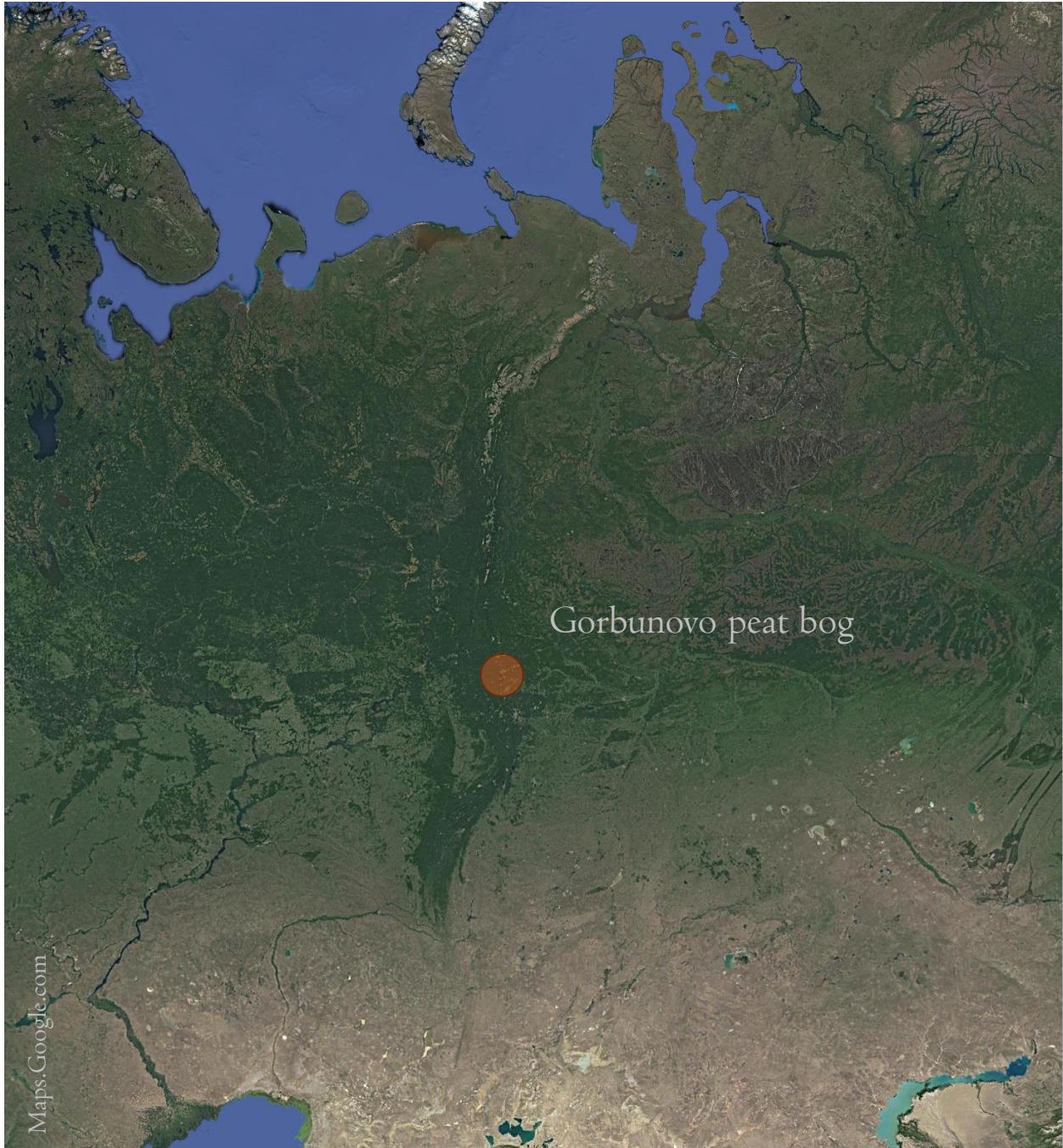


IV Международная Конференция – Москва, 21-23.05.2019 г.

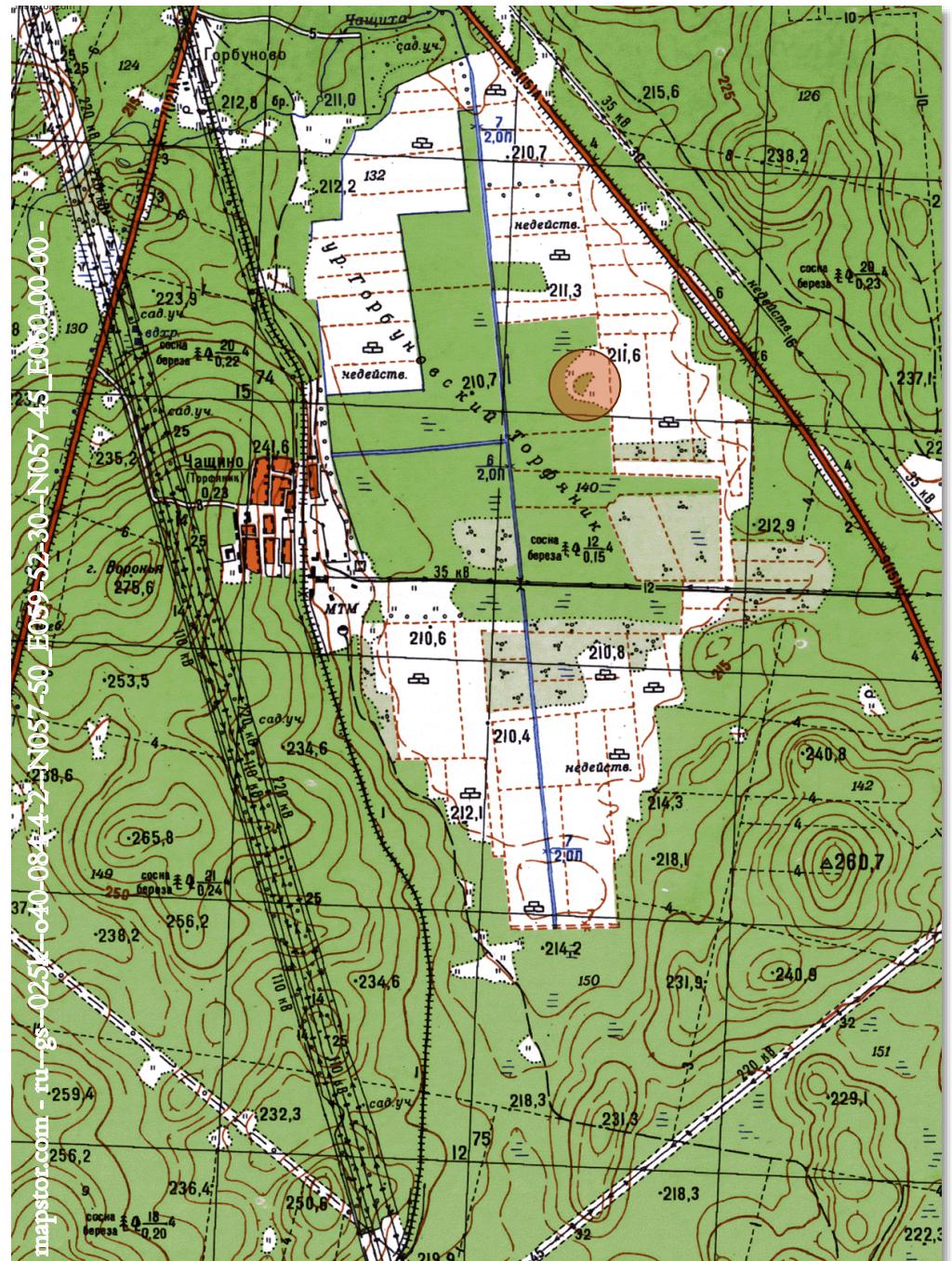
N. M. Chairkina, Sabine Reinhold, Uwe
Heußner, Alexander Janus, Dirk
Mariaschk

DIGITAL DOCUMENTATION STRATEGIES

at the Excavations in Shestoj Razrez -
Gorbunovo Peat Bog 2017/18



Gorbunovo peat bog





Trench 75 -2017



Excavation Chairkina



Excavation Chairkina



Excavation Chairkina



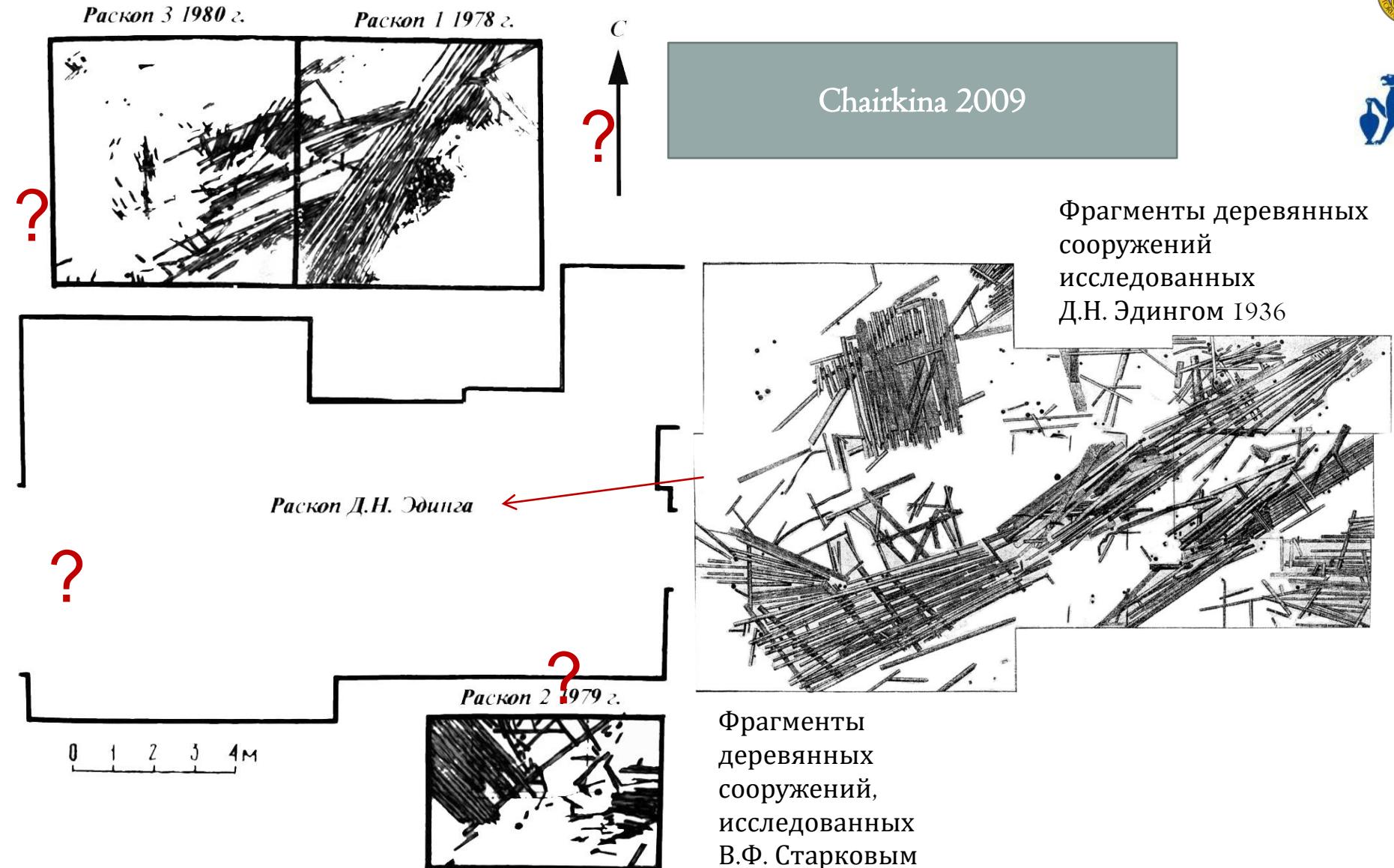
Museum Nizny Tagil

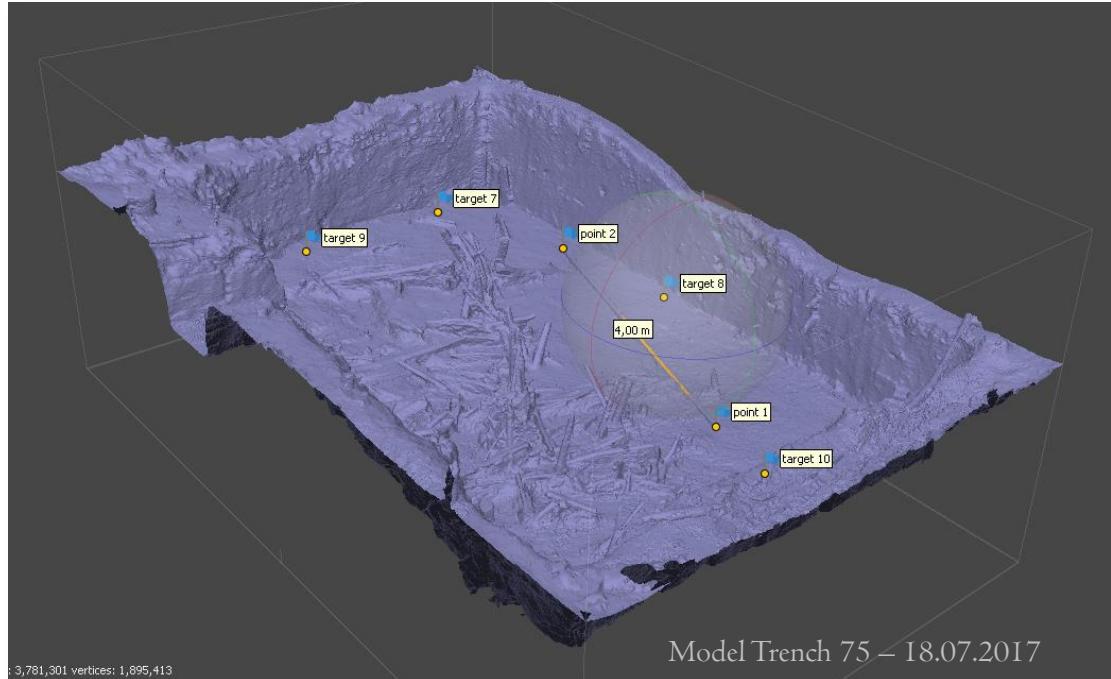


Museum Nizny Tagil

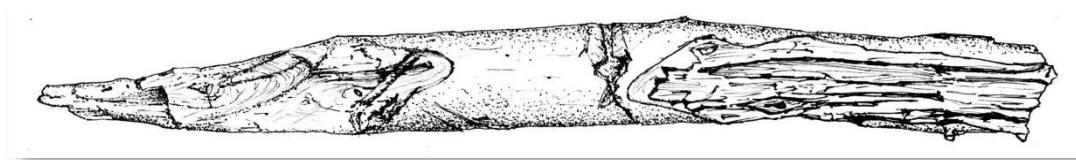


2017/18

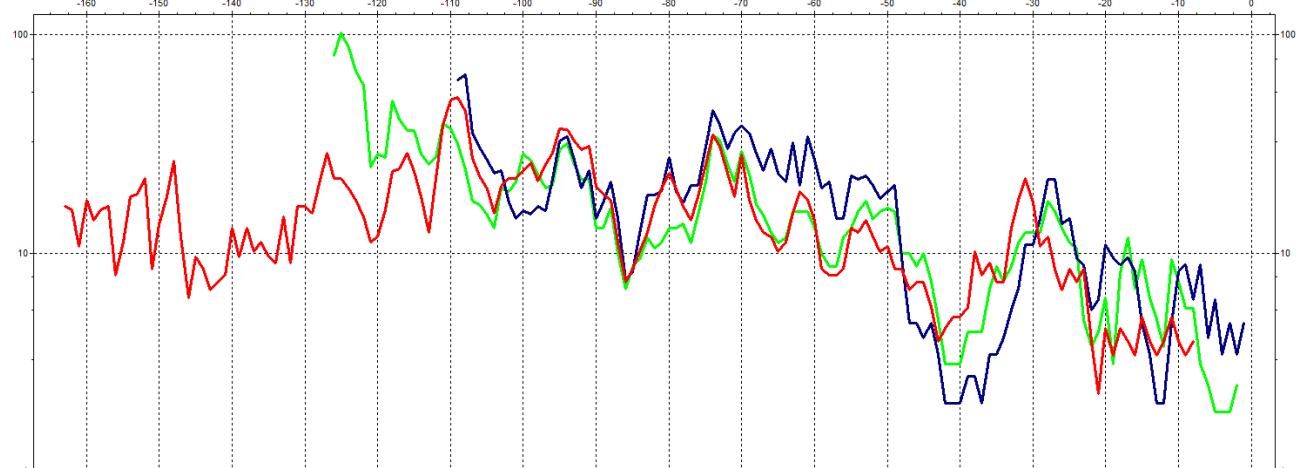




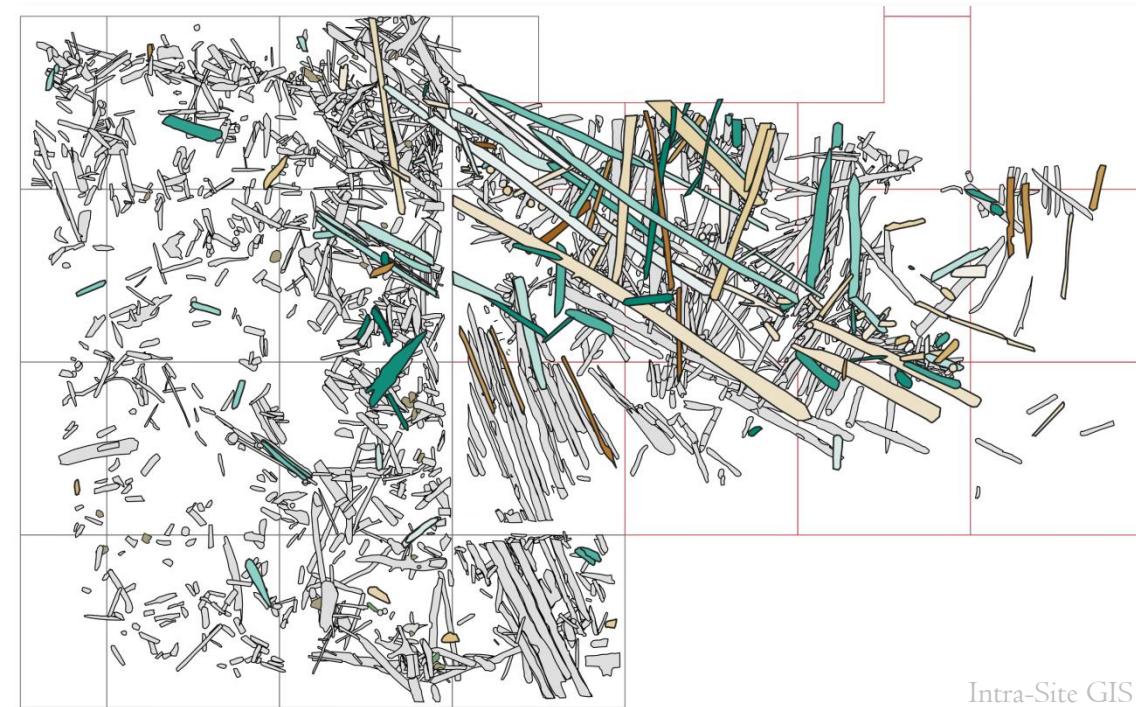
: 3,781,301 vertices; 1,895,413



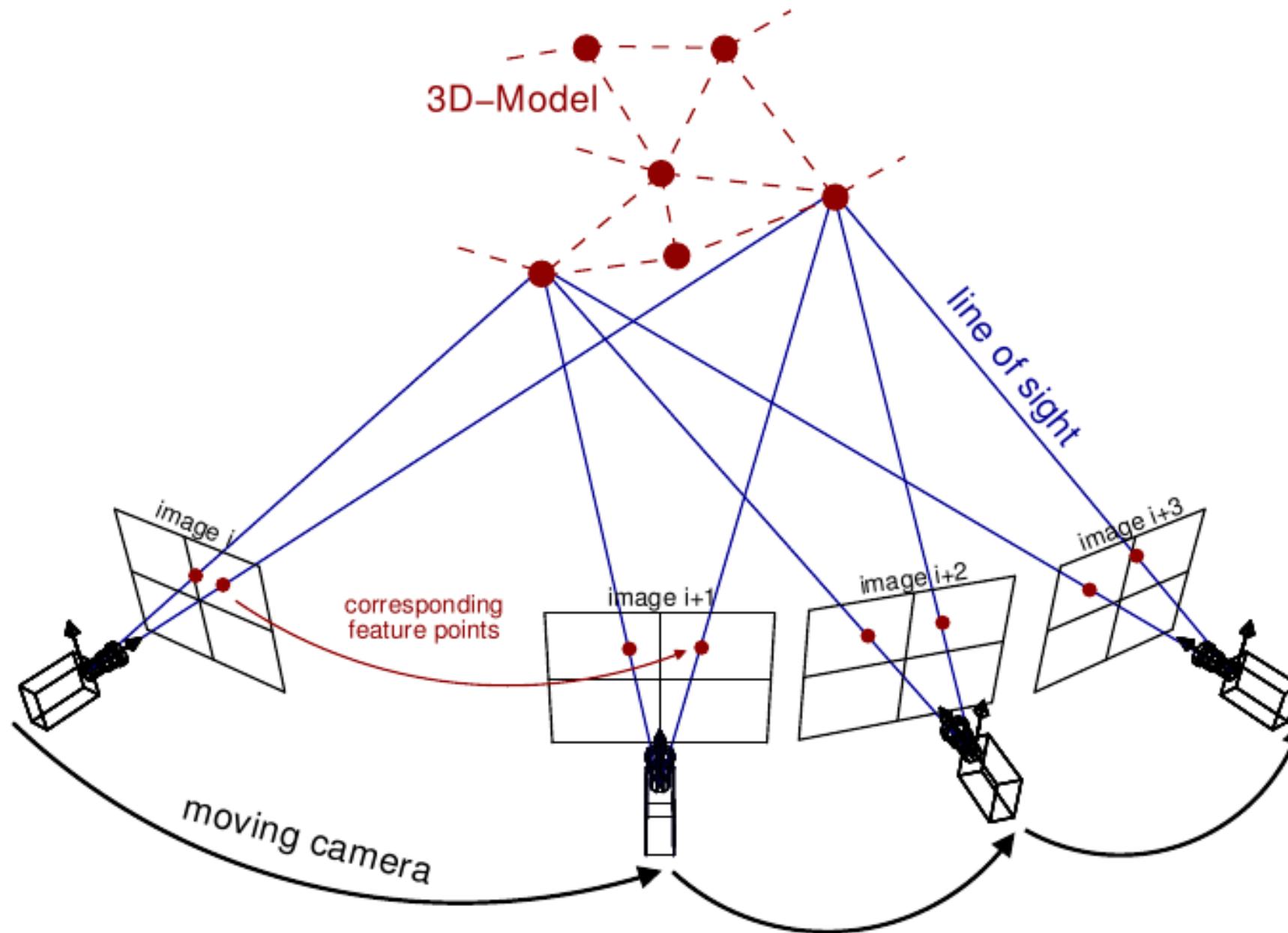
Sample 478 - 2017



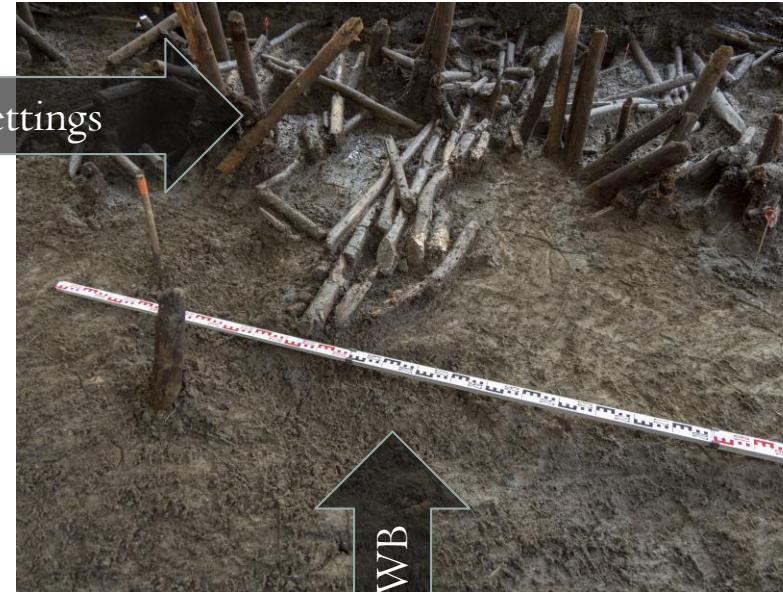
Dendrochronological Grow Curve



Intra-Site GIS

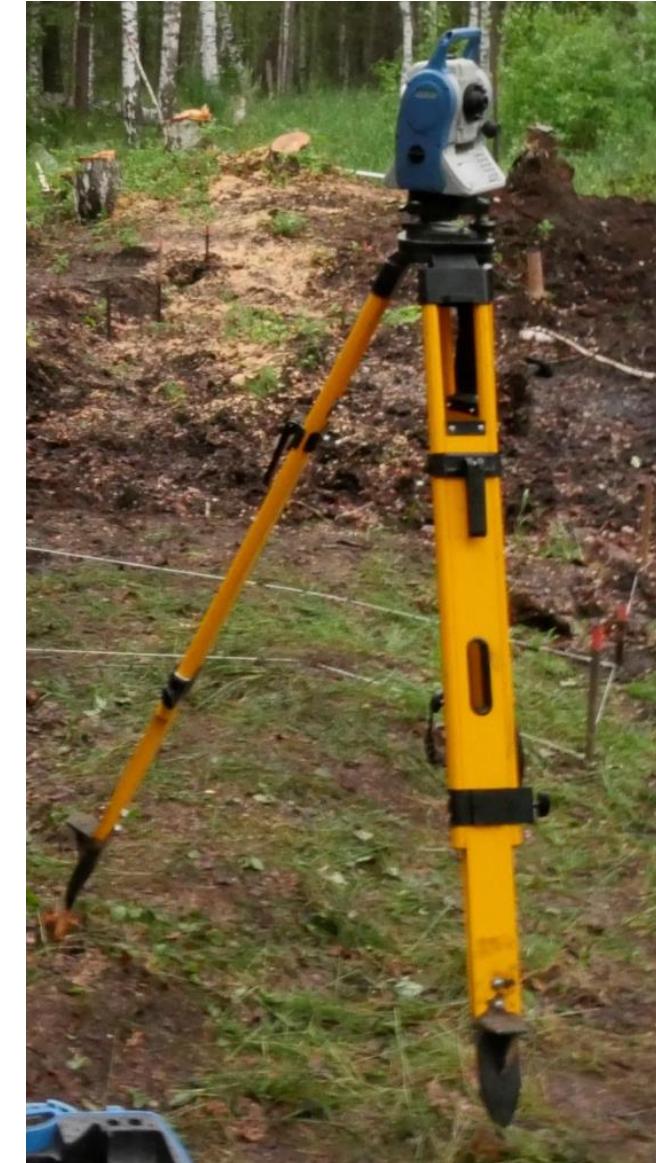
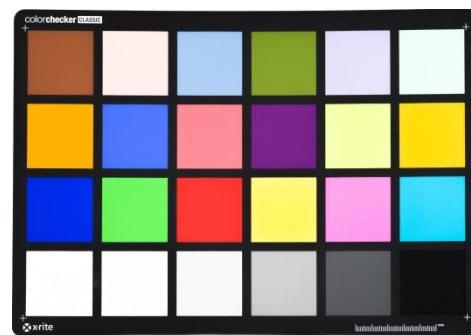


Structure from Motion (SfM) photogrammetric principle. Source: Theia-sfm.org (2016).

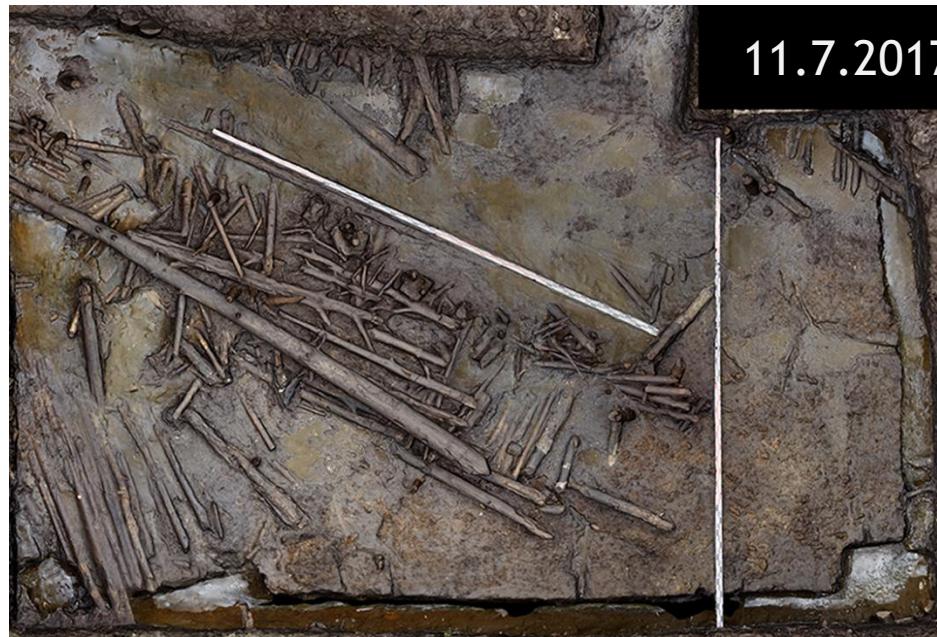


for a good comparability of
a set of photos:

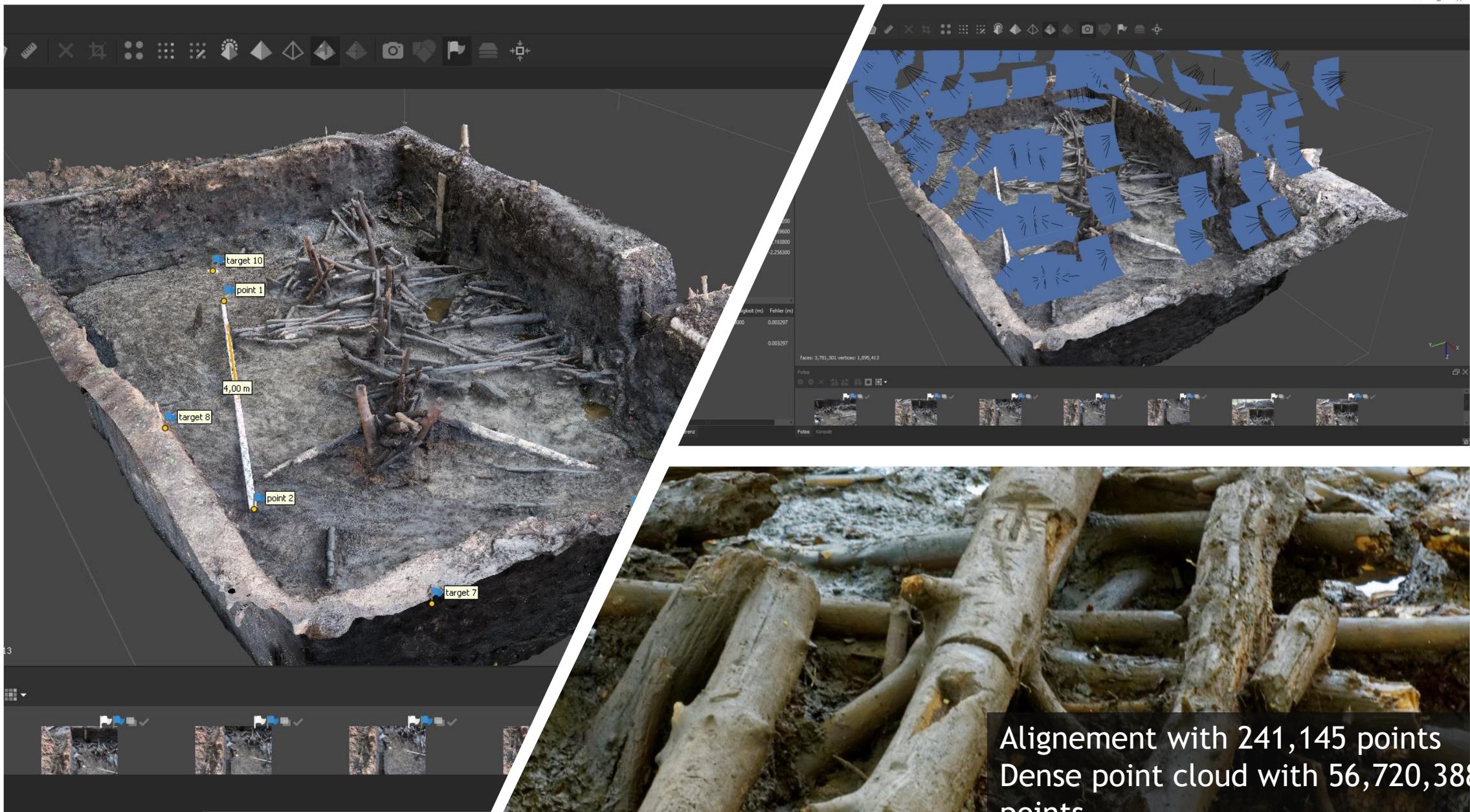
- same aperture
- same shutter speed
- same ISO value
- same focal length (in doubt, always 35mm)
- stabilized camera if possible
- no direct sunlight
- avoid reflections
- keep 70% (+) of overlapping area
- etc.



SfM-Equipment



different documentation units of Trench 75, July 2017



Alignment with 241,145 points
Dense point cloud with 56,720,388 points

12.07.2018



18.07.2018



15.07.2018

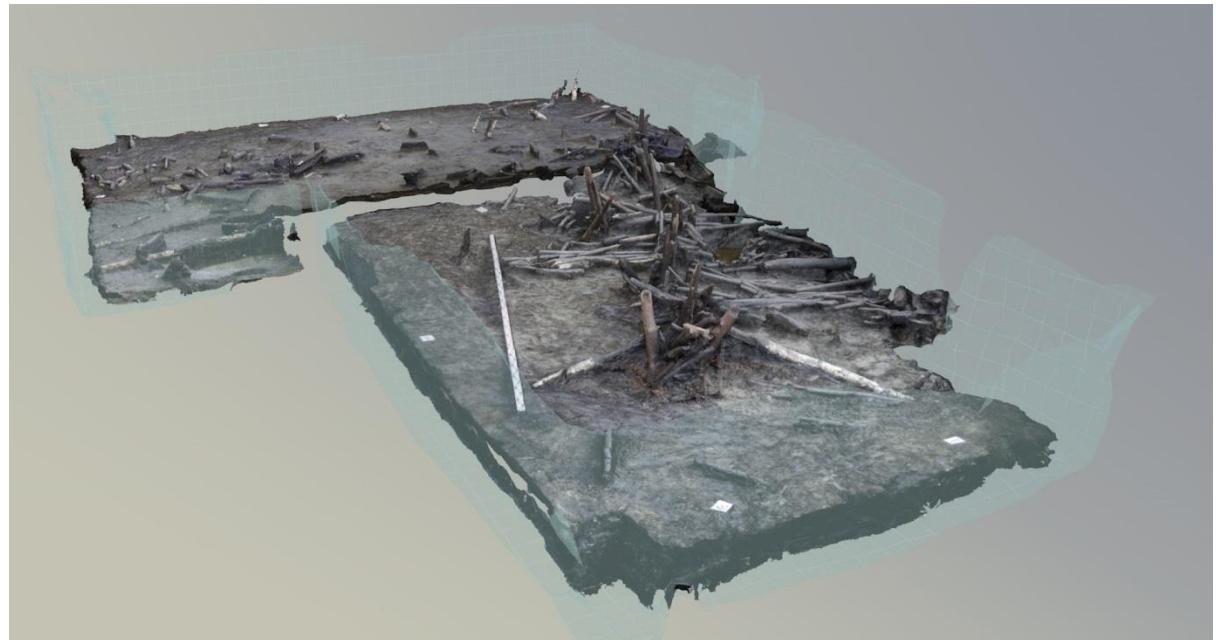
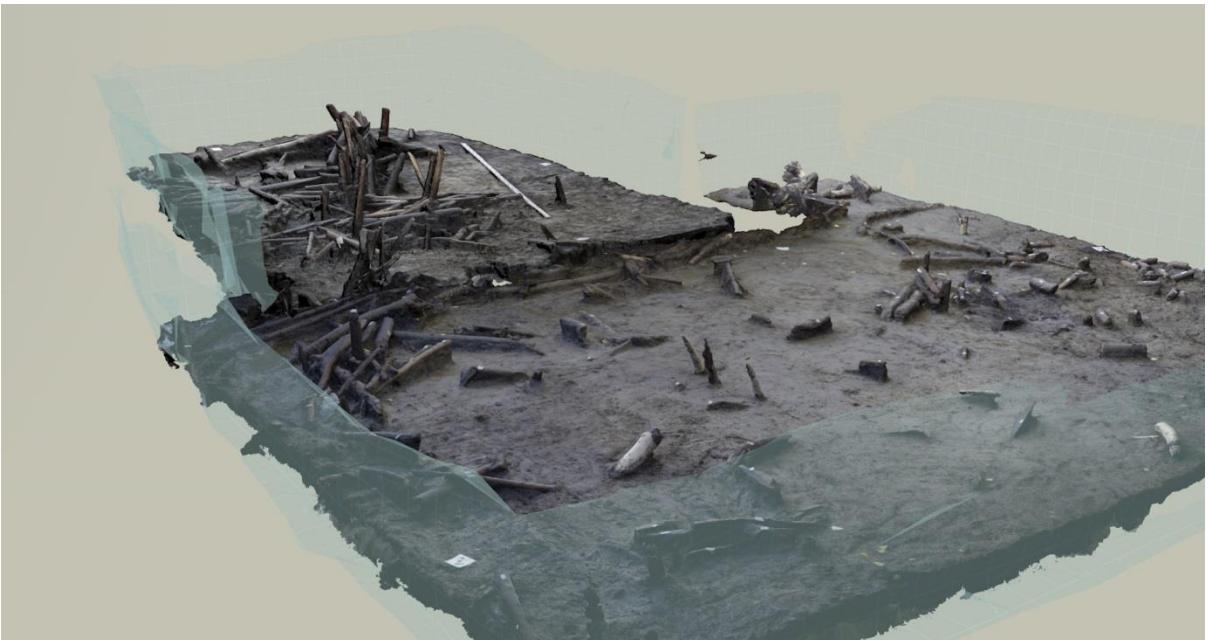


20.07.2018



different documentation units of Trench 76, July 2018

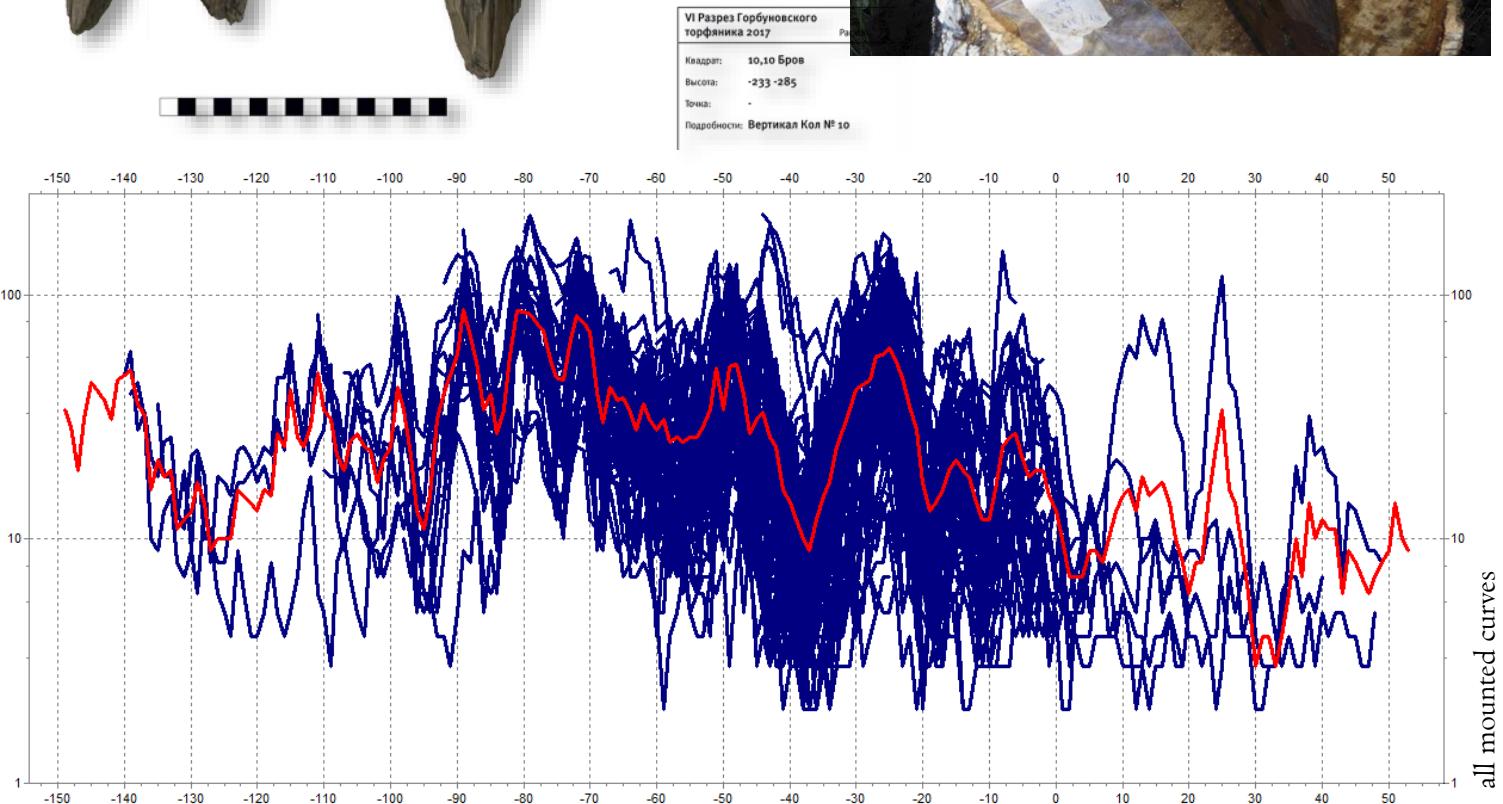




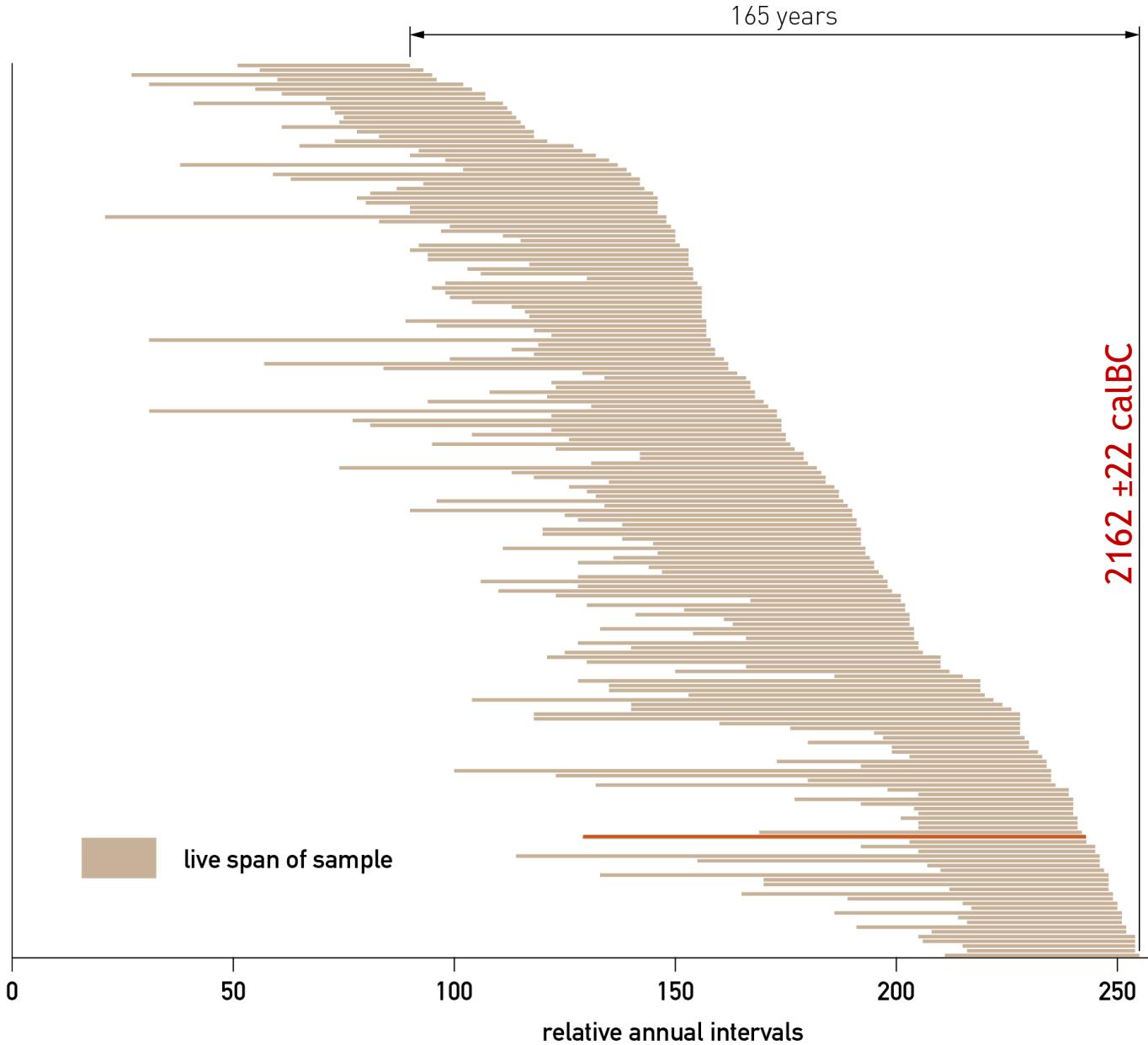
combined arrangement of trenches 75 and 76



Cleaned vertical post

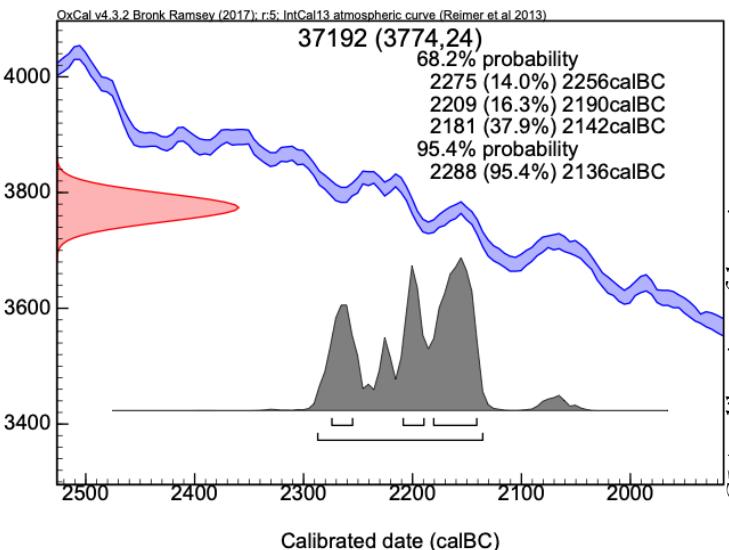
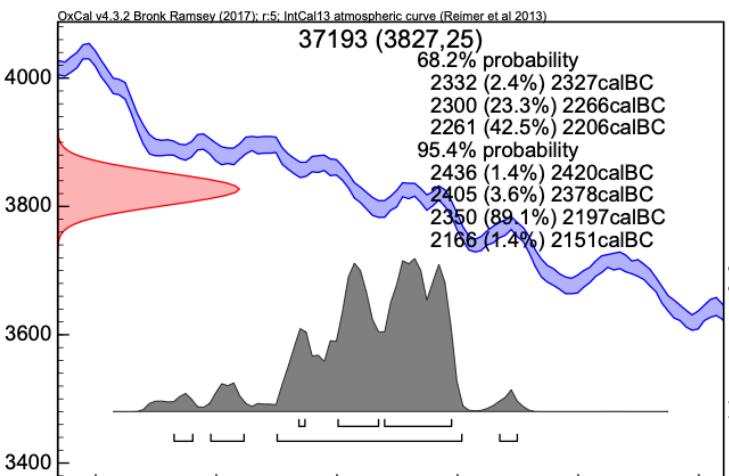


Dendrochronological measurement evaluation of the samples from 2017 and 2018



Radio carbon determination (BP)

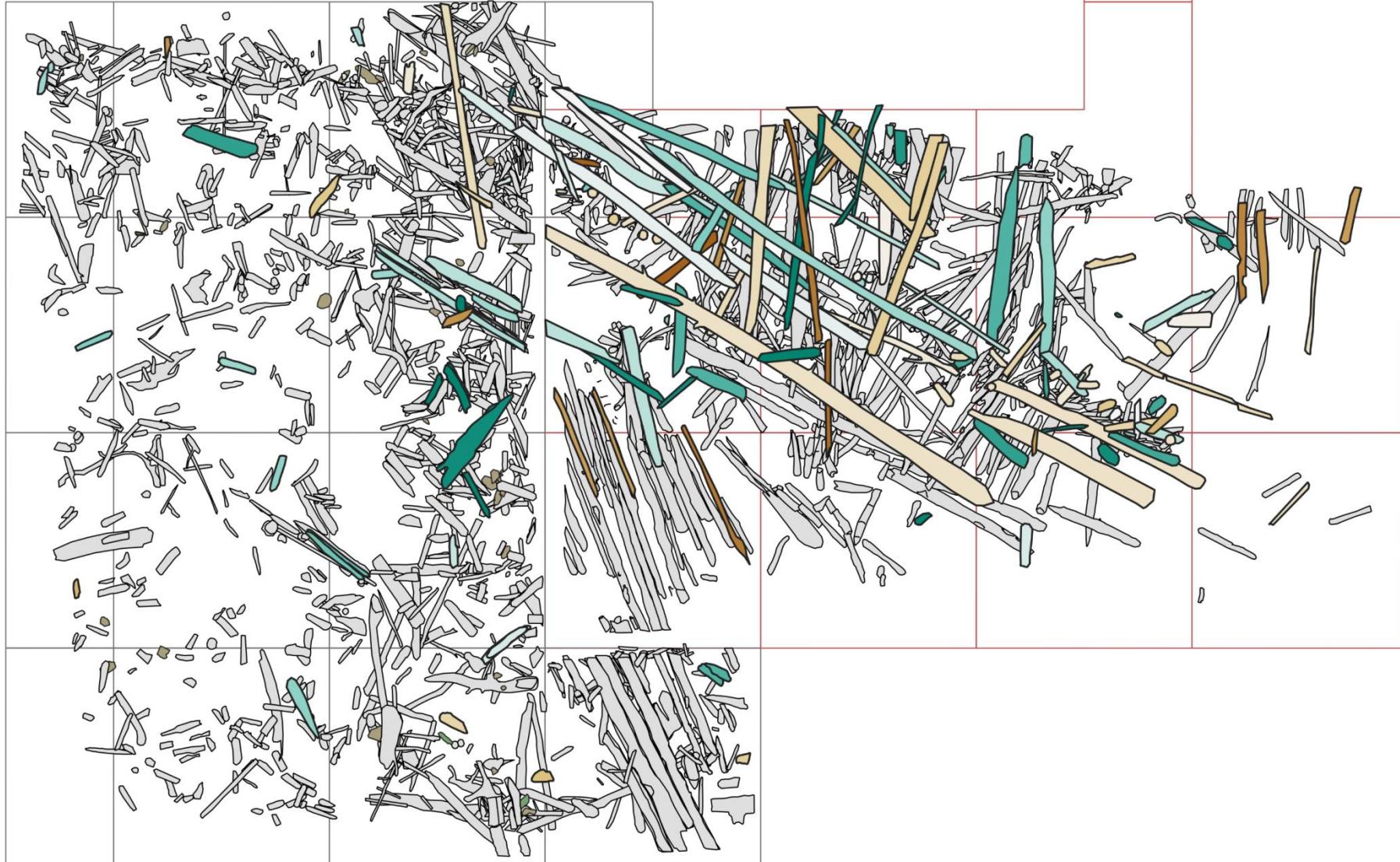
2162 ± 22 calBC





relative annual intervals

	-80 - -75 = 2327 - 2323 ±22 calBC
■	-75 - -70
■	-70 - -65
■	-65 - -60
■	-60 - -55
■	-55 - -50
■	-50 - -45
■	-45 - -40
■	-40 - -35
■	-35 - -30
■	-30 - -25
■	-25 - -20
■	-20 - -15
■	-15 - -10
■	-10 - -5
■	-5 - -0
■	-0 - 5
■	5 - 10
■	10 - 15
■	15 - 20
■	20 - 25
■	25 - 30
■	30 - 35
■	35 - 40
■	40 - 45
■	45 - 50
■	50 - 55
■	55 - 60
■	60 - 65
■	65 - 70
■	70 - 75
■	75 - 80
■	80 - 85

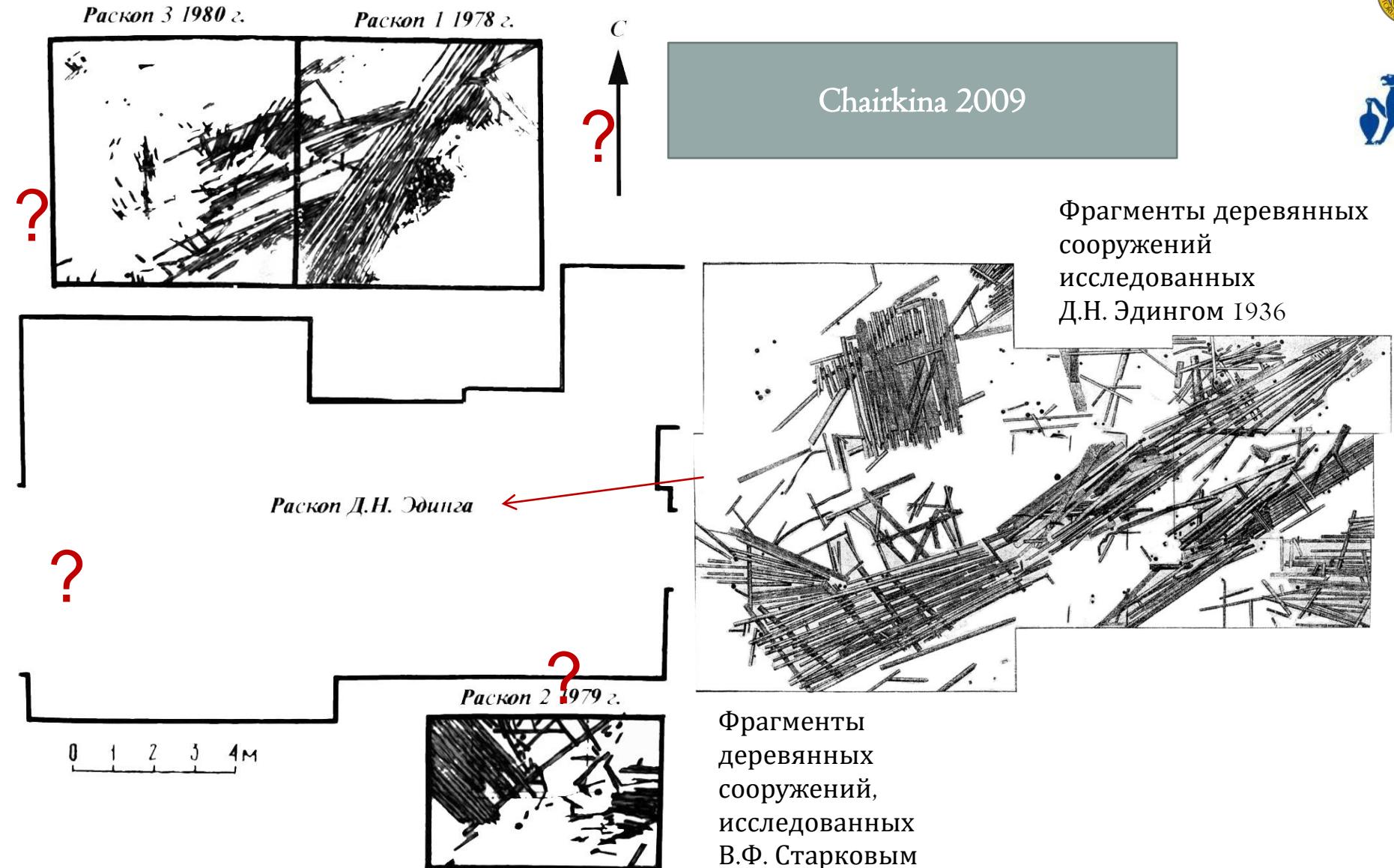


0 1 2 3 4 5 m





2017/18





Благодарим за внимание