

Regression test

Test run started 2025-08-27T01:32:49Z
Ashes version: 3.32.0

Onshore_Sensors			
Load case set 1			
Load case	Time series	Error score	
Load case 1	Power (aero)	0.000000	PASS
	Torque (aero)	0.000000	PASS
	Thrust (aero)	0.000000	PASS
	RPM	0.000000	PASS
	TSR	0.000000	PASS
	Representative demanded pitch angle	0.000000	PASS
	Power coef. (CP)	0.000000	PASS
	Thrust coef. (CT)	0.000000	PASS
	Torque coef. (CQ)	0.000000	PASS
	Tip speed	0.000000	PASS
	1P (one revolution)	0.000000	PASS
	nP (blade passing)	0.000000	PASS
	Azimuth angle	0.000000	PASS
	Rotation per timestep	0.000000	PASS
	Wind speed at hub, magnitude	0.000000	PASS
	Wind angle at hub	0.000000	PASS
	Yaw angle relative to forward	0.000000	PASS
	Yaw angle to reference direction	0.000000	PASS
	Yaw error	0.000000	PASS
	Torque about yaw axis	0.000000	PASS
	Power (electrical)	0.000000	PASS
	Torque	0.000000	PASS
	Torque on main shaft	0.000000	PASS
	Torque diff. on main shaft	0.000000	PASS
	RPM	0.000000	PASS
	Filtered RPM	0.000000	PASS
	Electricity production	0.000000	PASS
	Region	0.000000	PASS
	Demanded collective pitch angle	0.000000	PASS
	Cumulative demanded collective pitch angle	0.000000	PASS
	Demanded collective pitch angle rate	0.000000	PASS
	Set point	0.000000	PASS
	RPM error	0.000000	PASS

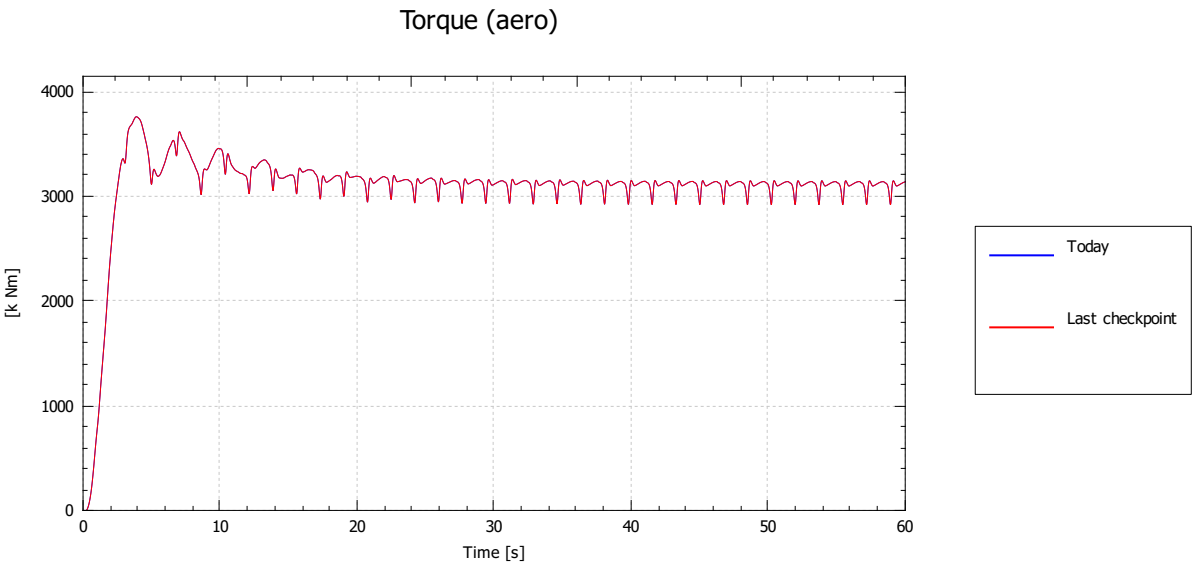
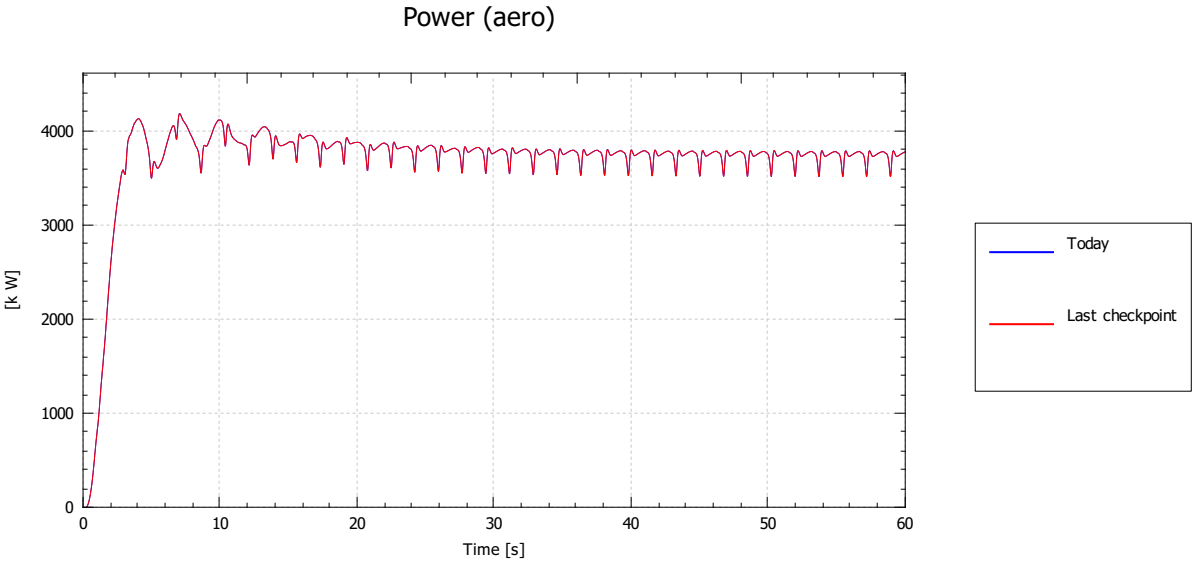
	P term	0.000000	PASS
	I term	0.000000	PASS
	D term	0.000000	PASS
	Gain scheduling factor	0.000000	PASS
	Root force (magnitude)	0.000000	PASS
	Root moment (magnitude)	0.000000	PASS
	Root moment (out-of-plane)	0.000000	PASS
	Root moment (in-plane)	0.000000	PASS
	Root moment about shaft	0.000000	PASS
	Pitch angle	0.000000	PASS
	Tip deflection (out-of-plane)	0.000000	PASS
	Tip deflection (in-plane)	0.000000	PASS
	Root torque	0.000000	PASS
	Position (x)	0.000000	PASS
	Position (y)	0.000000	PASS
	Position (z)	0.000000	PASS
	Displacement (u)	0.000000	PASS
	Displacement (v)	0.000000	PASS
	Displacement (w)	0.000000	PASS
	Displacement magnitude	0.000000	PASS
	Speed	0.000000	PASS
	Acceleration, magnitude	0.000000	PASS
	Rotational displacement (ru)	0.000000	PASS
	Rotational displacement (rv)	0.000000	PASS
	Rotational displacement (rw)	0.000000	PASS
	Rotational displacement magnitude	0.000000	PASS
	Rotational speed	0.000000	PASS
	Rotational acceleration mag	0.000000	PASS
	Displacement period	0.000000	PASS
	Displacement logarithmic decrement	0.000000	PASS
	Displacement damping ratio	0.000000	PASS
	Particle vel. (wind) - mag.	0.000000	PASS
	Aero perp. drag (596) (mag.)	0.000000	PASS
	Aero perp. drag (596) (sign)	0.000000	PASS
	Aero perp. drag (597) (mag.)	0.000000	PASS
	Aero perp. drag (597) (sign)	0.000000	PASS
	Gravity load - material (632) (mag.)	0.000000	PASS
	Gravity load - material (632) (sign)	0.000000	PASS
	Gravity load - material (633) (mag.)	0.000000	PASS
	Gravity load - material (633) (sign)	0.000000	PASS
	Position (x)	0.000000	PASS
	Position (y)	0.000000	PASS

	Position (z)	0.000000	PASS
	Displacement (u)	0.000000	PASS
	Displacement (v)	0.000000	PASS
	Displacement (w)	0.000000	PASS
	Displacement magnitude	0.000000	PASS
	Speed	0.000000	PASS
	Acceleration, magnitude	0.000000	PASS
	Rotational displacement (ru)	0.000000	PASS
	Rotational displacement (rv)	0.000000	PASS
	Rotational displacement (rw)	0.000000	PASS
	Rotational displacement magnitude	0.000000	PASS
	Rotational speed	0.000000	PASS
	Rotational acceleration mag	0.000000	PASS
	Displacement period	0.000000	PASS
	Displacement logarithmic decrement	0.000000	PASS
	Displacement damping ratio	0.000000	PASS
	Axial force	0.000000	PASS
	Shear force (1st prin. axis)	0.000000	PASS
	Shear force (2nd prin. axis)	0.000000	PASS
	Shear force, mag.	0.000000	PASS
	Torque	0.000000	PASS
	Moment (1st prin. axis), i	0.000000	PASS
	Moment (2nd prin. axis), i	0.000000	PASS
	Moment, mag., i	0.000000	PASS
	Moment (1st prin. axis), j	0.000000	PASS
	Moment (2nd prin. axis), j	0.000000	PASS
	Moment, mag., j	0.000000	PASS
	Max normal stress	0.000000	PASS
	Twist (structural)	0.000000	PASS
	Twist (structural) - rad	0.000000	PASS
	Deformed length	0.000000	PASS
	Elongation	0.000000	PASS
	Strain energy	0.000000	PASS
	Kinetic energy	0.000000	PASS
	Mechanical energy	0.000000	PASS
	Deformational rotation (i)	0.000000	PASS
	Deformational rotation (j)	0.000000	PASS
	Deformational rotation (axial)	0.000000	PASS
	Deformational rotation (1st prin.)	0.000000	PASS
	Deformational rotation (2nd prin.)	0.000000	PASS
	Deformational rotation (i) - rad	0.000000	PASS
	Deformational rotation (j) - rad	0.000000	PASS

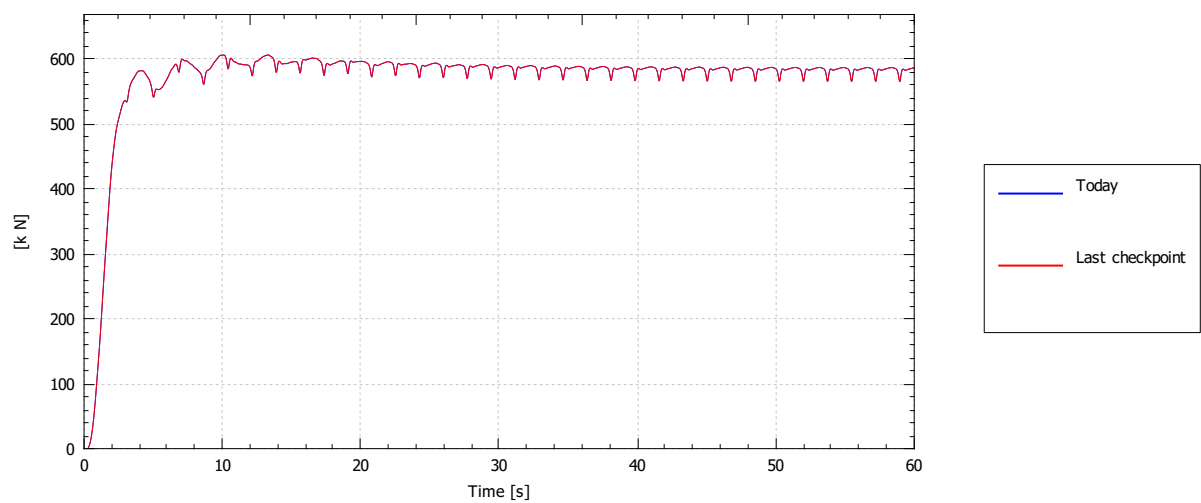
	Deformational rotation (axial) - rad	0.000000	PASS
	Deformational rotation (1st prin.) - rad	0.000000	PASS
	Deformational rotation (2nd prin.) - rad	0.000000	PASS
	Damping force, i	0.000000	PASS
	Damping moment, i	0.000000	PASS
	Damping force, sum	0.000000	PASS
	Damping moment, sum	0.000000	PASS
	Axial force	0.000000	PASS
	Shear force (1st prin. axis)	0.000000	PASS
	Shear force (2nd prin. axis)	0.000000	PASS
	Shear force, mag.	0.000000	PASS
	Torque	0.000000	PASS
	Moment (1st prin. axis), i	0.000000	PASS
	Moment (2nd prin. axis), i	0.000000	PASS
	Moment, mag., i	0.000000	PASS
	Moment (1st prin. axis), j	0.000000	PASS
	Moment (2nd prin. axis), j	0.000000	PASS
	Moment, mag., j	0.000000	PASS
	Max normal stress	0.000000	PASS
	Twist (structural)	0.000000	PASS
	Twist (structural) - rad	0.000000	PASS
	Deformed length	0.000000	PASS
	Elongation	0.000000	PASS
	Strain energy	0.000000	PASS
	Kinetic energy	0.000000	PASS
	Mechanical energy	0.000000	PASS
	Deformational rotation (i)	0.000000	PASS
	Deformational rotation (j)	0.000000	PASS
	Deformational rotation (axial)	0.000000	PASS
	Deformational rotation (1st prin.)	0.000000	PASS
	Deformational rotation (2nd prin.)	0.000000	PASS
	Deformational rotation (i) - rad	0.000000	PASS
	Deformational rotation (j) - rad	0.000000	PASS
	Deformational rotation (axial) - rad	0.000000	PASS
	Deformational rotation (1st prin.) - rad	0.000000	PASS
	Deformational rotation (2nd prin.) - rad	0.000000	PASS
	Damping force, i	0.000000	PASS
	Damping moment, i	0.000000	PASS
	Damping force, sum	0.000000	PASS
	Damping moment, sum	0.000000	PASS

Load case: Load case 1

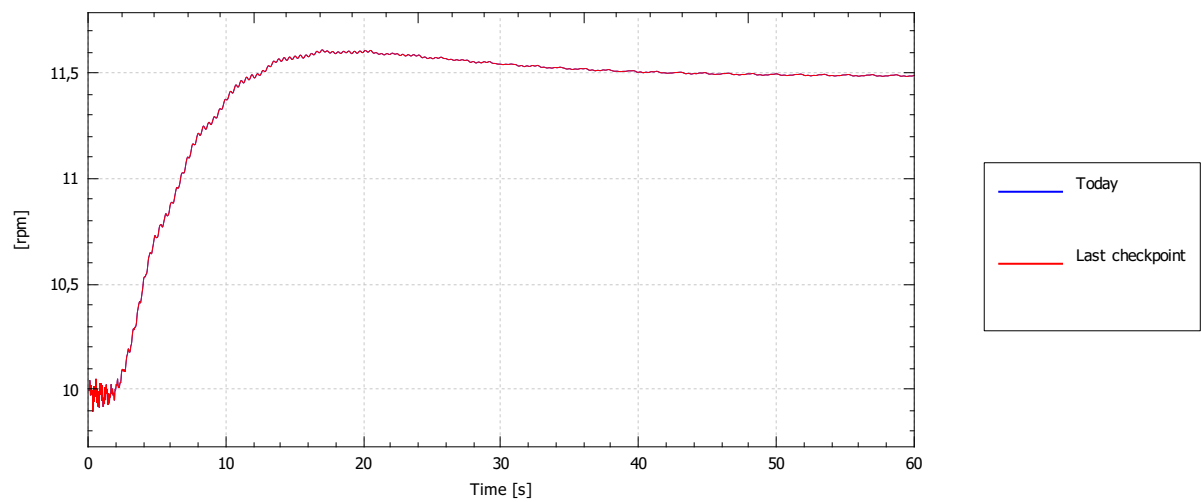
Rotor



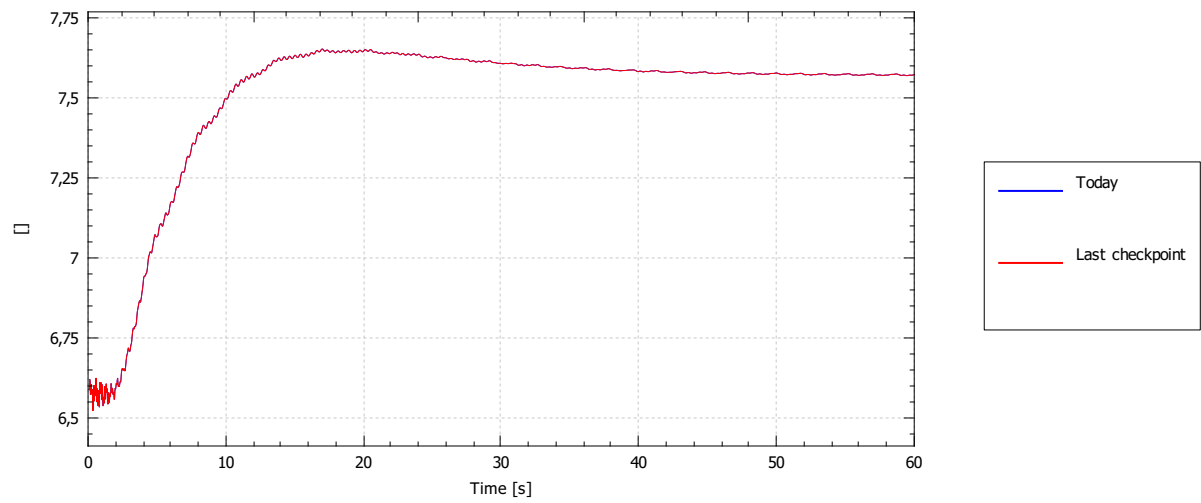
Thrust (aero)



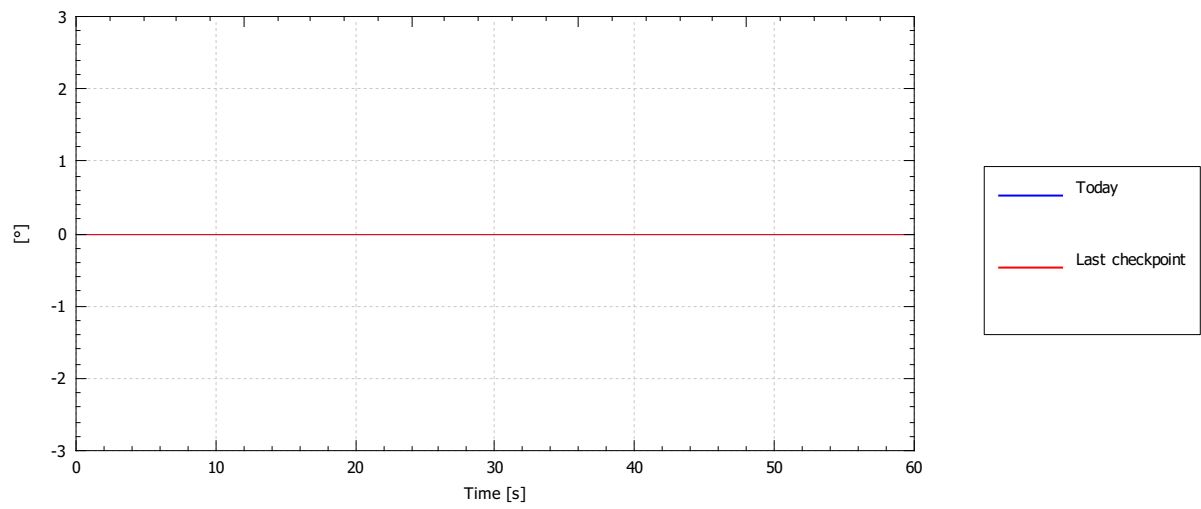
RPM



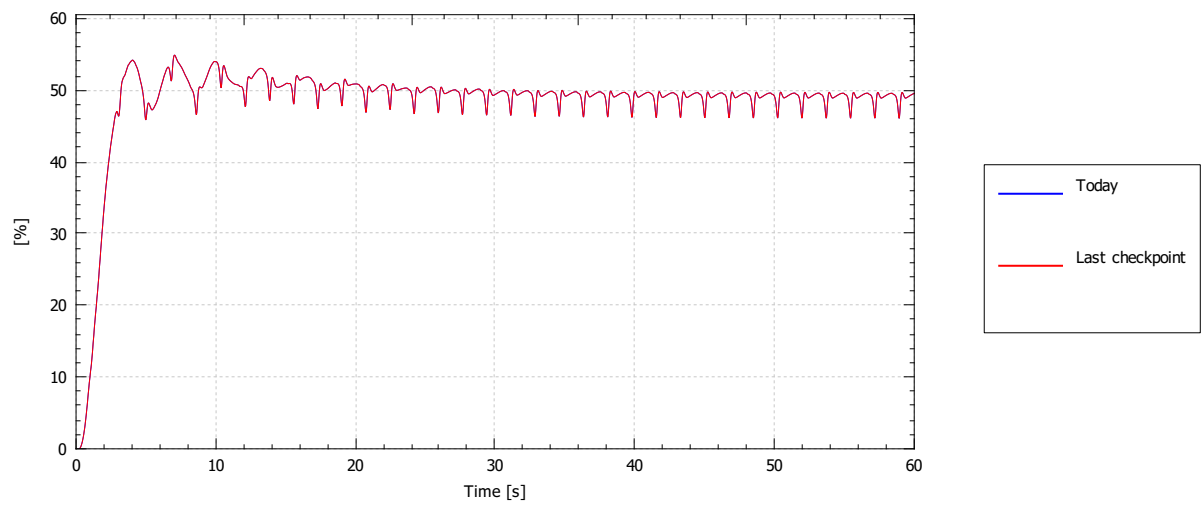
TSR



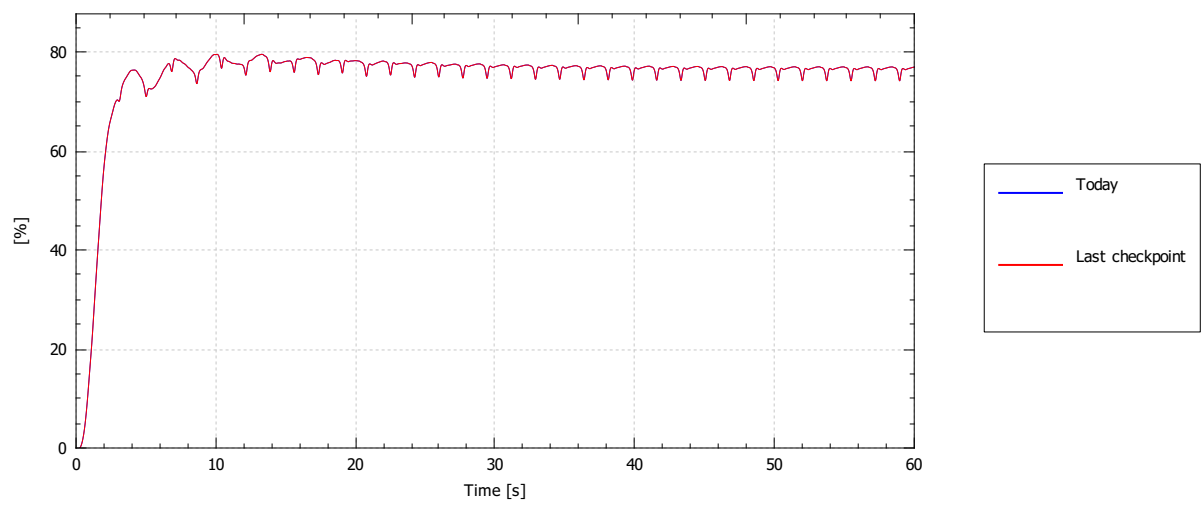
Representative demanded pitch angle



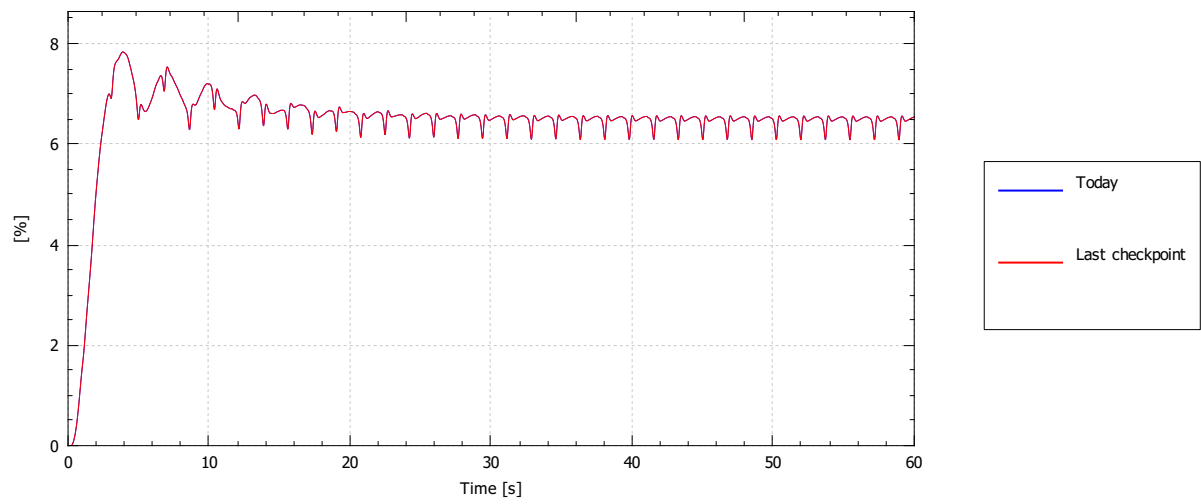
Power coef. (CP)



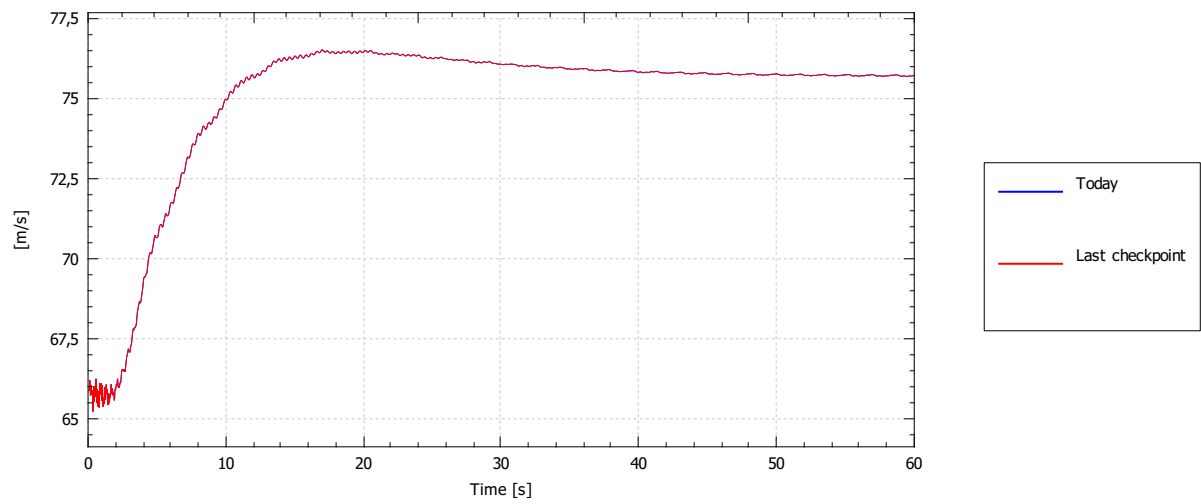
Thrust coef. (CT)



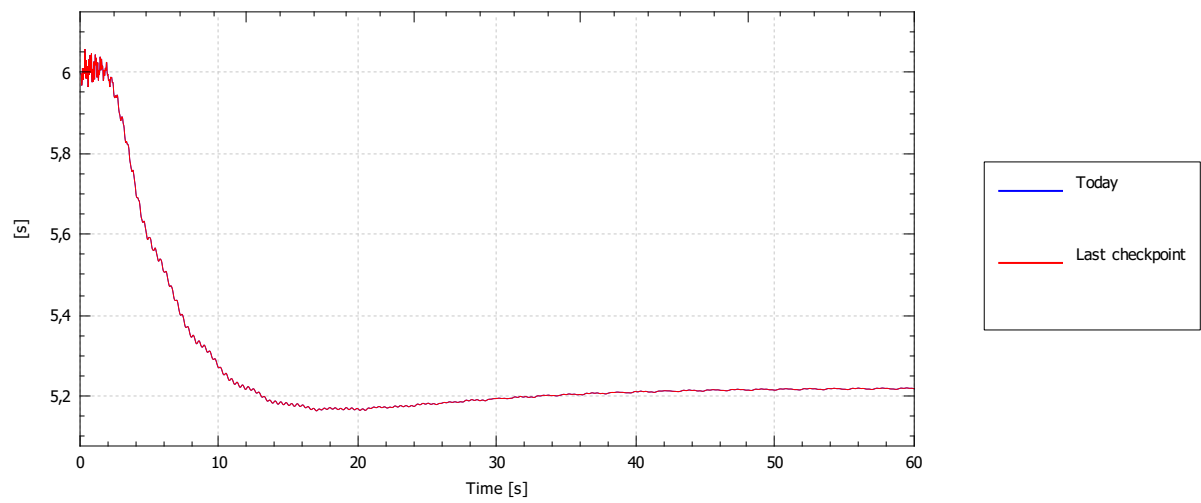
Torque coef. (CQ)



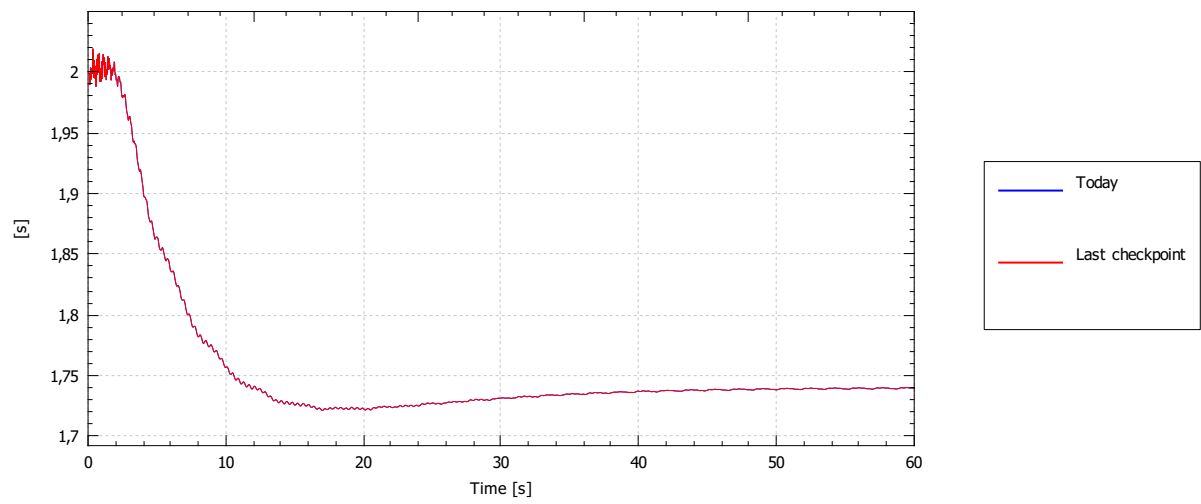
Tip speed



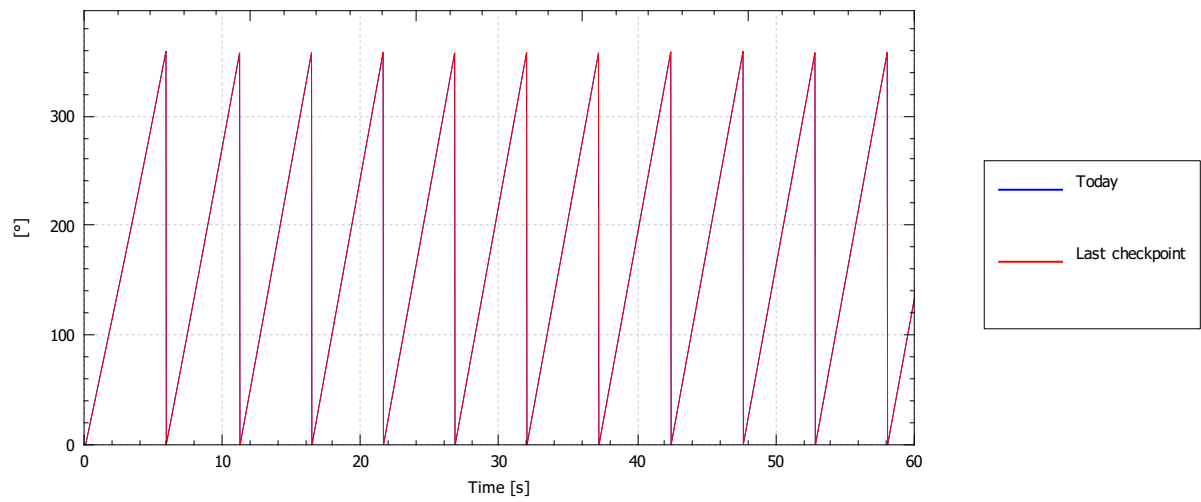
1P (one revolution)



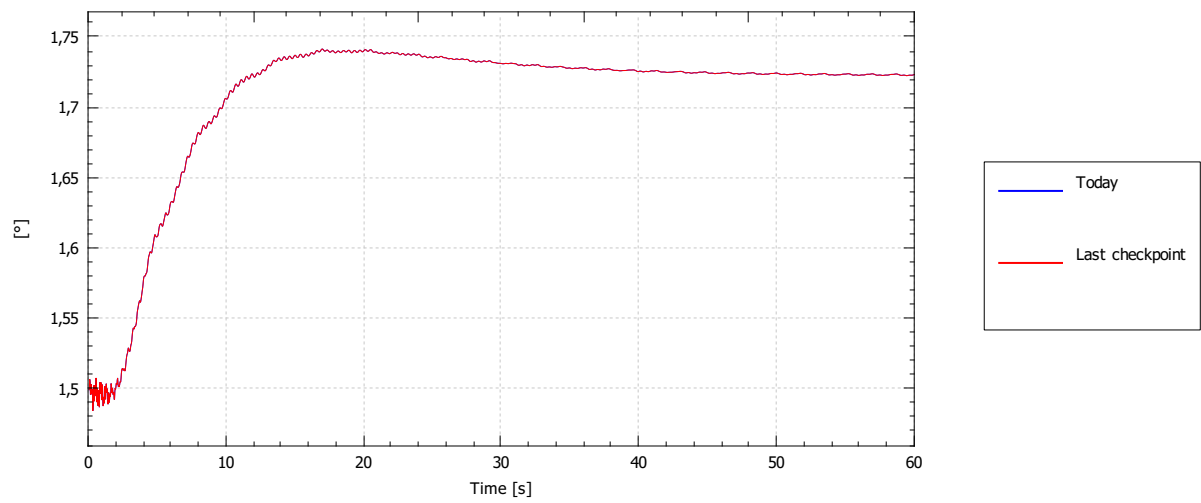
nP (blade passing)



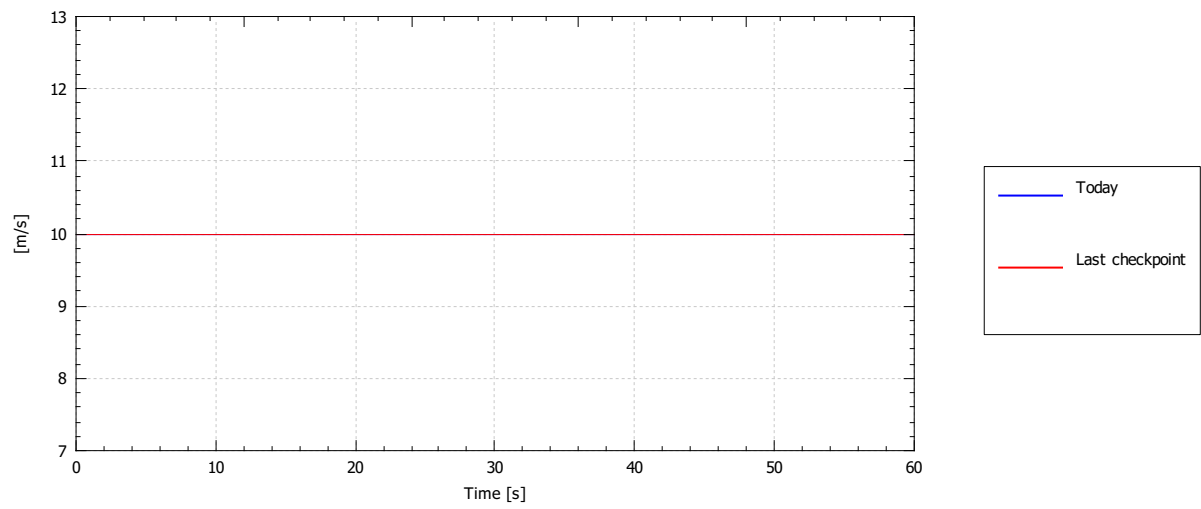
Azimuth angle



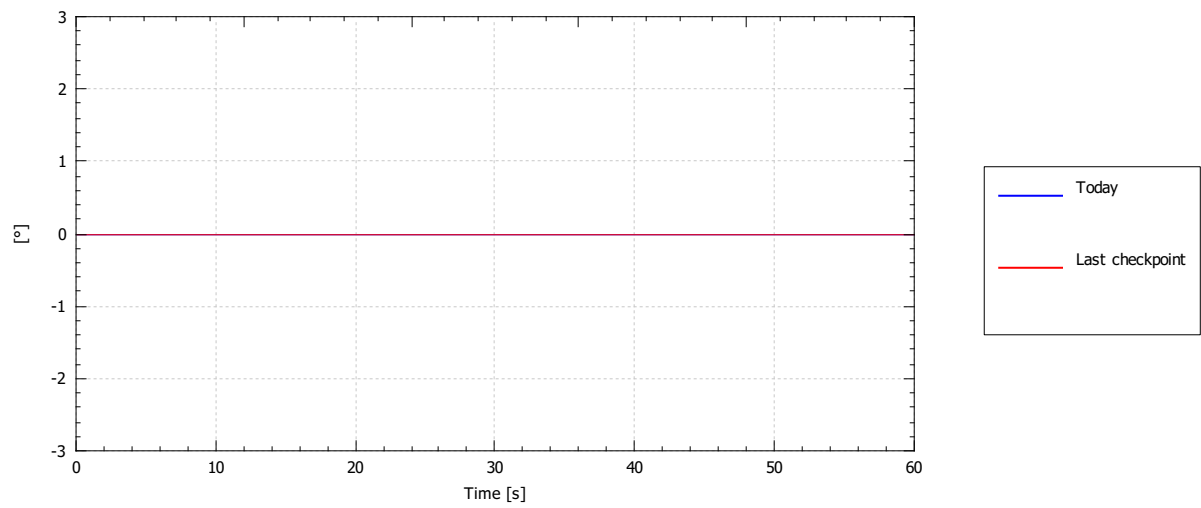
Rotation per timestep



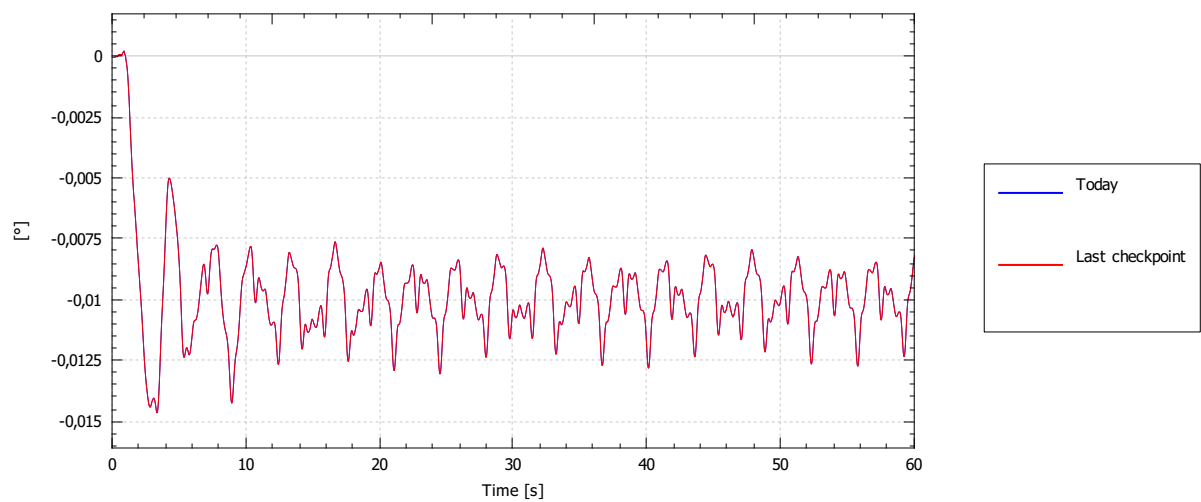
Wind speed at hub, magnitude



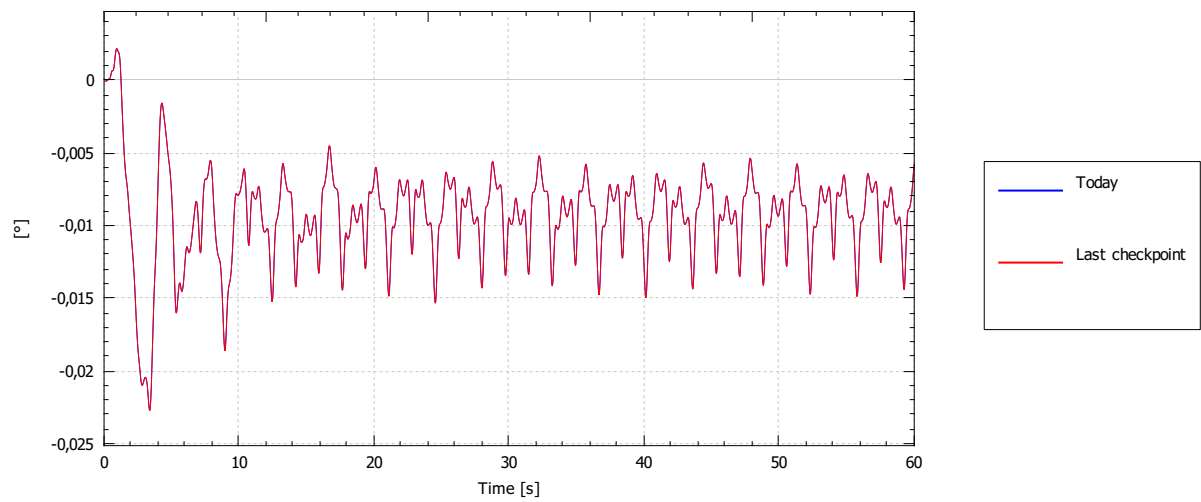
Wind angle at hub



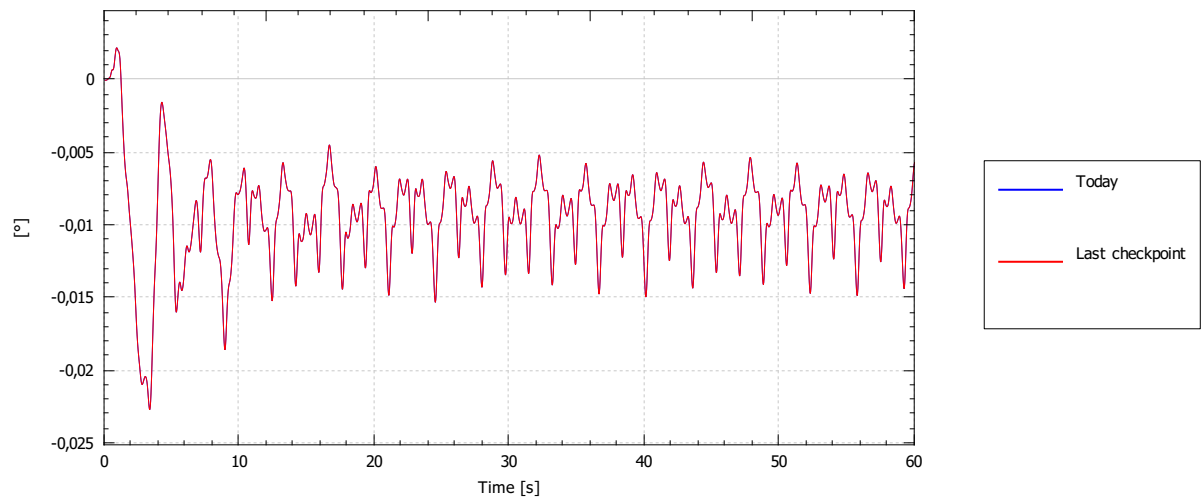
Yaw angle relative to forward



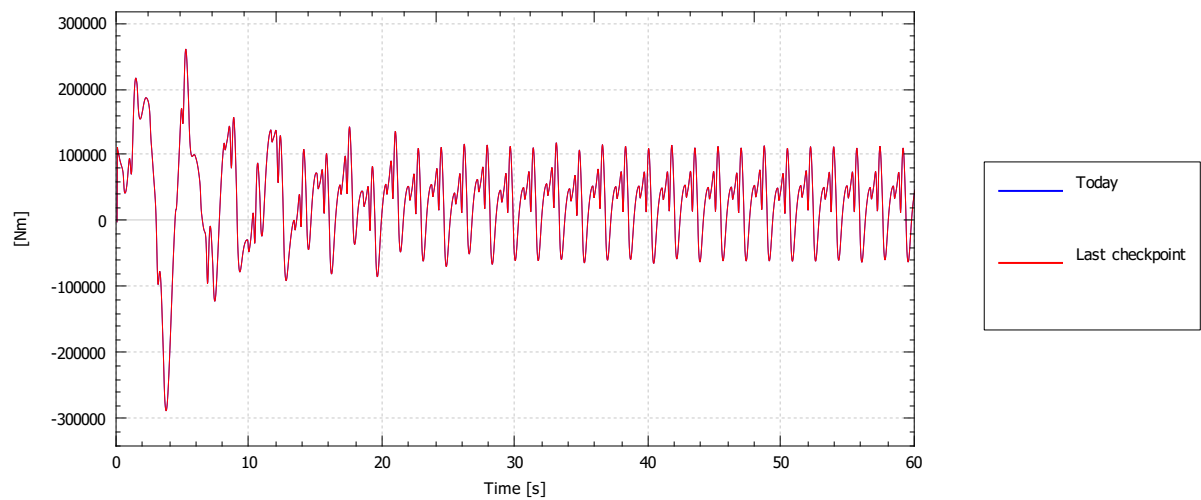
Yaw angle to reference direction



Yaw error

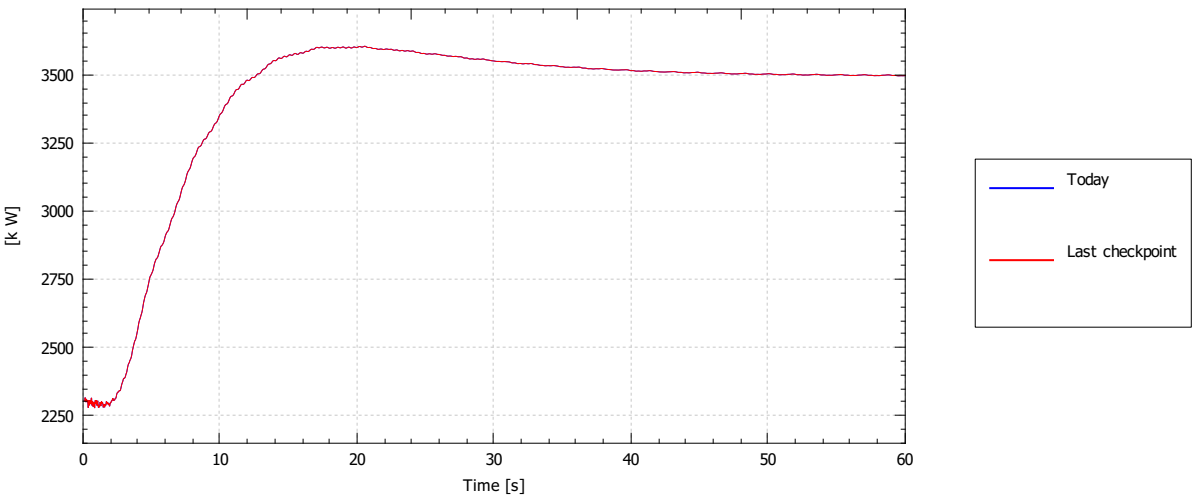


Torque about yaw axis

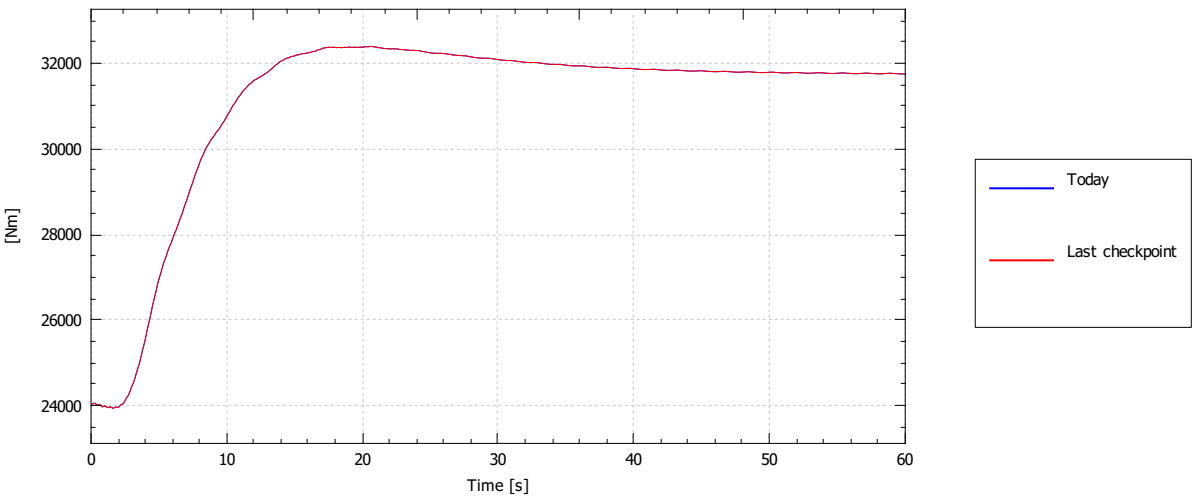


Generator

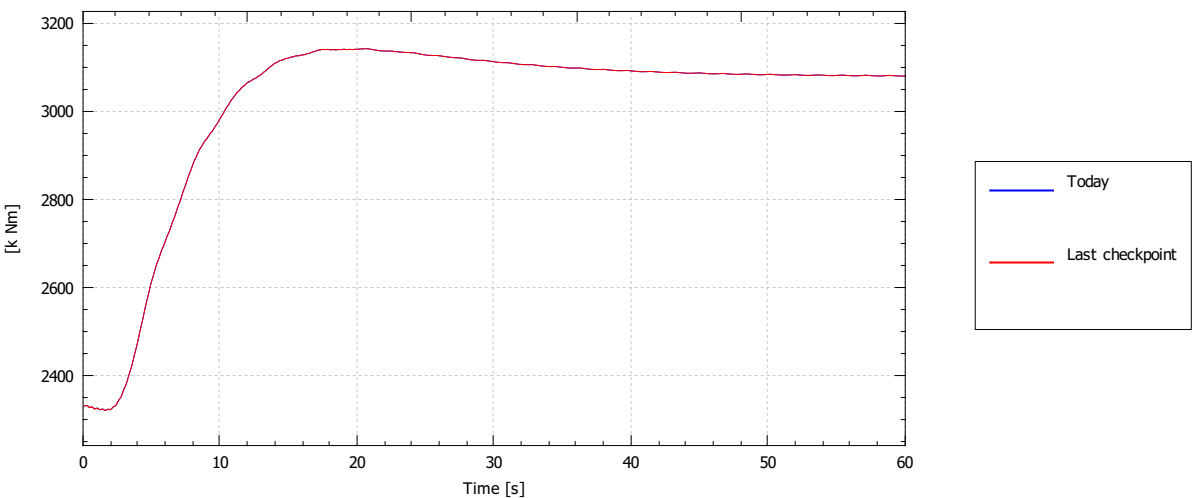
Power (electrical)



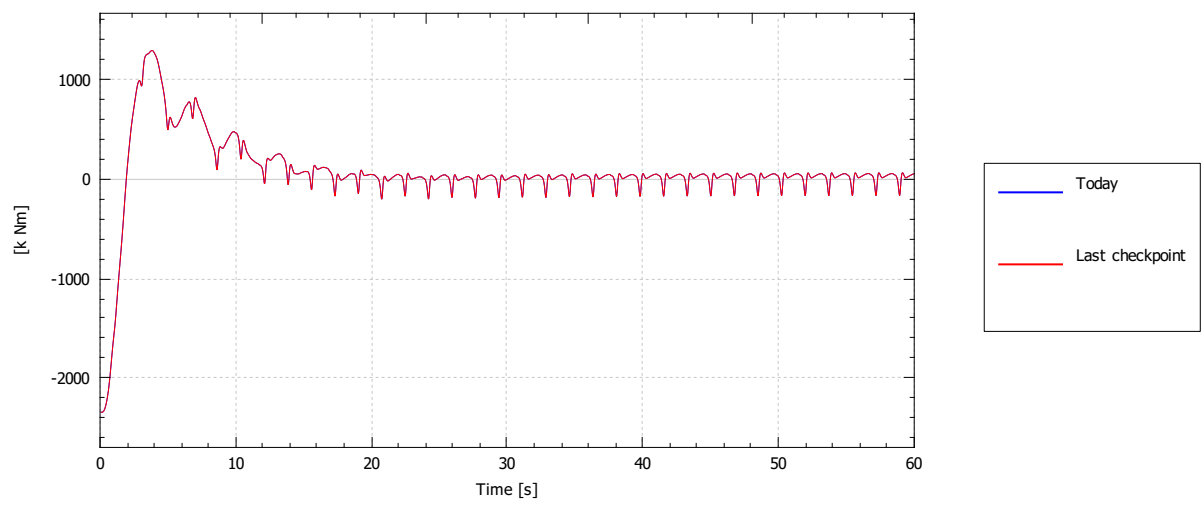
Torque



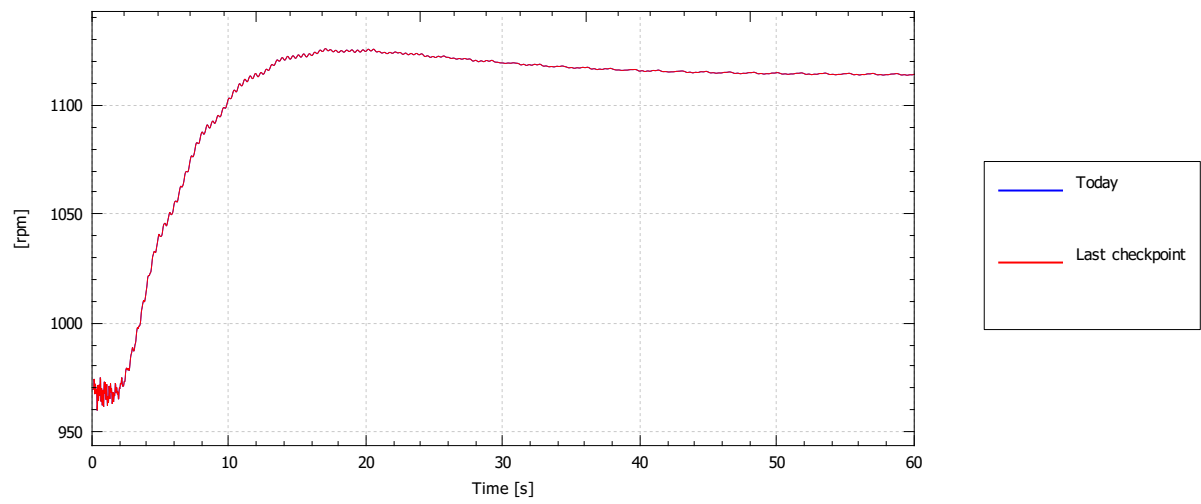
Torque on main shaft



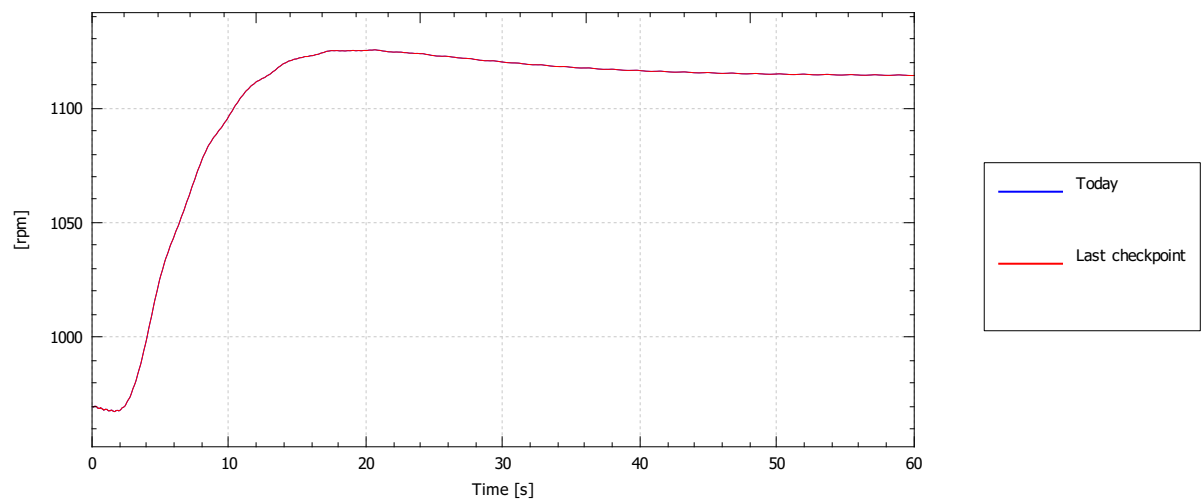
Torque diff. on main shaft



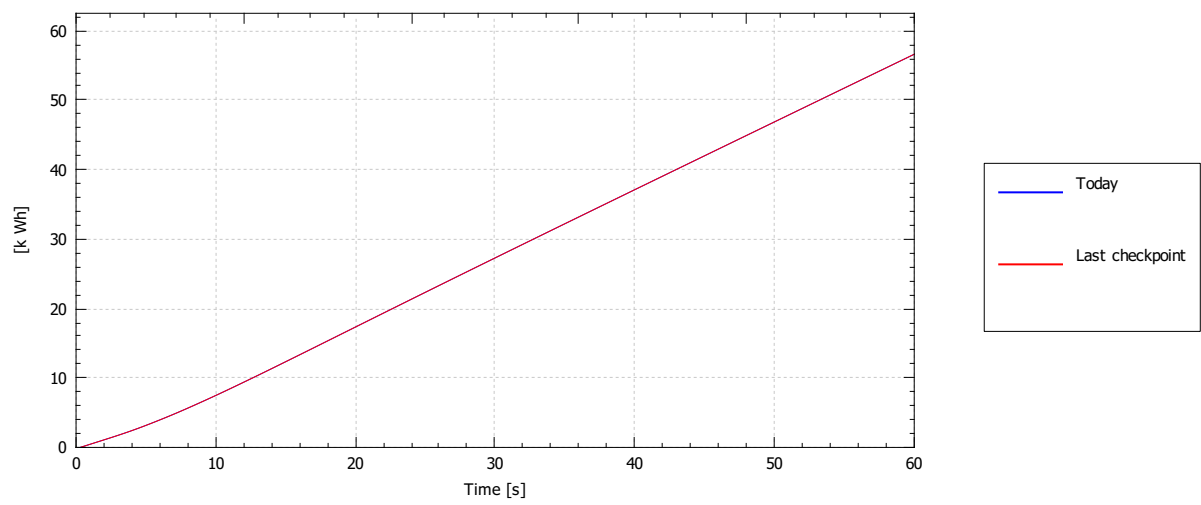
RPM



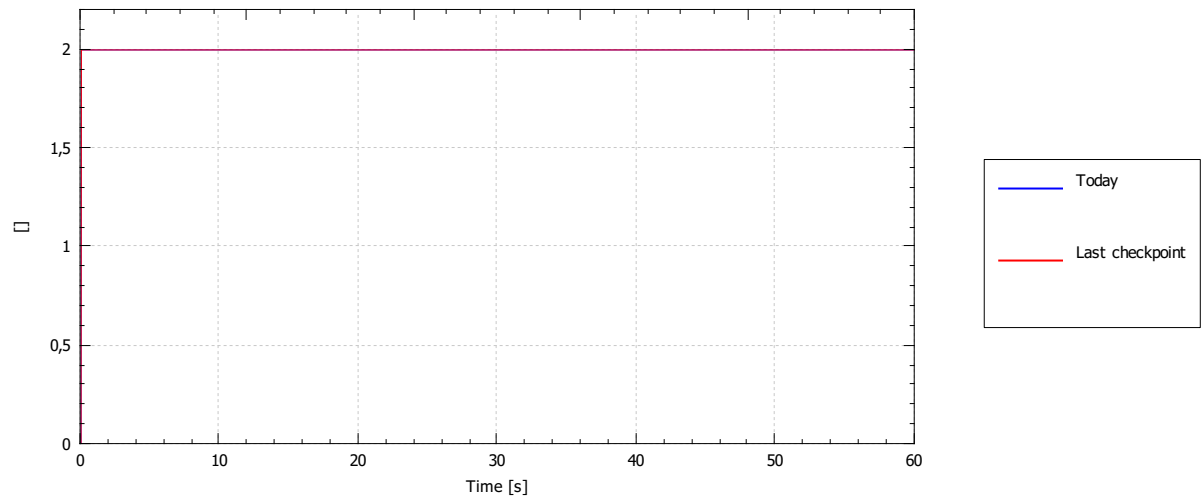
Filtered RPM



Electricity production

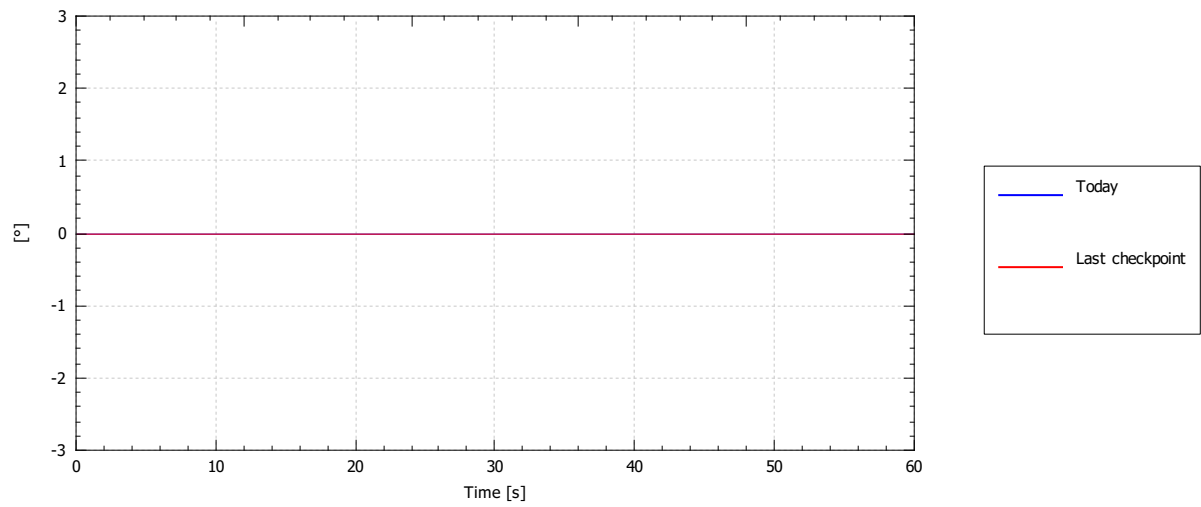


Region

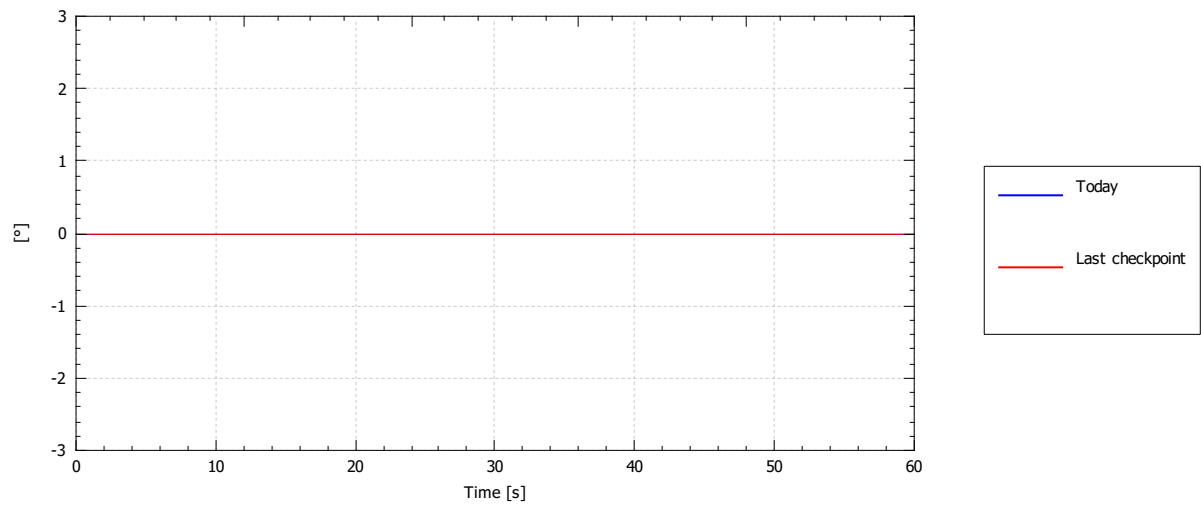


Demanded pitch controller

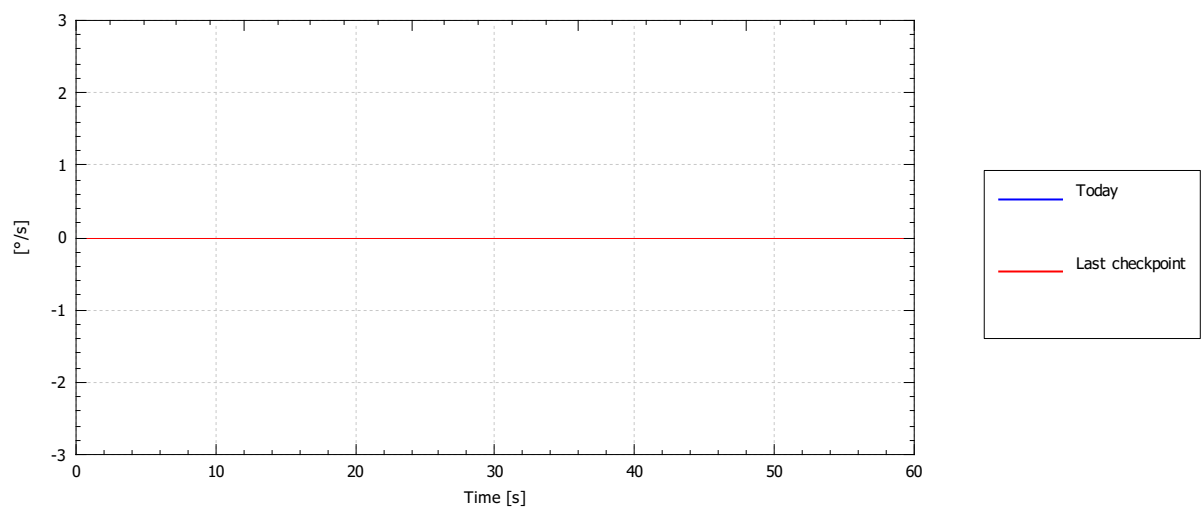
Demanded collective pitch angle



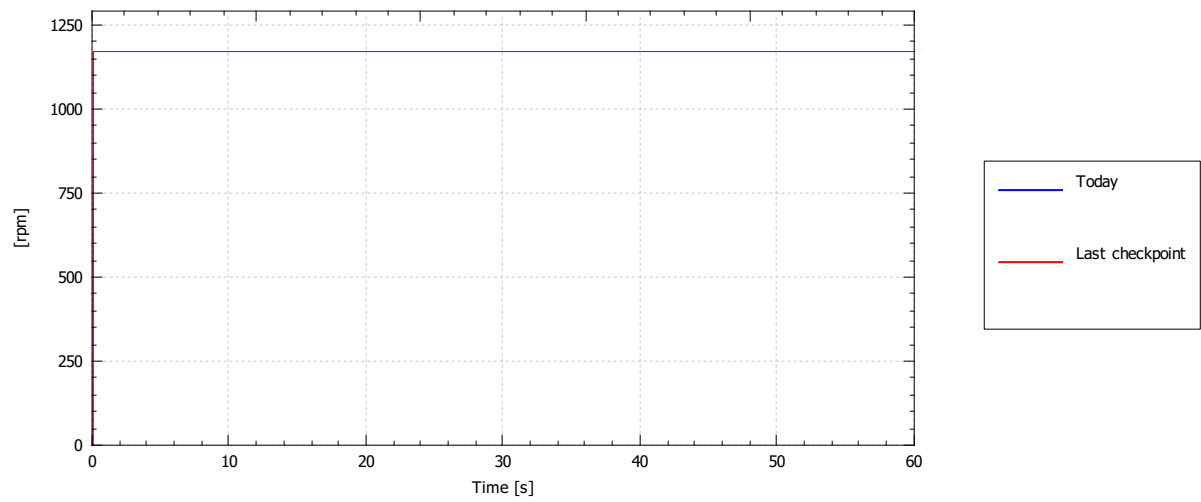
Cumulative demanded collective pitch angle



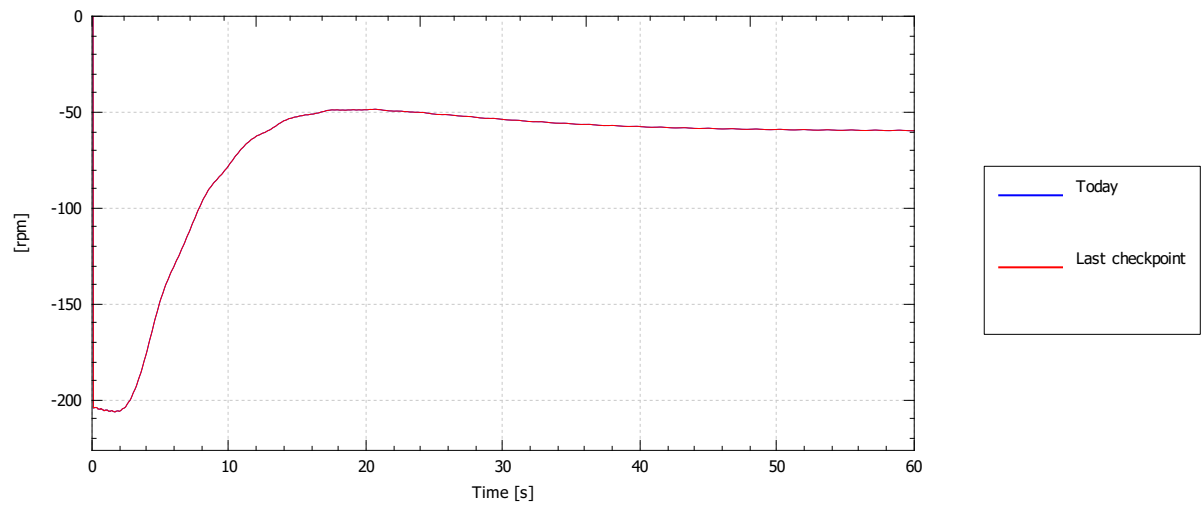
Demanded collective pitch angle rate



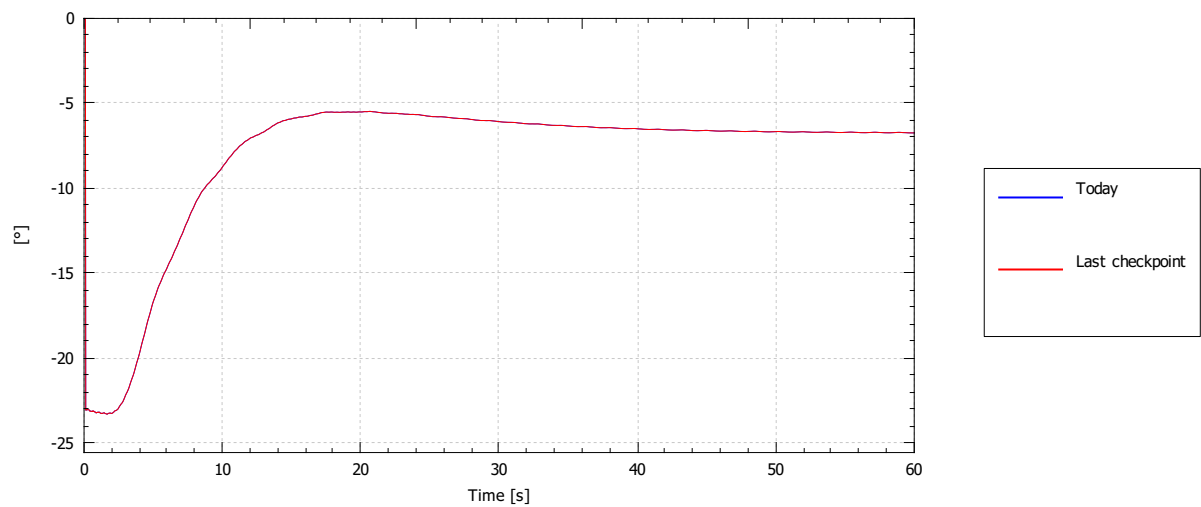
Set point



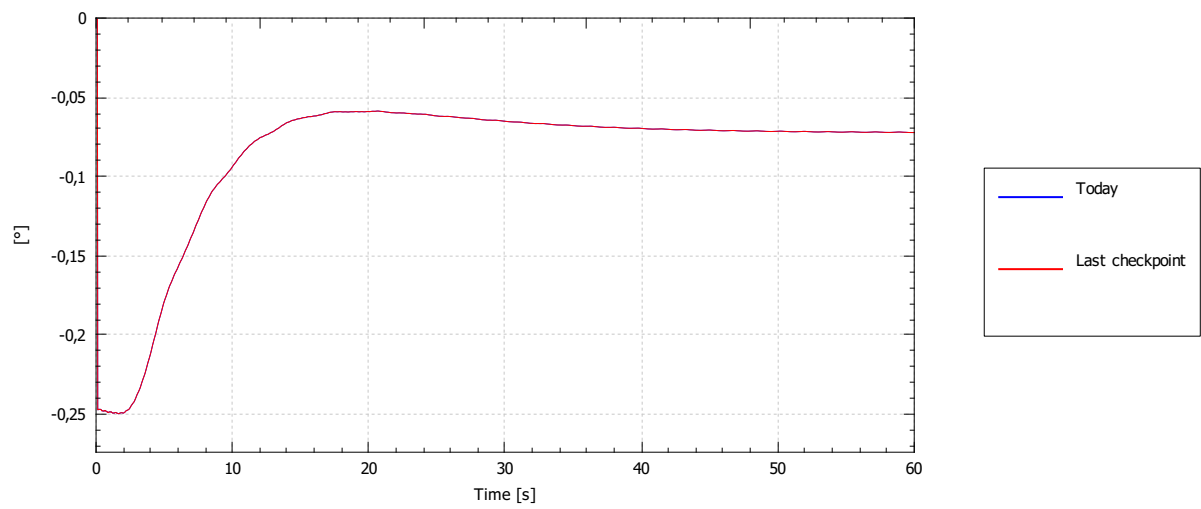
RPM error



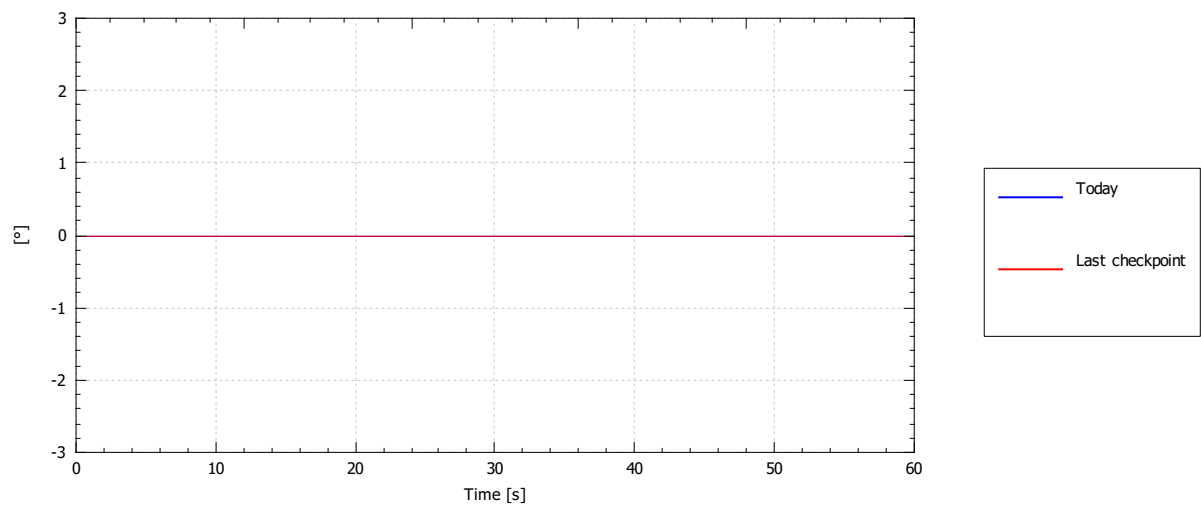
P term



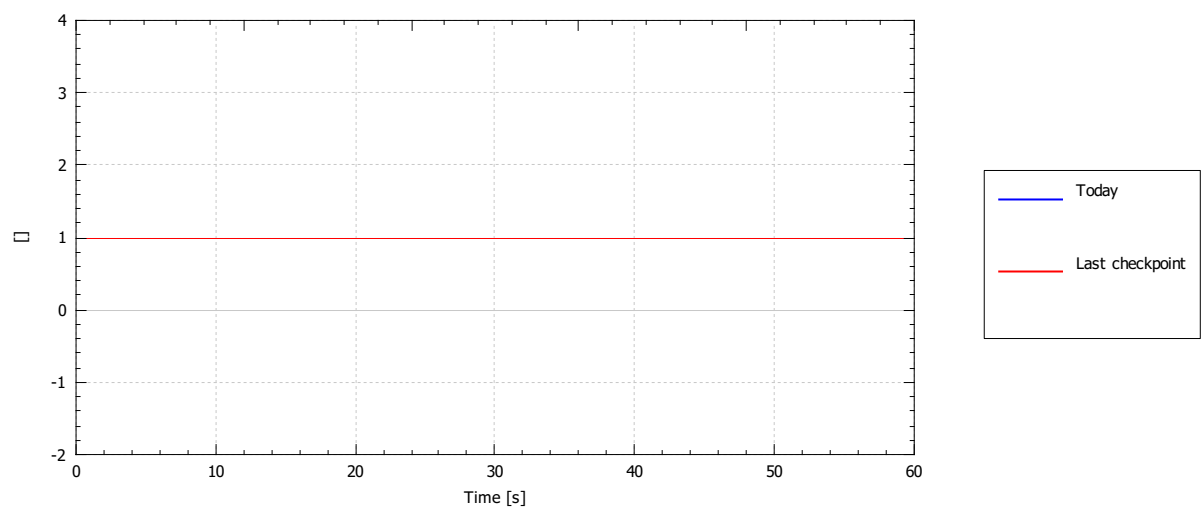
I term

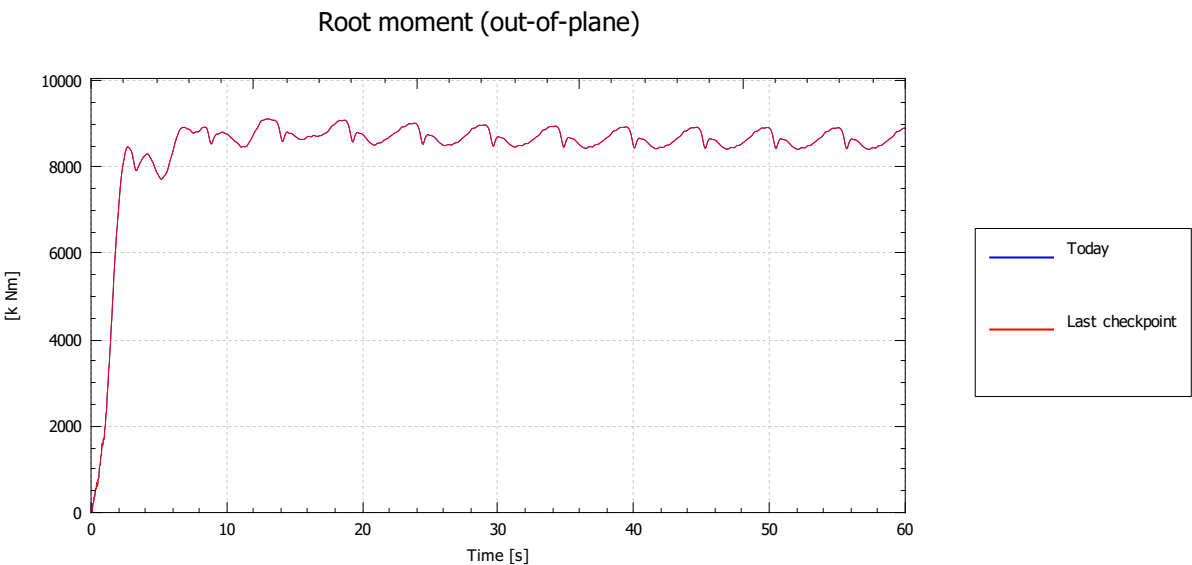
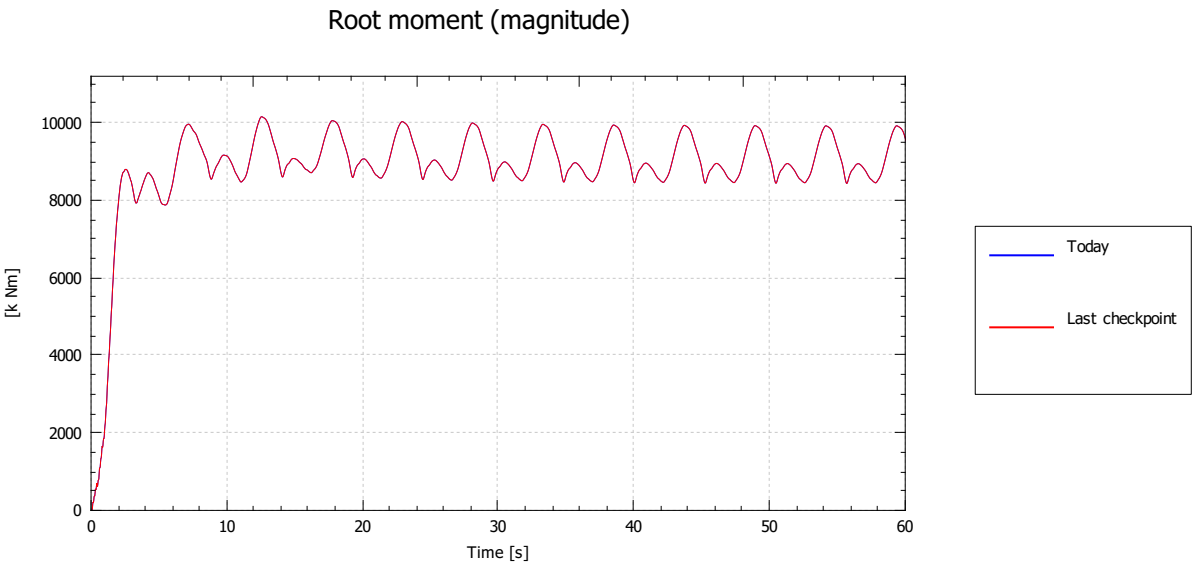
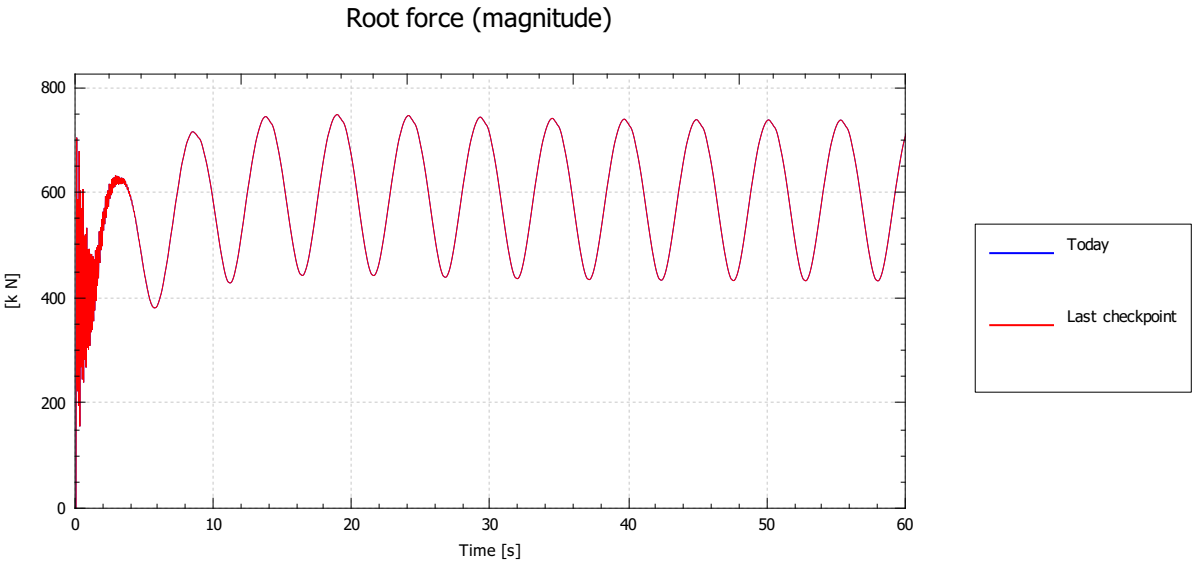


D term

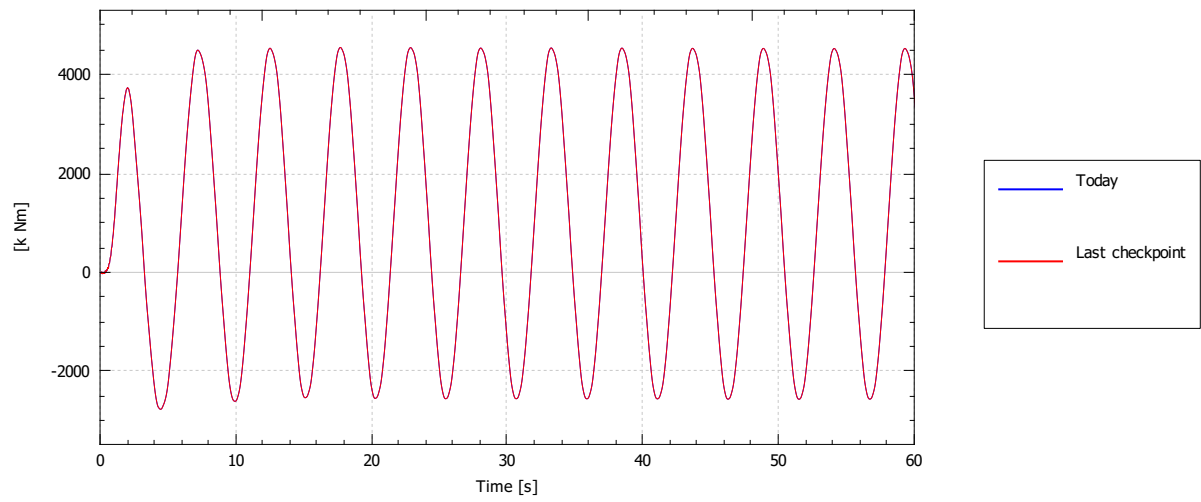


Gain scheduling factor

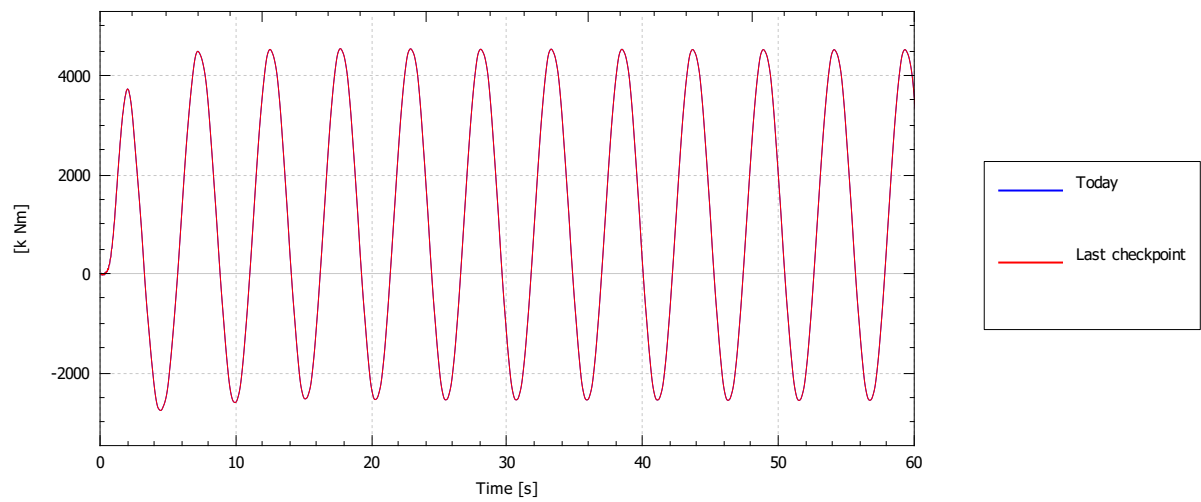




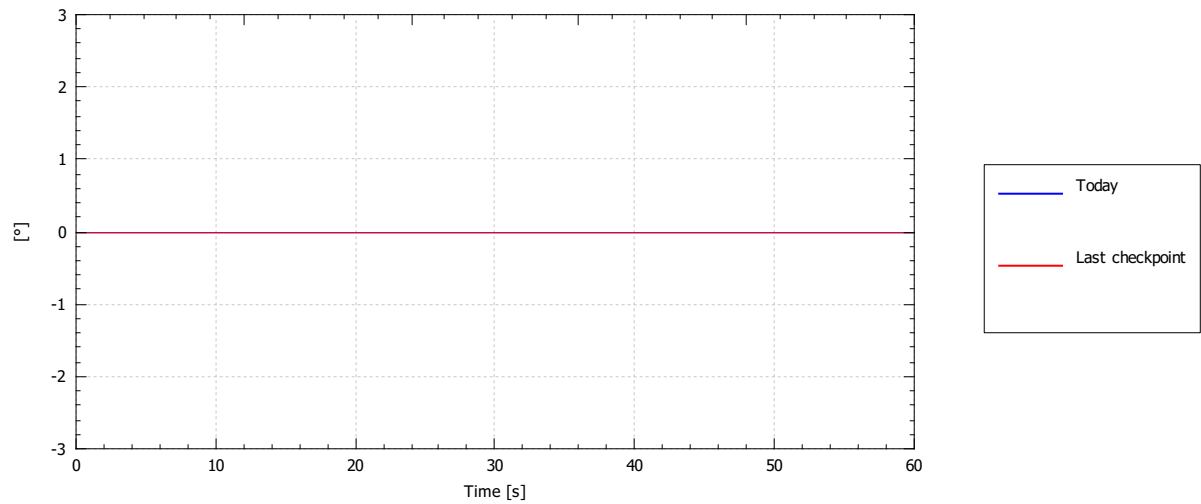
Root moment (in-plane)



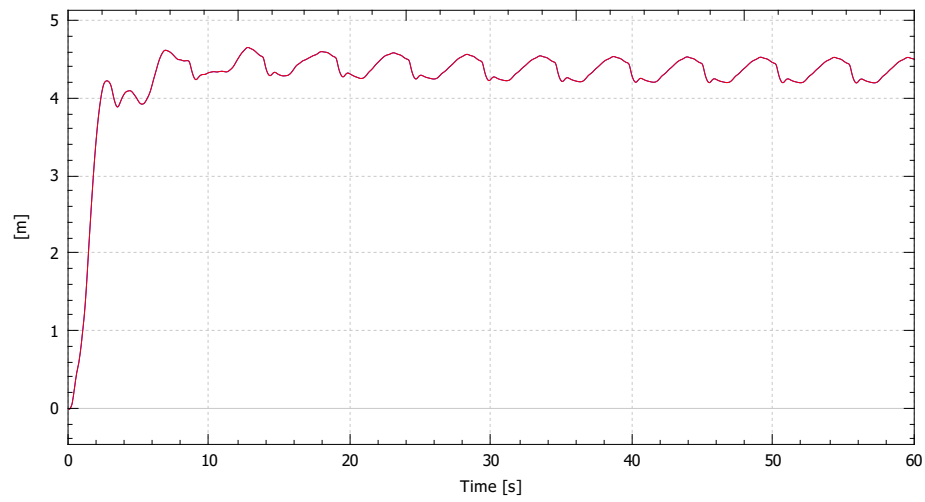
Root moment about shaft



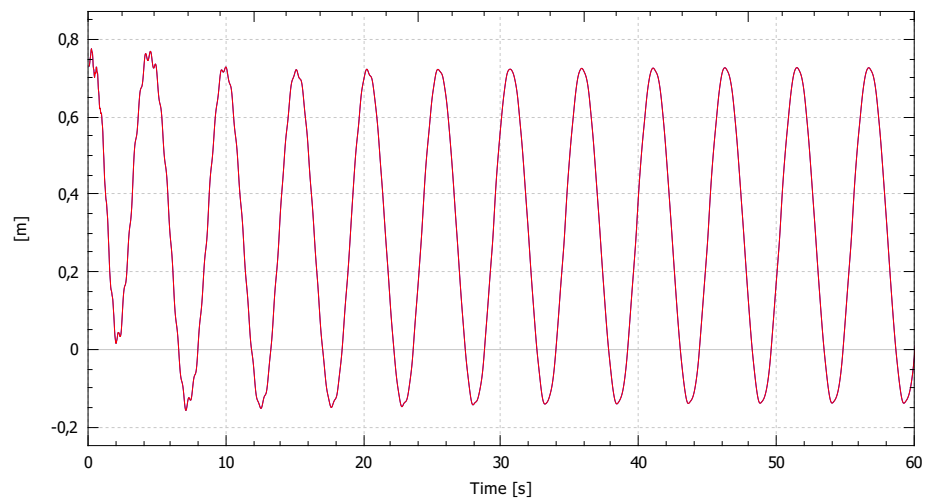
Pitch angle



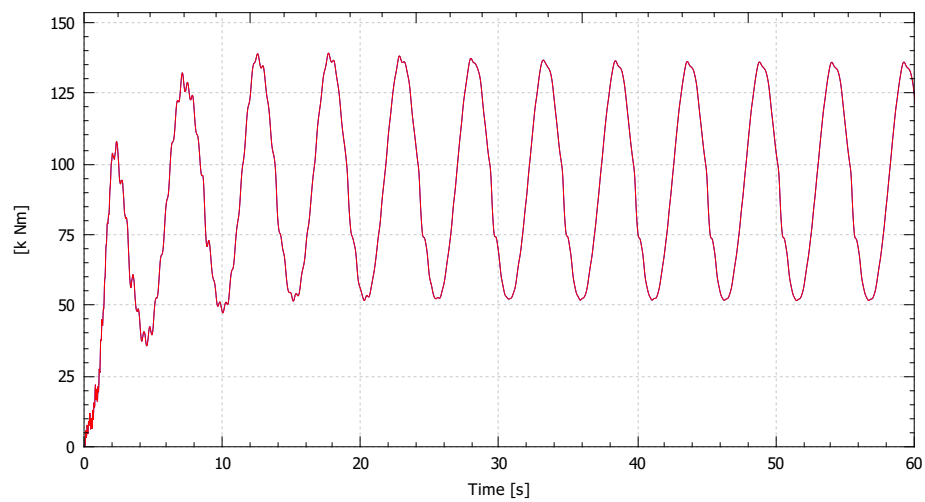
Tip deflection (out-of-plane)

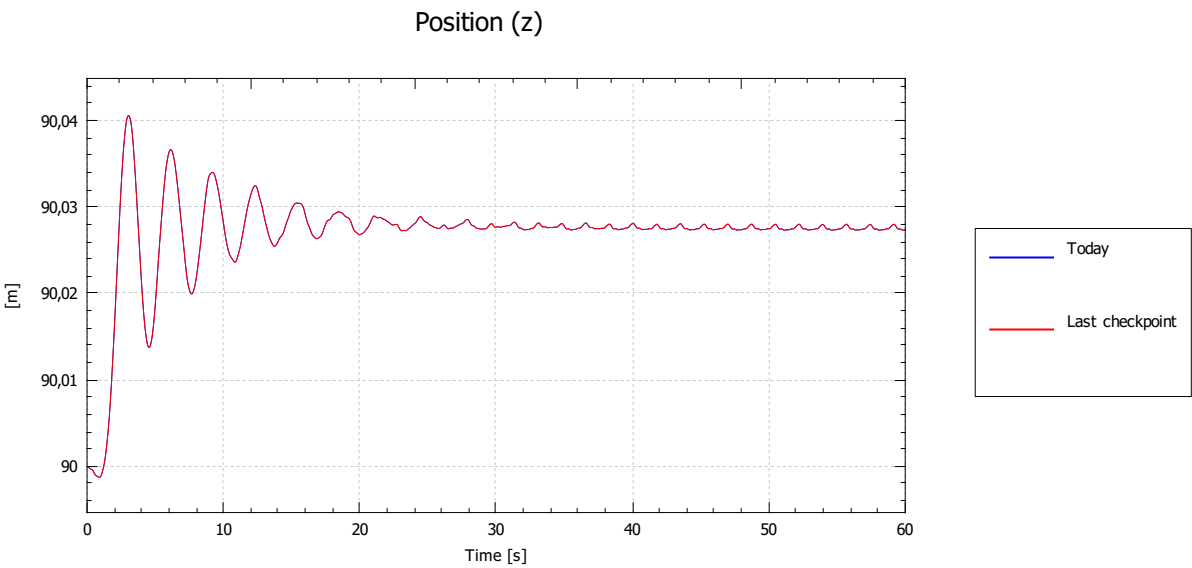
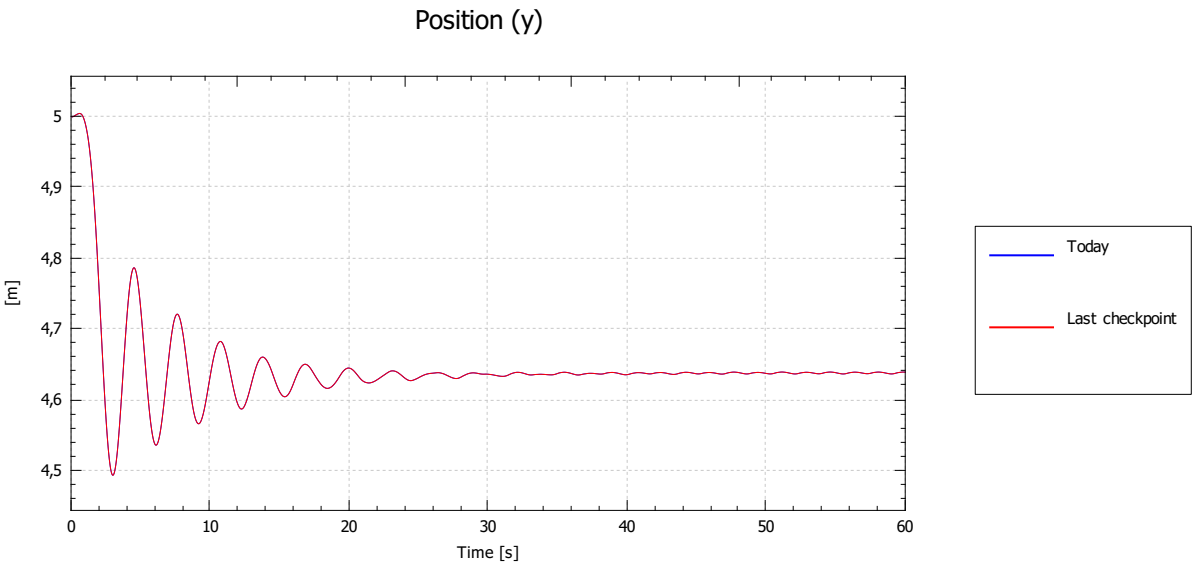
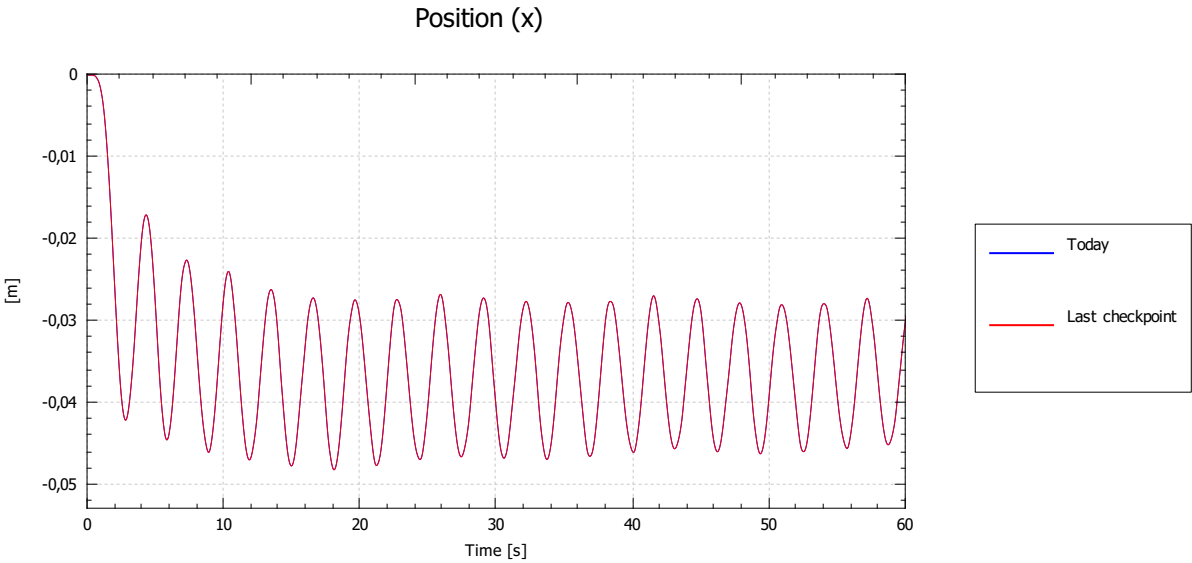


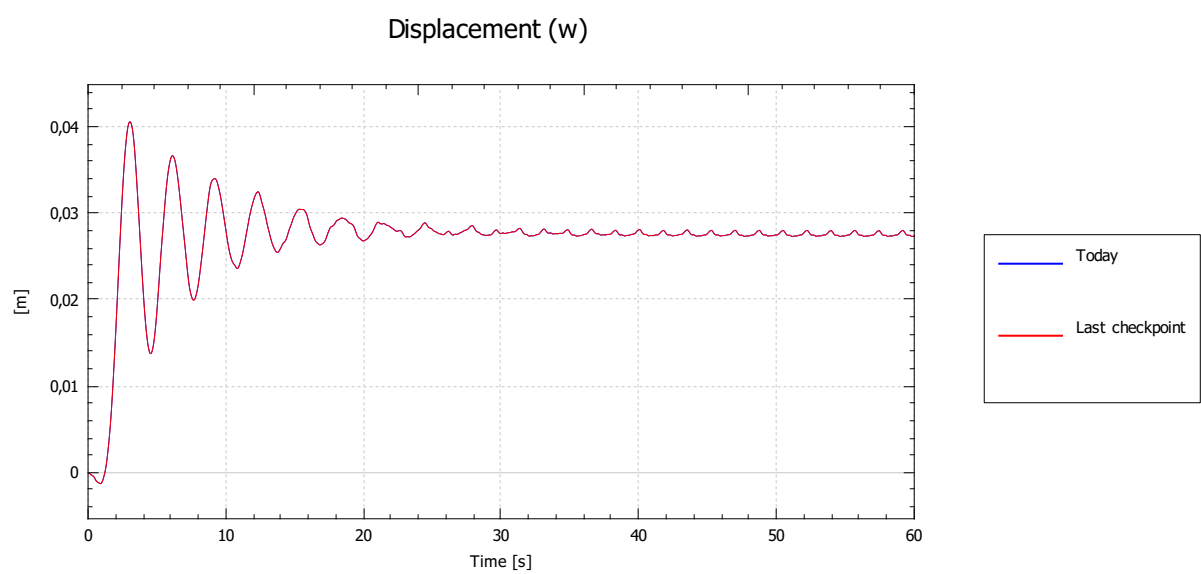
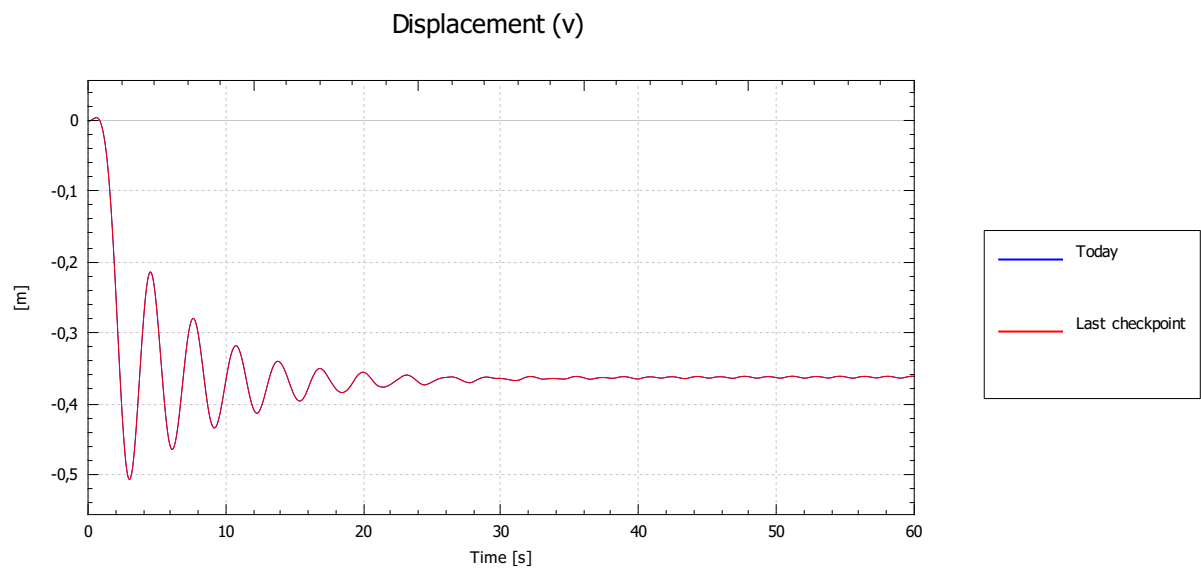
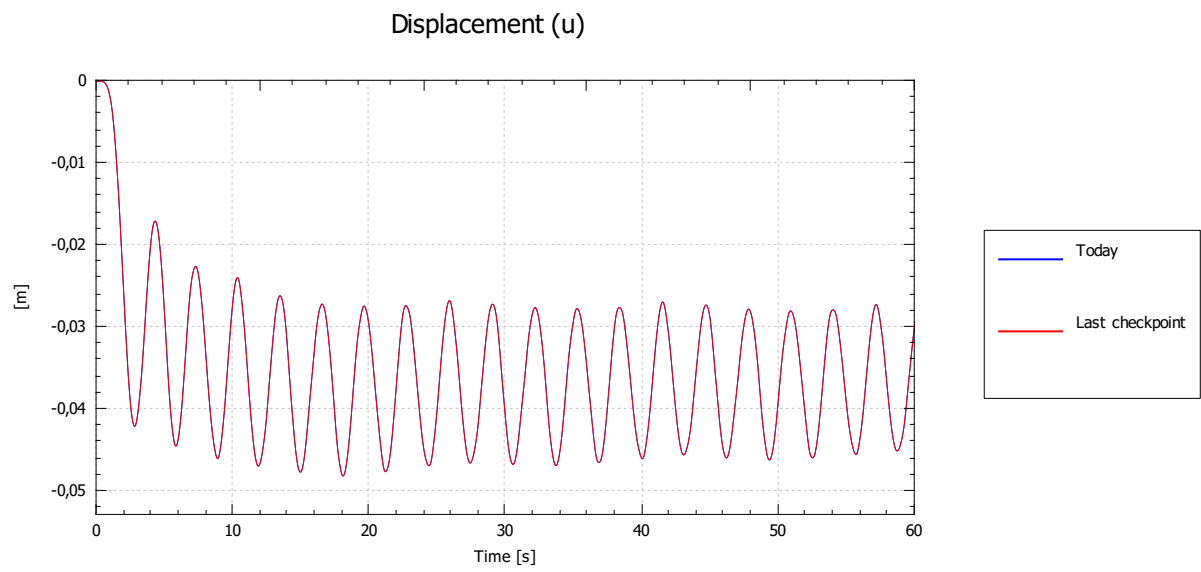
Tip deflection (in-plane)



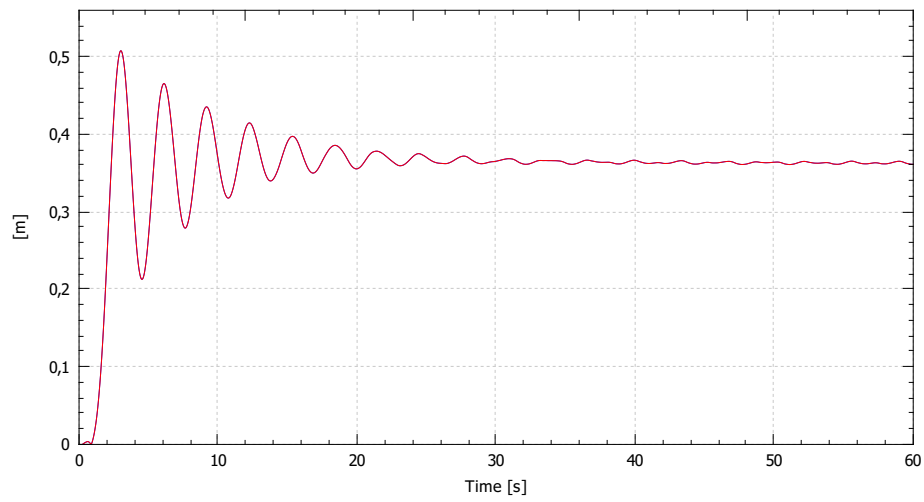
Root torque



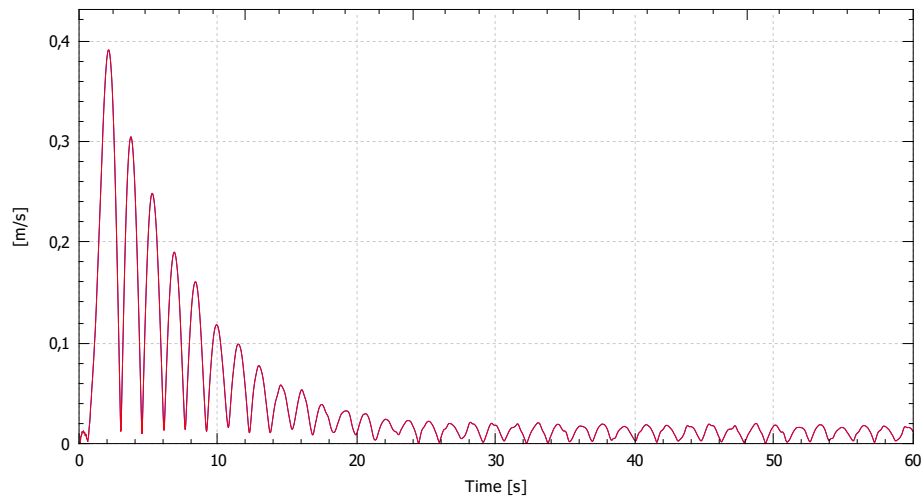




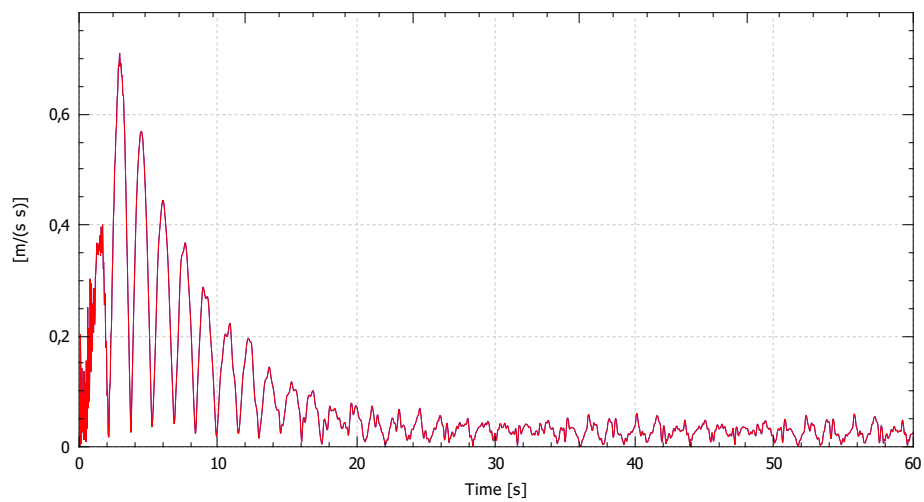
Displacement magnitude



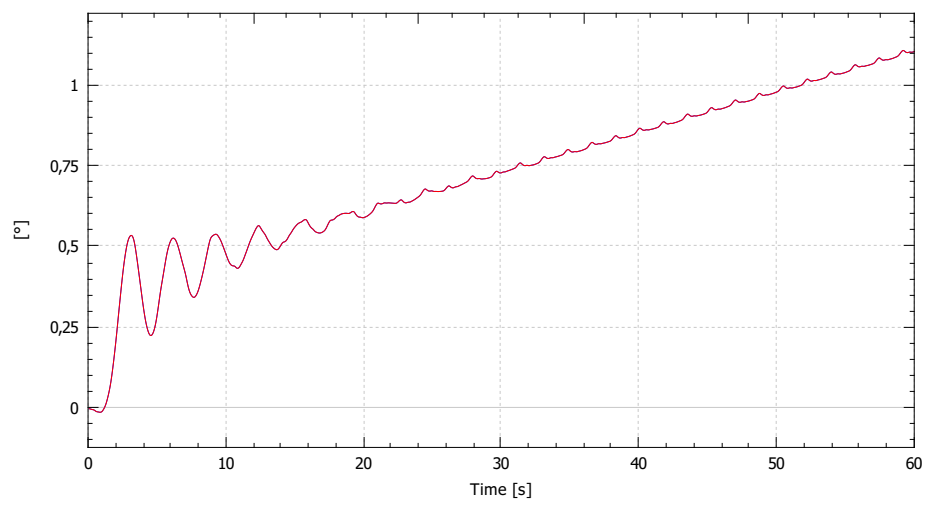
Speed



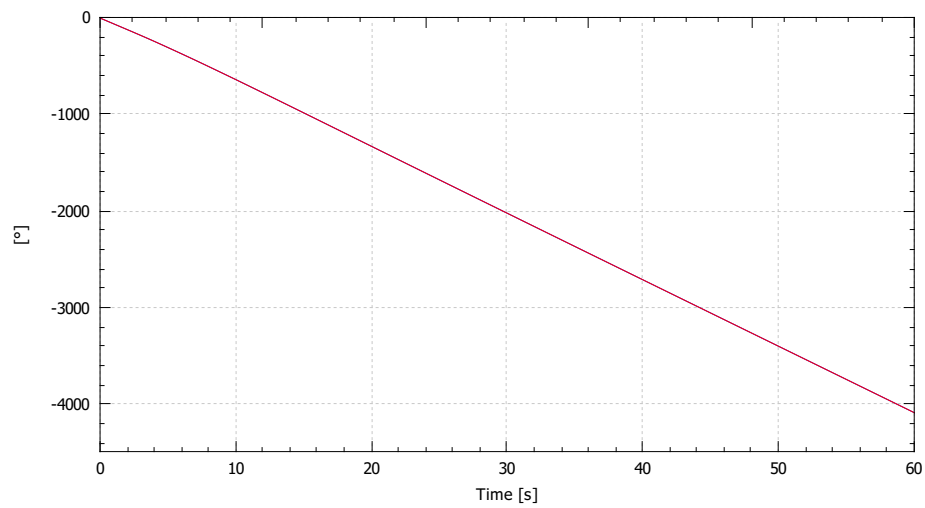
Acceleration, magnitude



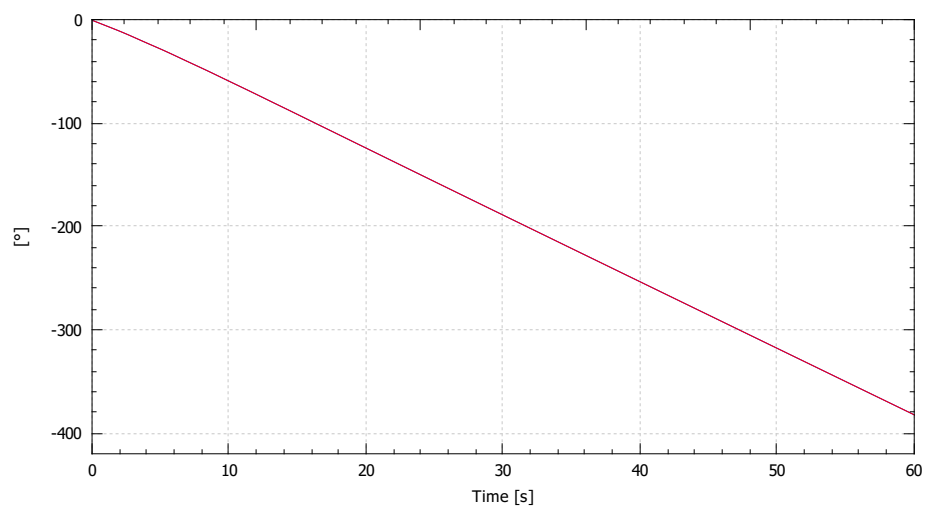
Rotational displacement (ru)



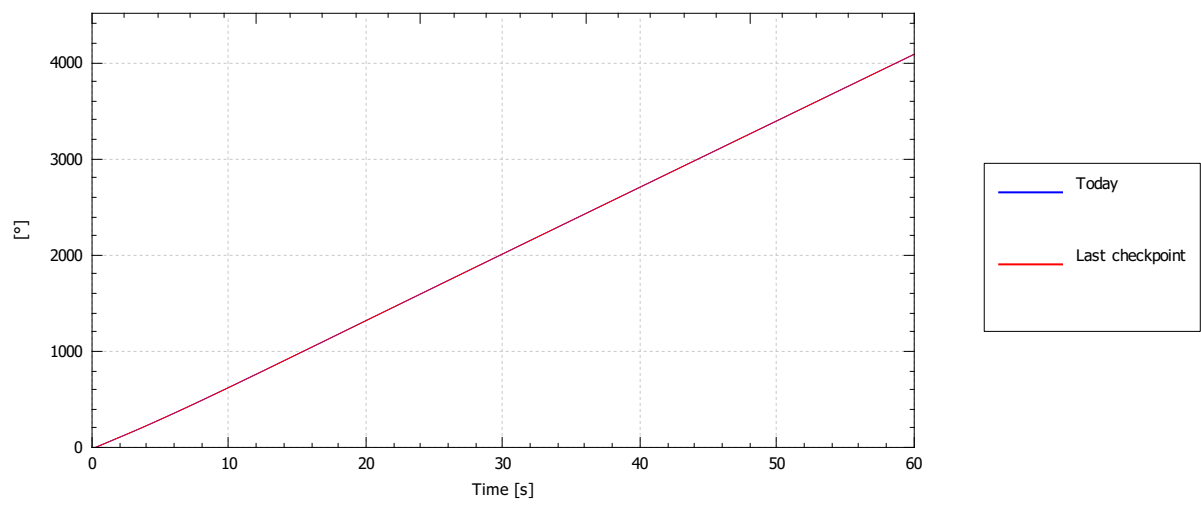
Rotational displacement (rv)



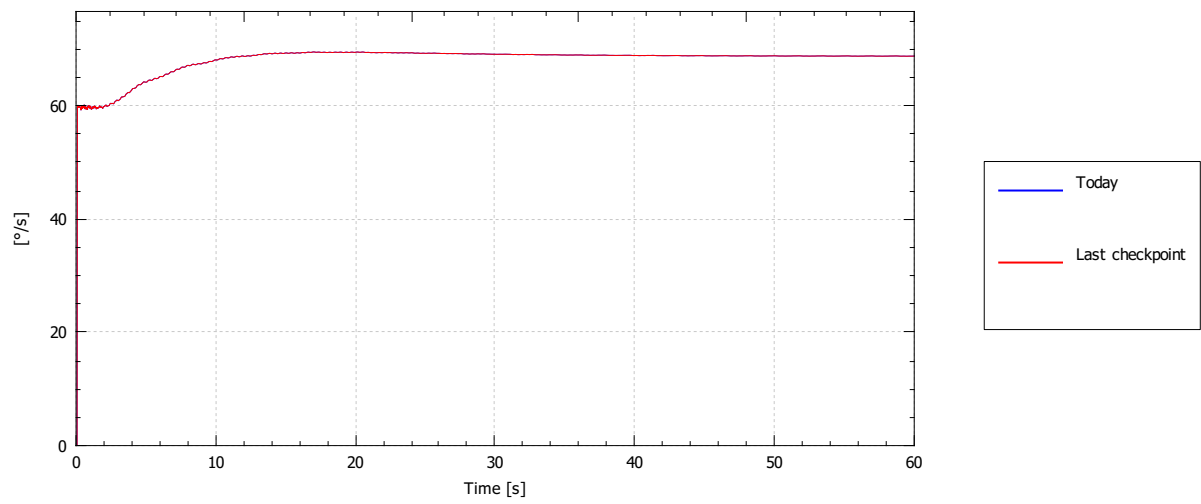
Rotational displacement (rw)



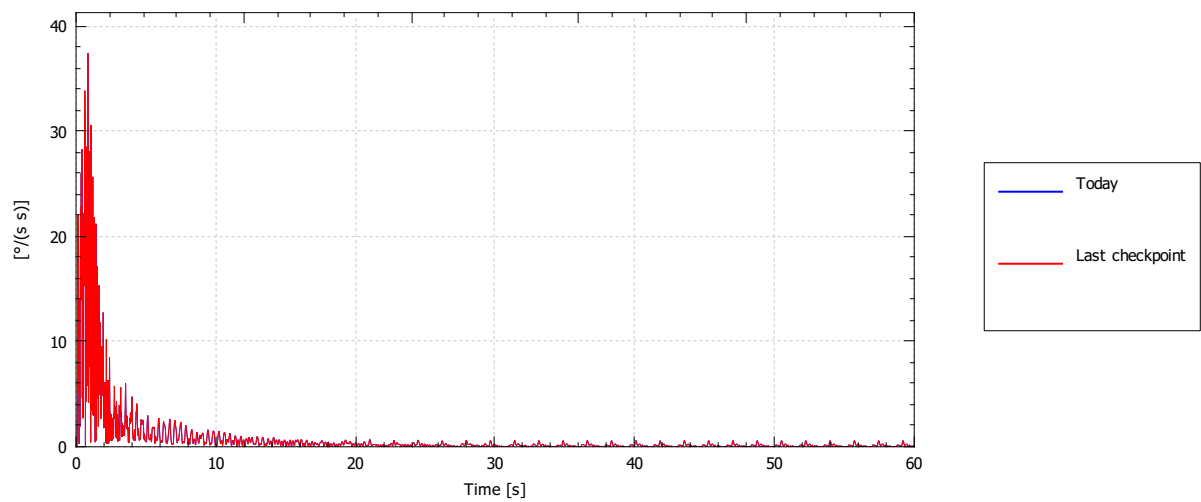
Rotational displacement magnitude



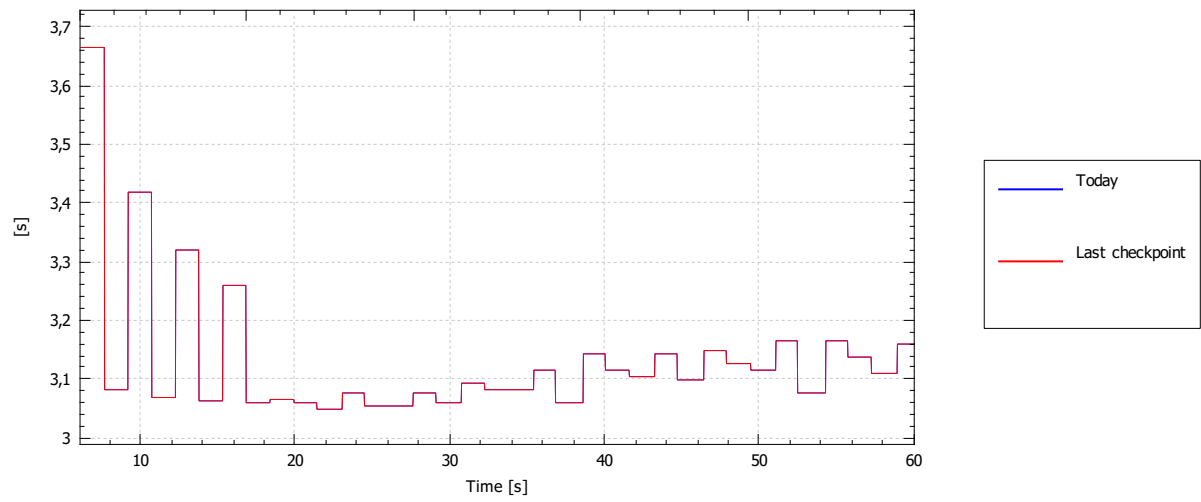
Rotational speed



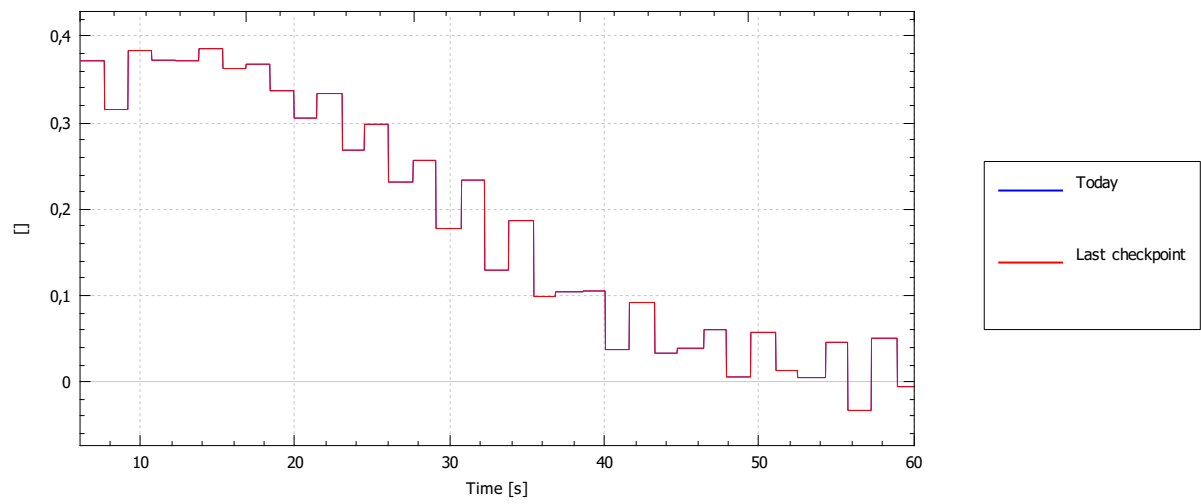
Rotational acceleration mag



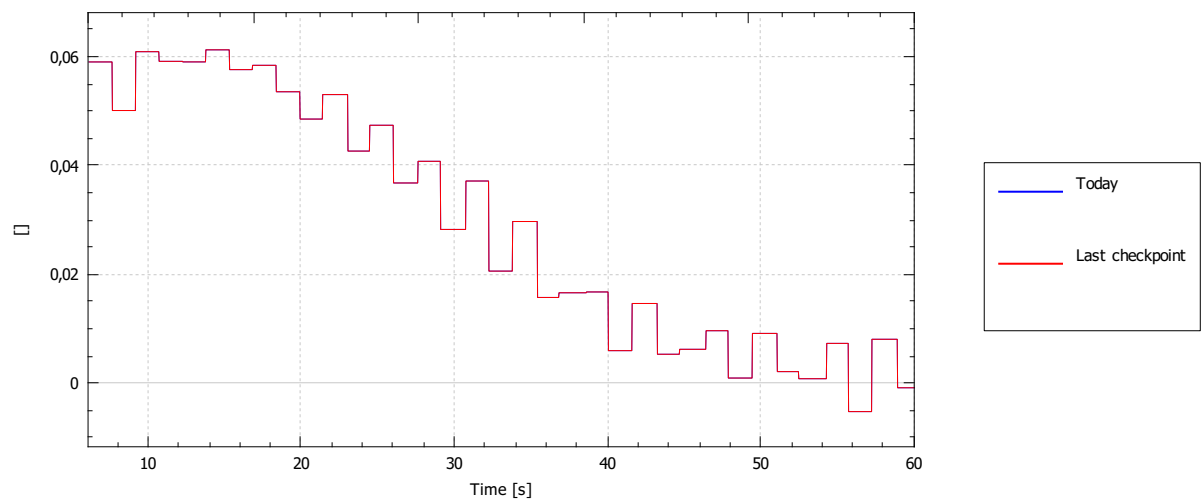
Displacement period



Displacement logarithmic decrement

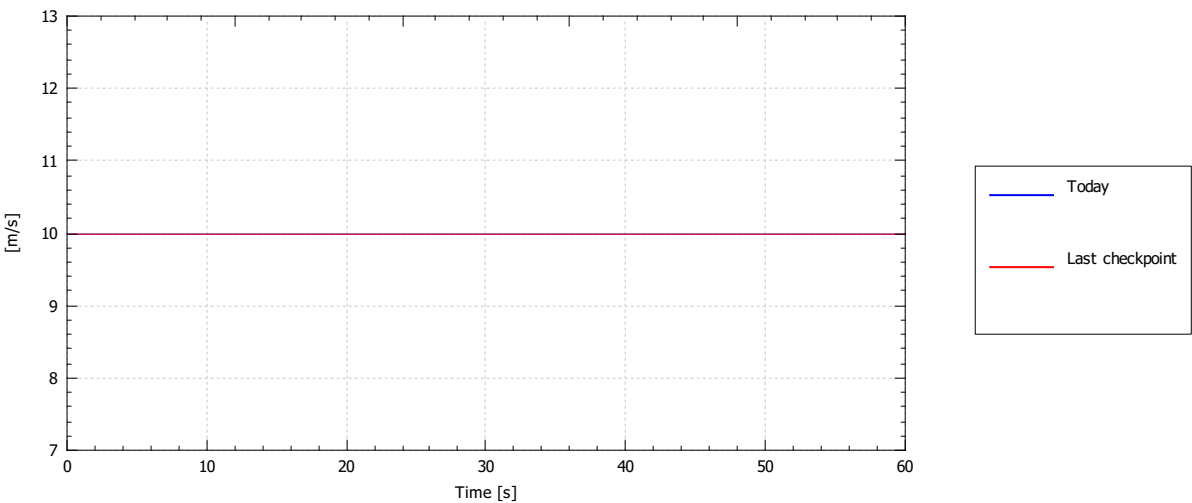


Displacement damping ratio



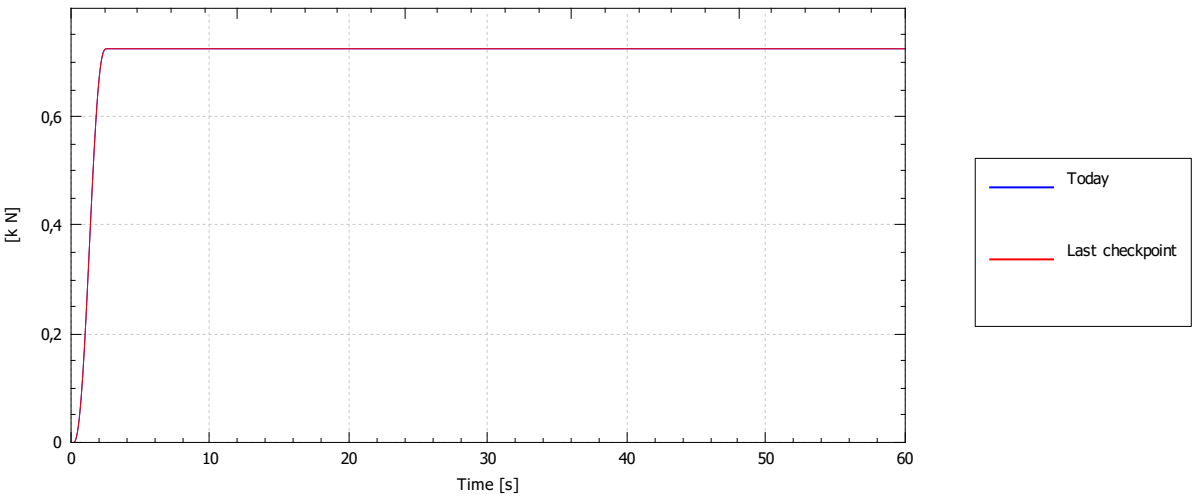
Node [Fluid kinematics] [Node 4 | Tubular tower]

Particle vel. (wind) - mag.

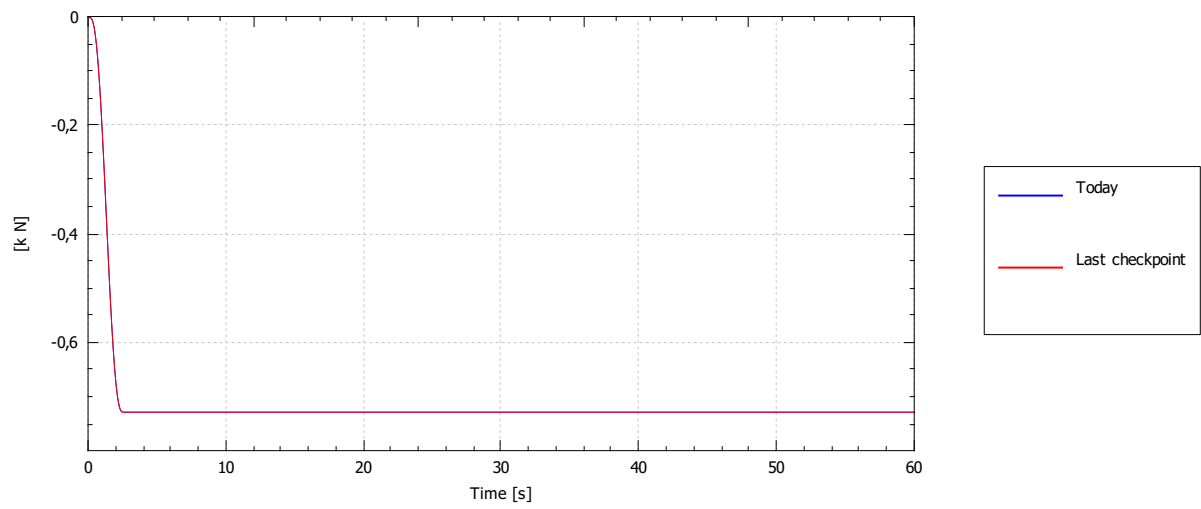


Node loads [Node 11 | Tubular tower]

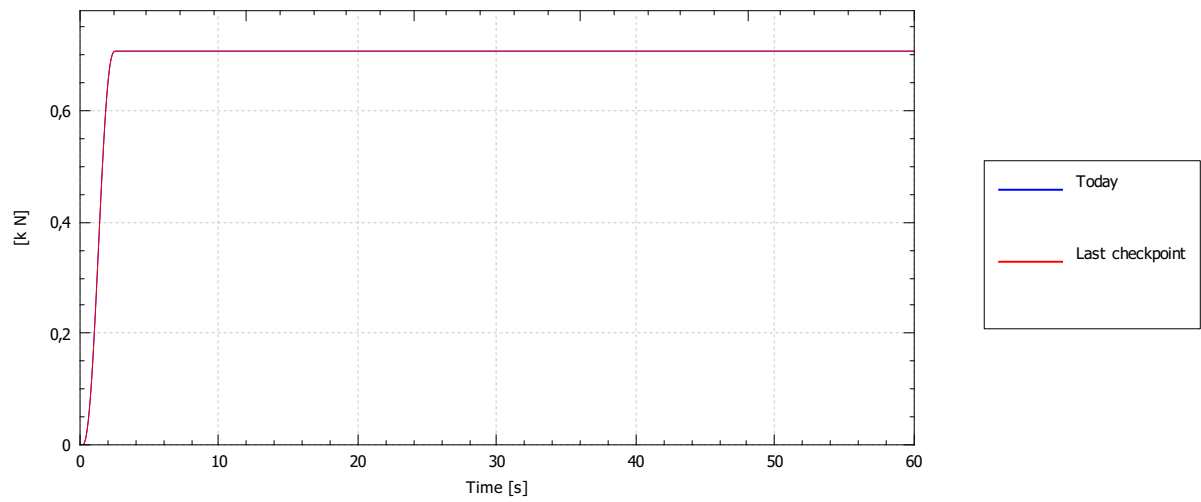
Aero perp. drag (596) (mag.)



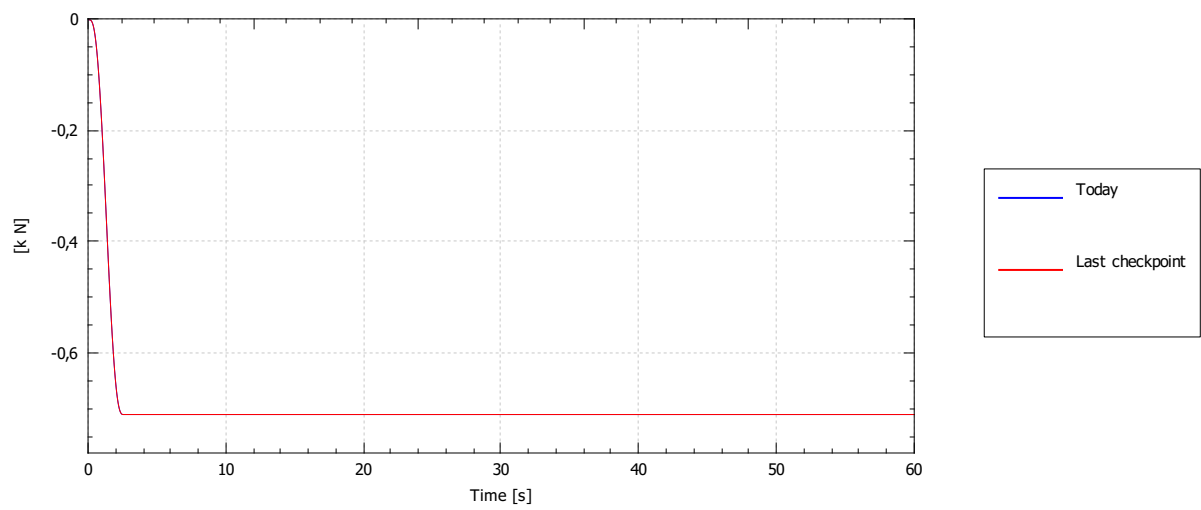
Aero perp. drag (596) (sign)



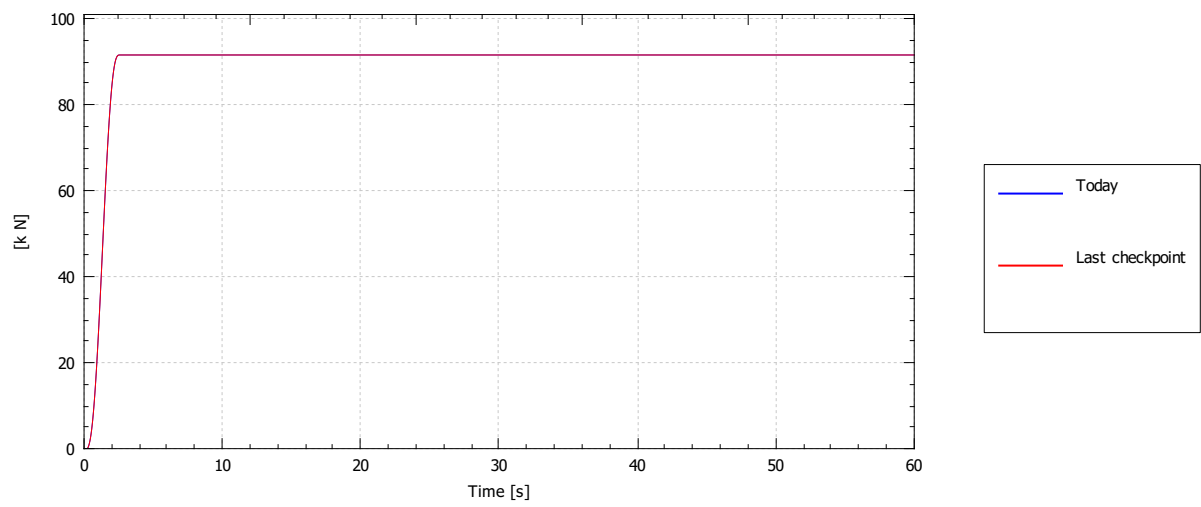
Aero perp. drag (597) (mag.)



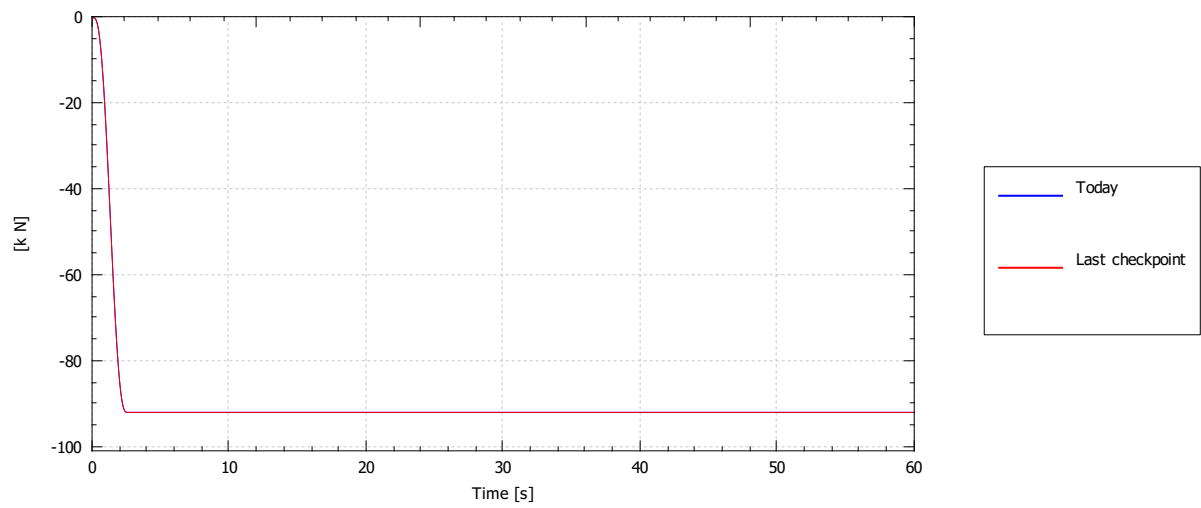
Aero perp. drag (597) (sign)



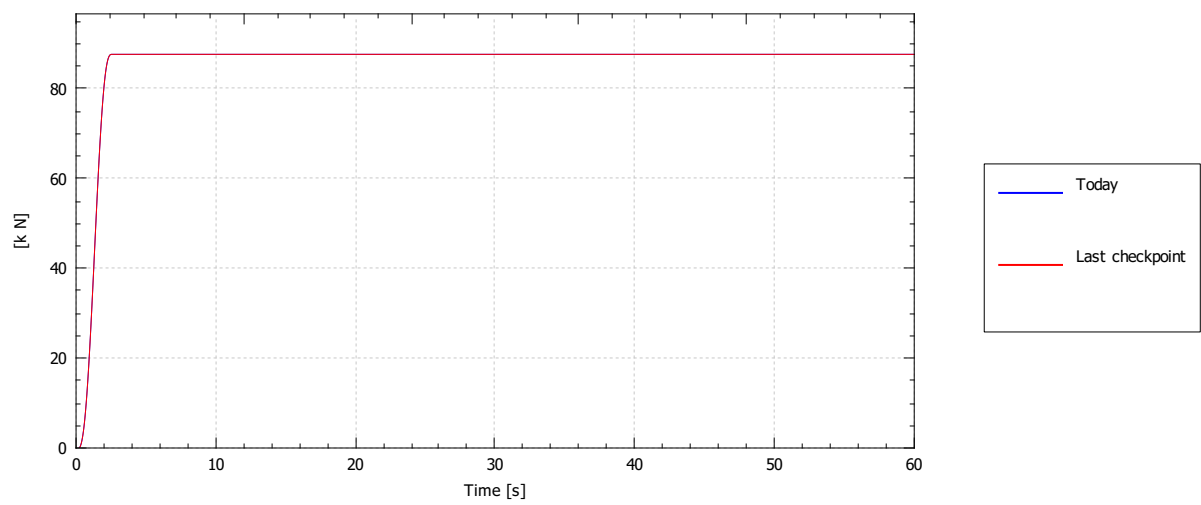
Gravity load - material (632) (mag.)



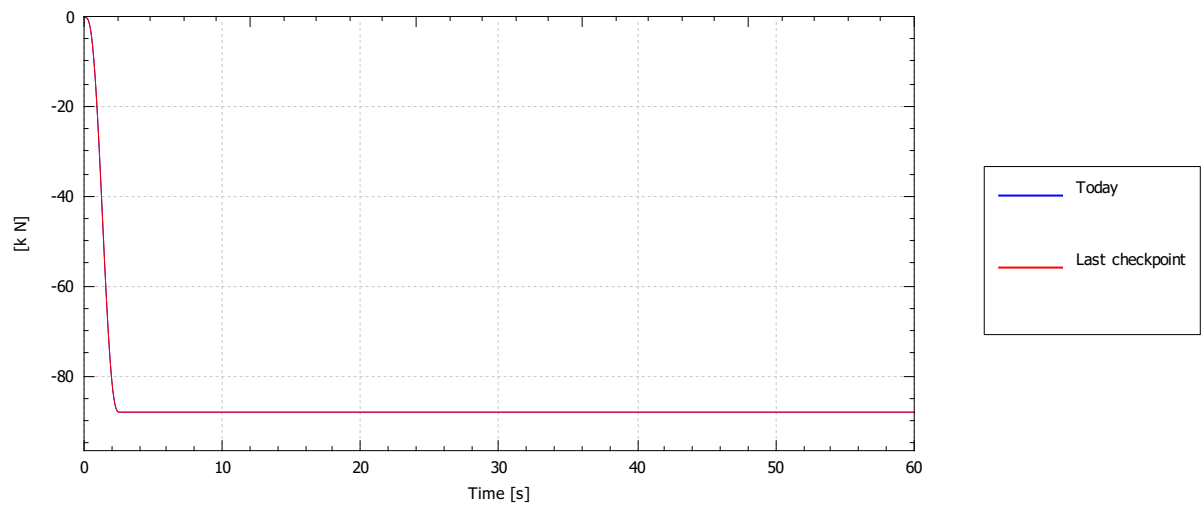
Gravity load - material (632) (sign)



Gravity load - material (633) (mag.)

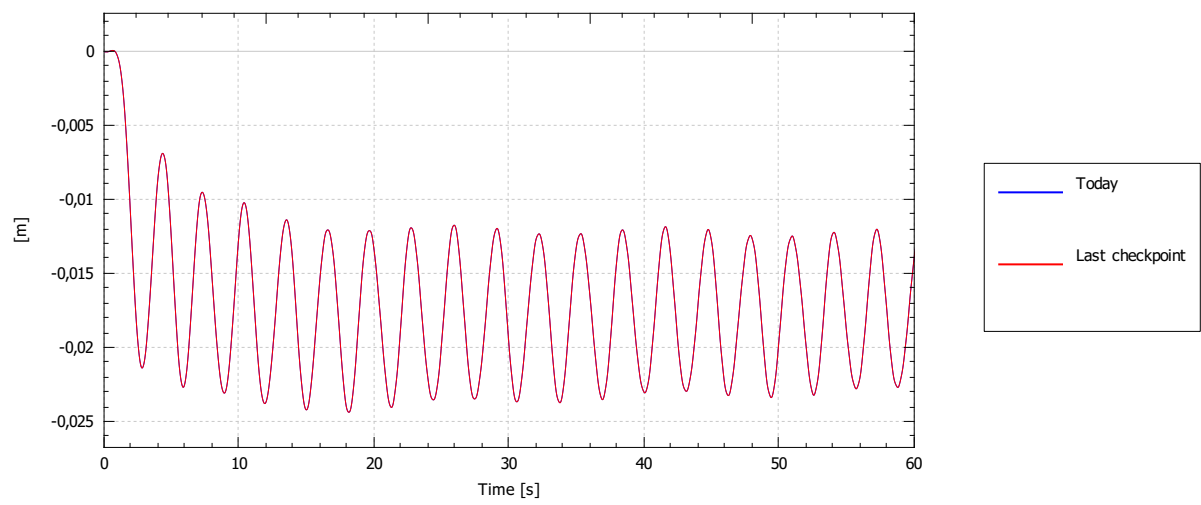


Gravity load - material (633) (sign)

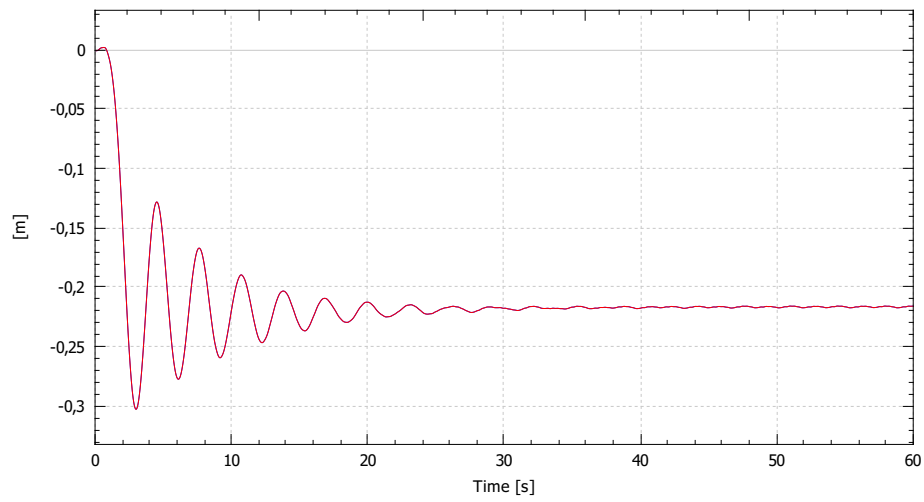


Node [Node 15 | Tubular tower]

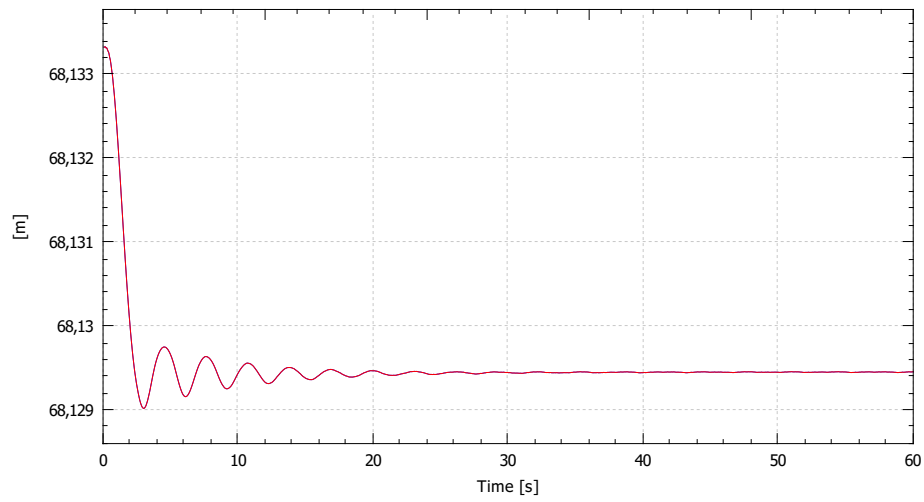
Position (x)



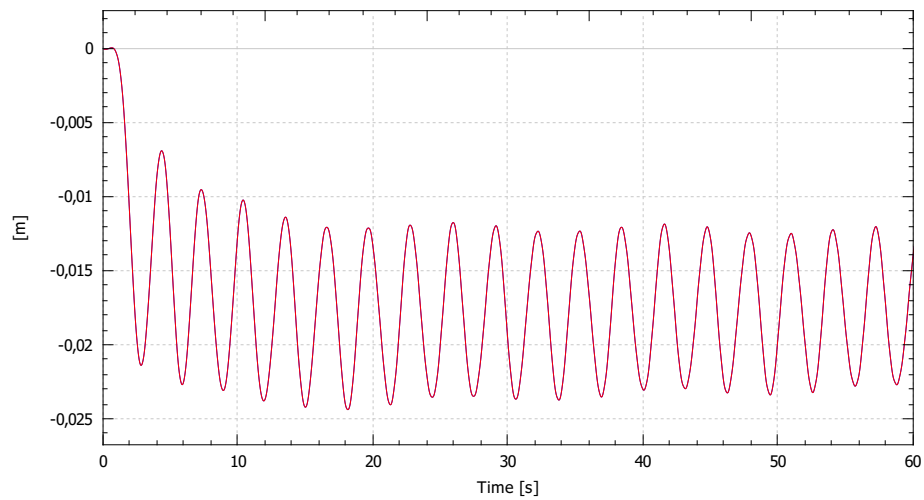
Position (y)



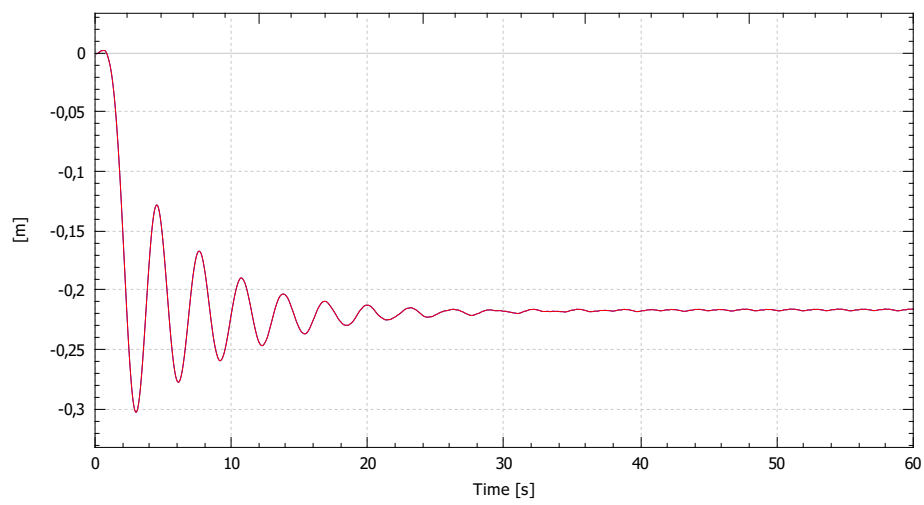
Position (z)



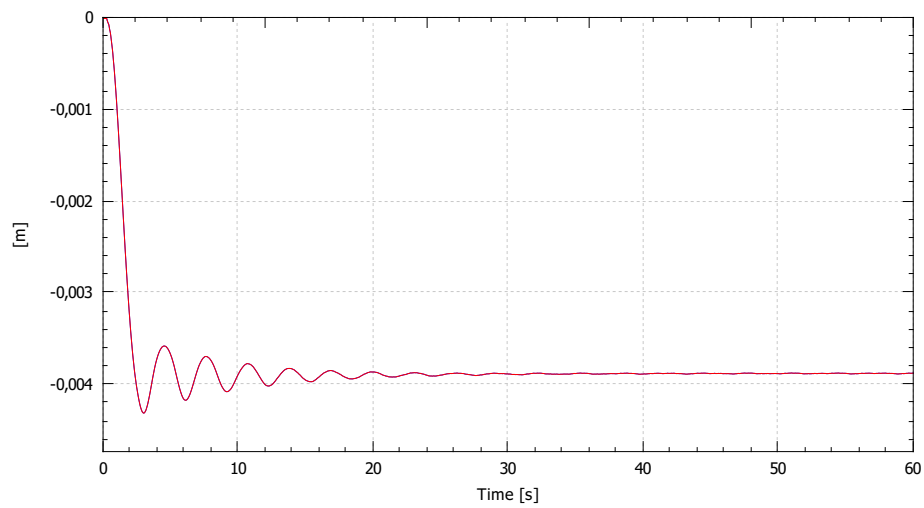
Displacement (u)



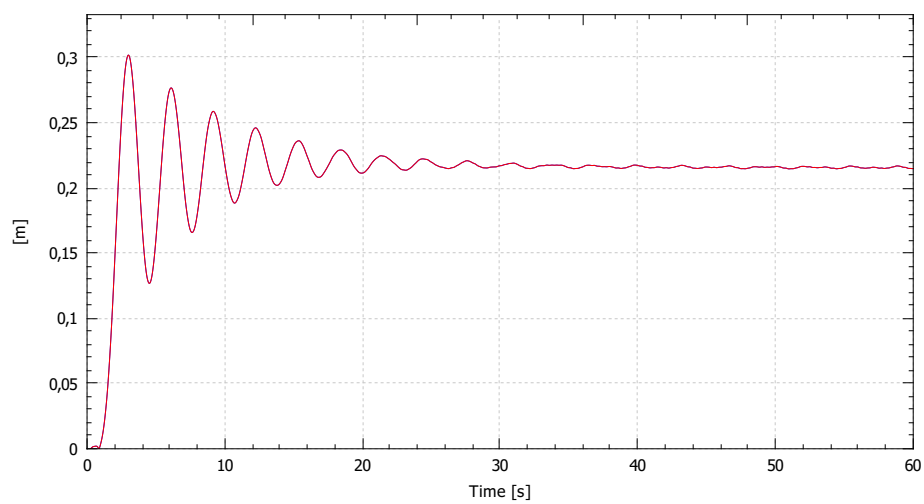
Displacement (v)



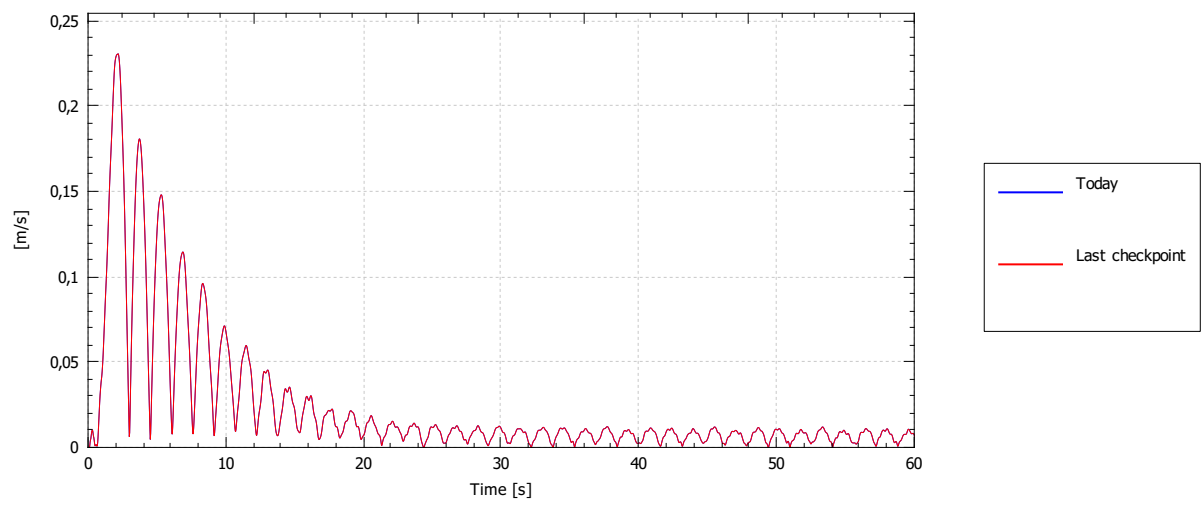
Displacement (w)



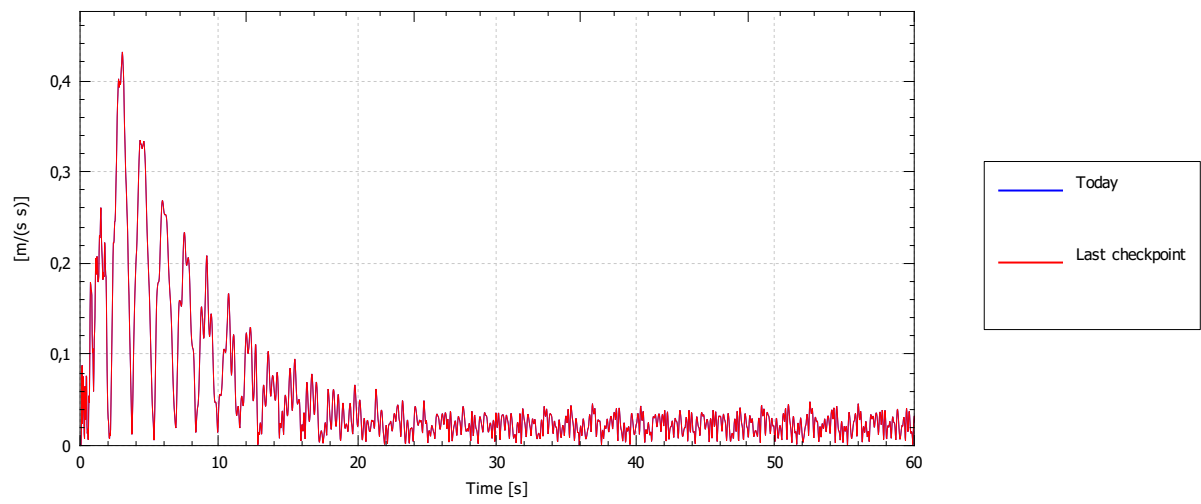
Displacement magnitude



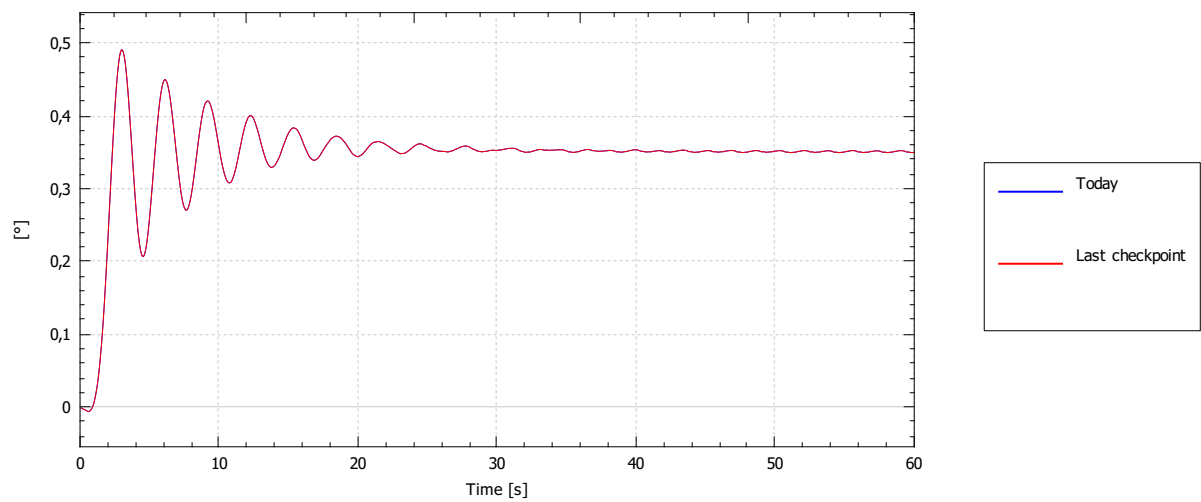
Speed



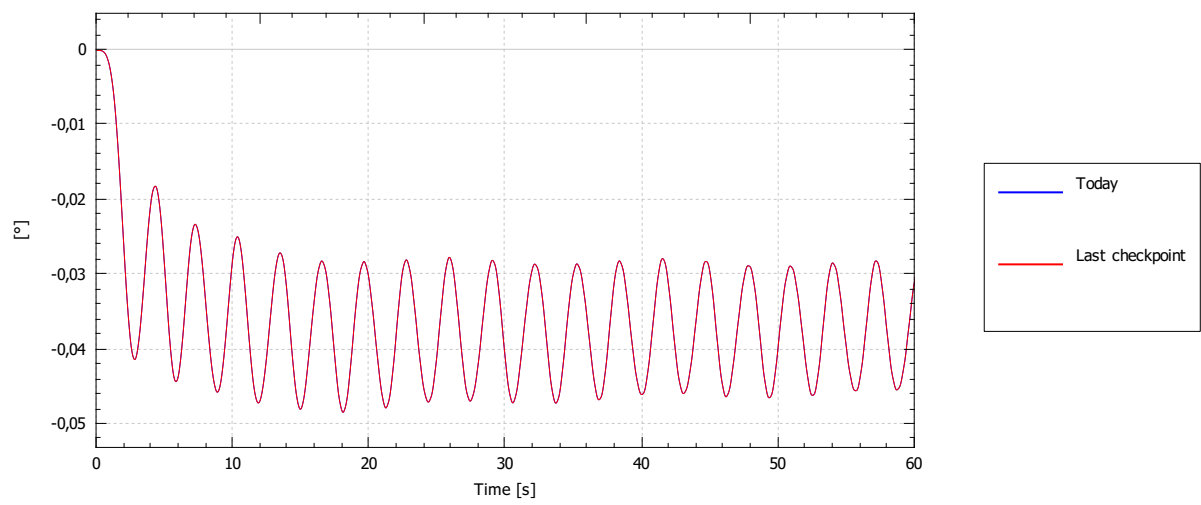
Acceleration, magnitude



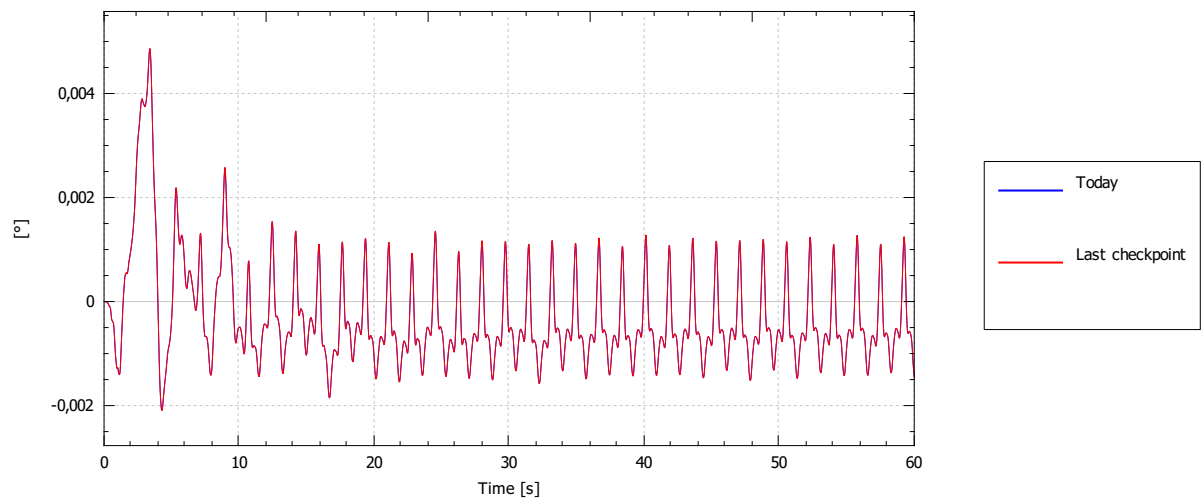
Rotational displacement (ru)



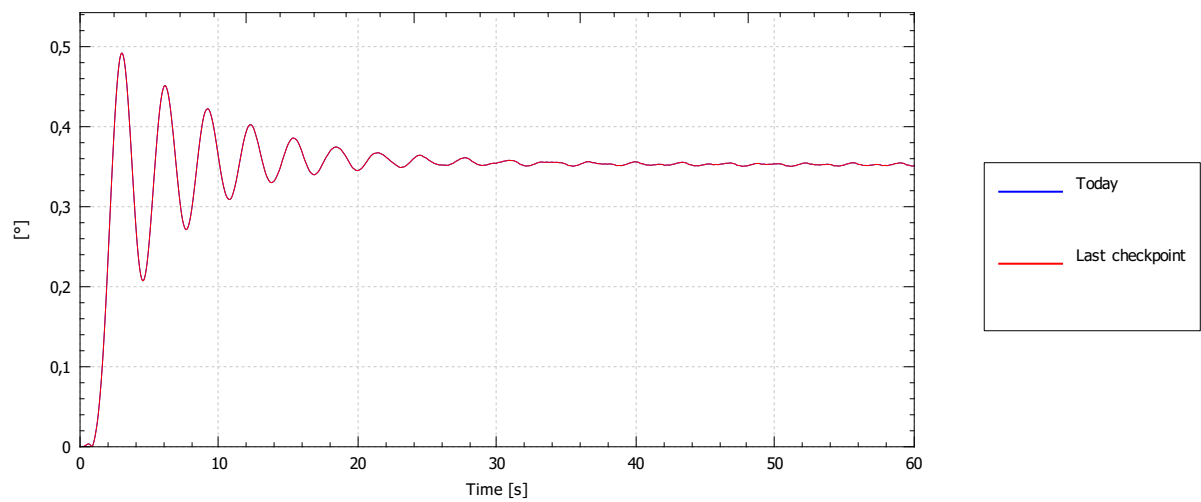
Rotational displacement (rv)



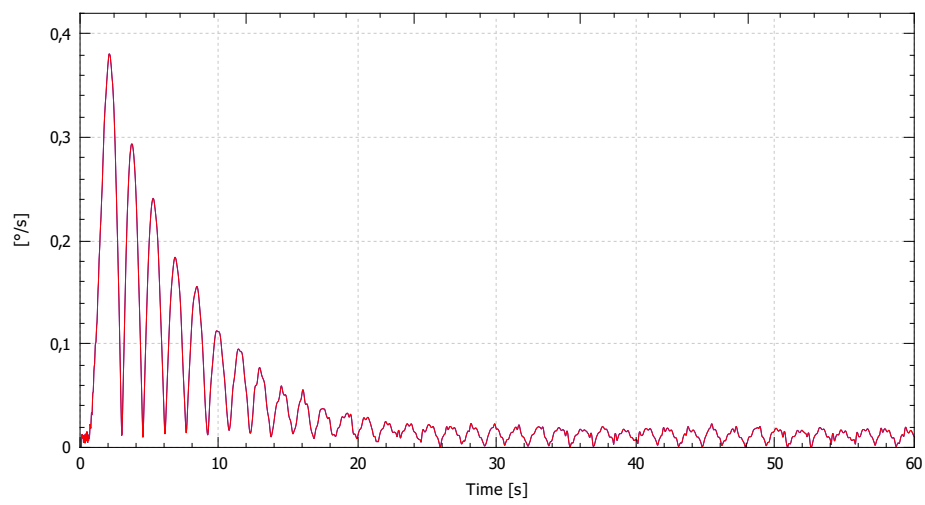
Rotational displacement (rw)



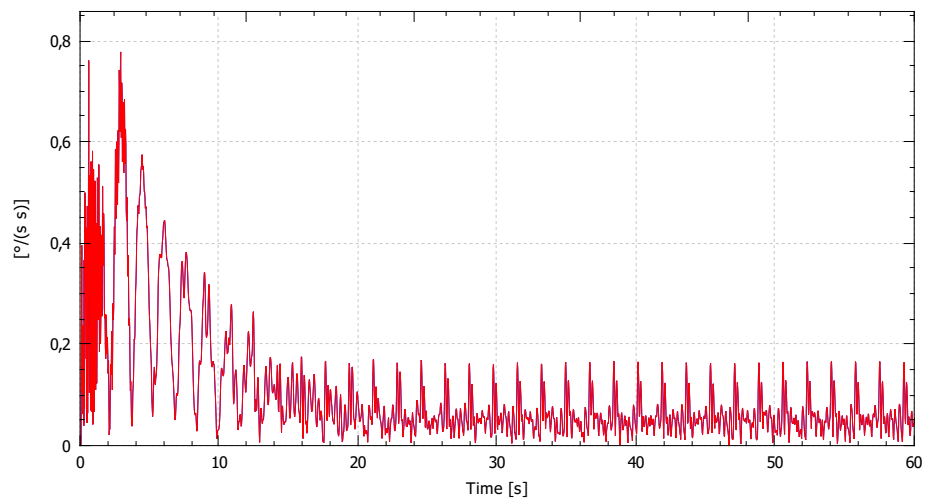
Rotational displacement magnitude



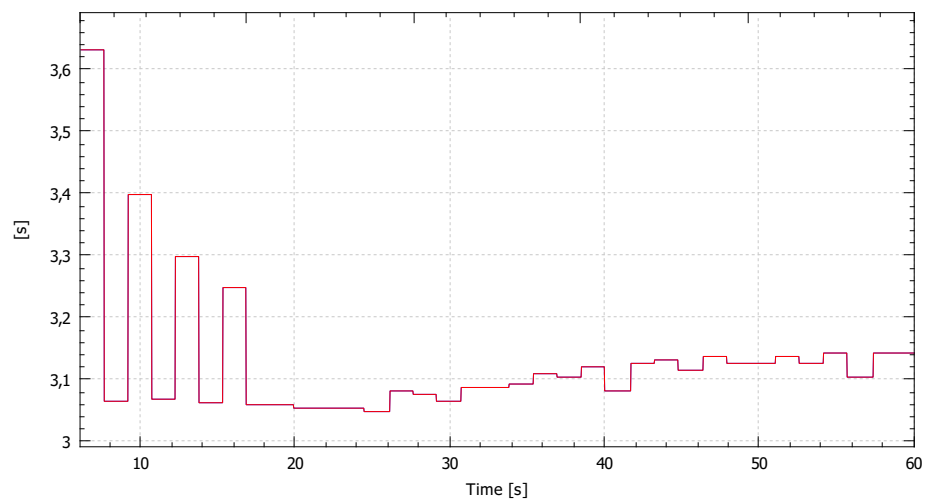
Rotational speed



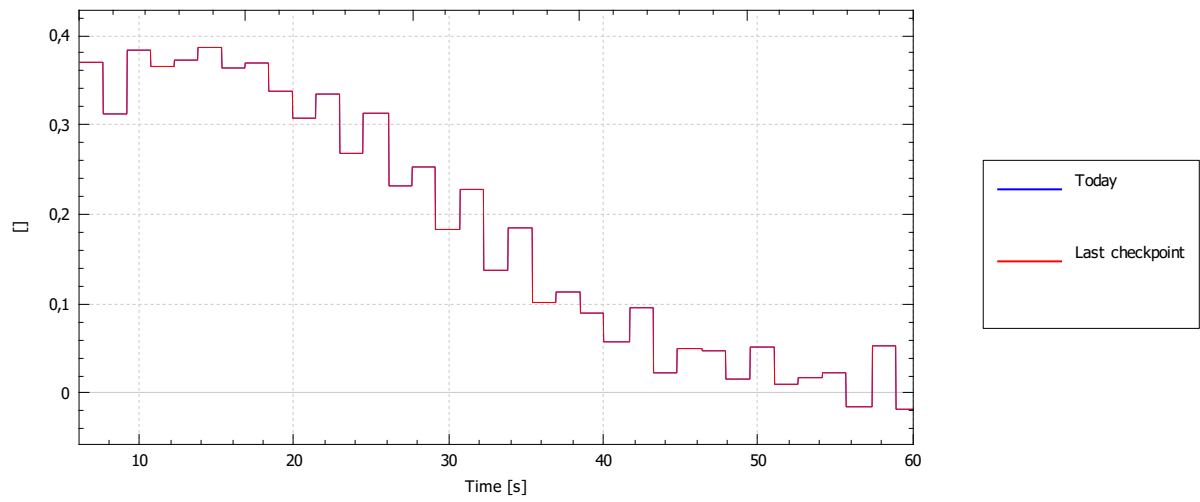
Rotational acceleration mag



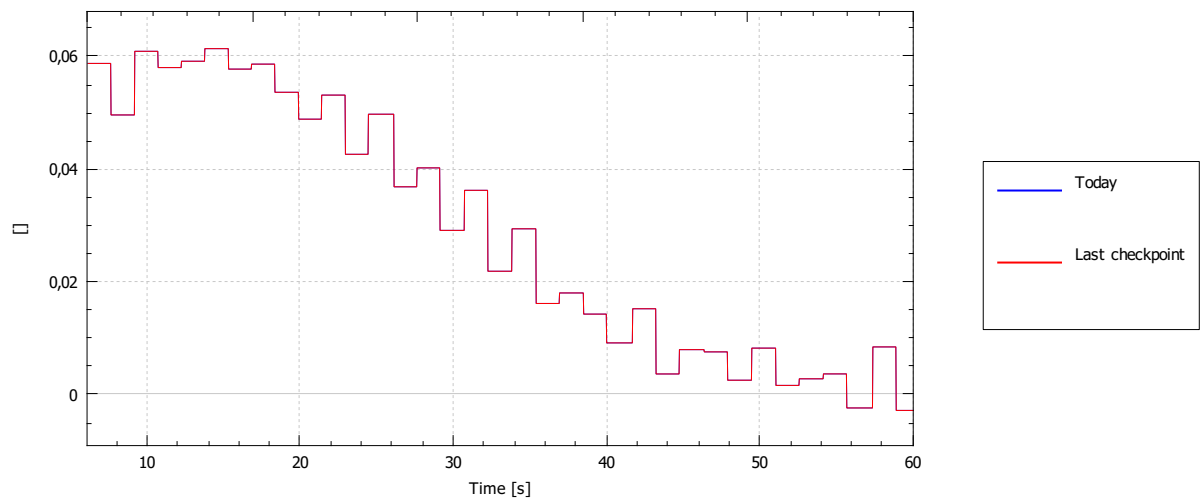
Displacement period



Displacement logarithmic decrement

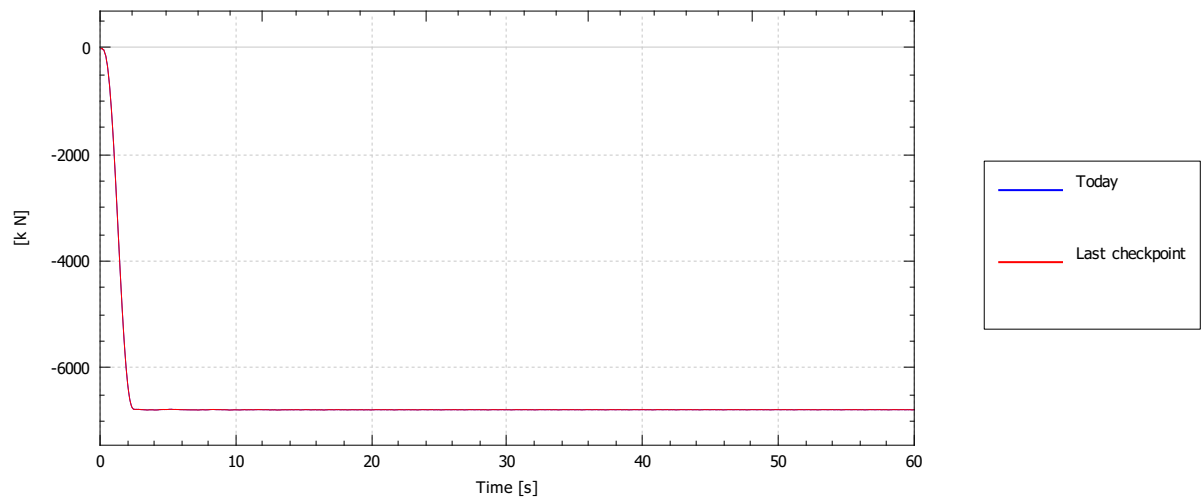


Displacement damping ratio

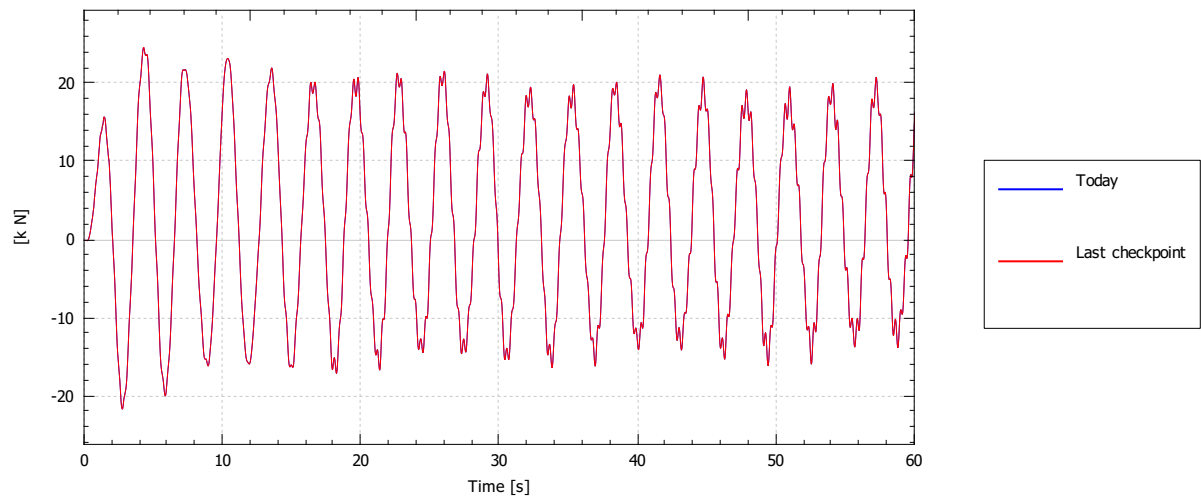


Beam element [Element 1 | Tubular tower]

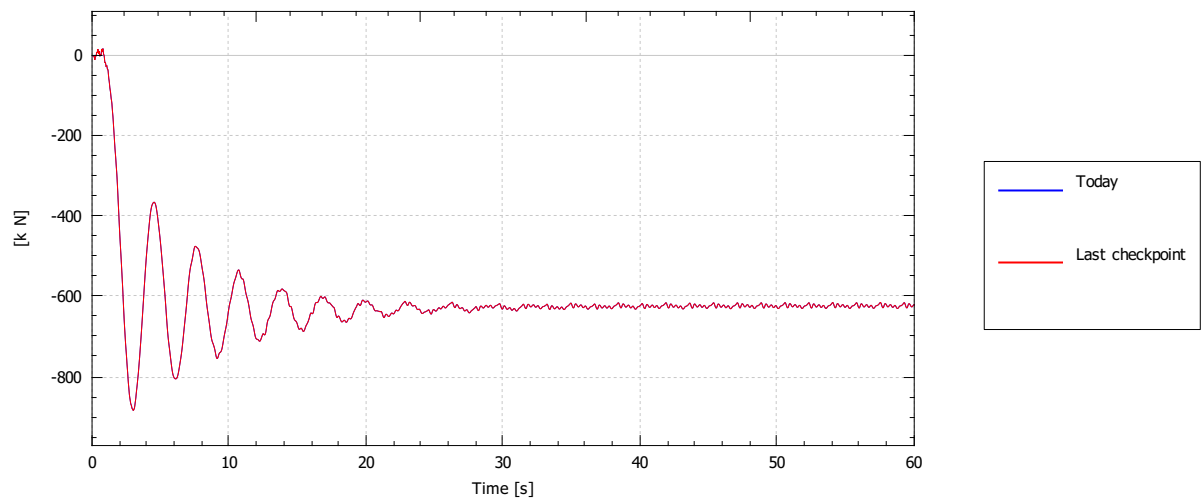
Axial force



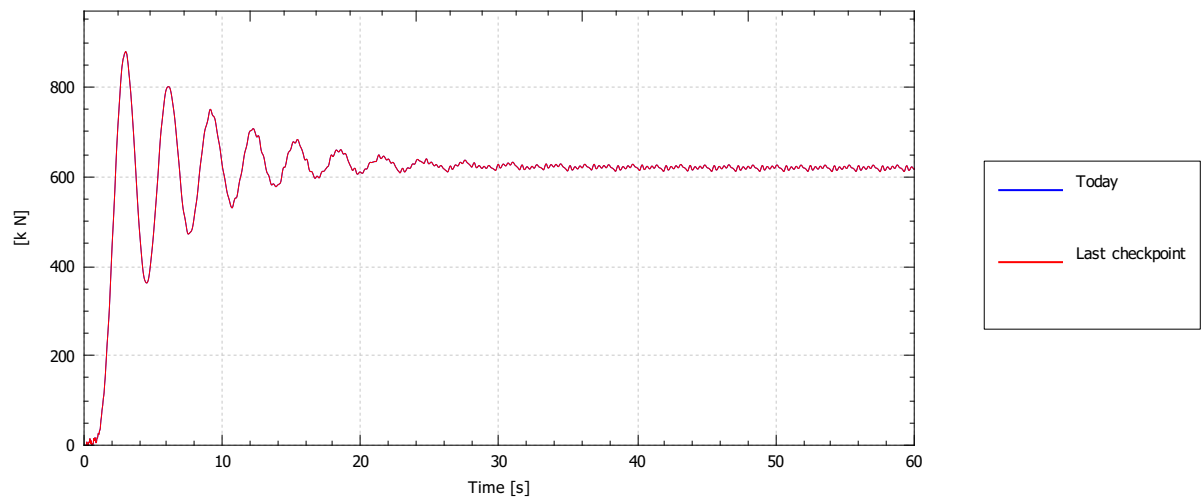
Shear force (1st prin. axis)



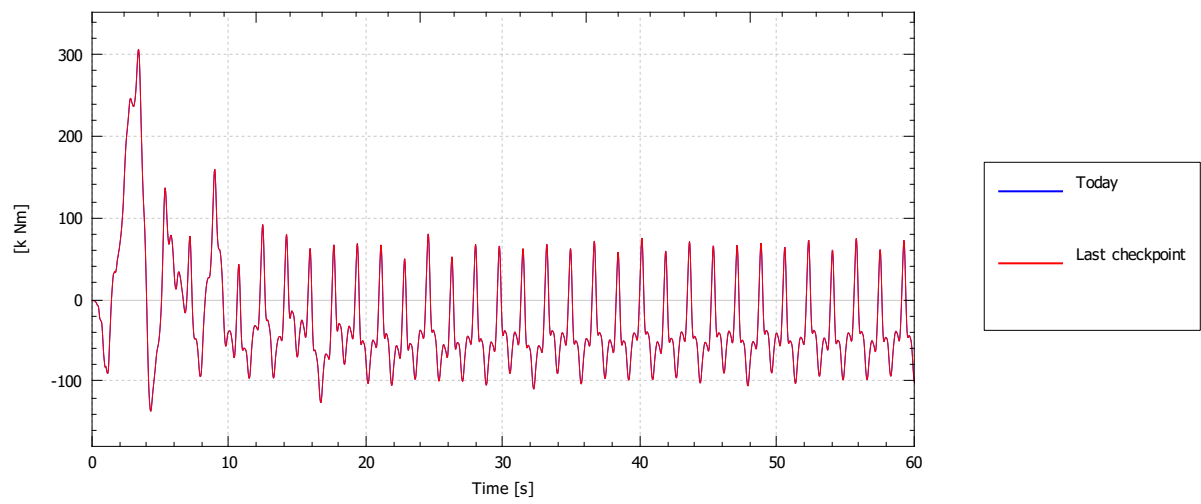
Shear force (2nd prin. axis)



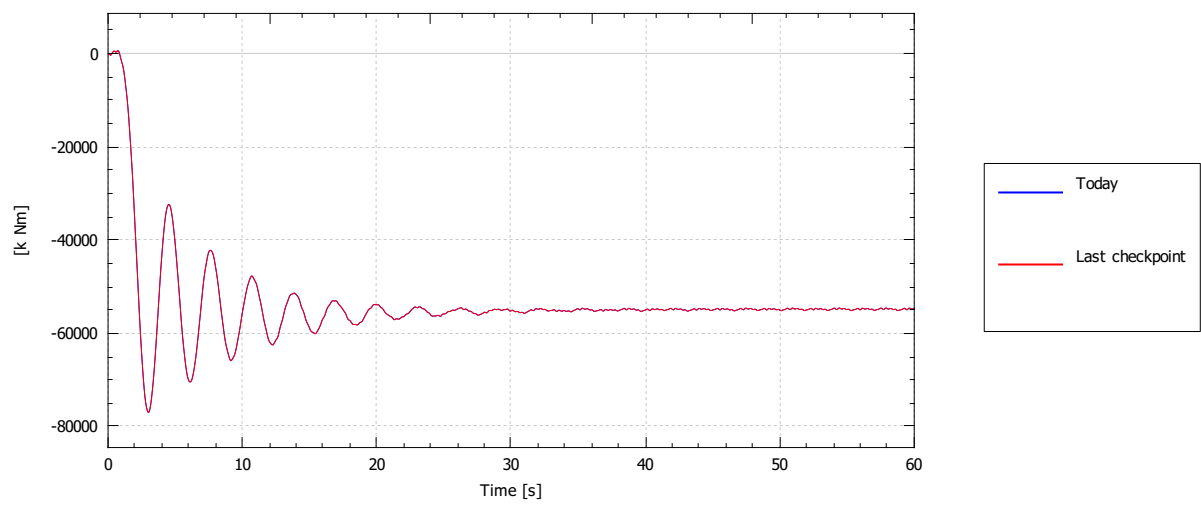
Shear force, mag.



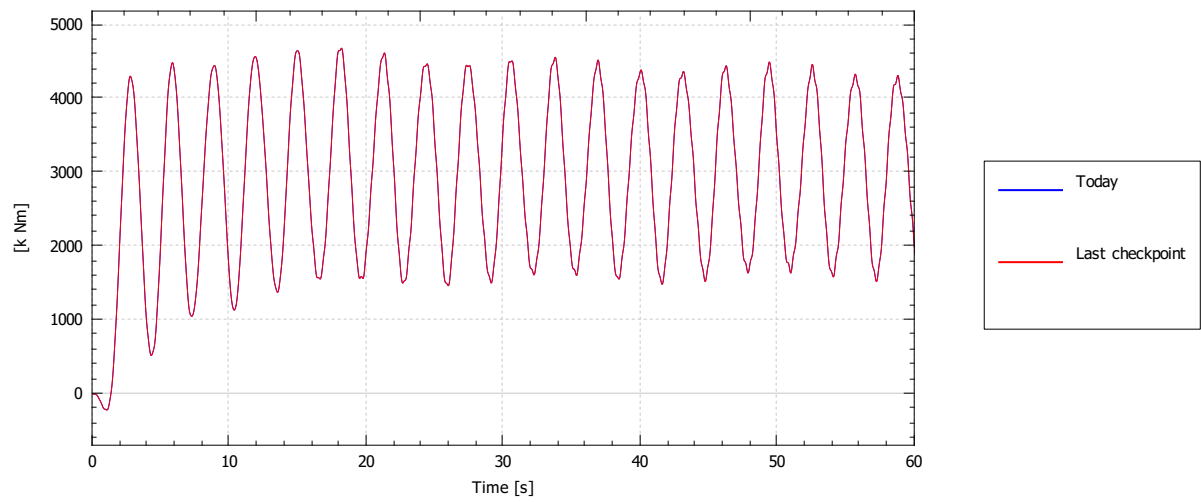
Torque



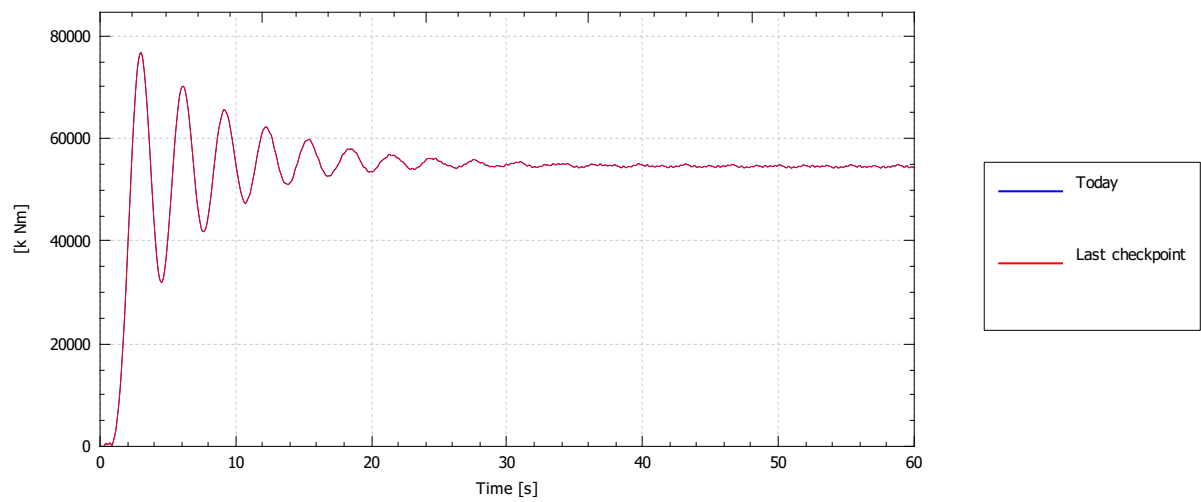
Moment (1st prin. axis), i



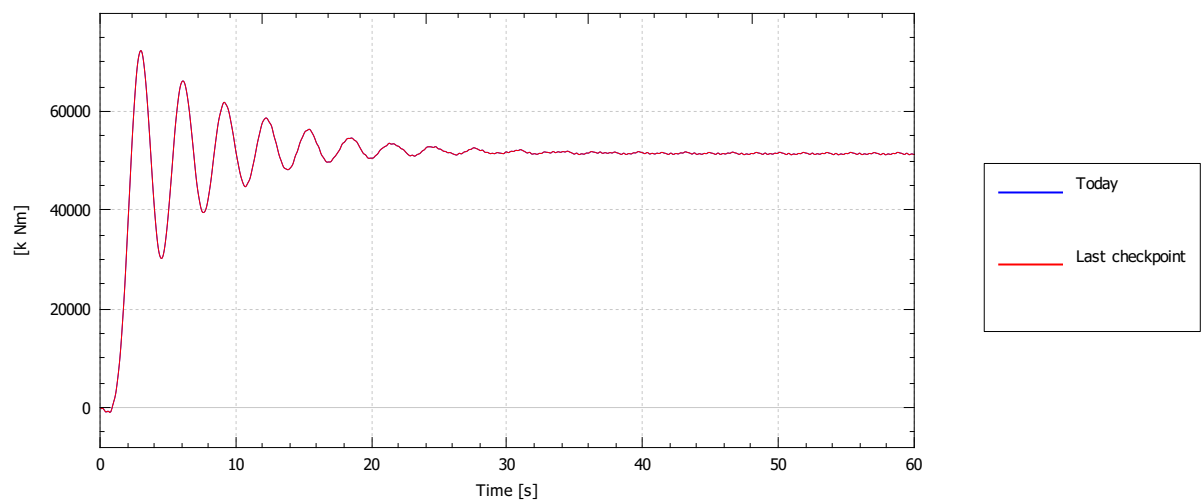
Moment (2nd prin. axis), i



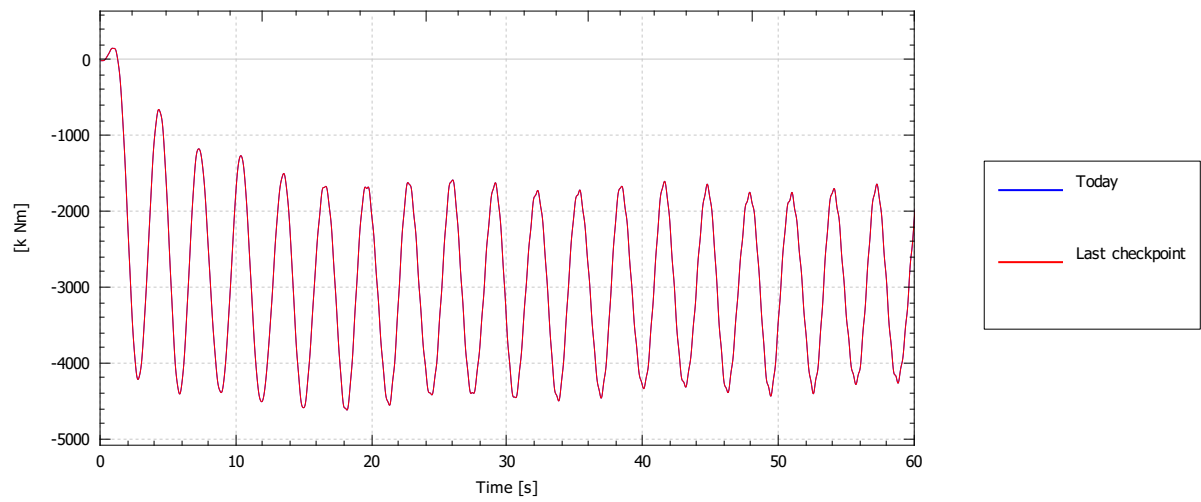
Moment, mag., i



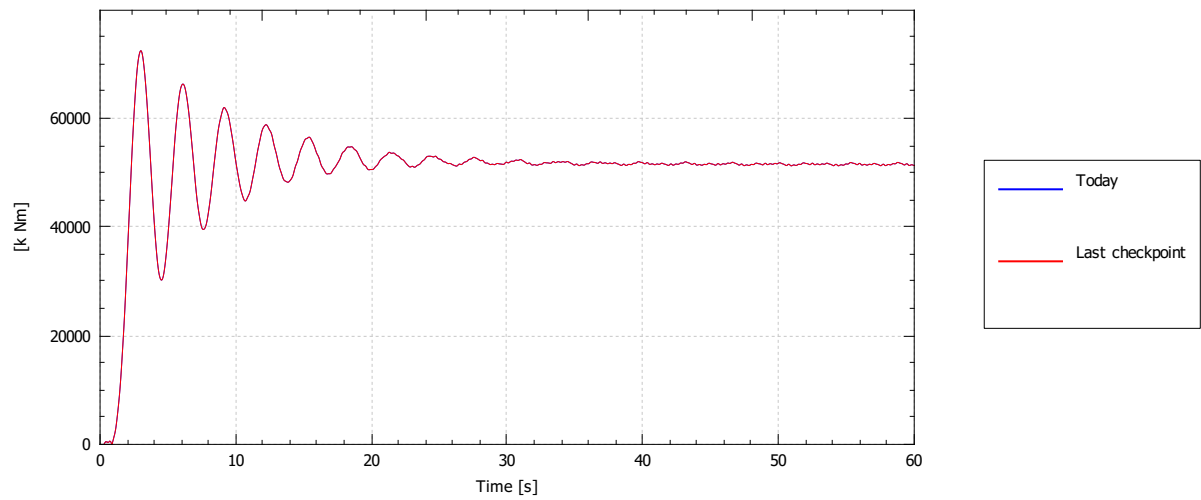
Moment (1st prin. axis), j



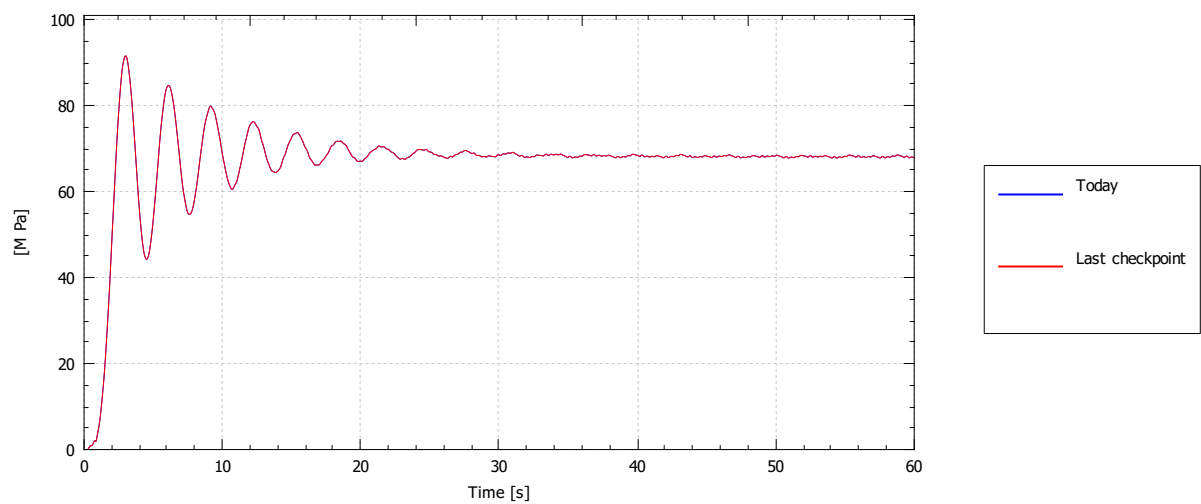
Moment (2nd prin. axis), j



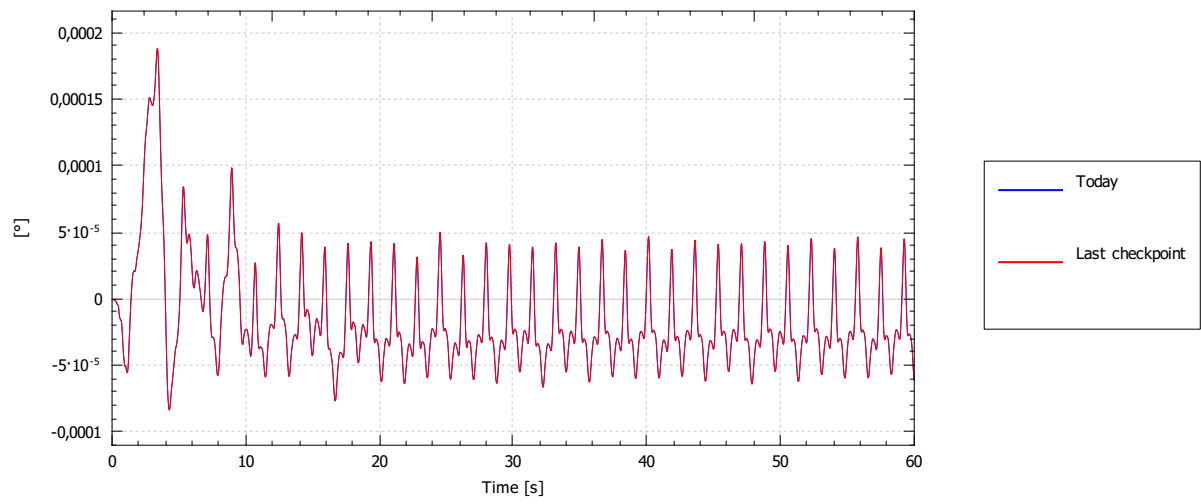
Moment, mag., j



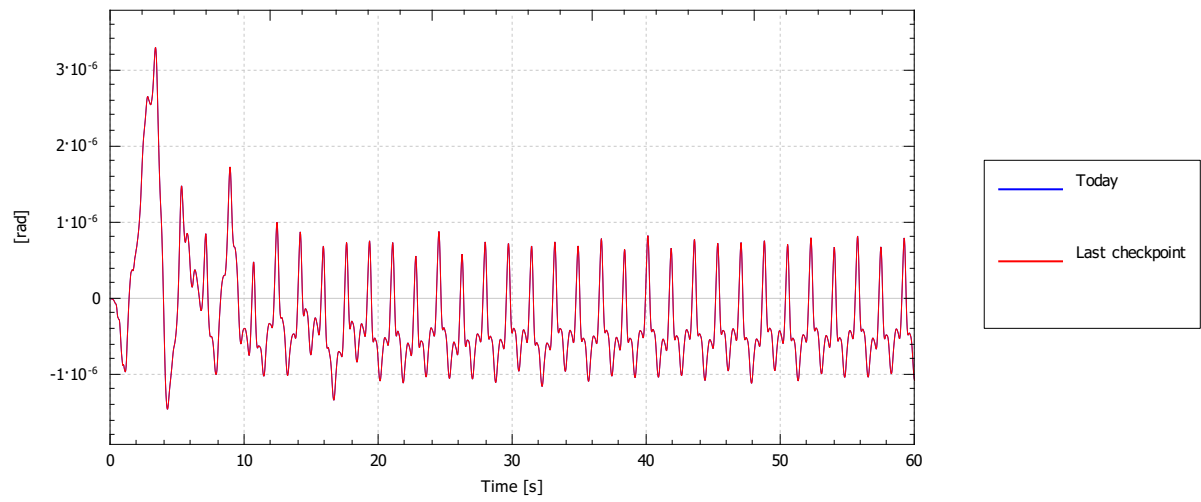
Max normal stress



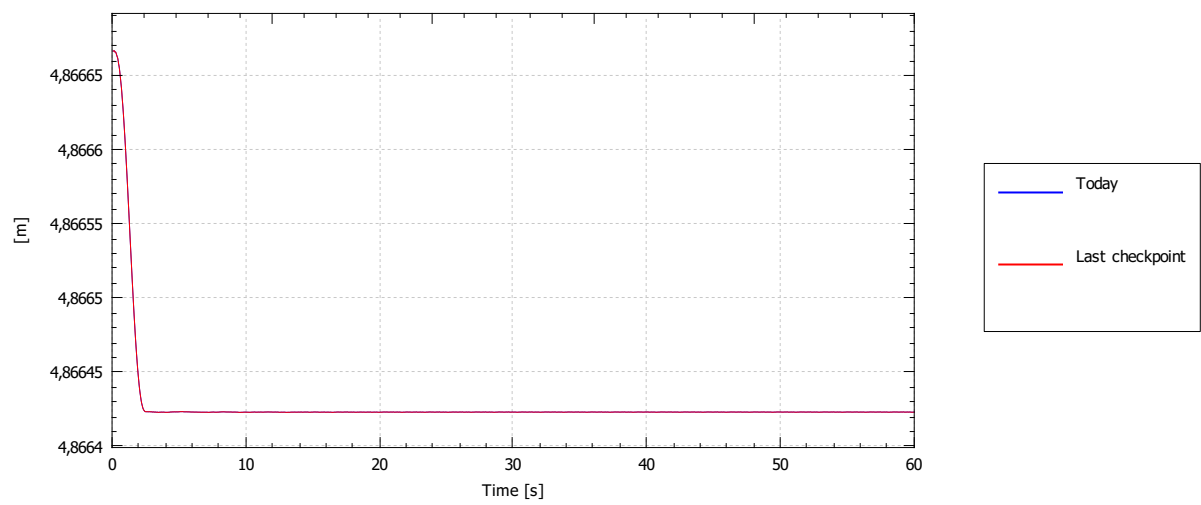
Twist (structural)



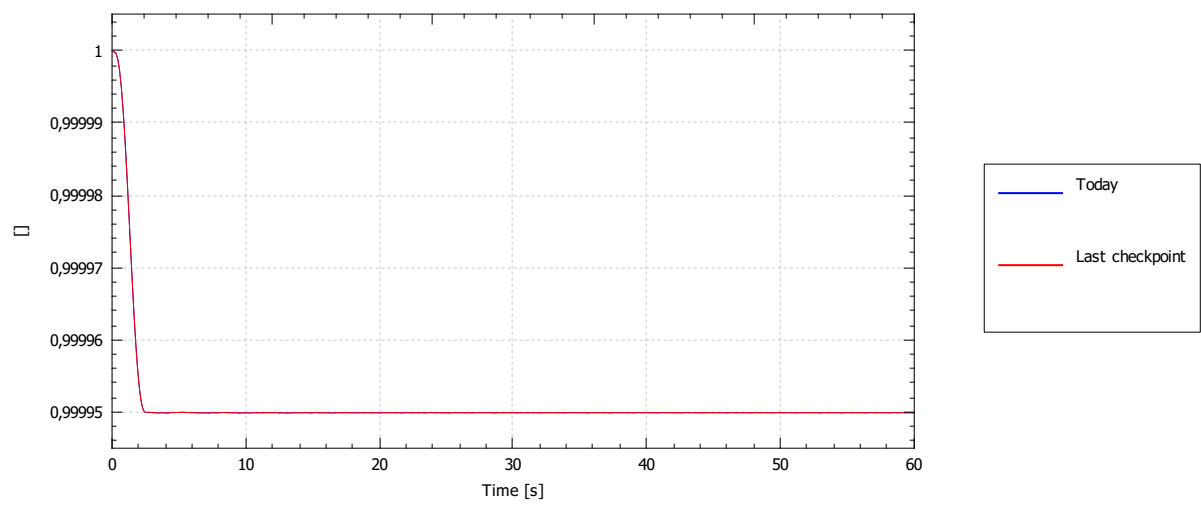
Twist (structural) - rad



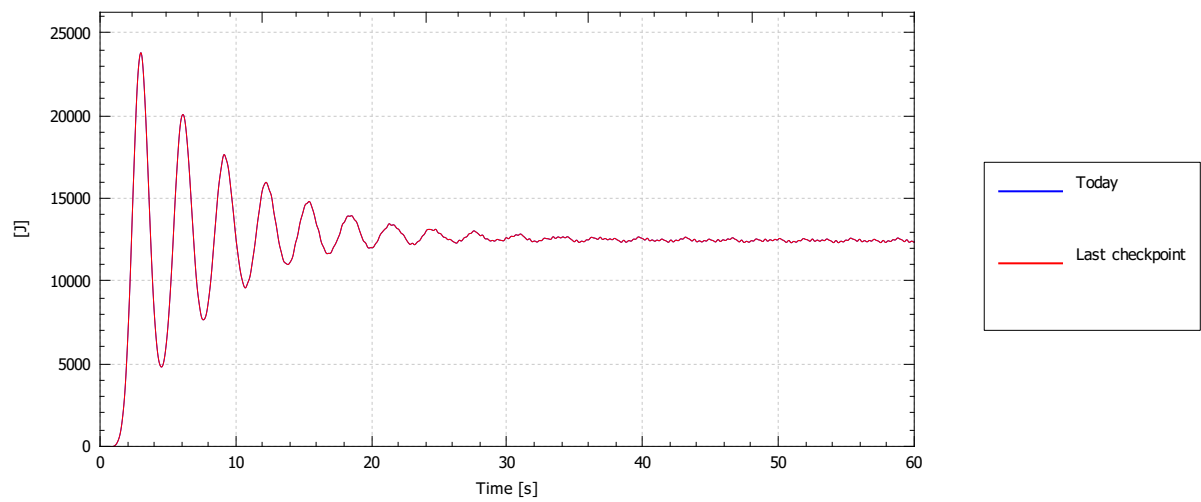
Deformed length



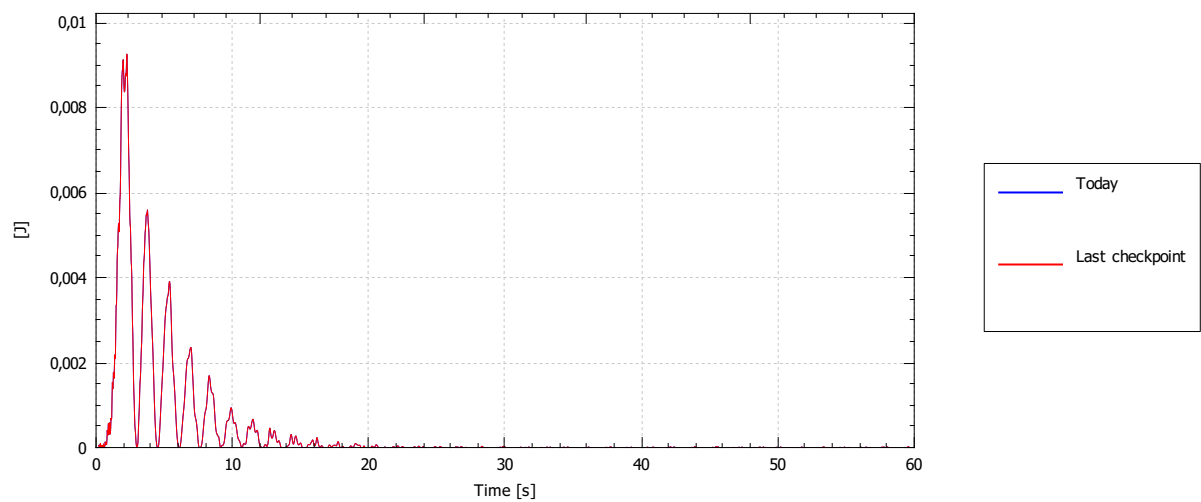
Elongation



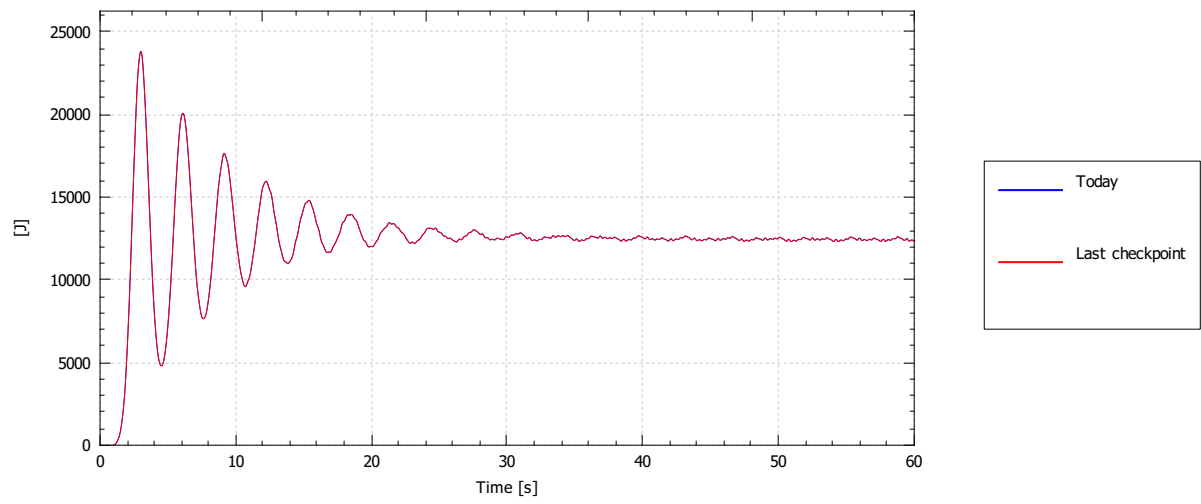
Strain energy



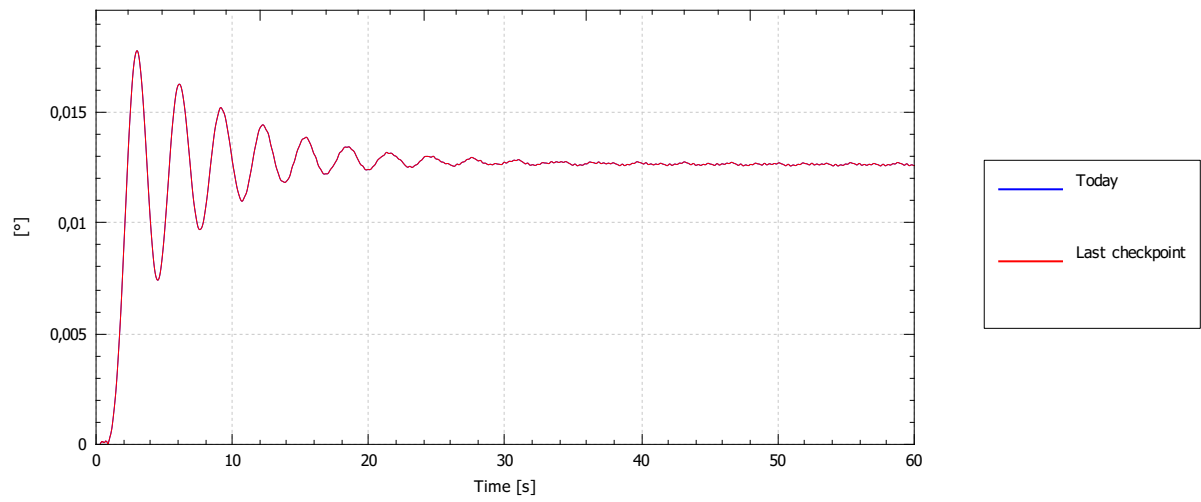
Kinetic energy



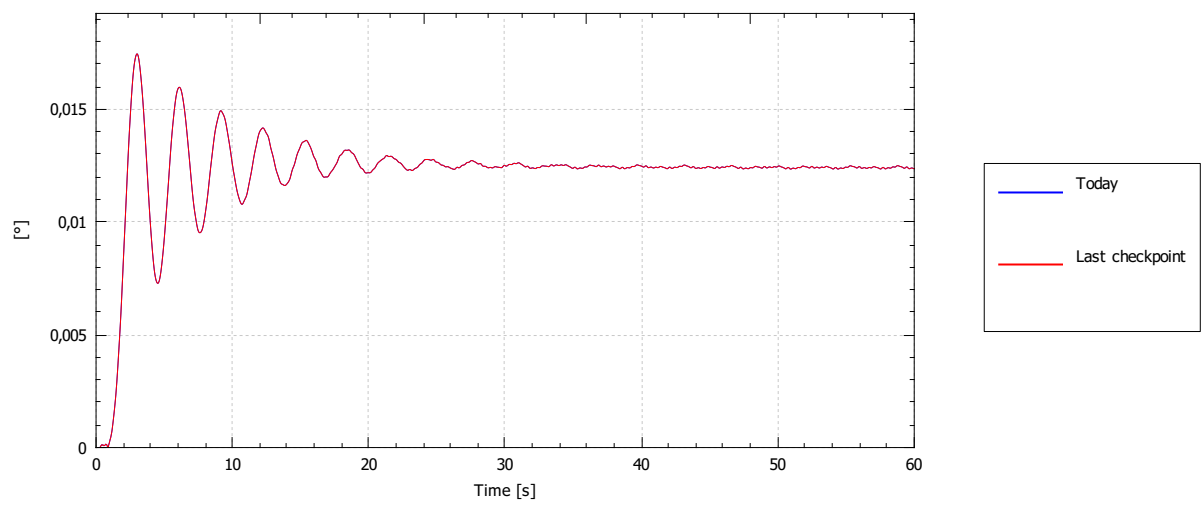
Mechanical energy



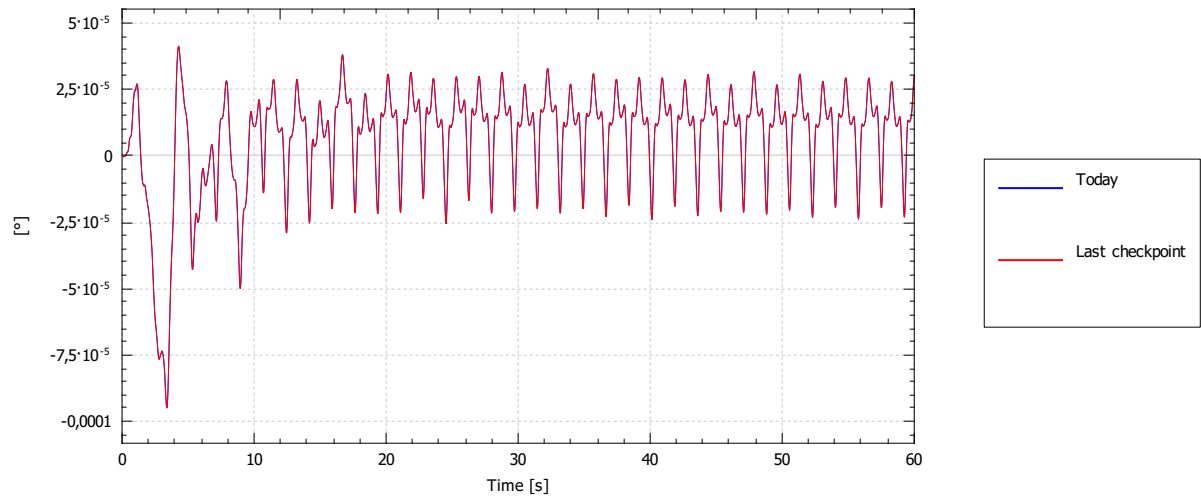
Deformational rotation (i)



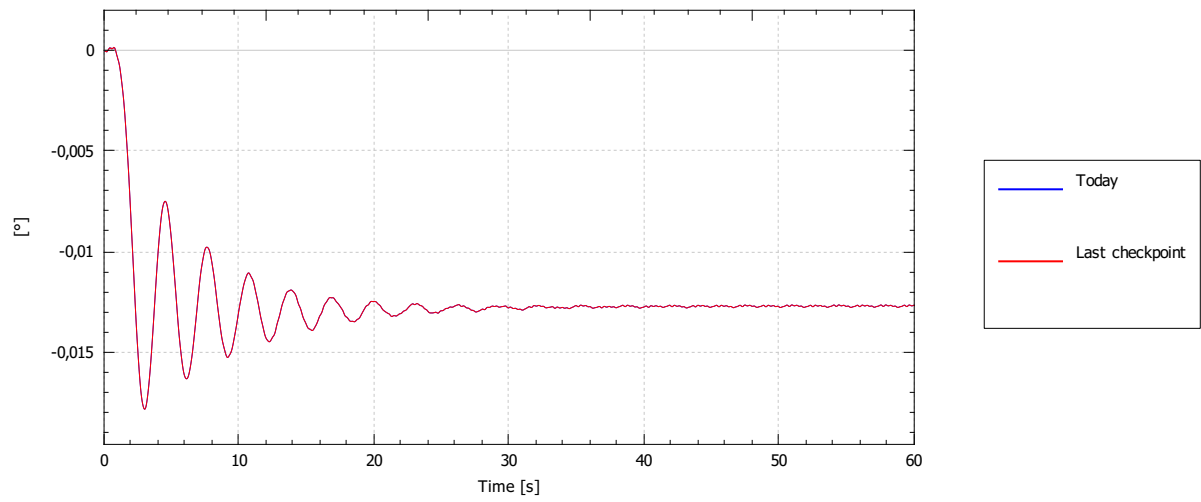
Deformational rotation (j)



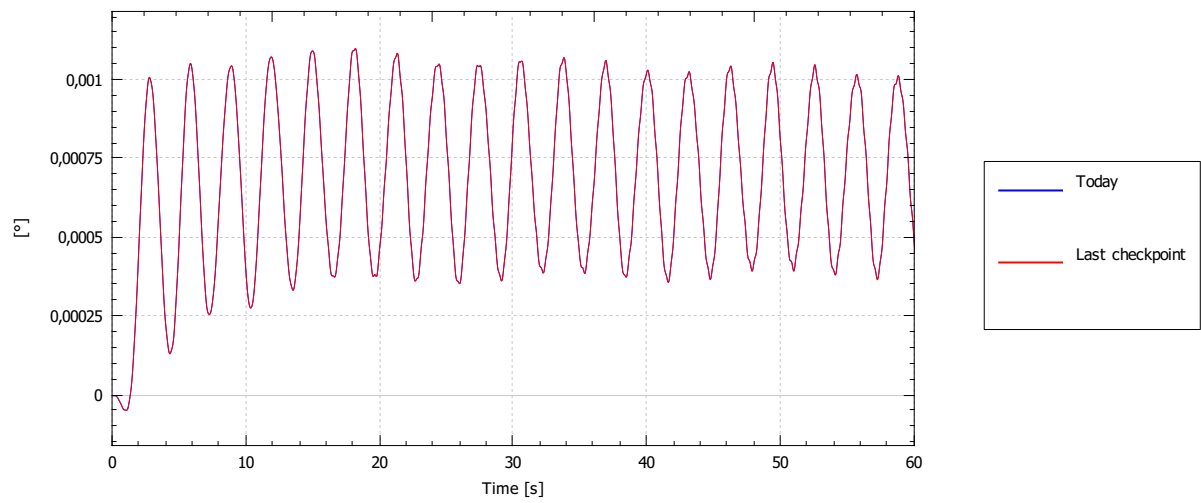
Deformational rotation (axial)



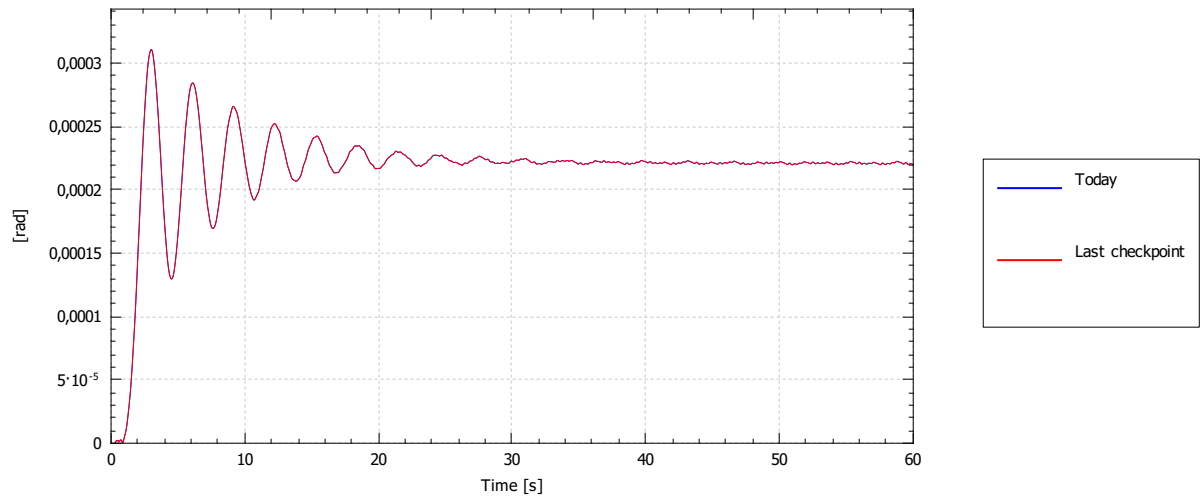
Deformational rotation (1st prin.)



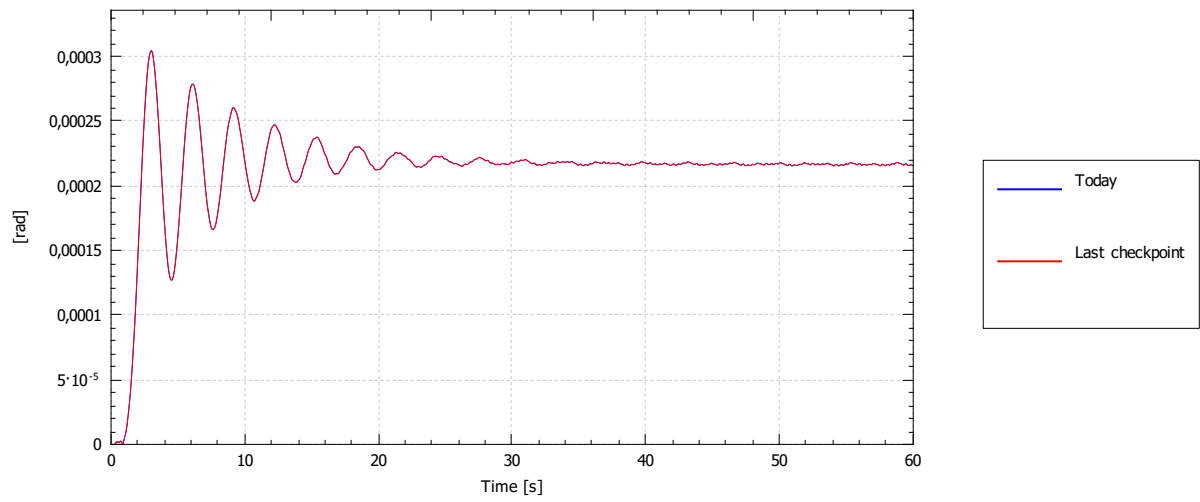
Deformational rotation (2nd prin.)



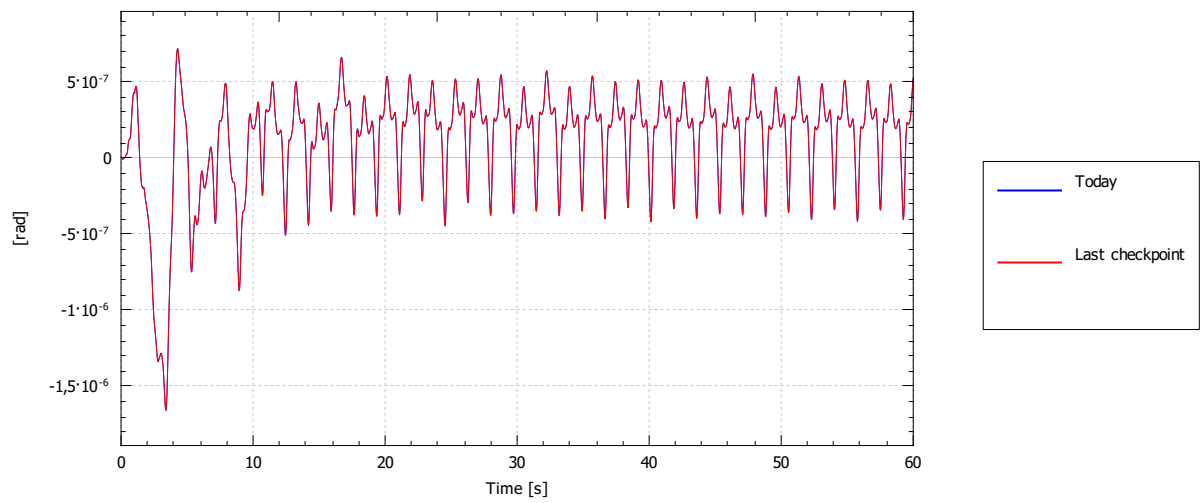
Deformational rotation (i) - rad



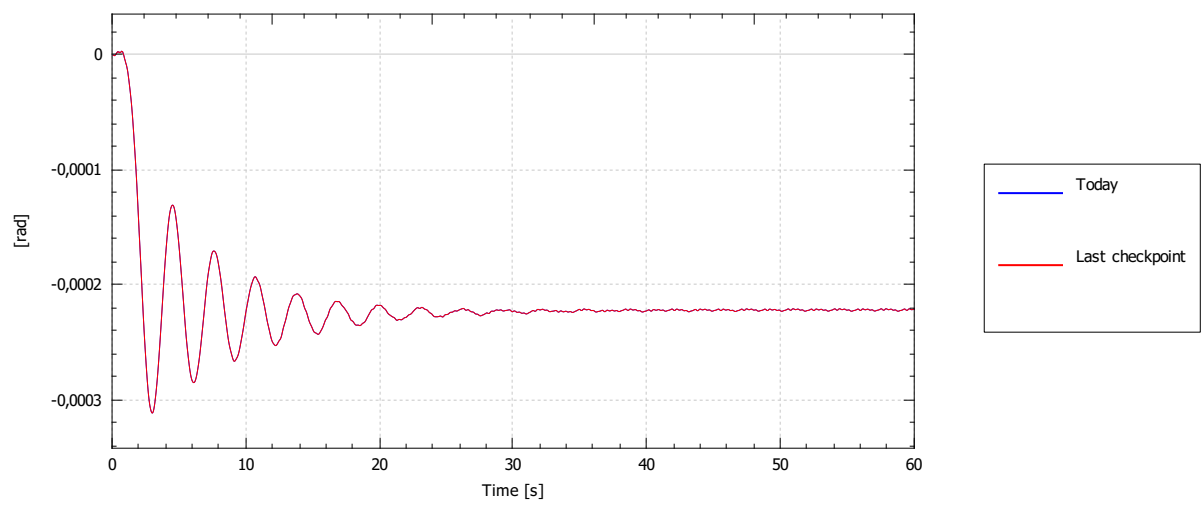
Deformational rotation (j) - rad



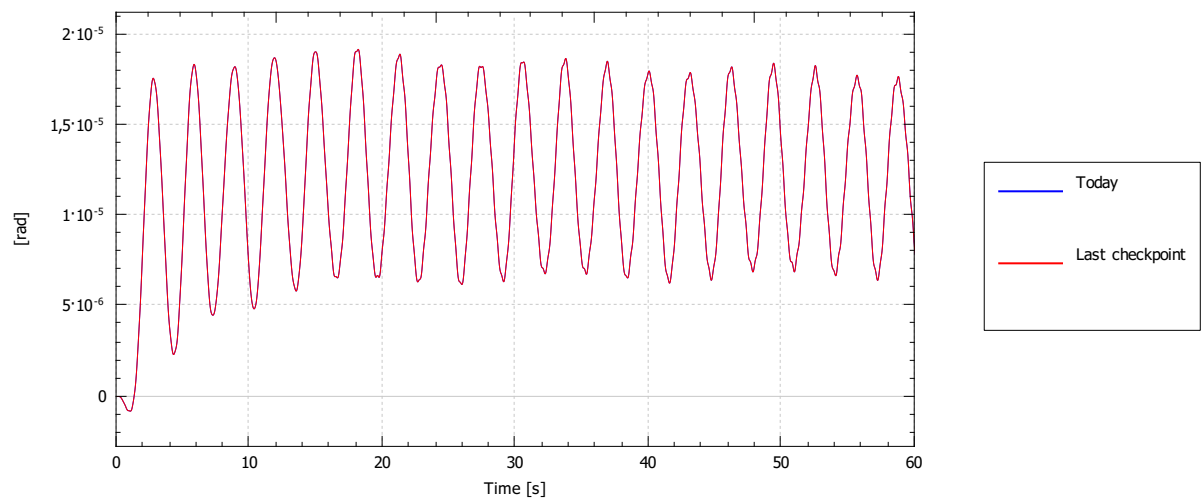
Deformational rotation (axial) - rad



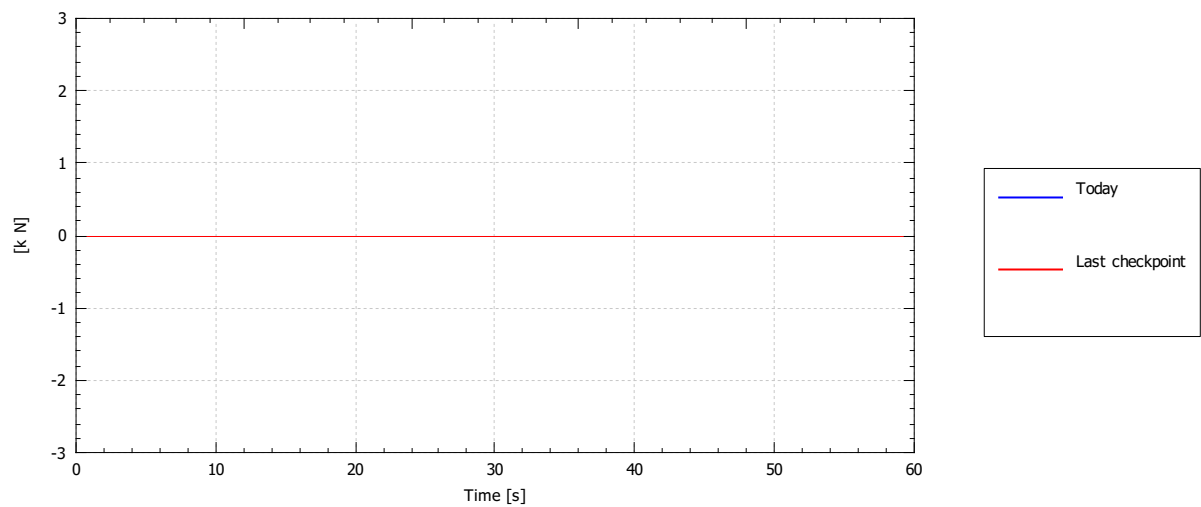
Deformational rotation (1st prin.) - rad



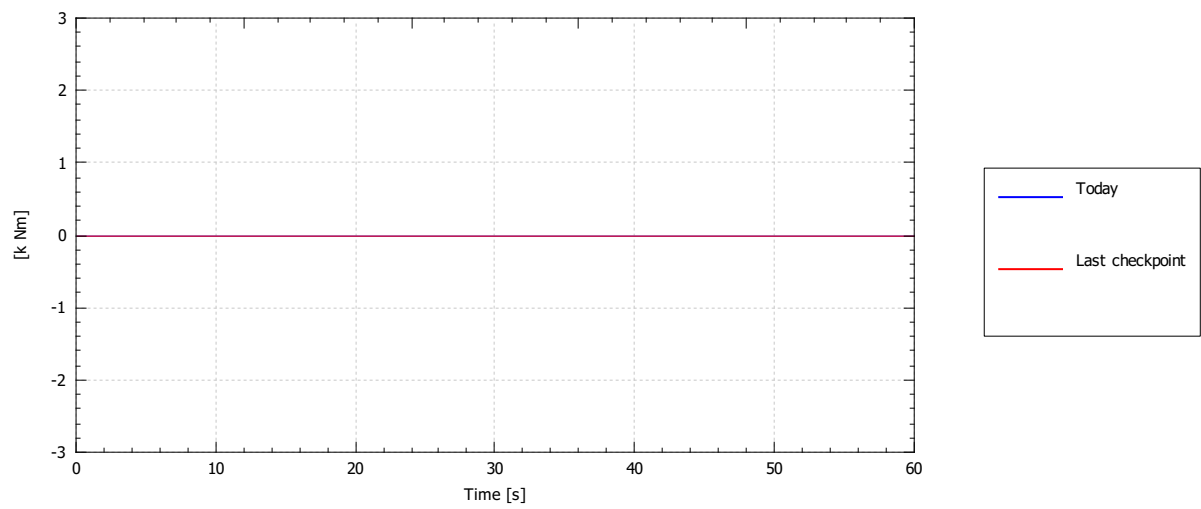
Deformational rotation (2nd prin.) - rad



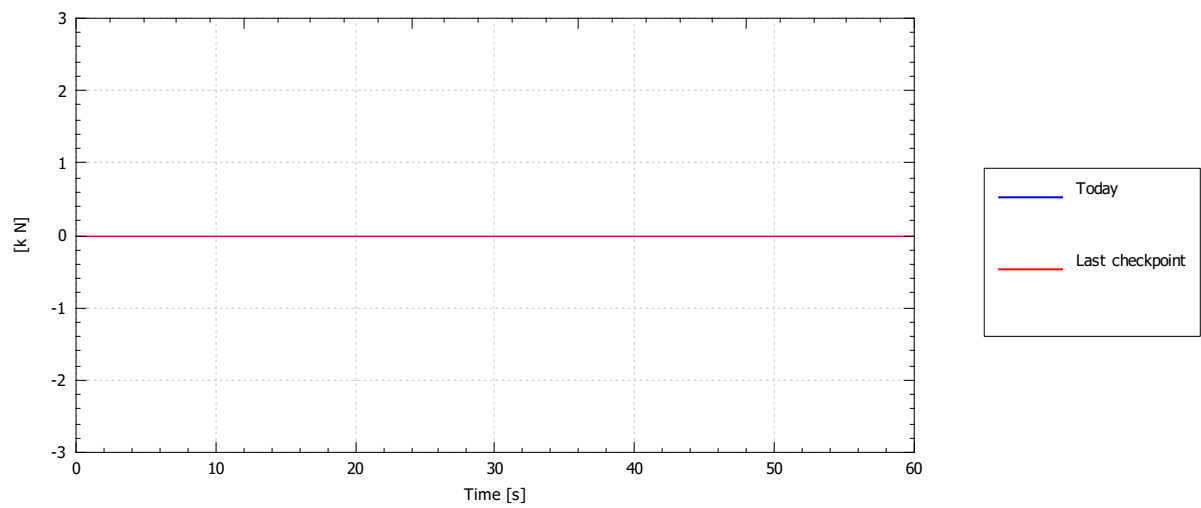
Damping force, i



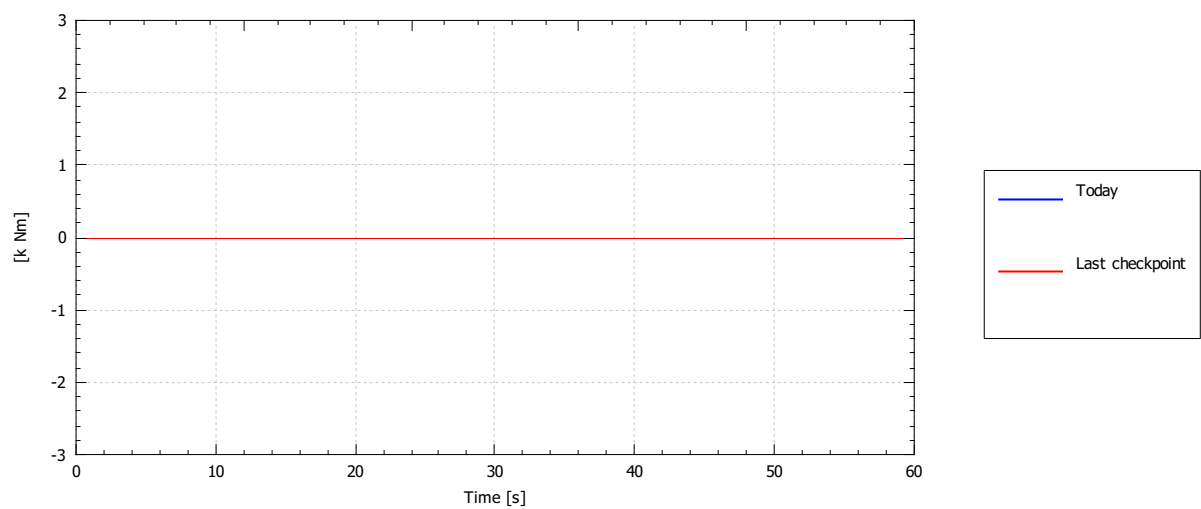
Damping moment, i



Damping force, sum

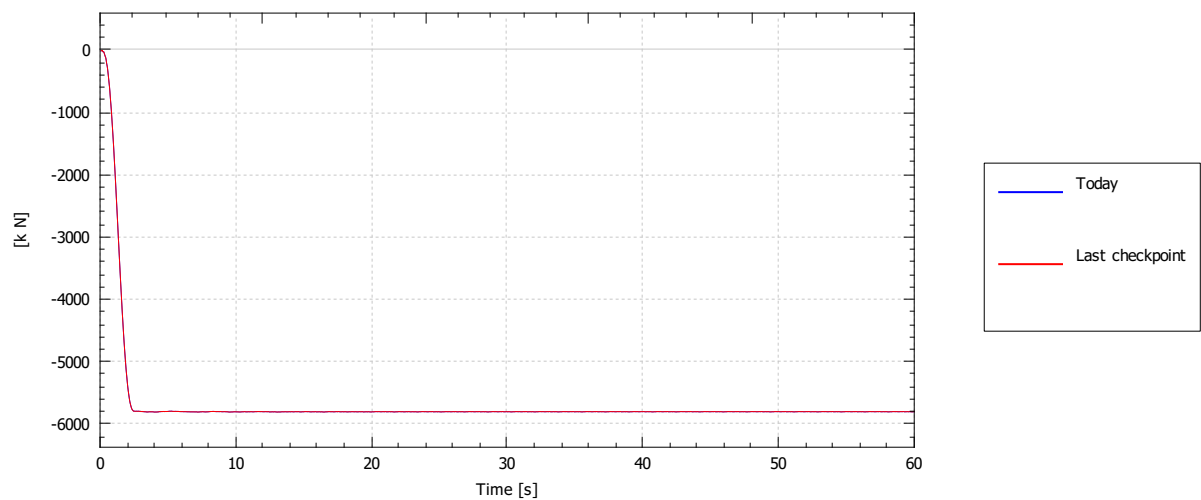


Damping moment, sum

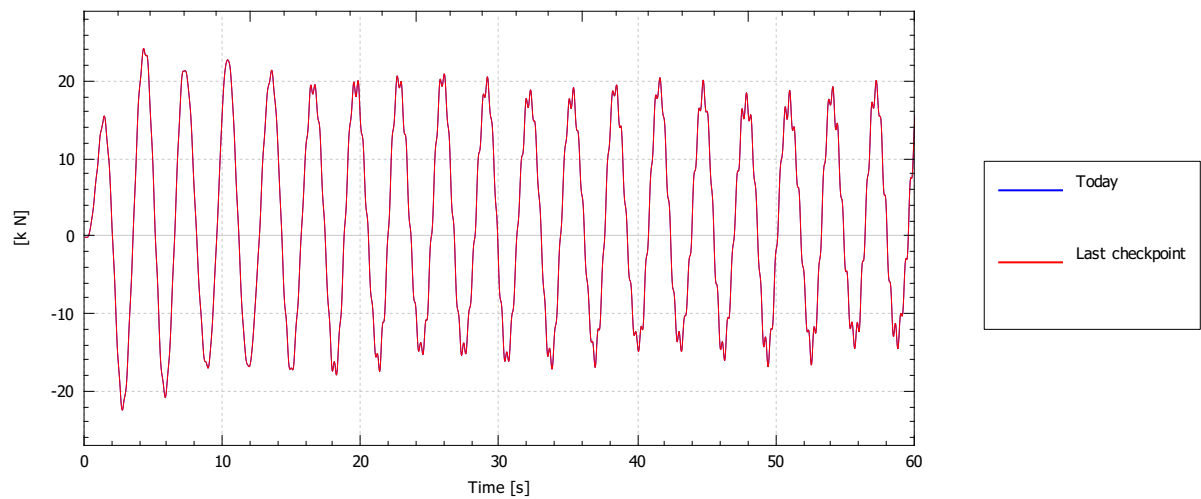


Beam element [Element 5 | Tubular tower]

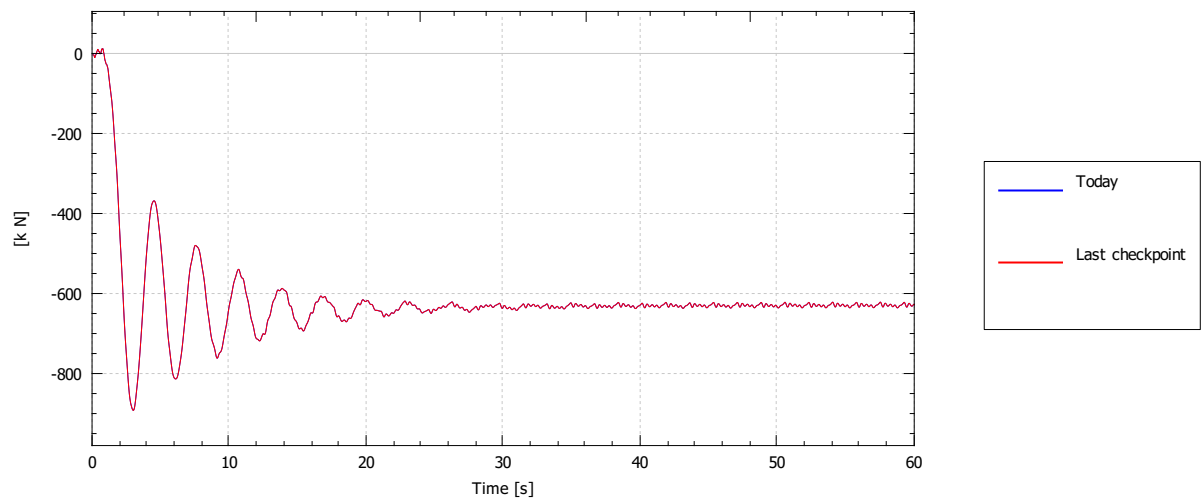
Axial force



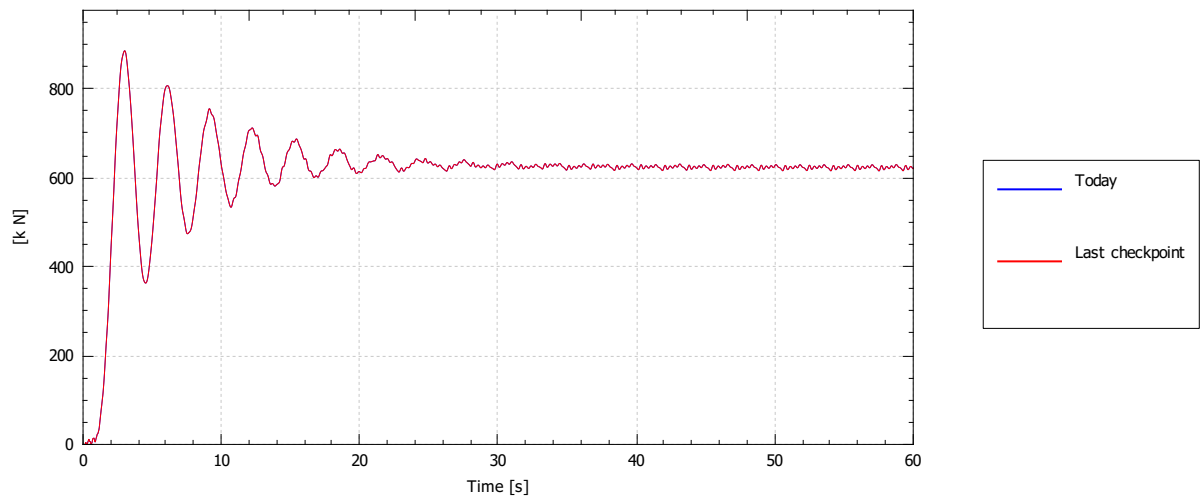
Shear force (1st prin. axis)



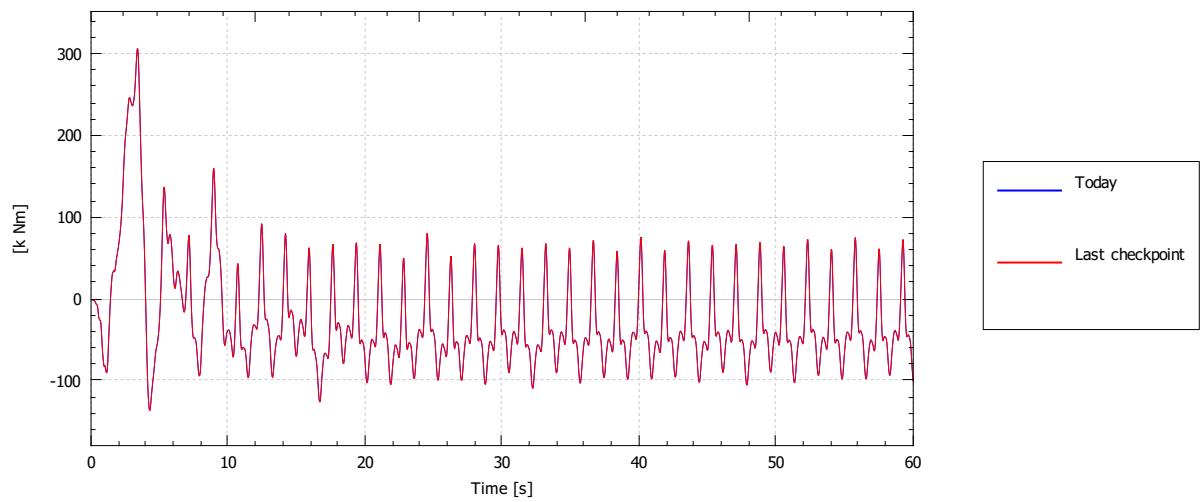
Shear force (2nd prin. axis)



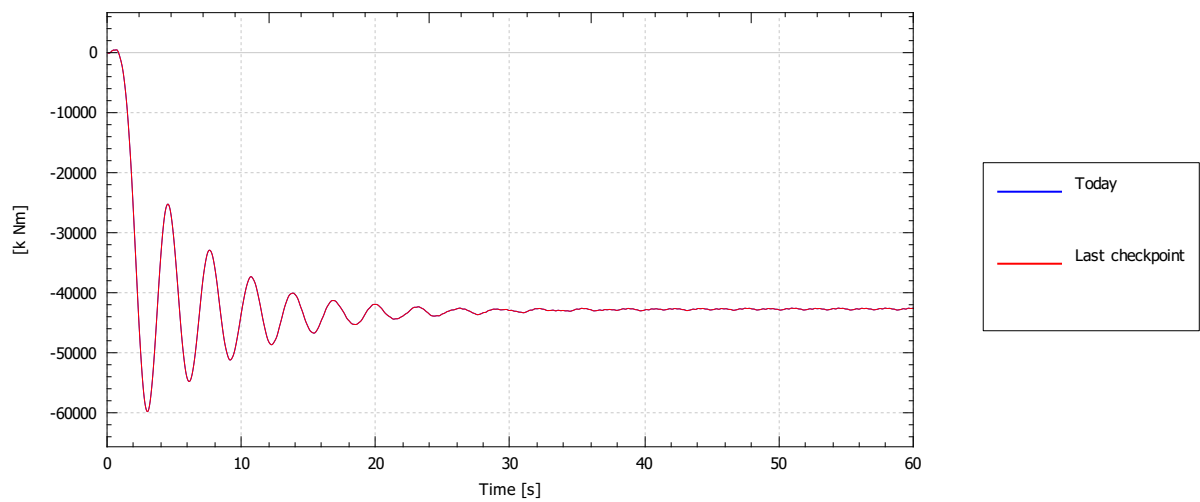
Shear force, mag.



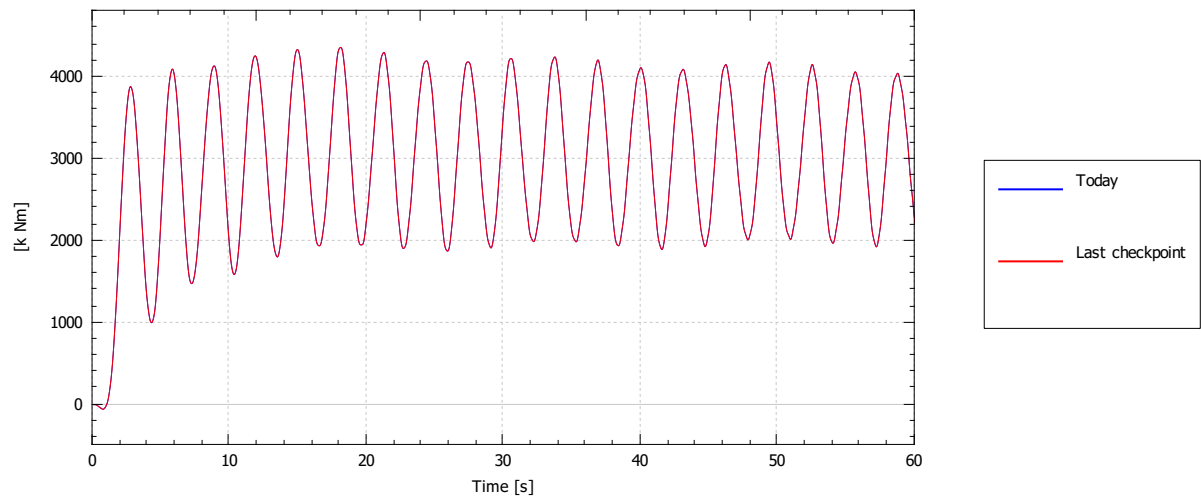
Torque



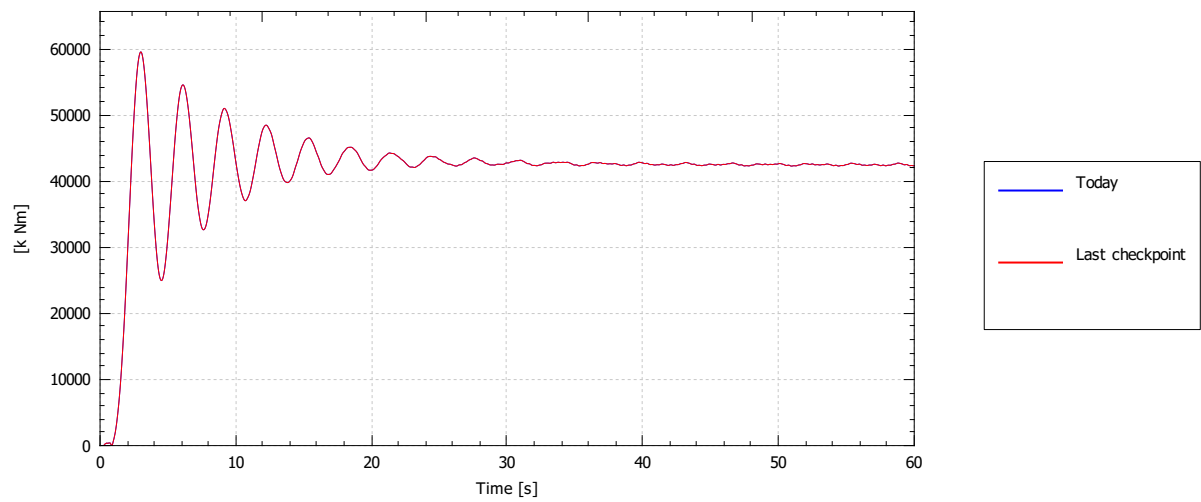
Moment (1st prin. axis), i



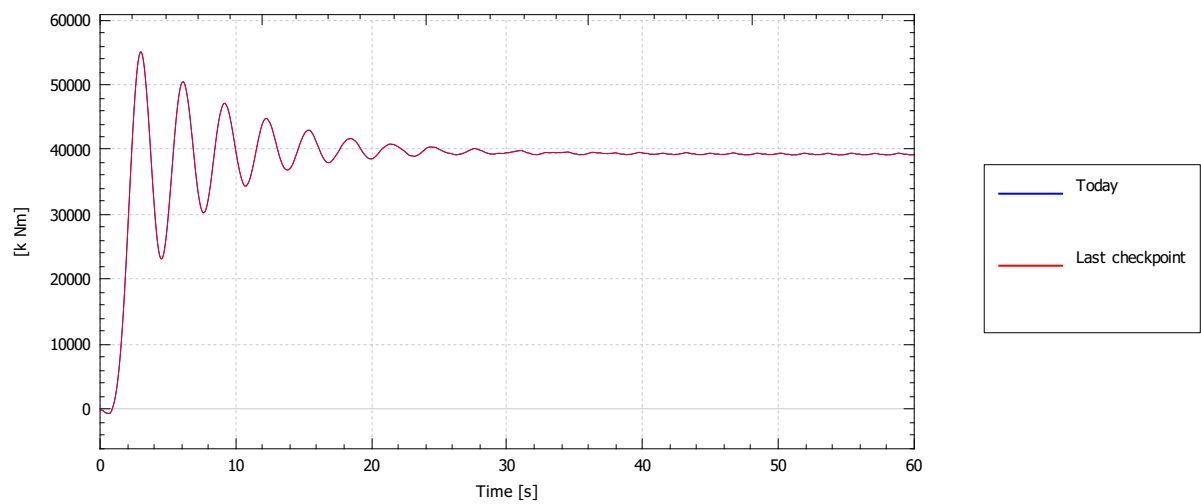
Moment (2nd prin. axis), i



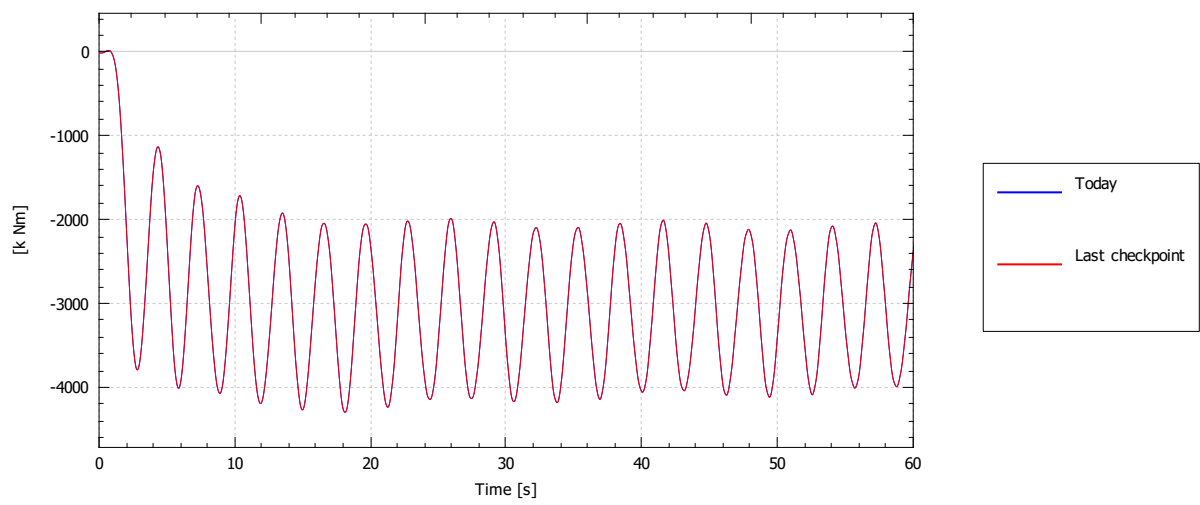
Moment, mag., i



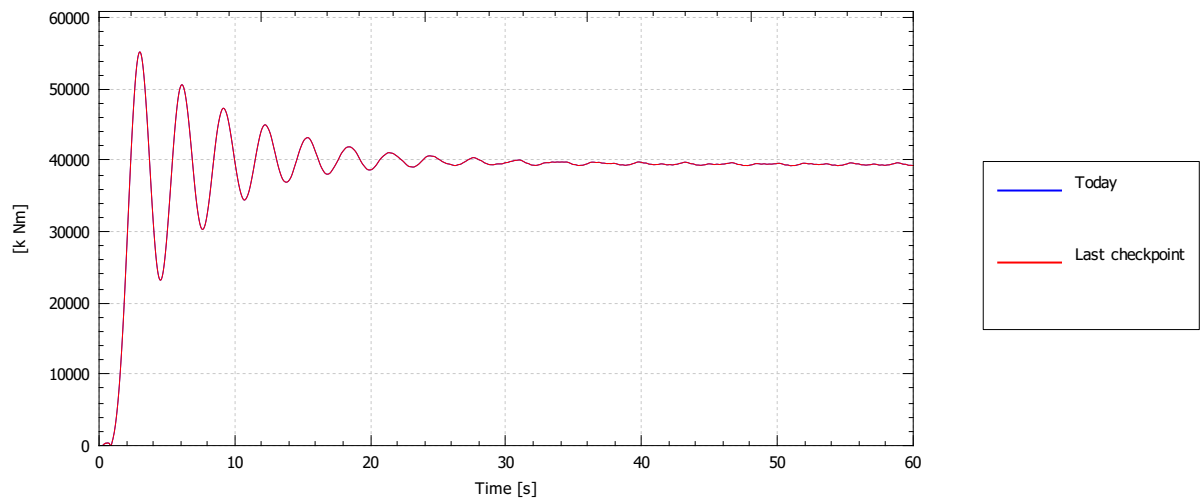
Moment (1st prin. axis), j



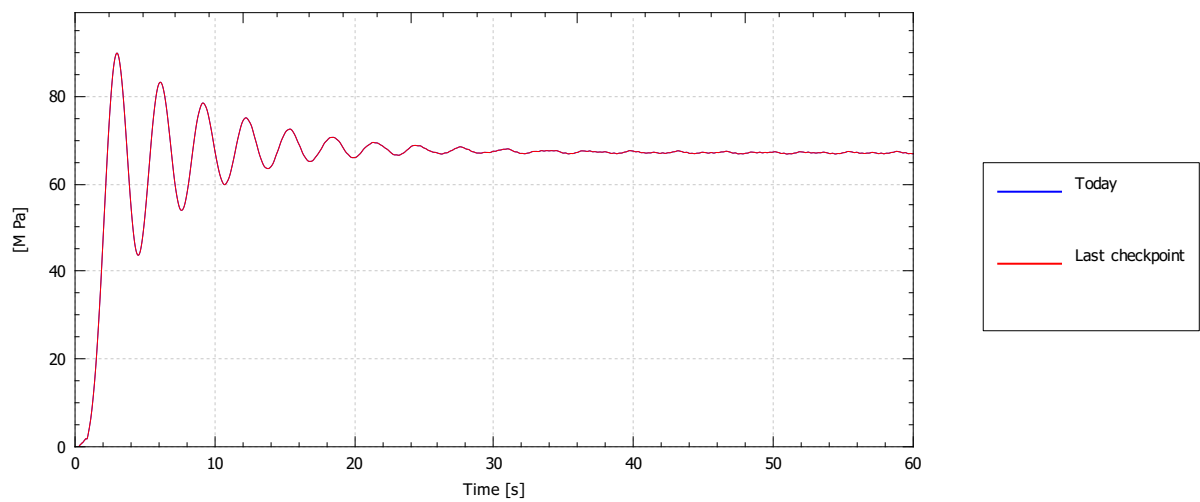
Moment (2nd prin. axis), j



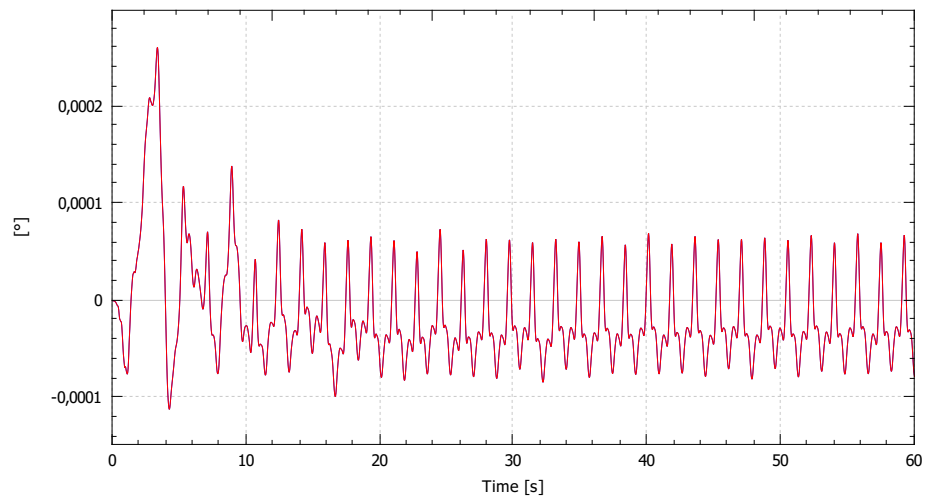
Moment, mag., j



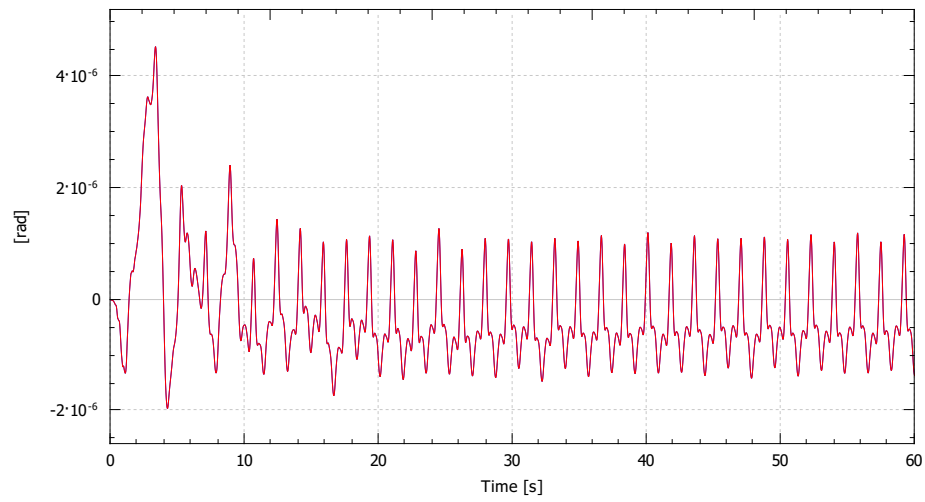
Max normal stress



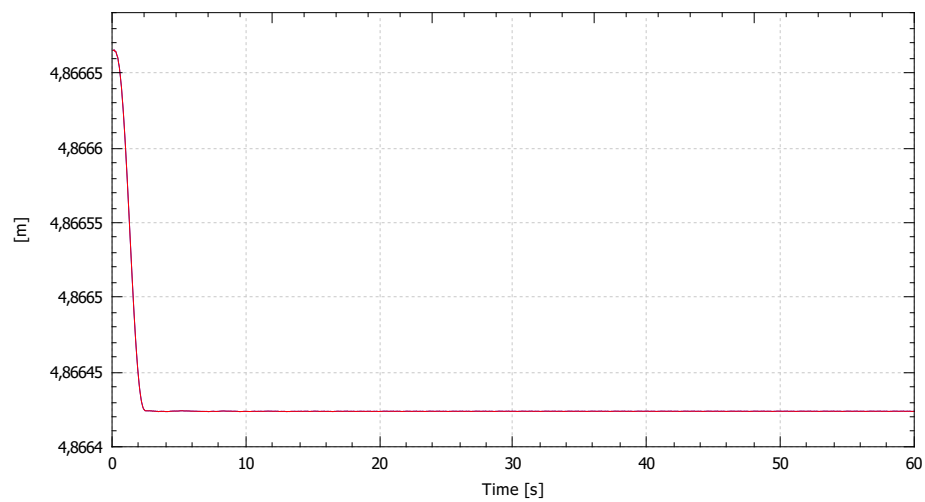
Twist (structural)



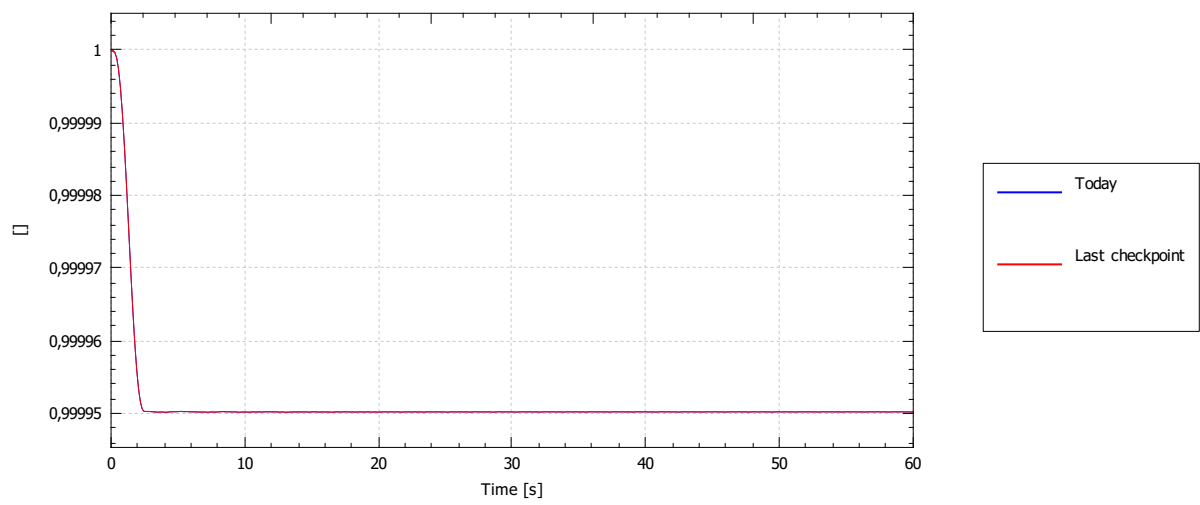
Twist (structural) - rad



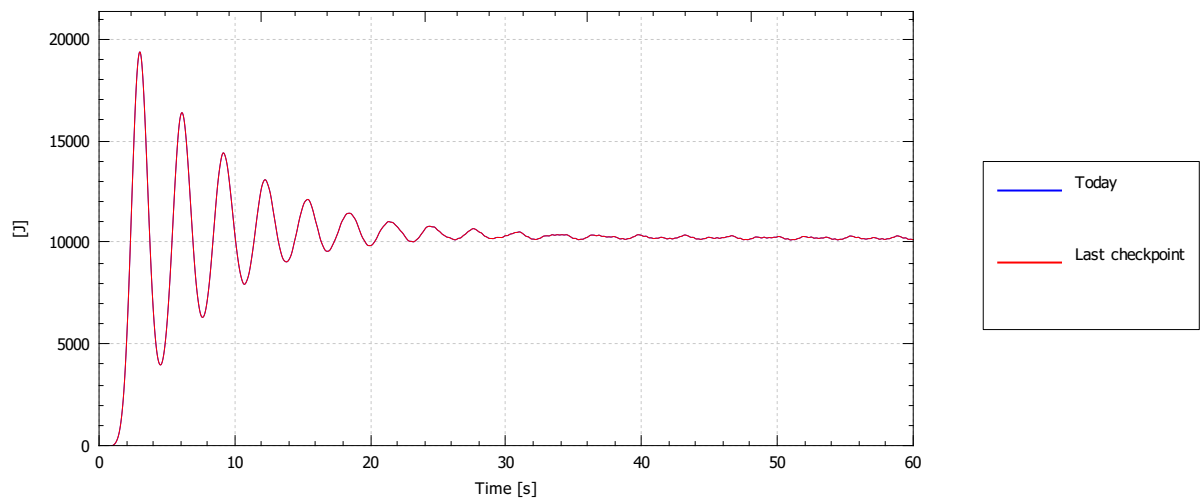
Deformed length



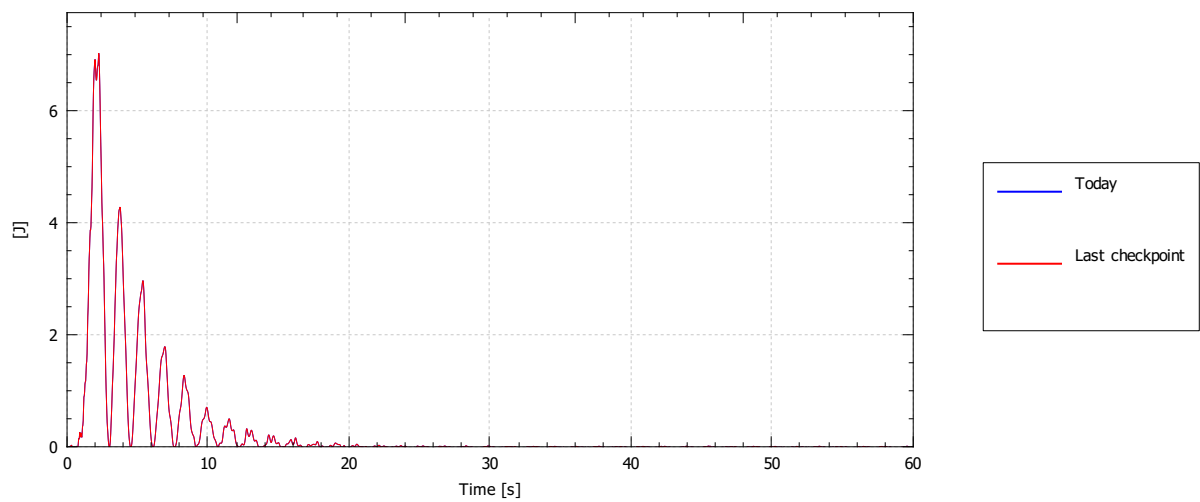
Elongation



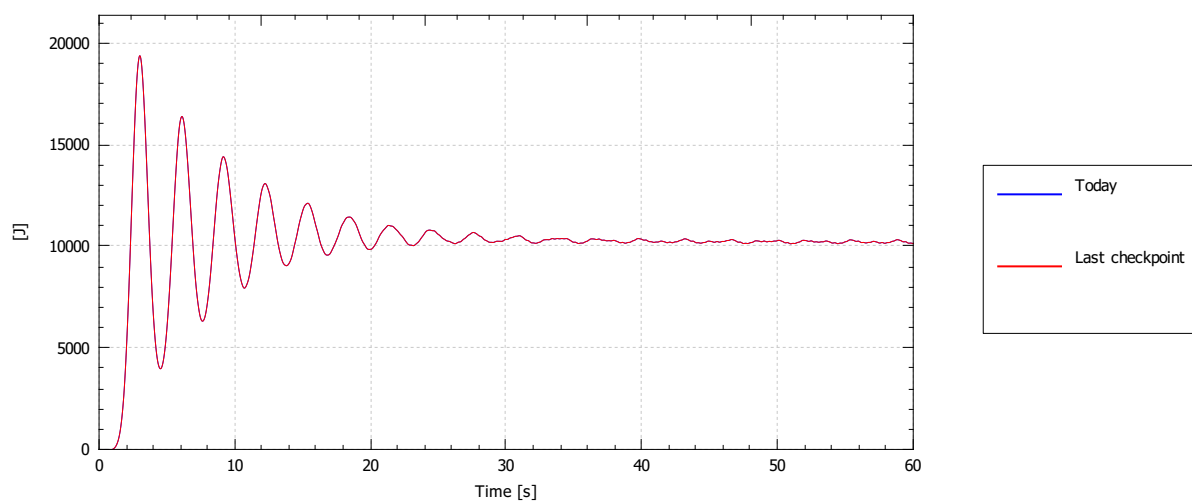
Strain energy



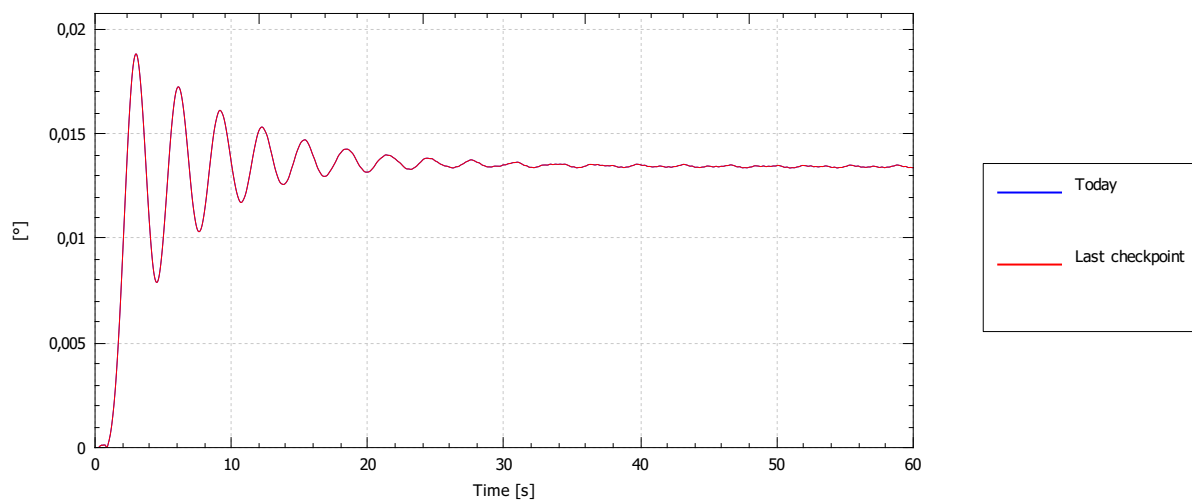
Kinetic energy



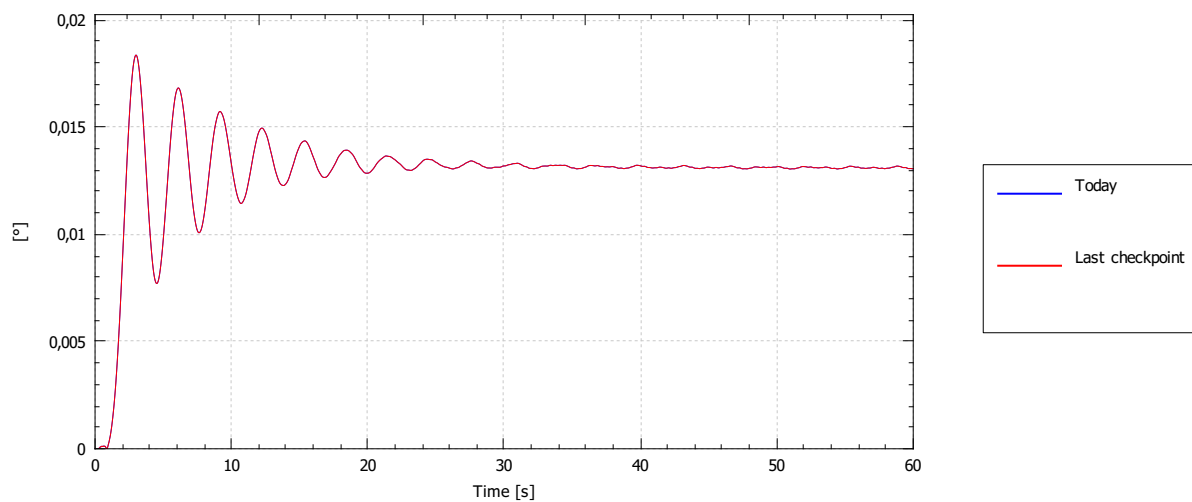
Mechanical energy



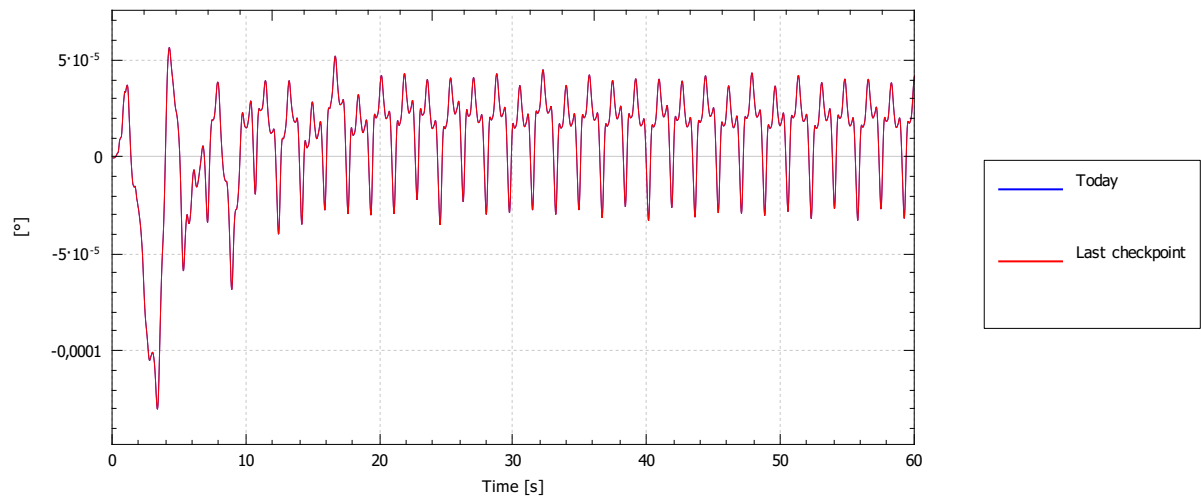
Deformational rotation (i)



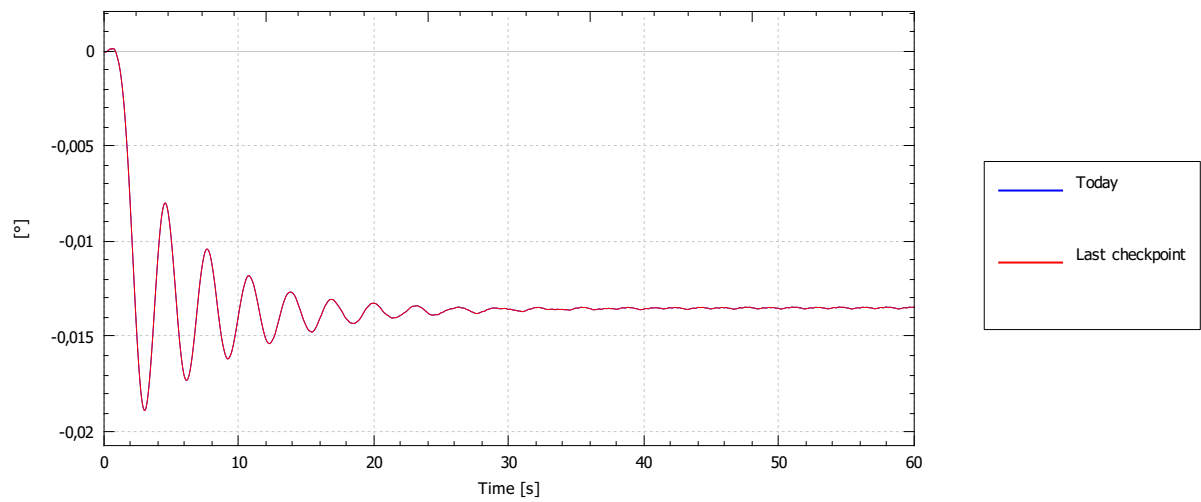
Deformational rotation (j)



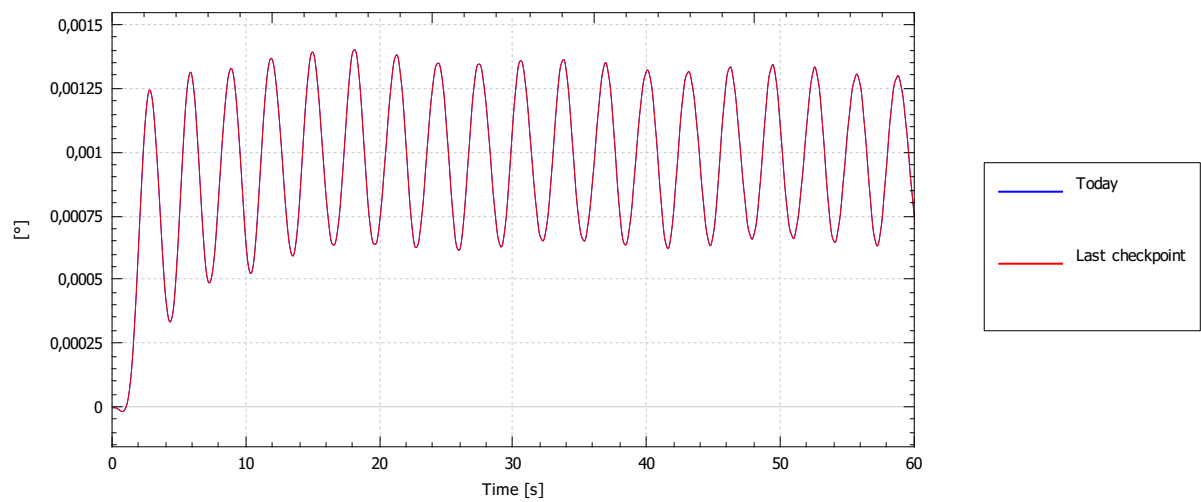
Deformational rotation (axial)



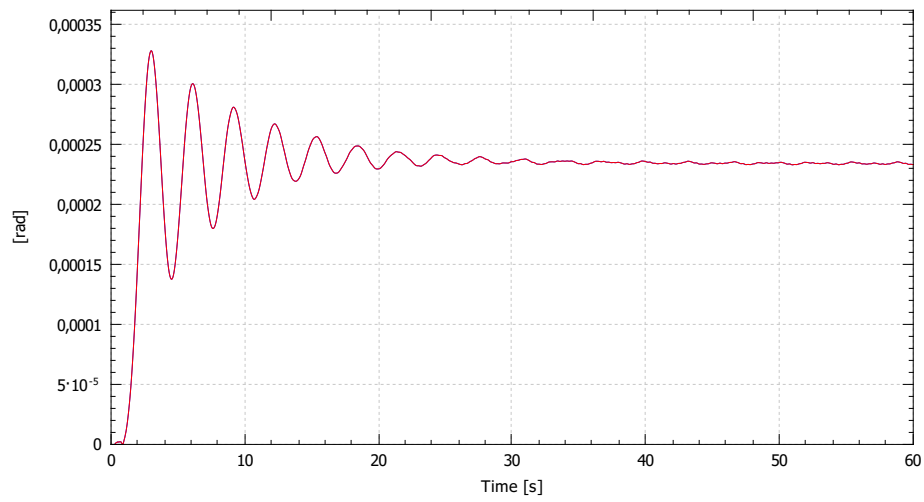
Deformational rotation (1st prin.)



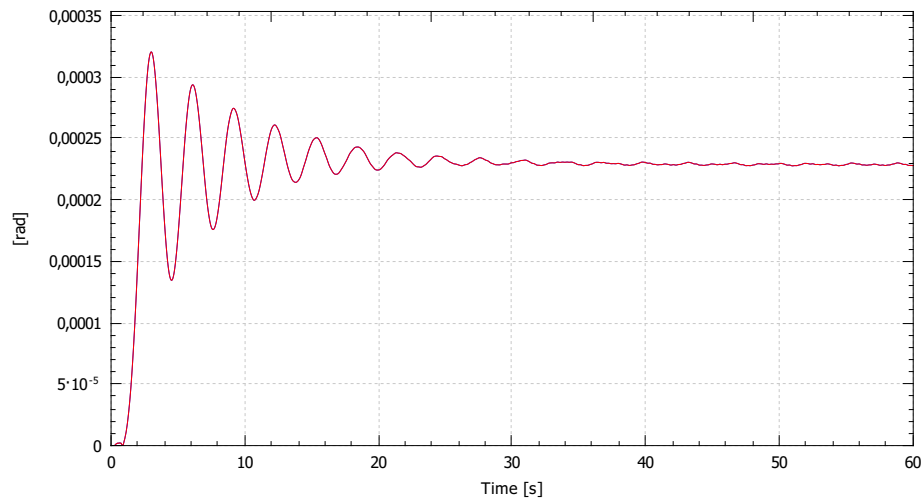
Deformational rotation (2nd prin.)



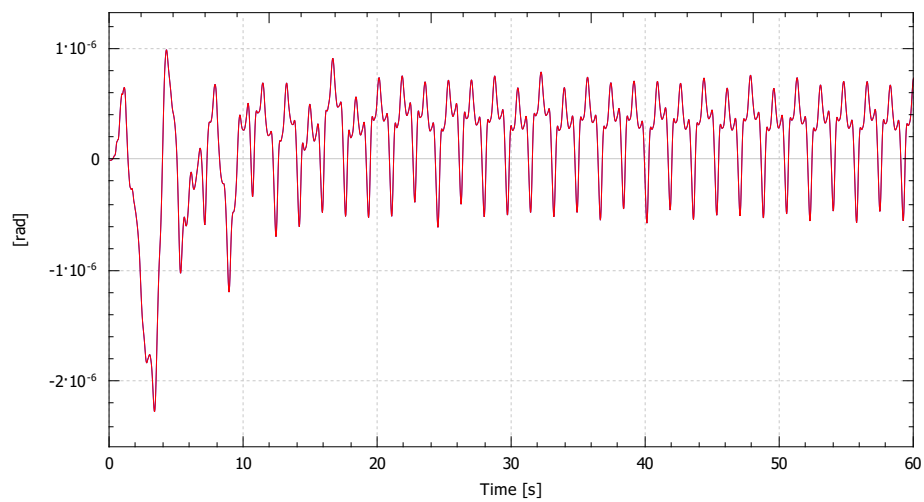
Deformational rotation (i) - rad



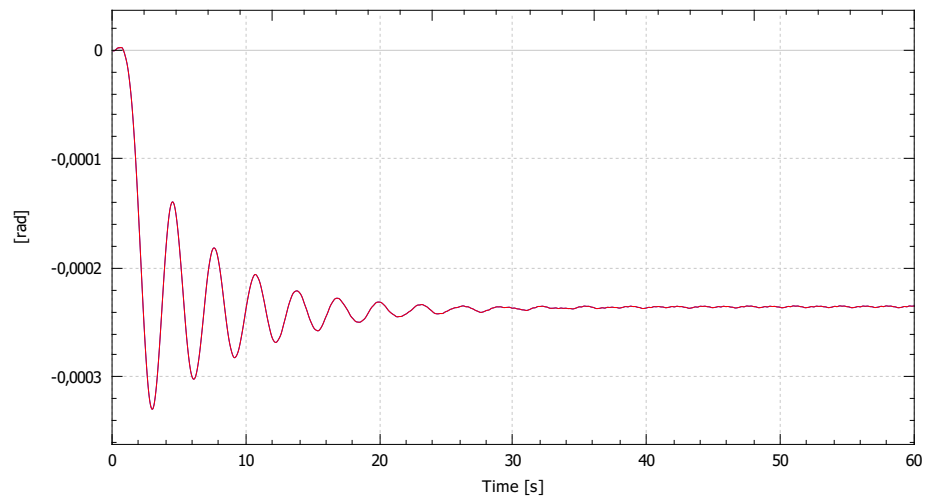
Deformational rotation (j) - rad



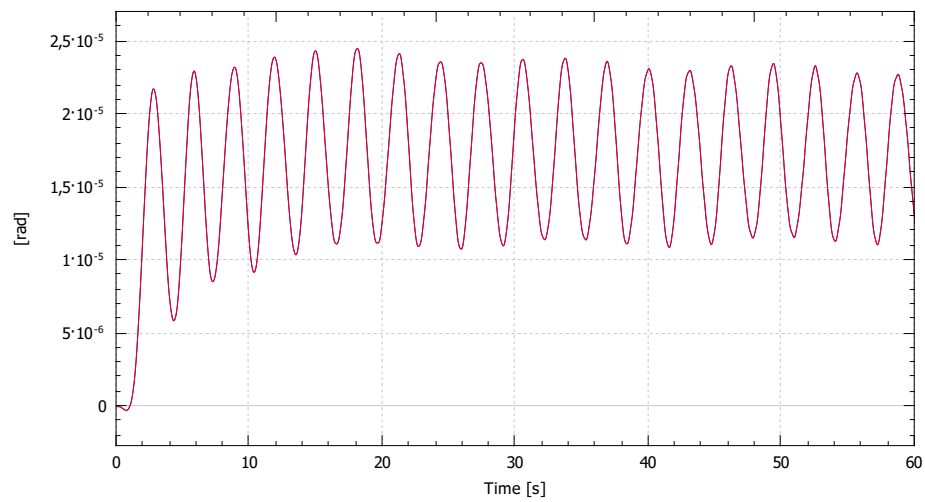
Deformational rotation (axial) - rad



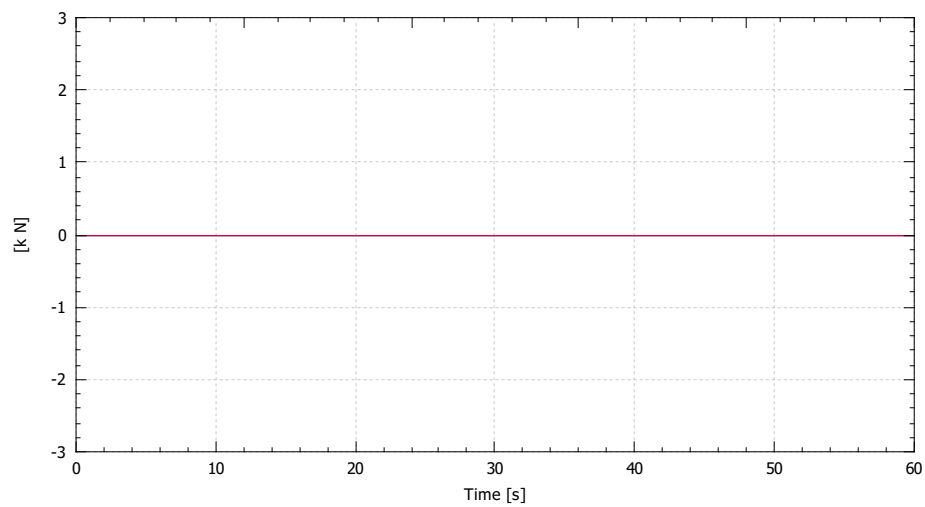
Deformational rotation (1st prin.) - rad



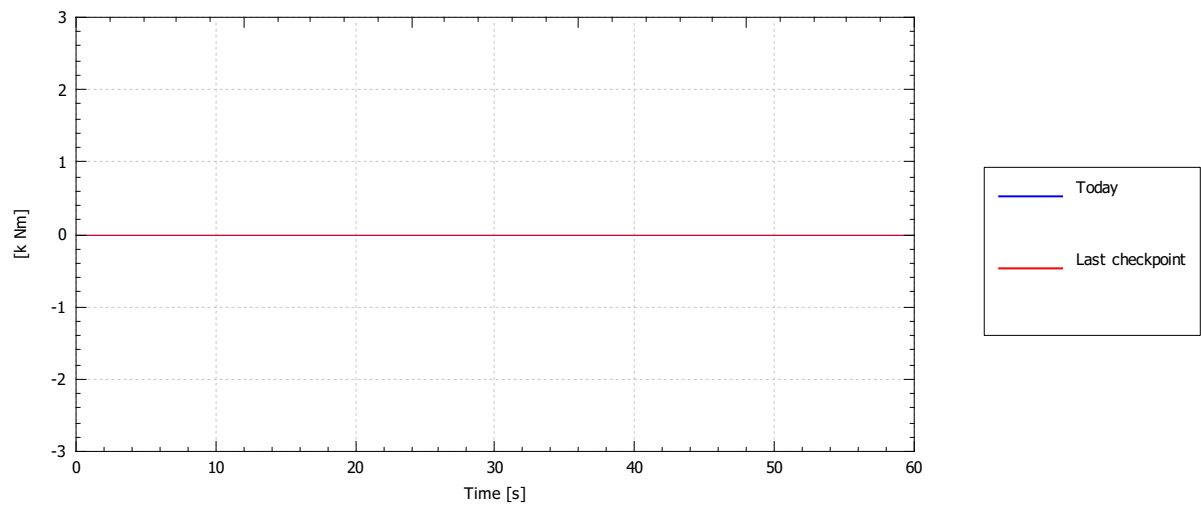
Deformational rotation (2nd prin.) - rad



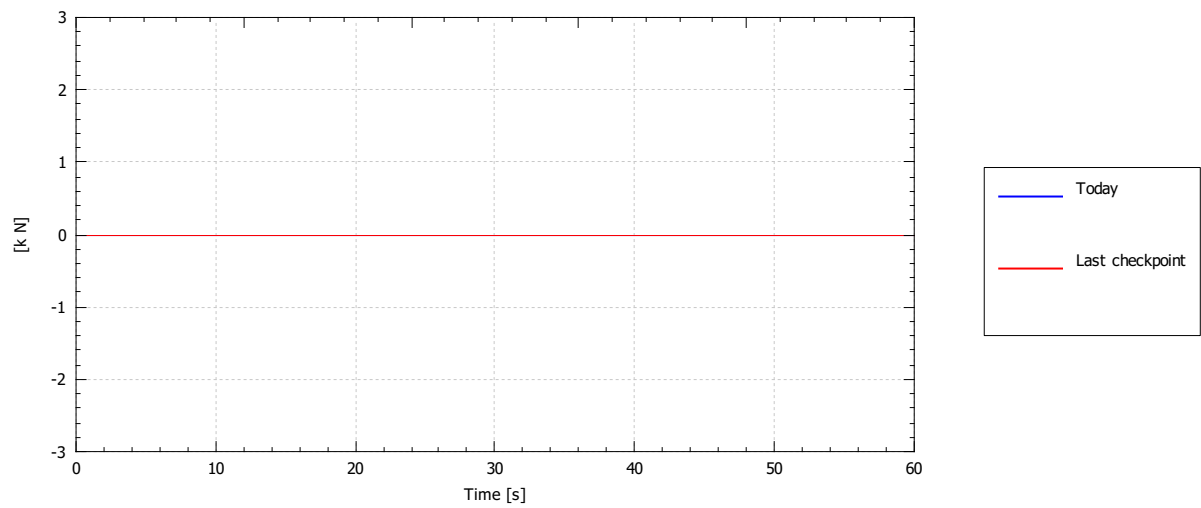
Damping force, i



Damping moment, i



Damping force, sum



Damping moment, sum

