



耶鲁大学-南京信息工程大学大气环境中心

Yale-NUIST Center on Atmospheric Environment

Comparing eddy covariance and micrometeorological measurements at XLS against observations at the other Taihu sites

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Outline

1.The introduction of Taihu sites

2.Data

3. Comparison of the data

(1)Comparing EC and MET measurements at XLS
against observations at BFG sites

(2) Comparing EC and MET measurements at XLS
against observations at MLW sites



The introduction of Taihu sites

XLS

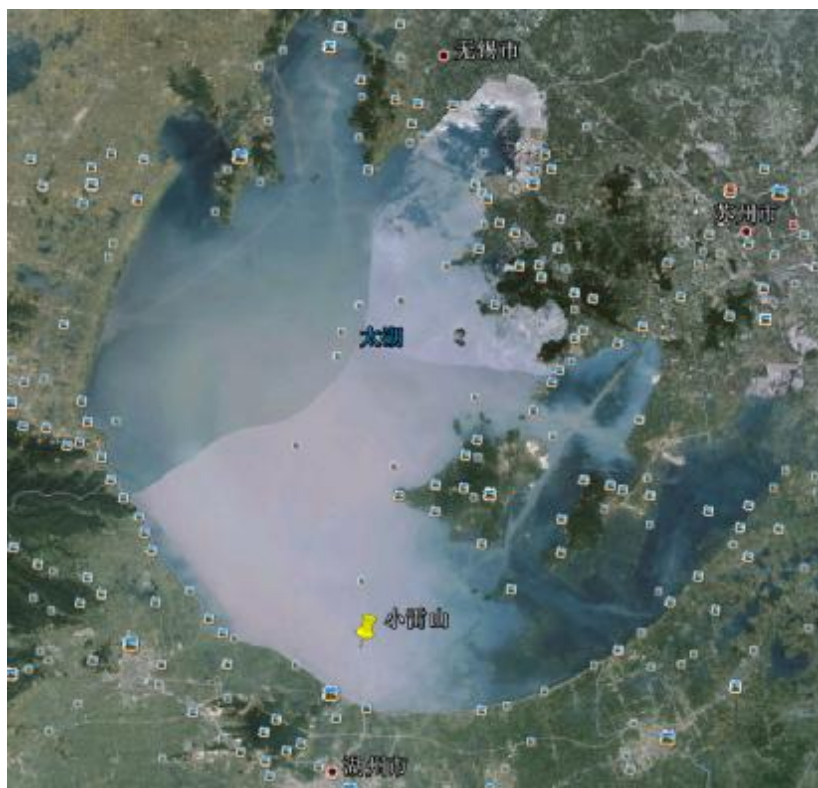


Plate. 1-1 XLS

(120° 08'04"E 30° 59' 50"N)

BFG



Plate.1-2 BFG

(120° 24'01"E, 31° 10'28"N)

MLW

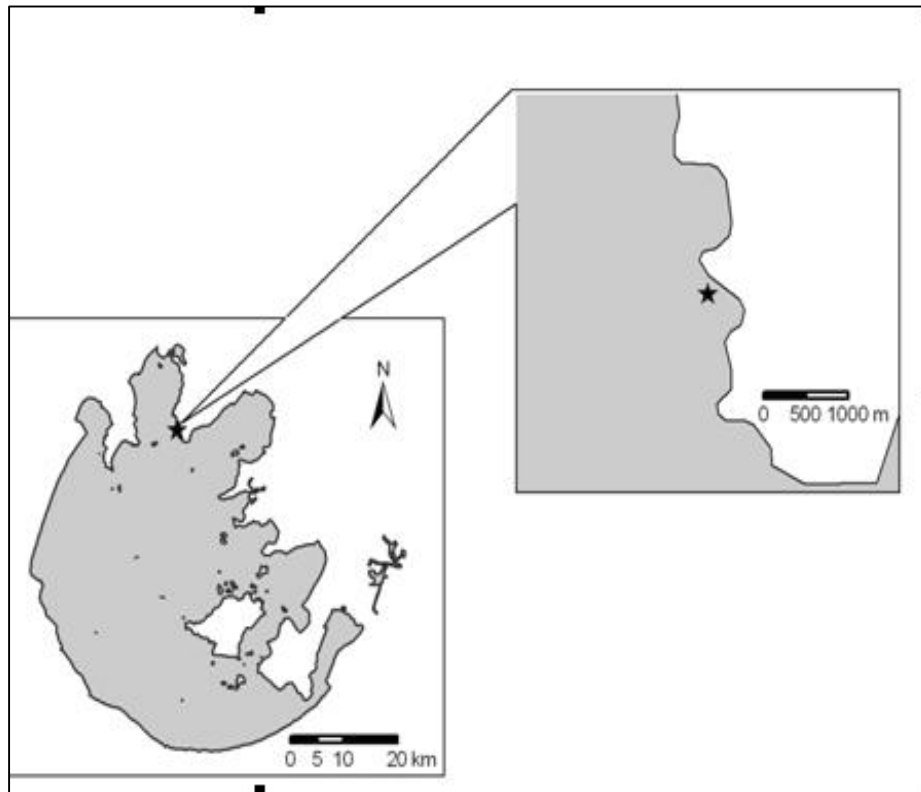


Plate.1-3 MLW

(120° 13'8.4"E, 31° 25'4.8"N)

DPK



Plate. 1-4 DPK

(119° 55'52.3"E, 31° 15'57.8"N)

Data

(1)Data :

Eddy covariance and micrometeorological measurements at XLS ,BFG and MLW

(2)Time:(2012-12-1 00:00 to 2012-12-31 23:30)

(3) Classification of Comparative data:EC(CO₂ ,H₂O ,Fc ,Hc ,Hs ,LE tau , u_star ,rho , wnd_spd_EC ,e);
MET(Rain ,Ta_avg ,RH , wnd_spd_met); Abd.

Comparison of the data

(1) Comparing EC and MET measurements at XLS against observations at BFG

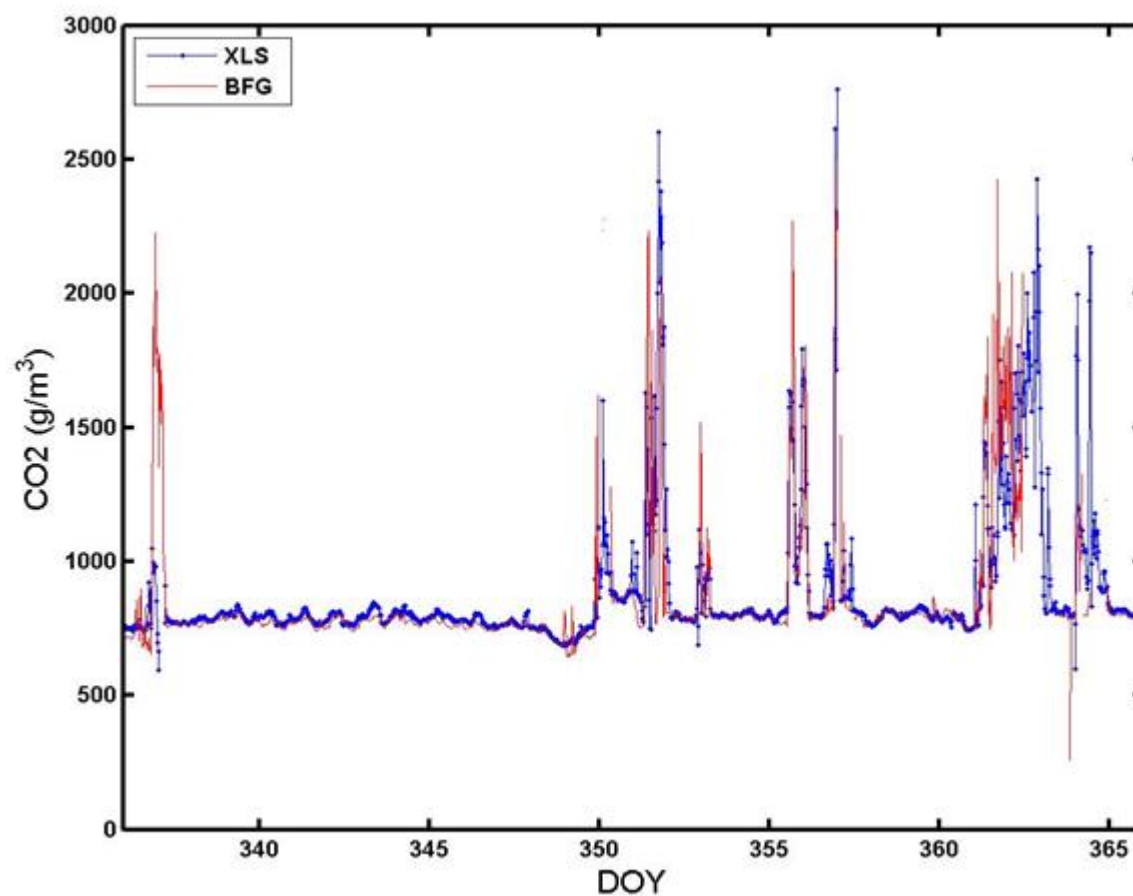


Fig.2-1 Comparing CO₂ at XLS measurements against observations at BFG

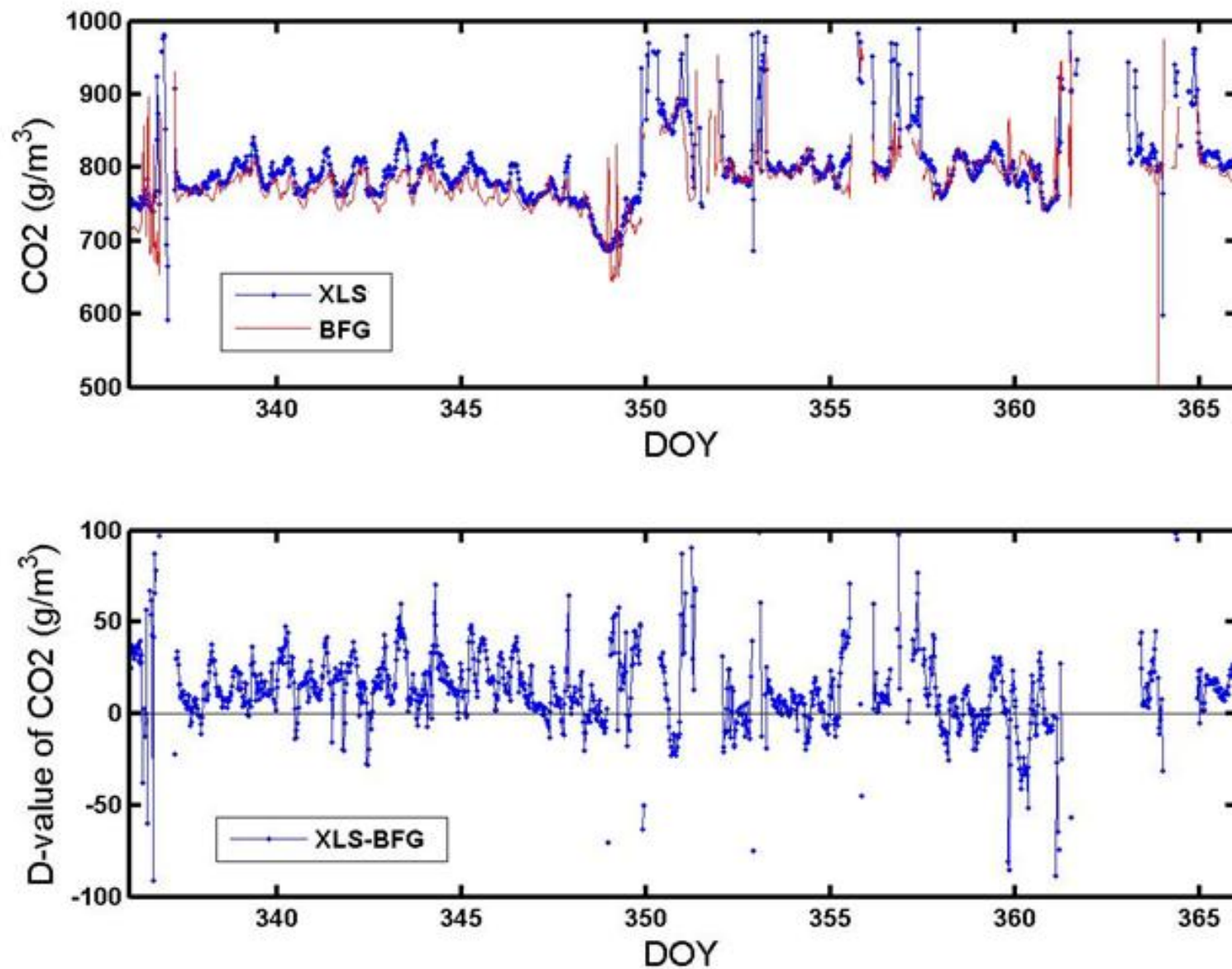


Fig.2-2 Comparing CO₂ at XLS measurements against observations at BFG (CO₂<1000)

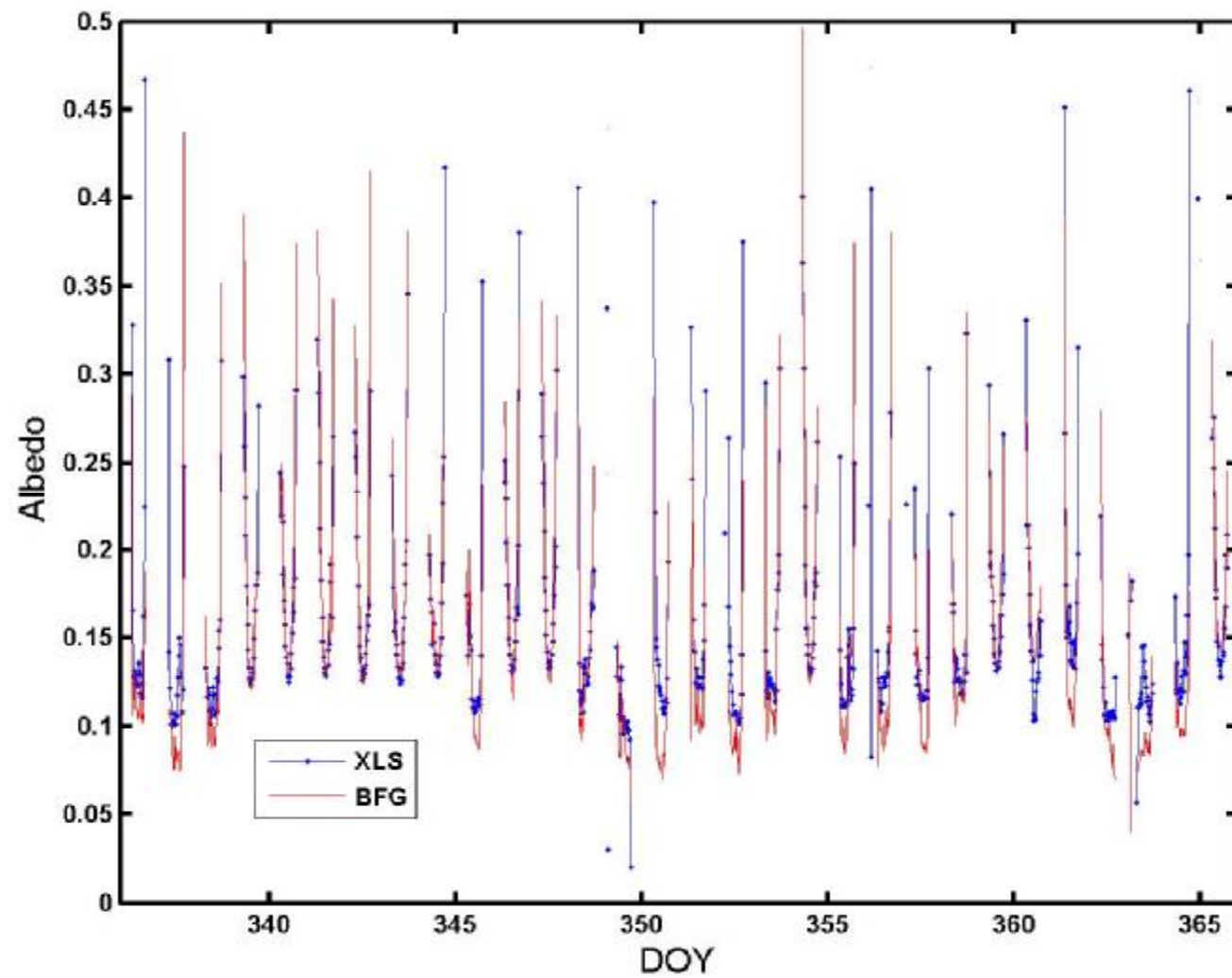


Fig.2-3 Comparing Albedo at XLS measurements against observations at BFG

XLS - BFG

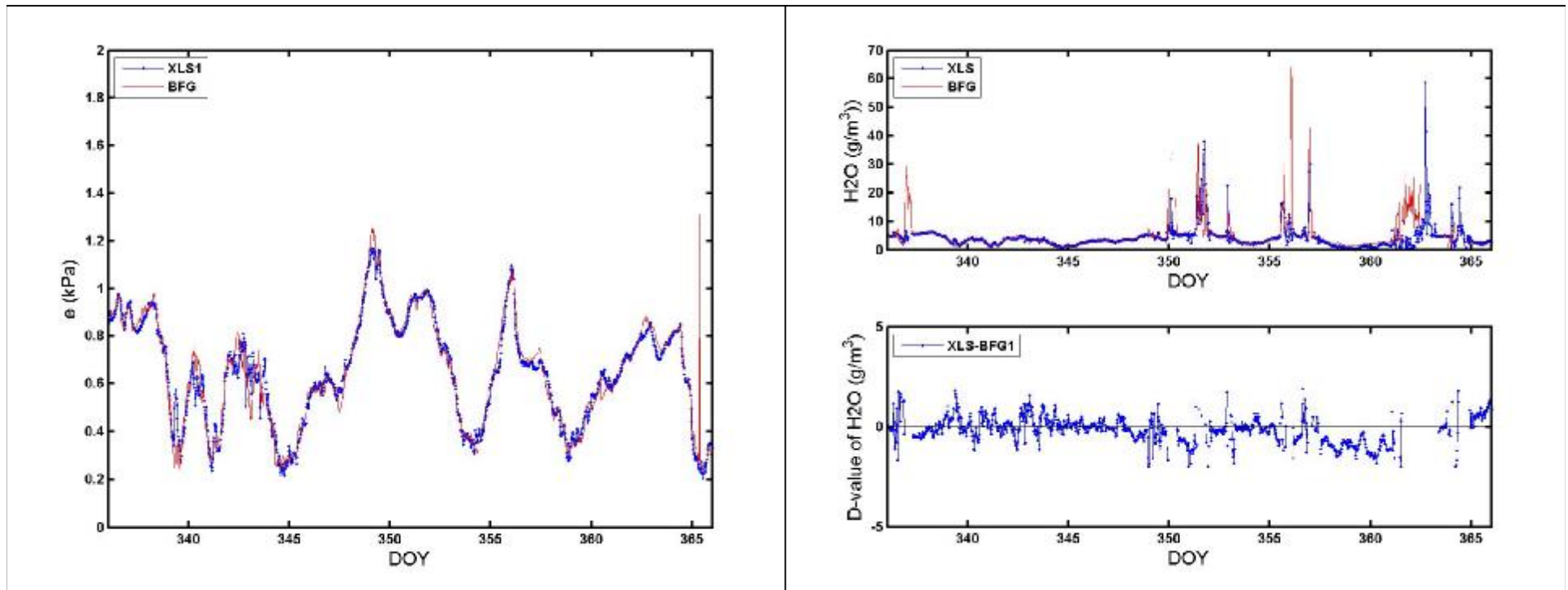


Fig.2-4 Comparing H_2O and e at XLS measurements against observations at BFG



XLS -BFG

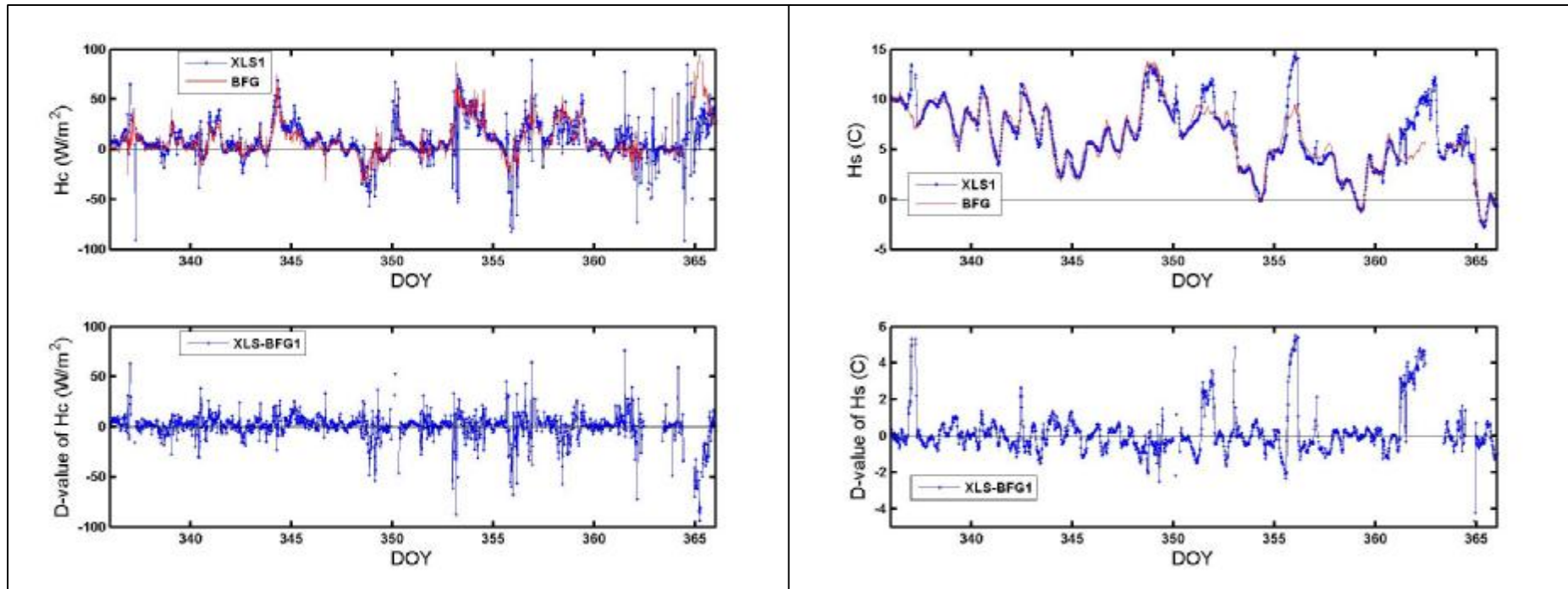


Fig.2-5 Comparing Hc and Hs at XLS measurements against observations at BFG

XLS -BFG

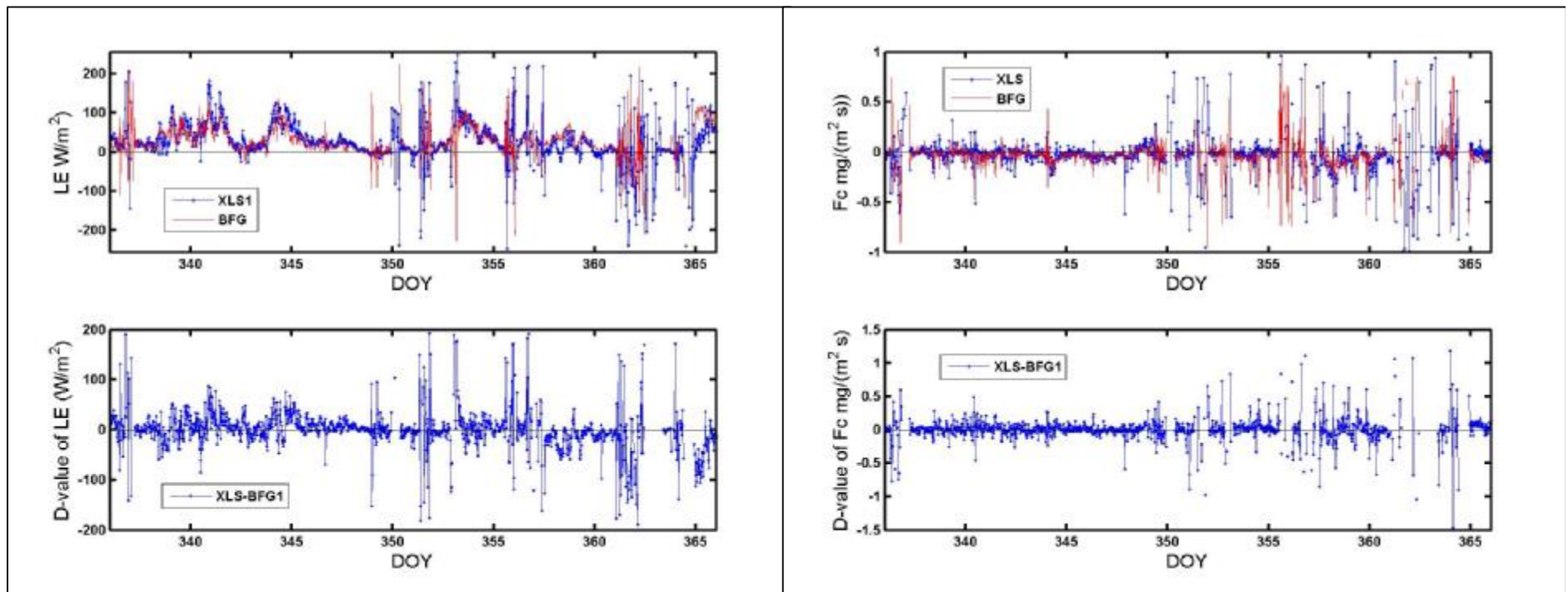


Fig.2-6 Comparing LE and Fc at XLS measurements against observations at BFG

XLS - BFG

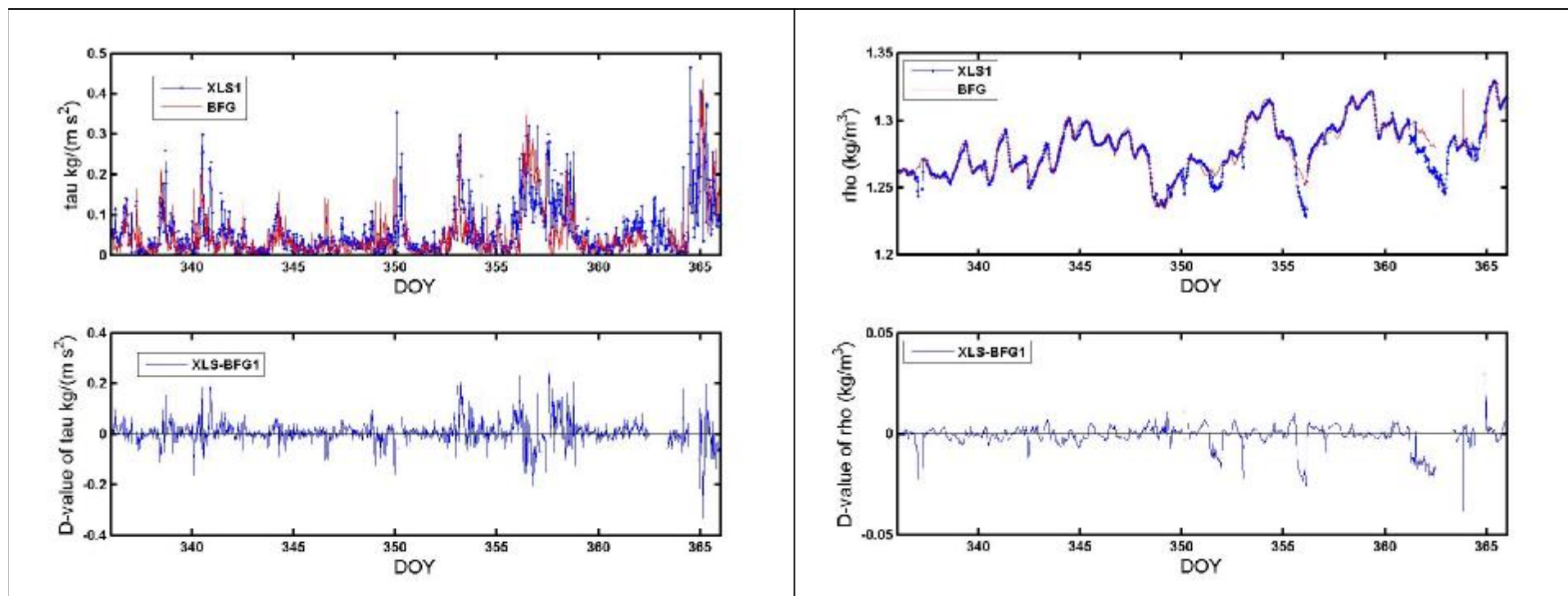


Fig.2-7 Comparing tau and rho at XLS measurements against observations at BFG

XLS - BFG

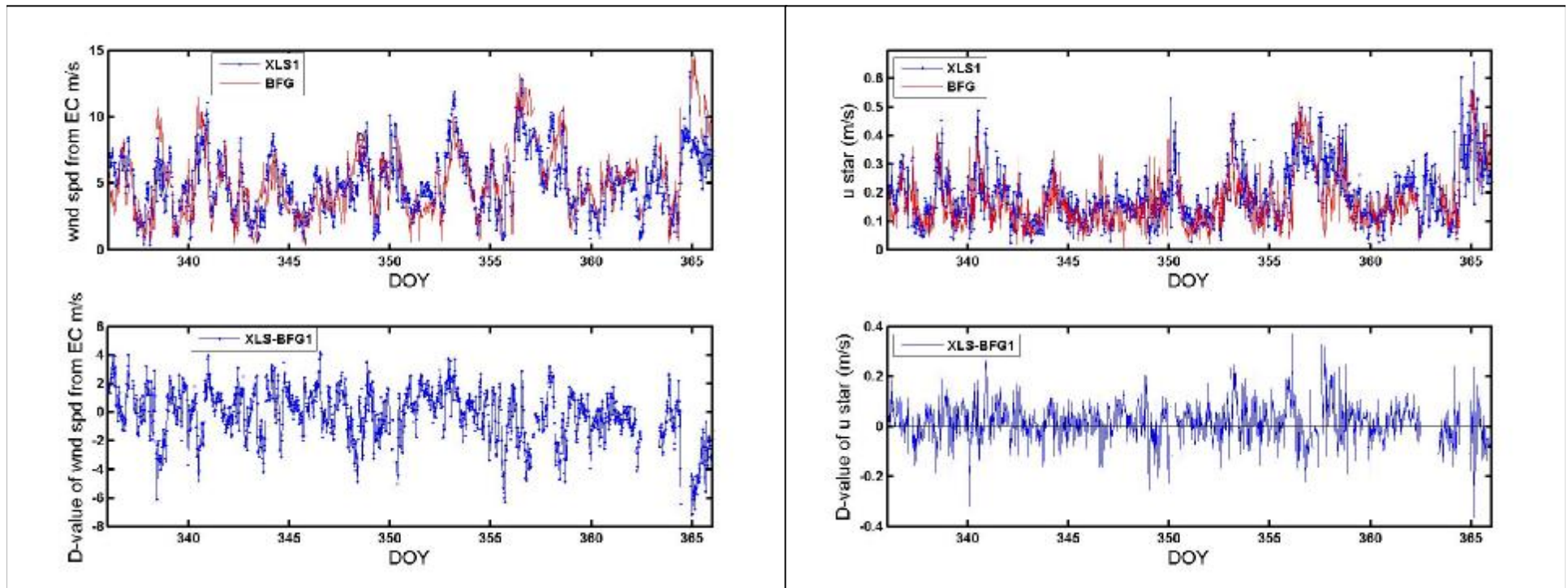


Fig.2-8 Comparing wnd_spd from EC and U_star at XLS measurements against observations at BFG

Comparison of the data

(2) Comparing EC and MET measurements at XLS against observations at MLW

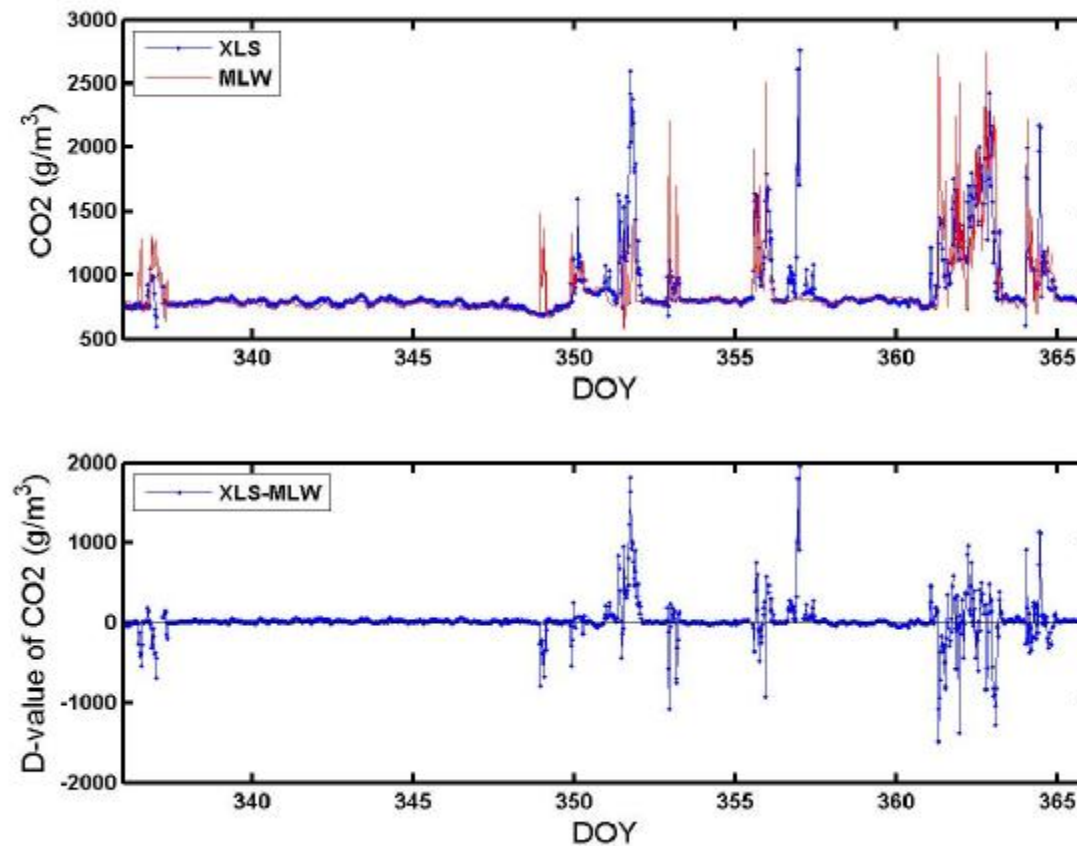


Fig.2-9 Comparing CO₂ at XLS measurements against observations at MLW

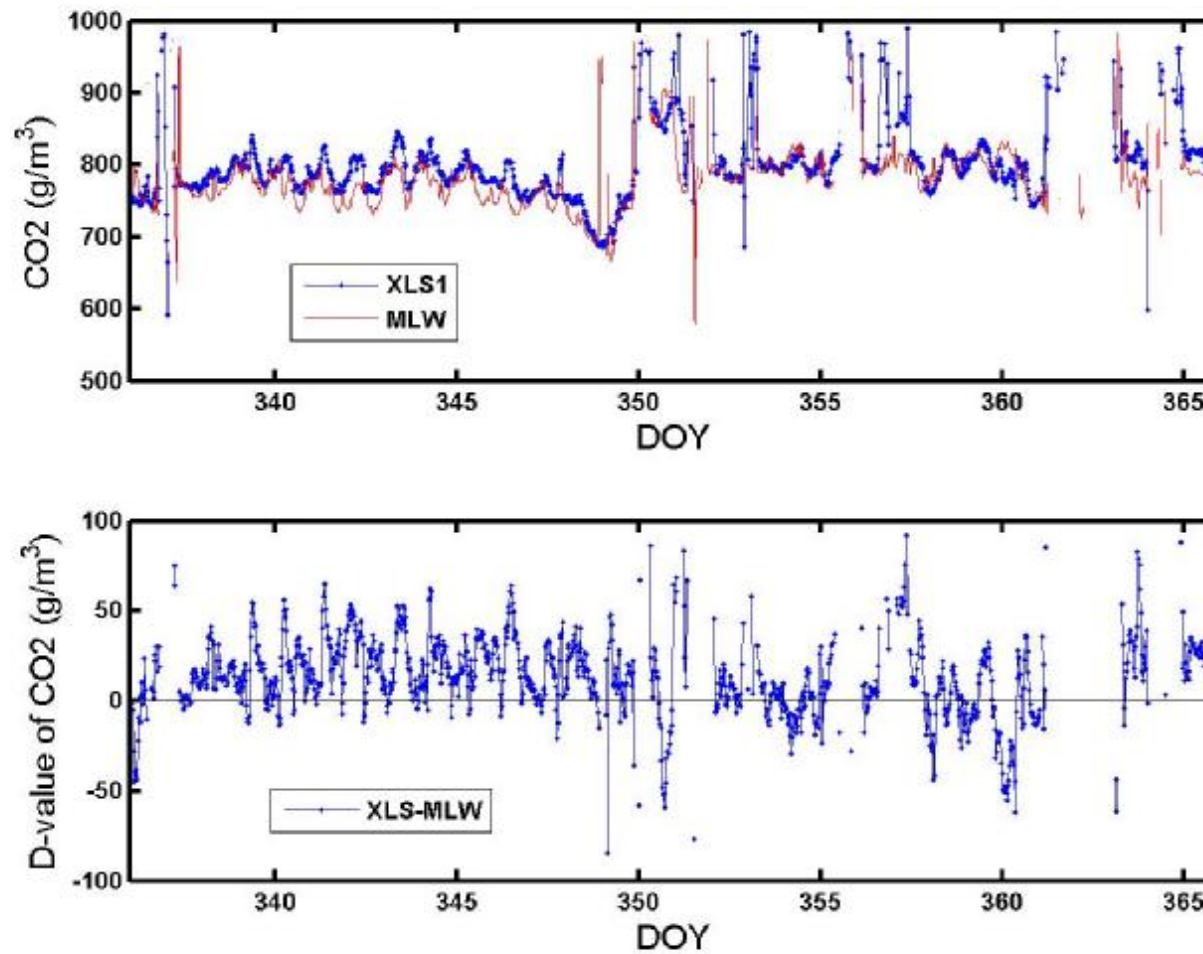


Fig.2- 10 Comparing CO₂ at XLS measurements against observations at MLW (CO₂<1000)

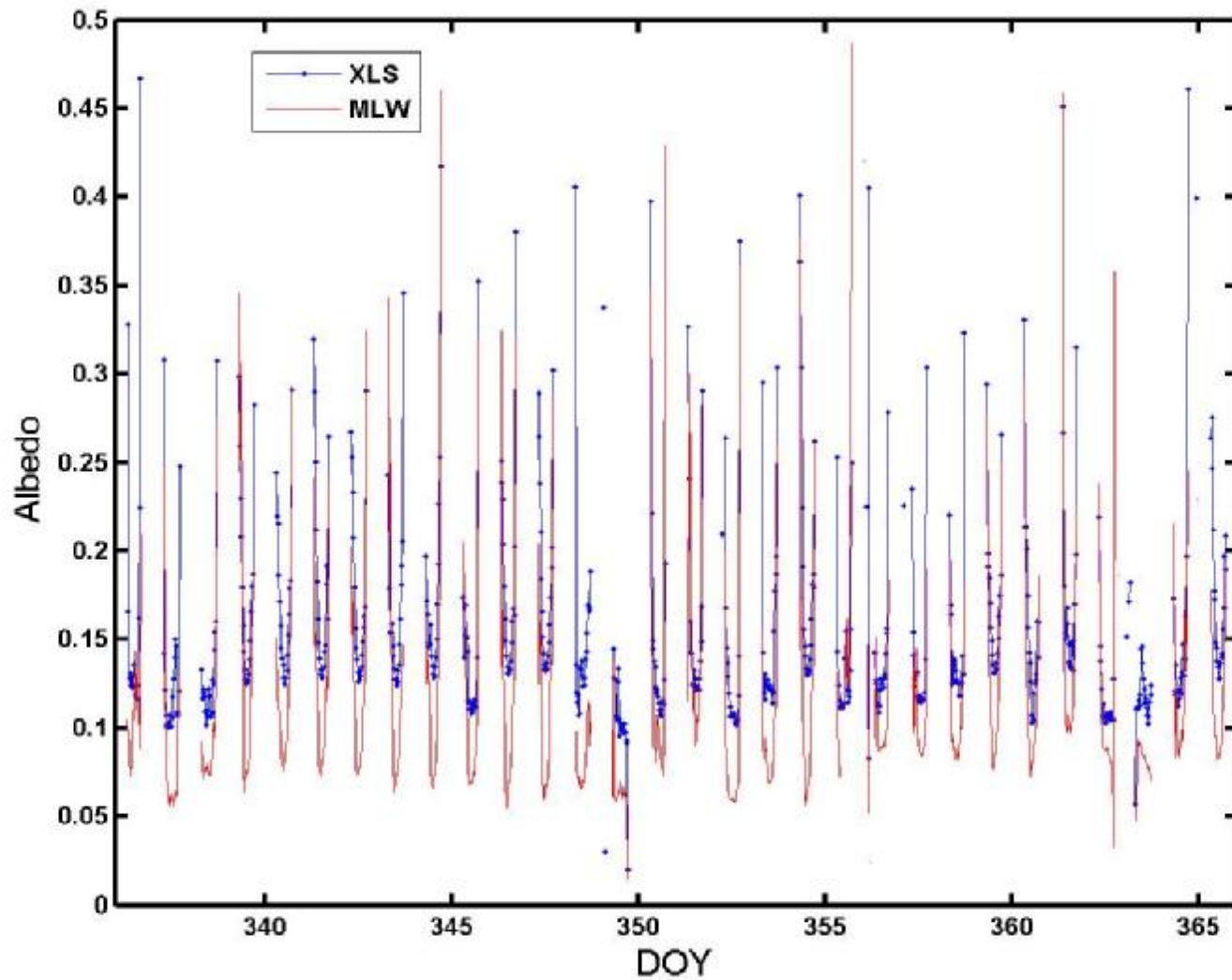


Fig.2-11 Comparing Albedo at XLS measurements against observations at MLW

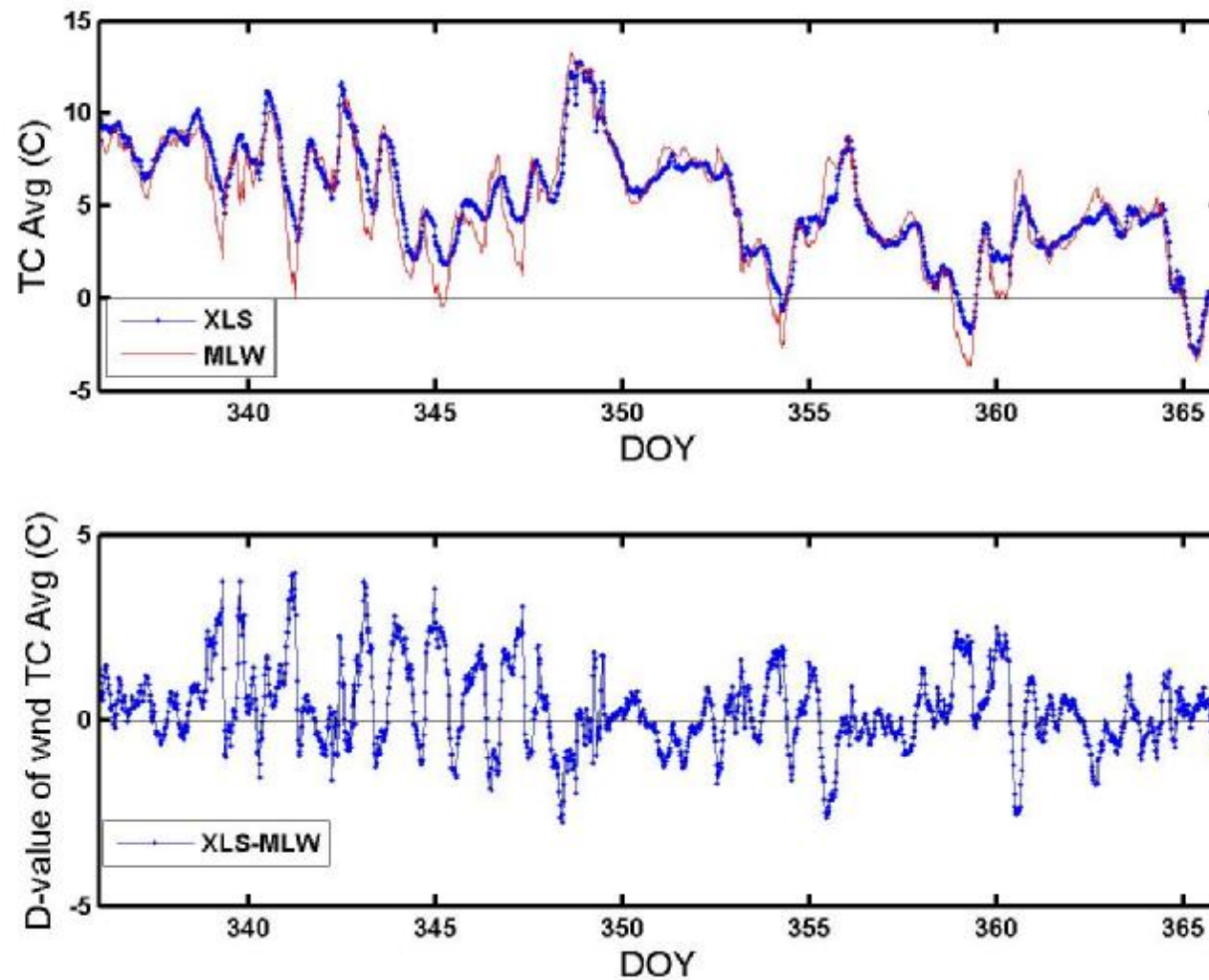


Fig.2-12 Comparing TC_avg at XLS measurements against observations at MLW

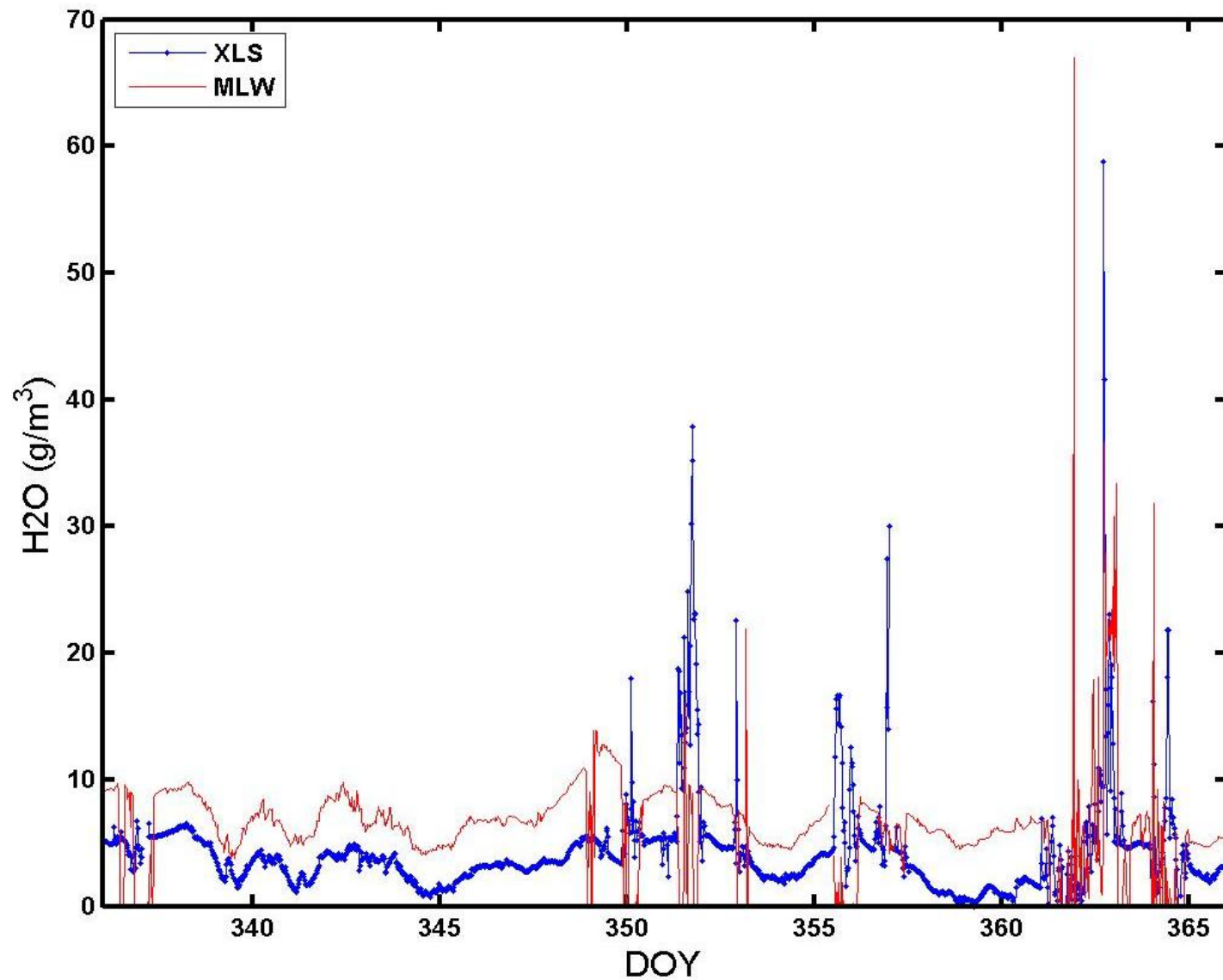


Fig.2-13 Comparing H₂O at XLS measurements against observations at MLW



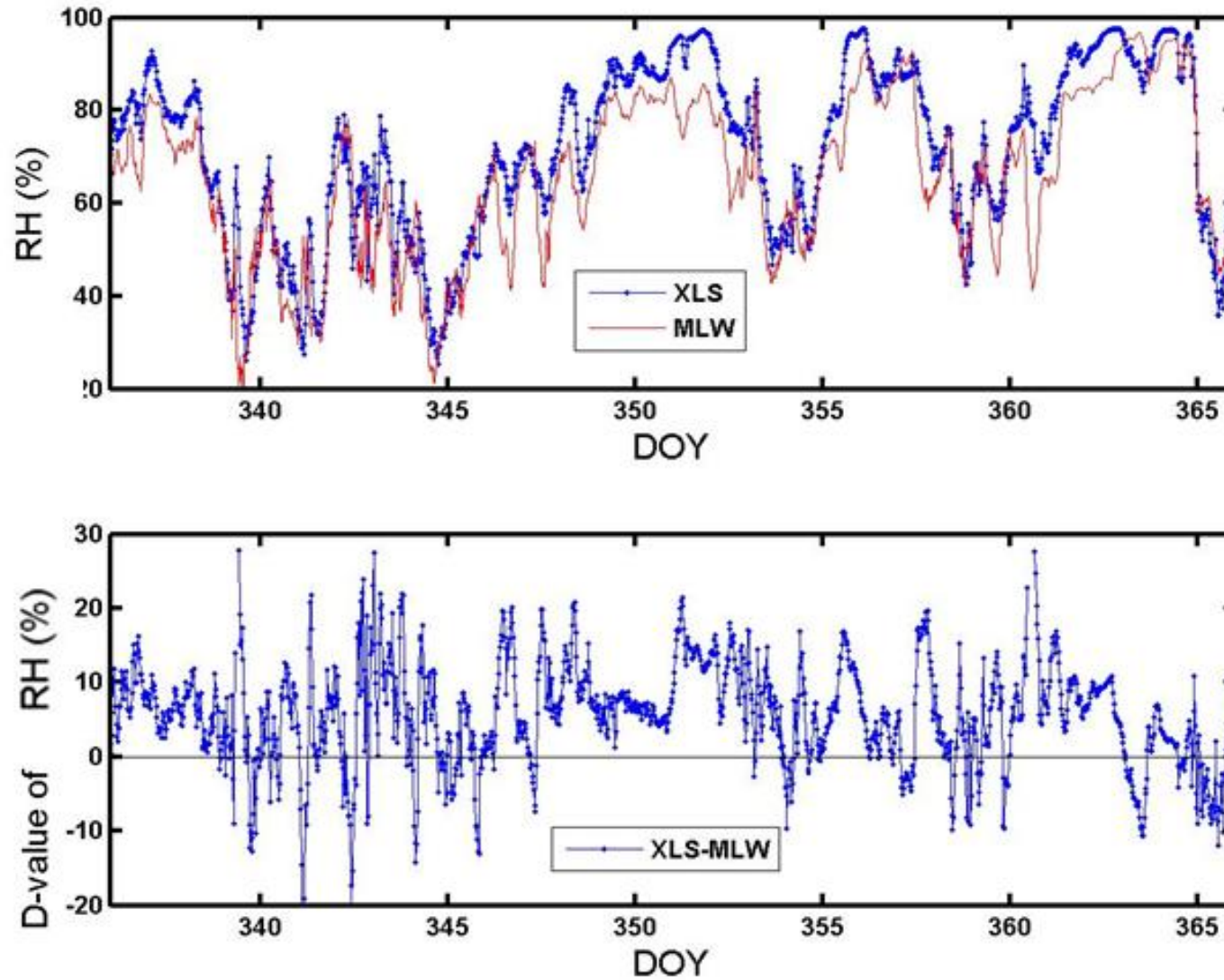
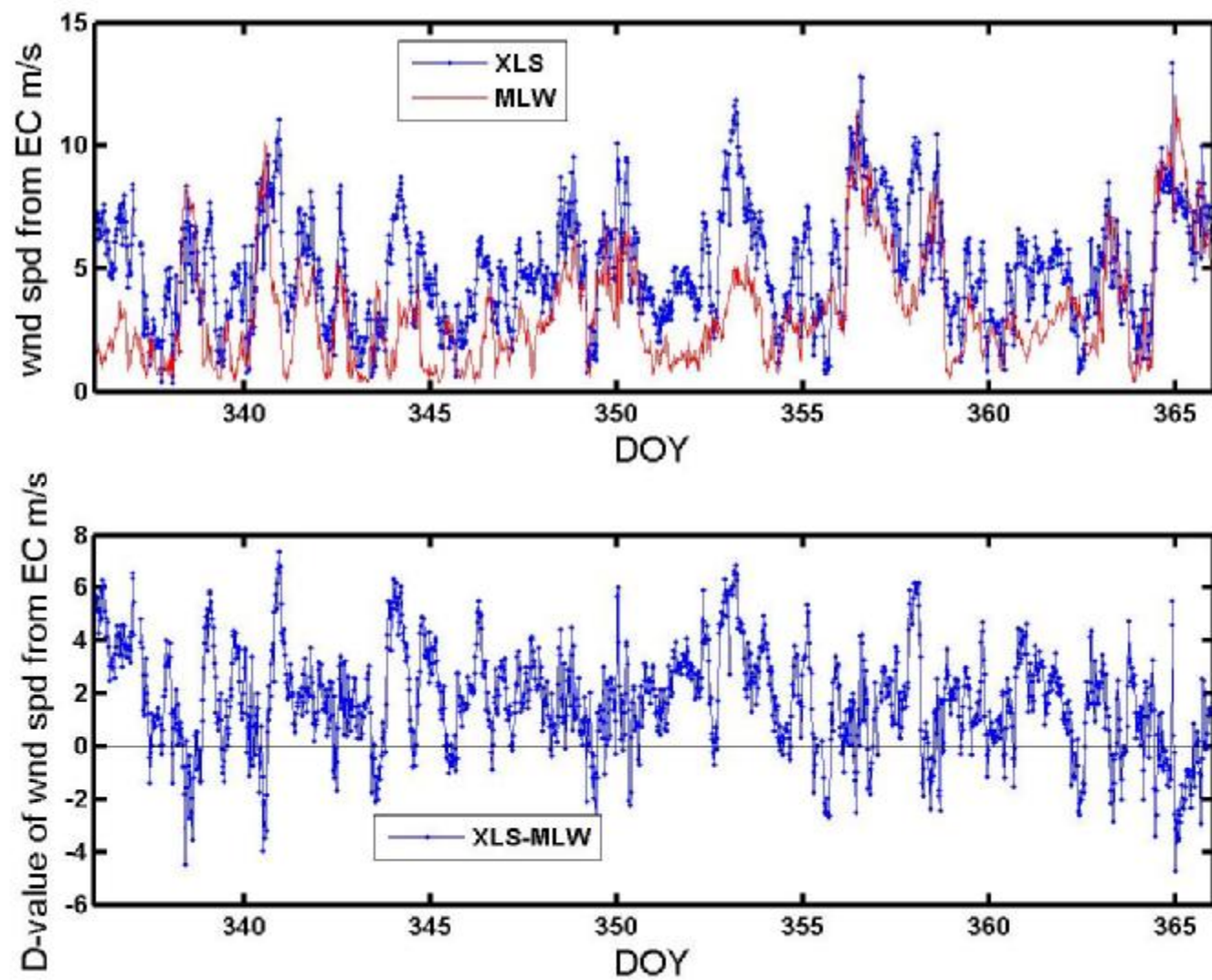
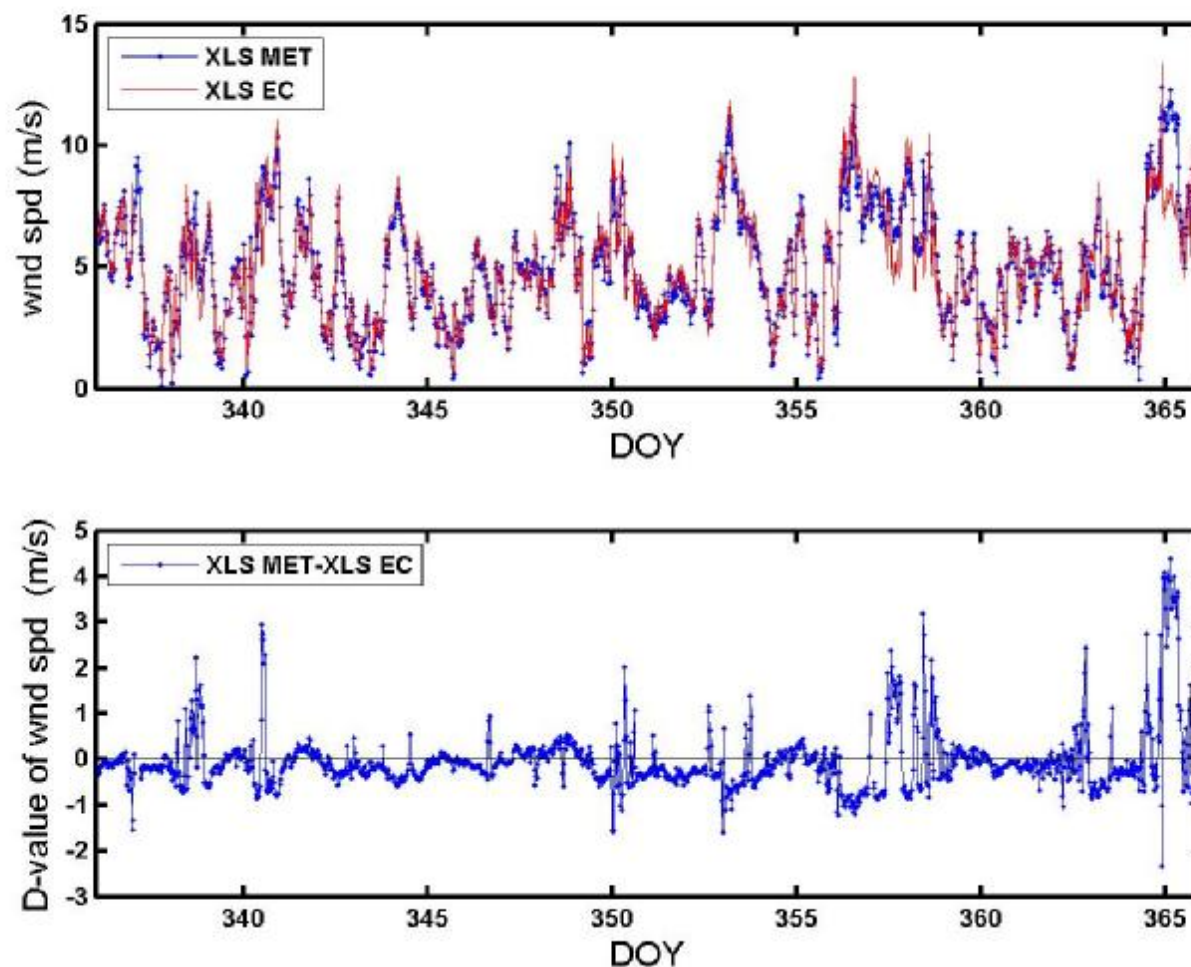


Fig.2-14 Comparing RH at XLS measurements against observations at MLW



**Fig.2-15 Comparing wnd_spd from EC
at XLS measurements against observations at BFG**

(3)XLS MET – XLS EC (wnd_spd)



**Fig.2-15 Comparing wnd_spd from EC
at XLS measurements against wnd_spd from MET observations at XLS**



Thank you