
Homogenisation of GERB and CERES fluxes: demonstration for the OLR

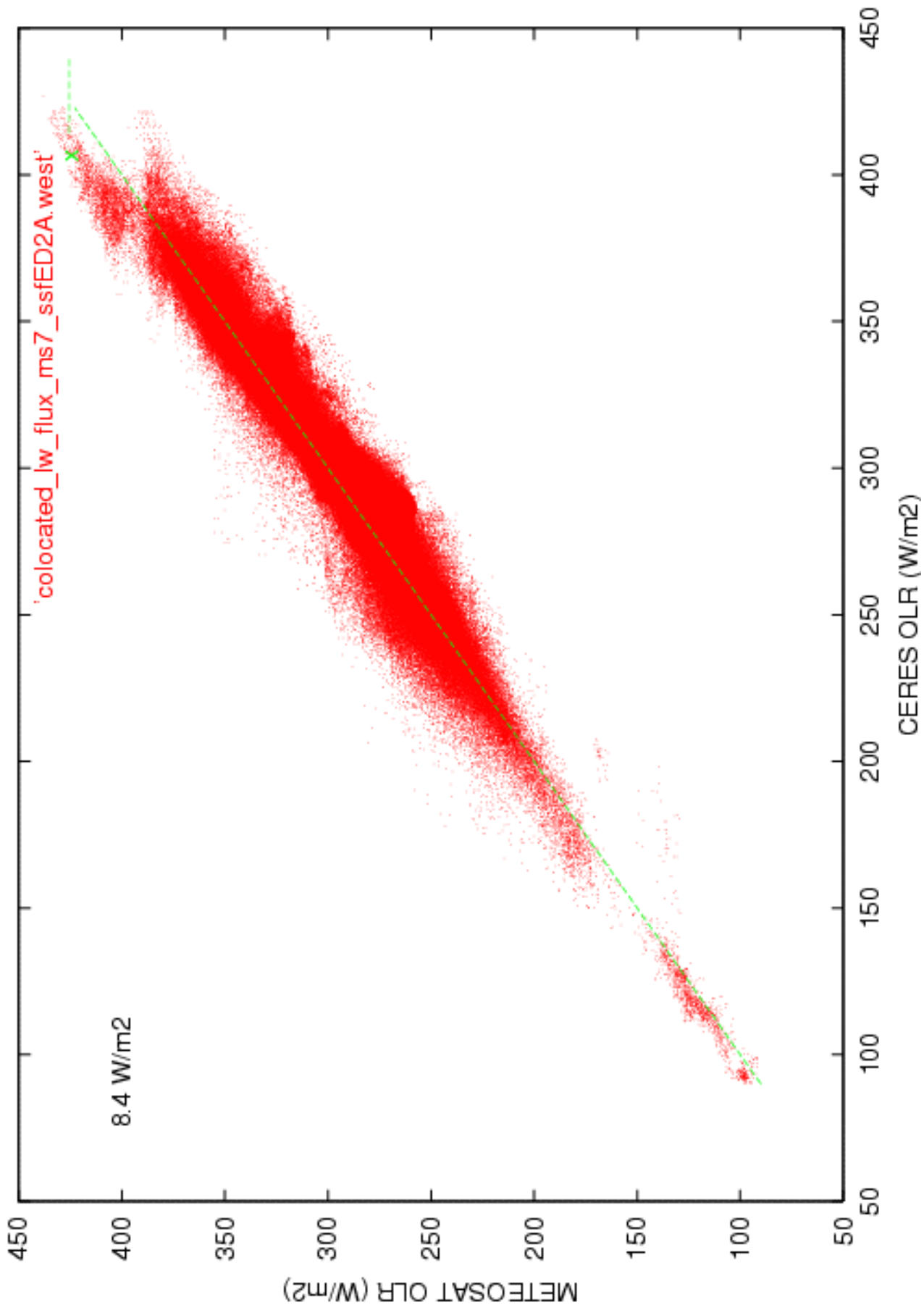
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Overview

- ◆ 1. GERB *like* and CERES OLR (LW) flux data
- ◆ 2. Homogenisation
- ◆ 3. First results RSF (SW) homogenisation
- ◆ 4. Conclusions

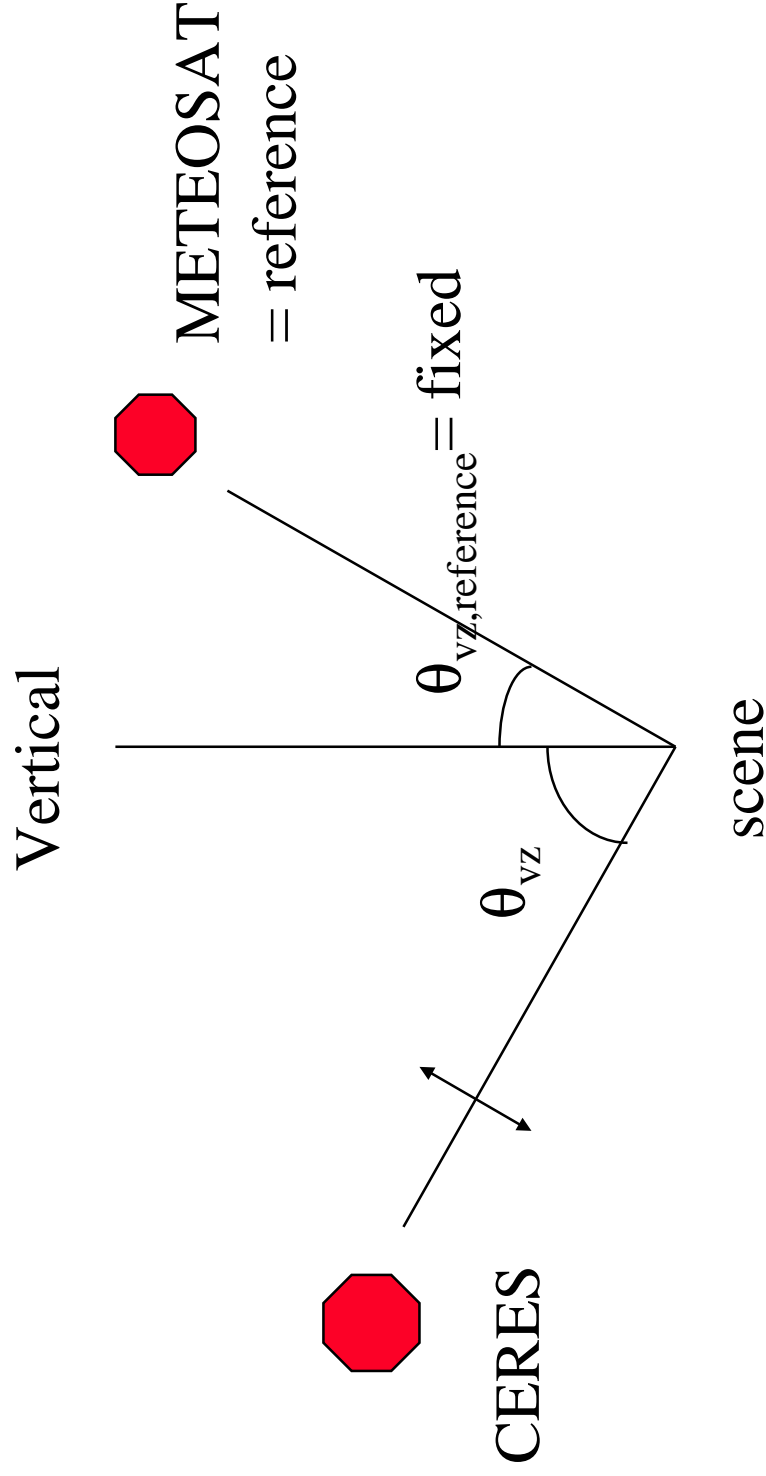
1. Used data

- ◆ GERB *like* derived from METEOSAT 7 during July and August 1998.
- ◆ SSF edition 2A from CERES instrument on TRMM satellite (RAPS days)

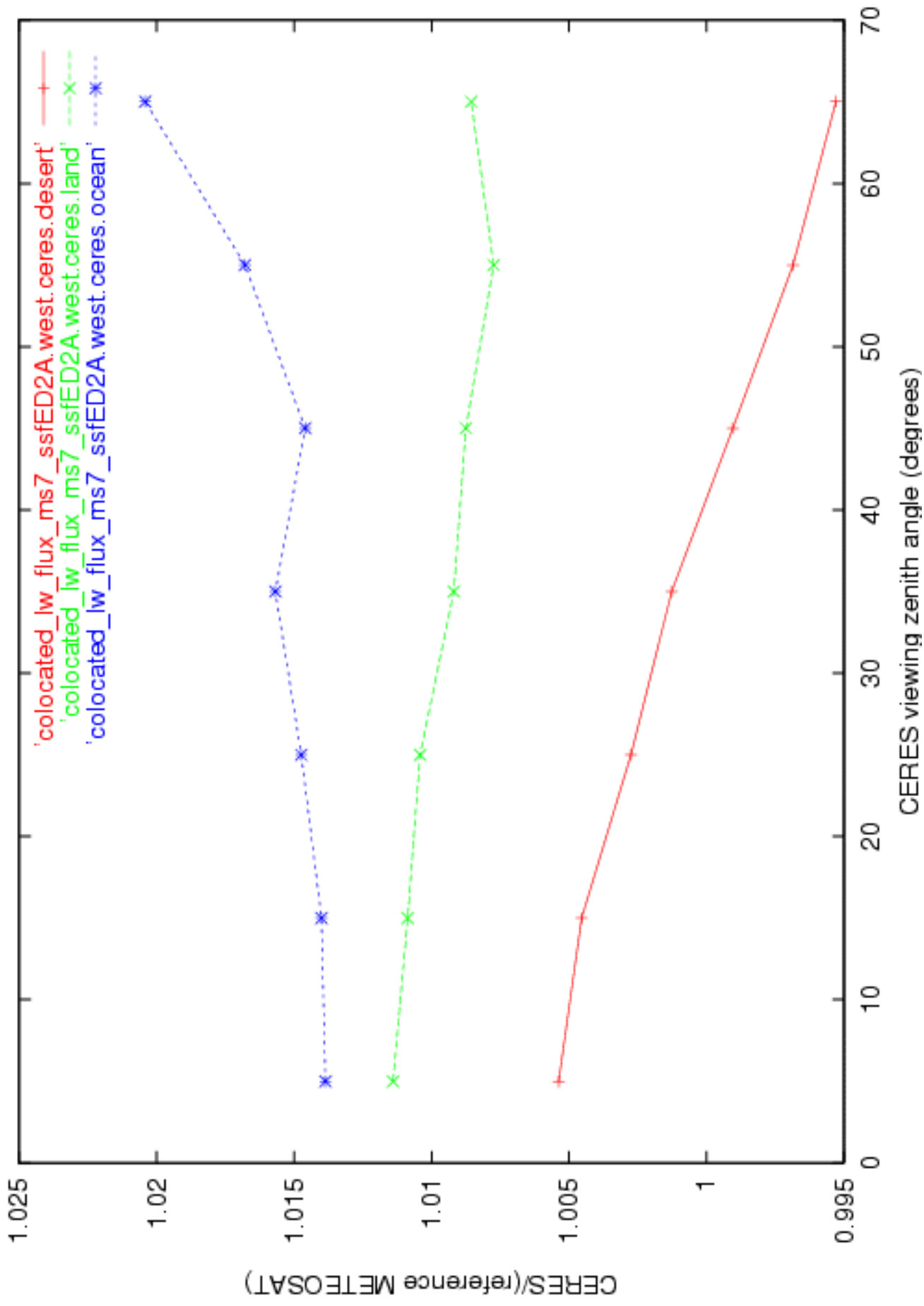


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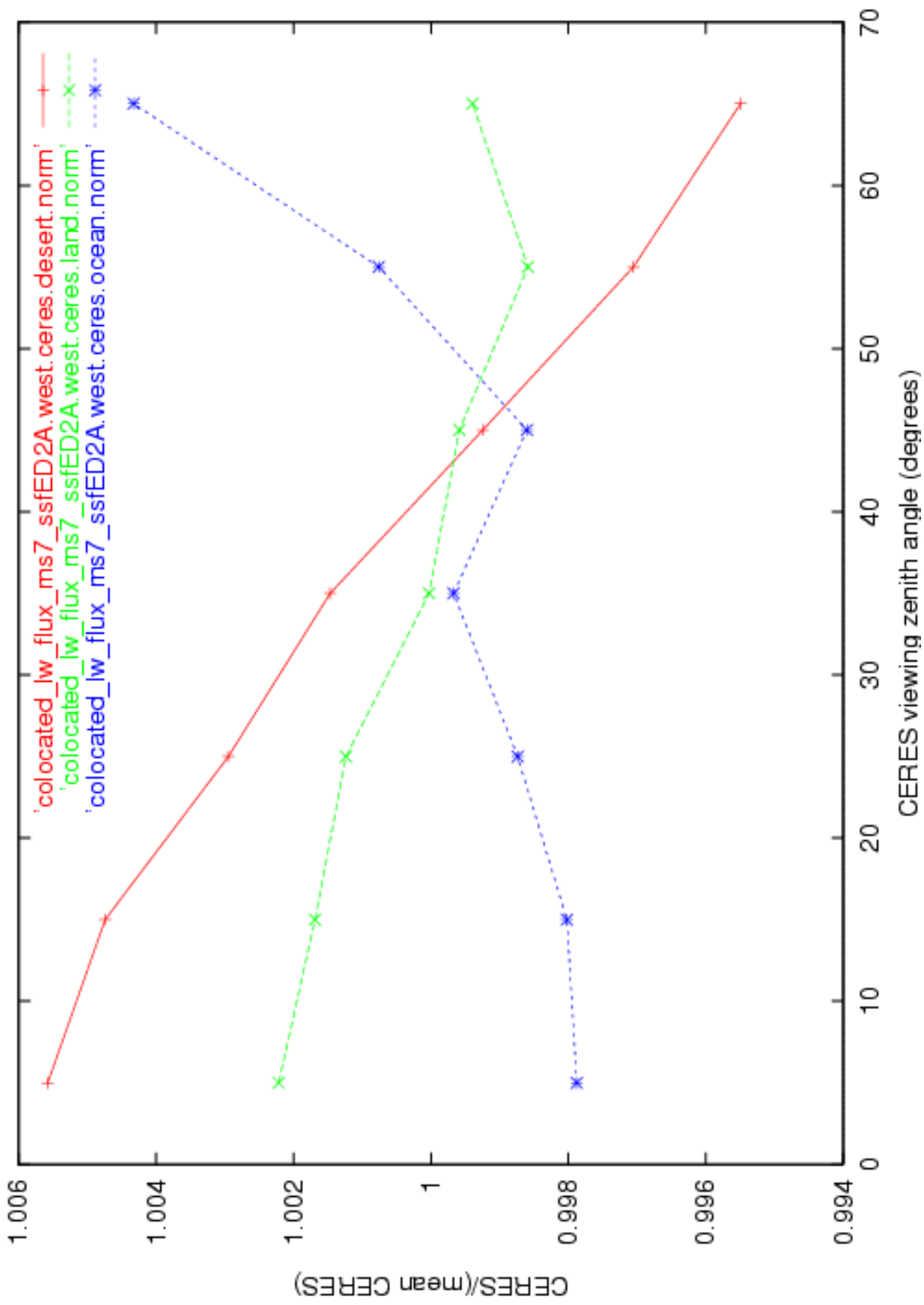
Variation of CERES OLR with viewing zenith angle



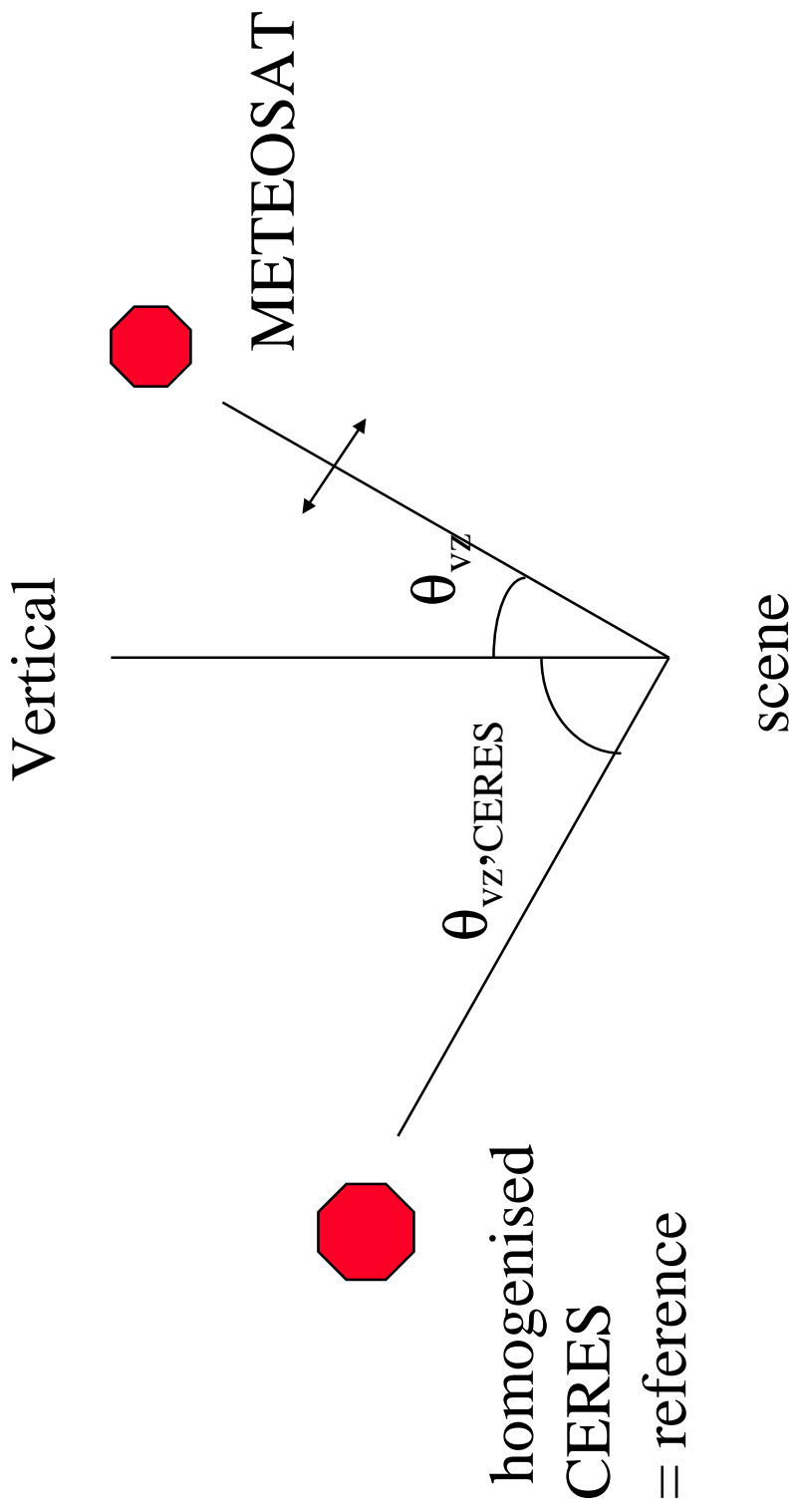
$$\text{CERES} / \text{ref. METEOSAT} (\theta_{vz}) = \text{OLR}_{\text{CERES}}(\theta_{vz}) / \text{OLR}_{\text{MET.}}(\theta_{vz,reference})$$



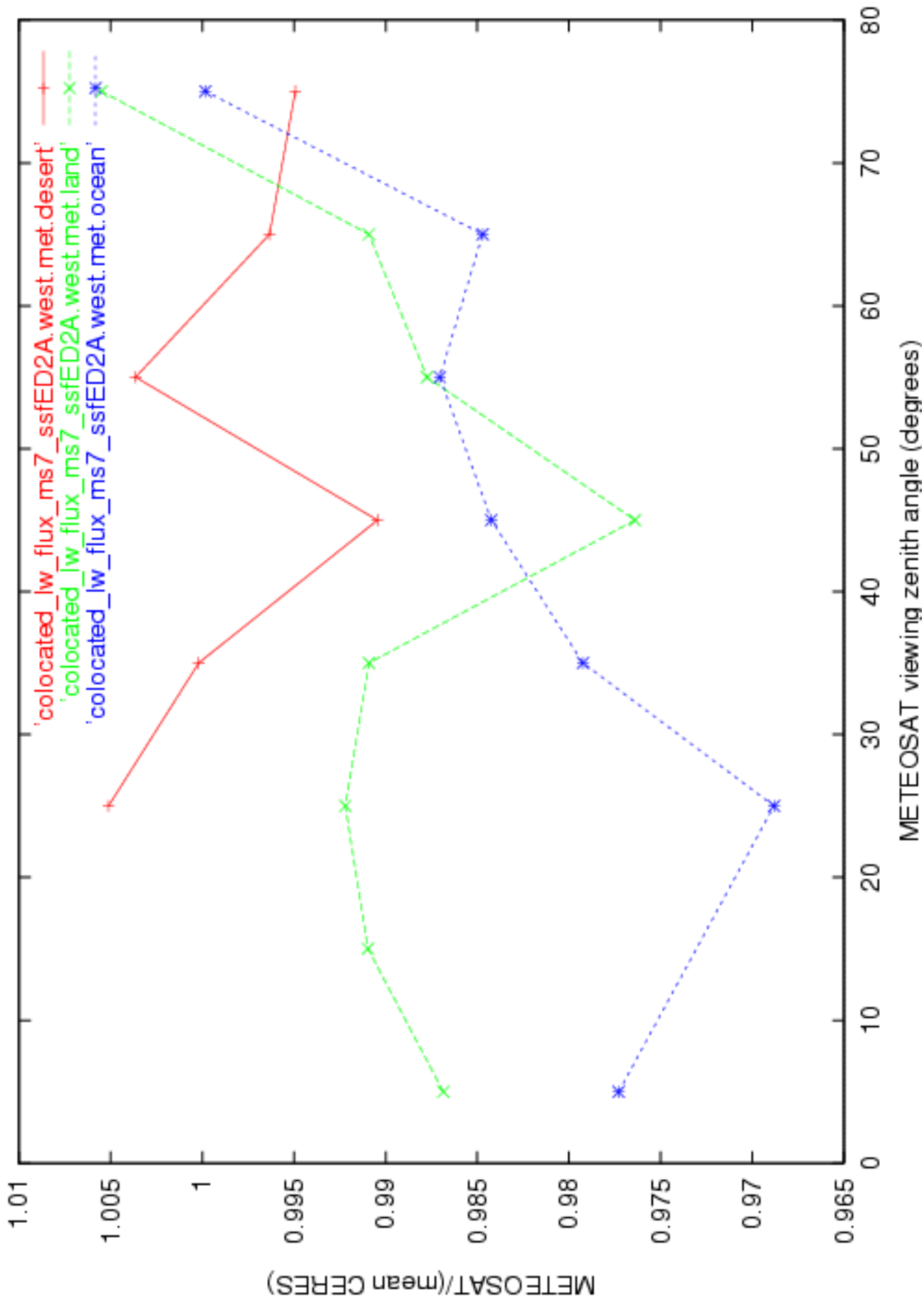
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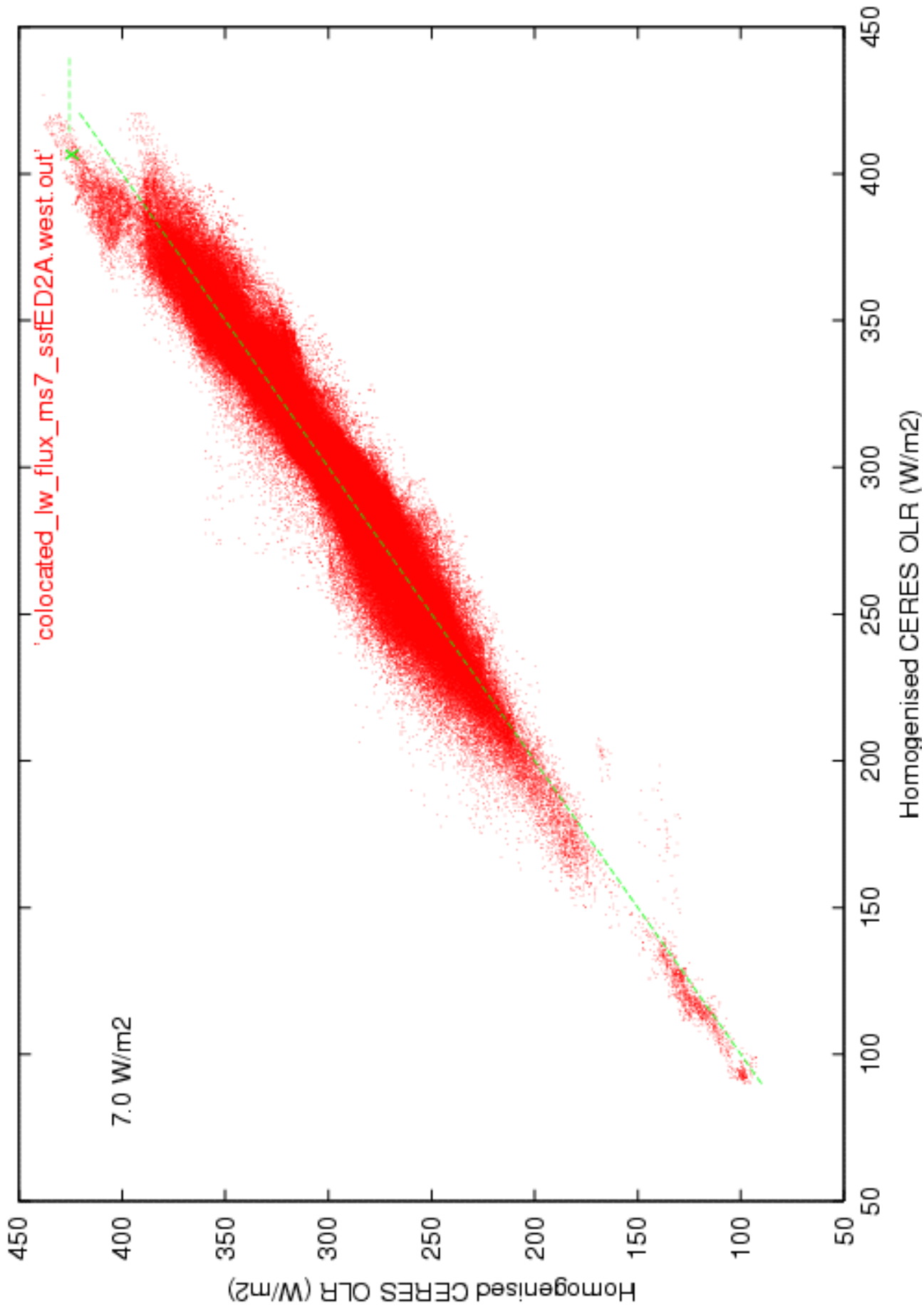
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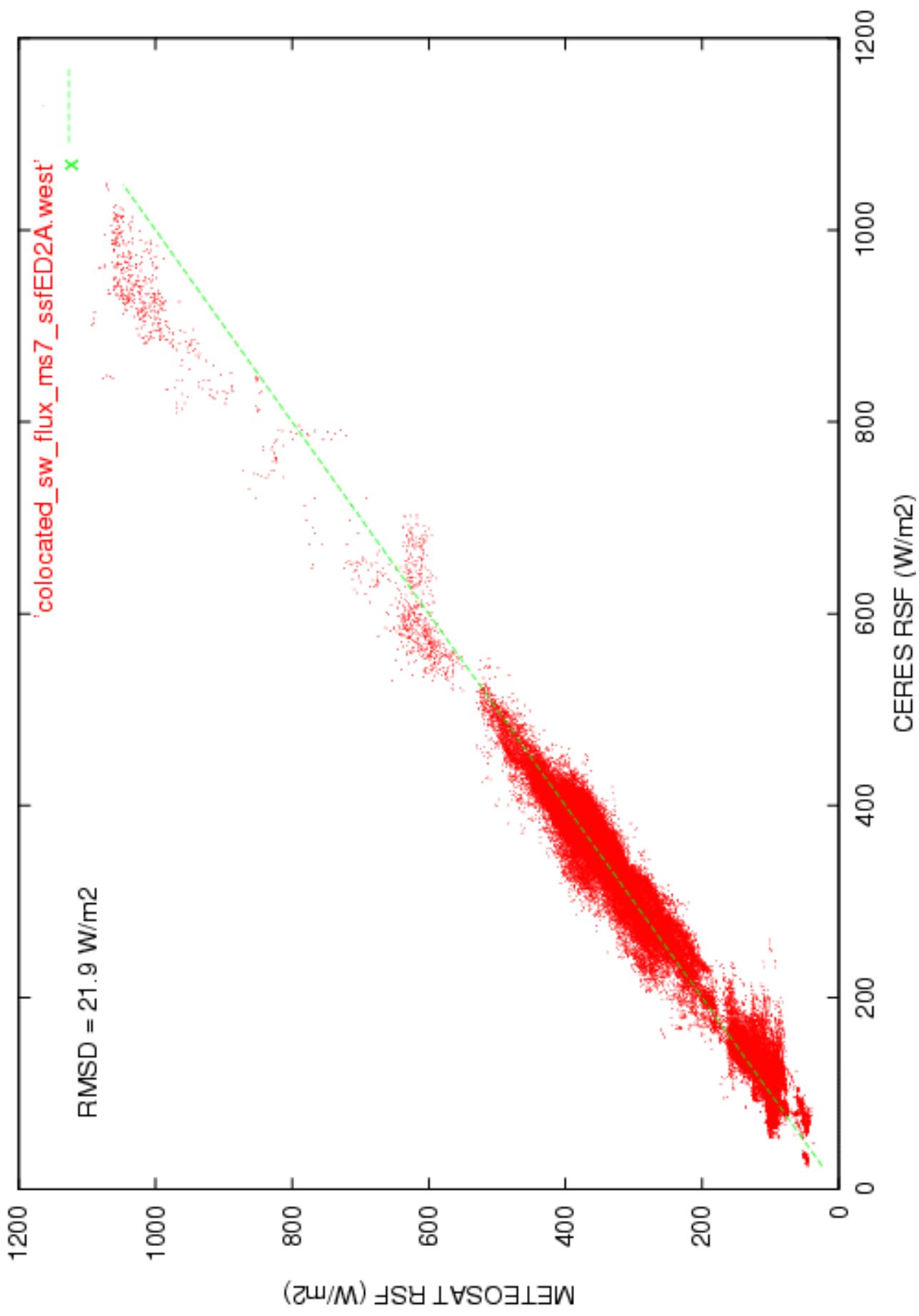
$$\text{MET.} / \text{mean CERES} (\theta_{VZ}) = \text{OLR}_{\text{MET.}} (\theta_{VZ}) / \text{hom. OLR}_{\text{CERES}} (\theta_{VZ, \text{CERES}})$$



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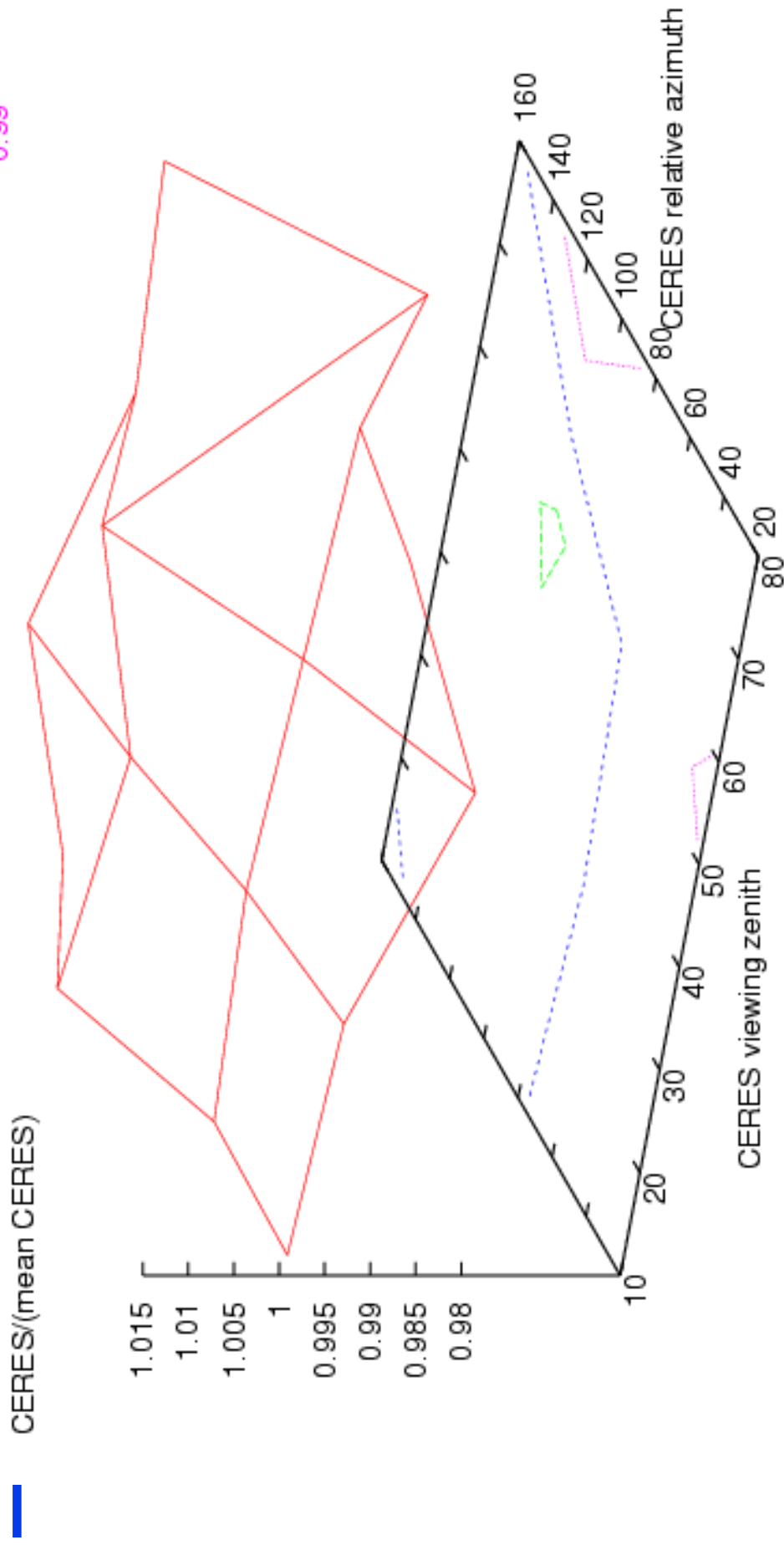


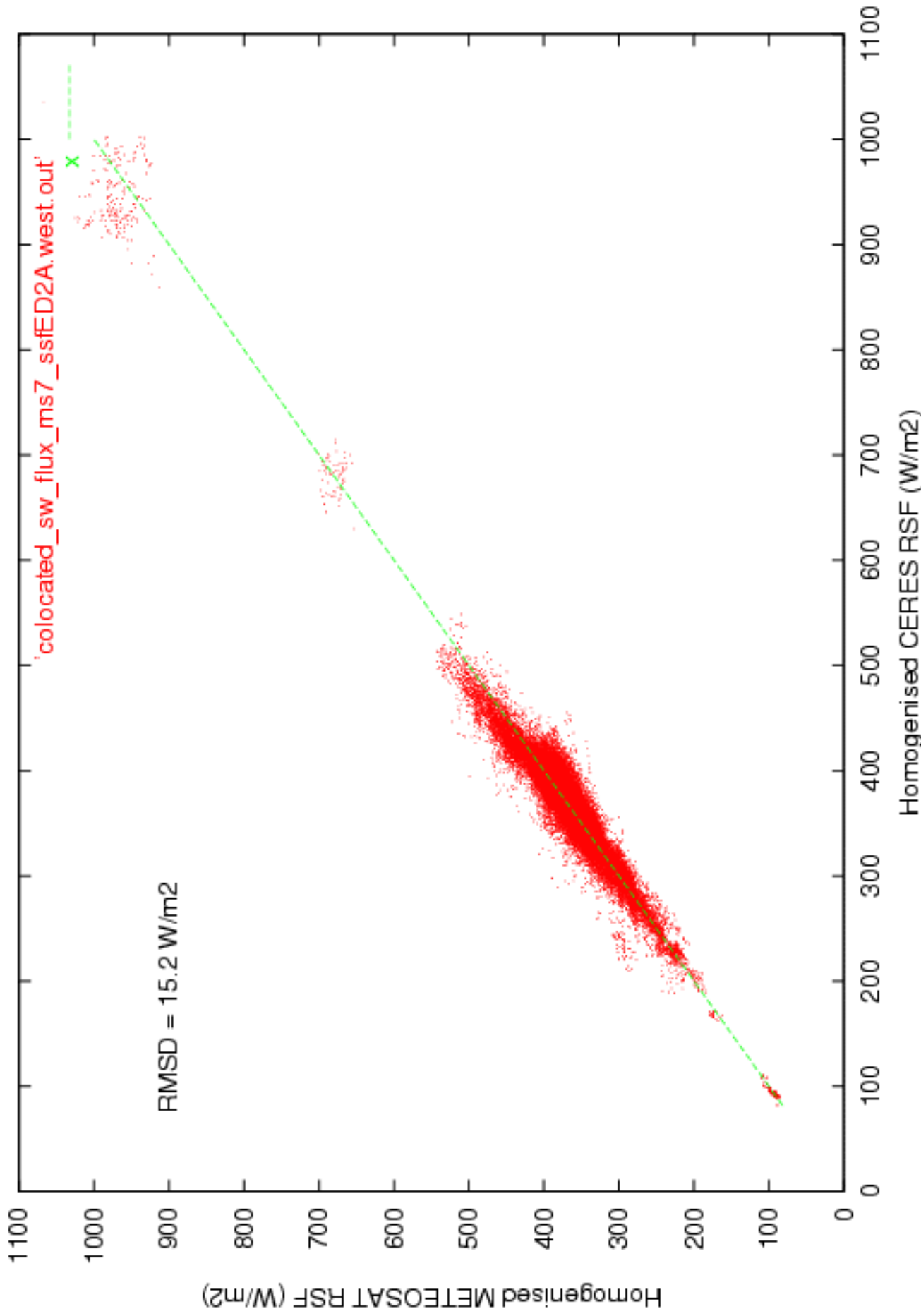
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'collocated_sw_flux_ms7_ssfED2A.ceres.desert.norm.22.5_45' using 1:2.3
 1.01
 1
 0.99





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3. Conclusions

- ◆ A method for the homogenisation of CERES and GERB (like) OLR data has been developed and tested.
- ◆ For CERES SSF edition 2A, the error with angle is mostly within 0.5 %.
- ◆ For GERB like, the error is mostly within 3%