GammaLib - Bug #1283

GCTAObservation::Write() don't write irf elements into xml file

07/16/2014 11:40 AM - Lu Chia-Chun

Status: Closed Start date: 07/16/2014

Priority: Normal Due date:

Assigned To: Lu Chia-Chun % Done: 100%

Category: Estimated time: 0.00 hour

Target version: 00-09-00

Description

The attached codes are intended for loading irfs for a given run, and create an observation xml file by the write(GXmlElement) method. write() is supposed to write elements of eventlist, aeff, psf etc. into an xml file.

write() doesn't work as expected because m_aeffname, m_psfname etc... are not filled except when the irfs are assigned by reading an input xml.

I propose the following:

fill m aeffname etc. in GCTAObservation::response(rsp) when a rsp is assigned.

```
1. set up a cta observation
    cta = GCTAObservation()
    cta.id('{run}'.format(**globals()))
    cta.load(f_event)
    print 'load', f_event
    rsp = cta.response()
    rsp.load_aeff(f_aeff)
    print 'load', f_aeff
    rsp.load_psf(f_psf)
    print 'load', f_psf
    rsp.load_background(f_bg)
    print 'load', f_bg
    cta.response(rsp)
    xmleIm = GXmIElement('observation_list')
    cta.write(xmleIm)
```

History

#1 - 07/16/2014 12:10 PM - Lu Chia-Chun

```
I added a few lines in GCTAObservation::response(). It seems to work. Please check this branch.
```

https://github.com/chiachun/gammalib/tree/1278.2-improve-GCTAResponseTable

```
void GCTAObservation::response(const GResponse& rsp) {
   // Get pointer on CTA response
   const GCTAResponse* ctarsp = dynamic_cast<const GCTAResponse*>(&rsp);
   if (ctarsp == NULL) {
    throw GCTAException::bad_response_type(G_RESPONSE);
}

// Copy response function
   m_response = *ctarsp;

// Copy filenames of response functions
   if (m_response.aeff()){
      m_aeffname = m_response.aeff()->filename();
   }
   if (m_response.psf()){
      m_psfname = m_response.psf()->filename();
   }
   if (m_response.edisp()){
      m_edispname = m_response.edisp()->filename();
   }
}
```

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```
if (m_response.background()){
   m_bgdname = m_response.background()->filename();
}

// Return
   return;
}
```

#2 - 07/16/2014 06:16 PM - Knödlseder Jürgen

- Status changed from New to Resolved
- Assigned To set to Lu Chia-Chun
- Target version set to 00-09-00
- % Done changed from 0 to 100

Indeed, this looks reasonable. Merging of the code will be done when resolving action #1278.

#3 - 07/20/2014 11:21 PM - Knödlseder Jürgen

- Status changed from Resolved to Closed

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