Advanced Lambda Example

Here's a more sophisticated lambda that performs statistical analysis:

```
def statistical_analysis_lambda(context, voxel_reader, voxel_writer):
  grades = []
  volumes = []
  for voxel in voxel_reader:
    grade = voxel.properties.get('grade',0.0)
    if grade &gt; 0: # Only include non-zero grades
      grades.append(grade)
      volumes.append(voxel.size)
  if not grades:
    return {'error':'No valid grade values found'}

  # Calculate statistics
  total_volume = sum(volumes)
  weighted_average_grade = sum(g * v for g, v in zip(grades, volumes)) / total_volume

  return {
    'total_volume': total_volume,
    'voxel_count':len(grades),
    'average_grade':sum(grades) / len(grades),
    'weighted_average_grade': weighted_average_grade,
    'min_grade': min(grades),
    'max_grade': max(grades)
  }
```

Revision #1
Created 21 October 2025 17:48:51 by admin
Updated 21 October 2025 17:54:47 by admin