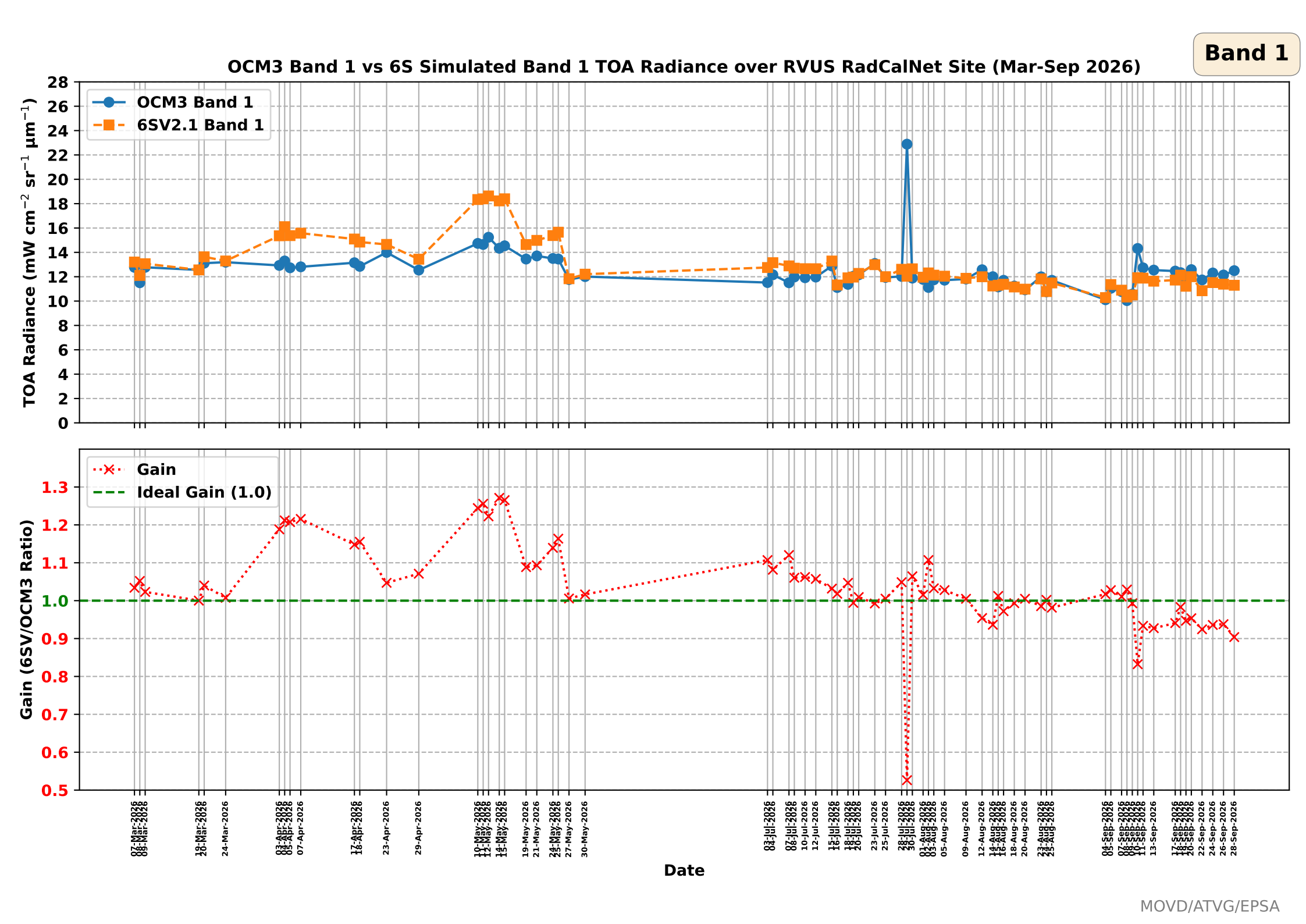
OCM3 Time-Series Analysis of TOA Radiance over RVUS-RadCalNet Site for all 13 Bands (Mar-Sep 2026)

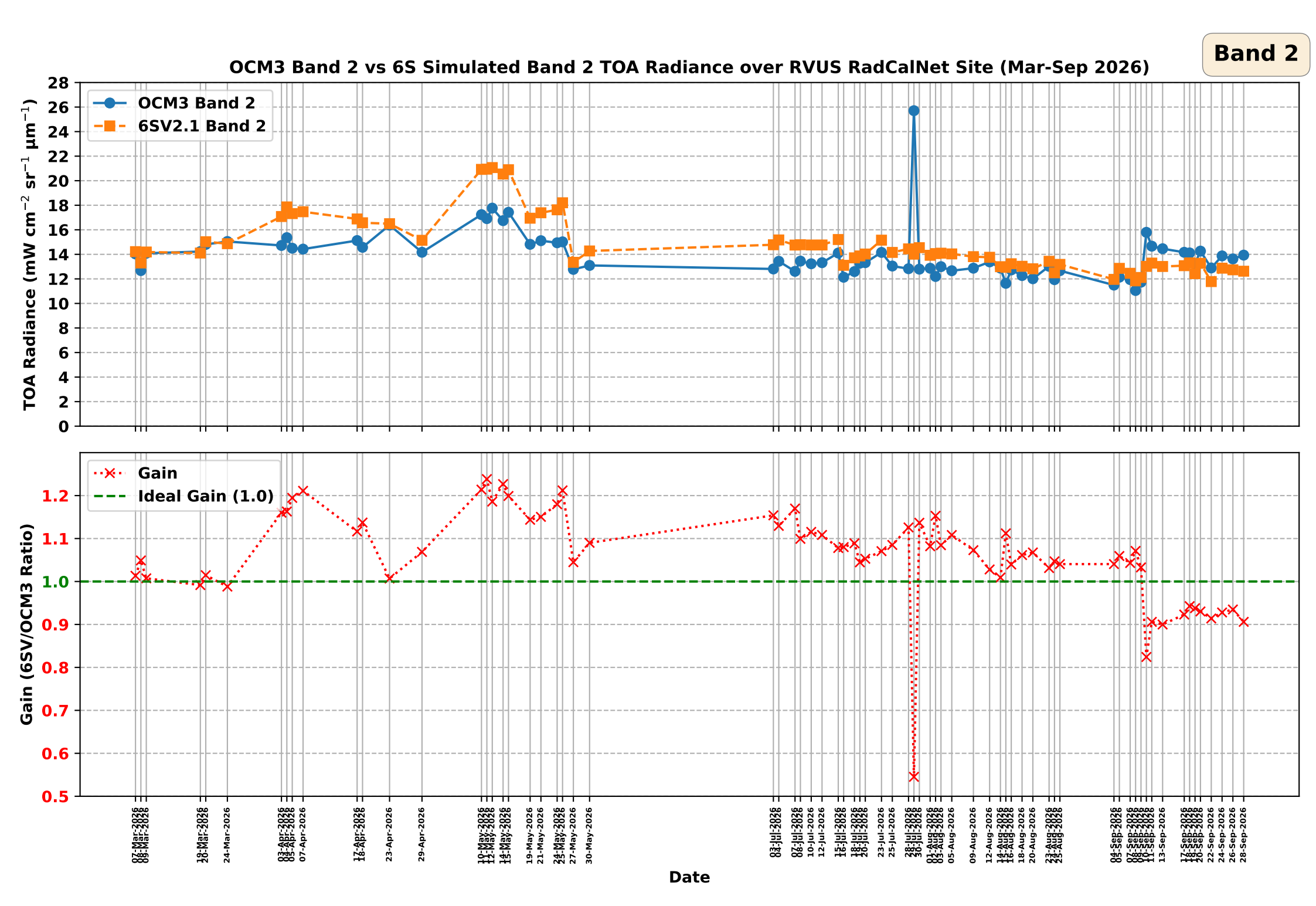
This report presents a time-series analysis utilizing automated open-source Ground-based Bottom of Atmosphere (BOA) reflectance data provided by RadCalNet over the RVUS (Railroad Valley Playa, USA).

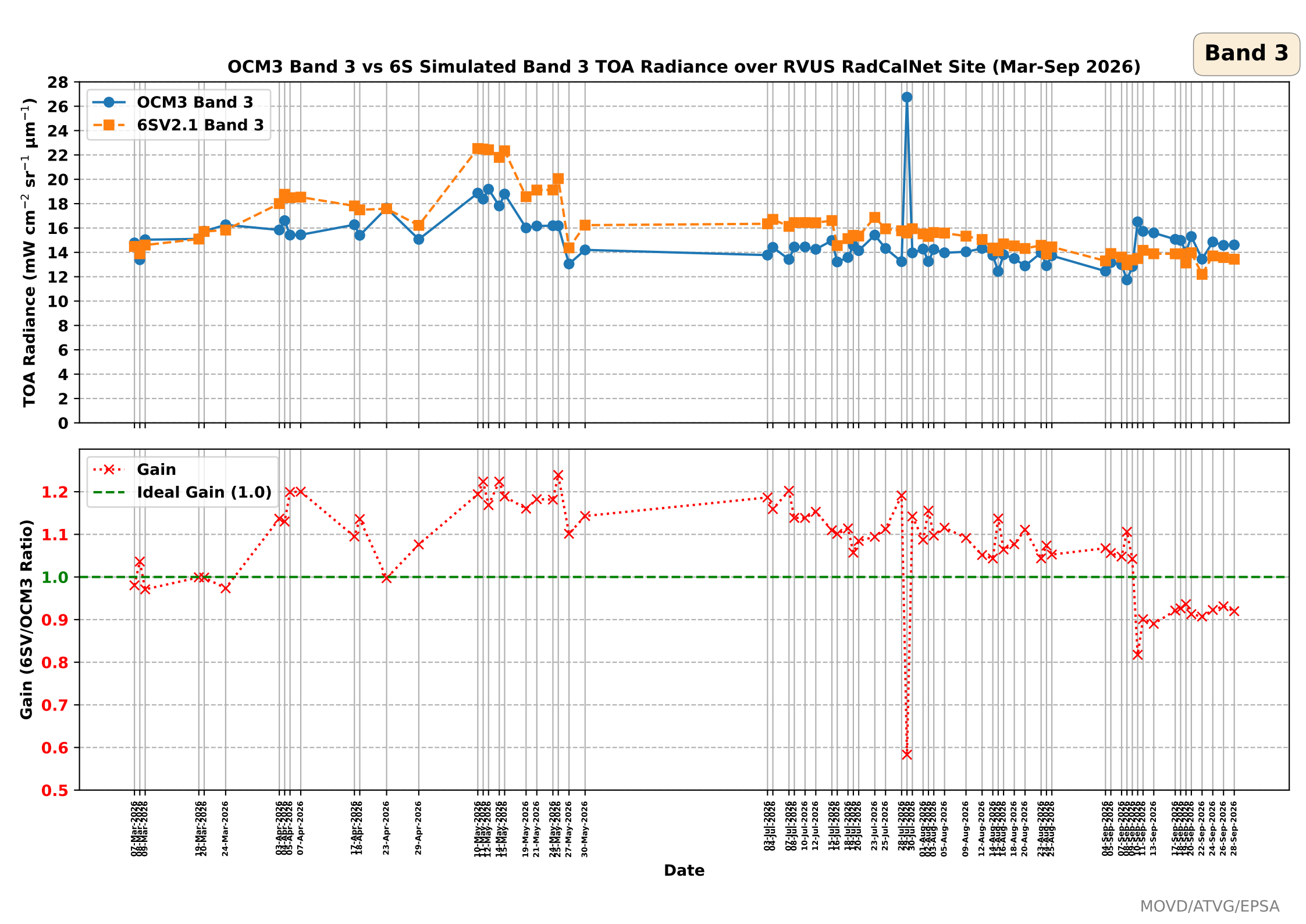
The site reflectance data, initially available at 10 nm spectral intervals, was interpolated to 2.5 nm resolution. This interpolated data was then used to derive Top-of-Atmosphere (TOA) radiance using the 6SV radiative transfer model. The 6SV model accounts for all atmospheric conditions, azimuth/elevation angles of the satellite, and spectral characteristics of OCM-3.

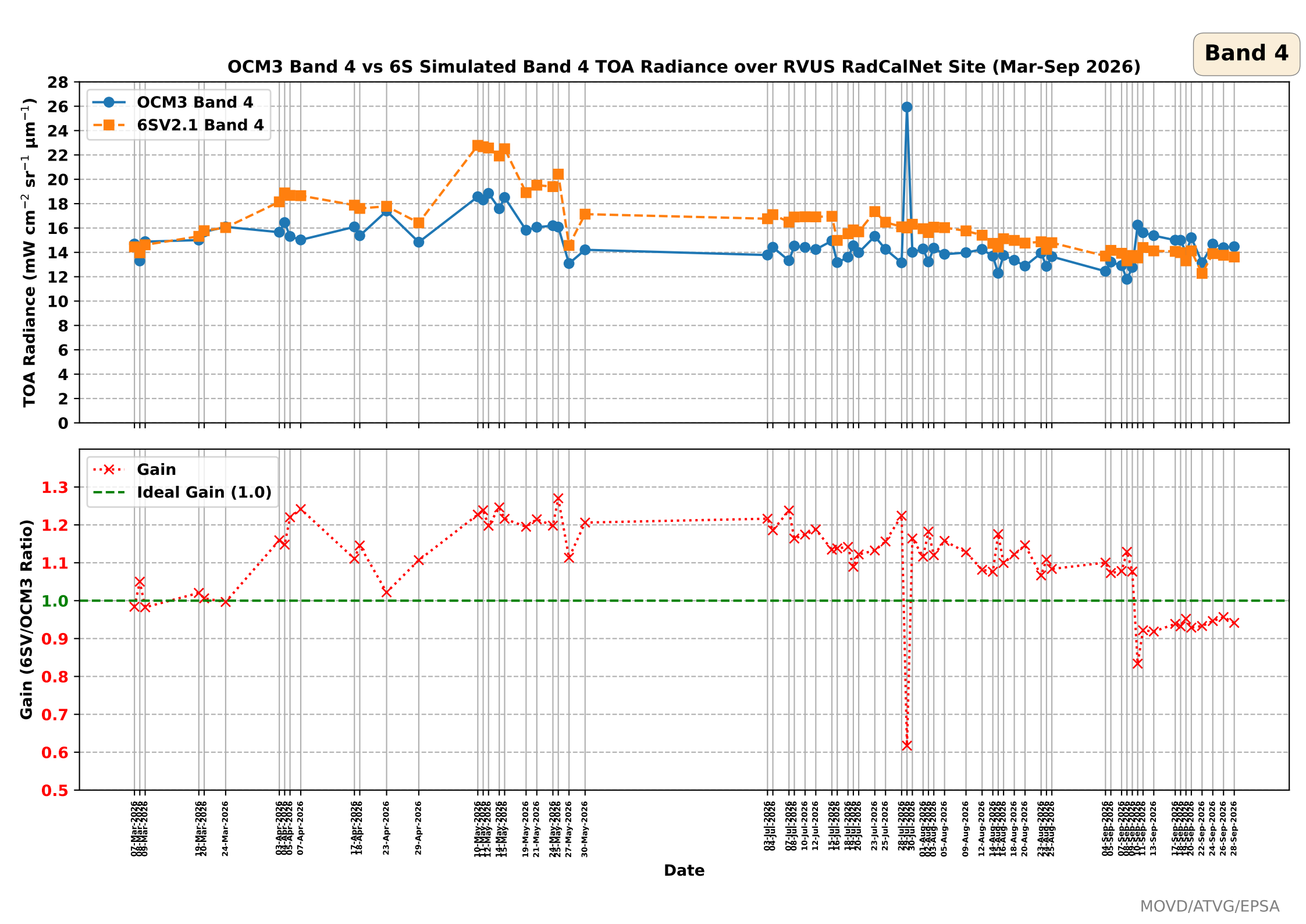
The ratio of 6SV-simulated TOA radiance to OCM-3 measured TOA radiance was calculated to derive gain numbers for each of the sensor's 13 bands. This report visualizes these key parameters for each band.

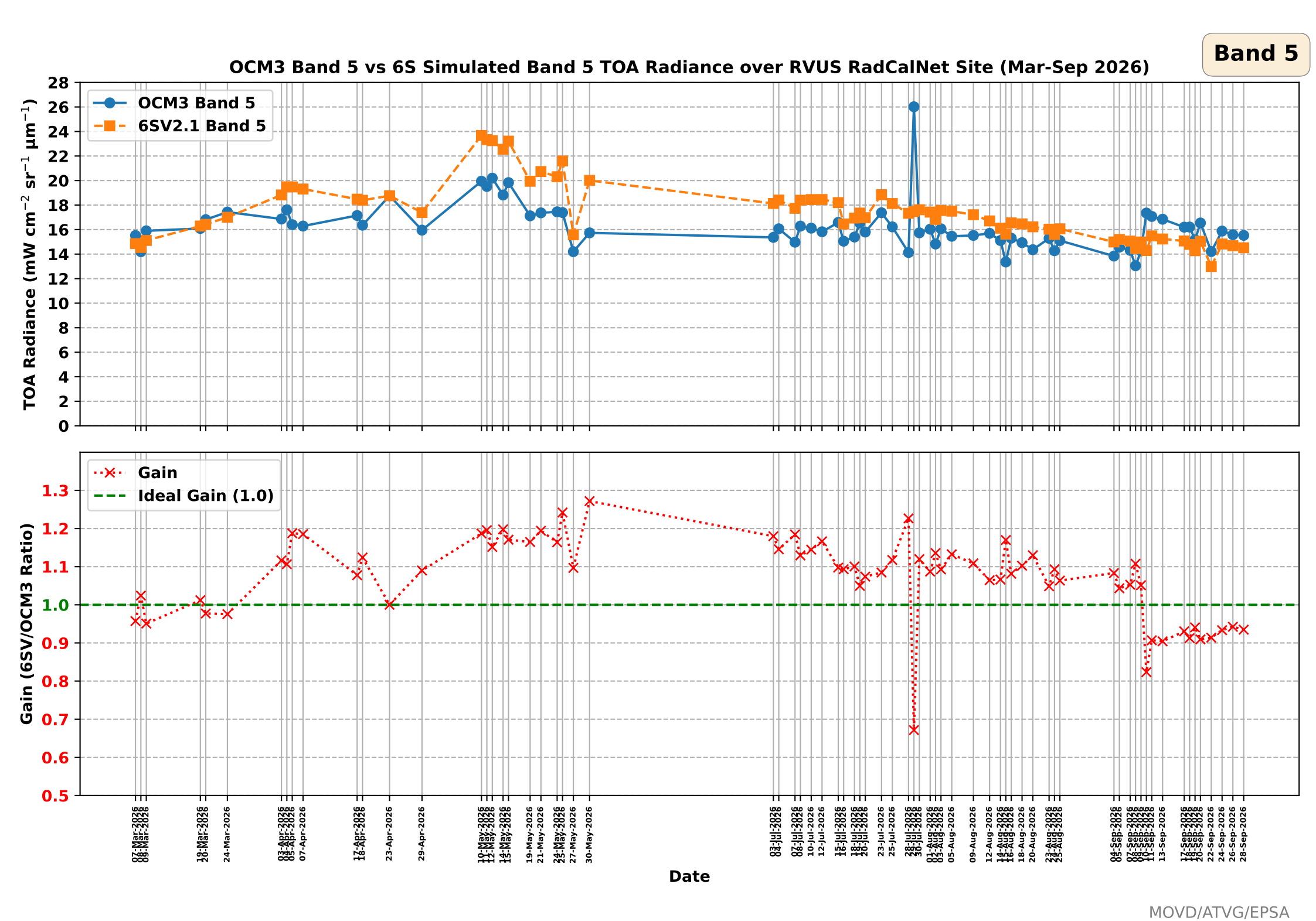
Each subsequent page displays two subplots for a specific band:
- The top subplot shows the TOA Radiance for OCM3 and 6SV2.1, with a consistent y-axis scale across all bands for easy comparison.
- The bottom subplot illustrates the calculated Gain (6SV/OCM3 Ratio), with the ideal gain value of 1.0 highlighted in green, and other tick labels in red.

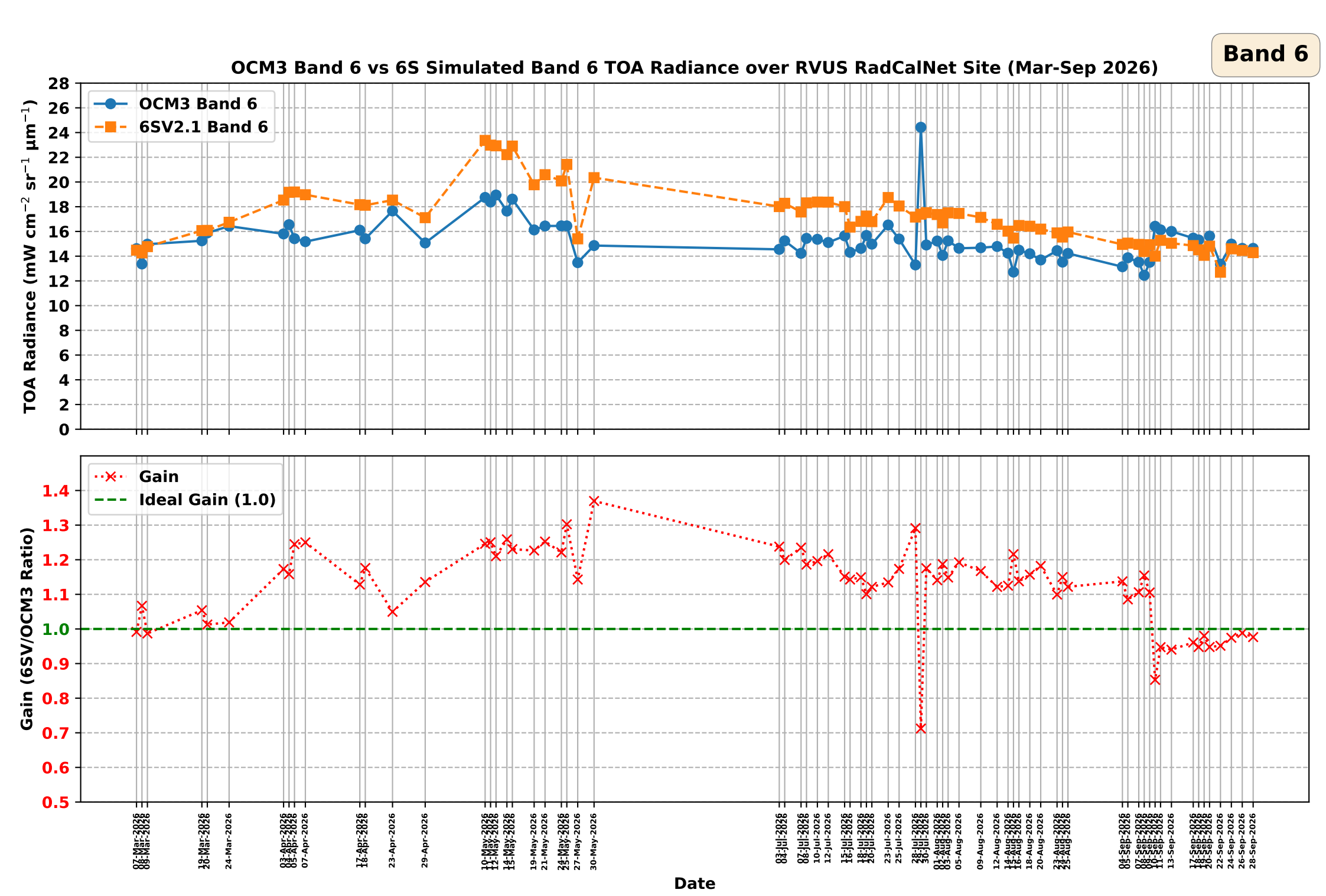

Band 1
OCM3 Band 1 vs 6S Simulated Band 1 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 1
6SV2.1 Band 1
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA

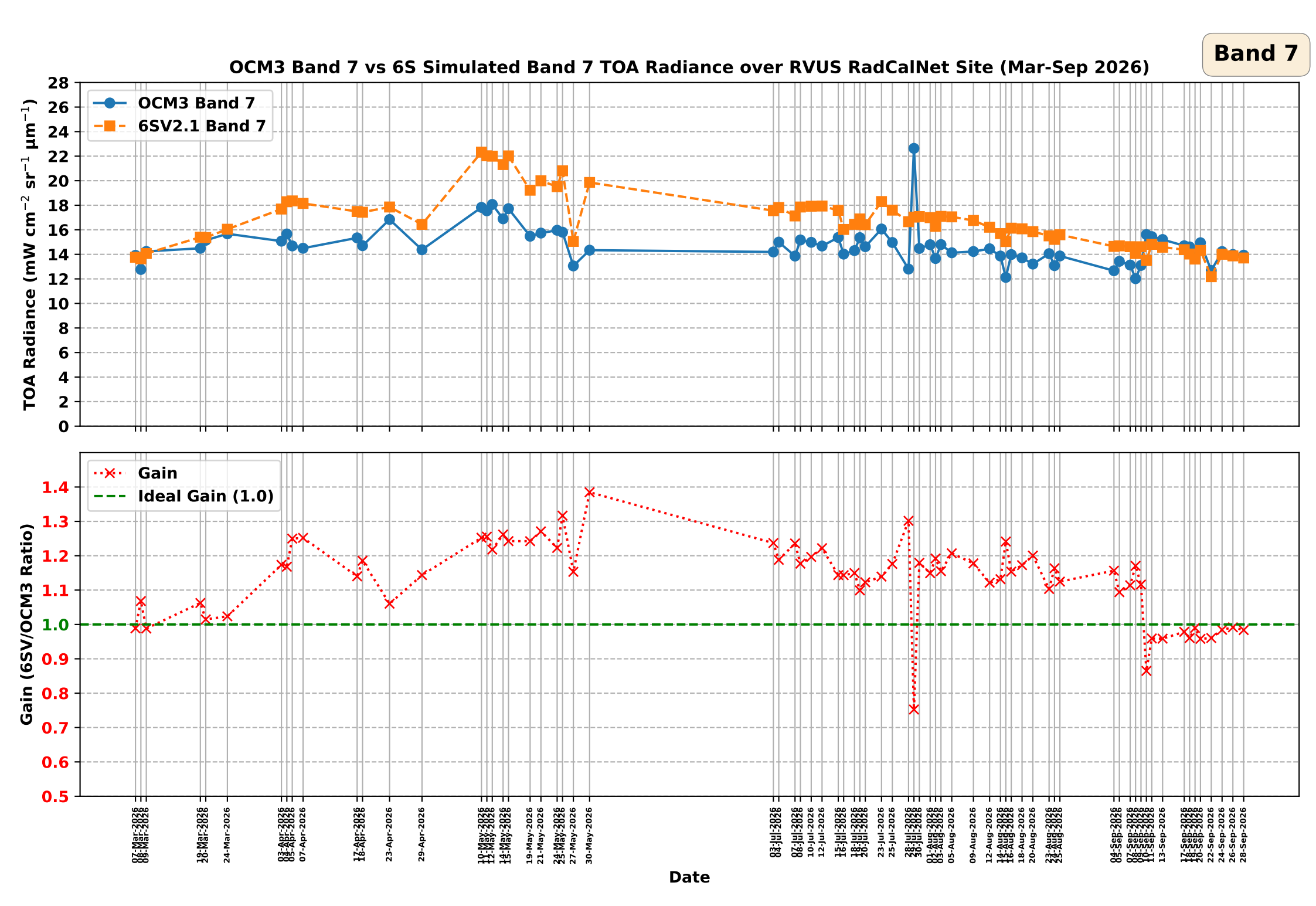

Band 2
OCM3 Band 2 vs 6S Simulated Band 2 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 2
6SV2.1 Band 2
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA

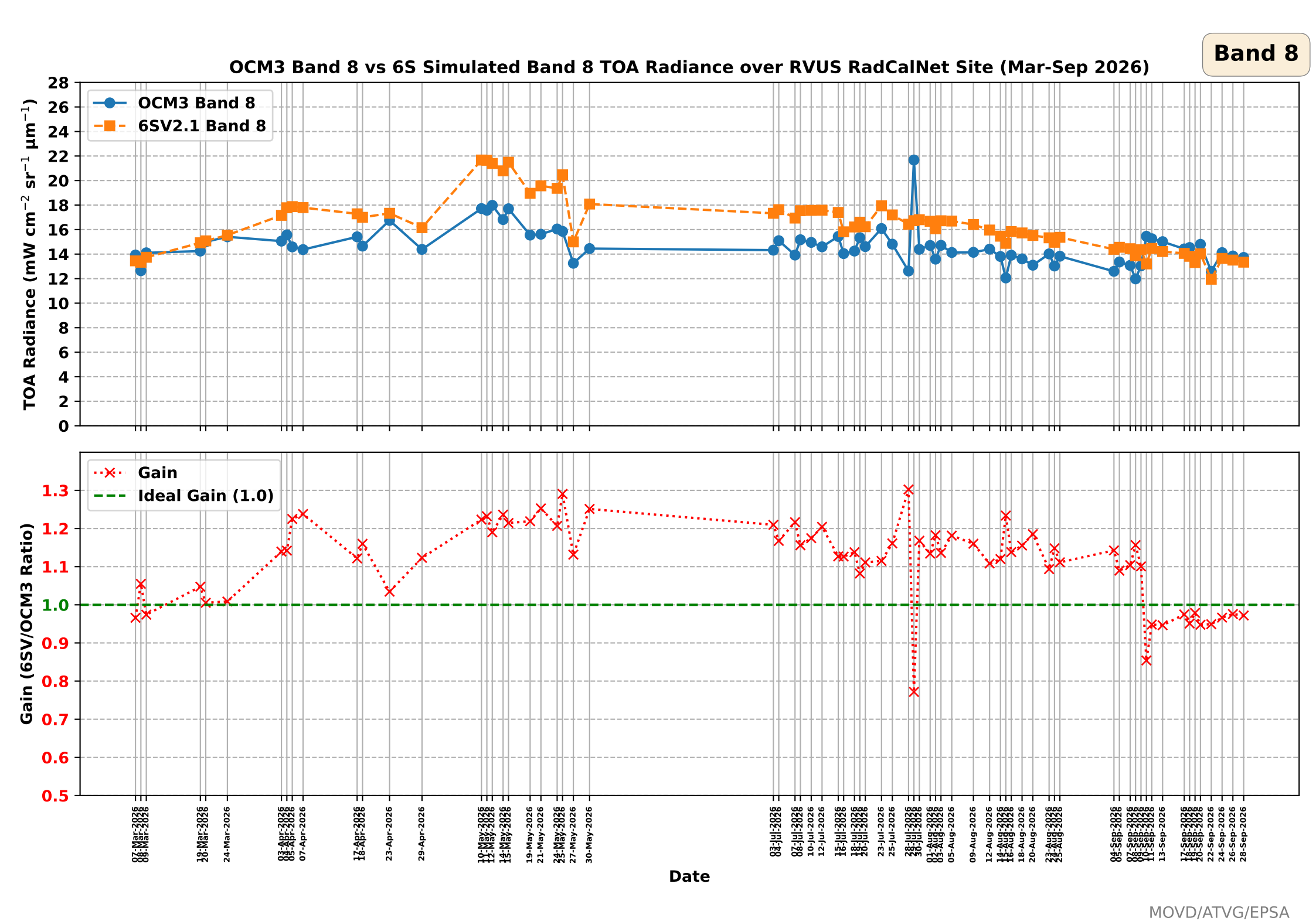

Band 3
OCM3 Band 3 vs 6S Simulated Band 3 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 3
6SV2.1 Band 3
TOA Radiance (mW cm⁻² sr⁻¹ µm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA

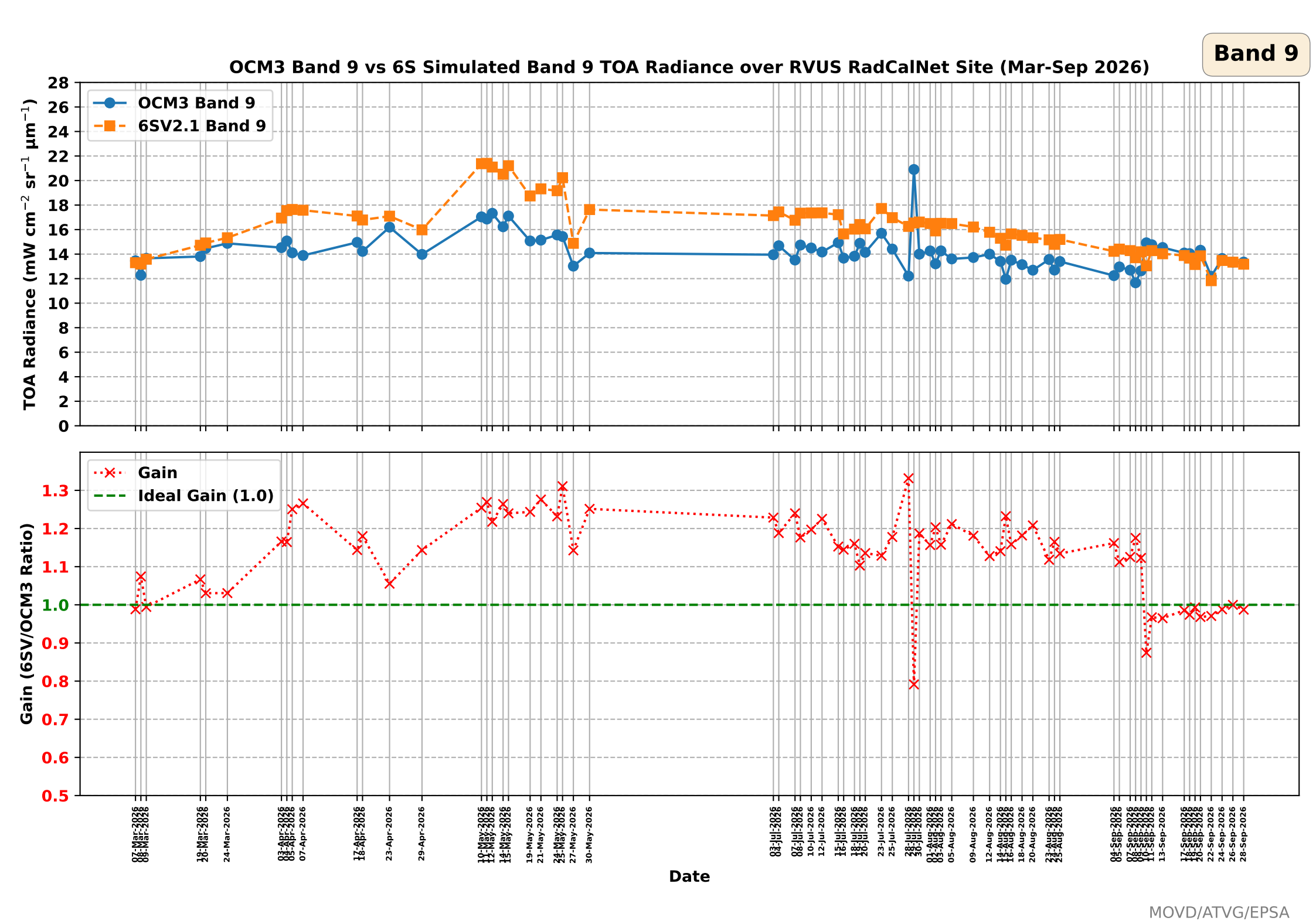

Band 4
OCM3 Band 4 vs 6S Simulated Band 4 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 4
6SV2.1 Band 4
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA

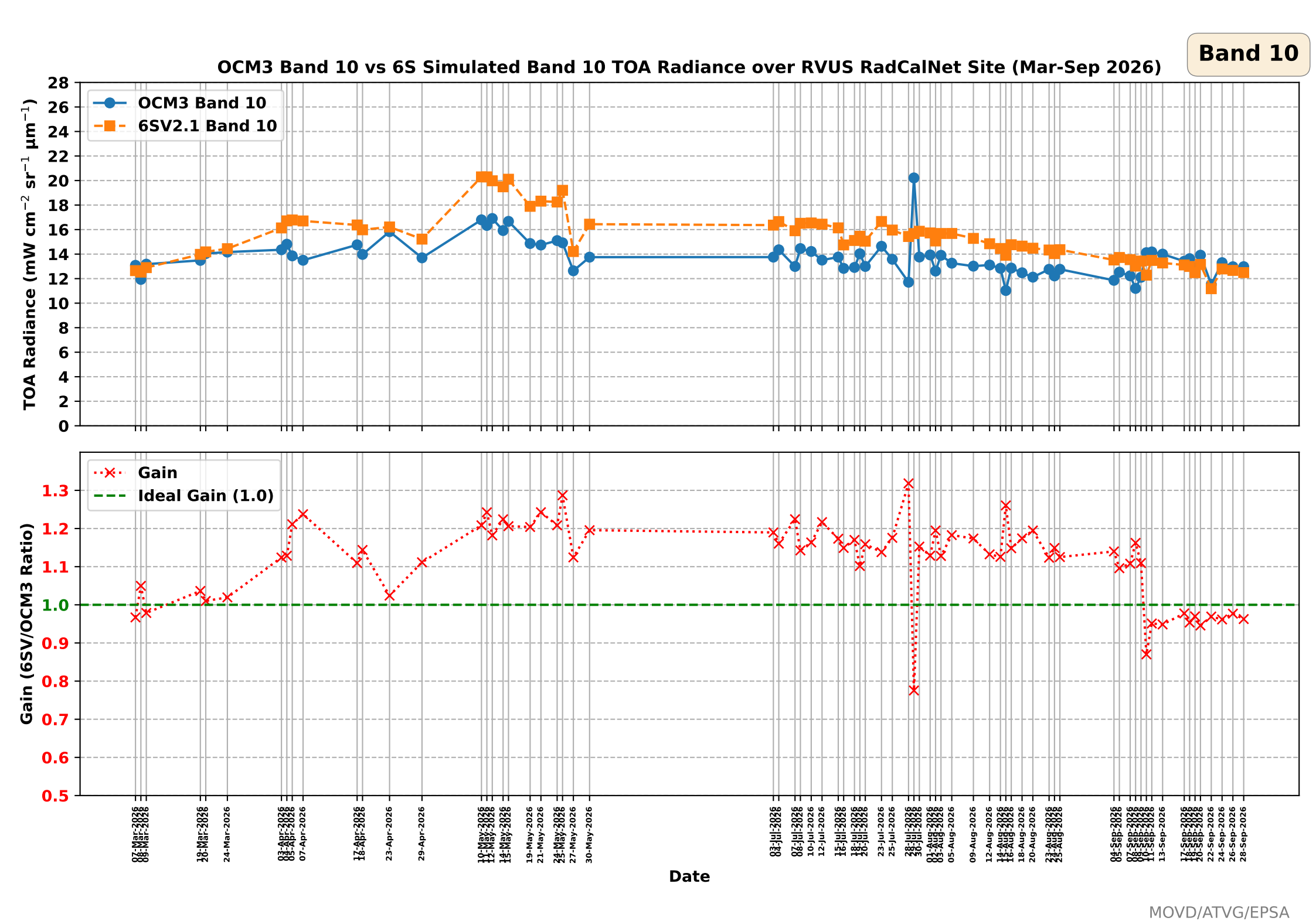

Band 5
OCM3 Band 5 vs 6S Simulated Band 5 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 5
6SV2.1 Band 5
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA

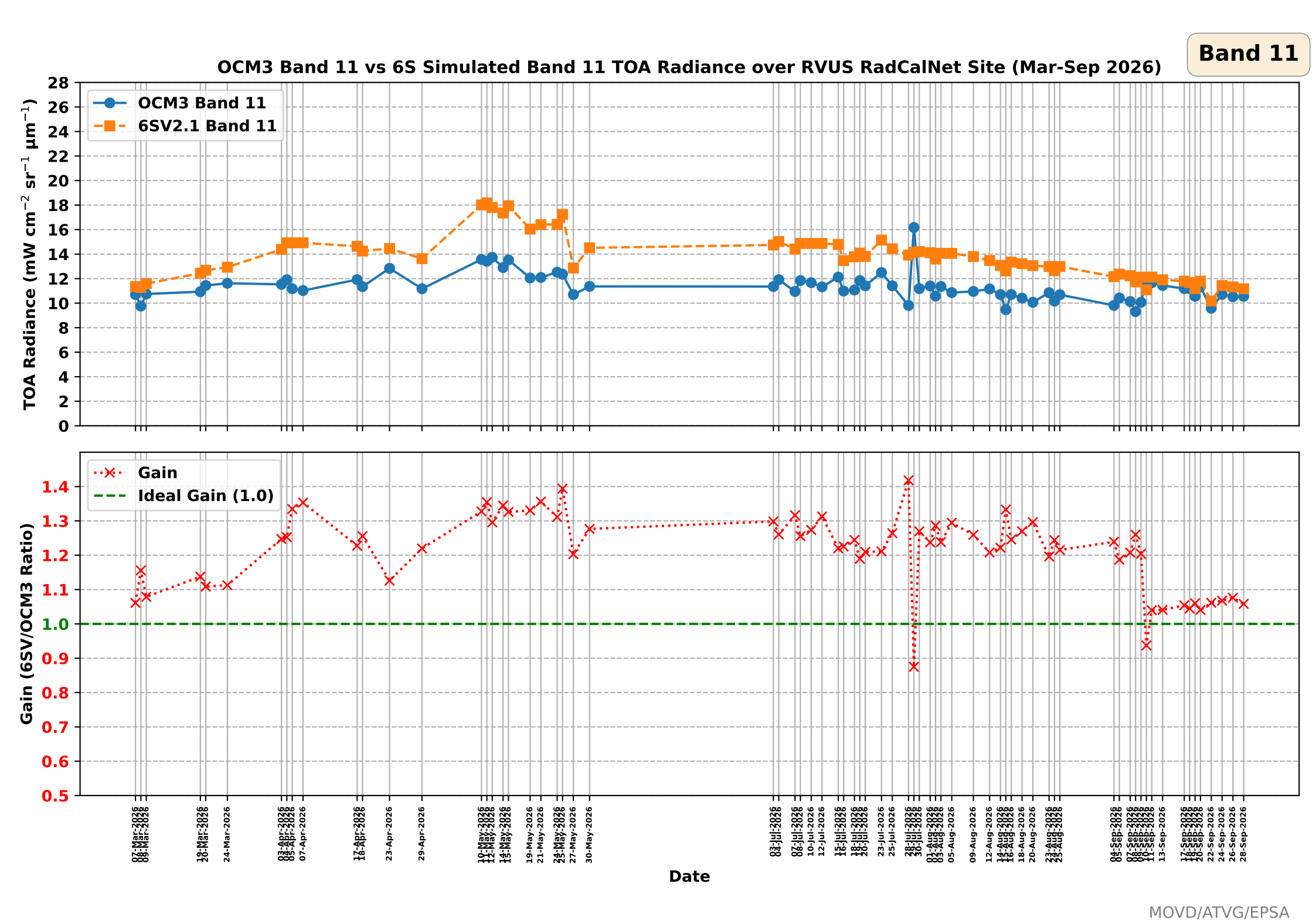

Band 6
OCM3 Band 6 vs 6S Simulated Band 6 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 6
6SV2.1 Band 6
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA

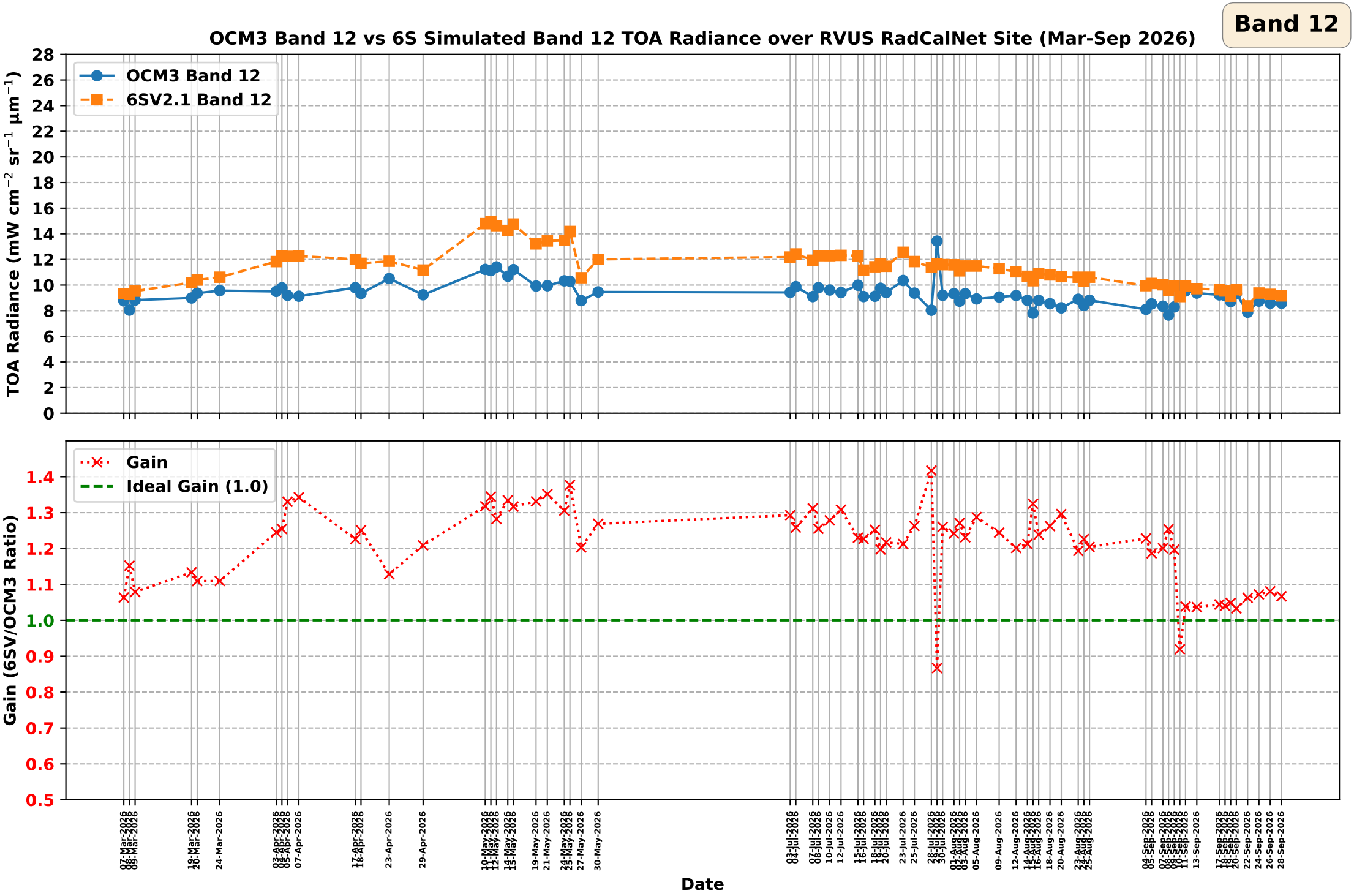

Band 7
OCM3 Band 7 vs 6S Simulated Band 7 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 7
6SV2.1 Band 7
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA

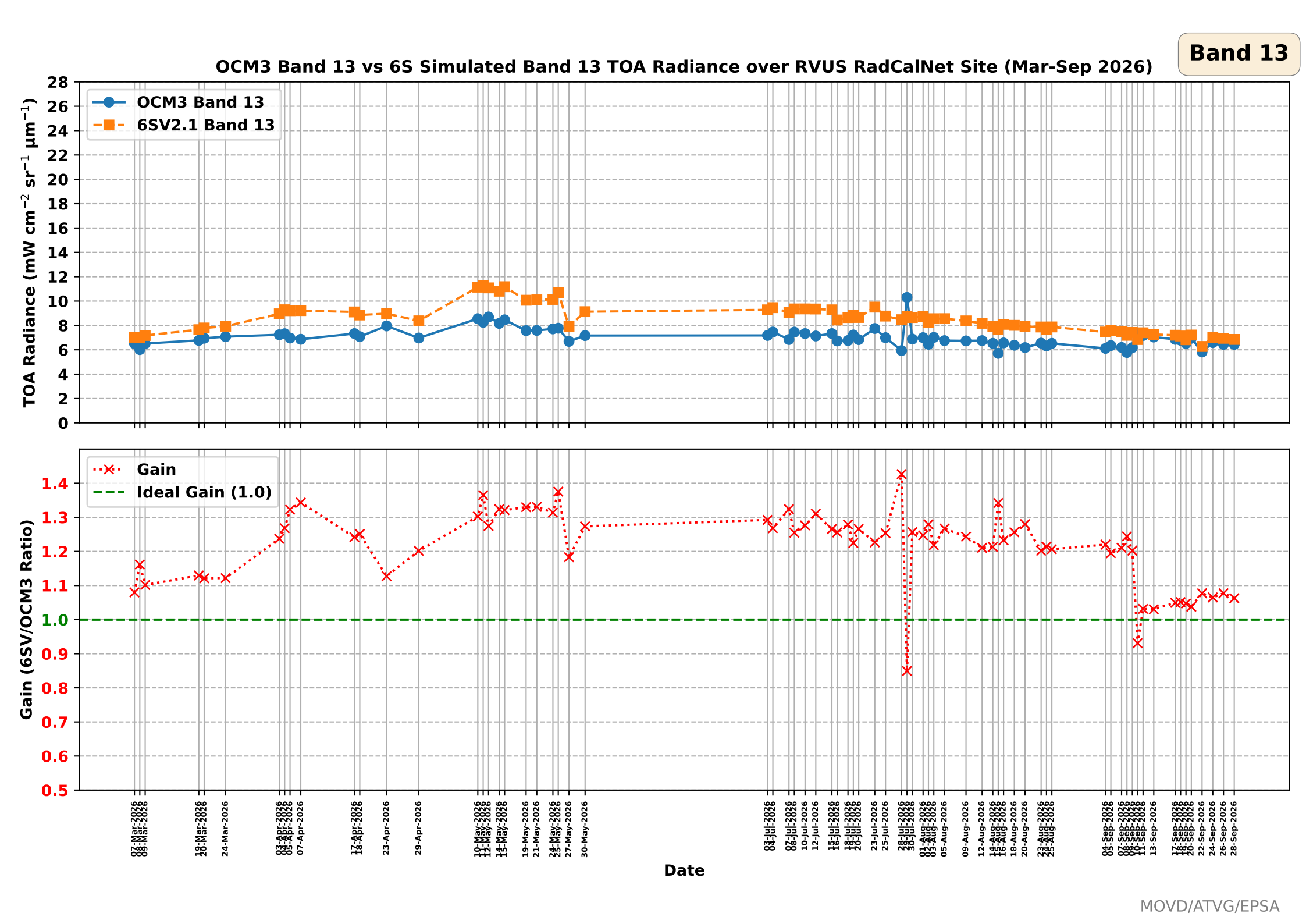

Band 8
OCM3 Band 8 vs 6S Simulated Band 8 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 8
6SV2.1 Band 8
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA


Band 9
OCM3 Band 9 vs 6S Simulated Band 9 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 9
6SV2.1 Band 9
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA


Band 10
OCM3 Band 10 vs 6S Simulated Band 10 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 10
6SV2.1 Band 10
TOA Radiance (mW cm⁻² sr⁻¹ µm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA


Band 11
OCM3 Band 11 vs 6S Simulated Band 11 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 11
6SV2.1 Band 11
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA


Band 12
OCM3 Band 12 vs 6S Simulated Band 12 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 12
6SV2.1 Band 12
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA


Band 13
OCM3 Band 13 vs 6S Simulated Band 13 TOA Radiance over RVUS RadCalNet Site (Mar-Sep 2026)
OCM3 Band 13
6SV2.1 Band 13
TOA Radiance (mW cm⁻² sr⁻¹ μm⁻¹)
Gain
Ideal Gain (1.0)
Gain (6SV/OCM3 Ratio)
Date
MOVD/ATVG/EPSA