Online-Appendix

„Development of a Cost Optimal Predictive Maintenance Strategy"

Christoph Weeber

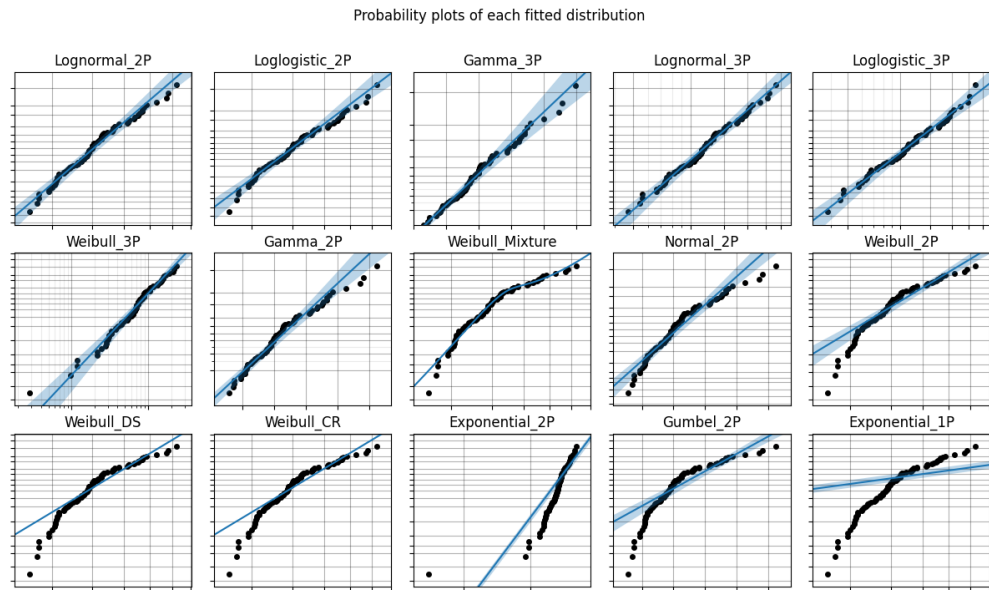Technical University of Munich

A. Appendix

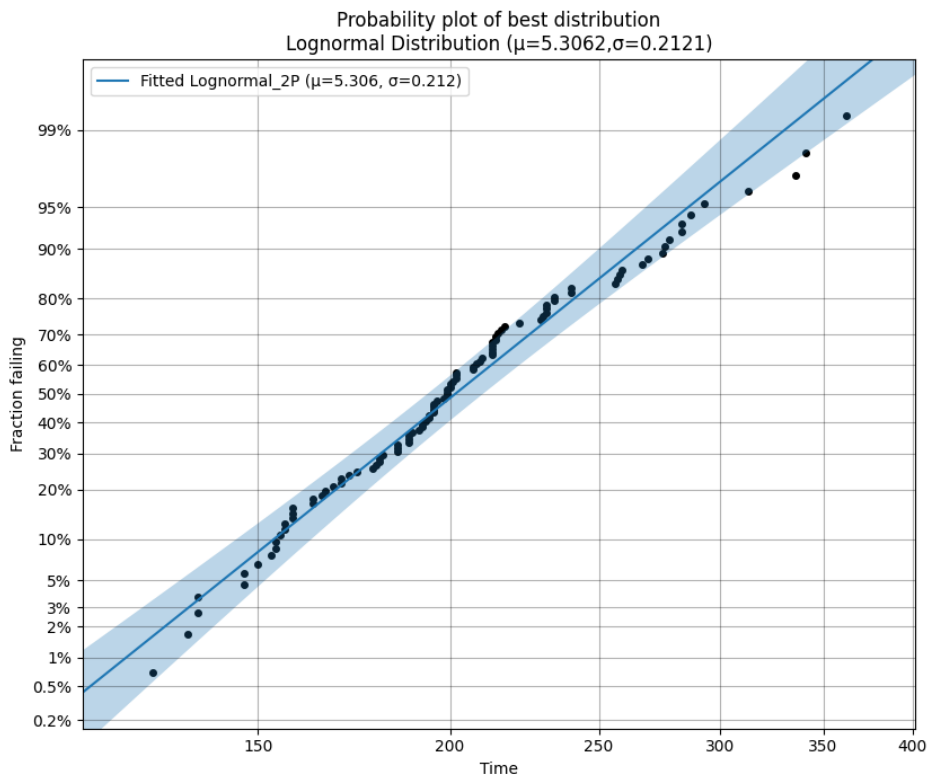**Figure 26** Probability Plots for all considered distributions

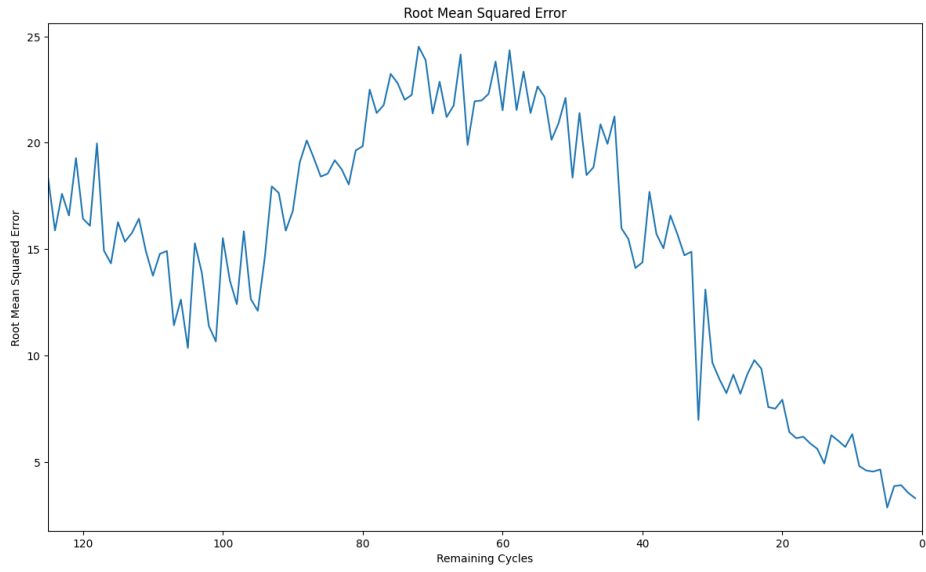**Figure 27** Probabulity Plot for the Lognormal Distribution

Figure 28 The average RMSE for all 20 engines of Test Set 1.

Table 20 Sensor values s_1 to s_{21} and their description

Sensor Number	Symbol	Description	Units
1	T2	Total Temperature at Fan inlet	R
2	T24	Total Temperature at LPC outlet	R
3	T30	Total Temperature at HPC outlet	R
4	T50	Total Temperature at LPT outlet	R
5	P2	Pressure at Fan inlet	$psia$
6	P15	Total Pressure in bypass-duct	$psia$
7	P30	Total pressure at HPC outlet	$psia$
8	Nf	Physical Fan speed	rpm
9	Nc	Physical Core speed	rpm
10	epr	Engine Pressure Ratio	$-$
11	Ps30	Static Pressure at HPC outlet	$psia$
12	Phi	Ratio of Fuel Flow to Ps30	pps/psi
13	NRf	Corrected Fan speed	rpm
14	NRc	Corrected Core speed	rpm
15	BPR	Bypass Ratio	$-$
16	farB	Burner fuel-air ratio	$-$
17	htBleed	Bleed Enthalpy	$-$
18	Nf_dmd	Demanded Fan speed	rpm
19	PCNfR_dmd	Demanded corrected Fan speed	rpm
20	W31	HPT coolant bleed	lbm/s
21	W32	LPT coolant bleed	lbm/s