



# Analysis of intensive sessions at BKG

24th Meeting of the European VLBI Group  
for Geodesy and Astrometry (EVGA)

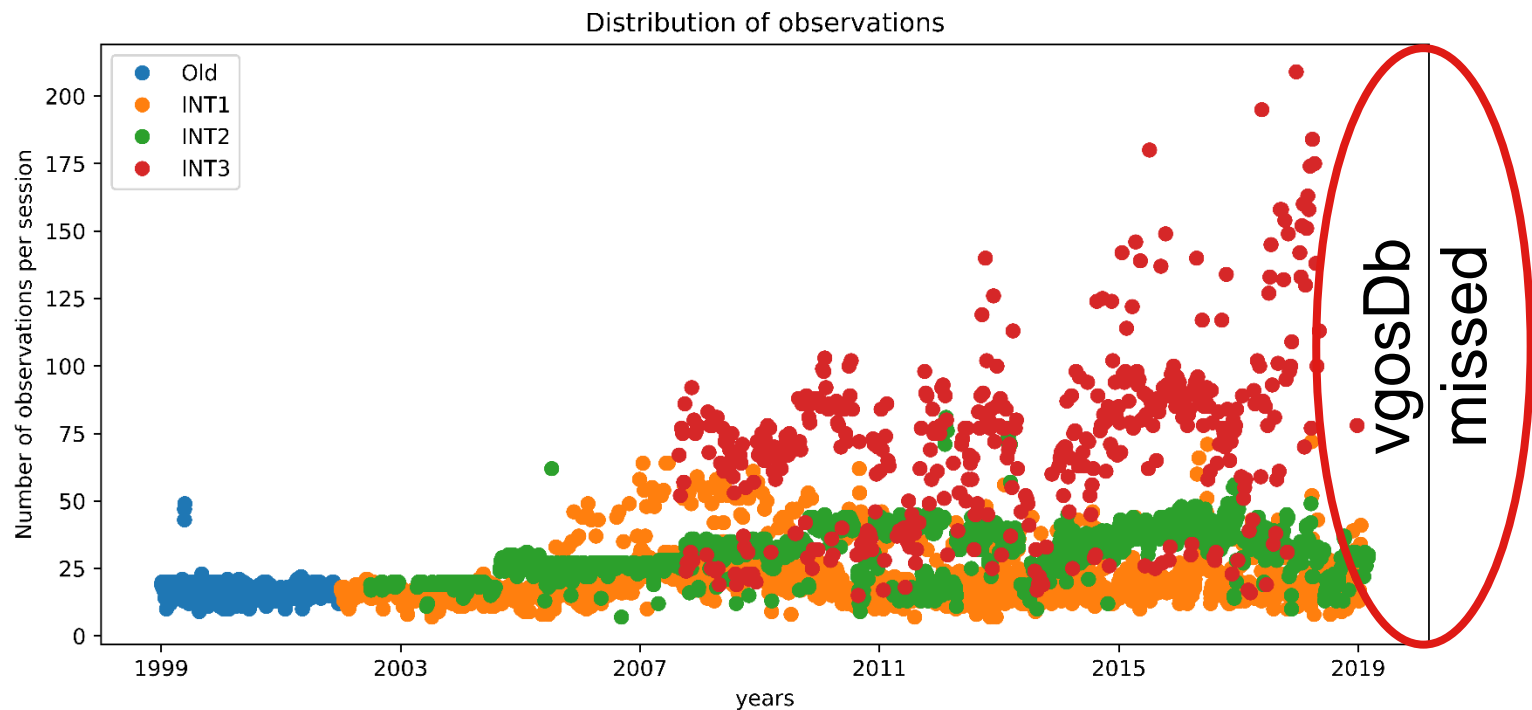
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Dieter Ullrich, Gerald Engelhardt, Reiner Wojdziak,  
Christian Plötz

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# BKG Analysis Center

- Data collection and mirroring
  - Mark - 3 data base
  - Auxiliary data
  - vgosDb \*new
- Data processing
  - Calc/Solve version 11.01 SOLVE release 2014.02.21
  - nuSolve-0.6.2 (\*new in test mode)
- Products
  - BKG EOP time series
  - daily SINEX and SINEX for intensives sessions
  - Tropospheric parameters (zenith delays and horizontal gradients) from the standard global solution
  - CRF, TRF (Quarterly solutions)
  - Scheduling SKED

# Intensive Sessions: BKG time series

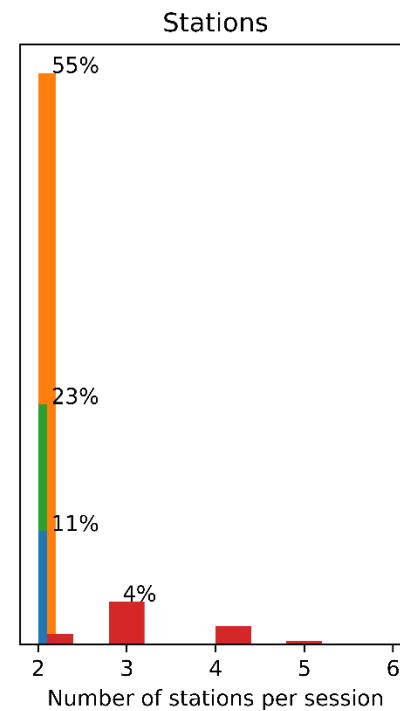
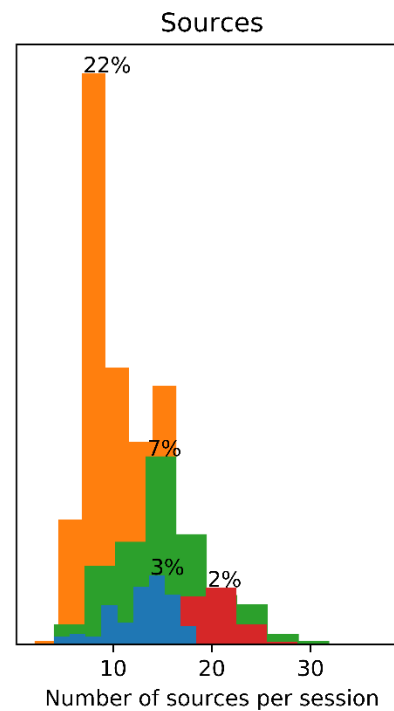
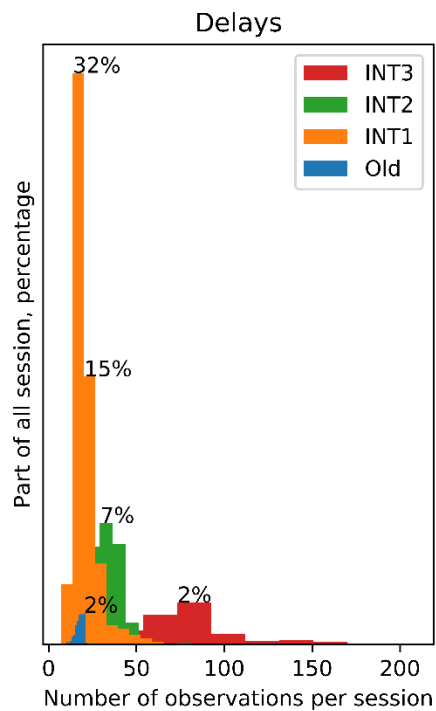


# Intensive Sessions

- INT1
  - Kk(Ts/Is)Wz(Sv) (,XU')
  - ? New intensives  
MkPtWnWz (,XW')
- INT2
  - Is(Ts)Wz (,XK')
- INT3
  - Is(Ts)Ny(Sh)WnWz (,XK')
- Intensives before 2002
  - KkWz (,XU')

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Experiments at Feb 2019
INT3 ,XK' 7:00							30 vgosDb / 470 mark3db Till Nov-17
INT1 ,XW' 8:30		INT1 ,XW' 7:15	INT1 ,XW' 8:15				10 vgosDb / 8 mark3db
INT1 ,XU' 18:30	INT1 ,XU' 18:30	INT1 ,XU' 18:30	INT1 ,XU' 18:30	INT1 ,XU' 18:30	INT2 ,XK' 7:30	INT2 ,XK' 7:30	3760/1490 mark3db
Intensives before 2002							700 mark3db

# Intensive Sessions: BKG time series

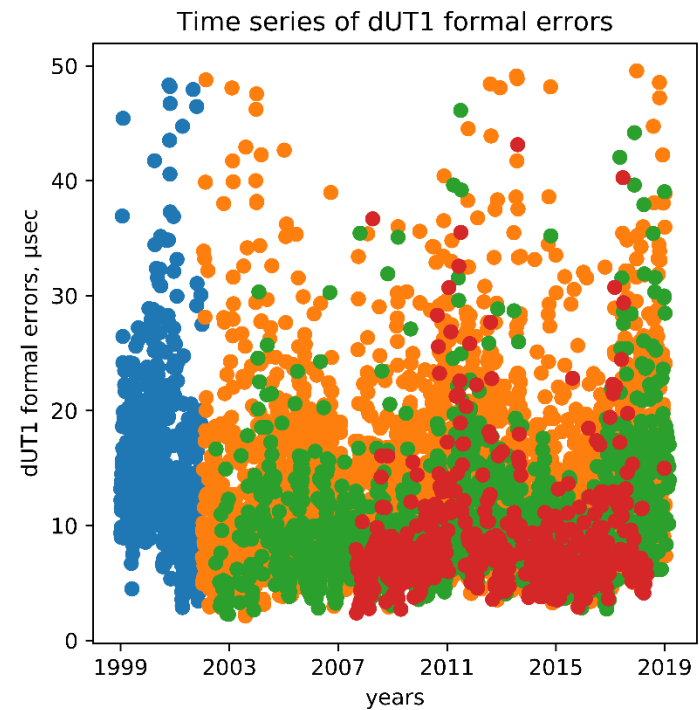
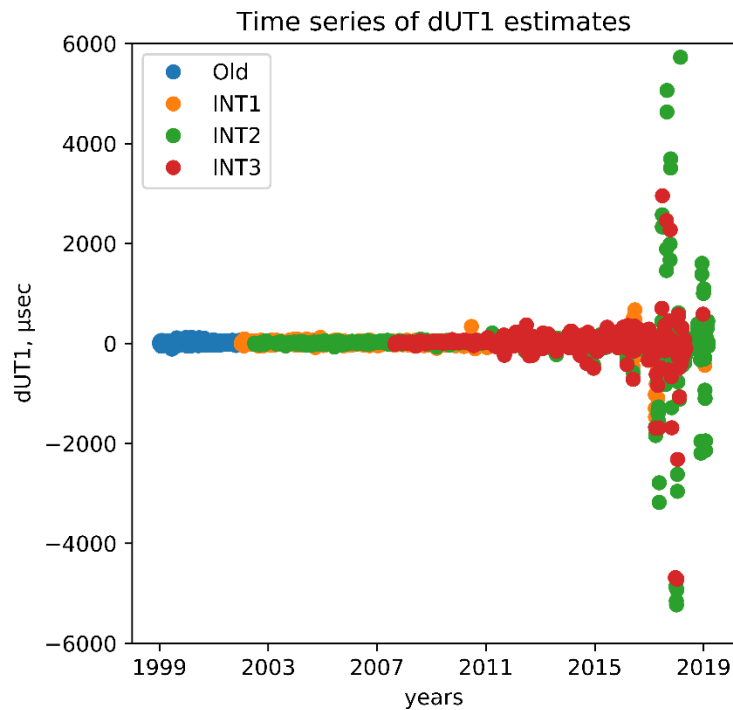


# Standard parametrization for Intensive session analysis at BKG

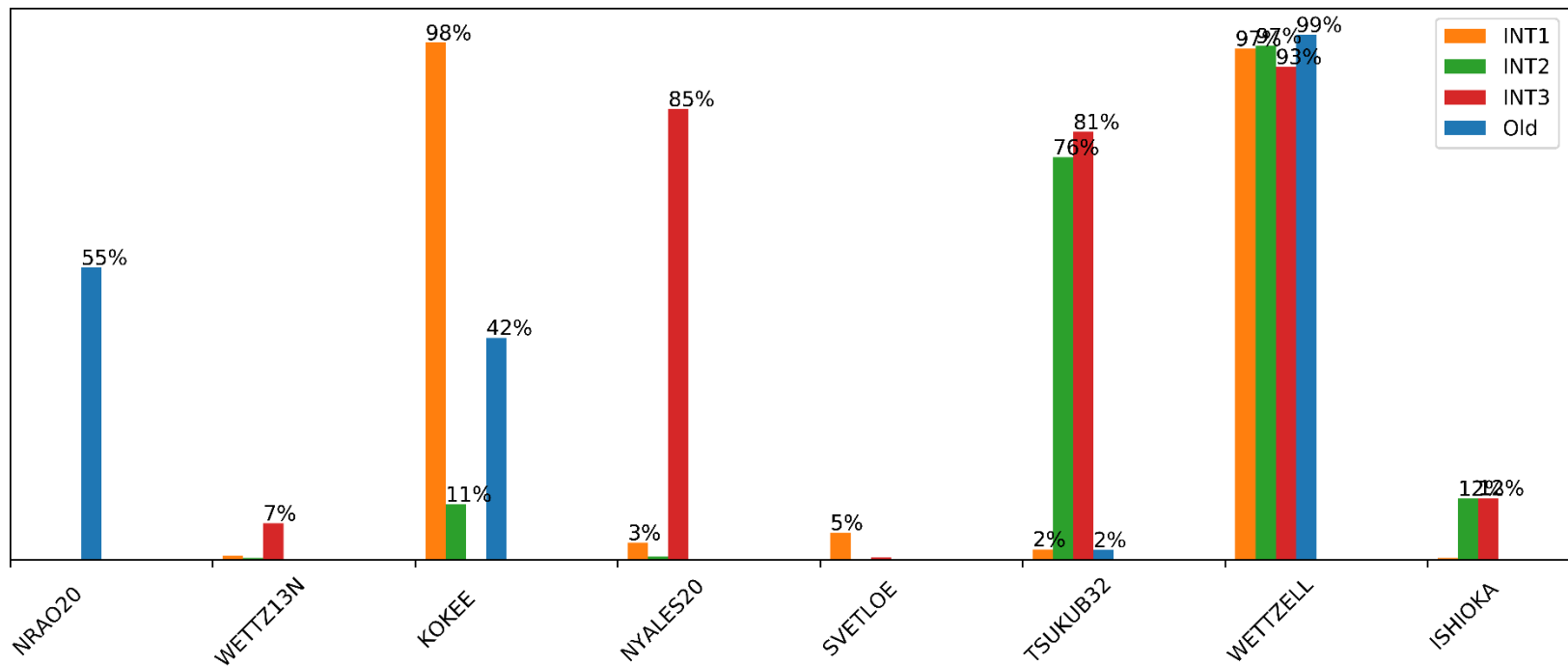
- Clock polynomials (up to 2<sup>nd</sup> degree)
- Atmospheric parameters (offset)
- dUT1
  
- VTRF2008a station position and velocities
- ICRF2 source positions
- EOP: usno\_finals.erp
- External tropospheric data based on VMF1
- Other reductions w.r.t. IERS Conventions recommendations

# Intensive session analysis at BKG

## dUT1 time series



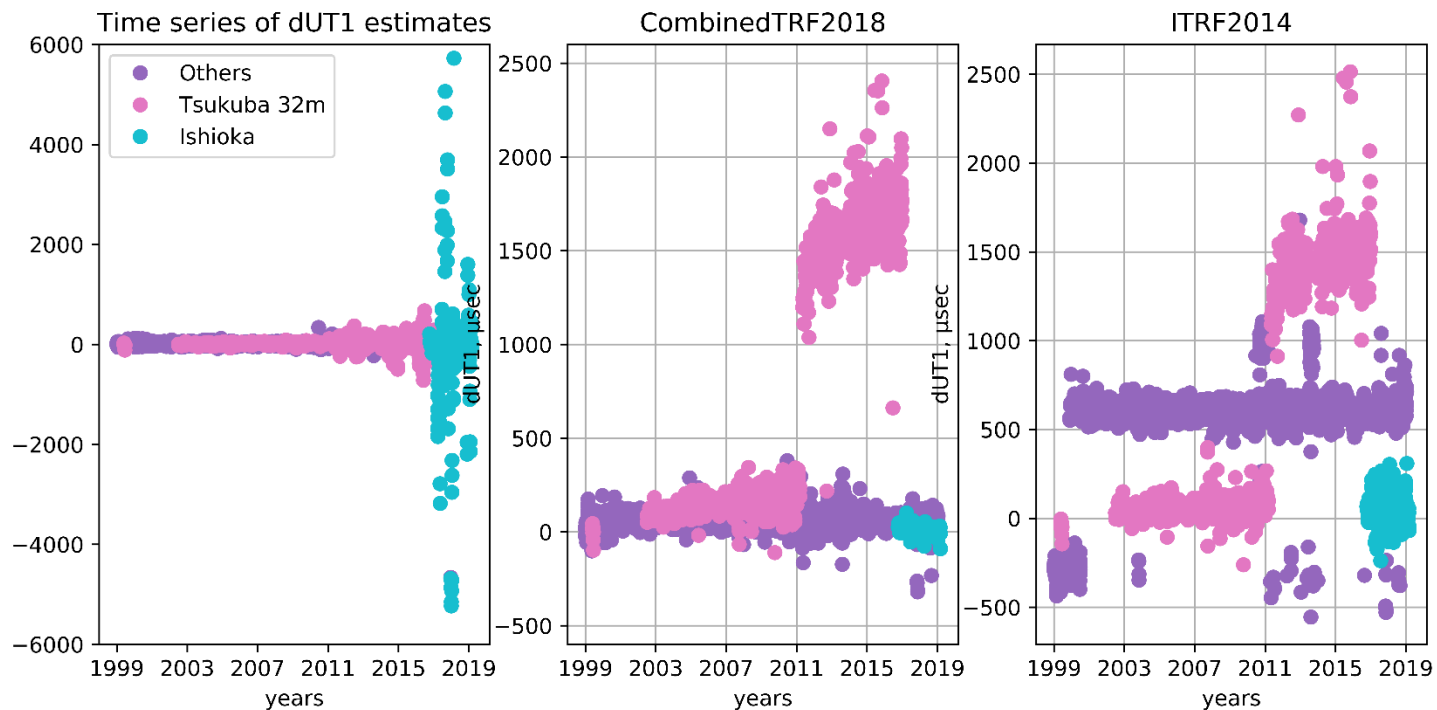
# Intensive Sessions: BKG time series





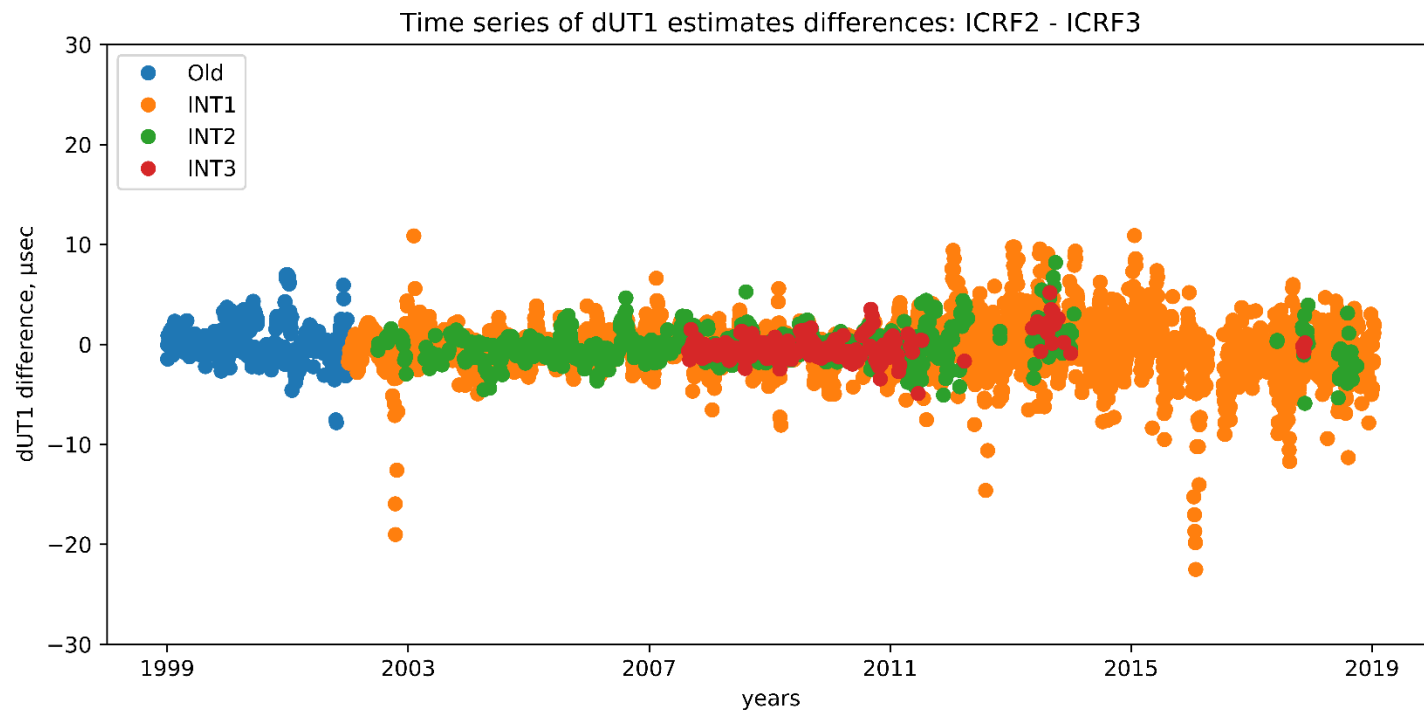
# Intensive session analysis at BKG

## dUT1 estimates : TRF changed



# Intensive session analysis at BKG

## dUT1 estimates : CRF changed



# Outline of intensive session analysis at BKG

- Currently we have a decent set of observations
- However this data set suffers of the lack of data
- TRF update
  - Demand for Tsukuba coordinates
  - ITRF2014 provides no Wz13N coordinates
- CRF update seems to be smooth

# Thank you for your attention!

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