution:

- Vertical air velocity
- Particle fall speed
- Eddy dissipation rate
- Supercooled liquid mask**





# MicroARSCL version 2

Integration of new **physical quantities** with existing rich set of **radar observables** on a common grid will significantly enhance the utility of MicroARSCL for cloud process studies.