MAGIC-TDAS 00-10
000510 / W. Wittek

PIXEL CALIBRATION, EVENT PRE-PROCESSING, PHYSICS ANALYSIS

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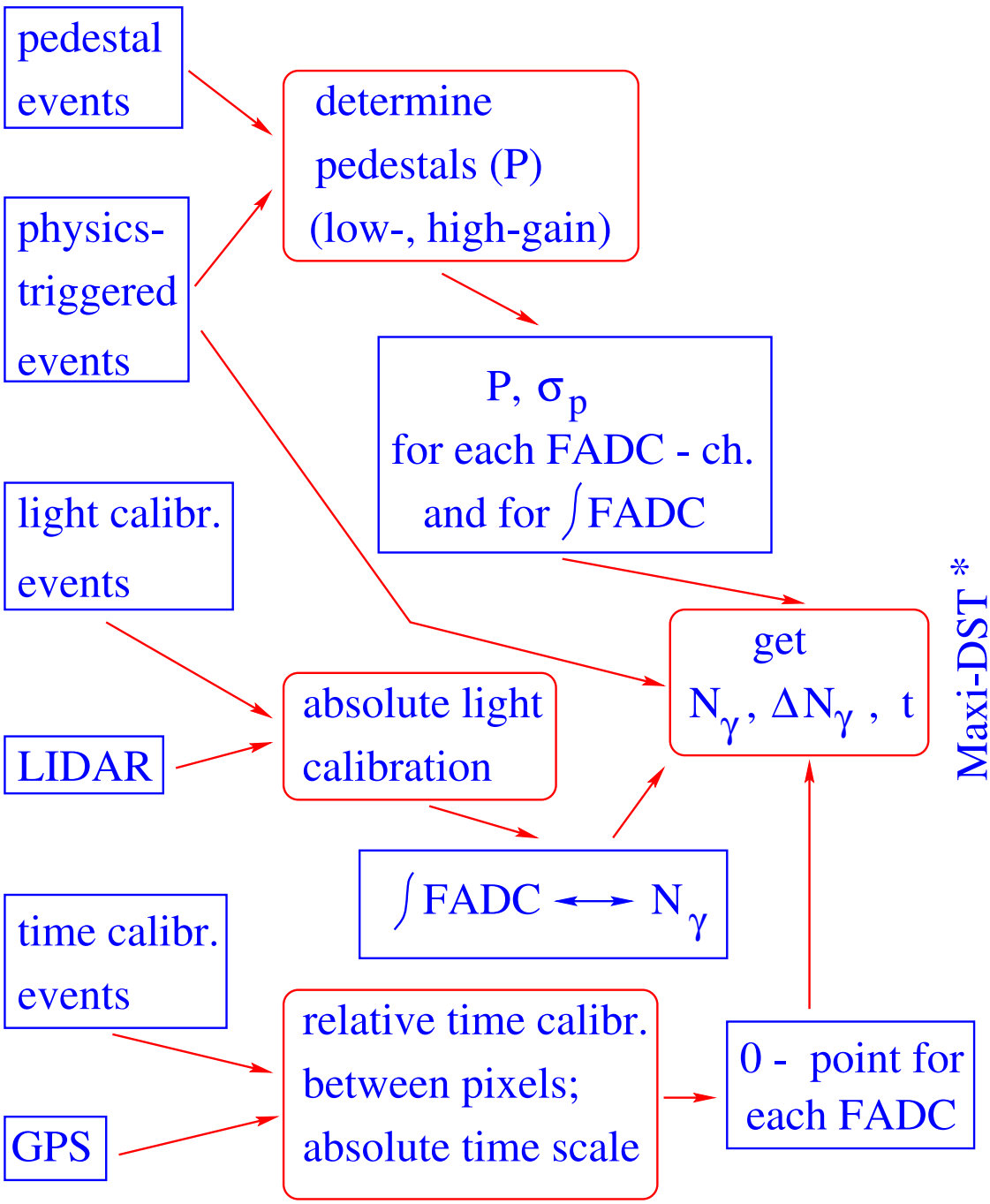
analysis steps	typical tasks	dealing with
1. pixel calibration	pedestals	pixels
2. event pre-processing	image parameters	events
3. physics analysis	$\Phi_\gamma(E, t)$	event samples
4. further analysis	timing analysis	independent of detector
5. technical studies	γ / h separation	mainly MC

1. Pixel calibration pixel - by - pixel



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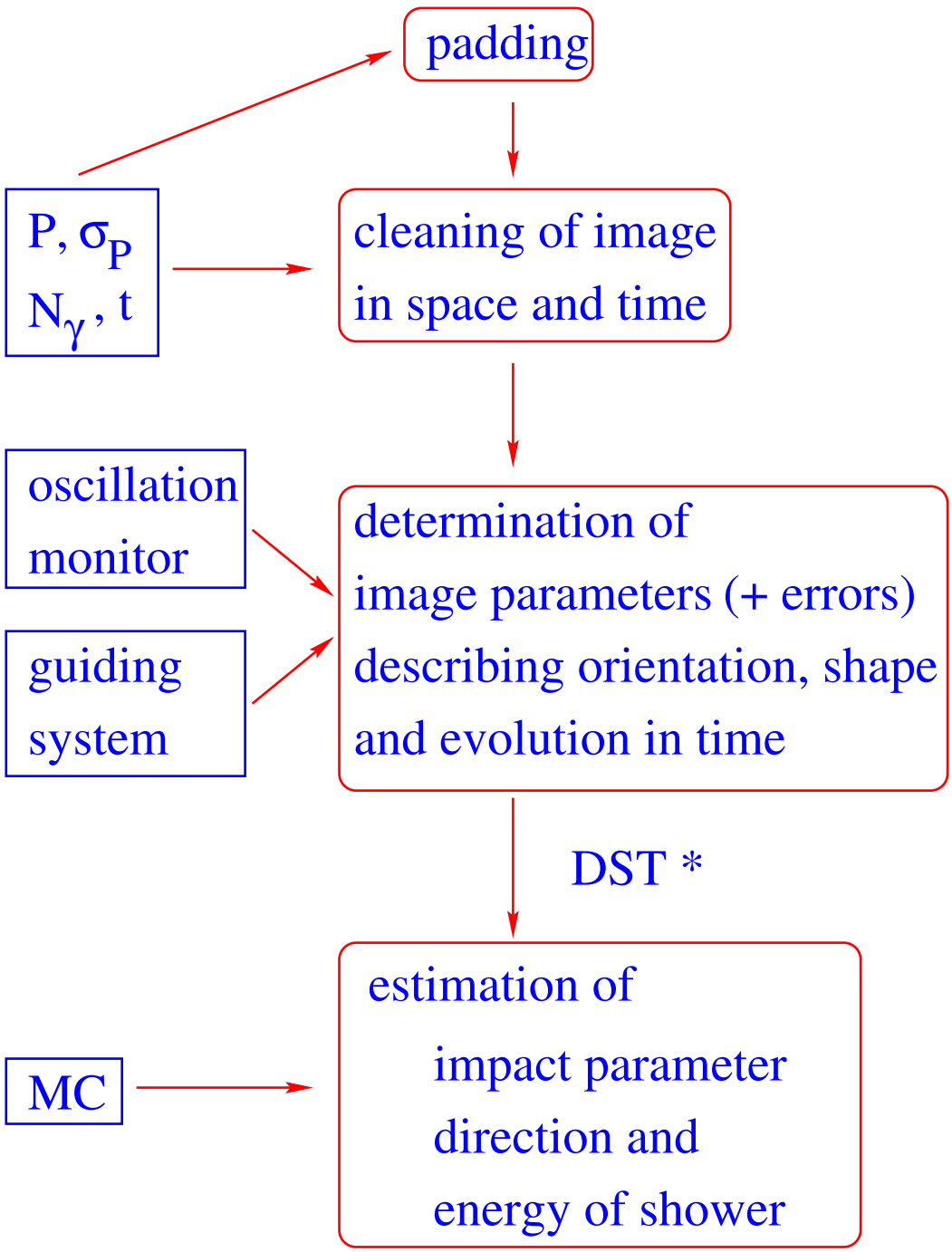
* Maxi-DST: at this point FADC information is no longer needed

2. Event pre - processing event - by - event

to be done for on - and off- data



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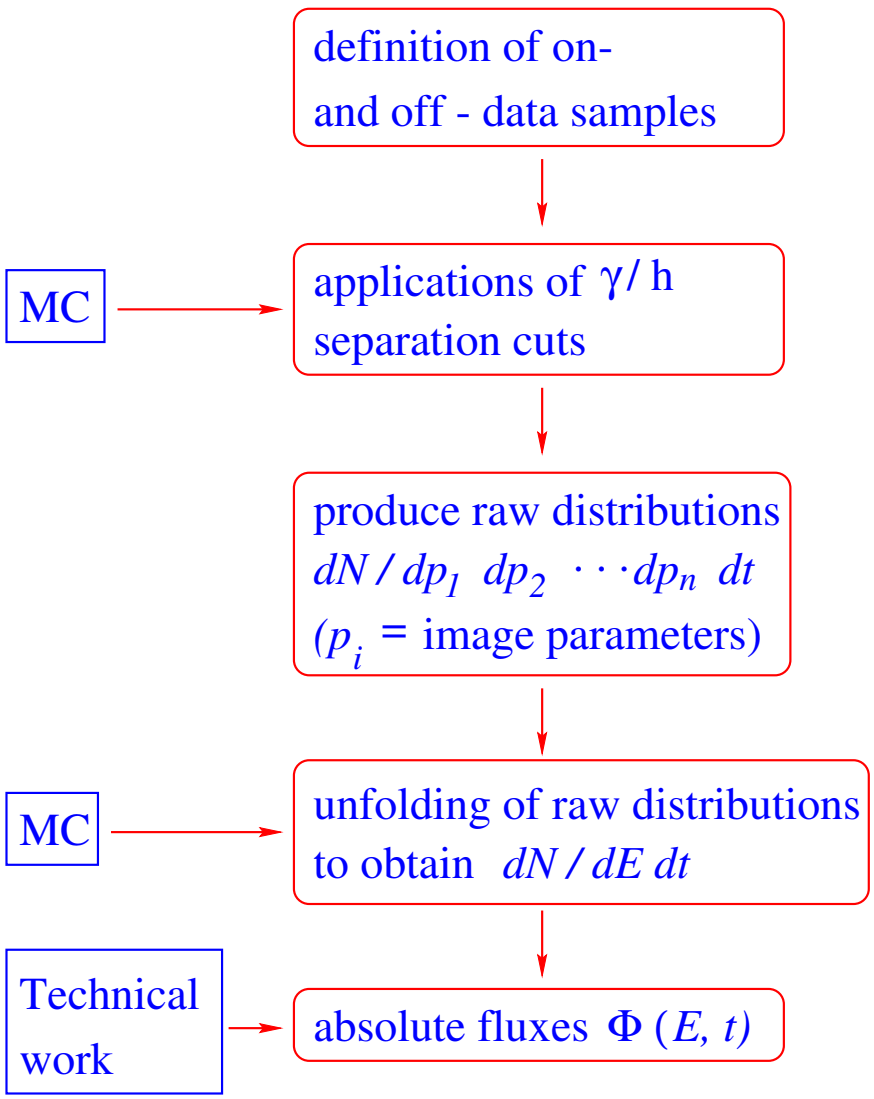
* DST: at this point pixel information is no longer needed

3. Physics analysis samples of events



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*Mini-DST: at this point any specific MAGIC information (MC and experimental data) is no longer needed

4. Further analysis decoupled from MAGIC detector

analysis of energy spectrum $\Phi(E)$:

- spectral index, cut-off energy,
- hardness ratio

timing analysis of $\Phi(E)$:

- $\gamma(t)$, $\Phi_0(t)$
- search for periodicities
- shortest time scales

correlation studies:

- fluxes at different energies
- time lags

pulsar studies

5. Technical work mainly MC

acceptances: $\mathrm{Acc}^{i}\ (E, \Theta, r)$ (i= species)

optimization of γ / h separation

check of absolute flux and energy scale

energy threshold

energy resolution

angular resolution

effective on-time