# Preliminary Cassini RADAR Ring Results

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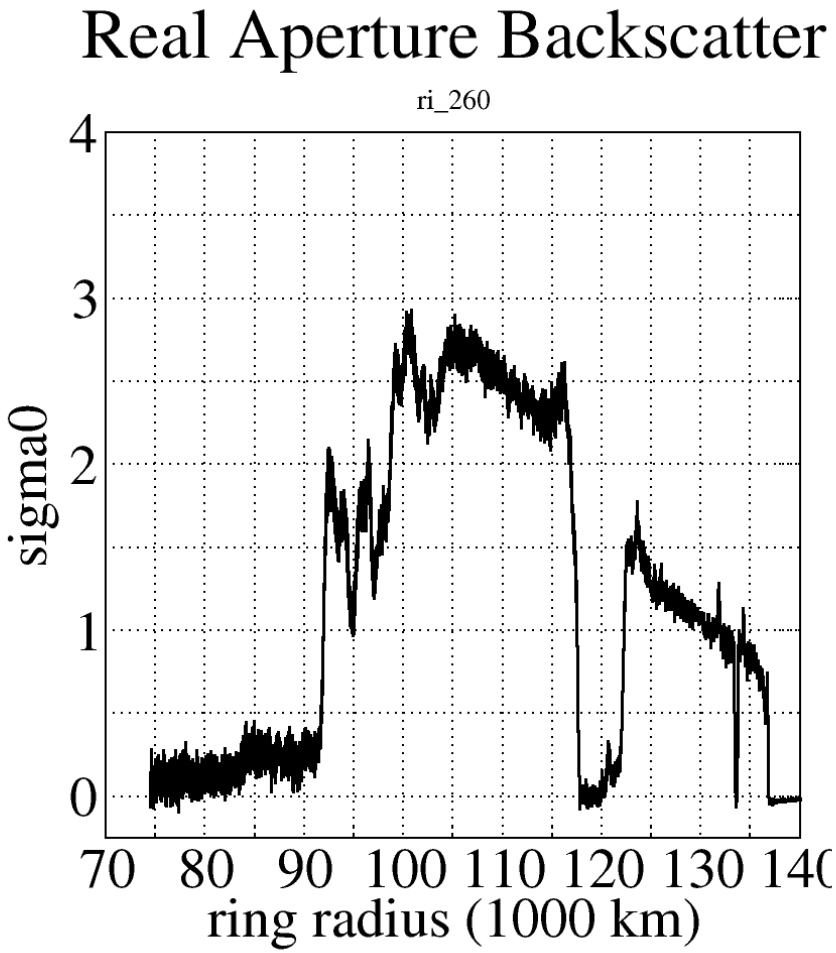
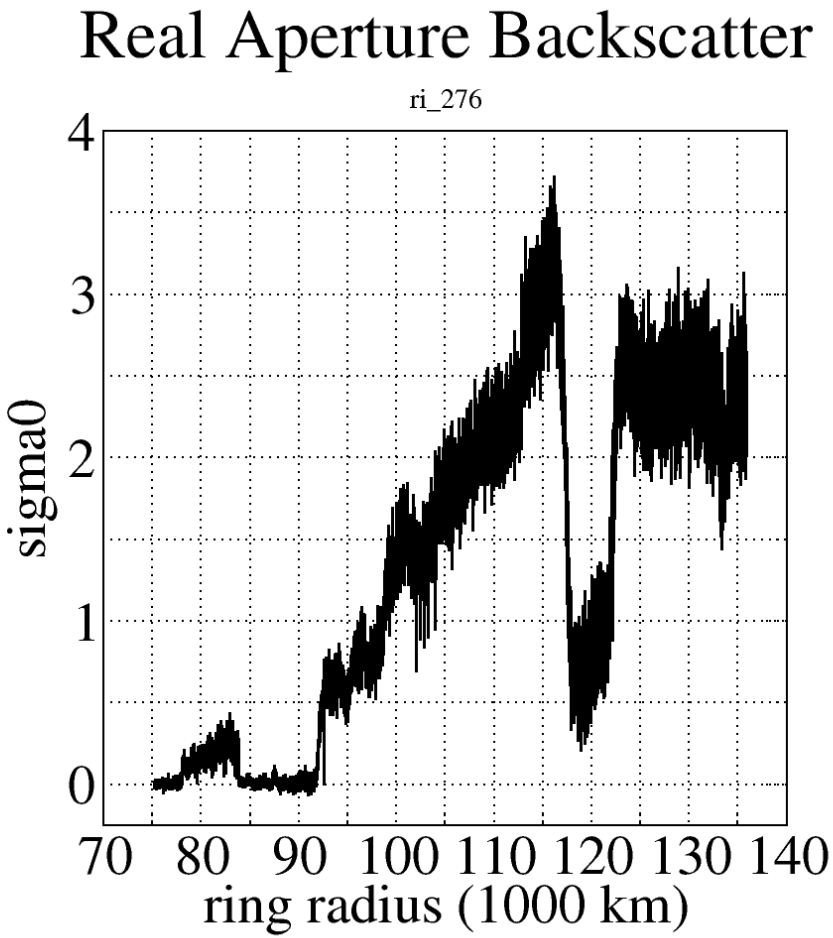
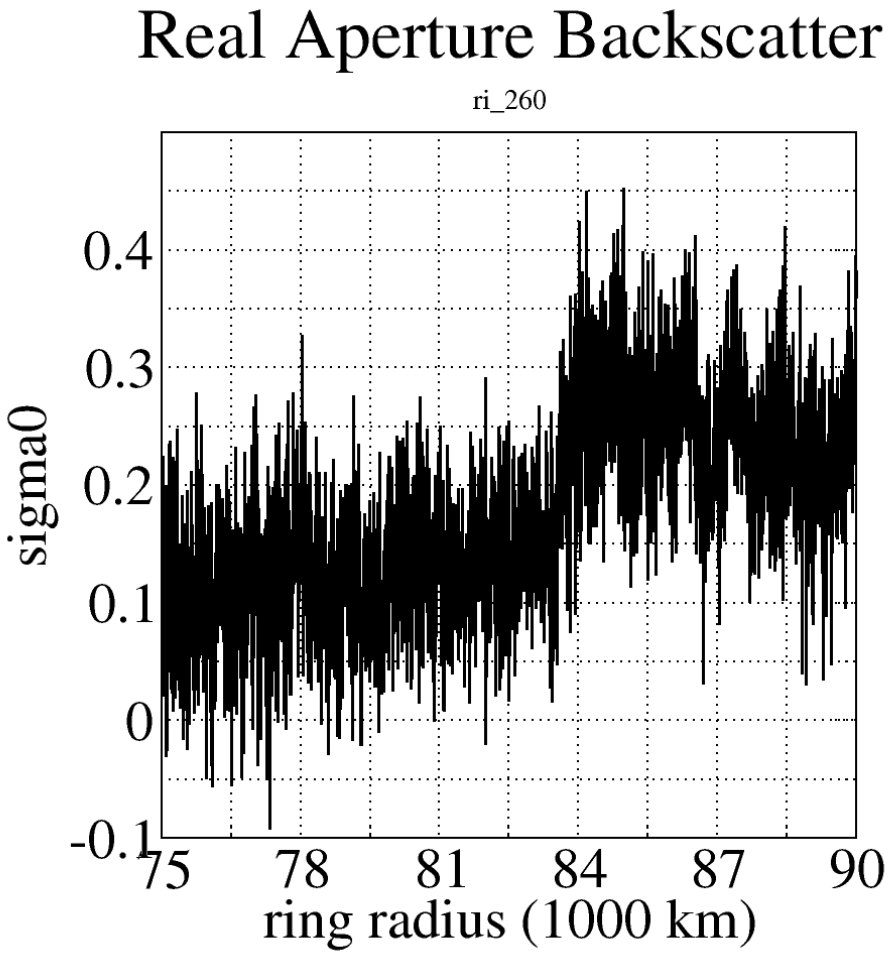
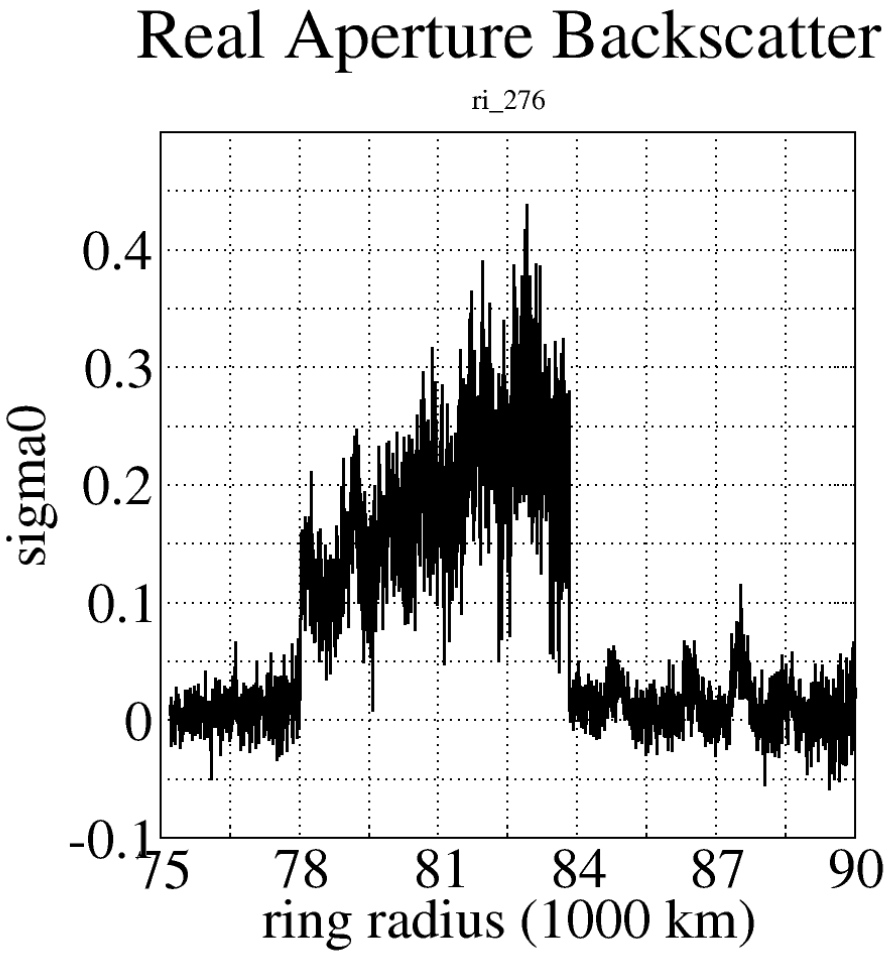
# Preliminary Backscatter



# Preliminary Backscatter Closeup
# C-ring

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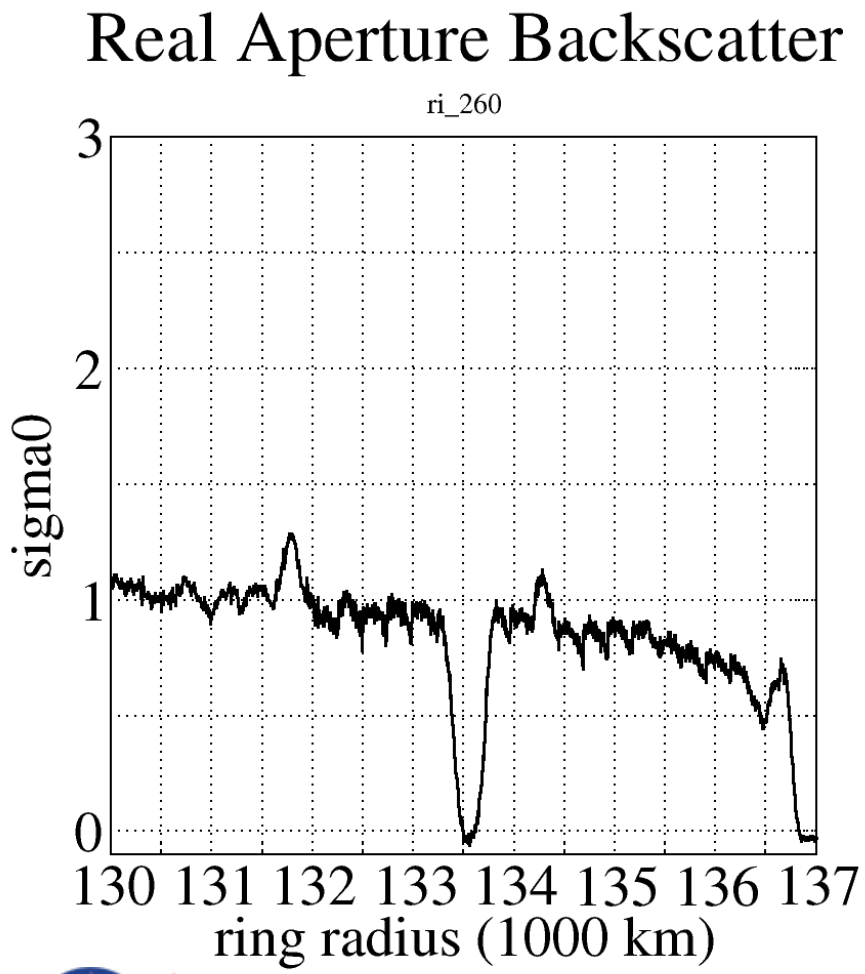
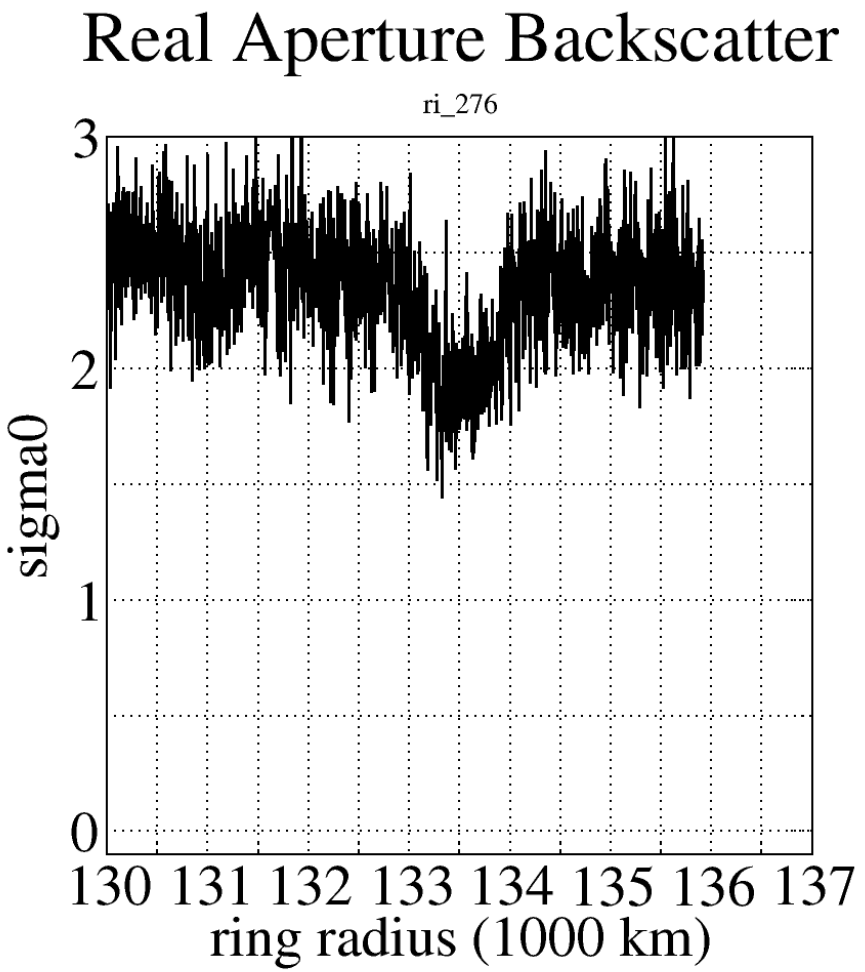
# Preliminary Backscatter Closeup
# Outer A-ring

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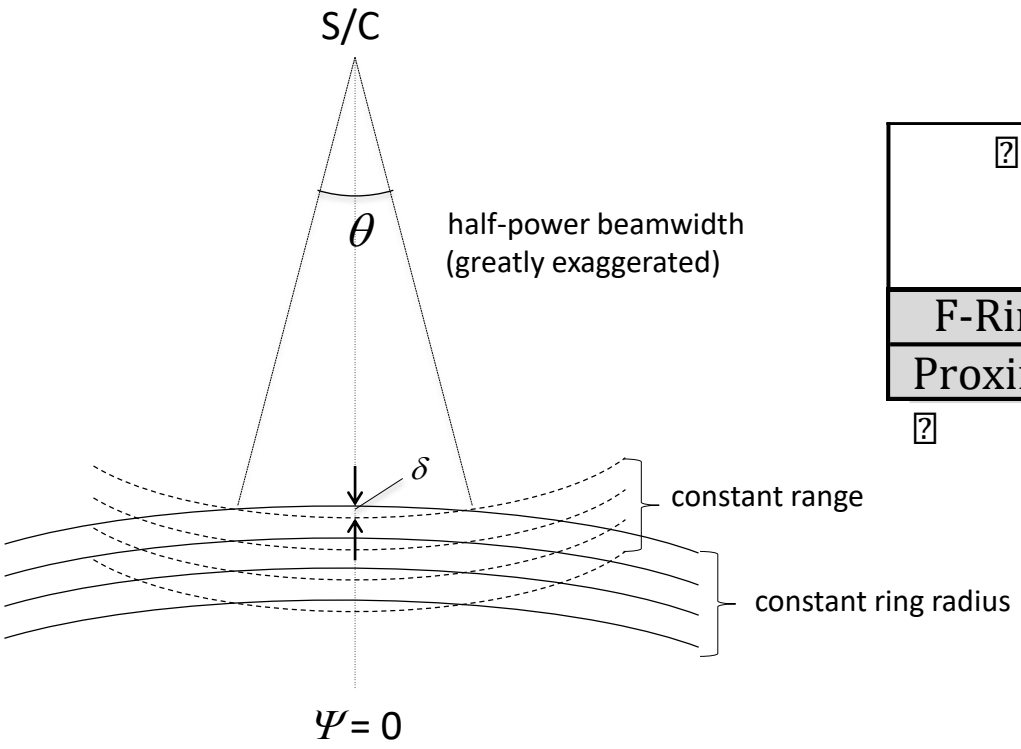
# 1-D Range Slicing




Geometric Smearing

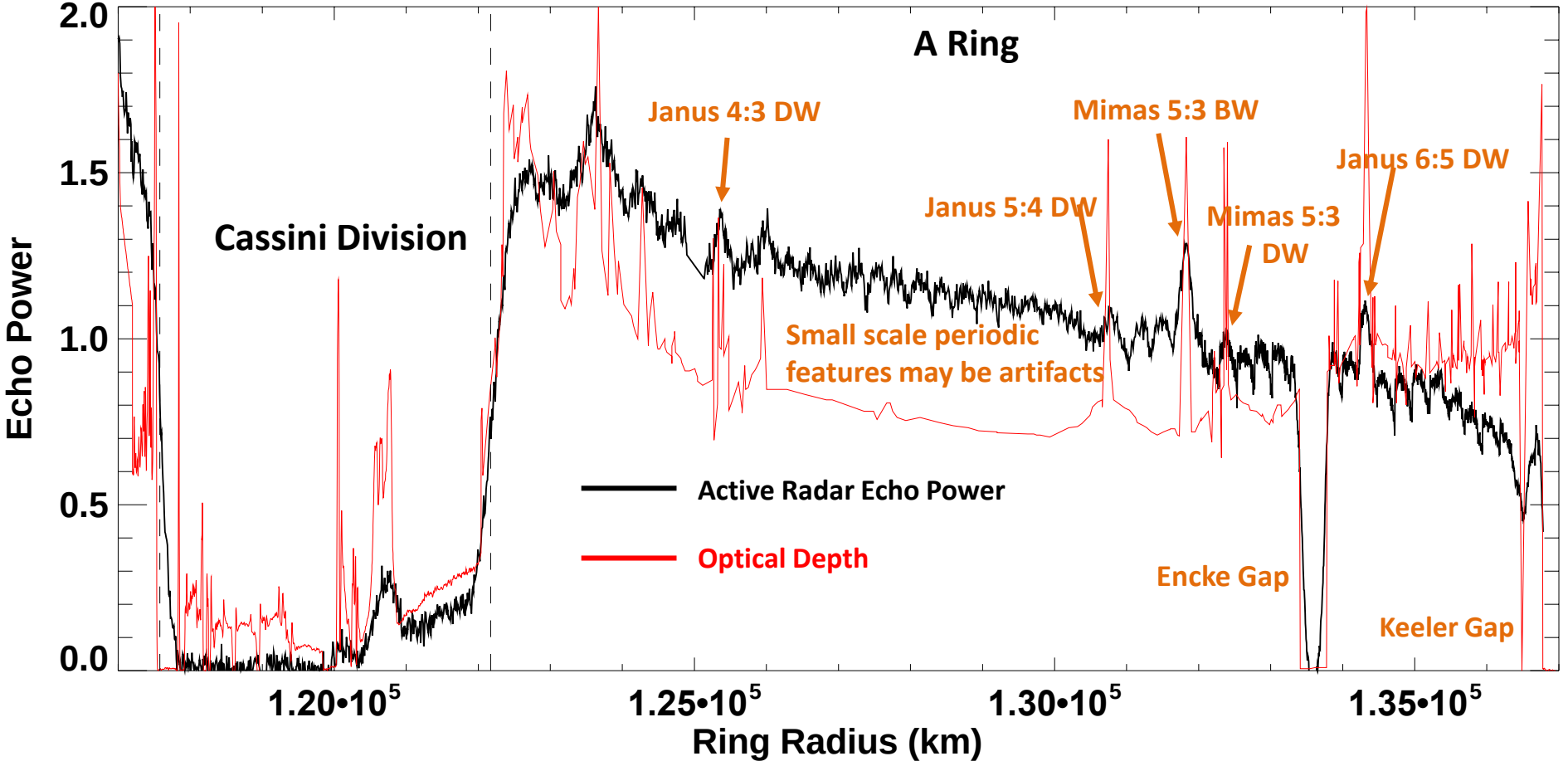
| δ | Inner Ring [m] | Outer Ring [m] |
|---|---|---|
| F-Ring Orbit | 500 | 75 |
| Proximal Orbit | 80 | 450 |

Observing point centered at zero azimuth angle relative to spacecraft

# Summary

- Full ring scans (A-C rings) for rev's 276, 277, 282.
  - Achieves radius resolutions of about 4 km while maintaining good measurement quality.
- Rev 260 is highest quality because it carries the observation closest to the ring plane crossing
- Rev 282 uses reverse scan direction to achieve incidence diversity in the A and B rings when combined with Rev 277 using a normal C to A scan.

# Zoom in Focusing on A Ring and Cassini Division

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