

EPM-XP plus エンジンアナライザー



実績あるEPM-XPの上位モデル



EPM-XP plus エンジンアナライザー



Model	EPM-XP	EPM-XP ^{plus}	reference
Measuring range	0...300 bar	0...300 bar	
Application range on 2-stroke engines	40 - 300 RPM	40 - 900 RPM	
Application range on 4-stroke engines	200-1500 rpm	200-1800 rpm	
Sampling rate per revolution	720 values	7200 values	
Resolution	2-stroke:0,5°C A 4-stroke:1°C A	2-stroke:0,05°C A 4-stroke:0,1°C A	
Storing capacity	20 cylinder	20 cylinder	
Number of pressure cycles	10	10	
USB interface	USB 1.0	USB 2.0	
Accuracy	±0.5 % FS	±0.5 % FS	
Battery	NiMh 270 mAh	4 x NiMh AAA 930 mAh	Fig. 1
Charging of battery	via USB cable	via USB cable	
Operating time	> 1h	> 20 h	
Net Weight	1100 g incl. sensor and thompson adaptor	1100 g incl. sensor and thompson adaptor	
Dimension	210 x 100 x 80 mm	210 x 100 x 80 mm	
Indicated items on display	Engine speed Cylinder Number Pmax	Engine speed Cylinder Number Pmax Measuring cell temperature Battery Status Date and time	Fig. 2
Conntinuous online measurement	-	○	Fig.3
Accuracy check by pressure pump	○	○	

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Model	EPM-XP	EPM-XP ^{plus}	
Functions of visualisation software			
Cylinder pressure diagram	○	○ plus cylinder details panel	Fig. 4
Automatic TDC adjustment	○	○	Fig. 4
Pcomp calculation	○	○	Fig. 4
Power/IMEP calculation & diagram	Option with dongle	○	Fig. 4
Derivative curve for all cylinder	-	○	Fig. 5
Trending	Option with dongle	○	Fig. 6
P/V diagram	○	○	Fig. 7
Balancing diagram	○	○	Fig. 8
Calculation of ignition start	-	○	Fig. 5
Adjustable filtering of pressure curve	-	○	Fig. 5
Loading of a measurement file as reference	-	○	Fig. 9
Report with additional statistic values and deviation highlighting	-	○	Fig.10

Fig.1 大容量バッテリー

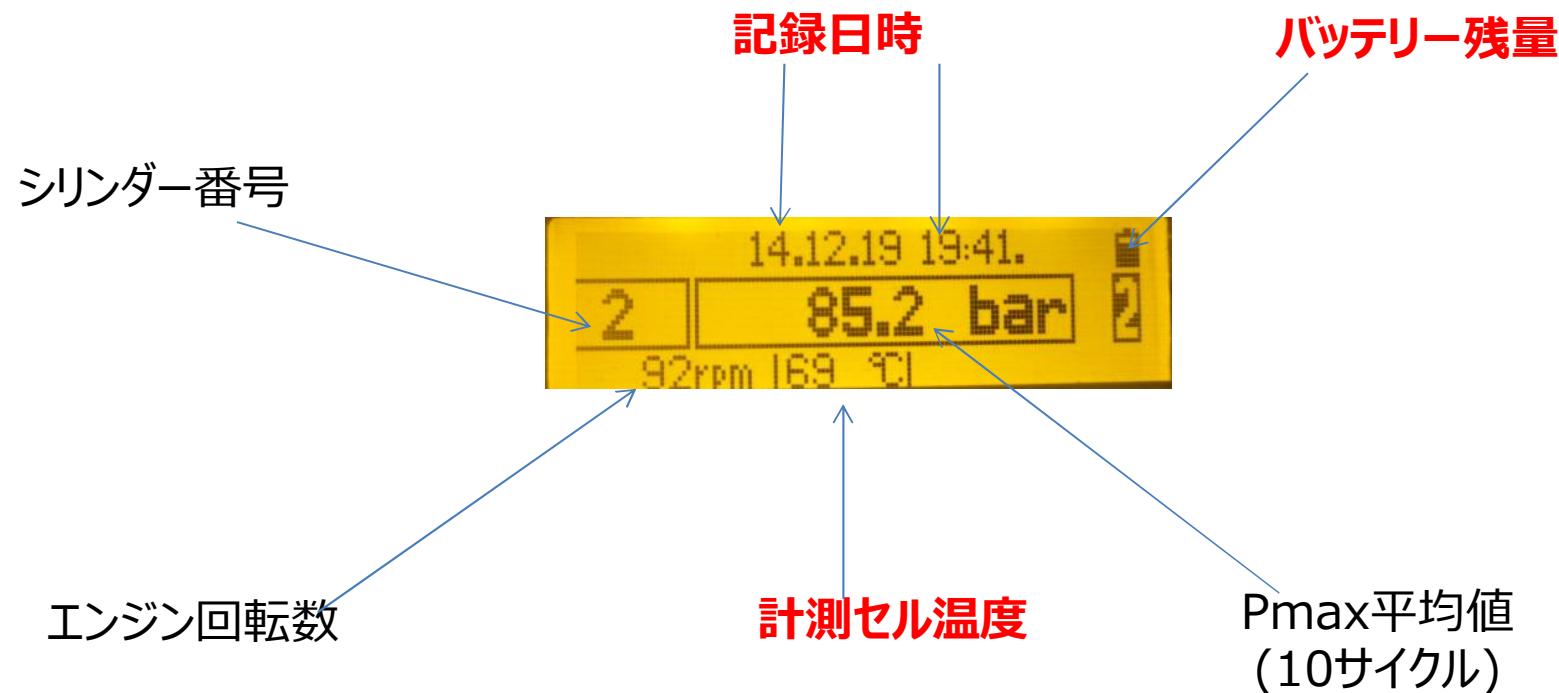


- 高容量ニッケル水素電池を4本搭載、20時間の連続使用を実現(XPは1時間)



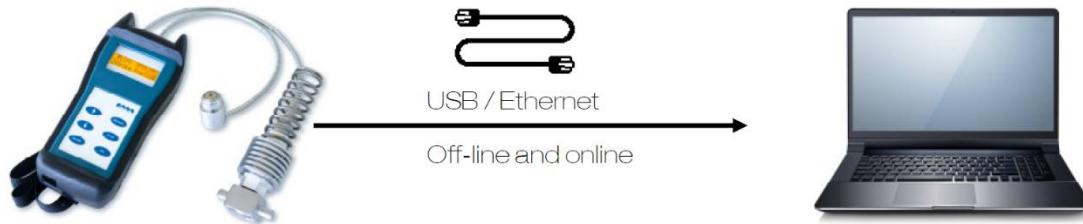
More than 20 hours

Fig.2 新ディスプレーで豊富な情報を提供



※赤字はXPでは非表示情報

Fig.3 オンライン計測



Max. length 50 m between EPM-XP plus unit and PC

従来の10サイクルのみのスポット計測だけでなく、EPM-XPとPCを繋いで長時間連続計測も可能になりました。

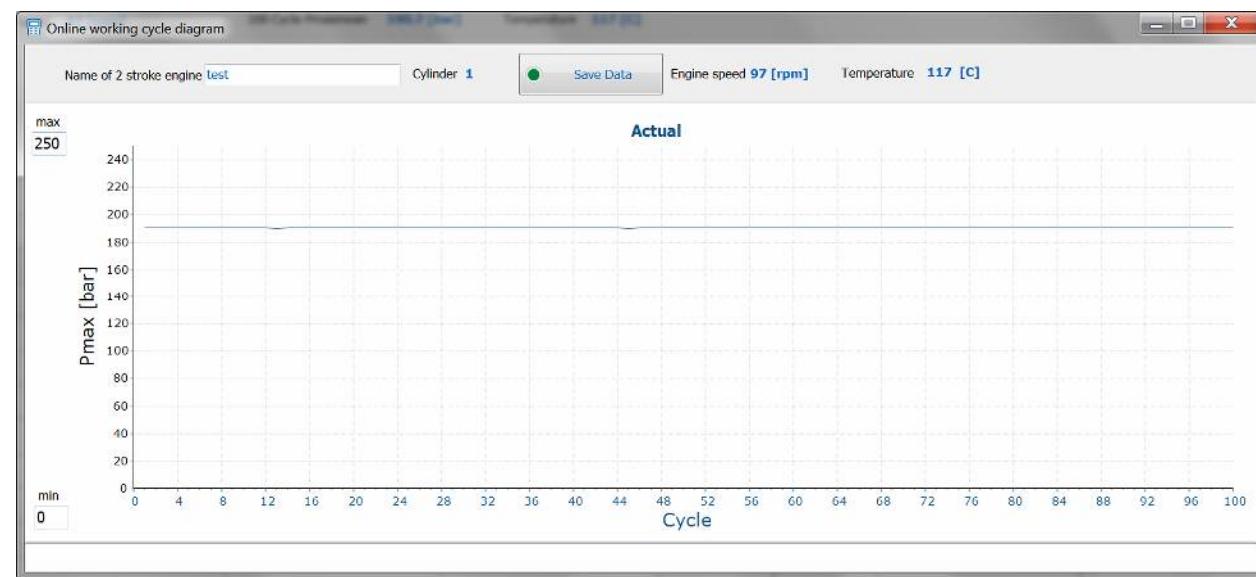
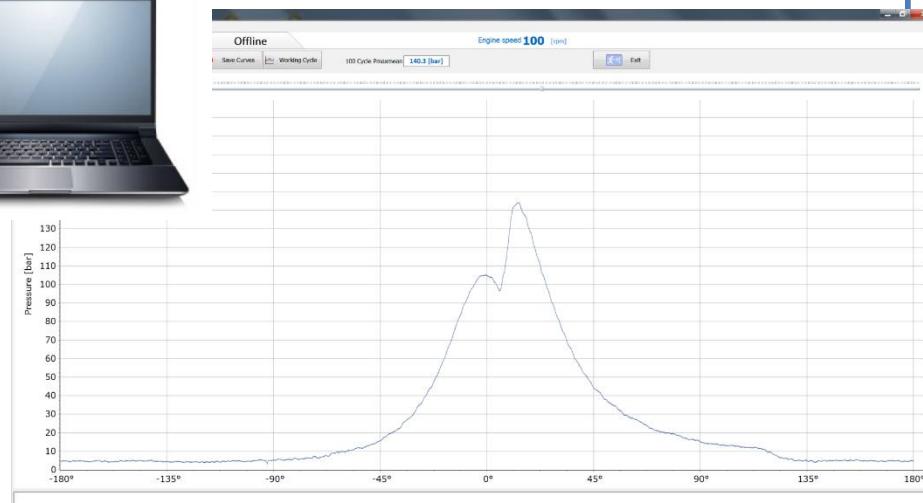


Fig.4 解析ソフトウェアの改良

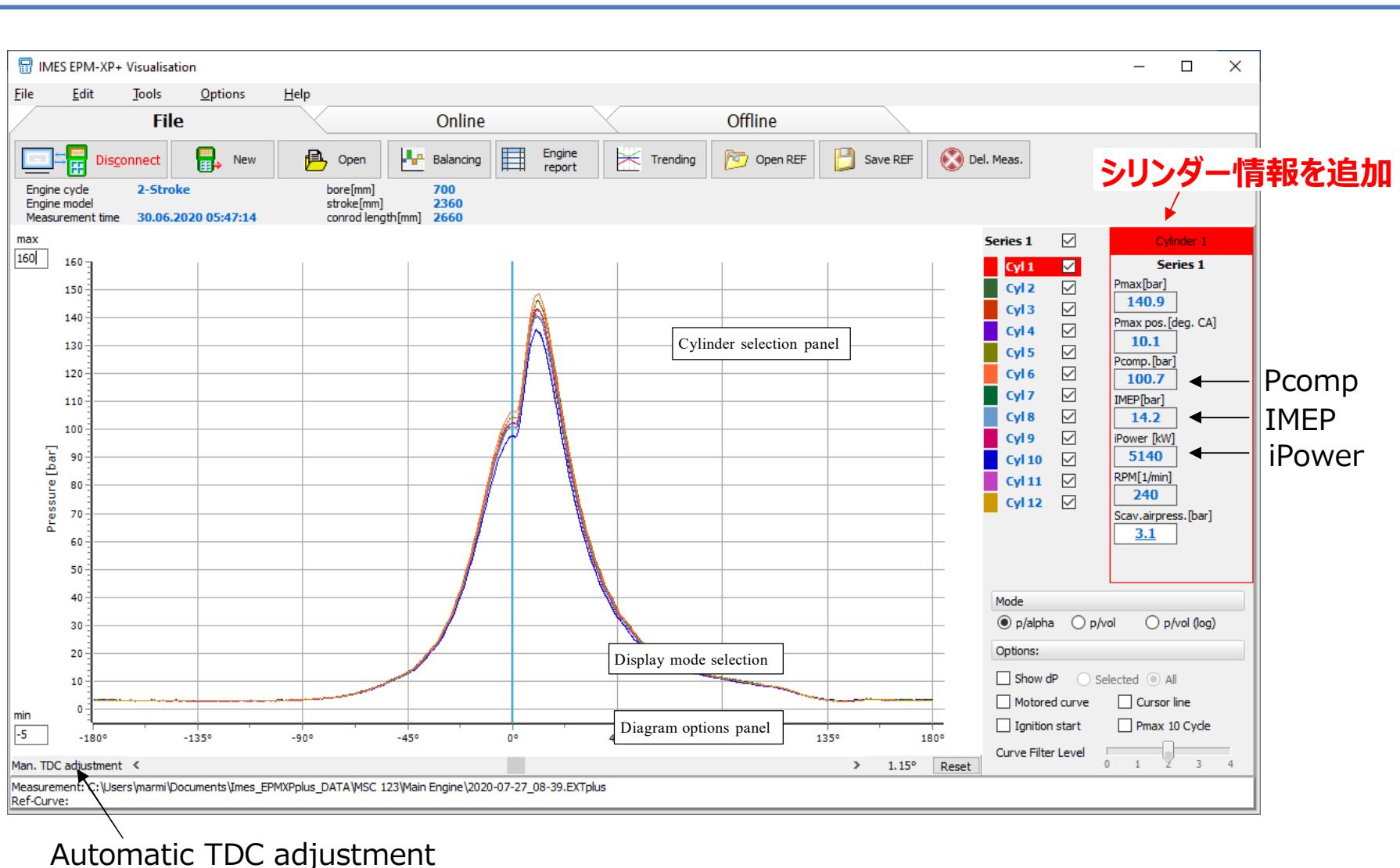


Fig.5 解析ソフトウェアの改良

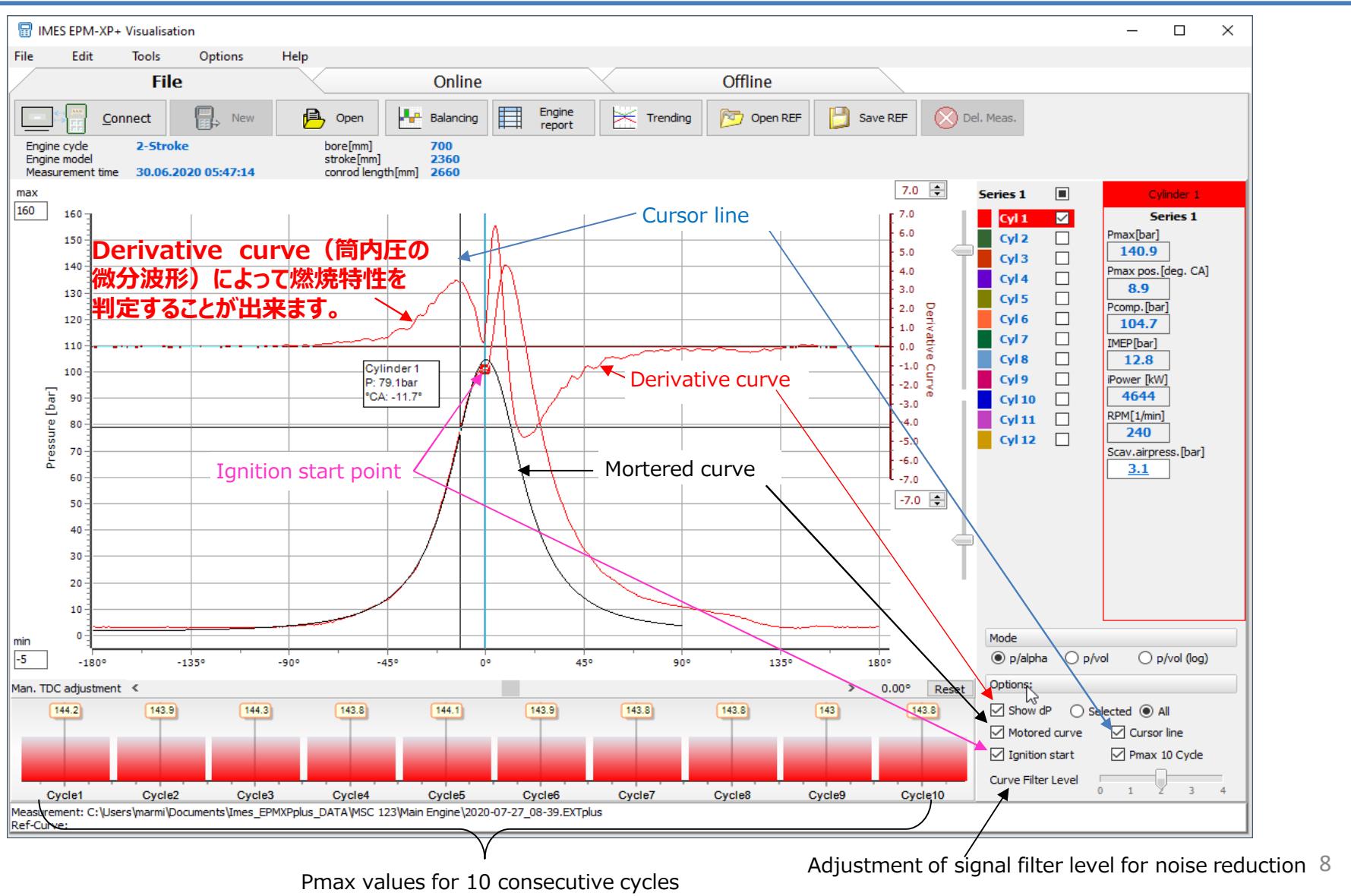


Fig.6 過去データの表示機能を標準搭載

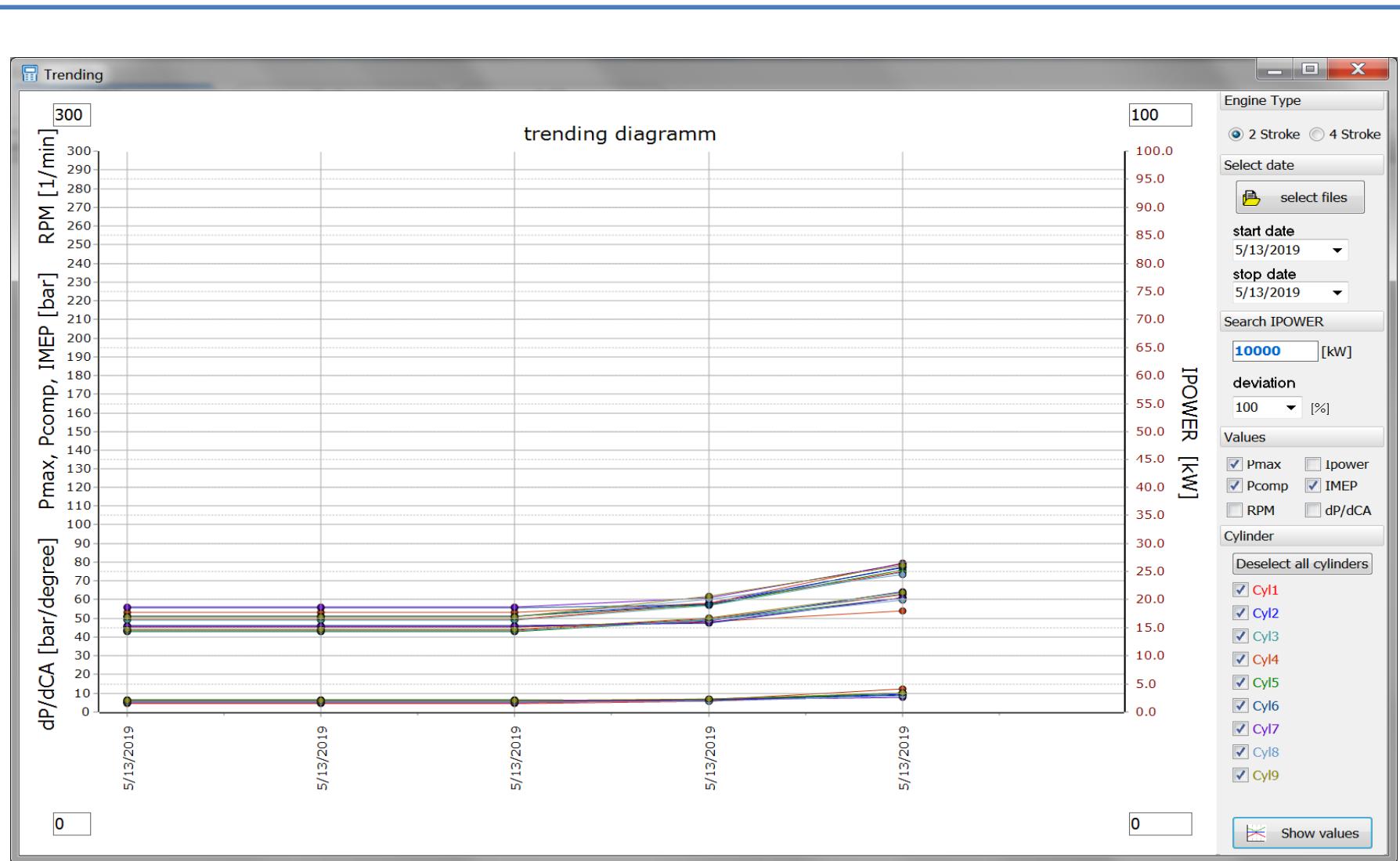


Fig.7 シリンダ容積ベースの筒内圧表示

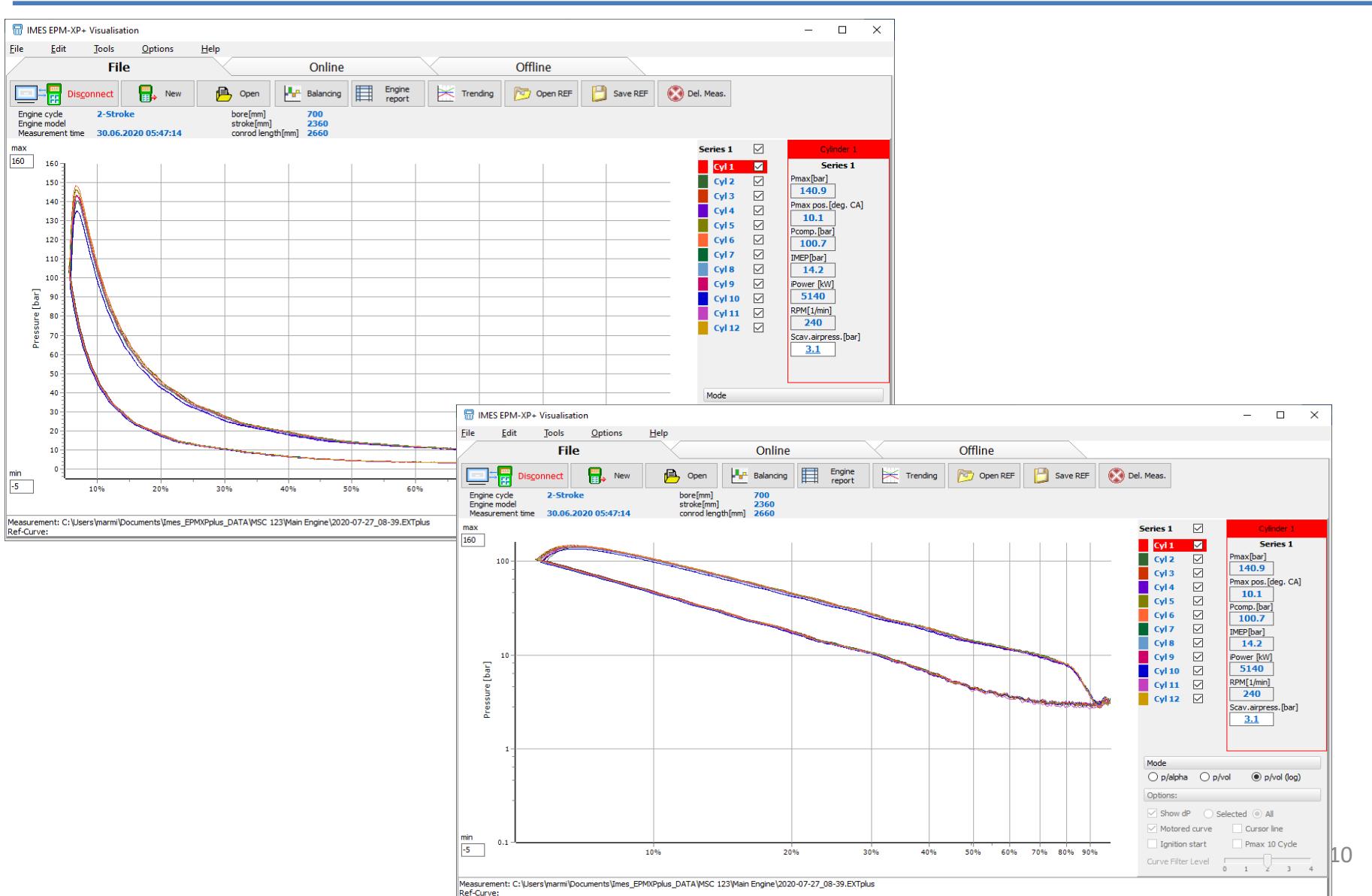


Fig.8 シリンダー毎の平均Pmaxからの偏差を表示

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the cylinder pressure people

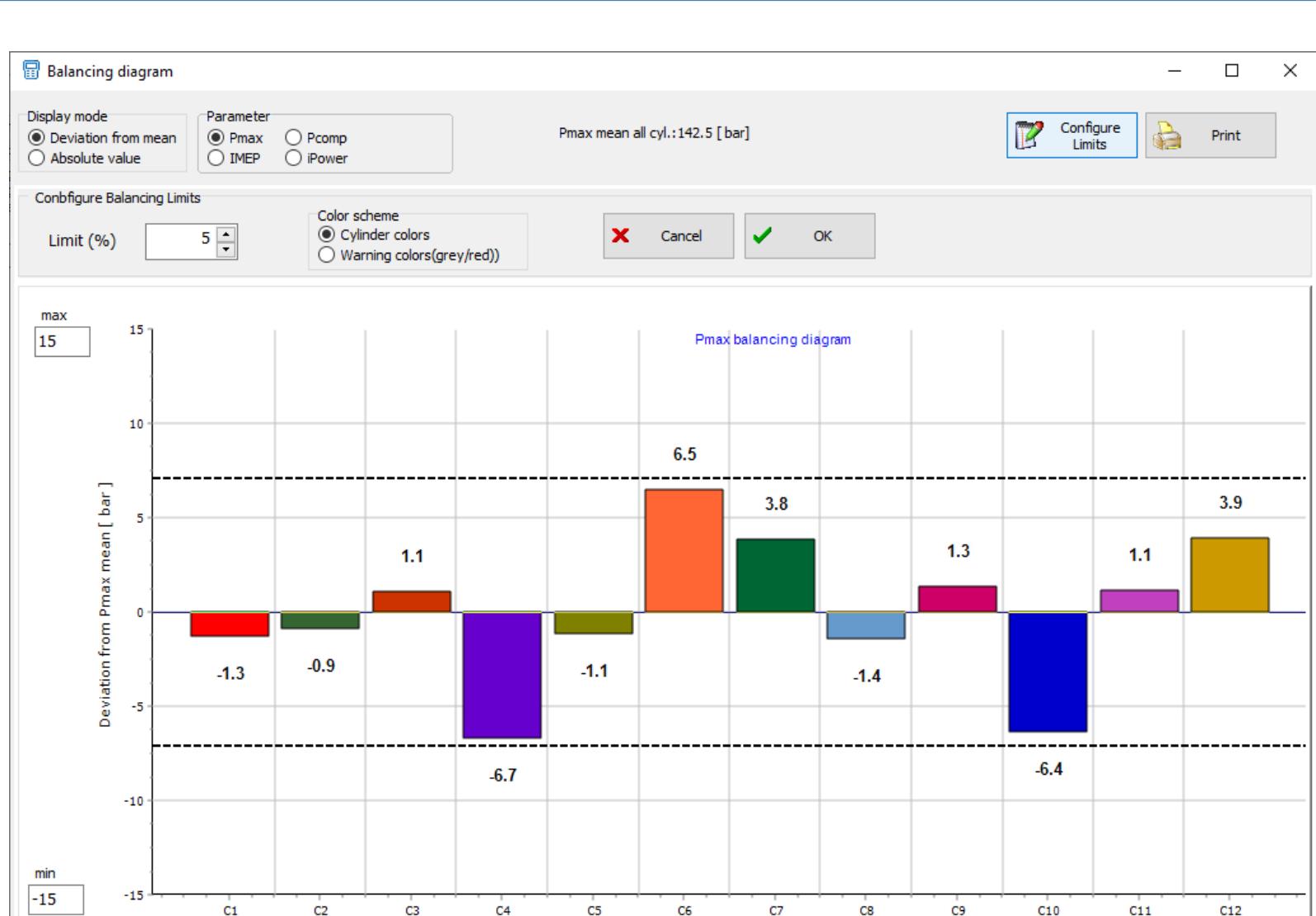


Fig.9 過去データとの比較

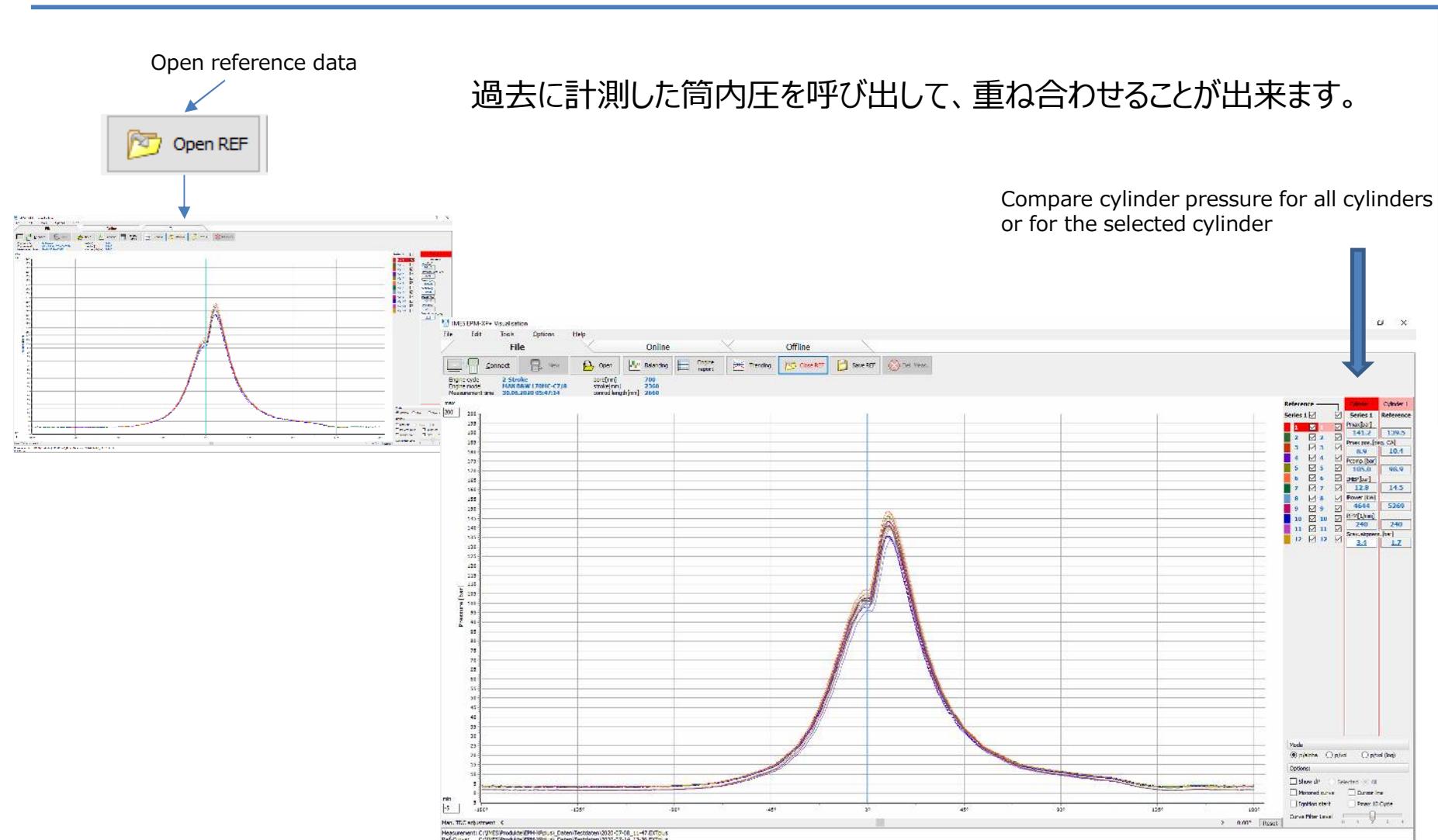
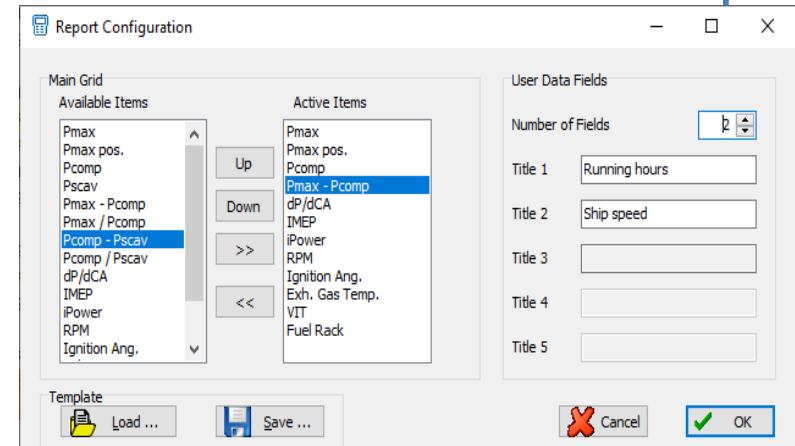
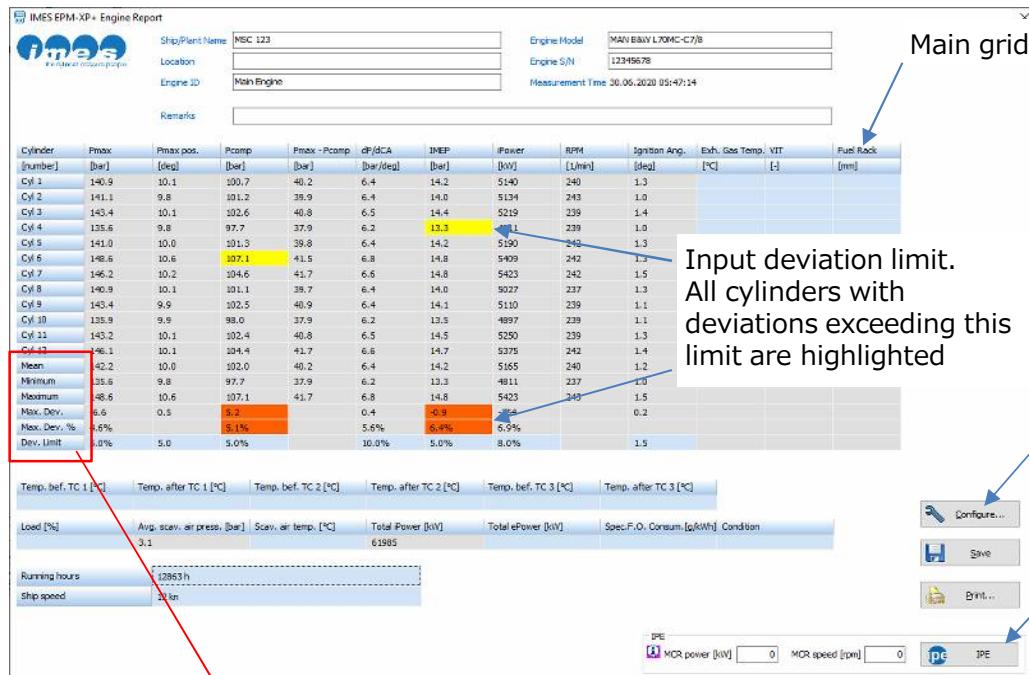


Fig.10 解析ソフトウェアの改良



Fields with grey background are calculated by the software.
Fields with blue background can be input by the user.



Press "IPE" button for direct data transfer to IPE software (optional)

The main grid lists major cylinder data. In addition to the cylinder values these statistic values are displayed:

- Mean: Mean value of all cylinder values
- Minimum: The minimum value of all cylinder values
- Maximum: The maximum value of all cylinder values
- Max. Dev.: The maximum deviation.
(Maximum – Mean) or (Minimum – Mean) whichever absolute value is larger
- Max Dev. %: The maximum percentage Deviation (absolute value)
- Dev. Limit: The allowable deviation limit. Cylinders with deviations exceeding this limit are highlighted.